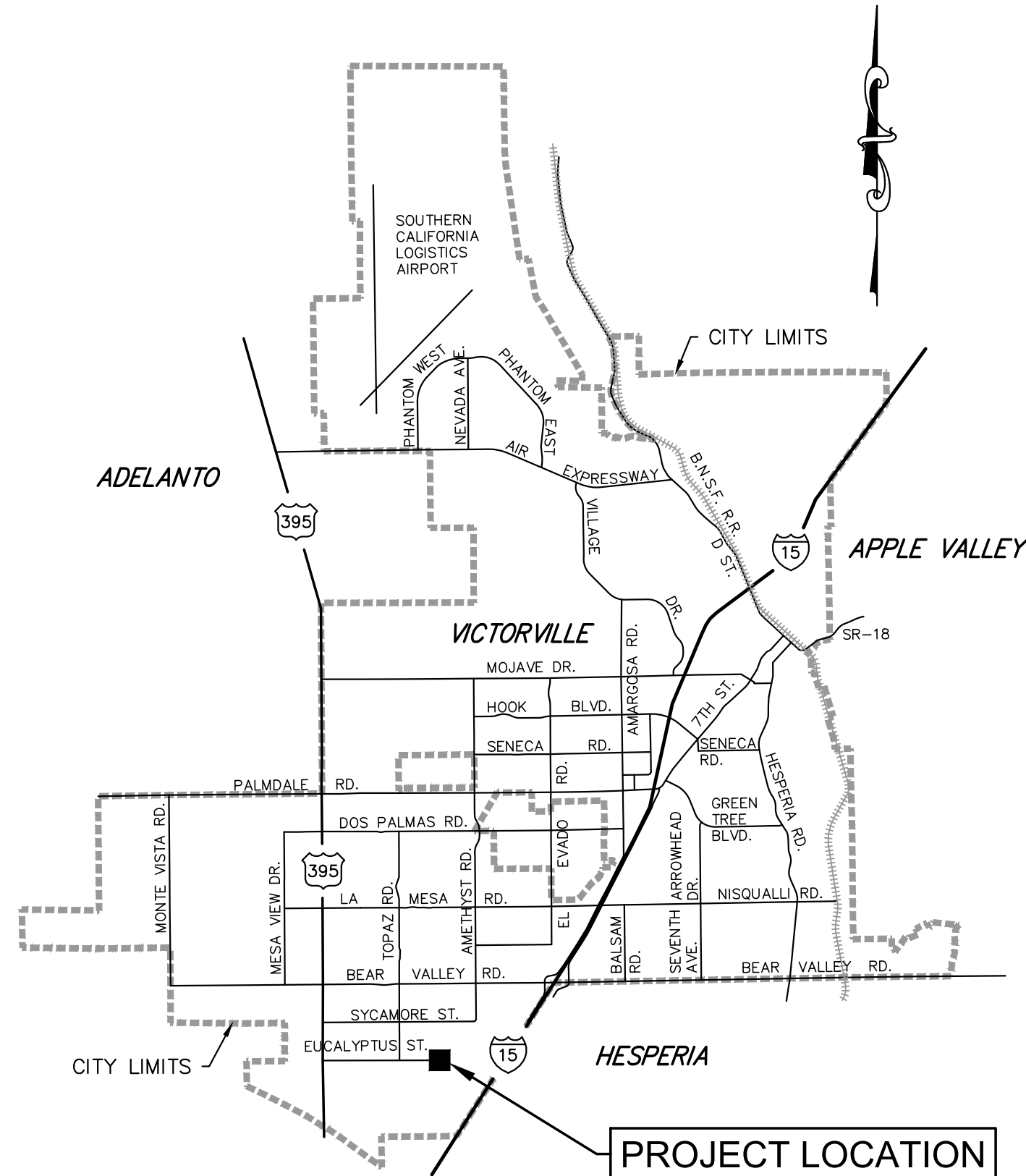


# CITY OF VICTORVILLE INFRASTRUCTURE IMPROVEMENT PLAN FOR EUCALYPTUS STREET

## STREET GENERAL NOTES:

- UNLESS OTHERWISE NOTED ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE PLANS, SPECIAL PROVISIONS, AND THE LATEST VERSION OF CITY OF VICTORVILLE STANDARD SPECIFICATIONS FOR PUBLIC WORKS IMPROVEMENTS, THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION "GREENBOOK", AND THE STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION "GREENBOOK".
- THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTIES; THAT THIS REQUIREMENT SHALL APPLY CONTINUALLY, AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD THE CITY HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THIS PROJECT.
- THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER OF ANY DISCREPANCIES OR UNUSUAL CONDITIONS ON THESE PLANS AND/OR THE SPECIAL PROVISIONS BEFORE BID AND AS SOON AS THEY ARE DISCOVERED.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BE FAMILIAR WITH THE WORK SITE AND ALL UNDERGROUND UTILITIES/FACILITIES SHOWN OR NOT SHOWN ON THESE PLANS.
- THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED BY THE CITY OF VICTORVILLE AND OTHER PUBLIC AGENCIES.
- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY CHANGES MADE TO THESE PLANS AND THE SPECIAL PROVISIONS WITHOUT PRIOR WRITTEN AUTHORIZATION OF THE CITY ENGINEER.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT SURVEYING MONUMENTS IN PLACE, AND THE CONTRACTOR SHALL BE RESPONSIBLE FINANCIALLY FOR RESETTling DAMAGED OR DESTROYED MONUMENTS.
- JOSHUA TREES SHALL BE PROTECTED IN PLACE OR RELOCATED AS APPROVED BY THE PARK DIVISION OF THE CITY OF VICTORVILLE, COMMUNITY SERVICES DEPARTMENT AT THE CONTRACTOR'S EXPENSE.
- ACCESS TO ALL DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES EXCEPT WHEN PRECLUDED BY NECESSARY CONSTRUCTION FOR A REASONABLE PERIOD OF TIME AS APPROVED BY THE CITY ENGINEER.
- THE CONTRACTOR SHALL MAINTAIN A NEAT APPEARANCE AT THE JOB SITE. THE CONTRACTOR SHALL REMOVE ALL RUBBISH, UNUSED MATERIALS, FORMS, BROKEN CONCRETE AND ASPHALT, UNUSED CONSTRUCTION EQUIPMENT, AND PLANTS AS SOON AS PRACTICABLE DURING CONSTRUCTION UNTIL FINAL ACCEPTANCE OF THE PROJECT BY THE CITY OF VICTORVILLE.
- CONSTRUCTION AND/OR MAINTENANCE OPERATIONS BY OTHERS MAY OCCUR CONCURRENTLY AT THE JOBSITE OR IN THE VICINITY OF THE JOBSITE. THE CONTRACTOR SHALL COOPERATE AND COORDINATE WITH THE OTHER CREWS.
- THE CONTRACTOR SHALL GRADE, COMPACT AND MATCH ALL EXISTING DRIVEWAY/ROAD TO THE FINISHED ELEVATIONS WITHOUT IMPEDING ANY NATURAL DRAINAGE FLOW.
- TEMPORARY TRAFFIC CONTROL PLANS SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CALIFORNIA MUTCD) AND AS APPROVED BY THE CITY ENGINEER.
- ALL TRAFFIC CONTROL DEVICES, ROAD SIGNS AND MARKERS TO BE REPLACED, REMOVED OR RELOCATED SHALL BE PER SIGNING AND STRIPING PLANS.
- IF ASPHALT IS TO BE PLACED DIRECTLY ON SUBSURFACE OF ROAD OR DRAINAGE FACILITIES, A SOIL STERILANT REGISTERED BY THE EPA FOR USE UNDER AC OR PC SHALL BE UNIFORMLY APPLIED AT THE MANUFACTURER'S RECOMMENDED RATE FOR FULL PAVEMENT WIDTH PRIOR TO PAVING.
- ALL NEW AC PAVEMENTS SHALL BE SEAL COATED PER CITY OF VICTORVILLE STANDARD SPECIFICATIONS OR THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION "GREENBOOK" AS DETERMINED BY THE CITY ENGINEER.
- ALL CURBS ADJACENT TO FIRE HYDRANTS SHALL BE PAINTED RED FOR A DISTANCE OF 15' EACH SIDE OF THE FIRE HYDRANT, MEASURED FROM THE CENTER OF THE FIRE HYDRANT.
- THE CONTRACTOR SHALL PLACE A BLUE TYPE I RPM AT ALL FIRE HYDRANT LOCATIONS ON ROADWAYS RECEIVING AC TREATMENT. THE RPM SHALL BE PLACED PER CALIFORNIA MUTCD FIGURE 3B-102 (CA).



VICINITY MAP  
NOT TO SCALE

## NOTATION AND LEGEND:

AB	AGGREGATE BASE	CORE REFERENCE	◆ R1
AC/ASPH	ASPHALT CONCRETE	CONSTRUCTION NOTE	⑤
APN	ASSESSOR'S PARCEL NUMBER	CURVE DATA NOTE	Ⓢ
BC/EC	BEGIN/END HORIZONTAL CURVE	CENTERLINE	—C—
BVC/EVC	BEGIN/END VERTICAL CURVE	PROPERTY LINE	—P—
C&G	CURB AND GUTTER	PROPOSED SLOPE	—YY— TOP TOE
CL	CENTERLINE	PROPOSED EDGE OF PAVEMENT	—E—
CMP	CORRUGATED METAL PIPE	EXISTING EDGE OF PAVEMENT	—E—
COMM	COMMUNICATIONS	EXISTING TRAFFIC SIGN	⊙ or ⊕ or ⊗ or ⊙
CONC.	CONCRETE	EXISTING SEWER LINE	—S—
DI	DRAINAGE INLET	EXISTING WATER LINE	—W—
DRWG	DRAWING	EXISTING GAS LINE	—G—
DWY	DRIVEWAY	EXISTING TELEPHONE LINE	—T—
EP	EDGE OF PAVEMENT	EXISTING CABLE TV LINE	—TV—
EXIST./EX.	EXISTING	EXISTING ELECTRICAL LINE	—E—
FG	FINISH GRADE	EXISTING RIGHT OF WAY LINE	—R—
FL	FLOW LINE	FUTURE RIGHT OF WAY LINE	—FR—
FS	FINISH SURFACE	EXISTING FIRE HYDRANT	⊕ or ⊙
GB	GRADE BREAK	EXISTING STREET LIGHT	⊙ or ⊕
GL	GROUND LINE	EXISTING POWER POLE	⊙ or ⊕
HP	HIGH POINT	EXISTING WATER VALVE/WATER METER	⊙ or ⊕
INV	INVERT	EXISTING GAS VALVE/GAS METER	⊙ or ⊕
LF	LINEAL FEET	EXISTING GAS VALVE/GAS METER	⊙ or ⊕
MB	MAILBOX	EXISTING GAS VALVE/GAS METER	⊙ or ⊕
NG	NATURAL GRADE/GROUND	COMMUNICATIONS PEDESTAL	⊙ or ⊕
PI/IP	POINT OF INTERSECTION/ INTERSECTION POINT	EXISTING TREE	⊙ or ⊕
PL	PROPOSED	EXISTING WALL	—W—
PROP.	PROPOSED	EXISTING ELEVATION	③ (35.7450)
RCB/RCP	REINFORCED CONCRETE BOX/PIPE	EXISTING ELEVATION (AT DECIMAL)	③ (35.1610)
R/W	RIGHT OF WAY	PROPOSED ELEVATION	③ (35.1610)
S/W	SIDEWALK	PROPOSED CONTOUR	② (25)
SCE	SOUTHERN CALIFORNIA EDISON	EXISTING CONTOUR	② (25)
SMH	SEWER MANHOLE		
STA.	STATION		
TC	TOP OF CURB		
THK.	THICK		
TMH	TELEPHONE MANHOLE		
TW/BW	TOP/BOTTOM OF WALL		
TYP.	TYPICAL		
VC	VERTICAL CURVE		
LT/RT	LEFT/RIGHT		
N/E/S/W	NORTH/EAST/SOUTH/WEST		

## SPECIAL NOTE TO THE CONTRACTOR:

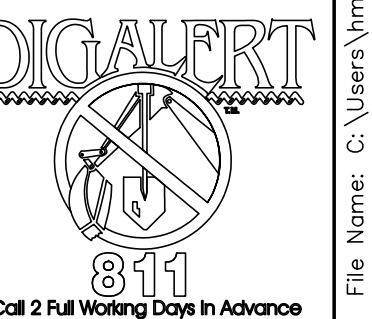
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF ALL AVAILABLE RECORDS, TO THE BEST OF OUR KNOWLEDGE. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINE NOT OF RECORD OR NOT SHOWN ON THESE PLANS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL CALL TOLL FREE 811 TO VERIFY THE UNDERGROUND LOCATION OF ALL UTILITIES.

## SHEET INDEX:

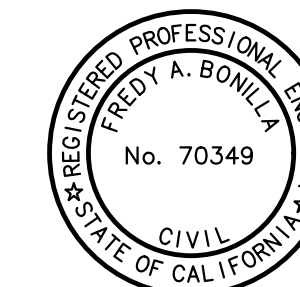
SHEET NO.	DESCRIPTION
1 OF 5	TITLE SHEET
2 OF 5	PLAN AND PROFILE
3 OF 5	STANDARDS & DETAILS
4 OF 5	STANDARDS
5 OF 5	STANDARDS

## CONSTRUCTION NOTES:

- CONSTRUCT 48" DIAMETER RCP (D-2000). USE SALVAGED MATERIAL AVAILABLE ON SITE, THEN NEW MATERIAL AS NEEDED. CONSTRUCT CONCRETE COLLARS PER CONSTRUCTION NOTE 4, ON JOINTS WHERE SALVAGED MATERIAL IS USED.
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- CONSTRUCT CATCH BASIN, WITH 3 GRATES TOTAL, PER SPPWC STANDARD 302-4, V=9.95, H=2.
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- CONSTRUCT 3" AC PAVEMENT OVER 8" AGGREGATE BASE.
- CONSTRUCT 8" CURB PER CITY OF VICTORVILLE STANDARD S-09 AND PER DETAIL ON SHEET 5.
- CONSTRUCT 5.5' DEEP, 1/2-TON (CLASS VII) OUTSIDE LAYER, METHOD A, UNGROUTED RIPRAP PER DETAIL ON SHEET 3.
- CONSTRUCT 1.25' DEEP BACKING No. 2 UNGROUTED RIPRAP PER DETAIL ON SHEET 3.
- CONSTRUCT RSP-TYPE B FABRIC UNDER RIPRAP LAYERS PER DETAIL ON SHEET 3.
- SAWCUT, REMOVE AND DISPOSE EXISTING AC PAVEMENT.
- COLD MILL AND DISPOSE 2.0' WIDE x 0.17' DEEP AC PAVEMENT.
- CONSTRUCT 2" AC PAVEMENT.
- REPAIR DAMAGED CATCH BASIN PER SPPWC STANDARD 302-4 AND PER DETAIL 'A' ON SHEET 2. INTEGRATE NEW CONCRETE TO EXISTING CONCRETE USING #6x12" DOWELS @ 12" O.C. ALL AROUND.
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- CONSTRUCT 10' PCC CUTOFF WALL PER DETAIL ON SHEET 4.
- CONSTRUCT METAL HAND RAILING, TYPE A, PER SPPWC STANDARD 606-5.

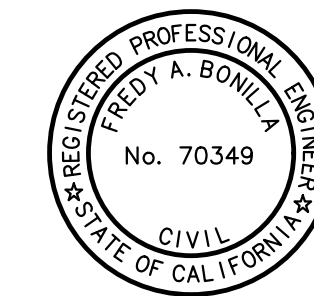
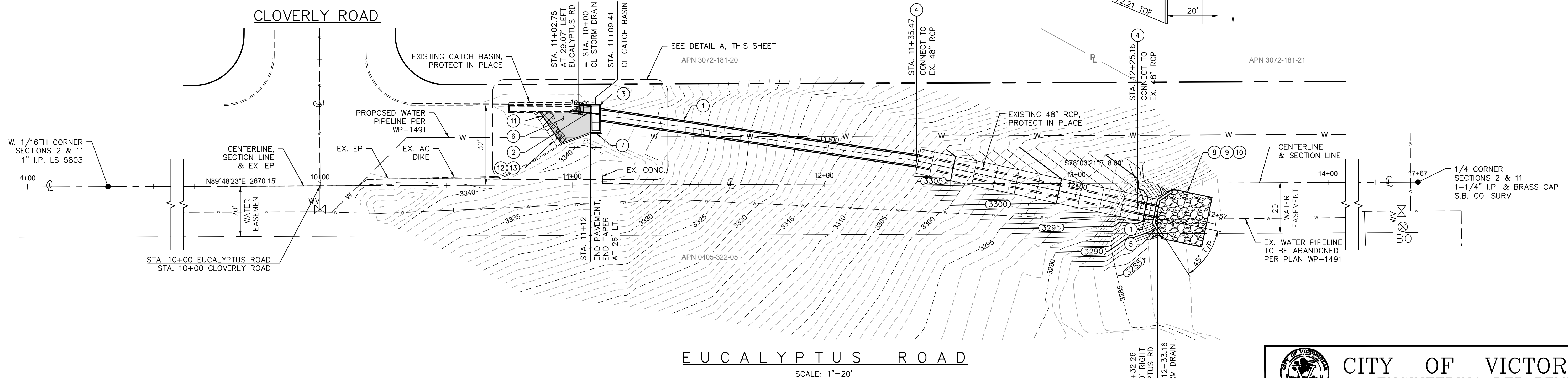
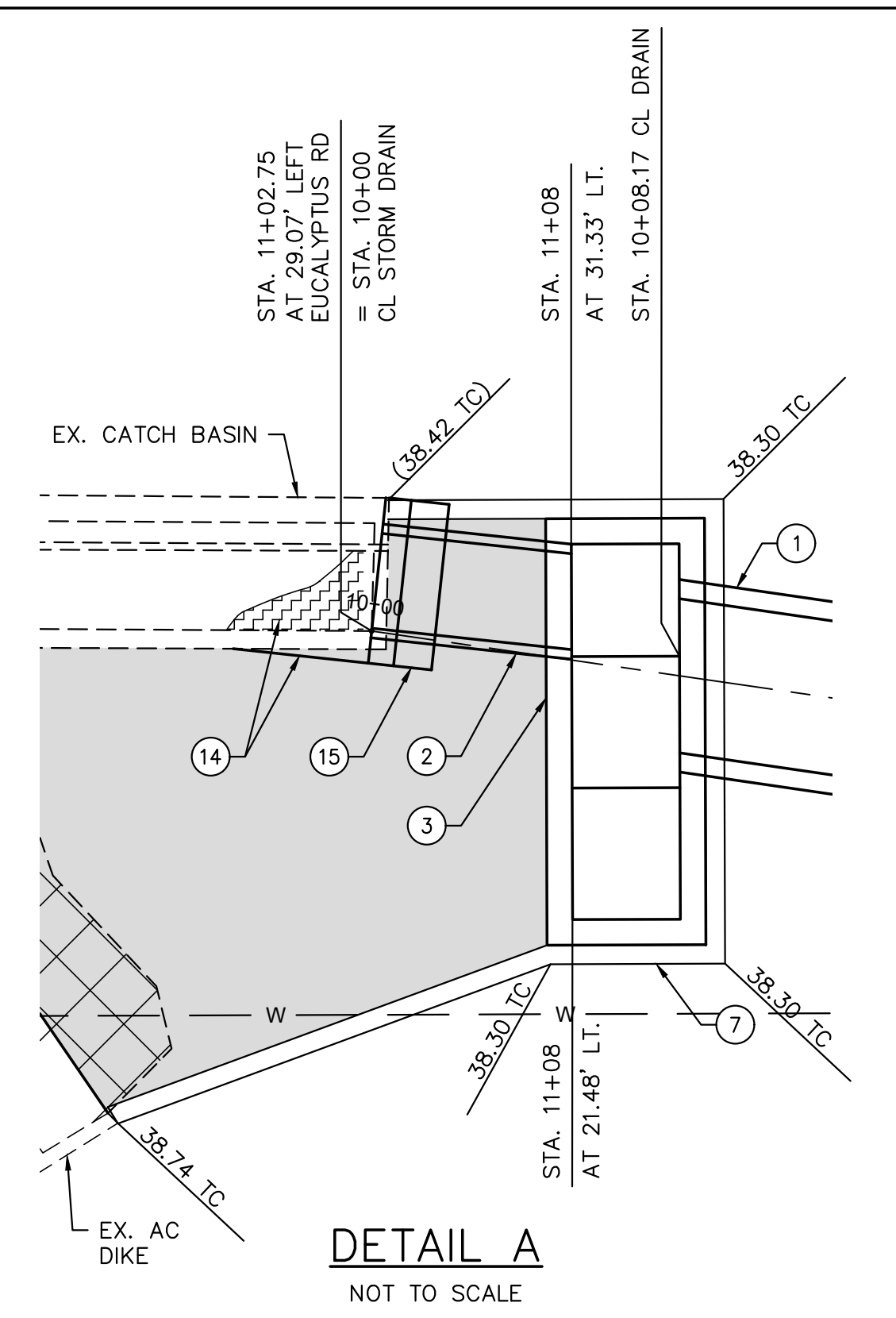
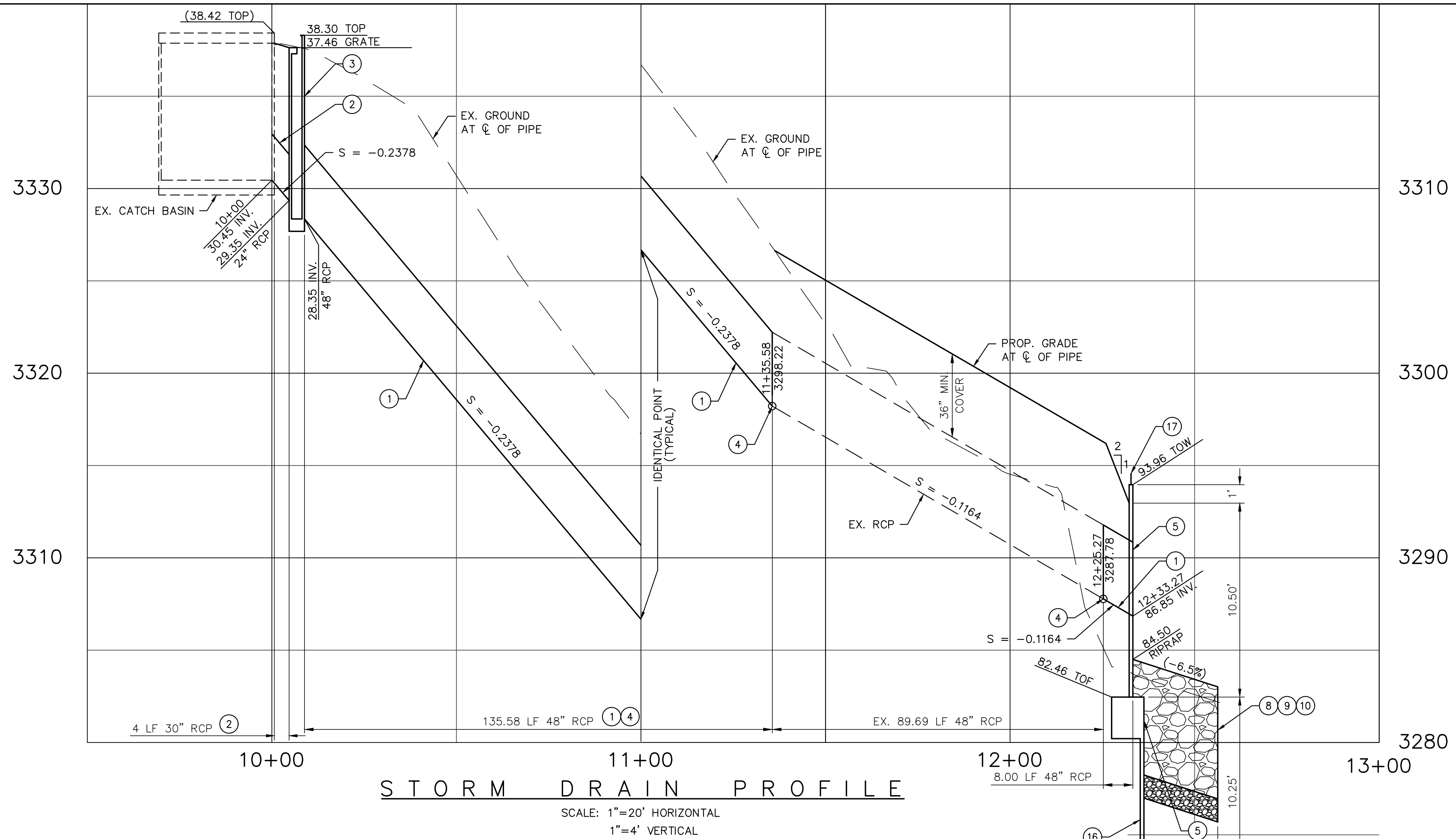


NO.		REVISION	BY	DATE	CITY OF VICTORVILLE ENGINEERING DEPARTMENT 14343 Civic Drive, Victorville, Ca. 92392 (760) 955-5158	
					INFRASTRUCTURE IMPROVEMENT PLAN EUCALYPTUS STREET	
FIELD BOOK NO. (S)					TITLE SHEET	
BENCH MARK: V-223 IN TC 5' E/O NE BCR MESA LINDA & EUCALYPTUS ELEVATION = 3376.91					DESIGN BY: STAFF	SHEET NO. 1 OF 5
APPROVED BY: CITY ENGINEER					CHECKED BY: H.M. DATE: 05/31/24	DRAWING NO. S-936
DATE: 06/06/24					R.C.E. 70349	PROJECT NO. 61038

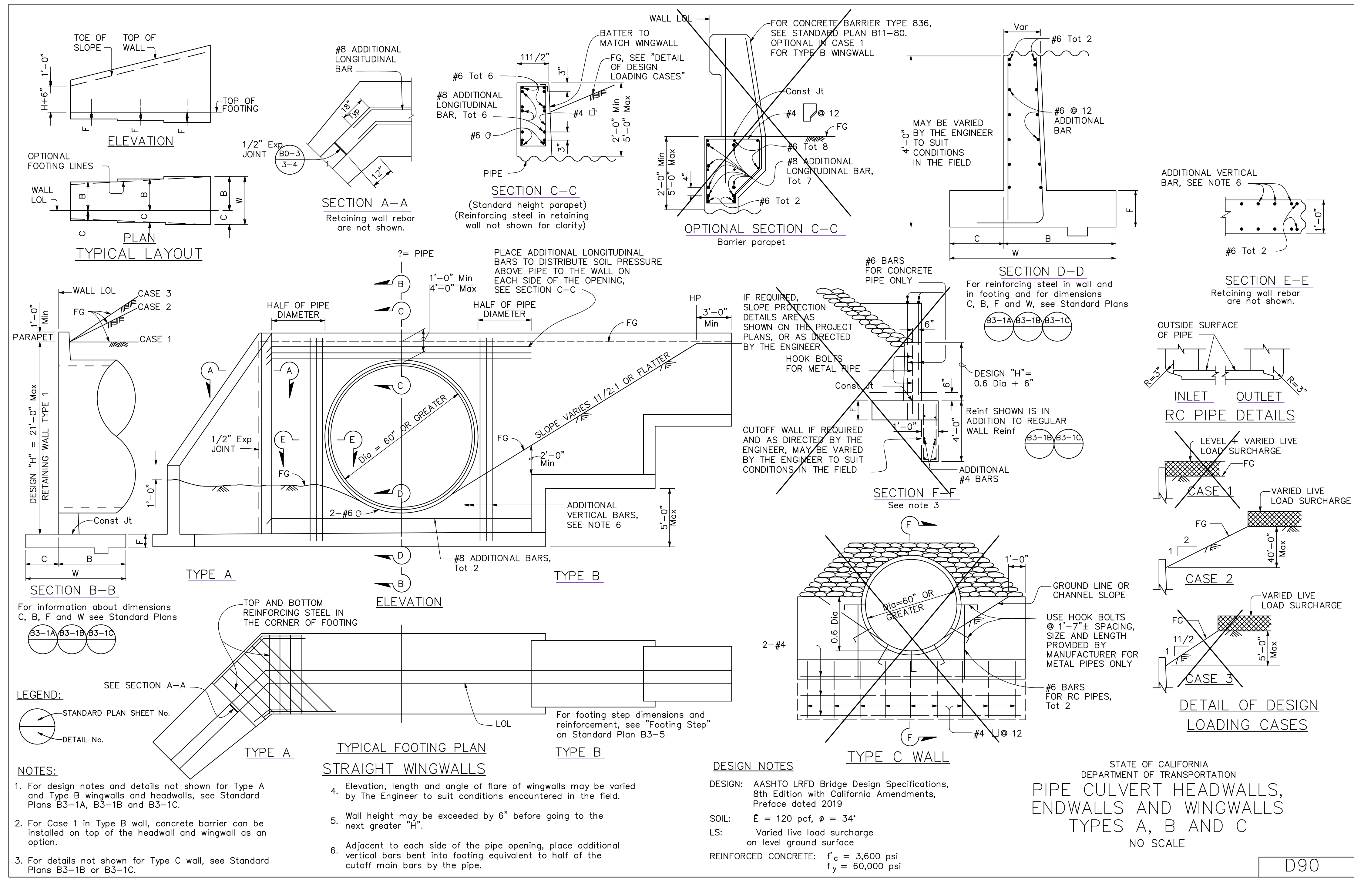


**CONSTRUCTION NOTES:**

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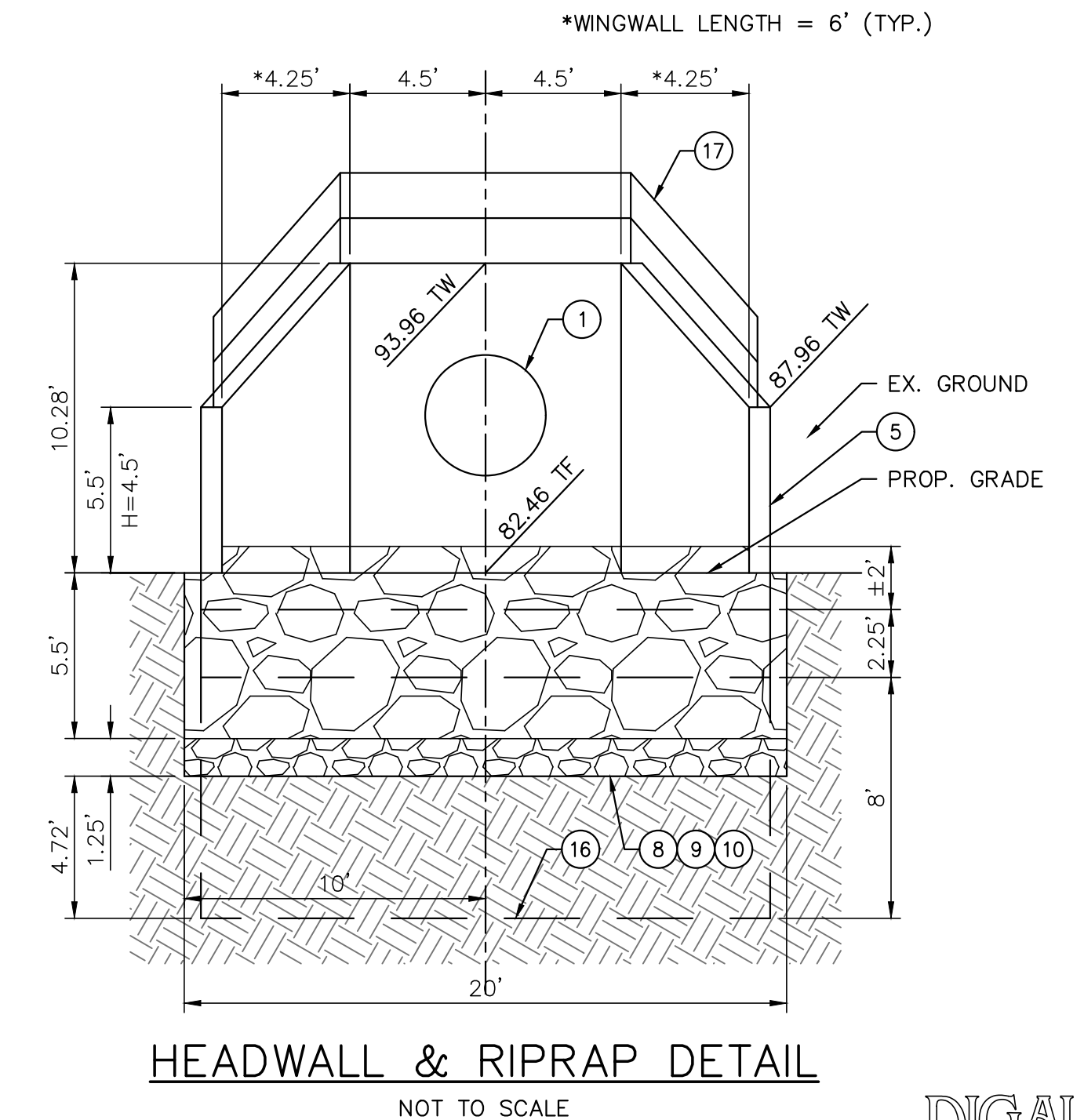
		<b>CITY OF VICTORVILLE</b> ENGINEERING DEPARTMENT 14343 Civic Drive, Victorville, Ca. 92392 (760) 955-5158	
		<b>INFRASTRUCTURE IMPROVEMENT PLAN</b> <b>EUCALYPTUS STREET</b> PLAN AND PROFILE	
NO.	REVISION	BY	DATE
FIELD BOOK NO. (S)		BENCH MARK:	
		V-223	
		IN TC 5' E/O NE BCR MESA LINDA & EUCALYPTUS	
		ELEVATION = 3376.91	
APPROVED BY:		DATE:	R.C.E.
CITY ENGINEER		06/06/24	70349
DESIGN BY: STAFF	CHECKED BY: H.M.	DATE: 05/31/24	SHEET NO. 2 of 5
DRAWING No. S-936		DRAWING No. 5-936	
PROJECT No. 61038		PROJECT No. 61038	



2023 STANDARD PLAN D90

**CONSTRUCTION NOTES:**

- CONSTRUCT 48" DIAMETER RCP (D-2000). USE SALVAGED MATERIAL AVAILABLE ON SITE, THEN NEW MATERIAL AS NEEDED. CONSTRUCT CONCRETE COLLARS, PER CONSTRUCTION NOTE 4, ON JOINTS WHERE SALVAGED MATERIAL IS USED.
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- CONSTRUCT METAL HAND RAILING, TYPE A, PER SPPWC STANDARD 606-5.



STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
PIPE CULVERT HEADWALLS,  
ENDWALLS AND WINGWALLS  
TYPES A, B AND C  
NO SCALE

D90

**LEGEND:**  
STANDARD PLAN SHEET No.  
DETAIL No.

**NOTES:**

- For design notes and details not shown for Type A and Type B wingwalls and headwalls, see Standard Plans B3-1A, B3-1B and B3-1C.
- For Case 1 in Type B wall, concrete barrier can be installed on top of the headwall and wingwall as an option.
- For details not shown for Type C wall, see Standard Plans B3-1B or B3-1C.

**CITY OF VICTORVILLE**  
ENGINEERING DEPARTMENT  
14343 Civic Drive, Victorville, Ca. 92392 (760) 955-5158

**INFRASTRUCTURE IMPROVEMENT PLAN**  
**EUCALYPTUS STREET**  
STANDARDS & DETAILS

NO.	REVISION	BY	DATE

FIELD BOOK NO. (S)

BENCH MARK:  
V-223  
IN TC 5' E/O NE BCR MESA LINDA & EUCALYPTUS  
ELEVATION = 3376.91

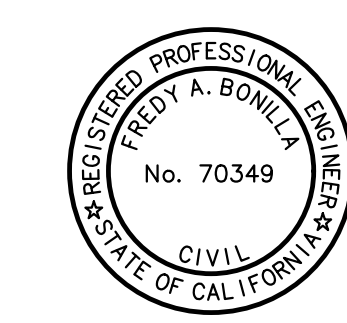
DESIGN BY: STAFF  
DRAWN BY: STAFF  
CHECKED BY: H.M.  
DATE: 05/31/24

SHEET NO.  
3 of 5

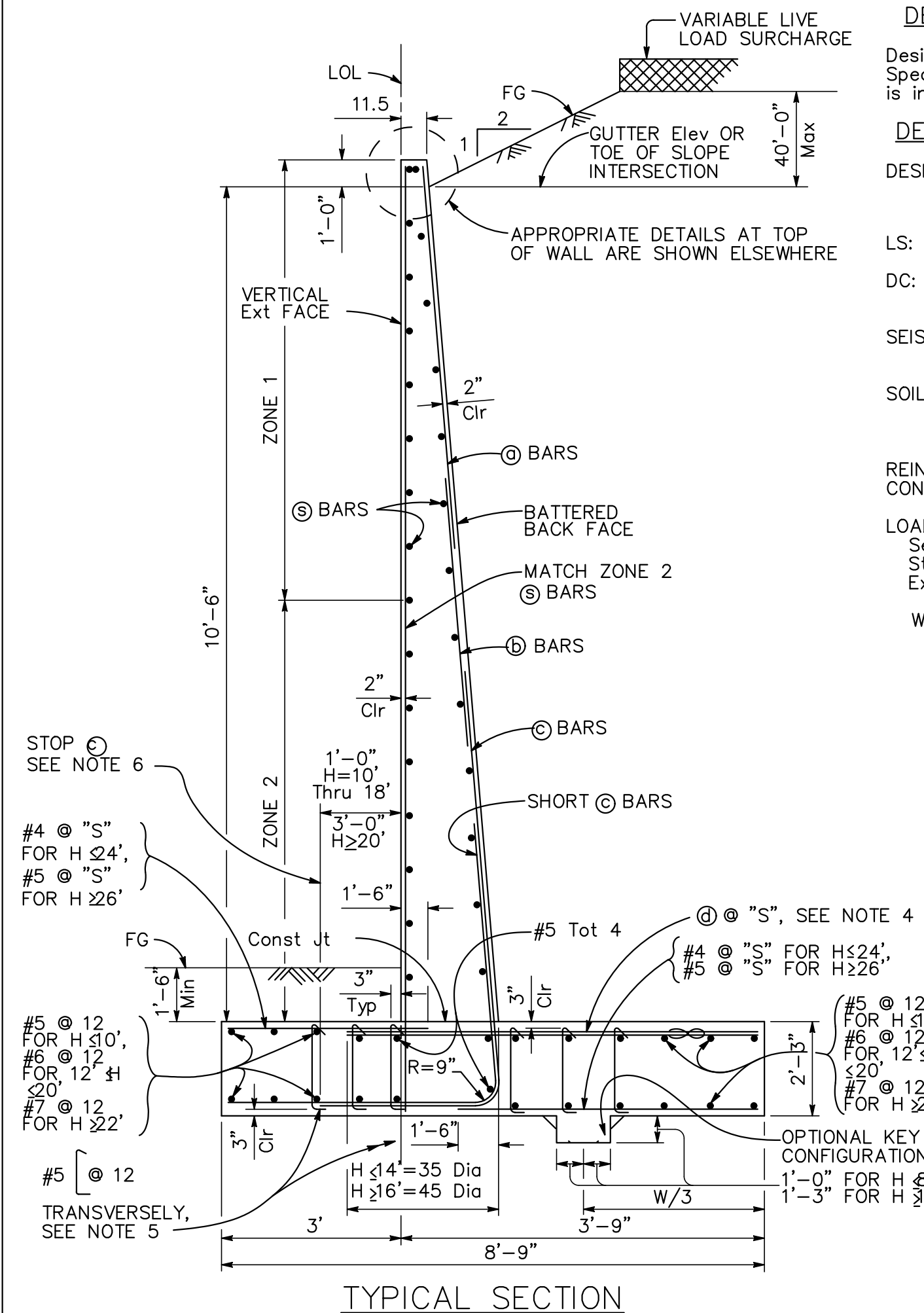
DRAWING No.  
S-936

PROJECT NO.  
61038

APPROVED BY: *Fredy A. Bonilla*  
CITY ENGINEER  
DATE: 06/06/24 R.C.E. 70349



378



TYPICAL SECTION

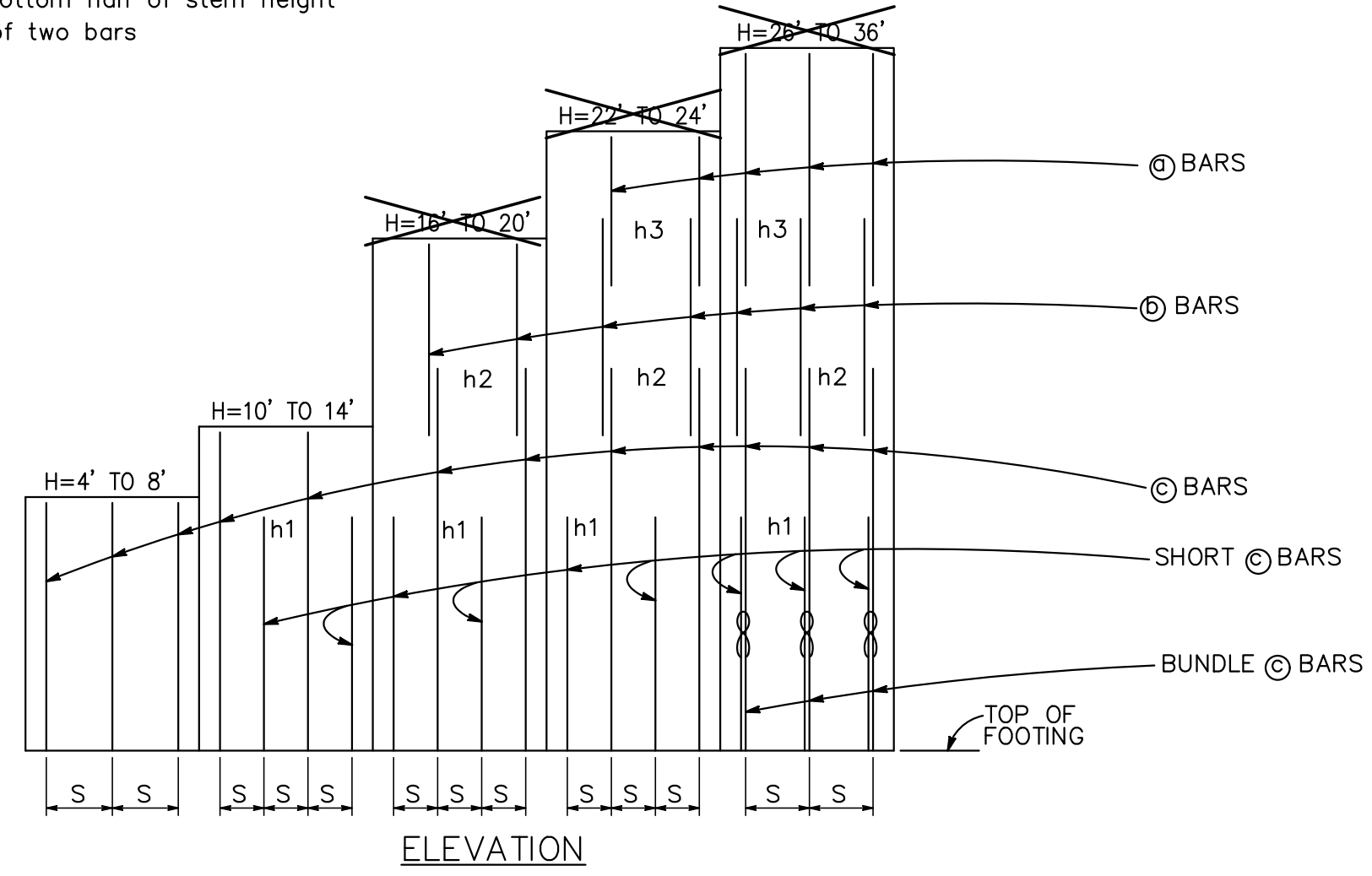
- NOTES:
- For details not shown and drainage notes, see B3-5.
  - For wall stem joint details, see B0-3 and B0-3/3-3.
  - At @ and short @ bars:
    - H < 6', no splices are allowed within 1'-8" above the top of footing.
    - H > 6', no splices are allowed within H/4 above the top of footing.
  - Bundle @ bars for H > 26'.
  - Hook stirrups around @ spce with alternating transverse reinforcement at 2 x S. For required number of toe or heel stirrup rows, see table. The first stirrups are placed adjacent to the stem as shown.
  - Extend @ bars to end of toe for H=4' to 8'.

**DESIGN CONDITIONS:**  
 Design H may be exceeded by 6" before going to the next size. Special footing design is required where foundation material is incapable of supporting bearing stress listed in the table.

**DESIGN NOTES:**  
 DESIGN: AASHTO LRFD Bridge Design Specifications, 8th Edition with California Amendments, Preface dated April 2019  
 LS: Variable live load surcharge on level ground surface  
 DC: Stem Architectural Treatment of thickness up to 2" of concrete (25 psf) considered  
 SEISMIC:  $k_h = 0.2$ ,  $k_v = 0.0$   
 SOIL BACKFILL:  $\bar{A} = 34'$ ,  $\bar{E} = 120$  pcf      SOIL FOR BASE FRICTION:  $\bar{A} = 32'$ ,  $\bar{E} = 120$  pcf  
 REINFORCED  $f'_c = 3,600$  psi  
 CONCRETE:  $f_y = 60,000$  psi  
 LOAD COMBINATIONS AND LIMIT STATES:  
 Service I  $Q = 1.00DC + 1.00EV + 1.00EH + 1.00LS$   
 Strength I  $Q = \phi DC + \phi EV + \phi EH + 1.75LS$   
 Extreme I  $Q = 1.00DC + 1.00EV + 1.00EH + 1.00EQD + 1.00EQE$

Where:  
 Q: Force Effects  
 a: 1.25 or 0.90, Whichever Controls Design  
 b: 1.35 or 1.00, Whichever Controls Design  
 c: 1.50 or 0.90, Whichever Controls Design  
 DC: Dead Load of Structure Components  
 EH: Horizontal Earth Fill Pressure  
 EV: Vertical Earth Pressure from Earth Fill Weight  
 LS: Live Load Surcharge  
 EQE: Seismic Earth Pressure  
 EQD: Soil and Structural and Nonstructural Components Inertia

**SYMBOLS:**  
 Ser - service limit state I  
 Str - strength limit state I  
 Ext I - extreme event limit state I  
 B' - effective footing width (ft)  
 $q'_o$  - net bearing stress (ksf), OG assumed to be FG at toe  
 $q_o$  - gross uniform bearing stress (ksf)  
 h1 = Top of footing to top of short @ bar  
 h2 = Top of footing to top of @ bar  
 h3 = Top of footing to top of @ bar  
 Zone 1 = Top half of stem height  
 Zone 2 = Bottom half of stem height  
 @ - Bundle of two bars



ELEVATION

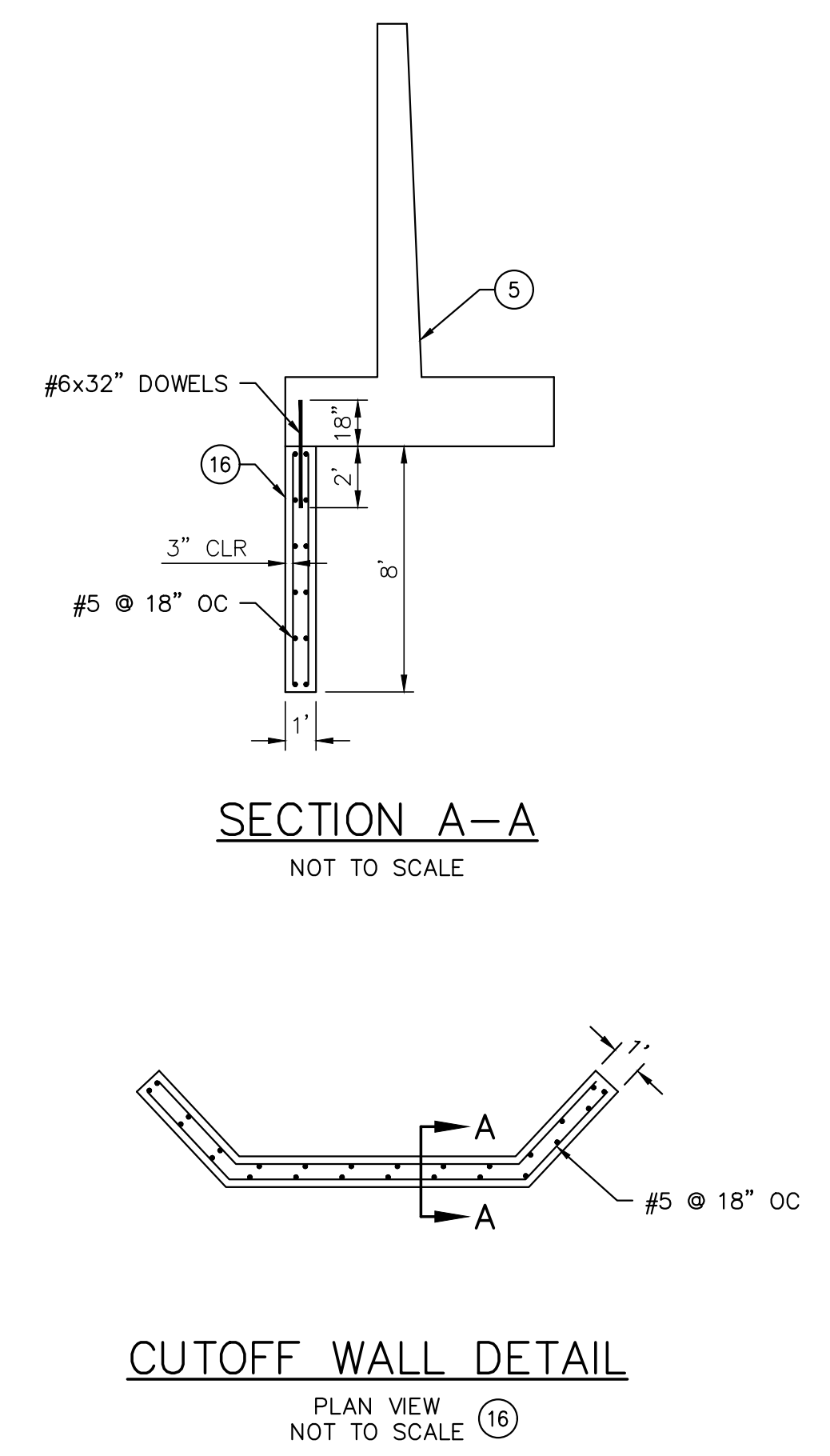
TABLE OF REINFORCING STEEL, DIMENSIONS AND DATA

DESIGN H	4'	6'	8'	10'	12'	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'	34'	36'
W	6'-6"	6'-6"	7'-8"	8'-9"	10'-0"	11'-7"	14'-0"	16'-3"	16'-3"	17'-6"	19'-0"	20'-3"	21'-6"	22'-9"	23'-6"	24'-6"	25'-6"
C	2'-3"	2'-3"	2'-10"	3'-0"	3'-6"	3'-10"	4'-9"	5'-0"	5'-0"	5'-6"	5'-9"	6'-3"	6'-6"	6'-9"	7'-0"	7'-8"	8'-0"
B	4'-3"	4'-3"	4'-10"	5'-9"	6'-6"	7'-9"	9'-3"	11'-3"	11'-3"	12'-0"	13'-3"	14'-0"	15'-0"	16'-0"	16'-6"	17'-0"	17'-6"
F	1'-6"	1'-6"	2'-0"	2'-3"	2'-6"	2'-8"	2'-16"	3'-0"	3'-4"	3'-6"	3'-6"	3'-7"	3'-7"	3'-9"	3'-9"	4'-0"	4'-4"
T	11.5"	11.5"	11.5"	11.5"	11.5"	11.5"	11.5"	11.5"	1'-0"	1'-0"	1'-1"	1'-4"	1'-6"	1'-10"	2'-1"	2'-9"	3'-7"
BATTER	0.5: 12	0.5: 12	0.5: 12	0.5: 12	0.5: 12	0.5: 12	0.625: 12	0.875: 12	0.875: 12	1.125: 12	1.125: 12	1.125: 12	1.125: 12	1.2: 12	1.2: 12	1.2: 12	1.2: 12
SPACING "S"	16"	14"	10"	7"	7"	7"	7"	7"	6"	6"	10"	8"	8"	8"	7"	7"	7"
@ BARS	-	-	-	-	-	-	-	-	#5	#5	#5	#5	#5	#5	#5	#5	#5
@ BARS	-	-	-	-	-	-	#6	#6	#6	#7	#7	#7	#7	#7	#7	#7	#7
@ BARS	#5	#5	#6	#6	#7	#8	#9	#10	#10	#10	#11	#11	#11	#11	#11	#11	#11
@ BARS	#5	#6	#5	#6	#6	#7	#8	#10	#10	#10	#10	#10	#10	#10	#10	#10	#10
h1	-	-	-	8'-3"	10'-0"	10'-7"	12'-2"	12'-11"	13'-8"	12'-7"	13'-9"	14'-6"	15'-0"	16'-3"	17'-0"	17'-9"	18'-8"
h2	-	-	-	-	-	-	15'-1"	17'-8"	20'-3"	19'-4"	21'-9"	21'-9"	21'-4"	22'-3"	22'-6"	23'-0"	23'-6"
h3	-	-	-	-	-	-	-	-	20'-4"	22'-1"	22'-7"	22'-10"	23'-10"	28'-7"	30'-1"	31'-0"	-
No. of Toe Stirrups	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6
No. of Heel Stirrups	0	0	0	0	0	0	2	3	4	6	7	7	7	8	8	8	8
ZONE 1 @ BARS	#4 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 12"	#5 @ 12"	#5 @ 12"	#6 @ 12"	#6 @ 12"	#7 @ 12"	#7 @ 12"
ZONE 2 @ BARS	#5 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 18"	#5 @ 12"	#5 @ 12"	#5 @ 12"	#6 @ 12"	#6 @ 12"	#6 @ 12"	#7 @ 12"	#7 @ 12"	#7 @ 12"	#8 @ 12"	#8 @ 12"
Ser: B', q' o	6.2, 0.6	6.5, 0.8	7.5, 1.1	8.2, 1.5	9.3, 1.7	10.8, 2.0	13.6, 2.1	15.9, 2.4	15.1, 2.9	16.2, 3.1	17.6, 3.4	18.8, 3.7	19.9, 4.0	21.0, 4.3	21.4, 4.6	22.3, 4.9	23.0, 5.2
Str: B', q' o	6.0, 1.3	6.4, 1.6	7.3, 2.1	8.1, 2.6	9.1, 3.0	10.5, 3.5	13.3, 3.6	15.6, 4.1	14.7, 4.8	15.8, 5.2	17.2, 5.6	18.3, 5.9	19.4, 6.3	20.4, 6.8	20.8, 7.3	21.6, 7.7	22.2, 8.1
Ext I: B', q' o	5.8, 1.7	4.8, 2.6	5.2, 3.5	5.5, 4.5	6.1, 5.1	7.2, 5.6	9.7, 5.3	11.7, 5.6	10.4, 7.0	11.2, 7.5	12.3, 7.9	13.2, 8.2	14.0, 8.7	14.7, 9.2	14.8, 9.9	15.4, 10.4	15.9, 11.0

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
 RETAINING WALL TYPE 1  
 (CASE 2)  
 NO SCALE  
 B3-1B

2023 STANDARD PLAN B3-1B

2-10-23



SECTION A-A  
NOT TO SCALE

CUTOFF WALL DETAIL  
PLAN VIEW  
NOT TO SCALE



**CITY OF VICTORVILLE**  
 ENGINEERING DEPARTMENT  
 14343 Civic Drive, Victorville, Ca. 92392 (760) 955-5158

**INFRASTRUCTURE IMPROVEMENT PLAN**  
**EUCALYPTUS STREET**

STANDARDS

NO.	REVISION	BY	DATE

FIELD BOOK NO. (S)

BENCH MARK: V-223  
 IN TC 5' E/O NE BCR MESA LINDA & EUCALYPTUS  
 ELEVATION = 3376.91

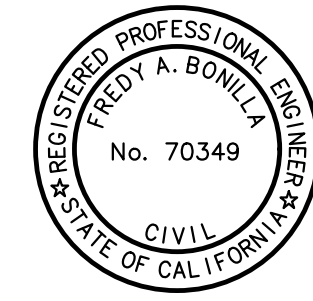
DESIGN BY: STAFF  
 DRAWN BY: STAFF  
 CHECKED BY: H.M.  
 DATE: 05/31/24

SHEET NO. 4 of 5

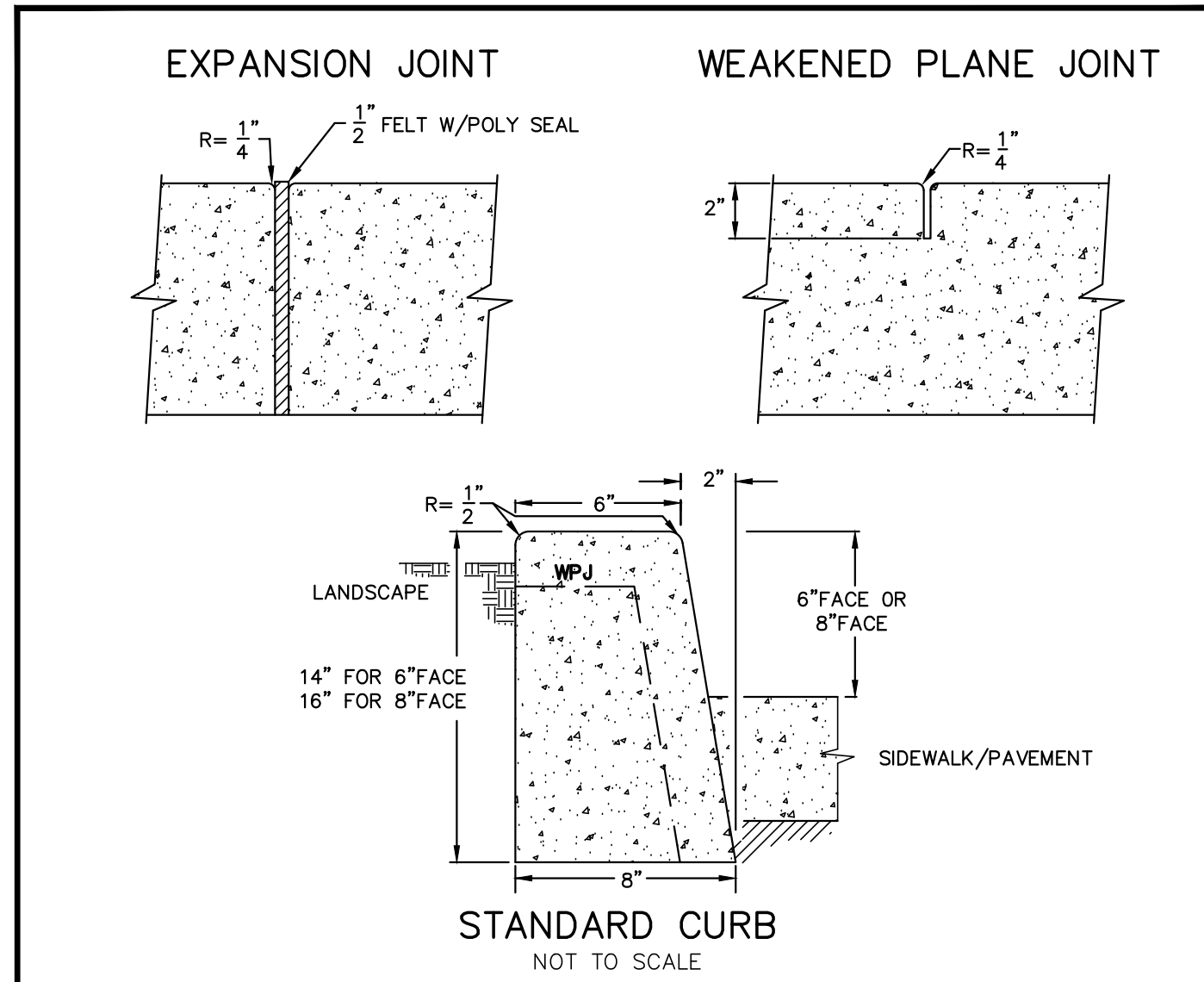
DRAWING No. S-936

PROJECT No. 61038

APPROVED BY: DATE: 06/06/24 R.C.E. 70349  
 CITY ENGINEER FREDY A. BONILLA

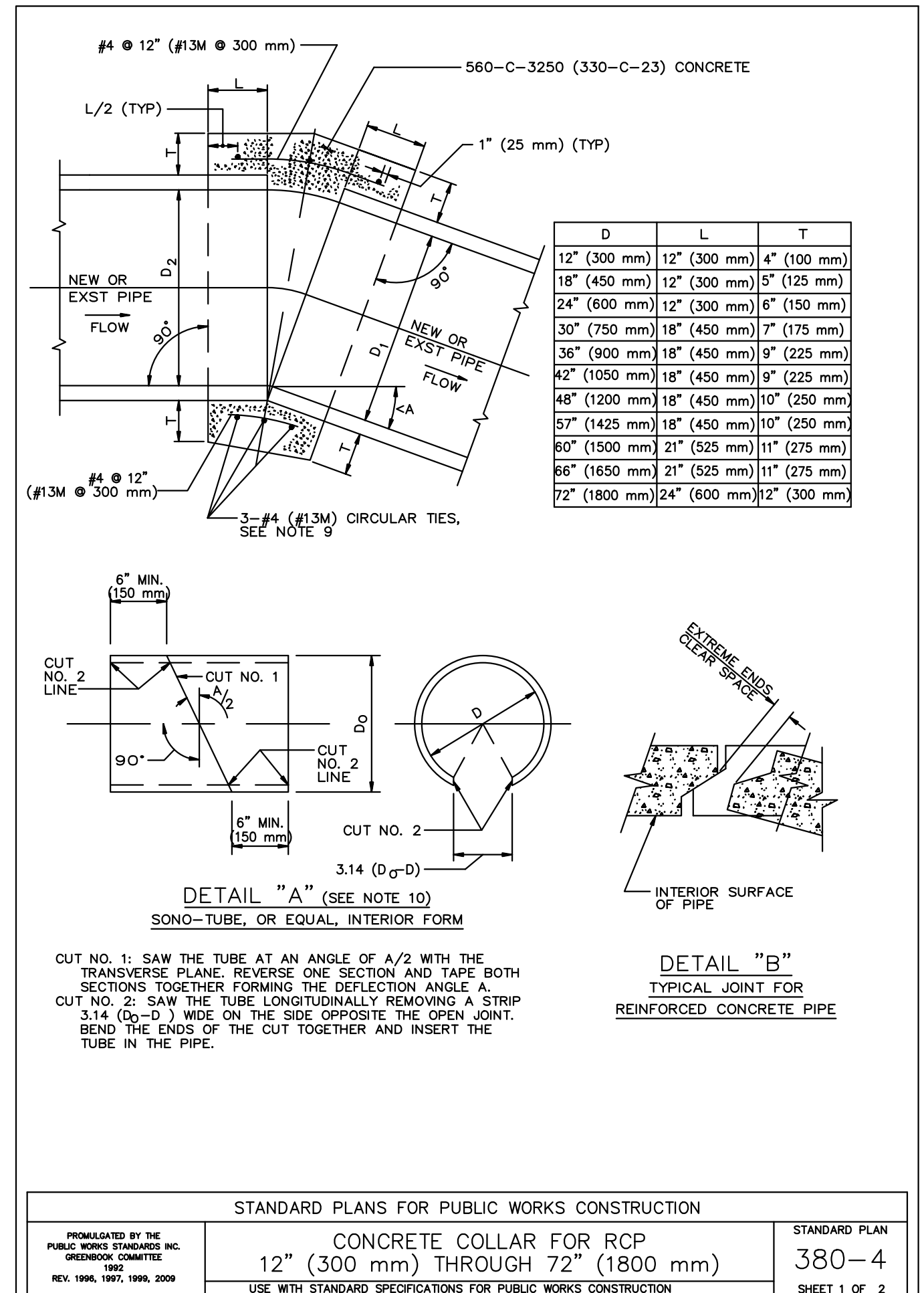


File Name: C:\Users\hmayo\OneDrive\CloudTemp\19X59931\_VS-09-36 Eucalyptus Storm Drain Repair.dwg  
 User: hmayo  
 Plot Date: 06/06/2024 5:25:51 PM  
 Last Update: 6/6/2024 5:23:47 PM



- NOTES:**
- CURB SHALL BE CONSTRUCTED PER SECTION 303 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK), LATEST EDITION.
  - THE PORTLAND CEMENT CONCRETE CLASS PER SECTION 201 SHALL BE 560-C-3250.
  - CONCRETE SHALL BE CURED WITH WHITE PIGMENTED CURING COMPOUND.
  - WHEN USED ADJACENT TO VEHICULAR TRAFFIC, CURB SHALL BE CONSTRUCTED ON MINIMUM 4" NATURAL CRUSHED AGGREGATE BASE COMPACTED TO 95% RELATIVE COMPACTION.
  - CRUSHED AGGREGATE BASE SHALL BE NATURAL MATERIAL CONFORMING TO SECTION 200-2.2 OF THE GREENBOOK SPECIFICATIONS.
  - WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED AT 10' INTERVALS.
  - WEAKENED PLANE JOINTS SHALL BE AT LEAST 2" DEEP.
  - EXPANSION JOINTS SHALL BE CONSTRUCTED AT ALL CURB RETURNS, DRIVEWAY APPROACHES AND AT 60' INTERVALS.
  - EXPANSION JOINTS SHALL BE 1/2" WIDE FELT PLACED 3/4" BELOW THE FINISHED SURFACE AND FILLED WITH POLYURETHANE JOINT SEALANT.
  - IF EXISTING CURB IS TO BE REMOVED, IT SHALL BE SCORED AT LEAST 1" DEEP WITH A CONCRETE SAW PRIOR TO REMOVAL. IF THE SAWCUT LINE IS CLOSER THAN 2" TO A WEAKENED PLANE JOINT OR EXPANSION JOINT, THE CURB SHALL BE REMOVED TO THE WEAKENED PLANE JOINT OR EXPANSION JOINT.

CITY OF VICTORVILLE - ENGINEERING DEPARTMENT			
REV. DATE	BY	<b>STANDARD CURB</b>	<b>S-09</b>
9/12/22		BRIAN W. GENGLER, CITY ENGINEER	SHEET 1 OF 1



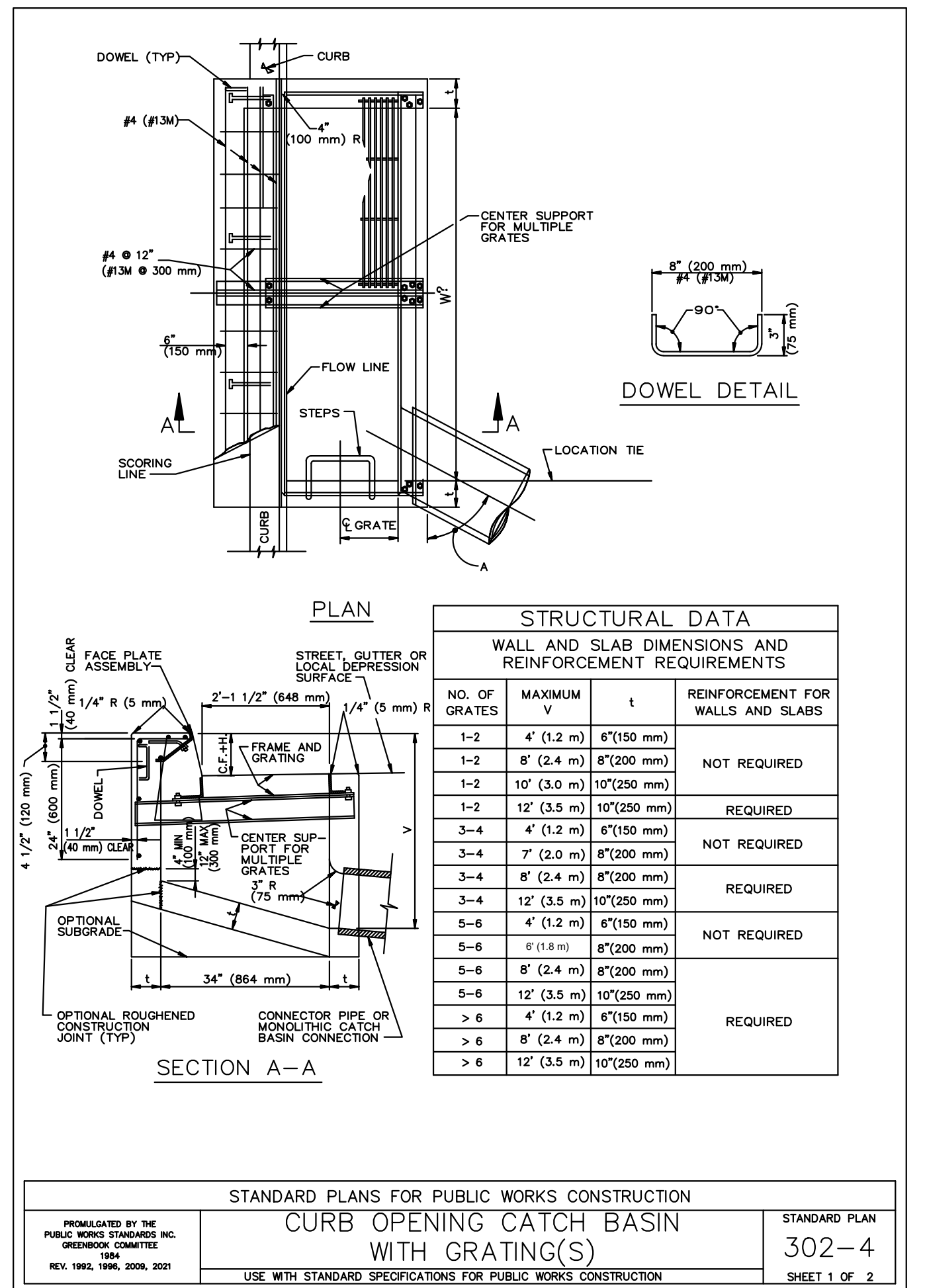
STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION		
CONCRETE COLLAR FOR RCP 12" (300 mm) THROUGH 72" (1800 mm)	STANDARD PLAN <b>380-4</b>	SHEET 1 OF 2

- NOTES:**
- A CONCRETE COLLAR IS REQUIRED WHERE THE CHANGE IN GRADE EXCEEDS 10%.
  - FOR CURVE JOINTS (SEE DETAIL B, SHEET 1)  
IF THE EXTREME ENDS OF THE PIPE LEAVE A CLEAR SPACE THAT IS GREATER THAN 1" (25 mm), BUT IS LESS THAN 3" (75 mm) A CONCRETE COVER IS REQUIRED IN ACCORDANCE WITH SSPWC 306-7.3.2.1.  
IF THE EXTREME ENDS OF THE PIPE LEAVE A CLEAR SPACE THAT IS EQUAL TO OR GREATER THAN 3" (75 mm), BUT LESS THAN 6" (150 mm), A CONCRETE COLLAR IS REQUIRED. IF THE CLEAR SPACE IS 6" (150 mm) OR GREATER, A TRANSITION STRUCTURE IS REQUIRED.
  - CONCRETE COLLAR SHALL NOT BE USED FOR A SIZE CHANGE ON THE MAIN LINE.
  - CONNECTOR PIPES  
A. WHERE PIPES OF DIFFERENT DIAMETERS ARE JOINED WITH A CONCRETE COLLAR, L AND T SHALL BE THOSE OF THE LARGER PIPE. D=DI OR D2, WHICHEVER IS GREATER.  
B. WHEN D1 IS EQUAL TO OR LESS THAN D2, JOIN INVERTS AND WHEN D1 IS GREATER THAN D2, JOIN SOFFITS.
  - FOR PIPE LARGER THAN 72" (1800 mm) SPECIAL COLLAR DETAILS ARE REQUIRED.
  - FOR PIPE SIZE NOT LISTED USE NEXT SIZE LARGER.
  - REINFORCEMENT SHALL CONFORM TO ASTM A 615 (A 615 M) GRADE 40 (300).
  - WHERE REINFORCING IS REQUIRED THE DIAMETER OF THE CIRCULAR TIES SHALL BE D+(2X WALL THICKNESS) + T.
  - REINFORCING SHALL BE USED WHERE THE PIPE DIAMETER IS GREATER THAN 21" (525 mm) AND ON ALL PIPES WHERE THE SPACES BETWEEN THE EXTREME OUTER ENDS IS 3" (75 mm) OR LARGER.  
CIRCULAR TIES:

PIPE DIAMETER	NO. OF CIRCULAR TIES
21" (525 mm) OR LESS	3
24" (600 mm) TO 30" (750 mm)	3
33" (825 mm) TO 57" (1425 mm)	4
60" (1500 mm) TO 72" (1800 mm)	5

WHERE THE SPACE BETWEEN PIPE ENDS EXCEEDS 3" (75 mm), THE NUMBER OF CIRCULAR TIES SHALL BE INCREASED TO MAINTAIN AN APPROXIMATE SPACING OF 6" (150 mm) O.C.
  - WHERE THE PIPE IS 21" (525 mm) OR LESS IN DIAMETER AN INTERIOR FORM OF UNSEALED SONO-TUBE OR EQUAL SHALL BE USED TO PROVIDE A SMOOTH INTERIOR JOINT. THE PAPER FORM MAY BE LEFT IN PLACE (SEE DETAIL A). WHEN THE PIPE IS 24" (600 mm) OR LARGER A REMOVABLE INTERIOR FORM SHALL BE USED OR THE INTERIOR JOINT SHALL BE COMPLETELY FILLED WITH MORTAR AND NEATLY POINTED.

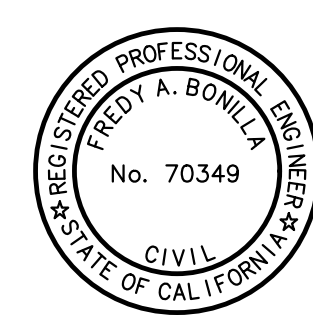
STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION	
CONCRETE COLLAR FOR RCP 12" (300 mm) THROUGH 72" (1800 mm)	STANDARD PLAN <b>380-4</b>



STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION		
CURB OPENING CATCH BASIN WITH GRATING(S)	STANDARD PLAN <b>302-4</b>	SHEET 1 OF 2

- NOTES:**
- WHERE THE BASIN IS TO BE CONSTRUCTED WITHIN THE LIMITS OF EXISTING OR PROPOSED SIDEWALK OR IS CONTIGUOUS TO SUCH SIDEWALK, THE TOP SLAB OF THE BASIN MAY BE POURED EITHER MONOLITHIC WITH THE SIDEWALK, OR SEPARATELY, USING THE SAME CLASS OF CONCRETE AS IN THE BASIN. WHEN POURED MONOLITHICALLY, THE SIDEWALK SHALL BE PROVIDED WITH A WEAKENED PLANE OR A 1" (25 mm) DEEP SAWCUT CONTINUOUSLY AROUND THE EXTERNAL PERIMETER OF THE CATCH BASIN WALLS, INCLUDING ACROSS THE FULL WIDTH OF THE SIDEWALK. SURFACE OF ALL EXPOSED CONCRETE SHALL CONFORM IN GRADE, COLOR, FINISH, AND SCORING TO EXISTING OR PROPOSED CURB AND WALK ADJACENT TO THE BASIN.
  - ALL CURVED CONCRETE SURFACES SHALL BE FORMED BY CURVED FORMS, AND SHALL NOT BE SHAPED BY PLASTERING.
  - ONE GRATING IS REQUIRED UNLESS OTHERWISE SHOWN ON THE PROJECT PLAN.
  - FLOOR OF BASIN SHALL BE GIVEN A STEEL TROWEL FINISH AND SHALL HAVE A LONGITUDINAL AND LATERAL SLOPE OF 1/8" PER FOOT MINIMUM AND 1/4" PER FOOT MAXIMUM, EXCEPT WHERE THE GUTTER GRADE EXCEEDS 8% IN WHICH CASE THE LONGITUDINAL SLOPE OF THE FLOOR SHALL BE THE SAME AS THE GUTTER GRADE. SLOPE FLOOR FROM ALL DIRECTIONS TO THE OUTLET.
  - DIMENSIONS:  
V = THE DIFFERENCE IN ELEVATION BETWEEN THE TOP OF THE CURB AND THE INVERT OF THE CATCH BASIN AT THE OUTLET = 4.5' (1.35 m).  
V2 = THE DIFFERENCE IN ELEVATION BETWEEN THE TOP OF THE CURB AND THE INVERT AT THE UPSTREAM END OF THE BASIN AND SHALL BE DETERMINED BY THE REQUIREMENTS OF NOTE 4, BUT SHALL NOT BE LESS THAN CURB FACE PLUS 12" (300 mm).  
V = THE DIFFERENCE IN ELEVATION BETWEEN THE TOP OF THE CURB AND THE INVERT OF THE INLET, NOTED ON THE PLANS.  
H = NOTED ON THE PROJECT PLANS.  
W2 = 2'-11 3/8" (900 mm) FOR ONE GRATING; ADD 3'-5 3/8" (1051 mm) FOR EACH ADDITIONAL GRATING.  
A = THE ANGLE, IN DEGREES, INTERCEPTED BY THE CENTERLINE OF THE CONNECTOR PIPE AND THE CATCH BASIN WALL TO WHICH THE CONNECTOR PIPE IS ATTACHED.
  - PLACE CONNECTOR PIPES AS INDICATED ON THE PLANS. UNLESS OTHERWISE SPECIFIED, THE CONNECTOR PIPE SHALL BE LOCATED AT THE DOWNSTREAM END OF THE BASIN. WHERE THE CONNECTOR PIPE IS SHOWN AT A CORNER, THE CENTERLINE OF THE PIPE SHALL INTERSECT THE INSIDE CORNER OF THE BASIN. THE PIPE MAY BE CUT AND TRIMMED AT A SKEW NECESSARY TO ENSURE MINIMUM 3" (75 mm) PIPE EMBEDMENT ALL AROUND, WITHIN THE CATCH BASIN WALL, AND 3" (75 mm) RADIUS OF ROUNDING OF STRUCTURE CONCRETE ALL AROUND, ADJACENT TO PIPE ENDS. A MONOLITHIC CATCH BASIN CONNECTION SHALL BE USED TO JOIN THE CONNECTOR PIPE TO THE CATCH BASIN WHENEVER ANGLE 'A' IS LESS THAN 70° OR GREATER THAN 110°, OR WHENEVER THE CONNECTOR PIPE IS LOCATED IN A CORNER. THE OPTIONAL USE OF A MONOLITHIC CATCH BASIN CONNECTION IN ANY CASE IS PERMITTED. MONOLITHIC CATCH BASIN CONNECTIONS MAY BE CONSTRUCTED TO AVOID CUTTING STANDARD LENGTHS OF PIPE.
  - STEPS SHALL BE LOCATED AS SHOWN. IF THE CONNECTOR PIPE INTERFERES WITH THE STEPS, THEY SHALL BE LOCATED ON THE FRONT WALL AT THE CENTERLINE OF THE DOWNSTREAM GRATING. STEPS SHALL BE SPACED 12" (300 mm) APART. THE TOP STEP SHALL BE 7" (175 mm) BELOW THE TOP OF THE GRATING AND PROJECT 2 1/2" (65 mm). ALL OTHER STEPS SHALL PROJECT 5" (130 mm).
  - DOWELS ARE REQUIRED AT EACH CORNER AND AT 7' (2.0 m) ON CENTER (MAXIMUM) ALONG THE BACKWALL.
  - THE FOLLOWING SSPWC ARE INCORPORATED HEREIN:  
308 MONOLITHIC CATCH BASIN CONNECTION  
309 CATCH BASIN REINFORCEMENT  
310 CATCH BASIN FACE PLATE ASSEMBLY AND PROTECTION BAR  
311 FRAME AND GRATING FOR CATCH BASINS  
635 STEEL STEP  
636 POLYPROPYLENE PLASTIC STEP

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION		
CURB OPENING CATCH BASIN WITH GRATING(S)	STANDARD PLAN <b>302-4</b>	SHEET 2 OF 2



**CITY OF VICTORVILLE**  
ENGINEERING DEPARTMENT  
14343 Civic Drive, Victorville, Ca. 92392 (760) 955-5158

**INFRASTRUCTURE IMPROVEMENT PLAN**  
**EUCALYPTUS STREET**

STANDARDS

NO.	REVISION	BY	DATE

FIELD BOOK NO. (S)

BENCH MARK: V-223  
IN TC S' E/O NE BCR MESA LINDA & EUCALYPTUS  
ELEVATION = 3376.91

DESIGN BY: STAFF  
DRAWN BY: STAFF  
CHECKED BY: H.M.  
DATE: 05/31/24

SHEET NO. 5 OF 5

DRAWING No. S-936

PROJECT NO. 61038

APPROVED BY: CITY ENGINEER  
DATE: 06/06/24  
R.C.E. 70349