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ST. JAMES'S VILLAGE, INC., a Nevada
corporation,

Appellant,

v.

TRUCKEE MEADOWS WATER
AUTHORITY; a joint powers authority under
NRS 277

Respondent.

**ST. JAMES'S VILLAGE, INC.'S
BRIEF/MEMORANDUM OF POINTS
AND AUTHORITIES IN SUPPORT OF
APPEAL OF HEARING OFFICER
FINDINGS OF FACT AND
CONCLUSIONS OF LAW**

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COMES NOW, appellant ST. JAMES'S VILLAGE, INC., a Nevada corporation ("Appellant"), by and through its attorneys of record, HOLLAND & HART, LLP., and hereby files its Appeal of the *Findings of Fact, Conclusions of Law and Final Decision of the Hearing Officer* ("Decision", attached as Exhibit "A") which found in favor of TRUCKEE MEADOWS WATER AUTHORITY, a joint powers authority under Nevada Revised Statutes ("NRS") Chapter 277 (the "Respondent").

I. INTRODUCTION

This Appeal is filed pursuant to Respondent Rule 8(D). On November 10, 2021, Appellant filed its Annexation and Discovery Request for a Portion of St. James Village consisting of twenty-eight (28) lots within Units 1H and 2C (such Units, the "Lots" and, the filing, the "Application")¹. On February 15, 2022, the Respondent promulgated that certain DISCOVERY-St. James Village Discovery 2_Annexation 1H_2C (the "Discovery")², with that certain St. James Village_Disc_Annex, TMWA WO# 15-4624 (the "2015 Discovery") as an attachment to the Discovery.

On March 15, 2022, Appellant filed its complaint upon the Respondent in accordance with Appellant Rule 8(B)(1) (the "Complaint"). On March 21, 2022, the Hearing Officer notified Appellant and Petitioner of the time and location of the hearing. On March 28, 2022, Appellant and Respondent filed their respective briefs with the Hearing Officer, attached hereto as Exhibit "B". The hearing was held on March 31, 2022, a transcript of which is attached hereto as Exhibit "C". As instructed by the Hearing Officer during the hearing, Appellant and Respondent submitted letter briefs regarding reversion to acreage on April 4, 2022, attached hereto as Exhibit "D". On April 14, 2022, the Hearing Officer served to the parties its Decision. On April 15, 2022, Appellant submitted to the Hearing Officer a *Motion to Strike Testimony of Witnesses from the Record or, in the Alternative, Request for Rehearing* ("Motion", attached hereto as Exhibit "E"), which Respondent replied to on April 19, 2022, attached hereto as Exhibit "F". The Hearing Officer denied the Motion on April 20, 2022, attached hereto as

¹ APPELLANT EXHIBIT NO. 1

1 Exhibit “G”. Appellant provided Respondent with its notice of an appeal of the Decision on
2 April 22, 2022. Respondent provided Appellant with a *Notice of Hearing* on June 1, 2022,
3 which established the hearing occur on August 17, 2022. Appellant thereafter requested an
4 expedited hearing be granted, resulting in the *Revised Notice of Hearing* delivered to Appellant
5 and Respondent on June 27, 2022, establishing the hearing occur on July 26, 2022.

6 The arguments and points raised herein do not waive any arguments and defenses
7 previously presented by Appellant. Any findings made by the Hearing Officer in the Decision or
8 claims made by the Respondent during oral argument or in its papers on file and not specifically
9 referenced herein remain disputed and Appellant does not concede any such findings, claims, or
10 arguments by not referencing the same. The Complaint and all attachments and exhibits to the
11 Complaint are hereby incorporated into this Appeal by reference.

12 **A. Statement of Applicable Law**

13 “Either Petitioner or the [Respondent] may appeal the final decision of a Hearing Officer
14 to the Board by filing a notice of appeal with the [Respondent] sent by certified mail to the
15 [Respondent’s] general manager within ten (10) Days after service of the final decision of the
16 Hearing Officer.”³ Appellant appeals the Hearing Officer’s Decision because the Decision is: (a)
17 in violation of constitutional or statutory provisions; (b) in excess of the statutory authority of the
18 agency; (c) made upon unlawful procedure; (d) affected by other error of law; (e) clearly
19 erroneous in view of the reliable, probative and substantial evidence on the whole record; and/or
20 (f) arbitrary or capricious or characterized by abuse of discretion.

21 An arbitrary or capricious exercise of discretion is one “founded on prejudice or
22 preference rather than on reason.”⁴ An abuse of discretion is “[a] clearly erroneous interpretation
23
24

25 ² APPELLANT EXHIBIT NO. 24

26 ³ See Respondent Rule 8(D)(1).

27 ⁴ Black’s Law Dictionary, 119 (9th ed. 2009) (defining “arbitrary”), or “contrary to the evidence or
28 established rules of law,” id. at 239 (defining “capricious”). See generally *City Council v. Irvine*, 102 Nev. 277, 279,
721 P.2d 371, 372 (1986) (concluding that “[a] city board acts arbitrarily and capriciously when it denies a license
without any reason for doing so”).

1 of the law or a clearly erroneous application of a law or rule.”⁵ Review of the Decision shall be
2 made for clear error or an arbitrary abuse of discretion.⁶ The Decision may be set aside when it
3 is “[c]learly erroneous in view of the reliable, probative and substantial evidence on the whole
4 record[.]”⁷

5 **B. Summary of Relief Requested**

6 Appellant requests that the Board reverse the following Hearing Officer’s findings in the
7 Decision:

- 8 • that the Discovery does not violate the Nevada Constitution;
- 9 • that no contractual obligations have been breached;
- 10 • that the Discovery was reasonably based on substantial evidence in the record;
- 11 and
- 12 • Respondent did not act arbitrarily, capriciously or in violation of its authority.

13 The relief Appellant requests herein constitutes an appropriate remedy because the
14 Hearing Officer’s Decision approved Respondent’s Discovery that violates the Nevada
15 Constitution, breaches the Respondent’s contractual obligations, is erroneous in view of the
16 reliable, probative, and substantial evidence on the record, and the Respondent has acted
17 arbitrarily, capriciously, and in violation of its authority in doing so. Therefore, the Board
18 should reverse the Decision in its entirety.

19 **II. FACTUAL BACKGROUND**

20 The St. James’s Village Development (“**Development**”) is located on the hydrographic
21 boundary of Washoe Valley and Pleasant Valley in Washoe County, Nevada, (the “**Land**”).⁸

22
23 ⁵ *Steward v. McDonald*, 330 Ark. 837, 958 S.W.2d 297, 300 (Ark. 1997); see *Jones Rigging and Heavy*
24 *Hauling v. Parker*, 347 Ark. 628, 66 S.W.3d 599, 602 (Ark. 2002) (stating that a manifest abuse of discretion “is one
25 exercised improvidently or thoughtlessly and without due consideration”); *Blair v. Zoning Hearing Hd. of Tp. of*
Pike, 676 A.2d 760, 761 (Pa. Commw. Ct. 1996) (“[M]anifest abuse of discretion does not result from a mere error
in judgment, but occurs when the law is overridden or misapplied, or when the judgment exercised is manifestly
unreasonable or the result of partiality, prejudice, bias or ill will.”).

26 ⁶ *City of N. Las Vegas v. Warburton*, 127 Nev. 682, 686, 262 P.3d 715, 718 (2011) (quoting *Day v. Washoe*
Cty. School Dist., 121 Nev. 387, 389, 116 P.3d 68, 69 (2005)).

27 ⁷ NRS 233B.135(3)(e).

28 ⁸ APPELLANT EXHIBIT NO. 2

1 Appurtenant to the Land are 720 acre-feet of the beneficial interest in groundwater rights (the
2 “**Water Rights**”),⁹ which had been dedicated to Washoe County (the “**County**”) pursuant to that
3 certain Purchase Agreement by and between the County and various members of the Pagni
4 Family (the “**Pagni Purchase Agreement**”).¹⁰ Appellant purchased the Land and Water Rights
5 in 1992¹¹ with plans to develop the Land with a high-class residential development and other
6 amenities.

7 To facilitate its planned development, Appellant submitted¹² and received approval¹³ of
8 its Tentative Map No. TM5-2-92 (with all amendments and supplements, the “**TM**”), thereby
9 including the Land in the County’s municipal service area.¹⁴ Appellant constructed and
10 dedicated to the County two wells¹⁵ and other water distribution facilities and began its
11 development of the Land.

12 On January 29, 2010, pursuant to that certain *Interlocal Agreement Governing the*
13 *Merger of the Washoe County Department of Water Resources Water Utility into the Truckee*
14 *Meadows Water Authority*, the Respondent acquired the County’s municipal purveyor
15 obligations and, as a part of that acquisition, acquired the Water Rights (subject to Appellant’s
16 beneficial ownership interest in the Water Rights) and the Development’s existing water
17 facilities. Respondent chose to not include the remaining County-approved TM lands associated
18 with the Development, which included areas with recorded final maps and reverted final maps.¹⁶

19 On June 21, 2019, the Appellant recorded a Final Map for Unit 2D which was approved
20 by the Respondent.¹⁷ Even though the Respondent issued a will-serve letter (the “**Will Serve**”)¹⁸

21 ⁹ APPELLANT EXHIBIT NO. 3

22 ¹⁰ APPELLANT EXHIBIT NO. 4

23 ¹¹ See Attachment “2”.

24 ¹² APPELLANT EXHIBIT NO. 6

25 ¹³ APPELLANT EXHIBIT NO. 7

26 ¹⁴ APPELLANT EXHIBIT NO. 8

27 ¹⁵ APPELLANT EXHIBIT NOS. 10 through 12

28 ¹⁶ Due to the economic impact on the real estate market from the recession of 2008, the rest of the County-
approved TM lands reverted to acreage (see Attachment “9”).

¹⁷ APPELLANT EXHIBIT NO. 15

1 and the Nevada Department of Conservation and Natural Resources, Department of Water
2 Resources (the “**State Engineer**”) confirmed utilization of the Water Rights for Unit 2D,¹⁹ the
3 Respondent failed to annex in the applicable Unit 2D land, further failed to have a Water Service
4 Agreement executed, did not obtain the applicable WSF Charge prior to issuance of the Will
5 Serve, and initiated water service to one (1) of the lots.

6 **III. ARGUMENT**

7 **A. In General**

8 Appellant appeals the Decision because: (1) the Respondent acted in violation of the non-
9 delegation doctrine of the Nevada Constitution and the applicable Nevada statutes by derating
10 two groundwater production wells; (2) the Hearing Officer’s findings regarding reversion to
11 acreage were incorrect and in violation of statutory provisions; (3) requiring the Applicant to
12 loop its water distribution facilities was an abuse of discretion; (4) subjecting the Development to
13 the Area 15 fee was an arbitrary and capricious decision; (5) the Hearing Officer’s determination
14 that the Will Serve subjected Appellant to the Area 15 fee was incorrect; and (6) Respondent is
15 breaching a contractual obligation by not adhering to the applicable covenants. Ignorance of the
16 evidence or law – or both – constitutes an abuse of discretion justifying reversing the Decision.²⁰

17 **B. The Respondent’s Derating and Dedication Requirement is Violative of the** 18 **Nevada Constitution.**

19 The powers of the legislature “may not be delegated to another branch of government.”
20 Nev. Const. art. 3, § 1. *See State ex rel. Bull v. Snodgrass*, 4 Nev. 524 (1869). “Although the
21 legislature may not delegate its power to legislate, it may delegate the power to determine the
22 facts or state of things upon which the law makes its own operations depend.” *Ex rel. Ginocchio*
23 *v. Shaughnessy*, 47 Nev. 129, 217 P. 581 (1923); *see also Panama Refining Co. v. Ryan*, 293
24 U.S. 388, 421 (1935); *Field v. Clark*, 143 U.S. 649, 694 (1892).

25 Absent limited circumstances, an administrative agency which has been delegated certain

26 ¹⁸ APPELLANT EXHIBIT NO. 16

27 ¹⁹ APPELLANT EXHIBIT NO. 17

28 ²⁰ *See Jerry's Nugget v. Keith*, 111 Nev. 49, 888 P.2d 921 (1995).

1 legislative powers may not subdelegate any of these powers to third parties. *See, e.g., U.S.*
2 *Telecom Ass’n v. FCC*, 359 F.3d 554, 565 (D.C. Cir. 2004) (“agency officials . . . may not
3 subdelegate to outside entities—private or sovereign—absent affirmative evidence of authority
4 to do so”). An agency may turn to third parties to gather facts or offer advice, but the agency
5 ceases to perform its own administrative function when it allows other parties to “make crucial
6 decisions” about the application of statutory standards to specific circumstances and when it
7 “rubber-stamps” other parties’ decisions “under the guise of seeking their advice.” *Id.* at 567-68.

8 As the *Telecom Ass’n* Court warned,

9 [W]hen an agency delegates power to outside parties, lines of
10 accountability may blur, undermining an important democratic
11 check on government decision-making. Also, delegation to outside
12 entities increases the risk that these parties will not share the
13 agency’s... “vision and perspective,” and thus may pursue goals
inconsistent with those of the agency and the underlying statutory
scheme. In short, subdelegation to outside entities aggravates the
risk of policy drift

14 *Id.* at 565-66 (citations omitted).

15 “The Legislature has established a comprehensive statutory scheme regulating the
16 procedures for acquiring, changing, and losing water rights in Nevada.” *Mineral Cty. v. Lyon*
17 *Cty.*, 473 P.3d 418, 426, 136 Nev. Adv. Rep. 58 (2020). Importantly, the Legislature declares
18 that it is the policy of Nevada “[t]o encourage the State Engineer to consider the best available
19 science in rendering decisions concerning the available surface and underground sources of
20 water in Nevada” and “[to] manage conjunctively the appropriation, use and administration of all
21 waters of this State, regardless of the source of the water.” NRS 533.024(c) and (e),
22 respectively. Nothing in NRS Chapter 533 allows the State Engineer to delegate these
23 enumerated powers to a third party, which includes the Respondent.

24 However, Respondent argues, and the Hearing Officer agreed, that NAC 445A.6672
25 provides Respondent with the power to effectively render decisions concerning the available
26 underground source of water and manage the use and administration of such water. The result is
27 that Appellant’s remaining Water Rights may not be used for the Development and that more
28 water rights are now required for future water service. Regardless of whether Respondent treats

1 all customers this way, it is an improper management technique in light of Nevada's
2 nondelegation doctrine and violative of Nevada's Constitution, as well as contrary to statutory
3 law. As such, Appellant must cease its management procedures or, at minimum, engage the
4 rightful administrative agency – the State Engineer – in such management decisions.

5 **C. The Hearing Officer's Finding that a Reversion to Acreage Terminates**
6 **Entitlements is Legally and Factually Incorrect.**

7 The Hearing Officer misconstrues and misapplies the statutory framework of NRS 278 as
8 it relates to reversions to acreage. Furthermore, the Hearing Officer failed to rely on the
9 substantial evidence in the record in reaching its conclusion that any entitlements associated with
10 the TM were relinquished.

11 NRS 278.490 replaces any previously recorded final map with a reversionary map. The
12 statutory provision specifically relates to recorded maps (which have satisfied the final map
13 requirements) and not "maps" in general, which may include both final and tentative maps. A
14 plain reading of the statute shows that when a reversionary map is submitted and subsequently
15 recorded, only the final map is relinquished from the official records. NRS 278.490 does not
16 provide that upon recordation of a reversionary map, the underlying tentative map is also
17 relinquished.

18 However, the Hearing Officer postulated that because the Appellant is required to obtain
19 a sewer will serve letter in order to record a subsequent final map, then the entitlements must
20 therefore be extinguished. This was in error. Obtaining such a will-serve is a part of the
21 certification process for final maps under NRS 278.377. This signifies to the applicant that the
22 required signature will be affixed to a final map when such map is sent out to the various
23 statutorily required entities because all requirements have been met by those entities.

24 The certification process for final maps under NRS 278.360 through 278.460, *inclusive*,
25 is distinct from the review process for tentative maps under NRS 278.330 through 278.353,
26 *inclusive*. Tentative maps are provided to the planning commission who then distributes the
27 tentative map to the necessary agencies for review and, after substantial review, approves,
28

1 conditionally approves, or disapproves the tentative map.²¹ The applicant must then adhere to
2 the time constraints for submitting its final maps.²² Upon the applicant's submittal of the final
3 map, the respective agencies determine whether the final map complies with the terms of the
4 tentative map.²³ However, the Hearing Officer incorrectly conflated these two distinct mapping
5 processes into one and made a finding that was in violation of statutory provisions.

6 More problematic is the Hearing Officer's determination that the entitlements under the
7 TM were extinguished upon reversion of the final map, which is clearly and blatantly against the
8 substantial evidence in the record. The Governing Agency Certificate on Final Map Units 1I,
9 2C, and 1H of Petitioner Exhibit 9 specifically state that "[t]he lands shown on this reversion to
10 acreage map will remain subject to the tentative map approval for St. James Village, TM5-2-92."
11 This tentative map and the entitlements associated therewith were certainly not relinquished as
12 the Hearing Officer incorrectly found, but rather binding and in full force and effect. As such,
13 the Hearing Officer's finding in the Decision that no prior commitments of the TM are binding
14 was affected by an error of law and must be reversed.

15 **D. The Hearing Officer's Finding that Looping is Required was in Error.**

16 Having disregarded the validity of the TM and associated entitlements, the Hearing
17 Officer continued making legal and factual errors. Particular to the Decision is that the Hearing
18 Officer found NAC 445A.6712 applied to the Development and no evidence existed that
19 Appellant obtained approval from either the Division of Environmental Protection or the District
20 Board of Health. NAC 445A.6712 establishes that tree systems are allowed if "justified by an
21 engineer and approved by the... appropriate district board of health." The Hearing Officer also
22 determined the longest dead end the District Board of Health would approve are 800 feet.

23 The Hearing Officer again failed to rely on the actual and substantial evidence in the
24 record in making this finding. Specifically, Petitioner Exhibit 9, Final Map Unit 1G, filed on
25 October 6, 2004, represents the terminus of the 6,300 feet tree system identified in Respondent

26 ²¹ NRS 278.330 through 278.3485, inclusive.

27 ²² NRS 278.360.

28 ²³ NRS 278.380.

1 Exhibit 21. Contrary to the Hearing Officer's assertions, the District Board of Health certified
2 this final map on September 28, 2004, nearly seven years after the applicable NAC provisions
3 were amended to preclude tree systems unless approved by the appropriate district board of
4 health. The District Board of Health's certification is in stark contrast to the Hearing Officer's
5 finding, as well as that of the Respondent's witness – whom the Hearing Officer cited as
6 authority – to support the proposition that it would be unlikely for the District Board of Health to
7 approve a tree system over 800 feet. The anecdotal evidence to support what the District Board
8 of Health might do is contrary to what it actually did – approve Final Map Unit 1G – making
9 both the Respondent's witnesses' assertions and the Hearing Officer's finding meritless.

10 Furthermore, the Respondent did not provide any evidence that either the District Board
11 of Health or the Division of Environmental Protection have sought amendments to NAC
12 445A.6712 to limit the length of a tree system. Instead, the Respondent implemented a distance
13 limitation in its own design guidelines. *See* Respondent Exhibit 20. By doing so, Respondent
14 asserts, and the Hearing Officer agrees, that this rule is controlling because the TM entitlements
15 are allegedly extinguished and Appellant must start the process with a clean slate. As shown
16 above, this is not the case. Rather, the Hearing Officer sanctions Respondent's desire to design a
17 water system as Respondent deems appropriate, in its sole and absolute discretion,
18 notwithstanding any valid and existing entitlements.

19 Such a “take it or leave it” approach is inconsistent with the laws, codes, and entitlements
20 enjoyed by Appellant and represents an abuse of discretion. As such, the Hearing Officer's
21 finding that looping the system is required must be reversed.

22 **E. The Area 15 Fee is Invalid and Inapplicable to Appellant.**

23 The Hearing Officer failed to consider the hydrogeologic characteristics associated with
24 the Development as set forth in Appellant's record. Instead, the Hearing Officer focused on
25 groundwater level reductions as a basis for upholding the Area 15 fee. This belies both the
26 science and Nevada groundwater law.

27 In an effort to mitigate unreasonable groundwater declines on the Mt. Rose alluvial fan,
28 the Respondent chose to construct the Whites Creek Water Treatment Plant (“WTP”) and, to pay

1 for its construction, subjected privately-owned vacant lots to the Area 15 fee. Area 15 includes
2 lands not only in the Pleasant Valley Hydrographic Basin, but also the Washoe Valley and
3 Truckee Meadows Hydrographic Basins. While the impetus for the WTP was localized in a
4 distinct setting within the Pleasant Valley Hydrographic Basin, the Respondent chose to require
5 private developments in hydrologically distinct areas pay for the WTP.

6 Specific to the Development, Respondent contends, and the Hearing Officer agreed, that
7 declining groundwater levels were a justifiable basis to subject the Development to the Area 15
8 fee. Under NRS 534.110(4), however, a water right:

9 [M]ust allow for a reasonable lowering of the static water level at
10 the appropriator's point of diversion. In determining a reasonable
11 lowering of the static water level in a particular area, the State
12 Engineer shall consider the economics of pumping water ... and
may also consider the effect of using water on the economy of the
area in general.

13 Nowhere in the record did Respondent identify whether the drawdown in Respondent
14 Exhibit 6 was unreasonable. Respondent only presented evidence of a lowering of the static
15 water level as justification to show why the Area 15 fee would be appropriate for the
16 Development – to which the Hearing Officer agreed. Making this decision is not vested with the
17 Respondent but with the State Engineer. Subjecting the Appellant to the Area 15 fee based on
18 such an improper decision-making process is an abuse of discretion and contrary to statute.

19 **F. The Will Serve Letter Waived the Area 15 Fee.**

20 The Hearing Officer erroneously relied on Respondent's assertion that the Will Serve
21 letter was signed as an accommodation and that the terms therein required subsequent payment
22 of the Area 15 fee. The evidence in the record and the applicable statutes show that this finding
23 was in error.

24 Apart from Respondent's testimony, nothing in the record shows that Respondent signed
25 the Will Serve as an accommodation. The Will Serve made no mention that Respondent was
26 accommodating Appellant in any capacity. The Respondent also provided no evidence that
27 Respondent was signing the Will Serve to assist Appellant in recording its final map. Only since
28

1 the initiation of Appellant's complaint has Respondent insinuated that that the Will Serve – and
2 subsequent final map – were signed as an accommodation.

3 Even if, *arguendo*, Respondent executed the Will Serve as an accommodation,
4 Respondent has identified no statutory authority under NRS 278 whereby the Respondent may
5 certify a final map without having all its requirements or contingencies satisfied absent an
6 applicant executing an agreement or posting a bond. These latter actions never took place. If
7 Respondent's claim were true and the other agencies' signatures on a final map were certified as
8 an "accommodation," then Appellant would certainly have to have an agreement with each of
9 those respective agencies requiring Appellant to perform its obligations after the final map was
10 recorded. There are no such agreements in existence nor in the record. If agencies
11 accommodated applicants in this manner, it would render the statute meaningless. This is not the
12 case as other agencies followed NRS 278 by affixing their certifications to a final map.

13 Confusing the issue more is the fact that Respondent initiated water service at one (1)²⁴ of
14 the seven (7) lots prior to executing any agreements and, furthermore, prior to collecting the fees
15 the Hearing Officer cited as mandatory. Here, the Respondent signed the Will Serve and final
16 map, did not require further fees, did not obtain any subsequent agreements, and initiated water
17 service to a singular lot. Indeed, the Respondent's Will Serve and final map certification went
18 well beyond an accommodation for such lot owner. A reasonable mind would conclude that the
19 Area 15 fee was inapplicable to the remaining lots in Final Map Unit 2D. However, the
20 Respondent incorrectly maintains the applicable lots are subject to the Area 15 fee,
21 notwithstanding its previous actions towards the single lot. Because the Hearing Officer agreed
22 with Respondent's arbitrary and capricious decision, the Hearing Officer's finding must be
23 reversed.

24 **G. Respondent Breached its Contractual Obligations.**

25 The Hearing Officer incorrectly determined that Respondent did not breach the Pagni
26 Purchase Agreement because Respondent did not assume any contractual obligations therein as
27

28 ²⁴ APN 156-071-05, 305 Timbercreek Court, Lot 507 Unit 2D.

1 part of the Washoe County merger. Yet, as a part of this merger, Respondent accepted the water
2 rights which were the subject of the Pagni Purchase Agreement.

3 Respondent's argument rests on the premise that the Pagni Purchase Agreement was an
4 Excluded Liability in Schedule 5.7(c) of Respondent Exhibit 15 and Respondent did not have to
5 adhere to such agreement's terms because Respondent chose not to. However, the Pagni
6 Purchase Agreement specifically states in Section 13 of Appellant Exhibit 4 that the terms of the
7 agreement "shall constitute covenants running with the land... and shall be binding upon and be
8 for the benefit of all persons with interest in the... water rights." In other words, Washoe
9 County, as covenantor, promised to Pagni, as covenantee, that Pagni retained the right to
10 designate the use of the water. This promise benefitted Pagni and burdened Washoe County.

11 The burden of the covenant ran to Respondent because the Pagni Purchase Agreement
12 intended it to be binding upon successors, there was privity of estate between Washoe County
13 and the Respondent, the covenant touched and concerned the property – being the water rights,
14 and Respondent had notice of the Pagni Purchase Agreement. *See* 9 Powell on Real Property §
15 60.04 (2022). Similarly, the benefit of the covenant ran to Appellant because the covenant
16 touched and concerned the property, the Pagni Purchase Agreement intended it to be binding
17 upon successors, and there was privity of estate between Pagni and Appellant.

18 Because Respondent was and is still bound by the covenant in the Pagni Purchase
19 Agreement, Respondent's failure to adhere to such obligations is a breach allowing Appellant to
20 pursue any remedies provided by law. Therefore, the Hearing Officer's finding was erroneous in
21 light of the applicable law and must be reversed.

22 **H. The Seven (7) Lots Are Included in the Discovery.**

23 The Hearing Officer found that the seven (7) lots of Unit 2D were not a part of the
24 Discovery. However, events leading up to the recordation of the Unit 2D Final Map and actions
25 taken by Appellant and Respondent after such recordation were cited by the Hearing Officer and
26 are included in this record. Particularly, the 2015 Discovery for the seven (7) lots was attached
27 to the Discovery. Also, Respondent's signing the Will Serve and final map, then initiating water
28 service to one lot without entering into an annexation or water service agreement is especially

1 applicable to this matter, as it shows how Respondent acted arbitrarily, capriciously, and abused
2 its discretion.

3 **IV. CONCLUSION**

4 For the reasons stated herein, Appellant respectfully requests that the Hearing Officer's
5 Decision be reversed, that the Hearing Officer be instructed to vacate the Discovery in its
6 entirety, and the Development be subject to the County's approved TM requirements.

7 Respectfully submitted this 16th day of July, 2022.

8 HOLLAND & HART LLP

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1 **CERTIFICATE OF SERVICE**

2 I hereby certify that I am an employee of Holland & Hart LLP, and that on July 16, 2022,
3 I caused a true and correct copy of the foregoing document to be served by electronic mail,
4 addressed as follows:

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20 *Attorneys and Secretary to the Board for Respondent Truckee Meadows Water Authority*

21 Dated this 16th day of July, 2022.

22 

23 _____
24 Evan J. Champa, Esq.,
25 an employee of Holland & Hart LLP

26 19274812_v1

M E M O R A N D U M

November 4, 2021

TO: Truckee Meadows Water Authority (“TMWA”)
FROM: Evan J. Champa
RE: Discovery Unit 2D, 1H and 2C

To whom it may concern:

This Memorandum accompanies that certain Annexation and Discovery Request of even date herewith and the accompanying cover letter attached hereto as **Exhibit “A”**, filed on behalf of St. James’s Village, Inc., a Nevada corporation (the “Applicant”). The purpose of this Memorandum is to provide the supporting information for the Applicant’s contention that certain fees do not apply to Applicant’s Units 2D, 1H, and 2C (the “Development”) project. In particular, the existing water system facilities are more than sufficient to accommodate the Development, thus negating any off-site improvements, the Applicant controls enough water rights to fully support the Development, and, because of these water rights and other matters, the Area 15 Surface Water Treatment Plant Fee should not apply.

Accompanying this Memorandum and Discovery Request is that certain Technical Memorandum, dated August 24, 2021, from Michael Hardy, P.E., P.G., WRS, of Lumos and Associates (“Lumos”) regarding St. James Village Water System Analysis for 12 Additional Lots (the “Technical Memorandum”), attached hereto as **Exhibit “B”**. The Technical Memorandum provides the engineering findings which support the basis that certain fees should not apply. Specifically, the existing infrastructure for storage, distribution, and pressure complies with Nevada Administrative Code (“NAC”) and any requirement that such infrastructure be updated would amount to an arbitrary decision. Further, Lumos has prepared that certain St. James Village Water System Preliminary Engineering Report (“PER”), dated November 1, 2021, attached hereto as **Exhibit “C”**. The PER analyzes the Applicant’s potable water system in detail based on NAC requirements and supplements the Technical Memorandum.

Further, the well capacity analysis in the Technical Memorandum identifies that the water-producing infrastructure, standing alone, has capacity to provide the Development with a source of water that complies with the requisite NAC provisions. This finding is based on the fact that, for a certain period, the applicable wells were not only supplying the Applicant’s existing development with its source of water, but were also being used to supply water to two neighboring developments outside the Applicant’s existing development, thereby exceeding the demand requirement for the Applicant’s existing development. The sustainability analysis in the Technical Memorandum, which includes this excess pumping, proves that the Development can

be supplied with water from its existing wells without injury to the aquifer and, most importantly, from utilizing any other source.

Also, in furtherance of the Applicant's assertion, the Applicant is the predecessor-in-interest to that certain Purchase Agreement, attached hereto as **Exhibit "D"**, which established the obligations between the contracting parties regarding use of the water rights therein. Particularly, the water rights "will be utilized to provide water service as designated by [the Seller]." These water rights are the same as on file with the Nevada Division of Water Resources who identifies the Applicant's remaining demand balance for future will-serves. The Applicant intends to utilize a portion of its remaining balance associated with these water rights for the total demand of the Development. Due to the Applicant's designation, no other water source is requested or required for the Development.

The final aspect of the Applicant's position is that while the Area 15 Surface Water Treatment Plant Fee does not actually encompass five (5) lots within Unit 2D (*see **Exhibit "E"*** attached hereto), such fee is inapplicable for the Development altogether. An impetus for the Area 15 Surface Water Treatment Plant Fee was the construction of a surface water treatment facility that would be used in a conjunctive management program to reduce aquifer stresses caused by a high density of domestic wells located on the Galena Fan.

The analysis conducted by Lumos indicates that groundwater pumping for the Applicant's existing development is hydrologically distinct from the Galena Fan Domestic Well Mitigation Area due to boundary conditions identified in Confluence Water Resources, LLC's September 3, 2020, presentation regarding the Serpa Well Testing & Groundwater Analyses, attached as **Exhibit "F"**. The projected cone of depression in the vicinity of the Applicant's development does not exacerbate the drawdown on the Galena Fan. This finding means the Applicant's development is in a sub-basin of the Pleasant Valley Hydrographic Basin. Such hydrogeologic conditions are not uncommon, especially in the western Nevada/eastern Basin and Range Province, as shown in multiple USGS reports and Division of Water Resources Orders and Rulings.

Given the presence of such hydrogeologic conditions and the Applicant's water supply capabilities, coupled with the Applicant directing the water rights be used solely for the Development, the Applicant cannot be required to pay a fee that has no scientific or engineering basis and which further runs afoul of contractual obligations. To require otherwise would be arbitrary and capricious.

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Based on the preceding, the Development can be annexed into the TMWA system and provided water service for \$0.00.

Sincerely,

/s/ Evan J. Champa

Evan J. Champa
of Holland & Hart LLP

cc: Michael Pagni, esq.

EXHIBIT A

[SEE ATTACHED]



Krater Consulting Group, PC
901 Dartmouth Drive
Reno, Nevada 89509

Ph: (775) 815-9561
Fax: (775) 786-2702
E-mail: Ken@KraterConsultingGroup.com

Transmittal

To: Danny Rotter, P.E., Engineering Manager
Truckee Meadows Water Authority

Nancy Raymond, New Business Project Coordinator
Truckee Meadows Water Authority

From: Kenneth Krater, P.E. *KSK*

CC: Fred Woodside, St. James Village
Evan Champa, Holland and Hart

Date: November 3, 2021

RE: Annexation and Discovery Request for a Portion of St. James Village

Danny and Nancy,

I am pleased to submit an Annexation and Discovery application for a portion of St. James Village. The application is specific to Tract Maps, #4567 (Sloane Court), #4705 (Golden Yarrow Court), and #5331 (7-infill lots). Sloane Court and Golden Yarrow Court were reverted to acreage during the great recession but previously approved for water service by the Washoe County Department of Water Resources (WCDWR).

Lumos Engineers just completed a Preliminary Engineering Report along with a previous technical memorandum that combined provide detailed information on the St. James water system that was originally designed, financed, and constructed by the developer. It should be noted that at the time the St. James water system was designed and built, it met all the existing NAC 445A water works requirements and was approved by WDWR when they accepted the infrastructure.

We were recently informed by TMWA that Lumos cannot be provided with TMWA's water model to do a more detailed transmission study. Said study would help to develop looping strategies for the existing and future phases of development in the service area and help create redundancy in the existing and future distribution piping network along with better fire flows. But we understand TMWA's concerns in providing the model to third party consultants and look forward to developing a resolution on this matter.

The information provided in the enclosed reports on the two system wells and single water tank is in my opinion, valuable information. We will want to work with TMWA long term to prepare a broader study to evaluate looping strategies for the existing and future phases of development including model calibration to ensure accurate results to the satisfaction of both TMWA and the developer. But, as we are in great

need of additional recorded lots for sale, we are only requesting a fairly simple annexation and discovery and feel that the enclosed Lumos reports provide adequate information to help speed this process along. Lumos's reports clearly show that the existing two wells and single water tank provide adequate capacity for the number of units associated with this annexation and discovery request.

Please note that Unit 2C and two of the seven lots in Tract Map #5331 are already in TMWA's service territory. We have included an exhibit that demonstrates this fact. I have also included the original tract maps, original approved water plans, assessor maps and exhibits showing all of the properties within St. James Village and the location of the subject tract maps, proof of property tax payments, and a corporate resolution showing that Fred Woodside is authorized to sign on behalf of St. James Village.

Sincerely,

Kenneth Krater, P.E., MSCE



NEW BUSINESS APPLICATION FOR NEW OR MODIFIED SERVICE

Effective January 15, 2021

Project classifications (See Submittal Requirements for more information)

Residential Service	Subdivision or Multi-family	Commercial Service	Commercial With Main or Main only	Hardship Letter
Annexation	Discovery Level 1 or 2	Tentative NAC Acknowledgment Letter	Fire Service or Hydrant only	

Do you have Water Rights? Yes _____ No _____ Unknown _____

Is Project in TMWA's Service Territory? Yes _____ No _____ Unknown _____

[Golden Yarrow Ct. per the attached map lies in TMWA's Retail Service Territory.](#)

Owner/Applicant Information: (Legal Name and Address for Owner)

Name _____ Attn: _____
Mailing Address _____ Email _____
City _____ State _____ Zip Code _____
Phone _____ Cell _____

Contact Information: (If different than Owner information)

Name _____ Attn: _____
Mailing Address _____ Email _____
City _____ State _____ Zip Code _____
Phone _____ Cell _____

Engineering Firm

Firm Name _____ Contact _____
Phone _____ Email _____

Project Information:

Service Address _____ City _____
Assessor Parcel # (APN) _____
Number of units _____ Sq. footage of building/dwelling _____
Location Description _____

Is this within Nevada Department of Transportation Right of Way? Yes No Unknown

Requested Services/Meters:**Domestic:**

Meter Size 1" Quantity 24
Meter Size NA Quantity

Irrigation:

Meter Size 1" Quantity 0
Meter Size NA Quantity

Is Re-vegetation Required?

Yes ☐ No ☒

Internal Fire Service(s):

Size NA Quantity

Fire Hydrant(s):

Quantity 6 3 each for Unit 1H and 2C

Will any pumps be installed (i.e. sewer pump, booster pumps, hydronic heating with chemical additives, etc.)? In accordance with NAC 445A.67195 appropriate backflow protection will be required.

Yes ☐ No ☒ Unknown ☐ Type

Brief Project Description (Include any project phasing):

This project is to allow two previously reverted Final Maps for Unit 1H (Sloane Ct., Tract map 4567) and Unit 2C (Golden Yarrow Ct., Tract map 4705) to be re-recorded and lots re-established. The previous final maps were recorded when the site was served by Washoe County Water Resources. A Technical Memorandum and Prelim Engineering Report was recently completed by Lumos & Associates in support of this Annexation and Discovery Request. Note that Unit 2C already lies in TMWA's Service Territory.

WATER RIGHTS DEDICATION – Applications for Residential Service, Subdivision/Multi-family, Commercial Service and Commercial With Main may require Applicant to dedicate water rights or purchase Will Serve Commitments before service will be provided.

A change of ownership during the application process will require a new application form for the new owner with proof of ownership. Additional fees may be required. Timelines will be evaluated at time of new application.

As TMWA is subject to Nevada's public records act, TMWA is required to provide non privileged public records to third parties upon request. TMWA will determine in its sole discretion whether the public records act applies to documents specific to any future requests.

Owner understands and acknowledges that TMWA will forward this request and the findings or results of this request to the Owner of Record for the afore referenced parcel(s).

Owner's Signature Frederick D. Woodruff Date 10/29/21

TMWA Representative

Complete Submittal Date

Submittal Requirements Partial submittals will not be accepted (updated 10/1/2019)

Required (X)	Annexation	Discovery Level 1 or 2	Tentative NAC/ Acknowledgement Letter	Residential Service ³	Commercial Service	Commercial with Main	Subdivision/ Multi-family	Fire Service Only
Initial Review Fee ¹	\$2,700 ⁴	\$2,400 ²	\$200	\$450 ⁴	\$1,150 ⁴	\$1,800 ⁵	\$2,850/phase ⁴	\$450/service
Proof of Ownership (Copy of Deed or Title Report)	X	IF AVAILABLE		X	X	X	X	X
Owner's Affidavit (ONLY if appointing third party agent)	X		X	X	X	X	X	X
Tentative Map Plans per City / County Requirements ²			X					
Official Plat or Parcel Map							X	
Wet Stamped							3 Sets	
Full Civil Set							X	
Wet Stamped				X	X	X	2 Sets	
Approved Fire Hydrant Locations, Demand & Duration				X	X	X	2 Sets	X
Landscape & Irrigation Plans with Separate Irrigation Demands				If Applicable	X	X	X	
Wet Stamped					2 Sets	2 Sets	2 Sets	
Water Design (W-1)		IF AVAILABLE		X	X	X	X	X
Wet Stamped				3 Sets	3 Sets	3 Sets	3 Sets	3 Sets
AutoCAD Files of Civil Set			X	X	X	X	X	
Plumbing, Architectural Floor & Mechanical Plans					X	X		
Wet Stamped					1 Set	1 Set		

Notes:

- 1 Check, Cash or Money Order only. Final project costs will be assessed at time of Water Service Agreement issuance in accordance with TMWA's current fee and rate schedules.
- 2 Discovery findings are preliminary in nature and are based on the quantity and accuracy of the data received. Level 2 Discovery fee is \$3,600; contact a Project Coordinator for fee determination.
- 3 Applies to a single parcel with no more than two (2) dwelling units [i.e. 1 single family home, 1 single family home with a "mother-in-law" unit or 1 duplex]. All others will be Commercial Service applications.
- 4 Includes both initial Engineering and Lands Fee.
- 5 An additional \$300 Lands Research/Easement establishment fee will be required if main is located on private property.
 - All Water Facility plan sets shall be 36" x 24" or 34" x 22". Plans plotted on larger formats will not be accepted.
 - All CAD files shall follow industry standard layer controls and include the following, at a minimum:
 - Property Lines
 - Easements
 - Limits of Paving (curb/gutter/sidewalk)
 - Curb and Building Pad Elevations
 - Building Footprints
 - Proposed Utility Piping
 - Above requirements are minimums. Additional information may be necessary depending upon the project complexity.

STATE OF Alabama)
 : ss
COUNTY OF Lawrence)

AFFIDAVIT OF OWNERSHIP

I, Frederick D Woodside, being duly sworn, depose and say:

1. That I am (a) the owner of record, or (b) an authorized agent acting in my capacity as authorized agent of St James's Village Inc the owner of record, (hereinafter "Owner") of that certain real property identified as Washoe County Assessor's Parcel No. _____ (hereinafter "Property");

2. That Owner intends to develop the Property or is currently investigating the Property for potential development;

3. That Owner hereby authorizes and appoints Ken Krater (hereinafter "Representative:") to assist Owner in its investigation and/or development of the Property;

4. That Owner hereby authorizes Truckee Meadows Water Authority (hereinafter "TMWA") to discuss water service relating to the Property with Representative, to accept information relating to Owner and the Property with Representative, and to treat Representative as the Owner of the Property for all purposes relating to the application for water service for the Property; and

5. That Owner acknowledges that any and all contractual agreements for water service and/or necessary grants of easements must be executed by Owner and not Representative, unless TMWA is provided with an acceptable Special Power of Attorney.

Dated this 1st day of November, 2021.

OWNER:

By: Frederick D Woodside

Subscribed and Sworn to this 1st day
Of November, 2021.

Amanda Davis
Notary Public



**CORPORATE RESOLUTION AND AUTHORIZATION OF CORPORATE
REPRESENTATIVE OF ST. JAMES VILLAGE, INC.**

The Board of Directors of St. James Village, Inc., a Nevada corporation (the "Corporation") through its Board of Directors hereby resolves and authorizes Frederick D. Woodside to act as the authorized agent of the Corporation to execute on behalf of the Corporation any and all real estate related documents, including but not limited to: (1) execution of documents from a state or local regulatory agency for land use, entitlements or water use; or (2) execution of documents related to the sale of individual lots at St. James Village. This authorization does not extend to the bulk sale of the St. James Village lots.

Dated Mar. 4, 2019

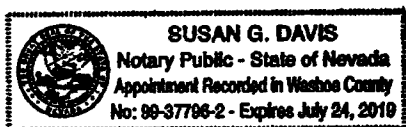
ST. JAMES VILLAGE, Inc., a Nevada corporation

By: _____

Ghassan Al Dahlawi, Chairman and President

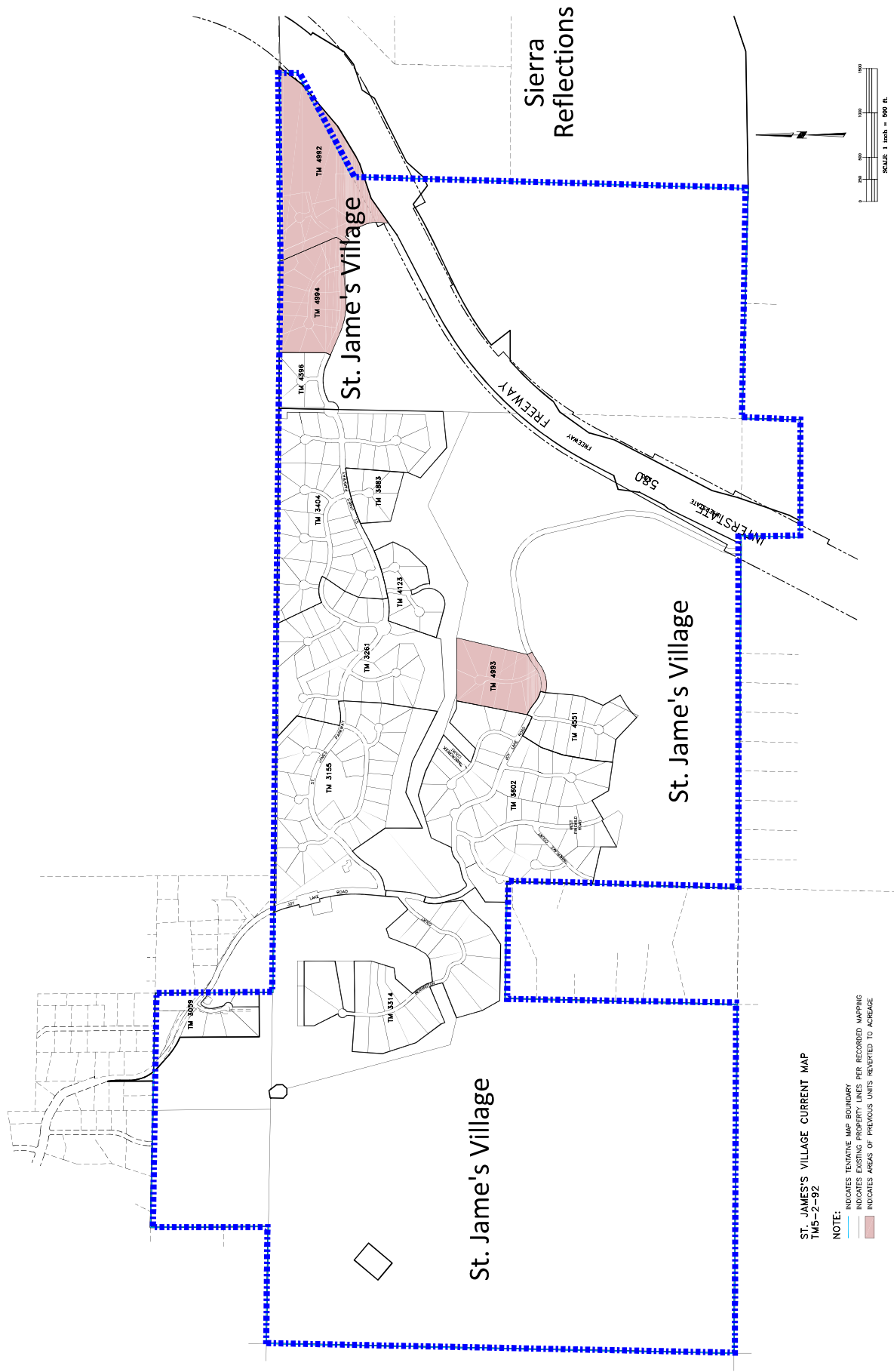
STATE OF NEVADA)
) ss.
COUNTY OF WASHOE)

This instrument was acknowledged before me on March 4, 2019 by Ghassan Al Dahlawi, as Chairman and President of St. James's Village, Inc.



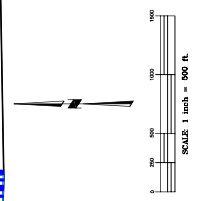
Susan G. Davis
Notary Public



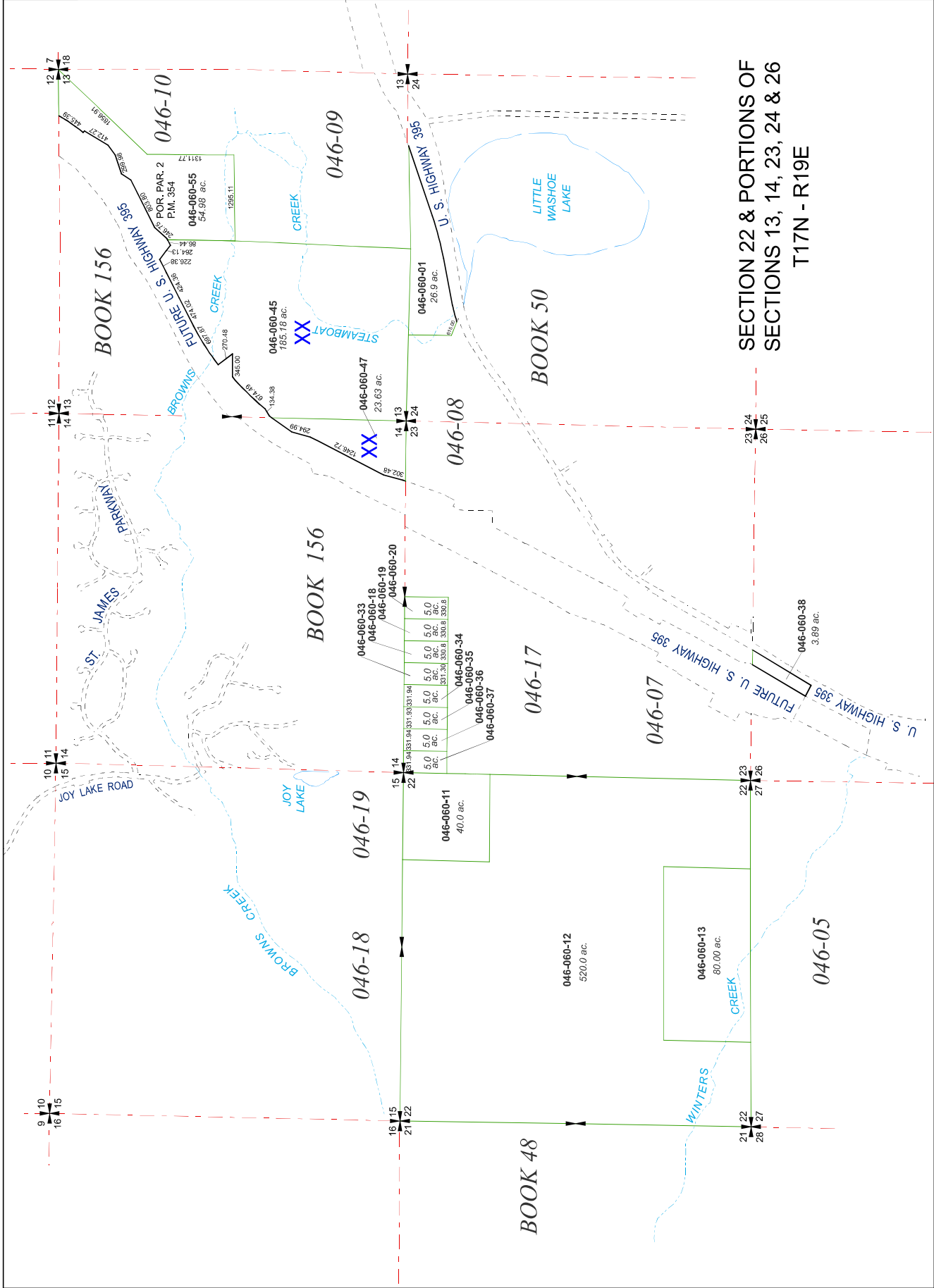


ST. JAMES'S VILLAGE CURRENT MAP
TM5-2-92

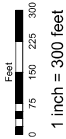
NOTE:
— INDICATES TENTATIVE MAP BOUNDARY
— INDICATES EXISTING PROPERTY LINES PER RECORDED MAPPING
— INDICATES AREAS OF PREVIOUS UNITS REVERTED TO ACREAGE



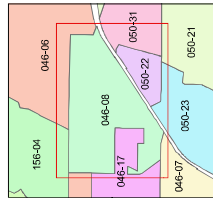
NOTE: This map was prepared for the use of the Washoe County Assessor for assessment and illustrative purposes only. It does not represent a survey of the premises. No liability is assumed as to the sufficiency or accuracy of the data delineated hereon.



PORTIONS OF SECTIONS 23 & 24
T17N - R19E

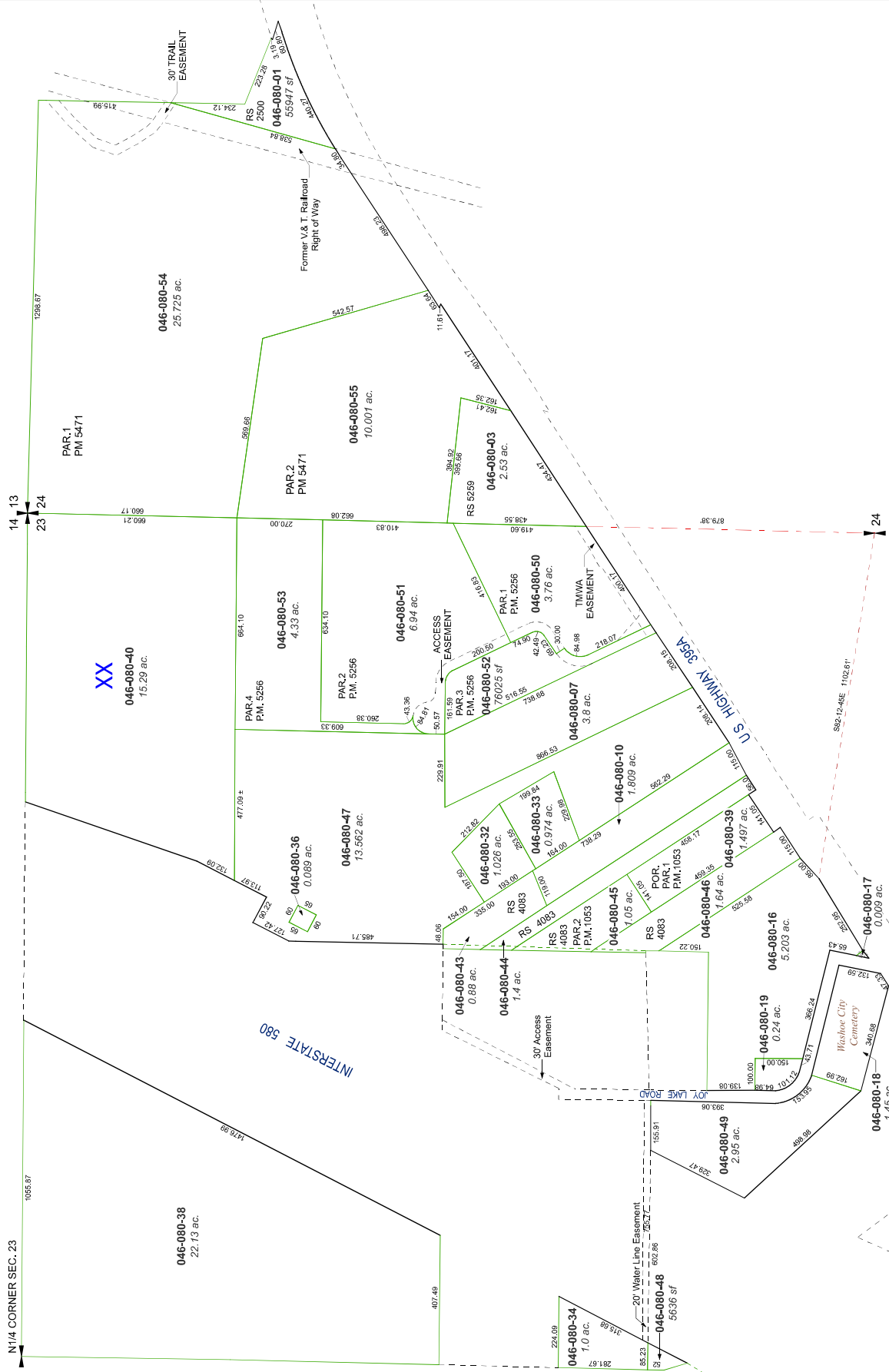


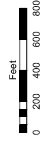
1 inch = 300 feet



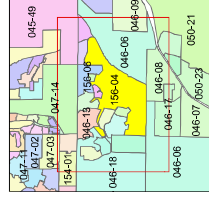
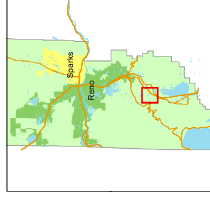
area previously shown on map(s):

NOTE: This map was prepared for the use of the Washoe County Assessor for assessment and illustrative purposes only. It does not represent a survey of the premises. No liability is assumed as to the sufficiency or accuracy of the data delineated hereon.





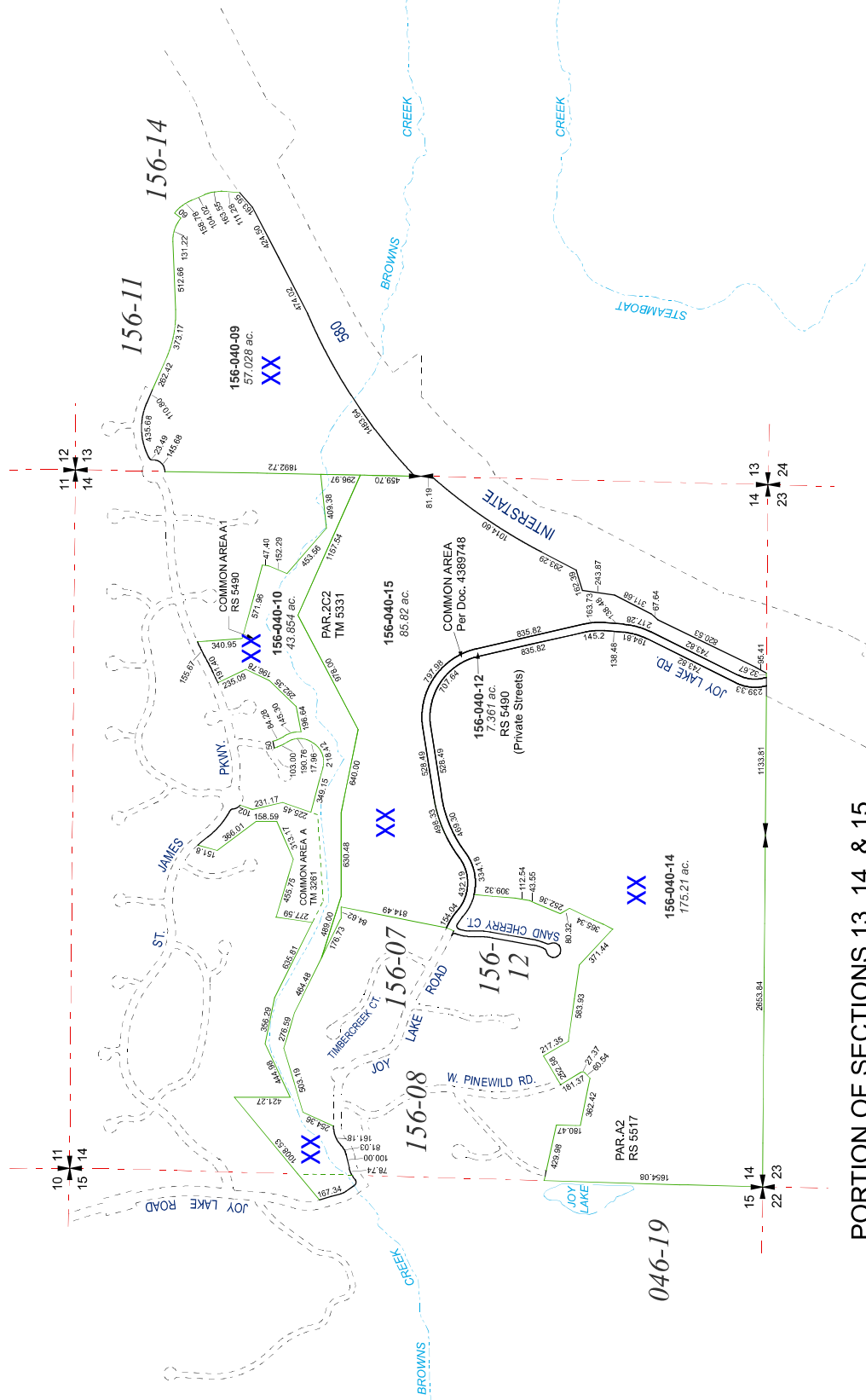
1 inch = 800 feet



created by: NLH 04/01/2009
updated: CFB 09/26/13 SR 06/28

area previously shown on map(s)

NOTE: This map was prepared for the use of the Washoe County Assessor for assessment and illustrative purposes only. It does not represent a survey of the premises. No liability is assumed as to the sufficiency or accuracy of the data delineated hereon.



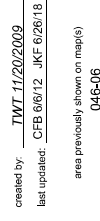
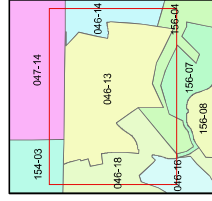
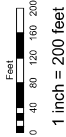
PORTION OF SECTIONS 13, 14 & 15
T17N - R19E

STATE OF NEVADA
WASHOE COUNTY
ASSESSOR'S OFFICE
Michael E. Clark, Assessor

1001 East Ninth Street
Building D
Reno, Nevada 89512

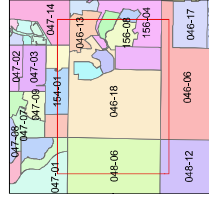
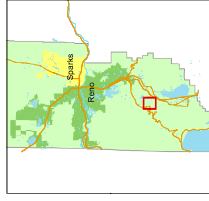
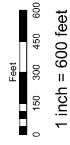
WASHOE COUNTY
ASSESSOR'S OFFICE
Michael E. Clark, Assessor

1001 East Ninth Street
Building D
Reno, Nevada 89512



NOTE: This map was prepared for the use of Washoe County Assessor for assessment and illustrative purposes only. It does not represent a survey of the premises. No liability is assumed as to the sufficiency or accuracy of the data delineated hereon.

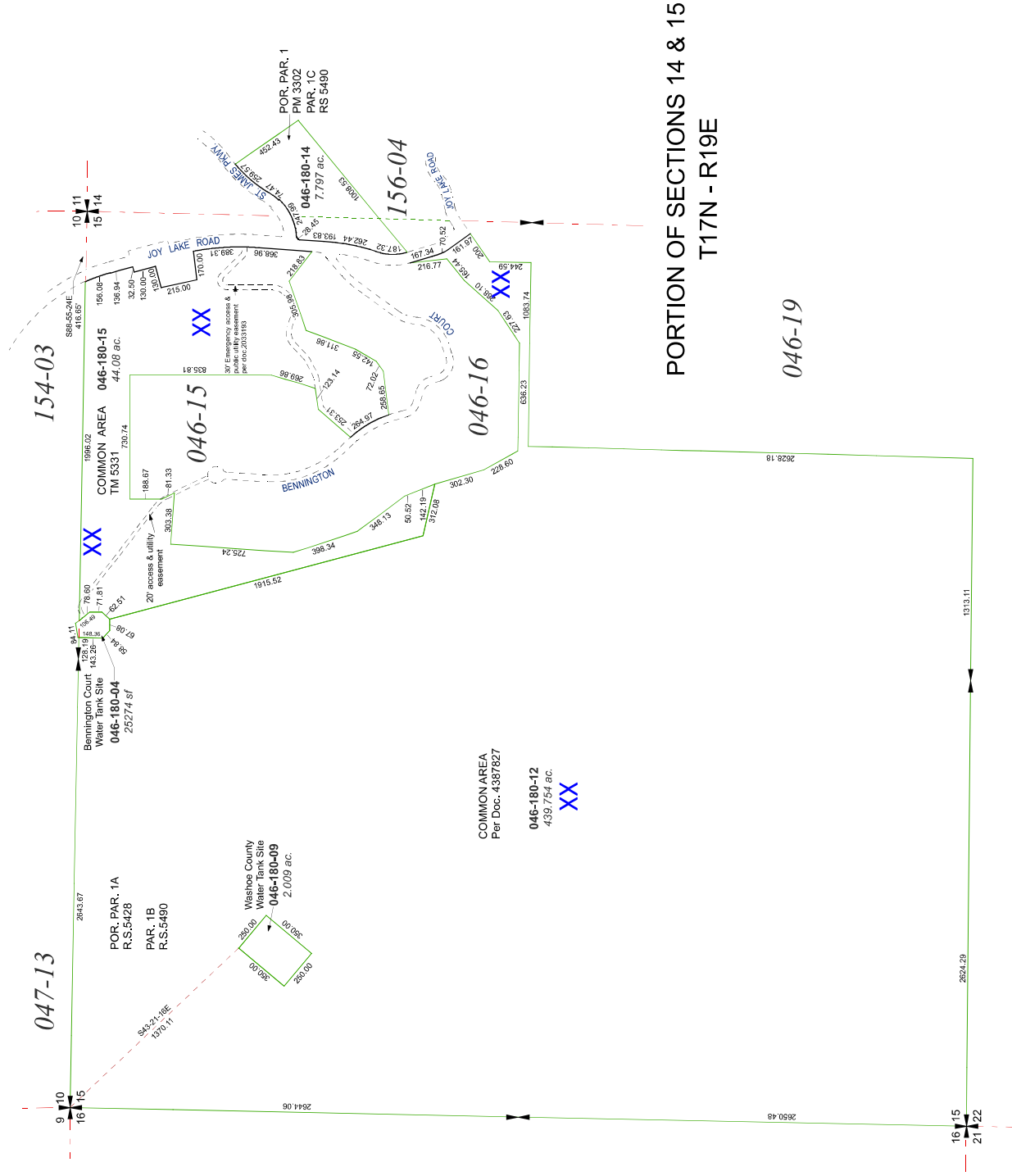




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updated: CFB 06/06/12 KSB 06/12/13
SR 07/02/19

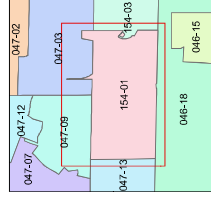
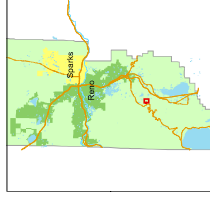
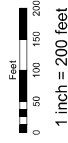
area previously shown on map(s):

NOTE: This map was prepared for the use of the Washoe County Assessor for assessment and illustrative purposes only. It does not represent a survey of the premises. No liability is assumed as to the sufficiency or accuracy of the data delineated hereon.



Assessor's Map Number
154-01

STATE OF NEVADA
WASHOE COUNTY
ASSESSOR'S OFFICE
1001 East Ninth Street, Building D
Reno, Nevada 89512
(775) 328-2231



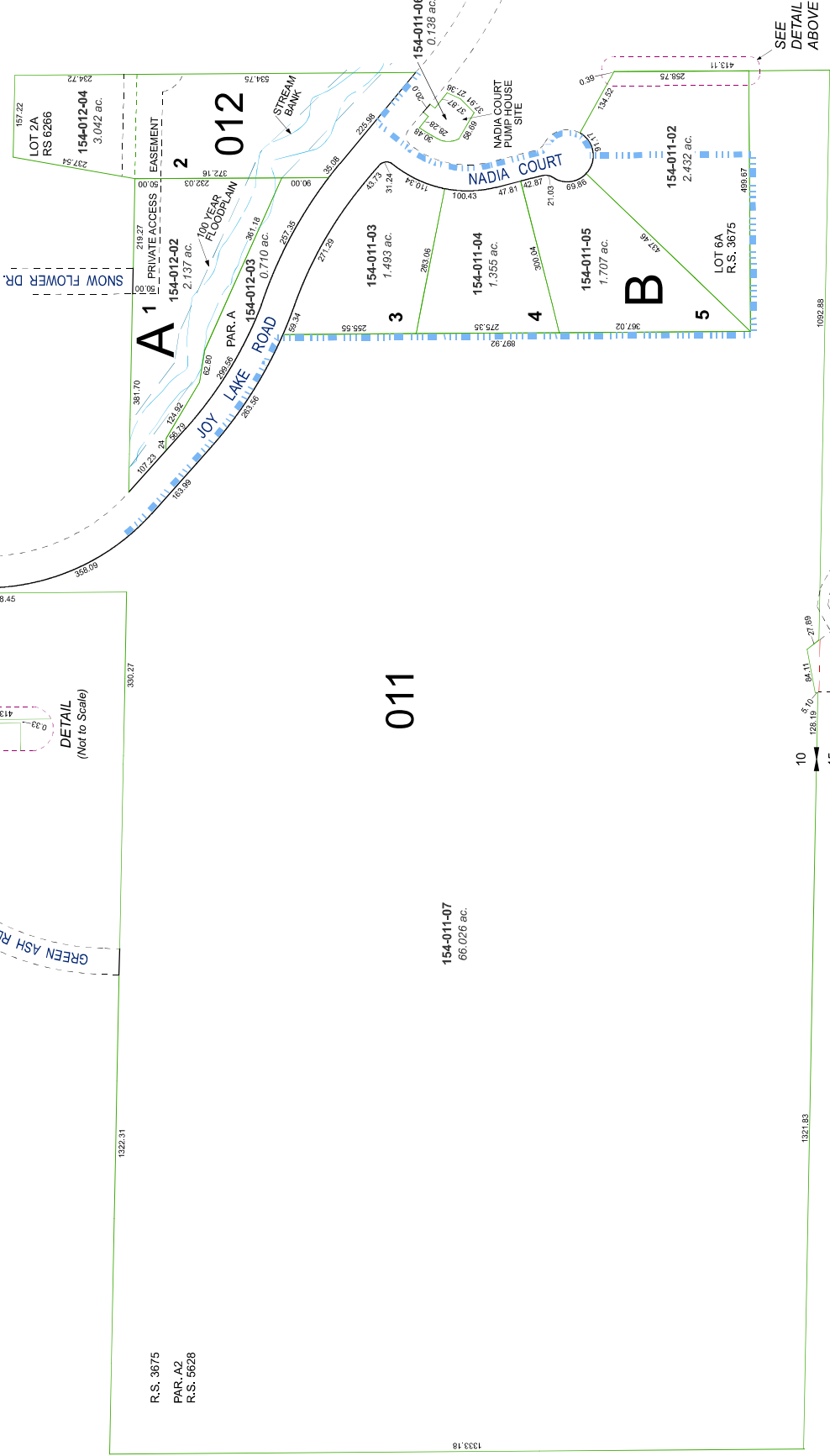
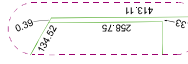
created by: KSB 3/07/2012
updated: KSB 5/08/15 JRA 6/15/21

area previously shown on map(s):
047-01, 047-03

NOTE: This map was prepared for the use of the Washoe County Assessor for assessment and illustrative purposes only. It does not represent a survey of the premises. No liability is assumed as to the sufficiency or accuracy of the data delineated hereon.

PORTION OF S¹/₂ SECTION 10
T17N - R19E

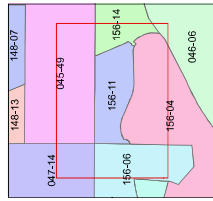
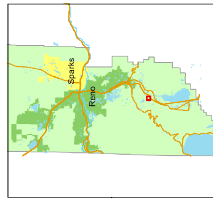
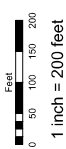
**NADIA COURT SUBDIVISION
(#3059)**



BENNINGTON COURT WATER TANK SITE

Assessor's Map Number
156-11

STATE OF NEVADA
WASHOE COUNTY
ASSESSOR'S OFFICE
1001 East Ninth Street, Building D
Reno, Nevada 89512
(775) 326-2231

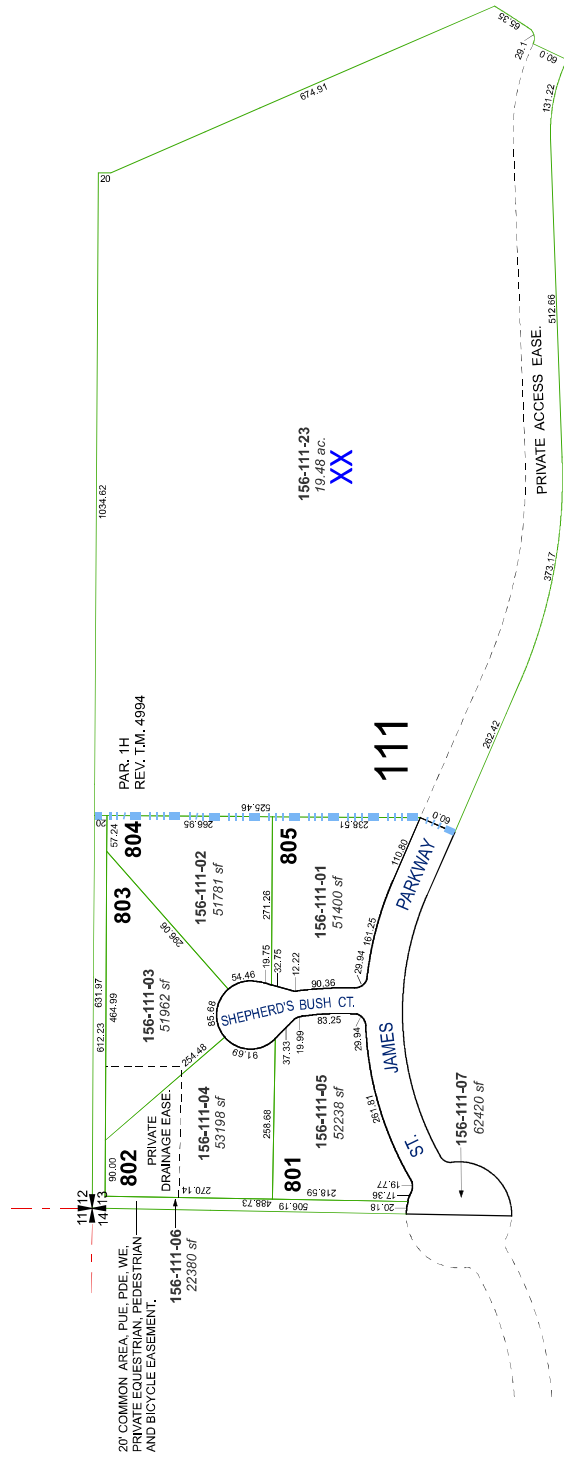


created by: NLH 04/01/2009
updated: NLH 07/05/11 SR 01/14/21

area previously shown on map(s):
046-06 & 156-04

NOTE: This map was prepared for the use of the Washoe County Assessor for assessment and illustrative purposes only. It does not represent an official survey and should not be relied upon as to the sufficiency or accuracy of the data delineated hereon.

(#4396)
ST. JAMES'S VILLAGE - UNIT 1G
A POR. OF THE NW ¼ OF SEC. 13
T17N - R19E

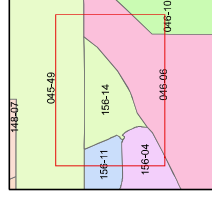
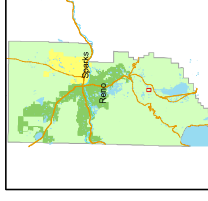


Assessor's Map Number
156-14

STATE OF NEVADA
WASHOE COUNTY
ASSESSOR'S OFFICE
Joshua G. Wilson, Assessor
1001 East Ninth Street
Building D
Reno, NV 89512
(775) 328-2231



Feet
0 25 50 100 150 200
1 inch = 200 feet



created by: NLH 10/17/2008
last updated: NLH 4/01/09 NLH 7/05/11
area previously shown on map(s)
156-04

NOTE: This map was prepared for the use of the Washoe County Assessor for assessment and illustrative purposes only. It does not represent an official survey. No warranty is made as to the sufficiency or accuracy of the data delineated herein.

A POR. OF THE N ½ OF SEC. 13
T17N - R19E

PAR. 11
REV. T.M. 4992

NB-25-54E
1327.08'

1219.35'

976.10'

82'

673.91'

58.35'

29.1'

0.06'

66.63'

0.06'

159.78'

104.02'

55.53'

111.28'

345.76'

415.59'

68.43'

21.99'

61.91'

1327.08'

1219.35'

976.10'

82'

XX

156-141-04
34.26 ac

FWY.

395

S.

FUTURE

141

WASHOE COUNTY TREASURER

Page 1 of 3

PO BOX 30039
 RENO, NV 89520-3039
 775-328-2510

Received By:

agallegos

Receipt Number:

U21.3560

Location:

Treasurer's Office

Receipt Year:

2021

Session:

agallegos-0-08052021

Date Received:

08/05/2021

PAYMENT RECEIPT

Type	Description	Balance	Net Tax	Interest	Fees Penalties	Current Due	Current Paid	Balance Remaining
Real	Bill Number: 2021314438 Bill Year: 2021 PIN: 04606047 Primary Owner: ST JAMES'S VILLAGE INC Property Addr: UNSPECIFIED Property Desc: Township 17 Section 14 Lot Block Range 19 SubdivisionName _UNS	11.59	11.59	0.00	0.00	11.59	11.59	0.00
Real	Bill Number: 2021314483 Bill Year: 2021 PIN: 04608040 Primary Owner: ST JAMES'S VILLAGE INC Property Addr: S VIRGINIA ST Property Desc: Range 19 Township 17 SubdivisionName _UNSPECIFIED Section 23	11.60	11.60	0.00	0.00	11.60	11.60	0.00
Real	Bill Number: 2021314417 Bill Year: 2021 PIN: 04606045 Primary Owner: ST JAMES'S VILLAGE INC Property Addr: US HIGHWAY 395 S Property Desc: Block Range 19 SubdivisionName _UNSPECIFIED Township 17 Section	1,868.89	468.76	0.00	0.00	468.76	468.76	1,400.13
Real	Bill Number: 2021358508 Bill Year: 2021 PIN: 04618014 Primary Owner: ST JAMES'S VILLAGE INC Property Addr: 4100 JOY LAKE RD Property Desc: Range 19 Block SubdivisionName _UNSPECIFIED Township 17 Section	6,920.56	1,745.92	0.00	0.00	1,745.92	1,745.92	5,174.64

W.C.T.O. 22**AUG 04 2021****PAID****WASHOE COUNTY TREASURER** PO BOX 30039 RENO, NV 89520-3039

By Whom Paid:

ST JAMES'S VILLAGE INC
 4100 JOY LAKE RD
 RENO NV 89511

BALANCE REMAINING	32,240.09
CHARGES	10,803.94
PAID	10,803.94
CHANGE	0.00

WASHOE COUNTY TREASURERPO BOX 30039
RENO, NV 89520-3039
775-328-2510

Page 2 of 3

Received By:

agallegos

Receipt Number:

U21.3560

Location:

Treasurer's Office

Receipt Year:

2021

Session:

agallegos-0-08052021

Date Received:

08/05/2021

PAYMENT RECEIPT

Type	Description	Balance	Net Tax	Interest	Fees Penalties	Current Due	Current Paid	Balance Remaining
Real	Bill Number: 2021254943 Bill Year: 2021 PIN: 04613206 Primary Owner: ST JAMES'S VILLAGE INC Property Addr: UNSPECIFIED Property Desc: Range 19 Block SubdivisionName ST JAMES'S VILLAGE 1B Township 1	2,245.82	563.33	0.00	0.00	563.33	563.33	1,682.49
Real	Bill Number: 2021357210 Bill Year: 2021 PIN: 15614104 Primary Owner: ST JAMES'S VILLAGE INC Property Addr: TOTTENHAM RD Property Desc: Township 17 Section 13 Lot 11 Block Range 19 SubdivisionName _R	3,969.97	994.37	0.00	0.00	994.37	994.37	2,975.60
Real	Bill Number: 2021356163 Bill Year: 2021 PIN: 15611123 Primary Owner: ST JAMES'S VILLAGE INC Property Addr: UNSPECIFIED Property Desc: Range 19 Block SubdivisionName _REVERSION Township 17 Section 1	2,621.83	657.34	0.00	0.00	657.34	657.34	1,964.49
Real	Bill Number: 2021373652 Bill Year: 2021 PIN: 15604015 Primary Owner: ST JAMES'S VILLAGE INC Property Addr: JOY LAKE RD Property Desc: Lot 2C2 Block Range 19 SubdivisionName ST JAMES VILLAGE 2D Town	7,186.75	1,797.04	0.00	0.00	1,797.04	1,797.04	5,389.71

W.C.T.O. 22**AUG 04 2021****PAID**

WASHOE COUNTY TREASURER

PO BOX 30039
 RENO, NV 89520-3039
 775-328-2510

Page 3 of 3

Received By:

agallegos

Receipt Number:

U21.3560

Location:

Treasurer's Office

Receipt Year:

2021

Session:

agallegos-0-08052021

Date Received:

08/05/2021

PAYMENT RECEIPT

Type	Description	Balance	Net Tax	Interest	Fees Penalties	Current Due	Current Paid	Balance Remaining
Real	Bill Number: 2021359153 Bill Year: 2021 PIN: 15604014 Primary Owner: ST JAMES'S VILLAGE INC Property Addr: JOY LAKE RD Property Desc: Township 17 Section 14 Lot A2 Block Range 19 SubdivisionName _U	14,567.43	3,642.21	0.00	0.00	3,642.21	3,642.21	10,925.22
Real	Bill Number: 2021354628 Bill Year: 2021 PIN: 15604009 Primary Owner: ST JAMES'S VILLAGE INC Property Addr: SAINT JAMES PKWY Property Desc: Range 19 Block SubdivisionName _UNSPECIFIED Township 17 Section	3,639.59	911.78	0.00	0.00	911.78	911.78	2,727.81
Totals:		43,044.03	10,803.94	0.00	0.00	10,803.94	10,803.94	32,240.09
Tender Information:		Charge Summary:						
Check #99-108/4287		10,803.94	Real	10,803.94				
Total Tendered		10,803.94	Total Charges	10,803.94				

W.C.T.O. 22**AUG 04 2021****PAID**

ST. JAMES'S VILLAGE - UNIT 1H

OWNER'S CERTIFICATE

THIS IS TO CERTIFY THAT THE UNDERSIGNED ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, IS THE OWNER OF THE TRACT OF LAND REPRESENTED ON THIS PLAT, AND HAS CONSENTED TO THE PREPARATION AND RECORDATION OF THIS PLAT, AND THAT THE SAME IS EXECUTED IN COMPLIANCE WITH AND SUBJECT TO THE PROVISIONS OF NRS CHAPTERS 116 AND 278, THAT THE STREETS, AVENUES, HIGHWAYS AND ALL APPURTENANCES THERETO AS SHOWN ARE HEREBY GRANTED AND SET APART TO BE USED AS PRIVATE ACCESS FOR- EVER; AND HEREBY GRANTS TO ALL PUBLIC UTILITIES AND WASHOE COUNTY PERMANENT EASEMENTS SHOWN ON THIS PLAT FOR THE CONSTRUCTION AND MAINTENANCE OF UTILITY SYSTEMS AND WATER AND SANITARY SEWER FACILITIES, TOGETHER WITH THE RIGHT OF ACCESS THERETO FOREVER. THE WATER FACILITIES AND SEWER FACILITIES AND ASSOCIATED APPURTENANCES ARE HEREBY DEDICATED TO WASHOE COUNTY. THE OWNER AND ASSIGNEES AGREE TO THE USE OF RESIDENTIAL WATER METERS.

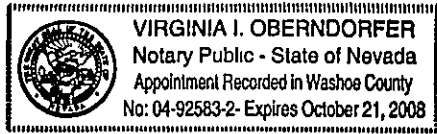
ST. JAMES'S VILLAGE, INC.,
A NEVADA CORPORATION

Frederick D. Woodside
FREDERICK D. WOODSIDE, VICE PRESIDENT

STATE OF NEVADA
COUNTY OF WASHOE

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON August 10, 2005, BY FREDERICK D. WOODSIDE, AS VICE PRESIDENT OF ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION.

Virginia I. Oberndorfer
NOTARY PUBLIC



TITLE COMPANY CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT THIS PLAT HAS BEEN EXAMINED AND THAT ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, OWNS OF RECORD AN INTEREST IN THE LAND DELINEATED HEREON AND THAT IT IS THE ONLY OWNER OF RECORD OF SAID LAND; THAT ALL THE OWNERS OF RECORD OF THE LAND HAVE SIGNED THE FINAL MAP; THAT NO ONE HOLDS OF RECORD A SECURITY INTEREST IN THE LAND TO BE DIVIDED; AND THAT THERE ARE NO LIENS OF RECORD AGAINST THE COMMON INTEREST COMMUNITY FOR DELINQUENT STATE, COUNTY, MUNICIPAL, FEDERAL OR LOCAL TAXES OR ASSESSMENTS COLLECTED AS TAXES OR SPECIAL ASSESSMENTS, AND THAT A GUARANTEE DATED 8-8-05, FOR THE BENEFIT OF THE COUNTY OF WASHOE, STATE OF NEVADA, HAS BEEN ISSUED WITH REGARD TO ALL THE ABOVE.

WESTERN TITLE COMPANY OF NEVADA *11/4/2005

BY: David Evans 8-9-05 11/9/05
DAVID EVANS, VICE PRESIDENT DATE

UTILITY COMPANIES CERTIFICATE

THE UTILITY EASEMENTS SHOWN ON THIS PLAT HAVE BEEN CHECKED AND APPROVED BY THE UNDERSIGNED PUBLIC UTILITY AND CABLE TV COMPANIES.

Rust Hong 8/9/2005
SIERRA PACIFIC POWER COMPANY DATE

D. Callahan 8/09/05
NEVADA BELL TELEPHONE COMPANY d/b/a SBC NEVADA DATE

Alan King 8-9-05
CHARTER COMMUNICATIONS DATE

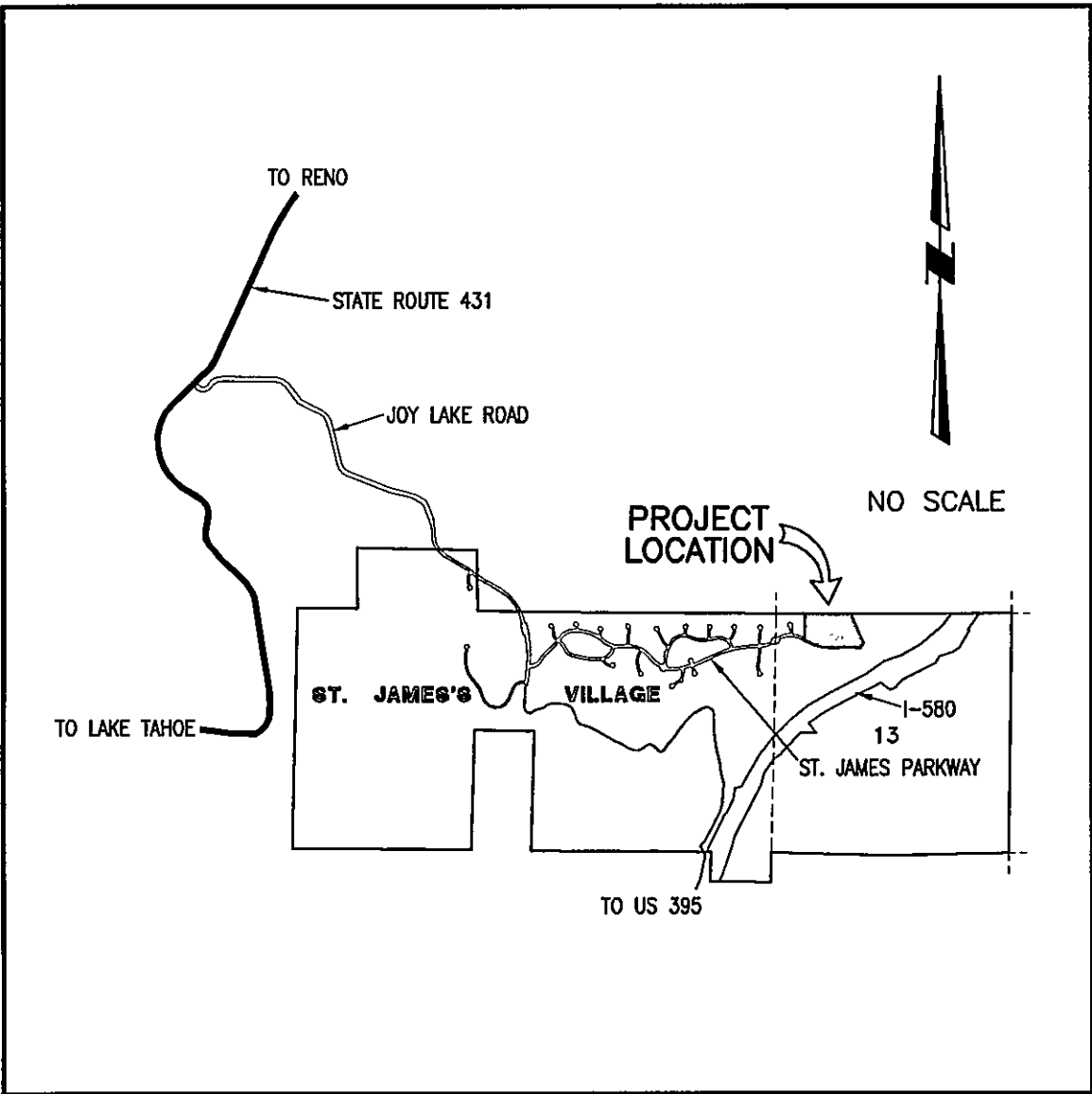
Vahid Behmaram 8/11/05
WASHOE COUNTY DEPARTMENT OF WATER RESOURCES DATE

TAXATION CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT ALL THE PROPERTY TAXES ON THE LAND FOR THE FISCAL YEAR HAVE BEEN PAID AND THAT THE FULL AMOUNT OF ANY DEFERRED PROPERTY TAXES FOR THE CONVERSION OF THE PROPERTY FROM AGRICULTURAL USE HAS BEEN PAID PURSUANT TO NRS 361A.265.

WASHOE COUNTY TREASURER

Jim Siff 8/10/2005
TITLE: DATE



VICINITY MAP

SURVEYOR'S CERTIFICATE

I, GEORGE FONG, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEVADA, CERTIFY THAT:

- THIS PLAT REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER MY DIRECT SUPERVISION AT THE INSTANCE OF ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION.
- THE LANDS SURVEYED LIE WITHIN THE NW1/4 OF SECTION 13, T.17N., R.19E., M.D.M., AND THE SURVEY WAS COMPLETED ON AUGUST 1, 2005.
- THIS PLAT COMPLIES WITH THE APPLICABLE STATE STATUTES AND ANY LOCAL ORDINANCES IN EFFECT ON THE DATE THAT THE GOVERNING BODY GAVE ITS FINAL APPROVAL.
- THE MONUMENTS DEPICTED ON THE PLAT WILL BE OF THE CHARACTER SHOWN AND OCCUPY THE POSITIONS INDICATED BY Aug 10, 2006 AND AN APPROPRIATE FINANCIAL GUARANTEE WILL BE POSTED WITH THE GOVERNING BODY BEFORE RECORDATION TO ENSURE THE INSTALLATION OF THE MONUMENTS.



WATER RIGHT DEDICATION CERTIFICATE

THE WATER AND SEWER RESOURCE REQUIREMENTS SET FORTH IN ARTICLE 422 OF THE WASHOE COUNTY DEVELOPMENT CODE, RELATED TO THE DEDICATION OF WATER RESOURCES HAVE BEEN SATISFIED.

Vahid Behmaram 8/11/05
WASHOE COUNTY DEPARTMENT OF WATER RESOURCES DATE

DIVISION OF WATER RESOURCES CERTIFICATE

THIS PLAT IS APPROVED BY THE STATE OF NEVADA DIVISION OF WATER RESOURCES OF THE DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES CONCERNING WATER QUANTITY, SUBJECT TO THE REVIEW OF APPROVAL ON FILE IN THIS OFFICE.

Robert H. Zeileft, P.E. 8/12/2005
DIVISION OF WATER RESOURCES DATE

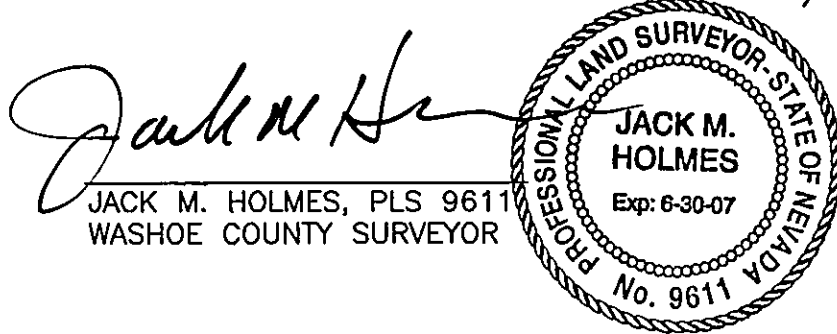
DISTRICT BOARD OF HEALTH CERTIFICATE

THIS FINAL MAP IS APPROVED BY THE WASHOE COUNTY DISTRICT BOARD OF HEALTH. THIS APPROVAL CONCERNS SEWAGE DISPOSAL, WATER POLLUTION, WATER QUALITY AND WATER SUPPLY FACILITIES AND IS PREDICATED UPON PLANS FOR A PUBLIC WATER SUPPLY AND INDIVIDUAL SYSTEMS FOR DISPOSAL OF SEWAGE.

S. J. J. 10/18/05
FOR THE DISTRICT BOARD OF HEALTH DATE

COUNTY SURVEYOR'S CERTIFICATE

I CERTIFY THAT I HAVE EXAMINED THIS MAP CONSISTING OF TWO SHEETS, AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT AND THAT AN ADEQUATE PERFORMANCE GUARANTEE HAS BEEN FILED GUARANTEEING THE MONUMENTS AS SHOWN WILL BE SET BY August 10, 2006.



Jack M. Holmes 10/20/05
JACK M. HOLMES, PLS 9611 DATE
WASHOE COUNTY SURVEYOR

COMMUNITY DEVELOPMENT CERTIFICATE

THE TENTATIVE MAP FOR ST. JAMES'S VILLAGE, TM5-2-92, WAS RECOMMENDED FOR APPROVAL BY THE WASHOE COUNTY PLANNING COMMISSION ON THE 8TH DAY OF JULY 1992, AND APPROVED BY THE WASHOE COUNTY COMMISSION ON THE 18TH DAY OF AUGUST, 1992.

THE FIRST FINAL MAP APPROVED FOR THIS TENTATIVE MAP AFTER THE 1ST DAY OF JULY 2001, THEREBY ESTABLISHING THE ANNIVERSARY DATE UNDER NRS 278.360, WAS APPROVED AND ACCEPTED FOR RECORDATION ON THE 11TH DAY OF OCTOBER 2002. THE MOST RECENTLY RECORDED FINAL MAP, UNIT 2B, FOR THIS TENTATIVE MAP WAS APPROVED AND ACCEPTED FOR RECORDATION ON THE 7TH DAY OF OCTOBER, 2005.

THIS FINAL MAP, ST. JAMES'S VILLAGE - UNIT 1H, MEETS ALL APPLICABLE STATUTES, ORDINANCES, AND CODE PROVISIONS; IS IN SUBSTANTIAL CONFORMANCE WITH THE TENTATIVE SUBDIVISION MAP CASE NO. TM5-2-92; AND ALL CONDITIONS HAVE BEEN MET.

THE NEXT FINAL MAP FOR TM5-2-92 MUST BE APPROVED AND ACCEPTED FOR RECORDATION BY THE COMMUNITY DEVELOPMENT DIRECTOR ON OR BEFORE THE EXPIRATION DATE, THE 11TH DAY OF OCTOBER, 2007, OR AN EXTENSION OF TIME FOR THE TENTATIVE MAP MUST BE APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON OR BEFORE SAID DATE.

THIS FINAL MAP IS APPROVED AND ACCEPTED FOR RECORDATION THIS 1st DAY OF November, 2005, BY THE WASHOE COUNTY COMMUNITY DEVELOPMENT DIRECTOR. THE OFFER OF DEDICATION OF THE WATER FACILITIES AND SEWER FACILITIES, AND ASSOCIATED APPURTENANCES, IS REJECTED AT THIS TIME, BUT WILL REMAIN OPEN IN ACCORDANCE WITH NRS CHAPTER 278.

Adrian P. Freum November 1, 2005
ADRIAN P. FREUM, AICP DATE
COMMUNITY DEVELOPMENT DIRECTOR

OFFICIAL PLAT		COUNTY RECORDER'S CERTIFICATE	
ST. JAMES'S VILLAGE - UNIT 1H		FILE NO: <u>3305275</u>	
A COMMON INTEREST COMMUNITY		FILED FOR RECORD AT THE REQUEST OF <u>St. James's Village</u>	
BEING A PORTION OF THE NW1/4 OF SECTION 13,		ON THIS <u>9</u> DAY OF <u>November</u> , 2005	
T.17N., R.19E., M.D.M.		AT <u>41</u> MINUTES PAST <u>42</u> O'CLOCK P.M.	
WASHOE COUNTY		OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA	
C & M ENGINEERING AND DESIGN, LTD		Kathryn L. Burke	
9498 DOUBLE R BLVD, SUITE B		COUNTY RECORDER	
RENO, NV 89521		BY: <u>C. Bartley</u>	
PHONE: (775) 856-3312		DEPUTY	
FAX: (775) 856-3318		FEE: <u>64.00</u>	
JOB NO. 04-008.08		SHEET <u>1</u> OF <u>2</u>	
DATE 4/8/05			

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

3305275

Subdivision Tract Map 4567

4567
CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

ST. JAMES'S VILLAGE - UNIT 2C

OWNER'S CERTIFICATE

THIS IS TO CERTIFY THAT THE UNDERSIGNED ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, IS THE OWNER OF THE TRACT OF LAND REPRESENTED ON THIS PLAT, AND HAS CONSENTED TO THE PREPARATION AND RECORDATION OF THIS PLAT, AND THAT THE SAME IS EXECUTED IN COMPLIANCE WITH AND SUBJECT TO THE PROVISIONS OF NRS CHAPTERS 116 AND 278, THAT THE STREETS, AVENUES, HIGHWAYS AND ALL APPURTENANCES THERETO AS SHOWN ARE HEREBY GRANTED AND SET APART TO BE USED AS PRIVATE ACCESS FOR- EVER; AND HEREBY GRANTS TO ALL PUBLIC UTILITY AND CABLE TV COMPANIES, AND WASHOE COUNTY PERMANENT EASEMENTS SHOWN ON THIS PLAT FOR THE CONSTRUCTION AND MAINTENANCE OF UTILITY AND CABLE TV SYSTEMS, AND WATER AND SANITARY SEWER FACILITIES, TOGETHER WITH THE RIGHT OF ACCESS THERETO FOREVER, AND HEREBY GRANTS PERMANENT PRIVATE EASEMENTS SHOWN ON THIS PLAT FOR PLOWED SNOW STORAGE AND CONSTRUCTION AND MAINTENANCE OF TRAFFIC CONTROL, SIGNAGE, THE WATER FACILITIES AND SEWER FACILITIES AND ASSOCIATED APPURTENANCES ARE HEREBY DEDICATED TO WASHOE COUNTY. THE OWNER AND ASSIGNEES AGREE TO THE USE OF RESIDENTIAL WATER METERS.

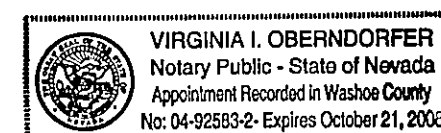
ST. JAMES'S VILLAGE, INC.,
A NEVADA CORPORATION

Frederick D. Woodside
FREDERICK D. WOODSIDE, VICE PRESIDENT

STATE OF NEVADA
COUNTY OF WASHOE

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON SEPTEMBER 21, 2006, BY FREDERICK D. WOODSIDE, AS VICE PRESIDENT OF ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION.

Virginia I. Oberndorfer
NOTARY PUBLIC



TITLE COMPANY CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT THIS PLAT HAS BEEN EXAMINED AND THAT ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, OWNS OF RECORD AN INTEREST IN THE LAND DELINEATED HEREON AND THAT IT IS THE ONLY OWNER OF RECORD OF SAID LAND; THAT ALL THE OWNERS OF RECORD OF THE LAND HAVE SIGNED THE FINAL MAP; THAT NO ONE HOLDS OF RECORD A SECURITY INTEREST IN THE LAND TO BE DIVIDED; AND THAT THERE ARE NO LIENS OF RECORD AGAINST THE COMMON INTEREST COMMUNITY FOR DELINQUENT STATE, COUNTY, MUNICIPAL, FEDERAL OR LOCAL TAXES OR ASSESSMENTS COLLECTED AS TAXES OR SPECIAL ASSESSMENTS, AND THAT A GUARANTEE DATED 8-25-06, FOR THE BENEFIT OF THE COUNTY OF WASHOE, STATE OF NEVADA, HAS BEEN ISSUED WITH REGARD TO ALL THE ABOVE.

WESTERN TITLE COMPANY OF NEVADA

BY: David Evans 8-29-06
DAVID EVANS, VICE PRESIDENT DATE

UTILITY COMPANIES CERTIFICATE

THE UTILITY EASEMENTS SHOWN ON THIS PLAT HAVE BEEN CHECKED AND APPROVED BY THE UNDERSIGNED PUBLIC UTILITY AND CABLE TV COMPANIES.

Sierra Pacific Power Company 6/28/2006
SIERRA PACIFIC POWER COMPANY DATE

Nevada Bell Telephone Company 7/1/2006
NEVADA BELL TELEPHONE COMPANY d/b/a AT&T NEVADA DATE

Charter Communications 7/10/2006
CHARTER COMMUNICATIONS DATE

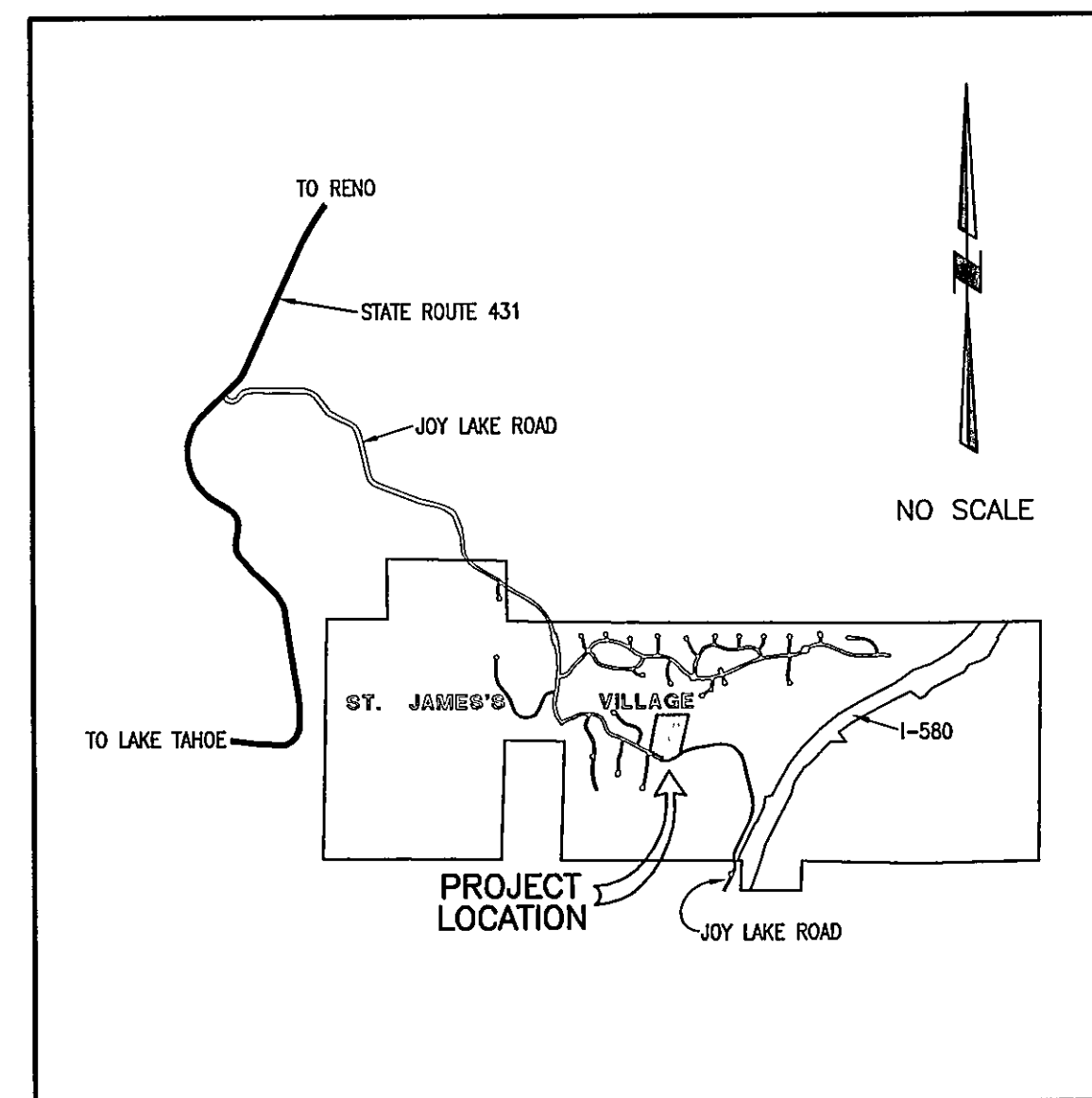
Washoe County Department of Water Resources 6/29/06
WASHOE COUNTY DEPARTMENT OF WATER RESOURCES DATE

TAXATION CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT ALL THE PROPERTY TAXES ON THE LAND FOR THE FISCAL YEAR HAVE BEEN PAID AND THAT THE FULL AMOUNT OF ANY DEFERRED PROPERTY TAXES FOR THE CONVERSION OF THE PROPERTY FROM AGRICULTURAL USE HAS BEEN PAID PURSUANT TO NRS 361A.265.

WASHOE COUNTY TREASURER

Daney A. Richard 9/25/06
TITLE: Assistant Chief Deputy Treasurer DATE



VICINITY MAP

SURVEYOR'S CERTIFICATE

I, GEORGE FONG, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEVADA, CERTIFY THAT:

1. THIS PLAT REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER MY DIRECT SUPERVISION AT THE INSTANCE OF ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION.
2. THE LANDS SURVEYED LIE WITHIN THE NW1/4, NE1/4 AND SW1/4 OF SECTION 14, T.17N., R.19E., M.D.M., AND THE SURVEY WAS COMPLETED ON OCTOBER 17, 2005.
3. THIS PLAT COMPLIES WITH THE APPLICABLE STATE STATUTES AND ANY LOCAL ORDINANCES IN EFFECT ON THE DATE THAT THE GOVERNING BODY GAVE ITS FINAL APPROVAL.
4. THE MONUMENTS DEPICTED ON THE PLAT WILL BE OF THE CHARACTER SHOWN AND OCCUPY THE POSITIONS INDICATED BY 9-28-07 AND AN APPROPRIATE FINANCIAL GUARANTEE WILL BE POSTED WITH THE GOVERNING BODY BEFORE RECORDATION TO ENSURE THE INSTALLATION OF THE MONUMENTS.

George Fong 4/25/06
GEORGE FONG - PLS 4043 DATE



WATER RIGHT DEDICATION CERTIFICATE

THE WATER AND SEWER RESOURCE REQUIREMENTS SET FORTH IN ARTICLE 422 OF THE WASHOE COUNTY DEVELOPMENT CODE, RELATED TO THE DEDICATION OF WATER RESOURCES HAVE BEEN SATISFIED.

Vahid Behmaram 6/28/06
WASHOE COUNTY DEPARTMENT OF WATER RESOURCES DATE

DIVISION OF WATER RESOURCES CERTIFICATE

THIS PLAT IS APPROVED BY THE STATE OF NEVADA DIVISION OF WATER RESOURCES OF THE DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES CONCERNING WATER QUANTITY, SUBJECT TO THE REVIEW OF APPROVAL ON FILE IN THIS OFFICE.

Robert H. Zwick, P.E. 7/5/2006
DIVISION OF WATER RESOURCES DATE

DISTRICT BOARD OF HEALTH CERTIFICATE

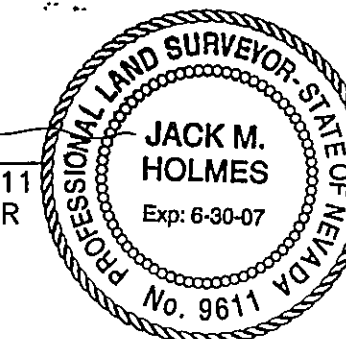
THIS FINAL MAP IS APPROVED BY THE WASHOE COUNTY DISTRICT BOARD OF HEALTH. THIS APPROVAL CONCERNS SEWAGE DISPOSAL, WATER POLLUTION, WATER QUALITY AND WATER SUPPLY FACILITIES AND IS PREDICATED UPON PLANS FOR A PUBLIC WATER SUPPLY AND INDIVIDUAL SYSTEMS FOR DISPOSAL OF SEWAGE.

For the District Board of Health 7/7/06
FOR THE DISTRICT BOARD OF HEALTH DATE

COUNTY SURVEYOR'S CERTIFICATE

I CERTIFY THAT I HAVE EXAMINED THIS MAP CONSISTING OF TWO SHEETS, AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT AND THAT AN ADEQUATE PERFORMANCE GUARANTEE HAS BEEN FILED GUARANTEEING THE MONUMENTS AS SHOWN WILL BE SET BY 9/28/07.

Jack M. Holmes 9/28/06
JACK M. HOLMES, PLS 9611
WASHOE COUNTY SURVEYOR DATE



COMMUNITY DEVELOPMENT CERTIFICATE

THE TENTATIVE MAP FOR ST. JAMES'S VILLAGE, TM5-2-92, WAS RECOMMENDED FOR APPROVAL BY THE WASHOE COUNTY PLANNING COMMISSION ON THE 8TH DAY OF JULY 1992, AND APPROVED BY THE WASHOE COUNTY COMMISSION ON THE 18TH DAY OF AUGUST, 1992.

THE FIRST FINAL MAP APPROVED FOR THIS TENTATIVE MAP AFTER THE 1ST DAY OF JULY 2001, THEREBY ESTABLISHING THE ANNIVERSARY DATE UNDER NRS 278.360, WAS APPROVED AND ACCEPTED FOR RECORDATION ON THE 11TH DAY OF OCTOBER 2002. THE MOST RECENTLY RECORDED FINAL MAP, UNIT 1H, FOR THIS TENTATIVE MAP WAS APPROVED AND ACCEPTED FOR RECORDATION ON THE 1ST DAY OF NOVEMBER 2005.

THIS FINAL MAP, ST. JAMES'S VILLAGE - UNIT 2C, MEETS ALL APPLICABLE STATUTES, ORDINANCES, AND CODE PROVISIONS; IS IN SUBSTANTIAL CONFORMANCE WITH THE TENTATIVE SUBDIVISION MAP CASE NO. TM5-2-92; AND ALL CONDITIONS HAVE BEEN MET.

THE NEXT FINAL MAP FOR TM5-2-92 MUST BE APPROVED AND ACCEPTED FOR RECORDATION BY THE COMMUNITY DEVELOPMENT DIRECTOR ON OR BEFORE THE EXPIRATION DATE, THE 11TH DAY OF OCTOBER, 2007, OR AN EXTENSION OF TIME FOR THE TENTATIVE MAP MUST BE APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON OR BEFORE SAID DATE.

THIS FINAL MAP IS APPROVED AND ACCEPTED FOR RECORDATION THIS 4th DAY OF October, 2006, BY THE WASHOE COUNTY COMMUNITY DEVELOPMENT DIRECTOR. THE OFFER OF DEDICATION OF THE WATER FACILITIES AND SEWER FACILITIES, AND ASSOCIATED APPURTENANCES, IS REJECTED AT THIS TIME, BUT WILL REMAIN OPEN IN ACCORDANCE WITH NRS CHAPTER 278.

Adrian P. Freundt, MCP 10/04/2006
COMMUNITY DEVELOPMENT DIRECTOR DATE

OFFICIAL PLAT

ST. JAMES'S VILLAGE - UNIT 2C

A COMMON INTEREST COMMUNITY
SITUATE WITHIN THE NW1/4, NE1/4 AND SW1/4 OF SECTION 14,
T.17N., R.19E., M.D.M.
BEING A PORTION OF PARCEL A OF SURVEY MAP 4040

WASHOE COUNTY

NEVADA

C & M ENGINEERING AND DESIGN, LTD
9498 DOUBLE R BLVD., SUITE B
RENO, NV 89521
PHONE: (775) 856-3312
FAX: (775) 856-3318

JOB NO. 04-008.12
DATE 10/17/05

SHEET 1 OF 2

COUNTY RECORDER'S CERTIFICATE

FILE NO: 3446757

FILED FOR RECORD AT THE REQUEST OF
St. James Village
ON THIS 4th DAY OF October, 2006
AT 49 MINUTES PAST 10 O'CLOCK A.M.
OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA

Kathryn L. Burke
COUNTY RECORDER

BY: C. Bartley
DEPUTY
FEE: 64.00

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

3446757

Subdivision Tract Map 4705

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

1885

BENNINGTON COURT - UNIT 2 ST. JAMES'S VILLAGE - UNIT 2D

OWNER'S CERTIFICATE

THIS IS TO CERTIFY THAT THE UNDERSIGNED ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, IS THE OWNER OF THE TRACT OF LAND REPRESENTED ON THIS PLAT, HAS CONSENTED TO THE PREPARATION AND RECORDATION OF THIS PLAT, THAT THE SAME IS EXECUTED IN COMPLIANCE WITH AND SUBJECT TO THE PROVISIONS OF NRS CHAPTERS 116 AND 278, AND HEREBY GRANTS TO ALL PUBLIC UTILITIES, TRUCKEE MEADOWS WATER AUTHORITY AND WASHOE COUNTY PERMANENT EASEMENTS SHOWN ON THIS PLAT FOR THE CONSTRUCTION AND MAINTENANCE OF UTILITY SYSTEMS AND WATER AND SANITARY SEWER FACILITIES, TOGETHER WITH THE RIGHT OF ACCESS THEREO, FOREVER. THE SEWER FACILITIES AND ASSOCIATED APPURTENANCES ARE HEREBY DEDICATED TO WASHOE COUNTY. THE OWNER AND ASSIGNEES AGREE TO THE USE OF RESIDENTIAL WATER METERS.

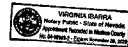
ST. JAMES'S VILLAGE, INC.,
A NEVADA CORPORATION

Frederick D. Woodside
FREDERICK D. WOODSIDE, AUTHORIZED
AGENT OF ST. JAMES'S VILLAGE, INC.

STATE OF NEVADA S.S.
COUNTY OF WASHOE

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON February 27, 2019, BY FREDERICK D. WOODSIDE, AUTHORIZED AGENT OF ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION.

Virginia Barrera
NOTARY PUBLIC



TITLE COMPANY CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT THIS PLAT HAS BEEN EXAMINED AND THAT ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, OWNS OF RECORD AN INTEREST IN THE LAND DELINEATED HEREON AND THAT IT IS THE ONLY OWNER OF RECORD OF SAID LAND; THAT ALL THE OWNERS OF RECORD OF THE LAND HAVE SIGNED THE FINAL MAP; THAT NO ONE HOLDS OF RECORD A SECURITY INTEREST IN THE LAND TO BE DIVIDED; AND THAT THERE ARE NO LINGS OF RECORD AGAINST THE COMMON INTEREST COMMUNITY FOR DELINQUENT STATE, COUNTY, MUNICIPAL, FEDERAL OR LOCAL TAXES OR ASSESSMENTS COLLECTED AS TAXES OR SPECIAL ASSESSMENTS, AND THAT A MINOR TITLE REPORT DATED 4-9-19 FOR THE BENEFIT OF THE COUNTY OF WASHOE, STATE OF NEVADA, HAS BEEN ISSUED WITH REGARD TO ALL THE ABOVE.

TICOR TITLE OF NEVADA, INC.

BY: *Ron E. ...* 4-10-19
RON BREAZEALE, TITLE OPERATIONS
MANAGER, VICE PRESIDENT DATE

UTILITY COMPANIES CERTIFICATE

THE UTILITY EASEMENTS SHOWN ON THIS PLAT HAVE BEEN CHECKED AND APPROVED BY THE UNDERSIGNED PUBLIC UTILITY AND CABLE TV COMPANIES, AND THE TRUCKEE MEADOWS WATER AUTHORITY.

Scott J. Hawn 4-15-19
SIERRA PACIFIC POWER COMPANY, 685 MY ENERGY
BY: SCOTT J. HAWN, LINES DRAFTSMAN DATE

Cliff Cooper 4-12-19
NORTH BELL TELEPHONE COMPANY, 4750/6 AT&T NEVADA
BY: CLIFF COOPER, MGR-OSP PLANNING AND ENGINEERING DESIGN DATE

Timothy Simpson 4/19/19
CHAPTER COMMUNITIES, 10000 VILLAGE COMMONS
BY: TIMOTHY SIMPSON, COMMUNITY DEVELOPMENT DEPT.
THOMAS COMMUNITY LICENSED ENGINEER

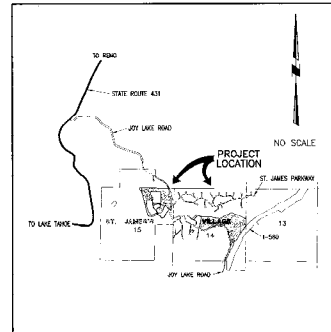
David Alvarado 4-18-2019
WASHOE COUNTY COMMUNITY SERVICES DEPARTMENT
BY: DAVID ALVARADO, LICENSED ENGINEER DATE

John R. Zimmerman 4-12-2019
TRUCKEE MEADOWS WATER AUTHORITY
BY: JOHN R. ZIMMERMAN, WATER RESOURCES MANAGER DATE

WATER AND SEWER RESOURCE REQUIREMENTS

THE DEVELOPMENT DEPICTED ON THIS PLAT IS IN CONFORMANCE WITH THE PROVISIONS SET FORTH IN ARTICLE 422 OF THE WASHOE COUNTY DEVELOPMENT CODE (CHAPTER 110).

Wahid Beharavan 4/15/19
WASHOE COUNTY COMMUNITY SERVICES DEPARTMENT DATE



VICINITY MAP

SURVEYOR'S CERTIFICATE

I, GEORGE FONG, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEVADA, CERTIFY THAT:

- THIS PLAT REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER MY DIRECT SUPERVISION AT THE INSTANCE OF ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION.
- THE LANDS SURVEYED LIE WITHIN SECTION 14 AND NE1/4 OF SECTION 15, T17N, R18E, N.D.M., AND THE SURVEY WAS COMPLETED ON DECEMBER 10, 2018.
- THIS PLAT COMPLIES WITH THE APPLICABLE STATE STATUTES AND ANY LOCAL ORDINANCES IN EFFECT ON THE DATE THAT THE GOVERNING BODY GAVE ITS FINAL APPROVAL.
- THE MONUMENTS DEPICTED ON THE PLAT ARE OF THE CHARACTER SHOWN AND OCCUPY THE POSITIONS AS INDICATED, AND THAT NO FINANCIAL GUARANTEE WILL BE REQUIRED TO BE POSTED WITH THE GOVERNING BODY BEFORE RECORDATION TO ENSURE THE INSTALLATION OF THE MONUMENTS.

George Fong 4/22/19
GEORGE FONG, PLS 20464
DATE



DIVISION OF WATER RESOURCES CERTIFICATE

THIS PLAT IS APPROVED BY THE STATE OF NEVADA DIVISION OF WATER RESOURCES OF THE DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES CONCERNING WATER QUANTITY, SUBJECT TO THE REVIEW OF APPROVAL ON FILE IN THIS OFFICE.

Madeline Wilson 4/22/2019
DIVISION OF WATER RESOURCES DATE

TAXATION CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT ALL THE PROPERTY TAXES FOR ASSESSOR'S PARCELS NUMBER 046-180-13, 156-040-11, AND 156-084-18 FOR THE FISCAL YEAR HAVE BEEN PAID AND THAT THE FULL AMOUNT OF ANY DEFERRED PROPERTY TAXES FOR THE CONVERSION OF THE PROPERTY FROM AGRICULTURAL USE HAS BEEN PAID PURSUANT TO NRS 301A.260.

Deputy Treasurer 4/12/19
DATE

DISTRICT BOARD OF HEALTH CERTIFICATE

THIS FINAL MAP IS APPROVED BY THE WASHOE COUNTY DISTRICT BOARD OF HEALTH. THIS APPROVAL CONCERNS SEWAGE DISPOSAL, WATER POLLUTION, WATER QUALITY AND WATER SUPPLY FACILITIES AND IS PREDICATED UPON PLANS FOR A PUBLIC WATER SUPPLY AND INDIVIDUAL SYSTEMS FOR DISPOSAL OF SEWAGE.

Wayne Handrock 06/17/2019
FOR THE DISTRICT BOARD OF HEALTH DATE

COUNTY SURVEYOR'S CERTIFICATE

I, COUNTY THAT I HAVE EXAMINED THIS MAP CONSISTING OF THREE SHEETS, AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT.

Wayne Handrock 6-19-19
WAYNE HANDROCK, PLS 20464
WASHOE COUNTY SURVEYOR DATE



COMMUNITY DEVELOPMENT CERTIFICATE

THE TENTATIVE MAP FOR ST. JAMES'S VILLAGE, TMS-2-92, WAS RECOMMENDED FOR APPROVAL BY THE WASHOE COUNTY PLANNING COMMISSION ON THE 8TH DAY OF JULY, 1992, AND APPROVED BY THE WASHOE COUNTY COMMISSION ON THE 18TH DAY OF AUGUST, 1992.

PER WASHOE COUNTY DEVELOPMENT CODE ARTICLE 908, AN EXTENSION OF TIME FOR THE TENTATIVE MAP OF ST. JAMES'S VILLAGE WAS GRANTED BY THE WASHOE PLANNING COMMISSION ON JULY 6, 2010 FOR TWO YEARS. THEREFORE, THE NEXT FINAL MAP FOR TMS-2-92 MUST BE APPROVED AND ACCEPTED FOR RECORDATION BY THE COMMUNITY DEVELOPMENT DIRECTOR ON OR BEFORE THE EXPIRATION DATE OF THE 11TH DAY OF OCTOBER, 2012.

PER ORDINANCE 1488 APPROVED BY THE BOARD OF WASHOE COUNTY COMMISSIONERS ON SEPTEMBER 25, 2012 AND RECORDED ON OCTOBER 9, 2012 AS DOCUMENT NO. 4160879, AN EXTENSION OF TIME FOR RECORDATION OF THE NEXT FINAL MAP WAS EXTENDED TO OCTOBER 16, 2016. PER SAME SAID ORDINANCE 1488, A FURTHER EXTENSION OF TIME FOR THE RECORDATION OF THE NEXT FINAL MAP WAS EXTENDED TO OCTOBER 16, 2020.

THIS FINAL MAP, BENNINGTON COURT - UNIT 2, ST. JAMES'S VILLAGE - UNIT 2D, MEET ALL APPLICABLE STATUTES, ORDINANCES, AND CODE PROVISIONS; IS IN SUBSTANTIAL CONFORMANCE WITH THE TENTATIVE SUBDIVISION MAP CASE NO. TMS-2-92; AND ALL CONDITIONS HAVE BEEN MET FOR THE PURPOSES OF RECORDATION OF THIS MAP.

THE NEXT FINAL MAP FOR TMS-2-92 MUST BE APPROVED AND ACCEPTED FOR RECORDATION BY THE COMMUNITY DEVELOPMENT DIRECTOR ON OR BEFORE THE EXPIRATION DATE, THE 15TH DAY OF OCTOBER, 2021, OR AN EXTENSION OF TIME FOR THE TENTATIVE MAP MUST BE APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON OR BEFORE SAID DATE.

THIS FINAL MAP IS APPROVED AND ACCEPTED FOR RECORDATION THIS 22 DAY OF JUNE, 2019, BY THE WASHOE COUNTY COMMUNITY DEVELOPMENT DIRECTOR.

Morja Hrudentz 6-20-19
MORJA HRUDENTZ, DIRECTOR
OF PLANNING AND ZONING DATE

IMMUTATIVE INTERESTS
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

4928453

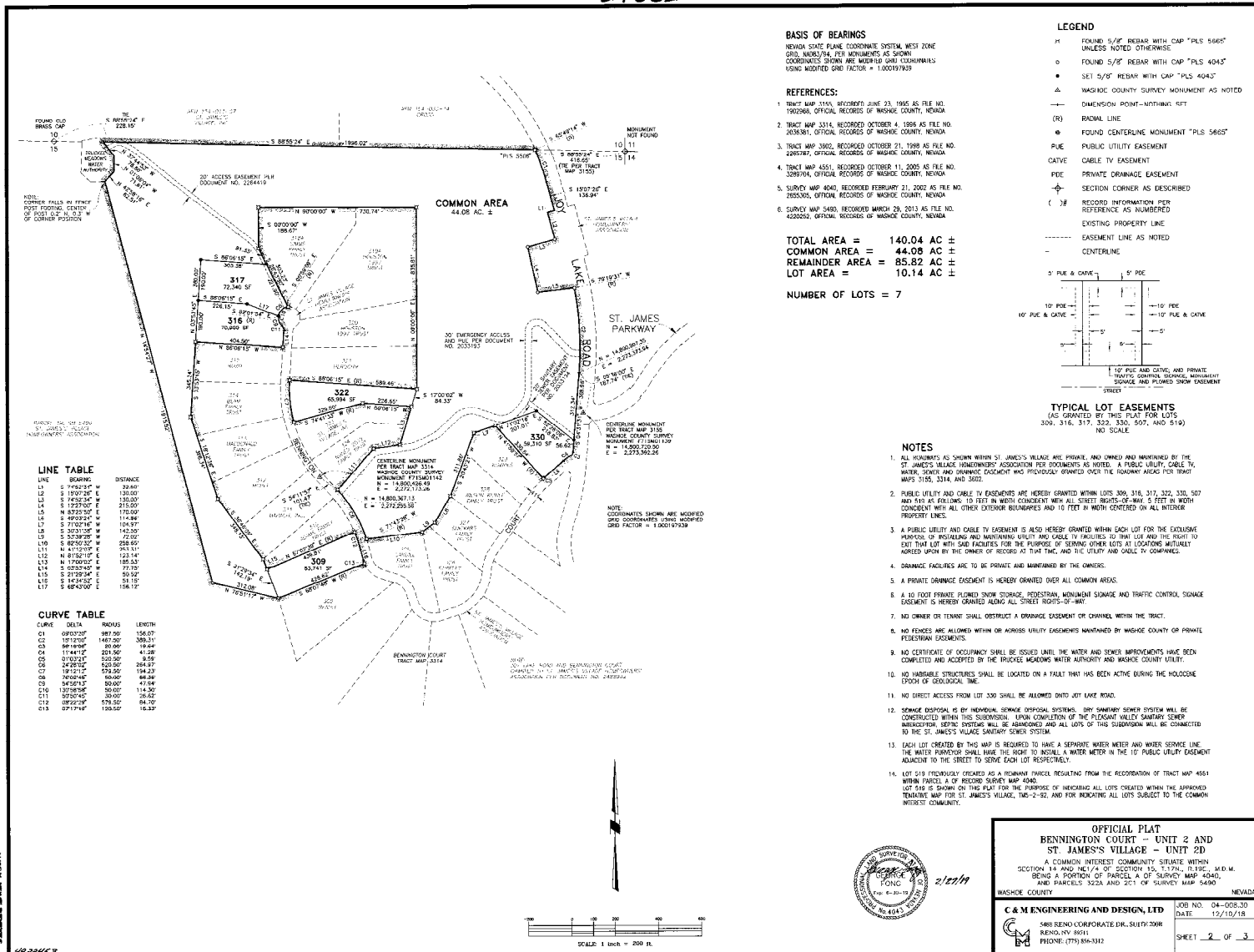
OFFICIAL PLAT BENNINGTON COURT - UNIT 2 AND ST. JAMES'S VILLAGE - UNIT 2D A COMMON INTEREST COMMUNITY SITUATE WITHIN SECTION 14 AND NE1/4 OF SECTION 15, T17N, R18E, N.D.M., BEING A PORTION OF PARCEL A OF SURVEY MAP 4040, AND PARCELS 322A AND 201 OF SURVEY MAP 5190		COUNTY RECORDER'S CERTIFICATE FILE NO. <u>1922453</u> FILED FOR RECORD AT THE REQUEST OF <u>C & M Engineering</u> ON THIS DAY OF <u>June</u> 2019 AT <u>10</u> MINUTES PAST <u>9</u> O'CLOCK <u>P.M.</u> OFFICIAL RECORDER OF WASHOE COUNTY, NEVADA
WASHOE COUNTY C & M ENGINEERING AND DESIGN, LTD 5485 RENO CORPORATE BLVD., SUITE 200R RENO, NV 95111 PHONE: (775) 856-3312	JOB NO. 04-00930 DATE 12/10/18 COUNTY RECORDER BY: <u>A. Peaslee</u> DEPUTY REC. <u>86-00</u>	SHEET <u>1</u> OF <u>3</u>

Subdivision Tract map 5331

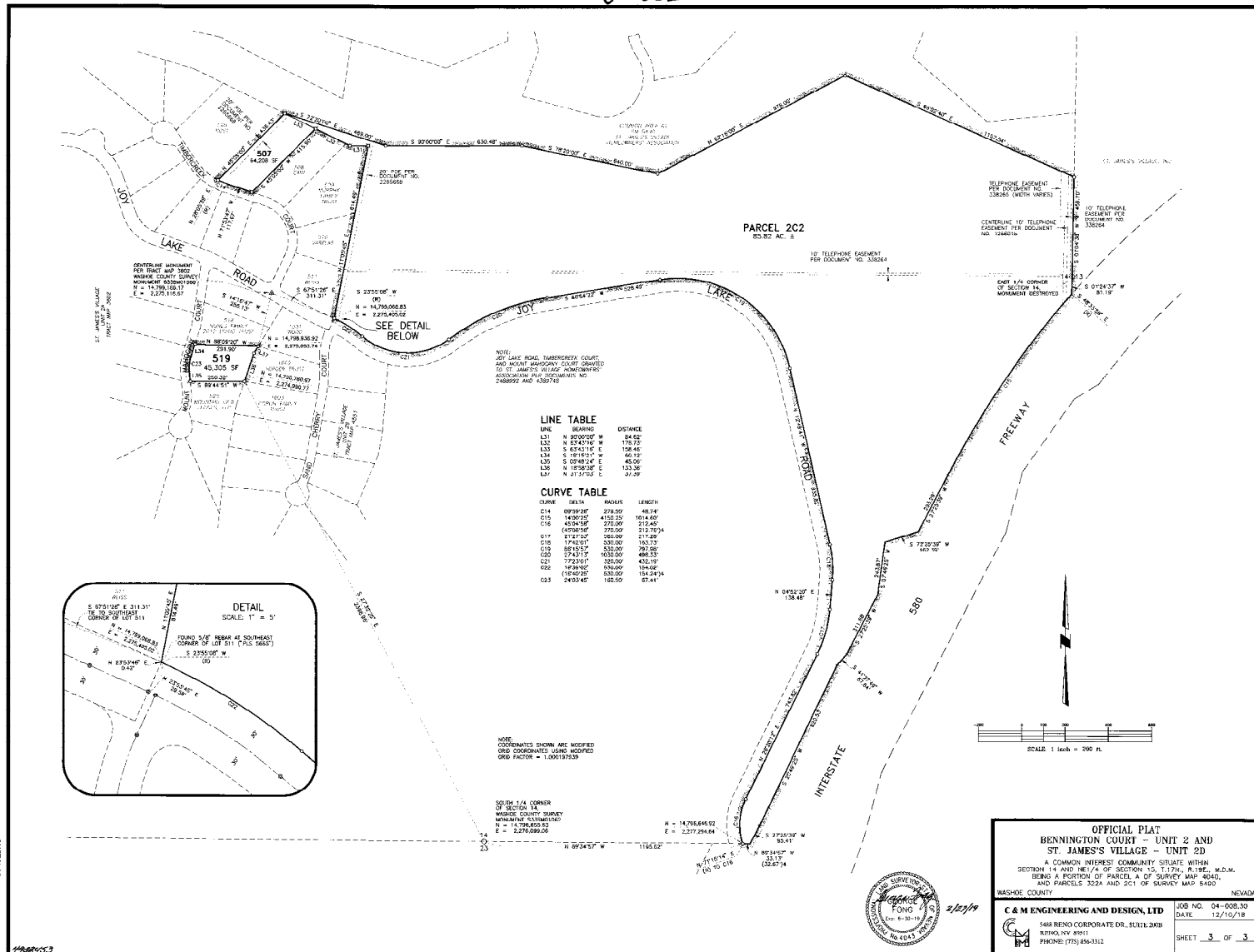
5331

CHANGES TO THIS MAP
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

5331A



53318



















Subdivision Tract Map 5331 B

53318

COLLECTIVE ROCKS
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THE MAP



LEGEND

- | | |
|---|--------------------|
|  | 11° ELBOW |
|  | 22° ELBOW |
|  | 45° ELBOW |
|  | 90° ELBOW |
|  | BACKFLOW PREVENTOR |
|  | CHECK VALVE |
|  | FIRE HYDRANT |
|  | FLUSH VALVE |
|  | METER-DUAL |
|  | METER-SINGLE |
|  | REDUCER |
|  | SERVICE-DUAL |
|  | SERVICE-SINGLE |
|  | TEE |
|  | VALVE |
|  | Construction Notes |

☐ WATER CONSTRUCTION NOTES

- | | |
|-----|---|
| W1 | (1) 8" FLG TEE W/ STD THRUST BLOCK,
(2) 8" FLOPGO GATE VALVES |
| W2 | WATER STUB FOR FUTURE CUL-DE-SAC
INSTALL AT SAME ELEVATION AS TEE, MAINTAIN MIN. 3' OF COVER OVER WATER
AT DITCH ELEVATION |
| W3 | (1) 8" FLUSH VALVE ASSEMBLY (10E-2) |
| W4 | (1) 8" PG GATE VALVE W/ STD THRUST BLOCK |
| W5 | (1) 8" FIRE HYDRANT SERVICE DETAIL (DETAIL 10F-2) |
| W6 | WATER SERVICE LATERAL CROSSING STREET DRAIN/SEWER (DETAIL 10L-13) |
| W7 | (1) 8" FLG CROSS W/ STD. THRUST BLOCK,
(3) 8" FLOPGO GATE VALVES |
| W8 | INSTALL 15' WIDE ALL WEATHER ROAD, IF ROAD GRADE EXCEEDS 8% MUST BE PAVED. |
| W9 | WATER CROSSING STREET DRAIN, RESTRAIN ALL JOINTS WITHIN 10' OF CROSSING
SEE DETAIL 10L-11 |
| W10 | 1" CTS-HDPE (PIPE LENGTH AS INDICATED ON PLANS) |
| W11 | (2) 1" TAP (DETAIL 10H-2)
(1) 1" DUAL SERVICE FOR 3/4" METER & ASSEMBLY (DETAIL 10K-6) |
| W12 | WATER CROSSING SEWER LATERAL, CENTER WATER PIPE AT CROSSING
SEE DETAIL 10L-12 |
| W13 | (1) 1" TAP (DETAIL 10H-2)
(1) 1" SINGLE SERVICE FOR 3/4" METER & ASSEMBLY (DETAIL 10K-2) |
| W14 | (1) CAP AND MARK FOR FUTURE EXTENSION |
| W15 | MAINTAIN MIN. 10" HORIZONTAL (OUTSIDE TO OUTSIDE) SEPARATION FROM SD/SS |
| W16 | (1) 8" ELBOW 45 DEGREE W/ STD THRUST BLOCK (DETAIL 10L-2) |
| W17 | (1) 8" ELBOW 22.5 DEGREE W/ STD THRUST BLOCK (DETAIL 10L-2) |
| W18 | AIR RELEASE VALVE ASSEMBLY (10L-4) AT HIGH POINT |
| W19 | NINLE FLUSH ASSEMBLY (DETAIL 10E-5) AT LOW POINT |
| W20 | CROSSING SURFACE WATER, WATER SHALL HAVE MIN. 5 FT OF BACKFILL, PIPELINE SHALL BE INSTALLED
WITHIN A CASING MEETING REQUIREMENTS OF SECTION 1.1.10, AND ISOLATION VALVES ARE REQUIRED AT BOTH
ENDS OF CROSSING, VALVES TO BE EASILY ACCESSIBLE AND NOT SUBJECT TO FLOODING. |

2 WORKING DAYS
BEFORE YOU DIG CALL USA
TOLL FREE 1-800-227-2600

[illegible]

FOR TMWA USE ONLY NEW BUSINESS WATER			
WO#		Map #	
New Main			
Date Installed:		Depth:	
Pressure Test Date:			
PSI		Hours Tested:	
Inspector:			
Contractor:			
Feet Laid	Size	Type	Main/Svc
Retired/ Abandoned/Removed			
Feet Ret.	Size	Type	Main/Svc
# of Meter boxes Inst./Size:			
# of Setters Inst./Size:			

2 working
days

Call
before you
Dig.

1-800-227-2600

TRUCKEE MEADOWS WATER

A U T H O R I T Y
1355 CAPITAL BLVD. / PO BOX 30013
RENO, NEVADA 89502-3013
PH 775-834-8000 / FX 775-834-8003

C & M ENGINEERING AND DESIGN, LTD
5488 RENO CORPORATE DR, STE 200B, RENO, NV 89511
PHONE: (775) 856-3312

ABBREVIATIONS

MRV	AIR RELEASE VALVE	W/
ASSY	ASSEMBLY	XING
ROT	BOTTOM (OF PIPE)	MJ
BOV	BLOW-OFF VALVE	MRJ
CL	CENTERLINE	OD
CONST	CONSTRUCT	PL OR P/L
CTS	COPPER TUBE SIZE	PO
DII, OR DIP	DUCTILE IRON PIPE	PUE
DIA	DIAMETER	PVC
DDCA	DOUBLE CHECK DETECTOR ASSEMBLY	R
EX	EXISTING	RCA
FH	FLANGE COUPLING ADAPTER	ROW OR R/W
FX	FIRE HYDRANT	RFB
FLG OR FL	FLANGE	STIL
FVA	FLUSH VALVE ASSEMBLY	TB
GV	GATE VALVE	TS
HDPE	HIGH DENSITY POLYETHYLENE	TYP
HP	HIGH POINT	W
		W/
		XING

INVERT ELEVATION
MECHANICAL JOINT
MECHANICALLY RESTRAINED JOINT
OUTSIDE DIAMETER
PROPERTY LINE
PUSH ON
PUBLIC UTILITY EASEMENT
POLYVINYL CHLORIDE PIPE
RADIUS
RESTRAINED FLANGE COUPLING ADAPTER
RIGHT OF WAY
REDUCED PRESSURE BACKFLOW ASSEMBLY
STEEL
THRUST BLOCK
TEST STATION
TYPICAL
WATER
WITH
CROSSING

WARNING:
PER PROVISIONS OF NRS 625, DRAWINGS AND DESIGNS ARE CONSIDERED PROPERTY OF THE ENGINEER

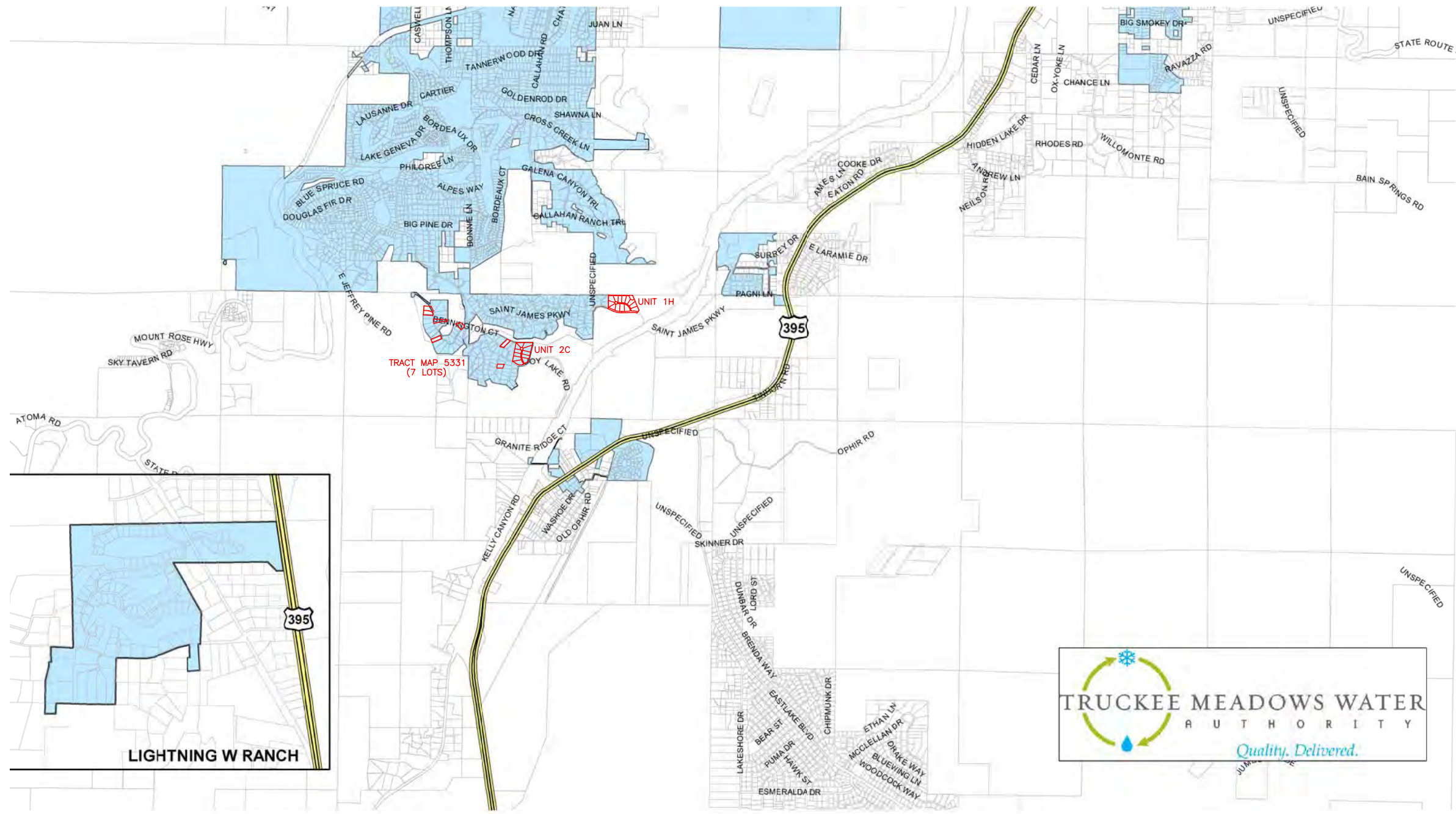


EXHIBIT B

[SEE ATTACHED]



Technical Memorandum

To: Fred Woodside

From: Michael Hardy, P.E., P.G., WRS

Cc: Kenneth Krater

Title: St. James Village Water System Analysis for 12 Additional Annexed Lots

Date: August 24, 2021

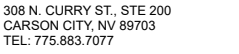
1.0 INTRODUCTION

The St. James Village Development is a gated mountain community located approximately 7 miles up Mount Rose Highway (Hwy 431), from Hwy 395, to Joy Lake Road and then approximately 2 miles down to the guard station. The water system was originally developed in the mid 1990's by St. James Village Inc. and dedicated to Washoe County Department of Water Resources (WDWR). On December 31, 2014, WDWR and Truckee Meadows Water Authority (TMWA) consolidated their two water utilities, which is now operated by TMWA, making TMWA the owner and operator of the water system in the St. James Village Service Area. The St. James Service Area straddles two hydrographic basins, which include the Pleasant Valley (Basin #88) and Washoe Valley (Basin #89) (Fig. 1).

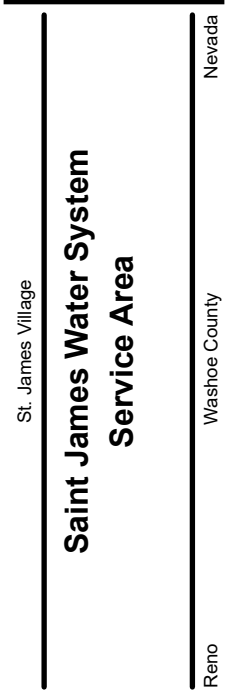
The water system, which serves the St. James Village gated community, also serves several additional single family residential lots (13 lots) with homes outside the St. James Village gated community on Joy Lake Road. These lots are located up to a mile back up Joy Lake Road to the intersection of Austrian Pine Road where TMWA has a pressure reducing station and a cluster of three water valves that are only opened in the event of an emergency (Fig. 2).

The St. James Village water system currently consists of 1) two production wells, 2) a 1-million-gallon (MG) storage tank (located on Bennington Court cul-de-sac), and distribution water mains separated into 5 pressure zones. Many of the existing distribution water mains contain dead ends lacking proper looping, which is important for service redundancy and greater fire flow to the customers.

To date, the St. James Village Development has recorded 227 lots through final mapping with approximately 240± lots (1 acre+ in size) left to record. Currently, St. James Village has seven lots that were approved by Washoe County, but not annexed into the TMWA service area at the time of approval. Additionally, St. James Village Development would like to have an additional five lots recorded in the next month, making a total of 12 lots annexed into TMWA's service area.



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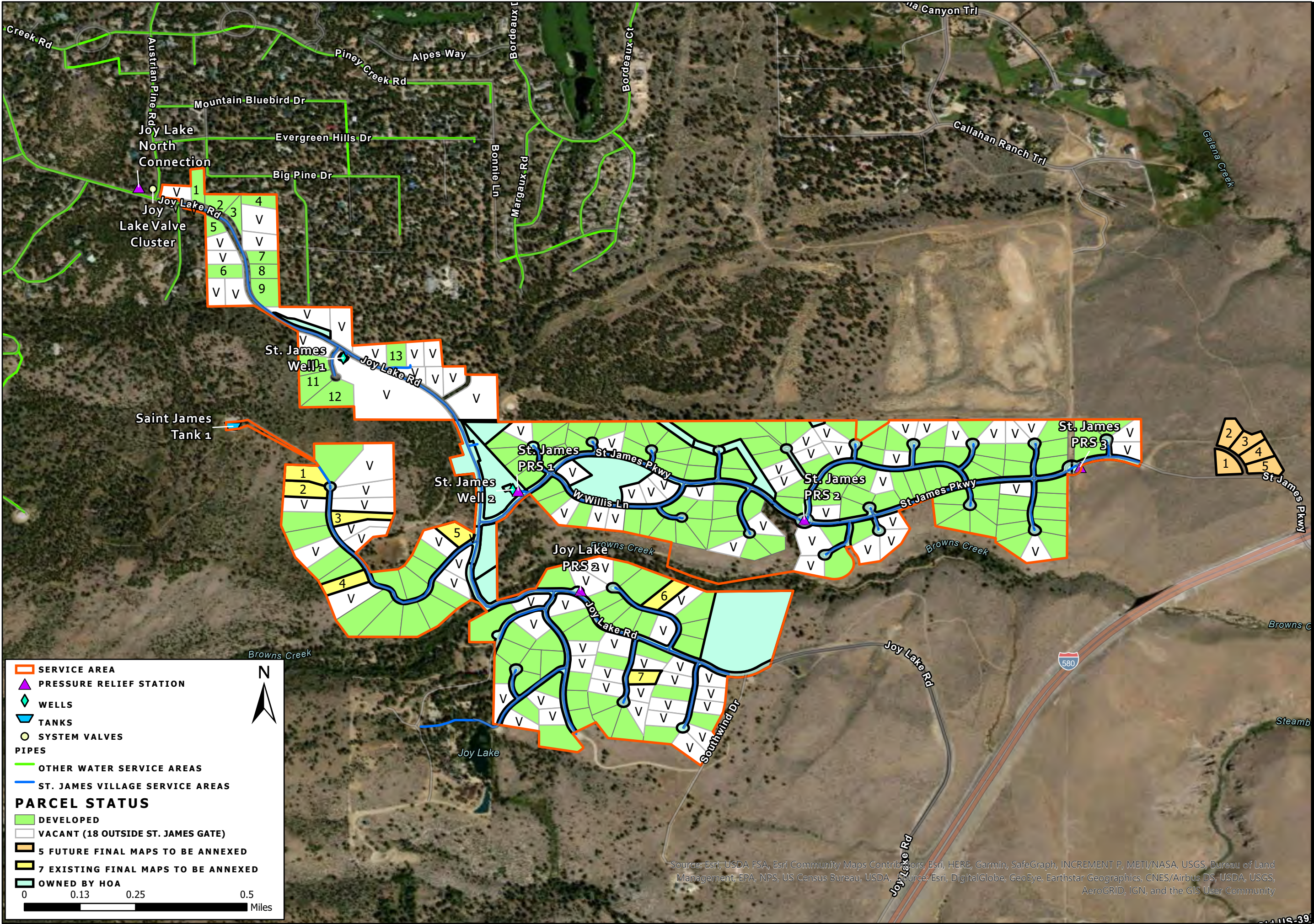
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Fig. 1

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DESIGNED BY: MH
CHECKED BY: MH
JOB NO.: 10347.000
SHEETS: 1 of 3



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St. James Village
**Saint James Water System
Service Area**
Washoe County
Nevada
Reno

REV	DATE	DESCRIPTION	BY

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0" 1"
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Fig. 2

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DESIGNED BY: MH
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SHEETS: 2 of 3

Source: Esri, USDA FSA, Esri Community Maps Contributors, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



The objective of this Technical Memorandum is to:

1. Better understand the water system capacity serving the St. James Village Service Area;
2. Determine the limitations of the existing water system to serve the remaining vacant recorded lots;
3. Determine the sustainability of the two municipal wells to continue serving the St. James Village Service Area; and
4. Determine if the existing water system infrastructure is capable of providing service to the additional 12 lots based on historic water use.

2.0 EXISTING CONDITIONS

The St. James Village water system currently consists of 1) two production wells, 2) 1-MG storage tank (located on Bennington Court cul-de-sac), and distribution water mains separated into 5 pressure zones (Fig. 3).

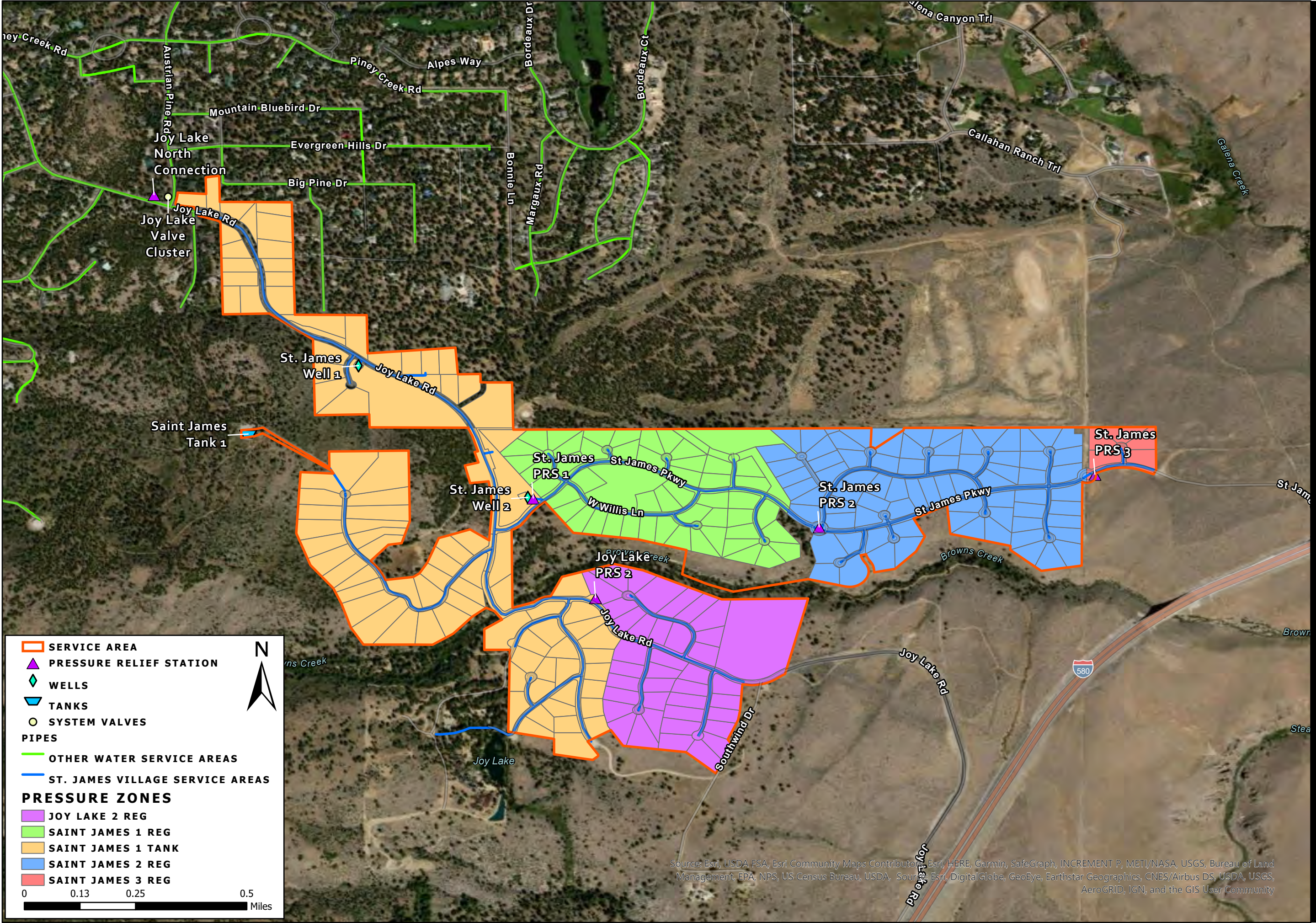
Wells:

St. James Well-1

Well-1, originally drilled in 1995, was constructed with nominal 10-inch diameter steel casing to a depth of 620 feet below ground level (bgl). The screen intervals consist of Roscoe Moss Ful Flo Louver from 260'-380', 400'-500', and 520'-620' bgl. According to the well log, this well was screen in a fracture flow aquifer. The original static water level, after completion, was 195 feet bgl. In January 2020, the static water level was 256 feet bgl. In 2014, the existing pump and submersible motor were replaced and in 2016, another submersible motor replacement occurred. A municipal well, with good water quality and proper maintenance, can have a useful life of 40 (± 5) years. Currently, Well-1 is 26 years old.

St. James Well-2

Well-2, originally drilled in 1995, was constructed with nominal 10-inch steel casing to a depth of 590 feet bgl. The screen intervals consist of Roscoe Moss Ful Flo Louver from 350'-490' and 510'-590' bgl. According to the well log, the well is screened in a fracture flow aquifer. The original static water level after completion was 242 feet bgl. In January 2020, the static water level was 295 feet bgl. In 2010, a new submersible motor was installed with the existing pump assembly and in 2018, another submersible motor replacement occurred. A municipal well, with good water quality and proper maintenance, can have a useful life of 40 (± 5) years. Currently, Well-2 is 26 years old.



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St. James Village

**Saint James Water System
Service Area**

Washoe County

Nevada

Reno

REV	DATE	DESCRIPTION	BY

BAR IS 1 INCH ON ORIGINAL DRAWING

0" 1"

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Source: Esri, USDA FSA, Esri Community Maps Contributor, Esri, HERE, Garmin, SafeGraph, INCREMENT P, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Storage:

There is one relatively large storage tank associated with the water system infrastructure in the St. James Village Service Area. The storage tank is located at the end of Bennington Court and accessible up a gated dirt road.

Tank 1

The one storage tank in the St. James Village Water System is a nominal 1.01 MG welded steel tank constructed in 1996. The storage tank is 75 feet in diameter and 32 feet high. In 2017, the storage tank underwent a routine TMWA rehabilitation. The rehabilitation work included an internal/external recoating with typical tank improvements to the air gap, vent, manways, roof hatch, sample tap and pressure transducer vault. A welded steel storage tank, that is properly maintained, can have a useful life expectancy of 45 (± 5) years. Currently the St. James Village Storage Tank is 25 years old.

Distribution Piping/Pressure Zones

The St. James Village Service Area's pipeline distribution system is made up of approximately 38,079 linear feet of 6", 8", 10" and 12" PVC pipe with approximately 1,230 linear feet of 12" ductile iron pipe from Bennington court to the St. James Storage Tank¹. Table 1 contains the distribution pipe diameter, materials, and linear feet. The distribution water system is separated into 5 specific pressure zones. TMWA has identified the different pressure zones as 1) St. James Tank 1 Pressure Zone (feeds directly off the water storage tank), 2) Joy Lake 2 Pressure Zone, 3) St. James 1 Pressure Zone, 4) St. James 2 Pressure Zone, and 5) St. James 3 Pressure Zone (Fig. 3). Except for the St. James Tank 1 pressure zone, the other pressure zones contain several dead ends lacking proper looping for system redundancy and greater fire flow.

Table 1: Distribution Pipe Diameter and Linear Feet

Pipe Diameter	Linear Footage
6-inch (PVC)	7,854
8-inch (PVC)	19,872
10-inch (PVC)	5,231
12-inch (PVC)	3,892
12-inch (DI)	1,230
Total	38,079

Located at the highest point of the St. James Tank 1 Pressure Zone (at the intersection of Joy Lake Road and Austrian Pine Road) is a three-way water valve cluster, which in an emergency, can be opened to allow water to flow down into the St. James Village Service Area. It also allows for conveyance of water from the St. James Village Service Area down Austrian Pine Road into the Galena Forest Estates and Montreux communities.

¹ TMWA was given the current hydraulic water distribution model by WDWR with the current piping materials and sizes. TMWA has not field verified the distribution pipe sizes and materials in the hydraulic distribution water model.

3.0 WATER USAGE AND CAPACITY

Annual Well Production

Table 2 summarizes the historical water production for the two wells from 2015 through 2020 based on the Nevada Division of Water Resources (NDWR) monthly production reports. Both wells are located within the St. James Tank 1 Pressure Zone. The annual water production shows a significant variation in total water pumped from year to year. The highest production year occurred in 2016 with 104.58 million gallons pumped and the lowest production year occurred in 2015 with 59.17 million gallons pumped. This is a difference of almost 50% between the two years.

Table 2: Annual Well Production for St. James Well-1 and Well-2.

	St. James Well-1		St. James Well-2		Total Pumped	
Year	AFA	MG/Y	AFA	MG/Y	AFA	MG/Y
2015	107.32	34.97	74.27	24.20	181.59	59.17
2016	114.99	37.47	205.95	67.11	320.94	104.58
2017	125.98	41.05	82.89	27.01	208.87	68.06
2018	151.08	49.23	124.01	40.41	275.10	89.64
2019	111.89	36.46	127.79	41.64	239.68	78.10
2020	181.34	59.09	135.58	44.18	316.92	103.27

AFA: Acre Feet Annually
MG/Y: Million Gallons per Year

Meter Data Annual Usage

Lumos was provided meter data for the St. James Village Service Area for 2018 through 2020. The data was used to develop an Average Day Demand (ADD) and Maximum Day Demand (MDD) for determining the capacity of the wells that currently supply water to the community. In addition to meter data for the residential homes, meter data was also provided for the Homeowners Association (HOA). The HOA meter data was initially removed from the meter datasets to develop a more accurate analysis of actual ADD and MDD for the single-family residents (SFR) in the service area. After an accurate ADD and MDD were developed, the HOA meter data was factored into the water demand based on the highest annual water usage by the HOA.

Using the provided three years of data, the ADD was calculated to be 700 gallons per day per customer (gpdpc) or 0.784-acre feet annually per customer. In order to develop the MDD, the highest monthly consumption meter data was analyzed. Using the maximum month for the meter data, the average day of the maximum month (ADMM) was calculated, which relates to the MDD value. MDD was then calculated by multiplying the ADMM by 1.25 (a standard developed by American Water Works Association [AWWA]). The three-year average ADD to MDD multiplying factor derived from the meter data (2018 – 2020) equates to 2.50, which is within the typical range. The MDD for all residential customers is 1,750 gpdpc. Using the three years of meter data, the largest customer count for the existing SFR equates to 159 units.

The highest irrigation water usage by the HOA, which usually occurred over a 7-month period (between May – November), was 2.17 million gallons in 2020. Since this is the highest

documented usage by the HOA from the meter data provided, an ADD and MDD were formulated using the 2020 data. Using the aforementioned residential ADD and MDD analysis, an ADD and MDD for the irrigation usage totaled 5,945 gpd and 18,750 gpd, respectively. This equates to a multiplying factor of 3.15. Adding the HOA quantities to the SFR quantities equates to an ADD flow rate of 81 gpm and a MDD flow rate of 204 gpm. Table 3 contains a summary of the analysis from the three years of meter data.

Table 3: Existing Demand Based on Three Year Average (2018 – 2020)

Customer Class	No. of Customers	Average Daily Demand (gpdpc)	Total Average Demand per Day (gpd)	Total System Average Daily Demand (gpm)	System MDD Required (gpm)
Residential	159	700	111,300	77	194
HOA Irrigation	1	5,945	5,945	4	13
SUBTOTAL	160	N/A	117,245	81	204

Table 4 contains the well capacity required to serve all the future recorded lots inside and outside the St. James Village gated community (St. James Service Area). Table 4 also includes the additional 12 lots that St. James Village would like to have annexed by TMWA. The future recorded lots include an additional 18 lots outside the gated community that are within the existing service area and 81 lots located inside the St. James Village gated community. Quantifying all the future lots results in a total future ADD well capacity of 135 gpm and a MDD of 342 gpm.

Table 4: Future Demand with All Recorded/Potential Annexed Lots

Customer Class	No. of Customers	Average Daily Demand (gpdpc)	Total Average Demand per Day (gpd)	Total System Average Daily Demand (gpm)	System MDD Required (gpm)
Existing Residential	159	700	111,300	77	194
HOA Irrigation	1	5,945	5,945	4	13
Added Lots outside of St. James gated community	18	700	12,600	9	22
Remaining Lots inside St. James gated community	81	700	56,700	39	98
SUBTOTAL	259		186,545	129	327
Additional Lots	12	700	8,400	6	15
TOTAL	271	N/A	194,945	135	342

NAC 445A.6672 requires a system that relies exclusively on wells to provide a total well capacity sufficient to meet the MDD when all the wells are operational, or the ADD with the most productive well out of service. TMWA provided information on average flow rates for the two wells. Well-1 has an average flow rate of 285 gpm and Well-2 has an average flow rate of 320 gpm. The available capacity with both wells in service is 605 gpm, as shown in Table 5. With Well-2, the

largest producer, out of service, the available pumping capacity is 285 gpm. With only Well-1 operational, the ADD is met for both current and future projected demands with the 12 additional lots targeted for annexation. With both wells in service, the current well capacity can meet the MDD required for the projected future demands including the 12 additional lots for annexation.

Table 5: Capacity Versus Demand (Current/Future)

Wells	Capacity (gpm) ¹	Backup Power	Year	Well Supply req'd for ADD (gpm)	Well Supply req'd for MDD (gpm)	Can Well Supply ² Meet MDD?
St. James Well-1	285	NO	2021	81	204	YES
St. James Well-2	320	NO	All Future Lots	135	342	YES
Total, All Wells in Service	605					
Total, Well 2 Out of Service	285					

1. Capacities are based on the most recent data provide by TMWA

2. Total well supply must be able to accommodate MDD.

When comparing the NDWR annual pumping reports to the annual total meter data for 2018 through 2020, a large water demand discrepancy was identified. Table 6 contains a comparison of the two data sets with the percentage of meter usage versus well production.

Table 6: Difference Between NDWR Report and Meter Data with Percent Difference

Year	NDWR Reported Pumping (MG/Y)	Meter Data Usage (MG/Y)	Percent Meter Usage of Well Production
2015	59.17	N/A	N/A
2016	104.58	N/A	N/A
2017	68.06	N/A	N/A
2018	89.06	48.03	54%
2019	78.1	45.9	59%
2020	103.27	47.65	46%

The discrepancy was brought to TMWA's attention during a meeting. After a brief investigation into the cause, TMWA's Engineering Manager believes the discrepancies is due to the valve at the intersection of Joy Lake Road and Austrian Pine Road being open for the last few years. Apparently, Galena Forest Estates and Montreux service areas had well failures at their Mt. Rose Wells 5 and 6. The loss of these wells resulted in the need for alternative water sources (St. James Wells 1 & 2 and surface water) to supply the needed demands. TMWA believes that it will take some time to develop a water balance determination from SCADA data on how much water



was conveyed to these other service areas from the St. James Village Wells and surface water conveyances.

4.0 WATER STORAGE EVALUATION

Water storage is regulated by the Nevada Administrative Code, Sections NAC 445A.6674, NAC 445A.66745, NAC 445A.6675 and NAC 445A.66755.

Total required storage capacity includes operating storage, emergency storage, and fire flow storage. TMWA calculates their required total storage capacity to be an operating storage of 15% of MDD, an emergency storage of ADD, and fire flow for the largest structure fire flow demand.

- Operating Storage – Operating storage is provided at 15% of MDD. The MDD for the water service area was calculated from the three-year average ADD from meter data provided for years 2018, 2019, and 2020.
- Emergency Storage – The NAC states that emergency storage can either be determined by the engineer or is 75% of the amount of operating storage. Since TMWA has negotiated with the regulators that operating storage is only 15% of MDD, Lumos has added emergency storage equivalent to ADD for this situation.
- Fire Flow Storage – Lumos obtained the square footage for all residential homes within the St. James Village Service Area from the Washoe County Assessors website. Based on the largest residential home of 8,411 square feet and a Type V-B construction, the fire flow required from the 2018 International Fire Code (IFC) is 2,500 gpm for a duration of two hours.

Using TMWA's regulatory approval for total storage capacity, which includes operating storage of 15% of MDD for one day, fire flow storage and emergency storage of ADD, Lumos developed an existing and future storage assessment for the St. James Village Service Area. Currently, there are 159 active SFR in the service area. Using the total unbuilt recorded lots remaining in the gated community (81 lots), remaining unbuilt SFR lots outside the gated community (18 lots) and the 12 lots for annexation, the total potential SFR equates to 270.

Table 7 shows the storage capacity analysis for existing storage capacity needs of 453,038 gallons and future storage capacity needs of 559,875 gallons. With the current storage tank capacity of 1,010,000 gallons, the existing storage capacity available meets the needs of all the potential future customers in the service area.

Table 7: St. James Village Storage Capacity Analysis

WATER SERVICE AREA STORAGE		EXISTING 2020 (gallons)	FUTURE All + 12 Lots (gallons)
ST. JAMES VILLAGE SERVICE AREA		Ex Connections (159)	Recorded Connections (270)
	MDD (ADD X 2.5)	278,250	472,500
Operational Storage	15% of MDD for one Day, based on historical usage (2018 - 2020)	41,738	70,875
Emergency Reserves	ADD for one Day, based on historical usage (2018 - 2020)	111,300	189,000
Fire Flows	2,500 gpm @ 2 hours - Largest Residential Home	300,000	300,000
Alternative Pumping Capacity: No Backup Power on St. James Well -1 & St. James Well-2	Total Storage Required	453,038	559,875
	Existing Storage Capacity	1,010,000	1,010,000
	Alternative Pumping Capacity	0	0
Recommendations: N/A			
	Total Storage Capacity Available	1,010,000	1,010,000
	Meets NAC for Storage?	YES	YES

5.0 Well Capacity Sustainability Analysis

St. James Well-1:

In December 2020, the static water level in Well-1 was 263 feet bgl, which is located in the upper screen interval. Figure 4 shows the static water levels recorded in Well-1 from 2015 through 2020. Figure 4 indicates that as pumping occurs in Well-1 during the summer and early fall months (high water usage months), the static water level in the well declines. During the winter and spring months, the water levels tend to recharge to a level similar to that of previous years. A trendline was generated for the 6-years of data provide from TMWA. The trendline suggests that Well-1 is showing an average annual decline in the static water level of two feet per year for the six-year period. For the entire 25-year period since the well was drilled, the static water level has declined an average of 2.6 feet per year. For a fracture flow aquifer, this aquifer system has shown remarkable recharge ability during the winter and spring months. Based on these findings, if this well was only utilized for the St. James Village Service Area, it is believed that the static water levels would stop declining and possibly even show some additional recovery and sustainability.

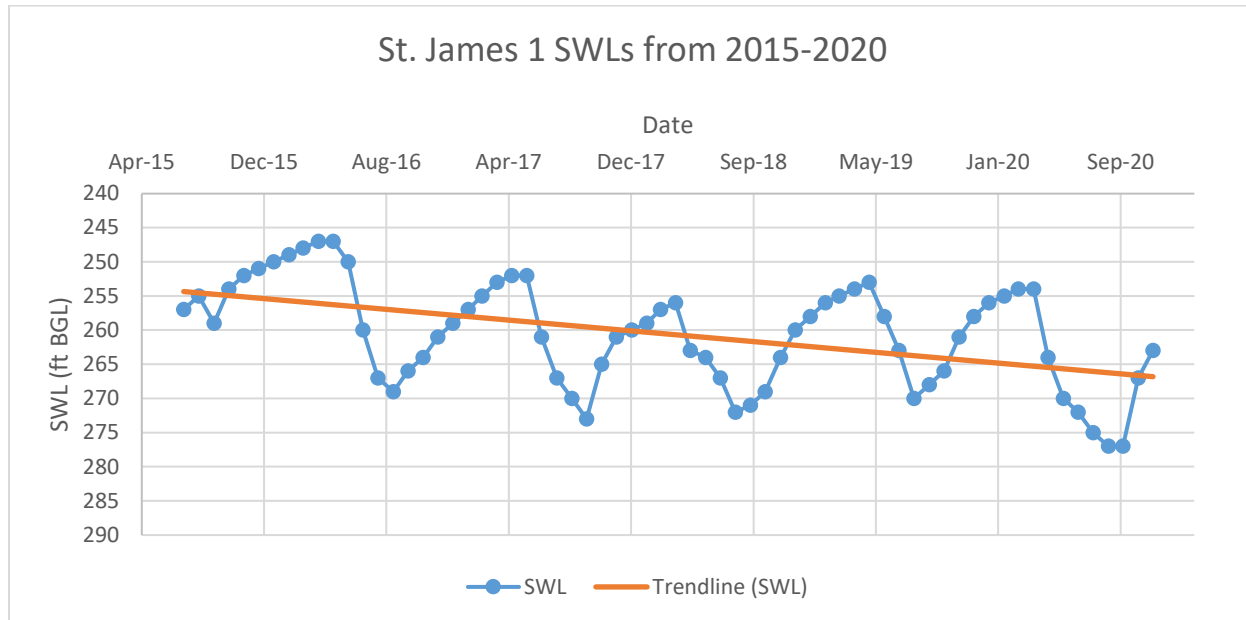


Figure 4: Six Year Trendline of Static Water Levels (SWL) in St. James Well-1

Figure 5 shows the specific capacities for Well-1 for the period of 2015 through 2020.

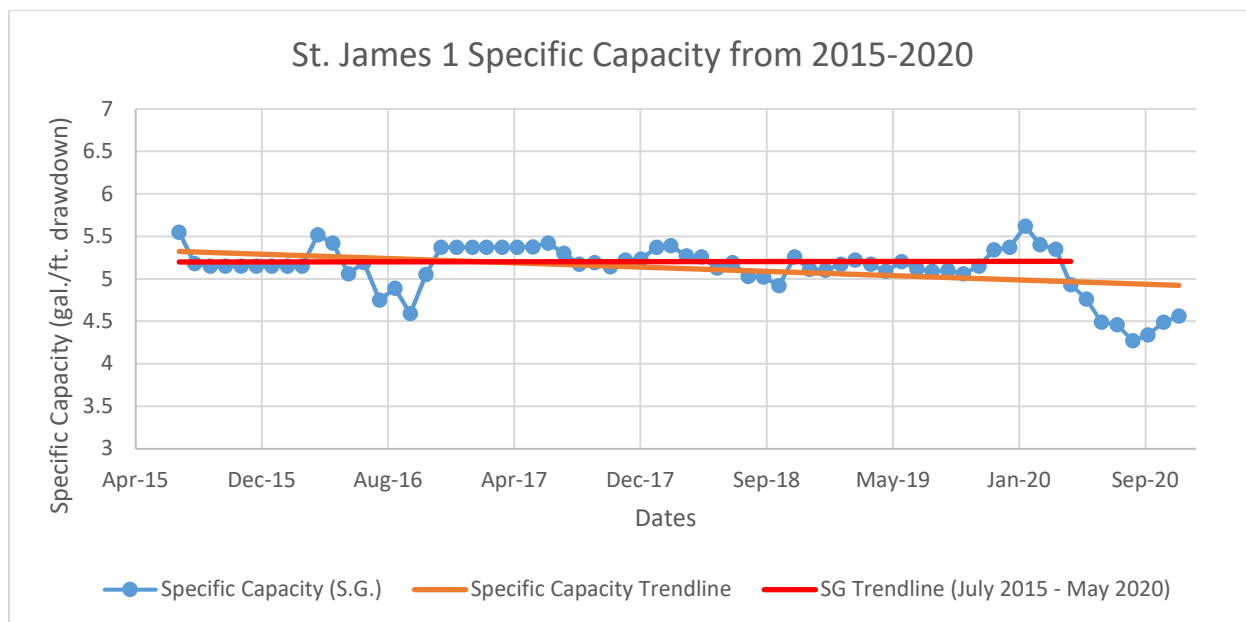


Figure 5: Six Year Trendline of Specific Capacities for St. James Village Well-1

Figure 5 shows that the specific capacity for Well-1 has been relatively stable until February 2020 to September 2020, where a dramatic decline has occurred. This dramatic decline in specific capacity over such a short period of time can suggest that a well's screen intervals are becoming plugged by mineral deposits and/or biofouling. With the pumping water level currently drawing

down into the upper screen interval, oxygen is introduced into the aquifer, which can be a food source for micro-organisms that have been oxygen starved in the past. With the pumping water level located in the screen interval, there is a high probability of cascading water occurring. The cascading water can also convey oxygen down into the aquifer promoting an increase in biological growth in the screen interval. Increased biological growth usually results in the plugging of the screen intervals which reduces the well's specific capacity.

St. James Well-2

Figure 6 shows the static water levels recorded in Well-2 from 2015 through 2020. Figure 6 indicates that as Well-2 is pumped during the summer and early fall months (high water usage months), the static water level in the well declines. During the winter and spring months, the water levels tend to recharge back to the previous year's water level. A trendline was generated for the six years of data provide from TMWA. The trendline suggests that Well-2 is showing a stable or even minor recovery in the static water level for the six-year period. For the entire 25-year period since the well was drilled, the static water level has declined an average of one foot per year. For a fracture flow aquifer, this aquifer system has shown remarkable sustainability and recharge ability during the winter and spring months. Based on these findings, it is believed that if this well was only utilized for the St. James Village Service Area, the static water levels would continue to remain relatively stable or even show additional recovery.

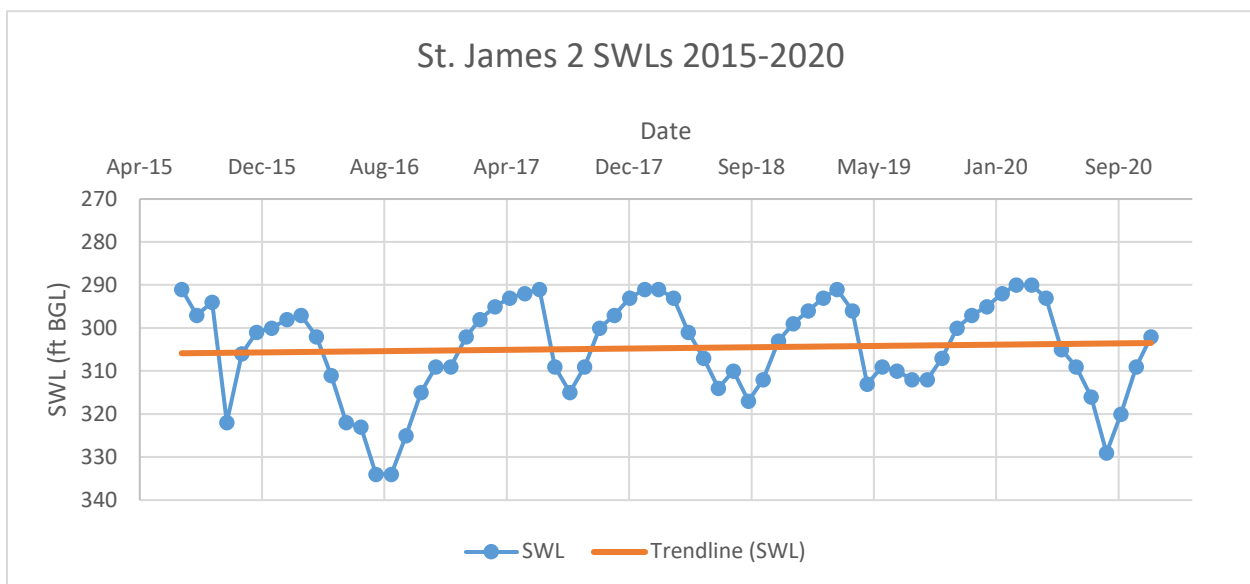


Figure 6: Six Year Trendline of Static Water Levels in St. James Well-2

Figure 7 shows the specific capacities for Well-2 from 2015 through 2020. A trendline was generated of the past six years of documented specific capacities. As indicated by the trendline over the past six years in Figure 7, there has been a relatively stable specific capacity rate. This type of data is very promising and along with the stable static water level over the past six years, suggest a very sustainable well source. If this well could be dedicated to just the St. James Village Service Area, it is believed that the well could remain a very sustainable water source for the community.

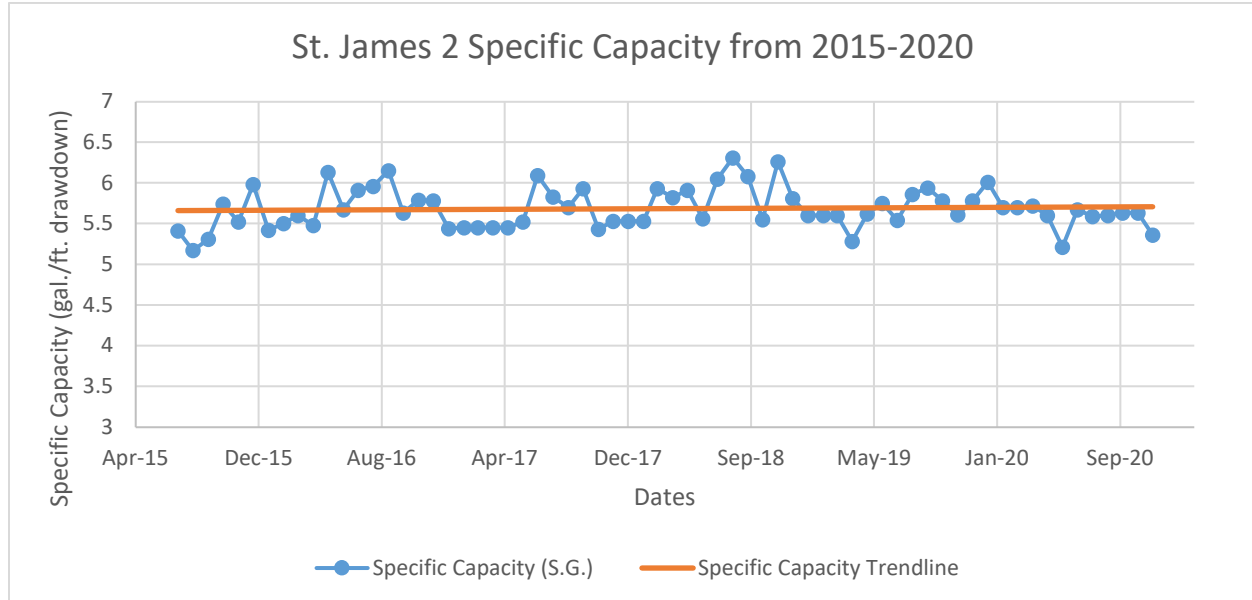


Figure 7: Six Year Trendline of Specific Capacities for St. James Well-2

6.0 Conclusions

The St. James Village water infrastructure is approximately 26 years old. The water system was built by St. James Village Inc. and dedicated to the Washoe County Department of Water Resources (WDWR). After the merger of WDWR and TMWA, the water system became the property of TMWA. The water system was analyzed to determine its capability of servicing all the existing customers, future vacant recorded lots and an additional 12-lots proposed for annexation.

Using meter data provided by TMWA from 2018 through 2020, a water demand for ADD and MDD was developed for the service area. The demands were used to calculate the required well capacity and storage capacity necessary to serve the existing and proposed lots. Based on the analysis, the St. James Village water infrastructure can meet the needed well capacity and storage capacity for all the proposed future lots.

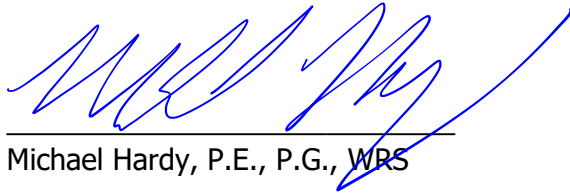
In addition to meter data, Lumos assessed six years of NDWR Annual Pumping Reports (2015 – 2020) for the St. James Village wells. Comparing the pumping reports for 2018 through 2020 to the meter data for 2018 through 2020, the wells pumped significantly more water than the St. James Village Service Area consumed. After a brief discussion with/and investigation by TMWA, it was determined that a valve at the intersection of Joy lake Road and Austrian Pine Road was opened allowing water to be conveyed to the Galena Forest Estates and Montreux communities. Apparently, the Galena Forest Estates and Montreux communities had two well failures and required alternative water sources to meet water demands.

Lumos's final conclusions/comments include:



1. The existing St. James Village Water System is sufficient to meet existing and future demands of all the recorded lots and proposed 12 lots for annexation if the water system is solely dedicated to the St. James Village Service Area.
2. The sustainability of the wells to meet existing and future water production demands are very promising, once again as long as the wells can be solely dedicated to the St. James Village Service Area.
3. Continued analysis is currently being done to determine water system infrastructure necessary for total Buildout of the St. James Village Development.
4. Continued work is currently being conducted to address existing and future distribution water pipe dead ends to provide better redundancy and fire flow to the St. James Village Service Area.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Michael Hardy', is written over a horizontal line.

Michael Hardy, P.E., P.G., WRS

EXHIBIT C

[SEE ATTACHED]

St. James Village, Inc.

St. James Water System Preliminary Engineering Report

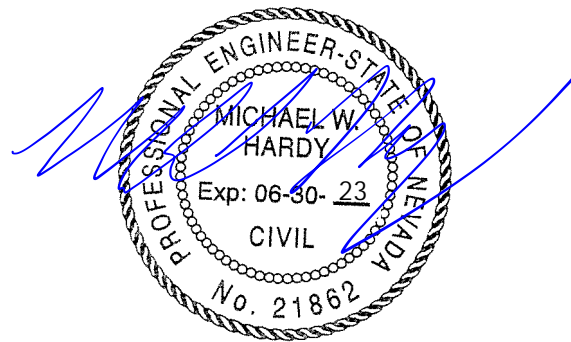
November 01, 2021



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- Appendix B: St. James Wells Water Quality
- Appendix C: St. James Well-1 and Well-2 Well Driller Reports
- Appendix D: NDWR Monthly Well Production Reports (2015 – 2020)

Certification

The technical material and data contained in the document were prepared under the supervision and direction of the undersigned professional engineer. The opinions contained in this document reflect Lumos & Associates, Inc. professional judgment in context with the scope of work and contract. The presented opinions are based on the conditions, information, and data provided to Lumos & Associates, Inc. at the time the document was published and may be subject to change based on changing conditions, information, and data. Lumos & Associates, Inc. did not verify independent information, conditions, and opinions supplied by others. There is no written or implied warranty or guarantee for any damages that occur from third party use of this document.



Prepared under the Responsible Charge
of Michael Hardy, P.E., P.G., WRS

Abbreviations

ADD	Average Day Demand
ADMM	Average Day Maximum Month
AF	Acre Feet
AFA	Acre Feet Annually
AL	Active Level
amsl	above mean sea level
AWWA	American Water Works Association
bgl	Below Ground Level
CU	Color Units
DWR	Nevada Division of Water Resources
fps	Feet per Second
ft	Feet
gpd	Gallons per day
gpdpc	Gallons per day per connection
gpm	Gallons per Minute
GIS	Geographical Information Systems
GPS	Global Positioning System
HAA5	Haloacetic acids
HGL	Hydraulic Grade Line
HP	Horsepower
LF	Linear Feet
MCL	Maximum Contaminant Level
MDD	Maximum Day Demand
MG	Million Gallons
MGA	Million Gallons Annually
MGD	Million Gallons per Day
mg/l	Milligrams per Liter
MG/Y	Million Gallons per Year
NAC	Nevada Administrative Code
ND	Non-Detect
NDEP	Nevada Division of Environmental Protection
NRS	Nevada Revised Statutes
NRW	Non-Revenue Water
O&M	Operation and Maintenance
pCi/L	Picocuries Per Liter
PER	Preliminary Engineering Report
PF	Peaking Factor
pH	Potential of Hydrogen
PHD	Peak Hour Demand
ppm	Parts per Million
ppb	Parts per Billion
PRS	Pressure Reducing Station
PRV	Pressure Reducing Valve
psi	Pounds per Square Inch
psig	Pounds per Square Inch Gauge
PVC	Poly Vinyl Chloride
SCADA	Supervisory Control and Data Acquisition

SDWA	Safe Drinking Water Act
SFR	single-family residence
TDH	Total Dynamic Head
TDS	Total Dissolved Solids
TMWA	Truckee Meadows Water Authority
TTHM	Trihalomethane
µg/L	Micrograms per Liter
USEPA	United States Environmental Protection Agency
WDWR	Washoe County Department of Water Resources

Glossary

Acre-feet – The amount of water that it would take to inundate one acre of land with one foot in depth of water.

Air entrainment – Air bubbles contained in water that gives the water a cloudy appearance. Given a small amount of time, the air will dissipate into the atmosphere. Air entrainment is a by-product of cascading water in water wells.

Alluvial fan – The accumulation of sediment emanating from a mountain canyon and forms a fan like formation. The thickness of the sediment is greatest at the mouth of the canyon and gradually decreases towards the valley floor.

Aquifer – Underground water bearing geologic formations of sufficient volume to support long term use. Aquifers are recharged through surface water infiltration at their higher elevations and discharge to the surface at their lower elevations through various means.

Cascading water – The result of a pumping level in a well that is below the well screen. Water entering the well screen then cascades to the pumping level. The turbulence that results contains air that becomes entrained in the water.

Cavitation – In water well pumps, cavitation occurs when air bubbles implode around the impellers. Pumps put liquid under pressure, but if the pressure of the liquid drops due to air bubbles, it begins to vaporize, just like boiling water causing physical damage to parts of the pump.

Fracture Flow Aquifer – Solid rock layer where groundwater is found in fractures, joints or cracks in the rock. Fractured aquifers can be found in many different types of rocks including granite and basalt.

Groundwater discharge – Groundwater that flows under pressure to the land surface or to a water body such as a stream, wetland or pond.

Groundwater gradient – Groundwater that moves from an area of high elevation to an area of lower elevation, usually under the influence of gravity.

Groundwater recharge – Water that percolates into the ground, past the root zone and infiltrating into an aquifer.

Groundwater reservoir – The groundwater stored within a system of aquifers.

Groundwater storage – Because of their volumetric size, aquifers have the ability to store water in terms of the volume of the recharge exceeding the volume of the discharge, or vice versa, in any given year.

Hydraulic Grade line - The surface or profile of water flowing in an open channel or a pipe flowing partially full. If a pipe is under pressure, the hydraulic grade line is that level water would rise to in a small, vertical tube connected to the pipe.

Hydrographic Basin – A topographic area or basin that encompasses all of the surface drainage. Within Nevada there are 232 hydrographic basins.

Max day demand or flow capacity – Within a year, the greatest amount of water used by customers (demand) in one day. Maximum flow capacity is the greatest amount of water that can be pumped by the wellfield.

Maximum Contaminant Level (MCL) – The maximum concentrations of a chemistry constituents in drinking water established by the USEPA. There are Primary Standards (primary health concerns) and Secondary Standards (aesthetic concerns).

Perennial Yield – The maximum amount of groundwater that can be salvaged each year over the long term without depleting the groundwater reservoir. The perennial yield cannot be more than the natural recharge of the groundwater reservoir and is usually limited to the maximum amount of natural discharge.

Potentiometric map – Similar to a topographic map showing land surface elevation contours, a potentiometric map contours the elevations of aquifer system pressures (in units of feet of head), both confined and unconfined. It can be loosely defined as a water table map.

Sub-Basin – A portion of a subregion or basin drained by a single stream or group of minor streams. The smallest unit into which the land surface is subdivided for hydrologic study purposes.

Supplemental water rights – Usually a groundwater right that is used to supplement a surface water right. In this case the supplemental right can only be used when the surface water is no longer available. Supplemental groundwater rights can also be used to support other groundwater rights. The total ground water used cannot exceed the primary right's duty.

System Yield – synonymous with perennial yield in cases where capture of surface water and groundwater reuse is not considered. Under the system yield concept, the maximum sustained groundwater withdrawal includes allowance for reuse and capture of surface water.

Total Dynamic Head – The amount of pressure (psi or feet of head) required to move groundwater from a well's pumping level to a particular location, usually a water tank. The pressure required must also overcome frictional losses in the piping. The sum of the pressure head, friction head and lift (elevation head) equal the total hydraulic head.

Watershed – The boundary of an area that encompasses an individual stream or river system including its tributaries.

1.0 EXECUTIVE SUMMARY

St. James Village, Inc. commissioned Lumos & Associates, Inc. (Lumos) to analyze the water system serving the St. James Village Development. St. James Village Development is a gated mountain community located approximately 7 miles up Mount Rose Highway and then down Joy Lake Road approximately 2 miles. The purpose of the analysis was to better understand the water needs of the St. James Village community and determine the extent of the existing water system to serve their existing and future demands. The existing water system, which is owned and operated by Truckee Meadows Water Authority (TMWA), consists of two municipal wells, a 1.01 million gallon storage tank, and approximately 38,078 linear feet of distribution water mains separated into 5 distinct pressure zones.

Lumos reviewed 6 years of well production data provided by the Nevada Division of Water Resources (NDWR) from 2015 through 2020. Over the course of the 6 years, the well production varied from a high of 104.58 million gallons in 2016 to a low of 59.17 million gallons in 2015. Lumos also analyzed 3-years of meter data provided by TMWA. The data was used to develop an average day demand (ADD) and maximum day demand (MDD) for the St. James Service Area. For the three years of meter data, the service area had an ADD and MDD of 700 gallons per minute (gpm) and 1750 gpm. Based on the three years of data, there were 159 single family residence (SFR) units of which 13 were located outside the St. James Village Development. In all, there are 31 SFR lots outside the St. James Village Development, but inside the St. James Service Area. For the existing 159 SFR and St. James Village HOA irrigation demands, the required ADD equates to 84 gpm and a MDD of 207 gpm to meet demand. When adding all the current recorded lots within the St. James Village Development and additional future 18 SFR lots outside the development, the required demand increases to an ADD of 132 gpm and MDD of 327 gpm. It should be noted that St. James Village mentioned that several unbuilt lots were purchased by the adjoining homeowner for extra privacy and may never be built on.

A comparison of the annual production data from the wells versus the annual meter data identified a large discrepancy between the two data sets. Based on the comparison, the meter data use was between 46% and 59% of the total production from the wells annually. The discrepancies were brought to TMWA's attention to determine the cause. After a brief investigation by TMWA, the discrepancies were identified as the result of diverted water to other water service areas that had emergency water demands due to well failures.

The two St. James wells were analyzed for continued sustainability of their use. The analysis determined that both wells could be sustainable groundwater resources if certain managerial practices were implemented. The first recommended managerial practice involves an annual conservative production of 32 MG/Y from St. James Well-1 and 35 MG/Y from St. James Well-2. The second recommended practice involves only using the two wells to serve the St. James Service Area. If these two practices were implemented, Lumos believes that these fracture flow aquifer systems, associated with the two St. James wells, could be sustainable systems.

Based on a growth projection rate of 25 lots per year, provide by St. James Village, Inc., Lumos developed a timeline and water infrastructure needs for buildout. Based on existing well capacities, NAC 445A water works regulations, and TMWA's negotiated regulation for storage tank capacity, St. James Village Development could record up to an additional 218 SFR lots before additional well capacity would be required. No additional storage capacity would be needed to reach buildout.

2.0 INTRODUCTION

St. James Village, Inc. commissioned Lumos & Associates, Inc (Lumos) for the purpose of analyzing the water system serving their community. This report assesses the historic, present day and future usage and condition of the existing water system to determine when new infrastructure may be needed to meet the service area buildout. This report also assesses the sustainability concerns with the existing water well sources that serve the community.

2.1 Background

2.1.1 St. James Village Development Overview

The St. James Village Development is a gated mountain community located on Joy Lake Road, approximately 2 miles south of Mount Rose Highway (Hwy 431) (Figure 2.1). The water system, paid for and constructed by St. James Village, Inc., was originally developed in the mid 1990's and dedicated to Washoe County Department of Water Resources (WDWR). On December 31, 2014, WDWR and Truckee Meadows Water Authority (TMWA) consolidated their two water utilities, which is now operated by TMWA. TMWA owns and operates the water system in the St. James Village Community. The St. James water system also serves several additional single family residential lots with homes (13 lots) outside of St. James Village on Joy Lake Road. These lots are located on Joy Lake Road up to the intersection of Austrian Pine Road where TMWA has a pressure reducing station and inline water main valve that is normally only opened in the event of an emergency.

The St. James water system currently consists of two production wells, a 1.01-MG storage tank (located above the Bennington Court cul-de-sac), and distribution water mains separated into 5 pressure zones. Many of the existing distribution water mains contains dead ends, lacking proper looping, which is important for service redundancy and greater fire flow to the community.

To date, the St. James Village Development has recorded 227 lots through final map with approximately 240± lots (1 acre+ in size) left to record. Currently, there are 7 lots in St. James Village that were approved by Washoe County, but not annexed into the TMWA service area at the time of approval. There are an additional 23 lots that they would like to get recorded over the next few months for a total of 30 lots annexed into TMWA's service area.

The purpose of this Preliminary Engineering Report (PER) is to better understand the water needs of the St. James Village community and determine the extent of the existing water system to serve those needs. In addition, Lumos intends to analyze the sustainability of the two municipal wells, limitations of the existing water system, and determine what additional water infrastructure may be necessary in the future to meet buildout of the community.

2.2 Objectives

The objectives of this Preliminary Engineer Report are to:

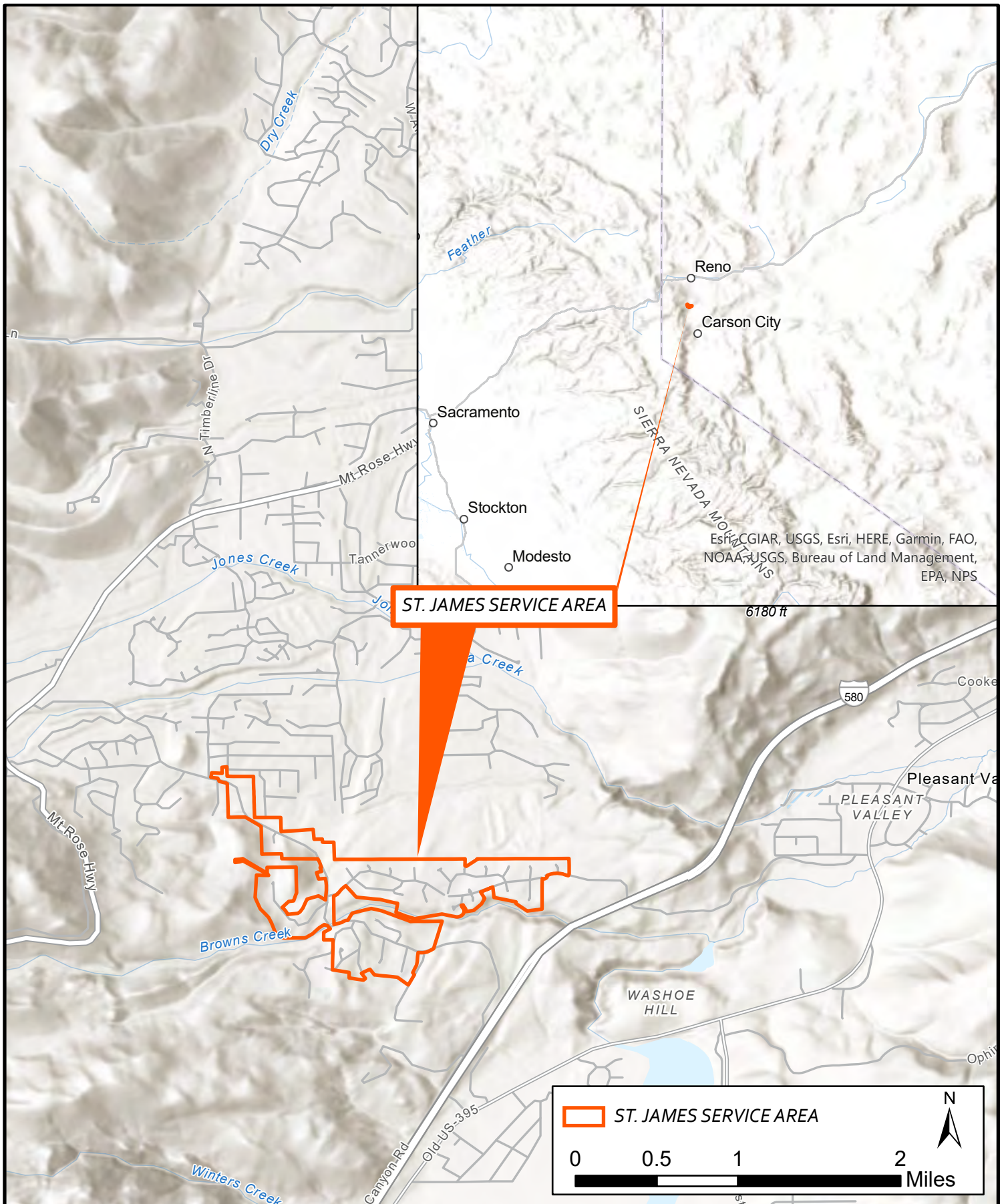
1. Better understand the water system capacity serving the St. James Service Area;
2. Determine the limitations of the existing water system to serve the remaining vacant recorded lots;
3. Analyze the sustainability of the two municipal wells to continue serving the St. James Service Area;
4. Determine if the existing water system infrastructure is capable of providing service to the additional 30 lots based on historic water use;

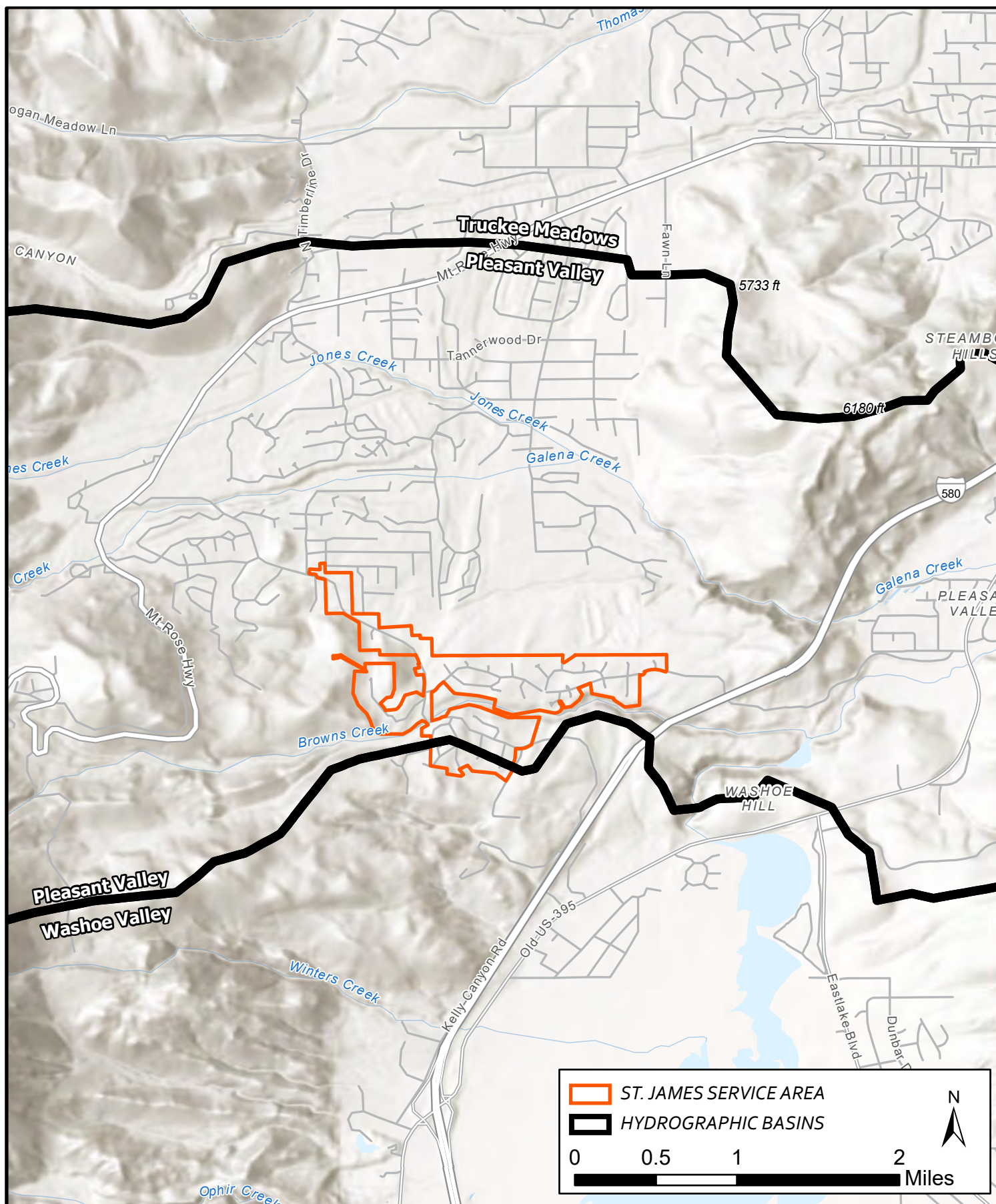
5. Determine what the existing water system infrastructure can serve and when additional infrastructure (wells and storage) may be necessary to meet buildout; and
6. Determine what potential future looping can be accomplished for the lots to better increase service redundancy and fire flow.

2.3 Hydrographic Basins

The St. James Village Development, which is part of TMWA's service territory, straddles two hydrographic basins in Nevada. The two basins include the Pleasant Valley Basin (Basin 088) and the Washoe Valley Basin (Basin 089). The two groundwater wells that serve St. James Village are located in Basin 088 (Figure 2.2). The majority of the water rights "Manner of Use" in Basin 088 consists of municipal/quasi-municipal followed by irrigation and then commercial. The total volume of groundwater "water rights" permits for domestic, commercial, irrigation and municipal/quasi-municipal "manner of use" is approximately 6,170 acre-feet annually (AFA). The perennial yield for Basin 088 is 3,000 AFA with a System Yield of 11,000 AFA. Currently, water rights in Basin 088 exceed the perennial yield of the basin but not the system yield. Appendix A contains the hydrographic basin summaries for Basins 088 and 089.

In 1978 (Order 709), the State Engineer elevated Basin 088 to a "designated basin" status. A basin is usually elevated to a designated status when the water rights in the basin have reached or exceeded its perennial yield. A designated basin allows the State Engineer additional authority in the administration of the water resources in the form of restricting specific uses and/or subdividing the basin for better management of the water resources. In 1999 (Order 1155), the State Engineer issued a domestic well credit program for all single-family residence with a domestic well or the right to drill a domestic well. If a single-family resident wishes to cease use of their domestic well and properly agree to abandon the well under NRS regulations, they have the right to hook up to the local water purveyor (for a connection fee) without the need to purchase water rights for their property.





3.0 EXISTING CONDITIONS

3.1 St. James Water System

3.1.1 Location

The St. James Service Area is located on Joy Lake Road, approximately 2 miles south of Mount Rose Highway (Hwy 431). Specifically, the St. James Village service area is located in Sections 10, 13, 14 and 15 of Township 17 North, Range 19 East of the Mount Diablo Meridian and within Washoe County, Nevada. The most recent service territory map for the water system can be found in Figure 2.1.

3.1.2 Geography and Climate

The St. James Service Area terrain is in the high foothills on the east side of Slide Mountain. The south easterly sloping foothills of the service area required the water system to include multiple linear pressure zones. The one and only water storage tank in the water system is located in the highest elevated pressure zone (St. James 1 Tank Pressure Zone) along with the two supply wells. From here, all the additional pressure zones flow down slope. Service area elevations range from approximately 5,990 feet above mean sea level (amsl) to 5,300 feet amsl resulting in approximately 690 feet of topographic relief across the service area. The service area is also dissected by a perennial stream called Browns Creek, which creates challenges with distribution pipeline routing.

Summers in St. James Village are characterized by hot, dry afternoons with temperatures in the 80s to low 90s cooling to lows in the high 40's to low 50's by morning. Average winter temperatures range from highs in the mid-40s to low 50s and lows in the mid-20s, frequently falling below freezing. Annual precipitation averages around 14.84 inches per year throughout the area. Sunny or partly cloudy skies are predominant. Table 3.1 summarizes average monthly weather data for the St. James Village Area.

Table 3.1: Cold Springs Average Monthly Weather Data

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Max. Temp. (°F)	44.0	46.0	50.0	57.0	64.0	76.0	84.0	84.0	77.0	64.0	51.0	43.0	62.0
Min. Temp. (°F)	24.0	25.0	29.0	33.0	39.0	48.0	55.0	53.0	47.0	37.0	29.0	24.0	37.0
Total Precip. (in.)	2.24	2.42	2.09	0.9	1.1	0.38	0.47	0.27	0.32	1.09	1.4	2.14	14.84

Note: Location Lat.; Long. (39.34; -119.84) Grid NRCC Interpolation (US) from Averaging Yrs. 2010 - 2020
Period of Record: 1/1/2010 to 12/31/2020
Source: Western Regional Climate Center

3.1.3 Land Use

Land use within the service area is primarily custom residential homes with some light HOA community facilities like parks and open hiking trails. Within the service area there is a HOA club house and a fire station operated by the Truckee Meadows Fire Protection District.

3.1.4 Water Supply and Quality

The water supply for St. James Village is groundwater from two (2) wells (St James Well-1 & Well-2), both located in the St. James Tank 1 Pressure Zone.

Water quality data was provided by TMWA for the years 2016 – January 2021 for St. James wells and is provided in Table 3.2 and Table 3.3. From the data provided, the reports illustrate that no regulated contaminants exceed maximum contaminant levels (MCLs) for the analysis provided. Specific types of analysis were left out of the tables (Volatile Organic Chemicals [VOC] and Synthetic Organic Chemicals [SOC]) since these types of contaminants are usually more relevant in industrial areas, not rural gated communities like the two St. James Wells. Appendix B contains a more complete analysis of the water quality provided by TMWA.

Table 3.2: Water Quality Data for St. James Well-1

Detected Substance	Units	Sample Year	Results	MCL	Violation
Microbiological					
No Detected Microbiological Contaminants Were Found in the Calendar Year of 2020					
Inorganic Contaminants					
Arsenic	ug/l	2019	<1	10	N
Fluoride	mg/l	2019	<0.2	4	N
Nitrate	mg/l	2021	<0.3	10	N
Nitrate - Nitrite	mg/l	2019	<0.2	10	N
Silver	ug/l	2019	<5.0		
Zinc	ug/l	2019	<50		
Radionuclides					
Combined Radium 226 & 228	pCi/L	2019	<1.0	5	N
Uranium	ug/L	2016	3.7	30	N
Radium 226	pCi/L	2019	<1.0	5	N
Radium 228	pCi/L	2019	<1.0	5	N
Lead and Copper					
Copper	mg/l	2019	<0.050	1.3 AL	N
Secondary Contaminants					
Aluminum	mg/L	2019	>0.05	0.05 – 0.2	N

Chloride	mg/L	2019	2.72	400	N
Color	CU	2019	<5	15	N
Iron	mg/L	2019	<0.05	0.3	
Magnesium	mg/L	2019	14.3	150	N
Manganese	mg/L	2019	<0.05	0.05	N
PH	pH	2019	7.13	8.5	N
Sodium	mg/L	2019	12	200	N
Sulfate	mg/L	2019	7.92	500	N
TDS	mg/L	2019	201	1000	N
Turbidity	NTU	2016	0.76	5	
Zinc	mg/L	2019	<0.5	5	N
Nitrogen	mg/L	2014	2.7		N

MFL = Million Fibers per Liter, HAA5 = Haloacetic Acid, TTHM = Trihalomethane, AL = Active Level, ppb = parts per billion, ppm = parts per million, pCi/L = picocuries per liter, mg/L = milligrams per liter, pH = Potential of Hydrogen, TDS = Total Dissolved Solids, CU = Color Units.

Table 3.3: Water Quality Data for St. James Well-2

Detected Substance	Units	Sample Year	Results	MCL	Violation
Microbiological					
No Detected Microbiological Contaminants Were Found in the Calendar Year of 2020					
Inorganic Contaminants					
Arsenic	ug/l	2019	<1.0	10	N
Fluoride	mg/l	2019	<0.2	4	N
Nitrate	mg/l	2021	<0.3	10	N
Nitrate - Nitrite	mg/l			10	N
Silver	ug/l	2019	<5.0		
Zinc	ug/l	2019	<50		
Radionuclides					
Combined Radium 226 & 228	pCi/L			5	N

Uranium	ug/L	2016	1.5	30	N
Radium 226	pCi/L			5	N
Radium 228	pCi/L			5	N
Lead and Copper					
Copper	mg/l	2019	<0.05	1.3 AL	N
Secondary Contaminants					
Aluminum	mg/L	2019	>0.05	0.05 – 0.2	N
Chloride	mg/L	2019	2.50	400	N
Color	CU	2019	<5	15	N
Iron	mg/L	2019	<0.05	0.3	
Magnesium	mg/L	2019	9.46	150	N
Manganese	mg/L	2019	<0.05	0.05	N
pH	pH	2019	7.34	8.5	N
Sodium	mg/L	2019	11	200	N
Sulfate	mg/L	2019	4.16	500	N
TDS	mg/L	2019	152	1000	N
Turbidity	NTU	2016	0.34	5	
Zinc	mg/L	2019	<0.01	5	N
Nitrogen	mg/L	2014	2.7		N

MFL = Million Fibers per Liter, HAA5 = Haloacetic Acid, TTHM = Trihalomethane, AL = Active Level, ppb = parts per billion, ppm = parts per million, pCi/L = picocuries per liter, mg/L = milligrams per liter, pH = Potential of Hydrogen, TDS = Total Dissolved Solids, CU = Color Units.

3.2 Existing System

3.2.1 Distribution Piping (Pressure Zones)

The St. James Village Service Area's pipeline distribution system is made up of approximately 38,079 linear feet of 6", 8", 10" and 12" PVC pipe with approximately 1,230 linear feet of 12" ductile iron pipe from Bennington court to the St. James Storage Tank¹. Table 3.4 contains the distribution pipe diameter, materials, and linear feet. The distribution water system is separated

¹ TMWA was given the current hydraulic water distribution model by WDWR with the current piping materials and sizes. TMWA has not field verified the distribution pipe sizes and materials in the hydraulic distribution water model.

into 5 specific pressure zones. TMWA has identified the different pressure zones as 1) St. James Tank 1 Pressure Zone (feeds directly off the water storage tank), 2) Joy Lake 2 Pressure Zone, 3) St. James 1 Pressure Zone, 4) St. James 2 Pressure Zone, and 5) St. James 3 Pressure Zone (Figure 2.2). Except for the St. James Tank 1 pressure zone, the other pressure zones contain several dead ends lacking proper looping for system redundancy and greater fire flow².

Table 3.4: Distribution Pipeline Diameters, Type, and Linear Feet

Pipe Diameter	Linear Footage
6-inch (PVC)	7,854
8-inch (PVC)	19,872
10-inch (PVC)	5,231
12-inch (PVC)	3,892
12-inch (DI)	1,230
Total	38,079

Located at the highest point of the St. James Tank 1 Pressure Zone (at the intersection of Joy Lake Road and Austrian Pine Road) is a pressure reducing station and three-way water valve cluster, which in an emergency, can be opened to allow water to flow into the St. James Village Service Area from the adjacent TMWA water system. It also allows for conveyance of water from the St. James Village Service Area down Austrian Pine Road into the Galena Forest Estates and Montreux communities (Figure 3.1).

The approximate static pressures in each zone are located in Table 3.5 (developed from data provide by TMWA). Based on the data provided from TMWA hydraulic water model the pressure zones all meet minimum and maximum allowable delivery pressures as per Nevada Administrative Code NAC 445A.6711(1b).

Table 3.5: St. James Village Pressure Zones

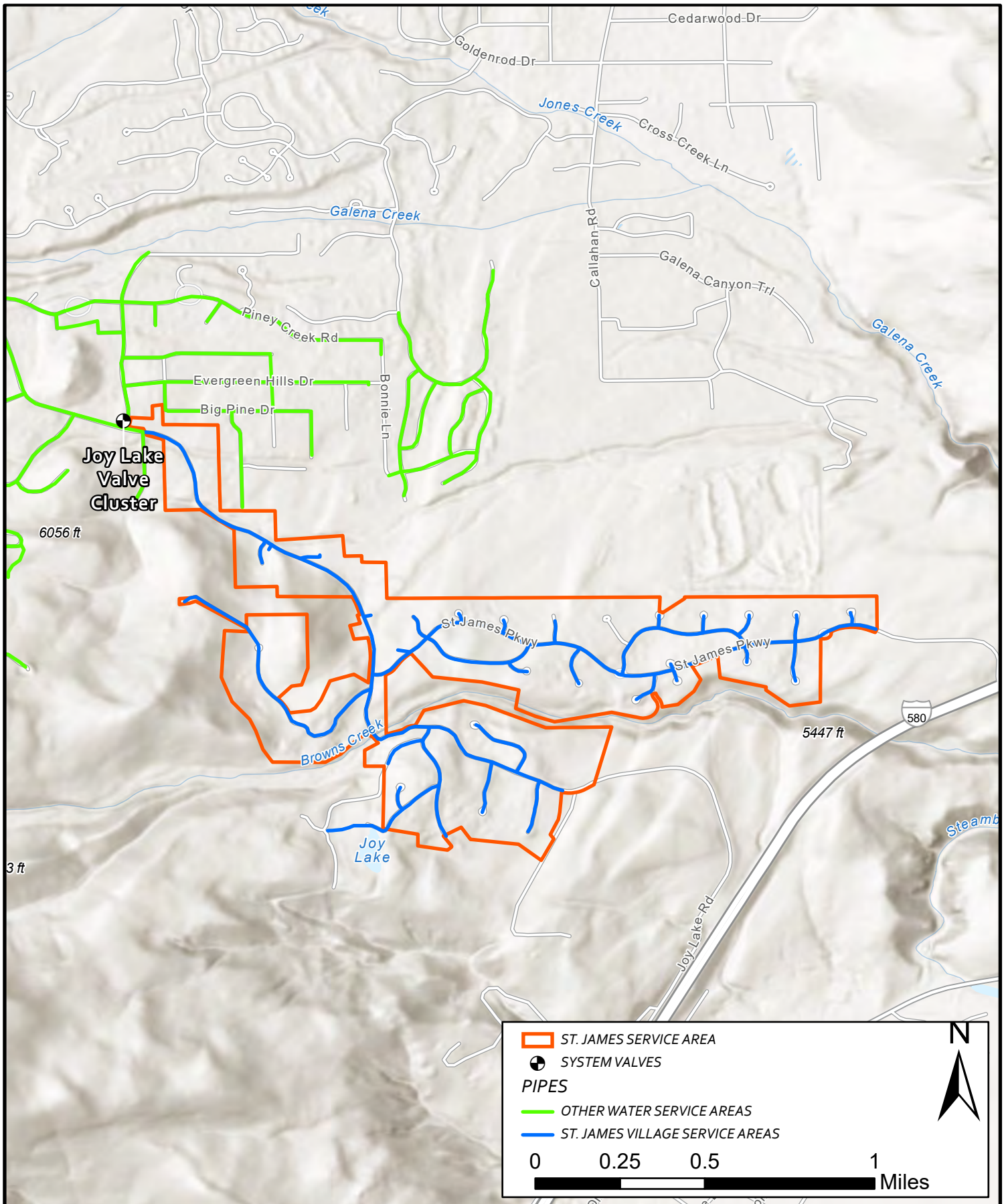
Pressure Zones	Supply/Upstream Pressure Zone	Hydraulic Grade Lines (amsl)	Hydraulic Model Static Pressures (psi)
St. James Tank 1	St. James Wells 1 & 2	5,993*	48 to ~ 115 psi
St. James 1 PRS	St. James Tank 1	5,812	39 to ~ 104 psi
St. James 2 PRS	St. James PRS 1	5,667	41 to ~ 102 psi
St. James 3 PRS	St. James PRS 2	5,434	65 to ~ 73 psi
Joy Lake 2	St. James Tank 1	5,832	46 to ~ 108 psi

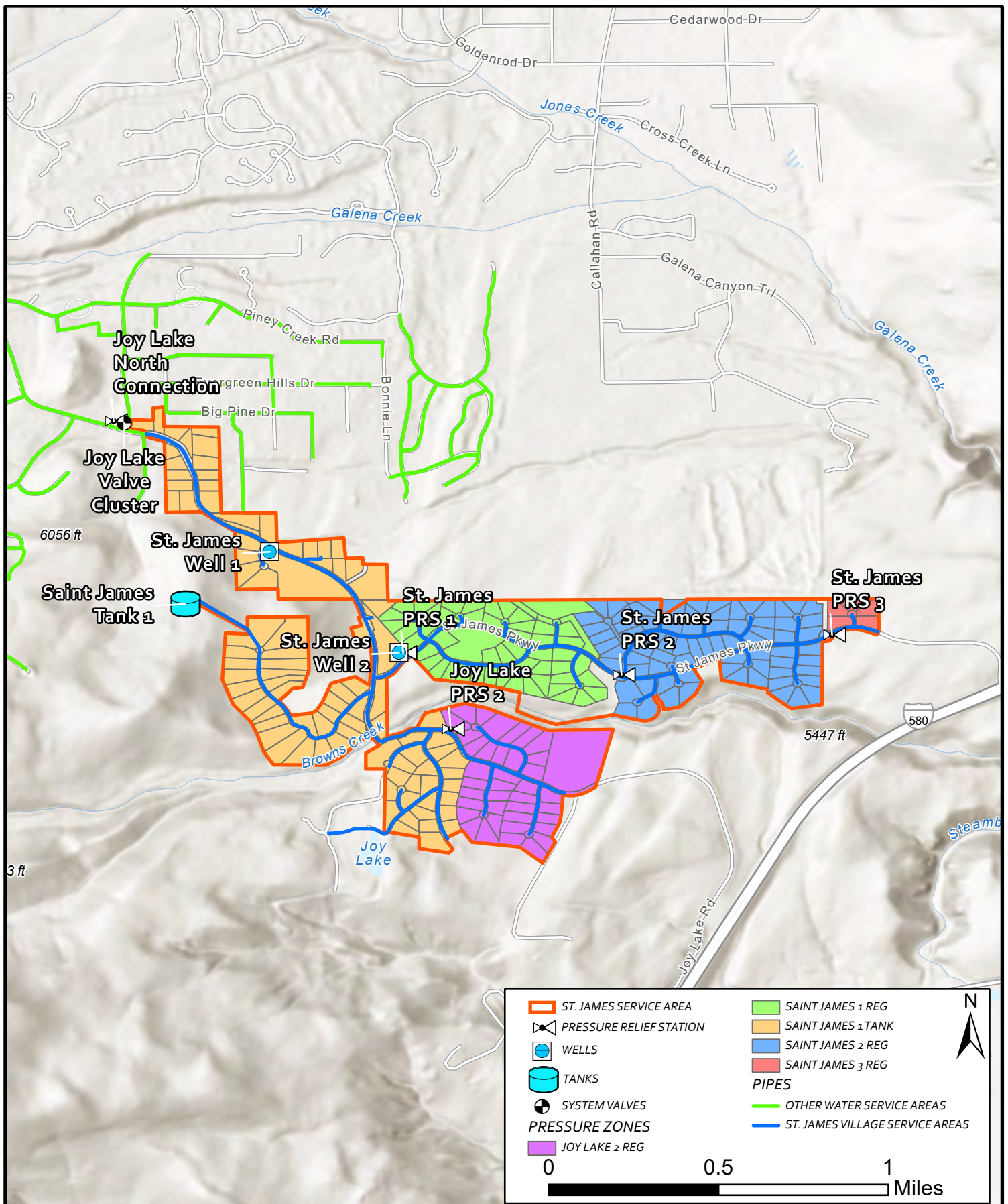
*Based on high water level in the tank

Distribution Piping Existing Condition Assessment

The St. James Village distribution piping was originally installed in the mid 1990's primarily using PVC materials. Assuming the distribution piping is the same age as the existing storage tank for the St. James Village water system, the pipeline mains are approximately 25 years old. Properly installed PVC water main pipe has a useful life expectancy of 75+ years. Assuming the PVC distribution piping was installed properly, it should have another 50+ years of useful life.

² It should be noted that at the time the St. James water system was designed and built, it met all the existing NAC 445A water works requirements and was approved by WDWR when they accepted the infrastructure.





Pressure Reducing Valve Stations Existing Condition Assessment

The five pressure zones are controlled by four pressure reducing valve stations (PRV) with the same corresponding names as the pressure zone, minus the St. James Tank 1 Pressure Zone as summarized in Table 3.6. Figure 3.2 shows the locations of each of the pressure zones with pressure reducing valve stations. No physical inspection of the pressure reducing valves were conducted during the field investigation. All data presented was provided by TMWA. The age of each PRV station is unknown but can be assumed to be the same age as the distribution water main system and storage tank in the service area. According to TMWA, the pressure reducing stations are all inspected regularly, but at what frequency, TMWA was not able to provide that information. Since taking over the water system at the end of 2014, TMWA has replaced all the pressure regulators making them all CLA-VAL systems. Table 3.6 contains each of the pressure reducing stations names, locations, upstream pressures, downstream pressures, and sizes of the CLA-Val's.

Table 3.6: St. James Pressure Reducing Valves

PRS	Location	Upstream pressure (psi)	Downstream pressure (psi)	CLA-Val Sizes
St. James PRS 1	St. James Pkwy	115	39/34	8" main/3" by-pass (CLA-VAL)
St. James PRS 2	St. James Pkwy/Marchmont Ln	120	38	8" main/3" by-pass (CLA-VAL)
St. James PRS 3	St. James Pkwy second roundabout	102	65	6" main/6" by-pass (CLA-VAL, Model 90-99)
Joy Lake PRS 2	Joy Lake Rd	90	46	6" main/2" bypass (CLA-VAL, Model 90-99)

3.2.2 Water Supply

The water that supplies the St. James Water System is produced from two production wells (St. James Well-1 and St. James Well-2) (Figure 3.2). Table 3.7 contains some general information regarding each of the wells. Both wells are located in the St. James Tank 1 Pressure Zone (Figure 2.2). Appendix C contains the well driller reports for the two wells.

Table 3.7: St. James Village Wells and Capacities

Well	Year Drilled	Elevation (ASL)	Depth (ft)	Casing Dia (in.)	Capacity (gpm)	Backup Power
St James Well 1	1995	5695'	620	10	285	No
St. James Well 2	1995	5730'	590	10	320	No
Total Production					605	

Water Supply Well Existing Conditions Assessment

St. James Well-1

Well-1, originally drilled in 1995, was constructed with nominal 10-inch diameter steel casing to a depth of 620 feet below ground level (bgl). The screen intervals consist of Roscoe Moss Ful Flo Louver from 260'-380', 400'-500', and 520'-620' bgl. According to the well log, this well is screened in a fracture flow aquifer. The original static water level, after completion, was 195 feet bgl. In January 2020, the static water level was 256 feet bgl. In 2014, the existing pump and submersible motor were replaced and in 2016, another submersible motor replacement occurred. A municipal well, with good water quality, proper construction, and proper maintenance, can have a useful life of 40 (± 5) years. Currently, Well-1 is 26 years old.

St. James Well-2

Well-2, originally drilled in 1995, was constructed with nominal 10-inch steel casing to a depth of 590 feet bgl. The screen intervals consist of Roscoe Moss Ful Flo Louver from 350'-490' and 510'-590' bgl. According to the well log, the well is screened in a fracture flow aquifer. The original static water level after completion was 242 feet bgl. In January 2020, the static water level was 295 feet bgl. In 2010, a new submersible motor was installed with the existing pump assembly and in 2018, another submersible motor replacement occurred. A municipal well, with good water quality, proper construction, and proper maintenance, can have a useful life of 40 (± 5) years. Currently, Well-2 is 26 years old.

3.2.3 Water Storage

There is one relatively large storage tank associated with the water system infrastructure in the St. James Service Area as listed in Table 3.8. The storage tank is located at the end of Bennington Court and accessible up a gated dirt road (Figure 2.2).

Table 3.8: St. James Village Water Storage

Tank	Volume (MG)	Diameter (ft.)	Height (ft.)	Base Elevation (ft.)
St. James Tank 1	1.10	75	32	5,963
Total	1.10			

Storage Tank Existing Conditions Assessment

The one storage tank in the St. James Water System is a nominal 1.01 MG welded steel tank constructed in 1996. The storage tank is 75 feet in diameter and 32 feet high. In 2017, the storage tank underwent a routine TMWA rehabilitation. The rehabilitation work included an internal/external recoating with typical tank improvements to the air gap, vent, manways, roof hatch, sample tap and pressure transducer vault. A welded steel storage tank, that is properly maintained, can have a useful life expectancy of 45 (± 5) years. Currently the St. James Village Storage Tank is 25 years old.

3.2.4 System Operation and Control

The wells are setup on a lead/lag operating system and controlled by a Supervisory Control and Data Acquisition (SCADA) system by monitoring the water level in the storage tank. When a water level drops to a preset level, a well pump turns on and begin filling the tank. If the storage tank cannot keep up with demand and continues to decline, the second well pump will turn on to supplement demand and fill the tank. Once the tank reaches a preset level, the wells turn off starting with the lag well first.

4.0 WATER USAGE AND CAPACITY

4.1 Annual Well Production

Lumos was able to acquire six years of production data from the Nevada Division of Water Resources (NDWR) for the St. James Wells-1 and -2. Table 4.1 is a summary of the historical water production for the two wells from 2015 through 2020 based on the NDWR monthly production reports. Both wells are located within the St. James Tank 1 Pressure Zone. The annual water production shows a significant variation in total water pumped from year to year. The highest production year occurred in 2016 with 104.58 million gallons pumped and the lowest production year occurred in 2015 with 59.17 million gallons pumped. This is a difference of approximately 44% between the two years. Appendix D contains the monthly breakdown of well production for St. James Wells 1 and 2.

Table 4.1: Annual Well Production for St. James Well-1 and Well-2

Year	St. James Well-1		St. James Well-2		Total Pumped	
	AFA	MG/Y	AFA	MG/Y	AFA	MG/Y
2015	107.32	34.97	74.27	24.20	181.59	59.17
2016	114.99	37.47	205.95	67.11	320.94	104.58
2017	125.98	41.05	82.89	27.01	208.87	68.06
2018	151.08	49.23	124.01	40.41	275.10	89.64
2019	111.89	36.46	127.79	41.64	239.68	78.10
2020	181.34	59.09	135.58	44.18	316.92	103.27

AFA: Acre Feet Annually

MG/Y: Million Gallons per Year

4.2 Meter Data Annual Usage

Lumos was provided meter data for the St. James Service Area for 2018 through 2020 from TMWA. The data was used to develop an Average Day Demand (ADD) and Maximum Day Demand (MDD) for evaluating the capacity of the wells that currently supply water to the community. In addition to meter data for the residential homes, meter data was also provided for the Homeowners Association (HOA) common areas. The HOA meter data was initially removed from the meter datasets to develop a more accurate analysis of actual ADD and MDD for the single-family residents (SFR) in the service area. After an accurate ADD and MDD were developed, the HOA meter data was factored back into the water demand based on the highest annual water usage by the HOA.

Using the provided three years of data, the ADD was calculated to be 700 gallons per day per customer (gpdpc) or 0.784-acre feet annually per customer. In order to develop the MDD, the average day of the maximum month (ADMM) was calculated. Using a ADMM and a MDD multiplier of 1.25 (a standard developed by American Water Works Association [AWWA]), the MDD for the residential customers is approximately 1,750 gpdpc. The three-year average ADD to MDD multiplying factor derived from the meter data (2018 – 2020) is approximately 2.50, which is within the typical water system utility range for metered customers. The largest SFR customer count from the period of available meter data is 159 units.

The highest irrigation water usage by the HOA, which usually occurred over a 7-month period (between May – November), was 2.17 million gallons in 2020. Based on this data and using a 7-

month annual usage period, the ADD and MDD for common area irrigation usage was calculated as 10,330 gpd and 18,750 gpd, respectively. This equates to a multiplying factor of 1.82. Adding the HOA common area irrigation demands to the SFR demand equates to an ADD flow rate of 84 gpm and a MDD flow rate of 207 gpm. Table 4.2 contains a summary of the analysis from the three years of meter data.

Table 4.2: Existing Demand Based on Three Years Average (2018 – 2020)

Customer Class	No. of Customers	Average Daily Demand (gpdpc)	Total Average Demand per Day (gpd)	Total System Average Daily Demand (gpm)	System MDD Required (gpm)
Residential	159	700	111,300	77	194
HOA Irrigation	1	10,330	10,330	7	13
Subtotal	160	N/A	117,245	84	207

Using the SFR ADD and MDD previously discussed, Table 4.3 contains the system demand required to serve all current and future recorded lots that are considered part of the St. James Service Area. The future recorded lots include an additional 18 residential lots outside the gated community that are within the existing service area and 81 lots located inside the St. James Village gated community. Quantifying all the future recorded lots results in a total future ADD system demand of 132 gpm and a MDD of 327 gpm.

Table 4.3: Future Demand at Buildout

Customer Class	No. of Customers	Average Daily Demand (gpdpc)	Total Average Demand per Day (gpd)	Total System Average Daily Demand (gpm)	System MDD Required (gpm)
Existing Residential	159	700	111,300	77	194
HOA Irrigation	1	10,330	10,330	7	13
Remaining Lots inside St. James gated community	81	700	56,700	39	98
Added Lots outside of St. James gated community	18	700	12,600	9	22
Total	259		186,545	132	327

NAC 445A.6672 requires a system that relies exclusively on wells to provide a total well capacity sufficient to meet the MDD when all the wells are operational (total capacity), or the ADD with the most productive well out of service (firm capacity). Based on data provided by TMWA, Well-1 has an average flow rate of 285 gpm and Well-2 has an average flow rate of 320 gpm. The available total capacity with both wells in service is 605 gpm, as shown in Table 4.4. With Well-2, the largest producer, out of service, the available firm pumping capacity is 285 gpm. With only Well-1 operational, the ADD is met for both current and all the recorded lots in the St. James

Service Area. With both wells in service, the current well capacity can meet the MDD required for all the recorded residential lots.

Table 4.4: Capacity Versus Demand (Current/Remaining Lots)

Wells	Capacity (gpm)¹	Backup Power	Year	Well Supply req'd for ADD (gpm)	Well Supply req'd for MDD (gpm)	Can Well Supply² Meet MDD?
St. James Well-1	285	NO	2021	81	204	YES
St. James Well-2	320	NO	Remaining Lots	135	327	YES
Total Capacity, All Wells in Service	605					
Firm Capacity, Well 2 Out of Service	285					

1. Capacities are based on the most recent data provide by TMWA

2. Total well supply must be able to accommodate MDD.

4.3 Well Production vs Meter Data Use

Lumos originally was looking to determine non-revenue water to determine potential water loss in the water system. The International Water Association (IWA) and the American Water Works Association (AWWA) define non-revenue water as equal to the total amount of water flowing into the potable water supply network from the source (wells) minus the total amount of water that industrial and domestic consumers are authorized to use (metered/billed authorized consumption). There are two broad types of losses that occur in drinking water utilities, which include apparent losses and real losses.

Apparent Losses: the non-physical losses that occur in utility operations due to customer meter inaccuracies, systematic data handling errors in customer billing systems, and unauthorized consumption. In other words, this water is consumed but is not properly measured, accounted for, or paid for.

Real Losses: the physical losses of water from the distribution system, including leakage and storage overflows.

Usually, a utility will attempt to target a non-revenue water of less than 10 percent. When comparing the NDWR annual pumping reports to the annual total meter data for 2018 through 2020, a large water demand discrepancy was identified. Table 4.5 contains a comparison of the two data sets with the percentage of well production versus meter usage. The discrepancy in the three years of data range from a low of 46% to a high of 59%. If this was truly non-revenue water, it would be of concern to the water utility.

Table 4.5: Comparing the NDWR Report and Meter Data with Percent Difference

Year	NDWR Reported Pumping (MG/Y)	Meter Data Usage (MG/Y)	Percent Meter Usage of Well Production
2015	59.17	N/A	N/A
2016	104.58	N/A	N/A
2017	68.06	N/A	N/A
2018	89.06	48.03	54%
2019	78.1	45.9	59%
2020	103.27	47.65	46%

TMWA completed a brief investigation into the cause of this discrepancy after it was brought to their attention. TMWA's Engineering Manager believes the discrepancies are due to the valve at the intersection of Joy Lake Road and Austrian Pine Road being open for the last few years. Apparently, Galena Forest Estates and Montreux service areas had well failures at their Mt. Rose Wells 5 and 6. The loss of these wells resulted in the need for alternative water sources (St. James Wells 1 & 2 and surface water) to supply the needed demands. TMWA believes that it will take some time to develop a water balance determination from SCADA data on how much water was conveyed to these other service areas from the St. James Village Wells and surface water conveyances. Due to this discovery, a non-revenue water analysis could not be conducted at this time.

4.4 Water Storage Evaluation

Water storage is regulated by the Nevada Administrative Code, Sections NAC 445A.6674, NAC 445A.66745, NAC 445A.6675 and NAC 445A.66755.

Total required storage capacity includes operating storage, emergency storage, and fire flow storage. TMWA calculates their required total storage capacity to be an operating storage of 15% of MDD (this was a negotiated volume with the regulatory entities), an emergency storage of ADD, and fire flow for the largest structure fire flow demand.

- Operating Storage – Operating storage is provided at 15% of MDD. The MDD for the water service area was calculated from the three-year average ADD from meter data provided for years 2018, 2019, and 2020.
- Emergency Storage – The NAC states that emergency storage can either be determined by the engineer or is 75% of the amount of operating storage. Since TMWA has negotiated with the regulatory agencies that operating storage is only 15% of MDD, Lumos has added emergency storage equivalent to ADD for this situation.
- Fire Flow Storage – Lumos obtained the square footage for all residential homes within the St. James Village Service Area from the Washoe County Assessors website. Based on the square footage of the largest residential home (8,411 square feet) and construction type (Type V-B), the fire flow required from the 2018 International Fire Code (IFC) is 2,500 gpm for a duration of two hours.

Using TMWA's regulatory approval for total storage capacity, which includes operating storage of 15% of MDD for one day, fire flow storage and emergency storage of ADD, Lumos developed an existing and recorded lots storage assessment for the St. James Service Area. Currently, there are 159 active SFR in the service area. Using the total unbuilt recorded lots remaining in the gated

community (81 lots) and remaining unbuilt SFR lots outside the gated community (18 lots), the total potential SFR equates to 258.

Table 4.6 shows the storage capacity analysis for existing and future conditions. The analysis estimates a storage capacity of 453,000 gallons for existing conditions and 548,325 gallons for future conditions. With the current storage tank capacity of 1,010,000 gallons, the existing storage capacity available meets the needs of all the recorded lots in the service area.

Table 4.6: St. James Village Storage Capacity Analysis

WATER SERVICE AREA STORAGE		EXISTING 2020 (gallons)	FUTURE Remaining Recorded Lots (gallons)
ST. JAMES VILLAGE SERVICE AREA		Existing Connections (159)	Recorded Lots Connections (259)
	MDD (ADD X 2.5) plus MDD for irrigation	297,000	470,250
Operational Storage	15% of MDD for one Day, based on historical usage (2018 - 2020)	44,550	70,538
Emergency Reserves	ADD for one Day, based on historical usage (2018 - 2020) plus ADD for irrigation	121,630	190,930
Fire Flows	2,500 gpm @ 2 hours - Largest Residential Home	300,000	300,000
Alternative Pumping Capacity: No Backup Power on St. James Well -1 & St. James Well-2	Total Storage Required	466,180	561,468
	Existing Storage Capacity	1,010,000	1,010,000
	Alternative Pumping Capacity	0	0
Recommendations: N/A			
	Total Storage Capacity Available	1,010,000	1,010,000
	Meets Requirements for Storage?	YES	YES

4.5 Water Distribution Evaluation

Lumos planned to work with TMWA's hydraulic water modeler to conduct an evaluation of the water distribution network. Unfortunately, a review of the hydraulic water model was not possible. It seems that the original hydraulic water model was created by WCDR and given to TMWA when they took over the system. Since TMWA has not had the time to verify all the components in the existing water model, they were not comfortable allowing Lumos to analyze the results of the model. TMWA did offer to provide the data in the water model to Lumos to develop a new model, but due to time constraints and additional cost to create and calibrate a water model, St. James Village Inc. decided not to move forward with the task. At this time, Lumos has not conducted a

water model evaluation of the St. James distribution system but does recommend developing a hydraulic water model in the future to evaluate future looping options, required flow capacities, and pressure/flow assessments.

5.0 WELL SUSTAINABILITY ANALYSIS

Lumos did an analysis on the two St. James Wells to determine their potential to sustainability meet current and future demands. The analysis looked at both wells historical static water levels, specific capacities, monthly production, and SNOTEL data (snow water equivalent) for the sub-basin.

5.1 St. James Well-1 Analysis

In December 2020, the static water level in Well-1 was 263 feet bgl, which is located in the upper screen interval. Figure 5.1 shows 6 years of monthly static water levels recorded in Well-1 from 2015 through 2020. The static water levels in Well-1 indicates that as pumping occurs during the summer and early fall months (high water usage months), the static water level in the well declines. During the winter and spring months, the static water levels indicate a recharging of the aquifer to levels similar to the previous years. A trendline was generated for the 6-years of data provide from TMWA. The trendline suggests that Well-1 is showing an average annual decline in the static water level of two feet per year for the six-year period. For the entire 25-year period since the well was drilled, the static water level has declined an average of 2.6 feet per year. For a fracture flow aquifer, this aquifer system has shown remarkable annual recharge ability during the winter and spring months.

Figure 5.1: Six Year Trendline of Static Water Levels (SWL) in St. James Well-1

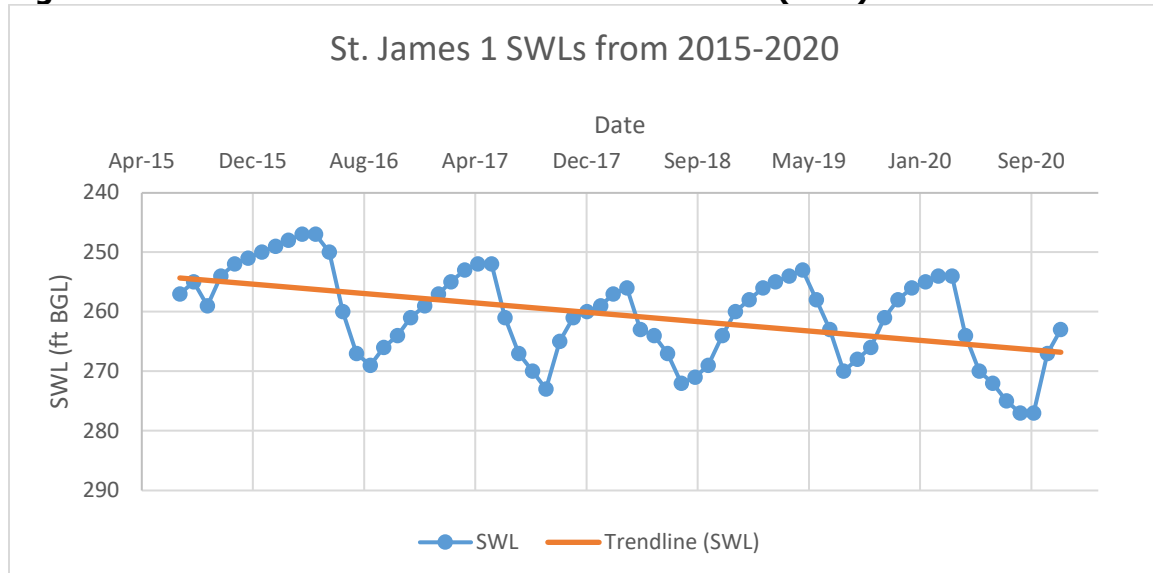
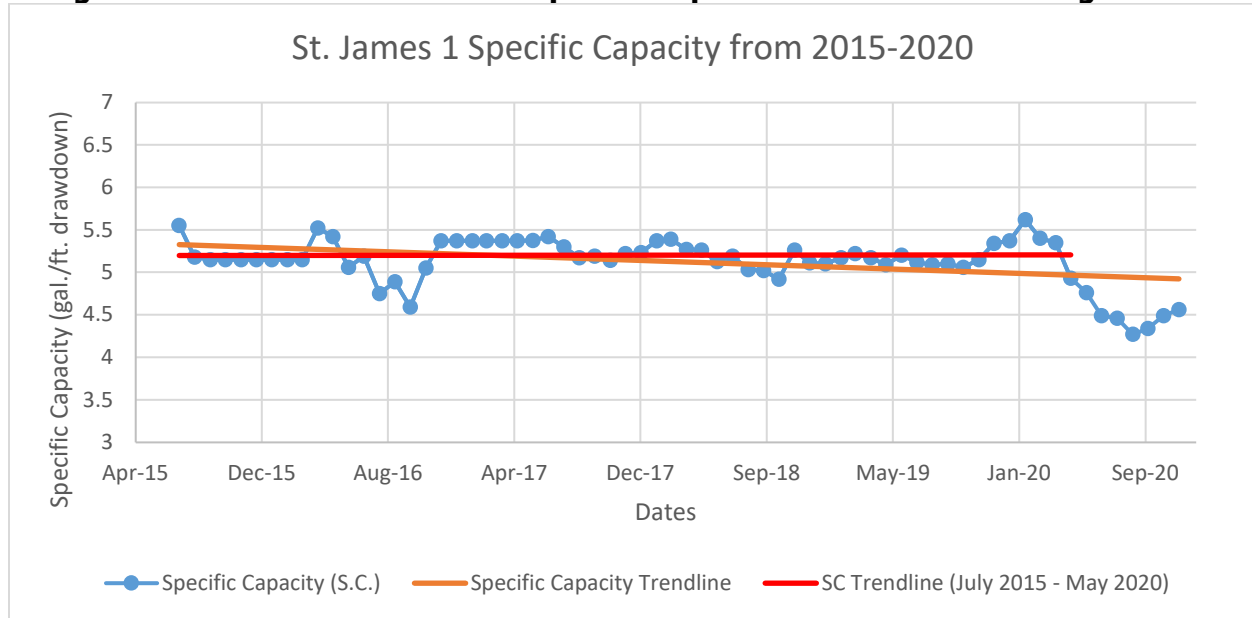


Figure 5.2 shows the specific capacity of Well-1 for the same period (2015 through 2020). Figure 5.2 indicates that the specific capacity for Well-1 has been relatively stable until February 2020 to September 2020, where a decline appears to have occurred. This decline in specific capacity over such a short period of time suggests that the well's screen intervals are becoming plugged by mineral deposits and/or biofouling. With the pumping water level currently drawing down into the upper screen interval, oxygen is likely being introduced into the aquifer adjacent to the exposed screen, which can be a food source for micro-organisms that have been oxygen starved in the past. When the pumping water level is located in the screen interval, there is a high probability of cascading water occurring which may lead to additional oxygenation of the water adjacent to the exposed well screen. Increased biological growth usually results in the plugging

of the screen intervals which reduces the well's specific capacity in a relatively short period of time.

Figure 5.2: Six Year Trendline of Specific Capacities for St. James Village Well-1



5.2 St. James Well-2 Analysis

Figure 5.3 shows the static water levels recorded in Well-2 from 2015 through 2020. Figure 5.3 indicates that as Well-2 is pumped during the summer and early fall months (high water usage months), the static water level in the well declines. During the winter and spring months, the water levels indicate recharge to the aquifer back to the previous year's water level. A trendline was generated for the six years of data provide from TMWA. The trendline suggests that Well-2 is showing a stable or even minor recovery in the static water level for the six-year period. For the entire 25-year period since the well was drilled, the static water level has declined an average of one foot per year. For a fracture flow aquifer, this aquifer system has shown remarkable sustainability and recharge ability during the winter and spring months.

Figure 5.3: Six Year Trendline of Static Water Levels (SWL) in St. James Well-2

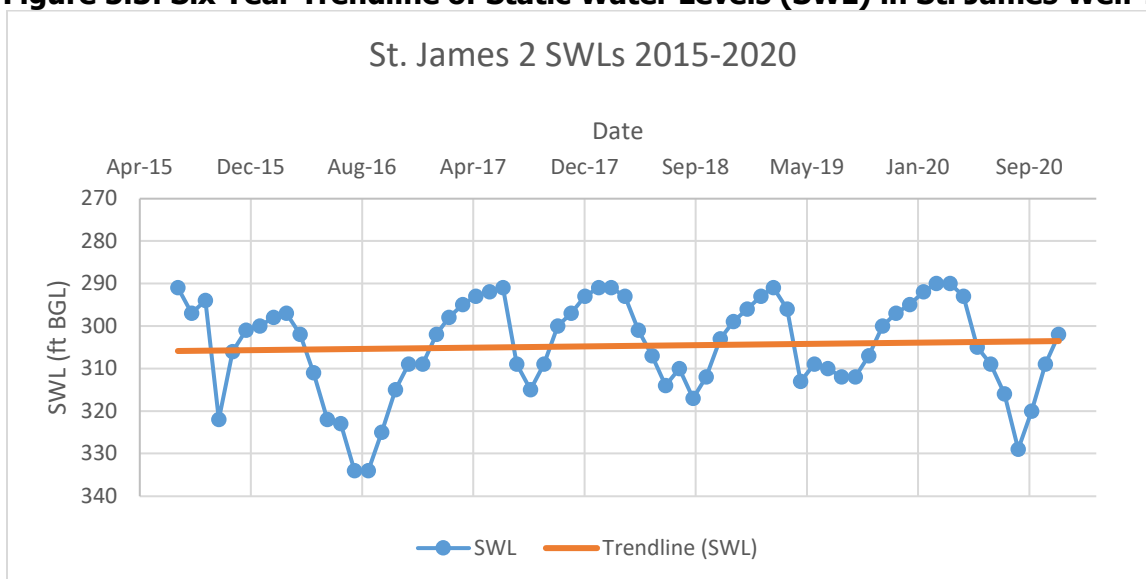
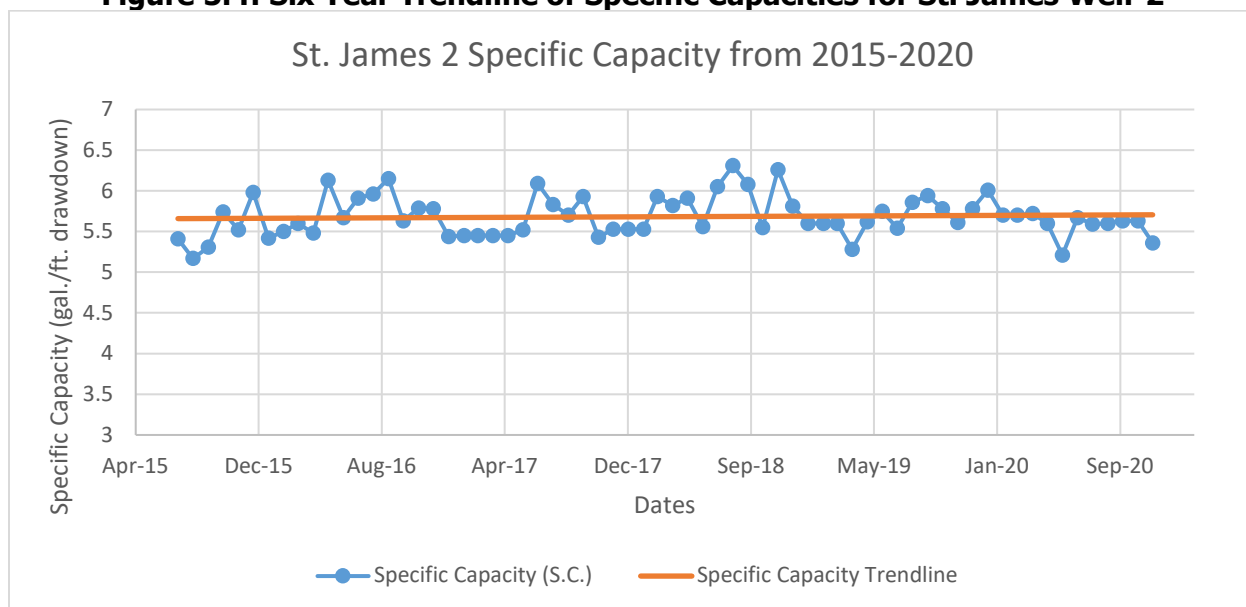


Figure 5.4 shows the specific capacities for Well-2 from 2015 through 2020. A trendline was generated of the past six years of documented specific capacities. As indicated by the trendline over the past six years in Figure 5.4, specific capacity has been relatively stable. This type of data is very promising and along with the stable static water level over the past six years, suggest that with proper management, St James Well 2 can likely be a sustainable well resource.

Figure 5.4: Six Year Trendline of Specific Capacities for St. James Well-2



5.3 St. James Well-1 and Well-2 Sustainable Capacity Analysis

Figure 5.5 and Figure 5.6 combine the static water levels and monthly production data for St. James Well-1 and Well-2. As the graphs indicates, the monthly static water levels decline during the months with the highest well production and begin to recover when the well production

declines. It appears that the level of recovery in each of the wells are dependent on the annual production rate. Over the course of the last 6 years, Well-1 and Well-2 have had an average annual production of 43.05 MG/Y and 47.76 MG/Y. The higher production from Well-1 may be why the static water level has been declining over the past 6 years. What is also noticeable is when well production for a corresponding month (Well-1 "June 2018") is reduced, the static water level decline rate appears to reflect the lower production. The graphs also show what happens during years of relative high well production (2016 "104.58 MG" and 2020 "103.27 MG"), the static water levels do not recover back to the previous year's water levels.

These types of responses suggest that while these aquifers appear to have finite lateral extent, they are effectively recharging annually. A good analogy for this type of aquifer system would be like a "bathtub" with the faucet running (recharge). If the drain plug is opened too much or for too long, the water in the bathtub begins to decline (over pumping). When the amount of water draining out of the bathtub does not exceed the amount of water refilling the bathtub annually, you can have sustainable "bathtub" aquifer systems.

Figure 5.5: St. James Well-1 SWL and Monthly Production for 2015 through 2020

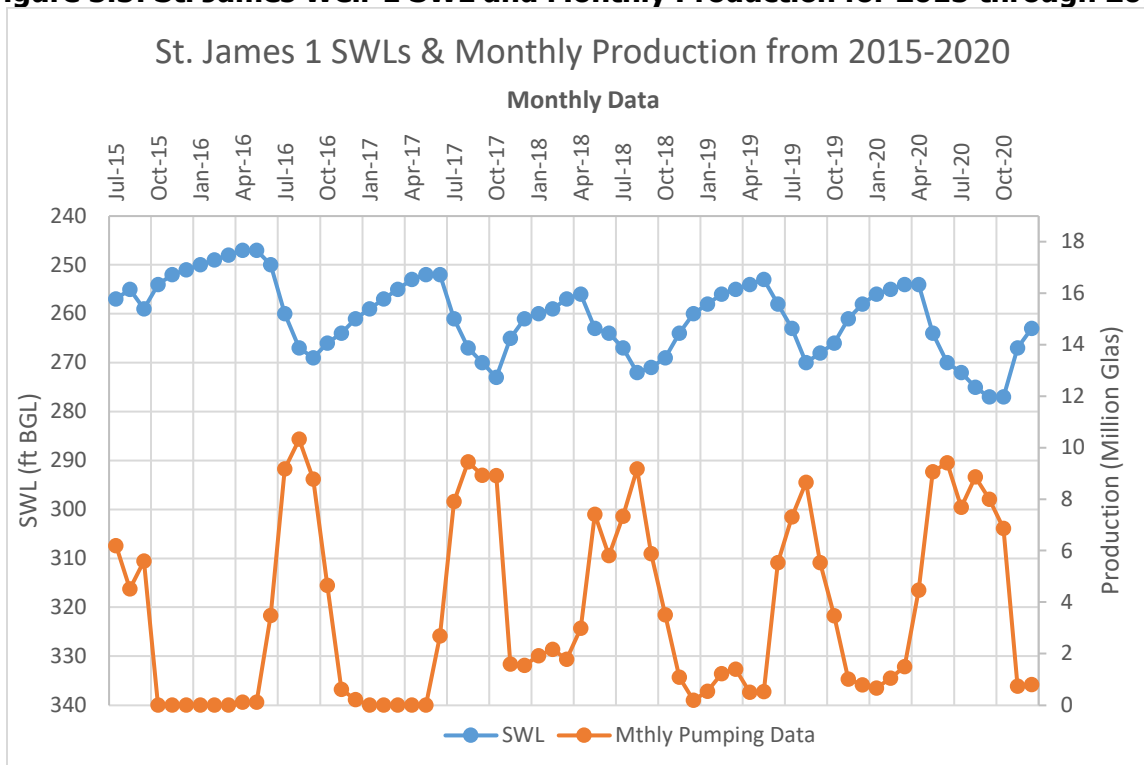


Figure 5.6: St. James Well-2 SWL and Monthly Production for 2015 through 2020

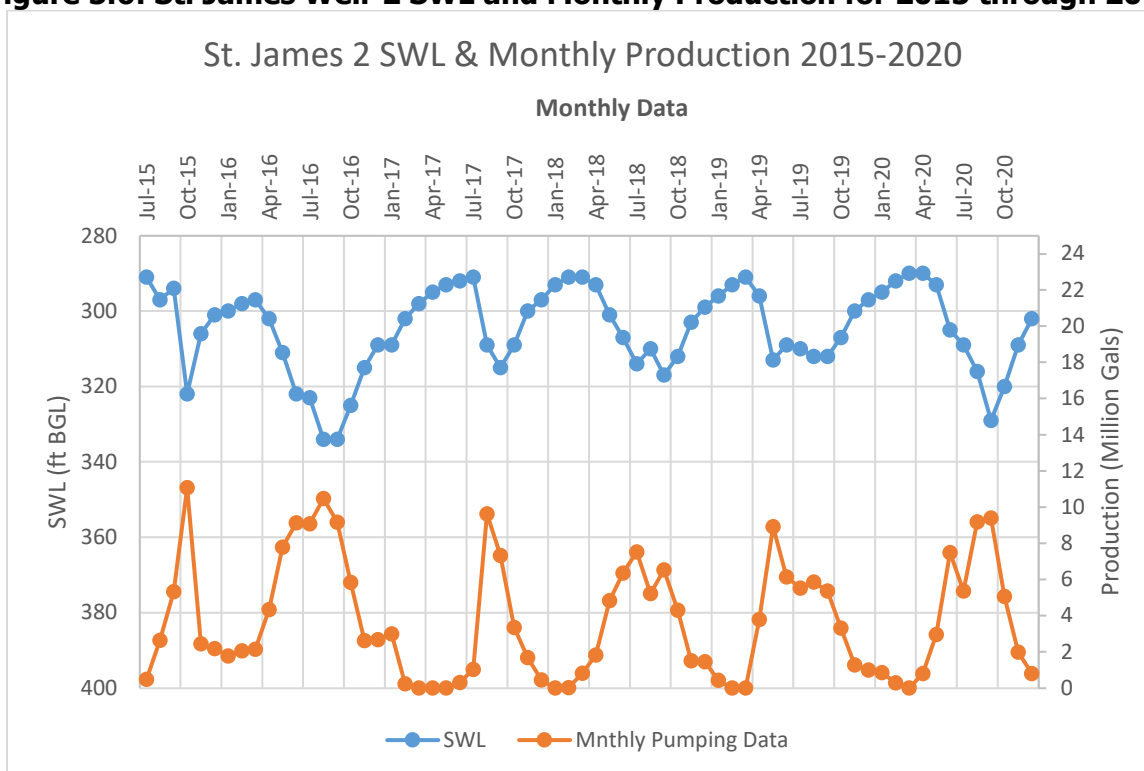


Figure 5.2 and Figure 5.4, which presents the St. James Well-1 and Well-2 specific capacities, also helps to support this analogy. The graphs indicates that the annual specific capacities for Well-1 and Well-2 (except for Well-1 in 2020) have been relatively stable over the past six years. Based on these findings, Lumos believes that these wells can sustainably provide a finite annual volume of water sufficient to meet the demands in the St. James Service Area. With proper well maintenance, management, and strategic operations the static water levels are likely to remain relatively stable or even begin to recover.

In addition to analyzing monthly production data, Lumos also assessed historical SNOTEL data charts for the snow water equivalent (SWE) associated with the Galena Sub-basin which incorporates the data from the Mt Rose Ski Area site (Location 652). The purpose for reviewing the historical data was to determine how the annual snowpack influences the recharge to the aquifers. Table 5.1 contains the historical monthly cumulative snow water equivalent data (in inches) for the water years 2015 through 2021 and the cumulative monthly median snow water equivalent (1991 to 2020). Table 5.1 provides the monthly cumulative inches recorded on the first day of each month. The monthly numbers in red indicate cumulative months, for specific water years, with values below the cumulative monthly median. The most important cumulative data point is the peaking month for the snowpack at SNOTEL Location 652. The peaking totals usually occur around the beginning of April, but totals can exceed the April 1 cumulative inches as occurred during the 2017 water year. Of the seven years of data, three years exceeded the annual median values. This suggests that if the St. James Well-1 and Well-2 recharge is directly affected by the annual snowpack, the SWL's should reflect the higher and lower recharge years. According to the data, 2015, 2018, and 2020 would have lower static water levels and 2016, 2017, 2019 should reflect higher static water levels. When comparing the data, there does not appear to be a year over year correlation between wet years and higher static water levels. While

it is apparent that precipitation is influencing aquifer recharge, the annual production from each of the wells appears to have a more substantial impact on year over year static water level recoveries.

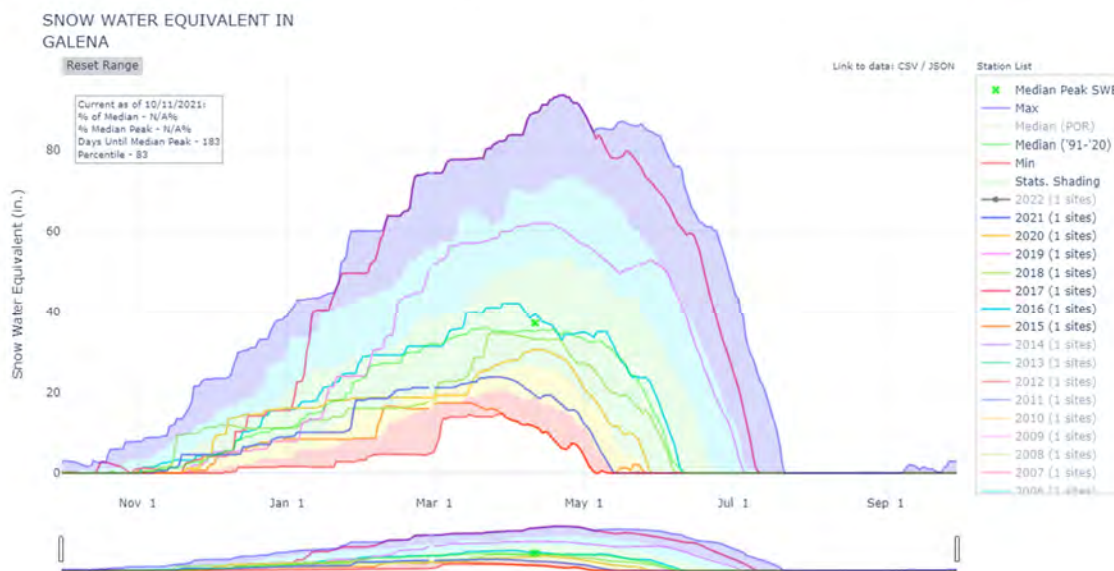
Table 5.1: Galena Sub-Basin Snow Water Equivalent (Inches)

Water Year	Nov	Dec	Jan	Feb	Mar	Apr	May	June
2015	0.5	2.2	7.9	8.4	17.3	13.3	4.4	0.0
2016	0.3	4.3	15.7	28.8	31.3	42.1	34.8	0.0
2017	1.1	4.2	15.6	49.6	74.4	83.7	89.2	69.4
2018	0.0	11.4	11.1	16.0	17.8	34.3	27.1	9.6
2019	0.0	4.5	7.9	24.0	51.9	59.9	56.6	51.8
2020	0.0	4.8	16.1	18.6	18.7	27.7	21.1	0.0
2021	0.0	4.6	9.0	18.1	21.2	23.3	12.3	0.0
Monthly Median (1991 to 2020)	0.0	4.2	11.1	23.7	31.8	34.8	33.2	12.4

(SNOTEL Location 652 (Mtn Rose Ski Area Data))

Figure 5.7 is a graphical representation of the data for the water years 2015-2021 showing snow water equivalent with the shaded zones representing the 90th, 70th, 50th, 30th, and 10th percentiles of the statistical data for the period of record (1981-2021). The green line represents the median data based on the statistical data from the period of record (1991- 2020). The green X represents the median Peak for the snow water equivalent for the same period of record.

Figure 5.7: Graph of Water Years (2015 through 2021) of Snow Water Equivalent



Source: Natural Resource Conservation Service Nevada, Interactive SNOTEL Charts.
(www.nrcs.usda.gov/wps/portal/nrcs/detail/nv/snow/products/?cid=nrcseprd1685435)

The graph in Figure 5.7 shows that the snowpack appears to diminish between May and June except for very high snowpack years, which occurred in 2017 and 2019. During those water years, the snowpack extended into July. When comparing the depletion of the snowpack to when the St. James well's static water levels begin to show recovery. There doesn't appear to show a direct correlation. Commonly, the static water levels for the two St. James wells appear to start showing static water level recovery's starting in October and the recoveries peak between March and April each year. It appears that only when production begins to increase do the static water levels begin to decline again. This does not suggest that the annual snowpack levels are not affecting these aquifers, it just appears to indicate that the monthly production is the more dominant factor affecting static water levels in the wells, year over year.

Existing data suggests that sustainable management of a wellfield in a fracture flow aquifer requires limiting the annual production from each of the wells. The challenge, with this type of aquifer system is determining what is a sustainable annual production for each of the wells. The best way to accomplish this is to start with production volumes that are relatively conservative and document the effects on the wells with respect to recovery each year (SWL's). Based on historical production, Lumos believes the proper starting point for production should be 32 million gallons per year out of St. James Well-1 and 35 million gallons per year out of St. James Well-2. This provides a combined production total of 67 MG/Y, which may allow for some supplemental water being conveyed to adjacent service areas outside the St. James Service Area in the case of emergencies. The proposed well production levels reflect an average decline of 26% from Well-1 and 14% from Well-2. Since Well-1 has continued to show annual declines in SWL, a greater reduction in annual production appears to be necessary as a starting point. Well-2 appears to have shown relatively stable SWL's over the past 6 year and so a smaller reduction may result in higher SWL recovery.

Looking at the meter data that was provide and assessed from TMWA (2018 – 2020 meter data), the highest annual production in the St. James Service Area over the past three years was 48.03 MG/Y. This suggests that roughly 19 MG/Y of capacity from these wells could be held in reserve in the wells or served to other service areas. To gain a better understanding of the long-term sustainable capacity of these wells, it is suggested that Well-1 and -2 are only used to serve the St. James Service Area for the next few years to see if the aquifer(s) recover above their latest historic static water levels. TMWA will have the final determination on how the wells are operated and at what annual production level.

6.0 GROWTH PROJECTIONS AND WATER DEMAND

Growth projections for the St. James Village Development were provided by the developer. St. James Village currently has recorded 227 single-family residence (SFR) lots through final mapping with an estimated 240± additional one acre lots that can be recorded. In addition, there are 13 existing SFR lots with an additional 18 future SFR lots just outside the gated community, but still located within the St. James Service Area. The purpose of the growth projection assessment is to determine the limitations of the existing St. James water system to service future additional recorded lots in their service area. Lumos assessed the well capacity, storage capacity, and sustainability of the two wells with respect to the future growth associated with the St. James Service Area. The objective was to determine when the water system will require additional infrastructure to meet the demands for reaching buildout.

6.1 Growth Projections

Currently, there are 159 SFR service connections within the St. James Service Area of which 13 connection are located outside the gated community (Non-SJV existing residents). This means that there are currently 146 residential service connection within the St. James Village gated community with 81 additional SFR recorded lots that have not been built yet. To date, the St. James Service Area has a total of 240 SFR lots annexed into the TMWA service area. In addition to the existing annexed lots, there are an additional 18 SFR lot outside the gated community that can be annexed into the St. James Service Area (Non-SJV future residents). Table 6.1 is a breakdown of the annexed and future Non-SJV lots that could be annexed.

Table 6.1: Current and Future St. James Village Service Area Customers

Customer Class	Number of Customers	Cumulative Customer Count
SJV Existing Residential	146	146
SJV Irrigation	1	147
SJV Unbuilt Lots	81	228
Non-SJV Existing Residential	13	241
Non-SJV Future lots	18	259

Although it could be argued that the additional 18 lots outside the gated community should not be included in the connection count as the system was not originally constructed to serve these connections, Lumos has decided to include them to acknowledge current system operations. If the client wishes to exclude them from the count, it will be easier to subtract them out of the growth projections. Using Table 6.1 as a starting point for total customer counts, Lumos requested an annual growth rate from the St. James Village developer to integrate into the potential water infrastructure demand. The growth rate provide to Lumos was an additional 25 lots per year. Since the developer already has a potential lot count for TMWA for annexation of 30 lots in 2021, the 25 lot per year growth rate would not start until 2022. Assuming that St. James Village has a maximum of 240, one acre lots, remaining to be recorded, the projected buildout of the development would occur in 2030. Table 6.2 contains the growth projections for the remaining lots within the St. James Village Development to reach proposed buildout.

Table 6.2: St. James Village Service Area Growth Rate

Customer Class	Number of Customers	Cumulative Customer Count
SJV Existing Residential	146	146
SJV Irrigation	1	147
SJV Unbuilt Lots	81	228
Non-SJV Existing Residential	13	241
Non-SJV Future lots	18	259
St. James Village Annual Growth Rate	Number of Lots	Cumulative Customer Count
2021	30	289
2022	25	314
2023	25	339
2024	25	364
2025	25	389
2026	25	414
2027	25	439
2028	25	464
2029	25	489
2030	10	499

Note: Acronym SJV is for St. James Village Development

6.2 Projected Water Demand

Utilizing the historical water demand data and the projected growth rate for the St. James Service Area, Lumos generated future water demand projections for total annual water use and maximum day capacity through buildout. Table 6.3 contains a breakout of projected water demand for the projected growth rate for the St. James Village Development. Based on the existing flow rates for St. James Well-1 and Well-2 and NAC 445A.6672 (see Section 3.20), the St. James Village water system could support approximately 228 additional residential water service connections. Based on the estimated annual "starting point" for production that can be extracted from the two wells (67 MG/Y), the St. James Service Area can likely support existing customers and unbuilt lots within and out of the gated community. What should be noted is that the 67 million gallons annual is only a starting point for a conservative annual production. This production could go up or down in the future based on how the wells respond to optimized operational practices.

Table 6.3: St. James Village Service Area Water Demand Projections

Customer Class	Number of Customers	Cumulative Customer Count	ADD (gpdpc)	MDD (gpdpc)	Total ADD Flow Rate	Total MDD Flow Rate	Total Annual Water Use (MG)
SJV Existing Residential	146	146	700	1,750	71	178	37.32
SJV Irrigation	1	147	10,330	18,750	7	13	2.17*
SJV Unbuilt Lots	81	241	700	1,750	39	98	20.50
Non-SJV Existing Residential	13	160	700	1,750	6	16	3.15
Non-SJV Future lots	18	259	700	1,750	9	22	4.73
Total Water Production					132	327	67.87
Annual Growth Rate	Number of Lots	Cumulative Customer Count	ADD (gpdpc)	MDD (gpdpc)	Cumulative Total ADD (gpm)	Cumulative Total MDD (gpm)	Cumulative Total Annual Water Use (MG)
2021	30	289	700	1,750	147	363	75.54
2022	25	314	700	1,750	159	393	81.93
2023	25	339	700	1,750	171	424	88.32
2024	25	364	700	1,750	183	454	94.71
2025	25	389	700	1,750	195	484	101.10
2026	25	414	700	1,750	207	515	107.49
2027	25	439	700	1,750	219	545	113.88
2028	25	464	700	1,750	232	575	120.27
2029	25	489	700	1,750	243	606	126.66
2030	10	499	700	1,750	248	618	129.22

Notes: * Indicates 7 months of irrigation demand.

The Bold "red" number represents the MDD well capacity threshold has been exceeded.

6.3 Projected Storage Requirements

Utilizing the same assumptions for the growth projections and water demands, Lumos conducted an assessment of the future storage requirements for the St. James Service Area (see Section 3.2). The TMWA storage requirement consist of an operating storage of 15% of MDD, Emergency Reserves at ADD and Fire Flow for the largest structure in the service area. Table 6.4 contains an analysis of the existing and future buildout for required storage capacity. The analysis shows that the current storage tank capacity is large enough to meet projected growth in the St. James Village service area.

Table 6.4: Existing and Future "Buildout" Requirements for Storage Capacity

WATER SERVICE AREA STORAGE		EXISTING 2020 (gallons)	BUILDOUT 2030 (gallons)
ST. JAMES VILLAGE SERVICE AREA		Existing Connections (259)	Future Connections (499)
Operational Storage	15% of MDD for one Day, based on historical usage (2018 - 2020)	70,534	133,534
	MDD (ADD X 2.50)	470,227	890,227
Emergency Reserves	ADD for one Day, based on historical usage (2018 - 2020)	186,545	354,545
Fire Flows	2,500 gpm @ 2 hours - Largest Residential Home	300,000	300,000
Alternative Pumping Capacity: No Backup Power on Wells St. James 1 & St. James 2	Total Storage Required	557,079	788,079
	Existing Storage Capacity	1,010,000	1,010,000
	Alternative Pumping Capacity	0	0
Notes: The existing storage capacity calculation includes the ADD and MDD for the irrigation demand.	Total Storage Capacity Available	1,010,000	1,010,000
	Meets NAC for Storage?	YES	YES

6.4 Projected Water Main Distribution Requirements

As previously discussed, Lumos and TMWA were unable to meet to review and evaluate the distribution system against existing demand. As a result, Lumos was also not able to evaluate the distribution system against projected future service and demand.

For these reasons, the only recommendation that Lumos can make at this time is when future lot layouts are developed in St. James Village, the engineer conduct an assessment for looping the existing dead ends and future lots for better redundancy and fire flow.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The St. James water infrastructure is approximately 26 years old. The water system was constructed and paid for by St. James Village Inc. and dedicated to the Washoe County Department of Water Resources (WDWR). After the merger of WDWR and TMWA, the water system became the property of TMWA. The purpose of this report is to document the estimated capacity of the water system and the ability of the water system to support growing service and demand.

Using meter data provided by TMWA from 2018 through 2020, a water demand for ADD and MDD was developed for the St. James Service Area. The demands were used to calculate the required well capacity and storage capacity necessary to serve the existing and future lots. Based on the existing well capacity, it is estimated that the St. James water system can support approximately 228 additional one acre lots with the current ADD and MDD. To reach a target water service area buildout of an additional 240 lots, additional well capacity will be required. Table 6.3 is a breakdown of the future required well capacity to reach buildout. Based on TMWA's storage capacity requirement, the existing storage tank is adequately sized to support all existing connections and anticipated buildout connections. Based on the growth projections provided by St. James Village Inc. (25 lots per year), the development should reach buildout in 2030.

In addition to the meter data provided by TMWA, Lumos assessed six years of Nevada Division of Water Resources (NDWR) pumping records for St. James Well-1 and Well-2 (2015 – 2020). When comparing the pumping reports for 2018 – 2020 to the meter data for 2018 – 2020, the wells produced significantly more water than the St. James Service Area consumed. After a brief discussion with/and investigation by TMWA, it was determined that a valve at the intersection of Joy Lake Road and Austrian Pine Road was opened to allow water to be conveyed from the St. James Service Area to the Galena Forest Estates and Montreux Service Areas. Apparently, the Galena Forest Estates and Montreux Service Areas had two well failures and required supplemental water from TMWA surface water sources and St. James Well-1 and Well-2 to meet their water demand.

One of the largest concerns associated with the St. James water system is the sustainability of the two wells. Lumos conducted an analysis of the wells, which included the evaluation of static water levels versus annual production, specific capacities, and SNOTEL data for the sub-basin associated with the area. After assessing all the data, Lumos determined that if the St. James wells are managed properly, they could be a sustainable water supply for the St. James Service Area. Management of the wells require that TMWA limit water production from each well and closely monitor monthly static water levels and continue to conduct evaluations of the wells. A second managerial recommendations to help with the well's sustainability is to only use the well capacity in the St. James Service Area. Lumos's final conclusions and recommendations from this preliminary engineering report are:



- Based on existing well capacities, the existing St. James water system is sufficient to meet all demands for existing recorded lot as well as up to 228 future lots annexed into TMWA service area.
- Based on the existing storage capacity requirements, the existing storage tank has adequate capacity to support buildout in the service area.
- The sustainability of the fracture flow aquifers is likely possible when proper managerial practices (finite conservative annual well production) associated with the two wells and service area are implemented.

- Based on the projected growth of the St. James Village Development, at least one additional production well will be necessary to reach buildout.
- Lumos recommends that a hydraulic water model be developed by St. James Village's engineer for use in developing looping strategies for the existing and future phases of development in the service area. This will help create redundancy in the existing and future distribution piping network along with better fire flows.

Appendix A

1. Hydrographic Basin Summary (Pleasant Valley, Basin 088)

Hydrographic Area Summary

Hydrographic Area No.	088	Hydrographic Area Name	PLEASANT VALLEY
Subarea Name			
Hydrographic Region No.	06	Hydrographic Region Name	TRUCKEE RIVER BASIN
Area (sq. mi.)	39		
Counties within the hydrographic area	Washoe		
Nearest Communities to Hydrographic Area	Reno, Washoe City		
Designated (Y/N, Order No.)	Y, O-709	For All or Portion of Basin: All	
Preferred Use (Order No., Description)	None	For All or Portion of Basin:	
State Engineer's Orders:		For All or Portion of Basin:	
State Engineer's Rulings:			
Pumpage Inventory Status	ongoing	Crop Inventory Status	None
Water Level Measurement?	Y		

Yield Values

Perennial Yield (AFY)	3000
System Yield (AFY)	11000
Yield Reference(s)	USGS Open File Report 84-433
Yield Remarks	

Source of Committed Data:	NDWR Database	Supplementally Adjusted?	Y
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Manner of Use	Underground	Geothermal	Other Ground Water
Commercial	351.57	0.00	0.00
Construction	0.00	0.00	0.00
Domestic	198.47	0.00	0.00
Environmental	0.00	0.00	0.00
Industrial	0.00	7,963.67	0.00
Irrigation	627.46	0.00	0.00
Mining and Milling	0.00	0.00	0.00
Municipal	2,948.85	0.00	0.00
Power	0.00	0.00	0.00
Quasi-Municipal	1,962.22	0.00	0.00
Recreation	0.00	0.00	0.00
Stockwater	2.91	0.00	0.00
Storage	0.00	0.00	0.00
Wildlife	0.00	0.00	0.00
Other	78.26	0.00	0.00
Totals	6,169.74	7,963.67	0.00



Related Reports

USGS Reconnaissance	57	USGS Bulletin	None
Other References	R 57		

Comments

2. Hydrographic Basin Summary (Washoe Valley, Basin 089)

Hydrographic Area Summary

Hydrographic Area No.	089	Hydrographic Area Name	WASHOE VALLEY
Subarea Name			
Hydrographic Region No.	06	Hydrographic Region Name	TRUCKEE RIVER BASIN
Area (sq. mi.)	82		
Counties within the hydrographic area	Washoe		
Nearest Communities to Hydrographic Area	Washoe City		
Designated (Y/N, Order No.)	Y, O-707	For All or Portion of Basin: All	
Preferred Use (Order No., Description)	None	For All or Portion of Basin:	
State Engineer's Orders:		For All or Portion of Basin:	
State Engineer's Rulings:			
Pumpage Inventory Status	ongoing	Crop Inventory Status	None
Water Level Measurement?	Y		

Yield Values

Perennial Yield (AFY)	15000
System Yield (AFY)	25000
Yield Reference(s)	USGS Recon. 41
Yield Remarks	Recharge

Source of Committed Data:	NDWR Database	Supplementally Adjusted?	Y
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Manner of Use	Underground	Geothermal	Other Ground Water
Commercial	19.18	0.00	0.00
Construction	0.00	0.00	0.00
Domestic	485.75	0.00	0.00
Environmental	0.00	0.00	0.00
Industrial	0.00	0.00	0.00
Irrigation	5,882.63	0.00	0.00
Mining and Milling	0.00	0.00	0.00
Municipal	2,008.68	0.00	0.00
Power	0.00	0.00	0.00
Quasi-Municipal	116.69	0.00	0.00
Recreation	955.00	0.00	0.00
Stockwater	67.52	0.00	0.00
Storage	0.00	0.00	0.00
Wildlife	831.52	0.00	0.00
Other	2.30	0.00	0.00
Totals	10,369.27	0.00	0.00

Related Reports

USGS Reconnaissance	57	USGS Bulletin	None
Other References	Rulings 2439, 3201		

Comments

Appendix B

1. St. James Well-1 Water Quality

Report of Analysis

Nitrate

Analyte	Method	Result	Unit	MRL	Analysis Date
St James Well 1					
		PWS ID: NV0000190		Facility ID: W65	
Site: NADW		Lab Sample ID: 1507020-01		Collect Date/Time: 7/15/2015 10:43	
Nitrate-N	300.0	<0.3	mg/L	0.3	7/15/2015
Site: NADW					
		Lab Sample ID: 1606006-01		Collect Date/Time: 6/1/2016 13:20	
2,3,7,8 - TCDD (Dioxin)	1613	<0.000005	ug/L	0.000005	6/28/2016
<i>Analyzed by Eurofins</i>					
Iron	200.7	0.56	mg/L	0.02	6/7/2016
<i>Analyzed by Wetlab</i>					
Sodium	200.7	11	mg/L	0.5	6/7/2016
<i>Analyzed by Wetlab</i>					
Aluminum	200.8	<50.0	ug/L	50.0	6/10/2016
Manganese	200.8	<5.0	ug/L	5.0	6/10/2016
Copper	200.8	<50.0	ug/L	50.0	6/10/2016
Zinc	200.8	<10.0	ug/L	10.0	6/10/2016
Arsenic	200.8	<1.0	ug/L	1.0	6/10/2016
Silver	200.8	<5.0	ug/L	5.0	6/10/2016
Uranium	200.8	3.7	ug/L	1.0	6/10/2016
Color	2120B	5	CU	5	6/2/2016
<i>Analyzed by NSPHL</i>					
Turbidity	2130B	0.76	NTU	0.1	6/1/2016
Odor	2150 B	0	Ton	0	6/1/2016
<i>Analyzed by NSPHL</i>					
Residue-filterable (TDS)	2540 C	251	mg/L	10	6/7/2016
Fluoride	300.0	<0.50	mg/L	0.50	6/1/2016
Chloride	300.0	<5.00	mg/L	5.00	6/1/2016
Nitrite-N	300.0	<0.50	mg/L	0.5	6/1/2016
Nitrate-N	300.0	<0.75	mg/L	0.75	6/1/2016
Sulfate	300.0	<10.0	mg/L	10.0	6/1/2016
pH	4500H-B	7.23	pH		6/1/2016
Alachlor	505	<0.1	ug/L	0.1	6/7/2016
<i>Analyzed by Eurofins</i>					
Chlordane	505	<0.1	ug/L	0.1	6/7/2016

Analyte	Method	Result	Unit	MRL	Analysis Date
St James Well 1		PWS ID: NV0000190		Facility ID: W65	
Analyzed by Eurofins					
Endrin	505	<0.01	ug/L	0.01	6/7/2016
Analyzed by Eurofins					
Heptachlor	505	<0.01	ug/L	0.01	6/7/2016
Analyzed by Eurofins					
Heptachlor epoxide	505	<0.01	ug/L	0.01	6/7/2016
Analyzed by Eurofins					
Lindane	505	<0.01	ug/L	0.01	6/7/2016
Analyzed by Eurofins					
Methoxychlor	505	<0.05	ug/L	0.05	6/7/2016
Analyzed by Eurofins					
Polychlorinated Biphenyls	505	<0.1	ug/L	0.1	6/7/2016
Analyzed by Eurofins					
Toxaphene	505	<0.5	ug/L	0.5	6/7/2016
Analyzed by Eurofins					
2,4,5-TP	515.4	<0.2	ug/L	0.2	6/11/2016
Analyzed by Eurofins					
2,4-D	515.4	<0.1	ug/L	0.1	6/11/2016
Analyzed by Eurofins					
Dalapon	515.4	<1	ug/L	1	6/11/2016
Analyzed by Eurofins					
Dinoseb	515.4	<0.2	ug/L	0.2	6/11/2016
Analyzed by Eurofins					
Pentachlorophenol	515.4	<0.04	ug/L	0.04	6/11/2016
Analyzed by Eurofins					
Picloram	515.4	<0.1	ug/L	0.1	6/11/2016
Analyzed by Eurofins					
1,1,1-Trichloroethane	524.2	<0.5	ug/L	0.5	6/3/2016
Analyzed by NSPHL					
1,1,2-Trichloroethane	524.2	<0.5	ug/L	0.5	6/3/2016
Analyzed by NSPHL					
1,1-Dichloroethene	524.2	<0.5	ug/L	0.5	6/3/2016
Analyzed by NSPHL					
1,2,4-Trichlorobenzene	524.2	<0.5	ug/L	0.5	6/3/2016
Analyzed by NSPHL					
1,2-Dichlorobenzene	524.2	<0.5	ug/L	0.5	6/3/2016
Analyzed by NSPHL					
1,2-Dichloroethane	524.2	<0.5	ug/L	0.5	6/3/2016
Analyzed by NSPHL					
1,2-Dichloropropane	524.2	<0.5	ug/L	0.5	6/3/2016
Analyzed by NSPHL					
1,4-Dichlorobenzene	524.2	<0.5	ug/L	0.5	6/3/2016
Analyzed by NSPHL					
Benzene	524.2	<0.5	ug/L	0.5	6/3/2016
Analyzed by NSPHL					
Carbon Tetrachloride	524.2	<0.5	ug/L	0.5	6/3/2016
Analyzed by NSPHL					
Chlorobenzene	524.2	<0.5	ug/L	0.5	6/3/2016
Analyzed by NSPHL					
cis-1,2-Dichloroethene	524.2	<0.5	ug/L	0.5	6/3/2016
Analyzed by NSPHL					
Ethylbenzene	524.2	<0.5	ug/L	0.5	6/3/2016
Analyzed by NSPHL					
Methylene Chloride	524.2	<0.5	ug/L	0.5	6/3/2016
Analyzed by NSPHL					
Styrene	524.2	<0.5	ug/L	0.5	6/3/2016
Analyzed by NSPHL					

Analyte	Method	Result	Unit	MRL	Analysis Date
St James Well 1		PWS ID: NV0000190		Facility ID: W65	
Tetrachloroethene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	6/3/2016
Toluene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	6/3/2016
Total Xylenes <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	6/3/2016
trans-1,2-Dichloroethene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	6/3/2016
Trichlorethene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	6/3/2016
Vinyl Chloride <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	6/3/2016
Atrazine <i>Analyzed by Eurofins</i>	525.2	<0.05	ug/L	0.05	6/16/2016
Benzo [a] pyrene <i>Analyzed by Eurofins</i>	525.2	<0.02	ug/L	0.02	6/16/2016
Di (2-ethylhexyl) adipate <i>Analyzed by Eurofins</i>	525.2	<0.6	ug/L	0.6	6/16/2016
Di (2-ethylhexyl) phthalate	525.2	<0.6	ug/L	0.6	6/16/2016
Hexachlorobenzene <i>Analyzed by Eurofins</i>	525.2	<0.05	ug/L	0.05	6/16/2016
Hexachlorocyclopentadiene <i>Analyzed by Eurofins</i>	525.2	<0.05	ug/L	0.05	6/16/2016
Simazine <i>Analyzed by Eurofins</i>	525.2	<0.05	ug/L	0.05	6/16/2016
Carbofuran <i>Analyzed by Eurofins</i>	531.2	<0.5	ug/L	0.5	6/7/2016
Oxamyl (Vydate) <i>Analyzed by Eurofins</i>	531.2	<0.5	ug/L	0.5	6/7/2016
Glyphosate <i>Analyzed by Eurofins</i>	547	<6	ug/L	6	6/11/2016
Endothall <i>Analyzed by Eurofins</i>	548.1	<5	ug/L	5	6/8/2016
Diquat <i>Analyzed by Eurofins</i>	549.2	<0.4	ug/L	0.4	6/7/2016
Dibromochloropropane <i>Analyzed by Eurofins</i>	551.1	<0.01	ug/L	0.01	6/7/2016
Ethylene dibromide <i>Analyzed by Eurofins</i>	551.1	<0.01	ug/L	0.01	6/7/2016
MBAS <i>Analyzed by NSPHL</i>	5540C	<0.1	mg/L	0.1	6/1/2016
Site: NADW	W65	Lab Sample ID: 1706033-01	Collect Date/Time: 6/27/2017 11:25		
Nitrate-N	300.0	<0.75	mg/L	0.75	6/27/2017
Site: NADW	W65	Lab Sample ID: 1711005-01	Collect Date/Time: 11/1/2017 9:31		
2,3,7,8 - TCDD (Dioxin) <i>Analyzed by Eurofins</i>	1613	<0.005	ng/L	0.005	11/18/2017
Alachlor <i>Analyzed by Eurofins</i>	505	<0.1	ug/L	0.1	11/8/2017
Chlordane <i>Analyzed by Eurofins</i>	505	<0.1	ug/L	0.1	11/8/2017
Endrin <i>Analyzed by Eurofins</i>	505	<0.01	ug/L	0.01	11/8/2017
Heptachlor <i>Analyzed by Eurofins</i>	505	<0.01	ug/L	0.01	11/8/2017

Analyte	Method	Result	Unit	MRL	Analysis Date
St James Well 1		PWS ID: NV0000190			Facility ID: W65
Heptachlor epoxide <i>Analyzed by Eurofins</i>	505	<0.01	ug/L	0.01	11/8/2017
Lindane <i>Analyzed by Eurofins</i>	505	<0.01	ug/L	0.01	11/8/2017
Methoxychlor <i>Analyzed by Eurofins</i>	505	<0.05	ug/L	0.05	11/8/2017
Polychlorinated Biphenyls <i>Analyzed by Eurofins</i>	505	<0.1	ug/L	0.1	11/8/2017
Toxaphene <i>Analyzed by Eurofins</i>	505	<0.5	ug/L	0.5	11/8/2017
2,4,5-TP <i>Analyzed by Eurofins</i>	515.4	<0.2	ug/L	0.2	11/15/2017
2,4-D <i>Analyzed by Eurofins</i>	515.4	<0.1	ug/L	0.1	11/15/2017
Dalapon <i>Analyzed by Eurofins</i>	515.4	<1	ug/L	1	11/15/2017
Dinoseb <i>Analyzed by Eurofins</i>	515.4	<0.2	ug/L	0.2	11/15/2017
Pentachlorophenol <i>Analyzed by Eurofins</i>	515.4	<0.04	ug/L	0.04	11/15/2017
Picloram <i>Analyzed by Eurofins</i>	515.4	<0.1	ug/L	0.1	11/15/2017
Atrazine <i>Analyzed by Eurofins</i>	525.2	<0.05	ug/L	0.05	11/16/2017
Benzo [a] pyrene <i>Analyzed by Eurofins</i>	525.2	<0.02	ug/L	0.02	11/16/2017
Di (2-ethylhexyl) adipate <i>Analyzed by Eurofins</i>	525.2	<0.6	ug/L	0.6	11/16/2017
Hexachlorobenzene <i>Analyzed by Eurofins</i>	525.2	<0.05	ug/L	0.05	11/16/2017
Hexachlorocyclopentadiene <i>Analyzed by Eurofins</i>	525.2	<0.05	ug/L	0.05	11/16/2017
Simazine <i>Analyzed by Eurofins</i>	525.2	<0.05	ug/L	0.05	11/16/2017
Carbofuran <i>Analyzed by Eurofins</i>	531.2	<0.5	ug/L	0.5	11/7/2017
Oxamyl (Vydate) <i>Analyzed by Eurofins</i>	531.2	<0.5	ug/L	0.5	11/7/2017
Glyphosate <i>Analyzed by Eurofins</i>	547	<6	ug/L	6	11/7/2017
Endothall <i>Analyzed by Eurofins</i>	548.1	<5	ug/L	5	11/9/2017
Diquat <i>Analyzed by Eurofins</i>	549.2	<0.4	ug/L	0.4	11/7/2017
Dibromochloropropane <i>Analyzed by Eurofins</i>	551.1	<0.01	ug/L	0.01	11/15/2017
Ethylene dibromide <i>Analyzed by Eurofins</i>	551.1	<0.01	ug/L	0.01	11/15/2017
Site: NADW	W65	Lab Sample ID: 1711005-02	Collect Date/Time: 12/6/2017 7:30		
Di (2-ethylhexyl) phthalate <i>Analyzed by Eurofins</i>	525.2	1.7	ug/L	0.6	12/14/2017
Site: NADW	W65	Lab Sample ID: 1803009-01	Collect Date/Time: 3/13/2018 0:00		
Nitrate-N	300.0	<0.3	mg/L	0.3	3/14/2018
Site: NADW	W65	Lab Sample ID: 1809008-01	Collect Date/Time: 9/11/2018 13:00		
Polychlorinated Biphenyls	508	<0.50	ug/L	0.50	9/27/2018

Analyte	Method	Result	Unit	MRL	Analysis Date
St James Well 1		PWS ID: NV0000190		Facility ID: W65	
Analyzed by Weck					
Site: NADW	W65	Lab Sample ID: 1810035-01		Collect Date/Time: 10/24/2018 12:19	
Dibromochloropropane	504.1	<0.01	ug/L	0.01	10/30/2018
Analyzed by Weck					
Ethylene dibromide	504.1	<0.02	ug/L	0.02	10/30/2018
Analyzed by Weck					
Chlordane	508	<0.10	ug/L	0.1	11/7/2018
Analyzed by Weck					
Endrin	508	<0.010	ug/L	0.01	11/7/2018
Analyzed by Weck					
Heptachlor	508	<0.010	ug/L	0.01	11/7/2018
Analyzed by Weck					
Heptachlor epoxide	508	<0.010	ug/L	0.01	11/7/2018
Analyzed by Weck					
Hexachlorobenzene	508	<0.050	ug/L	0.05	11/7/2018
Analyzed by Weck					
Hexachlorocyclopentadiene	508	<0.050	ug/L	0.05	11/7/2018
Analyzed by Weck					
Lindane	508	<0.010	ug/L	0.01	11/7/2018
Analyzed by Weck					
Methoxychlor	508	<0.010	ug/L	0.01	11/7/2018
Analyzed by Weck					
Polychlorinated Biphenyls	508	<0.5	ug/L	0.5	11/7/2018
Analyzed by Weck					
Toxaphene	508	<1.0	ug/L	1	11/7/2018
Analyzed by Weck					
2,4,5-TP	515.3	<0.2	ug/L	0.2	11/7/2018
Analyzed by Weck					
2,4-D	515.3	<0.4	ug/L	0.4	11/7/2018
Analyzed by Weck					
Dalapon	515.3	<0.4	ug/L	0.4	11/7/2018
Analyzed by Weck					
Dinoseb	515.3	<0.4	ug/L	0.4	11/7/2018
Analyzed by Weck					
Pentachlorophenol	515.3	<0.2	ug/L	0.2	11/7/2018
Analyzed by Weck					
Picloram	515.3	<0.6	ug/L	0.6	11/7/2018
Analyzed by Weck					
Alachlor	525.2	<0.10	ug/L	0.1	11/9/2018
Analyzed by Weck					
Atrazine	525.2	<0.10	ug/L	0.1	11/9/2018
Analyzed by Weck					
Benzo [a] pyrene	525.2	<0.10	ug/L	0.1	11/9/2018
Analyzed by Weck					
Di (2-ethylhexyl) adipate	525.2	<5.0	ug/L	5	11/9/2018
Analyzed by Weck					
Di (2-ethylhexyl) phthalate	525.2	<3.0	ug/L	3	11/9/2018
Analyzed by Weck					
Simazine	525.2	<0.10	ug/L	0.1	11/9/2018
Analyzed by Weck					
Carbofuran	531.1	<2	ug/L	2	11/19/2018
Analyzed by Weck					
Oxamyl (Vydate)	531.1	<2	ug/L	2	11/19/2018
Analyzed by Weck					
Glyphosate	547	<5.0	ug/L	5	11/1/2018
Analyzed by Weck					
Endothall	548.1	<45	ug/L	45	11/8/2018

Analyte	Method	Result	Unit	MRL	Analysis Date
St James Well 1		PWS ID: NV0000190		Facility ID: W65	
Analyzed by Weck					
Diquat	549.2	<4.0	ug/L	4	11/15/2018
Analyzed by Weck					
Site: NADW	W65	Lab Sample ID: 1901010-02		Collect Date/Time: 1/22/2019 14:41	
Iron	200.7	<0.05	mg/L	0.05	1/23/2019
Analyzed by NSPHL					
Sodium	200.7	12	mg/L	5	1/23/2019
Analyzed by NSPHL					
Aluminum	200.8	<50	ug/L	50	1/24/2019
Manganese	200.8	<5.0	ug/L	5	1/24/2019
Copper	200.8	<50	ug/L	50	1/24/2019
Zinc	200.8	<50	ug/L	10	1/24/2019
Arsenic	200.8	<1	ug/L	1	1/24/2019
Silver	200.8	<5.0	ug/L	5	1/24/2019
Color	2120B	<5	CU	5	1/22/2019
Analyzed by NSPHL					
Odor	2150 B	0.00	Ton	0	1/23/2019
Analyzed by NSPHL					
Residue-filterable (TDS)	2540 C	201	mg/L	10	1/25/2019
Chloride	300.0	2.72	mg/L	2	1/23/2019
Sulfate	300.0	7.92	mg/L	4	1/23/2019
Fluoride	300.0	<0.2	mg/L	0.2	1/23/2019
Nitrite-N	300.0	<0.2	mg/L	0.2	1/23/2019
Nitrate-N	300.0	<0.3	mg/L	0.3	1/23/2019
Magnesium	3500-MG-B	14.3	mg/L	1	1/23/2019
pH	4500H-B	7.13	pH		1/22/2019
1,1,1-Trichloroethane	524.3	<0.5	ug/L	0.5	1/25/2019
1,1,2-Trichloroethane	524.3	<0.5	ug/L	0.5	1/25/2019
1,1-Dichloroethene	524.3	<0.5	ug/L	0.5	1/25/2019
1,2,4-Trichlorobenzene	524.3	<0.5	ug/L	0.5	1/25/2019
1,2-Dichlorobenzene	524.3	<0.5	ug/L	0.5	1/25/2019
1,2-Dichloroethane	524.3	<0.5	ug/L	0.5	1/25/2019
1,2-Dichloropropane	524.3	<0.5	ug/L	0.5	1/25/2019
1,4-Dichlorobenzene	524.3	<0.5	ug/L	0.5	1/25/2019
Benzene	524.3	<0.5	ug/L	0.5	1/25/2019

Analyte	Method	Result	Unit	MRL	Analysis Date
St James Well 1		PWS ID: NV0000190		Facility ID: W65	
Carbon Tetrachloride	524.3	<0.5	ug/L	0.5	1/25/2019
Chlorobenzene	524.3	<0.5	ug/L	0.5	1/25/2019
cis-1,2-Dichloroethene	524.3	<0.5	ug/L	0.5	1/25/2019
Ethylbenzene	524.3	<0.5	ug/L	0.5	1/25/2019
Methylene Chloride	524.3	<0.5	ug/L	0.5	1/25/2019
Styrene	524.3	<0.5	ug/L	0.5	1/25/2019
Tetrachloroethene	524.3	<0.5	ug/L	0.5	1/25/2019
Toluene	524.3	<0.5	ug/L	0.5	1/25/2019
Total Xylenes	524.3	<0.5	ug/L	0.5	1/25/2019
trans-1,2-Dichloroethene	524.3	<0.5	ug/L	0.5	1/25/2019
Trichlorethene	524.3	<0.5	ug/L	0.5	1/25/2019
Vinyl Chloride	524.3	<0.5	ug/L	0.5	1/25/2019
MBAS <i>Analyzed by NSPHL</i>	5540C	<0.1	mg/L	0.1	1/23/2019
Site: NADW	W65	Lab Sample ID: 1908020-01		Collect Date/Time: 8/27/2019 10:24	
Radium-226 <i>Analyzed by Eurofins</i>	RA GA	<1.0	pCi/L	1	9/21/2019
Radium-228 <i>Analyzed by Eurofins</i>	RA GA	<1.0	pCi/L	1	9/21/2019
Site: NADW	W65	Lab Sample ID: 2001054-01		Collect Date/Time: 1/9/2020 6:18	
Nitrate-N	300.0	<0.3	mg/L	0.3	1/9/2020
Site: NADW	W65	Lab Sample ID: 2101009-01		Collect Date/Time: 1/4/2021 11:31	
Nitrate-N	300.0	<0.3	mg/L	0.3	1/4/2021

2. St. James Well-2 Water Quality



P.O. Box 30013
Reno, NV 89520
775-834-8118

Report of Analysis

Nitrate

Analyte	Method	Result	Unit	MRL	Analysis Date
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St James Well 2

PWS ID: NV0000190

Facility ID: W66

Site: STJW	Lab Sample ID: 1508084-01			Collect Date/Time: 8/31/2015 11:45	
Nitrate-N	300.0	<0.3	mg/L	0.3	9/1/2015

Site: STJW		Lab Sample ID: 1606004-01		Collect Date/Time: 6/1/2016 12:50	
2,3,7,8 - TCDD (Dioxin)	1613	<0.000005	ug/L	0.000005	6/28/2016
Analyzed by Eurofins					
Iron	200.7	<0.020	mg/L	0.02	6/7/2016
Analyzed by Wellab					
Sodium	200.7	10	mg/L	0.5	6/7/2016
Analyzed by Wellab					
Aluminum	200.8	<50.0	ug/L	50.0	6/10/2016
Manganese	200.8	<5.0	ug/L	5.0	6/10/2016
Copper	200.8	<50.0	ug/L	50.0	6/10/2016
Zinc	200.8	68.2	ug/L	10.0	6/10/2016
Arsenic	200.8	<1.0	ug/L	1.0	6/10/2016
Silver	200.8	<5.0	ug/L	5.0	6/10/2016
Uranium	200.8	1.5	ug/L	1.0	6/10/2016
Color	2120B	<5	CU	5	6/2/2016
Analyzed by NSPHL					
Turbidity	2130B	0.34	NTU	0.1	6/1/2016
Odor	2150 B	0	Ton	0	6/1/2016
Analyzed by NSPHL					
Residue-filterable (TDS)	2540 C	205	mg/L	10	6/7/2016
Fluoride	300.0	<0.50	mg/L	0.50	6/1/2016
Chloride	300.0	<5.00	mg/L	5.00	6/1/2016
Nitrite-N	300.0	<0.50	mg/L	0.50	6/1/2016
Nitrate-N	300.0	<0.75	mg/L	0.75	6/1/2016
Sulfate	300.0	<10.0	mg/L	10.0	6/1/2016
pH	4500H-B	7.19	pH		6/1/2016
Alachlor	505	<0.1	ug/L	0.1	6/7/2016
Analyzed by Eurofins					
Chlordane	505	<0.1	ug/L	0.1	6/7/2016

Analyte	Method	Result	Unit	MRL	Analysis Date
St James Well 2		PWS ID: NV0000190		Facility ID: W66	
Analyzed by Eurofins					
Endrin	505	<0.01	ug/L	0.01	6/7/2016
Analyzed by Eurofins					
Heptachlor	505	<0.01	ug/L	0.01	6/7/2016
Analyzed by Eurofins					
Heptachlor epoxide	505	<0.01	ug/L	0.01	6/7/2016
Analyzed by Eurofins					
Lindane	505	<0.01	ug/L	0.01	6/7/2016
Analyzed by Eurofins					
Methoxychlor	505	<0.05	ug/L	0.05	6/7/2016
Analyzed by Eurofins					
Polychlorinated Biphenyls	505	<0.1	ug/L	0.1	6/7/2016
Analyzed by Eurofins					
Toxaphene	505	<0.5	ug/L	0.5	6/7/2016
Analyzed by Eurofins					
2,4,5-TP	515.4	<0.2	ug/L	0.2	6/11/2016
Analyzed by Eurofins					
2,4-D	515.4	<0.1	ug/L	0.1	6/11/2016
Analyzed by Eurofins					
Dalapon	515.4	<1	ug/L	1	6/11/2016
Analyzed by Eurofins					
Dinoseb	515.4	<0.2	ug/L	0.2	6/11/2016
Analyzed by Eurofins					
Pentachlorophenol	515.4	<0.04	ug/L	0.04	6/11/2016
Analyzed by Eurofins					
Picloram	515.4	<0.1	ug/L	0.1	6/11/2016
Analyzed by Eurofins					
1,1,1-Trichloroethane	524.2	<0.5	ug/L	0.5	6/2/2016
Analyzed by NSPHL					
1,1,2-Trichloroethane	524.2	<0.5	ug/L	0.5	6/2/2016
Analyzed by NSPHL					
1,1-Dichloroethene	524.2	<0.5	ug/L	0.5	6/2/2016
Analyzed by NSPHL					
1,2,4-Trichlorobenzene	524.2	<0.5	ug/L	0.5	6/2/2016
Analyzed by NSPHL					
1,2-Dichlorobenzene	524.2	<0.5	ug/L	0.5	6/2/2016
Analyzed by NSPHL					
1,2-Dichloroethane	524.2	<0.5	ug/L	0.5	6/2/2016
Analyzed by NSPHL					
1,2-Dichloropropane	524.2	<0.5	ug/L	0.5	6/2/2016
Analyzed by NSPHL					
1,4-Dichlorobenzene	524.2	<0.5	ug/L	0.5	6/2/2016
Analyzed by NSPHL					
Benzene	524.2	<0.5	ug/L	0.5	6/2/2016
Analyzed by NSPHL					
Carbon Tetrachloride	524.2	<0.5	ug/L	0.5	6/2/2016
Analyzed by NSPHL					
Chlorobenzene	524.2	<0.5	ug/L	0.5	6/2/2016
Analyzed by NSPHL					
cis-1,2-Dichloroethene	524.2	<0.5	ug/L	0.5	6/2/2016
Analyzed by NSPHL					
Ethylbenzene	524.2	<0.5	ug/L	0.5	6/2/2016
Analyzed by NSPHL					
Methylene Chloride	524.2	<0.5	ug/L	0.5	6/2/2016
Analyzed by NSPHL					
Styrene	524.2	<0.5	ug/L	0.5	6/2/2016
Analyzed by NSPHL					

Analyte	Method	Result	Unit	MRL	Analysis Date
St James Well 2		PWS ID: NV0000190			Facility ID: W66
Tetrachloroethene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	6/2/2016
Toluene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	6/2/2016
Total Xylenes <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	6/2/2016
trans-1,2-Dichloroethene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	6/2/2016
Trichlorethene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	6/2/2016
Vinyl Chloride <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	6/2/2016
Atrazine <i>Analyzed by Eurofins</i>	525.2	<0.05	ug/L	0.05	6/16/2016
Benzo [a] pyrene <i>Analyzed by Eurofins</i>	525.2	<0.02	ug/L	0.02	6/16/2016
Di (2-ethylhexyl) adipate <i>Analyzed by Eurofins</i>	525.2	<0.6	ug/L	0.6	6/16/2016
Di (2-ethylhexyl) phthalate <i>Analyzed by Eurofins</i>	525.2	<0.6	ug/L	0.6	6/16/2016
Hexachlorobenzene <i>Analyzed by Eurofins</i>	525.2	<0.05	ug/L	0.05	6/16/2016
Hexachlorocyclopentadiene <i>Analyzed by Eurofins</i>	525.2	<0.05	ug/L	0.05	6/16/2016
Simazine <i>Analyzed by Eurofins</i>	525.2	<0.05	ug/L	0.05	6/16/2016
Carbofuran <i>Analyzed by Eurofins</i>	531.2	<0.5	ug/L	0.5	6/7/2016
Oxamyl (Vydate) <i>Analyzed by Eurofins</i>	531.2	<0.5	ug/L	0.5	6/7/2016
Glyphosate <i>Analyzed by Eurofins</i>	547	<6	ug/L	6	6/11/2016
Endothall <i>Analyzed by Eurofins</i>	548.1	<5	ug/L	5	6/8/2016
Diquat <i>Analyzed by Eurofins</i>	549.2	<0.4	ug/L	0.4	6/7/2016
Dibromochloropropane <i>Analyzed by Eurofins</i>	551.1	<0.01	ug/L	0.01	6/7/2016
Ethylene dibromide <i>Analyzed by Eurofins</i>	551.1	<0.01	ug/L	0.01	6/7/2016
MBAS <i>Analyzed by NSPHL</i>	5540C	<0.1	mg/L	0.1	6/1/2016
Site: STJW	W66	Lab Sample ID: 1706034-01	Collect Date/Time: 6/27/2017 11:35		
Nitrate-N	300.0	<0.75	mg/L	0.75	6/27/2017
Site: STJW	W66	Lab Sample ID: 1712009-01	Collect Date/Time: 11/17/2017 6:50		
2,3,7,8 - TCDD (Dioxin) <i>Analyzed by Eurofins</i>	1613	<0.005	ng/L	0.005	12/16/2017
Alachlor <i>Analyzed by Eurofins</i>	505	<0.1	ug/L	0.1	11/23/2017
Chlordane <i>Analyzed by Eurofins</i>	505	<0.1	ug/L	0.1	11/23/2017
Endrin <i>Analyzed by Eurofins</i>	505	<0.01	ug/L	0.01	11/23/2017
Heptachlor <i>Analyzed by Eurofins</i>	505	<0.01	ug/L	0.01	11/23/2017

Analyte	Method	Result	Unit	MRL	Analysis Date
St James Well 2		PWS ID: NV0000190			Facility ID: W66
Heptachlor epoxide <i>Analyzed by Eurofins</i>	505	<0.01	ug/L	0.01	11/23/2017
Lindane <i>Analyzed by Eurofins</i>	505	<0.01	ug/L	0.01	11/23/2017
Methoxychlor <i>Analyzed by Eurofins</i>	505	<0.05	ug/L	0.05	11/23/2017
Polychlorinated Biphenyls <i>Analyzed by Eurofins</i>	505	<0.1	ug/L	0.1	11/23/2017
Toxaphene <i>Analyzed by Eurofins</i>	505	<0.5	ug/L	0.5	11/23/2017
2,4,5-TP <i>Analyzed by Eurofins</i>	515.4	<0.2	ug/L	0.2	12/2/2017
2,4-D <i>Analyzed by Eurofins</i>	515.4	<0.1	ug/L	0.1	12/2/2017
Dalapon <i>Analyzed by Eurofins</i>	515.4	<1	ug/L	1	12/2/2017
Dinoseb <i>Analyzed by Eurofins</i>	515.4	<0.2	ug/L	0.2	12/2/2017
Pentachlorophenol <i>Analyzed by Eurofins</i>	515.4	<0.04	ug/L	0.04	12/2/2017
Picloram <i>Analyzed by Eurofins</i>	515.4	<0.1	ug/L	0.1	12/2/2017
Atrazine <i>Analyzed by Eurofins</i>	525.2	<0.05	ug/L	0.05	12/5/2017
Benzo [a] pyrene <i>Analyzed by Eurofins</i>	525.2	<0.02	ug/L	0.02	12/5/2017
Di (2-ethylhexyl) adipate <i>Analyzed by Eurofins</i>	525.2	<0.6	ug/L	0.6	12/5/2017
Di (2-ethylhexyl) phthalate <i>Analyzed by Eurofins</i>	525.2	<0.6	ug/L	0.6	12/5/2017
Hexachlorobenzene <i>Analyzed by Eurofins</i>	525.2	<0.05	ug/L	0.05	12/5/2017
Hexachlorocyclopentadiene <i>Analyzed by Eurofins</i>	525.2	<0.05	ug/L	0.05	12/5/2017
Simazine <i>Analyzed by Eurofins</i>	525.2	<0.05	ug/L	0.05	12/5/2017
Carbofuran <i>Analyzed by Eurofins</i>	531.2	<0.5	ug/L	0.5	11/22/2017
Oxamyl (Vydate) <i>Analyzed by Eurofins</i>	531.2	<0.5	ug/L	0.5	11/22/2017
Glyphosate <i>Analyzed by Eurofins</i>	547	<6	ug/L	6	11/27/2017
Endothall <i>Analyzed by Eurofins</i>	548.1	<5	ug/L	5	11/28/2017
Diquat <i>Analyzed by Eurofins</i>	549.2	<0.4	ug/L	0.4	11/23/2017
Dibromochloropropane <i>Analyzed by Eurofins</i>	551.1	<0.01	ug/L	0.01	12/5/2017
Ethylene dibromide <i>Analyzed by Eurofins</i>	551.1	<0.01	ug/L	0.01	12/5/2017
Site: STJW	W66	Lab Sample ID: 1806007-01	Collect Date/Time: 6/5/2018 10:22		
Nitrate-N	300.0	<0.3	mg/L	0.3	6/6/2018
Site: STJW	W66	Lab Sample ID: 1809009-01	Collect Date/Time: 9/11/2018 13:17		
Polychlorinated Biphenyls <i>Analyzed by Weck</i>	508	<0.50	ug/L	0.50	9/27/2018

Analyte	Method	Result	Unit	MRL	Analysis Date
St James Well 2		PWS ID: NV0000190		Facility ID: W66	
Site: STJW	W66	Lab Sample ID: 1901011-02		Collect Date/Time: 1/16/2019 12:02	
2,3,7,8 - TCDD (Dioxin) <i>Analyzed by Weck</i>	1613B	<5.00	pg/L	5.00	2/13/2019
Iron <i>Analyzed by NSPHL</i>	200.7	<0.05	mg/L	0.05	1/23/2019
Sodium <i>Analyzed by NSPHL</i>	200.7	11	mg/L	5	1/23/2019
Aluminum	200.8	<50	ug/L	50	1/23/2019
Manganese	200.8	<5.0	ug/L	5	1/23/2019
Copper	200.8	<50	ug/L	50	1/23/2019
Zinc	200.8	<10	ug/L	10	1/23/2019
Arsenic	200.8	<1.0	ug/L	1	1/23/2019
Silver	200.8	<5.0	ug/L	5	1/23/2019
Color <i>Analyzed by NSPHL</i>	2120B	<5	CU	5	1/17/2019
Odor <i>Analyzed by NSPHL</i>	2150 B	0.00	Ton	0	1/16/2019
Alkalinity	2320B	110	mg/L	1	1/23/2019
Residue-filterable (TDS)	2540 C	152	mg/L	10	1/18/2019
Fluoride	300.0	<0.2	mg/L	0.2	1/16/2019
Chloride	300.0	2.50	mg/L	2	1/16/2019
Nitrite-N	300.0	<0.2	mg/L	0.2	1/16/2019
Nitrate-N	300.0	<0.3	mg/L	0.3	1/16/2019
Sulfate	300.0	4.16	mg/L	4	1/16/2019
Magnesium	3500-MG-B	9.46	mg/L	1	1/17/2019
pH	4500H-B	7.34	pH		1/16/2019
1,1,1-Trichloroethane <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
1,1,2-Trichloroethane <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
1,1-Dichloroethene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
1,2,4-Trichlorobenzene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
1,2-Dichlorobenzene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
1,2-Dichloroethane <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
1,2-Dichloropropane <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
1,4-Dichlorobenzene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019

Analyte	Method	Result	Unit	MRL	Analysis Date
St James Well 2		PWS ID: NV0000190			Facility ID: W66
Benzene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
Carbon Tetrachloride <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
Chlorobenzene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
cis-1,2-Dichloroethene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
Ethylbenzene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
Methylene Chloride <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
Styrene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
Tetrachloroethene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
Toluene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
Total Xylenes <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
trans-1,2-Dichloroethene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
Trichlorethene <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
Vinyl Chloride <i>Analyzed by NSPHL</i>	524.2	<0.5	ug/L	0.5	1/18/2019
MBAS <i>Analyzed by NSPHL</i>	5540C	<0.1	mg/L	0.1	1/17/2019
Site: STJW	W66	Lab Sample ID: 2001055-01	Collect Date/Time: 1/9/2020 6:34		
Nitrate-N	300.0	<0.3	mg/L	0.3	1/9/2020
Site: STJW	W66	Lab Sample ID: 2102002-01	Collect Date/Time: 2/1/2021 9:51		
Nitrate-N	300.0	<0.3	mg/L	0.3	2/1/2021

Appendix C

1. St. James Well-1 Well Driller Report

PRINT OR TYPE ONLY
DO NOT WRITE ON BACK

WELL DRILLER'S REPORT
Please complete this form in its entirety in
accordance with NRS 534.170 and NAC 534.340

NOTICE OF INVENT NO 31940

1. OWNER ST. JAMES VILLAGE
MAILING ADDRESS 11766 WILSHIRE BLVD
SUITE 780, LOS ANGELES, CA. 90025
ADDRESS AT WELL LOCATION NATIA COURT AND JOY LAKE ROAD
2. LOCATION SW 1/4 SE 1/4 Sec 10 T 17 N/S R 19 E WASHOE County
PERMIT NO. 59330
Issued by Water Resources Parcel No. THE WOODS Subdivision Name

3. WORK PERFORMED
☒ New Well ☐ Replace ☐ Recondition
☐ Deepen ☐ Abandon ☐ Other
4. PROPOSED USE
☐ Domestic ☐ Irrigation ☐ Test
☒ Municipal/Industrial ☐ Monitor ☐ Stock
5. WELL TYPE
☐ Cable ☐ Rotary ☒ RVC
☐ Air ☐ Other

6. LITHOLOGIC LOG				
Material	Water Strata	From	To	Thick-ness
SANDY CLAY		0	71	71
SOFT SANDY CLAY		71	78	7
FRACTURED ROCK		78	88	10
GRAVEL SAND TRACE CLAY		88	135	47
HARD ROCK		135	162	27
HARD BLACK ROCK		162	222	60
FRACTURED ROCK		222	230	8
BLACK ROCK TRACE CLAY		230	236	6
FRACTURED BLACK ROCK		236	240	4
BLACK ROCK FRACTURED CLAY		240	260	20
LOST CIRCULATION		260	265	5
HARD ROCK W/ CLAY		260	299	39
RED CLAY		299	300	1
BLACK ROCK		300	338	38
BLACK ROCK W/ CLAY		338	360	22
BLACK ROCK LG. FRACTURES		360	366	6
HARD BLACK ROCK		366	374	8
FRACTURED BLACK ROCK		374	384	10
RED CLAY & ROCK		384	390	6
BLACK & RED ROCK		390	421	31
FRACTURED ROCK & CLAY		421	426	5
RED SANDY CLAY & ROCK		426	580	154
ROCK TRACE CLAY		580	605	25
CLAY & ROCK		605	700	95

8. WELL CONSTRUCTION
Depth Drilled 620 Feet Depth Cased 620 Feet
HOLE DIAMETER (BIT SIZE)
From To
12 Inches 0 Feet 700 Feet
18 Inches 0 Feet 620 Feet
Inches Feet Feet

CASING SCHEDULE				
Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
10	22.36	.250	+ 2	260
10	22.36	.250	380	400
10	22.36	.250	500	520

Perforations:
Type perforation LOUVERED-FUL FLOW
Size perforation .125
From 260 feet to 380 feet
From 400 feet to 500 feet
From 520 feet to 620 feet
From feet to feet
From feet to feet

Surface Seal: ☒ Yes ☐ No Seal Type:
Depth of Seal 100 ☐ Neat Cement
Placement Method: ☒ Pumped ☐ Cement Grout
☐ Poured ☐ Concrete Grout
Gravel Packed: ☐ Yes ☐ No
From 100 feet to 620 feet

9. WATER LEVEL
Static water level 195 feet below land surface
Artesian flow 300 G.P.M. P.S.I.
Water temperature COOL °F Quality

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.

Name SARGENT IRRIGATION COMPANY
Contractor
Address 9955 N. VIRGINIA ST.
Contractor
RENO, NV 89506

Nevada contractor's license number 21246
issued by the State Contractor's Board
Nevada driller's license number 1593 1493
issued by the Division of Water Resources, the on-site driller
Signed [Signature]
By driller performing actual drilling on site or contractor
Date 2-12-96

NOVEMBER 03, 1995
Date started
Date completed 12-12 (Perforation w/ Driller) 1995

7. WELL TEST DATA			
TEST METHOD: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump <input type="checkbox"/> Air Lift			
G.P.M.	Draw Down (Feet Below Static)	Time (Hours)	
300	91	236	

2. St. James Well-2 Well Driller Report

DIVISION OF WATER RESOURCES

WELL DRILLER'S REPORT

Please complete this form in its entirety in accordance with NRS 534.170 and NAC 534.340

OFFICE USE ONLY

Log No. 51413
Permit No. 1288
Basin. 1288

PRINT OR TYPE ONLY
DO NOT WRITE ON BACK

NOTICE OF INTENT NO. 21439

1. OWNER ST. JAMES VILLAGE ADDRESS AT WELL LOCATION ST. JAMES & JOY LAKE ROAD
MAILING ADDRESS 11766 WILSHIRE BLVD.
SUITE 760 LOS ANGELES CA 90045
2. LOCATION NW 1/4 NW 1/4 Sec 14 T 17 N/S R 10 E WASHOE County
PERMIT NO. 59631 Issued by Water Resources Parcel No. THE WOODS Subdivision Name

3. WORK PERFORMED
☐ New Well ☐ Replace ☐ Recondition
☒ Deepen ☐ Abandon ☐ Other
4. PROPOSED USE
☐ Domestic ☐ Irrigation ☐ Test
☐ Municipal/Industrial ☐ Monitor ☐ Stock
5. WELL TYPE
☐ Cable ☐ Rotary ☐ RVC
☐ Air ☒ Other

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
SAND & GRAVEL		0	10	10
SAND & CLAY COBBLES		10	50	40
SAND, SILT W/ CLAY		50	100	50
BLACK ROCK W/ CLAY		100	132	32
COARSE GRAVEL, CLAY		132	140	8
SANDY CLAY, GRAVEL		140	160	20
SAND & GRAVEL		160	172	12
ANDESITE - BLK		172	220	48
CLAY, BLACK ROCK		220	226	6
BROWN CLAY, ROCK		226	232	6
SAND, GRAVEL - FINE		232	260	28
ANDESITE		260	280	20
SAND GRAVEL COBBLES		280	312	32
BROKEN ROCK		312	317	5
SANDY W/ CHIPS		317	325	8
SANDY BROWN CLAY		325	330	5
BROWN CLAY, ROCK		330	340	10
BROKEN VOLCANICS		340	350	10
FINE BLACK CHIPS		350	380	30
BROKEN FRACTURED ROCK		380	400	20
BROKEN ANDESITE		400	415	15
RED ROCK		415	428	13
FRACTURED ROCK		428	435	7
BROKEN ROCK		435	438	3
BLACK CINDER ROCK		438	458	20
SANDY ROCK		458	498	40
ANDESITE		498	521	23
BROWN ANDESITE		521	535	14
BLACK ANDESITE		535	575	40
BROWN CLAY ROCK		575	605	30

Date started 11-26-95 Date completed 12-22-95

7. WELL TEST DATA

TEST METHOD:	G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
<input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump <input type="checkbox"/> Air Lift	400	105	240

8. WELL CONSTRUCTION

Depth Drilled 596 Feet Depth Cased 592 Feet

HOLE DIAMETER (BIT SIZE)

From	To
12 Inches	0 Feet 605 Feet
13 Inches	0 Feet 595 Feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
10"		.265	490	590
10"		.25	490	510

Perforations:

Type perforation COVERED FULL-FLY

Size perforation 2 1/2

From 350 feet to 490 feet

From 510 feet to 590 feet

From feet to feet

From feet to feet

From feet to feet

Surface Seal: ☐ Yes ☐ No Seal Type: ☐ Neat Cement ☐ Cement Grout ☒ Concrete Grout

Depth of Seal 100'

Placement Method: ☒ Pumped ☐ Poured

Gravel Packed: ☒ Yes ☐ No

From 490 feet to 590 feet

9. WATER LEVEL

Static water level 242 feet below land surface

Artesian flow G.P.M. 400 P.S.I.

Water temperature COOL °F Quality

10. DRILLER'S CERTIFICATION

This well was drilled under my supervision and the report is true to the best of my knowledge.

Name SARGENT IRRIGATION COMPANY Contractor

Address 2955 N. VIRGINIA ST. Contractor

RENO, NV. 89506

Nevada contractor's license number

issued by the State Contractor's Board 0011246

Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1593

Signed [Signature] By driller performing actual drilling on site or contractor

Date DECEMBER 22, 1995

Appendix D

Nevada Division of Water Resources Monthly Well Production Reports (2015 – 2020)

PERMIT		YEAR:	WATER PUMPED IN MILLIONS OF GALLONS												DATE:	TOTAL	
SITE I.D.	DUTY	NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		M G	A F
ST. JAMES #1	BASIN ALLOWE	88	1.12	0.00	0.00											1.12	3.42
ST. JAMES #2		88	0.96	1.22	1.57											3.74	11.49

PERMIT		YEAR:	WATER PUMPED IN MILLIONS OF GALLONS												DATE:	TOTAL	
SITE I.D.	DUTY	NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		M G	A F
ST. JAMES #1	BASIN ALLOWE	88	0.66	1.05	1.49	4.47	9.05	9.41	7.69	8.87	8.00	6.86	0.73	0.80		59.09	181.33
ST. JAMES #2		88	0.85	0.29	0.00	0.81	2.98	7.48	5.37	9.18	9.39	5.06	1.99	0.80		44.19	135.62

PERMIT		YEAR:	WATER PUMPED IN MILLIONS OF GALLONS												DATE:	TOTAL	
SITE I.D.	DUTY	NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		M G	A F
ST. JAMES #1	BASIN ALLOWE	88	0.54	1.22	1.39	0.50	0.53	5.53	7.31	8.65	5.53	3.47	1.01	0.78		36.46	111.90
ST. JAMES #2		88	0.43	0.00	0.00	3.79	8.92	6.15	5.53	5.86	5.37	3.32	1.28	0.99		41.64	127.78

PERMIT		YEAR:	WATER PUMPED IN MILLIONS OF GALLONS												DATE:	TOTAL	
SITE I.D.	DUTY	NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		M G	A F
ST. JAMES #1	BASIN ALLOWE	88	1.92	2.17	1.78	2.98	7.41	5.81	7.33	9.17	5.88	3.51	1.08	0.19		49.22	151.04
ST. JAMES #2		88	0.00	0.03	0.82	1.83	4.94	6.36	7.52	5.22	6.53	4.30	1.51	1.45		40.41	124.02

PERMIT		YEAR:	WATER PUMPED IN MILLIONS OF GALLONS												DATE:	TOTAL	
SITE I.D.	DUTY	NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		M G	A F
ST. JAMES #1	BASIN ALLOWE	88	0.00	0.00	0.00	0.00	0.00	2.69	7.91	9.45	8.93	8.92	1.60	1.55		41.05	125.98
ST. JAMES #2		88	3.00	0.24	0.00	0.00	0.00	0.31	1.04	9.63	7.33	3.34	1.68	0.44		27.01	82.89

PERMIT		YEAR:	WATER PUMPED IN MILLIONS OF GALLONS												DATE:	TOTAL	
SITE I.D.	DUTY	NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		M G	A F
ST. JAMES #1	BASIN ALLOWE	88	0.00	0.00	0.00	0.11	0.12	3.48	9.17	10.33	8.78	4.65	0.61	0.22		37.48	115.032
ST. JAMES #2		88	1.78	2.06	2.15	4.34	7.78	9.13	9.08	10.48	9.16	5.85	2.63	2.67		67.10	205.926

PERMIT		YEAR:	WATER PUMPED IN MILLIONS OF GALLONS												DATE:	TOTAL	
SITE I.D.	DUTY	NO.	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC		M G	A F
ST. JAMES #1	BASIN ALLOWE	88	0.93	0.84	1.63	4.72	4.56	5.99	6.19	4.51	5.60	0.00	0.00	0.00		34.96	107.289
ST. JAMES #2		88	0.03	0.01	0.01	0.00	0.00	0.01	0.48	2.64	5.32	11.08	2.44	2.18		24.19	74.2367

EXHIBIT D

[*SEE ATTACHED*]

PURCHASE AGREEMENT

THIS AGREEMENT, made and entered into this 12th day of June, 1990, by and between WASHOE COUNTY, NEVADA, a political subdivision of the State of Nevada, acting by and through its Board of County Commissioners, hereinafter referred to as "WASHOE COUNTY", and MARY PAGNI, DARLEEN GALLERON, DIANE BUGICA, DONNA BECKER, ESTATE OF ELIO PAGNI, VANNA PAGNI, ROBIN PAGNI, RAYMOND PAGNI, ALBERT PAGNI, and JUNE PAGNI, hereinafter referred to as "PAGNI",

W I T N E S S E T H:

WHEREAS, WASHOE COUNTY operates the Sunrise water service area in Pleasant Valley, Washoe County, Nevada; and

WHEREAS, PAGNI owns certain real property south of the Sunrise service area commonly known as the Pagni Ranch, and owns certain water rights and wells appurtenant to and located upon the Pagni Ranch property; and

WHEREAS, WASHOE COUNTY agrees to purchase and PAGNI agrees to sell to WASHOE COUNTY said water rights, wells and certain easements necessary for the use of said water rights and wells; and

WHEREAS, the parties desire to transfer said water rights and wells and to convey all easements necessary for the use of said water rights and wells to insure the continued delivery of water and water service to the Sunrise service area and the Pagni Ranch as set forth below.

NOW THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, and including the mutual

covenants and agreements contained herein, WASHOE COUNTY and PAGNI hereby agree as follows:

1. WATER RIGHTS AND WELLS: WASHOE COUNTY does hereby agree to acquire and PAGNI agrees to transfer, grant, and convey: (a) approximately 940 acre feet of water rights (annual withdrawal), excluding surface rights, identified as Permits 35805 and 46836, on the same sources described in the Permits; and (b) the two wells related to said water rights located on APN 046-100-06 and APN 046-100-07.

With respect to the water rights transferred to WASHOE COUNTY, identified as Permits 35805 and 46836, such rights will be utilized to provide water service as designated by PAGNI. WASHOE COUNTY will file applications for extensions of time, proofs and other appropriate papers for the purpose of maintaining the validity of the rights and for obtaining the maximum use of the rights. WASHOE COUNTY will be responsible for fees required by law to be paid for such filings and WASHOE COUNTY'S costs and overhead for the time and materials involved.

PAGNI shall have the right to arrange for the office of the State Engineer to provide PAGNI with copies of all official notices and other correspondence that may hereafter be sent to WASHOE COUNTY in connection with the rights. PAGNI shall have the same right, as if PAGNI were the owner, to commence, maintain or intervene in any administrative or judicial proceeding affecting the rights.

WASHOE COUNTY will exercise reasonable care and diligence in the performance of its obligations created by this

agreement. In no event shall WASHOE COUNTY be liable to PAGNI in any manner, if acts or omissions by WASHOE COUNTY cause all or part of the rights to become cancelled or otherwise invalid, or if PAGNI becomes dissatisfied with WASHOE COUNTY'S performance of this Agreement concerning the rights. By entering into this Agreement, PAGNI reserves the right to take any and all actions deemed necessary regarding such water rights, and PAGNI waives all other remedies, legal or equitable, that may be available against WASHOE COUNTY, its officers, agents or employees, concerning the water rights.

The reservation of water rights to PAGNI'S use under Permits 35805 and 46836 (in the approximate amount of 940 acre feet), may be used for the sole purpose of complying with the requirement that adequate water rights be dedicated to WASHOE COUNTY as a condition to approval of a project on said Pagni Ranch property.

To obtain water service for any project based on these water rights, PAGNI must comply with all valid requirements imposed by the water purveyor and governmental entities having jurisdiction, including the construction and dedication of other facilities required for the projects and inclusion of land to be served within the service area designated by WASHOE COUNTY.

2. EASEMENTS.

PAGNI further agrees to transfer, grant and convey to WASHOE COUNTY:

(a) a eighty (80) foot by eighty (80) foot permanent easement around the well site on APN 046-100-06, a eighty (80) foot by eighty (80) foot permanent easement around the well site on APN 046-100-07 and a thirty (30) foot permanent easement from the well site to Pagni Lane, all as more specifically described in Exhibit A attached hereto, for the purposes of operating the wells and water facilities, and for engineering, data collection, construction, repairing and maintaining the wells and the water storage, water service, water conveyance and other water facilities thereon; and

(b) a twenty (20) foot temporary construction easement along the easements described in subparagraph (a) above, all as more specifically described in Exhibit B attached hereto, for the purposes of the locating and constructing, repairing and maintaining water facilities between and around the two well sites. WASHOE COUNTY shall quitclaim its interest in this temporary construction easement to PAGNI after the construction has been completed.

3. CONSIDERATION: As additional consideration for the transfer, WASHOE COUNTY agrees, in accordance with Permits 35805 and 46836, as follows:

(a) To construct pumps, pump houses, motors, pipeline and to connect the wells and improvements to WASHOE COUNTY'S Sunrise water facilities.

(b) To construct pipelines within the properties described in Exhibit A. PAGNI may, at a later date, and at its sole expense, relocate the pipelines and designate other ease-

ments subject to the approval of WASHOE COUNTY, which approval will not be unreasonably withheld.

(c) To expand pumping facilities, if necessary, to supply water service as may be requested under Permits 35805 and 46836 to the Pagni Ranch, however, WASHOE COUNTY shall have the sole discretion to determine the available water which is put to use to supply said water service. The pumping rate shall be determined from WASHOE COUNTY'S pump testing, but shall not exceed 940 acre feet annually. PAGNI shall have the right, at its sole expense, to drill additional wells, as necessary, to achieve this volume of water.

(d) To transfer points of diversion of existing WASHOE COUNTY permits to coincide with Permits 35805 and 46836 and to exercise its best efforts to keep said permits in good standing consistent with the provisions of NRS 533.395. The parties acknowledge that WASHOE COUNTY cannot guarantee that some other agency will not take action beyond WASHOE COUNTY'S control.

PAGNI acknowledges and agrees that WASHOE COUNTY may charge and collect from PAGNI, its successors and assigns, reasonable hook-up fees for connection to WASHOE COUNTY'S water facilities.

As additional consideration, WASHOE COUNTY agrees to prepare, at WASHOE COUNTY'S expense, all the necessary documents and legal descriptions for the transfer of the water rights, wells and easements set forth herein.

The parties acknowledge that no dollar value has been assigned to the water rights or facilities being transferred, or

to the services to be performed and facilities to be provided by WASHOE COUNTY set forth hereinabove.

4. CONVEYANCES: PAGNI shall execute a Grant, Bargain and Sale Deed conveying the wells and water rights, described in Paragraph 1 to WASHOE COUNTY in the form attached hereto as Exhibit C. PAGNI shall execute Easement Deeds conveying the easements described in paragraph 2 and Exhibit B to WASHOE COUNTY, said deed to be in the form of Exhibit D. PAGNI shall execute a Bill of Sale transferring the two wells in the form attached hereto as Exhibit E.

5. TITLE: PAGNI shall transfer title to the two (2) wells, free and clear of all liens, obligations and encumbrances. PAGNI does not guarantee or warrant the working conditions of said wells and they are transferred in an "as is" condition.

6. WARRANTIES: PAGNI hereby warrants to WASHOE COUNTY that the water rights being transferred pursuant to this agreement belong to PAGNI, that PAGNI has the authority to convey title to said water rights to WASHOE COUNTY; that the water rights being transferred are free and clear of all liens and encumbrances, with the exception of a lien by Nancy L. Pagni, a copy of which is attached hereto as Exhibit "F"; that the water rights are in good standing with all governmental authorities; that the water rights represent 940 acre feet of permitted water rights being transferred; that the written approvals of all governmental agencies, necessary for the perfection of ownership of the water rights have been obtained; and that the wells are owned by PAGNI and can be validly transferred by the Bill of Sale, free and clear of any liens or encumbrances.

7. GOVERNMENTAL APPROVALS: PAGNI and WASHOE COUNTY understand and agree that this Purchase Agreement is subject to review and approval by the Board of County Commissioners, Washoe County, Nevada. PAGNI and WASHOE COUNTY agree to utilize their best efforts to secure such approval and other government approvals necessary to effectuate the transfer.

8. CLOSING: The transfer of the property described herein shall take place at the offices of Western Title Company, Inc., 225 South Arlington Avenue, Reno, Nevada, at _____ o'clock _____.m. on _____, 1990. The closing will be accomplished by PAGNI and WASHOE COUNTY through their attorneys or representatives, and at such closing, all sales documents required by this agreement will be signed and exchanged.

The parties agree that they will execute any and all other documents or instruments which may be necessary to carry out the terms or stated purposes of this agreement.

9. SUCCESSORS AND ASSIGNS: Except as otherwise provided herein, this agreement shall be binding upon and shall inure to the benefit of the heirs, executors, administrators, successors and assigns of the parties. The rights and obligations contained in this Agreement may be assigned.

10. ENFORCEMENT: In the event either party to this agreement is required to initiate an action in any court for the purpose of enforcing any provision of this agreement, the prevailing party shall be entitled to reasonable attorney fees and costs.

11. APPLICABLE LAW: The terms and conditions of this agreement shall be governed by the laws of the State of Nevada.

12. TIME: Time is the essence of this agreement.

13. RECORDING: Either party to this agreement is free to record this agreement in the official records of the Washoe County Recorder's Office and the Nevada State Engineer's Office. The provisions hereof shall constitute covenants running with the land, and equitable servitudes and liens, and shall be binding upon and be for the benefit of all persons with interest in the real property or water rights subject hereto.

14. DUPLICATE AGREEMENTS: This agreement will be executed in duplicate with each party to retain an original, signed agreement.

15. INDEPENDENT COUNSEL: It is acknowledged by their signatures hereto that each of the parties to this agreement has had the opportunity to seek the advice of and review by independent legal counsel in entering into this agreement.

16. INDEPENDENT INVESTIGATION: It is acknowledged that WASHOE COUNTY has made an independent investigation of the records on file with the Nevada State Engineer's Office, and has made an independent investigation of the water rights and wells transferred herein. PAGNI makes no warranties as to the quality of water available pursuant to the water rights herein conveyed.

17. ADDRESSES: The names and addresses upon which notices shall be served to the respective parties to this agreement are as follows:

WASHOE COUNTY: Washoe County
Department of Public Works
P. O. Box 11130
Reno, Nevada 89520
Attn: John M. Collins
Chief Sanitary Engineer

Mike Soumbeniotis
Allison, MacKenzie, Hartman,
Soumbeniotis & Russell, Ltd.
P. O. Box 646
Carson City, Nevada 89702

PAGNI: Ross E. deLipkau
Hill, Cassas, deLipkau & Erwin
P. O. Box 2790
Reno, Nevada 89505

Either party may change the foregoing address by serving written notice on the other party five (5) days before the effective day of the change of address.

18. INDEMNIFICATION, HOLD HARMLESS - INSURANCE: PAGNI acknowledges and agrees that WASHOE COUNTY shall not be liable to PAGNI for any effect that the development, use, storage, or transportation of the water rights purchased by WASHOE COUNTY hereunder may have on the diminution of value of the PAGNI property, or in the use of any water rights retained by PAGNI. PAGNI waives and releases any and all claims against WASHOE COUNTY for any and all effects WASHOE COUNTY'S actions in the development, transportation, storage or use of said water rights may have on such value of the PAGNI property, or in the use of any water rights owned by PAGNI. During the course of any construction work, WASHOE COUNTY agrees to require its agents, employees, contractors and other representatives entering the premises of PAGNI to conduct themselves in a safe and prudent manner. If during the course of construction of any work, any of

the officers, employees, contractors, invitees or other persons entering on the property shall negligently cause damage to PAGNI'S property, then WASHOE COUNTY agrees to pay to PAGNI, to the extent provided by law, the reasonable damages therefore. WASHOE COUNTY is free to purchase suitable insurance to assist it in protecting PAGNI pursuant to this provision.

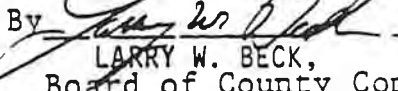
19. SURVIVAL: This agreement shall survive the recording of the deeds and delivery of the Bill of Sale.

20. ENTIRE AGREEMENT: This agreement constitutes the entire understanding between the parties with respect to the subject matter hereof, and supersedes all other agreements, written or oral, between the parties with respect to such subject matter. This Agreement may not be changed, modified or amended except by a written agreement between the parties which specifies that it amends this Agreement.

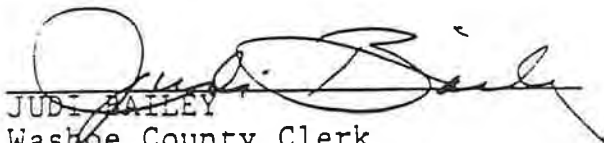
IN WITNESS WHEREOF, we have hereunto set our hands to this Agreement to be effective the day and year first above written.

"WASHOE COUNTY"

WASHOE COUNTY COMMISSIONERS


By  Chairman
LARRY W. BECK,
Board of County Commissioner

ATTEST:


JUDI BAILEY
Washoe County Clerk

Approved as to form:

MILLS LANE
WASHOE COUNTY DISTRICT ATTORNEY

By 
Edward J. Damm
Assistant District Attorney

"PAGNI"

By MARY PAGNI

By DIANE BUGICA

By VANNA PAGNI

By RAYMOND PAGNI

By JUNE PAGNI

By DARLEEN GALLERON

By DONNA BECKER

By ROBIN PAGNI

By ALBERT PAGNI

ESTATE OF ELIO PAGNI:

By EXECUTOR

STATE OF NEVADA)
COUNTY OF WASHOE) ss.

On this 5th day of February, 1990, personally appeared before me, a Notary Public, MARY PAGNI, known to me, who acknowledged to me that she executed the foregoing Purchase Agreement consisting of eleven (11) pages.

Linda B. Eller
NOTARY PUBLIC

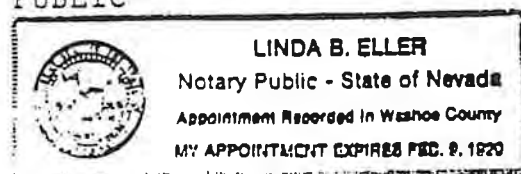
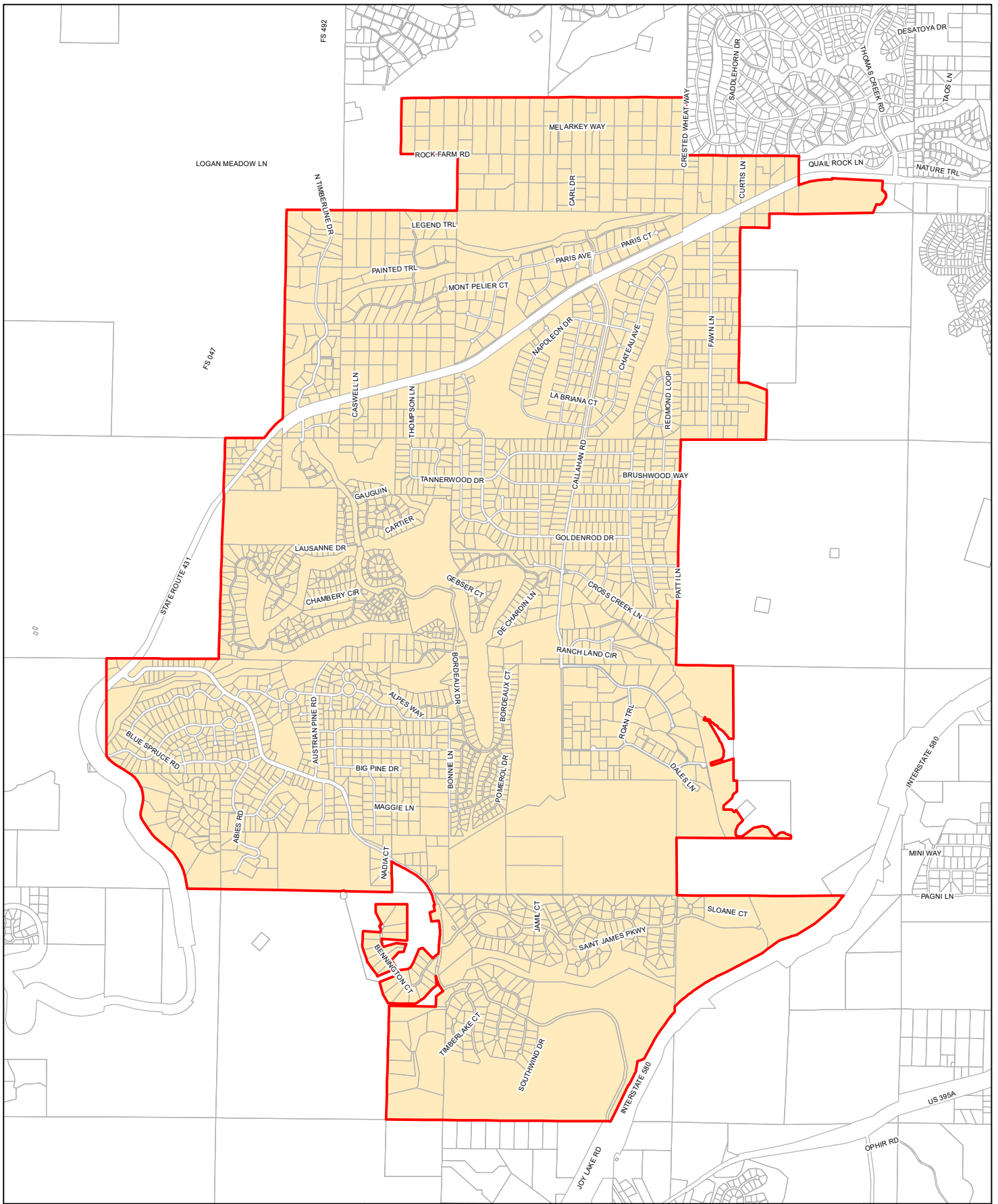


EXHIBIT E

[*SEE ATTACHED*]



Mt. Rose - Galena Fan Domestic Well Mitigation Area Map

DATE	3/16/2015
MAP BY:	LAK
REQUESTED BY:	AR
SCALE:	1 inch = 3,000 feet



EXHIBIT F

[*SEE ATTACHED*]



Washoe County, Nevada

September 3, 2020

**Meeting Regarding:
Sierra Reflections and St. James's Village
Projects**

Groundwater Supply and Development

Results of Ongoing Aquifer Analyses



**SERPA WELL TESTING
& GROUNDWATER ANALYSES**

Date: 9/2/2020

Project Overview

Slide 1



- **Introductions**
- **Project Overview**
 - **Status of St. James's Village**
 - **Plans for Sierra Reflections**
- **Project Water Demand**
- **Aquifer Testing**
- **Summary of Aquifer Analyses**
- **On-Going Forward Simulations and Analyses**
- **Plans Moving Forward**



Project Water Demand (TMWA Rule 7)

St. James's System:

- About 240 single family residence proposed.
- Total yearly demand: 206.4 AFY
- Total St. James maximum daily demand: 291 gpm (*TMWA Estimate*).
- Average daily demand: 127 gpm.

Sierra Reflections:

- Proposed 791 single family residence, 147 townhomes in Washoe County.
- Total yearly demand: 448 AFY.
- Total Sierra Reflections maximum daily demand: 467 gpm (*TMWA Estimate*).
- Average daily demand of 278 gpm.



SERPA WELL TESTING
& GROUNDWATER ANALYSES

Date: 9/2/2020

Project Overview

Slide 3

2018 Aquifer Test to Characterize Groundwater Resources South of Browns Creek

- Aquifer test completed in Washoe Valley using the Serpa Well AKA Falcon Capital Well (FCW).
- Worked closely with TMWA to develop test procedures, test duration, pre/post test monitoring, and the observation well network.
- Data sharing between CWR and TMWA.
- Step Drawdown Test to define well performance and optimal pumping rates.
- 2-weeks pre-test water level monitoring.
- Completion of a 10-day constant rate pumping test, monitoring drawdown in the pumping well and response across observation well network.
- 2-weeks post test recovery monitoring.
- Water quality analyses.
- Pre-test flow measurements in Browns Creek.
- TMWA analyses of aquifer test, estimates of Transmissivity & Storativity (T&S), and boundary conditions.
- CWR analyses of aquifer test, estimates of T&S, and boundary conditions.
- Predictive forward simulations (ongoing).



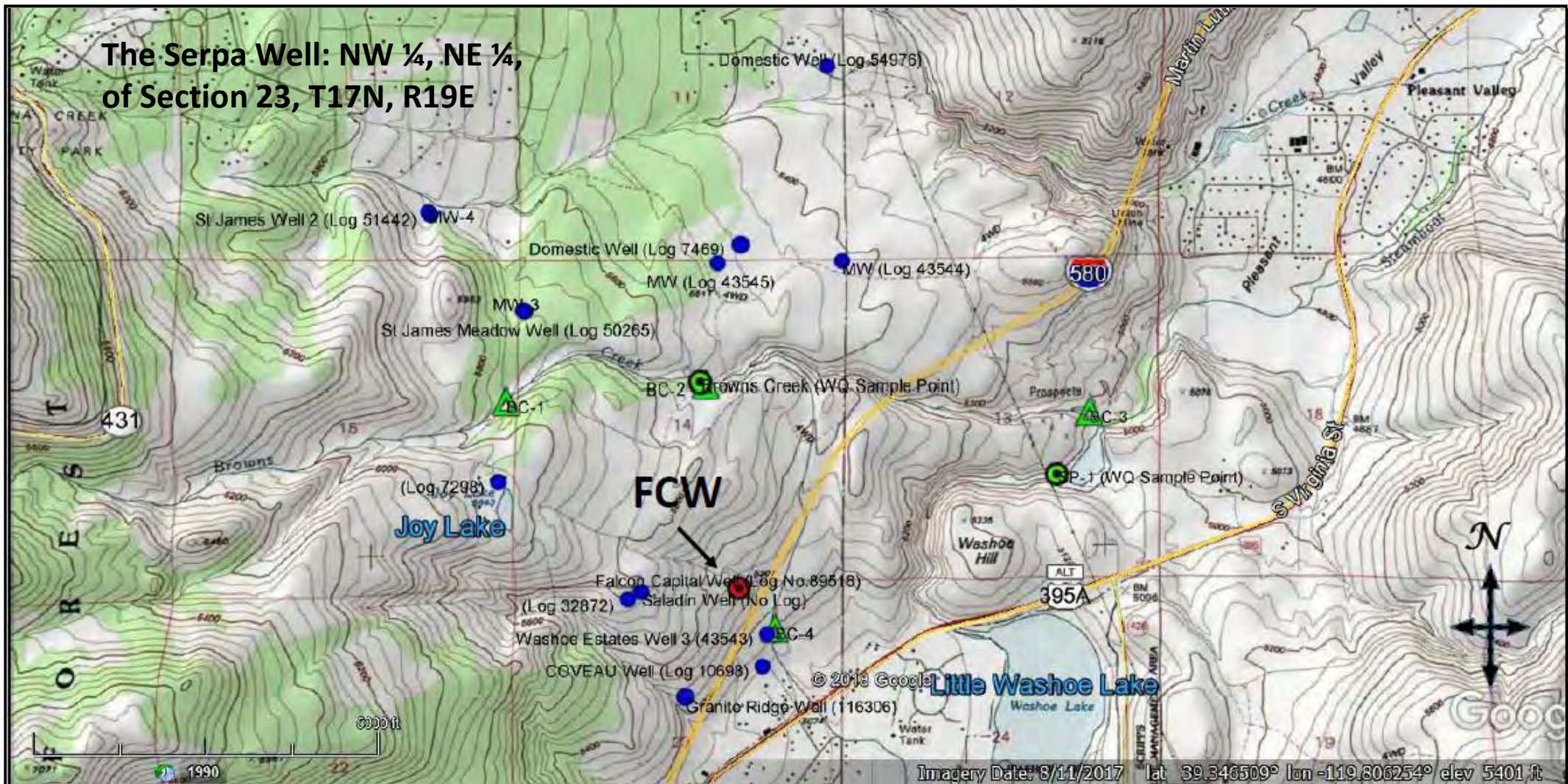
**SERPA WELL TESTING
& GROUNDWATER ANALYSES**

Date: 9/2/2020

Aquifer Testing

Slide 4

The Serpa Well: NW ¼, NE ¼, of Section 23, T17N, R19E





Serpa Well is in NV Groundwater Basin 89, Washoe Valley

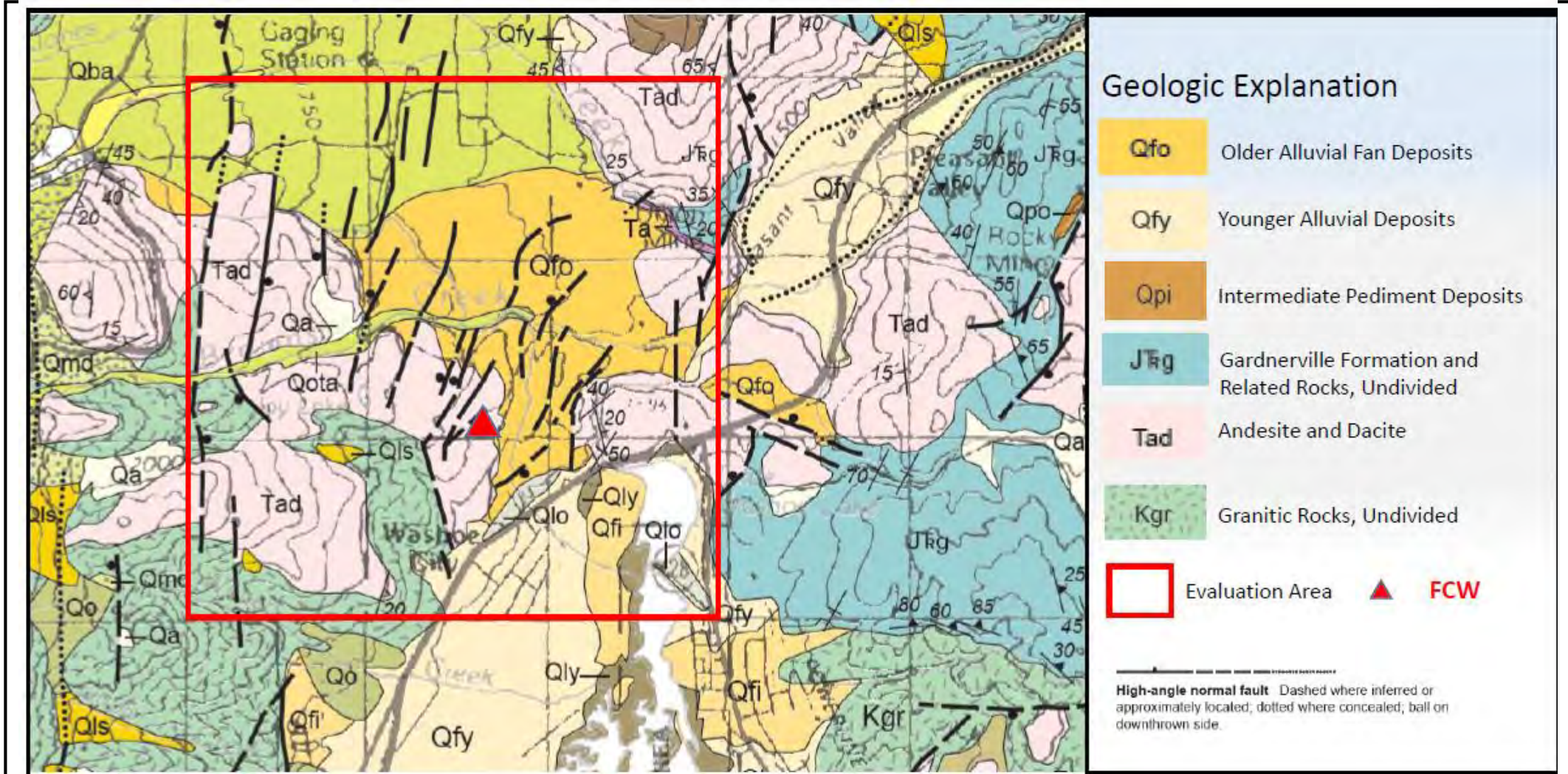


SERPA WELL TESTING & GROUNDWATER ANALYSES

Date: 9/2/2020

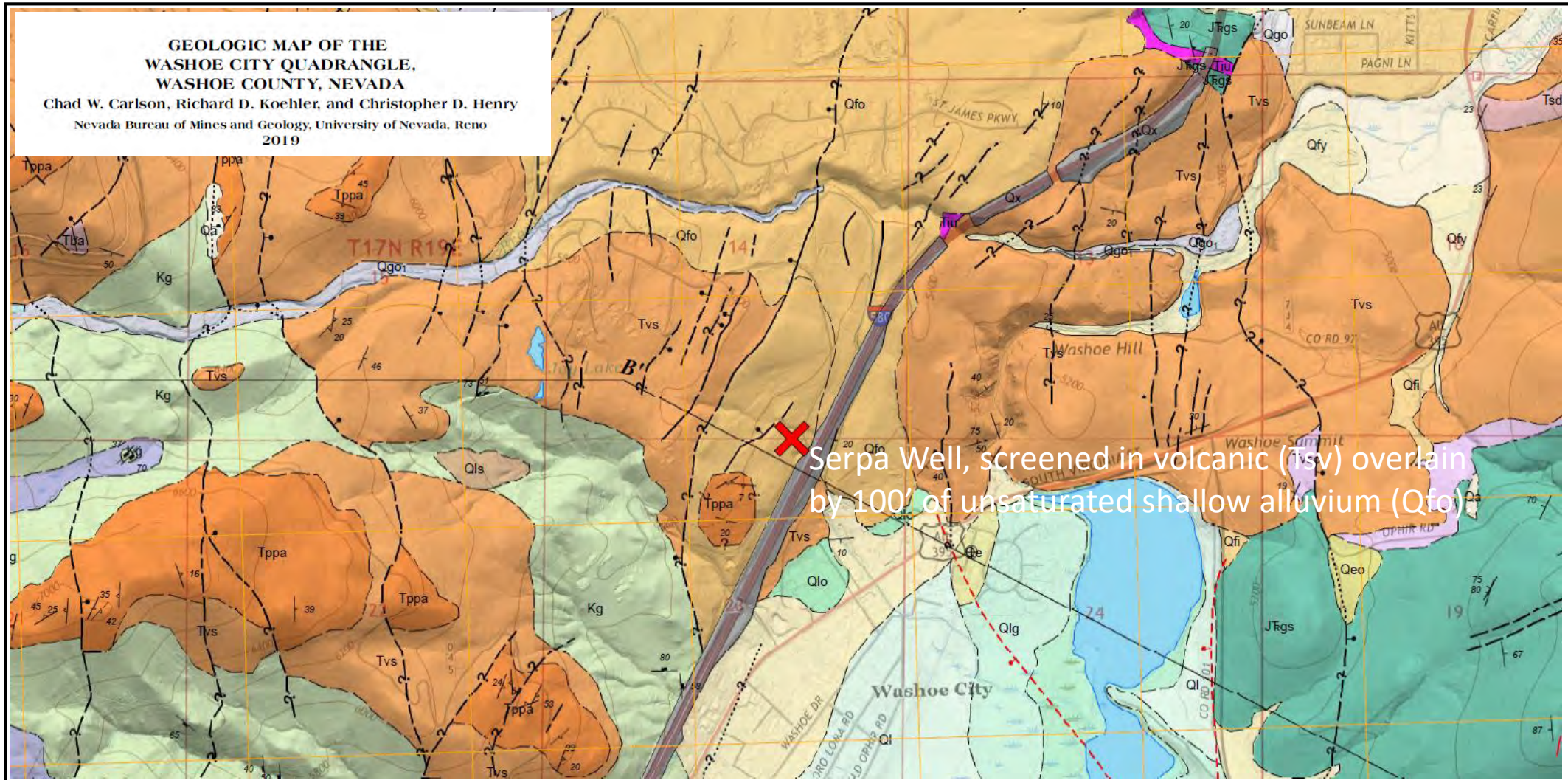
**Aquifer Testing
Serpa Well Location**

Slide 6



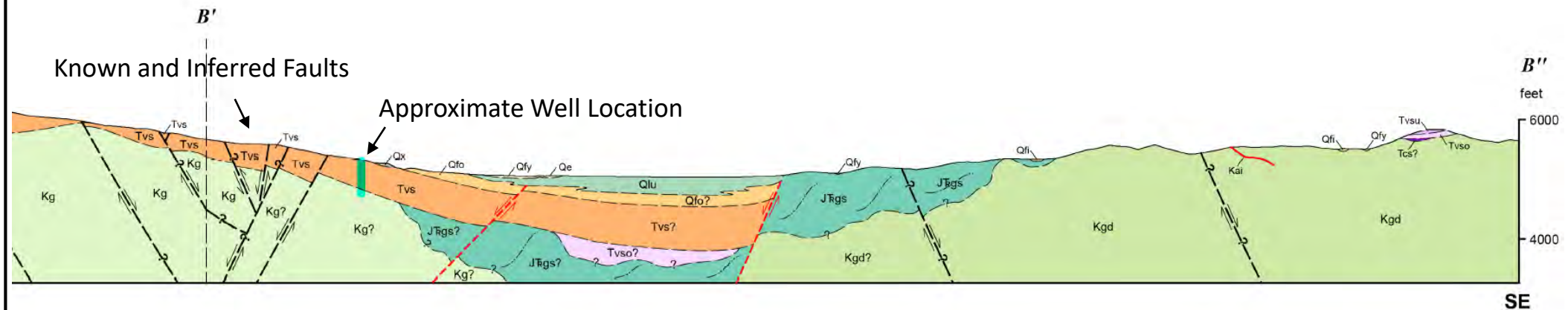
**GEOLOGIC MAP OF THE
WASHOE CITY QUADRANGLE,
WASHOE COUNTY, NEVADA**

Chad W. Carlson, Richard D. Koehler, and Christopher D. Henry
Nevada Bureau of Mines and Geology, University of Nevada, Reno
2019



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**SERPA WELL TESTING
& GROUNDWATER ANALYSES**

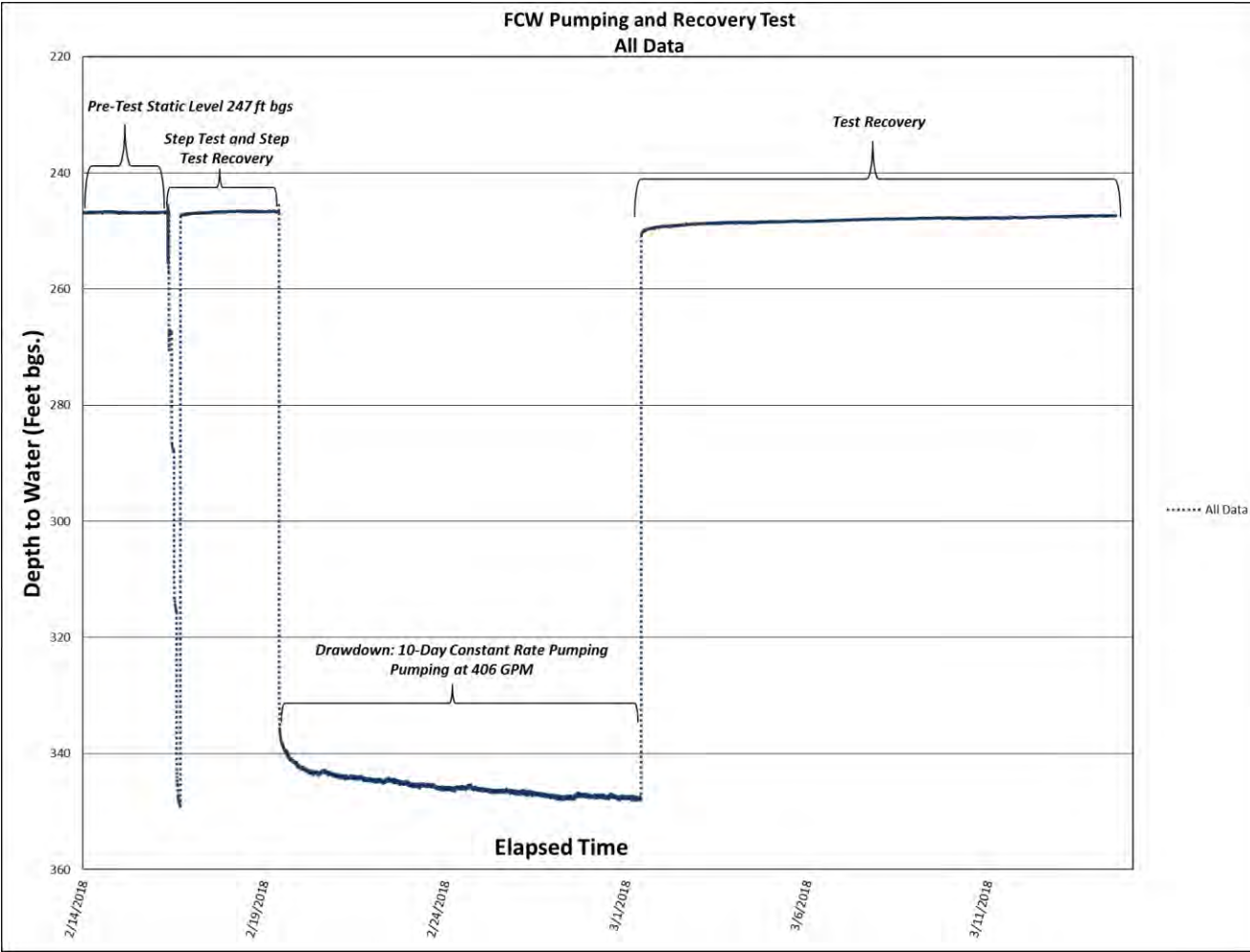
Date: 9/2/2020

**Aquifer Testing
Serpa Well Geology**

Slide 9

Pumping Well Response:

- The well was pumped at a constant rate of 406 gpm for 10 consecutive days.
- Pre-test static water level 247 ft bgs.
- The total drawdown over 10 consecutive days of pumping was 100.63 feet.
- Total drawdown response at OWE-3 was approximately 4.0 feet.
- Total drawdown response at OWE-4 was approximately 3.5.
- No response at St. James's Village Wells.



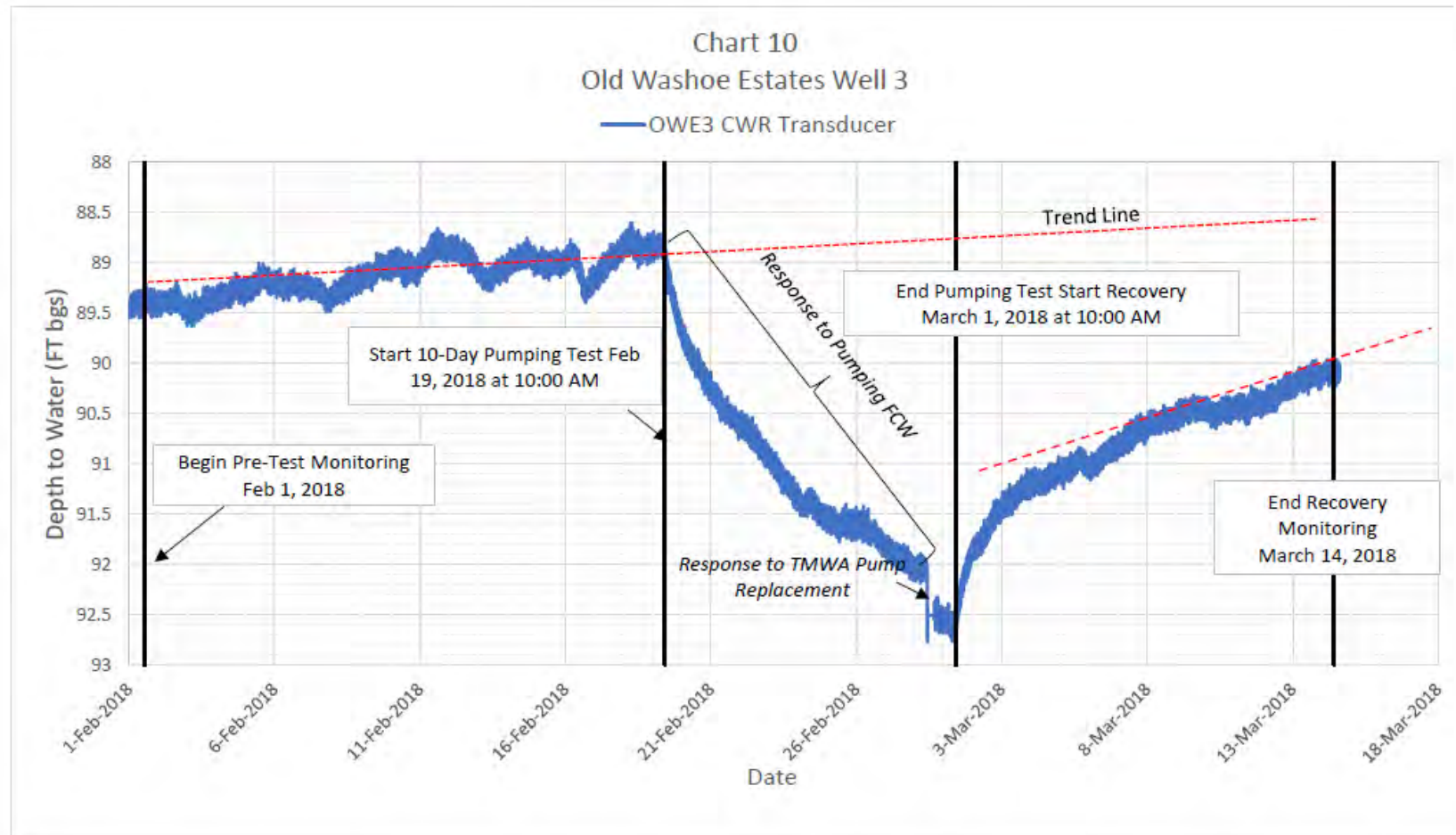
SERPA WELL TESTING
& GROUNDWATER ANALYSES

Date: 9/2/2020

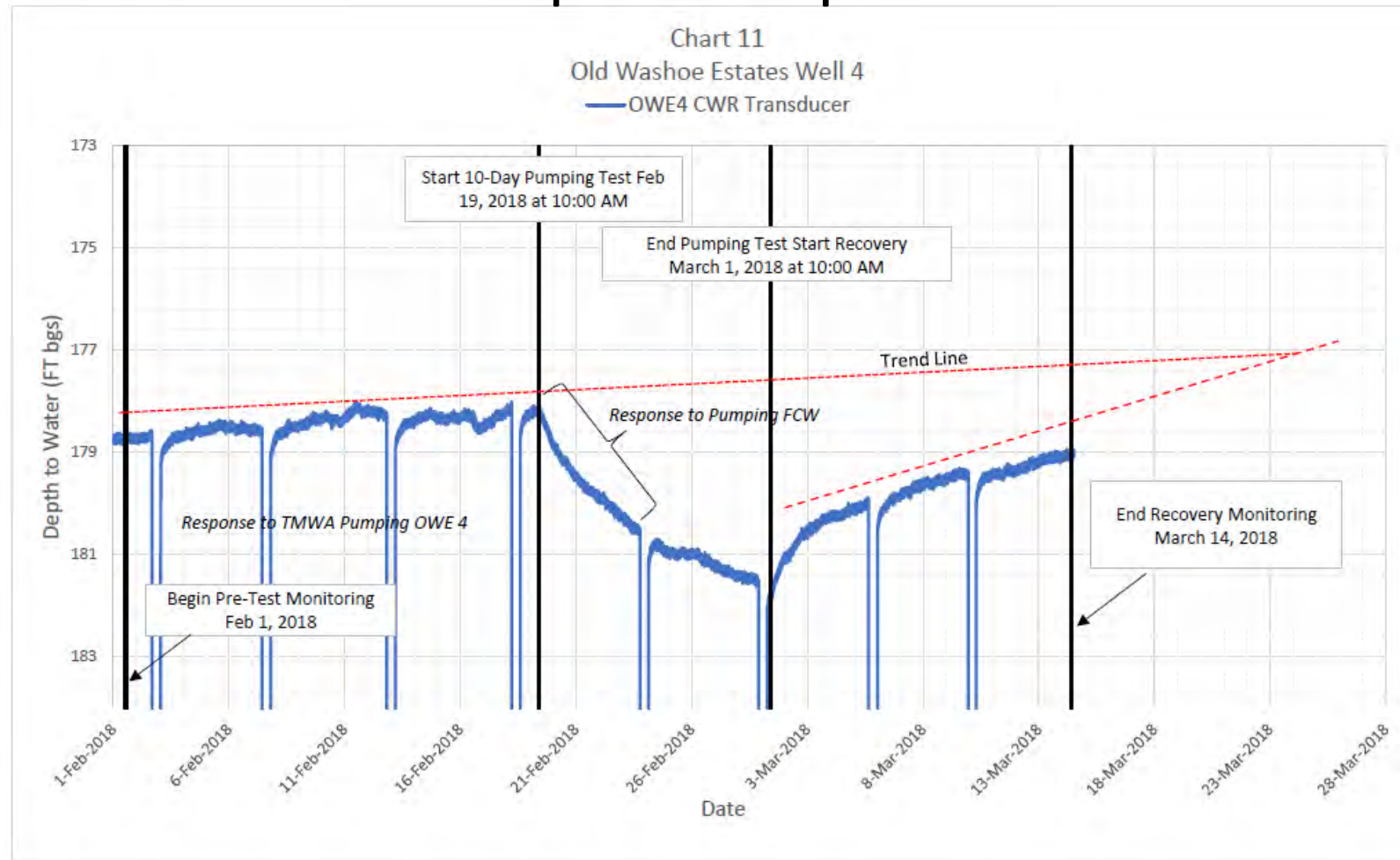
Aquifer Testing Response

Slide 10

Aquifer Test Response



Aquifer Test Response



CWR Calculated Aquifer Parameters for Serpa Well:

Data	Solution	Transmissivity (FT ² /Day)	Hydraulic Conductivity (FT/Day)
Drawdown	Cooper-Jacob Straight Line	3,712	8.37
Recovery	Theis Straight Line Recovery	7,163	16.17

Summary of Calculated Aquifer Parameters

Well ID	Transmissivity (Ft ² /Day)	Storativity	Detrended Transmissivity (Ft ² /Day)	Detrended Storativity	NDWR Calculated Transmissivity (Ft ² /Day)	NDWR Calculated Storativity
FCW	3,712	1.045E-21	--	--	--	--
OWE-3	11,082	4.53E-03	7,337	7.78E-03	10,690	5.10E-03
OWE-4	7,460	2.72E-03	9,135	1.24E-03	7,345	1.50E-03

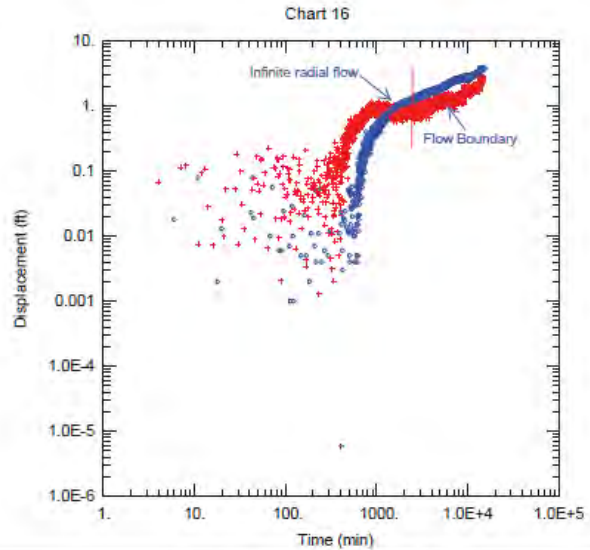


SERPA WELL TESTING & GROUNDWATER ANALYSES

Date: 9/2/2020

Aquifer Parameters

Slide 13



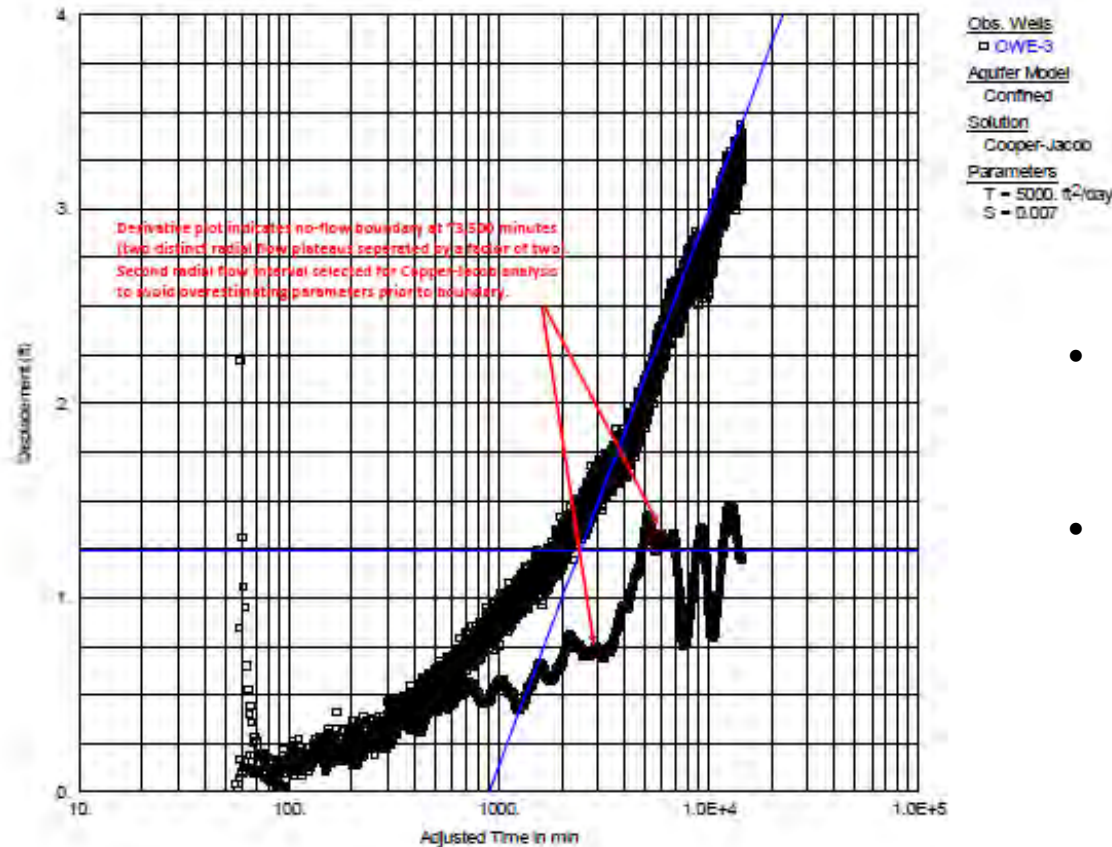
WELL TEST ANALYSIS					
Data Set: R:\Projects\CWR\Results 2\DS\AQTESOLV Analysis DS - OWE3_full.aqt					
Date: 09/20/18			Time: 08:32:12		
PROJECT INFORMATION					
Company: MGA					
Client: CWR					
Project: CWR001					
Location: WC					
Test Well: FCW					
AQUIFER DATA					
Saturated Thickness: 443. ft			Anisotropy Ratio (Kz/Kr): 0.2		
WELL DATA					
Pumping Wells			Observation Wells		
Well Name	X (ft)	Y (ft)	Well Name	X (ft)	Y (ft)
FCW	0	0	OWE-3	0	920

Boundary Conditions

- Derivative analyses of drawdown showed some evidence of a constant head boundary or infinite radial recharge boundary condition during the test.
- This boundary condition did not persist, and several no-flow boundaries were later identified.
- These no-flow boundaries provide evidence of a faulted or fractured hydrogeological regime



TMWA Analysis of Boundary Conditions



- No-flow boundaries are displayed as a deviation in drawdown slope of two orders of magnitude or greater.
- The predominant no flow boundaries during the 10-Day test are graphically identifiable and presented in the charts.



TMWA Assessment of Test

- Transmissivity (T) and storage (S) values calculated for a confined aquifer at OWE-3 and OWE-4 ranged from 5,000 ft²/day – 4,000 ft²/day and 0.007 – 0.002, respectively;
- Hydraulic conductivity (K) and specific storage (Ss) values calculated for a fractured rock aquifer at OWE-4 were 6.7 ft/day and 3.4e-6/ft, respectively.
- A 10-year forward simulation completed utilizing the fractured rock aquifer parameters resulted in approximately seven-feet of drawdown at St. James Production Well 2, a municipal supply well north of Browns Creek.
- TMWA's 10-year forward simulation completed in AQTESOLV assumes no recharge or boundary conditions are present throughout the entire duration of the simulation, which creates a conservative estimate of drawdown.



**SERPA WELL TESTING
& GROUNDWATER ANALYSES**

Date: 9/2/2020

TMWA Analyses

Slide 16

TMWA's 3-D Numerical Groundwater Model

Modification to the Pohll and Rybarski, 2018 model:

- Approximately 1.3-mile southward expansion of the model grid.
- Allow for the simulation of additional pumping from the Serpa Well and two nearby existing municipal supply wells owned and operated by Truckee Meadows Water Authority (TMWA) Old Washoe Estates 3 and 4 (OWE-3 and OWE-4).
- Layer thicknesses were extrapolated from the existing model.
- Little Washoe Lake was simulated as a general head boundary, and a section of Steamboat Creek was simulated using MODFLOW's river package.
- The area of layer 4 within the expanded model grid was assigned a (K) of 6.7 feet/day in the eastern section surrounding the Serpa Well.
- Mountain block recharge for the period 2017-2036 was simulated at the steady-state rate.
- Model allowed to equilibrate to the steady-state recharge rate over a 5-year period (2017-2021) to reduce error.



**SERPA WELL TESTING
& GROUNDWATER ANALYSES**

Date: 9/2/2020

TMWA Analyses

Slide 17

TMWA's 3-D Numerical Groundwater Model

Two pumping scenarios were completed over a period of 20 years (2022-2041)

1. Scenario 1 - Continuation of 2015 pumping rates at all wells (1,233 AFY).
 2. Scenario 2 - Continuation of 2015 pumping rates at all wells, plus adding in 474 acre-feet per year (AFY) to the Serpa Well, 356 AFY added to St. James Production Well 1 and Well 2, and 403 AFY added to Callamont North and Callamont South. Total added pumping equaled 1,992 AFY.
- Both scenarios show a general trend of decreasing groundwater levels throughout the model domain, with the greatest declines in the Steamboat Hills geothermal area.
 - The steeper water level gradients in the area surrounding the Steamboat Hills geothermal area are created by pumping and injection from the geothermal reservoir.



**SERPA WELL TESTING
& GROUNDWATER ANALYSES**

Date: 9/2/2020

TMWA Analyses

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TMWA's 3-D Numerical Groundwater Model

- The results for Scenario 2 show extensive drawdown.
- Scenario 2 drawdown extends from the southern end of the model northward beyond Arrowcreek.
- The greatest contribution is due to pumping at the St. James Wells.



Figure 4. Drawdown (ft) in groundwater elevation between 2022-2041 in Scenario 2; 474 AFY pumping added to Serpa Well, 356 AFY added to St. James Production Wells 1 and 2, and 403 AFY added to Callamont North and South.



Comments on TMWA Analyses and Model

- Pumping rates in Scenario 2 are overestimated based on the demand for St. James's Village and Sierra Reflections.
- St. James's will require 189.2 AFY and Sierra Reflections 448 totaling 637.2 AFY between projects.
- TMWA estimates 474 AFY added to the Serpa Well and 356 AFY added to St. James Well 1 and 2 totaling 830 AFY (over 20% increase in predicted requirements).
- Does not appear to account for no flow or partial flow boundaries and faults.
- Does not appear to consider recharge contributions from Browns or Galena Creek.
- Assesses regional cumulative impacts not project specific impacts.



**SERPA WELL TESTING
& GROUNDWATER ANALYSES**

Date: 9/2/2020

TMWA Analyses

Slide 20

Flows in Browns Creek

Monitoring Point	Date	Q (CFS)	Q (GPM)
BC-1	2/6/2018	1.67	749.5
BC-2	2/6/2018	1.24	556.5
Between BC-1 and BC-2		(0.43 CFS)	(193 GPM)
BC-1	8/19/20	0.41	184
BC-2	8/19/20	0.0783	35
Between BC-1 and BC-2		(0.332 CFS)	(149 GPM)

2/6/2018 ± 26% Loss.

8/19/2020 ± 80% Loss.



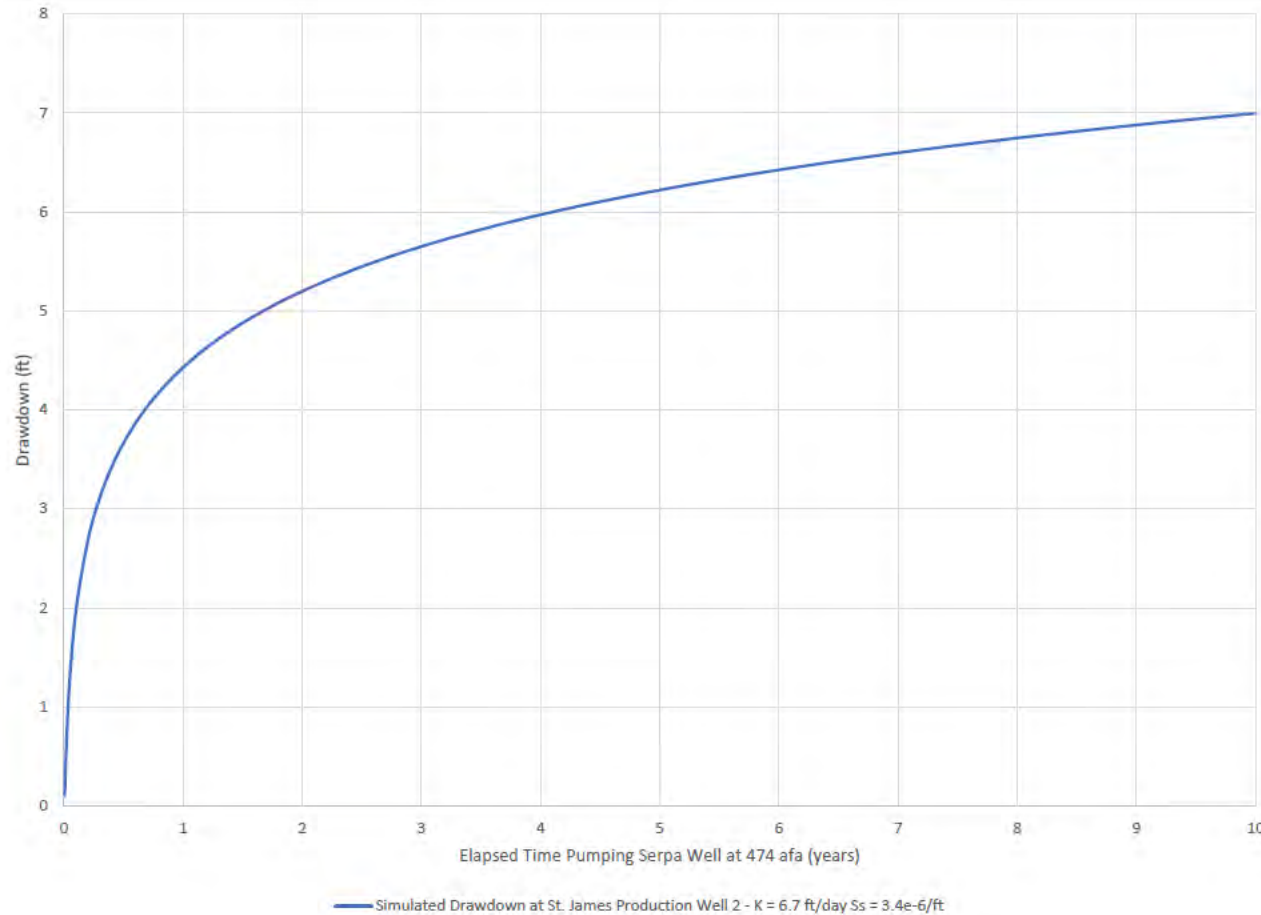
SERPA WELL TESTING & GROUNDWATER ANALYSES

Date: 9/2/2020

Summary of Flow in Browns Creek

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Forward Simulations: TMWA 10-Yr Analysis

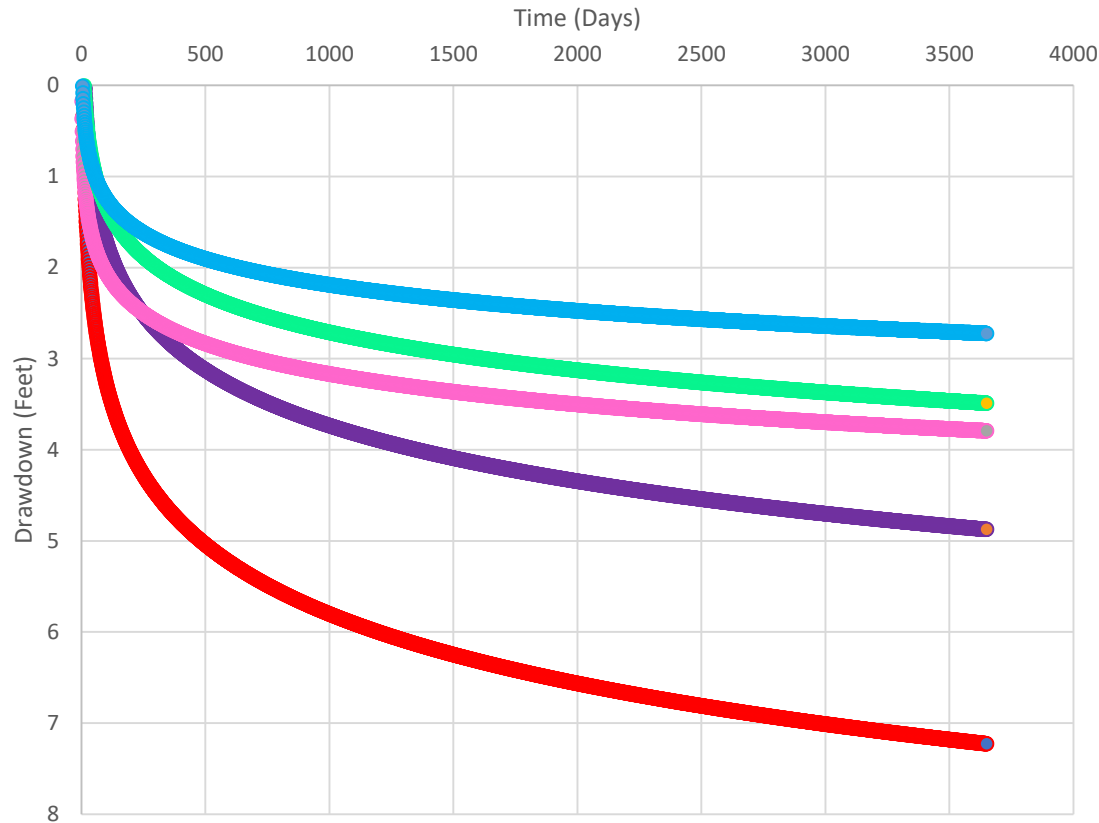


- TMWA simulated drawdown at St. James's Production Well 2.
- $K = 6.7$ ft/day and $S_s = 3.4E-6$.
- Results in about 7' of drawdown.
- Assumes no recharge or boundary conditions in analysis.



Theis Analysis Of Well Drawdown Influences: CWR 10-Yr Analysis

Drawdown 1-Mile From Serpa Well Over 10-Years



- CWR simulated drawdown at St. James's Production Well 2.
- Input 1: TMWA OWE-4 Values.
- Input 2: TMWA OWE-3 Values
- Input 3: CWR OWE-4 detrended values.
- Input 4: CWR OWE-3 detrended values.
- Input 5: NDWR OWE-4 Values.
- Assumes no recharge or boundary conditions in analysis.

Input 1
 Input 2
 Input 3
 Input 4
 Input 5

	Input 1		Input 2
Q cfs	0.654	Q cfs	0.654
T sq ft/day	4000	T sq ft/day	5000
t days	3650	t days	3650
r feet	5575	r feet	5575
S	0.002	S	0.007

	Input 3		Input 4		Input 5
Q cfs	0.654	Q cfs	0.654	Q cfs	0.654
T sq ft/day	9135	T sq ft/day	7337	T sq ft/day	10690
t days	3650	t days	3650	t days	365
r feet	5575	r feet	5575	r feet	5575
S	0.00124	S	0.00778	S	0.0051



**SERPA WELL TESTING
& GROUNDWATER ANALYSES**

Date: 9/2/2020

Additional Forward Simulations

Slide 23

10-Yr. Forward Simulations

- Agreement between CWR Input 1 and TMWA 10-Yr. forward simulation.
- Assumes Serpa Well would pump at 474 AFY.
- Assumes TMWA calculated T&S values for OWE-4.
- Results in approximately 7' of drawdown at St. James Production Well 2.
- The CWR detrended data from OWE-3 and OWE-4 (Input 3 and 4) provide a closer, more reliable match.
- Results in approximately 3 ½' of drawdown, nearly half of that simulated in Input 1.
- Input 5, using NDWR calculated T&S results in about 2 ½' of drawdown, which is considered insignificant.
- The CWR and TMWA 10-Yr. forward simulations both assumes no recharge or boundary conditions are present throughout the entire duration of the simulation.
- Input 3 and 4 results in approximately 5% of the overall simulated drawdown response from Scenario 2 of the TMWA model.
- This is proportionally insignificant to the overall TMWA Scenario 2 impact.
- An assessment of identified boundary response through the duration of the 10-Yr. simulation is expected to analytically validate the no-impact scenario at St. James Well 2.



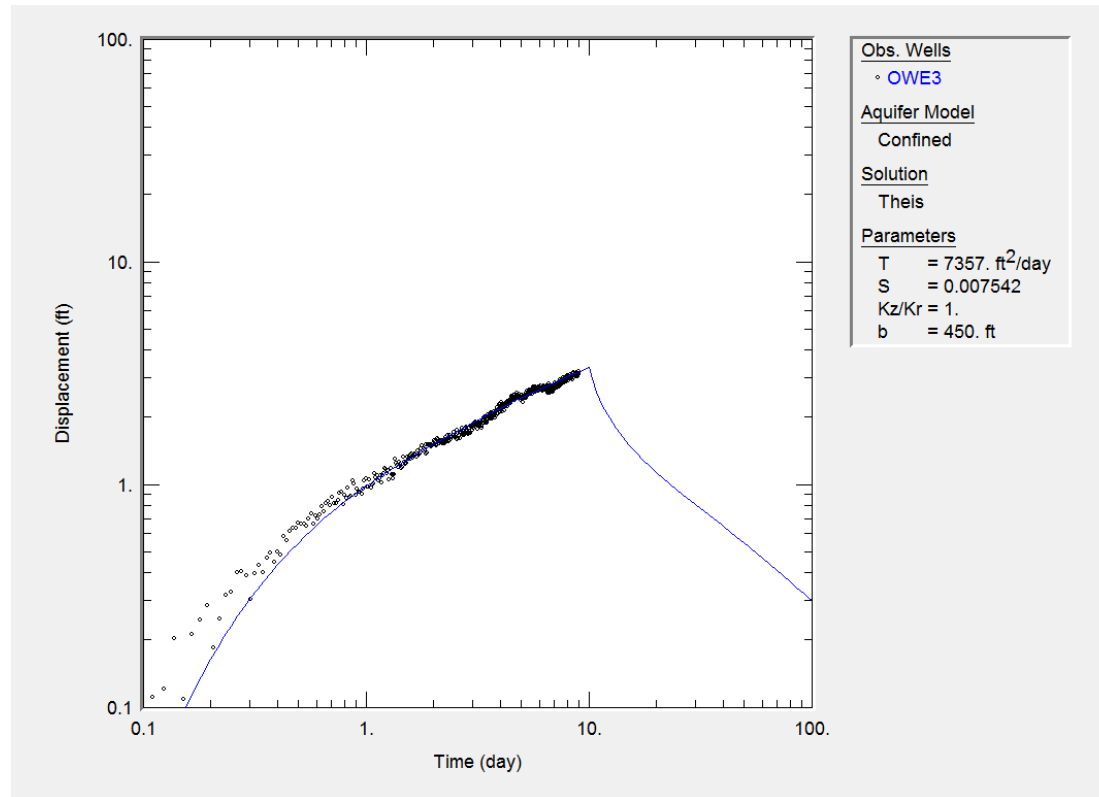
**SERPA WELL TESTING
& GROUNDWATER ANALYSES**

Date: 9/2/2020

Additional Forward Simulations

Slide 24

Boundary Response Analysis



- Good fit on OWE-3 using two no-flow boundaries.
- A boundary was added 1800' west of the Serpa Well.
- Another boundary added 5000' to the north.
- The curves fit best using more than one boundary.

Aquifer/Aquitard Properties

General | Aquitard | Double Porosity | Single Fracture | Wedge | Trench | Boundaries

Boundary Conditions
 A-B: No Flow | B-C: None
 C-D: None | D-A: No Flow

Boundary Coordinates (X,Y)
 A: -1800 | 5000 ft
 B: 3500 | 5000
 C: 3500 | -3800
 D: -1800 | -3800

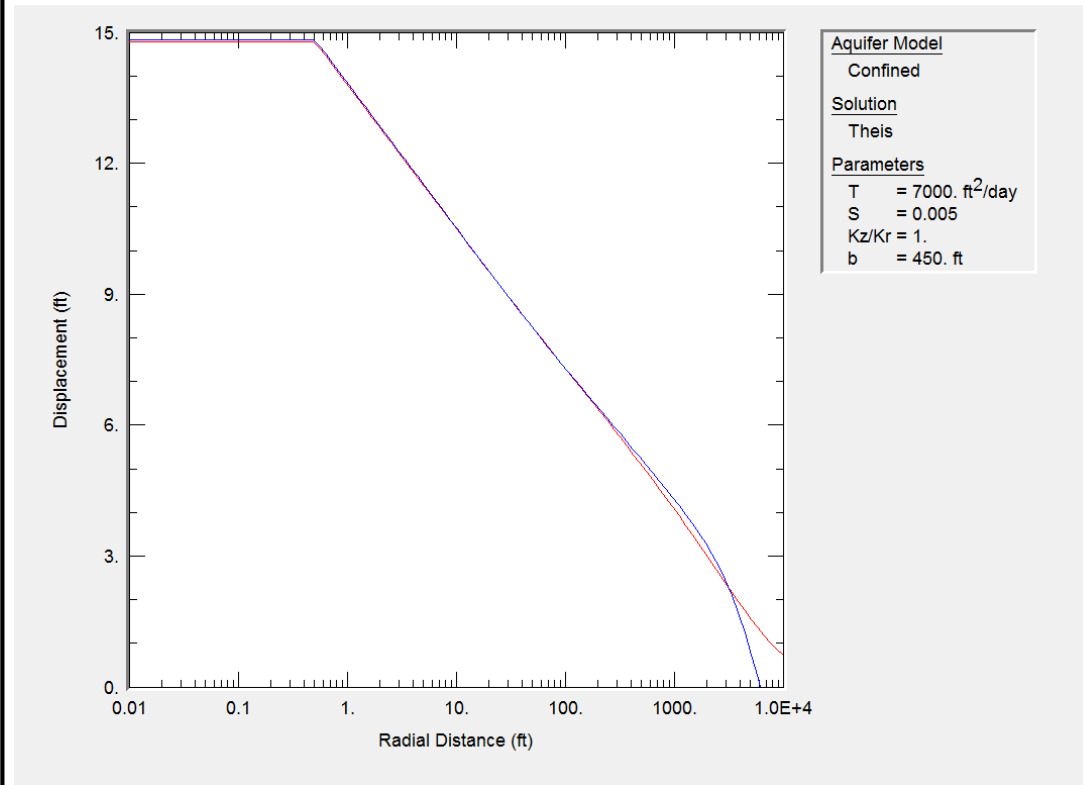
☒ Enable boundaries

Advanced

OK Cancel Apply Help



10-Yr. Forward Simulation with Boundaries



- AQTESOLV does not have an option for leaky boundaries.
- Although they exist, a no flow boundary from a fault plane cannot realistically be assessed in AQTESOLV.
- A constant head boundary simulation as shown on the right, predicts about 1.5' of drawdown ±5575' linear distance from the Serpa Well.
- Drawdown north of Browns Creek will be contingent on the recharge contributions from the perennial stream and any boundary influences from faults.
- Drawdown propagated over 10 years from the Serpa Well across these boundaries, north of Browns Creek is expected to be negligible to non-existent at the simulated pumping rates.



Plans Moving Forward:

- Approval of tentative master plan based on existing data.
- Inner basin transfers of water rights need to be less than 250 AFY.
- Many limitations with inner basin transfers.
- Potential “*rob Peter to pay Paul*” scenario with conjunctive use between 3 defined groundwater basins, each with specific hydrogeological constraints including faults.
- Measuring with a micrometer and analyzing with a chainsaw approach.
- Additional testing and installation of wells to support Sierra Reflections.
- Assess surface water recharge to groundwater in the vicinity of Browns and Galena Creeks.
- Annexation of project?
- Feasibility of stand-alone municipal system?



**SERPA WELL TESTING
& GROUNDWATER ANALYSES**

Date: 9/2/2020

Plans Moving Forward

Slide 26



Krater Consulting Group, PC
901 Dartmouth Drive
Reno, Nevada 89509

Ph: (775) 815-9561
Fax: (775) 786-2702
E-mail: Ken@KraterConsultingGroup.com

Transmittal

To: Danny Rotter, P.E., Engineering Manager
Truckee Meadows Water Authority

Nancy Raymond, New Business Project Coordinator
Truckee Meadows Water Authority

From: Kenneth Krater, P.E. *KK*

CC: Fred Woodside, St. James Village
Evan Champa, Holland and Hart

Date: November 3, 2021

RE: Annexation and Discovery Request for a Portion of St. James Village

Danny and Nancy,

I am pleased to submit an Annexation and Discovery application for a portion of St. James Village. The application is specific to Tract Maps, #4567 (Sloane Court), #4705 (Golden Yarrow Court), and #5331 (7-infill lots). Sloane Court and Golden Yarrow Court were reverted to acreage during the great recession but previously approved for water service by the Washoe County Department of Water Resources (WCDWR).

Lumos Engineers just completed a Preliminary Engineering Report along with a previous technical memorandum that combined provide detailed information on the St. James water system that was originally designed, financed, and constructed by the developer. It should be noted that at the time the St. James water system was designed and built, it met all the existing NAC 445A water works requirements and was approved by WDWR when they accepted the infrastructure.

We were recently informed by TMWA that Lumos cannot be provided with TMWA's water model to do a more detailed transmission study. Said study would help to develop looping strategies for the existing and future phases of development in the service area and help create redundancy in the existing and future distribution piping network along with better fire flows. But we understand TMWA's concerns in providing the model to third party consultants and look forward to developing a resolution on this matter.

The information provided in the enclosed reports on the two system wells and single water tank is in my opinion, valuable information. We will want to work with TMWA long term to prepare a broader study to evaluate looping strategies for the existing and future phases of development including model calibration to ensure accurate results to the satisfaction of both TMWA and the developer. But, as we are in great

need of additional recorded lots for sale, we are only requesting a fairly simple annexation and discovery and feel that the enclosed Lumos reports provide adequate information to help speed this process along. Lumos's reports clearly show that the existing two wells and single water tank provide adequate capacity for the number of units associated with this annexation and discovery request.

Please note that Unit 2C and two of the seven lots in Tract Map #5331 are already in TMWA's service territory. We have included an exhibit that demonstrates this fact. I have also included the original tract maps, original approved water plans, assessor maps and exhibits showing all of the properties within St. James Village and the location of the subject tract maps, proof of property tax payments, and a corporate resolution showing that Fred Woodside is authorized to sign on behalf of St. James Village.

Sincerely,

Kenneth Krater, P.E., MSCE



NEW BUSINESS APPLICATION FOR NEW OR MODIFIED SERVICE

Effective January 15, 2021

Project classifications (See Submittal Requirements for more information)

- ☐ Residential Service ☐ Subdivision or Multi-family ☐ Commercial Service ☐ Commercial With Main or Main only ☐ Hardship Letter
- ☒ Annexation ☒ Discovery Level 1 or 2 ☐ Tentative NAC Acknowledgment Letter ☐ Fire Service or Hydrant only

Do you have Water Rights? Yes ☒ No ☐ Unknown ☐

Is Project in TMWA's Service Territory? Yes ☒ No ☐ Unknown ☐

Golden Yarrow Ct. per the attached map lies in TMWA's Retail Service Territory.

Owner/Applicant Information: (Legal Name and Address for Owner)

Name St. James Village Inc. Attn: Fred Woodside
Mailing Address 4100 Joy Lake Road Email fred.woodside@att.net
City Reno State Nevada Zip Code 89511
Phone (775) 849-9070 Cell (775) 722-1499

Contact Information: (If different than Owner information)

Name Krater Consulting Group, PC Attn: Ken Krater
Mailing Address 901 Dartmouth Drive Email ken@kraterconsultinggroup.com
City Reno State NV Zip Code 89509
Phone (775) 815-9561 Cell (775) 815-9561

Engineering Firm

Firm Name Lumos & Associates Contact Mike Hardy
Phone (775) 827-6111 Email mhardy@lumosengineering.com

Project Information:

Service Address St. James Village City Reno
Assessor Parcel # (APN) 156-040-14 & 156-111-23
Number of units 24 Sq. footage of building/dwelling Largest Home = 8,411 sq. ft.
Location Description Sloane Ct. off Saint James Parkway and Golden Yarrow Ct. off Joy Lake Rd. (See attached maps)

Is this within Nevada Department of Transportation Right of Way? Yes ☐ No ☒ Unknown ☐

Requested Services/Meters:

Domestic:

Meter Size 1" Quantity 24
Meter Size NA Quantity

Irrigation:

Meter Size 1" Quantity 0
Meter Size NA Quantity

Is Re-vegetation Required?

Yes ☐ No ☒

Internal Fire Service(s):

Size NA Quantity

Fire Hydrant(s):

Quantity 6 3 each for Unit 1H and 2C

Will any pumps be installed (i.e. sewer pump, booster pumps, hydronic heating with chemical additives, etc.)? In accordance with NAC 445A.67195 appropriate backflow protection will be required.

Yes ☐ No ☒ Unknown ☐ Type

Brief Project Description (Include any project phasing):

This project is to allow two previously reverted Final Maps for Unit 1H (Sloane Ct., Tract map 4567) and Unit 2C (Golden Yarrow Ct., Tract map 4705) to be re-recorded and lots re-established. The previous final maps were recorded when the site was served by Washoe County Water Resources. A Technical Memorandum and Prelim Engineering Report was recently completed by Lumos & Associates in support of this Annexation and Discovery Request. Note that Unit 2C already lies in TMWA's Service Territory.

WATER RIGHTS DEDICATION – Applications for Residential Service, Subdivision/Multi-family, Commercial Service and Commercial With Main may require Applicant to dedicate water rights or purchase Will Serve Commitments before service will be provided.

A change of ownership during the application process will require a new application form for the new owner with proof of ownership. Additional fees may be required. Timelines will be evaluated at time of new application.

As TMWA is subject to Nevada's public records act, TMWA is required to provide non privileged public records to third parties upon request. TMWA will determine in its sole discretion whether the public records act applies to documents specific to any future requests.

Owner understands and acknowledges that TMWA will forward this request and the findings or results of this request to the Owner of Record for the afore referenced parcel(s).

Owner's Signature Frederick D. Woodruff Date 10/29/21

TMWA Representative

Complete Submittal Date

Submittal Requirements Partial submittals will not be accepted (updated 10/1/2019)

Required (X)	Annexation	Discovery Level 1 or 2	Tentative NAC/ Acknowledgement Letter	Residential Service ³	Commercial Service	Commercial with Main	Subdivision/ Multi-family	Fire Service Only	
Initial Review Fee ¹	\$2,700 ⁴	\$2,400 ²	\$200	\$450 ⁴	\$1,150 ⁴	\$1,800 ⁵	\$2,850/phase ⁴	\$450/service	
Proof of Ownership (Copy of Deed or Title Report)	X	IF AVAILABLE		X	X	X	X	X	
Owner’s Affidavit (ONLY if appointing third party agent)	X		X	X	X	X	X	X	
Tentative Map Plans per City / County Requirements ²	IF AVAILABLE		X						
Official Plat or Parcel Map Wet Stamped							X 3 Sets		
Full Civil Set Wet Stamped				X	X 2 Sets	X 2 Sets	X 2 Sets		
Approved Fire Hydrant Locations, Demand & Duration				X	X	X	X	X	
Landscape & Irrigation Plans with Separate Irrigation Demands Wet Stamped					If Applicable	X 2 Sets	X 2 Sets	X 2 Sets	
Water Design (W-1) Wet Stamped					X 3 Sets	X 3 Sets	X 3 Sets	X 3 Sets	X 3 Sets
AutoCAD Files of Civil Set				X	X	X	X	X	
Plumbing, Architectural Floor & Mechanical Plans Wet Stamped						X 1 Set	X 1 Set		

Notes:

- 1 Check, Cash or Money Order only. Final project costs will be assessed at time of Water Service Agreement issuance in accordance with TMWA's current fee and rate schedules.
- 2 Discovery findings are preliminary in nature and are based on the quantity and accuracy of the data received. Level 2 Discovery fee is \$3,600; contact a Project Coordinator for fee determination.
- 3 Applies to a single parcel with no more than two (2) dwelling units [i.e. 1 single family home, 1 single family home with a "mother-in-law" unit or 1 duplex]. All others will be Commercial Service applications.
- 4 Includes both initial Engineering and Lands Fee.
- 5 An additional \$300 Lands Research/Easement establishment fee will be required if main is located on private property.
 - All Water Facility plan sets shall be 36" x 24" or 34" x 22". Plans plotted on larger formats will not be accepted.
 - All CAD files shall follow industry standard layer controls and include the following, at a minimum:
 - Property Lines
 - Limits of Paving (curb/gutter/sidewalk)
 - Building Footprints
 - Easements
 - Curb and Building Pad Elevations
 - Proposed Utility Piping
 - Above requirements are minimums. Additional information may be necessary depending upon the project complexity.

STATE OF Alabama)
 : ss
COUNTY OF Lawrence)

AFFIDAVIT OF OWNERSHIP

I, Frederick D Woodside, being duly sworn, depose and say:

1. That I am (a) the owner of record, or (b) an authorized agent acting in my capacity as authorized agent of St James's V. Hage Inc the owner of record, (hereinafter "Owner") of that certain real property identified as Washoe County Assessor's Parcel No. _____ (hereinafter "Property");

2. That Owner intends to develop the Property or is currently investigating the Property for potential development;

3. That Owner hereby authorizes and appoints Ken Krater (hereinafter "Representative:") to assist Owner in its investigation and/or development of the Property;

4. That Owner hereby authorizes Truckee Meadows Water Authority (hereinafter "TMWA") to discuss water service relating to the Property with Representative, to accept information relating to Owner and the Property with Representative, and to treat Representative as the Owner of the Property for all purposes relating to the application for water service for the Property; and

5. That Owner acknowledges that any and all contractual agreements for water service and/or necessary grants of easements must be executed by Owner and not Representative, unless TMWA is provided with an acceptable Special Power of Attorney.

Dated this 1st day of November, 2021.

OWNER:

By: Frederick D Woodside

Subscribed and Sworn to this 1st day
Of November, 2021.

Amanda Davis
Notary Public



**CORPORATE RESOLUTION AND AUTHORIZATION OF CORPORATE
REPRESENTATIVE OF ST. JAMES VILLAGE, INC.**

The Board of Directors of St. James Village, Inc., a Nevada corporation (the "Corporation") through its Board of Directors hereby resolves and authorizes Frederick D. Woodside to act as the authorized agent of the Corporation to execute on behalf of the Corporation any and all real estate related documents, including but not limited to: (1) execution of documents from a state or local regulatory agency for land use, entitlements or water use; or (2) execution of documents related to the sale of individual lots at St. James Village. This authorization does not extend to the bulk sale of the St. James Village lots.

Dated March 4, 2019

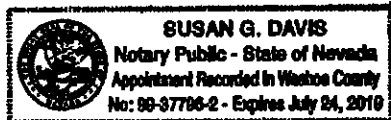
ST. JAMES VILLAGE, Inc., a Nevada corporation

By: _____

Ghassan Al Dahlawi, Chairman and President

STATE OF NEVADA)
) ss.
COUNTY OF WASHOE)

This instrument was acknowledged before me on March 4, 2019 by Ghassan Al Dahlawi, as Chairman and President of St. James's Village, Inc.



Susan G. Davis
Notary Public



Technical Memorandum

To: Fred Woodside

From: Michael Hardy, P.E., P.G., WRS

Cc: Kenneth Krater

Title: St. James Village Water System Analysis for 12 Additional Annexed Lots

Date: August 24, 2021

1.0 INTRODUCTION

The St. James Village Development is a gated mountain community located approximately 7 miles up Mount Rose Highway (Hwy 431), from Hwy 395, to Joy Lake Road and then approximately 2 miles down to the guard station. The water system was originally developed in the mid 1990's by St. James Village Inc. and dedicated to Washoe County Department of Water Resources (WDWR). On December 31, 2014, WDWR and Truckee Meadows Water Authority (TMWA) consolidated their two water utilities, which is now operated by TMWA, making TMWA the owner and operator of the water system in the St. James Village Service Area. The St. James Service Area straddles two hydrographic basins, which include the Pleasant Valley (Basin #88) and Washoe Valley (Basin #89) (Fig. 1).

The water system, which serves the St. James Village gated community, also serves several additional single family residential lots (13 lots) with homes outside the St. James Village gated community on Joy Lake Road. These lots are located up to a mile back up Joy Lake Road to the intersection of Austrian Pine Road where TMWA has a pressure reducing station and a cluster of three water valves that are only opened in the event of an emergency (Fig. 2).

The St. James Village water system currently consists of 1) two production wells, 2) a 1-million-gallon (MG) storage tank (located on Bennington Court cul-de-sac), and distribution water mains separated into 5 pressure zones. Many of the existing distribution water mains contain dead ends lacking proper looping, which is important for service redundancy and greater fire flow to the customers.

To date, the St. James Village Development has recorded 227 lots through final mapping with approximately 240± lots (1 acre+ in size) left to record. Currently, St. James Village has seven lots that were approved by Washoe County, but not annexed into the TMWA service area at the time of approval. Additionally, St. James Village Development would like to have an additional five lots recorded in the next month, making a total of 12 lots annexed into TMWA's service area.

Storage:

There is one relatively large storage tank associated with the water system infrastructure in the St. James Village Service Area. The storage tank is located at the end of Bennington Court and accessible up a gated dirt road.

Tank 1

The one storage tank in the St. James Village Water System is a nominal 1.01 MG welded steel tank constructed in 1996. The storage tank is 75 feet in diameter and 32 feet high. In 2017, the storage tank underwent a routine TMWA rehabilitation. The rehabilitation work included an internal/external recoating with typical tank improvements to the air gap, vent, manways, roof hatch, sample tap and pressure transducer vault. A welded steel storage tank, that is properly maintained, can have a useful life expectancy of 45 (± 5) years. Currently the St. James Village Storage Tank is 25 years old.

Distribution Piping/Pressure Zones

The St. James Village Service Area's pipeline distribution system is made up of approximately 38,079 linear feet of 6", 8", 10" and 12" PVC pipe with approximately 1,230 linear feet of 12" ductile iron pipe from Bennington court to the St. James Storage Tank¹. Table 1 contains the distribution pipe diameter, materials, and linear feet. The distribution water system is separated into 5 specific pressure zones. TMWA has identified the different pressure zones as 1) St. James Tank 1 Pressure Zone (feeds directly off the water storage tank), 2) Joy Lake 2 Pressure Zone, 3) St. James 1 Pressure Zone, 4) St. James 2 Pressure Zone, and 5) St. James 3 Pressure Zone (Fig. 3). Except for the St. James Tank 1 pressure zone, the other pressure zones contain several dead ends lacking proper looping for system redundancy and greater fire flow.

Table 1: Distribution Pipe Diameter and Linear Feet

Pipe Diameter	Linear Footage
6-inch (PVC)	7,854
8-inch (PVC)	19,872
10-inch (PVC)	5,231
12-inch (PVC)	3,892
12-inch (DI)	1,230
Total	38,079

Located at the highest point of the St. James Tank 1 Pressure Zone (at the intersection of Joy Lake Road and Austrian Pine Road) is a three-way water valve cluster, which in an emergency, can be opened to allow water to flow down into the St. James Village Service Area. It also allows for conveyance of water from the St. James Village Service Area down Austrian Pine Road into the Galena Forest Estates and Montreux communities.

¹ TMWA was given the current hydraulic water distribution model by WDWR with the current piping materials and sizes. TMWA has not field verified the distribution pipe sizes and materials in the hydraulic distribution water model.

St. James Village, Inc.

St. James Water System Preliminary Engineering Report

November 01, 2021



Prepared For:



St. James Village, Inc.
4100 Joy Lake Road
Reno, NV 89511

Prepared By:



9222 Prototype Drive
Reno, NV 89521-8987
775 / 883-7077
www.lumosengineering.com



11-01-2021

Michael Hardy

Digitally signed by Michael
Hardy
DN: C=US,
E=mhardy@lumosinc.com,
O=Lumos & Associates,
Inc., OU=Civil Engineer,
CN=Michael Hardy
Date: 2021.11.01
17:05:06-07'00'

month annual usage period, the ADD and MDD for common area irrigation usage was calculated as 10,330 gpd and 18,750 gpd, respectively. This equates to a multiplying factor of 1.82. Adding the HOA common area irrigation demands to the SFR demand equates to an ADD flow rate of 84 gpm and a MDD flow rate of 207 gpm. Table 4.2 contains a summary of the analysis from the three years of meter data.

Table 4.2: Existing Demand Based on Three Years Average (2018 – 2020)

Customer Class	No. of Customers	Average Daily Demand (gpdpc)	Total Average Demand per Day (gpd)	Total System Average Daily Demand (gpm)	System MDD Required (gpm)
Residential	159	700	111,300	77	194
HOA Irrigation	1	10,330	10,330	7	13
Subtotal	160	N/A	117,245	84	207

Using the SFR ADD and MDD previously discussed, Table 4.3 contains the system demand required to serve all current and future recorded lots that are considered part of the St. James Service Area. The future recorded lots include an additional 18 residential lots outside the gated community that are within the existing service area and 81 lots located inside the St. James Village gated community. Quantifying all the future recorded lots results in a total future ADD system demand of 132 gpm and a MDD of 327 gpm.

Table 4.3: Future Demand at Buildout

Customer Class	No. of Customers	Average Daily Demand (gpdpc)	Total Average Demand per Day (gpd)	Total System Average Daily Demand (gpm)	System MDD Required (gpm)
Existing Residential	159	700	111,300	77	194
HOA Irrigation	1	10,330	10,330	7	13
Remaining Lots inside St. James gated community	81	700	56,700	39	98
Added Lots outside of St. James gated community	18	700	12,600	9	22
Total	259		186,545	132	327

NAC 445A.6672 requires a system that relies exclusively on wells to provide a total well capacity sufficient to meet the MDD when all the wells are operational (total capacity), or the ADD with the most productive well out of service (firm capacity). Based on data provided by TMWA, Well-1 has an average flow rate of 285 gpm and Well-2 has an average flow rate of 320 gpm. The available total capacity with both wells in service is 605 gpm, as shown in Table 4.4. With Well-2, the largest producer, out of service, the available firm pumping capacity is 285 gpm. With only Well-1 operational, the ADD is met for both current and all the recorded lots in the St. James

Table 4.5: Comparing the NDWR Report and Meter Data with Percent Difference

Year	NDWR Reported Pumping (MG/Y)	Meter Data Usage (MG/Y)	Percent Meter Usage of Well Production
2015	59.17	N/A	N/A
2016	104.58	N/A	N/A
2017	68.06	N/A	N/A
2018	89.06	48.03	54%
2019	78.1	45.9	59%
2020	103.27	47.65	46%

TMWA completed a brief investigation into the cause of this discrepancy after it was brought to their attention. TMWA's Engineering Manager believes the discrepancies are due to the valve at the intersection of Joy Lake Road and Austrian Pine Road being open for the last few years. Apparently, Galena Forest Estates and Montreux service areas had well failures at their Mt. Rose Wells 5 and 6. The loss of these wells resulted in the need for alternative water sources (St. James Wells 1 & 2 and surface water) to supply the needed demands. TMWA believes that it will take some time to develop a water balance determination from SCADA data on how much water was conveyed to these other service areas from the St. James Village Wells and surface water conveyances. Due to this discovery, a non-revenue water analysis could not be conducted at this time.

4.4 Water Storage Evaluation

Water storage is regulated by the Nevada Administrative Code, Sections NAC 445A.6674, NAC 445A.66745, NAC 445A.6675 and NAC 445A.66755.

Total required storage capacity includes operating storage, emergency storage, and fire flow storage. TMWA calculates their required total storage capacity to be an operating storage of 15% of MDD (this was a negotiated volume with the regulatory entities), an emergency storage of ADD, and fire flow for the largest structure fire flow demand.

- Operating Storage – Operating storage is provided at 15% of MDD. The MDD for the water service area was calculated from the three-year average ADD from meter data provided for years 2018, 2019, and 2020.
- Emergency Storage – The NAC states that emergency storage can either be determined by the engineer or is 75% of the amount of operating storage. Since TMWA has negotiated with the regulatory agencies that operating storage is only 15% of MDD, Lumos has added emergency storage equivalent to ADD for this situation.
- Fire Flow Storage – Lumos obtained the square footage for all residential homes within the St. James Village Service Area from the Washoe County Assessors website. Based on the square footage of the largest residential home (8,411 square feet) and construction type (Type V-B), the fire flow required from the 2018 International Fire Code (IFC) is 2,500 gpm for a duration of two hours.

Using TMWA's regulatory approval for total storage capacity, which includes operating storage of 15% of MDD for one day, fire flow storage and emergency storage of ADD, Lumos developed an existing and recorded lots storage assessment for the St. James Service Area. Currently, there are 159 active SFR in the service area. Using the total unbuilt recorded lots remaining in the gated

community (81 lots) and remaining unbuilt SFR lots outside the gated community (18 lots), the total potential SFR equates to 258.

Table 4.6 shows the storage capacity analysis for existing and future conditions. The analysis estimates a storage capacity of 453,000 gallons for existing conditions and 548,325 gallons for future conditions. With the current storage tank capacity of 1,010,000 gallons, the existing storage capacity available meets the needs of all the recorded lots in the service area.

Table 4.6: St. James Village Storage Capacity Analysis

WATER SERVICE AREA STORAGE		EXISTING 2020 (gallons)	FUTURE Remaining Recorded Lots (gallons)
ST. JAMES VILLAGE SERVICE AREA		Existing Connections (159)	Recorded Lots Connections (259)
	MDD (ADD X 2.5) plus MDD for irrigation	297,000	470,250
Operational Storage	15% of MDD for one Day, based on historical usage (2018 - 2020)	44,550	70,538
Emergency Reserves	ADD for one Day, based on historical usage (2018 - 2020) plus ADD for irrigation	121,630	190,930
Fire Flows	2,500 gpm @ 2 hours - Largest Residential Home	300,000	300,000
Alternative Pumping Capacity: No Backup Power on St. James Well -1 & St. James Well-2	Total Storage Required	466,180	561,468
	Existing Storage Capacity	1,010,000	1,010,000
	Alternative Pumping Capacity	0	0
Recommendations: N/A			
	Total Storage Capacity Available	1,010,000	1,010,000
	Meets Requirements for Storage?	YES	YES

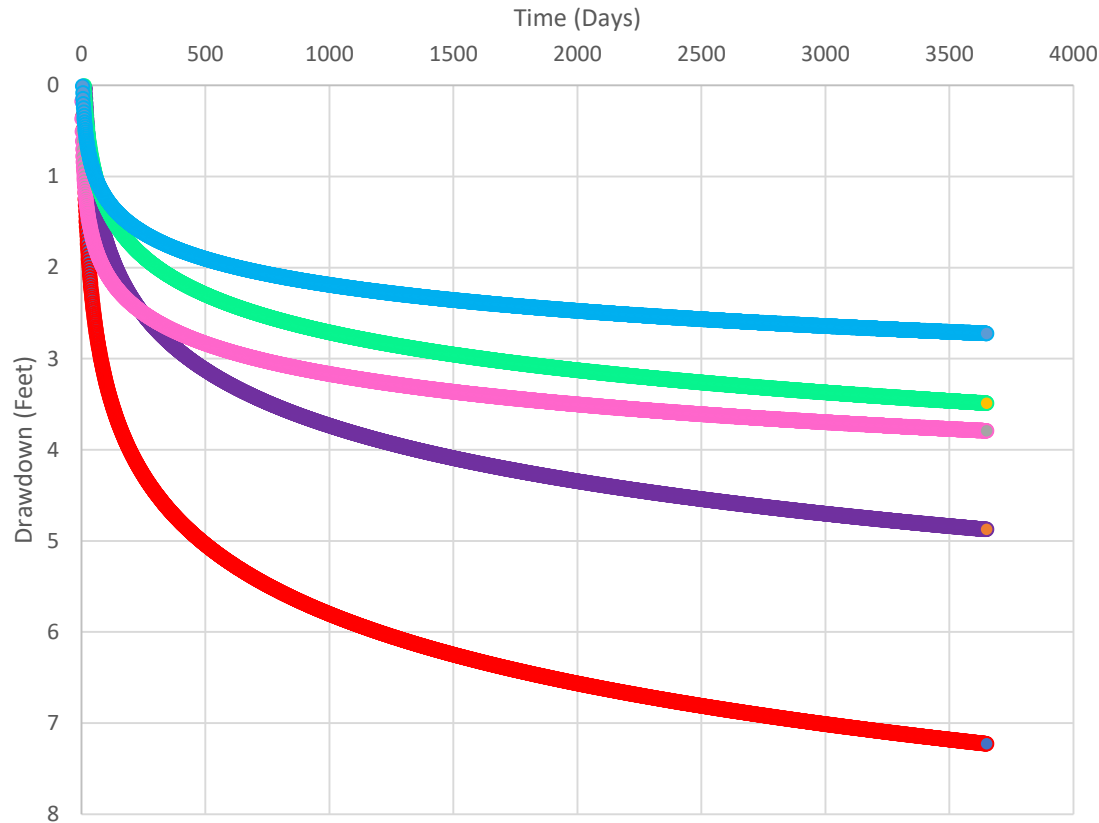
4.5 Water Distribution Evaluation

Lumos planned to work with TMWA's hydraulic water modeler to conduct an evaluation of the water distribution network. Unfortunately, a review of the hydraulic water model was not possible. It seems that the original hydraulic water model was created by WCDR and given to TMWA when they took over the system. Since TMWA has not had the time to verify all the components in the existing water model, they were not comfortable allowing Lumos to analyze the results of the model. TMWA did offer to provide the data in the water model to Lumos to develop a new model, but due to time constraints and additional cost to create and calibrate a water model, St. James Village Inc. decided not to move forward with the task. At this time, Lumos has not conducted a

water model evaluation of the St. James distribution system but does recommend developing a hydraulic water model in the future to evaluate future looping options, required flow capacities, and pressure/flow assessments.

Theis Analysis Of Well Drawdown Influences: CWR 10-Yr Analysis

Drawdown 1-Mile From Serpa Well Over 10-Years



- CWR simulated drawdown at St. James's Production Well 2.
- Input 1: TMWA OWE-4 Values.
- Input 2: TMWA OWE-3 Values
- Input 3: CWR OWE-4 detrended values.
- Input 4: CWR OWE-3 detrended values.
- Input 5: NDWR OWE-4 Values.
- Assumes no recharge or boundary conditions in analysis.

Input 1
 Input 2
 Input 3
 Input 4
 Input 5

	Input 1		Input 2
Q cfs	0.654	Q cfs	0.654
T sq ft/day	4000	T sq ft/day	5000
t days	3650	t days	3650
r feet	5575	r feet	5575
S	0.002	S	0.007

	Input 3		Input 4		Input 5
Q cfs	0.654	Q cfs	0.654	Q cfs	0.654
T sq ft/day	9135	T sq ft/day	7337	T sq ft/day	10690
t days	3650	t days	3650	t days	365
r feet	5575	r feet	5575	r feet	5575
S	0.00124	S	0.00778	S	0.0051



**SERPA WELL TESTING
& GROUNDWATER ANALYSES**

Date: 9/2/2020

Additional Forward Simulations

Slide 23

DECLARATION OF VALUE

1421872

Recording Date 8-21-98 Book _____ Page _____

Instrument # _____

Full Value of Property Interest Conveyed

\$

3,250,000⁰⁰

Less Assumed Liens & Encumbrances

-

0

Taxable Value (NRS 375.010, Section 3)

\$

3,250,000⁰⁰

Real Property Transfer Tax Due

\$

3,575⁰⁰

If exempt, state reason. NRS 375.090, Section _____ Explain:

() Escrow Holder only. Check if Real Property Transfer Tax is to be deferred under NRS 375.030, Section 2.

INDIVIDUAL

Under penalty of perjury, I hereby declare that the above statements are correct.

Signature of Declarant

Name (Please Print)

Address

City

State

Zip

ESCROW HOLDER

Under penalty of perjury, I hereby declare that the above statements are correct to the best of my knowledge based upon the information available to me in the documents contained in the escrow file.

Signature of Declarant

Name (Please Print)

Escrow Number

Firm Name

Address

City

State

Zip

Tax paid for the above transfer on _____, 19____
per NRS 375.030, Section 2.

Signature of Recorder or Representative

1421872

After recording, return to Grantees.

RPTT'S \$3,575.00

DEED

THIS INDENTURE, made and entered into August 15, 1990, by and between JUNE W. PAGNI, an unmarried woman; ALBERT PAGNI, a married man, dealing with his sole and separate property; WILLIAM RAGGIO, as Executor of the Estate of ELIO PAGNI, Deceased; MARY PAGNI, an unmarried woman; DARLEEN BARBARA GALLERON, DIANE MARILYN BUGICA and DONNA LYNN BECKER, as Co-Trustees of the WILLIAM A. PAGNI EXEMPTION TRUST; VANNA PAGNI, an unmarried woman; RAYMOND PAGNI, a married man, dealing with his sole and separate property, and ROBIN PAGNI, a married man, dealing with his sole and separate property, parties of the first part, and WORLD PROPERTIES, INC., a Nevada corporation, party of the second part, whose address is: C/O Mr. John Ketelson Holliman, Hackard & Taylor, 1435 River Park Drive, Suite 300, Sacramento, CA 95815

W I T N E S S E T H:

That the said parties of the first part, in consideration of the sum of TEN DOLLARS (\$10.00), lawful money of the United States of America, to them in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, do by these presents, grant, bargain and sell unto the said party of the second part, and to its successors and assigns forever, all that certain real property situate in the County of Washoe, State of Nevada, described as follows:

SEE EXHIBIT "A" ATTACHED HERETO.

TOGETHER with the tenements, hereditaments and appurtenances thereunto belonging or appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof.

TO HAVE AND TO HOLD the said premises, together with the appurtenances, unto the said party of the second part, and to its successors and assigns forever.

IN WITNESS WHEREOF, the parties of the first part have executed this conveyance the day and year first hereinabove written.

June W. Pagni
June W. Pagni

ESTATE OF ELIO PAGNI, DEC.
William Raggio
William Raggio, Executor

Darleen Barbara Galleron
Darleen Barbara Galleron,
Trustee

Albert Pagni
Albert Pagni

Mary Pagni
Mary Pagni

Vanna Pagni
Vanna Pagni

BK3129PG0812

STATE OF

)
) ss
)

COUNTY OF

On _____, 1990, personally appeared before me, a Notary Public, JUNE W. PAGNI, ALBERT PAGNI, MARY PAGNI, DARLEEN BARBARA GALLERON, DIANE MARILYN BUGICA, DONNA LYNN BECKER, VANNA PAGNI, RAYMOND PAGNI and ROBIN PAGNI, personally known (or proved) to me to be the person(s) whose name(s) is/are subscribed to the above instrument who acknowledged that he/she/they executed the instrument.

Notary Public

STATE OF Nevada)
COUNTY OF August Washoe) ss

On Aug 17, 1990, personally appeared before me, a Notary Public, WILLIAM RAGGIO, personally known (or proved) to me to be the person(s) whose name(s) is/are subscribed to the above instrument who acknowledged that he/she/they executed the instrument.

Marlene Kelly
Notary Public



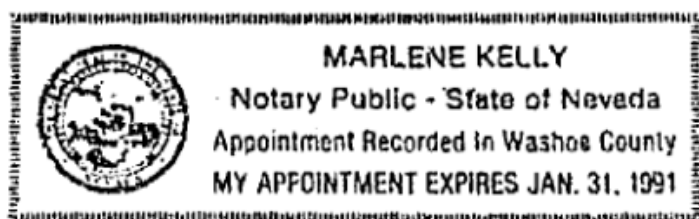
MARLENE KELLY
Notary Public - State of Nevada
Appointment Recorded In Washoe County
MY APPOINTMENT EXPIRES JAN. 31, 1991

BK3129PG0813

STATE OF Nevada)
COUNTY OF Washoe) ss

On August 20, 19 90, personally appeared
before me, a Notary Public, June Pagni,
personally known (or proved) to me to be the person(s) whose
name(s) is/are subscribed to the above instrument who
acknowledged that they/she/he executed the instrument.

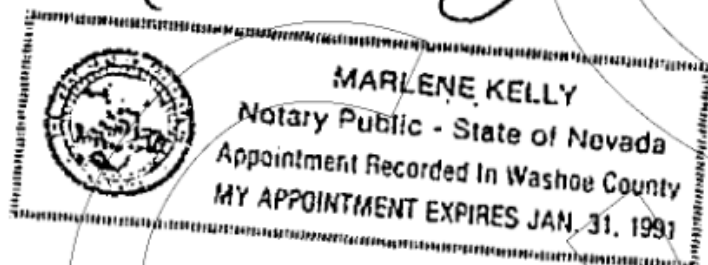
Marlene Kelly
NOTARY PUBLIC



STATE OF Nevada)
COUNTY OF Washoe) ss

On August 17, 19 90, personally appeared
before me, a Notary Public, Dorinda Lynn Becker,
personally known (or proved) to me to be the person(s) whose
name(s) is/are subscribed to the above instrument who
acknowledged that they/she/he executed the instrument.

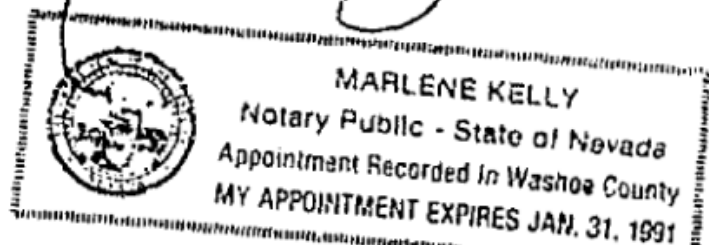
Marlene Kelly
NOTARY PUBLIC



STATE OF Nevada)
COUNTY OF Washoe) ss

On August 15, 19 90, personally appeared
before me, a Notary Public, Diane MARILYN Bugica,
personally known (or proved) to me to be the person(s) whose
name(s) is/are subscribed to the above instrument who
acknowledged that they/she/he executed the instrument.

Marlene Kelly
NOTARY PUBLIC



9K3129PG0814

STATE OF Nevada)
COUNTY OF Washoe) ss

On August 16, 19 90, personally appeared before me, a Notary Public, Darlene Barbara Miller, personally known (or proved) to me to be the person(s) whose name(s) is/are subscribed to the above instrument who acknowledged that they/she/he executed the instrument.

Marlene Kelly
NOTARY PUBLIC
 MARLENE KELLY
Notary Public - State of Nevada
Appointment Recorded in Washoe County
MY APPOINTMENT EXPIRES JAN. 31, 1991


STATE OF Nevada)
COUNTY OF Washoe) ss

On August 16, 19 90, personally appeared before me, a Notary Public, Albert Pagni, personally known (or proved) to me to be the person(s) whose name(s) is/are subscribed to the above instrument who acknowledged that they/she/he executed the instrument.

Marlene Kelly
NOTARY PUBLIC
 MARLENE KELLY
Notary Public - State of Nevada
Appointment Recorded in Washoe County
MY APPOINTMENT EXPIRES JAN. 31, 1991

STATE OF Nevada)
COUNTY OF Washoe) ss

On August 16, 19 90, personally appeared before me, a Notary Public, MARY Pagni, personally known (or proved) to me to be the person(s) whose name(s) is/are subscribed to the above instrument who acknowledged that they/she/he executed the instrument.

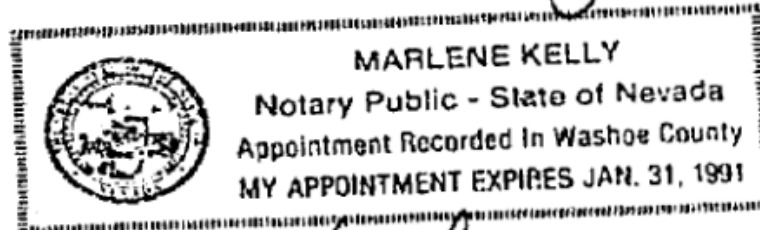
Marlene Kelly
NOTARY PUBLIC
 MARLENE KELLY
Notary Public - State of Nevada
Appointment Recorded in Washoe County
MY APPOINTMENT EXPIRES JAN. 31, 1991

BK3129PG0815

STATE OF Nevada)
)
COUNTY OF Washoe) ss

On August 16, 19 90, personally appeared
before me, a Notary Public, Marlene Kelly,
personally known (or proved) to me to be the person(s) whose
name(s) is/are subscribed to the above instrument who
acknowledged that they/she/he executed the instrument.

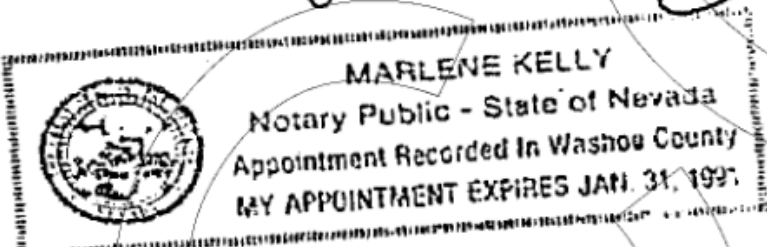
Marlene Kelly
NOTARY PUBLIC



STATE OF Nevada)
)
COUNTY OF Washoe) ss

On August 16, 19 90, personally appeared
before me, a Notary Public, Raymond Pagni,
personally known (or proved) to me to be the person(s) whose
name(s) is/are subscribed to the above instrument who
acknowledged that they/she/he executed the instrument.

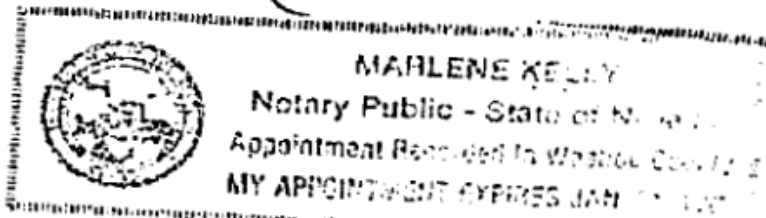
Marlene Kelly
NOTARY PUBLIC



STATE OF Nevada)
)
COUNTY OF Washoe) ss

On August 16, 19 90, personally appeared
before me, a Notary Public, Robin Pagni,
personally known (or proved) to me to be the person(s) whose
name(s) is/are subscribed to the above instrument who
acknowledged that they/she/he executed the instrument.

Marlene Kelly
NOTARY PUBLIC



BK3129PG0816

All that certain real property situate in the County of Washoe, State of Nevada, described as follows:

PARCEL 1:

The Southeast 1/4 of the Northeast 1/4 and the Southeast 1/4 of Section 13, Township 17 North, Range 19 East, M.D.B.&M.

PARCEL 2:

Lots 1 and 2 of the Northwest 1/4 and the West 1/2 of the Northeast 1/4 of Section 18, Township 17 North, Range 20 East, M.D.B.&M.

EXCEPTING THEREFROM the property heretofore conveyed by the following deeds:

Book 52, Page 277, Deed Records, on February 8, 1919.
Book 52, Page 278, Deed Records, on February 8, 1919.
Book 91, Page 247, Deed Records, on September 30, 1932.
Book 522, Page 335, Deed Records, on September 8, 1959.
Book 522, Page 589, Deed Records, on September 16, 1959.
Book 1035, Page 18, Official Records, Document No. 440201, on December 20, 1976.

ALSO EXCEPTING THEREFROM that portion of said Section 18 as conveyed to Pleasant Valley Volunteer Fire Department, Inc., a Nevada corporation, by deed recorded Aug 21, 1990, as Document No. 1421871.

TOGETHER WITH the surface water rights and the right of assignment under the water agreement with Washoe County.

BK3129PG0817

COPY

1421872

AUG 21 1990

OFFICIAL RECORDS
WASHOE COUNTY, NEV.
RECORD REQUESTED BY
FIRST CENTENNIAL
TITLE CO. OF NEVADA

3:37 PM

COUNTY RECORDER
FEE 10.00 DEP. 02

DECLARATION OF VALUE

1453271

Recording Date 1/14/91 Book _____ Page _____ Instrument # _____

Full Value of Property Interest Conveyed

\$ 1,568,000.00

Less Assumed Liens & Encumbrances

- _____

Taxable Value (NRS 375.010, Section 3)

\$ 1,568,000.00

Real Property Transfer Tax Due

\$ 1,724.80

If exempt, state reason. NRS 375.090, Section _____ Explain: _____

() Escrow Holder only. Check if Real Property Transfer Tax is to be deferred under NRS 375.030, Section 2.

INDIVIDUAL

Under penalty of perjury, I hereby declare that the above statements are correct.

Signature of Declarant

Name (Please Print)

Address

City

State

Zip

ESCROW HOLDER

Under penalty of perjury, I hereby declare that the above statements are correct to the best of my knowledge based upon the information available to me in the documents contained in the escrow file.

Signature of Declarant

Fern M. Sordi

Name (Please Print)

61650-6

Escrow Number

F.C.T.I.

690 E. Plumb

Address

Reno, Nev.

City

State

Zip

Tax paid for the above transfer on _____, 19____
per NRS 375.030, Section 2.

Signature of Recorder or Representative

GRANT, BARGAIN, SALE DEED

THIS INDENTURE WITNESSETH: That BETTY ALYCE JONES, HELEN JEANE JONES, IRIS G. BREWERTON, KENNETH G. WALKER and GERALD C. SMITH, as Trustees under the provisions of that certain Revocable Trust Agreement, dated May 21, 1980

in consideration of \$ 10.00 the receipt of which is hereby acknowledged, do hereby Grant, Bargain, Sell and Convey to SIERRA LAND CORPORATION, a Nevada corporation

all that real property situate in the _____ County of WASHOE State of Nevada, bounded and described as follows:

Township 17 North, Range 19 East, M.D.B. & M.

Section 15: North 1/2 and the Southwest 1/4 and the West 1/2 of the Southeast 1/4.

APN: 046-060-08

Together with all and singular the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining.

Witness our hands this 3rd day of January 1991

Betty Alyce Jones
Betty Alyce Jones, Trustee

Gerald C. Smith
Gerald C. Smith, Trustee

Helen Jeane Jones
Helen Jeane Jones, Trustee

STATE OF NEVADA

COUNTY OF Washoe } ss.

{ 61650-6

WHEN RECORDED MAIL TO: Grantees at
% 11766 Wilshire Blvd., Suite 780
Los Angeles, Calif. 90025

BK3199PG0133

DECLARATION OF VALUE

Instrument # _____

Full Value of Property Interest Conveyed \$ _____

Less Assumed Liens & Encumbrances - _____

Taxable Value (NRS 375.010) \$ _____

Real Property Transfer Tax Due \$ _____

1626829

If exempt, state reason. NRS 375.090, Section _____ Number 10. Explain:

Property is being transferred from a corporation to its wholly owned subsidiary.

INDIVIDUAL

Under penalty of perjury, I hereby declare that the above statements are correct.



Signature of Declarant

The Dahlawi Nevada Corporation
by: M. Mehdi Mostaedi, Vice President

Name (Please Print)

241 Ridge Street, Suite 305

Address

Reno, Nevada 89505

City State Zip

ESCROW HOLDER

Under penalty of perjury, I hereby declare that the above statements are correct to the best of my knowledge based upon the information available to me in the documents contained in the escrow file.

Signature of Declarant

Name (Please Print)

Escrow Number

Firm Name


Address

City State Zip

CERTIFICATION

The undersigned hereby certifies that ST. JAMES'S VILLAGE, INC. (previously, SIERRA LAND CORPORATION), a Nevada corporation is a wholly owned subsidiary of THE DAHLAWI NEVADA CORPORATION, a Nevada corporation.

THE DAHLAWI NEVADA CORPORATION

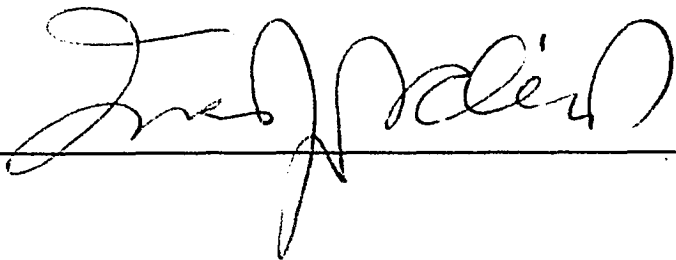

Darrell Lindgren
Vice President

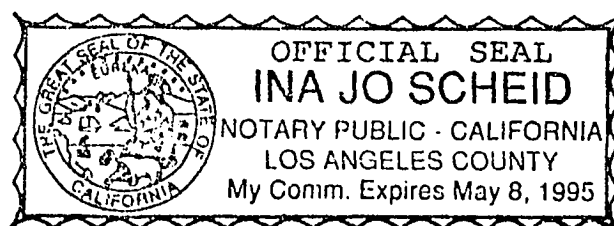
State of California)
County of Los Angeles)

On NOVEMBER 16, 1992 before me, INA JO SCHEID
personally appeared DARRELL LINDGREN
personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature





SP/SS

Order No. _____

1626829

Escrow No. _____

- WHEN RECORDED, MAIL TO:

Space above this line for recorder's use

GRANT, BARGAIN and SALE DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,
THE DAHLAWI NEVADA CORPORATION, a Nevada Corporation

do(es) hereby GRANT, BARGAIN and SELL to ST. JAMES'S VILLAGE, INC. previously

SIERRA LAND CORPORATION, a Nevada Corporation whose address is:
241 Ridge Street, Suite 305, Reno, Nevada 89505

the real property situate in the County of Washoe, State of
Nevada, described as follows:

The Southeast 1/4 of the Southwest 1/4 and the Southwest 1/4 of the Southeast 1/4
of Section 10, Township 17 North, Range 19, East, M.D.B. & M.

APN Number: 047 010 04

TOGETHER with all tenements, hereditaments and appurtenances, including
easements and water rights, if any, thereto belonging or appertaining,
and any reversions, remainders, rents, issues or profits thereof.

THE DAHLAWI NEVADA CORPORATION

Dated 11/4/92

M. Mehdi Mostaedi
M. Mehdi Mostaedi, Vice President

STATE OF NEVADA)
County of _____ : ss.

On _____ personally
appeared before me, a Notary Public,

who acknowledged that he executed
the above instrument.

Notary Public

BK3623PG0258

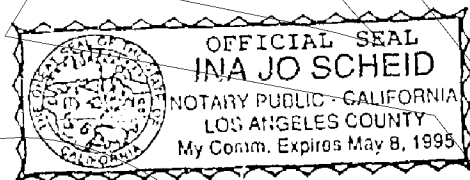
State of California
County of Los Angeles

On NOVEMBER 4, 1992 before me, INA JO SCHEID
personally appeared M. MEHDI MOSTAEDI
personally known to me (or proved to me on the basis of satisfactory
evidence) to be the person(s) whose name(s) is/are subscribed to the
within instrument and acknowledged to me that he/she/they executed
the same in his/her/their authorized capacity(ies), and that by
his/her/their signature(s) on the instrument the person(s) or the
entity upon behalf of which the person(s) acted, executed the
instrument.

WITNESS my hand and official seal.

Signature

[Handwritten Signature]



COPY

OFFICIAL RECORDS
WASHOE CO., NEVADA
RECORD REQUESTED BY
Sierra Land
'92 DEC -1 P1:09

JOE MELCHER
COUNTY RECORDER
FEE 10.00 DEP OK

1626829

BK3623PG0259

6.00 DB

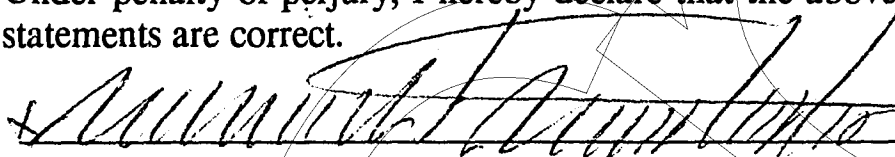
DECLARATION OF VALUE

Instrument # _____

Full Value of Property Interest Conveyed	\$	_____
Less Assumed Liens & Encumbrances	-	_____
Taxable Value (NRS 375.010)	\$	_____
Real Property Transfer Tax Due	\$	_____

1626830

If exempt, state reason. NRS 375.090, Section _____ Number 10 Explain:
Property is being transferred from a corporation to its wholly owned subsidiary.

INDIVIDUAL		
Under penalty of perjury, I hereby declare that the above statements are correct.		
		
Signature of Declarant		
The Dahlawi Nevada Corporation		
M. Mehdi Mostaedi, Vice President		
Name (Please Print)		
241 Ridge Street, Suite 305		
Address		
Reno, Nevada		89505
City	State	Zip

ESCROW HOLDER		
Under penalty of perjury, I hereby declare that the above statements are correct to the best of my knowledge based upon the information available to me in the documents contained in the escrow file.		
Signature of Declarant		
Name (Please Print)		
Escrow Number		
Firm Name		
Address		
City	State	Zip

AUGUSTON

Order No. _____

1626830

Escrow No. _____

WHEN RECORDED, MAIL TO:

Space above this line for recorder's use

GRANT, BARGAIN and SALE DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

THE DAHLAWI NEVADA CORPORATION, a Nevada Corporation

do(es) hereby GRANT, BARGAIN and SELL to ST. JAMES'S VILLAGE, INC., previously

SIERRA LAND CORPORATION, a Nevada Corporation whose address is:
241 Ridge Street, Suite 305, Reno, Nevada 89505the real property situate in the County of Washoe, State of
Nevada, described as follows:Section 14, Township 17 North, Range 19 East of the Mount
Diablo Meridian.

APN Number: 046-060-03

TOGETHER with all tenements, hereditaments and appurtenances, including
easements and water rights, if any, thereto belonging or appertaining,
and any reversions, remainders, rents, issues or profits thereof.

THE DAHLAWI NEVADA CORPORATION

Dated

11/4/92

M. Mehdi Mostaedi, Vice President

STATE OF NEVADA)

: ss.

County of _____)

On _____ personally
appeared before me, a Notary Public,who acknowledged that he executed
the above instrument.

Notary Public

BK3623PG0260

State of California
County of Los Angeles

On NOVEMBER 4 1992 before me, INA JO SCHEID
personally appeared M. MEHDI MOSTAEDI
personally known to me (or proved to me on the basis of satisfactory
evidence) to be the person(s) whose name(s) is/are subscribed to the
within instrument and acknowledged to me that he/she/they executed
the same in his/her/their authorized capacity(ies), and that by
his/her/their signature(s) on the instrument the person(s) or the
entity upon behalf of which the person(s) acted, executed the
instrument.

WITNESS my hand and official seal.

Signature

[Handwritten Signature]



BK3623PG0261

OFFICIAL RECORDS
WASHOE CO., NEVADA
RECORD REQUESTED BY
Sierra Land
92 DEC -1 P1:09

JOE MELCHER
COUNTY RECORDER
FEE 6.00 DEC 29

1626830

6.00 RB

DECLARATION OF VALUE

Instrument # _____

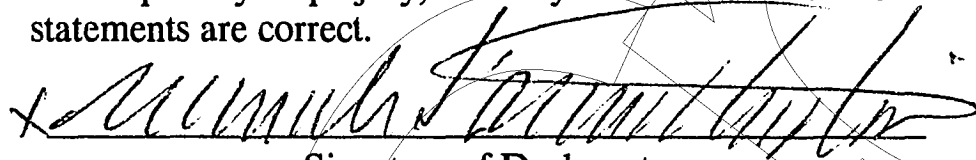
Full Value of Property Interest Conveyed	\$	_____
Less Assumed Liens & Encumbrances	-	_____
Taxable Value (NRS 375.010)	\$	_____
Real Property Transfer Tax Due	\$	_____

1626831

If exempt, state reason. NRS 375.090, Section Number 10. Explain:
Property is being transferred from a corporation to its wholly owned subsidiary.

INDIVIDUAL

Under penalty of perjury, I hereby declare that the above statements are correct.



Signature of Declarant

The Dahlawi Nevada Corporation
M. Mehdi Mostaedi, Vice President

Name (Please Print)

241 Ridge Street, Suite 305

Address

Reno, Nevada

89505

City

State

Zip

ESCROW HOLDER

Under penalty of perjury, I hereby declare that the above statements are correct to the best of my knowledge based upon the information available to me in the documents contained in the escrow file.

Signature of Declarant

Name (Please Print)

Escrow Number

Firm Name

Address

City

State

Zip

1500 330

Order No. _____

1626831

Escrow No. _____

WHEN RECORDED, MAIL TO: _____

Space above this line for recorder's use

GRANT, BARGAIN and SALE DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

THE DAHLAWI NEVADA CORPORATION, a Nevada Corporation

do(es) hereby GRANT, BARGAIN and SELL to ST. JAMES'S VILLAGE, INC. previously

SIERRA LAND CORPORATION, a Nevada Corporation whose address is:
241 Ridge Street, Suite 305, Reno, Nevada 89505

the real property situate in the County of Washoe, State of Nevada, described as follows:

Township 17 North, Range 19 East, M. D. B. &M.:

Section 13: The West 1/2, excepting therefrom that portion
lying within the Old V & T Railroad.

APN Number: 046 060 02

BK3623PG0262

TOGETHER with all tenements, hereditaments and appurtenances, including easements and water rights, if any, thereto belonging or appertaining, and any reversions, remainders, rents, issues or profits thereof.

THE DAHLAWI NEVADA CORPORATION

Dated 11/4/92

M. Mehdi Mostaedi
M. Mehdi Mostaedi, Vice President

STATE OF NEVADA)
County of _____) ss.

On _____ personally
appeared before me, a Notary Public,

who acknowledged that he executed
the above instrument.

Notary Public

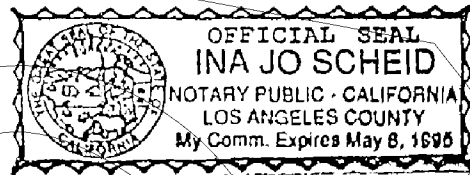
State of California
County of Los Angeles

On NOVEMBER 4, 1992 before me, INA JO SCHEID
personally appeared M. MEHDI MOSTAEDI
personally known to me (or proved to me on the basis of satisfactory
evidence) to be the person(s) whose name(s) is/are subscribed to the
within instrument and acknowledged to me that he/she/they executed
the same in his/her/their authorized capacity(ies), and that by
his/her/their signature(s) on the instrument the person(s) or the
entity upon behalf of which the person(s) acted, executed the
instrument.

WITNESS my hand and official seal.

Signature

INA JO SCHEID



COPY

OFFICIAL RECORDS
WASHOE CO., NEVADA
RECORD REQUESTED BY

Sierra Land
92 DEC -1 P1:09

JOE MELCHER
COUNTY RECORDER
FEE 6.00 DEP SA

1626831

BK3623PG0263

6.000B

DECLARATION OF VALUE

Instrument # _____

Full Value of Property Interest Conveyed	\$	_____
Less Assumed Liens & Encumbrances	-	_____
Taxable Value (NRS 375.010)	\$	_____
Real Property Transfer Tax Due	\$	_____

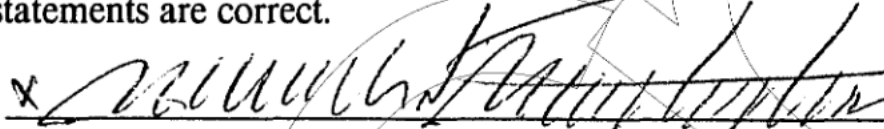
1626832

If exempt, state reason. NRS 375.090, Section _____ Number 10. Explain:

Property is being transferred from a corporation to its wholly-owned subsidiary.

INDIVIDUAL

Under penalty of perjury, I hereby declare that the above statements are correct.



Signature of Declarant

The Dahlawi Nevada Corporation
by: M. Mehdi Mostaedi, Vice President

Name (Please Print)

241 Ridge Street, Suite 305

Address

Reno,

Nevada 89505

City

State

Zip

ESCROW HOLDER

Under penalty of perjury, I hereby declare that the above statements are correct to the best of my knowledge based upon the information available to me in the documents contained in the escrow file.

Signature of Declarant

Name (Please Print)

Escrow Number

Firm Name

Address

City

State

Zip

CERTIFICATION

The undersigned hereby certifies that WORLD PROPERTIES, INC., a Nevada corporation is a wholly owned subsidiary of THE DAHLAWI NEVADA CORPORATION, a Nevada corporation.

THE DAHLAWI NEVADA CORPORATION



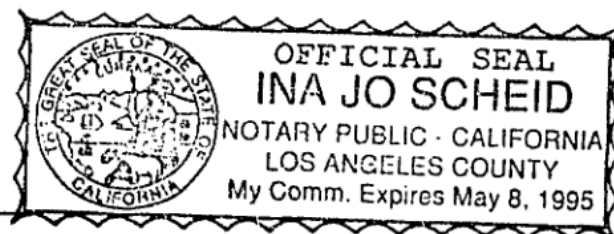
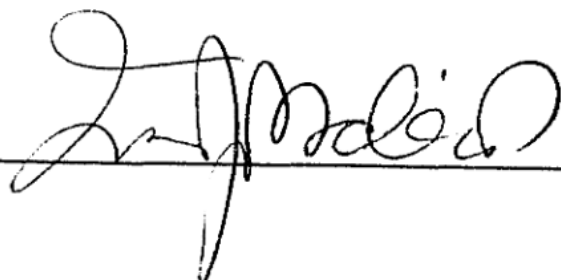
Darrell Lindgren
Vice President

State of California
County of Los Angeles

On NOVEMBER 16, 1992 before me, INA JO SCHEID
personally appeared DARRELL LINDGREN
personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature



STATE OF NEVADA
DEPARTMENT OF STATE
Carson City, Nevada

OFFICE USE ONLY
Date Reg. 11-4-92
Vol. 25 Page 703

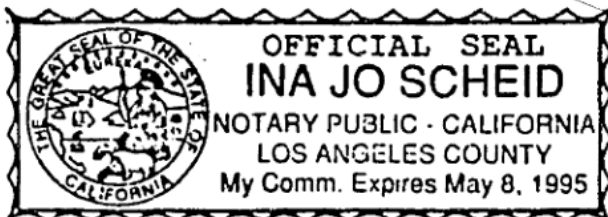
MARK REGISTRATION

IMPORTANT: PLEASE READ INSTRUCTIONS ON REVERSE SIDE BEFORE COMPLETING FORM

1. Please Designate ONE Choice: TRADEMARK ☐ TRADE NAME ☒ SERVICE MARK ☐
2. Mark to Be Registered St. James's Village and Resort 3. Class No. 101
4. Name of Applicant Sierra Land Corporation, now known as St. James's Village, Inc.
5. Business Address 11766 Wilshire Boulevard, Suite 780, Los Angeles, CA 90025
6. Applicant is: Individual ☐ Partnership ☐ Corporation ☒ Association ☐ Other ☐
7. If a corporation, give state where incorporated Nevada
8. If a partnership, list names of general partners
9. Date mark was first used anywhere March, 1992 In Nevada March, 1992
10. If mark used by predecessor in business, give name and address of same:
11. State specific goods or services in connection with which the mark is used:
12. (a) If a trademark, check how the mark is used. By applying it: directly to the goods....., directly to the containers for the goods....., to tags or labels affixed to the goods....., to tags or labels affixed to the containers for the goods....., or by displaying it: in physical association with the goods in the sale or distribution thereof.....
(b) If a service mark, by displaying it: in advertisements of the service....., on documents, wrappers, or articles delivered in connection with the service rendered....., in other fashion....., if so, (Specify).....
(c) If trade name, the general nature of the business Real estate, single-family residential development, hotel, conference center and golf course

STATE OF CALIFORNIA
COUNTY OF LOS ANGELES } ss.

M. MEHDI MOSTAEDI
he is Vice President and treasurer
being duly sworn, deposes and says that the above named applicant, that the statements contained in the foregoing statement are true and that he verily believes that said applicant is the owner of the mark sought to be registered and that no other person has the right in the State of Nevada to use such mark or has used such mark in the State of Nevada either in the identical form thereof, or in such near resemblance thereto, as to be likely, when applied to the goods or services of such person, to cause confusion or to cause mistake or to deceive.



SIERRA LAND CORPORATION, now known as
ST. JAMES'S VILLAGE INC.
M. Mehdi Mostaedi, Vice President and Treasurer

Official capacity

Subscribed and sworn to before me this 16th day of October 1992

See instructions on reverse side

SECRETARY OF STATE
STATE CAPITOL COMPLEX
CARSON CITY, NEVADA 89710

[Signature]
Notary Public

BLM

Order No. _____

Escrow No. _____

1626832

WHEN RECORDED, MAIL TO:

Space above this line for recorder's use

GRANT, BARGAIN and SALE DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

THE DAHLAWI NEVADA CORPORATION, a Nevada Corporation

do(es) hereby GRANT, BARGAIN and SELL to WORLD PROPERTIES INC., a Nevada Corporation

whose address is: 241 Ridge Street, Suite 305
Reno, Nevada 89505the real property situate in the County of WASHOE, State of
Nevada, described as follows:

SEE EXHIBIT "A" ATTACHED HERETO.

APN Numbers: 046 090 04 046 090 11
046 090 05 046 090 12
046 090 06 046 090 18
046 090 07 046 090 25
046 090 08 050 170 01
046 090 09 050 170 03
046 090 10

TOGETHER with all tenements, hereditaments and appurtenances, including easements and water rights, if any, thereto belonging or appertaining, and any reversions, remainders, rents, issues or profits thereof.

THE DAHLAWI NEVADA CORPORATION

Dated

10/21/92

BK3623PG0264

State of California
County of Los Angeles

On October 21, 1992 before me, Ina Jo Scheid
personally appeared M. Mehdi Mostaedi
personally known to me (or proved to me on the basis of satisfactory
evidence) to be the person(s) whose name(s) is/are subscribed to the
within instrument and acknowledged to me that he/she/they executed
the same in his/her/their authorized capacity(ies), and that by
his/her/their signature(s) on the instrument the person(s) or the
entity upon behalf of which the person(s) acted, executed the
instrument.

WITNESS my hand and official seal.

Signature

M. Mehdi Mostaedi



BK3623PG0265

Exhibit A

DESCRIPTION

All that real property situate in the County of Washoe, State of Nevada, and being a portion of Section 18 in Township 17 North, Range 20 East, M.D.M., described as follows:

PARCEL 1:

All of the E $\frac{1}{2}$ of the E $\frac{1}{2}$ of the SW $\frac{1}{4}$ lying North and West of U.S. Highway 395.

PARCEL 2:

All that portion of the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of the SE $\frac{1}{4}$ lying West of U.S. Highway 395.

PARCEL 3:

The W $\frac{1}{2}$ of the SW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of the SW $\frac{1}{4}$.

PARCEL 4:

All of the E $\frac{1}{2}$ of the NW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ lying North of U.S. Highway 395.

PARCEL 5:

The E $\frac{1}{2}$ of the SE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of the SW $\frac{1}{4}$ (also known as Govt. Lot 10) excepting the East 80 feet of the South 100 feet and All the E $\frac{1}{2}$ of the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ lying North of U.S. Highway 395.

PARCEL 6:

BK 3623 PG 0266

DECLARATION OF VALUE

Instrument # _____

Full Value of Property Interest Conveyed \$ _____

Less Assumed Liens & Encumbrances - _____

Taxable Value (NRS 375.010) \$ _____

Real Property Transfer Tax Due \$ _____

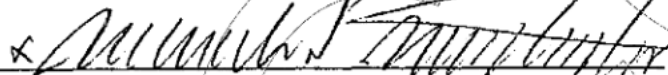
If exempt, state reason. NRS 375.090, Section _____ Number 10 Explain:

Property is being transferred from a corporation to its wholly owned subsidiary.

1626833

INDIVIDUAL

Under penalty of perjury, I hereby declare that the above statements are correct.



Signature of Declarant

The Dahlawi Nevada Corporation
M. Mehdi Mostaedi, Vice President

Name (Please Print)

241 Ridge Street, Suite 305

Address

Reno, Nevada

89505

City

State

Zip

ESCROW HOLDER

Under penalty of perjury, I hereby declare that the above statements are correct to the best of my knowledge based upon the information available to me in the documents contained in the escrow file.

Signature of Declarant

Name (Please Print)

Escrow Number

Firm Name

Address

City

State

Zip

RENO 70

Order No. _____

Escrow No. _____

WHEN RECORDED, MAIL TO:

1626833

Space above this line for recorder's use

GRANT, BARGAIN and SALE DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

THE DAHLAWI NEVADA CORPORATION, a Nevada Corporation

do(es) hereby GRANT, BARGAIN and SELL to ST. JAMES'S VILLAGE, INC., previously

SIERRA LAND CORPORATION, a Nevada Corporation whose address is:

241 Ridge Street, Suite 305, Reno, Nevada 89505

the real property situate in the County of Washoe, State of Nevada, described as follows:

The N 1/2 of NE 1/4 of NE 1/4 of Section 23, Township 17 North, Range 19 East, M.D.B. &M.

APN Number: 046-080-05

TOGETHER with all tenements, hereditaments and appurtenances, including easements and water rights, if any, thereto belonging or appertaining, and any reversions, remainders, rents, issues or profits thereof.

THE DAHLAWI NEVADA CORPORATION

Dated 11/4/92

State of California
County of Los Angeles

on NOVEMBER 4, 1992 before me, INA JO SCHEID
personally appeared M. MEHDI MOSTAEDI
personally known to me (or proved to me on the basis of satisfactory
evidence) to be the person(s) whose name(s) is/are subscribed to the
within instrument and acknowledged to me that he/she/they executed
the same in his/her/their authorized capacity(ies), and that by
his/her/their signature(s) on the instrument the person(s) or the
entity upon behalf of which the person(s) acted, executed the
instrument.

WITNESS my hand and official seal.

Signature *[Handwritten Signature]*



BK3623PG0268

DECLARATION OF VALUE

Instrument # _____

Full Value of Property Interest Conveyed \$ _____

Less Assumed Liens & Encumbrances - _____

Taxable Value (NRS 375.010) \$ _____

Real Property Transfer Tax Due \$ _____

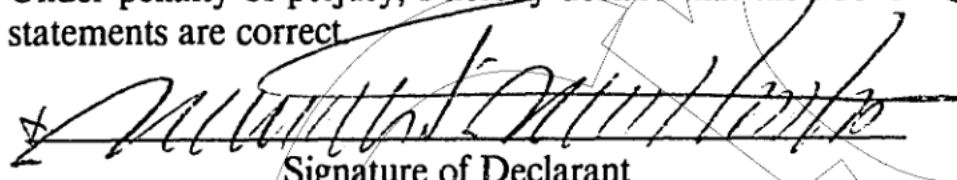
1626834

If exempt, state reason. NRS 375.090, Section _____ Number 10 _____ Explain:

Property is being transferred from a corporation to its wholly owned subsidiary.

INDIVIDUAL

Under penalty of perjury, I hereby declare that the above statements are correct.



Signature of Declarant

The Dahlawi Nevada Corporation
M. Mehdi Mostaedi, Vice President

Name (Please Print)

241 Ridge Street, Suite 305

Address

Reno, Nevada

89505

City

State

Zip

ESCROW HOLDER

Under penalty of perjury, I hereby declare that the above statements are correct to the best of my knowledge based upon the information available to me in the documents contained in the escrow file.

Signature of Declarant

Name (Please Print)

Escrow Number

Firm Name

Address

City

State

Zip

Order No. _____

1626834

Escrow No. _____

WHEN RECORDED, MAIL TO:

Space above this line for recorder's use

GRANT, BARGAIN and SALE DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

THE DAHLAWI NEVADA CORPORATION, a Nevada Corporation

do(es) hereby GRANT, BARGAIN and SELL to

World Properties, Inc., a Nevada Corporation whose address is:
241 Ridge Street, Suite 305, Reno, Nevada 89505the real property situate in the County of Washoe, State of
Nevada, described as follows:West 1/2 of the Southwest 1/2 of the Northeast 1/2 of the
Southwest 1/2 of Section 18, Township 17 North, Range 20
East, M.D.B. & M.Except all coal, oil, gas and other mineral deposits, together
with the right to prospect for, mine and remove the same,
according to the provisions of said Act of June 1, 1938 as
reserved by the United States of America in Patent
recorded February 9, 1955 as Document No. 238436 in
Book E, page 520 of Patents.

APN Number: 046 090 17

TOGETHER with all tenements, hereditaments and appurtenances, including
easements and water rights, if any, thereto belonging or appertaining,
and any reversions, remainders, rents, issues or profits thereof.

THE DAHLAWI NEVADA CORPORATION

Dated

11/4/92

BK3623PG0269

State of California
County of Los Angeles

On NOVEMBER 4, 1992 before me, INA JO SCHEID
personally appeared M. MEHDI MOSTAEDI
personally known to me (or proved to me on the basis of satisfactory
evidence) to be the person(s) whose name(s) is/are subscribed to the
within instrument and acknowledged to me that he/she/they executed
the same in his/her/their authorized capacity(ies), and that by
his/her/their signature(s) on the instrument the person(s) or the
entity upon behalf of which the person(s) acted, executed the
instrument.

WITNESS my hand and official seal.

Signature

[Handwritten Signature]



BK3623PG0270

DECLARATION OF VALUE

Instrument # _____

Full Value of Property Interest Conveyed

\$ _____

Less Assumed Liens & Encumbrances

- _____

Taxable Value (NRS 375.010)

\$ _____

Real Property Transfer Tax Due

\$ _____

If exempt, state reason. NRS 375.090, Section _____ Number 10 Explain:

Property is being transferred from a corporation to its wholly-owned subsidiary.

1651376

INDIVIDUAL

Under penalty of perjury, I hereby declare that the above statements are correct.



Signature of Declarant

The Dahlawi Nevada Corporation

by: M. Mehdi Mostaedi, Vice President

Name (Please Print)

241 Ridge Street, Suite 305

Address

Reno, Nevada 89505

City

State

Zip

ESCROW HOLDER

Under penalty of perjury, I hereby declare that the above statements are correct to the best of my knowledge based upon the information available to me in the documents contained in the escrow file.

Signature of Declarant

Name (Please Print)

Escrow Number

Firm Name

Address

City

State

Zip

BLM

Order No. _____

Escrow No. _____

1626832

WHEN RECORDED, MAIL TO:

Grantor
 241 Ridge St # 305
 Reno NV 89505

1651376

Space above this line for recorder's use

GRANT, BARGAIN and SALE DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

THE DAHLAWI NEVADA CORPORATION, a Nevada Corporation

do(es) hereby GRANT, BARGAIN and SELL to WORLD PROPERTIES INC., a Nevada Corporation

whose address is: 241 Ridge Street, Suite 305
 Reno, Nevada 89505

the real property situate in the County of WASHOE, State of Nevada, described as follows: *This document is being re recorded to correct the legal description. Please see Exhibit A.

SEE EXHIBIT "A" ATTACHED HERETO.

APN Numbers: 046 090 04 046 090 11
 046 090 05 046 090 12
 046 090 06 046 090 18
 046 090 07 046 090 25
 046 090 08 050 170 01
 046 090 09 050 170 03
 046 090 10

TOGETHER with all tenements, hereditaments and appurtenances, including easements and water rights, if any, thereto belonging or appertaining, and any reversions, remainders, rents, issues or profits thereof.

THE DAHLAWI NEVADA CORPORATION

Dated

10/21/92

BY: M. MEHDI MOSTAEDI, VICE PRESIDENT

STATE OF NEVADA)

County of _____)

: ss.

On _____ personally
 appeared before me, a Notary Public,

who acknowledged that he executed
 the above instrument.

Notary Public

BK3682PG0823

BK3622PG0264

State of California
County of Los Angeles

On October 21, 1992 before me, Ina Jo Scheid
personally appeared M. Mehdi Mostaedi
personally known to me (or proved to me on the basis of satisfactory
evidence) to be the person(s) whose name(s) is/are subscribed to the
within instrument and acknowledged to me that he/she/they executed
the same in his/her/their authorized capacity(ies), and that by
his/her/their signature(s) on the instrument the person(s) or the
entity upon behalf of which the person(s) acted, executed the
instrument.

WITNESS my hand and official seal.

Signature

M. Mehdi Mostaedi



BK3623PG0265

BK3682PG0824

Exhibit A

DESCRIPTION

All that real property situate in the County of Washoe, State of Nevada, and being a portion of Section 18 in Township 17 North, Range 20 East, M.D.M., described as follows:

PARCEL 1:

All of the E $\frac{1}{2}$ of the E $\frac{1}{2}$ of the SW $\frac{1}{4}$ lying North and West of U.S. Highway 395.

PARCEL 2:

All that portion of the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of the SE $\frac{1}{4}$ lying West of U.S. Highway 395.

PARCEL 3:

The W $\frac{1}{2}$ of the SW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of the SW $\frac{1}{4}$.

PARCEL 4:

All of the E $\frac{1}{2}$ of the NW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ lying North of U.S. Highway 395.

PARCEL 5:

The E $\frac{1}{2}$ of the SE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of the SW $\frac{1}{4}$ (also known as Govt. Lot 10) excepting the East 80 feet of the South 100 feet and

All the E $\frac{1}{2}$ of the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ lying North of U.S. Highway 395.

PARCEL 6:

All the W $\frac{1}{2}$ of the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ lying North of U.S. Highway 395 and

The East 80 feet of the South 100 feet of the E $\frac{1}{2}$ of the SE $\frac{1}{4}$ of the NW $\frac{1}{4}$ of the SW $\frac{1}{4}$

OFFICIAL RECORDS
WASHOE CO., NEVADA
RECORD REQUESTED BY

Sierra Land
92 DEC -1 P1:09

JOE MELCHER
COUNTY RECORDER
FEE 2.00 DEP 1.00

1626832

BK3623PG0266

BK3682PG0825

Exhibit A

Mount Diablo Meridien, Nevada

T. 17 N., R. 20 E.,

Sec. 18: NW 1/4 N 1/2 Lot 1 SW 1/4, E 1/2 SW 1/4 N 1/2 Lot 1
SW 1/4, N 1/2 SW 1/4 S 1/2 Lot 1 SW 1/4,
Lots 3, 4, 5, 6, 7, 8, 9, 11.

BK 3682 PG 0826

1651376

OFFICIAL RECORDS
WASHOE CO., NEVADA
RECORD REQUESTED BY
World Properties
93 MAR -2 AII :43

JOE MELCHER
COUNTY RECORDER
FEE 800 DEP 8

800 BK

DECLARATION OF VALUE

Instrument # _____

Full Value of Property Interest Conveyed

\$ _____

Less Assumed Liens & Encumbrances

- _____

Taxable Value (NRS 375.010)

\$ _____

Real Property Transfer Tax Due

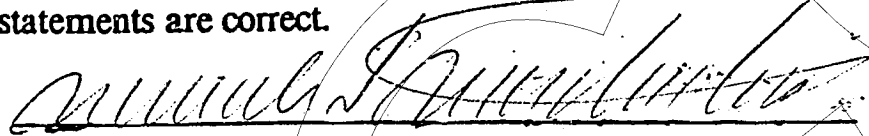
\$ _____

If exempt, state reason. NRS 375.090, Section _____ Number 10. Explain:

Property is being transferred from a corporation to its wholly-owned subsidiary.

INDIVIDUAL

Under penalty of perjury, I hereby declare that the above statements are correct.



Signature of Declarant

The Dahlawi Nevada Corporation

by: M. Mehdi Mostaedi, Vice President

Name (Please Print)

241 Ridge Street, Suite 305

Address

Reno, Nevada 89505

City

State

Zip

ESCROW HOLDER

Under penalty of perjury, I hereby declare that the above statements are correct to the best of my knowledge based upon the information available to me in the documents contained in the escrow file.

Signature of Declarant

Name (Please Print)

Escrow Number

Firm Name

Address

City

State

Zip

Reno 5

Order No. _____

~~1626834~~

Escrow No. _____

WHEN RECORDED, MAIL TO:

1651377

Grant
 241 Ridge St # 305
 Reno NV 89505

Space above this line for recorder's use

GRANT, BARGAIN and SALE DEED

FOR A VALUABLE CONSIDERATION, receipt of which is hereby acknowledged,

THE DAHLAWI NEVADA CORPORATION, a Nevada Corporation

do(es) hereby GRANT, BARGAIN and SELL to

World Properties, Inc., a Nevada Corporation whose address is:
 241 Ridge Street, Suite 305, Reno, Nevada 89505

the real property situate in the County of Washoe, State of
 Nevada, described as follows: *

West 1/2 of the Southwest 1/2 of the Northeast 1/2 of the
 Southwest 1/2 of Section 18, Township 17 North, Range 20
 East, M.D.B. & M.

Except all coal, oil, gas and other mineral deposits, together
 with the right to prospect for, mine and remove the same,
 according to the provisions of said Act of June 1, 1938 as
 reserved by the United States of America in Patent
 recorded February 9, 1955 as Document No. 238436 in
 Book E, page 520 of Patents.

*This document is being re recorded to correct legal description.
 see exhibit A.
 APN Number: 046 090 17

TOGETHER with all tenements, hereditaments and appurtenances, including
 easements and water rights, if any, thereto belonging or appertaining,
 and any reversions, remainders, rents, issues or profits thereof.

THE DAHLAWI NEVADA CORPORATION

Dated 11/4/92.

M. Mehdi Mostaedi
 M. Mehdi Mostaedi, Vice President

STATE OF NEVADA)
) ss.
 County of _____)

On _____ personally
 appeared before me, a Notary Public,

who acknowledged that he executed
 the above instrument.

Notary Public

BK3682PG0827

BK3623PG0269

State of California
County of Los Angeles

On NOVEMBER 4, 1992 before me, INA JO SCHEID
personally appeared M. MEHDI MOSTAEDI
personally known to me (or proved to me on the basis of satisfactory
evidence) to be the person(s) whose name(s) is/are subscribed to the
within instrument and acknowledged to me that he/she/they executed
the same in his/her/their authorized capacity(ies), and that by
his/her/their signature(s) on the instrument the person(s) or the
entity upon behalf of which the person(s) acted, executed the
instrument.

WITNESS my hand and official seal.

Signature

[Handwritten Signature]



BK3623P00270

BK3682P00828

OFFICIAL RECORDS
WASHOE CO., NEVADA
RECORD REQUESTED BY

Sierra Land
92 DEC -1 P1:09

JOE MELCHER
COUNTY RECORDER

FEE 6.00 DEP 0.00

1626834

6.00 DB

Exhibit A

West 1/2 of the Southwest 1/4 of the Northeast 1/4 of the
Southwest 1/4 of Section 18, Township 17 North, Range 20
East, M. D. B. & M.

APN Number: 046 090 17

1651377

OFFICIAL RECORDS
WASHOE CO., NEVADA
RECORD REQUESTED BY
World Properties
93 MAR -2 AM 11:43

JOE MELCHER
COUNTY RECORDER
FEE 7.00 DEP 87

7.00 BX

BK 3682 PG 0829

**APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER
OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE
STATE OF NEVADA HERETOFORE APPROPRIATED**

Date of filing in State Engineer's Office JUN 11 1992Returned to applicant for correction JUL 02 1992Corrected application filed _____ Map filed JUL 08 1992The applicant Washoe CountyP. O. Box 11130 _____ of Reno _____
Street and No. or P.O. Box No. City or TownNevada 89520 _____ hereby make 5 application for permission to change the
State and Zip Code No.Place of use _____
Point of diversion, manner of use, and/or place of useof water heretofore appropriated under Permit 35805
Identify existing right by Permit, Certificate, Proof or Claim Nos. If Decreed, give title of Decree and

identify right in Decree.

- The source of water is underground
Name of stream, lake, underground spring or other source.
- The amount of water to be changed 2.4 cfs
Second feet, acre feet. One second foot equals 448.83 gallons per minute.
- The water to be used for quasi-municipal and domestic
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.
- The water heretofore permitted for quasi-municipal and domestic
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.
- The water is to be diverted at the following point NE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 18 T.17N., R.20E., M.D.B.&M.,
Describe as being within a 40-acre subdivision of public survey and by course and
from which the northwest corner of said Section 18 bears N 84° 16' 51" W.,
distance to a section corner. If on unsurveyed land, it should be stated.
2007.00 feet
- The existing permitted point of diversion is located within N/A
If point of diversion is not changed, do not answer.

- Proposed place of use SE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$, of Section 10, W $\frac{1}{2}$, NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$,
Portion of SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 14, NE $\frac{1}{4}$, NW $\frac{1}{4}$, SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 15, Portion of NE $\frac{1}{4}$ NE $\frac{1}{4}$, of
Section 23, T.17N., R.19E., M.D.B.&M.; and portions of W $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, portions of
NW $\frac{1}{4}$ SW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$, of Section 18, T.17N., R.20E., M.D.B.&M.
Describe by legal subdivisions. If for irrigation state number of acres to be irrigated.
- Existing place of use Portions of SE $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$, of Section 13, T.17N., R.19E.,
M.D.B.&M., and NW $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, of Section 18, T.17N., R.20E.,
M.D.B.&M. (See Permits 35805 and 46836, and accompanying mapping)
Describe by legal subdivisions. If permit is for irrigation, state number of acres irrigated. If changing place of use and/or
manner of use of irrigation permit, describe acreage to be removed from irrigation.

- Use will be from January 1 to December 31 of each year.
Month and Day Month and Day
- Use was permitted from January 1 to December 31 of each year.
Month and Day Month and Day
- Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and
specifications of your diversion or storage works.) well, pump, tank, distribution system
State manner in which water is to be diverted, i.e. diversion structure,
ditches, pipes and flumes, or drilled well, etc.
- Estimated cost of works \$1.5 million
- Estimated time required to construct works 3 to 5 years - see attachment

14. Estimated time required to complete the application of water to beneficial use..... see attachment

15. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use:

See attachment

WASHOE COUNTY UTILITY DIVISION
By s/Jack D. Ferris
P. O. Box 11130
Reno, Nevada 89520

Compared bc/ bc ap/se

Protested Steven R. Pagni, 9/23/92;

Pro. wdr. 10-26-92

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions: This permit to change the place of use of the waters of an underground source as heretofore granted under Permit 35805 is issued subject to the terms and conditions imposed in said Permit 35805 and with the understanding that no other rights on the source will be affected by the change proposed herein. The well shall be equipped with a 2-inch opening and a totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of the water begins or before the proof of completion of work is filed. If the well is flowing, a valve must be installed and maintained to prevent waste. This source is located within an area designated by the State Engineer pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

The total combined duty of water under Permits 57749 and 57750 shall not exceed 720 acre-feet annually.

This permit is issued subject to the terms of the settlement agreement dated June 22, 1992 between the State Engineer and World Properties, Inc.

Monthly records shall be kept of the amount of water pumped from this well and the records submitted to the State Engineer on a quarterly basis within 15 days after the end of each calendar quarter.

The amount of water to be changed shall be limited to the amount which can be applied to beneficial use, and not to exceed 2.4 cubic feet per second, but not to exceed 208 acre-feet annually.

Work must be prosecuted with reasonable diligence and be completed on or before December 7, 1993

Proof of completion of work shall be filed before January 7, 1994

Application of water to beneficial use shall be made on or before December 7, 1994

Proof of the application of water to beneficial use shall be filed on or before January 7, 1995

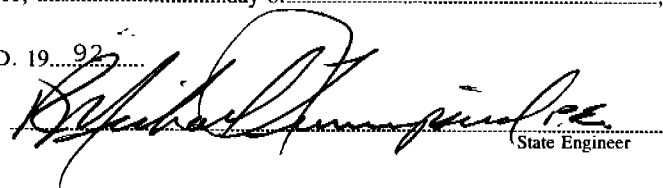
Map in support of proof of beneficial use shall be filed on or before January 7, 1995

Completion of work filed.....
Proof of beneficial use filed.....
Cultural map filed.....
Certificate No. Issued

IN TESTIMONY WHEREOF, I, R. MICHAEL TURNIPSEED, P.E.
State Engineer of Nevada, have hereunto set my hand and the seal of my

office, this 7th day of December,

A.D. 19 92


State Engineer

port 52870 1.24 cfs
Abrogated by

This Attachment is prepared and submitted by the owners and developers of the St. James's Village and the St. James's Resort to be used in conjunction with the Applications submitted by Washoe County to Expand the Place of Use and for Extension of Time for a beneficial use for Water Permits 35805 and 46836.

The underground water from Permits 35805 and 46836 is intended to be used on the approved St. James's Resort (formerly known as the Sierra Reflections Resort Conference Center) which consists of 350 hotel rooms, conference and meeting space, restaurants, casino, health and recreational facilities, a golf course, and 400 villas. The Resort Project received approval from Washoe County in September of 1991. It is currently anticipated that the Resort Project can be completed in approximately five to seven years, depending upon economic circumstances. It is anticipated that the Resort Project will be supplied water by Washoe County from the existing wells on the property.

Water from these Permits is also to be used to provide water service to a single-family residential project, known as the St. James's Village, to be located on property contiguous to the Resort. An Application for approval of St. James's Village was initially filed in September of 1991. During the review process, the Project has undergone substantial modifications in response to concerns raised by area residents. The Project currently consists of 530 single-family lots of a minimum size of one acre, together with a recreation center for the property owners. The Application is still pending and is currently scheduled for hearing before the Washoe County Planning Commission on June 30, 1992. After approval, it is estimated that Final Subdivision Maps for St. James's Village can be recorded for the entire development (in Phases) over a period of three to five years, depending upon economic circumstances. It is estimated that it will be twenty to twenty-five years before all the homes will actually be built.

The Residential Development is anticipated to be served by Washoe County as part of Mt. Rose Water Company. Water will be either supplied from the County's existing wells, including the wells on the Resort Property, or through the development of one or more additional wells to be located on the Residential Property. It is anticipated that the cost of the water system for the Residential Project, including any necessary wells, tank, pumps and distribution facilities, will be approximately \$1.5 million and will be constructed within three to five years.

Including the cost of land acquisition, development costs, including engineers, planners, architects, marketing studies, legal fees and other experts and consultants, the owners of the Resort and Residential Projects have spent or committed to spend \$11,000,000. The estimated cost to complete the construction of the Resort is \$140,000,000. The estimated cost to construct finished lots within the Residential Project is \$24,000,000.

JF:nz
a:attach.s2

**APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER
OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE
STATE OF NEVADA HERETOFORE APPROPRIATED**

Date of filing in State Engineer's Office JUN 11 1992Returned to applicant for correction JUL 02 1992Corrected application filed Map filed JUL 08 1992The applicant Washoe CountyP. O. Box 11130 of Reno
Street and No. or P.O. Box No. City or TownNevada 89520 hereby make S. application for permission to change the
State and Zip Code No.Place of Use
Point of diversion, manner of use, and/or place of useof water heretofore appropriated under Permit 46836
Identify existing right by Permit, Certificate, Proof or Claim Nos. If Decreed, give title of Decree andidentify right in Decree.1. The source of water is underground
Name of stream, lake, underground spring or other source.2. The amount of water to be changed 2.6 cfs
Second feet, acre feet. One second foot equals 448.83 gallons per minute.3. The water to be used for quasi-municipal and domestic
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.4. The water heretofore permitted for quasi-municipal and domestic
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.5. The water is to be diverted at the following point in the NW $\frac{1}{4}$ NE $\frac{1}{4}$, Section 18, T.17N., R.20E.,
Describe as being within a 40-acre subdivision of public survey and by course andM.D.B.&M., from which the northwest corner of said section bears N 81° 26' 35"
distance to a section corner. If on unsurveyed land, it should be stated.W a distance of 2670.06 feet.6. The existing permitted point of diversion is located within N/A
If point of diversion is not changed, do not answer.7. Proposed place of use SE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$, of Section 10, W $\frac{1}{2}$, NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$, Portion
Describe by legal subdivisions. If for irrigation state number of acres to be irrigated. 13; Section
14, NE $\frac{1}{4}$, NW $\frac{1}{4}$, SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$, Section 15, Portion of NE $\frac{1}{4}$ NE $\frac{1}{4}$, of Section
23, T.17N., R.19E., M.D.B.&M.; and portions of W $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, portions of NW $\frac{1}{4}$ SW $\frac{1}{4}$,
NE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$, of Section 18, T.17N., R.20E., M.D.B.&M.8. Existing place of use Portions of SE $\frac{1}{4}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$, of Section 13, T.17N., R.19E.,
Describe by legal subdivisions. If permit is for irrigation, state number of acres irrigated. If changing place of use and/or
M.D.B.&M., and NW $\frac{1}{4}$
NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, of Section 18, T.17N., R.20E.,
manner of use of irrigation permit, describe acreage to be removed from irrigation.M.D.B.&M. (See Permits 35805 and 46836 and accompanying mapping)9. Use will be from January 1 to December 31 of each year.
Month and Day Month and Day10. Use was permitted from January 1 to December 31 of each year.
Month and Day Month and Day

11. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and

specifications of your diversion or storage works.) well, pump, tank, distribution system
State manner in which water is to be diverted, i.e. diversion structure,ditches, pipes and flumes, or drilled well, etc.12. Estimated cost of works \$1.5 million13. Estimated time required to construct works 3 to 5 years - see attachment

14. Estimated time required to complete the application of water to beneficial use..... See attachment

15. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use:

..... See attachment

.....

.....

.....

WASHOE COUNTY UTILITY DIVISION
By s/Jack D. Ferris
P. O. Box 11130
Reno, Nevada 89520

Compared..... bc/bc ap/se

Protested..... Steven R. Pagni, 9/23/92;

Pro. wdr. 10-26-92

..... APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions: This permit to change the place of use of the waters of an underground source as heretofore granted under Permit 46836 is issued subject to the terms and conditions imposed in said Permit 46836 and with the understanding that no other rights on the source will be affected by the change proposed herein. The well shall be equipped with a 2-inch opening and a totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of the water begins or before the proof of completion of work is filed. If the well is flowing, a valve must be installed and maintained to prevent waste. This source is located within an area designated by the State Engineer pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

The total combined duty of water under Permits 57749 and 57750 shall not exceed 720 acre-feet annually.

This permit is issued subject to the terms of the settlement agreement dated June 22, 1992 between the State Engineer and World Properties, Inc.

Monthly records shall be kept of the amount of water pumped from this well and the records submitted to the State Engineer on a quarterly basis within 15 days after the end of each calendar quarter.

The amount of water to be changed shall be limited to the amount which can be applied to beneficial use, and not to exceed..... 2.6cubic feet per second., but not to exceed 512

acre-feet annually.

Work must be prosecuted with reasonable diligence and be completed on or before..... December 7, 1993

Proof of completion of work shall be filed before..... January 7, 1994

Application of water to beneficial use shall be made on or before..... December 7, 1994

Proof of the application of water to beneficial use shall be filed on or before..... January 7, 1995

Map in support of proof of beneficial use shall be filed on or before..... January 7, 1995

Completion of work filed..... JAN 10 1994

Proof of beneficial use filed.....

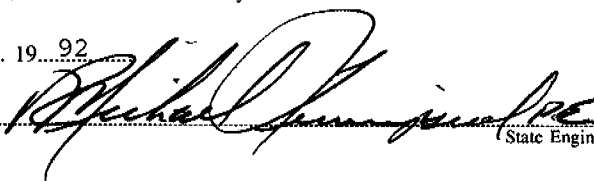
Cultural map filed.....

Certificate No..... Issued.....

IN TESTIMONY WHEREOF, I, R. MICHAEL TURNIPSEED, P.E.
State Engineer of Nevada, have hereunto set my hand and the seal of my

office, this..... 7thday of..... December.....,

A.D. 19..... 92


.....
(State Engineer)

Abrogated By: 59330 0.45, 59631 0.45,
59632 0.45, 59633 0.45

This Attachment is prepared and submitted by the owners and developers of the St. James's Village and the St. James's Resort to be used in conjunction with the Applications submitted by Washoe County to Expand the Place of Use and for Extension of Time for a beneficial use for Water Permits 35805 and 46836.

The underground water from Permits 35805 and 46836 is intended to be used on the approved St. James's Resort (formerly known as the Sierra Reflections Resort Conference Center) which consists of 350 hotel rooms, conference and meeting space, restaurants, casino, health and recreational facilities, a golf course, and 400 villas. The Resort Project received approval from Washoe County in September of 1991. It is currently anticipated that the Resort Project can be completed in approximately five to seven years, depending upon economic circumstances. It is anticipated that the Resort Project will be supplied water by Washoe County from the existing wells on the property.

Water from these Permits is also to be used to provide water service to a single-family residential project, known as the St. James's Village, to be located on property contiguous to the Resort. An Application for approval of St. James's Village was initially filed in September of 1991. During the review process, the Project has undergone substantial modifications in response to concerns raised by area residents. The Project currently consists of 530 single-family lots of a minimum size of one acre, together with a recreation center for the property owners. The Application is still pending and is currently scheduled for hearing before the Washoe County Planning Commission on June 30, 1992. After approval it is estimated that Final Subdivision Maps for St. James's Village can be recorded for the entire development (in Phases) over a period of three to five years, depending upon economic circumstances. It is estimated that it will be twenty to twenty-five years before all the homes will actually be built.

The Residential Development is anticipated to be served by Washoe County as part of Mt. Rose Water Company. Water will be either supplied from the County's existing wells, including the wells on the Resort Property, or through the development of one or more additional wells to be located on the Residential Property. It is anticipated that the cost of the water system for the Residential Project, including any necessary wells, tank, pumps and distribution facilities, will be approximately \$1.5 million and will be constructed within three to five years.

Including the cost of land acquisition, development costs, including engineers, planners, architects, marketing studies, legal fees and other experts and consultants, the owners of the Resort and Residential Projects have spent or committed to spend \$11,000,000. The estimated cost to complete the construction of the Resort is \$140,000,000. The estimated cost to construct finished lots within the Residential Project is \$24,000,000.

JF:nz
a:attach.s2

APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE STATE OF NEVADA HERETOFORE APPROPRIATED

MAY 26 1993

Date of filing in State Engineer's Office.....

Returned to applicant for correction.....

Corrected application filed..... Map filed **MAY 26 1993**

The applicant Washoe County
P.O. Box 11130 of Reno
Street and No. or P.O. Box No. City or Town
Nevada 89520 hereby make S application for permission to change the
State and Zip Code No.
Point of diversion of a portion
Point of diversion, manner of use, and/or place of use
of water heretofore appropriated under Permit 57749
Identify existing right by Permit, Certificate, Proof or Claim Nos. If Decreed, give title of Decree and identify right in Decree.

- The source of water is Underground
Name of stream, lake, underground spring or other source.
- The amount of water to be changed 107.40 acre-feet (1.24 cfs)
Second feet, acre feet. One second foot equals 448.83 gallons per minute.
- The water to be used for Quasi-municipal and domestic
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.
- The water heretofore permitted for Quasi-municipal and domestic
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.
- The water is to be diverted at the following point NE $\frac{1}{4}$ SE $\frac{1}{4}$, Section 3, T.17N., R.19E.,
Describe as being within a 40-acre subdivision of public survey and by course and distance to a section corner. If on unsurveyed land, it should be stated.
M.D.B.&M. or at a point from which the east quarter corner of said Section 3
bears N 63° 16' 21" E., a distance of 1246.10 feet.
- The existing permitted point of diversion is located within NE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 18, T.17N., R.20E.,
If point of diversion is not changed, do not answer.
M.D.B.&M. or at a point from which the northwest corner of said Section 18
bears N 84° 16' 51" W., a distance of 2007.00 feet.
SE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 10; W $\frac{1}{2}$, NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$,
7. Proposed place of use Portion of SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 13; Section 14; NE $\frac{1}{4}$, NW $\frac{1}{4}$, SW $\frac{1}{4}$,
Describe by legal subdivisions. If for irrigation state number of acres to be irrigated. 15; Portion
of NE $\frac{1}{4}$ NE $\frac{1}{4}$, of Section 23, T.17N., R.19E., M.D.B.&M; and portions of W $\frac{1}{2}$ NE $\frac{1}{4}$,
NW $\frac{1}{4}$, portions of NW $\frac{1}{4}$ SW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$, of section 18 T.17N., R.20E.,
M.D.B.&M.
- Existing place of use Same as 7 above
Describe by legal subdivisions. If permit is for irrigation, state number of acres irrigated. If changing place of use and/or manner of use of irrigation permit, describe acreage to be removed from irrigation.
- Use will be from January 1 to December 31 of each year.
Month and Day Month and Day
- Use was permitted from January 1 to December 31 of each year.
Month and Day Month and Day
- Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.) Pump to be installed in existing well, water
State manner in which water is to be diverted, i.e. diversion structure, ditches, pipes and flumes, or drilled well, etc.
to be transmitted to storage tank and then transmission lines
- Estimated cost of works \$500,000.00
- Estimated time required to construct works Well is completed (see attached report) transmission
works will take up to five (5) years to complete

14. Estimated time required to complete the application of water to beneficial use. Ten (10) years

15. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use:

Water to serve 120 residential units at 0.86 AFA/unit plus a fire
station and recreation center, plus incidental landscaping

Vahid Behmaram
 By s/Vahid Behmaram
 Washoe County Utility Division
 P.O. Box 11130, Reno, NV 89520

Compared bc/bc ab/se

Protested _____

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions: This permit to change the point of diversion of a portion of the waters of an underground source as heretofore granted under Permit 57749 is issued subject to the terms and conditions imposed in said Permit 57749 and with the understanding that no other rights on the source will be affected by the change proposed herein. The well shall be equipped with a 2-inch opening and a totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of the water begins or before the proof of completion of work is filed. If the well is flowing, a valve must be installed and maintained to prevent waste. This source is located within an area designated by the State Engineer pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

The total combined duty of water under Permits 57749, 57750 and 58870 shall not exceed 720 acre-feet annually.

This permit is subject to the terms of the settlement agreement dated June 22, 1992 between the State Engineer and World Properties, Inc.

Monthly records shall be kept of the amount of water pumped from this well and the records submitted to the State Engineer on a quarterly basis within 15 days after the end of each calendar quarter.

The amount of water to be changed shall be limited to the amount which can be applied to beneficial use, and not to exceed 1.24 cubic feet per second, but not to exceed 107.4 acre-feet annually.

Work must be prosecuted with reasonable diligence and be completed on or before December 7, 1994

Proof of completion of work shall be filed before January 7, 1995

Application of water to beneficial use shall be made on or before December 7, 1995

Proof of the application of water to beneficial use shall be filed on or before January 7, 1996

Map in support of proof of beneficial use shall be filed on or before January 7, 1996

Completion of work filed OCT 03 1997

Proof of beneficial use filed _____

Cultural map filed _____

Certificate No. _____ Issued _____

IN TESTIMONY WHEREOF, I, R. MICHAEL TURNIPSEED, P.E.
 State Engineer of Nevada, have hereunto set my hand and the seal of my

office, this 2nd day of November

A.D. 19 93


 State Engineer

**APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER
OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE
STATE OF NEVADA HERETOFORE APPROPRIATED**

Date of filing in State Engineer's Office OCT 22 1993
 Returned to applicant for correction DEC 2 1993
 Corrected application filed DEC 22 1993 Map filed DEC 27 1993

The applicant Washoe County, a political Subdivision of the State of Nevada
P.O. Box 11130 of Reno
Street and No. or P.O. Box No. City or Town
Nevada 89520-0027 hereby make S application for permission to change the
State and Zip Code No.
Point of Diversion of a portion
Point of diversion, manner of use, and/or place of use
 of water heretofore appropriated under Permit 57750
Identify existing right by Permit, Certificate, Proof or Claim Nos. If Decreed, give title of Decree and
 identify right in Decree.

1. The source of water is Underground
Name of stream, lake, underground spring or other source.
2. The amount of water to be changed 0.45 c.f.s. 88.6 acre-feet
Second feet, acre feet. One second foot equals 448.83 gallons per minute.
3. The water to be used for Quasi-Municipal and Domestic
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.
4. The water heretofore permitted for Quasi-Municipal and Domestic
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.
5. The water is to be diverted at the following point SW $\frac{1}{4}$ SE $\frac{1}{4}$ section 10, T.17N., R.19E.,
Describe as being within a 40-acre subdivision of public survey and by course and
M.D.B.&M. or at a point from which the NW corner of section 14,
distance to a section corner. If on unsurveyed land, it should be stated.
T.17N., R.19E., M.D.B.&M. bears S. 62°00'31" E. a distance of 1649.17
feet.
6. The existing permitted point of diversion is located within NW $\frac{1}{4}$ NE $\frac{1}{4}$ section 18, T.17N.,
If point of diversion is not changed, do not answer.
R.20E., M.D.B.&M., or at a point from which the NW corner of said
section 18 bears N. 81°26' 35" W. a distance of 2670.06 feet.
7. Proposed place of use See Exhibit "A"
Describe by legal subdivisions. If for irrigation state number of acres to be irrigated.
8. Existing place of use See Exhibit "A" No change
Describe by legal subdivisions. If permit is for irrigation, state number of acres irrigated. If changing place of use and/or
 manner of use of irrigation permit, describe acreage to be removed from irrigation.
9. Use will be from January 1st to December 31st of each year.
Month and Day Month and Day
10. Use was permitted from January 1st to December 31st of each year.
Month and Day Month and Day
11. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and
 specifications of your diversion or storage works.) Well, Pump, Tank, Distribution System
State manner in which water is to be diverted, i.e. diversion structure,
 ditches, pipes and flumes, or drilled well, etc.
12. Estimated cost of works \$500,000.00
13. Estimated time required to construct works 5 years

14. Estimated time required to complete the application of water to beneficial use 10 years

15. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use:

Survey and map will be submitted upon completion of exploratory
drilling as described in 9/27/93 waiver request. Water is to be
used as described under permit 57750.

By s/ Vahid Behmaram
Vahid Bermaram
Washoe County Utility Division
P.O.Box 11130, Reno, NV 89520-0027

Compared gkl/ jv cl/bk

Protested _____

APPROVAL
OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit to change the point of diversion of a portion of the waters of an underground source as heretofore granted under Permit 57750 is issued subject to the terms and conditions imposed in said Permit 57750 and with the understanding that no other rights on the source will be affected by the change proposed herein. The well shall be equipped with a 2-inch opening and a totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of the water begins or before the proof of completion of work is filed. If the well is flowing, a valve must be installed and maintained to prevent waste. This source is located within an area designated by the State Engineer pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

The well must be sealed with cement grout, concrete grout or neat cement from ground level to 100 feet.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.
(CONTINUED ON PAGE 2)

The amount of water to be changed shall be limited to the amount which can be applied to beneficial use, and not to exceed 0.45 cubic feet per second, but not to exceed 88.6 acre-feet annually.

Work must be prosecuted with reasonable diligence and be completed on or before December 7, 1996

Proof of completion of work shall be filed before January 7, 1997

Application of water to beneficial use shall be made on or before December 7, 1997

Proof of the application of water to beneficial use shall be filed on or before January 7, 1998

Map in support of proof of beneficial use shall be filed on or before N/A

Completion of work filed DEC 23 1997

Proof of beneficial use filed _____

Cultural map filed _____

Certificate No. _____ Issued _____

IN TESTIMONY WHEREOF, I, R. MICHAEL TURNIPSEED, P.E.
State Engineer of Nevada, have hereunto set my hand and the seal of my

office, this 1st day of November

A.D. 19 95

Christine Thiel
State Engineer

by: Christine Thiel, P.E.,
Deputy State Engineer

(PERMIT TERMS CONTINUED)

Monthly records shall be kept of the amount of water pumped from this well and the records submitted to the State Engineer on a quarterly basis within 15 days after the end of each calendar quarter.

The total combined duty of water under Permits 57749, 57750, 58870, 59330, 59631, 59632 and 59633 shall not exceed 720.0 acre-feet annually.

This permit is issued subject to the terms of the settlement agreement dated June 22, 1992 between the State Engineer and World Properties, Inc.

7700
EXHIBIT "A"

T.17N., R.19E., M.D.B. & M.

- Section 10: SE 1/4 SW 1/4, SW 1/4 SE 1/4
- Section 13: W 1/2, NE 1/4, N 1/2 SE 1/4,
SW 1/4 SE 1/4, Portion of SE 1/4 SE 1/4
- Section 14: All
- Section 15: NE 1/4, NW 1/4, SW 1/4, NW 1/4 SE 1/4,
SW 1/4 SE 1/4
- Section 23: Portion of N 1/2 NE 1/4 NE 1/4

T.17N., R.20E., M.D.B. & M.

- Section 18: NW 1/4, Portion of W 1/2 NE 1/4,
Portion of NW 1/4 SW 1/4,
Portion of NE 1/4 SW 1/4, and
Portion of SW 1/4 SW 1/4

APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE STATE OF NEVADA HERETOFORE APPROPRIATEDDate of filing in State Engineer's Office **DEC 22 1993**

Returned to applicant for correction

Corrected application filed Map filed **DEC 27 1993** under **59330**

The applicant Washoe County, a political Subdivision of the State of Nevada
P.O. Box 11130 of Reno
Street and No. or P.O. Box No. City or Town
Nevada 89520-0027 hereby make application for permission to change the
State and Zip Code No.
Point of Diversion of a portion
Point of diversion, manner of use, and/or place of use
of water heretofore appropriated under Permit 57750
Identify existing right by Permit, Certificate, Proof or Claim Nos. If Decreed, give title of Decree and
identify right in Decree.

1. The source of water is Underground
Name of stream, lake, underground spring or other source.
2. The amount of water to be changed 0.45 c.f.s. 88.6 acre-feet
Second feet, acre feet. One second foot equals 448.83 gallons per minute.
3. The water to be used for Quasi-Municipal and Domestic
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.
4. The water heretofore permitted for Quasi-Municipal and Domestic
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.
5. The water is to be diverted at the following point NW 1/4 NW 1/4, section 14, T.17N., R.19E.,
Describe as being within a 40-acre subdivision of public survey and by course and
M.D.B. & M., or at a point from which the NW corner of said section 14, bears N.
distance to a section corner. If on unsurveyed land, it should be stated.
5° 44' 47" W. a distance of 885.66 feet.
6. The existing permitted point of diversion is located within NW 1/4 NE 1/4, section 18, T.17N., R.20E.,
If point of diversion is not changed, do not answer.
M.D.B. & M., or at a point from which the NW corner of said section 18 bears N.
81° 26' 35" W. a distance of 2670.06 feet.
7. Proposed place of use unchanged
Describe by legal subdivisions. If for irrigation state number of acres to be irrigated.
8. Existing place of use Please refer to Exhibit "A"
Describe by legal subdivisions. If permit is for irrigation, state number of acres irrigated. If changing place of use and/or
manner of use of irrigation permit, describe acreage to be removed from irrigation.
9. Use will be from January 1st to December 31st of each year.
Month and Day Month and Day
10. Use was permitted from January 1st to December 31st of each year.
Month and Day Month and Day
11. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and
specifications of your diversion or storage works.) Well, Pump, Tank and Distribution System
State manner in which water is to be diverted, i.e. diversion structure,
ditches, pipes and flumes, or drilled well, etc.
12. Estimated cost of works \$500,000.00
13. Estimated time required to construct works 5 years

14. Estimated time required to complete the application of water to beneficial use.....10 years.....

15. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use:

Water to be used as described under permit 57750.....

By s/Jack D. Ferris
Jack D. Ferris
Washoe County Utility Division
P.O. Box 11130, Reno, NV 89520-0027
Compared.....bc/bc.....cl/bk
Protested.....

APPROVAL
OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit to change the point of diversion of a portion of the waters of an underground source as heretofore granted under Permit 57750 is issued subject to the terms and conditions imposed in said Permit 57750 and with the understanding that no other rights on the source will be affected by the change proposed herein. The well shall be equipped with a 2-inch opening and a totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of the water begins or before the proof of completion of work is filed. If the well is flowing, a valve must be installed and maintained to prevent waste. This source is located within an area designated by the State Engineer pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

The well must be sealed with cement grout, concrete grout or neat cement from ground level to 100 feet.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

(CONTINUED ON PAGE 2)

The amount of water to be changed shall be limited to the amount which can be applied to beneficial use, and not to exceed.....0.45.....cubic feet per second....., but not to exceed 88.6 acre-feet annually.....

Work must be prosecuted with reasonable diligence and be completed on or before.....December 7, 1996.....

Proof of completion of work shall be filed before.....January 7, 1997.....

Application of water to beneficial use shall be made on or before.....December 7, 1997.....

Proof of the application of water to beneficial use shall be filed on or before.....January 7, 1998.....

Map in support of proof of beneficial use shall be filed on or before.....N/A.....

Completion of work filed.....DEC 23 1997.....

Proof of beneficial use filed.....

Cultural map filed.....

Certificate No.....Issued.....

IN TESTIMONY WHEREOF, I, R. MICHAEL TURNIPSEED, P.E.
State Engineer of Nevada, have hereunto set my hand and the seal of my
office, this.....1st.....day of.....November.....
A.D. 19.....95.....

Christine Thiel
State Engineer

by: Christine Thiel, P.E.,
Deputy State Engineer

(PERMIT TERMS CONTINUED)

Monthly records shall be kept of the amount of water pumped from this well and the records submitted to the State Engineer on a quarterly basis within 15 days after the end of each calendar quarter.

The total combined duty of water under Permits 57749, 57750, 58870, 59330, 59631, 59632 and 59633 shall not exceed 720.0 acre-feet annually.

This permit is issued subject to the terms of the settlement agreement dated June 22, 1992 between the State Engineer and World Properties, Inc.

EXHIBIT "A"

T.17N., R.19E., M.D.B. & M.

- Section 10: SE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$
- Section 13: W $\frac{1}{2}$, NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$,
SW $\frac{1}{4}$ SE $\frac{1}{4}$, Portion of SE $\frac{1}{4}$ SE $\frac{1}{4}$
- Section 14: All
- Section 15: NE $\frac{1}{4}$, NW $\frac{1}{4}$, SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$,
SW $\frac{1}{4}$ SE $\frac{1}{4}$
- Section 23: Portion of N $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$

T.17N., R.20E., M.D.B. & M.

- Section 18: NW $\frac{1}{4}$, Portion of W $\frac{1}{2}$ NE $\frac{1}{4}$,
Portion of NW $\frac{1}{4}$ SW $\frac{1}{4}$,
Portion of NE $\frac{1}{4}$ SW $\frac{1}{4}$, and
Portion of SW $\frac{1}{4}$ SW $\frac{1}{4}$

**APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER
OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE
STATE OF NEVADA HERETOFORE APPROPRIATED**

Date of filing in State Engineer's Office. DEC 22 1993

Returned to applicant for correction. _____

Corrected application filed. _____ Map filed DEC 27 1993 under 59330

The applicant Washoe County, a political subdivision of the State of Nevada
_____ P.O. Box 11130 _____ of Reno _____
Street and No. or P.O. Box No. City or Town

_____ Nevada 89520-0027 _____ hereby makes application for permission to change the
State and Zip Code No.

_____ Point of Diversion of a portion _____
Point of diversion, manner of use, and/or place of use

of water heretofore appropriated under Permit 57750
Identify existing right by Permit, Certificate, Proof or Claim Nos. If Decreed, give title of Decree and
identify right in Decree.

1. The source of water is Underground
Name of stream, lake, underground spring or other source.

2. The amount of water to be changed 0.45 c.f.s. 88.6 acre-feet
Second feet, acre feet. One second foot equals 448.83 gallons per minute.

3. The water to be used for Quasi-Municipal and Domestic
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.

4. The water heretofore permitted for Quasi-Municipal and Domestic
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.

5. The water is to be diverted at the following point NE $\frac{1}{4}$ NE $\frac{1}{4}$ section 14, T.17N., R.19E.
Describe as being within a 40-acre subdivision of public survey and by course and
distance to a section corner. If on unsurveyed land, it should be stated.
M.D.B.&M. or at a point from which the NW corner of said section 14 bears
N. 89° 44' 33" W., a distance of 5194.92 feet.

6. The existing permitted point of diversion is located within NW $\frac{1}{4}$ NE $\frac{1}{4}$, Section 18, T.17N., R.20E.
If point of diversion is not changed, do not answer.
M.D.B.&M., or at a point from which the NW corner of said section 18 bears
N. 81° 26' 35" W. a distance of 2670.06 feet.

7. Proposed place of use Unchanged
Describe by legal subdivisions. If for irrigation state number of acres to be irrigated.

8. Existing place of use Please refer to Exhibit "A"
Describe by legal subdivisions. If permit is for irrigation, state number of acres irrigated. If changing place of use and/or
manner of use of irrigation permit, describe acreage to be removed from irrigation.

9. Use will be from January 1st to December 31st of each year.
Month and Day Month and Day

10. Use was permitted from January 1st to December 31st of each year.
Month and Day Month and Day

11. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and
specifications of your diversion or storage works.) Well, Pump, Tank and Distribution System
State manner in which water is to be diverted, i.e. diversion structure,
ditches, pipes and flumes, or drilled well, etc.

12. Estimated cost of works \$500,000.00

13. Estimated time required to construct works 5 years

14. Estimated time required to complete the application of water to beneficial use.....10 years.....

15. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use:

Water to be used as described under permit 57750.

By s/Jack D. Ferris
Jack D. Ferris
Washoe County Utility Division
P.O. Box 11130, Reno, NV 89520-0027
Compared bc/bc cl/bk
Protested

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit to change the point of diversion of a portion of the waters of an underground source as heretofore granted under Permit 57750 is issued subject to the terms and conditions imposed in said Permit 57750 and with the understanding that no other rights on the source will be affected by the change proposed herein. The well shall be equipped with a 2-inch opening and a totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of the water begins or before the proof of completion of work is filed. If the well is flowing, a valve must be installed and maintained to prevent waste. This source is located within an area designated by the State Engineer pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

The well must be sealed with cement grout, concrete grout or neat cement from ground level to 100 feet.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

(CONTINUED ON PAGE 2)

The amount of water to be changed shall be limited to the amount which can be applied to beneficial use, and not to exceed 0.45 cubic feet per second , but not to exceed 88.6 acre-feet annually.

Work must be prosecuted with reasonable diligence and be completed on or before December 7, 1996

Proof of completion of work shall be filed before January 7, 1997

Application of water to beneficial use shall be made on or before December 7, 1997

Proof of the application of water to beneficial use shall be filed on or before January 7, 1998

Map in support of proof of beneficial use shall be filed on or before N/A

Completion of work filed

Proof of beneficial use filed

Cultural map filed

Certificate No. Issued

IN TESTIMONY WHEREOF, I, R. MICHAEL TURNIPSEED, P.E.
State Engineer of Nevada, have hereunto set my hand and the seal of my
office, this 1st day of November
A.D. 19 95
Christine Thiel
State Engineer
by: Christine Thiel, P.E.,
Deputy State Engineer

(PERMIT TERMS CONTINUED)

Monthly records shall be kept of the amount of water pumped from this well and the records submitted to the State Engineer on a quarterly basis within 15 days after the end of each calendar quarter.

The total combined duty of water under Permits 57749, 57750, 58870, 59330, 59631, 59632 and 59633 shall not exceed 720.0 acre-feet annually.

This permit is issued subject to the terms of the settlement agreement dated June 22, 1992 between the State Engineer and World Properties, Inc.

EXHIBIT "A"

T.17N., R.19E., M.D.B. & M.

- Section 10: SE 1/4 SW 1/4, SW 1/4 SE 1/4
- Section 13: W 1/2, NE 1/4, N 1/2 SE 1/4,
SW 1/4 SE 1/4, Portion of SE 1/4 SE 1/4
- Section 14: All
- Section 15: NE 1/4, NW 1/4, SW 1/4, NW 1/4 SE 1/4,
SW 1/4 SE 1/4
- Section 23: Portion of N 1/2 NE 1/4 NE 1/4

T.17N., R.20E., M.D.B. & M.

- Section 18: NW 1/4, Portion of W 1/2 NE 1/4,
Portion of NW 1/4 SW 1/4,
Portion of NE 1/4 SW 1/4, and
Portion of SW 1/4 SW 1/4

APPLICATION FOR PERMISSION TO CHANGE POINT OF DIVERSION, MANNER OF USE AND PLACE OF USE OF THE PUBLIC WATERS OF THE STATE OF NEVADA HERETOFORE APPROPRIATEDDate of filing in State Engineer's Office DEC 22 1993

Returned to applicant for correction _____

Corrected application filed _____ Map filed DEC 27 1993 under 59330

The applicant Washoe County, a political Subdivision of the State of Nevada
P.O. Box 11130 of Reno
Street and No. or P.O. Box No. City or Town
Nevada, 89520-0027 hereby makes application for permission to change the
State and Zip Code No.
Point of Diversion of a portion
Point of diversion, manner of use, and/or place of use
of water heretofore appropriated under Permit 57750
Identify existing right by Permit, Certificate, Proof or Claim Nos. If Decreed, give title of Decree and
identify right in Decree.

1. The source of water is Underground
Name of stream, lake, underground spring or other source.
2. The amount of water to be changed 0.45 c.f.s. 88.6 acre-feet
Second feet, acre feet. One second foot equals 448.83 gallons per minute.
3. The water to be used for Quasi-Municipal and Domestic
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.
4. The water heretofore permitted for Quasi-Municipal and Domestic
Irrigation, power, mining, industrial, etc. If for stock state number and kind of animals.
5. The water is to be diverted at the following point NW 1/4 NE 1/4 section 14, T.17N., R.19E.,
Describe as being within a 40-acre subdivision of public survey and by course and
M.D.B.&M., or at a point from which the NW corner of said section 14 bears,
distance to a section corner. If on unsurveyed land, it should be stated.
N. 89° 21' 25" W a distance of 3044.68 feet.
6. The existing permitted point of diversion is located within NW 1/4 NE 1/4, section 18, T.17N., R.20E.,
If point of diversion is not changed, do not answer.
M.D.B.&M., or at a point from which the NW corner of said section 18 bears
N. 81° 26' 35" W. a distance of 2670.06 feet.
7. Proposed place of use Unchanged
Describe by legal subdivisions. If for irrigation state number of acres to be irrigated.
8. Existing place of use Please refer to Exhibit "A"
Describe by legal subdivisions. If permit is for irrigation, state number of acres irrigated. If changing place of use and/or
manner of use of irrigation permit, describe acreage to be removed from irrigation.
9. Use will be from January 1st to December 31st of each year.
Month and Day Month and Day
10. Use was permitted from January 1st to December 31st of each year.
Month and Day Month and Day
11. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.) Well, Pump, Tank and Distribution System
State manner in which water is to be diverted, i.e. diversion structure,
ditches, pipes and flumes, or drilled well, etc.
12. Estimated cost of works \$500,000.00
13. Estimated time required to construct works 5 years

14. Estimated time required to complete the application of water to beneficial use 10 years

15. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use:

Water to be used as described under permit 57750.

By s/Jack D. Ferris
Jack D. Ferris
Washoe County Utility Division
P.O. Box 11130, Reno, NV 89520-0027

Compared bc/bc cl/bk

Protested _____

APPROVAL OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit to change the point of diversion of a portion of the waters of an underground source as heretofore granted under Permit 57750 is issued subject to the terms and conditions imposed in said Permit 57750 and with the understanding that no other rights on the source will be affected by the change proposed herein. The well shall be equipped with a 2-inch opening and a totalizing meter must be installed and maintained in the discharge pipeline near the point of diversion and accurate measurements must be kept of water placed to beneficial use. The totalizing meter must be installed before any use of the water begins or before the proof of completion of work is filed. If the well is flowing, a valve must be installed and maintained to prevent waste. This source is located within an area designated by the State Engineer pursuant to NRS 534.030. The State retains the right to regulate the use of the water herein granted at any and all times.

The well must be sealed with cement grout, concrete grout or neat cement from ground level to 100 feet.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

(CONTINUED ON PAGE 2)

The amount of water to be changed shall be limited to the amount which can be applied to beneficial use, and not to exceed 0.45 cubic feet per second, but not to exceed 88.6 acre-feet annually.

Work must be prosecuted with reasonable diligence and be completed on or before December 7, 1996

Proof of completion of work shall be filed before January 7, 1997

Application of water to beneficial use shall be made on or before December 7, 1997

Proof of the application of water to beneficial use shall be filed on or before January 7, 1998

Map in support of proof of beneficial use shall be filed on or before N/A

Completion of work filed _____

Proof of beneficial use filed _____

Cultural map filed _____

Certificate No. _____ Issued _____

IN TESTIMONY WHEREOF, I, R. MICHAEL TURNIPSEED, P.E.
State Engineer of Nevada, have hereunto set my hand and the seal of my
office, this 1st day of November,
A.D. 1995

Christine Thiel
by: Christine Thiel, P.E.,
Deputy State Engineer

(PERMIT TERMS CONTINUED)

Monthly records shall be kept of the amount of water pumped from this well and the records submitted to the State Engineer on a quarterly basis within 15 days after the end of each calendar quarter.

The total combined duty of water under Permits 57749, 57750, 58870, 59330, 59631, 59632 and 59633 shall not exceed 720.0 acre-feet annually.

This permit is issued subject to the terms of the settlement agreement dated June 22, 1992 between the State Engineer and World Properties, Inc.

EXHIBIT "A"

T.17N., R.19E., M.D.B. & M.

Section 10: SE 1/4 SW 1/4, SW 1/4 SE 1/4

Section 13: W 1/2, NE 1/4, N 1/2 SE 1/4,
SW 1/4 SE 1/4, Portion of SE 1/4 SE 1/4

Section 14: All

Section 15: NE 1/4, NW 1/4, SW 1/4, NW 1/4 SE 1/4,
SW 1/4 SE 1/4

Section 23: Portion of N 1/2 NE 1/4 NE 1/4

T.17N., R.20E., M.D.B. & M.

Section 18: NW 1/4, Portion of W 1/2 NE 1/4,
Portion of NW 1/4 SW 1/4,
Portion of NE 1/4 SW 1/4, and
Portion of SW 1/4 SW 1/4

2771

37 1055

PURCHASE AGREEMENT

THIS AGREEMENT, made and entered into this 12th day of June, 1990, by and between WASHOE COUNTY, NEVADA, a political subdivision of the State of Nevada, acting by and through its Board of County Commissioners, hereinafter referred to as "WASHOE COUNTY", and MARY PAGNI, DARLEEN GALLERON, DIANE BUGICA, DONNA BECKER, ESTATE OF ELIO PAGNI, VANNA PAGNI, ROBIN PAGNI, RAYMOND PAGNI, ALBERT PAGNI, and JUNE PAGNI, hereinafter referred to as "PAGNI",

W I T N E S S E T H:

WHEREAS, WASHOE COUNTY operates the Sunrise water service area in Pleasant Valley, Washoe County, Nevada; and

WHEREAS, PAGNI owns certain real property south of the Sunrise service area commonly known as the Pagni Ranch, and owns certain water rights and wells appurtenant to and located upon the Pagni Ranch property; and

WHEREAS, WASHOE COUNTY agrees to purchase and PAGNI agrees to sell to WASHOE COUNTY said water rights, wells and certain easements necessary for the use of said water rights and wells; and

WHEREAS, the parties desire to transfer said water rights and wells and to convey all easements necessary for the use of said water rights and wells to insure the continued delivery of water and water service to the Sunrise service area and the Pagni Ranch as set forth below.

NOW THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, and including the mutual

covenants and agreements contained herein, WASHOE COUNTY and PAGNI hereby agree as follows:

1. WATER RIGHTS AND WELLS: WASHOE COUNTY does hereby agree to acquire and PAGNI agrees to transfer, grant, and convey: (a) approximately 940 acre feet of water rights (annual withdrawal), excluding surface rights, identified as Permits 35805 and 46836, on the same sources described in the Permits; and (b) the two wells related to said water rights located on APN 046-100-06 and APN 046-100-07.

With respect to the water rights transferred to WASHOE COUNTY, identified as Permits 35805 and 46836, such rights will be utilized to provide water service as designated by PAGNI. WASHOE COUNTY will file applications for extensions of time, proofs and other appropriate papers for the purpose of maintaining the validity of the rights and for obtaining the maximum use of the rights. WASHOE COUNTY will be responsible for fees required by law to be paid for such filings and WASHOE COUNTY'S costs and overhead for the time and materials involved.

PAGNI shall have the right to arrange for the office of the State Engineer to provide PAGNI with copies of all official notices and other correspondence that may hereafter be sent to WASHOE COUNTY in connection with the rights. PAGNI shall have the same right, as if PAGNI were the owner, to commence, maintain or intervene in any administrative or judicial proceeding affecting the rights.

WASHOE COUNTY will exercise reasonable care and diligence in the performance of its obligations created by this

agreement. In no event shall WASHOE COUNTY be liable to PAGNI in any manner, if acts or omissions by WASHOE COUNTY cause all or part of the rights to become cancelled or otherwise invalid, or if PAGNI becomes dissatisfied with WASHOE COUNTY'S performance of this Agreement concerning the rights. By entering into this Agreement, PAGNI reserves the right to take any and all actions deemed necessary regarding such water rights, and PAGNI waives all other remedies, legal or equitable, that may be available against WASHOE COUNTY, its officers, agents or employees, concerning the water rights.

The reservation of water rights to PAGNI'S use under Permits 35805 and 46836 (in the approximate amount of 940 acre feet), may be used for the sole purpose of complying with the requirement that adequate water rights be dedicated to WASHOE COUNTY as a condition to approval of a project on said Pagni Ranch property.

To obtain water service for any project based on these water rights, PAGNI must comply with all valid requirements imposed by the water purveyor and governmental entities having jurisdiction, including the construction and dedication of other facilities required for the projects and inclusion of land to be served within the service area designated by WASHOE COUNTY.

2. EASEMENTS.

PAGNI further agrees to transfer, grant and convey to WASHOE COUNTY:

(a) a eighty (80) foot by eighty (80) foot permanent easement around the well site on APN 046-100-06, a eighty (80) foot by eighty (80) foot permanent easement around the well site on APN 046-100-07 and a thirty (30) foot permanent easement from the well site to Pagni Lane, all as more specifically described in Exhibit A attached hereto, for the purposes of operating the wells and water facilities, and for engineering, data collection, construction, repairing and maintaining the wells and the water storage, water service, water conveyance and other water facilities thereon; and

(b) a twenty (20) foot temporary construction easement along the easements described in subparagraph (a) above, all as more specifically described in Exhibit B attached hereto, for the purposes of the locating and constructing, repairing and maintaining water facilities between and around the two well sites. WASHOE COUNTY shall quitclaim its interest in this temporary construction easement to PAGNI after the construction has been completed.

3. CONSIDERATION: As additional consideration for the transfer, WASHOE COUNTY agrees, in accordance with Permits 35805 and 46836, as follows:

(a) To construct pumps, pump houses, motors, pipeline and to connect the wells and improvements to WASHOE COUNTY'S Sunrise water facilities.

(b) To construct pipelines within the properties described in Exhibit A. PAGNI may, at a later date, and at its sole expense, relocate the pipelines and designate other ease-

ments subject to the approval of WASHOE COUNTY, which approval will not be unreasonably withheld.

(c) To expand pumping facilities, if necessary, to supply water service as may be requested under Permits 35805 and 46836 to the Pagni Ranch, however, WASHOE COUNTY shall have the sole discretion to determine the available water which is put to use to supply said water service. The pumping rate shall be determined from WASHOE COUNTY'S pump testing, but shall not exceed 940 acre feet annually. PAGNI shall have the right, at its sole expense, to drill additional wells, as necessary, to achieve this volume of water.

(d) To transfer points of diversion of existing WASHOE COUNTY permits to coincide with Permits 35805 and 46836 and to exercise its best efforts to keep said permits in good standing consistent with the provisions of NRS 533.395. The parties acknowledge that WASHOE COUNTY cannot guarantee that some other agency will not take action beyond WASHOE COUNTY'S control.

PAGNI acknowledges and agrees that WASHOE COUNTY may charge and collect from PAGNI, its successors and assigns, reasonable hook-up fees for connection to WASHOE COUNTY'S water facilities.

As additional consideration, WASHOE COUNTY agrees to prepare, at WASHOE COUNTY'S expense, all the necessary documents and legal descriptions for the transfer of the water rights, wells and easements set forth herein.

The parties acknowledge that no dollar value has been assigned to the water rights or facilities being transferred, or

to the services to be performed and facilities to be provided by WASHOE COUNTY set forth hereinabove.

4. CONVEYANCES: PAGNI shall execute a Grant, Bargain and Sale Deed conveying the wells and water rights, described in Paragraph 1 to WASHOE COUNTY in the form attached hereto as Exhibit C. PAGNI shall execute Easement Deeds conveying the easements described in paragraph 2 and Exhibit B to WASHOE COUNTY, said deed to be in the form of Exhibit D. PAGNI shall execute a Bill of Sale transferring the two wells in the form attached hereto as Exhibit E.

5. TITLE: PAGNI shall transfer title to the two (2) wells, free and clear of all liens, obligations and encumbrances. PAGNI does not guarantee or warrant the working conditions of said wells and they are transferred in an "as is" condition.

6. WARRANTIES: PAGNI hereby warrants to WASHOE COUNTY that the water rights being transferred pursuant to this agreement belong to PAGNI, that PAGNI has the authority to convey title to said water rights to WASHOE COUNTY; that the water rights being transferred are free and clear of all liens and encumbrances, with the exception of a lien by Nancy L. Pagni, a copy of which is attached hereto as Exhibit "F"; that the water rights are in good standing with all governmental authorities; that the water rights represent 940 acre feet of permitted water rights being transferred; that the written approvals of all governmental agencies, necessary for the perfection of ownership of the water rights have been obtained; and that the wells are owned by PAGNI and can be validly transferred by the Bill of Sale, free and clear of any liens or encumbrances.

7. GOVERNMENTAL APPROVALS: PAGNI and WASHOE COUNTY understand and agree that this Purchase Agreement is subject to review and approval by the Board of County Commissioners, Washoe County, Nevada. PAGNI and WASHOE COUNTY agree to utilize their best efforts to secure such approval and other government approvals necessary to effectuate the transfer.

8. CLOSING: The transfer of the property described herein shall take place at the offices of Western Title Company, Inc., 225 South Arlington Avenue, Reno, Nevada, at _____ o'clock _____.m. on _____, 1990. The closing will be accomplished by PAGNI and WASHOE COUNTY through their attorneys or representatives, and at such closing, all sales documents required by this agreement will be signed and exchanged.

The parties agree that they will execute any and all other documents or instruments which may be necessary to carry out the terms or stated purposes of this agreement.

9. SUCCESSORS AND ASSIGNS: Except as otherwise provided herein, this agreement shall be binding upon and shall inure to the benefit of the heirs, executors, administrators, successors and assigns of the parties. The rights and obligations contained in this Agreement may be assigned.

10. ENFORCEMENT: In the event either party to this agreement is required to initiate an action in any court for the purpose of enforcing any provision of this agreement, the prevailing party shall be entitled to reasonable attorney fees and costs.

11. APPLICABLE LAW: The terms and conditions of this agreement shall be governed by the laws of the State of Nevada.

12. TIME: Time is the essence of this agreement.

13. RECORDING: Either party to this agreement is free to record this agreement in the official records of the Washoe County Recorder's Office and the Nevada State Engineer's Office. The provisions hereof shall constitute covenants running with the land, and equitable servitudes and liens, and shall be binding upon and be for the benefit of all persons with interest in the real property or water rights subject hereto.

14. DUPLICATE AGREEMENTS: This agreement will be executed in duplicate with each party to retain an original, signed agreement.

15. INDEPENDENT COUNSEL: It is acknowledged by their signatures hereto that each of the parties to this agreement has had the opportunity to seek the advice of and review by independent legal counsel in entering into this agreement.

16. INDEPENDENT INVESTIGATION: It is acknowledged that WASHOE COUNTY has made an independent investigation of the records on file with the Nevada State Engineer's Office, and has made an independent investigation of the water rights and wells transferred herein. PAGNI makes no warranties as to the quality of water available pursuant to the water rights herein conveyed.

17. ADDRESSES: The names and addresses upon which notices shall be served to the respective parties to this agreement are as follows:

WASHOE COUNTY: Washoe County
Department of Public Works
P. O. Box 11130
Reno, Nevada 89520
Attn: John M. Collins
Chief Sanitary Engineer

Mike Soumbeniotis
Allison, MacKenzie, Hartman,
Soumbeniotis & Russell, Ltd.
P. O. Box 646
Carson City, Nevada 89702

PAGNI: Ross E. deLipkau
Hill, Cassas, deLipkau & Erwin
P. O. Box 2790
Reno, Nevada 89505

Either party may change the foregoing address by serving written notice on the other party five (5) days before the effective day of the change of address.

18. INDEMNIFICATION, HOLD HARMLESS - INSURANCE: PAGNI acknowledges and agrees that WASHOE COUNTY shall not be liable to PAGNI for any effect that the development, use, storage, or transportation of the water rights purchased by WASHOE COUNTY hereunder may have on the diminution of value of the PAGNI property, or in the use of any water rights retained by PAGNI. PAGNI waives and releases any and all claims against WASHOE COUNTY for any and all effects WASHOE COUNTY'S actions in the development, transportation, storage or use of said water rights may have on such value of the PAGNI property, or in the use of any water rights owned by PAGNI. During the course of any construction work, WASHOE COUNTY agrees to require its agents, employees, contractors and other representatives entering the premises of PAGNI to conduct themselves in a safe and prudent manner. If during the course of construction of any work, any of

the officers, employees, contractors, invitees or other persons entering on the property shall negligently cause damage to PAGNI'S property, then WASHOE COUNTY agrees to pay to PAGNI, to the extent provided by law, the reasonable damages therefore. WASHOE COUNTY is free to purchase suitable insurance to assist it in protecting PAGNI pursuant to this provision.

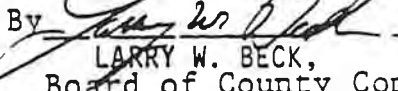
19. SURVIVAL: This agreement shall survive the recording of the deeds and delivery of the Bill of Sale.

20. ENTIRE AGREEMENT: This agreement constitutes the entire understanding between the parties with respect to the subject matter hereof, and supersedes all other agreements, written or oral, between the parties with respect to such subject matter. This Agreement may not be changed, modified or amended except by a written agreement between the parties which specifies that it amends this Agreement.

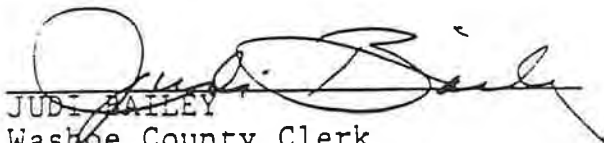
IN WITNESS WHEREOF, we have hereunto set our hands to this Agreement to be effective the day and year first above written.

"WASHOE COUNTY"

WASHOE COUNTY COMMISSIONERS


By  Chairman
LARRY W. BECK,
Board of County Commissioner

ATTEST:


JUDI BAILEY
Washoe County Clerk

Approved as to form:

MILLS LANE
WASHOE COUNTY DISTRICT ATTORNEY

By 
Edward J. Damm
Deputy District Attorney
Assistant

"PAGNI"

By MARY PAGNI

By DIANE BUGICA

By VANNA PAGNI

By RAYMOND PAGNI

By JUNE PAGNI

By DARLEEN GALLERON

By DONNA BECKER

By ROBIN PAGNI

By ALBERT PAGNI

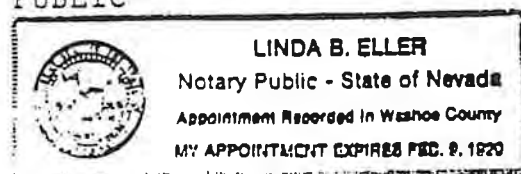
ESTATE OF ELIO PAGNI:

By EXECUTOR

STATE OF NEVADA)
COUNTY OF WASHOE) ss.

On this 5th day of February, 1990, personally appeared before me, a Notary Public, MARY PAGNI, known to me, who acknowledged to me that she executed the foregoing Purchase Agreement consisting of eleven (11) pages.

Linda B. Eller
NOTARY PUBLIC



Hydrographic Abstract

Basin	Region Name	App	Change Of App	Cert	Priority Dt	App Status	Src	Div Rate (CFS)	Type of Use	Owner of Record	Div. Balance	Duty Balance
88		11533		3069	4/4/1946	CER	UG	0.1	IRR	GAMBONI CON CO INC. : D & J KITTS	0.0688	49.67
			CHANGED BY: 11533R01			RLP	UG					
			CHANGED BY: 11533R02			RLP	UG					
88		11533R01	11533		4/4/1946	RLP	UG	0.0074	DOM	WASHOE COUNTY	0.0074	5.373
88		11533R02	11533		4/4/1946	RLP	UG	0.0028	DOM	WASHOE COUNTY	0.0028	2.02
88		19098		6630	8/3/1960	CER	UG	0.2	QM	MT. ROSE DEVELOPMENT COMPANY	0.2	4.818173
88		20857		5838	11/19/1962	CER	UG	0.1	OTH	WASHOE COUNTY	0.1	72.395
88		20913			12/31/1962	ABR	UG	0.25	QM	TOWNE, DOROTHY	0	0
88		22002		6270	5/15/1964	CER	UG	1	QM	WASHOE COUNTY SCHOOL DISTRICT	1	723.97
88		22087		6376	7/2/1964	CER	UG	0.002	DOM	CLARK, HAROLD B.	0.002	1.595828
88		22473		6772	3/3/1965	ABR	UG	0.05	IRR	WASHOE COUNTY	0	0
88		22474		6801	3/3/1965	CER	UG	0.3	IRR	HERMAN W. EATON FAMILY TRUST, TRUST A	0.24326	8.66
			CHANGED BY: 22474R01			RLP	UG					
88		22474R01	22474		3/3/1965	RLP	UG	0.05674	DOM	WASHOE COUNTY	0.05674	2.02
88		26133		9068	5/18/1971	ABR	UG	0.3	QM	STEAMBOAT SPRINGS PROPERTIES INC.	0	0
			CHANGED BY: 35969			ABR	UG					
88		26654		8568	4/7/1972	ABR	UG	0.122	QM	WASHOE COUNTY	0	0
			CHANGED BY: 64461			CER	UG					
88		28424			6/13/1974	ABR	UG	5	QM	MT. ROSE WATER COMPANY INC.	0	0
			CHANGED BY: 35147			PER	UG					
88		28425			6/13/1974	ABR	UG	5	QM	MT. ROSE WATER COMPANY INC.	0	0
			CHANGED BY: 35148			ABR	UG					
88		28426			6/13/1974	ABR	UG	5	QM	MT. ROSE WATER COMPANY INC.	0	0
			CHANGED BY: 35149			PER	UG					
88		28427			6/13/1974	ABR	UG	5	QM	MT. ROSE WATER COMPANY INC.	0	0
88		28429			6/13/1974	ABR	UG	5	QM	MT. ROSE WATER COMPANY INC.	0	0
88		28430			6/13/1974	ABR	UG	5	QM	MT. ROSE WATER COMPANY INC.	0	0
88		28867			11/4/1974	ABR	UG	0.4	QM	STEAMBOAT SPRINGS PROPERTIES INC.	0	0
			CHANGED BY: 35970			ABR	UG					
88		28895		9644	11/8/1974	CER	UG	0.027	QM	STEAMBOAT COURT WATER USERS ASSOC.	0.027	2.025474
88		28896		9645	11/8/1974	CER	UG	0.044	QM	STEAMBOAT COURT WATER USERS ASSOC.	0.044	2.547187
88		29418			6/5/1975	ABR	UG	0.5	IRR	WALKER, ALEXANDER S.	0	0
			CHANGED BY: 36089			CER	UG					
88		29419		9713	6/5/1975	CER	UG	0.078	IRR	KUTNOCK, ROBERT & BARBARA	0.0148	1.6
			CHANGED BY: 29419R01			RLP	UG					
			CHANGED BY: 85097			CER	UG					
88		29419R01	29419		6/5/1975	RLP	UG	0.0558	DOM	WASHOE COUNTY	0.0558	6
88		30069		9257	3/9/1976	ABR	UG	0.147	IRR	WALKER, ALEXANDER S.	0	0
			CHANGED BY: 58346			CER	UG					
88		30280			5/26/1976	ABR	UG	0.8	QM	STEAMBOAT SPRINGS PROPERTIES	0	0
			CHANGED BY: 35968			ABR	UG					
			CHANGED BY: 65508			PER	UG					
			CHANGED BY: 65507			PER	UG					
88		30382A01			7/8/1976	ABR	UG	0.042	QM	ZAHLER ENTERPRISES INC.	0	0
			CHANGED BY: 76651			PER	UG					
88		30382A02		14632	3/23/1992	CER	UG	0.008	QM	SWAN, CHERYL K. & H. RANDALL	0.008	1.135493
88		30434		10706	7/28/1976	CER	UG	0.016	QM	MT. ROSE BOWL PROPERTY OWNERS	0.016	8.040518
88		31125		10004	2/23/1977	CER	UG	0.22	QM	MCMILLAN, D.	0.22	1.135493
88		31167		10629	3/8/1977	CER	UG	0.003	STK	WALKER, ALEXANDER S.	0.003	2.240297
88		31502			5/6/1977	ABR	UG	2.7	IRR	WILLOMONTE LAND AND LIVESTOCK	0	0
			CHANGED BY: 49615			ABR	UG					
			CHANGED BY: 49616			ABR	UG					
			CHANGED BY: 52420			CER	UG					
88		32445			6/29/1977	ABR	UG	2.4	IRR	PAGNI BROTHERS	0	0
			CHANGED BY: 35279			ABR	UG					
88		33371		11086	8/26/1977	CER	UG	0.0446	QM	THE CALLAHAN RESIDENCE TRUST (UDI 1/7); BURKO, BILLY M. AND TERI L. (UDI 1/7); THE CALLAHAN TRUST (UDI 2/7); PGSF, LLC (UDI 1/7); THE MULLEN TRUST (UDI 1/7); AND BALDWIN, KENNETH C. AND KEMMET, KASEY (UDI 1/7)	0.0446	1.596
88		35074			3/24/1992	ABR	UG	0.5	QM	WASHOE COUNTY	0	0
			CHANGED BY: 61703			ABR	UG					
88		35147	28424		6/13/1974	PER	UG	5	QM	CALLAHAN, ROBERT V. AND/OR TINA	4.29	1828.51
			CHANGED BY: 47127			ABR	UG					
			CHANGED BY: 35147R01			RLP	UG					
			CHANGED BY: 67368			PER	UG					
88		35147R01	35147		6/13/1974	RLP	UG	0.011	DOM	TMWA	0.011	8.08
88		35148	28425		6/13/1974	ABR	UG	4.79	QM	CALLAHAN, ROBERT AND TINA	0	0
			CHANGED BY: 57173			CER	UG					
			CHANGED BY: 47128			ABR	UG					
			CHANGED BY: 58926			PER	UG					
			CHANGED BY: 62269			PER	UG					
88		35149	28426		6/13/1974	PER	UG	5	QM	CALLAHAN, ROBERT V. AND/OR TINA	3.342	1828.51
			CHANGED BY: 47129			ABR	UG					
			CHANGED BY: 67369			PER	UG					
			CHANGED BY: 47130			ABR	UG					
			CHANGED BY: 65364			PER	UG					

			CHANGED BY: 47131			ABR	UG					
			CHANGED BY: 58806			PER	UG					
			CHANGED BY: 58807			ABR	UG					
			CHANGED BY: 47132			ABR	UG					
88		35226		15161	3/24/1992	CER	UG	0.5	QM	TMWA	0.043	1
			CHANGED BY: 57429A01			CER	UG					
			CHANGED BY: 57429			PER	UG					
88		35279	32445		6/22/1978	ABR	UG	2.4	QM	PAGNI BROTHERS	0	0
			CHANGED BY: 35805			ABR	UG					
88		35280			4/14/1978	ABR	UG	2.6	QM	PAGNI BROTHERS	0	0
			CHANGED BY: 35806			ABR	UG					
88		35455			5/22/1978	ABR	UG	0.2	QM	MARK, JOSEPH	0	0
			CHANGED BY: 51326			ABR	UG					
88		35656		10325	7/24/1978	CER	UG	0.2	OTH	NEVADA-FORESTRY DIVISION	0.2	2.240297
88		35805	35279		6/29/1977	ABR	UG	2.4	QM	WASHOE COUNTY	0	0
			CHANGED BY: 57749			PER	UG					
88		35806	35280		4/14/1978	ABR	UG	2.6	QM	PAGNI BROTHERS	0	0
			CHANGED BY: 46836			ABR	UG					
88		35968	30280		5/26/1976	ABR	UG	0.8	QM	STEAMBOAT SPRINGS PROPERTIES INC	0	0
			CHANGED BY: 42703			ABR	UG					
88		35969	26133		5/18/1971	ABR	UG	0.3	QM	STEAMBOAT SPRINGS PROPERTIES INC	0	0
			CHANGED BY: 42704			ABR	UG					
88		35970	28867		11/4/1974	ABR	UG	0.4	QM	STEAMBOAT SPRINGS PROPERTIES INC	0	0
			CHANGED BY: 42705			ABR	UG					
88		36089	29418	11293	6/5/1975	CER	UG	0.5	IRR	WALKER, ALEXANDER S.	0.5	23.04
88		36145			4/12/1991	ABR	UG	0.24	QM	SOLARI, AL	0	0
			CHANGED BY: 63146			PER	UG					
88		36146			11/8/1978	ABR	UG	0.24	QM	SOLARI, JULIE ANN LOUISE	0	0
			CHANGED BY: 63147			PER	UG					
			CHANGED BY: 36336R01			RLP	UG					
			CHANGED BY: 62875			CER	UG					
88		36336R01	36336		12/22/1978	RLP	UG	0.13	DOM	WASHOE COUNTY	0.13	15.16
88		37986			4/23/1979	ABR	UG	0.5	COM	PRIESS, CONRAD E.	0	0
88		41571			6/23/1980	ABR	UG	0.111	REC	WASHOE COUNTY	0	0
			CHANGED BY: 63329			PER	UG					
88		41986		12941	8/8/1980	CER	UG	0.036	COM	BURKHART MANAGEMENT GROUP, LLC	0.036	0.889981
88		42645		13305	10/14/1980	ABR	UG	0.05	REC	WASHOE COUNTY	0	0
			CHANGED BY: 63328			CER	UG					
88		42703	35968		10/9/1987	ABR	UG	0.8	QM	STEAMBOAT SPRINGS WATER WORKS, INC.	0	0
			CHANGED BY: 58498			PER	UG					
88		42704	35969		10/9/1987	ABR	UG	0.3	QM	STEAMBOAT SPRINGS WATER WORKS, INC.	0	0
			CHANGED BY: 58497			PER	UG					
88		42705	35970		10/9/1987	ABR	UG	0.4	QM	STEAMBOAT SPRINGS WATER WORKS, INC.	0	0
			CHANGED BY: 58496			PER	UG					
88		42760			11/3/1980	ABR	UG	0.3	QM	WINBURN, MERLE B.	0	0
			CHANGED BY: 46958			PER	UG					
88		45133		11003	12/14/1981	CER	UG	0.02	COM	TOGLIATTI, ROBERT	0.02	0.030689
88		46836	35806		4/14/1978	ABR	UG	2.6	QM	WASHOE COUNTY	0	0
			CHANGED BY: 57750			PER	UG					
88		46958	42760		11/3/1980	PER	UG	0.3	QM	THE NELL J. REDFIELD TRUST	0.28	25.96289397
			CHANGED BY: 53701			ABR	UG					
88		47127	35147		6/13/1974	ABR	UG	0.23	QM	MT. ROSE DEVELOPMENT COMPANY	0	0
			CHANGED BY: 61265			ABR	UG					
			CHANGED BY: 63695			ABR	UG					
			CHANGED BY: 65956			ABR	UG					
88		47128	35148		6/13/1974	ABR	UG	0.23	QM	MT. ROSE DEVELOPMENT COMPANY	0	0
			CHANGED BY: 63696			ABR	UG					
			CHANGED BY: 61266			ABR	UG					
			CHANGED BY: 65957			ABR	UG					
88		47129	35149		6/13/1974	ABR	UG	0.23	QM	MT. ROSE DEVELOPMENT COMPANY	0	0
			CHANGED BY: 63697			ABR	UG					
			CHANGED BY: 65958			PER	UG					
			CHANGED BY: 61267			PER	UG					
88		47130	35150		6/13/1974	ABR	UG	0.23	QM	MT. ROSE DEVELOPMENT COMPANY	0	0
			CHANGED BY: 63698			ABR	UG					
			CHANGED BY: 65959			PER	UG					
			CHANGED BY: 61268			PER	UG					
88		47131	35151		6/13/1974	ABR	UG	0.23	QM	NELL J. REDFIELD TRUST	0	0
			CHANGED BY: 65960			PER	UG					
			CHANGED BY: 61269			PER	UG					
88		47132	35152		6/13/1974	ABR	UG	0.23	QM	NELL J. REDFIELD TRUST	0	0
			CHANGED BY: 65961			PER	UG					
			CHANGED BY: 61270			PER	UG					
88		48958		13846	11/30/1988	CER	UG	0.026	COM	WOOD, ANGELA & DAVID L.	0.026	2.025474
88		49324			9/3/1985	ABR	UG	0.905	QM	CALLAHAN FAMILY TRUST	0	0
			CHANGED BY: 53700			ABR	UG					
			CHANGED BY: 52127			PER	UG					
88		49615	31502		5/6/1977	ABR	UG	1.3	IRR	WILLOMONTE LAND AND LIVESTOCK	0	0
			CHANGED BY: 52422A01			ABR	UG					
			CHANGED BY: 52422A02			CER	UG					
88		49616	31502		5/6/1977	ABR	UG	1.351	IRR	WILLOMONTE LAND AND LIVESTOCK	0	0
			CHANGED BY: 52421A01			ABR	UG					
			CHANGED BY: 52421A02			CER	UG					
88		50380		16132	11/25/1986	CER	UG	0.1	QM	MONROE, R. LARRY & NANCY J.	0.1	3.36
88		50540		14122	1/21/1987	CER	UG	0.005	OTH	OLD GALENA LTD.	0.005	3.621302

88		51326	35455		5/22/1978	ABR	UG	0.2	QM	WASHOE COUNTY	0	0
			CHANGED BY: 55665			PER	UG					
88		52127	49324		9/3/1985	PER	UG	0.081	QM	MONTGOMERY STREET PROPERTIES, LLC	0.056	4.479
			CHANGED BY: 52127R01			RLP	UG					
88		52127R01	52127		9/3/1985	RLP	UG	0.025	DOM	WASHOE COUNTY	0.025	2.02
88		52420	31502	14541	5/6/1977	CER	UG	0.049	IRR	HOLLY CLAVELL-HEAD LAND TRUST	0.008	0.19
			CHANGED BY: 66450			CER	UG					
			CHANGED BY: 52420R01			RLP	UG					
88		52420R01	52420		5/6/1977	RLP	UG	0.034168	DOM	WASHOE COUNTY	0.034168	8.09
			CHANGED BY: 52421R01			RLP	UG					
88		52421A01	49616	14542	5/6/1977	ABR	UG	0.151	IRR	BUCK, ANNE E.	0	0
			CHANGED BY: 66452			CER	UG					
88		52421A02	49616	14630	5/6/1977	CER	UG	0.739	IRR	AMSTERDAM HOLDINGS, LLC	0.1363	43.772
			CHANGED BY: 77678			ABR	UG					
			CHANGED BY: 76316			CER	UG					
			CHANGED BY: 84317			CER	UG					
			CHANGED BY: 76539			CER	UG					
			CHANGED BY: 86544			CER	UG					
			CHANGED BY: 77677			PER	UG					
			CHANGED BY: 85666			PER	UG					
			CHANGED BY: 79858			PER	UG					
			CHANGED BY: 86630			PER	UG					
			CHANGED BY: 86632			PER	UG					
			CHANGED BY: 86631			PER	UG					
88		52421R01	52421		8/15/1988	RLP	UG	0.1344	DOM	WASHOE COUNTY	0.1344	31.84
88		52422A01	49615	14543	5/6/1977	ABR	UG	0.103	IRR	WASHOE COUNTY	0	0
88		52422A02	49615	14631	5/6/1977	CER	UG	0.407	IRR	JOHNSON, MARTIN AND SUSAN	0.401	279.12
			CHANGED BY: 77655			ABR	UG					
88		52422R01	52422		5/6/1977	RLP	UG	0.1034	DOM	WASHOE COUNTY	0.1034	24.52
88		53700	49324		9/3/1985	ABR	UG	0.781	QM	NELL J. REDFIELD TRUST	0	0
			CHANGED BY: 66654			PER	UG					
88		53701	46958		11/3/1980	ABR	UG	0.02	QM	NELL J. REDFIELD TRUST	0	0
			CHANGED BY: 66655			PER	UG					
			CHANGED BY: 54934R01			RLP	UG					
88		54934R01	54934		3/8/1978	RLP	UG	0.014	DOM	WASHOE COUNTY	0.014	2.02
			CHANGED BY: 54935R01			RLP	UG					
88		54935R01	54935		3/8/1978	RLP	UG	0.014	DOM	WASHOE COUNTY	0.014	2.02
			CHANGED BY: 54936R01			RLP	UG					
88		54936R01	54936		3/8/1978	RLP	UG	0.014	DOM	WASHOE COUNTY	0.014	2.02
			CHANGED BY: 54937R01			RLP	UG					
88		54937R01	54937		3/8/1978	RLP	UG	0.014	DOM	WASHOE COUNTY	0.014	2.02
			CHANGED BY: 54938R01			RLP	UG					
88		54938R01	54938		3/28/1978	RLP	UG	0.014	DOM	WASHOE COUNTY	0.014	2.02
			CHANGED BY: 54939R01			RLP	UG					
88		54939R01	54939		3/28/1978	RLP	UG	0.014	DOM	WASHOE COUNTY	0.014	2.02
			CHANGED BY: 54940R01			RLP	UG					
88		54940R01	54940		3/28/1978	RLP	UG	0.014	DOM	WASHOE COUNTY	0.014	2.02
			CHANGED BY: 54941R01			RLP	UG					
88		54941R01	54941		3/28/1978	RLP	UG	0.014	DOM	WASHOE COUNTY	0.014	2.02
			CHANGED BY: 54942R01			RLP	UG					
88		54942R01	54942		3/28/1978	RLP	UG	0.014	DOM	WASHOE COUNTY	0.014	2.02
88		55665	51326		5/22/1978	PER	UG	0.2	QM	TMWA	0.2	13.717983
			CHANGED BY: 56537R01			RLP	UG					
88		56537R01	56537		3/28/1978	RLP	UG	0.014	DOM	WASHOE COUNTY	0.014	2.02
88		57008		15275	12/16/1991	CER	UG	0.04	QM	MT. ROSE BOWL PROPERTY OWNERS WATER	0.04	20.346807
88		57173	35148	17115	6/13/1978	CER	UG	0.0046	QM	NESLER, RONALD L.	0.0046	2.21
88		57429	35226		3/28/1978	PER	UG	0.317	MUN	CHILDERS, MICHAEL AND NORMA	0.023	6.73
			CHANGED BY: 57429R01			RLP	UG					
			CHANGED BY: 57429R02			RLP	UG					
			CHANGED BY: 57429R03			RLP	UG					
			CHANGED BY: 90287			PER	UG					
			CHANGED BY: 91218			RFA	UG					
			CHANGED BY: 87302			PER	UG					
88		57429A01	35226	21006	3/24/1992	CER	UG	0.317	MUN	TMWA	0.1681	48.76
88		57429R01	57429		3/24/1992	RLP	UG	0.0139	DOM	WASHOE COUNTY	0.0139	10.08
88		57429R02	57429		3/24/1992	RLP	UG	0.0487	DOM	WASHOE COUNTY	0.0487	14.14
88		57429R03	57429		3/24/1992	RLP	UG	0.02068	DOM	CHRIS AND FRED KURTZ TRUST	0.02068	6
88		57749	35805		6/29/1977	PER	UG	2.4	QM	TMWA	1.16	100.6
			CHANGED BY: 58870			PER	UG					
88		57750	46836		4/14/1978	PER	UG	2.6	QM	TMWA	0.8	157.6
			CHANGED BY: 59631			CER	UG					
			CHANGED BY: 59633			PER	UG					
			CHANGED BY: 59632			PER	UG					
			CHANGED BY: 59330			PER	UG					
88		57915R03	57915		1/1/1900	RLP	UG	0.1306	DOM	RT MERCHANT, LLC	0.1306	4
88		58346	30069	15818	3/9/1976	CER	UG	0.147	IRR	WALKER, ALEXANDER S.	0.147	4.53
88		58496	42705		1/18/1996	PER	UG	0.4	QM	STEAMBOAT SPRINGS WATER WORKS, INC.	0.4	115.69753
88		58497	42704		1/18/1996	PER	UG	0.3	QM	STEAMBOAT SPRINGS WATER WORKS INC.	0.3	41.06
88		58498	42703		1/10/1996	PER	UG	0.8	QM	STEAMBOAT SPRINGS WATER WORKS INC.	0.8	235.231185
88		58806	35151		6/13/1974	PER	UG	0.04	QM	TMWA	0.04	19.25
88		58807	35152		6/13/1974	ABR	UG	0.04	QM	WASHOE COUNTY	0	0
			CHANGED BY: 60710			PER	UG					
			CHANGED BY: 58869R01			RLP	UG					
88		58869R01	58869		3/3/1965	RLP	UG	0.05	DOM	WASHOE COUNTY	0.05	9
88		58870	57749		6/29/1977	PER	UG	1.24	QM	TMWA	1.24	107.4
88		58926	35148		6/13/1978	PER	UG	4.488	QM	GUERRA, RAYMOND B.	4.4884	1886.78
88		59042		15826	7/22/1993	CER	UG	0.16	QM	1997 GENO O. & VELDA ROSASCHI REVOCABLE TRUST	0.0095	1.64

88		59330	57750		4/14/1978	PER	UG	0.45	QM	TMWA	0.45	88.5999999
88		59631	57750	18687	4/14/1978	CER	UG	0.45	QM	TMWA	0.45	88.5999999
88		59632	57750		3/23/2017	PER	UG	0.45	QM	TMWA	0.45	88.6
88		59633	57750		4/14/1978	PER	UG	0.45	QM	TMWA	0.45	88.6
88		60710	58807		6/13/1974	PER	UG	0.04	MUN	TMWA	0.04	19.25
88		61265	47127		6/13/1974	ABR	UG	0.143	MUN	THE NELL J. REDFIELD TRUST	0	0
			CHANGED BY: 70262			PER	UG					
88		61266	47128		6/13/1974	ABR	UG	0.143	MUN	THE NELL J. REDFIELD TRUST	0	0
			CHANGED BY: 70261			PER	UG					
88		61267	47129		6/13/1974	PER	UG	0.143	MUN	TMWA	0.143	103.33
88		61268	47130		6/13/1974	PER	UG	0.18	MUN	TMWA	0.18	130.01
88		61269	47131		6/13/1974	PER	UG	0.187	MUN	TMWA	0.187	135
88		61270	47132		6/13/1974	PER	UG	0.187	MUN	TMWA	0.187	135
88		61703	35074		3/24/1992	ABR	UG	0.32	MUN	WASHOE COUNTY	0	0
			CHANGED BY: 82835			PER	UG					
			CHANGED BY: 61860R01			RLP	UG					
88		61860R01	61860		4/4/1946	RLP	UG	0.005	DOM	WASHOE COUNTY	0.005	3.36
			CHANGED BY: 62137R01			RLP	UG					
			CHANGED BY: 62718			CER	UG					
88		62137R01	62137		4/4/1946	RLP	UG	0.0131	DOM	WASHOE COUNTY	0.0131	9.467
88		62269	35148		6/13/1978	PER	UG	0.056	QM	TMWA	0.056	26.88
88		62718	62137	16475	4/4/1946	CER	UG	0.00329	COM	STEAMBOAT STORAGE	0.003	2.38
88		62875	36336	17799	12/22/1978	CER	UG	0.00899999	DOM	MACDONALD, KRYSTIN N.	0.00899999	1
88		63146	36145		4/12/1991	PER	UG	0.24	QM	AMSTERDAM HOLDINGS, LLC	0.161	39.4804
			CHANGED BY: 63146R01			RLP	UG					
			CHANGED BY: 89794			PER	UG					
			CHANGED BY: 90810			PER	UG					
88		63146R01	63146		11/8/1978	RLP	UG	0.0175	DOM	WASHOE COUNTY	0.0175	4.23
88		63147	36146		11/8/1978	PER	UG	0.24	QM	AMSTERDAM HOLDINGS, LLC	0.165	39.4804
			CHANGED BY: 63147R01			RLP	UG					
88		63147R01	63147		11/8/1978	RLP	UG	0.0175	DOM	WASHOE COUNTY	0.0175	4.23
88		63328	42645	18736	10/14/1980	CER	UG	0.05	MUN	WASHOE COUNTY	0.05	0.91
88		63329	41571		6/23/1980	PER	UG	0.111	MUN	WASHOE COUNTY	0.111	46.0335
88		63695	47127		6/13/1974	ABR	UG	0.044	QM	MT. ROSE DEVELOPMENT COMPANY	0	0
			CHANGED BY: 67917			CER	UG					
88		63696	47128		6/13/1974	ABR	UG	0.044	QM	MT. ROSE DEVELOPMENT COMPANY	0	0
			CHANGED BY: 67918			CER	UG					
88		63697	47129		6/13/1974	ABR	UG	0.044	QM	MT. ROSE DEVELOPMENT COMPANY	0	0
			CHANGED BY: 67914			CER	UG					
88		63698	47130		6/13/1974	ABR	UG	0.01	QM	MT. ROSE DEVELOPMENT COMPANY	0	0
			CHANGED BY: 67915			CER	UG					
88		64461	26654	20369	4/7/1972	CER	UG	0.122	MUN	TMWA	0.122	2.240297
88		65090	V09035	18936		CER	UG	0.012	QM	JLC REALTY, LLC	0.012	4
88		65364	35150		6/13/1974	PER	UG	4.35	MUN	GUERRA, RAYMOND B.	4.35	1830.53
			CHANGED BY: 65488R01			RLP	UG					
88		65488R01	65488		7/22/1993	RLP	UG	0.007	DOM	WASHOE COUNTY	0.007	2.02
88		65507	30298		10/29/1954	PER	UG	0.628	COM	DGD DEVELOPMENT LIMITED PARTNERSHIP	0.628	87.93
			CHANGED BY: 81696			RFA	UG					
88		65508	30297		10/29/1954	PER	UG	0.519	COM	DGD DEVELOPMENT LIMITED PARTNERSHIP	0.519	248.87
			CHANGED BY: 81697			RFA	UG					
88		65956	47127		6/13/1974	ABR	UG	0.044	MUN	MT. ROSE DEVELOPMENT	0	0
			CHANGED BY: 79024			CER	UG					
88		65957	47128		6/13/1974	ABR	UG	0.044	MUN	WASHOE COUNTY	0	0
			CHANGED BY: 77729			PER	UG					
88		65958	47129		6/13/1974	PER	UG	0.044	MUN	TMWA	0.044	31.67
88		65959	47130		6/13/1974	PER	UG	0.044	MUN	TMWA	0.044	31.67
88		65960	47131		6/13/1974	PER	UG	0.044	MUN	TMWA	0.044	31.57
88		65961	47132		6/13/1974	PER	UG	0.044	MUN	TMWA	0.044	31.67
88		66450	52420	17800	5/6/1977	CER	UG	0.01403	IRR	HOLLY CLAVELL-HEAD LAND TRUST	0.01403	3.32
88		66451		17801	6/12/2000	CER	UG	0.01	COM	HOLLY CLAVELL-HEAD LAND TRUST	0.01	1.57
88		66452	52421A01	18250	5/6/1977	CER	UG	0.00852	IRR	GOLDEN R. HEART RANCH, LLC - SERIES F	0.005	1.06
			CHANGED BY: 90530T			PER	UG					
			CHANGED BY: 91611			APP	UG					
88		66453		18251	6/12/2000	CER	UG	0.1	COM	BUCK, ANNE E.	0.045	0.8
			CHANGED BY: 66454R01			RLP	UG					
88		66454R01	66454		6/13/1955	RLP	UG	0.00852	DOM	WASHOE COUNTY	0.00852	2.02
88		66654	53700		9/3/1985	PER	UG	0.781	QM	TMWA	0.781	63
88		66655	53701		9/3/1985	PER	UG	0.02	QM	TMWA	0.02	11
88		66890			10/18/2000	ABR	UG	0.928	QM	MT. ROSE DEVELOPMENT COMPANY	0	0
			CHANGED BY: 67916			CER	UG					
88		67368	35147		6/13/1974	PER	UG	1.13	MUN	CHILTON CHILDRENS TRUST	1.109	464.76
			CHANGED BY: 67368R01			RLP	UG					
			CHANGED BY: 83683			CER	UG					
			CHANGED BY: 84316			CER	UG					
			CHANGED BY: 83571			PER	UG					
88		67368R01	67368		6/13/1974	RLP	UG	0.0048	DOM	TMWA	0.0048	2
88		67369	35149		6/13/1974	PER	UG	1.12	MUN	CHILTON CHILDRENS TRUST	1.099	464.76
			CHANGED BY: 83682			CER	UG					
88		67914	63697	17118	6/13/1974	CER	UG	0.0438	QM	MT. ROSE DEVELOPMENT COMPANY	0.0438	31.669
88		67915	63698	17119	6/13/1974	CER	UG	0.01	QM	MT. ROSE DEVELOPMENT COMPANY	0.01	4.99
88		67916	66890	17120	10/18/2000	CER	UG	0.928	QM	MT. ROSE DEVELOPMENT COMPANY	0.928	100
88		67917	63695	17121	6/13/1974	CER	UG	0.0438	QM	MT. ROSE DEVELOPMENT COMPANY	0.0438	31.669
88		67918	63696	17122	6/13/1974	CER	UG	0.0438	QM	MT. ROSE DEVELOPMENT COMPANY	0.0438	31.669
88		70261	61266		6/13/1974	PER	UG	0.1427	MUN	TMWA	0.1427	103.33
88		70262	61265		6/13/1974	PER	UG	0.1427	MUN	TMWA	0.1427	103.33
88		70496		17819	10/3/2003	CER	UG	0.1	COM	BORDIGIONI TRUST AGREEMENT 3/18/1997	0.067	1.88
88		70668		18087	12/1/2003	CER	UG	0.1	COM	COLI-DAMONTE, LLC	0.05	2
88		73236		17929	9/9/2005	CER	UG	0.03	STK	ROLL/CHAIKEN TRUST DATED 6/21/2016	0.03	0.6720891

88		73318			10/10/2005	ABR	UG	0.045	COM	MARTIN & SUSAN JOHNSON FAMILY TRUST	0	0.93
			CHANGED BY: 81356			CER	UG					
88		76316	52421A02	17791	5/6/1977	CER	UG	0.1028	IRR	ROLL/CHAIKEN TRUST DATED 6/21/2016	0.1028	33.024
88		76539	52421A02	19605	5/6/1977	CER	UG	0.0983	IRR	ROLL/CHAIKEN TRUST DATED 6/21/2016	0.0983	31.584
88		76651	30382A01		7/8/1976	PER	UG	0.0419	QM	TMWA	0.0419	5.8156
88		77655	52422A02		5/6/1977	ABR	UG	0.00574	IRR	MARTIN W AND SUSAN JOHNSON	0	0
			CHANGED BY: 81357			CER	UG					
88		77677	52421A02		5/6/1977	PER	UG	0.0311	IRR	FLOYD FAMILY TRUST DATED MARCH 13, 2014	0.0311	10
88		77678	52421A02		5/6/1977	ABR	UG	0.0467	IRR	SCHULER, MICHAEL AND ELIZABETH	0	0
			CHANGED BY: 82376			ABR	UG					
88		77729	65957		6/13/1974	PER	UG	0.0438	MUN	TMWA	0.0438	31.669
88		79024	65956	19859	6/13/1974	CER	UG	0.0438	QM	MT. ROSE DEVELOPMENT COMPANY	0.0438	31.669
88		79858	52421A02		5/6/1977	PER	UG	0.04358	IRR	THE RED DOG TRUST, DATED FEBRUARY 22, 2016	0.04358	14
88		80237			10/22/2010	ABR	UG	0.6	REC	MT ROSE DEVELOPMENT COMPANY	0	0
			CHANGED BY: 85945			PER	UG					
88		81356	73318	19794	10/10/2005	CER	UG	0.045	COM	MSJ PROPERTIES, LLC	0.045	0.93
88		81357	77655	19975	5/6/1977	CER	UG	0.00574	IRR	MSJ PROPERTIES, LLC	0.00574	4
88		81696	65507		10/29/1954	RFA	UG	0.628	QM	DGD DEVELOPMENT LIMITED PARTNERSHIP	0.628	87.93
88		81697	65508		10/29/1954	RFA	UG	0.4239	QM	DGD DEVELOPMENT LIMITED PARTNERSHIP	0.4239	203.1404
88		82376	77678		5/6/1977	ABR	UG	0.0467	IRR	SCHULER, MICHAEL AND ELIZABETH	0	0
			CHANGED BY: 83594			CER	UG					
88		82835	61703		3/24/1992	PER	UG	0.2853	MUN	CHILDERS, MICHAEL AND NORMA	0.1993	57.99
			CHANGED BY: 88303			PER	UG					
88		83571	67368		6/13/1974	PER	UG	0.0048	QM	ROLL/CHAIKEN TRUST DATED 6/21/2016	0.0048	2
88		83594	82376	20983	5/6/1977	CER	UG	0.0467	IRR	SCHULER, MICHAEL AND ELIZABETH	0.0467	15
88		83682	67369	20760	6/13/1974	CER	UG	0.001	QM	WELCH, JAMES H.	0.001	0.28
88		83683	67368	20761	6/13/1974	CER	UG	0.009	QM	WELCH, JAMES H.	0.009	3.72
88		84316	67368	21903	6/13/1974	CER	UG	0.0024	QM	THE GAYMOND W. SCHULTZ AND CYNTHIA A. SCHULTZ INTER VIVOS TRUST, DATED MAY 27, 2010	0.0024	1
88		84317	52421A02	20984	5/6/1977	CER	UG	0.109	IRR	MIKE AND BETH SCHULER REVOCABLE FAMILY TRUST AGREEMENT DATED JUNE 8, 2007	0.109	35
88		85097	29419	21493	6/5/1975	CER	UG	0.0074	QM	MACLEAN LIVING TRUST	0.0074	0.8
88		85666	52421A02		5/6/1977	PER	UG	0.03735	IRR	CLAY TRUST	0.03735	12
88		85945	80237		10/22/2010	PER	UG	0.6	REC	MT. ROSE DEVELOPMENT COMPANY	0.6	131.669
88		85946			2/17/2016	PER	UG	1	REC	MT. ROSE DEVELOPMENT COMPANY	1	131.669
88		86544	52421A02	22092	5/6/1977	CER	UG	0.0183	IRR	THE KEVIN AND DEBRA QUILICI FAMILY TRUST AGREEMENT	0.0183	5.9
88		86630	52421A02		5/6/1977	PER	UG	0.01556	IRR	GRIMES LIVING TRUST, DATED 7/8/2014, REINSTATED 8/21/2015	0.01556	5
88		86631	52421A02		5/6/1977	PER	UG	0.03113	IRR	BRIAN AND TJ ALLMAN 2016 REVOCABLE LIVING TRUST DATED 11/2/2016	0.03113	10
88		86632	52421A02		5/6/1977	PER	UG	0.03735	IRR	GRIMES LIVING TRUST, DATED 7/8/2014, AS RESTATED 8/21/2015	0.03735	12
88		87302	57429		3/24/1992	PER	UG	0.005	COM	SORENSEN, KIRSTEN	0.005	1.5
88		88303	82835		3/24/1992	PER	UG	0.0026	COM	CHILDERS, MICHAEL AND NORMA	0.0026	0.76
88		89102			8/30/2019	PER	UG	1	REC	MT. ROSE DEVELOPMENT COMPANY	1	386.669
88		89103			8/30/2019	PER	UG	1	REC	MT. ROSE DEVELOPMENT COMPANY	1	386.669
88		89794	63146		4/12/1991	PER	UG	0.0166	IRR	AMSTERDAM HOLDINGS, LLC	0.0166	4.0396
88		90287	57429		3/28/1978	PER	UG	0.0139	IRR	OSULLIVAN FAMILY TRUST	0.0139	3.99
			CHANGED BY: 91218			RFA	UG					
88		90530T	66452		5/6/1977	PER	UG	0.004	IRR	GOLDEN R HEART RANCH, LLC SERIES F	0.004	0.96
88		90810	63146		4/12/1991	PER	UG	0.0041	COM	BAUER, BENNETT J. AND DARCY O.	0.0041	0.5
88		91218	57429		3/28/1978	RFA	UG	0.014	IRR	OSULLIVAN FAMILY TRUST	0.014	4
88		91218	90287		3/28/1978	RFA	UG	0.014	IRR	OSULLIVAN FAMILY TRUST	0.014	4
88		91611	66452		5/6/1977	APP	UG	0.008525	IRR	GOLDEN R. HEART RANCH, LLC SERIES F	0.008525	2.02
88		V04810			1/1/1930	VST	UG	0.1	IRR	MONROE, LARRY R.	0.1	16
88		V09035				ABR	UG	0.012	COM	GLORY TEMPLE CHURCH	0	0

WASHOE COUNTY DEVELOPMENT APPLICATION

ACTION REQUESTED:

<input checked="" type="radio"/>	AREA PLAN AMENDMENT
<input type="radio"/>	ADMINISTRATIVE WAIVER
<input checked="" type="radio"/>	CHANGE OF LAND USE DISTRICT
<input type="radio"/>	DIVISION INTO LARGE PARCELS
<input type="radio"/>	MAJOR PROJECT REVIEW
<input type="radio"/>	PARCEL MAP
<input checked="" type="radio"/>	SPECIAL USE PERMIT (BOA)
<input type="radio"/>	SPECIAL USE PERMIT (M-E)(WCPC)
<input checked="" type="radio"/>	TENTATIVE SUBDIVISION MAP
<input type="radio"/>	VARIANCE

SHADED AREA FOR DEPARTMENT USE ONLY CASE NUMBER(S) FEE

SECTION *	TOWNSHIP	RANGE
EXISTING ZONING: <u>A-1, A-4, A-R</u>		
PROPOSED ZONING: <u>A-1, A-R</u>		
EXISTING LAND USE: <u>Vacant</u>		

TOTAL FEE	
RECEIVED BY	
DATE OF RECEIPT	
ACCEPTANCE DATE	INITIAL

PROJECT DESCRIPTION: <u>St. James's Village</u>	
PROJECT ADDRESS: <u>Refer to Vicinity Map</u>	
PROPERTY SIZE: <u>1,626 acres</u>	ASSESSOR'S PARCEL NO(S): <u>46-060-02, 03 & 08</u>
	(PLEASE ATTACH LEGAL DESCRIPTION) <u>46-080-05, 47-010-04 & a portion of 46-100-01</u>

PROPERTY OWNER:

NAME: The Dahlawi Nevada Corp.

ADDRESS: 11766 Wilshire Blvd, Suite 780

Los Angeles CA ZIP 90025

PHONE: 310-473-5050

CONTACT PERSON: Mehdi Mostaedi

Linda Holloway

PERSON/FIRM PREPARING PLANS:

NAME: CFA

ADDRESS: 1150 Corporate Blvd

Reno NV ZIP 89502

PHONE: 702-786-1150

CONTACT PERSON: Alex Fittinghoff

APPLICANT/DEVELOPER:

NAME: The National Land Corporation

ADDRESS: 11766 Wilshire Blvd, Suite 780

Los Angeles CA ZIP 90025

PHONE: 310-473-5050

CONTACT PERSON: Mehdi Mostaedi

OTHER PERSON TO BE CONTACTED:

NAME: Mike Hoover

ADDRESS: 335 West First Street

Reno NV ZIP 89503

PHONE: 702-786-0335

(OVER)

* Sections 10, 13, 14, 15, 23 T. 17 N., R. 19 E.

OWNER AFFIDAVIT

~~STATE OF NEVADA~~)
STATE OF CALIFORNIA ss:
~~COUNTY OF WASHOE~~)
COUNTY OF LOS ANGELES
I, M. MEHDI MOSTAEDI

being duly sworn, depose and say that I am an owner of property involved in this petition and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true and correct to the best of my knowledge and belief. Applicants are hereby advised that no assurance or guarantee can be given by members of the Department of Development Review staff.

Signed

The Dahlawi Nevada Corporation
M. Mehdi Mostaedi, Vice President

Subscribed and sworn to before me this 23rd day of April, 19 92

Ina Jo Scheid
Notary Public in and for said county and state



My commission expires: May 8, 1995

WASHOE COUNTY

DEPARTMENT OF DEVELOPMENT REVIEW

1001 E. NINTH STREET
P.O. BOX 11130
RENO, NEVADA 89520
PHONE: (702) 328-3600
FAX: (702) 328-3648

OWNER AFFIDAVIT

~~STATE OF NEVADA~~)
~~STATE OF CALIFORNIA~~ ss:
~~COUNTY OF WASHOE~~)
LOS ANGELES

I, M. MEHDI MOSTAEDI

being duly sworn, depose and say that I am an owner of property involved in this petition and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true and correct to the best of my knowledge and belief. Applicants are hereby advised that no assurance or guarantee can be given by members of the Department of Development Review staff.

SIERRA LAND CORPORATION

Signed

M. Mehdi Mostaedi, Vice President

Subscribed and sworn to before me this 23rd day of April, 1992

Ina Jo Goveid
Notary Public in and for said county and state

My commission expires: May 8, 1995



WASHOE COUNTY

DEPARTMENT OF DEVELOPMENT REVIEW

1001 E. NINTH STREET
P.O. BOX 11130
RENO, NEVADA 89520
PHONE: (702) 328-3600
FAX: (702) 328-3648

OWNER AFFIDAVIT

~~STATE OF NEVADA~~)
~~STATE OF CALIFORNIA~~ ss:
~~COUNTY OF WASHOE~~)
COUNTY OF LOS ANGELES

M. MEHDI MOSTAEDI

I, _____
being duly sworn, depose and say that I am an owner of property involved in this petition and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true and correct to the best of my knowledge and belief. Applicants are hereby advised that no assurance or guarantee can be given by members of the Department of Development Review staff.

WORLD PROPERTIES INC.

Signed _____

M. Mehdi Mostaedi, Vice President

Subscribed and sworn to before me this 23rd day of April, 1992

Ina Jo Scheid
Notary Public in and for said county and state

My commission expires: May 8, 1995



WASHOE COUNTY

DEPARTMENT OF DEVELOPMENT REVIEW

1001 E. NINTH STREET
P.O. BOX 11130
RENO, NEVADA 89520
PHONE: (702) 328-3600
FAX: (702) 328-3648

OWNER AFFIDAVIT

~~STATE OF NEVADA~~)
STATE OF CALIFORNIA ss:
~~COUNTY OF WASHOE~~
COUNTY OF LOS ANGELES
I, M. MEHDI MOSTAEDI

being duly sworn, depose and say that I am an owner of property involved in this petition and that the foregoing statements and answers herein contained and the information herewith submitted are in all respects complete, true and correct to the best of my knowledge and belief. Applicants are hereby advised that no assurance or guarantee can be given by members of the Department of Development Review staff.

SIERRA REFLECTIONS CORPORATION

Signed

M. Mehdi Mostaedi, Executive Vice President

Subscribed and sworn to before me this 23rd day of April, 19 92

Ina Jo Scheid
Notary Public in and for said county and state

My commission expires: May 8, 1995



WASHOE COUNTY

DEPARTMENT OF DEVELOPMENT REVIEW

1001 E. NINTH STREET
P.O. BOX 11130
RENO, NEVADA 89520
PHONE: (702) 328-3600
FAX: (702) 328-3648

AREA PLAN AMENDMENT APPLICATION

AMENDMENT DESCRIPTION: From General Rural, Medium Density Rural & Tourist
PROPERTY ADDRESS: Refer to Vicinity Map Commercial*
PROPERTY SIZE: 1,626 acres ASSESSOR'S PARCEL NO(S): 46-060-02, 03, & 08
46-080-05, 47-010-04
(PLEASE ATTACH LEGAL DESCRIPTION) & a portion of
46-100-01

PROPERTY OWNER:

NAME: The Dahlawi Nevada Corp.
ADDRESS: 11766 Wilshire Blvd., Suite 780
Los Angeles, CA ZIP 90025
PHONE: 310-473-5050
CONTACT PERSON: Mehdi Mostaedi
Linda Halloway

PERSON/FIRM PREPARING PLANS:

NAME: CFA, Inc.
ADDRESS: 1150 Corporate Blvd.
Reno, NV ZIP 89502
PHONE: 702-786-1150
CONTACT PERSON: Alex Fittinghoff

APPLICANT/REPRESENTATIVE:

NAME: The National Land Corporation
ADDRESS: 11766 Wilshire Blvd., Suite 780
Los Angeles, CA ZIP 90025
PHONE: 310-473-5050
CONTACT PERSON: Mehdi Mostaedi

OTHER PERSON TO BE CONTACTED:

NAME: Mike Hoover
ADDRESS: 335 West First Street
Reno, NV ZIP 89503
PHONE: 702-786-0335

*to General Rural and Low Density Suburban. Redesignate a 2 mile portion of Joy Lake Road from Arterial to Private Rural Collector.

SHADED AREA FOR DEPARTMENT USE ONLY

SECTION _____	TOWNSHIP _____	RANGE _____
ZONING: _____		
ADOPTED LAND USE: _____		
PROPOSED LAND USE: _____		

RECEIVED BY _____
DATE OF RECEIPT _____
ACCEPTANCE DATE _____ INITIAL _____
MAILING RADIUS _____

2. FUTURE PROJECT DATA

- (a) Projected future land use:

Residential X

Commercial _____ (identify type below)

Industrial _____

Type of commercial use

Mix of uses (specifically identify)

Projected development impacts:

Residential dwelling units: 530

Trip generation: 3,840 trips/day

Water demand: 600 AF (at 1.12 acre feet/dwelling)

Sewer demand: 186,200 Gallons/day

- (b) Describe any needed improvements to community services that will be required to assist in the development of the proposed project:

Community services are discussed in detail in other parts of this submittal package.

- (c) Where is the nearest similar use located?

Galena Forest Estates

- (d) Why is this Area Plan amendment being requested at this time?

The applicant would like to commence construction during the 1993 building season.

3. PRESENT LAND USE

Vacant X

Agricultural _____

Industrial _____

Mix of uses (specifically identify)

Residential _____

Commercial _____

4 PROPERTY RESTRICTIONS

- (a) Are there deed restrictions or covenants, conditions and restrictions (CC&R's) affecting the property?

Yes _____ No X

- (b) If the answer is yes, what type (attach a copy):

Private _____ :

Expiration date

Subdivision _____

Expiration date

2. FUTURE PROJECT DATA

- (a) Projected future land use:

Residential X
Industrial _____
Type of commercial use _____
Mix of uses (specifically identify) _____

Projected development impacts:

Residential dwelling units: 530
 Trip generation: 3,840 trips/day
 Water demand: 600 AF (at 1.12 acre feet/dwelling)
 Sewer demand: 186,200 Gallons/day

- (b) Describe any needed improvements to community services that will be required to assist in the development of the proposed project:

Community services are discussed in detail in other parts of this submittal package.

- (c) Where is the nearest similar use located?

Galena Forest Estates

- (d) Why is this Area Plan amendment being requested at this time?

The applicant would like to commence construction during the 1993 building season.

3. PRESENT LAND USE

Vacant X Residential
Agricultural Commercial
Industrial
Mix of uses (specifically identify)

4 PROPERTY RESTRICTIONS

- (a) Are there deed restrictions or covenants, conditions and restrictions (CC&R's) affecting the property?

Yes _____ No X

- (b) If the answer is yes, what type (attach a copy):

Private _____; Expiration date _____
Subdivision _____; Expiration date _____

(c) If yes, do they affect the uses allowed under the proposed land use designation?
Yes _____ No _____

(d) If yes, describe how:

5. NATURAL/LANDMARK FEATURES

(a) Are any of the following natural constraints located on the property (attach a map identifying and locating them on the property)?

None	_____	Earthquake fault	_____
Wetlands	<u>X</u>	Significant Hydrologic Resources	_____
Landslide area	_____	Moderate or steep slope	<u>X</u>
Avalanche area	_____	(+ 15% grade)	_____
Flood-prone area	<u>X</u>	High water table	_____
Rare fish, fowl, animal or plant material	_____		_____
Other (describe)	_____		

(b) If any item, other than NONE, is marked, discuss what measures will be taken to reduce or eliminate the effect of these constraints on development (submit appropriate mitigation plans approved by either federal, state or local agencies):

Wetlands and steep slopes will remain undeveloped. No development
will be allowed within the 100-year flood plain of Browns Creek.

(c) Are there any historical or unique natural or manmade landmarks located on the property?
Yes X No _____

If yes, describe the landmark:

Low rock dams that were used to confine water to make ice.

If yes, discuss what measures will be taken to preserve or enhance the landmark:

A complete archaeological survey will be prepared prior to final
map recordation. At a minimum the dams will be photographed
and measured to create an archaeological record. Where possible,
the dams will be retained.

TRANSPORTATION:

- (d) Is there a Citifare bus route that serves the property or the immediate vicinity?

Yes _____ No X

If yes, how close is the nearest pick-up point?

Less than 500 feet _____
Between 500 feet and 1/4 mile _____
Between 1/4 mile and 1/2 mile _____
Over 1/2 mile _____

- (e) Is this property served by a paved street?

Yes X: Name of street Snowflower Drive
Estimated date of completion _____
No _____

Indicate proposed primary and alternate access to property/project on application maps

- (f) Name of the nearest major street or highway:

US 395

FIRE:

- (g) Fire protection agency:

Volunteer _____ Provider _____
Public X Provider Nevada Division of Forestry

- (h) Name/location of closest fire station:

Existing station on Mt. Rose Highway near Timberline Estates.

A station will be constructed on-site according to Nevada Division of Forestry timetable.

Estimated response distance to property:

1 mile or less X 1-5 miles X
5-15 miles _____ + 15 miles _____

POLICE:

- (i) Name/location of closest sub-station:

911 Parr Boulevard

Estimated response distance to property:

1 mile or less _____ 1-5 miles _____
5-15 miles X + 15 miles _____

EDUCATION:

- (j) Name of nearest school by category listed below and estimated distance from nearest school to property:

Elementary:	<u>Browns Elementary</u>	mi. <u>approx. 7 miles</u>
Middle:	<u>Pine Middle</u>	mi. <u>approx. 10 miles</u>
High:	<u>Galena High</u>	mi. <u>approx. 5 miles</u>

PARKS AND RECREATION:

- (k) Name of park closest to property:

Davis Creek County Park, Galena Creek Park

Distance to property:

1 mile or less	<u> </u>	1-2 miles	<u> X </u>
+ 2 miles	<u> </u>		

Park is owned by:

City County X State

7. CONSISTENCY WITH WASHOE COUNTY COMPREHENSIVE PLAN

Area Plan amendment applications must address the impact of the proposed land use change in the context of the entire area plan. In order to adequately address these issues, the Washoe County Planning Commission and/or the Board of County Commissioners requests information be submitted which is appropriate in detail for the amendment request. Please provide a separate response to the pertinent questions listed below:

POPULATION Refer to Chapter 5, Planning Analysis for a response to this question.

Does the amendment cause the planning area to exceed the Truckee Meadows Regional Plan or the Washoe County Comprehensive Plan forecast population? If the forecast population is exceeded, why should the population growth occur in this planning area instead of other areas in Washoe County.

CONSERVATION Responses to these questions are located throughout this report.

What is the effect of the proposed land use on conservation issues in the planning area? Evaluate such issues as: specific engineering mitigation measures for slope constraints, inclusion of a completed 404 study filed with the Corps of Engineers for potential wetlands, and inclusion of a legal delineation of flood hazards with an appropriate mitigation plan with flood channels, detention basins, etc. as needed. Include any additional studies, e.g., archeology, endangered species, mitigation plans for fire and geologic hazards, which support the area plan amendment request.

LAND USE COMPATIBILITY Refer to Chapter 5, Planning Analysis, for a response to this question.

Is the amendment compatible with adjacent land uses? This evaluation must include the full range of potential uses in each land use designation (for instance, low density suburban (LDS) land uses include the provision for small commercial uses which serve the needs of the residents in the area). If land uses are not compatible, what policies will be included to address measures to buffer and screen the incompatible uses? As an example, this evaluation would include providing larger residential lots adjacent to General Rural areas.

TRANSPORTATION Refer to Appendix B, Traffic Impact Analysis, for a response to this question.

What is the impact of the amendment on the existing and planned road network for the planning area? Does the amendment lower the Level of Service (LOS) for any road segment or intersection (once again, the planned land uses for the entire planning area must be used to calculate LOS)? Does the current Capital Improvements Program (CIP) include roadway improvement necessary to satisfy the traffic generated by the proposed land uses? If not, then improvement must either be provided by the developer, or the CIP must be amended to include the improvement.

PUBLIC SERVICES & FACILITIES Refer to Chapter 4, Infrastructure and services, for a response to this question.

Will the amendment impact on-going facilities plans or studies? Does the project require community water or sewer service (1 dwelling unit/acre or more dense, commercial or industrial uses)? If so, does the current Capital Improvements Program (CIP) include extension of service to the area? If not, then service must either be provided by the developer or the CIP must be amended to include the service. If services are to be provided by the developer, then a detailed cost analysis with recommended funding mechanisms must be completed. This cost analysis could possible contain an arrangement of needs in order of priority according to feasibility and cost.

8. PROJECTS OF REGIONAL SIGNIFICANCE

Area Plan amendments requests for properties within the jurisdiction of the Truckee Meadows Regional Planning Commission must respond to the following questions. A "Yes" answer to any of the following questions may result in the application being referred first to the Truckee Meadows Regional Planning Agency for submission as a project of regional significance. Applicants should consult with Department of Development Review or Growth Management staff for specific questions.

(a) Will the area plan amendment result in the "buildout" potential of increasing employment by not less than 938 employees?

Yes _____ No X

(b) Will the area plan amendment result in the "buildout" potential of increasing housing by not less than 625 units?

Yes _____ No X

(c) Will the area plan amendment result in the "buildout" potential of increasing hotel accommodations by not less than 625 rooms?

Yes _____ No X

(d) Will the area plan amendment result in the "buildout" potential of increasing sewage by not less than 187,500 gallons per day?

Yes _____ No X

(e) Will the area plan amendment result in the "buildout" potential of increasing water usage by not less than 625 acre-feet per year?

Yes _____ No X

(f) Will the area plan amendment result in the "buildout" potential of increasing traffic by not less than an average of 6,250 trips daily?

Yes _____ No X

(g) Will the area plan amendment result in a "buildout" potential that could cause a loss or significant degradation of an identified historic, archaeological, cultural or scenic resource?

Yes _____ No X

(h) Will the area plan amendment result in the "buildout" potential that could create a significant new geothermal or mining operation within twenty (20) miles of any land shown on the Truckee Meadows Regional Plan Regional Form Diagram?

Yes _____ No X

9. COMMENTS

This space may be used for any additional statements in support of this area plan amendment request.

**WASHOE COUNTY DEPARTMENT OF DEVELOPMENT REVIEW
CHANGE OF LAND USE DISTRICT APPLICATION
SUPPLEMENTAL INFORMATION**

ALL QUESTIONS MAY BE ANSWERED ON SEPARATE SHEETS
QUESTIONS PRECEDED BY (*) MUST BE ANSWERED

1. PLANNING AREAS

- (a)* In what planning area is this property located? South Valleys and Forest
- (b)* Is the request in conformance with the provisions of the adopted area plan?
Yes ___ No X
If the answer is yes, briefly discuss why: _____

If the answer is no, briefly discuss what the advantages to the area would be if the request were to be granted: Refer to text

- (c)* Do any other planning policies, such as those in the Comprehensive Regional Plan, support this request?
Yes X No ___
If the answer is yes, identify which policies and why they would support the request: _____
Refer to Chapter 5, Planning Analysis, for a response to this
question.

- (d)* Hydrobasin: Pleasant Valley

2. PROJECT

- (a)* Is this request for a specific project? Yes X No ___
If the answer is yes, please submit the following information and attach plans:

No. of dwelling units 530

Total square footage:

Retail 0

Office 0

Tourist 0

Light Industrial 0

Heavy Industrial 0

Other (recreation complex) 10,000

Total number of PERMANENT employees approximately 10 plus seasonal

If the answer is yes, describe any needed improvements to community services that will be required to assist in the development of the proposed project: employees.

Public services and facilities are discussed in Chapter 4.

If the answer is yes, where is the nearest similar use located?

Galena Forest Estates

If the answer is no, why is this change being requested at this time?

3. ZONING (EXISTING/REQUESTED)

(a)* Number of acres in each zoning category:

Existing: A-1 260 acres, A-4 1353 acres, A-R 13 acres

Proposed: A-1 674 acres, AR 952 acres

4. RESTRICTIONS

(a)* Are there deed restrictions or covenants, conditions and restrictions (CC&R's) affecting the property?

Yes No X

If the answer is yes, what type (attach a copy):

Private ; Expiration date

Subdivision ; Expiration date

If yes, do they affect the uses allowed under the proposed zoning?

Yes No

If yes, describe how:

5. NATURAL/LANDMARK FEATURES

- (a)* Are any of the following natural constraints located on the property (attach a map identifying and locating them on the property)?

None	_____	Earthquake fault	_____
Landslide area	_____	Overly steep slope	_____
Avalanche area	_____	(+30% grade)	<u>X</u>
Flood-prone area	<u>X</u>	High water table	_____
Rare fish, fowl, animal or plant material	_____	Other (describe)	_____

If any item, other than NONE, is marked, discuss what measures will be taken to reduce or eliminate the effect of these constraints on development:

Steep slopes will remain undisturbed. No development will be
allowed within the 100-year flood plain of Browns Creek.

- (b)* Are there any historical or unique natural or manmade landmarks located on the property?
Yes X No _____

If yes, describe the landmark: Low rock dams that were used to confine water
to make ice.

If yes, discuss what measures will be taken to preserve or enhance the landmark:

As typically required by Washoe County, an archaeological survey
will be prepared prior to final map recordation. At a minimum,
the dams will be photographed and measured to create an archaeological
SERVICES record. Where possible, the dams will be retained.

6. SERVICES

SEWER:

- (a)* What facilities are currently provided on or for the property?

None	<u>X</u>	Septic	_____
Private Community	_____	Provider	_____
Public Community	_____	Provider	_____

If NONE, what type of sewer system is proposed?

Septic	<u>X</u>	(interim)	_____
Private Community	_____	Provider	_____
Public Community	<u>X</u>	Provider	<u>Washoe County</u>

If NONE, when will the system identified be available?

1-3 yrs _____ 3-5yrs X 5+yrs _____

WATER:

(b)* What facilities are currently provided on or for the property?

None X Individual well
Sierra Pacific Power Company
Private Community Provider
Public Community Provider

If NONE, when will the system identified above be available?

1-3 yrs 3-5yrs X 5+ yrs

(c)* Are water rights to be dedicated to Washoe County either for the development of the property or pursuant to certain area plans? Yes X No Refer to text

If YES, answer the following:

Amount: acre feet

Type (include certificates and/or permit numbers and copies):

Permitted Certificated

Use: Agricultural Grazing
Municipal/Industrial
Other (describe)

TRANSPORTATION:

(d)* Is there a public transportation system (such as a bus) that serves the property or the immediate vicinity?

Yes : Provider
No X

If yes, how close is the nearest pick-up point?

Less than 500 feet
Between 500 feet and 1/4 mile
Between 1/4 mile and 1/2 mile
Over 1/2 mile

(e)* Is this property served by a paved street?

Yes X : Name of street Snowflower Drive
Estimated date of completion
No

(f)* Name of the nearest major street or highway:

US 395

FIRE:

(g)* Fire protection agency:

Volunteer
Public

____ Provider ____
X Provider Nevada Division of Forestry

(h)* Name/location of closest fire station:
The nearest station is on the Mt. Rose Highway near Timberline Estates. A station will be constructed on-site according to the Nevada Division of Forestry timetable.

Estimated response distance to property:

1 mile or less _____ 1-5 miles X
5-15 miles _____ + 15 miles _____

POLICE:

(i)* Police protection agency

Private
Sheriff

____ Provider ____
X

(j)* Name/location of closest sub-station:

911 Parr Boulevard

Estimated response distance to property:

1 mile or less _____ 1-5 miles _____
5-15 miles X + 15 miles _____

EDUCATION:

(k)* Name of nearest school by category listed below and estimated distance from nearest school to property:

Elementary	<u>Browns Elementary</u>	:	<u>approx. 7</u>	mi.
Middle	<u>Pine Middle</u>	:	<u>approx. 10</u>	mi.
High	<u>Galena High</u>	:	<u>approx. 5</u>	mi.

PARKS AND RECREATION:

(l)* Name of park closest to property:

Davis Creek County Park and Galena Creek Park

Distance to property:

0-1 mile _____ 1-2 miles X + 2 miles _____

Park is owned by:

City _____ County X State _____

7. PRESENT USE

Vacant X Residential _____ Agricultural _____
Commercial _____ Industrial _____
Mix of uses (specifically identify) _____

8. COMMENTS

This space may be used for any additional statements in support of this request.

**WASHOE COUNTY DEPARTMENT OF DEVELOPMENT REVIEW
TENTATIVE SUBDIVISION MAP APPLICATION
SUPPLEMENTAL INFORMATION**

General location: South of Callahan Ranch Road, east of Galena Forest Estates, and west of US 395.

Hydrobasin: Pleasant Valley

No. of acres in each zoning category: A-1 674 acres , A-R 952 acres

No. of lots/units in each zoning category: A-1 530 lots

Total number of lots: 530 Lot development X Home sales _____

Density of project:

Gross density: 0.33 dwelling units per acre 530 lots/ 1,626 acres

Net density: 0.36 dwelling units per acre 530 lots/(1,626 acres - 143 acres)

Acreage in streets:	Public <u>2</u> Private <u>84</u>	Freeway reservation <u>57</u> acres
parking:	Public <u>0</u> Private <u>0</u>	Recreation/maintenance <u>8</u> acres
common area:	Public <u>0</u> Private <u>891</u>	Fire station <u>2</u> acres
parks:	Public <u>0</u> Private <u>0</u>	
school site:	Public <u>0</u> Private <u>0</u>	

Average lot size: 582 acres/530 lots = 1.1

Utilities:

Sewer service Washoe County

Water service Washoe County

If water rights are to be dedicated, indicate the type and quantity of water rights you have available:

_____permitted, _____acre feet/year

_____certified, _____acre feet/year

Who holds title to these rights: Refer to text

All other _____

Community services:

Fire protection agency Nevada Division of Forestry

Police department Washoe County Sheriff's Department

Health care facility St. Mary's Regional Medical Center, Washoe Medical Center

Schools Browns Elementary School, Pine Middle School, Galena High School

Parks Davis Creek County Park and Galena Creek Park

Streets: Minimum width 20-24 Right-of-way 50 feet

Public _____ Private _____

Environmental factors:

Is your proposed project within the 100 year flood plain as shown on the adopted Federal Emergency Management Agency's Flood Boundary and Floodway Maps? yes If yes, please locate those areas on your tentative map.

Describe what methods of erosion control are to be used during construction. Erosion control methods will be approved by the Washoe-Storey Conservation District. Dust Control measures will meet the requirements of the Washoe County Health Department.

DENSITY OR CLUSTER SUBDIVISION:

If the proposed subdivision is a density transfer or cluster development, a special use permit is required. Please provide the following information where different from the minimum requirements as set forth in the zoning ordinance.

Lot sizes: Minimum _____ Maximum _____

Minimum setbacks: Front _____ Rear _____ Side _____

What improvements are proposed for common area: _____

Who maintains: _____

Approval of the tentative map will specify the total number of final maps that will be allowed for recording. Therefore, identify the total number of final maps intended to record the entire project, the number of lots or units in each map and the proposed sequence of recording:

It is anticipated that final maps will be recorded in 25-lot increments, which would result in approximately 20 final maps.

WASHOE COUNTY DEPARTMENT OF DEVELOPMENT REVIEW
SPECIAL USE PERMIT APPLICATION
SUPPLEMENTAL INFORMATION

Summary of proposed use (including type of activity, number of employees, description of structures to be built/used): A special use permit is required for the recreation complex located
at the northwestern end of the site. The facilities may include a recreation
center of approximately 10,000 square feet, tennis courts, volleyball court,
in-door/out-door swimming pool and picnic area. The recreation center may
include meeting rooms, sales office, snack bar, saunas, and a weight room.

Identify the impacts of the proposed use on adjacent land uses and public facilities (such as noise, traffic generation, hours of operation, odors, smoke, dust):

No impacts are anticipated.

Utilities:

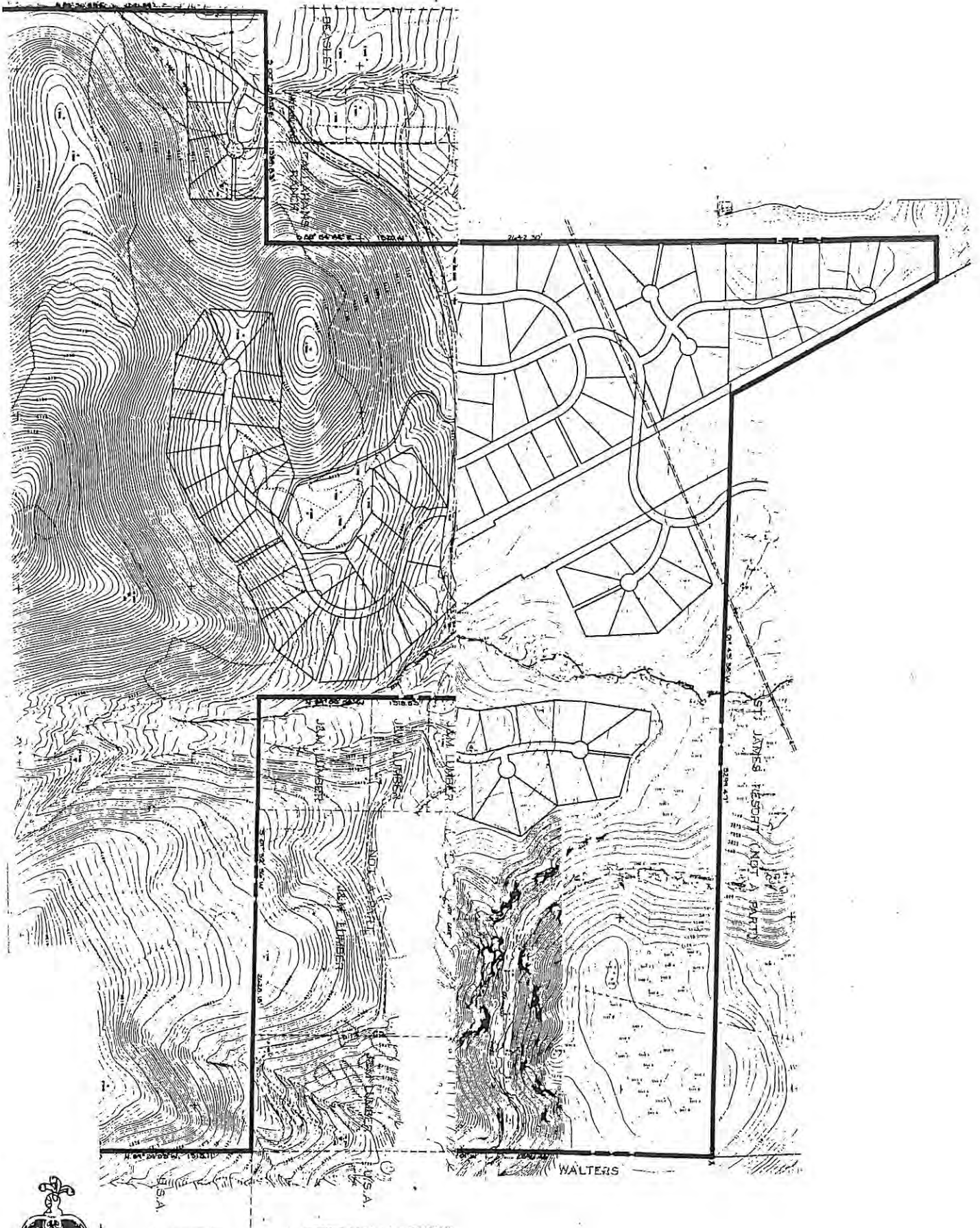
Sewer service Washoe County

Water service Washoe County

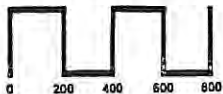
If water rights are to be dedicated, indicate the type and quantity of water rights you have available:

 permitted, acre feet/year
 certified, acre feet/year

Who holds title to these rights: Refer to text

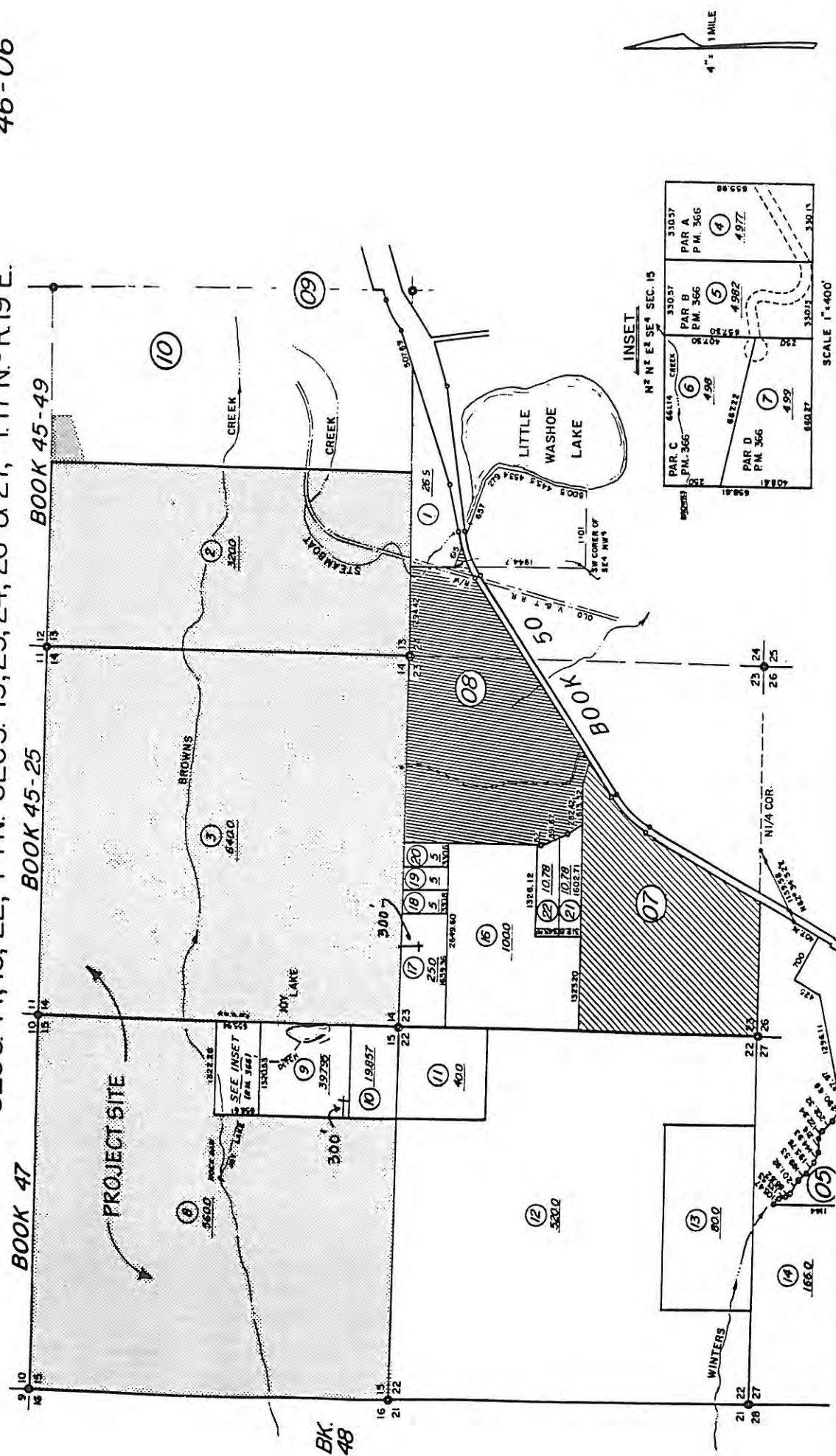


ST. JAMES'S VIL



SECS. 14, 15, 22, PTN. SEC'S. 13, 23, 24, 26 & 27, T.17N.-R.19E.

46-06

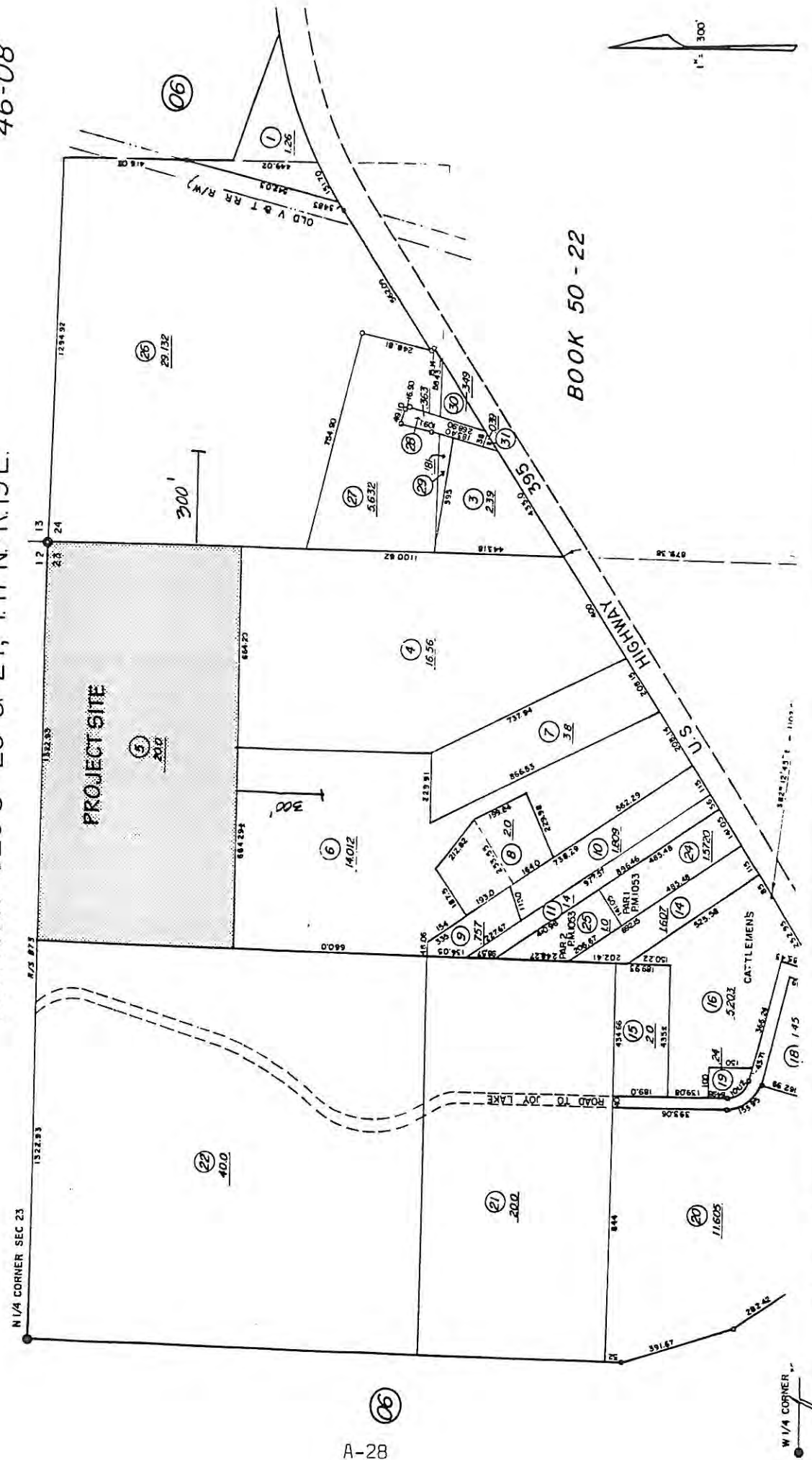


ASSESSOR'S PARCEL MAP

cfa

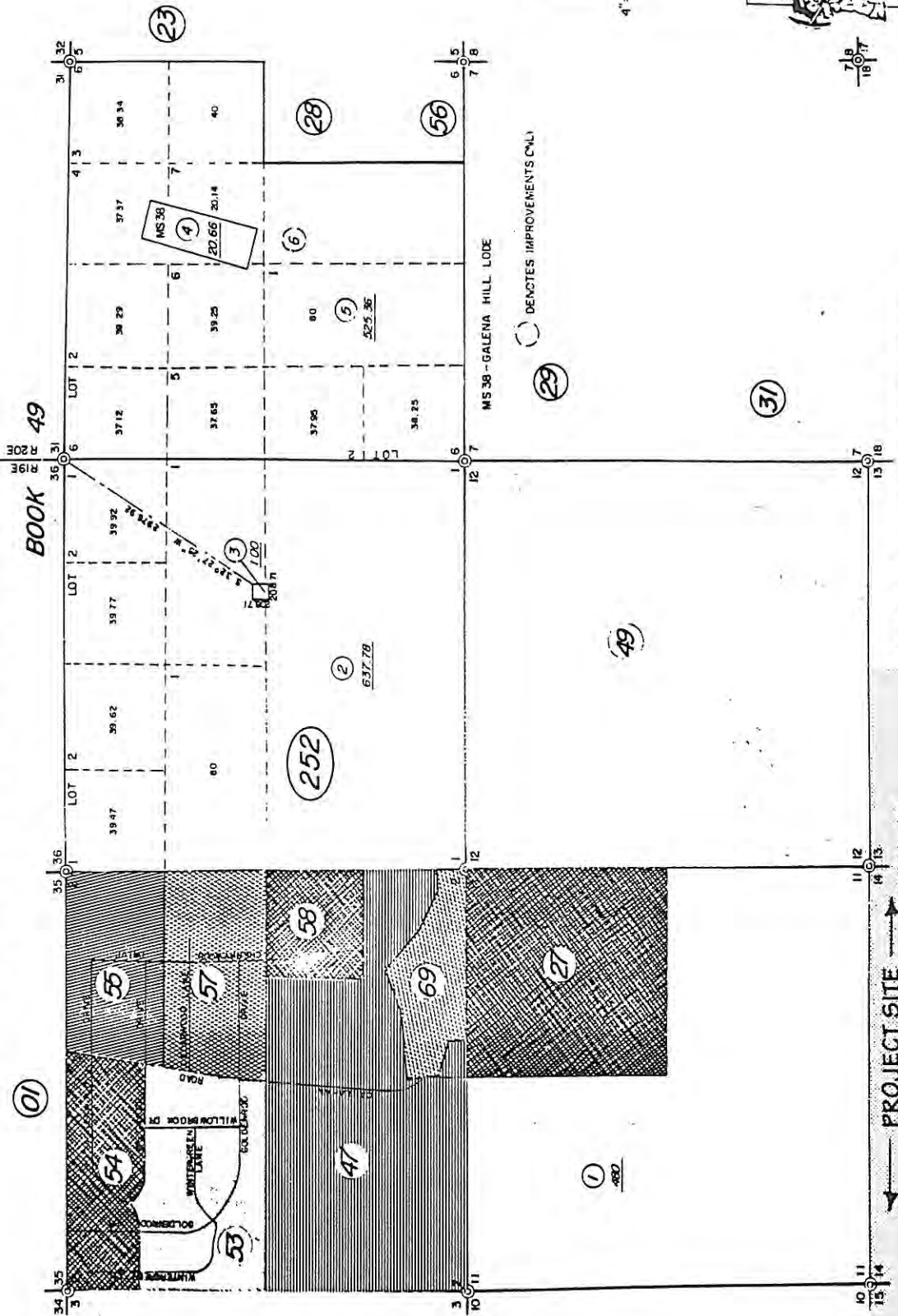
PORTION SEC'S 23 & 24, T.17 N.-R.19 E.

46-08



SECTION 1, PORTION OF SECTION 11-T17N-R19E
 PORTION OF SECTION 6-T17N-R20E

45-25



NOTE: This map is prepared for the use of the Washoe County Assessor's Map of Washoe, Nevada.

cfa

ASSESSOR'S PARCEL MAP



48-06

PORTION OF SECTIONS 16 & 17
T17N-R19E



ASSESSOR'S PARCEL MAP

cfa

DEY REF Y. 400

ASG
F



OFFICE OF THE WASHOE COUNTY CLERK

COUNTY COURTHOUSE, VIRGINIA AND COURT STS.
P.O. BOX 11130, RENO, NEVADA 89520
PHONE (702) 328-3260

JUDI BAILEY
County Clerk

September 9, 1992

National Land Corp.
Attn: M. Mehdi Mostaedi and Linda Holloway
11766 Wilshire Blvd.
Las Angeles, CA 90025

National Land Corp.
Attn: Mike Hoover
335 West First Street
Reno, NV 89503

Gentlemen:

I, Judi Bailey, County Clerk and Clerk of the Board of County Commissioners, Washoe County, Nevada, do hereby certify that at a regular meeting of the Board of County Commissioners, held on August 18, 1992, Chairman McDowell issued the following order:

92-840 ST. JAMES VILLAGE - NATIONAL LAND CORPORATION,
 AREA PLAN AMENDMENT CASE NO. APA92-SV-4,
 CHANGE OF LAND USE DISTRICT CASE NO. C5-3-92,
 TENTATIVE SUBDIVISION MAP CASE NO. TM5-2-92, AND
 SPECIAL USE PERMIT CASE NO. SPW5-5-92 FOR A RECREATION CENTER

9:30 a.m. This was the time set in a Notice of Public Hearing published in the Reno Gazette Journal on August 7, 1992, and mailed to affected property owners on August 5, 1992, to consider the recommendation of the Washoe County Planning Commission to approve Area Plan Amendment Case No. APA92-SV-4, and to consider the appeal of the Homeowners for Development Issues from the recommendation of the Washoe County Planning Commission to grant Change of Land Use District Case No. C5-3-92, Tentative Map Case No. TM5-2-92 and Special Use Permit Case No. SPW5-5-92 for National Land Corporation to develop St. James Village, a 530 lot single family subdivision, in multiple phases, on ±1,626 acres in the South Valleys and Forest Area Plans. Proof was made that due and legal Notice had been given.

Melvin Cohn, speaking on behalf of the appellants, stated that they are opposed to this development because it is in conflict with the land use plan for this area and because of the sports activities that are planned which will require more water, considering that water is already a problem. He also stated that they believe they were not treated fairly at the Planning Commission when they were not allowed to speak for more than three minutes. Mike Harper, Director of Development Review, stated that all the speakers were treated equally before the Planning Commission. Mr. Cohn stated that they had requested 15 minutes, 48 hours in advance of the meeting, in order to make a presentation; and the request was denied.

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September 9, 1992

Bill Whitney, Department of Comprehensive Planning, explained the Area Plan Amendment, stating that the proposed amendment does conform to the Truckee Meadows Regional Plan, the rural use category, and the recently adopted transportation plan for the area; that the request has been modified in an attempt to mitigate issues regarding wildlife in the area; and that under existing zoning, the proposed development of 532 houses is appropriate. He then detailed all the concerns raised by the area residents and Planning Commissioners and what has been done to address those concerns. He addressed the major concerns regarding keeping Joy Lake Road a private road and stated that although the developer cannot guarantee this, they have agreed to structure the CC&R's in such a way to allow for this.

In response to Commissioner Reid, Mr. Whitney then discussed the issue of water, stating that when this project was originally started as Sierra Reflections at that time, the County accepted 940 acre feet of water from the developer; that the County and the State Engineer have determined that 720 acre feet will be returned to the developer and can be used for residential use; that this will be monitored and that if more water is needed, the developer will have to go out and acquire more water rights.

Don Young, Department of Development Review, described the project specifics, and the requests for Change of Land Use, Tentative Subdivision Map, and Special Use Permit, explaining that the scope of the project has been greatly reduced from the original proposals of Sierra Reflections and the name has been changed to St. James Village. He further explained that this is a multi-phased project with a 25 year buildout; that of the 1600 acres, more than 900 acres will remain in its natural, forested state; and that the Special Use Permit is a request for a recreation complex on 6 acres. Mr. Young also stated that the issue of transportation has been a primary concern throughout this project; that the roadways for this project do conform to the adopted Forest and South Valleys Plans; and that this will be a gated community and all roadways within the project will remain private. He then discussed wildlife mitigation measures, the agreement between the developer and the Utility Division regarding water and sewer, new conditions that have been agreed to by the developer, and the issue of Joy Lake Road. Mr. Young said that an evaluation of Joy Lake Road has been completed, which resulted in a new condition, No. 36b, agreed to by the developer and the representatives of the Galena Forest Homeowner's Association.

John Frankovich, representing St. James Village, advised that this project has come a long way and gone through many changes since its inception and that much time and effort has been expended addressing all the concerns and objections. He then touched on all the issues previously discussed.

Alex Fittinghoff, representing developer, displayed a map of the area and stated that the roadway system will be private and built to rural, collector road standards; and that in order for any road to ever be opened as a public road, it would have to be widened, which all residents would have to agree to. Speaking to the issue of Joy Lake Road, he presented a viewfoil demonstration depicting traffic charts under various scenarios and stated that it is expected that about 15 percent of the traffic is forecast to use Joy Lake Road, 45 percent is estimated to use Pagni Lane, and the other 40 percent is expected to use the other southern access. He also stated that they are willing to spend \$80,000 on Joy Lake Road to solve the traffic and speeding problems they are already experiencing. Mr. Fittinghoff then discussed the proposed water and sewer systems, the requirement that lot purchasers will only be permitted to disturb 20 percent of their site, leaving 80 percent of each site in its natural state, and the fact that they will have an architectural review committee and all homes will have to meet their strict requirements.

Mr. Fittinghoff also discussed the proposed fire station and the recreation area. He then passed out an outline of the proposed development going over each item in detail and answered questions of the Board.

Chairman McDowell then opened the public hearing and called on those wishing to speak in favor of the project.

Speaking in support of the proposed development were Steve Evans, (Vice President of the Pleasant Valley-Steamboat Land Owners Association), Willis Beasley, Jennifer Cunningham, Don Kitts (Citizens Advisory Board), Randall York (President of the Galena Forest Homeowners Association), Bill Gates, Tom Cargill, Russ Garrett, Ron Anderson, Wayne Capurro, Bill Mitchell and Hannah Scott. They all stated that they feel this is a very well planned development that will maintain their quality of life and that the concerns of the area residents have been addressed as best as can be expected. Further, several of these residents stated that they believe everyone was treated fairly at all of the hearings and that the system does work in that the County has heard the community very effectively.

Mr. York also explained that his group has been working on the speeding problem on Joy Lake Road; that they have developed two different plans for the problem; and that they have surveyed the homeowners regarding which plan they prefer. He further stated that the homeowner's association will contribute \$20,000 to share in the mitigation costs of this problem.

Mr. Cargill still had a concern regarding the mitigation measures for Joy Lake Road and stressed that they should not infringe on any private property. Mr. Kitts offered other ideas for ways to preserve the wildlife areas; and Mr. Anderson also suggested pedestrian pathways.

There being no one else present to speak in support of the project, Chairman McDowell called on those opposed to this development.

Three Joy Lake Road residents, Melvin Cohn, Richard Papaleo and Michael Houghton spoke expressing adamant opposition to additional traffic on Joy Lake Road and the phasing method proposed for this project, stating that it would make more sense to begin construction at the southern end of the development. Each indicated that they believe their quality of life will be adversely affected and urged the Commissioners to insist that the residents of Joy Lake Road be directly involved in any mitigation measures required to ease the problems.

There being no one else wishing to speak, the Chairman closed the public hearing.

Commissioner Cornwall expressed her appreciation to the homeowners' associations, the Citizens Advisory Board, and all the residents who have worked together and with the developer and the County to reach the best possible solutions to the problems. She stated that the Joy Lake Road issue is a real problem that still needs to be resolved and indicated that she hopes everyone will remain involved so that a good end result for all concerned can be achieved.

Chairman McDowell stated that he has a special concern regarding the wildlife in the area and urged the developer and the area residents to use every means possible to mitigate the impact that this could have on the long-term wildlife habitat.

AREA PLAN AMENDMENT CASE NO. APA92-SV-4

On motion by Commissioner Cornwall, seconded By Commissioner Reid, which motion duly carried, Chairman McDowell ordered that Area Plan Amendment Case No. APA92-SV-4 requested by the National Land Corporation for St. James Village to amend the South Valleys and Forest Area Plans, a part of the Washoe County Comprehensive Plan, by redesignating 6 parcels totaling ±1,626 acres including Assessor's Parcels Numbers 46-060-02, 03 and 08, 46-080-05, 47-010-04, and a portion of 46-100-01 from General Rural, Medium Density Rural, and Low Density Suburban to General Rural, Public and Semi-Public Facilities, and Low Density Suburban, the appropriate Land Use Designations, to accommodate a 530-unit single-family private residential development that includes a recreational complex, a fire station site, and 892 acres of common open space, located south of the Callahan Ranch and Galena Forest area, and west of the approved/unbuilt St. James's Village Resort (a/k/a Sierra Reflections Resort) in Pleasant Valley, in portions of Sections 10, 13, 14, 15 and 23, Township 17N, Range 19E, MDB&M, Washoe County, Nevada, lying within the Pleasant Valley Hydrographic Basin and designated as both "Rural" and "Rural Reserve" on the Truckee Meadows Regional Plan land use diagram, be approved.

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CHANGE OF LAND USE DISTRICT CASE NO. C5-3-92

On motion by Commissioner Cornwall, seconded by Commissioner Leighton, which motion duly carried, Chairman McDowell ordered that the appeal of the Homeowners for Development issues be denied and that Change of Land Use District Case No. C5-3-92 for National Land Corporation, St. James Village, to change the zoning from A-1 (First Agricultural), A-4 (Farm & Forestry), and A-R (Active Recreation) to A-1 and A-R on six parcels totaling ±1,626 acres, resulting in elimination of the A-4 zoning and an increase and relocation of both A-1 and A-R zoning, located south of Callahan Ranch Road, east of Galena Forest Estates, and west of U.S. 395 South in Sections 10, 13, 14, 15, and 23, T17N, R19E, MDB&M, currently designated General Rural, Medium Density Rural, and Tourist Commercial in the Forest and South Valleys Area Plans, Washoe County, Nevada, be granted.

TENTATIVE MAP CASE NO. TM5-2-92

On motion by Commissioner Cornwall, seconded by Commissioner Beck, which motion duly carried, Chairman McDowell ordered that the appeal of the Homeowners for Development Issues be denied and that Tentative Map Case No. TM5-2-92 for National Land Corporation to develop St. James Village, a 530-lot single-family subdivision in multiple phases on six parcels totaling ±1,626 acres, zoned A-1 (First Agricultural), A-4 (Farm & Forest), and A-R (Active Recreation), proposed to be changed to A-1 and A-R, located south of Callahan Ranch Road, east of Galena Forest Estates, and west of U.S. 395 South in Sections 10, 13, 14, 15, and 23, T17N, R19E, MDB&M, currently designated General Rural, Medium Density Rural, and Tourist Commercial in the Forest and South Valleys Area Plans, Washoe County, Nevada, be granted subject to the following conditions as amended and with mitigation to begin as soon as possible:

ALL CONDITIONS MUST BE MET OR FINANCIAL ASSURANCES SHALL BE PROVIDED IN AN APPROPRIATE FORM AND AMOUNT, TO THE SATISFACTION OF THE PUBLIC WORKS DEPARTMENT PRIOR TO RECORDATION OF THE FINAL MAP, UNLESS OTHERWISE STATED.

COMPLIANCE WITH THE CONDITIONS OF THIS TENTATIVE MAP IS THE RESPONSIBILITY OF THE DEVELOPER, ITS SUCCESSOR IN INTEREST, AND ALL OWNERS, ASSIGNEES, AND OCCUPANTS OF THE PROPERTY AND THEIR SUCCESSORS IN INTEREST.

A COPY OF ALL AGREEMENTS, EASEMENTS, OR OTHER DOCUMENTATION REQUIRED BY THESE CONDITIONS SHALL BE FILED WITH THE DEVELOPMENT REVIEW STAFF.

PRIOR TO FILING A FINAL MAP FOR RECORDATION, THE DEVELOPER SHALL MEET WITH THE ENGINEERING DIVISION AND THE DEVELOPMENT REVIEW STAFF AT LEAST FOUR (4) WEEKS BEFORE THE ANTICIPATED RECORDATION DATE TO REVIEW REQUIREMENTS, FINAL CONSTRUCTION DRAWINGS, AND DOCUMENTATION NECESSARY TO ADEQUATELY COMPLY WITH THE CONDITIONS OF APPROVAL.

A REQUEST FOR AN EXTENSION OF TIME FOR THE RECORDING OF A FINAL MAP, WHICH PERMITS THE ADDITION, DELETION, OR AMENDMENT OF CONDITIONS, MUST BE SUBMITTED TO THE DEVELOPMENT REVIEW STAFF AT LEAST 60 DAYS PRIOR TO THE EXPIRATION DATE OF THE TENTATIVE SUBDIVISION MAP; SAID EXPIRATION BEING ONE YEAR FROM THE DATE OF THE BOARD OF COUNTY COMMISSIONERS APPROVAL OF THE TENTATIVE MAP OR A SUBSEQUENT FINAL MAP.

GENERAL CONDITIONS

1. Final maps and final construction drawings shall comply with all applicable statutes, ordinances, rules, regulations, and policies in effect at the time of approval of the tentative map or any subsequent extension date.
2. Final maps shall be in substantial compliance with all plans and documents submitted with and made part of this tentative map request, as may be amended by action of the final approving authority. All documentation necessary to satisfy the conditions noted below shall accompany the final map when submitted to the Engineering Division and the development review staff.
3. Conditions, covenants, and restrictions (CC&Rs) shall be reviewed and approved by the District Attorney's office and the development review staff. Washoe County shall be made a party to the applicable provisions of the CC&Rs to the satisfaction of the District Attorney's office. Said CC&Rs shall specifically address the potential for liens against the property and the individual property owner's responsibilities for the funding of the maintenance, replacement, and perpetuation of the following items, at a minimum:
 - a. Private roads within the subdivision.
 - b. Recreation center.
 - c. Staffing of maintenance and security forces.
 - d. Common area landscaping.
 - e. Entrance gates.
 - f. Snow removal and storage areas.
 - g. Streetscapes.
 - h. Fire and fuelbreaks on open space.
 - i. Detention basins and the accumulated sediment.
 - j. Equestrian trails.
 - k. Bicycle and pedestrian paths.

At a minimum, the CC&Rs shall also specifically address the following items:

- a. Requirement to abide by Community Design Guidelines
- b. Requirement to locate all structures, including fences, within the building envelope submitted with final map.

- c. Limitation of disturbance of site to 20% of lot area.
 - d. Specifications on the limitation of turf area.
 - e. Requirement to properly abandon individual septic disposal system and to connect to community sewer when available
 - f. Requirement of the homebuilder to install the house plumbing so that it can be easily connected to the community system
 - g. Waiver of protest of inclusion into a sewer district
 - h. Notice of requirement to pay future sewer user fees
 - i. Mandatory provision of greenbelt requirements.
 - j. Prohibition of private fencing outside of building envelope, other than "invisible" pet control fencing.
 - k. Minimum defensible space requirements.
 - l. Snow storage areas.
 - m. Requirement to adhere to National Electric Safety Code setbacks for existing overhead power lines.
 - n. Potential for conservation easements or dedication of open space.
 - o. Prohibition of motorized vehicles in open space.
 - p. Areas with potential for equestrian traffic.
 - q. Requirement of open space remaining open to pedestrian and bicycle traffic.
 - r. Notice of equestrian easements to abutting properties.
 - s. Notice of S-alignment to abutting properties.
 - t. Notice of the preservation requirements for lots containing or abutting the rock dams of the ice ponds.
4. Prior to the first final map, the developer shall submit the detailed set of Community Design Guidelines to the Design Review Committee of the Washoe County Planning Commission for review and approval. At a minimum, the Community Design Guidelines shall address the items specified within the application plus the homeowners variance procedures, if any.
5. At the time of recordation of each phase, the developer shall submit a site plan for each individual lot to the Building and Safety Division and the development review staff. The site plan shall be at an appropriate scale for an 8.5" x 11" sheet and shall indicate the lot and block number, the building envelope, the maximum structure height, location of sewer lateral stub-out, and, if applicable, driveway location, protected areas, retained trees, individual septic disposal system and leachfield areas, etc.
6. Educational materials for wildlife protection, water conservation, historic preservation, or similar issues that are supplied to prospective buyers or lot owners shall be submitted to the development review staff.

7. A note shall be placed on all construction drawings stating:

NOTE:

Should any prehistoric or historic remains/artifacts be discovered during site development, work shall temporarily be halted at the specific site and the Department of Conservation and Natural Resources, Division of Historic Preservation and Archeology, shall be notified to record and photograph the site. The period of temporary delay shall be limited to a maximum of two (2) working days from the date of notification.

8. Prior to ground disturbing activity of any specific phase of development, the developer shall provide an archaeological/historical survey for that phase to the Department of Conservation and Natural Resources, Division of Historic Preservation and Archeology for review.
9. Prior to acceptance of public improvements and release of any financial assurances, the developer shall furnish to the Utility Division and/or Engineering Division a complete set of reproducible 'as built' construction drawings prepared by a civil engineer registered in the State of Nevada, when field conditions mandate construction other than that shown in the original drawing.
10. The developer shall participate in any applicable General Improvement District or Special Assessment District formed by Washoe County to the satisfaction of the applicable division of the Department of Public Works.
11. The final map shall designate potentially-active (Holocene) fault lines on the record map and shall contain the following note to the satisfaction of the development review staff:

NOTE:

No habitable structures shall be located on a potentially-active (Holocene) fault line.

12. The developer is to provide written approval of the plans for the installation of mail delivery facilities from the US Postal Service. The system must be shown on the project construction plans and installed as part of the on-site improvements to the satisfaction of the Engineering Division and the US Postal Service.
13. All new utilities are to be placed underground to the satisfaction of the Engineering Division.

14. The developer and all successors shall direct any potential purchaser of the project site to meet with the development review staff to review conditions of approval prior to the final sale of the site. Any subsequent purchasers of the site shall notify the development review staff of the name, address, telephone number, and contact person of the new purchaser within 30 days of the final sale.
15. The Washoe County Planning Commission certificate on the final map shall be stated as follows:

The tentative map of this subdivision, TM5-2-92, was approved by the Washoe County Planning Commission on the 8th day of July, 1992. This final map is in substantial compliance with the tentative map and all conditions of approval have been met.

The signature block for the certificate shall be prepared for date and signature by the Director of the Washoe County Department of Development Review.

TRAFFIC

16. All roadway improvements (including but not limited to, curb, gutter, signage, snow removal and storage, sidewalk, and street lighting at major intersections) necessary to serve the project, that are to be dedicated to Washoe County, shall be designed and constructed to county specifications (60' right-of-way, 36' curb face to curb face, and collector pavement thickness) and/or financial assurances in an appropriate form and amount shall be provided to the satisfaction of the Engineering Division.
17. All roadway improvements (including but not limited to, drainage, signage, snow removal and storage, project gates, and street lighting at major intersections) that are within the project and not to be dedicated to Washoe County, shall be designed and constructed to the satisfaction of the Engineering Division (cul-de-sacs may have an improved section of 20 feet) and/or financial assurances in an appropriate form and amount shall be provided to the satisfaction of the Engineering Division.
18. Approved Occupancy Permits shall be obtained from the Nevada Department of Transportation (NDOT), for access to and from roads and highways maintained by NDOT and a copy of the said permit sent to the Engineering Division. These Occupancy Permits shall be required for Joy Lake Road at US 395 and Mount Rose Highway (SR 431) prior to the recordation of the first phase. The Occupancy Permit for Resort Parkway/Pagni Lane and US 395 shall be required prior to construction of the roadway.

19. The applicant shall comply with the NDOT requirements for acceleration/deceleration lanes and intersection designs for access to US 395 and Mount Rose Highway (SR 431) to the satisfaction of the Engineering Division.
20. The Construction Traffic Haul Route Plan, which shall utilize Joy Lake Road South, is to be submitted to the Engineering Division and development review staff for review and approval. Roads that will be used as construction haul routes and are not designated truck routes must be evaluated by a geotechnical study to determine the existing structural section and its load supporting capability. If the pavement section is inadequate to support the proposed construction loadings, the roadway must be reconstructed as needed to provide a 20-year design life in accordance with the AASHTO Interim Guide for Flexible Pavements.
21. The minimum pavement structural section shall be 4 inches of asphalt over 6 inches of gravel base (Type B) for roadways with a right-of-way of 60 feet in width and shall be 3 inches of asphalt over 6 inches of gravel base (Type B) for roadways with a right-of-way of 50 feet in width to the satisfaction of the Engineering Division.
22. The developer shall seal all asphalt concrete pavement surfaces in accordance with Washoe County specifications to the satisfaction of the Engineering Division.
23. The developer shall submit a detailed Geotechnical Analysis and Report which gives pavement design recommendations based upon the estimated traffic loadings for a 20-year design life in accordance with the AASHTO Interim Guide for Flexible Pavements to the Engineering Division for review and approval. The report shall include assumptions concerning the distribution of trucks, including project construction traffic. The pavement thickness determined by the Geotechnical Analysis must be used if it indicates a stronger structural section than the minimum is required.
24. The developer shall submit construction drawings which include all soil boring logs to the satisfaction of the Engineering Division.
25. For the portions not already offered for dedication, the developer shall acquire and dedicate full width right-of-way for Joy Lake Road north of the project site prior to the recordation of the first final map. All dedications and improvements shall be to the satisfaction of the Engineering Division. If the right-of-way cannot be acquired by the developer at a reasonable price as determined by the county, then the county may attempt to condemn the property. If the state court allows the condemnation, the developer shall pay the cost of the award and its appraisal fee.

26. The developer shall construct or provide financial assurances for the construction of Joy Lake Road north of the project site to collector standards as specified in Condition 16 to the satisfaction of the Engineering Division prior to recordation of the first final map. Due to the provision of legal access and an improved roadway to parcels not currently served, the applicant shall be entitled to reimbursement for a portion of the amount contributed for the construction the road outside the boundaries of the project pursuant to this condition. The reimbursement shall be semi-annually from the Interim Traffic Facility Collection Program (ITFCP) of Washoe County as funds become available from the development of property within the Forest planning area. The amount shall be based upon a proportionate share of the projected volume of traffic on that portion of roadway due to the project and the buildout of the area outside the boundaries that will be served in accordance with the current adopted area plan. The amount shall be determined by the Engineering Division and shall be based upon a traffic analysis provided by the developer.
27. The developer shall construct or provide financial assurances for the improvements to the intersection of Joy Lake Road and Mount Rose Highway (SR 431) to the satisfaction of the Engineering Division prior to recordation of the first final map.
28. The developer shall acquire and dedicate full width right-of-way for Joy Lake Road south of the project site prior to the recordation of the final map for the 151st lot. All dedications and improvements shall be to the satisfaction of the Engineering Division. If the right-of-way cannot be acquired by the developer at a reasonable price as determined by the county, then the county may attempt to condemn the property. If the state court allows the condemnation, the developer shall pay the cost of the award and its appraisal fee.
29. Prior to the recordation of the 151st lot, the developer shall provide financial assurances for the construction of Joy Lake Road south of the project site to the satisfaction of the Engineering Division. Prior to the issuance of the 151st building permit, the developer shall construct that portion of Joy Lake Road to the satisfaction of the Engineering Division.
30. Prior to the recordation of the 286th lot, the developer shall provide financial assurances for the construction of Resort Parkway to the satisfaction of the Engineering Division. Prior to the issuance of the 286th building permit, the developer shall construct Resort Parkway to the satisfaction of the Engineering Division.
31. On a quarterly basis, the developer shall provide the Engineering Division and the development review staff an accounting of the number of building permits issued for St. James's Village.

32. The developer shall install regulatory signs at the juncture of all public streets with a private street to the satisfaction of the Engineering Division. Said sign shall state: "PRIVATE STREET NOT MAINTAINED BY COUNTY".
33. The developer shall offer the right-of-way for the future US 395 bypass for dedication to Washoe County to the satisfaction of the Engineering Division. Washoe County will not accept the offer until NDOT is seeking acquisition of property within the area.
34. Street names shall be reviewed and approved by the Regional Street Naming Coordinator.
35. The final map shall contain the following note to the satisfaction of the development review staff:

NOTE:

An off-site road construction fee is applicable to all parcels created by this map. Any applicant for a permit to construct or otherwise use this land shall either (1) enter into an agreement with Washoe County, requiring financial assurances and approval by the District Attorney's Office, to pay the future off-site road impact fee upon its adoption or (2) pay the \$1000 interim fee imposed by Washoe County, be released from the responsibility of the future impact fee, and be eligible for a refund should the future impact fee charge less than the interim fee.

All options to pay existing interim fees expire upon the subsequent adoption of a replacement interim fee or an impact fee.

- 36a. To the satisfaction of the Engineering Division, the wording on the final maps shall be modified to reflect the fact that the streets within the subdivision are private and not offered for dedication to Washoe County.
- 36b. The applicant agrees to pay to Washoe County the sum of \$80,000 to be used for the purpose of constructing traffic mitigation measures intended to reduce the travel speed along the existing portion of Joy Lake Road. The applicant shall pay this \$80,000 prior to or concurrently with the approval of the first final subdivision map by the Board of County Commissioners. In the event that applicant commences construction of roadway improvements along Joy Lake Road prior to the approval of the first final subdivision map, applicant agrees to pay \$40,000 at the time of commencement of such construction, with the remaining \$40,00 to be paid at the approval of the first final subdivision map. These funds shall be held Washoe County to be used solely for the purpose of the mitigation measures along Joy Lake Road.

DRAINAGE

37. A final, detailed hydrology/hydraulic report, prepared by a registered engineer, shall be submitted to the Nevada Department of Transportation and the Engineering Division for approval. The report shall include the locations, points of entry and discharge, and rates of 10 and 100 year storm flows impacting both the site and off-site areas and the methods for handling those flows. The report shall include all storm drain pipe and ditch sizing calculations and a discussion of any impacts on existing off-site drainage facilities.
38. A master storm drainage plan, based upon the approved hydrology/hydraulic report, shall be submitted to the Nevada Department of Transportation and Engineering Division prior to the finalization of any portion of the subdivision. All drainage improvements shall be designed and constructed to the satisfaction of the District Health Department and the Engineering Division. All drainage structures under roadways and crossings of Browns and Steamboat Creeks shall be designed to pass the 100-year storm. Consideration will be given to minor culverts passing a portion of the 100-year storm over the roadway if the roadway is designed to not be washed out and to remain passable through the 100-year storm. The developer may arrange for financial assurances, acceptable to the Engineering Division, for all or part of these improvements.
39. A complete set of construction improvement drawings, including an on-site grading plan, shall be submitted to the Engineering Division for approval prior to finalization of any portion of the subdivision. Grading shall comply with best management practices and shall eliminate the potential for mosquito breeding within graded areas. Detention basins with controlled outlet facilities shall be shown on the plan.
40. Washoe County will only maintain drainage easements which are at least 15 feet wide and piped to the satisfaction of the Engineering Division.
41. Standard reinforced concrete headwalls or other approved alternatives shall be placed on the inlet and outlet of all drainage structures and rip-rap shall be used to prevent erosion at the inlets and outlets of all pipe culverts to the satisfaction of the District Health Department and the Engineering Division.
42. The developer shall provide pretreatment for petrochemicals and silt for all storm drainage from the site or into Steamboat or Browns Creek to the satisfaction of the Engineering Division.

43. The developer shall submit to the District Health Department a letter approving the proposed methods of erosion control and soil stabilization from the Washoe-Storey Conservation District.
44. The developer shall provide easements to all existing irrigation and diversion ditch owners to the satisfaction of the Engineering Division. Any proposed modifications to the ditches must be approved in writing by the ditch owners.

WATER AND WASTEWATER

45. The project shall be constructed with a dry sanitary sewer system within the boundaries of the subdivision. The sewer system shall be designed, constructed, and inspected to the satisfaction of the District Health Department and the Utility Division.
46. All minor infrastructure for sewer collection shall be designed, constructed, and inspected to the satisfaction of the District Health Department and the Utility Division.
47. Responsibility for design of any pump stations and interceptors to provide sewer service to the project will rest with the Utility Division. The Utility Division may either, provide such design in-house, or select an outside consultant. When an outside consultant is to be selected, the Utility Division and the developer shall jointly select that engineer. Funding of design and infrastructure in excess of the minimum requirements or that to serve the development as determined by generally accepted engineering calculations, shall be the responsibility of Washoe County. Washoe County shall either participate monetarily at the time of design and/or shall credit an appropriate number of service hookups to the developer at the time of recordation of the final map.
48. The design engineer shall submit a plan for the periodic inspection of the construction of the sewer service system to the District Health Department. The design engineer shall, pursuant to the approved inspection plan, periodically certify in writing to the District Health Department that the improvements are being installed in accordance with the approved plans and recognized practices of the trade.
49. The developer shall either construct or provide financial assurances for the construction of the sewer system facilities. The financial assurances must be in a form and amount satisfactory to the Utility Division.
50. In the event that the off-site sewage transmission and treatment facilities are not available at the time of final map recordation,

interim individual septic disposal systems may be reviewed and approved by the District Health Department, the Utility Division, and the Nevada Department of Environmental Protection. No more than 230 lots will be allowed to use interim individual septic disposal systems.

51. Should interim individual septic disposal systems be considered for use, evidence shall be submitted that a restrictive covenant in the county's favor has been recorded. This restrictive covenant shall include the waiver of protest of inclusion into the district, the notice of the requirement to pay user fees, and the requirement of the proper abandonment (pumping, filling, etc.) of the interim individual septic disposal system, and connection to the sanitary sewer system within 120 days of notice by the Department of Public Works that service from the provider is available.
52. All sewage disposal fields shall be located in the exact locations of the approved test holes to the satisfaction of the District Health Department.
53. The developer shall install the sewer service laterals with an acceptable plug and cap to a location a minimum of 10 feet within the property line to the satisfaction of the Utility Division.
54. All privilege connection (hookup) fees for sewer service for the area within the final map will be paid to the satisfaction of the Utility Division, including any credits given in accordance with Condition 47.
55. The sanitary sewer collection system must be offered for dedication to Washoe County to the satisfaction of the Utility Division.
56. The sanitary sewer collection system shall be designed to accommodate potential service to existing and future developments of the project to the satisfaction of the Utility Division.
57. A letter, which can be a will-serve letter, from the appropriate provider committing sewer service, must be submitted to the District Health Department and Utility Division. This letter shall indicate that the treatment facility will not be brought beyond its permitted capacity by this service.
58. The final subdivision map shall show a dedicated, all-weather easement, with access, over the development's sanitary sewer lines, to the satisfaction of the Utility Division.
59. The final map shall contain the following note to the satisfaction of the development review staff:

NOTE:

No Certificate of Occupancy shall be issued until the sewer facilities have been completed and accepted by resolution of the Board of County Commissioners.

60. All minor infrastructure for potable water distribution shall be designed, constructed, and inspected to the satisfaction of the District Health Department and the Utility Division.
61. Responsibility for design of wells, pump structure, controls, telemetry, and appurtenances, storage tanks, and transmission lines to the edge of the subdivision, all necessary to provide water service to the project, will rest with the Utility Division. The Utility Division may either, provide such design in-house, or select an outside consultant. When an outside consultant is to be selected, the Utility Division and the developer shall jointly select that engineer. Funding of design and infrastructure in excess of the minimum requirements or that to serve the development as determined by generally accepted engineering calculations, shall be the responsibility of Washoe County. Washoe County shall either participate monetarily at the time of design and/or shall credit an appropriate number of service hookups to the developer at the time of recordation of the final map.
62. The design engineer shall submit a plan for the periodic inspection of the construction of the water supply system to the District Health Department. The design engineer shall, pursuant to the approved inspection plan, periodically certify in writing to the District Health Department that the improvements are being installed in accordance with the approved plans and recognized practices of the trade.
63. The developer shall either construct or provide financial assurances for the construction of the water system facilities directly related to the project. Credits in accordance with Condition 61 may accrue at this time. The financial assurances must be in a form and amount satisfactory to the Utility Division.
64. The water system facilities must be offered for dedication to Washoe County to the satisfaction of the Utility Division.
65. Prior to approval of the first final map, the developer shall be responsible for the processing the necessary change applications to reflect the points of diversion and the place and manner of use actually intended for water service, to the satisfaction of the Utility Division.

66. A letter, which can be a will-serve letter, from the appropriate provider committing water service must be submitted to the District Health Department. This letter shall indicate that the facility will not be brought beyond its permitted capacity by this service.
67. The developer shall submit to the Utility Division, water quality test results from a laboratory certified in the State of Nevada for any new water sources. The water quality sampling and testing shall comply with the State of Nevada Regulations for Public Water Systems, Nevada Administrative Code Chapter 445.
68. The water source shall meet both primary and secondary (NAC 445.248 subsections 1 and 4) standards of the State of Nevada Regulations for Public Water Systems, Nevada Administrative Code Chapter 445. If the water quality does not meet these standards, water treatment facilities must be on-line and functioning prior to the issuance of any building permits to the satisfaction of the Utility Division.
69. If the water usage monitoring demonstrates that the water rights previously dedicated to Washoe County prove to be insufficient to support the recordation of any phase of the subdivision, the developer shall be required to dedicate additional rights to support that phase to the satisfaction of the Utility Division.
70. The developer shall submit documentation demonstrating the availability of adequate water resource to serve the proposed project to the satisfaction of the Utility Division.
71. Any wells on the property not in use for production or monitoring purposes, shall be properly abandoned in accordance with the applicable regulations governing Water Wells and Related Drilling to the satisfaction of the Utility Division and District Health Department.
72. The final map owner's certificate shall contain language indicating that the developer and his assignees agree to the use of residential water meters.
73. The final map shall contain the following note to the satisfaction of the development review staff:

NOTE:

No Certificate of Occupancy shall be issued until the water facilities have been completed and accepted by resolution of the Board of County Commissioners.

FIRE PROTECTION

74. The plans submitted with a building permit application shall show evidence of compliance with the recommendations of the Nevada Division of Forestry. Those concerns are access (primary and emergency), security gates, fire flows, fire hydrant number and location, sequential phasing of firebreaks during development, permanent firebreaks, minimum defensible space, use of fire resistant construction and/or roof material, sprinklering of structures, and spark arrestors in chimneys. Access and fire flows shall be addressed to the satisfaction of the fire protection agency prior to the introduction of any combustible materials to the site.
75. The developer shall construct and dedicate a fire station to the satisfaction of the Nevada Division of Forestry prior to the issuance of any building permits for private structures.

SPECIAL USE PERMIT CASE NO. SPW5-5-92

On motion by Commissioner Cornwall, seconded by Commissioner Beck, which motion duly carried, Chairman McDowell ordered that the appeal of the Homeowners for Development Issues be denied and that Special Use Permit Case No. SPW5-5-92 for National Land Corporation, St. James Village, to construct and operate a recreation complex of approximately 10,000 square feet, with tennis courts, volleyball court, indoor/outdoor swimming pool and picnic area as accessory uses to a 530-lot single-family subdivision on six parcels totaling $\pm 1,626$ acres, zoned A-1 (First Agricultural), A-4 (Farm & Forest), and A-R (Active Recreation) proposed to be changed to A-1 and A-R, located south of Callahan Ranch Road, east of Galena Forest Estates, and west of U.S. 395 South in Sections 10, 13, 14, 15 and 23, T17N, R19E, MDB&M, currently designated General Rural, Medium Density Rural, and Tourist Commercial in the Forest and South Valleys Area Plans, Washoe County, Nevada, be granted subject to the following conditions:

ALL CONDITIONS MUST BE MET OR FINANCIAL ASSURANCES MUST BE PROVIDED TO SATISFY THE CONDITIONS PRIOR TO ISSUANCE OF A BUILDING PERMIT, UNLESS OTHERWISE SPECIFIED.

COMPLIANCE WITH THE CONDITIONS OF THIS SPECIAL USE PERMIT IS THE RESPONSIBILITY OF THE APPLICANT, HIS SUCCESSOR IN INTEREST, AND ALL OWNERS, ASSIGNEES, AND OCCUPANTS OF THE PROPERTY AND THEIR SUCCESSORS IN INTEREST. FAILURE TO COMPLY WITH ANY CONDITIONS IMPOSED IN THE ISSUANCE OF THE SPECIAL USE PERMIT MAY RESULT IN THE INSTITUTION OF REVOCATION PROCEDURES.

ALL AGREEMENTS, EASEMENTS OR OTHER DOCUMENTATION REQUIRED BY THESE CONDITIONS SHALL HAVE A COPY FILED WITH THE DEPARTMENT OF DEVELOPMENT REVIEW.

THE BOARD OF COUNTY COMMISSIONERS RESERVES THE RIGHT TO REVIEW AND REVISE THE CONDITIONS OF THIS APPROVAL SHOULD THEY DETERMINE THAT A SUBSEQUENT LICENSE OR PERMIT ISSUED BY WASHOE COUNTY VIOLATES THE INTENT OF THIS APPROVAL.

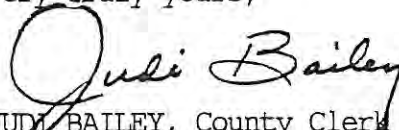
GENERAL CONDITIONS

1. To the satisfaction of the Department of Development Review, the developer shall demonstrate general conformance with the development standards in the submitted application and substantial conformance with the plans subsequently approved by Washoe County Planning Commission.
2. The developer shall complete construction of all structures used to further the operation within four years from the date of approval by the Washoe County Board of County Commissioners.
3. A copy of the Clerks Order stating conditional approval of this special use permit shall be attached to all applications for administrative permits issued by Washoe County.
4. Construction plans and equipment specification for any food-handling facilities, detailing food storage and preparation areas, shall be submitted to the District Health Department for review and approval prior to the issuance of a building permit.
5. Prior to ground disturbing activity, the developer shall submit a Construction Traffic Haul Route Plan to the Engineering Division for review and approval.
6. Water rights dedication requirements for the recreation complex, the maintenance facilities, and the common area landscaping shall be to the satisfaction of the Utility Division.
7. Upon system availability, the facilities shall be connected to the community sewer to the satisfaction of the District Health Department and the Utility Division.
8. Landscaping/architectural design plans for the recreation center and its ancillary uses and the maintenance building shall be submitted to the development review staff for review and approval by the Design Review Committee prior to any ground disturbing activity. Said plan shall address, but not be limited to, type and color of building material, general architectural design, ingress and egress, parking lot design and striping, lighting, signage, landscaping and buffering material (if plant material: type, size at time of planting, maturation size at full growth, period of time between planting and full growth), landscaping location, and landscaping irrigation system.

National Land Corporation
St. James Village
Page 20
September 9, 1992

9. The applicant and any successors shall direct any potential purchaser/operator of the site and/or the special use permit to meet with the development review staff to review conditions of approval prior to the final sale of the site and/or the special use permit. Any subsequent purchaser/operator of the site and/or the special use permit shall notify the development review staff of the name, address, telephone number, and contact person of the new purchaser/operator within 30 days of the final sale.

Very truly yours,



JUDI BAILEY, County Clerk and
Clerk of the Board of Washoe
County Commissioners

slg

cc: Planning, Development Review, Public Works, Building, Health
John Frankovich, P.O. Box 2670, Reno, NV 89505
CFA, Inc., 1150 Corporate Blvd., Reno, NV 89502
Robert W. Hubenette, 1630 Cordilleras Rd., Redwood City, CA 94062
Kleinfelder, 3189 Mill St., Reno, NV 89502
Michael Pontrelli, 2695 W. Plumb Ln., Reno, NV 89509
Sear-Brown Group, 1351 Deer Valley Rd., South, Park City, UT 84060
Penny Brock, 355 Mugo Pine Circle, Reno, NV 89511
Edward Toro, 1005 Joy Lake Road, Reno, NV 89511



WASHOE COUNTY

"To Protect and To Serve"



UTILITY DIVISION
DEPARTMENT OF PUBLIC WORKS
John M. Collins, Chief Sanitary Engineer

1195-B CORPORATE BOULEVARD
POST OFFICE BOX 11130
RENO, NEVADA 89520-0027
PHONE: (702) 856-7300
FAX: (702) 856-7310

July 27, 1995

TO: John A. MacIntyre, County Manager
THROUGH: Craig V. McConnell, Public Works Director
FROM: John M. Collins, Chief Sanitary Engineer
SUBJECT: Board of County Commissioners Agenda Item
Approval of Consulting Engineering Agreement with
Consulting Engineering Services for Design of the
St. James Village Water System



RECOMMENDATION

The Chief Sanitary Engineer recommends that the Board of County Commissioners:

1. Approve the agreement for consulting engineering services for the design of the St. James Village water system with Consulting Engineering Services (CES) in an amount not to exceed \$54,300;
2. If approved, authorize the Chairman to execute the agreement.

BACKGROUND

St. James Village is an approved residential subdivision located southeast of Galena Forest Estates and west of U.S. Highway 395 South in the Forrest and South Valleys Area Plans (Exhibits A & B). The development tentative map was approved in July 1992, and consists of 530 single family residential lots.

Tentative map conditions specified that the developer construct or provide financial assurances for the construction of a community water system to serve St. James Village, and that the water system be offered for dedication to Washoe County.


CES is the consulting engineering firm selected by the developer, with concurrence of the Utility Division, to design the community water system. In accordance with the tentative map conditions, the design will be overseen by the Utility Division. The agreement for engineering services contracts CES to design the water system for the Utility Division. The developer is financially responsible for the design cost. On June 28, 1995, the developer advanced \$54,300 to the Utility Division to pay for the design contract.

Board of County Commissioners Agenda Item
Approval of Consulting Engineering Agreement with
Consulting Engineering Services for Design of the
St. James Village Water System
Page Two
July 27, 1995

The agreement has been approved by the District Attorney's Office and County Risk Manager.

FISCAL IMPACT

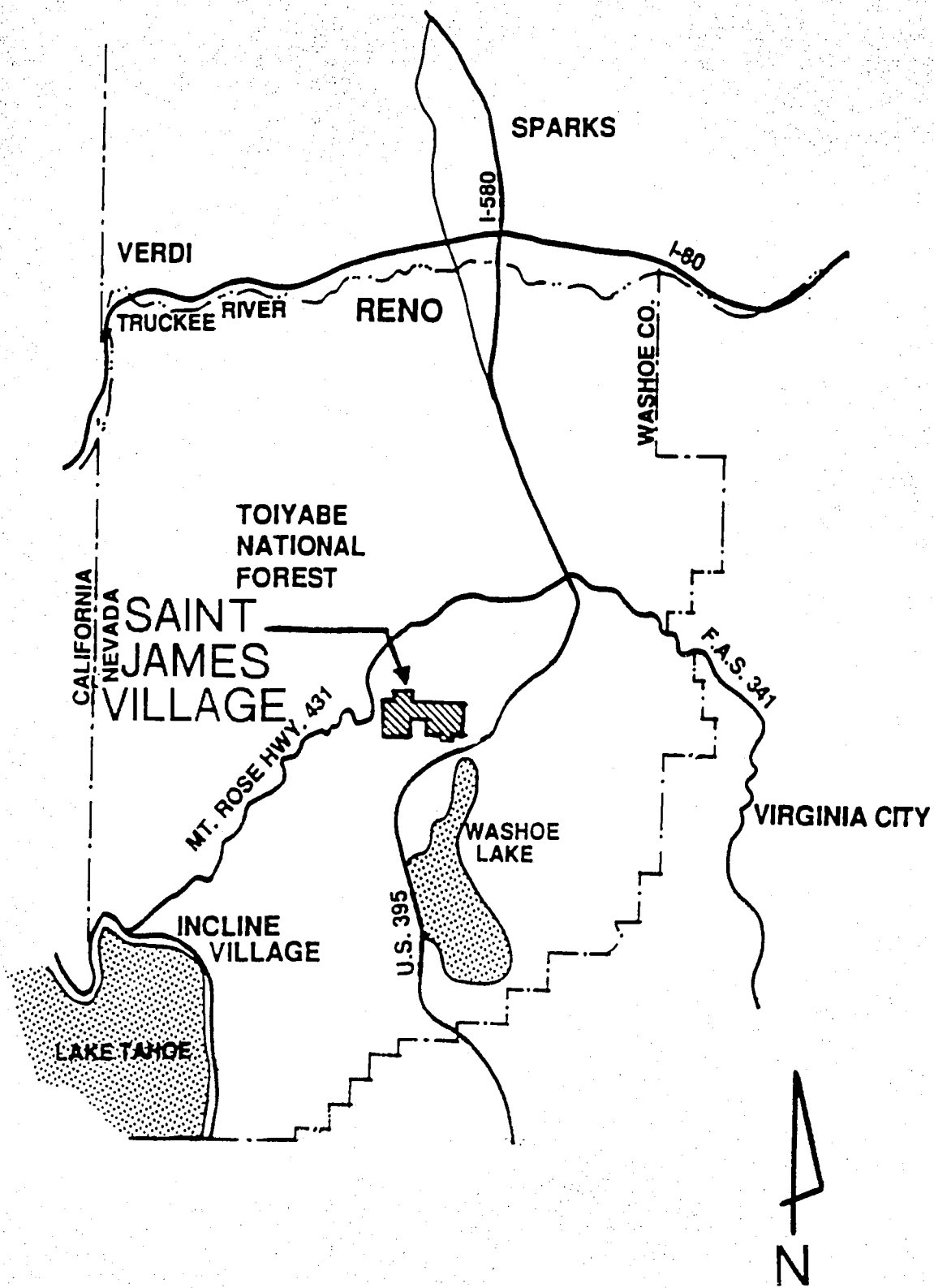
The developer of St. James Village has already advanced the \$54,300 contract fee to the Utility Division. There is no fiscal impact to Washoe County at this time.


JOHN M. COLLINS, P.E.

JMC:PCO:llr

cc: Robert Jasper, Asst. County Manager
Kathy Garcia, Comptroller
Jerry McKnight, Budget Coordinator

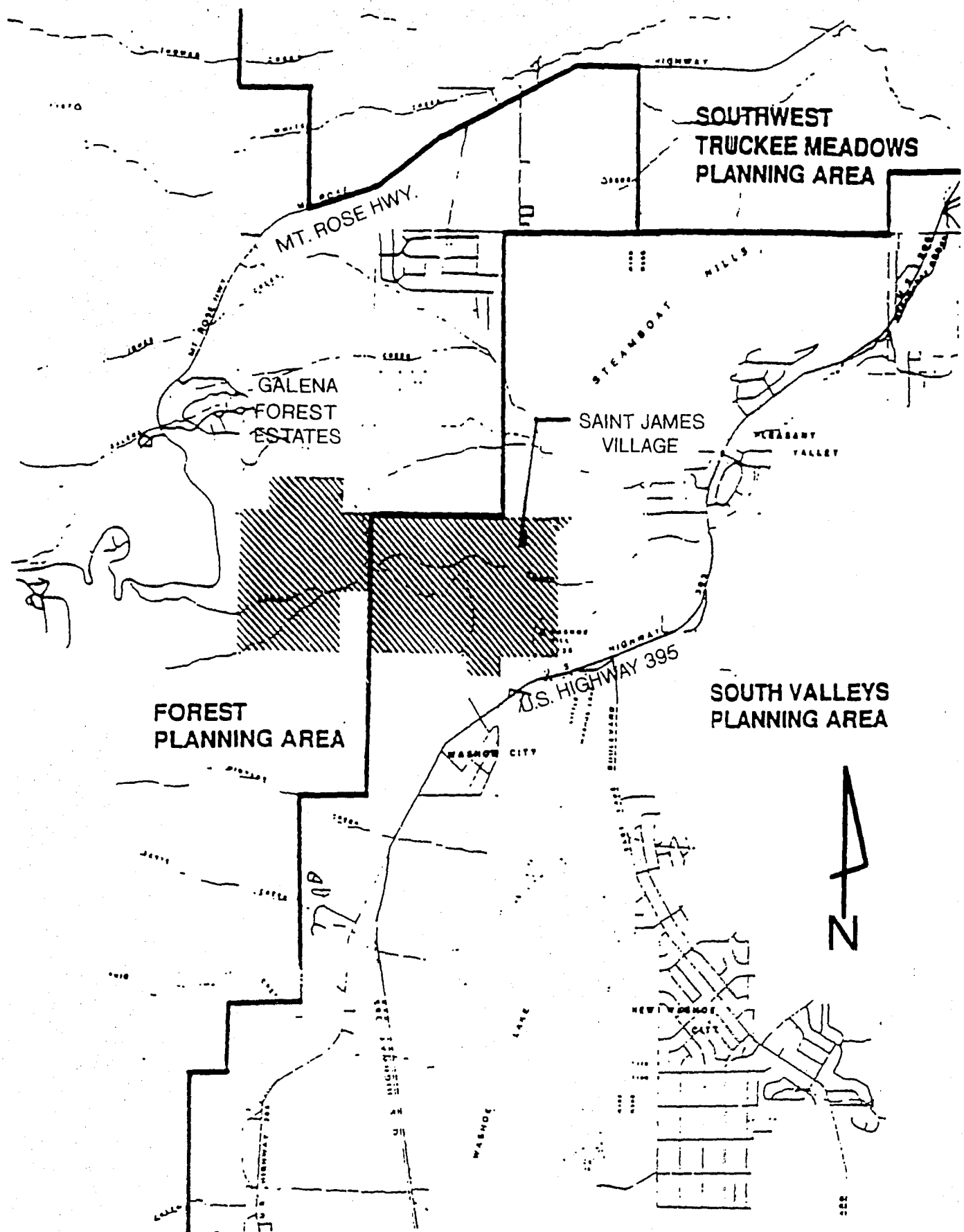
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95-737

REGIONAL VICINITY MAP

EXHIBIT A



LOCATION MAP

EXHIBIT B

AGREEMENT FOR ENGINEERING SERVICES

THIS AGREEMENT is between Washoe County (hereinafter referred to as Owner) and Consulting Engineering Services (CES), (hereinafter referred to as Engineer):

WITNESSETH:

WHEREAS OWNER desires engineering design services for the St. James Village Water System, including a new water storage tank, water transmission main, and up to three well pumping facilities, (hereinafter referred to as the Project); and

WHEREAS, Owner requires certain professional services in connection with the Project (hereinafter referred to as the Services); and,

WHEREAS, Engineer is prepared to provide such Services;

NOW THEREFORE, in consideration of the promises contained herein, the parties hereto agree as follows:

ARTICLE 1 - EFFECTIVE DATE

The effective date of this Agreement shall be August 8, 1995.

ARTICLE 2 - SERVICES TO BE PERFORMED BY ENGINEER

Engineer shall perform professional services as described in Exhibit A, Scope of Services, which is attached hereto and incorporated by reference as part of the Agreement.

ARTICLE 3 - COMPENSATION

3.1 Compensation for Services

For Services defined in Article 2, Engineer's compensation shall be determined on a time and material basis, in accordance with the fee schedule described in Exhibit B, and which is attached hereto and incorporated by reference as part of the Agreement. Total compensation shall not exceed FIFTY FOUR THOUSAND THREE HUNDRED DOLLARS (\$54,300.00). Attachment B will be utilized for a period of one (1) year after the effective date of this agreement, or the term of the contract, whichever is less. The fee schedule may be renegotiated at the end of the above period upon request by either the Owner or the Engineer. The actual costs charged for the work by Engineer in accordance with this provision shall be full compensation to Engineer for all services and duties required by Article 2, including , but not limited to: costs of supplies, facilities, and equipment; costs of labor and services of employees, engineers and consultants/subconsultants engaged by Engineer; travel expenses, telephone charges, typing, duplicating, costs of insurance, and all items of general overhead.

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3.2 Compensation for Additional Services

If Owner requests Engineer to perform services in addition to services agreed to be performed under Article 2, the cost of such additional services shall be determined prior to commencing additional work. All additional services and amount of payment must be authorized in writing by Owner's representative prior to commencing work.

3.3 Methods and Times of Payment

Engineer shall submit to Owner monthly progress invoices indicating the number of hours each employee provided services and other allowed direct expenses. Payment to Engineer for work on the Project shall be made within forty-five (45) days after receipt of Engineer's invoice. Payment by Owner of invoices or requests for payment shall not constitute acceptance by Owner of work performed on the Project by Engineer.

ARTICLE 4 - TIME SCHEDULE FOR COMPLETION

The work on the Project as described in Article 2 shall progress and be completed no later than December 31, 1995. Engineer shall be granted time extensions for items within the phases of the Project in writing by Owner if the time schedules cannot be met because of delays beyond Engineer's reasonable control, including, but not limited to, Owner's failure to furnish information, or to approve or disapprove Engineer's work promptly. Engineer will provide the Owner a monthly report including a schedule identifying progress or work completed, problems or difficulties being encountered, work to be initiated during the following month and other useful information. This report will be submitted on the first day of each month and will be in a format suitable for submittal to other interested agencies.

ARTICLE 5 - STANDARD OF CARE

Engineer shall exercise the same degree of care, skill, and diligence in the performance of the services as is ordinarily provided by a professional engineer under similar circumstances and Engineer shall, at no cost to Owner, re-perform services which fail to satisfy the foregoing standard of care. (This warranty is in lieu of all others, either expressed or implied; however, this in no way shall be construed to affect or impact the indemnification/hold harmless provisions attached hereto.) Said services may include, but not be limited to, correcting errors and omissions, or any other deficiencies in designs, drawings, specifications and reports. Review and approvals by the Owner do not relieve the Engineer of his responsibilities under this article.

ARTICLE 6 - LIMITATIONS OF RESPONSIBILITY

Engineer shall not generally be responsible for construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project. In addition, Engineer shall not be responsible for the failure of any contractor, subcontractor, vendor, or other project participant to fulfill contractual or other

responsibilities to the Owner or to comply with federal, state, or local laws, ordinances, regulations, rules, codes, orders, criteria, or standards. The Engineer shall notify the Owner of any apparent unsafe conditions, methods or procedures that the Engineer may observe at the construction site.

ARTICLE 7 - OPINIONS OF COST AND SCHEDULE

Since Engineer has no control over the cost of labor, materials, equipment or services furnished by others, or over contractors', subcontractors', or vendors' methods of determining prices, or over competitive bidding or market conditions, Engineer's cost estimates shall be made on the basis of qualification and experience as a professional engineer.

Since Engineer has no control over the resources provided by others to meet contract schedules, Engineer's forecast schedules shall be made on the basis of qualification and experience as a professional engineer. Engineer cannot and does not guarantee that proposals, bids or actual project costs will not vary from his cost estimates or that actual schedules will not vary from his forecast schedules.

ARTICLE 8 - INDEPENDENT CONTRACTOR

Engineer undertakes performance of the Services as an independent contractor and shall be wholly responsible for the methods of performance. Owner shall have no right to supervise the methods used by Engineer. Owner shall have the right to observe such performance. Engineer shall work closely with Owner in performing Services under this Agreement.

ARTICLE 9 - PERMITS AND LICENSES

Engineer shall procure the permits, certificates, and licenses necessary to allow Engineer to perform the Services. Engineer shall not be responsible for procuring permits, certificates, and licenses required for any construction unless such responsibilities are specifically assigned to Engineer in Attachment A, Scope of Services.

ARTICLE 10 - OWNER'S RESPONSIBILITY

Owner shall provide any information in its possession that is requested by Engineer and is necessary to complete the Project. Owner shall assist Engineer in obtaining access to public and private lands so the Engineer can perform the work under this Agreement. Owner shall examine all studies, reports, sketches, estimates, specifications, drawings, proposals, and other documents presented by the Engineer and shall render decisions pertaining thereto within a reasonable time so as not to delay the work of the Engineer.

ARTICLE 11 - REUSE OF DOCUMENTS

All documents, including drawings, specifications, and computer software, prepared

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by Engineer pursuant to this Agreement are instruments of service in respect to this Project. They are not intended or represented to be suitable for reuse by Owner or others on extensions of this Project or on any other project. Any reuse without written verification or adaptation by Engineer for the specific purpose intended will be at Owner's sole risk and without liability or legal exposure to Engineer; and Owner shall indemnify and hold harmless Engineer against all claims, damages, losses, and expenses including attorneys' fees arising out of or resulting from such reuse. Any such verification or adaptation will entitle Engineer to further compensation at rates to be agreed upon by Owner and Engineer.

ARTICLE 12 - TERMINATION OF CONTRACT

The obligation to continue Services under this Agreement may be terminated by either party upon seven days' written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party. If the Owner terminates the Engineer due to default, the Owner may reduce the amount owed the Engineer by the amount required to handle the default, including attorney fees.

Owner shall have the right to terminate this Agreement or suspend performance thereof for Owner's convenience upon written notice to Engineer, and Engineer shall terminate or suspend performance of services on a schedule acceptable to Owner. In the event of termination or suspension for Owner's convenience, Owner shall pay Engineer for all Services performed in accordance with the terms of this Agreement, and reasonable termination or suspension expenses, less any set-offs which Owner may have due to Engineer's negligence, nonperformance or breach of this Agreement. Upon restart of a suspended project equitable adjustment shall be made to Engineer's compensation.

ARTICLE 13 - NONDISCLOSURE OF PROPRIETARY INFORMATION

Engineer shall consider all information provided by Owner to be proprietary unless such information is available from public sources. Engineer shall not publish or disclose proprietary information for any purpose other than the performance of the Services without the prior written authorization of Owner or in response to legal process or as required by the regulations of public entities.

ARTICLE 14 - NOTICE

Any notice, demand, or request required by or made pursuant to this Agreement shall be deemed properly made if personally delivered in writing or deposited in the United States mail, postage prepaid, to the address specified below.

To Engineer: Thomas L. Kelly, P.E.
CES, Inc.
1105 Terminal Way
Reno, Nevada 89502

To Owner: John M. Collins, P.E.
 Washoe County Utility Division
 P.O. Box 11130
 Reno, Nevada 89520

Nothing contained in this Article shall be construed to restrict the transmission of routine communications between representatives of Engineer and Owner.

ARTICLE 15 - UNCONTROLLABLE FORCES

Neither Owner nor Engineer shall be considered to be in default of this Agreement if delays in or failure of performance shall be due to uncontrollable forces the effect of which, by the exercise of reasonable diligence, the non-performing party could not avoid and is not reasonably foreseeable at the time of entering into this Agreement. The term "uncontrollable forces" shall mean any event which results in the prevention or delay of performance by a party of its obligations under this Agreement and which is beyond the control of the non-performing party. It includes, but is not limited to, fire, flood, earthquakes, storms, lightning, epidemic, war, riot, civil disturbance, sabotage, inability to procure permits, licenses, or authorizations from any state, local, or federal agency or person for any of the supplies, materials, accesses, or services required to be provided by either Owner or Engineer under this Agreement, strikes, work slowdowns or other labor disturbances, and judicial restraint. Engineer shall be paid for services performed prior to the delay plus related costs incurred attributable to the delay.

Neither party shall, however, be excused from performance if nonperformance is due to uncontrollable forces which are removable or remediable and which the non-performing party could have, with reasonable dispatch removed or remedied. The provisions of this Article shall not be interpreted or construed to require Engineer or Owner to prevent, settle, or otherwise avoid a strike, work slowdown, or other labor action. The non-performing party shall upon being prevented or delayed from performance by an uncontrollable force, immediately give written notice to the other party describing the circumstances and uncontrollable forces preventing continued performance of the obligations of this Agreement.

ARTICLE 16 - GOVERNING LAW

This Agreement shall be governed by the laws of the State of Nevada.

ARTICLE 17 - MISCELLANEOUS

17.1 Nonwaiver

A waiver by either Owner or Engineer of any breach of this Agreement shall not be binding upon the waiving party unless such waiver is in writing. In the event of a written waiver, such a waiver shall not affect the waiving party's rights with respect to any other or further breach.

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17.2 Severability

The invalidity, illegality, or unenforceability of any provision of this Agreement, or the occurrence of any event rendering any portion or provision of this Agreement void, shall in no way affect the validity or enforceability of any other portion or provision of the Agreement. Any void provision shall be deemed severed from the Agreement and the balance of the Agreement shall be construed and enforced as if the Agreement did not contain the particular portion or provision held to be void. The parties further agree to reform the Agreement to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision.

ARTICLE 18 - INTEGRATION AND MODIFICATION

This Agreement represents the entire and integrated agreement between the Parties and supersedes all prior negotiations, representations, or agreements, either written or oral. This Agreement may be amended only by a written instrument signed by each of the Parties. Unless otherwise specified in writing, if there is any inconsistency between the terms of this Agreement and any other agreement between the parties, the terms of this Agreement shall control.

ARTICLE 19 - SUCCESSORS AND ASSIGNS

Owner and Engineer each binds itself and its directors, officers, partners, successors, executors, administrators, assigns and legal representatives to the other party to this Agreement and to the partners, successors, executors, administrators, assigns, and legal representatives of such other party, in respect to all covenants, agreements, and obligations of this Agreement.

ARTICLE 20 - ASSIGNMENT

Neither Owner nor Engineer shall assign, sublet, or transfer any rights under or interest in (including, but without limitation, monies that may become due or monies that are due) this Agreement without the written consent of the other, except to the extent that the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement. Nothing contained in this paragraph shall prevent Engineer from employing such independent consultants, associates, and subcontractors as he may deem appropriate to assist him in the performance of the Services hereunder.

ARTICLE 21 - THIRD PARTY RIGHTS

Nothing herein shall be construed to give any rights or benefits to anyone other than Owner and Engineer.

ARTICLE 22 - INDEMNIFICATION, INSURANCE, AND ARBITRATION

Washoe County has established specific indemnification and insurance requirements for agreements/contracts with consultants, engineers, and architects to help assure that reasonable insurance coverage is maintained. Indemnification and hold harmless clauses are intended to assure that consultants accept and are able to pay for the loss or liability related to their activities. Attachment C, Pages 1-8⁵, is included by reference. All conditions and requirements identified in this Attachment C shall be completed prior to the commencement of any work under this agreement.

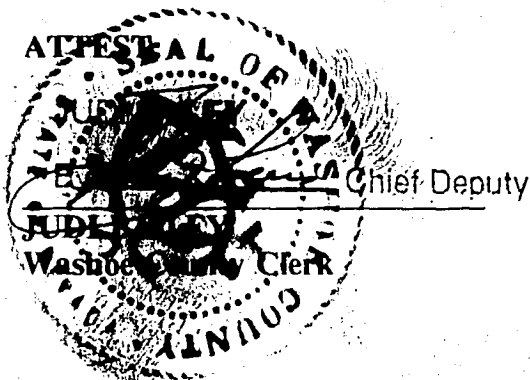
IN WITNESS WHEREOF, the parties have executed this Agreement.

WASHOE COUNTY

James M. Shaw
JAMES M. SHAW, CHAIRMAN
Board of County Commissioners
August 8, 1995

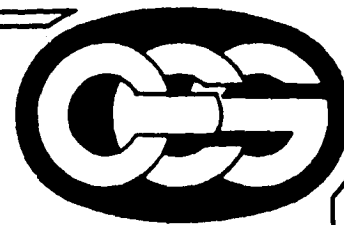
CONSULTING ENGINEERING SERVICES, INC.

Thomas L. Kelly
THOMAS L. KELLY, P.E.
Date: *8/14/95*



95-737

EXHIBIT "A" SCOPE OF WORK



July 25, 1995

Mr. Paul Orphan, P.E.
WASHOE COUNTY UTILITY DIVISION
P.O. Box 11130
Reno, Nevada 89502

94118.00

RE: St. James Village Water System - Proposal for Engineering Design Services

Dear Paul:

The following scope of work is modified from earlier scope of work for St. James Village to include only the Engineering Design portion of the work. The estimate of fees, as contained in Appendix B is based upon the following scope of work:

Design: Improvements to be designed by CES include a new water storage tank, water transmission main, and up to three well pumping facilities.

1. CES will design a new 1,000,000 gallon storage tank at the location identified on the attached map. The design will include:
 - ▶ Geotechnical investigation and report. The Geotech investigation shall include a drilled hole to a depth of 25 ft. at the tank site and test pits at each well site.
 - ▶ Access road alignment and design from the north end of the proposed Benington Court to the water tank site
 - ▶ Radio telemetry and water level controls
 - ▶ Preparation of plans and specifications for the construction of the tank and appurtenances
 - ▶ Field surveying for supplemental topography will be performed and adequate monumentation will be provided for future staking by the construction contractor
 - ▶ A landscaping design will be provided for the tank site.
2. CES will design the following water transmission pipe lines:
 - ▶ Approximately 4,600 feet of pipe on Joy Lake Road from St James Parkway to Benington Court and on Benington Court from Joy Lake Road to the water tank.

CONSULTING ENGINEERING SERVICES, INC.

1105 Terminal Way, Suite 304

Reno, Nevada 89502

Ph. (702) 786-5873 • Fax (702) 786-6138

95-737

Mr. Paul Orphan, P.E.
WASHOE COUNTY UTILITY DIVISION
July 25, 1995
Page 2 of 6

- ▶ Approximately 3,300 feet of pipe along the north section line for sections 15 and 14 from Joy Lake Road to one well located near the northeast corner of section 15 and to another well located 2,800 to 3,000 feet east of the first well.

Surveying, existing topo data, street location and street finished grade elevations are to be provided by the developer's engineer. We will need this information within 2 weeks of our receipt of the Notice to Proceed.

3. CES will design the pumping facilities for equipping each of three wells, including:

- ▶ Plans and specifications including pump house structural details, electrical details, and mechanical design of the mechanical piping systems. The pump houses will be located adjacent to the wells which will be equipped with submersible pumps and pitless units.
- ▶ Landscape designs will be provided for each well facility.

Well design and construction will be performed and administered by Washoe County Utility Division. The pumping facilities shall be the standard design used by the Utility Division with the well outside the building and the masonry building containing the electrical equipment, discharge meter, pump to waste line with pressure relief valve, and a separate room containing a hypochlorination system.

Based upon the presented scope of work and the listed assumptions, we have estimated our fee for the design portion of this work to be \$54,300 as follows detailed in Exhibit A.

Please review this scope of services and let me know if you have any questions.

Sincerely,

CONSULTING ENGINEERING SERVICES, INC.

Thomas L. Kelly
THOMAS L. KELLY, P.E.

enc.

EXHIBIT "A" SCOPE OF WORK



95-737

EXHIBIT "B"
FEE ESTIMATE FOR
MT ROSE SERVICE AREA
WATER SYSTEM DESIGN FOR ST JAMES

Supplemental Topo Surveys (Tank & Pump Houses)

Principal Engineer	1 hrs. @	\$100 /hr. =	\$100
Senior Engineer	1 hrs. @	\$97 /hr. =	\$97
Survey Crew	32 hrs. @	\$100 /hr. =	\$3,200
PLS	4 hrs. @	\$70 /hr. =	\$280
Computer Tech	4 hrs. @	\$55 /hr. =	\$220
Computer	4 hrs. @	\$10 /hr. =	\$40
			<u>\$3,937</u>

Preparation of Plans

Principal Engineer	1 hrs. @	\$100 /hr. =	\$100
Senior Engineer	4 hrs. @	\$97 /hr. =	\$388
Project Engineer	8 hrs. @	\$77 /hr. =	\$616
Computer Tech	10 hrs. @	\$55 /hr. =	\$550
Computer	10 hrs. @	\$10 /hr. =	\$100
Clerical	1 hrs. @	\$40 /hr. =	\$40

Per Sheet Amount: \$1,794

15 Shts @ \$1,794 /Sht = \$26,910

Preparation of Contract Documents

Principal Engineer	1 hrs. @	\$100 /hr. =	\$100
Senior Engineer	16 hrs. @	\$97 /hr. =	\$1,552
Project Engineer	32 hrs. @	\$77 /hr. =	\$2,464
Clerical	6 hrs. @	\$40 /hr. =	\$240
			<u>\$4,356</u>

Coordination and Reviews

Principal Engineer	1 hrs. @	\$100 /hr. =	\$100
Senior Engineer	8 hrs. @	\$97 /hr. =	\$776
Project Engineer	16 hrs. @	\$77 /hr. =	\$1,232
Clerical	4 hrs. @	\$40 /hr. =	\$160
			<u>\$2,268</u>

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Subconsultants

Electrical	\$4,800
Structural (Buildings)	\$2,200
Landscape Arch	\$3,000
Geotech	\$6,820
	<hr/>
	\$16,820

Design Total	\$54,291
USE:	\$54,300

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ATTACHMENT C**INSURANCE/HOLD HARMLESS REQUIREMENTS FOR
ST. JAMES VILLAGE WATER SYSTEM AGREEMENT**

IF A CONSULTANT AGREES TO RESPOND TO THE "REQUEST FOR QUALIFICATIONS/PROPOSALS", HE MUST BE WILLING TO COMPLY WITH THE INSURANCE REQUIREMENTS LISTED BELOW AND HAVE THEM INCLUDED IN ANY NEGOTIATED AGREEMENT. IT IS HIGHLY RECOMMENDED THAT CONSULTANTS CONFER WITH THEIR INSURANCE CARRIERS OR BROKERS TO DETERMINE IN ADVANCE OF PROPOSAL SUBMISSION THE AVAILABILITY OF INSURANCE CERTIFICATES AND ENDORSEMENTS AS PRESCRIBED AND PROVIDED HEREIN. IF THERE ARE ANY QUESTIONS REGARDING THESE INSURANCE REQUIREMENTS, IT IS RECOMMENDED THAT THE AGENT/BROKER CONTACT THE COUNTY RISK MANAGER DIRECTLY AT (702) 328-2071.

INDEMNIFICATIONProfessional Liability

As respects acts, errors or omissions in the performance of professional services, ENGINEER agrees to indemnify and hold harmless OWNER, its officers, agents, employees, and volunteers from and against any and all claims, demands, defense costs, liability or consequential damages of any kind or nature arising directly out of ENGINEER'S negligent acts, errors or omissions in the performance of its professional services under the terms of this agreement.

ENGINEER further agrees to defend OWNER and assume all costs, expenses and liabilities of any nature to which OWNER may be subjected as a result of any claim, demand, action or cause of action arising out of the negligent acts, errors or omissions of the ENGINEER or its Sub-consultant in the performance of their professional services under the Agreement.

GENERAL LIABILITY

As respects all acts or omissions which do not arise directly out of the performance of professional services, including but not limited to those acts or omissions normally covered by general and automobile liability insurance, ENGINEER agrees to indemnify, defend (at OWNER'S option), and hold harmless OWNER, its officers, agents, employees, and volunteers from and against any and all claims, demands, defense costs, liability, or consequential damages of any kind or nature arising out of or in connection with ENGINEER'S (or Sub-consultant, if any) performance of failure to perform, under the terms of this agreement; excepting those which arise out of the negligence of OWNER.

ENGINEER must either defend OWNER or upon determination that the work performed by ENGINEER was in any manner negligent or that ENGINEER failed to perform any duty set forth in this Agreement pay OWNER'S cost of defense for any claim, demand, action or cause of action.

If OWNER'S personnel (attorneys, engineers or other professionals) are involved in defending such legal actions, ENGINEER shall also reimburse OWNER for the time spent by such personnel at the rate charged for such services by private professionals.

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In determining the nature of the claim against the OWNER, the incident underlying the claim shall determine the nature of the claim, notwithstanding the form of the allegations against the OWNER.

GENERAL REQUIREMENTS

The OWNER requires that ENGINEER purchase Industrial Insurance, General and Auto Liability, and ENGINEER'S Errors and Omissions Liability Insurance as described below against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the ENGINEER, its agents, representatives, employees or Sub-consultants. The cost of all such insurance shall be borne by the ENGINEER.

INDUSTRIAL INSURANCE

It is understood and agreed that there shall be no Industrial Insurance coverage provided for ENGINEER or any Sub-consultant by the OWNER, and in view of NRS 616.280 and 617.210 requiring that ENGINEER comply with the provisions of Chapters 616 and 617 of NRS, ENGINEER shall, before commencing work under the provisions of this Agreement, furnish to the OWNER a certificate of insurance from the State Industrial Insurance System certifying that the ENGINEER and each Sub-consultant has complied with the provisions of the Nevada Industrial Insurance Act, by providing coverage for each and every employee, Sub-consultants, and independent consultants.

Upon completion of the project, the ENGINEER shall provide the OWNER with a Final Certificate for itself and each Sub-consultant which is prepared by the State of Nevada Industrial Insurance System. If the ENGINEER or Sub-consultant is unlicensed and is a sole proprietor, coverage for the sole proprietor must be purchased and evidence of coverage must appear on the Certificate of Insurance and Final Certificate.

Should ENGINEER be self-funded for Industrial insurance, ENGINEER shall so notify the OWNER in writing prior to the signing of any agreement. OWNER reserves the right to approve said retentions and may request additional documentation, financial or otherwise for review prior to the signing of any agreement.

MINIMUM SCOPE OF LIABILITY INSURANCE

Coverage shall be at least as broad as: *

1. Insurance Services Office Commercial General Liability Coverage "occurrence" form CG0001 11/88 or Insurance Service Office Comprehensive General Liability form GL0002 Ed 01/73 with the Broad Form Comprehensive General Liability Endorsement GL0404.
2. Insurance Services Office Business Auto Coverage form number CA00 01 12/90 covering Automobile Liability code 1 any "auto" with changes in Business Auto and Trucker's Coverage forms - Insured Contract Endorsement form number CA00 29 12/88.

* Coverages may be excluded only with prior approval of the COUNTY'S Risk Manager.

3. Professional Errors and Omissions Liability applying to all activities performed under this Agreement in a form acceptable to the OWNER. ENGINEER will maintain professional liability insurance during the term of this Agreement and for a period of three (3) years from the date of substantial completion of the project if available and affordable. The unavailability and/or unaffordability of coverage must be demonstrated by ENGINEER to the OWNER. In the event that ENGINEER goes out of business during the term of this Agreement or the three (3) year period described above, ENGINEER shall purchase at the request and

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expense of the OWNER, if available, Extended Reporting Coverage for claims arising out of ENGINEER'S negligent acts, errors and omissions committed during the term of the Professional Liability Policy.

MINIMUM LIMITS OF INSURANCE

ENGINEER shall maintain limits no less than:

1. General Liability: \$500,000 combined single limit per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, the general aggregate limit shall be increased to equal twice the required occurrence limit or revised to apply separately to this project or location.
2. Automobile Liability: \$500,000 combined single limit per accident for bodily injury and property damage. No aggregate limit may apply.
3. Professional Errors and Omissions Liability: \$1,000,000 per occurrence and as an annual aggregate. Premium costs incurred to increase ENGINEER'S insurance levels to meet minimum contract limits shall be borne by the ENGINEER at no cost to the OWNER.

Should OWNER and ENGINEER agree that higher limits are needed warranting a project policy, project coverage shall be purchased and the difference in cost shall be borne by the OWNER. OWNER retains the option to purchase project insurance through the ENGINEER'S insurer or its own source.

DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions must be declared to and approved by the COUNTY Risk Management Division prior to the start of work under this Agreement. The OWNER reserves the right to request additional documentation, financial or otherwise prior to giving its approval of the deductibles and self-insured retention and prior to executing the underlying agreement. Any changes to the deductibles or self-insured retentions made during the term of this Agreement or during the term of any policy must be approved by the COUNTY Risk Manager prior to the change taking effect.

OTHER INSURANCE PROVISIONS

The policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability Coverages
 - a. The OWNER, its officers, agents, employees and volunteers are to be covered as insureds as respects: liability arising out of activities performed by or on behalf of the ENGINEER, including the insured's general supervision of the ENGINEER; products and completed operations of the ENGINEER; or premises owned, occupied or used by the ENGINEER. The coverage shall contain no special limitations on the scope of protection afforded to the OWNER, its officers, agents, employees or volunteers.
 - b. The ENGINEER'S insurance coverage shall be primary insurance as respects the OWNER, its officers, agents, employees and volunteers. Any insurance or self-insurance maintained by the OWNER, its officers, agents, employees or volunteers shall be excess of the ENGINEER'S insurance and shall not contribute with it in any way.

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- c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the OWNER, its officers, agents, employees or volunteers.
- d. The ENGINEER'S insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- e. The ENGINEER'S insurance coverage shall be endorsed to state that coverage shall not be suspended, voided, canceled or non-renewed by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the OWNER except for nonpayment of premium.

ACCEPTABILITY OF INSURERS

Insurance is to be placed with insurers with a Best's rating of no less than A-: VII. The OWNER with the approval of the County Risk Manager may accept coverage with carriers having lower Best's ratings upon review of financial information concerning ENGINEER and insurance carrier. The OWNER reserves the right to require that the ENGINEER'S insurer be a licensed and admitted insurer in the State of Nevada, or on the Insurance Commissioner's approved but not admitted list.

VERIFICATION OF COVERAGE

ENGINEER shall furnish the OWNER with certificates of insurance and with original endorsements affecting coverage required by this exhibit. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates are to be on forms approved by the OWNER. All certificates and endorsements are to be addressed to the contracting department and be received and approved by the OWNER before work commences. The OWNER reserves the right to require complete, certified copies of all required insurance policies, at any time.

SUB-CONSULTANTS

ENGINEER shall include all Sub-consultants as insureds under its policies or shall furnish separate certificates and endorsements for each Sub-consultant. All coverages for Sub-consultants shall be subject to all of the requirements stated herein.

MISCELLANEOUS CONDITIONS

1. ENGINEER shall be responsible for and remedy all damage or loss to any property, including property of OWNER, caused in whole or in part by ENGINEER, any Sub-consultant, or anyone employed, directed or supervised by ENGINEER.
2. Nothing herein contained shall be construed as limiting in any way the extent to which ENGINEER may be held responsible for payment of damages to persons or property resulting from its operations or the operations of any Sub-consultants under it.

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3. In addition to any other remedies OWNER may have if ENGINEER fails to provide or maintain any insurance policies or policy endorsements to the extent and within the time herein required, OWNER may, at its sole option:
- a. Order ENGINEER to stop work under this Agreement and/or withhold any payments which become due ENGINEER hereunder until ENGINEER demonstrates compliance with the requirements hereof;
 - b. Purchase such insurance to cover any risk for which the OWNER may be liable through the operations of ENGINEER under this Agreement if ENGINEER is unable to comply with the insurance requirements, and deduct or retain the amount of the premiums for such insurance from any sums due under the Agreement;
 - c. Terminate the Agreement.

ARBITRATION

Any litigation arising out of this Agreement shall be governed by the Nevada Rules of Arbitration as delineated in part V(A) of the Nevada Supreme Court Rules. Both OWNER and ENGINEER retain the right to bring the other in as a party to any arbitration or litigation arising out of the work performed under this Agreement.

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WATER RIGHT DEDICATION CERTIFICATE

The water and sewer resource requirements set forth in Article 422 of the Washoe County Development Code related to the dedication of Water Resources have been satisfied.

Eden Sweet 7/15/97
WASHOE COUNTY UTILITY DIVISION DATE

COMMUNITY DEVELOPMENT CERTIFICATE

This final map is in substantial compliance with the tentative map and all conditions of approval have been met. Therefore, this parcel is approved and accepted this 12th day of August, 1997.

John B. Hester
John B. Hester, Director of Community Development

TAXATION CERTIFICATE

The undersigned certifies that all property taxes for the fiscal year have been paid.

BY: Grace C. Caudill 7-28-97
DEPUTY DATE

BASIS OF BEARINGS

BEARINGS WERE BASED ON THE NORTHEASTERLY LINE OF PARCEL B AS SHOWN ON RECORD OF SURVEY MAP NO. 1269, WASHOE COUNTY NEVADA. (N 51° 47' 05" W)

SURVEYOR'S CERTIFICATE

I HARLAN K. KING A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF NEVADA CERTIFY THAT:

- THIS PLAT REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER MY DIRECT SUPERVISION AT THE INSTANCE OF ST. JAMES'S VILLAGE, INC.
- THE LANDS SURVEYED LIE WITHIN THE NW 1/4 SEC. 14, T. 17N., R. 19E., M.D.B. & M. AND THE SURVEY WAS COMPLETED ON NOVEMBER 6, 1996.
- THIS PLAT COMPLIES WITH THE APPLICABLE STATE STATUTES AND ANY LOCAL ORDINANCES IN EFFECT ON THE DATE THAT THE GOVERNING BODY GAVE ITS FINAL APPROVAL.
- THE MONUMENTS DEPICTED ON THE PLAT ARE OF THE CHARACTER SHOWN, OCCUPY THE POSITIONS INDICATED, AND ARE OF SUFFICIENT NUMBER AND DURABILITY.

Harlan K. King PLS 5665

OWNER'S CERTIFICATE

This is to certify that the undersigned, ST. JAMES'S VILLAGE, INC., a Nevada Corporation is the owner of the tract of land represented on this plat and have consented to the preparation and recordation of this plat and that the same is executed in compliance with and subject to the provisions of NRS Chapter 278.

The access, utility and drainage easements as shown hereon are hereby granted

ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION

BY: Mehdi Mostaedi
M. MEHDI MOSTAEDI, PRESIDENT

STATE OF NEVADA
COUNTY OF WASHOE

On this 2 day of May, 1997 personally appeared before me, a Notary Public in the County of Washoe, M. MEHDI MOSTAEDI, President of ST. JAMES'S VILLAGE, INC. A NEVADA CORPORATION, who acknowledged to me that he executed the above instrument. In witness whereof, I hereunto set my hand and affix my official seal the date and year first above written.

Tracy Harris
Notary Public

UTILITY COMPANIES CERTIFICATE

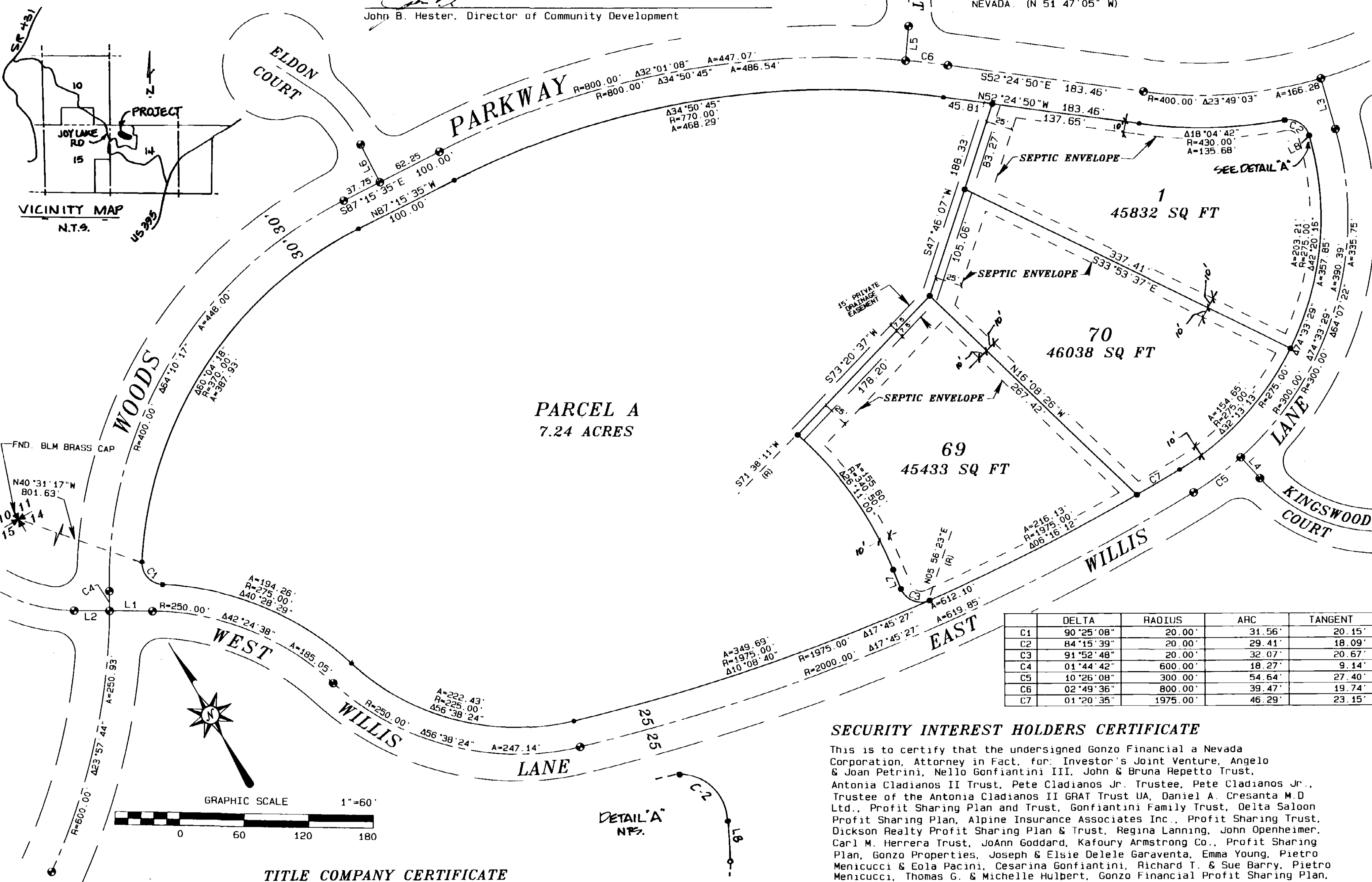
The utility easements shown on this plat have been checked and approved by the undersigned public utility and CATV companies.

James Cain 5-2-97
Sierra Pacific Power Company Date
Dr. Conner 4/29/97
Nevada Bell Date
Eden Sweet 7/15/97
Washoe County Utility Division Date
Dominic Wolf 5-2-97
TCI of Nevada, Inc. Date

NOTES:

- Parcels are subject to "Mutual Grant of Easement" for water well and pipeline purposes. See deed recorded in book 1384 page 791, document no. 603516.
- A utility easement is also hereby granted within each parcel for the exclusive purpose of installing and maintaining utility service facilities to that parcel at locations mutually agreed upon by the owner of record at the time of installation and the utility company.
- Utility easements within all lots shall be as follows:
(a) 7.5' along all road rights-of-way.
(b) 5.0' along all side and rear lot lines.
- Utility easements shall include Cable Television and also serve as private drainage easements.
- No owner or tenant shall obstruct natural drainages within the tract.
- Sanitary sewer service shall be by community sewer or individual septic systems, to the satisfaction of the District Health Dept.
- Lots 1, 69, and 70 as created on this Parcel Map shall be "Project Lots" as defined in the First Amended and Restated Declarations of Covenants, Conditions, and Restrictions of St. James's Village also known as The Woods filed in the office of the Washoe County Recorder on October 14, 1996, as Document No. 2038576; and are subject to all requirements therein.

TOTAL AREA SURVEYED = 10.40 ACRES +/-



SECURITY INTEREST HOLDERS CERTIFICATE

This is to certify that the undersigned Gonzo Financial a Nevada Corporation, Attorney in Fact, for Investor's Joint Venture, Angelo & Joan Petrini, Nello Gofiantini III, John & Bruna Hepetto Trust, Antonia Cladianos II Trust, Pete Cladianos Jr., Trustee, Pete Cladianos Jr., Trustee of the Antonia Cladianos II GRAT Trust UA, Daniel A. Cresanta M.D. Ltd., Profit Sharing Plan and Trust, Gofiantini Family Trust, Delta Saloon Profit Sharing Plan, Alpine Insurance Associates Inc., Profit Sharing Trust, Dickson Realty Profit Sharing Plan & Trust, Regina Lanning, John Openheimer, Carl M. Herrera Trust, JoAnn Goddard, Kafoury Armstrong Co., Profit Sharing Plan, Gonzo Properties, Joseph & Elsie Delele Garaventa, Emma Young, Pietro Menicucci & Eola Pacini, Cesarina Gofiantini, Richard T. & Sue Barry, Pietro Menicucci, Thomas G. & Michelle Hulbert, Gonzo Financial Profit Sharing Plan, Pete Cladianos III Trust, Pete Cladianos III GRAT Trust, Leslie Cladianos Trust, Leslie Cladianos GRAT Trust, Harold Wright, Deborah LeGarza, Thomas O'Gara & Julie O'Gara, Delores Larragueta, P. Nadene Lackey, Harold E. & Julia G. Glandville Revocable LIVING Trust, and Pete Cladianos Jr., Living Trust Althea Pappas, Dr. Carl M. Herrera Trust, Robert C. Herrera & Clarise E. Herrera Family Trust, Thomas or Marcelle Herrera, Raymond L. Ferrari, and Ruth Brown hereby consents to the preparation of this map.

GONZO FINANCIAL, A NEVADA CORPORATION

Grace C. Caudill 4-28-97
Grace C. Caudill, Corporate Secretary Date

STATE OF NEVADA
COUNTY OF WASHOE

On this 28 day of April, 1997 personally appeared before me, a Notary Public in the County of Washoe, Grace C. Caudill, Corporate Secretary of Gonzo Financial, a Nevada Corporation, who acknowledged to me that she executed the above instrument. In witness whereof, I hereunto set my hand and affix my official seal the date and year first above written.

Tracy Harris
Notary Public

SHEET 1 OF 1

TITLE COMPANY CERTIFICATE

The undersigned hereby certifies that this map has been examined and that ST. James's Village, Inc. a Nevada Corporation owns of record an interest in the lands delineated hereon and that it is the only owner of said land; that all owner's of record of the land have signed the final map; that Investors's Joint Venture, Angelo & Joan Petrini, Nello Gofiantini III, John & Bruna Hepetto Trust, Antonia Cladianos II Trust, Pete Cladianos Jr., Trustee, Pete Cladianos Jr., Trustee of the Antonia Cladianos II GRAT Trust UA, Daniel A. Cresanta M.D. Ltd., Profit Sharing Plan and Trust, Gofiantini Family Trust, Delta Saloon Profit Sharing Plan, Alpine Insurance Associates Inc., Profit Sharing Trust, Dickson Realty Profit Sharing Plan & Trust, Regina Lanning, John Openheimer, Carl M. Herrera Trust, JoAnn Goddard, Kafoury Armstrong Co., Profit Sharing Plan, Gonzo Properties, Joseph & Elsie Delele Garaventa, Emma Young, Pietro Menicucci & Eola Pacini, Cesarina Gofiantini, Richard T. & Sue Barry, Pietro Menicucci, Thomas G. & Michelle Hulbert, Gonzo Financial Profit Sharing Plan, Pete Cladianos III Trust, Pete Cladianos III GRAT Trust, Leslie Cladianos Trust, Leslie Cladianos GRAT Trust, Harold Wright, Deborah LeGarza, Thomas O'Gara & Julie O'Gara, Delores Larragueta, P. Nadene Lackey, Harold E. & Julia G. Glandville Revocable LIVING Trust, and Pete Cladianos Jr., Living Trust Althea Pappas, Dr. Carl M. Herrera Trust, Robert C. Herrera & Clarise E. Herrera Family Trust, Thomas or Marcelle Herrera, Raymond L. Ferrari, and Ruth Brown hold of record a security interest in said land and that there are no liens of record against the common interest community for delinquent state, county, municipal, federal or local taxes or assessments collected as taxes or special assessments.

STEWART TITLE OF NORTHERN NEVADA

JoAnne Brown 5-6-97
BY/TITLE Vice President Date

	DISTANCE	BEARING
L1	39.87'	N59°41'10"W
L2	32.83'	N59°41'10"W
L3	48.86'	S13°46'07"W
L4	26.68'	N12°06'31"W
L5	32.61'	N34°46'34"E
L6	39.27'	S02°44'25"W
L7	19.20'	S07°49'11"W
L8	1.12'	S13°46'07"W

LEGEND

- FOUND BRASS DISK IN MONUMENT WELL P.L.S. 5097
- SET 5/8 REBAR & CAP PLS 5665
- (R) RADIAL BEARING
- * CALCULATED POSITION (NOTHING SET)

2126068

CUMULATIVE INDEXES SHOULD BE EXAMINED FOR ANY SUBSEQUENT CHANGES TO THIS MAP

FILE NO. **2126068**
FILED FOR RECORD AT THE REQUEST OF HARLAN KING & ASSOC. ON THIS 15 DAY OF August 1997, AT 9:41 AM.
PAST 2:00 CLOCK, P.M.
OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA
JOE Melcher
COUNTY RECORDER
BY: C. Bartley
DEPUTY
FEE \$7.00

PARCEL MAP
FOR
ST. JAMES'S VILLAGE, INC.
A DIVISION OF A PORTION OF TRACT MAP 3155
LOCATED IN A PORTION OF THE NW1/4 OF SECTION 14
T.17N., R.19E., M.D.B. & M.
WASHOE COUNTY, NEVADA
HK HARLAN KING & ASSOCIATES
LAND SURVEYING & WATER RIGHTS
6147 LAKESIDE DRIVE, SUITE 104 * RENO, NV. 89509 (702) 829-0919

Parcel Map 3243

3243
CUMULATIVE INDEXES SHOULD BE EXAMINED FOR ANY SUBSEQUENT CHANGES TO THIS MAP

WATER RIGHT DEDICATION CERTIFICATE

The water and sewer resource requirements set forth in Article 422 of the Washoe County Development Code related to the dedication of Water Resources have been satisfied.

E. L. Smith 7/15/97
WASHOE COUNTY UTILITY DIVISION DATE

COMMUNITY DEVELOPMENT CERTIFICATE

This final map is in substantial compliance with the tentative map and all conditions of approval have been met. Therefore, this parcel is approved and accepted this 12th day of August, 1997.

John B. Hester
John B. Hester, Director of Community Development

TAXATION CERTIFICATE

The undersigned certifies that all property taxes for the fiscal year have been paid.

By: *Deputy* 7-24-97
DATE

BASIS OF BEARINGS

BEARINGS WERE BASED ON THE NORTHEASTERLY LINE OF PARCEL B AS SHOWN ON RECORD OF SURVEY MAP NO. 1269, WASHOE COUNTY NEVADA. (N 51° 47' 05" W)

SURVEYOR'S CERTIFICATE

I HARLAN K. KING A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF NEVADA CERTIFY THAT:

- THIS PLAT REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER MY DIRECT SUPERVISION AT THE INSTANCE OF ST. JAMES'S VILLAGE, INC.
- THE LANDS SURVEYED LIE WITHIN THE NW 1/4 SEC. 14, T. 17N., R. 19E., M.D.B. & M. AND THE SURVEY WAS COMPLETED ON NOVEMBER 6, 1996.
- THIS PLAT COMPLIES WITH THE APPLICABLE STATE STATUTES AND ANY LOCAL ORDINANCES IN EFFECT ON THE DATE THAT THE GOVERNING BODY GAVE ITS FINAL APPROVAL.
- THE MONUMENTS DEPICTED ON THE PLAT ARE OF THE CHARACTER SHOWN, OCCUPY THE POSITIONS INDICATED, AND ARE OF SUFFICIENT NUMBER AND DURABILITY.

HARLAN K. KING PLS 5665

OWNER'S CERTIFICATE

This is to certify that the undersigned, ST. JAMES'S VILLAGE, INC., a Nevada Corporation is the owner of the tract of land represented on this plat and have consented to the preparation and recordation of this plat and that the same is executed in compliance with and subject to the provisions of NRS Chapter 278.

The access, utility and drainage easements as shown hereon are hereby granted.

ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION

By: *M. Mehdi Mostafaei*
M. MEHDI MOSTAFAEI, PRESIDENT

STATE OF NEVADA S.S.
COUNTY OF WASHOE

On this 2nd day of May, 1997 personally appeared before me, a Notary Public in the County of Washoe, M. MEHDI MOSTAFAEI, President of ST. JAMES'S VILLAGE, INC., a NEVADA CORPORATION, who acknowledged to me that he executed the above instrument. In witness whereof, I hereunto set my hand and affix my official seal the date and year first above written.

Tracy Harris
Notary Public

UTILITY COMPANIES CERTIFICATE

The utility easements shown on this plat have been checked and approved by the undersigned public utility and CATV companies.

James Cain 5-2-97
Sierra Pacific Power Company Date

D. G. Conner 4/24/97
Nevada Bell Date

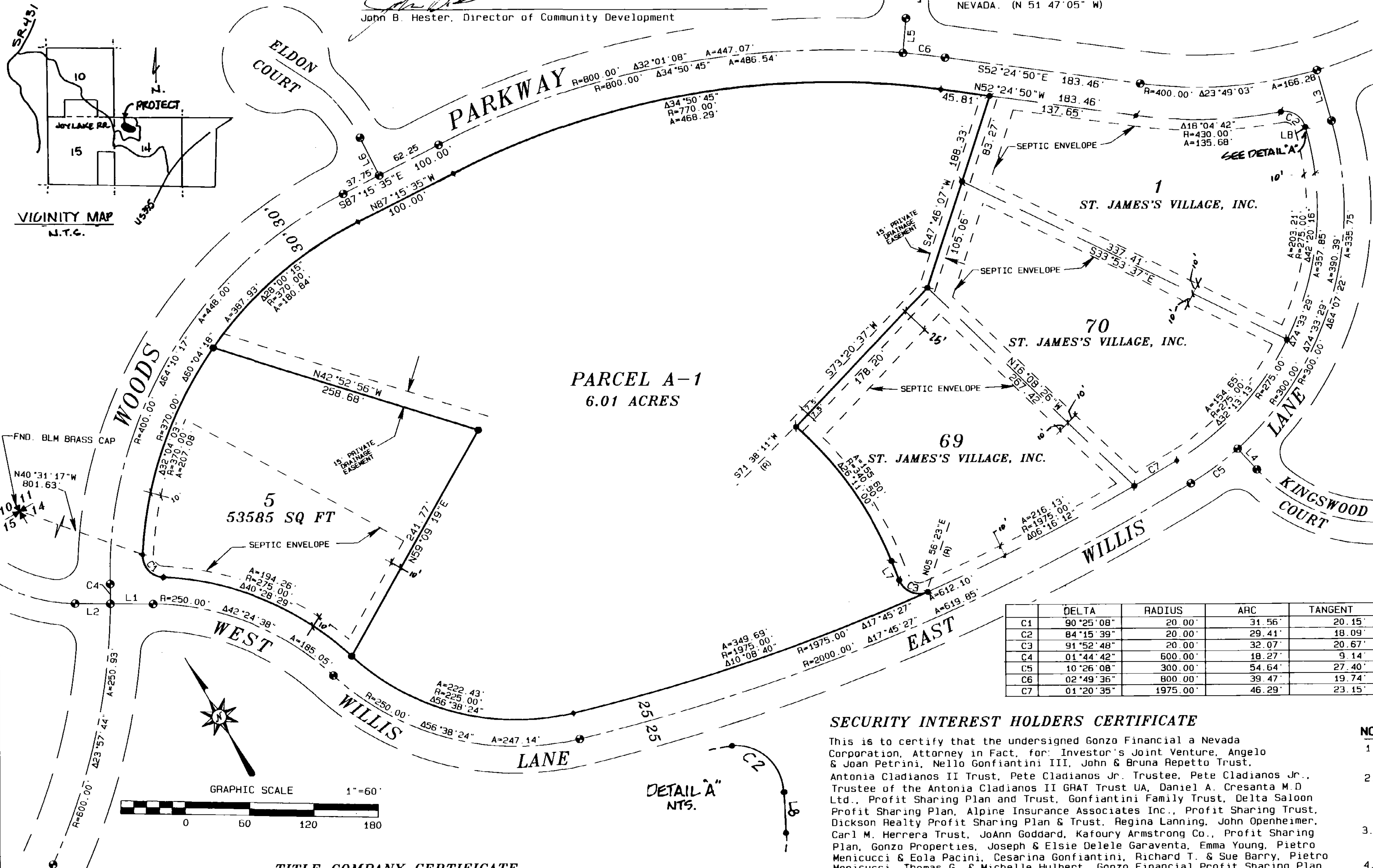
E. L. Smith 7/15/97
Washoe County Utility Division Date

D. G. Conner 5-2-97
Tel of Nevada, Inc. Date

NOTES:

- Parcels are subject to "Mutual Grant of Easement" for water well and pipeline purposes. See deed recorded in book 1384 page 791, document no. 603516.
- A utility easement is also hereby granted within each parcel for the exclusive purpose of installing and maintaining utility service facilities to that parcel at locations mutually agreed upon by the owner of record at the time of installation and the utility company.
- Utility easements within all lots shall be as follows:
(a) 7.5' along all road rights-of-way.
(b) 5.0' along all side and rear lot lines.
- Utility easements shall include Cable Television and also serve as private drainage easements.
- No owner or tenant shall obstruct natural drainages within the tract.
- Sanitary sewer service shall be by community sewer or individual septic systems, to the satisfaction of the District Health Dept.
- Lots 1, 69, and 70 as created on this Parcel Map shall be "Project Lots" as defined in the First Amended and Restated Declarations of Covenants, Conditions, and Restrictions of St. James's Village also known as The Woods filed in the office of the Washoe County Recorder on October 14, 1996, as Document No. 2038576, and are subject to all requirements therein.

TOTAL AREA SURVEYED = 7.24 ACRES +/-



	DELTA	RADIUS	ARC	TANGENT
C1	30°25'08"	20.00'	31.56'	20.15'
C2	84°15'39"	20.00'	29.41'	18.09'
C3	91°52'48"	20.00'	32.07'	20.67'
C4	01°44'42"	600.00'	18.27'	9.14'
C5	10°26'08"	300.00'	54.64'	27.40'
C6	02°49'36"	800.00'	39.47'	19.74'
C7	01°20'35"	1975.00'	46.29'	23.15'

SECURITY INTEREST HOLDERS CERTIFICATE

This is to certify that the undersigned Gonzo Financial a Nevada Corporation, Attorney in Fact, for: Investor's Joint Venture, Angelo & Joan Petrini, Nello Gonfiantini III, John & Bruna Repetto Trust, Antonia Cladianos II Trust, Pete Cladianos Jr. Trustee, Pete Cladianos Jr., Trustee of the Antonia Cladianos II GRAT Trust UA, Daniel A. Cresanta M.D. Ltd., Profit Sharing Plan and Trust, Gonfiantini Family Trust, Delta Saloon Profit Sharing Plan, Alpine Insurance Associates Inc., Profit Sharing Trust, Dickson Realty Profit Sharing Plan & Trust, Regina Lanning, John Openheimer, Carl M. Herrera Trust, JoAnn Goddard, Kafoury Armstrong Co., Profit Sharing Plan, Gonzo Properties, Joseph & Elsie Delele Garaventa, Emma Young, Pietro Menicucci & Eola Pacini, Cesarina Gonfiantini, Richard T. & Sue Barry, Pietro Menicucci, Thomas G. & Michelle Hulbert, Gonzo Financial Profit Sharing Plan, Pete Cladianos III Trust, Pete Cladianos III GRAT Trust, Leslie Cladianos Trust, Leslie Cladianos GRAT Trust, Harold Wright, Deborah LeGarza, Thomas O'Gara & Julie O'Gara, Delores Larragueta, P. Nadene Lackey, Harold E. & Julia G. Glandville Revocable Living Trust, and Pete Cladianos Jr., Living Trust, *Althea Pappas, Dr. Carl M. Herrera Trust, Robert C. Herrera & Clarise E. Herrera Family Trust, Thomas O'Gara & Julie O'Gara, Raymond L. Ferrari, and Ruth Brown hereby consent to the preparation of this map* GONZO FINANCIAL, A NEVADA CORPORATION

Grace C. Caudill 4-28-97
Grace C. Caudill, Corporate Secretary Date

STATE OF NEVADA S.S.
COUNTY OF WASHOE

On this 28th day of April, 1997 personally appeared before me, a Notary Public in the County of Washoe, Grace C. Caudill, Corporate Secretary of Gonzo Financial, a Nevada Corporation, who acknowledged to me that she executed the above instrument. In witness whereof, I hereunto set my hand and affix my official seal the date and year first above written.

Tracy Harris
Notary Public

TITLE COMPANY CERTIFICATE

The undersigned hereby certifies that this map has been examined and that ST. James's Village, Inc., a Nevada Corporation owns of record an interest in the lands delineated hereon and that it is the only owner of said land; that all owner's of record of the land have signed the final map; that Investors' Joint Venture, Angelo & Joan Petrini, Nello Gonfiantini III, John & Bruna Repetto Trust, Antonia Cladianos II Trust, Pete Cladianos Jr. Trustee, Pete Cladianos Jr., Trustee of the Antonia Cladianos II GRAT Trust UA, Daniel A. Cresanta M.D. Ltd., Profit Sharing Plan and Trust, Gonfiantini Family Trust, Delta Saloon Profit Sharing Plan, Alpine Insurance Associates Inc., Profit Sharing Trust, Dickson Realty Profit Sharing Plan & Trust, Regina Lanning, John Openheimer, Carl M. Herrera Trust, JoAnn Goddard, Kafoury Armstrong Co., Profit Sharing Plan, Gonzo Properties, Joseph & Elsie Delele Garaventa, Emma Young, Pietro Menicucci & Eola Pacini, Cesarina Gonfiantini, Richard T. & Sue Barry, Pietro Menicucci, Thomas G. & Michelle Hulbert, Gonzo Financial Profit Sharing Plan, Pete Cladianos III Trust, Pete Cladianos III GRAT Trust, Leslie Cladianos Trust, Leslie Cladianos GRAT Trust, Harold Wright, Deborah LeGarza, Thomas O'Gara & Julie O'Gara, Delores Larragueta, P. Nadene Lackey, Harold E. & Julia G. Glandville Revocable Living Trust, and Pete Cladianos Jr., Living Trust, *Althea Pappas, Dr. Carl M. Herrera Trust, Robert C. Herrera & Clarise E. Herrera Family Trust, Thomas O'Gara & Julie O'Gara, Raymond L. Ferrari, and Ruth Brown hold of record a security interest in said lands; and that there are no liens of record against the common interest community for delinquent state, county, municipal, federal or local taxes or assessments collected as taxes or special assessments*

STEWART TITLE OF NORTHERN NEVADA

John B. Hester 5-6-97
By: *John B. Hester* Vice President Date

	DISTANCE	BEARING
L1	39.87'	N59°41'10"W
L2	32.83'	N59°41'10"W
L3	48.86'	S13°46'07"W
L4	26.68'	N12°06'31"W
L5	32.61'	N34°45'34"E
L6	39.27'	S02°44'25"W
L7	19.20'	S07°49'11"W
L8	1.12'	S13°46'07"W

LEGEND

- FOUND BRASS DISK IN MONUMENT WELL P.L.S. 5097
- SET 5/8 REBAR & CAP PLS 5665
- (R) RADIAL BEARING
- * CALCULATED POSITION (NOTHING SET)
- FOUND 5/8 REBAR & CAP PLS 5665

CUMULATIVE INDEXES SHOULD BE EXAMINED FOR ANY SUBSEQUENT CHANGES TO THIS MAP

Parcel Map 3244

FILE NO. 2126069 FILED FOR RECORD AT THE REQUEST OF HARLAN KING & ASSOC. ON THIS 15th DAY OF August 1997, AT 5:41 PM. PAST 3:00 CLOCK P.M. OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA <i>Joe Melcher</i> COUNTY RECORDER BY: <i>C. Bartley</i> DEPUTY FEE \$7.00	2nd PARCEL MAP FOR ST. JAMES'S VILLAGE, INC. A DIVISION OF A PORTION OF PARCEL A OF MAP 3243 LOCATED IN A PORTION OF THE NW1/4 OF SECTION 14 T. 17N., R. 19E., M.D.B. & M. WASHOE COUNTY, NEVADA HARLAN KING & ASSOCIATES LAND SURVEYING & WATER RIGHTS 6147 LAKESIDE DRIVE, SUITE 104 • HENO, NV. 89509 (702) 829-0919
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CUMULATIVE INDEXES SHOULD BE EXAMINED FOR ANY SUBSEQUENT CHANGES TO THIS MAP

BENNINGTON COURT

(THE WOODS - PHASE 3)

OWNER'S CERTIFICATE

This is to certify that the undersigned, ST. James's Village, Inc., a Nevada Corporation is the owner of the tract of land represented on this plat, and has consented to the preparation and recordation of this plat, and that the same is executed in compliance with and subject to the provisions of N.R.S. chapters 116 and 278, and the streets, avenues and highways as shown on this plat are hereby set apart to be used as private access forever; The owner hereby grants to all public utilities and the County of Washoe, permanent easements shown on the plat for the construction and maintenance of utility systems, together with the right of access thereto forever. The water and sewer facilities are hereby dedicated to Washoe County. The owner and its assigns agree to the use of residential water meters.

ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION

BY: Mehdi Mostaedi
M. Mehdi Mostaedi, President

July 31, 1996
Date

NOTARY PUBLIC CERTIFICATE

STATE OF NEVADA
COUNTY OF WASHOE

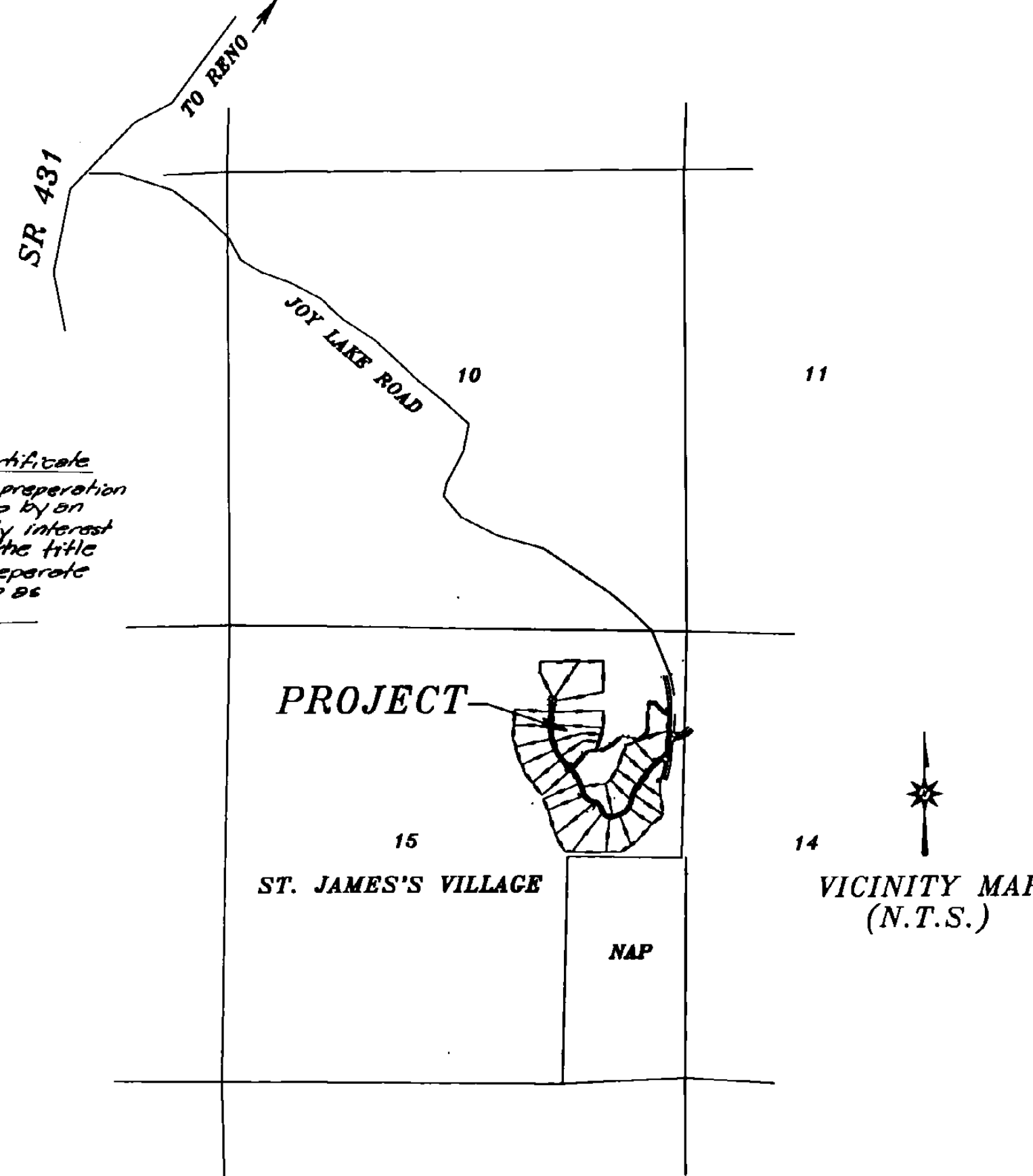
SS:

On this 31 day of July, 1996 personally appeared before me, a Notary Public in the County of WASHOE, M. Mehdi Mostaedi as President of ST. James's Village, Inc., a Nevada Corporation who acknowledged to me that he executed the above instruments. In witness whereof, I hereunto set my hand and affix my official seal the date and year first above written.

Tracy Harris
Notary Public



Security Interest Holders Certificate
The written consent to the preparation and recordation of this map by an additional holder of security interest listed in the guarantee of the title Company is set forth on a separate document filed with this map as document No. 2036367



TITLE COMPANY'S CERTIFICATE

The undersigned hereby certifies that this plat has been examined and that ST. James's Village, Inc., a Nevada Corporation owns of record an interest in the lands delineated hereon and that it is the only owner of record of said land; that all owner's of record of the land have signed the final map; that Investor's Joint Venture, A Nevada Limited Partnership, John and Bruna Repetto, Angelo and Joan Petrini, Nello Gontfanti III, Second amended Antonia Cladianos II Trust, Pete Cladianos Jr., Daniel A. Cresanta M.D. Ltd., Profit sharing Plan, Gontfanti Family Trust, Delta Saloon Profit Sharing Plan, Alpine Insurance Assoc. Inc., Profit Sharing Trust, Dickson Realty Profit Sharing Plan and Trust, Regina Lanning, John Oppenheimer, Carl M. Herrera Trust, Ciriaco Herrera, JoAnn Goddard, Kafoury Armstrong Co., Profit Sharing Plan, Gonzo Properties, Joseph and Elsie Garaventa, Emma Young, Pietro Menicucci, Eola Pacini, Cesarina Gontfanti, Richard T. and Sue Barry, Thomas G. and Michelle Hulbert, and Gonzo Financial Profit Sharing Plan, Pete Cladianos III GRAT Trust, Leslie Cladianos Trust, Leslie Cladianos GRAT Trust, Harold Knight, Deborah Le Garza, Thomas O'Garra and Julie O'Garra, Dolores Larroqueta, and P. Nedene Lackey, And Litchfield Financial Corporation hold of record a security interest in the land to be divided and that they are the only holders of record of a security interest in said land; and that there are no liens of record against the common interest community for delinquent state, county, municipal federal or local taxes or assessments collected as taxes or special assessments.

Stewart Title of Northern Nevada
By: William A. Hanks President
Oct. 4, 1996
Date

SECURITY INTEREST HOLDERS CERTIFICATE

This is to certify that the undersigned Gonzo Financial, A Nevada Corporation, Attorney-in-fact for Investor's Joint Venture, a Nevada Limited Partnership, John and Bruna Repetto Trust, Nello Gontfanti III, Dickson Realty profit sharing plan and trust, Second amended Antonia Cladianos II Trust, Richard T. and Sue E. Barry, Joseph and Elsie Garaventa, John Oppenheimer, Carl M. Herrera Trust, Ciriaco Herrera, Gontfanti Family Trust, Alpine Insurance Assoc., Inc., Profit Sharing Trust, Regina Lanning, JoAnn Goddard, Gonzo Properties, Daniel A. Cresanta, M.D. LTD., profit sharing plan, Angelo and Joan Petrini, Delta Saloon profit sharing plan, Kafoury Armstrong & Co. profit sharing plan, Emma Young, Pietro Menicucci, Eola Pacini, Cesarina Gontfanti, Thomas G. and Michelle Hulbert, and Gonzo Financial Profit Sharing Plan, Pete Cladianos III GRAT Trust, Leslie Cladianos Trust, Leslie Cladianos GRAT Trust, Harold Knight, Deborah Le Garza, Thomas and Julie O'Garra, Dolores Larroqueta, and P. Nedene Lackey, hereby consents to the preparation and recordation of this plat.

Gonzo Financial, A NEVADA CORPORATION
By: Grace C. Caudill
Grace C. Caudill, Corporate Secretary
NOTARY PUBLIC CERTIFICATE

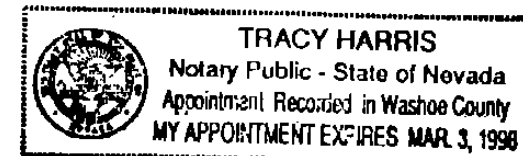
OCT. 1, 1996
Date

STATE OF NEVADA
COUNTY OF WASHOE

SS:

On this 1st day of October, 1996 personally appeared before me, a Notary Public in the County of WASHOE, Grace C. Caudill, Corporate Secretary of Gonzo Financial, A Nevada Corporation who acknowledged to me that she executed the above instruments. In witness whereof, I hereunto set my hand and affix my official seal the date and year first above written.

Tracy Harris
Notary Public



DIVISION OF WATER RESOURCES CERTIFICATE

This map is approved by the State of Nevada, Division of Water Resources of the Department of Conservation and Natural Resources concerning water quantity, subject to the review of approval on file in this office.

James K. P.E.
Division of Water Resources
8-5-96
Date

2036381

TAX CERTIFICATE

The undersigned hereby certifies that all property taxes on this land for the fiscal year have been paid.

Washoe County Treasurer

By: Joseph A. Anderson

Date: 8-12-96 Title: Deputy

DISTRICT BOARD OF HEALTH CERTIFICATE

This final map is approved by the Washoe County District Board of Health. This approval concerns sewage disposal, water pollution, water quality and water supply facilities and is predicated upon plans for a public water supply and a community system for disposal of sewage.

John P. Shum
For the District Board of Health
Aug 26, 1996
Date

TAX CERTIFICATE

The undersigned hereby certifies that all property taxes on this land for the fiscal year have been paid.

Washoe County Treasurer

By: Joseph A. Anderson

Date: 8-12-96 Title: Deputy

SURVEYOR'S CERTIFICATE

I, Harlan K. King, a Professional Land Surveyor registered in the State of Nevada, certify that:

- This plat represents the results of a survey conducted under my direct supervision at the instance of ST. James's Village, Inc.
- The lands surveyed lie within the NE 1/4 of Section 15, T.17N., R.19E., M.D.B.M. and the survey was completed on March 25, 1996.
- This plat complies with the applicable state statutes and any local ordinances in effect on the date that the governing body gave its final approval
- The monuments depicted on the plat will be of the character shown and occupy the positions indicated by 4-17-97 and an appropriate financial guarantee will be posted with the governing body before recordation to assure the installation of the monuments.

Harlan K. King

P.L.S. 5665

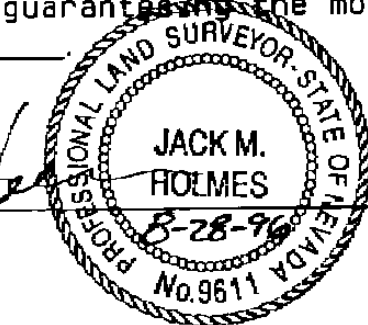


COUNTY SURVEYOR'S CERTIFICATE

I hereby certify that I have examined this plat, consisting of 2 sheets, and that all provisions and ordinances applicable have been complied with, and that I am satisfied that the map is technically correct, and that an adequate performance guarantee has been filed guaranteeing the monuments shown will be set by 9-17-97

County Surveyor

Date



WASHOE COUNTY PLANNING COMMISSION CERTIFICATE

A tentative map of ST. James's Village Subdivision, TW5-2-92, was recommended for approval by the Washoe County Planning Commission on the 8th day of July, 1992, and approved by the Board of County Commissioners of Washoe County, Nevada on the 16th day of August, 1992.

The final map of ST. James's Village Unit 1C was approved by the Planning Commission of Washoe County, Nevada on the 18th day of June, 1996 and subsequently recorded on the 19th day of June, 1996.

The final map of Bennington Court Subdivision is in substantial conformance with the Tentative Map and all the conditions of approval have been met. This final map is approved and accepted this 17th day of September, 1996 by the Planning Commission of Washoe County, Nevada. The offer of dedication of the sewer facilities and water facilities is rejected at this time, but will remain open in accordance with N.R.S. 278.

Robert Stohel
Chairman

ATTEST: The Director certifies that the Washoe County Planning Commission took the action noted above with a majority vote of the members present.

Michael Hays
Director, Department of Development Review

9/17/96
Date

WATER RIGHT DEDICATION CERTIFICATE

The Water and Sewer Resource Requirements set forth in Article 422 of the Washoe County Development Code, related to the dedication of water resources, have been satisfied.

John P. Shum
Washoe County Utility Division

8/8/96
Date

FILE NO. 2036381
FILED FOR RECORD AT THE
REQUEST OF HARLAN KING &
ASSOC. ON THIS 4 DAY
OF OCT. 1996, AT 4:10 MIN
PAST 12:00 O'CLOCK A.M.
OFFICIAL RECORDS OF
WASHOE COUNTY, NEVADA
COUNTY RECORDER
BY: C. Bartley
DEPUTY
FEE 43.75

OFFICIAL PLAT
OF
BENNINGTON COURT
(THE WOODS - PHASE 3)

LOCATED WITHIN A PORTION OF THE NE 1/4 OF SECTION 15
T.17N., R.19E., M.D.B.M.

WASHOE COUNTY

NEVADA

HARLAN KING & ASSOCIATES
LAND SURVEYING & WATER RIGHTS
6147 LAKESIDE DR., #104 RENO, NEVADA 89509 (702) 829-0919

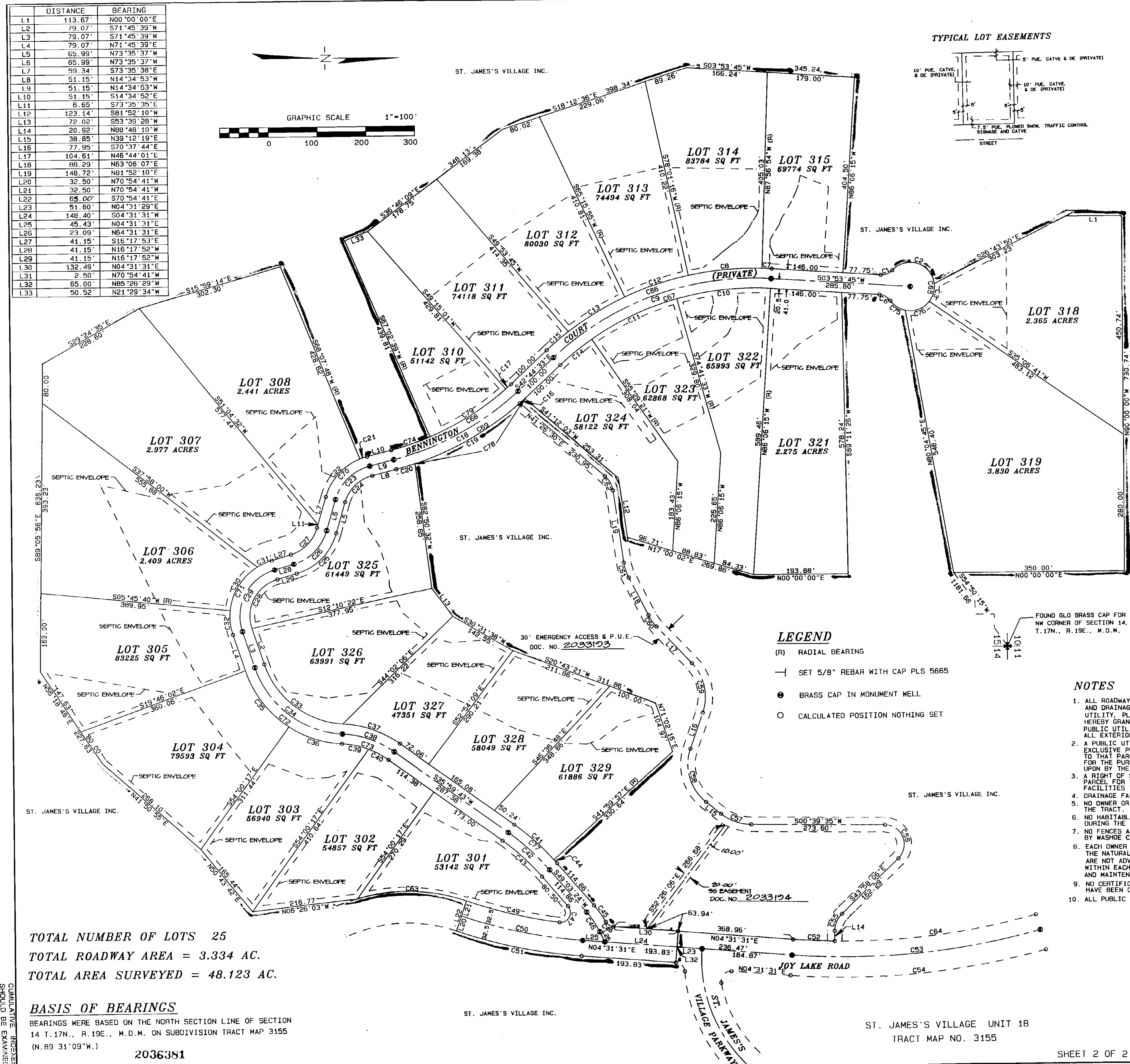
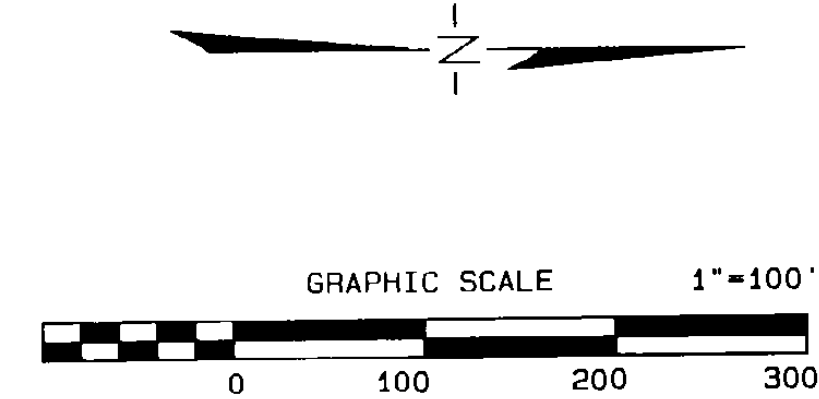
SHEET 1 OF 2

Subdivision Tract Map 3314

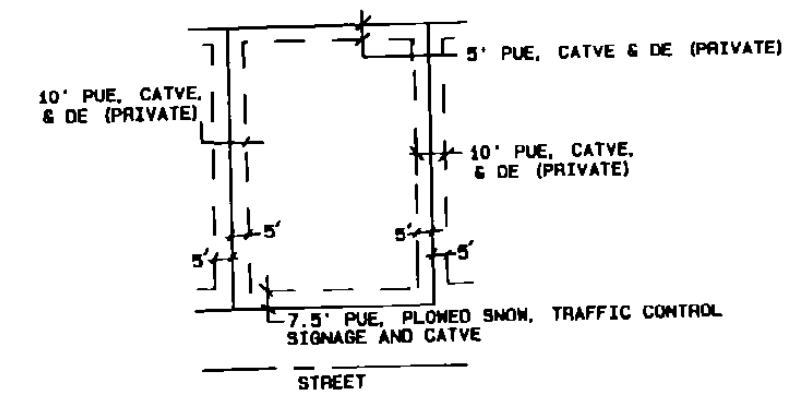
CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

3314
CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

	DISTANCE	BEARING
L1	113.67'	N00°00'00"E
L2	79.07'	S71°45'39"W
L3	79.07'	S71°45'39"W
L4	79.07'	N71°45'39"E
L5	65.99'	N73°35'37"W
L6	65.99'	S73°35'38"E
L7	69.34'	N14°34'53"W
L8	51.15'	N14°34'53"W
L9	51.15'	S14°34'52"E
L10	51.15'	S14°34'52"E
L11	6.65'	S73°35'35"E
L12	123.14'	S81°52'10"W
L13	72.02'	S53°39'28"W
L14	20.92'	N88°48'10"W
L15	38.85'	N39°12'19"E
L16	77.95'	S70°37'44"E
L17	104.61'	N46°44'01"E
L18	86.29'	N63°06'07"E
L19	148.72'	N81°52'10"E
L20	32.50'	N70°54'41"W
L21	32.50'	N70°54'41"W
L22	65.00'	S70°54'41"E
L23	51.60'	N04°31'29"E
L24	148.40'	S04°31'31"E
L25	45.43'	N04°31'31"E
L26	23.09'	N64°31'31"E
L27	41.15'	S16°17'53"E
L28	41.15'	N16°17'52"W
L29	41.15'	N16°17'52"W
L30	132.49'	N04°31'31"E
L31	2.50'	N70°54'41"W
L32	65.00'	N85°26'29"W
L33	50.52'	N21°29'34"W



TYPICAL LOT EASEMENTS



	DELTA	RADIUS	ARC	TANGENT
C1	50°50'45"	30.00'	25.62'	14.26'
C2	130°58'58"	50.00'	114.30'	109.67'
C3	44°41'15"	50.00'	39.00'	20.55'
C4	51°40'22"	50.00'	45.09'	24.21'
C5	54°23'10"	50.00'	47.46'	25.69'
C6	50°50'45"	30.00'	26.62'	14.26'
C7	01°50'38"	620.50'	19.97'	9.99'
C8	14°01'50"	620.50'	151.95'	76.36'
C9	46°38'18"	600.00'	488.40'	258.64'
C10	19°12'12"	579.50'	194.23'	98.03'
C11	19°12'12"	579.50'	194.23'	98.03'
C12	12°45'21"	620.50'	138.14'	69.36'
C13	12°35'54"	620.50'	136.44'	68.49'
C14	08°13'54"	579.50'	83.26'	41.70'
C15	05°24'35"	620.50'	58.58'	29.31'
C16	01°17'42"	620.50'	14.03'	7.01'
C17	01°29'55"	579.50'	15.16'	7.58'
C18	28°09'41"	600.00'	284.91'	150.49'
C19	23°10'19"	620.50'	250.95'	127.21'
C20	03°41'39"	620.50'	40.01'	20.01'
C21	07°17'19"	120.50'	15.33'	7.67'
C22	51°43'25"	120.50'	108.78'	58.41'
C23	59°00'45"	100.00'	103.00'	56.59'
C24	59°00'45"	79.50'	81.88'	44.99'
C25	57°17'45"	120.50'	120.50'	65.83'
C26	57°17'45"	100.00'	100.00'	54.63'
C27	57°17'45"	79.50'	79.50'	43.43'
C28	91°56'28"	79.50'	127.57'	82.24'
C29	91°56'28"	100.00'	160.47'	103.45'
C30	52°27'55"	120.50'	110.34'	59.38'
C31	15°28'33"	120.50'	32.55'	16.37'
C32	24°00'00"	120.50'	50.48'	25.61'
C33	68°25'46"	179.50'	214.38'	122.06'
C34	68°25'46"	200.00'	238.86'	135.99'
C35	38°26'02"	220.50'	147.91'	76.86'
C36	29°59'44"	220.50'	115.44'	59.07'
C37	32°39'49"	220.50'	124.70'	64.61'
C38	32°39'49"	200.00'	114.02'	58.60'
C39	17°56'27"	179.50'	46.12'	23.19'
C40	14°43'32"	520.50'	109.06'	54.73'
C41	13°03'41"	500.00'	113.98'	57.24'
C42	13°03'41"	479.50'	109.31'	54.89'
C43	01°03'21"	520.50'	9.59'	4.80'
C44	11°44'12"	201.50'	41.28'	20.71'
C45	15°28'07"	181.00'	48.87'	24.58'
C46	13°25'21"	20.00'	48.32'	52.68'
C47	56°16'06"	20.00'	19.64'	10.69'
C48	11°36'33"	967.50'	196.03'	98.35'
C49	14°33'49"	1000.00'	254.18'	127.78'
C50	14°33'49"	1032.50'	262.44'	131.93'
C51	03°19'40"	1467.50'	85.24'	42.63'
C52	19°38'57"	1500.00'	514.41'	259.78'
C53	19°38'57"	1542.50'	528.99'	267.12'
C54	44°50'03"	50.00'	39.13'	20.63'
C55	135°22'18"	40.00'	94.51'	97.48'
C56	38°32'43"	100.00'	57.21'	34.97'
C57	70°09'57"	100.00'	122.46'	70.24'
C58	62°38'15"	100.00'	109.32'	60.85'
C59	16°22'06"	100.00'	29.57'	14.38'
C60	18°46'02"	50.00'	32.75'	16.53'
C61	40°25'40"	50.00'	39.13'	20.63'
C62	35°57'54"	365.49'	227.44'	117.47'
C63	15°19'17"	1467.50'	418.03'	210.44'
C64	281°43'45"	50.00'	245.85'	
C65	45°38'18"	620.50'	505.08'	267.48'
C66	45°38'18"	579.50'	471.71'	249.80'
C67	28°09'41"	579.50'	284.93'	145.35'
C68	28°09'41"	620.50'	304.98'	155.64'
C69	59°00'45"	120.50'	124.11'	68.19'
C70	91°56'28"	120.50'	193.36'	124.65'
C71	58°25'46"	220.50'	263.35'	149.93'
C72	32°39'49"	179.50'	102.33'	52.60'
C73	08°22'29"	579.50'	84.70'	42.43'
C74	42°55'37"	50.00'	37.46'	19.65'
C75	63°07'55"	50.00'	55.09'	30.72'
C76	13°03'41"	520.50'	118.66'	59.59'
C77	24°28'02"	620.50'	264.97'	134.54'
C78	18°17'17"	579.50'	184.97'	93.28'
C79				

LEGEND

- (R) RADIAL BEARING
- SET 5/8" REBAR WITH CAP PLS 5665
- BRASS CAP IN MONUMENT WELL
- CALCULATED POSITION NOTHING SET

NOTES

- ALL ROADWAYS ARE TO BE PRIVATELY OWNED AND MAINTAINED. A PUBLIC UTILITY AND DRAINAGE EASEMENT IS HEREBY GRANTED OVER THE ROADWAY AREAS. PUBLIC UTILITY, PLOWED SNOW STORAGE, AND TRAFFIC CONTROL SIGNAGE EASEMENTS ARE HEREBY GRANTED. 7.5 FEET IN WIDTH COINCIDENT WITH ALL STREET RIGHT OF WAYS. PUBLIC UTILITY EASEMENTS ARE HEREBY GRANTED 5 FEET IN WIDTH COINCIDENT WITH ALL EXTERIOR BOUNDARIES, AND 10 FEET IN WIDTH CENTERED ON ALL INTERIOR LOT LINES.
- A PUBLIC UTILITY EASEMENT IS ALSO HEREBY GRANTED WITHIN EACH PARCEL FOR THE EXCLUSIVE PURPOSE OF INSTALLING AND MAINTAINING UTILITY SERVICE FACILITIES TO THAT PARCEL AND THE RIGHT TO EXIT THAT PARCEL WITH SAID UTILITY FACILITIES FOR THE PURPOSE OF SERVING ADJACENT PARCELS AT LOCATIONS MUTUALLY AGREED UPON BY THE OWNER OF RECORD AT THAT TIME, AND THE UTILITY COMPANY.
- A RIGHT OF SURFACE DRAINAGE EASEMENT IS ALSO HEREBY GRANTED WITHIN EACH PARCEL FOR THE EXCLUSIVE PURPOSE OF INSTALLING AND MAINTAINING DRAINAGE FACILITIES TO THAT PARCEL.
- DRAINAGE FACILITIES ARE TO BE PRIVATE AND MAINTAINED BY OWNERS.
- NO OWNER OR TENANT SHALL OBSTRUCT A DRAINAGE EASEMENT OR CHANNEL WITHIN THE TRACT.
- NO HABITABLE STRUCTURES SHALL BE LOCATED ON A FAULT THAT HAS BEEN ACTIVE DURING THE HOLOCENE EPOCH OF GEOLOGIC TIME.
- NO FENCES ARE ALLOWED WITHIN OR ACROSS SANITARY SEWER EASEMENTS MAINTAINED BY WASHOE COUNTY.
- EACH OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF DRAINAGE FACILITIES AND THE NATURAL DRAINAGE CHARACTERISTICS WITHIN THEIR LOT SO OTHER PROPERTIES ARE NOT ADVERSELY AFFECTED. A BLANKET DRAINAGE EASEMENT IS HEREBY GRANTED WITHIN EACH LOT TO THE AFFECTED PROPERTY AS MAY BE NECESSARY FOR THE PERPETUATION AND MAINTENANCE OF THE NATURAL CHARACTERISTICS AND IMPROVED DRAINAGE FACILITIES.
- NO CERTIFICATE OF OCCUPANCY SHALL BE ISSUED UNTIL THE WATER AND SEWER FACILITIES HAVE BEEN COMPLETED AND ACCEPTED BY THE WASHOE COUNTY UTILITY DIVISION.
- ALL PUBLIC UTILITY EASEMENTS SHALL INCLUDE CABLE TELEVISION.

TOTAL NUMBER OF LOTS 25
TOTAL ROADWAY AREA = 3.334 AC.
TOTAL AREA SURVEYED = 48.123 AC.

BASIS OF BEARINGS

BEARINGS WERE BASED ON THE NORTH SECTION LINE OF SECTION 14 T.17N., R.19E., M.D.M. ON SUBDIVISION TRACT MAP 3155 (N. 89° 31' 09" W.)

2036381

2036381
OFFICIAL PLAT
OF
BENNINGTON COURT
(THE WOODS - PHASE 3)
LOCATED WITHIN A PORTION OF THE NE 1/4 OF SECTION 15
T.17N., R.19E., M.D.B.&M.
WASHOE COUNTY NEVADA
HK HARLAN KING & ASSOCIATES
LAND SURVEYING & WATER RIGHTS
6147 LAKESIDE DR., #104 RENO, NEVADA 89509 (702) 829-0919

ST. JAMES'S VILLAGE UNIT 1B
TRACT MAP NO. 3155

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

3314 A
CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

ST. JAMES'S VILLAGE - UNIT 1B

OWNER'S CERTIFICATE

THIS IS TO CERTIFY THAT THE UNDERSIGNED, ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, IS THE OWNER OF THE TRACT OF LAND REPRESENTED ON THIS PLAT, AND HAS CONSENTED TO THE PREPARATION AND RECORDATION OF THIS PLAT, AND THAT THE SAME IS EXECUTED IN COMPLIANCE WITH AND SUBJECT TO THE PROVISIONS OF NRS CHAPTERS 116 AND 278, AND THE STREETS, AVENUES AND HIGHWAYS AS SHOWN ON THIS PLAT ARE HEREBY SET APART TO BE USED AS PRIVATE ACCESS FOREVER; THE OWNERS HEREBY GRANT TO ALL PUBLIC UTILITIES AND THE COUNTY OF WASHOE, PERMANENT EASEMENTS SHOWN ON THIS PLAT FOR THE CONSTRUCTION AND MAINTENANCE OF UTILITY SYSTEMS, TOGETHER WITH THE RIGHT OF ACCESS THERETO FOREVER. THE WATER AND SEWER FACILITIES ARE HEREBY DEDICATED TO WASHOE COUNTY. THE OWNER AND ITS ASSIGNS AGREE TO THE USE OF RESIDENTIAL WATER METERS.

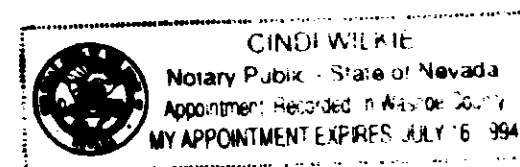
ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION

BY: Mehdi Mostaedi
M. MEHDI MOSTAEDI, PRESIDENT

STATE OF NEVADA S.S.
COUNTY OF WASHOE

ON THIS 2nd DAY OF June, 1994, PERSONALLY APPEARED BEFORE ME, A NOTARY PUBLIC IN THE COUNTY OF WASHOE, M. MEHDI MOSTAEDI, PRESIDENT OF ST. JAMES'S VILLAGE, INC., WHO ACKNOWLEDGED TO ME THAT HE EXECUTED THE ABOVE INSTRUMENT.

Andi Wilkie
NOTARY PUBLIC



SECURITY INTEREST HOLDERS CERTIFICATE

THIS IS TO CERTIFY THAT THE UNDERSIGNED NELL J. REDFIELD TRUST HEREBY CONSENTS TO THE PREPARATION AND RECORDATION OF THIS PLAT.

NELL J. REDFIELD TRUST

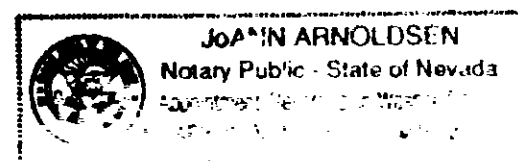
Betty Alyce Jones
BETTY ALYCE JONES, TRUSTEE

Gerald C. Smith
GERALD C. SMITH, TRUSTEE

STATE OF NEVADA S.S.
COUNTY OF WASHOE

ON THIS 25th DAY OF March, 1994, PERSONALLY APPEARED BEFORE ME, A NOTARY PUBLIC IN THE COUNTY OF WASHOE, BETTY ALYCE JONES, HELEN JEANE JONES AND GERALD C. SMITH, WHO ACKNOWLEDGED TO ME THAT THEY EXECUTED THE ABOVE INSTRUMENT.

John Arnoldson
NOTARY PUBLIC



TITLE COMPANY CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT THIS PLAT HAS BEEN EXAMINED AND THAT ST. JAMES'S VILLAGE, INC., OWNS OF RECORD AN INTEREST IN THE LANDS DELINEATED HEREON AND THAT IT IS THE ONLY OWNER OF RECORD OF SAID LANDS; THAT ALL THE OWNERS OF RECORD OF THE LAND HAVE SIGNED THE FINAL MAP; THAT THE NELL J. REDFIELD TRUST HOLDS OF RECORD A SECURITY INTEREST IN THE LANDS TO BE DIVIDED, AND THAT THERE ARE NO LIENS OF RECORD AGAINST THE COMMON INTEREST COMMUNITY FOR DELINQUENT STATE, COUNTY, MUNICIPAL, FEDERAL OR LOCAL TAXES OR ASSESSMENTS COLLECTED AS TAXES OR SPECIAL ASSESSMENTS.

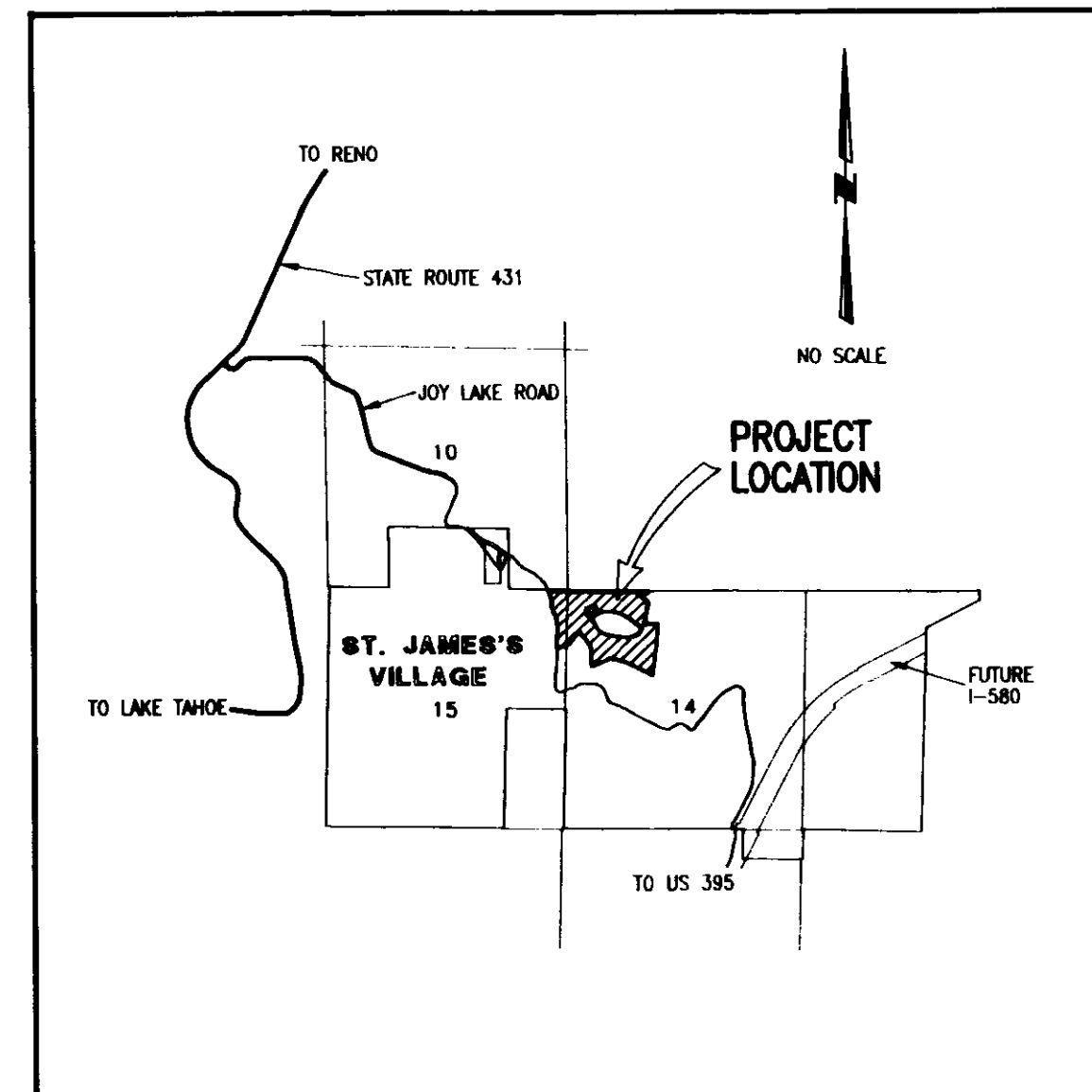
FIRST AMERICAN TITLE COMPANY OF NEVADA

BY: Bruce Morgan
TITLE: BRUCE MORGAN, Senior Vice President & Joe Pancherist DATE: MARCH 19, 1994
MAY 26, 1995

DIVISION OF WATER RESOURCES CERTIFICATE

THIS PLAT IS APPROVED BY THE STATE OF NEVADA DIVISION OF WATER RESOURCES OF THE DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES CONCERNING WATER QUANTITY, SUBJECT TO THE REVIEW OF APPROVAL ON FILE IN THIS OFFICE.

David Ricci
DIVISION OF WATER RESOURCES DATE: 23 MAY 95
17 MAR 94



VICINITY MAP

WASHOE COUNTY PLANNING COMMISSION CERTIFICATE

A TENTATIVE MAP OF ST. JAMES'S VILLAGE SUBDIVISION, TM5-2-92, WAS RECOMMENDED FOR APPROVAL BY THE WASHOE COUNTY PLANNING COMMISSION ON THE 8th DAY OF JULY, 1992, AND APPROVED BY THE BOARD OF COUNTY COMMISSIONERS OF WASHOE COUNTY, NEVADA ON THE 18th DAY OF AUGUST, 1992.

THE FINAL MAP OF NADIA COURT SUBDIVISION (PROCESSED AND APPROVED AS ST. JAMES'S VILLAGE SUBDIVISION, UNIT 1A), WAS APPROVED BY THE PLANNING COMMISSION OF WASHOE COUNTY, NEVADA, ON THE 19th DAY OF JULY, 1994, AND SUBSEQUENTLY RECORDED ON THE 21st DAY OF JULY, 1994.

THE FINAL MAP OF ST. JAMES'S VILLAGE SUBDIVISION, UNIT 1B, IS IN SUBSTANTIAL CONFORMANCE WITH THE TENTATIVE MAP AND ALL THE CONDITIONS OF APPROVAL HAVE BEEN MET. THIS FINAL MAP IS APPROVED AND ACCEPTED THIS 20th DAY OF JULY, 1994, BY THE PLANNING COMMISSION OF WASHOE COUNTY, NEVADA. THE OFFER OF DEDICATION OF SEWER FACILITIES AND WATER FACILITIES IS REJECTED AT THIS TIME BUT WILL REMAIN OPEN IN ACCORDANCE WITH NRS 278.

James M. Mott
CHAIRMAN

ATTEST: THE DIRECTOR CERTIFIES THAT THE WASHOE COUNTY PLANNING COMMISSION TOOK THE ACTION NOTED ABOVE WITH A MAJORITY VOTE OF THE MEMBERS PRESENT.

James M. Mott DATE: 20 JUL 94
DIRECTOR, DEPARTMENT OF DEVELOPMENT REVIEW

TAXATION CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT ALL THE PROPERTY TAXES ON THIS LAND FOR THE FISCAL YEAR HAVE BEEN PAID.

COUNTY SURVEYOR'S CERTIFICATE

I CERTIFY THAT I HAVE EXAMINED THIS MAP CONSISTING OF THREE SHEETS, AND THAT ALL PROVISIONS AND ORDINANCES APPLICABLE HAVE BEEN COMPLIED WITH, AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT AND THAT AN ADEQUATE PERFORMANCE GUARANTEE HAS BEEN FILED GUARANTEEING THE MONUMENTS AS SHOWN WILL BE SET BY George Fong.

George Fong
COUNTY SURVEYOR

UTILITY COMPANIES CERTIFICATE

THE UTILITY EASEMENTS SHOWN ON THIS PLAT HAVE BEEN CHECKED AND APPROVED BY THE UNDERSIGNED PUBLIC UTILITY AND CATV COMPANIES.

Sierra Pacific Power Company DATE: 5-22-95
Don Carmichael DATE: 5-22-95
Nevada Bell DATE: 5/22/95
TCI of Nevada, Inc. DATE: 5/30/95
Washoe County Utility Division DATE: 5/30/95
Washoe Lake and Galena Creek Ditch Company DATE: 9-15-94

DISTRICT BOARD OF HEALTH CERTIFICATE

THIS FINAL MAP IS APPROVED BY THE WASHOE COUNTY DISTRICT BOARD OF HEALTH. THIS APPROVAL CONCERNS SEWAGE DISPOSAL, WATER POLLUTION, WATER QUALITY AND WATER SUPPLY FACILITIES AND IS PREDICATED UPON PLANS FOR A PUBLIC WATER SUPPLY AND INDIVIDUAL SYSTEMS FOR DISPOSAL OF SEWAGE.

Paul R. Colby DATE: 30 May 1995
FOR THE DISTRICT BOARD OF HEALTH

PUBLIC WATER AND SEWER FACILITY CERTIFICATE

BLANKET EASEMENTS DESIGNATED BY THIS PLAT FOR PUBLIC WATER AND SEWER FACILITIES AND APPURTENANCES HERETO HAVE BEEN CHECKED AND APPROVED BY THE WASHOE COUNTY UTILITY DIVISION.

James Mott DATE: 5/30/95
WASHOE COUNTY UTILITY DIVISION
WASHOE COUNTY, NEVADA

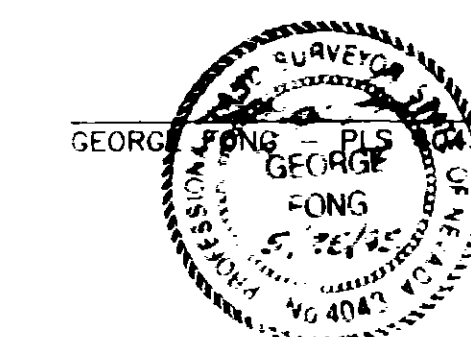
WATER RIGHT DEDICATION CERTIFICATE

THE WATER AND SEWER RESOURCE REQUIREMENTS SET FORTH IN ARTICLE 422 OF THE WASHOE COUNTY DEVELOPMENT CODE, RELATED TO THE DEDICATION OF WATER RESOURCES, HAVE BEEN SATISFIED.

James Mott DATE: 5/30/95
WASHOE COUNTY UTILITY DIVISION

SURVEYOR'S CERTIFICATE

1. GEORGE FONG, A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF NEVADA, CERTIFY THAT:
- THIS PLAT REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER MY DIRECT SUPERVISION AT THE INSTANCE OF ST. JAMES'S VILLAGE, INC.
 - THE LANDS SURVEYED LIE WITHIN PORTIONS OF THE NW1/4 OF SECTION 14 AND THE NE1/4 OF SECTION 15, T. 17 N., R. 19 E., M.D.M., AND THE SURVEY WAS COMPLETED ON DECEMBER 2, 1993.
 - THIS PLAT COMPLIES WITH THE APPLICABLE STATE STATUTES AND ANY LOCAL ORDINANCES IN EFFECT ON THE DATE THAT THE GOVERNING BODY GAVE ITS FINAL APPROVAL.
 - THE MONUMENTS DEPICTED ON THE PLAT WILL BE OF THE CHARACTER SHOWN AND OCCUPY THE POSITIONS INDICATED BY George Fong, AND THAT AN APPROPRIATE FINANCIAL GUARANTEE WILL BE POSTED WITH THE GOVERNING BODY BEFORE RECORDATION TO ASSURE THE INSTALLATION OF THE MONUMENTS.



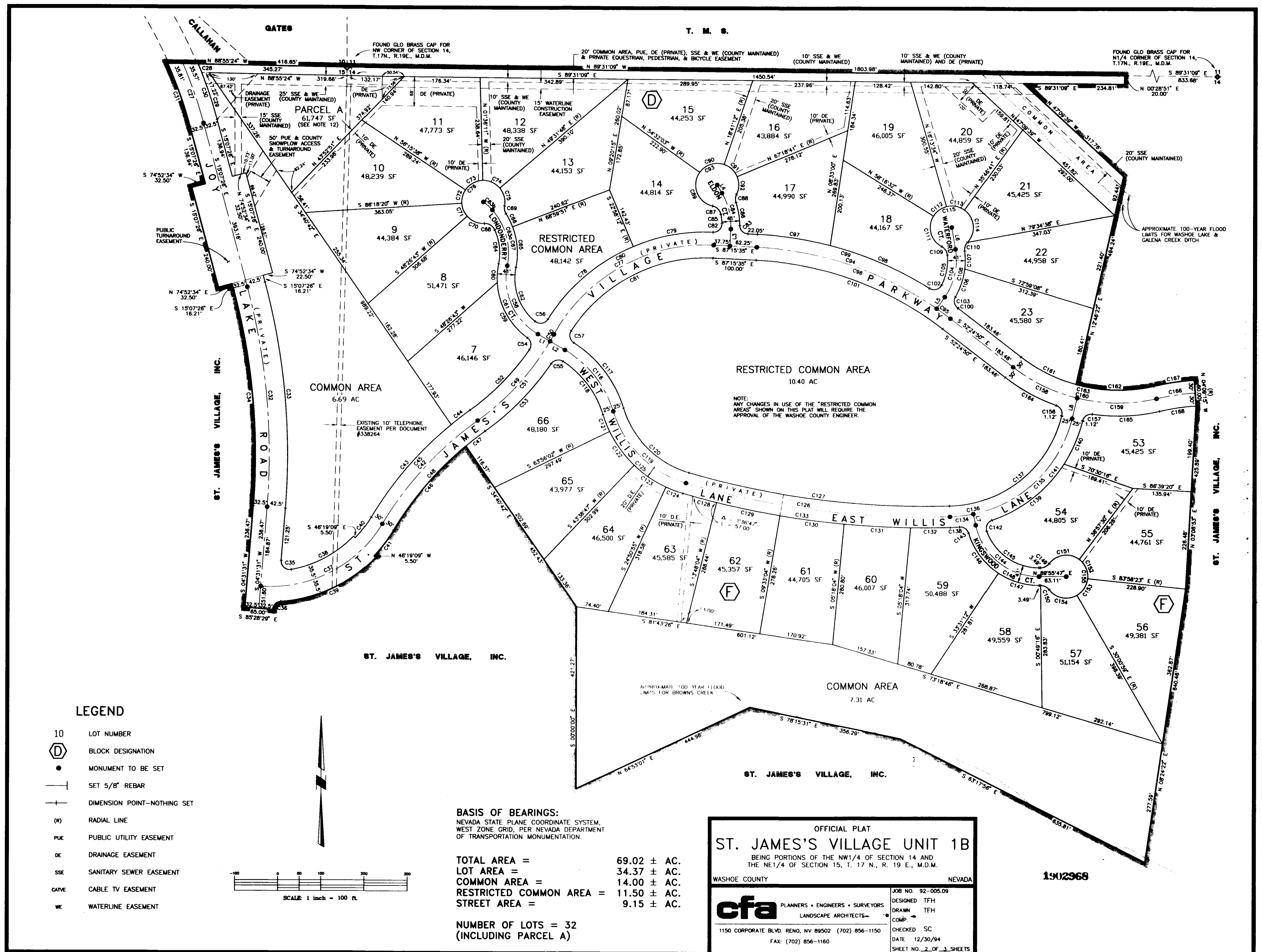
OFFICIAL PLAT		COUNTY RECORDER'S CERTIFICATE	
ST. JAMES'S VILLAGE-UNIT 1B		FILE NO.: <u>1902968</u>	
BEING PORTIONS OF THE NW1/4 OF SECTION 14 AND THE NE1/4 OF SECTION 15, T. 17 N., R. 19 E., M.D.M.		FILED FOR RECORD AT THE REQUEST OF <u>CEA</u>	
WASHOE COUNTY		ON THIS <u>23</u> DAY OF <u>June</u> , 1995	
DESIGNED TFW		AT <u>21</u> MINUTES PAST <u>2</u> O'CLOCK <u>P.M.</u>	
DRAWN		OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA	
COMP.		<u>Joe Melcher</u>	
CHECKED SC		COUNTY RECORDER	
DATE: 5/3/95		BY: <u>C. Bartley</u>	
SHEET NO. 1 OF 3 SHEETS		DEPUTY	
FEE: <u>46.20</u>			

cfa PLANNERS • ENGINEERS • SURVEYORS
LANDSCAPE ARCHITECTS
1150 CORPORATE BLVD. RENO, NV 89502 (702) 856-1150
FAX: (702) 856-1180

Subdivision Tract Map 3155

CUMULATIVE INDEXES
SHOULD BE MAINTAINED
FOR SUBSEQUENT
CHANGES TO THIS MAP

3155 A



Subdivision Tract Map 3155 A

3155 A

CUMULATIVE INDEXES
SHOULD BE MAINTAINED
AND SHOULD BE
CHANGED TO THIS MAP

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	BEARING
C27	08°11'50"	1020.00'	145.93'	73.09'	145.80'	N 19°13'21" W
C28	01°10'58"	1052.50'	21.73'	10.86'	21.73'	N 21°55'47" W
C29	06°12'52"	1052.50'	114.16'	57.13'	114.10'	N 18°13'52" W
C30	07°23'50"	1052.50'	135.88'	68.04'	135.79'	N 18°49'21" W
C31	09°03'20"	1052.50'	155.07'	78.20'	155.01'	N 19°39'06" W
C32	19°38'57"	1500.00'	514.41'	259.76'	511.90'	N 05°17'58" W
C33	19°38'57"	1542.50'	528.99'	267.12'	526.40'	N 05°17'58" W
C34	19°38'57"	1467.50'	503.27'	254.13'	500.81'	N 05°17'58" W
C35	10°48'35"	20.00'	31.69'	15.89'	31.69'	S 47°50'45" E
C36	81°30'27"	20.00'	28.45'	17.24'	26.11'	S 45°16'44" W
C37	63°46'25"	300.00'	333.92'	186.64'	316.95'	N 62°38'18" E
C38	36°02'01"	264.50'	166.35'	86.03'	163.62'	N 61°41'52" E
C39	42°21'06"	335.50'	247.99'	128.97'	242.39'	N 64°51'25" E
C40	12°55'46"	270.00'	60.93'	30.55'	60.80'	N 37°12'59" E
C41	12°55'46"	330.00'	74.47'	37.39'	74.31'	N 37°12'59" E
C42	23°31'28"	800.00'	328.46'	166.58'	326.16'	S 42°30'50" W
C43	19°41'43"	830.00'	285.31'	144.08'	283.91'	S 43°35'57" W
C44	03°49'45"	830.00'	55.47'	27.75'	55.46'	S 52°21'42" W
C45	23°31'28"	830.00'	340.78'	172.83'	338.39'	S 42°30'50" W
C46	19°18'52"	770.00'	259.57'	131.03'	258.34'	S 40°24'32" W
C47	04°12'36"	770.00'	56.58'	28.30'	56.57'	S 52°10'16" W
C48	23°31'28"	770.00'	316.15'	160.33'	313.93'	S 42°30'50" W
C49	23°57'44"	600.00'	250.93'	127.33'	249.11'	N 42°17'42" E
C50	01°44'42"	600.00'	18.27'	9.14'	18.27'	N 29°26'29" E
C51	25°42'26"	600.00'	269.21'	136.91'	266.95'	N 41°29'21" E
C52	19°50'04"	570.00'	197.32'	99.66'	196.34'	N 44°21'32" E
C53	19°58'35"	630.00'	219.65'	110.95'	218.54'	N 44°17'16" E
C54	08°31'29"	20.00'	30.90'	19.49'	27.92'	N 09°49'15" W
C55	88°24'28"	20.00'	30.86'	19.45'	27.89'	S 76°30'12" W
C56	87°43'58"	20.00'	34.12'	22.90'	30.13'	N 80°38'20" W
C57	90°28'08"	20.00'	20.15'	20.15'	20.39'	S 12°32'27" E
C58	70°53'05"	150.00'	185.58'	106.77'	173.97'	S 24°14'37" E
C59	50°50'52"	170.50'	151.31'	81.05'	146.40'	S 28°39'33" E
C60	14°28'02"	170.50'	42.95'	21.59'	42.84'	S 03°58'54" W
C61	17°16'54"	170.50'	194.28'	109.21'	183.93'	S 21°26'30" E
C62	61°41'35"	129.50'	139.44'	77.34'	132.80'	S 19°38'53" E
C63a	52°48'30"	150.00'	138.25'	74.47'	133.41'	N 15°12'20" W
C63b	13°26'01"	120.00'	28.14'	14.13'	28.07'	N 48°19'36" W
C64	35°43'16"	129.50'	80.74'	41.73'	79.44'	N 06°38'43" W
C65	32°12'04"	170.50'	85.82'	49.21'	94.57'	N 04°54'07" W
C66	11°26'38"	170.50'	34.05'	17.08'	34.00'	N 26°43'28" W
C67	43°38'42"	170.50'	129.88'	68.27'	126.76'	N 10°37'26" W
C68	68°28'59"	25.00'	29.87'	17.01'	28.12'	N 58°44'50" W
C69	42°43'35"	25.00'	25.00'	9.78'	18.21'	S 11°05'00" E
C70	51°25'03"	50.00'	44.87'	24.07'	43.38'	S 67°15'48" E
C71	37°51'37"	50.00'	33.04'	17.15'	32.44'	S 22°37'28" E
C72	37°28'02"	50.00'	32.67'	16.94'	32.09'	S 15°01'21" W
C73	54°39'27"	50.00'	47.70'	25.84'	45.91'	N 61°04'05" W
C74	51°07'58"	50.00'	44.62'	23.92'	43.16'	N 66°02'12" W
C75	50°45'00"	50.00'	44.29'	23.71'	42.85'	N 15°05'42" W
C76	28°15'07"	50.00'	247.18'	39.59'	62.08'	S 48°39'14" W
C77	64°10'17"	400.00'	448.00'	250.78'	424.95'	S 60°39'17" W
C78	35°15'27"	430.00'	264.61'	136.84'	260.45'	S 49°24'05" W
C79	25°17'35"	430.00'	189.82'	96.48'	188.28'	S 79°40'36" W
C80	60°33'02"	430.00'	454.43'	251.02'	433.57'	S 62°02'52" W
C81	60°04'18"	370.00'	397.93'	213.93'	370.40'	S 62°42'16" W
C82	95°11'53"	20.00'	33.23'	21.90'	29.54'	N 44°43'27" E
C83	86°46'21"	20.00'	30.29'	18.90'	27.48'	S 43°52'25" E
C84	33°16'46"	150.00'	87.13'	44.83'	85.91'	N 13°53'58" W
C85	09°10'31"	129.50'	20.74'	10.39'	20.72'	N 07°27'45" W
C86	18°01'57"	170.50'	53.66'	27.05'	53.44'	N 09°30'13" W
C87	65°45'21"	25.00'	28.89'	16.16'	27.14'	N 44°55'41" W
C88	44°38'48"	25.00'	19.48'	10.27'	18.99'	S 03°48'12" W
C89	11°16'19"	50.00'	98.85'	75.93'	83.52'	S 21°10'13" E
C90	73°13'15"	50.00'	63.90'	37.15'	59.84'	S 72°04'34" W
C91	48°37'29"	50.00'	42.43'	22.59'	41.17'	N 47°00'04" W
C92	48°48'55"	50.00'	42.60'	22.69'	41.32'	N 01°43'08" E
C93	28°55'58"	50.00'	247.78'	39.11'	61.61'	S 64°09'37" W
C94	32°01'08"	800.00'	447.07'	229.54'	441.27'	N 71°15'01" W
C95	02°49'36"	800.00'	39.47'	19.74'	39.47'	N 53°49'38" W
C96	34°50'45"	800.00'	486.54'	251.06'	479.07'	N 69°50'12" W
C97	11°49'39"	830.00'	171.34'	85.97'	171.03'	N 81°20'45" W
C98	17°22'39"	830.00'	251.73'	126.84'	250.77'	N 66°44'36" W
C99	29°12'18"	830.00'	423.07'	216.24'	416.50'	N 72°39'26" W
C100	00°08'38"	830.00'	2.08'	1.04'	2.08'	S 52°29'08" E
C101	34°50'45"	770.00'	468.29'	241.64'	461.11'	N 69°50'12" W
C102	95°46'57"	20.00'	33.43'	22.13'	29.67'	N 74°03'15" E
C103	82°21'36"	20.00'	28.75'	17.50'	26.34'	S 11°22'40" E
C104	44°32'12"	115.60'	11.62'	11.68'	11.62'	N 12°29'27" E
C105	31°24'01"	129.50'	70.97'	36.40'	70.09'	N 10°27'46" E
C106	23°03'10"	170.50'	68.60'	34.77'	68.14'	N 18°16'34" E
C107	13°59'08"	170.50'	41.62'	20.91'	41.51'	N 00°14'35" W
C108	37°02'14"	170.50'	110.22'	57.11'	108.31'	N 11°16'58" E
C109	56°52'31"	25.00'	24.82'	13.54'	23.81'	N 33°40'30" W
C110	50°17'39"	25.00'	21.94'	11.74'	21.25'	S 17°54'41" W
C111	93°50'14"	50.00'	81.89'	53.47'	73.04'	S 15°11'39" E
C112	44°03'47"	50.00'	38.45'	20.23'	37.51'	S 53°45'22" W
C113	49°59'25"	50.00'	43.82'	23.31'	42.25'	N 79°13'02" W
C114	97°16'49"	50.00'	84.89'	56.79'	75.06'	N 05°34'55" W
C115	28°51'01"	50.00'	248.86'	38.25'	60.76'	S 80°28'22" W
C116	42°24'38"	250.00'	185.05'	96.99'	180.85'	N 38°28'51" W
C117	40°28'29"	275.00'	191.38'	101.38'	190.25'	N 37°30'47" W
C118	40°01'01"	225.00'	157.15'	81.93'	153.97'	N 37°17'03" W
C119	56°38'24"	250.00'	247.14'	134.72'	237.20'	S 45°35'45" E
C120	56°38'24"	225.00'	222.43'	121.25'	213.48'	S 45°35'45" E
C121	08°47'25"	275.00'	42.19'	21.14'	42.15'	N 21°40'15" E
C122	20°17'15"	275.00'	97.37'	49.20'	96.87'	S 36°12'36" E
C123	18°47'51"	275.00'	90.22'	45.52'	89.82'	S 55°45'09" E
C124	08°45'52"	275.00'	42.07'	21.07'	42.03'	S 69°32'01" E
C125	56°38'24"	275.00'	271.85'	148.20'	260.92'	S 45°35'45" E
C126	17°45'27"	2000.00'	619.80'	312.43'	617.37'	S 82°47'40" E
C127	17°45'27"	1975.00'	612.10'	308.53'	609.66'	S 82°47'40" E
C128	02°16'59"	2025.00'	80.69'	40.35'	80.68'	S 75°03'26" E
C129	04°15'00"	2025.00'	150.21'	75.14'	150.17'	S 78°19'26" E
C130	04°15'00"	2025.00'	150.21'	75.14'	150.17'	S 82°44'26" E
C131	04°22'06"	2025.00'	154.39'	77.23'	154.35'	S 86°52'58" E
C132	02°36'23"	2025.00'	92.11'	46.06'	92.10'	N 89°37'47" E
C133	17°45'27"	2025.00'	627.80'	316.34'	625.09'	S 82°47'40" E
C134	10°28'08"	300.00'	54.64'	27.40'	54.56'	N 83°08'32" E
C135	64°07'22"	300.00'	335.75'	187.91'	318.50'	N 45°49'48" E
C136	74°33'29"	300.00'	390.39'	228.37'	363.42'	N 51°02'51" E
C137	74°33'29"	275.00'	357.85'	209.34'	333.13'	N 51°02'51" E
C138	03°48'24"	325.00'	21.59'	10.80'	21.59'	N 86°52'24" E
C139	38°03'20"	325.00'	215.88'	112.08'	211.92'	N 51°55'49" E
C140	19°08'03"	325.00'	108.53'	54.78'	108.03'	N 23°20'08" E
C141	57°11'23"	325.00'	324.40'	177.16'	311.10'	N 42°21'48" E
C142	91°21'36"	20.00'	31.89'	20.48'	28.62'	S 25°16'42" W
C143	78°33'01"	20.00'	27.42'	16.36'	25.32'	N 55°12'17" W
C144	77°57'42"	150.00'	204.10'	121.38'	188.72'	S 51°05'22" E
C145	69°40'07"	129.50'	157.46'	90.12'	147.94'	S 55°14'10" E
C146	39°33'01"	170.50'	117.69'	61.30'	115.37'	S 36°42'17" E
C147	33°35'25"	170.50'	99.86'	51.46'	98.53'	S 73°16'30" E
C148	73°08'26"	170.50'	217.85'	126.49'	203.17'	S 53°30'00" E
C149	52°39'04"	25.00'	22.97'	12.37'	22.17'	N 63°36'15" E
C150	52°39'04"	25.00'	22.97'	12.37'	22.17'	N 63°44'41" W
C151	89°40'47"	90.00'	78.26'	48.72'	70.51'	S 62°07'06" W
C152	59°04'07"	50.00'	51.55'	28.33'	49.29'	N 23°02'27" W
C153	53°57'24"	50.00'	47.09'	25.45'	45.37'	N 33°00'19" E
C154	82°35'50"	50.00'	72.08'	43.92'	66.00'	S 78°43'04" E
C155	28°51'08"	50.00'	248.97'	38.16'	60.87'	N 00°04'13" W
C156	84°15'39"	20.00'	29.41'	18.09'	26.83'	N 28°21'43" W
C157	84°15'39"	20.00'	29.41'	18.09'	26.83'	S 65°53'56" W
C158	23°49'03"	400.00'	166.28'	84.36'	165.08'	S 64°19'22" E
C159	26°36'48"	400.00'	185.80'	94.61'	184.13'	S 79°32'17" E
C160	50°25'51"	400.00'	352.80'	188.36'	340.82'	S 77°37'46" E
C161	22°18'24"	370.00'	143.84'	72.84'	142.93'	S 63°33'02" E
C162	28°09'27"	370.00'	181.83'	92.79'	180.01'	S 88°45'58" E
C163	50°25'51"	370.00'	325.67'	174.23'	315.26'	S 77°37'46" E
C164	18°04'42"	430.00'	135.68'	68.41'	135.11'	S 12°27'11" E
C165	20°52'27"	430.00'	156.68'	79.21'	155.79'	N 87°35'32" E
C166	08°41'26"	600.00'	91.01'	45.59'	90.92'	S 81°30'02" W
C167	08°41'26"	630.00'	95.56'	47.87'	95.47'	S 81°30'02" W
C168	08°41'26"	570.00'	86.46'	43.31'	86.37'	S 81°30'02" W

LINE	BEARING	DISTANCE
L1	N 59°41'10" W (R)	32.83'
L2	S 59°41'10" E (R)	39.87'
L3	N 02°44'25" E	39.27'
L4	N 30°32'21" W	21.95'
L5	N 34°45'34" E (R)	32.61'
L6	N 09°46'39" W	51.10'
L7	S 12°06'31" E (R)	26.68'
L8	N 13°46'07" E	48.8

3261

ST. JAMES'S VILLAGE - UNIT 1C

OWNER'S CERTIFICATE

THIS IS TO CERTIFY THAT THE UNDERSIGNED, ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, IS THE OWNER OF THE TRACT OF LAND REPRESENTED ON THIS PLAT, AND HAS CONSENTED TO THE PREPARATION AND RECORDATION OF THIS PLAT, AND THAT THE SAME IS EXECUTED IN COMPLIANCE WITH AND SUBJECT TO THE PROVISIONS OF NRS CHAPTERS 116 AND 278, AND THE STREETS, AVENUES AND HIGHWAYS AS SHOWN ON THIS PLAT ARE HEREBY SET APART TO BE USED AS PRIVATE ACCESS FOREVER; THE OWNER HEREBY GRANTS TO ALL PUBLIC UTILITIES AND THE COUNTY OF WASHOE, PERMANENT EASEMENTS SHOWN ON THIS PLAT FOR THE CONSTRUCTION AND MAINTENANCE OF UTILITY SYSTEMS, TOGETHER WITH THE RIGHT OF ACCESS THERETO FOREVER. THE WATER AND SEWER FACILITIES ARE HEREBY DEDICATED TO WASHOE COUNTY. THE OWNER AND ITS ASSIGNS AGREE TO THE USE OF RESIDENTIAL WATER METERS.

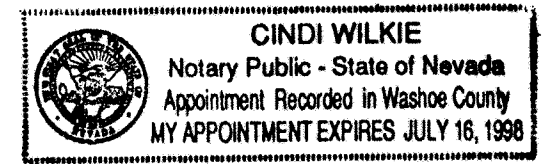
ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION

BY: M. Mehdi Mostaeedi
M. MEHDI MOSTAEDI, PRESIDENT

STATE OF NEVADA
COUNTY OF WASHOE S.S.

ON THIS 29th DAY OF November, 1995 PERSONALLY APPEARED BEFORE ME, A NOTARY PUBLIC IN THE COUNTY OF WASHOE, M. MEHDI MOSTAEDI, PRESIDENT OF ST. JAMES'S VILLAGE, INC., WHO ACKNOWLEDGED TO ME THAT HE EXECUTED THE ABOVE INSTRUMENT.

Cindi Wilkie
NOTARY PUBLIC



TITLE COMPANY CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT THIS PLAT HAS BEEN EXAMINED AND THAT ST. JAMES'S VILLAGE, INC., OWNS OF RECORD AN INTEREST IN THE LANDS DELINEATED HEREON AND THAT IT IS THE ONLY OWNER OF RECORD OF SAID LAND; THAT ALL THE OWNERS OF RECORD OF THE LAND HAVE SIGNED THE FINAL MAP; THAT INVESTOR'S JOINT VENTURE, A NEVADA LIMITED PARTNERSHIP, JOHN AND BRUNA REPETTO TRUST, NELLO GONFIANTINI III, DICKSON REALTY PROFIT SHARING PLAN AND TRUST, MARK AND FIANNA COMBS FAMILY TRUST, RICHARD T. AND SUE E. BARRY, JOSEPH AND ELSIE GARAVENTA, JOHN OPPENHEIMER, CARL M. HERRERA TRUST, CIRIACO HERRERA, PIONEER CITIZENS BANK OF NEVADA CUSTODIAN OF JOANN GODDARD SELF-DIRECTED CUSTODIAL IRA #69003182354, DANIEL A. CRESANTA, M.D. LTD., PROFIT SHARING PLAN, ANGELO AND JOAN PETRINI, DELTA SALOON PROFIT SHARING PLAN, AND KAFOURY ARMSTRONG & CO. PROFIT SHARING PLAN, HOLD OF RECORD A SECURITY INTEREST IN THE LAND TO BE DIVIDED; AND THAT THERE ARE NO LIENS OF RECORD AGAINST THE COMMON INTEREST COMMUNITY FOR DELINQUENT STATE, COUNTY, MUNICIPAL, FEDERAL OR LOCAL TAXES OR ASSESSMENTS COLLECTED AS TAXES OR SPECIAL ASSESSMENTS. STEWART TITLE OF NORTHERN NEVADA

BY: JoAnne Brown 5/23/96
TITLE: JOANNE BROWN DATE
1996 President

SECURITY INTEREST HOLDERS CERTIFICATE

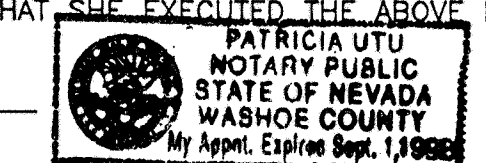
THIS IS TO CERTIFY THAT THE UNDERSIGNED GONZO FINANCIAL, A NEVADA CORPORATION, ATTORNEY-IN-FACT FOR INVESTOR'S JOINT VENTURE, A NEVADA LIMITED PARTNERSHIP, JOHN AND BRUNA REPETTO TRUST, NELLO GONFIANTINI III, DICKSON REALTY PROFIT SHARING PLAN AND TRUST, MARK AND FIANNA COMBS FAMILY TRUST, RICHARD T. AND SUE E. BARRY, JOSEPH AND ELSIE GARAVENTA, JOHN OPPENHEIMER, CARL M. HERRERA TRUST, CIRIACO HERRERA, PIONEER CITIZENS BANK OF NEVADA CUSTODIAN OF JOANN GODDARD SELF-DIRECTED CUSTODIAL IRA #69003182354, DANIEL A. CRESANTA, M.D. LTD., PROFIT SHARING PLAN, ANGELO AND JOAN PETRINI, DELTA SALOON PROFIT SHARING PLAN, AND KAFOURY ARMSTRONG & CO. PROFIT SHARING PLAN, HEREBY CONSENTS TO THE PREPARATION AND RECORDATION OF THIS PLAT. GONZO FINANCIAL, A NEVADA CORPORATION

Grace C. Caudill 5-23-96
GRACE C. CAUDILL, CORPORATE SECRETARY DATE

STATE OF NEVADA
COUNTY OF WASHOE S.S.

ON THIS 11th DAY OF MAY, 1996 PERSONALLY APPEARED BEFORE ME, A NOTARY PUBLIC IN THE COUNTY OF WASHOE, GRACE C. CAUDILL, CORPORATE SECRETARY OF GONZO FINANCIAL, A NEVADA CORPORATION, WHO ACKNOWLEDGED TO ME THAT SHE EXECUTED THE ABOVE INSTRUMENT.

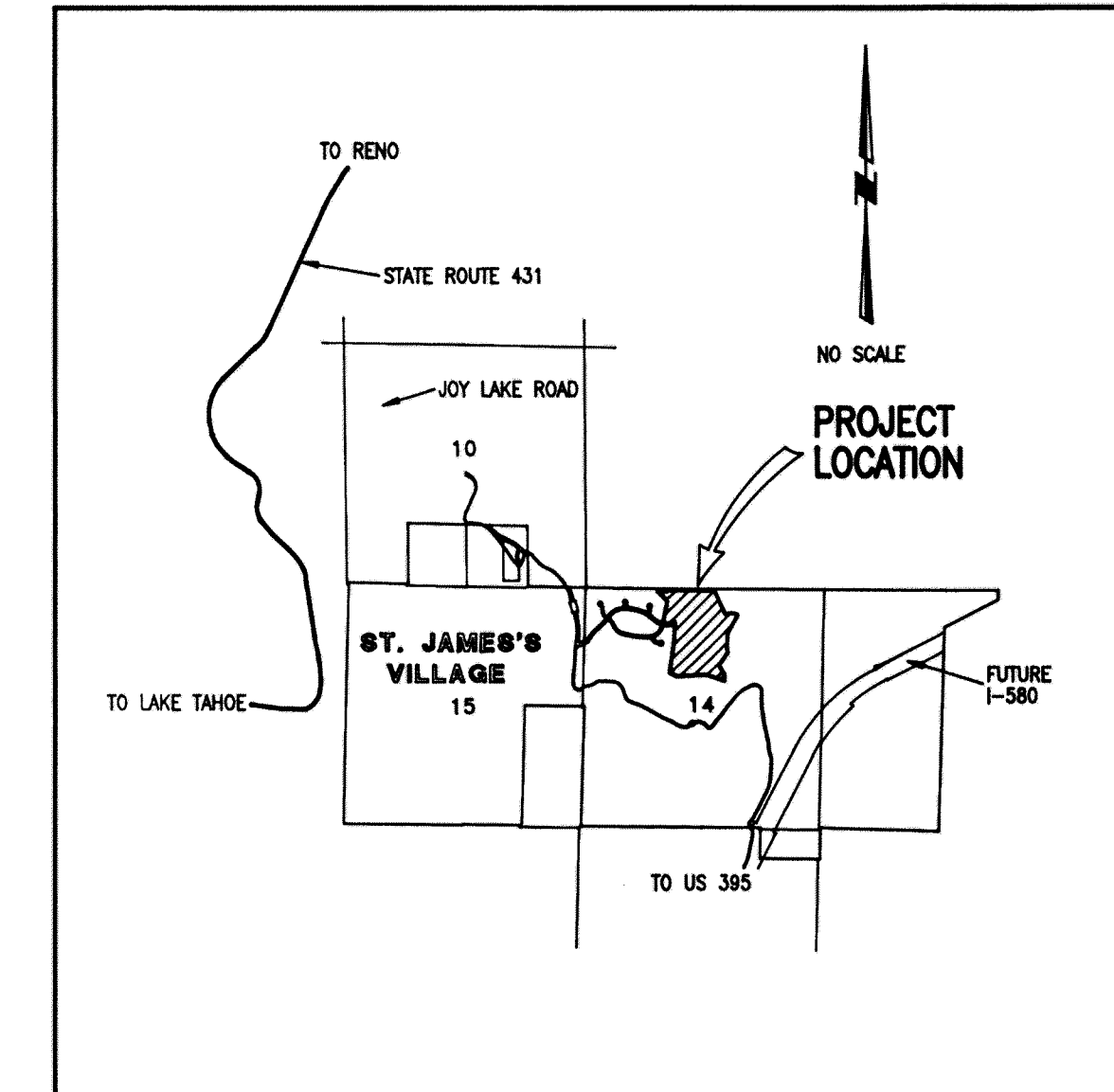
Patricia Uto
NOTARY PUBLIC



DIVISION OF WATER RESOURCES CERTIFICATE

THIS PLAT IS APPROVED BY THE STATE OF NEVADA DIVISION OF WATER RESOURCES OF THE DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES CONCERNING WATER QUANTITY, SUBJECT TO THE REVIEW OF APPROVAL ON FILE IN THIS OFFICE.

James K. R.E. 5-23-95
DIVISION OF WATER RESOURCES DATE



VICINITY MAP

WASHOE COUNTY PLANNING COMMISSION CERTIFICATE

A TENTATIVE MAP OF ST. JAMES'S VILLAGE SUBDIVISION, TM5-2-92, WAS RECOMMENDED FOR APPROVAL BY THE WASHOE COUNTY PLANNING COMMISSION ON THE 8th DAY OF JULY, 1992, AND APPROVED BY THE BOARD OF COUNTY COMMISSIONERS OF WASHOE COUNTY, NEVADA ON THE 18th DAY OF AUGUST, 1992.

THE FINAL MAP OF ST. JAMES'S VILLAGE SUBDIVISION, UNIT 1B, WAS APPROVED BY THE PLANNING COMMISSION OF WASHOE COUNTY, NEVADA, ON THE 20TH DAY OF JUNE, 1995, AND SUBSEQUENTLY RECORDED ON THE 23RD DAY OF JUNE, 1995.

THE FINAL MAP OF ST. JAMES'S VILLAGE SUBDIVISION, UNIT 1C, IS IN SUBSTANTIAL CONFORMANCE WITH THE TENTATIVE MAP AND ALL THE CONDITIONS OF APPROVAL HAVE BEEN MET. THIS FINAL MAP IS APPROVED AND ACCEPTED THIS 18th DAY OF JUNE, 1996, BY THE PLANNING COMMISSION OF WASHOE COUNTY, NEVADA. THE OFFER OF DEDICATION OF SEWER FACILITIES AND WATER FACILITIES IS REJECTED AT THIS TIME BUT WILL REMAIN OPEN IN ACCORDANCE WITH NRS 278.

Ann E. Johnson
CHAIRMAN

ATTEST: THE DIRECTOR CERTIFIES THAT THE WASHOE COUNTY PLANNING COMMISSION TOOK THE ACTION NOTED ABOVE WITH A MAJORITY VOTE OF THE MEMBERS PRESENT.

Michael D. Harper 6/18/96
DIRECTOR, DEPARTMENT OF DEVELOPMENT REVIEW DATE

WATER RIGHT DEDICATION CERTIFICATE

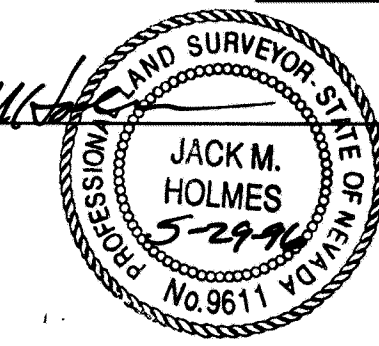
THE WATER AND SEWER RESOURCE REQUIREMENTS SET FORTH IN ARTICLE 422 OF THE WASHOE COUNTY DEVELOPMENT CODE, RELATED TO THE DEDICATION OF WATER RESOURCES, HAVE BEEN SATISFIED.

Edm. Smith 12/8/95
WASHOE COUNTY UTILITY DIVISION DATE

COUNTY SURVEYOR'S CERTIFICATE

I CERTIFY THAT I HAVE EXAMINED THIS MAP CONSISTING OF TWO SHEETS, AND THAT ALL PROVISIONS AND ORDINANCES APPLICABLE HAVE BEEN COMPLIED WITH, AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT AND THAT AN ADEQUATE PERFORMANCE GUARANTEE HAS BEEN FILED GUARANTEEING THE MONUMENTS AS SHOWN WILL BE SET BY July 1, 1997.

Jack M. Holmes May 29, 1996
COUNTY SURVEYOR DATE



UTILITY COMPANIES CERTIFICATE

THE UTILITY EASEMENTS SHOWN ON THIS PLAT HAVE BEEN CHECKED AND APPROVED BY THE UNDERSIGNED PUBLIC UTILITY AND CATV COMPANIES.

Sierra Pacific Power Company 5/22/95
SIERRA PACIFIC POWER COMPANY DATE

Nevada Bell 5/22/95
NEVADA BELL DATE

TCI of Nevada, Inc. 5/22/95
TCI OF NEVADA, INC. DATE

Washoe County Utility Division 12/8/95
WASHOE COUNTY UTILITY DIVISION DATE

DISTRICT BOARD OF HEALTH CERTIFICATE

THIS FINAL MAP IS APPROVED BY THE WASHOE COUNTY DISTRICT BOARD OF HEALTH. THIS APPROVAL CONCERNS SEWAGE DISPOSAL, WATER POLLUTION, WATER QUALITY AND WATER SUPPLY FACILITIES AND IS PREDICATED UPON PLANS FOR A PUBLIC WATER SUPPLY AND INDIVIDUAL SYSTEMS FOR DISPOSAL OF SEWAGE.

John P. Shaw Dec 14, 1995
FOR THE DISTRICT BOARD OF HEALTH DATE

TAXATION CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT ALL THE PROPERTY TAXES ON THIS LAND FOR THE FISCAL YEAR HAVE BEEN PAID.

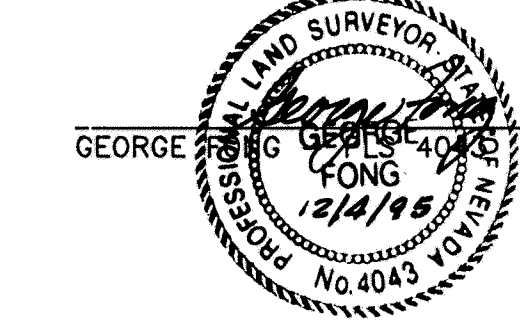
WASHOE COUNTY TREASURER

Melissa J. Lund
TITLE: Deputy Treasurer DATE 12-19-95

SURVEYOR'S CERTIFICATE

I, GEORGE FONG, A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF NEVADA, CERTIFY THAT:

- THIS PLAT REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER MY DIRECT SUPERVISION AT THE INSTANCE OF ST. JAMES'S VILLAGE, INC.
- THE LANDS SURVEYED LIE WITHIN A PORTION OF THE N1/2 OF SECTION 14, T. 17 N., R. 19 E., M.D.M., AND THE SURVEY WAS COMPLETED ON DECEMBER 2, 1993.
- THIS PLAT COMPLIES WITH THE APPLICABLE STATE STATUTES AND ANY LOCAL ORDINANCES IN EFFECT ON THE DATE THAT THE GOVERNING BODY GAVE ITS FINAL APPROVAL.
- THE MONUMENTS DEPICTED ON THE PLAT WILL BE OF THE CHARACTER SHOWN AND OCCUPY THE POSITIONS INDICATED BY 12/2/1993, AND THAT AN APPROPRIATE FINANCIAL GUARANTEE WILL BE POSTED WITH THE GOVERNING BODY BEFORE RECORDATION TO ASSURE THE INSTALLATION OF THE MONUMENTS.



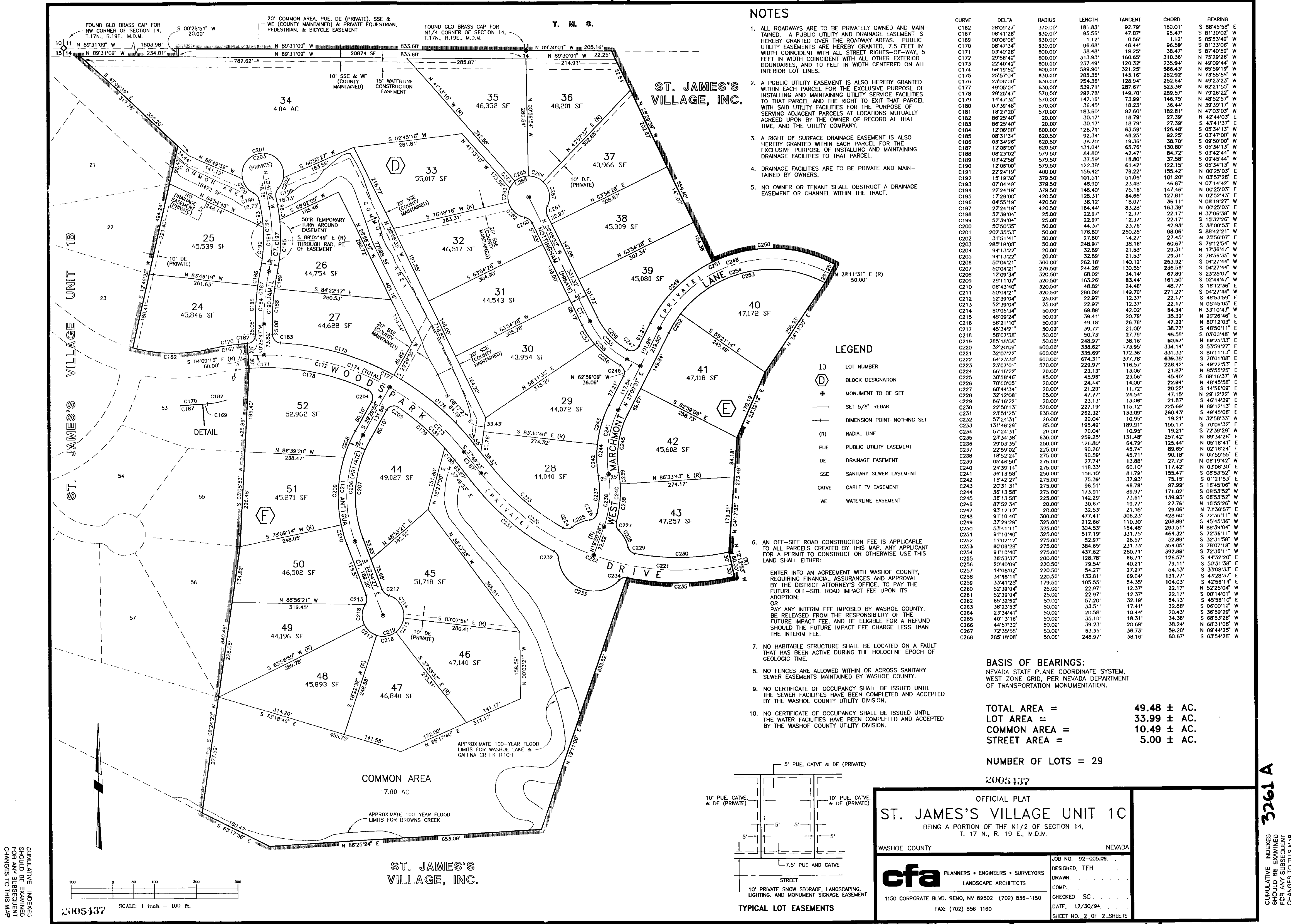
OFFICIAL PLAT		COUNTY RECORDER'S CERTIFICATE	
ST. JAMES'S VILLAGE-UNIT 1C		FILE NO: <u>2005437</u>	
BEING A PORTION OF THE N1/2 OF SECTION 14, T. 17 N., R. 19 E., M.D.M.		FILED FOR RECORD AT THE REQUEST OF <u>CEA</u>	
WASHOE COUNTY NEVADA		ON THIS <u>19</u> DAY OF <u>June</u> , 19 <u>96</u>	
cfa PLANNERS • ENGINEERS • SURVEYORS LANDSCAPE ARCHITECTS 1150 CORPORATE BLVD. RENO, NV 89502 (702) 856-1150 FAX: (702) 856-1160		AT <u>55</u> MINUTES PAST <u>2</u> O'CLOCK <u>P</u> .M. OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA.	
DESIGNED, TFR DRAWN, . COMP, . CHECKED, SC DATE, 5/3/95 SHEET NO. 1 OF 2 SHEETS		BY: <u>Joe Melcher</u> COUNTY RECORDER DEPUTY FEE: <u>45.15</u>	

Subdivision Tract Map 3261

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

2005437

3261
CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP



CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

3261A
CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

ST. JAMES'S VILLAGE - UNIT 1D

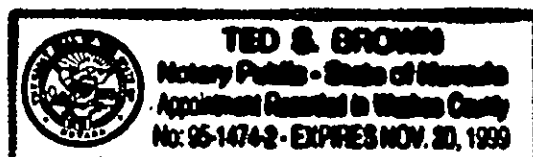
OWNER'S CERTIFICATE

THIS IS TO CERTIFY THAT THE UNDERSIGNED ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, IS THE OWNER OF THE TRACT OF LAND REPRESENTED ON THIS PLAT, AND HAS CONSENTED TO THE PREPARATION AND RECORDATION OF THIS PLAT, AND THAT THE SAME IS EXECUTED IN COMPLIANCE WITH AND SUBJECT TO THE PROVISIONS OF NRS CHAPTERS 116 AND 278, AND THAT THE STREETS, AVENUES AND HIGHWAYS AND ALL APPURTENANCES THERETO AS SHOWN ON THIS PLAT ARE HEREBY SET APART TO BE USED AS PRIVATE ACCESS FOREVER. THE OWNER HEREBY GRANTS TO ALL PUBLIC UTILITIES AND THE COUNTY OF WASHOE, PERMANENT EASEMENTS SHOWN ON THIS PLAT FOR THE CONSTRUCTION AND MAINTENANCE OF UTILITY SYSTEMS TOGETHER WITH THE RIGHT OF ACCESS THERETO FOREVER. THE WATER AND SEWER FACILITIES ARE HEREBY DEDICATED TO WASHOE COUNTY. THE OWNERS AND ITS ASSIGNS AGREE TO THE USE OF RESIDENTIAL WATER METERS.

ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION

BY: Linda Gnasdoskey
LINDA GNASDOSKEY, VICE PRESIDENT

STATE OF NEVADA S.S.
COUNTY OF WASHOE



ON THIS 29th DAY OF April, 1997, PERSONALLY APPEARED BEFORE ME, A NOTARY PUBLIC IN THE COUNTY OF WASHOE, LINDA GNASDOSKEY, AS VICE PRESIDENT OF ST. JAMES'S VILLAGE, INC., WHO ACKNOWLEDGED TO ME THAT SHE EXECUTED THE ABOVE INSTRUMENT.

Ted & Gracie
NOTARY PUBLIC

TITLE COMPANY CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT THIS PLAT HAS BEEN EXAMINED AND THAT ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, OWNS OF RECORD AN INTEREST IN THE LANDS DELINEATED HEREON AND THAT IT IS THE ONLY OWNER OF RECORD OF SAID LAND; THAT ALL THE OWNERS OF RECORD OF THE LAND HAVE SIGNED THE FINAL MAP; THAT INVESTOR'S JOINT VENTURE, A NEVADA LIMITED PARTNERSHIP, NELLO GONFIANTINI III, DICKSON REALTY PROFIT SHARING PLAN AND TRUST, RICHARD T. AND SUE E. BARRY, JOSEPH AND ELSIE DELELE GARAVENTA, JOHN OPPENHEIMER, DR. CARL M. HERRERA TRUST, JOANN GODDARD, DANIEL A. CRESANTA, M.D. LTD., PROFIT SHARING PLAN AND TRUST, ANGELO AND JOAN PETRINI, DELTA SALOON PROFIT SHARING PLAN, KAFOURY ARMSTRONG & CO. PROFIT SHARING PLAN, ANTONIA CLADIANOS II TRUST, ANTONIA CLADIANOS II GRAT TRUST, GONFIANTINI FAMILY TRUST, ALPINE INSURANCE ASSOCIATES, INC., PROFIT SHARING TRUST, REGINA LANNING, GONZO PROPERTIES, EMMA YOUNG, PIETRO MENICUCCI, EOLA PACINI, CESARINA GONFIANTINI, THOMAS G. AND MICHELLE HULBERT, GONZO FINANCIAL PROFIT SHARING PLAN, PETE CLADIANOS III TRUST, PETE CLADIANOS III GRAT TRUST, LESLIE CLADIANOS TRUST, LESLIE CLADIANOS GRAT TRUST, HAROLD WRIGHT, DEBORAH LEGARZA, THOMAS O'GARA AND JULIE O'GARA, DOLORES LARRAGUETA, P. NADENE LACKEY, HAROLD E. AND JULIA G. GLANDVILLE REVOCABLE LIVING TRUST, PETE CLADIANOS, JR., LIVING TRUST, ALTHEA PAPPAS, ROBERT C. HERRERA AND CLARISSE E. HERRERA FAMILY TRUST, THOMAS OR MARCELLE HERRERA, RAYMOND L. FERRARI, AND RUTH BROWN HOLD OF RECORD A SECURITY INTEREST IN THE LAND TO BE DIVIDED, AND THAT THEY ARE THE ONLY HOLDERS OF RECORD OF A SECURITY INTEREST IN SAID LAND; AND THAT THERE ARE NO LIENS OF RECORD AGAINST THE COMMON INTEREST COMMUNITY FOR DELINQUENT STATE, COUNTY, MUNICIPAL FEDERAL OR LOCAL TAXES OR ASSESSMENTS COLLECTED AS TAXES OR SPECIAL ASSESSMENTS.

STEWART TITLE OF NORTHERN NEVADA

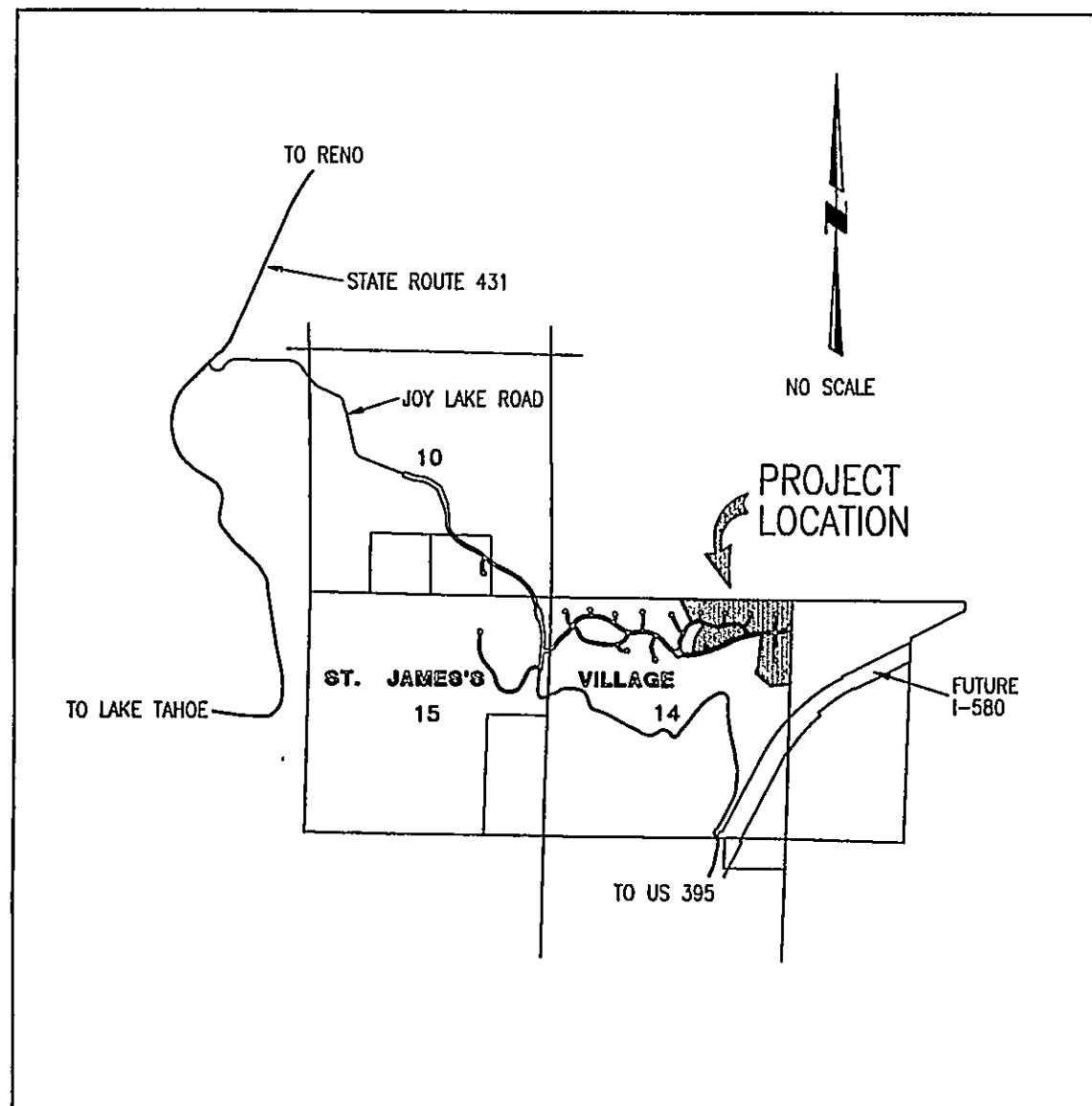
BY: Deanne Brown April 29, 1997
TITLE: Vice President DATE

SECURITY INTEREST HOLDER'S CERTIFICATE

THIS IS TO CERTIFY THAT THE UNDERSIGNED GONZO FINANCIAL, A NEVADA CORPORATION, ATTORNEY-IN-FACT FOR INVESTOR'S JOINT VENTURE, A NEVADA LIMITED PARTNERSHIP, NELLO GONFIANTINI III, DICKSON REALTY PROFIT SHARING PLAN AND TRUST, RICHARD T. AND SUE E. BARRY, JOSEPH AND ELSIE DELELE GARAVENTA, JOHN OPPENHEIMER, DR. CARL M. HERRERA TRUST, JOANN GODDARD, DANIEL A. CRESANTA, M.D. LTD., PROFIT SHARING PLAN AND TRUST, ANGELO AND JOAN PETRINI, DELTA SALOON PROFIT SHARING PLAN, KAFOURY ARMSTRONG & CO. PROFIT SHARING PLAN, ANTONIA CLADIANOS II TRUST, ANTONIA CLADIANOS II GRAT TRUST, GONFIANTINI FAMILY TRUST, ALPINE INSURANCE ASSOCIATES, INC., PROFIT SHARING TRUST, REGINA LANNING, GONZO PROPERTIES, EMMA YOUNG, PIETRO MENICUCCI, EOLA PACINI, CESARINA GONFIANTINI, THOMAS G. AND MICHELLE HULBERT, GONZO FINANCIAL PROFIT SHARING PLAN, PETE CLADIANOS III TRUST, PETE CLADIANOS III GRAT TRUST, LESLIE CLADIANOS TRUST, LESLIE CLADIANOS GRAT TRUST, HAROLD WRIGHT, DEBORAH LEGARZA, THOMAS O'GARA AND JULIE O'GARA, DOLORES LARRAGUETA, P. NADENE LACKEY, HAROLD E. AND JULIA G. GLANDVILLE REVOCABLE LIVING TRUST, PETE CLADIANOS, JR., LIVING TRUST, ALTHEA PAPPAS, ROBERT C. HERRERA AND CLARISSE E. HERRERA FAMILY TRUST, THOMAS OR MARCELLE HERRERA, RAYMOND L. FERRARI, AND RUTH BROWN, CONSENTS TO THE PREPARATION AND RECORDATION OF THIS PLAT.

GONZO FINANCIAL, A NEVADA CORPORATION

BY: Grace Caudill 5-1-97
GRACE C. CAUDILL, CORPORATE SECRETARY DATE



VICINITY MAP

WASHOE COUNTY PLANNING COMMISSION CERTIFICATE

A TENTATIVE MAP OF ST. JAMES'S VILLAGE SUBDIVISION, TM5-2-92, WAS RECOMMENDED FOR APPROVAL BY THE WASHOE COUNTY PLANNING COMMISSION ON THE 8th DAY OF JULY, 1992, AND APPROVED BY THE BOARD OF COUNTY COMMISSIONERS OF WASHOE COUNTY, NEVADA, ON THE 18th DAY OF AUGUST, 1992.

THE FINAL MAP OF BENNINGTON COURT SUBDIVISION (THE WOODS - PHASE 3) WAS APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON THE 17th DAY OF SEPTEMBER, 1996, AND SUBSEQUENTLY RECORDED ON THE 4th DAY OF OCTOBER, 1996. A ONE YEAR EXTENSION WAS GRANTED ON JUNE 17, 1997.

THE FINAL MAP OF ST. JAMES'S VILLAGE SUBDIVISION, UNIT 1D, IS IN SUBSTANTIAL CONFORMANCE WITH THE TENTATIVE MAP AND ALL THE CONDITIONS OF APPROVAL HAVE BEEN MET. THIS FINAL MAP IS APPROVED AND ACCEPTED THIS 4 DAY OF June, 1997, BY THE PLANNING COMMISSION OF WASHOE COUNTY, NEVADA. THE OFFER OF DEDICATION OF THE SEWER FACILITIES AND WATER FACILITIES IS REJECTED AT THIS TIME BUT WILL REMAIN OPEN IN ACCORDANCE WITH N.R.S. 278.

Robert J. Stuebel
CHAIRMAN

ATTEST: THE DIRECTOR OF COMMUNITY DEVELOPMENT CERTIFIES THAT THE FINAL MAP OF ST. JAMES'S VILLAGE SUBDIVISION, UNIT 1D, IS IN SUBSTANTIAL CONFORMANCE WITH THE TENTATIVE MAP AND ALL THE CONDITIONS OF APPROVAL HAVE BEEN MET AND THE WASHOE COUNTY PLANNING COMMISSION TOOK THE ACTION NOTED ABOVE WITH A MAJORITY VOTE OF THE MEMBERS PRESENT.

John B. Hester 5/18/97
JOHN B. HESTER, DIRECTOR OF COMMUNITY DEVELOPMENT DATE

COUNTY SURVEYOR'S CERTIFICATE

I CERTIFY THAT I HAVE EXAMINED THIS MAP CONSISTING OF THREE SHEETS, AND THAT ALL PROVISIONS AND ORDINANCES APPLICABLE HAVE BEEN COMPLIED WITH, AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT AND THAT AN ADEQUATE PERFORMANCE GUARANTEE HAS BEEN FILED GUARANTEEING THE MONUMENTS AS SHOWN WILL BE SET BY JUNE 3, 1998.

Jack M. Holmes 6-7-97
COUNTY SURVEYOR

WATER RIGHT DEDICATION CERTIFICATE

THE WATER AND SEWER RESOURCE REQUIREMENTS SET FORTH IN ARTICLE 422 OF THE WASHOE COUNTY DEVELOPMENT CODE, RELATED TO THE DEDICATION OF WATER RESOURCES HAVE BEEN SATISFIED.

Valid Behraman 5/1/97
WASHOE COUNTY UTILITY DIVISION DATE

UTILITY COMPANIES CERTIFICATE

THE UTILITY EASEMENTS SHOWN ON THIS PLAT HAVE BEEN CHECKED AND APPROVED BY THE UNDERSIGNED PUBLIC UTILITY AND CATV COMPANIES.

Sierra Pacific Power Company 4/29/97
DATE
Nevada Bell 4/29/97
DATE
Dominic Wood 4/29/97
TCI OF NEVADA, INC. DATE
Michael Lumbert 5/8/97
WASHOE COUNTY UTILITY DIVISION DATE

DIVISION OF WATER RESOURCES CERTIFICATE

THIS PLAT IS APPROVED BY THE STATE OF NEVADA DIVISION OF WATER RESOURCES OF THE DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES CONCERNING WATER QUANTITY, SUBJECT TO THE REVIEW OF APPROVAL ON FILE IN THIS OFFICE.

James K. P.E. 4-29-97
DIVISION OF WATER RESOURCES DATE

DISTRICT BOARD OF HEALTH CERTIFICATE

THIS FINAL MAP IS APPROVED BY THE WASHOE COUNTY DISTRICT BOARD OF HEALTH. THIS APPROVAL CONCERNS SEWAGE DISPOSAL, WATER POLLUTION, WATER QUALITY AND WATER SUPPLY FACILITIES AND IS PREDICATED UPON PLANS FOR A PUBLIC WATER SUPPLY AND INDIVIDUAL SYSTEMS FOR DISPOSAL OF SEWAGE.

Paul E. Shum May 12, 1997
FOR THE DISTRICT BOARD OF HEALTH DATE

TAXATION CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT ALL THE PROPERTY TAXES ON THIS LAND FOR THE FISCAL YEAR HAVE BEEN PAID.

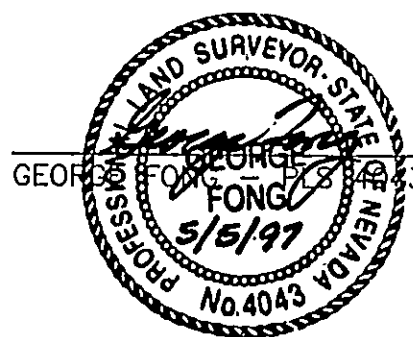
WASHOE COUNTY TREASURER

Dorey A. Anderson 4-29-97
TITLE: Deputy DATE

SURVEYOR'S CERTIFICATE

I, GEORGE FONG, A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF NEVADA, CERTIFY THAT:

- THIS PLAT REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER MY DIRECT SUPERVISION AT THE INSTANCE OF ST. JAMES'S VILLAGE, INC.
- THE LANDS SURVEYED LIE WITHIN PORTIONS OF THE NE1/4 OF SECTION 14, T. 17 N., R. 19 E., M.D.M., AND THE SURVEY WAS COMPLETED ON DECEMBER 2, 1993.
- THIS PLAT COMPLIES WITH THE APPLICABLE STATE STATUTES AND ANY LOCAL ORDINANCES IN EFFECT ON THE DATE THAT THE GOVERNING BODY GAVE ITS FINAL APPROVAL.
- THE MONUMENTS DEPICTED ON THE PLAT WILL BE OF THE CHARACTER SHOWN AND OCCUPY THE POSITIONS INDICATED BY JUNE 3, 1998 AND AN APPROPRIATE FINANCIAL GUARANTEE WILL BE POSTED WITH THE GOVERNING BODY BEFORE RECORDATION TO ASSURE THE INSTALLATION OF THE MONUMENTS.



OFFICIAL PLAT ST. JAMES'S VILLAGE UNIT 1D BEING A PORTION OF THE NE1/4 OF SECTION 14, T.17N., R.19E., M.D.M.		COUNTY RECORDER'S CERTIFICATE FILE NO. <u>2110182</u> FILED FOR RECORD AT THE REQUEST OF <u>Ted S. Brown</u> ON THIS <u>20</u> DAY OF <u>June</u> , 19 <u>97</u> AT <u>6</u> MINUTES PAST <u>11</u> O'CLOCK <u>A.M.</u> OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA.
WASHOE COUNTY cfa PLANNERS • ENGINEERS • SURVEYORS LANDSCAPE ARCHITECTS 1150 CORPORATE BLVD. RENO, NV 89502 (702) 856-1150 FAX: (702) 856-1160	NEVADA JOB NO. 92-005.10 DESIGNED TFH DRAWN COMP. CHECKED SC DATE 4/14/97 SHEET NO. 1 OF 3 SHEETS	Joe Melcher COUNTY RECORDER BY: <u>C. Bartley</u> DEPUTY FEE: <u>51.10</u>

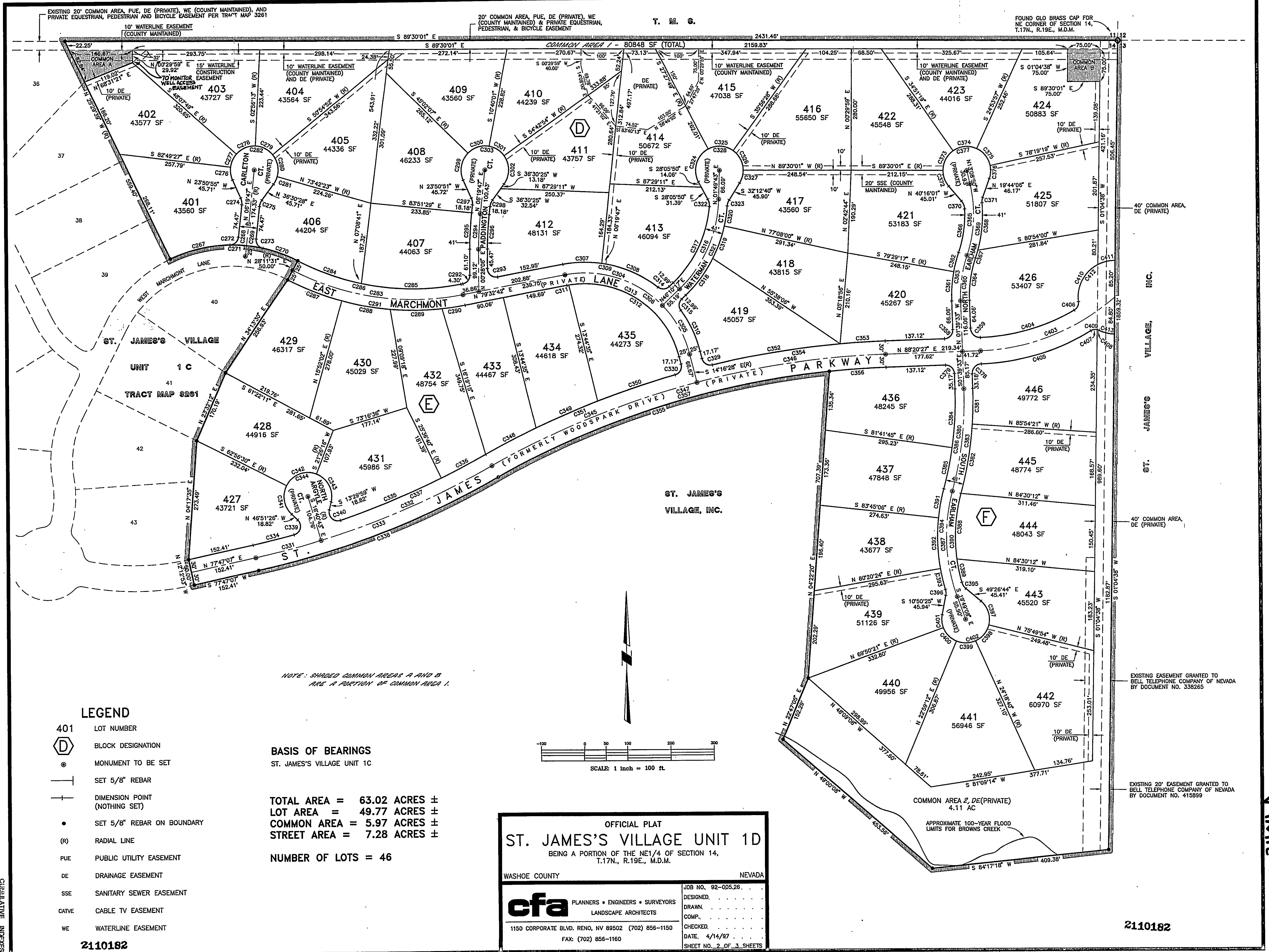
Subdivision Tract Map 3404

CUMULATIVE
INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

2110182

3404
CUMULATIVE
INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

WASHOE



3404 A
CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	BEARING
C267	25°04'57"	325.00'	142.28'	72.30'	141.14'	S 77°02'49" W
C268	08°44'30"	325.00'	38.24'	19.14'	38.22'	N 67°02'28" W
C269	08°44'30"	325.00'	38.24'	19.14'	38.22'	N 80°17'58" W
C270	15°07'15"	325.00'	85.77'	43.14'	85.52'	N 69°22'06" W
C271	53°41'11"	325.00'	304.53'	164.48'	295.51'	N 85°39'04" W
C272	83°15'37"	20.00'	23.08'	17.78'	26.57'	N 47°57'32" E
C273	83°15'30"	20.00'	29.08'	17.78'	26.57'	S 35°17'58" E
C274	30°10'41"	30.00'	15.80'	8.09'	15.62'	N 08°45'34" W
C275	30°10'41"	30.00'	15.80'	8.09'	15.62'	N 21°25'09" E
C276	31°01'28"	55.00'	23.78'	12.27'	26.42'	N 08°20'11" W
C277	34°41'37"	55.00'	33.50'	17.18'	32.80'	N 24°31'22" E
C278	51°04'02"	55.00'	49.02'	26.27'	47.41'	N 67°24'12" E
C279	47°58'39"	55.00'	46.05'	24.47'	44.72'	S 63°04'28" E
C280	55°22'45"	55.00'	53.18'	28.88'	51.11'	S 11°23'45" E
C281	20°12'52"	55.00'	19.40'	9.80'	19.30'	S 26°24'02" W
C282	24°21'23"	55.00'	230.73'	94.58'	95.09'	S 83°40'13" E
C283	38°38'50"	600.00'	404.71'	210.39'	397.08'	S 81°07'54" E
C284	15°35'48"	575.00'	156.52'	76.75'	156.04'	S 69°36'25" E
C285	23°03'02"	575.00'	231.33'	117.25'	226.77'	S 88°55'48" E
C286	38°38'50"	575.00'	387.85'	201.63'	380.54'	S 81°07'54" E
C287	12°19'29"	625.00'	134.44'	67.48'	134.18'	S 67°58'13" E
C288	10°25'59"	625.00'	113.81'	57.09'	113.65'	S 79°20'57" E
C289	10°57'04"	625.00'	119.48'	59.91'	119.28'	N 89°57'31" E
C290	04°58'18"	625.00'	53.87'	26.95'	53.85'	N 82°00'50" E
C291	38°38'50"	625.00'	421.58'	219.16'	413.63'	S 81°07'54" E
C292	79°04'36"	20.00'	27.60'	16.51'	25.48'	N 40°00'24" E
C293	10°58'24"	20.00'	35.23'	24.23'	30.85'	S 49°59'35" E
C294	05°51'41"	800.00'	81.84'	40.96'	81.80'	S 03°23'56" W
C295	05°51'41"	820.50'	83.94'	42.00'	83.90'	S 03°23'56" W
C296	05°51'41"	779.50'	79.74'	39.91'	79.71'	S 03°23'56" W
C297	30°10'38"	30.00'	15.80'	8.09'	15.62'	N 08°45'34" W
C298	30°10'38"	30.00'	15.80'	8.09'	15.62'	N 21°25'09" E
C299	68°48'44"	55.00'	66.08'	37.67'	62.16'	N 10°33'31" E
C300	58°42'08"	55.00'	53.47'	29.08'	51.39'	N 72°48'57" E
C301	44°02'53"	55.00'	42.28'	22.25'	41.25'	S 57°18'33" E
C302	71°47'31"	55.00'	68.92'	38.81'	64.49'	S 00°36'39" W
C303	24°21'15"	55.00'	230.72'	94.58'	95.09'	S 83°40'13" E
C304	56°37'36"	250.00'	247.08'	134.69'	237.15'	N 72°08'30" W
C305	29°33'14"	250.00'	128.95'	65.95'	127.53'	N 29°03'05" W
C306	86°10'50"	250.00'	376.03'	233.87'	341.57'	N 57°21'53" W
C307	18°52'07"	275.00'	90.58'	45.70'	90.15'	S 88°58'45" W
C308	29°52'01"	275.00'	143.35'	73.34'	141.73'	N 66°39'10" W
C309	48°44'08"	275.00'	233.91'	124.58'	226.93'	N 76°05'14" W
C310	21°39'47"	275.00'	103.97'	52.62'	103.38'	N 25°06'22" W
C311	01°04'23"	225.00'	4.21'	2.11'	4.21'	S 80°04'53" W
C312	85°06'27"	225.00'	334.22'	206.56'	304.33'	N 56°49'42" W
C313	86°10'50"	225.00'	338.43'	210.48'	307.42'	N 57°21'53" W
C314	82°06'33"	20.00'	28.68'	17.42'	26.27'	N 07°13'34" E
C315	82°06'33"	20.00'	28.68'	17.42'	26.27'	S 05°07'01" W
C316	44°20'36"	300.00'	232.18'	122.25'	226.43'	N 24°00'00" E
C317	40°44'01"	279.50'	198.71'	103.76'	194.55'	N 25°48'17" E
C318	19°03'58"	320.50'	108.65'	53.82'	108.16'	N 36°38'18" E
C319	14°14'19"	320.50'	79.65'	40.03'	79.44'	N 19°59'10" E
C320	08°20'22"	320.50'	86.65'	23.37'	46.61'	N 08°41'49" E
C321	41°38'40"	320.50'	232.95'	121.89'	227.86'	N 25°20'58" E
C322	33°32'06"	30.00'	17.58'	9.04'	17.31'	N 11°19'47" W
C323	27°41'02"	30.00'	14.50'	7.39'	14.35'	N 12°22'02" E
C324	90°38'01"	55.00'	67.00'	55.81'	78.21'	N 17°31'1" E
C325	63°24'17"	55.00'	60.86'	33.97'	57.81'	S 85°45'40" E
C326	54°33'31"	55.00'	52.37'	28.35'	50.42'	S 26°46'46" E
C327	31°42'41"	55.00'	30.44'	15.82'	30.05'	S 16°21'20" W
C328	24°18'30"	55.00'	230.68'	94.67'	95.11'	S 87°50'35" E
C329	86°44'32"	20.00'	30.98'	19.57'	27.97'	S 58°38'44" E
C330	48°44'32"	20.00'	30.98'	19.57'	27.97'	N 30°05'48" E
C331	04°27'50"	2000.00'	155.82'	77.95'	155.78'	N 75°33'12" E
C332	12°17'59"	2000.00'	428.34'	215.80'	428.28'	N 67°10'17" E
C333	16°45'49"	2000.00'	595.18'	294.69'	583.08'	N 69°24'12" E
C334	02°50'12"	1970.00'	97.53'	48.78'	97.52'	N 76°22'00" E
C335	07°18'19"	1970.00'	251.17'	125.76'	251.00'	N 68°02'29" E
C336	03°22'03"	1970.00'	115.78'	57.81'	115.77'	N 72°42'18" E
C337	10°40'22"	1970.00'	366.96'	184.01'	366.43'	N 66°21'28" E
C338	16°45'49"	2030.00'	593.94'	299.11'	591.82'	N 69°24'12" E
C339	12°14'21"	20.00'	42.52'	35.94'	34.95'	N 14°02'44" E
C340	12°14'21"	20.00'	42.52'	35.94'	34.95'	S 47°24'11" E

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	BEARING
C341	73°54'56"	55.00'	70.95'	41.38'	66.13'	N 09°53'58" W
C342	84°22'46"	55.00'	81.00'	49.85'	73.87'	N 69°14'53" E
C343	82°03'43"	55.00'	78.77'	47.85'	72.21'	S 27°31'52" E
C344	24°21'25"	2000.00'	230.73'	94.58'	95.09'	N 73°19'17" E
C345	14°42'14"	2000.00'	513.27'	258.05'	511.88'	S 68°22'24" W
C346	12°36'55"	2000.00'	440.36'	221.07'	439.47'	S 82°01'59" W
C347	27°19'09"	2000.00'	953.62'	486.05'	944.61'	S 74°49'52" W
C348	03°42'26"	2030.00'	131.35'	65.70'	131.32'	S 62°52'30" W
C349	04°23'45"	2030.00'	155.75'	77.91'	155.71'	S 86°55'36" W
C350	05°20'35"	2030.00'	189.31'	94.72'	189.24'	S 71°47'46" W
C351	13°26'46"	2030.00'	476.40'	239.30'	475.31'	S 67°44'40" W
C352	08°25'39"	2030.00'	298.58'	149.58'	298.31'	S 81°11'49" W
C353	02°59'48"	2030.00'	103.81'	51.92'	103.80'	S 86°52'32" W
C354	11°21'27"	2030.00'	402.40'	201.86'	401.74'	S 82°39'43" W
C355	23°30'02"	1970.00'	808.02'	408.77'	802.37'	N 72°48'18" E
C356	03°49'07"	1970.00'	939.32'	478.77'	931.27'	S 86°25'53" W
C357	27°19'09"	1970.00'	939.32'	478.76'	930.44'	S 74°40'52" W
C358	90°00'00"	20.00'	31.42'	20.00'	28.28'	N 43°20'27" E
C359	90°05'57"	22.00'	34.60'	22.04'	31.14'	S 46°42'32" E
C360	20°28'14"	300.00'	107.09'	54.08'	106.44'	S 08°33'33" W
C361	12°10'17"	320.50'	68.08'	34.17'	67.96'	N 04°25'35" E
C362	08°15'57"	320.50'	46.24'	23.18'	46.20'	N 14°38'42" E
C363	20°28'14"	320.50'	114.32'	57.77'	113.72'	S 08°33'33" W
C364	20°28'14"	278.50'	99.70'	50.38'	99.17'	S 08°33'33" W
C365	31°55'30"	300.00'	167.18'	85.81'	165.00'	N 02°48'55" E
C366	20°51'40"	278.50'	101.76'	51.45'	101.20'	N 08°20'50" E
C367	03°26'12"	320.50'	19.22'	9.61'	19.22'	N 17°03'35" E
C368	19°37'38"	320.50'	109.79'	55.44'	109.25'	N 05°31'40" W
C369	23°03'50"	320.50'	129.01'	65.39'	126.14'	N 07°14'46" E
C370	38°11'01"	30.00'	19.99'	10.38'	19.63'	N 21°10'30" W
C371	24°01'16"	30.00'	12.58'	6.39'	12.49'	S 07°43'28" W
C372	40°46'00"	55.00'	39.13'	20.44'	38.31'	N 19°53'01" W
C373	54°38'42"	55.00'	52.48'	28.41'	50.49'	N 27°49'20" E
C374	59°45'16"	55.00'	31.60'	16.80'	31.60'	N 85°01'19" E
C375	53°22'22"	55.00'	51.28'	27.68'	48.44'	S 38°23'22" E
C376	31°24'48"	55.00'	30.15'	15.47'	29.78'	S 04°01'43" W
C377	24°00'07"	55.00'	230.39'	95.28'	95.28'	S 79°44'03" W
C378	89°55'10"	22.00'	34.53'	21.97'	31.09'	N 43°18'02" E
C379	90°00'00"	20.00'	31.42'	20.00'	28.28'	N 46°39'33" W
C380	17°02'56"	800.00'	238.05'	119.91'	237.17'	N 08°51'55" E
C381	05°45'12"	820.50'	82.39'	41.23'	81.56'	N 01°13'03" E
C382	11°17'44"	820.50'	161.76'	81.14'	161.49'	N 09°44'31" E
C383	17°02'56"	820.50'	244.15'	122.98'	243.25'	N 08°51'55" E
C384	09°57'48"	779.50'	135.55'	67.95'	135.38'	S 03°19'21" W
C385	07°05'08"	779.50'	96.40'	48.26'	96.34'	S 11°50'49" W
C386	17°02'56"	779.50'	231.85'	116.84'	231.09'	N 08°51'55" E
C387	35°12'31"	400.00'	245.80'	126.92'	241.95'	S 02°12'53" E
C388	22°48'17"	379.50'	151.05'	76.54'	150.05'	S 03°59'14" W
C389	08°12'16"	379.50'	54.34'	27.22'	54.30'	S 11°31'02" E
C390	31°00'33"	379.50'	205.39'	105.28'	202.89'	N 00°08'54" W
C391	09°08'25"	420.50'	67.09'	33.62'	67.02'	S 10°49'08" W
C392	15°54'31"	420.50'	116.75'	58.75'	116.38'	S 01°42'21" E
C393	06°43'40"	420.50'	49.38'	24.72'	49.35'	S 13°01'26" E
C394	31°46'39"	420.50'	233.22'	119.69'	230.24'	N 00°29'57" W
C395	33°48'34"	30.00'	17.71'	9.12'	17.46'	S 32°31'57" E
C396	27°13'41"	30.00'	14.26'	7.27'	14.12'	S 02°46'26" E
C397	63°36'50"	55.00'	61.08'	34.11'	57.98'	S 17°38'19" E
C398	51°31'14"	55.00'	49.46'	26.54'	47.81'	S 39°55'43" W
C399	47°17'52"	55.00'	45.40'	24.08'	44.12'	S 89°20'16" W
C400	46°51'09"	55.00'	44.98'	23.83'	43.73'	N 43°35'14" W
C401	31°00'04"	55.00'	29.76'	15.25'	29.40'	N 04°39'37" W
C402	24°01'09"	55.00'	230.66'	94.72'	95.13'	N 70°41'50" E
C403	38°58'58"	500.00'	340.19'	176.97'	333.67'	N 65°50'58" E
C404	27°44'53"	470.00'	227.62'	116.09'	225.40'	N 74°22'03" E
C405	28°50'09"	530.00'	266.74'	136.26'	263.93'	N 73°50'32" E
C406	67°17'44"	20.00'	23.49'	13.31'	22.16'	N 26°50'45" E
C407	43°31'40"	20.00'	15.19'	7.98'	14.83'	N 81°11'17" E
C408	13°08'19"	20.00'	4.57'	2.30'	4.56'	S 70°29'44" E
C409	56°37'59"	20.00'	19.77'	10.78'	18.97'	N 87°44'27" E
C410	69°38'01"	85.00'	103.30'	59.11'	97.06'	S 28°00'53" W
C411	28°05'35"	85.00'	41.68'	21.27'	41.26'	N 76°52'41" E
C412	97°43'35"	85.00'	148.89'	73.31'	128.03'	N 42°03'41" E
C413	24°48'39"	85.00'	36.83'	18.71'	36.54'	S 76°21'24" E

ST. JAMES'S VILLAGE - UNIT 2A

OWNER'S CERTIFICATE

This is to certify that the undersigned, ST. James's Village, Inc., a Nevada Corporation is the owner of the tract of land represented on this plat, and has consented to the preparation and recordation of this plat, and that the same is executed in compliance with and subject to the provisions of N.R.S. chapters 116 and 278, and that the streets, avenues and highways and all appurtenances thereto as shown on this plat plat are hereby set apart to be used as private access forever;

The owner hereby grants to all public utilities and the County of Washoe, permanent easements shown on this plat for the construction and maintenance of utility systems, together with the right of access thereto forever. The water and sewer facilities are hereby dedicated to Washoe County. The owner and its assigns agree to the use of residential water meters.

ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION

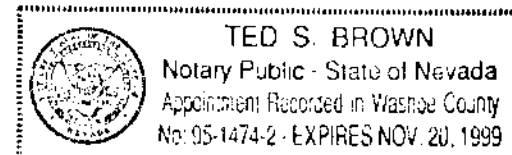
BY: M. Mehdi Mostaedi M.D. 15.98
M. Mehdi Mostaedi, President Date

NOTARY PUBLIC CERTIFICATE

STATE OF NEVADA
COUNTY OF WASHOE SS:

On this 15th day of May, 1998 personally appeared before me, a Notary Public in the County of WASHOE, M. Mehdi Mostaedi as President of ST. James's Village, Inc., a Nevada Corporation who acknowledged to me that he executed the above instruments. In witness whereof, I hereunto set my hand and affix my official seal the date and year first above written.

Ted S. Brown
Notary Public



SECURITY INTEREST HOLDERS CERTIFICATE

This is to certify that the undersigned Gonzo Financial a Nevada Corporation, Attorney in Fact, for: Investor's Joint Venture, Angelo & Joan Petrini, Nello Gonfiantini III, John & Bruna Repetto Trust, Mark S. Green and Katharine D. Green, Cesarina Bernardini Gonfiantini, trustees of the Cesarina Bernardini Gonfiantini Trust, Angelo and Joan Petrini, trustees of the 1987 Petrini Family Trust, Noonan Family Trust, Althea Pappas, Robert C. Herrera and Clarisse E. Herrera Family Trust, Thomas or Marcelle Herrera, Ruth Brown, Nello Gonfiantini III, trustee of the Nello Gonfiantini III 1981 Trust, Antonio Cladianos II Trust, Pete Cladianos Jr., trustee of the Antonio Cladianos II GRAT Trust UA, Daniel A. Cresanta M.D., trustee of the Alpine Insurance Associates Inc., Profit Sharing Plan, Dickson Realty Profit Sharing Plan & Trust, Regine Lanning, John Openheimer, Carl M. Herrera Trust, JoAnn Goddard, Kafoury Young, Pietro Menicucci & Eola Pacini, Cesarina Gonfiantini, Richard T. & Sue Barry, Pietro Menicucci, Thomas G. & Michelle Hulbert, Gonzo Financial Profit Sharing Plan, Pete Cladianos III Trust, Pete Cladianos III GRAT Trust, Leslie Cladianos Trust, Harold Wright, Deborah Legarza, Thomas O'Gara & Julie O'Gara, Delores Larraguet, P. Nadene Lackey, Harold E. & Julie G. Glendville Revocable Family Trust, Pete Cladianos Jr., Living Trust Specialty Mortgage Trust, Maryland Corporation, Eton Associates, Paolo Gaspari, Pete Cladianos Living Trust, Teresa Gaspari, Pietro Menicucci Survivors Trust, Dean Cresanta, Steve Johnson, Nadine Lackey, and Peter Meyer Menicucci hereby consents to the preparation and recordation of this map.

GONZO FINANCIAL, A NEVADA CORPORATION

Grace C. Caudill 9/20/20/98
Grace C. Caudill, Corporate Secretary 6/24/98
Date

TITLE COMPANY CERTIFICATE

The undersigned hereby certifies that this map has been examined and that ST. James's Village, Inc., a Nevada Corporation owns of record an interest in the lands delineated hereon and that it is the only owner of said land; that all owner's of record of the land have signed the final map; that the investors' Joint Venture, Angelo & Joan Petrini, Nello Gonfiantini III, John & Bruna Repetto Trust, Antonio Cladianos II Trust, Pete Cladianos Jr., trustee of the Antonio Cladianos II GRAT Trust UA, Daniel A. Cresanta M.D., trustee of the Alpine Insurance Associates Inc., Profit Sharing Plan, Dickson Realty Profit Sharing Plan & Trust, Regine Lanning, John Openheimer, Carl M. Herrera Trust, JoAnn Goddard, Kafoury Young, Pietro Menicucci & Eola Pacini, Cesarina Gonfiantini, Richard T. & Sue Barry, Pietro Menicucci, Thomas G. & Michelle Hulbert, Gonzo Financial Profit Sharing Plan, Pete Cladianos III Trust, Pete Cladianos III GRAT Trust, Leslie Cladianos Trust, Harold Wright, Deborah Legarza, Thomas O'Gara & Julie O'Gara, Delores Larraguet, P. Nadene Lackey, Harold E. & Julie G. Glendville Revocable Family Trust, Pete Cladianos Jr., Living Trust Specialty Mortgage Trust, Maryland Corporation, Eton Associates, Paolo Gaspari, Pete Cladianos Living Trust, Teresa Gaspari, Pietro Menicucci Survivors Trust, Dean Cresanta, Steve Johnson, Nadine Lackey, and Peter Meyer Menicucci hold of record a security interest in said land; and that there are no liens of record against the common interest community for delinquent state, county, municipal, federal or local taxes or assessments collected as taxes or special assessments.

STEWART TITLE OF NORTHERN NEVADA

BY: Roger T. Lunsford 4.2
Roger T. Lunsford, 4.2
Date

PRINTED Roger T. Lunsford, 4.2

NOTARY PUBLIC CERTIFICATE

STATE OF NEVADA
COUNTY OF WASHOE SS:

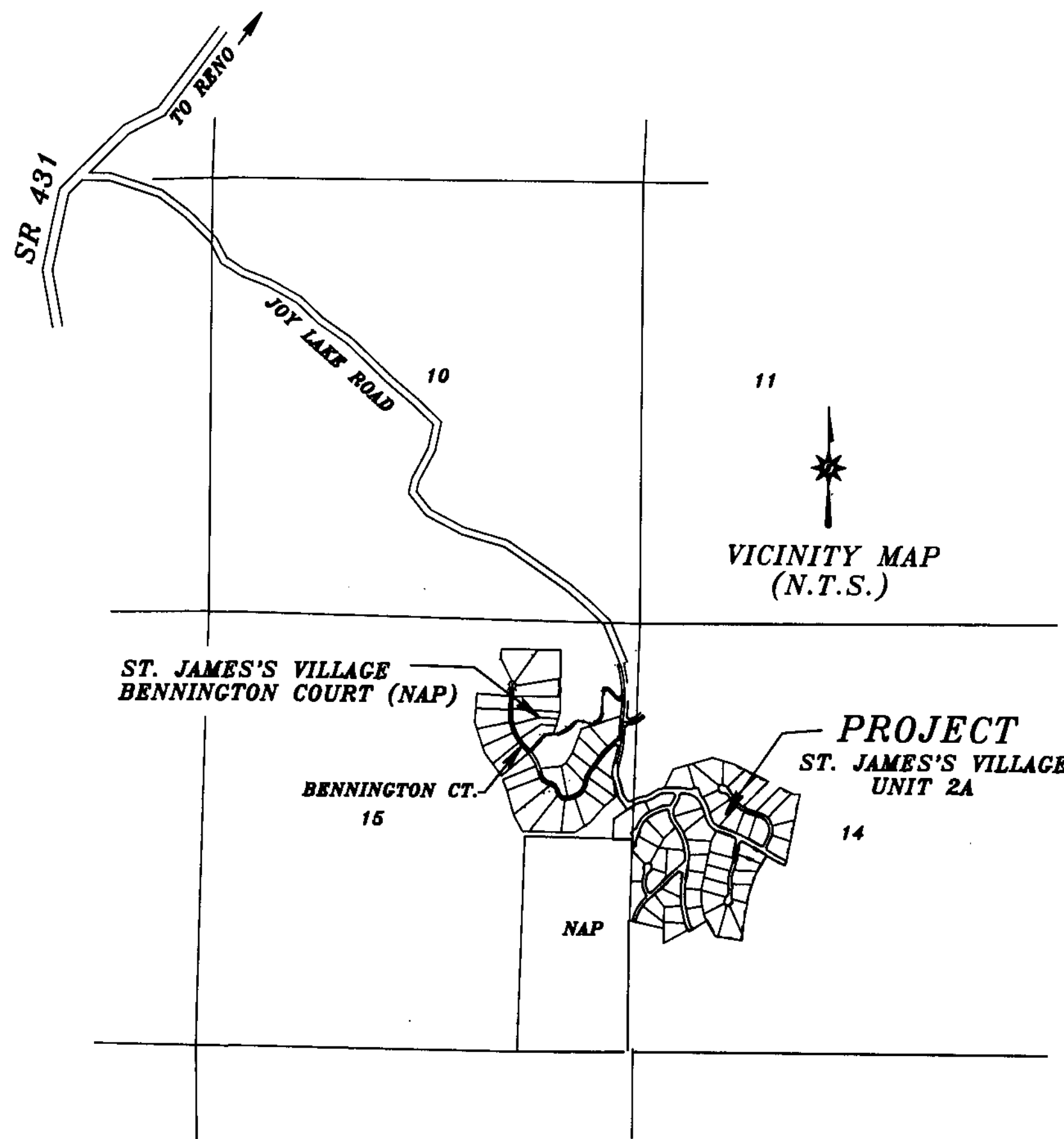
On this 14th day of June, 1998 personally appeared before me, a Notary Public in the County of WASHOE, Grace C. Caudill, Corporate Secretary of Gonzo Financial, A Nevada Corporation and Attorney in Fact for Investors Joint Venture, A Nevada Limited Partnership who acknowledged to me that she executed the above instruments. In witness whereof, I hereunto set my hand and affix my official seal the date and year first above written.

Grace C. Caudill
Notary Public

DIVISION OF WATER RESOURCES CERTIFICATE

This plat is approved by the State of Nevada, Division of Water Resources of the Department of Conservation and Natural Resources concerning water quantity, subject to review of approval on file in this office.

James K. P.E. 5-11-98
Division of Water Resources Date 2265787



UTILITY COMPANIES CERTIFICATE

The utility easements shown on this plat have been checked and approved by the undersigned public utility, sewer and cable television companies:

Carolyn Carrica 5/14/98
Sierra Pacific Power Company Date

Donna Marshall 5/13/98
Nevada Bell Date

John A. H. 5/15/98
TCI Cablevision of Nevada Date

E. Jim Smith 5/28/98
Washoe County Utility Services Division Date

DISTRICT BOARD OF HEALTH CERTIFICATE

This final map is approved by the Washoe County District Board of Health. This approval concerns sewage disposal, water pollution, water quality and water supply facilities and is predicated upon plans for a public water supply and an individual system for disposal of sewage.

Donald Smith June 10, 1998
For the District Board of Health Date

TAX CERTIFICATE

The undersigned hereby certifies that all property taxes on this land for the fiscal year have been paid and that the full amount of any deferred property taxes for the conversion of the property from agricultural use have been paid pursuant to NRS 361A.265.

Washoe County Treasurer
James K. P.E. Deputy
By: James K. P.E.
Date: 5-18-98 Title: Deputy
10-21-98

SURVEYOR'S CERTIFICATE

- I, Harlan K. King, a Professional Land Surveyor licensed in the State of Nevada, certify that:
- This plat represents the results of a survey conducted under my direct supervision at the instance of ST. James's Village, Inc.
 - The lands surveyed lie within the W 1/2 of Section 14 and the NE 1/4 of Section 15, T.17N., R.19E., M.D.B.M. and the survey was completed on March 6, 1998.
 - This plat complies with the applicable state statutes and any local ordinances in effect on the date that the governing body gave its final approval.
 - The monuments depicted on the plat will be of the character shown and occupy the positions indicated by 10-19-99 and an appropriate financial guarantee will be posted with the governing body before recordation to ensure installation of the monuments.

Harlan K. King P.L.S. 5665
No. 5665 5-29-98

COUNTY SURVEYOR'S CERTIFICATE

I hereby certify that I have examined this plat, consisting of 3 sheets, and that all provisions and ordinances applicable have been complied with, and that I am satisfied that the map is technically correct, and that an adequate performance guarantee has been filed guaranteeing the monuments as shown will be set by 10-19-99.

Jack M. Holmes 10/21/98
County Surveyor Date

WASHOE COUNTY PLANNING COMMISSION CERTIFICATE

A tentative map of ST. James's Village Subdivision, TM5-2-92, was recommended for approval by the Washoe County Planning Commission on the 8th day of July, 1992, and approved by the Board of County Commissioners of Washoe County, Nevada on the 18th day of August, 1992. A one year extension for filing the next final map was approved by the Washoe County Planning Commission on the 19th day of May, 1998.

The final map of ST. James's Village Unit 10 was approved by the Planning Commission of Washoe County, Nevada on the 17th day of June, 1997 and subsequently recorded on the 20th day of June, 1997.

The final map of ST. James's Village Unit 2A is in substantial compliance with the Tentative Map and all the conditions of approval have been met. This final map is approved and accepted this 20 day of Oct, 1998 by the Planning Commission of Washoe County, Nevada. The offer of dedication of the sewer facilities and water facilities is rejected at this time, but will remain open in accordance with N.R.S. 278.

Mary C. Canada
Chairman

ATTEST: The Director of Community Development certifies that the final map of ST. James's Village Subdivision, Unit 2A, is in substantial conformance with the tentative map and all conditions of approval have been met and the Washoe County Planning Commission took the action noted above with a majority vote of the members present.

William Owen Dindrich Planning Manager October 20, 1998
Director, Community Development Date

WATER RIGHT DEDICATION CERTIFICATE

The Water and Sewer Resource Requirements set forth in Article 422 of the Washoe County Development Code, related to the dedication of water resources, have been satisfied.

E. Jim Smith 5/28/98
Washoe County Utility Division Date

FILE NO. 2265787

FILED FOR RECORD AT THE REQUEST OF HARLAN KING & ASSOC. ON THIS 21 DAY OF Oct, 1998, AT 2:10 P.M. PAST 10 O'CLOCK P.M. OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA

Joe Melcher COUNTY RECORDER
BY: C. Bartley DEPUTY
FEE 52.05

OFFICIAL PLAT

OF
ST. JAMES'S VILLAGE-UNIT 2A

LOCATED WITHIN A PORTION OF THE WEST 1/2 OF SECTION 14 AND THE NE 1/4 OF SECTION 15 T.17N., R.19E., M.D.B.&M.

WASHOE COUNTY NEVADA

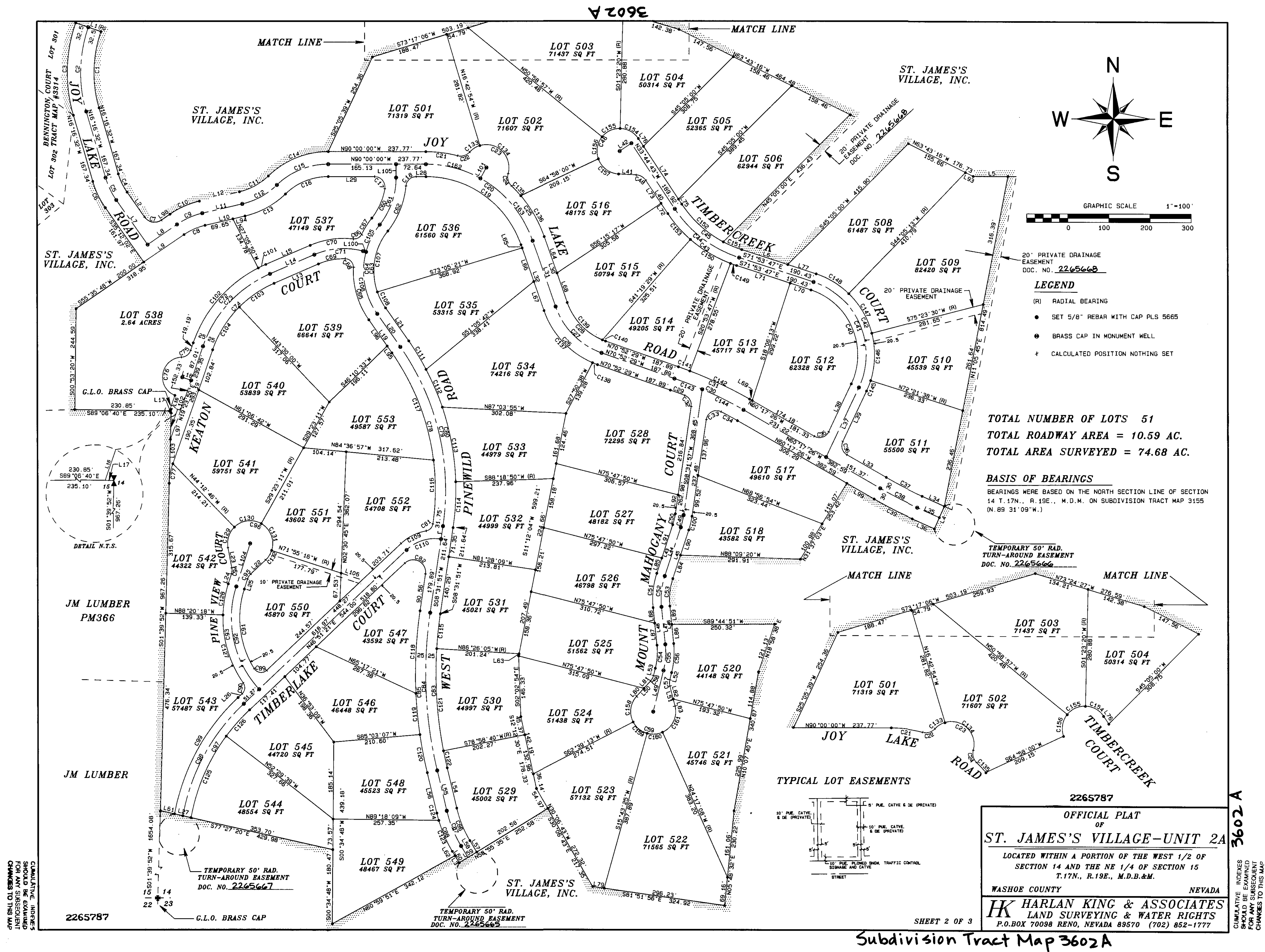
HK HARLAN KING & ASSOCIATES
LAND SURVEYING & WATER RIGHTS
P.O. BOX 70098 RENO, NEVADA 89570 (702)852-1777

SHEET 1 OF 3

Subdivision Tract Map 3602

CUMULATIVE INDEXES SHOULD BE EXAMINED FOR ANY SUBSEQUENT CHANGES TO THIS MAP

3602
CUMULATIVE INDEXES SHOULD BE EXAMINED FOR ANY SUBSEQUENT CHANGES TO THIS MAP



	DELTA	RADIUS	ARC	TANGENT
C1	35°21'54"	303.49'	187.32'	96.75'
C2	35°21'54"	335.99'	207.38'	107.11'
C3	35°21'54"	368.49'	227.44'	117.47'
C4	18°55'30"	148.50'	49.05'	24.75'
C5	18°55'30"	181.00'	59.79'	30.17'
C6	18°55'30"	213.50'	70.52'	35.58'
C7	89°12'09"	30.00'	46.71'	29.59'
C8	21°22'51"	151.00'	56.35'	28.51'
C9	21°22'51"	181.00'	67.54'	34.17'
C10	21°22'51"	211.00'	78.74'	39.83'
C11	30°44'46"	151.00'	81.03'	41.52'
C12	30°44'46"	181.00'	97.13'	49.76'
C13	30°44'46"	211.00'	113.23'	58.01'
C14	43°46'07"	211.00'	161.18'	84.75'
C15	43°46'07"	181.00'	138.27'	72.70'
C16	43°46'07"	151.00'	115.35'	60.65'
C17	100°01'59"	25.00'	43.65'	29.81'
C18	84°19'48"	25.00'	36.80'	22.64'
C19	70°52'08"	245.00'	303.04'	174.33'
C20	70°52'08"	275.00'	340.15'	195.68'
C21	14°37'32"	305.00'	77.86'	39.14'
C22	62°21'15"	30.00'	32.65'	18.15'
C23	153°17'36"	55.00'	147.15'	231.70'
C24	62°21'15"	30.00'	32.65'	18.15'
C25	27°39'30"	305.00'	147.23'	75.08'
C26	51°44'37"	211.00'	190.55'	102.33'
C27	51°44'37"	181.00'	163.45'	87.78'
C28	51°44'37"	151.00'	136.37'	73.23'
C29	02°11'40"	970.00'	37.15'	18.58'
C30	10°35'04"	1000.00'	184.73'	92.63'
C31	10°35'04"	1030.00'	190.27'	95.41'
C32	77°12'46"	25.00'	33.69'	19.96'
C33	108°31'10"	25.00'	47.35'	34.74'
C34	02°39'27"	970.00'	44.99'	22.50'
C35	94°25'43"	25.00'	41.20'	27.01'
C36	85°34'17"	25.00'	37.34'	23.14'
C37	05°48'49"	970.00'	98.42'	49.25'
C38	05°48'49"	1000.00'	101.47'	50.78'
C39	05°48'49"	1030.00'	104.51'	52.30'
C40	97°10'39"	164.50'	279.00'	188.51'
C41	97°10'39"	185.00'	313.77'	209.76'
C42	97°10'39"	205.50'	348.54'	233.00'
C43	38°09'04"	320.50'	213.41'	110.83'
C44	38°09'04"	300.00'	199.76'	103.74'
C45	38°09'04"	279.50'	186.11'	96.65'
C46	233°28'26"	55.00'	224.12'	
C47	233°28'26"	34.50'	140.58'	
C48	53°28'26"	30.00'	28.00'	15.11'
C49	09°43'24"	181.00'	30.72'	15.39'
C50	09°43'24"	160.50'	27.24'	13.65'
C51	24°03'45"	201.50'	84.62'	42.94'
C52	24°03'45"	181.00'	76.01'	38.58'
C53	24°03'45"	160.50'	67.40'	34.21'
C54	20°00'35"	160.50'	56.05'	28.31'
C55	20°00'35"	181.00'	63.21'	31.93'
C56	20°00'35"	201.50'	70.37'	36.55'
C57	28°43'53"	30.00'	15.04'	7.68'
C58	28°43'53"	30.00'	15.04'	7.68'
C59	237°27'46"	55.00'	227.94'	
C60	28°43'39"	156.00'	78.22'	39.95'
C61	38°45'37"	181.00'	122.45'	63.67'
C62	33°05'26"	206.00'	118.97'	61.20'
C63	73°54'58"	156.00'	201.25'	117.38'
C64	73°54'58"	181.00'	233.50'	136.19'
C65	37°35'35"	206.00'	135.16'	70.11'
C66	70°38'16"	20.00'	24.66'	14.17'
C67	12°59'48"	206.00'	46.73'	23.46'
C68	91°12'01"	20.00'	31.83'	20.42'
C69	24°44'08"	156.00'	67.35'	34.21'
C70	29°53'59"	206.00'	107.50'	56.00'
C71	38°25'18"	181.00'	121.38'	63.07'
C72	47°06'15"	325.00'	267.19'	141.67'
C73	47°06'15"	300.00'	246.64'	130.77'
C74	47°06'15"	275.00'	226.08'	119.87'
C75	68°17'34"	25.00'	29.80'	16.96'
C76	155°54'17"	48.00'	130.61'	224.90'
C77	17°43'58"	156.00'	48.28'	24.34'
C78	43°32'37"	575.00'	436.99'	229.66'
C79	43°41'12"	600.00'	457.49'	240.51'
C80	43°41'12"	625.00'	476.55'	250.53'
C81	71°33'22"	20.00'	24.98'	14.41'
C82	141°40'30"	30.00'	74.18'	86.33'
C83	22°01'35"	975.00'	374.82'	189.75'
C84	22°01'35"	1000.00'	384.43'	194.62'
C85	22°01'35"	1025.00'	394.05'	199.49'
C86	17°34'40"	275.00'	84.37'	42.52'
C87	17°34'40"	300.00'	92.04'	46.38'
C88	17°34'40"	325.00'	99.71'	50.25'
C89	101°09'51"	20.00'	35.31'	24.33'
C90	81°58'37"	20.00'	28.62'	17.38'
C91	49°55'08"	229.17'	199.67'	106.67'
C92	61°04'59"	249.67'	266.18'	147.31'
C93	53°03'36"	270.17'	250.20'	134.88'
C94	28°43'53"	30.00'	15.04'	7.68'
C95	28°43'53"	30.00'	15.04'	7.68'
C96	237°27'46"	55.00'	227.95'	
C97	36°05'00"	479.50'	301.98'	156.18'
C98	36°00'38"	500.00'	314.25'	162.51'
C99	35°56'37"	520.50'	326.53'	168.84'
C100	09°43'24"	201.50'	34.19'	17.14'

	DELTA	RADIUS	ARC	TANGENT
C101	03°35'55"	325.00'	20.41'	10.21'
C102	43°30'20"	325.00'	246.78'	129.68'
C103	21°24'48"	275.00'	102.78'	52.00'
C104	25°41'27"	275.00'	123.31'	62.71'
C105	23°50'14"	181.00'	75.30'	38.20'
C106	50°04'45"	181.00'	157.52'	84.55'
C107	57°51'11"	156.00'	43.74'	22.01'
C108	16°03'48"	156.00'	157.52'	84.55'
C109	33°05'18"	121.19'	69.98'	35.00'
C110	51°40'30"	100.69'	90.81'	48.76'
C111	07°22'05"	625.00'	80.37'	40.24'
C112	09°10'39"	625.00'	100.11'	50.16'
C113	16°55'28"	625.00'	184.62'	92.98'
C114	10°13'00"	625.00'	111.45'	55.87'
C115	04°57'55"	975.00'	84.50'	42.27'
C116	15°27'50"	575.00'	155.19'	78.07'
C117	28°04'47"	575.00'	281.80'	143.79'
C118	11°08'26"	1025.00'	199.30'	99.96'
C119	05°38'15"	1025.00'	100.85'	50.47'
C120	05°14'55"	1025.00'	93.90'	45.98'
C121	14°35'16"	975.00'	248.24'	124.79'
C122	02°28'24"	975.00'	42.09'	21.05'
C123	14°23'50"	325.00'	81.66'	41.05'
C124	03°10'51"	325.00'	18.04'	9.02'
C125	25°49'22"	479.50'	216.11'	109.92'
C126	10°15'38"	479.50'	85.87'	43.05'
C127	36°44'58"	270.17'	173.29'	89.74'
C128	16°18'38"	270.17'	76.91'	38.72'
C129	56°34'47"	55.00'	54.31'	29.60'
C130	73°35'58"	55.00'	70.65'	41.14'
C131	78°41'33"	55.00'	75.54'	45.09'
C132	28°35'29"	55.00'	27.45'	14.02'
C133	31°00'49"	55.00'	29.77'	15.26'
C134	122°16'48"	55.00'	117.38'	59.80'
C135	06°05'48"	305.00'	32.45'	16.24'
C136	21°33'42"	305.00'	114.78'	58.08'
C137	48°12'59"	211.00'	177.56'	94.42'
C138	03°31'38"	211.00'	12.99'	6.50'
C139	48°40'10"	151.00'	128.27'	68.29'
C140	03°04'27"	151.00'	8.10'	4.05'
C141	01°38'45"	1030.00'	29.59'	14.79'
C142	08°56'19"	1030.00'	160.69'	80.51'
C143	04°09'38"	1000.00'	72.61'	36.32'
C144	06°25'26"	1000.00'	112.12'	56.12'
C145	07°38'30"	205.50'	27.41'	13.72'
C146	32°14'52"	205.50'	115.66'	59.41'
C147	31°18'17"	205.50'	112.28'	57.58'
C148	25°59'00"	205.50'	93.19'	47.41'
C149	02°47'34"	320.50'	15.62'	7.81'
C150	20°25'42"	320.50'	114.27'	57.75'
C151	09°59'26"	279.50'	48.74'	24.43'
C152	28°09'38"	279.50'	137.37'	70.10'
C153	14°55'48"	320.50'	83.52'	42.00'
C154	54°51'57"	55.00'	52.67'	28.55'
C155	52°22'17"	55.00'	50.27'	27.05'
C156	58°47'29"	55.00'	56.44'	30.99'
C157	67°26'43"	55.00'	64.74'	36.71'
C158	70°16'51"	55.00'	67.46'	38.71'
C159	46°55'47"	55.00'	45.05'	23.87'
C160	40°00'34"	55.00'	38.41'	20.02'
C161	80°14'34"	55.00'	77.03'	46.35'
C162	28°55'05"	275.00'	138.80'	70.91'
C163	41°57'03"	275.00'	201.35'	105.43'

	DISTANCE	BEARING
L1	65.00'	S70°54'41"E
L2	73.27'	S35°12'02"E
L3	20.01'	S31°04'25"E
L4	60.00'	S23°53'45"W
L5	84.62'	S90°00'00"E
L6	117.67'	S71°53'47"E
L7	132.41'	S35°12'02"E
L8	86.86'	S55°35'48"W
L9	118.94'	N66°35'48"E
L10	100.00'	S76°58'39"W
L11	100.00'	N76°58'39"E
L12	100.00'	N76°58'39"E
L13	117.90'	N66°30'05"E
L14	117.90'	N66°30'05"E
L15	117.90'	S66°30'05"W
L16	40.16'	N19°23'50"E
L17	4.25'	N89°06'40"W
L18	23.00'	N70°36'10"W
L19	97.63'	S35°09'21"E
L20	97.63'	N35°09'21"W
L21	97.63'	N35°09'21"W
L22	50.00'	S46°40'13"W
L23	50.00'	N40°47'33"W
L24	25.32'	S17°56'20"W
L25	25.32'	S17°56'20"W
L26	13.61'	S46°51'21"W
L27	41.02'	S77°27'20"E
L28	23.77'	N90°00'00"W
L29	113.13'	S90°00'00"E
L30	170.32'	N19°07'52"W
L31	170.32'	N19°07'52"W
L32	170.32'	N19°07'52"W
L33	110.00'	N60°17'26"W
L34	59.28'	N66°06'15"W
L35	59.28'	S66°06'15"E
L36	59.28'	N66°06'15"W
L37	187.54'	N25°16'52"E
L38	128.85'	S25°16'52"W
L39	135.80'	N25°16'52"E
L40	95.99'	N33°44'43"W
L41	43.05'	N87°13'08"W
L42	34.50'	N56°15'17"W
L43	124.49'	S18°15'21"W
L44	124.49'	S18°15'21"W
L45	124.49'	S18°15'21"W
L46	90.86'	N05°48'24"W
L47	90.86'	N05°48'24"W
L48	90.86'	S05°48'24"E
L49	102.59'	S14°12'10"W
L50	50.00'	N42°56'03"E
L51	50.00'	S14°31'43"E
L52	17.89'	N14°12'10"E
L53	17.89'	N14°12'10"E
L54	99.58'	N13°29'45"W
L55	99.58'	N13°29'45"W
L56	99.58'	S13°29'45"E
L57	32.31'	N31°04'25"W
L58	32.31'	N31°04'25"W
L59	50.00'	S58°55'35"W
L60	32.31'	N31°04'25"W
L61	35.26'	S77°27'20"E
L62	12.30'	S31°04'25"E
L63	5.38'	N11°12'04"E
L64	94.52'	N19°07'52"W
L65	8.28'	N19°07'52"W
L66	85.69'	N19°07'52"W
L67	75.35'	N19°07'52"W
L68	75.80'	N19°07'52"W
L69	7.15'	S60°17'26"E
L70	53.34'	N71°53'47"W
L71	137.10'	N71°53'47"W
L72	29.57'	N33°44'43"W
L73	66.43'	N33°44'43"W
L74	152.90'	S33°44'43"E
L75	14.46'	S33°44'43"E
L76	22.56'	N33°44'43"W
L77	72.76'	S71°53'47"E
L78	37.37'	S31°07'03"W
L79	28.69'	N81°51'56"W
L80	26.05'	S42°56'03"E
L81	23.95'	N42°56'03"E
L82	32.52'	S14°31'43"E
L83	17.47'	S14°31'43"E
L84	60.12'	S18°15'21"W
L85	39.44'	S18°15'21"W
L86	45.80'	S05°48'24"E
L87	53.12'	S05°48'24"E
L88	37.74'	S05°48'

ST. JAMES'S VILLAGE UNIT 1E

OWNER'S CERTIFICATE

THIS IS TO CERTIFY THAT THE UNDERSIGNED, ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION IS THE OWNER OF THE TRACT OF LAND REPRESENTED ON THIS PLAT AND HAS CONSENTED TO THE PREPARATION AND RECORDATION OF THIS PLAT AND THAT THE SAME IS EXECUTED IN COMPLIANCE WITH AND SUBJECT TO THE PROVISIONS OF N.R.S. CHAPTER 278 AND 116, AND THAT THE STREETS, AVENUES, DRIVES, COURTS AND HIGHWAYS AND ALL APPURTENANCES THERETO AS SHOWN ARE HEREBY DEDICATED AND SET APART TO BE USED AS PUBLIC THOROUGHFARES FOREVER. THE OWNER HEREBY GRANTS TO ALL PUBLIC UTILITY COMPANIES AND WASHOE COUNTY, PERMANENT EASEMENTS SHOWN ON THIS PLAT FOR PLOWED SNOW STORAGE AND THE CONSTRUCTION AND MAINTENANCE OF TRAFFIC CONTROL, SIGNAGE, DRAINAGE AND UTILITY SYSTEMS, TOGETHER WITH THE RIGHT OF ACCESS THERETO FOREVER. THE WATER AND SEWER FACILITIES AND ASSOCIATED APPURTENANCES ARE HEREBY DEDICATED TO WASHOE COUNTY. THE OWNER AND ITS ASSIGNS AGREE TO THE USE OF RESIDENTIAL WATER METERS.

ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION

BY: Robert Howell 10/9/00
ROBERT HOWELL, VICE PRESIDENT DATE

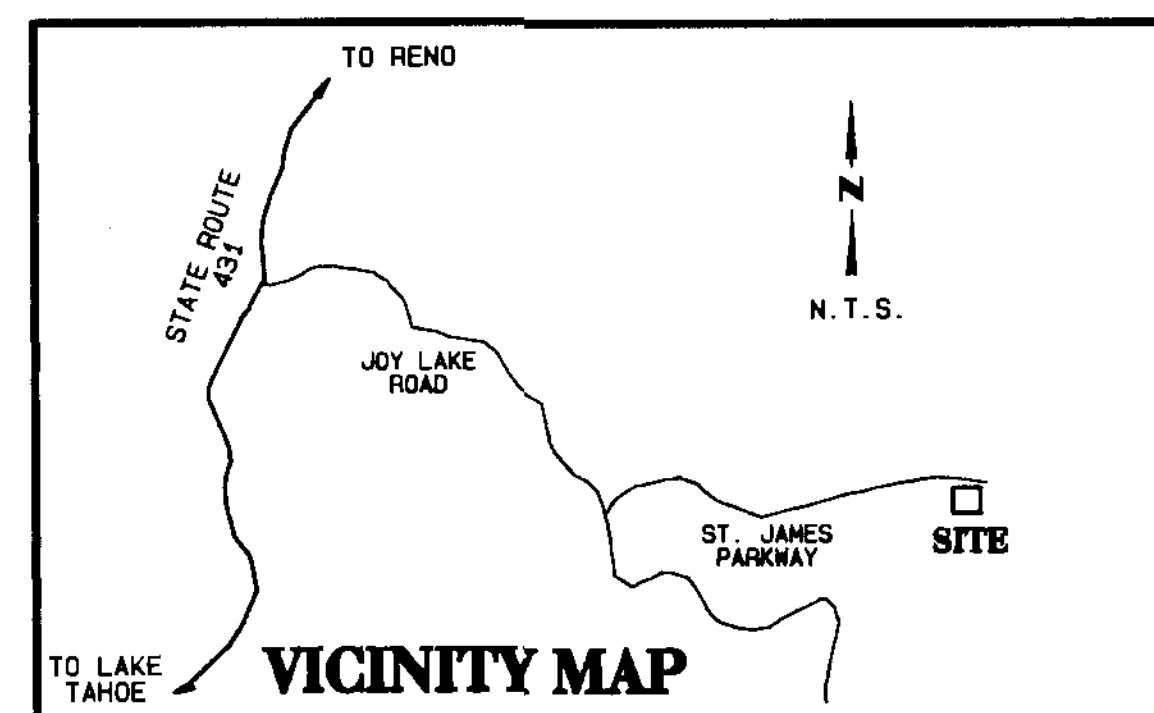
STATE OF NEVADA) ss
COUNTY OF WASHOE)

ON THIS 9th DAY OF October, 2000, PERSONALLY APPEARED BEFORE ME, A NOTARY PUBLIC IN AND FOR SAID STATE AND COUNTY, ROBERT HOWELL, AS VICE PRESIDENT OF ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, KNOWN TO ME OR PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON WHO EXECUTED THE ABOVE INSTRUMENT FOR THE PURPOSES HEREIN STATED.

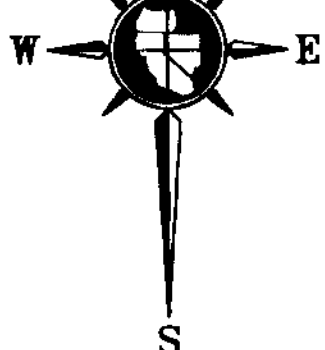
WITNESS MY HAND AND OFFICIAL SEAL.

Notary Public
NOTARY PUBLIC

Notary Public State of Nevada
COUNTY OF WASHOE
TED S. BROWN
My Appointment Expires November 20, 2003
No. 99-38852-2



LINE	BEARING	DISTANCE
L1	S14°16'28"E	34.81'
L2	S14°16'28"E	34.81'
L3	N34°33'00"E	45.67'
L4	S25°48'40"E	45.74'
L5	N14°16'28"W	55.23'
L6	N14°16'28"W	30.00'
L7	N14°16'28"W	66.67'
L8	S4°22'10"W	79.34'



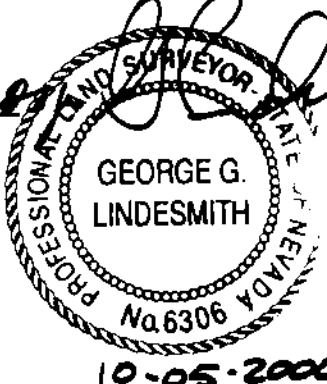
LINE	DELTA	RADIUS	ARC
C1	8°59'10"	1970.00'	308.97'
C2	1°11'24"	1970.00'	40.92'
C3	1°11'24"	1970.00'	40.92'
C4	7°36'24"	1970.00'	261.54'
C5	17°49'18"	229.50'	71.38'
C6	18°38'38"	250.00'	81.35'
C7	18°05'12"	270.50'	85.39'
C8	31°00'11"	30.00'	16.23'
C9	29°37'23"	30.00'	15.51'
C10	24°21'40"	55.00'	230.73'
C11	91°11'25"	20.00'	31.83'
C12	91°11'24"	20.00'	31.83'
C13	30°13'45"	55.00'	29.02'
C14	41°33'55"	55.00'	39.50'
C15	52°16'42"	55.00'	50.18'
C16	46°12'19"	55.00'	44.36'
C17	70°04'59"	55.00'	67.27'
C18	24°33'56"	30.00'	12.86'
C19	5°03'27"	30.00'	2.65'
C20	29°33'14"	250.00'	128.95'
C21	14°42'14"	2000.00'	513.26'
C22	12°36'55"	2000.00'	440.36'

2491419
TOTAL AREA = 7.02 ACRES, LOT AREA = 6.63 ACRES, STREET AREA = 0.39 ACRES, NUMBER OF LOTS = 6

SURVEYOR'S CERTIFICATE

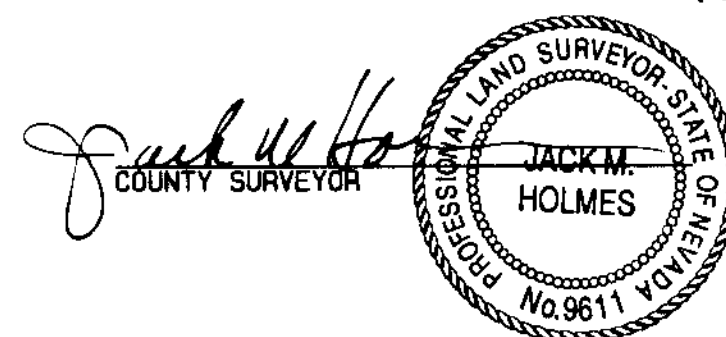
- I, GEORGE G. LINDESMITH, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEVADA, CERTIFY THAT:
- THIS PLAT REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER MY DIRECT SUPERVISION AT THE INSTANCE OF ST. JAMES'S VILLAGE INC.
 - THE LANDS SURVEYED LIE WITHIN A PORTION OF THE NE 1/4 OF SECTION 14, T. 17 N., R. 19 E., M.D.M., AND THE SURVEY WAS COMPLETED ON JULY 7, 2000.
 - THIS PLAT COMPLIES WITH THE APPLICABLE STATE STATUTES AND ANY LOCAL ORDINANCES IN EFFECT ON THE DATE THAT THE GOVERNING BODY GAVE ITS FINAL APPROVAL.
 - THE MONUMENTS DEPICTED ON THE PLAT WILL BE OF THE CHARACTER SHOWN AND OCCUPY THE POSITIONS INDICATED BY THE PLAT, AND AN APPROPRIATE FINANCIAL GUARANTEE WILL BE POSTED WITH THE GOVERNING BODY BEFORE RECORDATION TO ENSURE THE INSTALLATION OF THE MONUMENTS.

GEORGE G. LINDESMITH
PROFESSIONAL LAND SURVEYOR NO. 6306



COUNTY SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I HAVE EXAMINED THIS MAP CONSISTING OF 1 SHEET, AND THAT ALL PROVISIONS AND ORDINANCES APPLICABLE HAVE BEEN COMPLIED WITH, AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT AND THAT AN ADEQUATE PERFORMANCE GUARANTEE HAS BEEN FILED GUARANTEEING THE MONUMENTS AS SHOWN WILL BE SET BY 10/14/2000.



DATE 10/13/2000

TITLE COMPANY CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT THIS PLAT HAS BEEN EXAMINED AND THAT ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, OWNS OF RECORD AN INTEREST IN THE LANDS DELINEATED HEREON AND THAT IT IS THE ONLY OWNER OF RECORD OF SAID LAND; THAT ALL THE OWNERS OF RECORD OF THE LAND HAVE SIGNED THE FINAL MAP; THAT BENEFICIARIES AS LISTED BELOW HOLD OF RECORD A SECURITY INTEREST IN THE LAND TO BE DIVIDED, AND THAT THEY ARE THE ONLY HOLDERS OF RECORD OF A SECURITY INTEREST IN SAID LAND; AND THAT THERE ARE NO LIENS OF RECORD AGAINST THE COMMON INTEREST COMMUNITY FOR DELINQUENT STATE, COUNTY, MUNICIPAL, FEDERAL OR LOCAL TAXES OR ASSESSMENTS COLLECTED AS TAXES OR SPECIAL ASSESSMENTS AND THAT A GUARANTEE DATED 10/2/2000 FOR THE BENEFIT OF THE COUNTY OF WASHOE, STATE OF NEVADA, HAS BEEN ISSUED WITH REGARD TO ALL OF THE ABOVE.

BENEFICIARIES: NONE

STEWART TITLE OF NORTHERN NEVADA

BY: Roger T. Hansen
VICE PRESIDENT

DATE 10/9/2000

COMMUNITY DEVELOPMENT CERTIFICATE

A TENTATIVE MAP OF ST. JAMES'S VILLAGE SUBDIVISION, TMS-2-92, WAS RECOMMENDED FOR APPROVAL BY THE WASHOE COUNTY PLANNING COMMISSION ON THE 8th DAY OF JULY 1992, AND APPROVED BY THE BOARD OF COUNTY COMMISSIONERS OF WASHOE COUNTY, NEVADA, ON THE 18th DAY OF AUGUST, 1992.

THE FINAL MAP OF ST. JAMES'S VILLAGE UNIT 2A WAS APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON THE 20th DAY OF OCTOBER, 1998 AND SUBSEQUENTLY RECORDED ON THE 21st DAY OF OCTOBER, 1998. A ONE YEAR EXTENSION FOR FILING THE NEXT FINAL MAP WAS APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON THE 3rd DAY OF AUGUST, 1999.

THE FINAL MAP OF ST. JAMES'S VILLAGE, UNIT 1E, IS IN SUBSTANTIAL CONFORMANCE WITH THE TENTATIVE MAP AND ALL THE CONDITIONS OF APPROVAL HAVE BEEN MET. THIS FINAL MAP IS APPROVED AND ACCEPTED THIS 13th DAY OF October, 2000 BY THE COMMUNITY DEVELOPMENT DIRECTOR OF WASHOE COUNTY, NEVADA. THE OFFER OF DEDICATION OF SEWER FACILITIES AND WATER FACILITIES IS REJECTED AT THIS TIME, BUT WILL REMAIN OPEN IN ACCORDANCE WITH N.R.S. 278.

BY: Carl Wehler
ROBERT W. SELLMAN
COMMUNITY DEVELOPMENT DIRECTOR

DISTRICT BOARD OF HEALTH CERTIFICATE

THIS FINAL MAP IS APPROVED BY THE WASHOE COUNTY DISTRICT BOARD OF HEALTH. THIS APPROVAL CONCERNS SEWAGE DISPOSAL, WATER POLLUTION, WATER QUALITY AND WATER SUPPLY FACILITIES AND IS PRECEDENT UPON PLANS FOR A PUBLIC WATER SUPPLY AND INDIVIDUAL SYSTEMS SEWAGE DISPOSAL OF SEWAGE.

FOR THE DISTRICT BOARD OF HEALTH DATE 5 Oct 2000

DIVISION OF WATER RESOURCES CERTIFICATE

THIS PLAT IS APPROVED BY THE STATE OF NEVADA DIVISION OF WATER RESOURCES OF THE DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES CONCERNING WATER QUANTITY SUBJECT TO THE REVIEW OF APPROVAL ON FILE IN THIS OFFICE.

DATE 8-22-00

WATER RIGHT DEDICATION CERTIFICATE

THE WATER AND SEWER RESOURCE REQUIREMENTS SET FORTH IN ARTICLE 422 OF THE WASHOE COUNTY DEVELOPMENT CODE, RELATED TO THE DEDICATION OF WATER RESOURCES, HAVE BEEN SATISFIED.

DATE 8/30/00

UTILITY COMPANIES' CERTIFICATE

THE UTILITY EASEMENTS SHOWN ON THIS PLAT HAVE BEEN CHECKED, AND APPROVED BY THE UNDERSIGNED PUBLIC UTILITY, SEWER AND CABLE TELEVISION COMPANIES.

DATE 8-21-2000
DATE 8/21/2000
DATE 8/31/00
DATE 8/30/00

TAX CERTIFICATE

THE UNDERSIGNED CERTIFIES THAT ALL PROPERTY TAXES ON THIS LAND FOR THE FISCAL YEAR HAVE BEEN PAID AND THE FULL AMOUNT OF ANY DEFERRED PROPERTY TAXES FOR THE CONVERSION OF THE PROPERTY FROM AGRICULTURAL USE HAS BEEN PAID PURSUANT TO NRS 361A.265.

DATE 9-6-00

BASIS OF BEARING

THE BASIS OF BEARING FOR THIS PLAT IS N 82°41'33" E, BEING THE GRID BEARING BETWEEN NATIONAL GEODETIC SURVEY STATION CHALKBLUFF AND STATION VISTA 2 WITH THE FOLLOWING NEVADA COORDINATE SYSTEM WEST ZONE VALUES BASED ON THE NORTH AMERICAN DATUM OF 1983/84 HIGH ACCURACY REFERENCE NETWORK (NAD 83/94-HARN).

CHALKBLUFF NORTHING 4529395.304 METERS (14860191.093 U.S. SURVEY FOOT)
EASTING 688666.792 METERS (2260057.135 U.S. SURVEY FOOT)
VISTA 2 NORTHING 4531358.722 METERS (14866632.740 U.S. SURVEY FOOT)
EASTING 7041177.775 METERS (2310289.914 U.S. SURVEY FOOT)

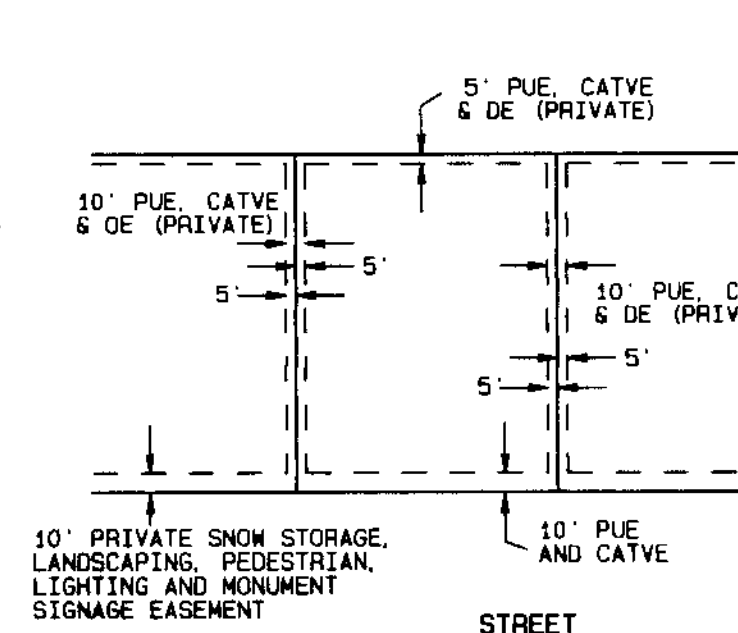
COORDINATES SHOWN ON THIS PLAT ARE GROUND EQUIVALENT VALUES, BASED ON A COMBINED FACTOR OF .999802100.

NOTES

- ALL ROADWAYS ARE TO BE PRIVATELY OWNED AND MAINTAINED. A PUBLIC UTILITY, CABLE TV AND DRAINAGE EASEMENTS ARE HEREBY GRANTED OVER THE ROADWAY AREAS. PUBLIC UTILITY PLOWED SNOW STORAGE, LANDSCAPING, PEDESTRIAN, LIGHTING, MONUMENT SIGNAGE, CABLE TV AND TRAFFIC CONTROL SIGNAGE EASEMENTS ARE HEREBY GRANTED, 10 FEET IN WIDTH COINCIDENT WITH ALL STREET RIGHTS-OF-WAY, 5 FEET IN WIDTH COINCIDENT WITH ALL OTHER EXTERIOR BOUNDARIES, AND 10 FEET IN WIDTH CENTERED ON ALL INTERIOR LOT LINES.
- A PUBLIC UTILITY AND CABLE TV EASEMENT IS ALSO HEREBY GRANTED WITHIN EACH PARCEL FOR THE EXCLUSIVE PURPOSE OF INSTALLING AND MAINTAINING UTILITY SERVICE FACILITIES TO THAT PARCEL AND THE RIGHT TO EXIT THAT PARCEL WITH SAID UTILITY FACILITIES FOR THE PURPOSE OF SERVING ADJACENT PARCELS AT LOCATIONS MUTUALLY AGREED UPON BY THE OWNER OF RECORD AT THAT TIME, AND THE UTILITY COMPANY.
- EACH OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF DRAINAGE FACILITIES AND THE NATURAL DRAINAGE CHARACTERISTICS WITHIN THEIR LOT SO OTHER PROPERTIES ARE NOT ADVERSELY AFFECTED. A BLANKET DRAINAGE EASEMENT IS HEREBY GRANTED WITHIN EACH LOT TO THE AFFECTED PROPERTY AS MAY BE NECESSARY FOR THE PERPETUATION AND MAINTENANCE OF THE NATURAL CHARACTERISTICS AND IMPROVED DRAINAGE FACILITIES.
- DRAINAGE FACILITIES ARE TO BE PRIVATE AND MAINTAINED BY OWNERS.
- NO OWNER OR TENANT SHALL OBSTRUCT A DRAINAGE EASEMENT OR CHANNEL WITHIN THE TRACT.
- NO HABITABLE STRUCTURE SHALL BE LOCATED ON A FAULT THAT HAS BEEN ACTIVE DURING THE HOLOCENE EPOCH OF GEOLOGIC TIME.
- NO FENCES ARE ALLOWED WITHIN OR ACROSS UTILITY EASEMENTS MAINTAINED BY WASHOE COUNTY.
- NO CERTIFICATE OF OCCUPANCY SHALL BE ISSUED UNTIL THE SEWER FACILITIES HAVE BEEN COMPLETED AND ACCEPTED BY THE WASHOE COUNTY UTILITY DIVISION.
- NO CERTIFICATE OF OCCUPANCY SHALL BE ISSUED UNTIL THE WATER FACILITIES HAVE BEEN COMPLETED AND ACCEPTED BY THE WASHOE COUNTY UTILITY DIVISION.

LEGEND

- FOUND NATIONAL GEODETIC SURVEY STATION
- SET 5/8" REBAR AND CAP PLS 6306
- SET CENTERLINE MONUMENT
- FOUND CENTERLINE MONUMENT PER TM#3404
- RADIAL LINE
- PUE PUBLIC UTILITY EASEMENT
- DRAINAGE EASEMENT
- SANITARY SEWER EASEMENT
- CATVE CABLE TV EASEMENT
- SET 5/8" REBAR AND CAP PLS 6306 OR CURB SCRIBE ON PROPERTY LINE EXTENSION



TYPICAL LOT EASEMENTS

OFFICIAL PLAT OF ST. JAMES'S VILLAGE - UNIT 1E

BRING A PORTION OF THE NE 1/4 OF SECTION 14 TOWNSHIP 17 NORTH, RANGE 19 EAST, M.D.M.

WASHOE COUNTY NEVADA
TRI STATE SURVEYING, LTD JOB NO. 00192.01W
1925 E. PRATER WAY
SPARKS, NEVADA 89434
(775) 358-9491 * FAX # 358-3664

FILE NO. 2491419
FILED FOR RECORD AT THE REQUEST OF St. James's Village ON THIS 16 DAY OF Oct 2000 AT 2:11 PM. PAST 4 O'CLOCK, P.M.
OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA.
Kathryn L. Burke
COUNTY RECORDER
BY: C. Bartley
DEPUTY
FEE 37.10

Subdivision Tract Map 3883

CUMULATIVE INDEXES SHOULD BE EXAMINED FOR ANY SUBSEQUENT CHANGES TO THIS MAP

CUMULATIVE INDEXES SHOULD BE EXAMINED FOR ANY SUBSEQUENT CHANGES TO THIS MAP

ST. JAMES'S VILLAGE - UNIT 1F

OWNER'S CERTIFICATE

THIS IS TO CERTIFY THAT THE UNDERSIGNED, ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, IS THE OWNER OF THE TRACT OF LAND REPRESENTED ON THIS PLAT AND HAS CONSENTED TO THE PREPARATION AND RECORDATION OF THIS PLAT AND THAT THE SAME IS EXECUTED IN COMPLIANCE WITH AND SUBJECT TO THE PROVISIONS OF N.R.S. CHAPTER 278 AND 116, THAT THE STREETS, AVENUES, DRIVES, COURTS AND HIGHWAYS AND ALL APPURTENANCES THEREON AS SHOWN ON THIS PLAT ARE HEREBY GRANTED AND SET APART TO BE USED AS PRIVATE ACCESS FOREVER, AND HEREBY GRANTS TO ALL PUBLIC UTILITIES AND WASHOE COUNTY PERMANENT EASEMENTS SHOWN ON THIS PLAT FOR THE CONSTRUCTION AND MAINTENANCE OF UTILITY SYSTEMS, AND WATER AND SANITARY SEWER FACILITIES, TOGETHER WITH THE RIGHT OF ACCESS THERETO FOREVER. THE WATER AND SEWER FACILITIES AND ASSOCIATED APPURTENANCES ARE HEREBY DEDICATED TO WASHOE COUNTY. THE OWNER AND ITS ASSIGNS AGREE TO THE USE OF RESIDENTIAL WATER METERS.

ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION

GHASSAN M. AL-DAHLAWI DATE 10-1-02

STATE OF NEVADA } S.S.
COUNTY OF WASHOE }

ON THIS 1st DAY OF October, 2002, PERSONALLY APPEARED BEFORE ME, A NOTARY PUBLIC, IN AND FOR SAID STATE AND COUNTY, GHASSAN M. AL-DAHLAWI AS PRESIDENT OF ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, WHO ACKNOWLEDGED TO ME THAT HE EXECUTED THE ABOVE INSTRUMENT.

Notary Public, State of Nevada
COUNTY OF WASHOE
TED S. BROWN
My Appointment Expires
November 20, 2003
No. 39-00552-2

TITLE COMPANY CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT THIS PLAT HAS BEEN EXAMINED AND THAT ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, OWNS OF RECORD AN INTEREST IN THE LANDS DELINEATED HEREON AND THAT IT IS THE ONLY OWNER OF RECORD OF SAID LAND; THAT BENEFICIARIES AS LISTED BELOW HOLD OF RECORD A SECURITY INTEREST IN THE LAND TO BE DIVIDED, AND THAT THEY ARE THE ONLY HOLDERS OF RECORD OF A SECURITY INTEREST IN SAID LAND; AND THAT THERE ARE NO LIENS OF RECORD AGAINST THE COMMON INTEREST COMMUNITY FOR DELINQUENT STATE, COUNTY, MUNICIPAL, FEDERAL OR LOCAL TAXES OR ASSESSMENTS COLLECTED AS TAXES OR SPECIAL ASSESSMENTS AND THAT A GUARANTEE DATED 10-11-2002 FOR THE BENEFIT OF THE COUNTY OF WASHOE, STATE OF NEVADA, HAS BEEN ISSUED WITH REGARD TO ALL OF THE ABOVE.

BENEFICIARIES: NONE

WESTERN TITLE COMPANY, INC.

NAME/TITLE: Assistant Secretary DATE 10-2-2002

COMMUNITY DEVELOPMENT CERTIFICATE

A TENTATIVE MAP OF ST. JAMES'S VILLAGE SUBDIVISION, TM 5-2-92, WAS RECOMMENDED FOR APPROVAL BY THE WASHOE COUNTY PLANNING COMMISSION ON THE 8TH DAY OF JULY 1992, AND APPROVED BY THE BOARD OF COUNTY COMMISSIONERS OF WASHOE COUNTY, NEVADA, ON THE 18TH DAY OF AUGUST, 1992.

THE FIRST FINAL MAP FOR TENTATIVE MAP OF ST. JAMES'S VILLAGE, TM 5-2-92, WAS APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON THE 20TH DAY OF OCTOBER, 1998 AND SUBSEQUENTLY RECORDED ON THE 21ST DAY OF OCTOBER, 1998. AN EXTENSION OF TIME FOR TENTATIVE MAP OF ST. JAMES'S VILLAGE, TM 5-2-92, WAS APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON OCTOBER 2, 2001 FOR ONE YEAR, UNTIL OCTOBER 13, 2002.

THE FINAL MAP FOR ST. JAMES'S VILLAGE UNIT 1F IS APPROVED AND ACCEPTED FOR RECORDATION THIS 11th DAY OF October 2002 BY THE WASHOE COUNTY COMMUNITY DEVELOPMENT DIRECTOR. THE OFFER OF DEDICATION FOR WATER AND SEWER FACILITIES AND ASSOCIATED APPURTENANCES IS REJECTED AT THIS TIME, BUT WILL REMAIN OPEN IN ACCORDANCE WITH NRS CHAPTER 278. APPROVAL OF THIS MAP EXTENDS THE TIME FOR APPROVAL OF THE NEXT MAP TO OCTOBER 11, 2003.

ADRIAN F. FREUND, AICP
COMMUNITY DEVELOPMENT DIRECTOR DATE 10/11/02

COUNTY SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I HAVE EXAMINED THIS MAP CONSISTING OF 2 SHEETS, AND THAT ALL PROVISIONS AND ORDINANCES APPLICABLE HAVE BEEN COMPLIED WITH, AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT AND THAT AN ADEQUATE PERFORMANCE GUARANTEE HAS BEEN FILED GUARANTEEING THE MONUMENTS AS SHOWN WILL BE SET BY 10-11-2003.

COUNTY SURVEYOR, DEPUTY
JEFFERY H. CRUESS - P.L.S. 12456

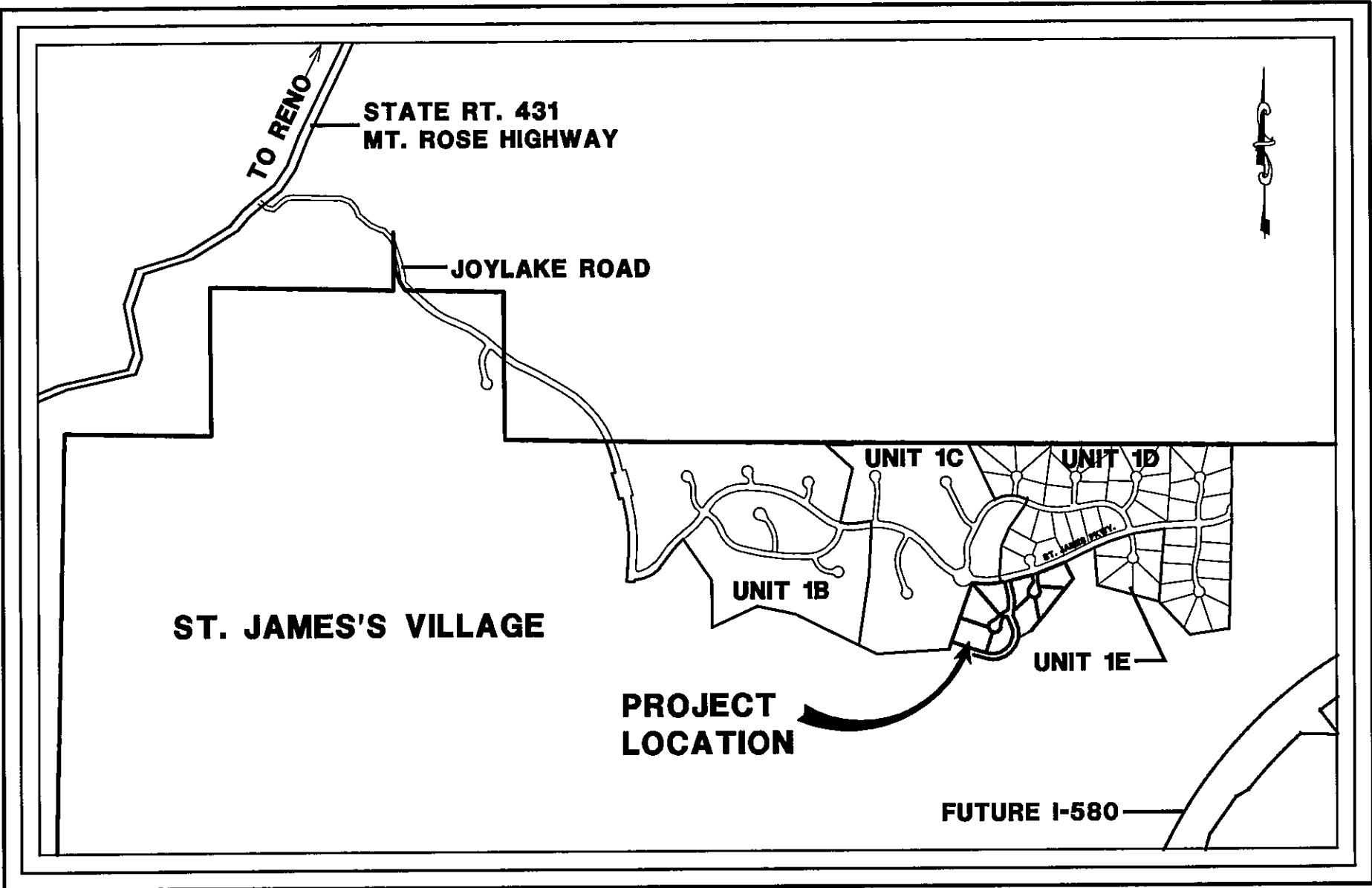
Jeffery H. Cruess
PROFESSIONAL LAND SURVEYOR - STATE OF NEVADA
JEFFERY H. CRUESS
No. 12456
10-11-02
expired 12-31-02

WATER RIGHT DEDICATION CERTIFICATE

THE WATER AND SEWER RESOURCE REQUIREMENTS SET FORTH IN ARTICLE 422 OF WASHOE COUNTY DEVELOPMENT CODE, RELATED TO THE DEDICATION OF WATER RESOURCES, HAVE BEEN SATISFIED.

Vahid Behravan
WASHOE COUNTY UTILITY SERVICES DIVISION DATE 10/1/02

2747532



VICINITY MAP

NOT TO SCALE

UTILITY COMPANIES CERTIFICATE

THE UTILITY EASEMENTS SHOWN ON THIS PLAT HAVE BEEN CHECKED, AND APPROVED BY THE UNDERSIGNED PUBLIC UTILITIES COMPANIES.

Dana D. Almey
SIERRA PACIFIC POWER COMPANY DATE 10/02/02
Nevada Bell DATE 10/03/02
Charter Communications DATE 10/3/02
Susan Ford
WASHOE COUNTY UTILITY SERVICES DIVISION DATE 10/9/02

DIVISION OF WATER RESOURCES CERTIFICATE

THIS PLAT IS APPROVED BY THE STATE OF NEVADA DIVISION OF WATER RESOURCES OF THE DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES CONCERNING WATER QUANTITY, SUBJECT TO REVIEW OF APPROVAL ON FILE IN THIS OFFICE.

For K. P.E.
DIVISION OF WATER RESOURCES DATE 10-1-02

DISTRICT BOARD OF HEALTH

THIS FINAL MAP IS APPROVED BY THE WASHOE COUNTY DISTRICT BOARD OF HEALTH, THIS APPROVAL CONCERNS SEWAGE DISPOSAL, WATER POLLUTION, WATER QUALITY, AND WATER SUPPLY FACILITIES AND IS PREDICATED UPON PLANS FOR PUBLIC WATER SUPPLY AND INDIVIDUAL SYSTEMS FOR DISPOSAL OF SEWAGE.

For the District Board of Health DATE 10-11-2002

TAX CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT ALL PROPERTY TAXES ON THIS LAND FOR THE FISCAL YEAR HAVE BEEN PAID AND THAT THE FULL AMOUNT OF ANY DEFERRED PROPERTY TAXES FOR THE CONVERSION OF THE PROPERTY FROM AGRICULTURAL USE HAS BEEN PAID PURSUANT TO NRS 361A.265
WASHOE COUNTY TREASURER

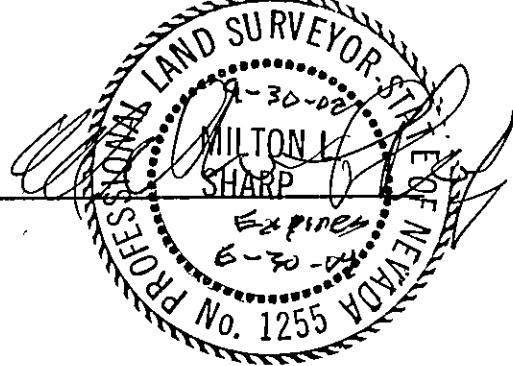
BY: Deputy DATE 10/1/02

SURVEYOR'S CERTIFICATE

I, MILTON L. SHARP, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEVADA, CERTIFY THAT:

1. THIS PLAT REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER MY DIRECT SUPERVISION AT THE INSTANCE OF ST. JAMES'S VILLAGE, INC.
2. THE LANDS SURVEYED LIE WITHIN THE NORTH 1/2 OF SECTION 14, TOWNSHIP 17 NORTH, RANGE 19 EAST, M.D.M. THE SURVEY WAS COMPLETED ON AUGUST 10, 2002.
3. THIS PLAT COMPLIES WITH THE APPLICABLE STATE STATUTES AND ANY LOCAL ORDINANCES IN EFFECT AS OF THE DATE THAT THE GOVERNING BODY GAVE ITS FINAL APPROVAL.
4. THE MONUMENTS DEPICTED ON THE PLAT WILL BE OF THE CHARACTER SHOWN AND OCCUPY THE POSITIONS INDICATED BY 10-11-2003 AND AN APPROPRIATE FINANCIAL GUARANTEE WILL BE POSTED WITH THE GOVERNING BODY BEFORE RECORDATION TO ENSURE THE INSTALLATION OF THE MONUMENTS.

MILTON L. SHARP
PLS NO. 1255



COUNTY RECORDER'S CERTIFICATE

FILE NO. 2747532
FILED FOR RECORD AT THE REQUEST OF
Ted S. Brown
ON THIS 11 DAY OF October, 2002
AT 2:22 MINUTES PAST 2 O'CLOCK P.M.

OFFICIAL RECORDS OF WASHOE CO. NEVADA

BY: KATHRYN L. BURKE
COUNTY RECORDER OF WASHOE COUNTY
BY: C. Bartley
DEPUTY
FEE: 64.00

OFFICIAL PLAT

ST. JAMES'S VILLAGE UNIT 1F
(A PORTION OF PARCEL A OF R/S 4040)
SITUATE WITHIN A PORTION OF THE
NORTH 1/2 OF SECTION 14, TOWNSHIP 17
NORTH, RANGE 19 EAST, M.D.B.&M.

WASHOE COUNTY NEVADA

Knopf Sharp
ASSOCIATES
a Division of Quade/Knopf LLC

1170 Financial Blvd., Suite 650
Reno, Nevada 89502
TEL: (775) 324-1212
FAX: (775) 324-2311
WEB: www.quadeknopf.com

PROJECT 02452
AUGUST 2002

SHEET NO. 1 OF 2

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

Subdivision Tract Map 4123

4123
CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

ST. JAMES'S VILLAGE - UNIT 1F
(A PORTION OF PARCEL A OF R/S 4040)
SITUATE WITHIN A PORTION OF THE
NORTH 1/2 OF SECTION 14, TOWNSHIP 17
NORTH, RANGE 19 EAST, M.D.B.&M.

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PROJECT 02452
AUGUST 2002

SHEET NO. 2 OF 2

CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA
C1	145.30	218.00	38°11'15"
C2	176.91	225.00	45°03'03"
C3	103.00	275.00	21°27'39"
C4	180.76	168.00	68°03'24"
C5	218.42	168.00	74°28'29"
C6	53.12	630.00	4°49'50"
C7	206.13	630.00	18°44'49"
C8	259.25	630.00	23°34'39"
C9	118.05	2030.00	3°19'55"
C10	80.21	2030.00	2°15'51"
C11	204.28	2030.00	5°45'56"
C12	402.54	2030.00	11°21'42"
C13	31.02	20.00	88°52'04"
C14	17.32	30.00	33°05'04"
C15	33.06	55.00	34°28'17"
C16	94.83	55.00	98°47'28"
C17	54.21	55.00	56°28'12"
C18	54.21	55.00	56°28'12"
C19	31.02	20.00	88°52'05"
C20	236.31	55.00	246°10'09"
C21	30.22	20.00	86°34'21"
C22	78.00	225.00	19°21'13"
C23	88.46	225.00	22°21'32"
C24	84.28	225.00	21°27'39"
C25	37.29	20.00	106°48'58"
C26	26.37	214.14	7°03'19"
C27	17.31	30.00	33°03'21"
C28	71.05	55.00	74°01'10"
C29	75.47	55.00	78°36'59"
C30	89.73	55.00	93°28'34"
C31	17.31	30.00	33°03'21"
C32	65.89	255.14	14°47'49"
C33	22.34	20.00	64°00'18"
C34	32.01	275.00	6°40'11"
C35	53.02	175.00	17°21'30"
C36	33.31	20.00	95°25'24"
C37	236.25	55.00	246°06'41"
C38	79.52	200.00	22°43'53"
C39	53.90	250.00	12°21'13"
C40	49.03	250.00	11°14'12"
C41	4.18	225.00	1°03'53"
C42	91.39	234.64	22°18'53"
C43	17.32	30.00	33°05'04"
C44	40.11	2030.00	1°07'55"
C45	40.10	2030.00	1°07'55"

LINE TABLE

LINE	LENGTH	BEARING
L1	33.91	N77°47'07"E
L2	28.25	N77°47'07"E
L3	58.59	S16°40'43"E
L4	37.95	S48°45'47"E
L5	37.95	S48°45'47"E
L6	37.95	S48°45'47"E
L7	58.59	S16°40'43"E
L8	38.03	S20°02'58"W
L9	38.03	S20°02'58"W
L10	28.92	N72°51'16"E
L11	93.48	N28°06'42"E
L12	43.85	N16°55'58"W
L13	19.96	N16°55'58"W
L14	12.46	S90°00'00"E
L15	12.78	N15°03'49"E
L16	125.43	S82°08'30"E
L17	111.68	S78°31'33"E
L18	65.86	N73°52'19"E
L19	46.85	N44°35'55"E
L20	66.99	N28°52'50"E
L21	67.09	N12°36'58"E
L22	123.27	N30°11'52"W
L23	55.41	N11°44'32"W
L24	100.65	S45°38'01"W
L25	57.84	S07°07'43"W
L26	60.39	S71°20'43"W
L27	17.38	N60°18'16"W
L28	39.65	N60°18'16"W
L29	87.33	N33°17'38"W
L30	17.30	N27°41'32"W
L31	48.44	S44°44'08"W
L32	58.49	N30°30'55"E
L33	34.85	N67°52'35"E
L34	43.40	N88°49'13"E
L35	78.53	N53°06'18"E
L36	36.54	N89°31'18"E
L37	62.97	N00°47'37"W
L38	66.89	N13°25'09"E
L39	24.91	N21°43'07"E
L40	65.19	S05°00'12"E
L41	34.45	S22°44'45"E
L42	35.60	S38°09'59"E
L43	111.42	S09°55'47"E
L44	118.87	S03°52'14"W
L45	36.34	N31°5

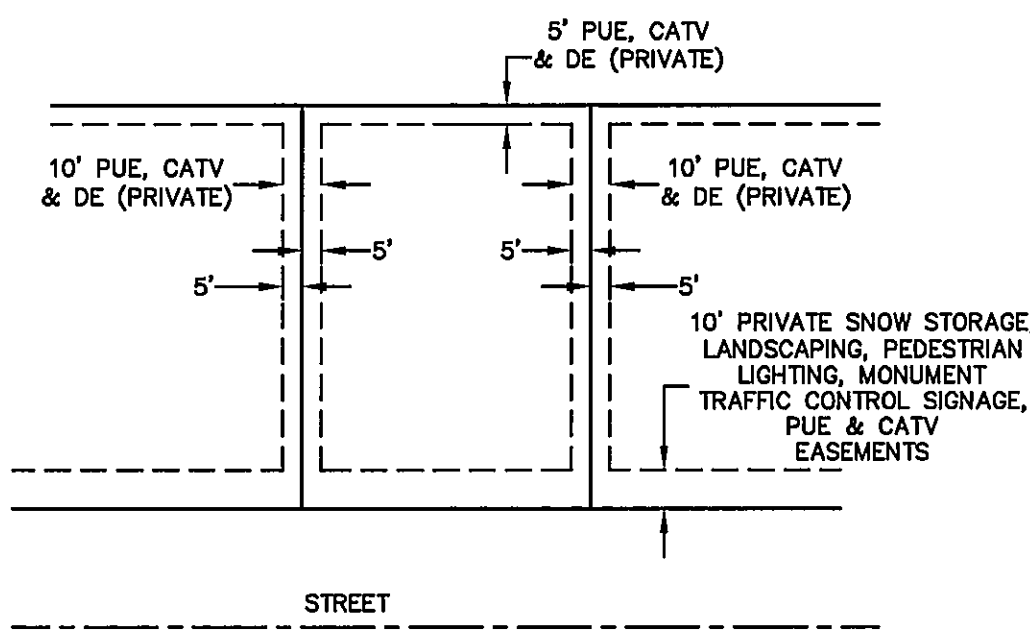
CURVE TABLE				LINE TABLE	
CURVE	LENGTH	RADIUS	DELTA	LINE	LENGTH BEARING
C1	145.30	218.00	38°11'15"	L1	33.91 N77°47'07"E
C2	176.91	225.00	45°03'03"	L2	28.25 N77°47'07"E
C3	103.00	275.00	21°27'39"	L4	58.58 S16°40'43"E
C4	168.00	280.00	68°03'24"	L5	34.95 S45°10'15"E
C5	218.42	168.00	74°28'28"	L6	37.65 N16°24'21"E
C6	53.12	630.00	4°49'50"	L7	58.19 S16°40'43"E
C7	206.13	630.00	18°44'48"	L8	38.03 S20°02'58"W
C8	259.25	630.00	23°34'38"	L9	38.03 S86°09'39"E
C9	118.05	2030.00	31°59'55"	L10	28.92 N72°15'18"E
C10	80.61	2030.00	21°51'51"	L11	93.48 N28°08'42"E
C11	204.28	2030.00	54°55'56"	L12	43.85 N11°30'31"E
C12	402.54	2030.00	11°21'42"	L13	19.96 N15°58'58"W
C13	31.02	20.00	88°52'04"	L14	12.46 S90°00'00"E
C14	17.32	30.00	33°05'04"	L15	12.78 N15°03'49"E
C15	33.08	55.00	34°26'17"	L16	125.43 S82°49'38"E
C16	94.63	55.00	88°47'28"	L17	111.68 S78°43'13"E
C17	54.21	55.00	56°28'12"	L18	65.86 N73°52'18"E
C18	54.21	55.00	95°28'12"	L19	65.86 N73°52'18"E
C19	31.02	20.00	88°52'04"	L20	66.99 N28°08'42"E
C20	236.31	55.00	248°10'08"	L21	67.09 N13°01'52"W
C21	30.22	30.00	86°34'21"	L22	123.27 N30°11'52"W
C22	76.86	225.00	18°21'13"	L23	55.41 N14°44'38"E
C23	88.46	225.00	22°31'32"	L24	100.65 S45°38'01"W
C24	84.28	225.00	21°27'39"	L25	57.84 S07°40'43"W
C25	37.29	20.00	106°48'58"	L26	60.39 S71°20'43"W
C26	32.01	275.00	7°03'18"	L27	37.36 N60°16'18"W
C27	17.37	30.00	33°05'04"	L28	39.65 N60°16'18"W
C28	71.05	55.00	74°01'10"	L29	87.33 N33°17'38"E
C29	75.47	55.00	78°36'59"	L30	17.30 N27°14'32"E
C30	89.73	55.00	93°28'32"	L31	48.64 N14°49'08"W
C31	17.31	30.00	33°05'04"	L32	58.49 N30°30'55"E
C32	65.89	255.14	14°47'21"	L33	34.85 N67°52'35"E
C33	23.24	20.00	64°00'18"	L34	43.40 N89°49'13"E
C34	32.01	275.00	7°03'18"	L35	45.53 N53°58'18"E
C35	63.02	175.00	17°21'30"	L36	35.54 N88°18'18"E
C36	33.31	20.00	95°25'24"	L37	62.97 N00°47'37"E
C37	236.25	55.00	246°06'41"	L38	89.09 N31°05'09"E
C38	79.52	20.00	22°46'53"	L39	24.81 S21°43'07"E
C39	53.90	250.00	12°21'13"	L40	65.19 S05°00'12"E
C40	49.03	250.00	11°14'12"	L41	34.45 S22°44'45"E
C41	4.18	225.00	10°53'53"	L42	14.60 S30°59'59"E
C42	4.18	224.64	29°16'41"	L43	11.42 S98°47'47"E
C43	17.32	30.00	33°05'04"	L44	118.87 S03°52'14"E
C44	40.11	2030.00	10°77'55"	L45	36.34 S31°54'32"W
C45	40.10	2030.00	10°77'55"	L46	15.38 S73°37'06"E
				L47	36.60 N90°00'00"E
				L48	46.87 N46°00'41"E
				L49	37.83 N06°01'39"E
				L50	14.61 N26°27'28"W
				L51	63.37 S42°10'15"E
				L52	65.37 N53°06'18"E
				L53	47.12 N36°28'43"E
				L54	44.23 N45°23'46"E

NOTES

1. ALL ROADWAYS ARE TO BE PRIVATELY OWNED AND MAINTAINED. A PUBLIC UTILITY, CABLE TV AND DRAINAGE EASEMENTS ARE HEREBY GRANTED OVER THE LANDS WITHIN THE PUBLIC UTILITY - PRIVATE SNOW STORAGE, LANDSCAPING, PEDESTRIAN, LIGHTING, MONUMENT SIGNAGE, CABLE TV AND TRAFFIC CONTROL, SIGNAGE EASEMENTS ARE HEREBY GRANTED 10 FEET IN WIDTH COINCIDENT WITH ALL STREET RIGHTS-OF-WAY. A PUBLIC UTILITY, CABLE TV AND DRAINAGE EASEMENTS ARE HEREBY GRANTED 5 FEET IN WIDTH COINCIDENT WITH ALL OTHER EXTERIOR BOUNDARIES, AND 10 FEET IN WIDTH CENTERED ON ALL INTERIOR LOT LINES.
2. A PUBLIC UTILITY AND CABLE TV EASEMENT IS ALSO HEREBY GRANTED WITHIN EACH PARCEL FOR THE EXCLUSIVE PURPOSE OF INSTALLING AND MAINTAINING UTILITY SERVICE FACILITIES TO THAT PARCEL AND THE RIGHT TO EXIST WITHIN THAT UTILITY. EASEMENTS ARE HEREBY GRANTED FOR THE SERVING ADJACENT PARCELS AT LOCATIONS MUTUALLY AGREED UPON BY THE OWNER OF RECORD AT THAT TIME, AND THE UTILITY COMPANY.
3. EACH OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF DRAINAGE FACILITIES AND THE NATURAL DRAINAGE CHARACTERISTICS WITHIN THEIR LOT. SO OTHER PROPERTIES ARE NOT ADVERSELY AFFECTED. A BLANKET DRAINAGE EASEMENT SHALL BE GRANTED WITHIN EACH LOT TO THE AFFECTED PROPERTY AS MAY BE NECESSARY FOR THE PERPETUATION AND MAINTENANCE OF THE NATURAL CHARACTERISTICS AND IMPROVED DRAINAGE FACILITIES.
4. DRAINAGE FACILITIES ARE TO BE PRIVATE AND MAINTAINED BY OWNERS.
5. NO OWNER OR TENANT SHALL OBSTRUCT A DRAINAGE EASEMENT OR CHANNEL WITHIN THE TRACT.
6. NO HABITABLE STRUCTURE SHALL BE LOCATED ON A FAULT THAT HAS BEEN ACTIVE DURING THE HOLOCENE EPOCH OF GEOLOGIC TIME.
7. NO FENCES ARE ALLOWED WITHIN OR ACROSS UTILITY EASEMENTS MAINTAINED BY WASHOE COUNTY, PEDESTRIAN EASEMENTS, OR WASHOE LAKE & GALENA CREEK DRAINAGE & DITCH EASEMENT.
8. NO CERTIFICATE OF OCCUPANCY SHALL BE ISSUED UNTIL THE SEWER FACILITIES HAVE BEEN COMPLETED AND ACCEPTED BY THE WASHOE COUNTY UTILITY DIVISION.
9. NO CERTIFICATE OF OCCUPANCY SHALL BE ISSUED UNTIL THE WATER FACILITIES HAVE BEEN COMPLETED AND ACCEPTED BY THE WASHOE COUNTY UTILITY DIVISION.
10. REFER TO MASTER DRAINAGE PLAN FOR ST. JAMES'S VILLAGE PREPARED BY CFA, DATED APRIL 28, 1994 FOR 100-YEAR FLOOD LIMITS SUBJECT TO POSSIBLE CHANGE AS MAY BE APPROVED BY THE WASHOE COUNTY ENGINEER.
11. NO DIRECT ACCESS FROM INDIVIDUAL LOTS SHALL BE ALLOWED ONTO ST. JAMES PARKWAY OR KNIGHTSBRIDGE CROSSING.

TYPICAL LOT EASEMENTS

SCALE: N.T.S.



LEGEND AND ABBREVIATIONS

- | | |
|--|-------------------|
| SECTION CORNER (CALC. TIE) | |
| FOUND MONUMENT AS NOTED. | |
| CL MONUMENT TO BE SET | |
| 5/8" DIA STEEL ROD & CAP 'PLS 1255' BOUNDARY MONUMENT | |
| SET 5/8" DIA. STEEL ROD AND CAP "PLS 1255" FRONT LOT LINES | |
| DIMENSION POINT (NOTHING SET) | |
| LOT NUMBER | BLOCK DESIGNATION |
| PUBLIC UTILITIES EASEMENT. | |
| DRAINAGE EASEMENT | |
| PROPERTY LINE | |
| SANITARY SEWER EASEMENT | |
| CABLE TV EASEMENT | |
| RADIAL MEASUREMENT | |

BASIS OF BEARING

THE BASIS OF BEARING FOR THIS PLAT IS S40°39'40"E BEING THE BEARING BETWEEN BETWEEN THE CONTINUOUS OPERATION GPS BASE STATIONS NW RENO AND ZOLEZZI LANE. WITH THE COORDINATE VALUES BASED ON NORTH AMERICAN DATUM OF 1983 / 1994 (HARN), NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE ARE AS FOLLOWS:

NW RENO NORTHING: 14873044.051
EASTING: 2257940.506

ZOLEZZI LANE NORTHING: 14830182.339
EASTING: 2294756.940

MAP REFERENCES

WASHOE COUNTY TRACT MAP No. 3261, THE OFFICIAL PLAT OF ST. JAMES'S VILLAGE UNIT 1C, RECORDED AS FILE No. 2005437 IN THE OFFICIAL RECORDS OF WASHOE COUNTY ON JUNE 29, 1996.

WASHOE COUNTY TRACT MAP No. 3404, THE OFFICIAL PLAT OF ST. JAMES'S VILLAGE UNIT 1D, RECORDED AS FILE No. 2110182 IN THE OFFICIAL RECORDS OF WASHOE COUNTY ON JUNE 20, 1997.

TOTAL AREA = 12,227 SF (11.46 AC)
LOT AREA = 4,312 SF (10.41 AC)
COMMON AREA = 0 SF
STREET AREA = 46,055 SF (1.06 AC)
NUMBER OF LOTS = 8

DETAIL
SCALE: NTS

OFFICIAL PLAT
ST. JAMES'S VILLAGE - UNIT 1F

(A PORTION OF PARCEL A OF R/S 404
SITUATE WITHIN A PORTION OF THE
NORTH 1/2 OF SECTION 14, TOWNSHIP 1
NORTH, RANGE 19 EAST, M.D.B.&M.

WASHOE COUNTY NEVADA

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PROJECT 02452
AUGUST 2002

SHEET NO. 2 OF 2

Subdivision Tract Map 4123A

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

4123 A

96EH

ST. JAMES'S VILLAGE - UNIT 1G

OWNER'S CERTIFICATE

THIS IS TO CERTIFY THAT THE UNDERSIGNED ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, IS THE OWNER OF THE TRACT OF LAND REPRESENTED ON THIS PLAT, AND HAS CONSENTED TO THE PREPARATION AND RECORDATION OF THIS PLAT, AND THAT THE SAME IS EXECUTED IN COMPLIANCE WITH AND SUBJECT TO THE PROVISIONS OF NRS CHAPTERS 116 AND 278, THAT THE STREETS, AVENUES, HIGHWAYS AND ALL APPURTENANCES THERETO AS SHOWN ARE HEREBY SET APART TO BE USED AS PRIVATE ACCESS FOREVER; AND HEREBY GRANTS TO ALL PUBLIC UTILITIES AND WASHOE COUNTY PERMANENT EASEMENTS SHOWN ON THIS PLAT FOR THE CONSTRUCTION AND MAINTENANCE OF UTILITY SYSTEMS AND WATER AND SANITARY SEWER FACILITIES, TOGETHER WITH THE RIGHT OF ACCESS THERETO FOREVER. THE WATER FACILITIES AND SEWER FACILITIES AND ASSOCIATED APPURTENANCES ARE HEREBY DEDICATED TO WASHOE COUNTY. THE OWNER AND ASSIGNEES AGREE TO THE USE OF RESIDENTIAL WATER METERS.

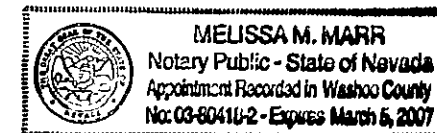
ST. JAMES'S VILLAGE, INC.,
A NEVADA CORPORATION

Frederick D. Woodside
FREDERICK D. WOODSIDE, VICE PRESIDENT

STATE OF NEVADA
COUNTY OF WASHOE S.S.

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON July 23
2004, BY FREDERICK D. WOODSIDE, AS VICE PRESIDENT OF ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION.

Melissa M. Marr
NOTARY PUBLIC



TITLE COMPANY CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT THIS PLAT HAS BEEN EXAMINED AND THAT ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, OWNS OF RECORD AN INTEREST IN THE LAND DELINEATED HEREON AND THAT IT IS THE ONLY OWNER OF RECORD OF SAID LAND; THAT ALL THE OWNERS OF RECORD OF THE LAND HAVE SIGNED THE FINAL MAP; THAT NO ONE HOLDS OF RECORD A SECURITY INTEREST IN THE LAND TO BE DIVIDED; AND THAT THERE ARE NO LIENS OF RECORD AGAINST THE COMMON INTEREST COMMUNITY FOR DELINQUENT STATE, COUNTY, MUNICIPAL, FEDERAL OR LOCAL TAXES OR ASSESSMENTS COLLECTED AS TAXES OR SPECIAL ASSESSMENTS, AND THAT A GUARANTEE DATED 7-29-04, FOR THE BENEFIT OF THE COUNTY OF WASHOE, STATE OF NEVADA, HAS BEEN ISSUED WITH REGARD TO ALL THE ABOVE.

WESTERN TITLE COMPANY OF NEVADA

BY: [Signature] 7-30-04
TITLE: Sr. V.P. DATE

UTILITY COMPANIES CERTIFICATE

THE UTILITY EASEMENTS SHOWN ON THIS PLAT HAVE BEEN CHECKED AND APPROVED BY THE UNDERSIGNED PUBLIC UTILITY AND CABLE TV COMPANIES.

Randy Remy 7/28/2004
SIERRA PACIFIC POWER COMPANY DATE

Paul Howard 7/28/04
NEVADA BELL TELEPHONE COMPANY d/b/a SBC NEVADA DATE

Chirakis 7-29-04
CHARTER COMMUNICATIONS DATE

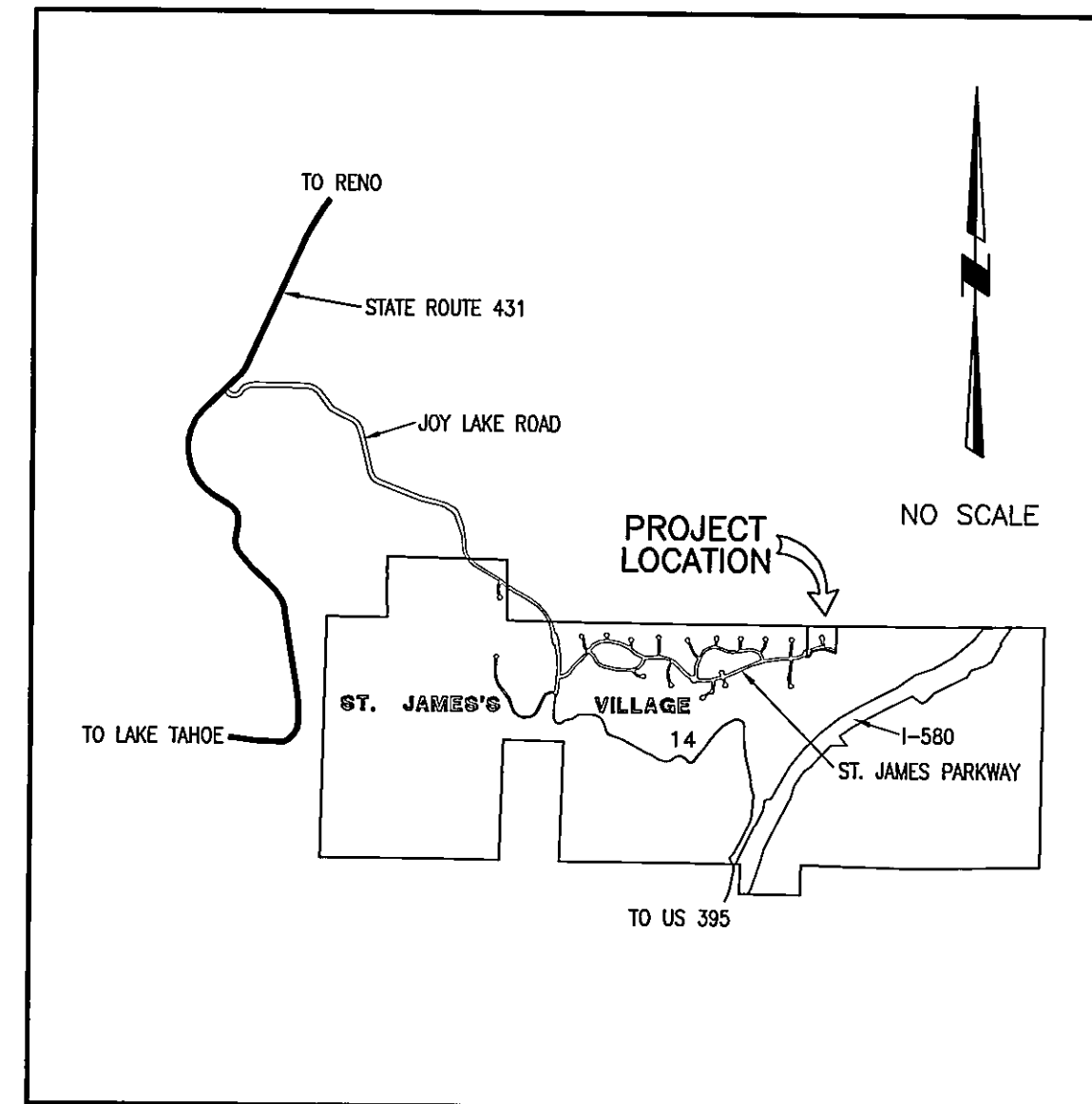
Susan Hard 7/29/2004
WASHOE COUNTY DEPARTMENT OF WATER RESOURCES DATE

TAXATION CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT ALL THE PROPERTY TAXES ON THE LAND FOR THE FISCAL YEAR HAVE BEEN PAID AND THAT THE FULL AMOUNT OF ANY DEFERRED PROPERTY TAXES FOR THE CONVERSION OF THE PROPERTY FROM AGRICULTURAL USE HAS BEEN PAID PURSUANT TO NRS 361A.265.

WASHOE COUNTY TREASURER

Donna Davis 10/1/04
TITLE: DEPUTY DATE

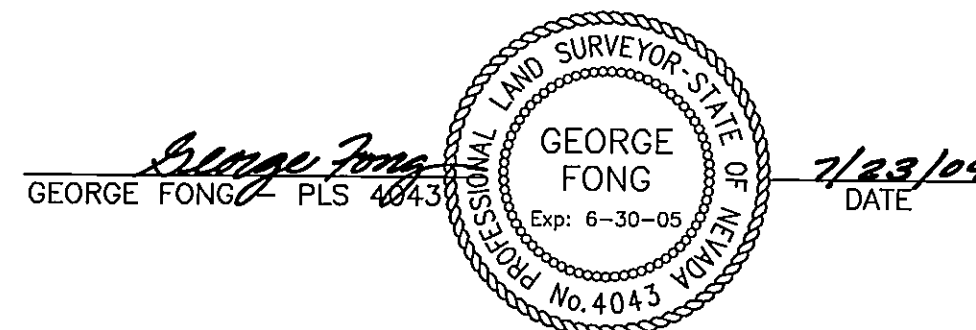


VICINITY MAP

SURVEYOR'S CERTIFICATE

I, GEORGE FONG, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEVADA, CERTIFY THAT:

1. THIS PLAT REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER MY DIRECT SUPERVISION AT THE INSTANCE OF ST. JAMES'S VILLAGE, INC.
2. THE LANDS SURVEYED LIE WITHIN THE NW1/4 OF SECTION 13, T.17N., R.19E., M.D.M., AND THE SURVEY WAS COMPLETED ON MARCH 19, 2004.
3. THIS PLAT COMPLIES WITH THE APPLICABLE STATE STATUTES AND ANY LOCAL ORDINANCES IN EFFECT ON THE DATE THAT THE GOVERNING BODY GAVE ITS FINAL APPROVAL.
4. THE MONUMENTS DEPICTED ON THE PLAT WILL BE OF THE CHARACTER SHOWN AND OCCUPY THE POSITIONS INDICATED BY 10/04/05 AND AN APPROPRIATE FINANCIAL GUARANTEE WILL BE POSTED WITH THE GOVERNING BODY BEFORE RECORDATION TO ENSURE THE INSTALLATION OF THE MONUMENTS.



WATER RIGHT DEDICATION CERTIFICATE

THE WATER AND SEWER RESOURCE REQUIREMENTS SET FORTH IN ARTICLE 422 OF THE WASHOE COUNTY DEVELOPMENT CODE, RELATED TO THE DEDICATION OF WATER RESOURCES HAVE BEEN SATISFIED.

Vahid Behnamian 9/10/04
WASHOE COUNTY DEPARTMENT OF WATER RESOURCES DATE

DIVISION OF WATER RESOURCES CERTIFICATE

THIS PLAT IS APPROVED BY THE STATE OF NEVADA DIVISION OF WATER RESOURCES OF THE DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES CONCERNING WATER QUANTITY, SUBJECT TO THE REVIEW OF APPROVAL ON FILE IN THIS OFFICE.

Robert B. Ziehlft, P.E. 9/10/2004
DIVISION OF WATER RESOURCES DATE

DISTRICT BOARD OF HEALTH CERTIFICATE

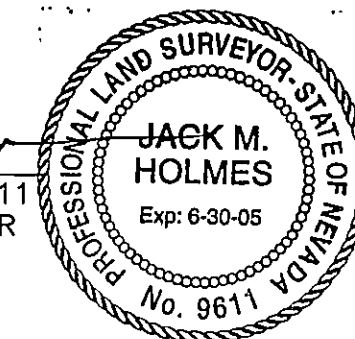
THIS FINAL MAP IS APPROVED BY THE WASHOE COUNTY DISTRICT BOARD OF HEALTH. THIS APPROVAL CONCERNS SEWAGE DISPOSAL, WATER POLLUTION, WATER QUALITY AND WATER SUPPLY FACILITIES AND IS PREDICATED UPON PLANS FOR A PUBLIC WATER SUPPLY AND INDIVIDUAL SYSTEMS FOR DISPOSAL OF SEWAGE.

[Signature] 9-28-2004
FOR THE DISTRICT BOARD OF HEALTH DATE

COUNTY SURVEYOR'S CERTIFICATE

I CERTIFY THAT I HAVE EXAMINED THIS MAP CONSISTING OF TWO SHEETS, AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT AND THAT AN ADEQUATE PERFORMANCE GUARANTEE HAS BEEN FILED, GUARANTEEING THE MONUMENTS AS SHOWN WILL BE SET BY 10/04/05.

[Signature] 10/04/04
JACK M. HOLMES, PLS 9611 DATE
WASHOE COUNTY SURVEYOR



COMMUNITY DEVELOPMENT CERTIFICATE

THE TENTATIVE MAP FOR ST. JAMES'S VILLAGE, TM5-2-92, WAS RECOMMENDED FOR APPROVAL BY THE WASHOE COUNTY PLANNING COMMISSION ON THE 8TH DAY OF JULY 1992, AND APPROVED BY THE WASHOE COUNTY COMMISSION ON THE 18TH DAY OF AUGUST, 1992.

THE FIRST FINAL MAP APPROVED FOR THIS TENTATIVE MAP AFTER THE 1ST DAY OF JULY 2001, THEREBY ESTABLISHING THE ANNIVERSARY DATE UNDER NRS 278.360, WAS APPROVED AND ACCEPTED FOR RECORDATION ON THE 11TH DAY OF OCTOBER 2002. A ONE YEAR EXTENSION OF TIME FOR THE TENTATIVE MAP WAS APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON THE 7TH DAY OF OCTOBER 2003.

THIS FINAL MAP, ST. JAMES'S VILLAGE - UNIT 1G, MEETS ALL APPLICABLE STATUTES, ORDINANCES, AND CODE PROVISIONS; IS IN SUBSTANTIAL CONFORMANCE WITH THE TENTATIVE MAP; AND ALL CONDITIONS HAVE BEEN MET.

THE NEXT FINAL MAP FOR TM5-2-92 MUST BE APPROVED AND ACCEPTED FOR RECORDATION BY THE COMMUNITY DEVELOPMENT DIRECTOR ON OR BEFORE THE EXPIRATION DATE, THE 11TH OF OCTOBER 2005, OR AN EXTENSION OF TIME FOR THE TENTATIVE MAP MUST BE APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON OR BEFORE SAID DATE.

THIS FINAL MAP IS APPROVED AND ACCEPTED FOR RECORDATION THIS 5th DAY OF October, 2004, BY THE WASHOE COUNTY COMMUNITY DEVELOPMENT DIRECTOR. THE OFFER OF DEDICATION OF THE WATER FACILITIES AND SEWER FACILITIES, AND ASSOCIATED APPURTENANCES IS REJECTED AT THIS TIME, BUT WILL REMAIN OPEN IN ACCORDANCE WITH NRS CHAPTER 278.

[Signature] 10/05/04
ADRIAN E. FREUND, AICP DATE
COMMUNITY DEVELOPMENT DIRECTOR

OFFICIAL PLAT		COUNTY RECORDER'S CERTIFICATE	
ST. JAMES'S VILLAGE - UNIT 1G		FILE NO: <u>3100540</u>	
BEING A PORTION OF THE NW1/4 OF SECTION 13, T.17N., R.19E., M.D.M.		FILED FOR RECORD AT THE REQUEST OF <u>St. James's Village</u>	
WASHOE COUNTY NEVADA		ON THIS <u>6</u> DAY OF <u>October</u> , 2004	
C & M ENGINEERING AND DESIGN, LTD		AT <u>29</u> MINUTES PAST <u>8</u> O'CLOCK P.M.	
9498 DOUBLE R BLVD., SUITE B		OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA	
RENO, NV 89521		Kathryn L. Burke	
PHONE: (775) 856-3312		COUNTY RECORDER	
FAX: (775) 856-3318		BY: <u>C. Bartley</u>	
JOB NO.: 03-75.03		DEPUTY	
DATE: 3/19/04		FEE: <u>64.00</u>	
SHEET 1 OF 2			

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

3100540

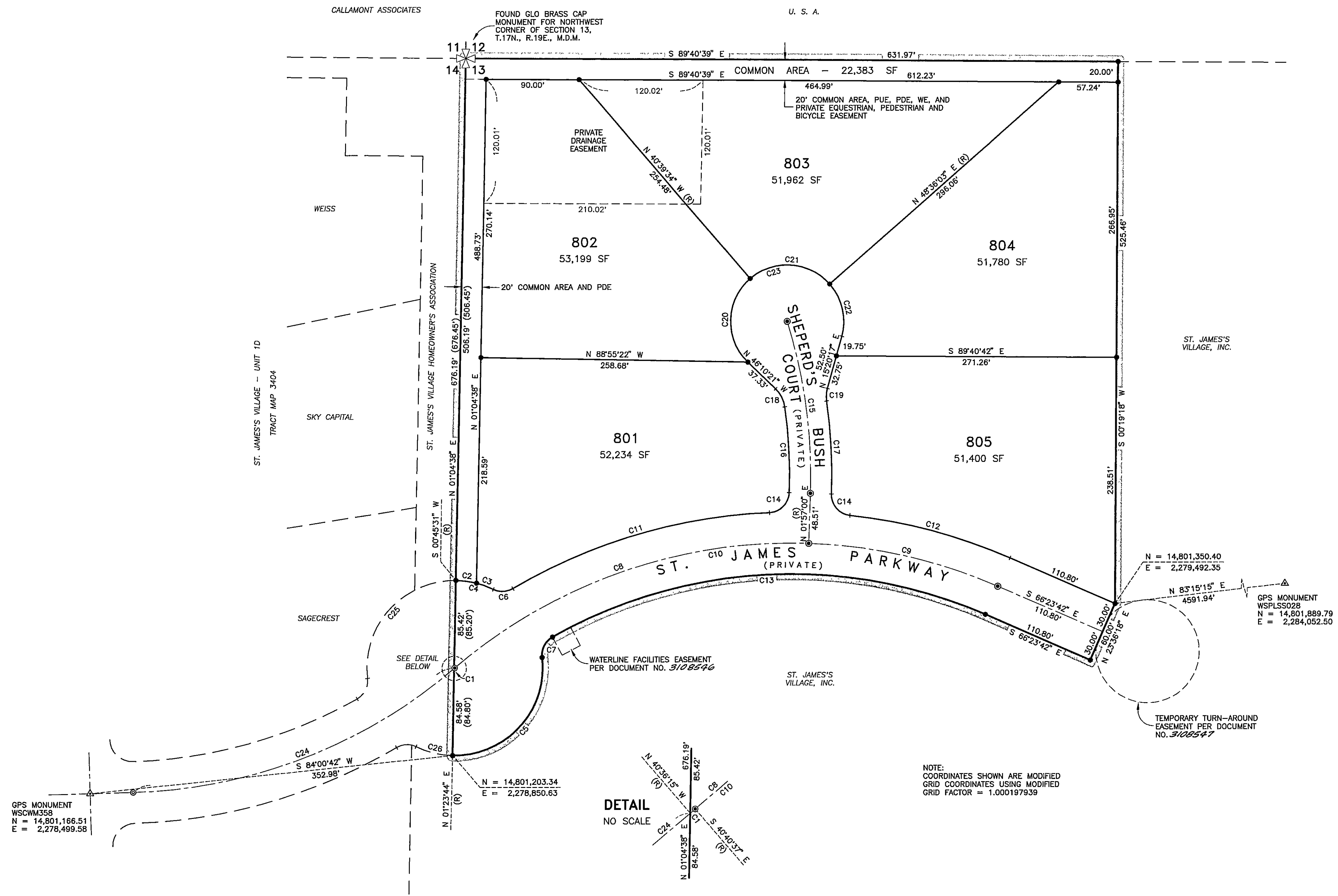
Subdivision Tract Map 4396

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

4396A

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

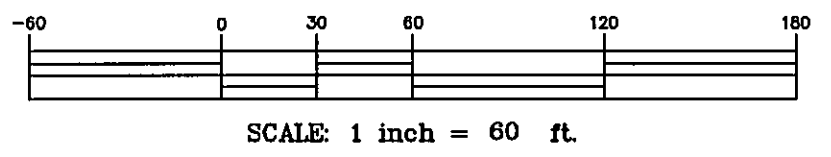
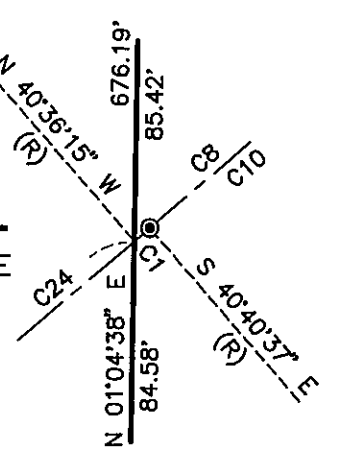
3108548



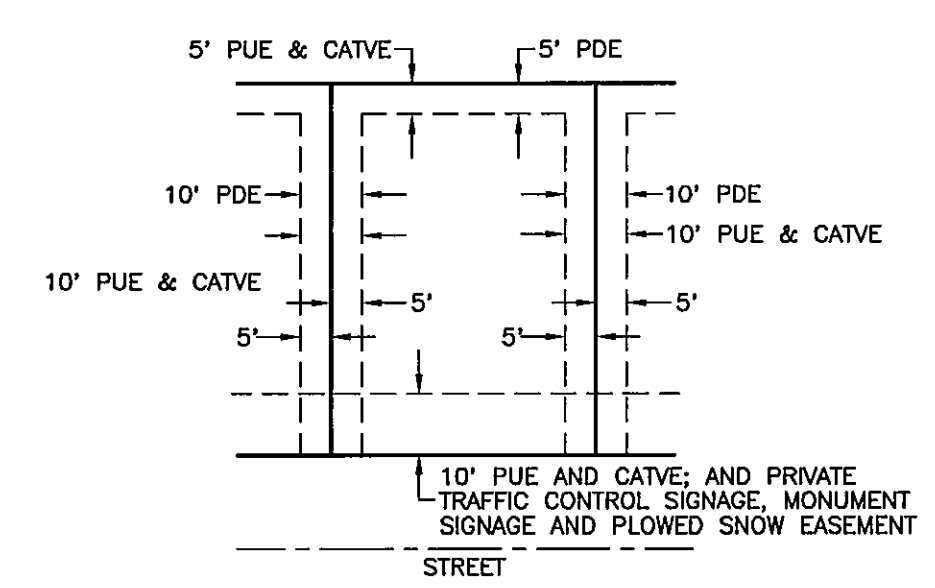
NOTES

- ALL ROADWAYS ARE TO BE PRIVATELY OWNED AND MAINTAINED. A PUBLIC UTILITY, CABLE TV AND DRAINAGE EASEMENT IS HEREBY GRANTED OVER THE ROADWAY AREAS. PUBLIC UTILITY AND CABLE TV EASEMENTS ARE HEREBY GRANTED, 10 FEET IN WIDTH COINCIDENT WITH ALL STREET RIGHTS-OF-WAY, 5 FEET IN WIDTH COINCIDENT WITH ALL OTHER EXTERIOR BOUNDARIES AND 10 FEET IN WIDTH CENTERED ON ALL INTERIOR PROPERTY LINES.
- A PUBLIC UTILITY AND CABLE TV EASEMENT IS ALSO HEREBY GRANTED WITHIN EACH LOT FOR THE EXCLUSIVE PURPOSE OF INSTALLING AND MAINTAINING UTILITY AND CABLE TV FACILITIES TO THAT LOT AND THE RIGHT TO EXIT THAT LOT WITH SAID FACILITIES FOR THE PURPOSE OF SERVING ADJACENT LOTS AT LOCATIONS MUTUALLY AGREED UPON BY THE OWNER OF RECORD AT THAT TIME, AND THE UTILITY AND CABLE TV COMPANIES.
- DRAINAGE FACILITIES ARE TO BE PRIVATE AND MAINTAINED BY THE OWNERS.
- A PRIVATE DRAINAGE EASEMENT IS HEREBY GRANTED OVER ALL COMMON AREAS.
- A 10 FOOT PRIVATE PLOWED SNOW STORAGE, PEDESTRIAN, MONUMENT SIGNAGE AND TRAFFIC CONTROL SIGNAGE EASEMENT IS HEREBY GRANTED ALONG ALL STREET RIGHTS-OF-WAY.
- NO OWNER OR TENANT SHALL OBSTRUCT A DRAINAGE EASEMENT OR CHANNEL WITHIN THE TRACT.
- NO FENCES ARE ALLOWED WITHIN OR ACROSS UTILITY EASEMENTS MAINTAINED BY WASHOE COUNTY OR PRIVATE PEDESTRIAN EASEMENTS.
- NO CERTIFICATE OF OCCUPANCY SHALL BE ISSUED UNTIL THE WATER AND SEWER IMPROVEMENTS HAVE BEEN COMPLETED AND ACCEPTED BY THE WASHOE COUNTY DEPARTMENT OF WATER RESOURCES.
- NO HABITABLE STRUCTURES SHALL BE LOCATED ON A FAULT THAT HAS BEEN ACTIVE DURING THE HOLOCENE EPOCH OF GEOLOGICAL TIME.
- NO DIRECT ACCESS FROM INDIVIDUAL LOTS SHALL BE ALLOWED ONTO ST. JAMES PARKWAY.
- SEWAGE DISPOSAL IS BY INDIVIDUAL SEWAGE DISPOSAL SYSTEMS. DRY SANITARY SEWER SYSTEM WILL BE CONSTRUCTED WITHIN THIS SUBDIVISION. UPON COMPLETION OF THE PLEASANT VALLEY SANITARY SEWER INTERCEPTOR, SEPTIC SYSTEMS WILL BE ABANDONED AND ALL UNITS OF THIS SUBDIVISION WILL BE CONNECTED TO THE ST. JAMES'S VILLAGE SANITARY SEWER SYSTEM.

DETAIL
NO SCALE



NOTE:
COORDINATES SHOWN ARE MODIFIED
GRID COORDINATES USING MODIFIED
GRID FACTOR = 1.000197359



BASIS OF BEARINGS

NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE
GRID, NAD83/94, PER MONUMENTS AS SHOWN

TOTAL AREA = 7.93 AC ±
STREET AREA = 62,415 SF ±
COMMON AREA = 22,383 SF ±
LOT AREA = 5.98 AC ±

NUMBER OF LOTS = 5

CURVE TABLE

CURVE	DELTA	RADIUS	LENGTH
C1	00°04'21"	500.00'	0.63'
C2	13°36'00"	85.00'	20.18'
C3	11°41'55"	85.00'	17.36'
C4	25°17'55"	85.00'	37.53'
C5	98°11'51"	85.00'	145.88'
C6	58°37'59"	20.00'	19.77'
C7	67°17'44"	20.00'	23.49'
C8	42°37'37"	500.00'	371.99'
C9	21°39'18"	500.00'	188.98'
C10	64°18'55"	500.00'	560.97'
C11	28°18'10"	530.00'	261.81'
C12	17°25'56"	530.00'	161.25'
C13	53°08'42"	470.00'	435.68'
C14	85°46'38"	20.00'	29.94'
C15	19°22'20"	500.00'	188.06'
C16	09°58'50"	478.50'	83.25'
C17	09°58'50"	520.50'	90.36'
C18	38°10'31"	30.00'	19.99'
C19	23°20'07"	30.00'	12.22'
C20	95°30'47"	55.00'	91.69'
C21	89°15'37"	55.00'	85.68'
C22	58°44'14"	55.00'	54.46'
C23	24°13'38"	55.00'	231.83'
C24	38°58'42"	500.00'	339.86'
C25	97°33'38"	85.00'	144.73'
C26	24°39'42"	85.00'	36.59'
C26	(24°49'39")	(85.00')	(36.83')

LEGEND

- 801 LOT NUMBER
- MONUMENT TO BE SET
 - ⊙ FOUND CENTERLINE MONUMENT
 - SET 5/8" REBAR, "PLS 4043,"
 - FOUND 5/8" REBAR, "PLS 5665"
 - △ GPS CONTROL POINT AS NOTED
 - + DIMENSION POINT—NOTHING SET
 - () RECORD DATA PER TRACT MAP 3404
 - (R) RADIAL LINE
 - PUE PUBLIC UTILITY EASEMENT
 - PDE PRIVATE DRAINAGE EASEMENT
 - CATVE CABLE TV EASEMENT
 - WE WATERLINE EASEMENT (COUNTY MAINTAINED)
 - SECTION CORNER

3108548

OFFICIAL PLAT

ST. JAMES'S VILLAGE - UNIT 1G

BEING A PORTION OF THE NW1/4 OF SECTION 13,
T.17N., R.19E., M.D.M.

WASHOE COUNTY NEVADA

C & M ENGINEERING AND DESIGN, LTD
9498 DOUBLE R BLVD., SUITE B
RENO, NV 89521
PHONE: (775) 856-3312
FAX: (775) 856-3318

JOB NO. 03-75.03
DATE 3/19/04

SHEET 2 OF 2

Subdivision Tract Map 4396A

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

ST. JAMES'S VILLAGE - UNIT 2B

OWNER'S CERTIFICATE

THIS IS TO CERTIFY THAT THE UNDERSIGNED ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, IS THE OWNER OF THE TRACT OF LAND REPRESENTED ON THIS PLAT, AND HAS CONSENTED TO THE PREPARATION AND RECORDATION OF THIS PLAT, AND THAT THE SAME IS EXECUTED IN COMPLIANCE WITH AND SUBJECT TO THE PROVISIONS OF NRS CHAPTERS 116 AND 278, THAT THE STREETS, AVENUES, HIGHWAYS AND ALL APPURTENANCES THERETO AS SHOWN ARE HEREBY GRANTED AND SET APART TO BE USED AS PRIVATE ACCESS FOREVER; AND HEREBY GRANTS TO ALL PUBLIC UTILITIES AND WASHOE COUNTY PERMANENT EASEMENTS SHOWN ON THIS PLAT FOR THE CONSTRUCTION AND MAINTENANCE OF UTILITY SYSTEMS AND WATER AND SANITARY SEWER FACILITIES, TOGETHER WITH THE RIGHT OF ACCESS THERETO FOREVER. THE WATER FACILITIES AND SEWER FACILITIES AND ASSOCIATED APPURTENANCES ARE HEREBY DEDICATED TO WASHOE COUNTY. THE OWNER AND ASSIGNEES AGREE TO THE USE OF RESIDENTIAL WATER METERS.

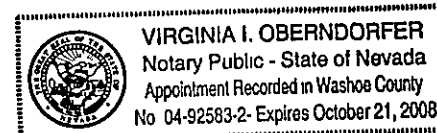
ST. JAMES'S VILLAGE, INC.,
A NEVADA CORPORATION

Frederick D. Woodside
FREDERICK D. WOODSIDE, VICE PRESIDENT

STATE OF NEVADA S.S.
COUNTY OF WASHOE

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON JULY 28, 2005, BY FREDERICK D. WOODSIDE, AS VICE PRESIDENT OF ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION.

Virginia I. Oberndorfer
NOTARY PUBLIC



TITLE COMPANY CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT THIS PLAT HAS BEEN EXAMINED AND THAT ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, OWNS OF RECORD AN INTEREST IN THE LAND DELINEATED HEREON AND THAT IT IS THE ONLY OWNER OF RECORD OF SAID LAND; THAT ALL THE OWNERS OF RECORD OF THE LAND HAVE SIGNED THE FINAL MAP; THAT NO ONE HOLDS OF RECORD A SECURITY INTEREST IN THE LAND TO BE DIVIDED; AND THAT THERE ARE NO LIENS OF RECORD AGAINST THE COMMON INTEREST COMMUNITY FOR DELINQUENT STATE, COUNTY, MUNICIPAL, FEDERAL OR LOCAL TAXES OR ASSESSMENTS COLLECTED AS TAXES OR SPECIAL ASSESSMENTS, AND THAT A GUARANTEE DATED July 27, 2005, FOR THE BENEFIT OF THE COUNTY OF WASHOE, STATE OF NEVADA, HAS BEEN ISSUED WITH REGARD TO ALL THE ABOVE.

WESTERN TITLE COMPANY OF NEVADA

BY: David Evans 7-29-05
DAVID EVANS, VICE PRESIDENT DATE

UTILITY COMPANIES CERTIFICATE

THE UTILITY EASEMENTS SHOWN ON THIS PLAT HAVE BEEN CHECKED AND APPROVED BY THE UNDERSIGNED PUBLIC UTILITY AND CABLE TV COMPANIES.

Keith Fong 7/24/2005
SIERRA PACIFIC POWER COMPANY DATE

D. Callahan 7/29/05
NEVADA BELL TELEPHONE COMPANY d/b/a SBC NEVADA DATE

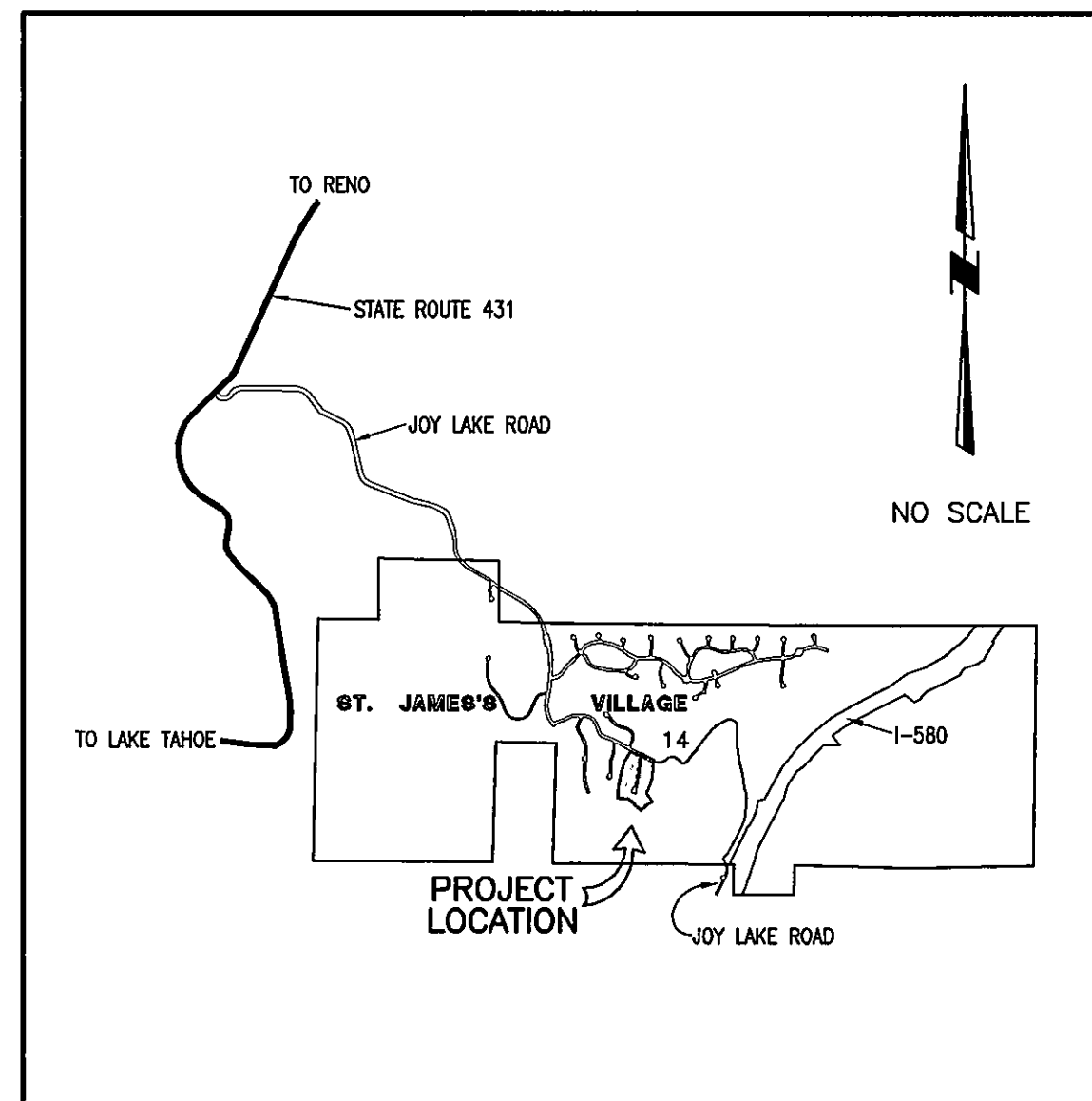
Alan K. St. 7/29/2005
CHARTER COMMUNICATIONS DATE

Vahid Behmaram 8/11/05
WASHOE COUNTY DEPARTMENT OF WATER RESOURCES DATE

TAXATION CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT ALL THE PROPERTY TAXES ON THE LAND FOR THE FISCAL YEAR HAVE BEEN PAID AND THAT THE FULL AMOUNT OF ANY DEFERRED PROPERTY TAXES FOR THE CONVERSION OF THE PROPERTY FROM AGRICULTURAL USE HAS BEEN PAID PURSUANT TO NRS 361A.265.

WASHOE COUNTY TREASURER
Jack [Signature] 8/9/2005
TITLE: DATE

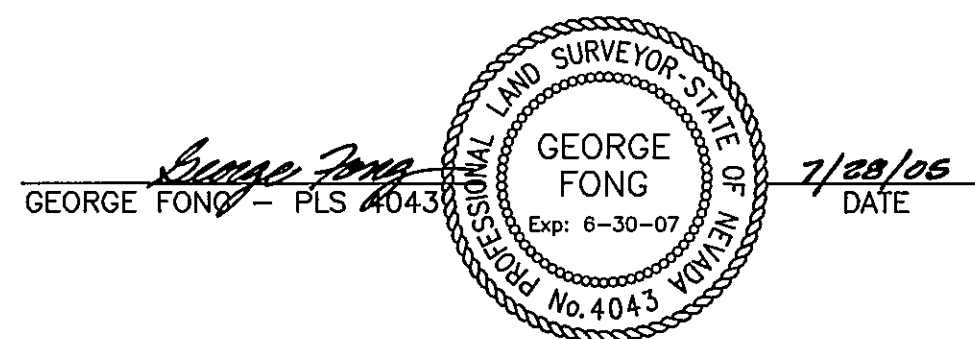


VICINITY MAP

SURVEYOR'S CERTIFICATE

I, GEORGE FONG, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEVADA, CERTIFY THAT:

- THIS PLAT REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER MY DIRECT SUPERVISION AT THE INSTANCE OF ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION.
- THE LANDS SURVEYED LIE WITHIN THE SW1/4 OF SECTION 14, T.17N., R.19E., M.D.M., AND THE SURVEY WAS COMPLETED ON MAY 23, 2005.
- THIS PLAT COMPLIES WITH THE APPLICABLE STATE STATUTES AND ANY LOCAL ORDINANCES IN EFFECT ON THE DATE THAT THE GOVERNING BODY GAVE ITS FINAL APPROVAL.
- THE MONUMENTS DEPICTED ON THE PLAT WILL BE OF THE CHARACTER SHOWN AND OCCUPY THE POSITIONS INDICATED BY Oct 6, 2006, AND AN APPROPRIATE FINANCIAL GUARANTEE WILL BE POSTED WITH THE GOVERNING BODY BEFORE RECORDATION TO ENSURE THE INSTALLATION OF THE MONUMENTS.



WATER RIGHT DEDICATION CERTIFICATE

THE WATER AND SEWER RESOURCE REQUIREMENTS SET FORTH IN ARTICLE 422 OF THE WASHOE COUNTY DEVELOPMENT CODE, RELATED TO THE DEDICATION OF WATER RESOURCES HAVE BEEN SATISFIED.

Vahid Behmaram 8/11/05
WASHOE COUNTY DEPARTMENT OF WATER RESOURCES DATE

DIVISION OF WATER RESOURCES CERTIFICATE

THIS PLAT IS APPROVED BY THE STATE OF NEVADA DIVISION OF WATER RESOURCES OF THE DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES CONCERNING WATER QUANTITY, SUBJECT TO THE REVIEW OF APPROVAL ON FILE IN THIS OFFICE.

Robert H. Ziemelt, P.E. 8/3/2005
DIVISION OF WATER RESOURCES DATE

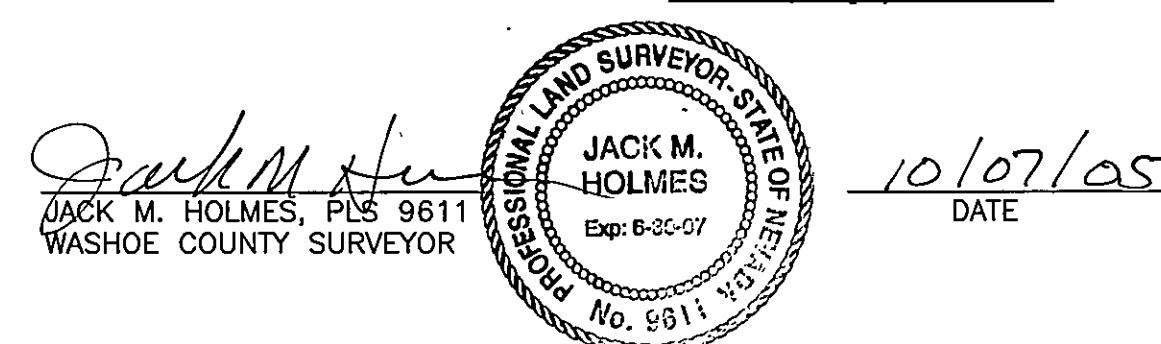
DISTRICT BOARD OF HEALTH CERTIFICATE

THIS FINAL MAP IS APPROVED BY THE WASHOE COUNTY DISTRICT BOARD OF HEALTH. THIS APPROVAL CONCERNS SEWAGE DISPOSAL, WATER POLLUTION, WATER QUALITY AND WATER SUPPLY FACILITIES AND IS PREDICATED UPON PLANS FOR A PUBLIC WATER SUPPLY AND INDIVIDUAL SYSTEMS FOR DISPOSAL OF SEWAGE.

[Signature] 10/4/05
FOR THE DISTRICT BOARD OF HEALTH DATE

COUNTY SURVEYOR'S CERTIFICATE

I CERTIFY THAT I HAVE EXAMINED THIS MAP CONSISTING OF TWO SHEETS, AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT AND THAT AN ADEQUATE PERFORMANCE GUARANTEE HAS BEEN FILED GUARANTEEING THE MONUMENTS AS SHOWN WILL BE SET BY 10/16/2006.



COMMUNITY DEVELOPMENT CERTIFICATE

THE TENTATIVE MAP FOR ST. JAMES'S VILLAGE, TM5-2-92, WAS RECOMMENDED FOR APPROVAL BY THE WASHOE COUNTY PLANNING COMMISSION ON THE 8TH DAY OF JULY 1992, AND APPROVED BY THE WASHOE COUNTY COMMISSION ON THE 18TH DAY OF AUGUST, 1992.

THE FIRST FINAL MAP APPROVED FOR THIS TENTATIVE MAP AFTER THE 1ST DAY OF JULY 2001, THEREBY ESTABLISHING THE ANNIVERSARY DATE UNDER NRS 278.360, WAS APPROVED AND ACCEPTED FOR RECORDATION ON THE 11TH DAY OF OCTOBER 2002. THE MOST RECENTLY RECORDED FINAL MAP, UNIT 1G, FOR THIS TENTATIVE MAP WAS APPROVED AND ACCEPTED FOR RECORDATION ON THE 10TH DAY OF OCTOBER 2004.

THIS FINAL MAP, ST. JAMES'S VILLAGE - UNIT 2B, MEETS ALL APPLICABLE STATUTES, ORDINANCES, AND CODE PROVISIONS; IS IN SUBSTANTIAL CONFORMANCE WITH THE TENTATIVE SUBDIVISION MAP CASE NO. TM5-2-92; AND ALL CONDITIONS HAVE BEEN MET.

THE NEXT FINAL MAP FOR TM5-2-92 MUST BE APPROVED AND ACCEPTED FOR RECORDATION BY THE COMMUNITY DEVELOPMENT DIRECTOR ON OR BEFORE THE EXPIRATION DATE, THE 11TH DAY OF OCTOBER, 2006, OR AN EXTENSION OF TIME FOR THE TENTATIVE MAP MUST BE APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON OR BEFORE SAID DATE.

THIS FINAL MAP IS APPROVED AND ACCEPTED FOR RECORDATION THIS 7th DAY OF October, 2005, BY THE WASHOE COUNTY COMMUNITY DEVELOPMENT DIRECTOR. THE OFFER OF DEDICATION OF THE WATER FACILITIES AND SEWER FACILITIES, AND ASSOCIATED APPURTENANCES, IS REJECTED AT THIS TIME, BUT WILL REMAIN OPEN IN ACCORDANCE WITH NRS CHAPTER 278.

Adrian P. Freung, AICP 10/07/2005
COMMUNITY DEVELOPMENT DIRECTOR DATE

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

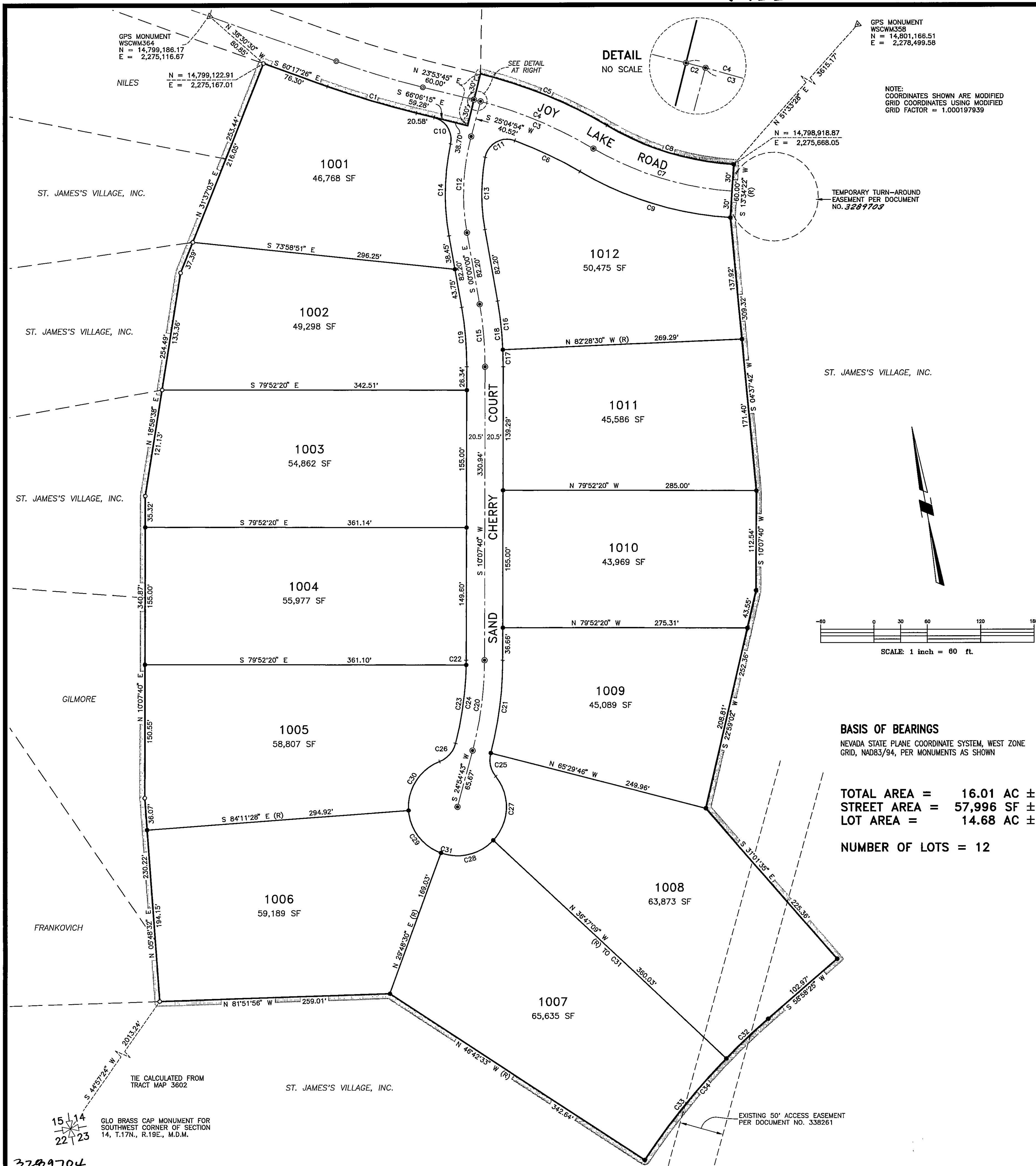
3289704

OFFICIAL PLAT ST. JAMES'S VILLAGE - UNIT 2B A COMMON INTEREST COMMUNITY BEING A PORTION OF THE SW1/4 OF SECTION 14, T.17N., R.19E., M.D.M.		COUNTY RECORDER'S CERTIFICATE FILE NO: <u>3289704</u> FILED FOR RECORD AT THE REQUEST OF <u>St. James's Village</u> ON THIS <u>11</u> DAY OF <u>October</u> , 200 <u>5</u> AT <u>4</u> MINUTES PAST <u>10</u> O'CLOCK <u>A.</u> M. OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA.
WASHOE COUNTY C & M ENGINEERING AND DESIGN, LTD 9498 DOUBLE R BLVD., SUITE B RENO, NV 89521 PHONE: (775) 856-3312 FAX: (775) 856-3318	JOB NO. 04-008.09 DATE 4/8/05 SHEET <u>1</u> OF <u>2</u>	<u>Kathryn L. Burke</u> COUNTY RECORDER BY: <u>C. Bartley</u> DEPUTY FEE: <u>64.00</u>

Subdivision Tract Map 4551

4551
CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

4551A



NOTES

- ALL ROADWAYS ARE TO BE PRIVATELY OWNED AND MAINTAINED. A PUBLIC UTILITY, CABLE TV AND DRAINAGE EASEMENT IS HEREBY GRANTED OVER THE ROADWAY AREAS. PUBLIC UTILITY AND CABLE TV EASEMENTS ARE HEREBY GRANTED, 10 FEET IN WIDTH COINCIDENT WITH ALL STREET RIGHTS-OF-WAY, 5 FEET IN WIDTH COINCIDENT WITH ALL OTHER EXTERIOR BOUNDARIES AND 10 FEET IN WIDTH CENTERED ON ALL INTERIOR PROPERTY LINES.
- A PUBLIC UTILITY AND CABLE TV EASEMENT IS ALSO HEREBY GRANTED WITHIN EACH LOT FOR THE EXCLUSIVE PURPOSE OF INSTALLING AND MAINTAINING UTILITY AND CABLE TV FACILITIES TO THAT LOT AND THE RIGHT TO EXIT THAT LOT WITH SAID FACILITIES FOR THE PURPOSE OF SERVING ADJACENT LOTS AT LOCATIONS MUTUALLY AGREED UPON BY THE OWNER OF RECORD AT THAT TIME, AND THE UTILITY AND CABLE TV COMPANIES.
- DRAINAGE FACILITIES ARE TO BE PRIVATE AND MAINTAINED BY THE OWNERS.
- A 10 FOOT PRIVATE PLOWED SNOW STORAGE, PEDESTRIAN, MONUMENT SIGNAGE AND TRAFFIC CONTROL SIGNAGE EASEMENT IS HEREBY GRANTED ALONG ALL STREET RIGHTS-OF-WAY.
- NO OWNER OR TENANT SHALL OBSTRUCT A DRAINAGE EASEMENT OR CHANNEL WITHIN THE TRACT.
- NO FENCES ARE ALLOWED WITHIN OR ACROSS UTILITY EASEMENTS MAINTAINED BY WASHOE COUNTY OR PRIVATE PEDESTRIAN EASEMENTS.
- NO CERTIFICATE OF OCCUPANCY SHALL BE ISSUED UNTIL THE WATER AND SEWER IMPROVEMENTS HAVE BEEN COMPLETED AND ACCEPTED BY THE WASHOE COUNTY DEPARTMENT OF WATER RESOURCES.
- NO HABITABLE STRUCTURES SHALL BE LOCATED ON A FAULT THAT HAS BEEN ACTIVE DURING THE HOLOCENE EPOCH OF GEOLOGICAL TIME.
- NO DIRECT ACCESS FROM INDIVIDUAL LOTS SHALL BE ALLOWED ONTO JOY LAKE ROAD.
- SEWAGE DISPOSAL IS BY INDIVIDUAL SEWAGE DISPOSAL SYSTEMS. DRY SANITARY SEWER SYSTEM WILL BE CONSTRUCTED WITHIN THIS SUBDIVISION. UPON COMPLETION OF THE PLEASANT VALLEY SANITARY SEWER INTERCEPTOR, SEPTIC SYSTEMS WILL BE ABANDONED AND ALL UNITS OF THIS SUBDIVISION WILL BE CONNECTED TO THE ST. JAMES'S VILLAGE SANITARY SEWER SYSTEM.

CURVE TABLE

CURVE	DELTA	RADIUS	LENGTH
C1	05°48'49"	1030.00'	104.51'
C2	00°51'52"	500.00'	7.54'
C3	15°48'33"	500.00'	137.96'
C4	16°40'25"	500.00'	145.51'
C5	16°40'25"	530.00'	154.24'
C6	08°53'42"	470.00'	81.17'
C7	26°59'48"	350.00'	164.81'
C8	26°59'48"	320.00'	150.78'
C9	26°59'48"	380.00'	179.05'
C10	88°12'17"	25.00'	38.49'
C11	100°14'46"	25.00'	43.74'
C12	25°04'54"	250.00'	109.44'
C13	20°25'42"	229.50'	81.83'
C14	22°06'02"	270.50'	104.34'
C15	10°07'40"	400.00'	70.71'
C16	07°31'30"	420.50'	55.23'
C17	02°36'10"	420.50'	19.10'
C18	10°07'40"	420.50'	74.33'
C19	10°07'40"	379.50'	67.08'
C20	14°47'03"	400.00'	103.21'
C21	14°26'23"	420.50'	105.97'
C22	00°48'56"	379.50'	5.40'
C23	13°31'37"	379.50'	89.60'
C24	14°20'33"	379.50'	95.00'
C25	53°12'46"	30.00'	27.86'
C26	53°59'00"	30.00'	28.27'
C27	81°51'33"	55.00'	78.58'
C28	66°35'40"	55.00'	63.93'
C29	66°00'02"	55.00'	63.36'
C30	72°38'40"	55.00'	69.73'
C31	28°05'55"	55.00'	275.59'
C32	04°47'53"	775.00'	44.91'
C33	10°53'03"	775.00'	147.22'
C34	15°40'58"	775.00'	212.13'

LEGEND

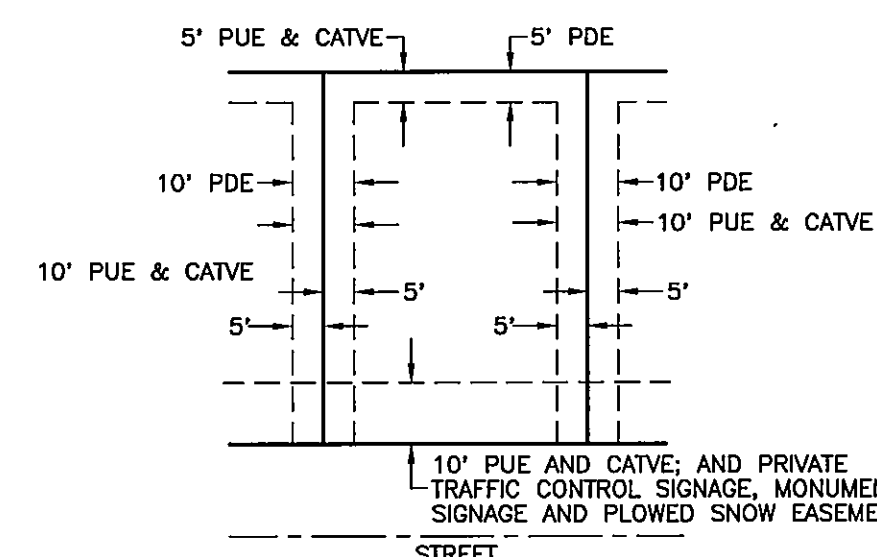
201	LOT NUMBER
⊙	MONUMENT TO BE SET
⊙	FOUND CENTERLINE MONUMENT
●	SET 5/8" REBAR, "PLS 4043,"
⊙	FOUND 5/8" REBAR, "PLS 5685"
△	GPS CONTROL POINT AS NOTED
—	DIMENSION POINT—NOTHING SET
()	RECORD DATA PER TRACT MAP 3404
(R)	RADIAL LINE
PUE	PUBLIC UTILITY EASEMENT
PDE	PRIVATE DRAINAGE EASEMENT
CATVE	CABLE TV EASEMENT
WE	WATERLINE EASEMENT (COUNTY MAINTAINED)
✱	SECTION CORNER

BASIS OF BEARINGS

NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE
GRID, NAD83/94, PER MONUMENTS AS SHOWN

TOTAL AREA = 16.01 AC ±
STREET AREA = 57,996 SF ±
LOT AREA = 14.68 AC ±

NUMBER OF LOTS = 12



TYPICAL LOT EASEMENTS
(AS GRANTED BY THIS PLAT)
NO SCALE

3289704

OFFICIAL PLAT

ST. JAMES'S VILLAGE - UNIT 2B

A COMMON INTEREST COMMUNITY
BEING A PORTION OF THE SW1/4 OF SECTION 14,
T.17N., R.19E., M.D.M.

WASHOE COUNTY NEVADA

C & M ENGINEERING AND DESIGN, LTD
9498 DOUBLE R BLVD., SUITE B
RENO, NV 89521
PHONE: (775) 856-3312
FAX: (775) 856-3318

JOB NO. 04-008.09

DATE 4/8/05

SHEET 2 OF 2

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

3289704

Subdivision Tract Map 4551A

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

2667

REVERSION TO ACREAGE ST. JAMES'S VILLAGE - UNIT 11

OWNER'S CERTIFICATE

THIS IS TO CERTIFY THAT THE UNDERSIGNED ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, IS THE OWNER OF THE TRACT OF LAND REPRESENTED ON THIS PLAT, AND HAS CONSENTED TO THE PREPARATION AND RECORDATION OF THIS PLAT, THAT THE GRANT OF THE STREETS, AVENUES, HIGHWAYS AND ALL APPURTENANCES THERETO TO BE USED AS PRIVATE ACCESS FOREVER, PER TRACT MAP 4889, IS HEREBY RESCINDED, AND THAT THE SAME IS EXECUTED IN COMPLIANCE WITH AND SUBJECT TO THE PROVISIONS OF NRS CHAPTERS 116 AND 278.

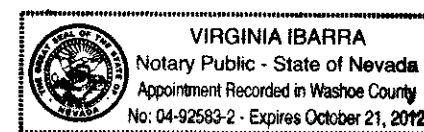
ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION

BY: Frederick D. Woodside
FREDERICK D. WOODSIDE, AS POWER OF
ATTORNEY FOR ST. JAMES'S VILLAGE, INC.

STATE OF NEVADA
COUNTY OF WASHOE S.S.

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON JUNE 22
2011, BY FREDERICK D. WOODSIDE, AS POWER OF ATTORNEY FOR ST. JAMES'S
VILLAGE, INC., A NEVADA CORPORATION.

Virginia Ibarra
NOTARY PUBLIC



TITLE COMPANY CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT THIS PLAT HAS BEEN EXAMINED AND THAT ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, OWNS OF RECORD AN INTEREST IN THE LAND DELINEATED HEREON AND THAT IT IS THE ONLY OWNER OF RECORD OF SAID LAND; THAT ALL THE OWNERS OF RECORD OF THE LAND HAVE SIGNED THE FINAL MAP; THAT NO ONE HOLDS OF RECORD A SECURITY INTEREST IN THE LAND TO BE DIVIDED, EXCEPT FOR THOSE LIENS RECORDED AS DOCUMENTS NO. 3690266, 3693939, 3693940, 3693941, 3695299 AND 3695332 AS OF JUNE 20, 2011.

WESTERN TITLE COMPANY OF NEVADA

BY: Debbie H. Cimutti 6-22-11
DEBBIE H. CIMUTTI, AVP DATE

TAXATION CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT ALL THE PROPERTY TAXES ON THE LAND FOR THE FISCAL YEAR HAVE BEEN PAID AND THAT THE FULL AMOUNT OF ANY DEFERRED PROPERTY TAXES FOR THE CONVERSION OF THE PROPERTY FROM AGRICULTURAL USE HAS BEEN PAID PURSUANT TO NRS 361A.265.

WASHOE COUNTY TREASURER

Jammi Davis 6/28/11
TITLE: TREASURER DATE

DIVISION OF WATER RESOURCES CERTIFICATE

THIS PLAT IS APPROVED BY THE STATE OF NEVADA DIVISION OF WATER RESOURCES OF THE DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES CONCERNING WATER QUANTITY, SUBJECT TO THE REVIEW OF APPROVAL ON FILE IN THIS OFFICE.

Robert H. Zalcoff, PE 6/22/2011
DIVISION OF WATER RESOURCES DATE

DISTRICT BOARD OF HEALTH CERTIFICATE

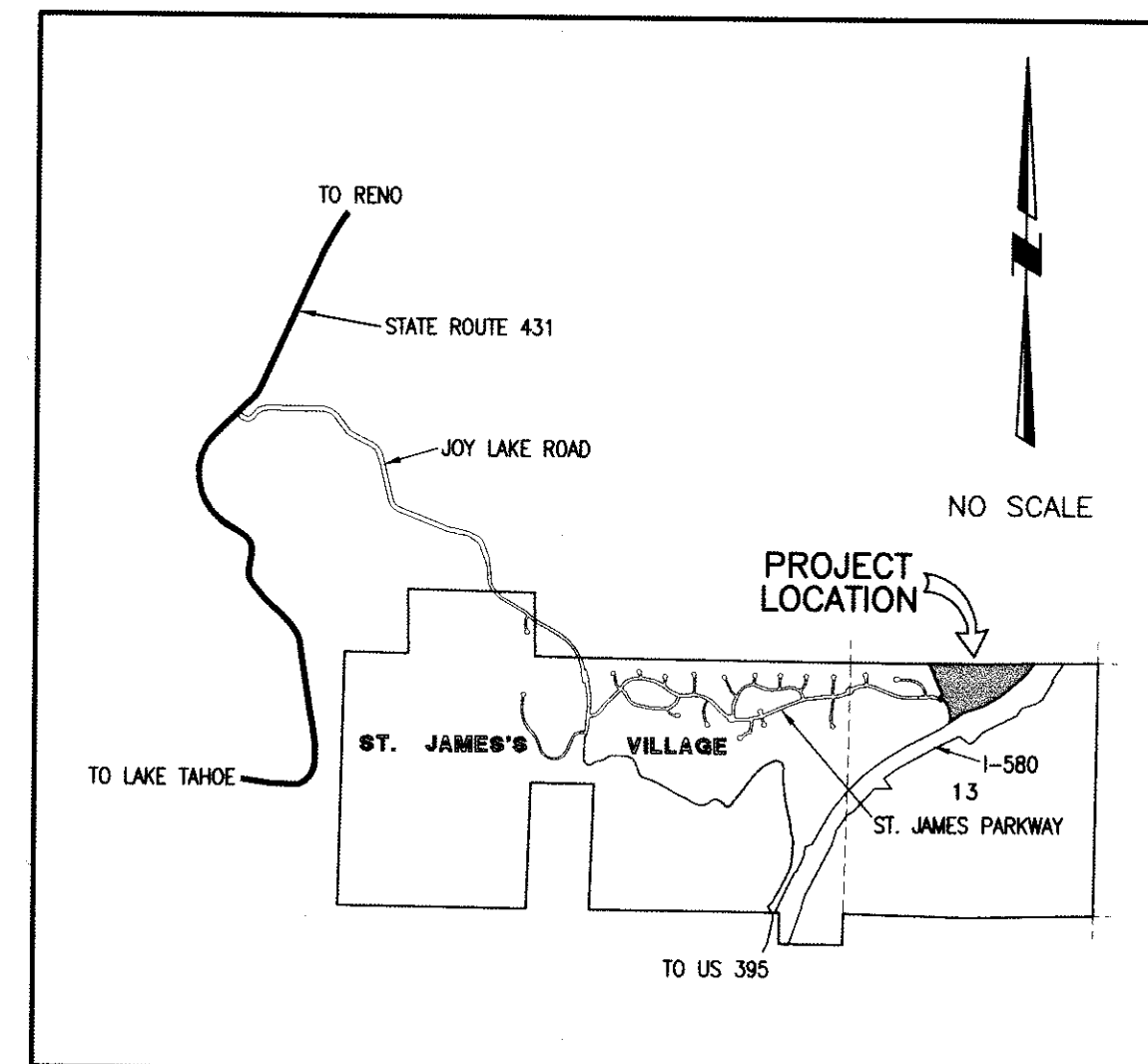
THIS FINAL MAP IS APPROVED BY THE WASHOE COUNTY DISTRICT BOARD OF HEALTH. THIS APPROVAL CONCERNS SEWAGE DISPOSAL, WATER POLLUTION, WATER QUALITY AND WATER SUPPLY FACILITIES AND IS PREDICATED UPON PLANS FOR A PUBLIC WATER SUPPLY AND INDIVIDUAL SYSTEMS FOR DISPOSAL OF SEWAGE.

Robert H. Zalcoff, PE 6/22/11
FOR THE DISTRICT BOARD OF HEALTH DATE

WATER RIGHT DEDICATION CERTIFICATE

THE WATER AND SEWER RESOURCE REQUIREMENTS SET FORTH IN ARTICLE 422 OF THE WASHOE COUNTY DEVELOPMENT CODE, RELATED TO THE DEDICATION OF WATER RESOURCES HAVE BEEN SATISFIED.

Vahid Behmaram 6/21/11
WASHOE COUNTY DEPARTMENT OF WATER RESOURCES DATE

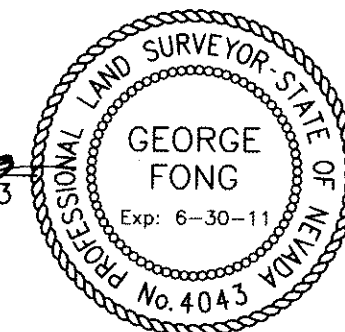


VICINITY MAP

SURVEYOR'S CERTIFICATE

1. GEORGE FONG, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEVADA, CERTIFY THAT:
1. THIS PLAT REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER MY DIRECT SUPERVISION AT THE INSTANCE OF ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION.
2. THE LANDS SURVEYED LIE WITHIN THE N1/2 OF SECTION 13, T.17N., R.19E., M.D.M., AND THE SURVEY WAS COMPLETED ON APRIL 14, 2011.
3. THIS PLAT COMPLIES WITH THE APPLICABLE STATE STATUTES AND ANY LOCAL ORDINANCES IN EFFECT ON THE DATE THAT THE GOVERNING BODY GAVE ITS FINAL APPROVAL.
4. THIS PLAT HAS BEEN PREPARED FROM RECORD INFORMATION SHOWN ON SUBDIVISION TRACT MAP 4889, OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA AND IS INTENDED TO REVERT TO ACREAGE ALL LOTS, COMMON AREAS AND STREETS, AND TO RELINQUISH ALL EASEMENTS AS SHOWN ON SAID TRACT MAP 4889, EXCEPT AS NOTED.
5. NO ADDITIONAL MONUMENTS ARE REQUIRED.

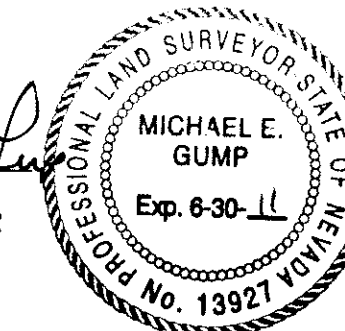
George Fong 6/20/11
GEORGE FONG - PLS 4843 DATE



COUNTY SURVEYOR'S CERTIFICATE

I CERTIFY THAT I HAVE EXAMINED THIS MAP CONSISTING OF TWO SHEETS, AND THAT ALL PROVISIONS OF ALL ACTS AND ORDINANCES APPLICABLE HAVE BEEN COMPLIED WITH AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT. NO ADDITIONAL MONUMENTS ARE REQUIRED.

Michael E. Gump 6-22-11
MICHAEL E. GUMP DATE
WASHOE COUNTY SURVEYOR



GOVERNING AGENCY CERTIFICATE

I CERTIFY THAT I HAVE EXAMINED THIS PLAT AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT. THE LANDS SHOWN ON THIS REVERSION TO ACREAGE MAP WILL REMAIN SUBJECT TO THE TENTATIVE MAP APPROVAL FOR ST. JAMES'S VILLAGE, TMS-2-92. I HEREBY APPROVE FOR RECORDATION IN ACCORDANCE WITH WASHOE COUNTY CODE 110.614.20.

Michael E. Gump 6-22-11
MICHAEL E. GUMP DATE
WASHOE COUNTY SURVEYOR

UTILITY COMPANIES CERTIFICATE

THE UTILITY EASEMENTS SHOWN ON THIS PLAT TO BE RELINQUISHED, GRANTED OR TO REMAIN HAVE BEEN APPROVED BY THE UNDERSIGNED PUBLIC UTILITY AND CABLE TV COMPANIES.

Carolyn Barbash 6/21/2011
SIERRA PACIFIC POWER COMPANY, dba NV ENERGY DATE
BY: CAROLYN BARBASH
TITLE: ENERGY DELIVERY EXECUTIVE

Deanna Vieira 6/21/2011
NEVADA BELL TELEPHONE COMPANY dba AT&T NEVADA DATE
BY: DEANNA VIEIRA
TITLE: MANAGER, OSP PLANNING AND ENGINEERING DESIGN

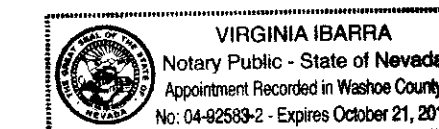
Diane Albrecht 6/21/2011
CHARTER COMMUNICATIONS DATE
BY: DIANE ALBRECHT
TITLE: DESIGNER

Susan Hood 6/21/11
WASHOE COUNTY DEPARTMENT OF WATER RESOURCES DATE
BY: SUSAN HOOD
TITLE: LICENSED ENGINEER

STATE OF NEVADA
COUNTY OF WASHOE S.S.

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON JUNE 21
2011, BY CAROLYN BARBASH, AS ENERGY DELIVERY EXECUTIVE FOR SIERRA
PACIFIC POWER COMPANY, A NEVADA CORPORATION, dba NV ENERGY.

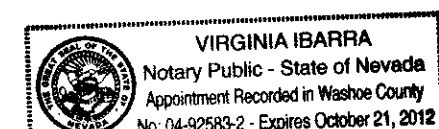
Virginia Ibarra
NOTARY PUBLIC



STATE OF NEVADA
COUNTY OF WASHOE S.S.

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON JUNE 21
2011, BY DEANNA VIEIRA, AS MANAGER, OSP PLANNING AND ENGINEERING
DESIGN FOR NEVADA BELL TELEPHONE COMPANY, dba AT&T NEVADA.

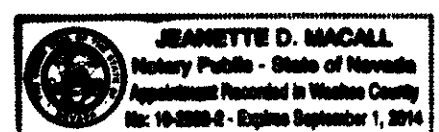
Virginia Ibarra
NOTARY PUBLIC



STATE OF NEVADA
COUNTY OF WASHOE S.S.

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON 6/21
2011, BY DIANE ALBRECHT, AS DESIGNER FOR CHARTER COMMUNICATIONS, c/o
FALCON CABLE SYSTEMS COMPANY, L.P.

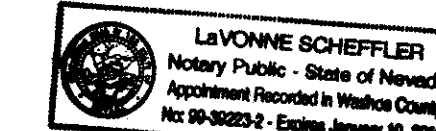
Jeanette D. MacCall
NOTARY PUBLIC



STATE OF NEVADA
COUNTY OF WASHOE S.S.

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON June 21
2011, BY SUSAN HOOD, LICENSED ENGINEER FOR WASHOE COUNTY DEPARTMENT
OF WATER RESOURCES.

Susan Hood
NOTARY PUBLIC



REVERSION TO ACREAGE (FINAL MAP TO TENTATIVE MAP) ST. JAMES'S VILLAGE - UNIT 11 BEING SUBDIVISION TRACT MAP 4889 A PORTION OF THE N1/2 OF SECTION 13, T.17N., R.19E., M.D.M.		COUNTY RECORDER'S CERTIFICATE FILE NO: <u>4018802</u> FILED FOR RECORD AT THE REQUEST OF <u>Chapman Merante</u> ON THIS <u>30</u> DAY OF <u>June</u> , 20 <u>11</u> AT <u>4:55</u> MINUTES PAST <u>2</u> O'CLOCK P.M. OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA	
WASHOE COUNTY C & M ENGINEERING AND DESIGN, LTD 9498 DOUBLE R BLVD., SUITE B RENO, NV 89521 PHONE: (775) 856-3312 FAX: (775) 856-3318		NEVADA JOB NO. 04-008.24 DATE 4/7/11 SHEET <u>1</u> OF <u>2</u> BY: <u>C. Bartley</u> DEPUTY FEE: <u>64.00</u>	

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

4018802

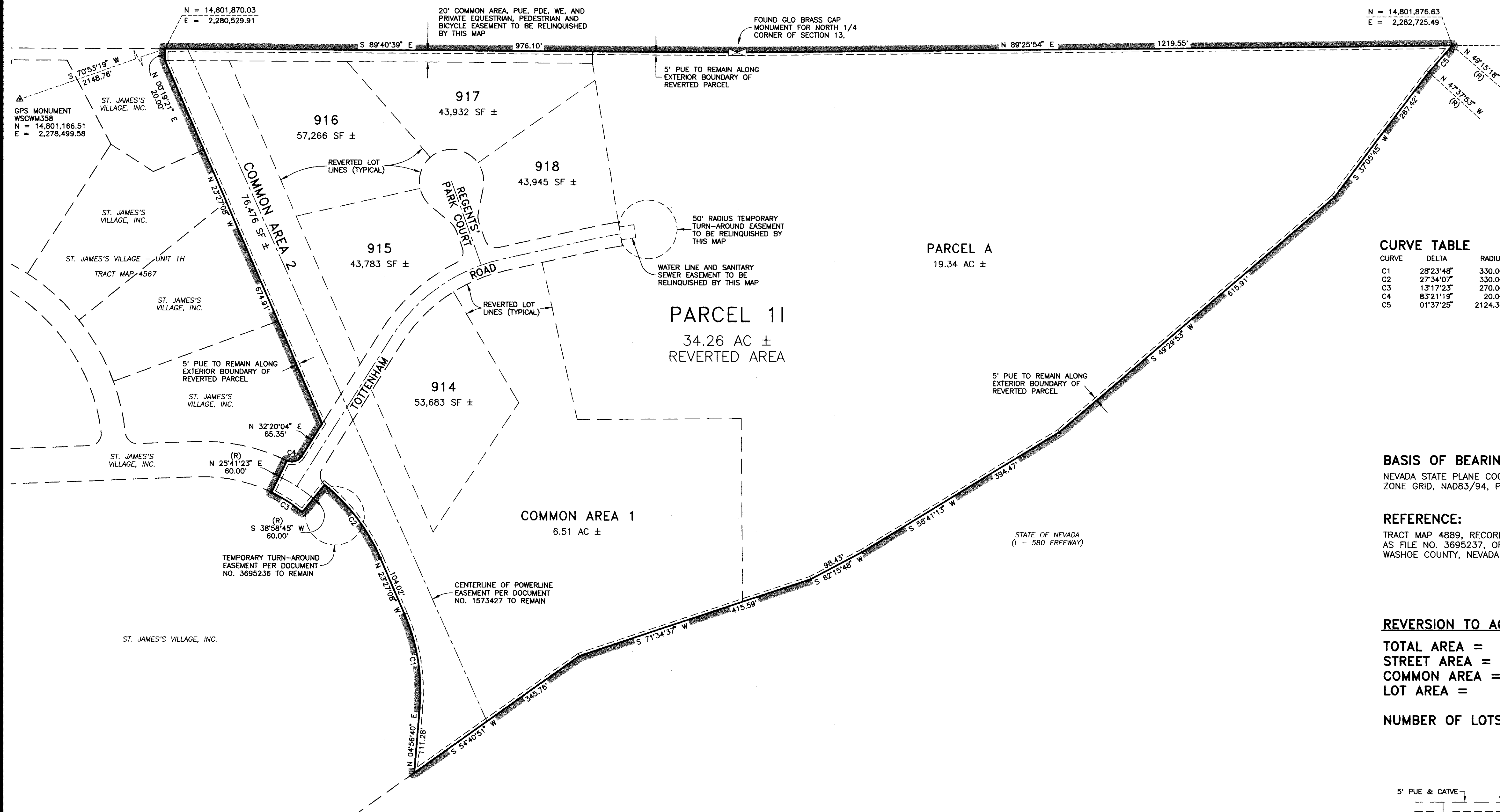
Reversion Tract Map 4992

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

4992A

NOTE:
COORDINATES SHOWN ARE MODIFIED
GRID COORDINATES USING MODIFIED
GRID FACTOR = 1.000197939

U. S. A.



FOUND GLO BRASS CAP
MONUMENT FOR NORTHEAST
CORNER OF SECTION 13,
T.17N., R.19E., M.D.M.

GPS MONUMENT
WSPSS028
N = 14,801,889.79
E = 2,284,052.50

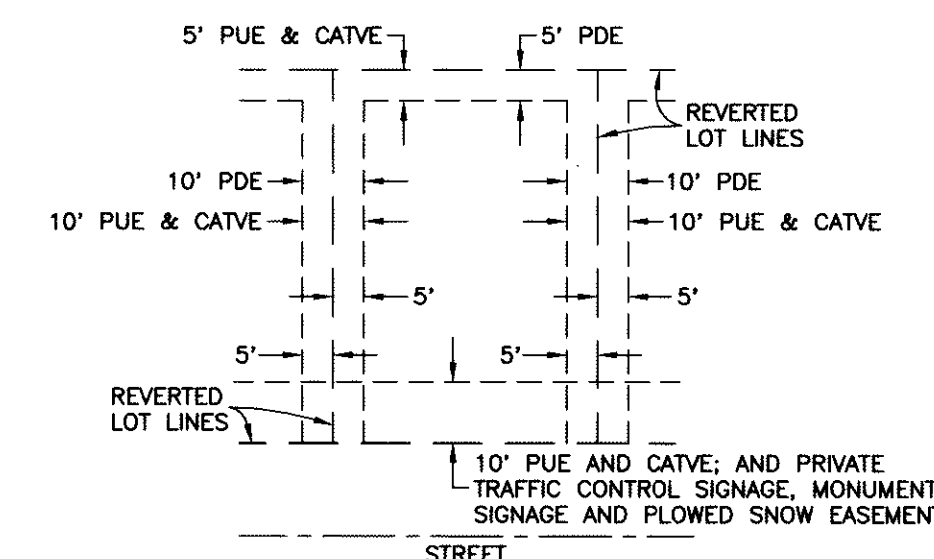
CURVE TABLE			
CURVE	DELTA	RADIUS	LENGTH
C1	28°23'48"	330.00'	163.55'
C2	27°34'07"	330.00'	158.78'
C3	13°17'23"	270.00'	62.63'
C4	83°21'19"	20.00'	29.10'
C5	01°37'25"	2124.34'	60.20'

BASIS OF BEARINGS
NEVADA STATE PLANE COORDINATE SYSTEM, WEST
ZONE GRID, NAD83/94, PER MONUMENTS SHOWN

REFERENCE:
TRACT MAP 4889, RECORDED OCTOBER 9, 2008
AS FILE NO. 3695237, OFFICIAL RECORDS OF
WASHOE COUNTY, NEVADA

REVERSION TO ACREAGE:
TOTAL AREA = 34.26 AC ±
STREET AREA = 46,879 SF ±
COMMON AREA = 8.27 AC ±
LOT AREA = 24.91 AC ±

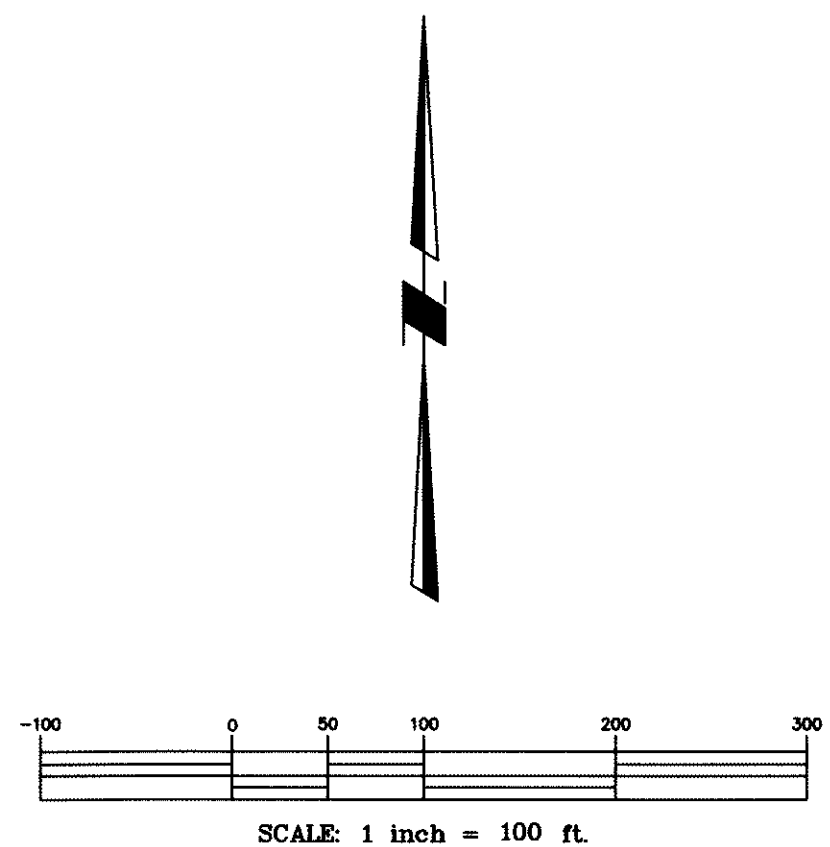
NUMBER OF LOTS = 6



TYPICAL LOT EASEMENTS
TO BE RELINQUISHED BY THIS MAP
(EXCEPT AS NOTED)
NO SCALE

- LEGEND**
- 901 LOT NUMBER
 - GPS CONTROL POINT AS NOTED
 - DIMENSION POINT—NOTHING SET
 - (R) RADIAL LINE
 - PUE PUBLIC UTILITY EASEMENT
 - PDE PRIVATE DRAINAGE EASEMENT
 - CATVE CABLE TV EASEMENT
 - WE WATERLINE EASEMENT (COUNTY MAINTAINED)
 - SECTION CORNER

- NOTES**
- THE PUBLIC UTILITY, CABLE TV AND DRAINAGE EASEMENT PREVIOUSLY GRANTED OVER THE ROADWAY AND COMMON AREAS IS RELINQUISHED BY THIS MAP. THE PUBLIC UTILITY AND CABLE TV EASEMENTS PREVIOUSLY GRANTED, 10 FEET IN WIDTH COINCIDENT WITH ALL STREET RIGHTS-OF-WAY, 5 FEET IN WIDTH COINCIDENT WITH ALL OTHER EXTERIOR BOUNDARIES AND 10 FEET IN WIDTH CENTERED ON ALL INTERIOR PROPERTY LINES, AS SHOWN ON THE TYPICAL LOT EASEMENT DETAIL, ARE RELINQUISHED BY THIS MAP. A 5 FOOT WIDE PUBLIC UTILITY AND CABLE TV EASEMENT IS TO REMAIN ALONG THE EXTERIOR BOUNDARY OF THE REVERTED PARCEL AS SHOWN.
 - THE PUBLIC UTILITY AND CABLE TV EASEMENTS PREVIOUSLY GRANTED WITHIN EACH LOT FOR THE EXCLUSIVE PURPOSE OF INSTALLING AND MAINTAINING UTILITY AND CABLE TV FACILITIES TO THAT LOT AND THE RIGHT TO EXIT THAT LOT WITH SAID FACILITIES FOR THE PURPOSE OF SERVING ADJACENT LOTS AT LOCATIONS MUTUALLY AGREED UPON BY THE OWNER OF RECORD AT THAT TIME, AND THE UTILITY AND CABLE TV COMPANIES, ARE RELINQUISHED BY THIS MAP. A PUBLIC UTILITY AND CABLE TV EASEMENT IS HEREBY GRANTED WITHIN THE REVERTED PARCEL FOR THE EXCLUSIVE PURPOSE OF INSTALLING AND MAINTAINING UTILITY AND CABLE TV FACILITIES TO THAT PARCEL AND THE RIGHT TO EXIT THAT PARCEL WITH SAID FACILITIES FOR THE PURPOSE OF SERVING ADJACENT PARCELS AT LOCATIONS MUTUALLY AGREED UPON BY THE OWNER OF RECORD AT THAT TIME, AND THE UTILITY AND CABLE TV COMPANIES.
 - THE PRIVATE DRAINAGE EASEMENT PREVIOUSLY GRANTED OVER ALL COMMON AREAS IS RELINQUISHED BY THIS MAP.
 - THE 10 FOOT PRIVATE PLOWED SNOW STORAGE, PEDESTRIAN, MONUMENT SIGNAGE AND TRAFFIC CONTROL SIGNAGE EASEMENT PREVIOUSLY GRANTED ALONG ALL STREET RIGHTS-OF-WAY IS RELINQUISHED BY THIS MAP.



CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

4018002

4018002

**REVERSION TO ACREAGE
(FINAL MAP TO TENTATIVE MAP)**
ST. JAMES'S VILLAGE - UNIT 11
BEING SUBDIVISION TRACT MAP 4889
A PORTION OF THE N1/2 OF SECTION 13,
T.17N., R.19E., M.D.M.

WASHOE COUNTY NEVADA

C & M ENGINEERING AND DESIGN, LTD
9498 DOUBLE R BLVD., SUITE B
RENO, NV 89521
PHONE: (775) 856-3312
FAX: (775) 856-3318

JOB NO. 04-008.26
DATE 4/7/11

SHEET 2 OF 2

Reversion Tract Map 4992A

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

8667

REVERSION TO ACREAGE ST. JAMES'S VILLAGE - UNIT 2C

OWNER'S CERTIFICATE

THIS IS TO CERTIFY THAT THE UNDERSIGNED ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, IS THE OWNER OF THE TRACT OF LAND REPRESENTED ON THIS PLAT, AND HAS CONSENTED TO THE PREPARATION AND RECORDATION OF THIS PLAT, THAT THE GRANT OF THE STREETS, AVENUES, HIGHWAYS AND ALL APPURTENANCES THERE TO BE USED AS PRIVATE ACCESS FOREVER, PER TRACT MAP 4705, IS HEREBY RESCINDED, AND THAT THE SAME IS EXECUTED IN COMPLIANCE WITH AND SUBJECT TO THE PROVISIONS OF NRS CHAPTERS 116 AND 278.

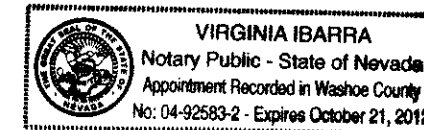
ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION

BY: Frederick D. Woodside
FREDERICK D. WOODSIDE, AS POWER OF
ATTORNEY FOR ST. JAMES'S VILLAGE, INC.

STATE OF NEVADA
COUNTY OF WASHOE

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON JUNE 22,
2011, BY FREDERICK D. WOODSIDE, AS POWER OF ATTORNEY FOR ST. JAMES'S
VILLAGE, INC., A NEVADA CORPORATION.

Virginia Ibarra
NOTARY PUBLIC



TITLE COMPANY CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT THIS PLAT HAS BEEN EXAMINED AND THAT ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, OWNS OF RECORD AN INTEREST IN THE LAND DELINEATED HEREON AND THAT IT IS THE ONLY OWNER OF RECORD OF SAID LAND; THAT ALL THE OWNERS OF RECORD OF THE LAND HAVE SIGNED THE FINAL MAP; THAT NO ONE HOLDS OF RECORD A SECURITY INTEREST IN THE LAND TO BE DIVIDED, EXCEPT FOR THOSE LIENS RECORDED AS DOCUMENTS NO. 3690266, 3693939, 3693940, 3693941, 3695299 AND 3695332 AS OF June 20, 2011.

WESTERN TITLE COMPANY, OF NEVADA

BY: Debbie H. Cimjotti AVP 6-22-11
DEBBIE H. CIMJOTTI AVP DATE

TAXATION CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT ALL THE PROPERTY TAXES ON THE LAND FOR THE FISCAL YEAR HAVE BEEN PAID AND THAT THE FULL AMOUNT OF ANY DEFERRED PROPERTY TAXES FOR THE CONVERSION OF THE PROPERTY FROM AGRICULTURAL USE HAS BEEN PAID PURSUANT TO NRS 361A.265.

WASHOE COUNTY TREASURER

Jamie D. Davis 6/28/11
TITLE: TREASURER DATE

DIVISION OF WATER RESOURCES CERTIFICATE

THIS PLAT IS APPROVED BY THE STATE OF NEVADA DIVISION OF WATER RESOURCES OF THE DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES CONCERNING WATER QUANTITY, SUBJECT TO THE REVIEW OF APPROVAL ON FILE IN THIS OFFICE

Robert H. Ziegler, PE 6/22/2011
DIVISION OF WATER RESOURCES DATE

DISTRICT BOARD OF HEALTH CERTIFICATE

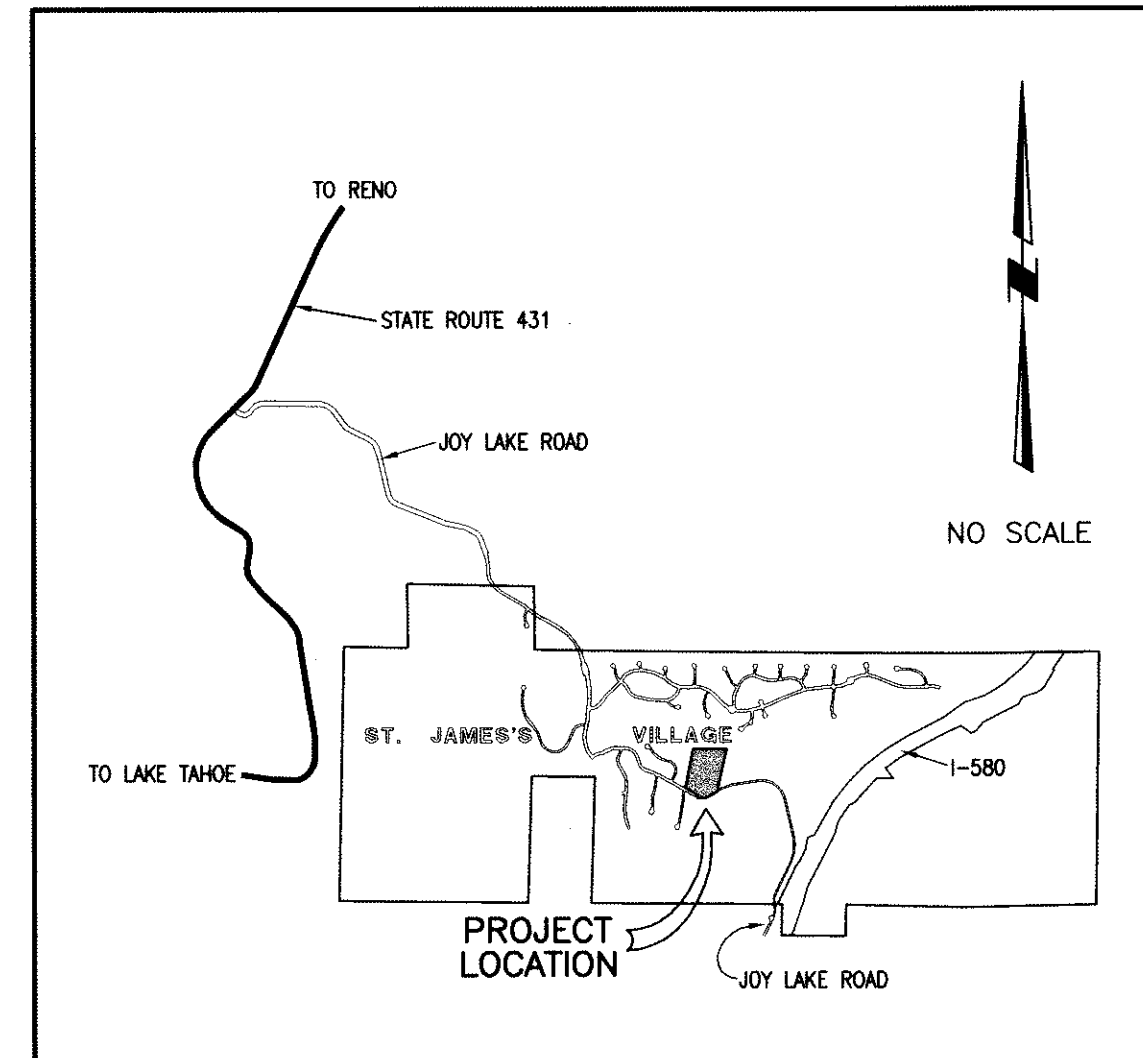
THIS FINAL MAP IS APPROVED BY THE WASHOE COUNTY DISTRICT BOARD OF HEALTH. THIS APPROVAL CONCERNS SEWAGE DISPOSAL, WATER POLLUTION, WATER QUALITY AND WATER SUPPLY FACILITIES AND IS PREDICATED UPON PLANS FOR A PUBLIC WATER SUPPLY AND INDIVIDUAL SYSTEMS FOR DISPOSAL OF SEWAGE.

B. W. S. 6/22/11
FOR THE DISTRICT BOARD OF HEALTH DATE

WATER RIGHT DEDICATION CERTIFICATE

THE WATER AND SEWER RESOURCE REQUIREMENTS SET FORTH IN ARTICLE 422 OF THE WASHOE COUNTY DEVELOPMENT CODE, RELATED TO THE DEDICATION OF WATER RESOURCES HAVE BEEN SATISFIED.

Valid Behnam 6/21/11
WASHOE COUNTY DEPARTMENT OF WATER RESOURCES DATE



VICINITY MAP

SURVEYOR'S CERTIFICATE

1. GEORGE FONG, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEVADA, CERTIFY THAT:
 1. THIS PLAT REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER MY DIRECT SUPERVISION AT THE INSTANCE OF ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION.
 2. THE LANDS SURVEYED LIE WITHIN THE NW1/4, NE1/4 AND SW1/4 OF SECTION 14, T.17N., R.19E., M.D.M., AND THE SURVEY WAS COMPLETED ON APRIL 14, 2011.
 3. THIS PLAT COMPLIES WITH THE APPLICABLE STATE STATUTES AND ANY LOCAL ORDINANCES IN EFFECT ON THE DATE THAT THE GOVERNING BODY GAVE ITS FINAL APPROVAL.
 4. THIS PLAT HAS BEEN PREPARED FROM RECORD INFORMATION SHOWN ON SUBDIVISION TRACT MAP 4705, OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA AND IS INTENDED TO REVERT TO ACREAGE ALL LOTS AND STREETS, AND TO RELINQUISH ALL EASEMENTS AS SHOWN ON SAID TRACT MAP 4705.
 5. NO ADDITIONAL MONUMENTS ARE REQUIRED.

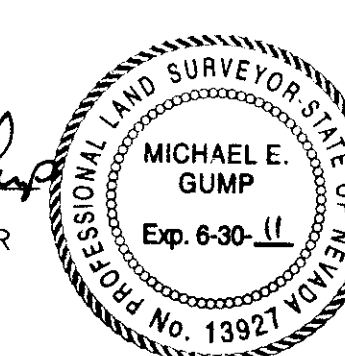
George Fong 6/20/11
GEORGE FONG - PLS 4042 DATE



COUNTY SURVEYOR'S CERTIFICATE

I CERTIFY THAT I HAVE EXAMINED THIS MAP CONSISTING OF TWO SHEETS, AND THAT ALL PROVISIONS OF ALL ACTS AND ORDINANCES APPLICABLE HAVE BEEN COMPLIED WITH AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT. NO ADDITIONAL MONUMENTS ARE REQUIRED.

Michael E. Gump 6-22-11
MICHAEL E. GUMP DATE
WASHOE COUNTY SURVEYOR



GOVERNING AGENCY CERTIFICATE

I CERTIFY THAT I HAVE EXAMINED THIS PLAT AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT. THE LANDS SHOWN ON THIS REVERSION TO ACREAGE MAP WILL REMAIN SUBJECT TO THE TENTATIVE MAP APPROVAL FOR ST. JAMES'S VILLAGE, TM5-2-92. I HEREBY APPROVE FOR RECORDATION IN ACCORDANCE WITH WASHOE COUNTY CODE 110.614.20.

Michael E. Gump 6-22-11
MICHAEL E. GUMP DATE
WASHOE COUNTY SURVEYOR

UTILITY COMPANIES CERTIFICATE

THE UTILITY EASEMENTS SHOWN ON THIS PLAT TO BE RELINQUISHED, GRANTED OR TO REMAIN HAVE BEEN APPROVED BY THE UNDERSIGNED PUBLIC UTILITY AND CABLE TV COMPANIES.

Carolyn C. Barbash 6/21/2011
SIERRA PACIFIC POWER COMPANY, dba NV ENERGY DATE
BY: CAROLYN BARBASH
TITLE: ENERGY DELIVERY EXECUTIVE

Deanna Vieira 6/21/2011
NEVADA BELL TELEPHONE COMPANY dba AT&T NEVADA DATE
BY: DEANNA VIEIRA
TITLE: MANAGER, OSP PLANNING AND ENGINEERING DESIGN

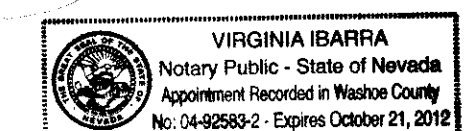
Diane Albrecht 6/21/2011
CHARTER COMMUNICATIONS DATE
BY: DIANE ALBRECHT
TITLE: DESIGNER

Susan Hood 6/21/2011
WASHOE COUNTY DEPARTMENT OF WATER RESOURCES DATE
BY: SUSAN HOOD
TITLE: LICENSED ENGINEER

STATE OF NEVADA
COUNTY OF WASHOE

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON JUNE 21,
2011, BY CAROLYN BARBASH, AS ENERGY DELIVERY EXECUTIVE FOR SIERRA
PACIFIC POWER COMPANY, A NEVADA CORPORATION, dba NV ENERGY.

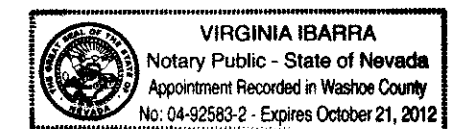
Virginia Ibarra
NOTARY PUBLIC



STATE OF NEVADA
COUNTY OF WASHOE

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON JUNE 21,
2011, BY DEANNA VIEIRA, AS MANAGER, OSP PLANNING AND ENGINEERING
DESIGN FOR NEVADA BELL TELEPHONE COMPANY, dba AT&T NEVADA.

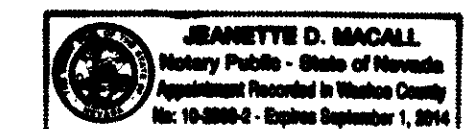
Virginia Ibarra
NOTARY PUBLIC



STATE OF NEVADA
COUNTY OF WASHOE

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON 6/21,
2011, BY DIANE ALBRECHT, AS DESIGNER FOR CHARTER COMMUNICATIONS, c/o
FALCON CABLE SYSTEMS COMPANY, L.P.

Jeanette D. Macall
NOTARY PUBLIC



STATE OF NEVADA
COUNTY OF WASHOE

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON June 21,
2011, BY SUSAN HOOD, LICENSED ENGINEER FOR WASHOE COUNTY DEPARTMENT
OF WATER RESOURCES.

Lavonne Scheffler
NOTARY PUBLIC



REVERSION TO ACREAGE (FINAL MAP TO TENTATIVE MAP) ST. JAMES'S VILLAGE - UNIT 2C BEING SUBDIVISION TRACT MAP 4705 A PORTION OF THE NW1/4, NE1/4 AND SW1/4 OF SECTION 14, T.17N., R.19E., M.D.M.		COUNTY RECORDER'S CERTIFICATE FILE NO: <u>4018803</u> FILED FOR RECORD AT THE REQUEST OF <u>Chacon & Menante</u> ON THIS <u>30</u> DAY OF <u>June</u> , 20 <u>11</u> AT <u>4:55</u> MINUTES PAST <u>2</u> O'CLOCK P.M. OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA
WASHOE COUNTY	NEVADA	<u>Kathryn L. Burke</u> COUNTY RECORDER
C & M ENGINEERING AND DESIGN, LTD 9498 DOUBLE R BLVD., SUITE B RENO, NV 89521 PHONE: (775) 856-3312 FAX: (775) 856-3318	JOB NO. 04-008.25 DATE 4/7/11 SHEET <u>1</u> OF <u>2</u>	BY: <u>C. Bartley</u> DEPUTY FEE: <u>64.00</u>

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

4018803

Reversion Tract Map 4993

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

Reversion Tract Map 4993 A

REVERSION TO ACREAGE
ST. JAMES'S VILLAGE - UNIT 1H

OWNER'S CERTIFICATE

THIS IS TO CERTIFY THAT THE UNDERSIGNED ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, IS THE OWNER OF THE TRACT OF LAND REPRESENTED ON THIS PLAT, AND HAS CONSENTED TO THE PREPARATION AND RECORDATION OF THIS PLAT, THAT THE GRANT OF THE STREETS, AVENUES, HIGHWAYS AND ALL APPURTENANCES THERETO TO BE USED AS PRIVATE ACCESS FOREVER, PER TRACT MAP 4567, IS HEREBY RESCINDED, AND THAT THE SAME IS EXECUTED IN COMPLIANCE WITH AND SUBJECT TO THE PROVISIONS OF NRS CHAPTERS 116 AND 278.

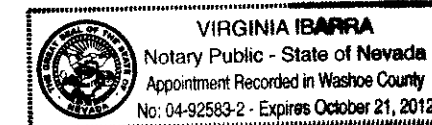
ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION

BY: Frederick D. Woodside
FREDERICK D. WOODSIDE, AS POWER OF
ATTORNEY FOR ST. JAMES'S VILLAGE, INC.

STATE OF NEVADA S.S.
COUNTY OF WASHOE

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON JUNE 22, 2011, BY FREDERICK D. WOODSIDE, AS POWER OF ATTORNEY FOR ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION.

Virginia Ibarra
NOTARY PUBLIC



TITLE COMPANY CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT THIS PLAT HAS BEEN EXAMINED AND THAT ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, OWNS OF RECORD AN INTEREST IN THE LAND DELINEATED HEREON AND THAT IT IS THE ONLY OWNER OF RECORD OF SAID LAND; THAT ALL THE OWNERS OF RECORD OF THE LAND HAVE SIGNED THE FINAL MAP; THAT NO ONE HOLDS OF RECORD A SECURITY INTEREST IN THE LAND TO BE DIVIDED, EXCEPT FOR THOSE LIENS RECORDED AS DOCUMENTS NO. 3690266, 3693939, 3693940, 3693941, 3695299 AND 3695332 AS OF JUNE 20, 2011.

WESTERN TITLE COMPANY OF NEVADA

BY: Debbie H. Cimjotti 6-22-11
DEBBIE H. CIMJOTTI AVP DATE

TAXATION CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT ALL THE PROPERTY TAXES ON THE LAND FOR THE FISCAL YEAR HAVE BEEN PAID AND THAT THE FULL AMOUNT OF ANY DEFERRED PROPERTY TAXES FOR THE CONVERSION OF THE PROPERTY FROM AGRICULTURAL USE HAS BEEN PAID PURSUANT TO NRS 361A.265.

WASHOE COUNTY TREASURER

Jamie Davis 6/28/11
TITLE: TREASURER DATE

DIVISION OF WATER RESOURCES CERTIFICATE

THIS PLAT IS APPROVED BY THE STATE OF NEVADA DIVISION OF WATER RESOURCES OF THE DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES CONCERNING WATER QUANTITY, SUBJECT TO THE REVIEW OF APPROVAL ON FILE IN THIS OFFICE.

Robert H. Zeigler, PE 6/22/2011
DIVISION OF WATER RESOURCES DATE

DISTRICT BOARD OF HEALTH CERTIFICATE

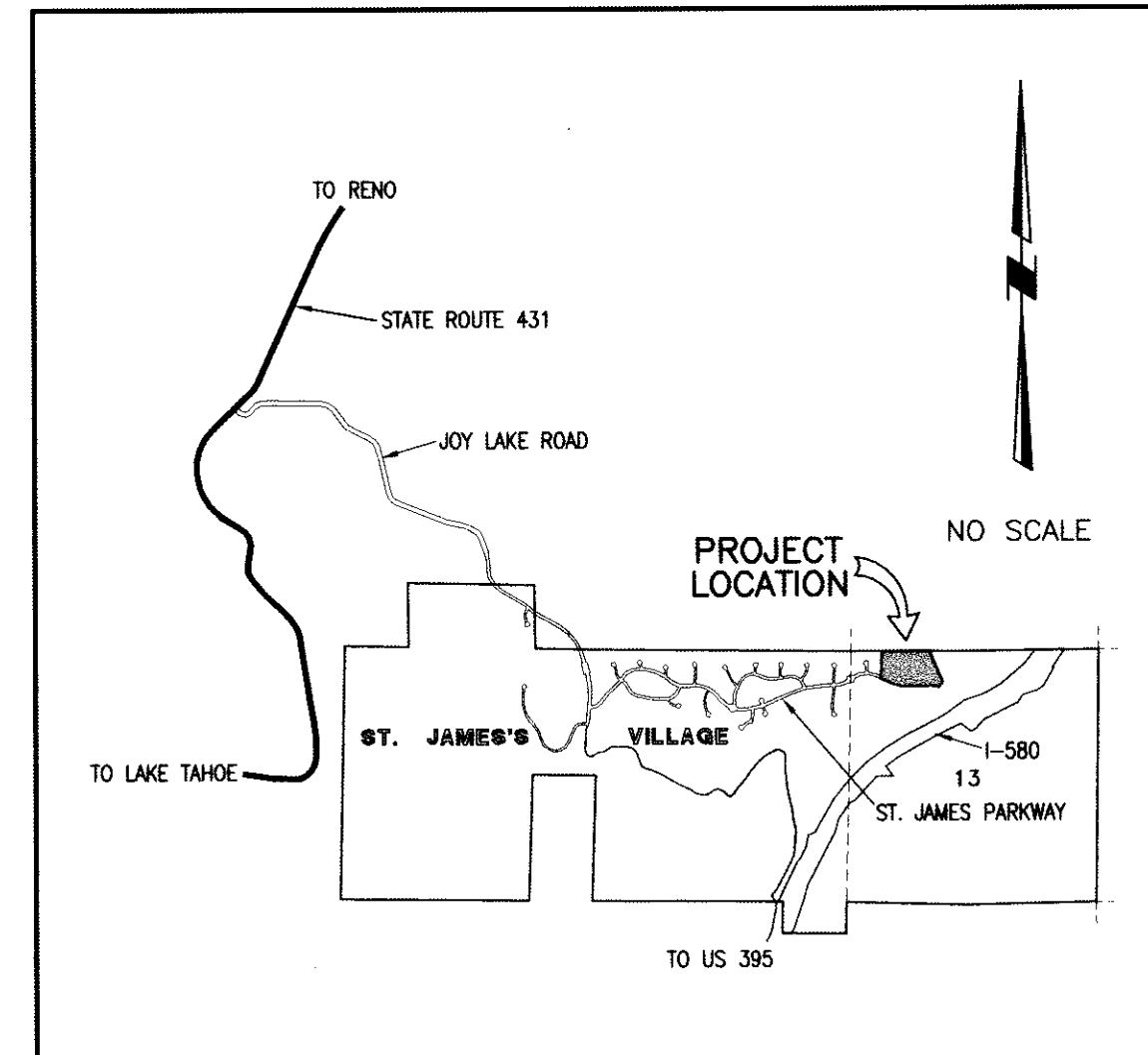
THIS FINAL MAP IS APPROVED BY THE WASHOE COUNTY DISTRICT BOARD OF HEALTH. THIS APPROVAL CONCERNS SEWAGE DISPOSAL, WATER POLLUTION, WATER QUALITY AND WATER SUPPLY FACILITIES AND IS PREDICATED UPON PLANS FOR A PUBLIC WATER SUPPLY AND INDIVIDUAL SYSTEMS FOR DISPOSAL OF SEWAGE.

For the District Board of Health 6/22/11
FOR THE DISTRICT BOARD OF HEALTH DATE

WATER RIGHT DEDICATION CERTIFICATE

THE WATER AND SEWER RESOURCE REQUIREMENTS SET FORTH IN ARTICLE 422 OF THE WASHOE COUNTY DEVELOPMENT CODE, RELATED TO THE DEDICATION OF WATER RESOURCES HAVE BEEN SATISFIED.

Valid Behmaram 6/21/11
WASHOE COUNTY DEPARTMENT OF WATER RESOURCES DATE



VICINITY MAP

SURVEYOR'S CERTIFICATE

- I, GEORGE FONG, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEVADA, CERTIFY THAT:
1. THIS PLAT REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER MY DIRECT SUPERVISION AT THE INSTANCE OF ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION.
 2. THE LANDS SURVEYED LIE WITHIN THE NW1/4 OF SECTION 13, T.17N., R.19E., M.D.M., AND THE SURVEY WAS COMPLETED ON APRIL 14, 2011.
 3. THIS PLAT COMPLIES WITH THE APPLICABLE STATE STATUTES AND ANY LOCAL ORDINANCES IN EFFECT ON THE DATE THAT THE GOVERNING BODY GAVE ITS FINAL APPROVAL.
 4. THIS PLAT HAS BEEN PREPARED FROM RECORD INFORMATION SHOWN ON SUBDIVISION TRACT MAP 4567, OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA AND IS INTENDED TO REVERT TO ACREAGE ALL LOTS, COMMON AREAS AND STREETS, AND TO RELINQUISH ALL EASEMENTS AS SHOWN ON SAID TRACT MAP 4567.
 5. NO ADDITIONAL MONUMENTS ARE REQUIRED.

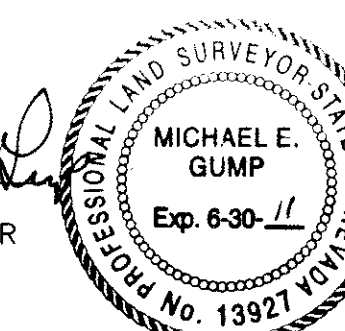
George Fong 6/20/11
GEORGE FONG - PLS 4043 DATE



COUNTY SURVEYOR'S CERTIFICATE

I CERTIFY THAT I HAVE EXAMINED THIS MAP CONSISTING OF TWO SHEETS, AND THAT ALL PROVISIONS OF ALL ACTS AND ORDINANCES APPLICABLE HAVE BEEN COMPLIED WITH AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT. NO ADDITIONAL MONUMENTS ARE REQUIRED.

Michael E. Gump 6-22-11
MICHAEL E. GUMP DATE
WASHOE COUNTY SURVEYOR



GOVERNING AGENCY CERTIFICATE

I CERTIFY THAT I HAVE EXAMINED THIS PLAT AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT. THE LANDS SHOWN ON THIS REVERSION TO ACREAGE MAP WILL REMAIN SUBJECT TO THE TENTATIVE MAP APPROVAL FOR ST. JAMES'S VILLAGE, TM5-2-92. I HEREBY APPROVE FOR RECORDATION IN ACCORDANCE WITH WASHOE COUNTY CODE 110.614.20.

Michael E. Gump 6-22-11
MICHAEL E. GUMP DATE
WASHOE COUNTY SURVEYOR

UTILITY COMPANIES CERTIFICATE

THE UTILITY EASEMENTS SHOWN ON THIS PLAT TO BE RELINQUISHED, GRANTED OR TO REMAIN HAVE BEEN APPROVED BY THE UNDERSIGNED PUBLIC UTILITY AND CABLE TV COMPANIES.

Carolyn C. Barbash 6/21/2011
SIERRA PACIFIC POWER COMPANY, dba NV ENERGY DATE
BY: CAROLYN BARBASH
TITLE: ENERGY DELIVERY EXECUTIVE

Deanna Vieira 6/21/2011
NEVADA BELL TELEPHONE COMPANY dba AT&T NEVADA DATE
BY: DEANNA VIEIRA
TITLE: MANAGER, OSP PLANNING AND ENGINEERING DESIGN

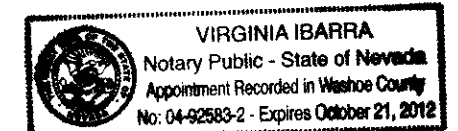
Diane Albrecht 6/21/2011
CHARTER COMMUNICATIONS DATE
BY: DIANE ALBRECHT
TITLE: DESIGNER

Susan Hood 6/21/2011
WASHOE COUNTY DEPARTMENT OF WATER RESOURCES DATE
BY: SUSAN HOOD
TITLE: LICENSED ENGINEER

STATE OF NEVADA S.S.
COUNTY OF WASHOE

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON JUNE 21, 2011, BY CAROLYN BARBASH, AS ENERGY DELIVERY EXECUTIVE FOR SIERRA PACIFIC POWER COMPANY, A NEVADA CORPORATION, dba NV ENERGY.

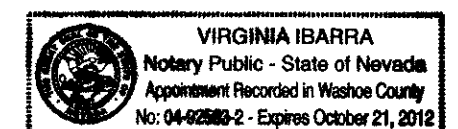
Virginia Ibarra
NOTARY PUBLIC



STATE OF NEVADA S.S.
COUNTY OF WASHOE

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON JUNE 21, 2011, BY DEANNA VIEIRA, AS MANAGER, OSP PLANNING AND ENGINEERING DESIGN FOR NEVADA BELL TELEPHONE COMPANY, dba AT&T NEVADA.

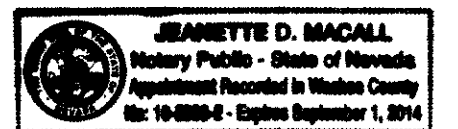
Virginia Ibarra
NOTARY PUBLIC



STATE OF NEVADA S.S.
COUNTY OF WASHOE

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON 6/21, BY DIANE ALBRECHT, AS DESIGNER FOR CHARTER COMMUNICATIONS, c/o FALCON CABLE SYSTEMS COMPANY, L.P.

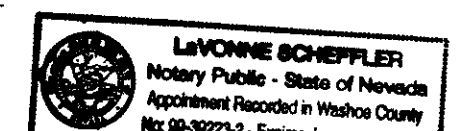
Jeanette D. Macall
NOTARY PUBLIC



STATE OF NEVADA S.S.
COUNTY OF WASHOE

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON June 21, 2011, BY SUSAN HOOD, LICENSED ENGINEER FOR WASHOE COUNTY DEPARTMENT OF WATER RESOURCES.

Susan Hood
NOTARY PUBLIC



REVERSION TO ACREAGE
(FINAL MAP TO TENTATIVE MAP)
ST. JAMES'S VILLAGE - UNIT 1H
BEING SUBDIVISION TRACT MAP 4567
A PORTION OF THE NW1/4 OF SECTION 13,
T.17N., R.19E., M.D.M.

WASHOE COUNTY

NEVADA

C & M ENGINEERING AND DESIGN, LTD
9498 DOUBLE R BLVD., SUITE B
RENO, NV 89521
PHONE: (775) 856-3312
FAX: (775) 856-3318

JOB NO. 04-008.24

DATE 4/7/11

SHEET 1 OF 2

COUNTY RECORDER'S CERTIFICATE
FILE NO: 4018904

FILED FOR RECORD AT THE REQUEST OF
Chacon Menante
ON THIS 30 DAY OF June, 2011
AT 4:55 MINUTES PAST 2 O'CLOCK P.M.
OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA

Kathryn L. Burke
COUNTY RECORDER

BY: C. Bartley
DEPUTY

FEE: 64.00

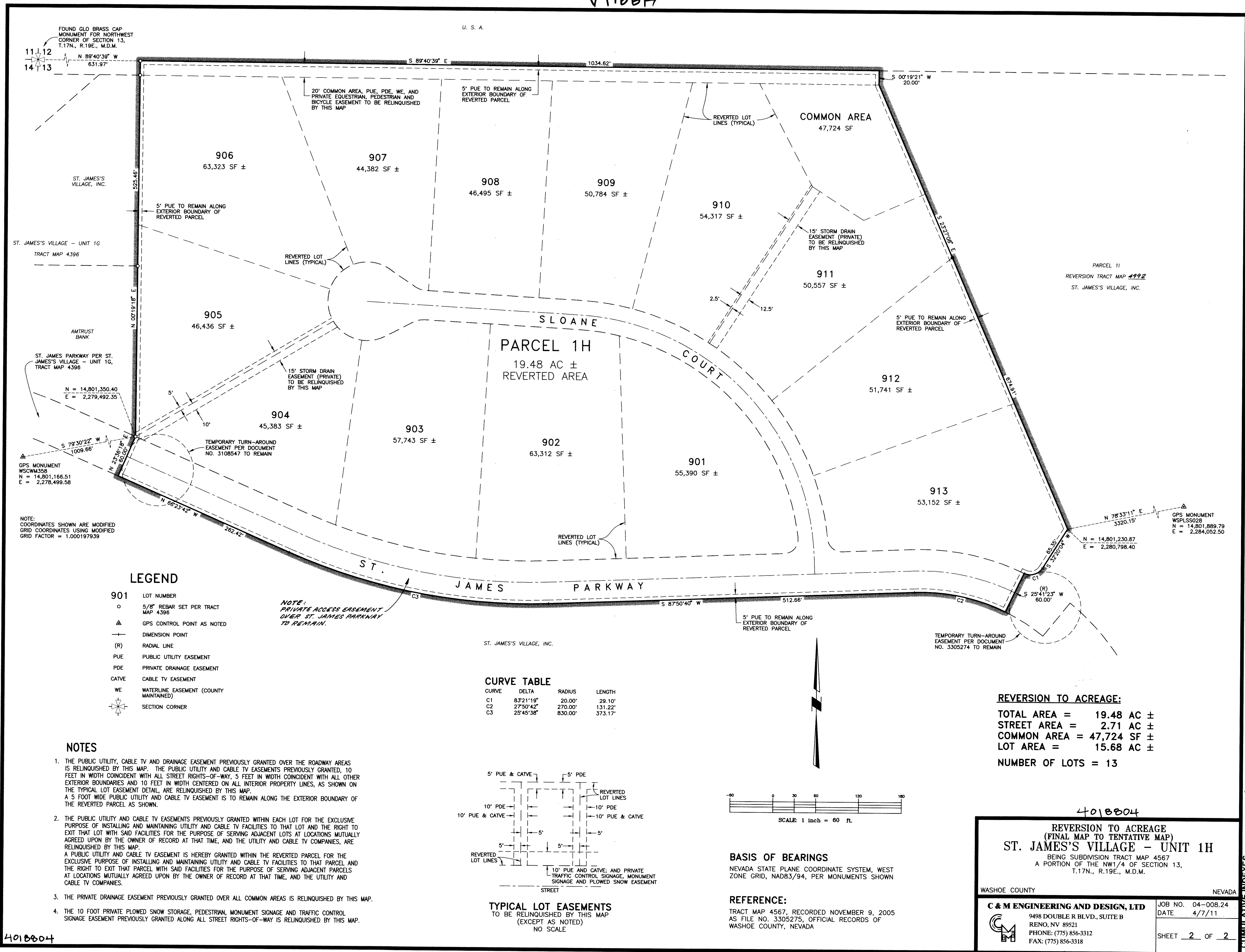
CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

4018904

Reversion Tract Map 4994

CUMULATIVE INDEXES 4994
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

4994A



LEGEND

- 901 LOT NUMBER
- 5/8" REBAR SET PER TRACT MAP 4396
- GPS CONTROL POINT AS NOTED
- DIMENSION POINT
- (R) RADIAL LINE
- PUE PUBLIC UTILITY EASEMENT
- PDE PRIVATE DRAINAGE EASEMENT
- CATVE CABLE TV EASEMENT
- WE WATERLINE EASEMENT (COUNTY MAINTAINED)
- SECTION CORNER

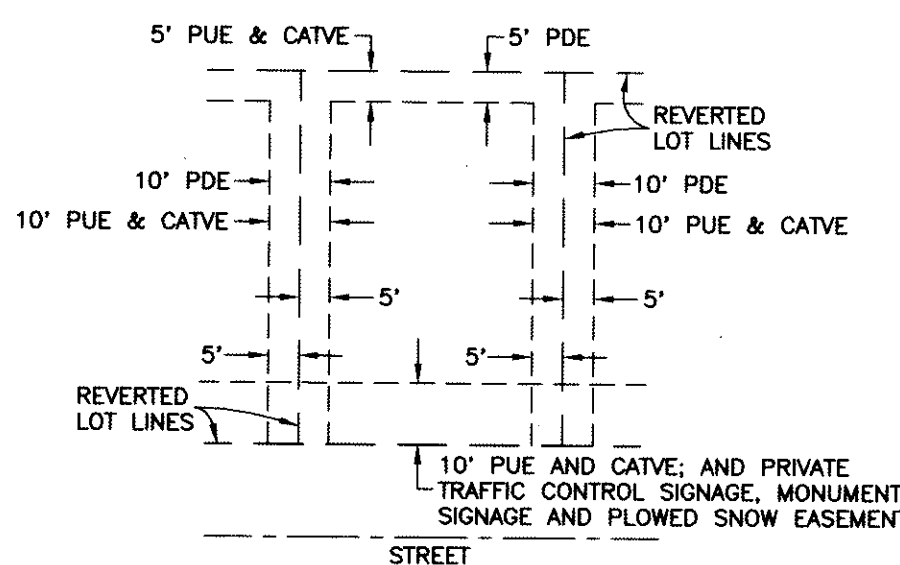
NOTES

- THE PUBLIC UTILITY, CABLE TV AND DRAINAGE EASEMENT PREVIOUSLY GRANTED OVER THE ROADWAY AREAS IS RELINQUISHED BY THIS MAP. THE PUBLIC UTILITY AND CABLE TV EASEMENTS PREVIOUSLY GRANTED, 10 FEET IN WIDTH COINCIDENT WITH ALL STREET RIGHTS-OF-WAY, 5 FEET IN WIDTH COINCIDENT WITH ALL OTHER EXTERIOR BOUNDARIES AND 10 FEET IN WIDTH CENTERED ON ALL INTERIOR PROPERTY LINES, AS SHOWN ON THE TYPICAL LOT EASEMENT DETAIL, ARE RELINQUISHED BY THIS MAP. A 5 FOOT WIDE PUBLIC UTILITY AND CABLE TV EASEMENT IS TO REMAIN ALONG THE EXTERIOR BOUNDARY OF THE REVERTED PARCEL AS SHOWN.
- THE PUBLIC UTILITY AND CABLE TV EASEMENTS PREVIOUSLY GRANTED WITHIN EACH LOT FOR THE EXCLUSIVE PURPOSE OF INSTALLING AND MAINTAINING UTILITY AND CABLE TV FACILITIES TO THAT LOT AND THE RIGHT TO EXIT THAT LOT WITH SAID FACILITIES FOR THE PURPOSE OF SERVING ADJACENT LOTS AT LOCATIONS MUTUALLY AGREED UPON BY THE OWNER OF RECORD AT THAT TIME, AND THE UTILITY AND CABLE TV COMPANIES, ARE RELINQUISHED BY THIS MAP. A PUBLIC UTILITY AND CABLE TV EASEMENT IS HEREBY GRANTED WITHIN THE REVERTED PARCEL FOR THE EXCLUSIVE PURPOSE OF INSTALLING AND MAINTAINING UTILITY AND CABLE TV FACILITIES TO THAT PARCEL AND THE RIGHT TO EXIT THAT PARCEL WITH SAID FACILITIES FOR THE PURPOSE OF SERVING ADJACENT PARCELS AT LOCATIONS MUTUALLY AGREED UPON BY THE OWNER OF RECORD AT THAT TIME, AND THE UTILITY AND CABLE TV COMPANIES.
- THE PRIVATE DRAINAGE EASEMENT PREVIOUSLY GRANTED OVER ALL COMMON AREAS IS RELINQUISHED BY THIS MAP.
- THE 10 FOOT PRIVATE PLOWED SNOW STORAGE, PEDESTRIAN, MONUMENT SIGNAGE AND TRAFFIC CONTROL SIGNAGE EASEMENT PREVIOUSLY GRANTED ALONG ALL STREET RIGHTS-OF-WAY IS RELINQUISHED BY THIS MAP.

NOTE: PRIVATE ACCESS EASEMENT OVER ST. JAMES PARKWAY TO REMAIN.

CURVE TABLE

CURVE	DELTA	RADIUS	LENGTH
C1	83°21'19"	20.00'	29.10'
C2	27°50'42"	270.00'	131.22'
C3	25°45'38"	830.00'	373.17'



TYPICAL LOT EASEMENTS
TO BE RELINQUISHED BY THIS MAP
(EXCEPT AS NOTED)
NO SCALE

BASIS OF BEARINGS

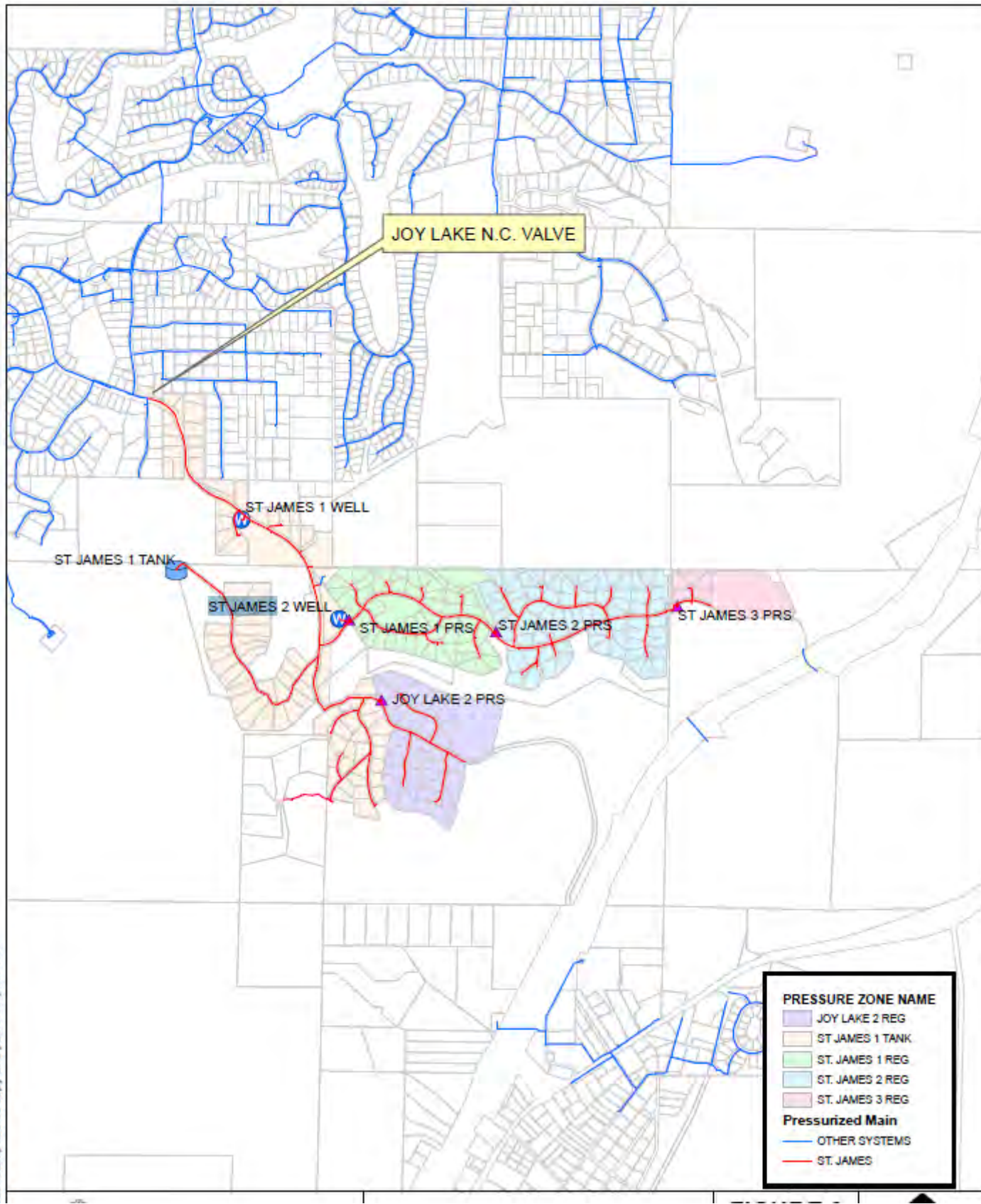
NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE GRID, NAD83/94, PER MONUMENTS SHOWN

REFERENCE:

TRACT MAP 4567, RECORDED NOVEMBER 9, 2005
AS FILE NO. 3305275, OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

Reversion Tract Map 4994A



JOY LAKE N.C. VALVE

ST JAMES 1 WELL

ST JAMES 1 TANK

ST JAMES 2 WELL

ST JAMES 1 PRS

ST JAMES 2 PRS

ST JAMES 3 PRS

JOY LAKE 2 PRS

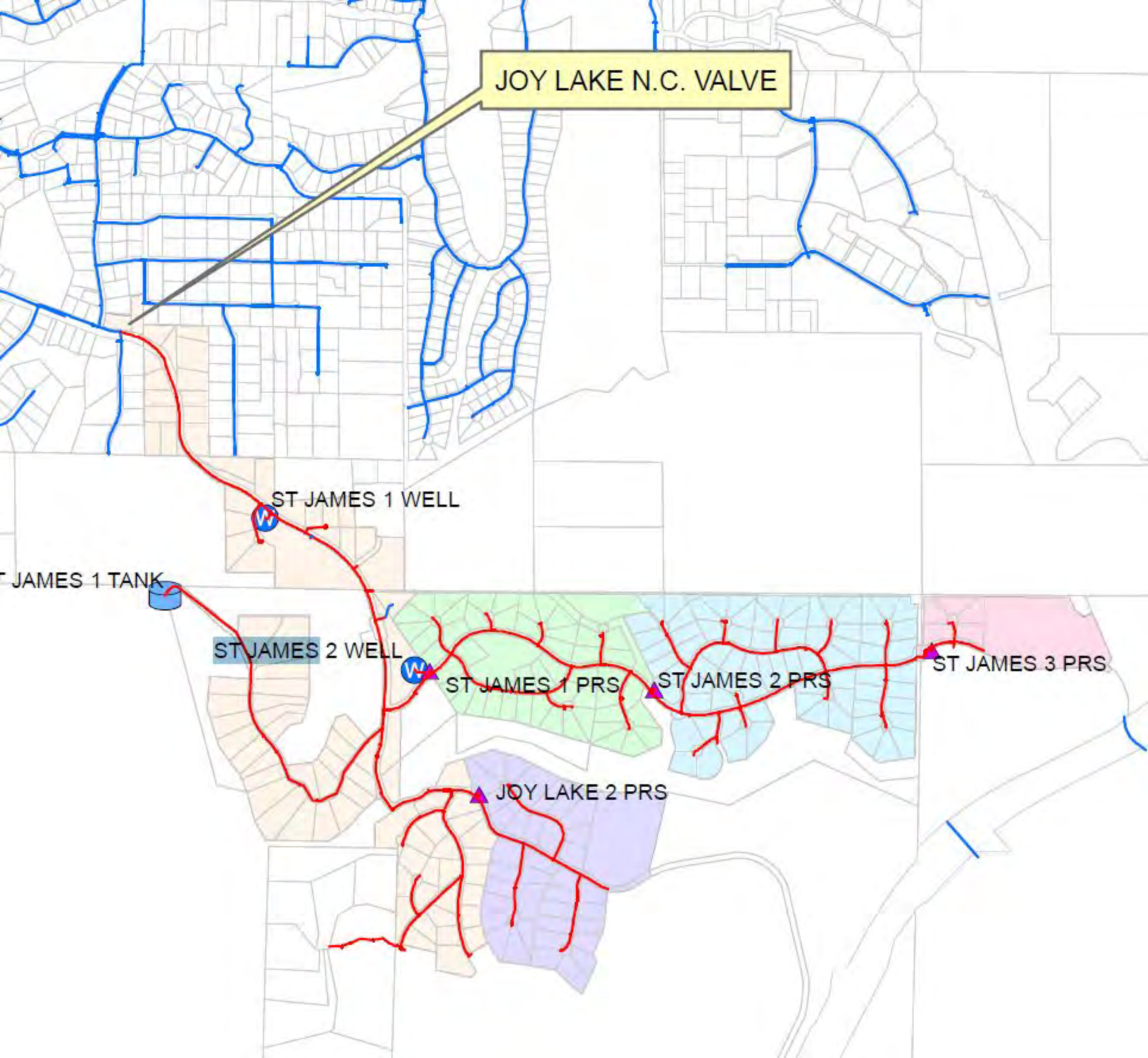
PRESSURE ZONE NAME

- JOY LAKE 2 REG
- ST JAMES 1 TANK
- ST. JAMES 1 REG
- ST. JAMES 2 REG
- ST. JAMES 3 REG

Pressurized Main

- OTHER SYSTEMS
- ST. JAMES

JOY LAKE N.C. VALVE



ST JAMES 1 WELL

ST JAMES 1 TANK

ST JAMES 2 WELL

ST JAMES 1 PRS

ST JAMES 2 PRS

ST JAMES 3 PRS

JOY LAKE 2 PRS

WELL DRILLER'S REPORT

Please complete this form in its entirety in
accordance with NRS 534.170 and NAC 534.340

OFFICE USE ONLY
Log No. 51442
Permit No. 1088
Basis

PRINT OR TYPE ONLY
DO NOT WRITE ON BACK

NOTICE OF INVENT NO 31940

1. OWNER ST. JAMES VILLAGE
MAILING ADDRESS 11766 WILSHIRE BLVD
SUITE 780, LOS ANGELES, CA. 90025
ADDRESS AT WELL LOCATION NATIA COURT AND JOY LAKE ROAD
2. LOCATION SW 1/4 SE 1/4 Sec 10 T 17 N/S R 19 E WASHOE County
PERMIT NO. 59330
Issued by Water Resources Parcel No. THE WOODS Subdivision Name

3. WORK PERFORMED
☒ New Well ☐ Replace ☐ Recondition
☐ Deepen ☐ Abandon ☐ Other
4. PROPOSED USE
☐ Domestic ☐ Irrigation ☐ Test
☒ Municipal/Industrial ☐ Monitor ☐ Stock
5. WELL TYPE
☐ Cable ☐ Rotary ☒ RVC
☐ Air ☐ Other

6. LITHOLOGIC LOG				
Material	Water Strata	From	To	Thick-ness
SANDY CLAY		0	71	71
SOFT SANDY CLAY		71	78	7
FRACTURED ROCK		78	88	10
GRAVEL SAND TRACE CLAY		88	135	47
HARD ROCK		135	162	27
HARD BLACK ROCK		162	222	60
FRACTURED ROCK		222	230	8
BLACK ROCK TRACE CLAY		230	236	6
FRACTURED BLACK ROCK		236	240	4
BLACK ROCK FRACTURED CLAY		240	260	20
LOST CIRCULATION		260	265	5
HARD ROCK W/ CLAY		260	299	39
RED CLAY		299	300	1
BLACK ROCK		300	338	38
BLACK ROCK W/ CLAY		338	360	22
BLACK ROCK LG. FRACTURES		360	366	6
HARD BLACK ROCK		366	374	8
FRACTURED BLACK ROCK		374	384	10
RED CLAY & ROCK		384	390	6
BLACK & RED ROCK		390	421	31
FRACTURED ROCK & CLAY		421	426	5
RED SANDY CLAY & ROCK		426	580	154
ROCK TRACE CLAY		580	605	25
CLAY & ROCK		605	700	95

8. WELL CONSTRUCTION
Depth Drilled 620 Feet Depth Cased 620 Feet
HOLE DIAMETER (BIT SIZE)
From To
12 Inches 0 Feet 700 Feet
18 Inches 0 Feet 620 Feet
Inches Feet Feet

CASING SCHEDULE				
Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
10	22.36	.250	+ 2	260
10	22.36	.250	380	400
10	22.36	.250	500	520

Perforations:
Type perforation LOUVERED-FUL FLOW
Size perforation 125
From 260 feet to 380 feet
From 400 feet to 500 feet
From 520 feet to 620 feet
From feet to feet
From feet to feet

Surface Seal: ☒ Yes ☐ No Seal Type:
Depth of Seal 100 ☐ Neat Cement
Placement Method: ☒ Pumped ☐ Cement Grout
☐ Poured ☐ Concrete Grout

Gravel Packed: ☐ Yes ☐ No
From 100 feet to 620 feet

9. WATER LEVEL
Static water level 195 feet below land surface
Artesian flow G.P.M. 300 P.S.I.
Water temperature COOL °F Quality

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.

Name SARGENT IRRIGATION COMPANY
Contractor
Address 9955 N. VIRGINIA ST.
Contractor
RENO, NV 89506

Nevada contractor's license number 21246
issued by the State Contractor's Board

Nevada driller's license number issued by the
Division of Water Resources, the on-site driller 1593 1493

Signed [Signature]
By driller performing actual drilling on site or contractor
Date 2-12-96

NOVEMBER 03, 1995
Date started
Date completed 12-12 (Perforation w/ Driller) 1995

7. WELL TEST DATA			
TEST METHOD: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump <input type="checkbox"/> Air Lift			
G.P.M.	Draw Down (Feet Below Static)	Time (Hours)	
300	91	236	

Log No. 50265
Permit No. 078
Basin. 078

PRINT OR TYPE ONLY
DO NOT WRITE ON BACK

WELL DRILLER'S REPORT

Please complete this form in its entirety in
accordance with NRS 534.170 and NAC 534.340

NOTICE OF INTENT NO. 31939

1. OWNER ST. JAMES VILLAGE ADDRESS AT WELL LOCATION ST. JAMES & JOY LAKE ROAD
MAILING ADDRESS 11766 WILSHIRE BLVD.
SUITE 780 LOS ANGELES, CA. 90025

2. LOCATION NW 1/4 NW 1/4 Sec 14 T 17 N/S R 19 E WASHOE County THE WOODS
PERMIT NO. 59631 Issued by Water Resources Parcel No. Subdivision Name

3. WORK PERFORMED
☒ New Well ☐ Replace ☐ Recondition
☐ Deepen ☐ Abandon ☐ Other.....

4. PROPOSED USE
☐ Domestic ☐ Irrigation ☐ Test
☒ Municipal/Industrial ☐ Monitor ☐ Stock

5. WELL TYPE
☐ Cable ☐ Rotary ☒ RVC
☐ Air ☐ Other.....

6. LITHOLOGIC LOG				
Material	Water Strata	From	To	Thickness
SAND & GRAVEL		0	10	10
SAND & CLAY COBBLES		10	50	40
SAND, SILT W/ CLAY		50	100	50
BLACK ROCK W/ CLAY		100	132	32
COARSE GRAVEL, CLAY		132	140	8
SANDY CLAY, GRAVEL		140	160	20
SAND & GRAVEL		160	172	12
ANDESITE - HARD		172	220	28
CLAY, BLACK ROCK		220	228	8
BROWN CLAY, ROCK		228	232	4
SAND, GRAVEL - FINE		232	260	28
ANDESITE		260	280	20
SAND GRAVEL COBBLES		280	312	32
BROKEN ROCK		312	317	5
SANDY W/ CHIPS		317	325	8
SANDY BROWN CLAY		325	330	5
BROWN CLAY, ROCK		330	340	10
BROKEN VOLCANICS		340	350	10
FINE BLACK CHIPS		350	380	30
BROKEN FRACTURED ROCK		380	400	20
BROKEN ANDESITE		400	415	15
RED ROCK		415	428	13
FRACTURED ROCK		428	435	7
BROKEN ROCK		435	438	3
BLACK CINDER ROCK		438	458	20
SANDY ROCK		458	498	40
ANDESITE		498	521	23
BROWN ANDESITE		521	535	14
BLACK ANDESITE		535	575	40
BROWN CLAY ROCK		575	605	30
Date started <u>11-28-95</u> 19.....				
Date completed <u>12-22-95</u> 19.....				

8. WELL CONSTRUCTION
Depth Drilled 596 Feet Depth Cased 590 Feet

HOLE DIAMETER (BIT SIZE)
From To
12 Inches 0 Feet 605 Feet
18 Inches 0 Feet 595 Feet
Inches Feet Feet

CASING SCHEDULE				
Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
10"		.250	+ 2	350
10"		.25	490	510

Perforations:
Type perforation LOUVERED FULL-FLOW
Size perforation .125
From 350 feet to 490 feet
From 510 feet to 590 feet
From feet to feet
From feet to feet
From feet to feet

Surface Seal: ☒ Yes ☐ No Seal Type:
Depth of Seal 100' ☐ Neat Cement
Placement Method: ☒ Pumped ☐ Poured ☒ Cement Grout ☐ Concrete Grout

Gravel Packed: ☒ Yes ☐ No
From 100 feet to 590 feet

9. WATER LEVEL
Static water level NOT AVAILABLE feet below land surface
Artesian flow 242 G.P.M. P.S.I.
Water temperature °F Quality

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.

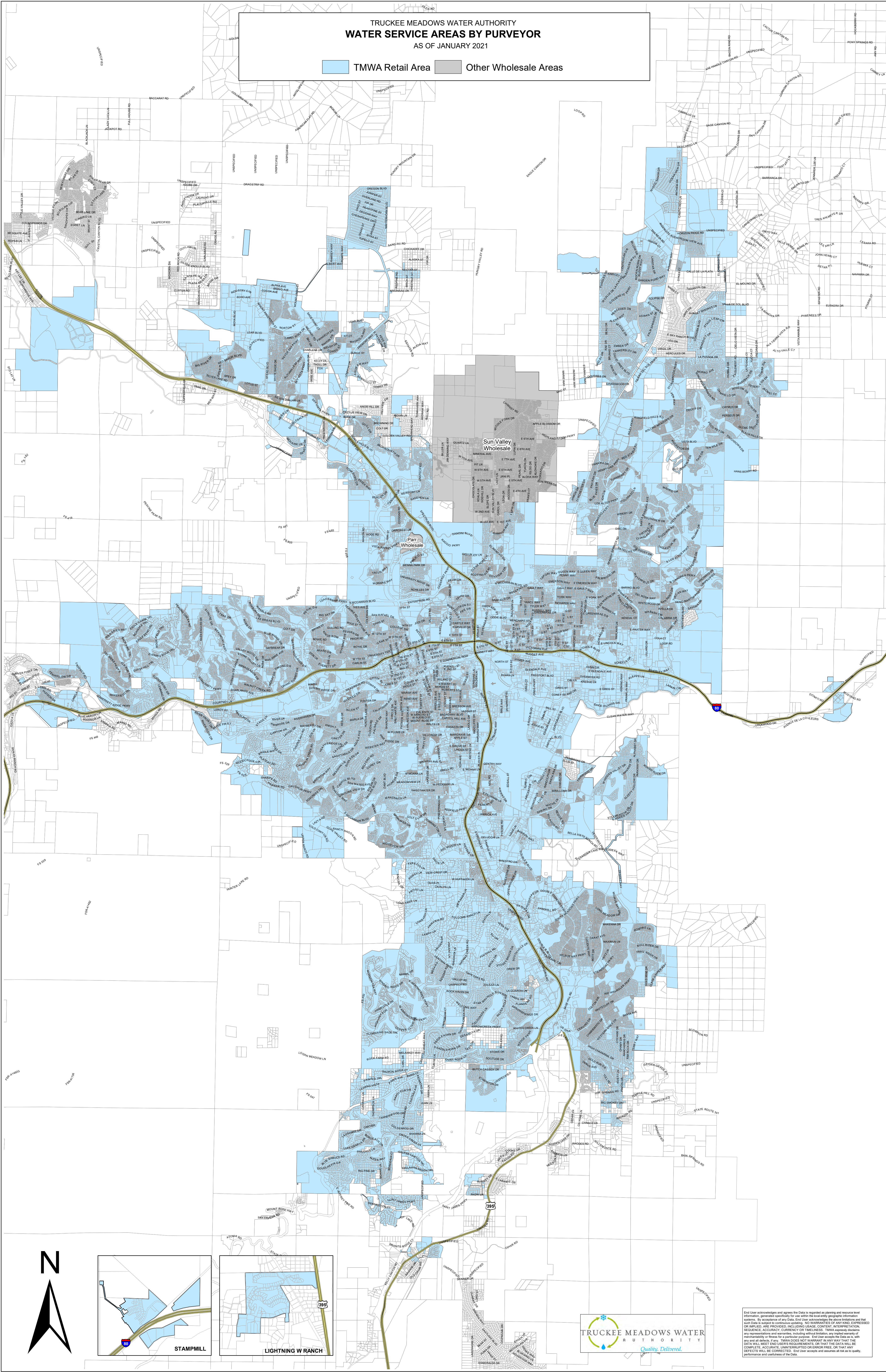
Name SARGENT IRRIGATION COMPANY Contractor
Address 9955 N. VIRGINIA ST. Contractor
RENO, NV. 89506

Nevada contractor's license number issued by the State Contractor's Board 0021246
Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1593
Signed Mark White
By driller performing actual drilling on site or contractor
Date DECEMBER 22, 1995

7. WELL TEST DATA			
TEST METHOD: <input type="checkbox"/> Bailer <input type="checkbox"/> Pump <input type="checkbox"/> Air Lift			
G.P.M.	Draw Down (Feet Below Static)	Time (Hours)	
<u>400</u>	<u>105</u>	<u>240</u>	

TRUCKEE MEADOWS WATER AUTHORITY
WATER SERVICE AREAS BY PURVEYOR
AS OF JANUARY 2021

TMWA Retail Area Other Wholesale Areas



BENNINGTON COURT - UNIT 2 ST. JAMES'S VILLAGE - UNIT 2D

OWNER'S CERTIFICATE

THIS IS TO CERTIFY THAT THE UNDERSIGNED ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, IS THE OWNER OF THE TRACT OF LAND REPRESENTED ON THIS PLAT, HAS CONSENTED TO THE PREPARATION AND RECORDATION OF THIS PLAT, THAT THE SAME IS EXECUTED IN COMPLIANCE WITH AND SUBJECT TO THE PROVISIONS OF NRS CHAPTERS 116 AND 278, AND HEREBY GRANTS TO ALL PUBLIC UTILITIES, TRUCKEE MEADOWS WATER AUTHORITY AND WASHOE COUNTY PERMANENT EASEMENTS SHOWN ON THIS PLAT FOR THE CONSTRUCTION AND MAINTENANCE OF UTILITY SYSTEMS AND WATER AND SANITARY SEWER FACILITIES, TOGETHER WITH THE RIGHT OF ACCESS THERETO FOREVER. THE SEWER FACILITIES AND ASSOCIATED APPURTENANCES ARE HEREBY DEDICATED TO WASHOE COUNTY. THE OWNER AND ASSIGNEES AGREE TO THE USE OF RESIDENTIAL WATER METERS.

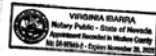
ST. JAMES'S VILLAGE, INC.,
A NEVADA CORPORATION

Frederick D. Woodside
FREDERICK D. WOODSIDE, AUTHORIZED
AGENT OF ST. JAMES'S VILLAGE, INC.

STATE OF NEVADA
COUNTY OF WASHOE

THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON February 27
2019, BY FREDERICK D. WOODSIDE, AUTHORIZED AGENT OF ST. JAMES'S VILLAGE,
INC., A NEVADA CORPORATION.

Christina Hance
NOTARY PUBLIC



TITLE COMPANY CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT THIS PLAT HAS BEEN EXAMINED AND THAT ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION, OWNS OF RECORD AN INTEREST IN THE LAND DELINEATED HEREON AND THAT IT IS THE ONLY OWNER OF RECORD OF SAID LAND; THAT ALL THE OWNERS OF RECORD OF THE LAND HAVE SIGNED THE FINAL MAP; THAT NO ONE HOLDS OF RECORD A SECURITY INTEREST IN THE LAND TO BE DIVIDED; AND THAT THERE ARE NO LIENS OF RECORD AGAINST THE COMMON INTEREST COMMUNITY FOR DELINQUENT STATE, COUNTY, MUNICIPAL, FEDERAL, OR LOCAL TAXES OR ASSESSMENTS COLLECTED AS TAXES OR SPECIAL ASSESSMENTS, AND THAT A GUARANTEE DATED 4-9-19 FOR THE BENEFIT OF THE COUNTY OF WASHOE, STATE OF NEVADA, HAS BEEN ISSUED WITH REGARD TO ALL THE ABOVE.

TICOR TITLE OF NEVADA, INC.

BY: *Ron Breazale* 4-10-19
RON BREAZALE, TITLE OPERATIONS
MANAGER, VICE PRESIDENT DATE

UTILITY COMPANIES CERTIFICATE

THE UTILITY EASEMENTS SHOWN ON THIS PLAT HAVE BEEN CHECKED AND APPROVED BY THE UNDERSIGNED PUBLIC UTILITY AND CABLE TV COMPANIES, AND THE TRUCKEE MEADOWS WATER AUTHORITY.

Seth J. Horn 4-15-19
SIERRA PACIFIC POWER COMPANY, d/b/a NV ENERGY DATE
BY: SETH J. HORN, LANDS DRAFTSMAN

Cliff Cooper 4-12-19
NETEL BEL TELEPHONE COMPANY, d/b/a AT&T NEVADA DATE
BY: CLIFF COOPER, MOR-OSP PLANNING AND ENGINEERING DESIGN

Timothy Simpson 4/19/19
SHARPER COMMUNICATIONS - WASHOE COUNTY COMM. SERVICES DEPT. DATE
BY: THOMAS SIMPSON, LICENSED ENGINEER

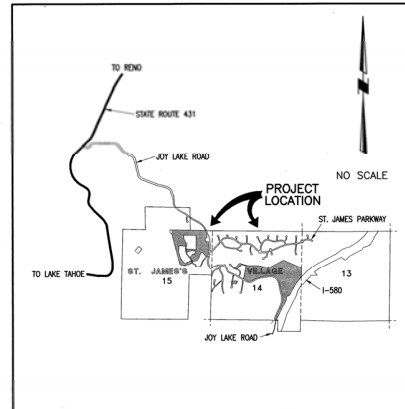
Timothy Simpson 4-12-2019
WASHOE COUNTY COMMUNITY SERVICES DEPARTMENT DATE
BY: THOMAS SIMPSON, LICENSED ENGINEER

Jon R. Zimmerman 4-12-2019
TRUCKEE MEADOWS WATER AUTHORITY DATE
BY: JONH R. ZIMMERMAN, WATER RESOURCES MANAGER

WATER AND SEWER RESOURCE REQUIREMENTS

THE DEVELOPMENT DEPICTED ON THIS PLAT IS IN CONFORMANCE WITH THE PROVISIONS SET FORTH IN ARTICLE 422 OF THE WASHOE COUNTY DEVELOPMENT CODE (CHAPTER 110).

Vahid Behmaram 4/15/19
WASHOE COUNTY COMMUNITY SERVICES DEPARTMENT DATE



VICINITY MAP

SURVEYOR'S CERTIFICATE

I, GEORGE FONG, A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEVADA, CERTIFY THAT:

- THIS PLAT REPRESENTS THE RESULTS OF A SURVEY CONDUCTED UNDER MY DIRECT SUPERVISION AT THE INSTANCE OF ST. JAMES'S VILLAGE, INC., A NEVADA CORPORATION.
- THE LANDS SURVEYED LIE WITHIN SECTION 14 AND NE1/4 OF SECTION 15, T.17N., R.19E., M.D.M., AND THE SURVEY WAS COMPLETED ON DECEMBER 10, 2018.
- THIS PLAT COMPLIES WITH THE APPLICABLE STATE STATUTES AND ANY LOCAL ORDINANCES IN EFFECT ON THE DATE THAT THE GOVERNING BODY GAVE ITS FINAL APPROVAL.
- THE MONUMENTS DEPICTED ON THE PLAT ARE OF THE CHARACTER SHOWN AND OCCUPY THE POSITIONS AS INDICATED, AND THAT NO FINANCIAL GUARANTEE WILL BE REQUIRED WITH THE GOVERNING BODY BEFORE RECORDATION TO ENSURE THE INSTALLATION OF THE MONUMENTS.

George Fong 4/22/19
GEORGE FONG, PLS 8043 DATE
LAND SURVEYOR STATE OF NEVADA
No. 4043

DIVISION OF WATER RESOURCES CERTIFICATE

THIS PLAT IS APPROVED BY THE STATE OF NEVADA DIVISION OF WATER RESOURCES OF THE DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES CONCERNING WATER QUANTITY, SUBJECT TO THE REVIEW OF APPROVAL ON FILE IN THIS OFFICE.

Malcolm Wilson, P.E. 4/22/2019
DIVISION OF WATER RESOURCES DATE

TAXATION CERTIFICATE

THE UNDERSIGNED HEREBY CERTIFIES THAT ALL THE PROPERTY TAXES FOR ASSESSOR'S PARCELS NUMBER 046-180-13, 156-040-11, AND 156-084-18 FOR THE FISCAL YEAR HAVE BEEN PAID AND THAT THE FULL AMOUNT OF ANY DEFERRED PROPERTY TAXES FOR THE CONVERSION OF THE PROPERTY FROM AGRICULTURAL USE HAS BEEN PAID PURSUANT TO NRS 361A.265.

WASHOE COUNTY TREASURER
Deputy Treasurer 4/12/19
DATE

DISTRICT BOARD OF HEALTH CERTIFICATE

THIS FINAL MAP IS APPROVED BY THE WASHOE COUNTY DISTRICT BOARD OF HEALTH. THIS APPROVAL CONCERNS SEWAGE DISPOSAL, WATER POLLUTION, WATER QUALITY AND WATER SUPPLY FACILITIES AND IS PREDICATED UPON PLANS FOR A PUBLIC WATER SUPPLY AND INDIVIDUAL SYSTEMS FOR DISPOSAL OF SEWAGE.

Wayne Handrock 06/17/2019
FOR THE DISTRICT BOARD OF HEALTH DATE

COUNTY SURVEYOR'S CERTIFICATE

I CERTIFY THAT I HAVE EXAMINED THIS MAP CONSISTING OF THREE SHEETS, AND THAT I AM SATISFIED SAID MAP IS TECHNICALLY CORRECT.

Wayne Handrock 6-19-19
WAYNE HANDROCK, PLS 20464 DATE
WASHOE COUNTY SURVEYOR
Wayne Handrock
No. 20464

COMMUNITY DEVELOPMENT CERTIFICATE

THE TENTATIVE MAP FOR ST. JAMES'S VILLAGE, TMS-2-92, WAS RECOMMENDED FOR APPROVAL BY THE WASHOE COUNTY PLANNING COMMISSION ON THE 8TH DAY OF JULY 1992, AND APPROVED BY THE WASHOE COUNTY COMMISSION ON THE 18TH DAY OF AUGUST, 1992.

PER WASHOE COUNTY DEVELOPMENT CODE ARTICLE 608, AN EXTENSION OF TIME FOR THE TENTATIVE MAP OF ST. JAMES'S VILLAGE WAS GRANTED BY THE WASHOE PLANNING COMMISSION ON JULY 6, 2010 FOR TWO YEARS. THEREFORE, THE NEXT FINAL MAP FOR TMS-2-92 MUST BE APPROVED AND ACCEPTED FOR RECORDATION BY THE COMMUNITY DEVELOPMENT DIRECTOR ON OR BEFORE THE EXPIRATION DATE OF THE 11TH DAY OF OCTOBER, 2012.

PER ORDINANCE 1498 APPROVED BY THE BOARD OF WASHOE COUNTY COMMISSIONERS ON SEPTEMBER 25, 2012 AND RECORDED ON OCTOBER 9, 2012 AS DOCUMENT NO. 4160879, AN EXTENSION OF TIME FOR RECORDATION OF THE NEXT FINAL MAP WAS EXTENDED TO OCTOBER 16, 2016. PER SAME SAID ORDINANCE 1498, A FURTHER EXTENSION OF TIME FOR THE RECORDATION OF THE NEXT FINAL MAP WAS EXTENDED TO OCTOBER 16, 2020.

THIS FINAL MAP, BENNINGTON COURT - UNIT 2, ST. JAMES'S VILLAGE - UNIT 2D, MEET ALL APPLICABLE STATUTES, ORDINANCES, AND CODE PROVISIONS; IS IN SUBSTANTIAL CONFORMANCE WITH THE TENTATIVE SUBDIVISION MAP CASE NO. TMS-2-92; AND ALL CONDITIONS HAVE BEEN MET FOR THE PURPOSES OF RECORDATION OF THIS MAP.

THE NEXT FINAL MAP FOR TMS-2-92 MUST BE APPROVED AND ACCEPTED FOR RECORDATION BY THE COMMUNITY DEVELOPMENT DIRECTOR ON OR BEFORE THE EXPIRATION DATE, THE 16TH DAY OF OCTOBER, 2021, OR AN EXTENSION OF TIME FOR THE TENTATIVE MAP MUST BE APPROVED BY THE WASHOE COUNTY PLANNING COMMISSION ON OR BEFORE SAID DATE.

THIS FINAL MAP IS APPROVED AND ACCEPTED FOR RECORDATION THIS 20 DAY OF JUNE, 2019, BY THE WASHOE COUNTY COMMUNITY DEVELOPMENT DIRECTOR.

Morja Hadenstein 6-20-19
MORJA HADENSTEIN, DIRECTOR
OF PLANNING AND BUILDING DATE

OFFICIAL PLAT BENNINGTON COURT - UNIT 2 AND ST. JAMES'S VILLAGE - UNIT 2D A COMMON INTEREST COMMUNITY SITUATE WITHIN SECTION 14 AND NE1/4 OF SECTION 15, T.17N., R.19E., M.D.M. BEING A PORTION OF PARCEL A OF SURVEY MAP 4040, AND PARCELS 322A AND 2C1 OF SURVEY MAP 5490 WASHOE COUNTY NEVADA		COUNTY RECORDER'S CERTIFICATE FILE NO: <u>4922453</u> FILED FOR RECORD AT THE REQUEST OF <u>C & M Engineering</u> ON THIS <u>21st</u> DAY OF <u>June</u> , 20 <u>19</u> AT <u>10</u> MINUTES PAST <u>9</u> O'CLOCK <u>PM</u> OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA
C & M ENGINEERING AND DESIGN, LTD 5488 RENO CORPORATE DR., SUITE 200B RENO, NV 89511 PHONE: (775) 856-3312	JOB NO. 04-008.30 DATE 12/10/18 SHEET <u>1</u> OF <u>3</u>	COUNTY RECORDER <i>Abbie M. Work</i> BY: <u>A. Peaslee</u> DEPUTY REC: <u>86.00</u>

Subdivision Tract Map 5331

5331A

BASIS OF BEARINGS

NEVADA STATE PLANE COORDINATE SYSTEM, WEST ZONE
GRD, NAD83/04, PER MONUMENTS AS SHOWN
COORDINATES SHOWN ARE MODIFIED GRID COORDINATES
USING MODIFIED GRID FACTOR = 1.000197939

REFERENCES:

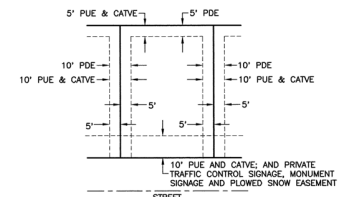
- TRACT MAP 3155, RECORDED JUNE 23, 1995 AS FILE NO. 1902968, OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA
- TRACT MAP 3314, RECORDED OCTOBER 4, 1996 AS FILE NO. 2036381, OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA
- TRACT MAP 3602, RECORDED OCTOBER 21, 1998 AS FILE NO. 2265787, OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA
- TRACT MAP 4551, RECORDED OCTOBER 11, 2005 AS FILE NO. 3289704, OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA
- SURVEY MAP 4040, RECORDED FEBRUARY 21, 2002 AS FILE NO. 2655305, OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA
- SURVEY MAP 5490, RECORDED MARCH 29, 2013 AS FILE NO. 4220252, OFFICIAL RECORDS OF WASHOE COUNTY, NEVADA

TOTAL AREA = 140.04 AC ±
COMMON AREA = 44.08 AC ±
REMAINDER AREA = 85.82 AC ±
LOT AREA = 10.14 AC ±

NUMBER OF LOTS = 7

LEGEND

- xx FOUND 5/8" REBAR WITH CAP "PLS 5665" UNLESS NOTED OTHERWISE
- o FOUND 5/8" REBAR WITH CAP "PLS 4043"
- SET 5/8" REBAR WITH CAP "PLS 4043"
- Δ WASHOE COUNTY SURVEY MONUMENT AS NOTED
- DIMENSION POINT—NOTHING SET
- (R) RADIAL LINE
- FOUND CENTERLINE MONUMENT "PLS 5665"
- PUE PUBLIC UTILITY EASEMENT
- CATVE CABLE TV EASEMENT
- PDE PRIVATE DRAINAGE EASEMENT
- SECTION CORNER AS DESCRIBED
- () RECORD INFORMATION PER REFERENCE AS NUMBERED
- EXISTING PROPERTY LINE
- EASEMENT LINE AS NOTED
- CENTERLINE



TYPICAL LOT EASEMENTS
(AS GRANTED BY THIS PLAT FOR LOTS
309, 316, 317, 322, 330, 507, AND 519)
NO SCALE

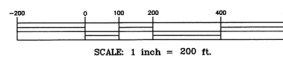
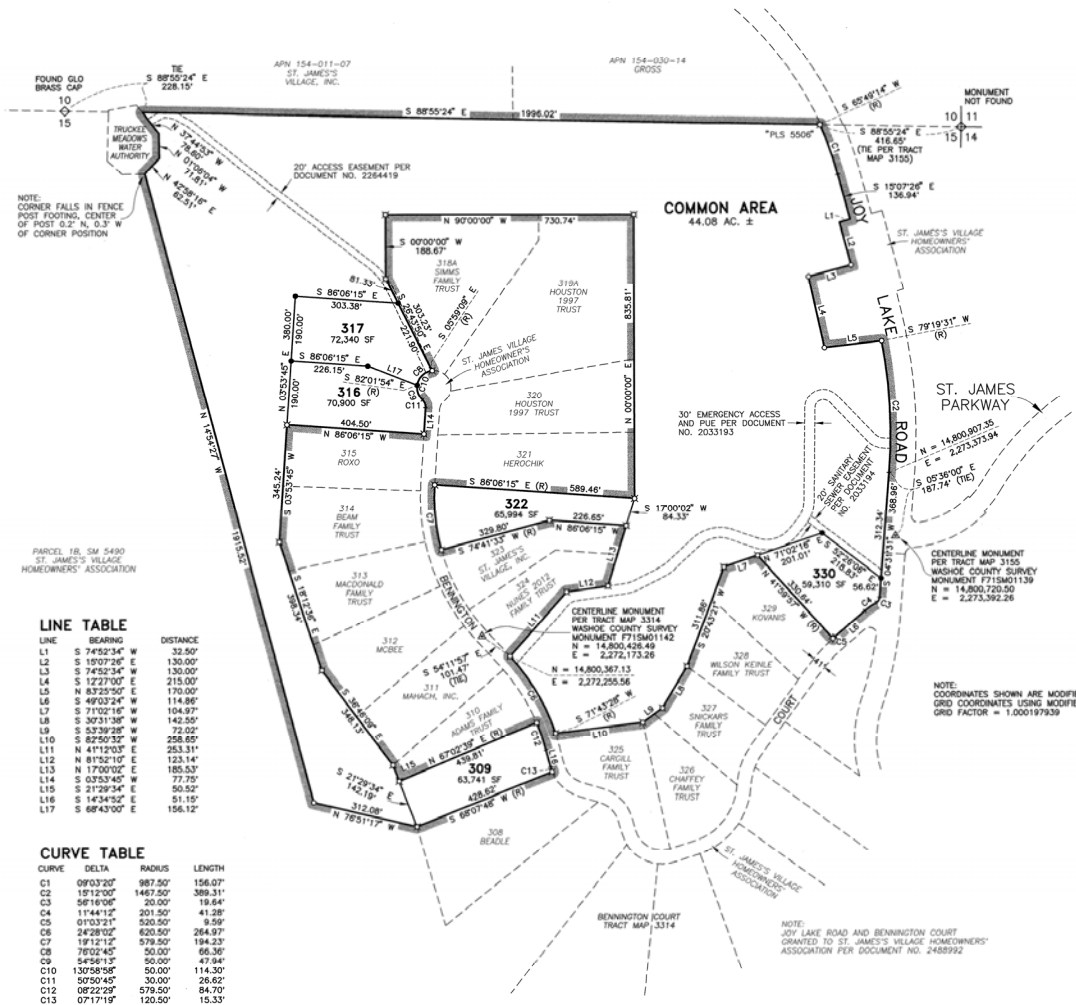
NOTES

- ALL ROADWAYS AS SHOWN WITHIN ST. JAMES'S VILLAGE ARE PRIVATE, AND OWNED AND MAINTAINED BY THE ST. JAMES'S VILLAGE HOMEOWNERS' ASSOCIATION PER DOCUMENTS AS NOTED. A PUBLIC UTILITY, CABLE TV, WATER, SEWER AND DRAINAGE EASEMENT WAS PREVIOUSLY GRANTED OVER THE ROADWAY AREAS PER TRACT MAPS 3155, 3314, AND 3602.
- PUBLIC UTILITY AND CABLE TV EASEMENTS ARE HEREBY GRANTED WITHIN LOTS 309, 316, 317, 322, 330, 507 AND 519 AS FOLLOWS: 10 FEET IN WIDTH COINCIDENT WITH ALL STREET RIGHTS-OF-WAY, 5 FEET IN WIDTH COINCIDENT WITH ALL OTHER EXTERIOR BOUNDARIES AND 10 FEET IN WIDTH CENTERED ON ALL INTERIOR PROPERTY LINES.
- A PUBLIC UTILITY AND CABLE TV EASEMENT IS ALSO HEREBY GRANTED WITHIN EACH LOT FOR THE EXCLUSIVE PURPOSE OF INSTALLING AND MAINTAINING UTILITY AND CABLE TV FACILITIES TO THAT LOT AND THE RIGHT TO DIT THAT LOT WITH SAID FACILITIES FOR THE PURPOSE OF SERVING OTHER LOTS AT LOCATIONS MUTUALLY AGREED UPON BY THE OWNER OF RECORD AT THAT TIME, AND THE UTILITY AND CABLE TV COMPANIES.
- DRAINAGE FACILITIES ARE TO BE PRIVATE AND MAINTAINED BY THE OWNERS.
- A PRIVATE DRAINAGE EASEMENT IS HEREBY GRANTED OVER ALL COMMON AREAS.
- A 10 FOOT PRIVATE PLOWED SNOW STORAGE, PEDESTRIAN, MONUMENT SIGNAGE AND TRAFFIC CONTROL SIGNAGE EASEMENT IS HEREBY GRANTED ALONG ALL STREET RIGHTS-OF-WAY.
- NO OWNER OR TENANT SHALL OBSTRUCT A DRAINAGE EASEMENT OR CHANNEL WITHIN THE TRACT.
- NO FENCES ARE ALLOWED WITHIN OR ACROSS UTILITY EASEMENTS MAINTAINED BY WASHOE COUNTY OR PRIVATE PEDESTRIAN EASEMENTS.
- NO CERTIFICATE OF OCCUPANCY SHALL BE ISSUED UNTIL THE WATER AND SEWER IMPROVEMENTS HAVE BEEN COMPLETED AND ACCEPTED BY THE TRUCKEE MEADOWS WATER AUTHORITY AND WASHOE COUNTY UTILITY.
- NO HABITABLE STRUCTURES SHALL BE LOCATED ON A FAULT THAT HAS BEEN ACTIVE DURING THE HOLOCENE EPOCH OF GEOLOGICAL TIME.
- NO DIRECT ACCESS FROM LOT 330 SHALL BE ALLOWED ONTO JOY LAKE ROAD.
- SEWAGE DISPOSAL IS BY INDIVIDUAL SEWAGE DISPOSAL SYSTEMS. DRY SANITARY SEWER SYSTEM WILL BE CONSTRUCTED WITHIN THIS SUBDIVISION. UPON COMPLETION OF THE PLEASANT VALLEY SANITARY SEWER INTERCEPTOR, SEPTIC SYSTEMS WILL BE ABANDONED AND ALL LOTS OF THIS SUBDIVISION WILL BE CONNECTED TO THE ST. JAMES'S VILLAGE SANITARY SEWER SYSTEM.
- EACH LOT CREATED BY THIS MAP IS REQUIRED TO HAVE A SEPARATE WATER METER AND WATER SERVICE LINE. THE WATER PURVEYOR SHALL HAVE THE RIGHT TO INSTALL A WATER METER IN THE 10' PUBLIC UTILITY EASEMENT ADJACENT TO THE STREET TO SERVE EACH LOT RESPECTIVELY.
- LOT 519 PREVIOUSLY CREATED AS A REMAINT PARCEL, RESULTING FROM THE RECORDED OF TRACT MAP 4551 WITHIN PARCEL A OF RECORD SURVEY MAP 4040. LOT 519 IS SHOWN ON THIS PLAT FOR THE PURPOSE OF INDICATING ALL LOTS CREATED WITHIN THE APPROVED TENTATIVE MAP FOR ST. JAMES'S VILLAGE, TMS-2-92, AND FOR INDICATING ALL LOTS SUBJECT TO THE COMMON INTEREST COMMUNITY.



<p>OFFICIAL PLAT BENNINGTON COURT - UNIT 2 AND ST. JAMES'S VILLAGE - UNIT 2D A COMMON INTEREST COMMUNITY SITUATE WITHIN SECTION 14 AND NE1/4 OF SECTION 15, T.17N., R.19E., M.D.M. BEING A PORTION OF PARCEL A OF SURVEY MAP 4040, AND PARCELS 322A AND 2C1 OF SURVEY MAP 5490 WASHOE COUNTY NEVADA</p>	
<p>C & M ENGINEERING AND DESIGN, LTD 5485 RENO CORPORATE DR., SUITE 200B RENO, NV 89511 PHONE: (775) 856-3312</p>	<p>JOB NO. 04-008.30 DATE 12/10/18 SHEET 2 OF 3</p>

Subdivision Tract Map 5331A



LINE TABLE

LINE	BEARING	DISTANCE
L1	S 74°52'34" W	32.50'
L2	S 10°07'29" E	130.00'
L3	S 74°52'34" W	130.00'
L4	S 12°27'00" E	215.00'
L5	N 82°52'50" E	170.00'
L6	S 49°03'24" W	114.89'
L7	S 17°02'16" W	104.97'
L8	S 30°31'38" W	142.55'
L9	S 53°39'28" W	72.02'
L10	S 62°50'32" W	258.65'
L11	N 41°12'03" E	253.31'
L12	N 81°52'10" E	123.14'
L13	N 17°00'02" E	185.53'
L14	S 03°53'45" W	77.79'
L15	S 21°29'34" E	50.52'
L16	S 14°34'52" E	51.15'
L17	S 68°43'00" E	156.12'

CURVE TABLE

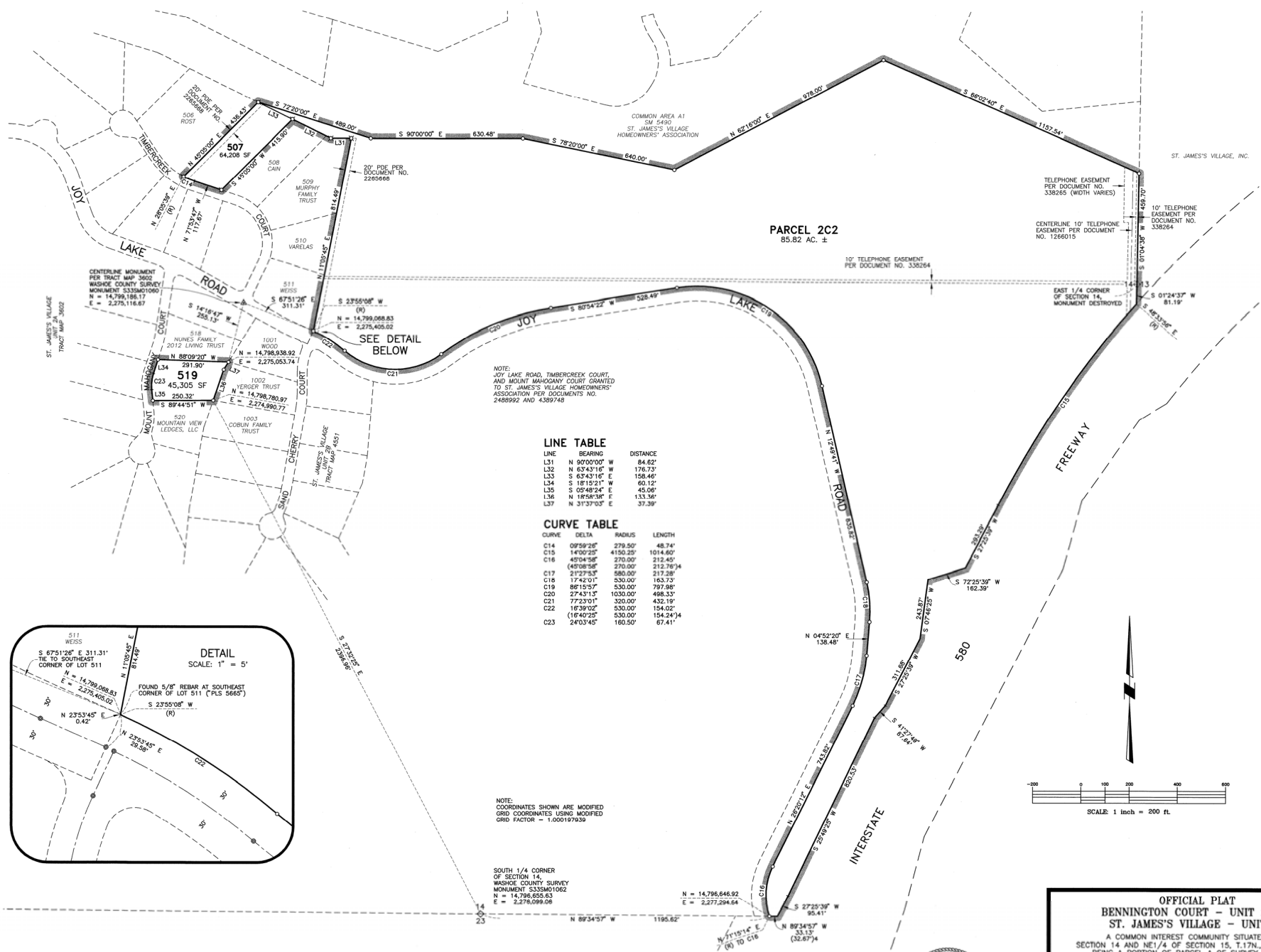
CURVE	DELTA	RADIUS	LENGTH
C1	09°03'20"	987.50'	156.07'
C2	19°12'00"	1467.50'	389.31'
C3	56°18'06"	20.00'	19.64'
C4	11°44'12"	201.50'	41.28'
C5	01°03'21"	520.50'	9.59'
C6	24°28'02"	620.50'	264.97'
C7	19°12'12"	578.50'	184.23'
C8	76°02'45"	50.00'	66.36'
C9	54°56'13"	50.00'	47.84'
C10	130°58'56"	50.00'	114.30'
C11	50°50'45"	30.00'	26.62'
C12	08°22'29"	578.50'	84.70'
C13	07°17'19"	120.50'	15.33'

CURVATURE IMPROVEMENTS
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

4928453

5331A
CURVATURE IMPROVEMENTS
SHOULD BE EXAMINED

81E35

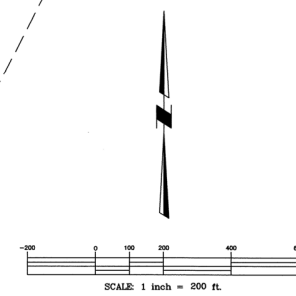


LINE TABLE

LINE	BEARING	DISTANCE
L31	N 90°00'00" W	84.62'
L32	N 63°43'16" W	176.75'
L33	S 63°43'16" E	158.46'
L34	S 18°15'21" W	60.12'
L35	S 05°48'24" E	45.06'
L36	N 18°58'34" E	133.36'
L37	N 31°33'03" E	37.39'

CURVE TABLE

CURVE	DELTA	RADIUS	LENGTH
C14	09°59'26"	279.50'	48.74'
C15	14°00'25"	4150.25'	1014.60'
C16	48°04'58"	270.00'	212.40'
C17	49°08'58"	270.00'	212.76'
C18	17°42'01"	530.00'	163.73'
C19	86°15'57"	530.00'	797.88'
C20	27°43'13"	1030.00'	468.33'
C21	77°23'01"	320.00'	432.19'
C22	16°39'02"	530.00'	154.02'
C23	24°03'45"	160.50'	67.41'



OFFICIAL PLAT
BENNINGTON COURT - UNIT 2 AND
ST. JAMES'S VILLAGE - UNIT 2D

A COMMON INTEREST COMMUNITY SITUATE WITHIN
SECTION 14 AND NE1/4 OF SECTION 15, T.17N., R.19E., M.D.M.
BEING A PORTION OF PARCEL A OF SURVEY MAP 4040,
AND PARCELS 322A AND 2C1 OF SURVEY MAP 5490

WASHOE COUNTY NEVADA

C & M ENGINEERING AND DESIGN, LTD.
5488 RENO CORPORATE DR., SUITE 200B
RENO, NV 89511
PHONE: (775) 856-3312

JOB NO. 04-008.30
DATE 12/10/18
SHEET 3 OF 3



Subdivision Tract Map 5331 B

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP

5331 B

CUMULATIVE INDEXES
SHOULD BE EXAMINED
FOR ANY SUBSEQUENT
CHANGES TO THIS MAP



February 28, 2019

Project: ST JAMES'S VILLAGE UNIT 2D AND
BENNINGTON CT. UNIT 2
JOY LAKE RD. AND BENNINGTON CT.
SFR (7 LOTS)
LANDSCAPING: N/A

Tim Wilson, P.E.
State of Nevada
Division of Water Resources
901 S. Stewart St.
Carson City, NV 89701-5250

Water Rights (AF): 5.57
Demand (AF): 5.57
Permit No(s) (AF): 59330 (5.57AF)

Dear Mr. Wilson:

We have reviewed the plans for the above referenced development ("Project") as submitted to the Truckee Meadows Water Authority (TMWA) and have determined the Project is within TMWA's retail service territory. This letter constitutes a commitment that the applicant for the Project has dedicated sufficient water resources to TMWA to meet the demand described above, and that TMWA has sufficient water resources to deliver water in the amount of the demand to the Project. The water demand stated herein is an estimate based on the information provided by the applicant.

This commitment is made subject to all applicable TMWA Rules. This commitment does not constitute an obligation to provide water service to the Project under NAC 445A or to provide planning, design or construction of the water facilities necessary for service to the project. The provision of water service is conditional upon applicant's satisfaction of all other applicable provisions of TMWA's Rules and Rate Schedules and requirements of the local health authority, including, without limitation and where applicable, the submission of a specific development proposal with a complete Application for Service, payment of fees, review and approval of a water facilities plan, the construction and dedication of water system facilities, final approval of the water facility plan by the local health authority, and approval of and execution of a Water Service Agreement.

Please be advised that completing this process can be time consuming, and there is no guarantee of how long the approval process, including approval from the local health authority, may take or that such approval will be granted. Once final approval is received from the local health authority, TMWA will prepare the Water Service Agreement which includes all fees the applicant must pay TMWA prior to water being delivered to the project.

Since the subject water rights are permitted rights, no guarantee by TMWA is required for these rights.

Should the approval of this Project expire or be terminated by the local governing body, this commitment shall automatically terminate and be deemed void.

Very truly yours,


John R. Zimmerman, Esq.
Water Resources Manager

JZ/dn
cc: ST. JAMES'S VILLAGE, INC.

**ST. JAMES'S VILLAGE UNIT 2 & 2D - 7 LOTS
GROUND WATER RIGHTS AND METER FUND CONTRIBUTION
CALCULATION WORKSHEET**

Line No.	Lot Number	Lot Size	Demand Calculation
1	309	63,741	0.80
2	316	70,900	0.81
3	317	72,340	0.81
4	322	65,994	0.80
5	330	59,310	0.79
6	507	64,208	0.80
7	519	45,305	0.76
			<u>5.57</u>
			Less: Demand Credits
			<u>0.00</u>
			NET PROJECT DEMAND
			5.57
TOTAL WATER RIGHTS REQUIRED			5.57

Quote is valid for 10 days
from date of statement.

18-0602, St. James's Village Unit 2 and 2D, 7 Lots, 12-2018
2/28/2019
3:20 PM



**DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF WATER RESOURCES**

901 South Stewart Street, Suite 2002
Carson City, Nevada 89701-5250
(775) 684-2800 • Fax (775) 684-2811
<http://water.nv.gov>

April 22, 2019

To: John Zimmerman
Water Resource Manager
Truckee Meadows Water Authority
1355 Capital Boulevard
Reno, NV 89502

Re: Final Subdivision Review No. 21017-F, Permit 59330

Name: *Bennington Court – Unit 2 and St. James's Village – Unit 2D*

County: Washoe County – St. James's Village

Location: A portion of Section 14 and the northeast quarter of Section 15, Township 17 North, Range 19 East, MDB&M.

Plat: Final: Seven (7) lots, common areas and right-of-ways, totaling approximately 54.22 acres.

**Water Service
Commitment**

Allocation: 5.57 acre-feet annually has been allocated from Truckee Meadows Water Authority Permit 59330, all of which is demand.

**Owner-
Developer:** St. James's Village, Inc.
4100 Joy Lake Rd,
Reno, NV 89511

Engineer: C & M Engineering and Design, LTD
5488 Reno Corporate Drive, Suite 200B
Reno, NV 89511

Water Supply: Truckee Meadows Water Authority

General: A subdivision map was presented and approved by this office on April 22, 2019, as described on the **Bennington Court – Unit 2 and St. James's Village – Unit 2D** map.

Correspondence dated February 28, 2019, from Truckee Meadows Water Authority and signed by John Zimmerman, Manager Water Resources, Truckee Meadows Water Authority, to the Division of Water Resources states that Truckee Meadows Water Authority will serve water to the subject subdivision. This letter is a matter of public record on file in the Office of Division of Water Resources. This letter revises the allocation and changes a portion of the commitment from Permit 59330.

As provided in Nevada Revised Statutes (NRS) 278.377, a copy of this certificate must be furnished to the subdivider who in turn shall provide a copy of the certificate to each purchaser of land before the time the sale is completed. Any statement of approval is not a warranty or representation in favor of any person as to the safety or quantity of such water.

Action: Approved concerning water quantity as required by statute for **Bennington Court – Unit 2 and St. James's Village – Unit 2D** subdivision based on continued water service by Truckee Meadows Water Authority.

Best regards,



Malcolm J. Wilson, P.E.
Section Chief, Water Rights

TAW/lr

Serpa Well Pumping Test Report and Assessment of Local Groundwater System

Report Prepared for



and

Mr. Keith Serpa



Prepared by



Confluence Water Resources, LLC

June 2018

Reviewed By: Nevada Division of Water Resources

Revised: October 2018

Serpa Well Pumping Test Report & Assessment of Local Groundwater System



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Nevada Division of Water Resources

Revised October 2018

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Appendices

Appendix A: Work Plan for FCW Constant Rate Pumping Test
Appendix B: Water Level Trend Charts
Appendix C: Well Drillers Reports
Appendix D: Laboratory Analytical Report

1 Purpose and Scope

This report has been prepared by Confluence Water Resources (CWR) to characterize the groundwater resources associated with Saint James Village and the Serpa Well, hereinafter referred to as the Falcon Capital Well (FCW), which is located within the NW¼, NE¼, of Section 23, T17N, R19E, Mount Diablo Baseline and Meridian. **Figure 1** shows the location of the FCW.

The results of the characterization work and the groundwater testing presented in this report are presented to examine aquifer dynamics and to determine if there is an influence with other water rights holders or domestic well owners. Although the FCW does not meet construction standards for a municipal water supply well, the well was selected to complete evaluations required to assess potential impacts to the Mount Rose Fan groundwater system and adjacent aquifers from prolonged extraction of groundwater at the FCW location. A long-term constant rate pumping and recovery test was performed to assess hydrogeological boundary conditions, groundwater quality, impacts to other wells and potential water production.

CWR worked directly with the Truckee Meadows Water Authority (TMWA) to develop a work plan and conformance criteria for administration of the long-term constant rate test. The work plan identified the monitoring network and protocol for administration of data collection. CWR and TMWA worked together to collect monitoring data, sufficient to support the assessment. The following work was thus accomplished:

- Redevelopment of FCW and Video Survey.
- Collection of Background and Pre-Test Water Levels.
- Collection of Groundwater and Surface Water Quality Samples.
- Collection of Flow Measurements along Browns Creek and Return Ditch to Washoe Valley.
- Administration of a Step Drawdown and Recovery Test of the FCW.
- Administration of a 10 Consecutive Day Constant Rate Discharge and Recovery Test of the FCW.
- Collection of Post-Pumping Test Water Levels.
- Data Analyses and Assessment of Potential Cumulative Impacts.
- Assessment of Available Water Resources and Likely Performance of New Production Wells.

The work plan, methods and equipment used to complete the work described above are provided in **Appendix A**.

2 Summary of Conclusions

The results of the testing, monitoring and analyses of data collected from the constant rate pumping and recovery test are summarized below:

- The FCW was pumped at a constant rate of 406 gallons per minute (gpm) for ten (10) consecutive days. The total drawdown over 10 consecutive days of pumping was 100.63 feet.

- The Specific Capacity at a rate of 406 gpm is about 4 gpm/Ft. Well efficiency is approximately 40.7% at 450 gpm and 67.3% at 150 gpm.
- The Transmissivity of the formation, which the FCW is screened, was estimated from both the rate of drawdown and rate of recovery in the pumped well. The range in Transmissivity values between the Theis Recovery and Cooper-Jacob drawdown is (7,163 Ft²/Day vs. 3,712 Ft²/Day).
- The rate of recovery in the well bore is thought to be influenced by borehole storage effects and not by water siphoning down the drop pipe to the pump once pumping had been terminated. The Transmissivity estimated from the recovery data is expected to be slightly over estimated based on this initial response. The late time drawdown data is expected to provide a more reliable estimate of Transmissivity.
- The Transmissivity estimated from Cooper-Jacob drawdown is approximately 3,712 Ft²/Day.
- Transmissivity at OWE-3 was estimated to be approximately 11,082 Ft²/Day with Storativity of approximately 4.53E-03. Detrended data suggests the transmissivity is closer to 7,337 Ft²/Day with Storativity of approximately 7.78E-03.
- Transmissivity at OWE-4 was estimated to be 7,460 Ft²/Day with Storativity of approximately 2.72E-03. Detrended data suggests the transmissivity is closer to 9,135 Ft²/Day with Storativity of approximately 1.24E-03.
- Total drawdown response at OWE-3 was approximately 4.0 feet after 10 consecutive days of pumping at the FCW. The 14-Day post-test recovered water level was within 68% of the pretest water level trend in the well.
- Total drawdown response at OWE-4 was approximately 3.5 feet after 10 consecutive days of pumping at the FCW. The 14-Day post-test recovered water level was within 74% of the pretest water level trend in the well.
- Derivative analyses of drawdown showed some evidence of a constant head boundary or infinite radial recharge boundary condition during the test. However, this boundary condition did not persist, and several no-flow boundaries were later identified. These no-flow boundaries provide evidence of a faulted or fractured hydrogeological regime.
- A potentiometric surface map was generated from measured water level elevations within the evaluation area. The data indicates groundwater within the vicinity of the FCW flows from west to east, 18° southeast at an average gradient of about 0.07 Ft/Ft and not in a northwest direction.
- Pre-test water levels in wells north and west of Browns Creek exhibited an increase in trend throughout the duration of the pumping test, and through the post-test recovery period. There was no response in any of the wells north of Browns Creek resulting from pumping of the FCW.
- Water quality analyses exhibit two very distinctive affinities between the FCW groundwater and SP-1 vs. the water sampled from Browns Creek.
- During the time of the evaluation, nearly 90% of the flow from Browns Creek was diverted into Washoe Valley adjacent to OWE-3. This diversion is expected to occur

per water rights permits. There are two points of diversion on Browns Creek, the upper diversion for water righted land in Washoe Valley (the old Winters Ranch) and the lower diversion to Little Washoe Lake. The lower diversion combines water from both Galena Creek and Browns Creek into storage in Little Washoe Lake.

- Impacts to water resources north of Browns Creek are not expected to occur from long-term extraction of groundwater at the FCW.
- Long-term extraction of groundwater is expected to influence domestic wells in Washoe Valley and TMWA operated municipal supply wells OWE-3 and OWE-4 also located in Washoe Valley. By applying a conservative Transmissivity of 3,721 Ft²/day from the FCW and a calculated average Storativity of .005 from the detrended data, a Theis based simulation of time and drawdown was produced. The Theis analysis generally agrees with the response observed during the long-term test since well loss was not accounted for. The simulation indicates over 800 gpm could continuously be extracted from the aquifer via a high capacity well or series of wells for a duration over five consecutive years.
- A Theis simulation was produced to assumes continuouse extraction of groundwater at a rate of 800 gpm for over five consecutive years. The simulation resulted in a drawdown stress of over 20 feet, extenuating over one (1) mile from the FCW. The stress is expected to occur in the direction of OWE-3 and OWE-4 in Washoe Valley and not in the direction of the up-gradient and cross-gradient wells, north of Browns Creek.
- Browns Creek may recharge the groundwater system. The flow measurements collected from BC-1 and BC-2 indicate Browns Creek may lose approximately 0.43 Ft³/sec or about 193 gpm between this reach during the time of the evaluation.
- This evaluation does not take into consideration recharge components from precipitation to the groundwater system, seasonal trends in water levels, moon and tide affects, pumping of other domestic or municipal wells, or other factors outside the stress exclusively induced from the pumping test of the FCW. However, the water level measurements from OWE-3 and OWE-4 were de-trended to better assess the stress induced from pumping of the FCW (*McGinley and Associates 2018*).

3 Hydrogeological Setting

3.1 Hydrogeological Setting

The FCW is located within NW ¼, NE ¼, of Section 23, T17N, R19E. **Table 1** provides the location coordinates for the FCW and the observation wells within the evaluation area. The evaluation area is located within Section 10, 11, 12, 13, 14, 15 and Section 23 of T17N, R19E. The geologic map of the *1999 Carson City 30 x 60 Minute Quadrangle, Nevada by John H. Stewart, Nevada Bureau of Mines and Geology* presents the regional geologic materials. **Figure 2** presents a map of the geology within the evaluation area. The FCW is located within Washoe Valley, Nevada Groundwater Basin 89. The evaluation area straddles both Groundwater Basins 88 (Pleasant Valley) and 89 (Washoe Valley).

The rocks at the FCW are bounded to the west by the Carson Range of the Sierra Nevada and on the east by the Virginia Range. Washoe Lake is located about 1-mile south east of

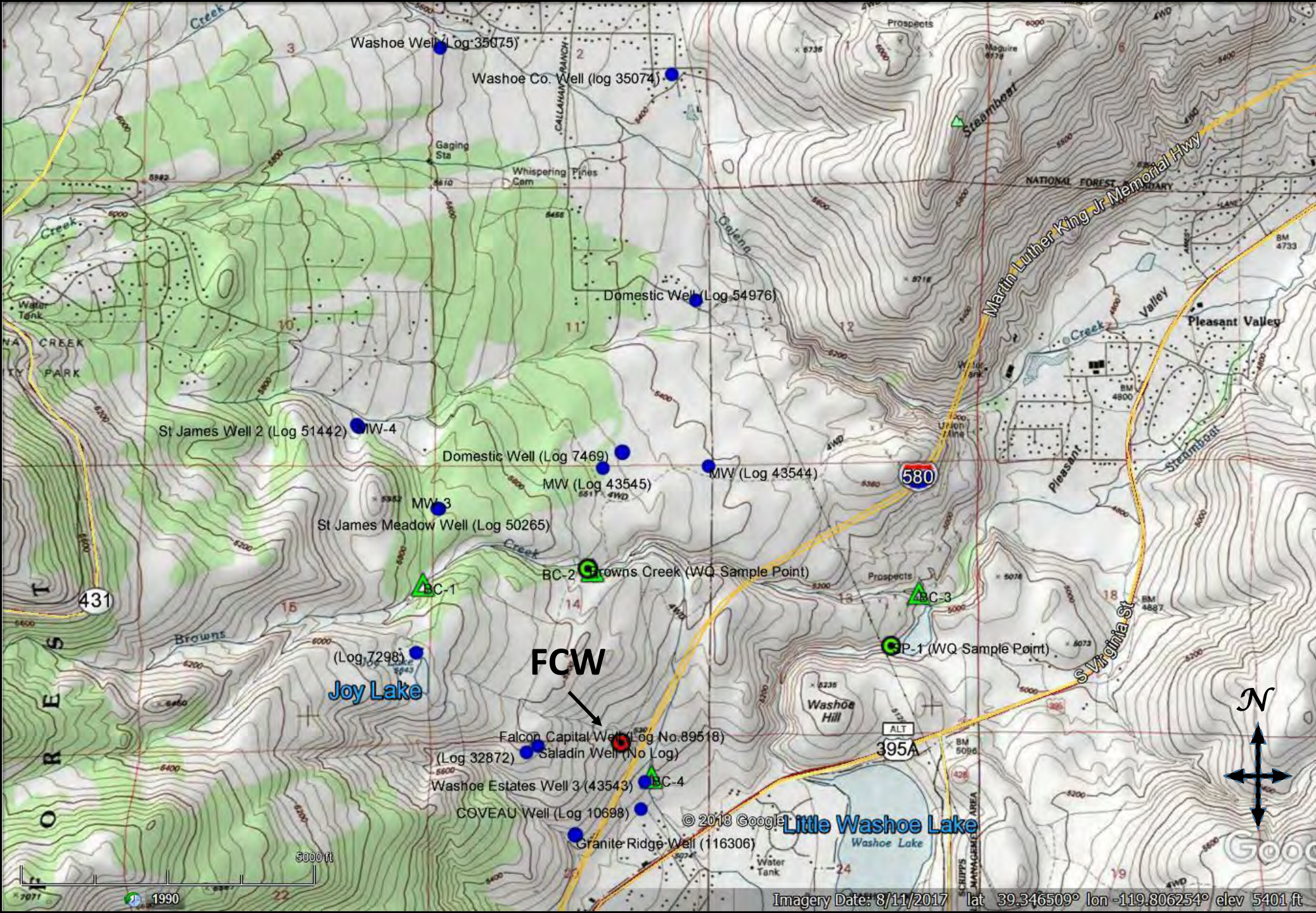
the FCW. Browns Creek is located approximately 0.6 miles to the north. The well drillers report for the FCW (**Appendix C**) indicate the underlying geology consists of broken volcanics. The geologic map indicates these rocks may consist of fractured andesite and dacite.

A series of five Pleistocene rhyolite domes (Qsh) occur along a NE-SW fault trend. The Steamboat Hills geothermal field occurs predominantly along this same NE-SW trending fault system within the granitic rocks (Skalbeck et.al 2002). According to Skalbeck, the thick zone of altered rocks along the western flank of the Steamboat Hills is coincident with a north-NW trending fault that may represent a previously unrecognized upflow zone for the steamboat geothermal system. The NE-trending fault system along the axis of the Steamboat Hills likely conducts the thermal water toward the geothermal production areas and eventually discharges to the alluvial deposits northeast of Steamboat Hills along north-trending faults (Skalbeck, et. al., 2002). The FCW is likely located along strike of this fault system. Ambient groundwater temperature typically ranges from between 50°F and 55°F. Water temperature from the FCW pumping test was measured via a dedicated down-hole Level Troll pressure transducer. Water temperature throughout the test was consistently about 70°F.

3.2 Depth to Groundwater, Gradient and Flow Direction

Groundwater elevations within the evaluation area range from between 5,440 feet above mean sea level (feet AMSL) at ST. James Production Well 1 and 5,093 feet AMSL at the Edmund Coveau Well in Washoe Valley. Groundwater elevations have been approximated based on measured or reported depth to water in wells, relative to wellhead elevations estimated from Google Earth and land topography maps. The measured water levels used to approximate groundwater elevations were collected before the pumping test began to provide a snapshot in time approximation of the groundwater contour within the evaluation area (potentiometric surface). **Table 1** presents a tabulation of details for the wells examined within the evaluation area. The well details include depth to static groundwater, well completion information, approximate location of wells and expected geology at each well. **Figure 3** and **Figure 4** present potentiometric surface maps at 50-foot contour and 5 foot contour intervals respectively. The contours were generated using groundwater contouring software (SURFER). The contours were generated using a combination of natural neighbor raster and Kriging.

Groundwater near the FCW flows from west to east, -18° southeast at an average gradient of 0.07 Ft/Ft. North of Browns Creek, groundwater appears to generally follow the land contours. Groundwater levels within the Montreux and Callahan Ranch areas suggest flow originates from the west and flows to the east towards the Mt. Rose Fan, then doglegs in a southerly direction near Washoe County Mt. Rose Well 3 and 5, and then follows the land contour along axis of Galena Creek. There is no indication that the axis of primary groundwater flow within the evaluation area is in a northerly direction. Static groundwater measured at the FCW is 247 feet below ground surface (feet bgs) from the top of the steel well casing. The elevation of groundwater at the FCW is approximately 5,080 Ft AMSL. The groundwater elevation at OWE-3 is approximately 5,079 Ft AMSL. The elevations suggest the lower diversion ditch that is located within approximately 100 feet of OWE-3 could be influencing the water level of the well. Groundwater in this area flows in an east – southeast direction (**Figure 3**).



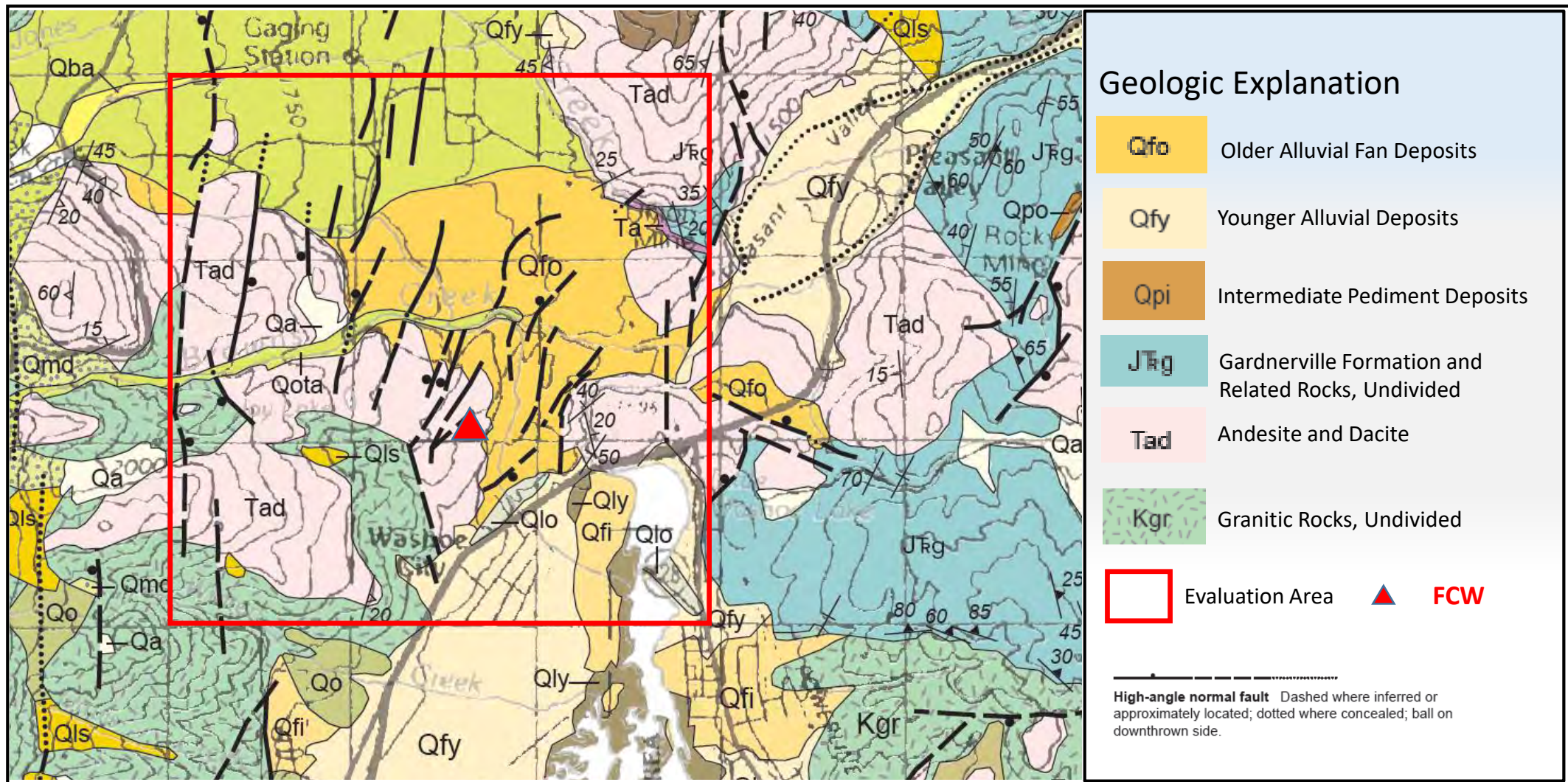
Serpa Well Pumping Test Report and Assessment of Local Groundwater System	
1-inch = 0.4 Miles	T19N R17E

Observation Wells	●
Stream Gauge Site	▲
Surface WQ Sampling Point	●

Prepared for:

ST. JAMES'S VILLAGE

Figure 1
Project Area and Well Location
Map



From: John H. Steward, 1999 Geologic Map of the Carson City 30 X 60 Minute Quadrangle, Nevada

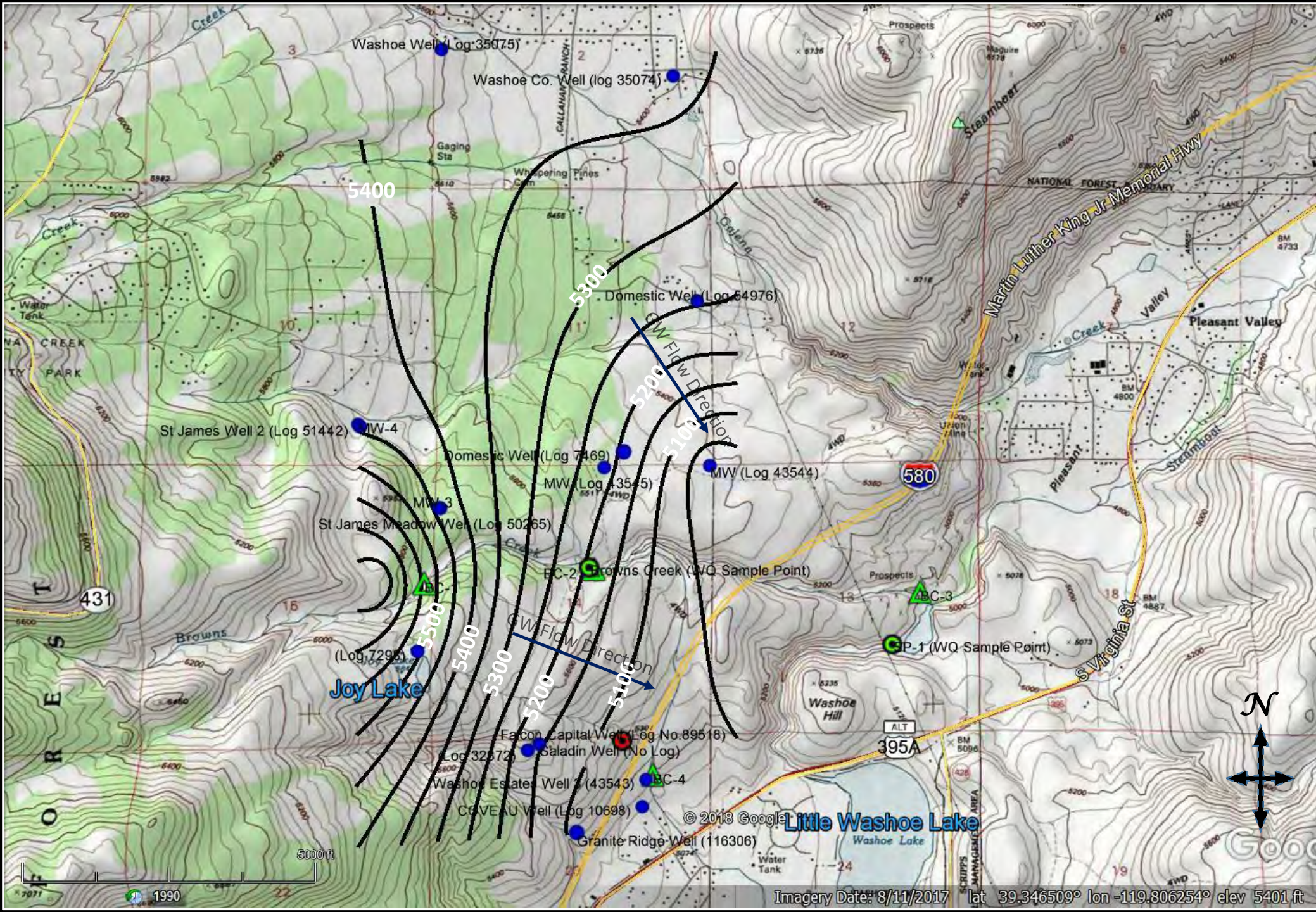



1 Mile or 1.6 Km
Contour Interval: 50 Meters
Date: 5/12/2018

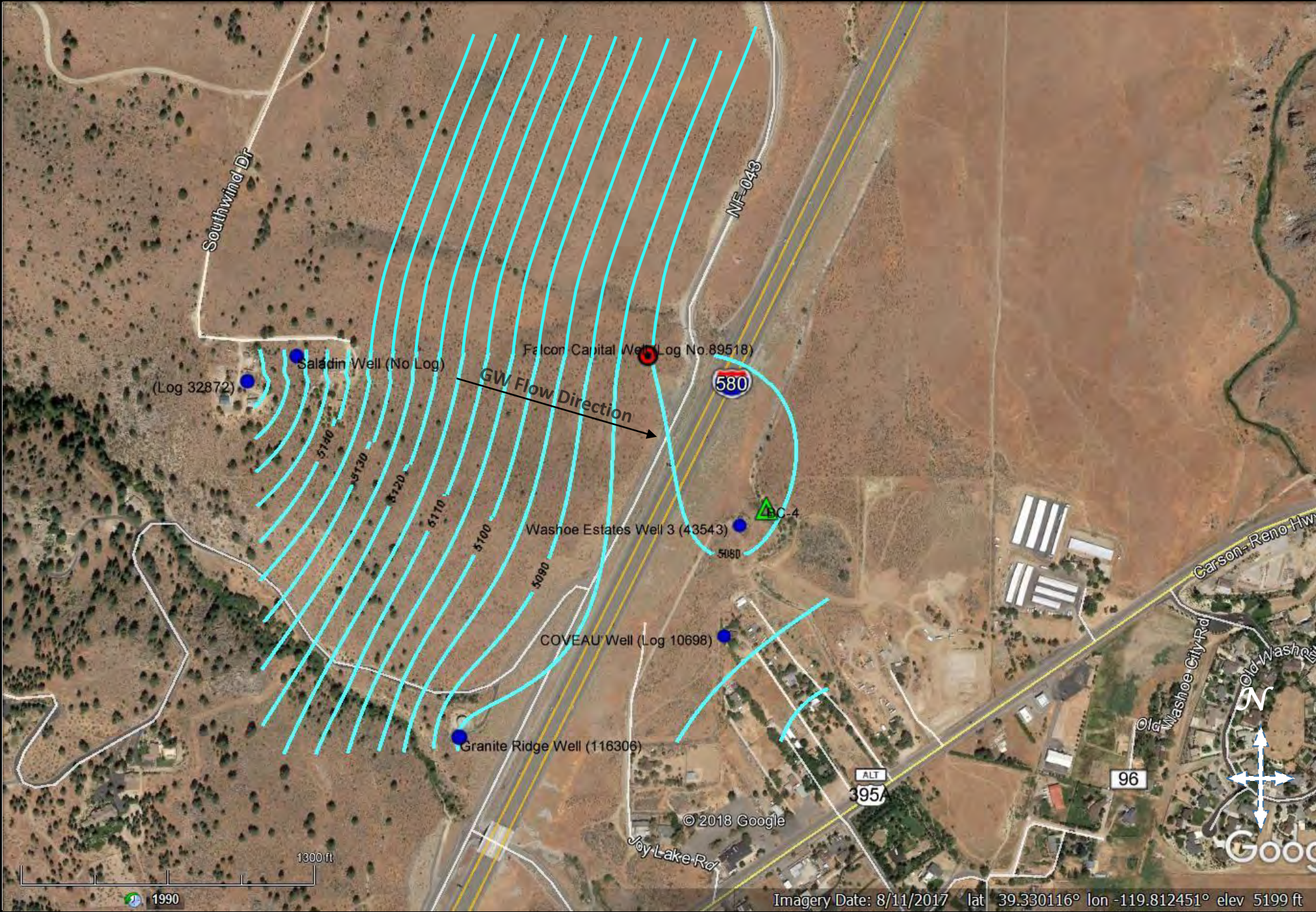
Serpa Well Pumping Test Report and Assessment of Local Groundwater System

Geologic Map of Evaluation Area

Figure 2



Serpa Well Pumping Test Report and Assessment of Local Groundwater System	Observation Wells Stream Gauge Site Surface WQ Sampling Point
1-inch = 0.4 Mile T19N R17E	
Prepared for:  ST. JAMES'S VILLAGE	Figure 3 Potentiometric Surface Map 50 FT Contour Interval




Serpa Well Pumping Test Report and Assessment of Local Groundwater System	Observation Wells	●
	Stream Gauge Site	▲
1-inch = 520 FT	T19N R17E	
Prepared for:	 ST. JAMES'S VILLAGE	
Figure 4 Potentiometric Surface Map 5 FT Contour Interval		

Table 1: Well Information and Water Levels

Well ID	Well Log No.	Type	APN	Latitude	Longitude	Approximate Well Collar Elv. (Ft amsl) From Top of Steel Casing	Well Depth	Screen Interval (Top) Ft bgs	Screen Interval (Bottom) Ft bgs	Screen Elevation (Top) Ft amsl	Screen Elevation (Bottom) Ft amsl	Geologic Unit Screened	Depth to Water (Ft bgs)	Approximate Groundwater Elevation (Ft amsl)	TMWA SCADA	TMWA TDX	CWR TDX	Well Responded to Pumping Test
Falcon Capital Well (Pumping Test Well)	89518	H	046-080-38	39.331428°	-119.813875°	5,327	697	290	690	5,037	4,637	Tad	247	5,080	No	No	Yes	Yes
Washoe Estates Well 3 (OWE-3)	43543	P	046-080-06	39.329199°	-119.812353°	5,168	300	190	270	4,978	4,898	Qfy	89.4	5,079	No	No	Yes	Yes
Washoe Estates Well 4	116306	P	046-080-34	39.326487°	-119.816939°	5,262	470	360	460	4,902	4,802	Tad	178.75	5,083	No	No	Yes	Yes
COVEAU, EDMUND E. Well	10698	H	046-080-43	39.326294°	-119.810825°	5,110	90	74	87	5,036	5,023	Qft	16.53	5,093	No	No	Yes	Yes
Danzinger Well	32872	H	046-060-18	39.331033°	-119.820234°	5,584	650	530	650	5,054	4,934	Tad	420	5,164	Monitoring By Home Owner			No
Saladin Well	No Log	H	046-060-19	39.331349°	-119.819464°	5,572	NA	NA	NA	NA	NA	NA	NA	NA	Monitoring By Home Owner			No
Joy Lake Well	7298	H	046-190-13	NE,SE Sec 15	T17N, R19E	5,840	390	316	348	5,524	5,492	Tad	150	5,690	No	No	No	No
St. James Production Well 1 (Nadia Ct Well)	51442	P	154-011-06	39.348043°	-119.831452°	5,694	620	260	620	5,434	5,074	Tad	255	5,439	Yes	Yes	No	No
St. James Production Well 2 (Meadow Well)	50265	P	046-131-22	39.343788°	-119.826017°	5,720	590	350	590	5,370	5,130	Tad	290	5,430	Yes	Yes	No	No
St. James MW-3 (Near Meadow Well)	NA	MW	046-131-22	39.343787°	-119.826017°	5,722	NA	NA	NA	NA	NA	NA	293.31	5,429	No	Yes	No	No
St. James MW-4 (Nadia Ct MW) Per TMWA	43547	MW	154-011-06	39.348042°	-119.831452°	5,692	360	240	360	240	360	Tad	250	5,442	No	Yes	No	No
St. James MW-1, 22 N. Earlhان Ct.	43544	MW	156-061-01	39.346006°	-119.807950°	5,414	770	470	770	4,944	4,644	Qfo	404.8	5,009	No	Yes	No	No
St. James MW-2, 189 Carlton Ct.	43545	MW	156-061-01	39.345909°	-119.815110°	5,507	640	530	630	4,977	4,877	Qfo	286.8	5,220	No	Yes	No	No
Domestic Well	4769	H	NA	SW,SE Sec 11	T17N R19E	5,485	144	135	144	5,350	5,341	Qota	135	5,350	No	No	No	No
Wayne Capurro Well	54976	H	045-270-15	39.352907°	-119.806134°	5,285	157	75	157	5,210	5,128	Qfo	56	5,229	No	No	No	No
Washoe Co. Mt. Rose Well 5	35075	P	047-040-17	39.367914°	-119.826086°	5,608	802	400	780	5,208	4,828	Qota	244	5,364	Yes	Yes	No	No
Washoe Co. Mt. Rose Well 3	35074	P	045-082-13	39.366676°	-119.810458°	5,410	223	120	210	5,290	5,200	Qota	41	5,369	Yes	Yes	No	No

Feet Above Mean Sea Level (Ft amsl).
Feet Below Ground Surface (Ft bgs).
Yellow Highlighted Cells Require Validation of Coordinates.
TDX = Pressure Transducer.

4 Well and Aquifer Testing

From October 2017 to March 2018, several tests were conducted in the FCW to assess pumping dynamics and local aquifer parameters. The following work was completed and the results of these tests are summarized in Section 4.

- Video Survey of Well (October 20, 2017)
- Well development, brushing swabbing and pumping (Week of October 30 to November 5, 2017).
- Short-Term hydraulic test of FCW (November 1 and 2, 2017).
- Background Water Level Data Collection (February 1 to February 15, 2018)
- Step Drawdown Test of FCW (February 16 and 17, 2018).
- Ten Day Constant Rate Discharge Test of FCW (February 19 to March 1, 2018).
- 14 Day Recovery of FCW (March 1 to March 14, 2018).

4.1 Well Development and Short-Term Test

Carson Pump administered well development and the short-term test, under direction of CWR. Since the FCW had not been pumped for over a decade, well development was prescribed to evaluate the current conditions and potential pumping dynamics. Well development included brushing the well screen and pump surging using a double-ended swab tool. The method proved to be effective and the well was reconditioned for testing. On November 1, 2017 a four (4) hour short term pumping test of the FCW was performed, followed by a recovery period to pre-test static conditions. An assessment of the hydraulics of the formation, for which the well is screened assuming Specific Capacity, was performed according to (Driscoll, Fletcher 1986). The transmissivity was calculated to be about 2,400 Ft²/day. A graphical presentation of these analyses are presented in **Chart 1**. These data were presented to TMWA in the work plan for the long-term constant rate test. A copy of the work plan is provided in **Appendix A**. Based on the results of the short-term test, TMWA and CWR agreed that the appropriate target duration for the long-term test would be 10 consecutive days at a target constant discharge rate between 400 to 450 gpm.

WELL ID: Falcon Capital Well

Local ID: Falcon Capital Well

Date: 11/1/2017

Time: 9:00

INPUT

Construction:

Casing dia. (d_c) 8 Inch

Annulus dia. (d_w) 12 Inch

Screen Length (L) 400 Feet

Depths to:

water level (DTW) 250 Feet

Top of Aquifer 250 Feet

Base of Aquifer 690 Feet

Annular Fill:

across screen -- Gravel

above screen -- Cement

Aquifer Material -- Fractured Igneous and

FLOW RATE

250 GPM

COMPUTED

Aquifer thickness = 440 Feet

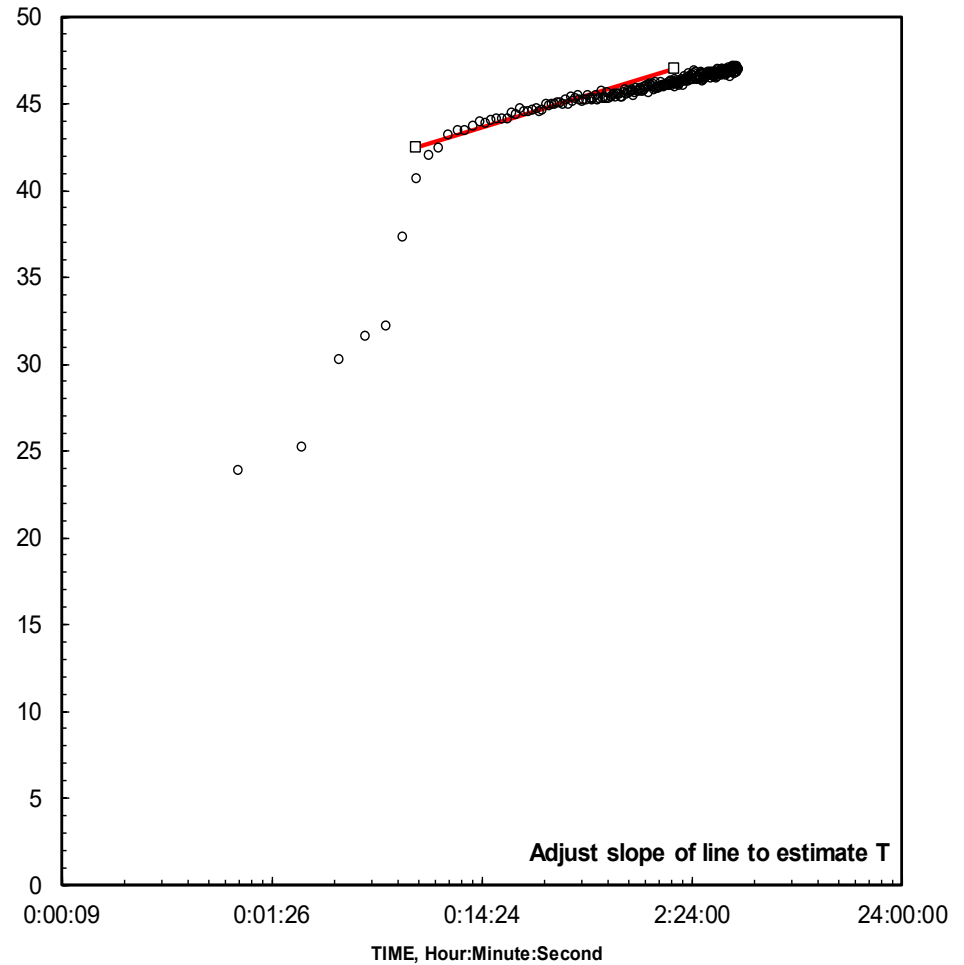
Slope = 3.6464316 Feet/log10

Input is consistent.

K = 5.5 Feet/Day

T = 2400 Feet²/Day

DRAWDOWN, IN FEET



REMARKS: Cooper-Jacob analysis of single-well aquifer test

Falcon Capital Well, St. James Village, Nevada.

Prepared for:



Falcon Capital Well Project
Saint James Village
Washoe County, Nevada

Cooper Jacob Analysis of Single Well
 Aquifer Test

Chart 1

4.2 Water Level Trends and Data Collection

Water level trends for observation wells selected within the evaluation area were monitored two weeks prior to initiation of the step test and constant rate discharge test. TMWA programmed pressure transducers located in the TMWA operated wells to begin recording water level measurements on one (1) minute time intervals on February 1, 2018. TMWA also worked with their operations management to limit pumping from production wells within the evaluation area. The TMWA SCADA system was also quarried for data two weeks prior to initiation of the constant rate test to establish baseline conditions and trends in water levels.

Initial water level measurements were collected via electrical water level indicators from all observation wells and the FCW to create a snapshot in time potentiometric surface map i.e. groundwater contour map of the evaluation area (**Figures 3 and 4**). CWR also deployed ventilated In-Situ Inc. Level Troll Pressure Transducers™ in wells without TMWA operated measuring devices or transducers, and programed them to record water level measurements on one (1) minute time intervals beginning on February 1, 2018. This time and data collection sequence allowed CWR and TMWA the ability to manage the data sets generated from each of the measuring devices and decipher trends in water levels.

4.2.1 Trends in St. James Wells

Trends in water levels from wells within the evaluation area are provided in **Appendix B**. The charts in the appendix show water level trends two weeks before the test, during the test, and up-to two weeks after the test was terminated. In general, water levels in all wells within the evaluation area appear to exhibit an upward trend. This is expected to coincide with the rate of regional recharge within the groundwater system. Despite of pumping from TMWA operated wells in St. James Village; the overall trend in water levels appears to be in an upward direction (see St. James Production Well 2 SCADA of **Appendix B**). The transducer in St. James MW-1 malfunctioned sometime during the evaluation and data was not retrievable from the device. Water level measurements collected from MW-1 via electric water level indicator did not significantly change throughout the duration of the investigation, and a trend could not be deciphered.

The upward trend in St. James wells continues through the duration of the FCW pumping test, and through the recovery period. There was no indication of change in the water level data, which would have suggested a deviation from this trend. The water level trends from wells north of Browns Creek suggests the stress propagated during the 10-Day pumping tests did not influence water levels of the St. James wells. The water level in St. James Production Well 2 (the Meadow Well) appears to have increased about three (3) feet from January to March of 2018 (see **Appendix B**).

4.2.2 Trends in Domestic Wells

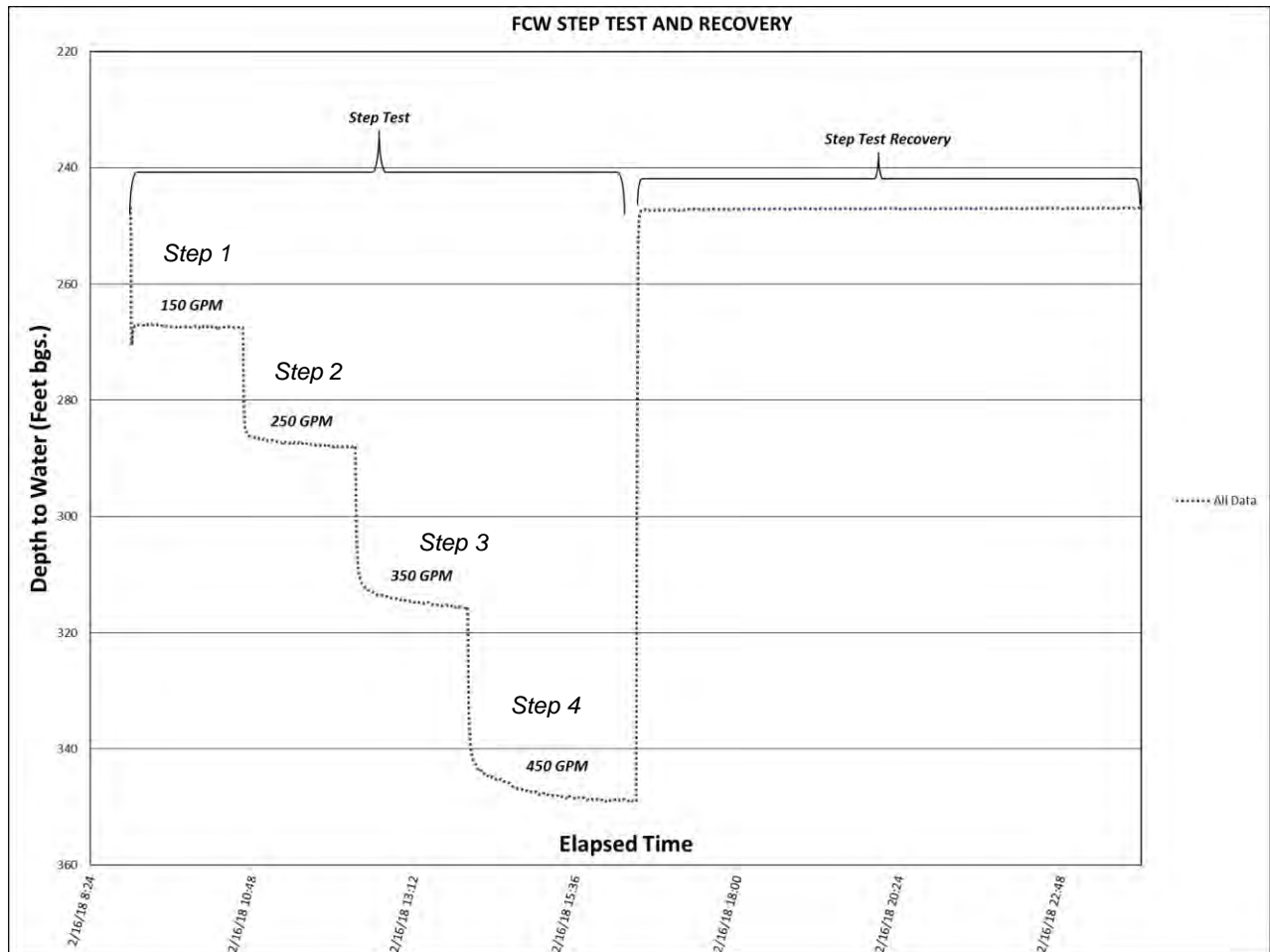
Domestic wells in Washoe Valley were inspected. However, due to constraints in well construction and pump arrangements, water level measurements were largely not achievable. The domestic well operated by Edmund Coveau provided some indication of depth to water in this area, and was monitored for trends before, during and after the FCW pumping test. A notice letter describing the proposed FCW pumping test was sent to the Danzinger and the Saladin residences who operate domestic wells west of the FCW. The notice letter advised the residence to monitor production rates from their respective wells and

report any changes in production during the time of the test to either CWR or TMWA. There was no report of loss of production from any of the domestic wells within the evaluation area.

4.3 Step Drawdown Test

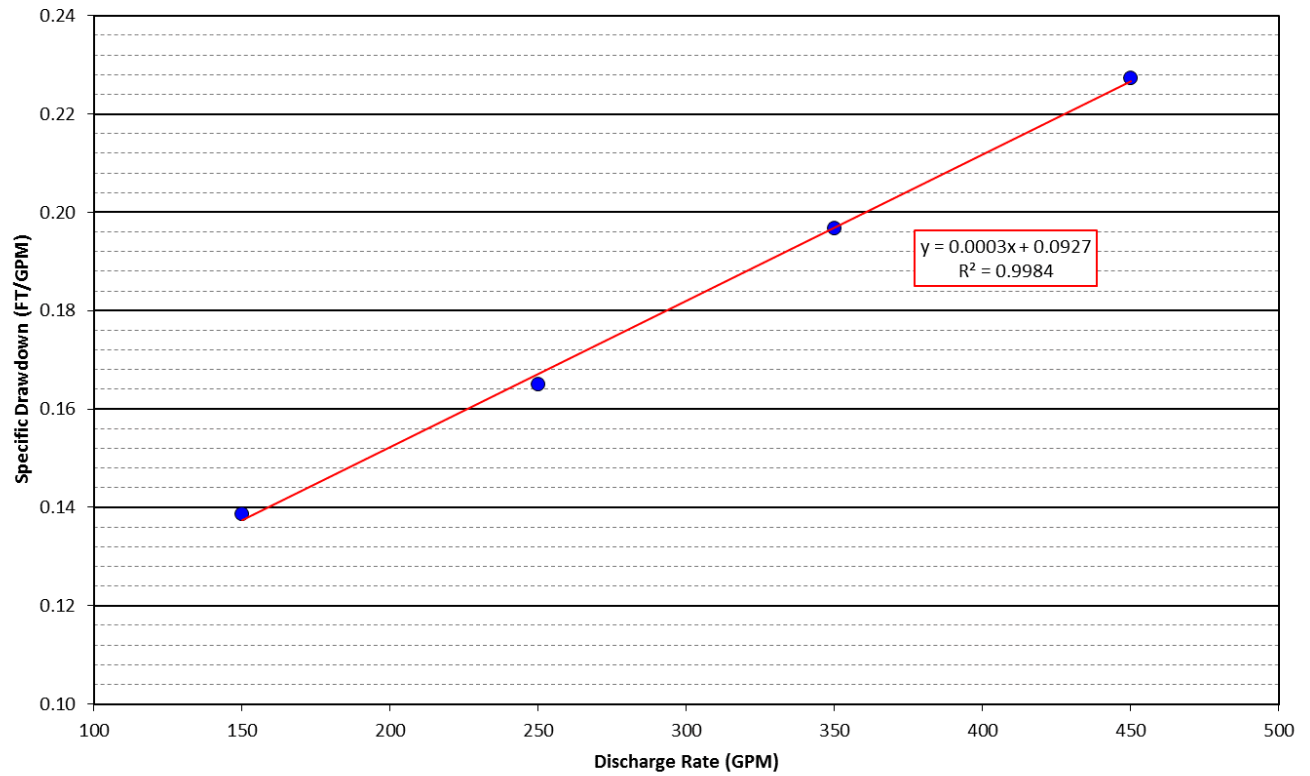
CWR and Carson Pump completed a step drawdown test of the FCW beginning at 9:00 am on February 16, 2018. The step test consisted of three, 100-minute steps and one, 150-minute step (four steps). Step test procedures are summarized in the work plan, which is provided in **Appendix A**. An annotated water level and pumpage hydrograph for the FCW during the step drawdown test is presented below (**Chart 2**).

Chart 2: Step Drawdown Test and Recovery



4.3.1 Interpretations

Well efficiency calculated from specific capacity and drawdown is about 40.7% at 450 gpm. It is theoretically impossible to have a 100% efficient well due to turbulence and frictional losses. Values for aquifer loss and well loss are estimated from equation for the line of best fit for points of specific drawdown and discharge, as plotted below in **Chart 3**. **Table 2** provides a tabulation of calculated step test parameters which include drawdown, specific capacity and well efficiencies at different pumping rates. The total discharge during the step test was approximately 142,500 gallons.

Chart 3: Specific Drawdown vs. Discharge Rate**FCW Step Test Analysis****Table 2: Step Test Parameters**

Step No.	Q (gpm)	Aquifer Loss BQ (ft)	Well Loss CQ ² (ft)	Calculated Drawdown S' (ft)	Calculated Specific Capacity Q/S' (gpm/ft)	Well Efficiency E (%)
1	150	13.91	6.75	20.66	7.26	67.3
2	250	23.18	18.75	41.93	5.96	55.3
3	350	32.45	36.75	69.20	5.06	46.9
4	450	41.72	60.75	102.47	4.39	40.7

4.4 Constant Rate Discharge Test of FCW

The constant rate discharge test of the FCW was conducted for ten (10) consecutive days or 240 hours. The test began at 10:00 am on February 19, 2018 and ended at 10:00 am on March 1, 2018. An average discharge rate of approximately 406 gpm was maintained through the duration of the test with approximately 60 psi of backpressure in the pump string.

Total drawdown in the FCW after 10 consecutive days of pumping was 100.63 feet. An annotated water level hydrograph showing drawdown and recovery is provided in **Chart 4**. Drawdown and depth to water for the FCW during the constant rate discharge test is presented in **Chart 5**. The total volume of groundwater pumped during the test was 5.84 Million gallons or about 18-acre feet.

Water level recovery data were collected for two weeks beginning at 10:00 am on March 1, 2018. Recovery data collection was terminated on March 14, 2018, when the recovered water level in the FCW had reached within 99% of the pre-test static water level. **Chart 6** presents a hydrograph detailing the recovery of the FCW after 10 consecutive days of pumping. **Chart 7** presents a scaled version of the latent recovery used for data analyses.

Chart 4: FCW 10-Day Test Drawdown and Recovery vs. Time

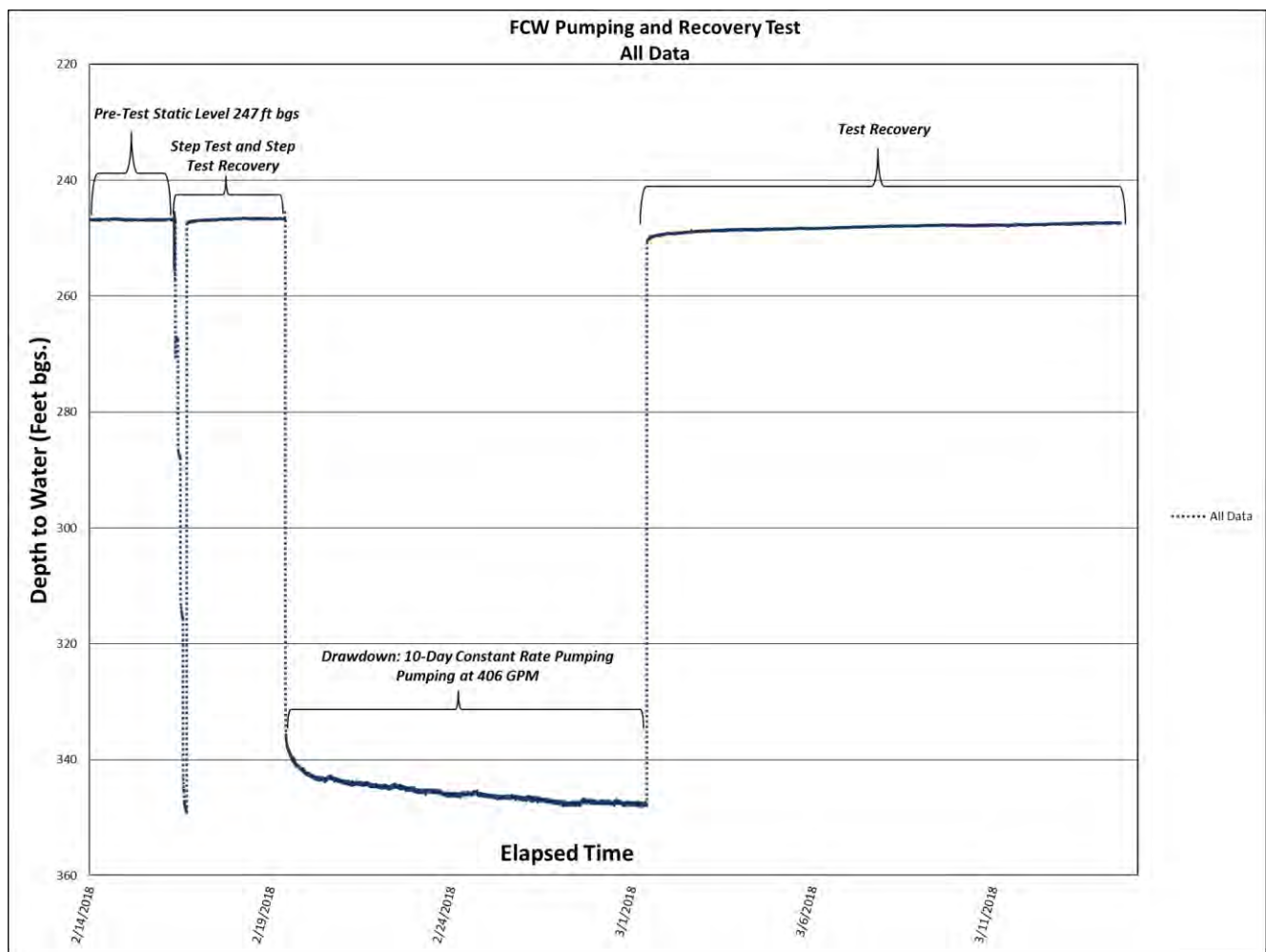


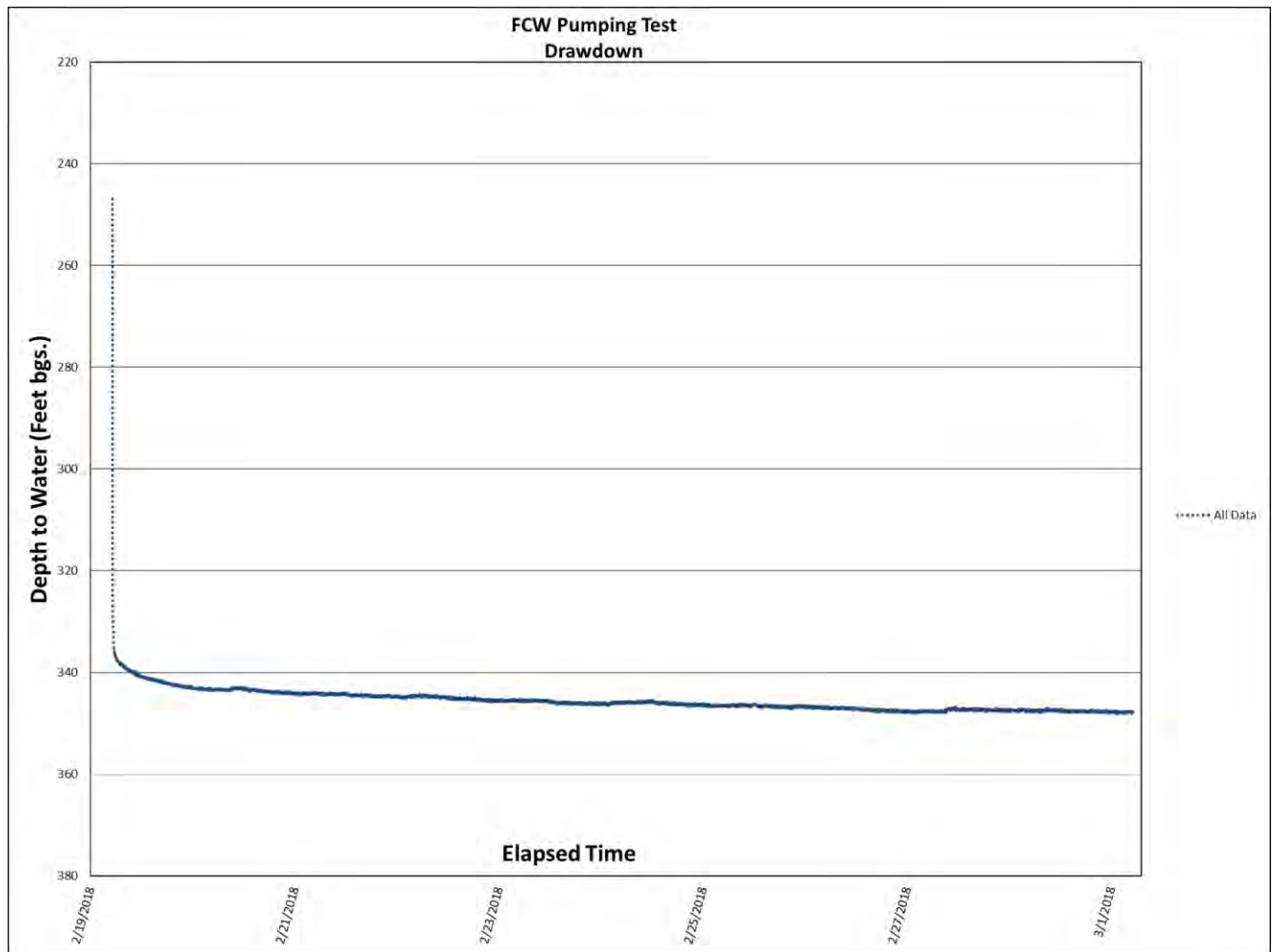
Chart 5: FCW 10-Day Test Drawdown vs. Time

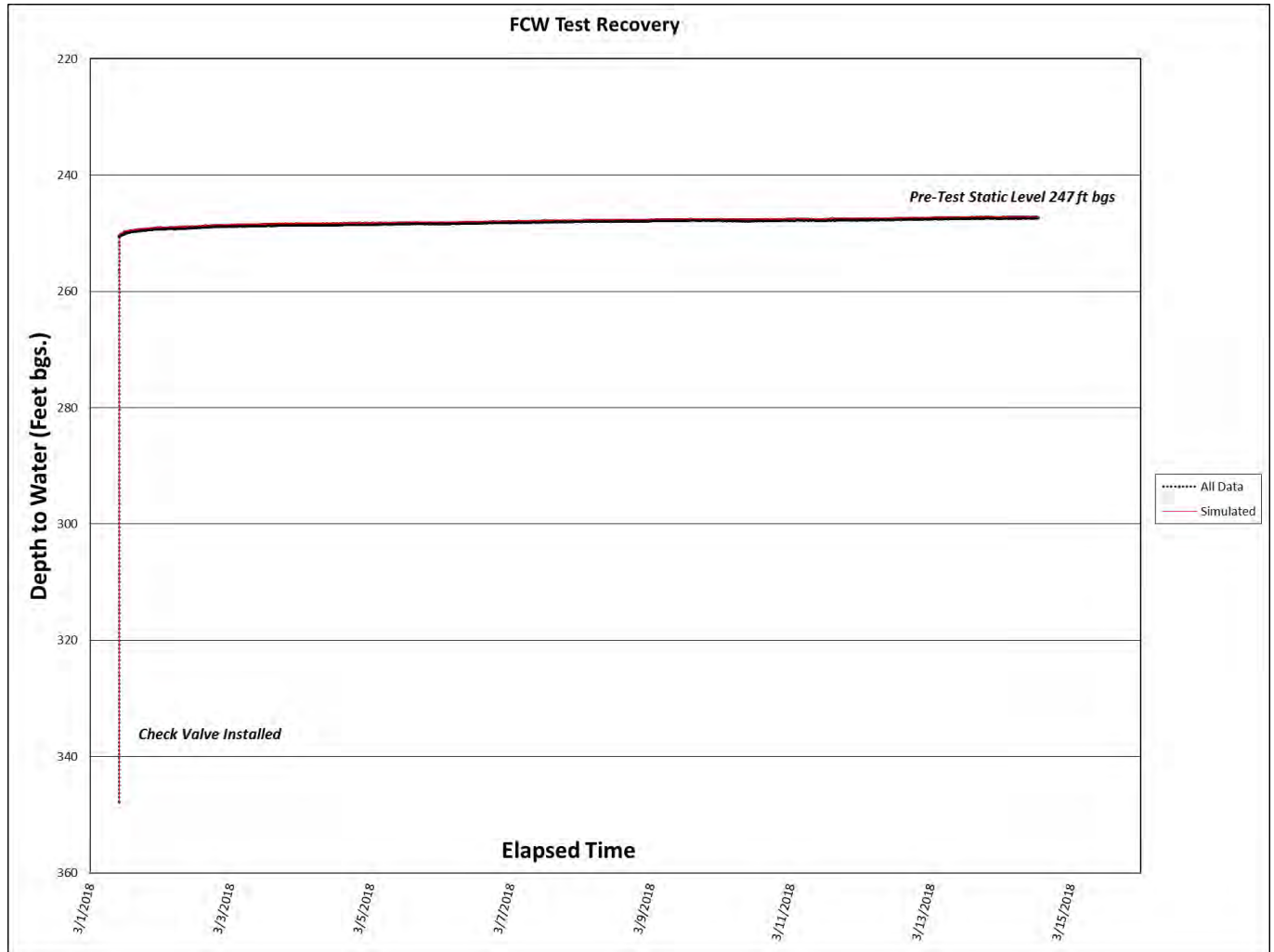
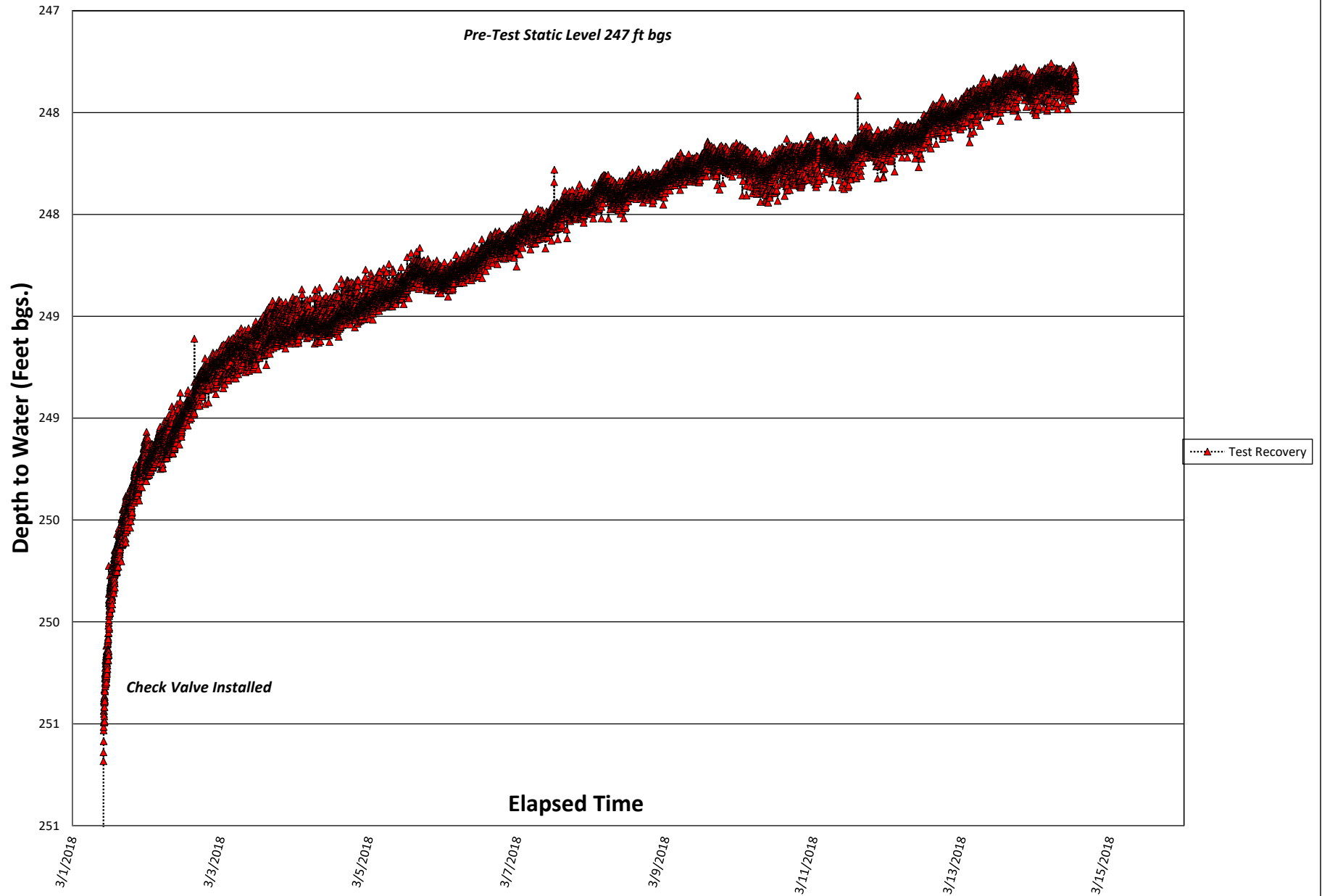
Chart 6: FCW 10-Day Test Recovery vs. Time

Chart 7: Scaled Test Recovery



4.5 Analyses and Interpretation of Pumping Test Results

Drawdown and recovery data collected from the FCW tests were used to calculate hydraulic conductivity values and transmissivity. **Table 3** lists the types of analysis completed, and the hydraulic conductivity values estimated from each analysis. Water-level recovery data were analyzed using two methods:

- Recovery in the “pumped” well following constant-rate pumping, using the Theis straight-line recovery method (Kruseman and DeRidder, 1970);
- Drawdown in the “pumped” well assuming non-equilibrium radial flow in a confined aquifer, using the Cooper-Jacob Straight-Line Time-Drawdown Method as described by CW. Fetter, Applied Hydrogeology, 2001, Fourth Edition.

Recovery data from the constant rate test were analyzed using the Theis Straight Line method (**Chart 8**). The red line is used to estimate $\Delta s'$ over one log cycle. The following assumptions are made when using both Cooper-Jacob drawdown and the Theis recovery solution:

- The aquifer has infinite areal extent.
- The aquifer is homogenous, isotropic and of uniform thickness.
- The well is fully penetrating.
- Flow to the well is horizontal.
- The aquifer is confined.
- Flow to the well is unsteady.
- Water is released instantaneously from storage with decline in hydraulic head, and
- The diameter of the well is infinitesimally small so that storage in the well can be neglected.

A mathematical solution by Theis (1935) is useful for determining the hydraulic properties (transmissivity) of non-leaky confined aquifers from recovery tests. Analysis involves matching the Theis recovery solution to water-level recovery (residual drawdown) data collected after a pumping test. Theis derived the following approximate linear equation to predict residual drawdown in a homogeneous, isotropic, and non-leaky confined aquifer assuming a fully penetrating line sink that discharged at a constant rate prior to recovery:

Transmissivity (T) is determined using the slope of the line, $\Delta s'$, from the following equation:

$$T = \frac{2.3Q}{4\pi\Delta s'}$$

Drawdown data from the constant rate test were also analyzed using the Cooper-Jacob Straight-Line Time Drawdown Method (**Chart 9**), using AQTESOLVE™ solution. The analyses assume the following;

$$T = \frac{2.3Q}{4\pi\Delta(h_0 - h)}$$

Where;

T = Transmissivity (Ft^2/Day)

Q = Pumping Rate (Ft^3/Day)

$\Delta(h_o - h)$ is the drawdown per log cycle of time (Ft)

$\Delta s'$ is the slope of the fitted line (change in residual drawdown per log cycle equivalent time)

The late time recovery data was used to determine $\Delta s'$ due to initial response to borehole storage. Transmissivity was calculated from average discharge and residual drawdown over one log cycle of T/t' (total test time T over recovery time t'). Hydraulic conductivity is Transmissivity divided by the saturated thickness (or length of well screen) and is provided in **Table 3** for each of the analyses.

The range in Transmissivity values between the Theis Recovery and Cooper-Jacob drawdown is (7,163 Ft^2/Day vs. 3,712 Ft^2/Day). The rate of recovery in the well bore is thought to be influenced by secondary permeability and not by water siphoning down the drop pipe to the pump once pumping had been terminated. A check valve had been installed along the drop pipe. The check valve was inspected to insure siphoning did not occur. The resulting slope of initial well recovery is steep and presents several orders of deviation in the slope of the late stage recovery data. The Transmissivity estimated from the recovery data is thereby expected to be an over estimate based on the initial response.

This sort of response can be expected in faulted or fractured rocks where secondary permeability may be greater than the primary permeability of the formation. Fissures have an immediate elastic response to a sudden change in water levels, while porous blocks have an induced subsequent elastic response. In this case, late time drawdown data is expected to provide a more reliable estimate of primary permeability, while recovery in the pumped well may provide an estimate of secondary permeability.

Table 3: Summary of Calculated Aquifer Parameters from the FCW

Data	Solution	Transmissivity (FT^2/Day)	Hydraulic Conductivity (FT/Day)
Drawdown	Cooper-Jacob Straight Line	3,712	8.37
Recovery	Theis Straight Line Recovery	7,163	16.17

Chart 8: Theis Analysis

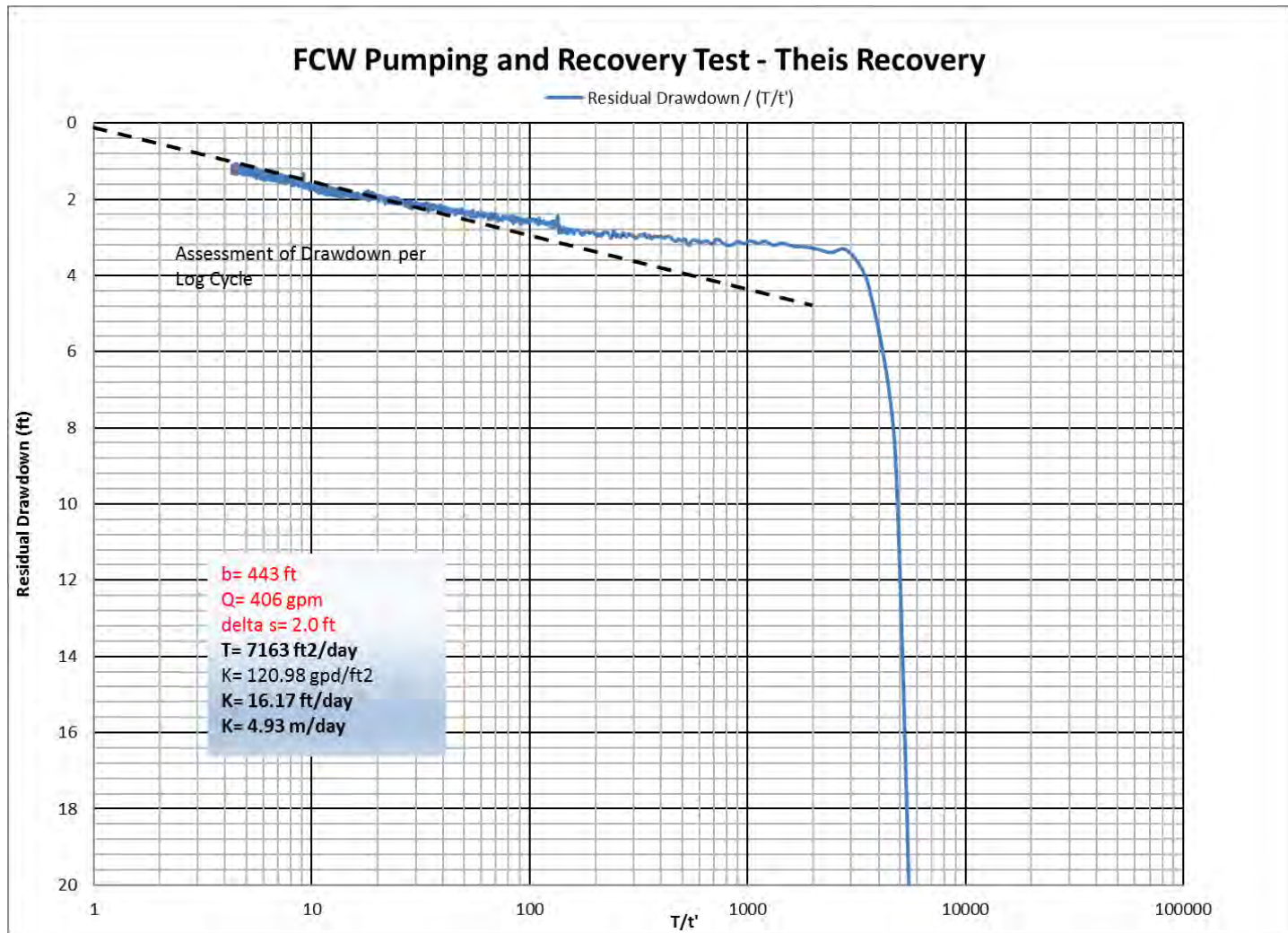
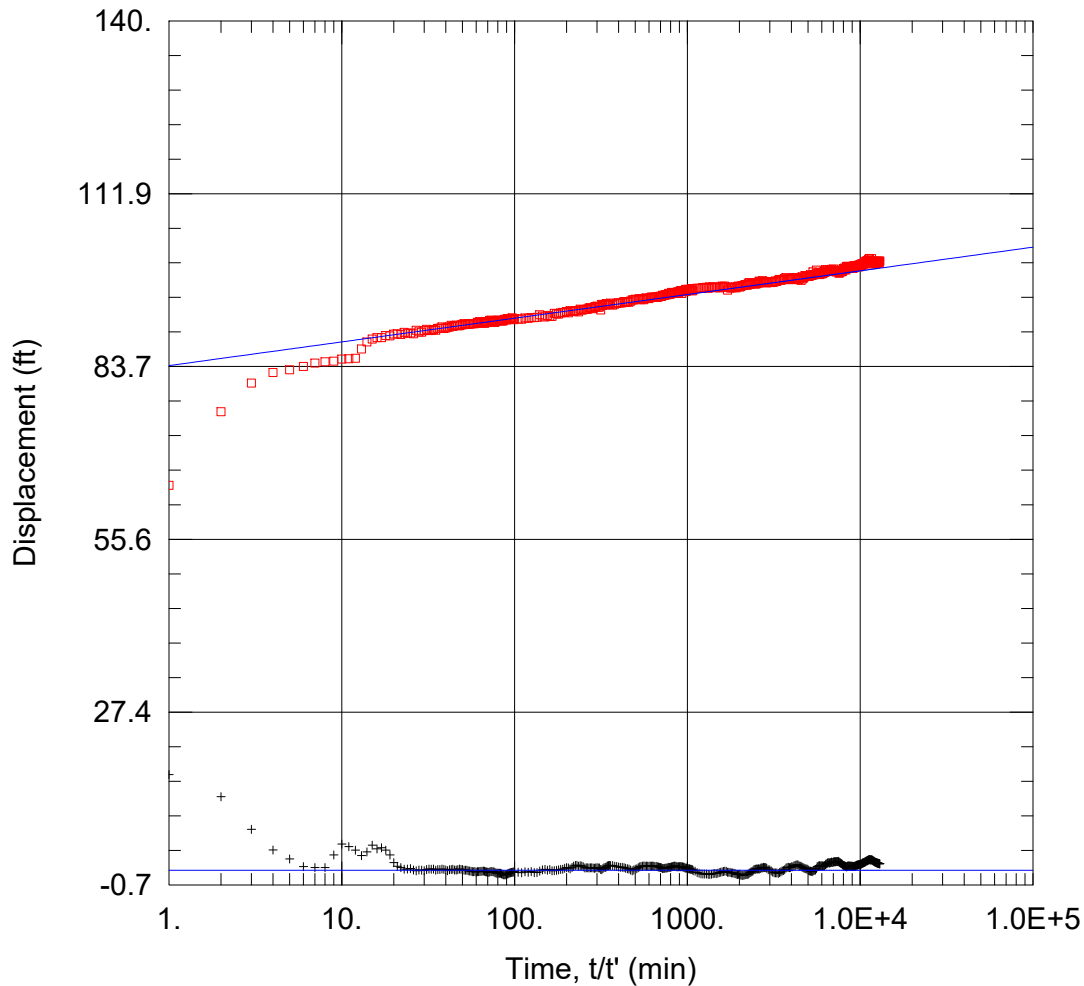


Chart 9



WELL TEST ANALYSIS

Data Set: E:\CWR\AQTESOLV Analysis jf2 - FCW.aqt

Date: 07/18/18

Time: 16:30:40

PROJECT INFORMATION

Company: MGA

Client: CWR

Project: CWR001

Location: WC

Test Well: FCW

AQUIFER DATA

Saturated Thickness: 443. ft

Anisotropy Ratio (K_z/K_r): 0.2

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
FCW	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
FCW	0	0

SOLUTION

Aquifer Model: Confined

Solution Method: Cooper-Jacob

$T = 2.578 \text{ ft}^2/\text{min}$

$S = 1.045\text{E-}21$

4.6 Analyses of Hydraulic Response in Observation Wells

Seventeen (17) wells were evaluated during the groundwater assessment. **Table 1** provides details for the wells assessed within the evaluation area. Twelve (12) of these wells were monitored for response during the 10 day pumping test. Of these 12 wells, three (3) observation wells and the pumping well responded to the test (total of four wells). The wells that responded included the FCW, OWE-3, OWE-4 and the Coveau Well. The total drawdown response is summarized below.

- Total drawdown at OWE-3 was approximately 4.0 feet after 10 consecutive days of pumping at the FCW. The 14-Day post-test recovered water level was within 68% of the pre-test water level trend.
- Total drawdown at OWE-4 was approximately 3.5 feet after 10 consecutive days of pumping at the FCW. The 14-Day post-test recovered water level was within 74% of the pre-test water level trend. The water level trend in this well represents trends in a pumped municipal well.
- Total drawdown at Coveau Well was approximately 1.3 feet after 10 consecutive days of pumping at the FCW. The 14-Day post-test recovered water level was within 90% of the pre-test water level trend. The pre-test water level trend represents trends in a pumped domestic well.

Although a response was measured at the Coveau domestic well, the density of data was not enough to generate a high-resolution dataset that could be analyzed for aquifer parameters. **Chart 10** presents a hydrograph of pre-test water levels, drawdown and recovery in OWE-3 and **Chart 11** presents a hydrograph of pre-test water levels, drawdown and recovery in OWE-4. There was no measurable response at ST. James MW-1 or MW-2, which are located north of Browns Creek.

CWR completed a Cooper-Jacob Straight-Line Time Drawdown analyses from the drawdown response measured in both OWE-3 and OWE-4 which was later validated by an AQTESOLVE™ solution completed by McGinley and Associates. Per recommendation from NDWR, the data was detrended and another AQTESOLVE™ solution was completed by McGinley and Associates to compare between methods and results. A second independent analysis completed by NDWR provided further validation in the range of aquifer parameters. The drawdown response in these wells were used to further evaluate aquifer parameters, including Transmissivity and Storativity.

A derivative analysis of drawdown over semi-logarithmic time scale was also used to evaluate boundary conditions. The derivative analysis was completed with both raw and detrended datasets using AQTESOLVE™ solution to compare results.

During the test, OWE-4 was periodically pumped by TMWA for municipal supply and a new pump was installed in OWE-3. The hydrographs presented in **Charts 10 and 11** show the response to TMWA activities. These data have been adjusted to reflect the response of the test at the FCW and remove most of the noise from TMWA activities.

Chart 10
Old Washoe Estates Well 3

— OWE3 CWR Transducer

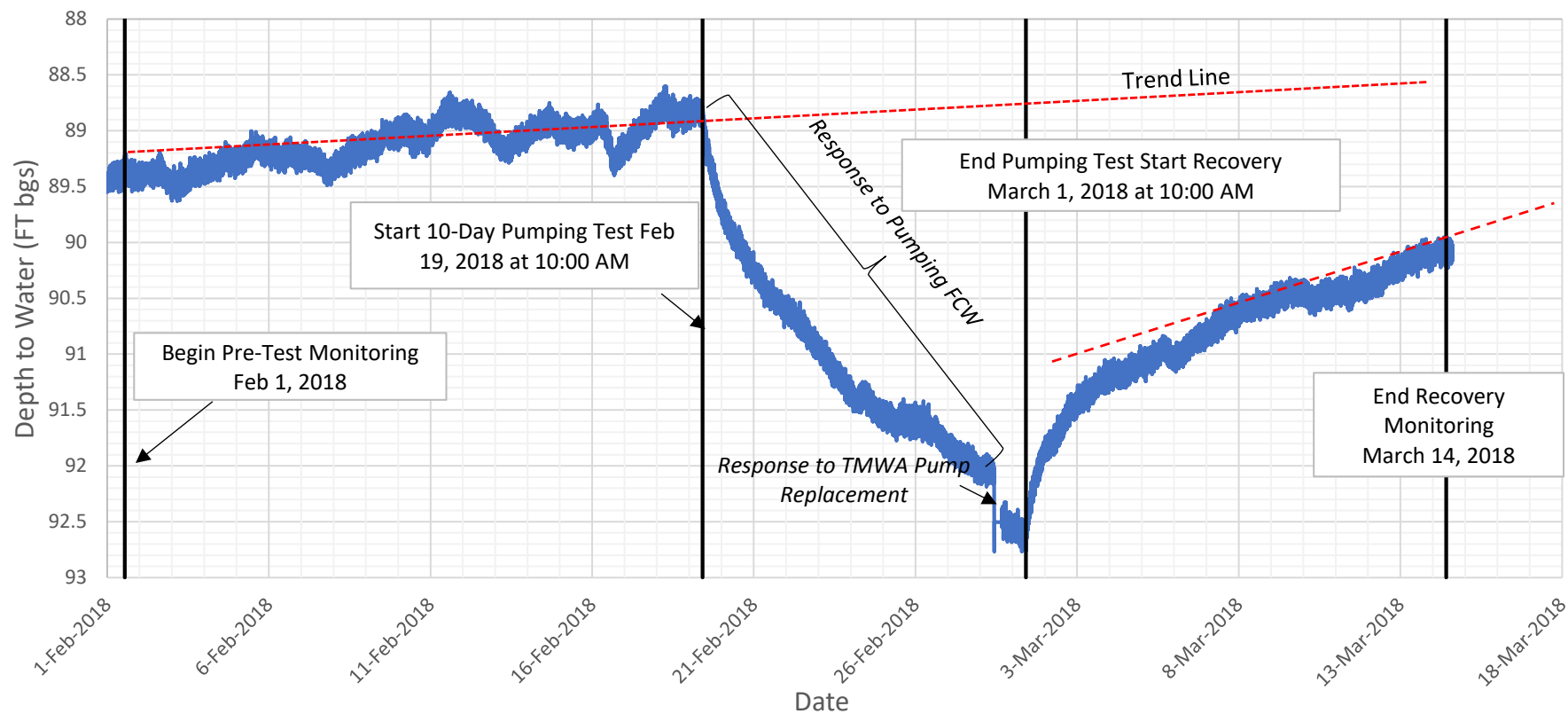
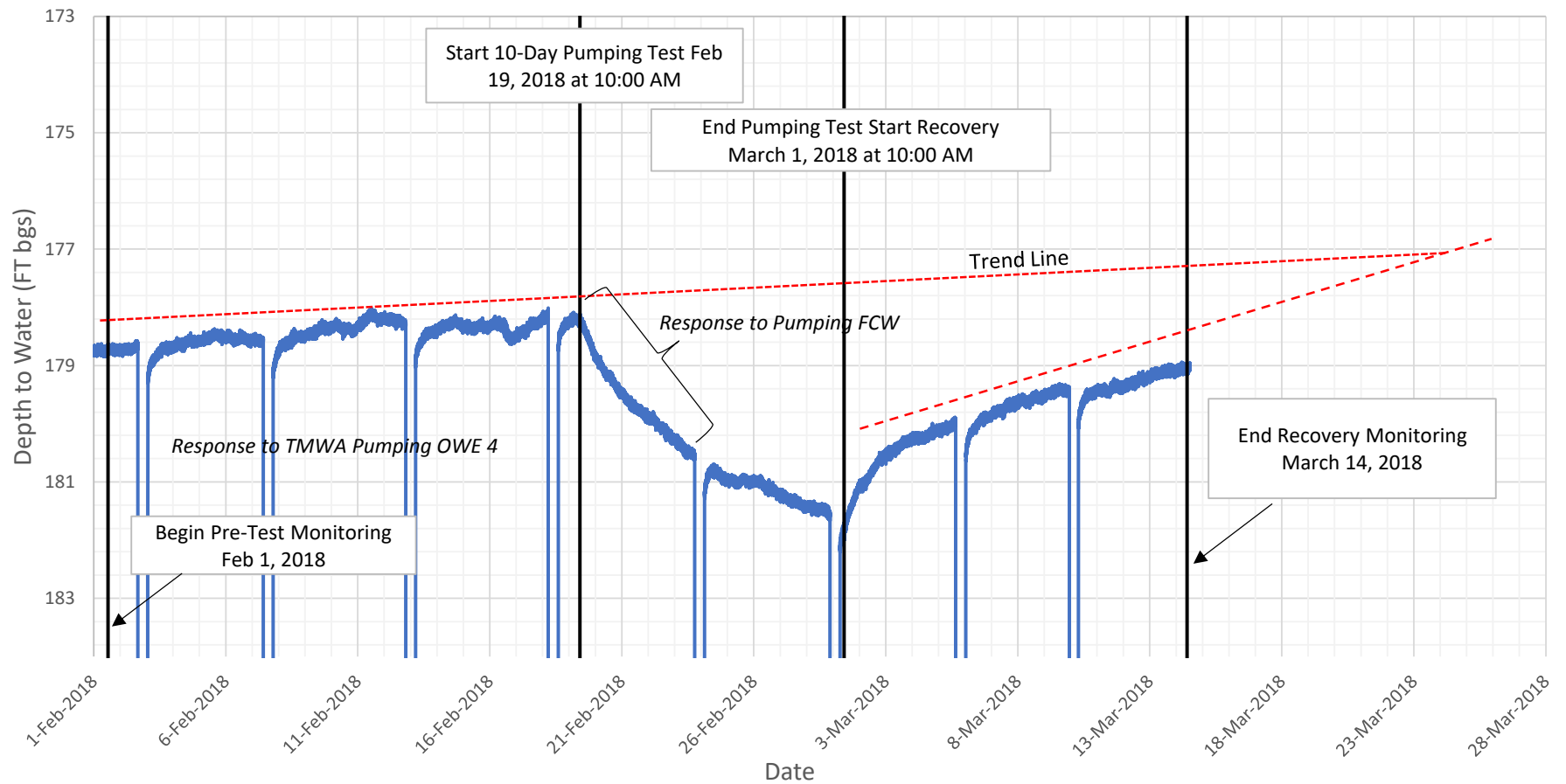


Chart 11
Old Washoe Estates Well 4
— OWE4 CWR Transducer



4.6.1 Assessment of Transmissivity and Storativity

Cooper-Jacob drawdown assumed the following to solve for Transmissivity and Storativity;

$$T = \frac{2.3Q}{4\pi\Delta(h_0 - h)}$$

$$S = \frac{2.25Tt_0}{r^2}$$

S = Storativity (Dimensionless)

r = Radial distance to the well (FT)

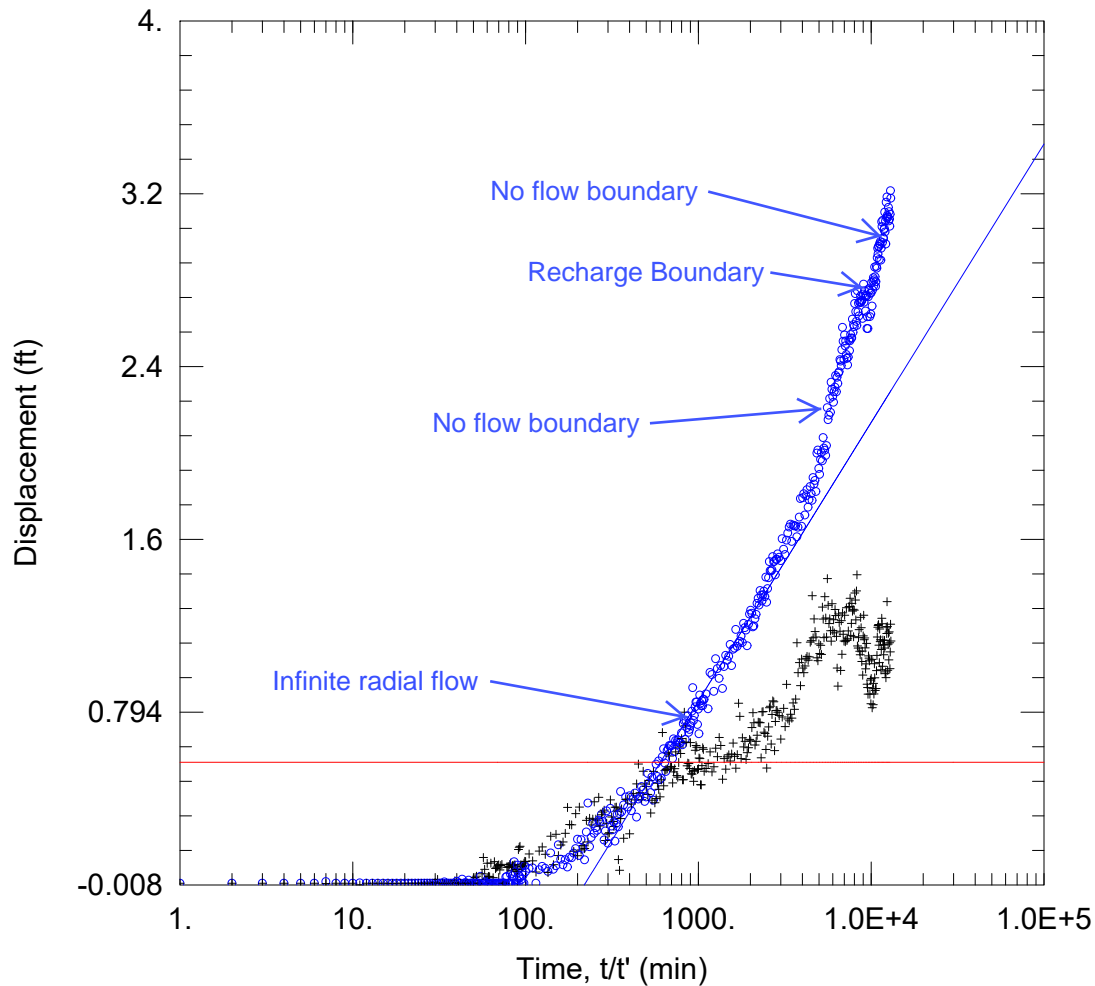
t₀ = Time, where the straight line intersects the zero-drawdown axis (Days)

Chart 12 and Chart 13 presents a graphical analysis of the AQTESOLVE™ well test analysis using Cooper-Jacob drawdown and raw data from the test. **Chart 14 and Chart 15** presents a graphical analysis of the AQTESOLVE™ well test analysis using Cooper-Jacob drawdown and the detrended data for OWE-3 and OWE-4 respectively. **Table 4** is a summary of the range in test results in addition to the results reported from the independent analysis conducted by NDWR.

Table 4: Summary of Calculated Aquifer Parameters

Well ID	Transmissivity (Ft ² /Day)	Storativity	Detrended Transmissivity (Ft ² /Day)	Detrended Storativity	NDWR Calculated Transmissivity (Ft ² /Day)	NDWR Calculated Storativity
FCW	3,712	1.045E-21	--	--	--	--
OWE-3	11,082	4.53E-03	7,337	7.78E-03	10,690	5.10E-03
OWE-4	7,460	2.72E-03	9,135	1.24E-03	7,345	1.50E-03

Chart 12



WELL TEST ANALYSIS

Data Set: E:\CWR\AQTESOLV Analysis jf2 - OWE3.aqt

Date: 07/18/18

Time: 16:56:34

PROJECT INFORMATION

Company: MGA

Client: CWR

Project: CWR001

Location: WC

Test Well: FCW

AQUIFER DATA

Saturated Thickness: 443. ft

Anisotropy Ratio (K_z/K_r): 0.2

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
FCW	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
OWE-3	0	920

SOLUTION

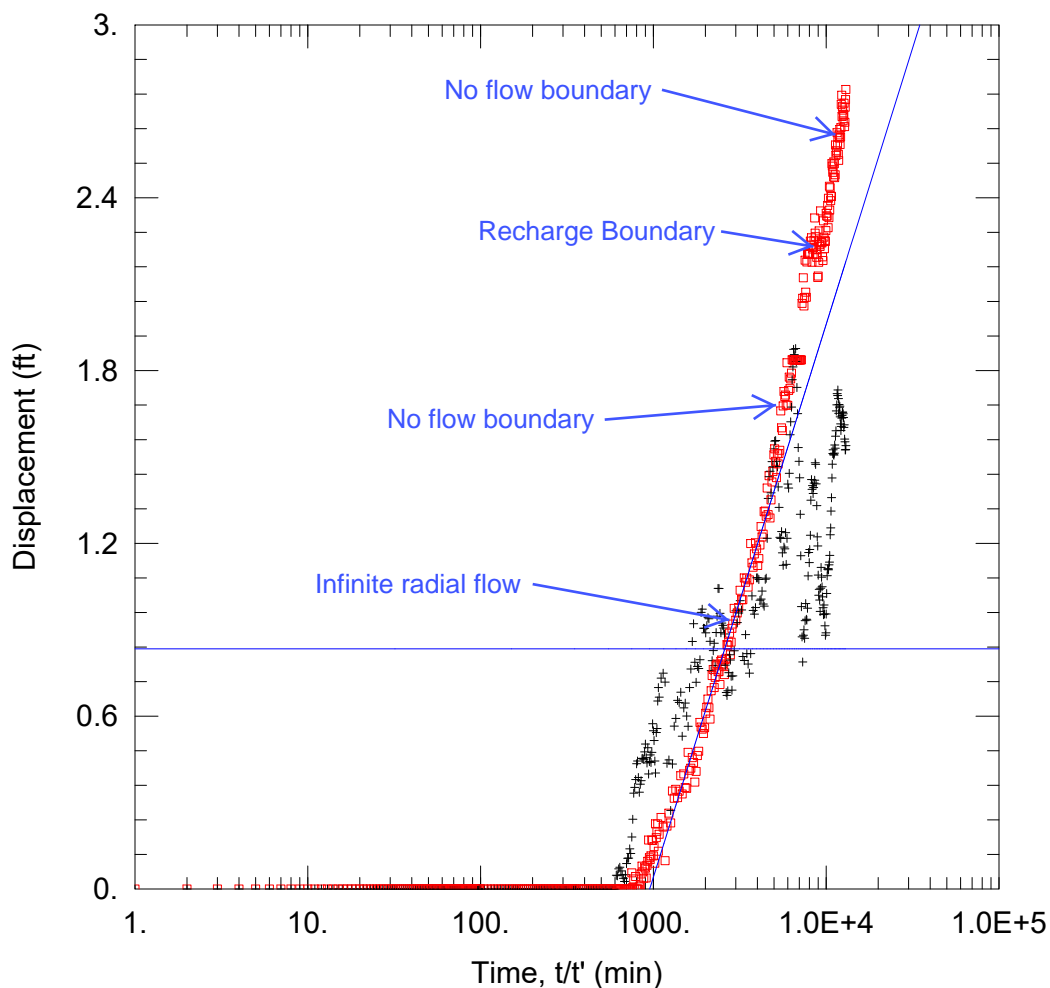
Aquifer Model: Confined

Solution Method: Cooper-Jacob

$T = 7.696 \text{ ft}^2/\text{min}$

$S = 0.004533$

Chart 13



WELL TEST ANALYSIS

Data Set: E:\CWR\AQTESOLV Analysis jf2 - OWE4.aqt

Date: 07/18/18

Time: 16:59:09

PROJECT INFORMATION

Company: MGA

Client: CWR

Project: CWR001

Location: WC

Test Well: FCW

AQUIFER DATA

Saturated Thickness: 443. ft

Anisotropy Ratio (K_z/K_r): 0.2

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
FCW	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
□ OMW-4	0	2000

SOLUTION

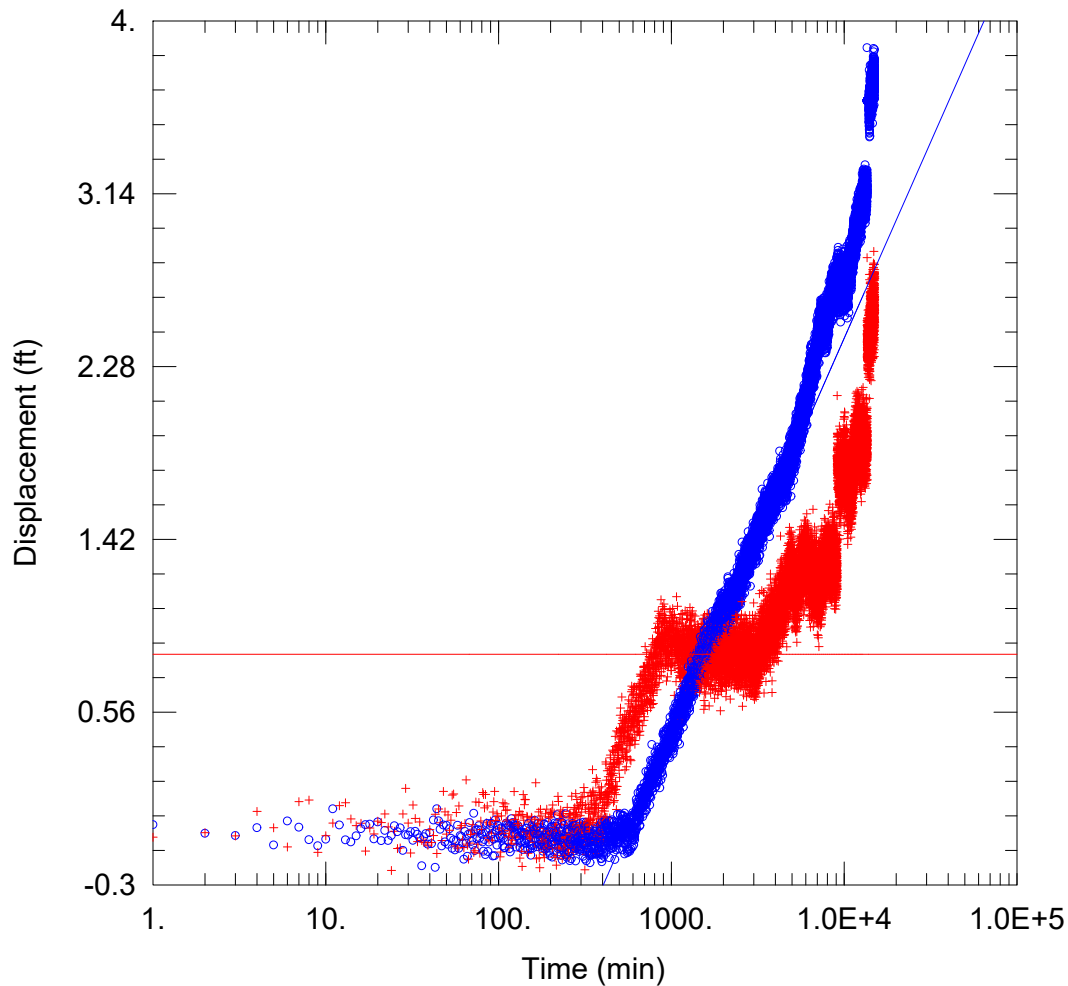
Aquifer Model: Confined

Solution Method: Cooper-Jacob

$T = 5.181 \text{ ft}^2/\text{min}$

$S = 0.002772$

Chart 14



WELL TEST ANALYSIS

Data Set: R:\Projects\CWR\Results 2\DS\AQTESOLV Analysis DS - OWE3_full.aqt

Date: 09/20/18

Time: 08:50:41

PROJECT INFORMATION

Company: MGA

Client: CWR

Project: CWR001

Location: WC

Test Well: FCW

AQUIFER DATA

Saturated Thickness: 443. ft

Anisotropy Ratio (K_z/K_r): 0.2

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
FCW	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
○ OWE-3	0	920

SOLUTION

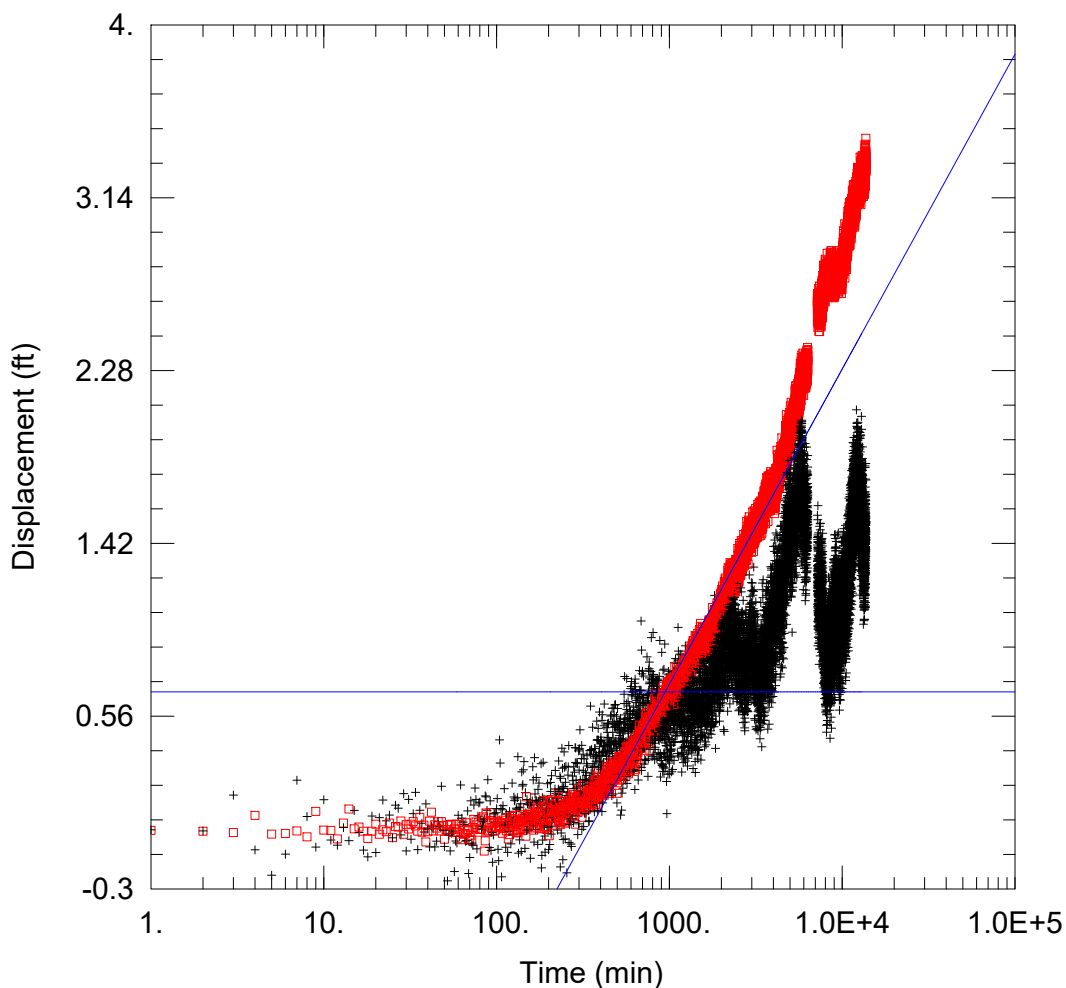
Aquifer Model: Confined

Solution Method: Cooper-Jacob

$T = 5.095 \text{ ft}^2/\text{min}$

$S = 0.007782$

Chart 15



WELL TEST ANALYSIS

Data Set: R:\Projects\CWR\Results 2\DS\AQTESOLV Analysis DS - OWE4_full.aqt

Date: 09/20/18

Time: 09:49:51

PROJECT INFORMATION

Company: MGA

Client: CWR

Project: CWR001

Location: WC

Test Well: FCW

AQUIFER DATA

Saturated Thickness: 443. ft

Anisotropy Ratio (K_z/K_r): 0.2

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
FCW	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
□ OMW-4	0	2000

SOLUTION

Aquifer Model: Confined

Solution Method: Cooper-Jacob

$T = 6.344 \text{ ft}^2/\text{min}$

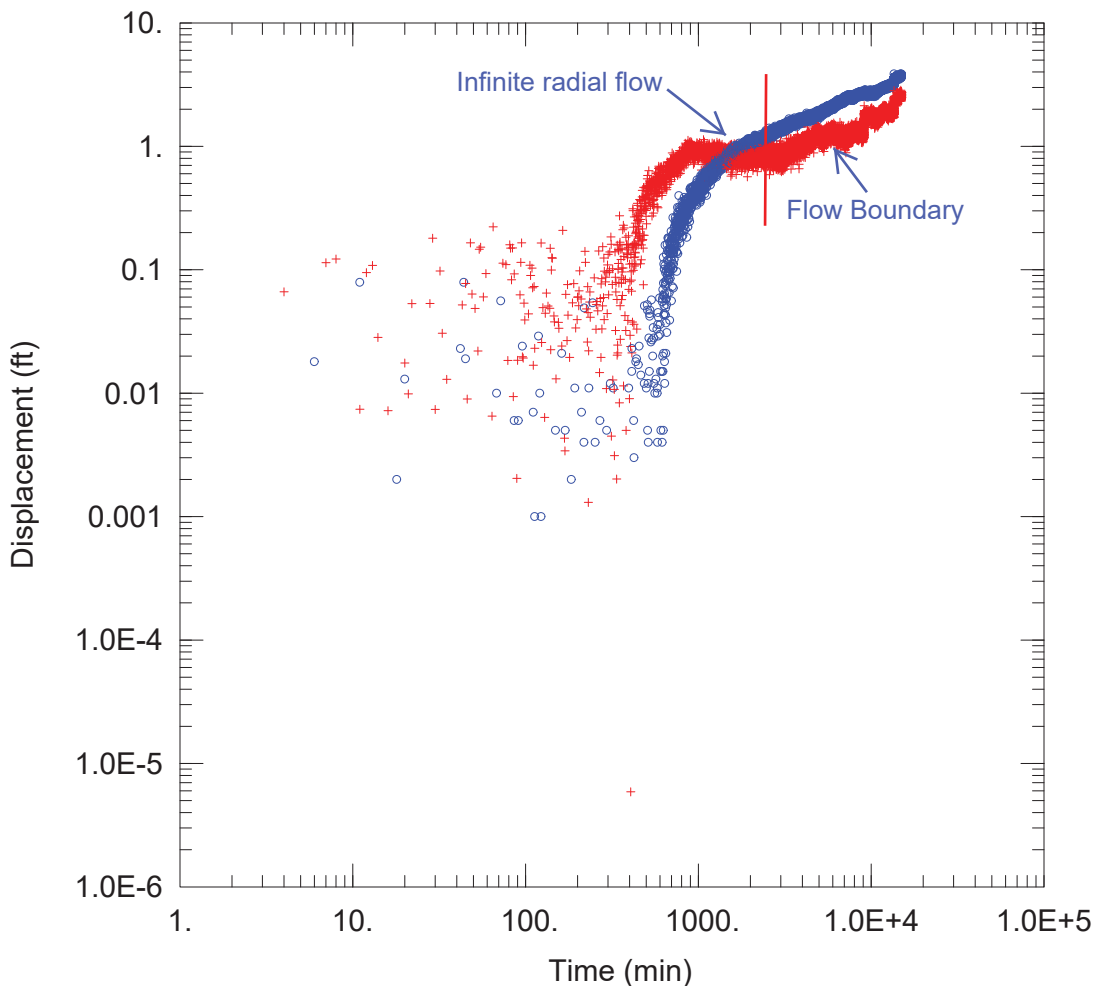
$S = 0.001239$

4.6.2 Boundary Conditions

Chart 16 and Chart 17 presents the results of derivative analysis using an AQTESOLVE™ well test solution and detrended data from the response at OWE-3 and OWE-4 respectively. **Chart 18** also presents a derivative analysis using the AQTESOLVE™ well test solution from the response at the FCW.

Derivative analyses of drawdown over semi-logarithmic time scale showed some evidence of a constant head boundary or infinite radial recharge boundary condition during the test. However, this boundary condition did not persist, and several no-flow boundaries were later identified. These no-flow boundaries provide evidence of a faulted or fractured hydrogeological regime. No-flow boundaries are displayed as a deviation in drawdown slope of two orders of magnitude or greater. The predominant no flow boundaries during the 10-Day test are graphically identifiable and presented in the charts.

Chart 16



WELL TEST ANALYSIS

Data Set: R:\Projects\CWR\Results 2\DS\AQTESOLV Analysis DS - OWE3_full.aqt

Date: 09/20/18

Time: 08:32:12

PROJECT INFORMATION

Company: MGA

Client: CWR

Project: CWR001

Location: WC

Test Well: FCW

AQUIFER DATA

Saturated Thickness: 443. ft

Anisotropy Ratio (K_z/K_r): 0.2

WELL DATA

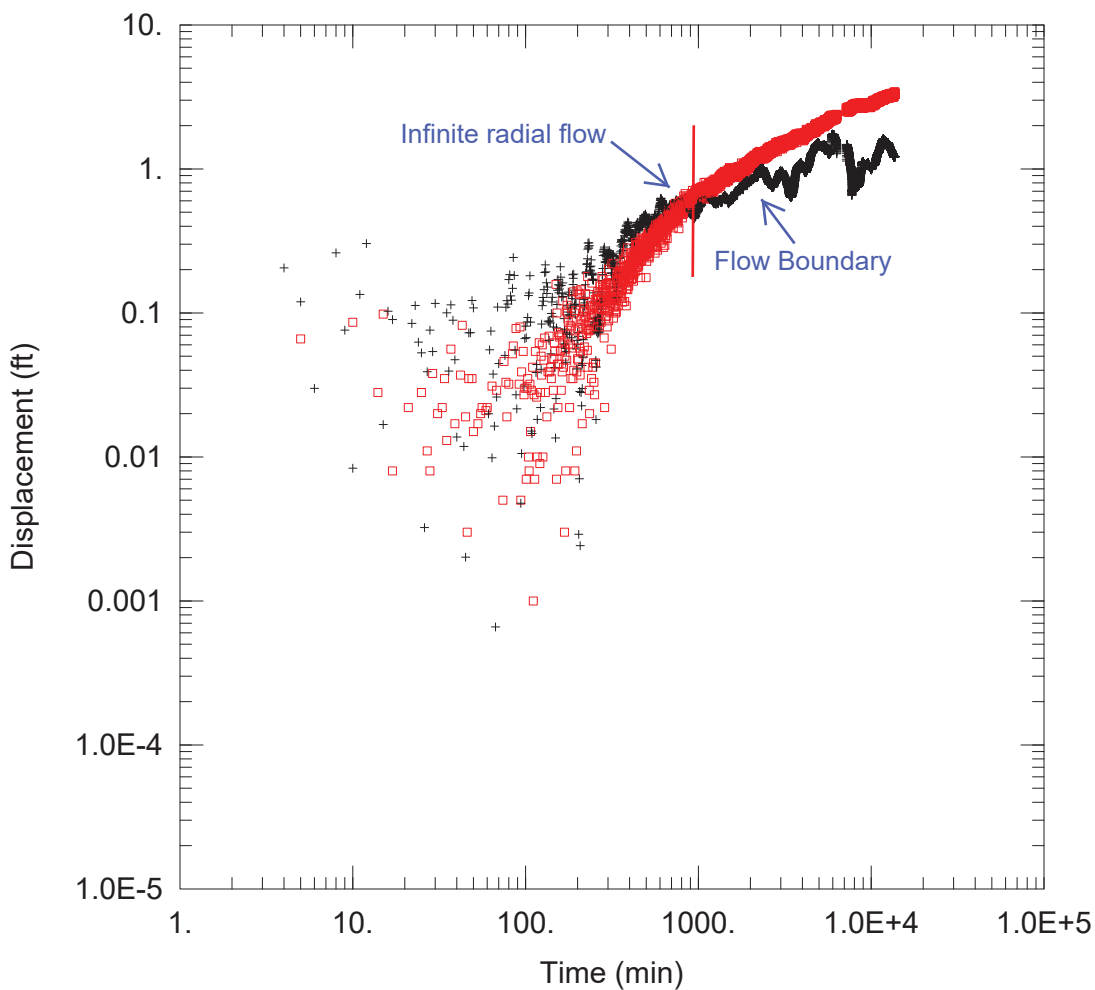
Pumping Wells

Well Name	X (ft)	Y (ft)
FCW	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
○ OWE-3	0	920

Chart 17



WELL TEST ANALYSIS

Data Set: R:\Projects\CWR\Results 2\DS\AQTESOLV Analysis DS - OWE4_full.aqt

Date: 09/20/18

Time: 10:03:22

PROJECT INFORMATION

Company: MGA

Client: CWR

Project: CWR001

Location: WC

Test Well: FCW

AQUIFER DATA

Saturated Thickness: 443. ft

Anisotropy Ratio (K_z/K_r): 0.2

WELL DATA

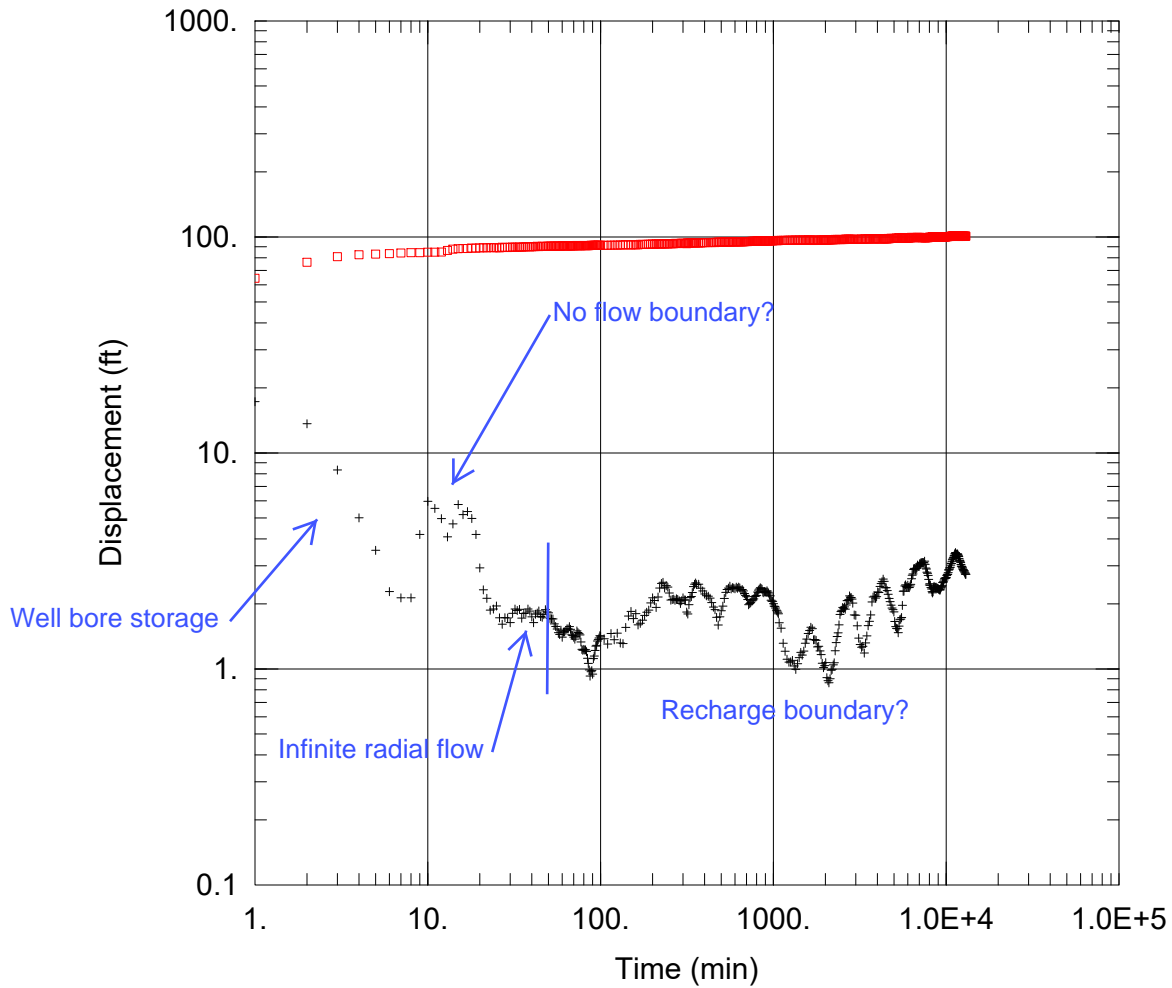
Pumping Wells

Well Name	X (ft)	Y (ft)
FCW	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
□ OMW-4	0	2000

Chart 18



WELL TEST ANALYSIS

Data Set: E:\CWR\AQTESOLV Analysis jf2 - FCW.aqt

Date: 07/18/18

Time: 17:09:48

PROJECT INFORMATION

Company: MGA

Client: CWR

Project: CWR001

Location: WC

Test Well: FCW

AQUIFER DATA

Saturated Thickness: 443. ft

Anisotropy Ratio (K_z/K_r): 0.2

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
FCW	0	0

Observation Wells

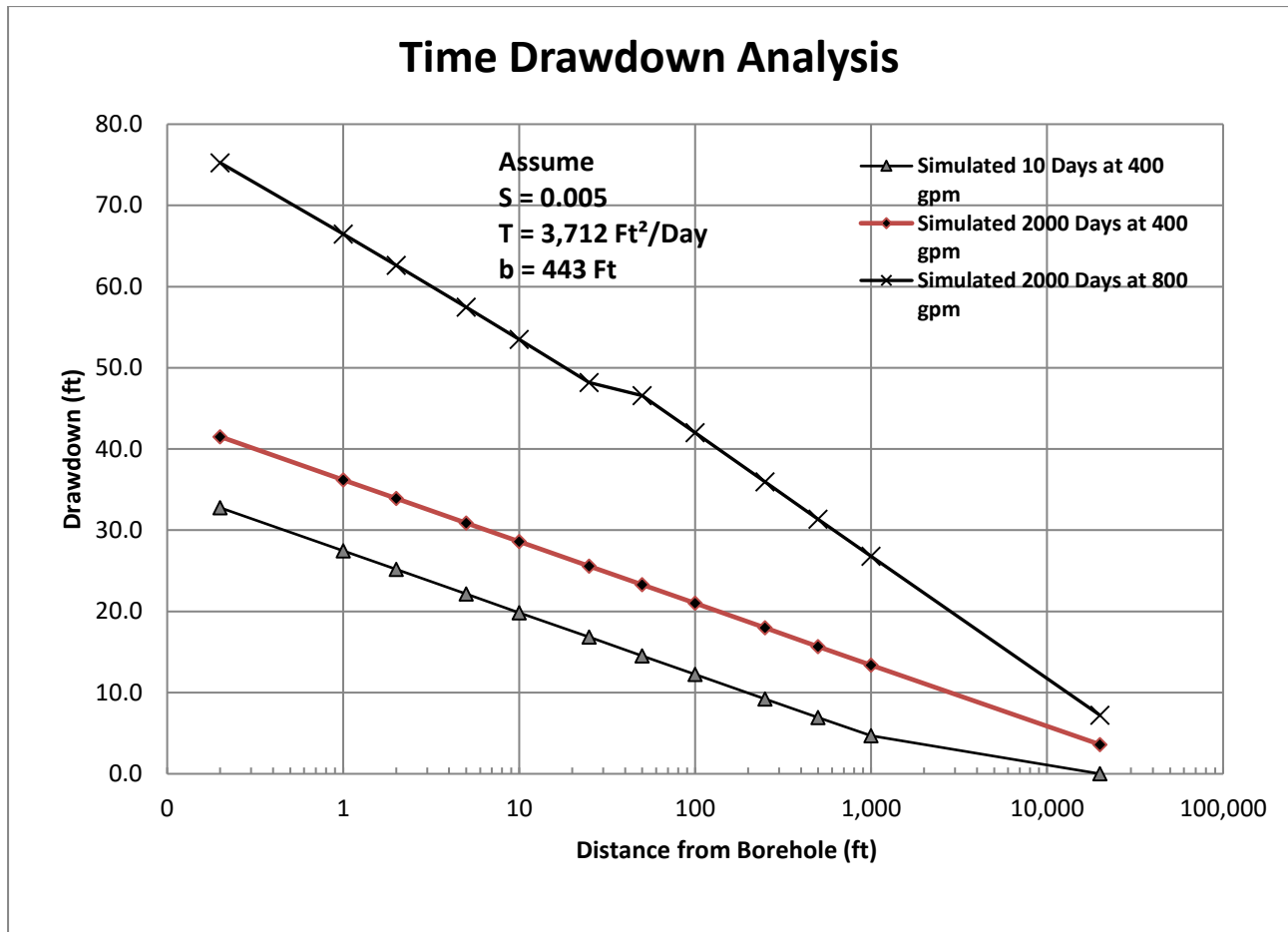
Well Name	X (ft)	Y (ft)
FCW	0	0

5 Predicted Drawdown and Well Performance

The transmissivity of the rocks at the FCW are favorable for extraction of groundwater at sustainable rates greater than 400 gpm. The limiting factor at the FCW is well efficiency and pump capacity. Both of which are limited by the diameter of the well (8-inches). A new, larger diameter well installed within the rocks at the FCW location is expected to sustainably yield more than 400 gpm. The Transmissivity (T) which the FCW is screened was calculated to be about 3,712Ft²/Day. A Theis based analysis of distance drawdown over time was applied (Driscoll, Fletcher 1986), assuming an average Storativity value of 0.005 from the detrended data, and a conservative (T) value of 3,712Ft²/Day from the pumped well. **Chart 19** provides the graphical results of the simulation. The following analysis of time and drawdown was simulated;

- Simulated distance drawdown based on 400-gpm discharge for a duration of ten consecutive days and a separate simulation for a duration of 2,000 consecutive days at the same rate.
- Simulated distance drawdown based on 800 gpm for a duration of 2,000 consecutive days.

Chart 19: Time Drawdown Analysis



The analysis slightly over estimates the response to pumping at the observation wells. The analysis generally agrees with the response observed during the long-term test since well loss was not accounted for. The simulation did indicate extraction rates of over 800 gpm could be consistently pumped from the aquifer for a duration of over five consecutive years. The simulation resulted in a drawdown stress of less than 20 feet, extending over one (1) mile from the FCW. Due to the faulted and fractured nature of the groundwater system and the presence of no flow boundaries, the stress is expected to occur in the direction of OWE-3 and OWE-4 and not in the direction of the up-gradient wells, north of Browns Creek. It should be noted that the allowable diversion rate on the FCW is 2.42 Ft³/sec, not to exceed 474.86 acre feet/annum. Pumping at 800 gpm for one year would yield a total withdrawal of over 1,290 acre feet, 2.7 times greater than what is allowed under the permits. The average pumping rate required for 474.86 acre feet is approximately 294 gpm.

6 Surface Water Interactions with Groundwater

According to the 1964, Geological Survey-Water Supply Paper 1779-S, "Along much of their courses, the streams draining the Carson Range flow across fairly impermeable deposits underlying the 5,000-foot terrace. As a result, the streams do not lose much water to the groundwater reservoir." To validate this assessment, CWR measured point stream flows via the area velocity method using a Marsh McBirney flow meter. Point flow measurements were collected from four (4) locations along the course of flow in Browns Creek. These locations are denoted as BC-1, BC-2, BC-3, and BC-4 in **Figure 3**. The discharge measured at each location is summarized below:

- BC-1 1.67 Ft³/sec
- BC-2 1.24 Ft³/sec
- BC-3 0.05 Ft³/sec
- BC-4 1.41 Ft³/sec

From BC-1 to BC-2, Browns Creek loses approximately 0.43 Ft³/sec. From the diversion at Browns Creek, (BC-2 to BC-4), flow appears to gain about 0.17 Ft³/sec. BC-2 to BC-3 is the reach of natural channel in Browns Creek downgradient of the Washoe Ditch diversion. BC-3 is located slightly upgradient from where the natural channel confluent with Steamboat Creek. BC-3 was flowing at about 0.05 Ft³/sec during the evaluation. The primary loss appears to occur within the natural channel between BC-1 and BC-2. Water is then diverted from the takeout below BC-2 and flows through the Washoe Ditch to BC-4, then towards Washoe Lake where it is stored. The net loss between BC-1 and BC-4 was about 0.26 Ft³/sec during the time of the evaluation. However, the net loss to groundwater and phreatophytes between BC-1 and BC-2 was about 0.43 Ft³/sec or about 193 gpm.

The flow measurements collected during the evaluation indicate the nearly 90% of the flow from Browns Creek was diverted into Washoe Valley adjacent to OWE-3. This diversion is expected to occur per water rights permits.

7 Water Quality

Water quality samples were collected from the FCW discharge at various stages of the constant rate test. Samples were also collected from surface water at Browns Creek and a spring located in the SE $\frac{1}{4}$ of Section 13. Surface water sample locations are denoted as Browns Creek Water Quality (WQ) Sampling Point and SP-1 WQ Sampling Point in **Figure 3**. Groundwater samples collected from the FCW were gathered at the following time intervals; 30 hours, 120 hours, and at 218 hours into the constant rate test. The samples were submitted to Western Environmental Testing Laboratory (WET Lab) in Sparks Nevada for analyses of Nevada Profile 1 constituents, and the University of Nevada Reno, Department of Geological Sciences & Engineering Laboratory for analysis of oxygen 18 and deuterium isotopes. The results of these analyses are compared to the primary drinking water maximum contaminant levels (MCL) for the constituents analyzed. In general, water quality is good with the exception of an MCL exceedance in manganese concentration (0.052 mg/L) in the sample collected from the FCW at 218 hours. **Table 5** presents a tabulation of water quality results compared to the primary drinking water MCL's.

TABLE 5: ST. James Water Quality

Description	MCL (mg/L)*	FCW @ 30 Hrs	FCW @ 120 Hrs	FCW @ 218 Hrs	Browns Creek	SP-1
NV Certified Lab	--	Wet Lab	Wet Lab	Wet Lab	Wet Lab	Wet Lab
Lab Reference No.	--	1802633-001	1802633-003	1802633-004	1802633-002	1802633-005
Sampling Date	--	2/20/2018	2/24/2018	2/28/2018	2/24/2018	3/7/2018
Lab Test Date	--	2/21/2018	2/27/2018	3/5/2018	2/27/2018	3/9/2018
Sampled By	--	M. Banta	M. Banta	M. Banta	M. Banta	M. Banta
Alkalinity, Bicarbonate (as CaCO ₃)	--	140	150	150	38	120
Alkalinity, Total (as CaCO ₃)	--	140	150	150	38	120
Aluminum	0.2	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.006	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
Arsenic	0.01	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Barium	1.0	0.058	0.061	0.057	0.016	0.09
Beryllium	0.004	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cadmium	0.005	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Calcium	--	22	24	24	12	18
Chloride	250	1.3	1.1	1.0	19	3.3
Chromium	0.05	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Copper	1.0	<0.040	<0.040	<0.040	<0.040	<0.040
Fluoride	2.0	<0.10	<0.10	<0.10	<0.10	0.12
Iron	0.3	<0.020	<0.020	<0.020	0.18	<0.040
Lead	0.015	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
Magnesium	150	11	11	11	2.7	11
Manganese	0.05	0.0081	0.0096	0.052	0.042	<0.0050
Mercury	0.002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Nickel		<0.030	<0.030	<0.030	<0.030	<0.030
Nitrate + Nitrite (as N)	10	0.22	0.22	0.25	<0.1	0.33
Nitrogen Total (as N)	10	<0.50	<0.50	<0.50	<0.50	0.94
pH (±0.1 SU)**	6.5-8.5	8.02	7.98	7.97	7.54	7.79
Potassium	--	3.9	3.9	3.9	1.8	5.2
Selenium	0.05	<0.0050	0.0050	<0.0050	<0.0050	<0.0050
Silver	0.1	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Sodium	--	19	19	19	8.8	17
Sulfate	250	2.6	2.7	2.4	<1.0	3.6
Thallium	0.002	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Total Dissolved Solids	1000	180	190	180	96	210
Zinc	5.0	<0.020	<0.020	<0.020	<0.020	<0.020

All Metals Analysis - Dissolved Fraction Only

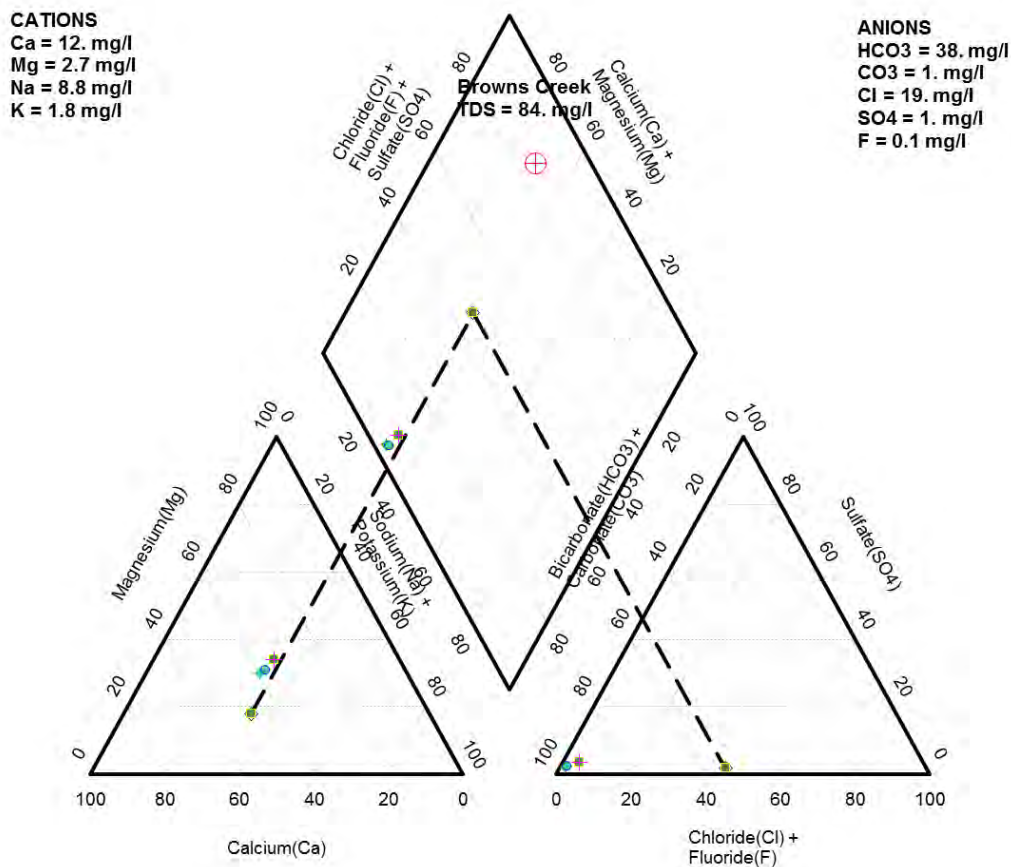
Bold Highlighted Values Exceed Primary Drinking Water Standard

*Primary Drinking Water Standards

**Analyzed Outside Recommended Hold Time

A Piper Diagram, which graphically displays the percent relative composition of major cations (Ca, Mg, Na, K) and anions (Cl, SO₄, HCO₃, CO₃) in solution, was prepared to initially evaluate the water chemistry at the site (**Chart 20**). In constructing the diagram, the milliequivalents of major cations and anions are first plotted on the lower left and right hand trilinear diagrams, respectively. A line is then projected from each of these trilinear plots from the corresponding sample and parallel to the Mg and SO₄ axes. The intersection of these two lines defines the sample location on the diamond shaped field. The chemical composition of the water sample is a reflection of water-rock interactions and/or anthropogenic contamination and indicates the hydrochemical facies (dominant ions, water type).

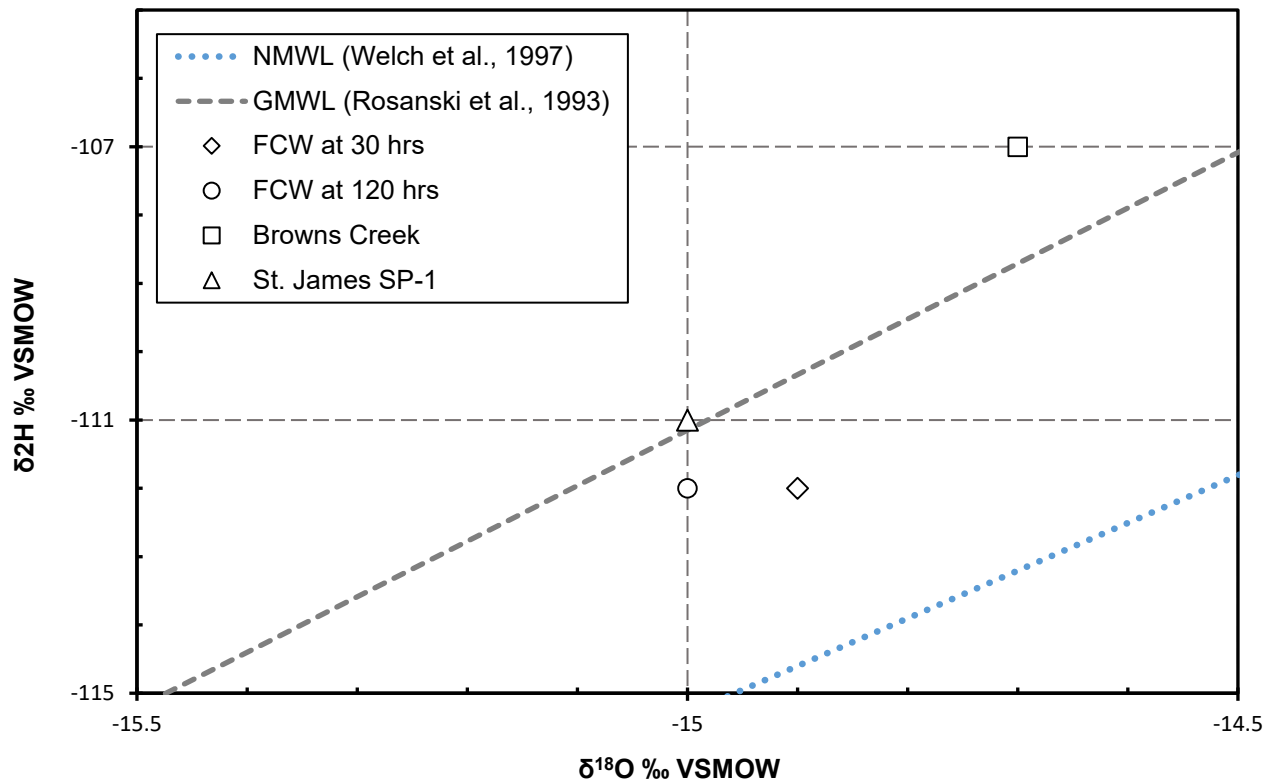
Chart 20: Piper Diagram



Water quality analyses exhibit two distinct affinities between the FCW groundwater and SP-1 v.s. Browns Creek. In this case, the dominant ions in both groundwater from the FCW and in SP-1 are calcium and bicarbonate (Ca-HCO₃ type water), typical of geochemically “young” water. Browns Creek appears to be more Chloride dominant, typical of water directly influenced by precipitation and a high proportion of impervious surfaces (i.e. Paved Roads) in the watershed.

Chart 21 presents an assessment of oxygen 18 and deuterium isotopes analyzed from the groundwater and surface water samples collected during the evaluation. The results are plotted against the global meteoric water line and a Nevada specific meteoric water line. Hydration of silicates (e.g., reaction of water with feldspars and hornblende to form clays) lightens oxygen 18 and increases deuterium. Since rocks are enriched in oxygen 18, isotopic equilibration with them at elevated temperature shifts the data points to the right in the evolution of deuterium and oxygen 18 in geothermal waters as a function of temperature during reaction with host rocks. Rocks tend to be strongly enriched in oxygen 18. The more energetic (hotter) the system, the more readily the rocks oxygen 18 is exchanged with the water. Cooler temperatures remove less oxygen 18 from the rocks. However, deuterium seems to behave in the opposite manner. This is probably because hydrogen is sparse in primary silicates. As these react, they form hydrous minerals such as phyllosilicates. As solid phases, these would tend to enrich in the heavier hydrogen isotope, (Clark and Fritz, 1997).

Chart 21: Global and Nevada Meteoric Water Line



Notes:

- 1) Global Meteoric Water Line (GMWL) Equation: $\delta^2\text{H} = 8.13\delta^{18}\text{O} + 10.8$ (Rosanski et al., 1993)
- 2) Nevada Meteoric Water Line (NMWL) Equation: $\delta^2\text{H} = 6.98\delta^{18}\text{O} - 10.6$ (Welch and others, 1997)
- 3) Units: Per mil (‰) in reference to Vienna Standard Mean Ocean Water (VSMOW)

Water from SP-1 plots along the global meteoric water line, which suggests that the source of water from SP-1 is dominated by precipitation-derived recharge. Water from FCW exhibits an oxygen shift (to the right) that commonly occurs when water is geothermally influenced by hot rock. Conversely, water from Browns Creek exhibits a hydrogen shift (to the left) that can occur during exchanges with H_2S or CO_2 , or more plausibly, through the process of hydrolysis when silicate minerals, such as hornblende, in the host rocks become hydrated. All samples shift left when compared along the Nevada meteoric water line.

8 Closing Remarks

The FCW was pumped at a constant rate of 406 gallons per minute (gpm) for ten (10) consecutive days, with a total drawdown of 100.63 feet. The Specific Capacity at a rate of 406 gpm is about 4 gpm/Ft. Well efficiency is approximately 40.7% at 450 gpm and 67.3% at 150 gpm. The Transmissivity of the formation, which the FCW is screened, was estimated from both the rate of drawdown and rate of recovery in the pumped well. The range in Transmissivity values between the Theis Recovery and Cooper-Jacob drawdown is (7,163 Ft^2/Day vs. 3,712 Ft^2/Day). The rate of recovery in the well bore is thought to be influenced by borehole storage effects and not by water siphoning down the drop pipe to the pump once pumping had been terminated. The Transmissivity estimated from the recovery data is expected to be slightly over estimated based on this initial response. This sort of response can be expected in faulted or fractured rocks where secondary permeability may be greater than the primary permeability of the formation. In this case, late time drawdown data is expected to provide a more reliable and more conservative estimate of permeability.

No flow boundaries observed in the drawdown data suggests faults, structures or less permeable rocks may present strong barriers to uniform radial groundwater flow.

Storativity of the rocks evaluated is expected to average about 0.005 based on the detrended data from OWE-3 and OWE-4.

Long-term extraction of groundwater at the FCW is expected to influence domestic wells and TMWA operated wells OWE-3 and OWE-4. By applying a Transmissivity of 3,712 Ft^2/Day , a Theis based simulation of time and drawdown was produced. The simulation indicated extraction rates of over 800 gpm could be pumped from the aquifer for a duration over five consecutive years or more. The simulation indicated about 20 feet of drawdown may extend over one (1) mile under this scenario. The stress is expected to occur primarily in the direction of OWE-3 and OWE-4 in Washoe Valley, and not in the direction of the up-gradient and cross gradient St. James Wells, located north of Browns Creek.

The assessment did not fully investigate the interaction between surface water recharge to groundwater. However, the flow measurements collected along Browns Creek indicate some loss occurs between measuring points BC-1 and BC-2.

Water quality appears to be generally good. However, prolonged pumping may result in extracting waters which are geochemically enriched with manganese. Ambient groundwater temperature typically ranges from between 50°F and 55°F. Water temperatures measured from transducer during the pumping test was consistently about 70°F. Water temperature from other wells in this area, OWE-3 and OWE-4 ranged from between 64°F to 66°F. The isotope and water quality data suggest the source waters are new in origin but perhaps are influenced by hot rocks at depth. Circulation of fluids and upwelling of waters in high angle regional faults may contribute to slightly elevated temperature of the groundwater.

The potentiometric surface map strongly indicates groundwater within the vicinity of the FCW flows from west to east, about 18° southeast at an average gradient of about 0.07 Ft/Ft and not in a northwest direction towards Reno or the Mt. Rose Alluvial Fan area. There is no indication from the data collected during this evaluation, or from the results of the 10-Day pumping test that would indicate extraction of groundwater from the aquifer south of Browns Creek in Washoe Valley, would impact wells in St. James Village, Callahan Ranch, Montreux, or the Mt. Rose Alluvial groundwater system.

9 References

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- Kruseman, G.P., and DeRidder, N.A., 1970, Analysis and Evaluation of Pumping Test Data, 2nd Edition, International Institute for Land Reclamation and Improvement, Publication 47.
- https://nevada.usgs.gov/tech/excelforhydrology/Listing_and_Description.htm

10 Certification

CWR has exercised all due care in reviewing all information collected. Opinions presented in this report apply to the site conditions and features, as they existed at the time of CWR's assessment, and those reasonably foreseeable. These opinions do not necessarily apply to conditions and features that may arise after the date of this report.

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Prepared For:
St. James Village and,
Mr. Keith Serpa
June 2018

Revised per NDWR Comments
October 2018

Prepared By:



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Appendix A
Work Plan for Serpa Well Pumping Test



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January 30, 2018

Memorandum

Work Plan for Falcon Capital Well Pumping Test - Groundwater Testing and Monitoring

Attention:

Randy Van Hoozer
Senior Hydrogeologist
Truckee Meadows Water Authority
1355 Capital Blvd. I Reno, NV 89502

This Memorandum has been prepared by Confluence Water Resources (CWR) to support groundwater characterization studies for Saint James Village and testing of the Falcon Capital Well located within the NW ¼, NE ¼, of Section 23, T17N, R19E, Mount Diablo Baseline and Meridian.

1. Program Objectives

The results of characterization work and groundwater testing are intended to be used to evaluate aquifer dynamics and probability to impact other water rights holders or domestic well owners from prolonged extraction of groundwater at the well location. Although the Falcon Capital Well does not meet conformance criteria for a municipal supply well, it may be used to complete the evaluations required to assess potential impacts to the Mount Rose Fan groundwater system and adjacent aquifers, resulting from prolonged pumping at the Falcon Capital Well location. A long-term pumping and recovery test will be required to assess hydrogeological boundary conditions, cumulative impacts and potential water production from the local country rocks which the Falcon Capital Well is screened.

2. Background Information

CWR has reviewed the following documentation in preparation of this work plan:

- 2003, Tec Civil Engineering Consultants Water Rights Point of Diversion and Place of Use Map for the Falcon Capital Well.
- 2003, Falcon Capital Domestic Well Pumping Test Report, Prepared By Tec 1, Inc.
- 2016 TMWA Comments Pertaining to Previous Work Plan for Falcon Capital Well Pumping Test and Results from December 2017 TMWA Meeting - Report on Phase I Findings.
- NDWR Well Logs (Log No. Referenced in **Table 1** and **Figure 1** and **Figure 2**).
- 1994, Report on Old Washoe Estates New Production Well, Prepared By Washoe County Utility Division, Department of Public Works.

3. Responsibilities of The Testing Team

The team includes Truckee Meadows Water Authority (TMWA), Saint James Village and their representative CWR, and Carson Pump (subcontractor to Saint James Village).

3.1. Pump Contractor Responsibilities

Carson Pump will be responsible for pump string installation and test set up, and assistance in oversight of the pumping test. Carson Pump will be required to provide and maintain equipment for testing including but not limited to;

- The test pump and drop pipe,
- Check valve,
- Totalizing flow meter,
- Variable Frequency Drive (VFD),
- Discharge piping (500 ft),
- Sounder tubes,
- Light plant,
- Generator and fuel, and
- Will carry all equipment purchase or rental fees except those specified by CWR.

From CWR's experience, a constant rate pumping test is difficult to administer using a manual flow control device such as gate or butterfly valve. A constant rate can be achieved through use of a VFD. Carson Pump will also provide the following services to support the pumping test;

- 24 hr. oversight of pumping activities.
- Generator, fuel delivery, preventative maintenance on equipment, service of generator, VFD, and all other equipment not provided by CWR as specified herein.
- Recording of discharge readings from totalizing flow meter and pump or line pressure measurements as directed for at least 11 consecutive days.
- Collection of physical water level measurements (depth to water or dynamic pumping level in well) via water level indicator during pumping or as directed by CWR.
- Test pump and drop pipe rental during recovery period, assume approximately 30 consecutive days.

Carson Pump will provide daily shift reports. The reports will include measurements of depth to water, pumping pressure, hertz on generator, and discharge readings from the flow meter.

3.2. CWR Responsibilities

CWR will utilize pre-installed instrumentation to record drawdown and recovery in the Falcon Capital Well and will direct and oversee the test. CWR will validate the collection of manual measurements of depth to groundwater during the test via water level indicator from the second sounder tube installed in the pumping well. The frequency of "hand" collected water level measurements shall be directed by CWR upon initiation of the test, then will likely decrease as the test progresses (log scale). Hand collected measurements during the recovery period will be gathered by CWR. CWR will download data daily from all observation wells if a pressure transducer is accessible via cable through the duration of the pumping test.

CWR will also be responsible for providing the Team with daily pumping and activity reports though duration of the test and will be representative of Saint James Village.

3.3. Saint James Village Responsibilities

Saint James Village will provide access to all wells within the property of Saint James Village and will provide security at the site of the Falcon Capital Well. Saint James Village and partners will carry the costs of the work proposed herein.

3.4. TMWA Responsibilities

This work plan and the project relies on TMWA to provide the team access to water level data from the wells identified as (TMWA TDX) in **Table 1**, at the frequency proposed below. The team requests TMWA to provide the following;

- Access to data 14 days prior to the test, through the duration of pumping test, and through a potential 30 day recovery period.
- All digitally accessed data are circulated to the team once a week through test recovery.
- Non vented transducers hung on stainless steel cables will be downloaded once recovery is complete. These transducers will remain untouched until that time. Once downloaded, these data will be provided to the team.
- Manual measurements are circulated daily during the pumping test and within the first 48-hrs of the recovery period.
- TMWA will work with operations to minimize or eliminate pumping from nearby municipal wells during the test.

4. Background Water Level Measurements, Observation Wells, and Frequency of Data Collection

CWR has begun to establish background water level information from observation wells selected for monitoring in preparation of a long-term pumping and recovery test of the Falcon Capital Well. Details of wells proposed to be included in the monitoring network per TMWA recommendations are provided in **Table 1** and the locations are shown in **Figure 1** and **Figure 2**.

4.1. Pre Test Water Level Measurements

Initial water level measurements will be collected via water level indicator from all observation wells and the Falcon Capital Well to generate a snapshot in time potentiometric surface of the evaluation area. InSitu Inc. Level Troll Pressure Transducers™ (transducers) will then be deployed in those wells without transducers, and programed to collect high resolution water level measurements 14 days prior to the start of the pumping test.

4.2. Water Level Indicator Measurements

Water level measurements will be collected at the Falcon Capital Well via water level indicator to back up and validate transducer generated data. Hand collected water level indicator measurements will be frequent upon initiation of the pumping test and also during the first day of recovery (one (1) measurement every minute). Otherwise, hand collected water level measurements will be collected hourly during the test. During late stage recovery, the team will rely on transducer generated water level data which will be periodically confirmed via water level indicator until recovery is complete.

4.3. Frequency of Transducer Measurements

The transducers will begin to record and store water level measurements on an internal data logger 14 days prior to the pumping test. The transducers will continue to record data on the same interval during and after the pumping test and through the recovery period. Transducers are not proposed to record measurements on a logarithmic scale. Rather, all of the long term monitoring will be collected at the same frequency as the transducer recording data at the pumping well. Pressure transducers installed by Saint James and/or CWR will be programed to

collect measurements on one-minute intervals through the duration of all testing and recovery. CWR proposes a similar data collection frequency from the TMWA operated observation wells.

4.4. Water Level Data Transfer Protocol

For a successful test, CWR and Saint James will request TMWA provide the team access to water level data from the wells identified as (TMWA TDX) in **Table 1**. This includes access to data up-to 14 days prior to the test through the duration of pumping and through the anticipated recovery period. This data should be circulated to the team weekly until recovery has reached to within 95% of the pre-test water levels. **Table 2** highlights the proposed schedule for TMWA and team data transfers.

4.5. Monitoring of Domestic Wells

The Danzinger Well (Log No. 32872) and the Saladin Well (No Well Log) are domestic wells located within 1,800 feet west of the Falcon Capital Well. TMWA, Saint James Village, and CWR have made efforts to contact the respective homeowners' to gain access and permission to monitor the wells. The provisions and limitations in accessing both wells preclude monitoring with pressure transducers or water level indicator without extensive liability to both the team and the homeowners. As such, CWR proposes notifying the homeowners of the upcoming tests and request they closely monitor for noticeable reductions in their domestic water supply during the pumping test. CWR and/or TMWA will install a transducer in the Coveau domestic well (Log No. 10698) to monitor response during the pumping test. No other domestic wells are proposed for monitoring during the test.

4.6. Flow Rate Monitoring

The flow rate from the pumping test will be monitored at high frequency (every 1-10 minutes) upon initiation of step testing and the long-term constant rate test. Flow measurement frequency will be logarithmic, such that discharge and pumping pressure measurements will be every hour once the test is underway.

5. Pumping Test Specifications

This section includes general specifications for the test pump and drop pipe string set-up, duration of the test, target discharge rate, discharge management and observation well network based from the results of the Phase I investigation conducted in October and November of 2017.

5.1. General Specifications for Pump String Setup

Carson Pump will provide the following pump arrangement as proposed by CWR and Carson Pump:

- 75 hp submersible test pump assembly. A cooling shroud may not be necessary based on the results of the short-term Phase I test.
- Drop pipe (650 ft. 4-inch dia.).
- Two sounder tubes (645 ft. 1-inch dia. each).
- Backflow check valve.
- Totalizing flow meter (prefer digital meter).
- Variable Frequency Drive (VFD).
- Lay-Flat discharge piping (500 ft. 4-inch dia.).
- Generator and fuel, with requirement to service the generator prior to the test to limit potential for shut down.

5.2. Test Duration and Target Discharge Rate

An assessment of the hydraulics of the formation which the Falcon Capital well is screened assuming Specific Capacity, according to (Driscoll, Fletcher 1986). The (T) which the well is screened was calculated to be about 2,400 ft²/day. Using Driscoll, a storativity value of 0.10 was assumed for fractured or faulted bedrock. By applying a (T) of 2,400 ft²/day, the following analysis of time and drawdown was produced;

- Calculated distance drawdown at the well using (T) 2,400 ft²/day with a discharge rate of 250 gpm over 4 hours of pumping.
- Actual measured drawdown at the pumping well using the measured discharge rate of 250 gpm, over 4 hours of pumping for comparative purposes.
- Estimated distance drawdown based on 500 gpm for a duration of ten consecutive days. This calculation considers the (T) of 2,400 ft²/day.
- Estimated distance drawdown based on 500 gpm for a duration of 30 consecutive days. This calculation considers the (T) of 2,400 ft²/day.

A graphical presentation of these analyses are presented in **Figure 3** and **Figure 4**. These data were presented to TMWA in the November 2017 meeting. The consensus amongst the team is to target a duration of **ten (10) consecutive days** with option to extend the duration of the test several days based on measured response in the observation well network. Extending the test will be discussed amongst the team and authorized by Saint James Village.

The following summarizes technical testing specifications.

5.2.1. Step Test

CWR will work with Carson Pump to administer a step pumping test of the well. CWR will provide and install instrumentation to record water level drawdown and recovery and will direct and oversee the step test (minimum of four 100 minute steps) as follows;

- 0-100 minutes @ 150 gpm
- 100-200 minutes @ 250 gpm
- 200-300 minutes @ 350 gpm
- 300-400 minutes @ 450 gpm

CWR will use data obtained from the step test to further evaluate specific capacity, well efficiency, and the optimal pumping rate for the constant rate test. Drawdown data from each step will be plotted on a logarithmic scale and extrapolated for 10 days to assess potential drawdown over time. An email report will be provided to the team detailing the results of the step test, and the estimated optimal pumping rate for the long-term constant rate test.

The accepted method for administration of a step test in Nevada requires aquifer recovery be recorded up to 95% of the premeasured static water level. CWR assumes two (2) days or more of water level recovery time could be required between the end of the step test and the beginning of the constant rate discharge test.

5.2.2. Pumping Test

The optimal pumping rate will consider the highest discharge possible, ensuring adequate pump submergence for cooling purposes. *The duration of the Falcon Capital Well Pumping Test will target **10 consecutive days**, at a target discharge rate of **±450 gpm**.*

5.3. Recovery Specifications

Time and groundwater recovery data are critical for determining aquifer and pumping dynamics. When the pumping test ends, CWR and Carson Pump will collect hand measurements of the initial recovery rate of the pumping well within the first day of recovery. CWR will then monitor water levels in the well until the water level is expected to have recovered to within 95% of the pre-test levels. **The well is not to be pumped during the recovery portion of the test and the pump string shall not be removed until directed by CWR.** CWR expects the pumping well may require between 15 and 30 days to recover within 95% of the pre-test levels.

CWR will monitor recovery from the observation well network daily and then weekly until the recovered water levels are within 95% of the pre-test levels. Recovery of observation wells is expected to require between 10 and 30 days depending on the volume of groundwater extracted during the pumping test. It will be critical TMWA provide the team with water level data from the TMWA operated observation wells throughout the recovery period of the test. CWR will work with TMWA to determine when recovery is complete.

5.4. Discharge Management

Discharge from the pumping test will be managed on private land controlled by Saint James Village or project partners. Discharge from the test will be piped approximate 500 feet to rip-rapped outfall location with sufficient distance from both pumping well and observation wells to ensure the discharge does not infiltrate and influence the results of the test. CWR and Carson Pump will monitor discharge from the test to ensure the existing Best Management Practices (BMPs) are maintained and continue to function during the test.

6. Water Quality Sampling

During the test, CWR proposes to collect up to three (3) water quality samples from the well. A sample will be collected near the beginning, middle and end of the long term test. Water samples will be analyzed by a Nevada certified laboratory for Profile 1 constituents, which include arsenic. The results primarily will be used to estimate changes in Total Dissolved Solids and Alkalinity throughout pumping activities. At the end of the test, a sample will be collected and analyzed for bacteriological constituents if required. Analytical results will be used to estimate groundwater quality, assess beneficial use(s) and determine if treatment is required to meet drinking water limitations.

Additionally, water quality samples will be collected from the Falcon Capital Well discharge and from Browns Creek and analyzed for Oxygen-18 and Deuterium. The results of these analyses are intended to provide insight to groundwater recharge from precipitation and nearby surface waters.

7. Data Analyses and Reporting

7.1. Data Analysis

Data collected during the test will be processed and analyzed by CWR to provide a range of potential production capacities from the local country rocks and assess sustainable yield(s). The data will also be analyzed to further evaluate aquifer parameters such as hydraulic conductivities, transmissivities, potential boundary conditions and **(storage coefficient - if and only if, a drawdown response can be successfully propagated from the long term test and measured in a nearby observation well)**. The data will be scrutinized against various analytical approaches to reduce variability and uncertainty in the methods, and will be validated by TMWA and peer reviewed by a third party consultant (subcontracted through CWR).

7.2. Reporting

CWR will prepare a report that provides a discussion of field methods, test methods, and analytical methods used for well testing and data analysis. The report will include a summary of the test results with interpretations and conclusions regarding potential maximum and sustainable yields. The report will also include the following:

- A discussion on the probability to impact other water rights holders or domestic well owners from prolonged extraction of groundwater at the well location.
- Recommendations for completion of a water supply well conformant to TMWA standards (likely will include construction of a stainless steel well).
- Water quality results.

The report will also provide recommendations for further evaluation or best future use for the Falcon Capital Well based from the results of all testing.

8. Testing Schedule

Table 2 presents the proposed schedule and timeframe for completion of the work described herein. The step test is expected to begin at 9:00 am on February 15, 2018 and the constant rate test will at minimum extend through February 27, 2018.

Please direct any questions regarding this Memorandum to Matt Banta of CWR.

Sincerely,

Confluence Water Resources, LLC



Matt Banta, PHG
mbanta@confluencewaterresources.com
(775) 843-1908

Figures

Figure 1: Well Location Map (USGS QUAD)

Figure 2: Well Location Map (Aerial Image)

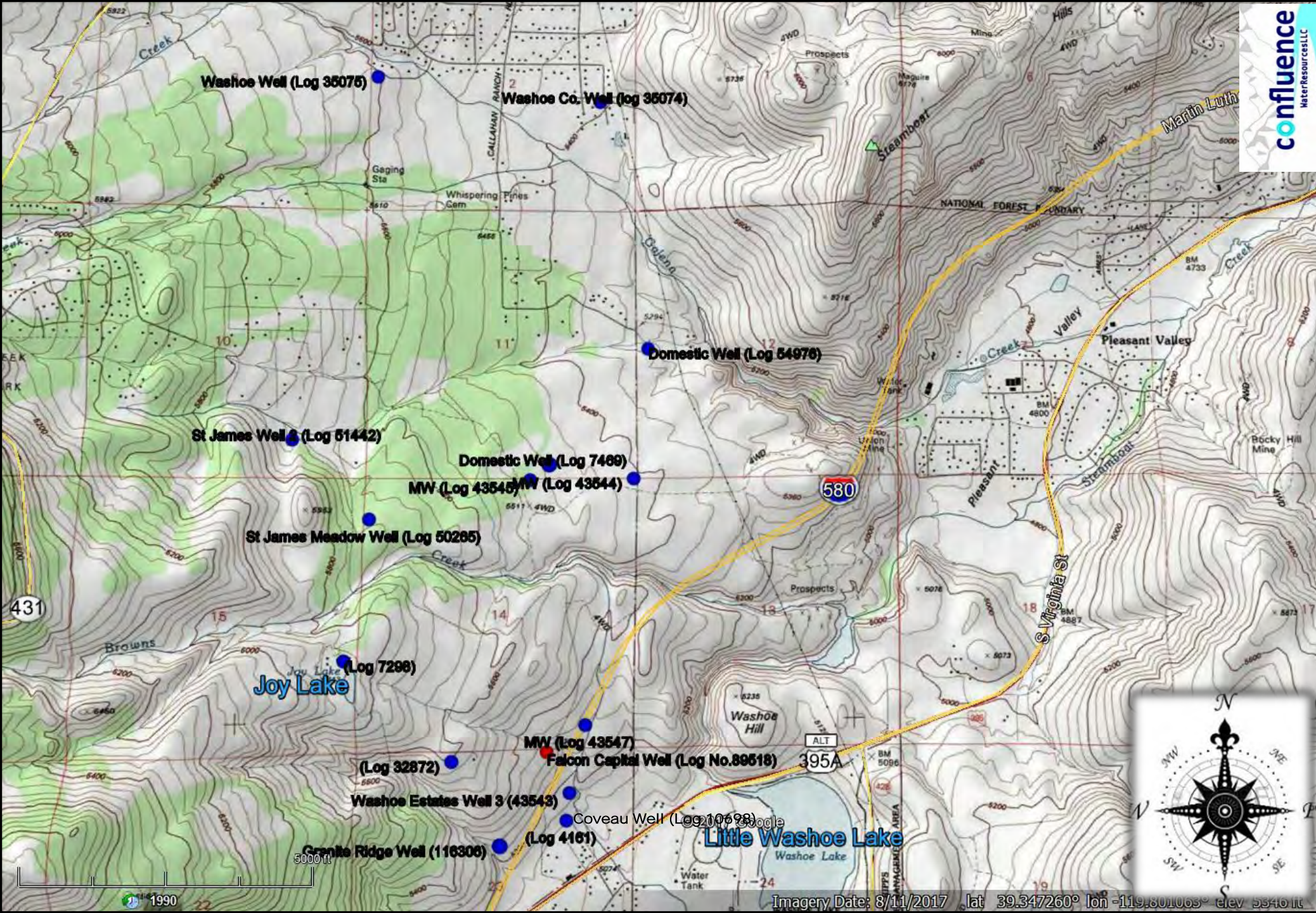
Figure 3: Cooper-Jacob Drawdown Analysis

Figure 4: Theis Based Analysis of Time and Drawdown

Tables

Table 1: Well Specifications

Table 2: Project Schedule



<p>Proposed Observation Wells</p>	<p>FIGURE 1: Well Location Map</p>	<p>1-inch = 3,000 feet T19N R17E</p>	<p>Prepared for:</p> <p>ST. JAMES'S VILLAGE</p>
<p>Falcon Capital Well Project</p> <p>Saint James Village</p> <p>Washoe County, Nevada</p>			



<p>FIGURE 2: Well Location Map</p>	<p>1-inch = 3,000 feet T19N R17E</p>	<p>Proposed Observation Wells</p>	<p>Falcon Capital Well Project Saint James Village Washoe County, Nevada</p>
<p>Prepared for:</p> <p>ST. JAMES'S VILLAGE</p>			

WELL ID: Falcon Capital Well

Local ID: Falcon Capital Well

Date: 11/1/2017

Time: 9:00

INPUT

Construction:

Casing dia. (d_c) 8 Inch

Annulus dia. (d_w) 12 Inch

Screen Length (L) 400 Feet

Depths to:

water level (DTW) 250 Feet

Top of Aquifer 250 Feet

Base of Aquifer 690 Feet

Annular Fill:

across screen -- Gravel

above screen -- Cement

Aquifer Material -- Fractured Igneous and

FLOW RATE 250 GPM

COMPUTED

Aquifer thickness = 440 Feet

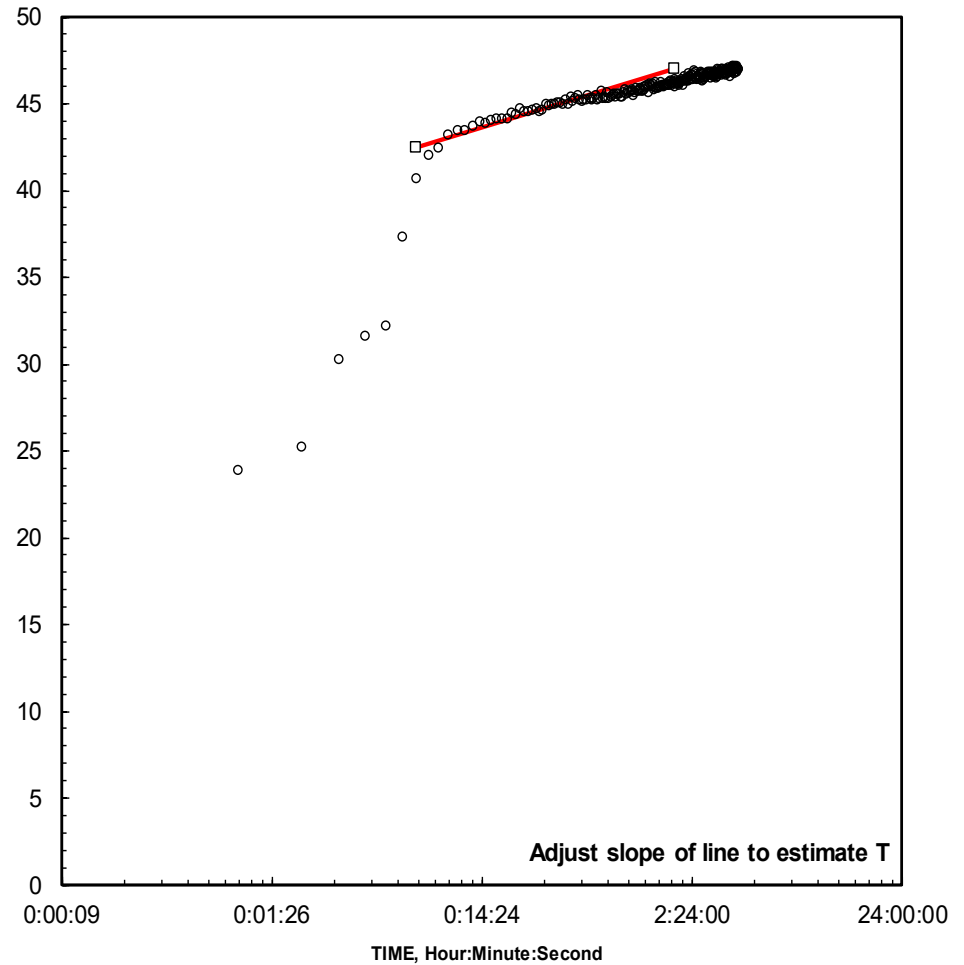
Slope = 3.6464316 Feet/log10

Input is consistent.

K = 5.5 Feet/Day

T = 2400 Feet²/Day

DRAWDOWN, IN FEET



REMARKS: Cooper-Jacob analysis of single-well aquifer test

Falcon Capital Well, St. James Village, Nevada.

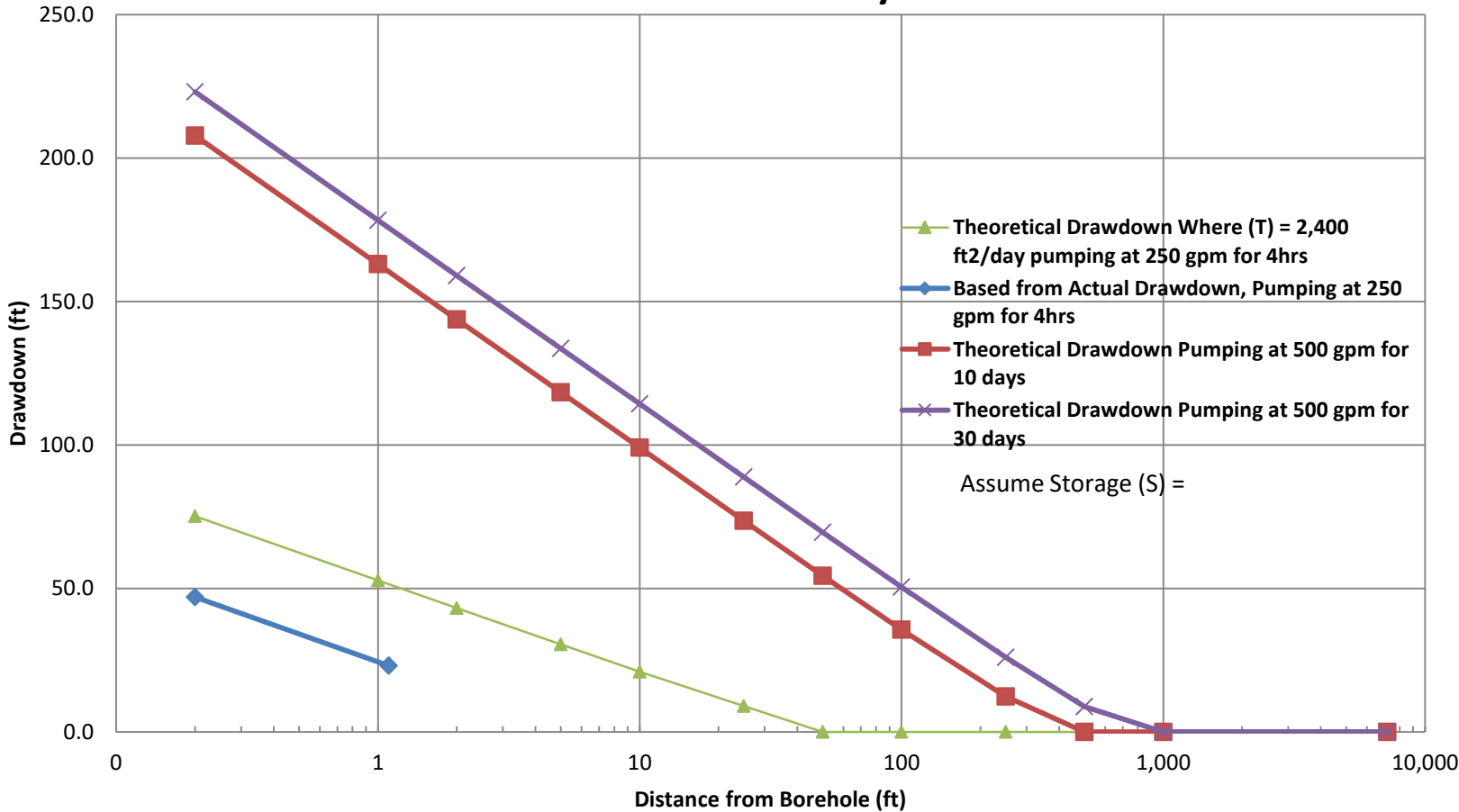
Prepared for:



Falcon Capital Well Project
Saint James Village
Washoe County, Nevada

Figure 3

Figure 4
Time Drawdown Analysis



Prepared for:



Falcon Capital Well Project
Saint James Village
Washoe County, Nevada

Figure 4

Table 1: Well Information and Water Levels

Well ID	Well Log No.	Type	APN	Latitude	Longitude	Approximate Well Collar Elv (Ft amsl)	Well Depth	Screen Interval (Top) Ft bgs	Screen Interval (Bottom) Ft bgs	Screen Elevation (Top) Ft amsl	Screen Elevation (Bottom) Ft amsl	Geologic Unit Screened	Depth to Water (Ft bgs)	Approximate Groundwater Elevation (Ft amsl)	TMWA SCADA	TMWA TDX	CWR TDX
Falcon Capital Well (Pumping Test Well)	89518	H	046-080-38	39.331428°	-119.813875°	5,327	697	290	690	5,037	4,637	Tad	247	5,080	No	No	Yes
Washoe Estates Well 3 (OWE-3)	43543	P	046-080-06	39.329199°	-119.812353°	5168	300	190	270	4978	4,898	Qfy	90.4	5,078	No	No	Yes
Washoe Estates Well 4	116306	P	046-080-34	39.326487°	-119.816939°	5262	470	360	460	4902	4,802	Tad	175	5,087	No	No	Yes
COVEAU, EDMUND E. Well	10698	H	046-080-43	39.326294°	-119.810825°	5110	90	74	87	5036	5,023	Qft	12	5,098	No	No	Yes
Danzinger Well	32872	H	046-060-18	39.331033°	-119.820234°	5584	650	530	650	5054	4,934	Tad	420	5,164	Monitoring By Home Owner		
Saladin Well	No Log	H	046-060-19	39.331349°	-119.819464°	5572	NA	NA	NA	NA	NA	NA	NA	NA	Monitoring By Home Owner		
Joy Lake Well	7298	H	046-190-13	NE,SE Sec 15 T17N, R19E		5840	390	316	348	5524	5,492	Tad	150	5,690	No	No	No
St. James Production Well 1 (Nadia Ct Well)	51442	P	154-011-06	39.348043°	-119.831452°	5694	620	260	620	5434	5,074	Tad	195	5,499	Yes	Yes	No
St. James Production Well 2 (Meadow Well)	50265	P	046-131-22	39.343788°	-119.826017°	5720	590	350	590	5370	5,130	Tad	242	5,478	Yes	Yes	No
St. James MW-3 (Near Meadow Well)	?	MW													No	Yes	No
St. James MW 4 (Per Well Log)	43547	MW	047-010-04	SE,SE Sec 14 T17N, R19E		5300	360	240	360	5060	4,940	Qfy	190	5,110	No	Yes	No
St. James MW-4 (Nadia Ct MW) Per TMWA	?	MW													No	Yes	No
St. James MW-1, 22 N. Earlhane Ct.	43544	MW	156-061-01	39.346006°	-119.807950°	5414	770	470	770	4944	4,644	Qfo	402	5,012	No	Yes	No
St. James MW-2, 189 Carlton Ct.	43545	MW	156-061-01	39.345909°	-119.815110°	5507	640	530	630	4977	4,877	Qfo	245	5,262	No	Yes	No
Domestic Well	4769	H	NA	SW,SE Sec 11 T17N R19E		5485	144	135	144	5350	5,341	Qota	135	5,350	No	No	No
Wayne Capurro Well	54976	H	045-270-15	39.352907°	-119.806134°	5285	157	75	157	5210	5,128	Qfo	56	5,229	No	No	No
Washoe Co. Mt. Rose Well 5	35075	P	047-040-17	39.367914°	-119.826086°	5608	802	400	780	5208	4828	Qota	244	5,364	Yes	Yes	No
Washoe Co. Mt. Rose Well 3	35074	P	045-082-13	39.366676°	-119.810458°	5410	223	120	210	5290	5200	Qota	41	5,369	Yes	Yes	No

Feet Above Mean Sea Level (Ft amsl).

Feet Below Ground Surface (Ft bgs).

Yellow Highlighted Cells Require Validation of Coordinates.

TDX = Pressure Transducer.

TMWA = Truckee Meadows Water Authority.

Table 2: Project Schedule

Table 2: Schedule

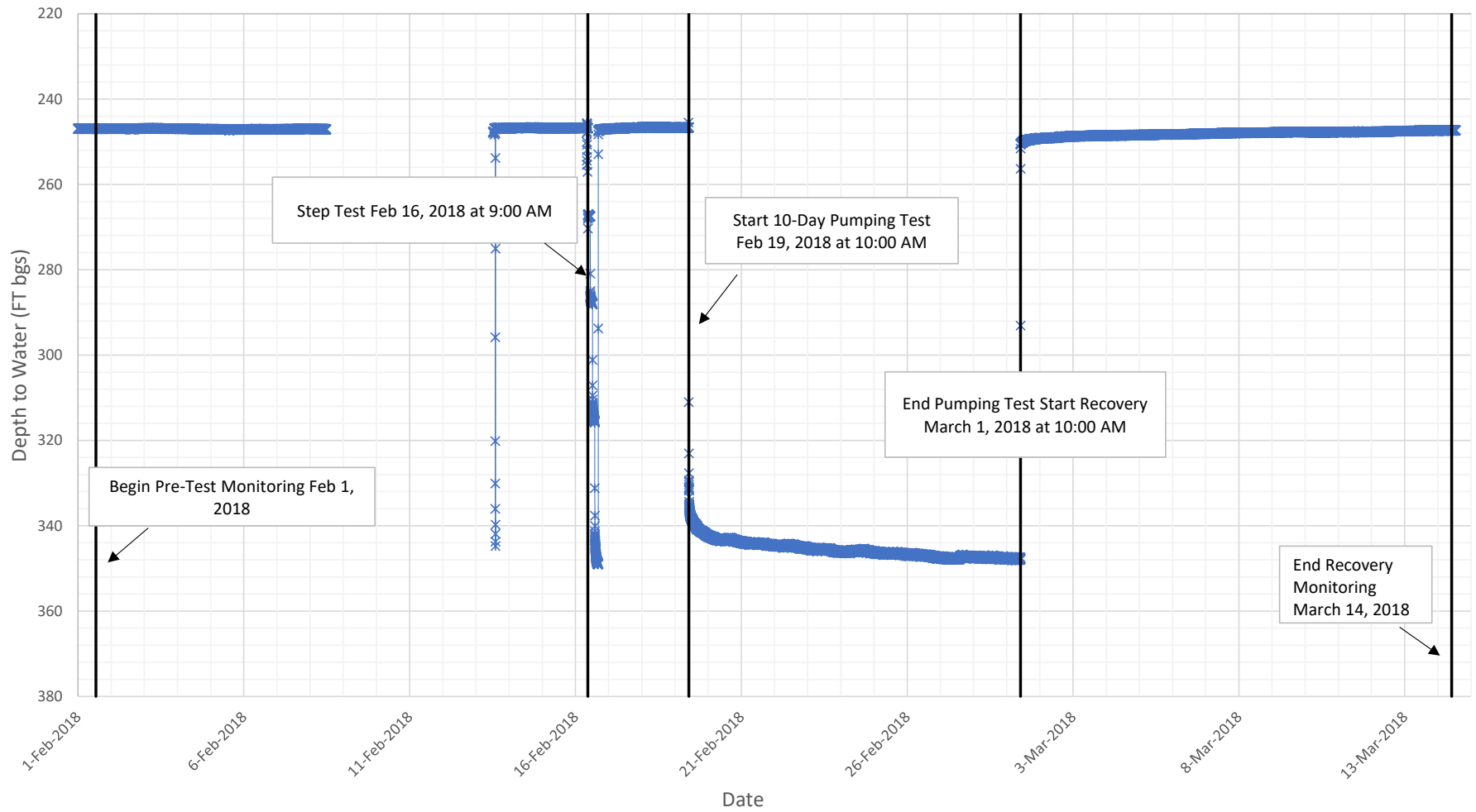
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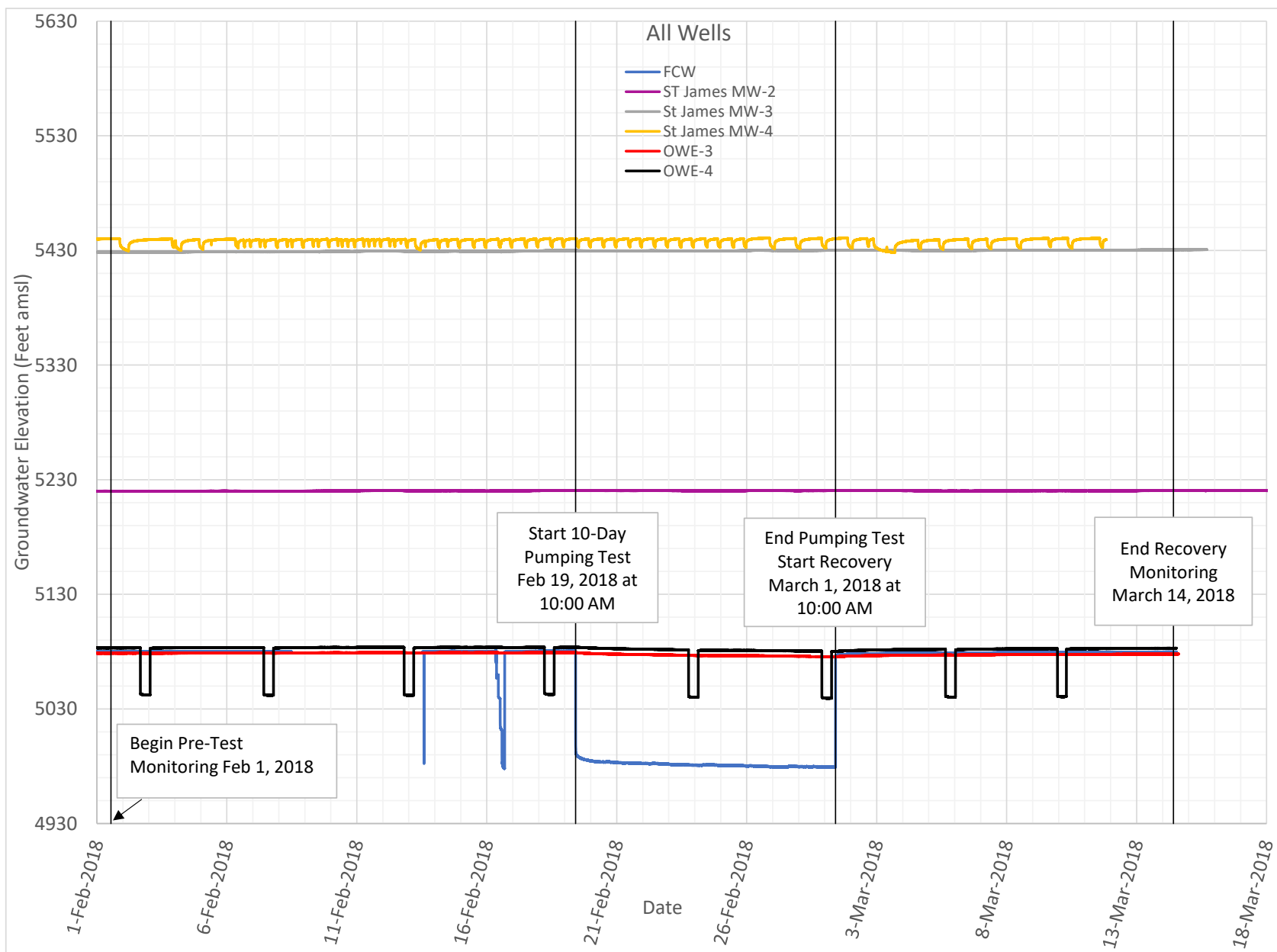
Appendix B

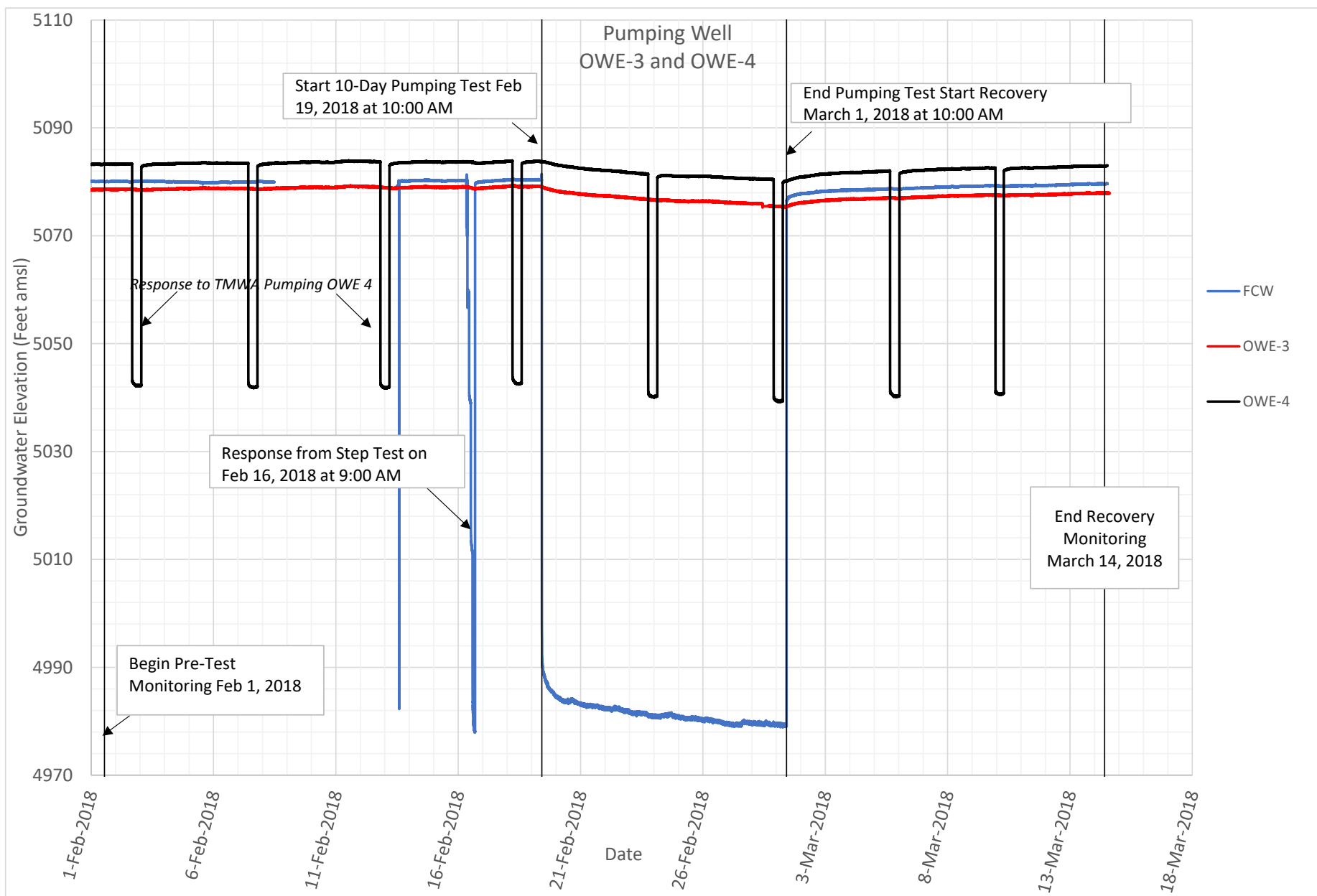
Hydrographs of Water Level Trends

FCW- Pumping Test Well

—*— FCW CWR Transducer

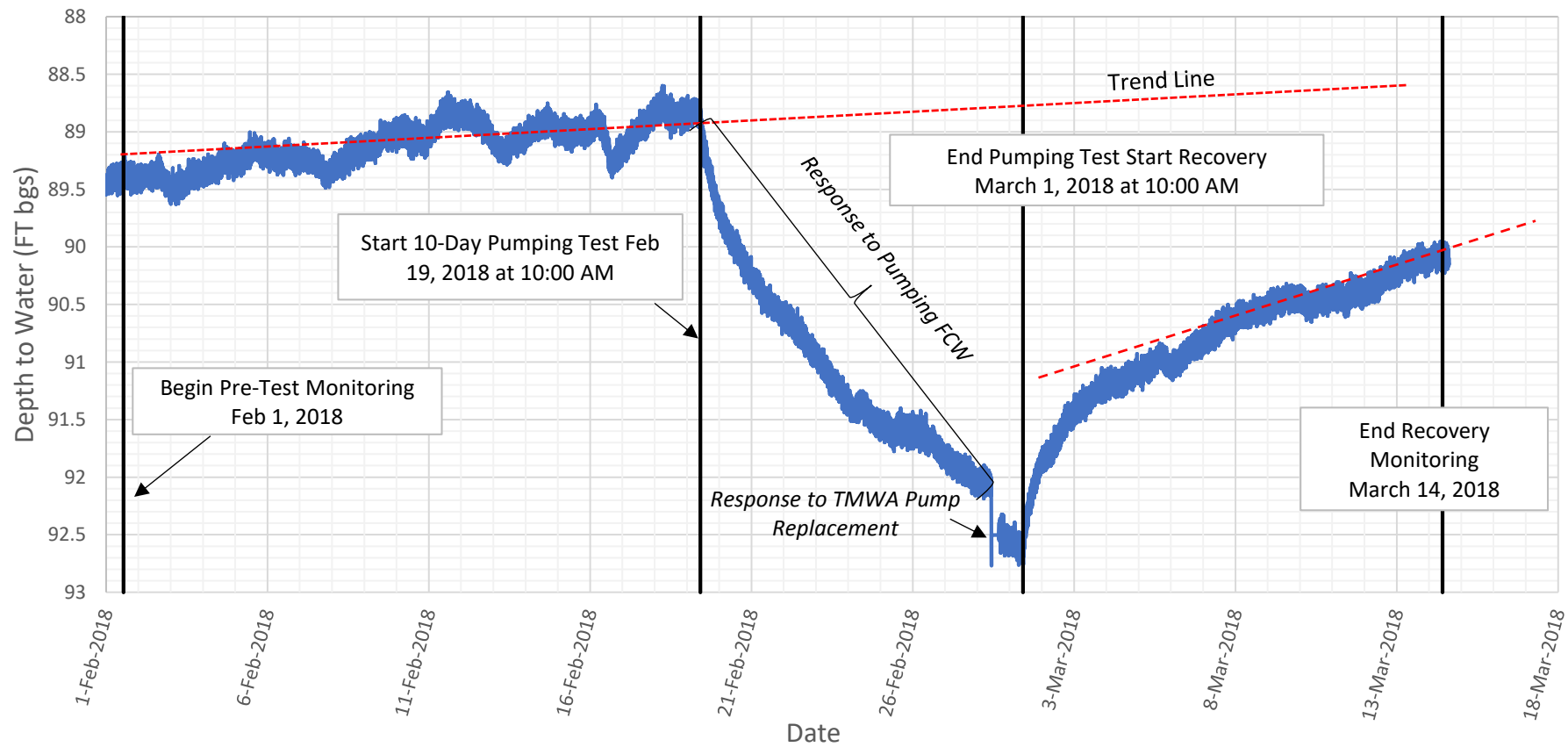






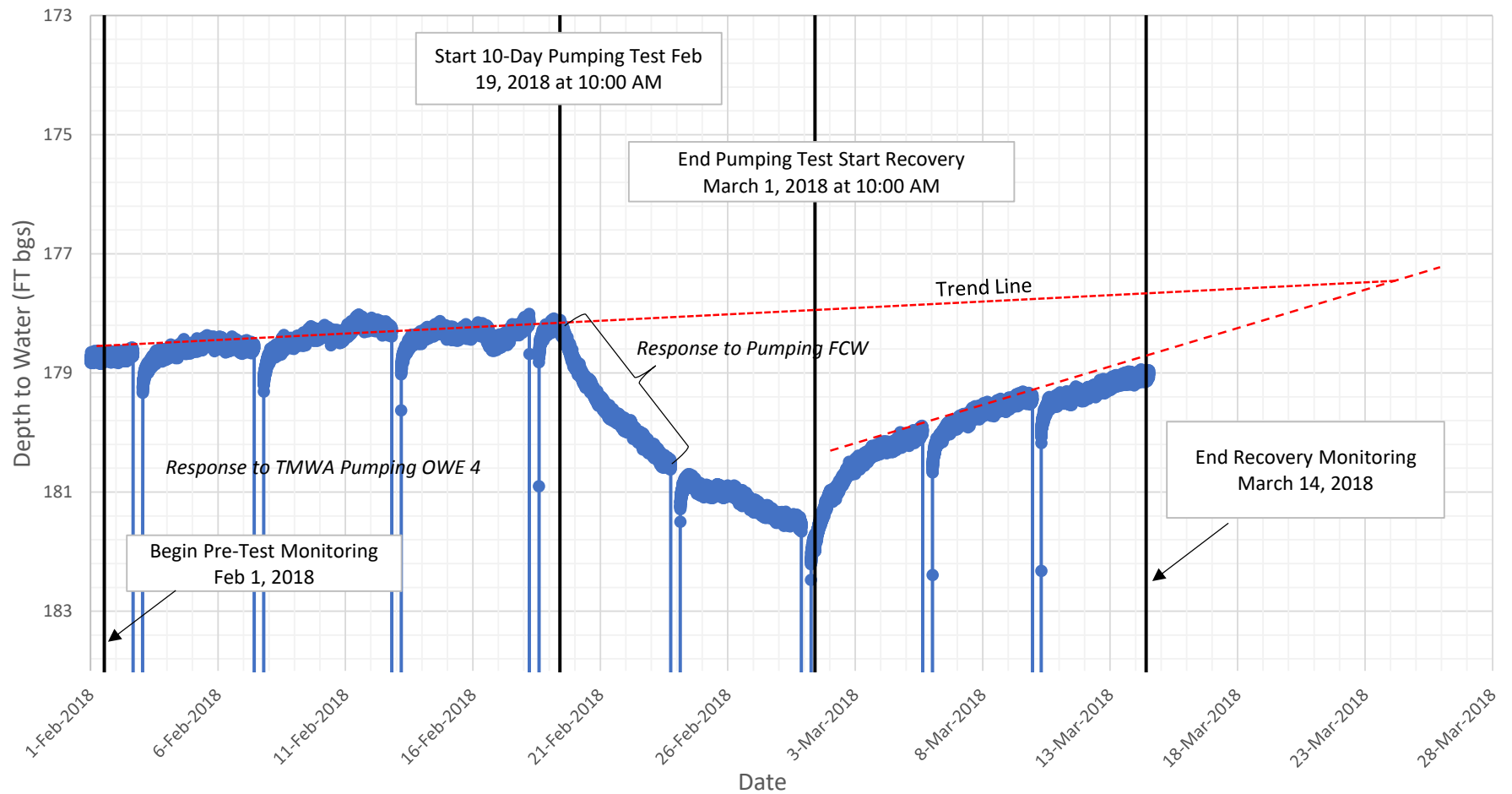
Old Washoe Estates Well 3

— OWE3 CWR Transducer



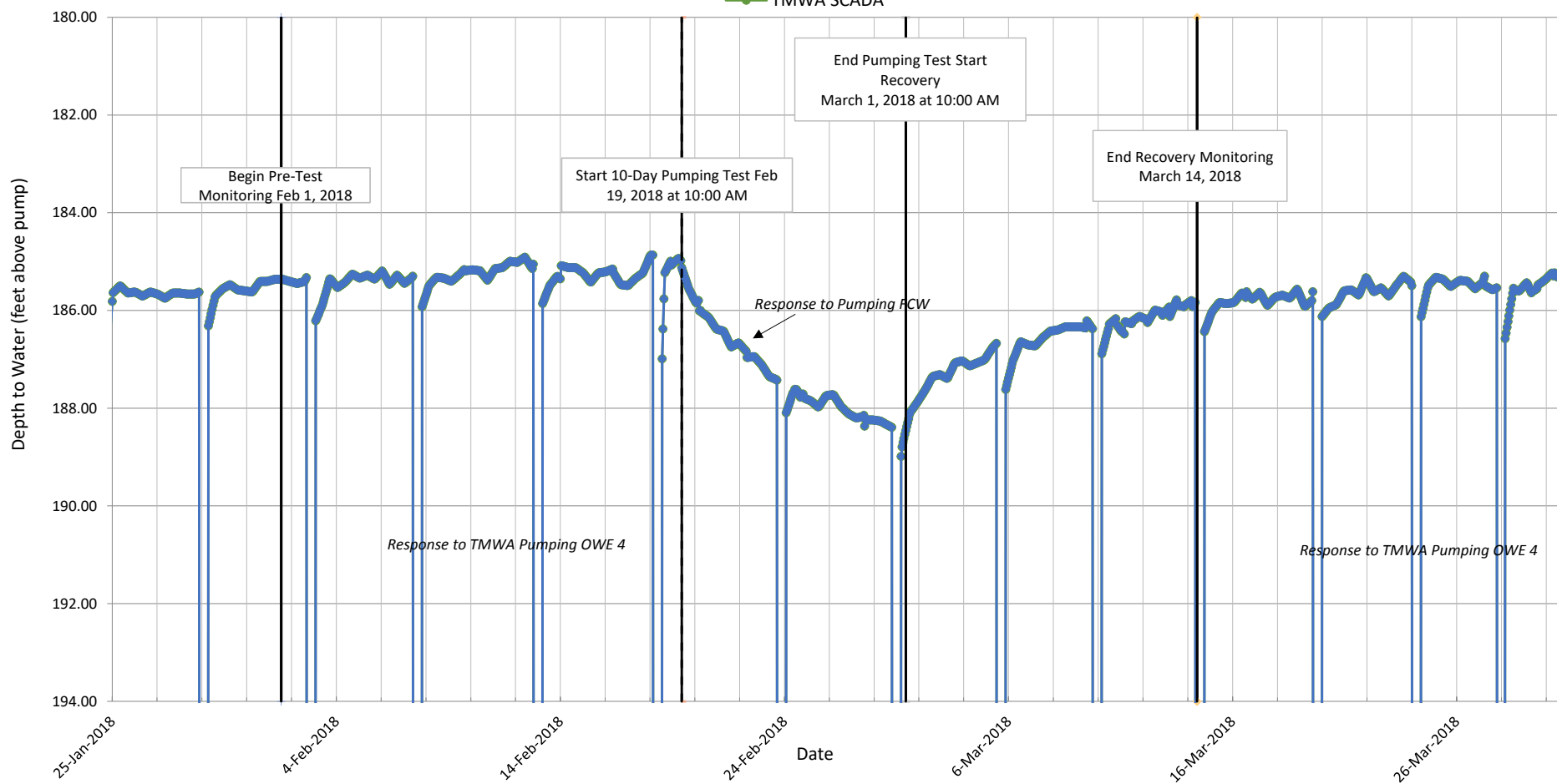
Old Washoe Estates Well 4

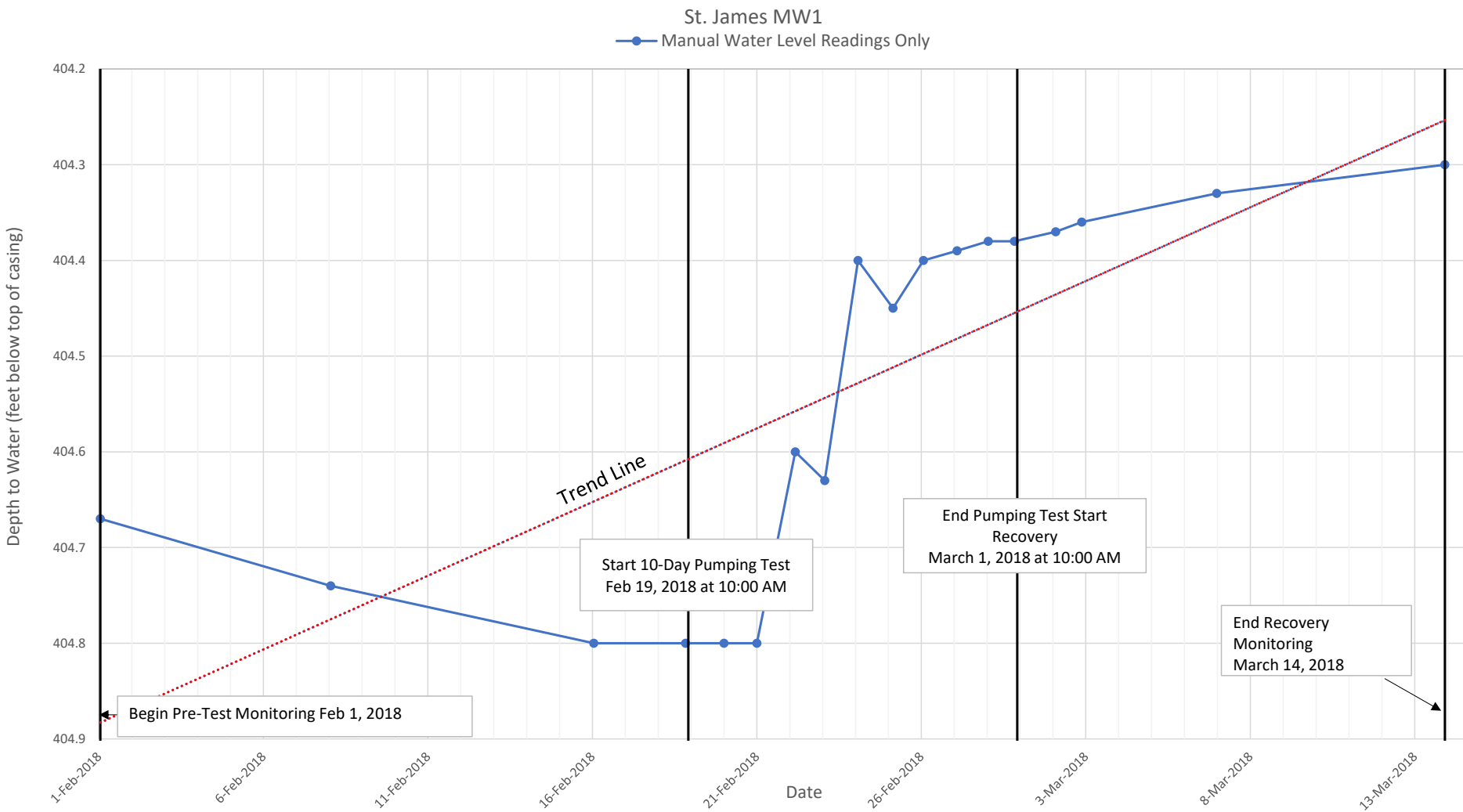
—●— OWE4 CWR Transducer



Old Washoe Estates 4

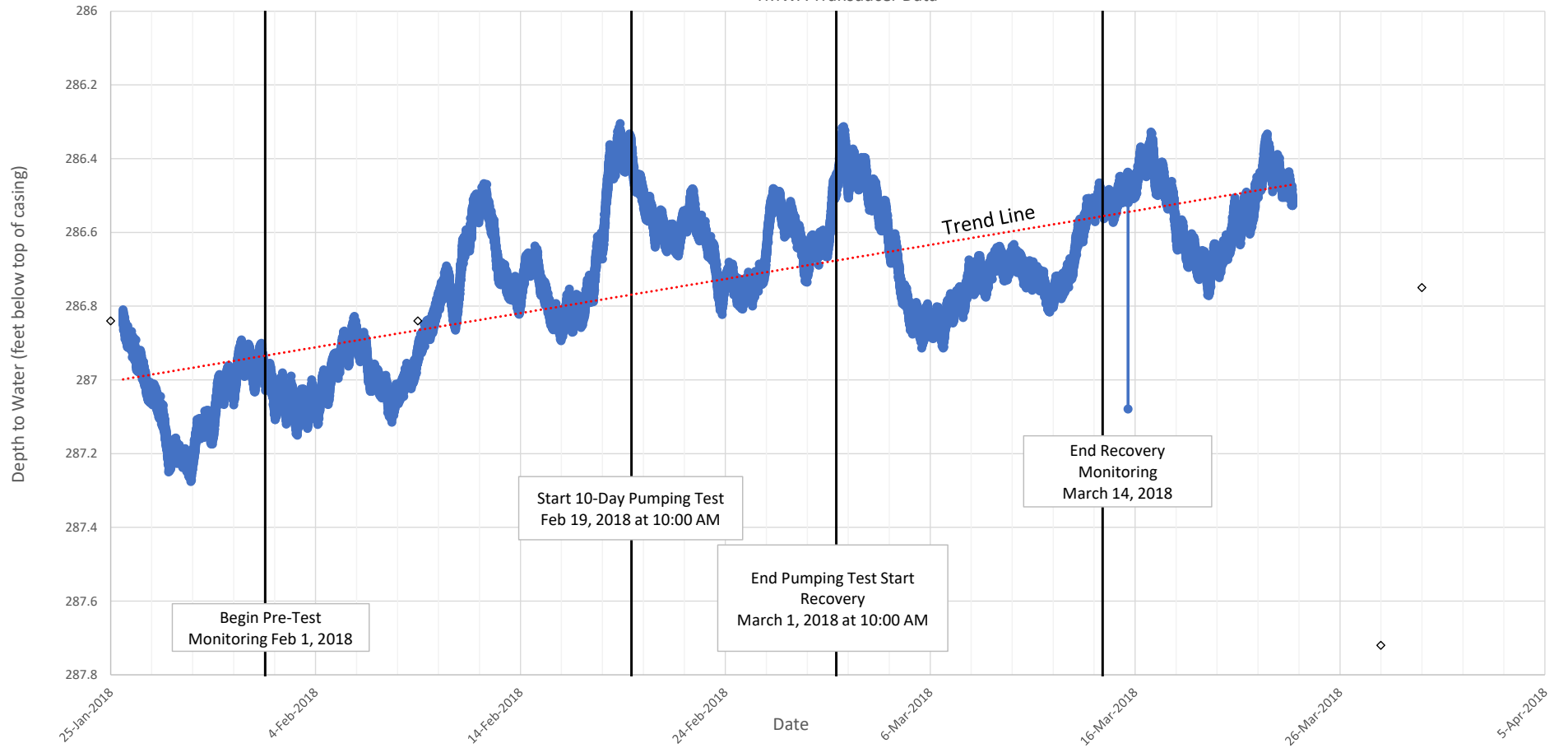
TMWA SCADA





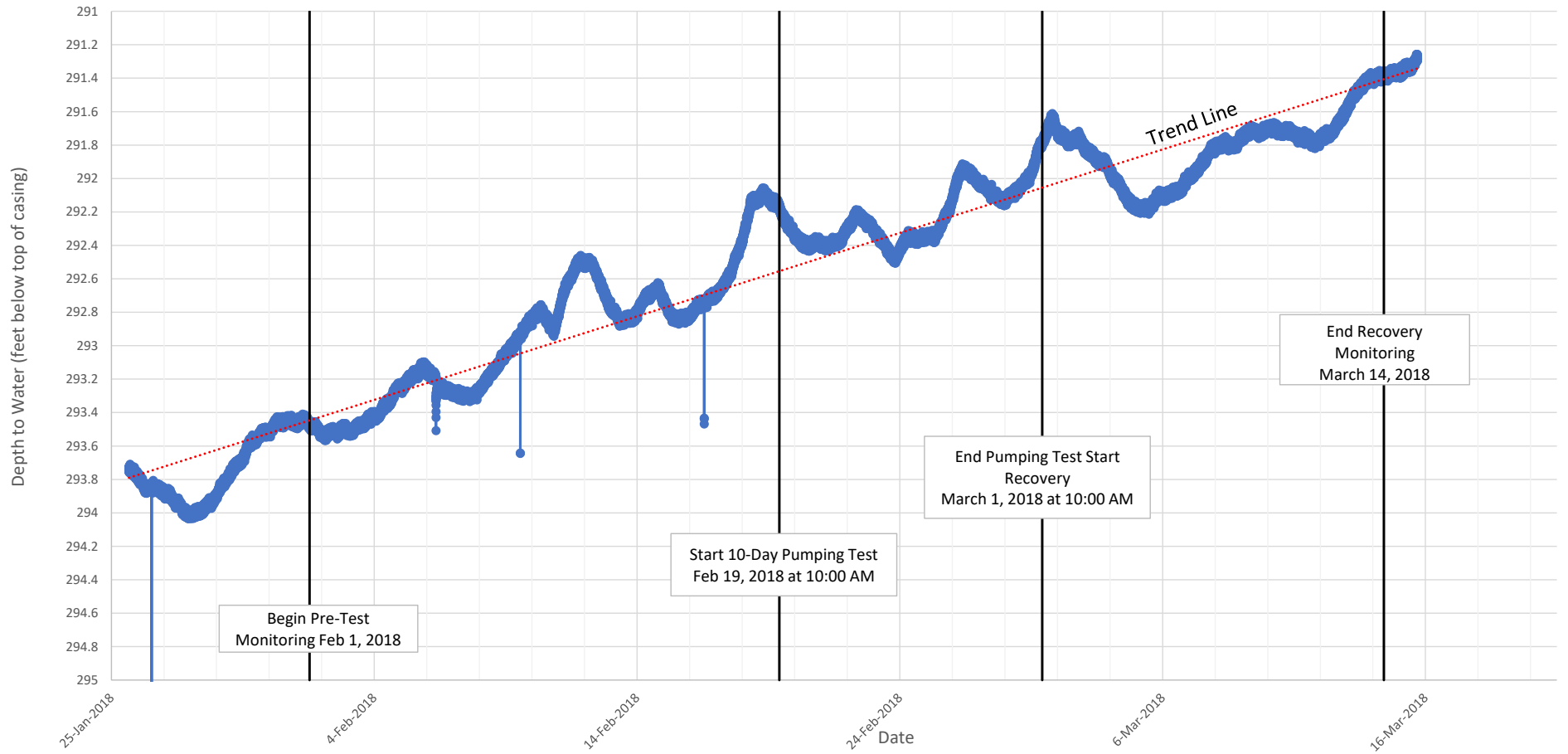
St. James MW2

TMWA Transducer Data



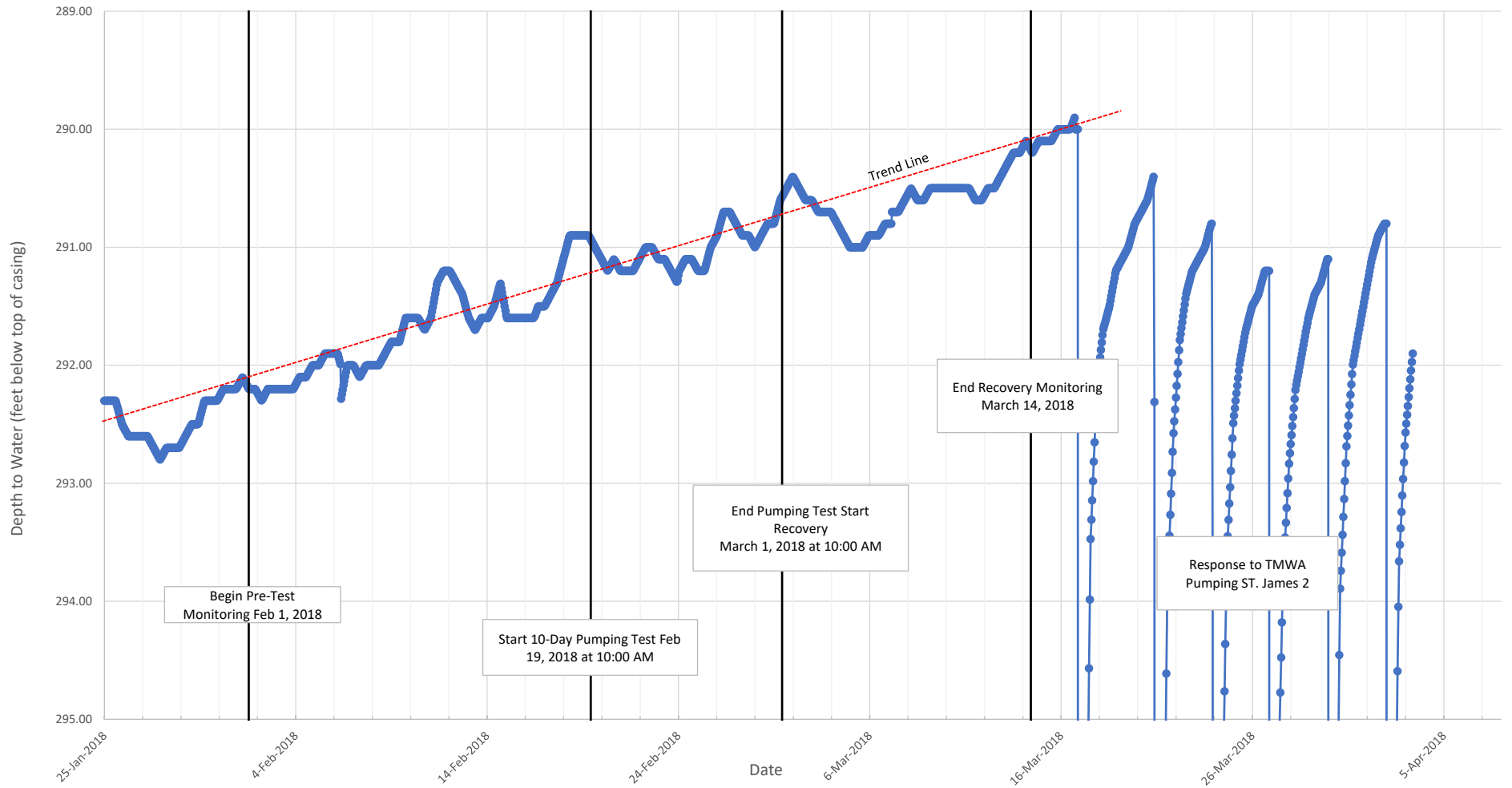
St. James MW3

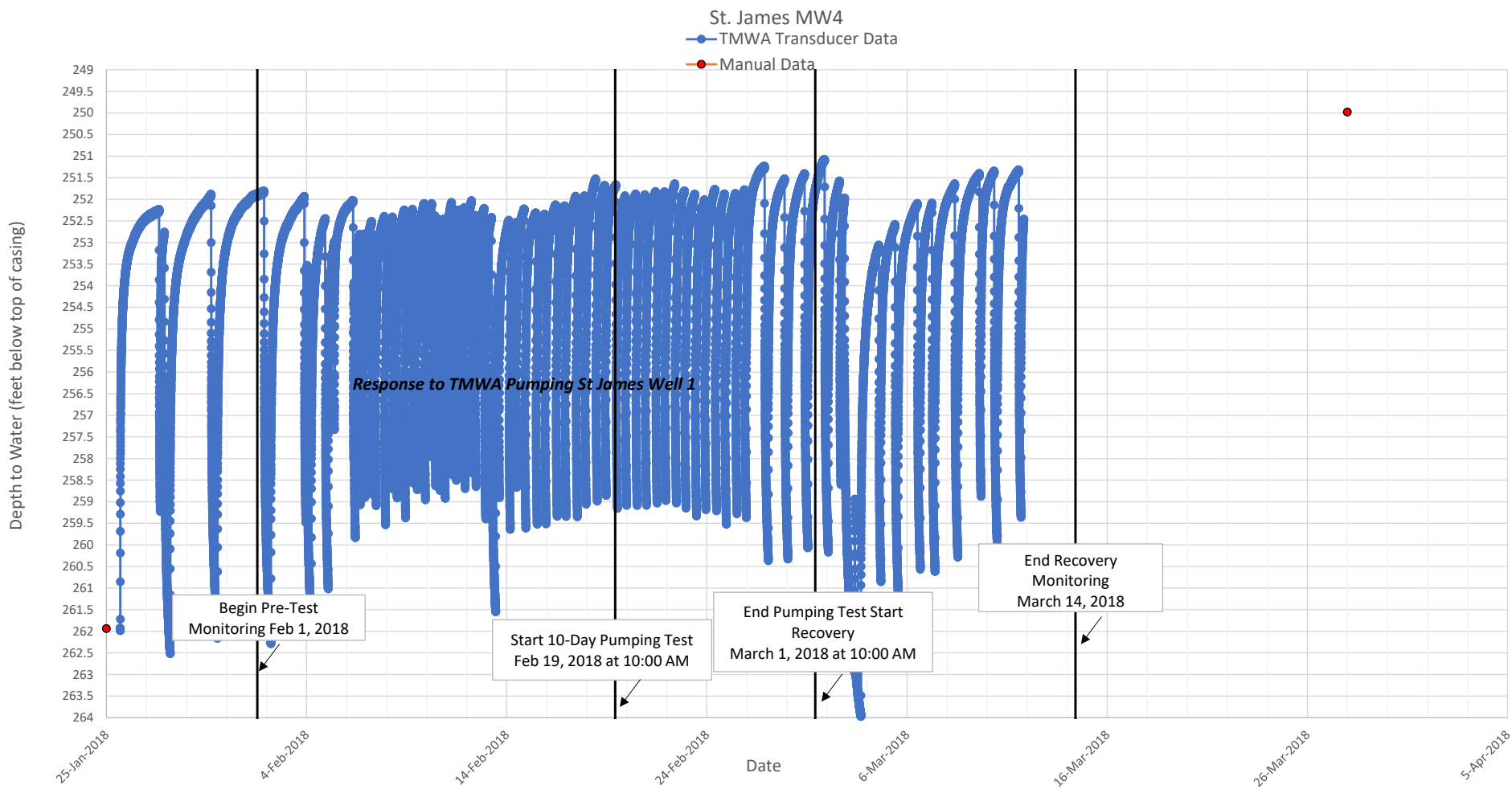
TMWA Transducer Data

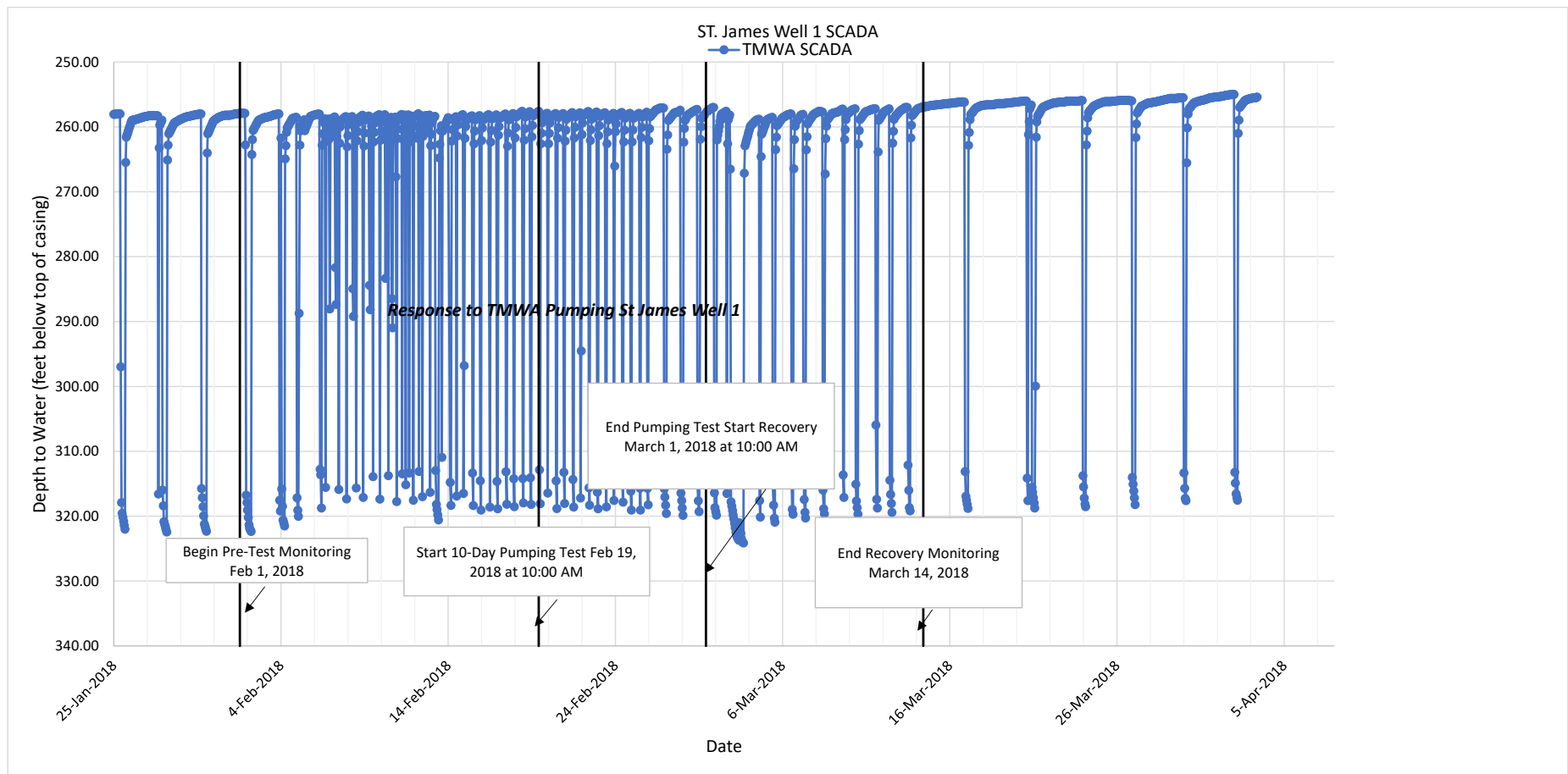


St. James 2

—●— TMWA SCADA







Appendix C

Well Drillers Reports

DIVISION OF WATER RESOURCES WELL DRILLER'S REPORT

Log No. **89518**

Permit No. **089**
Basin **089**

NOTICE OF INTENT NO. **49914**
Joy Lake Road

1. OWNER **Falcon Capital LLC**
MAILING ADDRESS **500 Damonte Rch Pkwy #1056**
Reno NV 89521

ADDRESS AT WELL LOCATION

2. Location **NW 1/4 NE 1/4 Sec 23 T 17N R 19E**
PERMIT NO. **PARCEL NO. 046-080-38**

Washoe County

SUBDIVISION NAME

3. WORK PERFORMED

☒ New Well Replace Recondition
Deepen Abandon Other

4. PROPOSED USE

☒ Domestic Irrigation Test
Municipal/Industrial Monitor Stock

5. WELL TYPE

Cable ☒ Rotary RVC
Air Other ☒ Mud

6. LITHOLOGIC LOG

Material	Water Strata	From	To	Thickness
Clay & boulders.		0	95	95
Red clay.		95	111	16
Black rock.		111	117	6
Volcanic.		117	143	26
Red clay.		143	160	17
Lost Circulation.		160	310	150
Black Rock.		310	360	50
Lost Circulation		360	437	77
Volcanic & clay.		437	673	236
Rock.		673	690	17
Clay.		690	695	5

8. WELL CONSTRUCTION

Depth Drilled **695** feet Depth Cased **695** feet
HOLE DIAMETER (BIT SIZE)

	From	To	
12 1/4 inches	0	feet	695 feet
inches		feet	feet
inches		feet	feet

CASING SCHEDULE

Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
8 5/8	16.94	188	+1 1/2	695

Perforations:

Type Perforation	Factory
Size perforation	3/32 x 3"
From	290 feet to 690 feet
From	feet to feet
From	feet to feet
From	feet to feet
From	feet to feet

Surface Seal ☒ YES No Seal Type:
Depth of Seal **100** feet Neat Cement
Pumped ☒ Cement Grout
x Poured Concrete Grout

Gravel Packed: Yes No
From **100** feet to **695** feet

9. WATER LEVEL

Static water level **270** feet below land surface
Artesian flow **0** GPM **0** P.S.I.
Water Temperature **68** Degrees F Quality

Date started **1-8 -03**
Date completed **2-11 -03**

7. WELL TEST DATA

TEST METHOD:	Bailer	Pump	x	Air Lift
G.P.M.	Draw Down (Feet Below Static)	Time (hours)		
4	80			
100	230	10 HR		
250	420			

10. DRILLER'S CERTIFICATION

This well was drilled under my supervision and the report is true to the best of my knowledge.

Name **McKay Drilling, Inc.**
2290 Pioneer Drive
Reno, NV 89509

NV Contractors No. **14170**
NV Driller's Lic (on site) **2121**

Signed

Steve McKay
By driller performing actual drilling on site or contractor

Date **2-13 -03**

RECEIVED
MAR 19 AM 11:21
STATE ENGINEERING OFFICE

WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

Log No. 4161
 Rec. July 8 1958
 Well No. _____
 Permit No. _____

Do not fill in

Owner Mrs. Schmidt Driller John Chapman
 Address Washoe City Address 6390 S. Virginia Lic. No. 29
 Location of well: SE 1/4 NW 1/4 Sec. 23, T. 17 N/S, R. 20 E, in _____ County

Water will be used for domestic Total depth of well 117 ft.

Size of drilled hole 1 1/2" Weight of casing per linear foot _____

Thickness of casing 12 gauge R.H. Temp. of water _____

Diameter and length of casing 117' - 6"
 (Casing 12" in diameter and under give inside diameter; casing 12" in diameter give outside diameter.)

If flowing well give flow in c.f.s. or g.p.m. and pressure _____

If nonflowing well give depth of standing water from surface 3 ft.

If flowing well describe control works _____ (Type and size of valve, etc.)

Date of commencement of well June 8 - 58 Date of completion of well June 9 - 58

Type of well rig Rotary

LOG OF FORMATIONS

From feet	To feet	Thickness feet	Type of material	Water-bearing Formation, Casing Perforations, Etc.
0	4		top soil	
4	19		Granite Boulders sand	Chief aquifer (water-bearing formation)
19	54		sand & clay	from <u>6</u> to _____ ft.
54	103		fine sand	Other aquifers _____
103	117		fine sand & some coarse water	_____
				First water at <u>6</u> feet.
				Casing perforated
				from <u>97</u> to <u>117</u> ft.
				Size of perforations
				<u>Chisel point</u>

From feet	To feet	Thickness	Type of material

Diam. casing	From feet	To feet	Length	"Remarks"—Seals, Grouting, Etc.
-----------------	--------------	------------	--------	---------------------------------

, 19.

1958 JUL 8 PM 3 30

OFFICE
CIVIL ENGINEER

WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

Log No. 4336
 Rec. Nov. 21 1958
 Well No. _____
 Permit No. _____

Do not fill in

(PAYNE)

Owner Bill Payer Driller Harvey & Bob Meyer
 Address Washoe Valley Address 306 Bath St. Carson Lic. No. 10
 Location of well: NE NW 23 17 Sec. 32 T16 N/S, R19 E, in Washoe County
 or Across highway from Halfway House
 Water will be used for Domestic Total depth of well 75½ feet
 Size of drilled hole 6" Weight of casing per linear foot 13#
 Thickness of casing 3/16"2 Temp. of water Cool
 Diameter and length of casing 6"ID, 75½ feet
 (Casing 12" in diameter and under give inside diameter; casing 12" in diameter give outside diameter.)
 If flowing well give flow in c.f.s. or g.p.m. and pressure Not flowing
 If nonflowing well give depth of standing water from surface 12 feet
 If flowing well describe control works Not flowing
 (Type and size of valve, etc.)
 Date of commencement of well Sept 18, 1958 Date of completion of well Sept 20, 1958
 Type of well rig 71-A Speed Star, Cable Tool

LOG OF FORMATIONS

From feet	To feet	Thickness feet	Type of material	Water-bearing Formation, Casing Perforations, Etc.
0	2	2	Top Soil	
2	24	22	Clay & Sand	Chief aquifer (water-bearing formation) from <u>46</u> to <u>76</u> ft.
24	27	3	Sand	Other aquifers
27	46	19	Clay	
46	76	30	Water Sand	
HARVEY & BOB MEYER DRILLING CONTRACTORS CARSON CITY, NEVADA				First water at <u>24</u> feet.
				Casing perforated from <u>56</u> to <u>76</u> ft.
				Size of perforations <u>1/8" X 6"</u> <u>Torch</u>

(OVER)

From feet	To feet	Thickness	Type of material

Diam. casing	From feet	To feet	Length	"Remarks"—Seals, Grouting, Etc.
6" ID	0	75½	75½	Star Drive Shoe

Well will make 900 GPH @ 50 feet

OFFICE
OF THE ENGINEER

WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

PLEASE COMPLETE THIS FORM IN ITS ENTIRETY

Log No. 7298
 Rec. July 29 1963
 Well No.
 Permit No. 19931
 Do not fill in.

Owner. Robert Talmadge Driller. Dudley Newton
 Address. 2021 Brisbane Ave - Reno, Nev Address. 7468 So. Virginia - Reno Lic. No. 286
 Location of well: NE 1/4 SE 1/4 Sec. 15, T. 17 N/S, R. 19 E, in Washoe County
 or.....
 Water will be used for Domestic Total depth of well 390'
 Size of drilled hole 8" Weight of casing per linear foot.....
 Thickness of casing .188 Wall Temp. of water Cold
 Diameter and length of casing 8" x 349'
 (Casing 12" in diameter and under give inside diameter; casing 12" in diameter give outside diameter.)
 If flowing well give flow in c.f.s. or g.p.m. and pressure.....
 If nonflowing well give depth of standing water from surface 150'
 If flowing well describe control works.....
 (Type and size of valve, etc.)
 Date of commencement of well 5/30/59 Date of completion of well 6/22/59
 Type of well rig Cable Tool

LOG OF FORMATIONS

From feet	To feet	Thickness feet	Type of material	Water-bearing Formation, Casing Perforations, etc.
0	2	2	Top soil & rock	
2	18	16	Clay	Chief aquifer (water-bearing formation)
18	46	28	Clay & rock	
46	52	6	Boulders	from.....to.....ft.
52	60	8	Clay-brown	Other aquifers.....
60	100	40	Clay-yellow	See Log
100	104	4	Boulders	
104	110	6	Clay-brown	
110	114	4	Boulders	
114	131	17	Clay & boulders	
131	157	26	Yellow clay & sand, W/B	
157	166	9	Clay & coarse sand	
166	169	3	Lava rock	
169	176	7	Boulders	First water at <u>157</u> feet.
176	184	8	Clay-brown	
184	198	14	Decomposed granite, clay & rock	Casing perforated
198	202	4	Solid rock	from <u>316</u> to <u>348</u> ft.
202	212	10	Lava rock	
212	219	7	Lava, ash	
219	249	30	Lava rock	
249	257	8	Soft gray rock	Size of perforations
257	260	3	Hard gray rock	Torch Cut
260	264	4	Broken rock	
264	296	32	Red lava, some soft	
296	340	44	Rock, gray, soft, W/B	
340	388	48	Lava, gray	
388	390	2	Black fine sand, W/B	
390			Granite	

(OVER)

LOG OF FORMATIONS—Continued

From feet	To feet	Thickness	Type of material

CASING RECORD

Diam. casing	From feet	To feet	Length	REMARKS—Seals, Grouting, etc.
8"	0	349	349'	Cement slab poured around casing to provide base for tank etc.

GENERAL INFORMATION—Pumping Test, Quality of Water, etc.

Well bail tested at 8 GPM with 125' drawdown.

Pump set at 383'.

This well was drilled by Dudley Newton and this information was all we had in our files.

WELL DRILLER'S STATEMENT

This well was drilled under my jurisdiction and the above information is true to my best information and belief.

Signed RENE Pump & Supply
Dudley NEWTON Well Driller

By _____

License No. 286

Dated 7/25/1963

COPY

(Not to be filled in by Driller)

1963 JUL 29 AM 10 10

STATE ENGINEER

WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

PLEASE COMPLETE THIS FORM IN ITS ENTIRETY

Log No. 7336
Rec. Aug 20 1963
Well No.
Permit No.

Do not fill in.

Owner Mr. Harold B. Clark Driller Erving R. Tennessee
Address 1423 B St Sparks Nevada Address Carsen City, Nevada Lic. No. 541
Location of well: NW 1/4 SW 1/4 SE 1/4 Sec. 11, T. 17 N. 8, R. 19 E, in Washoe County

Water will be used for Domestic Total depth of well 200 ft

Size of drilled hole 8 7/8 Weight of casing per linear foot 11.7 lbs

Thickness of casing 10 gage Temp. of water Cold

Diameter and length of casing 8" X 48"
(Casing 12" in diameter and under give inside diameter; casing 12" in diameter give outside diameter.)

If flowing well give flow in c.f.s. or g.p.m. and pressure

If nonflowing well give depth of standing water from surface 120 ft

If flowing well describe control works
(Type and size of valve, etc.)

Date of commencement of well 7-24-63 Date of completion of well 7-31-63

Type of well rig percussion

LOG OF FORMATIONS

From feet	To feet	Thickness feet	Type of material	Water-bearing Formation, Casing Perforations, etc.
0	1	1	top soil	
1	18	17	Granite Boulder	Chief aquifer (water-bearing formation)
18	92	74	Sandstone & Rocks	from <u>177</u> to <u>198</u> ft.
92	115	23	Hard Sandstone & Rocks	Other aquifers <u>131-135</u>
115	127	12	yellow clay	<u>150-160</u>
127	131	4	Sandstone	
131	135	4	Coarse sand	
135	150	15	N.K. Granite	
150	160	10	Coarse gravel	
160	177	17	Clay & Sandstone	First water at <u>131</u> feet.
177	198	21	Cemented sand & gravel	Casing perforated
198	200	2	Hard Sandstone	from <u>160</u> to <u>196</u> ft.
				Size of perforations
				<u>3/32 x 1 1/2</u>
				<u>machine milled</u>

LOG OF FORMATIONS—Continued

From feet	To feet	Thickness	Type of material
8"	1	12	

CASING RECORD

Diam. casing	From feet	To feet	Length	REMARKS—Seals, Grouting, etc.
8"	1	199	200	Sealed with Bentonite

GENERAL INFORMATION—Pumping Test, Quality of Water, etc.

Water level static	126 ft.
Bailing 15 A. P. M.	128 ft.

WELL DRILLER'S STATEMENT

This well was drilled under my jurisdiction and the above information is true to my best information and belief.

Signed Irving R. Tanner
Well Driller

By Florence Blain

License No. 341

Dated 8-17, 1963

(Not to be filled in by Driller)

1963 AUG 20 AM 9 09

STATE ENGINEER

WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

PLEASE COMPLETE THIS FORM IN ITS ENTIRETY

Owner JAMES L HORSLEY Driller IRVING R. TANNESSEN
 Address PT. BOX 7544 RENO NEV Address CARSON CITY Lic. No. 341
 Location of well SW 1/4 SE 1/4 Sec. 11, T. 17N R. 19E, in WASHOE County

Water will be used for DOMESTIC Total depth of well 144 ft.

Size of drilled hole 6" Weight of casing per linear foot

Thickness of casing .188 Temp. of water COLD

Diameter and length of casing 6 1/4 I.D. RANDOM
(Casing 12" in diameter and under give inside diameter; casing 12" in diameter give outside diameter.)

If flowing well give flow in c.f.s. or g.p.m. and pressure

If nonflowing well give depth of standing water from surface 120 ft.

If flowing well describe control works
(Type and size of valve, etc.)

Date of commencement of well OCT 21-63 Date of completion of well OCT 28-63

Type of well rig CABLE

LOG OF FORMATIONS

From feet	To feet	Thickness feet	Type of material
0	34	34	DK and Boulders
34	66	32	SANDSTONE + ROCKS
66	135	69	Yellow CLAY
135	144	9	COARSE SAND

Water-bearing Formation, Casing Perforations, etc.

Chief aquifer (water-bearing formation)

from 135 to 144 ft.

Other aquifers NONE

First water at 135 feet.

Casing perforated

from 124 to 144 ft.

Size of perforations

1/8 x 4

LOG OF FORMATIONS—Continued

From feet	To feet	Thickness	Type of material

CASING RECORD

Diam. casing	From feet	To feet	Length	REMARKS—Seals, Grouting, etc.
6 5/8	+1	144	145	CLAY

GENERAL INFORMATION—Pumping Test, Quality of Water, etc.

BAILED 20 GPM

WELL DRILLER'S STATEMENT

This well was drilled under my jurisdiction and the above information is true to my best information and belief.

Signed

Irving P. Tommenen
Well Driller

By

License No. 341

Dated

Nov 6, 1963

(Not to be filled in by Driller)

NOV 8 AM 9 54

STATE ENGINEER

WELL LOG AND REPORT TO THE STATE ENGINEER OF NEVADA

10698

Log No. 10697
 Rec. _____ 19____
 Well No. _____
 Permit No. 0820
 Do not fill in.

PLEASE COMPLETE THIS FORM IN ITS ENTIRETY

Owner W. J. Conner Driller J. J. Conner
 Address 700 N. 1st St. Reno Address 700 N. 1st St. Reno Lic. No. 1000
 Location of well: $\frac{1}{4}$ Sec. 22, T. 17 N/S, R. 19 E, in _____ County
 or _____
 Water will be used for Irrigation Total depth of well 92'
 Size of drilled hole 6" Weight of casing per linear foot 12.1
 Thickness of casing 1/16" Temp. of water 71
 Diameter and length of casing 12' 0"
 (Casing 12" in diameter and under give inside diameter; casing 12" in diameter give outside diameter.)
 If flowing well give flow in c.f.s. or g.p.m. and pressure _____
 If nonflowing well give depth of standing water from surface 12'
 If flowing well describe control works _____
 (Type and size of valve, etc.) _____
 Date of commencement of well July 1919 Date of completion of well July 1919
 Type of well rig Cell rig

LOG OF FORMATIONS

From feet	To feet	Thickness feet	Type of material
0	12	12	Sh. clay
12	32	20	Sh. sand
32	56	24	Sh. clay
56	68	12	Sh. sand
68	80	12	Sh. sand
80	88	8	Sh. sand
88	92	4	Sh. sand

Water-bearing Formation, Casing Perforations, etc.

Chief aquifer (water-bearing formation)
 from 68' to 88' ft.
 Other aquifers 11-32'
56-68'
 First water at 12' feet.
 Casing perforated
 from 77' to 87' ft.
 Size of perforations 1/4"

From feet	To feet	Thickness	Type of material

Diam. casing	From feet	To feet	Length	REMARKS—Seals, Grouting, etc.
6"	0	40	40'	Drilling Seal

Bill of material sent - 7/2
sent to app
2nd to report of 6-17.

STATE ENGINEER
OFFICE

WELL DRILLER'S REPORT

PRINT OR TYPE ONLY

Please complete this form in its entirety

NOTICE OF INTENT NO. 13813

1. OWNER L. F. VANZINER ADDRESS AT WELL LOCATION 18 Southwind
MAILING ADDRESS B 15 Broadway
Canon City, CO, NE
2. LOCATION N 1/2 N 1/2 Sec. 23 T 17 N/S R 19 E Washoe County
PERMIT NO. NONE 46-060-18 Washoe Permit #3419
Issued by Water Resources Parcel No. Washoe Permit #3419

3.	TYPE OF WORK		4.	PROPOSED USE			5. TYPE WELL	
	New Well <input checked="" type="checkbox"/>	Recondition <input type="checkbox"/>		Domestic <input checked="" type="checkbox"/>	Irrigation <input type="checkbox"/>	Test <input type="checkbox"/>	Cable <input type="checkbox"/>	Rotary <input checked="" type="checkbox"/>
	Deepen <input type="checkbox"/>	Other <input type="checkbox"/>		Municipal <input type="checkbox"/>	Industrial <input type="checkbox"/>	Stock <input type="checkbox"/>	Other <input type="checkbox"/>	

6. LITHOLOGIC LOG

[illegible]

Date started 10/25/89, 1989
Date completed 10/30/89, 1989

7 WELL TEST DATA

Pump RPM	G.P.M.	Draw Down	After Hours Pump
Air Rotary	Air Lift		
TEST =			

BAILER TEST

G.P.M. 10 gpm Draw down.....feethours
G.P.M. Draw down.....feethours
G.P.M. Draw down.....feethours

8. // WELL CONSTRUCTION

Diameter 6 inches Total depth 650 feet
 _____ inches
 _____ inches
 Casing record 658
 Weight per foot 11.5 Thickness 188
 Diameter _____ From _____ To _____
6 inches 0 feet 650 feet
 _____ inches _____ feet _____ feet
 _____ inches _____ feet _____ feet
 _____ inches _____ feet _____ feet
 _____ inches _____ feet _____ feet
 _____ inches _____ feet _____ feet
 _____ inches _____ feet _____ feet
 Surface seal: Yes ☒ No ☐ Type CONCRETE
 Depth of seal 100 feet
 Gravel packed: Yes ☐ No ☐
 Gravel packed from 100 feet to 650 feet
 Perforations:
 Type perforation Factory
 Size perforation 3 x 3/32
 From 530 feet to 650 feet
 From _____ feet to _____ feet
 From _____ feet to _____ feet
 From _____ feet to _____ feet
 From _____ feet to _____ feet

9. WATER LEVEL

Static water level 420 feet below land surface
Flow NO G.P.M. NO P.S.I.
Water temperature 16.0 °F Quality UNKNOWN

10. **DRILLER'S CERTIFICATION**

This well was drilled under my supervision and the report is true to the best of my knowledge.

Name W.M. Blain Contractor

Address 2537 H. Ave. Cc 89 Contractor NFW

Nevada contractor's license number issued by the State Contractor's Board 10950

Nevada contractor's driller's number issued by the Division of Water Resources 1118

Nevada driller's license number issued by the Division of Water Resources, the on-site driller 1118

Signed W.M. Blain By driller performing actual drilling on site or contractor

Date 12/01/89

PRINT OR TYPE ONLY
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WELL DRILLER'S REPORT

Please complete this form in its entirety in accordance with NRS 534.170 and NAC 534.340

OFFICE USE ONLY
Log No. 43544
Permit No. 88
Basin T

NOTICE OF INTENT NO

1. OWNER <u>Washoe County</u>		ADDRESS AT WELL LOCATION <u>St. Jame's Village - well #1</u>	
MAILING ADDRESS <u>P.O. Box 11130</u> <u>Reno, Nev. 89520</u>			
2. LOCATION <u>NE 1/4 NE 1/4 Sec. 14 T. 17N</u>		<u>N/S R 19 E. Washoe</u> County	
PERMIT NO. <u>59632</u>		<u>46-060-03</u>	
Issued by <u>Water Resources</u>		Subdivision Name <u>St. Jame's Village</u>	

3. WORK PERFORMED	4. PROPOSED USE	5. WELL TYPE
<input checked="" type="checkbox"/> New Well <input type="checkbox"/> Deepen	<input type="checkbox"/> Domestic <input type="checkbox"/> Municipal/Industrial	<input type="checkbox"/> Cable <input checked="" type="checkbox"/> Air
<input type="checkbox"/> Replace <input type="checkbox"/> Abandon	<input type="checkbox"/> Irrigation <input checked="" type="checkbox"/> Monitor	<input type="checkbox"/> Rotary <input checked="" type="checkbox"/> Other
<input type="checkbox"/> Recondition <input type="checkbox"/> Other	<input type="checkbox"/> Test <input type="checkbox"/> Stock	<input type="checkbox"/> RVC <input type="checkbox"/> fluid

[illegible]

8. WELL CONSTRUCTION
Depth Drilled 788 Feet Depth Cased 770 Feet

HOLE DIAMETER (BIT SIZE)			
	From	To	
10	0	788	
Inches		Feet	Feet
		Feet	Feet
		Feet	Feet

CASING SCHEDULE				
Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
4.50		.188	0	770
2 3/8		sch 40	0	42

Perforations:
 Type perforation Mill slot
 Size perforation 3/32 x 3"
 From 470 feet to 770 feet
 From _____ feet to _____ feet
 From _____ feet to _____ feet
 From _____ feet to _____ feet
 From _____ feet to _____ feet

Surface Seal: ☒ Yes ☐ No Seal Type:
 Depth of Seal: 50' ☐ Neat Cement
 Placement Method: ☐ Pumped ☐ Cement Grout
☒ Poured ☒ Concrete Grout
 Gravel Packed: ☒ Yes ☐ No
 From: 50 feet to: 770 feet

9. WATER LEVEL
 Static water level.....403'.....feet below land surface
 Artesian flow.....G.P.M.....P.S.I.
 Water temperature.....°F Quality.....

10. **DRILLER'S CERTIFICATION**
This well was drilled under my supervision and the report is true to the best of my knowledge.

Name Mark Fredrick pump & Well Drilling
Contractor
Address P.O. Box 335
Jackson, CA 95642
Contractor

Nevada contractor's license number
issued by the State Contractor's Board 0036313

Nevada driller's license number issued by the
Division of Water Resources, the on-site driller, 1476

Signed W. F. Smith
By driller performing actual drilling on site or contractor
Date 1-11-94

[illegible]

WELL DRILLER'S REPORT

Please complete this form in its entirety in
accordance with NRS 534.170 and NAC 534.340

OFFICE USE ONLY
Log No. 43575
Permit No. 6-88
Basin. 6-88

PRINT OR TYPE ONLY
DO NOT WRITE ON BACK

NOTICE OF INTENT NO. _____

1. OWNER Washoe County ADDRESS AT WELL LOCATION _____
MAILING ADDRESS P.O. Box 11130 St. Jame's - well #2
Reno, Nev. 89520
2. LOCATION NW 1/4 NE 1/4 Sec. 14 T. 17 N. N/S R. 19 E. Washoe County
PERMIT NO. 59303 46-060-03 St. Jame's Village
Issued by Water Resources Parcel No. Subdivision Name

3. WORK PERFORMED 4. PROPOSED USE 5. WELL TYPE
☒ New Well ☐ Replace ☐ Recondition ☐ Domestic ☐ Irrigation ☐ Test ☐ Cable ☐ Rotary ☐ RVC
☐ Deepen ☐ Abandon ☐ Other _____ ☐ Municipal/Industrial ☒ Monitor ☐ Stock ☒ Air ☒ Other fluid

6. LITHOLOGIC LOG 8. WELL CONSTRUCTION
Material Water Strata From To Thickness
silt, sand, gravel 000 260
andesite 260 640
94 FEB -7 P 2:20
STATE OF NEVADA
HOLE DIAMETER (BIT SIZE)
From 10 Inches 0 Feet To 640 Feet
Inches Feet
Inches Feet
CASING SCHEDULE
Size O.D. (Inches) Weight/Ft. (Pounds) Wall Thickness (Inches) From (Feet) To (Feet)
6 5/8 .188 0 535
2 sch 40 0 630
Perforations: on perforations 2"
Type perforation mill slot
Size perforation 3/32 x 3"
From 530 feet to 630 feet
From feet to feet
From feet to feet
From feet to feet
From feet to feet
Surface Seal: ☒ Yes ☐ No Seal Type:
Depth of Seal 50' ☐ Neat Cement
Placement Method: ☐ Pumped ☒ Concrete Grout
☒ Poured
Gravel Packed: ☒ Yes ☐ No between 2" & 6"
From 20 feet to 640 feet
9. WATER LEVEL
Static water level 24.5 feet below land surface
Artesian flow G.P.M. P.S.I.
Water temperature °F Quality

Date started Nov. 22 1993
Date completed Dec. 12 1993

7. WELL TEST DATA
TEST METHOD: ☐ Bailer ☒ Pump ☐ Air Lift
G.P.M. Draw Down (Feet Below Static) Time (Hours)
140 43 42.5

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.
Name Fredrick Pump & Well Drilling
Contractor
Address P.O. Box 335
Contractor
Jackson, CA 95642
Nevada contractor's license number 0036313
issued by the State Contractor's Board
Nevada driller's license number issued by the 1476
Division of Water Resources, the on-site driller
Signed Michael Fredrick
By driller performing actual drilling on site or contractor
Date 1-11-94

Log No. 50265
Permit No. 078
Basin 078

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WELL DRILLER'S REPORT

Please complete this form in its entirety in
accordance with NRS 534.170 and NAC 534.340

NOTICE OF INTENT NO. 31939

1. OWNER ST. JAMES VILLAGE ADDRESS AT WELL LOCATION ST. JAMES & JOY LAKE ROAD
MAILING ADDRESS 11766 WILSHIRE BLVD.
SUITE 780 LOS ANGELES, CA. 90025

2. LOCATION NW 1/4 NW 1/4 Sec 14 T 17 N/S R 19 E WASHOE County
PERMIT NO. 59631 Issued by Water Resources Parcel No. THE WOODS Subdivision Name

3. WORK PERFORMED
☒ New Well ☐ Replace ☐ Recondition
☐ Deepen ☐ Abandon ☐ Other.....

4. PROPOSED USE
☐ Domestic ☐ Irrigation ☐ Test
☒ Municipal/Industrial ☐ Monitor ☐ Stock

5. WELL TYPE
☐ Cable ☐ Rotary ☒ RVC
☐ Air ☐ Other.....

6. LITHOLOGIC LOG				
Material	Water Strata	From	To	Thick-ness
SAND & GRAVEL		0	10	10
SAND & CLAY COBBLES		10	50	40
SAND, SILT W/ CLAY		50	100	50
BLACK ROCK W/ CLAY		100	132	32
COARSE GRAVEL, CLAY		132	140	8
SANDY CLAY, GRAVEL		140	160	20
SAND & GRAVEL		160	172	12
ANDESITE - HARD		172	220	28
CLAY, BLACK ROCK		220	228	8
BROWN CLAY, ROCK		228	232	4
SAND, GRAVEL - FINE		232	260	28
ANDESITE		260	280	20
SAND GRAVEL COBBLES		280	312	32
BROKEN ROCK		312	317	5
SANDY W/ CHIPS		317	325	8
SANDY BROWN CLAY		325	330	5
BROWN CLAY, ROCK		330	340	10
BROKEN VOLCANICS		340	350	10
FINE BLACK CHIPS		350	380	30
BROKEN FRACTURED ROCK		380	400	20
BROKEN ANDESITE		400	415	15
RED ROCK		415	428	13
FRACTURED ROCK		428	435	7
BROKEN ROCK		435	438	3
BLACK CINDER ROCK		438	458	20
SANDY ROCK		458	498	40
ANDESITE		498	521	23
BROWN ANDESITE		521	535	14
BLACK ANDESITE		535	575	40
BROWN CLAY ROCK		575	605	30
Date started <u>11-28-95</u> 19.....				
Date completed <u>12-22-95</u> 19.....				

8. WELL CONSTRUCTION
Depth Drilled 596 Feet Depth Cased 590 Feet

HOLE DIAMETER (BIT SIZE)
From To
12 Inches 0 Feet 605 Feet
18 Inches 0 Feet 595 Feet
Inches Feet Feet

CASING SCHEDULE				
Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
10"		.250	+ 2	350
10"		.25	490	510

Perforations:
Type perforation LOUVERED FULL-FLOW
Size perforation .125
From 350 feet to 490 feet
From 510 feet to 590 feet
From feet to feet
From feet to feet
From feet to feet

Surface Seal: ☒ Yes ☐ No Seal Type:
Depth of Seal 100' ☐ Neat Cement
Placement Method: ☒ Pumped ☐ Cement Grout
☐ Poured ☐ Concrete Grout

Gravel Packed: ☒ Yes ☐ No
From 100 feet to 590 feet

9. WATER LEVEL
Static water level NOT AVAILABLE feet below land surface
Artesian flow 242 G.P.M. P.S.I.
Water temperature °F Quality

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.

Name SARGENT IRRIGATION COMPANY
Contractor
Address 9955 N. VIRGINIA ST.
Contractor
RENO, NV. 89506

Nevada contractor's license number
issued by the State Contractor's Board 0021246
Nevada driller's license number issued by the
Division of Water Resources, the on-site driller 1593
Signed Mark White
By driller performing actual drilling on site or contractor
Date DECEMBER 22, 1995

7. WELL TEST DATA			
TEST METHOD: <input type="checkbox"/> Bailer <input type="checkbox"/> Pump <input type="checkbox"/> Air Lift			
G.P.M.	Draw Down (Feet Below Static)	Time (Hours)	
<u>400</u>	<u>105</u>	<u>240</u>	

WELL DRILLER'S REPORT

Please complete this form in its entirety in
accordance with NRS 534.170 and NAC 534.340

OFFICE USE ONLY
Log No. 51442
Permit No. 1088
Basin

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NOTICE OF INVENT NO 31940

1. OWNER ST. JAMES VILLAGE
MAILING ADDRESS 11766 WILSHIRE BLVD
SUITE 780, LOS ANGELES, CA. 90025
ADDRESS AT WELL LOCATION NATIA COURT AND JOY LAKE ROAD
2. LOCATION SW 1/4 SE 1/4 Sec 10 T 17 N/S R 19 E WASHOE County
PERMIT NO. 59330
Issued by Water Resources Parcel No. THE WOODS Subdivision Name

3. WORK PERFORMED
☒ New Well ☐ Replace ☐ Recondition
☐ Deepen ☐ Abandon ☐ Other
4. PROPOSED USE
☐ Domestic ☐ Irrigation ☐ Test
☒ Municipal/Industrial ☐ Monitor ☐ Stock
5. WELL TYPE
☐ Cable ☐ Rotary ☒ RVC
☐ Air ☐ Other

6. LITHOLOGIC LOG				
Material	Water Strata	From	To	Thick-ness
SANDY CLAY		0	71	71
SOFT SANDY CLAY		71	78	7
FRACTURED ROCK		78	88	10
GRAVEL SAND TRACE CLAY		88	135	47
HARD ROCK		135	162	27
HARD BLACK ROCK		162	222	60
FRACTURED ROCK		222	230	8
BLACK ROCK TRACE CLAY		230	236	6
FRACTURED BLACK ROCK		236	240	4
BLACK ROCK FRACTURED CLAY		240	260	20
LOST CIRCULATION		260	265	5
HARD ROCK W/ CLAY		260	299	39
RED CLAY		299	300	1
BLACK ROCK		300	338	38
BLACK ROCK W/ CLAY		338	360	22
BLACK ROCK LG. FRACTURES		360	366	6
HARD BLACK ROCK		366	374	8
FRACTURED BLACK ROCK		374	384	10
RED CLAY & ROCK		384	390	6
BLACK & RED ROCK		390	421	31
FRACTURED ROCK & CLAY		421	426	5
RED SANDY CLAY & ROCK		426	580	154
ROCK TRACE CLAY		580	605	25
CLAY & ROCK		605	700	95

8. WELL CONSTRUCTION
Depth Drilled 620 Feet Depth Cased 620 Feet
HOLE DIAMETER (BIT SIZE)
From To
12 Inches 0 Feet 700 Feet
18 Inches 0 Feet 620 Feet
Inches Feet Feet

CASING SCHEDULE				
Size O.D. (Inches)	Weight/Ft. (Pounds)	Wall Thickness (Inches)	From (Feet)	To (Feet)
10	22.36	.250	+ 2	260
10	22.36	.250	380	400
10	22.36	.250	500	520

Perforations:
Type perforation LOUVERED-FUL FLOW
Size perforation 125
From 260 feet to 380 feet
From 400 feet to 500 feet
From 520 feet to 620 feet
From feet to feet
From feet to feet

Surface Seal: ☒ Yes ☐ No Seal Type:
Depth of Seal 100 ☐ Neat Cement
Placement Method: ☒ Pumped ☐ Cement Grout
☐ Poured ☐ Concrete Grout

Gravel Packed: ☐ Yes ☐ No
From 100 feet to 620 feet

9. WATER LEVEL
Static water level 195 feet below land surface
Artesian flow G.P.M. 300 P.S.I.
Water temperature COOL °F Quality

10. DRILLER'S CERTIFICATION
This well was drilled under my supervision and the report is true to the best of my knowledge.

Name SARGENT IRRIGATION COMPANY
Contractor

Address 9955 N. VIRGINIA ST.
Contractor

RENO, NV 89506

Nevada contractor's license number 21246
issued by the State Contractor's Board

Nevada driller's license number issued by the
Division of Water Resources, the on-site driller 1593 1493

Signed
By driller performing actual drilling on site or contractor

Date 2-12-96

NOVEMBER 03, 1995
Date started
Date completed 12-12 (Perforation w/ Driller) 1995

7. WELL TEST DATA			
TEST METHOD: <input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Pump <input type="checkbox"/> Air Lift			
G.P.M.	Draw Down (Feet Below Static)	Time (Hours)	
300	91	236	

NOTICE OF INTENT NO. 32016

Subdivision Name

5. WELL TYPE

<input type="checkbox"/> Cable	<input type="checkbox"/> Rotary	<input type="checkbox"/> RVC
<input checked="" type="checkbox"/> Air	<input type="checkbox"/> Other _____	

		From		To	
<u>6 1/8</u>	Inches	<u>75</u>	Feet	<u>157</u>	Feet
_____	Inches	_____	Feet	_____	Feet
_____	Inches	_____	Feet	_____	Feet

Date 9-6-94

RECEIVED
SEP 12 PM 12:00
STATE DEPT. OFFICE

STATE OF NEVADA
DIVISION OF WATER RESOURCES
WELL DRILLER'S REPORT

OFFICE USE ONLY

Log No. 116306
Permit No. 81865T, 81745
Basin 089

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Please complete this form in its entirety in accordance with NRS 534.170 and NAC 534.340

NOTICE OF INTENT NO. 68520

1. OWNER <u>Washoe County</u>		ADDRESS AT WELL LOCATION <u>GRANITE RIDGE COURT @</u>	
MAILING ADDRESS <u>4930 Energy Way</u>		<u>WASHOE COUNTY DWR WATER TANK, WASHOE VALLEY</u>	
<u>Reno, NV 89439</u>		Subdivision Name:	County: <u>Washoe</u>
2. LOCATION <u>SW ¼ NE ¼ Sec 23 T 17N N/S R 19 E</u>		Latitude	<u>UTM E 257162.8996</u> <input type="checkbox"/> NAD 27
PERMIT/WAIVER No. <u>81715, 81865T</u>		Longitude	<u>N 4356796.3614</u> <input checked="" type="checkbox"/> NAD 83/WGS 84
<i>Issued by Water Resources</i>		Parcel No.	

3. WORKED PERFORMED			4. PROPOSED USE			5. WELL TYPE		
<input checked="" type="checkbox"/> New Well	<input type="checkbox"/> Replace	<input type="checkbox"/> Recondition	<input type="checkbox"/> Domestic	<input type="checkbox"/> Irrigation	<input type="checkbox"/> Test	<input type="checkbox"/> Cable	<input checked="" type="checkbox"/> Rotary	<input type="checkbox"/> RVC
<input type="checkbox"/> Deepen	<input type="checkbox"/> Other		<input checked="" type="checkbox"/> Municipal/Industrial	<input type="checkbox"/> Monitor	<input type="checkbox"/> Stock	<input type="checkbox"/> Air	<input type="checkbox"/> Other	

[illegible]

Date started:	8-May	20	12
Date completed:	15-May	20	12

7.	Water Level		
Static water level:	175'	feet below land surface	
Artesian Flow:	NO	G.P.M.	0 P.S.I.
Water Temperature:	COOL	°F	
Quality:			

WELL TEST DATA			
TEST METHOD:	<input type="checkbox"/> Bailer	<input checked="" type="checkbox"/> Pump	<input type="checkbox"/> Air Lift
	G.P.M.	Draw Down (Feet Below Static)	Time (Hours)
STEP TEST	75	34.1'	100 MINUTES
STEP TEST	100	67.1'	100 MINUTES
STEP TEST	125	94.1'	100 MINUTES
STEP TEST	150	128.4'	100 MINUTES
CONSTANT	125	110'	72 HOURS

10. DRILLER'S CERTIFICATION

This well was drilled under my supervision and the report is true to the best of my knowledge.

Name Hydro Resources-West, Inc.
Contractor

Address 4975 W. Winnemucca Blvd.
Contractor

Winnemucca NV, 89445

Nevada contractor's license number
issued by the *State Contractor's Board* 56797

Nevada driller's license number issued by the
Division of Water Resources, the *on-site driller* # 2437

Signed Michelle Strothen
By driller performing actual drilling on site or contractor

Date 7/10/2012

39.326573°N
119.816113°W NA027

USE ADDITIONAL SHEETS IF NECESSARY

Appendix D

Water Quality Analytical Reports

4/4/2018

Confluence Water Resources, LLC
14175 Saddlebow Dr
Reno, NV 89511
Attn: Matt Banta

OrderID: 1802633

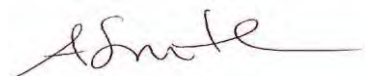
Dear: Matt Banta

This is to transmit the attached analytical report. The analytical data and information contained therein was generated using specified or selected methods contained in references, such as Standard Methods for the Examination of Water and Wastewater, online edition, Methods for Determination of Organic Compounds in Drinking Water, EPA-600/4-79-020, and Test Methods for Evaluation of Solid Waste, Physical/Chemical Methods (SW846) Third Edition.

The samples were received by WETLAB-Western Environmental Testing Laboratory in good condition on 2/21/2018. Additional comments are located on page 2 of this report.

If you should have any questions or comments regarding this report, please do not hesitate to call.

Sincerely,



Andy Smith
QA Manager

SPARKS

475 E. Greg Street, Suite 119
Sparks, Nevada 89431
tel (775) 355-0202
fax (775) 355-0817
EPA LAB ID: NV00925 - ELAP No: 2523

ELKO

1084 Lamoille Hwy
Elko, Nevada 89801
tel (775) 777-9933
fax (775) 777-9933
EPA LAB ID: NV00926

LAS VEGAS

3230 Polaris Ave. Suite 4
Las Vegas, Nevada 89102
tel (702) 475-8899
fax (702) 622-2868
EPA LAB ID: NV00932

Western Environmental Testing Laboratory

Report Comments

Confluence Water Resources, LLC - 1802633

Specific Report Comments

None

Subcontracting Comments

The analysis for Isotopes was performed by University of Nevada of Reno, NV. Their report is attached.

Report Legend

B	-- Blank contamination; Analyte detected above the method reporting limit in an associated blank
D	-- Due to the sample matrix dilution was required in order to properly detect and report the analyte. The reporting limit has been adjusted accordingly.
HT	-- Sample analyzed beyond the accepted holding time
J	-- The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit
M	-- The matrix spike/matrix spike duplicate (MS/MSD) values for the analysis of this parameter were outside acceptance criteria due to probable matrix interference. The reported result should be considered an estimate.
N	-- There was insufficient sample available to perform a spike and/or duplicate on this analytical batch.
NC	-- Not calculated due to matrix interference
QD	-- The sample duplicate or matrix spike duplicate analysis demonstrated sample imprecision. The reported result should be considered an estimate.
QL	-- The result for the laboratory control sample (LCS) was outside WETLAB acceptance criteria and reanalysis was not possible. The reported data should be considered an estimate.
S	-- Surrogate recovery was outside of laboratory acceptance limits due to matrix interference. The associated blank and LCS surrogate recovery was within acceptance limits
SC	-- Spike recovery not calculated. Sample concentration >4X the spike amount; therefore, the spike could not be adequately recovered
U	-- The analyte was analyzed for, but was not detected above the level of the reported sample reporting/quantitation limit

General Lab Comments

Per method recommendation (section 4.4), Samples analyzed by methods EPA 300.0 and EPA 300.1 have been filtered prior to analysis.

The following is an interpretation of the results from EPA method 9223B:

A result of zero (0) indicates absence for both coliform and Escherichia coli meaning the water meets the microbiological requirements of the U.S. EPA Safe Drinking Water Act (SDWA). A result of one (1) for either test indicates presence and the water does not meet the SDWA requirements. Waters with positive tests should be disinfected by a certified water treatment operator and retested.

Per federal regulation the holding time for the following parameters in aqueous/water samples is 15 minutes: Residual Chlorine, pH, Dissolved Oxygen, Sulfite.

SPARKS

475 E. Greg Street, Suite 119
Sparks, Nevada 89431
tel (775) 355-0202
fax (775) 355-0817
EPA LAB ID: NV00925 - ELAP No: 2523

ELKO

1084 Lamoille Hwy
Elko, Nevada 89801
tel (775) 777-9933
fax (775) 777-9933
EPA LAB ID: NV00926

LAS VEGAS

3230 Polaris Ave. Suite 4
Las Vegas, Nevada 89102
tel (702) 475-8899
fax (702) 622-2868
EPA LAB ID: NV00932

Western Environmental Testing Laboratory

Analytical Report

Confluence Water Resources, LLC

Date Printed: 4/4/2018

14175 Saddlebow Dr

OrderID: 1802633

Reno, NV 89511

Attn: Matt Banta

Phone: (775) 843-1908 Fax:

PO\Project: St. James

Customer Sample ID: FCW @30 hrs

Collect Date/Time: 2/20/2018 16:00

WETLAB Sample ID: 1802633-001

Receive Date: 2/21/2018 11:37

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
<u>General Chemistry</u>							
pH	SM 4500-H+ B	8.02 HT	pH Units	1		2/21/2018	NV00925
Temperature at pH	SM 2550B	23	°C	1		2/21/2018	NV00925
Total Alkalinity	SM 2320B	140	mg/L as CaCO3	1	1.0	2/21/2018	NV00925
Bicarbonate (HCO3)	SM 2320B	140	mg/L as CaCO3	1	1.0	2/21/2018	NV00925
Carbonate (CO3)	SM 2320B	ND	mg/L as CaCO3	1	1.0	2/21/2018	NV00925
Hydroxide (OH)	SM 2320B	ND	mg/L as CaCO3	1	1.0	2/21/2018	NV00925
Total Nitrogen	Calc.	ND	mg/L	1	0.50	2/23/2018	NV00925
Total Dissolved Solids (TDS)	SM 2540C	180	mg/L	1	10	2/23/2018	NV00925
<u>Anions by Ion Chromatography</u>							
Chloride	EPA 300.0	1.3	mg/L	1	1.0	2/26/2018	NV00925
Fluoride	EPA 300.0	ND	mg/L	1	0.10	2/26/2018	NV00925
Sulfate	EPA 300.0	2.6	mg/L	1	1.0	2/26/2018	NV00925
<u>Flow Injection Analyses</u>							
Nitrate + Nitrite Nitrogen	EPA 353.2	0.22	mg/L	5	0.10	2/23/2018	NV00925
Total Kjeldahl Nitrogen	EPA 351.2	ND	mg/L	1	0.40	2/23/2018	NV00925
<u>Trace Metals by ICP-OES</u>							
Aluminum, Dissolved	EPA 200.7	ND	mg/L	1	0.045	3/1/2018	NV00925
Barium, Dissolved	EPA 200.7	0.058	mg/L	1	0.010	3/1/2018	NV00925
Beryllium, Dissolved	EPA 200.7	ND	mg/L	1	0.0010	3/1/2018	NV00925
Cadmium, Dissolved	EPA 200.7	ND	mg/L	1	0.0010	3/1/2018	NV00925
Calcium, Dissolved	EPA 200.7	22	mg/L	1	0.50	3/1/2018	NV00925
Chromium, Dissolved	EPA 200.7	ND	mg/L	1	0.0050	3/1/2018	NV00925
Copper, Dissolved	EPA 200.7	ND	mg/L	1	0.040	3/1/2018	NV00925
Iron, Dissolved	EPA 200.7	ND	mg/L	1	0.020	3/1/2018	NV00925
Magnesium, Dissolved	EPA 200.7	11	mg/L	1	0.50	3/1/2018	NV00925
Manganese, Dissolved	EPA 200.7	0.0081	mg/L	1	0.0050	3/1/2018	NV00925
Nickel, Dissolved	EPA 200.7	ND	mg/L	1	0.030	3/1/2018	NV00925
Phosphorus, Dissolved	EPA 200.7	ND	mg/L	1	0.50	3/1/2018	NV00925
Potassium, Dissolved	EPA 200.7	3.9	mg/L	1	1.0	3/1/2018	NV00925
Silver, Dissolved	EPA 200.7	ND	mg/L	1	0.0050	3/1/2018	NV00925
Sodium, Dissolved	EPA 200.7	19	mg/L	1	0.50	3/1/2018	NV00925
Zinc, Dissolved	EPA 200.7	ND	mg/L	1	0.020	3/1/2018	NV00925
<u>Trace Metals by ICP-MS</u>							
Antimony, Dissolved	EPA 200.8	ND	mg/L	1	0.0025	2/27/2018	NV00925
Arsenic, Dissolved	EPA 200.8	ND	mg/L	1	0.0050	2/27/2018	NV00925
Lead, Dissolved	EPA 200.8	ND	mg/L	1	0.0025	3/1/2018	NV00925

DF=Dilution Factor, RL=Reporting Limit, ND=Not Detected or <RL

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SPARKS

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 EPA LAB ID: NV00926

LAS VEGAS

3230 Polaris Ave. Suite 4
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 tel (702) 475-8899
 fax (702) 622-2868
 EPA LAB ID: NV00932

Customer Sample ID: FCW @30 hrs

Collect Date/Time: 2/20/2018 16:00

WETLAB Sample ID: 1802633-001

Receive Date: 2/21/2018 11:37

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Selenium, Dissolved	EPA 200.8	ND	mg/L	1	0.0050	2/27/2018	NV00925
Thallium, Dissolved	EPA 200.8	ND	mg/L	1	0.0010	3/1/2018	NV00925
<u>Mercury by CVAA</u>							
Mercury, Dissolved	EPA 245.1	ND	mg/L	1	0.0001	3/5/2018	NV00925
<u>Ion Balance</u>							
Anions	Calculation	2.99	meq/L	1	0.10		NV00925
Cations	Calculation	2.93	meq/L	1	0.10		NV00925
Error	Calculation	1.08	%	1	1.00		NV00925
<u>Sample Preparation</u>							
Trace Metals Digestion, Dissolved	EPA 200.2	Complete		1		2/26/2018	NV00925
Sample Filtration (Metals)	N/A	Complete		1		2/21/2018	NV00925
<u>Subcontracted Analyses</u>							
Oxygen Isotopes	N/A	See Attached		1			
Deuterium	N/A	See Attached		1			

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LAS VEGAS

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 EPA LAB ID: NV00932

Customer Sample ID: Browns Creek
WETLAB Sample ID: 1802633-002

Collect Date/Time: 2/24/2018 12:00

Receive Date: 2/26/2018 03:50

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
General Chemistry							
pH	SM 4500-H+ B	7.54 HT	pH Units	1		2/27/2018	NV00925
Temperature at pH	SM 2550B	20	°C	1		2/27/2018	NV00925
Total Alkalinity	SM 2320B	38	mg/L as CaCO3	1	1.0	2/27/2018	NV00925
Bicarbonate (HCO3)	SM 2320B	38	mg/L as CaCO3	1	1.0	2/27/2018	NV00925
Carbonate (CO3)	SM 2320B	ND	mg/L as CaCO3	1	1.0	2/27/2018	NV00925
Hydroxide (OH)	SM 2320B	ND	mg/L as CaCO3	1	1.0	2/27/2018	NV00925
Total Nitrogen	Calc.	ND	mg/L	1	0.50	3/1/2018	NV00925
Total Dissolved Solids (TDS)	SM 2540C	96	mg/L	1	10	2/27/2018	NV00925
Anions by Ion Chromatography							
Chloride	EPA 300.0	19	mg/L	1	1.0	2/27/2018	NV00925
Fluoride	EPA 300.0	ND	mg/L	1	0.10	2/27/2018	NV00925
Sulfate	EPA 300.0	ND	mg/L	1	1.0	2/27/2018	NV00925
Flow Injection Analyses							
Nitrate + Nitrite Nitrogen	EPA 353.2	ND	mg/L	5	0.10	3/1/2018	NV00925
Total Kjeldahl Nitrogen	EPA 351.2	ND M	mg/L	1	0.40	2/27/2018	NV00925
Trace Metals by ICP-OES							
Aluminum, Dissolved	EPA 200.7	ND	mg/L	1	0.045	3/1/2018	NV00925
Barium, Dissolved	EPA 200.7	0.016	mg/L	1	0.010	3/1/2018	NV00925
Beryllium, Dissolved	EPA 200.7	ND	mg/L	1	0.0010	3/1/2018	NV00925
Cadmium, Dissolved	EPA 200.7	ND	mg/L	1	0.0010	3/1/2018	NV00925
Calcium, Dissolved	EPA 200.7	12	mg/L	1	0.50	3/1/2018	NV00925
Chromium, Dissolved	EPA 200.7	ND	mg/L	1	0.0050	3/1/2018	NV00925
Copper, Dissolved	EPA 200.7	ND	mg/L	1	0.040	3/1/2018	NV00925
Iron, Dissolved	EPA 200.7	0.18	mg/L	1	0.020	3/1/2018	NV00925
Magnesium, Dissolved	EPA 200.7	2.7	mg/L	1	0.50	3/1/2018	NV00925
Manganese, Dissolved	EPA 200.7	0.042	mg/L	1	0.0050	3/1/2018	NV00925
Nickel, Dissolved	EPA 200.7	ND	mg/L	1	0.030	3/1/2018	NV00925
Phosphorus, Dissolved	EPA 200.7	ND	mg/L	1	0.50	3/1/2018	NV00925
Potassium, Dissolved	EPA 200.7	1.8	mg/L	1	1.0	3/1/2018	NV00925
Silver, Dissolved	EPA 200.7	ND	mg/L	1	0.0050	3/1/2018	NV00925
Sodium, Dissolved	EPA 200.7	8.8	mg/L	1	0.50	3/1/2018	NV00925
Zinc, Dissolved	EPA 200.7	ND	mg/L	1	0.020	3/1/2018	NV00925
Trace Metals by ICP-MS							
Antimony, Dissolved	EPA 200.8	ND	mg/L	1	0.0025	2/28/2018	NV00925
Arsenic, Dissolved	EPA 200.8	ND	mg/L	1	0.0050	2/28/2018	NV00925
Lead, Dissolved	EPA 200.8	ND	mg/L	1	0.0025	2/28/2018	NV00925
Selenium, Dissolved	EPA 200.8	ND	mg/L	1	0.0050	2/28/2018	NV00925
Thallium, Dissolved	EPA 200.8	ND	mg/L	1	0.0010	3/1/2018	NV00925
Mercury by CVAA							
Mercury, Dissolved	EPA 245.1	ND	mg/L	1	0.0001	3/5/2018	NV00925
Ion Balance							
Anions	Calculation	1.30	meq/L	1	0.10		NV00925
Cations	Calculation	1.26	meq/L	1	0.10		NV00925
Error	Calculation	1.35	%	1	1.00		NV00925
Sample Preparation							
Trace Metals Digestion, Dissolved	EPA 200.2	Complete		1		2/27/2018	NV00925
Sample Filtration (Metals)	N/A	Complete		1			NV00925

DF=Dilution Factor, RL=Reporting Limit, ND=Not Detected or <RL

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LAS VEGAS

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EPA LAB ID: NV00932

Customer Sample ID: Browns Creek

Collect Date/Time: 2/24/2018 12:00

WETLAB Sample ID: 1802633-002

Receive Date: 2/26/2018 03:50

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Subcontracted Analyses							
Oxygen Isotopes	N/A	See Attached		1			
Deuterium	N/A	See Attached		1			

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LAS VEGAS

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EPA LAB ID: NV00932

Customer Sample ID: FCW @120 HRS

WETLAB Sample ID: 1802633-003

Collect Date/Time: 2/24/2018 10:00

Receive Date: 2/26/2018 03:50

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
General Chemistry							
pH	SM 4500-H+ B	7.98 HT	pH Units	1		2/27/2018	NV00925
Temperature at pH	SM 2550B	20	°C	1		2/27/2018	NV00925
Total Alkalinity	SM 2320B	150	mg/L as CaCO3	1	1.0	2/27/2018	NV00925
Bicarbonate (HCO3)	SM 2320B	150	mg/L as CaCO3	1	1.0	2/27/2018	NV00925
Carbonate (CO3)	SM 2320B	ND	mg/L as CaCO3	1	1.0	2/27/2018	NV00925
Hydroxide (OH)	SM 2320B	ND	mg/L as CaCO3	1	1.0	2/27/2018	NV00925
Total Nitrogen	Calc.	ND	mg/L	1	0.50	3/1/2018	NV00925
Total Dissolved Solids (TDS)	SM 2540C	190	mg/L	1	10	2/27/2018	NV00925
Anions by Ion Chromatography							
Chloride	EPA 300.0	1.1	mg/L	1	1.0	2/27/2018	NV00925
Fluoride	EPA 300.0	ND	mg/L	1	0.10	2/27/2018	NV00925
Sulfate	EPA 300.0	2.7	mg/L	1	1.0	2/27/2018	NV00925
Flow Injection Analyses							
Nitrate + Nitrite Nitrogen	EPA 353.2	0.22	mg/L	5	0.10	3/1/2018	NV00925
Total Kjeldahl Nitrogen	EPA 351.2	ND	mg/L	1	0.40	2/27/2018	NV00925
Trace Metals by ICP-OES							
Aluminum, Dissolved	EPA 200.7	ND	mg/L	1	0.045	3/1/2018	NV00925
Barium, Dissolved	EPA 200.7	0.061	mg/L	1	0.010	3/1/2018	NV00925
Beryllium, Dissolved	EPA 200.7	ND	mg/L	1	0.0010	3/1/2018	NV00925
Cadmium, Dissolved	EPA 200.7	ND	mg/L	1	0.0010	3/1/2018	NV00925
Calcium, Dissolved	EPA 200.7	24	mg/L	1	0.50	3/1/2018	NV00925
Chromium, Dissolved	EPA 200.7	ND	mg/L	1	0.0050	3/1/2018	NV00925
Copper, Dissolved	EPA 200.7	ND	mg/L	1	0.040	3/1/2018	NV00925
Iron, Dissolved	EPA 200.7	ND	mg/L	1	0.020	3/1/2018	NV00925
Magnesium, Dissolved	EPA 200.7	11	mg/L	1	0.50	3/1/2018	NV00925
Manganese, Dissolved	EPA 200.7	0.0096	mg/L	1	0.0050	3/1/2018	NV00925
Nickel, Dissolved	EPA 200.7	ND	mg/L	1	0.030	3/1/2018	NV00925
Phosphorus, Dissolved	EPA 200.7	ND	mg/L	1	0.50	3/1/2018	NV00925
Potassium, Dissolved	EPA 200.7	3.9	mg/L	1	1.0	3/1/2018	NV00925
Silver, Dissolved	EPA 200.7	ND	mg/L	1	0.0050	3/1/2018	NV00925
Sodium, Dissolved	EPA 200.7	19	mg/L	1	0.50	3/1/2018	NV00925
Zinc, Dissolved	EPA 200.7	ND	mg/L	1	0.020	3/1/2018	NV00925
Trace Metals by ICP-MS							
Antimony, Dissolved	EPA 200.8	ND	mg/L	1	0.0025	2/28/2018	NV00925
Arsenic, Dissolved	EPA 200.8	ND	mg/L	1	0.0050	2/28/2018	NV00925
Lead, Dissolved	EPA 200.8	ND	mg/L	1	0.0025	2/28/2018	NV00925
Selenium, Dissolved	EPA 200.8	ND	mg/L	1	0.0050	2/28/2018	NV00925
Thallium, Dissolved	EPA 200.8	ND	mg/L	1	0.0010	3/1/2018	NV00925
Mercury by CVAA							
Mercury, Dissolved	EPA 245.1	ND	mg/L	1	0.0001	3/5/2018	NV00925
Ion Balance							
Anions	Calculation	3.10	meq/L	1	0.10		NV00925
Cations	Calculation	3.03	meq/L	1	0.10		NV00925
Error	Calculation	1.17	%	1	1.00		NV00925
Sample Preparation							
Trace Metals Digestion, Dissolved	EPA 200.2	Complete		1		2/27/2018	NV00925
Sample Filtration (Metals)	N/A	Complete		1			NV00925

DF=Dilution Factor, RL=Reporting Limit, ND=Not Detected or <RL

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Customer Sample ID: FCW @120 HRS

Collect Date/Time: 2/24/2018 10:00

WETLAB Sample ID: 1802633-003

Receive Date: 2/26/2018 03:50

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Subcontracted Analyses							
Deuterium	N/A	See Attached		1			
Oxygen Isotopes	N/A	See Attached		1			

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EPA LAB ID: NV00932

Customer Sample ID: FCW @ 218 HRS

WETLAB Sample ID: 1802633-004

Collect Date/Time: 2/28/2018 12:00

Receive Date: 3/2/2018 02:30

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
General Chemistry							
pH	SM 4500-H+ B	7.97 HT	pH Units	1		3/5/2018	NV00925
Temperature at pH	SM 2550B	22	°C	1		3/5/2018	NV00925
Total Alkalinity	SM 2320B	150	mg/L as CaCO3	1	1.0	3/5/2018	NV00925
Bicarbonate (HCO3)	SM 2320B	150	mg/L as CaCO3	1	1.0	3/5/2018	NV00925
Carbonate (CO3)	SM 2320B	ND	mg/L as CaCO3	1	1.0	3/5/2018	NV00925
Hydroxide (OH)	SM 2320B	ND	mg/L as CaCO3	1	1.0	3/5/2018	NV00925
Total Nitrogen	Calc.	ND	mg/L	1	0.50	3/7/2018	NV00925
Total Dissolved Solids (TDS)	SM 2540C	180	mg/L	1	10	3/6/2018	NV00925
Anions by Ion Chromatography							
Chloride	EPA 300.0	1.0	mg/L	1	1.0	3/5/2018	NV00925
Fluoride	EPA 300.0	ND	mg/L	1	0.10	3/5/2018	NV00925
Sulfate	EPA 300.0	2.4	mg/L	1	1.0	3/5/2018	NV00925
Flow Injection Analyses							
Nitrate + Nitrite Nitrogen	EPA 353.2	0.25	mg/L	5	0.10	3/7/2018	NV00925
Total Kjeldahl Nitrogen	EPA 351.2	ND	mg/L	1	0.40	3/5/2018	NV00925
Trace Metals by ICP-OES							
Aluminum, Dissolved	EPA 200.7	ND	mg/L	1	0.045	3/5/2018	NV00925
Barium, Dissolved	EPA 200.7	0.057	mg/L	1	0.010	3/5/2018	NV00925
Beryllium, Dissolved	EPA 200.7	ND	mg/L	1	0.0010	3/5/2018	NV00925
Cadmium, Dissolved	EPA 200.7	ND	mg/L	1	0.0010	3/5/2018	NV00925
Calcium, Dissolved	EPA 200.7	24	mg/L	1	0.50	3/5/2018	NV00925
Chromium, Dissolved	EPA 200.7	ND	mg/L	1	0.0050	3/5/2018	NV00925
Copper, Dissolved	EPA 200.7	ND	mg/L	1	0.040	3/5/2018	NV00925
Iron, Dissolved	EPA 200.7	ND	mg/L	1	0.020	3/5/2018	NV00925
Magnesium, Dissolved	EPA 200.7	11	mg/L	1	0.50	3/5/2018	NV00925
Manganese, Dissolved	EPA 200.7	0.052	mg/L	1	0.0050	3/5/2018	NV00925
Nickel, Dissolved	EPA 200.7	ND	mg/L	1	0.030	3/5/2018	NV00925
Phosphorus, Dissolved	EPA 200.7	ND	mg/L	1	0.50	3/5/2018	NV00925
Potassium, Dissolved	EPA 200.7	3.9	mg/L	1	1.0	3/5/2018	NV00925
Silver, Dissolved	EPA 200.7	ND	mg/L	1	0.0050	3/5/2018	NV00925
Sodium, Dissolved	EPA 200.7	19	mg/L	1	0.50	3/5/2018	NV00925
Zinc, Dissolved	EPA 200.7	ND	mg/L	1	0.020	3/5/2018	NV00925
Trace Metals by ICP-MS							
Antimony, Dissolved	EPA 200.8	ND	mg/L	1	0.0025	3/6/2018	NV00925
Arsenic, Dissolved	EPA 200.8	ND	mg/L	1	0.0050	3/6/2018	NV00925
Lead, Dissolved	EPA 200.8	ND	mg/L	1	0.0025	3/6/2018	NV00925
Selenium, Dissolved	EPA 200.8	ND	mg/L	1	0.0050	3/6/2018	NV00925
Thallium, Dissolved	EPA 200.8	ND	mg/L	1	0.0010	3/6/2018	NV00925
Uranium, Dissolved	EPA 200.8	0.0065	mg/L	1	0.0050	3/6/2018	NV00925
Mercury by CVAA							
Mercury, Dissolved	EPA 245.1	ND	mg/L	1	0.0001	3/16/2018	NV00925
Ion Balance							
Anions	Calculation	3.09	meq/L	1	0.10		NV00925
Cations	Calculation	3.03	meq/L	1	0.10		NV00925
Error	Calculation	1.03	%	1	1.00		NV00925
Sample Preparation							
Trace Metals Digestion, Dissolved	EPA 200.2	Complete		1		3/5/2018	NV00925

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LAS VEGAS

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EPA LAB ID: NV00932

Customer Sample ID: FCW @ 218 HRS

Collect Date/Time: 2/28/2018 12:00

WETLAB Sample ID: 1802633-004

Receive Date: 3/2/2018 02:30

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Sample Filtration (Metals)	N/A	Complete		1			NV00925
<u>Subcontracted Analyses</u>							
Deuterium	N/A	See Attached		1			
Oxygen Isotopes	N/A	See Attached		1			

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LAS VEGAS

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tel (702) 475-8899
fax (702) 622-2868
EPA LAB ID: NV00932

Customer Sample ID: St James SP-1
WETLAB Sample ID: 1802633-005

Collect Date/Time: 3/7/2018 13:00

Receive Date: 3/9/2018 10:45

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
General Chemistry							
pH	SM 4500-H+ B	7.79 HT	pH Units	1		3/9/2018	NV00925
Temperature at pH	SM 2550B	24	°C	1		3/9/2018	NV00925
Total Alkalinity	SM 2320B	120	mg/L as CaCO3	1	1.0	3/9/2018	NV00925
Bicarbonate (HCO3)	SM 2320B	120	mg/L as CaCO3	1	1.0	3/9/2018	NV00925
Carbonate (CO3)	SM 2320B	ND	mg/L as CaCO3	1	1.0	3/9/2018	NV00925
Hydroxide (OH)	SM 2320B	ND	mg/L as CaCO3	1	1.0	3/9/2018	NV00925
Total Nitrogen	Calc.	0.94	mg/L	1	0.50	3/14/2018	NV00925
Total Dissolved Solids (TDS)	SM 2540C	210	mg/L	1	10	3/14/2018	NV00925
Anions by Ion Chromatography							
Chloride	EPA 300.0	3.3	mg/L	1	1.0	3/12/2018	NV00925
Fluoride	EPA 300.0	0.12	mg/L	1	0.10	3/12/2018	NV00925
Sulfate	EPA 300.0	3.6	mg/L	1	1.0	3/12/2018	NV00925
Flow Injection Analyses							
Nitrate + Nitrite Nitrogen	EPA 353.2	0.33	mg/L	5	0.10	3/13/2018	NV00925
Total Kjeldahl Nitrogen	EPA 351.2	0.61	mg/L	1	0.40	3/14/2018	NV00925
Trace Metals by ICP-OES							
Aluminum, Dissolved	EPA 200.7	ND	mg/L	1	0.045	3/13/2018	NV00925
Barium, Dissolved	EPA 200.7	0.090	mg/L	1	0.010	3/13/2018	NV00925
Beryllium, Dissolved	EPA 200.7	ND	mg/L	1	0.0010	3/13/2018	NV00925
Cadmium, Dissolved	EPA 200.7	ND	mg/L	1	0.0010	3/13/2018	NV00925
Calcium, Dissolved	EPA 200.7	18	mg/L	1	0.50	3/13/2018	NV00925
Chromium, Dissolved	EPA 200.7	ND	mg/L	1	0.0050	3/13/2018	NV00925
Copper, Dissolved	EPA 200.7	ND	mg/L	1	0.040	3/13/2018	NV00925
Iron, Dissolved	EPA 200.7	ND D	mg/L	2	0.040	3/13/2018	NV00925
Magnesium, Dissolved	EPA 200.7	11	mg/L	1	0.50	3/13/2018	NV00925
Manganese, Dissolved	EPA 200.7	ND	mg/L	1	0.0050	3/13/2018	NV00925
Nickel, Dissolved	EPA 200.7	ND	mg/L	1	0.030	3/13/2018	NV00925
Phosphorus, Dissolved	EPA 200.7	ND	mg/L	1	0.50	3/13/2018	NV00925
Potassium, Dissolved	EPA 200.7	5.2	mg/L	1	1.0	3/13/2018	NV00925
Silver, Dissolved	EPA 200.7	ND	mg/L	1	0.0050	3/13/2018	NV00925
Sodium, Dissolved	EPA 200.7	17	mg/L	1	0.50	3/13/2018	NV00925
Zinc, Dissolved	EPA 200.7	ND	mg/L	1	0.020	3/13/2018	NV00925
Trace Metals by ICP-MS							
Antimony, Dissolved	EPA 200.8	ND	mg/L	1	0.0025	3/12/2018	NV00925
Arsenic, Dissolved	EPA 200.8	ND	mg/L	1	0.0050	3/12/2018	NV00925
Lead, Dissolved	EPA 200.8	ND	mg/L	1	0.0025	3/12/2018	NV00925
Selenium, Dissolved	EPA 200.8	ND	mg/L	1	0.0050	3/12/2018	NV00925
Thallium, Dissolved	EPA 200.8	ND	mg/L	1	0.0010	3/12/2018	NV00925
Mercury by CVAA							
Mercury, Dissolved	EPA 245.1	ND	mg/L	1	0.0001	3/16/2018	NV00925
Ion Balance							
Anions	Calculation	2.60	meq/L	1	0.10		NV00925
Cations	Calculation	2.68	meq/L	1	0.10		NV00925
Error	Calculation	1.51	%	1	1.00		NV00925
Sample Preparation							
Trace Metals Digestion, Dissolved	EPA 200.2	Complete		1		3/12/2018	NV00925
Sample Filtration (Metals)	N/A	Complete		1			NV00925

DF=Dilution Factor, RL=Reporting Limit, ND=Not Detected or <RL

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SPARKS

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LAS VEGAS

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EPA LAB ID: NV00932

Customer Sample ID: St James SP-1

Collect Date/Time: 3/7/2018 13:00

WETLAB Sample ID: 1802633-005

Receive Date: 3/9/2018 10:45

Analyte	Method	Results	Units	DF	RL	Analyzed	LabID
Subcontracted Analyses							
Deuterium	N/A	See Attached		1			
Oxygen Isotopes	N/A	See Attached		1			

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Western Environmental Testing Laboratory

QC Report

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC18020768	Blank 1	Nitrate + Nitrite Nitrogen	EPA 353.2	ND			mg/L
QC18020773	Blank 1	Total Kjeldahl Nitrogen	EPA 351.2	ND			mg/L
QC18020829	Blank 1	Total Dissolved Solids (TDS)	SM 2540C	ND			mg/L
QC18020835	Blank 1	Chloride	EPA 300.0	ND			mg/L
		Fluoride	EPA 300.0	ND			mg/L
		Sulfate	EPA 300.0	ND			mg/L
QC18020861	Blank 1	Total Kjeldahl Nitrogen	EPA 351.2	ND			mg/L
QC18020879	Blank 1	Chloride	EPA 300.0	ND			mg/L
		Fluoride	EPA 300.0	ND			mg/L
		Sulfate	EPA 300.0	ND			mg/L
QC18030005	Blank 1	Total Dissolved Solids (TDS)	SM 2540C	ND			mg/L
QC18030011	Blank 1	Antimony, Dissolved	EPA 200.8	ND			mg/L
		Arsenic, Dissolved	EPA 200.8	ND			mg/L
		Lead, Dissolved	EPA 200.8	ND			mg/L
		Selenium, Dissolved	EPA 200.8	ND			mg/L
		Thallium, Dissolved	EPA 200.8	ND			mg/L
QC18030030	Blank 1	Antimony, Dissolved	EPA 200.8	ND			mg/L
		Arsenic, Dissolved	EPA 200.8	ND			mg/L
		Lead, Dissolved	EPA 200.8	ND			mg/L
		Selenium, Dissolved	EPA 200.8	ND			mg/L
		Thallium, Dissolved	EPA 200.8	ND			mg/L
QC18030034	Blank 1	Nitrate + Nitrite Nitrogen	EPA 353.2	ND			mg/L
QC18030060	Blank 1	Aluminum, Dissolved	EPA 200.7	ND			mg/L
		Barium, Dissolved	EPA 200.7	ND			mg/L
		Beryllium, Dissolved	EPA 200.7	ND			mg/L
		Cadmium, Dissolved	EPA 200.7	ND			mg/L
		Calcium, Dissolved	EPA 200.7	ND			mg/L
		Chromium, Dissolved	EPA 200.7	ND			mg/L
		Copper, Dissolved	EPA 200.7	ND			mg/L
		Iron, Dissolved	EPA 200.7	ND			mg/L
		Magnesium, Dissolved	EPA 200.7	ND			mg/L
		Manganese, Dissolved	EPA 200.7	ND			mg/L
		Nickel, Dissolved	EPA 200.7	ND			mg/L
		Phosphorus, Dissolved	EPA 200.7	ND			mg/L
		Potassium, Dissolved	EPA 200.7	ND			mg/L
		Silver, Dissolved	EPA 200.7	ND			mg/L
		Sodium, Dissolved	EPA 200.7	ND			mg/L
		Zinc, Dissolved	EPA 200.7	ND			mg/L
QC18030067	Blank 1	Aluminum, Dissolved	EPA 200.7	ND			mg/L
		Barium, Dissolved	EPA 200.7	ND			mg/L
		Beryllium, Dissolved	EPA 200.7	ND			mg/L
		Cadmium, Dissolved	EPA 200.7	ND			mg/L
		Calcium, Dissolved	EPA 200.7	ND			mg/L
		Chromium, Dissolved	EPA 200.7	ND			mg/L
		Copper, Dissolved	EPA 200.7	ND			mg/L
		Iron, Dissolved	EPA 200.7	ND			mg/L
		Magnesium, Dissolved	EPA 200.7	ND			mg/L
		Manganese, Dissolved	EPA 200.7	ND			mg/L

DF=Dilution Factor, RL=Reporting Limit, ND=Not Detected or <RL

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QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
		Nickel, Dissolved	EPA 200.7	ND			mg/L
		Phosphorus, Dissolved	EPA 200.7	ND			mg/L
		Potassium, Dissolved	EPA 200.7	ND			mg/L
		Silver, Dissolved	EPA 200.7	ND			mg/L
		Sodium, Dissolved	EPA 200.7	ND			mg/L
		Zinc, Dissolved	EPA 200.7	ND			mg/L
QC18030139	Blank 1	Total Kjeldahl Nitrogen	EPA 351.2	ND			mg/L
QC18030140	Blank 1	Mercury, Dissolved	EPA 245.1	ND			mg/L
QC18030141	Blank 1	Mercury, Dissolved	EPA 245.1	ND			mg/L
QC18030142	Blank 1	Mercury, Dissolved	EPA 245.1	ND			mg/L
QC18030152	Blank 1	Aluminum, Dissolved	EPA 200.7	ND			mg/L
		Barium, Dissolved	EPA 200.7	ND			mg/L
		Beryllium, Dissolved	EPA 200.7	ND			mg/L
		Cadmium, Dissolved	EPA 200.7	ND			mg/L
		Calcium, Dissolved	EPA 200.7	ND			mg/L
		Chromium, Dissolved	EPA 200.7	ND			mg/L
		Copper, Dissolved	EPA 200.7	ND			mg/L
		Iron, Dissolved	EPA 200.7	ND			mg/L
		Magnesium, Dissolved	EPA 200.7	ND			mg/L
		Manganese, Dissolved	EPA 200.7	ND			mg/L
		Nickel, Dissolved	EPA 200.7	ND			mg/L
		Phosphorus, Dissolved	EPA 200.7	ND			mg/L
		Potassium, Dissolved	EPA 200.7	ND			mg/L
		Silver, Dissolved	EPA 200.7	ND			mg/L
		Sodium, Dissolved	EPA 200.7	ND			mg/L
		Zinc, Dissolved	EPA 200.7	ND			mg/L
QC18030161	Blank 1	Chloride	EPA 300.0	ND			mg/L
		Fluoride	EPA 300.0	ND			mg/L
		Sulfate	EPA 300.0	ND			mg/L
QC18030191	Blank 1	Antimony, Dissolved	EPA 200.8	ND			mg/L
		Arsenic, Dissolved	EPA 200.8	ND			mg/L
		Lead, Dissolved	EPA 200.8	ND			mg/L
		Selenium, Dissolved	EPA 200.8	ND			mg/L
		Thallium, Dissolved	EPA 200.8	ND			mg/L
		Uranium, Dissolved	EPA 200.8	ND			mg/L
QC18030247	Blank 1	Nitrate + Nitrite Nitrogen	EPA 353.2	ND			mg/L
QC18030337	Blank 1	Total Dissolved Solids (TDS)	SM 2540C	ND			mg/L
QC18030419	Blank 1	Chloride	EPA 300.0	ND			mg/L
		Fluoride	EPA 300.0	ND			mg/L
		Sulfate	EPA 300.0	ND			mg/L
QC18030425	Blank 1	Antimony, Dissolved	EPA 200.8	ND			mg/L
		Arsenic, Dissolved	EPA 200.8	ND			mg/L
		Lead, Dissolved	EPA 200.8	ND			mg/L
		Selenium, Dissolved	EPA 200.8	ND			mg/L
		Thallium, Dissolved	EPA 200.8	ND			mg/L
QC18030439	Blank 1	Aluminum, Dissolved	EPA 200.7	ND			mg/L
		Barium, Dissolved	EPA 200.7	ND			mg/L
		Beryllium, Dissolved	EPA 200.7	ND			mg/L
		Cadmium, Dissolved	EPA 200.7	ND			mg/L
		Calcium, Dissolved	EPA 200.7	ND			mg/L
		Chromium, Dissolved	EPA 200.7	ND			mg/L
		Copper, Dissolved	EPA 200.7	ND			mg/L
		Iron, Dissolved	EPA 200.7	ND			mg/L

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QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
		Magnesium, Dissolved	EPA 200.7	ND			mg/L
		Manganese, Dissolved	EPA 200.7	ND			mg/L
		Nickel, Dissolved	EPA 200.7	ND			mg/L
		Phosphorus, Dissolved	EPA 200.7	ND			mg/L
		Potassium, Dissolved	EPA 200.7	ND			mg/L
		Silver, Dissolved	EPA 200.7	ND			mg/L
		Sodium, Dissolved	EPA 200.7	ND			mg/L
		Zinc, Dissolved	EPA 200.7	ND			mg/L
QC18030456	Blank 1	Nitrate + Nitrite Nitrogen	EPA 353.2	ND			mg/L
QC18030501	Blank 1	Total Kjeldahl Nitrogen	EPA 351.2	ND			mg/L
QC18030586	Blank 1	Total Dissolved Solids (TDS)	SM 2540C	ND			mg/L
QC18030588	Blank 1	Mercury, Dissolved	EPA 245.1	ND			mg/L

QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC18020685	LCS 1	pH	SM 4500-H+ B	7.02	7.00	100	pH Units
QC18020687	LCS 1	Total Alkalinity	SM 2320B	98.6	100	99	mg/L
QC18020768	LCS 1	Nitrate + Nitrite Nitrogen	EPA 353.2	0.793	0.800	99	mg/L
QC18020773	LCS 1	Total Kjeldahl Nitrogen	EPA 351.2	1.07	1.00	107	mg/L
QC18020829	LCS 1	Total Dissolved Solids (TDS)	SM 2540C	148	150	99	mg/L
QC18020829	LCS 2	Total Dissolved Solids (TDS)	SM 2540C	145	150	97	mg/L
QC18020835	LCS 1	Chloride	EPA 300.0	9.66	10.0	97	mg/L
		Fluoride	EPA 300.0	2.07	2.00	104	mg/L
		Sulfate	EPA 300.0	23.9	25.0	96	mg/L
QC18020861	LCS 1	Total Kjeldahl Nitrogen	EPA 351.2	0.983	1.00	98	mg/L
QC18020863	LCS 1	pH	SM 4500-H+ B	7.03	7.00	100	pH Units
QC18020863	LCS 2	pH	SM 4500-H+ B	7.03	7.00	100	pH Units
QC18020865	LCS 1	Total Alkalinity	SM 2320B	100	100	100	mg/L
QC18020865	LCS 2	Total Alkalinity	SM 2320B	99.9	100	100	mg/L
QC18020879	LCS 1	Chloride	EPA 300.0	10.4	10.0	104	mg/L
		Fluoride	EPA 300.0	2.12	2.00	106	mg/L
		Sulfate	EPA 300.0	26.9	25.0	108	mg/L
QC18030005	LCS 1	Total Dissolved Solids (TDS)	SM 2540C	156	150	104	mg/L
QC18030005	LCS 2	Total Dissolved Solids (TDS)	SM 2540C	151	150	101	mg/L
QC18030011	LCS 1	Antimony, Dissolved	EPA 200.8	0.0104	0.010	104	mg/L
		Arsenic, Dissolved	EPA 200.8	0.0500	0.050	100	mg/L
		Lead, Dissolved	EPA 200.8	0.0098	0.010	98	mg/L
		Selenium, Dissolved	EPA 200.8	0.0528	0.050	106	mg/L
		Thallium, Dissolved	EPA 200.8	0.0106	0.010	106	mg/L
QC18030030	LCS 1	Antimony, Dissolved	EPA 200.8	0.0101	0.010	101	mg/L
		Arsenic, Dissolved	EPA 200.8	0.0490	0.050	98	mg/L
		Lead, Dissolved	EPA 200.8	0.0105	0.010	105	mg/L
		Selenium, Dissolved	EPA 200.8	0.0494	0.050	99	mg/L
		Thallium, Dissolved	EPA 200.8	0.0090	0.010	90	mg/L
QC18030034	LCS 1	Nitrate + Nitrite Nitrogen	EPA 353.2	0.785	0.800	98	mg/L
QC18030060	LCS 1	Aluminum, Dissolved	EPA 200.7	1.01	1.00	101	mg/L
		Barium, Dissolved	EPA 200.7	0.944	1.00	94	mg/L
		Beryllium, Dissolved	EPA 200.7	0.986	1.00	99	mg/L
		Cadmium, Dissolved	EPA 200.7	0.907	1.00	91	mg/L
		Calcium, Dissolved	EPA 200.7	9.95	10.0	100	mg/L
		Chromium, Dissolved	EPA 200.7	0.956	1.00	96	mg/L
		Copper, Dissolved	EPA 200.7	4.99	5.00	100	mg/L
		Iron, Dissolved	EPA 200.7	1.01	1.00	101	mg/L
		Magnesium, Dissolved	EPA 200.7	9.89	10.0	99	mg/L

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QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC18030067	LCS 1	Manganese, Dissolved	EPA 200.7	0.973	1.00	97	mg/L
		Nickel, Dissolved	EPA 200.7	4.58	5.00	92	mg/L
		Phosphorus, Dissolved	EPA 200.7	4.52	5.00	90	mg/L
		Potassium, Dissolved	EPA 200.7	10.1	10.0	101	mg/L
		Silver, Dissolved	EPA 200.7	0.090	0.090	100	mg/L
		Sodium, Dissolved	EPA 200.7	10.1	10.0	101	mg/L
		Zinc, Dissolved	EPA 200.7	0.911	1.00	91	mg/L
		Aluminum, Dissolved	EPA 200.7	0.967	1.00	97	mg/L
		Barium, Dissolved	EPA 200.7	0.971	1.00	97	mg/L
		Beryllium, Dissolved	EPA 200.7	0.962	1.00	96	mg/L
		Cadmium, Dissolved	EPA 200.7	0.973	1.00	97	mg/L
		Calcium, Dissolved	EPA 200.7	9.62	10.0	96	mg/L
		Chromium, Dissolved	EPA 200.7	0.963	1.00	96	mg/L
		Copper, Dissolved	EPA 200.7	4.87	5.00	97	mg/L
		Iron, Dissolved	EPA 200.7	0.963	1.00	96	mg/L
		Magnesium, Dissolved	EPA 200.7	9.64	10.0	96	mg/L
		Manganese, Dissolved	EPA 200.7	0.966	1.00	97	mg/L
		Nickel, Dissolved	EPA 200.7	4.84	5.00	97	mg/L
		Phosphorus, Dissolved	EPA 200.7	4.90	5.00	98	mg/L
		Potassium, Dissolved	EPA 200.7	9.69	10.0	97	mg/L
QC18030139	LCS 1	Silver, Dissolved	EPA 200.7	0.087	0.090	97	mg/L
		Sodium, Dissolved	EPA 200.7	9.65	10.0	96	mg/L
		Zinc, Dissolved	EPA 200.7	0.983	1.00	98	mg/L
		Total Kjeldahl Nitrogen	EPA 351.2	1.03	1.00	103	mg/L
QC18030140	LCS 1	Mercury, Dissolved	EPA 245.1	0.005290	0.005	106	mg/L
QC18030141	LCS 1	Mercury, Dissolved	EPA 245.1	0.005290	0.005	106	mg/L
QC18030142	LCS 1	Mercury, Dissolved	EPA 245.1	0.005610	0.005	112	mg/L
QC18030152	LCS 1	Aluminum, Dissolved	EPA 200.7	0.995	1.00	100	mg/L
		Barium, Dissolved	EPA 200.7	0.979	1.00	98	mg/L
		Beryllium, Dissolved	EPA 200.7	0.993	1.00	99	mg/L
		Cadmium, Dissolved	EPA 200.7	1.02	1.00	102	mg/L
		Calcium, Dissolved	EPA 200.7	9.88	10.0	99	mg/L
		Chromium, Dissolved	EPA 200.7	0.952	1.00	95	mg/L
		Copper, Dissolved	EPA 200.7	5.10	5.00	102	mg/L
		Iron, Dissolved	EPA 200.7	0.929	1.00	93	mg/L
		Magnesium, Dissolved	EPA 200.7	9.18	10.0	92	mg/L
		Manganese, Dissolved	EPA 200.7	0.969	1.00	97	mg/L
		Nickel, Dissolved	EPA 200.7	5.01	5.00	100	mg/L
		Phosphorus, Dissolved	EPA 200.7	4.89	5.00	98	mg/L
		Potassium, Dissolved	EPA 200.7	9.93	10.0	99	mg/L
		Silver, Dissolved	EPA 200.7	0.089	0.090	99	mg/L
		Sodium, Dissolved	EPA 200.7	9.76	10.0	98	mg/L
		Zinc, Dissolved	EPA 200.7	1.00	1.00	100	mg/L
QC18030161	LCS 1	Chloride	EPA 300.0	9.95	10.0	100	mg/L
		Fluoride	EPA 300.0	1.99	2.00	100	mg/L
		Sulfate	EPA 300.0	24.3	25.0	97	mg/L
QC18030168	LCS 1	pH	SM 4500-H+ B	7.02	7.00	100	pH Units
QC18030168	LCS 2	pH	SM 4500-H+ B	7.03	7.00	100	pH Units
QC18030170	LCS 1	Total Alkalinity	SM 2320B	97.2	100	97	mg/L
QC18030170	LCS 2	Total Alkalinity	SM 2320B	96.0	100	96	mg/L
QC18030191	LCS 1	Antimony, Dissolved	EPA 200.8	0.0098	0.010	98	mg/L
		Arsenic, Dissolved	EPA 200.8	0.0486	0.050	97	mg/L
		Lead, Dissolved	EPA 200.8	0.0093	0.010	93	mg/L

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QCBatchID	QCType	Parameter	Method	Result	Actual	% Rec	Units
QC18030247	LCS 1	Selenium, Dissolved	EPA 200.8	0.0553	0.050	111	mg/L
		Thallium, Dissolved	EPA 200.8	0.0106	0.010	106	mg/L
		Uranium, Dissolved	EPA 200.8	0.0092	0.010	92	mg/L
		Nitrate + Nitrite Nitrogen	EPA 353.2	0.779	0.800	97	mg/L
QC18030337	LCS 1	Total Dissolved Solids (TDS)	SM 2540C	153	150	102	mg/L
QC18030337	LCS 2	Total Dissolved Solids (TDS)	SM 2540C	144	150	96	mg/L
QC18030381	LCS 1	pH	SM 4500-H+ B	7.02	7.00	100	pH Units
QC18030381	LCS 2	pH	SM 4500-H+ B	7.02	7.00	100	pH Units
QC18030385	LCS 1	Total Alkalinity	SM 2320B	99.1	100	99	mg/L
QC18030385	LCS 2	Total Alkalinity	SM 2320B	101	100	101	mg/L
QC18030419	LCS 1	Chloride	EPA 300.0	10.2	10.0	102	mg/L
		Fluoride	EPA 300.0	1.98	2.00	99	mg/L
		Sulfate	EPA 300.0	24.2	25.0	97	mg/L
QC18030425	LCS 1	Antimony, Dissolved	EPA 200.8	0.0100	0.010	100	mg/L
		Arsenic, Dissolved	EPA 200.8	0.0465	0.050	93	mg/L
		Lead, Dissolved	EPA 200.8	0.0103	0.010	103	mg/L
		Selenium, Dissolved	EPA 200.8	0.0490	0.050	98	mg/L
QC18030439	LCS 1	Thallium, Dissolved	EPA 200.8	0.0107	0.010	107	mg/L
		Aluminum, Dissolved	EPA 200.7	1.02	1.00	102	mg/L
		Barium, Dissolved	EPA 200.7	0.981	1.00	98	mg/L
		Beryllium, Dissolved	EPA 200.7	0.984	1.00	98	mg/L
		Cadmium, Dissolved	EPA 200.7	0.988	1.00	99	mg/L
		Calcium, Dissolved	EPA 200.7	9.87	10.0	99	mg/L
		Chromium, Dissolved	EPA 200.7	1.000	1.00	100	mg/L
		Copper, Dissolved	EPA 200.7	5.15	5.00	103	mg/L
		Iron, Dissolved	EPA 200.7	0.948	1.00	95	mg/L
		Magnesium, Dissolved	EPA 200.7	10.1	10.0	101	mg/L
		Manganese, Dissolved	EPA 200.7	0.983	1.00	98	mg/L
		Nickel, Dissolved	EPA 200.7	4.90	5.00	98	mg/L
		Phosphorus, Dissolved	EPA 200.7	5.11	5.00	102	mg/L
		Potassium, Dissolved	EPA 200.7	9.98	10.0	100	mg/L
		Silver, Dissolved	EPA 200.7	0.078	0.090	87	mg/L
		Sodium, Dissolved	EPA 200.7	9.70	10.0	97	mg/L
		Zinc, Dissolved	EPA 200.7	1.02	1.00	102	mg/L
QC18030456	LCS 1	Nitrate + Nitrite Nitrogen	EPA 353.2	0.784	0.800	98	mg/L
QC18030501	LCS 1	Total Kjeldahl Nitrogen	EPA 351.2	1.05	1.00	105	mg/L
QC18030586	LCS 1	Total Dissolved Solids (TDS)	SM 2540C	165	150	110	mg/L
QC18030586	LCS 2	Total Dissolved Solids (TDS)	SM 2540C	136	150	91	mg/L
QC18030588	LCS 1	Mercury, Dissolved	EPA 245.1	0.005570	0.005	111	mg/L

QCBatchID	QCType	Parameter	Method	Duplicate Sample	Sample Result	Duplicate Result	Units	RPD
QC18020685	Duplicate 1	pH	SM 4500-H+ B	1802636-001	8.69	8.71	HT	pH Units
QC18020687	Duplicate 1	Total Alkalinity	SM 2320B	1802636-001	248	250		mg/L as CaCO3
		Bicarbonate (HCO3)	SM 2320B	1802636-001	214	215		mg/L as CaCO3
		Carbonate (CO3)	SM 2320B	1802636-001	33.5	35.3		mg/L as CaCO3
		Hydroxide (OH)	SM 2320B	1802636-001	ND	ND		mg/L as CaCO3
QC18020829	Duplicate 1	Total Dissolved Solids (TDS)	SM 2540C	1802630-001	768	748		mg/L
QC18020829	Duplicate 2	Total Dissolved Solids (TDS)	SM 2540C	1802612-003	324	312		mg/L
QC18020863	Duplicate 1	pH	SM 4500-H+ B	1802633-002	7.54	7.55	HT	pH Units
QC18020863	Duplicate 2	pH	SM 4500-H+ B	1802767-001	7.98	8.06	HT	pH Units

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QCBatchID	QCType	Parameter	Method	Duplicate Sample	Sample Result	Duplicate Result	Units	RPD
QC18020863	Duplicate 3	pH	SM 4500-H+ B	1802766-011	7.42	7.43	HT	pH Units <1%
QC18020865	Duplicate 1	Total Alkalinity	SM 2320B	1802633-002	38.0	37.8		mg/L as CaCO3 1 %
		Bicarbonate (HCO3)	SM 2320B	1802633-002	38.0	37.8		mg/L as CaCO3 1 %
		Carbonate (CO3)	SM 2320B	1802633-002	ND	ND		mg/L as CaCO3 <1%
		Hydroxide (OH)	SM 2320B	1802633-002	ND	ND		mg/L as CaCO3 <1%
QC18020865	Duplicate 2	Total Alkalinity	SM 2320B	1802767-001	194	195		mg/L as CaCO3 <1%
		Bicarbonate (HCO3)	SM 2320B	1802767-001	194	195		mg/L as CaCO3 <1%
		Carbonate (CO3)	SM 2320B	1802767-001	ND	ND		mg/L as CaCO3 <1%
		Hydroxide (OH)	SM 2320B	1802767-001	ND	ND		mg/L as CaCO3 <1%
QC18020865	Duplicate 3	Total Alkalinity	SM 2320B	1802766-011	26.1	25.1		mg/L as CaCO3 4 %
		Bicarbonate (HCO3)	SM 2320B	1802766-011	26.1	25.1		mg/L as CaCO3 4 %
		Carbonate (CO3)	SM 2320B	1802766-011	ND	ND		mg/L as CaCO3 <1%
		Hydroxide (OH)	SM 2320B	1802766-011	ND	ND		mg/L as CaCO3 <1%
QC18030005	Duplicate 1	Total Dissolved Solids (TDS)	SM 2540C	1802711-001	365	371		mg/L 2 %
QC18030005	Duplicate 2	Total Dissolved Solids (TDS)	SM 2540C	1802714-002	361	349		mg/L 3 %
QC18030168	Duplicate 1	pH	SM 4500-H+ B	1803063-001	5.87	5.87	HT	pH Units <1%
QC18030168	Duplicate 2	pH	SM 4500-H+ B	1803073-003	7.93	7.95	HT	pH Units <1%
QC18030168	Duplicate 3	pH	SM 4500-H+ B	1803047-007	7.86	7.86	HT	pH Units <1%
QC18030170	Duplicate 1	Total Alkalinity	SM 2320B	1803063-001	3.61	3.07		mg/L as CaCO3 16 %
		Bicarbonate (HCO3)	SM 2320B	1803063-001	3.61	3.07		mg/L as CaCO3 16 %
		Carbonate (CO3)	SM 2320B	1803063-001	ND	ND		mg/L as CaCO3 <1%
		Hydroxide (OH)	SM 2320B	1803063-001	ND	ND		mg/L as CaCO3 <1%
QC18030170	Duplicate 2	Total Alkalinity	SM 2320B	1803073-003	113	112		mg/L as CaCO3 <1%
		Bicarbonate (HCO3)	SM 2320B	1803073-003	113	112		mg/L as CaCO3 <1%
		Carbonate (CO3)	SM 2320B	1803073-003	ND	ND		mg/L as CaCO3 <1%
		Hydroxide (OH)	SM 2320B	1803073-003	ND	ND		mg/L as CaCO3 <1%
QC18030170	Duplicate 3	Total Alkalinity	SM 2320B	1803047-007	89.2	89.0		mg/L as CaCO3 <1%
		Bicarbonate (HCO3)	SM 2320B	1803047-007	89.2	89.0		mg/L as CaCO3 <1%
		Carbonate (CO3)	SM 2320B	1803047-007	ND	ND		mg/L as CaCO3 <1%
		Hydroxide (OH)	SM 2320B	1803047-007	ND	ND		mg/L as CaCO3 <1%
QC18030337	Duplicate 1	Total Dissolved Solids (TDS)	SM 2540C	1802633-004	185	183		mg/L 1 %
QC18030337	Duplicate 2	Total Dissolved Solids (TDS)	SM 2540C	1802827-003	374	365		mg/L 2 %
QC18030381	Duplicate 1	pH	SM 4500-H+ B	1803269-001	8.32	8.32	HT	pH Units <1%
QC18030381	Duplicate 2	pH	SM 4500-H+ B	1803271-001	7.55	7.59	HT	pH Units 1 %
QC18030381	Duplicate 3	pH	SM 4500-H+ B	1803271-002	7.61	7.63	HT	pH Units <1%
QC18030381	Duplicate 4	pH	SM 4500-H+ B	1803313-001	6.54	5.86	HT,Q	pH Units 11 %
QC18030381	Duplicate 5	pH	SM 4500-H+ B	1803328-001	8.74	8.76	HT	pH Units <1%
QC18030385	Duplicate 1	Total Alkalinity	SM 2320B	1803269-001	330	330		mg/L as CaCO3 <1%
		Bicarbonate (HCO3)	SM 2320B	1803269-001	324	326		mg/L as CaCO3 <1%
		Carbonate (CO3)	SM 2320B	1803269-001	5.30	4.66		mg/L as CaCO3 13 %
		Hydroxide (OH)	SM 2320B	1803269-001	ND	ND		mg/L as CaCO3 <1%
QC18030385	Duplicate 2	Total Alkalinity	SM 2320B	1803271-001	106	106		mg/L as CaCO3 <1%

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QCBatchID	QCType	Parameter	Method	Duplicate Sample	Sample Result	Duplicate Result	Units	RPD
QC18030385	Duplicate 3	Bicarbonate (HCO3)	SM 2320B	1803271-001	106	106	mg/L as CaCO3	<1%
		Carbonate (CO3)	SM 2320B	1803271-001	ND	ND	mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	1803271-001	ND	ND	mg/L as CaCO3	<1%
		Total Alkalinity	SM 2320B	1803271-002	141	141	mg/L as CaCO3	<1%
		Bicarbonate (HCO3)	SM 2320B	1803271-002	141	141	mg/L as CaCO3	<1%
		Carbonate (CO3)	SM 2320B	1803271-002	ND	ND	mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	1803271-002	ND	ND	mg/L as CaCO3	<1%
QC18030385	Duplicate 4	Total Alkalinity	SM 2320B	1803313-001	1.03	ND	QD mg/L as CaCO3	161 %
		Bicarbonate (HCO3)	SM 2320B	1803313-001	1.03	ND	QD mg/L as CaCO3	161 %
		Carbonate (CO3)	SM 2320B	1803313-001	ND	ND	mg/L as CaCO3	<1%
		Hydroxide (OH)	SM 2320B	1803313-001	ND	ND	mg/L as CaCO3	<1%
QC18030385	Duplicate 5	Total Alkalinity	SM 2320B	1803328-001	256	257	mg/L as CaCO3	1 %
		Bicarbonate (HCO3)	SM 2320B	1803328-001	215	215	mg/L as CaCO3	<1%
		Carbonate (CO3)	SM 2320B	1803328-001	40.3	42.3	mg/L as CaCO3	5 %
		Hydroxide (OH)	SM 2320B	1803328-001	ND	ND	mg/L as CaCO3	<1%
QC18030586	Duplicate 1	Total Dissolved Solids (TDS)	SM 2540C	1803210-005	585	615	QD mg/L	5 %
QC18030586	Duplicate 2	Total Dissolved Solids (TDS)	SM 2540C	1803210-006	422	423	mg/L	<1%

QCBatchID	QCType	Parameter	Method	Spike Sample	Sample Result	MS Result	MSD Result	Spike Value	Units	MS %Rec	MSD %Rec	RPD %
QC18020768	MS 1	Nitrate + Nitrite Nitrogen	EPA 353.2	1802574-001	ND	5.37	5.59	1	mg/L	107	112	4
QC18020768	MS 2	Nitrate + Nitrite Nitrogen	EPA 353.2	1802582-002	ND	M 5.60	5.43	1	mg/L	NC	NC	NC
QC18020773	MS 1	Total Kjeldahl Nitrogen	EPA 351.2	1802691-001	1.00	M 2.15	2.20	1	mg/L	NC	NC	NC
QC18020773	MS 2	Total Kjeldahl Nitrogen	EPA 351.2	1802630-002	0.430	1.34	1.41	1	mg/L	91	98	5
QC18020835	MS 1	Chloride	EPA 300.0	1802582-003	295	395	431	5	mg/L	100	136	9
		Fluoride	EPA 300.0	1802582-003	ND	D 40.0	43.4	2	mg/L	98	107	8
		Sulfate	EPA 300.0	1802582-003	1025	1217	1333	10	mg/L	96	154	9
QC18020861	MS 1	Total Kjeldahl Nitrogen	EPA 351.2	1802657-005	ND	M 1.85	1.32	1	mg/L	NC	NC	NC
QC18020861	MS 2	Total Kjeldahl Nitrogen	EPA 351.2	1802633-002	ND	M 1.06	1.06	1	mg/L	NC	NC	NC
QC18020879	MS 1	Chloride	EPA 300.0	1802633-002	19.2	24.6	24.7	5	mg/L	109	110	<1
		Fluoride	EPA 300.0	1802633-002	ND	2.23	2.21	2	mg/L	110	109	<1
		Sulfate	EPA 300.0	1802633-002	ND	11.8	11.8	10	mg/L	114	114	<1
QC18020879	MS 2	Chloride	EPA 300.0	1802745-001	ND	5.78	5.79	5	mg/L	114	114	<1
		Fluoride	EPA 300.0	1802745-001	ND	2.23	2.25	2	mg/L	108	109	<1
		Sulfate	EPA 300.0	1802745-001	2.28	13.6	13.6	10	mg/L	113	113	<1
QC18030011	MS 1	Antimony, Dissolved	EPA 200.8	1802633-001	ND	0.0101	0.0106	0.01	mg/L	101	106	5
		Arsenic, Dissolved	EPA 200.8	1802633-001	ND	0.0484	0.0523	0.05	mg/L	95	103	8
		Lead, Dissolved	EPA 200.8	1802633-001	ND	0.0094	0.0095	0.01	mg/L	92	93	1
		Selenium, Dissolved	EPA 200.8	1802633-001	ND	0.0489	0.0533	0.05	mg/L	98	107	9
		Thallium, Dissolved	EPA 200.8	1802633-001	ND	0.0112	0.0112	0.01	mg/L	112	112	<1
QC18030030	MS 1	Antimony, Dissolved	EPA 200.8	1802633-002	ND	0.0099	0.0097	0.01	mg/L	99	97	2
		Arsenic, Dissolved	EPA 200.8	1802633-002	ND	0.0505	0.0492	0.05	mg/L	101	98	3
		Lead, Dissolved	EPA 200.8	1802633-002	ND	0.0101	0.0096	0.01	mg/L	101	96	5
		Selenium, Dissolved	EPA 200.8	1802633-002	ND	0.0527	0.0521	0.05	mg/L	105	104	1
		Thallium, Dissolved	EPA 200.8	1802633-002	ND	0.0093	0.0089	0.01	mg/L	92	88	4
QC18030034	MS 1	Nitrate + Nitrite Nitrogen	EPA 353.2	1802048-001	0.674	5.99	5.98	1	mg/L	106	106	<1
QC18030034	MS 2	Nitrate + Nitrite Nitrogen	EPA 353.2	1802728-005	ND	M 5.57	5.62	1	mg/L	NC	NC	NC
QC18030060	MS 1	Aluminum, Dissolved	EPA 200.7	1802633-002	ND	1.06	1.08	1	mg/L	103	105	2

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QCBatchID	QCType	Parameter	Method	Spike Sample	Sample Result	MS Result	MSD Result	Spike Value	Units	MS %Rec	MSD %Rec	RPD %
QC18030067 MS 1		Barium, Dissolved	EPA 200.7	1802633-002	0.016	0.967	0.977	1	mg/L	95	96	1
		Beryllium, Dissolved	EPA 200.7	1802633-002	ND	0.991	0.989	1	mg/L	99	99	<1
		Cadmium, Dissolved	EPA 200.7	1802633-002	ND	0.914	0.924	1	mg/L	91	92	1
		Calcium, Dissolved	EPA 200.7	1802633-002	11.8	22.2	21.6	10	mg/L	104	98	3
		Chromium, Dissolved	EPA 200.7	1802633-002	ND	0.966	0.969	1	mg/L	97	97	<1
		Copper, Dissolved	EPA 200.7	1802633-002	ND	5.06	5.04	5	mg/L	101	101	<1
		Iron, Dissolved	EPA 200.7	1802633-002	0.177	1.22	1.20	1	mg/L	104	102	2
		Magnesium, Dissolved	EPA 200.7	1802633-002	2.72	12.6	12.5	10	mg/L	99	98	<1
		Manganese, Dissolved	EPA 200.7	1802633-002	0.042	1.03	1.02	1	mg/L	99	98	1
		Nickel, Dissolved	EPA 200.7	1802633-002	ND	4.60	4.62	5	mg/L	92	92	<1
		Phosphorus, Dissolved	EPA 200.7	1802633-002	ND	4.56	4.61	5	mg/L	91	92	1
		Potassium, Dissolved	EPA 200.7	1802633-002	1.81	12.1	12.0	10	mg/L	103	102	<1
		Silver, Dissolved	EPA 200.7	1802633-002	ND	0.090	0.092	0.09	mg/L	100	102	2
		Sodium, Dissolved	EPA 200.7	1802633-002	8.79	19.2	18.9	10	mg/L	104	101	2
		Zinc, Dissolved	EPA 200.7	1802633-002	ND	0.918	0.918	1	mg/L	92	92	<1
		Aluminum, Dissolved	EPA 200.7	1802633-001	ND	0.968	0.965	1	mg/L	97	96	<1
		Barium, Dissolved	EPA 200.7	1802633-001	0.058	1.03	1.03	1	mg/L	97	98	<1
		Beryllium, Dissolved	EPA 200.7	1802633-001	ND	0.968	0.969	1	mg/L	97	97	<1
		Cadmium, Dissolved	EPA 200.7	1802633-001	ND	0.960	0.960	1	mg/L	96	96	<1
		Calcium, Dissolved	EPA 200.7	1802633-001	22.5	31.7	31.7	10	mg/L	93	92	<1
		Chromium, Dissolved	EPA 200.7	1802633-001	ND	0.958	0.956	1	mg/L	96	96	<1
		Copper, Dissolved	EPA 200.7	1802633-001	ND	4.85	4.87	5	mg/L	97	97	<1
		Iron, Dissolved	EPA 200.7	1802633-001	ND	0.967	0.971	1	mg/L	96	96	<1
		Magnesium, Dissolved	EPA 200.7	1802633-001	10.8	20.2	20.1	10	mg/L	94	93	<1
		Manganese, Dissolved	EPA 200.7	1802633-001	0.008	0.963	0.962	1	mg/L	95	95	<1
		Nickel, Dissolved	EPA 200.7	1802633-001	ND	4.75	4.75	5	mg/L	95	95	<1
		Phosphorus, Dissolved	EPA 200.7	1802633-001	ND	4.92	4.95	5	mg/L	97	98	<1
		Potassium, Dissolved	EPA 200.7	1802633-001	3.85	13.3	13.4	10	mg/L	95	96	<1
		Silver, Dissolved	EPA 200.7	1802633-001	ND	0.086	0.087	0.09	mg/L	94	96	1
		Sodium, Dissolved	EPA 200.7	1802633-001	18.8	27.8	27.9	10	mg/L	90	91	<1
		Zinc, Dissolved	EPA 200.7	1802633-001	ND	0.976	0.983	1	mg/L	97	98	<1
QC18030139 MS 1		Total Kjeldahl Nitrogen	EPA 351.2	1802633-004	ND	1.08	0.910	1	mg/L	108	91	17
QC18030139 MS 2		Total Kjeldahl Nitrogen	EPA 351.2	1803054-001	0.413	1.43	1.31	1	mg/L	102	90	9
QC18030140 MS 1		Mercury, Dissolved	EPA 245.1	1802633-003	ND	0.004680	0.005220	0.005	mg/L	94	104	11
QC18030141 MS 1		Mercury, Dissolved	EPA 245.1	1802633-001	ND	0.005570	0.005620	0.005	mg/L	111	112	<1
QC18030142 MS 1		Mercury, Dissolved	EPA 245.1	1802633-002	ND	0.005730	0.005640	0.005	mg/L	115	113	2
QC18030152 MS 1		Aluminum, Dissolved	EPA 200.7	1802633-004	ND	1.01	1.02	1	mg/L	101	102	1
		Barium, Dissolved	EPA 200.7	1802633-004	0.057	1.02	1.03	1	mg/L	96	97	1
		Beryllium, Dissolved	EPA 200.7	1802633-004	ND	0.974	0.984	1	mg/L	97	98	1
		Cadmium, Dissolved	EPA 200.7	1802633-004	ND	0.979	0.987	1	mg/L	98	99	<1
		Calcium, Dissolved	EPA 200.7	1802633-004	24.0	31.9	32.7	10	mg/L	79	87	2
		Chromium, Dissolved	EPA 200.7	1802633-004	ND	0.949	0.952	1	mg/L	95	95	<1
		Copper, Dissolved	EPA 200.7	1802633-004	ND	5.01	5.10	5	mg/L	100	102	2
		Iron, Dissolved	EPA 200.7	1802633-004	ND	0.932	0.936	1	mg/L	93	93	<1
		Magnesium, Dissolved	EPA 200.7	1802633-004	11.1	18.8	19.2	10	mg/L	77	81	2
		Manganese, Dissolved	EPA 200.7	1802633-004	0.052	1.01	1.02	1	mg/L	96	97	1
		Nickel, Dissolved	EPA 200.7	1802633-004	ND	4.82	4.85	5	mg/L	96	97	<1
		Phosphorus, Dissolved	EPA 200.7	1802633-004	ND	4.93	4.87	5	mg/L	99	97	1
		Potassium, Dissolved	EPA 200.7	1802633-004	3.90	13.2	13.6	10	mg/L	93	97	3
		Silver, Dissolved	EPA 200.7	1802633-004	ND	0.085	0.086	0.09	mg/L	95	96	1
		Sodium, Dissolved	EPA 200.7	1802633-004	18.7	26.5	27.3	10	mg/L	78	86	3
		Zinc, Dissolved	EPA 200.7	1802633-004	ND	0.970	0.975	1	mg/L	97	97	<1

DF=Dilution Factor, RL=Reporting Limit, ND=Not Detected or <RL

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QCBatchID	QCType	Parameter	Method	Spike Sample	Sample Result	MS Result	MSD Result	Spike Value	Units	MS %Rec	MSD %Rec	RPD %
QC18030161	MS 1	Chloride	EPA 300.0	1802633-004	1.04	6.62	6.55	5	mg/L	112	110	1
		Fluoride	EPA 300.0	1802633-004	ND	2.35	2.35	2	mg/L	112	112	<1
		Sulfate	EPA 300.0	1802633-004	2.37	13.2	13.1	10	mg/L	108	108	<1
QC18030191	MS 1	Antimony, Dissolved	EPA 200.8	1802633-004	ND	0.0085	0.0087	0.01	mg/L	85	87	2
		Arsenic, Dissolved	EPA 200.8	1802633-004	ND	0.0493	0.0492	0.05	mg/L	94	94	<1
		Lead, Dissolved	EPA 200.8	1802633-004	ND	0.0097	0.0096	0.01	mg/L	97	96	1
		Selenium, Dissolved	EPA 200.8	1802633-004	ND	0.0519	0.0515	0.05	mg/L	104	103	<1
		Thallium, Dissolved	EPA 200.8	1802633-004	ND	0.0108	0.0107	0.01	mg/L	108	107	<1
		Uranium, Dissolved	EPA 200.8	1802633-004	0.0065	0.0176	0.0169	0.01	mg/L	111	105	4
		Nitrate + Nitrite Nitrogen	EPA 353.2	1802633-004	0.246	5.46	5.48	1	mg/L	104	105	<1
QC18030247	MS 2	Nitrate + Nitrite Nitrogen	EPA 353.2	1803040-001	ND	5.47	5.99	1	mg/L	109	120	9
QC18030419	MS 1	Chloride	EPA 300.0	1803313-001	ND	5.54	5.44	5	mg/L	108	106	2
		Fluoride	EPA 300.0	1803313-001	ND	M 2.91	2.68	2	mg/L	NC	NC	NC
		Sulfate	EPA 300.0	1803313-001	ND	11.3	10.8	10	mg/L	112	107	4
QC18030419	MS 2	Chloride	EPA 300.0	1803195-007	162	265	269	5	mg/L	103	107	2
		Fluoride	EPA 300.0	1803195-007	ND	D 45.0	45.5	2	mg/L	111	112	1
		Sulfate	EPA 300.0	1803195-007	3512	SC 3664	3718	10	mg/L	NC	NC	NC
QC18030425	MS 1	Antimony, Dissolved	EPA 200.8	1803327-001	ND	0.0098	0.0102	0.01	mg/L	97	101	4
		Arsenic, Dissolved	EPA 200.8	1803327-001	0.0055	0.0521	0.0528	0.05	mg/L	93	94	1
		Lead, Dissolved	EPA 200.8	1803327-001	ND	0.0101	0.0102	0.01	mg/L	101	102	1
		Selenium, Dissolved	EPA 200.8	1803327-001	ND	0.0479	0.0483	0.05	mg/L	96	97	<1
		Thallium, Dissolved	EPA 200.8	1803327-001	ND	QD 0.0086	0.0109	0.01	mg/L	86	109	24
QC18030439	MS 1	Aluminum, Dissolved	EPA 200.7	1803327-001	0.092	1.09	1.08	1	mg/L	100	99	<1
		Barium, Dissolved	EPA 200.7	1803327-001	0.059	1.03	1.03	1	mg/L	98	97	<1
		Beryllium, Dissolved	EPA 200.7	1803327-001	ND	0.995	0.990	1	mg/L	100	99	<1
		Cadmium, Dissolved	EPA 200.7	1803327-001	ND	0.965	0.964	1	mg/L	97	96	<1
		Calcium, Dissolved	EPA 200.7	1803327-001	10.7	20.4	20.5	10	mg/L	97	97	<1
		Chromium, Dissolved	EPA 200.7	1803327-001	ND	1.000	0.987	1	mg/L	100	99	1
		Copper, Dissolved	EPA 200.7	1803327-001	ND	5.19	5.12	5	mg/L	104	102	1
		Iron, Dissolved	EPA 200.7	1803327-001	0.022	0.966	0.964	1	mg/L	94	94	<1
		Magnesium, Dissolved	EPA 200.7	1803327-001	4.83	14.8	14.6	10	mg/L	99	98	1
		Manganese, Dissolved	EPA 200.7	1803327-001	ND	0.970	0.968	1	mg/L	97	97	<1
		Nickel, Dissolved	EPA 200.7	1803327-001	0.235	5.06	5.06	5	mg/L	96	96	<1
		Phosphorus, Dissolved	EPA 200.7	1803327-001	ND	5.33	5.27	5	mg/L	103	102	1
		Potassium, Dissolved	EPA 200.7	1803327-001	3.50	13.4	13.5	10	mg/L	99	100	<1
		Silver, Dissolved	EPA 200.7	1803327-001	ND	0.077	0.077	0.09	mg/L	86	86	<1
		Sodium, Dissolved	EPA 200.7	1803327-001	18.7	28.5	28.8	10	mg/L	98	101	1
		Zinc, Dissolved	EPA 200.7	1803327-001	0.027	1.04	1.03	1	mg/L	101	100	1
QC18030456	MS 1	Nitrate + Nitrite Nitrogen	EPA 353.2	1802378-001	0.326	5.65	5.63	1	mg/L	107	106	<1
QC18030501	MS 1	Total Kjeldahl Nitrogen	EPA 351.2	1803200-003	ND	0.990	0.996	1	mg/L	99	100	<1
QC18030501	MS 2	Total Kjeldahl Nitrogen	EPA 351.2	1803200-004	ND	1.08	1.09	1	mg/L	108	109	<1
QC18030588	MS 1	Mercury, Dissolved	EPA 245.1	1802633-004	ND	0.005660	0.005540	0.005	mg/L	113	111	2

DF=Dilution Factor, RL=Reporting Limit, ND=Not Detected or <RL

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Sample #	$\delta^{18}\text{O}_{\text{VSMOW}}$ (‰)	$\delta\text{D}_{\text{VSMOW}}$ (‰)	Comments
WetLab 1802633-005	-15.0	-111	

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Sample #	$\delta^{18}\text{O}_{\text{VSMOW}}$ (‰)	$\delta\text{D}_{\text{VSMOW}}$ (‰)	Comments
Wetlab 1802633-001	-14.9	-112	
Wetlab 1802633-002	-14.7	-107	
Wetlab 1802633-003	-15.0	-112	



Memorandum

To: [File – Natural Resources](#)
From: Nick White, Hydrogeologist
Date: August 2, 2018
Re: Serpa Well Pump Test Analyses, Forward Simulation and Groundwater Modeling

Executive Summary

Confluence Water Resources, LLC (CWR) recently conducted a 10-day constant rate pump test on behalf of St. James Village utilizing the Serpa Well (also known as the Falcon-Capital Well), located adjacent to the south entrance of St. James Village. The purpose of the test was to gain a better understanding of aquifer properties in the area and assess potential impacts to the Mt. Rose fan aquifer system(s). Multiple monitoring points were utilized during the test including two municipal supply wells (OWE-3 and OWE-4) owned and operated by Truckee Meadows Water Authority (TMWA). TMWA utilized data from the Serpa Well, OWE-3 and OWE-4 to complete internal pump test analyses and run a predictive forward simulation. Groundwater modeling simulations were also completed to predict cumulative impacts associated with future development expected to occur on the Mt. Rose fan, which included the permitted duty of the Serpa Well. Results associated with the work completed can be summarized as follows:

- Transmissivity (T) and storage (S) values calculated for a confined aquifer at OWE-3 and OWE-4 ranged from 5,000 ft²/day – 4,000 ft²/day and 0.007 – 0.002, respectively;
- Hydraulic conductivity (K) and specific storage (Ss) values calculated for a fractured rock aquifer at OWE-4 were 6.7 ft/day and 3.4e-6/ft, respectively.
- A 10-year forward simulation completed utilizing the aforementioned fractured rock aquifer parameters resulted in approximately seven-feet of drawdown at St. James Production Well 2, a municipal supply well north of Browns Creek; and,
- Groundwater modeling results associated with future development indicate regional drawdown (over a base case) would expand over much of the Mt. Rose fan, exceeding 50 feet at existing municipal supply wells.

Additional groundwater modeling simulations were completed due to TMWA's concerns regarding historical water level declines observed at multiple monitoring points across the Mt. Rose fan (exceeding five feet per year at some locations). Pump test analyses and methodology, forward simulation parameters and results, and groundwater modeling structure and results are further explained below.

Pump Test Analyses and Methodology

Confined Aquifer Analysis

As indicted above, aquifer parameters were obtained from analyzing drawdown response observed at OWE-3 and OWE-4. Pumping and drawdown data from the Serpa Well, OWE-3 and OWE-4 were formatted and imported into AQTESOLV (Duffield, 2007). Multiple methods of analysis were applied in order to calculate a range of aquifer parameters. Derivative analysis, a technique introduced by the petroleum engineering industry (Bourdet et al. 1983) was first applied to target an acceptable drawdown

interval for analysis. Derivative analysis includes plotting both drawdown data and derivative data (change in slope of drawdown data) on the same axes for evaluation. Trends observed on the derivative plot aid in proper selection of drawdown intervals appropriate for analysis. This is done by attempting to identify a radial flow plateau represented by a straight-line parallel to the x-axis in the derivative data. Radial flow plateaus are assumed to coincide with intervals where drawdown is consistent and controlled by aquifer characteristics rather than interferences such as boundary conditions, wellbore storage, partial aquifer penetration, etc. Based on derivative plots for both OWE-3 and OWE-4, a potential no-flow boundary was intercepted at approximately 3,500 minutes. The radial flow plateaus observed in the derivative data after the no-flow boundary was intercepted were selected for analysis. Parameters calculated utilizing a Cooper-Jacob straight-line fit (Cooper and Jacob, 1946) through these intervals for a confined aquifer equaled:

- OWE-3: $T = 5,000 \text{ ft}^2/\text{day}$, $S = 0.007$; and,
- OWE-4: $T = 4,000 \text{ ft}^2/\text{day}$, $S = 0.002$.

Cooper-Jacob straight-line fits combined with derivative plots for OWE-3 and OWE-4 are provided in Attachment I.

Fractured Rock Aquifer Analysis

Existing well logs and published geologic maps (Ramelli et al., 2011) indicate the Serpa Well is completed in tertiary volcanic deposits of the Kate Peak Formation. As such, a Moench (Moench, 1984) equation was utilized to obtain a K and S_s value more applicable to a fractured rock setting. The Moench curve was fit to the late-time drawdown and recovery portions of the data for OWE-4. The late-time drawdown data fit with the Moench curve was selected based on the derivative analysis described above. K and S_s values calculated for a fractured rock aquifer utilizing a Moench curve equaled 6.7 ft/day and $3.4\text{e-}6/\text{ft}$, respectively. The Moench curve fit for OWE-4 is provided in Attachment II.

Calculated aquifer parameters were then utilized to produce simulated drawdown curves for OWE-3 and OWE-4. The simulated curves were plotted with the observed drawdown data to verify accuracy of the estimated parameters and highlight potential boundary conditions. Potential boundary conditions are represented by deviations from the smooth simulated curve in the observed drawdown data. Parameters calculated utilizing a Moench curve for OWE-3 could not be utilized to accurately create a simulated drawdown curve; therefore, they were omitted from discussion in this memorandum. Observed vs. simulated drawdown curves are provided in Attachment III.

Forward Simulation

Based on the geology the Serpa well was drilled and constructed in, the fractured rock aquifer parameters ($K = 6.7 \text{ ft/day}$, $S_s = 3.4\text{e-}6/\text{ft}$) were utilized to run a ten-year predictive forward simulation in AQTESOLV. The forward simulation was completed to assess the extent of drawdown impacts surrounding the current location of the Serpa Well. The ten-year simulation was completed assuming the Serpa Well would pump at a permitted duty of 474 afa. Results of the ten-year forward simulation indicate approximately seven-feet of drawdown may occur at St. James Production Well 2, located approximately 5,575 feet northwest of the Serpa Well (north of Brown's Creek). It is important to note that the 10-year forward simulation completed in AQTESOLV assumes no recharge or boundary conditions are present throughout the entire duration of the simulation, which creates a conservative estimate of drawdown. The simulated ten-year drawdown curve for St. James Production Well 2 is provided in Attachment IV.

Groundwater Modeling

Given TMWA's concerns regarding historical water level declines observed at multiple monitoring points across the Mt. Rose fan, groundwater modeling was also completed utilizing the most recent update of the South Truckee Meadows (STM) model (Pohll and Rybarski, 2018). The model domain was expanded to the south to include the area surrounding the Serpa Well. The K surrounding the Serpa Well was then set equal to 6.7 ft/day based on results of the pump test analyses. Two separate model simulations were completed and structured as follows:

- Simulation 1 – TMWA's 2015 groundwater production rates were repeated for 20-years forward; and,
- Simulation 2 – TMWA's 2015 groundwater production rates plus an additional 1,992 afa of production needed to meet projected demands associated with future development were repeated for 20-years forward.

The additional 1,992 afa required to meet demands associated with future development was provided by TMWA engineering personnel. Calculated annual demand estimates per development equaled:

- 1,186 afa required for St. James and Sierra Reflections (including 474 afa from the Serpa Well);
- 548 afa required for Ascente; and,
- 258 afa required for Terrasante.

For comparison, groundwater elevations at the end of Simulation 2 were subtracted from groundwater elevations at the end of Simulation 1. Results indicate that the additional drawdown associated with the 1,992 afa would expand over much of the Mt. Rose fan, with maximum additional drawdown exceeding 50 feet at existing municipal supply wells. Additional drawdown propagating away from the municipal supply wells ranged from approximately 10 to 30 feet. Drawdown of this magnitude would be considered a regional impact, while drawdown exceeding 50 feet would be localized around municipal supply wells that are actively pumping groundwater. Additional water level declines of this magnitude validate TMWA's efforts to mitigate such impacts through implementation of various regional groundwater management strategies (further discussed below). Groundwater modeling results and figures are provided in Attachment V.

Conclusions

Aquifer parameters calculated utilizing data from a recent 10-day constant rate pump test conducted by CWR are in general agreement with TMWA's calibrated groundwater model for STM. Predictive forward simulations and groundwater modeling simulations utilizing these parameters both indicate an increase in groundwater production on the Mt. Rose fan would result in significant regional drawdown. Through recent implementation of conjunctive use TMWA has been decreasing annual groundwater production on the Mt. Rose fan. Between 2013 and 2015 groundwater production decreased by approximately 1,334 afa (5,597 afa to 4,263 afa). TMWA is also currently in the process of expanding its aquifer storage and recovery (ASR) program. In 2015, 2016 and 2017 small volumes of surface water were recharged through existing municipal supply wells on the Mt. Rose fan for testing and characterization purposes. As expected, water levels are responding to these regional groundwater management strategies by stabilizing. Increasing groundwater production would again create a declining regional water level trend. Measures such as expanding ASR and conjunctive use operations with surface water from White's Creek and the Truckee River will enhance groundwater recharge and allow the Mt. Rose fan aquifer system(s) to continue to stabilize.

References

Bourdet, D., T.M. Whittle, A.A. Douglas and Y.M. Pirard, 1983. A new set of type curves simplifies well test analysis. World Oil.

Cooper, H.H. Jr., and C.E. Jacob, 1946. A generalized graphical method for evaluating formation constants and summarizing well-field history. Transactions, American Geophysical Union 27, no. 4: 526–534.

Duffield, G.M., 2007. AQTESOLV for Windows Version 4.5 User's Guide, HydroSOLVE, Inc., Reston, VA.

Moench, A.F., 1984. Double-porosity models for a fissured groundwater reservoir with fracture skin, Water Resources Research, vol. 20, no. 7, pp. 831-846.

Pohll, G., and S. Rybarski, 2018. South Truckee Meadows Groundwater Model, Washoe County, NV. Prepared for the Truckee Meadows Water Authority.

Ramelli, A, Henry, D., and Walker, J., 2011. Preliminary Revised Geologic Maps of the Reno Urban Area, Nevada

Attachments

Attachment I – Cooper-Jacob Straight-Line Fit and Derivative Plots – OWE-3 and OWE-4

Attachment II – Moench Curve Fit – OWE-4

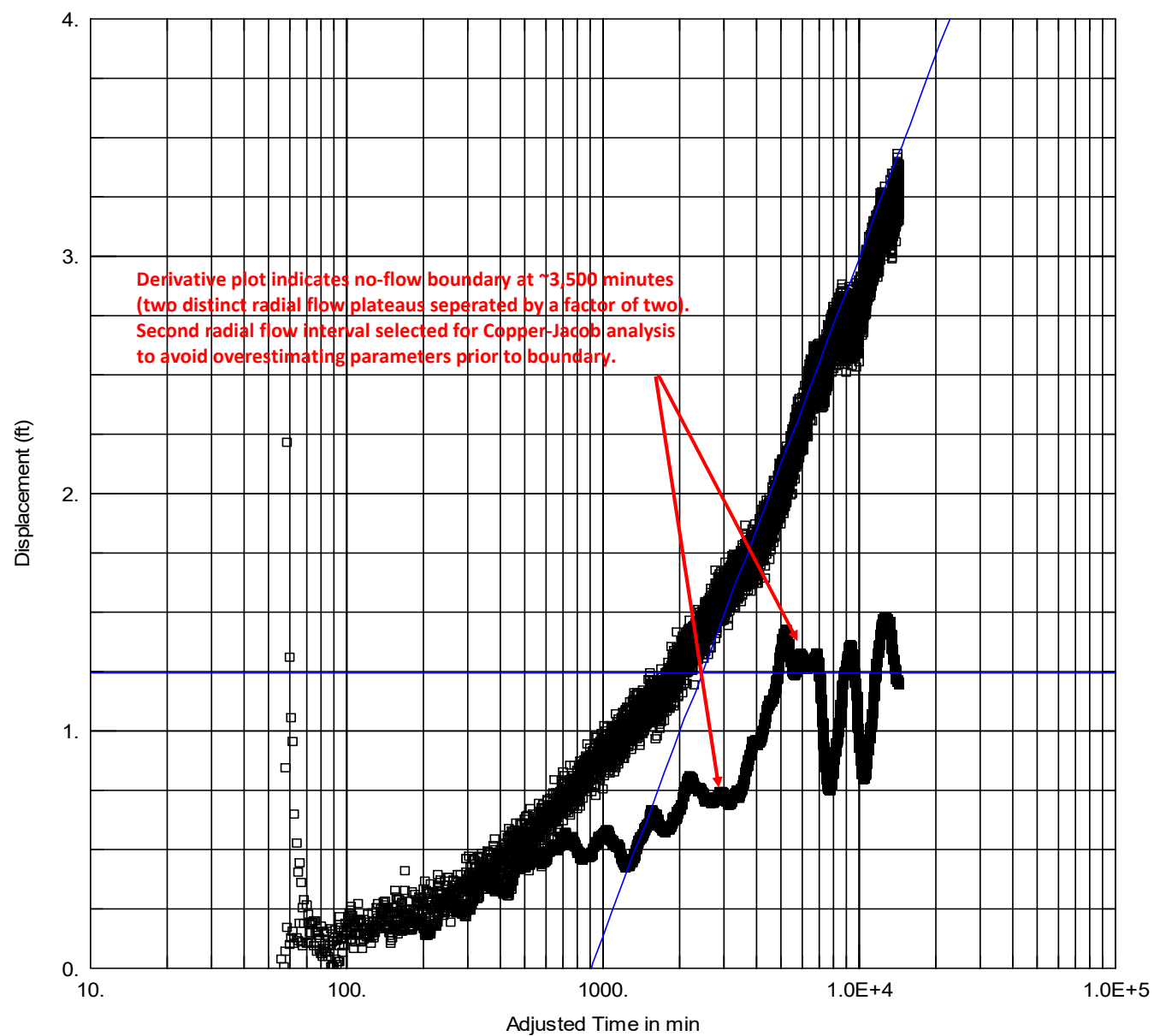
Attachment III – Observed vs. Simulated Drawdown – OWE-3 and OWE-4

Attachment IV – 10-year Simulated Drawdown Curve – St. James Production Well 2

Attachment V – Groundwater Modeling Results – Mt. Rose Fan Development

Attachment I

Cooper-Jacob Straight-Line Fit and Derivative Plots – OWE-3 and OWE-4



Obs. Wells

□ OWE-3

Aquifer Model

Confined

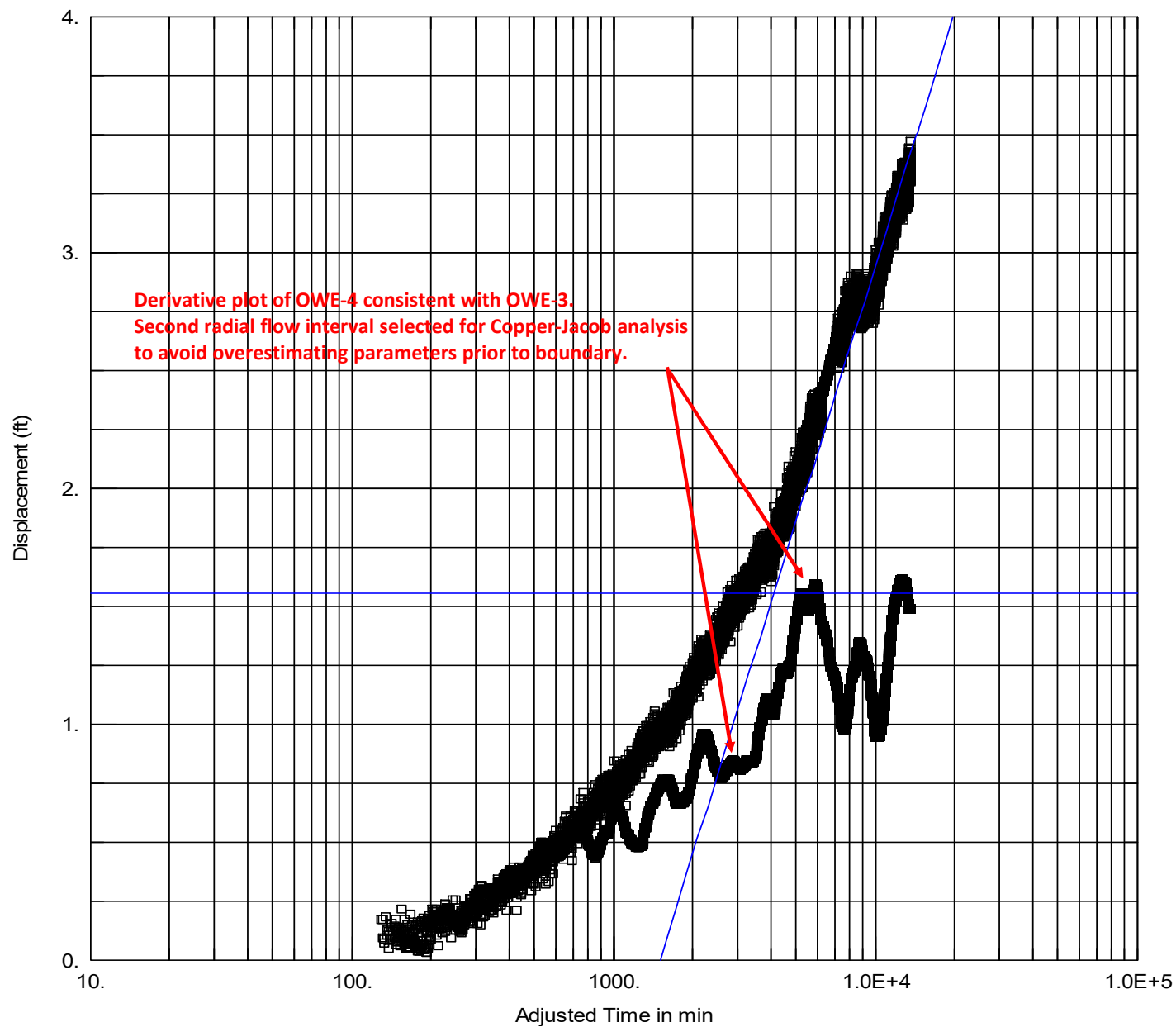
Solution

Cooper-Jacob

Parameters

$T = 5000. \text{ ft}^2/\text{day}$

$S = 0.007$



Obs. Wells

□ OWE-4

Aquifer Model

Confined

Solution

Cooper-Jacob

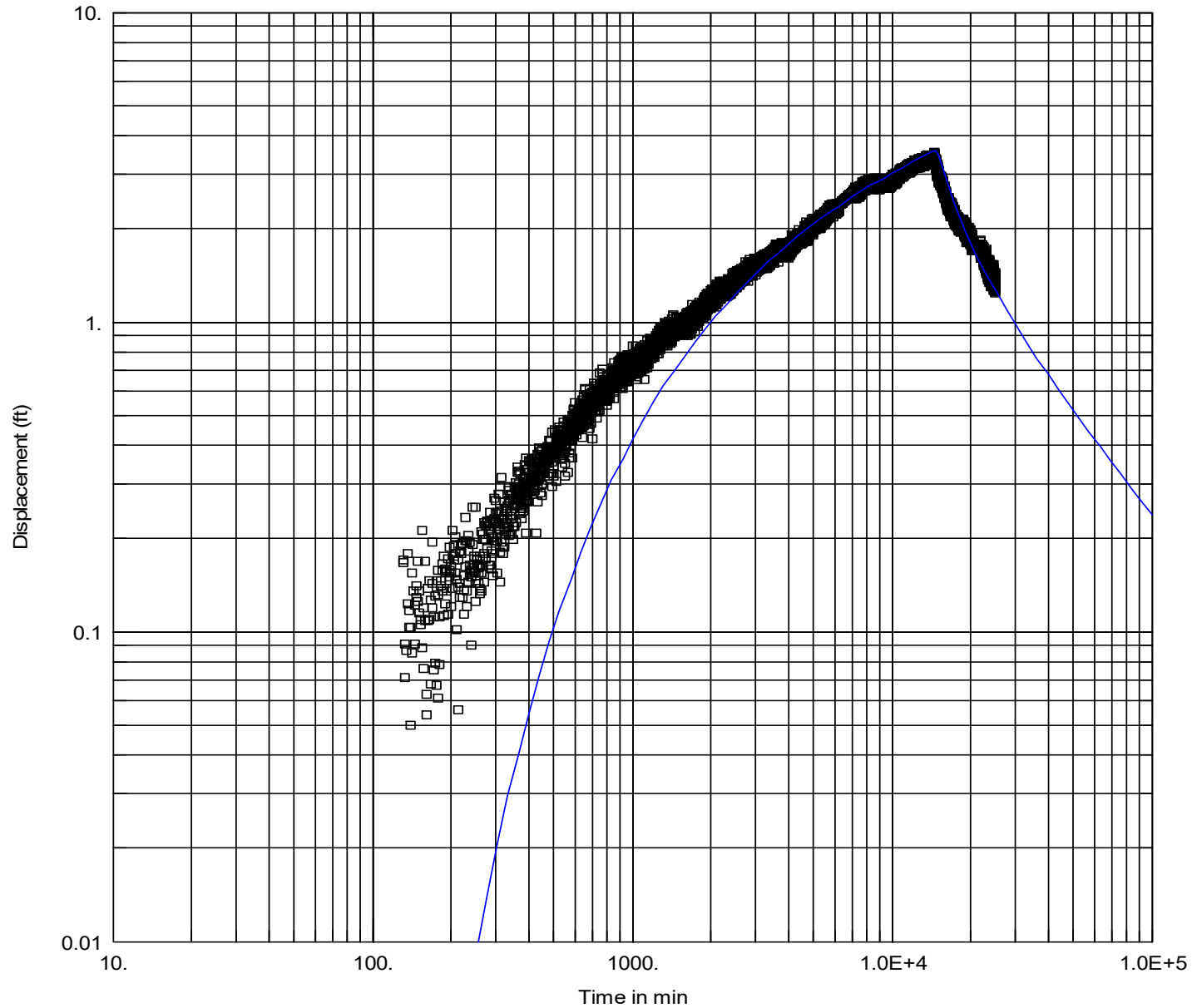
Parameters

$T = 4000. \text{ ft}^2/\text{day}$

$S = 0.002$

Attachment II

Moench Curve Fit – OWE-4



Obs. Wells

□ OWE-4

Aquifer Model

Fractured

Solution

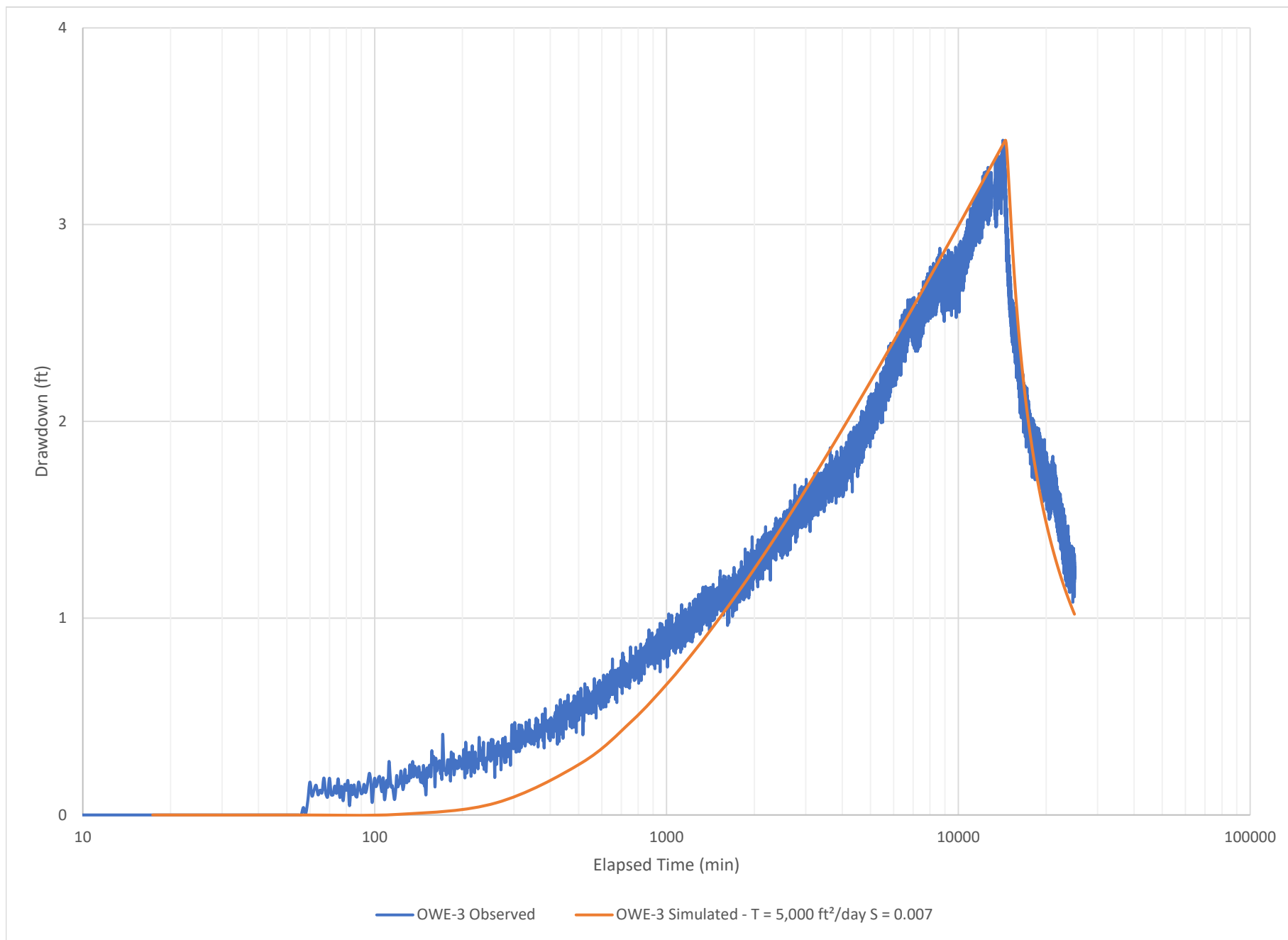
Moench w/slab blocks

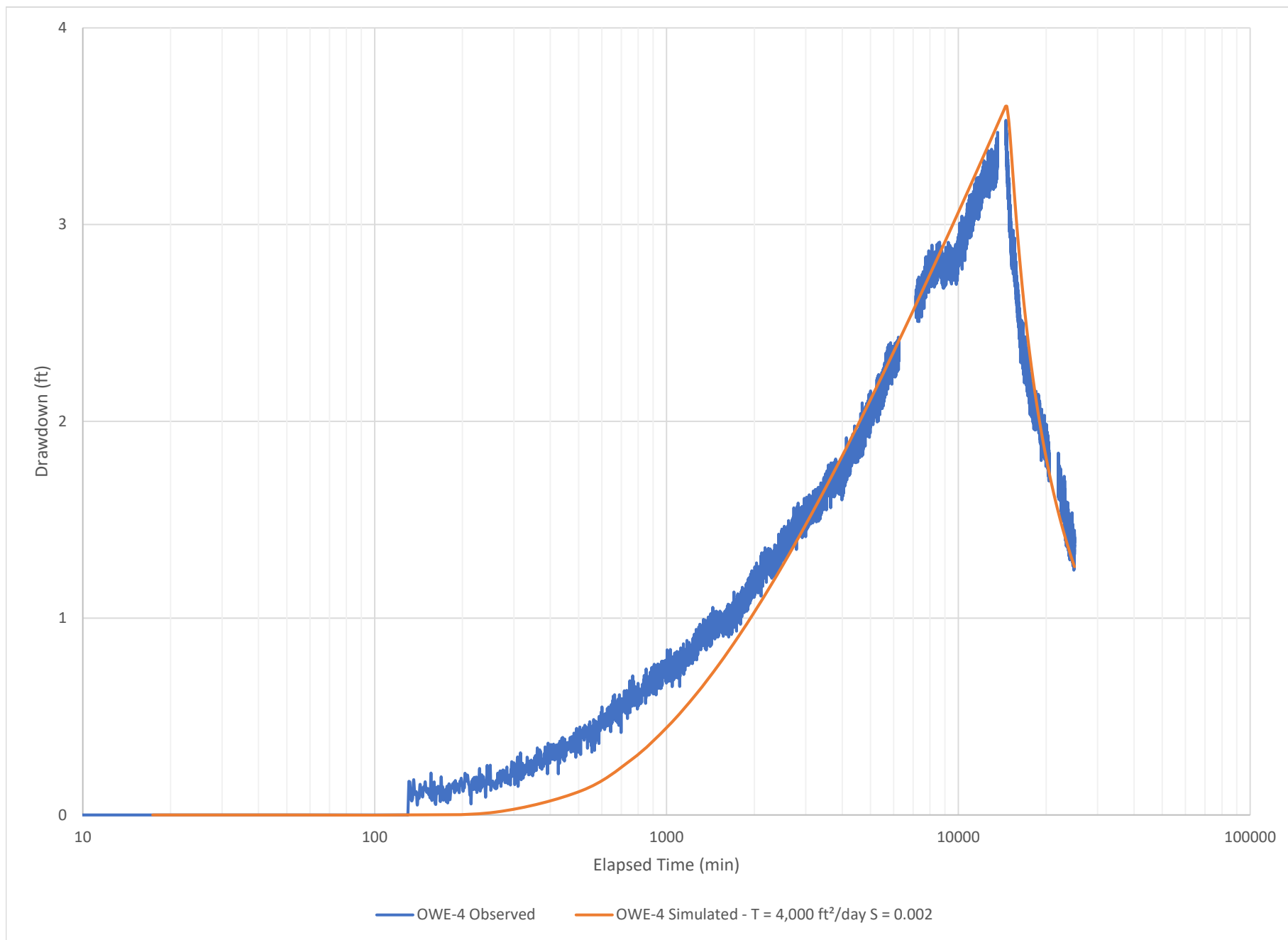
Parameters

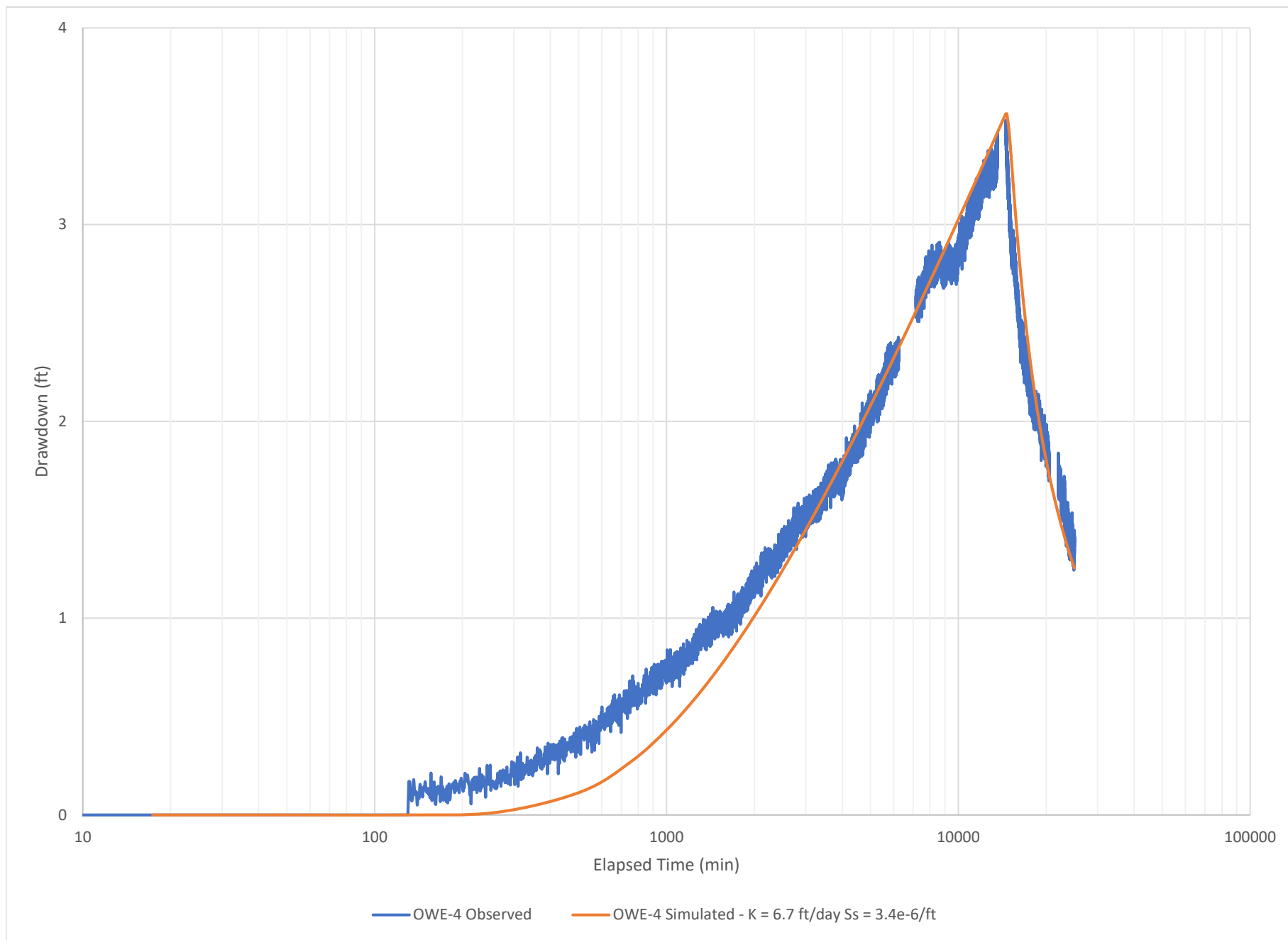
$K = 6.66 \text{ ft/day}$
 $S_s = 3.384\text{E-}6 \text{ ft}^{-1}$
 $K' = 1.616\text{E-}7 \text{ ft/day}$
 $S_s' = 1.122\text{E-}10 \text{ ft}^{-1}$
 $S_w = 1.$
 $S_f = 1.$
 $r(w) = 0.5 \text{ ft}$
 $r(c) = 0.33 \text{ ft}$

Attachment III

Observed vs. Simulated Drawdown – OWE-3 and OWE-4

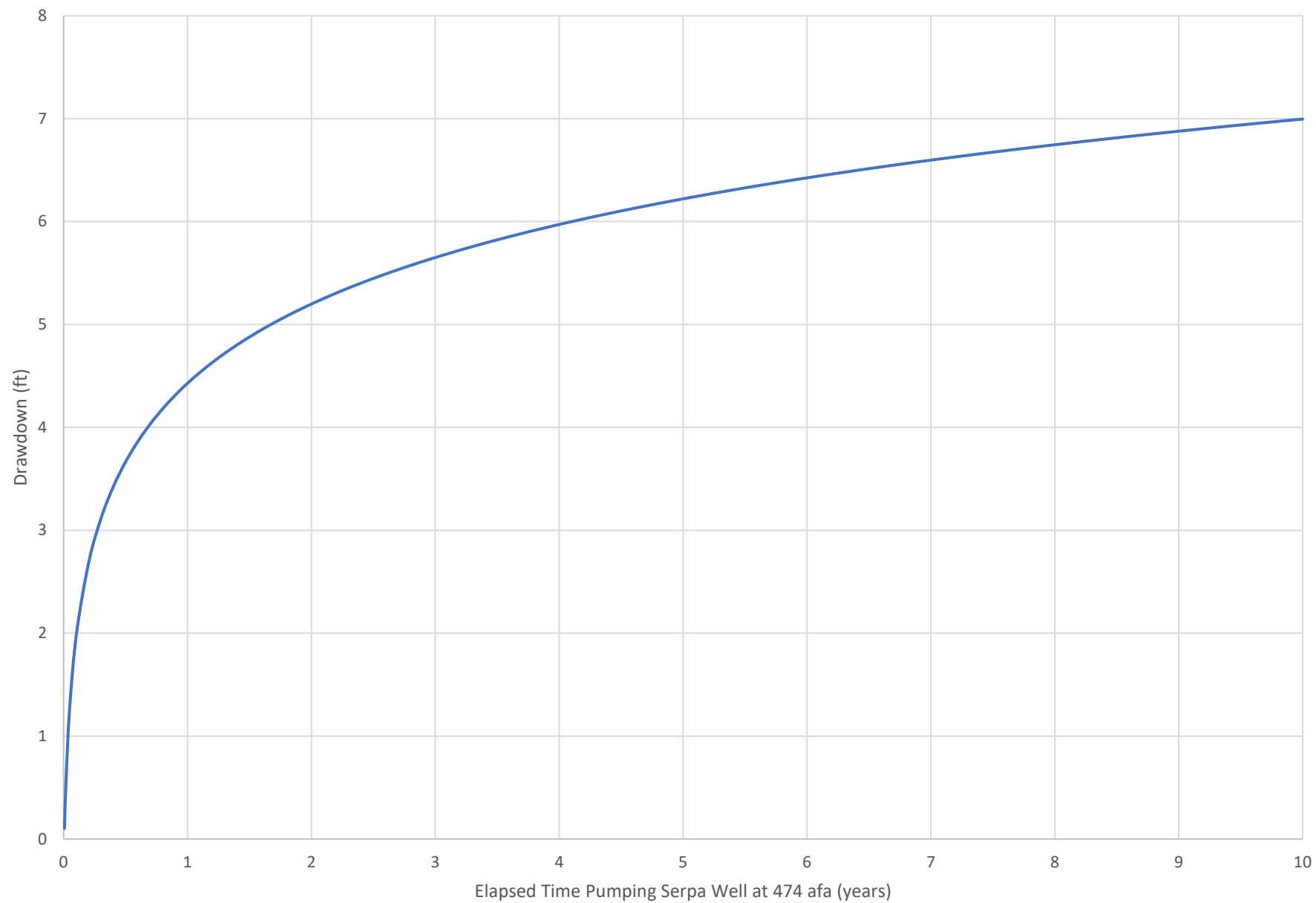






Attachment IV

10-year Simulated Drawdown Curve – St. James Production Well 2



— Simulated Drawdown at St. James Production Well 2 - $K = 6.7 \text{ ft/day}$ $S_s = 3.4\text{e-}6/\text{ft}$

Attachment V

Groundwater Modeling Results – Mt. Rose Fan Development

TECHNICAL MEMORANDUM

To: Nick White, Truckee Meadows Water Authority

From: Greg Pohl

Date: August 2, 2018

Re: Mt. Rose Fan Development Modeling

Background

This technical memorandum details the results of two predictive models simulating increased production rates at five wells in South Truckee Meadows. The results of the simulations were compared to assess impacts associated with increased groundwater production if it were to meet future development demands on the Mt. Rose fan. The analysis relies on a groundwater model that was recently updated for the area (Pohl and Rybarski, 2018), but which was further modified for the purposes of the simulations described herein. Two pumping scenarios were completed over a period of 20 years (2022-2041), following a 5-year period (2017-2021) simulated without additional pumping to allow the model to equilibrate to new recharge conditions:

1. Continuation of 2015 pumping rates at all wells.
2. Continuation of 2015 pumping rates at all wells, with 474 acre-feet per year (AFY) added to the Serpa Well, 356 AFY added to St. James Production Well 1 and St. James Production Well 2, and 403 AFY added to Callamont North and Callamont South. Total added pumping equaled 1,992 AFY.

The major modification to the Pohl and Rybarski, 2018 model was the approximately 1.3-mile southward expansion of the model grid to allow for the simulation of additional pumpage from the Serpa Well and two nearby existing municipal supply wells owned and operated by Truckee Meadows Water Authority (TMWA) Old Washoe Estates 3 and 4 (OWE-3 and OWE-4). Well locations are depicted in Figure 1. Layer thicknesses were extrapolated from the existing model. Additionally, within that area, Little Washoe Lake was simulated as a general head boundary, and a section of Steamboat Creek was simulated using MODFLOW's river package. Both the lake and creek were assigned conductances matching the calibrated values used for lakes and streams in the previously existing model domain. The Serpa Well is screened in the tertiary volcanic deposits of the Kate Peak Formation, represented by layers 2 and 3 of the Pohl and Rybarski, 2018 model, and a recent pump test indicates a hydraulic conductivity of approximately 6.7 feet/day (White, 2018) in the area surrounding the well. However, the screened interval of the Serpa Well places it in layer 4. The area of layer 4 within the expanded model grid was therefore assigned a hydraulic conductivity of 6.7 feet/day in the eastern section surrounding

the Serpa Well. The western section was assigned a lower value consistent with unfractured granodiorite (Figure 2). The boundary between these conductivity values was determined based on a mapped granodiorite outcrop (Ramelli, 2011).

A steady-state simulation covering the updated model domain was run to obtain a head field to serve as the initial condition in the transient simulations. Steady-state model error increased by approximately 11 feet relative to the Pohll and Rybarski, 2018 simulation. The resulting heads were applied as the initial condition to the two transient simulations, which were run from 1983-2016 using the same rates as in the Pohll and Rybarski, 2018 model. For the period 2017-2041, the wells were pumped as previously described for the two scenarios. Mountain block recharge for the period 2017-2036 was simulated at the steady-state rate. This differs from the 1983-2016 period, where recharge was allowed to vary in proportion with recorded precipitation rates. Because 2016 recharge rates were higher than average, this resulted in a decline in simulated water levels in 2017. The model was therefore allowed to equilibrate to the steady-state recharge rate over a 5-year period (2017-2021) to prevent this response from affecting the results of the pumping scenarios.

Results

Drawdown plots for the period 2022-2041 for the two predictive scenarios and a difference plot depicting scenario 1 less scenario 2 are shown in Figures 3-5, and hydrographs for each of the five tested wells are shown in Figures 6-10. A head difference plot between the two predictive scenarios is shown in Figure 5. Both scenarios show a general trend of decreasing groundwater levels throughout the model domain, with the greatest declines in the Steamboat Hills geothermal area. The steeper water level gradients in the area surrounding the Steamboat Hills geothermal area are created by pumping and injection from the geothermal reservoir.

The results for scenario 2 (474 AFY added to Serpa Well, 356 AFY added to St. James Production Wells 1 and 2, and 403 AFY added to Callamont North and South) show extensive drawdown. With this scenario, drawdown extends from the southern end of the model northward beyond Arrowcreek. The greatest contribution is due to pumping at the St. James Wells, where as indicated by the difference plot (Figure 5), additional drawdown exceeds 50 feet. Additional regional drawdown surrounding actively pumping production wells created by scenario 2 ranges from 10 to 30 feet, expanding over much of the Mt. Rose fan.

References

- Pohll, G. and S. Rybarski, 2018. South Truckee Meadows Groundwater Model, Report prepared for the Truckee Meadows Water Authority, 38p.
- Ramelli A.R., dePolo Craig, Garside, L. House, Trexler, J. and Widmer, M., 2011. Revised Geologic Maps of the Reno Urban Area, Nevada, Nevada Bureau of Mines and Geology.
- White, N. 2018. Serpa Well Pump Test Analyses, Forward Simulation and Groundwater Modeling, Truckee Meadows Water Authority.

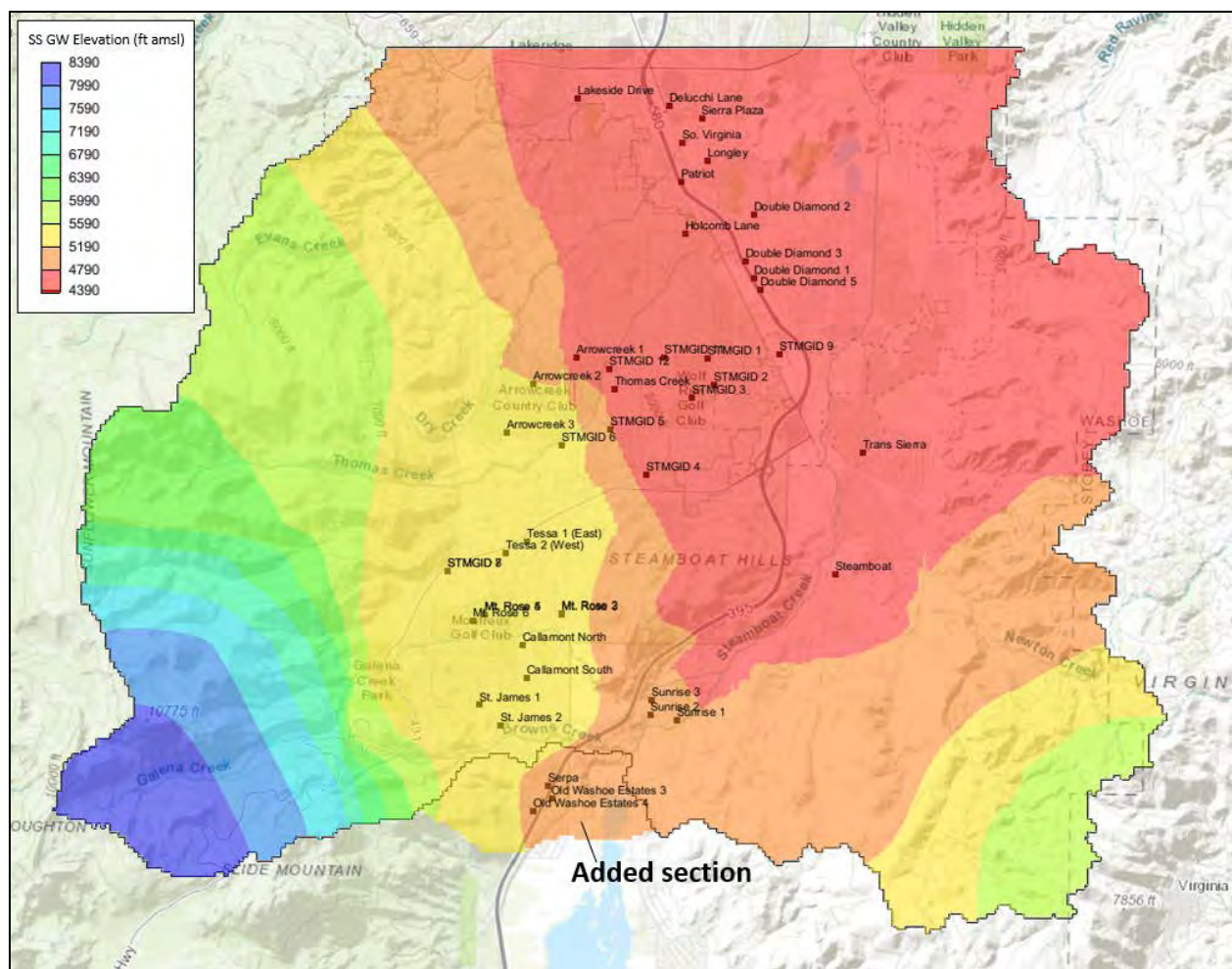


Figure 1. Steady-state heads and delineation of addition to model domain.

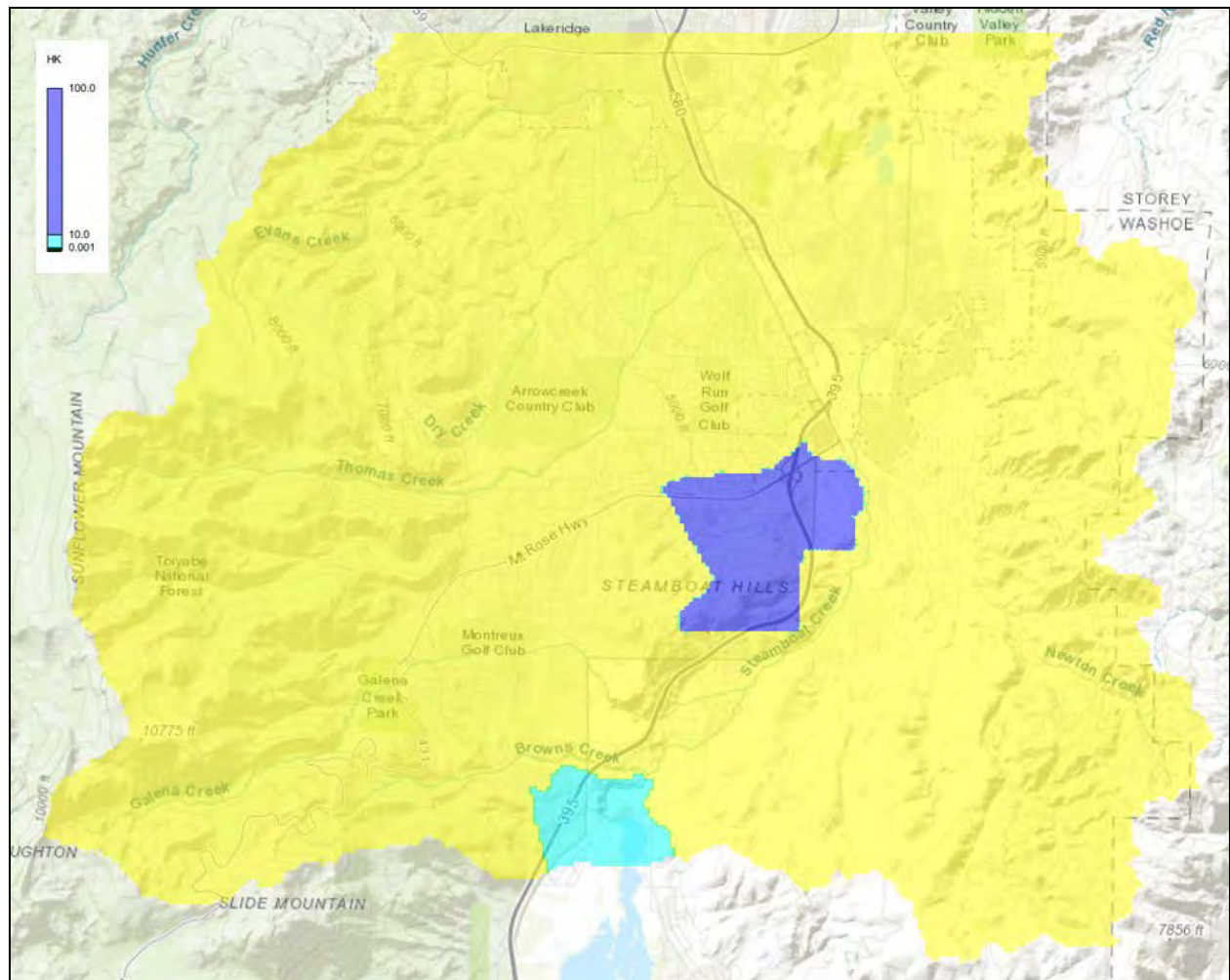


Figure 2. Updated hydraulic conductivity field for layer 4, showing area updated to $K = 6.7 \text{ ft/d}$.

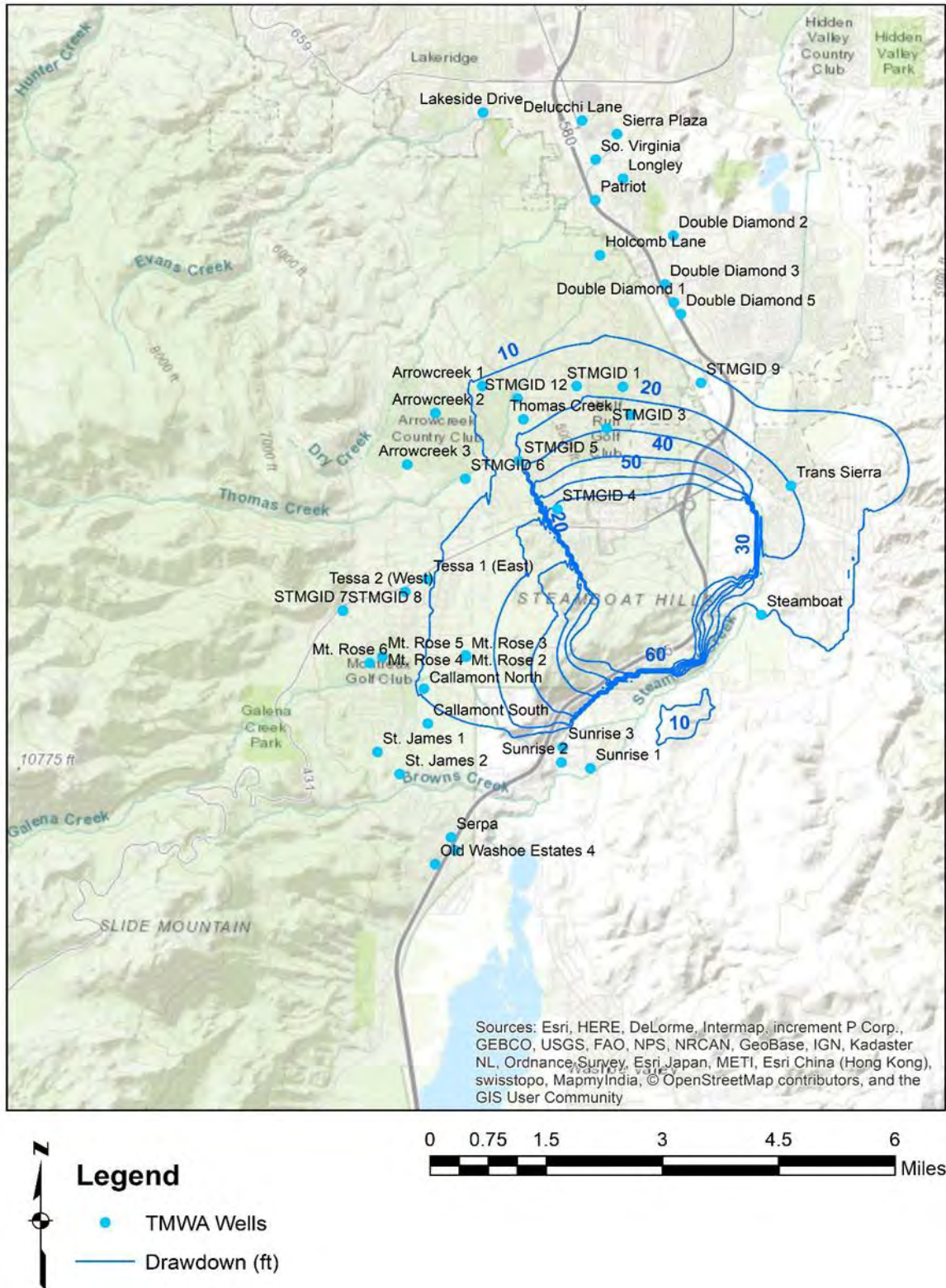


Figure 3. Drawdown (ft) in groundwater elevation between 2022-2041 in Scenario 1, all wells pumping at 2015 rate.

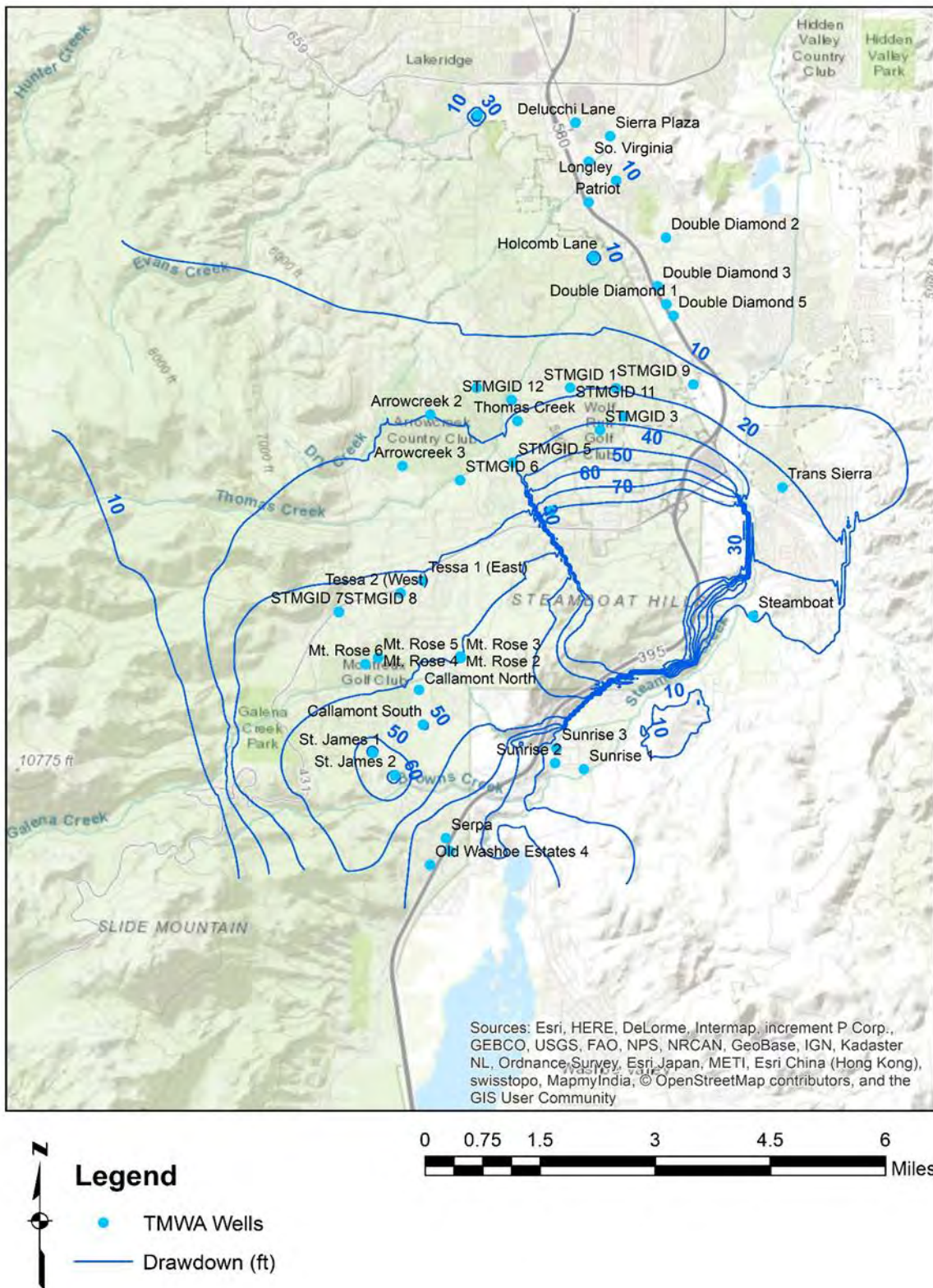


Figure 4. Drawdown (ft) in groundwater elevation between 2022-2041 in Scenario 2; 474 AFY pumping added to Serpa Well, 356 AFY added to St. James Production Wells 1 and 2, and 403 AFY added to Callamont North and South.

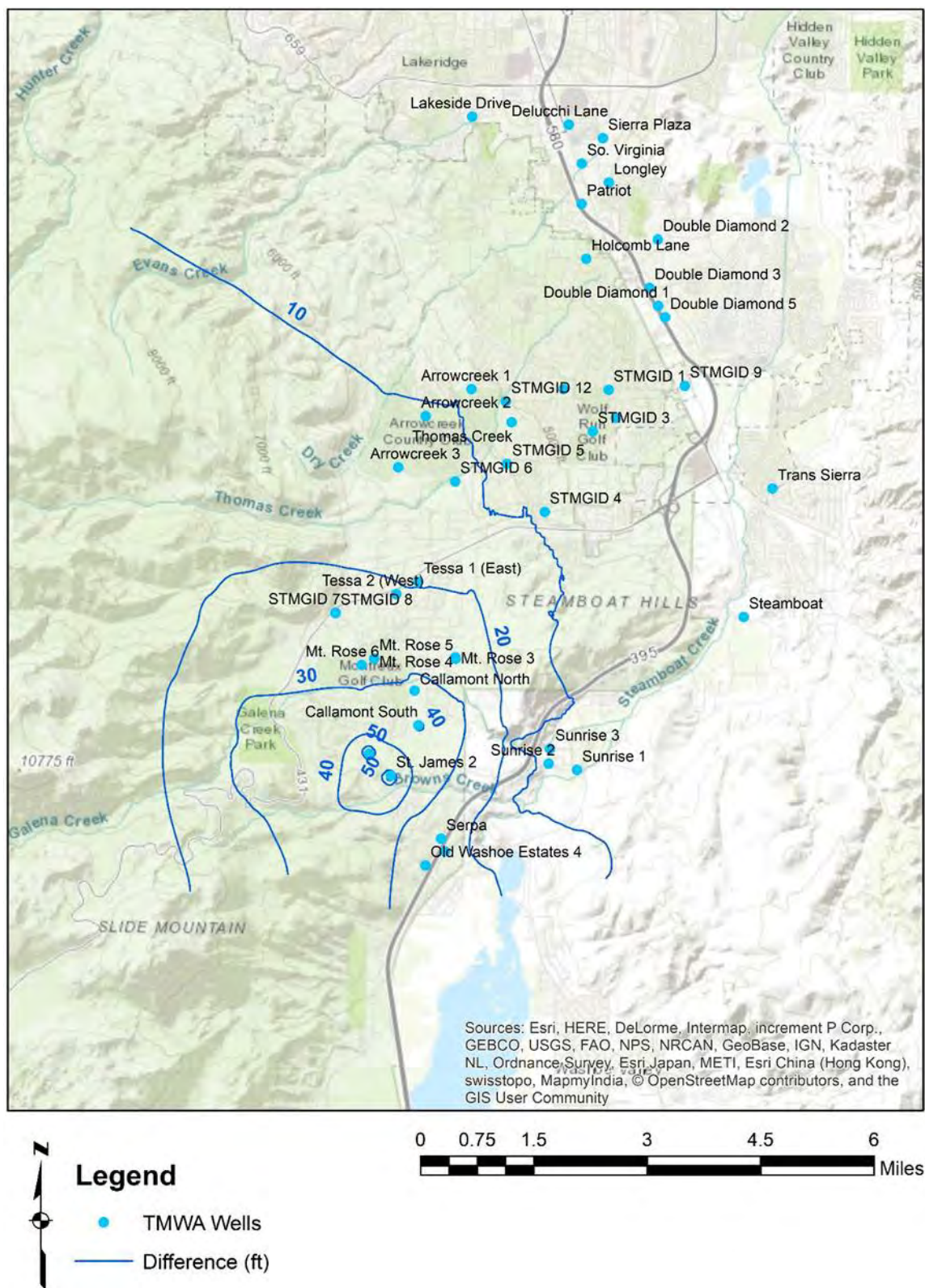


Figure 5. Final 2041 heads for Scenario 1 less final heads for Scenario 2.

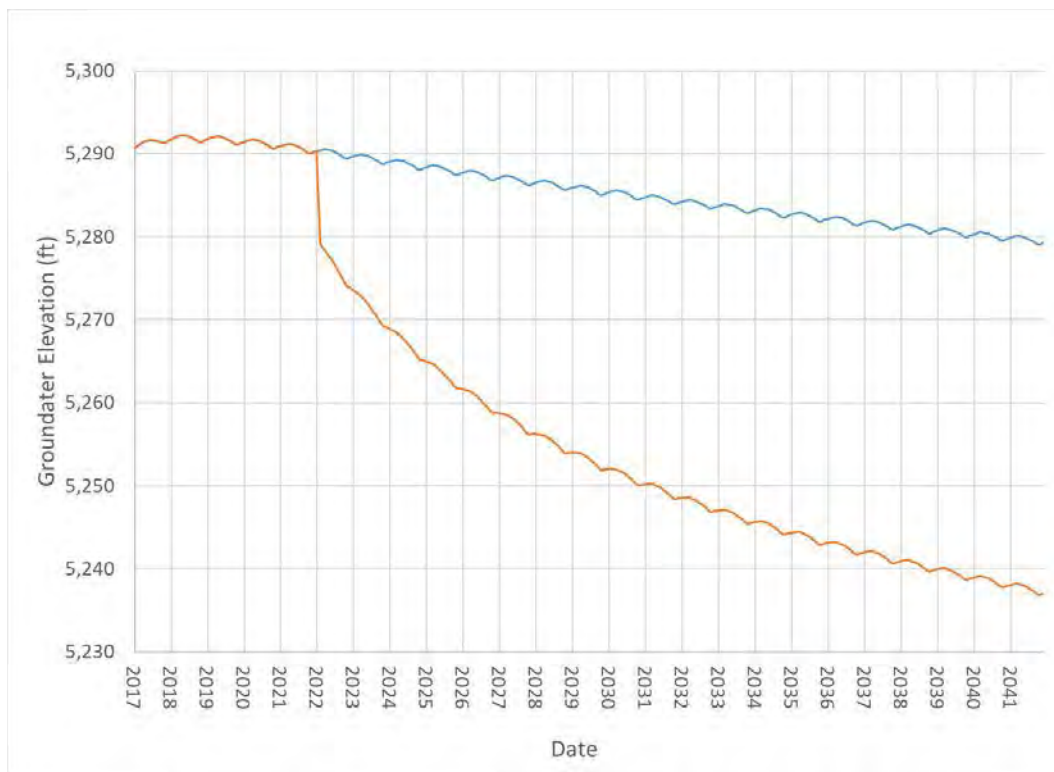


Figure 6. Hydrograph for Callamont North well, depicting results for both pumping scenarios.

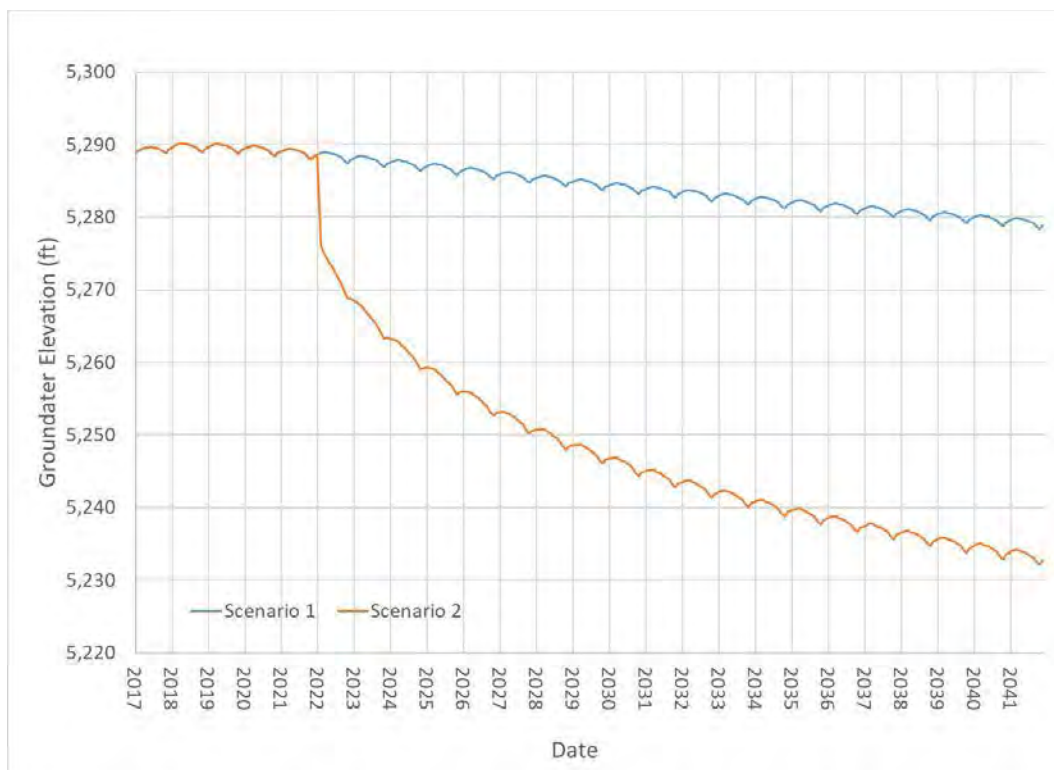


Figure 7. Hydrograph for Callamont South well, depicting results for both pumping scenarios.

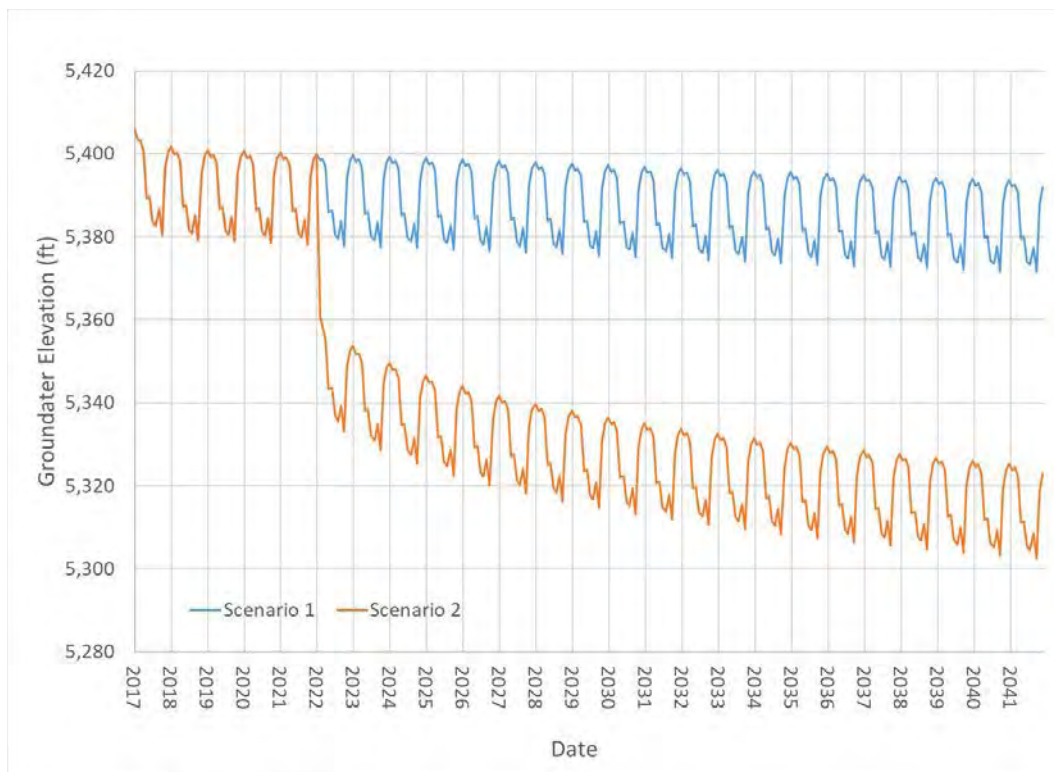


Figure 8. Hydrograph for St. James Production Well 1, depicting results for both pumping scenarios.

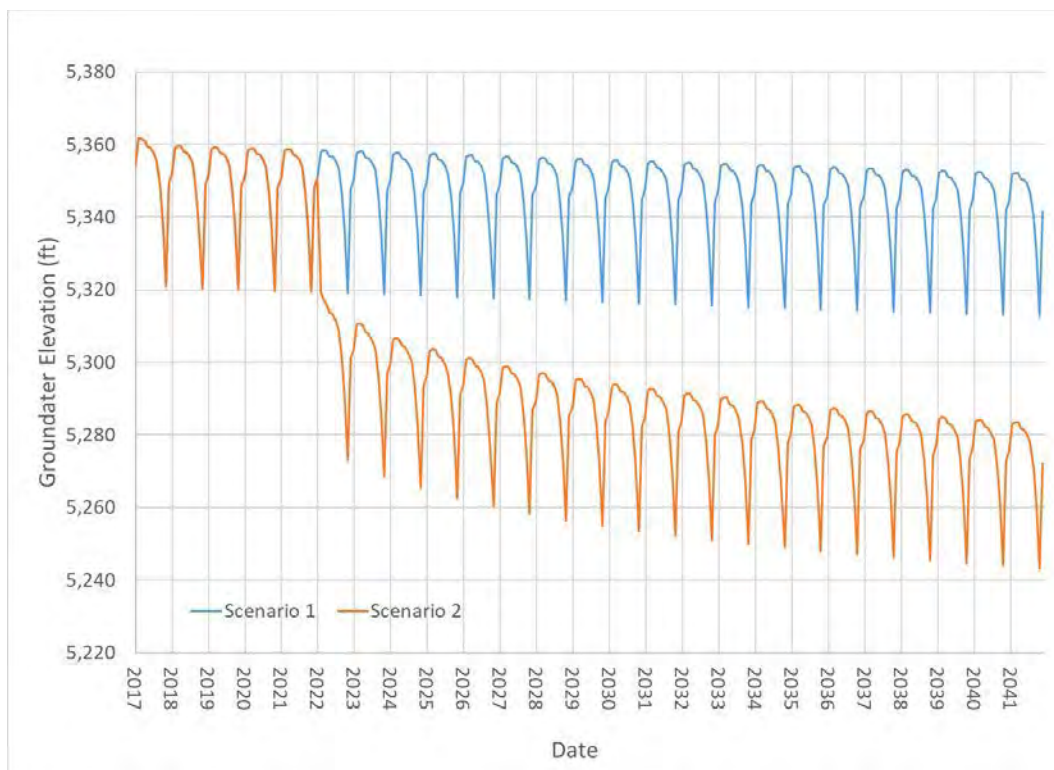


Figure 9. Hydrograph for St. James Production Well 2, depicting results for both pumping scenarios.

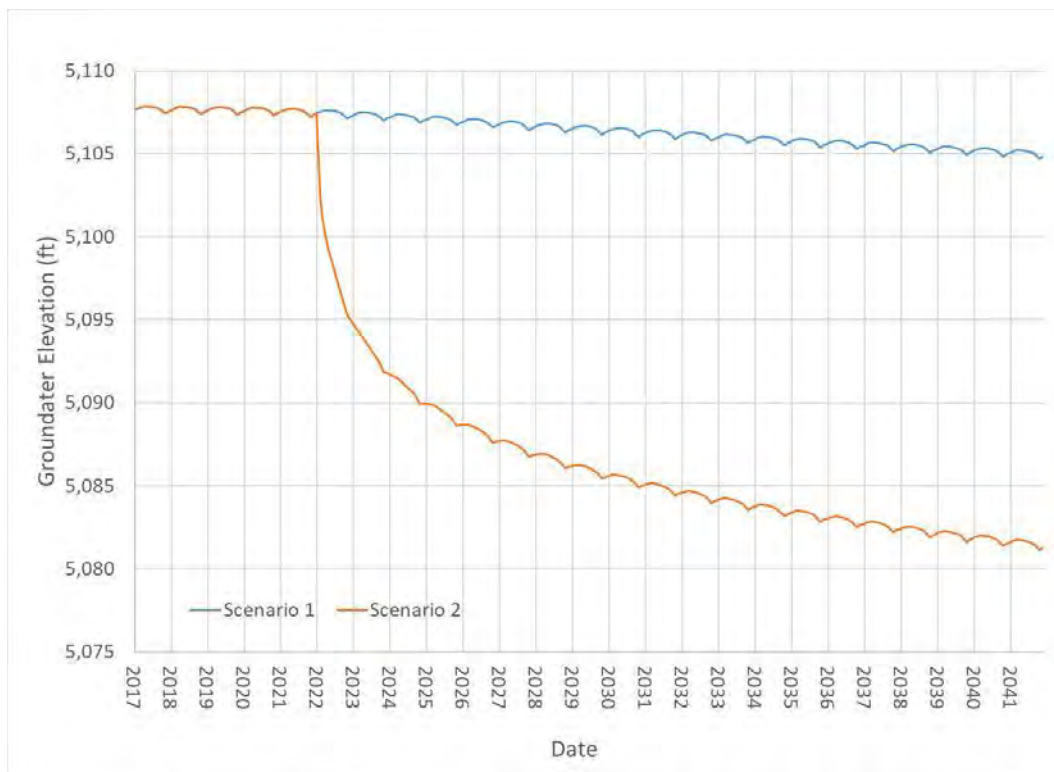


Figure 10. Hydrograph for Serpa well, depicting results for both pumping scenarios.

Memorandum

To: Files
From: Jon Benedict
Date: November 12, 2020

RE: Review of Serpa Well Aquifer Test Results and Groundwater Assessments in the St. James Village/Sierra Reflections Project Areas

Several documents have been provided to the Nevada Division of Water Resources regarding the assessment of groundwater conditions in the area that encompasses the St. James Village gated community development and the Sierra Reflections proposed housing development. Two of these documents focus on the Serpa Well 10-day aquifer test and are authored by Confluence Water Resources (CWR)¹ and Truckee Meadows Water Authority (TMWA)². They both provide useful information regarding the hydrogeologic character of the area and the potential for developing the water resource for future proposed development. However, the interpretive assessments provide a relatively wide range of results, not all of which are in harmony with each other. The purpose of this memo is to summarize those results in a manner that focuses on the key and pertinent technical findings with respect to water availability in the area.

Context

These two projects are adjacent to each other, with St. James Village on the northwest side of I-580 and Sierra Reflections on the southeast side (Figures 1 and 2). Both projects straddle the Washoe Valley/Pleasant Valley Hydrographic Area boundary. Brown's Creek roughly bisects each property, running from west to east before feeding into Steamboat Creek in the midpoint of the Sierra Reflections property. Steamboat Creek flows from southwest to northeast though the long dimension of the Sierra Reflections property. St. James currently has about 240 single family homes, with another 220 future lots planned for development. Sierra Reflections is proposed to have 791 single family homes and 147 townhomes. Projected water needs at full build-out is expected to be 396 afy for St. James and 448 afy for Sierra Reflections. Water would be pumped from existing St. James wells 1 and 2 (for St. James) and from the Serpa Well (for Sierra Reflections). Currently demand for the 240 existing single-family homes is about 206 afy and is being served by the St. James wells.³

¹ CWR, 2019, *Serpa Well Pumping Test Report and Assessment of Local Groundwater System*, prepared by Confluence Water Resources, LLC for St. James Village and Mr. Keith Serpa, October 8, 2019 revision (CWR Report).

² TMWA, 2019, *Serpa Well Pump Test Analyses, Forward Simulation and Groundwater Modeling*, Memorandum to the Files prepared by Nick White, dated August 2, 2018 (TMWA Memo).

³ Banta, Matt, *Serpa Well Testing and Groundwater Analysis*, Project Overview Powerpoint Presentation dated September 3, 2020 and presented to NDWR on October 8, 2020.

Geology

The area lies immediately to the southwest of the Steamboat Hills geothermal complex (Figure 3). Most of the area around St. James and the Sierra Reflections properties is underlain by older Quaternary alluvial fan deposits and Tertiary andesitic lavas. The lavas are intercalated with volcanic debris flow deposits and together represent the principal aquifer. These volcanics are interpreted to be on the order of 500-1000 feet thick and underlain by Mesozoic granite and metasedimentary rock. To the northwest, in the area around Galena and Jones Creek, there is a veneer of glacial outwash sediments that cover much of the bedrock.⁴

Aquifer Characteristics

All three of the wells (Serpa, St James 1 and 2) intended for use as production wells at St. James and Sierra Reflections are constructed in lithology described as a variable mix of black rock, red rock, volcanic rock, andesite, fractured andesite, broken volcanics, clay, and other similar descriptions. Based on these descriptions and the locations of the wells relative to mapped surface geology (Figure 3), all three wells are interpreted to derive their water from Tertiary andesitic volcanics. Static water levels in each of these wells ranged from nearly 200 to 270 feet below land surface (ft bls) when constructed. Static water levels recorded on driller's reports for other wells constructed in the region indicate that the water table generally mimics the land surface topography, having a west-to-east slope with a gradient in the range of 0.02 – 0.07 ft/ft. Although the distribution of data is relatively sparse, water levels tend to indicate that the upper reaches of Brown's Creek and Galena Creek are not physically connected to the water table in the volcanic aquifer system. Well log data suggest that water levels that approach land surface are only observed in wells that are either constructed across younger alluvial material or are at relatively low elevations, nearer to Steamboat Creek. To the extent that the data are representative, this means that there is no hydraulic connection between the volcanic aquifer and surface water flow in the area of interest. **Therefore, while Galena Creek, Brown's Creek, and other tributaries to Steamboat Creek that flow across the area undoubtedly contribute recharge into the volcanic aquifer, pumping in that aquifer does not capture flow to or induce recharge from those surface features.**

Well test data on the driller's reports indicate specific capacities (SC) that were 0.5 gpm/ft drawdown (dd) at the Serpa Well to 3.3 and 3.8 gpm/ft dd at the St. James wells at the time of well construction. Using the method of Thomasson and others (1960) these values yield transmissivity (T) values in the range of between 133 to about 1,000 ft²/day. Prior to the subject 10-day aquifer test, the Serpa well was re-developed and yielded a SC-based T of about 1,500 ft²/day. More detailed data collected during the post-development work suggested a T closer to 2,400 ft²/day.¹

Substantially better data from the Serpa Well 10-day aquifer test indicate that the T in the area around the Serpa well may be as high as 9,000 ft²/day. Estimates reported by CWR and TMWA range from 3,700 – 11,000 ft²/day. Some of the higher estimates

⁴ Carlson, C.W., Koehler, R.D., and Henry, C.D., 2019, *Geologic map of the Washoe City quadrangle, Washoe County, Nevada*, Nevada Bureau of Mines and Geology Open-File Report 19-4, scale 1:24,000, 7 p.

reported by CWR were overestimates that did not account for the long-term rising water levels. CWR estimated T for the pumping well at 3,700 ft²/day. TMWA did not estimate T using the pumping well data. Both CWR and TWMA estimated T using observation wells OWE-3 and OWE-4, two production wells located less than a mile to the southeast and southwest, respectively, of the Serpa well. TMWA estimated a T in the range of 4,000 to 5,000 ft²/day using late time observation well data and the rationale that any increased drawdown due to hydraulic barriers that affected the late-time data needed to be accounted for. Whereas, CWR used early time observation well data to obtain T values that were almost double the magnitude, in the range of 7,300 – 9,200 ft²/day. These may be a better representation of the intrinsic permeability of the aquifer. **While the TMWA and CWR sets of estimates are different, they are consistent with the interpretation that the aquifer system near the Serpa well has a T of about 8,000 ft²/day, but that hydraulic barriers or nearby zones of lower permeability affect the area such that the effective T in the immediate area of the aquifer test is about 4,000 ft²/day.**

Estimates of the aquifer's storage coefficient (S) from the test yielded a range between 0.002-0.005 for CWR and 0.002-0.007 for TMWA. TWMA's estimates are considered effective values due to their use of late-time data late time (post-barrier influence) data instead of earlier (pre-barrier influence) data for the Cooper-Jacob method. **This suggests that a value of 0.003 is a reasonable representative value for the aquifer, with a value of 0.005 reflecting an effective S in the immediate area of the aquifer test.**

Data Limitations Regarding Extent of Cone of Depression

Drawdown associated with the Serpa aquifer test was observed at three of the eleven observation wells instrumented with transducers.⁵ Each of these three wells are to the south or southeast of the Serpa well, with the furthest being OWE-4, located 2,000 feet to the southwest. All of the other instrumented observation wells were to the north or northwest at distances greater than 5,200 feet from the pumping well. At these distances, and assuming uniform radial flow with effective aquifer parameters (T = 4,000 ft²/day, S = 0.005), the cone of depression would extend out to those observation wells, but would cause only about 0.5 ft of drawdown after 10 days, an amount that might be difficult to resolve from the background water level dynamics exhibited in many of these observation wells to the north and northwest. **This means that while the lack of observable drawdown to the north and northwest suggests that the cone of depression does not propagate as effectively in that direction, those data are not conclusive.**

Heterogeneities and Complexities

Despite data limitations that lower the confidence in characterizing drawdown impacts as being either radially uniform or as propagating in preferential directions,

⁵ There were also another five wells that were reportedly monitored and interpreted to have no response (see Table 1, CWR Report). However, for these wells no data were documented in the report. Considering the fact that during the time of the test water levels in portions of the area had a rising trend, these data are discounted.

aquifer test data plotted on a time vs. drawdown chart can provide indicators of complex aquifer characteristics, including hydraulic barriers, recharge boundaries, and/or heterogeneities that cause other deviations in the rate of drawdown over time. These time vs. drawdown indicators can point to aquifer dynamics that serve to 1) qualitatively characterize aquifer conditions that affect aquifer behavior, and 2) expose limitations of using aquifer test results to predict drawdown distribution on a more regional scale.

Heterogeneity and aquifer complexity can be common, if not expected, in range-front-positioned, fracture-controlled aquifer systems such as exists in the St. James-Sierra Reflections area. Both CWR and TMWA acknowledge that structurally controlled heterogeneities including hydraulic barriers, potential compartmentalization, or zones of higher or lower permeability likely exist in the St. James/Sierra Reflections area. CWR also recognizes trends in background water levels and suggests that there are flux-related boundary conditions associated with recharge that may affect drawdown. Below is a brief discussion of aquifer heterogeneities identified and interpreted by CWR and/or TMWA.

- Hydraulic Barriers

Aquifer test data can provide evidence of hydraulic barriers by causing drawdown rates to increase at a rate greater than would otherwise be expected if the aquifer were uniform, homogeneous and regionally expansive. The classic example of this is illustrated when aquifer test data are plotted as a semi-log curve of time vs. drawdown and the slope of the drawdown line doubles in response to the cone of depression encountering a vertical planar no-flow boundary. In this ideal case, the time duration between when the aquifer test starts and when the drawdown slope doubles is dependent on the relative locations of the barrier, the pumping well, and the observation well. If the barrier is relatively near the pumping well but not near the observation well the slope change in drawdown data will be observed sooner at the pumping well than at the observation well⁶. If the barrier is relatively nearer to the observation well but not near the pumping well, the slope change will occur sooner at the observation well than the pumping well. For both ideal cases, once the slope of the drawdown has doubled, it will remain constant. In each of these cases, transmissivity calculated from the drawdown affected by the barrier will be 2x the transmissivity calculated from the post-barrier drawdown.

For the Serpa aquifer test, both CWR and TMWA recognize that semi-log plots from observation wells OWE-3 and OWE-4 both exhibit doubling in slope after about 3,500 minutes into the test. Taken together, these plots are suggested to represent a flow barrier whose affects are exhibited at OWE-3 and OWE-4 at about the same time, even though the observation wells have different locations relative to the pumped well. Assuming an ideal case, in order for this to happen the flow barrier would need to be either entirely south of or entirely north of both the set of observation wells and the pumping well, and the barrier would need to have a southwest-northeast orientation.⁷ If the barrier were south of the observation wells, the increased slope would occur later at

⁶ In this classic case, the increase in rate of drawdown would already be incorporated in measured drawdown at the observation well by the time the cone of depression reaches the observation well.

⁷ The location and orientation of the structure can be constrained using a mirror image well that must be equidistance from both observation wells, while maintaining a planar barrier that is equidistant from the mirror and pumping well.

the pumping well compared to the observation wells. If it were to the north, the increase in slope would be observed at the pumping well before the observation wells. Looking at the semi-log plot for the pumped well, the slope of the drawdown curve is relatively uniform suggesting that either 1) it is so far from the barrier that impacts were not seen during the test, 2) it is so near the barrier that impacts were seen almost immediately, or 3) it's more complicated than that. Interestingly, the transmissivity estimated from the pumped well is about ½ of the transmissivity estimated by CWR for the early time slope of the observation wells and about the same as the late time estimates by TMWA. This is more consistent with option #2, that the barrier is near and north of the pumping well and oriented in a north-northeast direction. However, option #3 also probably plays a role here because of the physical improbability, if not near-impossibility to have a planar no-flow barrier that is near the pumping well, while at the same time having the proper orientation that would affect both observation wells at the same time. **Ultimately it is most reasonable to conclude that 1) boundaries do affect drawdown in the area, 2) the data are more consistent with a boundary to the north-northwest of the pumped and observation wells, but 3) boundaries in the St. James/Sierra Reflections area are neither planar nor necessarily continuous in dimension.**

CWR makes very detailed interpretations of slope changes, based on using derivative plots to identify barriers (increases in slope).⁸ A derivative plot is a visual tool that merely superposes a plot of the time vs. drawdown rate on top of the semi-log time vs. drawdown chart. It plots a curve of the relative magnitude of the drawdown rate against time, so that changes in the rate of drawdown with time can be readily quantified and visualized. A uniformly flat derivative curve indicates radial flow, whereas an abrupt doubling of the curve indicates the presence of a planar no-flow barrier. The detailed interpretation of flow barriers documented by CWR are not as compelling as the more general flow barrier interpretation from the drawdown curves for OWE-3 and OWE-4, recognized by both CWR and TMWA, and described above. And as indicated by CWR in their report, most of these interpreted barriers are represented by derivative plot "shifts" that are not persistent. **The lack of persistence suggests that temporally intermittent increases in drawdown rate are may be noise or local effects caused by local aquifer heterogeneities.** This assertion seems more reasonable because under a persistent stress, like this controlled aquifer test, induced impacts caused by the interaction of that stress with a regional scale boundary would also tend to be persistent. **This assertion also applies to CWR's identification of recharge boundaries based on temporally intermittent reductions in the drawdown rate.**

- Recharge Boundaries

CWR makes the suggestion that there may enhanced permeability in the southwest-northeast direction and state that drawdown is likely to occur predominantly in the direction of OWE-3 and OWE-4 and not in the direction of upgradient wells north of Brown's Creek.⁹ While no specific data are explicitly detailed to support this conclusion, CWR does describe data indicating that Brown's Creek is a losing stream that acts as a source of recharge beneath certain reaches that flow across the area; and they point to thermal and chemical data that indicate that deeper geothermal waters contribute to the

⁸ See Charts 12, 13, 16-18 in *Serpa Well Pumping Test Report and Assessment of Local Groundwater System*, prepared by Confluence Water Resources, LLC for St. James Village and Mr. Keith Serpa, October 8, 2019 revision.

⁹ See page 3, bullet 3, CWR Report.

shallow aquifer in the area. **Although the inference that both Brown's Creek and geothermal waters are recharge sources is reasonable, neither source appears available for induced capture by pumping.** This conclusion is based on two lines of evidence. First, and as described previously, Brown's Creek appears to be disconnected from the volcanic aquifer, meaning that even if it is a recharge source, pumping cannot capture any more recharge than what naturally infiltrates through the vadose zone. Similarly, even though geothermal water may up-well into the shallow aquifer, it seems unlikely that pumping in the shallow aquifer would cause an increased vertical gradient sufficient to measurably increase upward flow and buffer drawdown during the test. Second, if either of these sources of recharge were available for capture, a signature reduction in drawdown rate should be recognizable in the drawdown curves at the pumping well and the observation wells. This signature would be characterized by a reduction in the slope of the drawdown curve over time that ultimately would either flatten if sufficient capturable recharge exists to offset pumping amounts (in this case 406 gpm), or stabilize at a new drawdown rate once the limited recharge source is entirely captured. No such signature exists.

Anticipated Drawdown

The key issue with respect to characterizing the aquifer system ultimately focusses on whether additional pumping in the area could have unacceptable adverse impacts. Potential adverse impacts would include 1) "capture" impacts to senior-appropriated surface water resources caused by pumping-derived streamflow depletion, 2) drawdown impacts to nearby, existing wells, or 3) insufficient capacity of the proposed pumped wells to provide a dependable supply of water. Since nearby surface water features do not appear to be hydraulically connected to the volcanic aquifer system, capture impacts to existing surface water resources are limited to streamflow impacts along the Steamboat Ck corridor. This issue is not addressed in either the TMWA or CWR report. The principal concern addressed by TMWA and CWR focused on drawdown impacts and whether the proposed pumping would cause drawdown of a magnitude that is either unsustainable or harmful to nearby existing wells.

Both CWR and TMWA conducted drawdown analyses based on their respective interpretations of the aquifer characteristics. Results from each effort are summarized below.

CWR performed a relatively straightforward analysis that predicts drawdown of 40 feet at the pumped well after 5.5 years of pumping at 400 gpm, and a double of that drawdown if pumped at 800 gpm. Drawdown at distances of 920 and 2,000 ft, equivalent to the locations of the Old Washoe Estates production wells OWE-3 and OWE-4 would be 14 and 11 ft for pumping at 400 gpm and double that for pumping at 800 gpm. CWR notes that the water rights at the Serpa well would only allow for pumping at an annual rate that averages 294 gpm. This means that based on CWR's analysis, drawdown would be about 29, 10, and 8 ft at Serpa, OWE-3, and OWE-4, respectively, after over 5 years of continuous pumping at 294 gpm. They conclude that due to faulting and fracturing and perhaps recharge from Brown's Creek, drawdown would be localized in the southeast and southwest direction, towards OWE-3 and 4, and would not propagate upgradient to the west and northwest. However, they do not support this interpretation with any explicit or thoroughly vetted geologic or hydrologic information.

TMWA also conducted a Theis analysis and used that to predict 7 feet of drawdown at the St. James Well 2, located about 5,570 feet northwest of the Serpa well, after 10 years of pumping at 294 gpm (equivalent to 474 afa). In addition, TMWA updated their regional numerical groundwater model to accommodate the St. James/Sierra Reflection area and to update with interpretive results from the Serpa aquifer test. Predictive simulations using the TMWA model were run under two scenarios. The baseline scenario used pumpage that reflects current demand in the area (using 2015 pumping rates). The predictive scenario added 1,992 afy of pumpage to reflect estimated demand for full build-out of the St. James, Sierra Reflections, and Callamont developments. These results predict a regional increase in drawdown in the 20-50 foot range after 20 years, centered on the St. James wells and extending for about 2 miles in all directions. Unfortunately this prediction does not resolve drawdown contributions associated with individual well pumping, like the Serpa well. However, to the extent that the model is accurate, results do suggest that the St. James wells would be the largest contributors of future regional drawdown impacts.

In order to more realistically predict the impacts associated with the pumping of the Serpa well alone, an independent Theis analysis was conducted by NDWR and described herein. This analysis uses effective aquifer parameters considered most reasonable based on the Serpa aquifer test ($T = 4,000 \text{ ft}^2/\text{day}$, $S = 0.005$). It also uses a pumping rate of 278 gpm, the amount needed to meet the stated 448 afy demand for the Sierra Reflections build-out. Results are shown on Table 1.

Table 1. Predicted drawdown caused by Serpa Well pumping at 278 gpm, using Theis non-equilibrium equation with $T = 4,000 \text{ ft}^2/\text{day}$ and $S = 0.005$.

WELL	DISTANCE FROM SERPA WELL <i>FT</i>	PREDICTED DRAWDOWN (FT)			
		<i>1 YR</i>	<i>5 YRS</i>	<i>10 YRS</i>	<i>20 YRS</i>
OWE-3	950	6.6	8.7	9.4	10.2
OWE-4	2,080	4.9	7.1	7.8	8.5
ST. JAMES 2	5,570	2.9	5.0	5.7	6.4
ST. JAMES 1	7,860	2.2	4.2	5.0	5.7

The reasonability of these predicted drawdown results is conditioned on the limitations of the method. The principal limitation in this case is the degree to which flow barriers and other heterogeneities, whose location and characteristics are not known, affect the propagation of the cone of depression. A reasonable interpretation is that there is some level of compartmentalization in the area that would cause drawdown proximal to the Serpa well to be reasonably predicted by the “effective” aquifer properties, and drawdown further from, and northwest of the Serpa well, to be less than

predicted by the Theis analysis. This interpretation is suggested based on conceptual grounds that include 1) groundwater flow is more likely to be inhibited across faults, and there is a higher density of north-south to northeast-southwest faults mapped to the west of the Serpa well than east of the Serpa well; 2) there is a greater distance between the pumping well and wells-of-concern to the northwest, providing more opportunity (more space) for heterogeneities to exist and impact drawdown; 3) the observable drawdown at OWE-3 and OWE-4 that indicates an absence of a significant flow barrier between those observation wells and the Serpa well, 4) the possibility that drawdown to the southeast, in the direction of OWE-3 and OWE-4 may become buffered by induced infiltration from Steamboat Creek, and; 5) the conceptual understanding that if partial flow barriers do exist to the northwest, they would enhance drawdown on the pumping-well side of the barrier and limit drawdown on the opposite side of the barrier. **On these grounds, it is more likely that after 20 years of pumping at the Serpa well, attributable drawdown at the OWE wells would be in the 8 to 10 foot range, whereas drawdown at the St. James wells caused by Serpa well pumping would in the 5 foot or less range.**

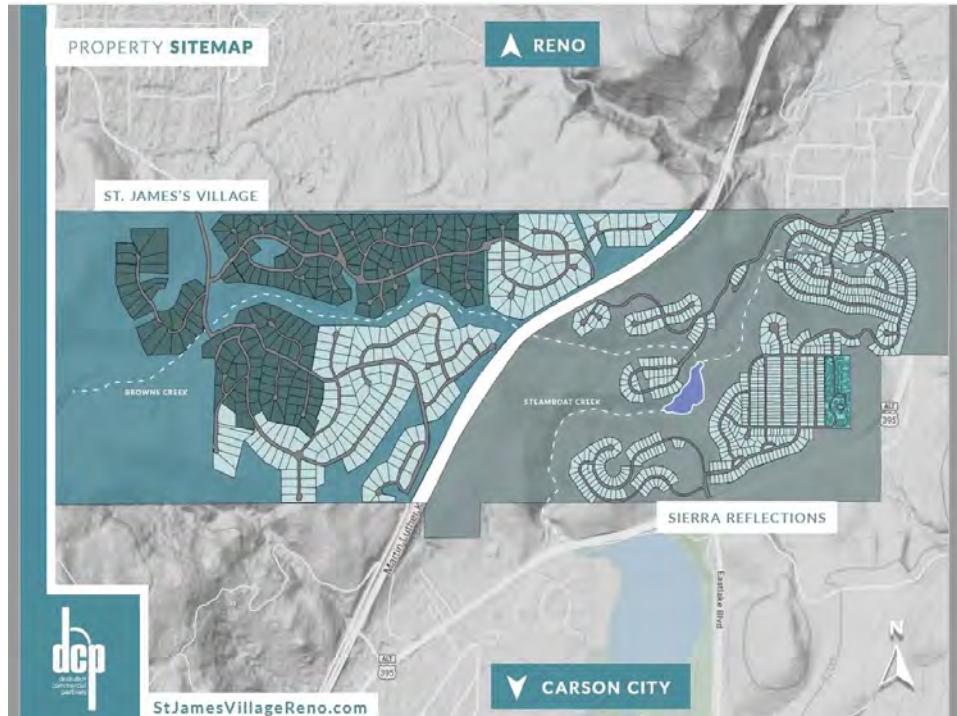


Figure 1. Subdivision map of St. James Village and Sierra Reflections. (Source: Drakulich Commercial Partners website, <https://stjamesvillagereno.com/>)



Figure 2. St. James Village and Sierra Reflections project areas overlain on aerial imagery. (Source: Drakulich Commercial Partners website, <https://stjamesvillagereno.com/>)

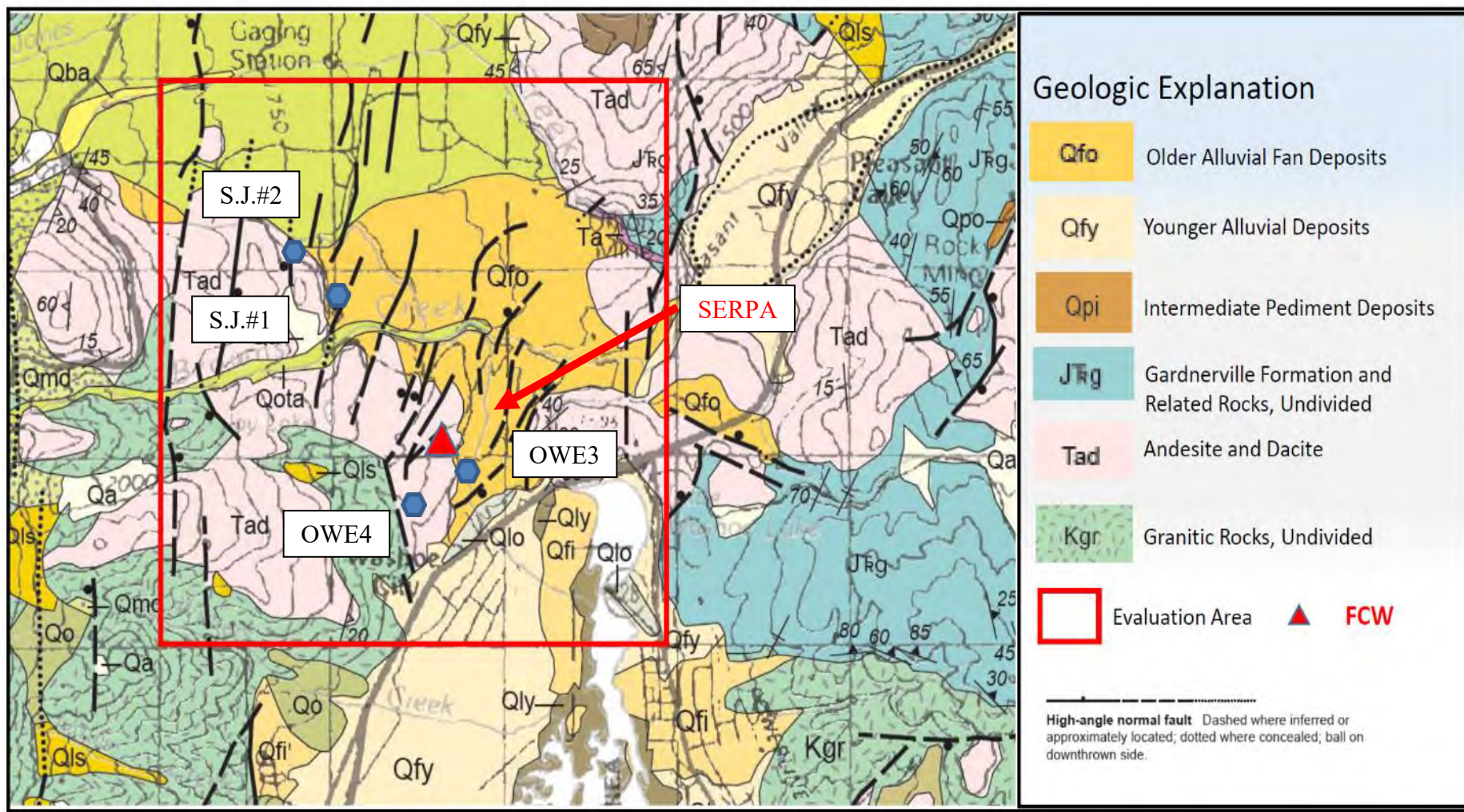


Figure 3. Geology and locations of wells of concern. (Source: CWR; see footnote #1, with Geology from Stewart, 1999)



WASHOE COUNTY
COMMUNITY SERVICES DEPARTMENT
Engineering and Capital Projects

1001 EAST 9TH STREET
PO BOX 11130
RENO, NEVADA 89520-0027
PHONE (775) 328.3600
FAX (775) 328.3699

February 16, 2022

St. James's Village
4100 Joy Lake Road
Reno NV 89511

Attn: Fred Woodside

Via Email to: fred.woodside@att.net
lmenante@candmengineering.com

SUBJECT: Sewer Will-Serve Letter for St. James's Village 2C-2
11 lots – Deferred Fees

SW22-012

The Washoe County Community Services Department, Utility Division, has reviewed the subject project and determined sufficient wastewater treatment capacity currently exists at the South Truckee Meadows Water Reclamation Facility (STMWRF) located in Reno, Nevada and in the associated sewage collection systems. If necessary to serve the project, the system will be expanded to provide for the additional demand per NAC 278.420. This letter constitutes a commitment to sanitary sewer service to the subject project and sufficient treatment capacity will be reserved subject to the following conditions;

- Commitment of resource availability will not be valid if the approval for this project expires or is terminated by the local governing body at which time this commitment to sanitary sewer service will be revoked.
- Commitment of sanitary sewer treatment capacity in the STMWRF does not include or presume the necessary application(s) for sanitary sewer service and payment of all customary and required sanitary sewer connection privilege fees necessary for sanitary sewer service.

The review and approval of design and construction drawings for improvements or modifications to the sanitary sewer collection system is the responsibility of Washoe County. Upon completion and acceptance, the collection system improvements will be owned by and maintained by Washoe County. Washoe County's receipt and review of the submitted project information does not constitute an application for service, nor imply approval or processing of design and construction drawings.

Sincerely,



Dwayne Smith, P.E.

Director, Engineering & Capital Projects



INTEGRITY



EFFECTIVE
COMMUNICATION



QUALITY
PUBLIC SERVICE



WASHOE COUNTY
COMMUNITY SERVICES DEPARTMENT
Engineering and Capital Projects

1001 EAST 9TH STREET
PO BOX 11130
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PHONE (775) 328.3600
FAX (775) 328.3699

February 16, 2022

St. James's Village
4100 Joy Lake Road
Reno NV 89511

Attn: Fred Woodside

Via Email to: fred.woodside@att.net
Imenante@candmengineering.com

SUBJECT: Sewer Will-Serve Letter for St. James's Village 1H
5 lots – Deferred Fees

SW22-011

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Sincerely,


Dwayne Smith, P.E.

Director, Engineering & Capital Projects



INTEGRITY



EFFECTIVE
COMMUNICATION



QUALITY
PUBLIC SERVICE

APN: 156-040-15 & 156-111-23

When Recorded, Return to:

Truckee Meadows Water Authority
Attn: Amanda Duncan, SR/WA, Land Agent I
P O Box 30013
Reno, NV 89520-3013
TMWA WO: 21-8575

RETAIL WATER SERVICE AREA ANNEXATION AGREEMENT

THIS RETAIL WATER SERVICE AREA ANNEXATION AGREEMENT ("Annexation Agreement"), entered into this _____ day of _____, 202____ ("Effective Date"), by and between **TRUCKEE MEADOWS WATER AUTHORITY** (the "Authority"), a Joint Powers Authority entity created pursuant to a cooperative agreement among the cities of Reno, Nevada, Sparks, Nevada and Washoe County, Nevada pursuant to N.R.S. Chapter 277, and **ST. JAMES'S VILLAGE, INC.**, a Nevada Corporation (referred to as "Developer" or "Owner" in this Agreement and exhibits attached hereto, and together with Authority collectively hereinafter referred to as "Parties");

WITNESSETH:

WHEREAS, Owner owns certain real property more particularly described on Exhibit "A" and depicted in Exhibit "A-1" attached hereto incorporated herein by this reference ("Property", or "Owner's Project"), located outside of Authority's current retail water service area.

WHEREAS, Owner desires the Authority to expand its retail water service area to provide water service to the Property.

WHEREAS, on December 31, 2014, Authority acquired the water utility system of the Washoe County Department of Water Resources and the South Truckee Meadows General Improvement District, and as a result, new customers may be eligible to annex into the Authority service area based upon their proximity to existing Authority facilities, availability of water resources, or cost-effectiveness.

WHEREAS, based upon these criteria, Authority has determined it is appropriate that Authority provide service to Owner and accordingly, Owner's property may be annexed into Authority's retail water service area.

WHEREAS, the expansion of Authority's retail water service area may require dedication of certain real property or water system facility improvements to facilitate the

efficient management and operation of Authority's system to include the Property in its retail water service area.

WHEREAS, Authority is willing to expand its retail water service area to include water service to the Property and Owner agrees to the expansion of Authority's retail water service area upon the terms and conditions set forth in this Agreement, subject to and on the express condition that Owner fully and completely perform the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and conditions herein contained, the Parties agree as follows:

1. Expansion of Water Service Area. Authority agrees to expand its retail water service area as set forth in Exhibits "A" and "A-1" attached hereto to provide water service for the Property; provided, however, that such expansion of the Authority's retail water service area is specifically conditioned upon execution of this Agreement by Owner and the Authority, and the complete and satisfactory performance of the terms and conditions in Section 2 herein by Owner and its permitted successors and assigns, to the extent applicable.

2. Conditions to Annexation. The following conditions must be satisfied within the time frames stipulated below or this Agreement shall automatically terminate, and the Property shall be deemed de-annexed from the Authority retail service area.

2.1 Construction/Dedication of Facility Improvements. The Authority has determined that additions, improvements and/or modifications to its Water System Facilities are required to expand its retail water service area to include the Property. Owner is responsible for all costs related to, and except as otherwise provided herein, shall install and construct the off-site additions, improvements and modifications to the Authority's Water System Facilities as delineated in Exhibit "B" attached hereto and incorporated herein by this reference. Upon completion of the facilities listed in Exhibit B, Owner shall dedicate the facilities to Authority pursuant to the terms of this Annexation Agreement and Authority's Rules, and Authority will own all capacity in the system including any excess capacity. Owner shall submit a complete Application for New or Modified Water Service and enter a Water Service Agreement with Authority for the completion of required Water Facilities (or portions thereof, for phased development) no later than twenty-four (24) months from the Effective Date of this Annexation Agreement, or this Agreement shall automatically terminate, and the Property shall be deemed de-annexed from the Authority retail service area. For phased development, Owner shall continue to submit complete Applications for New or Modified Water Service and enter into Water Service Agreements for subsequent phases no later than twenty-four months from the Effective Date of the previous Water Service Agreement, or portions of the Property not actively receiving water service from Authority shall be deemed de-annexed from the Authority retail service area. Authority shall have no obligation to provide water service to any portion of the Property until required water system facilities are completed to the satisfaction of Authority.

2.2 Dedication of Real Property. The Authority has determined that the dedication of certain real property in fee, or certain easements, rights of way or other interests in real property as described in Exhibit C attached hereto and incorporated herein by this reference, is required to expand its retail water service area to include the Property. Owner shall, prior to the start of construction of any facilities required under this Annexation Agreement, grant and convey to Authority, all necessary easements, conveyances, deeds, rights-of-way, or other rights required by this Annexation Agreement. Such property shall be conveyed free and clear of all liens and encumbrances, and Owner shall obtain and provide Authority prior to dedication, at Owner's expense, a preliminary title report for any property offered for dedication showing all matters of record affecting such property. Owner is solely responsible for obtaining all appropriate permits, licenses, construction easements, subordination agreements, consents from lenders, and other necessary rights from all necessary parties to dedicate property with title acceptable to Authority. If any portion of the property required for dedication is located on property other than that owned by Owner, Owner shall be responsible for obtaining, at no cost to Authority, any necessary interests therein from such owners for conveyance to Authority free and clear of all liens and encumbrances. Owner may not apply for, nor shall Authority have any obligation to issue or enter, a Water Service Agreement for service to any portion of the Property until such real property required hereunder is granted to Authority in such form, location, scope and condition of title satisfactory to Authority. Furthermore, unless such real property is granted to Authority no later than twenty-four (24) months from the Effective Date of this Annexation Agreement, this Annexation Agreement shall automatically terminate, and the Property shall be deemed de-annexed from the Authority retail service area. In the event Owner has not conveyed the real property within the 24-month period, Owner may submit a written request for, and Authority in its sole discretion may grant, an extension up to one-year if Owner can show reasonable justification to Authority why the real property was not transferred.

3. Conditions of Water Service. Owner acknowledges and agrees that this Annexation Agreement merely addresses conditions required for the expansion of Authority's retail water service area, and that Owner must independently comply with all applicable requirements in Authority's Rules before the Authority has any obligation to provide water service to the Property, including without limitation (i) submitting and receiving approval from the Authority of appropriate applications for service; (ii) dedicating sufficient Water Resources to the Authority and receiving a Will Serve Commitment for service to the Property; (iii) in addition to any dedication requirements in Section 2 of this Annexation Agreement, dedicating appropriate easements and other real property required for service; (iv) in addition to any dedication requirements in Section 2 of this Annexation Agreement, installing, constructing and dedicating subdivision or on-site water system facility additions, improvements or modifications or further additions, improvements, extensions or modifications to Authority's Water System Facilities as necessary to provide the requested new service(s) or modification of service(s) to the Property; (v) payment of Area Facility Charges, Supply-Treatment Facility Charges and Storage Charges (collectively "WSF Charges"); and (vi) satisfying such other terms and conditions pursuant to the Authority's Rules and any requirements of any local governmental entity with jurisdiction over the Property as necessary to obtain a Will-Serve Commitment letter from the Authority for the delivery of water to the Property. Owner shall

submit such applications and execute such other documents required by Authority's Rules and procedures prior to being eligible for the delivery of water to the Property. All such conditions, dedications, additions, improvements, extensions and modifications shall be made in accordance with the Authority's Rules and regulations in effect at the time Authority and Owner enter into any agreement or agreements for the specific dedication, additions, improvements or modifications required to provide water service to the Property.

4. General Terms

4.1 Owner acknowledges and agrees that it is entering this Annexation Agreement voluntarily, that the expansion of Authority's service area is specifically conditioned on Owner's performance of all terms and conditions contained herein, and that if any of the provisions of this Annexation Agreement are deemed unenforceable or if Owner fails to perform any of its obligations hereunder, Authority is under no obligation to expand its service area to include any portion of the Property for which the Authority has not previously entered an agreement to provide water service. Nothing in this paragraph shall be construed to grant Owner a right, and Owner specifically waives any right, if any exists, to dispute any of the terms and conditions of this Annexation Agreement under Rule 8 in Authority's Rules, as such may be amended from time to time. Upon annexation of the Property, the Parties acknowledge and agree that both are bound by the terms and conditions of the rules and regulations adopted by Authority, as the rules and regulations may be amended from time to time, and as such rules may exist at the time service is applied for or requested for the Property or certain phases of the Property.

4.2. Any written notices or communications required hereunder shall be served by placing such notices in the U.S. Mail, postage prepaid, properly addressed to the following:

To: Authority	Truckee Meadows Water Authority Attn. General Manager P.O. Box 30013 Reno, NV 89520-3013
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To: Owner	St. James Village Inc. Attn.: Fred Woodside 4100 Joy Lake Road Reno, NV 89511
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4.3. This Annexation Agreement shall inure to and be binding upon the parties, their respective successors and assigns.

4.4. This Annexation Agreement shall not be modified except in writing, signed by all parties.

4.5. This Annexation Agreement represents the entire agreement between the Parties related to the expansion of the Authority's retail water service area and supersedes all prior representations and agreements whether written or oral with respect to the covenants and conditions provided herein; provided, however, that the obligations set forth in this Annexation Agreement shall be in addition to, and do not supersede or replace, any obligations that may be imposed upon Owner under Authority's Rules.

4.6 This Annexation Agreement and terms and conditions herein shall run with the land and be binding upon and inure to the benefit and burden of the parties to the agreement and their heirs, successors and assigns and any future owners of the Property.

4.7 Neither this Annexation Agreement nor any of the terms set forth herein shall be effective or binding on Authority until this Annexation Agreement is executed by Authority, and the Authority will be under no obligation to execute this Annexation Agreement if not executed and returned by Owners to the Authority by ***June 10th, 2022***.

IN WITNESS WHEREOF, the Parties hereto have executed this Annexation Agreement effective as of the Effective Date first written above.

**TRUCKEE MEADOWS WATER
AUTHORITY, A Joint Powers Authority**

ST. JAMES'S VILLAGE, INC.,
a Nevada Corporation

By: _____

By: _____

Name: _____

Name: _____

Title: _____

Title: _____

STATE OF NEVADA)
) ss
COUNTY OF WASHOE)

This instrument was acknowledged before me on _____, 202__, by
_____, as _____, of ST.
JAMES'S VILLAGE, INC., on behalf of said Nevada Corporation therein named.

NOTARY PUBLIC

STATE OF NEVADA)
) ss
COUNTY OF WASHOE)

This instrument was acknowledged before me on _____, 202__,
by _____ as _____,
TRUCKEE MEADOWS WATER AUTHORITY, on behalf of said Joint Powers Authority
therein named.

NOTARY PUBLIC

Exhibit “A”
Legal Description of Property Subject to TMWA Annexation

PARCEL 1 APN: 156-040-15

PARCEL 2C2 of that OFFICAL PLAT FOR BENNINGTON COURT-UNIT 2 AND ST. JAMES’S VILLAGE-UNIT 2D, also known as Tract Map 5331, recorded as Document No. 4922453 on June 21st, 2019 in the office of the County Recorder of Washoe County, State of Nevada.

APN: 156-040-15

PARCEL 2 APN: 156-111-23

PARCEL 1H of that REVERSION TO ACREAGE MAP for ST. JAMES’S VILLAGE – UNIT 1H, also known as Reversion Tract Map 4994, recorded as Document No. 4018804 on June 30th, 2011 in the office of the County Recorder of Washoe County, State of Nevada.

APN: 156-111-23

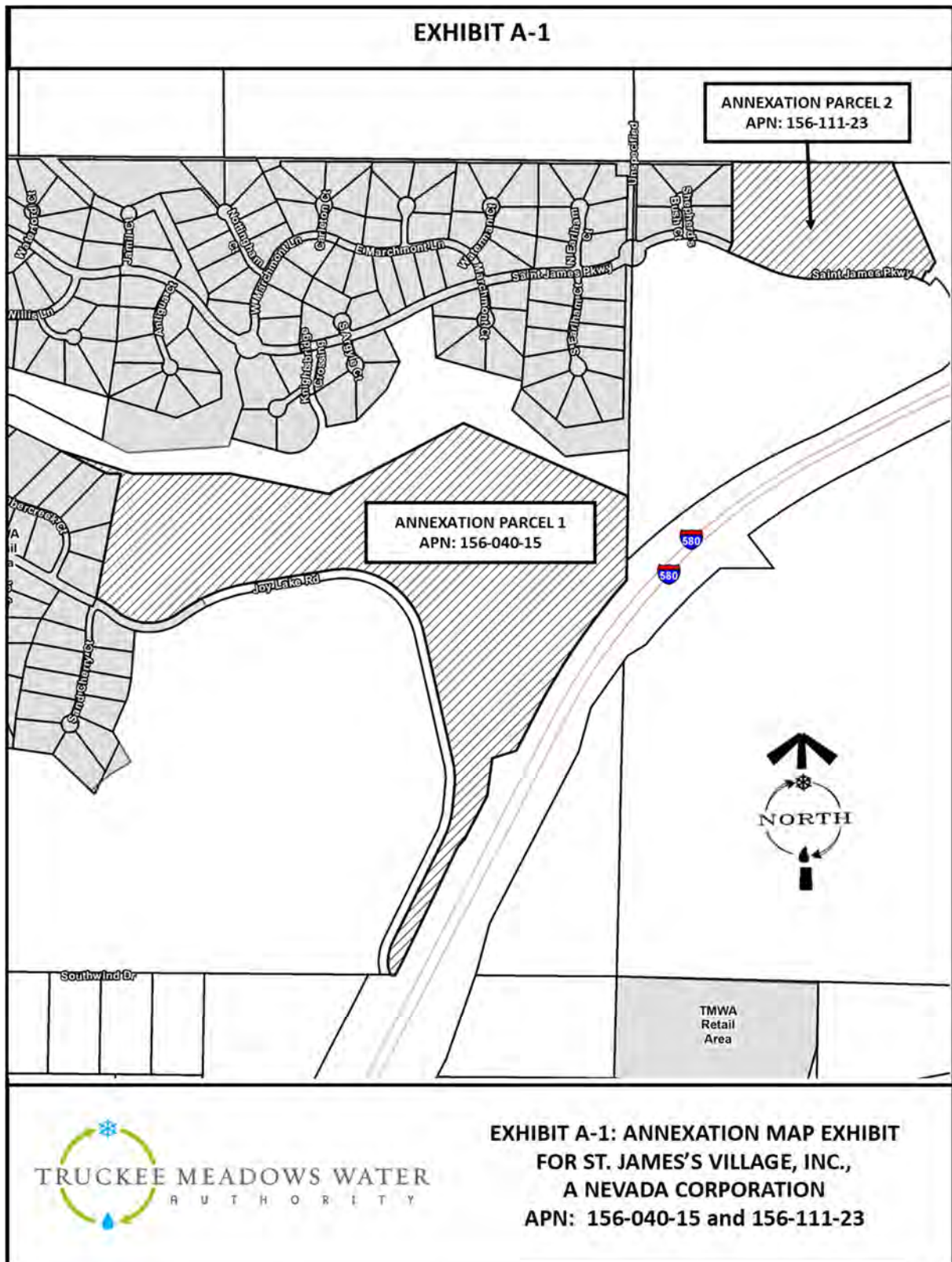


EXHIBIT B

SAINT JAMES VILLAGE ANNEXATION UNITS 1H & 2C W.O.#21-8275

SUMMARY OF OFFSITE FACILITY REQUIREMENTS AND APPROXIMATE COSTS TO BE PAID BY DEVELOPER

Table 1: Estimated Major Water Facility Costs

Description	Quantity	Unit	Unit Cost	Cost
8" Diameter Offsite Main	11,800	Linear Feet	\$200	\$2,360,000
Pressure Reducing Station	1	Each	\$100,000	\$100,000
Pressure Reducing Station w/SCADA Control	1	Each	\$125,000	\$125,000
Area 15 Facility Charge ⁵	35.1	MDD, gpm	\$14,624	\$513,302
Total				\$3,098,302

1. All facilities must be permitted, designed (such design to be approved by TMWA), and built by the developer and then dedicated to TMWA.
2. All costs are the responsibility of the developer.
3. The cost opinion does not include meters, meter assemblies, backflow devices, and any associated private fire loop for the Project.
4. No common area irrigation demand was included in this Discovery. For reference, 1 acre-foot of irrigation demand equates to 1.7 gpm of MDD.
5. Unit Fee could be reduced to \$10,286/gpm if applicant provides and dedicates acceptable creek water rights.

Notes:

1. Water System Facility Charges are determined based on the maximum day demand (MDD) of the development. The above MDD is estimated and will be determined at the time final development plans are submitted with a formal application for water service. All facility requirements listed above are preliminary and are subject to change during the final planning and design process.
2. Review of conceptual plans or tentative maps by TMWA does not constitute an application for service, nor implies a commitment by TMWA for planning, design or construction of the water facilities necessary for service. The extent of required off-site and on-site water infrastructure improvements will be determined by TMWA upon receiving a specific development proposal or complete application for service and upon review and approval of a water facilities plan by the local health authority. Because the NAC 445A Water System regulations are subject to interpretation, TMWA cannot guarantee that a subsequent water facility plan will be approved by the health authority or that a timely review and approval of the Project will be made. The Applicant should carefully consider the financial risk associated with committing resources to their project prior to receiving all required approvals. After submittal of a complete Application for Service, the required facilities, the cost of these facilities and associated fees will be estimated and will be included as part of the Water Service Agreement necessary for the Project. All fees must be paid to TMWA prior to water delivery to the Project.

Exhibit “C”

Real Property Rights Required for Annexation

1. A minimum 20-foot wide pipeline, access and utility easement between St. James Parkway and the St. James Monitoring Well #1 site including any cut and fill slopes necessary to construct an all-weather access road and temporary construction access easements as necessary to construct facilities within the permanent easement.
2. An easement suitable for construction, operation, maintenance and access of a SCADA controlled Pressure Regulating Station including temporary construction easements as needed and easements for an access road, fencing, electrical service and cut and fill slopes as necessary.
3. A minimum 20-foot wide pipeline and access easement between St. James Parkway and the St. James Unit 2C cul-de-sac including any cut and fill slopes necessary to construct an all-weather access road, temporary construction access easements as necessary to construct facilities within the permanent easement and environmental or other permitting required for the pipeline to cross Brown’s Creek.
4. A minimum 20-foot wide pipeline and access easement between Joy Lake Road and the east end of St. James Unit 1H in an alignment following the northern property line of the St. James development including any cut and fill slopes necessary to construct an all-weather access road, temporary construction access easements as necessary to construct facilities within the permanent easement.

Other On-Site Water Facilities:

5. Other easements and deeded parcels required for any required pumping facilities, main extensions/ties, other tank sites and other water facilities not required at annexation will be required at the time of development.



February 15, 2022

Mr. Fred Woodside
St. James Village Inc.
4100 Joy Lake Rd.
Reno, NV 89511

RE: DISCOVERY-St. James Village Discovery 2_Annexation 1H_2C; PLL# 21-8275

Dear Mr. Woodside,

Pursuant to your request, Truckee Meadows Water Authority (TMWA) has completed its Discovery for the above-referenced project, also referred to as St. James Village _DISC-Annexation, PLL# 21-8275, or APNs 156-040-14_156-111-23.

Please find attached two internal memoranda from TMWA's Engineering and Water Rights Departments detailing their findings. Should you have any questions after reviewing the enclosures, please feel free to contact me at 775.834.8199, or nraymond@tmwa.com. The Annexation Agreement will be forthcoming.

Thank you for the opportunity to serve your discovery, and future project development needs.

Regards,

Nancy Raymond

Nancy Raymond
New Business Project Coordinator

Attachments

cc: Ken Krater – Krater Consulting Group, PC



TO: Nancy Raymond

DATE: February 14, 2022

THRU: Scott Estes & Danny Rotter

FROM: David Kershaw

RE: **DISCOVERY: Saint James Village Annexation Units 1H & 2C¹**
TMWA WO# 21-8275

PURPOSE:

The purpose of this Discovery is to present a water service plan including the offsite water facility requirements and an estimate of their associated costs for the proposed project (Project).

DISCUSSION:

The Project is proposed to include development of up to 24-single family residences within Saint James Village Units 1H & 2C. These two subdivisions are located within portions of two Washoe County parcels with an approximate acreage of 105 acres (Washoe County APNs: 156-040-14 & 156-111-23) on the Mount Rose Fan area. Only a portion of the total parcel area is being proposed for development in this Discovery. The Project is partially located within TMWA's retail service territory, with Unit 2C within TMWA's existing service territory but without any service commitments and Unit 1H outside the service territory. Therefore, annexation is required for the portion of the Project consisting of Unit 1H.

It should be noted that a previous Discovery (W.O. 15-4624) was completed, dated December 23, 2015. The 2015 Discovery identified required improvements to provide water service for remaining infill of existing approved lots and an additional (then) proposed 239 single family residential lots.

Existing System Configuration:

The existing system is laid out in a tree configuration (Figure 2), with a single arterial main that decreases in diameter over its length, which has various mains of smaller diameter connected to it. This system was designed and installed for a prior water utility and was not reviewed or approved by TMWA. This existing system design and layout is contrary to TMWA design standards (section 1.1.06) and does not comply with Nevada Administrative Code. For example, Nevada Administrative Code section 445A.6712 requires systems to be designed, to the extent possible, to eliminate dead ends and for a system of arterial loops.

¹ As previously advised on December 23, 2021, the Discovery request is limited to Unit 1H and 2C.

Tree systems are prohibited except as justified by an engineer. TMWA will not support a request for variance from these standards from the Bureau of Safe Drinking Water or Washoe County Health District and in TMWA's engineering opinion and reasonable utility discretion does not believe perpetuating or extending system layouts contrary to TMWA design standards and/or the Nevada Administrative Code is in the best interests of public health and safety or prudent utility operations.²

Sound engineering grounds support these opinions, including the following. The lack of looping greatly increases the chance of pressure loss in the water system during main breaks and leaks. Loss of pressure in the system may result in potential contamination of the system due to introduction of foreign material. Therefore, the lack of looping in the existing water system is a potential public health issue. TMWA's design standards (section 1.1.06.06) recognize dead ends are sometimes unavoidable, but limits the length to 800 feet. This is the maximum radial main length that the Health District has accepted in the past and is the maximum radial main length TMWA will accept. Additionally, the lack of looping and existing main sizes also significantly limits the available fire flow for existing and future units in the development. Reduced fire flow in remote and/or wildland urban interface environments create additional public health and safety issues. The existing St. James's system far exceeds this maximum (>6,000 feet for one branch) and extending this existing noncompliant system to new services will not be allowed without modifications or mitigation measures to resolve the issue and protect public health and safety. The purpose and intent of prudent water system design is not just to move water from point A to point B; it is to ensure protection of water quality, quantity, and system pressure and to provide system redundancies in the interests of public health and prudent utility operations, including for fire protection.

Water Supply:

At this time, no will serve commitments have been issued for the Project. The current development is supplied by two municipal groundwater production wells, Saint James Well 1 and Saint James Well 2. These two wells have a historical nameplate total capacity of 715 gallons per minute (gpm); however, the actual sustainable capacity is far less (as discussed below)³. In an emergency, the Saint James system can be supplied water from the Mount Rose system for a limited period. Existing maximum day demand supplied from these wells without the proposed Project is estimated at approximately 207 gpm.

² Even if one were to assume that the existing water system facilities are adequate to simply move water from point A to point B, substantial evidence exists which a reasonable mind could accept as sufficient to demonstrate that design of those systems is contrary to applicable standards and interests of public health and safety such that reasonable engineering discretion could conclude the existing system is not adequately designed to permit extension for service to new development without modifications which bring it into closer conformity with applicable standards.

³ It is not uncommon for there to be a significant difference between the face value identified on a permit and the actual water the permitted source can reliably and sustainably produce.




Figure 1 shows the water level in the two production wells and the existing monitoring wells on the property. The data indicates a fairly consistent decline in water levels in both monitoring and production wells with a slow leveling off in the last four years. Notably, in the last five years TMWA has actively tried to reduce groundwater pumping from the region and supply more of the region with surface water as part of a resource conjunctive use strategy that includes the construction of the Mt. Rose Surface Water Treatment Plant. One of the purposes of these efforts is to reduce overpumping of the groundwater aquifer which was prevalent in this area prior to TMWA taking over the Washoe County utility and South Truckee Meadows GID systems.


A significant risk with any water right, whether permitted by the Nevada State Engineer or not, is whether a reliable supply of actual physical water exists year-in, year-out that can be diverted for the intended beneficial use. This is particularly true in groundwater basins where the amount of water stored in the groundwater aquifer experiences continual decline in water levels year-over-year without evidence of recovery either from natural hydrologic cycle or engineered solutions⁴ that replenish the aquifer. The impact of declining sub-surface water supplies causes hardships on municipal and domestic well owners and may threaten the sustainability of water supplies previously committed for service. These issues can be exacerbated, and reliability of municipal supplies threatened, if prudent resource management and discretion is not exercised and groundwater resources in these types of basins are accepted without considering the supply's long term- reliability and sustainability.

With these principals in mind and based on sound data and prudent utility operation practices to ensure sustainable supply sources, TMWA has derated the reliable maximum day capacity for these two wells and other wells in the area in its 2035 Water Facility Plan due to the continued decline of water levels observed since construction. Both Saint James Well 1 and Saint James Well 2 have been derated to 175 gpm each for planning purposes.

In addition to the Project and existing demands, there are an additional 81 approved, undeveloped residential lots in the subdivision, with service committed to those lots from the existing wells. The maximum day demand from the remaining 81 developed lots is estimated at 122 gpm which will be additional future demand on the groundwater basin and wells. Thus, the total maximum day demand associated with existing development and future approved development (81 lots) is 329 gpm, nearly the full sustainable rated capacity of the two wells.

Additional sources of supply and/or supply capacity improvements will be required to serve the Project. Because of the declining water levels observed in the existing Saint James' wells and prudent utility operation practices coupled with the fact that the Project demands exceed the available rated capacity of the wells, TMWA is unwilling to supply the Project or

⁴ Engineered solutions can include deploying alternate sources of supply in lieu of continued groundwater pumping, injecting other treated water supplies into the aquifer, spreading or rapid infiltration basins, pumping limitations on municipal and domestic wells, or any combination of these.



any future additional development solely from the two existing groundwater wells as proposed without additional supply capacity, other mitigation measures⁵ or until, at the earliest, the groundwater levels in the existing wells have stabilized and modelling demonstrates the stabilized wells can independently provide sustainable adequate sources of supply for future growth to TMWA's satisfaction.

However, alternate sources of supply or mitigations are available for water supply to the Project⁶. This Discovery has identified facility improvements to allow the new units to obtain a water supply from TMWA's regional, conjunctive use system without impacting the local groundwater resources. TMWA is open to consideration of other supply options that do not negatively impact the long-term reliability of existing regional groundwater resources and wells, but understandably it is contrary to public health and prudent water supply management to issue will serve commitments supported solely on unsustainable or unproven sources of water supply.

⁵ Based on data from TMWA's historical hydrogeologic monitoring and modeling efforts for the area, data from the Nevada State Engineer and other studies, groundwater levels in this area are declining and evidence indicates additional withdrawals of groundwater will exceed the sustainable yield of the basin, causing continued declines in water levels in the aquifer, and/or conflict with existing water rights. Pursuant to TMWA Rule 7, the Authority has the right, in its sole discretion, to accept or reject any water rights offered for dedication based upon its consideration of criteria set forth in that Rule and exercise of prudent utility resource management discretion.

⁶ The unique conditions of groundwater rights in this area and concerns with, among other things, the quantity, drought-year supply, and yield of groundwater rights requires surface and groundwater resources be conjunctively managed to mitigate these issues. TMWA's Rules provide mechanisms for dedication of supplemental surface water supplies at the time groundwater rights are offered for dedication to facilitate issuance of will serve commitments in Charge Area 15.

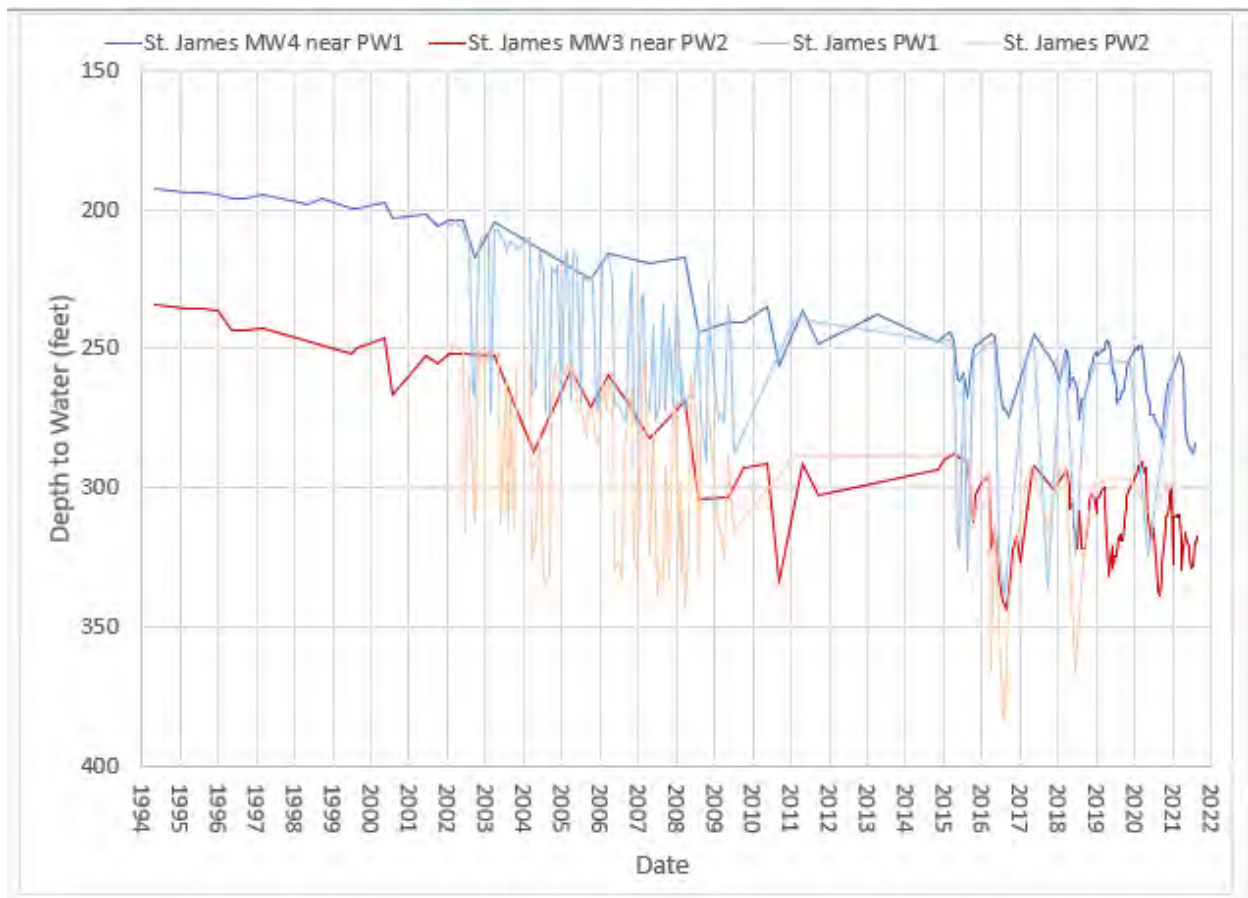


Figure 1. St. James's Production and Monitoring Wells Historic Water Levels

Location:

The Project is located on Joy Lake Road and Saint James Parkway just west of Interstate 580 at the north end of Washoe Valley (see Figure 2). Portions of the Project which are annexed into TMWA's service area (Unit 2C) are located within TMWA's Water Service Facilities Area 15. Portions of the Project outside TMWA's service area (Unit 1H) will be located within TMWA's Water Service Facilities Fee Area 15 upon annexation.

PROJECT WATER MAXIMUM DAY DEMANDS

The Project's estimated maximum day demand (MDD) is 35.1 gallons per minute. A common area irrigation demand estimate was not included in this Discovery. Current uncommitted sustainable supply from Saint James Well 1 and Saint James Well 2 is insufficient to serve the entire Project demand. Additional sources of supply and/or supply capacity improvements will be required to serve the Project.



MAJOR WATER FACILITIES AND COST OPINION

A conceptual water service plan for the Project is shown in Figure 1.

The improvements include looping mains and pressure reducing stations to supply the design fire flow event and meet design criteria regarding radial mains for the Project. The improvements also include a new SCADA controlled pressure reducing station at the intersection of Austrian Pine Road and Joy Lake Road to supply water to the Saint James system from TMWA's regional conjunctive use system to supply the Project maximum day demands. These improvements provide the additional water supply required to serve the entire Project demand through supplemental supply from conjunctive use management of groundwater supply from other municipal wells and surface water supply from the Mt. Rose Water Treatment Plant consistent with the overall conjunctive use strategy for the area. Additionally, these improvements will provide short term system redundancy in the event of a mechanical well failure on Well 1 or Well 2.

The Project is (or will be) located within TMWA Charge Area 15 and will be subject to TMWA WSF charges applicable to Charge Area 15.

An opinion of cost for the major Project water facilities and TMWA's current Water Service Facilities Fee Area 15 charge are listed in Table 1.

Table 1. Cost Opinion

Description	Quantity	Unit	Unit Cost	Cost
8" Diameter Onsite Main	750	Linear Feet	\$200	\$150,000
8" Diameter Offsite Main	11,800	Linear Feet	\$200	\$2,360,000
10" Diameter Onsite Main	800	Linear Feet	\$250	\$200,000
Pressure Reducing Station	1	Each	\$100,000	\$100,000
Pressure Reducing Station w/SCADA Control	1	Each	\$125,000	\$125,000
Area 15 Facility Charge ⁵	35.1	MDD, gpm	\$14,624	\$513,302
Total				\$3,448,302

1. All facilities must be permitted, designed (such design to be approved by TMWA), and built by the developer and then dedicated to TMWA.
2. All costs are the responsibility of the developer.
3. The cost opinion does not include meters, meter assemblies, backflow devices, and any associated private fire loop for the Project.
4. No common area irrigation demand was included in this Discovery. For reference, 1 acre-foot of irrigation demand equates to 1.7 gpm of MDD.
5. Unit Fee could be reduced to \$10,286/gpm if applicant provides and dedicates acceptable creek water rights.

STORAGE CAPACITY

TMWA has sufficient storage capacity for the Project.


PROJECT PRESSURES

Maximum Day pressures are shown in Figure 2. Individual service pressure reducing valves are required to be installed on each water service with system pressures of 80 psi and higher and on all water services in pump system pressure zones and any regulated pressure zones. If the water service is a combined fire and domestic service, pressure regulating valves may need to be installed downstream of the fire service tee, installation of the pressure reducing valves on any fire line shall be reviewed by the fire contractor.

DEAD ENDS AND LOOPING

Nevada Administrative Code section 445A.6712 requires systems to be designed, to the extent possible, to eliminate dead ends. The water facility layout proposed in this Discovery meets the dead end and looping requirements that include radial mains which do not exceed 800 linear feet per TMWA design criteria.

It should be noted that other existing water facilities in the Saint James Village development do not meet this requirement; however they are located outside of the pressure zones which will serve this Project. While outside the scope of this Discovery, please note that those



other existing water facilities will need to be addressed prior to development and/or annexation of new projects in those pressure zones.

FIRE FLOWS

Fire flow requirements are established by the fire department. The assumed fire flow requirement for this project provided by the applicant is 2,500 gpm for two hours. The proposed facility improvements identified in this Discovery can convey estimated maximum day demands and provide up to 2,500 gpm fire flow for 2 hours while maintaining a residual pressure greater than 20 psi.

REGIONAL INTEGRATION

The project lies between the existing St. James's system and proposed projects to the east and north. The proposed project to the east, Sierra Reflections, is under common ownership with the St. James development. To provide support for the Sierra Reflections project and integrate system extension, the Applicant will be requested to set aside a location for a pressure regulating station for the Sierra Reflections project.

In addition, as a condition of annexation, the Applicant will be required to grant TMWA a public utility easement for access and water facilities construction, operation and maintenance between St. James Parkway and the St. James Monitoring Well 1 site. The purpose of this easement is for integration of the St. James's system with future development to the north, and for mutual support between the St. James's system and other parts of TMWA's system.

FUTURE PHASES OF DEVELOPMENT


Additional supply and main facility improvements will be required for continued development in the area. The previous completed Discovery dated December 23, 2015 identified some of the required improvements that include distribution main looping and sizing to meet current design criteria and proposed fire flow requirements. The document has been attached for reference. Any future proposed development in the area will need to apply for a new Discovery evaluation to take into account then current supply constraints, design requirements, and development phasing, which may require updates or revisions to required improvements.

ASSUMPTIONS:

1. The applicant shall be responsible for all application and review fees in effect at the time of application submittal. The applicant is responsible for all inspection fees, permit fees, easements, Area Fees and Facility Charges in effect at the time the project is approved by TMWA and the Water Service Agreement is issued. The Water Service Agreement must be executed and all fees paid within 60 days of agreement issuance.

2. The cost opinions contained herein do not include new business fees, cost of water rights, sustainability fees and related fees.
3. Project pressure criteria are:
 - a. Maximum day pressure of 45 pounds per square inch (psi) at building pad elevation with tank level at top of emergency storage,
 - b. Peak hour pressure of 40 psi at building pad elevation with tank level at top of emergency storage, and
 - c. Maximum day plus fire flow pressure of 20 psi at center of street elevation with tank level at bottom of fire storage.
 - d. For new systems, unregulated distribution system pressures should not exceed 100 psi anywhere in the system. Individual water service pressure regulators are required for system service pressures over 80 psi and on all individual water services in regulated system pressure zones and pump zones.
4. A site grading plan with elevations was not provided by the applicant. Elevations used for this Discovery were derived from existing site topographic information.
5. Facility requirements for the Project are based on the assumed elevations, maximum day demand and fire flow requirements. Changes in elevation, demand or fire flow requirements may affect facility requirements.
6. Easements, permits and all pertinent Agency approvals shall be obtained by applicant for the design and construction of the water infrastructure necessary to serve the proposed Project.
7. All cost opinions are preliminary and subject to change. The costs presented in this study are planning level estimates based on the information available. Actual costs will be determined at the time of application for service and nothing in the foregoing cost opinions should be construed as a guaranty of cost or shall be binding on TMWA in any respect.
8. Future development (on or off-site) may alter the conclusions of this Discovery. Capacity in TMWA's system is available on a first-come, first-served basis, and commitment to provide service is not established until a contract for service is executed, all fees are paid, adequate resources dedicated and a will serve commitment issued in compliance with TMWA Rules.
9. Applicant shall comply with all applicable TMWA Rules and Regulations applicable to applications for new service.

Review of conceptual site plans or tentative maps by TMWA does not constitute an application for service, nor constitute or imply a commitment by TMWA for planning, design or construction of the water facilities necessary for service, nor constitute or imply a commitment by TMWA to provide future water service. The extent of required off-site and on-site water infrastructure improvements will be determined upon TMWA receiving a specific development proposal or complete application for service and upon review and approval of a water facilities plan. After submittal of a complete Application for Service, the required facilities, the cost of these facilities, which could be significant, and associated fees



will be estimated and will be included as part of the Water Service Agreement for the project. All fees must be paid to TMWA prior to water being delivered to the project.

Please contact David Kershaw (834-8201) with any questions or comments regarding this Discovery.

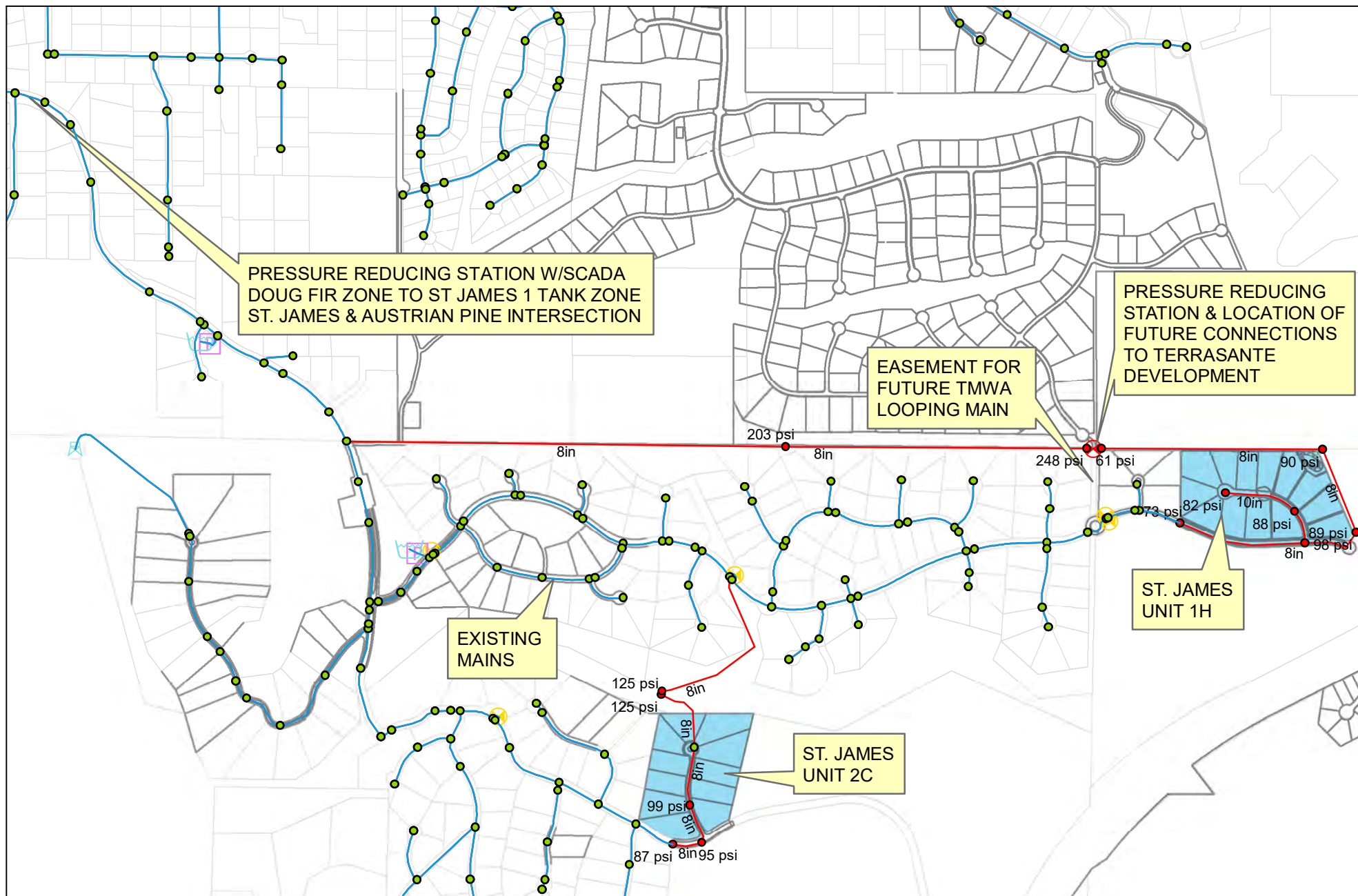


FIGURE 2: WATER FACILITIES
21-8275
ST JAMES VILLAGE DISCOVERY
UNITS 1H & 2C

1355 Capital Blvd. • P.O. Box 30013 • Reno, NV 89520-3013
P 775.834.8080 • F 775.834.8003

TO: Nancy Raymond **DATE:** December 23, 2015
THRU: Scott Estes
FROM: Keith Ristinen
RE: ST. JAMES'S VILLAGE_DISC_ANNEX, TMWA WO# 15-4624

SUMMARY:

The Applicant proposes development of 239 single family residential lots on approximately 425 acres in Washoe County, Nevada. TMWA can serve the project, subject to the Applicant completing the improvements described in this discovery. The improvements include developing adequate well capacity to serve the project demands and providing looping to the existing system. The cost opinion of facility fees and major off-site improvements to serve the project is \$11.5 million.

Review of conceptual site plans or tentative maps by TMWA and/or agents of TMWA shall not constitute an application for service, nor implies a commitment by TMWA for planning, design or construction of the water facilities necessary for service. The extent of required off-site and on-site water infrastructure improvements will be determined by TMWA upon receiving a specific development proposal or complete application for service and upon review and approval of a water facilities plan by the local Health Authority. Because the NAC 445A Water System regulations are subject to interpretation, TMWA and/or agents of TMWA cannot guarantee that a subsequent water facility plan will be approved by the Health Authority or that a timely review and approval of the Project will be made. The Applicant should carefully consider the financial risk associated with committing resources to their Project prior to receiving all required approvals. After submittal of a complete Application for Service, the required facilities, the cost of these facilities, which could be significant, and associated fees will be estimated and will be included as part of the Water Service Agreement necessary for the Project. All fees must be paid to TMWA prior to water being delivered to the Project.

Please contact me at 775-834-8292 with any questions or comments.

PURPOSE:

Determine the service plan and off-site improvements for a 239 unit residential subdivision, "project."

LOCATION:

The project is in Washoe County on the following APNs:

046-180-13 046-180-14 156-141-04 156-040-09 156-040-11 156-040-14 156-111-23

The project parcels cover approximately 425 acres. The Project is outside TMWA's retail service boundary and will require annexation prior to service from TMWA. The project will be within Fee Area 15 once annexed, but the area fee will be modified to credit the Applicant for the Applicant's construction of existing and future facilities.

ASSUMPTIONS:

1. The applicant shall be responsible for all application, review, inspection, storage, treatment, permit, easements, and other fees pertinent to the Project as adopted by the TMWA at the time of execution of water service agreement.
2. The cost opinions contained herein do not include new business fees, cost of water rights and related fees, or contribution to the water meter retrofit fund.
3. For the purposes of discovery, the total maximum day demand is estimated at 467 gpm, and average day demands are estimated at 179 gpm: Demand calculations are attached. Demand calculations, and fees based on demands, are estimates; actual fees will be determined at the time of application for service.
4. For the purposes of discovery, fire flow requirements are assumed at 2,500 gpm for 2 hours with 20 psi residual pressure. This fire flow requirement is consistent with International Fire Code requirements for single family homes up to 9,400 square feet in size. The Truckee Meadows Fire Protection District is responsible for establishing the fire flow requirements.
5. Project pressure criteria are:
 - a. Maximum day pressure of at least 45 pounds per square inch (psi) at building pad elevation with tank level at top of fire storage,
 - b. Peak hour pressure of at least 40 psi at building pad elevation with tank level at top of emergency storage,
 - c. Maximum day plus fire flow pressure of at least 20 psi at center of street elevation with tank level at bottom of fire storage, and
 - d. Wintertime minimum demand pressure of at most 100 psi at service elevation with the tank nearly full and filling.
 - e. TMWA does not calculate pressures for multi-story buildings. Confirmation that pressure will be adequate for upper stories is the responsibility of the Applicant.
6. Site elevations were taken from existing topography provided by Washoe County. Existing elevations on the project site range from 5294 to 5970 feet. Changes in assumed site elevations may affect the facility requirements.
7. Facility requirements for the Project are based on the assumed elevations, maximum day demand, and fire flow requirements. Changes in these may affect facility requirements.
8. Easements, permits and all pertinent Agency approvals are obtained for the design and construction of the water infrastructure necessary to serve the proposed Project.
9. All cost opinions are preliminary and subject to change. The costs presented in this study are planning level estimates based on the information available. Actual costs will be determined at the time of application for service. Cost opinions do not include on-site improvements made by the applicant.
10. This discovery is based on the current status of TMWA's system. Future development may alter the conclusions of this discovery. Capacity in TMWA's system is available on

a first-come, first-served basis, and commitment to provide service is not established until a contract for service is executed and all fees are paid.

DISCUSSION:

The Applicant proposes development of approximately 239 single family residential lots in Washoe County Nevada. The project is further development of the St. James's Village and forms a portion a tentative map first approved in 1993.

The Applicant will be required to construct new facilities to serve the project. The Applicant will be responsible for the entire cost of the new facilities, including design, permitting, and construction. The design and construction need to be to TMWA's standards, and TMWA's approval of the plans, and ongoing inspection of the construction, will be required. Upon completion of construction, and acceptance by TMWA, the facilities will be dedicated to TMWA. There is no mechanism for the Applicant to recover any portion of the facilities cost from subsequent users who may tap into, extend, or otherwise benefit from the Applicant's installation of the facilities.

Issues the new facilities will need to address include:

Existing System Configuration,
Water Supply,
Storage Tanks,
Regional Integration,
Project Phasing, and
Site Topography

Existing System Configuration

The existing system is laid out in a tree configuration (Exhibit 2), with a single arterial main that decreases in diameter over its length, which has various mains of smaller diameter connected to it. This layout is contrary to TMWA design standards (section 1.1.06) and appears to not comply with Nevada Administrative Code. Nevada Administrative Code section 445A.6712 requires systems to be designed, to the extent possible, to eliminate dead ends and for a system of arterial loops. Tree systems are prohibited except as justified by an engineer.

The lack of looping greatly increases the chance of loss of pressure in the water system during main breaks and leaks. Loss of pressure in the system results in potential contamination of the system due to introduction of foreign material. Therefore, the lack of looping in the existing water system is a potential public health issue. TMWA's design standards (section 1.1.06.06) recognize dead ends are sometimes unavoidable, but limit the length to 800 feet where practical. The St. James's system far exceeds this maximum. Thus, TMWA is unwilling to extend service to additional lots in St. James's system that rely on an unlooped system. The service plan presented later in this document remedies the lack of looping in the existing system and allows for further development of the St James's system.

The lack of looping is also reflected in the available fire flow to the existing lots (Exhibit 3). TMWA does not have records to indicate what the fire flow requirements were at the time the existing portion of the St. James's development was designed.

Water Supply

The existing St. James's system wells have a nameplate capacity of 715 gpm. Existing maximum day demand is estimated at 206 gpm from 138 developed residential lots and common area landscaping. Despite the existing demand being a fraction of the rated well capacity, the static water levels in the two St. James's wells have been declining since the wells were installed in 1993. Figure 1 shows the groundwater level at the monitoring wells adjacent to the system production wells.

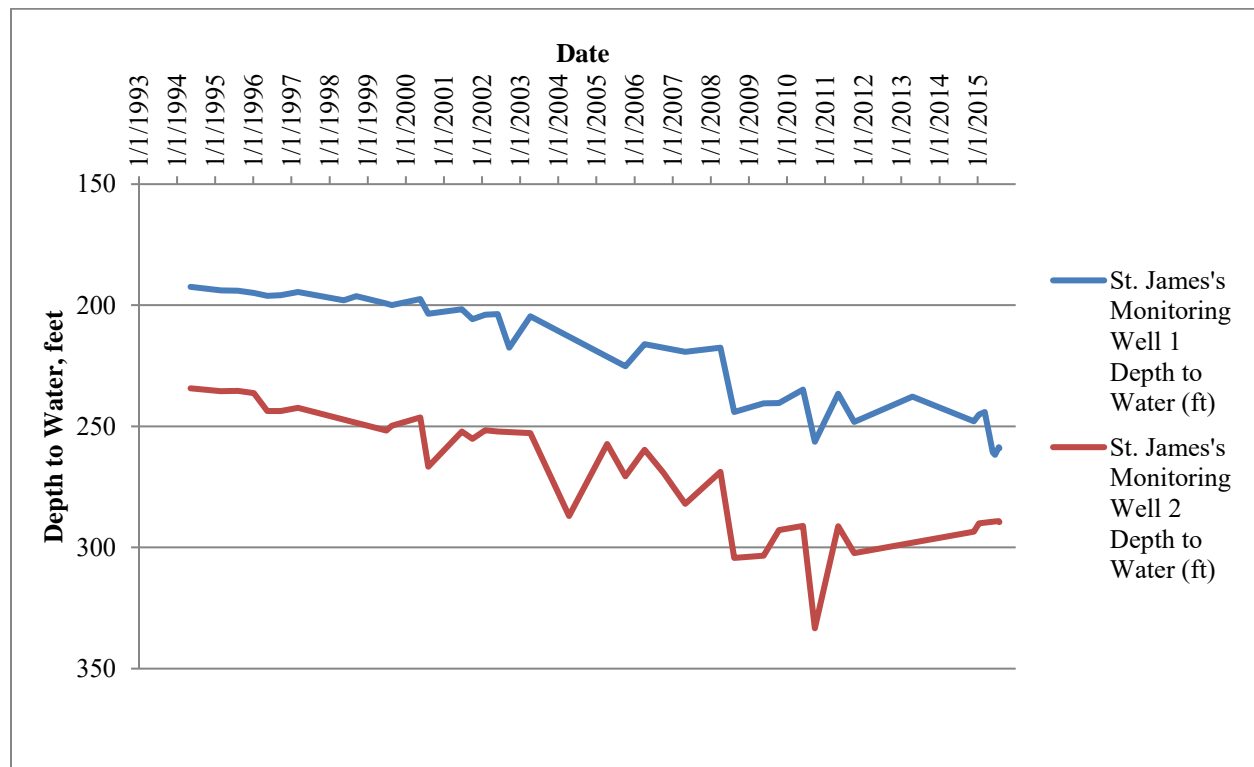


Figure 1. St. James's Monitoring Wells Historic Water Level

There are an additional 85 undeveloped residential lots in the approved subdivision, with service committed from the existing wells. The estimated maximum day demand from the remaining 85 developed lots is 145 gpm. Because of the declining water levels seen in the existing St. James's wells, TMWA is unwilling to supply any additional development from the two existing wells until the regional groundwater sustainability plan for the Mt Rose and Galena alluvial fans (see discussion below) is in place and operational, and groundwater levels in the existing wells have stabilized to TMWA's satisfaction.

For the proposed project, TMWWA will require the Applicant to complete at least two new groundwater wells. Two exploration wells have been drilled for the project, St. James's wells 3 and 4, and Applicant holds groundwater rights on these two wells. This discovery assumes the development of these two wells will be sufficient to provide the needs of the project. The following guidelines will apply to new wells:

-
1. The groundwater supplies must be proven sustainable to TMWA's satisfaction,
 2. Exploration and development shall be coordinated with TMWA.,
 3. Exploration wells shall be completed as monitoring wells,
 4. Wells, and the water produced, shall meet Nevada Administrative Code requirements,
 5. Wells shall be equipped with emergency generators,
 6. Wells shall be equipped for recharge,
 7. Wells shall discharge directly to tank zones, and
 8. Changing well locations or capacities from the values assumed in this discovery may alter the on-site improvements discussed in this discovery.

In addition, TMWA will require the Applicant to contribute to TMWA's efforts to stabilize groundwater levels in the Mt. Rose and Galena alluvial fans. TMWA's plan to stabilize groundwater levels is to use creek water while surface water runoff is seasonally available, and supplement the creek water with groundwater wells during peak demands. The applicant's responsibility toward TMWA's efforts to stabilize groundwater levels will consist of dedication of creek water rights (in addition to dedication of groundwater rights and development of groundwater wells) and financial contribution toward the construction of a new surface water treatment plant (TMWA's Area 15 Surface Water Treatment Plant). Financial contributions will be pro-rated based on the project's demand.

It is possible groundwater supplies sufficient to meet the project demand cannot be located on site. In that case, the Applicant might be able to import water from other sources. One such source would be the Sierra Reflections project located nearby and under common ownership.

For the purposes of discovery, it is assumed the project will require the completion of both St. James's wells 3 and 4, each with a nominal 300 gpm production capacity.

Fire Flows

Next to a sustainable water supply, the second most difficult aspect of service to the proposed project is the provision of fire flow. Exhibit 3 shows the existing system fire flows with existing facilities, all wells running, and the tank storage level at the bottom of fire storage. Fire flows are limited by the tree structure of the existing system, relatively high service elevations on the tree, and relatively small pipe diameters along the system backbone.

The addition of the proposed project worsens fire flows in the existing development by increasing the ordinary demands on the system. Exhibit 4 shows fire flows with the additional of the proposed project, but before any additional looping or improvements to the existing distribution system are made. As with Exhibit 3, the data used in Exhibit 4 was modeled with all wells running and the tank level set to the bottom of fire storage.

This discovery assumes the fire flow requirement for the existing and proposed development is 2,500 gpm, consistent with International Fire Code requirements for stick-built residences of up to 9,600 square feet. For reference, the largest existing residence in St. James's Village has a footprint of approximately 10,000 square feet. While the building footprint is not necessarily the square footage used in calculation of the fire flow requirement, it does give an indication of the size of residences expected. The International Fire Code allows for the reduction of fire flow requirements if internal fire suppression systems (fire sprinklers) are installed. Establishment of

the fire flow requirement is done on a building-by-building basis by the Truckee Meadows Fire Protection District at the time of application for building permits.

Fire flows are the worst for existing and proposed development south of Brown's Creek. To the north of Brown's Creek, the transmission main for the two proposed wells provides a convenient means of looping the nearby zones, and in so doing provides adequate fire flows. To the south of Brown's Creek, the existing system configuration forces all flow through a single main, which decreases in diameter from 12 inches at the tank to 8 inches in diameter at the services. To achieve a 2,500 gpm fire flow to the proposed project, several improvements were considered. Listed in order of decreasing effectiveness, the improvements considered included:

1. Additional looping from Joy Lake Road to the existing termination of Timberlake Court,
2. Installation of a double check valve on the hydrant extension into private property at the existing termination of Timberlake Court,
3. Installation of a Pressure Regulating Station on Joy Lake Road adjacent to Green Ash Road, and
4. Installation of a second pipeline crossing Brown's Creek parallel to Joy Lake Road.

These improvements are shown on Exhibit 5 and are discussed in more detail in the Service Plan section of this discovery. The final fire flow with the proposed service plan is shown in Exhibit 6.

Fire flow improvements that were considered but rejected include:

1. A parallel tank main between Joy Lake Road and Bennington Court in the existing dirt access road. This improvement had minimal impact on fire flows and was therefore rejected, and
2. A pump station at the existing termination of West Pinewild Court. This pump station would have pumped from the merged St. James 1/Joy Lake 2 zones (see service plan, below) to the termination of the St. James tank zone south of Brown's Creek. This improvement was unable to satisfy fire flow requirements.

Storage

The project is expected to add the following requirements to storage:

Emergency Storage: 1 average day @ 179 gpm =	257,760 gallons
Operating Storage: 15% of maximum day at 467 gpm =	<u>100,872</u>
Total:	358,632 gallons

The St. James's tank currently has 359,760 gallons of unattached storage capacity. TMWA's system currently has adequate storage to accommodate the project.

Regional Integration

The project lies between the existing St. James's system and proposed projects to the east and north. The proposed project to the east, Sierra Reflections, is under common ownership with the St. James's development. To provide support for the Sierra Reflections project, the

Applicant will be expected to set aside a location for a pressure regulating station to provide support for the Sierra Reflections project.

In addition, as a condition of annexation, the Applicant will be required to grant TMWA a public utility easement for waterline construction and maintenance between St. James Parkway and the St. James Well 4 site. The purpose of this easement is for integration of the St. James's system with future development to the north, and for mutual support between the St. James's system and other parts of TMWA's system.

Phasing

This discovery does not consider any potential phasing plan. The Applicant will be responsible for ensuring that all phases of the project are capable of meeting TMWA and regulatory requirements without the addition of future phases.

Site Topography

The project site is divided by the Brown's Creek drainage. The Applicant will be required to provide looping to all services despite the presence of the drainage. The maximum allowable slope of installed pipe is 10%, and the creek crossings themselves will require special construction. The Applicant is referred to TMWA design standard sections 1.1.06 and 1.1.20.04 for further information.

SERVICE PLAN

The proposed Project includes construction of 239 residential units. The lots will be distributed into five pressure zones, including two new pressure zones, and one formed by merging two existing zones. See Exhibit 5. Significant features of the service plan are:

1. Two new wells, the St. James 3 and 4 wells. These two wells have been drilled (in 1993) as exploration wells, and were tested at approximately 150 gpm each. Both had water that met the then current drinking water regulations. Each of these wells will need to be redrilled and equipped as production wells. As discussed elsewhere in this discovery, the sustainable production capacity of these wells will need to be demonstrated to TMWA's satisfaction.

The wells will discharge to the tank zone via a new pipeline installed in St. James Village HOA property along the northern boundary of the existing development.

2. A dual zone regulating station at the St. James Well 4 site. One of the zones will discharge to the St. James 2 regulated zone on the upstream side of the existing St. James Pressure Regulating Station 3 via a pipeline installed through property owned by St. James Village Inc. The second zone will discharge to the St. James 3 regulated zone via a pipeline along the northern boundary of the project to the eastern end of the project. This will provide looping to the St. James 2 and 3 regulated zones.
3. A pipeline across Brown's Creek from the St. James 2 Pressure Regulating Station to Joy Lake Road. This pipeline will merge the existing St. James 1 and Joy Lake 2 zones, and provide required looping to both zones.

-
4. Six single zone pressure regulating stations. One station provides looping for new lots added to the merged St. James 1/Joy Lake 2 zones (item 3 above). Four stations provide looped supply into each of two new pressure zones. The sixth station is on Joy Lake Road adjacent to Green Ash Road (Item 5.C. below).
 5. Fire flow improvements to tank zone lots south of Brown's Creek (see fire flow discussion above). It should be noted that while items A and D below are categorized as fire flow improvements, they also fulfill looping requirements, and that TMWA will not consider additions to any area that will not be adequately looped.
 - A. Additional looping from Joy Lake Road to the existing termination of Timberlake Court. This alignment was chosen to cover the best topography, and avoid undeveloped land. The alignment crosses land owned by St. James Village HOA, the Gourley Family Trust (APN 046-190-16), and the Marud-Rivas Family Trust (APN 156-082-01). The alignment starts at Joy Lake Road on the south side of Brown's Creek, and terminates at the existing end of Timberlake Court. The new looping pipeline will parallel existing pipe in Pine View Court and Timberlake Court. If right-of-way cannot be secured for this alignment, alternate alignments may be possible, but were not investigated.
 - B. Installation of a double check valve on the hydrant extension into private property at the existing termination of Timberlake Court. This will maintain positive pressure at the local distribution system high point during fire flow demands.
 - C. Installation of a Pressure Regulating Station on Joy Lake Road adjacent to Green Ash Road. The PRS will be used to deliver additional water from higher zones in the Mt. Rose water system during fire flows. The delivery of water from Mt. Rose will decrease the flows out of the St. James Tank, resulting in higher pressures in the St. James system during fire flows.
 - D. Installation of a second pipeline crossing Brown's Creek parallel to Joy Lake Road. This is necessary to reduce frictional losses in the current single Brown's Creek crossing and provide redundant supply to the proposed lots in the St. James Tank zone south of Brown's Creek.

Service Pressure and Elevation

Due to elevation changes in the project, two new pressure zones will be required to maintain service pressures in the project between 45 and 100 psi. Exhibits 7 through 9 show the proposed service pressures and pipe diameters.

Cost Opinion

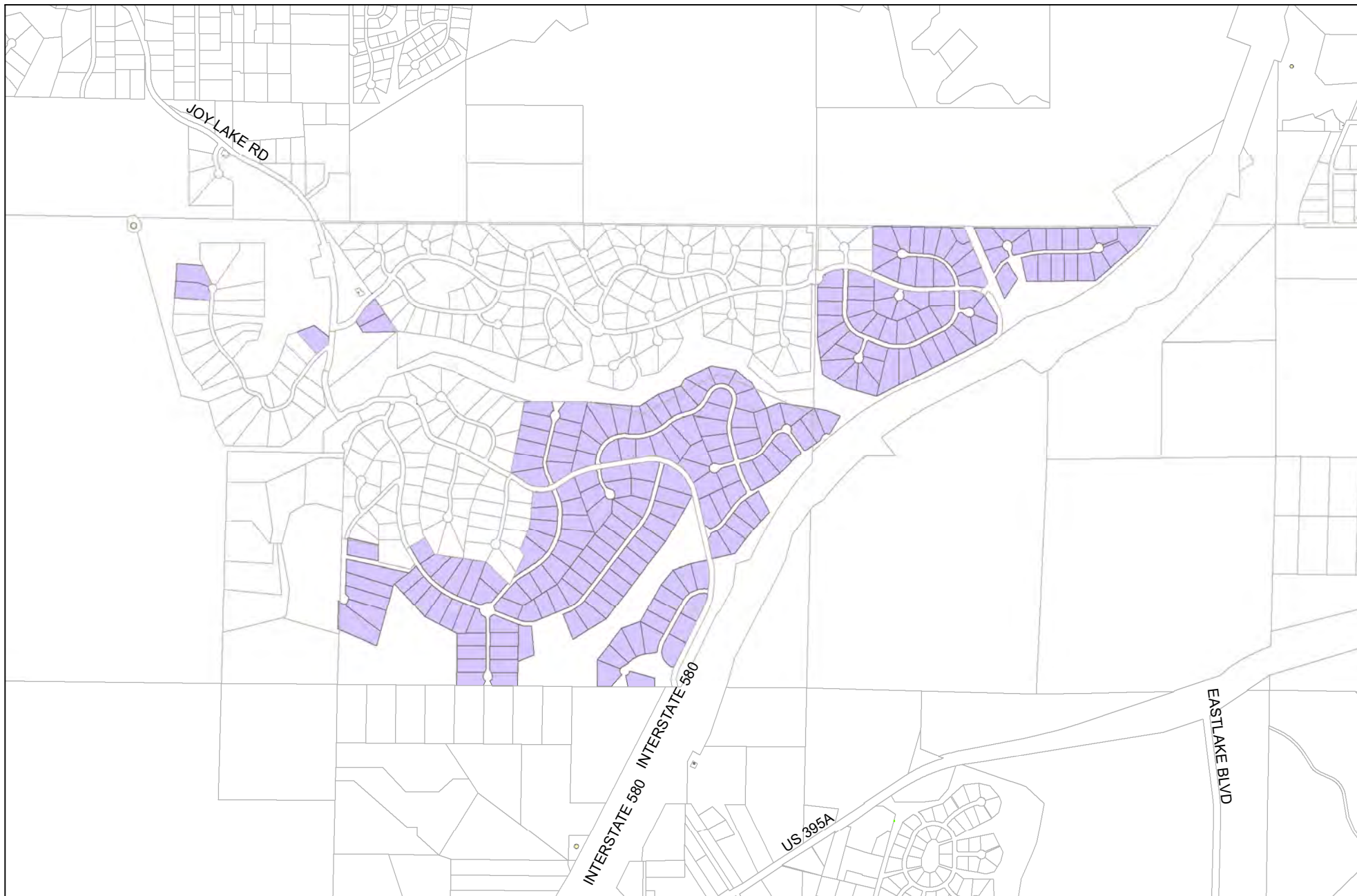
The cost opinion for the proposed project includes TMWA's facility fees, off-site improvements, and major or unusual on-site costs. The cost opinion for major improvements for the proposed Project is presented in Table 1.

Table 1. Cost Opinion for Major Improvements

Imp. #	Description	Quantity	Units	Unit Cost	Extension
1	New Production Wells	2*	Ea.	\$2,000,000	\$4,000,000
	8" Diameter Production Well Discharge Piping	5600	LF	\$120	\$672,000
2	Dual Zone Regulating Station at SJ Well 4 Site	1	Ea.	\$125,000	\$125,000
	8" Diameter Looping pipeline to SJ 2 Reg Zone	700	LF	\$120	\$84,000
	8" Diameter Looping pipeline to SJ 3 Reg Zone	3400	LF	\$120	\$408,000
3	8" Diameter Looping Pipeline to Merge St. James 1 & Joy Lake 2 Reg Zones	2800	LF	\$160	\$448,000
4	New regulator Stations	6	Ea.	\$75,000	\$450,000
5.A	10" Diameter St. James Tank Zone Looping Pipeline	4400	LF	\$200	\$880,000
	8" Diameter St. James Tank Zone Looping Pipeline	500	LF	\$160	\$80,000
	Right-of-Way acquisition for St. James Tank Zone Looping Pipeline	1	Ea.	\$50,000	\$50,000
5.B	Double Check Valve at Timberlake Court Termination	1	Ea.	\$75,000	\$75,000
5.C	Included in item 4. above				\$ -
5.D	8" Diameter Brown's Creek Crossing Parallel to Joy Lake Road	1500	LF	\$160	\$ 240,000
---	Area 15 Surface Water Treatment Plant Fee	467	Maximum Day gpm	\$8,448**	\$3,945,216
TOTAL					\$11,457,216

*Number of wells subject to change

** Fee could be lowered to \$ 3,497/gpm if Applicant provides and dedicates acceptable creek water rights



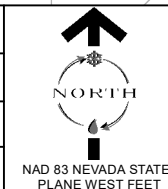
ST. JAMES'S DISCOVERY
PROPOSED DEVELOPMENT

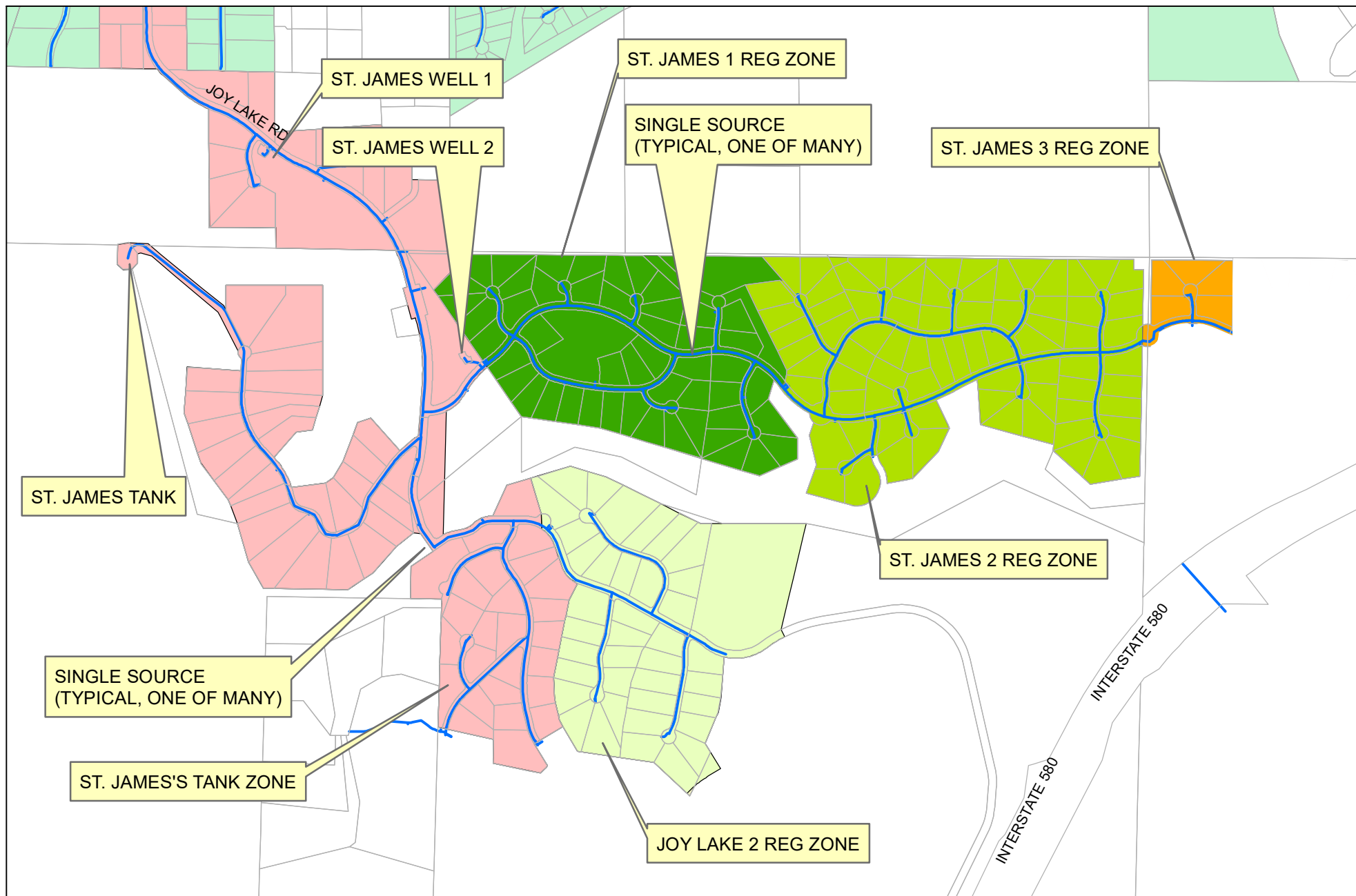
EXHIBIT 1

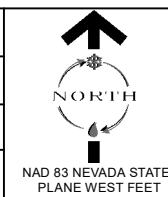
WORK ORDER: 15-4624

DATE: 12-1-2015

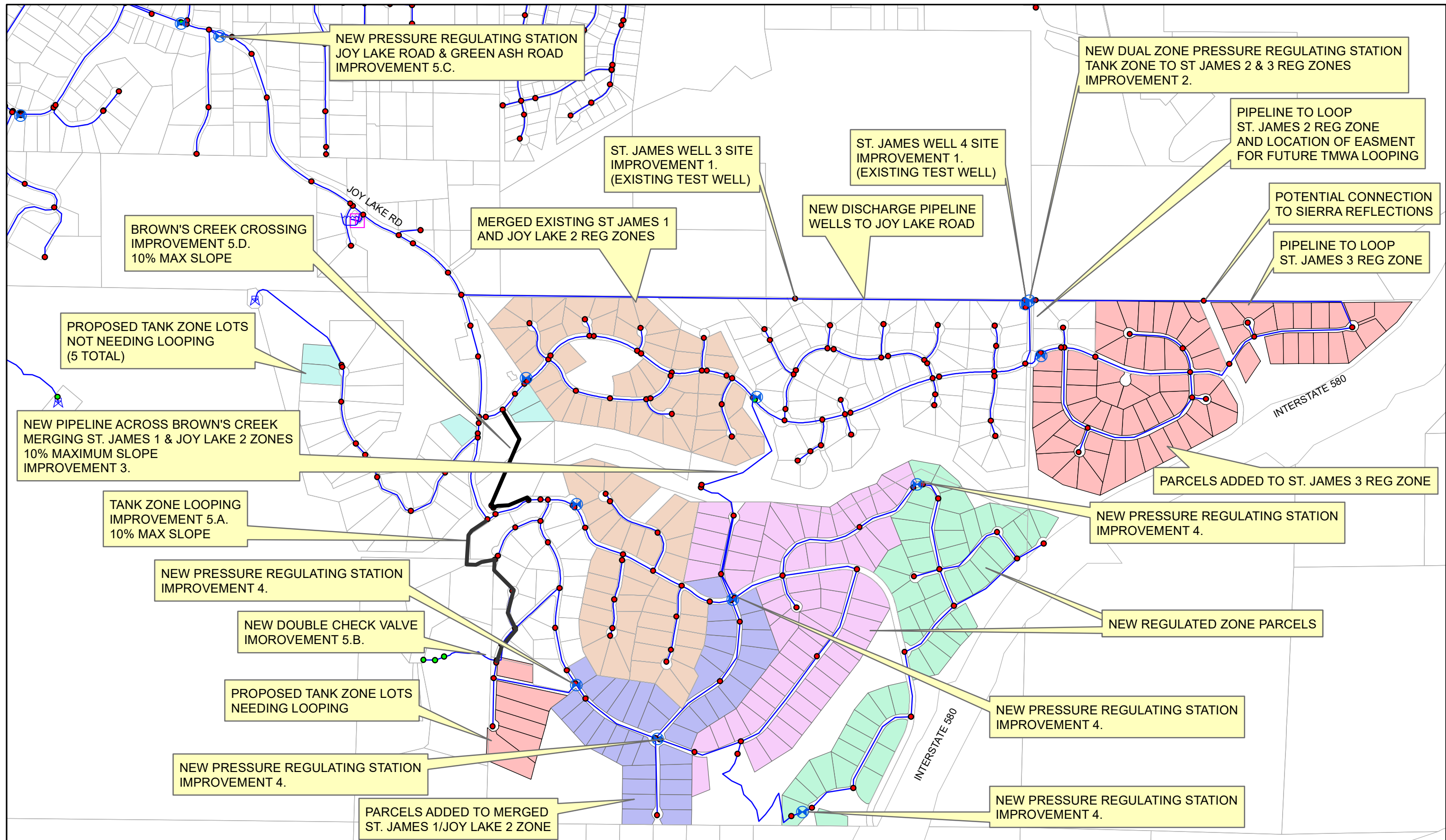
SCALE: 1 inch = 1,500 feet



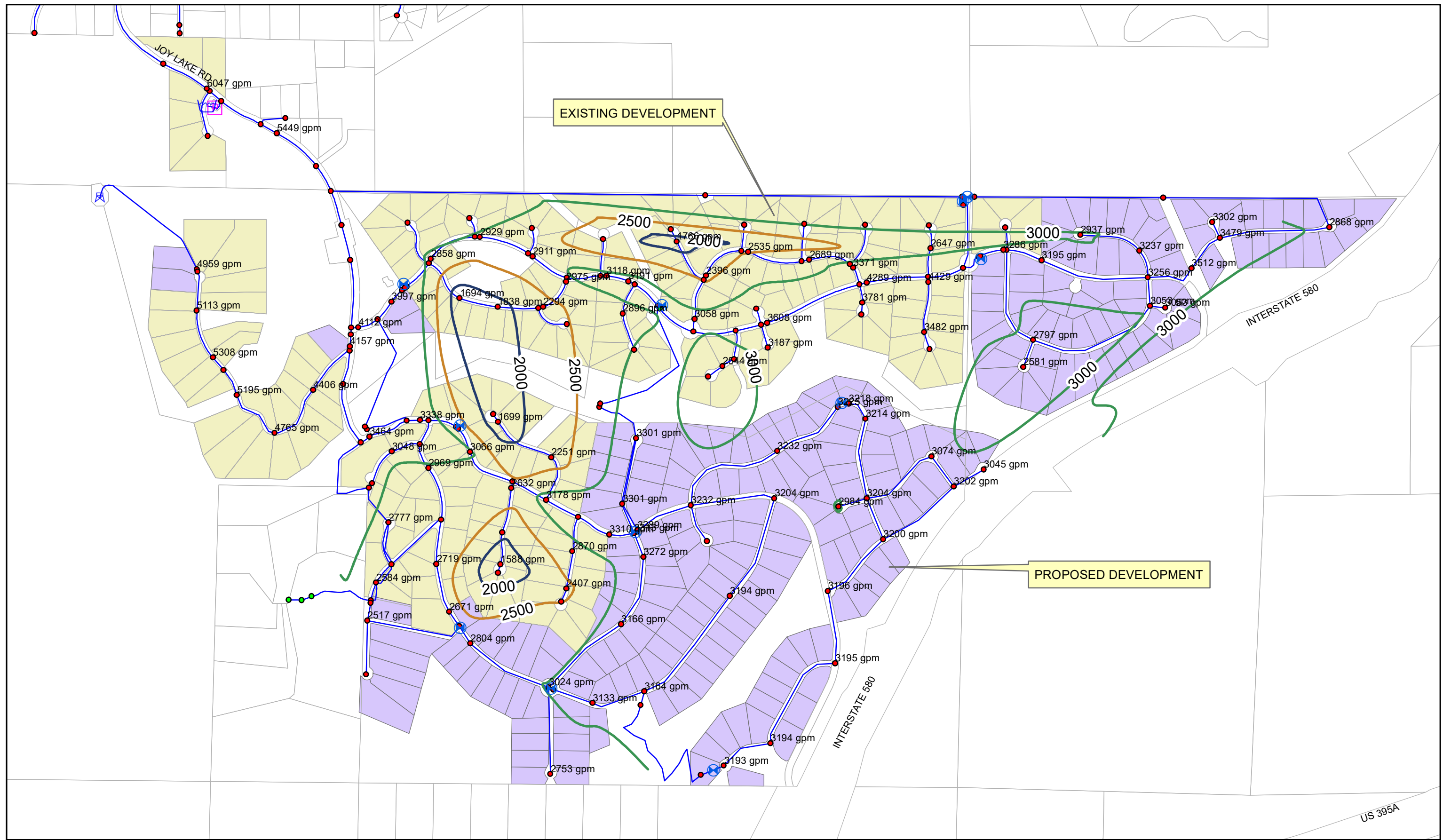


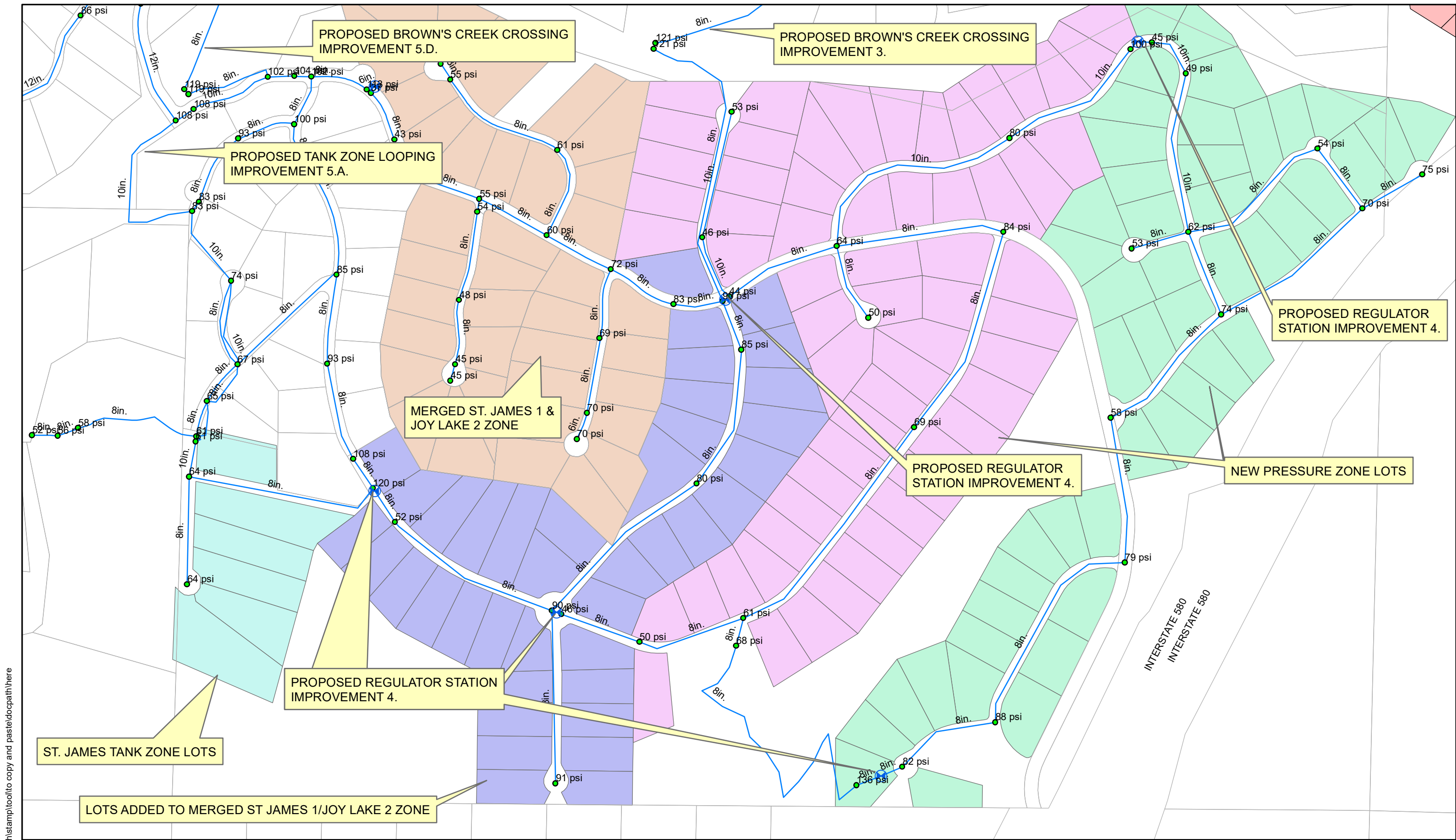


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ST. JAMES'S DISCOVERY
PIPE DIAMETERS AND MAXIMUM DAY PRESSURES

EXHIBIT 8
WORK ORDER: 15-4624
DATE: 12-8-2015
SCALE: 1 inch = 400 feet





Date: November 15, 2021

To: Nancy Raymond

From: David Nelson *DN*

RE: 21-8275, St. James's Village Unit 1H & 2C Discovery 2, +/- 24 Lots (APNs: 156-040-14 & 156-111-23)

The New Business/Water Resource team will answer the following assumptions on each new discovery:

- Is the property within Truckee Meadows Water Authority's water service territory?
- Does the property have Truckee River water rights appurtenant to the property, groundwater or resource credits associated with the property?
 - If yes, what is the status of the water right: Agricultural or Municipal and Domestic use?
- Estimated water demand for residential and or commercial projects.
- Any special conditions, or issues, that are a concern to TMWA or the customer.

The following information is provided to complete the Discovery as requested:

- A portion of these subject parcels (APNs: 156-040-14 and 156-111-23) are not within Truckee Meadows Water Authority's (TMWA's) service territory. An annexation is required for those outside of our service territory.
- There are no resource credits or Truckee River decreed water rights appurtenant to these properties. The developer will be required to follow TMWA's current rules, specifically Rule 7, and pay all fees for water rights needed in order to obtain a will serve commitment letter.
- Based on the information provided by the applicant this project "St. James's Village Unit 1H and 2C" is estimated to require a domestic demand of **17.30-acre feet (AF)**. Landscaping plans were not provided to TMWA; therefore, a landscaping demand was not determined. Once final plans are submitted, a more accurate demand will be calculated. Please see the attached demand calculation sheet for the **estimated** demand and water resource fees. *Note: Water rights held or banked by the applicant must be dedicated to the project, if acceptable. Applicant does have Area 15 groundwater resources. If applicant also has Whites Creek water, please contact TMWA staff for further clarification on dedication. Area needs to be annexed into TMWA's service area for estimate of demand to be valid.*
- Any existing right of ways and public easements would need to be reviewed, and if needed the property owner will need to grant TMWA the proper easements and/or land dedications to provide water service to the subject properties. Property owner will be required, at its sole expense, to provide TMWA with a current preliminary title report for all subject properties. Owner will represent and warrant such property offered for dedication or easements to TMWA shall be free and clear of all liens and encumbrances. Owner is solely responsible for obtaining all appropriate permits, licenses, construction easements, subordination agreements, consents from lenders, and other necessary rights from all necessary parties to dedicate property or easements with title acceptable to TMWA.

ST. JAMES'S VILLAGE UNIT 1H & 2C
GROUND WATER RESOURCE
CALCULATION WORKSHEET

Line No.	Lot Number	Lot Size	Demand Calculation
1	554	61,203	<u>0.74</u>
2	555	59,023	<u>0.74</u>
3	556	45,305	<u>0.70</u>
4	557	45,024	<u>0.70</u>
5	558	42,883	<u>0.69</u>
6	559	44,724	<u>0.70</u>
7	560	59,373	<u>0.74</u>
8	561	79,135	<u>0.78</u>
9	562	53,477	<u>0.72</u>
10	563	46,243	<u>0.70</u>
11	564	49,425	<u>0.71</u>
12	901	55,390	<u>0.73</u>
13	902	63,312	<u>0.75</u>
14	903	57,743	<u>0.74</u>
15	904	45,383	<u>0.70</u>
16	905	46,436	<u>0.70</u>
17	906	63,323	<u>0.75</u>
18	907	44,382	<u>0.70</u>
19	908	46,495	<u>0.70</u>
20	909	50,784	<u>0.72</u>
21	910	54,317	<u>0.73</u>
22	911	50,557	<u>0.72</u>
23	912	51,741	<u>0.72</u>
24	913	53,152	<u>0.72</u>

17.30

Less: Demand Credits

0.00

NET PROJECT DEMAND

17.30

Water Rights (0.11 AF per AF of total demand)

0.00 NA

Return Flow (based on Permit used for dedication)

0.00 (Estimation Only) NA

TOTAL WATER RIGHTS REQUIRED

17.30

Price of Water Rights per AF

\$7,700

TOTAL COST OF WATER RIGHTS

\$ 0

Water Resource Sustainability (AF of Net Project Demand)

\$1,600

\$ 0

Will Serve Letter Preparation

\$ 150

TOTAL TO TRUCKEE MEADOWS WATER AUTHORITY

\$ 150

=====

SUBMITTED BY: St James Village Inc.

PHONE: Ken Krater 775.815.9561

APN: 156-040-14 & 156-111-23

DATE: 11/15/2021

PROJ NO: 21-8275

CALCED BY: David 834-8021

REMARKS: Price of Water Rights is subject to change; please call for current price.

Applicant will dedicate acceptable Area 15 groundwater. If applicant has Whites Creek

water, please contact TMWA staff for further clarification on dedication requirements.

TRUCKEE MEADOWS WATER AUTHORITY
MATTERS BEFORE HEARING OFFICER

In the Matter of:)
)
ST. JAMES VILLAGE, INC.,)
a Nevada corporation)
)
Petitioner,)
)
v.)
)
TRUCKEE MEADOWS WATER)
AUTHORITY, a joint powers authority)
Under NRS 277)
)
Respondent)
_____)

Hearing Date: March 31, 2022

**FINDINGS OF FACT, CONCLUSIONS OF LAW AND FINAL DECISION OF THE
HEARING OFFICER**

In this matter, both parties submitted Pre-Hearing Briefs and a supplemental brief regarding the legal impact of property being reverted to acreage under NRS 278.490 *et seq.*

During the Hearing, St. James Village, Inc. (“SJV”) was represented by its attorney, Evan Champa, who presented no witnesses. Truckee Meadows Water Authority (“TMWA”) was represented by John Zimmerman; Stefanie Morris; and Matthew Addison, TMWA’s attorney. TMWA presented two witnesses: Scott Estes and John Enloe. The Hearing lasted approximately two and one-half hours.

The relief requested by SJV is to vacate the following determinations in TMWA’s DISCOVERY -St. James Village Discovery 2__Annexation 1H_2C; PLL# 21-8275 (the “Discovery”) issued February 15, 2022:

1. That SJV must construct and dedicate to TMWA the offsite water mains shown in the Discovery;
2. That SJV must construct and dedicate to the Authority water mains to loop the existing water facility system which would cross Brown's Creek;
3. That SJV is located within Area 15 and subject to the Area 15 Facility Charge;
4. That SJV must dedicate further water rights for the Development; and
5. That the Wells are incapable of producing sufficient water for the Development.

SJV asserts that this relief is appropriate because the Discovery (1) violates the United States and Nevada Constitutions; (2) breaches TMWA's contractual obligations; (3) is erroneous in view of the reliable, probative, and substantial evidence on the record; and (4) TMWA has acted arbitrarily, capriciously and in violation of its authority.

TMWA Rule 8 Standard of Review

Under TMWA Rule 8(C)(6), the Petitioner, SJV, shall bear the burden of proof in this hearing. In addition, TMWA Rule 8(C)(6) states: the "Hearing Officer shall comply with the standards for review set forth in subsection 3 of NRS 233B.135 which states as follows:

3. The court shall not substitute its judgment for that of the agency as to the weight of evidence on a question of fact. The court may remand or affirm the final decision or set it aside in whole or in part if substantial rights of the petitioner have been prejudiced because the final decision of the agency is:

- (a) In violation of constitutional or statutory provisions;
- (b) In excess of the statutory authority of the agency;
- (c) Made upon unlawful procedure;
- (d) Affected by other error of law;
- (e) Clearly erroneous in view of the reliable, probative and substantial evidence on the whole record; or
- (f) Arbitrary or capricious or characterized by abuse of discretion.

For purposes of clarification, subsection 4 of NRS 233B.135 states: "As used in this section, "substantial evidence" means evidence which a reasonable mind might accept as adequate to support a conclusion."

TMWA Rule 8(C)(7) states that the Hearing Officer's "Findings of Fact must be based exclusively on substantial evidence and on matters officially noticed."

7 Infill Lots

The 7 infill lots discussed in the briefs are not included in this decision as they were not part of the Discovery, and TMWA properly notified SJV as such by letter dated December 23, 2021 (TMWA Exhibit 4).

TMWA's Decision to Require SJV to Construct and Dedicate to TMWA the Offsite Water Mains Shown in the Discovery and to Require SJV to Construct and Dedicate to the Authority Water Mains to Loop the Existing Water Facility System

SJV argues that TMWA arbitrarily vacated the County's findings regarding the infrastructure required to supply municipal water to the Development's future residents. The facts and the law do not support this assertion.

In 2011, SJV voluntarily requested that the property at issue in the Discovery be reverted to acreage pursuant to NRS 278.490. SJV was unable to locate the actual application that was submitted but admits in its supplemental brief that the reversion to acreage was not a result of an expired map as set forth in NRS 278.360(1)(b). NRS 278.490 refers to a voluntary request by the applicant to revert any recorded subdivision map, parcel map, or map of division into large parcels. I, therefore, reject SJV's assertion that the TM and associated entitlements are not terminated simply because SJV reverted some of its maps to acreage for two reasons. First, the new map replaces any prior recorded maps as set forth in NRS 278.490. Second, it is untrue that associated entitlements are not terminated upon a reversion. If that was true, why would SJV have needed to seek a new sewer will serve letter as set forth in SJV Exhibit 21? I, therefore, find that the legal effect of the 2011 reversion to acreage is that the lots created by the prior recorded subdivision maps are no longer in existence and any entitlements related to those lots were relinquished as of the date of the reversion. As no prior commitments are binding, any applications or requests for services on such acreage must be evaluated as new applications and subjected to the requirements of the law in existence at the time of such new requests.

In 1997, the Board of Health amended Nevada Administrative Code ("NAC") Chapter 445A. This Chapter addresses water controls design, construction, operation and maintenance. NAC 445A.6712(1) states: "A distribution system must be designed, to the extent possible, in such a manner as to eliminate dead ends and form a grid system or system of arterial loops." Both parties acknowledge that the tree system utilized by SVJ does not eliminate dead ends or form a grid system or system of arterial loops. The only exception offered in NAC 445A.6712 states: "Except as otherwise justified by an engineer and approved by the Division or the appropriate district board of health, tree systems are prohibited." There is no evidence on the record that SVJ obtained the approval of either the Division of Environmental Protection of the State Department of Conservation and Natural Resources or the District Board of Health. Mr. Estes, in fact, presented evidence that the longest dead ends that the District Board of Health would approve are

800 ft. The dead ends on the proposed Project are 3500 ft. and 6300 ft. as set forth in TMWA Exhibit 21. Mr. Estes testified that these dead ends would also not meet TMWA's design standards and that he would not recommend a variance due to public health and safety reasons. SJV's own engineers confirm that: "Many of the existing distribution water mains contain dead ends, lacking proper looping, which is important for service redundancy and greater fire flow to the customers" (SJV Exhibit 1(B) p.1).

Even if the NAC did not prohibit tree systems and dead ends, TMWA would be acting irresponsibly and contrary to health and safety considerations if it allowed SJV to add additional lots to the existing system without modifications. Mr. Estes testified that the 2,500 gallons per minute fire flow requirement comes from the 2018 International Fire Code Standards. TMWA's Exhibit 23 shows that much of SJV's existing system does not meet that requirement. Adding additional water demand to the system could not make the system perform any better.

Mr. Estes also testified as to how TMWA develops its water model and how the water model and computer modeling are used to determine required additional facilities and the costs for those additional facilities. SJV did not develop a hydrologic water model as set forth in its Exhibit 1(C) p. 39. As such, SJV did not present any evidence that TMWA's water model was not appropriate for determining what additional facilities would be necessary for the Development.

TMWA acted reasonably and its decision was based on substantial evidence in finding that the existing infrastructure for the Project does not meet the NAC requirements or TMWA design standards. For TMWA to have decided any other way would have violated the NAC and exposed the lots covered by the Discovery to inadequate health and safety measures.

Area 15 Inclusion and Fees

SJV asserts that including St. James Village in Area 15 and subjecting SJV to fees for the White's Creek Water Treatment Plant ("WCTP") is an arbitrary decision that is an abuse of discretion. It is clear from Mr. Enloe's testimony, information shown in the Eco:Logic Engineering report in 2002 (TMWA Exhibit 7) and the graph showing the decline in groundwater levels (TMWA Exhibit 6) that over-pumping of the aquifer was resulting in falling groundwater levels and that a program for the mitigation of unreasonable adverse effects of municipal pumping on domestic wells in the Mr. Rose-Galena Fan area was reasonably proposed. TMWA then properly noticed and held two public hearings and two public workshops prior to the TMWA Board of Directors adopting the rate and rule amendments. SJV was included on Groundwater Sustainability Plan map included in 8,000 letters sent in July 2015 (TMWA Exhibit 14, p. 5). Mr. Enloe testified that Mr. Woodside, SJV's representative, told him that he received multiple copies. SJV had the opportunity to challenge these actions at that

time and did not do so. Accordingly, the request to set aside the part of the Discovery stating that SJV is located within Area 15 and subject to the Area 15 Facility Charge is not granted.

TMWA's Decision that the Wells are Incapable of Producing Sufficient Water for the Development and that SJV Must Dedicate Further Water Rights for the Development

Mr. Estes testified that pursuant to NAC 445A.6672, TMWA must determine the maximum daily demand ("MDD") and average daily demand and determine whether the capacity of the wells serving the project is sufficient. Mr. Estes testified that the process set forth in NAC 445A.6672 and TMWA Rule 5 is used with all customers and potential customers of TMWA and that SJV was treated no differently than any other water customer submitting an application for water service.

Though there is some discrepancy as to the total MDD when one compares SJV Exhibit 1(B) p. 8 and TMWA Exhibit 24, TMWA's analysis is reasonable. The real discrepancy comes from what each party thinks is the capacity of SJV's Wells 1 and 2. As long as the positions taken by TMWA in the Discovery are supported by substantial evidence, I may not substitute my judgement for that of the TMWA staff in making the decision to derate the 2 existing SJV wells and demand that SJV dedicate additional water resources in exchange for TMWA's agreement to provide water services. I find, therefore, that TMWA's decision to derate the 2 SJV wells (as well as at least 2 other wells in the area) as part of the larger regional Mt. Rose-Galena Fan Domestic Well Mitigation Program as well as TMWA's demand that SJV dedicate additional water resources as part of the conjunctive use plan are supported by substantial evidence. Pieces of this substantial evidence are found in TMWA's Exhibits 6, 7, 8, 9, 10, 12, 14, 25 and 26.

SJV's asserts that TMWA ignored SJV's substantial evidence; however, Mr. Enloe testified that TMWA staff met with Confluence Water Resources LLC, the authors of the Serpa Well Testing and Groundwater Analysis, and incorporated the results into TMWA's comprehensive model of the area (See TMWA Exhibit 25). John Enloe also testified that John Benedict's information (SJV Exhibit 20) was incorporated into TMWA's regional groundwater model and that all TMWA's regional models look at hydrologic barriers including faults and bedrock. Accordingly, I do not find that the evidence that SJV's submitted with its application for Discovery was ignored or discredited.

Will Serve Letter

SJV argues that it relied on the Will Serve letter dated February 28, 2019 in assuming that the WSF Charge were inapplicable to Unit 2D. TMWA states the letter was an accommodation to assist with getting the lots subdivided. Mr. Champa rejected that assertion. Nevertheless, the letter contains the following statements:

This commitment is made subject to all applicable TMWA Rules.
This commitment does not constitute an obligation to provide

water service to the Project under NAC 445A or to provide planning, design, or construction of the water facilities necessary for service to the project. The provision of water service is conditional upon applicant's satisfaction of all other applicable provisions of TMWA's Rules and Rate Schedules and requirements of the local health authority, including without limitation and where applicable, the submission of a specific developmental proposal with a complete Application for Service, payment of fees, review and approval of a water facilities plan, the construction and dedication of water system facilities, final approval of the water facility plan by the local health authority, and approval of and execution of a Water Service Agreement.

Since this language specifically states: "The provision of water service is conditional upon applicant's satisfaction of all other applicable provisions of TMWA's Rules and Rate Schedules ..., including without limitation and where applicable, ...payment of fees, ...," I reject the assertion that SJV reasonably relied upon this letter to determine that the WSF Charge was not applicable.

Contractual Breach Issue

TMWA was not a party to the Pagni Purchase Agreement (SJV Exhibit 4) and did not assume it in the merger with Washoe County Water Resources in 2014 (TMWA Exhibit 15). I, therefore, find that there can be no breach of contract by TMWA.

Constitutional Taking Issue

SJV makes three separate arguments regarding the taking of its water rights in violation of the United States and Nevada Constitutions. The first argument is that TMWA has taken its water rights. However, TMWA responded that TMWA has banked SJV's water rights while SJV pursues its tentative and final maps for its development. TMWA further stated that at any time, at SJV's request, TMWA will return the undedicated water rights to SJV, and they can be retained pending the filing of an application for water service on its development, sold on the open market, or put to use in the formation of SJV's own water system provider, separate from TMWA. Therefore, this cannot be a taking in violation of the US Constitution or the Nevada Constitution.

SJV's second taking argument is that TMWA's decision to request different water rights in exchange for its agreement to provide water service "effectively nullifies a large portion of [SJV's] Water Rights" and "is per se forfeiture of the certificated portion and cancellation of remaining permitted portion of the Water Rights" (SJV Brief, p. 9). I disagree and find that no water rights have been taken with TMWA's decision to request additional water rights in exchange for water service. SJV's brief states: "The Takings Clause of the United States and

Nevada Constitutions prohibits the state from taking private property for public use without just compensation (SJV p. 2). There has been no taking of private property because, as discussed above, all un-dedicated water rights can be returned by TMWA to SJV for its use upon request.

SJV's third taking argument is that there is a taking because TMWA "no longer identifies these alternative water rights as usable for the Development" in the Discovery. The language that SJV refers to is the following language contained in the 2015 Discovery: "It is possible groundwater supplies sufficient to meet the project demand cannot be located on site. In that case, the Applicant might be able to import water from other sources. One such source would be the Sierra Reflections project located nearby and under common ownership." The Discovery contained the following language:

However, alternate sources of supply or mitigations are available for water supply to the Project. This Discovery has identified facility improvements to allow the new units to obtain a water supply from TMWA's regional, conjunctive use system without impacting the local groundwater resources. TMWA is open to consideration of other supply options that do not negatively impact the long-term reliability of existing regional groundwater resources and wells, but understandably it is contrary to public health and prudent water supply management to issue will serve commitments supported solely on unsustainable or unproven sources of water supply. (SJV Exhibit 24, p. 4)

Not only does it appear that TMWA would consider alternate water rights, but the evidence presented at the hearing shows that the new alternate sources are significantly less expensive for SJV than what was proposed in the 2015 Discovery. In the 2015 Discovery, SJV was asked to construct two additional groundwater wells at a cost of \$4 million (Exhibit 16 p. 9) whereas the costs of dedicating surface water rights and paying the Area 15 fees are more than \$2.9 million less (TMWA Exhibit 19 p. 7). Therefore, the decision by TMWA to demand additional water rights from SJV in the Discovery cannot be a taking.

SJV also states that TMWA "arbitrarily and capriciously disregarded its own previous decision to utilize available water sources for water service to the Development." Since TMWA did not disregard its own previous decision, I find that TMWA did not act arbitrarily or capriciously.

Conclusion

TMWA Rule 8 directs my decision making as follows. First, as long as the positions taken by TMWA in the Discovery are supported by "substantial evidence," I may not substitute my judgement for that of the TMWA staff. Second, I may set aside the Discovery, in whole or in part, only if I find proof that the Discovery: (a) violates constitutional or statutory provisions; (b) exceeds the statutory authority of the agency; (c) is made upon unlawful procedure; (d) is affected by other error of law; (e) is clearly erroneous in view of the reliable, probative and

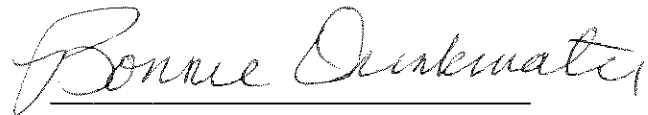
substantial evidence on the whole record; or (f) is arbitrary or capricious or characterized by abuse of discretion. SJV asserts that the relief requested is appropriate because the Discovery: (1) violates the United State and Nevada Constitutions, (2) breaches TMWA's contractual obligations, (3) is erroneous in view of the reliable, probative, and substantial evidence on the record, and (4) TMWA has acted arbitrarily, capriciously and in violation of its authority in doing so.

I therefore make the following findings:

1. The Discovery does not violate either the United States or Nevada Constitutions;
2. No contractual obligations have been breached;
3. The Discovery was reasonably based on substantial evidence in the record; and
4. TMWA did not act arbitrarily, capriciously or in violation of its authority.

As such, I do not grant SJV's request to vacate any determinations in TMWA's Discovery.

Dated: 4/14/22



Bonnie Drinkwater, Hearing Officer

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13 ST. JAMES'S VILLAGE, INC., a Nevada
14 corporation,

15 Petitioner,

16 v.

17 TRUCKEE MEADOWS WATER
18 AUTHORITY; a joint powers authority under
19 NRS 277

20 Respondent.

21 **ST. JAMES'S VILLAGE, INC.'S**
22 **BRIEF/MEMORANDUM OF POINTS**
23 **AND AUTHORITIES IN SUPPORT OF**
24 **PETITION FOR REVIEW OF**
25 **AUTHORITY DECISION**

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COMES NOW, petitioner ST. JAMES’S VILLAGE, INC., a Nevada corporation (“**Petitioner**”), by and through its attorneys of record, HOLLAND & HART, LLP., and hereby files its Complaint against TRUCKEE MEADOWS WATER AUTHORITY, a joint powers authority under Nevada Revised Statutes (“**NRS**”) Chapter 277 (the “**Authority**”).

I. INTRODUCTION

This Complaint is filed pursuant to Authority Rule 8(B)(1). On November 10, 2021, Petitioner filed its Annexation and Discovery Request for a Portion of St. James Village consisting of twenty-eight (28) lots within Units 1H and 2C (the “**Lots**”), attached hereto as Attachment “1” and incorporated herein by this reference (the “**Application**”). On February 15, 2022, the Authority promulgated that certain DISCOVERY-St. James Village Discovery 2_Annexation 1H_2C; PLL#21-8275, attached hereto as Attachment “24” (the “**Discovery**”), with that certain St. James Village_Disc_Annex, TMWA WO# 15-4624 (the “**2015 Discovery**”) in attachment to the Discovery. The Discovery is directly contrary to the substantial evidence contained within Petitioner’s Application.

A. Statement of Applicable Law

“A Person disputing an action taken by the Authority pursuant to [the] Rules may obtain administrative review of the matter by filing a written Complaint with the Authority as provided in this Rule.”¹ Petitioner disputes the Authority’s action because the Authority’s Discovery constitutes a taking, violates the Authority’s contractual obligations, and is arbitrary, capricious, and an abuse of discretion.

The Authority is public agency of Nevada created under the provisions of NRS Chapter 277 and is therefore a state actor. Petitioner is a person as defined in NRS 0.039. “Water rights are a separate ‘stick’ in the bundle of property rights.”²

The Takings Clauses of the United States and Nevada Constitutions prohibit the state from taking private property for public use without just compensation.³ A state may effectuate a

¹ See Authority Rule 8(B).

² *Adaven Mgmt. v. Mt. Falls Acquisition Corp.*, 124 Nev. 770, 191 P.3d 1189 (2008).

³ U.S. Const. amend. V; Nev. Const. art. 1, § 8(6); see also *Chicago, Burlington & Quincy R.R. Co. v.*

1 taking through a “direct government appropriation or physical invasion of private property.”⁴
2 When determining whether a regulation constitutes a compensable regulatory taking, the
3 following factors must be considered: “(1) the regulation’s economic impact on the property
4 owners, (2) the regulation’s interference with investment-backed expectations, and (3) the
5 character of the government action.”⁵

6 An arbitrary or capricious exercise of discretion is one “founded on prejudice or
7 preference rather than on reason.”⁶ An abuse of discretion is “[a] clearly erroneous interpretation
8 of the law or a clearly erroneous application of a law or rule.”⁷

9 **B. Summary of Relief Requested**

10 Petitioner requests that the Hearing Officer vacate the following Authority’s
11 determinations in the Discovery:

- 12 • that Petitioner must construct and dedicate to the Authority the offsite water
13 mains shown in the Discovery;
- 14 • that Petitioner must construct and dedicate to the Authority water mains to “loop”
15 the existing water facility system which would cross Browns Creek;
- 16 • that Petitioner is located within Area 15 and subject to the Area 15 Facility
17 Charge;
- 18 • that Petitioner must dedicate further water rights for the Development; and

19
20 *Chicago*, 166 U.S. 226, 238-41, 17 S. Ct. 581, 41 L. Ed. 979 (1897)

21 ⁴ *Lingle v. Chevron U.S.A. Inc.*, 544 U.S. 528, 537, 125 S. Ct. 2074, 161 L. Ed. 2d 876 (2005); *see also*
22 *McCarran Int’l Airport v. Sisolak*, 122 Nev. 645, 662, 137 P.3d 110, 1121-22 (2006).

23 ⁵ *Sisolak*, 122 Nev. at 663, 137 P.3d at 1122; *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 124,
24 98 S. Ct. 2646, 57 L. Ed. 2d 631 (1978).

25 ⁶ Black’s Law Dictionary, 119 (9th ed. 2009) (defining “arbitrary”), or “contrary to the evidence or
26 established rules of law,” *id.* at 239 (defining “capricious”). *See generally City Council v. Irvine*, 102 Nev. 277, 279,
27 721 P.2d 371, 372 (1986) (concluding that “[a] city board acts arbitrarily and capriciously when it denies a license
28 without any reason for doing so”).

⁷ *Steward v. McDonald*, 330 Ark. 837, 958 S.W.2d 297, 300 (Ark. 1997); *see Jones Rigging and Heavy*
Hauling v. Parker, 347 Ark. 628, 66 S.W.3d 599, 602 (Ark. 2002) (stating that a manifest abuse of discretion “is one
exercised improvidently or thoughtlessly and without due consideration”); *Blair v. Zoning Hearing Hd. of Tp. of*
Pike, 676 A.2d 760, 761 (Pa. Commw. Ct. 1996) (“[M]anifest abuse of discretion does not result from a mere error
in judgment, but occurs when the law is overridden or misapplied, or when the judgment exercised is manifestly
unreasonable or the result of partiality, prejudice, bias or ill will.”).

- that the Wells are incapable of producing sufficient water for the Development.

The relief Petitioner requests herein constitutes an appropriate remedy because the Authority has issued a Discovery that violates the United States and Nevada Constitutions, breaches the Authority's contractual obligations, is erroneous in view of the reliable, probative, and substantial evidence on the record, and the Authority has acted arbitrarily, capriciously, and in violation of its authority in doing so. Therefore, the Hearing Officer should set aside the Authority's Discovery in its entirety.

II. FACTUAL BACKGROUND

The St. James's Village Development ("**Development**") is located on the hydrographic boundary of Washoe Valley and Pleasant Valley in Washoe County, Nevada, off Joy Lake Road, as more specifically set forth in the various deeds attached hereto as Attachment "2" (the "**Land**"). Appurtenant to the Land are 720 acre-feet of the beneficial interest in groundwater rights, as more specifically set forth in Attachment "3" (the "**Water Rights**"), which had been dedicated to Washoe County (the "**County**") pursuant to that certain Purchase Agreement, attached hereto as Attachment "4". Petitioner purchased the Land and Water Rights in 1992⁸ with plans to develop the Land with a high-class residential development and other amenities.

To facilitate its planned development, Petitioner began its engineering design and submitted its Tentative Map Application (with all amendments and supplements, the "**TM**"), attached hereto as Attachment "6", to Washoe County, which was subsequently reviewed by the Washoe County Department of Water Resources. The Washoe County Department of Water Resources reviewed and subsequently approved the Development's TM (as more fully set forth in Attachment "7", attached hereto), and, upon TM approval, the County included the Land in its municipal service area. (*See, e.g., Attachment "8"*, attached hereto). Petitioner then began moving forward with its phased Development by completing and recording in the official records of the Washoe County Recorder twelve (12) Final Maps identified in Attachment "9"). Upon completion of the improvements required by each Final Map, the Petitioner dedicated, and

⁸ See Attachment "2".

1 Washoe County accepted, the applicable infrastructure to the County, including water wells and
2 pump houses, water storage tanks, transmission lines and other pertinent infrastructure.

3 Particular to the water facilities, in 1996 Petitioner constructed a 1,010,000 gallon water
4 storage tank and two production wells as shown in Attachment “10”, attached hereto, to provide
5 water service to the entire Development. Well No. 1 is a 10-inch diameter production well,
6 constructed to a depth of 520 feet (see Attachment “11”, “**Well No. 1**”) and Well No. 2 is a 10-
7 inch diameter production well, constructed to a depth of 510 feet (see Attachment “12”, “**Well**
8 **No. 2**” and, together with Well No. 1, the “**Wells**”). The water distribution facility pipelines
9 were constructed according to the County’s approved “Tree system” (as shown in Attachment
10 “10”, attached hereto). Petitioner rightfully anticipated that it could continue its development of
11 the remaining tentatively-mapped lots without substantial changes to the approved water supply
12 system.

13 However, on January 29, 2010, pursuant to that certain *Interlocal Agreement Governing*
14 *the Merger of the Washoe County Department of Water Resources Water Utility into the Truckee*
15 *Meadows Water Authority*, the Authority acquired the County’s municipal purveyor obligations
16 and, as a part of that acquisition, acquired the Water Rights and the Development’s existing
17 water facilities. Instead of relying on the expertise and professional judgment of the Washoe
18 County Department of Water Resources, the Authority chose to not include the remaining
19 County-approved TM lands associated with the Development, which included areas with
20 recorded final maps.⁹

21 Particular to the Development, the Authority’s action was substantial, as the entire TM
22 area was approved for water service according to the conditions of approval for the TM and
23 acceptance of the constructed water infrastructure. As such, the undeveloped Land which was
24 considered annexed into the County’s water service area was thereafter not considered annexed
25 into the Authority’s Water Service Area (as shown in Attachment “13”, attached hereto).

26
27
28 ⁹ Due to the economic impact on the real estate market from the recession of 2008, the rest of the County-
approved TM lands reverted to acreage (see Attachment “9”).

1 Seemingly, this subjected the Petitioner to begin its mapping process anew, but only in regards to
2 the Authority's approval process.

3 During Petitioner's earnest development of the Development, the Authority constructed
4 the White's Creek Surface Water Treatment Facility which, according to the Authority, is used
5 as a conjunctive management tool to rectify the groundwater drawdown on the Mt. Rose alluvial
6 fan caused by extensive groundwater pumping from numerous domestic wells. To pay for the
7 costs of construction, the Authority subjected all lands within Area 15 (the map of which is
8 attached hereto as Attachment "1", Exhibit E) to a Water Service Facility Fee ("**WSF Charge**").
9 According to the Authority, the undeveloped Land associated with the Development is subjected
10 to this WSF Charge.

11 On June 21, 2019, the Petitioner recorded a Final Map for Unit 2D (attached hereto as
12 Attachment "15") which was approved by the Authority. Even though the Authority issued a
13 will-serve letter (*see* Attachment "16", the "**Will-Serve**") and the Nevada Department of
14 Conservation and Natural Resources, Department of Water Resources (the "**State Engineer**")
15 confirmed utilization of the Water Rights for Unit 2D (*see* Attachment "17"), the Authority
16 failed to annex in the applicable Unit 2D land, further failed to have a Water Service Agreement
17 executed, and did not obtain the applicable WSF Charge prior to issuance of the Will-Serve.
18 Petitioner justifiably assumed the WSF Charges were inapplicable based on issuance of the Will-
19 Serve and rightfully continued its development of the Development.

20 **III. ARGUMENT**

21 **A. In General**

22 Petitioner challenges the Authority's Discovery because: (A) the Authority effectively
23 forfeits Petitioner's beneficial interest in the Water Rights because the Authority (1) based its
24 findings on data which included Authority utilization of Water Rights for residential
25 developments outside the Development and (2) arbitrarily and capriciously disregarded its own
26 previous decision to utilize available water sources for water service to the Development; (B)
27 subjected the Petitioner to the WSF Charge based on an abuse of discretion; and (C) arbitrarily
28

1 vacated the County's findings regarding the infrastructure required to supply municipal water to
2 the Development's future residents.

3 **B. The Authority Reduces Petitioner's Beneficial Interest in the Water Rights**

4 At no small expense, Petitioner purchased Water Rights so that it could have a sufficient
5 and reliable supply of water for its Development. The purchased Water Rights are among the
6 most senior in priority in the Pleasant Valley Hydrographic Basin (see Attachment "5"), thereby
7 adding protection in the event of curtailment. The Water Rights are also of a quantity capable of
8 supplying the Development with the necessary water so future water right dedications would be
9 unnecessary. Similarly, the groundwater Wells used as points of diversion for the Water Rights
10 have the necessary hydrogeologic characteristics to actually develop the aquifer and satisfy the
11 Development's water needs.

12 The Authority, however, cuts against these simple facts. In its Discovery, the Authority
13 incorrectly based its findings on faulty data and an erroneous interpretation of the controlling
14 law. These determinations contemplate reducing Petitioner's Water Rights without following the
15 proper statutory procedures under NRS Chapter 533 and turning a blind eye to its contractual
16 obligations. If approved, the Authority will be reducing Petitioner's property rights, as "water
17 rights are a separate 'stick' in the bundle of property rights."¹⁰ Most alarming is the Authority's
18 decision will not only be done without just compensation,¹¹ but actually required the Petitioner to
19 pay to the Authority added fees.

20 1. The Authority included excess use of the Water Rights

21 The Authority's Discovery utilized hydrologic data which purported to show a decline in
22 depth-to-water in the Wells. The Authority used its interpretation of its monthly metered data –
23 supplied to Petitioner, but not its supervisory control and data acquisition information
24 ("SCADA") – to decide the Wells could not supply the future Development with a reliable water
25 supply because of the groundwater drawdown. However, engineering reports authored by
26 Michael Hardy, P.E., P.G., WRS, of Lumos and Associates ("Lumos"), regarding *St. James*

27
28 ¹⁰ *Adaven Mgmt. v. Mt. Falls Acquisition Corp.*, 124 Nev. 770, 191 P.3d 1189 (2008).

1 *Village Water System Analysis for 12 Additional Lots*, attached hereto as Attachment “1”,
2 Exhibit B (the “**Technical Memorandum**”), and the *St. James Village Water System*
3 *Preliminary Engineering Report*, dated November 1, 2021, attached hereto as Attachment “1”,
4 Exhibit C (“**PER**” and, together with the Technical Memorandum, the “**Lumos Reports**”), show
5 that the Authority had opened a valve to supply neighboring developments with a water supply.
6 This extra water supply, which the Authority still has not yet quantified and not allowed
7 Petitioner to review the SCADA data, resulted in an added increase to the withdrawal of
8 groundwater from the Wells and, therefore, an overall drawdown in the surrounding aquifer.

9 The Authority relies on this erroneous data notwithstanding it being the actual cause for
10 the apparent overdraft.

11 With the valve potentially closed (based on Petitioner’s review of current Authority
12 SCADA data) and the Wells pumping at a capacity which is sufficient to supply the current
13 Development, the Authority’s skewed data cannot be used in support of its finding that the
14 aquifer is inadequate as a sole source of supply for further development. In fact, the Lumos
15 Report identifies that current groundwater pumping will adequately supply the Development for
16 not only the existing residences, but for 111 future planned lots. The Authority’s findings in the
17 Discovery, which are based on plainly erroneous data and bear no rational nexus to any
18 substantial evidence, cannot be used to reduce Petitioner’s beneficial interest – and indeed, its
19 property right – in its water rights.

20 2. The Authority demands further water rights to supply the Development

21 The Authority unabashedly said in its discovery that it is “unwilling to supply the [current
22 subject lots] or any future additional development solely from the [Wells] as proposed without
23 additional supply capacity...” (see Attachment “24”). As set forth in the Section above, the
24 Authority’s justification is based on blatantly faulty data and, without any further substantial
25 evidence to support its claim, is the definition of an arbitrary and capricious decision. Also, at
26 the forefront is the Authority’s breach of its contractual obligation “to provide water service as
27

28 ¹¹ See Nev. Const. art. I, § 8(3); see also U.S. Const. amend. V.

1 designated by [Petitioner].”¹² As shown in this Petition, the Authority anticipates violation its
2 contractual obligations, Nevada law, the Nevada Constitution, and the U.S. Constitution.

3 Based on the Lumos Reports, the Development can be sustainably supplied using the
4 Water Rights from the Wells. In the unlikely event an added supply should be required for
5 distant development, other water rights could be utilized – a point which was abundantly clear in
6 the 2015 Discovery. However, the Authority attempts to erase this previous finding as the
7 Discovery no longer identifies these alternative water rights as usable for the Development. In
8 an abrupt and unforeseen fashion, the Authority now demands more water rights to provide
9 municipal service to the Development, all with no rational nexus or substantial evidence
10 supporting its demands. Curiously, the Authority provides no justification as to why its 2015
11 Discovery was incorrect regarding the alternative source and supply, nor does the Authority
12 mention its findings in the Discovery. Without any cited data or documentation justifying the
13 Authority’s change in its position, the Authority’s findings in the Discovery are again the
14 definition of a Capricious decision.

15 Further, the Authority’s decision effectively nullifies a large portion of the Petitioner’s
16 Water Rights. This act, if upheld, is a per se forfeiture of the certificated portion and a
17 cancellation of remaining permitted portion of the Water Rights. Both forfeiture and
18 cancellation of any water right must follow the applicable notice and hearing provisions set forth
19 in NRS Chapters 533 and 534. Most importantly, the State Engineer must preside over either of
20 these proceedings as the Nevada Legislature delegated to the State Engineer the powers
21 necessary to control all the water resources of Nevada. The State Engineer did not delegate any
22 of its powers to the Authority and, therefore, the Authority cannot sua sponte take action which
23 results in a reduction to a person’s property right without following the proper statutory and
24 constitutional framework. The Authority’s willingness to take action to the contrary of both the
25 controlling Statutes and Constitution is cause for concern.

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27
28 ¹² See Attachment “4”.

1 If upheld, the Authority is given the power to take a person's property right without just
2 compensation – the most chilling outcome imaginable.

3 **C. The Lateral Extent of Area 15 is Not Supported By Any Evidence**

4 The Authority determined that it would initiate an aquifer supply recovery program due
5 to the extensive aquifer drawdown on the Mt. Rose alluvial fan caused by domestic well
6 pumping.¹³ The Authority's plan consisted of constructing a water treatment plan on White's
7 Creek ("WCTP") which the Authority assumed could be used for conjunctive management
8 purposes or a source of supply. To recoup the costs associated with the construction of the
9 WCTP, the Authority chose to identify lands which it would subject to the WSF Charge. The
10 Authority established the "Area 15" service area (*see Attachment "1", Exhibit E, "Area 15"*),
11 which represents the lands the Authority ultimately subjected to the WSF Charge. Most notably,
12 Area 15 represents land in private ownership but does not include any land owned by the United
13 States of America, the County, or portions of Unit 2D. Also, it includes lands not within the
14 Authority Service Area and includes lands in not only in the Pleasant Valley Hydrographic
15 Basin, but also the Washoe Valley and Truckee Meadows Hydrographic Basins.

16 The Authority's decision to establish Area 15 is not based on established hydrogeologic
17 principles, but rather title ownership as the sole basis to recoup costs for the WCTP. Had the
18 Authority utilized any scientific evidence, it would have first not included the Truckee Meadows
19 and Washoe Valley Hydrographic Basins in its Area 15, as the Authority has not identified any
20 interbasin flows between the respective basins. Contrary evidence – known all too well to the
21 Authority – are a series of documents relating to a pump test at the Falcon Capital Well (*see*
22 *Serpa Well Pumping Test Report and Assessment of Local Groundwater System* prepared by
23 Confluence Water Resources, LLC, dated June 2018 and further revised October 2018, attached
24 hereto as Attachment "18", the *Serpa Well Pump Test Analyses, Forward Simulation and*
25 *Groundwater Modeling* Memorandum prepared by the Authority, dated August 2, 2018, attached
26 hereto as Attachment "19", and the *Review of Serpa Well Aquifer Test Results and Groundwater*

27 ¹³ See 2015-2035 Water System Facility Plan Update, available at [https://tmwa.com/wp-](https://tmwa.com/wp-content/uploads/2019/11/2035-WFP-5-1-19.pdf)
28 [content/uploads/2019/11/2035-WFP-5-1-19.pdf](https://tmwa.com/wp-content/uploads/2019/11/2035-WFP-5-1-19.pdf)

1 *Assessments in the St James Village/Sierra Reflections Project Areas* Memorandum, prepared by
2 Jon Benedict, dated November 12, 2020, attached hereto as Attachment “20”).

3 Further adhering to this known and substantial scientific evidence would have reduced
4 the lateral extent of Area 15 due to boundary conditions in the area of the Development, as
5 identified in the Confluence Water Resources Groundwater Supply and Development (see
6 Attachment “1”, Exhibit F). In disregard to the evidence, the Authority instead demands that the
7 Petitioner pay the Area 15 fee to make up for the Authority’s shortfall in its own funding of the
8 WCTP, brought about only by the Authority’s failure to engage in its own cost-benefit analysis.
9 Subjecting the Petitioner to pay for the WCTP when data shows that pumping from the Wells has
10 no impact on the drawdown associated with the Mt. Rose alluvial fan is yet another arbitrary
11 decision that is an abuse of discretion.

12 **D. The Authority Requires Uneconomic Updates to the Water Facilities**

13 In 1992, Petitioner submitted its TM to the Washoe County Department of Water
14 Resources, whose staff conditioned the Petitioner to either participate monetarily for the major
15 infrastructure that the county would use to serve the entire project or pay water connection fees.
16 Petitioner chose to participate by building and dedicating the major water infrastructure required
17 by the Department of Water Resources, thus eliminating any water connection fees owed to
18 Washoe County. The Department of Water Resources’ Hydrologists then found two wells that
19 would produce sufficient water to meet the demands for the entire project. Washoe County’s
20 Engineering Division contracted out the water storage tank design and two wells and then put the
21 projects out for construction bids. During this approval process, the Department of Water
22 Resources was aware that the Development would be located on the north and south sides of
23 Browns Creek and, using sound engineering judgment, approved a separate water main on each
24 side of the creek. Relying on the County’s engineering justifications, the Petitioner has been
25 developing in accordance with these approved plans ever since.

1 This existing public water system¹⁴ was designed using the accepted engineering
2 judgment of the County as required by the NAC 445A.6673(2). It was not until 1997 that certain
3 provisions of NAC 445A were amended, which included a “Tree system” definition,¹⁵ and
4 generally prohibited new public water systems from utilizing a Tree system design. However,
5 Tree systems would be allowed if sound engineering could be used to justify such system’s
6 construction.¹⁶ Because of the Land’s topography, the County’s Utility Engineering Division
7 utilized sound engineering judgement and a cost/risk and cost/benefit analysis in its TM review
8 to ultimately approve the Tree system.

9 The County’s Engineers determined that constructing a transmission main from one
10 arterial main to the other arterial main, thereby crossing Browns Creek and creating a looped
11 system – as the Authority now demands – could potentially do more harm to the existing wildlife
12 and habitat than it would provide a benefit to the Development. Among other negative aspects,
13 the County’s Engineers found that should the transmission main rupture or break, it would
14 release chlorinated water into Browns Creek and cause unnecessary environmental harm. The
15 County’s Engineers also determined that the exorbitant costs associated with constructing such a
16 transmission main could not be justified simply to ensure a limited number of homes with a
17 guaranteed water supply. In utilizing a Tree system, any required repairs and/or maintenance
18 causing a shut-off in water supply would be resolved in a reasonable time with minimal and
19 negligible impacts to users of the applicable water system.

20 In order to provide added safety mechanisms, the County’s Engineers required internal
21 looping within each arterial main to allow District Health Department approval.¹⁷ Based on the
22 totality of the circumstances present during its review, the County’s engineers determined that
23
24

25 ¹⁴ See NAC 445A.6591.

26 ¹⁵ See NAC 445A.6653.

27 ¹⁶ See NAC 445A.6712.

28 ¹⁷ See NAC 445A.6712(1).

1 the Tree system was able to meet average day demand, maximum day demand, peak hour
2 demand, and the requirements for fire flow and fire demand as required by the NAC.¹⁸

3 Adhering to the County's previous findings, the Petitioner provided to the Authority the
4 Lumos Reports which specifically identified that the existing public water system could still
5 meet the all the demand requirements for the Lots without abandoning the Tree system design.
6 Surprisingly, the Authority did not provide any information disputing the findings in the Lumos
7 Report and the Confluence Water Resources Report. Most surprisingly, the Authority failed to
8 make any mention of the Lumos Reports or the Confluence Water Resources Report in its
9 Discovery. Instead, the Authority treated the Discovery as its carte blanche opportunity to make
10 unnecessary changes to an existing public water system. This is in opposition to other municipal
11 purveyors who have approved the Lots, notwithstanding the design of the existing public water
12 system. (*See Sewer Will-Serve Letter for St James's Village 2C-2 and 1H* from the Washoe
13 County Community Services Department Engineering and Capital Projects, dated February 16,
14 2022, attached hereto as Attachments "21" and "22", respectfully).

15 The Authority failed to use rational engineering judgement in promulgating its Discovery
16 because it did not consider a cost-benefit analysis as was previously performed by the County.
17 For this simple fact, the Development is now uneconomical as the costs associated with the
18 Authority's demands equate to \$129,096 for each Lot. (*See the Authority's Retail Water Service*
19 *Area Annexation Agreement*, attached hereto as Attachment "23"). The inability for the
20 Petitioner to continuously develop the Development in an economically viable manner has
21 consequences the reach beyond the Petitioner. Multiple municipal purveyors and agencies
22 anticipate constructing various improvements contingent only upon the Development. With the
23 Authority acting as a stalwart based only upon its whim, the Development's progress will now be
24 stagnant.

25 **IV. CONCLUSION**


26
27

28 ¹⁸ See NAC 445A.6673.

1 For the reasons stated herein, Petitioner respectfully requests that the Discovery be
2 vacated in its entirety and the Development be subject to the County's approved TM
3 requirements.

4 Respectfully submitted this 28th day of March, 2022.

5 HOLLAND & HART LLP

6
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CERTIFICATE OF SERVICE

Pursuant to N.R.C.P. 5(b), I certify that I am an employee of Holland & Hart LLP and not a party to, nor interested in, the within action; that on March 28, 2022, a true and correct copy of the foregoing document was served by email, addressed as follows:

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Dated this 28th day of March, 2022.



DIANE TSCHOPP, Legal Specialist,
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1 I N D E X

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1 RENO, NEVADA; THURSDAY, MARCH 31, 2022; 9:00 A.M.
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4 HEARING OFFICER DRINKWATER: Good morning,
5 everyone. My name is Bonnie Drinkwater. I am the
6 designated hearing officer for TWMA and have been that
7 since 2010. I need to get a couple of things out of the
8 way before we start. This is Reno and there are, I
9 think, one degree of separation between most people in
10 this town. So I think it's important that I tell you
11 that in 2010 when TWMA was formed, I was on the team at
12 McDonald Carano. I left one year later from that firm
13 and started my own firm, and so I've been away from
14 McDonald Carano and TWMA for 20 years. But my husband,
15 Michael Drinkwater, is involved in the water world. He
16 is the plant manager of Truckee Meadows Water Reclamation
17 Facility. And as such, I've met a number of you over the
18 years. Dave Kershaw's son went to high school with my
19 daughter, and of course I've known Matt Addison since he
20 was my partner at McDonald Carano.

21 The briefs themselves show a number of
22 similar-type situations from this town where people know
23 each other. I don't believe any of those things cause
24 any sort of conflict or affect my ability to make an
25 objective decision today, but I didn't want anybody to be

1 surprised by any of those things. So without further
2 delay, let's get moving.

3 I plan to follow Rule 8, the process set
4 forth there for the hearing, and that means that the
5 first thing that happens is a brief orientation by
6 Authority staff.

7 MR. ADDISON: Good morning, Your Honor. Matt
8 Addison, from McDonald Carano, on behalf TMWA. With me
9 is John Zimmerman, the Assistant General Manager of TWMA,
10 Stefanie Morris, in-house counsel. What we thought we'd
11 do for the introduction is call Scott Estes. Scott is an
12 engineer with TWMA.

13 Scott, if you'd come forward and have a seat
14 at this table, we'd appreciate it. And as I know Your
15 Honor's read all of the briefs, Exhibit 1 is a timeline
16 of the procedural history in this matter. Rather than
17 simply read that, we've asked Scott to give you a
18 narration -- I'll guide that a bit -- of his personal
19 knowledge of this project and the Mr. Rose Alluvial Fan
20 as he's had experience with it over the years.

21 So with that, Scott, would you please state
22 your name and spell your name for the record.

23 MR. ESTES: My name is Scott Estes. I'm the
24 Director of Engineering at TMWA. My last name is spelled
25 E-S-T-E-S.

1 MR. ADDISON: Thank you, sir. And would you
2 give the Hearing Officer a brief summary of your
3 employment history related to the Mt. Rose Alluvial Fan
4 and your work for TWMA over the years.

5 MR. ESTES: I actually started working for
6 the water company when it was under Sierra Pacific in
7 1989, and I've been continuously employed since that
8 time. And I've been in the new business area for at
9 least 20 years here at TWMA.

10 MR. ADDISON: Do you have then personal
11 knowledge of this process with St. James Village in its
12 application and attempted development of its property --

13 MR. ESTES: I do.

14 MR. ADDISON: -- on the Mt. Rose Highway?

15 MR. ESTES: I do.

16 MR. ADDISON: Okay. With that then, I'd
17 rather not ask you questions and lead you through this,
18 but I'd like you to speak directly to the Hearing Officer
19 and tell her what you recall from your personal knowledge
20 about the history of this matter and its procedural
21 history. Who did what when, according to your
22 involvement.

23 MR. ESTES: Okay. Great. Please interrupt
24 me if you have any questions.

25 HEARING OFFICER DRINKWATER: I will. Thank

1 you.

2 MR. ESTES: So this project goes back about
3 30 years. St. James Village, in 1992, got approval of a
4 tentative map for 530 single-family residential units.
5 Then in the period in 1994 to 1997, several final maps
6 were approved through Washoe County for St. James
7 Villages 1 and 2.

8 Also in 1997, the NAC 445A regulations became
9 effective. Those regulations are minimum standards for
10 the design, construction, operation of water system
11 facilities. I bring that up because it appears that the
12 water system design for these final maps was actually
13 performed before the effective date of those regulations.

14 So I'm going to jump forward to 2008. That
15 was when TWMA and Washoe County began a joint study to
16 evaluate the feasibility of merging of the water systems.
17 That process, during that process, TWMA had the ability
18 to review pumping, historical pumping data, historical
19 groundwater level, things of that nature. And that data
20 showed us that the water, groundwater levels were
21 declining pretty severely, especially up in the Mt. Rose
22 Fan area.

23 So in 2011, these groundwaters continued to
24 decline, but Washoe County was concerned about that as
25 well. In 2011, they created the Mt. Rose Fan Domestic

1 Well Mitigation Program, and that was because of the
2 effect that municipal pumping was having on the domestic
3 wells in the Mt. Rose Fan area.

4 Also in 2011, which was about the bottom of
5 the Great Recession, St. James Village reverted their
6 remaining subdivision maps they had not developed yet to
7 acreage. What I mean by that is the subdivision maps
8 basically go away and this property where a subdivision
9 map had been reverts back to raw land.

10 HEARING OFFICER DRINKWATER: Can I ask you a
11 question about that?

12 MR. ESTES: Certainly.

13 HEARING OFFICER DRINKWATER: How does that
14 procedurally happen? Does the map expire, just expires,
15 or does somebody do something to make the reversion
16 occur?

17 MR. ESTES: I believe they have to submit a
18 request for reversion to Washoe County.

19 HEARING OFFICER DRINKWATER: So the landowner
20 would submit a request for the reversion?

21 MR. ESTES: Correct.

22 HEARING OFFICER DRINKWATER: Thank you.

23 MR. ESTES: Sure. So I'm going to jump to
24 the very end of 2014 now. This is when the merger of the
25 Washoe County Water Systems into TWMA was completed.

1 With that action, the TWMA board adopted the Mt. Rose
2 Domestic Well Mitigation Program as our Rule 10, and the
3 board also approved initial water facility charges for
4 former county systems.

5 So in 2015, we were experiencing drought
6 conditions and nobody really knew what was going to
7 happen, how long those conditions would persist.
8 Groundwater levels were continuing to decline in the Mt.
9 Rose area.

10 And because of that, we decided -- TWMA
11 decided to accelerate our conjunctive use program. So
12 that decision actually culminated in May of 2015 when the
13 TWMA Board approved an increase to our Area 15 facility
14 charge, and that increase was because we added the cost
15 to construct the Mt. Rose Water Treatment Plant. That
16 facility will divert and treat water from Whites Creek
17 and put it right back into the distribution system on the
18 Mt. Rose Fan.

19 HEARING OFFICER DRINKWATER: Sorry. I have
20 another question for you.

21 MR. ESTES: Sure.

22 HEARING OFFICER DRINKWATER: Area 15. Can
23 you explain to me how areas are developed?

24 MR. ESTES: Sure. An area reflects the fact
25 that the facility improvements within that area and

1 sometimes outside the area will improve service within
2 that particular geographic area within the boundaries of
3 the area. Does that make sense?

4 HEARING OFFICER DRINKWATER: Yes. But how
5 are they exactly set? And when?

6 MR. ESTES: They are proposed by TWMA staff
7 and the TWMA Board approves those.

8 HEARING OFFICER DRINKWATER: Thank you.

9 MR. ESTES: So our first interaction with St.
10 James Village came later on in the fall of 2015. They
11 submitted an application for discovery for 239 single
12 family residential units, so TWMA took in the
13 application, processed it, did our analysis.

14 We published a report on that discovery in
15 deposition of 2015. That report identified several
16 deficiencies in the existing system, St. James Village,
17 and it also provided a laundry list of facilities
18 including two new production wells that would be required
19 to build out St. James Village.

20 That report had a concluding statement, and
21 the statement said that TWMA was unwilling to serve
22 additional growth in the St. James Village area until
23 such time as we had fully implemented our conjunctive use
24 plan and until water levels in the existing St. James
25 wells had stabilized to our satisfaction.

1 St. James Village digested that report, and
2 in 2016, in January, they sent us a letter, and the
3 letter withdrew applications for discovery and also
4 notified TWMA that they would be hiring consultants to
5 evaluate other water supply options for their project.

6 In early 2016, TWMA completed the very first
7 conjunctive use project. It was called the Arrowcreek
8 Drought Response Project. That allowed us to deliver a
9 limited amount of conjunctive use water up into the
10 Arrowcreek zone, and from there, it could be distributed
11 into the systems up there on the Mt. Rose Fan.

12 The next big step in implementing our
13 conjunctive use plan came in 2018 when we issued a notice
14 to proceed for construction of the Mt. Rose Water
15 Treatment Plant. Later on in 2018, St. James Village
16 proposed a nine-unit infill project. What I mean by
17 infill was they took existing open space and HOA
18 properties within the existing subdivision and turned
19 those into residential lots.

20 Because TWMA was having -- making very good
21 progress in implementing our conjunctive use plan at that
22 time, we decided to agree to go ahead and serve these
23 infill lots, but we included a statement in our discovery
24 that we were not willing to serve an expanded St. James
25 Village system until such time as the Mt. Rose Water

1 Treatment Plant was in service.

2 So in 2019, we worked with St. James Village.
3 We issued a will-serve commitment for those infill lots
4 that allowed them to record their tract map, subdivision
5 tract map. We also signed off as a utility service
6 provider on that tract map, and that signing off is
7 really just an approval of the easements that are shown
8 on the tract map.

9 So in October 2021, St. James Village was
10 able to obtain an extension, a two-year extension of
11 their original tentative map. That extension will take
12 them out to October 2023.

13 The following month in November, St. James
14 Village submitted an application for discovery for a
15 24-unit project to TWMA. That consisted of Units 1H,
16 Unit 4C, and the infill lots. Along with that
17 application for discovery, St. James Village attached the
18 Lumos reports for our use and review.

19 Earlier this month, TWMA issued the discovery
20 report. This report presents a revised water supply plan
21 for growth in St. James Village. Instead of requiring
22 the construction of two new water production wells, this
23 plan will deliver supply through the existing -- through
24 and from the existing Mt. Rose system. So this new water
25 supply plan is less expensive than the original plan

1 proposed in 2015. So we gave that report to St. James
2 Village, and they digested that. And even though it was
3 a less expensive and better plan in our minds, they told
4 us that they wished to pursue dispute resolution per our
5 TWMA Rule 8, and that takes us up to today.

6 MR. ADDISON: Thank you, Mr. Estes.

7 HEARING OFFICER DRINKWATER: Can I just --

8 MR. ADDISON: Does Your Honor have more
9 questions?

10 HEARING OFFICER DRINKWATER: Yes, I'm sorry.

11 MR. ADDISON: Please. No.

12 HEARING OFFICER DRINKWATER: I'm confused
13 about the infill lots, and I think everybody might be a
14 little bit confused. In the application itself, I don't
15 see the infill lots, but they are referenced in the cover
16 letter. Were the infill lots included in the discovery
17 that came out and are we talking about them as well?

18 MR. ESTES: The infill lots were not a part
19 of the 2021 discovery. And the reason for that was we
20 found out that St. James Village had actually sold most
21 of those -- I don't know -- maybe all of those lots, and
22 so they were no longer the owner of those lots.

23 HEARING OFFICER DRINKWATER: Thank you.

24 MR. ADDISON: We did anticipate a number of
25 questions, so I'm not going to -- like I said, I'm not

1 going to lead him or anything. Just put it out there
2 through his own voice and allow you to get everything
3 straight that you want.

4 HEARING OFFICER DRINKWATER: I am going to
5 allow myself a question period at the end, but I'd like
6 to hear from St. James Village first before I compile all
7 of those questions. Maybe we'll take a short break.

8 MR. ADDISON: Of course.

9 HEARING OFFICER DRINKWATER: Make sure to
10 have everything compiled in an orderly manner.

11 MR. ADDISON: And also so that you know,
12 Mr. Estes will stay and be in the back, and he can be
13 recalled at any time.

14 HEARING OFFICER DRINKWATER: Great. Thank
15 you.

16 MR. ESTES: You're welcome.

17 MR. ADDISON: What's that? We don't need a
18 break if you'd like to continue.

19 HEARING OFFICER DRINKWATER: I don't mean
20 now. Before I compile all of my -- I have lists already.
21 I just want to know what's been answered, but I'd like to
22 hear from St. James Village before we do that.

23 MR. ADDISON: Okay.

24 MS. MORRIS: And, Your Honor, just to be
25 clear, we planned on summarizing our brief in our

1 testimony after St. James Village according to Rule 8.

2 HEARING OFFICER DRINKWATER: Yes, of course.

3 MS. MORRIS: Thank you.

4 HEARING OFFICER DRINKWATER: Okay. Ready?

5 MR. CHAMPA: I believe so. St. James Village
6 is here to show that the authorities' discovery is
7 clearly erroneous in view of the substantial evidence on
8 the whole record. The Authority's discovery is
9 arbitrary, capricious, and an abuse of discretion, and
10 the Authority's position is in violation of Nevada water
11 law and various constitutional principles.

12 Because of this, the Hearing Officer can
13 overturn the discovery in its entirety. Particularly,
14 the Authority failed to adhere to the pertinent
15 administrative code in rendering its discovery as it
16 relates to the current water facilities. Also, the
17 Authority failed to follow Nevada's long-standing water
18 law resulting in injury to St. James's property rights.

19 Further, the Authority failed to utilize
20 substantial evidence in rendering its discovery. Now we
21 know that substantial is that which a reasonable mind
22 might accept as adequate to support a conclusion. Now
23 St. James will show that the Authority's discovery was
24 not based on substantial evidence. St. James will
25 further show that with the exhibits to the discovery

1 request and attachments to its brief, substantial
2 evidence was provided to the Authority but incorrectly
3 discredited or flat-out ignored.

4 Conversely, the Authority will simply
5 continue to say that its discovery is based on
6 substantial evidence. The pieces of evidence the
7 Authority uses in support of its claim are staff reports
8 and board recommendations and the agenda, the Authority's
9 rules, various party correspondence and items that
10 generally don't provide a reasonable mind with enough
11 information to accept as adequate the Authority's
12 findings in its discovery. Still just from the evidence
13 provided, the Authority says a reasonable mind should
14 accept as adequate the conclusions in the discovery
15 because the Authority says so.

16 At no small expense, St. James has been
17 continuing its development in earnest. There was the
18 hiccup in 2008 caused by the Great Recession, and there
19 was reversion to acreage, but that was from extraneous
20 forces. Still, in no small expense, St. James, according
21 to Mr. Estes's brief discussion there, said that it would
22 go out and hire consultants, which it did. And it
23 created its new discovery submittal utilizing certified
24 engineering reports, engaging in constant input from its
25 third-party consultants, and then where applicable,

1 utilizing a Department of Water Resources' opinion.

2 These items are all from the following
3 personnel. There's Kent Grader, who is a professional
4 engineer, who I believe is up on zoom right now. He
5 holds a Master's in civil engineering with over 30 years
6 of experience. He authored the transmittal and the new
7 business application of a portion of Exhibit A of
8 Attachment 1.

9 Susan Hood has also been a consultant, who is
10 a retired professional engineer who worked for Washoe
11 County Department of Water Resources for 15 years.
12 Michael Hardy, another professional engineer,
13 professional geologist and licensed Nevada water rights
14 surveyor, has 12 years of Nevada experience, and he
15 authored the Lumos reports in Exhibits B and C of
16 Attachment 1.

17 There's Matthew Banza, a professional
18 hydrogeologist with over 20 years of experience, whose
19 report was reviewed by Timothy Donahoe. Mr. Banza, of
20 Confluence Resources, authored the Confluence reports in
21 Exhibit F of Attachment 1 as well as Attachment 18. And
22 then the Department of Water Resources' opinion was
23 authored by John Benedict, who is the senior
24 hydrogeologist from the Division of Water Resources, who
25 has roughly 21 years of experience.

1 Now this memorandum, which was Attachment 20,
2 was in reference, as I said, to both the Confluence
3 report as well as the Authority's own separate analysis
4 which it authored due to what's called the Serpa Well
5 test of the Falcon Capitol Well, and that is attached as
6 -- identified as Attachment 19.

7 So these reports and opinions, all taken from
8 third-party impartial professional engineers, actually
9 represents the substantial evidence that St. James has
10 relied upon in pursuit of its development. This is the
11 same substantial evidence St. James thought the Authority
12 would rely upon in rendering its discovery. Still, this
13 is the same substantial evidence that St. James requests
14 the Hearing Officer to rely upon in rendering the
15 findings of fact.

16 What St. James requests is the Hearing
17 Officer not rely on the Authority's decisions simply
18 because the Authority says so. Now there's two main
19 issues that St. James has with the discovery. There's
20 the implication on the existing water facilities and then
21 the implications associated with St. James' beneficial
22 interests in the water rights.

23 First I'm going to turn to focus on the water
24 facilities. At St. James, a tree system exists because
25 Washoe County, when it first approved or first reviewed

1 the tentative map and promulgated its approval, saw that
2 there was certain issues with the topography of the land
3 and utilized cost benefit analysis to decide that there
4 can be two tree systems which would satisfy the public
5 health and water service criteria at the time when that
6 system was designed. And the tentative map process with
7 the application and Washoe County subsequent approval are
8 the Attachments 6 to 8 of our list of attachments.

9 Would you like me to offer exhibits as I go
10 along?

11 MR. ADDISON: It's up to you. We can follow
12 you. It's up to Hearing Officer Drinkwater in my view.

13 HEARING OFFICER DRINKWATER: I read every one
14 of them, so I know they're there. I've seen them.

15 MR. CHAMPA: Okay. All right. So Mr. Estes
16 talked about that there were changes, and I can't
17 specifically remember the actual words he used, but as I
18 recall, there were amendments to the NAC in 1997.

19 And so prior to 1997 when I know St. James
20 was pursuing its tentative map approval, there wasn't a
21 whole lot regarding dead ends or tree systems. But after
22 the 1997 revisions, tree systems became prohibited in
23 general. But the ability still remains to this day to
24 construct and continue utilizing these tree water
25 systems.

1 The NAC requirements, which particularly
2 relate to fire flows and maximum day demand, are shown to
3 have been met in the Lumos Engineering reports. And as I
4 reviewed everything, the Authority's support to combat
5 these findings is the map showing the Authority's own
6 model which just shows that there's a little bit of
7 variation that some pressure or some GPD goes below, I
8 think, a thousand gallons a minute or a thousand gallons
9 a day -- sorry -- and the Authority's decision to sua
10 sponte derate the St. James wells.

11 Now all we know that these decisions were
12 made because the Authority said so, but we don't know
13 why. And in particular, the wells were derated or what
14 the data behind the Authority's model was to come up to
15 allow the Authority to come up with its decision. So the
16 Authority takes the applicable NAC standard and then goes
17 above and beyond what the general requirements are. And
18 this is above and beyond what the board of health and the
19 environmental commission deems necessary for continuing
20 to utilize a tree system.

21 Instead of just allowing an engineer to just
22 -- to allow a tree system, it's now the Authority's
23 decision that matters and controls. This detracts from
24 any engineer providing substantial evidence to prove that
25 a tree system is still viable as long as the Division or

1 the appropriate district board of health approve of the
2 system. So it takes away any engineer's ability to say
3 that a tree system can be used. That's gone. Now
4 without it giving any regard for the County's expertise
5 as to why a tree system should be used or could continue
6 to be used, the Authority fails to give a reasonable
7 review of the pertinent code and simply says no. It's
8 because we say so.

9 Now turning to the water rights and the water
10 supply issue, St. James provided substantial evidence
11 that its water supply was viable and its beneficial
12 interest in the dedicated water rights were also
13 sufficient for the development.

14 St. James proved that the well capabilities
15 and capacities were found to be sustainable. This was
16 found in the Lumos report. And to that point, the
17 Authority said well, it's not valid because we de-rated
18 the wells because we felt like it. The Serpa Well
19 pumping test also determined that water could sustainably
20 supply the development. This resulted in identifying
21 various aquifer characteristics based on the pumping test
22 that showed favorable conditions existed to allow
23 continued and sustainable use of the aquifer.

24 The Authority projections that came from the
25 Serpa Well test are based on regional data and

1 depth-to-water base drawdown rather than looking at a
2 percentage-based reduction at specific wells. Also from
3 that pump test, boundary conditions show that their
4 hydrogeologic characteristics which actually require an
5 island based handling of the pertinent hydrology at that
6 location.

7 HEARING OFFICER DRINKWATER: Sorry. Can you
8 repeat that?

9 MR. CHAMPA: Boundary conditions show that
10 there are hydrogeologic characteristics requiring
11 island-based handling of the hydrology at that specific
12 location. Sorry.

13 HEARING OFFICER DRINKWATER: Can you put that
14 in English for me?

15 MR. CHAMPA: Let me try. So I'm a lawyer.
16 I'm not a hydrogeologist anymore. Boundary and
17 conditions are certain aspects of the aquifer, the rocks
18 and how the water translates through those. And so not
19 everything is, according to Steno's Law, homogenous
20 throughout. There are going to be variations. There's
21 going to be peaks and valleys, faults that create
22 different sort of mechanisms that are going to implicate
23 the transmissivity values the way that water flows at a
24 certain rate through certain media.

25 And so with these pump tests -- and I think

1 the State Engineer's report from John Benedict does a
2 really good job of explaining the mathematical components
3 that are seen through graphs when water hits certain
4 highly permeable or impermeable media.

5 So boundary conditions that are shown,
6 especially through the Serpa Well report, identified that
7 there is some lag with the data, and whether that is
8 closer to the pumping well or closer to the monitoring
9 wells which prove that lag is still unknown, but there is
10 something there. And so utilizing a widespread regional
11 groundwater model that doesn't particularly have those
12 certain variances incorporated into the model parameters
13 makes the findings of that regional model inapplicable or
14 suspect to question.

15 So because of the boundary conditions shown,
16 you have to look at everything sort of in a microscope
17 for the specific area that is subject to the drawdown
18 rather than looking at a multiple basin and just
19 utilizing regional groundwater drawdowns as the end all
20 say all. Did that help? Okay.

21 So, like I said, both reports, both the
22 Confluence reports as well as the Authority's
23 hydrogeologic reports associated with the pumping well
24 test at the Serpa Well were given to the State Engineer.
25 And the Nevada Division of Water Resources, under John

1 Benedict, created an opinion which looked at both lines
2 of evidence and the conclusions drawn from Confluence as
3 well as the Authority and figured out what in the State
4 Engineer's mind was the correct findings, and those show
5 that there are certain things associated with the St.
6 James area which require -- which go to show that it can
7 be treated as a moderately, if not wholly separate and
8 distinct hydro geographical component of the Pleasant
9 Valley Hydrographic Basin.

10 HEARING OFFICER DRINKWATER: Can you point me
11 to that specifically, the State Engineer's decision?

12 MR. CHAMPA: It's not an order, but yes.
13 That will be our Attachment 19.

14 HEARING OFFICER DRINKWATER: Okay.

15 MR. CHAMPA: Or no. Sorry. Attachment 20.

16 HEARING OFFICER DRINKWATER: Okay. So
17 specifically in Attachment 20.

18 MR. CHAMPA: Yes. So the hydraulic barriers
19 in most of these findings are throughout in bold.

20 HEARING OFFICER DRINKWATER: So page four, is
21 that where you're looking?

22 MR. CHAMPA: You can go to page five.

23 HEARING OFFICER DRINKWATER: Okay. You're
24 talking about the -- Okay. The bolded language.

25 MR. CHAMPA: Bold language. So ultimately,

1 most reliable to conclude that one: Boundaries do affect
2 drawdown in the area. The data are most consistent with
3 the boundary to the north-northwest of the pumped and the
4 observation wells, but boundaries in the St. James Sierra
5 Reflections area are neither planar or necessarily
6 continuous in dimension. Do you want me to go through
7 and --

8 HEARING OFFICER DRINKWATER: No. I'm going
9 to come back to this. I will ask you more questions
10 about it later.

11 MR. CHAMPA: Okay.

12 HEARING OFFICER DRINKWATER: So sorry to
13 interrupt your flow.

14 MR. CHAMPA: It's quite all right. I'll
15 figure out where I'm going. Now St. James is of the
16 opinion that what the State Engineers Office or what
17 Mr. Benedict of the State Engineers Office has provided
18 is very telling and should be followed and at least given
19 some semblance of it's of such weight that the Authority
20 should have at least spoken to this finding, yet the
21 Authority did not. There was no mention made of John
22 Benedict's obtaining or the findings therein.

23 Instead, the Authority utilized the Serpa
24 Well data to incorporate such data into its existing
25 model which then extended the model parameters 1.3 miles

1 to the south into St. James as well as the Sierra
2 Reflections area. St. James also has large concerns
3 regarding the water rights and the fact that the water
4 rights are in good standing with the Division of Water
5 Resources.

6 The Authority, throughout its discovery and
7 briefs, talk about how papered rights don't really
8 account for much. But even with a papered right, the
9 granting itself is based on prior appropriation doctrine,
10 the doctrine of good faith and beneficial use, the
11 non-impairment doctrine and water availability just to
12 name a few. But those are all decisions made by the
13 State Engineer's Office.

14 Unfortunately, St. James feels that the
15 Authority sees itself as the ultimate decision maker as
16 to what a water right means and how such rights can be
17 used. Each of the Authority's justifications run afoul
18 of basic concepts and doctrines of Nevada water law. The
19 Authority's sole determination that it has the power to
20 determine whether water exists to satisfy the paper
21 right, that violates the non-delegation doctrine. That's
22 something for the State Engineer to decide and no one
23 else.

24 It also seems to violate St. James' due
25 process rights that when somebody files an application to

1 get a water right, they could file it for 50,000 acre
2 feet if there's water available, but if they cannot put
3 the water to beneficial use by the time they have to file
4 the proof of beneficial use, then they get whatever
5 certificated right they get. It could be five acre feet.
6 But just simply saying this permanent right which has not
7 yet been certificated and it goes away, there are certain
8 statutory safeguards under NRS 533 that should be
9 followed.

10 St. James is also concerned that the
11 Authority's forfeiting the portion or the permitted and
12 the certificated water rights which would be a regulatory
13 taking. Water rights can be split from a thousand acre
14 feet all the way down to five acre feet or less. Taking
15 60, 50, 40, however many acre feet St. James has
16 beneficial interest in and saying you need to bring more
17 water, what the going rate on the market is maybe \$7,000
18 according to the Authority's figure, but it could also go
19 up to \$65,000. That's a lot of money to say no, we're
20 not allowing you to use your water rights anymore.

21 HEARING OFFICER DRINKWATER: So in your
22 brief, I understood you to say that your taking argument
23 had to do with water rights that had been dedicated and
24 --

25 MR. CHAMPA: For beneficial use.

1 HEARING OFFICER DRINKWATER: -- not used.

2 But today, this is a slightly -- What I'm hearing you say
3 is something different, which is your taking argument is
4 that not that your rights have been taken, but that in
5 fact, you're being asked to bring different water rights
6 that cost money. Is that right? Which argument are you
7 making?

8 MR. CHAMPA: I think it's one and the same
9 because the original taking argument we made was that we
10 no longer have the beneficial interest in these water
11 rights. The Authority is getting rid of that.

12 Now the Authority brought up salient argument
13 that it was only founded on the Nevada Constitution and
14 said regulatory takings are very hard to make, and so I'm
15 answering that now in this oral argument, is that not
16 only is the beneficial use taken away, but the Authority
17 is saying you have to bring more water rights. But
18 because that beneficial use is taken away, because that
19 beneficial use is a stick in the bundle of rights -- and
20 there's lots of sticks in the bundle so to say with water
21 rights, whether it be priority, the beneficial use, what
22 have you, that's still a right that has been taken away
23 that St. James originally had, but now it doesn't
24 anymore. And that will cause an actual monetary harm to
25 continue its development even though it also went out and

1 purchased water rights.

2 HEARING OFFICER DRINKWATER: Is that still
3 your argument after TWMA's brief said all of your rights
4 are banked and you can have them back?

5 MR. CHAMPA: I'll have to ask my client about
6 that, but I would see that if all of the rights would
7 come back, everything that was originally banked, then
8 that would definitely be an argument, and I don't think I
9 could, with a straight face, make any kind of takings
10 argument.

11 HEARING OFFICER DRINKWATER: Okay. You'll
12 let me know on that?

13 MR. CHAMPA: I can let you know on that.

14 HEARING OFFICER DRINKWATER: Thanks.

15 MR. CHAMPA: Many of the Authority's findings
16 were based on regional water level. And I touched upon
17 this already, but substantial evidence should be based on
18 the hydro geographical findings, and it should dictate
19 anyone's course of action.

20 Now the Authority said that -- and this is in
21 particular to our claim about the valves being opened.
22 When a valve is opened, a pond somewhere else with water
23 is going to incur a larger draw on the production wells.

24 We don't know how long the valves were
25 opened, but what the Authority says in its brief is that

1 the valves were opened twice: Once for an emergency
2 outside of St. James and once for an emergency inside of
3 St. James. But what the Lumos reports found is that when
4 they went out into the field -- and this is past the 2017
5 or 2018 valve openings that the Authority has
6 identified -- the valve had been opened and no one knew
7 for how long or why the valve was open. But the fact was
8 the valve remained open for potentially long period of
9 time which calls into question the actual data that the
10 Authority is relying upon at this time to say that the
11 wells can't meet their production because of groundwater
12 drawdowns.

13 Basically going to wrap this up as quick as I
14 can. I know I've been rambling. St. James has a bit of
15 concern with the fact that the Authority doesn't seem to
16 care what was in the original Pagni agreement or the
17 Pagni Ranch provided the water rights to Washoe County.

18 I understand now that when the Authority
19 takes water rights from -- not takes water rights but,
20 you know, assumes the role of accepting water rights for
21 potential well serves. There are certain agreements, and
22 the Pagni agreement would not have met the muster of the
23 Authority whatsoever, but we can't focus on what the
24 Authority would do now. We have to look at what Washoe
25 County did and the terms that they agreed to in order to

1 take those water rights and then convey those to the
2 Authority.

3 Just because Washoe County agrees to some
4 terms associated with the water rights, particularly that
5 the beneficial interest owner had the ability to identify
6 where those water rights should be used, the Authority
7 says that it doesn't have to do that because it never
8 took any interest in that agreement.

9 Now just because they say so, it seems like a
10 relatively novel concept that I've yet to see for
11 terminating any sort of covenants associated with real
12 property. So it is St. James' opinion that those water
13 rights should be used where St. James decides they should
14 be used and St. James wants those water rights to be used
15 for the St. James development.

16 Now I think we've initially touched on the
17 Area 15. I know you had some questions on that, and I
18 think Mr. Estes did a good job identifying that there
19 were certain lots that were outside of the service area
20 but not within Area 15, but those lots right now were
21 still being subject to the Area 15 fee. There was even
22 one lot that was within the service area and not within
23 Area 15, but still, they're subject to the Area 15 feet.
24 There was even one lot outside the service area but
25 within Area 15, but it had a meter, and the Authority was

1 providing water to that residence.

2 I don't know if any annotation agreements or
3 water service agreements had been signed at this point,
4 but that seemed a little strange, and in the Authority's
5 -- I believe the Authority has some various
6 correspondence under their Exhibit 5. And what's missing
7 is the letter that St. James wrote to the Authority's
8 attorney highlighting these details, but that's missing
9 in the Authority's exhibits, and I have three copies if
10 anybody wants one.

11 HEARING OFFICER DRINKWATER: I would like a
12 copy, please. That's on my list of questions.

13 MR. CHAMPA: Okay. Good. So all this being
14 said, St. James has some very valid concerns.

15 HEARING OFFICER DRINKWATER: Hold on. Before
16 you move past Area 15, you said certain lots are outside
17 the service area but subject to the Area 15 fee. Those
18 lots -- and I think there are seven lots -- they're
19 outside of the service area because they were never
20 annexed. They're not outside the service area of the map
21 of Area 15; is that right?

22 MR. CHAMPA: Yes. So if they're outside the
23 service area, they're outside of TWMA's service area
24 because they had not yet been annexed.

25 HEARING OFFICER DRINKWATER: But had they

1 been annexed, they would certainly be within Area 15; is
2 that correct?

3 MR. CHAMPA: I don't believe that's correct.

4 HEARING OFFICER DRINKWATER: All right. Can
5 you show me that or --

6 MR. CHAMPA: Okay. This is my terrible
7 sketch. I'll get you a cleaner one. And I think that
8 was one of the things and the Authority's previous
9 attorney had said that well, once they're annexed in or
10 once the lands are annexed into the TMWA service area,
11 then they will be annexed into Area 15.

12 But as I look at the Area 15 map, which was
13 just recently printed, it was last updated March 16th of
14 2015. And it makes me think that Area 15 is not subject
15 to any sort of updates because yet there are no -- I have
16 not seen any staff reports or Authority board meetings to
17 show that Area 15 is actually up for, you know, an
18 update. So it seems like once the original Area 15, at
19 least from St. James' position, once this was created,
20 it's been set in stone and this is what it is. But
21 that's all St. James knows at this point.

22 HEARING OFFICER DRINKWATER: Okay. Sorry.
23 Finish your conclusion.

24 MR. CHAMPA: So St. James is concerned about
25 just the economic ramifications of what the Authority

1 alone is requiring to continue building this project.
2 Just on the recent discovery alone for 24 lots, I
3 believe, it comes to \$150,000 of improvements per lot. I
4 think -- and this is St. James' position -- that you
5 would be hard-pressed to find a developer who can make a
6 project like that pencil. And this is something that
7 Washoe County was keenly aware of and made their decision
8 based on that, but the Authority is shrugging it off
9 because it says so.

10 And so one final point. Mr. Estes talked
11 about signing the final map, and that is only a signature
12 identifying that the Authority is willing to accept the
13 easements and the necessary improvements for that
14 particular development. And with the will-serve letter,
15 as I see it, which the Authority sent to the State
16 Engineer a will-serve letter on February 20 -- on
17 February 28th, 2019, which was Attachment 16. But then
18 shortly thereafter, right around the same time as the
19 State Engineer wrote back to the Authority and said: I
20 confirm all of this water is good to go, the Authority
21 signed the final map.

22 And I know that the NAC provisions are a
23 little peculiar, and it's subject to interpretation, but
24 it's St. James' interpretation that particular to the
25 seven lots which the Authority signed, there was

1 correspondence saying that everything has already been
2 dedicated up to this point and you're good to go, and
3 this is for water. And then their form language, I
4 believe that says still subject to the rules and
5 everything else.

6 So it's St. James' position that when the
7 Truckee Meadows Water Authority signs a final map and
8 it's in lieu of a will-serve agreement that's sent to the
9 Nevada State Engineer, it seems like it's more akin to
10 providing water than requiring utilities.

11 HEARING OFFICER DRINKWATER: I'm sorry. Did
12 you just say that you think a signature on a final map
13 can replace a water service letter agreement? Sorry.
14 You don't need to have the agreement if you sign the map?

15 MR. CHAMPA: In the normal course of events,
16 I would think you would. According to the Authority's
17 rules, you would. But particular to the seven lots,
18 things were done a little strangely.

19 HEARING OFFICER DRINKWATER: Do you dispute
20 TWMA's contention that that was done -- that letter was
21 done as an accommodation being essentially a
22 chicken-and-egg problem, the lots couldn't be divided
23 unless the will-serve letter had issued and the lots, I
24 mean, you couldn't do a will-serve until the lots
25 existed. I mean, you couldn't do a water service

1 agreement until the lots existed.

2 MR. CHAMPA: No, because you can do a water
3 service agreement for it.

4 HEARING OFFICER DRINKWATER: I'm sorry. You
5 do dispute --

6 MR. CHAMPA: I do dispute --

7 HEARING OFFICER DRINKWATER: -- their
8 explanation?

9 MR. CHAMPA: Yes, I do.

10 HEARING OFFICER DRINKWATER: So it wasn't
11 done to help your client get the lots subdivided?

12 MR. CHAMPA: I don't believe so.

13 HEARING OFFICER DRINKWATER: Okay. And it
14 was only those seven lots, that will-serve letter;
15 correct?

16 MR. CHAMPA: Correct.

17 HEARING OFFICER DRINKWATER: Thanks.

18 MR. CHAMPA: I'll turn it over to the
19 Authority now. Do you need a break or are we ready to --

20 MR. ADDISON: It's up to you, Your Honor.
21 We're ready to proceed.

22 HEARING OFFICER DRINKWATER: All right.

23 MR. ADDISON: What we have now then is
24 co-counsel, Stefanie Morris, will conduct direct of Scott
25 Estes and then John Enloe. Your Honor, we estimate 40

1 minutes on that testimony at most. But Mr. Estes will go
2 first.

3 HEARING OFFICER DRINKWATER: Okay.

4 MR. ADDISON: Mr. Estes?

5

6 DIRECT EXAMINATION

7 BY MS. MORRIS:

8 Q Your Honor, I'm not going to spend a lot of
9 time focusing on some of the legal arguments that I think
10 are covered in the brief and the evidence, in particular,
11 relating to the seven infill lots which are not part of
12 this discovery. But I am going to spend some time with
13 Mr. Estes talking about the engineering and TMWA's proven
14 utility management of the water of the system including
15 looping, fire flow, maximum daily demand.

16 And with Mr. Enloe, I'm going to talk a
17 little bit about the hydrogeologic area on the Mt. Rose
18 Fan and whether the water supply is sufficient from St.
19 James Wells 1 and 2 to supply the project as asserted by
20 the Petitioners.

21 So Mr. Estes has already stated his name for
22 the record. Could you please describe for us, Mr. Estes,
23 what a discovery is and the general process for obtaining
24 water service from TWMA?

25 A Discovery is a process that I'll describe is

1 -- for a typical subdivision project, it's a process that
2 a developer can give us whatever information they have on
3 their proposed residential project and we do an analysis,
4 we do computer modeling, we look at the location of the
5 project, and we develop a report for them which will show
6 them what kind of facilities are going to be required to
7 provide the requested water service. That may include
8 offsite improvements, things of that nature. It also
9 includes the cost of connection fees for their project.

10 And in general, in most cases, this
11 information is used by the property owner to assist them
12 in getting proper financing for their project, and it
13 also allows them to proceed with the water system design
14 because we tell them -- we show them how this water
15 system should be laid out and what the pressures are
16 going to be, things of that nature. So it allows them to
17 proceed with a preliminary design.

18 HEARING OFFICER DRINKWATER: Can you please
19 elaborate on you said: We do our analysis and computer
20 modeling. What role does the information that's provided
21 to you, for example, the Lumos report and the other
22 reports, what role do those reports play in your analysis
23 and what is your body of data that you're comparing it
24 with?

25 THE WITNESS: Take a stab at this. The

1 information such as provided by Lumos really doesn't
2 enter into our new business investigations and analysis
3 because we're primarily concerned with distribution
4 facilities and service pressures and things of that
5 nature. They did not analyze or develop a computer model
6 to do those kind of things, so it's that kind of
7 information is more the information they provided was
8 more in the water resource arena instead of the
9 distribution system arena.

10 Q (BY MS. MORRIS:) Just to follow up on that
11 question, can you look at the larger binder that is the
12 Petitioner's exhibits, and under Exhibit C, which is the
13 St. James Village Water System Preliminary Engineering
14 Report dated November 1st, 2021, submitted by Lumos, and
15 could you look at page 39 of that report, the second
16 bullet, please.

17 A Okay.

18 Q Thanks. Does that indicate that the
19 hydraulic modeling was not completed by Lumos for this
20 project?

21 A That is correct.

22 Q Does it also suggest that that modeling be
23 completed in the future to help with developing looping
24 strategies?

25 A It does.

1 Q Thank you. Going back to the process, once
2 you get through a discovery, does that mean you're
3 guaranteed water service? What are the next steps?

4 A The next step following the discovery --
5 assuming that the developer wants to move forward, they
6 actually submit an application for water service. Now
7 preceding that, if in fact this location of the project
8 is outside a retail water service area, they usually have
9 to submit an application for annexation. And they can do
10 that at the same time as application for water service,
11 but we cannot enter into an water service agreement until
12 we have the annexation agreement.

13 HEARING OFFICER DRINKWATER: I'm sorry. Can
14 I interrupt?

15 MR. ADDISON: Sure.

16 HEARING OFFICER DRINKWATER: I need to go
17 back to my past question because you answered half of it,
18 but you didn't answer the other half, and I really,
19 really need that answer.

20 THE WITNESS: Could you repeat that?

21 HEARING OFFICER DRINKWATER: What is your
22 body of data and how do you do your modeling?

23 THE WITNESS: So the data that we're looking
24 for from an applicant includes lot layouts, street
25 layouts, more importantly, elevations, the grading plan.

1 Those are the most important items. Lot sizes, we need
2 those to calculate the maximum day demand, things of that
3 that nature.

4 HEARING OFFICER DRINKWATER: Okay. Thank
5 you.

6 Q (BY MS. MORRIS:) Mr. Estes, you spoke about
7 annexation. When an area is annexed, like there's
8 property that's outside the service area and let's just
9 say Area 15 applies, when you annex those new properties
10 or lots in, does the Area 15 fee or any area fee apply?

11 A Yes. The area fee would apply upon
12 annexation. We would adjust that boundary to include the
13 annexed property.

14 Q And why is that?

15 A Well, I mean, it's a process that needs to be
16 done to adjust those boundaries to include the
17 properties. They're benefitting from the facilities that
18 go into this area fee, and so that's why they need to pay
19 the fee.

20 Q And just to follow up on the discovery, if a
21 discovery provides information such as the Lumos report
22 and the Confluence report, do you look at it and consider
23 it before you come out with your discovery? Even if you
24 don't necessarily reference it, did you review it in this
25 instance prior to the discovery being completed?

1 A Yes, I did review it.

2 Q Thank you. I want to clear up some confusion
3 about the lot sizes which are subject to the 2022
4 discovery because there's a number of different numbers
5 of lots floating around. How many lots are in the St.
6 James Village 2021 discovery request?

7 A Twenty four.

8 Q And did TWMA inform St. James that the seven
9 infill lots were not part of the discovery?

10 A Right. Correct.

11 Q And looking at TWMA Exhibit 4, which is in
12 the smaller binder, it's a December 23rd, '21 letter to
13 Mr. Krater and Mr. Champa from Mr. Rotter, the
14 engineering manager. Is this the communication that let
15 them know that those seven infill lots were no longer --
16 were not part of the discovery?

17 A That is correct.

18 Q And does it say why they are not part of the
19 discovery?

20 A Well, yes, it does.

21 Q And is that because they no longer own those
22 lots?

23 A That was one of the items, yes.

24 MS. MORRIS: Thank you.

25 HEARING OFFICER DRINKWATER: I'm sorry. I

1 missed your exhibit. I read it. I know I read it.

2 MS. MORRIS: Exhibit 4.

3 HEARING OFFICER DRINKWATER: Exhibit 4.

4 Thank you.

5 Q (BY MS. MORRIS:) Of course. When looking at
6 necessary infrastructure, does TWMA follow the Nevada
7 Administrative Code or NAC?

8 A We do.

9 Q And when looking at necessary infrastructure,
10 does TWMA have design standards?

11 A We do.

12 Q Does the Nevada Division of Environmental
13 Protection and the Washoe County Public Health Department
14 review and approve TWMA's design standards?

15 A They did.

16 Q And looking at TWMA Exhibit 19, can you
17 identify what this document is?

18 A This is the discovery for the 24 units.

19 Q And it's dated February 14, 2022?

20 A Correct.

21 Q And looking at page 11, which it's not
22 marked, but it's Figure 2, water facilities, does this
23 show the current system?

24 A It does.

25 Q And is this a tree distribution system?

1 A Yes, it is.

2 Q And looking at Exhibit 30 of TWMA's exhibits,
3 do you see NAC Section 445.6712?

4 A I do.

5 Q And does that section allow for a tree
6 distribution system?

7 A It does not.

8 Q In looking at Exhibit 20, is this a page from
9 TWMA's design standards?

10 A It is.

11 Q And looking specifically at standard
12 1.1.06.06, does this standard allow for a tree system?

13 A It does not.

14 Q And can you please turn to Exhibit 21. Can
15 you explain what this exhibit shows?

16 A This exhibit highlights the single arterial
17 dead end main that forms the basis of the tree system
18 both in the north and in the south of the St. James
19 Village water system.

20 Q Does it also show the lengths of those dead
21 end mains?

22 A It does.

23 Q And could you please state for the record
24 what they are.

25 A The northern section is 6,300 feet long.

1 That comes from -- goes from St. James Parkway all the
2 way to the end of the system at proposed Unit 1H.

3 **Q Are there occasions when TWMA design**
4 **standards allow for a dead end main?**

5 A They do. We've, over the years in
6 discussions with the health Authority, we've come to an
7 agreement that we can have a maximum dead end length of
8 800 feet. That accommodates a lot of the longer
9 cul-de-sacs that you see in some of the developments
10 these days.

11 **Q And based on Exhibit 21 and the lengths shown**
12 **here, would this please TWMA's design standards?**

13 A No, it wouldn't.

14 **Q Because it's more than 800 feet?**

15 A Correct.

16 **Q In your professional judgment, would you**
17 **recommend a variance from the 800-foot dead end main**
18 **requirement?**

19 A No, I would not.

20 **Q And why not?**

21 A In a radial dead end main such as this, any
22 break in single portions of the main, everybody
23 downstream from that point of the main break is going to
24 be without water pressure. And when you depressurize a
25 main like that, you're asking for problems from

1 infiltration and possible contamination of the main.

2 Q So it's a public health and safety issue?

3 A Correct.

4 Q Thank you. And you did -- you said you
5 reviewed the Lumos technical memo that was submitted with
6 the St. James discovery request; correct?

7 A I did.

8 Q So looking at Petitioner Exhibit 1, Tab B,
9 it's a technical memorandum to Mr. Woodside from
10 Mr. Hardy about the St. James Village water system
11 analysis.

12 A Okay.

13 Q Do you see that?

14 A I do.

15 Q Looking at the third full paragraph,
16 beginning with: "The St. James Village water system
17 currently consists of," do you see that? I think it's
18 exhibit -- it's B. It's a memo. It's not the larger
19 Lumos report.

20 HEARING OFFICER DRINKWATER: It's in Exhibit
21 1.

22 MS. MORRIS: 1B. 1C is the larger Lumos
23 report. You've got to go backwards. No. Other way.

24 THE WITNESS: Other way.

25 MS. MORRIS: B. Look for B.

1 THE WITNESS: B?

2 MS. MORRIS: B. Keep going.

3 THE WITNESS: Oh, Exhibit B?

4 MS. MORRIS: Yeah. Exhibit 1, Tab B.

5 THE WITNESS: Okay.

6 Q (BY MS. MORRIS:) Okay. So looking -- you
7 see that's the technical memorandum to Mr. Woodside from
8 Mr. Hardy?

9 A Correct.

10 Q Okay. Looking at the third full paragraph,
11 did Lumos agree that the system lacked proper looping?

12 A They did.

13 Q And of that same exhibit, can you turn to
14 page six?

15 A Okay.

16 Q And looking at the distribution piping and
17 pressure zones tab in the last sentence, does that
18 paragraph -- does that also agree that there was not
19 proper looping for the system?

20 A It does.

21 Q And does it state that that was important for
22 system redundancy and greater fire flow?

23 A It does.

24 Q Thank you. Let's talk a little bit about
25 fire flows. I think you said that -- and we looked at

1 the Lumos larger report -- that they did not conduct fire
2 flow modeling; is that correct?

3 A That is correct.

4 Q And can you turn to -- Did TWMA complete that
5 modeling?

6 A We did.

7 Q And what are the fire flows for this project?

8 A Taking a look at the size of the homes in
9 that development, we determined that the fire flow would
10 be 2,500 gallons per minute.

11 Q And did Lumos agree with that?

12 A They did.

13 Q And that's not a number TWMA just made up;
14 correct?

15 A No.

16 Q It's based on a standard?

17 A International Fire Code standards.

18 Q And the NAC requires that you do such
19 analysis and modeling for fire flow; correct?

20 A It does.

21 Q And could you turn to TWMA Exhibit 23? If
22 you could explain what this shows and maybe orient us a
23 little bit about where the proposed areas for this
24 project are for the discovery.

25 A This again is a -- this exhibit is a map of

1 the St. James Village water system. It shows both the
2 northern and southern portions of the system. And what
3 this is, this shows the result of a fire flow analysis
4 throughout the entire system. And the nodes with the
5 numbers next to them, that indicates the maximum fire
6 flow that can be delivered at that point in the system.

7 Q And can you tell me if this modeling
8 demonstrates that the 2,500 gallons per minute or GPM
9 standard is met?

10 A You can see on the west side or the left side
11 of this exhibit near the St. James 1 tank, this is the
12 only area within that system where you can get in excess
13 of 2,500 gallons per minute of fire flow. The remaining
14 portions of the system are -- well, you can tell from
15 just looking at the numbers no numbers exceed 2,500
16 gallons per minute. And even in the southeastern portion
17 towards the bottom left of this exhibit, you can see the
18 fire flows are less than a thousand gallons per minute.

19 Q Thank you. Let's talk a little bit about
20 maximum day demand. Looking at Exhibit 30, TWMA Exhibit
21 30.

22 A Okay.

23 Q And these are relevant sections of the NAC.
24 Does NAC 445.6672 require an analysis that includes a
25 maximum day demand?

1 A It does.

2 Q And did TWMA complete that analysis?

3 A We did.

4 Q And if we could turn to TWMA Exhibit 24.

5 Maybe you could just briefly explain what a maximum day
6 demand is and why it's important.

7 A Sure. For residential development, we
8 calculate the maximum day demand by the lot size. So
9 what we do is we take the lot area in square feet, put
10 this into a spreadsheet, and we calculate the maximum
11 daily demand for each lot in the project and we get a
12 total maximum day demand that way.

13 So for the existing St. James units, the max
14 daily demand using that method is 207 gallons per minute.
15 That includes the homeowner's association irrigation
16 service. There's an additional 81 lots in the St. James
17 Village area that were committed to serve, but they serve
18 -- but they're not yet built, so that's a committed max
19 day demand of 122 gallons per minute.

20 And then if you add the 24 lots that were
21 part of the discovery, they had a maximum day demand of
22 35.1 gallons per minute which gives you a total committed
23 max day demand in the 24 lots were developed of 364.1
24 gallons per minute.

25 Q And when you look at the max day demand, as

1 proposed by the Petitioner, it would be met with just St.
2 James' Wells 1 and 2 for a capacity; correct?

3 A Correct.

4 Q And what are the capacity rates of those two
5 wells?

6 A We de-rated the original capacity of those
7 two wells, so the combined capacity from the existing
8 wells is 350 gallons per minute.

9 Q And so looking at Exhibit 24, it shows that
10 based on your analysis, there's a deficit capacity just
11 using those two wells for that source; correct?

12 A Correct: 14.1 gallons per minute.

13 Q And in the Lumos report that was submitted,
14 which is Petitioner Exhibit 1, Tab B on page 8, they also
15 identify additional 18 lots that are outside the St.
16 James gated community as a requirement for future demand.
17 Did you include those 18 units in this analysis?

18 A No.

19 Q And if you did include those, would that make
20 the deficit greater?

21 A It would.

22 MS. MORRIS: Thank you.

23 HEARING OFFICER DRINKWATER: Can I ask -- I
24 don't know if this is a good time, but it's as good a
25 time as any. Explain to me about de-rating the well.

1 Are you involved in that?

2 THE WITNESS: That's probably a better
3 question for Mr. Enloe.

4 HEARING OFFICER DRINKWATER: Okay. Thank
5 you. I will ask it.

6 Q (BY MS. MORRIS:) Yeah, and I have questions
7 about that. But I would like you to talk about capacity
8 de-rating versus water resource availability de-rating.
9 Can you speak to the capacity de-rating?

10 A I think I can handle that one.

11 Q Thank you.

12 A The actual capacity -- we're talking about
13 capacity of supply is the amount of water that you can
14 pump by the wells. The water rights capacity is more of
15 an annual duty for the development, and it's usually
16 noted in acre feet per year.

17 HEARING OFFICER DRINKWATER: The Lumos --
18 second Lumos report, the Exhibit C to Exhibit 1, has
19 charts on page 22 regarding maximum daily demand. There
20 numbers are slightly different from your numbers. It's
21 my understanding this is a fairly formulaic process based
22 on those lot sizes. Why are the numbers different?

23 Q (BY MS. MORRIS:) Maybe I could just help
24 here. If you look at the table in 22, if you take the
25 existing residential demand plus the HOA irrigation which

1 you said you combined for the 206, is the 194 plus 13

2 roughly 206? I'm really bad at math. I'm a lawyer.

3 HEARING OFFICER DRINKWATER: 194 plus 213?

4 MS. MORRIS: Thirteen.

5 HEARING OFFICER DRINKWATER: Oh, 13 plus 13.

6 So these two?

7 Q (BY MS. MORRIS:) Mr. Estes, you have to help
8 me with the math.

9 A Yes.

10 Q So in TWMA Exhibit 24, you said existing use
11 was 206 GPM?

12 A 207.

13 Q And then if you take the table from Lumos on
14 page 22 and look at -- and this is Table 4.3, for the
15 record, and look at the first two lines, existing
16 residential plus HOA irrigation, is that roughly the 206
17 that you used?

18 A It's the 207. Yes.

19 Q Rounding errors potentially?

20 A Yes, probably.

21 MS. MORRIS: Do you have more questions on
22 that table before I move on?

23 HEARING OFFICER DRINKWATER: I'm not sure.

24 I'll have to come back to that.

25 Q (BY MS. MORRIS:) Okay. Looking at Exhibit

1 16, TWMA's Exhibit 16, can you identify for the record
2 what this document is?

3 A This is the 2015 discovery report.

4 Q And it was provided to St. James --

5 A It was.

6 Q -- Village. Did this discovery suggest
7 drilling two new wells: St. James three and four, to
8 meet capacity issues?

9 A It does.

10 Q And the cost estimate for the two new wells
11 shown on page nine of the discovery under item one?

12 A Yes.

13 Q And what was the estimated cost for those two
14 new wells?

15 A For the two wells, cost estimate was \$4
16 million dollars.

17 Q And looking at that same Exhibit 16 on page
18 five, district your attention to the second full
19 paragraph. Did the discovery acknowledge that there may
20 not be sufficient groundwater supplies onsite to meet the
21 project demand?

22 A It does.

23 Q And looking at the paragraph above, did it
24 also acknowledge the Area 15 fees would apply?

25 A It does.

1 Q Did the 2022 discovery find a different way
2 to try to address the reliable pumping capacity issue?

3 A It did.

4 Q And let's look at that discovery. Can you
5 turn to Exhibit 19.

6 A Okay.

7 Q And what was the solution that TWMA came up
8 with to try to address the reliable pumping capacity
9 issue other than drilling two new wells?

10 A Instead of putting additional stress on the
11 aquifer by building additional production wells, what we
12 proposed now is to serve growth in St. James Village by
13 sending water through the existing -- from and through
14 the existing Mt. Rose water system.

15 Q And looking at Exhibit 19, page seven, let me
16 know when you get there.

17 A Okay.

18 Q Can you identify which line item would be the
19 cost of that proposed solution.

20 A That would be the pressure reducing station
21 with SCADA control at a cost estimate of \$125,000.

22 Q So that would be a cheaper solution to
23 address the capacity issues rather than drilling two new
24 wells?

25 A It would.

1 Q By roughly how much?

2 A When you take into account the connection
3 fees, the Area 15 fees as well, the revised plan is
4 approximately \$2.9 million dollars less.

5 Q And, Mr. Estes, have you seen the cost
6 benefit analysis that Washoe County performed --

7 A I have not.

8 Q -- that was referenced --

9 A No.

10 Q -- in the pleadings? So that wasn't provided
11 by the Petitioners?

12 A I have not seen it.

13 MS. MORRIS: Okay. Thank you.

14

15 DIRECT EXAMINATION

16 BY MS. MORRIS:

17 Q Mr. Enloe, can you please state your name and
18 your title and spell your last name for the record.

19 A Sure. My name is John Enloe: E-N-L-O-E.
20 I'm the Director of Natural Resources for TWMA.

21 Q In your role as natural resources, do you
22 oversee hydrogeologists?

23 A Yes, I do.

24 Q And do you work with those hydrogeologists to
25 determine how TWMA can serve reliable water supply in the

1 future?

2 A Yes, I do.

3 Q And could you please describe your
4 professional experience working with the Mt. Rose-Galena
5 Fan groundwater resources from 1999 to roughly 2015.

6 A Sure. So in 1999, I was a consultant for a
7 company called Ecologic Engineering, and we were hired by
8 Washoe County and the South Truckee Meadows General
9 Improvement District to prepare a comprehensive water and
10 wastewater facility plan for the entire south Truckee
11 Meadows area. It's a much larger area than really what
12 we're talking about up on the Mt. Rose Fan, all of Double
13 Diamond and Arrowcreek and so forth.

14 Part of that study included a groundwater
15 model for that entire area where we looked at the
16 sustainable pumping amount. Mr. Estes referred to an
17 earlier conjunctive use, so we were looking at a facility
18 plan that utilized groundwater resources, creek
19 resources. And at the time, TWMA had a wholesale service
20 to Washoe County utilizing Truckee River resources, so we
21 were looking at the combination of those three resources
22 to satisfy a large area demand. One of the --

23 Q Mr. Enloe, sorry. If I can stop you.

24 A Sure.

25 Q As part of that work that you were involved

1 in looking at Exhibit 7 of TWMA's exhibits, is that the
2 technical memorandum you were referring to?

3 A Yeah, that's what I was just going to speak
4 to. So one of the outcomes of this facility plan was a
5 groundwater model. And this Exhibit 7 that is being
6 referred to is one of the technical memoranda within that
7 facility plan.

8 And the primary conclusion from this was that
9 the amount of committed and I'll say water rights that
10 were intended to serve tentative maps within the entire
11 service area, there was not sufficient groundwater, there
12 were not sufficient groundwater resources, the wet water,
13 to satisfy the amount of permitted groundwater in the
14 area.

15 So one of the outcomes of that facility plan
16 was a recommendation for the construction of an upper
17 water treatment plant that would be used to supply
18 treated surface water to augment the groundwater
19 resources in that area. So at the time, Washoe County
20 and STMGID, in that area, relied 100 percent on
21 groundwater. And this facility plan, which was approved
22 by Washoe County and STMGID in 2002, acknowledged that
23 and recognized the need for conjunctive use and the need
24 for an upper surface water treatment plant to provide
25 that source of supply.

1 Q And would the Mt. Rose Water Treatment Plant
2 that was recently completed by TWMA be just that kind of
3 facility?

4 A Yes, it is.

5 Q Okay. And do you have the Petitioner's
6 complaint in front of you?

7 A I do.

8 Q Could you please turn to page 10. And I want
9 to direct your attention to lines four through six. It
10 says: "The Authority determined that it would initiate
11 an aquifer supply recovery program due to the extensive
12 aquifer drawdown on the Mt. Rose Alluvial Fan caused by
13 domestic well pumping." Do you see that?

14 A Yes, I do.

15 Q Do you agree with that statement?

16 A No, I don't.

17 Q And can you please turn to Exhibit 8, TWMA
18 Exhibit 8. What is that document?

19 A This is a staff report from Washoe County in
20 August of 2011 related to the implementation of the
21 domestic well mitigation program for the Mt. Rose Fan.

22 Q So does that indicate to you that it was
23 really municipal pumping that was causing issues with
24 domestic wells?

25 A That was the reason this whole program was

1 implemented. There's been a long history of public
2 engagement, I will say, with the utilities related to
3 municipal groundwater pumping that impacts the domestic
4 wells. It was a big part of the facility plan effort
5 completed in 2002. That carried on through the early
6 2000s and culminated with this domestic well mitigation
7 program that compensates domestic well owners for the
8 impacts of municipal pumping on domestic wells.

9 **Q Can you describe -- since the Washoe County**
10 **merger in 2014 -- what has TWMA done to promote**
11 **conjunctive use and what steps have you taken?**

12 **A** Sure. So Mr. Estes referred to it. When
13 TWMA -- so just for some clarity, I didn't start work for
14 TWMA until 2014, but during the merger process, it was
15 recognized that there was a significant problem in the
16 Mt. Rose Fan.

17 The drought of 2011 through 2015 exacerbated
18 that problem, and upon completion of the merger, TWMA
19 accelerated improvements for this conjunctive use plan so
20 that consisted of the water supply project that Mr. Estes
21 referred to pumping water from basically treated Truckee
22 River water from the Walmart area and Double Diamond all
23 the way up to the top of Arrowcreek Parkway. From that
24 point, the water could be distributed to the entire upper
25 portions of the Mt. Rose Fan. And we completed that in

1 2016, and with completion of that project, we were able
2 to reduce groundwater pumping by those upper wells by
3 approximately 40 percent.

4 And in addition to that, Mr. Estes referred
5 to the design and construction of the Mt. Rose Water
6 Treatment Plant which is now complete, and we are also
7 actively recharging three wells in that area. So placing
8 -- during this time of year actually treated water back
9 down the wells to help restore groundwater levels in the
10 area.

11 Q Thank you. I want to take a couple of steps
12 back. When TWMA -- when the merger was complete, did
13 TWMA adopt the Mt. Rose-Galena Fan domestic well
14 mitigation program?

15 A Yes, we did.

16 Q And looking at Exhibit 10 of TWMA, is that
17 Rule 10 for TWMA?

18 A Yes, it is.

19 Q And I want to talk briefly about how TWMA
20 adopts area fees, so could you please turn to Exhibit 9,
21 TWMA Exhibit 9. Thank you. Could you just explain what
22 this document is.

23 A So this is a staff report dated April 6th,
24 2015 related to proposed rule changes and WSF charges,
25 the Area 15 -- they're essentially connection fees, 14

1 and 15, for that area.

2 Q And when TWMA changes its fees, does it have
3 to do a public process?

4 A Yes, we do. There's two public readings of
5 that. And for this process, we also held a public
6 workshop.

7 Q And can you just briefly look at Exhibits 11
8 and 13? Are those the TWMA board agendas agendizing the
9 changes to those rate fees for Area 15?

10 A Yes, they are.

11 Q And after TWMA adopted the rate changes and
12 through that public process, if you could turn to Exhibit
13 14. And can you describe what Exhibit 14 is.

14 A So Exhibit 14 is a letter that we sent out to
15 over 8, 000 water customers in the Mt. Rose Fan basically
16 advising them that TWMA is now the water purveyor in the
17 region. We recognize that there are significant problems
18 with the groundwater resource in that area and that we
19 were moving forward with implementation of several large
20 improvement projects to address that issue.

21 Q And this is a little bit of a strange letter
22 because it says -- again, it's Exhibit 14. It says:
23 July, question mark, question mark, 2015. But if you
24 look at the back page of the exhibit, there's an invoice
25 attached. Did TWMA cause, through a mail merge, 8,000 of

1 these letters to be sent to property owners --

2 A Yes.

3 Q -- in the area? And do you know if
4 Mr. Woodside, the representative for St. James Village,
5 received this letter?

6 A He did not receive the letter directly. I
7 looked at the actual mail merge list, but I recalled in
8 one of our meetings here at TWMA that Mr. Woodside did
9 receive that letter because he commented that he received
10 multiple copies of it.

11 Q And then if I could just direct your
12 attention again to Exhibit 14, there's the second-to-last
13 page, there's a map. And that was sent with the letter.
14 Can you describe what that map shows in the context of
15 yellow dotted lines as well as the blue area labeled St.
16 James?

17 A Right. So I think there's some confusion
18 between the domestic well mitigation program boundary and
19 our Area 15 boundary because they are not the same. The
20 yellow dashed line represents the domestic well
21 mitigation area boundary, so any domestic well owner
22 within that area could file a claim with TWMA and
23 basically, if they needed to do something with their
24 wells, their costs are partially reimbursed according to
25 the rules and so forth.

1 The black line is the line that reflects the
2 Area 15 charge boundary, and so that's more -- that's in
3 line with TWMA's service area, and it so it extends all
4 the way up to the Arrowcreek subdivision to the north as
5 far south as St. James Village, and it was -- that area
6 was identified to incorporate the municipal wells in the
7 upper Mt. Rose Fan that were contributing to the regional
8 water level decline in the area.

9 Q So I'd like to direct your -- I have a very
10 quick question before we talk about water supply about
11 banked water at TWMA versus dedicated. So if water is
12 banked at TWMA, does that mean TWMA controls it and
13 possesses it or does that mean that TWMA holds it for the
14 use of someone else at a certain point in time?

15 A Yeah, we're basically holding it for the
16 beneficial use of others.

17 Q And if a person who has banked water or an
18 entity has banked water and they want it back, how does
19 that work?

20 A I don't know exactly, but if they want their
21 water back, I believe they could send us a request and we
22 would deed their water back to them.

23 Q Thanks. And I want to take a look at
24 Petitioner's exhibit. It's that bigger binder. And in
25 looking at 6, Exhibit 6.

1 A Six?

2 Q Yeah. And -- sorry -- seven. And I would
3 like to direct your attention first to the cover page, if
4 you could describe for the record what this exhibit is.

5 HEARING OFFICER DRINKWATER: Wait. Their
6 Exhibit 7 or yours?

7 MS. MORRIS: Their Exhibit 7. Petitioner's
8 Exhibit 7.

9 THE WITNESS: This looks like the tentative
10 map and special use conditions for St. James Village.

11 Q (BY MS. MORRIS:) That was adopted by the
12 Washoe County?

13 A Right. In 1992. Correct.

14 Q And if you could turn to page 17 of that
15 exhibit and look at condition 69. Can you describe what
16 that condition says?

17 A Basically, it says if water usage monitoring
18 demonstrates the water rights dedicated to serve the
19 project are insufficient, then additional water rights
20 shall be required to serve that demand.

21 Q So it looks like Washoe County had a
22 condition that considered that there may not be
23 sufficient water and they were going to monitor it in the
24 future to determine that.

25 A Correct.

1 Q Okay. And now let's look at exhibit -- TWMA
2 Exhibit 16. Sorry I'm making you flip all over the
3 place. This is the December 23rd, 2015 discovery. And
4 I'd like to direct your attention to page four, and in
5 particular, Figure 1.

6 So is this the data that TWMA relied upon in
7 2015 to make the determination that there was -- that the
8 St. James Wells 1 and 2 were not sufficient to meet the
9 reliable water supply for the project into the future?

10 A Yeah, this and other data as well.

11 Q And can you describe what is shown on Figure
12 1?

13 A So Figure 1 shows the static water level and
14 two monitoring wells nearby to the St. James production
15 wells. And over essentially a what is that?
16 20-year-period, there were over 50 feet of water level
17 declines in each of those wells really with very small
18 pumping amounts relative to their overall water rights.

19 Q And can you -- Sorry. This is showing data
20 for 1994 through 2015?

21 A Correct.

22 Q And this was one of the pieces of data that
23 you were looking at to make that determination in the
24 discovery?

25 A Yeah. This was the determination in the

1 discovery as well as this type of information fed into
2 the whole Area 15 conjunctive use mitigation program.

3 Q And if we could also turn to Exhibit 6, TWMA
4 Exhibit 6. Can you please describe what this depicts
5 including what the blue and black lines show as well as
6 the dotted line?

7 A Sure. So the blue line represents the water
8 levels in one of those same monitoring wells: St. James
9 monitoring well one. And you have that same time period
10 from basically '95 through 2015.

11 What the black line shows is the cumulative
12 pumping of its seven wells in the Mt. Rose Fan.
13 Basically, it's the municipal wells south of Mr. Rose
14 Highway, and over that time period, that pumping
15 increased from only a couple hundred feet, acre feet to
16 almost 2,000 acre feet per year, and the dashed line
17 basically represents when TWMA took over.

18 And what you can see from the blue line is
19 the water levels, compared to earlier years, started to
20 stabilize. And the reason that those water levels are
21 stabilizing can be seen in the black line because at that
22 same time period, TWMA -- that was when we talked about
23 implementing these conjunctive use, sending water up
24 Arrowcreek and reducing the groundwater pumping.

25 So the groundwater pumping went down from

1 over 1,500, 1,700, 1,800 acre feet a year to maybe an
2 average of a thousand acre feet per year. So it was that
3 reduction in regional groundwater pumping that
4 contributed to the stabilization of the St. James water
5 levels.

6 Q Thank you. Mr. Enloe, did you review the
7 Confluence materials that were submitted separately as
8 well as part of the Lumos materials for the 2021 same
9 joint discovery?

10 A Yes, I did.

11 Q And did some of your staff meet with
12 Confluence to discuss those findings and materials?

13 A Yes, they did.

14 Q And in general, did your staff agree with the
15 findings for the Serpa Well tests that were provided?

16 A Yeah, they did agree with the test results
17 from the Serpa Well to a large extent, and they took
18 those results and incorporated them into our regional
19 model.

20 If I could just add something. Because of
21 this regional model, there were models developed in the
22 early 1990s that identified that there was a problem in
23 the upper Mt. Rose Fan with the sustainable water
24 resources. The modeling that we did as part of the
25 facility plan confirmed that.

1 When TWMA took over the system in 2015, we
2 worked on additional models to try to incorporate the
3 most comprehensive and available information. One of the
4 big additions to this was we were able to incorporate the
5 Ormat geothermal facility into the groundwater modeling
6 because that was essentially a black box in all of the
7 other groundwater models that had been developed and we
8 were never able to get that information. But through
9 some good work of our hydrogeologist, they were able to
10 work with Ormat and get that information, so we feel we
11 have a very accurate and comprehensive model of that
12 area. With respect to the Serpa groundwater model, I
13 mean one of the things --

14 **Q Let's talk -- the Serpa, the well testing,**
15 **you mean?**

16 A Right.

17 **Q So you're familiar with that test?**

18 A Yes.

19 **Q Okay. And what basin are the St. James --**
20 **What groundwater basin are the St. James wells located**
21 **in?**

22 A St. James are in the Pleasant Valley
23 Hydrographic Basin.

24 **Q And what basin is the Serpa Well located in?**

25 A The Washoe Valley Hydrographic Basin.

1 Q And you have a groundwater modeler on staff;
2 correct?

3 A A very good one.

4 Q And what is his name?

5 A Greg Pohll.

6 Q And he updates the regional models as you've
7 just described?

8 A Yes, he did.

9 Q Your regional model looks at hydraulic
10 barriers, does it not?

11 A Yes, it does.

12 Q It considers those when it looks at regional
13 impacts?

14 A Yes, it does.

15 Q That would include faults?

16 A Yes.

17 Q That would include bedrock?

18 A And that was really -- with the comments that
19 John Benedict from the State Engineers Office, he
20 provided some input on faulting and so forth, and that
21 information was also incorporated into the regional
22 groundwater model.

23 Q And so I want to direct your attention to
24 TWMA Exhibit 25. And let me know when you get there.

25 HEARING OFFICER DRINKWATER: Sorry. Which

1 exhibit?

2 Q (BY MS. MORRIS:) TWMA Exhibit 25.

3 Is this a summary of some model simulations
4 that were run by your staff?

5 A Yes, it is.

6 Q And on the first page of that exhibit, on the
7 second paragraph at the very bottom, it talks about the
8 model hydraulic conductivity in the vicinity of the Serpa
9 Well was increased, blah, blah, blah?

10 A Right.

11 Q In accordance with an aquifer test at that
12 well. Do you see that?

13 A Yes.

14 Q So the results from the Serpa Well tests were
15 incorporated into this model?

16 A That is correct.

17 Q And can you just briefly summarize what the
18 model results show from these runs, in particular,
19 looking at scenario two?

20 A Right. So scenario two is basically a
21 representation in the model of increased pumping rates
22 from approved development up in the area. So not only
23 does St. James Village have an approved tentative map,
24 but so does a project called Terrasante, another one
25 called Ascente, so there's much more potential

1 development up there in that area. So this scenario two
2 looked at increased pumping levels from all of those
3 approved developments to reflect long-term changes in the
4 groundwater level.

5 Q In your professional opinion, would it be
6 wise to make a long-term resource supply determination
7 based on a two-week test from a well that's not even
8 contemplated to provide water supply?

9 A No.

10 Q Would you do it without looking at other
11 regional impacts?

12 A No.

13 Q And finally, in your opinion, and based on
14 the modelings, is there a hydrologic connectivity between
15 the Pleasant Valley Basin and other surrounding basins?

16 A Yes, there is. And I just wanted to comment
17 that the Confluence report even recognized the
18 conductivity between the pump test at Serpa and the St.
19 James Wells.

20 Q And I want to direct your attention to
21 Petitioner Exhibit 19. This is a TWMA memo dated August
22 2nd, 2018 to the file. Does Mr. White work with you?

23 A Yes, he did.

24 Q And are you familiar with this memo?

25 A Yes.

1 Q And looking at page one, on the fourth
2 bullet, does that indicate that the model found regional
3 drawdown over much of the Mt. Rose Fan exceeding 50 feet
4 based on future development?

5 A Correct.

6 Q And does this memo and the model results in
7 Exhibit 25 indicate regional hydrologic connectivity?

8 A I'm sorry. Can you repeat that question?
9 You threw out another exhibit there.

10 Q I'll strike that. I'm going to move on.
11 Mr. Enloe, are you familiar with the valve that's
12 referenced in Petitioner's complaint that connects the
13 Mt. Rose system with the St. James system?

14 A Yes, I am.

15 Q Are you aware that in 2017 and 2018, the
16 valve was opened to help address wells being down in
17 either of those systems?

18 A Yes, I am.

19 Q Is it generally good public utility -- Is it
20 prudent for utilities to have redundancy in systems to be
21 able to address outages in other areas?

22 A Very much so.

23 Q Did TWMA base its opinions and conclusions
24 about the groundwater availability for the 2015 discovery
25 on data from the future?

1 A No.

2 Q Or was it on past data prior to 2017 and
3 2018?

4 A It was basically the 2015 discovery and that
5 Figure 1 that we looked at in there that was prior to
6 really TWMA taking over the system and prior to that
7 valve even being opened. So during the time period when
8 that valve was opened was the time period when the water
9 levels were stable in the St. James Wells because of kind
10 of our reduced groundwater pumping.

11 Q Okay. Thank you. And if you can look again
12 at Petitioner's brief on page nine, and really focusing
13 on lines three through 14, essentially four through 14.

14 A Okay.

15 Q Do you agree with that statement that the
16 Authority wouldn't consider alternative water rights?

17 A No.

18 Q Has it changed its opinion from 2015 to 2022?

19 A No. In the discovery, I think, mentioned a
20 couple of alternatives, one being wells down on the
21 Sierra Reflections property and the other being
22 supplemental water rights from the Whites Creek Water
23 Treatment Plant.

24 Q And if you could reference Exhibit TWMA
25 Exhibit 19, page four, the first full paragraph.

1 A Starting with "However"?

2 Q Yes. Does that confirm what you just said:
3 That other sources of supply or mitigation could be
4 available?

5 A Correct.

6 Q And does it also suggest that TWMA's open to
7 considering other supply options as long as they don't
8 have impacts on the long-term reliability of the regional
9 groundwater?

10 A Correct.

11 HEARING OFFICER DRINKWATER: I'm not with
12 you. Sorry. He's right.

13 MS. MORRIS: I think it's TWMA Exhibit 19.

14 HEARING OFFICER DRINKWATER: All right. I'm
15 there.

16 MS. MORRIS: And it's page four.

17 HEARING OFFICER DRINKWATER: And my page four
18 is all references.

19 MS. MORRIS: I think you're on the wrong
20 exhibit book.

21 HEARING OFFICER DRINKWATER: Oh, you're
22 right. Sorry. That's exactly what happens.

23 MS. MORRIS: No worries. I'll wait.

24 HEARING OFFICER DRINKWATER: Got it. Thank
25 you. Sorry.

1 Q (BY MS. MORRIS:) So again, looking at page
2 four of --

3 HEARING OFFICER DRINKWATER: Yeah, I see
4 where you're talking about.

5 Q (BY MS. MORRIS:) -- Exhibit 19. And then I
6 guess in -- I need one second. So just to confirm, TWMA
7 would be open to looking at other water resources and
8 mitigation?

9 A Correct.

10 Q As indicated on page four?

11 A Correct.

12 MS. MORRIS: I don't have any further
13 questions.

14

15 EXAMINATION

16 BY HEARING OFFICER DRINKWATER:

17 Q Could we go back to my earlier question about
18 the de-rating of the well?

19 A Sure.

20 Q How and when and how -- I mean, how does that
21 all happen?

22 A Okay. So when we were looking at
23 implementing this entire program, we were looking at
24 water levels with wells in that entire area, and we
25 actually conducted and reviewed pump tests on wells and

1 so forth. But what we were seeing was that water levels
2 were declining rapidly, easily two or more feet a year
3 with no rebound whatsoever.

4 The derating of these wells was not just
5 limited to St. James Village. We also derated -- they're
6 called two Tessa wells that were equipped and providing
7 service to customers, and the water levels in those wells
8 were really dropping. So again, cutting back on the
9 pumping reduces that demand on the aquifer.

10 And then there are two other wells. They're
11 not TWMA wells currently, but they're associated with the
12 Terrasante development that have also been derated for
13 the same reason. So we're looking at, I mean, it's
14 really not just the GPM pumping capacity issue, but how
15 much water can you remove from the aquifer in that
16 location without causing a significant impact.

17 HEARING OFFICER DRINKWATER: Okay. Thank
18 you.

19 MR. ENLOE: And so these wells were derated
20 in 2015, as were the other four that I referred to.

21 HEARING OFFICER DRINKWATER: I have one more
22 question for Mr. Estes. I didn't ask you, but I meant to
23 ask you. You described the process of the application
24 and the discovery and my question is: Was St. James
25 Village treated any differently than any other customer

1 in your process?

2 MR. ESTES: No, they weren't.

3 HEARING OFFICER DRINKWATER: Thank you.

4 MS. MORRIS: I remembered my last question if
5 you wouldn't mind. It was for Mr. Enloe.

6 HEARING OFFICER DRINKWATER: Okay.

7

8 FURTHER EXAMINATION

9 BY MS. MORRIS:

10 Q When you look at other projects and other
11 discoveries, do you, in that area, would you use the same
12 regional model?

13 A Yes.

14 Q And you would look at that pumping and assess
15 based on that regional model whether that resource was
16 sustainable?

17 A Correct.

18 MS. MORRIS: Thank you.

19 HEARING OFFICER DRINKWATER: I think it's
20 time for us to take a short break. Is ten minute us
21 enough time? So let's come back just about a little bit
22 after 11:00.

23 (Recess.)

24 HEARING OFFICER DRINKWATER: We're back.

25 MR. ADDISON: Your Honor, this is Matt

1 Addison again. I just have two housekeeping matters,
2 procedural matters. The first is you had referenced your
3 desire to see an April 19th, 2021 letter from Mr. Champa,
4 Petitioner's counsel, to our former partner, Mike Ponti
5 at McDonald Carano, on behalf of TWMA. And Mr. Champa
6 indicated on the record earlier he had three copies of
7 and that and he would distribute it.

8 During the break, we negotiated a stipulation
9 very quickly to simply take this copy that Mr. Champa
10 provided and amend the record in the matter by amending
11 TWMA's Exhibit Number 5 and appending this letter of
12 April 19th, 2021, to the end of Exhibit 5 to supplement
13 the record.

14 Mr. Champa, have I stated our stipulation
15 correctly?

16 MR. CHAMPA: That's correct.

17 MR. ADDISON: Thank you. I appreciate your
18 courtesy very much.

19 Your Honor, is that okay with you?

20 HEARING OFFICER DRINKWATER: Absolutely.

21 MR. ADDISON: Thank you very much.

22 Secondly, just as I indicated before we took
23 the direct testimony of Mr. Estes and Mr. Enloe, we
24 completed -- Ms. Morris completed that direct examination
25 just about in the time we had allotted, and we want to

1 make sure that you have a complete opportunity to ask
2 these gentlemen questions and then open them up for
3 cross-examination by Mr. Champa. So they're here.
4 They're ready. Any questions you or Mr. Champa have,
5 they're ready to field.

6 HEARING OFFICER DRINKWATER: Would you like
7 to do cross-examination?

8 MR. CHAMPA: Briefly.

9 HEARING OFFICER DRINKWATER: Okay.

10

11

CROSS-EXAMINATION

12 BY MR. CHAMPA:

13 Q Good morning still. I'm Mr. Champa, on
14 behalf of St. James. Now I think this question is for
15 you, Mr. Estes. I'm not quite sure, but in regards to
16 the NAC provisions, particularly regarding the
17 Authority's 1.1.06.06 Provision, you had stated that you
18 had provided or sought counsel from the applicable
19 authorities. I think it was the health department.

20 Is there any writing pertaining to that
21 confirmation where the authorities said or the health
22 division said oh, we agree with the 1.1.06.06 provisions?

23 A Well, in general, we have a letter that says
24 they reviewed and approved our standards.

25 MR. ADDISON: Objection. Excuse me. I don't

1 mean to be interrupting, but that's not the NAC
2 provision, right?

3 MR. CHAMPA: Correct. No.

4 MR. ADDISON: That's the TWMA internal rules.

5 MR. CHAMPA: TWMA internal rules.

6 MR. ADDISON: No offense. I think the
7 question was posed as referring to the NACs.

8 MR. CHAMPA: Okay. I apologize. Would you
9 like me to rephrase?

10 MR. ADDISON: I just don't want the record to
11 be confused, so if you wouldn't mind.

12 MR. CHAMPA: Okay. Absolutely.

13 MR. ADDISON: Thank you.

14 MR. CHAMPA: Let me actually go to the --

15 MR. ADDISON: And it's the TWMA internal
16 design; correct?

17 THE WITNESS: Uh-huh.

18 MS. MORRIS: It's Exhibit 20, if you're
19 looking for it.

20 MR. CHAMPA: Exhibit 20.

21 MS. MORRIS: Uh-huh.

22 Q (BY MR. CHAMPA:) So you indicated earlier
23 that you took the Truckee Meadows Water Authority
24 engineering and construction standards and provided a
25 copy of those to I think it was the health department who

1 is the one who promulgated the NAC provisions regarding
2 tree systems. Is that correct?

3 A Correct.

4 Q Okay. And do you have a copy of that
5 correspondence or was there any written correspondence?
6 Sorry. That's compound.

7 MR. ADDISON: You're fine.

8 Q (BY MR. CHAMPA:) Was there any written
9 correspondence from the health department approving the
10 1.1.06.06 TWMA standards?

11 A We have a letter noting their approval of our
12 standards as a whole. They don't address specific items
13 within those standards.

14 Q And did the health department review the
15 entirety of what this Exhibit 20, the engineering and
16 construction standards, design guidelines?

17 A Yes, and much more than that.

18 Q And do we have -- Is there a copy readily
19 available online of all of these design standards?

20 A They should be on our website.

21 Q Okay. Now I think this might be another one
22 for you. When TWMA was taking over Washoe County in
23 particular the STMGID duties for the southern area of
24 Reno, particularly the St. James region, did TWMA perform
25 a review of the existing water facilities at St. James?

1 A Yes, we did.

2 Q And did you review the well capacities
3 associated with the wells that were there?

4 A The reported capacity, yes.

5 Q Did you also review the existing tree
6 structures?

7 A I don't recall looking at that specifically
8 at that time.

9 Q Were you aware that the tree systems were in
10 excess of 800 feet?

11 A I could have told that by looking at the
12 system mapping, but I don't recall doing that
13 specifically either at that point.

14 Q So was it correct then that you had not
15 performed any maximum day demand calculations at that
16 time?

17 A No, we did some rough calculations based on
18 the information at hand.

19 Q Did you find that those calculations
20 satisfied the existing NAC provisions?

21 A I will have to review that calculation sheet.
22 I don't recall off the top of my head.

23 Q And I would pose the same question for the
24 fire demand as well. Would that also take a review and
25 confirm whether those fire demands met TWMA's approval?

1 A At that time, we did not have computer models
2 built of all of the former county systems, so we would
3 not have performed that analysis at that time.

4 Q Okay. Now this question is for you,
5 Mr. Estes. Did you review my or St. James' Attachment 20
6 which is the State Engineer report from?

7 A Yes. Enloe.

8 Q Enloe. Did I say Enloe or Estes?

9 MR. ESTES: Estes.

10 Q My apologies.

11 A No problem.

12 Q Yeah, this is in regards to our Exhibit 20,
13 if you can get there, please.

14 MS. MORRIS: Just for the record, if I may,
15 there's nothing on this that indicates it's an official
16 document from the Nevada Division of Water Resources. In
17 fact, there's no logo or anything of that nature. It
18 looks like it's just a memo to file from John Benedict,
19 but again, no indication that it's an official document
20 from the Nevada Division of Water Resources.

21 HEARING OFFICER DRINKWATER: Mr. Champa, do
22 you want to explain that or --

23 MR. CHAMPA: No, no.

24 MS. MORRIS: Just objecting to the
25 characterization.

1 HEARING OFFICER DRINKWATER: All right.

2 Q (BY MR. CHAMPA:) Absolutely. Okay.

3 Mr. Enloe?

4 A Yes.

5 Q You've been a hydrogeologist in this area for
6 quite some time; correct?

7 A No. I'm a Professional Engineer. I'm not a
8 hydrogeologist.

9 Q Okay. But in that vain, are you familiar
10 with John Benedict?

11 A Yes, I am.

12 Q Do you know where he works?

13 A I think he's still working part time at the
14 State Engineers Office.

15 Q Okay. So but have you reviewed this
16 memorandum from John Benedict?

17 A Not in detail, no. I relied upon TWMA's
18 hydrogeology staff to review the technical details of it.

19 Q I think that's all I have for that then
20 unless -- When you reviewed your -- the hydrogeology
21 staff -- were you aware that they had reviewed this
22 report?

23 A Yes.

24 Q And were you aware that there were different
25 findings from the Confluence report compared to what the

1 **Authority had created?**

2 A I know there were some minor differences, but
3 as I stated in my testimony, I believe Mr. Pohll
4 incorporated the hydraulic properties and much of the
5 information that was contained from their pump test into
6 our regional model including faults and so forth.

7 MR. CHAMPA: Okay. I have no further
8 questions.

9 MR. ADDISON: Your Honor, if you don't mind,
10 we just have one follow-up. Ms. Morris does. Very
11 brief.

12 HEARING OFFICER DRINKWATER: Okay.

13

14 FURTHER EXAMINATION

15 BY MS. MORRIS:

16 Q **Mr. Estes, when TWMA took on the county**
17 **system, you just took it as it was; correct?**

18 A True.

19 Q **You didn't have the opportunity to amend it.**
20 **It wasn't like an annexation where you could require**
21 **things to be amended?**

22 A That is correct.

23 Q **To make the system better?**

24 A Yes, that's correct.

25 MS. MORRIS: Thank you. No further

1 questions.

2 HEARING OFFICER DRINKWATER: I think my
3 questions were answered already, so thank you.

4 MR. ADDISON: Thank you. That would conclude
5 TWMA's case-in-chief.

6 HEARING OFFICER DRINKWATER: Thank you.

7 MR. ADDISON: Thank you.

8 HEARING OFFICER DRINKWATER: Okay.
9 Mr. Champa, your rebuttal?

10 MR. CHAMPA: This is going to be a bit longer
11 than my opening, so bear with me.

12 MR. ADDISON: I appreciate your good nature.

13 MR. CHAMPA: I try. Now, the St. James,
14 based upon all of the information it's provided, has
15 shown in comparison to the authorities's findings that
16 the discovery is erroneous in view of the substantial
17 evidence on the whole record. The Authority's discovery
18 is arbitrary, capricious and abuse of discretion, and
19 their position is still in violation of Nevada water law
20 and the various constitutional principles and doctrines
21 associated with water.

22 The Authority gave no regard for the County's
23 expertise as to why a tree system should be used.
24 Instead, the Authority based its decision on its
25 interpretation of the pertinent code and then doubled

1 down on utilization of its annex requirements and
2 concluded that the tree system is not viable.

3 The Authority attempted to discredit the
4 capacity of the wells by derating them because they just
5 said so and decided to do so. The Authority attempted to
6 forfeit portions of St. James' water rights through means
7 that result in violations of long-standing doctrines of
8 western water law and Nevada water law itself because it
9 said so.

10 In all, the Authority picks and chooses what
11 it wants, how it wants it and when all because it says
12 so. Because of this and the papers on file representing
13 the substantial evidence on the whole record, the Hearing
14 Officer should overturn the discovery in its entirety.
15 That's it.

16 HEARING OFFICER DRINKWATER: I have a
17 question for you.

18 MR. CHAMPA: Okay.

19 HEARING OFFICER DRINKWATER: Please explain
20 to me the legal impact of property being reverted to
21 acreage. I know I didn't say that exactly right, but you
22 know what I mean.

23 MR. CHAMPA: My understanding -- and this is
24 not my realm, so I think I would probably do best to
25 write a memo or a brief in very short order to not put

1 anything on the record that is incorrect.

2 HEARING OFFICER DRINKWATER: Is that
3 acceptable?

4 MR. ADDISON: Well, Your Honor, what I'd like
5 to do is add to that. And I'd like Mr. Enloe or
6 Mr. Estes to answer that question because they can
7 explain the practical effect of returning land to
8 acreage. And it's a footnote three in our brief toward
9 the beginning. I believe it's page five or so.

10 And that's something I would like one of our
11 gentlemen to talk about because it does have effect. And
12 I'll just, as an offer of proof, summarize it. What it
13 does is start the process over at that point. That
14 becomes raw land which then, if the developer wants to
15 subsequently develop it, he or she or they or it has to
16 come back and ask for more discovery, do an application,
17 the whole nine yards for service. So again, just an
18 offer of proof from a lawyer. But I'd prefer, if you're
19 going to allow that, which I have no objection to, that
20 one of these gentlemen speak to it first from our
21 perspective.

22 HEARING OFFICER DRINKWATER: Okay,
23 Mr. Champa. How soon can you get that to me?

24 MR. CHAMPA: Thursday.

25 HEARING OFFICER DRINKWATER: I have only ten,

1 I think, either ten or ten days to --

2 MR. CHAMPA: Monday.

3 HEARING OFFICER DRINKWATER: Monday? Monday
4 is good.

5 MR. CHAMPA: Okay.

6 HEARING OFFICER DRINKWATER: Thank you.

7 MS. MORRIS: Just, Your Honor, if there are
8 additional legal arguments raised, we'd like the
9 opportunity to respond by Tuesday. There may not be, but
10 if there's new legal arguments raised, we should have the
11 opportunity to respond.

12 HEARING OFFICER DRINKWATER: Yes, that seems
13 fair to me.

14 MR. ADDISON: And do you want concurrent
15 letters on the first day with the ability to provide --

16 HEARING OFFICER DRINKWATER: I think you're
17 going to ask your question and let your people answer
18 here. If you'd like to write a brief as well, I suppose
19 you could do that by Monday as well.

20 MR. ADDISON: Well, thank you. Because what
21 my point was very specific. And I said I would like one
22 of these gentlemen to opine on the practical effects of
23 that with TWMA, not necessarily the legal side.

24 HEARING OFFICER DRINKWATER: Okay.

25 MR. ADDISON: So we would appreciate the

1 opportunity to simultaneously brief the issue on Monday,
2 but I would like the practical side on the record now as
3 well.

4 HEARING OFFICER DRINKWATER: Okay. Let's do
5 that.

6 MR. ADDISON: Gentlemen, which of you is
7 best? Mr. Estes?

8 MR. ESTES: I'm going to take a stab at it
9 first.

10 MR. ADDISON: Okay, sir. Do you now
11 understand the context of the question?

12 MR. ESTES: I do.

13 MR. ADDISON: Okay. What happens when land
14 is returned to acreage?

15 MR. ESTES: As I tried to describe earlier,
16 when that happens, it's basically the land goes from a
17 subdivision plat, an approved subdivision to raw land.
18 In my mind, that starts the process of all over again for
19 the property owner as far as obtaining a final map again
20 on that property in the future, and as far as TWMA goes,
21 it's they're starting all over again with us.

22 MR. ADDISON: So describe each -- just
23 summarize again quickly this, each step of that process,
24 please, in chronological order.

25 MR. ESTES: As far as TWMA processes are

1 concerned, they would have to apply for a discovery.
2 They would have to apply for annexation. And ultimately,
3 assuming that annexation agreement is executed, they
4 would have to apply for a water service agreement.

5 MR. ADDISON: So, in other words, it's
6 starting completely over?

7 MR. ESTES: Correct.

8 MR. ADDISON: And nothing that's done
9 beforehand is binding on that started-over process;
10 correct?

11 MR. ESTES: That is correct.

12 MR. ADDISON: Okay. Because conditions could
13 change in the interim?

14 MR. ESTES: Absolutely.

15 MR. ADDISON: Okay. And that's why a
16 discovery would be necessitated again, the process be
17 completed again before any promises of service would be
18 made?

19 MR. ESTES: That's right.

20 MR. ADDISON: Okay. Thank you, Your Honor.
21 That's all I have.

22 HEARING OFFICER DRINKWATER: Okay. I believe
23 you guys get a final rebuttal, although I lost my piece
24 of paper.

25 MR. ADDISON: We do not.

1 HEARING OFFICER DRINKWATER: Oh, you do not?

2 MR. ADDISON: No.

3 HEARING OFFICER DRINKWATER: Okay. So at
4 this point, I am awaiting two briefs on Monday with
5 responses to each other's briefs by Tuesday, let's say,
6 5:00 o'clock each day. And my report will be delivered
7 in accordance with the time frame set out in Rule 8.

8 Does anyone have any questions for me?

9 MR. ADDISON: I do, Your Honor.
10 Single-spaced letter okay instead of a traditional
11 pleading brief?

12 HEARING OFFICER DRINKWATER: Yes.

13 MR. ADDISON: Or do you want a pleading
14 brief?

15 HEARING OFFICER DRINKWATER: Whatever form
16 you'd like. I can read it either way. And then can we
17 have a page limit? I mean, I don't want to get this out
18 of control and create, you know -- I'm concerned about
19 the potential for new arguments.

20 MR. CHAMPA: No. I appreciate it.

21 MR. ADDISON: How about two pages,
22 single-spaced letter?

23 HEARING OFFICER DRINKWATER: Is that
24 acceptable to you?

25 MR. CHAMPA: That's acceptable.

1 MR. ADDISON: Thank you. I just want to keep
2 parameters around it in light of the tight deadlines.

3 HEARING OFFICER DRINKWATER: Thank you. I've
4 been reading a lot lately.

5 MR. ADDISON: Thank you, Your Honor. We
6 appreciate that.

7 MR. ADDISON: And exchange them by e-mail and
8 get them to you by email as well?

9 HEARING OFFICER DRINKWATER: Yes, please.
10 That would be excellent.

11 MR. ADDISON: Got it.

12 HEARING OFFICER DRINKWATER: I just want to
13 make sure I have all of my questions answered for
14 Mr. Champa.

15 HEARING OFFICER DRINKWATER: Mr. Champa, in
16 your brief on page nine, you talk about and we discussed
17 this briefly earlier, but I still want to circle back to
18 this. You talk about this at line 15. The Authority's
19 decision effectively nullifies a large portion of
20 Petitioner's water rights. Explain that, please, that
21 statement.

22 MR. CHAMPA: Which line again?

23 HEARING OFFICER DRINKWATER: I'm sorry. Your
24 page nine, line 15. It's the last full paragraph on the
25 page.

1 MR. CHAMPA: Okay. Yeah. So this goes back
2 to the aspect of St. James has dedicated water rights
3 with the Authority. There's a certain amount. I can't
4 specifically remember. Let's say it's 160 have been
5 utilized for both services, so that leaves 40 left.

6 That's 40 acre feet of water rights that are
7 a property right, and the Authority is now saying you
8 cannot use these. You have to bring different water
9 rights. You have to use water rights from the Serpa Well
10 or potentially a Pleasant Valley or creek rights in lieu
11 of that. And so those 40 water rights in St. James'
12 position have just vanished. And that's the simplest I
13 can make the argument.

14 MR. ADDISON: Your Honor, may I rebut that?

15 HEARING OFFICER DRINKWATER: Yes, please.

16 MR. ADDISON: And I don't need to do it. I
17 would like Mr. Enloe to do it, please, because I'd like
18 you to hear it from the horse's mouth. Mr. Enloe?

19 MR. ENLOE: I don't believe that statement is
20 correct because we will accept St. James Village
21 groundwater rights. There's never been an issue with
22 that.

23 The issue is we need supplemental rights in
24 addition to those groundwater rights to make a full water
25 supply. So it's really the combination of the two, the

1 groundwater rights and the supplemental Whites Creek
2 rights. Because on their own, the groundwater rights
3 don't provide a sustainable supply, my professional
4 opinion.

5 On their own, the Whites Creek water does not
6 provide a sustainable supply because of it's really
7 timing issues. There's a lot of water in the creek
8 spring runoff, and then in the summer, it goes down and
9 there's not much water available. So it's the
10 combination of the groundwater rights and the Whites
11 Creek surface water rights that make a full sustainable
12 water supply.

13 MR. ADDISON: Mr. Enloe, I'd like to ask you
14 a question. Are the groundwater rights gone, as
15 Mr. Champa put it?

16 MR. ENLOE: No. No.

17 MR. ADDISON: Where are they and can they be
18 returned? And if so, in full?

19 MR. ENLOE: Bank with TMWA. If they want
20 them back, send us a letter.

21 MR. ADDISON: All of them?

22 MR. ENLOE: Whatever.

23 MR. ADDISON: So yes?

24 MR. ENLOE: Yeah. Sorry. Yeah.

25 MS. MORRIS: All of the ones that are not

1 committed --

2 MR. ENLOE: Not committed. Right.

3 MS. MORRIS: -- to other projects.

4 MR. ENLOE: Right. Exactly. But, I mean,
5 that really serves no purpose because you still need --
6 you need the groundwater rights to be able to pump water
7 from wells. This conjunctive use program is giving you
8 the opportunity to use those groundwater rights, like I
9 said, because on their own, they're not sustainable. But
10 with supplemental surface water rights, they are.

11 MR. ADDISON: Thank you, sir. Appreciate the
12 clarification.

13 HEARING OFFICER DRINKWATER: Thank you. That
14 is my last question as well. So I thank you all for your
15 time today and look forward to seeing your briefs on
16 Monday.

17 MS. MORRIS: Thank you.

18 MR. ADDISON: Thank you, Your Honor.

19 HEARING OFFICER DRINKWATER: Have a good day.

20 (The proceedings concluded at 11:27 a.m.)

21 -o0o-

22

23

24

25

1 STATE OF NEVADA)
2 WASHOE COUNTY)

3

4 I, NICOLE J. HANSEN, Court Reporter for the
5 administrative hearing, do hereby certify:

6

7 That on the 31st day of March, 2022, I was
8 present at said meeting for the purpose of
9 reporting in verbatim stenotype notes the within-entitled
10 public meeting;

11 That the foregoing transcript, consisting of pages 1
12 through 96, inclusive, includes a full, true and correct
13 transcription of my stenotype notes of said public
14 meeting.

15

16 Dated at Reno, Nevada, this 1st day of
17 April, 2022.

18

19

Nicole J. Hansen

20

NICOLE J. HANSEN, NV CCR #446
CAL. CSR 13,909 RPR, CRR, RMR

21

22

23

24

25

1 HEALTH INFORMATION PRIVACY & SECURITY: CAUTIONARY NOTICE

2 Litigation Services is committed to compliance with applicable federal

3 and state laws and regulations ("Privacy Laws") governing the

4 protection and security of patient health information. Notice is

5 hereby given to all parties that transcripts of depositions and legal

6 proceedings, and transcript exhibits, may contain patient health

7 information that is protected from unauthorized access, use and

8 disclosure by Privacy Laws. Litigation Services requires that access,

9 maintenance, use, and disclosure (including but not limited to

10 electronic database maintenance and access, storage, distribution/

11 dissemination and communication) of transcripts/exhibits containing

12 patient information be performed in compliance with Privacy Laws.

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14 information may be further disclosed except as permitted by Privacy

15 Laws. Litigation Services expects that all parties, parties'

16 attorneys, and their HIPAA Business Associates and Subcontractors will

17 make every reasonable effort to protect and secure patient health

18 information, and to comply with applicable Privacy Law mandates,

19 including but not limited to restrictions on access, storage, use, and

20 disclosure (sharing) of transcripts and transcript exhibits, and

21 applying "minimum necessary" standards where appropriate. It is

22 recommended that your office review its policies regarding sharing of

23 transcripts and exhibits - including access, storage, use, and

24 disclosure - for compliance with Privacy Laws.

25 © All Rights Reserved. Litigation Services (rev. 6/1/2019)

April 4, 2022

Via Email

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Re: Reversion to Acreage Letter in the Notice of Dispute of Action Taken by the Authority – Rule 8(b) Regarding St. James Discovery-Annexation 1H-2C: PLL# 21-8275

Dear Madam Hearing Officer:

In the Truckee Meadows Water Authority Hearing (the “**Hearing**”), you requested an explanation of “the legal impact of property being reverted to acreage.”¹ Truckee Meadows Water Authority (the “**Authority**”) claims that when a map reverts to acreage, it “reverts back to raw land.”² That assertion is both factually and legally incorrect.

Nevada Revised Statutes Chapter (“**NRS**”) 278 relates to the divisions of land and the mapping process thereunder. Specifically, NRS 278.490 *et seq* controls reversion to acreage. Nowhere within these statutes is “raw land” defined. When a word is used generally, the popular meaning is the one that is intended.³ A similar term which uses “raw land” is “unimproved land,” which is defined as “raw land that has never been developed, and usually lacks utilities.”⁴ St. James has taken action to change the unimproved land into improved land. Notably, Tentative Map TM5-2-92 (“**TM**”) and the entitlements associated therewith are the initial stages of how lands become improved. Therefore, the Authority’s definition of “raw land” must mean that the TM and associated entitlements are terminated.

A reversionary map “removes legal lot lines from the record”⁵ and any easements that are no longer needed for the reverted map. The tentative map and related entitlements, however, are

¹ Tanscr. of Proc. 87:20-21 (Mar. 31, 2022).

² Tanscr. of Proc. 7:9 (Mar. 31, 2022).

³ *Smith v. Shrieves*, 13 Nev. 303, 24 (1878).

⁴ *Black’s Law Dictionary* 956 (9th ed., 2009).

⁵ Nev. Assembly Comm. Taxation Minutes, 72nd Sess. (April 3, 2003).

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April 4, 2022

Page 2

not removed from the record. Terminating the tentative map and related entitlements are set forth in NRS 278.360(1)(b). This will occur when the developer fails to adhere to the NRS 278.360(1)(a) development timeline.

The TM and associated entitlements are not terminated simply because St. James reverted some of its maps to acreage. In fact, the TM is referenced in the Community Development Certificate of Tract Map 5331.⁶ That Certificate further set forth the deadline for the next final map, as required by NRS 278.360(a)(2)(II). St. James has been moving forward with its development and exercised its statutory right to extend the next final map deadline. Because the extension was granted, the TM and the entitlements remain appurtenant to the land.

The Authority argues that a reversionary map “start[s] the process over.”⁷ This assertion is in relation to the TM and only because the Authority chooses to ignore the entitlement therein. While other municipal providers continue to adhere to the TM and its entitlements,⁸ the Authority is not, simply because it said so.

Sincerely,

/s/ *Evan J. Champa*

Evan J. Champa
for Holland & Hart LLP

EJC:dt

cc: Client

18541564_v1

⁶ See Petitioner’s Brief, Attachment 15.

⁷ Tanscr. of Proc. 88:13 (Mar. 31, 2022).

⁸ See Petitioner’s Brief, Attachments 21 & 22.

Matthew C. Addison
Managing Partner, Reno Office
maddison@mcdonaldcarano.com

Reply to Reno

April 4, 2022

Via E-Mail Only (bdrinkwater@drinkwaterlaw.com)

Ms. Bonnie Drinkwater
Hearing Officer

Re: Notice of Dispute of Action taken by the Authority – Rule 8(b) Regarding St. James Discovery-Annexation 1H-2C; PLL #21-8275

Dear Ms. Drinkwater:

TMWA submits this letter brief pursuant to your request. At the close of last Thursday's hearing in the above-referenced matter, you asked Petitioner's attorney the following question and he requested the opportunity to submit a brief limited to addressing it. You granted both parties a short brief to address the question, and the following is TMWA's response.

- 1) What is the legal impact of land subject to development maps being reverted to acreage?

A reversion to acreage is a way by which subdivided lands may be returned to the same status as non-divided land. Essentially, the reversion to acreage merges any formerly subdivided lands with the related undeveloped and undivided parcels. Nevada Revised Statutes (NRS) Chapter 278 governs planning and zoning. Specifically, NRS 278.490 provides the procedure for reverting maps to acreage. A reversion can be initiated by an owner or a governing body, such as Washoe County. *See* NRS 278.490. Additionally, Washoe County Development Code, Article 614 sets forth the process for abandoning all or part of a subdivision map. *See* Article 614, sections 110.614.00-110.614.50.

The final maps (subdivision plats) for Units 1H and 2C were recorded on November 9, 2005 and October 4, 2006, respectively. *See* Petitioner's Exhibit A. Petitioner recorded the Reversion to Acreage maps for both Units on June 30, 2011. *See* Petitioner's Attachment 9. The practical and legal effect of a reversion to acreage is the lots created by the subdivision maps are no longer in existence and any public utility easements related to those lots are relinquished. If an owner wishes to develop the property, they must go through the entitlement process again.

Regardless of the stage of the development, an owner's property must be annexed into TMWA's service area and the owner must execute a water service agreement with TMWA to receive water. Lastly, under TMWA Rule 7(I), any will-serve commitment is automatically revoked if an applicant's project is canceled, or approval of an applicant's project expires or is terminated by the applicable governing body.

Sincerely,



Matthew C. Addison

MCA/nah

cc: Evan Champa, Esq. (via email only)
4892-7832-2970, v. 1



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12 *Attorneys for Petitioner*

13 ST. JAMES'S VILLAGE, INC., a Nevada
14 corporation,

15 Petitioner,

16 v.

17 TRUCKEE MEADOWS WATER
18 AUTHORITY; a joint powers authority under
19 NRS 277

20 Respondent.

21 **ST. JAMES'S VILLAGE, INC.'S**
22 **MOTION TO STRIKE TESTIMONY OF**
23 **WITNESSES FROM THE RECORD OR,**
24 **IN THE ALTERNATIVE, REQUEST**
25 **FOR REHEARING**
26
27
28

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COMES NOW, petitioner ST. JAMES’S VILLAGE, INC., a Nevada corporation (“**Petitioner**”), by and through its attorneys of record, HOLLAND & HART, LLP., and hereby files its Motion to Strike Testimony of Witnesses From the Record or, in the Alternative, Request for Rehearing.

I. BACKGROUND

Petitioner filed its Complaint against the Truckee Meadows Water Authority, a joint powers authority under Nevada Revised Statutes (“**NRS**”) Chapter 277 (the “**Authority**”) on March 16, 2022. Pursuant to Authority Rule 8(C)(1), on March 21, 2022, an Authority-appointed hearing officer (the “**Hearing Officer**”) served upon the Petitioner and Authority a notice of the time and place of the contested case hearing (the “**Notice**”). The Notice established the contested case hearing would occur at 9:00 a.m. on March 31, 2022, at the Authority headquarters, located at 1355 Capital Boulevard, Reno, Nevada 89502, in the Stampede and Independence conference rooms. The Notice also established that Authority Rule 8 would apply to the hearing. Pursuant to Authority Rule 8(C)(2), on March 28, 2022, Petitioner and Authority submitted to the Hearing Officer their respective briefs with the statement of applicable law. The hearing was held on the date as set forth in the Notice.

Present at the hearing on behalf of the Authority was the Authority’s counsel, in-house counsel, its Assistant General Manager, the Director of Engineering, the Director of Natural Resources, and various other Authority personnel. Present for Petitioner was its counsel.

II. LEGAL ARGUMENT

A. THE HEARING OFFICER SHOULD STRIKE ALL TESTIMONY

Authority Rule 8 applied to the hearing. In salient part, Authority Rule 8(C)(5) states, “[t]he provisions of NRS 233B.123 regarding admissible evidence are adopted by reference as applicable to hearings before the Hearing Officer.” Importantly, NRS 233B.123(3) states that “[e]very witness shall declare, by oath or affirmation, that he or she will testify truthfully.” (Emphasis added).

The Hearing Officer did not administer an oath for either of the Authority’s witnesses, nor did those witnesses provide an affirmation that their testimony would be truthful. The

1 Authority and the Hearing Officer failed to adhere to the Authority's mandatory rule.
2 Accordingly, the Hearing Officer should strike the testimony of the Authority's Director of
3 Engineering and Director of Natural Resources.

4 **B. ALTERNATIVELY, PETITIONER PETITIONS FOR A REHEARING**

5 The Authority is subject to the statutes under NRS Chapter 233B because the Authority is
6 not exempt from the Nevada Administrative Procedures Act. (*See* NRS 233B.039). Should the
7 Hearing Officer not strike the testimony of the Authority's Director of Engineering and Director
8 of Natural Resources as requested *supra*, Petitioner requests that a rehearing be administered
9 pursuant to NRS 233B.130(4).


10 The Authority's witnesses failed to testify under oath as required by the Authority's own
11 rules. At the rehearing, the witnesses will be required to provide an oath prior to giving their
12 testimony. The Hearing Officer has been subjected to the witnesses' previous testimony and
13 cannot render an impartial ruling. Because the Hearing Officer has listened to the improper
14 testimony of the Authority's witnesses, a new hearing officer must be selected for the rehearing.

15 **III. CONCLUSION**

16 For the reasons stated herein, Petitioner respectfully requests that the testimony of the
17 Authority's Director of Engineering and Director of Natural Resources be stricken or, in the
18 alternative, Petitioner's petition for rehearing be granted subject to the rehearing being conducted
19 by an alternative hearing officer.

20 Respectfully submitted this 14th day of April, 2022.

21 HOLLAND & HART LLP

22
23 By: 
24 Timothy A. Lukas, Esq. (NSB 4678)
25 Bryce C. Alstead, Esq. (NSB 9954)
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Attorneys for Respondent Truckee Meadows Water Authority

ST. JAMES'S VILLAGE, INC., a Nevada
corporation,

Petitioner,

v.

TRUCKEE MEADOWS WATER
AUTHORITY, a joint powers authority under
NRS277,

Respondent.

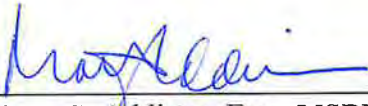
In Re: Notice of Dispute of Action taken by
the Authority – Rule 8(b) Regarding St.
James Discovery-Annexation 1H-2C; PLL#
21-8275

RESPONDENT'S REPLY TO MOTION TO STRIKE OR FOR REHEARING

Respondent Truckee Meadows Water Authority ("TMWA"), by and through its undersigned counsel of record, hereby submits this Reply to Petitioner's Motion to Strike or for Rehearing ("Reply"), pursuant to the Hearing Officer's authorization to do so. This Reply is based upon the facts and legal authorities cited herein and the Exhibits attached hereto.

DATED this 18th day of April, 2022.

McDONALD CARANO LLP


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Attorneys for Respondent TMWA

1 **POINTS AND AUTHORITIES IN SUPPORT OF TMWA'S REPLY**

2 **INTRODUCTION**

3 The testimony of TMWA's two witnesses was and remains undisputedly truthful, and they
4 have confirmed it to be so, under oath, after a careful review of the certified court reporter's
5 transcript. Petitioner had at least three separate and clear opportunities, during the hearing, to
6 object and demand the witnesses be sworn, but it never did so. As Petitioner cites no factual
7 evidence or legal authority in support of its request for alternative relief, its Motion to Strike or
8 For Rehearing (the "Motion") is unfounded, without merit and should be denied in its entirety.

9 **ARGUMENT**

10 **I. The Witnesses Have Sworn, Under Oath, They Testified Truthfully.**

11 Each of TMWA's witnesses has sworn, under oath, that all of his testimony given on March
12 31, 2022 was and is completely truthful. *See* Affidavits of Scott Estes and John Enloe, attached
13 hereto as Exhibits "A" and "B", respectively. Tellingly, nothing in the Motion even questions the
14 veracity of either witness. Its bald, underlying assertion is the Hearing Officer should simply
15 enforce "form over substance".

16 **II. Each Witness Has Confirmed, Under Oath, The Transcript Preserved His Truthful**
17 **Testimony.**

18 A true and correct copy of the certified court reporter's transcript of the March 31st hearing is
19 attached hereto as Exhibit "D". *See* Affidavit of Matthew C. Addison, attached hereto as Exhibit
20 "C", at paragraph 6. Each of TMWA's witnesses has carefully reviewed his entire testimony set
21 forth in that transcript and confirmed, under oath: (a) but for a few minor reporting errors, the
22 transcript fully and accurately reflects his substantive testimony; (b) his substantive testimony
23 reflected therein was and is completely truthful; and (c) had he been sworn prior to giving his
24 substantive testimony, it would not have differed, at all, from that reported in the transcript. *See*
25 Exh. "A" at paragraphs 5-13, and Exh. "B" at paragraphs 5-12.

26 Petitioner agreed to have the hearing reported and to pay half of the reporter's charges, but its
27 Motion is devoid of any mention of, let alone challenge to, the transcript's reliability. A true and
28 correct copy of Mr. Champa's e-mail of March 22, 2022 is attached hereto as Exhibit "E"; *see*

1 Exh. C, at paragraph 7. Clearly, Petitioner agreed to purchase the transcript to memorialize “the
2 record” and support a future challenge to this Hearing Officer’s anticipated decision. Thus, its
3 present attempt to convince the Hearing Officer to ignore that same transcript to establish the
4 truthfulness of the subject testimony is disingenuous.

5 **III. Petitioner Never Objected on the Oath and Cross-Examined the Witnesses.**

6 As the certified court reporter’s transcript reflects, Petitioner did not object to Mr. Estes’
7 introduction and recitation of the procedural history of the matter. *See* Exhibit “D” at pgs. 4-5.
8 Petitioner then failed to object at the beginning of, or during, the direct testimony of either witness.
9 *Id* at pgs. 36-78. Finally, even after a break in the proceedings, specifically offered and taken to
10 allow Petitioner’s team to hone its cross-examination points, Petitioner proceeded, without
11 success, to “clarify” the witnesses’ testimony, but never questioned either’s truthfulness or
12 objected to their lack of an opportunity to swear an oath. *Id* at pgs. 78-85.

13 **IV. The Attached Affidavits are Admissible and Appropriate Evidence.**

14 In response to Petitioner’s Motion, the Hearing Officer specifically directed Respondent’s
15 counsel to provide her “... with affidavits from Mr. Enloe and Mr. Estes in accordance with NRS
16 223B.123(3).” A true and correct copy of Hearing Officer Drinkwater’s e-mail to counsel of April
17 15, 2022, is attached hereto as Exhibit “F”; *see* Exh. C, at paragraph 8. The Hearing Officer’s
18 direction was and is perfectly consistent with her express, statutory authority to receive evidence
19 in the form of affidavits. *See* NRS 223B.123(1).

20 **V. Petitioner Cannot Demonstrate Any Prejudice.**

21 As set forth above, (a) Petitioner’s Motion does not challenge the truthfulness of either
22 witness’ testimony; (b) each witness has affirmed the truthfulness of all of his substantive
23 testimony, under oath, following a careful review of the transcript; and (c) the Hearing Officer is
24 statutorily entitled to receive evidence in the form of affidavits.

25 In order to prevail on any claim the attached Affidavits (*see* Exh. “A” and Exh. “B”) do
26 not obviate its concerns, Petitioner would have to prove it would be “prejudiced substantially” by
27 their admission. NRS 223B.123(1). To show prejudice, Petitioner would have to solicit
28 admissions from the witnesses that they felt free to be dishonest because they realized they were

1 not under any binding obligation to tell the truth. Without so much as an allegation that either
2 witness testified untruthfully, the likelihood of success of such an endeavor is obviously so slight
3 that even the assertion of such a claim would be patently absurd. This is especially true since both
4 witnesses have confirmed, under oath, that had they been sworn prior to giving their testimony at
5 the hearing, it would not have differed, at all, from that reported in the transcript.

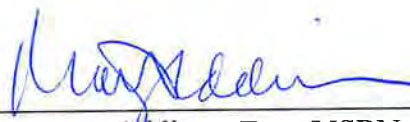
6 The attached Affidavits simply complete this hearing's formal record. They clearly do not
7 constitute "new" evidence or additions to either witness' substantive testimony. As such,
8 Petitioner has no grounds to assert any prejudice, let alone "substantial prejudice", to justify a
9 request for a new hearing or a rehearing.

10 CONCLUSION

11 Petitioner failed to achieve the relief it sought through a full and fair briefing and hearing
12 process, which included supplemental briefs, so it now seeks a second "bite at the apple" before a
13 different hearing officer. There are, however, simply no allegations, which, if proved, would
14 support any conclusion, by any hearing officer, that a rehearing of the matter would result in any
15 substantive difference in the facts provided by the subject witnesses. This Hearing Officer has
16 reasonably exercised her discretion to receive the attached Affidavits to finalize the formal record
17 in an expeditious and efficient manner, which is clearly within her statutory authority. Thus,
18 Petitioner's Motion should be DENIED, in its entirety.

19 DATED this 18th day of April, 2022.

20 McDONALD CARANO LLP

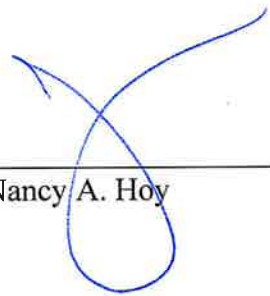
21 

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27 Attorneys for Respondent TMWA
28

CERTIFICATE OF SERVICE

Pursuant to NRCP 5(b), I certify that I am an employee of McDonald Carano LLP and on the 18th day of April, 2022, I caused to be served a true and correct copy of the foregoing **RESPONDENT TRUCKEE MEADOWS WATER AUTHORITY'S OPPOSITION TO MOTION TO STRIKE TESTIMONY OF WITNESSES FROM THE RECORD OR, IN THE ALTERNATIVE, REQUEST FOR REHEARING** on the parties below by electronic mail to the email addresses listed below:

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Bryce C. Alstead, Esq.
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Nancy A. Hoy

4856-4472-3228, v. 2

EXHIBIT “A”

EXHIBIT “A”

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Attorneys for Respondent Truckee Meadows Water Authority

ST. JAMES'S VILLAGE, INC., a Nevada
corporation,

Petitioner,

v.

TRUCKEE MEADOWS WATER
AUTHORITY, a joint powers authority under
NRS277,

Respondent.

In Re: Notice of Dispute of Action taken by
the Authority – Rule 8(b) Regarding St.
James Discovery-Annexation 1H-2C; PLL#
21-8275

**AFFIDAVIT OF SCOTT ESTES IN SUPPORT OF RESPONDENT'S REPLY TO
MOTION TO STRIKE OR FOR REHEARING**

COUNTY OF WASHOE)
STATE OF NEVADA) ss:

I, SCOTT ESTES, having first been sworn, state that:

1. I am the Director of Engineering at the Truckee Meadows Water Authority
("TMWA"), Respondent in the above referenced action.

2. I make this Affidavit in support of TMWA's Reply to Motion to Strike or for
Rehearing ("Reply"). I am over the age of 18 and am competent to testify as to the same.

3. On March 31, 2022, I provided testimony in the hearing regarding St. James
Discovery- Annexation 1H-2C; PLL #21-8275.

4. A copy of the certified court reporter's transcript of the proceedings from the

1 March 31, 2022, hearing was provided to me, and I carefully reviewed all of my testimony
2 reported in it.

3 5. The transcript is a true and accurate statement of all of my testimony, except for a
4 few, minor transcription errors, which I feel should be corrected as follows.

5 6. On page 9, line 15, strike "deposition" and insert "December".

6 7. On page 39, line 8, strike "usually".

7 8. On page 49, line 17, strike "were" and insert "we are".

8 9. On page 49, line 23, strike "in" and insert "if".

9 10. On page 51, line 14, strike "by" and insert "from".

10 11. Based upon my recollection and my careful review of the court reporter's
11 transcript, I can confirm all of the testimony I provided was truthful and accurate.

12 12. Had I been given an oath and/or sworn in prior to providing my testimony on
13 March 31, 2022, it would not have differed, at all, from that reported in the transcript, except for
14 the corrections noted in paragraphs 6-10 above, which were transcription errors.

15 13. I appreciated the formal nature and solemnity of the hearing on March 31, 2022, I
16 knew I was obligated to testify truthfully, and I would have testified truthfully that day, and did
17 so, regardless of whether I had been sworn.

18 14. I declare under penalty of perjury under the laws of the State of Nevada that the
19 foregoing is true and correct.

20 DATED this 18th day of April 2022.

21
22 Scott J. Estes
23 Scott Estes

24 SUBSCRIBED and SWORN to before
25 me this 18th day of April, 2022.

26 Amanda Duncan
27

28 Notary Public

4883-9409-1292, v. 2

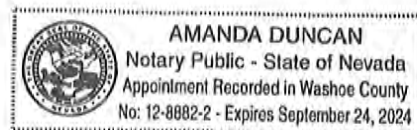


EXHIBIT “B”

EXHIBIT “B”

Matthew C. Addison (NSBN 4201)
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maddison@mcdonaldcarano.com

Attorneys for Respondent Truckee Meadows Water Authority

ST. JAMES'S VILLAGE, INC., a Nevada
corporation,

Petitioner,

v.

TRUCKEE MEADOWS WATER
AUTHORITY, a joint powers authority under
NRS277,

Respondent.

In Re: Notice of Dispute of Action taken by
the Authority – Rule 8(b) Regarding St.
James Discovery-Annexation 1H-2C; PLL#
21-8275

**AFFIDAVIT OF JOHN ENLOE IN SUPPORT OF RESPONDENT'S REPLY TO
STRIKE OR FOR REHEARING**

COUNTY OF WASHOE)
STATE OF NEVADA) ss:

I, JOHN ENLOE, having first been sworn, state that:

1. I am the Director of Natural Resources for the Truckee Meadows Water Authority
("TMWA"), Respondent in the above referenced action.

2. I make this Affidavit in support of TMWA's Reply to Motion to Strike or for
Rehearing ("Reply"). I am over the age of 18 and am competent to testify as to the same.

3. On March 31, 2022, I provided testimony in the hearing regarding St. James
Discovery- Annexation 1H-2C; PLL #21-8275.

4. A copy of the certified court reporter's transcript of the proceedings from the

1 March 31, 2022, hearing was provided to me, and I carefully reviewed all of my testimony
2 reported in it.

3 5. The transcript is a true and accurate statement of all of my testimony, except for a
4 few, minor transcription errors, which I feel should be corrected as follows.

5 6. On page 66, line 13, strike "Mr." and insert "Mt."

6 7. On page 71, line 23, strike "did" and insert "does".

7 8. On page 73, line 9, strike "of kind".

8 9. On page 95, line 19, add "ed" to "bank" should read "banked".

9 10. Based upon my recollection and my careful review of the court reporter's
10 transcript, I can confirm all of the testimony I provided was truthful and accurate.

11 11. Had I been given an oath and/or sworn in prior to providing my testimony on
12 March 31, 2022, it would not have differed, at all, from that reported in the transcript, except for
13 the corrections noted in paragraphs 6-9 above, which were transcription errors.


14 12. I appreciated the formal nature and solemnity of the hearing on March 31, 2022, I
15 knew I was obligated to testify truthfully, and I would have testified truthfully that day, and did
16 so, regardless of whether I had been sworn.

17 13. I declare under penalty of perjury under the laws of the State of Nevada that the
18 foregoing is true and correct.

19 DATED this 18th day of April 2022.

20
21 
22 John Enloe

23 SUBSCRIBED and SWORN to before
24 me this 18th day of April, 2022.

25 
26 Notary Public

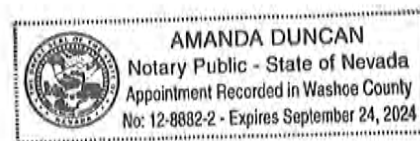


EXHIBIT “C”

EXHIBIT “C”

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Attorneys for Respondent Truckee Meadows Water Authority

ST. JAMES'S VILLAGE, INC., a Nevada
 corporation,

 Petitioner,

 v.

 TRUCKEE MEADOWS WATER
 AUTHORITY, a joint powers authority under
 NRS277,

 Respondent.

In Re: Notice of Dispute of Action taken by
 the Authority – Rule 8(b) Regarding St.
 James Discovery-Annexation 1H-2C; PLL#
 21-8275

**AFFIDAVIT OF MATTHEW C. ADDISON IN SUPPORT OF RESPONDENT'S REPLY
 TO MOTION TO STRIKE OR FOR REHEARING**

COUNTY OF WASHOE)
) ss:
 STATE OF NEVADA)

I, MATTHEW C. ADDISON, having first been sworn, state that:

1. I am over the age of eighteen (18) years. I have personal knowledge of the facts stated within this Affidavit. If called as a witness, I would be competent to testify to these facts.

2. I am an attorney duly licensed to practice law in the State of Nevada, an attorney in the law firm of McDonald Carano LLP, and I presently serve as counsel for Respondent Truckee Meadows Water Authority ("TMWA").

3. I have personal knowledge of the procedural history of this action and offer this Affidavit in support of the TMWA's Reply to Motion to Strike or for Rehearing ("Reply").

4. Attached to Respondent's Reply as Exhibit "A" is a true and correct copy of the Affidavit of Scott Estes.

5. Attached to Respondent's Reply as Exhibit "B" is a true and correct copy of the Affidavit of John Enloe.


6. Attached to Respondent's Reply as Exhibit "D" is a true and correct copy of Litigation Services' "Transcript of Proceedings", Job Number 863093, from the March 31, 2022 Hearing "In the Matter Of: In Re: Notice of Dispute of Action Taken by the Authority".

7. Attached to Respondent's Reply as Exhibit "E" is a true and correct copy of Mr. Champa's e-mail of March 22, 2022.

8. Attached to Respondent's Reply as Exhibit "F" is a true and correct copy of Hearing Officer's e-mail to counsel of April 15, 2022.

9. I declare under penalty of perjury under the laws of the State of Nevada that the foregoing is true and correct.

DATED this 18th day of April 2022.


Matthew C. Addison

SUBSCRIBED and SWORN to before
me this 18th day of April, 2022.



Notary Public



EXHIBIT “D”

EXHIBIT “D”

In the Matter Of:

In Re: Notice of Dispute of Action Taken by the Authority

TRANSCRIPT OF PROCEEDINGS

March 31, 2022

Job Number: 863093

1 I N D E X

2

THE WITNESS:

PAGE:

3 SCOTT ESTES, P.E.

4

Direct examination by Ms. Morris

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7

THE WITNESS:

8 JOHN ENLOE, P.E.

9

Direct examination by Ms. Morris

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10 Examination by Hearing Officer Drinkwater

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11 Cross-examination by Mr. Champa

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1 RENO, NEVADA; THURSDAY, MARCH 31, 2022; 9:00 A.M.
-o0o-

2
3
4 HEARING OFFICER DRINKWATER: Good morning,
5 everyone. My name is Bonnie Drinkwater. I am the
6 designated hearing officer for TWMA and have been that
7 since 2010. I need to get a couple of things out of the
8 way before we start. This is Reno and there are, I
9 think, one degree of separation between most people in
10 this town. So I think it's important that I tell you
11 that in 2010 when TWMA was formed, I was on the team at
12 McDonald Carano. I left one year later from that firm
13 and started my own firm, and so I've been away from
14 McDonald Carano and TWMA for 20 years. But my husband,
15 Michael Drinkwater, is involved in the water world. He
16 is the plant manager of Truckee Meadows Water Reclamation
17 Facility. And as such, I've met a number of you over the
18 years. Dave Kershaw's son went to high school with my
19 daughter, and of course I've known Matt Addison since he
20 was my partner at McDonald Carano.

21 The briefs themselves show a number of
22 similar-type situations from this town where people know
23 each other. I don't believe any of those things cause
24 any sort of conflict or affect my ability to make an
25 objective decision today, but I didn't want anybody to be

1 surprised by any of those things. So without further
2 delay, let's get moving.

3 I plan to follow Rule 8, the process set
4 forth there for the hearing, and that means that the
5 first thing that happens is a brief orientation by
6 Authority staff.

7 MR. ADDISON: Good morning, Your Honor. Matt
8 Addison, from McDonald Carano, on behalf TMWA. With me
9 is John Zimmerman, the Assistant General Manager of TWMA,
10 Stefanie Morris, in-house counsel. What we thought we'd
11 do for the introduction is call Scott Estes. Scott is an
12 engineer with TWMA.

13 Scott, if you'd come forward and have a seat
14 at this table, we'd appreciate it. And as I know Your
15 Honor's read all of the briefs, Exhibit 1 is a timeline
16 of the procedural history in this matter. Rather than
17 simply read that, we've asked Scott to give you a
18 narration -- I'll guide that a bit -- of his personal
19 knowledge of this project and the Mr. Rose Alluvial Fan
20 as he's had experience with it over the years.

21 So with that, Scott, would you please state
22 your name and spell your name for the record.

23 MR. ESTES: My name is Scott Estes. I'm the
24 Director of Engineering at TMWA. My last name is spelled
25 E-S-T-E-S.

1 MR. ADDISON: Thank you, sir. And would you
2 give the Hearing Officer a brief summary of your
3 employment history related to the Mt. Rose Alluvial Fan
4 and your work for TWMA over the years.

5 MR. ESTES: I actually started working for
6 the water company when it was under Sierra Pacific in
7 1989, and I've been continuously employed since that
8 time. And I've been in the new business area for at
9 least 20 years here at TWMA.

10 MR. ADDISON: Do you have then personal
11 knowledge of this process with St. James Village in its
12 application and attempted development of its property --

13 MR. ESTES: I do.

14 MR. ADDISON: -- on the Mt. Rose Highway?

15 MR. ESTES: I do.

16 MR. ADDISON: Okay. With that then, I'd
17 rather not ask you questions and lead you through this,
18 but I'd like you to speak directly to the Hearing Officer
19 and tell her what you recall from your personal knowledge
20 about the history of this matter and its procedural
21 history. Who did what when, according to your
22 involvement.

23 MR. ESTES: Okay. Great. Please interrupt
24 me if you have any questions.

25 HEARING OFFICER DRINKWATER: I will. Thank

1 you.

2 MR. ESTES: So this project goes back about
3 30 years. St. James Village, in 1992, got approval of a
4 tentative map for 530 single-family residential units.
5 Then in the period in 1994 to 1997, several final maps
6 were approved through Washoe County for St. James
7 Villages 1 and 2.

8 Also in 1997, the NAC 445A regulations became
9 effective. Those regulations are minimum standards for
10 the design, construction, operation of water system
11 facilities. I bring that up because it appears that the
12 water system design for these final maps was actually
13 performed before the effective date of those regulations.

14 So I'm going to jump forward to 2008. That
15 was when TWMA and Washoe County began a joint study to
16 evaluate the feasibility of merging of the water systems.
17 That process, during that process, TWMA had the ability
18 to review pumping, historical pumping data, historical
19 groundwater level, things of that nature. And that data
20 showed us that the water, groundwater levels were
21 declining pretty severely, especially up in the Mt. Rose
22 Fan area.

23 So in 2011, these groundwaters continued to
24 decline, but Washoe County was concerned about that as
25 well. In 2011, they created the Mt. Rose Fan Domestic

1 Well Mitigation Program, and that was because of the
2 effect that municipal pumping was having on the domestic
3 wells in the Mt. Rose Fan area.

4 Also in 2011, which was about the bottom of
5 the Great Recession, St. James Village reverted their
6 remaining subdivision maps they had not developed yet to
7 acreage. What I mean by that is the subdivision maps
8 basically go away and this property where a subdivision
9 map had been reverts back to raw land.

10 HEARING OFFICER DRINKWATER: Can I ask you a
11 question about that?

12 MR. ESTES: Certainly.

13 HEARING OFFICER DRINKWATER: How does that
14 procedurally happen? Does the map expire, just expires,
15 or does somebody do something to make the reversion
16 occur?

17 MR. ESTES: I believe they have to submit a
18 request for reversion to Washoe County.

19 HEARING OFFICER DRINKWATER: So the landowner
20 would submit a request for the reversion?

21 MR. ESTES: Correct.

22 HEARING OFFICER DRINKWATER: Thank you.

23 MR. ESTES: Sure. So I'm going to jump to
24 the very end of 2014 now. This is when the merger of the
25 Washoe County Water Systems into TWMA was completed.

1 With that action, the TWMA board adopted the Mt. Rose
2 Domestic Well Mitigation Program as our Rule 10, and the
3 board also approved initial water facility charges for
4 former county systems.

5 So in 2015, we were experiencing drought
6 conditions and nobody really knew what was going to
7 happen, how long those conditions would persist.
8 Groundwater levels were continuing to decline in the Mt.
9 Rose area.

10 And because of that, we decided -- TWMA
11 decided to accelerate our conjunctive use program. So
12 that decision actually culminated in May of 2015 when the
13 TWMA Board approved an increase to our Area 15 facility
14 charge, and that increase was because we added the cost
15 to construct the Mt. Rose Water Treatment Plant. That
16 facility will divert and treat water from Whites Creek
17 and put it right back into the distribution system on the
18 Mt. Rose Fan.

19 HEARING OFFICER DRINKWATER: Sorry. I have
20 another question for you.

21 MR. ESTES: Sure.

22 HEARING OFFICER DRINKWATER: Area 15. Can
23 you explain to me how areas are developed?

24 MR. ESTES: Sure. An area reflects the fact
25 that the facility improvements within that area and

1 sometimes outside the area will improve service within
2 that particular geographic area within the boundaries of
3 the area. Does that make sense?

4 HEARING OFFICER DRINKWATER: Yes. But how
5 are they exactly set? And when?

6 MR. ESTES: They are proposed by TWMA staff
7 and the TWMA Board approves those.

8 HEARING OFFICER DRINKWATER: Thank you.

9 MR. ESTES: So our first interaction with St.
10 James Village came later on in the fall of 2015. They
11 submitted an application for discovery for 239 single
12 family residential units, so TWMA took in the
13 application, processed it, did our analysis.

14 We published a report on that discovery in
15 deposition of 2015. That report identified several
16 deficiencies in the existing system, St. James Village,
17 and it also provided a laundry list of facilities
18 including two new production wells that would be required
19 to build out St. James Village.

20 That report had a concluding statement, and
21 the statement said that TWMA was unwilling to serve
22 additional growth in the St. James Village area until
23 such time as we had fully implemented our conjunctive use
24 plan and until water levels in the existing St. James
25 wells had stabilized to our satisfaction.

1 St. James Village digested that report, and
2 in 2016, in January, they sent us a letter, and the
3 letter withdrew applications for discovery and also
4 notified TWMA that they would be hiring consultants to
5 evaluate other water supply options for their project.

6 In early 2016, TWMA completed the very first
7 conjunctive use project. It was called the Arrowcreek
8 Drought Response Project. That allowed us to deliver a
9 limited amount of conjunctive use water up into the
10 Arrowcreek zone, and from there, it could be distributed
11 into the systems up there on the Mt. Rose Fan.

12 The next big step in implementing our
13 conjunctive use plan came in 2018 when we issued a notice
14 to proceed for construction of the Mt. Rose Water
15 Treatment Plant. Later on in 2018, St. James Village
16 proposed a nine-unit infill project. What I mean by
17 infill was they took existing open space and HOA
18 properties within the existing subdivision and turned
19 those into residential lots.

20 Because TWMA was having -- making very good
21 progress in implementing our conjunctive use plan at that
22 time, we decided to agree to go ahead and serve these
23 infill lots, but we included a statement in our discovery
24 that we were not willing to serve an expanded St. James
25 Village system until such time as the Mt. Rose Water

1 Treatment Plant was in service.

2 So in 2019, we worked with St. James Village.
3 We issued a will-serve commitment for those infill lots
4 that allowed them to record their tract map, subdivision
5 tract map. We also signed off as a utility service
6 provider on that tract map, and that signing off is
7 really just an approval of the easements that are shown
8 on the tract map.

9 So in October 2021, St. James Village was
10 able to obtain an extension, a two-year extension of
11 their original tentative map. That extension will take
12 them out to October 2023.

13 The following month in November, St. James
14 Village submitted an application for discovery for a
15 24-unit project to TWMA. That consisted of Units 1H,
16 Unit 4C, and the infill lots. Along with that
17 application for discovery, St. James Village attached the
18 Lumos reports for our use and review.

19 Earlier this month, TWMA issued the discovery
20 report. This report presents a revised water supply plan
21 for growth in St. James Village. Instead of requiring
22 the construction of two new water production wells, this
23 plan will deliver supply through the existing -- through
24 and from the existing Mt. Rose system. So this new water
25 supply plan is less expensive than the original plan

1 proposed in 2015. So we gave that report to St. James
2 Village, and they digested that. And even though it was
3 a less expensive and better plan in our minds, they told
4 us that they wished to pursue dispute resolution per our
5 TWMA Rule 8, and that takes us up to today.

6 MR. ADDISON: Thank you, Mr. Estes.

7 HEARING OFFICER DRINKWATER: Can I just --

8 MR. ADDISON: Does Your Honor have more
9 questions?

10 HEARING OFFICER DRINKWATER: Yes, I'm sorry.

11 MR. ADDISON: Please. No.

12 HEARING OFFICER DRINKWATER: I'm confused
13 about the infill lots, and I think everybody might be a
14 little bit confused. In the application itself, I don't
15 see the infill lots, but they are referenced in the cover
16 letter. Were the infill lots included in the discovery
17 that came out and are we talking about them as well?

18 MR. ESTES: The infill lots were not a part
19 of the 2021 discovery. And the reason for that was we
20 found out that St. James Village had actually sold most
21 of those -- I don't know -- maybe all of those lots, and
22 so they were no longer the owner of those lots.

23 HEARING OFFICER DRINKWATER: Thank you.

24 MR. ADDISON: We did anticipate a number of
25 questions, so I'm not going to -- like I said, I'm not

1 going to lead him or anything. Just put it out there
2 through his own voice and allow you to get everything
3 straight that you want.

4 HEARING OFFICER DRINKWATER: I am going to
5 allow myself a question period at the end, but I'd like
6 to hear from St. James Village first before I compile all
7 of those questions. Maybe we'll take a short break.

8 MR. ADDISON: Of course.

9 HEARING OFFICER DRINKWATER: Make sure to
10 have everything compiled in an orderly manner.

11 MR. ADDISON: And also so that you know,
12 Mr. Estes will stay and be in the back, and he can be
13 recalled at any time.

14 HEARING OFFICER DRINKWATER: Great. Thank
15 you.

16 MR. ESTES: You're welcome.

17 MR. ADDISON: What's that? We don't need a
18 break if you'd like to continue.

19 HEARING OFFICER DRINKWATER: I don't mean
20 now. Before I compile all of my -- I have lists already.
21 I just want to know what's been answered, but I'd like to
22 hear from St. James Village before we do that.

23 MR. ADDISON: Okay.

24 MS. MORRIS: And, Your Honor, just to be
25 clear, we planned on summarizing our brief in our

1 testimony after St. James Village according to Rule 8.

2 HEARING OFFICER DRINKWATER: Yes, of course.

3 MS. MORRIS: Thank you.

4 HEARING OFFICER DRINKWATER: Okay. Ready?

5 MR. CHAMPA: I believe so. St. James Village
6 is here to show that the authorities' discovery is
7 clearly erroneous in view of the substantial evidence on
8 the whole record. The Authority's discovery is
9 arbitrary, capricious, and an abuse of discretion, and
10 the Authority's position is in violation of Nevada water
11 law and various constitutional principles.

12 Because of this, the Hearing Officer can
13 overturn the discovery in its entirety. Particularly,
14 the Authority failed to adhere to the pertinent
15 administrative code in rendering its discovery as it
16 relates to the current water facilities. Also, the
17 Authority failed to follow Nevada's long-standing water
18 law resulting in injury to St. James's property rights.

19 Further, the Authority failed to utilize
20 substantial evidence in rendering its discovery. Now we
21 know that substantial is that which a reasonable mind
22 might accept as adequate to support a conclusion. Now
23 St. James will show that the Authority's discovery was
24 not based on substantial evidence. St. James will
25 further show that with the exhibits to the discovery

1 request and attachments to its brief, substantial
2 evidence was provided to the Authority but incorrectly
3 discredited or flat-out ignored.

4 Conversely, the Authority will simply
5 continue to say that its discovery is based on
6 substantial evidence. The pieces of evidence the
7 Authority uses in support of its claim are staff reports
8 and board recommendations and the agenda, the Authority's
9 rules, various party correspondence and items that
10 generally don't provide a reasonable mind with enough
11 information to accept as adequate the Authority's
12 findings in its discovery. Still just from the evidence
13 provided, the Authority says a reasonable mind should
14 accept as adequate the conclusions in the discovery
15 because the Authority says so.

16 At no small expense, St. James has been
17 continuing its development in earnest. There was the
18 hiccup in 2008 caused by the Great Recession, and there
19 was reversion to acreage, but that was from extraneous
20 forces. Still, in no small expense, St. James, according
21 to Mr. Estes's brief discussion there, said that it would
22 go out and hire consultants, which it did. And it
23 created its new discovery submittal utilizing certified
24 engineering reports, engaging in constant input from its
25 third-party consultants, and then where applicable,

1 utilizing a Department of Water Resources' opinion.

2 These items are all from the following
3 personnel. There's Kent Grader, who is a professional
4 engineer, who I believe is up on zoom right now. He
5 holds a Master's in civil engineering with over 30 years
6 of experience. He authored the transmittal and the new
7 business application of a portion of Exhibit A of
8 Attachment 1.

9 Susan Hood has also been a consultant, who is
10 a retired professional engineer who worked for Washoe
11 County Department of Water Resources for 15 years.
12 Michael Hardy, another professional engineer,
13 professional geologist and licensed Nevada water rights
14 surveyor, has 12 years of Nevada experience, and he
15 authored the Lumos reports in Exhibits B and C of
16 Attachment 1.

17 There's Matthew Banza, a professional
18 hydrogeologist with over 20 years of experience, whose
19 report was reviewed by Timothy Donahoe. Mr. Banza, of
20 Confluence Resources, authored the Confluence reports in
21 Exhibit F of Attachment 1 as well as Attachment 18. And
22 then the Department of Water Resources' opinion was
23 authored by John Benedict, who is the senior
24 hydrogeologist from the Division of Water Resources, who
25 has roughly 21 years of experience.

1 Now this memorandum, which was Attachment 20,
2 was in reference, as I said, to both the Confluence
3 report as well as the Authority's own separate analysis
4 which it authored due to what's called the Serpa Well
5 test of the Falcon Capitol Well, and that is attached as
6 -- identified as Attachment 19.

7 So these reports and opinions, all taken from
8 third-party impartial professional engineers, actually
9 represents the substantial evidence that St. James has
10 relied upon in pursuit of its development. This is the
11 same substantial evidence St. James thought the Authority
12 would rely upon in rendering its discovery. Still, this
13 is the same substantial evidence that St. James requests
14 the Hearing Officer to rely upon in rendering the
15 findings of fact.

16 What St. James requests is the Hearing
17 Officer not rely on the Authority's decisions simply
18 because the Authority says so. Now there's two main
19 issues that St. James has with the discovery. There's
20 the implication on the existing water facilities and then
21 the implications associated with St. James' beneficial
22 interests in the water rights.

23 First I'm going to turn to focus on the water
24 facilities. At St. James, a tree system exists because
25 Washoe County, when it first approved or first reviewed

1 the tentative map and promulgated its approval, saw that
2 there was certain issues with the topography of the land
3 and utilized cost benefit analysis to decide that there
4 can be two tree systems which would satisfy the public
5 health and water service criteria at the time when that
6 system was designed. And the tentative map process with
7 the application and Washoe County subsequent approval are
8 the Attachments 6 to 8 of our list of attachments.

9 Would you like me to offer exhibits as I go
10 along?

11 MR. ADDISON: It's up to you. We can follow
12 you. It's up to Hearing Officer Drinkwater in my view.

13 HEARING OFFICER DRINKWATER: I read every one
14 of them, so I know they're there. I've seen them.

15 MR. CHAMPA: Okay. All right. So Mr. Estes
16 talked about that there were changes, and I can't
17 specifically remember the actual words he used, but as I
18 recall, there were amendments to the NAC in 1997.

19 And so prior to 1997 when I know St. James
20 was pursuing its tentative map approval, there wasn't a
21 whole lot regarding dead ends or tree systems. But after
22 the 1997 revisions, tree systems became prohibited in
23 general. But the ability still remains to this day to
24 construct and continue utilizing these tree water
25 systems.

1 The NAC requirements, which particularly
2 relate to fire flows and maximum day demand, are shown to
3 have been met in the Lumos Engineering reports. And as I
4 reviewed everything, the Authority's support to combat
5 these findings is the map showing the Authority's own
6 model which just shows that there's a little bit of
7 variation that some pressure or some GPD goes below, I
8 think, a thousand gallons a minute or a thousand gallons
9 a day -- sorry -- and the Authority's decision to sua
10 sponte derate the St. James wells.

11 Now all we know that these decisions were
12 made because the Authority said so, but we don't know
13 why. And in particular, the wells were derated or what
14 the data behind the Authority's model was to come up to
15 allow the Authority to come up with its decision. So the
16 Authority takes the applicable NAC standard and then goes
17 above and beyond what the general requirements are. And
18 this is above and beyond what the board of health and the
19 environmental commission deems necessary for continuing
20 to utilize a tree system.

21 Instead of just allowing an engineer to just
22 -- to allow a tree system, it's now the Authority's
23 decision that matters and controls. This detracts from
24 any engineer providing substantial evidence to prove that
25 a tree system is still viable as long as the Division or

1 the appropriate district board of health approve of the
2 system. So it takes away any engineer's ability to say
3 that a tree system can be used. That's gone. Now
4 without it giving any regard for the County's expertise
5 as to why a tree system should be used or could continue
6 to be used, the Authority fails to give a reasonable
7 review of the pertinent code and simply says no. It's
8 because we say so.

9 Now turning to the water rights and the water
10 supply issue, St. James provided substantial evidence
11 that its water supply was viable and its beneficial
12 interest in the dedicated water rights were also
13 sufficient for the development.

14 St. James proved that the well capabilities
15 and capacities were found to be sustainable. This was
16 found in the Lumos report. And to that point, the
17 Authority said well, it's not valid because we de-rated
18 the wells because we felt like it. The Serpa Well
19 pumping test also determined that water could sustainably
20 supply the development. This resulted in identifying
21 various aquifer characteristics based on the pumping test
22 that showed favorable conditions existed to allow
23 continued and sustainable use of the aquifer.

24 The Authority projections that came from the
25 Serpa Well test are based on regional data and

1 depth-to-water base drawdown rather than looking at a
2 percentage-based reduction at specific wells. Also from
3 that pump test, boundary conditions show that their
4 hydrogeologic characteristics which actually require an
5 island based handling of the pertinent hydrology at that
6 location.

7 HEARING OFFICER DRINKWATER: Sorry. Can you
8 repeat that?

9 MR. CHAMPA: Boundary conditions show that
10 there are hydrogeologic characteristics requiring
11 island-based handling of the hydrology at that specific
12 location. Sorry.

13 HEARING OFFICER DRINKWATER: Can you put that
14 in English for me?

15 MR. CHAMPA: Let me try. So I'm a lawyer.
16 I'm not a hydrogeologist anymore. Boundary and
17 conditions are certain aspects of the aquifer, the rocks
18 and how the water translates through those. And so not
19 everything is, according to Steno's Law, homogenous
20 throughout. There are going to be variations. There's
21 going to be peaks and valleys, faults that create
22 different sort of mechanisms that are going to implicate
23 the transmissivity values the way that water flows at a
24 certain rate through certain media.

25 And so with these pump tests -- and I think

1 the State Engineer's report from John Benedict does a
2 really good job of explaining the mathematical components
3 that are seen through graphs when water hits certain
4 highly permeable or impermeable media.

5 So boundary conditions that are shown,
6 especially through the Serpa Well report, identified that
7 there is some lag with the data, and whether that is
8 closer to the pumping well or closer to the monitoring
9 wells which prove that lag is still unknown, but there is
10 something there. And so utilizing a widespread regional
11 groundwater model that doesn't particularly have those
12 certain variances incorporated into the model parameters
13 makes the findings of that regional model inapplicable or
14 suspect to question.

15 So because of the boundary conditions shown,
16 you have to look at everything sort of in a microscope
17 for the specific area that is subject to the drawdown
18 rather than looking at a multiple basin and just
19 utilizing regional groundwater drawdowns as the end all
20 say all. Did that help? Okay.

21 So, like I said, both reports, both the
22 Confluence reports as well as the Authority's
23 hydrogeologic reports associated with the pumping well
24 test at the Serpa Well were given to the State Engineer.
25 And the Nevada Division of Water Resources, under John

1 Benedict, created an opinion which looked at both lines
2 of evidence and the conclusions drawn from Confluence as
3 well as the Authority and figured out what in the State
4 Engineer's mind was the correct findings, and those show
5 that there are certain things associated with the St.
6 James area which require -- which go to show that it can
7 be treated as a moderately, if not wholly separate and
8 distinct hydro geographical component of the Pleasant
9 Valley Hydrographic Basin.

10 HEARING OFFICER DRINKWATER: Can you point me
11 to that specifically, the State Engineer's decision?

12 MR. CHAMPA: It's not an order, but yes.
13 That will be our Attachment 19.

14 HEARING OFFICER DRINKWATER: Okay.

15 MR. CHAMPA: Or no. Sorry. Attachment 20.

16 HEARING OFFICER DRINKWATER: Okay. So
17 specifically in Attachment 20.

18 MR. CHAMPA: Yes. So the hydraulic barriers
19 in most of these findings are throughout in bold.

20 HEARING OFFICER DRINKWATER: So page four, is
21 that where you're looking?

22 MR. CHAMPA: You can go to page five.

23 HEARING OFFICER DRINKWATER: Okay. You're
24 talking about the -- Okay. The bolded language.

25 MR. CHAMPA: Bold language. So ultimately,

1 most reliable to conclude that one: Boundaries do affect
2 drawdown in the area. The data are most consistent with
3 the boundary to the north-northwest of the pumped and the
4 observation wells, but boundaries in the St. James Sierra
5 Reflections area are neither planar or necessarily
6 continuous in dimension. Do you want me to go through
7 and --

8 HEARING OFFICER DRINKWATER: No. I'm going
9 to come back to this. I will ask you more questions
10 about it later.

11 MR. CHAMPA: Okay.

12 HEARING OFFICER DRINKWATER: So sorry to
13 interrupt your flow.

14 MR. CHAMPA: It's quite all right. I'll
15 figure out where I'm going. Now St. James is of the
16 opinion that what the State Engineers Office or what
17 Mr. Benedict of the State Engineers Office has provided
18 is very telling and should be followed and at least given
19 some semblance of it's of such weight that the Authority
20 should have at least spoken to this finding, yet the
21 Authority did not. There was no mention made of John
22 Benedict's obtaining or the findings therein.

23 Instead, the Authority utilized the Serpa
24 Well data to incorporate such data into its existing
25 model which then extended the model parameters 1.3 miles

1 to the south into St. James as well as the Sierra
2 Reflections area. St. James also has large concerns
3 regarding the water rights and the fact that the water
4 rights are in good standing with the Division of Water
5 Resources.

6 The Authority, throughout its discovery and
7 briefs, talk about how papered rights don't really
8 account for much. But even with a papered right, the
9 granting itself is based on prior appropriation doctrine,
10 the doctrine of good faith and beneficial use, the
11 non-impairment doctrine and water availability just to
12 name a few. But those are all decisions made by the
13 State Engineer's Office.

14 Unfortunately, St. James feels that the
15 Authority sees itself as the ultimate decision maker as
16 to what a water right means and how such rights can be
17 used. Each of the Authority's justifications run afoul
18 of basic concepts and doctrines of Nevada water law. The
19 Authority's sole determination that it has the power to
20 determine whether water exists to satisfy the paper
21 right, that violates the non-delegation doctrine. That's
22 something for the State Engineer to decide and no one
23 else.

24 It also seems to violate St. James' due
25 process rights that when somebody files an application to

1 get a water right, they could file it for 50,000 acre
2 feet if there's water available, but if they cannot put
3 the water to beneficial use by the time they have to file
4 the proof of beneficial use, then they get whatever
5 certificated right they get. It could be five acre feet.
6 But just simply saying this permanent right which has not
7 yet been certificated and it goes away, there are certain
8 statutory safeguards under NRS 533 that should be
9 followed.

10 St. James is also concerned that the
11 Authority's forfeiting the portion or the permitted and
12 the certificated water rights which would be a regulatory
13 taking. Water rights can be split from a thousand acre
14 feet all the way down to five acre feet or less. Taking
15 60, 50, 40, however many acre feet St. James has
16 beneficial interest in and saying you need to bring more
17 water, what the going rate on the market is maybe \$7,000
18 according to the Authority's figure, but it could also go
19 up to \$65,000. That's a lot of money to say no, we're
20 not allowing you to use your water rights anymore.

21 HEARING OFFICER DRINKWATER: So in your
22 brief, I understood you to say that your taking argument
23 had to do with water rights that had been dedicated and
24 --

25 MR. CHAMPA: For beneficial use.

1 HEARING OFFICER DRINKWATER: -- not used.

2 But today, this is a slightly -- What I'm hearing you say
3 is something different, which is your taking argument is
4 that not that your rights have been taken, but that in
5 fact, you're being asked to bring different water rights
6 that cost money. Is that right? Which argument are you
7 making?

8 MR. CHAMPA: I think it's one and the same
9 because the original taking argument we made was that we
10 no longer have the beneficial interest in these water
11 rights. The Authority is getting rid of that.

12 Now the Authority brought up salient argument
13 that it was only founded on the Nevada Constitution and
14 said regulatory takings are very hard to make, and so I'm
15 answering that now in this oral argument, is that not
16 only is the beneficial use taken away, but the Authority
17 is saying you have to bring more water rights. But
18 because that beneficial use is taken away, because that
19 beneficial use is a stick in the bundle of rights -- and
20 there's lots of sticks in the bundle so to say with water
21 rights, whether it be priority, the beneficial use, what
22 have you, that's still a right that has been taken away
23 that St. James originally had, but now it doesn't
24 anymore. And that will cause an actual monetary harm to
25 continue its development even though it also went out and

1 purchased water rights.

2 HEARING OFFICER DRINKWATER: Is that still
3 your argument after TWMA's brief said all of your rights
4 are banked and you can have them back?

5 MR. CHAMPA: I'll have to ask my client about
6 that, but I would see that if all of the rights would
7 come back, everything that was originally banked, then
8 that would definitely be an argument, and I don't think I
9 could, with a straight face, make any kind of takings
10 argument.

11 HEARING OFFICER DRINKWATER: Okay. You'll
12 let me know on that?

13 MR. CHAMPA: I can let you know on that.

14 HEARING OFFICER DRINKWATER: Thanks.

15 MR. CHAMPA: Many of the Authority's findings
16 were based on regional water level. And I touched upon
17 this already, but substantial evidence should be based on
18 the hydro geographical findings, and it should dictate
19 anyone's course of action.

20 Now the Authority said that -- and this is in
21 particular to our claim about the valves being opened.
22 When a valve is opened, a pond somewhere else with water
23 is going to incur a larger draw on the production wells.

24 We don't know how long the valves were
25 opened, but what the Authority says in its brief is that

1 the valves were opened twice: Once for an emergency
2 outside of St. James and once for an emergency inside of
3 St. James. But what the Lumos reports found is that when
4 they went out into the field -- and this is past the 2017
5 or 2018 valve openings that the Authority has
6 identified -- the valve had been opened and no one knew
7 for how long or why the valve was open. But the fact was
8 the valve remained open for potentially long period of
9 time which calls into question the actual data that the
10 Authority is relying upon at this time to say that the
11 wells can't meet their production because of groundwater
12 drawdowns.

13 Basically going to wrap this up as quick as I
14 can. I know I've been rambling. St. James has a bit of
15 concern with the fact that the Authority doesn't seem to
16 care what was in the original Pagni agreement or the
17 Pagni Ranch provided the water rights to Washoe County.

18 I understand now that when the Authority
19 takes water rights from -- not takes water rights but,
20 you know, assumes the role of accepting water rights for
21 potential well serves. There are certain agreements, and
22 the Pagni agreement would not have met the muster of the
23 Authority whatsoever, but we can't focus on what the
24 Authority would do now. We have to look at what Washoe
25 County did and the terms that they agreed to in order to

1 take those water rights and then convey those to the
2 Authority.

3 Just because Washoe County agrees to some
4 terms associated with the water rights, particularly that
5 the beneficial interest owner had the ability to identify
6 where those water rights should be used, the Authority
7 says that it doesn't have to do that because it never
8 took any interest in that agreement.

9 Now just because they say so, it seems like a
10 relatively novel concept that I've yet to see for
11 terminating any sort of covenants associated with real
12 property. So it is St. James' opinion that those water
13 rights should be used where St. James decides they should
14 be used and St. James wants those water rights to be used
15 for the St. James development.

16 Now I think we've initially touched on the
17 Area 15. I know you had some questions on that, and I
18 think Mr. Estes did a good job identifying that there
19 were certain lots that were outside of the service area
20 but not within Area 15, but those lots right now were
21 still being subject to the Area 15 fee. There was even
22 one lot that was within the service area and not within
23 Area 15, but still, they're subject to the Area 15 feet.
24 There was even one lot outside the service area but
25 within Area 15, but it had a meter, and the Authority was

1 providing water to that residence.

2 I don't know if any annotation agreements or
3 water service agreements had been signed at this point,
4 but that seemed a little strange, and in the Authority's
5 -- I believe the Authority has some various
6 correspondence under their Exhibit 5. And what's missing
7 is the letter that St. James wrote to the Authority's
8 attorney highlighting these details, but that's missing
9 in the Authority's exhibits, and I have three copies if
10 anybody wants one.

11 HEARING OFFICER DRINKWATER: I would like a
12 copy, please. That's on my list of questions.

13 MR. CHAMPA: Okay. Good. So all this being
14 said, St. James has some very valid concerns.

15 HEARING OFFICER DRINKWATER: Hold on. Before
16 you move past Area 15, you said certain lots are outside
17 the service area but subject to the Area 15 fee. Those
18 lots -- and I think there are seven lots -- they're
19 outside of the service area because they were never
20 annexed. They're not outside the service area of the map
21 of Area 15; is that right?

22 MR. CHAMPA: Yes. So if they're outside the
23 service area, they're outside of TWMA's service area
24 because they had not yet been annexed.

25 HEARING OFFICER DRINKWATER: But had they

1 been annexed, they would certainly be within Area 15; is
2 that correct?

3 MR. CHAMPA: I don't believe that's correct.

4 HEARING OFFICER DRINKWATER: All right. Can
5 you show me that or --

6 MR. CHAMPA: Okay. This is my terrible
7 sketch. I'll get you a cleaner one. And I think that
8 was one of the things and the Authority's previous
9 attorney had said that well, once they're annexed in or
10 once the lands are annexed into the TMWA service area,
11 then they will be annexed into Area 15.

12 But as I look at the Area 15 map, which was
13 just recently printed, it was last updated March 16th of
14 2015. And it makes me think that Area 15 is not subject
15 to any sort of updates because yet there are no -- I have
16 not seen any staff reports or Authority board meetings to
17 show that Area 15 is actually up for, you know, an
18 update. So it seems like once the original Area 15, at
19 least from St. James' position, once this was created,
20 it's been set in stone and this is what it is. But
21 that's all St. James knows at this point.

22 HEARING OFFICER DRINKWATER: Okay. Sorry.
23 Finish your conclusion.

24 MR. CHAMPA: So St. James is concerned about
25 just the economic ramifications of what the Authority

1 alone is requiring to continue building this project.
2 Just on the recent discovery alone for 24 lots, I
3 believe, it comes to \$150,000 of improvements per lot. I
4 think -- and this is St. James' position -- that you
5 would be hard-pressed to find a developer who can make a
6 project like that pencil. And this is something that
7 Washoe County was keenly aware of and made their decision
8 based on that, but the Authority is shrugging it off
9 because it says so.

10 And so one final point. Mr. Estes talked
11 about signing the final map, and that is only a signature
12 identifying that the Authority is willing to accept the
13 easements and the necessary improvements for that
14 particular development. And with the will-serve letter,
15 as I see it, which the Authority sent to the State
16 Engineer a will-serve letter on February 20 -- on
17 February 28th, 2019, which was Attachment 16. But then
18 shortly thereafter, right around the same time as the
19 State Engineer wrote back to the Authority and said: I
20 confirm all of this water is good to go, the Authority
21 signed the final map.

22 And I know that the NAC provisions are a
23 little peculiar, and it's subject to interpretation, but
24 it's St. James' interpretation that particular to the
25 seven lots which the Authority signed, there was

1 correspondence saying that everything has already been
2 dedicated up to this point and you're good to go, and
3 this is for water. And then their form language, I
4 believe that says still subject to the rules and
5 everything else.

6 So it's St. James' position that when the
7 Truckee Meadows Water Authority signs a final map and
8 it's in lieu of a will-serve agreement that's sent to the
9 Nevada State Engineer, it seems like it's more akin to
10 providing water than requiring utilities.

11 HEARING OFFICER DRINKWATER: I'm sorry. Did
12 you just say that you think a signature on a final map
13 can replace a water service letter agreement? Sorry.
14 You don't need to have the agreement if you sign the map?

15 MR. CHAMPA: In the normal course of events,
16 I would think you would. According to the Authority's
17 rules, you would. But particular to the seven lots,
18 things were done a little strangely.

19 HEARING OFFICER DRINKWATER: Do you dispute
20 TWMA's contention that that was done -- that letter was
21 done as an accommodation being essentially a
22 chicken-and-egg problem, the lots couldn't be divided
23 unless the will-serve letter had issued and the lots, I
24 mean, you couldn't do a will-serve until the lots
25 existed. I mean, you couldn't do a water service

1 agreement until the lots existed.

2 MR. CHAMPA: No, because you can do a water
3 service agreement for it.

4 HEARING OFFICER DRINKWATER: I'm sorry. You
5 do dispute --

6 MR. CHAMPA: I do dispute --

7 HEARING OFFICER DRINKWATER: -- their
8 explanation?

9 MR. CHAMPA: Yes, I do.

10 HEARING OFFICER DRINKWATER: So it wasn't
11 done to help your client get the lots subdivided?

12 MR. CHAMPA: I don't believe so.

13 HEARING OFFICER DRINKWATER: Okay. And it
14 was only those seven lots, that will-serve letter;
15 correct?

16 MR. CHAMPA: Correct.

17 HEARING OFFICER DRINKWATER: Thanks.

18 MR. CHAMPA: I'll turn it over to the
19 Authority now. Do you need a break or are we ready to --

20 MR. ADDISON: It's up to you, Your Honor.
21 We're ready to proceed.

22 HEARING OFFICER DRINKWATER: All right.

23 MR. ADDISON: What we have now then is
24 co-counsel, Stefanie Morris, will conduct direct of Scott
25 Estes and then John Enloe. Your Honor, we estimate 40

1 minutes on that testimony at most. But Mr. Estes will go
2 first.

3 HEARING OFFICER DRINKWATER: Okay.

4 MR. ADDISON: Mr. Estes?

5

6 DIRECT EXAMINATION

7 BY MS. MORRIS:

8 Q Your Honor, I'm not going to spend a lot of
9 time focusing on some of the legal arguments that I think
10 are covered in the brief and the evidence, in particular,
11 relating to the seven infill lots which are not part of
12 this discovery. But I am going to spend some time with
13 Mr. Estes talking about the engineering and TMWA's proven
14 utility management of the water of the system including
15 looping, fire flow, maximum daily demand.

16 And with Mr. Enloe, I'm going to talk a
17 little bit about the hydrogeologic area on the Mt. Rose
18 Fan and whether the water supply is sufficient from St.
19 James Wells 1 and 2 to supply the project as asserted by
20 the Petitioners.

21 So Mr. Estes has already stated his name for
22 the record. Could you please describe for us, Mr. Estes,
23 what a discovery is and the general process for obtaining
24 water service from TWMA?

25 A Discovery is a process that I'll describe is

1 -- for a typical subdivision project, it's a process that
2 a developer can give us whatever information they have on
3 their proposed residential project and we do an analysis,
4 we do computer modeling, we look at the location of the
5 project, and we develop a report for them which will show
6 them what kind of facilities are going to be required to
7 provide the requested water service. That may include
8 offsite improvements, things of that nature. It also
9 includes the cost of connection fees for their project.

10 And in general, in most cases, this
11 information is used by the property owner to assist them
12 in getting proper financing for their project, and it
13 also allows them to proceed with the water system design
14 because we tell them -- we show them how this water
15 system should be laid out and what the pressures are
16 going to be, things of that nature. So it allows them to
17 proceed with a preliminary design.

18 HEARING OFFICER DRINKWATER: Can you please
19 elaborate on you said: We do our analysis and computer
20 modeling. What role does the information that's provided
21 to you, for example, the Lumos report and the other
22 reports, what role do those reports play in your analysis
23 and what is your body of data that you're comparing it
24 with?

25 THE WITNESS: Take a stab at this. The

1 information such as provided by Lumos really doesn't
2 enter into our new business investigations and analysis
3 because we're primarily concerned with distribution
4 facilities and service pressures and things of that
5 nature. They did not analyze or develop a computer model
6 to do those kind of things, so it's that kind of
7 information is more the information they provided was
8 more in the water resource arena instead of the
9 distribution system arena.

10 Q (BY MS. MORRIS:) Just to follow up on that
11 question, can you look at the larger binder that is the
12 Petitioner's exhibits, and under Exhibit C, which is the
13 St. James Village Water System Preliminary Engineering
14 Report dated November 1st, 2021, submitted by Lumos, and
15 could you look at page 39 of that report, the second
16 bullet, please.

17 A Okay.

18 Q Thanks. Does that indicate that the
19 hydraulic modeling was not completed by Lumos for this
20 project?

21 A That is correct.

22 Q Does it also suggest that that modeling be
23 completed in the future to help with developing looping
24 strategies?

25 A It does.

1 Q Thank you. Going back to the process, once
2 you get through a discovery, does that mean you're
3 guaranteed water service? What are the next steps?

4 A The next step following the discovery --
5 assuming that the developer wants to move forward, they
6 actually submit an application for water service. Now
7 preceding that, if in fact this location of the project
8 is outside a retail water service area, they usually have
9 to submit an application for annexation. And they can do
10 that at the same time as application for water service,
11 but we cannot enter into an water service agreement until
12 we have the annexation agreement.

13 HEARING OFFICER DRINKWATER: I'm sorry. Can
14 I interrupt?

15 MR. ADDISON: Sure.

16 HEARING OFFICER DRINKWATER: I need to go
17 back to my past question because you answered half of it,
18 but you didn't answer the other half, and I really,
19 really need that answer.

20 THE WITNESS: Could you repeat that?

21 HEARING OFFICER DRINKWATER: What is your
22 body of data and how do you do your modeling?

23 THE WITNESS: So the data that we're looking
24 for from an applicant includes lot layouts, street
25 layouts, more importantly, elevations, the grading plan.

1 Those are the most important items. Lot sizes, we need
2 those to calculate the maximum day demand, things of that
3 that nature.

4 HEARING OFFICER DRINKWATER: Okay. Thank
5 you.

6 Q (BY MS. MORRIS:) Mr. Estes, you spoke about
7 annexation. When an area is annexed, like there's
8 property that's outside the service area and let's just
9 say Area 15 applies, when you annex those new properties
10 or lots in, does the Area 15 fee or any area fee apply?

11 A Yes. The area fee would apply upon
12 annexation. We would adjust that boundary to include the
13 annexed property.

14 Q And why is that?

15 A Well, I mean, it's a process that needs to be
16 done to adjust those boundaries to include the
17 properties. They're benefitting from the facilities that
18 go into this area fee, and so that's why they need to pay
19 the fee.

20 Q And just to follow up on the discovery, if a
21 discovery provides information such as the Lumos report
22 and the Confluence report, do you look at it and consider
23 it before you come out with your discovery? Even if you
24 don't necessarily reference it, did you review it in this
25 instance prior to the discovery being completed?

1 A Yes, I did review it.

2 Q Thank you. I want to clear up some confusion
3 about the lot sizes which are subject to the 2022
4 discovery because there's a number of different numbers
5 of lots floating around. How many lots are in the St.
6 James Village 2021 discovery request?

7 A Twenty four.

8 Q And did TWMA inform St. James that the seven
9 infill lots were not part of the discovery?

10 A Right. Correct.

11 Q And looking at TWMA Exhibit 4, which is in
12 the smaller binder, it's a December 23rd, '21 letter to
13 Mr. Krater and Mr. Champa from Mr. Rotter, the
14 engineering manager. Is this the communication that let
15 them know that those seven infill lots were no longer --
16 were not part of the discovery?

17 A That is correct.

18 Q And does it say why they are not part of the
19 discovery?

20 A Well, yes, it does.

21 Q And is that because they no longer own those
22 lots?

23 A That was one of the items, yes.

24 MS. MORRIS: Thank you.

25 HEARING OFFICER DRINKWATER: I'm sorry. I

1 missed your exhibit. I read it. I know I read it.

2 MS. MORRIS: Exhibit 4.

3 HEARING OFFICER DRINKWATER: Exhibit 4.

4 Thank you.

5 Q (BY MS. MORRIS:) Of course. When looking at
6 necessary infrastructure, does TWMA follow the Nevada
7 Administrative Code or NAC?

8 A We do.

9 Q And when looking at necessary infrastructure,
10 does TWMA have design standards?

11 A We do.

12 Q Does the Nevada Division of Environmental
13 Protection and the Washoe County Public Health Department
14 review and approve TWMA's design standards?

15 A They did.

16 Q And looking at TWMA Exhibit 19, can you
17 identify what this document is?

18 A This is the discovery for the 24 units.

19 Q And it's dated February 14, 2022?

20 A Correct.

21 Q And looking at page 11, which it's not
22 marked, but it's Figure 2, water facilities, does this
23 show the current system?

24 A It does.

25 Q And is this a tree distribution system?

1 A Yes, it is.

2 Q And looking at Exhibit 30 of TWMA's exhibits,
3 do you see NAC Section 445.6712?

4 A I do.

5 Q And does that section allow for a tree
6 distribution system?

7 A It does not.

8 Q In looking at Exhibit 20, is this a page from
9 TWMA's design standards?

10 A It is.

11 Q And looking specifically at standard
12 1.1.06.06, does this standard allow for a tree system?

13 A It does not.

14 Q And can you please turn to Exhibit 21. Can
15 you explain what this exhibit shows?

16 A This exhibit highlights the single arterial
17 dead end main that forms the basis of the tree system
18 both in the north and in the south of the St. James
19 Village water system.

20 Q Does it also show the lengths of those dead
21 end mains?

22 A It does.

23 Q And could you please state for the record
24 what they are.

25 A The northern section is 6,300 feet long.

1 That comes from -- goes from St. James Parkway all the
2 way to the end of the system at proposed Unit 1H.

3 Q Are there occasions when TWMA design
4 standards allow for a dead end main?

5 A They do. We've, over the years in
6 discussions with the health Authority, we've come to an
7 agreement that we can have a maximum dead end length of
8 800 feet. That accommodates a lot of the longer
9 cul-de-sacs that you see in some of the developments
10 these days.

11 Q And based on Exhibit 21 and the lengths shown
12 here, would this please TWMA's design standards?

13 A No, it wouldn't.

14 Q Because it's more than 800 feet?

15 A Correct.

16 Q In your professional judgment, would you
17 recommend a variance from the 800-foot dead end main
18 requirement?

19 A No, I would not.

20 Q And why not?

21 A In a radial dead end main such as this, any
22 break in single portions of the main, everybody
23 downstream from that point of the main break is going to
24 be without water pressure. And when you depressurize a
25 main like that, you're asking for problems from

1 infiltration and possible contamination of the main.

2 Q So it's a public health and safety issue?

3 A Correct.

4 Q Thank you. And you did -- you said you
5 reviewed the Lumos technical memo that was submitted with
6 the St. James discovery request; correct?

7 A I did.

8 Q So looking at Petitioner Exhibit 1, Tab B,
9 it's a technical memorandum to Mr. Woodside from
10 Mr. Hardy about the St. James Village water system
11 analysis.

12 A Okay.

13 Q Do you see that?

14 A I do.

15 Q Looking at the third full paragraph,
16 beginning with: "The St. James Village water system
17 currently consists of," do you see that? I think it's
18 exhibit -- it's B. It's a memo. It's not the larger
19 Lumos report.

20 HEARING OFFICER DRINKWATER: It's in Exhibit
21 1.

22 MS. MORRIS: 1B. 1C is the larger Lumos
23 report. You've got to go backwards. No. Other way.

24 THE WITNESS: Other way.

25 MS. MORRIS: B. Look for B.

1 THE WITNESS: B?

2 MS. MORRIS: B. Keep going.

3 THE WITNESS: Oh, Exhibit B?

4 MS. MORRIS: Yeah. Exhibit 1, Tab B.

5 THE WITNESS: Okay.

6 Q (BY MS. MORRIS:) Okay. So looking -- you
7 see that's the technical memorandum to Mr. Woodside from
8 Mr. Hardy?

9 A Correct.

10 Q Okay. Looking at the third full paragraph,
11 did Lumos agree that the system lacked proper looping?

12 A They did.

13 Q And of that same exhibit, can you turn to
14 page six?

15 A Okay.

16 Q And looking at the distribution piping and
17 pressure zones tab in the last sentence, does that
18 paragraph -- does that also agree that there was not
19 proper looping for the system?

20 A It does.

21 Q And does it state that that was important for
22 system redundancy and greater fire flow?

23 A It does.

24 Q Thank you. Let's talk a little bit about
25 fire flows. I think you said that -- and we looked at

1 the Lumos larger report -- that they did not conduct fire
2 flow modeling; is that correct?

3 A That is correct.

4 Q And can you turn to -- Did TWMA complete that
5 modeling?

6 A We did.

7 Q And what are the fire flows for this project?

8 A Taking a look at the size of the homes in
9 that development, we determined that the fire flow would
10 be 2,500 gallons per minute.

11 Q And did Lumos agree with that?

12 A They did.

13 Q And that's not a number TWMA just made up;
14 correct?

15 A No.

16 Q It's based on a standard?

17 A International Fire Code standards.

18 Q And the NAC requires that you do such
19 analysis and modeling for fire flow; correct?

20 A It does.

21 Q And could you turn to TWMA Exhibit 23? If
22 you could explain what this shows and maybe orient us a
23 little bit about where the proposed areas for this
24 project are for the discovery.

25 A This again is a -- this exhibit is a map of

1 the St. James Village water system. It shows both the
2 northern and southern portions of the system. And what
3 this is, this shows the result of a fire flow analysis
4 throughout the entire system. And the nodes with the
5 numbers next to them, that indicates the maximum fire
6 flow that can be delivered at that point in the system.

7 Q And can you tell me if this modeling
8 demonstrates that the 2,500 gallons per minute or GPM
9 standard is met?

10 A You can see on the west side or the left side
11 of this exhibit near the St. James 1 tank, this is the
12 only area within that system where you can get in excess
13 of 2,500 gallons per minute of fire flow. The remaining
14 portions of the system are -- well, you can tell from
15 just looking at the numbers no numbers exceed 2,500
16 gallons per minute. And even in the southeastern portion
17 towards the bottom left of this exhibit, you can see the
18 fire flows are less than a thousand gallons per minute.

19 Q Thank you. Let's talk a little bit about
20 maximum day demand. Looking at Exhibit 30, TWMA Exhibit
21 30.

22 A Okay.

23 Q And these are relevant sections of the NAC.
24 Does NAC 445.6672 require an analysis that includes a
25 maximum day demand?

1 A It does.

2 Q And did TWMA complete that analysis?

3 A We did.

4 Q And if we could turn to TWMA Exhibit 24.

5 Maybe you could just briefly explain what a maximum day
6 demand is and why it's important.

7 A Sure. For residential development, we
8 calculate the maximum day demand by the lot size. So
9 what we do is we take the lot area in square feet, put
10 this into a spreadsheet, and we calculate the maximum
11 daily demand for each lot in the project and we get a
12 total maximum day demand that way.

13 So for the existing St. James units, the max
14 daily demand using that method is 207 gallons per minute.
15 That includes the homeowner's association irrigation
16 service. There's an additional 81 lots in the St. James
17 Village area that were committed to serve, but they serve
18 -- but they're not yet built, so that's a committed max
19 day demand of 122 gallons per minute.

20 And then if you add the 24 lots that were
21 part of the discovery, they had a maximum day demand of
22 35.1 gallons per minute which gives you a total committed
23 max day demand in the 24 lots were developed of 364.1
24 gallons per minute.

25 Q And when you look at the max day demand, as

1 proposed by the Petitioner, it would be met with just St.
2 James' Wells 1 and 2 for a capacity; correct?

3 A Correct.

4 Q And what are the capacity rates of those two
5 wells?

6 A We de-rated the original capacity of those
7 two wells, so the combined capacity from the existing
8 wells is 350 gallons per minute.

9 Q And so looking at Exhibit 24, it shows that
10 based on your analysis, there's a deficit capacity just
11 using those two wells for that source; correct?

12 A Correct: 14.1 gallons per minute.

13 Q And in the Lumos report that was submitted,
14 which is Petitioner Exhibit 1, Tab B on page 8, they also
15 identify additional 18 lots that are outside the St.
16 James gated community as a requirement for future demand.
17 Did you include those 18 units in this analysis?

18 A No.

19 Q And if you did include those, would that make
20 the deficit greater?

21 A It would.

22 MS. MORRIS: Thank you.

23 HEARING OFFICER DRINKWATER: Can I ask -- I
24 don't know if this is a good time, but it's as good a
25 time as any. Explain to me about de-rating the well.

1 Are you involved in that?

2 THE WITNESS: That's probably a better
3 question for Mr. Enloe.

4 HEARING OFFICER DRINKWATER: Okay. Thank
5 you. I will ask it.

6 Q (BY MS. MORRIS:) Yeah, and I have questions
7 about that. But I would like you to talk about capacity
8 de-rating versus water resource availability de-rating.
9 Can you speak to the capacity de-rating?

10 A I think I can handle that one.

11 Q Thank you.

12 A The actual capacity -- we're talking about
13 capacity of supply is the amount of water that you can
14 pump by the wells. The water rights capacity is more of
15 an annual duty for the development, and it's usually
16 noted in acre feet per year.

17 HEARING OFFICER DRINKWATER: The Lumos --
18 second Lumos report, the Exhibit C to Exhibit 1, has
19 charts on page 22 regarding maximum daily demand. There
20 numbers are slightly different from your numbers. It's
21 my understanding this is a fairly formulaic process based
22 on those lot sizes. Why are the numbers different?

23 Q (BY MS. MORRIS:) Maybe I could just help
24 here. If you look at the table in 22, if you take the
25 existing residential demand plus the HOA irrigation which

1 you said you combined for the 206, is the 194 plus 13

2 roughly 206? I'm really bad at math. I'm a lawyer.

3 HEARING OFFICER DRINKWATER: 194 plus 213?

4 MS. MORRIS: Thirteen.

5 HEARING OFFICER DRINKWATER: Oh, 13 plus 13.

6 So these two?

7 Q (BY MS. MORRIS:) Mr. Estes, you have to help
8 me with the math.

9 A Yes.

10 Q So in TWMA Exhibit 24, you said existing use
11 was 206 GPM?

12 A 207.

13 Q And then if you take the table from Lumos on
14 page 22 and look at -- and this is Table 4.3, for the
15 record, and look at the first two lines, existing
16 residential plus HOA irrigation, is that roughly the 206
17 that you used?

18 A It's the 207. Yes.

19 Q Rounding errors potentially?

20 A Yes, probably.

21 MS. MORRIS: Do you have more questions on
22 that table before I move on?

23 HEARING OFFICER DRINKWATER: I'm not sure.

24 I'll have to come back to that.

25 Q (BY MS. MORRIS:) Okay. Looking at Exhibit

1 16, TWMA's Exhibit 16, can you identify for the record
2 what this document is?

3 A This is the 2015 discovery report.

4 Q And it was provided to St. James --

5 A It was.

6 Q -- Village. Did this discovery suggest
7 drilling two new wells: St. James three and four, to
8 meet capacity issues?

9 A It does.

10 Q And the cost estimate for the two new wells
11 shown on page nine of the discovery under item one?

12 A Yes.

13 Q And what was the estimated cost for those two
14 new wells?

15 A For the two wells, cost estimate was \$4
16 million dollars.

17 Q And looking at that same Exhibit 16 on page
18 five, district your attention to the second full
19 paragraph. Did the discovery acknowledge that there may
20 not be sufficient groundwater supplies onsite to meet the
21 project demand?

22 A It does.

23 Q And looking at the paragraph above, did it
24 also acknowledge the Area 15 fees would apply?

25 A It does.

1 Q Did the 2022 discovery find a different way
2 to try to address the reliable pumping capacity issue?

3 A It did.

4 Q And let's look at that discovery. Can you
5 turn to Exhibit 19.

6 A Okay.

7 Q And what was the solution that TWMA came up
8 with to try to address the reliable pumping capacity
9 issue other than drilling two new wells?

10 A Instead of putting additional stress on the
11 aquifer by building additional production wells, what we
12 proposed now is to serve growth in St. James Village by
13 sending water through the existing -- from and through
14 the existing Mt. Rose water system.

15 Q And looking at Exhibit 19, page seven, let me
16 know when you get there.

17 A Okay.

18 Q Can you identify which line item would be the
19 cost of that proposed solution.

20 A That would be the pressure reducing station
21 with SCADA control at a cost estimate of \$125,000.

22 Q So that would be a cheaper solution to
23 address the capacity issues rather than drilling two new
24 wells?

25 A It would.

1 Q By roughly how much?

2 A When you take into account the connection
3 fees, the Area 15 fees as well, the revised plan is
4 approximately \$2.9 million dollars less.

5 Q And, Mr. Estes, have you seen the cost
6 benefit analysis that Washoe County performed --

7 A I have not.

8 Q -- that was referenced --

9 A No.

10 Q -- in the pleadings? So that wasn't provided
11 by the Petitioners?

12 A I have not seen it.

13 MS. MORRIS: Okay. Thank you.

14

15 DIRECT EXAMINATION

16 BY MS. MORRIS:

17 Q Mr. Enloe, can you please state your name and
18 your title and spell your last name for the record.

19 A Sure. My name is John Enloe: E-N-L-O-E.
20 I'm the Director of Natural Resources for TWMA.

21 Q In your role as natural resources, do you
22 oversee hydrogeologists?

23 A Yes, I do.

24 Q And do you work with those hydrogeologists to
25 determine how TWMA can serve reliable water supply in the

1 future?

2 A Yes, I do.

3 Q And could you please describe your
4 professional experience working with the Mt. Rose-Galena
5 Fan groundwater resources from 1999 to roughly 2015.

6 A Sure. So in 1999, I was a consultant for a
7 company called Ecologic Engineering, and we were hired by
8 Washoe County and the South Truckee Meadows General
9 Improvement District to prepare a comprehensive water and
10 wastewater facility plan for the entire south Truckee
11 Meadows area. It's a much larger area than really what
12 we're talking about up on the Mt. Rose Fan, all of Double
13 Diamond and Arrowcreek and so forth.

14 Part of that study included a groundwater
15 model for that entire area where we looked at the
16 sustainable pumping amount. Mr. Estes referred to an
17 earlier conjunctive use, so we were looking at a facility
18 plan that utilized groundwater resources, creek
19 resources. And at the time, TWMA had a wholesale service
20 to Washoe County utilizing Truckee River resources, so we
21 were looking at the combination of those three resources
22 to satisfy a large area demand. One of the --

23 Q Mr. Enloe, sorry. If I can stop you.

24 A Sure.

25 Q As part of that work that you were involved

1 in looking at Exhibit 7 of TWMA's exhibits, is that the
2 technical memorandum you were referring to?

3 A Yeah, that's what I was just going to speak
4 to. So one of the outcomes of this facility plan was a
5 groundwater model. And this Exhibit 7 that is being
6 referred to is one of the technical memoranda within that
7 facility plan.

8 And the primary conclusion from this was that
9 the amount of committed and I'll say water rights that
10 were intended to serve tentative maps within the entire
11 service area, there was not sufficient groundwater, there
12 were not sufficient groundwater resources, the wet water,
13 to satisfy the amount of permitted groundwater in the
14 area.

15 So one of the outcomes of that facility plan
16 was a recommendation for the construction of an upper
17 water treatment plant that would be used to supply
18 treated surface water to augment the groundwater
19 resources in that area. So at the time, Washoe County
20 and STMGID, in that area, relied 100 percent on
21 groundwater. And this facility plan, which was approved
22 by Washoe County and STMGID in 2002, acknowledged that
23 and recognized the need for conjunctive use and the need
24 for an upper surface water treatment plant to provide
25 that source of supply.

1 Q And would the Mt. Rose Water Treatment Plant
2 that was recently completed by TWMA be just that kind of
3 facility?

4 A Yes, it is.

5 Q Okay. And do you have the Petitioner's
6 complaint in front of you?

7 A I do.

8 Q Could you please turn to page 10. And I want
9 to direct your attention to lines four through six. It
10 says: "The Authority determined that it would initiate
11 an aquifer supply recovery program due to the extensive
12 aquifer drawdown on the Mt. Rose Alluvial Fan caused by
13 domestic well pumping." Do you see that?

14 A Yes, I do.

15 Q Do you agree with that statement?

16 A No, I don't.

17 Q And can you please turn to Exhibit 8, TWMA
18 Exhibit 8. What is that document?

19 A This is a staff report from Washoe County in
20 August of 2011 related to the implementation of the
21 domestic well mitigation program for the Mt. Rose Fan.

22 Q So does that indicate to you that it was
23 really municipal pumping that was causing issues with
24 domestic wells?

25 A That was the reason this whole program was

1 implemented. There's been a long history of public
2 engagement, I will say, with the utilities related to
3 municipal groundwater pumping that impacts the domestic
4 wells. It was a big part of the facility plan effort
5 completed in 2002. That carried on through the early
6 2000s and culminated with this domestic well mitigation
7 program that compensates domestic well owners for the
8 impacts of municipal pumping on domestic wells.

9 **Q Can you describe -- since the Washoe County**
10 **merger in 2014 -- what has TWMA done to promote**
11 **conjunctive use and what steps have you taken?**

12 **A** Sure. So Mr. Estes referred to it. When
13 TWMA -- so just for some clarity, I didn't start work for
14 TWMA until 2014, but during the merger process, it was
15 recognized that there was a significant problem in the
16 Mt. Rose Fan.

17 The drought of 2011 through 2015 exacerbated
18 that problem, and upon completion of the merger, TWMA
19 accelerated improvements for this conjunctive use plan so
20 that consisted of the water supply project that Mr. Estes
21 referred to pumping water from basically treated Truckee
22 River water from the Walmart area and Double Diamond all
23 the way up to the top of Arrowcreek Parkway. From that
24 point, the water could be distributed to the entire upper
25 portions of the Mt. Rose Fan. And we completed that in

1 2016, and with completion of that project, we were able
2 to reduce groundwater pumping by those upper wells by
3 approximately 40 percent.

4 And in addition to that, Mr. Estes referred
5 to the design and construction of the Mt. Rose Water
6 Treatment Plant which is now complete, and we are also
7 actively recharging three wells in that area. So placing
8 -- during this time of year actually treated water back
9 down the wells to help restore groundwater levels in the
10 area.

11 Q Thank you. I want to take a couple of steps
12 back. When TWMA -- when the merger was complete, did
13 TWMA adopt the Mt. Rose-Galena Fan domestic well
14 mitigation program?

15 A Yes, we did.

16 Q And looking at Exhibit 10 of TWMA, is that
17 Rule 10 for TWMA?

18 A Yes, it is.

19 Q And I want to talk briefly about how TWMA
20 adopts area fees, so could you please turn to Exhibit 9,
21 TWMA Exhibit 9. Thank you. Could you just explain what
22 this document is.

23 A So this is a staff report dated April 6th,
24 2015 related to proposed rule changes and WSF charges,
25 the Area 15 -- they're essentially connection fees, 14

1 and 15, for that area.

2 Q And when TWMA changes its fees, does it have
3 to do a public process?

4 A Yes, we do. There's two public readings of
5 that. And for this process, we also held a public
6 workshop.

7 Q And can you just briefly look at Exhibits 11
8 and 13? Are those the TWMA board agendas agendizing the
9 changes to those rate fees for Area 15?

10 A Yes, they are.

11 Q And after TWMA adopted the rate changes and
12 through that public process, if you could turn to Exhibit
13 14. And can you describe what Exhibit 14 is.

14 A So Exhibit 14 is a letter that we sent out to
15 over 8, 000 water customers in the Mt. Rose Fan basically
16 advising them that TWMA is now the water purveyor in the
17 region. We recognize that there are significant problems
18 with the groundwater resource in that area and that we
19 were moving forward with implementation of several large
20 improvement projects to address that issue.

21 Q And this is a little bit of a strange letter
22 because it says -- again, it's Exhibit 14. It says:
23 July, question mark, question mark, 2015. But if you
24 look at the back page of the exhibit, there's an invoice
25 attached. Did TWMA cause, through a mail merge, 8,000 of

1 these letters to be sent to property owners --

2 A Yes.

3 Q -- in the area? And do you know if
4 Mr. Woodside, the representative for St. James Village,
5 received this letter?

6 A He did not receive the letter directly. I
7 looked at the actual mail merge list, but I recalled in
8 one of our meetings here at TWMA that Mr. Woodside did
9 receive that letter because he commented that he received
10 multiple copies of it.

11 Q And then if I could just direct your
12 attention again to Exhibit 14, there's the second-to-last
13 page, there's a map. And that was sent with the letter.
14 Can you describe what that map shows in the context of
15 yellow dotted lines as well as the blue area labeled St.
16 James?

17 A Right. So I think there's some confusion
18 between the domestic well mitigation program boundary and
19 our Area 15 boundary because they are not the same. The
20 yellow dashed line represents the domestic well
21 mitigation area boundary, so any domestic well owner
22 within that area could file a claim with TWMA and
23 basically, if they needed to do something with their
24 wells, their costs are partially reimbursed according to
25 the rules and so forth.

1 The black line is the line that reflects the
2 Area 15 charge boundary, and so that's more -- that's in
3 line with TWMA's service area, and it so it extends all
4 the way up to the Arrowcreek subdivision to the north as
5 far south as St. James Village, and it was -- that area
6 was identified to incorporate the municipal wells in the
7 upper Mt. Rose Fan that were contributing to the regional
8 water level decline in the area.

9 Q So I'd like to direct your -- I have a very
10 quick question before we talk about water supply about
11 banked water at TWMA versus dedicated. So if water is
12 banked at TWMA, does that mean TWMA controls it and
13 possesses it or does that mean that TWMA holds it for the
14 use of someone else at a certain point in time?

15 A Yeah, we're basically holding it for the
16 beneficial use of others.

17 Q And if a person who has banked water or an
18 entity has banked water and they want it back, how does
19 that work?

20 A I don't know exactly, but if they want their
21 water back, I believe they could send us a request and we
22 would deed their water back to them.

23 Q Thanks. And I want to take a look at
24 Petitioner's exhibit. It's that bigger binder. And in
25 looking at 6, Exhibit 6.

1 A Six?

2 Q Yeah. And -- sorry -- seven. And I would
3 like to direct your attention first to the cover page, if
4 you could describe for the record what this exhibit is.

5 HEARING OFFICER DRINKWATER: Wait. Their
6 Exhibit 7 or yours?

7 MS. MORRIS: Their Exhibit 7. Petitioner's
8 Exhibit 7.

9 THE WITNESS: This looks like the tentative
10 map and special use conditions for St. James Village.

11 Q (BY MS. MORRIS:) That was adopted by the
12 Washoe County?

13 A Right. In 1992. Correct.

14 Q And if you could turn to page 17 of that
15 exhibit and look at condition 69. Can you describe what
16 that condition says?

17 A Basically, it says if water usage monitoring
18 demonstrates the water rights dedicated to serve the
19 project are insufficient, then additional water rights
20 shall be required to serve that demand.

21 Q So it looks like Washoe County had a
22 condition that considered that there may not be
23 sufficient water and they were going to monitor it in the
24 future to determine that.

25 A Correct.

1 Q Okay. And now let's look at exhibit -- TWMA
2 Exhibit 16. Sorry I'm making you flip all over the
3 place. This is the December 23rd, 2015 discovery. And
4 I'd like to direct your attention to page four, and in
5 particular, Figure 1.

6 So is this the data that TWMA relied upon in
7 2015 to make the determination that there was -- that the
8 St. James Wells 1 and 2 were not sufficient to meet the
9 reliable water supply for the project into the future?

10 A Yeah, this and other data as well.

11 Q And can you describe what is shown on Figure
12 1?

13 A So Figure 1 shows the static water level and
14 two monitoring wells nearby to the St. James production
15 wells. And over essentially a what is that?
16 20-year-period, there were over 50 feet of water level
17 declines in each of those wells really with very small
18 pumping amounts relative to their overall water rights.

19 Q And can you -- Sorry. This is showing data
20 for 1994 through 2015?

21 A Correct.

22 Q And this was one of the pieces of data that
23 you were looking at to make that determination in the
24 discovery?

25 A Yeah. This was the determination in the

1 discovery as well as this type of information fed into
2 the whole Area 15 conjunctive use mitigation program.

3 Q And if we could also turn to Exhibit 6, TWMA
4 Exhibit 6. Can you please describe what this depicts
5 including what the blue and black lines show as well as
6 the dotted line?

7 A Sure. So the blue line represents the water
8 levels in one of those same monitoring wells: St. James
9 monitoring well one. And you have that same time period
10 from basically '95 through 2015.

11 What the black line shows is the cumulative
12 pumping of its seven wells in the Mt. Rose Fan.
13 Basically, it's the municipal wells south of Mr. Rose
14 Highway, and over that time period, that pumping
15 increased from only a couple hundred feet, acre feet to
16 almost 2,000 acre feet per year, and the dashed line
17 basically represents when TWMA took over.

18 And what you can see from the blue line is
19 the water levels, compared to earlier years, started to
20 stabilize. And the reason that those water levels are
21 stabilizing can be seen in the black line because at that
22 same time period, TWMA -- that was when we talked about
23 implementing these conjunctive use, sending water up
24 Arrowcreek and reducing the groundwater pumping.

25 So the groundwater pumping went down from

1 over 1,500, 1,700, 1,800 acre feet a year to maybe an
2 average of a thousand acre feet per year. So it was that
3 reduction in regional groundwater pumping that
4 contributed to the stabilization of the St. James water
5 levels.

6 Q Thank you. Mr. Enloe, did you review the
7 Confluence materials that were submitted separately as
8 well as part of the Lumos materials for the 2021 same
9 joint discovery?

10 A Yes, I did.

11 Q And did some of your staff meet with
12 Confluence to discuss those findings and materials?

13 A Yes, they did.

14 Q And in general, did your staff agree with the
15 findings for the Serpa Well tests that were provided?

16 A Yeah, they did agree with the test results
17 from the Serpa Well to a large extent, and they took
18 those results and incorporated them into our regional
19 model.

20 If I could just add something. Because of
21 this regional model, there were models developed in the
22 early 1990s that identified that there was a problem in
23 the upper Mt. Rose Fan with the sustainable water
24 resources. The modeling that we did as part of the
25 facility plan confirmed that.

1 When TWMA took over the system in 2015, we
2 worked on additional models to try to incorporate the
3 most comprehensive and available information. One of the
4 big additions to this was we were able to incorporate the
5 Ormat geothermal facility into the groundwater modeling
6 because that was essentially a black box in all of the
7 other groundwater models that had been developed and we
8 were never able to get that information. But through
9 some good work of our hydrogeologist, they were able to
10 work with Ormat and get that information, so we feel we
11 have a very accurate and comprehensive model of that
12 area. With respect to the Serpa groundwater model, I
13 mean one of the things --

14 **Q Let's talk -- the Serpa, the well testing,**
15 **you mean?**

16 A Right.

17 **Q So you're familiar with that test?**

18 A Yes.

19 **Q Okay. And what basin are the St. James --**
20 **What groundwater basin are the St. James wells located**
21 **in?**

22 A St. James are in the Pleasant Valley
23 Hydrographic Basin.

24 **Q And what basin is the Serpa Well located in?**

25 A The Washoe Valley Hydrographic Basin.

1 Q And you have a groundwater modeler on staff;
2 correct?

3 A A very good one.

4 Q And what is his name?

5 A Greg Pohll.

6 Q And he updates the regional models as you've
7 just described?

8 A Yes, he did.

9 Q Your regional model looks at hydraulic
10 barriers, does it not?

11 A Yes, it does.

12 Q It considers those when it looks at regional
13 impacts?

14 A Yes, it does.

15 Q That would include faults?

16 A Yes.

17 Q That would include bedrock?

18 A And that was really -- with the comments that
19 John Benedict from the State Engineers Office, he
20 provided some input on faulting and so forth, and that
21 information was also incorporated into the regional
22 groundwater model.

23 Q And so I want to direct your attention to
24 TWMA Exhibit 25. And let me know when you get there.

25 HEARING OFFICER DRINKWATER: Sorry. Which

1 exhibit?

2 Q (BY MS. MORRIS:) TWMA Exhibit 25.

3 Is this a summary of some model simulations
4 that were run by your staff?

5 A Yes, it is.

6 Q And on the first page of that exhibit, on the
7 second paragraph at the very bottom, it talks about the
8 model hydraulic conductivity in the vicinity of the Serpa
9 Well was increased, blah, blah, blah?

10 A Right.

11 Q In accordance with an aquifer test at that
12 well. Do you see that?

13 A Yes.

14 Q So the results from the Serpa Well tests were
15 incorporated into this model?

16 A That is correct.

17 Q And can you just briefly summarize what the
18 model results show from these runs, in particular,
19 looking at scenario two?

20 A Right. So scenario two is basically a
21 representation in the model of increased pumping rates
22 from approved development up in the area. So not only
23 does St. James Village have an approved tentative map,
24 but so does a project called Terrasante, another one
25 called Ascente, so there's much more potential

1 development up there in that area. So this scenario two
2 looked at increased pumping levels from all of those
3 approved developments to reflect long-term changes in the
4 groundwater level.

5 Q In your professional opinion, would it be
6 wise to make a long-term resource supply determination
7 based on a two-week test from a well that's not even
8 contemplated to provide water supply?

9 A No.

10 Q Would you do it without looking at other
11 regional impacts?

12 A No.

13 Q And finally, in your opinion, and based on
14 the modelings, is there a hydrologic connectivity between
15 the Pleasant Valley Basin and other surrounding basins?

16 A Yes, there is. And I just wanted to comment
17 that the Confluence report even recognized the
18 conductivity between the pump test at Serpa and the St.
19 James Wells.

20 Q And I want to direct your attention to
21 Petitioner Exhibit 19. This is a TWMA memo dated August
22 2nd, 2018 to the file. Does Mr. White work with you?

23 A Yes, he did.

24 Q And are you familiar with this memo?

25 A Yes.

1 Q And looking at page one, on the fourth
2 bullet, does that indicate that the model found regional
3 drawdown over much of the Mt. Rose Fan exceeding 50 feet
4 based on future development?

5 A Correct.

6 Q And does this memo and the model results in
7 Exhibit 25 indicate regional hydrologic connectivity?

8 A I'm sorry. Can you repeat that question?
9 You threw out another exhibit there.

10 Q I'll strike that. I'm going to move on.
11 Mr. Enloe, are you familiar with the valve that's
12 referenced in Petitioner's complaint that connects the
13 Mt. Rose system with the St. James system?

14 A Yes, I am.

15 Q Are you aware that in 2017 and 2018, the
16 valve was opened to help address wells being down in
17 either of those systems?

18 A Yes, I am.

19 Q Is it generally good public utility -- Is it
20 prudent for utilities to have redundancy in systems to be
21 able to address outages in other areas?

22 A Very much so.

23 Q Did TWMA base its opinions and conclusions
24 about the groundwater availability for the 2015 discovery
25 on data from the future?

1 A No.

2 Q Or was it on past data prior to 2017 and
3 2018?

4 A It was basically the 2015 discovery and that
5 Figure 1 that we looked at in there that was prior to
6 really TWMA taking over the system and prior to that
7 valve even being opened. So during the time period when
8 that valve was opened was the time period when the water
9 levels were stable in the St. James Wells because of kind
10 of our reduced groundwater pumping.

11 Q Okay. Thank you. And if you can look again
12 at Petitioner's brief on page nine, and really focusing
13 on lines three through 14, essentially four through 14.

14 A Okay.

15 Q Do you agree with that statement that the
16 Authority wouldn't consider alternative water rights?

17 A No.

18 Q Has it changed its opinion from 2015 to 2022?

19 A No. In the discovery, I think, mentioned a
20 couple of alternatives, one being wells down on the
21 Sierra Reflections property and the other being
22 supplemental water rights from the Whites Creek Water
23 Treatment Plant.

24 Q And if you could reference Exhibit TWMA
25 Exhibit 19, page four, the first full paragraph.

1 A Starting with "However"?

2 Q Yes. Does that confirm what you just said:
3 That other sources of supply or mitigation could be
4 available?

5 A Correct.

6 Q And does it also suggest that TWMA's open to
7 considering other supply options as long as they don't
8 have impacts on the long-term reliability of the regional
9 groundwater?

10 A Correct.

11 HEARING OFFICER DRINKWATER: I'm not with
12 you. Sorry. He's right.

13 MS. MORRIS: I think it's TWMA Exhibit 19.

14 HEARING OFFICER DRINKWATER: All right. I'm
15 there.

16 MS. MORRIS: And it's page four.

17 HEARING OFFICER DRINKWATER: And my page four
18 is all references.

19 MS. MORRIS: I think you're on the wrong
20 exhibit book.

21 HEARING OFFICER DRINKWATER: Oh, you're
22 right. Sorry. That's exactly what happens.

23 MS. MORRIS: No worries. I'll wait.

24 HEARING OFFICER DRINKWATER: Got it. Thank
25 you. Sorry.

1 Q (BY MS. MORRIS:) So again, looking at page
2 four of --

3 HEARING OFFICER DRINKWATER: Yeah, I see
4 where you're talking about.

5 Q (BY MS. MORRIS:) -- Exhibit 19. And then I
6 guess in -- I need one second. So just to confirm, TWMA
7 would be open to looking at other water resources and
8 mitigation?

9 A Correct.

10 Q As indicated on page four?

11 A Correct.

12 MS. MORRIS: I don't have any further
13 questions.

14

15 EXAMINATION

16 BY HEARING OFFICER DRINKWATER:

17 Q Could we go back to my earlier question about
18 the de-rating of the well?

19 A Sure.

20 Q How and when and how -- I mean, how does that
21 all happen?

22 A Okay. So when we were looking at
23 implementing this entire program, we were looking at
24 water levels with wells in that entire area, and we
25 actually conducted and reviewed pump tests on wells and

1 so forth. But what we were seeing was that water levels
2 were declining rapidly, easily two or more feet a year
3 with no rebound whatsoever.

4 The derating of these wells was not just
5 limited to St. James Village. We also derated -- they're
6 called two Tessa wells that were equipped and providing
7 service to customers, and the water levels in those wells
8 were really dropping. So again, cutting back on the
9 pumping reduces that demand on the aquifer.

10 And then there are two other wells. They're
11 not TWMA wells currently, but they're associated with the
12 Terrasante development that have also been derated for
13 the same reason. So we're looking at, I mean, it's
14 really not just the GPM pumping capacity issue, but how
15 much water can you remove from the aquifer in that
16 location without causing a significant impact.

17 HEARING OFFICER DRINKWATER: Okay. Thank
18 you.

19 MR. ENLOE: And so these wells were derated
20 in 2015, as were the other four that I referred to.

21 HEARING OFFICER DRINKWATER: I have one more
22 question for Mr. Estes. I didn't ask you, but I meant to
23 ask you. You described the process of the application
24 and the discovery and my question is: Was St. James
25 Village treated any differently than any other customer

1 in your process?

2 MR. ESTES: No, they weren't.

3 HEARING OFFICER DRINKWATER: Thank you.

4 MS. MORRIS: I remembered my last question if
5 you wouldn't mind. It was for Mr. Enloe.

6 HEARING OFFICER DRINKWATER: Okay.

7

8 FURTHER EXAMINATION

9 BY MS. MORRIS:

10 Q When you look at other projects and other
11 discoveries, do you, in that area, would you use the same
12 regional model?

13 A Yes.

14 Q And you would look at that pumping and assess
15 based on that regional model whether that resource was
16 sustainable?

17 A Correct.

18 MS. MORRIS: Thank you.

19 HEARING OFFICER DRINKWATER: I think it's
20 time for us to take a short break. Is ten minute us
21 enough time? So let's come back just about a little bit
22 after 11:00.

23 (Recess.)

24 HEARING OFFICER DRINKWATER: We're back.

25 MR. ADDISON: Your Honor, this is Matt

1 Addison again. I just have two housekeeping matters,
2 procedural matters. The first is you had referenced your
3 desire to see an April 19th, 2021 letter from Mr. Champa,
4 Petitioner's counsel, to our former partner, Mike Ponti
5 at McDonald Carano, on behalf of TWMA. And Mr. Champa
6 indicated on the record earlier he had three copies of
7 and that and he would distribute it.

8 During the break, we negotiated a stipulation
9 very quickly to simply take this copy that Mr. Champa
10 provided and amend the record in the matter by amending
11 TWMA's Exhibit Number 5 and appending this letter of
12 April 19th, 2021, to the end of Exhibit 5 to supplement
13 the record.

14 Mr. Champa, have I stated our stipulation
15 correctly?

16 MR. CHAMPA: That's correct.

17 MR. ADDISON: Thank you. I appreciate your
18 courtesy very much.

19 Your Honor, is that okay with you?

20 HEARING OFFICER DRINKWATER: Absolutely.

21 MR. ADDISON: Thank you very much.

22 Secondly, just as I indicated before we took
23 the direct testimony of Mr. Estes and Mr. Enloe, we
24 completed -- Ms. Morris completed that direct examination
25 just about in the time we had allotted, and we want to

1 make sure that you have a complete opportunity to ask
2 these gentlemen questions and then open them up for
3 cross-examination by Mr. Champa. So they're here.
4 They're ready. Any questions you or Mr. Champa have,
5 they're ready to field.

6 HEARING OFFICER DRINKWATER: Would you like
7 to do cross-examination?

8 MR. CHAMPA: Briefly.

9 HEARING OFFICER DRINKWATER: Okay.

10

11 CROSS-EXAMINATION

12 BY MR. CHAMPA:

13 Q Good morning still. I'm Mr. Champa, on
14 behalf of St. James. Now I think this question is for
15 you, Mr. Estes. I'm not quite sure, but in regards to
16 the NAC provisions, particularly regarding the
17 Authority's 1.1.06.06 Provision, you had stated that you
18 had provided or sought counsel from the applicable
19 authorities. I think it was the health department.

20 Is there any writing pertaining to that
21 confirmation where the authorities said or the health
22 division said oh, we agree with the 1.1.06.06 provisions?

23 A Well, in general, we have a letter that says
24 they reviewed and approved our standards.

25 MR. ADDISON: Objection. Excuse me. I don't

1 mean to be interrupting, but that's not the NAC
2 provision, right?

3 MR. CHAMPA: Correct. No.

4 MR. ADDISON: That's the TWMA internal rules.

5 MR. CHAMPA: TWMA internal rules.

6 MR. ADDISON: No offense. I think the
7 question was posed as referring to the NACs.

8 MR. CHAMPA: Okay. I apologize. Would you
9 like me to rephrase?

10 MR. ADDISON: I just don't want the record to
11 be confused, so if you wouldn't mind.

12 MR. CHAMPA: Okay. Absolutely.

13 MR. ADDISON: Thank you.

14 MR. CHAMPA: Let me actually go to the --

15 MR. ADDISON: And it's the TWMA internal
16 design; correct?

17 THE WITNESS: Uh-huh.

18 MS. MORRIS: It's Exhibit 20, if you're
19 looking for it.

20 MR. CHAMPA: Exhibit 20.

21 MS. MORRIS: Uh-huh.

22 Q (BY MR. CHAMPA:) So you indicated earlier
23 that you took the Truckee Meadows Water Authority
24 engineering and construction standards and provided a
25 copy of those to I think it was the health department who

1 is the one who promulgated the NAC provisions regarding
2 tree systems. Is that correct?

3 A Correct.

4 Q Okay. And do you have a copy of that
5 correspondence or was there any written correspondence?
6 Sorry. That's compound.

7 MR. ADDISON: You're fine.

8 Q (BY MR. CHAMPA:) Was there any written
9 correspondence from the health department approving the
10 1.1.06.06 TWMA standards?

11 A We have a letter noting their approval of our
12 standards as a whole. They don't address specific items
13 within those standards.

14 Q And did the health department review the
15 entirety of what this Exhibit 20, the engineering and
16 construction standards, design guidelines?

17 A Yes, and much more than that.

18 Q And do we have -- Is there a copy readily
19 available online of all of these design standards?

20 A They should be on our website.

21 Q Okay. Now I think this might be another one
22 for you. When TWMA was taking over Washoe County in
23 particular the STMGID duties for the southern area of
24 Reno, particularly the St. James region, did TWMA perform
25 a review of the existing water facilities at St. James?

1 A Yes, we did.

2 Q And did you review the well capacities
3 associated with the wells that were there?

4 A The reported capacity, yes.

5 Q Did you also review the existing tree
6 structures?

7 A I don't recall looking at that specifically
8 at that time.

9 Q Were you aware that the tree systems were in
10 excess of 800 feet?

11 A I could have told that by looking at the
12 system mapping, but I don't recall doing that
13 specifically either at that point.

14 Q So was it correct then that you had not
15 performed any maximum day demand calculations at that
16 time?

17 A No, we did some rough calculations based on
18 the information at hand.

19 Q Did you find that those calculations
20 satisfied the existing NAC provisions?

21 A I will have to review that calculation sheet.
22 I don't recall off the top of my head.

23 Q And I would pose the same question for the
24 fire demand as well. Would that also take a review and
25 confirm whether those fire demands met TWMA's approval?

1 A At that time, we did not have computer models
2 built of all of the former county systems, so we would
3 not have performed that analysis at that time.

4 Q Okay. Now this question is for you,
5 Mr. Estes. Did you review my or St. James' Attachment 20
6 which is the State Engineer report from?

7 A Yes. Enloe.

8 Q Enloe. Did I say Enloe or Estes?

9 MR. ESTES: Estes.

10 Q My apologies.

11 A No problem.

12 Q Yeah, this is in regards to our Exhibit 20,
13 if you can get there, please.

14 MS. MORRIS: Just for the record, if I may,
15 there's nothing on this that indicates it's an official
16 document from the Nevada Division of Water Resources. In
17 fact, there's no logo or anything of that nature. It
18 looks like it's just a memo to file from John Benedict,
19 but again, no indication that it's an official document
20 from the Nevada Division of Water Resources.

21 HEARING OFFICER DRINKWATER: Mr. Champa, do
22 you want to explain that or --

23 MR. CHAMPA: No, no.

24 MS. MORRIS: Just objecting to the
25 characterization.

1 HEARING OFFICER DRINKWATER: All right.

2 Q (BY MR. CHAMPA:) Absolutely. Okay.

3 Mr. Enloe?

4 A Yes.

5 Q You've been a hydrogeologist in this area for
6 quite some time; correct?

7 A No. I'm a Professional Engineer. I'm not a
8 hydrogeologist.

9 Q Okay. But in that vain, are you familiar
10 with John Benedict?

11 A Yes, I am.

12 Q Do you know where he works?

13 A I think he's still working part time at the
14 State Engineers Office.

15 Q Okay. So but have you reviewed this
16 memorandum from John Benedict?

17 A Not in detail, no. I relied upon TWMA's
18 hydrogeology staff to review the technical details of it.

19 Q I think that's all I have for that then
20 unless -- When you reviewed your -- the hydrogeology
21 staff -- were you aware that they had reviewed this
22 report?

23 A Yes.

24 Q And were you aware that there were different
25 findings from the Confluence report compared to what the

1 **Authority had created?**

2 A I know there were some minor differences, but
3 as I stated in my testimony, I believe Mr. Pohll
4 incorporated the hydraulic properties and much of the
5 information that was contained from their pump test into
6 our regional model including faults and so forth.

7 MR. CHAMPA: Okay. I have no further
8 questions.

9 MR. ADDISON: Your Honor, if you don't mind,
10 we just have one follow-up. Ms. Morris does. Very
11 brief.

12 HEARING OFFICER DRINKWATER: Okay.

13

14 FURTHER EXAMINATION

15 BY MS. MORRIS:

16 Q **Mr. Estes, when TWMA took on the county**
17 **system, you just took it as it was; correct?**

18 A True.

19 Q **You didn't have the opportunity to amend it.**
20 **It wasn't like an annexation where you could require**
21 **things to be amended?**

22 A That is correct.

23 Q **To make the system better?**

24 A Yes, that's correct.

25 MS. MORRIS: Thank you. No further

1 questions.

2 HEARING OFFICER DRINKWATER: I think my
3 questions were answered already, so thank you.

4 MR. ADDISON: Thank you. That would conclude
5 TWMA's case-in-chief.

6 HEARING OFFICER DRINKWATER: Thank you.

7 MR. ADDISON: Thank you.

8 HEARING OFFICER DRINKWATER: Okay.
9 Mr. Champa, your rebuttal?

10 MR. CHAMPA: This is going to be a bit longer
11 than my opening, so bear with me.

12 MR. ADDISON: I appreciate your good nature.

13 MR. CHAMPA: I try. Now, the St. James,
14 based upon all of the information it's provided, has
15 shown in comparison to the authorities's findings that
16 the discovery is erroneous in view of the substantial
17 evidence on the whole record. The Authority's discovery
18 is arbitrary, capricious and abuse of discretion, and
19 their position is still in violation of Nevada water law
20 and the various constitutional principles and doctrines
21 associated with water.

22 The Authority gave no regard for the County's
23 expertise as to why a tree system should be used.
24 Instead, the Authority based its decision on its
25 interpretation of the pertinent code and then doubled

1 down on utilization of its annex requirements and
2 concluded that the tree system is not viable.

3 The Authority attempted to discredit the
4 capacity of the wells by derating them because they just
5 said so and decided to do so. The Authority attempted to
6 forfeit portions of St. James' water rights through means
7 that result in violations of long-standing doctrines of
8 western water law and Nevada water law itself because it
9 said so.

10 In all, the Authority picks and chooses what
11 it wants, how it wants it and when all because it says
12 so. Because of this and the papers on file representing
13 the substantial evidence on the whole record, the Hearing
14 Officer should overturn the discovery in its entirety.
15 That's it.

16 HEARING OFFICER DRINKWATER: I have a
17 question for you.

18 MR. CHAMPA: Okay.

19 HEARING OFFICER DRINKWATER: Please explain
20 to me the legal impact of property being reverted to
21 acreage. I know I didn't say that exactly right, but you
22 know what I mean.

23 MR. CHAMPA: My understanding -- and this is
24 not my realm, so I think I would probably do best to
25 write a memo or a brief in very short order to not put

1 anything on the record that is incorrect.

2 HEARING OFFICER DRINKWATER: Is that
3 acceptable?

4 MR. ADDISON: Well, Your Honor, what I'd like
5 to do is add to that. And I'd like Mr. Enloe or
6 Mr. Estes to answer that question because they can
7 explain the practical effect of returning land to
8 acreage. And it's a footnote three in our brief toward
9 the beginning. I believe it's page five or so.

10 And that's something I would like one of our
11 gentlemen to talk about because it does have effect. And
12 I'll just, as an offer of proof, summarize it. What it
13 does is start the process over at that point. That
14 becomes raw land which then, if the developer wants to
15 subsequently develop it, he or she or they or it has to
16 come back and ask for more discovery, do an application,
17 the whole nine yards for service. So again, just an
18 offer of proof from a lawyer. But I'd prefer, if you're
19 going to allow that, which I have no objection to, that
20 one of these gentlemen speak to it first from our
21 perspective.

22 HEARING OFFICER DRINKWATER: Okay,
23 Mr. Champa. How soon can you get that to me?

24 MR. CHAMPA: Thursday.

25 HEARING OFFICER DRINKWATER: I have only ten,

1 I think, either ten or ten days to --

2 MR. CHAMPA: Monday.

3 HEARING OFFICER DRINKWATER: Monday? Monday
4 is good.

5 MR. CHAMPA: Okay.

6 HEARING OFFICER DRINKWATER: Thank you.

7 MS. MORRIS: Just, Your Honor, if there are
8 additional legal arguments raised, we'd like the
9 opportunity to respond by Tuesday. There may not be, but
10 if there's new legal arguments raised, we should have the
11 opportunity to respond.

12 HEARING OFFICER DRINKWATER: Yes, that seems
13 fair to me.

14 MR. ADDISON: And do you want concurrent
15 letters on the first day with the ability to provide --

16 HEARING OFFICER DRINKWATER: I think you're
17 going to ask your question and let your people answer
18 here. If you'd like to write a brief as well, I suppose
19 you could do that by Monday as well.

20 MR. ADDISON: Well, thank you. Because what
21 my point was very specific. And I said I would like one
22 of these gentlemen to opine on the practical effects of
23 that with TWMA, not necessarily the legal side.

24 HEARING OFFICER DRINKWATER: Okay.

25 MR. ADDISON: So we would appreciate the

1 opportunity to simultaneously brief the issue on Monday,
2 but I would like the practical side on the record now as
3 well.

4 HEARING OFFICER DRINKWATER: Okay. Let's do
5 that.

6 MR. ADDISON: Gentlemen, which of you is
7 best? Mr. Estes?

8 MR. ESTES: I'm going to take a stab at it
9 first.

10 MR. ADDISON: Okay, sir. Do you now
11 understand the context of the question?

12 MR. ESTES: I do.

13 MR. ADDISON: Okay. What happens when land
14 is returned to acreage?

15 MR. ESTES: As I tried to describe earlier,
16 when that happens, it's basically the land goes from a
17 subdivision plat, an approved subdivision to raw land.
18 In my mind, that starts the process of all over again for
19 the property owner as far as obtaining a final map again
20 on that property in the future, and as far as TWMA goes,
21 it's they're starting all over again with us.

22 MR. ADDISON: So describe each -- just
23 summarize again quickly this, each step of that process,
24 please, in chronological order.

25 MR. ESTES: As far as TWMA processes are

1 concerned, they would have to apply for a discovery.
2 They would have to apply for annexation. And ultimately,
3 assuming that annexation agreement is executed, they
4 would have to apply for a water service agreement.

5 MR. ADDISON: So, in other words, it's
6 starting completely over?

7 MR. ESTES: Correct.

8 MR. ADDISON: And nothing that's done
9 beforehand is binding on that started-over process;
10 correct?

11 MR. ESTES: That is correct.

12 MR. ADDISON: Okay. Because conditions could
13 change in the interim?

14 MR. ESTES: Absolutely.

15 MR. ADDISON: Okay. And that's why a
16 discovery would be necessitated again, the process be
17 completed again before any promises of service would be
18 made?

19 MR. ESTES: That's right.

20 MR. ADDISON: Okay. Thank you, Your Honor.
21 That's all I have.

22 HEARING OFFICER DRINKWATER: Okay. I believe
23 you guys get a final rebuttal, although I lost my piece
24 of paper.

25 MR. ADDISON: We do not.

1 HEARING OFFICER DRINKWATER: Oh, you do not?

2 MR. ADDISON: No.

3 HEARING OFFICER DRINKWATER: Okay. So at
4 this point, I am awaiting two briefs on Monday with
5 responses to each other's briefs by Tuesday, let's say,
6 5:00 o'clock each day. And my report will be delivered
7 in accordance with the time frame set out in Rule 8.

8 Does anyone have any questions for me?

9 MR. ADDISON: I do, Your Honor.
10 Single-spaced letter okay instead of a traditional
11 pleading brief?

12 HEARING OFFICER DRINKWATER: Yes.

13 MR. ADDISON: Or do you want a pleading
14 brief?

15 HEARING OFFICER DRINKWATER: Whatever form
16 you'd like. I can read it either way. And then can we
17 have a page limit? I mean, I don't want to get this out
18 of control and create, you know -- I'm concerned about
19 the potential for new arguments.

20 MR. CHAMPA: No. I appreciate it.

21 MR. ADDISON: How about two pages,
22 single-spaced letter?

23 HEARING OFFICER DRINKWATER: Is that
24 acceptable to you?

25 MR. CHAMPA: That's acceptable.

1 MR. ADDISON: Thank you. I just want to keep
2 parameters around it in light of the tight deadlines.

3 HEARING OFFICER DRINKWATER: Thank you. I've
4 been reading a lot lately.

5 MR. ADDISON: Thank you, Your Honor. We
6 appreciate that.

7 MR. ADDISON: And exchange them by e-mail and
8 get them to you by email as well?

9 HEARING OFFICER DRINKWATER: Yes, please.
10 That would be excellent.

11 MR. ADDISON: Got it.

12 HEARING OFFICER DRINKWATER: I just want to
13 make sure I have all of my questions answered for
14 Mr. Champa.

15 HEARING OFFICER DRINKWATER: Mr. Champa, in
16 your brief on page nine, you talk about and we discussed
17 this briefly earlier, but I still want to circle back to
18 this. You talk about this at line 15. The Authority's
19 decision effectively nullifies a large portion of
20 Petitioner's water rights. Explain that, please, that
21 statement.

22 MR. CHAMPA: Which line again?

23 HEARING OFFICER DRINKWATER: I'm sorry. Your
24 page nine, line 15. It's the last full paragraph on the
25 page.

1 MR. CHAMPA: Okay. Yeah. So this goes back
2 to the aspect of St. James has dedicated water rights
3 with the Authority. There's a certain amount. I can't
4 specifically remember. Let's say it's 160 have been
5 utilized for both services, so that leaves 40 left.

6 That's 40 acre feet of water rights that are
7 a property right, and the Authority is now saying you
8 cannot use these. You have to bring different water
9 rights. You have to use water rights from the Serpa Well
10 or potentially a Pleasant Valley or creek rights in lieu
11 of that. And so those 40 water rights in St. James'
12 position have just vanished. And that's the simplest I
13 can make the argument.

14 MR. ADDISON: Your Honor, may I rebut that?

15 HEARING OFFICER DRINKWATER: Yes, please.

16 MR. ADDISON: And I don't need to do it. I
17 would like Mr. Enloe to do it, please, because I'd like
18 you to hear it from the horse's mouth. Mr. Enloe?

19 MR. ENLOE: I don't believe that statement is
20 correct because we will accept St. James Village
21 groundwater rights. There's never been an issue with
22 that.

23 The issue is we need supplemental rights in
24 addition to those groundwater rights to make a full water
25 supply. So it's really the combination of the two, the

1 groundwater rights and the supplemental Whites Creek
2 rights. Because on their own, the groundwater rights
3 don't provide a sustainable supply, my professional
4 opinion.

5 On their own, the Whites Creek water does not
6 provide a sustainable supply because of it's really
7 timing issues. There's a lot of water in the creek
8 spring runoff, and then in the summer, it goes down and
9 there's not much water available. So it's the
10 combination of the groundwater rights and the Whites
11 Creek surface water rights that make a full sustainable
12 water supply.

13 MR. ADDISON: Mr. Enloe, I'd like to ask you
14 a question. Are the groundwater rights gone, as
15 Mr. Champa put it?

16 MR. ENLOE: No. No.

17 MR. ADDISON: Where are they and can they be
18 returned? And if so, in full?

19 MR. ENLOE: Bank with TMWA. If they want
20 them back, send us a letter.

21 MR. ADDISON: All of them?

22 MR. ENLOE: Whatever.

23 MR. ADDISON: So yes?

24 MR. ENLOE: Yeah. Sorry. Yeah.

25 MS. MORRIS: All of the ones that are not

1 committed --

2 MR. ENLOE: Not committed. Right.

3 MS. MORRIS: -- to other projects.

4 MR. ENLOE: Right. Exactly. But, I mean,
5 that really serves no purpose because you still need --
6 you need the groundwater rights to be able to pump water
7 from wells. This conjunctive use program is giving you
8 the opportunity to use those groundwater rights, like I
9 said, because on their own, they're not sustainable. But
10 with supplemental surface water rights, they are.

11 MR. ADDISON: Thank you, sir. Appreciate the
12 clarification.

13 HEARING OFFICER DRINKWATER: Thank you. That
14 is my last question as well. So I thank you all for your
15 time today and look forward to seeing your briefs on
16 Monday.

17 MS. MORRIS: Thank you.

18 MR. ADDISON: Thank you, Your Honor.

19 HEARING OFFICER DRINKWATER: Have a good day.

20 (The proceedings concluded at 11:27 a.m.)

21 -o0o-

22

23

24

25

1 STATE OF NEVADA)
2 WASHOE COUNTY)

3

4 I, NICOLE J. HANSEN, Court Reporter for the
5 administrative hearing, do hereby certify:

6

7 That on the 31st day of March, 2022, I was
8 present at said meeting for the purpose of
9 reporting in verbatim stenotype notes the within-entitled
10 public meeting;

11 That the foregoing transcript, consisting of pages 1
12 through 96, inclusive, includes a full, true and correct
13 transcription of my stenotype notes of said public
14 meeting.

15

16 Dated at Reno, Nevada, this 1st day of
17 April, 2022.

18

19

Nicole J. Hansen

20

21

NICOLE J. HANSEN, NV CCR #446
CAL. CSR 13,909 RPR, CRR, RMR

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EXHIBIT “E”

EXHIBIT “E”

From: Evan J. Champa <EJChampa@hollandhart.com>
Sent: Tuesday, March 22, 2022 1:27 PM
To: Morris, Stefanie <SMorris@tmwa.com>
Subject: St. James - TMWA Hearing

Hi Steph,

We're a go on the split costs for the reporter.

We're also good to go with briefs by EOD on Monday.

Evan Champa

Attorney, Holland & Hart LLP

5441 Kietzke Lane, 2nd Floor, Reno, NV 89511

T 775.327.3000 F 775.786.6179



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Our vision is to enhance the quality of life in the Truckee Meadows by delivering exceptional, customer-focused water services.

EXHIBIT “F”

EXHIBIT “F”

From: Bonnie Drinkwater <bdrinkwater@drinkwaterlaw.com>

Sent: Friday, April 15, 2022 10:55 AM

To: Evan J. Champa <EJChampa@hollandhart.com>; Matthew C. Addison <maddison@Mcdonaldcarano.com>; Morris, Stefanie <SMorris@tmwa.com>

Subject: RE: Hearing Officer Decision

Mr. Addison,

I you would like to reply to Petitioner's Motion, please do so by 5:00pm on Monday, April 18, 2022. In addition, please provide me with affidavits from Mr. Enloe and Mr. Estes in accordance with NRS 233B.123(3).

Thank you!

Bonnie

Bonnie Drinkwater



5421 Kietzke Lane, Suite 100

Reno, NV 89511

Phone: 775-828-0800

Fax: 775-828-0858



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From: Evan J. Champa <EJChampa@hollandhart.com>
Sent: Thursday, April 14, 2022 2:47 PM
To: Bonnie Drinkwater <bdrinkwater@drinkwaterlaw.com>; maddison@mcdonaldcarano.com; Morris, Stefanie <SMorris@tmwa.com>
Subject: RE: Hearing Officer Decision

Madam Hearing Officer,

I'm in receipt of your Findings of Fact and will review the same.

Please find attached St. James's Motion, a copy of which is being sent via certified mail.

Kindly,

Evan Champa
Attorney, Holland & Hart LLP
5441 Kietzke Lane, 2nd Floor, Reno, NV 89511
T 775.327.3025 F 775.786.6179



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To: Evan J. Champa <EJChampa@hollandhart.com>; maddison@mcdonaldcarano.com; Morris, Stefanie <SMorris@tmwa.com>
Subject: Hearing Officer Decision

External Email

Mr. Champa and Mr. Addison,

Please find attached the decision regarding the Dispute of Action taken by the Authority -Rule 8(B) regarding St. James Village Discovery-Annexation 1H-2C; PLL# 21-8275.

Please let me know if you would like me to mail a hard copy or if you have any trouble opening the attachment.

Thank you!

Bonnie

Bonnie Drinkwater
DRINKWATER EATON
LAW OFFICES

5421 Kietzke Lane, Suite 100
Reno, NV 89511
Phone: 775-828-0800
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TRUCKEE MEADOWS WATER AUTHORITY
MATTERS BEFORE HEARING OFFICER

In the Matter of:)
)
ST. JAMES VILLAGE, INC.,)
a Nevada corporation)
)
Petitioner,)
)
v.)
)
TRUCKEE MEADOWS WATER)
AUTHORITY, a joint powers authority)
Under NRS 277)
)
Respondent)
_____)

Hearing Date: March 31, 2022

DECISION REGARDING MOTION TO STRIKE OR FOR REHEARING

The hearing (“Hearing”) in this matter was held on March 31, 2022. During the Hearing, Truckee Meadows Water Authority (“TMWA”) presented two witnesses: Scott Estes and John Enloe. At no time did Petitioner, St. James Village, Inc. (“SJV”), object to the testimony of these witnesses or demand that they be sworn under oath and, in fact, cross examined both witnesses. This Hearing Officer presented her Findings of Fact, Conclusions of Law and Final Decision (the “Decision”) on April 14, 2022 at 2:34 PM. SJV submitted its Motion to Strike Testimony of Witnesses From the Record or, In the Alternative, Request for Rehearing (the “Motion”) on April 14, 2022 at 2:47 PM. TMWA, through its legal counsel, responded with Respondent’s Reply to Motion to Strike or For Rehearing (the “Reply”) on April 18, 2022.

Despite the fact that Petitioner never questions either witnesses’ truthfulness and did not object to their testimony during the Hearing, it is SJV’s contention that my failure to swear in the witnesses pursuant to NRS 233B.123 should result in either the exclusion of all of the testimony

from the hearing on March 31, 2022 (the Hearing”) by Mr. Enloe and Mr. Estes or, in the alternative, a new hearing with a new hearing officer.

NRS 233B.123(3) states, “Every witness shall declare, by oath or affirmation, that he or she will testify truthfully. TMWA’s Response contained the Affidavit of Scott Estes in Support of Respondent’s Reply to Motion to Strike or For Rehearing (Exhibit A to the Reply), the Affidavit of John Enloe in Support of Respondent’s Reply to Strike or For Rehearing (Exhibit B to the Reply), and Affidavit of Matthew C. Addison in Support of Respondent’s Reply to Motion to Strike or For Rehearing (Exhibit C to Reply). In the affidavits for Mr. Enloe and Mr. Estes, there is an affirmation that each witness reviewed his testimony as contained in the official transcript of the Hearing (the “Transcript”) and that the Transcript is a true and accurate statement of his testimony except for a few, minor transcription errors which were corrected in the affidavits. I find that these affidavits meet the requirement in NRS 233B.123(3) that each witness declare by affirmation that the testimony is truthful. As such, I deny SJV’s request that the testimony be stricken from the record.

Despite the fact that I have denied the request to strike the testimony from the record, I have carefully reviewed my Decision and have determined that each part of the testimony to which I referred can be either (1) supported by other evidence on the record, or (2) treated as unnecessary to the Decision. The following are such statements and my categorization of each:

1. **Mr. Estes, in fact, presented evidence that the longest dead ends that the District Board of Health would approve are 800 ft.**

TMWA’s brief, page 6, states, “TMWA’s design standards (Section 1.1.06.06) recognize dead ends are sometimes unavoidable but limit the length to 800 feet. This is the maximum radial main length that the Washoe County Health District has accepted in the past and is the maximum radial main length that TMWA will accept.” Therefore, this information was on the record before Mr. Estes’ testimony.

2. **Mr. Estes testified that these dead ends would also not meet TMWA’s design standards and that he would not recommend a variance due to public health and safety reasons.**

As stated above, TMWA’s brief page 6 addresses the statement that 800 feet is the maximum radial main length that the Washoe County Health District has accepted in the past and is the maximum radial main length that TMWA will accept. It is clear from the Discovery that TMWA chose not to allow a variance. There is sufficient evidence on the record, even without this testimony, that TMWA’s decision not to allow a variance was based on the NAC requirement, TMWA design standards, prior TMWA practices and health and safety concerns.

3. **Mr. Estes testified that the 2,500 gallons per minute fire flow requirement comes from the 2018 International Fire Code Standards.**

The 2,500 gallons per minute flow requirement is contained in TMWA's brief p. 7.

4. **Mr. Estes also testified as to how TMWA develops its water model and how the water model and computer modeling are used to determine required additional facilities and the costs for those additional facilities.**

Even without Mr. Estes' testimony, it was clear that TMWA used an extensive water model and other historical information to determine the water needs for the new areas of SJV. The falling groundwater levels and proposed (and implemented) remedies are well documented in the briefs submitted by TMWA and SJV. SJV did not develop a hydrologic water model as set forth in its Exhibit 1(C) p. 39. As such, SJV did not present any evidence that TMWA's water model was not appropriate for determining what additional facilities would be necessary for the Development. Even if this testimony was stricken from the record, SJV did not meet its burden of proof to show that TMWA's water model was not based on substantial evidence.

5. **Mr. Enloe testified that Mr. Woodside, SJV's representative, told him that he received multiple copies.**

TMWA properly noticed and held two hearings and two workshops on the subject of Area 15 fees; therefore, proof of whether SJV actually received the letter is not required for my Decision.

6. **Mr. Estes testified that pursuant to NAC 445A.6672, TMWA must determine the maximum daily demand ("MDD") and average daily demand and determine whether the capacity of the wells serving the project is sufficient.**

The TMWA brief, page 7, clearly describes this process and references NAC 445A.6672; therefore, this information was already in the record prior to Mr. Estes' testimony.

7. **Mr. Estes testified that the process set forth in NAC 445A.6672 and TMWA Rule 5 is used with all customers and potential customers of TMWA and that SJV was treated no differently than any other water customer submitting an application for water service.**

There was never any allegation or evidence presented by SJV that it had been treated differently than any other applicant; therefore, the exclusion of this testimony would not alter my Decision.

- 8. Mr. Enloe testified that TMWA staff met with Confluence Water Resources LLC, the authors of the Serpa Well Testing and Groundwater Analysis, and incorporated the results into TMWA's comprehensive model of the area (See TMWA Exhibit 25).**

While this information is important and relevant to the allegation that TMWA ignored the reports submitted with SJV's application, it is not essential to my Decision that TMWA's decision to derate the 2 SJV wells (as well as at least 2 other wells in the area) as part of the larger regional Mt. Rose-Galena Fan Domestic Well Mitigation Program as well as TMWA's demand that SJV dedicate additional water resources as part of the conjunctive use plan are supported by substantial evidence (TMWA's Exhibits 6, 7, 8, 9, 10, 12, 14, 25 and 26). In order to make this finding, I did not need to find that SJV's evidence was not ignored.

- 9. John Enloe also testified that John Benedict's information (SJV Exhibit 20) was incorporated into TMWA's regional groundwater model and that all TMWA's regional models look at hydrologic barriers including faults and bedrock.**

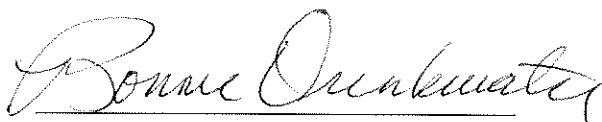
The analysis in #8 above applies here as well.

- 10. The evidence presented at the hearing shows that the new alternate sources are significantly less expensive for SJV than what was proposed in the 2015 Discovery.**

In addition to having been presented at the Hearing, this information was already on the record as it was contained in the 2015 Discovery (Exhibit 16 p. 9) and the Discovery (TMWA Exhibit 19 p. 7).

I conclude that the requirement contained in NRS 233B.123(3) has been met. Even if it was not met and the testimony had to be stricken from the record, for the reasons listed above, my Decision would not change. I, therefore, deny SJV's request to strike the testimony of Mr. Enloe and Mr. Estes and deny SJV's request to grant a new hearing.

Dated: 4/20/22


Bonnie Drinkwater, Hearing Officer