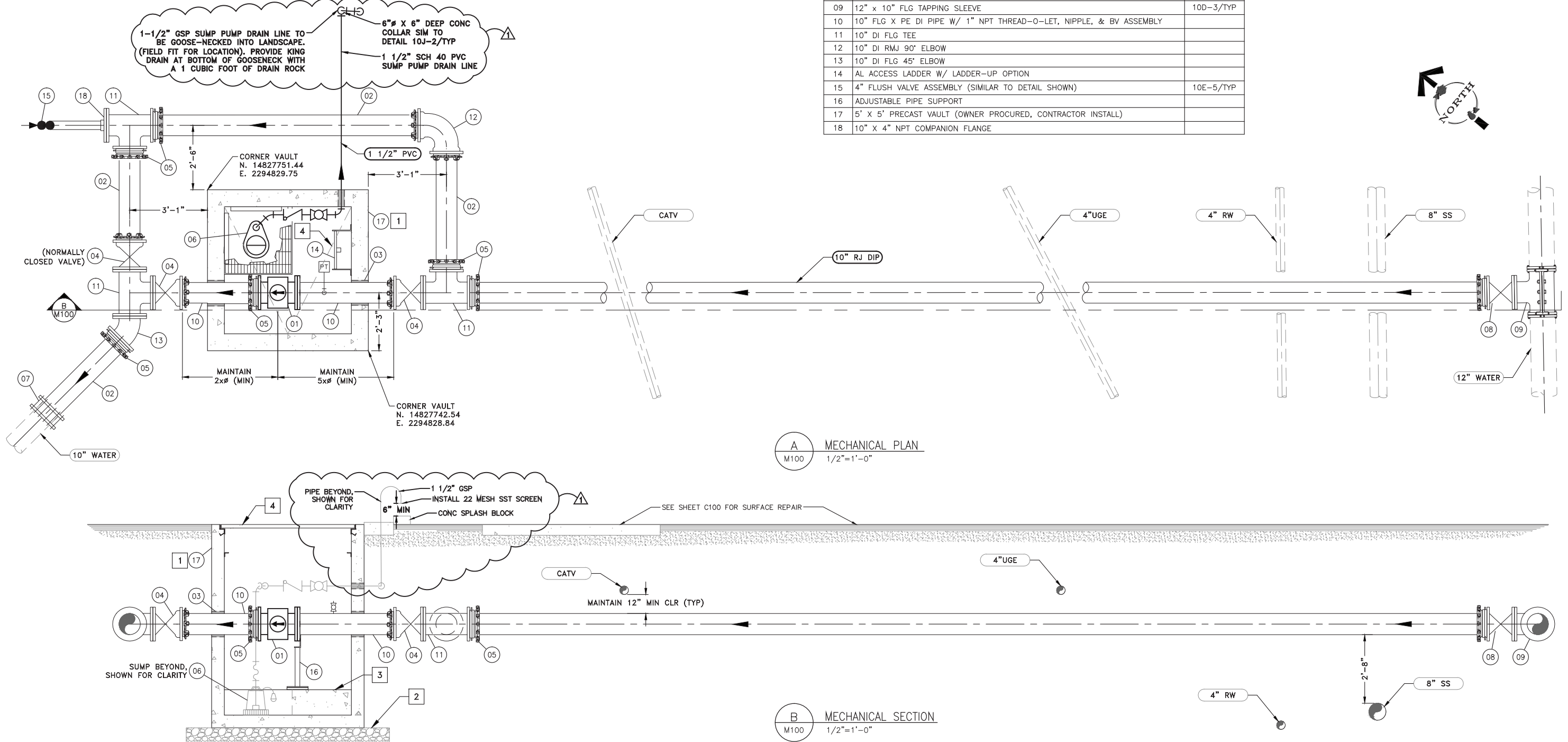


MECHANICAL SHEET NOTES:

1. PROVIDE SPRAY FOAM INSULATION ON CEILING, ACCESS HATCH, & WALLS 2' BELOW SURFACE.
2. PROVIDE 12" LAYER OF AB COMPACTED TO 90%, EXTEND 12" BEYOND VAULT WALLS.
3. FORM 24" SQ. SUMP WITH 12" THICK CONCRETE, FINISH SURFACE WITH GROUT & SLOPE VAULT FLOOR BACK TO SUMP.
4. DRAIN VAULT LIDS TO SUMP PUMP. IF DRY WELL, DRAIN VAULT LIDS TO DAYLIGHT (SEE SITE PLAN) PROVIDE CONCRETE COLLAR FOR VAULT ACCESS HATCHES AS REQUIRED.
5. ALL NON-BURIED DIP & DIP FITTINGS SHALL BE FACTORY COATED WITH RED PRIMER, CONTRACTOR TO PROVIDE FINISH COATINGS PER SPECIFICATIONS.
6. SEE ELECTRICAL SHEETS FOR CONTROLS AND INSTRUMENTATION.

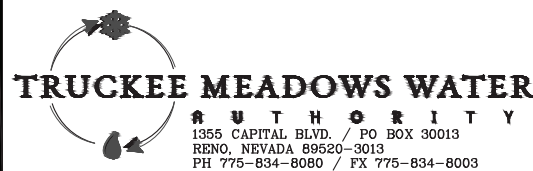
DOUBLE R METER EQUIPMENT/MATERIAL LIST		
TAG	DESCRIPTION	DETAIL
01	10" FLG MAG-METER, SPARLING MODEL: TIGERMAG FM656 OR APPROVED EQUAL	
02	10" PE DIP (FIELD CUT TO FIT)	
03	PIPE PENETRATION	M302/TYP
04	10" FLG x MJ RESILIENT WEDGE GV	
05	10" RFA	
06	0.5 HP SUMP PUMP	M601/TYP
07	10" FC	
08	10" FLG RESILIENT WEDGE GV	10D-3/TYP
09	12" x 10" FLG TAPPING SLEEVE	10D-3/TYP
10	10" FLG X PE DI PIPE W/ 1" NPT THREAD-O-LET, NIPPLE, & BV ASSEMBLY	
11	10" DI FLG TEE	
12	10" DI RMJ 90° ELBOW	
13	10" DI FLG 45° ELBOW	
14	AL ACCESS LADDER W/ LADDER-UP OPTION	
15	4" FLUSH VALVE ASSEMBLY (SIMILAR TO DETAIL SHOWN)	10E-5/TYP
16	ADJUSTABLE PIPE SUPPORT	
17	5' X 5' PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
18	10" X 4" NPT COMPANION FLANGE	



V:\2015\Active\20150803\79\Drawings\Mechanical\M100.mxd 8/26/15

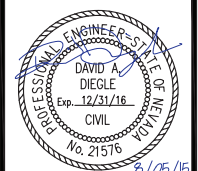
REVISION	DESCRIPTION	BY	APP	DATE
1	ADDENDUM #2	DAD	DAD	8/26/15

WORK ORDER NO.	10-0002
DESIGNED	JPB/DAD
DRAWN	LHP
DATE	AUGUST 2015
CHECKED	RCK
SUBMITTED	
RECOMMENDED	
APPROVED	

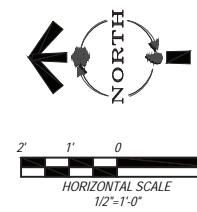


NOT REPRODUCIBLE
PROPERTY OF
TRUCKEE MEADOWS WATER
AUTHORITY, RETURN UPON
COMPLETION OF PROJECT
(Per Homeland Security Act)

TMWA ARROWCREEK DROUGHT RESPONSE DESIGN PROJECT
DOUBLE R BPS MECHANICAL PLAN & SECTIONS



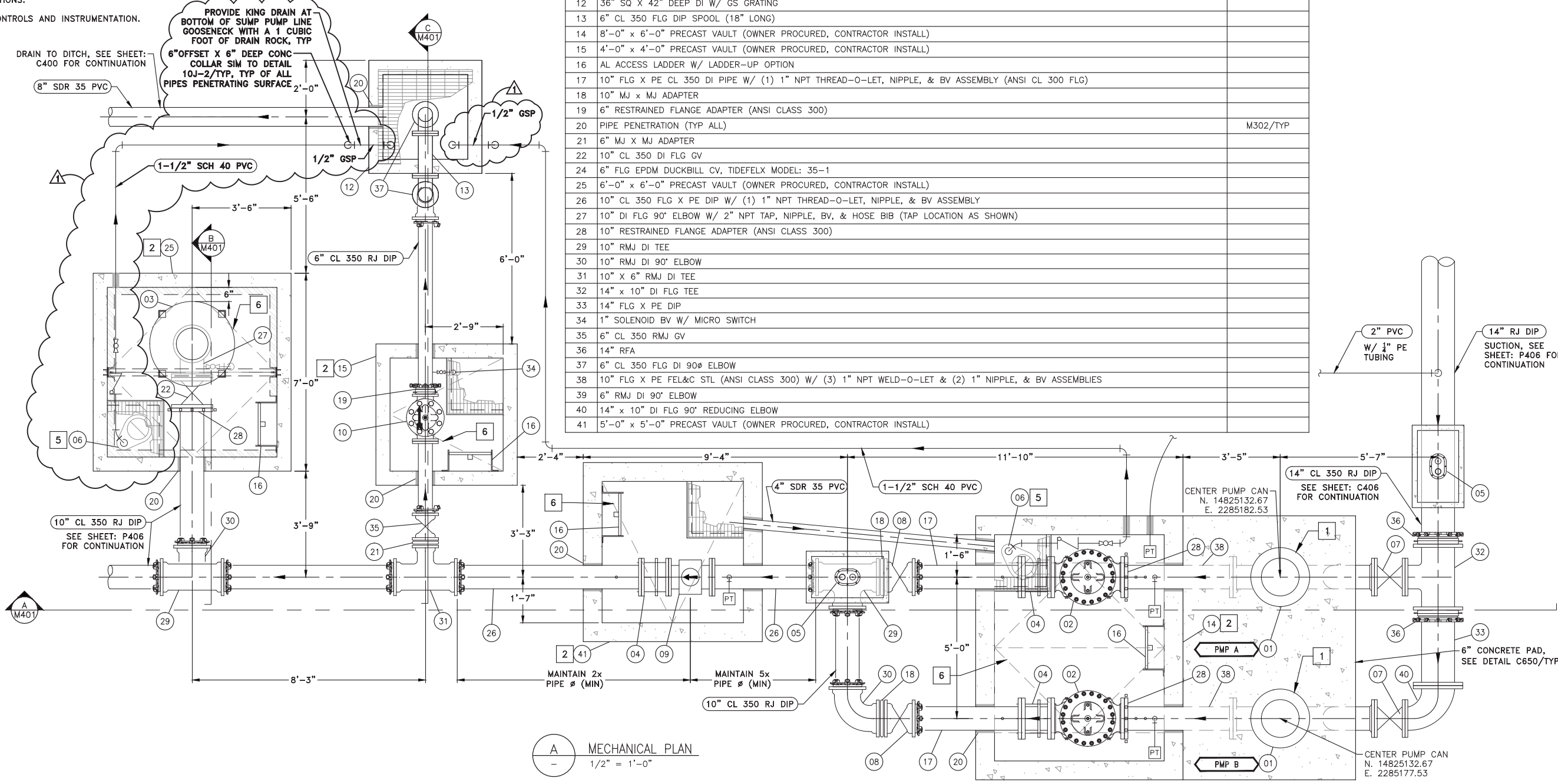
SHEET NUMBER
M100
40 OF 90



MECHANICAL SHEET NOTES:

1. PROVIDE CONTROL DENSITY FILL SURROUNDING PUMP CAN ASSEMBLY & 12" BELOW FLANGES, SEE SPECIFICATIONS. BACKFILL REMAINING VOID TO SURFACE OR CONCRETE PAD WITH AB COMPACTED TO 95%.
2. PROVIDE SPRAY FOAM INSULATION ON CEILING, ACCESS HATCH, & WALLS 2' BELOW SURFACE.
3. PROVIDE 24" SQ. SAWCUT HOLE (DRY SUMP). PROVIDE & INSTALL GS GRATING & NECESSARY FRAMEWORK. 18" LAYER OF DRAIN ROCK WRAPPED IN FILTER FABRIC BENEATH VAULT, EXTEND 12" BEYOND VAULT WALLS (TYP).
4. PROVIDE 12" LAYER OF AB COMPACTED TO 90%, EXTEND 12" BEYOND VAULT WALLS.
5. FORM 24" SQ. SUMP WITH 12" THICK CONCRETE, FINISH SURFACE WITH GROUT & SLOPE VAULT FLOOR BACK TO SUMP.
6. DRAIN VAULT LIDS TO SUMP PUMP. IF DRY WELL, DRAIN VAULT LIDS TO DAYLIGHT (SEE SITE PLAN) PROVIDE CONCRETE COLLAR FOR VAULT ACCESS HATCHES AS REQUIRED.
7. ALL NON-BURIED DIP & DIP FITTINGS SHALL BE FACTORY COATED WITH RED PRIMER, CONTRACTOR TO PROVIDE FINISH COATINGS PER SPECIFICATIONS.
8. SEE ELECTRICAL SHEETS FOR CONTROLS AND INSTRUMENTATION.

ZOLEZZI BPS EQUIPMENT/MATERIAL LIST		
TAG	DESCRIPTION	DETAIL
01	150 HP SUBMERSIBLE TURBINE PUMP, 900 GPM @ 460' TDH, INSTALLED IN FEL&C STL PITLESS ADAPTER W/ 10" FLG CONNECTIONS (AWWA CLASS 150 SUCTION/ANSI CLASS 300 DISCHARGE)	
02	10" FLG BOOSTER PUMP CONTROL VALVE, CLA-VAL MODEL: 60-11 (ANSI CLASS 300 FLANGES), DRAIN VALVE TO SUMP	
03	250 GALLON BLADDER SURGE TANK W/ 10" FLG CONNECTION	
04	10" DISMANTLING JOINT (ANSI CLASS 300 FLANGES)	
05	1" CAV ASSEMBLY	10L-4/TYP
06	0.5 HP SUMP PUMP	M601/TYP
07	10" FLG RESILIENT WEDGE GV	
08	10" CL 350 RMJ GV	
09	10" ANSI CL 300 FLG MAG-METER	
10	6" PRV/PRESSURE RELIEF VALVE, CLA-VAL MODEL: 50-01 (ANSI CLASS 300)	
11	ADJUSTABLE PIPE SUPPORT	M412/TYP
12	36" SQ X 42" DEEP DI W/ GS GRATING	
13	6" CL 350 FLG DIP SPOOL (18" LONG)	
14	8'-0" x 6'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
15	4'-0" x 4'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
16	AL ACCESS LADDER W/ LADDER-UP OPTION	
17	10" FLG X PE CL 350 DI PIPE W/ (1) 1" NPT THREAD-O-LET, NIPPLE, & BV ASSEMBLY (ANSI CL 300 FLG)	
18	10" MJ X MJ ADAPTER	
19	6" RESTRAINED FLANGE ADAPTER (ANSI CLASS 300)	
20	PIPE PENETRATION (TYP ALL)	M302/TYP
21	6" MJ X MJ ADAPTER	
22	10" CL 350 DI FLG GV	
24	6" FLG EPDM DUCKBILL CV, TIDEFELX MODEL: 35-1	
25	6'-0" x 6'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
26	10" CL 350 FLG X PE DIP W/ (1) 1" NPT THREAD-O-LET, NIPPLE, & BV ASSEMBLY	
27	10" DI FLG 90° ELBOW W/ 2" NPT TAP, NIPPLE, BV, & HOSE BIB (TAP LOCATION AS SHOWN)	
28	10" RESTRAINED FLANGE ADAPTER (ANSI CLASS 300)	
29	10" RMJ DI TEE	
30	10" RMJ DI 90° ELBOW	
31	10" X 6" RMJ DI TEE	
32	14" x 10" DI FLG TEE	
33	14" FLG X PE DIP	
34	1" SOLENOID BV W/ MICRO SWITCH	
35	6" CL 350 RMJ GV	
36	14" RFA	
37	6" CL 350 FLG DI 90° ELBOW	
38	10" FLG X PE FEL&C STL (ANSI CLASS 300) W/ (3) 1" NPT WELD-O-LET & (2) 1" NIPPLE, & BV ASSEMBLIES	
39	6" RMJ DI 90° ELBOW	
40	14" x 10" DI FLG 90° REDUCING ELBOW	
41	5'-0" x 5'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	



A MECHANICAL PLAN
1/2" = 1'-0"

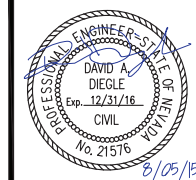
REVISION	DESCRIPTION	BY	APP	DATE
▲	ADDENDUM #2	DAD	DAD	8/26/15

WORK ORDER NO.	10-0002
DESIGNED	JPB/DAD
DRAWN	AAA
DATE	AUGUST 2015
CHECKED	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

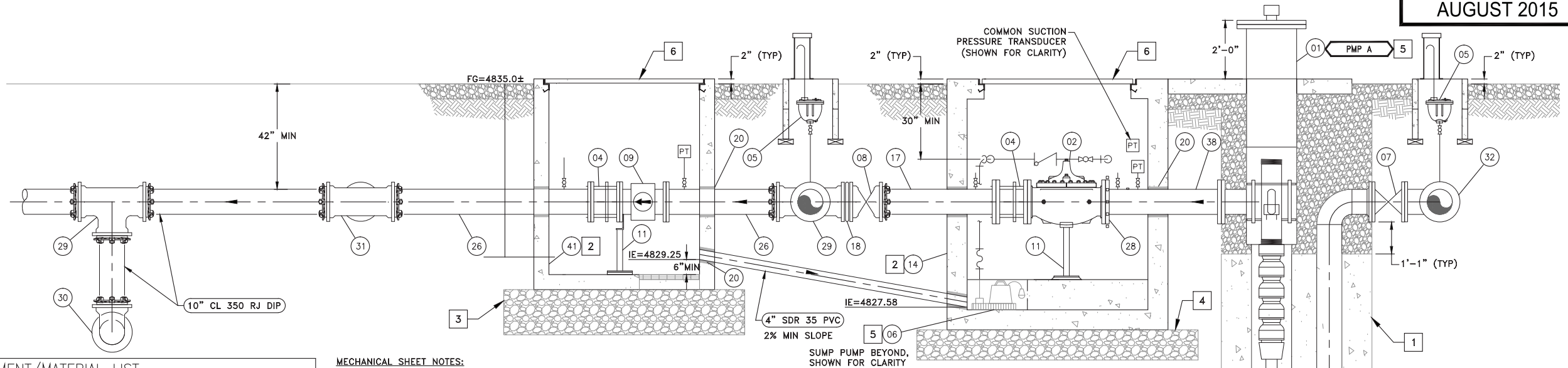
NOT REPRODUCIBLE
PROPERTY OF TRUCKEE MEADOWS WATER AUTHORITY, RETURN UPON COMPLETION OF PROJECT
(Per Homeland Security Act)

TMWA ARROWCREEK DROUGHT RESPONSE DESIGN PROJECT
NEW ZOLEZZI LANE BPS MECHANICAL PLAN



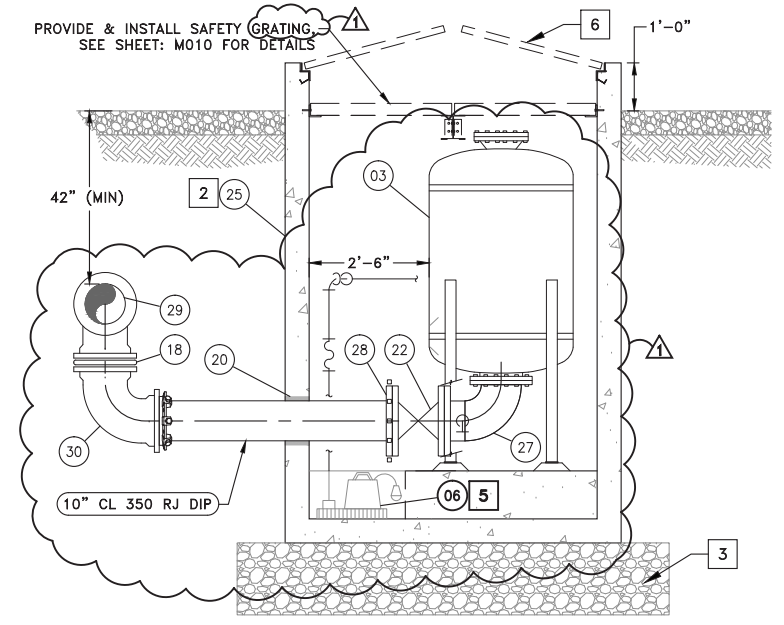
SHEET NUMBER
M400
41 OF 90

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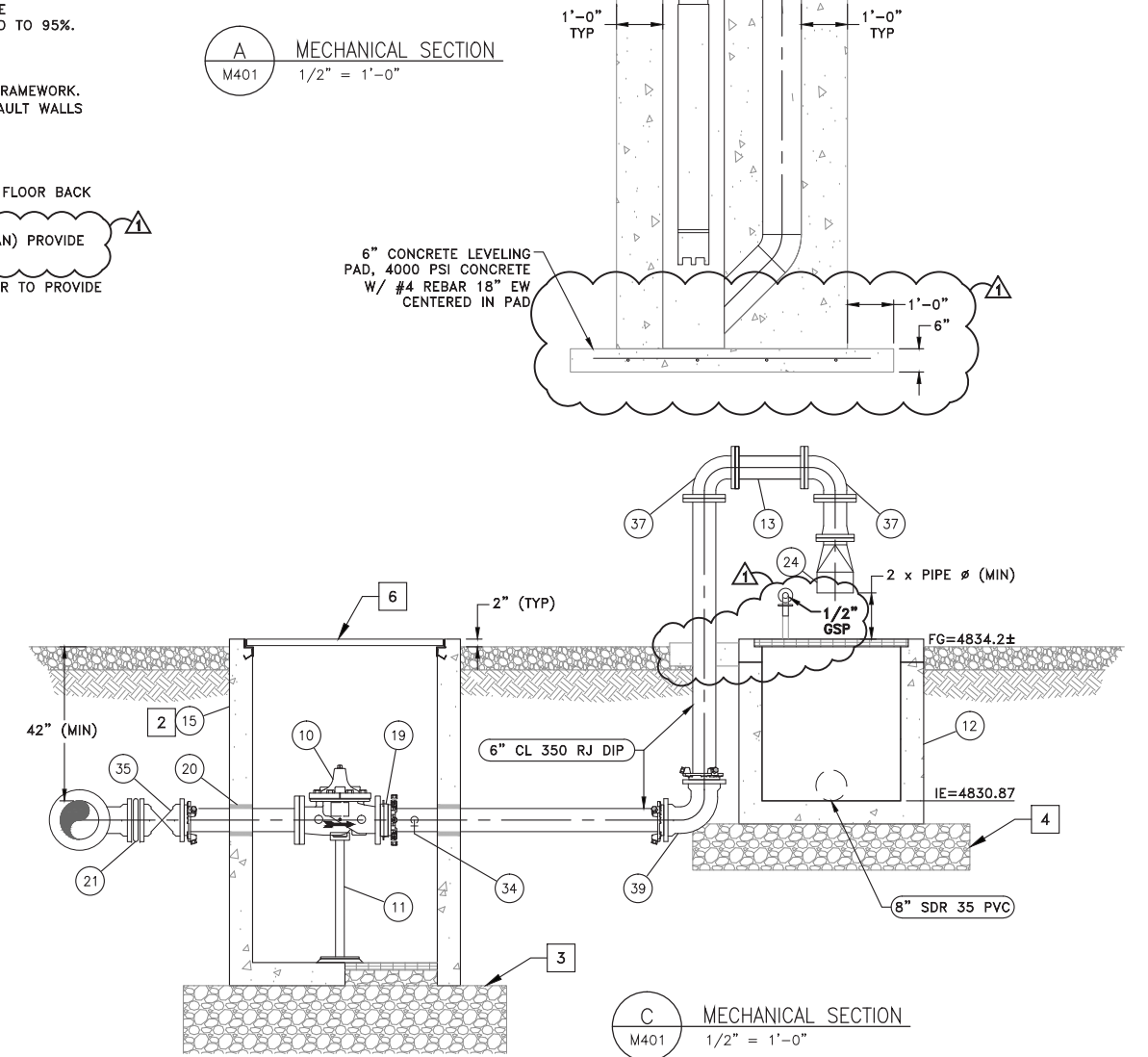


A MECHANICAL SECTION
M401 1/2" = 1'-0"

- MECHANICAL SHEET NOTES:**
1. PROVIDE CONTROL DENSITY FILL SURROUNDING PUMP CAN ASSEMBLY & 12" BELOW FLANGES, SEE SPECIFICATIONS. BACKFILL REMAINING VOID TO SURFACE OR CONCRETE PAD WITH AB COMPACTED TO 95%.
 2. PROVIDE SPRAY FOAM INSULATION ON CEILING, ACCESS HATCH, & WALLS 2' BELOW SURFACE.
 3. PROVIDE 24" SQ. SAWCUT HOLE (DRY SUMP). PROVIDE & INSTALL GS GRATING & NECESSARY FRAMEWORK. 18" LAYER OF DRAIN ROCK WRAPPED IN FILTER FABRIC BENEATH VAULT, EXTEND 12" BEYOND VAULT WALLS (TYP).
 4. PROVIDE 12" LAYER OF AB COMPACTED TO 90%, EXTEND 12" BEYOND VAULT WALLS.
 5. FORM 24" SQ. SUMP WITH 12" THICK CONCRETE, FINISH SURFACE WITH GROUT & SLOPE VAULT FLOOR BACK TO SUMP.
 6. DRAIN VAULT LIDS TO SUMP PUMP. IF DRY WELL, DRAIN VAULT LIDS TO DAYLIGHT (SEE SITE PLAN) PROVIDE CONCRETE COLLAR FOR VAULT ACCESS HATCHES AS REQUIRED.
 7. ALL NON-BURIED DIP & DIP FITTINGS SHALL BE FACTORY COATED WITH RED PRIMER, CONTRACTOR TO PROVIDE FINISH COATINGS PER SPECIFICATIONS.
 8. SEE ELECTRICAL SHEETS FOR CONTROLS AND INSTRUMENTATION.



B MECHANICAL SECTION
M401 1/2" = 1'-0"



C MECHANICAL SECTION
M401 1/2" = 1'-0"

ZOLEZZI BPS EQUIPMENT/MATERIAL LIST		
TAG	DESCRIPTION	DETAIL
01	150 HP SUBMERSIBLE TURBINE PUMP, 900 GPM @ 460' TDH, INSTALLED IN FEL&C STL PITLESS ADAPTER W/ 10" FLG CONNECTIONS (AWWA CLASS 150 SUCTION/ANSI CLASS 300 DISCHARGE)	
02	10" FLG BOOSTER PUMP CONTROL VALVE, CLA-VAL MODEL: 60-11 (ANSI CLASS 300 FLANGES), DRAIN VALVE TO SUMP	
03	250 GALLON BLADDER SURGE TANK W/ 10" FLG CONNECTION	
04	10" DISMANTLING JOINT (ANSI CLASS 300 FLANGES)	
05	1" CAV ASSEMBLY	10L-4/TYP
06	0.5 HP SUMP PUMP	M601/TYP
07	10" FLG RESILIENT WEDGE GV	
08	10" CL 350 RMJ GV	
09	10" ANSI CL 300 FLG MAG-METER	
10	6" PRV/PRESSURE RELIEF VALVE, CLA-VAL MODEL: 50-01 (ANSI CLASS 300)	
11	ADJUSTABLE PIPE SUPPORT	M412/TYP
12	36" SQ X 42" DEEP DI W/ GS GRATING	
13	6" CL 350 FLG DIP SPOOL (18" LONG)	
14	8'-0" x 6'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
15	4'-0" x 4'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
16	AL ACCESS LADDER W/ LADDER-UP OPTION	
17	10" FLG X PE CL 350 DI PIPE W/ (1) 1" NPT THREAD-O-LET, NIPPLE, & BV ASSEMBLY (ANSI CL 300 FLG)	
18	10" MJ X MJ ADAPTER	
19	6" RESTRAINED FLANGE ADAPTER (ANSI CLASS 300)	
20	PIPE PENETRATION (TYP ALL)	M302/TYP
21	6" MJ X MJ ADAPTER	
22	10" CL 350 DI FLG GV	
24	6" FLG EPDM DUCKBILL CV, TIDEFELX MODEL: 35-1	
25	6'-0" x 6'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
26	10" CL 350 FLG X PE DIP W/ (1) 1" NPT THREAD-O-LET, NIPPLE, & BV ASSEMBLY	
27	10" DI FLG 90° ELBOW W/ 2" NPT TAP, NIPPLE, BV, & HOSE BIB (TAP LOCATION AS SHOWN)	
28	10" RESTRAINED FLANGE ADAPTER (ANSI CLASS 300)	
29	10" RMJ DI TEE	
30	10" RMJ DI 90° ELBOW	
31	10" X 6" RMJ DI TEE	
32	14" x 10" DI FLG TEE	
33	14" FLG X PE DIP	
34	1" SOLENOID BV W/ MICRO SWITCH	
35	6" CL 350 RMJ GV	
36	14" RFA	
37	6" CL 350 FLG DI 90° ELBOW	
38	10" FLG X PE FEL&C STL (ANSI CLASS 300) W/ (3) 1" NPT WELD-O-LET & (2) 1" NIPPLE, & BV ASSEMBLIES	
39	6" RMJ DI 90° ELBOW	
40	14" x 10" DI FLG 90° REDUCING ELBOW	
41	5'-0" x 5'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	

REVISION	DESCRIPTION	BY	APP	DATE
ADDENDUM #2		DAD	DAD	8/26/15

WORK ORDER NO.	10-0002
DESIGNED	JPB/DAD
DRAWN	AAA
DATE	AUGUST 2015
CHECKED	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

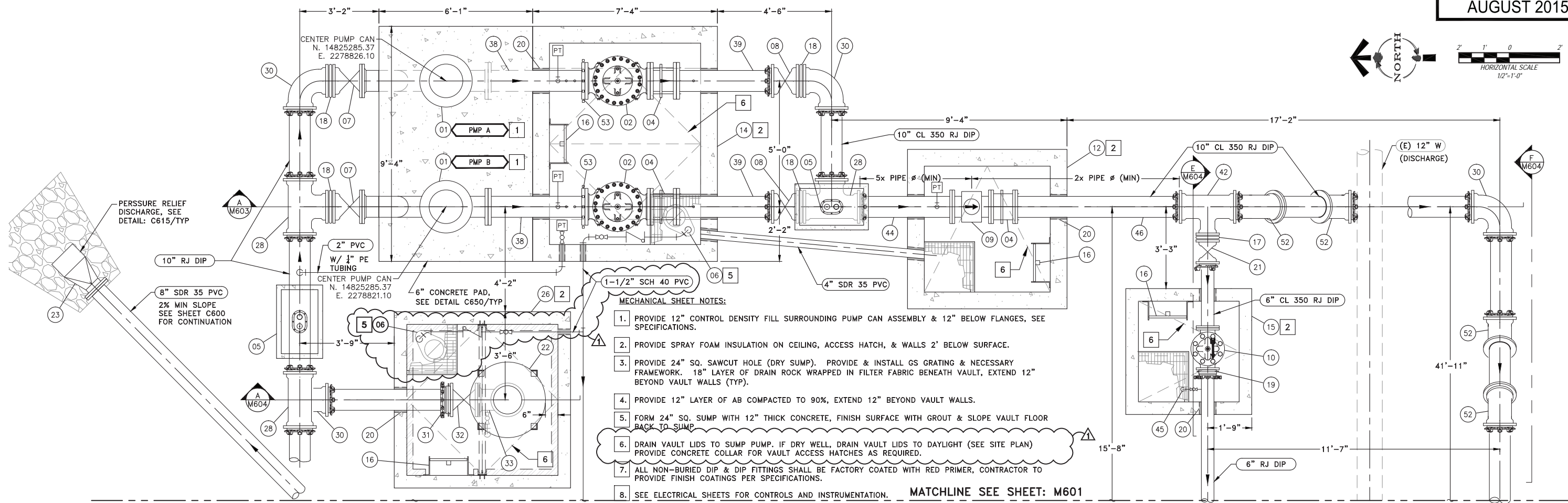
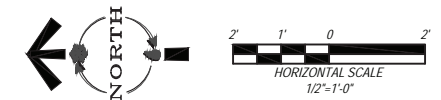
NOT REPRODUCIBLE
 PROPERTY OF TRUCKEE MEADOWS WATER AUTHORITY, RETURN UPON COMPLETION OF PROJECT
 (Per Homeland Security Act)

TMWA ARROWCREEK DROUGHT RESPONSE DESIGN PROJECT
NEW ZOLEZZI LANE BPS MECHANICAL SECTIONS

PROFESSIONAL ENGINEER - STATE OF NEVADA
 DAVID A. DIEGLE
 Exp. 12/31/16
 CIVIL
 No. 21576
 8/05/15

SHEET NUMBER
M401
 42 OF 90

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 TMWA_Map5mon.ctb



- MECHANICAL SHEET NOTES:**
1. PROVIDE 12" CONTROL DENSITY FILL SURROUNDING PUMP CAN ASSEMBLY & 12" BELOW FLANGES, SEE SPECIFICATIONS.
 2. PROVIDE SPRAY FOAM INSULATION ON CEILING, ACCESS HATCH, & WALLS 2' BELOW SURFACE.
 3. PROVIDE 24" SQ. SAWCUT HOLE (DRY SUMP). PROVIDE & INSTALL GS GRATING & NECESSARY FRAMEWORK. 18" LAYER OF DRAIN ROCK WRAPPED IN FILTER FABRIC BENEATH VAULT, EXTEND 12" BEYOND VAULT WALLS (TYP).
 4. PROVIDE 12" LAYER OF AB COMPACTED TO 90%, EXTEND 12" BEYOND VAULT WALLS.
 5. FORM 24" SQ. SUMP WITH 12" THICK CONCRETE, FINISH SURFACE WITH GROUT & SLOPE VAULT FLOOR BACK TO SUMP.
 6. DRAIN VAULT LIDS TO SUMP PUMP. IF DRY WELL, DRAIN VAULT LIDS TO DAYLIGHT (SEE SITE PLAN) PROVIDE CONCRETE COLLAR FOR VAULT ACCESS HATCHES AS REQUIRED.
 7. ALL NON-BURIED DIP & DIP FITTINGS SHALL BE FACTORY COATED WITH RED PRIMER, CONTRACTOR TO PROVIDE FINISH COATINGS PER SPECIFICATIONS.
 8. SEE ELECTRICAL SHEETS FOR CONTROLS AND INSTRUMENTATION. **MATCHLINE SEE SHEET: M601**

EQUIPMENT NOTES ARROWCREEK BPS

TAG	DESCRIPTION	DETAIL
01	100 HP SUBMERSIBLE TURBINE PUMP, 750 GPM @ 385' TDH, INSTALLED IN FEL&C STL PITLESS ADAPTER W/ 10" FLG CONNECTIONS	
02	10" FLG BOOSTER PUMP CONTROL VALVE, CLA-VAL MODEL: 60-11 (ANSI CLASS 300 FLANGES), DRAIN VALVE TO SUMP	
03	THRUST BLOCK	10L-2/TYP
04	10" DISMANTLING JOINT (ANSI CLASS 300 FLANGES)	
05	1" CAV ASSEMBLY	10L-4/TYP
06	0.5 HP SUMP PUMP	M601/TYP
07	10" FLG x MJ RESILIENT WEDGE GV	
08	10" RMJ CL 350 RESILIENT WEDGE GV	
09	10" ANSI CL 300 FLG MAG-METER	
10	6" PRV/PRESSURE RELIEF VALVE, CLA-VAL MODEL: 50-01 (ANSI CLASS 300)	
11	10" FLG TAPPING SLEEVE	10D-2
12	5'-0" x 5'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
13	48" SQ X 42" DEEP PRECAST CONCRETE DROP INLET W/ GS GRATING (OWNER PROCURED, CONTRACTOR INSTALL)	
14	8'-0" x 6'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
15	4'-0" x 4'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
16	AL ACCESS LADDER W/ LADDER-UP OPTION	
17	6" MJ x MJ ADAPTER	
18	10" MJ x MJ ADAPTER	
19	6" RESTRAINED FLANGE ADAPTER (ANSI CLASS 300)	
20	PIPE PENETRATION	M302/TYP
21	6" CL 350 RMJ GV	
22	250 GALLON SURGE TANK W/ 10" FLG CONNECTION	
23	6" FLG EPDM DUCKBILL CV (MATCH DIAMETER TO CONNECTING PIPE SIZE)	
24	12" X 10" FLG TAPPING SLEEVE	10D-2
25	4" PRV/PRESSURE RELIEF VALVE, CLA-VAL MODEL: 50-01	

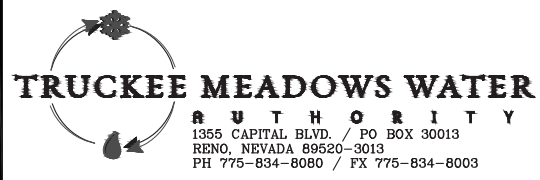
26	6'-0" x 6'-0" PRECAST CONCRETE VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
27	ADJUSTABLE PIPE SUPPORT	M412/TYP
28	10" DI RMJ TEE	
29	10" CL 350 FLG RESILIENT WEDGE GV	
30	10" DI RMJ 90° ELBOW	
31	10" RFA	
32	10" FLG RESILIENT WEDGE GV	
33	10" DI FLG 90° ELBOW W/ 2" NPT TAP, NIPPLE, BV, & HOSE BIB (TAP LOCATION AS SHOWN)	
34	6" DI FLG 90° ELBOW	
35	4" DI FLG 90° ELBOW	
36	6" DI FLG PIPE (12" LONG)	
37	4" DI FLG PIPE (18" LONG)	
38	10" FLG X PE FEL&C STL (ANSI CLASS 300) W/ (3) 1" NPT WELD-O-LET & (2) 1" NIPPLE, & BV ASSEMBLIES	
39	10" FLG X PE CL 350 DI PIPE W/ (1) 1" NPT THREAD-O-LET, NIPPLE, & BV ASSEMBLY (ANSI CL 300 FLG)	
40	4" DI RMJ 90° ELBOW	
41	4" RFA	
42	10" x 6" RMJ DI TEE	
43	6" DI RMJ 90° ELBOW	
44	10" CL 350 FLG X PE DIP W/ (1) 1" NPT THREAD-O-LET, NIPPLE, & BV ASSEMBLY	10L-4/TYP
45	1" SOLENOID BV W/ MICRO SWITCH	
46	10" FLG X PE CL 350 DI PIPE	
47	2" FLG PRV/PRESSURE REGULATING VALVE, CLA-VAL MODEL: 93-01	
48	2" X 1" NPT GS TEE W/ 1" BV & NIPPLE	
49	4" X 2" COMPANION FLANGE	
50	2" X 2" NPT COMPANION FLANGE	
51	2" NPT COUPLING	
52	10" DI FLG 45° ELBOW	
53	10" RESTRAINED FLANGE ADAPTER (ANSI CLASS 300)	

A MECHANICAL PLAN
M600 1/2" = 1'-0"

V:\2015\Arrowcreek\20150803\39\dwg\m600.mxd (M600) 8/26/15 10:40:00 AM B:\kayla.dillon

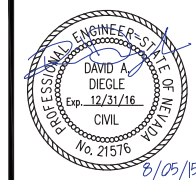
REVISION	DESCRIPTION	BY	APP	DATE
ADDENDUM #2		DAD	DAD	8/26/15

WORK ORDER NO. 10-0002
 DESIGNED JPB/DAD
 DRAWN AAA
 DATE AUGUST 2015
 CHECKED RCK
 SUBMITTED
 RECOMMENDED
 APPROVED

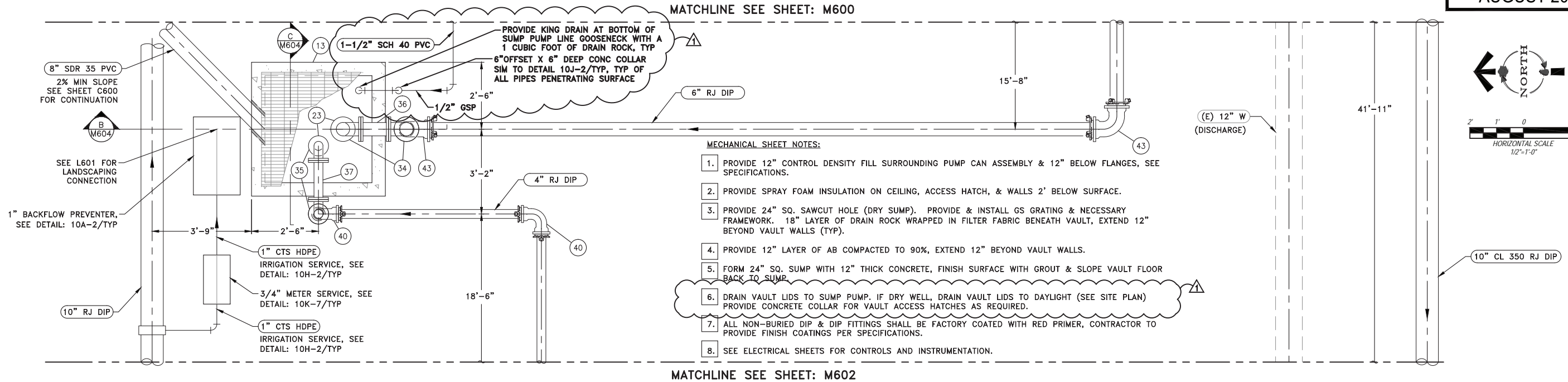


NOT REPRODUCIBLE
 PROPERTY OF TRUCKEE MEADOWS WATER AUTHORITY, RETURN UPON COMPLETION OF PROJECT (Per Homeland Security Act)

TMWA ARROWCREEK DROUGHT RESPONSE DESIGN PROJECT
ARROWCREEK BPS MECHANICAL PLAN 1



SHEET NUMBER
M600
 47 OF 90

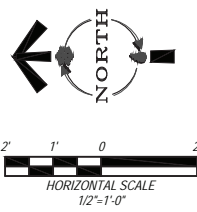


MECHANICAL SHEET NOTES:

1. PROVIDE 12" CONTROL DENSITY FILL SURROUNDING PUMP CAN ASSEMBLY & 12" BELOW FLANGES, SEE SPECIFICATIONS.
2. PROVIDE SPRAY FOAM INSULATION ON CEILING, ACCESS HATCH, & WALLS 2' BELOW SURFACE.
3. PROVIDE 24" SQ. SAWCUT HOLE (DRY SUMP). PROVIDE & INSTALL GS GRATING & NECESSARY FRAMEWORK. 18" LAYER OF DRAIN ROCK WRAPPED IN FILTER FABRIC BENEATH VAULT, EXTEND 12" BEYOND VAULT WALLS (TYP).
4. PROVIDE 12" LAYER OF AB COMPACTED TO 90%, EXTEND 12" BEYOND VAULT WALLS.
5. FORM 24" SQ. SUMP WITH 12" THICK CONCRETE, FINISH SURFACE WITH GROUT & SLOPE VAULT FLOOR BACK TO SUMP.
6. DRAIN VAULT LIDS TO SUMP PUMP. IF DRY WELL, DRAIN VAULT LIDS TO DAYLIGHT (SEE SITE PLAN) PROVIDE CONCRETE COLLAR FOR VAULT ACCESS HATCHES AS REQUIRED.
7. ALL NON-BURIED DIP & DIP FITTINGS SHALL BE FACTORY COATED WITH RED PRIMER, CONTRACTOR TO PROVIDE FINISH COATINGS PER SPECIFICATIONS.
8. SEE ELECTRICAL SHEETS FOR CONTROLS AND INSTRUMENTATION.

MATCHLINE SEE SHEET: M602

A MECHANICAL PLAN
M601 1/2" = 1'-0"



EQUIPMENT NOTES ARROWCREEK BPS

TAG	DESCRIPTION	DETAIL
01	100 HP SUBMERSIBLE TURBINE PUMP, 750 GPM @ 385' TDH, INSTALLED IN FEL&C STL PITLESS ADAPTER W/ 10" FLG CONNECTIONS	
02	10" FLG BOOSTER PUMP CONTROL VALVE, CLA-VAL MODEL: 60-11 (ANSI CLASS 300 FLANGES), DRAIN VALVE TO SUMP	
03	THRUST BLOCK	10L-2/TYP
04	10" DISMANTLING JOINT (ANSI CLASS 300 FLANGES)	
05	1" CAV ASSEMBLY	10L-4/TYP
06	0.5 HP SUMP PUMP	M601/TYP
07	10" FLG x MJ RESILIENT WEDGE GV	
08	10" RMJ CL 350 RESILIENT WEDGE GV	
09	10" ANSI CL 300 FLG MAG-METER	
10	6" PRV/PRESSURE RELIEF VALVE, CLA-VAL MODEL: 50-01 (ANSI CLASS 300)	
11	10" FLG TAPPING SLEEVE	10D-2
12	5'-0" x 5'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
13	48" SQ X 42" DEEP PRECAST CONCRETE DROP INLET W/ GS GRATING (OWNER PROCURED, CONTRACTOR INSTALL)	
14	8'-0" x 6'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
15	4'-0" x 4'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
16	AL ACCESS LADDER W/ LADDER-UP OPTION	
17	6" MJ x MJ ADAPTER	
18	10" MJ x MJ ADAPTER	
19	6" RESTRAINED FLANGE ADAPTER (ANSI CLASS 300)	
20	PIPE PENETRATION	M302/TYP
21	6" CL 350 RMJ GV	
22	250 GALLON SURGE TANK W/ 10" FLG CONNECTION	
23	6" FLG EPDM DUCKBILL CV (MATCH DIAMETER TO CONNECTING PIPE SIZE)	
24	12" X 10" FLG TAPPING SLEEVE	10D-2
25	4" PRV/PRESSURE RELIEF VALVE, CLA-VAL MODEL: 50-01	

26	6'-0" x 6'-0" PRECAST CONCRETE VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
27	ADJUSTABLE PIPE SUPPORT	M412/TYP
28	10" DI RMJ TEE	
29	10" CL 350 FLG RESILIENT WEDGE GV	
30	10" DI RMJ 90° ELBOW	
31	10" RFA	
32	10" FLG RESILIENT WEDGE GV	
33	10" DI FLG 90° ELBOW W/ 2" NPT TAP, NIPPLE, BV, & HOSE BIB (TAP LOCATION AS SHOWN)	
34	6" DI FLG 90° ELBOW	
35	4" DI FLG 90° ELBOW	
36	6" DI FLG PIPE (12" LONG)	
37	4" DI FLG PIPE (18" LONG)	
38	10" FLG X PE FEL&C STL (ANSI CLASS 300) W/ (3) 1" NPT WELD-O-LET & (2) 1" NIPPLE, & BV ASSEMBLIES	
39	10" FLG X PE CL 350 DI PIPE W/ (1) 1" NPT THREAD-O-LET, NIPPLE, & BV ASSEMBLY (ANSI CL 300 FLG)	
40	4" DI RMJ 90° ELBOW	
41	4" RFA	
42	10" x 6" RMJ DI TEE	
43	6" DI RMJ 90° ELBOW	
44	10" CL 350 FLG X PE DIP W/ (1) 1" NPT THREAD-O-LET, NIPPLE, & BV ASSEMBLY	10L-4/TYP
45	1" SOLENOID BV W/ MICRO SWITCH	
46	10" FLG X PE CL 350 DI PIPE	
47	2" FLG PRV/PRESSURE REGULATING VALVE, CLA-VAL MODEL: 93-01	
48	2" X 1" NPT GS TEE W/ 1" BV & NIPPLE	
49	4" X 2" COMPANION FLANGE	
50	2" X 2" NPT COMPANION FLANGE	
51	2" NPT COUPLING	
52	10" DI FLG 45° ELBOW	
53	10" RESTRAINED FLANGE ADAPTER (ANSI CLASS 300)	

REVISION	DESCRIPTION	BY	APP	DATE
▲	ADDENDUM #2	DAD	DAD	8/26/15

WORK ORDER NO.	10-0002
DESIGNED	JPB/DAD
DRAWN	AAA
DATE	AUGUST 2015
CHECKED	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)

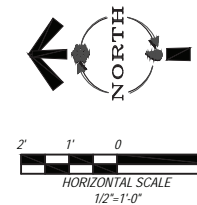
TMWA ARROWCREEK DROUGHT RESPONSE DESIGN PROJECT
ARROWCREEK BPS MECHANICAL PLAN 2

PROFESSIONAL ENGINEER-STATE OF NEVADA
 DAVID A. DIEGLE
 Exp. 12/31/16
 CIVIL
 No. 21576
 8/05/15

SHEET NUMBER
M601
 48 OF 90

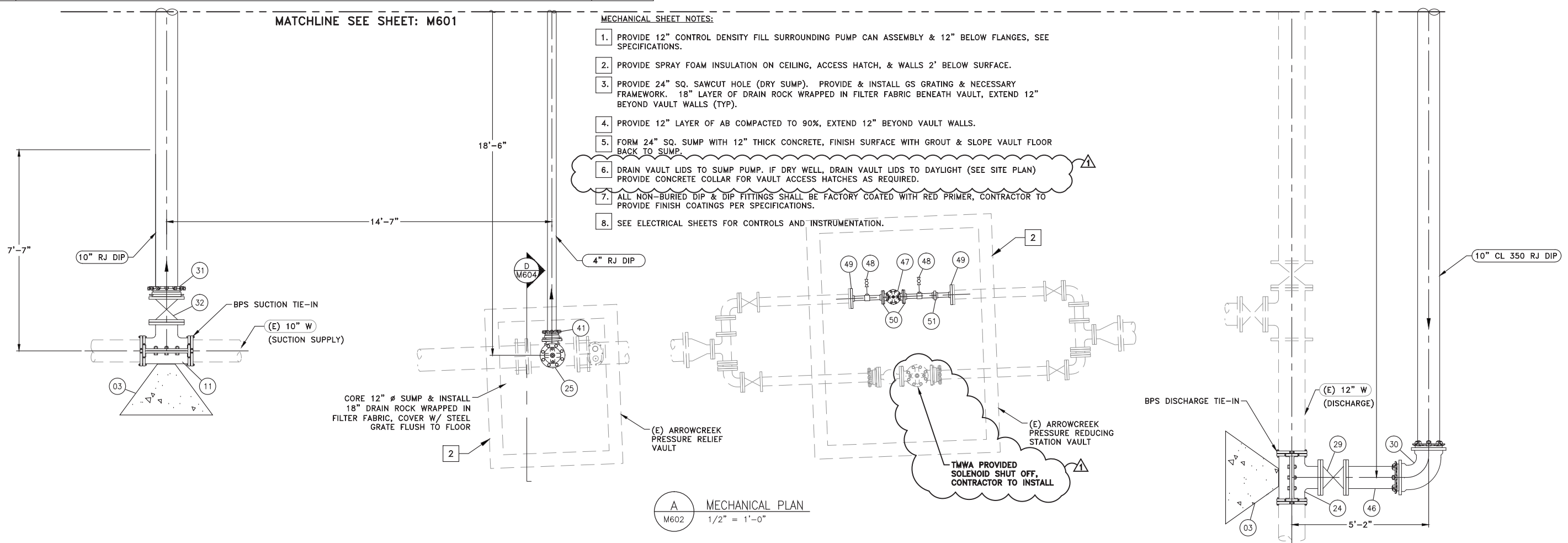
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TMWA_Map5monoc.ctb



EQUIPMENT NOTES ARROWCREEK BPS		
TAG	DESCRIPTION	DETAIL
01	100 HP SUBMERSIBLE TURBINE PUMP, 750 GPM @ 385' TDH, INSTALLED IN FEL&C STL PITLESS ADAPTER W/ 10" FLG CONNECTIONS	
02	10" FLG BOOSTER PUMP CONTROL VALVE, CLA-VAL MODEL: 60-11 (ANSI CLASS 300 FLANGES), DRAIN VALVE TO SUMP	
03	THRUST BLOCK	10L-2/TYP
04	10" DISMANTLING JOINT (ANSI CLASS 300 FLANGES)	
05	1" CAV ASSEMBLY	10L-4/TYP
06	0.5 HP SUMP PUMP	M601/TYP
07	10" FLG x MJ RESILIENT WEDGE GV	
08	10" RMJ CL 350 RESILIENT WEDGE GV	
09	10" ANSI CL 300 FLG MAG-METER	
10	6" PRV/PRESSURE RELIEF VALVE, CLA-VAL MODEL: 50-01 (ANSI CLASS 300)	
11	10" FLG TAPPING SLEEVE	10D-2
12	5'-0" x 5'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
13	48" SQ X 42" DEEP PRECAST CONCRETE DROP INLET W/ GS GRATING (OWNER PROCURED, CONTRACTOR INSTALL)	
14	8'-0" x 6'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
15	4'-0" x 4'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
16	AL ACCESS LADDER W/ LADDER-UP OPTION	
17	6" MJ x MJ ADAPTER	
18	10" MJ x MJ ADAPTER	
19	6" RESTRAINED FLANGE ADAPTER (ANSI CLASS 300)	
20	PIPE PENETRATION	M302/TYP
21	6" CL 350 RMJ GV	
22	250 GALLON SURGE TANK W/ 10" FLG CONNECTION	
23	6" FLG EPDM DUCKBILL CV (MATCH DIAMETER TO CONNECTING PIPE SIZE)	
24	12" X 10" FLG TAPPING SLEEVE	10D-2
25	4" PRV/PRESSURE RELIEF VALVE, CLA-VAL MODEL: 50-01	

26	6'-0" x 6'-0" PRECAST CONCRETE VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
27	ADJUSTABLE PIPE SUPPORT	M412/TYP
28	10" DI RMJ TEE	
29	10" CL 350 FLG RESILIENT WEDGE GV	
30	10" DI RMJ 90° ELBOW	
31	10" RFA	
32	10" FLG RESILIENT WEDGE GV	
33	10" DI FLG 90° ELBOW W/ 2" NPT TAP, NIPPLE, BV, & HOSE BIB (TAP LOCATION AS SHOWN)	
34	6" DI FLG 90° ELBOW	
35	4" DI FLG 90° ELBOW	
36	6" DI FLG PIPE (12" LONG)	
37	4" DI FLG PIPE (18" LONG)	
38	10" FLG X PE FEL&C STL (ANSI CLASS 300) W/ (3) 1" NPT WELD-O-LET & (2) 1" NIPPLE, & BV ASSEMBLIES	
39	10" FLG X PE CL 350 DI PIPE W/ (1) 1" NPT THREAD-O-LET, NIPPLE, & BV ASSEMBLY (ANSI CL 300 FLG)	
40	4" DI RMJ 90° ELBOW	
41	4" RFA	
42	10" x 6" RMJ DI TEE	
43	6" DI RMJ 90° ELBOW	
44	10" CL 350 FLG X PE DIP W/ (1) 1" NPT THREAD-O-LET, NIPPLE, & BV ASSEMBLY	10L-4/TYP
45	1" SOLENOID BV W/ MICRO SWITCH	
46	10" FLG X PE CL 350 DI PIPE	
47	2" FLG PRV/PRESSURE REGULATING VALVE, CLA-VAL MODEL: 93-01	
48	2" X 1" NPT GS TEE W/ 1" BV & NIPPLE	
49	4" X 2" COMPANION FLANGE	
50	2" X 2" NPT COMPANION FLANGE	
51	2" NPT COUPLING	
52	10" DI FLG 45° ELBOW	
53	10" RESTRAINED FLANGE ADAPTER (ANSI CLASS 300)	

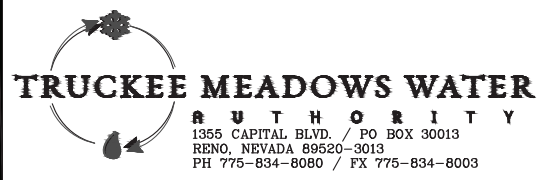


- MECHANICAL SHEET NOTES:**
1. PROVIDE 12" CONTROL DENSITY FILL SURROUNDING PUMP CAN ASSEMBLY & 12" BELOW FLANGES, SEE SPECIFICATIONS.
 2. PROVIDE SPRAY FOAM INSULATION ON CEILING, ACCESS HATCH, & WALLS 2' BELOW SURFACE.
 3. PROVIDE 24" SQ. SAWCUT HOLE (DRY SUMP). PROVIDE & INSTALL GS GRATING & NECESSARY FRAMEWORK. 18" LAYER OF DRAIN ROCK WRAPPED IN FILTER FABRIC BENEATH VAULT, EXTEND 12" BEYOND VAULT WALLS (TYP).
 4. PROVIDE 12" LAYER OF AB COMPACTED TO 90%, EXTEND 12" BEYOND VAULT WALLS.
 5. FORM 24" SQ. SUMP WITH 12" THICK CONCRETE, FINISH SURFACE WITH GROUT & SLOPE VAULT FLOOR BACK TO SUMP.
 6. DRAIN VAULT LIDS TO SUMP PUMP. IF DRY WELL, DRAIN VAULT LIDS TO DAYLIGHT (SEE SITE PLAN) PROVIDE CONCRETE COLLAR FOR VAULT ACCESS HATCHES AS REQUIRED.
 7. ALL NON-BURIED DIP & DIP FITTINGS SHALL BE FACTORY COATED WITH RED PRIMER, CONTRACTOR TO PROVIDE FINISH COATINGS PER SPECIFICATIONS.
 8. SEE ELECTRICAL SHEETS FOR CONTROLS AND INSTRUMENTATION.

A MECHANICAL PLAN
M602 1/2" = 1'-0"

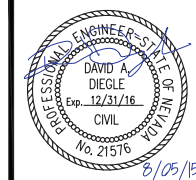
REVISION	DESCRIPTION	BY	APP	DATE
▲	ADDENDUM #2	DAD	DAD	8/26/15

WORK ORDER NO.	10-0002
DESIGNED	JPB/DAD
DRAWN	AAA
DATE	AUGUST 2015
CHECKED	RCK
SUBMITTED	
RECOMMENDED	
APPROVED	



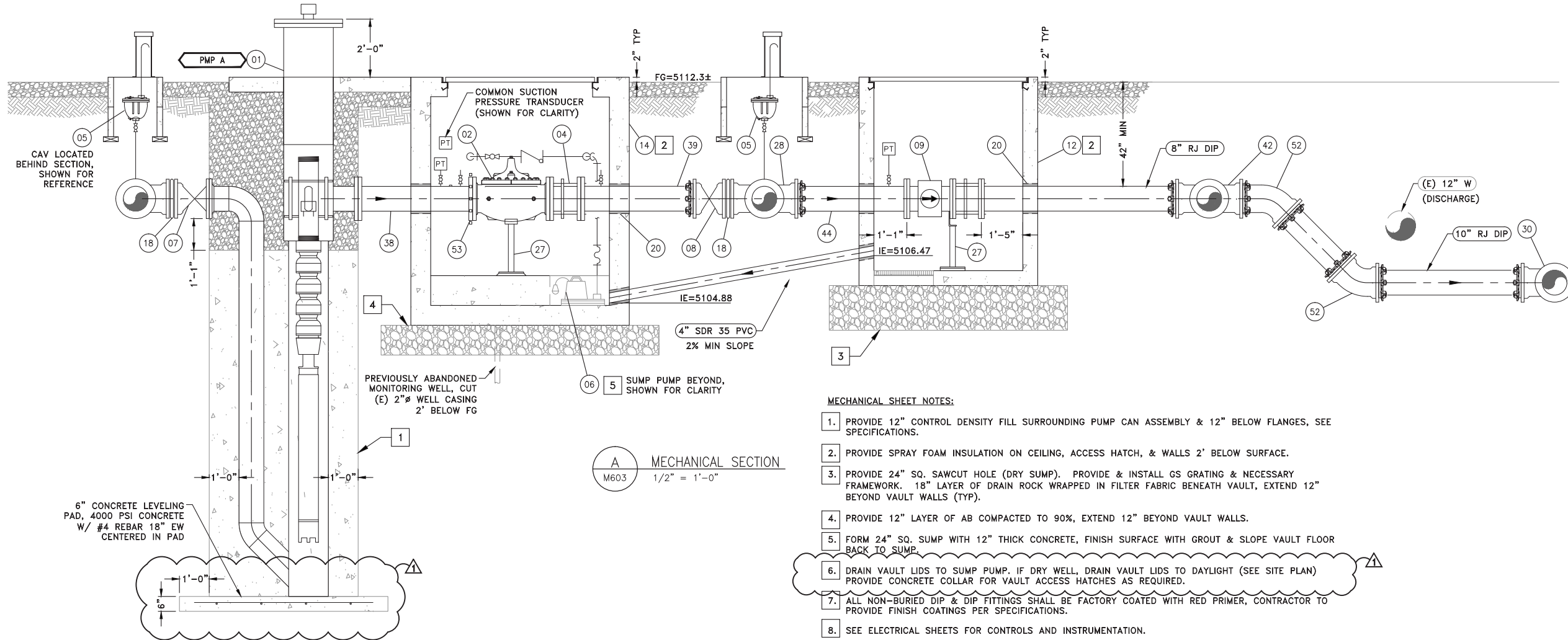
NOT REPRODUCIBLE
PROPERTY OF TRUCKEE MEADOWS WATER AUTHORITY, RETURN UPON COMPLETION OF PROJECT (Per Homeland Security Act)

TMWA ARROWCREEK DROUGHT RESPONSE DESIGN PROJECT
ARROWCREEK BPS MECHANICAL PLAN 3



SHEET NUMBER
M602
49 OF 90

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MECHANICAL SHEET NOTES:

1. PROVIDE 12" CONTROL DENSITY FILL SURROUNDING PUMP CAN ASSEMBLY & 12" BELOW FLANGES, SEE SPECIFICATIONS.
2. PROVIDE SPRAY FOAM INSULATION ON CEILING, ACCESS HATCH, & WALLS 2' BELOW SURFACE.
3. PROVIDE 24" SQ. SAWCUT HOLE (DRY SUMP). PROVIDE & INSTALL GS GRATING & NECESSARY FRAMEWORK. 18" LAYER OF DRAIN ROCK WRAPPED IN FILTER FABRIC BENEATH VAULT, EXTEND 12" BEYOND VAULT WALLS (TYP).
4. PROVIDE 12" LAYER OF AB COMPACTED TO 90%, EXTEND 12" BEYOND VAULT WALLS.
5. FORM 24" SQ. SUMP WITH 12" THICK CONCRETE, FINISH SURFACE WITH GROUT & SLOPE VAULT FLOOR BACK TO SUMP.
6. DRAIN VAULT LIDS TO SUMP PUMP. IF DRY WELL, DRAIN VAULT LIDS TO DAYLIGHT (SEE SITE PLAN) PROVIDE CONCRETE COLLAR FOR VAULT ACCESS HATCHES AS REQUIRED.
7. ALL NON-BURIED DIP & DIP FITTINGS SHALL BE FACTORY COATED WITH RED PRIMER, CONTRACTOR TO PROVIDE FINISH COATINGS PER SPECIFICATIONS.
8. SEE ELECTRICAL SHEETS FOR CONTROLS AND INSTRUMENTATION.

EQUIPMENT NOTES ARROWCREEK BPS

TAG	DESCRIPTION	DETAIL
01	100 HP SUBMERSIBLE TURBINE PUMP, 750 GPM @ 385' TDH, INSTALLED IN FEL&C STL PITLESS ADAPTER W/ 10" FLG CONNECTIONS	
02	10" FLG BOOSTER PUMP CONTROL VALVE, CLA-VAL MODEL: 60-11 (ANSI CLASS 300 FLANGES), DRAIN VALVE TO SUMP	
03	THRUST BLOCK	10L-2/TYP
04	10" DISMANTLING JOINT (ANSI CLASS 300 FLANGES)	
05	1" CAV ASSEMBLY	10L-4/TYP
06	0.5 HP SUMP PUMP	M601/TYP
07	10" FLG x MJ RESILIENT WEDGE GV	
08	10" RMJ CL 350 RESILIENT WEDGE GV	
09	10" ANSI CL 300 FLG MAG-METER	
10	6" PRV/PRESSURE RELIEF VALVE, CLA-VAL MODEL: 50-01 (ANSI CLASS 300)	
11	10" FLG TAPPING SLEEVE	10D-2
12	5'-0" x 5'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
13	48" SQ X 42" DEEP PRECAST CONCRETE DROP INLET W/ GS GRATING (OWNER PROCURED, CONTRACTOR INSTALL)	
14	8'-0" x 6'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
15	4'-0" x 4'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
16	AL ACCESS LADDER W/ LADDER-UP OPTION	
17	6" MJ x MJ ADAPTER	
18	10" MJ x MJ ADAPTER	
19	6" RESTRAINED FLANGE ADAPTER (ANSI CLASS 300)	
20	PIPE PENETRATION	M302/TYP
21	6" CL 350 RMJ GV	
22	250 GALLON SURGE TANK W/ 10" FLG CONNECTION	
23	6" FLG EPDM DUCKBILL CV (MATCH DIAMETER TO CONNECTING PIPE SIZE)	
24	12" x 10" FLG TAPPING SLEEVE	10D-2
25	4" PRV/PRESSURE RELIEF VALVE, CLA-VAL MODEL: 50-01	

26	6'-0" x 6'-0" PRECAST CONCRETE VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
27	ADJUSTABLE PIPE SUPPORT	M412/TYP
28	10" DI RMJ TEE	
29	10" CL 350 FLG RESILIENT WEDGE GV	
30	10" DI RMJ 90° ELBOW	
31	10" RFA	
32	10" FLG RESILIENT WEDGE GV	
33	10" DI FLG 90° ELBOW W/ 2" NPT TAP, NIPPLE, BV, & HOSE BIB (TAP LOCATION AS SHOWN)	
34	6" DI FLG 90° ELBOW	
35	4" DI FLG 90° ELBOW	
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37	4" DI FLG PIPE (18" LONG)	
38	10" FLG X PE FEL&C STL (ANSI CLASS 300) W/ (3) 1" NPT WELD-O-LET & (2) 1" NIPPLE, & BV ASSEMBLIES	
39	10" FLG X PE CL 350 DI PIPE W/ (1) 1" NPT THREAD-O-LET, NIPPLE, & BV ASSEMBLY (ANSI CL 300 FLG)	
40	4" DI RMJ 90° ELBOW	
41	4" RFA	
42	10" x 6" RMJ DI TEE	
43	6" DI RMJ 90° ELBOW	
44	10" CL 350 FLG X PE DIP W/ (1) 1" NPT THREAD-O-LET, NIPPLE, & BV ASSEMBLY	10L-4/TYP
45	1" SOLENOID BV W/ MICRO SWITCH	
46	10" FLG X PE CL 350 DI PIPE	
47	2" FLG PRV/PRESSURE REGULATING VALVE, CLA-VAL MODEL: 93-01	
48	2" X 1" NPT GS TEE W/ 1" BV & NIPPLE	
49	4" X 2" COMPANION FLANGE	
50	2" X 2" NPT COMPANION FLANGE	
51	2" NPT COUPLING	
52	10" DI FLG 45° ELBOW	
53	10" RESTRAINED FLANGE ADAPTER (ANSI CLASS 300)	

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REVISION	DESCRIPTION	BY	APP	DATE
1	ADDENDUM #2	DAD	DAD	8/26/15

WORK ORDER NO.	10-0002
DESIGNED	JPB/DAD
DRAWN	AAA
DATE	AUGUST 2015
CHECKED	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 ARROWCREEK DROUGHT RESPONSE DESIGN PROJECT

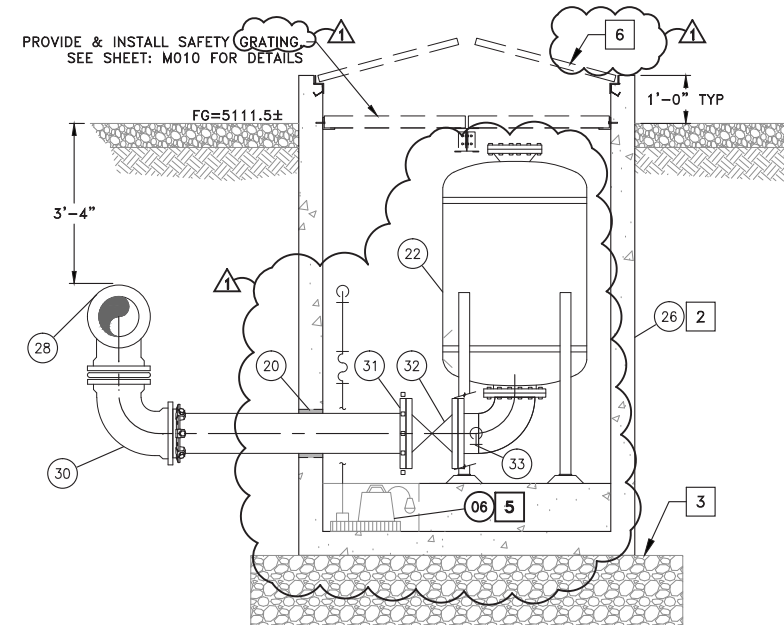
ARROWCREEK BPS MECHANICAL SECTIONS 1

PROFESSIONAL ENGINEER - STATE OF NEVADA
DAVID A. DIEGLE
Exp. 12/31/16
CIVIL
No. 21576
8/05/15

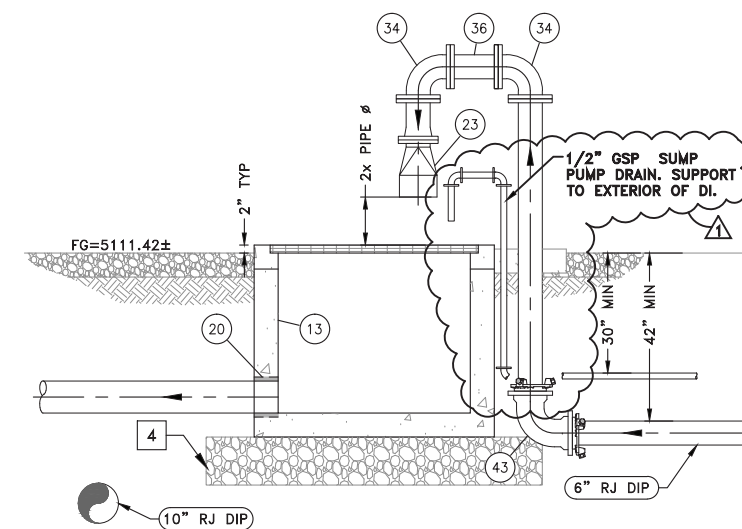
SHEET NUMBER
M603
50 OF 90

EQUIPMENT NOTES ARROWCREEK BPS

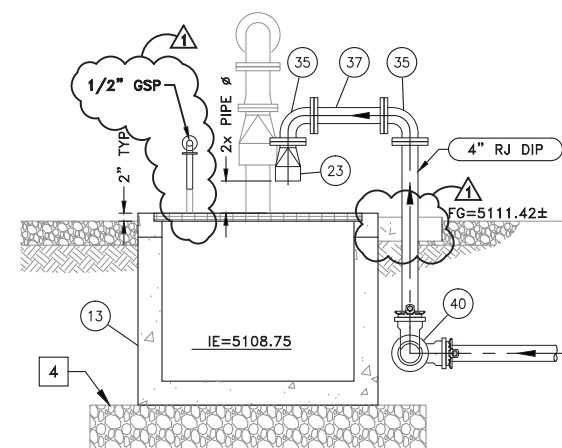
TAG	DESCRIPTION	DETAIL
01	100 HP SUBMERSIBLE TURBINE PUMP, 750 GPM @ 385' TDH, INSTALLED IN FEL&C STL PITLESS ADAPTER W/ 10" FLG CONNECTIONS	
02	10" FLG BOOSTER PUMP CONTROL VALVE, CLA-VAL MODEL: 60-11 (ANSI CLASS 300 FLANGES), DRAIN VALVE TO SUMP	
03	THRUST BLOCK	10L-2/TYP
04	10" DISMANTLING JOINT (ANSI CLASS 300 FLANGES)	
05	1" CAV ASSEMBLY	10L-4/TYP
06	0.5 HP SUMP PUMP	M601/TYP
07	10" FLG x MJ RESILIENT WEDGE GV	
08	10" RMJ CL 350 RESILIENT WEDGE GV	
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11	10" FLG TAPPING SLEEVE	10D-2
12	5'-0" x 5'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
13	48" SQ X 42" DEEP PRECAST CONCRETE DROP INLET W/ GS GRATING (OWNER PROCURED, CONTRACTOR INSTALL)	
14	8'-0" x 6'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
15	4'-0" x 4'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
16	AL ACCESS LADDER W/ LADDER-UP OPTION	
17	6" MJ x MJ ADAPTER	
18	10" MJ x MJ ADAPTER	
19	6" RESTRAINED FLANGE ADAPTER (ANSI CLASS 300)	
20	PIPE PENETRATION	M302/TYP
21	6" CL 350 RMJ GV	
22	250 GALLON SURGE TANK W/ 10" FLG CONNECTION	
23	6" FLG EPDM DUCKBILL CV (MATCH DIAMETER TO CONNECTING PIPE SIZE)	
24	12" X 10" FLG TAPPING SLEEVE	10D-2
25	4" PRV/PRESSURE RELIEF VALVE, CLA-VAL MODEL: 50-01	
26	6'-0" x 6'-0" PRECAST CONCRETE VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
27	ADJUSTABLE PIPE SUPPORT	M412/TYP
28	10" DI RMJ TEE	
29	10" CL 350 FLG RESILIENT WEDGE GV	
30	10" DI RMJ 90° ELBOW	
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44	10" CL 350 FLG X PE DIP W/ (1) 1" NPT THREAD-O-LET, NIPPLE, & BV ASSEMBLY	10L-4/TYP
45	1" SOLENOID BV W/ MICRO SWITCH	
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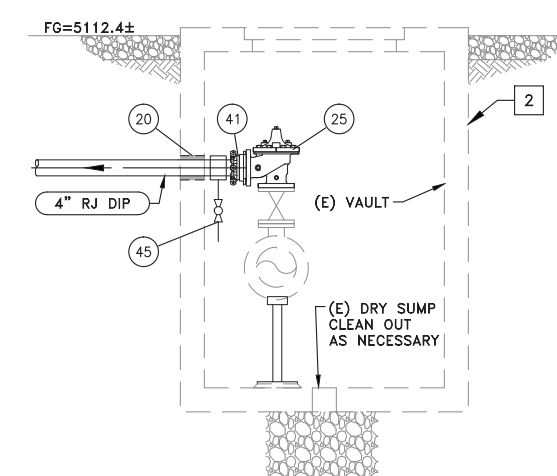
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M604 1/2" = 1'-0"



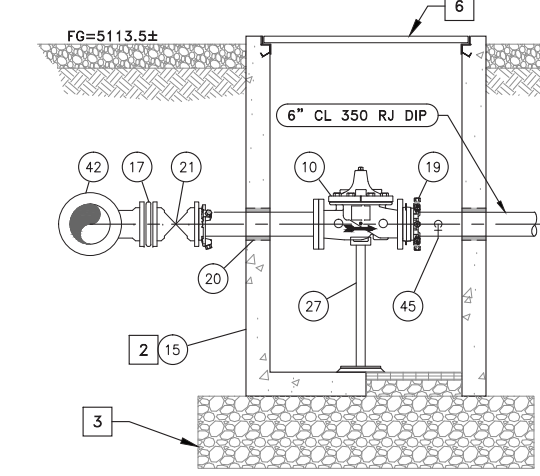
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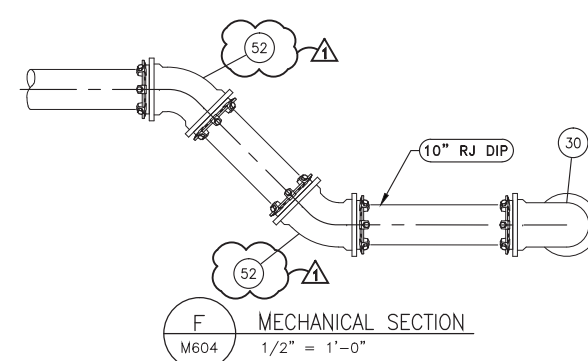
C MECHANICAL SECTION
M604 1/2" = 1'-0"



D MECHANICAL SECTION
M604 1/2" = 1'-0"



E MECHANICAL SECTION
M604 1/2" = 1'-0"



F MECHANICAL SECTION
M604 1/2" = 1'-0"

- MECHANICAL SHEET NOTES:**
1. PROVIDE 12" CONTROL DENSITY FILL SURROUNDING PUMP CAN ASSEMBLY & 12" BELOW FLANGES, SEE SPECIFICATIONS.
 2. PROVIDE SPRAY FOAM INSULATION ON CEILING, ACCESS HATCH, & WALLS 2' BELOW SURFACE.
 3. PROVIDE 24" SQ. SAWCUT HOLE (DRY SUMP). PROVIDE & INSTALL GS GRATING & NECESSARY FRAMEWORK. 18" LAYER OF DRAIN ROCK WRAPPED IN FILTER FABRIC BENEATH VAULT, EXTEND 12" BEYOND VAULT WALLS (TYP).
 4. PROVIDE 12" LAYER OF AB COMPACTED TO 90%, EXTEND 12" BEYOND VAULT WALLS.
 5. FORM 24" SQ. SUMP WITH 12" THICK CONCRETE, FINISH SURFACE WITH GROUT & SLOPE VAULT FLOOR BACK TO SUMP.
 6. DRAIN VAULT LIDS TO SUMP PUMP. IF DRY WELL, DRAIN VAULT LIDS TO DAYLIGHT (SEE SITE PLAN) PROVIDE CONCRETE COLLAR FOR VAULT ACCESS HATCHES AS REQUIRED.
 7. ALL NON-BURIED DIP & DIP FITTINGS SHALL BE FACTORY COATED WITH RED PRIMER, CONTRACTOR TO PROVIDE FINISH COATINGS PER SPECIFICATIONS.
 8. SEE ELECTRICAL SHEETS FOR CONTROLS AND INSTRUMENTATION.

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REVISION	DESCRIPTION	BY	APP	DATE
▲	ADDENDUM #2	DAD	DAD	8/26/15

WORK ORDER NO.	10-0002
DESIGNED	JPB/DAD
DRAWN	AAA
DATE	AUGUST 2015
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APPROVED	

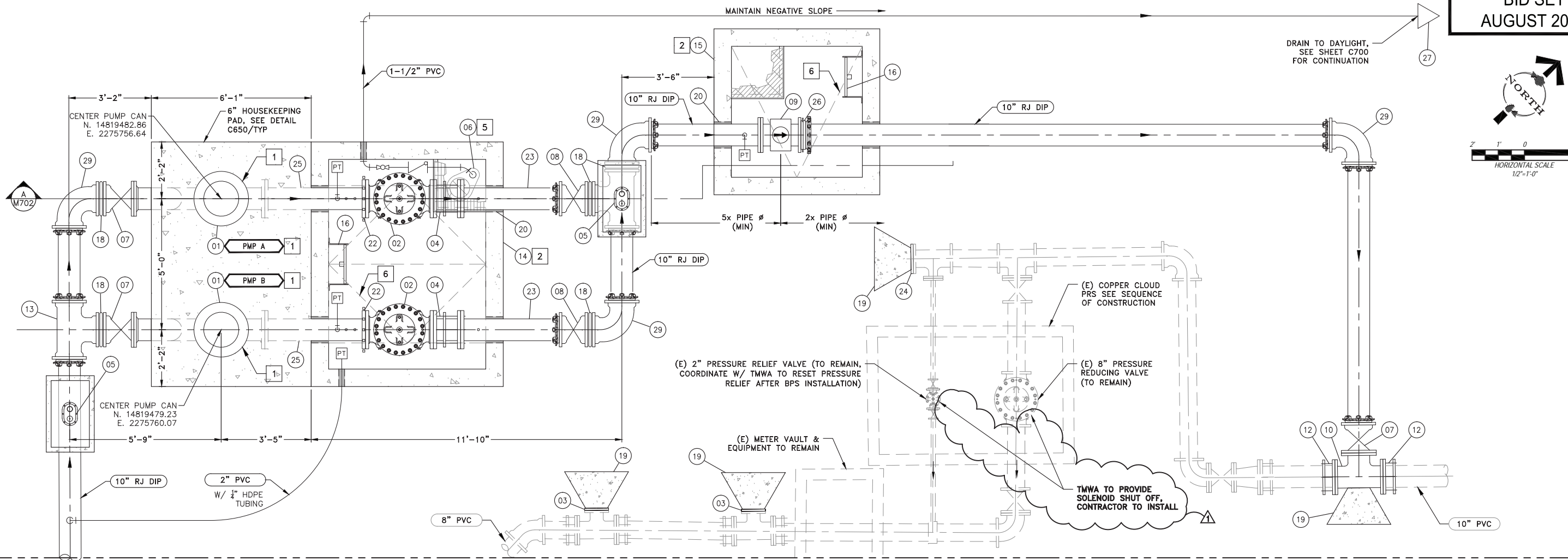
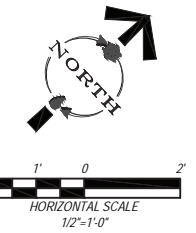
TRUCKEE MEADOWS WATER AUTHORITY
 1355 CAPITAL BLVD. / PO BOX 30013
 RENO, NEVADA 89520-3013
 PH 775-834-8080 / FX 775-834-8003

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

TMWA ARROWCREEK DROUGHT RESPONSE DESIGN PROJECT
ARROWCREEK BPS
MECHANICAL SECTIONS 2

PROFESSIONAL ENGINEER-SITE WORK
 DAVID A. DIEGLE
 Exp. 12/31/16
 CIVIL
 No. 21576
 8/05/15

SHEET NUMBER
M604
 51 OF 90



MATCHLINE SEE SHEET: M701
A MECHANICAL PLAN
M700 1/2" = 1'-0"

TAG	DESCRIPTION	DETAIL
01	100 HP SUBMERSIBLE TURBINE PUMP, 900 GPM @ 350' TDH, INSTALLED IN FEL&C STL PITLESS ADAPTER W/ 10" FLG CONNECTIONS (AWWA CLASS 150 SUCTION/ANSI CLASS 300 DISCHARGE)	
02	10" FLG BOOSTER PUMP CONTROL VALVE, CLA-VAL MODEL: 60-11 (ANSI CLASS 300 FLANGES), DRAIN VALVE TO SUMP	
03	4" DI BLIND FLANGE (AWWA CLASS 250 RATED)	
04	10" DISMANTLING JOINT (ANSI CLASS 300 FLANGES)	
05	1" CAV ASSEMBLY	10L-4/C002
06	0.5 HP SUMP PUMP	M601/TYP
07	10" FLG x MJ RESILIENT WEDGE GV	
08	10" MJ x MJ RESILIENT WEDGE GV	
09	8" FLG MAG-METER, SPARLING MODEL: TIGERMAG FM656 OR APPROVED EQUAL	
10	10" FLG DI TEE	
11	ADJUSTABLE PIPE SUPPORT	M404/TYP
12	10" FCA	
13	14" x 10" MJ DI TEE	
14	8'-0" x 6'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
15	4'-0" x 4'-0" PRECAST VAULT (OWNER PROCURED, CONTRACTOR INSTALL)	
16	AL ACCESS LADDER W/ LADDER-UP OPTION	
17	14" x 10" FLG TAPPING SLEEVE	

18	10" MJ x MJ ADAPTER	
19	THRUST BLOCK	10L-2/C002
20	PIPE PENETRATION	M302/TYP
21	12" DI CULVERT, SEE C700	
22	10" RESTRAINED FLANGE ADAPTER (ANSI CLASS 300)	
23	10" FLG X PE CL 350 DI PIPE W/ (1) 1" NPT THREAD-O-LET, NIPPLE, & BV ASSEMBLY (ANSI CL 300 FLG)	
24	8" DI BLIND FLANGE	
25	10" FLG X PE FEL&C STL (ANSI CLASS 300) W/ (3) 1" NPT WELD-O-LET, NIPPLE, & BV ASSEMBLIES	
26	10" RFA	
27	1-1/2" "DUCKBILL" CHECK VALVE	
28	10" FLG RESILIENT WEDGE GV	
29	10" MJ DI 90° ELBOW	

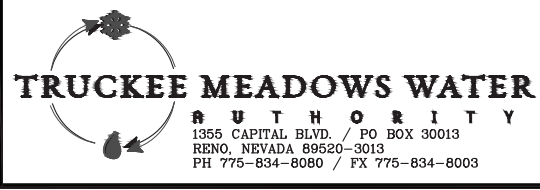
MECHANICAL SHEET NOTES:

1. PROVIDE CONTROL DENSITY FILL SURROUNDING PUMP CAN ASSEMBLY UP TO 12" BELOW CAN FLANGES AS SHOWN, SEE SPECIFICATIONS. BACKFILL REMAINING VOID TO SURFACE OR CONCRETE PAD WITH AB COMPACTED TO 95%.
2. PROVIDE SPRAY FOAM INSULATION ON CEILING, ACCESS HATCH, & WALLS 2' BELOW SURFACE.
3. PROVIDE 24" SQ. SAWCUT HOLE (DRY SUMP). PROVIDE & INSTALL GS GRATING & NECESSARY FRAMEWORK. 18" LAYER OF DRAIN ROCK WRAPPED IN FILTER FABRIC BENEATH VAULT, EXTEND 12" BEYOND VAULT WALLS (TYP).
4. PROVIDE 12" LAYER OF AB COMPACTED TO 90%, EXTEND 12" BEYOND VAULT WALLS.
5. FORM 24" SQ. SUMP WITH 12" THICK CONCRETE, FINISH SURFACE WITH GROUT & SLOPE VAULT FLOOR BACK TO SUMP.
6. DRAIN VAULT LIDS TO SUMP PUMP. IF DRY WELL, DRAIN VAULT LIDS TO DAYLIGHT (SEE SITE PLAN) PROVIDE CONCRETE COLLAR FOR VAULT ACCESS HATCHES AS REQUIRED.
7. ALL NON-BURIED DIP & DIP FITTINGS SHALL BE FACTORY COATED WITH RED PRIMER, CONTRACTOR TO PROVIDE FINISH COATINGS PER SPECIFICATIONS.
8. SEE ELECTRICAL SHEETS FOR CONTROLS AND INSTRUMENTATION.

V:\2015\Arrows\20150807\70\Drawings\Mechanical\M700.dwg 8/26/15 JPB

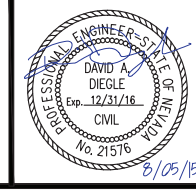
REVISION	DESCRIPTION	BY	APP	DATE
▲	ADDENDUM #2	DAD	DAD	8/26/15

WORK ORDER NO.	10-0002
DESIGNED	JPB/DAD
DRAWN	AAA
DATE	AUGUST 2015
CHECKED	RCK
SUBMITTED	
RECOMMENDED	
APPROVED	

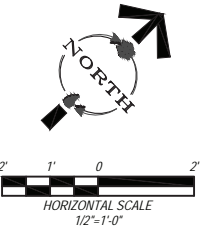


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PROPERTY OF TRUCKEE MEADOWS WATER AUTHORITY, RETURN UPON COMPLETION OF PROJECT (Per Homeland Security Act)

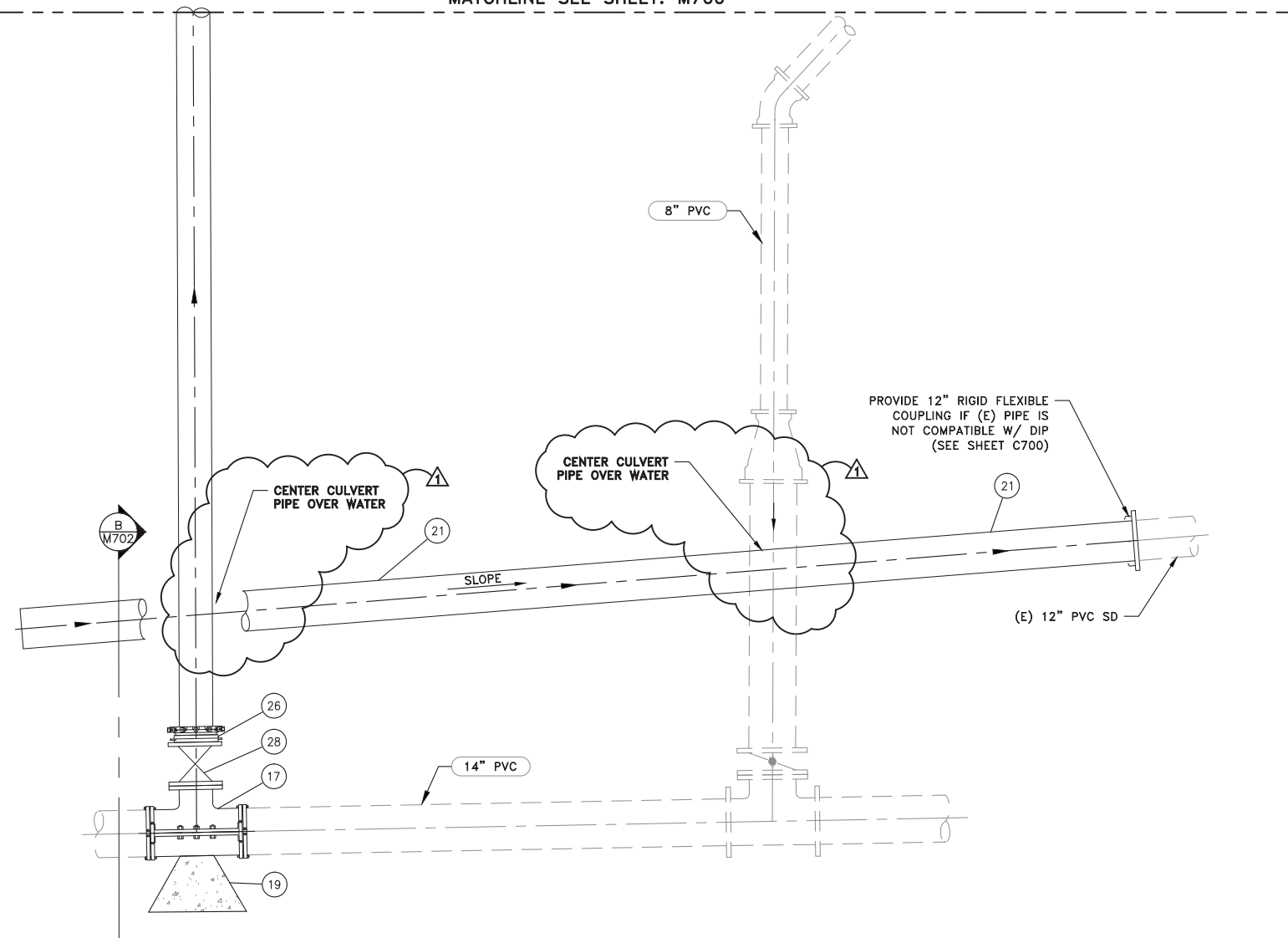
TMWA ARROWCREEK DROUGHT RESPONSE DESIGN PROJECT
COPPER CLOUD BPS MECHANICAL PLAN



SHEET NUMBER
M700
52 OF 90



MATCHLINE SEE SHEET: M700



A MECHANICAL PLAN
M701 1/2" = 1'-0"

EQUIPMENT NOTES COPPER CLOUD BPS

TAG	DESCRIPTION	DETAIL
01	100 HP SUBMERSIBLE TURBINE PUMP, 900 GPM @ 350' TDH, INSTALLED IN FEL&C STL PITLESS ADAPTER W/ 10" FLG CONNECTIONS (AWWA CLASS 150 SUCTION/ANSI CLASS 300 DISCHARGE)	
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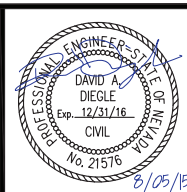
REVISION	DESCRIPTION	BY	APP	DATE
▲	ADDENDUM #2	DAD	DAD	8/26/15

WORK ORDER NO. 10-0002
 DESIGNED JPB/DAD
 DRAWN AAA
 DATE AUGUST 2015
 CHECKED RCK
 SUBMITTED
 RECOMMENDED
 APPROVED

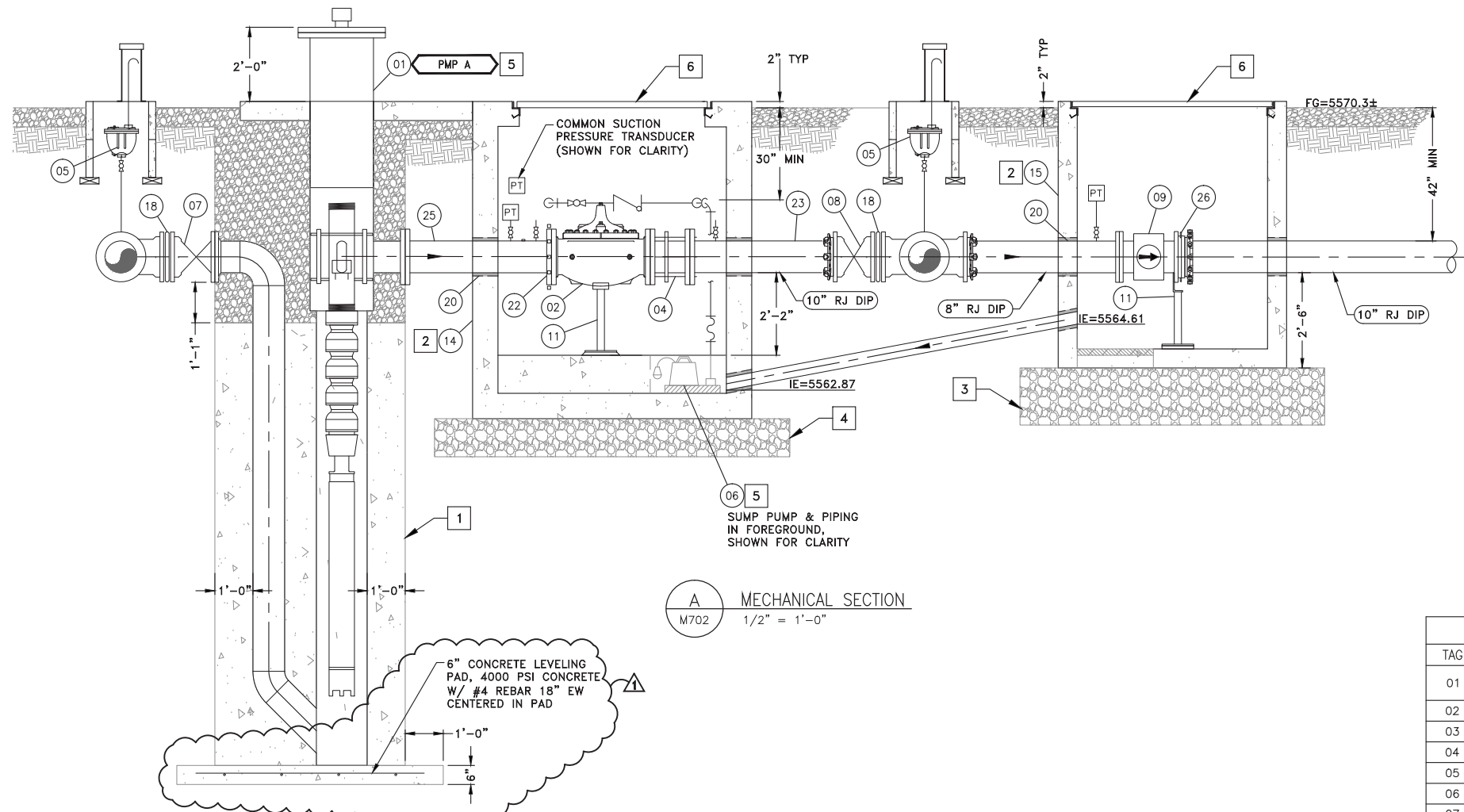
TRUCKEE MEADOWS WATER AUTHORITY
 1355 CAPITAL BLVD. / PO BOX 30013
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TMWA ARROWCREEK DROUGHT RESPONSE DESIGN PROJECT
COPPER CLOUD BPS MECHANICAL PLAN

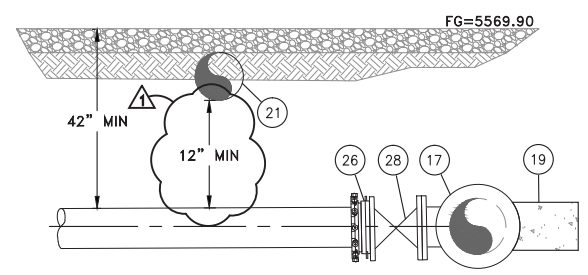


SHEET NUMBER
M701
 53 OF 90



A MECHANICAL SECTION
M702 1/2" = 1'-0"

6" CONCRETE LEVELING PAD, 4000 PSI CONCRETE W/ #4 REBAR 18" EW CENTERED IN PAD



B MECHANICAL SECTION
M702 1/2" = 1'-0"

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EQUIPMENT NOTES COPPER CLOUD BPS		
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REVISION	DESCRIPTION	BY	APP	DATE
▲	ADDENDUM #2	DAD	DAD	8/26/15

WORK ORDER NO.	10-0002
DESIGNED	JPB/DAD
DRAWN	AAA
DATE	AUGUST 2015
CHECKED	RCK
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TMWA ARROWCREEK DROUGHT RESPONSE DESIGN PROJECT
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PROFESSIONAL ENGINEER - STATE OF NEVADA
 DAVID A. DIEGLE
 Exp. 12/31/16
 CIVIL
 No. 21576
 8/05/15

SHEET NUMBER
M702
 54 OF 90