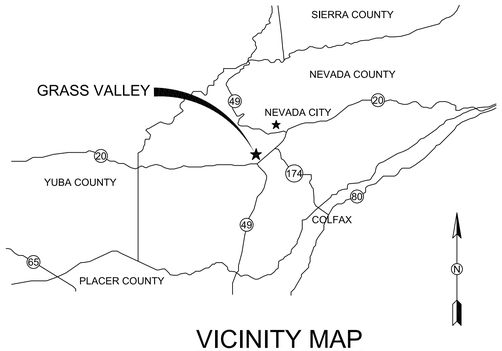
CITY OF GRASS VALLEY

ENGINEERING DIVISION

IMPROVEMENT PLANS FOR

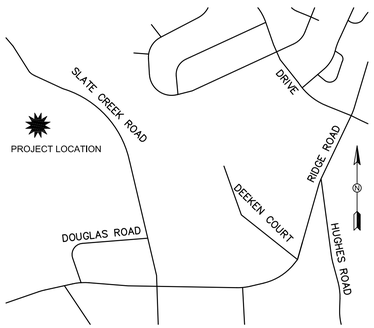
SLATE CREEK LIFT STATION PUMP REPLACEMENT PROJECT

PROJECT NO. 17-09



VICINITY MAP

NO SCALE



LOCATION MAP

NO SCALE

CONSTRUCTION LEGEND:

10+00 11+00 12+00	STATION LINE
	(E) CURB; DIKE; DRIVEWAY
	(E) WALL
	(E) FENCE
	LOT/ROW LINE
	EASEMENT LINE
G G G	(E) GAS
SS SS SS	(E) SEWER AND SIZE
SD SD SD	(E) STORM DRAIN AND SIZE
T T T	(E) TELEPHONE
W W W	(E) WATER
DRAINAGE INLET	SINGLE POLE SIGN
FIRE HYDRANT	MAILBOX
WATER METER BOX	TREE
MANHOLE (SS, SD, TEL, ELEC)	BENCHMARK
VALVE (GAS, TEL, ARV, WTR)	(P) SPOT ELEVATION (AC=100.00 / TC= 100.00)
GUY POLE	DENOTES STD PLAN NO/DETAIL NO (A1 / GV-1)
GUY WIRE	CONSTRUCTION KEYNOTE (1)
LIGHT POST	
POLE	

UTILITY/EMERGENCY CONTACTS:

WATER	NEVADA IRRIGATION DISTRICT 1036 WEST MAIN ST GRASS VALLEY, CA 95945	530-273-6185
SEWER/ STORM DRAIN:	CITY OF GRASS VALLEY 125 E MAIN ST GRASS VALLEY, CA 95945	530-274-4350
FIRE PROTECTION:	CITY OF GRASS VALLEY 125 E MAIN ST GRASS VALLEY, CA 95945	530-274-4370
ELECTRICITY/GAS:	PG&E 788 TAYLORVILLE RD GRASS VALLEY, CA 95945	530-477-3260
TELEVISION:	COMCAST 427 EATON RD CHICO, CA 95973	530-206-6172
PHONE:	AT&T 2700 WATT AVE SACRAMENTO, CA 95821	916-484-2388

SHEET INDEX:

ABBREVIATIONS:

AB	AGGREGATE BASE	PCC	PORTLAND CEMENT CONCRETE
AC	ASPHALT CONCRETE	℄	PROPERTY LINE
C&G	CURB AND GUTTER	(P)	PROPOSED
CF	CUBIC FOOT	PSI	POUNDS PER SQUARE INCH
℄	CENTERLINE	PUE	PUBLIC UTILITY EASEMENT
CY	CUBIC YARD	PVC	POLYVINYL CHLORIDE
E	ELECTRIC	PVMT	PAVEMENT
(E)	EXISTING	R	RADIUS
ELEV	ELEVATION	RCP	REINFORCED CONCRETE PIPE
EP	EDGE OF PAVEMENT	RW	RETAINING WALL
FL	FLOW LINE	ROW	RIGHT OF WAY
FT	FEET	SD	STORM DRAIN
FTG	FOOTING	SF	SQUARE FOOT
G	GAS	SY	SQUARE YARD
ID	INSIDE DIAMETER	ST	STREET
IE	INVERT ELEVATION	STA	STATION
L	LEFT	STD	STANDARD
LF	LINEAR FOOT	SW	SIDEWALK
MAX	MAXIMUM	SS	SANITARY SEWER
MH	MANHOLE	TBC	TOP BACK OF CURB
MIN	MINIMUM	TBW	TOP BACK OF WALK
MISC	MISCELLANEOUS	TFC	TOP FACE OF CURB
NO	NUMBER	TC	TOP OF CURB
NTS	NOT TO SCALE	TP	TELEPHONE POLE
OD	OUTSIDE DIAMETER	TS	TRAFFIC SIGNAL
		TYP	TYPICAL

CALL BEFORE YOU DIG

THE CONTRACTOR SHALL CALL "UNDERGROUND SERVICE ALERT" (USA) AT 1-800-227-2600 AT LEAST TWO WORKING DAYS PRIOR TO PERFORMING EXCAVATION.

NOTES:

1. THE CONTRACTOR SHALL POSSESS A VALID CALIFORNIA CLASS A CONTRACTORS LICENSE, OR A COMBINATION OF THE FOLLOWING CLASSES, (C-8 - CONCRETE CONTRACTOR, C10 - ELECTRICAL CONTRACTOR, C12 - EARTHWORK AND PAVING CONTRACTOR, C34 - PIPELINE CONTRACTOR, C36 - PLUMBING CONTRACTOR, C-42 SANITATION SYSTEM CONTRACTOR, AND D63 - CONSTRUCTION CLEANUP) AT THE TIME OF THE BID AWARD, AND THE LICENSE SHALL REMAIN IN EFFECT THROUGHOUT THE TERM OF THIS CONTRACT.

2. THE CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO LATEST EDITIONS OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AND STANDARD PLANS, THE IMPROVEMENT STANDARDS AND STANDARD DRAWINGS OF THE CITY OF GRASS VALLEY AND THE CALIFORNIA MUTCD. IN CASE OF CONFLICT, REFER TO THE PROJECT SPECIAL PROVISIONS FOR ORDER OF PRECEDENCE.

3. THE CITY OF GRASS VALLEY HAS MADE EVERY EFFORT TO SHOW LOCATIONS OF ANY AND ALL EXISTING SURFACE AND SUBSURFACE STRUCTURES. HOWEVER, ACTUAL FIELD CONDITIONS AND LOCATIONS CAN VARY CONSIDERABLY FROM PLAN LOCATIONS. THEREFORE, THE CITY OF GRASS VALLEY CANNOT, AND DOES NOT, ASSUME RESPONSIBILITY OF THE EXISTENCE OR LOCATION OF ANY STRUCTURE SUCH AS, BUT NOT LIMITED TO, UTILITIES, PIPELINES AND SEWERS. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL AGENCIES AND/OR OWNERS TO VERIFY THIS INFORMATION PRIOR TO AND DURING CONSTRUCTION OF IMPROVEMENTS SHOWN HEREON, AND TO CONTACT THE ENGINEER IN THE EVENT OF ANY SIGNIFICANT DISCREPANCY.

4. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE LOCATION OF, AND PROTECTING ALL EXISTING UTILITIES AND REPAIRING DAMAGE TO EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (1-800-227-2600) TWO WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION.

RECORD DRAWINGS NOTE:

ALL INFORMATION SHOWN ON THESE PLANS HAS BEEN PREPARED BY, OR UNDER THE DIRECTION OF, THE UNDERSIGNED ENGINEER. ADJUSTMENTS MADE IN THE FIELD DURING CONSTRUCTION ARE INCLUDED HEREIN AND ARE BASED UPON FIELD OBSERVATIONS MADE UNDER THE DIRECTION OF OR BY THE UNDERSIGNED AND/OR INFORMATION RECEIVED FROM THE CITY CONSTRUCTION INSPECTOR, PROJECT CONTRACTORS AND OTHER SOURCES WHEN THE ENGINEER IS ADVISED IN WRITING OF SUCH ADJUSTMENTS. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, CHANGES TO THESE PLANS NOT AUTHORIZED BY THE ENGINEER. ADJUSTMENTS MADE IN THE FIELD WERE NOT SURVEYED AND THE ACCURACY OF THESE DRAWINGS WITH RESPECT TO THOSE ADJUSTMENTS IS NOT GUARANTEED BY THE ENGINEER OR THE CITY OF GRASS VALLEY; FIELD VERIFICATION OF ALL IMPROVEMENTS IS RECOMMENDED.

DATE — ENGINEER SIGNATURE (STAMP OR SEAL)

"APPROVED BY THE CITY COUNCIL OF THE CITY OF GRASS VALLEY THE 11TH DAY OF Aug 2025."

CITY CLERK		
CITY ENGINEER	75378 R.C.E.	8/14/25 DATE
PROJECT ENGINEER	78778 R.C.E.	08/14/2025 DATE

NOTE:
THE CITY OF GRASS VALLEY OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

REVISIONS

No.	Description	Engr Init	By	APPROVAL Date

REGISTERED PROFESSIONAL ENGINEER BJORN P JONES No. 75378 CIVIL STATE OF CALIFORNIA

PROJECT NUMBER: **17-09**

CITY OF GRASS VALLEY ENGINEERING DIVISION

SLATE CREEK LIFT STATION PUMP REPLACEMENT PROJECT

TITLE SHEET

DRAWN BY: CAD	DATE: AUG 2025
CHECKED BY: BPJ	DATE: AUG 2025

DRAWING NUMBER: **2146**

SHEET NUMBER: **1 OF 6**

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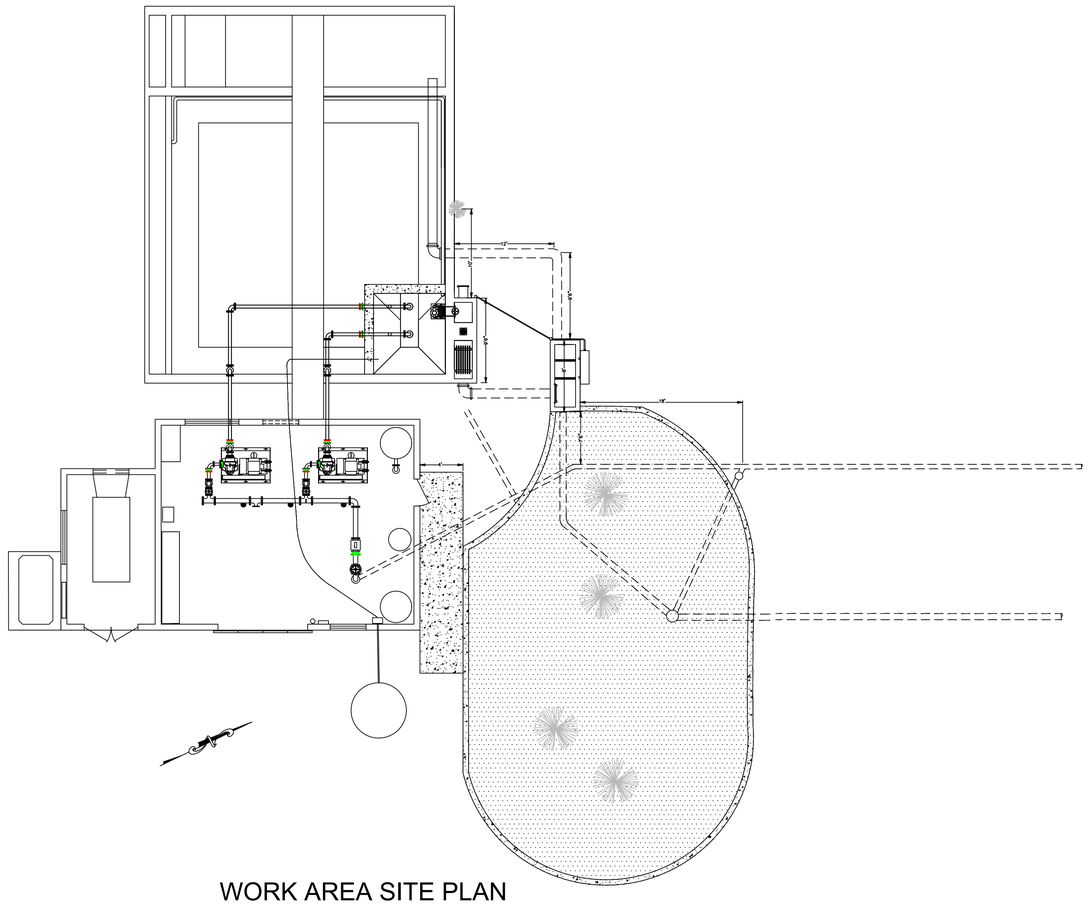
LIFT STATION LOCATION

NOTES

1. THE CURRENT LIFT STATION WAS PREVIOUSLY A TREATMENT PLANT AND WAS MODIFIED IN THE PAST.
2. THE EXISTING WET WELL WAS CREATED BY SECTIONING OFF A CORNER OF THE ORIGINAL WET WELL.
3. GRAVITY PUMPS ARE LOCATED IN THE BUILDING. ALL PIPING FROM THE WET WELL TO THE PUMPS IN THE BUILDING IS ABOVE GROUND.
4. THERE IS ABOVE GROUND PIPING IN THE BUILDING UNTIL THE TWO PUMPS CONVERGE TO TRANSITION TO UNDERGROUND PIPING.
5. EXISTING BIOXIDE TANK LOCATED OUTSIDE THE BUILDING WILL REMAIN IN USE. BIOXIDE PUMP INSIDE BUILDING WILL REMAIN IN USE. CURRENTLY, THE BIOXIDE IS CONVEYED THROUGH A VINYL TUBE THAT IS LAID ON THE GROUND IN THE BUILDING AND ROUTED THROUGH THE LOUVERED WINDOW WHERE IT IS DROPPED INTO THE OPEN TOPPED WET WELL.
6. THE INVERT FOR THE 15" GRAVITY SEWER MAIN COMING INTO THE MANHOLE IN THE PLANTER IS 48" BELOW THE RIM.
7. THERE IS RAILING ALONG THE TOP OF THE WALL SURROUNDING THE ENTIRE ORIGINAL WET WELL AND CLARIFIER THAT IS NOT SHOWN ON THE PLANS.
8. ALL ELECTRICAL EQUIPMENT CONTROLLING THE PUMPS IS IN THE ELECTRICAL CABINET IN THE BUILDING. THE ELECTRICAL LOCATED AT THE OVERFLOW STRUCTURE ONLY FEEDS THE GRINDER.



WORK AREA SITE PLAN

REVISIONS

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CITY OF GRASS VALLEY ENGINEERING DIVISION

SLATE CREEK LIFT STATION PUMP REPLACEMENT PROJECT

SITE PLAN

DRAWN BY:	DATE:
CAD	AUG 2025
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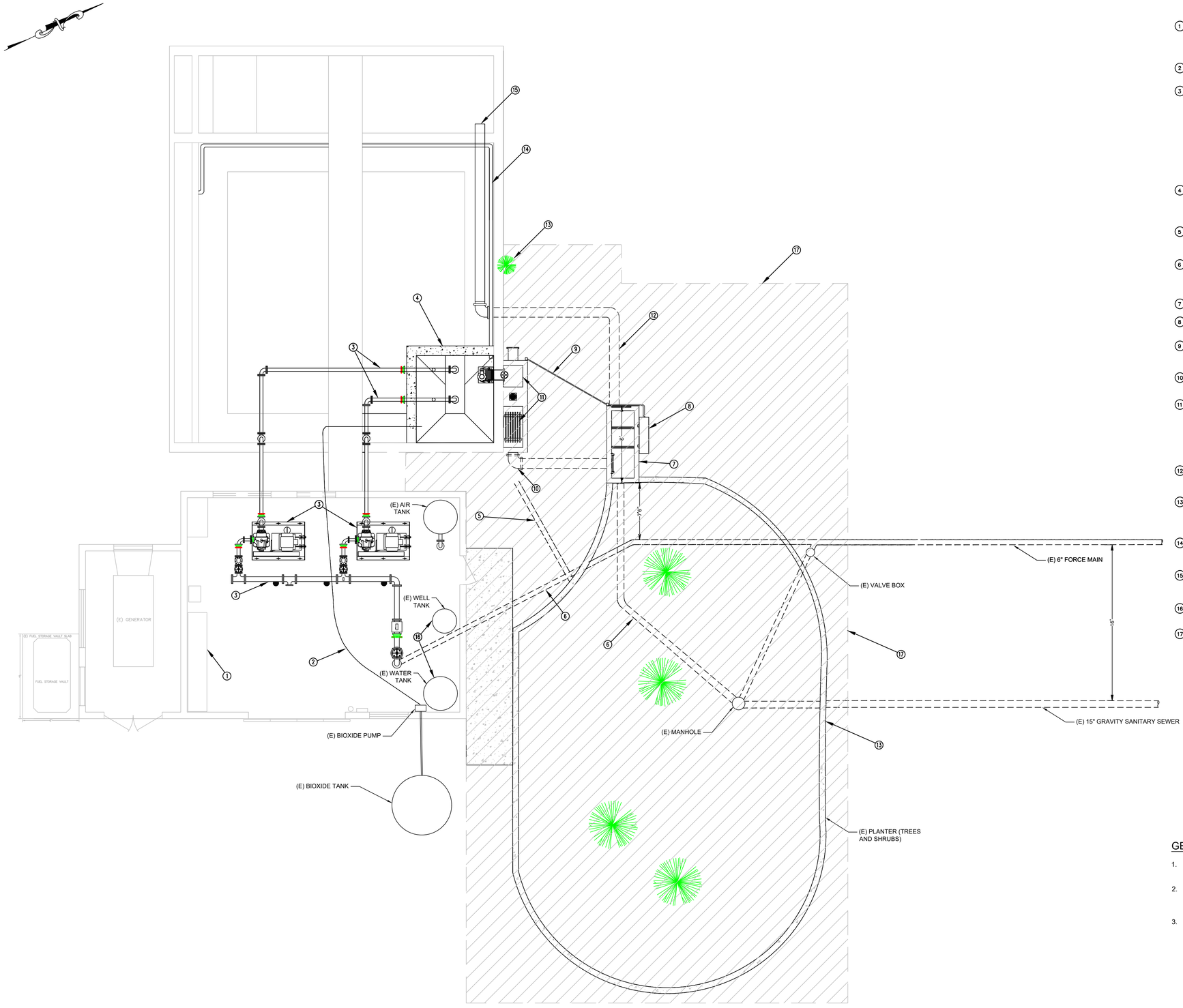
BPJ	AUG 2025

DRAWING NUMBER:
2146

SHEET NUMBER:
2 OF 6



DEMOLITION PLAN

SCALE: 1"=5'

DEMOLTION NOTES

1. ELECTRICAL DEMO - UPON COMPLETION OF THE TEMPORARY BYPASS, CITY STAFF WILL REMOVE REUSABLE ELECTRICAL COMPONENTS PRIOR TO THE CONTRACTOR REMOVING THE REMAINING ELECTRICAL PANELS, THE AUTOMATIC TRANSFER SWITCH AND ALL ASSOCIATED WIRING.
2. BIOXIDE TUBING - REMOVE THE EXISTING TUBING THAT CONVEYS THE BIOXIDE TO THE WET WELL FROM THE BIOXIDE TANK.
3. GRAVITY PUMPS AND PIPING - REMOVE THE EXISTING GRAVITY PUMPS IN THE BUILDING AND ALL ABOVE GROUND PIPING. THE PIPES ORIGINATE AT THE BOTTOM OF THE WET WELL, PENETRATE THE WALL OF THE WET WELL AND ARE ATTACHED TO THE WALL OF THE LARGER BASIN FOR ENTRY INTO THE BUILDING WHERE THEY CONNECT TO THE GRAVITY PUMPS. THE FORCE MAIN TRANSITIONS FROM ABOVE GROUND TO UNDERGROUND INSIDE THE BUILDING. ALL ABOVEGROUND PIPING IS TO BE REMOVED, BUT THE UNDERGROUND PIPING IN THE BUILDING SHALL BE ABANDONED IN PLACE. THE PIPING IS TO BE REMOVED FLUSH WITH THE FLOOR SURFACE AND THE PIPING IS TO BE FILLED IN WITH CONCRETE TO ELIMINATE ANY TRIP HAZARDS.
4. WET WELL - REMOVE EXISTING CHAMFER FROM ALL FOUR SIDES OF THE WET WELL. REMOVE ALL PIPING THAT PENETRATES THE EXISTING WELL AND ALL EQUIPMENT INSTALLED IN THE WET WELL (INCLUDING SENSORS, FLOATS, ETC.).
5. DRAIN PIPE - THE EXISTING DUCTILE IRON DRAIN PIPE THAT COMES OUT OF THE PLANTER AREA AND DAYLIGHTS NEAR THE CORNER OF THE HEADWORKS IS TO BE REMOVED.
6. SEWER PIPING - ALL UNDERGROUND 6" FORCE MAIN PIPING AND 15" GRAVITY FEED PIPING THAT IS IN CONFLICT WITH REQUIRED IMPROVEMENTS SHALL BE REMOVED. ALL REMAINING UNDERGROUND PIPING CAN BE ABANDONED IN PLACE.
7. OVERFLOW STRUCTURE - REMOVE THE ENTIRE OVERFLOW STRUCTURE.
8. ELECTRIC BOX AT OVERFLOW STRUCTURE - REMOVE THE ELECTRIC BOX AND ALL ABOVEGROUND ASSOCIATED CONDUIT AND WIRING.
9. UG ELECTRIC CONDUIT - REMOVE THE UNDERGROUND ELECTRIC CONDUIT THAT PROVIDES POWER FROM THE PANEL AT THE OVERFLOW STRUCTURE TO THE GRINDER IN THE HEADWORKS.
10. GRAVITY FEED TO HEADWORKS - REMOVE THE UNDERGROUND PIPE FROM THE OVERFLOW STRUCTURE TO THE HEADWORKS.
11. HEADWORKS AND GRINDER - REMOVE THE EXISTING RAILING ACROSS THE TOP OF THE HEADWORKS AND RETAIN TO REINSTALL UPON COMPLETION OF THE IMPROVEMENTS. THE ENTIRE HEADWORKS STRUCTURE AND SEWAGE GRINDER SHALL BE REMOVED. PRIOR TO REMOVAL OF THE GRINDER, CITY STAFF WILL REMOVE ANY REUSABLE ITEMS. THE EXISTING TOP OF WALL HEIGHT AND WIDTH SHALL BE THE FINISHED HEIGHT AND WIDTH FOR THE AREA WHERE THE HEADWORKS IS REMOVED.
12. UNDERGROUNG OVERFLOW PIPING - REMOVE THE OVERFLOW PIPING FROM THE OVERFLOW STRUCTURE TO THE PENETRATION INTO THE PREVIOUS WET WELL.
13. SHRUB AND PLANTER AREA - REMOVE THE SHRUB THAT HAS GROWN ALONG THE RAIL TO THE RIGHT OF THE HEADWORKS. THE ENTIRE PLANTER AREA AND ALL OF ITS CONTENTS (CONCRETE CURB, TREES, SHRUBS AND GROUND COVER) SHALL BE REMOVED.
14. 3" RESTROOM CONDUIT ATTACHED IN WET WELL - REMOVE THE ENTIRE UNUSED EXISTING 3" SDR BATHROOM DRAIN THAT DROPS INTO THE TOP OF THE WET WELL.
15. OVERFLOW PIPE ATTACHED IN WET WELL - REMOVE THE PIPING THAT IS ATTACHED TO THE WALL OF THE PREVIOUS WET WELL THAT CURRENTLY TERMINATES IN THE CLARIFIER AREA.
16. REMOVE THE EXISTING WATER TANK AND THE WELL TANK AND ALL ASSOCIATED PIPING.
17. THE LIMITS OF THE HMA AND CONCRETE REMOVAL AS SHOWN ARE APPROXIMATE. EXACT LOCATIONS TO BE MARKED IN THE FILED AND APPROVED BY THE ENGINEER PRIOR TO STARTING DEMOLITION WORK. ALL HMA AND CONCRETE SHALL BE REMOVED TO A NEAT, STRAIGHT, SAWCUT EDGE AS DETERMINED BY THE ENGINEER. RUNOFF FROM SAWCUTTING OPERATIONS SHALL BE VACUUMED UP OR COMPLETELY CONTAINED AND PROPERLY DISPOSED OF.

GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING ALL SEWER FLOWS (INCLUDING INFLOW AND INFILTRATION) TO THE EXTENT NECESSARY TO CONSTRUCT THE IMPROVEMENTS SHOWN.
2. THE CONTRACTOR SHALL ACCURATELY LOCATE AND RECORD THE LOCATIONS OF ALL UTILITY BOXES, CLEANOUTS AND MANHOLES. A COPY OF THIS RECORD SHALL BE PROVIDED TO THE ENGINEER PRIOR TO PERFORMING ANY WORK.
3. ALL ITEMS TO BE REMOVED ARE TO BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE (INCLUDING PUMPS, PIPING, ASPHALT, CONCRETE, VEGETATION, ETC.).

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REVISIONS

No.	Description	Engr Init	APPROVAL By	Date

REGISTERED PROFESSIONAL ENGINEER
BJORN P JONES
No. 75378
CIVIL
STATE OF CALIFORNIA

PROJECT NUMBER:
17-09

CITY OF GRASS VALLEY ENGINEERING DIVISION

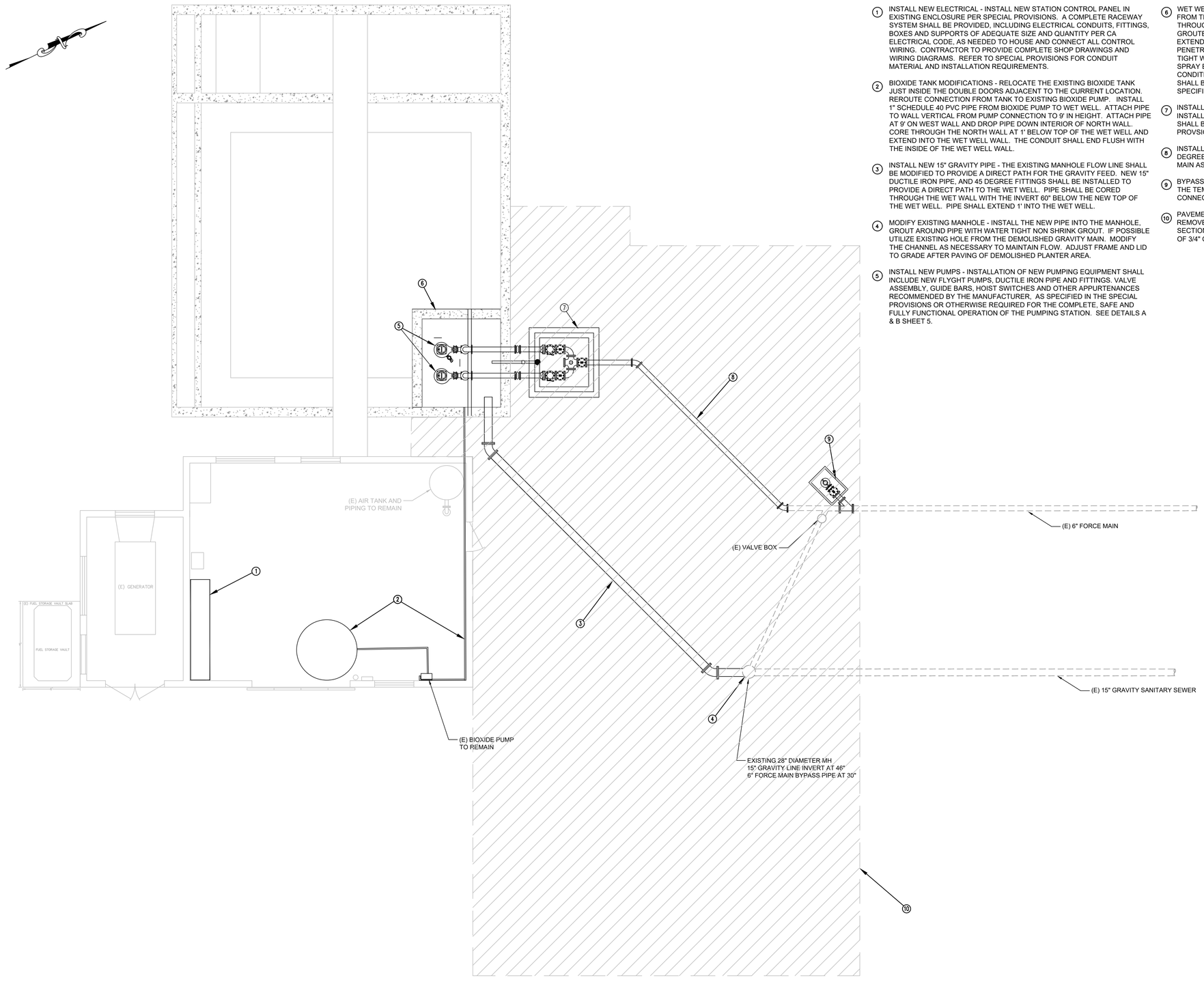
SLATE CREEK LIFT STATION PUMP REPLACEMENT PROJECT

DEMOLITION PLAN

DRAWN BY: CAD — DATE: AUG 2025
CHECKED BY: BPJ — DATE: AUG 2025

DRAWING NUMBER:
2146

SHEET NUMBER:
3 OF 6



CONSTRUCTION NOTES

1. INSTALL NEW ELECTRICAL - INSTALL NEW STATION CONTROL PANEL IN EXISTING ENCLOSURE PER SPECIAL PROVISIONS. A COMPLETE RACEWAY SYSTEM SHALL BE PROVIDED, INCLUDING ELECTRICAL CONDUITS, FITTINGS, BOXES AND SUPPORTS OF ADEQUATE SIZE AND QUANTITY PER CA ELECTRICAL CODE, AS NEEDED TO HOUSE AND CONNECT ALL CONTROL WIRING. CONTRACTOR TO PROVIDE COMPLETE SHOP DRAWINGS AND WIRING DIAGRAMS. REFER TO SPECIAL PROVISIONS FOR CONDUIT MATERIAL AND INSTALLATION REQUIREMENTS.

2. BIOXIDE TANK MODIFICATIONS - RELOCATE THE EXISTING BIOXIDE TANK JUST INSIDE THE DOUBLE DOORS ADJACENT TO THE CURRENT LOCATION. REROUTE CONNECTION FROM TANK TO EXISTING BIOXIDE PUMP. INSTALL 1" SCHEDULE 40 PVC PIPE FROM BIOXIDE PUMP TO WET WELL. ATTACH PIPE TO WALL VERTICAL FROM PUMP CONNECTION TO 9' IN HEIGHT. ATTACH PIPE AT 9' ON WEST WALL AND DROP PIPE DOWN INTERIOR OF NORTH WALL. CORE THROUGH THE NORTH WALL AT 1' BELOW TOP OF THE WET WELL AND EXTEND INTO THE WET WELL WALL. THE CONDUIT SHALL END FLUSH WITH THE INSIDE OF THE WET WELL WALL.

3. INSTALL NEW 15" GRAVITY PIPE - THE EXISTING MANHOLE FLOW LINE SHALL BE MODIFIED TO PROVIDE A DIRECT PATH FOR THE GRAVITY FEED. NEW 15" DUCTILE IRON PIPE, AND 45 DEGREE FITTINGS SHALL BE INSTALLED TO PROVIDE A DIRECT PATH TO THE WET WELL. PIPE SHALL BE CORED THROUGH THE WET WALL WITH THE INVERT 60" BELOW THE NEW TOP OF THE WET WELL. PIPE SHALL EXTEND 1' INTO THE WET WELL.

4. MODIFY EXISTING MANHOLE - INSTALL THE NEW PIPE INTO THE MANHOLE, GROUT AROUND PIPE WITH WATER TIGHT NON SHRINK GROUT. IF POSSIBLE UTILIZE EXISTING HOLE FROM THE DEMOLISHED GRAVITY MAIN. MODIFY THE CHANNEL AS NECESSARY TO MAINTAIN FLOW. ADJUST FRAME AND LID TO GRADE AFTER PAVING OF DEMOLISHED PLANTER AREA.

5. INSTALL NEW PUMPS - INSTALLATION OF NEW PUMPING EQUIPMENT SHALL INCLUDE NEW FLYGHT PUMPS, DUCTILE IRON PIPE AND FITTINGS. VALVE ASSEMBLY, GUIDE BARS, HOIST SWITCHES AND OTHER APPURTENANCES RECOMMENDED BY THE MANUFACTURER, AS SPECIFIED IN THE SPECIAL PROVISIONS OR OTHERWISE REQUIRED FOR THE COMPLETE, SAFE AND FULLY FUNCTIONAL OPERATION OF THE PUMPING STATION. SEE DETAILS A & B SHEET 5.

CONSTRUCTION NOTES - CONTINUED

6. WET WELL MODIFICATIONS - THE EXISTING CHAMFER SHALL BE REMOVED FROM THE BOTTOM OF THE WET WELL. ALL CURRENT PENETRATIONS THROUGH THE WET WELL WALLS SHALL BE REMOVED AND THE HOLES GROUTED. THE TWO INTERIOR WALLS OF THE WET WELL, SHALL BE EXTENDED 5' IN HEIGHT TO PROVIDE ADDITIONAL CAPACITY. ALL NEW PENETRATIONS SHALL BE CORED FOR CLEAN HOLES AND GROUTED WATER TIGHT WITH NON SHRINK GROUT. THE WET WELL SHALL BE COATED WITH A SPRAY EPOXY PROTECTIVE COATING AS SPECIFIED IN THE SPECIAL CONDITIONS. SEE DETAILS A & B SHEET 5. THE OPEN TOP OF THE WET WELL SHALL BE MODIFIED AS NEEDED TO ACCEPT A NEW ACCESS COVER AS SPECIFIED IN THE SPECIAL PROVISIONS.

7. INSTALL VALVE VAULT WITH COVER - A NEW 7'4" X 7'X4" VAULT SHALL BE INSTALLED AS SPECIFIED IN THE SPECIAL CONDITIONS. AN ACCESS COVER SHALL BE INSTALLED ON THE VALVE VAULT AS SPECIFIED IN THE SPECIAL PROVSIONS.

8. INSTALL NEW 6" FORCE MAIN - INSTALL NEW 6" DUCTILE IRON PIPE AND 45 DEGREE FITTINGS TO CONNECT THE NEW PUMPS TO THE EXISTING FORCE MAIN AS SPECIFIED IN THE SPECIAL PROVISIONS.

9. BYPASS CONNECTION - UPON COMPLETION OF PROJECT AND REMOVAL OF THE TEMPORARY BYPASS, CONTRACTOR SHALL VERIFY THAT THE BYPASS CONNECTION IS FULLY FUNCTIONAL FOR FUTURE USE.

10. PAVEMENT RESTORATION - THE OUTLINE OF THE ASPHALT AREA TO BE REMOVED SHALL BE CUT ON NEAT LINES TO A DEPTH OF THE REPLACEMENT SECTION. HOT MIX ASPHALT SHALL BE PLACED TO A DEPTH OF 4" OVER 6" OF 3/4" CRUSHED ROCK BASE MATERIAL.

CONSTRUCTION PLAN

SCALE: 1"=5'

NOTE:
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REVISIONS

No.	Description	Engr Init	By	Date

APPROVAL

REGISTERED PROFESSIONAL ENGINEER
BJORN P JONES
No. 75378
CIVIL
STATE OF CALIFORNIA

PROJECT NUMBER:
17-09

CITY OF GRASS VALLEY ENGINEERING DIVISION

SLATE CREEK LIFT STATION PUMP REPLACEMENT PROJECT

CONSTRUCTION PLAN

DRAWN BY:	DATE:
CAD	AUG 2025
CHECKED BY:	DATE:
BPJ	AUG 2025

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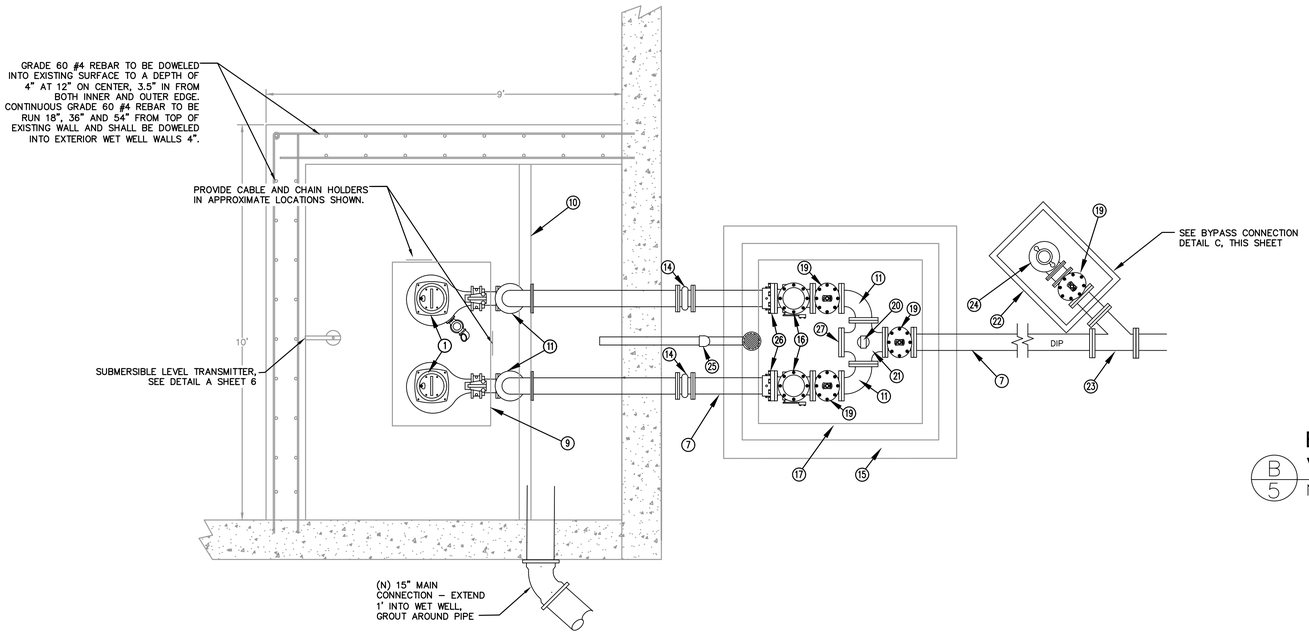
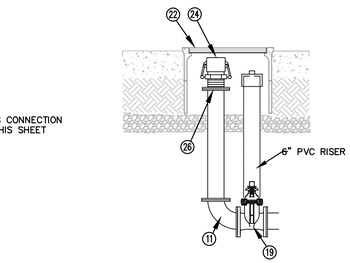
4 OF 6

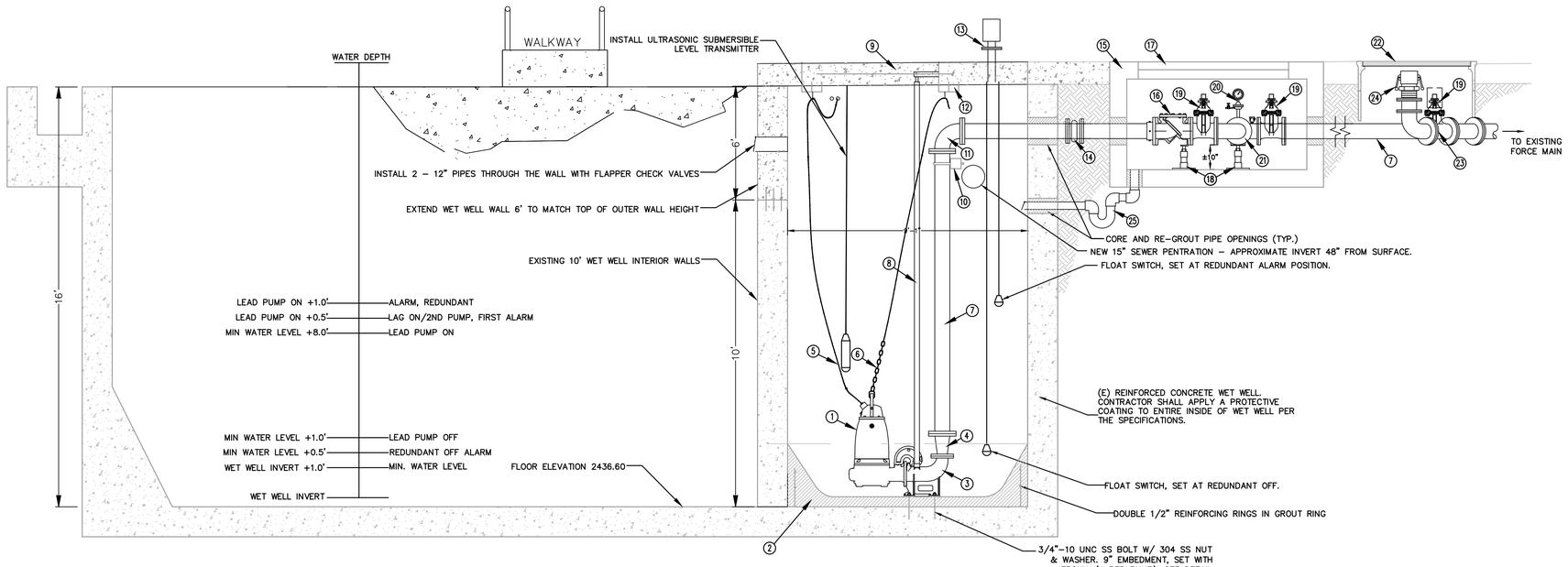


A/5 PUMPING ASSEMBLY AND BYPASS CONNECTION PLAN VIEW
NOT TO SCALE



B/5 BYPASS CONNECTION ELEVATION VIEW
NOT TO SCALE

1. FLYGT 72 HP NP3202 SH 3~ 274 SUBMERSIBLE WASTEWATER PUMP
2. REINFORCED GROUT CIRCLE AND LEVELING COURSE UNDER PUMPS, MAINTAIN ±60° SLOPE TOWARDS CENTER
3. 4" DISCHARGE CONNECTION
4. 4"x6" FLANGED REDUCER
5. FLYGT POWER CABLE (ONE PER PUMP EACH)
6. FLYGT GRIP EYE LIFTING CABLE (ONE PER PUMP EACH)
7. 6" DIP PIPE, VERIFY MEASUREMENTS BEFORE FABRICATION. SEE TRENCH DETAIL G, SHEET 6.
8. 2" STAINLESS STEEL GUIDE RAILS AND UPPER GUIDE RAIL BRACKET (ONE PER PUMP)
9. INSTALL 6" CONCRETE WELL COVER WITH 5' X 3' ALUMINUM ACCESS HATCH WITH SAFETY GRATE , PER SPECIAL PROVISIONS.
10. PIPE SUPPORT PER DETAIL C, SHEET 6
11. 6"x6" FLANGED 90°
12. STAINLESS STEEL CABLE & CHAIN HOLDER
13. 4"ø FLANGED STEEL VENT LINE (E). RETROFIT W/ PEACEMAKER ODOR FILTER AND EPOXY COAT VENT PIPE.
14. 6" FLANGED EXPANSION COUPLING
15. INSTALL 7'4" X 7'4" CONCRETE VALVE VAULT.
16. 6" RESILIENT SEATED CHECK VALVE MATCO NORCA 120WC (OUTSIDE LEVER AND WEIGHT) OR EQUAL
17. INSTALL VAULT COVER W/ 5'x5' SPRING ASSISTED ALUMINUM ACCESS COVER, TRAFFIC RATED
18. PIPE SUPPORT 1 @ EACH FLANGE BETWEEN VALVES & ONE AT CROSS
19. 6" OPEN PORT BALL VALVE
20. PRESSURE GAUGE (4.5" 0–60 PSI), SEE DETAIL F, SHEET 6
21. 6"x 6"x 6"x 6" FLANGED CROSS WITH BLIND FLANGE ON SIDE FACING WET WELL
22. 24"x 36" CONCRETE VAULT W/ 12" RISER CHRISTY B1730 OR EQUAL W/ TRAFFIC RATED LID
23. 6"x 6"x 6" FLANGED WYE
24. 6" CAM LOCK MALE ADAPTER WITH CAP
25. 3" ABS DRAIN LINE WITH P TRAP, FLAPPER CHECK VALVE ON END, AND FLOOR DRAIN LOCATED AS SHOWN
26. 6" EBAA IRON MEGAFLANGE SERIES 2100 ADAPTER FLANGE, OR EQUAL



C/5 PUMPING ASSEMBLY AND BYPASS CONNECTION ELEVATION VIEW
NOT TO SCALE

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PROJECT NUMBER: **17-09**

CITY OF GRASS VALLEY ENGINEERING DIVISION

SLATE CREEK LIFT STATION REHABILITATION PROJECT

WET WELL AND VALVE DETAILS

DRAWN BY: CAD — DATE: AUG 2025
CHECKED BY: BPJ — DATE: AUG 2025

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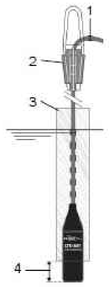
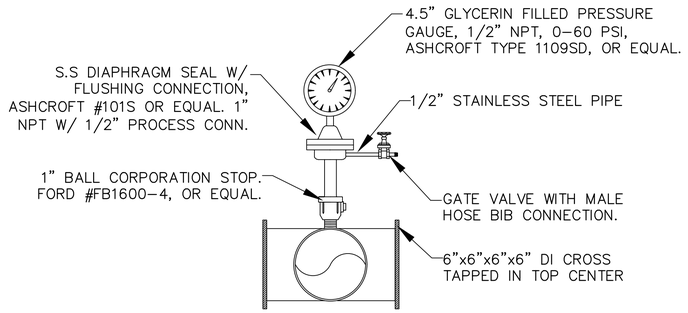
SHEET NUMBER: **5 OF 6**



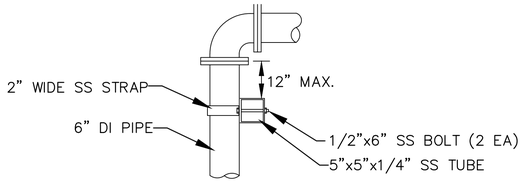
1. CABLE, DIAMETER 8.5–9.0 MM (0.33–0.35 IN.)
2. CABLE BRACKET
3. PROTECTIVE PIPE, NOMINAL DIAMETER GREATER THAN OR EQUAL TO 75 MM (3 IN.)
4. HEIGHT CLEARANCE BETWEEN THE PIPE AND UNIT BOTTOM, 25–50 MM (1–2 IN.)

1. ATTACH A HOOK ABOVE THE LOCATION OF MEASUREMENT. THE HOOK HAS TO BE STRONG ENOUGH TO SUPPORT THE WEIGHT OF THE CABLE.
2. CAREFULLY LOWER THE UNIT UNTIL IT IS AT THE BOTTOM OF ITS RANGE PER PROJECT SPECIFICATIONS. DO NOT EXCEED THE DEPTH RANGE OF THE UNIT.
3. IF NECESSARY, ATTACH THE UNIT TO THE CABLE BRACKET.
4. IF THE UNIT IS USED IN A LOCATION WITH TURBULENCE, THEN INSTALL A PIPE. THE PIPE PROTECTS THE UNIT FROM HITTING THE WALLS OR OTHER OBJECTS. THE PIPE CANNOT COVER AT LEAST 25 MM (0.98 IN.) OF THE BOTTOM OF THE UNIT.

A/6 SUBMERSIBLE LEVEL TRANSMITTER
NOT TO SCALE

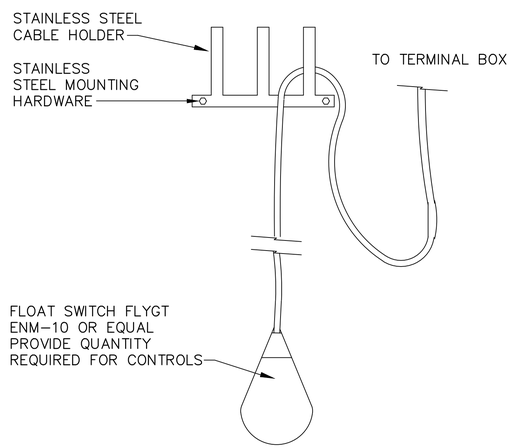


B/6 PRESSURE GAUGE
NOT TO SCALE

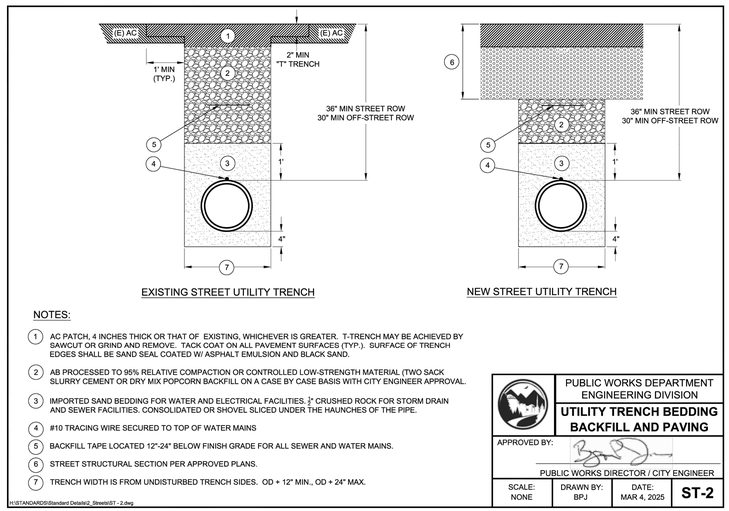


SECTION AT PIPE SUPPORT

C/6 PIPE SUPPORT
NOT TO SCALE



D/6 FLOAT SWITCH AND HANGER
NOT TO SCALE



EXISTING STREET UTILITY TRENCH

NEW STREET UTILITY TRENCH

NOTES:

1. AC PATCH, 4 INCHES THICK OR THAT OF EXISTING, WHICHEVER IS GREATER. T-TRENCH MAY BE ACHIEVED BY SAWCUT OR GRIND AND REMOVE. TACK COAT ON ALL PAVEMENT SURFACES (TYP.). SURFACE OF TRENCH EDGES SHALL BE SAND SEAL COATED W/ ASPHALT EMULSION AND BLACK SAND.
2. AB PROCESSED TO 95% RELATIVE COMPACTION OR CONTROLLED LOW-STRENGTH MATERIAL (TWO SACK SLURRY CEMENT OR DRY MIX POPCORN BACKFILL ON A CASE BY CASE BASIS WITH CITY ENGINEER APPROVAL.
3. IMPORTED SAND BEDDING FOR WATER AND ELECTRICAL FACILITIES. ¾" CRUSHED ROCK FOR STORM DRAIN AND SEWER FACILITIES. CONSOLIDATED OR SHOVEL SLICED UNDER THE HAUNCHES OF THE PIPE.
4. #10 TRACING WIRE SECURED TO TOP OF WATER MAINS
5. BACKFILL TAPE LOCATED 12"-24" BELOW FINISH GRADE FOR ALL SEWER AND WATER MAINS.
6. STREET STRUCTURAL SECTION PER APPROVED PLANS.
7. TRENCH WIDTH IS FROM UNDISTURBED TRENCH SIDES. OD + 12" MIN., OD + 24" MAX.

PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

UTILITY TRENCH BEDDING BACKFILL AND PAVING

APPROVED BY:

PUBLIC WORKS DIRECTOR / CITY ENGINEER

SCALE:	DRAWN BY:	DATE:	
NONE	BPJ	MAR 4, 2025	ST-2

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E/6 STANDARD TRENCH DETAIL
NOT TO SCALE

NOTE:
THE CITY OF GRASS VALLEY OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

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REVISIONS

No.	Description	Engr Init	By	APPROVAL Date

REGISTERED PROFESSIONAL ENGINEER
BJORN P JONES
No. 75378
CIVIL
STATE OF CALIFORNIA

PROJECT NUMBER:
17-09

CITY OF GRASS VALLEY ENGINEERING DIVISION

SLATE CREEK LIFT STATION REHABILITATION PROJECT

DETAILS

DRAWN BY: CAD DATE: AUG 2025
CHECKED BY: BPJ DATE: AUG 2025

DRAWING NUMBER:
2146

SHEET NUMBER:
6 OF 6