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Addendum No. 1

COS 2017 UNIT 3 WATER MAIN REPLACEMENT PROJECT

PWP Bid No. WA-2017-126
March 15, 2017

The following information, clarifications, changes and modifications are by reference incorporated into the bid documents for the above referenced project. Any work item or contract provision not changed or modified will remain in full force and effect. The bid date and time and construction schedule remain the same.

CLARIFICATION

- The City of Sparks has a paving project following this waterline project and this project is broken down in to two phases as follows:
 - Phase 1 – Cauble, 18th Street north and south, and Nash: to be completed by May 8th.
 - Phase 2 – F and D Street: to be completed by June 12.
- Please note this project includes working with and removal of Asbestos Concrete Pipe (Transite). See TMWA's General Conditions, water general notes on sheet G2, and technical specifications.

BIDDING CONTRACT TECHNICAL SPECIFICATION

- ADD SPECIFICATION SECTION 01661 REGULATORY REQUIREMENTS TO THE TABLE OF CONTENTS.
- REPLACE BID SCHEDULE PAGES 3-5 WITH THE 3 PAGES ATTACHED:
 - The description of bid item 1.9 has been modified. Quantity of Bid Item 1.4 changed from 38 to 39 and Bid Item 1.5 from 10 to 9.
- ADD SPECIFICATION SECTION 01661 REGULATORY REQUIREMENTS ATTACHED.
- MODIFICATIONS TO SECTION 01025 MEASUREMENT AND PAYMENT:
 1. **Remove and replace the first paragraph of subsection 1.3 with:**

The bid price for this item shall include all labor, equipment and materials required to provide and install 6-inch CL 350 restrained joint (RJ) ductile iron pipe water main as indicated on the Plans. It also includes a minimal amount of 4" and 8" RJ DIP for connections to existing mains. Payment will be made at the unit price per linear foot, including pipe, tracer wire, dewatering, excavation, bedding, backfill, compaction, saw cutting, removal of old asphalt, water testing and disinfection, as well as temporary asphalt patching and stripping repairs as required by the City of Sparks and depicted in the contract drawings. No payment will be made for fittings, valves, blind flanges, tapping sleeves, flexible couplings,

mechanical joint retainers, reducers, flanged coupling adapters, or flange adapters, which shall be incidental to other items.

2. Remove subsection 1.9 in its entirety and replace with the following:

1.9 FURNISH AND PLACE PERMANENT ASPHALT CONCRETE (AC) PAVEMENT PATCH, PERMANENT CONCRETE PATCH, AND 2" GRIND AND OVERLAY

The bid price for this item shall include all labor, materials, and equipment required to permanently AC Pavement patch, concrete patch, and 2" grind and overlay those areas indicated on the drawings. The Contractor shall trench patch pave, concrete patch, and/or 2" grind and overlay those areas as indicated on the drawings. The AC patch shall be per the typical permanent patch detail. The concrete patch shall be per the typical details called out and material per the latest edition of the Orange Book. The overlay patch shall be the same AC mix as the permanent patch. This item shall also include removing existing AC to centerline of Nash alley, Condition and compact existing base, and pave as detailed in the drawings. Extents of permanent patch, concrete patch, and 2" grind and overlay areas shown on the drawings are a guide to indicate those areas of non-temporary paving and the contractor shall provide their own quantity take-off. This take off shall include but not limited to trench widths, excavations, requirements for abandonment items and removal of pipe, etc. This bid item shall also include but not limited to, saw cutting, removal of existing asphalt, and thermoplastic/paint striping repair for Victorian Ave as shown.

No measurement will be made for this item. Payment will be made at the lump sum price as indicated on the Bid Schedule:

BIDDING CONTRACT DRAWING

- **REPLACE DRAWING SHEET G3 WITH THE ATTACHED –**
Added 2" grind and overlay hatch. Added Remove and Replace AC hatch and added material specification for disinfection tablets.
- **REPLACE DRAWING SHEET P3 WITH THE ATTACHED –**
Added 2" grind and overlay hatch to the centerline of A-street and to the nearest lane line on Victorian Ave. Stripping repairs on Victorian Ave have been shown and called out. Change callout for alley patch from C400/D17 to C116/D16.
- **REPLACE DRAWING SHEET P4 WITH THE ATTACHED –**
Added 2" grind and overlay hatch to the centerline of 16th street. Remove existing AC to centerline of Nash Alley; condition and compact existing base to 95% Maximum Dry Density, and pave 3" min or equal section to existing AC, whichever is greater. Move limits of future paving project line and extended permanent pavement patch in to the intersection of Nash and the Nash Alley. Changed the existing material callout for water service #15 from plastic to copper. Due to the material change the service no longer needs full replacement to the meter.
- **REPLACE DRAWING SHEET D17 WITH THE ATTACHED**
Removed and Replaced C400/D17 with a standard driveway detail for Nash Alley and 16th street.

SECTION 01661
REGULATORY REQUIREMENTS

PART 1 GENERAL

1.1 DESCRIPTION

This Section includes requirements for complying with the National Sanitation Foundation/American National Standards Institute (NSF/ANSI) 61 regulations as set forth by NSF International and as required by federal, state and local governing agencies.

The NSF/ANSI 61 certification process includes specific product testing by NSF International or approved independent third party testing laboratories. The tests include gathering chemical composition of products and submergence of products to determine leaching of harmful constituents into drinking water.

Simple compliance with the requirements of NSF/ANSI 61 is not acceptable, nor does that equate to formal NSF/ANSI 61 Certification. The State of Nevada and Washoe County review all water improvements for compliance with NSF/ANSI 61 and have the authority to enforce these requirements including assessment of fines for non-compliance.

1.2 REFERENCES

- A. NSF International web site: <http://www.nsf.org/services/by-industry/water-wastewater/municipal-water-treatment/nsf-ansi-standard-61>

1.3 SUBMITTALS

- A. In accordance with Section 01300.
- B. **All** materials, linings, coatings, lubricants, adhesives, treatment media, and equipment that are in physical contact with potable water must be NSF61 certified. The NSF61 certification mark(s) must be present on all submittals as required. No exception will be granted.
- C. Certification letters shall be submitted for all items in physical contact with potable water. No exception will be granted.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

END OF SECTION 01661

BID SCHEDULES
(Cont)

BID SCHEDULES

PWP #: PWP-WA-2017-126

BID TITLE: City of Sparks 2017 Unit 3 Water Main Replacement Project

NOTICE: No substitution or revision to this Bid Schedule form will be accepted. Truckee Meadows Water Authority will reject any Bid that is received that has changes or alterations to this document. Although the Prevailing Wages are provided in this bid document, the bidder is responsible to verify with the Labor Commissioner if any addendums have been issued. If different, the successful bidder will be required to provide the current Prevailing Wages used in preparation of their bid within 24 hours of bid submission.

PRICES must be valid for 30 calendar days after the bid opening.

A COPY OF THE "CERTIFICATE" of eligibility to receive a preference in bidding on public works issued to him/her by the State Contractors' Board and (if claiming Locals Preference) the Local's Preference Affidavit (provided above) must be submitted with his/her bid to the Contracts Division for the preference to be considered. These Statutes do not apply to projects expected to cost less than \$250,000.

COMPLETION of this project is expected **PURSUANT TO CONTRACT DOCUMENTS**.

BIDDER acknowledges receipt of _____ Addendums.

Item pricing on this schedule is for use in preparing the schedule of values that will be used as a basis for partial payment during construction and for internal TMWA use. Item descriptions are not intended to be all inclusive. Bidders shall include costs for work not specifically mentioned in the most appropriate item.

Refer to Article 7 of the General Conditions for a list of items that may be included in the mobilization bid item. TMWA reserves the right to perform extra work using time and expense or negotiated lump sum procedures.

The Contract Sum will be adjusted (increased or decreased) for actual quantities per unit price items. Lump sum items will not be adjusted.

Compliance with all permit and environmental requirements is incidental to the Work. No separate bid item, or additional payment provisions, shall be made for operational constraints or conditions placed on the Work by permitting agency requirements.

(signature)

SUMMARY

Description	Scheduled Value	Unit	Unit Price	Total Price
General				
1.1 Mobilization and Demobilization	1	LS		

BID SCHEDULES
(Cont)

Description	Scheduled Value	Unit	Unit Price	Total Price
1.2 Traffic Control	1	LS		
1.3 6 inch restrained joint water service main and misc 4" and 8" pipe.	3,960	LF		
1.4 Reconnection of existing service lines from connection point on plans to new water main.	38 39	EA		
1.5 Reconnection of existing services lines from existing water meter to new water main.	40 9	EA		
1.6 Disconnect and abandon existing water main (grouting)	1	LS		
1.7 Removal of existing ACP (Transite) water mains	1,256	LF		
1.8 Furnish and install 4-inch and 6-inch tapping sleeve assembly	3	EA		
1.9 Furnish and place permanent asphalt concrete (ac) pavement patch, permanent concrete patch, and 2" grind and overlay.	1	LS		
Adjustable Unit Cost Items				
1.10 Rock Excavation (Reference Article 4 of the General Conditions)	25	CY		
1.11 Additional Trench Excavation Depth – Per Foot of Depth, for Additional Trench Depths Which Exceed 2 feet Below the Design Profile Depth	50	LF		
TOTAL BID PRICE				

Total Bid Price Written in Words: _____

NOTES TO BID SCHEDULE:

1. This project is bid on a unit price basis and shall include all necessary incidentals and appurtenances for a complete in place, functional facility as described in the contract documents. Where applicable, all Bid Items shall include bolts and nuts, warning tape, cross laminated polyethylene encasement, excavation, bedding, backfill, compaction, asphalt concrete pavement patch, disinfection, flushing, testing, valve boxes, conductor riser pipes, concrete pads, thrust blocks, and any other incidentals and/or appurtenances required for a complete in place, functional facility. Prices include all labor, equipment, materials, supervision, profit, overhead, and incidental costs. Bid item descriptions are not intended to be all inclusive. Bidders shall include costs for work not specifically mentioned in the most appropriate item, including but not limited to: potholing (both where necessary to verify existing utilities and at the locations specifically identified on the Improvement Plans); pavement saw-cutting, grinding, or other method as approved by TMWA; removal and disposal of existing pavement, concrete, and trench spoils; removal and disposal of existing mains/facilities necessary to make

BID SCHEDULES (Cont)

connections to existing water mains/facilities and/or to install new water mains/facilities; removal and disposal of existing valve/curb valve boxes, conductor pipes, meter boxes, and any other facilities identified in the Improvement Plans, including backfill with aggregate base and placement of asphalt concrete pavement patch; furnishing, installation, and/or removal of flush/test assemblies.

2. Refer to Article 7 of the General Conditions for a list of items that may be included in the mobilization bid item.
3. TMWA reserves the right to perform extra work using time and expense or negotiated lump sum procedures.
4. Trench and pavement patch widths depicted in the trench detail(s) are MINIMUM widths. NO ADDITIONAL PAYMENT will be made for additional backfill materials (sand, cement slurry, and/or base) and/or asphalt concrete (AC) pavement patch for trench and/or pavement patch widths in excess of those depicted in the trench detail(s). Theoretically, the trench and/or pavement patch width(s) could be the entire width of the street from lip of curb to lip of curb. Excavation, backfill, and asphalt concrete (AC) pavement patches required at water main connection locations, cut and cap locations, valve box removal locations, and any other locations not specifically mentioned, shall be as required to complete the task, with NO ADDITIONAL PAYMENT.
5. Compliance with all permit and environmental requirements is incidental to the Work. No separate bid item, or additional payment provisions, shall be made for operational constraints or conditions placed on the Work by permitting agency requirements.
6. *Bid items 1.10 and 1.11 are contingent items and may not be required or authorized. Bid items 1.10 and 1.11 will be considered in the total bid price when selecting the best bidder pursuant to NRS 338.

MATERIAL SPECIFICATIONS

1. SCOPE

THESE MATERIAL SPECIFICATIONS SUPPLEMENT THE TECHNICAL SPECIFICATIONS, THE TRUCKEE MEADOWS WATER AUTHORITY ENGINEERING & CONSTRUCTION STANDARDS, AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION "ORANGE BOOK", LATEST EDITION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE TMWA PROJECT REPRESENTATIVE FOR RESOLUTION.
2. MATERIAL COMPLIANCE

ALL MATERIALS SHALL BE NSF 61 CERTIFIED. DOCUMENTATION OF SUCH CERTIFICATION SHALL BE PROVIDED IN ALL SUBMITTALS. SEE SPECIFICATIONS SECTION 01300.
3. DUCTILE IRON PIPE

ALL PIPE MATERIALS AND APPURTENANCES SHALL BE PER THE TMWA ENGINEERING & CONSTRUCTION STANDARDS, UNLESS MODIFIED/AMENDED HEREIN. INSTALLATION, WORKMANSHIP, PRESSURE TESTING AT 300 PSI, AND DISINFECTION SHALL BE PER THE TMWA ENGINEERING & CONSTRUCTION STANDARDS.

ALL DUCTILE IRON PIPE SHALL BE CLASS 350 AND MEET THE REQUIREMENTS OF AWWA STANDARDS C151, C104 AND C111 WITH PRESSURE CLASS AS SPECIFIED IN THE IMPROVEMENT PLANS. ALL DUCTILE IRON PIPE SHALL BE POLYETHYLENE ENCASED PER AWWA C105. DUCTILE IRON PIPE SHALL BE EQUIPPED WITH TYTON TYPE BELL AND SPIGOT JOINTS. DUCTILE IRON PIPE SHALL BE TYTON JOINT DUCTILE IRON PIPE AS MANUFACTURED BY U.S. PIPE, GRIFFIN TYTON JOINT DUCTILE IRON PIPE AS MANUFACTURED BY GRIFFIN PIPE PRODUCTS CO., INC., OR EQUAL.
4. GATE VALVES

GATE VALVES FOR SIZES UP TO AND INCLUDING 12-INCHES SHALL MEET AWWA C509 OR C515, NON-RISING STEM, RESILIENT-SEATED VALVES WITH 2-INCH OPERATING NUT FOR BURIED SERVICE. VALVES MEETING THE AWWA C515 STANDARD SHALL HAVE A DUCTILE IRON BODY. 14-INCH AND LARGER GATE VALVES SHALL MEET AWWA C515, DUCTILE IRON BODY AND BONNET, NON-RISING STEM, RESILIENT-SEATED VALVES WITH 2-INCH OPERATING NUT FOR BURIED SERVICE. VALVE ENDS SHALL BE AS SPECIFIED IN THE IMPROVEMENT PLANS. ALL GATE VALVES SHALL BE FUSION EPOXY LINED AND COATED. ALL VALVES SHALL BE POLYETHYLENE ENCASED PER AWWA C105. GATE VALVES UP TO AND INCLUDING 12-INCHES SHALL BE MUELLER 2360 SERIES RESILIENT WEDGE GATE VALVES, AMERICAN AVK COMPANY SERIES RESILIENT WEDGE GATE VALVES, OR EQUAL. GATE VALVES 14-INCH AND LARGER SHALL BE MUELLER A-2361 D.I. RESILIENT WEDGE GATE VALVES, AMERICAN SERIES 2500 RESILIENT WEDGE GATE VALVES, OR EQUAL.
5. FITTINGS

ALL FITTINGS SHALL BE DUCTILE IRON AND MEET THE REQUIREMENTS OF AWWA STANDARDS C110/C153 AND C104 WITH END CONFIGURATIONS AS SPECIFIED IN THE IMPROVEMENT PLANS. ALL FITTINGS SHALL BE POLYETHYLENE ENCASED PER AWWA C105. FITTINGS SHALL BE ASPHALTIC COATED WITH CEMENT-MORTAR LINING PER AWWA C110/C153 AND C104. FOR FITTINGS WHERE CEMENT-MORTAR LININGS ARE NOT NORMALLY SUPPLIED, SUCH AS CAPS, PLUGS, AND SLEEVES, THE INSIDE OF THESE FITTINGS SHALL BE ASPHALTIC COATED PER AWWA C110/C153 CONFORMING TO ALL APPROPRIATE REQUIREMENTS FOR SEAL COAT PER AWWA C104.
6. RESTRAINED JOINT PIPE AND RESTRAINED JOINT FITTINGS

ALL RESTRAINED JOINT PIPING SHALL BE DUCTILE IRON PIPE, UNLESS OTHERWISE SPECIFIED IN THE IMPROVEMENT PLANS. BELL AND SPIGOT PUSH-ON TYPE DUCTILE IRON TYTON JOINTS SHALL BE RESTRAINED USING RUBBER GASKETS WITH STAINLESS STEEL LOCKING SEGMENTS VULCANIZED INTO THE RUBBER GASKETS. RESTRAINED JOINT RUBBER GASKETS SHALL BE FIELD LOK 350 GASKETS AS MANUFACTURED BY U.S. PIPE. THE GRIPPER GASKET AS MANUFACTURED BY GRIPPER GASKET LLC, OR EQUAL.

RESTRAINED JOINT FITTINGS SHALL BE MECHANICAL JOINT (MJ) DUCTILE IRON WITH MECHANICAL JOINT WEDGE ACTION RESTRAINT GLANDS COMPATIBLE WITH ALL MECHANICAL JOINTS CONFORMING TO ANSI/AWWA C110/A21.10. GLAND BODY, WEDGES, AND WEDGE ACTUATING COMPONENTS SHALL BE CAST FROM GRADE 65-45-12 DUCTILE IRON IN ACCORDANCE WITH ASTM A536. DUCTILE IRON GRIPPING WEDGES SHALL BE HEAT TREATED WITHIN A RANGE OF 370 TO 470 BHN. WEDGE ASSEMBLIES SHALL BE XLYAN FLUOROPOLYMER COATED. CASTING BODIES SHALL BE COATED WITH A POLYESTER BASED POWDER TO PROVIDE CORROSION PROTECTION THAT IS ELECTROSTATICALLY APPLIED AND HEAT CURED. MECHANICAL JOINT WEDGE ACTION RESTRAINT GLANDS SHALL BE MEGALUG SERIES 1100 FOR DUCTILE IRON PIPE AS MANUFACTURED BY EBAA IRON, INC., STARGRIP SERIES 3000 WITH STARBOND COATING FOR DUCTILE IRON PIPE AS MANUFACTURED BY STAR PIPE PRODUCTS, OR EQUAL.
7. STRAIGHT AND TRANSITION COUPLINGS

STRAIGHT AND TRANSITION COUPLINGS SHALL MEET THE REQUIREMENTS OF AWWA C219. SLEEVE MATERIAL SHALL BE CARBON STEEL OR DUCTILE IRON WITH NSF-61 REGISTERED FUSION-BONDED EPOXY COATING. BOLTS AND NUTS FOR BURIED SERVICE APPLICATIONS SHALL BE 304 STAINLESS STEEL. COUPLINGS SHALL BE DESIGNED SPECIFICALLY FOR THE PIPE MATERIAL/SIZE AND APPLICATION. COUPLINGS SHALL INSTALL WITH A MAXIMUM OF ONE BOLT AT EACH END. STRAIGHT AND TRANSITION COUPLINGS SHALL BE HYMAX 2000 SERIES AS MANUFACTURED BY TOTAL PIPING SOLUTIONS, INC., ROMAC MACRO TWO-BOLT WIDE RANGE DUCTILE IRON COUPLING AS MANUFACTURED BY ROMAC INDUSTRIES, INC., OR EQUAL.
8. FLANGED COUPLING ADAPTERS

FLANGED COUPLING ADAPTERS SHALL MEET THE REQUIREMENTS OF AWWA C219. SLEEVE MATERIAL SHALL BE CARBON STEEL WITH NSF-61 REGISTERED FUSION-BONDED EPOXY COATING. BOLTS AND NUTS FOR BURIED SERVICE APPLICATIONS SHALL BE ANSI 304/303 STAINLESS STEEL. FLANGED COUPLING ADAPTERS SHALL BE DESIGNED SPECIFICALLY FOR THE PIPE MATERIAL/SIZE AND APPLICATION AND SHALL INSTALL WITH A MAXIMUM OF ONE BOLT ON THE COMPRESSION END. FLANGED COUPLING ADAPTERS SHALL BE FC400 (CLASS F) FLANGED ADAPTERS AS MANUFACTURED BY ROMAC INDUSTRIES, INC., OR EQUAL. FLANGED GASKETS SHALL BE FULL FACE WITH PROFILE BY ACIPCO (TORUSEAL), US PIPE (FLANGETITE) OR APPROVED EQUAL.
9. FLANGE AND MECHANICAL JOINT T-HEAD BOLTS AND NUTS

FLANGE BOLTS AND NUTS: BOLTS AND NUTS SHALL BE CARBON STEEL WITH A MINIMUM 60,000 PSI TENSILE STRENGTH CONFORMING TO ASTM A307, GRADE A. BOLTS SHALL BE STANDARD ANSI B1.1, CLASS 2A COARSE THREADS. NUTS SHALL CONFORM TO ASTM A563 AND BE STANDARD ANSI B1.1, CLASS 2A COARSE THREADS. ALL BOLT HEADS AND NUTS SHALL BE HEXAGONAL. IDENTIFICATION ON THE HEAD OF THE BOLT SHALL BE: A 307 A.

MECHANICAL JOINT T-HEAD BOLTS AND NUTS: BOLTS SHALL BE ASTM A242 WEATHERING STEEL WITH A MINIMUM YIELD STRENGTH OF 45,000 PSI. ALL T-HEAD BOLTS AND NUTS SHALL BE THREADED IN ACCORDANCE WITH ANSI B1.1, CLASS 2A COARSE THREADS. **HEAVY HEX NUTS SHALL BE USED.** BOLT HEADS SHALL BE IN ACCORDANCE WITH THE DIMENSIONS OF ANSI/AWWA C111/A21.11-95.

FINISH: ALL FLANGE BOLTS AND NUTS AND MECHANICAL JOINT T-HEAD BOLTS AND NUTS SHALL BE FINISHED WITH THE TRIPAC 2000 BLUE COATING SYSTEM TO SIGNIFICANTLY REDUCE THE EFFECTS OF CORROSION, OR EQUAL. A MULTI-STEP PROCESS SHALL BE UTILIZED TO CHEMICALLY CLEAN, ABRASIVE BLAST, AND PRIME WITH ZINC/NICKEL PHOSPHATE PRIMER PRIOR TO APPLICATION OF THE XLYAN FLUOROPOLYMER. WEAR RESISTANCE (K-FACTOR) SHALL BE IN THE RANGE OF 6 TO 8 (EXCELLENT) AND MINIMAL EFFECTS SHOULD BE SEEN AFTER A 3,000 HOUR SALT SPRAY TEST CONFORMING TO ASTM B-117. BOLTS AND NUTS FINISHED WITH THE TRIPAC 2000 BLUE COATING SYSTEM DO NOT REQUIRE COATING WITH MASTIC.
10. CORPORATION STOPS FOR SERVICE CONNECTIONS

CORPORATION STOPS SHALL BE BALL VALVE, BRASS CONFORMING TO AWWA C800 AND ASTM B-62, AND SUITABLE FOR A WORKING PRESSURE OF 300 PSI. INLET END SHALL BE MALE IRON PIPE THREAD (MIP) OR AWWA I.P. THREAD. OUTLET END SHALL BE COMPRESSION CONNECTION SUITABLE FOR CONNECTION TO CTS O.D. HDPE TUBING, SIZE AS SPECIFIED IN THE IMPROVEMENT PLANS. CORPORATION STOPS FOR SERVICE CONNECTIONS SHALL BE FORD BALLCORP CORPORATION STOPS WITH QUICK JOINT COMPRESSION CONNECTION OUTLET MODEL # FB1100-X-Q AS MANUFACTURED BY THE FORD METER BOX COMPANY, INC., MUELLER 300 BALL TYPE CORPORATION VALVES WITH MUELLER 110 COMPRESSION CONNECTION OUTLET MODEL # B-25028, OR EQUAL.
11. CORPORATION STOPS FOR 2-INCH TEMPORARY FLUSHING AND TESTING ASSEMBLIES

CORPORATION STOPS SHALL BE BALL VALVE, BRASS CONFORMING TO AWWA C800 AND ASTM B-62, AND SUITABLE FOR A WORKING PRESSURE OF 300 PSI. INLET END SHALL BE MALE IRON PIPE THREAD (MIP) OR AWWA I.P. THREAD. OUTLET END SHALL BE MALE IRON PIPE THREAD (MIP). CORPORATION STOPS FOR 2-INCH TEMPORARY FLUSHING AND TESTING ASSEMBLIES SHALL BE FORD BALLCORP CORPORATION STOPS MODEL # FB500-7 AS MANUFACTURED BY THE FORD METER BOX COMPANY, INC., MUELLER 300 BALL TYPE CORPORATION VALVES MODEL # B-2969, OR EQUAL.
12. GASKETS

THE GASKET SHALL BE OF SUCH SIZE AND SHAPE TO PROVIDE AN ADEQUATE COMPRESSIVE FORCE AGAINST THE PLAIN END AND SOCKET AFTER ASSEMBLY TO AFFECT A POSITIVE SEAL UNDER ALL CONDITIONS OF JOINT AND GASKET TOLERANCES. THE SIZE, MOLD NUMBER, GASKET MANUFACTURER'S MARK, THE TRADEMARK OF THE JOINT, AND YEAR OF MANUFACTURER SHALL BE MOLDED ON THE GASKETS. MARKINGS SHALL NOT BE ON THE SEALING SURFACES. ONE GASKET SHALL BE FURNISHED WITH EACH LENGTH OF PIPE. LUBRICANT, WHERE REQUIRED, SHALL BE NONTXIC, SHALL NOT SUPPORT THE GROWTH OF BACTERIA, AND SHALL HAVE NO DETEIORATION EFFECTS ON THE GASKET MATERIAL NOR SHALL IT IMPART TASTE OR ODOR TO WATER IN A PIPE. THE LUBRICANT SHALL BE DELIVERED TO THE SITE IN UNOPENED, SEALED CONTAINERS LABELED WITH THE TRADEMARK OR TRADE NAME AND THE PIPE MANUFACTURER'S NAME. FLANGED GASKETS: USE FULL FACE TYPE WITH PROFILE BY ACIPCO (TORUSEAL), US PIPE (FLANGE-TITE), OR APPROVED EQUAL.
13. POLYETHYLENE ENCASEMENT

POLYETHYLENE ENCASEMENT SHALL COMPLY WITH ISO 8180, ANSI A21.5, AWWA C105, AND ASTM A674. POLYETHYLENE ENCASEMENT SHALL HAVE A THICKNESS OF 4 MIL. MATERIAL SHALL BE HIGH-DENSITY, CROSS-LAMINATED FILM CONFORMING TO SECTION 4.1.3 OF AWWA STANDARD C105. TUBE SIZE SHALL BE AS LISTED IN TABLE 1 OF SAME STANDARD.
14. SERVICE SADDLES

SERVICE SADDLE CLAMPS SHALL BE FUSION NYLON COATING DUCTILE IRON CASING WITH DOUBLE STAINLESS STEEL STRAPS.
15. HOT TAP TAPPING SLEEVES

SERVICE TAPPING SLEEVES SHALL BE ROMAC SST WITH FULL CIRCUMFERENTIAL GASKET, OR TMWA APPROVED EQUAL.
16. DISINFECTION TABLETS

DISINFECTION TABLETS SHALL BE CALCIUM HYPOCHLORITE AS OUTLINED IN AWWA C651, TABLET METHOD, LATEST EDITION. A NSF-61 APPROVED, FOOD-GRADE ADHESIVE (LOCTITE AA H3101, NO EQUAL) SHALL BE USED TO ADHERE CALCIUM HYPOCHLORITE TABLETS TO THE INTERIOR OF THE PIPE LENGTHS AS THE PIPE IS INSTALLED. LOCTITE AA H3101 SHALL BE USED ALONE, AND NOT WITH THE PRIMER 2000 PRODUCT.
17. PERMANENT PAVEMENT

PERMANENT PAVEMENT SHALL BE PG64-28 TYPE 2 (TYPE 3 IN ALLEYS) PER THE LATEST EDITION OF THE ORANGE BOOK.

±	DIAMETER
AC	PLUS OR MINUS
ACP, (AC)	ASPHALT CONCRETE PAVEMENT
ANSI	ASTROBOS CEMENT PIPE
APPROX.	AMERICAN NATIONAL STANDARDS INSTITUTE
AWWA	APPROXIMATE(LY)
C&G	AMERICAN WATER WORKS ASSOCIATION
CI	CURB AND GUTTER
CIPP	CAST IRON
CL	CURE IN PLACE PIPE
CORP	CLASS/CENTERLINE
CTS	CORPORATION
CU	COPPER TUBING SIZE
D/W	COPPER
D/C	DRIVEWAY
DI	DEPRESSED CURB
DIP	DUCTILE IRON/DROP INLET
EX./(E)	DUCTILE IRON PIPE
EXIST	EXISTING
FCA	EXISTING GRADE
FDC	FLANGED COUPLING ADAPTER
FIP	FIRE DEPARTMENT CONNECTION
FLG	FEMALE IRON PIPE
GV	FLANGE
GALV.	GATE VALVE
HDPE	GALVANIZED
EX.	HIGH DENSITY POLYETHYLENE
LF	POUND
LT	LINEAR FEET
MAX.	LEFT
MIN.	MAXIMUM
MIP	MINIMUM
MJ	MALE IRON PIPE
NSF	MECHANICAL JOINT
NTS	NATIONAL SANITATION FOUNDATION
O.D.	NOT TO SCALE
P.C.C.	OUTSIDE DIAMETER
PE	PORTLAND CEMENT CONCRETE
PO	PLAIN END
PSF	PUSH-ON
PVC	POUNDS PER SQUARE FOOT
RCP	POUNDS PER SQUARE INCH
REF.	POLYVYL CHLORIDE
RMJ	REINFORCED CONCRETE PIPE
RJ	REFERENCE
RT	RESTRAINED MECHANICAL JOINT
R&W	RESTRAINED-JOINT
SD	RESTRAINED-JOINT DUCTILE IRON PIPE
SDMH	RIGHT
SHT	REMOVE & WASTE
SIM	STORM DRAIN
SS	STORM DRAIN MANHOLE
SSMH	SHEET
SSPWC	SIMILAR
STA	SANITARY SEWER
STL	SANITARY SEWER MANHOLE
TBA	STANDARD SPECIFICATIONS FOR PUBLIC WORKS
TWMA	CONSTRUCTION, LATEST EDITION
TR	STATION
TYP.	STEEL
WM	TO BE ABANDONED
	TRUCKEE MEADOWS WATER AUTHORITY
	TRANSITE (AC) PIPE
	TYPICAL
	WATER METER

	NEW WATER MAIN/SERVICE LINE
— W	EXISTING WATER MAIN
	EXISTING WATER SERVICE LINE
	PREVIOUSLY ABANDONED WATER SERVICE LINE
— 18"SD	EXISTING STORM DRAIN MAIN/LATERAL WITH SIZE
— 12"SS	EXISTING SANITARY SEWER MAIN WITH SIZE
— RW	EXISTING RECLAIMED WATER
— 12"D	EXISTING WATER TANK DRAIN LINE WITH SIZE
— GAS	EXISTING NATURAL GAS MAIN/LATERAL
ATT — ATT	EXISTING UNDERGROUND AT&T TELECOMMUNICATIONS FACILITY
— CATV	EXISTING UNDERGROUND CABLE TV
FO	EXISTING FIBER OPTIC CABLE – CHARTER COMMUNICATIONS
— UGE	EXISTING UNDERGROUND ELECTRIC FACILITY
— TS	EXISTING UNDERGROUND TRAFFIC SIGNAL FACILITY
	EXISTING ROADWAY CENTERLINE (APPROXIMATE)
	EXISTING PROPERTY LINE
- X · X · X · X · X · X · X · X ·	EXISTING PIPE TO BE REMOVED AND DISPOSED OF
	EXISTING PIPE TO ABANDON
	EXISTING FLOWLINE
	EXISTING FENCE LINE
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING CONCRETE
	EXTENTS OF FUTURE PAVING PROJECT

MJ ADAPTOR (FOSTER ADAPTOR)

MEGALUG RESTRAINT OR APPROVED EQUAL

MECHANICAL JOINT OR BELL & SPIGOT FITTING

FLANGED FITTING

FLANGED COUPLING ADAPTER

RESTRAINED FLANGED COUPLING ADAPTER

RESTRAINED FLEXIBLE/TRANSITION COUPLING

FLEXIBLE/TRANSITION COUPLING

HYMAX COUPLING OR APPROVED EQUAL

GATE VALVE COUPLER (GREY COLOR = EXISITN)

4818.5

4822.1

4824.9

EXISTING GROUND
ELEVATION (TYP)

	PROPOSED TEE / TAPPING SLEEVE
	PROPOSED 90° ELBOW
	PROPOSED 45° ELBOW
	PROPOSED 11.25° ELBOW
	PROPOSED VERTICAL ELBOW
	EXISTING VERTICAL ELBOW
	PROPOSED THRUST BLOCK
	PROPOSED REDUCER
	PROPOSED GATE VALVE PLAN
	PROPOSED GATE VALVE PROFILE
	PROPOSED GATE VALVE - NORMALLY CLOSED
	EXISTING ISOLATION VALVE
	EXISTING ISOLATION VALVE - NORMALLY CLOSED
	PROPOSED COUPLING
	PROPOSED CAP / FCA WITH BLIND FLANGE
	EXISTING CAP
	PROPOSED NEW WATER METER BOX AND COVER
	EXISTING WATER METER FACILITY
	PROPOSED FLUSH ASSEMBLY
	EXISTING FLUSH ASSEMBLY
	PROPOSED SSMH BY OTHERS
	PROPOSED TEST STATION
	EXISTING SSMH TO BE DEMO BY OTHERS
	EXISTING SINGLE CHECK VALVE
	EXISTING FIRE HYDRANT
	EXISTING WATER VALVE
	EXISTING STORM DRAIN MANHOLE (SDMH)
	EXISTING SANITARY SEWER MANHOLE (SSMH)
	EXISTING STORM DRAIN CATCH BASIN TYPE 1
	EXISTING STORM DRAIN CATCH BASIN TYPE 4-R
	EXISTING ROUND STORM DRAIN CATCH BASIN WITH GRATE
	EXISTING NATURAL GAS VALVE
	EXISTING NATURAL GAS CAP
	EXISTING NATURAL GAS REDUCER
	EXISTING UTILITY POLE
	EXISTING UNDERGROUND ELECTRIC VAULT WITH MANHOLE ACCESS
	EXISTING ELECTRIC BOX / VAULT (SIZES VARY)
	EXISTING ELECTRIC TRANSFORMER
	EXISTING TELECOMMUNICATIONS BOX / VAULT (SIZES VARY)
	EXISTING TELECOMMUNICATIONS VAULT WITH MANHOLE ACCESS
	EXISTING CHARTER COMMUNICATIONS CABLE TV/FIBER OPTIC BOX (SIZES VARY)
	EXISTING TRAFFIC SIGNAL BOX (SIZES VARY)
	EXISTING TRAFFIC SIGNAL CABLE MANHOLE ACCESS BOX
	EXISTING TRAFFIC SIGNAL - MULTIPLE LIGHTS WITH ARM
	EXISTING TRAFFIC SIGNAL - SINGLE LIGHT
	EXISTING STREET LIGHT
	EXISTING (FOUND) MONUMENT
	SURVEY CONTROL POINT
	EXISTING METAL SIGN POST
	FLOW ARROW
	BARRIER POST
	REMOVABLE BARRIER POST
	EXISTING TREE
	GENERAL NOTE, TYP. ON ALL P-SHEETS, NO CALL-OUT
	CONSTRUCTION NOTE, TYP. ON ALL P-SHEETS, WITH CALL OUT
	SHEET NOTE, SPECIFIC TO CURRENT SHEET

BID SET

GENERAL NOTES:

- A. ALL CONSTRUCTION SHALL CONFORM TO TMWA STANDARDS.
- B. THE WATER SYSTEM SHALL CONFORM TO TMWA STANDARDS AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
- C. SUBMITTALS FOR ALL WATER PIPE AND APPURTENANCES SHALL BE SUBMITTED AND APPROVED BY TMWA PRIOR TO CONSTRUCTION.
- D. PRIOR TO ACCEPTANCE OF THE WATER LINE, THE CONTRACTOR SHALL PERFORM A TRACER WIRE CONTINUITY TEST AFTER BACKFILLING THE WATER PIPE TRENCH TO THE SATISFACTION OF THE INSPECTOR.
- E. CONTRACTOR TO MAINTAIN LOCAL ACCESS TO ALL RESIDENTS.
- F. WHEN WORKING WITH TRANSITE (ACP) CONTRACTOR SHALL CONFORM TO THE TMWA GENERAL CONDITIONS 4.05.G. & 6.11.I. [HTTP://WWW.TMWA.COM/DOING-BUSINESS-WITH-US/BIDDING-OPPORTUNITIES/](http://www.tmwa.com/doing-business-with-us/bidding-opportunities/).
- G. SEE PROPOSED CONSTRUCTION SEQUENCE IN SPECIFICATION SECTION 01020.
- H. CONTRACTOR SHALL POTHOLE TO VERIFY LOCATION, DEPTHS, AND REQUIRED MATERIALS FOR CONNECTION TO EXISTING.
- I. CONTRACTOR SHALL MAINTAIN SAFE WORKING DISTANCE FROM EXISTING GAS, ELECTRIC AND OVERHEAD UTILITIES.
- J. INSTALL ALL PIPING PER TRENCH DETAIL 10L-6/D14 AND ALL PIPE AND FITTINGS SHALL BE MECHANICALLY RESTRAINED.
- K. ALL SURVEY MONUMENTS DISTURBED DURING THE COARSE OF CONSTRUCTION ARE TO BE REPLACED BY A LICENSED NEVADA PLS. RESTORE MONUMENTS PER DETAIL C124/D16.
- L. ALL TRENCH REPAIR SHALL BE TEMPORARY AC PAVEMENT PER DETAIL C121/D16 UNLESS NOTED OTHERWISE ON THE PLANS.

CONSTRUCTION NOTES:

1. WATER SERVICE MATERIAL AND SIZE SHALL BE VERIFIED IN FIELD. INSTALL SINGLE WATER SERVICE PER DETAIL C580/D17.
2. INSTALL GATE VALVE PER DETAIL 10J-2/D12.
3. INSTALL GATE VALVE PER DETAIL 10B-2/D10.
4. WATER MAIN CROSSING SEWER MAIN PER DETAIL 10L-11/D15.
5. WATER MAIN OR WATER SERVICE PARALLEL TO OR CROSSING SEWER SERVICE PER 10L-12/D15.
6. WATER SERVICE LATERAL CROSSING SEWER MAIN PER 10L-13/D15.
7. WATER MAIN OR WATER SERVICE PARALLEL TO SEWER MAIN PER DETAIL 10L-10/D15.
8. PERMANENT AC PAVEMENT REPAIR DETAIL C120/D16. LIMITS SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL PROVIDE THEIR OWN TAKE-OFF FOR BIDDING.
9. GROUT FILL EXISTING PIPE TO BE ABANDONED IN PLACE. UTILIZE ALL NECESSARY EQUIPMENT TO ENSURE PIPE IS COMPLETELY FILLED WITH GROUT INCLUDING BUT NOT LIMITED TO GROUT PUMPS, STAND PIPES, AIR VENTS, ETC.
10. REMOVE AND WASTE EXISTING ACP PIPE, SEE GENERAL NOTE F.

SHEET NOTES:

1. SALVAGE EXISTING VALVES AND RETURN IT TO TMWA. REMOVE CONCRETE AND PIPE FROM VALVE.
2. REPAIR VALLEY GUTTER IN KIND PER DETAIL C107/D16.
3. ROAD CLOSURES ON VICTORIAN AVE WILL NOT BE PERMITTED. LANE CLOSURES MUST BE APPROVED PRIOR TO BEING IMPLEMENTED.
4. EXISTING WATER VALVES TO BE ABANDONED, SEE DETAIL C600/D17.
5. CONTACT SPARKS FIRE DEPARTMENT FOR FIRE HYDRANT SHUT DOWN PERIOD. INSTALL 6" RMJ TEE W/6" GV AND CONNECT TO (E) FIRE HYDRANT LATERAL USING HYMAX COUPLER PER DETAIL 10C-2/D10.
6. CONNECT TO EXISTING TRACER WIRE AND INSTALL TEST STATION PER DETAIL 10L-9/D14.
7. REPLACE CONCRETE ALLEY, VALLEY GUTTER, AND C&G PER DETAIL C116/D16.
8. CUT AND CAP PIPE PROVIDE THRUST BLOCK AS REQUIRED PER DETAIL 10L-2/D14.

SERVICE REPLACEMENT SCHEDULE				
TAG NO.	EXISTING SIZE & MATERIAL	NEW SERVICE SIZE	ADDRESS	FULL REPLACEMENT Y OR N
09	0.75" Cu	1"	102 18TH ST	N
10	0.75" Cu	1"	122 18TH ST	N
11	0.75" Cu	1"	121 18TH ST	N
12	0.75" Cu	1"	1761 VICTORIAN AVE	N
13	1" Cu	1"	1801 VICTORIAN AVE	N

VA:1801 Victorian 180101.dwg, drawing location: U:\1801_18th St.dwg, User: B. D. Dagle, Date: 02/13/17

REVISION	DESCRIPTION	BY	APP	DATE
1	ADDENDUM 1	DAD	DAD	3/13/17

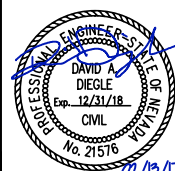
WORK ORDER NO. 10-0002
DESIGNED DAD
DRAWN RCO/EHP/DAD
DATE FEBRUARY 2017
CHECKED DAD/RCK
SUBMITTED
RECOMMENDED
APPROVED

TRUCKEE MEADOWS WATER AUTHORITY
1355 CAPITAL BLVD. / PO BOX 30013
RENO, NEVADA 89520-3013
PH 775-834-8080 / FX 775-834-8003

NOT REPRODUCIBLE

PROPERTY OF
TRUCKEE MEADOWS WATER
AUTHORITY. RETURN UPON
COMPLETION OF PROJECT
(Per Homeland Security Act)

**TMWA COS 2017 UNIT 3 WATER MAIN
REPLACEMENT PROJECT - SPARKS, NV
18TH STREET SOUTH ALIGNMENT
A ST TO VICTORIAN AVE**



SHEET NUMBER

P3

7 OF 27

GENERAL NOTES:

- ALL CONSTRUCTION SHALL CONFORM TO TMWA STANDARDS.
- THE WATER SYSTEM SHALL CONFORM TO TMWA STANDARDS AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
- SUBMITTALS FOR ALL WATER PIPE AND APPURTENANCES SHALL BE SUBMITTED AND APPROVED BY TMWA PRIOR TO CONSTRUCTION.
- PRIOR TO ACCEPTANCE OF THE WATER LINE, THE CONTRACTOR SHALL PERFORM A TRACER WIRE CONTINUITY TEST AFTER BACKFILLING THE WATER PIPE TRENCH TO THE SATISFACTION OF THE INSPECTOR.
- CONTRACTOR TO MAINTAIN LOCAL ACCESS TO ALL RESIDENTS.
- WHEN WORKING WITH TRANSITE (ACP) CONTRACTOR SHALL CONFORM TO THE TMWA GENERAL CONDITIONS 4.05.G. & 6.11.I. [HTTP://WWW.TMWA.COM/DOING-BUSINESS-WITH-US/BIDDING-OPPORTUNITIES/](http://www.tmwa.com/doing-business-with-us/bidding-opportunities/).
- SEE PROPOSED CONSTRUCTION SEQUENCE IN SPECIFICATION SECTION 01020.
- CONTRACTOR SHALL POTHOLE TO VERIFY LOCATION, DEPTHS, AND REQUIRED MATERIALS FOR CONNECTION TO EXISTING.
- CONTRACTOR SHALL MAINTAIN SAFE WORKING DISTANCE FROM EXISTING GAS, ELECTRIC AND OVERHEAD UTILITIES.
- INSTALL ALL PIPING PER TRENCH DETAIL 10L-6/D14 AND ALL PIPE AND FITTINGS SHALL BE MECHANICALLY RESTRAINED.
- ALL SURVEY MONUMENTS DISTURBED DURING THE COARSE OF CONSTRUCTION ARE TO BE REPLACED BY A LICENSED NEVADA PLS. RESTORE MONUMENTS PER DETAIL C124/D16.
- ALL TRENCH REPAIR SHALL BE TEMPORARY AC PAVEMENT PER DETAIL C121/D16 UNLESS NOTED OTHERWISE ON THE PLANS.

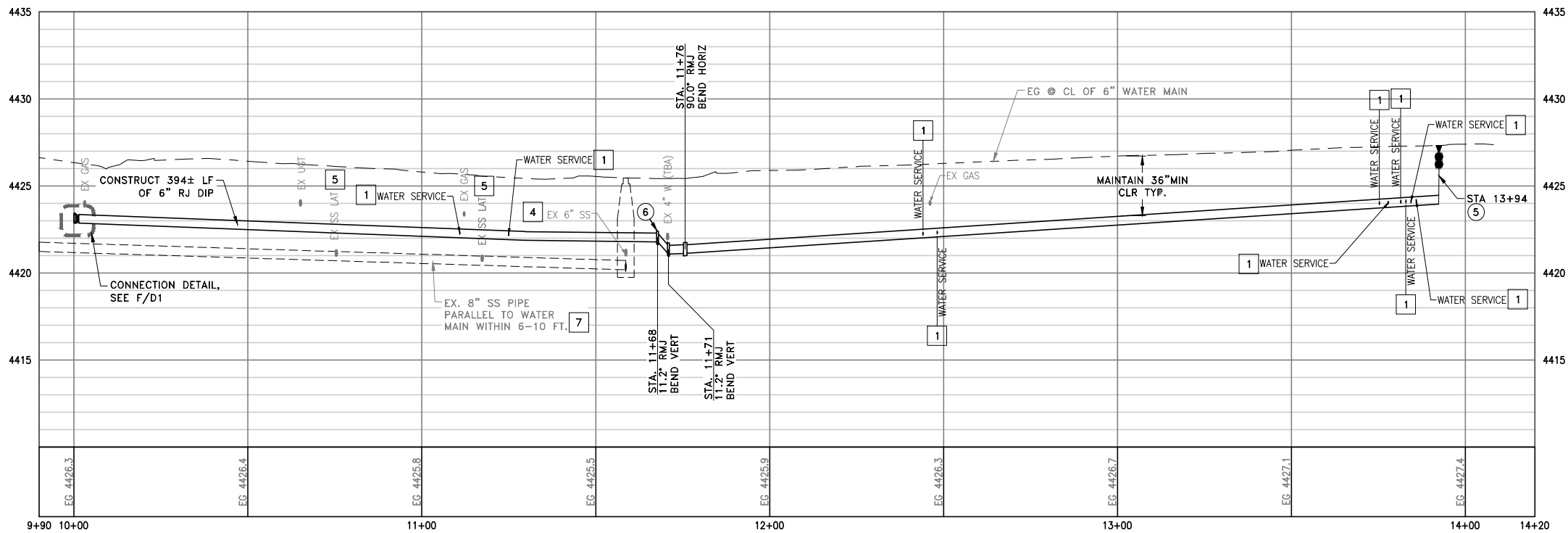
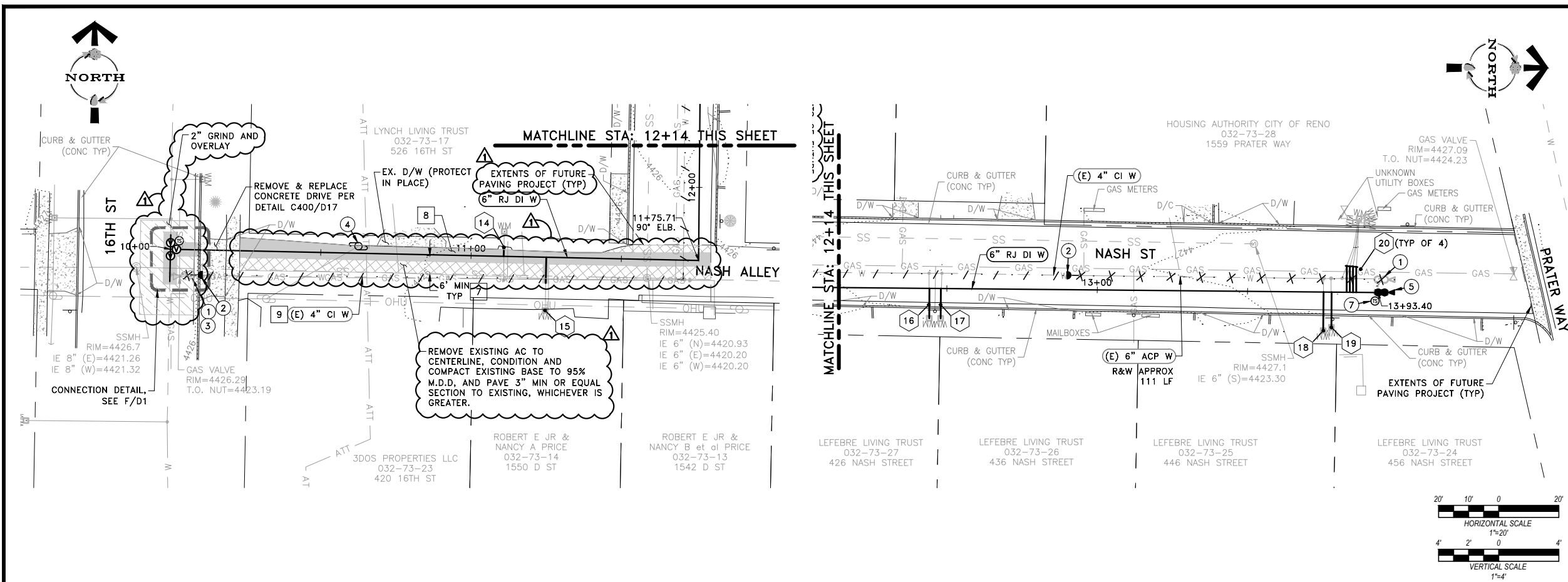
CONSTRUCTION NOTES:

- WATER SERVICE MATERIAL AND SIZE SHALL BE VERIFIED IN FIELD. INSTALL SINGLE WATER SERVICE PER DETAIL C580/D17
- INSTALL GATE VALVE PER DETAIL 10J-2/D12.
- INSTALL GATE VALVE PER DETAIL 10B-2/D10.
- WATER MAIN CROSSING SEWER MAIN PER DETAIL 10L-11/D15
- WATER MAIN OR WATER SERVICE PARALLEL TO OR CROSSING SEWER SERVICE PER 10L-12/D15.
- WATER SERVICE LATERAL CROSSING SEWER MAIN PER 10L-13/D15.
- WATER MAIN OR WATER SERVICE PARALLEL TO SEWER MAIN PER DETAIL 10L-10/D15.
- PERMANENT AC PAVEMENT REPAIR DETAIL C120/D16. LIMITS SHOWN ARE APPROXIMATE AND CONTRACTOR SHALL PROVIDE THEIR OWN TAKE-OFF FOR BIDDING.
- GROUT FILL EXISTING PIPE TO BE ABANDONED IN PLACE. UTILIZE ALL NECESSARY EQUIPMENT TO ENSURE PIPE IS COMPLETELY FILLED WITH GROUT INCLUDING BUT NOT LIMITED TO GROUT PUMPS, STAND PIPES, AIR VENTS, ETC.
- REMOVE AND WASTE EXISTING ACP PIPE, SEE GENERAL NOTE F.

SHEET NOTES:

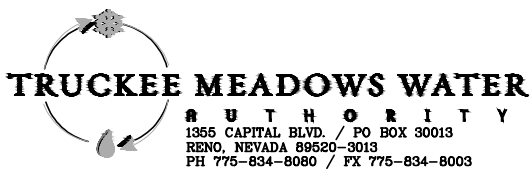
- SALVAGE EXISTING VALVES AND RETURN TO TMWA. REMOVE CONCRETE AND PIPE FROM VALVES.
- CUT AND CAP PIPE PROVIDE THRUST BLOCK AS REQUIRED PER DETAIL 10L-2/D14.
- EXPOSE EXISTING VALVE COVERED BY ASPHALT.
- CONTRACTOR TO PROTECT POWER POLE IN PLACE. CONTRACTOR TO COORDINATE WITH NV ENERGY PRIOR TO TRENCHING NEAR EXISTING POWER POLE.
- INSTALL FLUSH ASSEMBLY PER DETAIL 10E-3/D11.
- INSTALL RESTRAINED JOINT VERTICAL OFFSET, SEE DETAIL 10I-4/D12.
- CONNECT TO EXISTING TRACER WIRE AND INSTALL TEST STATION PER DETAIL 10L-9/D14.

SERVICE REPLACEMENT SCHEDULE				
TAG NO.	EXISTING MATERIAL & SIZE	NEW SERVICE SIZE	ADDRESS	FULL REPLACEMENT Y OR N
14	0.75" Cu	1"	526 16TH ST	N
15	0.75" CU	1"	1550 D ST	N
16	1.5" POLYBUTYLENE	1.5"	426 NASH ST	Y
17	1.5" POLYBUTYLENE	1.5"	436 NASH ST	Y
18	1.5" POLYBUTYLENE	1.5"	446 NASH ST	Y
19	1.5" POLYBUTYLENE	1.5"	456 NASH ST	Y
20	2" HDPE (TYP OF 4)	2"	1559 PRATER WAY	N



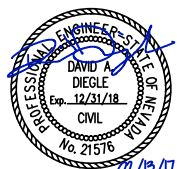
REVISION	DESCRIPTION	BY	APP	DATE
1	ADDENDUM 1	DAD	DAD	3/13/17

WORK ORDER NO. 10-0002
 DESIGNED DAD
 DRAWN RCO/EHP/DAD
 DATE FEBRUARY 2017
 CHECKED DAD/RCK
 SUBMITTED
 RECOMMENDED
 APPROVED

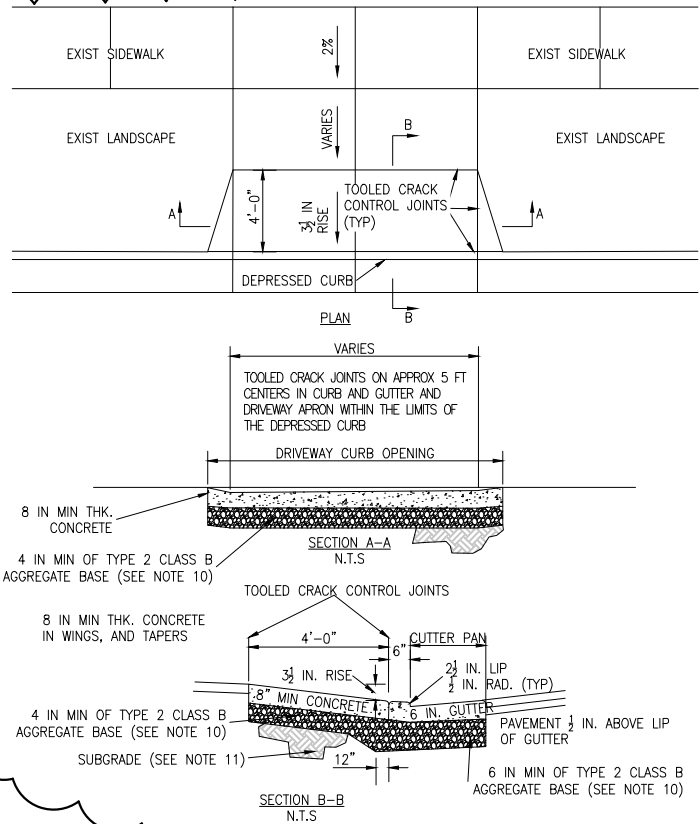


NOT REPRODUCIBLE
 PROPERTY OF
 TRUCKEE MEADOWS WATER
 AUTHORITY. RETURN UPON
 COMPLETION OF PROJECT
 (Per Homeland Security Act)

TMWA COS 2017 UNIT 3 WATER MAIN
 REPLACEMENT PROJECT - SPARKS, NV
 NASH STREET ALIGNMENT
 16TH ST TO PRATER WAY

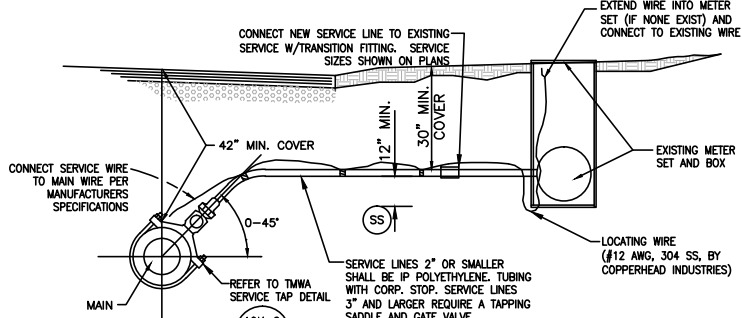


SHEET NUMBER
P4
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CONCRETE DRIVEWAY (NASH ALLEY)
NTS

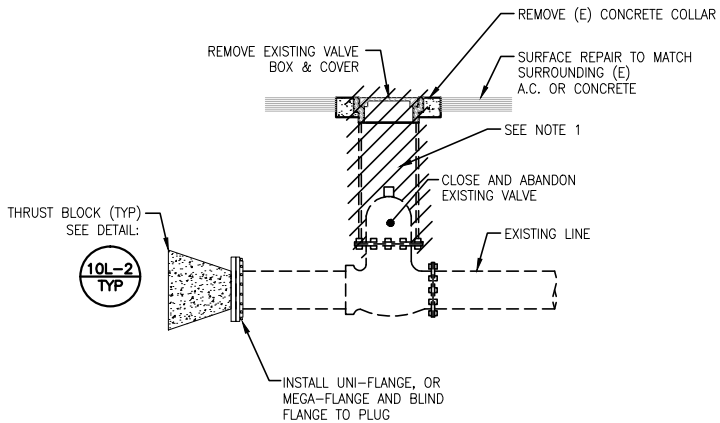
C400
D17



- NOTES:
- ALL SERVICE LINE COUPLING FITTINGS SHALL BE MUELLER CTS 110 COMP. x MIP.
 - ALL SERVICE VALVES SHALL BE SAME SIZE AS SERVICE LINES (ON 3" SERVICE, USE 4" GATE VALVE AND PIPE.)
 - SERVICE CLAMPS SHALL BE FACTORY COATED EPOXY WITH STAINLESS STEEL BAND.
 - MINIMUM DISTANCE BETWEEN TAPS AND MAINLINE FITTINGS, INCLUDING BELLS SHALL BE 18".
 - TAPPING SADDLES 3" OR LARGER SHALL BE STAINLESS STEEL, HAVE A FULL CIRCUMFERENTIAL SEAL AND HAVE EITHER A STAINLESS STEEL OR DUCTILE IRON FLANGE.
 - ALL PLUMBING SHALL BE DISCONNECTED FROM CORP AND PLUGGED AT BOTH ENDS. WATER UTILITY SHALL BE NOTIFIED FOR INSPECTION OF CORP ASSEMBLY PRIOR TO BACKFILLING.
 - ALL NEW SERVICE LINES SHALL CONNECT TO EXISTING METER PIT SETTER AT EXISTING COMPRESSION FITTING LOCATION.
 - IF EXISTING COMPRESSION FITTING IS IPS, IT SHALL BE REMOVED AND REPLACED WITH A CTS COMPRESSION FITTING TO FIT THE NEWLY INSTALLED PE SERVICE LINE.

WATER SERVICE TAP & METER CONNECTION
NTS

C580
D17



- NOTE:
- ALL VALVES TO BE RETIRED SHALL BE ABANDONED IN THE CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE BOX AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND OR TYPE 2, CLASS B AGGREGATE BASE, THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE.

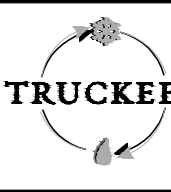
TYPICAL ABANDONED VALVE & PIPE
NTS

C600
D17

VA 1801 (active) 180101 (78) drawing (active) 0178 D17.dwg by Diegle, David

REVISION	DESCRIPTION	BY	APP	DATE
1	ADDENDUM 1	DAD	DAD	3/6/17

WORK ORDER NO.	10-0002
DESIGNED	DAD
DRAWN	RCO/EHP/DAD
DATE	FEBRUARY 2017
CHECKED	DAD/RCK
SUBMITTED	
RECOMMENDED	
APPROVED	



TRUCKEE MEADOWS WATER AUTHORITY
1355 CAPITAL BLVD. / PO BOX 80013
RENO, NEVADA 89520-3013
PH 775-834-8080 / FX 775-834-8003

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TMWA COS 2017 UNIT 3 WATER MAIN REPLACEMENT PROJECT - SPARKS, NV

TYPICAL MECHANICAL DETAILS



DAVID DIEGLE
No. 21576
CIVIL
02/19/17

SHEET NUMBER

D17

27 OF 27