CITY OF PLACERVILLE
MEASURE H&L IMPROVEMENT PROJECT

DRAWING INDEX		
SHT NO.	DRAWING	TITLE
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2	G-2	SYMBOLOGY, ABBREVIATIONS, GENERAL NOTES AND ALIGNMENT TABULATION
3	C-1	WATER MAIN REPLACEMENT & SEWER IMPROVEMENTS
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NO.	REVISIONS	APPROVAL BY	DATE

MOSQUITO ROAD STABILZATION PROJECT
PHASE I

PROJECT NO. 41819

SUBMITTED BY:

AARON C SCHIESTEL RCE: 77357
ASSOCIATE CIVIL ENGINEER
CITY OF PLACERVILLE

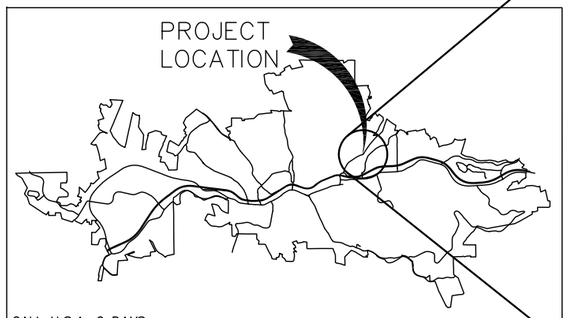
REGISTERED PROFESSIONAL ENGINEER
AARON C SCHIESTEL
No. C 77357
Exp. 6/30/21
CIVIL
STATE OF CALIFORNIA

APPROVED BY:

REBECCA NEVES RCE: 71920
CITY ENGINEER
CITY OF PLACERVILLE

OCTOBER, 2019

UTILITY REPRESENTATIVES			
UTILITY		REPRESENTATIVE	PHONE
SEWER/STORM:	CITY OF PLACERVILLE	CORY SCHIESTEL	(530) 642-5557
WATER:	CITY OF PLACERVILLE	CORY SCHIESTEL	(530) 642-5557
TELEPHONE:	AT&T	DARREN MORTENSON	(530) 621-6926
ELECTRICITY:	PG&E	JENNIFER DONOVAN	(530) 621-7246
CABLE T.V.:	COMCAST	JUSTIN WALLACE	(530) 292-8108
WATER:	EL DORADO IRRIGATION DISTRICT	PATRICK WILSON	(530) 642-4079

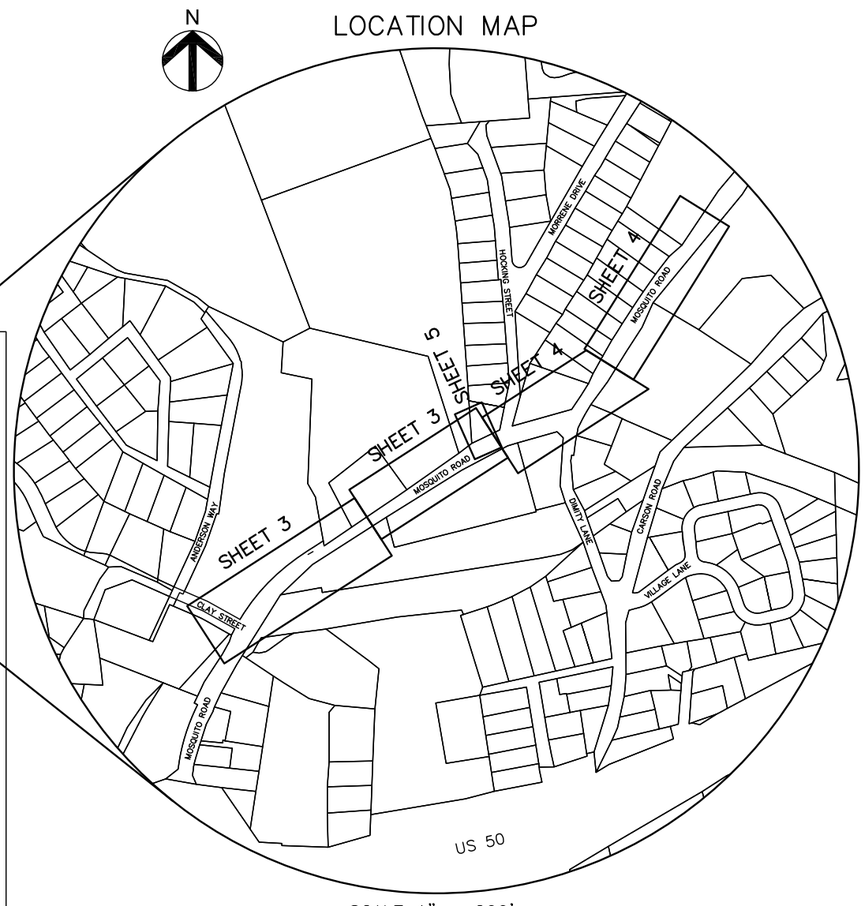


CALL U.S.A. 2 DAYS
BEFORE YOU DIG
1-800-642-2444
(UNDERGROUND UTILITY
LOCATIONS ARE APPROX)

USA NORTH 811
Call 811 Before You Dig

VICINITY MAP
(EL DORADO COUNTY)

LOCATION MAP



SCALE 1" = 200'

S:\CIP Projects\Mosquito Road Stabilization (41819)\04 Design Development\C-Plans\Mosquito Road Stabilization Project Phase 1 C-Plan Revised Alignment.dwg Oct 14, 2019 - 12:13pm

SYMBOLOGY

EXISTING	DESCRIPTION	PROPOSED
	EMBANKMENT SLOPE	
125	CONTOUR	125
	BASELINE	
	CENTERLINE	
	FLOW LINE	
	PROPERTY LINE	
E	ELECTRICITY	E
GAS	GAS MAIN	GAS
GAS	GAS SERVICE	GAS
S	SEWER	S
GAS	HIGH PRESSURE GAS	GAS
FO	FIBER OPTIC	FO
T	TELEPHONE	T
OHW	OVERHEAD WIRES	OHW
W	WATER	W
	DROP INLET	
	CLEAN OUT	CO
	HYDRANT	
	MANHOLE	
WM	WATER METER	
	LIGHT STANDARD	
	UTILITY POLE	
	WATER VALVE	
	EASEMENT	
	WORK EASEMENT	
(E) 12" SD	DRAIN PIPE ≤ 18"	(N) 12" SD
(E) 21" SD	DRAIN PIPE > 18"	(N) 21" SD
	EDGE PAVEMENT	
	R/W LINE	
	TOP BACK OF CURB	
	SIDEWALK	
	DRAINAGE DITCH FLOW	
	CUT LINE	C→···· C→···· C→····
	VEGETATION	
	SURVEY MONUMENT	
	ROADWAY CORE SAMPLE LOCATION	

EASEMENTS — UNDISTURBED SOIL

CONCRETE — DUMPED RIPRAP

AGGREGATE BASE — CRUSHED AGGREGATE

NATIVE BACKFILL — HYDROSEED

N

ARROW INDICATES DIRECTION OF PLAN NORTH

SECTION CUT MARKER

SECTION LETTER

SECTION
SCALE: X" =X"

*DRAWING WHERE SECTION VIEW IS FIRST CUT

ARROW INDICATES DIRECTION OF SECTION CUT

*DRAWING WHERE SECTION VIEW IS LOCATED

DETAIL MARKER

DETAIL NUMBER

DETAIL
SCALE: X" =X"

*DRAWING FROM WHERE DETAIL WAS TAKEN

DETAIL NUMBER

*DRAWING WHERE DETAIL IS LOCATED

ELEVATION MARKER

ELEVATION LETTER

ELEVATION
SCALE: X" =X"

*DRAWING FROM WHERE POINT OF VIEW MARKER CAN BE FOUND

ELEVATION LETTER

ARROW INDICATES POINT OF VIEW

*DRAWING WHERE ELEVATION IS LOCATED

*IF PLAN, SECTION OR DETAIL CALL-OUT AND DETAIL ARE SHOWN ON SAME DRAWING, THE DRAWING NUMBER IS REPLACED BY A (-).

GENERAL NOTES

1. ALL CONSTRUCTION WORK AND INSTALLATION SHALL CONFORM TO THE STATE OF CALIFORNIA STANDARD CONSTRUCTION SPECIFICATIONS AND ALL OF ITS DRAWINGS, DATED SEPTEMBER 2015. ALL WORK IS SUBJECT TO THE APPROVAL OF THE ENGINEER.

2. TOPOGRAPHIC MAPPING IS BASED UPON SURVEY DATED JULY 2019. AERIAL PHOTO TAKEN IN 2011.

3. THE BASELINES SHOWN ON THE DRAWINGS ARE THE CONSTRUCTION REFERENCE LINE ESTABLISHED FOR THIS PROJECT. THE CITY SHALL ESTABLISH, THE BASELINES AND ANY OFFSETS REQUIRED, UTILIZING THE REFERENCED MONUMENTATION.

4. NOTIFICATION OF UNDERGROUND SERVICE ALERT (U.S.A.) IS REQUIRED A MINIMUM OF 48 HOURS IN ADVANCE OF BEGINNING ALL EXCAVATION WORK.

5. UTILITY INFORMATION WAS COMPILED FROM DATA PROVIDED BY THE UTILITY OWNERS AND LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL EXPOSE AND VERIFY THE ACTUAL LOCATION AND ELEVATION OF ALL EXISTING UTILITIES IN THE CONSTRUCTION AREA. THE ELEVATION AND LOCATION DATA SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL ANTICIPATE, AND ALLOW TIME FOR, NECESSARY RELOCATIONS. ALL EXISTING UNDERGROUND AND OVERHEAD UTILITIES SHALL BE PROTECTED FROM CONSTRUCTION EQUIPMENT AND OPERATIONS.

6. UTILITY RELOCATION REQUIRED FOR THE CONSTRUCTION OF THESE FACILITIES WILL BE PERFORMED BY THE UTILITY COMPANY, UNLESS OTHERWISE NOTED.

7. TEMPORARY OR PERMANENT RELOCATION OR ALTERATION OF UTILITIES REQUESTED BY THE CONTRACTOR FOR THEIR CONVENIENCE SHALL BE THEIR RESPONSIBILITY AND THEY SHALL MAKE ALL ARRANGEMENTS AND BEAR ALL COSTS.

8. FOR ALL TRENCH EXCAVATIONS FIVE FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL OBTAIN A PERMIT FROM CAL OSHA (2424 ARDEN WAY, STE 115, (916) 263-2800) PRIOR TO BEGINNING ANY EXCAVATION. A COPY OF THIS PERMIT SHALL BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.

9. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR FURNISHING, INSTALLING AND MAINTAINING ALL WARNING SIGNS AND DEVICES NECESSARY TO SAFEGUARD THE GENERAL PUBLIC AND THE WORK AND TO PROVIDE FOR THE PROPER AND SAFE ROUTING OF VEHICULAR AND PEDESTRIAN TRAFFIC DURING THE PERFORMANCE OF THE WORK.

10. PIPE TIE-INS AT EXISTING STRUCTURES SHALL BE MADE USING RESILIENT CONNECTORS PER ASTM STANDARD C923-96-02.

11. ALL MANHOLE RIM AND INLET ELEVATIONS ARE APPROXIMATE AND SHOWN FOR BID ESTIMATION ONLY. MANHOLE RIMS AND DRAIN INLET FRAMES SHALL BE SET TO MATCH EXISTING PROFILES UNLESS NOTED OTHERWISE.

12. ALL PAVEMENT MARKINGS DISTURBED SHALL BE REPLACED, TO THE SATISFACTION OF THE CITY, AT NO EXTRA COST.

13. CONTRACTOR SHALL PROTECT ADJACENT IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO PAVEMENT, FROM INJURY OR DAMAGE. THE CONTRACTOR SHALL UTILIZE SUITABLE SAFEGUARDS TO PROTECT ADJACENT IMPROVEMENTS FROM INJURY OR DAMAGE. IF SUCH IMPROVEMENTS ARE INJURED OR DAMAGED BY REASON OF CONTRACTOR'S OPERATIONS, THEY SHALL BE REPLACED OR RESTORED TO A CONDITION AS GOOD AS WHEN THE CONTRACTOR ENTERED UPON THE WORK, AND ALL EXPENSES OF WHATEVER NATURE ARISING FROM SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR.

14. THE EXISTING PAVEMENT ON THE PROJECT ROADS IS MORE THAN 5 YEARS OLD.

15. PRECAST STRUCTURES MUST USE A BOOT OR INTEGRAL CONNECTION. THE MAXIMUM DEFLECTION OF A BOOT IS 7°. IF THE DEFLECTION IS MORE THAN 7°, THE UNIT MUST BE BUILT AS A CAST IN PLACE STRUCTURE.

16. HMA PAVING THICKNESS TO BE 5" UNLESS OTHERWISE NOTED.

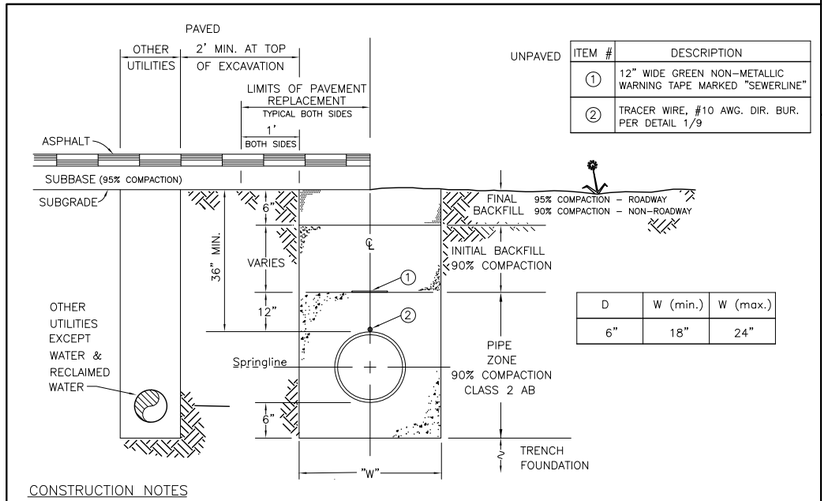
17. EXISTING STATIC WATER MAIN PRESSURE MEASURED AT (E) FIRE HYDRANT LOCATED AT 2890 MOSQUITO ROAD AT 100 PSI ON AUGUST 24, 2017.

ALIGNMENT TABULATION

BASELINE NAME	POINT TYPE	BASELINE STA	R.E.Y. ENGINEERS SURVEY ALIGNMENT NAME	STA	OFFSET
A	POB	1+85.1	MOSQUITO ROAD	10+45.7	4.77 LT
	PI	2+45.1	MOSQUITO ROAD	11+05.2	7.61 LT
	PI	4+08.2	MOSQUITO ROAD	12+66.9	7.17 LT
	PI	8+94.6	MOSQUITO ROAD	17+52.6	9.42 LT
	PI	10+09.4	MOSQUITO ROAD	18+65.9	12.60 LT
	PI	10+62.7	MOSQUITO ROAD	19+18.3	11.76 LT
	PI	10+71.5	MOSQUITO ROAD	19+18.4	2.96 LT
	PI	10+96.9	MOSQUITO ROAD	19+43.8	2.84 LT
	PI	11+06.0	MOSQUITO ROAD	19+44.1	11.89 LT
	PI	12+53.1	MOSQUITO ROAD	20+92.4	6.37 LT
	PI	13+03.0	MOSQUITO ROAD	21+44.4	1.06 LT
	PI	13+97.0	MOSQUITO ROAD	22+38.4	3.16 LT
	PI	14+97.0	MOSQUITO ROAD	23+38.3	2.57 LT
	PI	16+82.0	MOSQUITO ROAD	25+24.2	4.55 LT
	POE	19+00.0	MOSQUITO ROAD	27+40.9	5.76 LT
B	POB	1+00.0	MOSQUITO ROAD	18+61.1	11.04 RT
	PI	1+50.3	MOSQUITO ROAD	18+60.9	29.26 LT
	POE	1+83.5	MOSQUITO ROAD	18+55.2	61.85 LT

ABBREVIATIONS

(A)	ABANDON
AB	AGGREGATE BASE
AC	ASPHALT CONCRETE
ACP	ASBESTOS CEMENT PIPE
ADDNL	ADDITIONAL
APN	ASSESSOR PARCEL NUMBER
APPROX	APPROXIMATELY
ASB	AGGREGATE SUBBASE
BC	BEGIN CURVE
℄ OR BL	BASE LINE
BM	BENCH MARK
CAP	CORRUGATED ALUMINUM PIPE
CC	CENTER TO CENTER
CIP	CAST-IN-PLACE
CIPP	CURED-IN-PLACE PIPE
C&G	CURB AND GUTTER
CJ	COLD JOINT
℄ or CL	CENTER LINE
CLS	CLASS
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
CONC	CONCRETE
CONST	CONSTRUCT
CONST'N	CONSTRUCTION
CONT	CONTINUOUS
CP	NON REINFORCED CONCRETE PIPE
CSP	CORRUGATED STEEL PIPE
CF	CUBIC FOOT/FEET
CY	CUBIC YARD/YARDS
(D)	DEMOLISH
D/S	DOWN STREAM
DBL.	DOUBLE
DI	DROP INLET
DIA or ⌀	DIAMETER
DIP	DUCTILE IRON PIPE
DRWY	DRIVEWAY
(E)	EXISTING
E	ELECTRICAL
EA	EACH
EBC	END AND BEGIN CURVE
EC	END OF CURVE
EG	EXISTING GRADE
EID	EL DORADO IRRIGATION DISTRICT
℄ or EL	EDGE LINE
ELEV	ELEVATION
E/P	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
EXP	EXPANSION
EW	EACH WAY
FES	FLARED END SECTION
FG	FINISH GRADE
℄ or FL	FLOW LINE
FO	FIBER OPTICS
FT	FEET
FTP	FLAT TOP
FUT	FUTURE
G	GAS
GAR	GARAGE
GD	GUTTER DRAIN
GFL	GUTTER FLOW LINE
GRND	GROUND
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HGL	HYDRAULIC GRADE LINE
HORIZ	HORIZONTAL
INV	INVERT
IS	IRRIGATION SYSTEM
JP	JOINT POLE
JT	JOINT TRENCH
L	LENGTH
LF	LINEAL FOOT/FEET
LIP	LIP OF GUTTER
LPB	LIGHT PULL BOX
LS	LUMP SUM
LT	LEFT
MANUF	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
(N)	NEW
NTS	NOT TO SCALE
OC	ON CENTER
(P)	PROPOSED
PCC	POINT OF CHANGE OF CURVATURE
℄ or PL	PROPERTY LINE
PI	POINT OF INTERSECTION
POB	POINT OF BEGINNING
POE	POINT OF ENDING
PRC	POINT OF REVERSE CURVATURE
PP	POWER POLE
PNT	POINT
PROP	PROPOSED
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE PIPE
PW	POTABLE WATER
(R)	REMOVE
r	RADIUS
RAP	RIBBED ALUMINUM PIPE
RCP	REINFORCED CONCRETE PIPE
RDWY	ROADWAY
REINF	REINFORCED/REINFORCING
RL	RESTRAINED JOINT LENGTH
R&R	REMOVE AND REPLACE
RSP	RIBBED STEEL PIPE
RT	RIGHT
R/W	RIGHT OF WAY
S	SANITARY SEWER
SS	SANITARY SEWER
SCO	SANITARY SEWER CLEAN OUT
SSCO	SANITARY SEWER CLEAN OUT
SD	STORM DRAIN
SF	SQUARE FOOT/FEET
SHT	SHEET
SP	SPECIAL PROVISIONS
SPEC	SPECIFICATION
SRP	STEEL RIBBED PIPE
STA	STATION
STD	STANDARD
SW	SIDEWALK
T	TANGENT
TB	TOP OF BANK
TBM	TEMPORARY BENCH MARK
TBW	TOP BACK OF WALK
THK	THICK
TOC	TOP OF CURB
TP	TELEPHONE POLE
TYP	TYPICAL
U/S	UPSTREAM
V	DEPTH
VAR	VARIES
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
WE	TEMPORARY WORK EASEMENT
W	WATER MAIN
W/	WITH
WM	WATER MAIN
WS	WATER SEAL
WSEL	WATER SURFACE ELEVATION
@	AT
Δ	DELTA/DIFFERENCE



ITEM #	DESCRIPTION
1	12" WIDE GREEN NON-METALLIC WARNING TAPE MARKED "SEWERLINE"
2	TRACER WIRE, #10 AWG. DIR. BUR. PER DETAIL 1/9

D	W (min.)	W (max.)
6"	18"	24"

CONSTRUCTION NOTES

1. PERMITS SHALL BE REQUIRED FOR ANY EXCAVATION OVER 5 FEET IN DEPTH, INTO WHICH A PERSON IS REQUIRED TO DESCEND OR ANY EXCAVATION LESS THAN 5 FEET IN DEPTH IN SOILS WHERE HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED AND INTO WHICH A PERSON IS REQUIRED TO DESCEND.
2. PIPE TO BE LAID WITH LABEL UP ON EACH JOINT.
3. ROAD REPAIR SHALL CONFORM TO ROAD AGENCY PERMIT CONDITIONS AND SPECIFICATIONS.
4. COMPACTION IS RELATIVE TO CAL TRANS CALIF. TEST 231F OR ASTM 1557
5. WHEN COUNTY OR CITY ENCROACHMENT PERMIT CONDITIONS ARE MORE RESTRICTIVE, THEY WILL TAKE PRECEDENCE.
6. NO OTHER WET UTILITIES PERMITTED WITHIN 10' HORIZONTALLY AND/OR 1' VERTICALLY OF SEWER FACILITIES.
7. INSTALL #10 TRACER WIRE ON ALL APPURTENANCES. INSTALL A PULL BOX AT EVERY 1000 FEET INTERVAL OF TRACING WIRE ALONG THE PIPE MAIN.
8. PIPE ZONE BACKFILL SHALL BE CLASS 2 AB. INITIAL AND FINAL BACKFILL SECTIONS SHALL BE CLASS 2 AB. FINAL BACKFILL IN UNPAVED AREAS SHALL BE 12" NATIVE SOIL.

SEWER TRENCH SECTION (1/5)
SCALE: NOT TO SCALE

NO.	REVISIONS	APPROVAL BY	DATE
DRAWN	A.C.S.		
DESIGNED	A.C.S.		
APPROVED	REBECCA NEVES		
DATE	10/14/19		
FILE NO.	N/A		
GRID NO.	N/A		
CONTRACT NO.	41819		
DATE	10/14/19		

10/14/19
DATE
PROJECT ENGINEER
A.C. SCHIESTEL

CITY OF PLACERVILLE
ENGINEERING DEPARTMENT
3101 CENTER STREET
PLACERVILLE, CA 95667
(530) 642-5250

PLANS FOR THE CONSTRUCTION OF
MOSQUITO ROAD STABILIZATION PROJECT PHASE - I
CITY OF PLACERVILLE

SYMBOLOGY, ABBREVIATIONS, GENERAL NOTES, AND ALIGNMENT TABULATION

GENERAL

DRAWING G-2
SHEET: 2 OF 10

SCALE
HORZ: AS NOTED
VERT: AS NOTED

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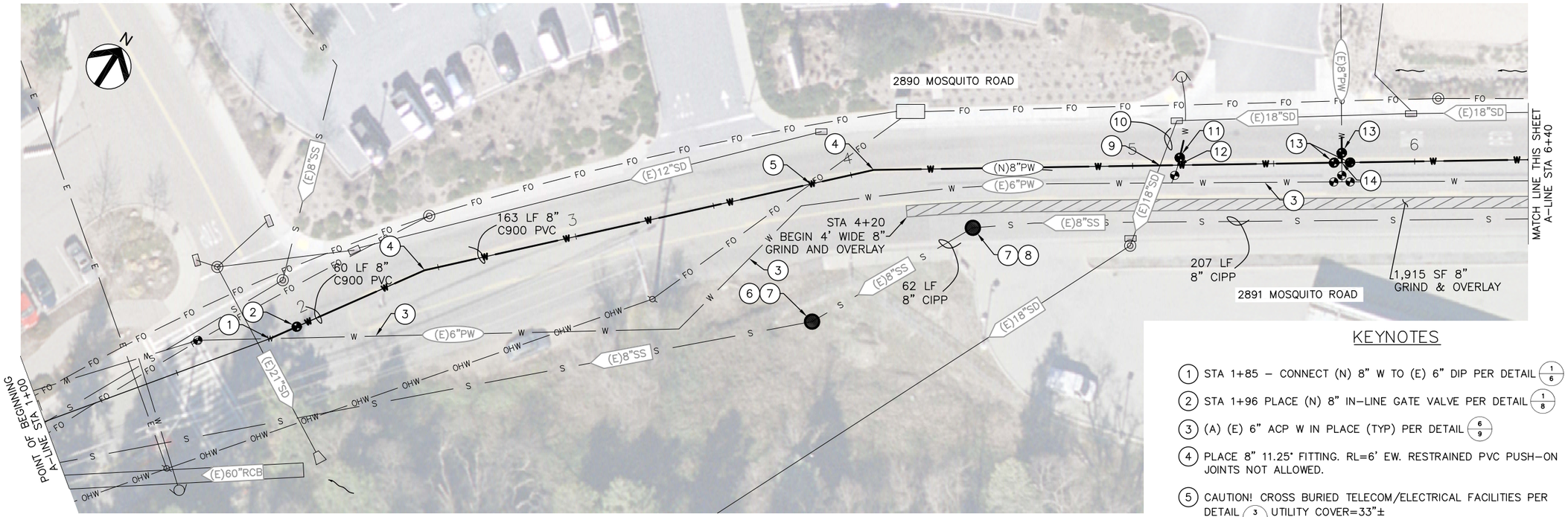
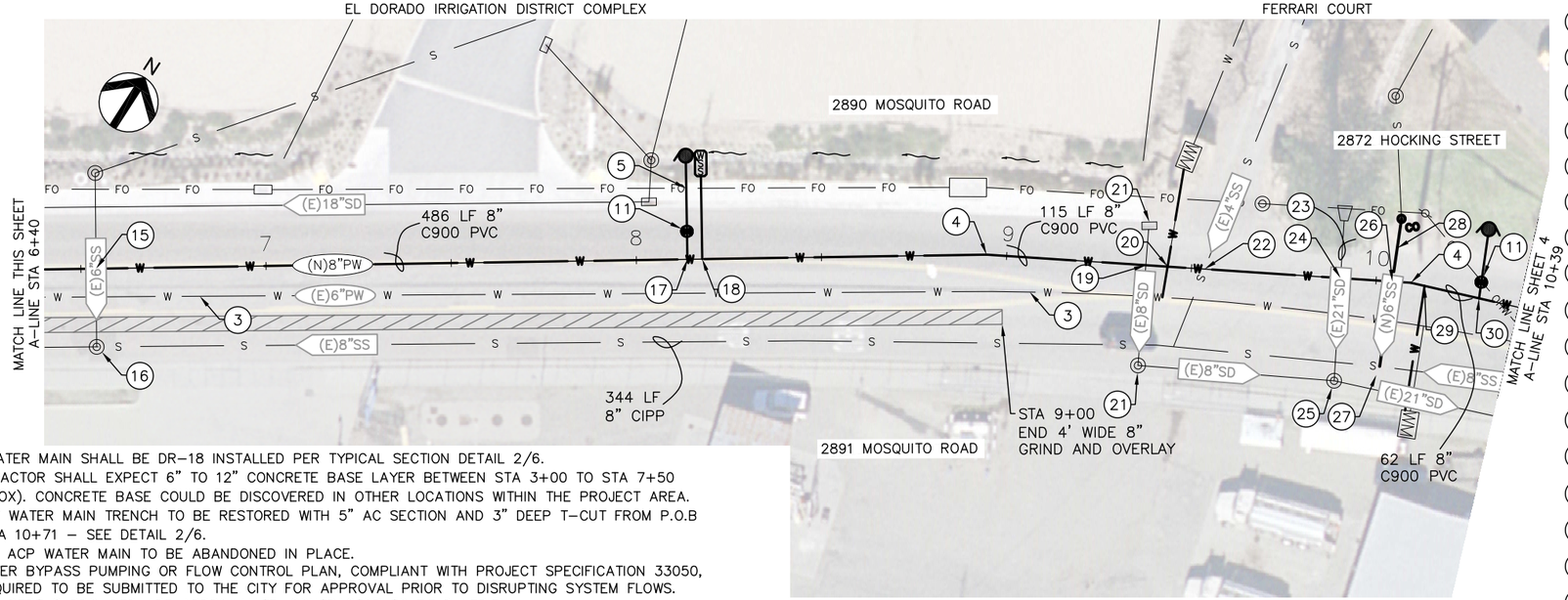


GRAPHIC SCALE
40 20 10 0 20 60
(IN FEET)
1 inch = 20 ft.

MOSQUITO ROAD



MOSQUITO ROAD

NOTES:

1. (N) WATER MAIN SHALL BE DR-18 INSTALLED PER TYPICAL SECTION DETAIL 2/6.
2. CONTRACTOR SHALL EXPECT 6" TO 12" CONCRETE BASE LAYER BETWEEN STA 3+00 TO STA 7+50 (APPROX). CONCRETE BASE COULD BE DISCOVERED IN OTHER LOCATIONS WITHIN THE PROJECT AREA.
3. (N) 8" WATER MAIN TRENCH TO BE RESTORED WITH 5" AC SECTION AND 3" DEEP T-CUT FROM P.O.B TO STA 10+71 – SEE DETAIL 2/6.
4. (E) 6" ACP WATER MAIN TO BE ABANDONED IN PLACE.
5. A SEWER BYPASS PUMPING OR FLOW CONTROL PLAN, COMPLIANT WITH PROJECT SPECIFICATION 33050, IS REQUIRED TO BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO DISRUPTING SYSTEM FLOWS.
6. COVER DEPTHS PROVIDED ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY.
7. LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY.
8. CIPP LINING SEGMENTS TO BE INSTALLED PER PROJECT SPECIFICATION 33311.
9. ALL FINAL ROADWAY STRIPING SHALL BE TEMPORARY TAPE PER PROJECT SPEC SECTION 02575.
10. INSTALL (N) WATER QUALITY SAMPLING STATION PER THE KORALEEN SHOP DRAWING FOUND IN APPENDIX B OF THE PROJECT SPECIFICATIONS.

KEYNOTES

1. STA 1+85 – CONNECT (N) 8" W TO (E) 6" DIP PER DETAIL 1/6
2. STA 1+96 PLACE (N) 8" IN-LINE GATE VALVE PER DETAIL 1/8
3. (A) (E) 6" ACP W IN PLACE (TYP) PER DETAIL 6/9
4. PLACE 8" 11.25° FITTING. RL=6' EW. RESTRAINED PVC PUSH-ON JOINTS NOT ALLOWED.
5. CAUTION! CROSS BURIED TELECOM/ELECTRICAL FACILITIES PER DETAIL 3/6 UTILITY COVER=33"±
6. END (D/S) 62 LF 8" CIPP LINING SEGMENT.
7. INSTALL (N) CIP S MH PER EID STD DWG S09B & S09E (SEE APPENDIX C OF SPECS). <10' COVER TO (E) MAIN. CONTRACTOR TO DETERMINE EXACT LOCATION OF (E) BEND IN THE FIELD.
8. END (D/S) 207 LF 8" CIPP S LINING SEGMENT.
9. CROSS 18" CMP SD PIPE PER DETAIL 4/6
10. PLACE 43 LF 18" CIPP CMP LINING.
11. PLACE (N) 6" GATE VALVE PER DETAIL 1/8
12. STA 5+16 – CONNECT TO (E) 6" FH CONNECTION PER DETAIL 4/6
13. PLACE (N) 8" TEE GATE VALVE PER DETAIL 1/8
14. STA 5+74 – CONNECT TO (E) 8" EID SERVICE PER DETAIL 2/7
15. MAINTAIN 1' MIN CLEAR OVER TOP OF (E) 6" S PER 1/5
16. END (D/S) 344 LF 8" CIPP LINING SEGMENT.
17. STA 8+14 – INSTALL (N) DRY BARREL HYDRANT PER DETAIL 2/8
18. STA 8+18 – INSTALL (N) WATER SAMPLING STATION SEE NOTE 10.
19. (E) 8" SD. REMOVE AND (A) AS NECESSARY. UTILITY COVER=21"±
20. REPLACE (E) 2" SERVICE TO (E) 2" METER PER DETAIL 3/8
21. REMOVE (E) SD MH & DI PER SPEC. (A) SD PIPES IN PLACE PER 6/9
22. MAINTAIN 1' MIN CLEAR OVER TOP OF (E) 4" S PER 1/10
23. PLACE (D/S) 41 LF OF 21" CIPP CMP LINING.
24. CROSS (E) 21" CMP SD PER DETAIL 2/10
25. PROTECT (E) SD MH IN PLACE.
26. MAINTAIN 1' MIN CLEAR OVER TOP OF (N) SEWER. SEE SHEET 5
27. INSTALL (N) CIP S MH PER EID STD DWG S09B & S09E (SEE APPENDIX C OF SPECS). (E) MAIN COVER APPROXIMATELY 4'. CONTRACTOR TO DETERMINE EXACT LOCATION OF WYE CONNECTION IN THE FIELD. SEE SHEET 5.
28. PLACE 38' OF (N) 6" S MAIN. SEE SHEET 5.
29. REPLACE (E) 1" SERVICE. CONNECT TO (E) METER AND (N) MAIN PER 4/8 DO NOT INSTALL (N) METER OR PRESSURE REGULATOR.
30. STA 10+28 – INSTALL NEW DRY BARREL HYDRANT PER DETAIL 2/8

NO.	REVISIONS	DATE	APPROVAL BY	DATE
	DRAWN A.C.S.	10/14/19		
	DESIGNED A.C.S.	10/14/19		
	APPROVED REBECCA NEVES	DATE		

DATE 10/14/19
CONTRACT NO. 41819
GRID NO. N/A
FILE NO. N/A

10/14/19 DATE
PROJECT ENGINEER A.C. SCHIESTEL

CITY OF PLACERVILLE
ENGINEERING DEPARTMENT
3101 CENTER STREET
PLACERVILLE, CA 95667
(530) 642-5250

PLANS FOR THE CONSTRUCTION OF
MOSQUITO ROAD STABILIZATION PROJECT PHASE - I
WATER MAIN REPLACEMENT AND SEWER IMPROVEMENTS
CITY OF PLACERVILLE

PLAN VIEW
DRAWING C-1
SHEET: 3 OF 10
SCALE
HORZ: AS NOTED
VERT: AS NOTED

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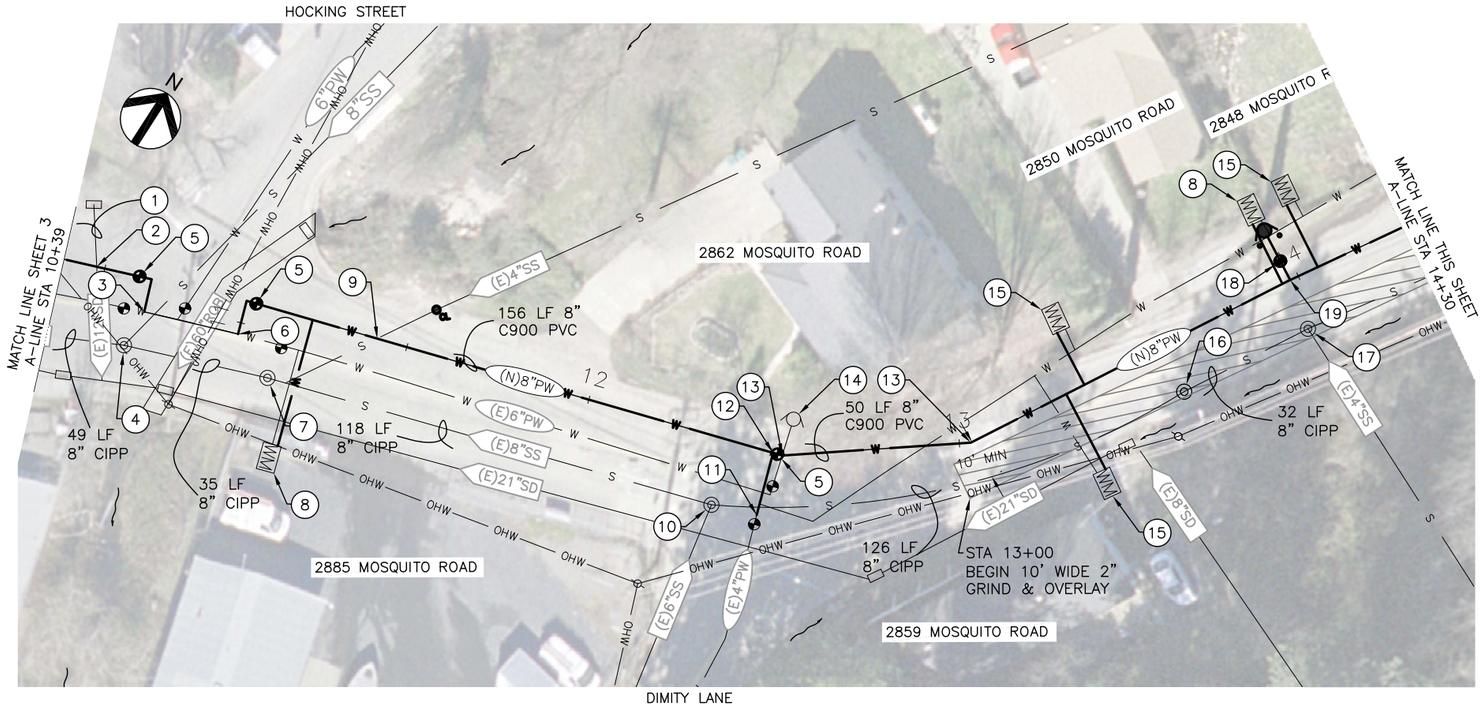
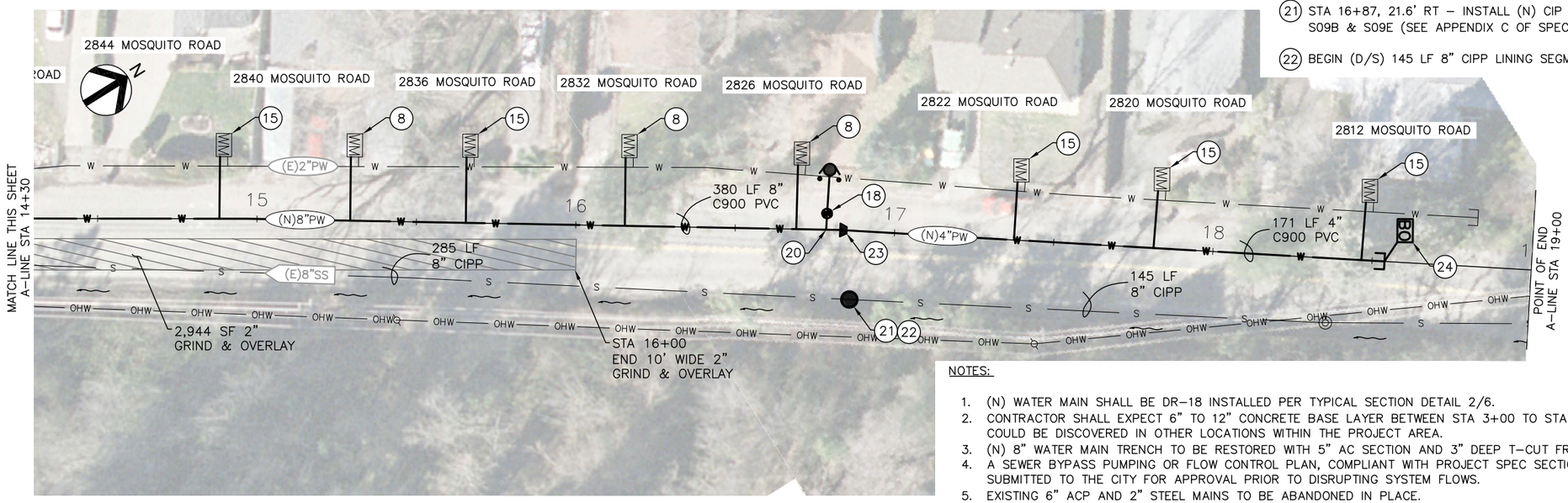


GRAPHIC SCALE
40 20 10 0 20 60
(IN FEET)
1 inch = 20 ft.

MOSQUITO ROAD



MOSQUITO ROAD

KEYNOTES

1. PLACE 45 LF OF 12" CIPP CMP LINING.
2. CROSS 12" CMP SD PIPE PER DETAIL 3/10 UTILITY COVER=12"±.
3. STA 10+71 – CONNECT (N) 8" W TO (E) 6" ACP PER DETAL 4/7 COVER=36"±
4. END (D/S) 35 LF 8" CIPP LINING SEGMENT.
5. PLACE (N) 8" GATE VALVE PER DETAIL 1/8
6. STA 10+97 – CONNECT (N) W TO (E) 6" ACP PER DETAIL 4/7 COVER=36"±.
7. END (D/S) 118 LF 8" CIPP LINING SEGMENT.
8. TYPE 1 METER REPLACEMENT – INSTALL (N) SERVICE, METER, RESIDENTIAL PRESSURE REGULATOR & TRAFFIC RATED METER BOX PER DETAIL 4/9
9. MAINTAIN 1' MIN CLEAR OVER TOP OF (E) 4" S PER 4/10
10. END (D/S) 126 LF 8" CIPP LINING SEGMENT.
11. CONNECT 15' (N) 4" W TO (E) 4" W PER DETAIL 3/7
12. 8"X8"X4" TEE FITTING
13. 8" 22.5° FITTING. RL=6' EW
14. REMOVE (E) HYDRANT. PER DETAIL 1/7 & 3/7
15. TYPE 2 METER REPLACEMENT – INSTALL (N) SERVICE, METER, RESIDENTIAL PRESSURE REGULATOR & TRAFFIC RATED BOX AND LID PER DETAIL 5/9
16. END (D/S) 32 LF 8" CIPP LINING SEGMENT.
17. END (D/S) 285 LF 8" CIPP LINING SEGMENT.
18. INSTALL 6" GATE VALVE PER 1/8
19. STA 13+98 – INSTALL NEW DRY BARREL HYDRANT PER DETAIL 2/8 PLACE TWO NEW BOLLARDS PER 5/7
20. STA 16+79 – INSTALL NEW DRY BARREL HYDRANT PER DETAIL 2/8 PLACE TWO NEW BOLLARDS PER 5/7
21. STA 16+87, 21.6' RT – INSTALL (N) CIP SEWER MANHOLE PER EID STD DWG S09B & S09E (SEE APPENDIX C OF SPECS). <10' COVER TO (E) MAIN.
22. BEGIN (D/S) 145 LF 8" CIPP LINING SEGMENT.
23. STA 16+83 – 8" X 4" REDUCER
24. STA 18+60, 10.0' LT – INSTALL (N) 2" AIR VALVE AND 2" DEAD-END BLOW-OFF ASSEMBLY PER DETAIL 5/8 & 3/9

NOTES:

1. (N) WATER MAIN SHALL BE DR-18 INSTALLED PER TYPICAL SECTION DETAIL 2/6.
2. CONTRACTOR SHALL EXPECT 6" TO 12" CONCRETE BASE LAYER BETWEEN STA 3+00 TO STA 7+50 (APPROX). CONCRETE BASE COULD BE DISCOVERED IN OTHER LOCATIONS WITHIN THE PROJECT AREA.
3. (N) 8" WATER MAIN TRENCH TO BE RESTORED WITH 5" AC SECTION AND 3" DEEP T-CUT FROM STA 10+71 TO P.O.E..
4. A SEWER BYPASS PUMPING OR FLOW CONTROL PLAN, COMPLIANT WITH PROJECT SPEC SECTION 33050, IS REQUIRED TO BE SUBMITTED TO THE CITY FOR APPROVAL PRIOR TO DISRUPTING SYSTEM FLOWS.
5. EXISTING 6" ACP AND 2" STEEL MAINS TO BE ABANDONED IN PLACE.
6. LOCATION OF WATER METERS ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY.
7. LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY.
8. MAINTAIN 10' CLEAR (HORIZONTAL) BETWEEN WATER AND SEWER PIPES.
9. COVER DEPTHS PROVIDED ARE APPROXIMATE. CONTRACTOR TO FIELD VERIFY.
10. CIPP LINING SEGMENTS TO BE INSTALLED PER PROJECT SPECIFICATION 33311.
11. ALL FINAL ROADWAY STRIPING SHALL BE TEMPORARY PER PROJECT SPEC SECTION 02575.

NO.	REVISIONS	DATE	APPROVAL BY	DATE
	DESIGNED A.C.S.	APPROVED REBECCA NEVES	10/14/19	
	DRAWN A.C.S.	DATE	10/14/19	
	FILE NO. N/A	GRID NO. N/A	CONTRACT NO. 41819	DATE 10/14/19

PROFESSIONAL ENGINEER No. C 71357 Exp. 6/30/21 CIVIL STATE OF CALIFORNIA
10/14/19 DATE
PROJECT ENGINEER A.C. SCHIESTEL

CITY OF PLACERVILLE
ENGINEERING DEPARTMENT
3101 CENTER STREET
PLACERVILLE, CA 95667
(530) 642-5250

PLANS FOR THE CONSTRUCTION OF
MOSQUITO ROAD STABILIZATION PROJECT PHASE - I
WATER MAIN REPLACEMENT AND SEWER IMPROVEMENTS
CITY OF PLACERVILLE

PLAN VIEW

DRAWING C-2
SHEET: 4 OF 10

SCALE
HORZ: AS NOTED
VERT: AS NOTED

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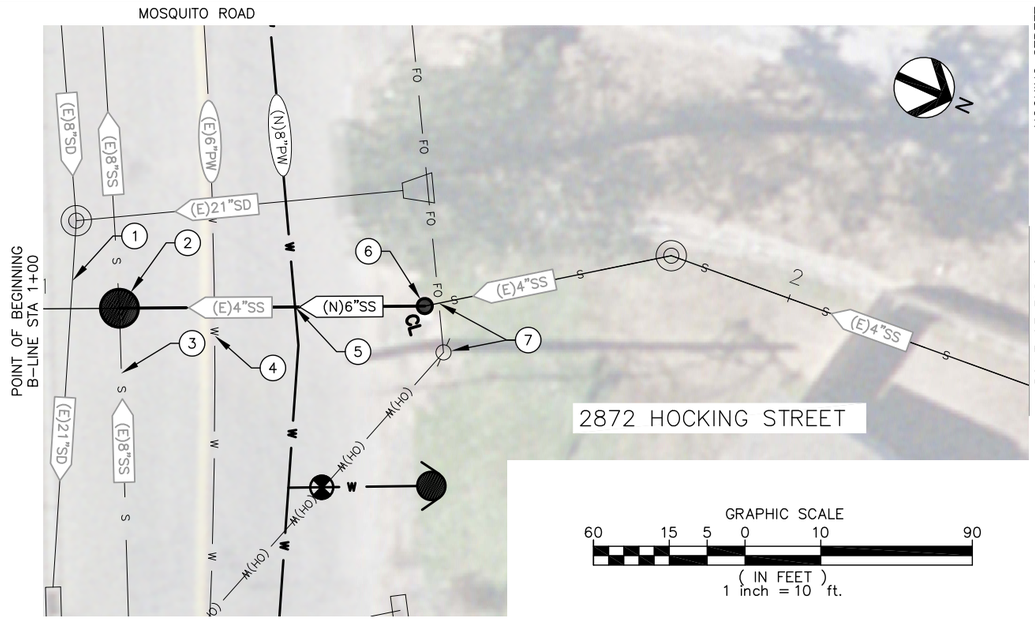
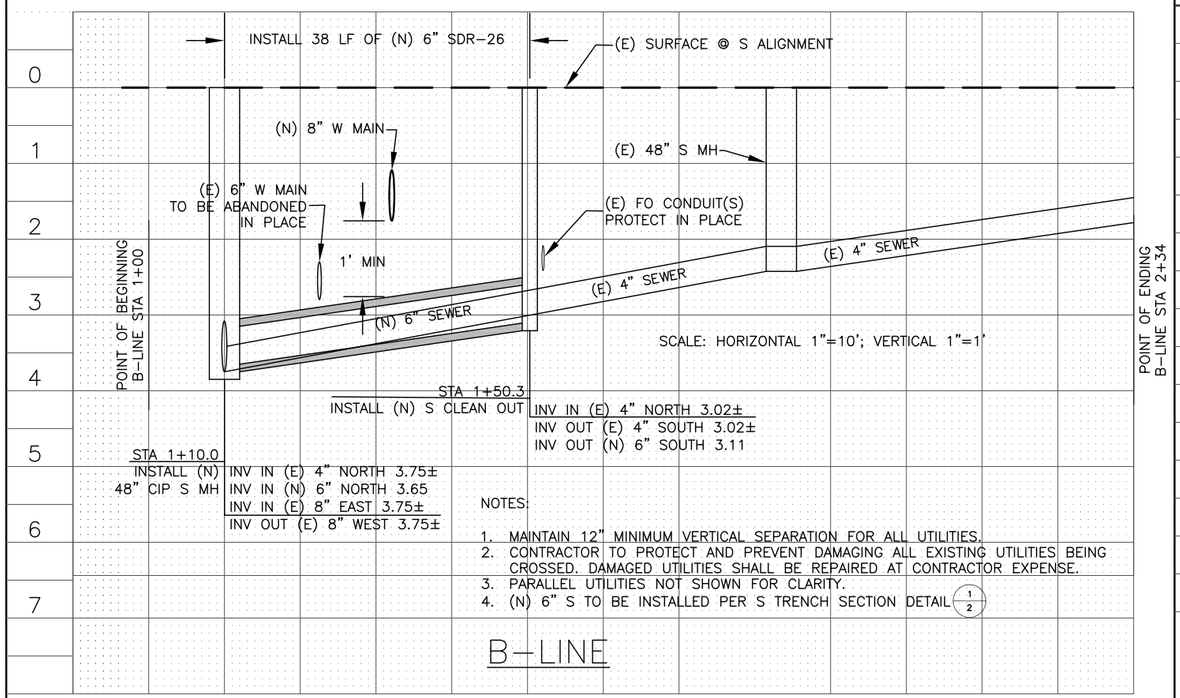


B-LINE

KEYNOTES

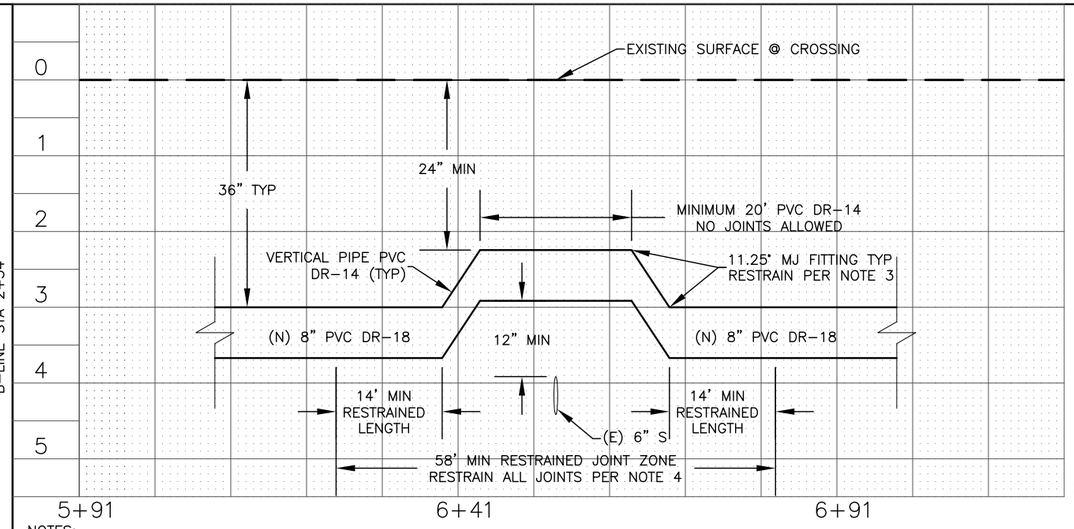
1. (E) 21" SD TO BE PROTECTED IN PLACE.
2. REPLACE (E) WYE WITH (N) 48" CIP MH PER EID STD DWG S09B & S09E (SEE APPENDIX C OF THE SPECS).
3. PROTECT (N) 1" W SERVICE IN PLACE
4. (E) 6" W TO BE ABANDONED AFTER (N) 8" W IS PLACED INTO SERVICE.
5. PROTECT (N) 8" W MAIN IN PLACE. MAINTAIN 1' MIN CLEAR.
6. INSTALL (N) CLEAN OUT PER EID STD DWG S08E AND SASD STD DWG LL-02 (SEE APPENDIX E OF THE SPECS).
7. CAUTION! BURIED TELECOM/ELECTRICAL FACILITIES AND (E) JOINT POLE TO BE PROTECTED IN PLACE.



NOTES:

1. MAINTAIN 12" MINIMUM VERTICAL SEPARATION FOR ALL UTILITIES.
2. CONTRACTOR TO PROTECT AND PREVENT DAMAGING ALL EXISTING UTILITIES BEING CROSSED. DAMAGED UTILITIES SHALL BE REPAIRED AT CONTRACTOR EXPENSE.
3. PARALLEL UTILITIES NOT SHOWN FOR CLARITY.
4. (N) 6" S TO BE INSTALLED PER S TRENCH SECTION DETAIL (1/2)

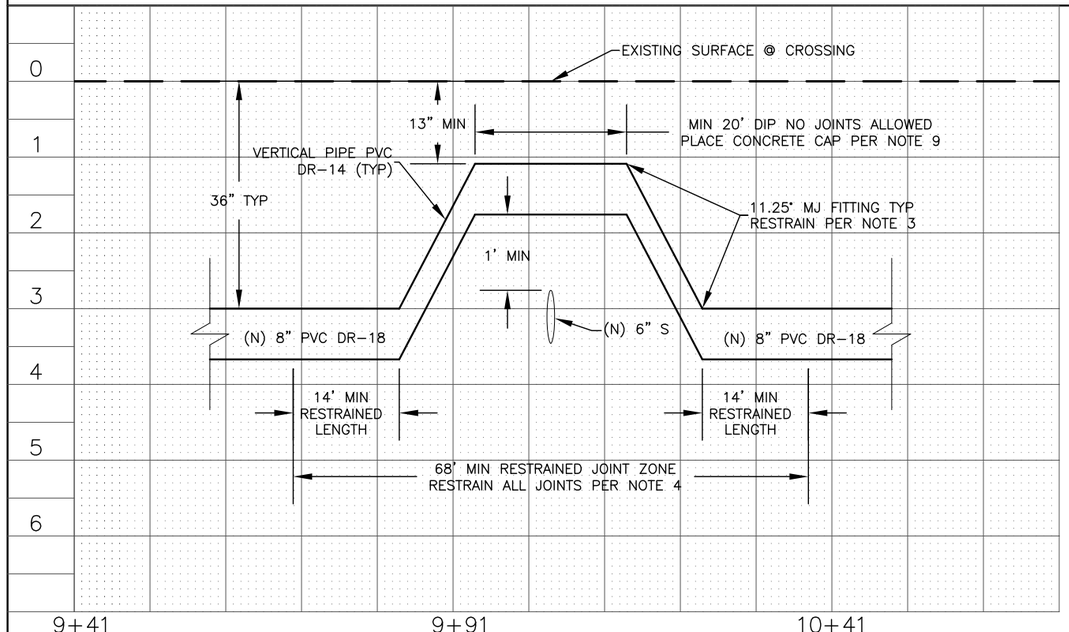
B-LINE



NOTES:

1. MAINTAIN 12" MINIMUM VERTICAL SEPARATION FOR ALL UTILITIES.
2. CONTRACTOR TO PROTECT AND PREVENT DAMAGING ALL EXISTING UTILITIES BEING CROSSED. DAMAGED UTILITIES SHALL BE REPAIRED AT CONTRACTOR EXPENSE.
3. NO JOINTS WITHIN 6 FEET OF FITTINGS ARE ALLOWED. ONLY MECHANICAL JOINTS ARE ALLOWED WITHIN RESTRAINED JOINT ZONE. USE MEGA LUG RESTRAINTS (OR EQUIVALENT) FOR ALL MJ FITTINGS. RESTRAINED PVC PUSH-ON JOINTS NOT ALLOWED. RESTRAINT HARNESS REQUIRED.
4. VERTICAL BEND THRUST BLOCKS NOT ALLOWED.
5. DUCTILE IRON PIPE WITH HOT BITUMINOUS COATING ALLOWED IF APPROVED BY CITY ENGINEER.
6. UTILITY CROSSING TRENCH BACKFILL SHALL COMPLY WITH DETAIL (2/6)
7. (E) UTILITY DEPTHS ARE APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD.
8. (E) UTILITIES AT CROSSING SHALL BE POTHOLED BY THE CONTRACTOR TO CONFIRM 1' MINIMUM CLEARANCE WITH (N) W.
9. PLACE 8" THICK CLASS B CONCRETE CAP OVER C900 WITH LESS THAN 20" COVER. MAINTAIN 2" OF AB BETWEEN CROWN OF PIPE AND CONCRETE CAP.

STA: 6+54 (A-LINE)
6" SEWER CROSSING (1/3)
SCALE: HORIZONTAL:1"=10'; VERTICAL:1"=1'



STA: 10+04 (A-LINE)
6" SEWER MAIN CROSSING (2/3)
SCALE: HORIZONTAL:1"=10'; VERTICAL:1"=1'

DATE	10/14/19
CONTRACT NO.	41819
GRID NO.	N/A
FILE NO.	N/A

NO.	REVISIONS	DATE	APPROVAL BY	DATE

DESIGNED	A.C.S.	10/14/19
DRAWN	A.C.S.	10/14/19
APPROVED	REBECCA NEVES	DATE

PROFESSIONAL ENGINEER No. C 77357 Exp. 6/30/21 CIVIL STATE OF CALIFORNIA

10/14/19 DATE

PROJECT ENGINEER
A.C. SCHIESTEL

CITY OF PLACERVILLE
ENGINEERING DEPARTMENT
3101 CENTER STREET
PLACERVILLE, CA 95667
(530) 642-5250

PLANS FOR THE CONSTRUCTION OF

MOSQUITO ROAD STABILIZATION PROJECT PHASE - I

SEWER MAIN REPLACEMENT
WATER MAIN CROSSING PROFILE DETAILS

CITY OF PLACERVILLE

PLAN AND PROFILE

DRAWING S-1

SHEET: 5 OF 10

SCALE
HORZ: AS NOTED
VERT: AS NOTED

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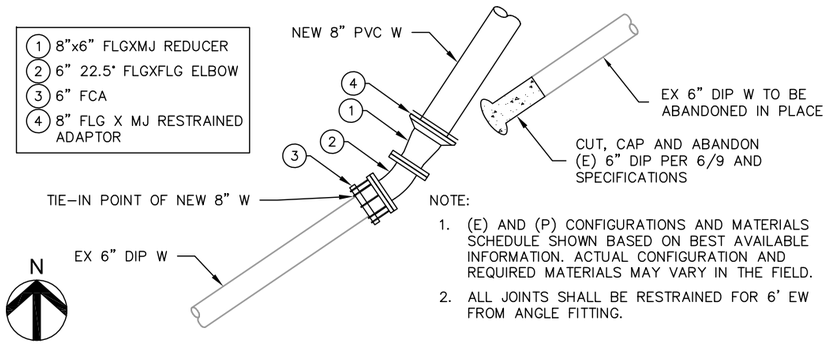
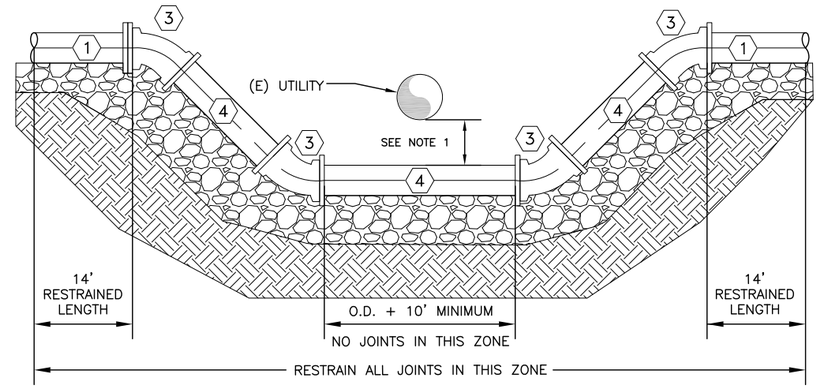


NOTE:

1. (E) AND (P) CONFIGURATIONS AND MATERIALS SCHEDULE SHOWN BASED ON BEST AVAILABLE INFORMATION. ACTUAL CONFIGURATION AND REQUIRED MATERIALS MAY VARY IN THE FIELD.
2. ALL JOINTS SHALL BE RESTRAINED FOR 6' EW FROM ANGLE FITTING.

TIE-IN POINT DETAIL (1/3)

SCALE: NTS



LEGEND

1. PVC DR-18 WATER MAIN. 14' RL EACH WAY.
2. USE MEGA LUG RESTRAINTS FOR ALL MJ FITTINGS. VERTICAL BEND THRUST BLOCKS NOT ALLOWED.
3. 11.25° MJ ELBOW W/MEGA LUG RESTRAINT
4. 9' PVC DR-14 WATER MAIN. DIP WITH HOT DIP BITUMINOUS COATING IF APPROVED BY CITY ENGINEER.

WATER PIPELINE UTILITY CROSSING

NOTES:

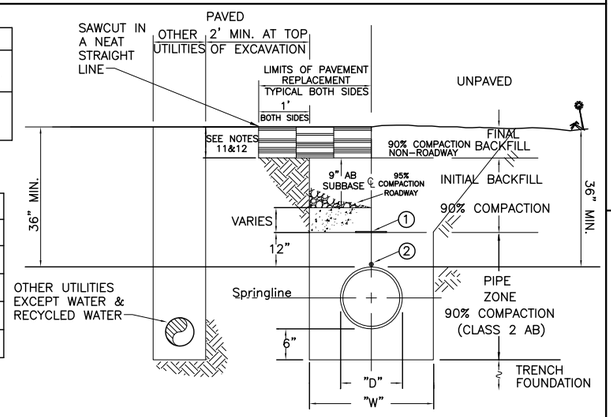
1) MAINTAIN 12" MINIMUM VERTICAL SEPARATION FOR ALL UTILITIES.
2) CONTRACTOR TO PROTECT AND PREVENT DAMAGING ALL EXISTING UTILITIES BEING CROSSED. DAMAGED UTILITIES SHALL BE REPAIRED AT CONTRACTOR EXPENSE.
3) NO JOINTS WITHIN 6 FEET OF FITTINGS ARE ALLOWED.
4) ONLY MECHANICAL JOINTS ARE ALLOWED WITHIN RESTRAINED JOINT ZONE. USE MEGA LUG RESTRAINTS (OR EQUIVALENT) FOR ALL MJ FITTINGS. RESTRAINED PVC PUSH-ON JOINTS NOT ALLOWED. RESTRAINT HARNESS REQUIRED.
5) UTILITY CROSSING TRENCH BACKFILL SHALL COMPLY WITH DETAIL 2 THIS SHEET.
6) (E) UTILITIES AT CROSSING SHALL BE POTHOLED BY THE CONTRACTOR TO CONFIRM 1' MINIMUM CLEARANCE WITH (N) W.

UTILITY CROSSING DETAIL (3/3,4)

SCALE: NTS

ITEM #	DESCRIPTION
1	12" WIDE BLUE NON-METALLIC WARNING TAPED MARKED "WATER"
2	TRACER WIRE, #10 AWG. DIR. BUR. PER DETAIL 1/9

TRENCH WIDTH TABLE		
PIPE SIZE (D)	TOTAL TRENCH WIDTH "W" MIN	MAX
4"	17"	29"
6"	19"	31"
8"	21"	33"

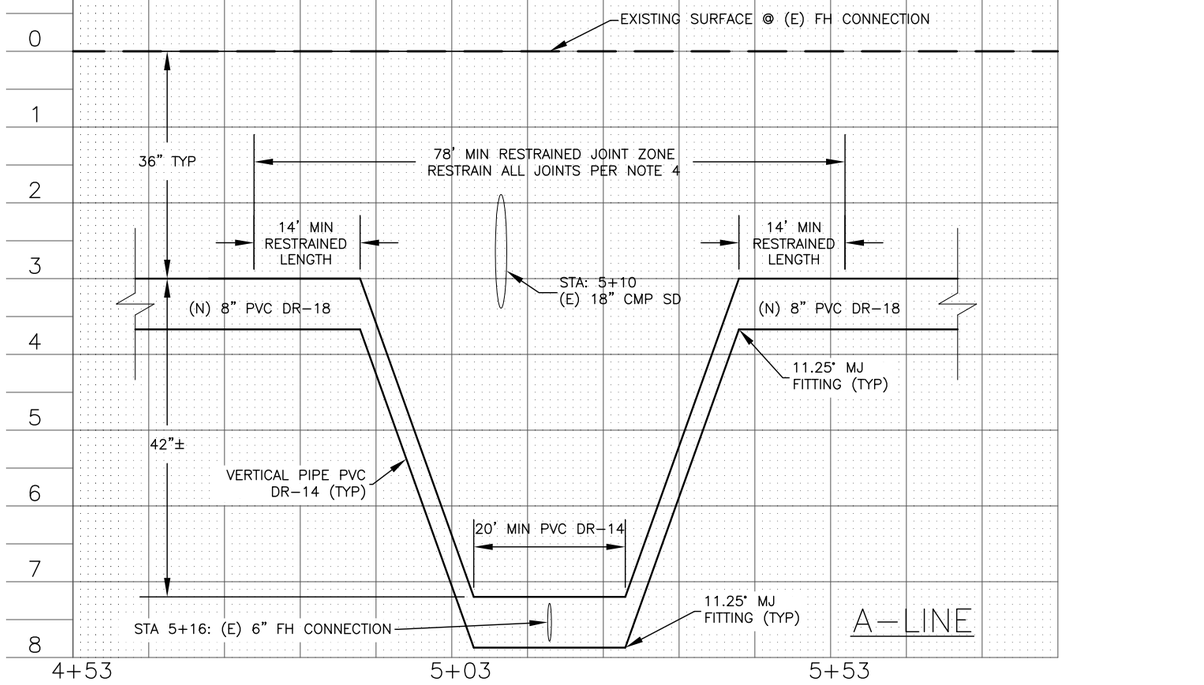


CONSTRUCTION NOTES

1. PERMITS SHALL BE REQUIRED FOR ANY EXCAVATION OVER 5 FEET IN DEPTH, INTO WHICH A PERSON IS REQUIRED TO DESCEND OR ANY EXCAVATION LESS THAN 5 FEET IN DEPTH IN SOILS WHERE HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED AND INTO WHICH A PERSON IS REQUIRED TO DESCEND.
2. PIPE TO BE LAID WITH LABEL UP ON EACH JOINT.
3. ROAD REPAIR SHALL CONFORM TO CITY PERMIT CONDITIONS AND SPECIFICATIONS.
4. COMPACTION IS RELATIVE TO ASTM 1557.
5. ENCROACHMENT PERMIT CONDITIONS TAKE PRECEDENCE WHEN MORE RESTRICTIVE.
6. SEWER UTILITIES ARE NOT PERMITTED WITHIN 10' HORIZONTALLY AND/OR 1' VERTICALLY OF WATER FACILITIES WITHOUT WRITTEN AUTHORIZATION.
7. RECYCLED WATER AND STORM DRAIN UTILITIES ARE NOT PERMITTED WITHIN 4' HORIZONTALLY AND/OR 1' VERTICALLY OF WATER FACILITIES.
8. PIPE SIZES BELOW 6" REQUIRE A MINIMUM TRENCH CLEARANCE OF 6" ON EACH SIDE OF PIPE.
9. PIPE ZONE EXCAVATION LIMITS ARE NOT TO BE EXCEEDED. PIPE ZONE TRENCH WALLS ARE TO BE VERTICAL, SEE EID STANDARD DRAWING W10A FOR UNSTABLE CONDITIONS.
10. INSTALL #10 TRACER WIRE ON ALL APPURTENANCES. INSTALL A PULL BOX AT EVERY 1000 FEET INTERVAL OF TRACING WIRE ALONG THE MAIN PIPE.
11. FROM P.O.B. TO STA 10+74: TRENCH SECTION SHALL BE A MINIMUM OF 5" THICK OF HMA OVER 9" OF AB. T-CUT SECTION SHALL CONSIST OF REMOVING AND REPLACING 3" AC THICKNESS 1' WIDE BOTH SIDES OF TRENCH OVER EXISTING SUBBASE WITHIN CITY ROW.
12. FROM STA 10+74 TO P.O.E. TRENCH SECTION SHALL BE A MINIMUM OF 2" THICK HMA OVER 9" OF AB. NO T-CUT SHALL BE REQUIRED.
13. ASSUME UP TO 10" THICKNESS OF (E) AC PAVEMENT FOR CUTTING.
14. PIPE ZONE BACKFILL SHALL BE CLASS 2 AB. TRENCH SECTION BACKFILL SHALL BE CLASS 2 AB. WHERE UNDERMINING OR CRACKS OCCUR IN TRENCH WALL, CONTRACTOR WILL COLLAPSE OR FILL THESE AREAS WITH CLSM OR EQUIVALENT. FINAL BACKFILL IN UNPAVED AREAS SHALL BE 12" NATIVE SOIL.
15. CONTRACTOR TO STRIPE MOSQUITO ROAD USING TEMPORARY STRIPING (OVERLAY PROJECT TO FOLLOW).

TYPICAL WATER TRENCH SECTION (2/3,4)

SCALE: NTS



NOTES:

1. MAINTAIN 12" MINIMUM VERTICAL SEPARATION FOR ALL UTILITIES.
2. CONTRACTOR TO PROTECT AND PREVENT DAMAGING ALL EXISTING UTILITIES BEING CROSSED. DAMAGED UTILITIES SHALL BE REPAIRED AT CONTRACTOR EXPENSE.
3. CONNECT TO EXISTING FH LATERAL USING FLEX COUPLER. REFER TO DETAIL (2/8)
4. NO JOINTS WITHIN 6 FEET OF FITTINGS ARE ALLOWED.
5. ONLY MECHANICAL JOINTS ARE ALLOWED WITHIN RESTRAINED JOINT ZONE. USE MEGA LUG RESTRAINTS (OR EQUIVALENT) FOR ALL MJ FITTINGS. RESTRAINED PVC PUSH-ON JOINTS NOT ALLOWED. RESTRAINT HARNESS REQUIRED.
6. VERTICAL BEND THRUST BLOCKS NOT ALLOWED.
7. DUCTILE IRON PIPE WITH HOT BITUMINOUS COATING ALLOWED IF APPROVED BY CITY ENGINEER.
8. UTILITY CROSSING TRENCH BACKFILL SHALL COMPLY WITH DETAIL 2 THIS SHEET.
9. (E) FH CONNECTION DEPTH IS APPROXIMATE AND SHALL BE CONFIRMED BY THE CONTRACTOR IN THE FIELD.

STA 4+63 TO STA 5+69 (A-LINE) PROFILE @ (E) FIRE HYDRANT CONNECTION (4/3)

SCALE: HORIZONTAL: 1"=10'; VERTICAL: 1"=1'

NO.	REVISIONS	DATE	APPROVAL BY	DATE
	DRAWN A.C.S.			
	DESIGNED A.C.S.			
	APPROVED REBECCA NEVES	10/14/19		
	DATE	10/14/19		
	CONTRACT NO. 41819			
	GRID NO. N/A			
	FILE NO. N/A			

10/14/19
DATE
PROJECT ENGINEER
A.C. SCHIESTEL

CITY OF PLACERVILLE
ENGINEERING DEPARTMENT
3101 CENTER STREET
PLACERVILLE, CA 95667
(530) 642-5250

PLANS FOR THE CONSTRUCTION OF

MOSQUITO ROAD STABILIZATION PROJECT PHASE - I

WATER DETAILS 1

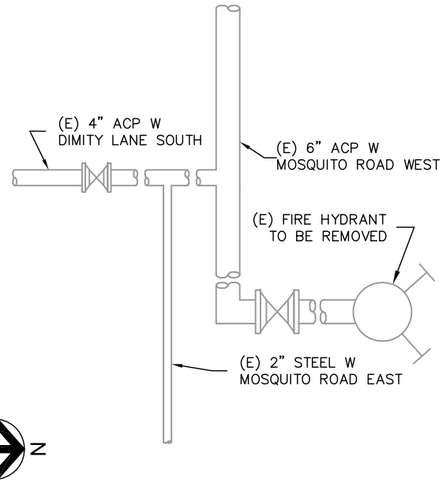
CITY OF PLACERVILLE

WATER DETAILS

DRAWING D-1

SHEET: 6 OF 10

SCALE
HORZ: AS NOTED
VERT: AS NOTED

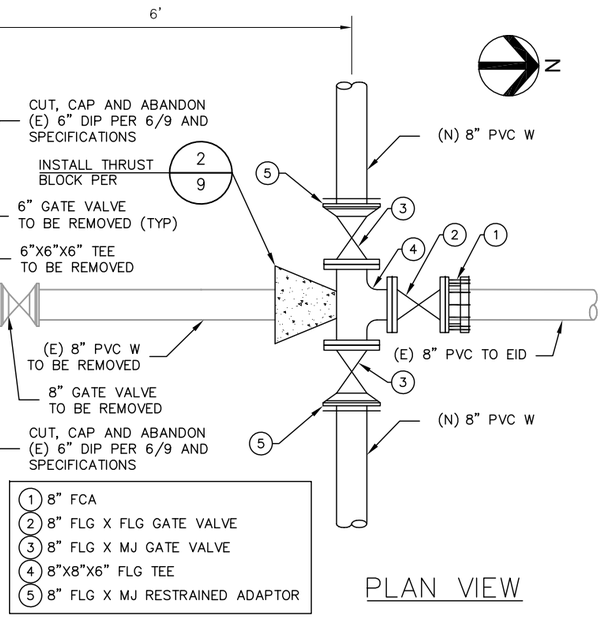


EXISTING CONDITION

NOTE:
1. (E) CONFIGURATION SHOWN BASED ON BEST AVAILABLE INFORMATION. ACTUAL CONFIGURATION MAY VARY IN THE FIELD.

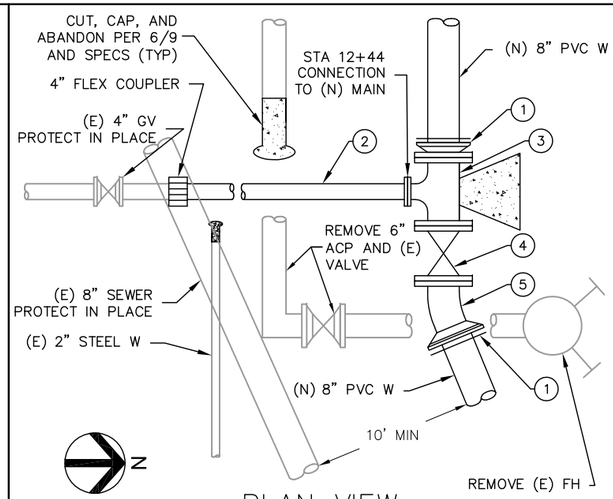
STA: 12+51 (A-LINE)
EXISTING CONFIGURATION — 1/4
SCALE: NTS

NOTES:
1. VALVES AND TEE TO BE REMOVED AND PIPES TO ABANDONED PER SPECIFICATIONS.
2. (E) AND (P) CONFIGURATIONS AND MATERIALS SCHEDULE SHOWN BASED ON BEST AVAILABLE INFORMATION. ACTUAL CONFIGURATION AND REQUIRED MATERIALS MAY VARY IN THE FIELD.



PLAN VIEW

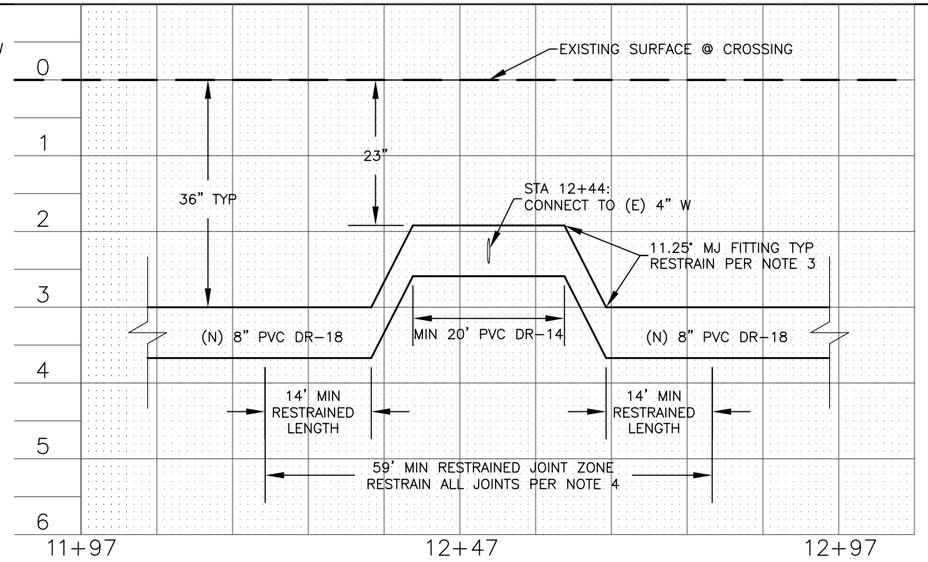
STA 5+74 (A-LINE)
EID 8" SERVICE CONNECTION — 2/3
SCALE: NTS



PLAN VIEW

1 8" FLG X MJ RESTRAINED ADAPTOR
2 4" FLG X PE DUCTILE IRON SPOOL (LENGTH FIELD DETERMINED)
3 8"X8"X4" FLG TEE
4 8" FLG GATE VALVE
5 8" FLG X MJ 22° ELBOW

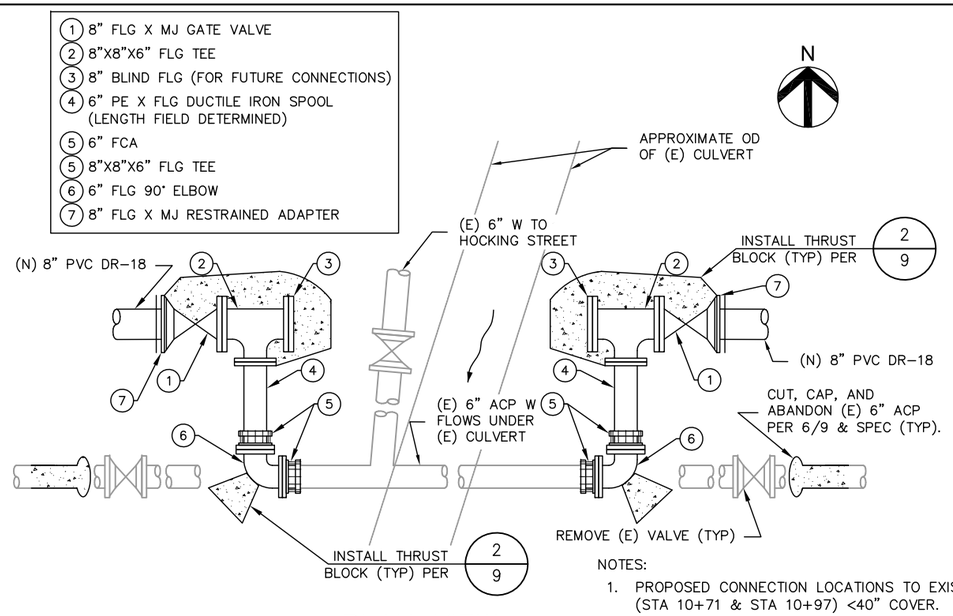
NOTES:
1. VALVES AND FIRE HYDRANT TO BE REMOVED AND PIPES TO ABANDONED PER SPECIFICATIONS.
2. (E) AND (P) CONFIGURATIONS AND MATERIALS SCHEDULE SHOWN BASED ON BEST AVAILABLE INFORMATION. ACTUAL CONFIGURATION AND REQUIRED MATERIALS MAY VARY IN THE FIELD.
3. MAINTAIN 10' MIN HORIZONTAL AND 12" MIN VERTICAL CLEARANCE FORM (E) 6" S MAIN.
4. ALL JOINTS SHALL BE RESTRAINED FOR 6' EW FROM ANGLE FITTING.



A-LINE

NOTES:
1. MAINTAIN 12" MINIMUM VERTICAL SEPARATION FOR ALL UTILITIES.
2. NO JOINTS WITHIN 6 FEET OF FITTINGS ARE ALLOWED.
3. ONLY MECHANICAL JOINTS ARE ALLOWED WITHIN RESTRAINED JOINT ZONE. USE MEGA LUG RESTRAINTS (OR EQUIVALENT) FOR ALL MJ FITTINGS. RESTRAINED PVC PUSH-ON JOINTS NOT ALLOWED. RESTRAINT HARNESS REQUIRED.
4. VERTICAL BEND THRUST BLOCKS NOT ALLOWED.
5. DUCTILE IRON PIPE WITH HOT BITUMINOUS COATING ALLOWED IF APPROVED BY CITY ENGINEER.
6. UTILITY CROSSING TRENCH BACKFILL SHALL COMPLY WITH DETAIL 2 THIS SHEET.
7. (E) 4" MAIN CONNECTION DEPTH IS APPROXIMATE AND SHALL BE CONFIRMED BY THE CONTRACTOR IN THE FIELD.

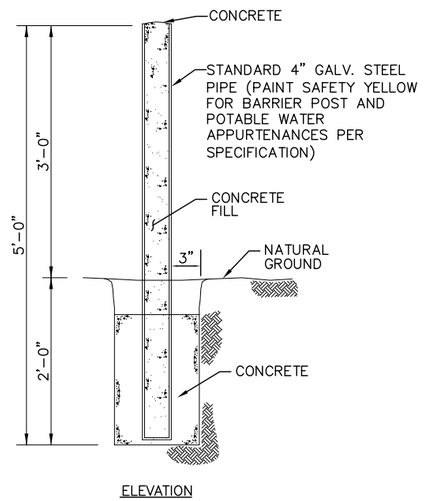
STA: 12+51 (A-LINE)
CONNECTION TO EXISTING 4" MAIN — 3/4
SCALE: NTS



PLAN VIEW

CONNECT TO (E) AT CULVERT DETAIL — 4/4
SCALE: NTS

NOTES:
1. PROPOSED CONNECTION LOCATIONS TO EXISTING (STA 10+71 & STA 10+97) <40" COVER.
2. ALL JOINTS SHALL BE FULLY RESTRAINED.
3. (E) AND (P) CONFIGURATIONS AND MATERIALS SCHEDULE SHOWN BASED ON BEST AVAILABLE INFORMATION. ACTUAL CONFIGURATION AND REQUIRED MATERIALS MAY VARY IN THE FIELD.



ELEVATION

CONSTRUCTION NOTES
1. REMOVABLE BARRIER POST UPON CITY APPROVAL.

BOLLARD
N.T.S. — 5/4

DATE	10/14/19		
CONTRACT NO.	41819		
GRID NO.	N/A		
FILE NO.	N/A		

NO.	REVISIONS	DATE	APPROVAL BY
DESIGNED	A.C.S.	10/14/19	
DRAWN	A.C.S.		
APPROVED	REBECCA NEVES	DATE	

10/14/19
DATE
PROJECT ENGINEER
A.C. SCHIESTEL

CITY OF PLACERVILLE
ENGINEERING DEPARTMENT
3101 CENTER STREET
PLACERVILLE, CA 95667
(530) 642-5250

PLANS FOR THE CONSTRUCTION OF
MOSQUITO ROAD STABILIZATION PROJECT PHASE - I
CITY OF PLACERVILLE

WATER DETAILS 2

WATER DETAILS
DRAWING D-2
SHEET: 7 OF 10
SCALE
HORZ: AS NOTED
VERT: AS NOTED

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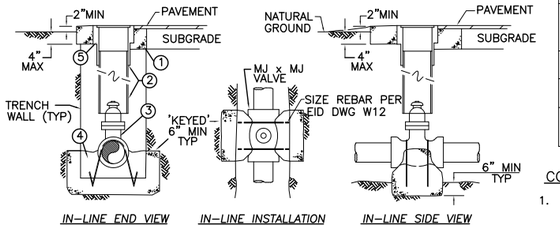


ITEM #	DESCRIPTION
1	6"X6" CONCRETE COLLAR WITH 2" HMA OVERLAY IF WITHIN PAVED AREA.
2	8" PVC-C900 PIPE RISER ONE PIECE
3	GATE VALVE
4	G5 CONCRETE VALVE BOX WITH IRON LID

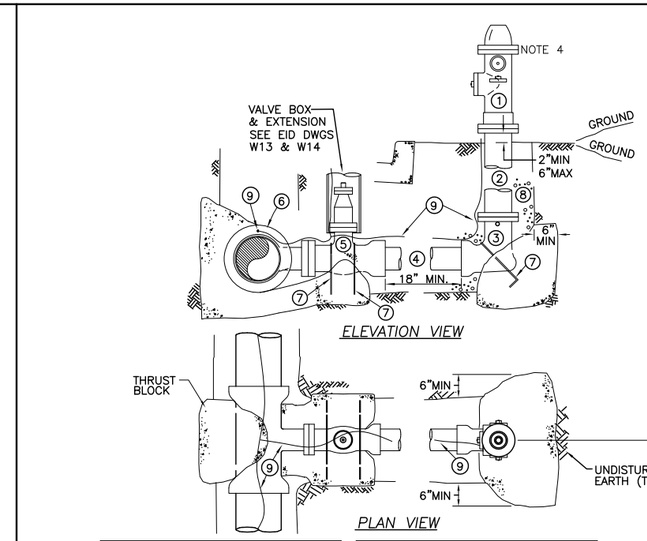
CONSTRUCTION NOTES

1. CENTER AND PLUM RISER OVER VALVE NUT.
2. SHAFT EXTENSION REQUIRED WHERE TOP OF NUT IS MORE THAN 3' BELOW FINISH GROUND. SHAFT SHALL BE 1-1/4" DIA. WITH A SELF-CENTERING DEVICE. SEE EID DWG W14.

GATE VALVE INSTALLATION

SCALE: NTS

1 TYP



ITEM #	DESCRIPTION
1	FIRE HYDRANT BODY
2	FIRE HYDRANT BURY
3	HYDRANT SHOE, FLANGE OR MJ CONNECTION
4	6" PIPE, PVC C900 (DR-14)

ITEM #	DESCRIPTION
5	6" GATE VALVE, FL x MJ
6	TEE, MJ x MJ x FL
7	No. 4 REBAR
8	3/4" MINUS DRAIN ROCK AS DIRECTED BY EID
9	#10 TRACER WIRE

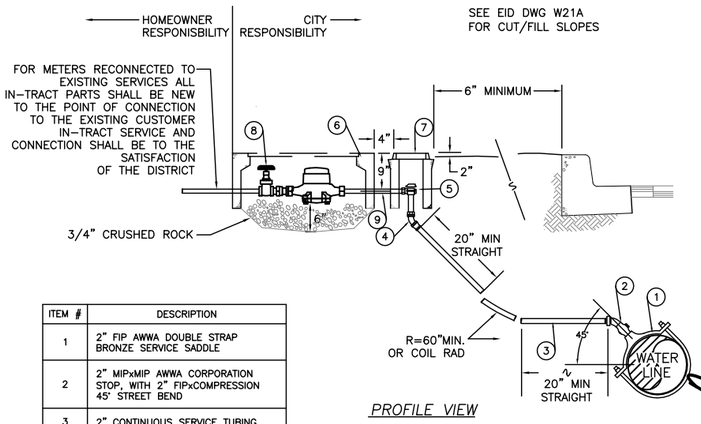
CONSTRUCTION NOTES

1. USE TAPPING SLEEVE AND VALVE ON EXISTING MAINS 8" AND LARGER.
2. INSTALL BOLLARDS AS SHOWN IN PLANS.
3. REFER TO EID STANDARD DWG W18 FOR FIRE HYDRANT LOCATIONS.
4. FIRE HYDRANT SHALL BE PAINTED "FIRE ENGINE RED". SUBMIT COLOR SAMPLE TO CITY FOR APPROVAL.
5. INSTALL BLUE REFLECTOR PER LOCAL FIRE DEPARTMENT STANDARDS.
6. MAINTAIN 7.5' IN FRONT AND SIDES, AND 4' CLEARANCE BEHIND (N) HYDRANT.

TYPICAL FIRE HYDRANT INSTALLATION

SCALE: NTS

2 3,4



ITEM #	DESCRIPTION
1	2" FIP AWWA DOUBLE STRAP BRONZE SERVICE SADDLE
2	2" MIPxMIP AWWA CORPORATION STOP, WITH 2" FIPxCOMPRESSION 45° STREET BEND
3	2" CONTINUOUS SERVICE TUBING
4	2" MIPxCOMPRESSION 45° STREET BEND
5	2" FIPxFL BRONZE ANGLE METER STOP LOCKWING
6	METER BOX (27 ½" X 18") AND PORTED LID
7	G5 VALVE BOX
8	2" BRASS GATE VALVE
9	12" BRASS NIPPLE

CONSTRUCTION NOTES

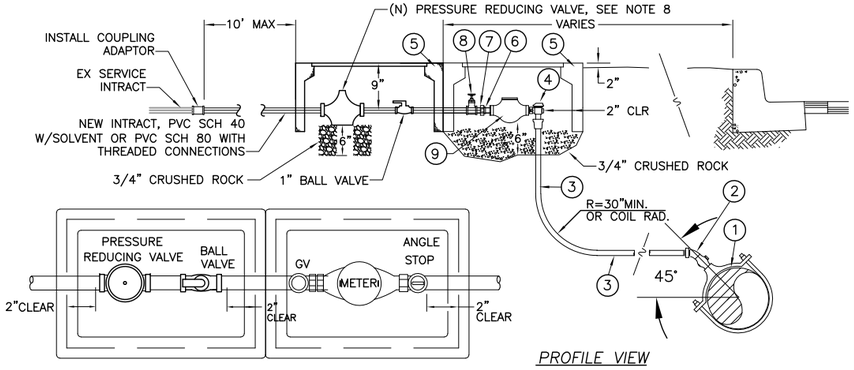
1. ALL MATERIAL SHALL BE PER STANDARD DETAIL W08.
2. SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN 36" OF VALVE, JOINT OR FITTING.
3. SET TOP OF METER BOX FLUSH WITH SIDEWALK OR AS SHOWN.
4. ALL TAPS SHALL BE MADE WITH MACHINE GUIDE OR PILOT TAP.
5. THE WATER SERVICE SHALL EXTEND PERPENDICULAR TO THE CENTERLINE OF THE STREET FROM THE WATER MAIN TO THE METER STOP.
6. POLYETHYLENE TUBING AND COPPER TUBING SHALL BE CONTINUOUS WITH TRACER WIRE.
7. ALL FITTINGS SHALL BE BRONZE.

2" SERVICE & METER BOX INSTALLATION FOR 1-1/2" & 2" METERS

2" SERVICE INSTALLTION FOR 2" METERS

SCALE: NTS

3 3,4



PRESSURE REDUCING VALVE/METER BOX PLAN CONSTRUCTION NOTES

ITEM #	DESCRIPTION
1	BRONZE SERVICE SADDLE, 1" AWWA I.P.T.
2	1" CORPORATION STOP, AWWA I.P.T.x F.L.P. W/45° STREET ELBOW, COMPRESSION FITTING
3	1" BLUE P.E. TUBING, CTS CONTINUOUS WITH TRACER WIRE
4	1" ANGLE METER STOP, METER CPLG NUT x STAB TYPE END
5	B16 CONCRETE METER BOX W/ IRON PORTED LID
6	METER COUPLING
7	BRASS NIPPLE CLOSE
8	BRASS GATE VALVE
9	SENSUS SRII METER (ALL BRONZE SEALED-REGISTER, POSITIVE DISPLACEMENT TYPE WITH MAGNETIC DRIVE WITH STRAINER.

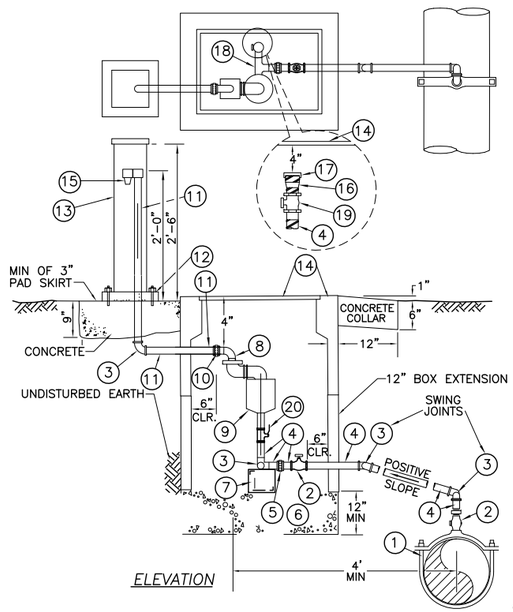
CONSTRUCTION NOTES

1. SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN 36" OF VALVE, JOINT OR FITTING.
2. SET TOP OF METER BOX FLUSH WITH SIDEWALK OR AS SHOWN.
3. ALL TAPS SHALL BE MADE WITH MACHINE GUIDE OR PILOT TAP.
4. THE WATER SERVICE SHALL EXTEND PERPENDICULAR TO THE CENTERLINE OF THE STREET FROM THE WATER MAIN TO THE METER STOP.
5. P.E. TUBING SHALL BE CONTINUOUS WITH TRACER WIRE
6. ALL FITTINGS SHALL BE BRONZE.
7. REFER TO EID STANDARD DWG W21A FOR CUT/FILL SLOPES
8. 1" WATTS, 1LF25AVB-Z3, BRASS PRESSURE REGULATOR
9. 1" SERVICE BEDDING AND BACKFILL PER DETAIL 2/6.

1" SERVICE, PRESSURE REGULATOR & METER INSTALLATION FOR 1" METERS

SCALE: NTS

4 4



ITEM #	DESCRIPTION
1	BRASS SERVICE SADDLE
2	BRASS CORPORATION STOP AWWA I.P.T. x F.I.P.
3	FITTINGS SAME AS PIPE MATERIAL
4	SCH. 40 BRASS, DOUBLE WRAPPED WITH PVC TAPE
5	BRASS UNION
6	3/4" CLEAN DRAIN ROCK
7	SUPPORT BLOCK, BRICK
8	STREET ELBOW
9	COMBINATION AIR VALVE UNLESS OTHERWISE SPECIFIED ON PLANS
10	UNION PVC
11	PVC SCH. 80
12	ENCLOSURE ANCHORED IN CONC. W/4 HOLLOW BOLTS
13	PLACER WATER WORKS MODEL PM/AV32M ENCLOSURE-BLUE
14	CONCRETE BOX W/ STEEL LID, SEE NOTE 6
15	VENT W/ 20-MESH S.S. SCREEN
16	2"NPT x 2-1/2"HOSE THREAD MALE x MALE REDUCER
17	2-1/2" HOSE THREAD CAP
18	BRASS TEE
19	2" CURB STOP W/ LOCKWING- FIP x FIP
20	2" BALL VALVE N.P.T. x N.P.T.

CONSTRUCTION NOTES

1. SIZE OF PIPING SHALL MATCH SIZE OF AIR VALVE.
2. ENGINEER TO SPECIFY TYPE & SIZE OF VALVE.
3. AIR VALVES LARGER THAN 2" SHALL BE BY SPECIAL DESIGN.
4. AIR VALVE SHALL BE PLACED OUTSIDE OF TRAFFIC AREAS.
5. CENTER VALVE IN LONGITUDINAL DIRECTION IN BOX.
6. CHRISTY B40 AND 12" EXTENSION FOR 2" ARV.
7. SERVICE SADDLE SHALL NOT BE INSTALLED WITHIN 36" OF VALVE, JOINT OR FITTING

2" AIR VALVE & 2" BLOW OFF ASSEMBLY

SCALE: NTS

5 4

DATE	10/14/19
CONTRACT NO.	41819
GRID NO.	N/A
FILE NO.	N/A

NO.	REVISIONS	DATE	APPROVAL BY
DESIGNED	A.C.S.	10/14/19	REBECCA NEVES
DRAWN	A.C.S.		
APPROVED			

10/14/19
DATE

PROJECT ENGINEER
A.C. SCHIESTEL

CITY OF PLACERVILLE
ENGINEERING DEPARTMENT
3101 CENTER STREET
PLACERVILLE, CA 95667
(530) 642-5250

PLANS FOR THE CONSTRUCTION OF

MOSQUITO ROAD STABILIZATION PROJECT PHASE - I

WATER DETAILS 3

CITY OF PLACERVILLE

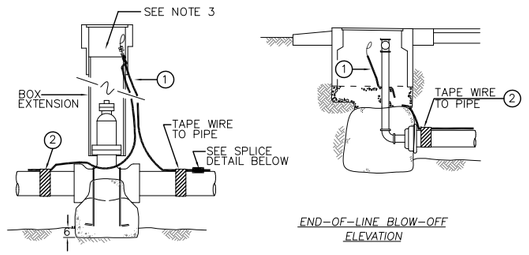
WATER DETAILS

DRAWING D-3

SHEET: 8 OF 10

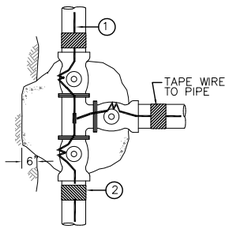
SCALE
HORZ: AS NOTED
VERT: AS NOTED

S:\CIP Projects\Mosquito Road Stabilization (41819)\04 Design Development\C-Plans\Mosquito Road Stabilization Project Phase 1 C-Plan.dwg Oct 14, 2019 - 12:26pm



VALVE BOX ELEVATION

END-OF-LINE BLOW-OFF ELEVATION



TEE W/3 GATE VALVES - PLAN

ITEM #	DESCRIPTION
1	#10 SOLID A.W.G. COPPER TRACER WIRE (DIR. BUR.) WITH THERMO-PLASTIC INSULATION. PLACE ON OUTSIDE OF RISER
2	WRAP TAPE

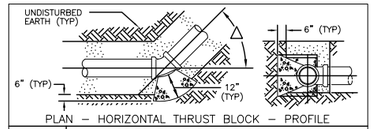
SPLICE DETAIL

CONSTRUCTION NOTES

1. LOCATING WIRE SHALL BE INSTALLED WITH ALL PIPE. WIRE TO BE TAPED TO BASE OF CURB STOP.
2. LOCATE WIRE DIRECTLY ON TOP OF THE PIPE AND TAPE TO PIPE. (FOUR PLACES EVERY FULL PIPE SECTION.) WESTERN UNION SPLICE WITH GEL PACK, SOLDER OR OTHER EID APPROVED METHOD, NO ACID.
3. STRIP APPROXIMATELY 3 INCHES OF INSULATION AT THE TERMINATION OF THE WIRE IN THE VALVE OR METER BOX.
4. LEAVE 2 FEET OF TRACING WIRE AT TERMINATING ENDS.
5. INSTALL AN EXTRA VALVE BOX IF NECESSARY WHERE LOCATION WIRE IS TERMINATED AND SHOW ON THE PLANS.
6. THE CONTRACTOR SHALL TEST THE CONTINUITY OF THE FINISHED INSTALLATION.

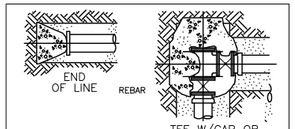
TRACER WIRE DETAIL (1 TYP)

SCALE: NTS



PLAN - HORIZONTAL THRUST BLOCK - PROFILE

PIPE DIA. (in)	HORIZONTAL THRUST BLOCK BEARING AREA (S.F.)			
	D=11.25°	D=22.50°	D=45°	D=90°
4 & 6	1.0	2.0	4.0	7.0
8	2.0	3.0	7.0	12.0
10	3.0	5.0	10.0	18.0
12	4.0	7.0	14.0	26.0



TEE W/CAP OR BLIND FLANGE

PIPE DIA. (in)	THRUST BLOCK BEARING AREA (S.F.)
4 & 6	5.0
8	8.0
10	13.0
12	18.0

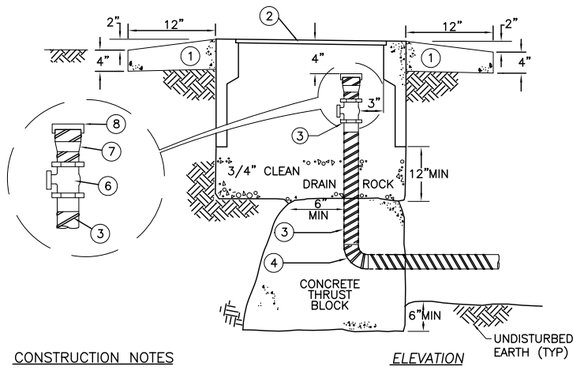
REBAR SIZES (HORIZONTAL THRUST ONLY)	
PIPE SIZE	REBAR
UP TO 10"	#4
12"	#5

NOTES:

1. THRUST BLOCK DESIGN IS BASED ON TEST PRESSURE=200psi, SOIL BEARING PRESSURE=1500lbs/SF. INSTALLATIONS USING HIGHER PRESSURE OR LOWER SOIL BEARING PRESSURE SHALL BE ADJUSTED ACCORDINGLY, AND SUBMITTED FOR APPROVAL BY ENGINEERING DEPARTMENT.
2. THRUST BLOCKS SHALL BE CONSTRUCTED OF CALTRANS CLASS "B" CONCRETE.
3. THRUST BLOCKS SHALL BE PLACED AGAINST UNDISTURBED SOIL.
4. JOINTS, NUTS AND BOLTS SHALL BE KEPT CLEAR OF CONCRETE AND BE ABLE TO BE OPERATED WITHOUT DISTURBING THRUST BLOCK(S).
5. REBAR SHALL BE SHAPED WITH 90° BEND AT END, AND MINIMUM OF 3" CLEARANCE FROM SOIL.
6. COAT EXPOSED REBAR WITH 80 MILS OF COLD-APPLIED BITUMASTIC WATER PROOFING COMPOUND. WRAP EXTERIOR OF VALVE AND ACTUATOR WITH 8 MIL POLYETHYLENE SHEETING AND TAPE PER EID SPECIFICATION.
7. ALL REBAR SHALL BE GRADE 60 STEEL.

THRUST BLOCK DETAIL (TYP) (2 TYP)

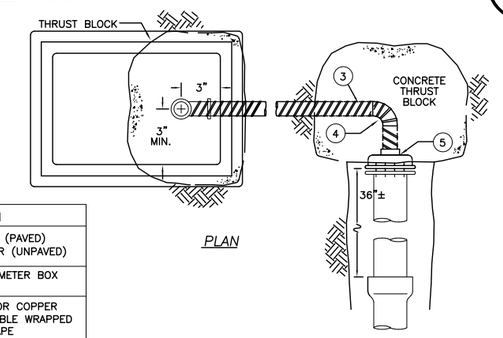
SCALE: NTS



ELEVATION

CONSTRUCTION NOTES

1. 2" BLOW-OFFS TO BE INSTALLED ON 8" MAINS AND SMALLER. FOR MAINS LARGER THAN 8", BLOW-OFF SIZE SHALL BE NOTED ON PLAN AND PROFILE.
2. BOXES FOR BLOW-OFF ASSEMBLY SHALL BE INSTALLED BEHIND CURB OR BACK OF WALK. BOXES CANNOT BE INSTALLED IN ROADWAY.



PLAN

ITEM #	DESCRIPTION
1	6"x6" CONC. COLLAR (PAVED) 6"x12" CONC. COLLAR (UNPAVED)
2	PRECAST CONCRETE METER BOX WITH STEEL COVER
3	2" SCH. 40 BRASS OR COPPER TUBING TYPE K, DOUBLE WRAPPED WITH 10 MIL. PVC TAPE
4	2"-90° THREADED BRASS ELBOW
5	M.J. TAPPED CAP
6	CURB STOP W/ LOCKWING- FIP x FIP
7	2" NPT x 2-1/2" HOSE THREAD MALE x MALE REDUCER
8	2-1/2" HOSE THREAD CAP

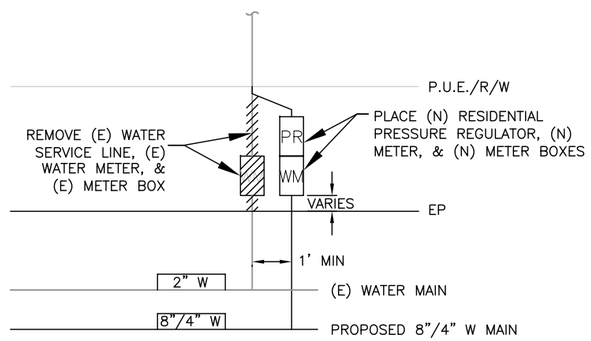
2" DEAD-END BLOW-OFF ASSEMBLY

2" DEAD-END BLOWOFF DETAIL (3 4)

SCALE: NTS

NOTES:

1. METER AND SERVICE LINE SHALL BE 1" UNLESS OTHERWISE NOTED.
2. SERVICE LINE, SERVICE SADDLE, AND COUPLINGS SHALL BE PER DETAIL 4/8.
3. (N) METERS, (N) PRESSURE REGULATORS, AND (N) METER BOXES SHALL BE PROVIDED BY THE CITY.
4. CAP EXISTING SERVICE AT EDGE OF PAVEMENT AND ABANDON IN PLACE.
5. REPLACE (E) LANDSCAPE IN AREA OF DISTURBANCE IN KIND.

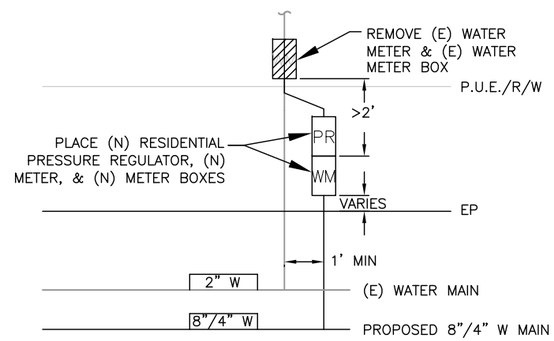


WATER SERVICE TYPE 1 (4 4)

SCALE: NTS

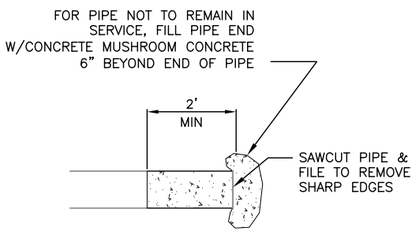
NOTES:

1. USE TYPE 2 IN CASE PROPOSED METER IS INSTALLED MORE THAN 2' IN FRONT OF THE EXISTING METER.
2. METER AND SERVICE LINE SHALL BE 1" UNLESS OTHERWISE NOTED.
3. SERVICE LINE, SERVICE SADDLE, AND COUPLINGS SHALL BE PER DETAIL 4/8.
4. (N) METERS, (N) PRESSURE REGULATORS, AND (N) METER BOXES SHALL BE PROVIDED BY THE CITY.
5. CAP EXISTING SERVICE AT EDGE OF PAVEMENT AND ABANDON IN PLACE.
6. REPLACE (E) LANDSCAPE IN AREA OF DISTURBANCE IN KIND.
7. REPLACE PRIVATE WATER SERVICE LINE THROUGH THE REMOVAL OF EXISTING METER BOX.



WATER SERVICE TYPE 2 (5 4)

SCALE: NTS



FOR PIPE TO BE ABANDONED

TYPICAL PIPE CAPPING DETAIL (6 TYP)

SCALE: NTS

APPROVED	REBECCA NEVES	10/14/19	DATE
DESIGNED	A.C.S.		
DRAWN	A.C.S.		
NO.	REVISIONS	DATE	APPROVAL BY

DATE	10/14/19
CONTRACT NO.	41819
GRID NO.	N/A
FILE NO.	N/A

10/14/19
DATE
PROJECT ENGINEER
A.C. SCHIESTEL

CITY OF PLACERVILLE
ENGINEERING DEPARTMENT
3101 CENTER STREET
PLACERVILLE, CA 95667
(530) 642-5250

PLANS FOR THE CONSTRUCTION OF

MOSQUITO ROAD STABILIZATION PROJECT PHASE - I

WATER DETAILS 4

CITY OF PLACERVILLE

WATER DETAILS

DRAWING D-4

SHEET: 9 OF 10

SCALE
HORZ: AS NOTED
VERT: AS NOTED

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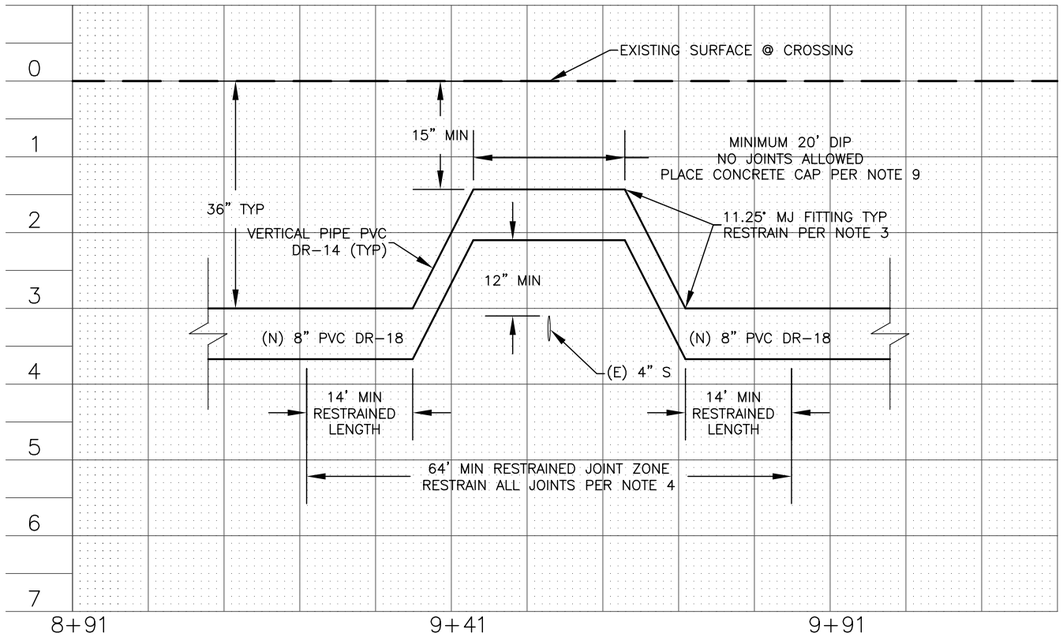
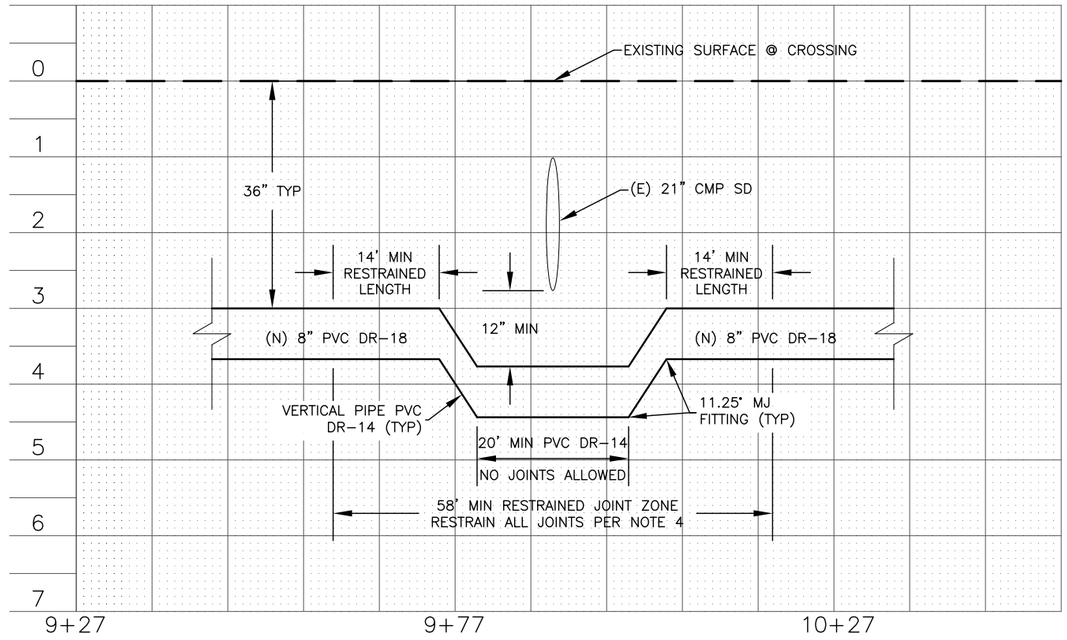
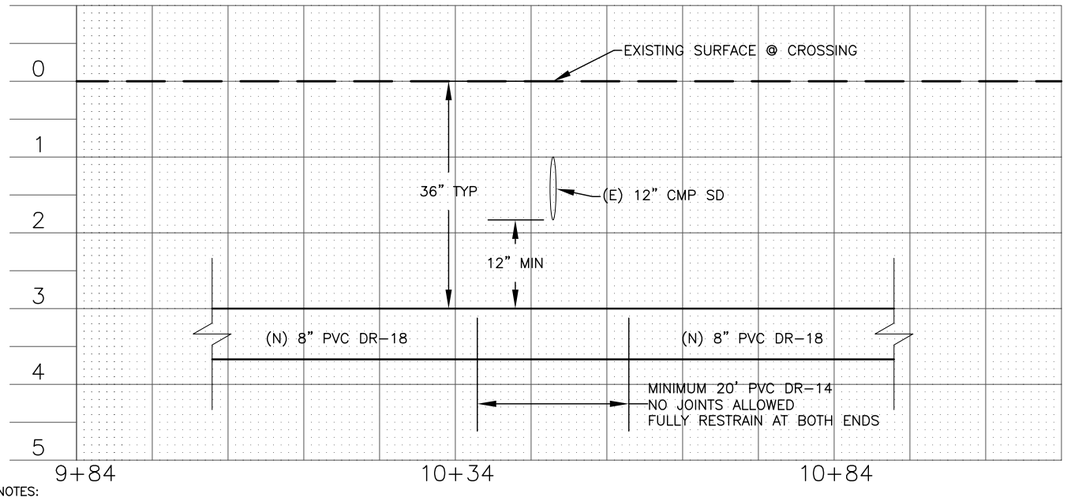


STA: 9+54 (A-LINE)
4" SEWER SERVICE CROSSING (1/3)
SCALE: HORIZONTAL: 1"=10'; VERTICAL: 1"=1'



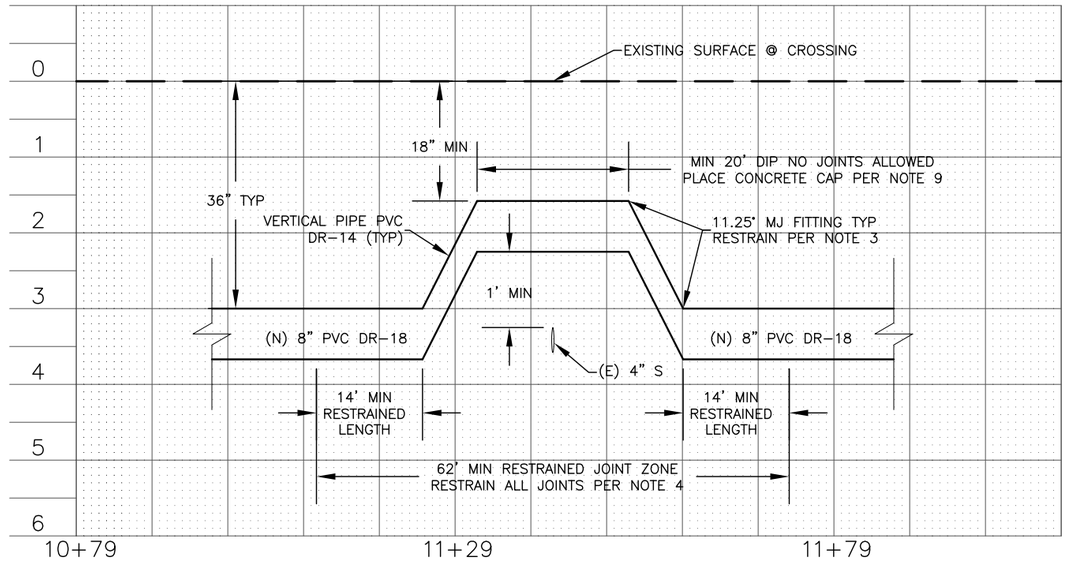
STA: 9+90 (A-LINE)
21" STORM DRAIN CROSSING (2/3)
SCALE: HORIZONTAL: 1"=10'; VERTICAL: 1"=1'



NOTES:

1. MAINTAIN 12" MINIMUM VERTICAL SEPARATION FOR ALL UTILITIES.
2. CONTRACTOR TO PROTECT AND PREVENT DAMAGING ALL EXISTING UTILITIES BEING CROSSED. DAMAGED UTILITIES SHALL BE REPAIRED AT CONTRACTOR EXPENSE.
3. NO JOINTS WITHIN 6 FEET OF FITTINGS ARE ALLOWED. ONLY MECHANICAL JOINTS ARE ALLOWED WITHIN RESTRAINED JOINT ZONE. USE MEGA LUG RESTRAINTS (OR EQUIVALENT) FOR ALL MJ FITTINGS. RESTRAINED PVC PUSH-ON JOINTS NOT ALLOWED. RESTRAINT HARNESS REQUIRED.
4. VERTICAL BEND THRUST BLOCKS NOT ALLOWED.
5. DUCTILE IRON PIPE WITH HOT BITUMINOUS COATING ALLOWED IF APPROVED BY CITY ENGINEER.
6. UTILITY CROSSING TRENCH BACKFILL SHALL COMPLY WITH DETAIL (2/6)
7. (E) UTILITY DEPTHS ARE APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD.
8. (E) UTILITIES AT CROSSING SHALL BE POTHOLED BY THE CONTRACTOR TO CONFIRM 1' MINIMUM CLEARANCE WITH (N) W.
9. PLACE 8" THICK CLASS B CONCRETE CAP OVER C900 WITH LESS THAN 20" COVER. MAINTAIN 2" OF AB BETWEEN CROWN OF PIPE AND CONCRETE CAP.

STA: 10+47 (A-LINE)
12" STORM DRAIN CROSSING (3/4)
SCALE: HORIZONTAL: 1"=10'; VERTICAL: 1"=1'



STA: 11+42 (A-LINE)
4" SEWER SERVICE CROSSING (4/4)
SCALE: HORIZONTAL: 1"=10'; VERTICAL: 1"=1'

DATE	10/14/19		
CONTRACT NO.	41819		
GRID NO.	N/A		
FILE NO.	N/A		

NO.	REVISIONS	APPROVAL BY	DATE
DESIGNED	A.C.S.		
DRAWN	A.C.S.		
APPROVED	REBECCA NEVES		
DATE	10/14/19		

10/14/19
DATE

PROJECT ENGINEER
A.C. SCHIESTEL

CITY OF PLACERVILLE
ENGINEERING DEPARTMENT
3101 CENTER STREET
PLACERVILLE, CA 95667
(530) 642-5250

PLANS FOR THE CONSTRUCTION OF
MOSQUITO ROAD STABILIZATION PROJECT PHASE - I
WATER MAIN CROSSING PROFILE DETAILS
CITY OF PLACERVILLE

WATER DETAILS

DRAWING D-5

SHEET: 10 OF 10

SCALE
HORZ: AS NOTED
VERT: AS NOTED

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