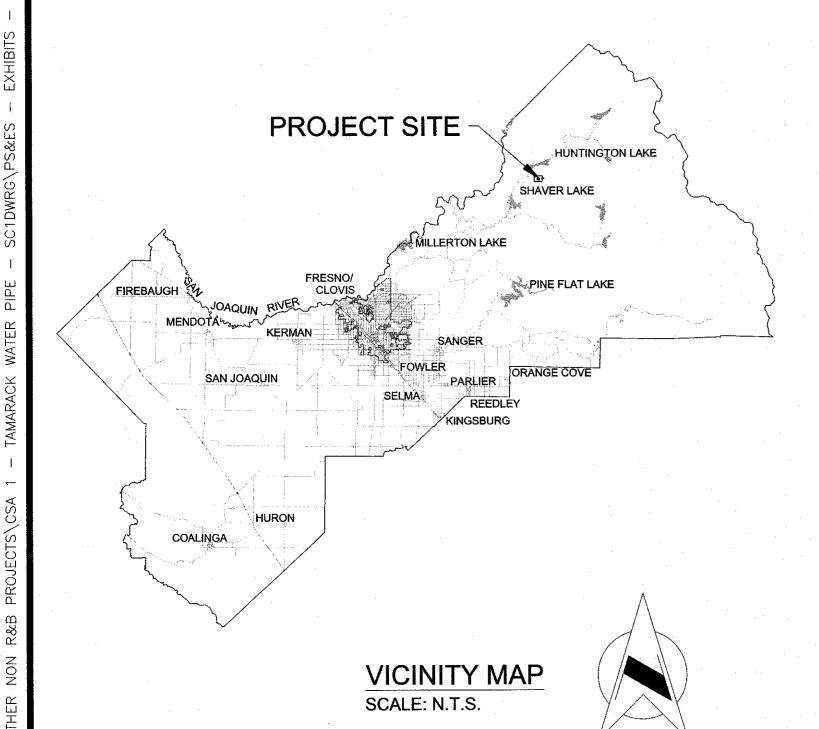
## PLANS FOR CONSTRUCTION

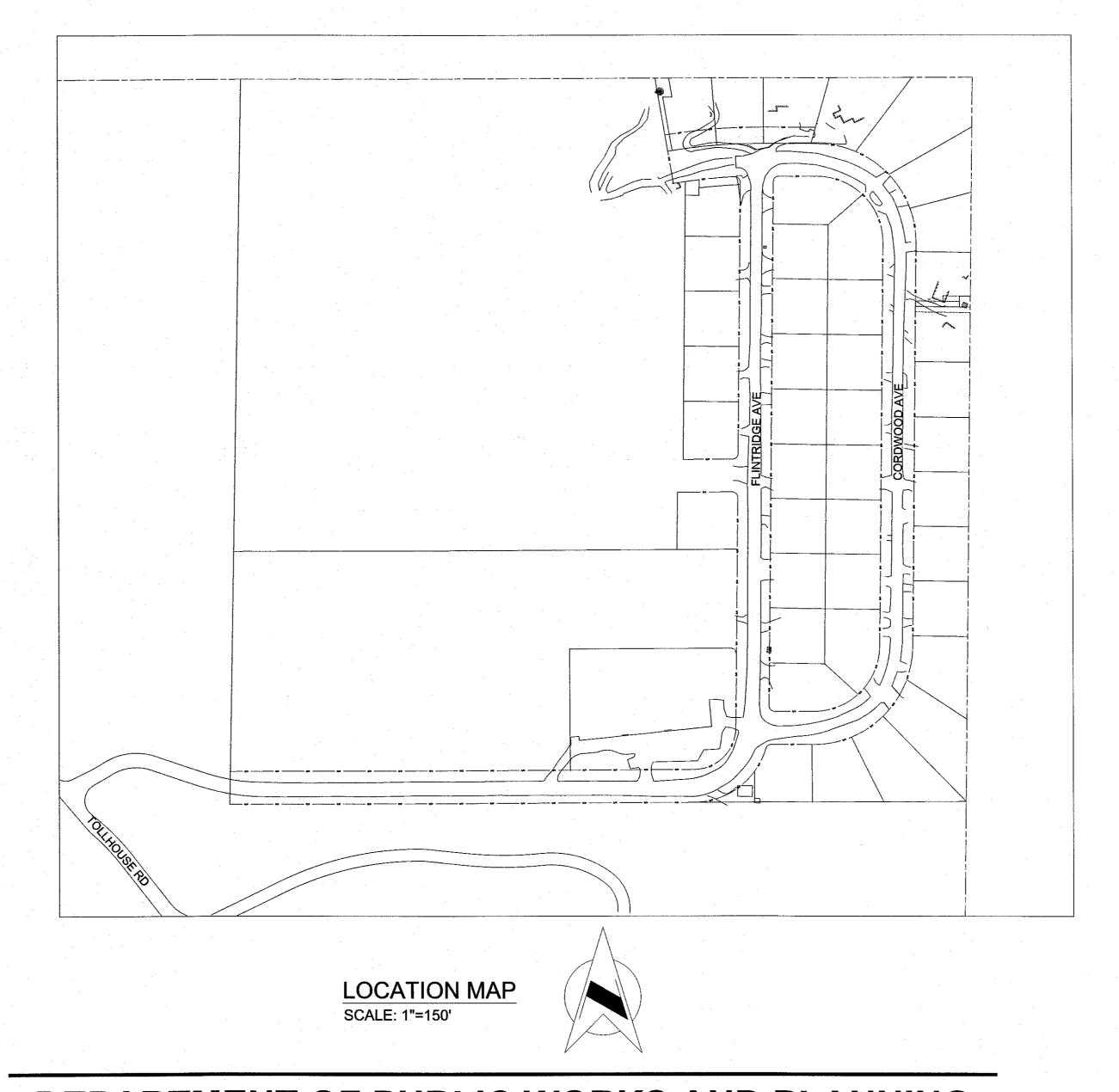
# CSA 1 - TAMARACK WATER INFRASTRUCTURE REPLACEMENT PROJECT

INDED BY CALIFORNIA DEPARTMENT OF WATER RESOURCES UNDER THE SMALL COMMUNITY DROUGHT RELIEF PROGRAM.

	INDEX OF SHEETS							
SHEET NO.	TITLE							
01	TITLE							
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13	PLAN AND PROFILE - WATER LINE E AND F							
14	PLAN AND PROFILE - WATER TANK SITE							
15	OVERLAY PLAN							
16-23	CONSTRUCTION DETAILS							

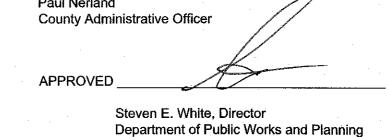


DIVISION	DESIGN	CONST	RMO	RESC
SIGNATURE	MA			DA
DATE	10/17/2024			10/17/24



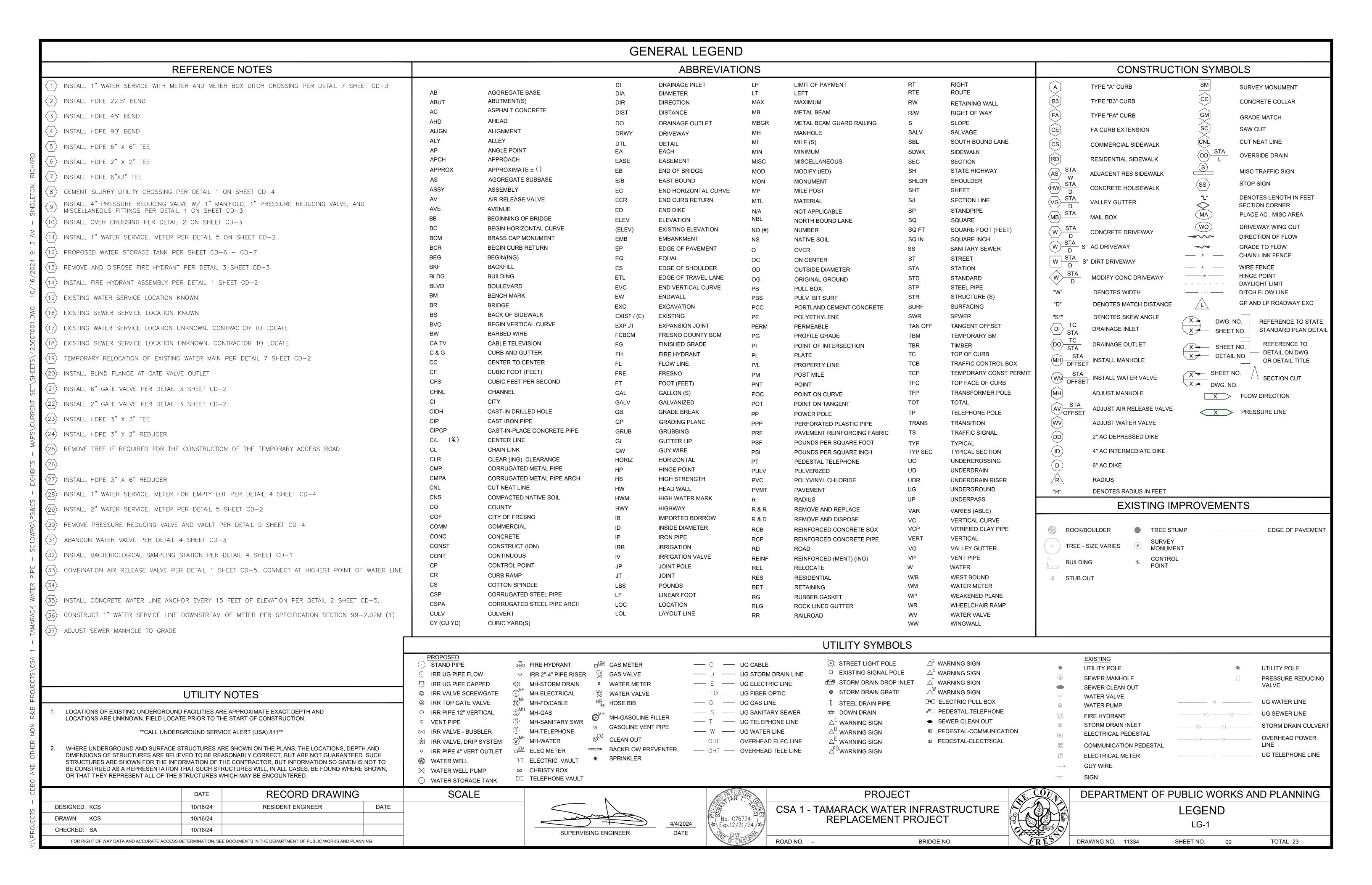
DEPARTMENT OF PUBLIC WORKS AND PLANNING

Brian Pacheco Steve Brandau	Vice Chairman	1st 2nd	District District
Sal Quintero		3rd	District
Ernest "Buddy" Mendes	Chairman	4th	District
Nathan Magsig		5th	District



CALIFORNIA	CONTRACT	OR'S LICENS	ES REQUIRE	D FOR THIS	PROJECT				
	CLA	SS A, GENERA	L ENGINEERIN	G					
C-34, PIPELINE CONTRACTOR									
DRAWING NO.	ROAD NO.	BRIDGE NO.	FISCAL YR.	SHEET NO.	TOTAL				
11334 -		N/A	24/25	01	23				
		CONTRACT N	O. 24-15-C	1					

	RECORD DRAWING	
	CONTRACTOR	
NAME		
ADDRESS		
CITY	STATE	ZIP
PHONE		
DATE AWARDED		
DATE STARTED		
DATE COMPLETED		
	RESIDENT ENGINEER	
NAME	SIGNATURE	
NAME	SIGNATURE	
·	·	



NORTH AMERICAN DATUM OF 1983 (NAD83).

COORDINATES SHOWN HEREON ARE GROUND AND BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE

NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

#### PROJECT BENCHMARK (POINT# 15001)

SET MAG NAIL, POINT# 15001, IN ASPHALT, ALONG THE SOUTH SIDE OF FLINTRIDGE DRIVE, LOCATED APPROXIMATELY 360' EAST OF THE FLINTRIDGE DRIVE AND TOLLHOUSE ROAD INTERSECTION, 130' SOUTHWEST OF THE "AHEAD" STENCIL, 100' EAST OF A "NO PARKING" SIGN, AND 2' NORTH OF THE EDGE OF PAVEMENT. ELEVATION = 7208.59 FEET (NAVD88)

SURVEY NOTES

- THE FIELD WORK FOR THIS SURVEY WAS CONDUCTED IN JUNE 2023.
- NO ATTEMPT WAS MADE TO IDENTIFY THE NATURE OF USE OF UNDERLYING LAND SHOWN HEREON. ANY POTENTIAL PAST USES, INCLUDING THOSE WHICH MAY HAVE RESULTED IN SIGNIFICANT ENVIRONMENTAL OR CULTURAL IMPACTS, WERE NOT ASSESSED BY THIS SURVEY.
- 3. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ON THIS SITE, IT IS ADVISED THAT ALL INVOLVED PARTIES REVIEW SECTION 8771 AND SECTION 8725 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE, AND SECTION 605 OF THE CALIFORNIA PENAL CODE TO ENSURE THAT MONUMENT CONSERVATION HAS BEEN PROPERLY ADDRESSED.
- NOTHING ON THIS SURVEY SHALL BE INTERPRETED IN A MANNER CONTRARY TO THESE STATEMENTS. PHYSICAL ITEMS SHOWN ON THIS SURVEY ARE LIMITED TO THOSE SURFACE-VISIBLE STRUCTURES, FACILITIES, AND FEATURES OBSERVED AT THE TIME OF THE FIELD SURVEY. SUBSURFACE OBJECTS, IF ANY, WERE NOT LOCATED BY THIS
- BOUNDARY LINES (STREET CENTERLINES, ROAD RIGHTS-OF-WAY, PARCEL LINES, EASEMENTS, SECTION LINES, ETC.) ARE FOR CONCEPTUAL PURPOSES ONLY AND PLOTTED FROM RECORD INFORMATION ONLY. BOUNDARY SURVEY INFORMATION SHOWN HEREON IS BASED ON A FIELD SURVEY AND RESEARCH OF PUBLICLY AVAILABLE RECORDS AT THE TIME OF THE SURVEY. NO TITLE REPORT WAS PROVIDED OR OBTAINED.

#### <u>CONSTRUCTION NOTES</u>

- 1. SEWER, WATER, GAS AND STORM DRAIN UTILITY CROSSINGS:
- A. THE CONTRACTOR SHALL VERIFY THE DEPTH OF THE EXISTING UTILITY PIPES AS THE FIRST ORDER OF WORK AND SHALL NOTIFY THE ENGINEER OF ANY OBSERVED CONFLICTS WITH THE PROPOSED WATER MAIN PROFILES. IN NO CASE WILL LESS THAN 4" CLEARANCE BE ALLOWED BETWEEN EXISTING UTILITIES, EXCEPT EXISTING WATER LINES AND NEW WATER MAINS.
- B. IF THE NEW WATER MAIN IS ABOVE OR BELOW THE EXISTING UTILITY PIPE AND CLEARANCE IS LESS THAN 12", THE CONTRACTOR SHALL CEMENT SLURRY BACKFILL AND INSTALL PIPE AS SHOWN PER DETAIL 1 ON SHEET CD-4.
- 2. SEWER LATERAL CROSSINGS:
- A. NEW WATER MAINS SHALL BE INSTALLED ABOVE EXISTING SEWER HOUSE BRANCH LATERALS WITH A MINIMUM CLEARANCE OF
- B. WHEREVER NECESSARY, EXISTING SEWER HOUSE BRANCH LATERALS IN CONFLICT WITH THE NEW WATER MAIN PROFILE SHALL BE REMOVED AND REINSTALLED AS SHOWN PER DETAIL 6 ON CD-2.
- MINIMUM DEPTH OF COVER OVER THE NEW WATER MAINS SHALL BE A MINIMUM OF 3 FEET. ANYWHERE MINIMUM COVER CANNOT BE ACHIEVED. IMPROVED PIPE BEDDING. INCLUDING CONCRETE SLURRY CRADLES MAY BE REQUIRED. AS DIRECTED BY THE ENGINEER.

#### SPECIAL NOTE

WHERE UNDERGROUND AND SURFACE STRUCTURES ARE SHOWN ON THE PLANS, THE LOCATIONS, DEPTH AND DIMENSIONS OF STRUCTURES ARE BELIEVED TO BE REASONABLY CORRECT, BUT ARE NOT GUARANTEED. SUCH STRUCTURES ARE SHOWN FOR THE INFORMATION OF THE CONTRACTOR, BUT INFORMATION SO GIVEN IS NOT TO BE CONSTRUED AS A REPRESENTATION THAT SUCH STRUCTURES WILL, IN ALL CASES, BE FOUND WHERE SHOWN, OR THAT THEY REPRESENT ALL OF THE STRUCTURES WHICH MAY BE ENCOUNTERED.

#### SITE SAFETY AND PROTECTION NOTES

THE DUTY OF THE ENGINEER, OWNER OR ITS AGENTS TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE AND THE UNDERTAKING OF INSPECTIONS OR THE GIVING OF INSTRUCTIONS AS AUTHORIZED HEREIN IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE AND SHALL NOT BE CONSTRUED AS SUPERVISION OF THE ACTUAL CONSTRUCTION NOR MAKE THE ENGINEER, OWNER OR ITS AGENTS RESPONSIBLE FOR PROVIDING A SAFE PLACE FOR THE PERFORMANCE OF WORK BY THE CONTRACTOR, SUBCONTRACTORS, OR SUPPLIERS, OR FOR ACCESS, VISITS, USE, WORK, TRAVEL OR OCCUPANCY BY ANY PERSON.

THE CONTRACTOR SHALL HAVE AT THE WORK SITE, COPIES OR SUITABLE EXTRACTS OF CONSTRUCTION SAFETY ORDERS, ISSUED BY CAL-OSHA. CONTRACTOR SHALL COMPLY WITH PROVISIONS OF THESE AND ALL OTHER APPLICABLE LAWS, ORDINANCES AND REGULATIONS. THE CONTRACTOR MUST COMPLY WITH PROVISIONS OF THE SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION, PROMULGATED BY THE SECRETARY OF LABOR UNDER SECTION 107 OF THE CONTRACT WORK HOURS AND SAFETY STANDARDS ACT, AS SET FORTH IN TITLE 29 C.F.R.

TO PROTECT THE LIVES AND HEALTH OF CONTRACTOR'S EMPLOYEES UNDER THE CONTRACT, THE CONTRACTOR SHALL COMPLY WITH ALL PERTINENT PROVISIONS OF THE "MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION" ISSUED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, INC., AND SHALL MAINTAIN AN ACCURATE RECORD OF ALL CASES OF DEATH, OCCUPATIONAL DISEASE, AND INJURY REQUIRING MEDICAL ATTENTION OR CAUSING LOSS OF TIME FROM WORK, ARISING OUT OF AND IN THE COURSE OF EMPLOYMENT OR WORK UNDER THE CONTRACT.

THE CONTRACTOR ALONE SHALL BE RESPONSIBLE FOR THE SAFETY, EFFICIENCY, AND ADEQUACY OF CONTRACTOR'S FACILITIES, APPLIANCES, AND METHODS AND FOR ANY DAMAGE, WHICH MAY RESULT FROM THEIR FAILURE OR THEIR IMPROPER CONSTRUCTION, MAINTENANCE OR OPERATION.

THE CONTRACTOR AGREES THAT IT SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, PROVOST & PRITCHARD CONSULTING GROUP, AND THEIR RESPECTIVE AGENTS HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF OWNER, ENGINEER, OR THEIR RESPECTIVE AGENTS.

THE OWNER AND ITS AGENTS' SITE RESPONSIBILITIES ARE LIMITED SOLELY TO THE ACTIVITIES OF THEIR EMPLOYEES ON SITE. THESE RESPONSIBILITIES SHALL NOT BE INFERRED BY ANY PARTY TO MEAN THAT THE OWNER OR ITS AGENTS HAVE RESPONSIBILITY FOR SITE SAFETY. SAFETY IN, ON, OR ABOUT THE SITE IS THE SOLE AND EXCLUSIVE RESPONSIBILITY OF THE CONTRACTOR ALONE. THE CONTRACTOR'S METHODS OF WORK PERFORMANCE, SUPERINTENDENCE AND THE CONTRACTOR'S EMPLOYEES, AND SEQUENCING OF CONSTRUCTION ARE ALSO THE SOLE AND EXCLUSIVE RESPONSIBILITIES OF THE CONTRACTOR ALONE.

EXCESS MATERIAL AND DEBRIS SHALL BE REMOVED FROM THE ROAD RIGHT-OF-WAY AND DISPOSED OF BY THE CONTRACTOR AT THE END OF CONSTRUCTION OPERATIONS, NIGHTLY.

#### WATER FACILITY NOTES

- 1. THE WORK CONTAINED HEREIN SHALL COMPLY WITH TITLE 22 SECTION 64572 OF THE CALIFORNIA CODE OF REGULATIONS.
- 2. USED MATERIAL, REJECTS, MISFITS, OR SECONDS, ETC. ARE NOT ACCEPTABLE FOR USE ON COUNTY OF FRESNO FACILITIES.
- 3. TYPICAL MINIMUM PIPE COVER FOR ALL HDPE PIPE SHALL BE 3.0 FEET (2.5 FEET ALLOWED WHERE APPROVED BY THE ENGINEER.)
- 4. WATER MAIN SHALL BE INSTALLED WITH BEDDING, PIPE ZONE BACKFILL, MARKER TAPE, AND TRACER WIRE PER DETAIL 3 ON SHEET CD-1. TRENCH BACKFILL SHALL BE COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS AND THE GEOTECHNICAL REPORT CONTAINED IN THE SPECIFICATIONS.
- 5. PERMANENT TRENCH RESURFACING SHALL BE IN ACCORDANCE WITH DETAIL 3 ON SHEET CD-4.
- 6. WATER SERVICES SHALL BE INSTALLED BY TRENCH INSTALLATION OR BORED INTO PLACE AS DETERMINED BY THE CONTRACTOR.
- 7. WATER METERS SHALL BE BADGER COUNTY FURNISHED.
- 8. NEW WATER FACILITIES SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- 9. AFTER THE WATER SYSTEM HAS BEEN TESTED AND ACCEPTED, CONNECTIONS TO THE WATER SERVICES AT THE METER WILL BE COMPLETED.
- 10. PLACE FIRE HYDRANT MINIMUM 5' CLEAR OF DRIVE APPROACHES AND OBSTRUCTIONS IN AREAS PROTECTED FROM SNOW PLOWING MACHINES AS DIRECTED BY ENGINEER.
- 11. ALL BURIED WATER MAIN SHALL BE OF THE TYPE AND CLASS SPECIFIED ON THE PLANS. ALL BURIED DUCTILE IRON PIPE SHALL BE WRAPPED IN POLYETHYLENE ENCASEMENT.
- 12. ALL ABOVE GROUND PIPE 4" OR LARGER IN DIAMETER SHALL BE DUCTILE IRON PIPE WITH FLANGED CONNECTIONS PER THE SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
- 13. AT LOCATIONS WHERE NEW WATER MAIN CONFLICTS WITH EXISTING WATER MAIN, EXISTING ASBESTOS CONCRETE WATER MAINS SHALL BE REMOVED AND DISPOSED OF AS NOTED ON THE PLANS AND PER ALL APPLICABLE REQUIREMENTS.
- 14. ANY EXISTING WATER SERVICES THAT CONFLICT WITH THE NEW PIPELINE ALIGNMENT SHALL BE REMOVED AND TEMPORARILY REPLACED.
- 15. ANY EXISTING SEWER SERVICES CONFLICTING WITH NEW WATER LINE SHALL BE RELAID PER DETAIL 6 ON SHEET CD-2.

#### UTILITY POLE SPECIAL NOTES

SCALE

- 1. POLES SHALL BE SUPPORTED AT ALL TIMES WHERE OUTSIDE EDGE OF TRENCH IS WITHIN 5' OF OUTSIDE EDGE OF POLE UNTIL SUCH TIME THAT TRENCH IS BACKFILLED AND COMPACTED. THE CONTRACTOR SHALL SUPPORT EXISTING POLES IN A MANNER APPROVED IN ADVANCE BY UTILITY COMPANY.
- 2. THE CONTRACTOR SHALL NOTIFY UTILITY IN ADVANCE OF STARTING CONSTRUCTION ACTIVITIES REQUIRING POLE HOLDING AND OBTAIN A POLE HOLDING PERMIT.

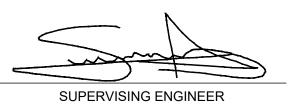
#### GENERAL NOTES

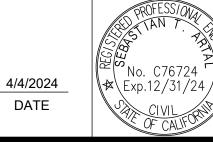
- 1. ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THESE PLANS, PROJECT SPECIFICATIONS, AND ALL OTHER STANDARDS REFERENCED.
- 2. THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING FACILITIES PRIOR TO COMMENCING WORK. CALL UNDERGROUND SERVICE ALERT (USA) AT 8-1-1. CONTRACTOR SHALL MAKE ENGINEER AWARE OF ANY
- THE CONTRACTOR SHALL REPLACE ANY DISTURBED WARNING MARKERS, SIGNS, STRIPING, CROSS BARS AND STOP BARS AS NECESSARY AND AS DIRECTED BY THE COUNTY.
- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE HEALTH AND SAFETY LAWS OF THE STATE OF CALIFORNIA AND CAL/OSHA STANDARDS.
- 5. ALL EXCESS MATERIAL AND/OR DEBRIS SHALL BE REMOVED UPON PROJECT COMPLETION.
- 6. A PRE-CONSTRUCTION MEETING BETWEEN ALL PARTIES INVOLVED IN THE CONSTRUCTION AND INSPECTION OF IMPROVEMENTS SHALL BE ARRANGED BY THE OWNER.
- 7. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS INCLUDING BUT NOT LIMITED TO: FENCES, GATES, MAILBOXES, CONCRETE, AND LANDSCAPING. ANY EXISTING IMPROVEMENTS DAMAGED SHALL BE REPLACED "IN KIND" AND RESTORED TO THEIR ORIGINAL CONDITION.

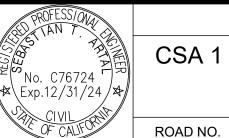
#### EXISTING UTILITY NOTES

- 1. THE CONTRACTOR SHALL POTHOLE ALL EXISTING FACILITIES IDENTIFIED PRIOR TO THE START OF CONSTRUCTION AS FIRST ORDER OF WORK. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY CONFLICTS PRIOR TO CONSTRUCTION TO ALLOW ADVANCE DECISIONS TO BE MADE ON NECESSARY RELOCATIONS OR GRADE CHANGES TO PROPOSED FACILITIES. THE COUNTY RESIDENT ENGINEER SHALL APPROVE FIELD CHANGES THAT INCLUDE ANY RELOCATIONS AND GRADE CHANGES ASSOCIATED WITH EXISTING FACILITY CONFLICTS.
- 2. POTHOLING SHALL EXPOSE THOSE FACILITIES THAT MAY AFFECT THE LOCATION OR DEPTH OF THE WATER MAIN OR THOSE UTILITIES AS SPECIFICALLY NOTED HEREIN.
- THE EXISTING WATER DISTRIBUTION SYSTEMS AND SEWER COLLECTION SYSTEMS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS BASED ON INFORMATION AVAILABLE. THE CONTRACTOR SHALL COORDINATE WITH THE COUNTY'S REPRESENTATIVE TO IDENTIFY LOCATION OF EXISTING WATER AND SEWER FACILITIES IN THE FIELD. THE CONTRACTOR IS RESPONSIBLE FOR POTHOLING AND PHYSICALLY VERIFYING THE ALIGNMENT AND DEPTH OF THE PROPOSED WATER LINE WILL NOT BE IN CONFLICT WITH ANY UTILITIES AND A MINIMUM SEPARATION WITH SEWER MAINS ARE MAINTAINED.
- 4. THE DEPTH OF SEWER MAINS SHOWN ARE APPROXIMATE BASED ON FIELD MEASUREMENTS AND FLOW LINES ARE SHOWN ON THE PLANS FOR REFERENCE. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE DEPTH ALIGNMENT (ESPECIALLY ALONG THE CURVED AREAS OF THE ROADS) OF EXISTING SEWER MAINS AT WATER MAIN CROSSINGS.
- 5. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL SEWER SERVICES AND VERIFY ADEQUATE SEPARATION FROM NEW WATER SERVICES (SEE CONSTRUCTION NOTES ON THIS SHEET).

RECORD DRAWING DATE DESIGNED: KCS 10/16/24 RESIDENT ENGINEER DATE DRAWN: KCS 10/16/24 CHECKED: SA 10/16/24 FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING







### CSA 1 - TAMARACK WATER INFRASTRUCTURE REPLACEMENT PROJECT

**PROJECT** 

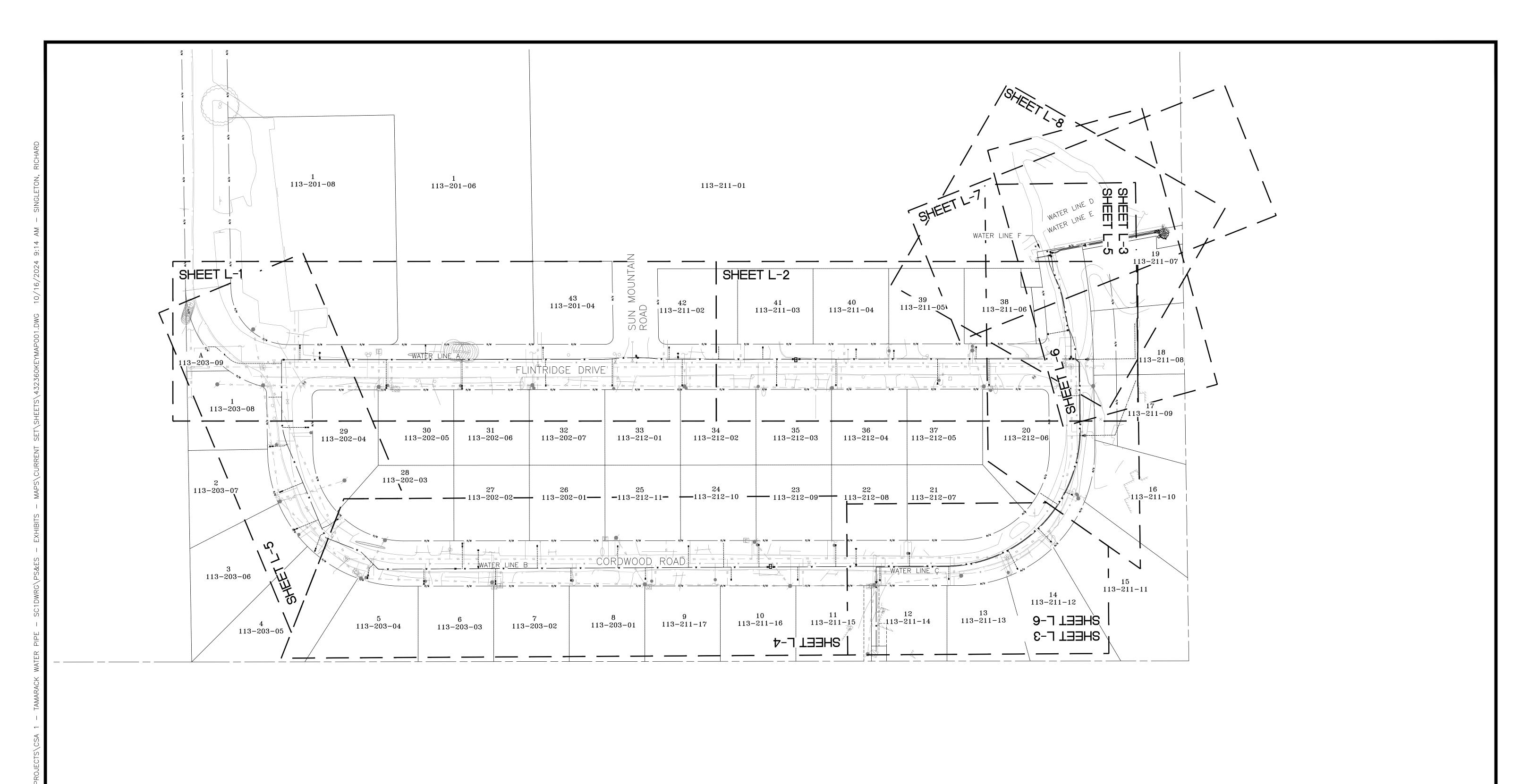
BRIDGE NO.

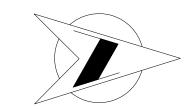


## DEPARTMENT OF PUBLIC WORKS AND PLANNING **GENERAL NOTES**

GN-1

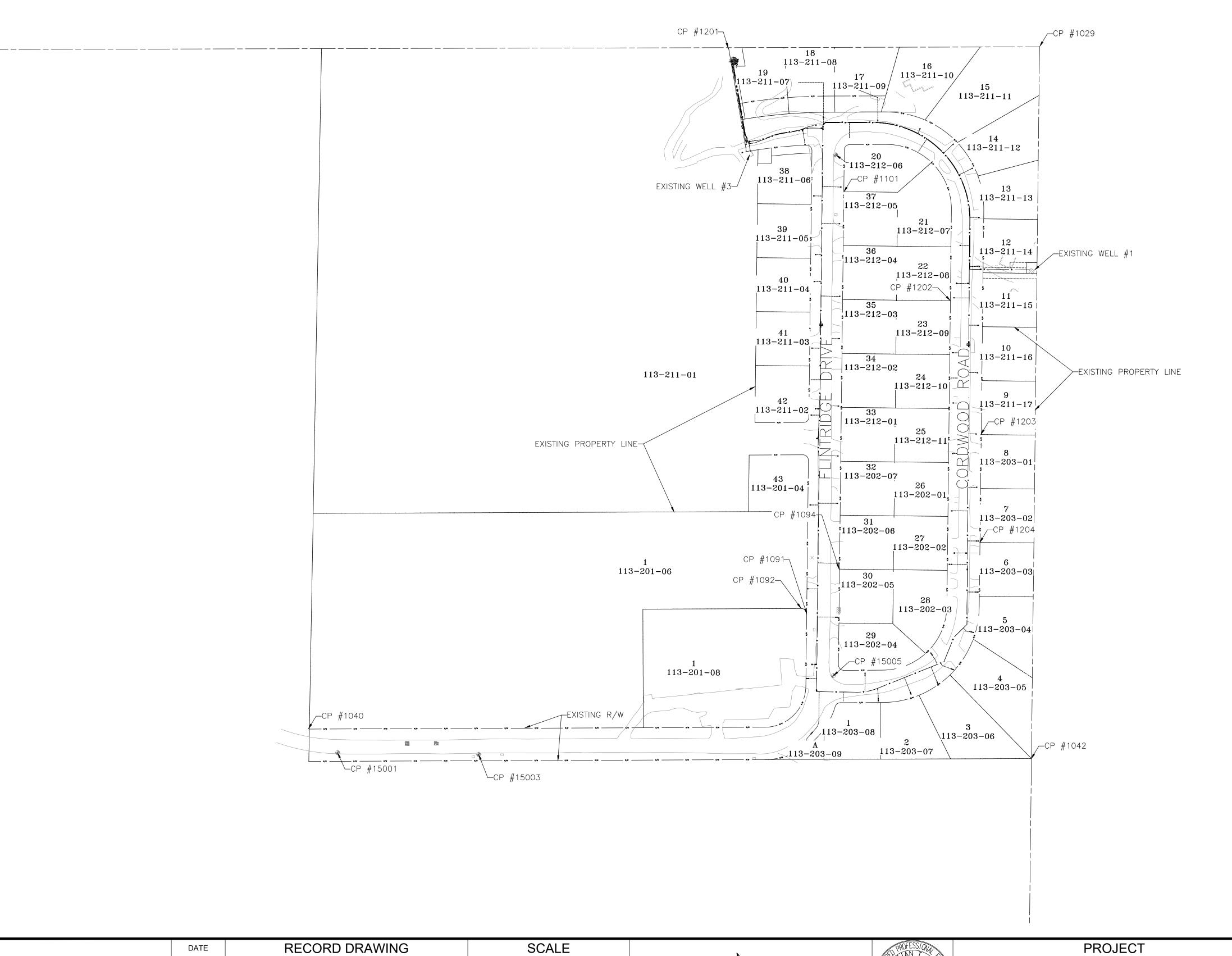
DRAWING NO. 11334 SHEET NO. TOTAL 23 03







- CD		DATE	RECORD DRAWING		SCALE	N		PROFESS/ONAV	PROJECT	COUN	DEPARTMENT (	OF PUBLIC W	ORKS AN	D PLANNING
S	DESIGNED: KCS	10/16/24	RESIDENT ENGINEER	DATE					CSA 1 - TAMARACK WATER INFRASTRUCTUR			INDEX SHE	EET	
JECT	DRAWN: KCS	10/16/24			60 30 0 60		4/4/2024	No. C76724	REPLACEMENT PROJECT			10.4		
ROC	CHECKED: SA	10/16/24			GRAPHIC SCALE: 1"=60'	SUPERVISING ENGINEER	<del></del>	CIVIL 2017		1856		15-1		
\.\ \.\	FOR RIGHT OF WAY DATA AND ACCURATE ACCESS D	ETERMINATION, SE	EE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLAN	INING.				OF CALIFORNIA	ROAD NO BRIDGE NO.	FRES	DRAWING NO. 11334	SHEET NO.	04	TOTAL 23



	SURVEY CONTROL POINT									
POINT NUMBER	DESCRIPTION	ELEVATION	NORTHING	EASTING						
15001	SET MAG	7208.59	2318578.13	6502287.48						
15003	SET RBR	7219.33	2318574.82	6502549.16						
15005	SET RBR	7233.27	2318720.82	6503206.88						
15008	SET RBR	7358.87	2319686.68	6503211.45						
1040	FD ¾" IP	7207.85	2318621.69	6502233.86						
1042	FD 1" IP UP 0.4' LEANING	7234.27	2318566.15	6503574.34						
1091	FD ¾" IP	7239.95	2318835.32	6503157.61						
1092	FD ¾" UP	7241.02	2318845.52	6503147.61						
1094	FD $\frac{3}{4}$ " IP W/GAS CAP; UP 0.5'	7249.76	2318918.58	6503218.52						
1204	FD ¾" IP FLUSH;LS 2931	7263.72	2318968.02	6503478.86						
1203	FD ¾ IP UP 1.0';LS 2931	7292.81	2319167.22	6503480.07						
1202	FD ¾ IP UP 0.5';LS 2931	7331.17	2319416.09	6503424.40						
1101	FD ½" ROD	7348.80	2319618.18	6503227.43						
1029	FD 1" IP UP 1.0'	7390.75	2319886.86	6503589.60						
1201	FD 3" IP	7441.82	2319883.60	6503012.90						





	DATE	RECORD DRAWIN	SCALE						
DESIGNED: KCS	10/16/24	RESIDENT ENGINEER	DATE						
DRAWN: KCS	10/16/24			100 50 0 100					
CHECKED: SA	10/16/24			GRAPHIC SCALE: 1"=100'					
FOR RIGHT OF WAY DATA AND ACCURATE	FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING.								



4/4/2024 DATE

No. C76724

Exp.12/31/24

CIVIL

OF CALIFORNIA



ROAD NO. - BRIDGE NO.

COUN	
1856	
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DEPARTMENT OF PUBLIC WORKS AND PLANNING
HORIZONTAL CONTROL
HC-1
-

DRAWING NO. 11334 SHEET NO. 05 TOTAL 23

	WATER LINE A											
NUMBER	STATION	LENGTH	RADIUS	DELTA (Δ)	LINE/CHORD DIRECTION	NORTHING	EASTING	PIPE SIZE	PIPE MATERIAL			
L1	10+00.00	421.92'			N0° 39' 08.46"E	2318691.08	6503175.92	6 INCH	HDPE			
C1	14+21.92	17.90'	160.00'	6°24'35"	N2° 33' 05.31"W	2319112.98	6503180.72	6 INCH	HDPE			
C2	14+39.82	17.90'	160.00	6°24'34"	N2° 33' 05.40"W	2319130.85	6503179.92	6 INCH	HDPE			
L2	14+57.72	18.77'			N0° 38′ 52.71"E	2319148.72	6503179.13	6 INCH	HDPE			
С3	14+76.49	17.91'	160.00'	6°24'43"	N3° 51' 14.16"E	2319167.49	6503179.34	6 INCH	HDPE			
C4	14+94.40	17.89'	160.00'	6°24'24"	N3° 51' 23.68"E	2319185.35	6503180.54	6 INCH	HDPE			
L3	15+12.29	538.26			N0° 39' 07.52"E	2319203.19	6503181.75	6 INCH	HDPE			
L4	20+50.55	7.04'			N44° 58' 45.29"E	2319741.41	6503187.87	6 INCH	HDPE			

	WATER LINE B											
NUMBER	STATION	LENGTH	RADIUS	DELTA (Δ)	LINE/CHORD DIRECTION	NORTHING	EASTING	PIPE SIZE	PIPE MATERIAL			
L5	10+00.00	87.07			N89° 58' 45.29"E	2319746.39	6503192.85	6 INCH	HDPE			
C5	10+87.07	284.04	180.00'	90°24'44"	S44° 48′ 52.87"E	2319746.42	6503279.92	6 INCH	HDPE			
L6	13+71.11	749.49			S0°23′28.98"W	2319565.19	6503459.98	6 INCH	HDPE			
L7	21+20.59	33.50'			S45° 46' 40.95"W	2318815.72	6503454.86	6 INCH	HDPE			
L8	21+54.09	49.42			S22° 10′ 26.04″W	2318792.36	6503430.85	6 INCH	HDPE			
L9	22+03.51	132.69			S68° 13' 00.19"W	2318746.60	6503412.20	6 INCH	HDPE			
C6	23+36.20	39.17	100.00'	22°26'24"	S79° 26' 12.05"W	2318697.36	6503288.98	6 INCH	HDPE			
L10	23+75.37	74.82			N89°20′36.08″W	2318690.22	6503250.73	6 INCH	HDPE			

	WATER LINE C											
NUMBER	STATION	LENGTH	RADIUS	DELTA (Δ)	LINE/CHORD DIRECTION	NORTHING	EASTING	PIPE SIZE	PIPE MATERIAL			
L11	10+00.00	11.03'			N80° 14' 09.00"E	2319710.24	6503044.54	3 INCH	HDPE			
C7	10+11.03	6.04	75.00'	4°36'58"	N82° 32' 37.88"E	2319712.11	6503055.41	2 INCH	HDPE			
C8	10+17.07	20.56	75.00'	15°42'14"	N76° 59' 59.91"E	2319712.89	6503061.40	2 INCH	HDPE			
L12	10+37.62	12.52'			N69°08′53.06″E	2319717.50	6503081.36	2 INCH	HDPE			
C9	10+50.14	20.18'	100.86	11°27'52"	N74° 52' 49.18"E	2319721.96	6503093.06	2 INCH	HDPE			
L13	10+70.32	29.14			N80° 36′ 45.30″E	2319727.21	6503112.51	2 INCH	HDPE			
C10	10+99.46	10.61	39.14'	15°31'56"	N72° 50' 47.06"E	2319731.97	6503141.26	2 INCH	HDPE			
C11	11+10.07	33.47'	75.00'	25°34'19"	N77° 51' 58.17"E	2319735.09	6503151.37	2 INCH	HDPE			
L14	11+43.54	3.44'			S89°20′52.47″E	2319742.06	6503183.82	2 INCH	HDPE			
L15	11+46.98	7.40'			N44° 58' 45.29"E	2319742.02	6503187.26	2 INCH	HDPE			
L16	11+54.38	87.43'			N89° 58' 45.29"E	2319747.26	6503192.49	2 INCH	HDPE			
C12	12+41.81	285.41	180.87	90°24'44"	S44° 48' 52.87"E	2319747.29	6503279.92	2 INCH	HDPE			
L17	15+27.21	90.56			S0° 23' 28.98"W	2319565.19	6503460.84	2 INCH	HDPE			
L18	16+17.77	111.19'			S89°20′36.08″E	2319474.63	6503460.23	2 INCH	HDPE			

		WATER LINE D												
NUMBER	STATION	LENGTH	RADIUS	DELTA (Δ)	LINE/CHORD DIRECTION	NORTHING	EASTING	PIPE SIZE	PIPE MATERIAL					
L19	10+00.00	22.82'			N89°20′48.00″W	2319736.03	6503187.81	6 INCH	HDPE					
C13	10+22.82	15.65	40.00'	22°25'08"	S79°26′39.37"W	2319736.29	6503164.99	6 INCH	HDPE					
C14	10+38.47	8.64'	40.00'	12°22'40"	S74° 25' 25.34"W	2319733.44	6503149.70	6 INCH	HDPE					
L20	10+47.11	29.14			S80° 36′ 45.30"W	2319731.12	6503141.40	6 INCH	HDPE					
C15	10+76.25	20.01	100.00'	11°27'52"	S74°52′49.18″W	2319726.37	6503112.65	6 INCH	HDPE					
L21	10+96.26	33.70'			S69°08′53.06"W	2319721.16	6503093.36	6 INCH	HDPE					
L22	11+29.96	16.90'			S80° 14' 09.00"W	2319709.16	6503061.87	6 INCH	HDPE					
L23	11+46.86	132.49			N9° 46' 07.69"W	2319706.30	6503045.22	6 INCH	HDPE					
C16	12+79.34	4.95'	50.00'	5°40'36"	N12° 44′ 49.09"W	2319836.86	6503022.74	6 INCH	HDPE					
L24	12+84.30	1.10'			N15° 35' 07.07"W	2319841.69	6503021.65	6 INCH	HDPE					
C17	12+85.40	5.34'	50.00'	6°07'17"	N12° 31' 28.74"W	2319842.75	6503021.35	6 INCH	HDPE					
L25	12+90.74	2.33'			N9° 27' 50.41"W	2319847.97	6503020.19	6 INCH	HDPE					

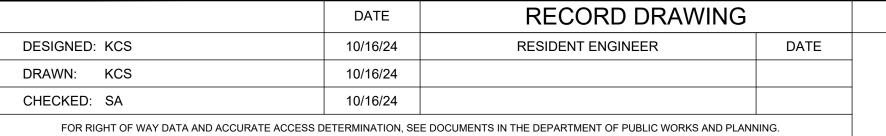
	WATER LINE E											
NUMBER	STATION	LENGTH	RADIUS	DELTA (Δ)	LINE/CHORD DIRECTION	NORTHING	EASTING	PIPE SIZE	PIPE MATERIAL			
L26	10+00.00	6.00'			N9° 45' 51.00"W	2319710.75	6503047.50	3 INCH	HDPE			
C18	10+06.00	4.61'	10.00'	26°25'12"	N22° 58' 26.76"W	2319716.66	6503046.48	3 INCH	HDPE			
C19	10+10.61	4.61'	10.00'	26°25'12"	N22° 58' 26.76"W	2319720.87	6503044.70	3 INCH	HDPE			
L27	10+15.22	125.48			N9° 45' 51.00"W	2319725.08	6503042.91	3 INCH	HDPE			

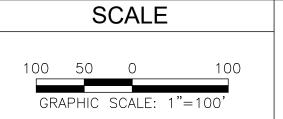
WATER LINE F										
NUMBER	STATION	LENGTH	LINE/CHORD DIRECTION	NORTHING	EASTING	PIPE SIZE	PIPE MATERIAL			
L28	10+00.00	18.86'	N9° 45' 51.00"W	2319692.61	6503053.31	2 INCH	HDPE			

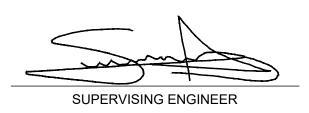
	ACCESS ROAD WATER TANK													
NUMBER	STATION	LENGTH	RADIUS	DELTA (Δ)	LINE/CHORD DIRECTION	NORTHING	EASTING							
L29	9+82.16	2.38'			N19° 57' 54.05"W	2319663.40	6502908.29							
C20	9+84.54	8.38'	10.00'	48°01'08"	N4° 02' 40.01"E	2319665.64	6502907.48							
L30	10+00.00	60.20'			N28°03′14.06″E	2319680.00	6502911.38							
C21	10+60.20	35.94	100.00	20°35'40"	N38°21'04.15"E	2319733.13	6502939.69							
L31	10+96.15	1.97'			N48° 38' 54.24"E	2319761.17	6502961.88							
C22	10+98.12	46.02'	100.00	26°22'11"	N35° 27' 48.83"E	2319762.47	6502963.36							
L32	11+44.14	11.58			N22° 16′ 43.42"E	2319799.63	6502989.82							
L33	11+55.73	38.95			N16°47′38.08″E	2319810.35	6502994.21							













4/4/2024

DATE



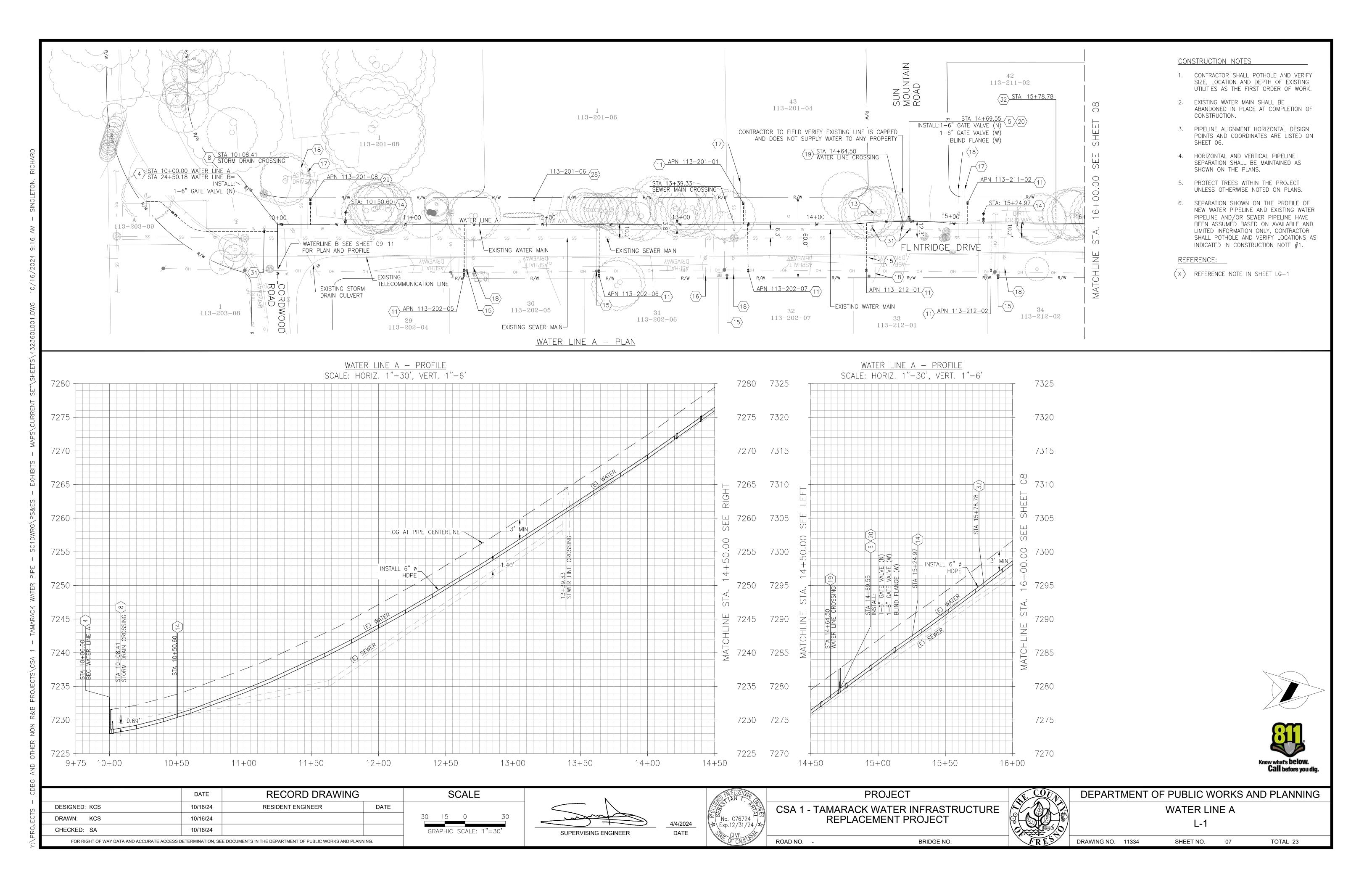


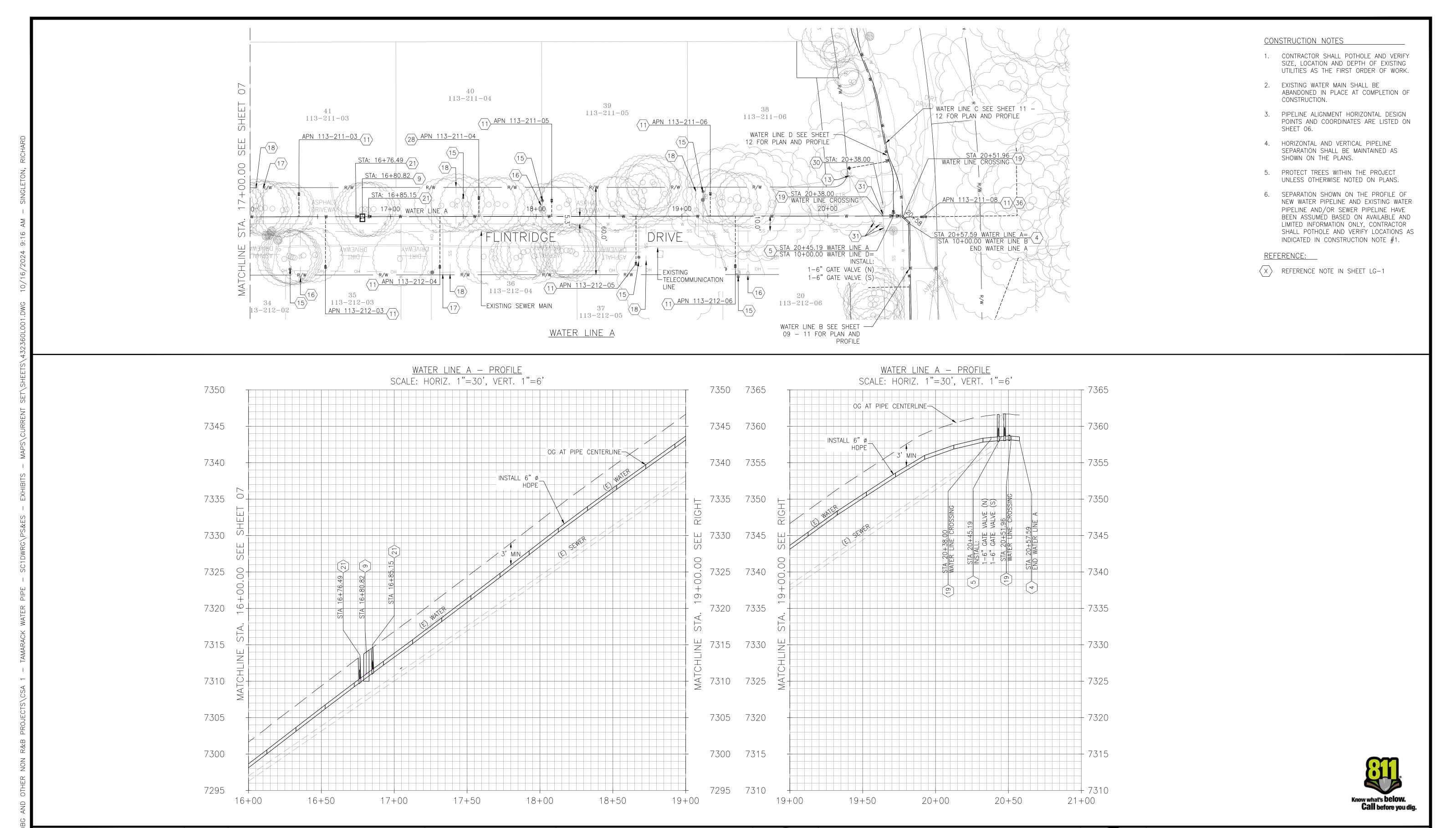
ROAD NO	BRIDGE NO.



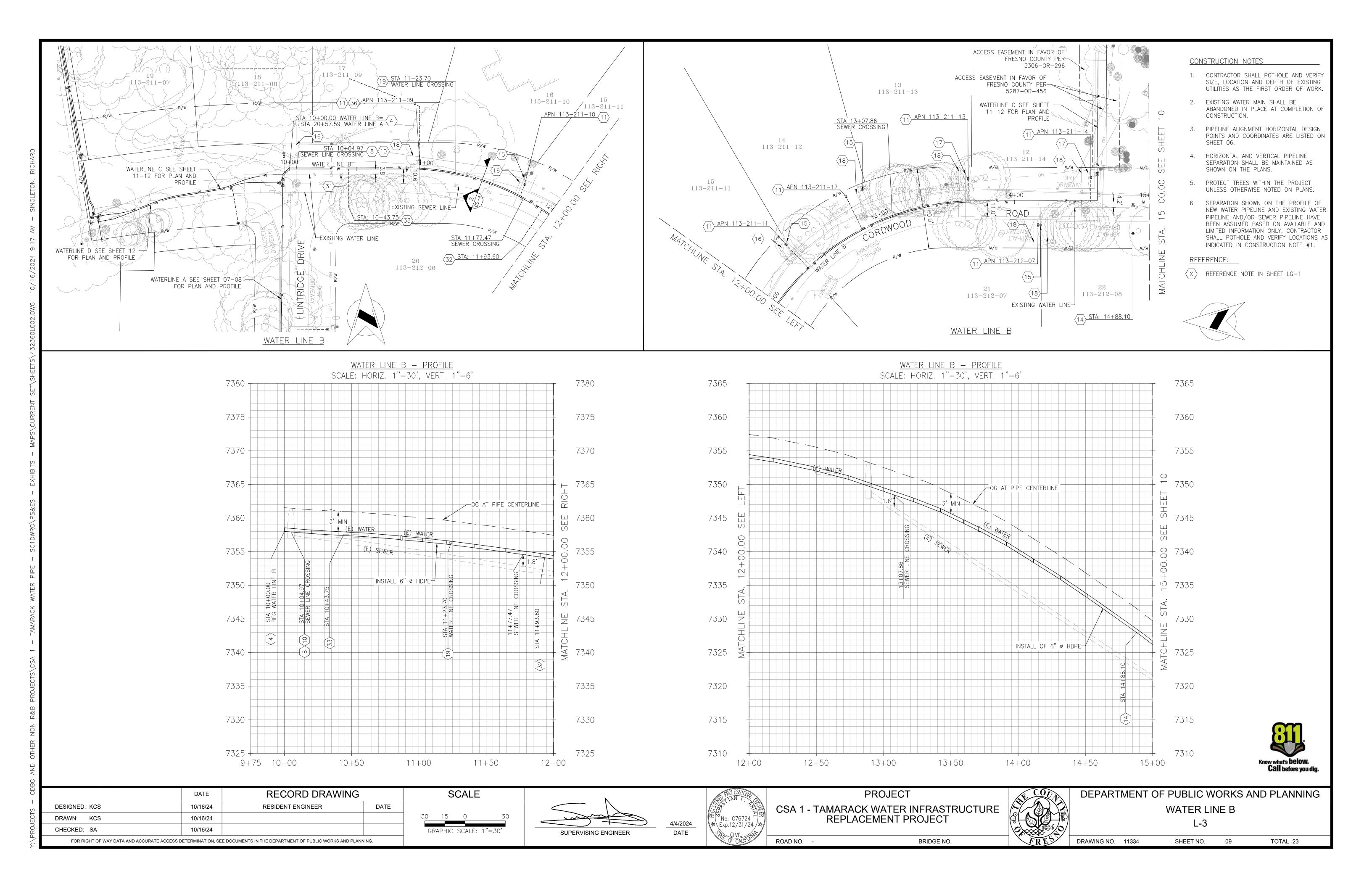
DEPARTMENT OF PUBLIC WORKS AND PLANNING HORIZONTAL CONTROL HC-2

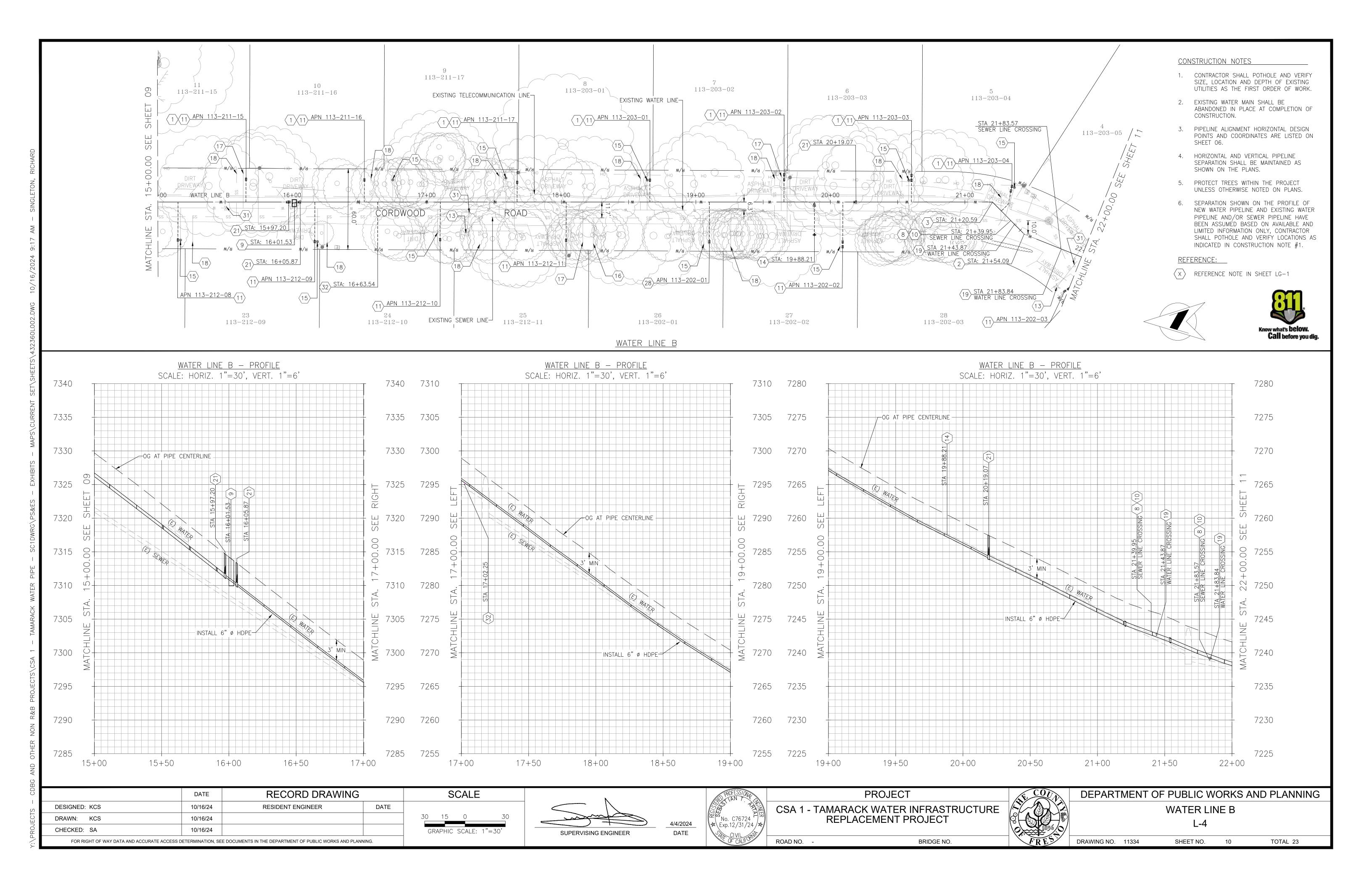
SHEET NO. 06 TOTAL 23 DRAWING NO. 11334

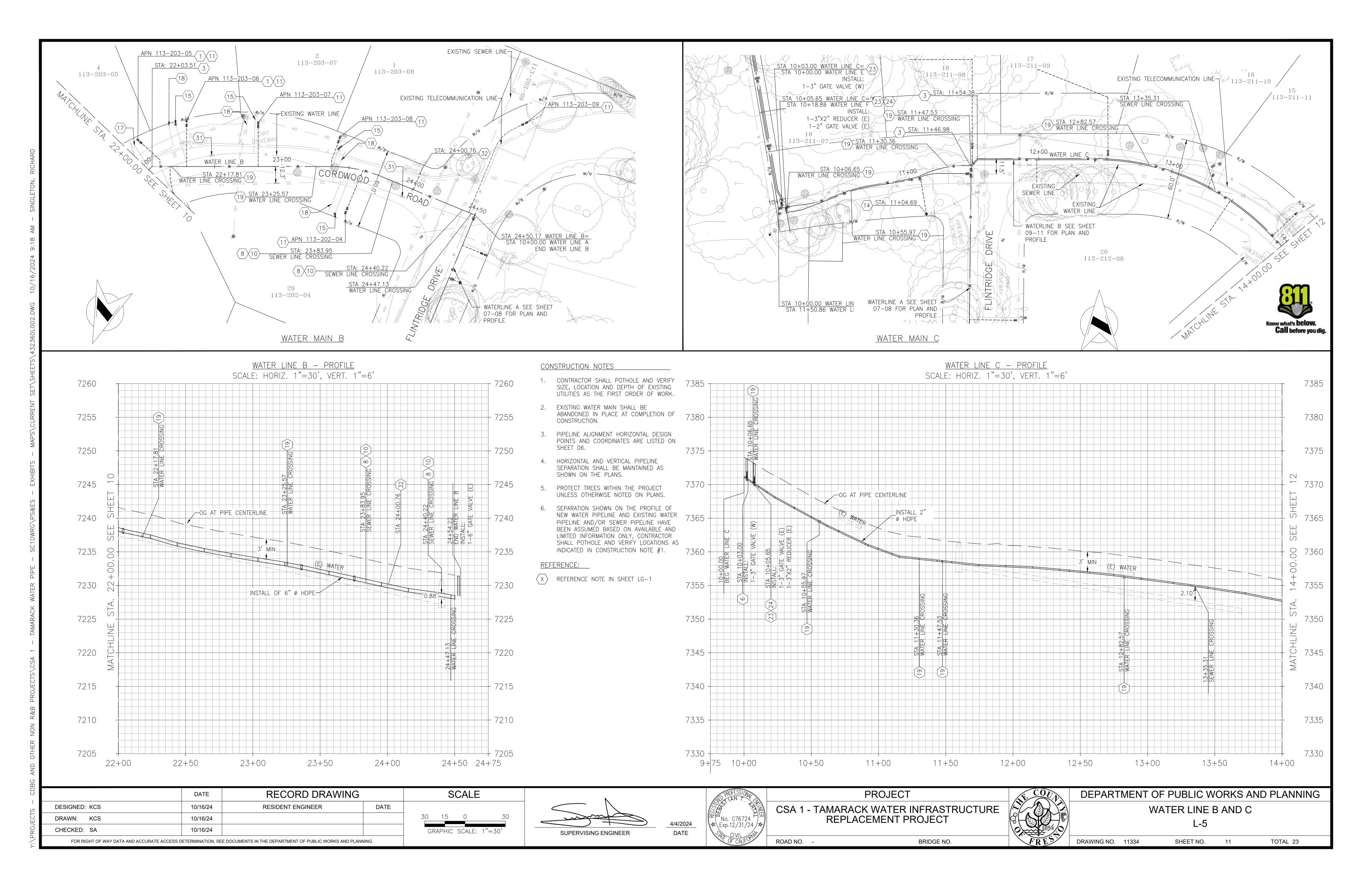


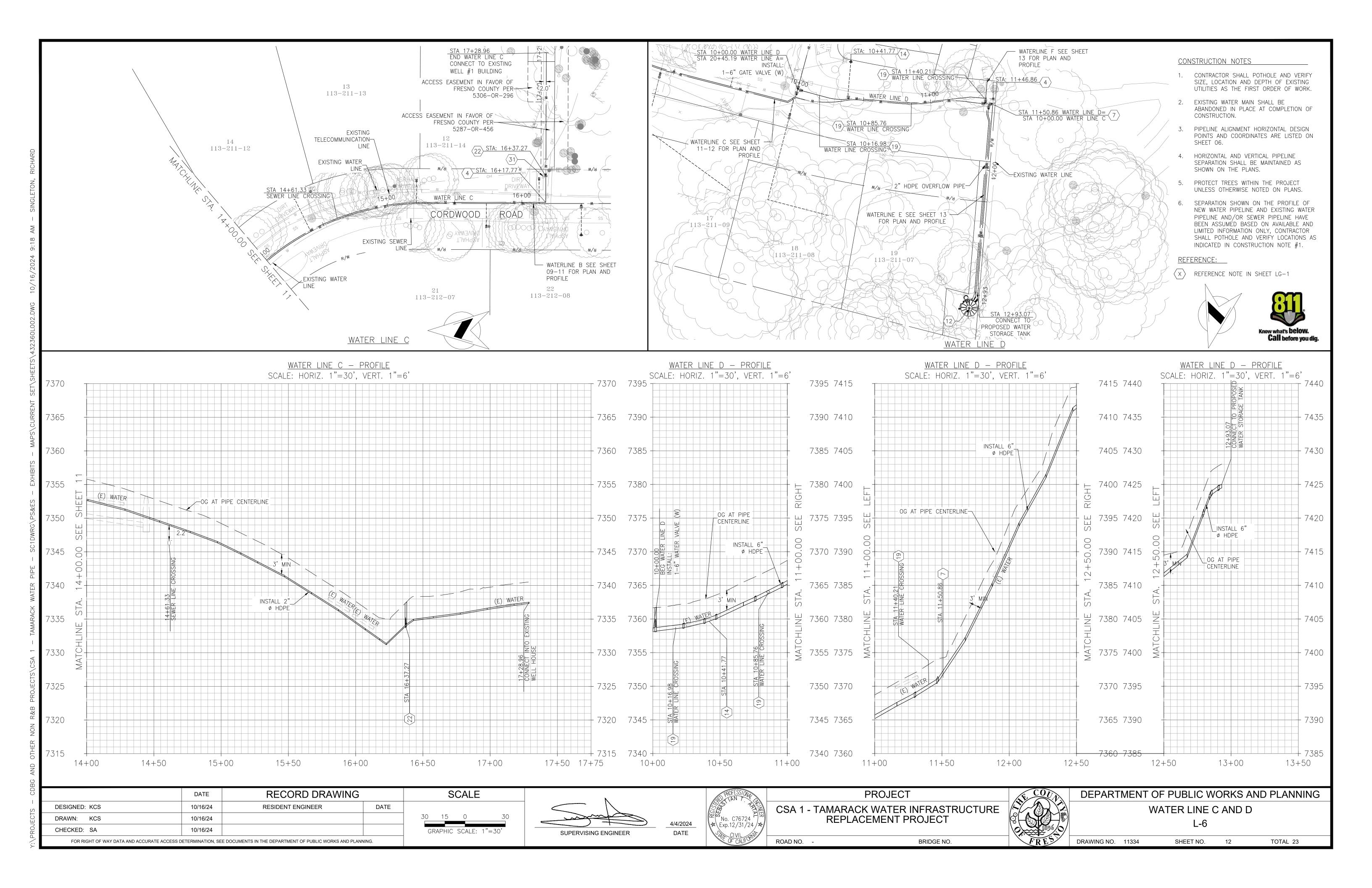


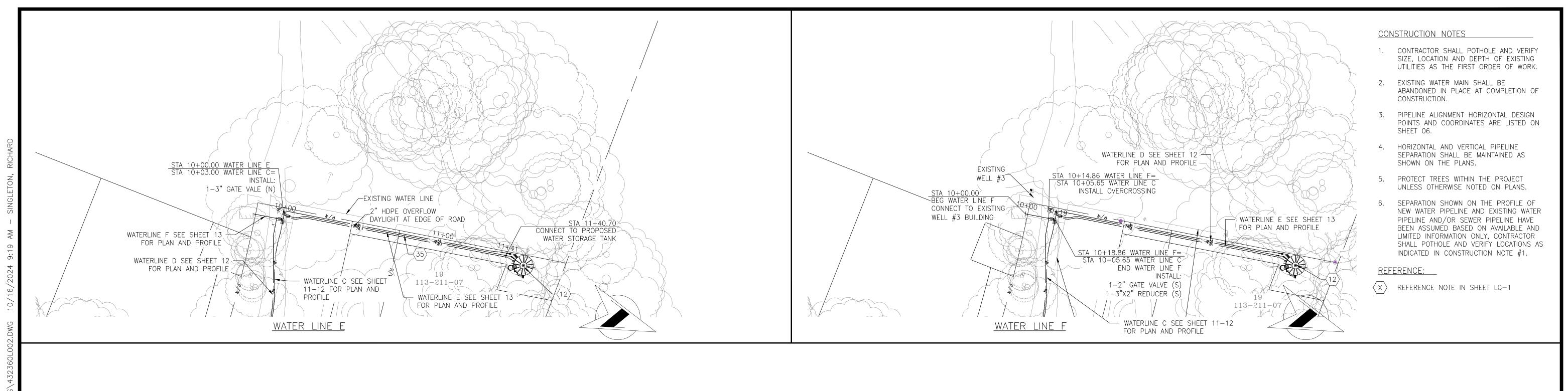
)		DATE	RECORD DRAWING		SCALE		PROFESSIONAL DE LA PROFESSIONAL		PROJEC	PROJECT		DEPARTMENT	EPARTMENT OF PUBLIC WORKS AND PLANNIN		
)	DESIGNED: KCS	10/16/24	RESIDENT ENGINEER	DATE					CSA 1 - TAMARACK WATER	R INFRASTRUCT		\	WATER LIN	NE A	
	DRAWN: KCS	10/16/24			30 15 0 30		4/4/2024	No. C76724	REPLACEMENT	PROJECT			1 -2		
	CHECKED: SA	10/16/24			GRAPHIC SCALE: 1"=30'	SUPERVISING ENGINEER	DATE	CIVIL 2007			1856	/	L-Z		
-	FOR RIGHT OF WAY DATA AND ACCURAT	TE ACCESS DETERMINATION, SEE	DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND F	PLANNING.				OF CALIFOR	ROAD NO	BRIDGE NO.	FRES	DRAWING NO. 11334	SHEET NO.	08	TOTAL 23

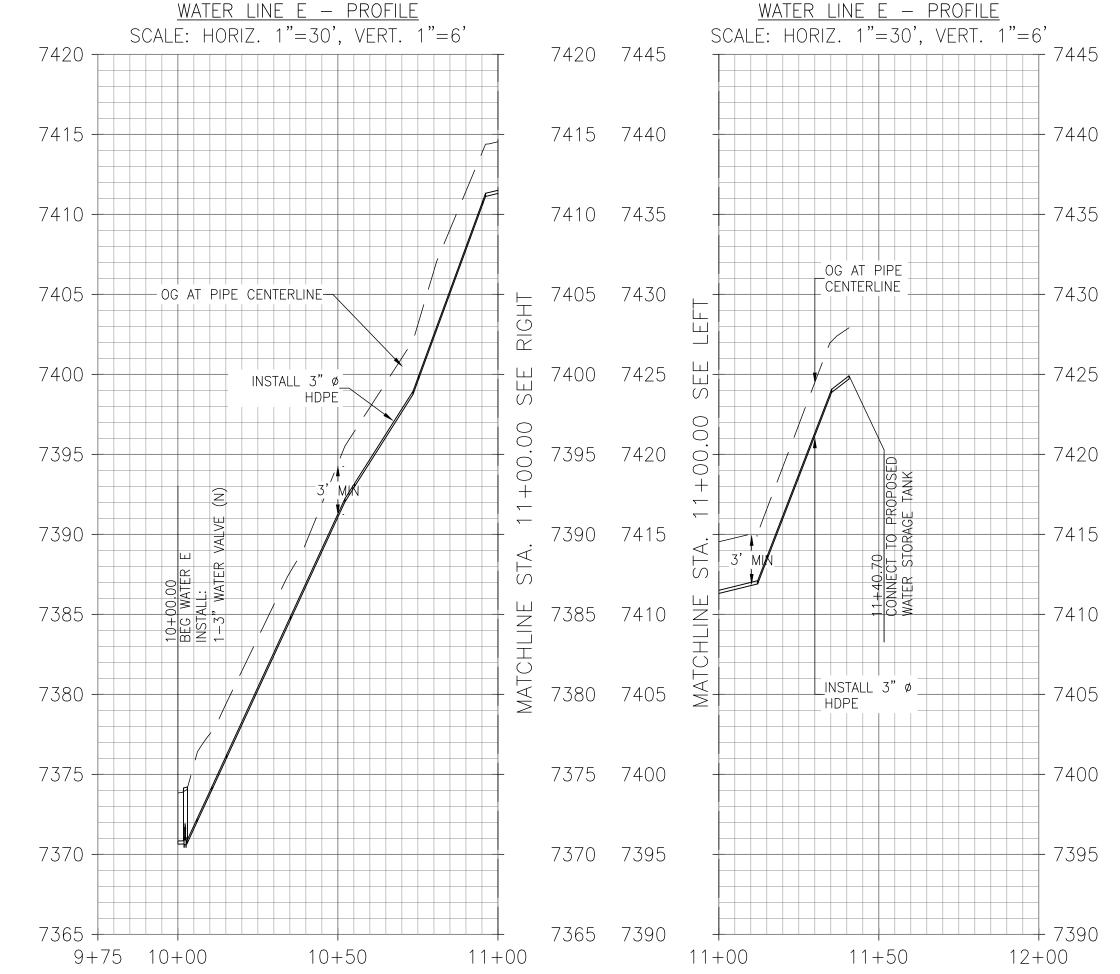


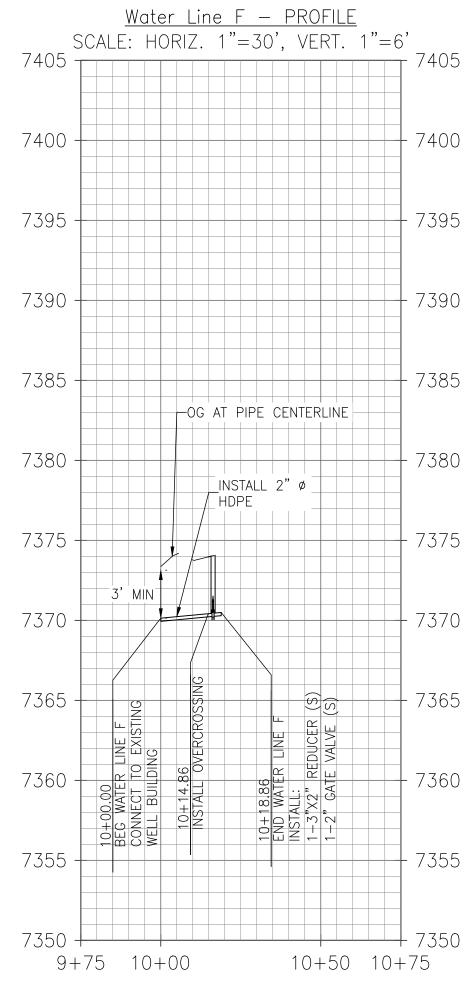






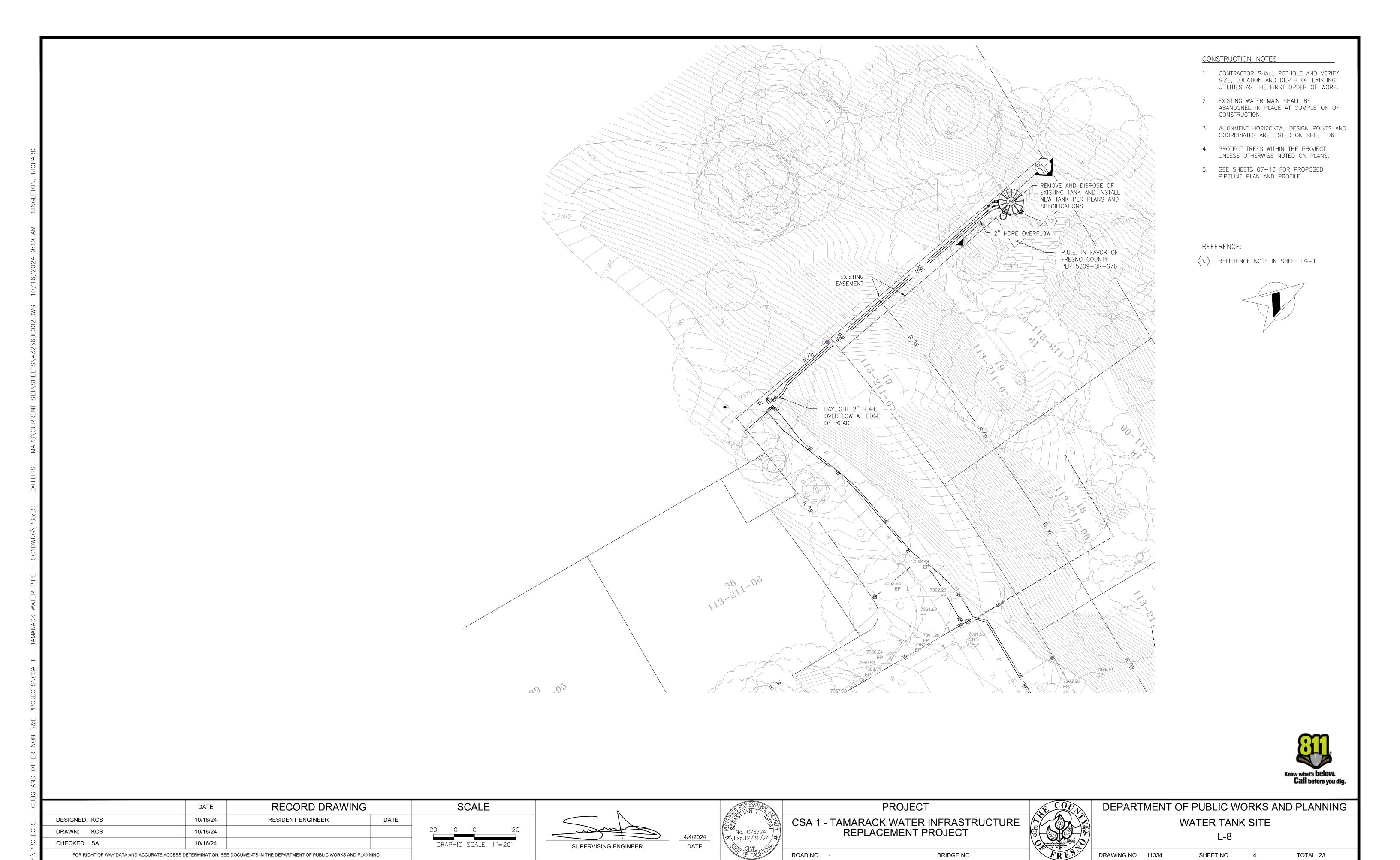


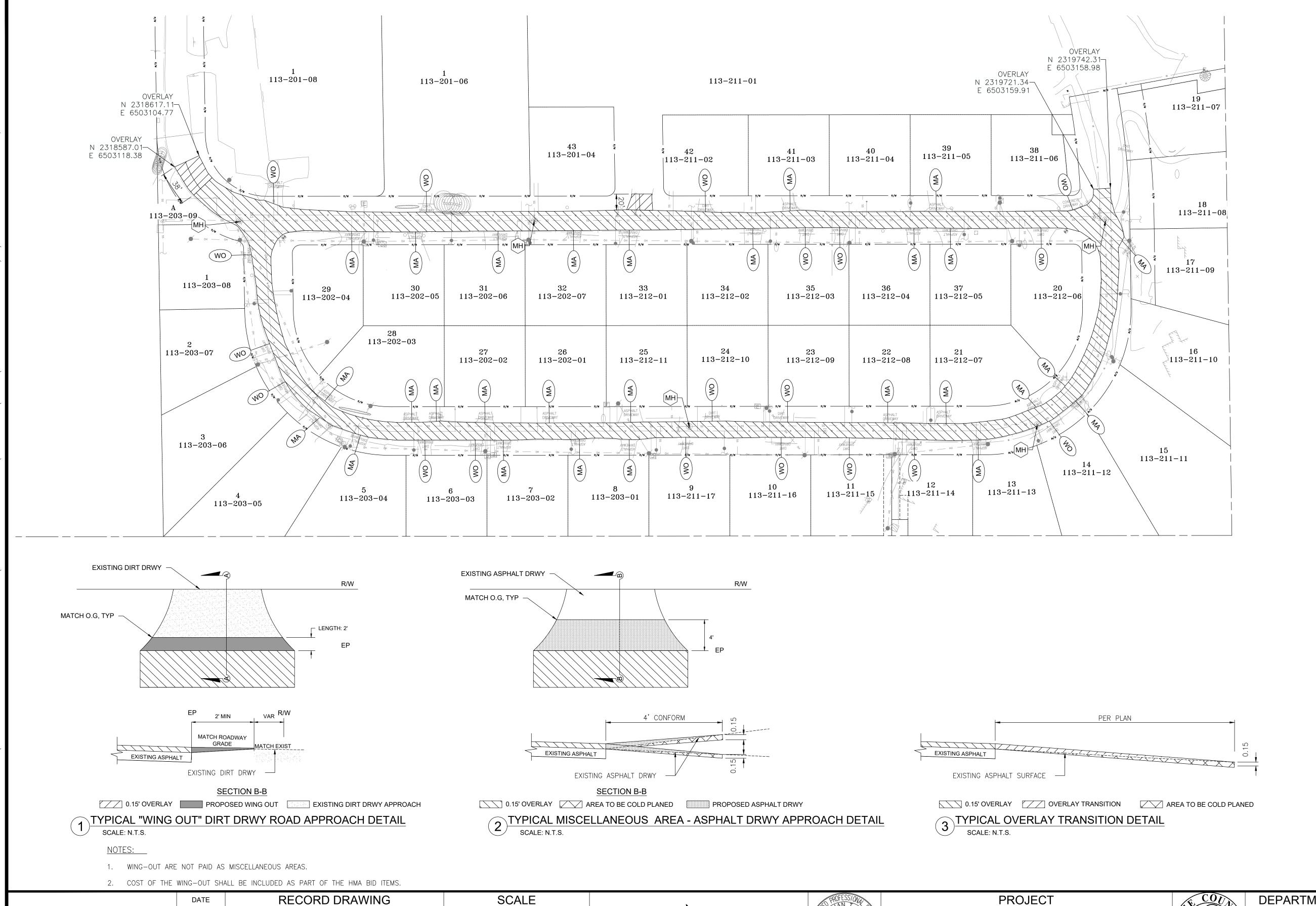






	DATE	RECORD DRAWING		SCALE			PROFESS/ONAL AN 7	PROJECT	COUN	DEPARTMENT OF PUBLIC WORKS AND PLANNING				
DESIGNED: KCS	10/16/24	RESIDENT ENGINEER	DATE					CSA 1 - TAMARACK WATER INFRA	ASTRUCTURE (C)	WATER LINE E AND F				
DRAWN: KCS	10/16/24			30 15 0 30		4/4/2024	No. C76724	REPLACEMENT PROJE		I <sub>-</sub> 7				
CHECKED: SA	10/16/24			GRAPHIC SCALE: 1"=30'	SUPERVISING ENGINEER	DATE	CIVII - CIVII		1856	L-1				
FOR RIGHT OF WAY DATA AND ACCURA	ATE ACCESS DETERMINATION, SEE DOCUM	MENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANN	NING.				OF CALIFORNIA	ROAD NO BRIDG		DRAWING NO. 11334 SHEET NO. 13	TOTAL 23			





4/4/2024

DATE

SUPERVISING ENGINEER

10/16/24

10/16/24

10/16/24

FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING

DESIGNED: KCS

DRAWN: KCS

CHECKED: SA

RESIDENT ENGINEER

GRAPHIC SCALE: 1"=60'

CONSTRUCTION NOTES

- 1. ALIGNMENT HORIZONTAL DESIGN POINTS AND COORDINATES ARE LISTED ON SHEET 06.
- 2. SEE SHEETS 07-13 FOR PROPOSED PIPELINE PLAN AND PROFILE
- 3. OVERLAY THICKNESS PER DETAIL 3 SHEET CD-4
- 4. WATER INFRASTRUCTURE IMPROVEMENTS NOT SHOWN IN THIS SHEET FOR CLARITY. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ANY NEW WATER VALVE BEING INSTALLED WITH THIS PROJECT WITH THE OVERLAY. COUNTY WILL NOT PAY FOR NEW WATER VALVE ADJUSTMENTS TO GRADE.

#### REFERENCE:

- WO DRIVEWAY WINGOUT PER DETAIL 1 THIS SHEET
- MA TYPICAL ASPHALT DRIVEWAY APPROACH PER DETAIL 2 THIS SHEET

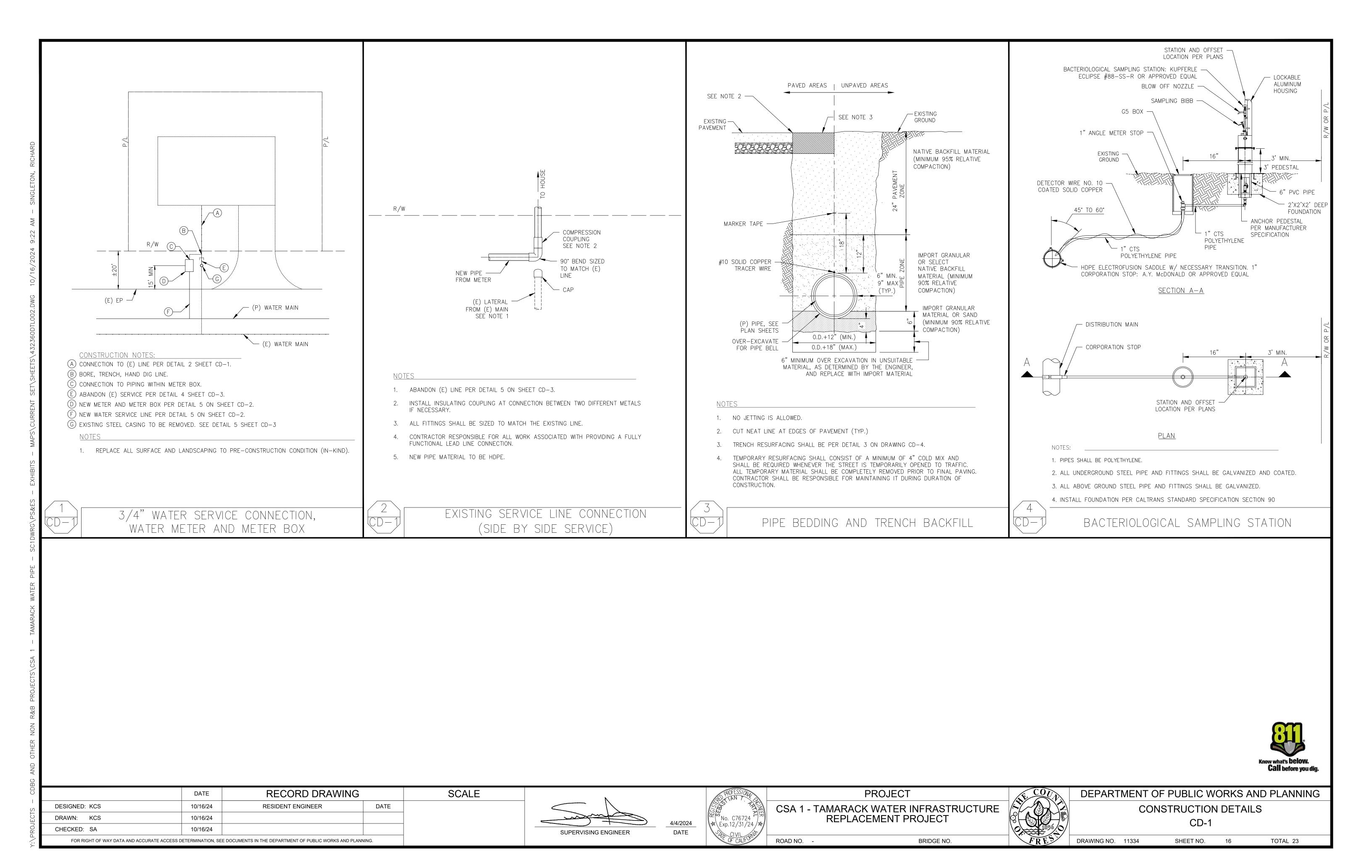
0.15' HMA OVERLAY

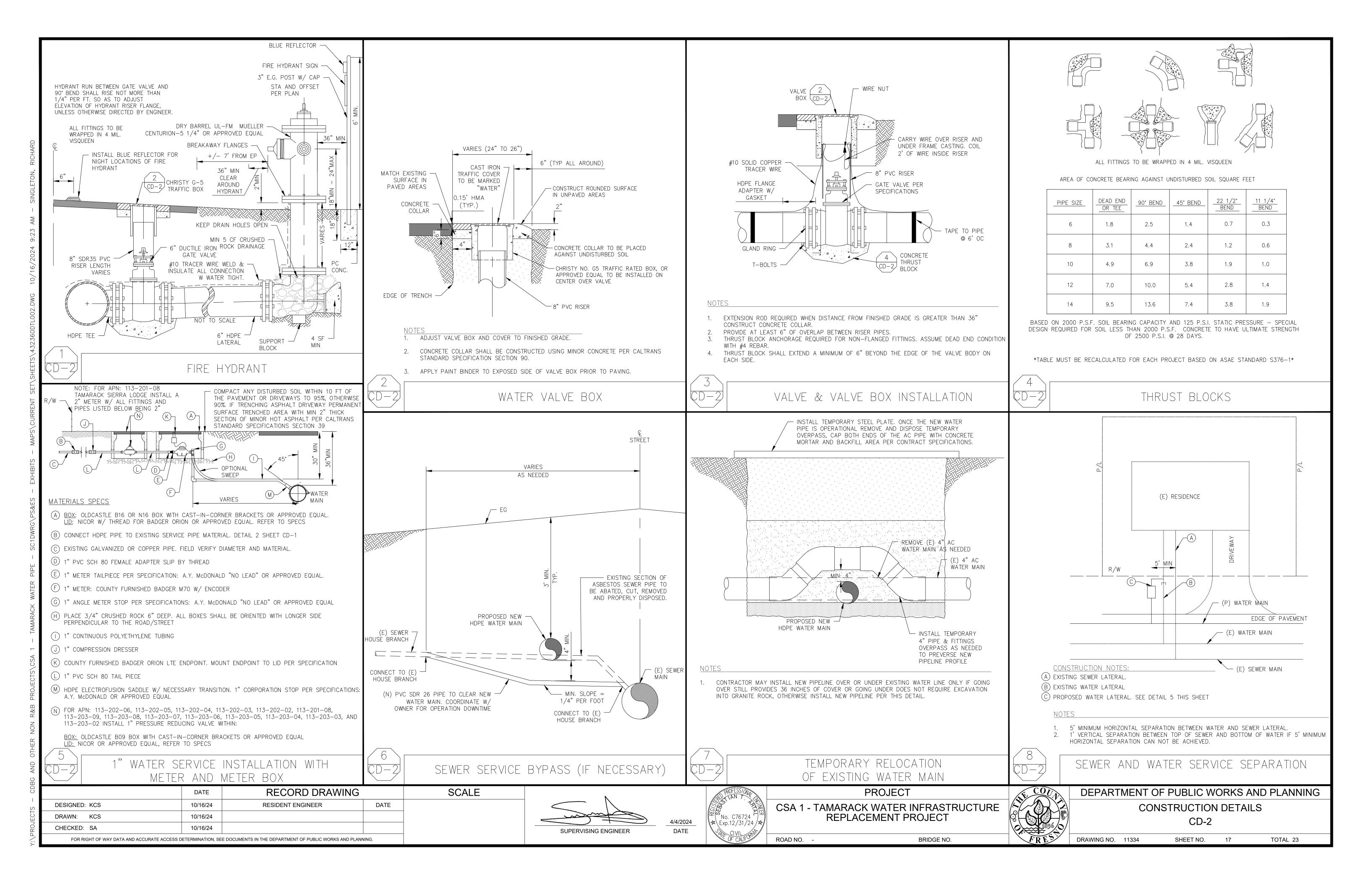
OVERLAY TRANSITION PER DETAIL 3 THIS SHEET

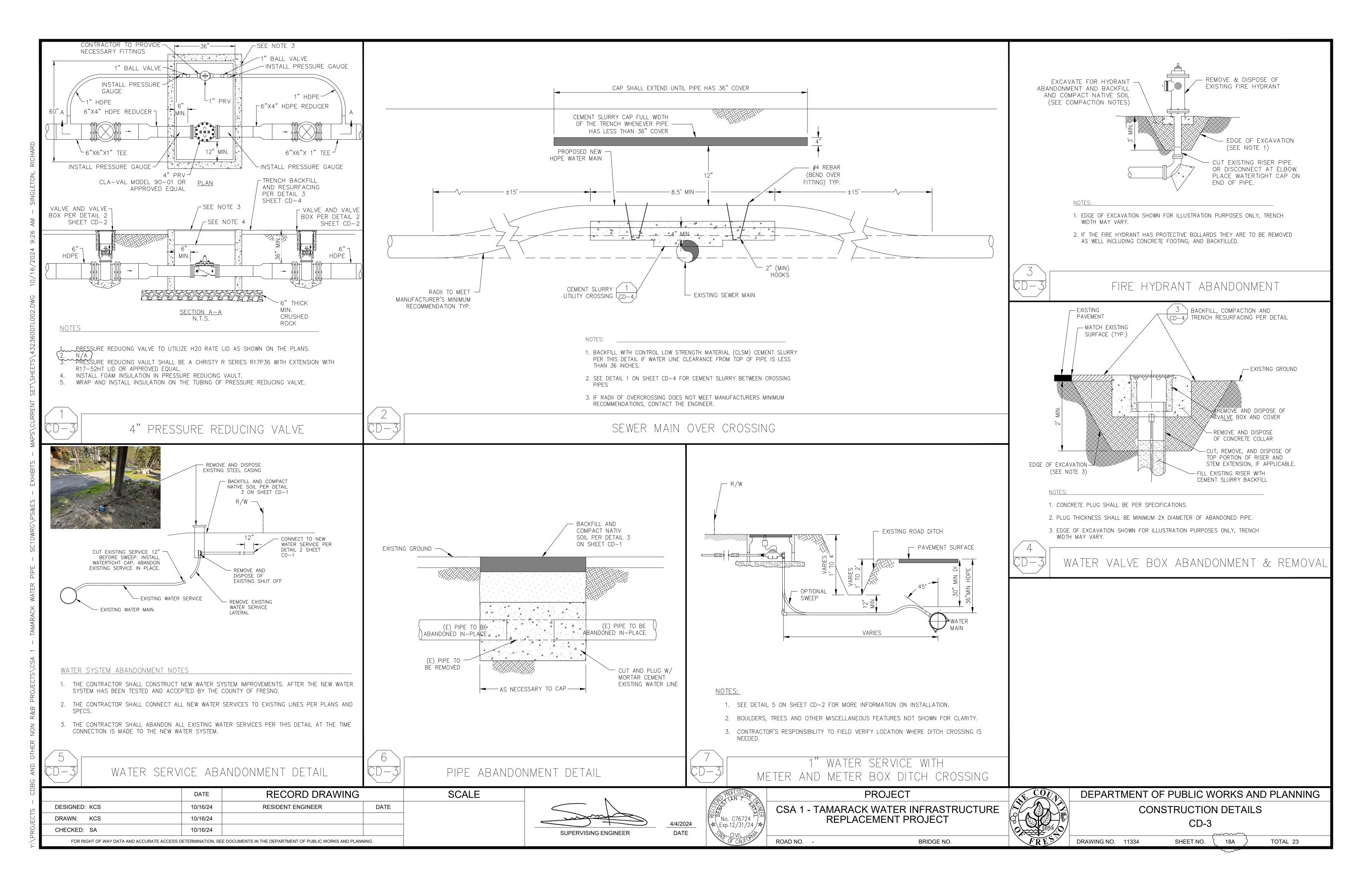


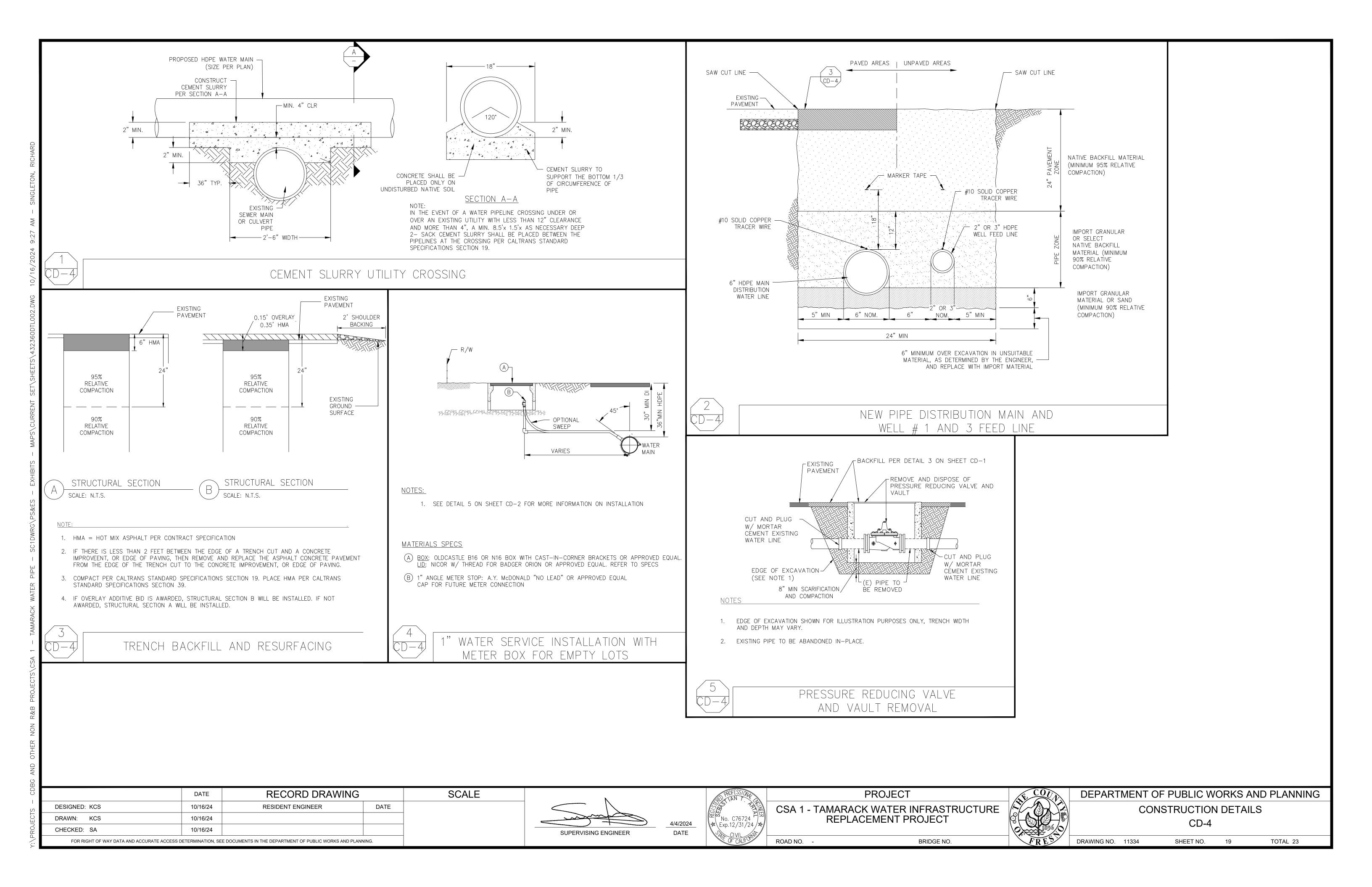


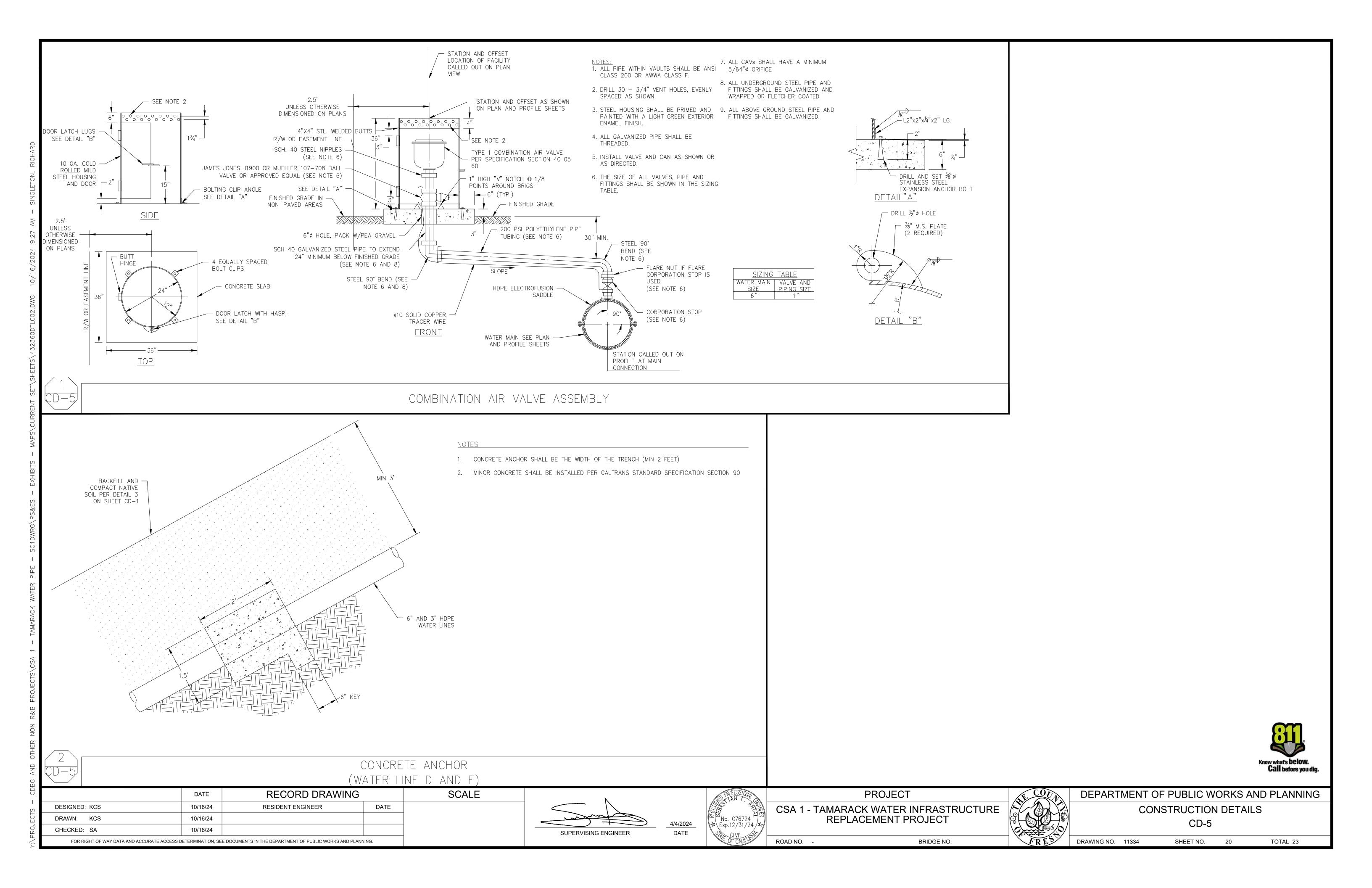
PROFESS/ONAL		PROJECT	COUN	DEPARTM	IENT OF	PUBLIC WO	ORKS AN	ND PLANNING	
No C76724		MARACK WATER INFRASTRUCTURE		OVERLAY PLAN					
Exp.12/31/24	r	REPLACEMENT PROJECT	1856			L-9			
OF CALIFORNIA	ROAD NO	BRIDGE NO.	FRES	DRAWING NO. 1	1334	SHEET NO.	15	TOTAL 23	











DESIGNED: KCS

DRAWN: KCS

CHECKED: SA

## NOTES:

- 1. ORIENTATION OF TANK ACCESSORIES, INLETS, DRAINS AND OUTLETS ARE DIAGRAMMATIC ONLY. PREFERRED ORIENTATION IS DEPICTED IN CONSTRUCTION DETAILS CD-6.
- 2. N/A
- 3. N/A
- 4. LOCATE INLET FLOAT VALVE ADJACENT TO THE ACCESS OPENING.
- 5. SLOPE FG AWAY PER SHEET CD-7.
- 6. TANK VENT TO BE EQUIPPED WITH #24 MESH, NON-CORRODIBLE SCREEN, PER EPA.
- 7. ALL CHEMICALS USED IN THE WATER SYSTEM, INCLUDING CHLORINE SHALL BE CERTIFIED UNDER NSF/ANSI STANDARDS 60.
- 8. ALL MATERIALS THAT COME INTO CONTACT WITH WATER SHALL BE LEAD FREE AND NSF/ANSI STANDARD 61 CERTIFIED TO DEMONSTRATE MATERIAL DOES NOT LEACH ANY CONTAMINANTS INTO THE DRINKING WATER.
- 9. CONTRACTOR SHALL FOLLOW ALL SITE PREPARATION RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT.
- 10. WRAP AND INSULATE ALL EXPOSED PIPE, FITTINGS, VALVES, DRAINS AND OVERFLOW PIPE.

NORTH ELEVATION

DATE

10/16/24

10/16/24

10/16/24

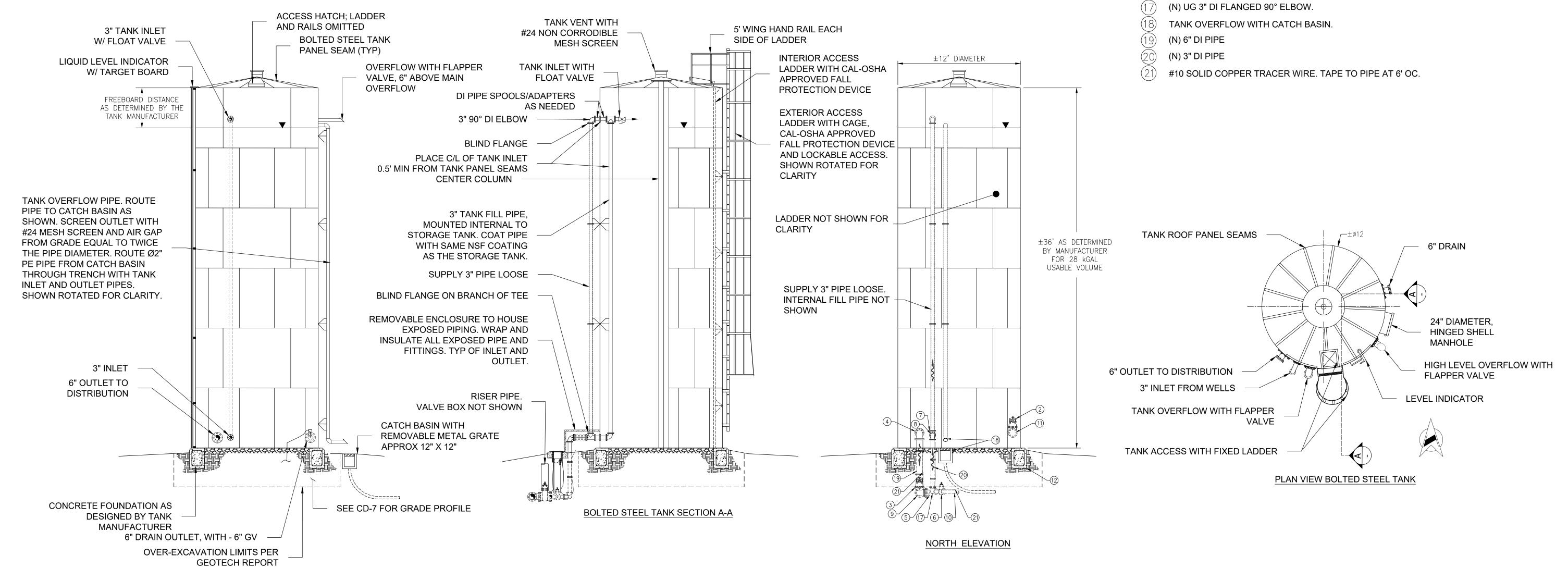
FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING

RECORD DRAWING

DATE

RESIDENT ENGINEER

SCALE



4/4/2024

DATE

SUPERVISING ENGINEER

C76724

ROAD NO. -

**★**\Exp.12/31/24/**★**/

**PROJECT** 

CSA 1 - TAMARACK WATER INFRASTRUCTURE

BRIDGE NO.

REPLACEMENT PROJECT

REFERENCE NOTES

(N) 6" DI FLANGED 90° ELBOW.

(N) 3" DI FLANGED 90° ELBOW.

(N) UG 6" DI MECHANICAL JOINT 90° ELBOW.

(N) 6" DI BLIND FLANGE FOR GATE VALVE.

INSTALL NEW ± 28,000 GAL BOLTED WATER STORAGE TANK.

(N) 6" DI RESILIENT WEDGE GATE VALVES WITH OPERATOR NUT.

(N) 3" DI TEE WITH BLIND FLANGE INSTALLED ON BRANCH SIDE.

(N) UG 6" DI RESILIENT WEDGE GATE VALVE WITH OPERATOR NUT. SEE DETAIL 3/CD-2.

INSTALL NEW UG 6", DR11, C906 HDPE PIPE. SEE SHEET L-6 FOR WATER LINE ALIGNMENT.

INSTALL NEW UG 3", DR11, C901 HDPE PIPE. SEE SHEET L-7 FOR WATER LINE ALIGNMENT.

TANK FOUNDATION. NOTE DEPTH OF FOUNDATION IN TANK PROFILE VIEW, PAGE CD-7.

DEPARTMENT OF PUBLIC WORKS AND PLANNING

**CONSTRUCTION DETAILS** 

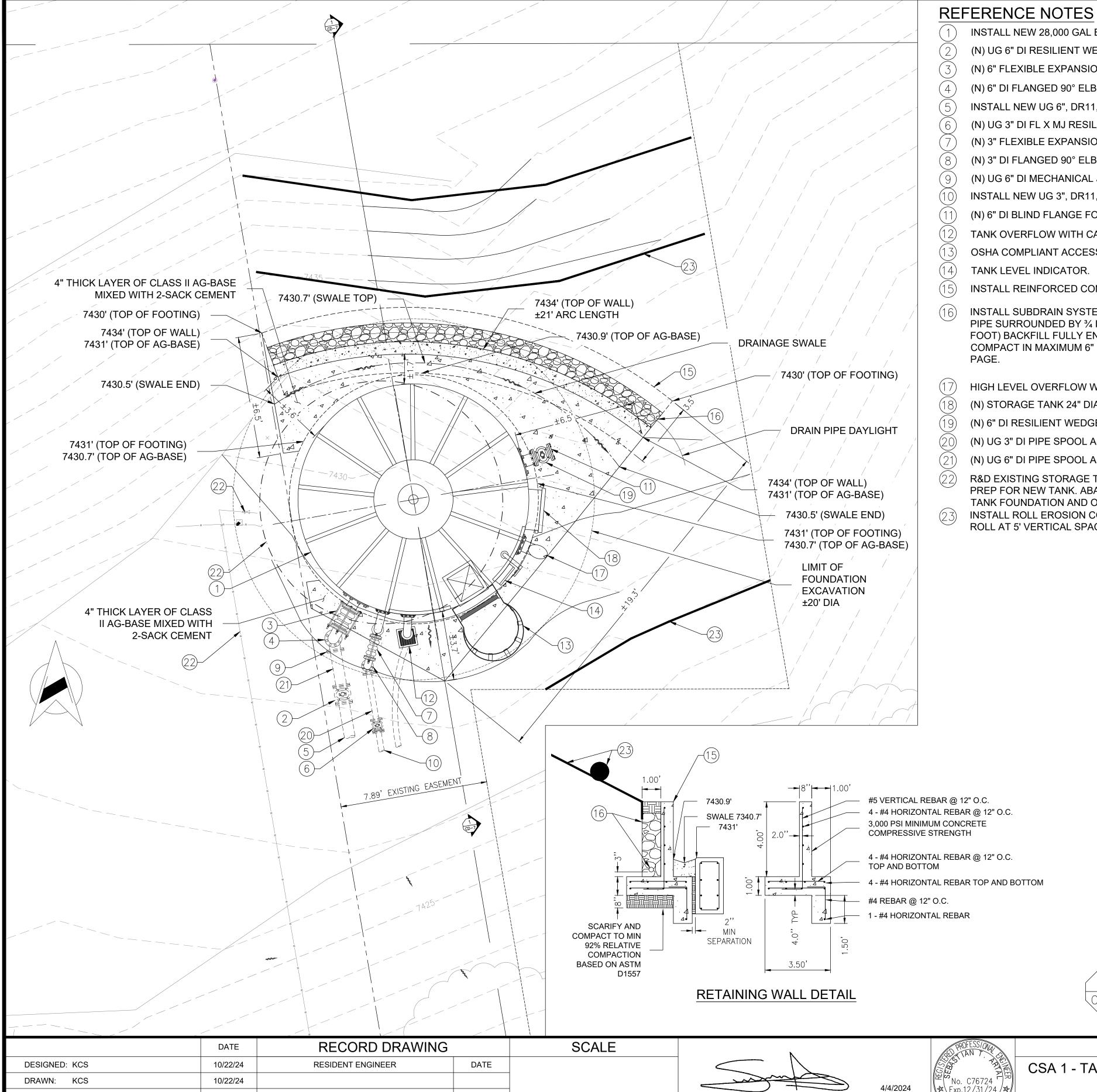
CD-6

SHEET NO. 21

TOTAL 23

DRAWING NO. 11334

(N) UG 3" DI RESILIENT WEDGE GATE VALVE WITH OPERATOR NUT. SEE DETAIL 3/CD-2.



CHECKED: SA

10/22/24

FOR RIGHT OF WAY DATA AND ACCURATE ACCESS DETERMINATION, SEE DOCUMENTS IN THE DEPARTMENT OF PUBLIC WORKS AND PLANNING

- INSTALL NEW 28,000 GAL BOLTED WATER STORAGE TANK.
- (N) UG 6" DI RESILIENT WEDGE GATE VALVES WITH OPERATOR NUT. SEE DETAIL 3/CD-2.
- (N) 6" FLEXIBLE EXPANSION JOINT, NSF61 CERTIFIED THAT ALLOWS 2" LATERAL DEFLECTION.
- (N) 6" DI FLANGED 90° ELBOW.
- INSTALL NEW UG 6", DR11, C906 HDPE PIPE. SEE SHEET L-6 FOR WATER LINE ALIGNMENT.
- (N) UG 3" DI FL X MJ RESILIENT WEDGE GATE VALVE WITH OPERATOR NUT. SEE DETAIL 3/CD-2.
  - (N) 3" FLEXIBLE EXPANSION JOINT, NSF61 CERTIFIED THAT ALLOWS 2" LATERAL DEFLECTION.
  - (N) 3" DI FLANGED 90° ELBOW.
  - (N) UG 6" DI MECHANICAL JOINT 90° ELBOW.
- INSTALL NEW UG 3", DR11, C901 HDPE PIPE. SEE SHEET L-7 FOR WATER LINE ALIGNMENT.
- (N) 6" DI BLIND FLANGE FOR GATE VALVE.
- TANK OVERFLOW WITH CATCH BASIN.
- OSHA COMPLIANT ACCESS LADDER.
- INSTALL REINFORCED CONCRETE RETAINING WALL PER DETAIL, THIS SHEET.
- INSTALL SUBDRAIN SYSTEM BEHIND CONCRETE WALL WITH 4" DIA PERFORATED DRAIN PIPE SURROUNDED BY ¾ INCH CRUSHED ROCK (MINIMUM 1 CUBIC FOOT PER LINEAL FOOT) BACKFILL FULLY ENCAPSULATED IN MIRAFI 140 N FILTER FABRIC, OR EQUIVALENT. COMPACT IN MAXIMUM 6" LIFTS TO A NON-YIELDING CONDITION. SEE WALL PROFILE THIS
- HIGH LEVEL OVERFLOW WITH FLAPPER VALVE.
- (N) STORAGE TANK 24" DIAMETER HINGED ACCESS
- (N) 6" DI RESILIENT WEDGE GATE VALVE WITH OPERATOR NUT.
- (N) UG 3" DI PIPE SPOOL AS NEEDED.

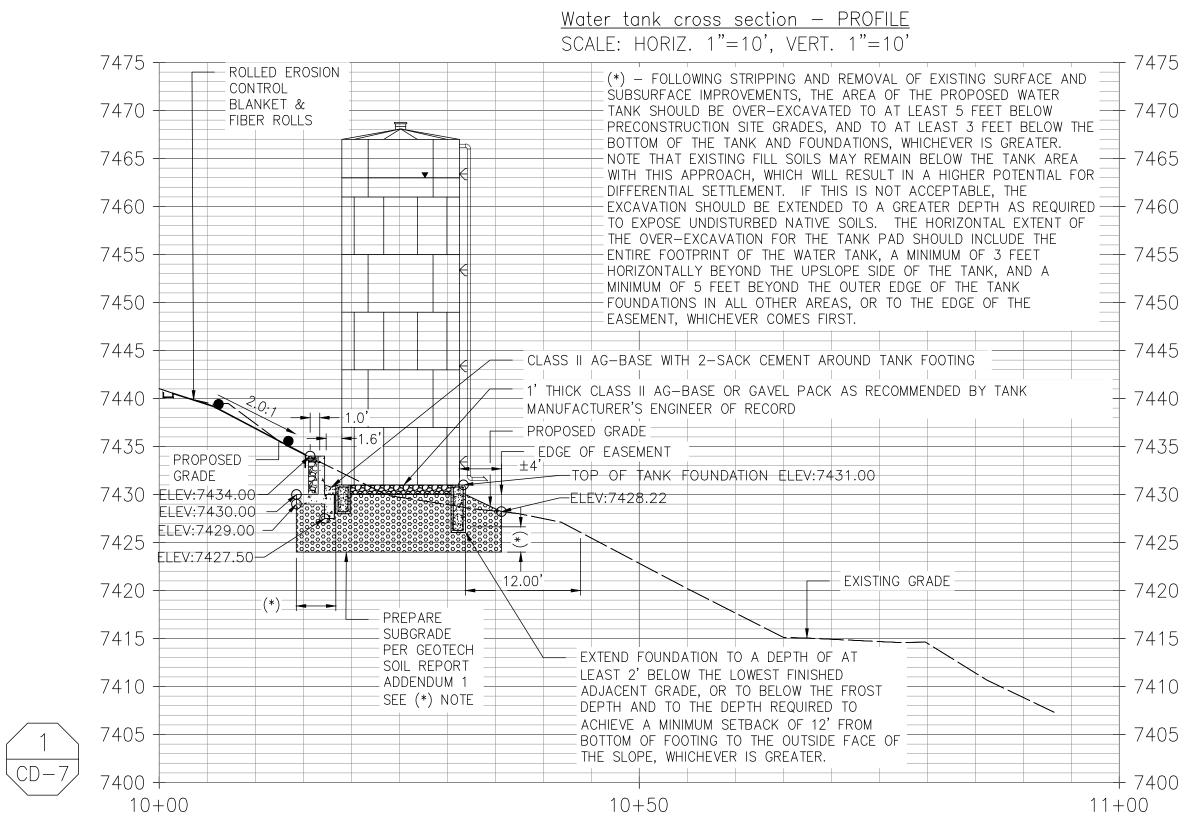
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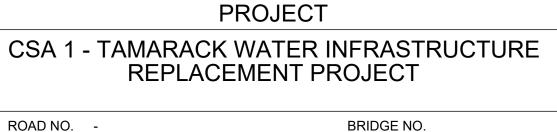
SUPERVISING ENGINEER

- (N) UG 6" DI PIPE SPOOL AS NEEDED.
- R&D EXISTING STORAGE TANK, OUTLET ELBOW, VALVES, ANY INLET COMPONENTS TO PREP FOR NEW TANK. ABANDON INLET & OUTLET PIPE IN PLACE AS NEEDED FOR NEW TANK FOUNDATION AND OVER EXCAVATION LIMITS. REFER TO GEOTECH REPORT.
- INSTALL ROLL EROSION CONTROL BLANKET OVER DISTURBED SOIL & INSTALL FIBER ROLL AT 5' VERTICAL SPACING MAX PER CALTRANS STD DETAIL H51.

#### **GENERAL NOTES**

- COAT ABOVE GROUND PIPING PER SPECIFICATIONS.
- CONTRACTOR SHALL VERIFY ACTUAL DIMENSIONS OF PIPING AND EQUIPMENT AND ADJUST PIPING AND EQUIPMENT LAYOUT DIMENSIONS AS NECESSARY. ADJUSTMENTS TO LAYOUT DIMENSIONS SHALL BE APPROVED IN ADVANCE BY THE ENGINEER.
- CONTRACTOR SHALL TEST THE INSTALLED SYSTEM, INCLUDING STARTUP AND SHUTDOWN, AND STABILITY OF THE WELL PUMPS, MOTORS AND SYSTEM COMPONENTS.
- CONTRACTOR SHALL FOLLOW ALL SITE PREPARATION RECOMMENDATIONS AS OUTLINED IN THE GEOTECHNICAL REPORT.
- (N)STORAGE TANK SHALL BE FILLED AND PRELOADED FOR A PERIOD OF THREE (3) WEEKS PER GEOTECHNICAL REPORT.
- INSULATE ALL EXPOSED PIPE, VALVES, DRAIN LINES, AND OVERFLOW LINES.
- 7. WRAP ALL UG DI PIPE, VALVES, FITTINGS PER SPECIFICATIONS.

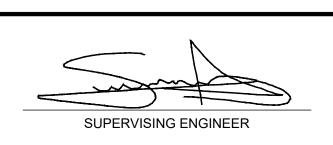






## DEPARTMENT OF PUBLIC WORKS AND PLANNING **CONSTRUCTION DETAILS** CD-7

DRAWING NO. 11334 SHEET NO. 22 TOTAL 23

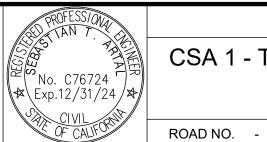


SCALE



4/4/2024

DATE





**PROJECT** 

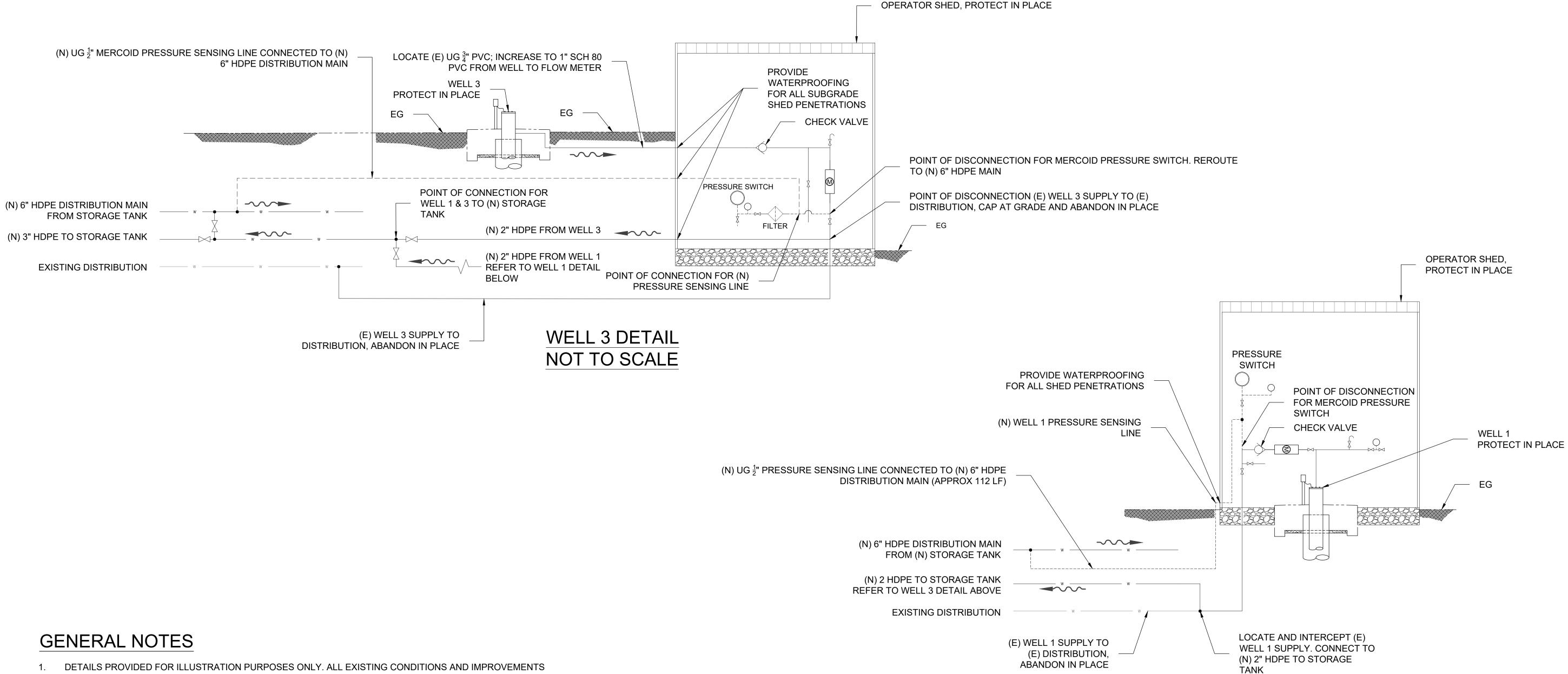
BRIDGE NO.



WELL 1 DETAIL

NOT TO SCALE

DEPARTMENT OF PUBLIC WORKS AND PLANNING CONSTRUCTION DETAILS CD-8 DRAWING NO. 11334 SHEET NO. 23 TOTAL 23



- DETAILS PROVIDED FOR ILLUSTRATION PURPOSES ONLY. ALL EXISTING CONDITIONS AND IMPROVEMENTS MAY NOT BE SHOWN.
- 2. CONTRACTOR SHALL VERIFY ACTUAL DIMENSIONS OF PIPING AND EQUIPMENT AND FURNISH PIPING, FITTINGS AND EQUIPMENT AS NECESSARY TO PROVIDE A FULLY OPERATIONAL SYSTEM. CONTRACTOR SHALL SUBMIT PROPOSED EQUIPMENT LAYOUT, INCLUDING MATERIALS PLANNED TO BE USED FOR APPROVAL OF THE ENGINEER.
- CONTRACTOR SHALL TEST THE INSTALLED SYSTEM, INCLUDING STARTUP AND SHUTDOWN, AND STABILITY OF THE PUMPS, MOTORS AND SYSTEM COMPONENTS.