

Addendum No. 7
Mt. Rose Water Treatment Plant
PWP Bid No.: WA-2018-240
TMWA Capital Project No.: 11-0010
Monday, August 27, 2018

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 have changed, please refer to Addendum No. 2:**

CLARIFICATIONS, QUESTIONS AND RESPONSES, DRAWINGS AND SPECIFICATIONS

CLARIFICATIONS

Clarification No. 1:

Sheet GA03: See Revised Sheet GA03 attached that clarifies hardware items.

1. Door 108 receives hardware group 5.
2. Review all the doors for revised hardware group 5 that includes the Von Duprin Panic device 99EO with latching trim.
3. Door 109 uses MODIFIED Hardware group 6: Includes vertical rod panic bars and (1 side) electrified kit panic device for card reader control. REX in non-electrified side panic device. Also added a coordinator, astragal, and power transfer hinge.
4. Modified Detail 1/GA03 for Card Reader Control to include double door 109 per (3) above.
5. NEW Hardware group 7 (Passage Set) applies to Doors 103C, 104B, 105B, 107.
6. See Electrical Division 16 for Card Reader specifications.
7. See Electrical Drawings (Addendum 7) for added conduit and data for electric strikes and card reader locations as called for in the GA03 Door and Hardware Schedule.
8. Added a Type C Hollow Metal frame for Door 109.

QUESTIONS AND RESPONSES

Question No. 1: Will payment for materials stored offsite be provided with pictures and proof of insurance? It will allow suppliers to procure materials early and reduce anticipated material escalations costs, that would otherwise be included in the bid amount if payment for materials stored off site is not allowed.

Response to Question No 1: Payment for offsite materials will be granted provided that the contractor conforms to the General Conditions and Specification Section 01640. Contractor shall also provide manufacturer invoicing and the materials shall be inspected by TMWA representative(s) prior to application for payment. Please see 00800 - Supplementary Conditions Update below.

Question No. 2: Sheet S206 showing the Structural Low Roof & Mezz. Framing Plan calls out detail 2/GS05 for both the awning and low sloped roof over the control room. Detail 2/GS05 is for c composite metal deck. Should this be detail 1/GS05 for a non-composite metal deck?

Response to Question No. 2: Yes, the callout for the awning and low sloped roof should be changed to read Detail "1/GS05".

Question No. 3: Please provide the applicable wage rate.

Response to Question No. 3: Please refer to Volume 1 of 5 of the Spec Book under the Prevailing Wage Tab. The 2018 State of Nevada prevailing wage rate with an October 1, 2017, date applies to this project. However, the applicable State of Nevada prevailing wage rate is determined by the wage rate in effect at bid opening.

Question No. 4: Can excess spoils from excavation be disposed onsite?

Response to Question No. 4: Excess materials will require offsite disposal.

Question No. 5: Please provide a list of Owner furnished equipment.

Response to Question No. 5: No owner furnished equipment provided by TMWA other than the SCADA Computer.

Question No. 6: Spec section 16950, 1.1-B states that the electrical testing is by the owners testing agency, please clarify what testing will be done by the owner and what needs to be done by the contractor.

Response to Question No. 6: Electrical system components to be tested shall include switchboards, motor control centers, automatic transfer switch, standby generator, circuit breakers, motors, feeder circuits, and other electrical equipment shown on the one-line diagrams and shall be completed per NETA requirements and will be done by TMWA's testing agency. The Contractor shall coordinate with TMWA and provide access to TMWA's testing agency to complete the testing. Following the testing, the Contractor shall repair and/or replace any electrical equipment deemed to be defective or not meet NETA standards.

Question No. 7: With regards to Reference Drawings: G012, I261, I263, I265, I266, I267, I269, 1271 and Reference Specs: 15070, 15060, 15065: The Polyethylene tubing shown in the P&ID, piping schedules, and specs mentioned above is difficult to fabricate utilizing butt-fused connections and flanging with 1/2" and 3/4" sized tubing. Is CPVC piping that matches the other chemical feed piping acceptable as a substitute for the polyethylene tubing?

Response to Question No. 7: Drawing G012, Group PE01, Fittings column to be changed to read, "Compression type, with no metallic components. Hose barb fittings are not acceptable".

Question No. 8: Please confirm that electrical conduits are not allowed in any concrete slabs.

Response to Question No. 8: Conduits shall not be placed within the concrete slabs, except where necessary to pass through the concrete slab.

Question No. 9: Specs state that all outdoor conduits are to be PVC/RGS, please confirm that all liquid tight flex connectors are to be PVC/RGS type also.

Response to Question No. 9: Yes, all outdoor exposed connectors and fittings shall be PVC coated RGS.

Question No. 10: In the instruction to the bidders in the specifications item L-9 states that the bidders and certain subcontractors must meet a minimum requirement of experience to be qualified to bid the project. please confirm this requirement will be enforced.

Response to Question No. 10: For Instructions to Bidders, Item L-9, the second sentence of the first paragraph, “Bidder has successfully constructed at least three similar projects of equal or greater size, scope, type, cost and complexity within the previous seven years.”, shall be deleted in entirety.

Question No. 11: Please provide a specification for the overhead doors.

Response to Question No. 11: Refer to Specification 08330 provided with Addendum No. 6.

Question No 12: In the bid documents, under References (Page 17), a comment is made “See supplemental Conditions for the TMWA Project Category required for this project.” I have read through the Supplemental Conditions and do not see a reference for a project category. Could you provide this information or direct me to it if I have missed it?

Response to Question No. 12: Thank you for bringing this matter to our attention. The information you are seeking is not found in the Supplementary Conditions. It is located in the Instructions to Bidders, Page 8, Item No. 9, which identifies the category as a **water treatment plant and transmission water pipeline** project.

Question No. 13: Can you please respond to the question below from one of the painting subs? Please ask the engineer if the manholes, diversion structure, raw water pump station, recycled & clearwells receive system 108 coating per 09800-3.21C-2?

Response to Question No. 13: Storm Drain Manholes and the one Sanitary Sewer Manhole will not receive coatings. The Diversion Structure Concrete will not receive a coating. The raw water pump station, recycle & clearwell tanks shall receive coating per 09800. The sewer lift station shall receive an outside coating of Sonneborn HLM500T and the inside coating shall receive coating per 09800. Refer to revised specification 11308 below.

Question No. 14: I was going to bid on this project and one of my lower tier subs has a question regarding the controls as far as scope and sequence of operation. Also, it is unclear who is responsible for the conduit and wire for the temperature controls and interlock ventilation conduit and wire. Can you help us with these questions?

Response to Question No. 14:

- I. The statement suggests that a subcontractor has a question regarding controls and sequence of operation, however no question is provided and no therefore response can be provided.
- II. HVAC control conduits shall be by Electrical Contractor. Wiring can be by Electrical or HVAC Contractor.

Question No.15: We are having a hard time getting subs to look at this project. It makes things a little more difficult for the subcontractors to bid this project due to the Homeland Security Requirements of not being able to duplicate plans or have them in a pdf format to send out. I would like to request a 1 week extension to the current bid date to help resolve some of these issues.

Response to Question No. 15: No extension of the bid date will be made.

Question No. 16: Section 11000 item 2.1.I, please confirm procedures and certified welders in accordance with ASME Section IX are acceptable for pump manufacturing.

Response to Question No. 16: Contractor is to comply with the requirements of Specification 11000.2.1.I. It is the Contractor’s responsibility to determine if ASME Section IX complies with the requirements of Specification 11000.2.1.I.

Question No. 17: Section 11100 item 2.5 Testing, various questions:

- I. Since the Vtp pumps are specified with bowl efficiencies, please confirm whether bowl tests only are acceptable or complete pumps need to be tested.
- II. Please confirm that job vfd's are required for pump shop testing, or that a shop vfd can be utilized for these tests.
- III. Specification states that shop motors can be used subject to Engineer approval. Please confirm shop motors can be used or provide example of when this would not be acceptable to the Engineer.
- IV. The Finished Water Pumps are to be supplied with 150 hp motors. The specification states pumps with 15 to 125 motors are non-witnessed and pumps with motors 200 hp and larger are to be witnessed. Please confirm whether the Finished Water Pumps are to non-witnessed or witnessed as they fall in between the specification's ranges.

Response to Question No. 17 (I-IV):

- I. Entire pump is to be tested.
- II. Job VFD is required, though where more than one pump runs on a VFD, one job VFD may be utilized for all the pumps.
- III. Job motors are to be used for testing. Consideration would be given to a shop motor if acquisition of the job motor would severely impact the project schedule and would be evaluated on a case by case basis.
- IV. Pumps smaller than 200 hp will not require a witness test.

Question No. 18: Section 11103 item 2.2.C.3, please confirm which bearings are required, one place Neoprene bearings are specified and then later bismuth tin bronze or Vesconite bearings are to be supplied. Please confirm which bearings should be supplied.

Response to Question No. 18: Line shaft bearings are to be steel-backed rubber or Vesconite.

Question No. 19: I have a few more technical questions related to the medium pressure UV disinfection equipment specification that I'd like your help to submit on for Mt. Rose. Can you send these in on my behalf?

- I. Specification Section 2.1(A) and 2.4(J) makes reference to automatic chemical and mechanical cleaning systems to be provided as part of the UV system and states no out of channel cleaning will be required. Will UV systems without chemical cleaning be acceptable?
- II. Specification Section Part 1 General, (A) makes reference to UV systems furnished with reactor supports. Reactors are supported by piping flange connections and no reactor supports are required for the Trojan system. Can you revise the specification to state "reactor supports if necessary"?
- III. Specification Section 1.9 (C1), makes reference to ballast failures and if 10% of ballasts fail within the first year, all ballasts need to be replaced. Because the Trojan system only contains 8 ballasts, if solely one ballast fails this already exceeds the 10% and all ballasts must be replaced. Can you please consider a more reasonable percentage?
- IV. Specification Section 1.10 (B), makes reference to inflation adjustments for fixed price unit replacement prices based on the Las Vegas region. Can you please consider the index based on the National Consumer Price Index?

Response to Question No. 19 (I-IV):

- I. Chemical and/or mechanical cleaning systems are acceptable.
- II. Reactor supports shall be provided by the UV SUPPLIER where required. If the SUPPLIER's technology is supported by the piping system, additional supports are not required. This can be shown in the SUPPLIER's shop drawings for approval.
- III. Lamp replacement requirements will be modified. See revisions to Section 11290.1.9.C.1 below.

- IV. It is acceptable to base the index on the National Consumer Price Index. See revisions to Section 11290.1.10.B below.

Question No. 20: Please see the following items that might require a response from the design engineer. The instrument index has what we would assume to be a complete list of the required instrumentation for the project. However, there are a number of instruments shown on the P&ID drawings that are not on the instrument list.

Please advise who is the responsible party for the following instruments and revise bid documentation accordingly.

Dwg I120 FSL 1274
 FIT/FE 1270

Dwg I121 FSL 1271
 FSL 1272
 FSL 1273

Dwg I231 PIT 2364

Dwg I232 FLS 2377 Shown on Instrument list by contractor. However, this instrument along with others by Filter Manufacturer and included in a dashed box. Need clarification if this is by contractor or not.

Dwg I240 PIT 2463
Dwg I267 PI 2664A
Dwg I267 PI 2665A
Dwg I270 PI 2761A

Response to Question No. 20: All instruments are to be provided by Contractor, unless noted within a vendor-provided packaged system.

Question No. 21: Sheet GE08 Detail E910 - Clarify which trade and specification is responsible to provide and install the YAGI antenna and cable.

Response to Question No. 21: YAGI antenna, conduit and wires shall be as detailed per TMWA's standard, no specification section is provided.

Question No. 22: Sheet E201 – the cable schedule specifies CAT5e cable to be provided of the CCTV but Division 16750 states to us CAT6. Clarify the correct category cable will need to be provided.

Response to Question No. 22: Provide CAT6 cables. The Conformed drawings will be updated to show CAT6 cable in the Conduit and Cable Schedule.

Question No. 23: Sheet E021 – the cable schedule for D0001 specifies to provide a fiber optic cable. Clarify cable optic type and number of fiber strands that will be needed for termination.

Response to Question No. 23: Cable type and strands to be determined by AT&T.

Question No. 24: The listed magnetic flowmeter supplier in specification 17102 2.1 is stating that the flow rates in the specifications are unattainable for the meters as shown in the P&ID's on ½ or ¾" process lines.

The flow rates shown in the instrument index 17101-4 and 17101-5 are too low for accurate measurement. How does the engineer propose we address this problem?

Response to Question No. 24: Please refer to the response to Question No. 8 in Addendum No. 6.

Question No. 25: In going through the structural drawings, I have found some errors/conflicting info:

- I. S110- section labeled 1/s111 foundation plan: "3'-0" x 1'-0" CONT FOOTING ..." is in conflict with the drawings and details on next page show 1'8" x 1'.
- II. Also on that section and 2/s111 wall plan: the section cuts are labeled 2/s111 for both cross ways and that is not correct. the top label should be 1/s111? Very confusing.

Response to Question No. 25 (I-II):

- I. The plan appears to be correct. Where the sections are cut the footings are 1'-8" as shown in the details. The three "wing" walls do have 3'0" footings as called for.
- II. There is an error on the section callout. Both the longitudinal and transverse sections are called out as Detail "2/S111". The transverse section should be corrected to Detail "1/S111".

Question No. 26: We have a question regarding pump testing tolerances:

Ref: Specification 11100 Pumps General
Para. 2.5.A.3.c

Referenced Paragraph states HI Tolerance to be 1U for motors from 15 and up to 125 HP. Is this same tolerance to be used for 150 HP motors?

Response to Question No. 26: Correct, 1U is the appropriate tolerance level for the 150 HP pumps.

Question No. 27: General Pump Section, 11100 Item 1.1.E: Are the VFDs to be supplied by the pump manufacturer?

Response to Question No. 27: Yes, pump manufacturer is responsible for furnishing pumps, motors, and VFDs.

Question No. 28: We have a few questions on this package.

- I. 1: Drawing E121 Shows Conduit # EL1004 going back to "PB-P3 and PB-S3 see Sheet E120" but these are not shown on E120, or anywhere else. Please clarify.
- II. 2: Drawing E201 shows a conduit tagged as "L2012" which is not on the conduit and cable schedule. Please clarify.
- III. 3: Drawing E100 shows a conduit tagged as "L1001" which is not on the cable schedule. Please clarify.
- IV. 4: Drawing E100 shows a conduit tagged as "EL1101" which is not on the cable schedule. Please clarify.
- V. 5: What size are pullboxes PB-P1, PB-S1, PB-P2, and PB-S2?

Response to Question No. 28 (I-V):

- I. Refer to response to Question 5 in Addendum No. 4.
- II. Provide 1”C-2#12,1#12G. Conformed drawings will be updated to show the conduit and cable in the Conduit and Cable Schedule.
- III. Provide 1”C-2#12,1#12G. Conformed drawings will be updated to show the conduit and cable in the Conduit and Cable Schedule.
- IV. Conduit tag should read “EL1001.” Conformed drawings will be revised accordingly.
- V. Refer to response to Question 2 in Addendum No. 3.

Question No. 29: Please clarify the supplier of Flow Switches (FSL) for Vertical Turbine Pumps. At a minimum this affects P-1210, P-1220, P-1230, and P-1240. For each of these pumps there is an FSL switch on the drawing sheets that is not marked as provided by the pump vendor but no corresponding FSL for the pump is found in the instrument index (section 17100). Researching 11103 for the pumps does not appear to clarify the provider of the switch or the required minimum flow rate to determine a specific flow switch model. Please clarify the supplier and flow range for the switch (make and break).

Response to Question No. 29: Seal water flow switches on vertical turbine pumps P-1210, P-1220, P-1230, and P-1240 are supplied by the Contractor and shall be set to alarm at 1 GPM. Manufacturer shall be GEMS, model FS-480 SERIES FLOW SWITCH, or equal.

Question No. 30: Various instrumentation related items are shown on the drawings but are not listed in the Instrument Index. Such items include the following:

- a. Sheet I120: FEM-1270 / FIT-1270

Response to Question No. 30: Details for FEM/ FIT-1270 are below.

P&ID DRAWING	TAG NUMBER	ELEMENT DESCRIPTION	TYPE	SUPPLY BY	MIN RANGE	MAX RANGE	UNIT	SIZE
I120	FIT 1270	Flow indicating transmitter	Analog	Contractor	200	400	GPM	6

Question No. 31: One or more pH probe elements on the drawings (including one provided by the Contractor) shows connection to the process using a diaphragm seal. Please clarify this usage as the sensor will not be able to analyze the water pH with such an arrangement.

Response to Question No. 31: Diaphragm seals are not required for pH probes.

Question No. 32: PT-2360 of the Instrument Index does not match PIT-2360 of sheet I233 for instrument type. PT vs PIT, please clarify the desired instrument.

Response to Question No. 32: Instrument shall be PIT.

Question No. 33: The Instrument Index table has grey colored table cells on the right side of the table for some instruments and not for others. There does not appear to be any pattern or obvious reasoning for pertinent data. Is there any intent for these gray colored cells on some instruments and not on others?

Response to Question No. 33: There is no meaning attributed to the grey cells. The grey color is a printing error.

Question No. 34: CP-2601 on sheet I260 is indicated to be vendor supplied equipment while similar panels such as CP-2602 on sheet I262 and CP-2603 on sheet I264 are not. Please clarify.

Response to Question No. 34: CP-2601 shall be Contractor supplied. Asterisk will be deleted from Conformed drawings.

Question No. 35: Please clarify if various LCP panels for pumps and other equipment (that are not vendor supplied equipment) are intended to be supplied by the Electrical Supplier or by the PCIS supplier or undetermined at the discretion of the Contractor.

Response to Question No. 35: Panels not supplied as part of vendor packaged system can be provided at Contractor's discretion.

Question No. 36: Sheet I280 has various float switches that have been marked as vendor supplied equipment, including being placed within the dashed line for the vendor package, yet the Instrument Index shows they are provided by the Contractor. Please clarify.

Response to Question No. 36: The system is a packaged system is provided with float switches. The Contractor is not required to provide float switches.

Question No. 37: Power monitoring devices on Sheet I290, such as the Power Fail monitor and SPD fail switch are shown as supplied by the Contractor (assuming PCIS supplier). Please clarify if this is desired as such instrumentation is customarily part of (or integrated into) the MCC assembly with customer connections for connecting to the PCIS. It is recommended that such instrumentation be part of the MCC assembly similar to the Shunt trip monitoring device on the same page.

Response to Question No. 37: Provide instruments as part of MCC assembly.

Question No. 38: Sheet I291 has flow switches for the safety showers. The instrument index indicates that such flow switches are provided by the contractor (assuming PCIS supplier). Please clarify that these flow switches are not already included in any specified shower model as is customary for safety showers.

Response to Question No. 38: Contractor to provide flow switch for safety shower. Contractor may select a safety shower with a supplied flow switch.

Question No. 39: Specifications Section 17200, paragraph 2.3 M and succeeding paragraphs indicate that every loop in the PCIS system will be protected by various models of SPD's. The drawings however indicate that only certain instruments shall be protected by lightning surge arrestors. Please clarify the intent of the specifications and clarify if every single analog and discrete loop is to be protected, even those in the same or adjacent panels.

Response to Question No. 39: Field input into PLC as noted by the symbol "LSA" on P&IDs shall be protected.

Question No. 40: Various chemical system magmeters as shown in the plans and instrument index have flow tube sizes less than 1 inch. There is a conflict within Section 17102 and the MAJOR PRODUCT OR SYSTEMS SCHEDULE where the Sparling Tigermag is the only allowed magmeter. Also, the Sparling Tigermag series does not appear to accommodate some of the various sizes and liners as required for these chemicals. Please clarify if other brands such as the Siemens Mag series or others for chemical systems will be allowed.

Response to Question No. 40: Please refer to the response to Question No. 8 in Addendum No. 6.

DRAWINGS

Drawing No. GA03: Delete GA03 and replace with attached GA03.

Drawing No. E201-E205: Provide all exterior single man-doors with door access control per detail E708/GE06. Each door shall be provided with 3/4"C-(1)6#18AWG, (1)2#16AWG, (1)2#18AWG, (1)4#18AWG cables. Conformed drawings will be updated to show conduit and cable in the Conduit and Cable Schedule.

SPECIFICATIONS

Specification No. 00800 Supplementary Conditions: *Replace subsection 7.02.D.1 with the following:*

1. Materials shall be stockpiled at the job site or at a secured location under the control of the Contractor that is within **50 miles** of the job site.

Specification No. 11290: Delete 1.9.C.1 "If more than 10% of the lamp drivers for a respective reactor fail in the first year, all the lamp drivers for the reactor shall be replaced by the Manufacturer at no cost to the Owner. If more than 10% of the total number of lamp drivers fail across all PDCs in the first year, all the lamp drivers shall be replaced by the Manufacturer at no cost to the Owner." Replace 1.9.C.1 with "If more than 50% of the lamp drivers for a respective reactor fail in the first year, all the lamp drivers for the reactor shall be replaced by the Manufacturer at no cost to the Owner. If more than 50% of the total number of lamp drivers fail across all PDCs in the first year, all the lamp drivers shall be replaced by the Manufacturer at no cost to the Owner."

Specification No. 11000: Delete first sentence in 2.5.A.4.a "Perform factory witnessed test on centrifugal pumps with drives 200 hp and larger in accordance with the certified factory non-witnessed test procedure indicated above for 15 hp to 125 hp pumps with the exception that tests shall be witnessed by the OWNER and ENGINEER." Replace first sentence in 2.5.A.4.a with "Perform factory witnessed test on centrifugal pumps with drives 200 hp and larger in accordance with the certified factory non-witnessed test procedure indicated above for pumps 15 hp up to 200 hp with the exception that tests shall be witnessed by the OWNER and ENGINEER."

Specification No. 11290: Delete 1.10.B "Every year, the fixed price may be adjusted for inflation only according to the Consumer Price Index in the Las Vegas region as published by the Bureau of Labor Statistics." Replace 1.10.B with "Every year, the fixed price may be adjusted for inflation only according to the National Consumer Price Index as published by the Bureau of Labor Statistics."

Specification No. 11308: Replace subsection 2.4.F with "F. Wetwell shall be coated with Sonneborn 5000T on the outside and System 108 on the inside per specification 09800".

QUESTION CUT-OFF DATE: August 23, 2018
END OF ADDENDUM NO. 7

ORIGINAL SHEET - 34"x22"

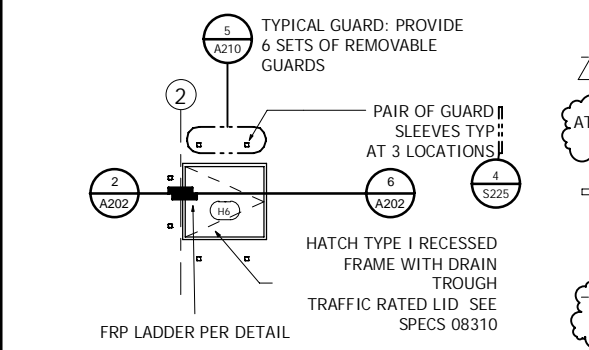
**BID SET
JUNE 2018**

NOT FOR CONSTRUCTION

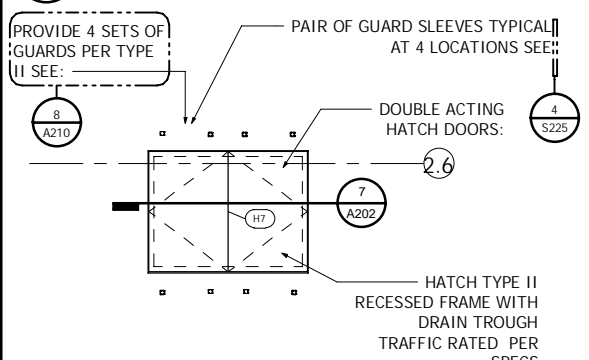
DOOR & HATCH HARDWARE SPECIFICATION					
KEY NAME	ITEM	MFG NAME	MODEL NO.	FINISH	COMMENTS
AS	ASTRAGAL	PEMKO	355V	BLACK VINYL	
C1	CLOSER	LCN	4050	CAST ALUMINUM	TRIARM, AT EXT. DOORS-METAL COVER; MAX 5LB PULL
C2	CLOSER	LCN	1450	CAST ALUMINUM	ALL INT. DOORS, 5LB MAX PULL
CS	SPRING ASSIST	HATCH MFR		316 STAINLESS STL	SPRING ASSIST. OPENER
CR	COORDINATOR	HAGER	297D		
CR	CARD READER	PER SPECS			AS SPECIFIED IN DIVISION 16
DB	DOOR BOTTOM	PEMKO	220V	ANODIZED ALUM.	MATCH DOOR THICKNESS AND WIDTH
EPDM	U WEATHER SEAL	HATCH MFR		EPDM RUBBER	SEE SPECS 08310 FOR FLOOD RATED GASKET
ES	ELECTRIC STRIKE	VON DUPRIN	4200		TRANSFORMER, REX DEVICE, KEY DEVICE, ETC
G1	GASKET	PEMKO	S88		
H1	HINGES	HAGER	BB 1279	USD-626	NRP HINGES AT EXTERIOR
H2	HINGES	HAGER	BB 7277	USD-626	
H3	HINGE-SSTL	HATCH MFR		319 STAINLESS STL	
HO	HOLD OPEN	HATCH MFR		316 STAINLESS STL	
KP1	KICKPLATES	DON-JO	J102	STAINLESS STL	12x34 TYPICAL
L1	ENTRY	BEST	93K7-S3	626	15D-ADA LEVER HANDLE
L2	PRIVACY	BEST	93K7-S3	626	15D-ADA LEVER HANDLE
L3	STOREROOM	BEST	93K7-S3	626	15D-ADA LEVER HANDLE
L4	PAIR STOREROOM	BEST	93K7-S3	626	15D-ADA LEVER HANDLE
L5	PANIC	VON DUPRIN	99EQ	626	LATCHING TRIM
L6	CYLINDER	BEST	93K7-S3	626	MATCH OWNER KEYWAY
L7	PASSAGE	BEST	93K7-S3	626	15D-ADA LEVER HANDLE
L9	PANIC-RODS-EL	VON DUPRIN	SEE COMMENTS	626	1 SIDE: 99-RX-WS, 1 SIDE: 99-WS-EL, E996L TRIM
LG	LOCK GUARD	DON-JO	CLP10632D	STAINLESS STL	
PT	POWER TRANSFER	HAGER	2-679-0621	ALUM PC	2 CONDUCTOR POWER TRANSFER
SD1	SILENCER-DOOR	HAGER	D307	BLACK	
SF1	STOP-FLOOR	DON-JO	1471		
SL	SLAM LOCK	HATCH MFR		316 STAINLESS STL	WITH FIXED INTERIOR /EXTERIOR HANDLES
SW1	STOP-WALL	DON-JO	1412	CAST BRASS/RUBBER	
T1	THRESHOLD	PEMKO	2705-T	ANODIZED ALUM.	MATCH DOOR WIDTH AND FRAME DEPTH
WS1	WEATHERSTRIP	PEMKO	303DS	ANODIZED BRONZE	SILICON BUBBLE FRAME SURROUND
WS2	SMOKE GASKET	PEMKO	S88	MATCH FRAME	FACTORY BRUSH TYPE

DOOR & HATCH HARDWARE GROUPS											
SET No.	FUNCTION	LOCKSET	HINGES	CLOSER	GASKET	THRESH' LD	BOTTOM	KICK PLATE	MISC.	FLUSH BOLT	COMMENTS
1	ENTRY SECURE	L4-ES-CR	H1	C1	WS1	T1	DB		LG		CR SPEC IN DIV 16
2	PRIVACY	L2	H1	C2							
3	STOREROOM	L3	H1	C1	12S88			12X34			
4	PAIR STORERM	L4	H2	C1	WS1	T2	DB	12X34	LG	YES	
5	PANIC SECURE	L5-ES-CR	H1	C1	S88	T1	DB	12X34	LG		CR SPEC IN DIV 16
6	PAIR STOREROOM-PANIC	L9-ES-CR	H2-PT	C1	S88	T1	DB	12X34	LG, AS COR		CR SPEC IN DIV 16, PT ONE SIDE
7	COILING DOOR	L6	FACT	NO	FACT						
8	PASSAGE SET	L8	H1	C1	S88	T1		12X34			
H1	FLOOR HATCH-SINGLE	SL	SS-HO	C3	EPDM						SEE SPECS
H2	FLOOR HATCH DOUBLE	SL	SS-HO	C3-EA LEAF	EPDM						SEE SPECS
H3	FLOOR CURB HATCH SINGLE	SL	SS-HO	C3	EPDM						SEE SPECS

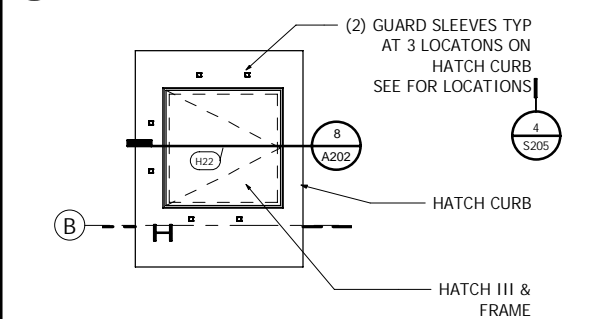
DOOR SCHEDULE											
MARK	DOOR				FRAME		HARDWARE GROUP	FIRE RATING	COMMENTS		
	WIDTH	HEIGHT	THICKNESS	TYPE	MAT.	TYPE			MAT.		
101A	3'-0"	7'-0"	1 3/4"	F	HM	B	HM	1			SEE DETAIL 1
101B	3'-0"	7'-0"	1 3/4"	HG	HM	B	HM	3			SEE DETAIL 1
102	3'-0"	7'-0"	1 3/4"	F	HM	B	HM	2			
103A	3'-0"	7'-0"	1 3/4"	FIG	HM	A	HM	3	90		FIG-FIRE GLASS MAX 144 SQ IN
103B	3'-0"	7'-0"	1 3/4"	FIG	HM	B	HM	3	90		FIG+ FIRE GLASS MAX 144 SQ IN
103C	8'-0"	8'-0"	1"	C	ST	F	ST	7			
104A	3'-0"	7'-0"	1 3/4"	F	HM	B	HM	5			
104B	10'-0"	10'-0"	1"	C	ST	F	ST	7			
105A	3'-0"	7'-0"	1 3/4"	F	HM	B	HM	5			
105B	10'-0"	10'-0"	1"	C	ST	F	ST	7			
106	3'-0"	7'-0"	1 3/4"	F	HM	B	HM	5			
107	10'-0"	8'-0"	1"	C	ST	F	ST	7			
108	3'-0"	7'-0"	1 3/4"	F	HM	B	HM	5			
109	(2) 3'-6"	8'-4"	1 3/4"	F	HM	C	HM	6			VERT ROD PANIC (1) SIDE ELECT PANIC KIT WITH CR
201	3'-0"	7'-0"	1 3/4"	F	HM	B	HM	5			



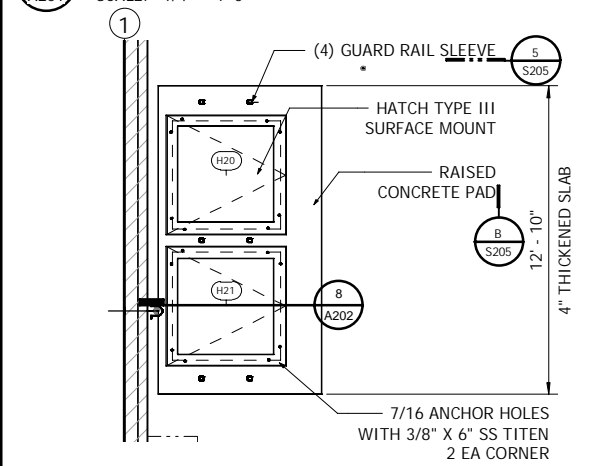
5 HATCH TYPE I SINGLED DRAINING
SCALE: 1/4" = 1'-0"



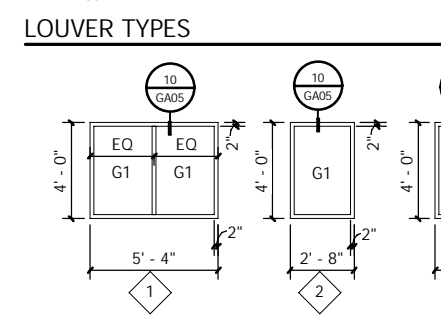
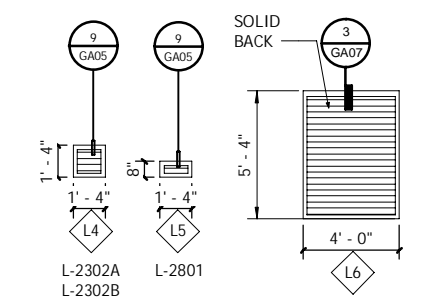
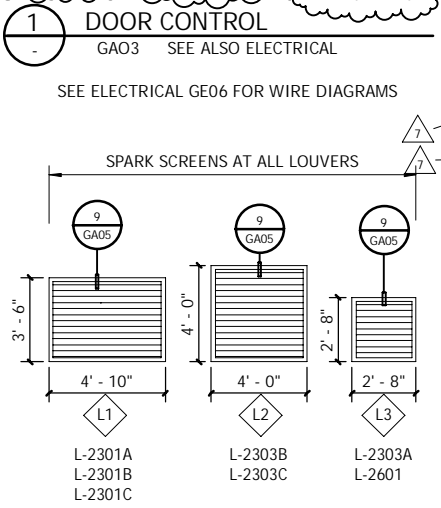
4 HATCH TYPE II PLAN
SCALE: 1/4" = 1'-0"



3 SINGLE TYPE III HATCH-CURB
SCALE: 1/4" = 1'-0"



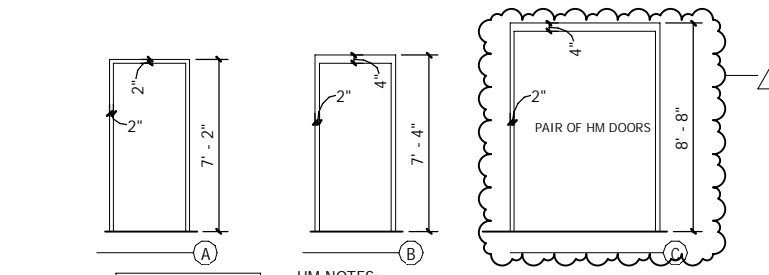
2 PAIR OF TYPE III HATCHES-CURB
SCALE: 1/4" = 1'-0"



GLAZING TYPES:
G1 - 1" LOW-E, INSULATED GLAZING (2 PANES), 1/4" FLOAT GLASS, OPTIGRAY+SOLARBAN 60 : SHGC : .35 U VALUE: .29 VLT : 50 (*)
G2 - 1" LOW-E, INSULATED GLAZING (2 PANES), 1/4" LAMINATED GLASS, OPTIGRAY+ SOLARBAN 60 : SHGC .35, UVALUE .29 VLT : 50 (*)
FRAME TYPE:
2"x4-1/2" ALUMINUM FRAMING SYSTEM, FRONT GLAZED, THERMALLY-BROKEN. COLOR: DARK BRONZE ANODIZED

(*) GLASS PRODUCT TESTING: OBTAIN GLASS TEST RESULTS FOR PRODUCT TEST REPORTS IN SUBMITTALS ARTICLE FROM A QUALIFIED INDEPENDENT TESTING AGENCY ACCREDITED ACCORDING TO THE NFRC 100 AND 200 CERTIFICATION AGENCY PROGRAM. PRODUCT SHALL BE LABELED AND CERTIFIED BY THE MANUFACTURER

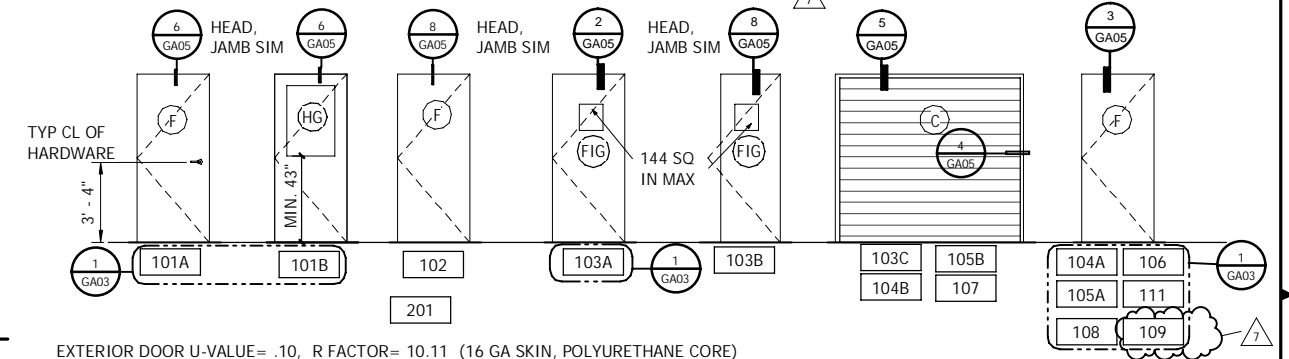
WINDOW TYPES



HM NOTES:
1. THREE (3) JAMB ANCHORS EA. SIDE
2. GROUT FRAME SOLID at CMU & CONCRETE WALLS



FRAME TYPES



EXTERIOR DOOR U-VALUE= .10, R FACTOR= 10.11 (16 GA SKIN, POLYURETHANE CORE)
DOOR U VALUES SHALL BE DETERMINED IN ACCORDANCE WITH NFRC 100 BY AN ACCREDITED INDEPENDENT LABORATORY AND LABELED AND CERTIFIED BY THE MANUFACTURER.

DOOR HARDWARE: ALL MAN-DOOR CLOSERS SHALL BE ADJUSTED TO MAX. 5LB MAX OPENING FORCE PER ANSI A117.1 (CHPTR 404)
DOOR DOOR TYPE LEGEND

FLOOR HATCH SCHEDULE											
MARK	HATCH		FRAME		HARDWARE GROUP	COMMENTS					
	Net W	Net L	Thick	MAT.		TYPE	MAT.				
H6	3'-0"	2'-8"	1/4"	AL	I	I	AL	H1	(1) SELF DRAINING, SINGLE DOOR, 1/4" ALUM DIAMOND COVER PLT H20 RATED LID		
H7	6'-2"	4'-7"	1/4"	AL	II	II	AL	H2	(2) SELF DRAINING, DOUBLE DOOR, 1/4" DIAMOND PLT COVER-NON H20 RATED LID		
H8	6'-2"	4'-7"	1/4"	AL	II	II	AL	H2	(2)		
H20	4'-6"	4'-6"	1/4"	AL	III	III	AL	H3	(3) CURB MOUNT, SINGLE DOOR SEALED, 1/4" ALUM DIA COVER PLT NON RATED LID		
H21	4'-6"	4'-6"	1/4"	AL	III	III	AL	H3	(3)		
H22	4'-6"	4'-6"	1/4"	AL	III	III	AL	H3	(3)		
H23	4'-6"	4'-6"	1/4"	AL	III	III	AL	H3	(3)		

REVISION	DESCRIPTION	BY	APP	DATE
7	ADDENDUM 7			8/24/2018

WORK ORDER NO.	-
DESIGNED	JMW
DRAWN	JLK
DATE	06/15/2018
CHECKED	CHJ
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)

MT. ROSE WATER TREATMENT PLANT
DOOR, HATCH, WINDOW, LOUVER & HARDWARE SCHEDULES & DETAILS

JAMES M. WALLI
REGISTERED ARCHITECT
2635
8/24/18
STATE OF NEVADA

SHEET NUMBER
GA03
78 OF 295