

Notice of Exemption

Appendix E

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

From: (Public Agency): City of Folsom
50 Natoma Street
Folsom, CA 95630

County Clerk
County of: Sacramento

(Address)

Project Title: Ashland I Water Rehabilitation Project

Project Applicant: City of Folsom

Project Location - Specific:

Project Location - City: Folsom Project Location - County: Sacramento

Description of Nature, Purpose and Beneficiaries of Project:
See attached project description for full detail.

Name of Public Agency Approving Project: City of Folsom

Name of Person or Agency Carrying Out Project: _____

Exempt Status: (check one):

- Ministerial (Sec. 21080(b)(1); 15268);
- Declared Emergency (Sec. 21080(b)(3); 15269(a));
- Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- Categorical Exemption. State type and section number: Class 2: 15302(c)
- Statutory Exemptions. State code number: _____

Reasons why project is exempt:

The Project consists of upgrading an existing facility by replacing existing water infrastructure. The project will not significantly change the purpose or footprint of the previous infrastructure. See attached Project Description for additional details.

Lead Agency
Contact Person: Vaughn Fleischbein Area Code/Telephone/Extension: 916-351-3415

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? Yes No

Signature:  Date: 2/12/2013 Title: EWK Director

Signed by Lead Agency Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: _____

PROJECT DESCRIPTION

The proposed project will rehabilitate approximately 1,839 lineal feet of existing 18-inch and 21-inch waterline through a combination of both open-cut excavation and trenchless technologies on both the north and south side of Rainbow Bridge within the City of Folsom. The rehabilitation work will include the existing pipe at the north abutment of Rainbow Bridge and extend north to the intersection of Folsom-Auburn Road and Greenback Lane where it will turn north along Folsom-Auburn Road for approximately 500 feet to Hillswood Drive and the existing pipe at the south abutment of Rainbow Bridge and extend south along Greenback Lane (south) approximately 300 feet (Figure 1). At this location the project will include supervisory control and data acquisition (SCADA) upgrades to the existing pressure reducing valve (PRV) Station and a new power service from SMUD.

The proposed project will include the following work (see attachment A for more details):

1. Install a new 12-inch butterfly valve for bypass isolation at the intersection of Folsom Ranch Drive and Greenback Lane.
2. Add a buried bypass pipe interconnection and valve for the PRV in Folsom Ranch Drive.
3. Within the USBR Property:
 - a. Trim and/or provide special provisions for construction around existing elderberry shrub as recommended by the project-specific valley elderberry longhorn beetle (VELB) survey and VELD avoidance measures memorandum for project activities.
 - b. Remove 21-inch welding steel pipe (WSP) and replace with 20-inch restrained ductile iron pipe (RDIP) below grade on north and south side of Rainbow Bridge.
 - c. Remove existing isolation valves.
 - d. Remove 20-inch WSP and replace with 20-inch restrained ductile iron pipe (RDIP) below grade on north and south side of Rainbow Bridge.
 - e. Remove 20-inch WSP and replace with 20-inch fusion bonded epoxy WSP above grade on north and south side of Rainbow Bridge and connect to existing pipe.
 - f. Replace existing 8-inch blowoff assembly in kind.
 - g. Weld restraint harness and existing pipe and repair coating.
4. Install new 20-inch butterfly valves upstream and downstream of United States Bureau of Reclamation (USBR) property.
5. Replace existing 8-inch blowoff valve assembly and extend discharge to back of sidewalk.
6. Replace existing 1-inch air/ vacuum release valve assembly and extend to back of sidewalk.

7. Provide CCTV inspection including providing sufficient access to the existing pipeline, water removal and disposal, and rehabilitation of all associated surface features/ roadway work and existing utilities needed to provide CCTV access. Based on CCTV inspection results, rehabilitation of the inspected pipeline may occur during construction.
8. Replace emergency spot repair sleeve with new section of pipe and repair sleeves that include hand holes for grouting.
9. Replace two 18-inch butterfly valves near the intersection of Folsom-Auburn Road and Greenback Lane.
10. Install a new 12-inch butterfly valve on the branch tee near the intersection of Folsom-Auburn Road and Greenback Lane.
11. Add SCADA monitoring functionality and new power service to the existing Pressure Reducing Valve (PRV) station located south of Rainbow Bridge.
12. Replace PRV and PRV Enclosure.

The project will also include public notifications, environmental protection and monitoring (where necessary), SWPPP compliance, potholing/field verification, disinfection and testing, traffic and pedestrian control, tree protection/trimming/removal, surface restoration, VELB protection (as indicated above) and site security.

If project construction will take place between March 15 and August 31st, a preconstruction nesting bird survey will be conducted by a qualified biologist or ornithologist prior to the start of construction activity. If no raptor or special status bird nests are found during the surveys, construction may proceed unconstrained by conflicts with raptors and/or migratory birds. If nests are found, construction activities within 300 feet shall be postponed until the fledglings have left the nest. The time of the bird's departure must be determined by a qualified wildlife biologist. If the project will take place outside of the nesting season the proposed project will not include a nesting bird survey.

Construction methods consist of open trenching. For work along Folsom Auburn and Greenback Lane, including work at Rainbow Bridge, construction and associated traffic control will occur at night to minimize traffic. If necessary due to lane closure during construction activities, a detour around Rainbow Bridge (as preferred by the City) will be provided. To ensure that no protected trees are impacted as a part of the proposed project, only hand digging will take place near Oaks within the project footprint.



Location: C:\Users\sreed\OneDrive - ECORP Consulting, Inc\Project Work - Personal\folson\MyProject\MyProject.aprx - Vicinity (2020) A112 Quad Base - Lrv (sreed\10/2022)

Work Limits - 6.16 ac.

Sacramento County, California
 §.26 & §.35, T.10N, R.07E, MDBM
 Rio De Los Americanos Land Grant
 Latitude (NAD83): 38.6837555°
 Longitude (NAD83): 121.1771254°
 Watershed: Lower American 18020111

Map Date: 9/30/2022
 Sources: ESRI, USGS

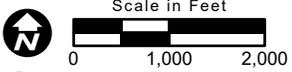
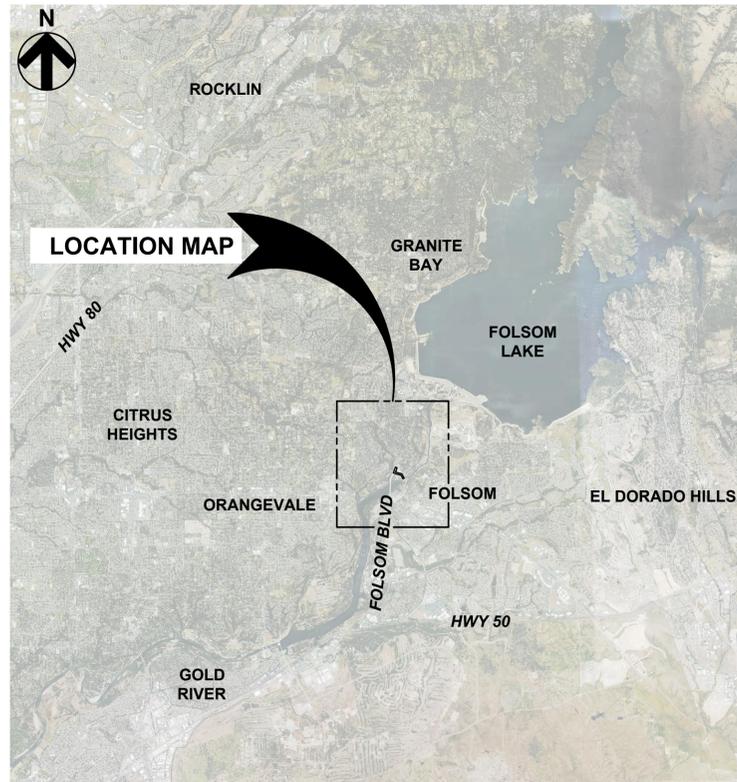


Figure 1. Project Location and Vicinity

Attachment A: Project Engineering Plans



VICINITY MAP
SCALE: NTS

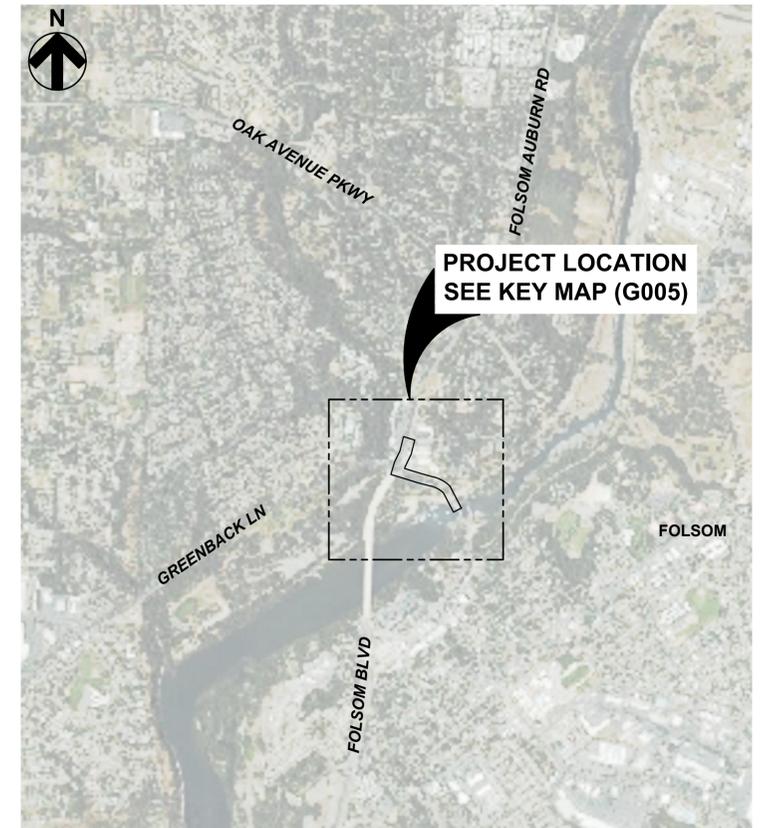
CITY OF FOLSOM

ASHLAND WATER REHABILITATION PROJECT 1

PROJECT No. 361-005

BID SET

FEBRUARY 2023



LOCATION MAP
SCALE: NTS

DRAWING INDEX

SHEET NO.	DRAWING NO.	DRAWING TITLE
GENERAL		
1	G001	COVER SHEET, DRAWING INDEX, LOCATION MAP & VICINITY MAP
2	G002	SYMBOLS, LEGENDS, SERVICE DESIGNATIONS & ABBREVIATIONS
3	G003	GENERAL NOTES
4	G004	GENERAL NOTES
5	G005	KEY MAP, WORK SEQUENCE, AND UTILITY LOCATING SCHEDULE
CIVIL		
6	C100	PLAN & PROFILE - FOLSOM AUBURN ROAD - STA 100+00 TO 103+75
7	C101	PLAN & PROFILE - GREENBACK LANE - STA 103+75 TO 109+00
8	C102	PLAN & PROFILE - GREENBACK LANE - STA 109+00 TO 113+50
9	C103	PLAN & PROFILE - GREENBACK LANE - STA 113+50 TO 115+27
10	C104	PLAN & PROFILE - GREENBACK LANE - STA 200+00 TO 203+03
11	C105	BLACK MINER'S BAR BYPASS VALVE PLAN & DETAIL
12	C106	EXISTING PRV STATION BYPASS PLAN AND DETAIL
13	C150	CIVIL DETAILS - 1
14	C151	CIVIL DETAILS - 2
15	C152	CIVIL DETAILS - 3
16	C153	CIVIL DETAILS - 4
17	C154	CIVIL DETAILS - 5
18	C155	CATHODIC PROTECTION DETAILS - 1
19	C156	CATHODIC PROTECTION DETAILS - 2

DRAWING INDEX

SHEET NO.	DRAWING NO.	DRAWING TITLE
ELECTRICAL		
20	E001	ELECTRICAL SYMBOLS AND ABBREVIATIONS
21	E002	ELECTRICAL AREA PLAN VIEW
22	E003	ELECTRICAL SINGLE LINE DIAGRAM
23	E004	CONTROL PANEL WIRING DIAGRAM
24	E005	TYPICAL INSTALLATION DETAILS
25	E006	ELECTRICAL SITE PLAN
INSTRUMENTATION		
26	I001	INSTRUMENTATION SYMBOLS AND ABBREVIATIONS
27	I002	PROCESS AND INSTRUMENTATION DIAGRAM

APPROVED FOR CONSTRUCTION:

STEVE KRAHN, PE
CITY ENGINEER

DATE

MARCUS YASUTAKE, PE
EWR DIRECTOR

DATE

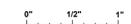
ERIC L. JONES PE 68550
PROJECT MANAGER

DATE



10569 OLD PLACERVILLE ROAD
SACRAMENTO, CA 95827
OFFICE: 916.364.1490

PAPER SIZE: 22X34 (ANSI D)



THIS BAR IS 1 INCH
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IF NOT, SCALE
ACCORDINGLY.

JOB NO. 361-005

DATE 2/9/2023

DRAWN BY AGP/BF

DESIGNED BY BF

PROJ. MGR. ELJ

REV	DESCRIPTION	DATE	APVD



ASHLAND WATER
REHABILITATION
PROJECT 1

COVER SHEET, DRAWING INDEX,
LOCATION MAP & VICINITY MAP



G001
DRAWING
NUMBER

SHEET 1 OF 27

Plot Date: 2/8/2023 9:51 AM
Plotted By: ANTHONY PEREZ
File Name: S:\common\projects\361-City of Folsom\005-Ashland\04-Design\Drawings\01-General\361-005-G_Sheets.dwg

ABBREVIATIONS

A		MJ	MECHANICAL JOINT
AB	AGGREGATE BASE	MTR	MOTOR
AC	ASPHALT CONCRETE	N	
APPROX	APPROXIMATE(LY)	(N)	NEW
AVE	AVENUE	N/A	NOT APPLICABLE
AVRV	AIR VACUUM AIR RELEASE VALVE	NTS	NOT TO SCALE
B			
BF	BLIND FLANGE	O	ON CENTER
BFV	BUTTERFLY VALVE	OC	OUTSIDE DIAMETER
BM	BEAM/BENCHMARK	OD	OVERFLOW
BOV	BLOWOFF VALVE	OF	OVERFLOW MANHOLE
BV	BALL VALVE	OFMH	OVERFLOW MANHOLE
C			
CLSM	CONTROLLED LOW STRENGTH MATERIAL	P&ID	PROCESS AND INSTRUMENTATION DIAGRAM
CMC	CEMENT MORTAR COATING	PE	PLAIN END
CML	CEMENT MORTAR LINING	PH	POT HOLE
CML&C	CEMENT MORTAR LINING AND COATING	PSI	POUNDS PER SQUARE INCH
CONC	CONCRETE	PV	PLUG VALVE
CPLG	COUPLING	PVC	POLYVINYLCHLORIDE
CV	CONTROL VALVE	Q	
D			
D	DRAIN	QCPLG	QUICK COUPLING
DET	DETAIL	R	RADIUS
DI	DROP INLET	RCP	REINFORCED CONCRETE PIPE
DIA	DIAMETER	RDIP	RESTRAINED DUCTILE IRON PIPE
DIP	DUCTILE IRON PIPE	RD	ROAD
DWG	DRAWING	RED	REDUCER
E			
(E)	EXISTING	REQ'D	REQUIRED
EG	EXISTING GRADE	RW	RECYCLED WATER
EL	ELEVATION	S	
ELEC	ELECTRICAL	SAM	SAMPLE
ELL	ELBOW	SCH	SCHEDULE
EQUIP	EQUIPMENT	SD	STORM DRAIN
EXIST	EXISTING	SDMH	STORM DRAIN MANHOLE
F			
(F)	FUTURE	SFM	SEWER FORCE-MAIN
FCA	FLANGE COUPLING	SHT	SHEET
ADAPTER		SP	SPECIAL PROVISIONS
FD	FLOOR DRAIN/FIRE DAMPER	SPEC	SPECIFICATION(S)
FE	FLOW-METER	SS	SANITARY SEWER
FF	FINISHED FLOOR	SSMH	SANITARY SEWER MANHOLE
FG	FINISHED GRADE	SST	STAINLESS STEEL
FL	FLOW LINE	STA	STATION
FLG	FLANGE(D)	STD	STANDARD
FRP	FIBERGLASS REINFORCED PLASTIC	STL	STEEL
FT	FEET	T	
G			
GPM	GALLONS PER MINUTE	T, TEL	TELECOMMUNICATIONS
GV	GATE VALVE	TOP	TOP OF PIPE
H			
HP	HORSEPOWER	TBC	TOP BACK OF CURB
I			
IE	INVERT ELEVATION	TC	TOP OF CURB/TOP OF CONCRETE
INV	INVERT	TCDI	TOP OF CURB DROP INLET
J			
JT	JOINT	TP	TOP OF PAVEMENT
L			
L	LENGTH	TYP	TYPICAL
LF	LINEAL FEET	U	
M			
MAX	MAXIMUM	ULT1	UTILITY LOCATION TRENCH NO 1
MECH	MECHANICAL	UON	UNLESS OTHERWISE NOTED
MGD	MILLION GALLONS PER DAY	V	
MH	MANHOLE	V	VALVE/VENT
MIN	MINIMUM/MINUTE	VAR	VARIES, VARIABLE
		VERT	VERTICAL
		VFD	VARIABLE FREQUENCY DRIVE
		VLV	VALVE
		W	
		W	WATER/WEST/WATTS
		WSP	WELDED STEEL PIPE
		W/	WITH
		W/O	WITHOUT
		WW	WASTEWATER

LINE-TYPE LEGEND

---	CENTERLINE OF PIPE
—	NEW PIPE -- ABOVEGROUND (MECH DWGS)
---	NEW PIPE -- UNDERGROUND (MECH DWGS)
---	EXISTING PIPE -- ABOVEGROUND (MECH DWGS)
---	EXISTING PIPE -- UNDERGROUND (MECH DWGS)
— W —	NEW WATER MAIN PIPE
— W —	EXISTING WATER MAIN PIPE
— SFM —	NEW SEWER FORCE MAIN
— SFM —	EXISTING SEWER FORCE MAIN
— RW —	NEW RECYCLED WATER PIPE
— RW —	EXISTING RECYCLED WATER PIPE
— SS —	NEW SANITARY SEWER PIPE
— SS —	EXISTING SANITARY SEWER PIPE
— SD —	NEW STORM DRAIN LINE
— SD —	EXISTING STORM DRAIN LINE
— OF —	NEW OVER FLOW LINE
— OF —	EXISTING OVER FLOW LINE
— D —	NEW DRAIN LINE
— D —	EXISTING DRAIN LINE
-----	PIPING TO BE ABANDONED OR REMOVED
— NG —	EXISTING NATURAL GAS LINE
— E —	NEW ELECTRICAL CONDUIT
— E —	EXISTING ELECTRICAL CONDUIT
—	NEW EQUIPMENT
—	EXISTING EQUIPMENT OR STRUCTURES
---	PROPERTY LINE
---	MATCH LINE
---	CENTER LINE
---	RIGHT OF WAY
— X —	FENCE
▼	GRADE BREAK
---	SWALE OR DITCH
---	EDGE OF WATER
200	MAJOR CONTOURS
195	MINOR CONTOURS
○	HANDRAIL

PIPE SYMBOLS LEGEND

└┐	90° ELBOW	•	WELDED JOINT
⊕	90° ELBOW UP	○	GROOVED JOINT
⊖	90° ELBOW DOWN		FLANGED JOINT
└┐	45° ELBOW		MECHANICAL JOINT
└┐	22.5° ELBOW	⊞	RESTRAINED MECHANICAL JOINT
⊕	45° ELBOW UP	⊞	BALL JOINT
⊖	45° ELBOW DOWN	┌┐	FLANGE GROOVE ADAPTER
└┐	TEE	┌┐	FLANGE COUPLING ADAPTER
⊕	TEE UP	┌┐	FLEXIBLE COUPLING
⊖	TEE DOWN	⊞	UTILITY STATION
└┐	LATERAL	⊞	DROP INLET
└┐	LATERAL UP	⊞	SANITARY SEWER MANHOLE
└┐	LATERAL DOWN	⊞	STORM DRAIN MANHOLE
⊞	CONCENTRIC REDUCER	⊞	FIRE EXTINGUISHER
⊞	ECCENTRIC REDUCER	⊞	PRESSURE INDICATING GAUGE
└┐	CAP	⊞	STRAINER
└┐	BLIND FLANGE	⊞	CLEANOUT
└┐	QUICK CONNECTOR	⊞	EXPANSION JOINT
	UNION	⊞	AUDIBLE ALARM (BUZZER OR HORN)
↔	BREAK IN PIPING (SINGLE LINE)	⊞	FLEXIBLE COUPLING
⊞	GATE VALVE	⊞	DRAIN
⊞	PLUG VALVE (PLAN VIEW)	⊞	AIR VENT
⊞	PLUG VALVE (SECTION VIEW)	⊞	EMERGENCY SHOWER/ EYEWASH STATION
⊞	HOSE BIBB	⊞	BACKFLOW PREVENTER
⊞	PLUG VALVE W/ VALVE BOX (NORMALLY CLOSED)	⊞	DIAPHRAGM SEAL
⊞	PLUG VALVE W/ VALVE BOX (NORMALLY OPEN)	⊞	AIR VACUUM RELEASE VALVE OR AIR RELEASE VALVE
⊞	BALL VALVE	⊞	HYDRANT
⊞	BUTTERFLY VALVE	⊞	HOSE BIBB
⊞	CHECK VALVE	⊞	
⊞	FLOW METER	⊞	
⊞	MANUAL AIR VENT	⊞	
⊞	AUTOMATIC AIR VENT	⊞	
•	BLOWOFF VALVE ASSEMBLY (PLAN VIEW)		
▼	AVRV (PLAN VIEW)		

PATTERN LEGEND

▨	DEMOLITION AREA	▨	STEEL OR STAINLESS STEEL
▨	AC W/ AB (SECTION VIEW)	▨	AC PAVEMENT IN PLAN VIEW (OR GROUT IN SECTION VIEW)
▨	NATURAL GROUND OR GRADE	▨	GRATING
▨	COMPACTED BACKFILL	▨	MISCELLANEOUS MATERIAL
▨	AB (SECTION VIEW)	▨	HIGHLIGHTED AREA
▨	CONCRETE		
▨	CHECKER PLATE		

SERVICE IDENTIFICATION SYSTEM

PIPE SIZE (NOMINAL)
SERVICE ABBREVIATION
NOTE/REFERENCE

24" (SS)
SEE NOTES 1 & 3

SERVICE ABBREVIATIONS

C	ELECTRICAL CONTROL
D	DRAIN
EFF	EFFLUENT
E	ELECTRICAL SERVICE
FA	FOUL AIR
FM	FORCE MAIN
OF	OVERFLOW
NPW	NON POTABLE WATER
PW	POTABLE WATER
RW	RECYCLED WATER/RAW WATER
SAM	SAMPLE
SD	STORM DRAIN
SFM	SEWER FORCE MAIN
SS	SANITARY SEWER
SSFM	SANITARY SEWER FORCE MAIN
V	VENT
W	WATER SERVICE
Δ	POINT OF INFLECTION

MISC. MARKS

⋮	SINGLE LINE CONTINUATION
⋮	DOUBLE LINE CONTINUATION
⋮	GENERAL CONTINUATION
▽	WATERLINE
➔	TRAFFIC DIRECTION
PH#	POT HOLE
○	UTILITY LOCATION TRENCH (LENGTH OF TRENCH INDICATED)
⊙	CAPITAL CITY MARKER
⬆	NORTH ARROW

SECTION/DETAIL NUMBERING

(1) MAIN FEATURE TITLE: **<FEATURE TITLE>** (FEATURE TITLE)
SCALE: 1" = 1'-0" (NOTE/SCALE)

(2) DETAIL TITLE: ON DWG M180 THIS DETAIL IS IDENTIFIED AS DETAIL 1
<DETAIL NAME> (DETAIL LABEL (NUMBERS FOR DETAILS))
SCALE: 1" = 1'-0" (SEE NOTE 2 (TYP 2 PLACES)) (SHEET REFERENCED SCALE & NOTES)

(3) SECTION OR ELEVATION TITLE: ON DWG C102 THIS SECTION (OR ELEVATION) IS IDENTIFIED AS SECTION A OR ELEVATION A
<DETAIL NAME> (SECTION OR ELEVATION TITLE)
SCALE: NO SCALE (SECTION LABEL (LETTERS FOR SECTIONS)) (SHEET REFERENCED SCALE)

(4) SECTION/ELEVATION CALL OUT: SECTION A (OR ELEVATION A) FROM DWG C100:
<DETAIL NAME> (SECTION/ELEVATION DESIGNATION) (SHEET SECTION IS ON)

(5) PHOTO CALL OUT: PHOTO 1 FROM DWG M001:
<DETAIL NAME> (PHOTO NUMBER) (SHEET PHOTO IS ON)

10569 OLD PLACERVILLE ROAD
SACRAMENTO, CA 95827
OFFICE: 916.364.1490

PAPER SIZE: 22X34 (ANSI D)

THIS BAR IS 1 INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.

JOB NO. 361-005
DATE 2/9/2023
DRAWN BY AGP/BF
DESIGNED BY BF
PROJ. MGR. ELJ

REV	DESCRIPTION	DATE	APVD

CITY OF FOLSOM
UTILITIES
ENGINEERING & COMPLIANCE

ASHLAND WATER REHABILITATION PROJECT 1

SYMBOLS, LEGENDS, SERVICE DESIGNATIONS & ABBREVIATIONS

REGISTERED PROFESSIONAL ENGINEER
CIVIL
STATE OF CALIFORNIA
C68550

G002
DRAWING NUMBER

SHEET 2 OF 27

Plot Date: 2/8/2023 3:19 PM
Plotted By: ERIC JONES
File Name: S:\common\projects\361-City of Folsom\005-Ashland I Project\04-Design\Drawings\01-General\361-005-G_Sheets.dwg

GENERAL NOTES

- ALL WORKMANSHIP, MATERIALS, AND CONSTRUCTION SHALL CONFORM TO THE CITY OF FOLSOM'S LATEST REVISED STANDARD CONSTRUCTION SPECIFICATIONS AND STANDARD CONSTRUCTION DETAILS, PROJECT MANUAL; THE AWWA STANDARDS; THE ASTM STANDARDS; AND THE STATE STANDARD SPECIFICATIONS AND STANDARD PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UNDERSTANDING ALL STANDARDS PERTAINING TO THIS PROJECT.
- CONSTRUCTION BIDS SHALL BE BASED ON THE WORK REQUIRED BY THIS PLAN SET AND SPECIFICATIONS, WHETHER OR NOT SPECIFICALLY ITEMIZED ON THE BID SHEET, TO CONSTRUCT THE FACILITIES COMPLETE AND IN PLACE THAT ARE SUITABLE FOR THEIR INTENDED PURPOSE.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY CONSTRUCTION PERMITS, INCLUDING BUT NOT LIMITED TO PERMITS FOR ENCROACHMENT, CONSTRUCTION WATER, DISCHARGE OF CONSTRUCTION WATER, RIGHTS OF ENTRY, APPROVALS AND LICENSES PRIOR TO BEGINNING CONSTRUCTION.
- TO OBTAIN THE ENCROACHMENT PERMIT, THE CONTRACTOR WILL BE REQUIRED TO POST A PERFORMANCE BOND FOR THE WORK IN THE PUBLIC RIGHT-OF-WAY OR EASEMENT AND PROVIDE PROOF OF INSURANCE NAMING THE CITY OF FOLSOM AS ADDITIONALLY INSURED.
- THE CONTRACTOR SHALL WARRANT ALL WORK UNDER THE TWO (2) YEAR GUARANTEE AS DESCRIBED IN GENERAL PROVISIONS, SECTION 5.23.
- THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL POWER, UTILITIES, AND TEMPORARY FACILITIES THAT ARE NECESSARY TO COMPLETE THE WORK.
- BEFORE COMMENCING WORK, THE CONTRACTOR SHALL NOTIFY THE CITY OF FOLSOM DEPARTMENT OF PUBLIC WORKS (5) WORKING DAYS IN ADVANCE. CALL CITY OF FOLSOM PUBLIC WORKS DEPARTMENT AT (916) 351-3559.
- BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL PROVIDE, IN WRITING, NOTIFICATION TO RESIDENTS OR BUSINESSES WHEN CONTRACTOR IS AFFECTING RESIDENT/BUSINESSES PER GENERAL PROVISIONS SECTION 10.05 AND AS MODIFIED BELOW. THIS INCLUDES BUT IS NOT LIMITED TO COMMENCEMENT WITH CONSTRUCTION, WATER SERVICE SHUT DOWN, NIGHT WORK, ROAD WORK THAT WOULD AFFECT ACCESS TO THE RESIDENT/BUSINESS, ETC. THE COMMERCIAL NOTIFICATION SHALL INCLUDE BLACK MINOR'S CALIFORNIA STATE PARK WHEN IDENTIFIED AS AN OUT OF SERVICE PARCEL IN THE WATER SERVICE OUTAGE MAPS. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE DOOR HANGER ONLY NOTIFICATION TO RESIDENTS AND BUSINESS INCLUDING INFORMATION DESCRIBED IN IN THE GENERAL PROVISIONS BASED ON THE TIME TABLE BELOW:
30 DAYS (COMMERCIAL ONLY GENERAL NOTICE)
14 DAYS (RESIDENTIAL ONLY GENERAL NOTICE)
3 DAYS (RESIDENTIAL AND COMMERCIAL)
DAY PRIOR TO CONSTRUCTION, KNOCK ON DOOR (COMMERCIAL AND RESIDENTIAL)
- SECURITY MEASURES FOR THE SAFETY OF ALL CONSTRUCTION EQUIPMENT AND UNIT APPLIANCES SHALL BE EMPLOYED.
- ALL CONSTRUCTION MATERIALS, EQUIPMENT, STORAGE, STOCKPILING AND STAGING MUST BE DONE WITHIN PRIVATE PROPERTY WITH WRITTEN PERMISSION FROM THE OWNER. THE PUBLIC RIGHT-OF-WAY/STREET MUST BE KEPT CLEAR AND FREE OF DEBRIS WHILE WORKING WITHIN.
- THE CONTRACTOR MUST OBTAIN WRITTEN PERMISSION FROM THE OWNER OF ANY PRIVATELY OWNED PROPERTY PRIOR TO BEGINNING ANY WORK, STORING MATERIALS OR OTHERWISE CONDUCTING ANY OPERATIONS ON SAID PROPERTY. THE WRITTEN APPROVAL FROM THE PROPERTY OWNER MUST BE ON FILE WITH THE CITY BEFORE ANY OPERATIONS WILL BE PERMITTED ON SAID PROPERTY.
- THE CONTRACTOR IS RESPONSIBLE FOR HAVING A COMPLETE SET OF CONTRACT PLANS AND SPECS, CITY PERMITS, AND THE LATEST GOVERNING STANDARD SPECIFICATIONS AT THE PROJECT SITE DURING WORK HOURS.
- THE CONTRACTOR SHALL KEEP UP-TO-DATE A COMPLETE RECORD SET OF RED-LINED PRINTS OF THE CONTRACT DRAWINGS SHOWING EVERY CHANGE FROM THE ORIGINAL DRAWINGS MADE DURING THE COURSE OF CONSTRUCTION, INCLUDING EXACT LOCATIONS, SIZES, MATERIALS, AND EQUIPMENT. A COMPLETE SET OF CORRECTED AND COMPLETED RECORD DRAWINGS SHALL BE SUBMITTED TO THE CITY PRIOR TO FINAL ACCEPTANCE OF THE SYSTEM.
- THE CONTRACTOR SHALL COORDINATE THROUGH THE CONSTRUCTION INSPECTOR WITH THE CITY OF FOLSOM LIGHTING AND LANDSCAPING DISTRICT (LLD) MANAGER FOR THE REMOVAL, RELOCATION, AND/OR REPLACEMENT OF ALL EXISTING PLANT MATERIAL IMPACTED BY CONSTRUCTION, WHICH IS MAINTAINED BY THE LIGHTING AND LANDSCAPING DISTRICT, AND FOR ANY SHUTDOWNS OF EXISTING IRRIGATION SYSTEMS.
14.1. UNLESS OTHERWISE AGREED TO IN WRITING, REPLACEMENT PLANTS SHALL BE OF THE SAME TYPE AND OF COMPARABLE SIZE TO THOSE REMOVED.
14.2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE EXISTING IRRIGATION SYSTEM DURING CONSTRUCTION, INCLUDING REPAIRS OF ANY CONSTRUCTION DAMAGE.
14.3. THE CONTRACTOR SHALL GIVE A MINIMUM OF 48 HOURS NOTICE OF INTENT TO SHUT DOWN THE EXISTING IRRIGATION SYSTEM TO THE LLD MANAGER.
14.4. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY PLANT MATERIAL WHICH IS DAMAGED BY CONSTRUCTION ACTIVITY, WHETHER DIRECTLY OR AS A RESULT OF INSUFFICIENT WATER OR SIMILAR CAUSES.
14.5. THE CONTRACTOR SHALL EXERCISE GREAT CARE WHEN CUTTING INTO EXISTING IRRIGATION

GENERAL NOTES (CONTINUED)

- MAINLINES TO PREVENT THE INTRODUCTION OF DIRT OR OTHER FOREIGN MATERIALS INTO THE PIPE WHICH MAY CLOG EXISTING HEADS OR OTHERWISE DAMAGE THE SYSTEM.
- 14.6. PRIOR TO FINAL ACCEPTANCE OF THE IMPROVEMENTS SHOWN ON THESE PLANS, THE LANDSCAPING AND IRRIGATION SHALL BE RESTORED TO THE CITY'S SATISFACTION.
15. THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH THE GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY OF FOLSOM HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT.
16. IF ANY ARCHEOLOGICAL, CULTURAL, OR HISTORICAL RESOURCES, ARTIFACTS OR FEATURES ARE DISCOVERED DURING THE COURSE OF CONSTRUCTION ANYWHERE ON THE PROJECT SITE, WORK SHALL BE SUSPENDED WITHIN 150 FEET OF THAT LOCATION UNTIL A QUALIFIED PROFESSIONAL ARCHEOLOGIST ASSESSES THE SIGNIFICANCE OF THE DISCOVERY AND PROVIDES CONSULTATION WITH THE FOLSOM HISTORICAL SOCIETY AND THE COMMUNITY DEVELOPMENT DEPARTMENT. THE CITY OF FOLSOM COMMUNITY DEVELOPMENT AND THE FOLSOM HISTORICAL SOCIETY SHALL BE NOTIFIED AND ANY APPROPRIATE MEASURES AGREED UPON PRIOR TO THE RECOMMENCEMENT OF CONSTRUCTION IN THE AREA IN QUESTION.
17. CONSTRUCTION WORK HOURS FOR WORKING INSIDE THE ROADWAY WITHIN FOLSOM AUBURN RD, THE INTERSECTION OF FOLSOM-AUBURN RD AND GREENBACK LANE, AND SOUTH OF THIS INTERSECTION TO THE RAINBOW BRIDGE ARE LIMITED **NIGHT WORK ONLY**. NIGHT WORK SHALL BE LIMITED SUNDAY NIGHT THOUGH THURSDAY NIGHT, FROM 8:00 PM TO 5:30 AM. OTHER WORK THAT IS LOCATED OUTSIDE OF THE AREA DESCRIBED ABOVE FOR NIGHT WORK MAY ONLY OCCUR MONDAY THROUGH FRIDAY, FROM 8:30 AM TO 3:30 PM IF A MINIMUM OF ONE LANE IS OPEN IN EACH DIRECTION OF TRAVEL AT ALL TIMES. IF CONTRACTOR IS WORKING OUTSIDE OF THE ROADWAY WHERE TRAFFIC ISN'T IMPACTED, HOURS OF WORK ARE 7:00 AM TO 6:00 PM. FLUSHING, DISINFECTION, TIE-INS, AND WATER SHUT DOWNS ARE ONLY ALLOWED BETWEEN 8:30 AM AND 3:30 PM ON MAJOR ROADS AND 7:00 AM AND 6:00 PM ON NON-MAJOR ROADS. CONSTRUCTION IS PROHIBITED ON SATURDAY AND SUNDAYS (DURING THE DAY), CITY/FEDERAL HOLIDAYS, AND PER SPECIFICATIONS, EXCEPT WITH WRITTEN PERMISSION OF THE CITY. REQUESTS MUST BE SUBMITTED IN WRITING TO THE OWNER'S REPRESENTATIVE AT LEAST TWO (2) WORKING DAYS IN ADVANCE OF THE INTENDED WORK. IN CASE OF AN EMERGENCY THE CONTRACTOR WILL BE ALLOWED TO WORK AT NIGHT OR ON WEEKENDS OR LEGAL HOLIDAYS BUT MUST NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY.
18. COMPLIANCE WITH NOISE RESTRICTIONS SHALL BE REQUIRED. CONSTRUCTION MUST ONLY OCCUR DURING APPROVED WORK HOURS AS DESCRIBED IN NOTE 17, AND EQUIPMENT SHALL BE MUFFLED AND SHROUDED TO MINIMIZE NOISE LEVELS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
19. NO REFUELING, LUBRICATION, OR MAINTENANCE OF CONSTRUCTION VEHICLES SHALL BE DONE ANYWHERE ON THE SITE EXCEPT WITHIN APPROVED CONSTRUCTION STAGING AREAS. STAGING AREAS SHALL BE SET UP TO THE SATISFACTION OF THE CONSTRUCTION INSPECTOR AND THE FIRE DEPARTMENT.
20. THE CITY OF FOLSOM IS A MEMBER OF THE UNDERGROUND SERVICES ALERT (USA) ONE-CALL PROGRAM. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS CONTRACT SHALL NOTIFY USA TWO (2) WORKING DAYS PRIOR TO PERFORMING ANY EXCAVATION WORK BY CALLING THE TOLL-FREE NUMBER 811 OR 800-642-2444. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL EXISTING UNDERGROUND UTILITIES, WHETHER OR NOT THEY ARE SHOWN ON THESE PLANS.
21. OVERHEAD UTILITY SERVICE DROPS ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL INVESTIGATE THE SITE AND BE AWARE OF ANY POSSIBLE LIMITED OVERHEAD CLEARANCES.
22. EXISTING UTILITIES COVER INDICATED ON THE PLAN AND SECTION DRAWINGS ARE BASED ON AS-BUILT INFORMATION. THE CONTRACTOR SHALL USE THE DEPTHS OF PIPING SHOWN PLUS 20% FOR BIDDING PURPOSES AND VERIFY DEPTHS IN THE FIELD.
23. THE CONTRACTOR SHALL PROTECT AND PRESERVE CITY MONUMENTS PER CITY STANDARDS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF MONUMENTS ENCOUNTERED, AND SHALL NOT REMOVE OR DAMAGE SAID MONUMENT UNTIL THE MONUMENT CAN BE CROSS REFERENCED AND TIED OUT BY THE SURVEY PARTY. THE CONTRACTOR SHALL ALLOW A MINIMUM OF ONE WORKING DAY FOR SUCH REFERENCING TO BE ACCOMPLISHED.
24. THE CONTRACTOR SHALL PREPARE AND IMPLEMENT A NON-PERMITTED STORM POLLUTION PREVENTION PLAN (SWPPP) PER GENERAL PROVISIONS SECTION 6.08. THE CONTRACTOR MUST ALSO COMPLY WITH SWPPP PROVISIONS FOR PROJECTS LESS THAN 1 ACRE AS OUTLINED IN APPENDIX A OF THE PROJECT MANUAL.
25. EROSION AND SEDIMENTATION CONTROL SHALL BE PERFORMED PER SECTION 14.29.330 OF THE FOLSOM MUNICIPAL CODE, THE SWPPP FILED FOR THIS PROJECT, AND THE LATEST EDITION OF THE COUNTY OF SACRAMENTO EROSION AND SEDIMENT CONTROL GUIDELINES. FIELD APPLICATION OF THE CONTROLS AND TIMING OF IMPLEMENTATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE SWPPP IS CONSIDERED A DYNAMIC DOCUMENT AND WILL CHANGE AS CONDITIONS WARRANT.
26. TARPULINS OR OTHER EFFECTIVE COVERS SHALL BE USED ON ALL STOCKPILES OF EARTH

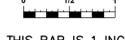
GENERAL NOTES (CONTINUED)

- MATERIAL AND HAUL TRUCKS TO MINIMIZE DUST AND RUNOFF.
27. THE CITY SHALL HAVE THE AUTHORITY TO STOP ALL CONSTRUCTION OPERATIONS. IF, IN OPINION OF THE CITY STAFF, INADEQUATE DUST CONTROL MEASURES ARE BEING PRACTICED OR EXCESSIVE WIND CONDITIONS CONTRIBUTE TO EXCESSIVE DUST EMISSIONS.
28. STREETS SHALL BE SWEEPED TO REMOVE SILT AND OTHER DIRT WHICH IS EVIDENT FROM CONSTRUCTION ACTIVITIES.
29. SHOULD CONSTRUCTION OPERATIONS UNCOVER HAZARDOUS MATERIALS, OR WHAT APPEARS TO BE HAZARDOUS MATERIAL, THE CITY OF FOLSOM FIRE DEPARTMENT SHALL BE CONTACTED IMMEDIATELY AT (916) 984-2280.
30. THE CONTRACTOR SHALL COMPLY WITH THE REGULATIONS OF THE SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT.
31. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A TRAFFIC CONTROL PLAN FOR ALL ASPECTS WHERE THE WORK IS ON OR ADJACENT TO CITY STREETS. TRAFFIC CONTROL AND PEDESTRIAN USE DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST CA MUTCD AND CONFORM TO THE REQUIREMENTS OF THE AMERICAN DISABILITIES ACT (ADA) AND SHALL ACCOMMODATE PEDESTRIAN TRAFFIC THROUGH OR AROUND THE WORK ZONES. IF THE ENGINEER DETERMINES THAT THE CONTRACTOR HAS FAILED TO PERFORM THE WORK REQUIRED BY THE TRAFFIC CONTROL PLAN, THE CONTRACTOR SHALL PAY THE CITY OF FOLSOM A SUM OF FIVE HUNDRED DOLLARS (\$500.00) AS DAMAGES AND NOT AS A PENALTY FOR EACH OCCURRENCE PER CALENDAR DAY THE CONTRACTOR CONTINUES NOT TO PERFORM THE WORK REQUIRED BY THE TRAFFIC CONTROL PLAN.
32. THE CONTRACTOR SHALL POST "NO PARKING" SIGNS SEVENTY-TWO (72) HOURS IN ADVANCE OF CONSTRUCTION ACTIVITIES IF ON-STREET PARKING IS ALLOWED WITHIN THE PROJECT BOUNDARY. THE SIGNS SHALL CITE THE STATE OF CALIFORNIA'S VEHICLE CODE AND BE ATTACHED TO A-FRAME ROAD BARRICADES. EACH A-FRAME BARRICADE SHALL BE EQUIPPED WITH A TYPED LETTER INFORMING RESIDENTS OF THE TYPE OF WORK, THE CLOSURE DAYS AND CLOSURE TIMES AND PARKING RESTRICTIONS. THE CITY OF FOLSOM WILL BE RESPONSIBLE FOR THE REMOVAL OF ANY VEHICLES THAT IGNORE THE "NO PARKING" NOTIFICATION.
33. THE CONTRACTOR SHALL PROVIDE, OPERATE, AND MAINTAIN PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) IN EACH DIRECTION OF TRAVEL DURING THE LENGTH OF THE PROJECT: TWO (2) MESSAGE BOARD SIGNS WILL BE PLACED AT EACH STRAIGHT THROUGH, THREE (3) MESSAGE BOARD SIGNS WILL BE PLACED AT EACH 'T' INTERSECTION AND FOUR (4) MESSAGE BOARD SIGNS AT A CROSS INTERSECTION. THE SIGNS SHALL BE POSTED A MINIMUM OF SEVENTY-TWO (72) HOURS PRIOR TO THE BEGINNING OF THE TRAFFIC IMPACTS. PCMS'S SHALL COMPLY WITH STATE SPECIFICATION 12-3.32. ADDITIONAL SIGNS MAY BE REQUIRED TO MEET THE APPROVED TRAFFIC CONTROL PLAN AND SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE CITY.
34. THE CONTRACTOR SHALL COVER ALL TRENCHES WITHIN IMPROVED AREAS AT THE END OF EACH WORKDAY PER CITY SPECIFICATIONS AND ANY SPECIAL PROVISIONS. ALL TRENCH PLATES NEED TO BE FLUSH WITH FINISHED GRADE OF ROADWAY (RECESSED) AND STAKED. ALL TRAVELED WALKWAYS SHALL BE SAFE AND USABLE AT THE END OF EACH WORKDAY.
35. AC PAVEMENT OVERLAYS SHALL BE KEYED INTO EXISTING PAVEMENT AND TO THE LIP OF GUTTER AT A BUTT JOINT CREATED BY GRINDING 1-1/2 INCHES OF THE EXISTING PAVEMENT.
36. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY AND ALL BROKEN AND/OR HAZARDOUS PUBLIC SIDEWALK OR CURB AND GUTTER WITHIN THE PROJECT SITE AND ALONG THE SITE FRONTAGE, TO THE SATISFACTION OF THE CONSTRUCTION INSPECTOR.
37. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECYCLING/DISPOSAL OF ALL BITUMINOUS PAVEMENT, CONCRETE, REINFORCEMENT, AND SPOILS NOT NEEDED FOR BACKFILL PER THE CITY SPECIFICATIONS. MATERIAL DISPOSED OF SHALL ALSO CONFORM TO THE CITY OF FOLSOM MUNICIPAL CODE SECTION 14.29.
38. TRAFFIC STRIPES, RAISED PAVEMENT MARKERS AND PAVEMENT MARKINGS DAMAGED DUE TO THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED PER CITY OF FOLSOM TRAFFIC STANDARDS. PATCHING OF DAMAGED MARKINGS WILL NOT BE ALLOWED WITHOUT PRIOR APPROVAL FROM THE ENGINEER. ALL DAMAGED RAISED PAVEMENT (NON-REFLECTIVE) MARKERS MUST BE CERAMIC. REFER TO SPECIFICATIONS FOR DISPOSAL OF MATERIALS WHICH CONTAIN PAVEMENT MARKINGS AS PAINT MAY CONTAIN LEAD
39. WHERE APPLICABLE, ALL UTILITY COVERS SHALL BE BROUGHT TO GRADE WITHIN 48 HOURS OF PAVING. ALL EXISTING UTILITY VAULTS AND/OR PULL BOXES THAT ARE LOOSE AND/OR BROKEN SHALL BE RE-SECURED AND/OR REPLACED TO THE CITY'S SATISFACTION.



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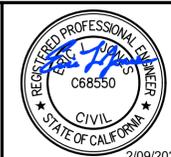
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PROJ. MGR. ELJ

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ASHLAND WATER REHABILITATION PROJECT 1

GENERAL NOTES



G003
DRAWING NUMBER

SHEET 3 OF 27

File Name: S:\common\projects\361-City of Folsom\005-Ashland\Project\04-Design\Drawings\01-General\361-005-G_Sheets.dwg
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WATER NOTES

- THE TYPES, LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE CONTRACT DRAWINGS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF UNDERGROUND UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES. HOWEVER, THE CITY CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES NOR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH MAY BE ENCOUNTERED BUT NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL ASSUME THAT ALL RESIDENTIAL PROPERTIES HAVE SANITARY, WATER, ELECTRICAL/CABLE, PHONE, AND GAS SERVICES.
- PERFORM UTILITY LOCATION WHERE INDICATED ON THE PLANS AND ELSEWHERE AS REQUIRED TO CONFIRM EXISTING UTILITY LOCATIONS, PIPE CROSSINGS, AND CONNECTION POINTS.
- CONTRACTOR SHALL USE VACUUM EXCAVATOR TO LOCATE EXISTING UTILITIES VIA POTHOLING. WHEN EXCAVATING WITHIN 24-INCHES OF THE OUTSIDE DIAMETER OF A UTILITY, HAND EXPOSE OR USE HYDRO VACUUM EXCAVATOR, AND PROTECT THE FACILITY PRIOR TO USING POWER EQUIPMENT. ALL UTILITIES MUST BE PROTECTED IN PLACE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY UTILITIES DAMAGED DURING CONSTRUCTION.
- WORK SHALL BE COMPLETED IN DRY CONDITIONS PER SECTION 02140 DEWATERING. CONTRACTOR SHALL EXPECT SHALLOW PERCHED GROUNDWATER BETWEEN OCTOBER 31ST AND THROUGH APRIL 31ST, RESULTING FROM PRECIPITATION.
- ALL WATER MAIN PIPING SHALL BE FULLY RESTRAINED BY MECHANICAL MEANS OR WELDS AND SUPPORTED WITH THRUST BLOCKS WHERE SHOWN. PIPE RESTRAINT SHALL BE IN ACCORDANCE WITH THE CITY'S DESIGN AND CONSTRUCTION SPECIFICATIONS.
- DEPTH OF BURY TO THE TOP OF ALL MAINS SHALL MATCH EXISTING PIPELINE AND BE MINIMUM 36 INCHES IN STREETS AND DRIVEWAYS, AND MINIMUM 30 INCHES IN LANDSCAPED AREAS UNLESS SPECIFICALLY STATED ON THESE PLANS.
- ALL DOMESTIC WATER PIPES SHALL BE EITHER
 - RESTRAINED DUCTILE IRON PIPE (RDIP) DOUBLE BOND JUMPERED, PRESSURE CLASS 350 FOR PIPE 4-INCH TO 12-INCH AND PRESSURE CLASS 250 FOR ABOVE 12-INCH IN DIA. RDIP SHALL BE DOUBLE WRAPPED WITH POLYETHYLENE ENCASED PER SPECIFICATION SECTION 15060 AND 15062.
 - WELDED STEEL AWWA C200, FUSION BONDED EPOXY (ABOVE GRADE) AND CEMENT-MORTAR LINED AND COATED (BELOW GRADE) PER SPECIFICATION 15060 AND 15061.
- ALL BELOW-GRADE DUCTILE IRON PIPE, VALVES, FITTINGS, FLANGES, MECHANICAL JOINTS, AND RESTRAINTS SHALL BE DOUBLE BOND JUMPERED AND DOUBLE WRAPPED POLYETHYLENE ENCASED PER SECTION 4 OF THE CITY OF FOLSOM STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL PROVIDE GATE VALVE FOR WATER MAIN ISOLATION FOR PIPELINES 8-INCH IN DIAMETER AND SMALLER AND BUTTERFLY VALVE FOR WATER MAIN ISOLATION FOR PIPELINES 10-INCH IN DIAMETER AND LARGER.
- WATERLINE VALVES SHALL BE BOLTED DIRECTLY TO THE TEE.
- A SOLID NO. 10 INSULATED COPPER LOCATING WIRE SHALL BE PLACED WITH ALL PIPES FOR WATER DISTRIBUTION MAINS REGARDLESS OF TYPE OF PIPE MATERIAL. TAPE WITH 10MIL TAPE EVERY 5 FEET.
- METHOD OF WATER APPURTENANCE (VALVE, BOX, RISER, ETC.) ABANDONMENT SHALL BE IDENTIFIED ON THE PLANS AND FIELD VERIFIED BY WATER QUALITY DEPARTMENT STAFF PRIOR TO BACKFILL.
- REQUIREMENTS FOR TESTING, STERILIZATION AND DISINFECTION, AND CONNECTION SHALL BE IN ACCORDANCE WITH SECTION 01757 - DISINFECTION AND TESTING. CONTRACTOR TO HAVE THE TEMPORARY ABOVE GROUND BACKFLOW RECERTIFIED BY A CERTIFIED BACKFLOW TECHNICIAN AT EACH RP DEVICE RELOCATION.
- THE CONTRACTOR SHALL PROVIDE POSITIVE ISOLATION OF THE PROPOSED MAIN FROM THE EXISTING MAIN, AS APPROVED BY THE CITY, DURING CONSTRUCTION, TESTING, CHLORINATION, AND FINAL-CONNECTION PROCEDURES, AS SPECIFIED IN AWWA C651.
- ALL PIPING, FITTINGS, COUPLING, AND JOINTS SHALL BE PROVIDED TO MEET THE TEST PRESSURE SPECIFIED IN SECTION 15060.

CONSTRUCTION WATER

- DURING WATER CONSERVATION STAGES 3, 4 AND 5, NO WATER FROM THE CITY'S WATER SYSTEM SHALL BE USED FOR CONSTRUCTION PURPOSES SUCH AS DUST CONTROL, COMPACTION, OR TRENCH JETTING. THE CITY MAY PROHIBIT THE USE OF POTABLE WATER FOR GRADING AND/OR CONSTRUCTION PURPOSES ON THE PROJECT IN ITS SOLE DISCRETION REGARDLESS OF WATER CONSERVATION STAGE
- WATER FOR CONSTRUCTION PURPOSES OBTAINED FROM CITY'S WATER SUPPLY MAY ONLY BE USED IN THE CITY'S WATER SERVICE AREA. WATER FOR DUST CONTROL, COMPACTION AND OTHER CONSTRUCTION ACTIVITIES SHALL BE SUBJECT TO THE FOLLOWING CONDITIONS:
 - USE OF WATER FROM THE CITY WATER SYSTEM FOR CONSTRUCTION PURPOSES SHALL REQUIRE A CITY ISSUED CONSTRUCTION WATER METER AND A REFUNDABLE SECURITY DEPOSIT THAT INCLUDES A MONTHLY METER RENTAL FEE AS ESTABLISHED BY THE DEPARTMENT. PRIOR TO SUCH WATER USE, THE CONSTRUCTION WATER CUSTOMER MUST OBTAIN APPROVAL FROM THE DIRECTOR TO USE THE WATER FOR CONSTRUCTION AND AGREE TO COMPLY WITH ALL OF THE REQUIREMENTS OF THIS CHAPTER. THE DIRECTOR MAY IMPOSE SUCH ADDITIONAL CONDITIONS ON THE USE OF SUCH WATER, INCLUDING, BUT NOT LIMITED TO, CONDITIONS REGULATING THE PURPOSE FOR THE USE OF THE WATER, RATE OF USE, LOCATION, FREQUENCY AND QUANTITY OF USE, AND SUCH OTHER CONDITIONS AS DEEMED REASONABLY NECESSARY BY THE DIRECTOR TO EFFECTUATE THE PURPOSES OF THIS CHAPTER. THE CONSTRUCTION METER SHALL BE LOCATED BY THE DEPARTMENT AND SHALL ONLY BE RELOCATED OR REMOVED BY THE DEPARTMENT. UNAUTHORIZED RELOCATION OR REMOVAL OF A CONSTRUCTION METER SHALL BE DEEMED THEFT AND THE OFFENDER SHALL BE SUBJECT TO PENALTIES SET FORTH IN ORDINANCE NO. 1118 SECTION 13.26.170.
 - CONSTRUCTION WATER SHALL ONLY BE DRAWN THROUGH A CONSTRUCTION WATER METER. CONSTRUCTION WATER DRAWN THROUGH AN UNMETERED CONNECTION SHALL BE DEEMED THEFT OF WATER AND SHALL BE GROUNDS FOR THE DEPOSIT ON THE CONSTRUCTION METER TO BE FORFEITED. THE OFFENDER SHALL ALSO BE SUBJECT TO PENALTIES SPECIFIED IN SECTION 13.26.170. IN THE EVENT THE PERSON IDENTIFIED AS DRAWING WATER WITHOUT A METERED CONNECTION DOES NOT HAVE A METER, THE ACTION SHALL BE DEEMED THEFT AND THE OFFENDER SHALL BE SUBJECT TO PENALTIES SPECIFIED IN ORDINANCE NO. 1118 SECTION 13.26.170.
 - THESE REQUIREMENTS FOR CONSTRUCTION WATER USE MAY BE MODIFIED OR SUPPLEMENTED BY OTHER CONSERVATION MEASURES AS DETERMINED APPROPRIATE BY THE DIRECTOR FOR THE DECLARED CONSERVATION STAGE. THE DIRECTOR MAY TERMINATE THE APPROVAL GRANTED TO USE THE CONSTRUCTION WATER BASED ON WATER USE RESTRICTION STAGES, VIOLATION OF THE TERMS AND CONDITIONS OF USE, AND/OR FOR CONDUCT THAT AMOUNTS TO WASTEFUL USE OF WATER.

PRECONSTRUCTION SURVEYS

- IF PROJECT CONSTRUCTION WILL TAKE PLACE BETWEEN MARCH 15 AND AUGUST 31ST, THE CONTRACTOR SHALL HIRE A QUALIFIED BIOLOGIST OR ORNITHOLOGIST TO CONDUCT A PRECONSTRUCTION NESTING BIRD SURVEY PRIOR TO THE START OF CONSTRUCTION ACTIVITY. IF NO RAPTOR OR SPECIAL STATUS BIRD NESTS ARE FOUND DURING THE SURVEYS, CONSTRUCTION MAY PROCEED UNCONSTRAINED BY CONFLICTS WITH RAPTORS AND/OR MIGRATORY BIRDS. IF NESTS ARE FOUND, CONSTRUCTION ACTIVITIES WITHIN 300 FEET SHALL BE POSTPONED UNTIL THE FLEDGLINGS HAVE LEFT THE NEST. THE TIME OF THE BIRD'S DEPARTURE MUST BE DETERMINED BY A QUALIFIED WILDLIFE BIOLOGIST. IF THE PROJECT WILL TAKE PLACE OUTSIDE OF THE NESTING SEASON THE PROPOSED PROJECT WILL NOT INCLUDE A NESTING BIRD SURVEY.

INSPECTIONS

- ALL CONSTRUCTION OR WORK SHALL BE SUBJECTED TO INSPECTION BY THE CITY OF FOLSOM BUILDING OFFICIAL/CITY ENGINEER (OR HIS/HER REPRESENTATIVES) AND SUCH CONSTRUCTION OR WORK SHALL REMAIN ACCESSIBLE AND EXPOSED FOR INSPECTION PURPOSES UNTIL APPROVED. APPROVAL AS A RESULT OF AN INSPECTION SHALL NOT BE CONSTRUED TO BE AN APPROVAL OF A VIOLATION OF THE PROVISIONS OF THIS CODE OR OF OTHER ORDINANCES OF THE JURISDICTION. INSPECTIONS PRESUMING TO GIVE AUTHORITY TO VIOLATE OR CANCEL THE PROVISIONS OF THE CODE OR OF OTHER ORDINANCES OF THE JURISDICTION SHALL NOT BE VALID. IT SHALL BE THE DUTY OF THE PERMIT APPLICANT TO CAUSE THE WORK TO REMAIN ACCESSIBLE AND EXPOSED FOR INSPECTION PURPOSES. NEITHER THE BUILDING OFFICIAL NOR THE JURISDICTION SHALL BE LIABLE FOR EXPENSE ENTAILED IN THE REMOVAL OR REPLACEMENT OF ANY MATERIAL REQUIRED TO ALLOW INSPECTION. C.B.C SECTION 110

ENVIRONMENTAL NOTES

- SEE SPECIFICATION 01140 FOR ENVIRONMENTAL PROTECTION REQUIREMENTS
- AN AVOIDANCE AREA SHALL ENCIRCLE THE ELDERBERRY BUSH AND HAVE A DIAMETER EQUAL TO THE WIDEST RADIUS OF THE DRIPLINE (THE AREA OF SOIL AND ROOTS LOCATED DIRECTLY UNDER THE OUTER CIRCUMFERENCE OF THE SHRUB'S BRANCHES) PLUS 20 FEET. THE CONTRACTOR SHALL DEMARCATED WITH HIGH-VISIBILITY MATERIALS (E.G., HIGH-VISIBILITY PIN FLAGS AND/OR FLAGGING) THE AVOIDANCE AREA PRIOR TO CONSTRUCTION, WHERE POSSIBLE, AND MARKERS SHOULD BE MAINTAINED UNTIL THE COMPLETION OF ALL WORK ACTIVITIES OCCURRING WITHIN 30 FEET OF THE AVOIDANCE AREA.
- A QUALIFIED BIOLOGIST WITH STOP-WORK AUTHORITY SHALL BE PROVIDED BY THE CITY TO MONITOR ALL GROUND- OR VEGETATION-DISTURBING WORK THAT WILL TAKE PLACE WITHIN THE ELDERBERRY AVOIDANCE AREA. THE CONTRACTOR SHALL COORDINATE WORK DIRECTLY WITH THE BIOLOGIST AND PROVIDE A MINIMUM OF TWO WEEKS NOTICE FOR SCHEDULING WORK.
- THE CONTRACTOR SHALL PROVIDE WORKER AWARENESS TRAINING BY THE PROJECT BIOLOGIST FOR ALL PROJECT PERSONNEL THAT WILL WORK WITHIN 30 FEET OF THE ELDERBERRY AVOIDANCE AREA ON THE STATUS OF VALLEY ELDERBERRY LONGHORN BEETLE (VELB), ITS HOST PLANT AND HABITAT, THE NEED TO AVOID DAMAGING ELDERBERRY SHRUBS, AND THE POSSIBLE PENALTIES FOR NON-COMPLIANCE PRIOR TO THE START OF WORK WITHIN 30 FEET OF THE ELDERBERRY.
- DUST GENERATION SHALL BE MINIMIZED BY APPLYING WATER DURING CONSTRUCTION ACTIVITIES OR BY PRESOAKING WORK AREAS FOR ALL WORK WITHIN 30 FEET OF THE ELDERBERRY.
- NO UNNECESSARY GROUND- OR VEGETATION-DISTURBING ACTIVITIES SHALL TAKE PLACE WITHIN THE ELDERBERRY AVOIDANCE AREA.
- THE ELDERBERRY SHRUB SHALL NOT BE TRANSPLANTED, BUT THE CONTRACTOR MAY TRIM UP TO 40 STEMS AT LEAST 1-INCH IN DIAMETER OR GREATER TO PROVIDE ACCESS TO THE PIPELINE. THE FOLLOWING MEASURES SHALL BE MAINTAINED:
 - TRIMMING OF THE ELDERBERRY SHOULD BE MINIMIZED AND REMOVAL OF BRANCHES GREATER OR EQUAL TO ONE-INCH DIAMETER SHALL BE AVOIDED IF POSSIBLE.
 - TRIMMING SHALL ONLY TAKE PLACE DURING THE DORMANT PERIOD (BETWEEN NOVEMBER AND FEBRUARY).
 - GROUND DISTURBANCE WITHIN THE DRIPLINE OF THE ELDERBERRY SHOULD BE LIMITED TO HAND PULLING OR TRIMMING OF VEGETATION.
- ALL WORK OTHER THAN TRIMMING THAT IS LOCATED WITHIN THE AVOIDANCE AREA SHALL BE LIMITED TO THE SEASON WHEN VELB ADULTS ARE NOT ACTIVE (AUGUST - FEBRUARY) AND SHOULD AVOID DAMAGING THE ELDERBERRY.

SURVEY NOTES

- HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83).
- COORDINATE SYSTEM: COORDINATES SHOWN HEREON ARE GROUND AND BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE II.
- VERTICAL DATUM: NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).
- PROJECT BENCHMARK (PT #1051): 2" BRASS DISK, STAMPED CITY OF FOLSOM B.M. 51 AT BACK OF WALK NEXT TO A LIGHT POLE AT NORTH END OF THE SOUTHWESTERLY CURB RETURN INTERSECTION FOLSOM-AUBURN ROAD AND OAK AVENUE. ELEVATION = 213.98 FEET (NGVD29).



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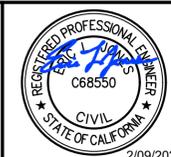
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 DRAWN BY AGP/BF
 DESIGNED BY BF
 PROJ. MGR. ELJ

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**ASHLAND WATER
REHABILITATION
PROJECT 1**

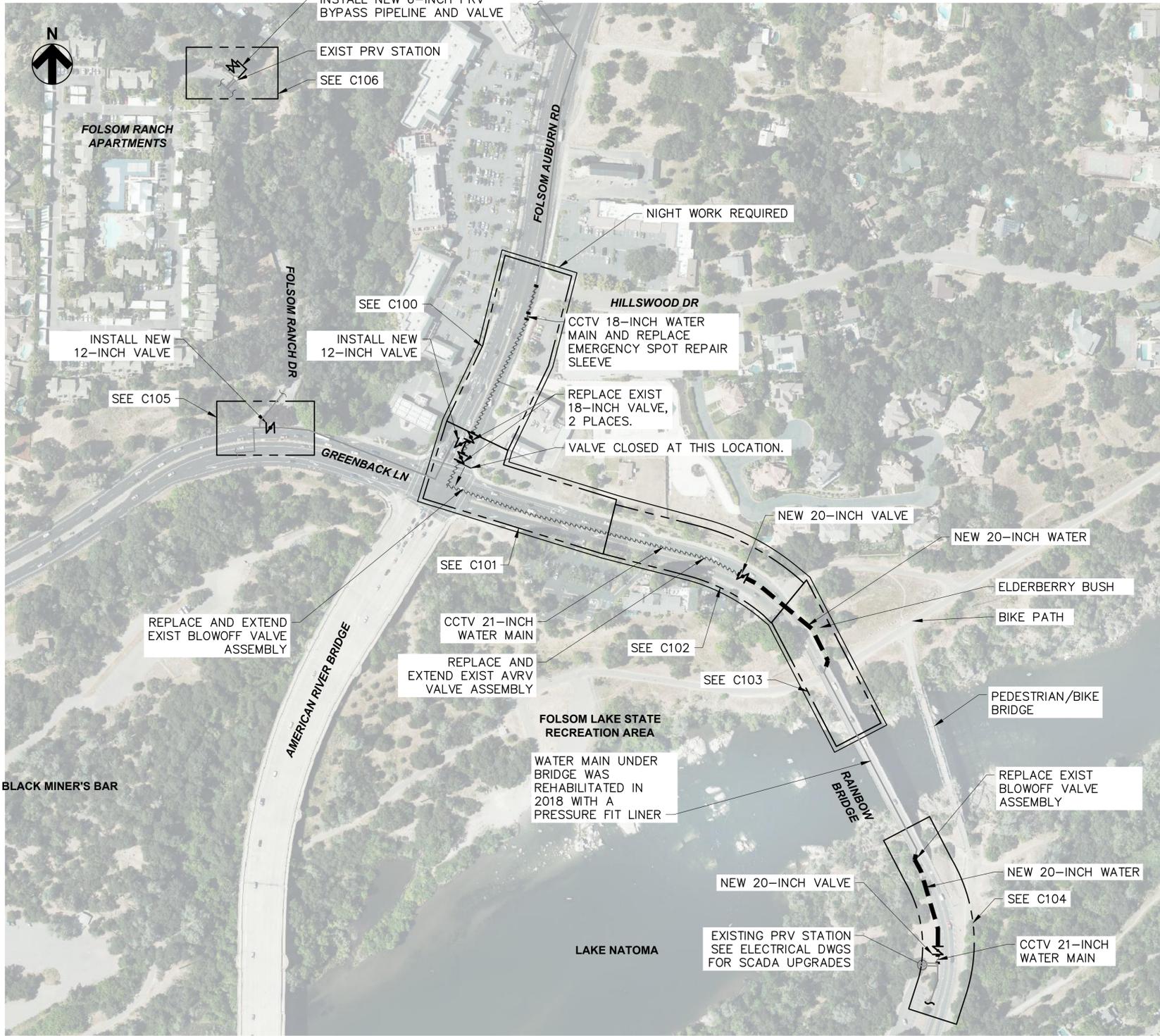
GENERAL NOTES



G004
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SHEET 4 OF 27

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- CCTV EXISTING PIPE
 - REMOVE AND REPLACE
 - APPROXIMATE VALVE LOCATION

KEY MAP
SCALE: NTS

GENERAL REQUIREMENTS FOR WORK SEQUENCE

1. THE CONTRACTOR SHALL CONDUCT WORK IN ACCORDANCE WITH THE FOLLOWING SEQUENCE.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS. SEE SP-30 PERMITS.
3. THE WATER MAIN IS CURRENTLY UNPRESSURIZED AND DRAINED BETWEEN THE INTERSECTION OF GREENBACK LANE AND FOLSOM AUBURN ROAD, AND THE EXISTING PRV STATION LOCATED SOUTH OF THE RAINBOW BRIDGE. THERE IS A LOW SPOT AT STATION 105+25 IN THE PIPELINE, AND PRIOR TO CCTV, THE CONTRACTOR SHALL DRAIN AND DISPOSE OF WATER PER CITY STANDARDS. SEE KEY MAP.
4. REFER TO THE WATER SERVICE OUTAGE MAPS IN APPENDIX B OF THE SPECIFICATIONS FOR ANTICIPATED OUTAGES REQUIRED TO CONDUCT WORK FOR THE PRESSURIZED WATER MAIN.
5. REFER TO THE FLUSHING AND DISINFECTION MAP IN APPENDIX E OF THE SPECIFICATIONS FOR EXTENT OF WATER TO BE DISPOSED OF DURING PIPE DEWATERING, FLUSHING AND DISINFECTION ACTIVITIES.
6. SEE ENVIRONMENTAL NOTES ON G004 FOR WORK REQUIREMENTS IN THE AVOIDANCE AREA AROUND THE ELDERBERRY BUSH LOCATED NEAR THE NORTH RAINBOW BRIDGE ABUTMENT. TRIMMING SHALL ONLY TAKE PLACE DURING THE DORMANT PERIOD (BETWEEN NOVEMBER AND FEBRUARY). WORK INSIDE THE AVOIDANCE AREA OTHER THAN TRIMMING SHALL BE LIMITED TO THE SEASON WHEN VELB ADULTS ARE NOT ACTIVE (AUGUST - FEBRUARY) AND SHOULD AVOID DAMAGING THE ELDERBERRY.
7. SUBMIT A CONSTRUCTION PROCEDURE, SEQUENCE OF OPERATIONS, AND SPECIAL CONSTRAINTS PLAN, AND TRAFFIC CONTROL PLAN AND GET CITY APPROVAL PRIOR TO COMMENCEMENT OF WORK. SEE SPECIFICATION FOR DETAILS RELATED TO THE WORK PLANS, SHUT DOWN OF THE EXISTING WATER SYSTEM AND CONTINGENCY PLAN COMPONENT OF THE WORK PLAN.
8. THE CONTRACTOR SHALL NOTIFY AFFECTED PROPERTY OWNERS AND THE CITY AS INDICATED IN THE SPECIFICATIONS AND PRIOR TO MOBILIZATION.
9. LOCATION OF EXISTING FACILITIES IS APPROXIMATE ONLY. CONTRACTOR SHALL POTHOLE TO VERIFY LOCATIONS, SIZE AND MATERIAL OF EXISTING FACILITIES. SEE UTILITY LOCATION SCHEDULE FOR MINIMUM UTILITY LOCATING REQUIRED FOR POTHOLE SUBMITTAL. CONTRACTOR TO NOTE THAT ADDITIONAL UTILITY LOCATING IS REQUIRED FOR CONSTRUCTION AND THIS IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM. SEE SPECIFICATION SECTION 02610. CONTRACTOR SHALL SURVEY AND SUBMIT THE POTHOLING RESULTS.
10. VERIFY WORK WITH THE CITY AND ENGINEER BASED ON THE RESULTS OF POTHOLING ACTIVITIES PRIOR TO ORDERING PIPE MATERIALS
11. REMOVAL AND REPLACEMENT WORK SHALL BEGIN WITH THE PIPE REPLACEMENT SECTION NORTH OF RAINBOW BRIDGE BETWEEN STA 112+51.24 AND STA 115+27.00 (SHEET C102 AND C103), AND THEN FINISH WITH THE SECTION SOUTH OF RAINBOW BRIDGE BETWEEN STA 200+00.00 AND STA 202+18.62 (SHEET C104).
12. THE FOLLOWING WORK MUST BE COMPLETED PRIOR TO CCTV AND CONDUCTING REPLACEMENT WORK FOR THE PRESSURIZED SECTION OF THE NEW WATER MAIN ALONG FOLSOM AUBURN ROAD:
 - 12.1. INSTALLATION OF THE NEW VALVE LOCATED AT THE INTERSECTION OF FOLSOM RANCH DRIVE AND GREENBACK LANE AS SHOWN ON C105,
 - 12.2. THE NEW PRV BYPASS AS SHOWN ON DRAWING C106, AND
 - 12.3. REDIRECT WATER DISTRIBUTION TO PROVIDE WATER TO BLACK MINER'S BAR USING THE NEW BYPASS FACILITIES (BY THE CITY).
13. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ACCESS TO THE PIPELINE AT LOCATIONS SUITABLE TO CCTV, AND RETURNING THE PIPELINE AND SURFACE CONDITIONS TO THE ORIGINAL CONDITION IMMEDIATELY FOLLOWING CCTV. THE CONTRACTOR MAY USE LOCATION IDENTIFIED IN PLANS AND WILL PROVIDE (3) ADDITIONAL LOCATIONS LOCATED ANYWHERE ALONG THE PIPELINE TO BE CCTV'D IF NEEDED DURING CONSTRUCTION.
14. CCTV SHALL BE PERFORMED DURING STEPS 11-12 TO LOCATE POTENTIAL REPAIR LOCATIONS. CONTRACTOR AND ENGINEER SHALL EVALUATE CCTV RESULTS AND DETERMINE WITH CITY APPROVAL ANY ADDITIONAL WORK. CONTRACTOR SHALL ALLOW UP TO 14 CALENDAR DAYS FOR REVIEW AND DIRECTION TO BE PROVIDED.
15. PERFORM TESTING, FLUSHING AND DISINFECTION ON ENTIRE SYSTEM PER SPECIFICATIONS.

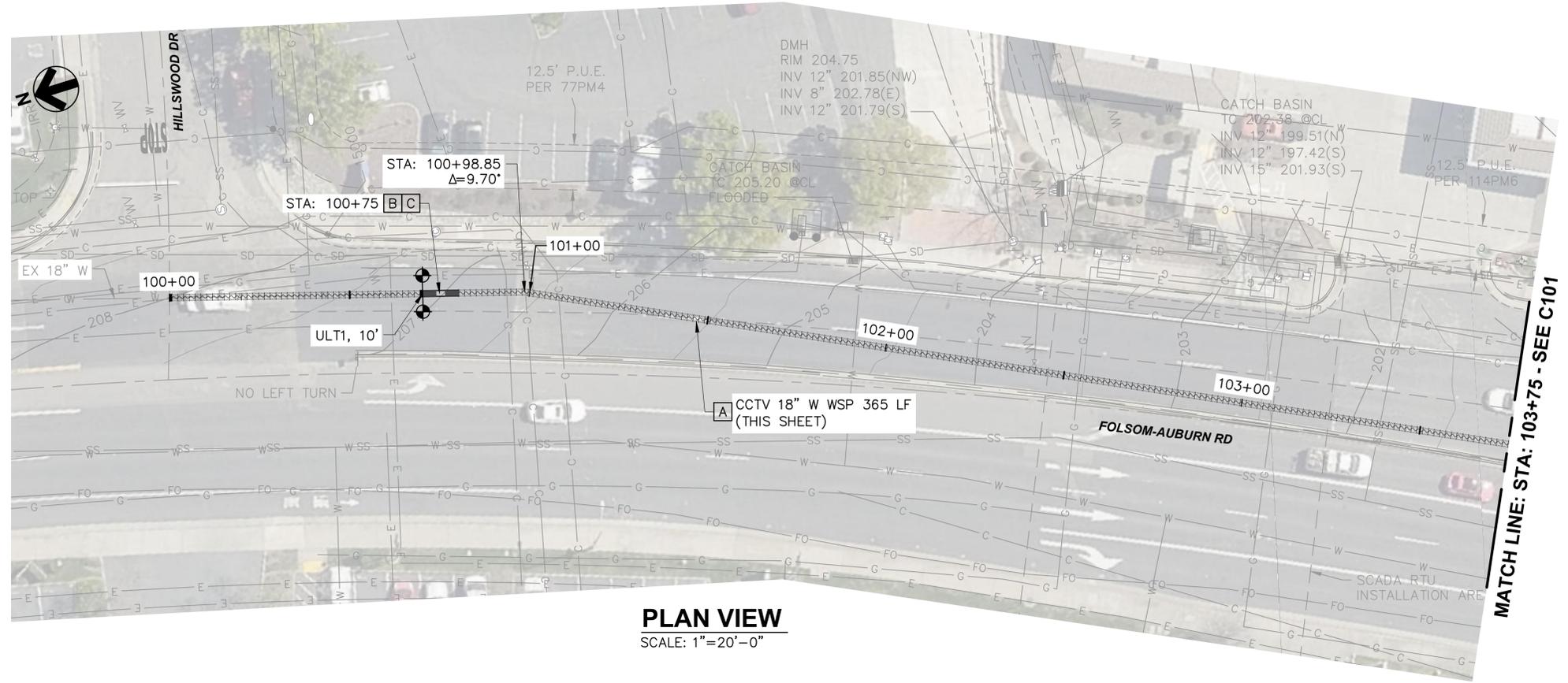
UTILITY LOCATION SCHEDULE

UTILITY LOCATION NO.	UTILITIES TO VERIFY	SIZE	NORTHING*	EASTING*
ULT1	WATER	18"	2012439.22	6796155.45
PH2	WATER	18"	2012146.85	6796018.86
PH3	WATER	12"	2012142.01	6796011.75
ULT4	WATER	18"	2012045.42	6795969.64
ULT5	WATER	18"	2012030.52	6796001.40
ULT6	WATER	21"	2011823.32	6796669.80
PH7	WATER	21"	2010939.24	6797106.65

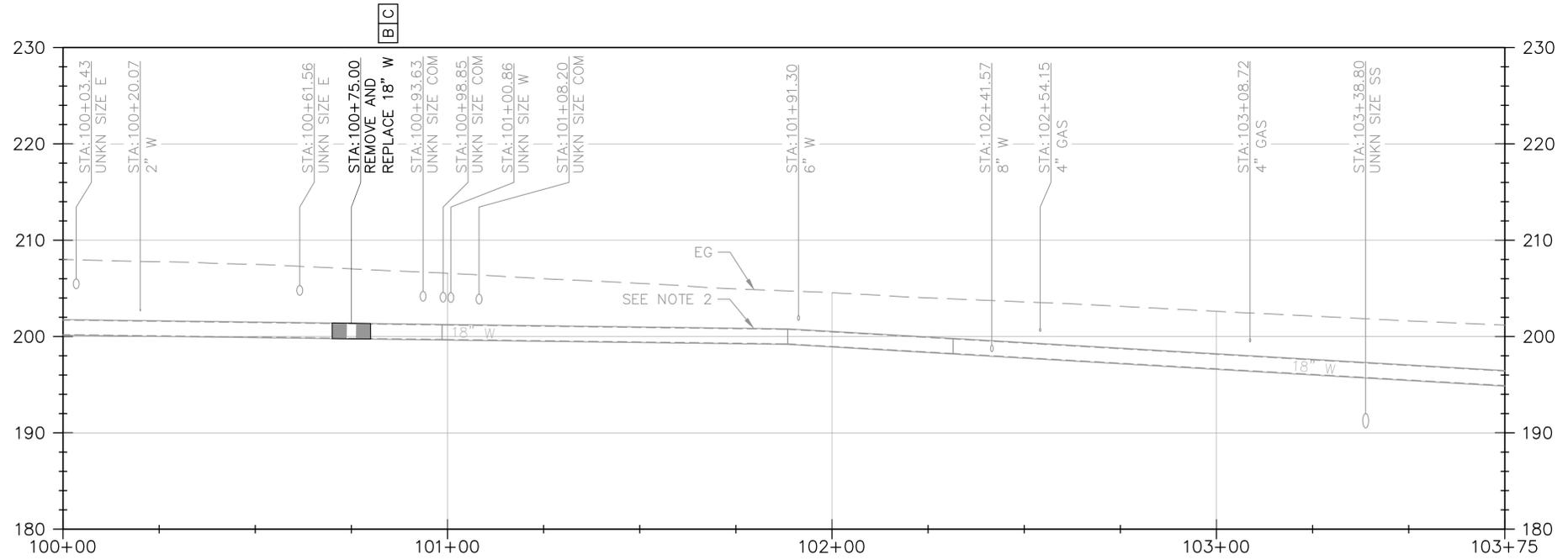
* COORDINATES ARE APPROXIMATE. CONTRACTOR SHALL CONFIRM EXACT LOCATION. UTILITY LOCATION TRENCH NORTHING AND EASTING REPRESENT THE CENTER OF TRENCH

 10569 OLD PLACERVILLE ROAD SACRAMENTO, CA 95827 OFFICE: 916.364.1490	PAPER SIZE: 22X34 (ANSI D) THIS BAR IS 1 INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.	JOB NO. 361-005 DATE 2/9/2023 DRAWN BY AGP/BF DESIGNED BY BF PROJ. MGR. ELJ	<table border="1"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APVD</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REV	DESCRIPTION	DATE	APVD					 CITY OF FOLSOM UTILITIES ENGINEERING & COMPLIANCE	ASHLAND WATER REHABILITATION PROJECT 1	KEY MAP, WORK SEQUENCE, AND UTILITY LOCATION SCHEDULE	 2/09/2023	G005 DRAWING NUMBER SHEET 5 OF 27
REV	DESCRIPTION	DATE	APVD													

File Name: S:\common\projects\361-City of Folsom\005-Ashland\1 Project\04-Design\Drawings\03-Civil\361-005-C100 to C104 Pipeline.dwg
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PLAN VIEW
SCALE: 1"=20'-0"



PROFILE - STA 100+00.00 TO 103+75.00
 HORIZONTAL SCALE: 1"=20'-0"
 VERTICAL SCALE: 1"=8'-0"

GENERAL NOTES

1. SEE G005 FOR NOTES REGARDING GENERAL SEQUENCE OF CONSTRUCTION WORK PLAN SUBMITTAL REQUIREMENTS.
2. EXISTING PIPE ELEVATIONS ARE BASED ON AS-BUILTS DRAWINGS. CONTRACTOR SHALL POTHOLE TO VERIFY LOCATION, SIZE, COATING THICKNESS AND MATERIAL OF EXISTING WATER MAIN PRIOR TO ORDERING PIPING AND CONNECTION FITTINGS.
3. REMOVE AND DISPOSE OF EXIST WATER MAIN AS REQ'D TO COMPLETE WORK.
4. CONTRACTOR SHALL CLEAN AND VIDEOTAPE EXIST PIPELINE AS SHOWN ON PLANS. SEE SPECIFICATION SECTION 01050 CCTV INSPECTION. CONTRACTOR SHALL PROVIDE ACCESS LOCATIONS AND COMPLETELY DEWATER EXISTING PIPE PRIOR TO CCTV.
5. FOR WORK WITHIN THE ROADWAY, BACKFILL AND RESTORE ASPHALT ROAD SECTION USING T-CUT AND GRIND ON ALL SIDES OF THE EXCAVATION PER DET B/C152.

CONSTRUCTION NOTES

- A** PROVIDE CCTV OF EXIST WATER PIPE USING POTENTIAL ACCESS POINTS IDENTIFIED ON THE PLAN OR SUITABLE ALTERNATIVE LOCATION PROPOSED BY THE CONTRACTOR AND ACCEPTED BY THE CITY. WHERE NECESSARY REMOVE SECTION OF PIPE AND REPLACE PER DETAILS ON SHEET C150 AND/OR UTILIZE SPECIALIZED CCTV EQUIPMENT TO CCTV FULL PIPE LENGTH.
- B** POTENTIAL CCTV ACCESS LOCATION.
- C** APPROXIMATE LOCATION OF EXIST EMERGENCY SPOT REPAIR SLEEVE. REMOVE AND REPLACE EXIST EMERGENCY SPOT REPAIR SLEEVE PER DET B/C150.



WATER PIPELINE ALIGNMENT AND ASSOCIATED APPURTENANCES ARE SHOWN SCHEMATICALLY. CONTRACTOR TO FIELD VERIFY UTILITY INFORMATION SHOWN HEREIN.

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REV	DESCRIPTION	DATE	APVD

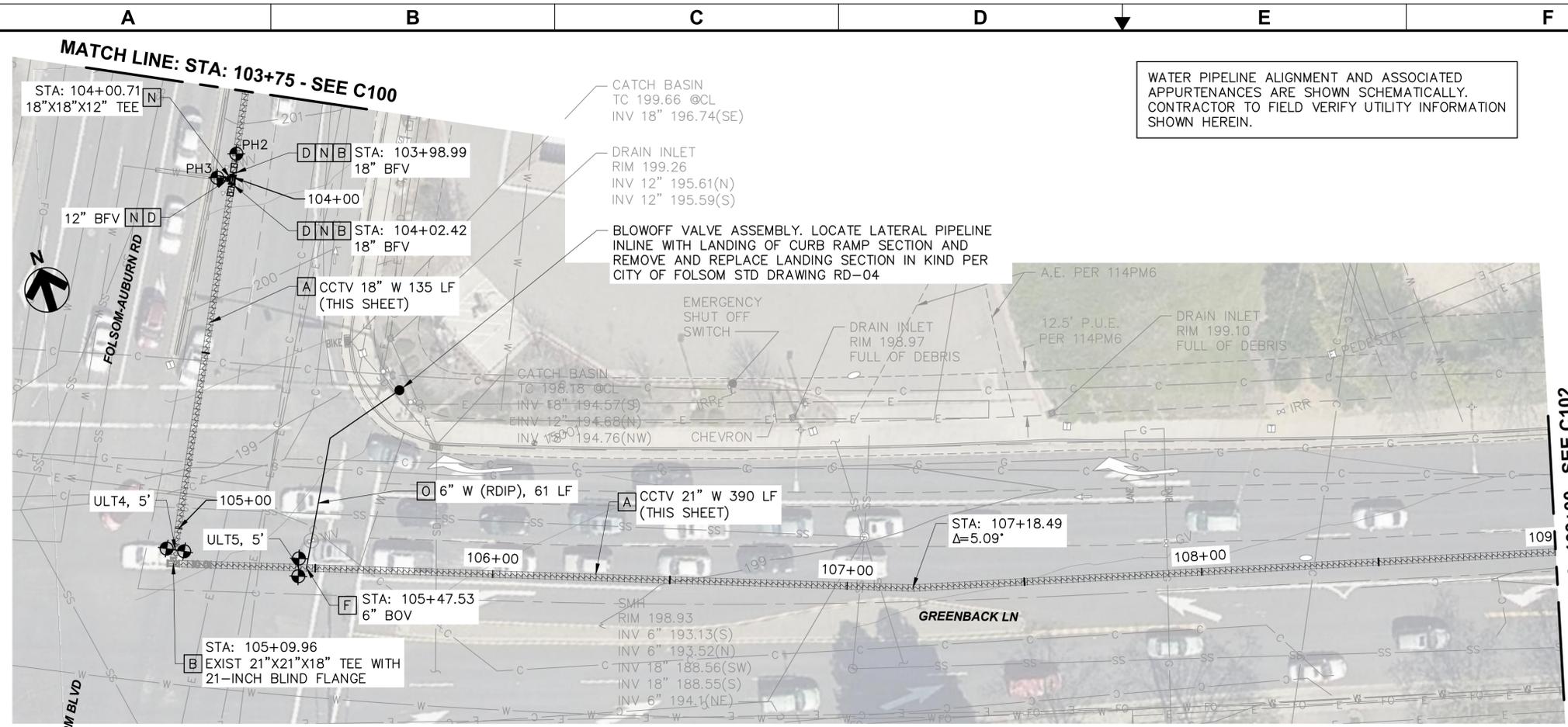
CITY OF FOLSOM UTILITIES
 ENGINEERING & COMPLIANCE

ASHLAND WATER REHABILITATION PROJECT 1

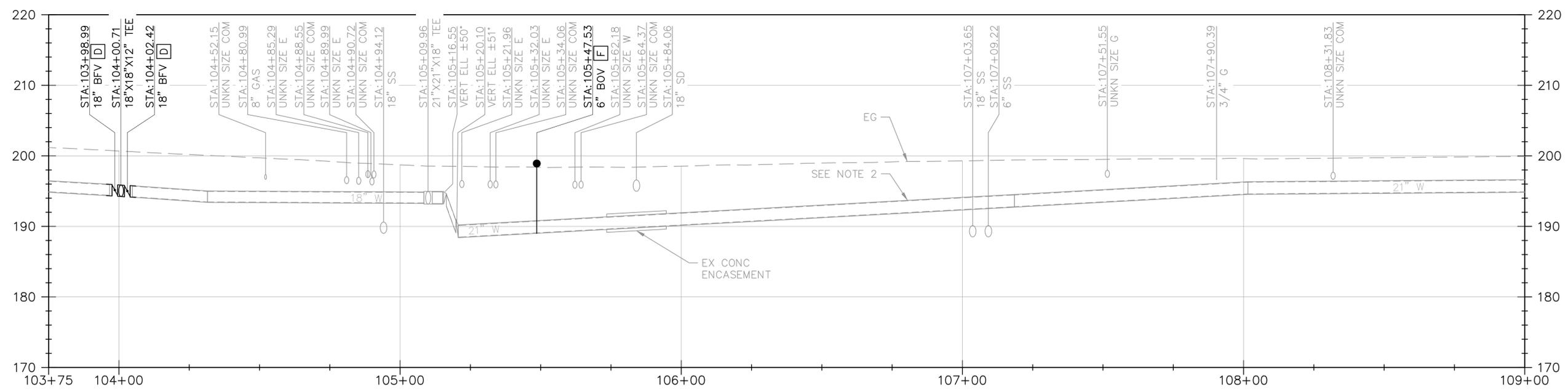
PLAN & PROFILE FOLSOM AUBURN ROAD STA 100+00 TO 103+75

C100
 DRAWING NUMBER
 SHEET 6 OF 27

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PLAN VIEW
 SCALE: 1"=20'-0"



PROFILE - STA 103+75.00 TO 109+00.00

HORIZONTAL SCALE: 1"=20'-0"
 VERTICAL SCALE: 1"=8'-0"

GENERAL NOTES

- SEE G005 FOR NOTES REGARDING GENERAL SEQUENCE OF CONSTRUCTION WORK PLAN SUBMITTAL REQUIREMENTS.
- EXISTING PIPE ELEVATIONS ARE BASED ON AS-BUILTS DRAWINGS. CONTRACTOR SHALL POHOLE TO VERIFY LOCATION, SIZE, COATING THICKNESS AND MATERIAL OF EXISTING WATER MAIN PRIOR TO ORDERING PIPING AND CONNECTION FITTINGS.
- REMOVE AND DISPOSE OF EXIST WATER MAIN AS REQ'D TO COMPLETE WORK.
- CONTRACTOR SHALL CLEAN AND VIDEOTAPE EXIST PIPELINE AS SHOWN ON PLANS. SEE SPECIFICATION SECTION 01050 CCTV INSPECTION. CONTRACTOR SHALL PROVIDE ACCESS LOCATIONS AND COMPLETELY DEWATER EXISTING PIPE PRIOR TO CCTV.
- FOR WORK WITHIN THE ROADWAY, BACKFILL AND RESTORE ASPHALT ROAD SECTION USING T-CUT AND GRIND ON ALL SIDES OF THE EXCAVATION PER DET B/C152.

CONSTRUCTION NOTES

- [A] PROVIDE CCTV OF EXIST WATER PIPE USING POTENTIAL ACCESS POINTS IDENTIFIED ON THE PLAN OR SUITABLE ALTERNATIVE LOCATION PROPOSED BY THE CONTRACTOR AND ACCEPTED BY THE CITY. WHERE NECESSARY REMOVE SECTION OF PIPE AND REPLACE PER DETAILS ON SHEET C150 AND/OR UTILIZE SPECIALIZED CCTV EQUIPMENT TO CCTV FULL PIPE LENGTH.
- [B] POTENTIAL CCTV ACCESS LOCATION.
- [D] REMOVE EXIST ISOLATION VALVE, ASSOCIATED VALVE BOX AND ASSOCIATED APPURTENANCES INCLUDING BURIED CONC VALVE SUPPORT AND TEE INCLUDING THRUST BLOCKS.
- [F] REMOVE BLOWOFF VALVE ASSEMBLY, ASSOCIATED VALVE BOX AND APPURTENANCES INCLUDING BURIED CONC VALVE SUPPORT/ THRUST BLOCKS AND REPLACE BLOWOFF VALVE ASSEMBLY PER DET B/C151. USE EXISTING CONNECTION TO MAIN AND EXTEND DISCHARGE TO BACK OF SIDEWALK.
- [N] CONSTRUCT NEW 18"X18"X12" TEE AND ISOLATION VALVES. CONNECT TO EXISTING PIPE PER DET A/C151.
- [O] CONSTRUCT NEW WATER MAIN. INSTALL CATHODIC PROTECTION PER DETAILS ON DRAWINGS C155 AND C156.

----- CCTV
 - - - - - REMOVE AND REPLACE

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REV	DESCRIPTION	DATE	APVD
REVISIONS			

CITY OF FOLSOM UTILITIES
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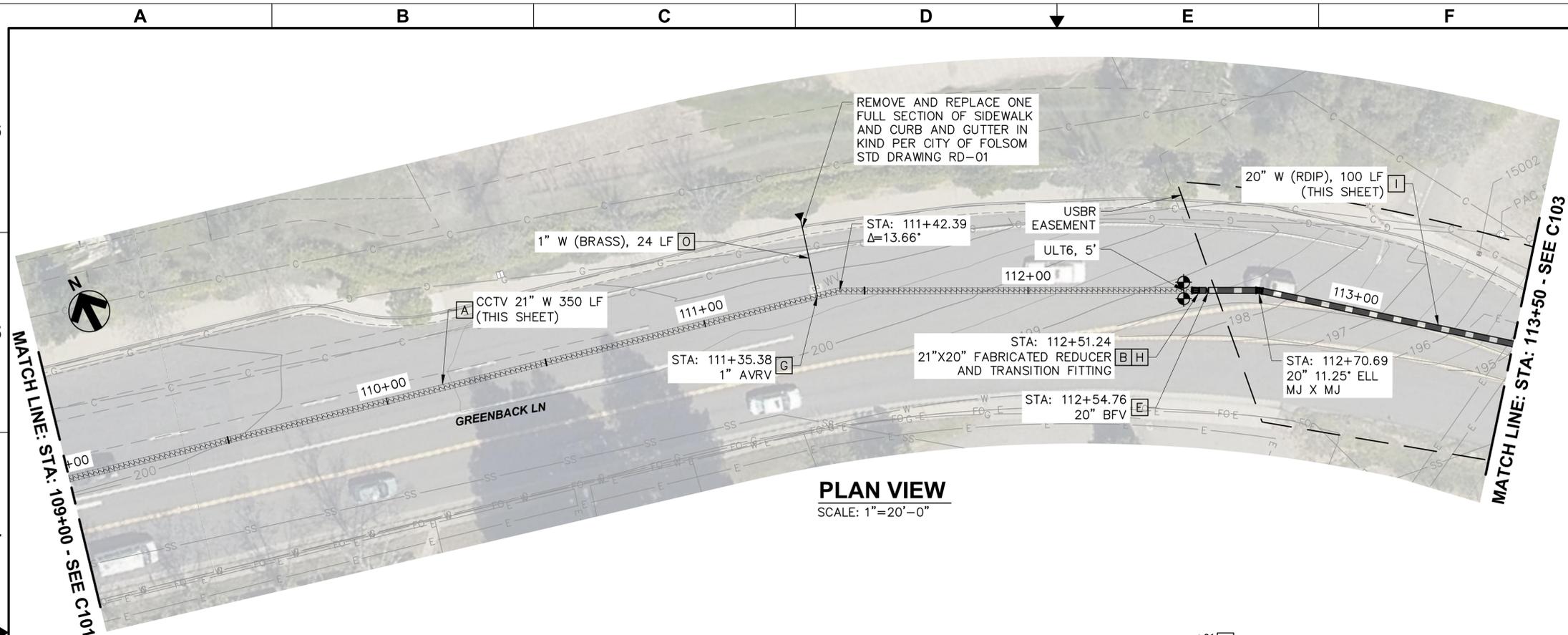
ASHLAND WATER REHABILITATION PROJECT 1

PLAN & PROFILE GREENBACK LANE STA 103+75 TO 109+00

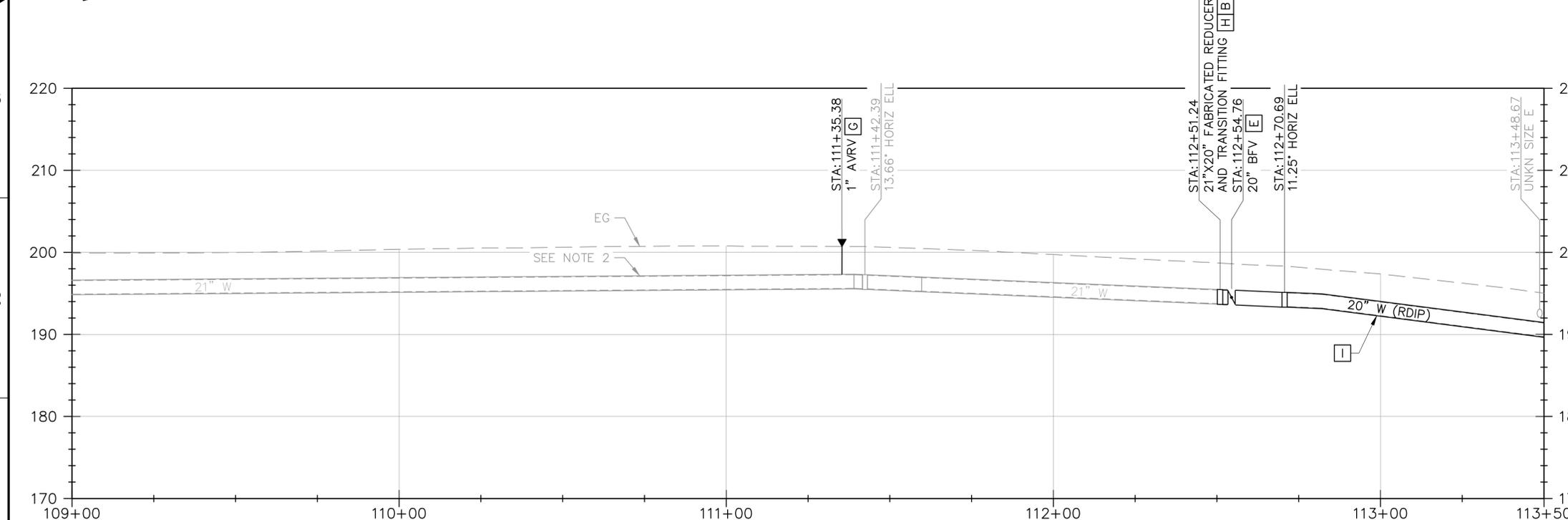
REGISTERED PROFESSIONAL ENGINEER
 C68550
 CIVIL
 STATE OF CALIFORNIA
 2/09/2023

C101
 DRAWING NUMBER
 SHEET 7 OF 27

File Name: S:\common\projects\361-City of Folsom\005-Ashland\Project\04-Design\Drawings\03-Civil\361-005-C100 to C104-Pipeline.dwg
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PLAN VIEW
 SCALE: 1"=20'-0"



PROFILE - STA 109+00.00 TO 113+50.00
 HORIZONTAL SCALE: 1"=20'-0"
 VERTICAL SCALE: 1"=8'-0"

GENERAL NOTES

1. SEE G005 FOR NOTES REGARDING GENERAL SEQUENCE OF CONSTRUCTION WORK PLAN SUBMITTAL REQUIREMENTS.
2. EXISTING PIPE ELEVATIONS ARE BASED ON AS-BUILTS DRAWINGS. CONTRACTOR SHALL POTHOLE TO VERIFY LOCATION, SIZE, COATING THICKNESS AND MATERIAL OF EXISTING WATER MAIN PRIOR TO ORDERING PIPING AND CONNECTION FITTINGS.
4. REMOVE AND DISPOSE OF EXIST WATER MAIN AND FOLLOW UP WITH REPAIR OF PIPE SECTIONS AS REQ'D TO COMPLETE WORK.
5. CONTRACTOR SHALL CLEAN AND VIDEOTAPE EXIST PIPELINE AS SHOWN ON PLANS. SEE SPECIFICATION SECTION 01050 CCTV INSPECTION. CONTRACTOR SHALL PROVIDE ACCESS LOCATIONS AND COMPLETELY DEWATER EXISTING PIPE PRIOR TO CCTV.
6. FOR WORK WITHIN THE ROADWAY, BACKFILL AND RESTORE ASPHALT ROAD SECTION USING T-CUT AND GRIND ON ALL SIDES OF THE EXCAVATION PER DET B/C152.

CONSTRUCTION NOTES

- [A] PROVIDE CCTV OF EXIST WATER PIPE USING POTENTIAL ACCESS POINTS IDENTIFIED ON THE PLAN OR SUITABLE ALTERNATIVE LOCATION PROPOSED BY THE CONTRACTOR AND ACCEPTED BY THE CITY. WHERE NECESSARY REMOVE SECTION OF PIPE AND REPLACE PER DETAILS ON C150 AND/OR UTILIZE SPECIALIZED CCTV EQUIPMENT TO CCTV FULL PIPE LENGTH.
- [B] POTENTIAL CCTV ACCESS LOCATION.
- [E] CONSTRUCT NEW ISOLATION VALVE PER DET A/C153.
- [G] REMOVE AND REPLACE EXIST AIR RELIEVE VALVE ASSEMBLY, ASSOCIATED VALVE BOX AND APPURTENANCES. USE EXISTING CONNECTION TO MAIN AND EXTEND DISCHARGE TO BACK OF SIDEWALK PER DET C/C151.
- [H] CONNECT TO EXISTING PIPE PER DET A/C152.
- [I] REMOVE EXISTING WATER MAIN INCLUDING ASSOCIATED THRUST BLOCK AND APPURTENANCES AND CONSTRUCT NEW WATER MAIN IN SAME LOCATION. ALL FITTINGS AND JOINTS SHALL BE FULLY RESTRAINED. INSTALL CATHODIC PROTECTION PER DETAILS ON DRAWINGS C155 AND C156.
- [O] CONSTRUCT NEW WATER MAIN. INSTALL CATHODIC PROTECTION PER DETAILS ON DRAWINGS C155 AND C156.

- CCTV
- REMOVE AND REPLACE

WATER PIPELINE ALIGNMENT AND ASSOCIATED APPURTENANCES ARE SHOWN SCHEMATICALLY. CONTRACTOR TO FIELD VERIFY UTILITY INFORMATION SHOWN HEREIN.

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REVISIONS			

CITY OF FOLSOM
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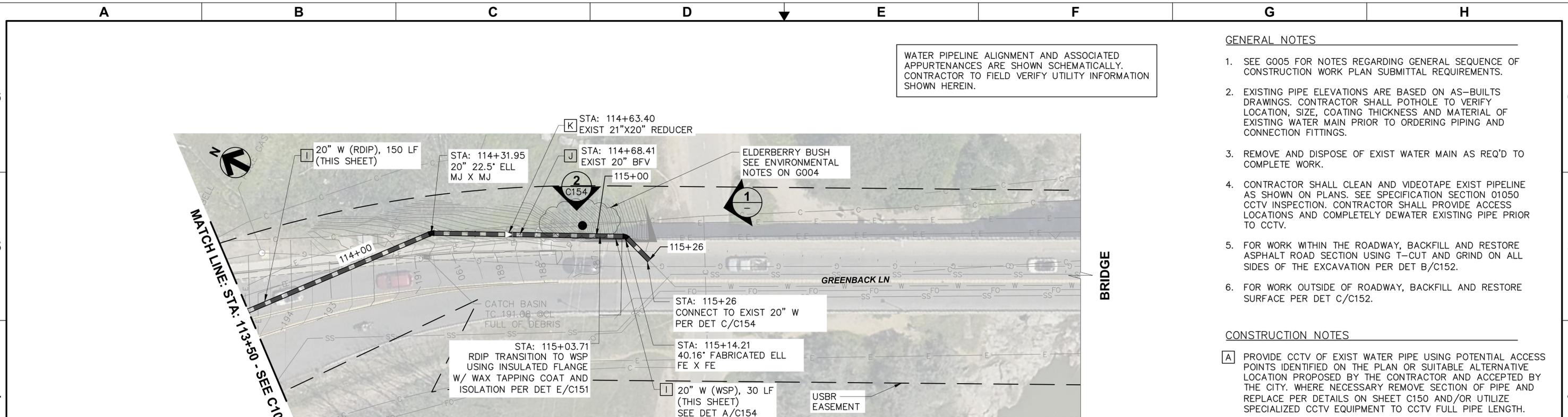
ASHLAND WATER REHABILITATION PROJECT 1

PLAN & PROFILE GREENBACK LANE STA 109+00 TO 113+50

C102
 DRAWING NUMBER

SHEET 8 OF 27

File Name: S:\common\projects\361-City of Folsom\005-Ashland\04-Design\Drawings\03-Civil\361-005-C100 to C104-Pipeline.dwg
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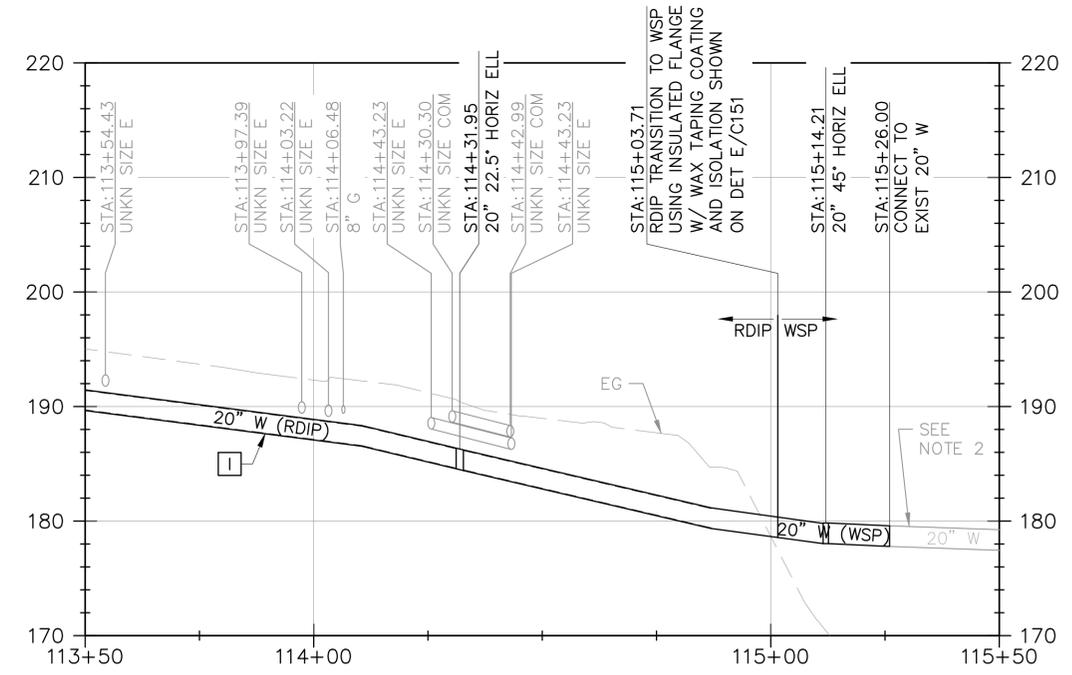


WATER PIPELINE ALIGNMENT AND ASSOCIATED APPURTENANCES ARE SHOWN SCHEMATICALLY. CONTRACTOR TO FIELD VERIFY UTILITY INFORMATION SHOWN HEREIN.

- GENERAL NOTES**
- SEE G005 FOR NOTES REGARDING GENERAL SEQUENCE OF CONSTRUCTION WORK SUBMITTAL REQUIREMENTS.
 - EXISTING PIPE ELEVATIONS ARE BASED ON AS-BUILTS DRAWINGS. CONTRACTOR SHALL POthOLE TO VERIFY LOCATION, SIZE, COATING THICKNESS AND MATERIAL OF EXISTING WATER MAIN PRIOR TO ORDERING PIPING AND CONNECTION FITTINGS.
 - REMOVE AND DISPOSE OF EXIST WATER MAIN AS REQ'D TO COMPLETE WORK.
 - CONTRACTOR SHALL CLEAN AND VIDEOTAPE EXIST PIPELINE AS SHOWN ON PLANS. SEE SPECIFICATION SECTION 01050 CCTV INSPECTION. CONTRACTOR SHALL PROVIDE ACCESS LOCATIONS AND COMPLETELY DEWATER EXISTING PIPE PRIOR TO CCTV.
 - FOR WORK WITHIN THE ROADWAY, BACKFILL AND RESTORE ASPHALT ROAD SECTION USING T-CUT AND GRIND ON ALL SIDES OF THE EXCAVATION PER DET B/C152.
 - FOR WORK OUTSIDE OF ROADWAY, BACKFILL AND RESTORE SURFACE PER DET C/C152.

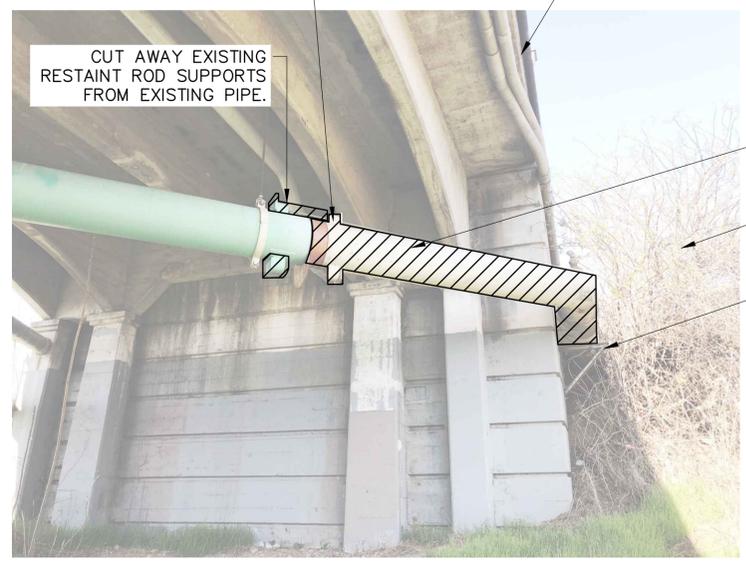
- CONSTRUCTION NOTES**
- [A]** PROVIDE CCTV OF EXIST WATER PIPE USING POTENTIAL ACCESS POINTS IDENTIFIED ON THE PLAN OR SUITABLE ALTERNATIVE LOCATION PROPOSED BY THE CONTRACTOR AND ACCEPTED BY THE CITY. WHERE NECESSARY REMOVE SECTION OF PIPE AND REPLACE PER DETAILS ON SHEET C150 AND/OR UTILIZE SPECIALIZED CCTV EQUIPMENT TO CCTV FULL PIPE LENGTH.
 - [I]** REMOVE EXISTING WATER MAIN INCLUDING ASSOCIATED THRUST BLOCK AND APPURTENANCES AND CONSTRUCT NEW WATER MAIN IN SAME LOCATION. ALL FITTINGS AND JOINTS SHALL BE FULLY RESTRAINED. INSTALL CATHODIC PROTECTION PER DETAILS ON DRAWINGS C155 AND C156.
 - [J]** REMOVE EXIST WATER VALVE, ASSOCIATED VALVE BOX, CONCRETE SUPPORT AND APPURTENANCES.
 - [K]** REMOVE EXIST 21" X 20" REDUCER.

PLAN VIEW
SCALE: 1"=20'-0"



PROFILE - STA 113+50.00 TO 115+50.00
HORIZONTAL SCALE: 1"=20'-0"
VERTICAL SCALE: 1"=8'-0"

REMOVE EXISTING RESTRAINTS AND PROVIDE NEW HARNESS RESTRAINT PER AWWA MANUAL M11.



BRIDGE CONNECTION (NORTH) 1
SCALE: N.T.S.

- REMOVE EXIST ABOVE GRADE EPOXY BONDED STEEL PIPELINE. SEE NOTE 3 AND DET A/C154.
- EXISTING ELDERBERRY BUSH. SPECIAL CONSTRUCTION AND PROTECTION REQUIRED PER ENVIRONMENTAL NOTES ON G004 AND SPECIFICATIONS.
- EXIST PIPE SUPPORT, SEE DET E/C154.

- CCTV
- REMOVE AND REPLACE

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REV	DESCRIPTION	DATE	APVD

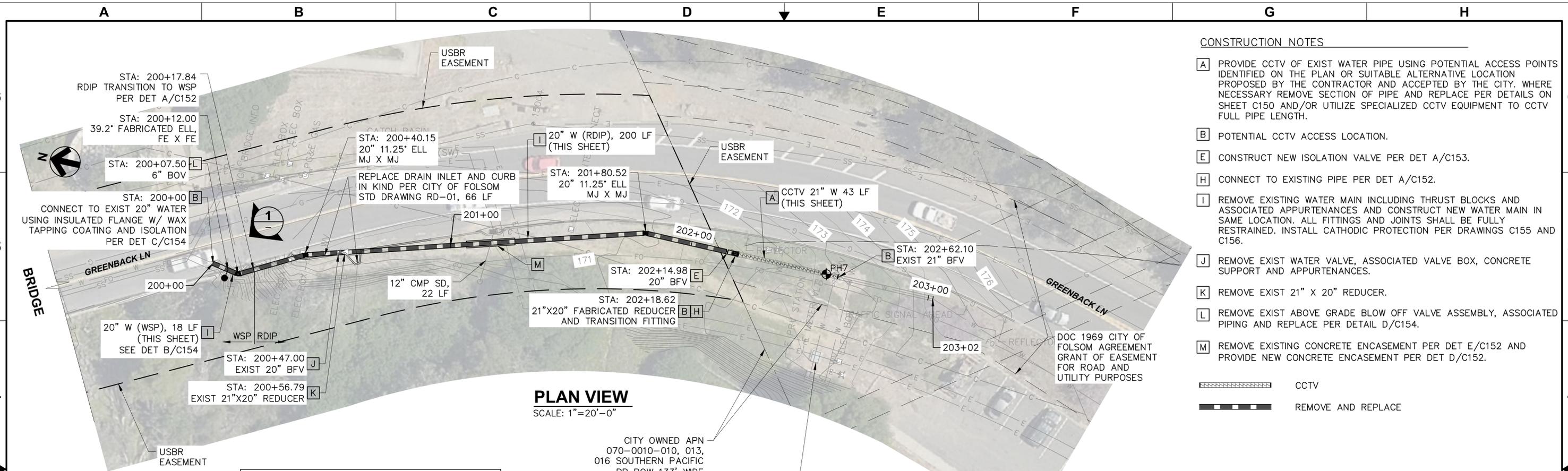
CITY OF FOLSOM UTILITIES
ENGINEERING & COMPLIANCE

ASHLAND WATER REHABILITATION PROJECT 1

PLAN & PROFILE GREENBACK LANE STA 113+50 TO 115+26

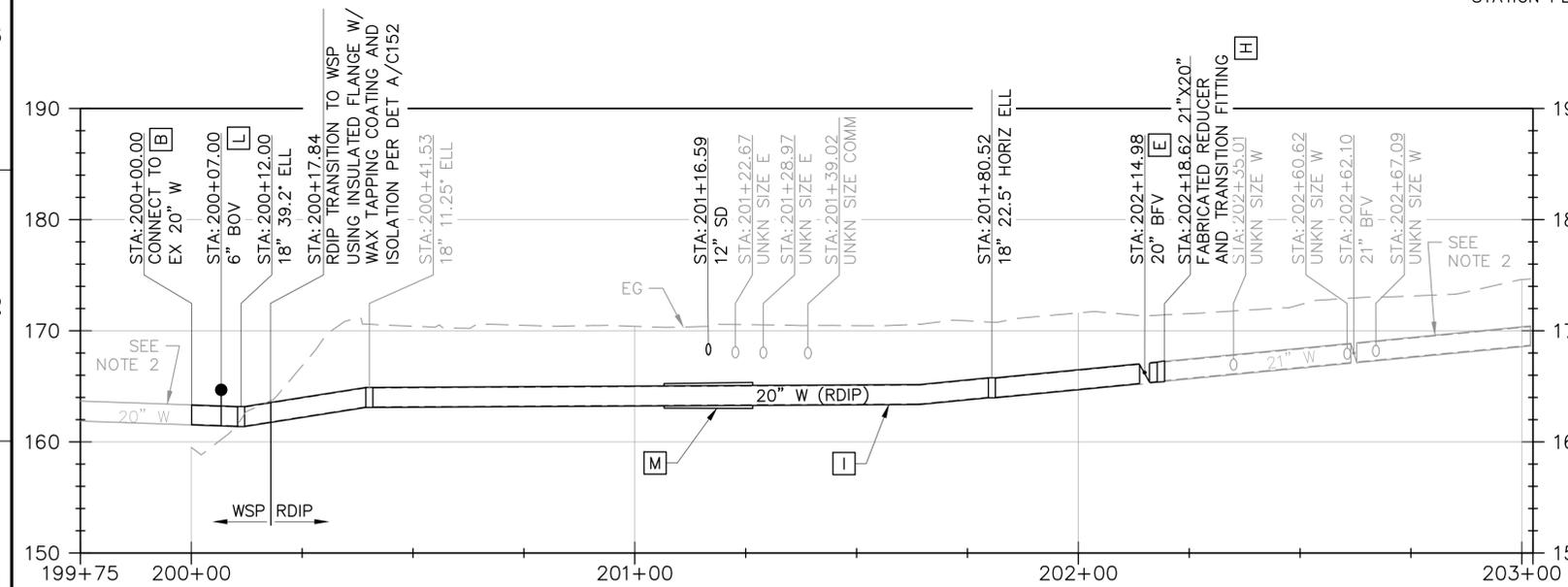
C103
DRAWING NUMBER
SHEET 9 OF 27

File Name: S:\common\projects\361-City of Folsom\005-Ashland\1 Project\04-Design\Drawings\03-Civil\361-005-C100 to C104 Pipeline.dwg
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 Plot Date: 2/8/2023 9:53 AM



PLAN VIEW
SCALE: 1"=20'-0"

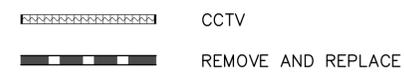
WATER PIPELINE ALIGNMENT AND ASSOCIATED APPURTENANCES ARE SHOWN SCHEMATICALLY. CONTRACTOR TO FIELD VERIFY UTILITY INFORMATION SHOWN HEREIN.



PROFILE - STA 199+75.00 TO 203+02.52
HORIZONTAL SCALE: 1"=20'-0"
VERTICAL SCALE: 1"=8'-0"

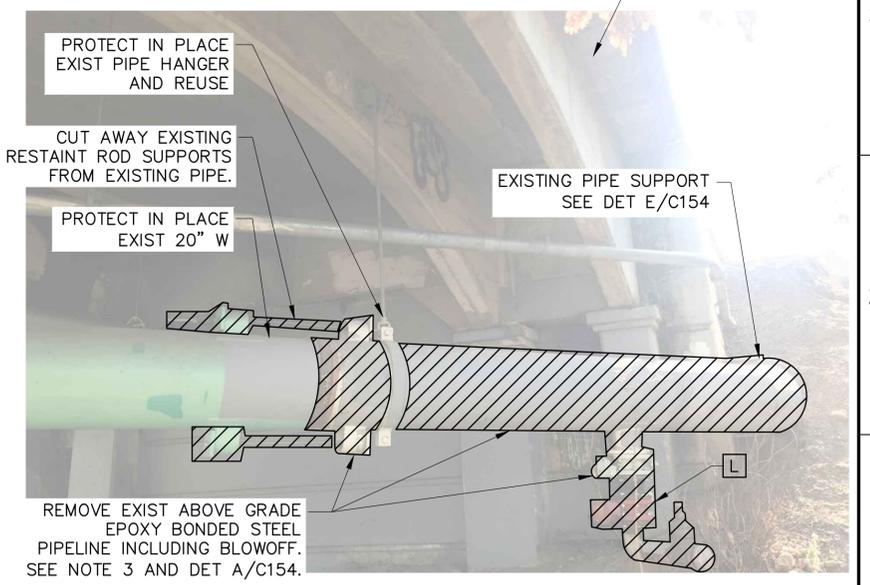
CONSTRUCTION NOTES

- [A] PROVIDE CCTV OF EXIST WATER PIPE USING POTENTIAL ACCESS POINTS IDENTIFIED ON THE PLAN OR SUITABLE ALTERNATIVE LOCATION PROPOSED BY THE CONTRACTOR AND ACCEPTED BY THE CITY. WHERE NECESSARY REMOVE SECTION OF PIPE AND REPLACE PER DETAILS ON SHEET C150 AND/OR UTILIZE SPECIALIZED CCTV EQUIPMENT TO CCTV FULL PIPE LENGTH.
- [B] POTENTIAL CCTV ACCESS LOCATION.
- [E] CONSTRUCT NEW ISOLATION VALVE PER DET A/C153.
- [H] CONNECT TO EXISTING PIPE PER DET A/C152.
- [I] REMOVE EXISTING WATER MAIN INCLUDING THRUST BLOCKS AND ASSOCIATED APPURTENANCES AND CONSTRUCT NEW WATER MAIN IN SAME LOCATION. ALL FITTINGS AND JOINTS SHALL BE FULLY RESTRAINED. INSTALL CATHODIC PROTECTION PER DRAWINGS C155 AND C156.
- [J] REMOVE EXIST WATER VALVE, ASSOCIATED VALVE BOX, CONCRETE SUPPORT AND APPURTENANCES.
- [K] REMOVE EXIST 21" X 20" REDUCER.
- [L] REMOVE EXIST ABOVE GRADE BLOW OFF VALVE ASSEMBLY, ASSOCIATED PIPING AND REPLACE PER DETAIL D/C154.
- [M] REMOVE EXISTING CONCRETE ENCASEMENT PER DET E/C152 AND PROVIDE NEW CONCRETE ENCASEMENT PER DET D/C152.



GENERAL NOTES

1. SEE G005 FOR NOTES REGARDING GENERAL SEQUENCE OF CONSTRUCTION WORK PLAN SUBMITTAL REQUIREMENTS.
2. EXISTING PIPE ELEVATIONS ARE BASED ON AS-BUILTS DRAWINGS. CONTRACTOR SHALL POthOLE TO VERIFY LOCATION, SIZE, COATING THICKNESS AND MATERIAL OF EXISTING WATER MAIN PRIOR TO ORDERING PIPING AND CONNECTION FITTINGS.
3. REMOVE AND DISPOSE OF EXIST WATER MAIN AS REQ'D TO COMPLETE WORK.
4. CONTRACTOR SHALL CLEAN AND VIDEOTAPE EXIST PIPELINE AS SHOWN ON PLANS. SEE SPECIFICATION SECTION 01050 CCTV INSPECTION. CONTRACTOR SHALL PROVIDE ACCESS LOCATIONS AND COMPLETELY DEWATER EXISTING PIPE PRIOR TO CCTV.
5. FOR WORK WITHIN THE ROADWAY, BACKFILL AND RESTORE ASPHALT ROAD SECTION USING T-CUT AND GRIND ON ALL SIDES OF THE EXCAVATION PER DET B/C152.
6. FOR WORK OUTSIDE OF ROADWAY, BACKFILL AND RESTORE SURFACE PER DET C/C152.



BRIDGE CONNECTION (SOUTH) 1
SCALE: N.T.S.

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DESIGNED BY BF
PROJ. MGR. ELJ

REV	DESCRIPTION	DATE	APVD

CITY OF FOLSOM UTILITIES
ENGINEERING & COMPLIANCE

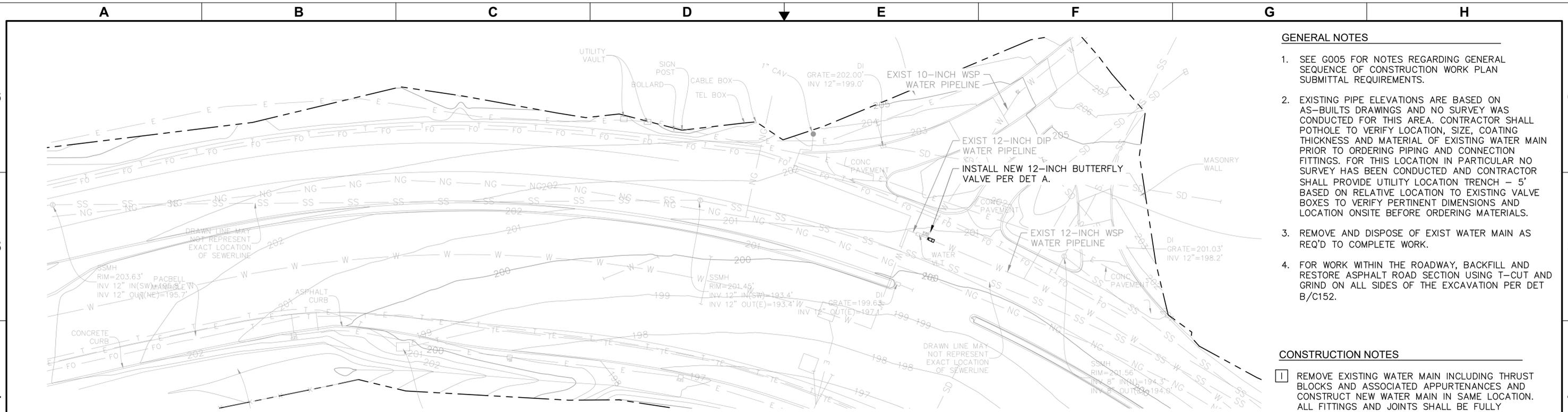
ASHLAND WATER REHABILITATION PROJECT 1

PLAN & PROFILE GREENBACK LANE STA 200+00 TO 203+03

REGISTERED PROFESSIONAL ENGINEER
C68550
CIVIL
STATE OF CALIFORNIA
2/09/2023

C104
DRAWING NUMBER
SHEET 10 OF 27

File Name: S:\common\projects\361-City of Folsom\005-Ashland\1-Project\04-Design\Drawings\03-Civil\361-005-005-C105 & C106-Site-Plans.dwg
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 Plot Date: 2/8/2023 9:53 AM

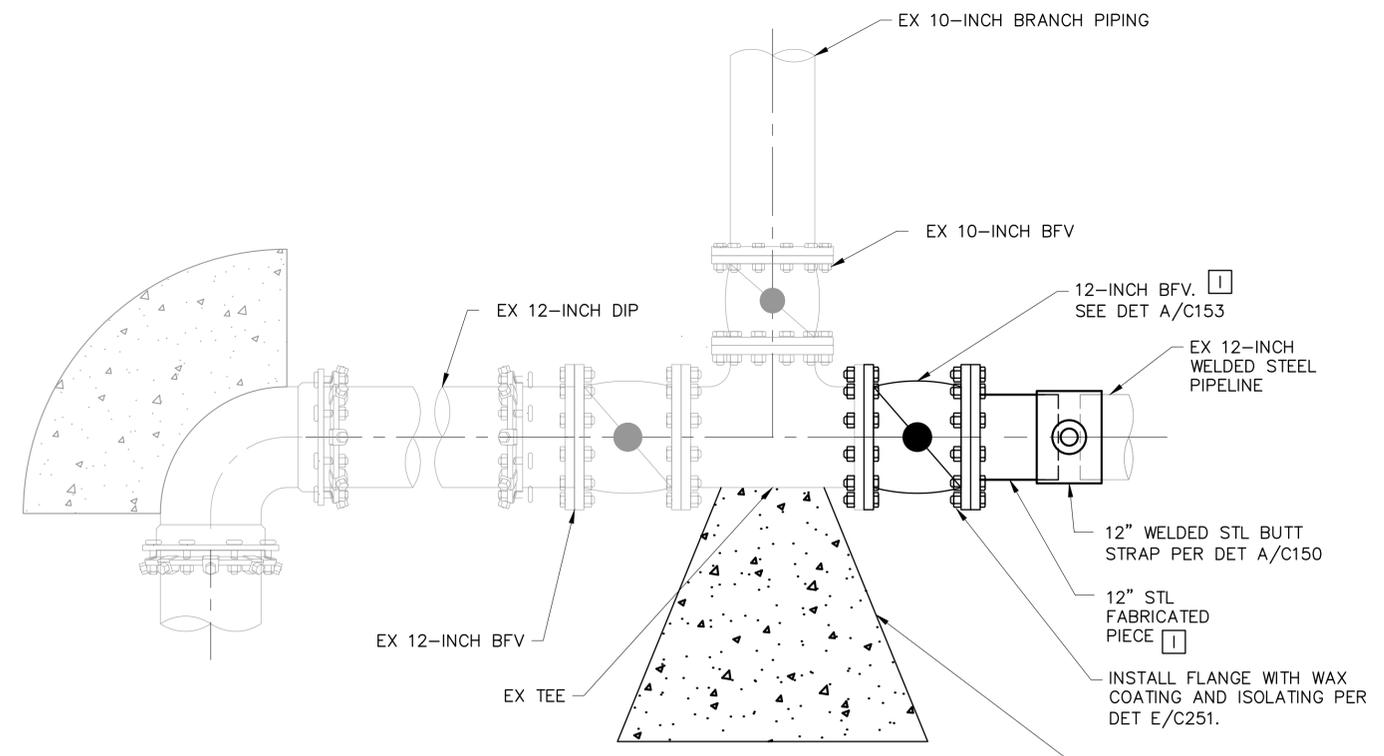


PLAN
 SCALE: 1"=20'-0"

1
 G005

- GENERAL NOTES**
- SEE G005 FOR NOTES REGARDING GENERAL SEQUENCE OF CONSTRUCTION WORK PLAN SUBMITTAL REQUIREMENTS.
 - EXISTING PIPE ELEVATIONS ARE BASED ON AS-BUILTS DRAWINGS AND NO SURVEY WAS CONDUCTED FOR THIS AREA. CONTRACTOR SHALL POTHOLE TO VERIFY LOCATION, SIZE, COATING THICKNESS AND MATERIAL OF EXISTING WATER MAIN PRIOR TO ORDERING PIPING AND CONNECTION FITTINGS. FOR THIS LOCATION IN PARTICULAR NO SURVEY HAS BEEN CONDUCTED AND CONTRACTOR SHALL PROVIDE UTILITY LOCATION TRENCH - 5' BASED ON RELATIVE LOCATION TO EXISTING VALVE BOXES TO VERIFY PERTINENT DIMENSIONS AND LOCATION ONSITE BEFORE ORDERING MATERIALS.
 - REMOVE AND DISPOSE OF EXIST WATER MAIN AS REQ'D TO COMPLETE WORK.
 - FOR WORK WITHIN THE ROADWAY, BACKFILL AND RESTORE ASPHALT ROAD SECTION USING T-CUT AND GRIND ON ALL SIDES OF THE EXCAVATION PER DET B/C152.

- CONSTRUCTION NOTES**
- 1 REMOVE EXISTING WATER MAIN INCLUDING THRUST BLOCKS AND ASSOCIATED APPURTENANCES AND CONSTRUCT NEW WATER MAIN IN SAME LOCATION. ALL FITTINGS AND JOINTS SHALL BE FULLY RESTRAINED. INSTALL CATHODIC PROTECTION PER DRAWINGS C155 AND C156.



DETAIL
 SCALE: N.T.S.

A

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 10569 OLD PLACERVILLE ROAD
 SACRAMENTO, CA 95827
 OFFICE: 916.364.1490

PAPER SIZE: 22X34 (ANSI D)
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JOB NO. 361-005
 DATE 2/9/2023
 DRAWN BY RLS/BF
 DESIGNED BY BF
 PROJ. MGR. ELJ

REV	DESCRIPTION	DATE	APVD

CITY OF FOLSOM UTILITIES
 ENGINEERING & COMPLIANCE

ASHLAND WATER REHABILITATION PROJECT 1

BLACK MINER'S BAR BYPASS VALVE PLAN & DETAIL



C105
 DRAWING NUMBER
 SHEET 11 OF 27

File Name: S:\common\projects\361-City of Folsom\005-Ashland\Project\04-Design\Drawings\03-Civil\361-005-C106-Site Plans.dwg
 Plotted By: ANTHONY PEREZ
 Plot Date: 2/8/2023 9:53 AM



EXISTING PRV STATION BYPASS PLAN
 SCALE: 1"=10'-0"

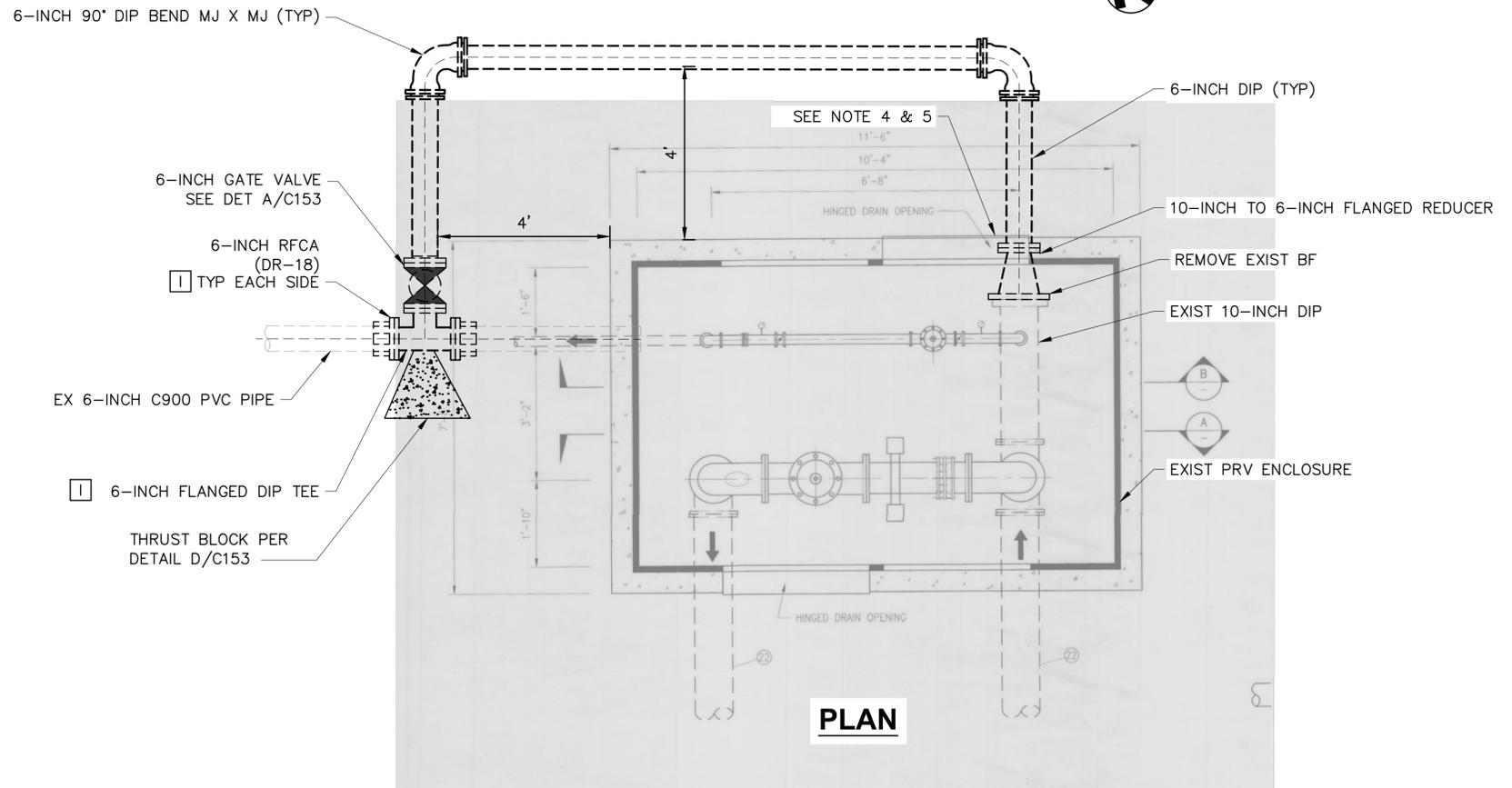
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 G005

GENERAL NOTES

- SEE G005 FOR NOTES REGARDING GENERAL SEQUENCE OF CONSTRUCTION WORK PLAN SUBMITTAL REQUIREMENTS.
- EXISTING PIPE ELEVATIONS ARE BASED ON AS-BUILTS DRAWINGS AND NO SURVEY WAS CONDUCTED FOR THIS AREA. CONTRACTOR SHALL POTHOLE TO VERIFY LOCATION, SIZE, COATING THICKNESS AND MATERIAL OF EXISTING WATER MAIN PRIOR TO ORDERING PIPING AND CONNECTION FITTINGS. FOR THIS LOCATION IN PARTICULAR NO SURVEY HAS BEEN CONDUCTED AND CONTRACTOR SHALL PROVIDE UTILITY LOCATION TRENCH - 5' AND ACCESS PIT TO VERIFY BLIND FLANGE LOCATION BASED ON RELATIVE LOCATION TO EXISTING ABOVE GRADE PIPING TO VERIFY PERTINENT DIMENSIONS AND LOCATION ONSITE BEFORE ORDERING MATERIALS. REMOVE AND DISPOSE OF EXIST WATER MAIN AS REQ'D TO COMPLETE WORK.
- FOR WORK WITHIN THE ROADWAY, BACKFILL AND RESTORE ASPHALT ROAD SECTION USING T-CUT AND GRIND ON ALL SIDES OF THE EXCAVATION PER DET B/C152.
- CONTRACTOR SHALL EXCAVATE ACCESS PIT ADJACENT TO EXISTING CONCRETE SLAB, PROVIDE SHORING AND/OR TEMPORARY SUPPORTS FOR EXISTING SLAB AS NEEDED TO INSTALL PIPING WITH EXISTING CONCRETE SLAB LEFT IN PLACE.
- CONTRACTOR SHALL PROTECT IN PLACE EXISTING STRUCTURE ADJACENT TO NEW INSTALLATION.

CONSTRUCTION NOTES

- REMOVE EXISTING WATER MAIN INCLUDING THRUST BLOCKS AND ASSOCIATED APPURTENANCES AND CONSTRUCT NEW WATER MAIN IN SAME LOCATION. ALL FITTINGS AND JOINTS SHALL BE FULLY RESTRAINED. INSTALL CATHODIC PROTECTION PER DRAWINGS C155 AND C156.



EXISTING PRV STATION BYPASS DETAIL
 SCALE: 1" = 2'-0"

B
 -

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REV	DESCRIPTION	DATE	APVD
REVISIONS			



ASHLAND WATER REHABILITATION PROJECT 1

EXISTING PRV STATION BYPASS PLAN AND DETAIL

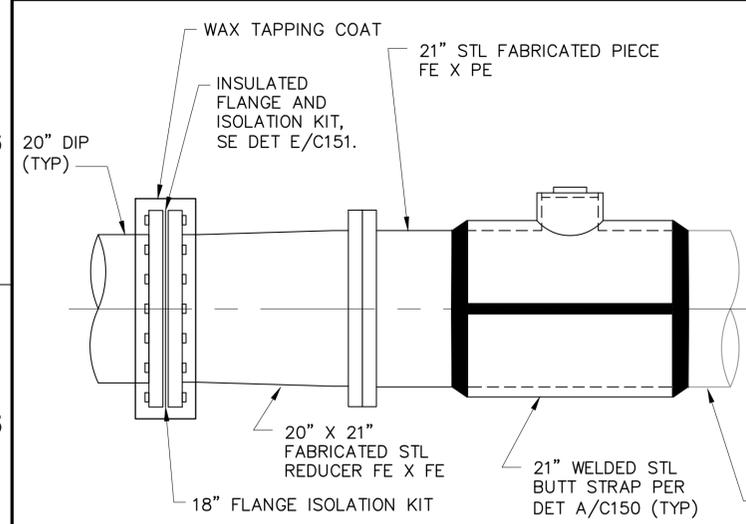


C106
 DRAWING NUMBER

SHEET 12 OF 27

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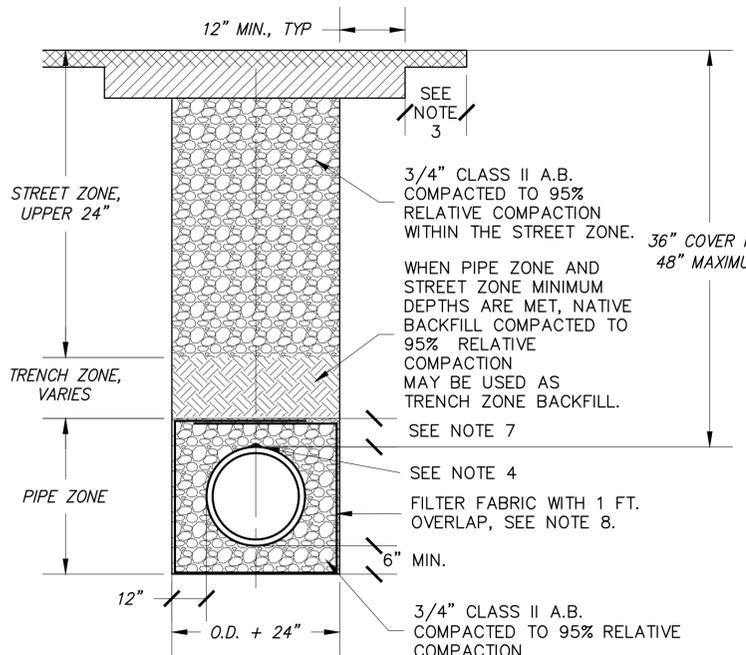
A B C D E F G H



- NOTES:**
1. CONTRACTOR SHALL FIELD VERIFY THE SIZE AND THICKNESS OF EXISTING PIPE TO MATCH THE SIZE AND THICKNESS OF CONNECTION.
 2. BUTT-STRAPS SHALL BE WELDED OUTSIDE JOINT.
 3. WELD THE LONGITUDINAL JOINTS IN THE BUTT-STRAP USING FULL PENETRATION WELDS BEFORE MAKING THE CIRCUMFERENTIAL FILLET WELDS.
 4. DO NOT MAKE ALIGNMENT CHANGES AT BUTT-STRAP JOINTS.
 5. DO NOT USE MITERED BUTT-STRAPS.
 6. PROVIDE AIR TEST HOLES WITH LINING BLOCKOUTS AS FOLLOWS:
 7. CYLINDER THICKNESS (t_y) GREATER THAN $3/16" - 1/4" \text{ NPT}$
 8. CONTRACTOR TO REMOVE AND REPLACE AND REPAIR EXISTING PIPE COATING AS NEEDED.
 9. CONTRACTOR TO REMOVE AND REPLACE AND REPAIR EXISTING PIPE LINING AS NEEDED
 10. APPLY MORTAR COATING OVER BUTT STRAPS.

CONNECTION DETAIL #2
SCALE: NO SCALE

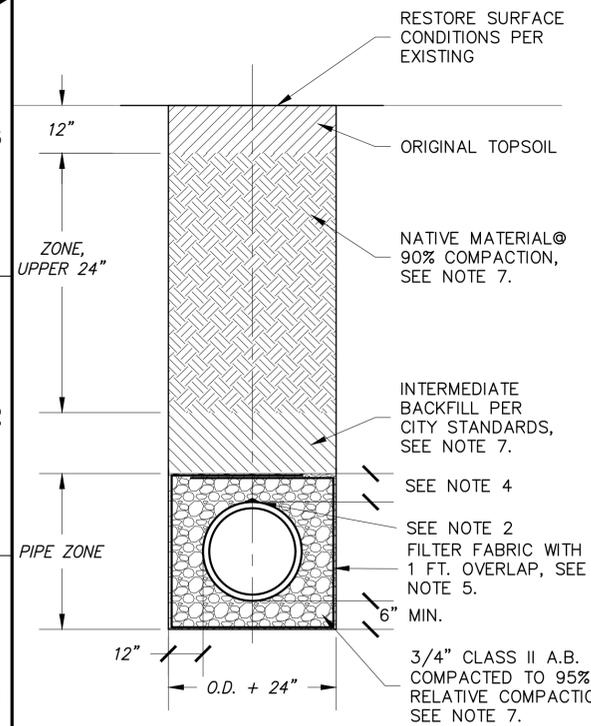
A



- NOTES:**
1. MATCH EXISTING A.C. THICKNESS OR 8" MINIMUM WHICHEVER IS GREATER. CONTRACTOR TO ASSUME 10" FOR REMOVAL AND REPLACEMENT FOR BIDDING PURPOSES.
 2. SAW CUT 12" BEYOND THE WIDTH OF THE TRENCH.
 3. T-GRIND REQUIRED FOR ALL PAVEMENTS (12" MINIMUM WIDTH). 1/2" DEEP GRIND AND PAVE TO THE LIP OF GUTTER, LANE LINE, OR CENTER OF ADJACENT TRAFFIC LANE (WHICHEVER IS APPLICABLE).
 4. #10 TRACER WIRE. CONNECT SERVICE LATERAL TRACER WIRE TO MAIN LINE TRACER WIRE PER WR-12, DET C/C153 AND CITY STANDARDS.
 5. BACKFILL SHALL BE MECHANICALLY CONSOLIDATED AND SHOVEL SLICED UNDER THE HAUNCHES OF THE PIPE. SEE CITY SPECIFICATIONS FOR BACKFILL AND COMPACTION REQUIREMENTS.
 6. 3" WIDE (MINIMUM) BLUE MARKING TAPE, 18" ABOVE PIPE. TAPE SHOULD READ "BURIED WATER MAIN".
 7. PIPE ZONE COVER OVER THE TOP OF WATER MAINS SHALL BE A MINIMUM OF 12".
 8. IN AREAS OF FLOWING GROUNDWATER, FILTER FABRIC SHALL BE PLACED AROUND THE PIPE ZONE BEDDING AND SHADING IN ACCORDANCE WITH THE ON-SITE GEOTECHNICAL ENGINEER, AS WELL AS METHODS FOR COLLECTING AND CONVEYING GROUNDWATER AWAY FROM UNDERGROUND ROADWAY AND INFRASTRUCTURE PER GEOTECHNICAL ENGINEER.
 9. DETAIL BASED ON CITY STANDARD DETAIL WR-15 AND PROJECT SPECIFIC REQUIREMENTS.

TYPICAL TRENCH SECTION FOR ROADWAY
SCALE: NO SCALE

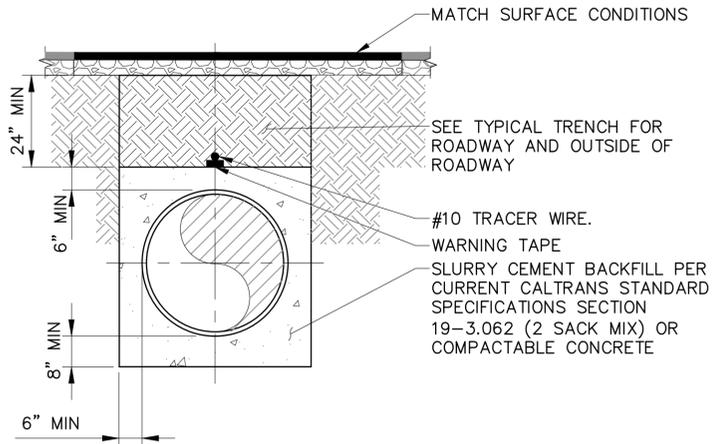
B



- NOTES:**
1. MATCH EXISTING SURFACE CONDITIONS. REMOVE AND REPLACE A MINIMUM OF 12" BEYOND TRENCH WALL TO THE SATISFACTION OF THE CITY AND PROPERTY OWNER.
 2. #10 TRACER WIRE. CONNECT SERVICE LATERAL TRACER WIRE TO MAIN LINE TRACER WIRE PER WR-12, DET C/C153 AND CITY STANDARDS.
 3. BACKFILL SHALL BE MECHANICALLY CONSOLIDATED AND SHOVEL SLICED UNDER THE HAUNCHES OF THE PIPE. SEE CITY SPECIFICATIONS FOR BACKFILL AND COMPACTION REQUIREMENTS.
 4. PIPE ZONE COVER OVER THE TOP OF WATER MAINS SHALL BE A MINIMUM OF 12".
 5. IN AREAS OF FLOWING GROUNDWATER, FILTER FABRIC SHALL BE PLACED AROUND THE PIPE ZONE BEDDING AND SHADING IN ACCORDANCE WITH THE ON-SITE GEOTECHNICAL ENGINEER, AS WELL AS METHODS FOR COLLECTING AND CONVEYING GROUNDWATER AWAY FROM UNDERGROUND ROADWAY AND INFRASTRUCTURE PER GEOTECHNICAL ENGINEER.
 6. DETAIL BASED ON CITY STANDARD DETAIL RD-21 AND PROJECT SPECIFIC REQUIREMENTS.
 7. BACKFILL WITH CLSM FOR TRENCH LOCATED ADJACENT AND UP TO 5-FT FROM THE RAINBOW BRIDGE ABUTMENT.

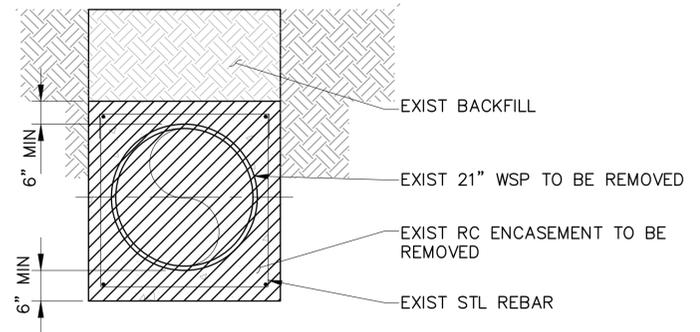
TYPICAL TRENCH SECTION - OUTSIDE OF ROADWAY
SCALE: NO SCALE

C



CONCRETE ENCASEMENT
SCALE: NO SCALE

D



DEMO OF EXIST CONC ENCASEMENT
SCALE: NO SCALE

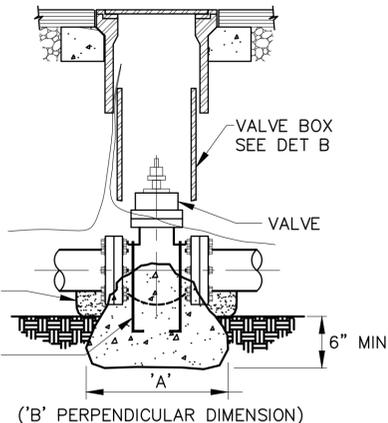
E

 10569 OLD PLACERVILLE ROAD SACRAMENTO, CA 95827 OFFICE: 916.364.1490	PAPER SIZE: 22X34 (ANSI D) THIS BAR IS 1 INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.	JOB NO. 361-005 DATE 2/9/2023 DRAWN BY AGP/BF DESIGNED BY BF PROJ. MGR. ELJ	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APVD</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REV	DESCRIPTION	DATE	APVD					 CITY OF FOLSOM UTILITIES ENGINEERING & COMPLIANCE	ASHLAND WATER REHABILITATION PROJECT 1	CIVIL DETAILS - 3	 2/09/2023	C152 DRAWING NUMBER SHEET 15 OF 27
REV	DESCRIPTION	DATE	APVD													

A B C D E F G H

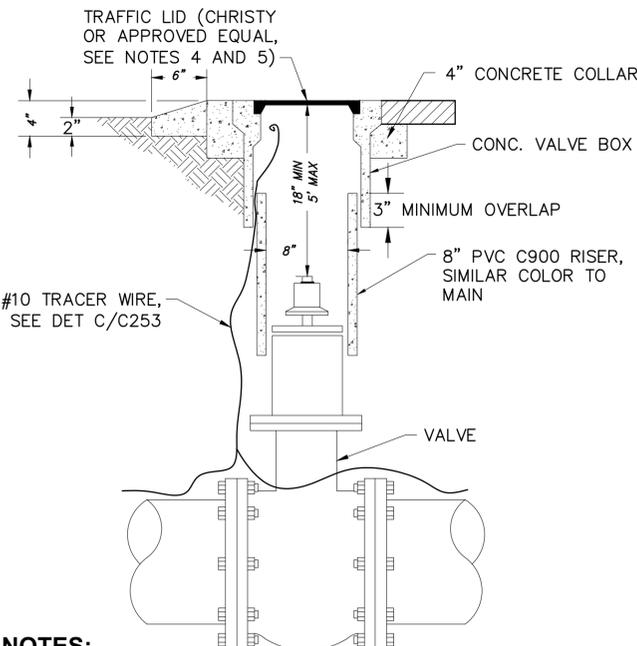
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 Plotted By: ANTHONY PEREZ
 Plot Date: 2/8/2023 9:54 AM

VALVE SIZE	ANCHOR BLOCK FOOTPRINT DIMENSIONS	
	'A' (FT)	'B' (FT)
6	1.5	1.0
8	1.5	1.0
10	2.0	1.5
12	2.0	1.5
14	2.5	2.0
18	2.5	2.5



- NOTES:**
- ANCHOR BLOCK SHALL BE KEYPED NO LESS THAN 12 INCHES INTO UNDISTURBED SOIL OF THE TRENCH WALL AND NO LESS THAN 6 INCHES INTO THE TRENCH BOTTOM.
 - ANCHORS ARE TO BE INSTALLED ON ALL VALVES UNLESS OTHERWISE NOTED ON PLANS. ALL ANCHOR RODS ARE TO BE COVERED WITH BITUMASTIC COMPOUND.

BURIED VALVE SUPPORT DETAIL A
 SCALE: NO SCALE



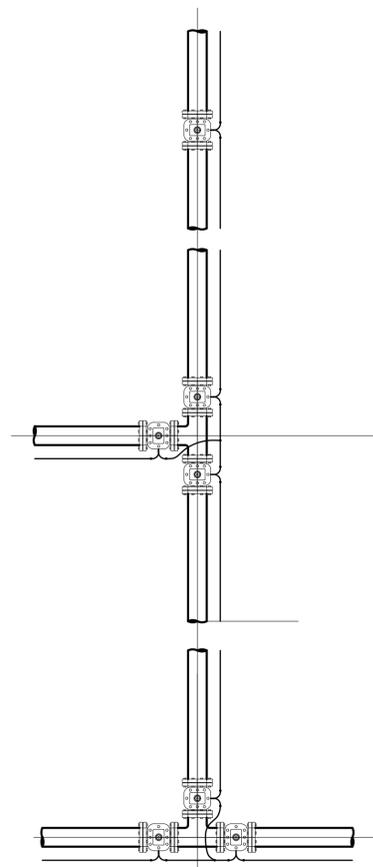
- NOTES:**
- SET VALVE BOX TO FINAL FINISHED GRADE. WHERE THE FINISHED GRADE HAS NOT BEEN DEFINED, PLACE 4 X 4 LOCATING POST PAINTED BLUE, WITHIN 1' OF VALVE BOX. POST SHALL BE 6" IN LENGTH AND BURIED 3'.
 - VALVE BOX AND RISER TO BE SET PLUMB AND CENTERED OVER WATER VALVE NUT.
 - FIELD COLLAR REQUIRED WHEN VALVES ARE INSTALLED IN SOIL. MINIMUM. 2' DIAMETER COLLAR 6" ABOVE GRADE.
 - USE CHRISTY G-05 OR APPROVED EQUAL.
 - PRESSURE ZONE SHALL BE WELDED ONTO THE VALVE BOX FRAME. NAMEPLATE TAGS ARE NOT AN ACCEPTABLE ALTERNATIVE TO FRAME WELDS. PRESSURE ZONE SHALL BE LABELED AS FOLLOWS:
 - 5.1. POTABLE PRESSURE ZONE LABELS: PZ-1, PZ-2, PZ-3, PZ-4, PZ-5, PZ-6.
 - DETAIL BASED ON CITY STANDARD DETAIL WR-7 AND PROJECT SPECIFIC REQUIREMENTS.

WATER VALVE RISER AND BOX B
 SCALE: NTS

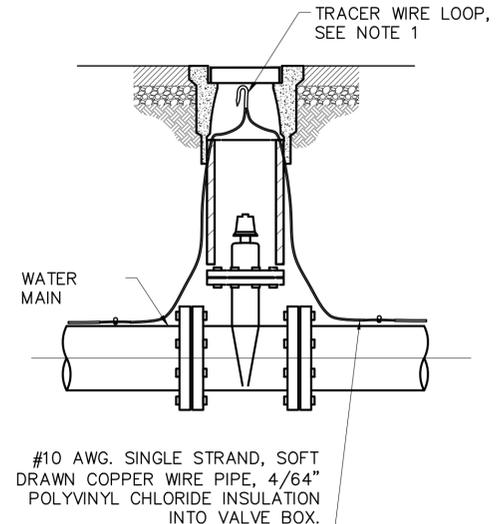
MINIMUM REQUIRED BEARING AREA - TOTAL SQUARE FEET					
TYPE OF FITTING	90° BEND	45° BEND	11 1/4" OR 22 1/2" BEND	TEE OR DEAD END	TEE W/PLUG
TYPICAL INSTALLATION					
SIZE OF PIPE	6"	4.7	-	7.2	-
	8"	-	-	-	-
	10"	-	-	17.8	-
	12"	-	-	14.9	-
	20"	-	-	-	-

- NOTES:**
- THRUST BLOCK SIZES BASED ON A MINIMUM BEARING CAPACITY OF 1,000 LBS/SF OR A UNIT PASSIVE SOIL PRESSURE OF 450 PSF PER FOOT OF DEPTH, WITH A MINIMUM SOIL COVER OF 3'-0" OR AS SHOWN ON PROFILE AND A FACTOR OF SAFETY OF 1.5.
 - THRUST BLOCKS TO BE CONSTRUCTED OF CLASS B CONCRETE. CONCRETE COMPRESSIVE STRENGTH SHALL MEET SPECIFICATIONS FOR 3000 PSI AT 28 DAYS CURING WHEN TESTED IN ACCORDANCE WITH ASTM C39.
 - THRUST BLOCKS SHALL BE POURED SOLIDLY AGAINST FIRM, UNDISTURBED SOIL WITH PASSIVE PRESSURE EQUAL TO OR GREATER THAN THAT SHOWN IN NOTE 1.
 - AREAS GIVEN ARE FOR PIPES TESTED AT PRESSURE OF 225 P.S.I. INSTALLATIONS, TEST PRESSURES, AND/OR LESSER SOIL TYPES SHOULD ADJUST AREAS ACCORDINGLY, SUBJECT TO APPROVAL OF ENGINEER.
 - JOINTS AND FACE OF PLUGS SHALL BE KEPT CLEAR OF CONCRETE.
 - THRUST BLOCKS MAY BE REQUIRED FOR CASES NOT DEPICTED ABOVE.

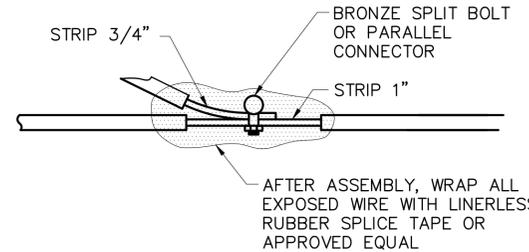
THRUST BLOCK BEARING AREA D
 SCALE: NO SCALE



TYPICAL LAYOUT F



VALVE DETAIL G



SPLICE DETAIL H

- NOTES:**
- #10 INSULATED COPPER WIRE TO BE CONTINUOUS BETWEEN VALVE BOXES, EXCEPT AS NOTED. TRACER WIRE SHALL HAVE MIN. 12" EXCESS LOOP LOCATED INSIDE THE METER/VALVE BOX. CONTRACTOR SHALL CONDUCT A CONTINUITY TEST ON ALL SPLICES.
 - SITE INSPECTOR WILL PERFORM CONTINUITY TEST ON THE ENTIRE TRACER WIRE SYSTEM PRIOR TO ACCEPTANCE.
 - BARE WIRE MUST NOT TOUCH VALVES OR FITTINGS.
 - LOCATING WIRE TO BE PLACED ON TOP OF PIPE AND TAPED WITH 10 MIL VINYL TAPE EVERY 5'.
 - SOLDERING SHALL BE PERFORMED WHEN REQUESTED BY THE CITY ENGINEER.
 - DETAIL BASED ON CITY STANDARD DETAIL WR-8 AND PROJECT SPECIFIC REQUIREMENTS.

LOCATING WIRE FOR WATER MAIN C
 SCALE: NTS

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DATE 2/9/2023
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PROJ. MGR. ELJ

REV	DESCRIPTION	DATE	APVD
REVISIONS			

CITY OF FOLSOM UTILITIES
 ENGINEERING & COMPLIANCE

ASHLAND WATER REHABILITATION PROJECT 1

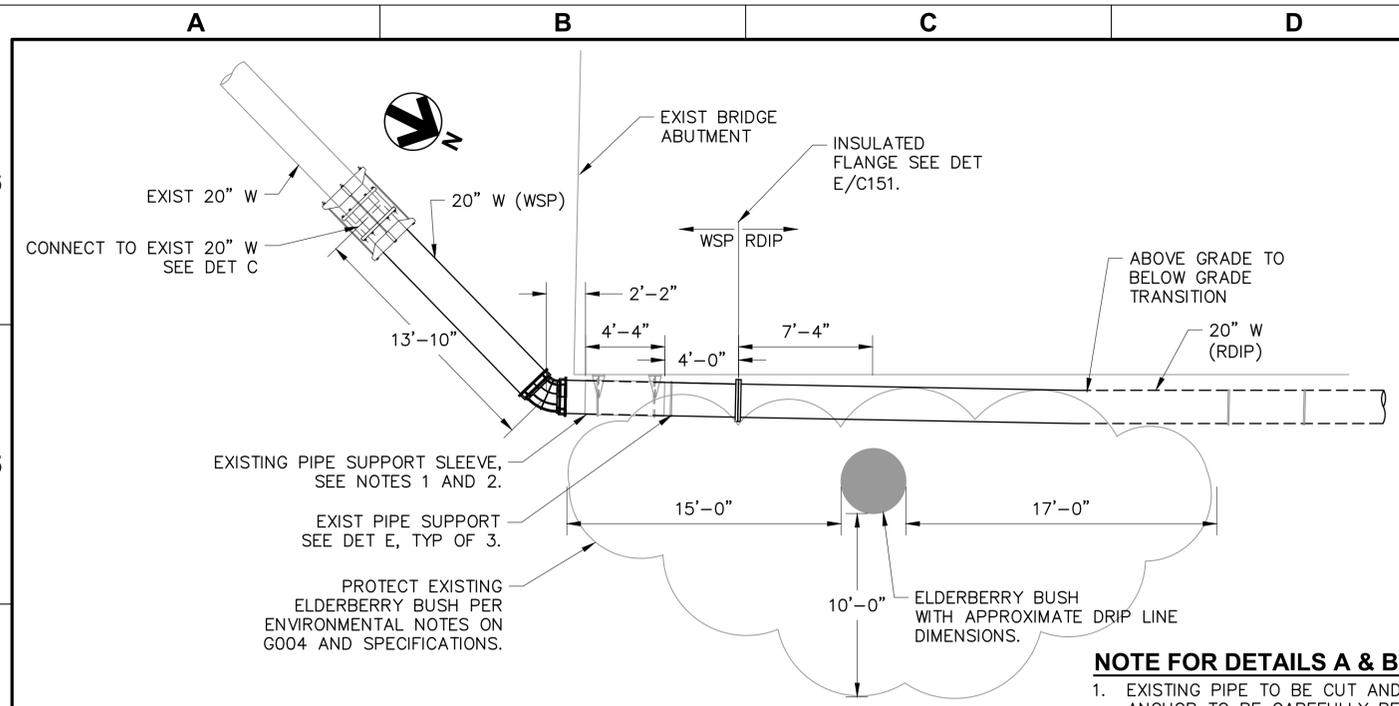
CIVIL DETAILS - 4

REGISTERED PROFESSIONAL ENGINEER
 C68550
 CIVIL
 STATE OF CALIFORNIA
 2/09/2023

C153
 DRAWING NUMBER

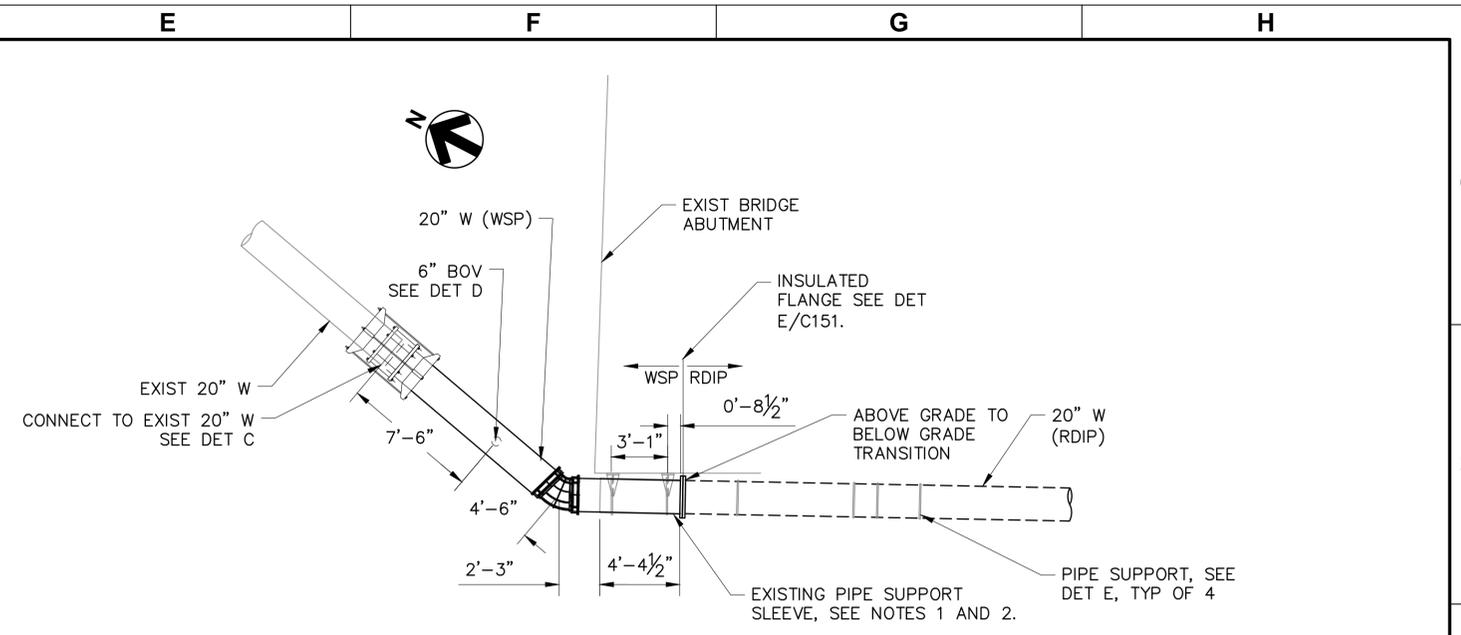
SHEET 16 OF 27

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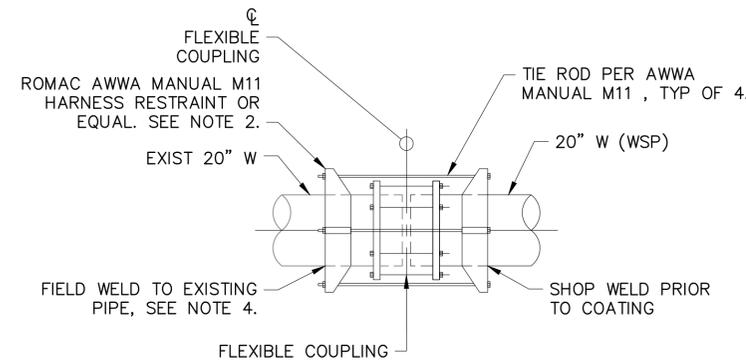


RAINBOW BRIDGE - NORTH CONNECTION (A)
 SCALE: 1" = 5'
 C103

NOTE FOR DETAILS A & B:
 1. EXISTING PIPE TO BE CUT AND EXISTING STEEL SLEEVE SUPPORT ANCHOR TO BE CAREFULLY REMOVED, FACTORY CLEANED, RECOATED, AND REINSTALLED WITH NEW PIPING.

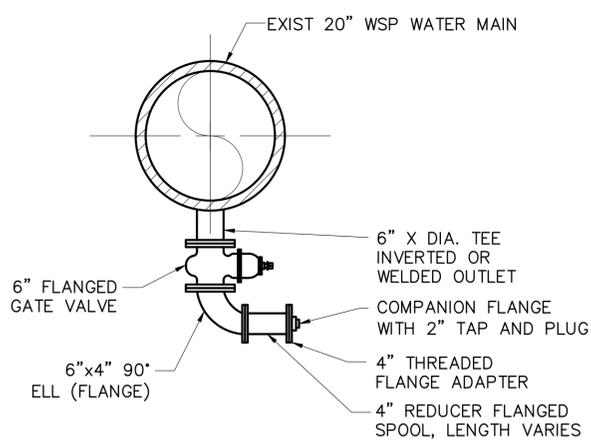


RAINBOW BRIDGE - SOUTH CONNECTION (B)
 SCALE: 1" = 5'
 C104

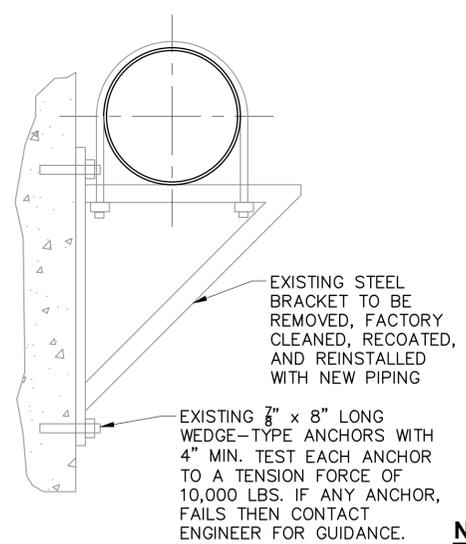


- NOTES**
- CONTRACTOR SHALL PROVIDE ADEQUATE SPACE FOR SLEEVE TO NOT CONFLICT WITH HARNESS RESTRAINT DURING INSTALLATION.
 - RESTRAINING TIE DOWN SYSTEM SHALL TRAVEL OVER FLEXIBLE COUPLING FASTENERS BY 1" MIN CLEARANCE.
 - TWO RESTRAINING TIE DOWN CHAIRS PER SIDE OF JOINT, INSTALLED IN THE SAME HORIZONTAL PLANE. TO PERMIT VERTICAL FLEXIBILITY.
 - REPAIR FUSION BONDED EPOXY LINING AND COATING MINIMUM 6-INCH FROM FIELD WELDS PER SPECIFICATIONS.

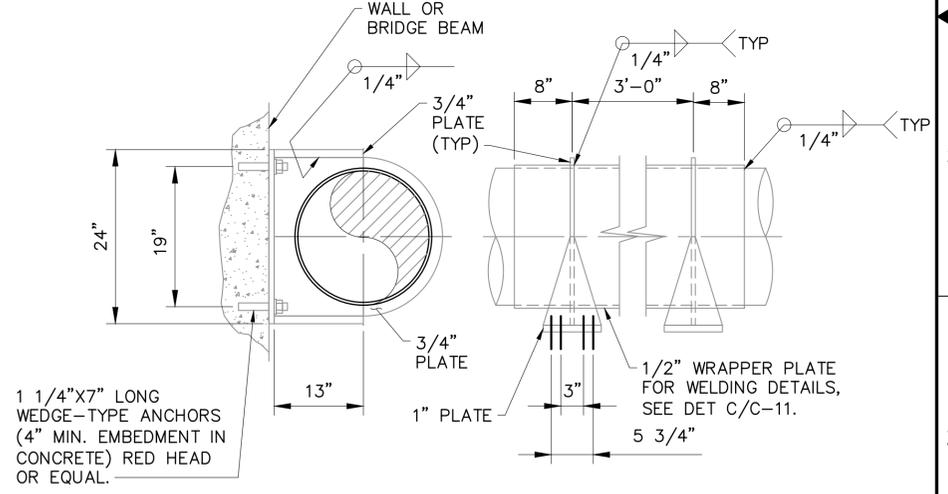
TYPICAL CONNECTION (C)
 SCALE: 1" = 1'



BLOW OFF ASSEMBLY DETAIL (ABOVE GRADE) (D)
 SCALE: NO SCALE



EXISTING PIPE SUPPORT (E)
 SCALE: NO SCALE



- NOTE FOR DETAIL E & F:**
- DETAIL FROM AS-BUILT DRAWING FOR WATER SYSTEM IMPROVEMENT ASHLAND AREA WATER SYSTEM, BY JAMES MONTGOMERY CONSULTING, DATED 1977.
 - TEST EACH ANCHOR TO A TENSION FORCE OF 10,000 LBS. IF ANY ANCHOR FAILS, CONTACT ENGINEER FOR GUIDANCE.

EXISTING PIPE SUPPORT SLEEVE (F)
 SCALE: NO SCALE

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REVISIONS			

CITY OF FOLSOM UTILITIES
 ENGINEERING & COMPLIANCE

ASHLAND WATER REHABILITATION PROJECT 1

CIVIL DETAILS - 5

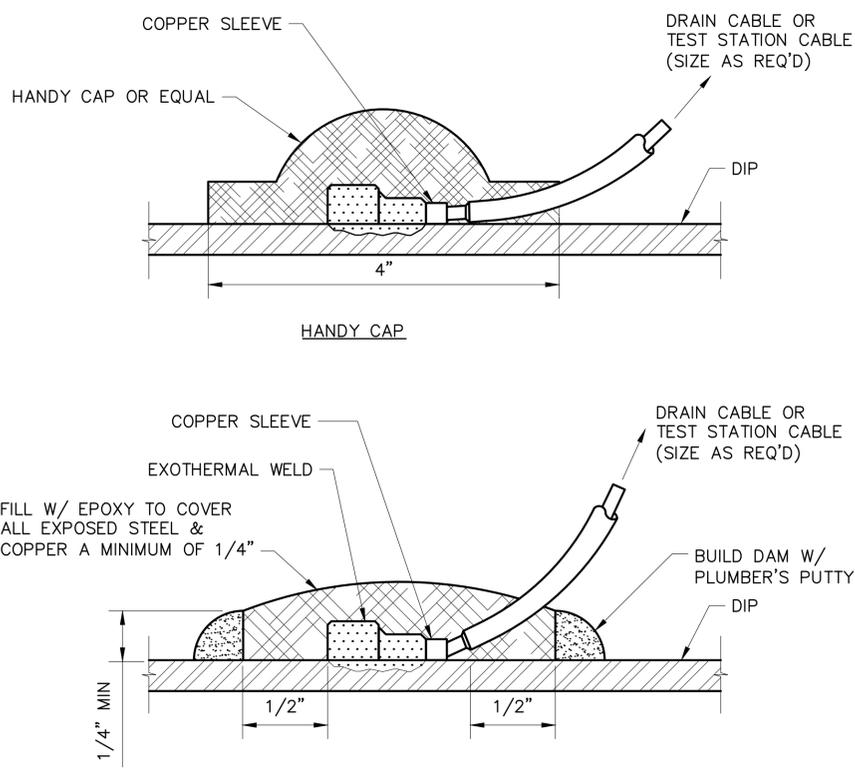
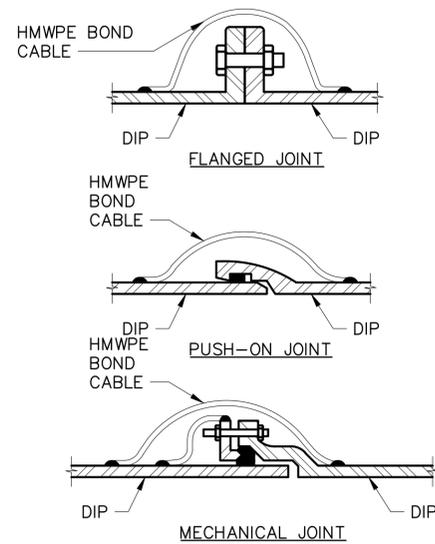
REGISTERED PROFESSIONAL ENGINEER
 C68550
 CIVIL
 STATE OF CALIFORNIA
 2/09/2023

C154
 DRAWING NUMBER
 SHEET 17 OF 27

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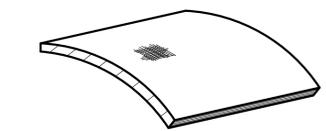
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5
4
3
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1



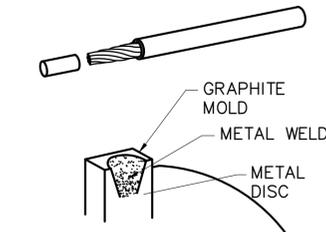
BONDING FOR DUCTILE IRON FITTINGS

A

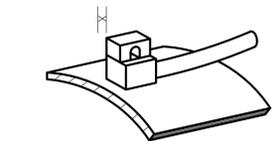
SCALE: NTS
 1) FILE TO BARE METAL & CLEAN OVER SURFACE



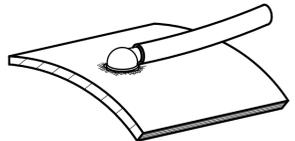
2) STRIP INSULATION FROM WIRE AND ATTACH SLEEVE



3) HOLD MOLD FIRMLY WITH OPENING AWAY FROM OPERATOR, IGNITE WITH FLINT GUN



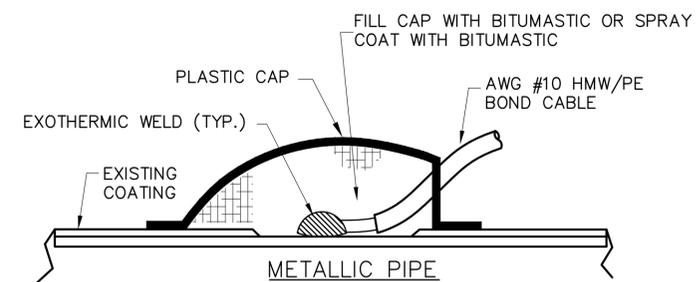
4) REMOVE SLAG FROM CONNECTION, COVER CONNECTION WITH COMPATIBLE COATING AND CAP OVER ALL EXPOSED METAL



CABLE TO DIP CONNECTION

B

SCALE: NTS



NOTES:

- A. EACH JOINT SHALL HAVE TWO SEPARATE WELD WIRES. ONE CONNECTION SHOWN ON DETAILS FOR CLARITY.
- B. CLEAN PIPE TO BRIGHT METAL WITH FILE OR GRINDER.
- C. WELD WIRE TO PIPE FOLLOWING WELD MANUFACTURER'S DIRECTIONS.
- D. EXOTHERMIC WELD ALLOY SHALL BE SUITABLE FOR TYPE OF PIPE METAL (I.E. STEEL).

EXOTHERMIC WELDS TO STEEL PIPE

C

SCALE: NTS

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CITY OF FOLSOM UTILITIES
 ENGINEERING & COMPLIANCE

ASHLAND WATER REHABILITATION PROJECT 1

CATHODIC PROTECTION DETAILS - 2

C156
 DRAWING NUMBER

SHEET 19 OF 27

A B C D E F G H

Plot Date: 2/18/2023 3:20 PM
Plotted By: ERIC JONES
File Name: S:\common\projects\361-City of Folsom\005-Ashland\1-Project\04-Design\Drawings\02-Electrical\361-005-E-Sheets.dwg

WIRING & CONDUIT - CONNECTIONS

- PANEL OR EQUIPMENT WIRING
- FIELD WIRING
- EXISTING WIRING
- CONDUCTORS - NOT CONNECTED
- CONDUCTORS - CONNECTED
- GROUND
- CHASSIS OR FRAME GROUND
- PLUG AND RECEPTACLE
- INCOMING LINE
- SHIELDED CABLE
- CONDUIT CONCEALED IN WALL OR CEILING 3/4"C-2#12, 1#12GND UON
- CONDUIT, IN SLAB OR BELOW GRADE 3/4"C-2#12, 1#12GND UON
- CONDUIT, EXPOSED 3/4"C-2#12, 1#12GND UON
- CONDUIT STUBBED OUT AND CAPPED CONDUIT
- BENDS TOWARD OBSERVER CONDUIT
- BENDS AWAY FROM OBSERVER
- BARE COPPER GROUND WIRE
- GROUND CONNECTION BOLTED TYPE
- GROUND CONNECTION EXOTHERMIC WELD

SWITCHES - PROCESS

- FLOW SWITCH - CLOSSES UPON INCREASING FLOW
- FLOW SWITCH - OPENS UPON INCREASING FLOW
- LEVEL SWITCH - CLOSSES UPON INCREASING LEVEL
- LEVEL SWITCH - OPENS UPON INCREASING LEVEL
- PRESSURE SWITCH - CLOSSES UPON INCREASING PRESSURE (INCREASING VACUUM)
- PRESSURE SWITCH - OPENS UPON INCREASING PRESSURE (INCREASING VACUUM)
- PRESSURE SWITCH - OPENS UPON INCREASING PRESSURE (INCREASING VACUUM)
- TEMPERATURE SWITCH - CLOSSES UPON INCREASING TEMPERATURE
- TEMPERATURE SWITCH - OPENS UPON INCREASING TEMPERATURE
- LIMIT SWITCH - CLOSSES AT SET
- LIMIT SWITCH - OPENS AT SET LIMIT
- PROXIMITY SWITCH - CLOSSES UPON DECREASING DISTANCE
- PROXIMITY SWITCH - CLOSSES UPON DECREASING DISTANCE
- TORQUE SWITCH - CLOSSES UPON INCREASING TORQUE
- TORQUE SWITCH - OPENS UPON INCREASING TORQUE

SWITCHES - OPERATORS

- TOGGLE OR DISCONNECT SWITCH
- PUSHBUTTON - NORMALLY OPEN, MOMENTARY ACTION
- PUSHBUTTON- NORMALLY CLOSED, MOMENTARY ACTION
- LEVEL SWITCH - OPENS UPON INCREASING
- LEVEL SELECTOR SWITCH, 3 POSITION- CONTACT STATUS SHOWN EXISTS AT POSITION OF H-HAND, O-OFF, A-AUTO
- 3-POLE SWITCH

DEVICES - RELAY

- CONTROL RELAY CR1 WITH NORMALLY OPEN CONTACT ON LINE 28 AND NORMALLY CONTACT ON LINE 111
- TIME DELAY RELAY TR2 - ADJUSTABLE TIME DELAY RANGE AND SETTING AS SHOWN
- TIME DELAY RELAY ON ENERGIZATION
- TIME DELAY RELAY ON DE-ENERGIZATION
- CONTACTOR OR STARTER M1
- SOLENOID
- NORMALLY OPEN RELAY CONTACT- ACTUATED BY RELAY CR-1 COIL ON LINE 105
- NORMALLY CLOSED RELAY CONTACT- ACTUATED BY RELAY CR-1 COIL
- NORMALLY OPEN, TIME DELAY RELAY CONTACT - CONTACT CLOSSES AFTER RELAY IS ENERGIZED
- NORMALLY CLOSED, TIME DELAY RELAY CONTACT - CONTACT OPENS AFTER RELAY IS ENERGIZED
- NORMALLY OPEN, TIME DELAY RELAY CONTACT - CONTACT OPENS AFTER RELAY IS DEENERGIZED
- NORMALLY CLOSED, TIME DELAY RELAY CONTACT - CONTACT CLOSSES AFTER RELAY IS DEENERGIZED

DEVICES - FRONT PANEL

- INDICATING LIGHT, LETTER INDICATES COLOR R=RED, G=GREEN, A=AMBER, W=WHITE Y=YELLOW, B=BLUE
- INDICATING LIGHT, PUSH TO TEST
- ELAPSED TIME METER

DEVICES - MISCELLANEOUS

- AUDIBLE ALARM
- HEATER
- MOTOR. # = MOTOR HORSEPOWER
- TRANSFORMER
- GENERATOR
- SMOKE DETECTOR
- DISCONNECT, 3 POLE CONTACT ON LINE 28 AND NORMALLY CONTACT ON LINE 111
- CIRCUIT BREAKER, 3 POLE TM = THERMAL MAGNETIC MCP = MOTOR CIRCUIT PROTECTOR
- THERMAL OVERLOAD CONTACT
- THERMAL OVERLOAD ELEMENT
- FUSE WITH BLOWN FUSE INDICATOR LIGHT
- FUSE
- CIRCUIT BREAKER

ELECTRICAL ABBREVIATIONS

A AMPERES	GFCI GROUND FAULT CIRCUIT INTERRUPT	NIC NOT IN CONTRACT	SP SET POINT
AFF ABOVE FINISHED FLOOR	GND GROUND	NL NIGHT LIGHT	SPD SURGE PROTECTION DEVICE
AI ANALOG INPUT	GR GROUND ROD	NO NORMALLY OPEN	SPECSPECIFICATION
AIC AMPS INTERRUPTING CAPACITY, SYMM	GRS GALVANIZED RIGID STEEL CONDUIT	O OPEN	SPSTSINGLE POLE, SINGLE THROW
AM AMMETER	GW GROUND WELL	OI OPERATOR INTERFACE	SR SENSING RELAY
AO ANALOG OUTPUT	HI HIGH	OL OVERLOAD	SS SOFT STARTER,SURGE SUPPRESSOR
ATS AUTOMATIC TRANSFER SWITCH	HID HIGH INTENSITY DISCHARGE	P POLE, PRESSURE	STA STATION
AUX AUXILIARY	HOA HAND-OFF-AUTO	PB PULL BOX, PUSHBUTTON	SV SOLENOID VALVE
AWG AMERICAN WIRE GAUGE	HP HORSEPOWER	PCP PROCESS CONTROL PANEL	SW SWITCH
BATTBATTERY	HPS HIGH PRESSURE SODIUM	PF POWER FACTOR	SWBD SWITCHBOARD
BSC BARE STRANDED COPPER	HTR HEATER	PI PHASE	SYMM SYMMETRICAL
BKR BREAKER	HZ HERTZ (CYCLES PER SECOND)	PI PRESSURE INDICATOR	T TRIP
BLDGBUILDING	HZD HAZARDOUS AREA, EXPLOSION PROOF	PLC PROGRAMMABLE LOGIC CONTROLLER PMP PUMP	TB TERMINAL BLOCK
C CONDUIT, CLOSE, CONTROL	I INTERLOCK OR INTELIGENT/LOGIC DEVICE	PNL PANEL	TDD,TDE TIME DELAY RELAY
CB CIRCUIT BREAKER	I/O INPUT/OUTPUT	POT POTENTIOMETER	TEL CO TELEPHONE COMPANY
CKT CIRCUIT	INST INSTRUMENTATION	PR PAIR, TWISTED AND SHIELDED CABLE PROVIDE FURNISH, INSTALL AND CONNECT	TM THERMAL MAGNETIC
CNTRL CONTROL	ISC SHORT CIRCUIT INTERRUPTING CURRENT (SYMM)	PS PRESSURE SWITCH	TEMP TEMPERATURE
COAX COAXIAL CABLE	ISR INTRINSICALLY SAFE RELAY	PT POTENTIAL TRANSFORMER	TS TEMPERATURE SWITCH
COMM COMMUNICATION PORT	J/J-BOX JUNCTION BOX	PT POTENTIAL TRANSFORMER	TTB TELEPHONE TERMINAL BACKBOARD
CP CONTROL PANEL	K KILO, THOUSAND (PREFIX)	PSI POUNDS PER SQUARE INCH	TWP TWISTED PAIR
CPT CONTROL POWER TRANSFORMER	KCMIL THOUSAND CIRCULAR MILS	PVC POLYVINYLCHLORIDE	TWSPWISTED SHIELDED PAIR
CR CONTROL RELAY	LC LIGHTING CONTACTOR	PVCR PVC AND GRC CONDUIT	UG UNDERGROUND
CT CURRENT TRANSFORMER	LOS LOCK-OUT STOP SWITCH	PVC-GRC PVC COATED GRC CONDUIT	UON UNLESS OTHERWISE NOTED
CU COPPER	LI LEVEL INDICATOR	PVC-RSC PVC COATED RSC CONDUIT	V VOLTAGE
DI DIGITAL INPUT	LIT LEVEL INDICATOR TRANSMITTER	PWR POWER	VA VOLT AMPS
DISC DISCONNECT	LS LEVEL SWITCH	R RED	VFD VARIABLE FREQUENCY DRIVE
DO DIGITAL OUTPUT	LTG LIGHTING	REC RECEPTACLE	VLV VALVE
DPDDOUBLE POLE, DOUBLE THROW	M MOTOR CONTACTOR	RGS RIGID GALVANIZED STEEL	VM VOLTMETER
EF EXHAUST FAN	mA MILLIAMPERES	RMS ROOT MEAN SQUARE	VS VARIABLE SPEED
EMERG EMERGENCY	MCC MOTOR CONTROL CENTER	RSC RIGID STEEL CONDUIT	W WATTS, WHITE, WIRE
EMT ELECTRICAL METALLIC TUBING	MCP MOTOR CIRCUIT PROTECTOR	RT RESET TIMER	WHM WATT-HOUR METER
ETM ELAPSED TIME METER	MD MOISTURE DETECTION	RTM RUN TIME METER	WM WATTMETER
FACFIRE ALARM CONTROL PANEL	MFR MANUFACTURER	RTU REMOTE TERMINAL UNIT	WP WATERPROOF, WEATHERPROOF
FI FLOW INDICATOR	MINS MINUTES	RVATREDUCED VOLTAGE AUTOTRANSFORMER	YFMR TRANSFORMER
FIT FLOW INDICATOR TRANSDUCER	MLO MAIN LUGS ONLY	RVNR REDUCED VOLTAGE NON-REVERSING	Y YELLOW
FLA FULL LOAD AMPS	MOA MANUAL-OFF-AUTO	RVSSREDUCED VOLTAGE SOFT START	ZAU INTRUSION ALARM
FO FAIL OPEN	MOV MOTOR OPERATED VALVE	SEC SECONDARY	ZS LIMIT SWITCH
FLEX FLEX METAL LIQUID TIGHT CONDUIT	MTC EMPTY CONDUIT WITH PULLROPE	SECSSECONDS	
FS FLOW SWITCH	MTS MANUAL TRANSFER SWITCH	SEQ SEQUENCE	
FTS FLOAT SWITCH	MTR MOTOR	SHLD SHIELDED	
FVNRFULL VOLTAGE NON-REVERSING FUTURE	N NEUTRAL		
FVR FULL VOLTAGE REVERSING	NC NORMALLY CLOSED		
G GREEN			
GEN GENERATOR			

SYMBOLS - PLAN

- DISCONNECT SWITCH
- FIELD MOUNTED DEVICE
- SPECIAL RECEPTACLE, SIZE AS INDICATED
- JUNCTION BOX
- CONTROL STATION
- WALL MOUNTED LIGHT FIXTURE
- SITE LIGHT FIXTURE
- LED LIGHT FIXTURE LIGHT
- FIXTURE TYPE "A" WITH 2-32 WATT LAMPS, TYPICAL FOR ROOM NOTED, UON.
- DUPLEX RECEPTACLE AT +18" UON # = CIRCUIT NUMBER
- DOUBLE DUPLEX RECEPTACLE AT +18" UON # = CIRCUIT NUMBER
- TOGGLE SWITCH AT +48" UON SUBSCRIPT - CIRCUIT CONTROLLED SUPERScript - BLANK = 1
- POLE 2 = 2
- POLE 3 = 3 WAY
- M = MOTOR OVERLOAD
- T = SPRING WOUND TIMER
- EMERGENCY EXIT LIGHTING
- CONDUIT AND CONDUCTOR DESIGNATION SEE SCHEDULE FOR SIZE
- 3 PHASE SPECIAL RECEPTACLE, SIZE AS INDICATED
- TELEPHONE OUTLET
- TAMPER SWITCH
- FLOW SWITCH
- THERMOSTAT AT +48" UON
- REMOVE I/O DATA OUTLET
- FIBER OPTIC OUTLET
- GROUND ROD, 3/4" X 10'-0" GW INDICATES GROUND ROD IN GROUND ROD BOX SEE GROUND ROD DETAIL.
- INTERCEPTION POINT - DEMO PLANS: EXISTING TO REMAIN TO EXISTING TO BE REMOVED NEW PLANS: EXISTING TO NEW
- MOTION DETECTOR
- PHOTOCELL
- GROUND ROD, 3/4" X 10'-0" GR INDICATES GROUND ROD IN CONCRETE HANDHOLE TEST WELL.

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JOB NO. 361-005
DATE 2/9/2023
DRAWN BY AGP/MAH
DESIGNED BY MAH
PROJ. MGR. MAM

REV	DESCRIPTION	DATE	APVD
REVISIONS			

CITY OF FOLSOM
UTILITIES
ENGINEERING & COMPLIANCE

ASHLAND WATER REHABILITATION PROJECT 1

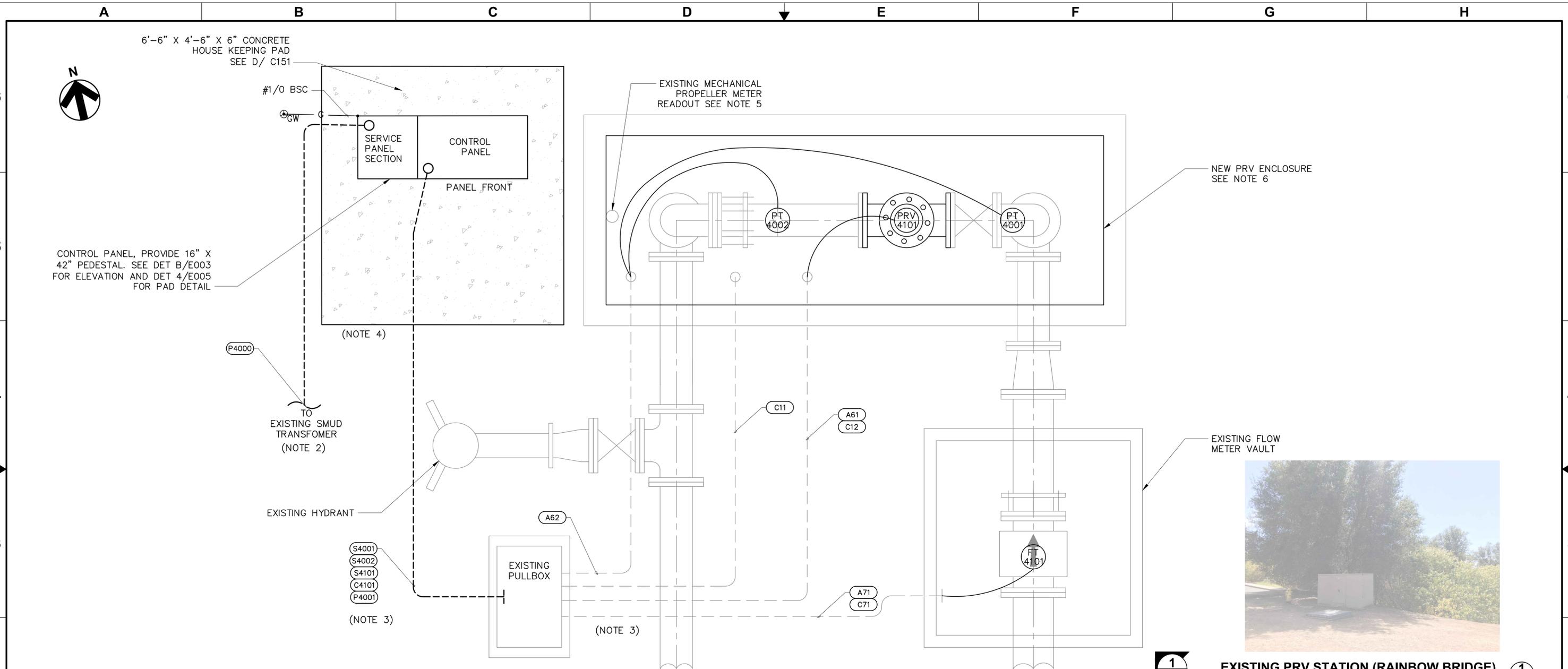
ELECTRICAL SYMBOLS AND ABBREVIATIONS

REGISTERED PROFESSIONAL ENGINEER
MARC A. MARRANDINO
E14505
STATE OF CALIFORNIA

E001
DRAWING NUMBER

SHEET 20 OF 27

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PRESSURE REDUCING VALVE ELECTRICAL SITE PLAN
 SCALE: 1 1/2" = 1'-0"



EXISTING PRV STATION (RAINBOW BRIDGE)
 SCALE: N.T.S.

- NOTES**
- REFER TO SMUD ELECTRICAL SERVICE DESIGN DOCUMENTS FOR INSTALLATION DETAILS AND REQUIREMENTS.
 - TRANSFORMER SECONDARY CABLE SIZE AND NUMBER SHALL BE COORDINATED WITH SMUD AND INSTALLED BY THE CONTRACTOR. COORDINATE WITH SMUD FOR CONNECTIONS OF THE CABLES TO TRANSFORMER AND METER INSTALLATION.
 - REPLACE ALL EXISTING WIRES AND CABLES WITH NEW ONES. ALL ANALOG CABLES SHALL BE ONE PIECE TWISTED-SHIELDED CABLE FROM THE ANALOG DEVICES/INSTRUMENTS TO THE PLC ANALOG MODULES. SPLICING IS ALLOWED ONLY IF AUTHORIZED BY THE ENGINEER. USE EXISTING CONDUITS TO THE EXTENT SHOWN ON THE PLANS. ALL CORRODED CONDUITS AND CONDUIT BODIES SHALL BE REPLACED.
 - PROVIDE A 36" LANDING IN FRONT OF THE PANEL.
 - REMOVE THE MECHANICAL PROPELLER FLOW METER READOUT LOCATED ON THE PRV STRUCTURE WALL AND INSTALL AN ELECTRONIC FLOW TRANSMITTER WITH 4-20mA SIGNAL TO BE CONNECTED TO THE PLC. INSTALL A ONE-PIECE TWISTED-SHIELDED CABLE BETWEEN THE FLOW TRANSMITTER AND THE PLC ANALOG MODULE.
 - REMOVE EXISTING ENCLOSURE AND INSTALL NEW MODEL BE6D AS MANUFACTURED BY PLACER WATERWORKS OR ENGINEER APPROVED EQUAL. ENCLOSURE SHALL BE CUSTOM BUILT AND MOUNTED ON EXISTING CONCRETE PAD WITH MINIMUM 5" EDGE DISTANCE. EXISTING CONCRETE PAD DIMENSIONS ARE 11'-2" X 4'-4".

CONDUIT AND CONDUCTOR ROUTING SCHEDULE*								
C NO.	FROM	TO	CONDUIT QTY	CONDUIT SIZE	WIRE QTY	WIRE SIZE	GND SIZE	NOTES
P4000	(E)UTILITY TRANSFORMER	METER PANEL	1	3"	2	2/0	1/0	COORD w/ SMUD (NOTE 1)
P4001	CONTROL PANEL	8" CLA VAL 131-01	1	1"	2	#12	#12	VALVE POWER
C4101	CONTROL PANEL	8" CLA VAL 131-01	1	1"	6	#14	#14	VALVE STATUS
S4001	CONTROL PANEL	PIT 4001/4002	1	1"	2	#16TSP	#14	ANALOG SIGNAL
S4002	CONTROL PANEL	PIT 4002	1	1"	1	#16TSP	#14	ANALOG SIGNAL
S4101	CONTROL PANEL	FLOW METER	1	2"	1	#16TSP	#14	ANALOG SIGNAL

* EXISTING CONDUITS SHALL REMAIN AND ALL NEW CONDUCTORS SHALL BE RUN THROUGH THEM. CONTRACTOR TO FIELD VERIFY NUMBER OF EXISTING CONDUITS AND AVAILABILITY.

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 ENGINEERING & COMPLIANCE

ASHLAND WATER REHABILITATION PROJECT 1

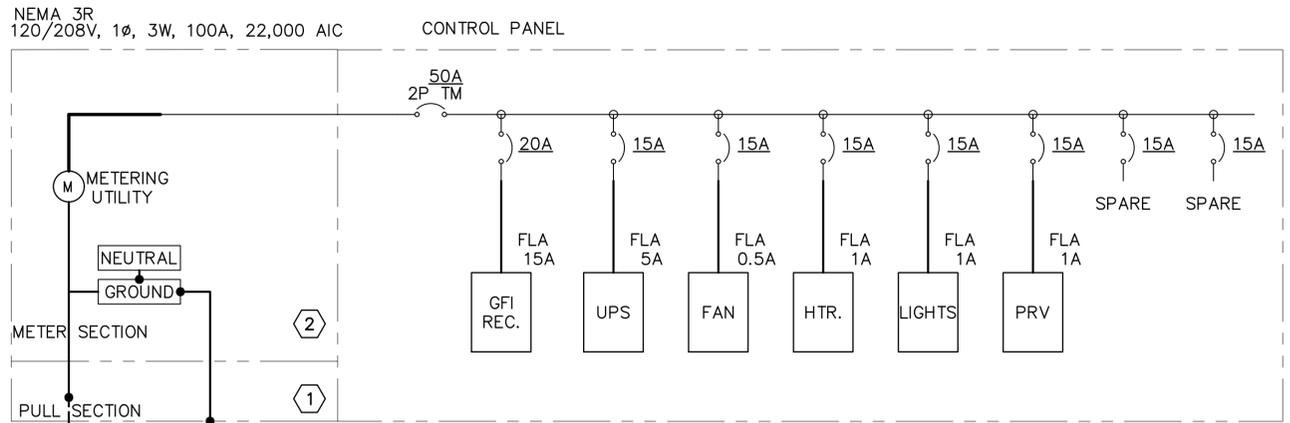
ELECTRICAL AREA PLAN VIEW

REGISTERED PROFESSIONAL ENGINEER
 MKE. A. MARANDY
 E14505
 STATE OF CALIFORNIA
 2/09/2023

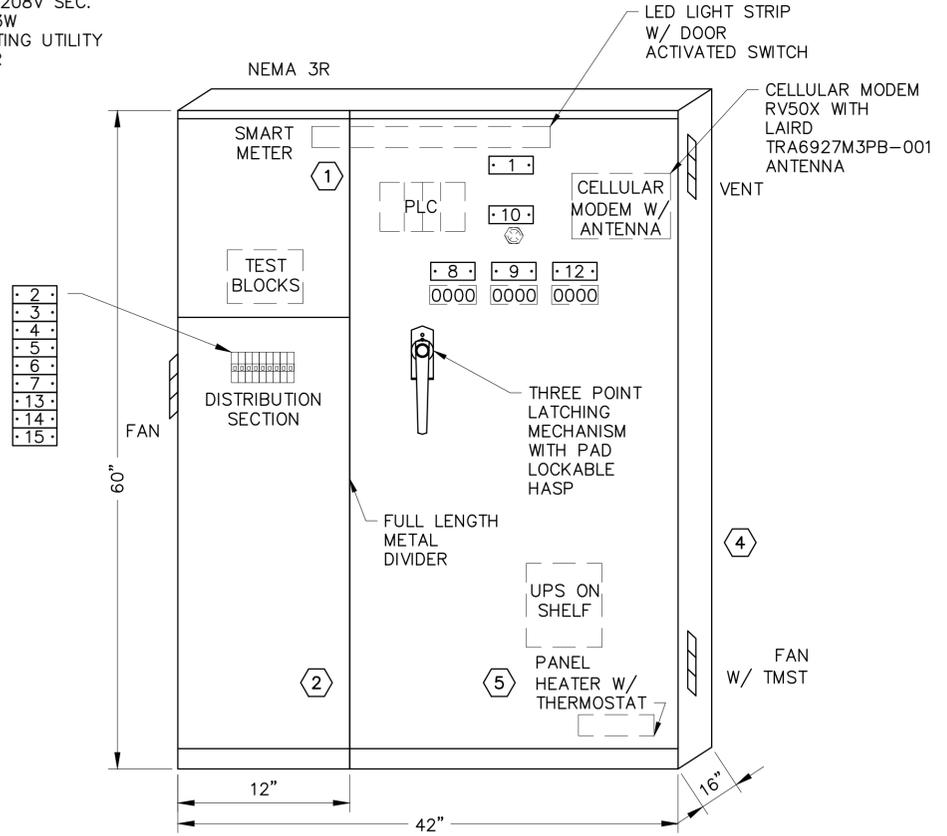
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A B C D E F G H



ONELINE DIAGRAM
SCALE: NTS



PRV SERVICE AND CONTROL PANEL ELEVATIONS
SCALE: NTS

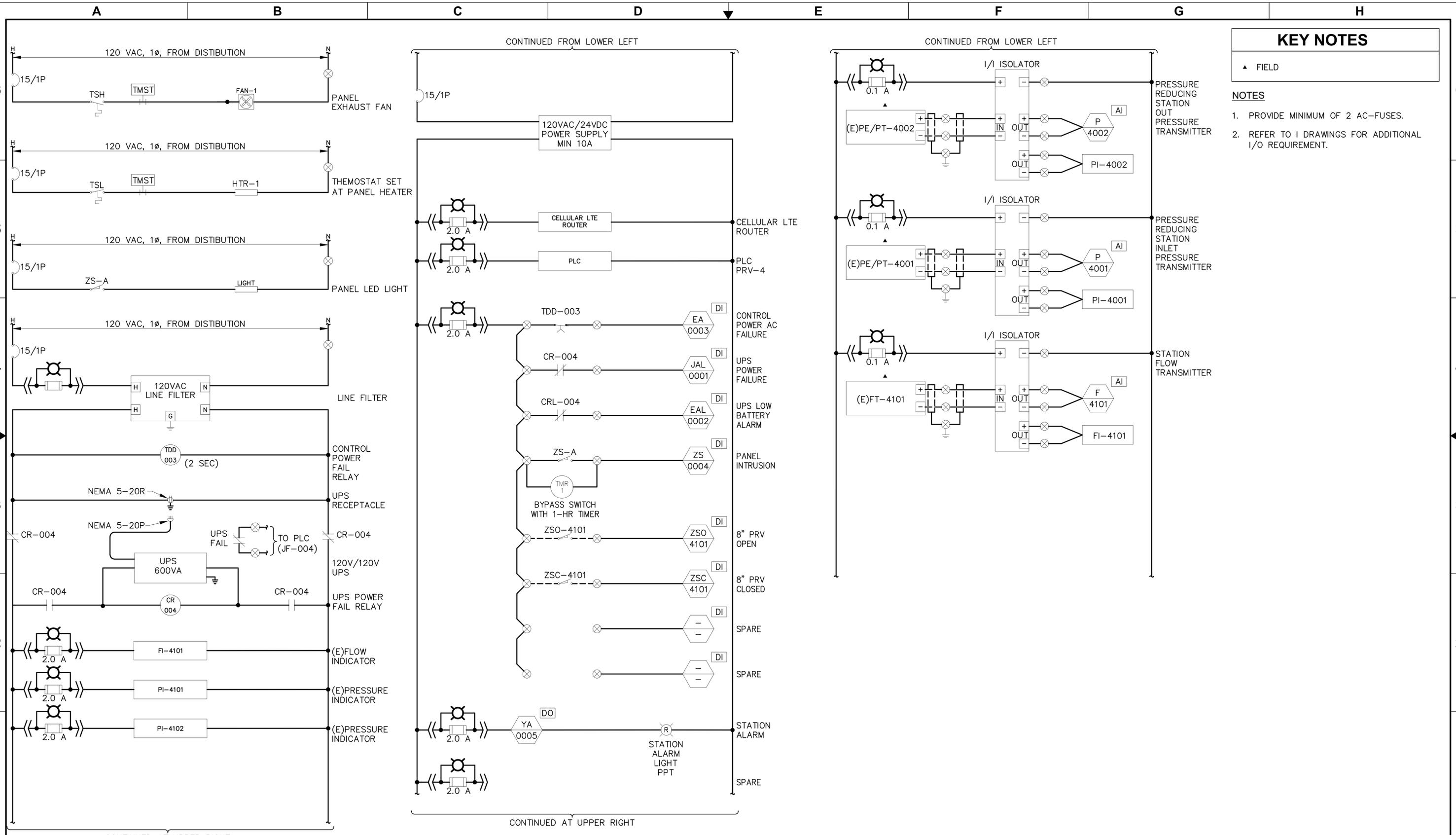
LOAD CALCULATION	
LOAD DESCRIPTION	POWER (WATTS)
UPS	600.0
GFI RECEPTACLE	1800.0
FAN 1, HEATER 1	120.0
PRV	120.0
LIGHTS	120.0
25% CONTINUOUS LOADS	700.0
TOTAL	3460.0
120VAC, 1 PHASE = 28.8AMP	

- NOTES**
- COORDINATE UTILITY METER AND POWER REQUIREMENTS WITH SMUD. CONFIRM SMUD AIC RATING WITH PANEL RATING.
 - COORDINATE CONDUIT ROUTING AND STUB-UP LOCATIONS WITH THE APPROVED EQUIPMENT SUBMITTAL AND SMUD DESIGN DRAWINGS FOR THE ELECTRIC SERVICE.
 - COORDINATE WITH OWNER TO SUBMIT SERVICE PEDESTAL DRAWINGS AND SPECIFICATIONS TO SMUD FOR APPROVAL PRIOR TO DELIVERY TO THE PROJECT SITE.
 - THE SERVICE PEDESTAL IS BASED ON TESCO 26-100, TYPE IIIAF. THE SERVICE PANEL AND CONTROL PANEL SHALL BE CUSTOM-MADE TO BE A SINGLE PANEL WITH TWO DOORS AND THREE-POINT LATCH WITH PADLOCK HASP ON THE RIGHT HAND SIDE. PROVIDE FULL LENGTH DIVIDER TO SEPERATE THE METER SECTION FROM THE CP SECTIONS. THE OVERALL WIDTH, DEPTH AND HEIGHT OF THE PANEL SHALL NOT BE MORE THAN 42"WX16"D X60"H.
 - MOUNT THE UPS ON A SHELF WITH THE HMI ACCESSIBLE FROM THE FRONT. STRAP THE UPS TO PREVENT FROM OVERTURNING. SUBMIT UPS MOUNTING DETAILS WITH CONTROL PANEL SUBMITTAL FOR REVIEW.

NAMEPLATE SCHEDULE			
TAG#	QTY	LETTER SIZE	INSCRIPTION
1	1	2"	'PRESSURE REDUCING STATION'
2	1	1/2"	'MAIN DISCONNECT'
3	1	1/2"	'CONTROLS SECTION DISCONNECT'
4	1	1/2"	'UPS DISCONNECT'
5	1	1/2"	'PANEL HEATER'
6	1	1/2"	'SERVICE GFCI DISCONNECT'
7	1	1/2"	'LIGHTS'
8	1	1/2"	'INLET PRESSURE PI-4001'
9	1	1/2"	'OUTLET PRESSURE PI-4002'
10	1	3/16"	'STATION ALARM'
11	1	1/2"	'CONTROLS DISCONNECT'
12	1	1/2"	'STATION FLOW FI-4101'
13	2	1/2"	'PRV'
14	2	1/2"	SPARE
15	2	1/2"	SPARE

 10569 OLD PLACERVILLE ROAD SACRAMENTO, CA 95827 OFFICE: 916.364.1490	PAPER SIZE: 22X34 (ANSI D) THIS BAR IS 1 INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.	JOB NO. 361-005 DATE 2/9/2023 DRAWN BY AGP/MAH DESIGNED BY MAH PROJ. MGR. MAM	<table border="1"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APVD</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REV	DESCRIPTION	DATE	APVD					 CITY OF FOLSOM UTILITIES ENGINEERING & COMPLIANCE	ASHLAND WATER REHABILITATION PROJECT 1	ELECTRICAL SINGLE LINE DIAGRAM	 REGISTERED PROFESSIONAL ENGINEER MIKE A. MARANDOU E14505 STATE OF CALIFORNIA 2/09/2023	E003 DRAWING NUMBER SHEET 22 OF 27
		REV	DESCRIPTION	DATE	APVD											
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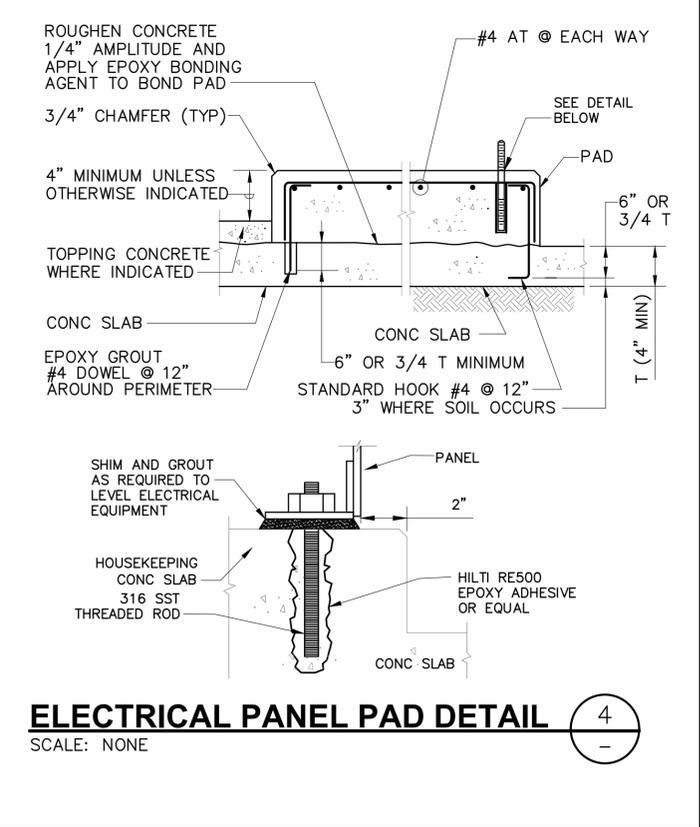
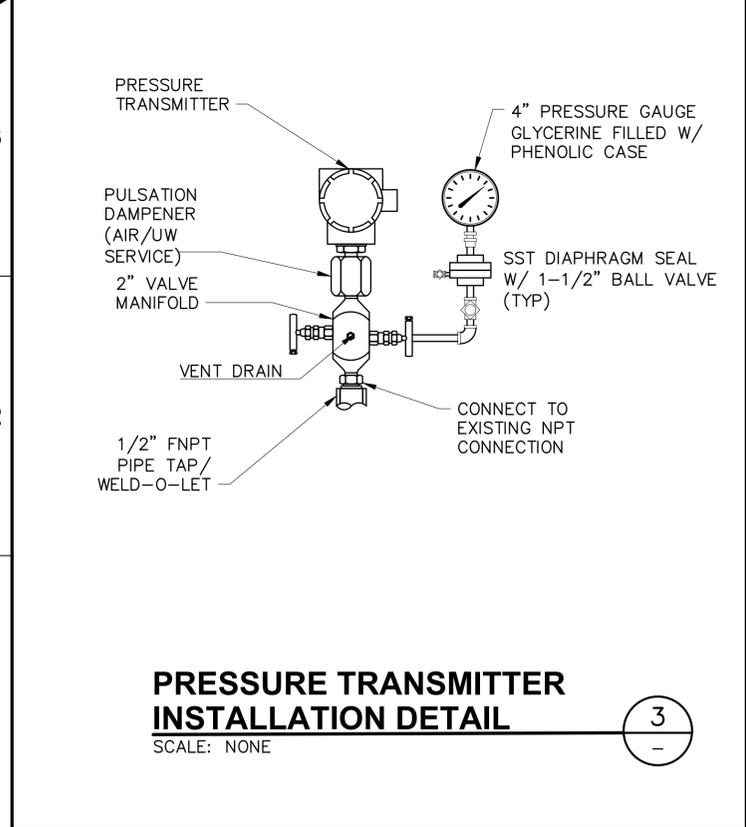
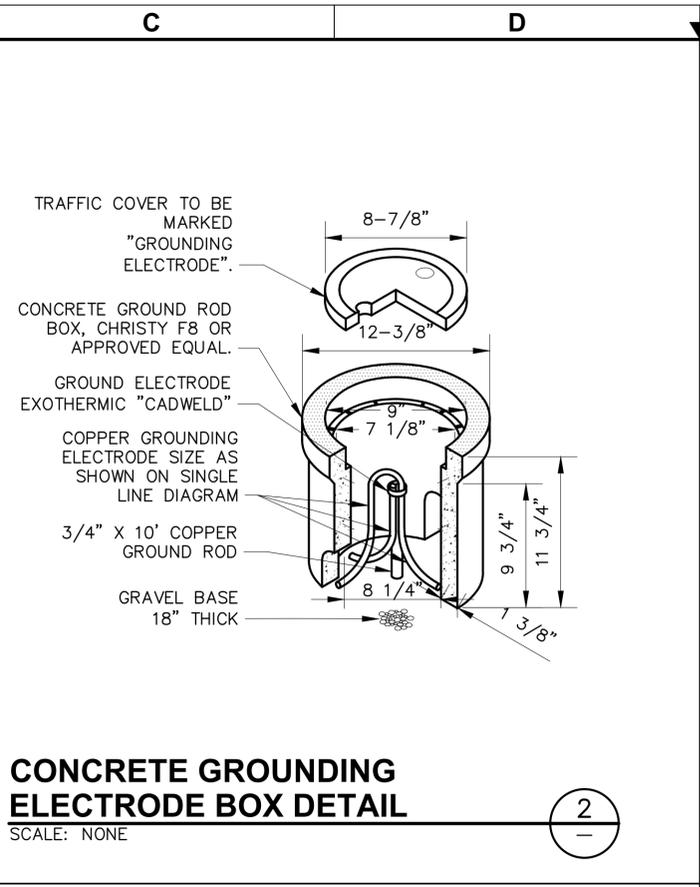
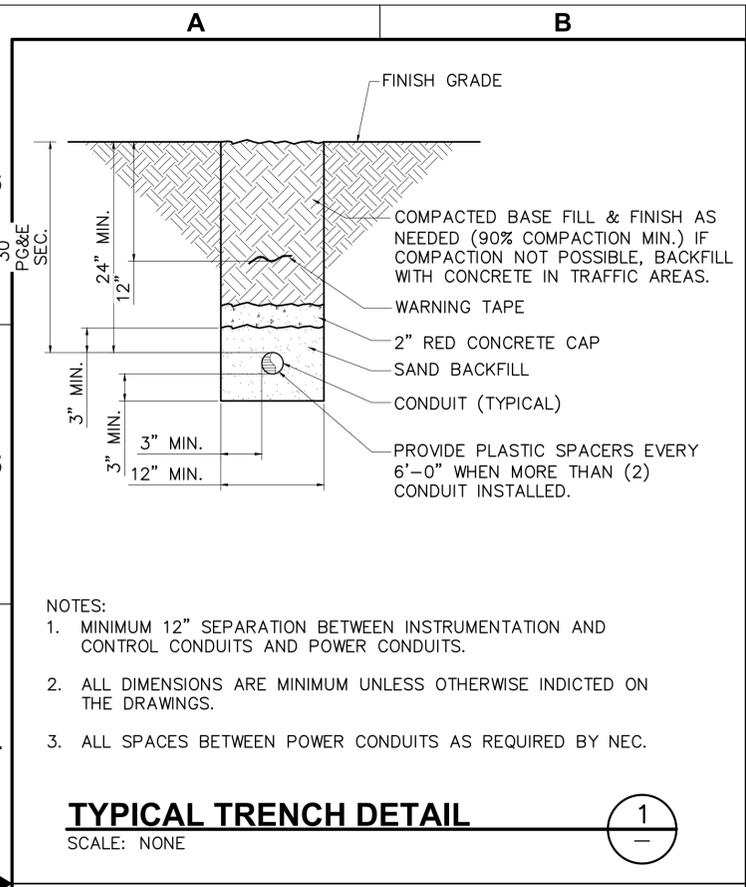
ASHLAND WATER REHABILITATION PROJECT 1

CONTROL PANEL WIRING DIAGRAM



E004
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CITY OF FOLSOM UTILITIES
 ENGINEERING & COMPLIANCE

ASHLAND WATER REHABILITATION PROJECT 1

TYPICAL INSTALLATION DETAILS

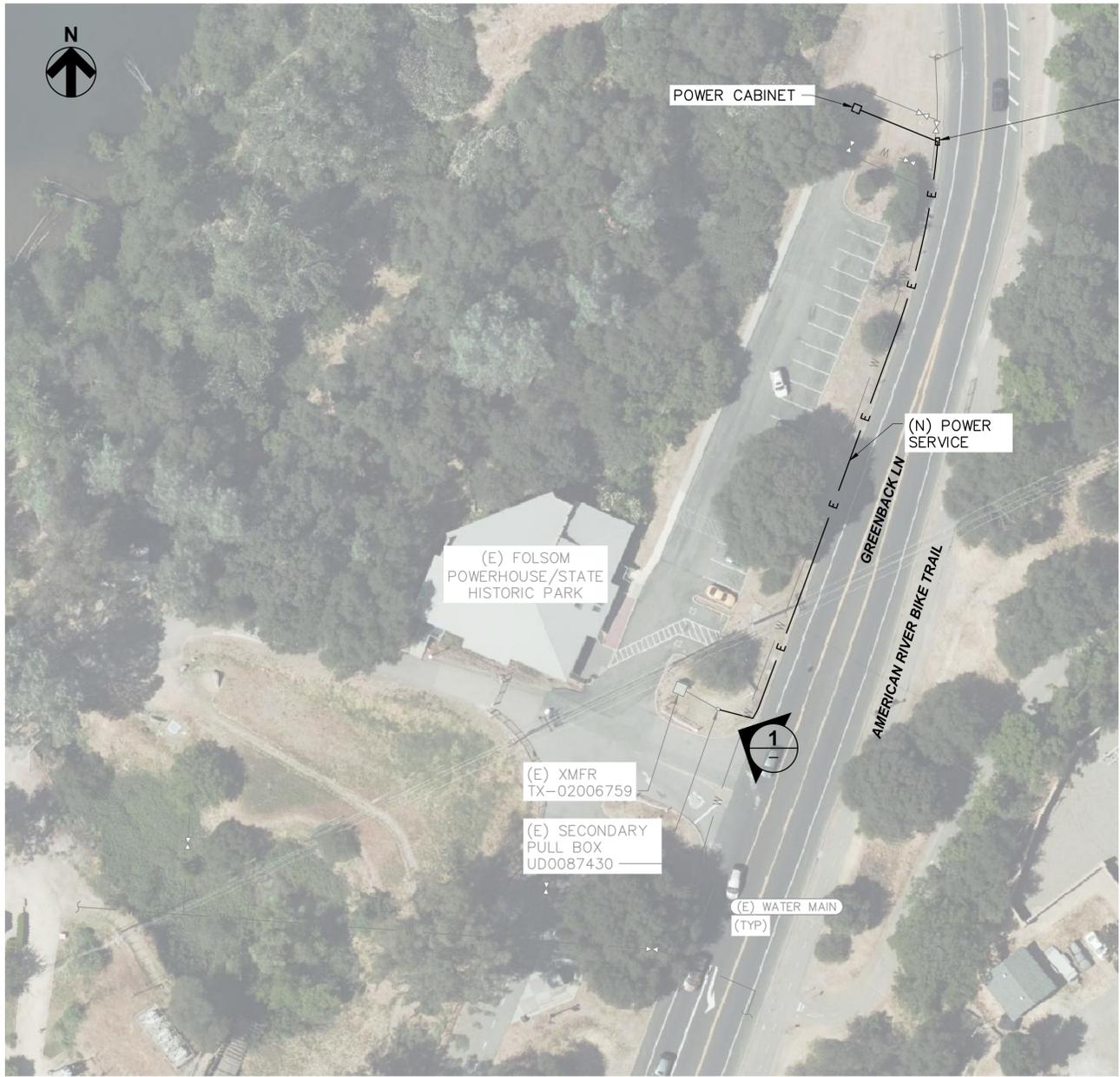
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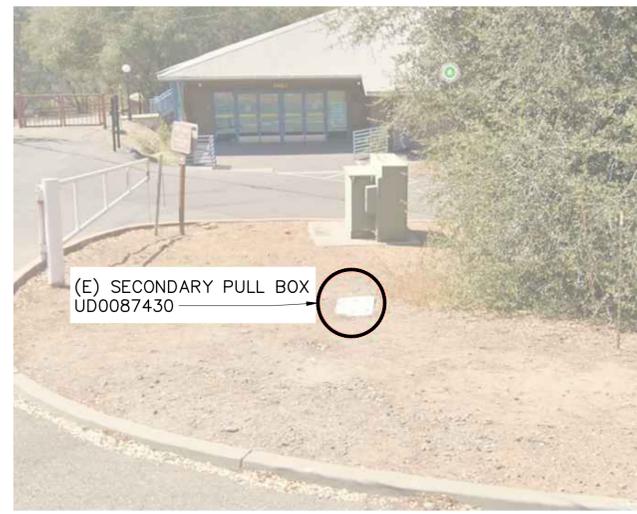
UD0087430



ELECTRICAL SITE PLAN
SCALE: 1" = 40'-0"

NOTES

1. PROPOSED ROUTE FOR ELECTRICAL SERVICE SHOWN. COORDINATION WITH THE UTILITY CONSTRUCTION DRAWINGS FOR FINAL CONDUIT ROUTING.
2. ANY CONDUIT BETWEEN THE EXISTING TRANSFORMER AND EXISTING SECONDARY PULL BOX TO BE BY SMUD. CONTRACTOR SHALL INSTALL THE CONDUIT AND CABLE BETWEEN THE SERVICE PEDESTAL AND THE SECONDARY PULL BOX AS SHOWN ON THE ONE-LINE. THE CABLE SHOULD BE COILED UP WITH ENOUGH LENGTH IN THE SECONDARY PULL BOX TO ALLOW SMUD TO PULL THROUGH THE CONDUIT TO CONNECT TO THE TRANSFORMER.
3. PROVIDE PULLBOX WITH DRAIN SYSTEM TO PREVENT WATER ACCUMULATION. SIZE THE PULLBOX PER NEC, IF NEC REQUIREMENTS DICTATE DIFFERENT FROM WHAT IS SHOWN ON PLAN.



(E) SECONDARY PULL BOX
SCALE: NONE

WATER PIPELINE ALIGNMENT AND ASSOCIATED APPURTENANCES ARE SHOWN SCHEMATICALLY. CONTRACTOR TO FIELD VERIFY UTILITY INFORMATION SHOWN HEREIN.

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0" 12" 1"
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CITY OF FOLSOM UTILITIES
ENGINEERING & COMPLIANCE

ASHLAND WATER REHABILITATION PROJECT 1

ELECTRICAL SITE PLAN

REGISTERED PROFESSIONAL ENGINEER
MARC A. MARANDY
E14505
ELECTRICAL
STATE OF CALIFORNIA
2/09/2023

E006
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MISCELLANEOUS MECHANICAL EQUIPMENT SYMBOLS

		VARIABLE FREQUENCY DRIVE		FIELD MOUNTED INSTRUMENT
		TANK		FACE MOUNTED INSTRUMENT ON LOCAL PANEL, OPERATOR ACCESSIBLE
		SLUICE GATE (NORMALLY OPEN)		INSTRUMENT MOUNTED IN LOCAL PANEL, OPERATOR INACCESSIBLE
		SLUICE GATE (NORMALLY CLOSED)		FACE MOUNTED INSTRUMENT ON FIELD PANEL, OPERATOR ACCESSIBLE
		SLIDE GATE (NORMALLY OPEN)		INSTRUMENT MOUNTED IN FIELD PANEL, OPERATOR INACCESSIBLE
		SLIDE GATE (NORMALLY CLOSED)		OPERATION PERFORMED WITH LOGIC OR HARDWIRED DEVICES - REFERENCE ELEMENTARY DWG. #
		STATIC MIXER		LAMP INDICATION (STATUS OR ALARM)
		BAFFLE WALL		ANNUNCIATOR WINDOW
		SILENCER		COMMUNICATIONS POINT
		INLET AIR FILTER-SILENCER		PLC/RTU OR COMPUTER FUNCTION
		EQUIPMENT MOTOR		PLC/RTU OR COMPUTER FUNCTION
		METERING PUMP		PLC/RTU OR COMPUTER PERFORMING INTERNAL OPERATION
		TELESCOPING VALVE		INSTRUMENT PANEL MOUNTED WITH COMPUTING, CONVERTING, OR INTERFACE FUNCTION
		GROUND		GRINDER
		SHEET NOTE TAG		
		VERTICAL TURBINE PUMP		

VALVE AND ACTUATOR SYMBOLS

	THREE WAY VALVE		PRESSURE AND VACUUM RELIEF VALVE
	GATE VALVE (NORMALLY OPEN)		VACUUM RELIEF VALVE
	GATE VALVE (NORMALLY CLOSED)		PRESSURE RELIEF VALVE
	PLUG VALVE (NORMALLY OPEN)		MULTI-FUNCTION VALVE
	PLUG VALVE (NORMALLY CLOSED)		PRESSURE REDUCING REGULATOR (SELF-CONTAINED)
	BALL VALVE (NORMALLY OPEN)		BACK PRESSURE REGULATOR (SELF-CONTAINED)
	BALL VALVE (NORMALLY CLOSED)		PRESSURE REDUCING VALVE
	BUTTERFLY VALVE		BACK PRESSURE REDUCING VALVE
	GLOBE VALVE		SOLENOID (PILOT) VALVE
	DIAPHRAGM VALVE		DIAPHRAGM OPERATED VALVE
	ANGLE VALVE		PRESSURE BALANCE OPERATED VALVE
	FLOAT VALVE		PNEUMATIC OPERATED VALVE (FOR VALVE TYPE - SEE SPECS)
	PINCH VALVE		MOTOR OPERATED VALVE (FOR VALVE TYPE - SEE SPECS)
	NEEDLE VALVE		3-WAY CONTROL VALVE PNEUMATIC OPERATOR
	DOUBLE LEAF CHECK VALVE		PNEUMATIC CYLINDER OPERATED VALVE
	CHECK VALVE		VALVE ACTUATOR
	BALL CHECK VALVE		VALVE POSITIONER
	KNIFE GATE VALVE		
	FLAP GATE		
	BALANCING COCK		
	CIRCUIT SETTER		
	THERMOSTATICALLY CONTROLLED VALVE		

INSTRUMENT ABBREVIATIONS

CODE LETTER	FIRST LETTER(S)		SUCCEEDING LETTER(S)		
	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS		ALARM		AUTO/LAG
B	BURNER FLAME				
C	CHLORINE			CONTROL	CLOSE
D	DENSITY	DIFFERENTIAL			
E	VOLTAGE		ELEMENT, SENSOR		LEAD
F	FLOW	RATIO	FUEL		FAILURE
G	GAUGING		VIEWING DEVICE		
H	HAND				HIGH/HAND
I	CURRENT		INDICATE		
J	POWER	SCAN			
K	TIME	TIME RATE OF CHANGE		CONTROL STATION	
L	LEVEL		PILOT LIGHT		LOW/LOCAL
M	MOISTURE/MOTOR	MOMENTARY	MOTOR		MIDDLE/MANUAL
N	STATUS				
O	OPERATOR		ORIFICE		OPEN/OVERLOAD
P	PRESSURE		POINT		
Q	EVENT	TOTALIZE	TOTAL		
R	RESET		RECORD		RUNNING/REMOTE
S	SPEED	SAFETY		SWITCH	STOP/SPEED
T	TEMPERATURE		TEST	TRANSMIT	
U	MULTIVARIABLE		MULTIFUNCTION		
V	VIBRATION			VALVE	
W	FORCE, WEIGHT		WELL		
X	TELEMETRY INTERFACE				
Y	COMPUTER INTERFACE			COMPUTE/RELAY/CONVERTER	
Z	POSITION			ACTUATE	POSITION

PIPE LINE DEVICE SYMBOLS

	STRAINER		BLIND FLANGE		CALIBRATION TUBE
	MANUAL AIR VENT		FLEXIBLE COUPLING		AIR VACUUM RELEASE VALVE OR AIR RELEASE VALVE
	AUTOMATIC AIR VENT		QUICK CONNECTOR		HYDRANT
	CLEANOUT		FLOW METER		HOSE BIBB
	EXPANSION JOINT		DRAIN		
	UNION		AIR VENT		
	AUDIBLE ALARM (BUZZER OR HORN)		EMERGENCY SHOWER/EYEWASH STATION		
	REDUCER		BACKFLOW PREVENTER		
	CAP OR PLUG		DIAPHRAGM SEAL		

NOTES AND EQUIP. ABBREVIATIONS

NOTES

- THE PROCESS SCHEMATIC ARE PRESENTED IN DIAGRAMMATIC FORM TO SHOW PROCESS FLOWS CONTROL CONCEPTS AND UNIT OPERATING PARAMETERS, AND AS SUCH ARE NOT INTENDED TO SHOWN ALL VALVING PIPING AND INSTRUMENTATION SYSTEMS.
- PROCESS SYMBOLS ARE FOR REFERENCE ONLY. NOT ALL SYMBOLS ARE USED IN THESE CONTRACT DRAWINGS.

EQUIPMENT ABBREVIATIONS	DESCRIPTION
ARV	AIR RELIEF VALVE
BLDG	BUILDING
CV	CHECK VALVE
FLR	FLARE
FN	FAN
LVR	LOUVER
MBR	MEMBRANE BIOREACTOR
MF	MOTOR, FIXED
MOD	MODULE
P	PANEL
PNL	PANEL
TK	TANK

PROCESS FLOW LINE LEGEND

	FUTURE ELECTRIC SIGNAL
	ELECTRICAL SIGNAL
	ELECTRIC POWER/CONTROL
	PNEUMATIC SIGNAL
	CAPILARY TUBING (FILLED SYSTEM)
	HYDRAULIC SIGNAL
	SONIC OR ELECTROMAGNETIC SIGNAL
	FUTURE PROCESS LINE
	MAIN PROCESS LINE
	SECONDARY PROCESS LINE
	AUXILIARY PROCESS LINE
	DIRECTION OF FLOW
	MANUFACTURER'S PRE-WIRING
	LOGIC OR DATA SIGNAL

TYPICAL PROCESS DIAGRAM CROSS REFERENCE LEGEND

- ON DWG. P3 CONTINUATION IS SHOWN AS:
- ON DWG. P4 THIS CONTINUATION IS SHOWN AS:
- SYSTEM FLOW BOTH DIRECTIONS

WATER SURFACE ELEVATION SYMBOL

TAG NUMBER ABBREVIATIONS

ALL TAG NUMBERS FOR EQUIPMENT AND INSTRUMENTS SHOWN IN THESE DRAWINGS SHALL BE PRECEDED BY A THREE LETTER ABBREVIATION BASED ON PROCESS AREA.

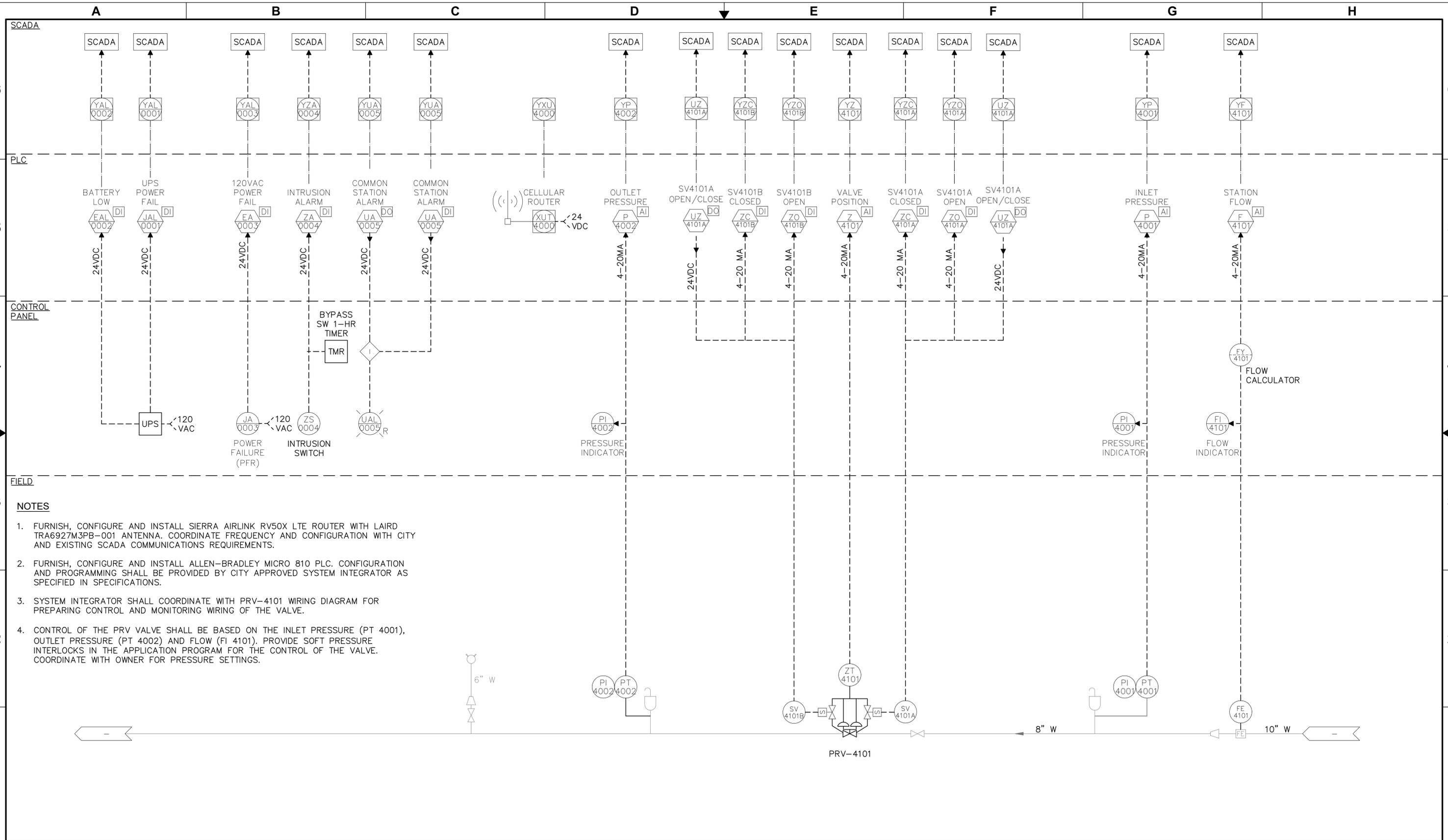
CGN	COGENERATION
DIG	DIGESTER AND FLARE
EXT	EXHAUST TREATMENT
GST	GAS TREATMENT
PWR	POWER

PLC I/O SIGNAL TYPE LEGEND

	DI SIGNAL		DO SIGNAL		AI SIGNAL		AO SIGNAL
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 10569 OLD PLACERVILLE ROAD SACRAMENTO, CA 95827 OFFICE: 916.364.1490	PAPER SIZE: 22X34 (ANSI D) THIS BAR IS 1 INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.	JOB NO. 361-005 DATE 2/9/2023 DRAWN BY AGP/MAH DESIGNED BY MAH PROJ. MGR. MAM	<table border="1"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APVD</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		REV	DESCRIPTION	DATE	APVD					 CITY OF FOLSOM UTILITIES ENGINEERING & COMPLIANCE	ASHLAND WATER REHABILITATION PROJECT 1	INSTRUMENTATION SYMBOLS AND ABBREVIATIONS	 REGISTERED PROFESSIONAL ENGINEER M. A. MARANDI E14505 STATE OF CALIFORNIA 2/09/2023	I001 DRAWING NUMBER
		REV	DESCRIPTION	DATE	APVD												
SHEET 26 OF 27																	

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- NOTES**
- FURNISH, CONFIGURE AND INSTALL SIERRA AIRLINK RV50X LTE ROUTER WITH LAIRD TRA6927M3PB-001 ANTENNA. COORDINATE FREQUENCY AND CONFIGURATION WITH CITY AND EXISTING SCADA COMMUNICATIONS REQUIREMENTS.
 - FURNISH, CONFIGURE AND INSTALL ALLEN-BRADLEY MICRO 810 PLC. CONFIGURATION AND PROGRAMMING SHALL BE PROVIDED BY CITY APPROVED SYSTEM INTEGRATOR AS SPECIFIED IN SPECIFICATIONS.
 - SYSTEM INTEGRATOR SHALL COORDINATE WITH PRV-4101 WIRING DIAGRAM FOR PREPARING CONTROL AND MONITORING WIRING OF THE VALVE.
 - CONTROL OF THE PRV VALVE SHALL BE BASED ON THE INLET PRESSURE (PT 4001), OUTLET PRESSURE (PT 4002) AND FLOW (FI 4101). PROVIDE SOFT PRESSURE INTERLOCKS IN THE APPLICATION PROGRAM FOR THE CONTROL OF THE VALVE. COORDINATE WITH OWNER FOR PRESSURE SETTINGS.

 10569 OLD PLACERVILLE ROAD SACRAMENTO, CA 95827 OFFICE: 916.364.1490	PAPER SIZE: 22X34 (ANSI D) THIS BAR IS 1 INCH AT FULL SCALE. IF NOT, SCALE ACCORDINGLY.	JOB NO. 361-005 DATE 2/9/2023 DRAWN BY AGP/MAH DESIGNED BY MAH PROJ. MGR. MAM	<table border="1"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>DATE</th> <th>APVD</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REV	DESCRIPTION	DATE	APVD					 CITY OF FOLSOM UTILITIES ENGINEERING & COMPLIANCE	ASHLAND WATER REHABILITATION PROJECT 1	PROCESS AND INSTRUMENTATION DIAGRAM	 REGISTERED PROFESSIONAL ENGINEER ERIC A. MARAND No. E14505 STATE OF CALIFORNIA	1002 DRAWING NUMBER SHEET 27 OF 27
REV	DESCRIPTION	DATE	APVD													