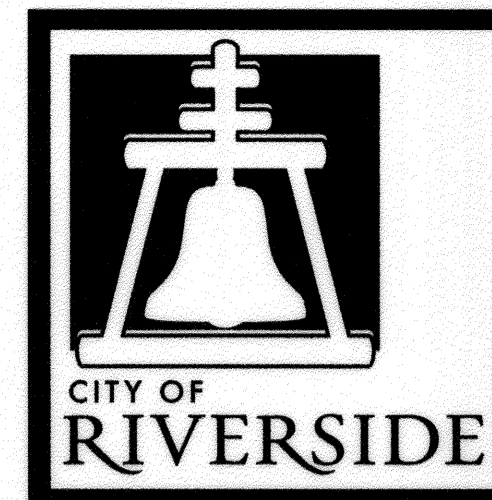


RIVERSIDE



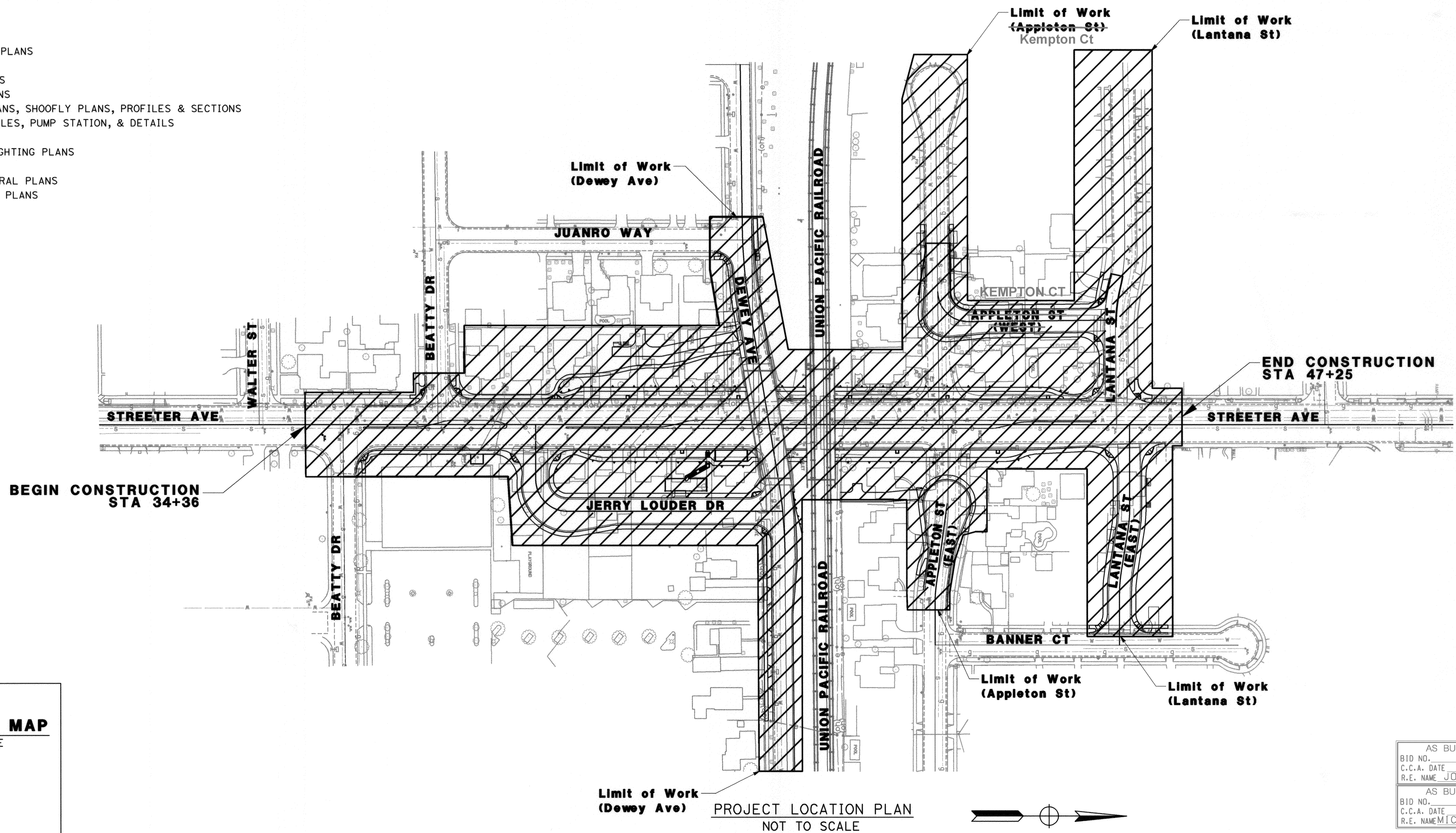
CALIFORNIA

PUBLIC WORKS DEPARTMENT STREETER AVENUE UNDERPASS

UNION PACIFIC RAILROAD LOS ANGELES SUBDIVISION - MP 55.2-53.8

INDEX OF PLANS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-3	GENERAL NOTES
4-8	ROADWAY TYPICAL CROSS SECTIONS
9-16	ROADWAY STAGING PLANS
17-19	DETOUR PLAN, PROFILE, & TRAFFIC HANDLING
20-29	LAYOUT PLANS
30-35	ROADWAY PROFILES
36	SIGNAL PLAN
37-38	SIGNING AND STRIPING PLANS
39-54	CONSTRUCTION DETAILS
55-57	CONTOUR GRADING PLANS
58-66	RAILROAD PHASING PLANS
67-88	RAILROAD MAINLINE PLANS, SHOOFLY PLANS, PROFILES & SECTIONS
89-119	DRAINAGE PLANS, PROFILES, PUMP STATION, & DETAILS
120-124	SEWER PLANS
125-127	STREETER SIDEWALK LIGHTING PLANS
128-138	LANDSCAPE PLANS
139-157	DEWEY BRIDGE STRUCTURAL PLANS
158-182	UP BRIDGE STRUCTURAL PLANS
183	SURVERY CONTROL
184-191	WAYSIDE HORN PLANS

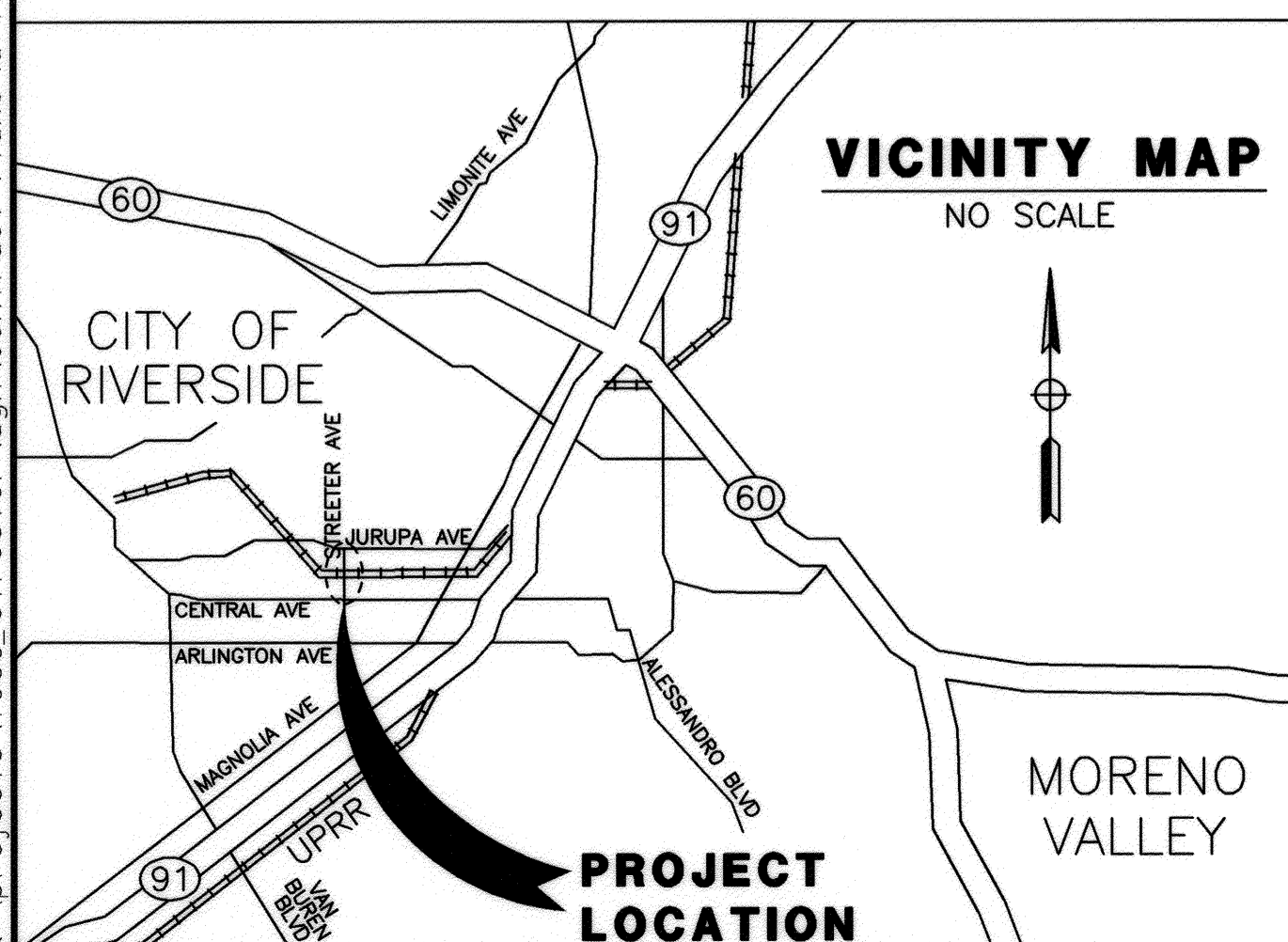


BENCHMARK

CITY OF RIVERSIDE BENCHMARK H5-F3
RAILROAD SPIKE IN POWER POLE, 1 FOOT
ABOVE GROUND.
NORTHWEST OF THE INTERSECTION OF
STREETER AVENUE AND THE UPRR
ELEVATION 788.643 (NAVD 1929)

BASIS OF BEARINGS

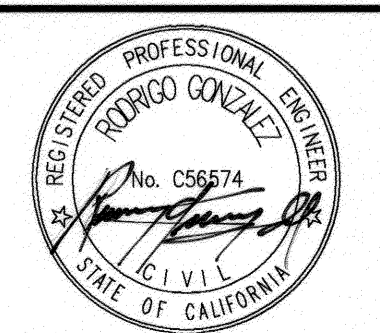
THE BEARINGS SHOW HEREON ARE BASED
ON THE LINE BETWEEN CITY OF RIVERSIDE
SURVEY CONTROL POINTS 0179 AND 2086
ON RECORD AT THE CITY OF RIVERSIDE,
N66°32'14.4"E, A DISTANCE OF
3,683.80 FEET. CITY OF RIVERSIDE CONTROL
DATUM WAS USED FOR THIS PROJECT.



AS BUILT
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA
AS BUILT
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
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requires a Dig Alert Identification
Number to be placed before a
"Permit to Excavate" will be void.
For your Dig Alert I.D. Number call
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48 HOURS BEFORE YOU DIG
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TY-LIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com



APPROVED BY	BY	DATE			
ENGINEERING MANAGER	F.M.	8/7/12			
CONST. CONTRACT ADMIN.					
STREET SERVICES					
SURVEYOR					
TRAFFIC DIVISION	S.H.	8.9.12			
DESIGNED BY	PP	DRAWN BY	PP	CHECKED BY	RG

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
APPROVED BY
Michael Wolff
CITY ENGINEER
DATE 8/9/2012

STREETER AVENUE
UNDERPASS
TITLE SHEET

R-4180
SHEET 1 OF 191

GENERAL NOTES:

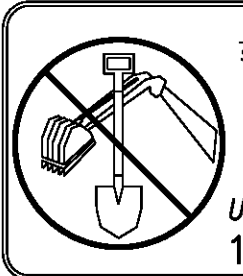

1. NO PERSON SHALL PERFORM ANY CONSTRUCTION ACTIVITY OR INSTALL ANY OBJECTS WITHIN THE PUBLIC RIGHTS-OF-WAY OR EASEMENTS OF THE CITY OF RIVERSIDE WITHOUT A VALID CONSTRUCTION PERMIT OR, A STREET OPENING PERMIT OR AN ENCROACHMENT PERMIT ISSUED BY THE CITY'S PUBLIC WORKS DEPARTMENT.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAR THE RIGHT OF WAY IN ACCORDANCE WITH THE PROVISIONS OF LAW AS IT AFFECTS EACH UTILITY INCLUDING IRRIGATION LINES AND APPURTENANCES AND AT NO COST TO THE CITY.
3. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE DEPARTMENT OF PUBLIC WORKS, STANDARD DRAWINGS, ITS SUPPLEMENTAL NOTES AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION.
4. THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE WORK HEREON. IN THE EVENT OF DISCREPANCIES ARISING DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY (THIS NOTE REQUIRED ON ALL PLANS.)
5. WHEN A PORTION OF THE WORK IS TO BE DONE BY THE CITY, THE CONTRACTOR SHALL GIVE THE CITY 60-DAYS NOTICE SO THAT THE CONTRACTOR'S WORK AND THE CITY'S WORK CAN BE PROPERLY COORDINATED. THE CONTRACTOR SHALL PREPARE AND COMPACT THE SUBGRADE TO ELEVATIONS WITHIN +/- .1' OF THE DESIGN ELEVATIONS AND SHALL BE RESPONSIBLE FOR THE CONDITION OF THE SUBGRADE UNTIL ACCEPTED BY THE CITY. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ANY BARRICADING DURING THIS TIME.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING OR RE-ESTABLISHING AND REFERENCING SURVEY MONUMENTS DESTROYED, DISTURBED OR BURIED AS A RESULT OF CONSTRUCTION SHOWN HEREON.
7. WHERE NEW PAVEMENT IS TO JOIN THE EXISTING PAVEMENT, THE EDGE OF THE EXISTING PAVEMENT SHALL BE TRIMMED IN A SMOOTH AND STRAIGHT LINE. CONSTRUCT MATCH-UP PAVING AS SHOWN ON THE PLANS AND OVERLAY PAVING AS DIRECTED IN THE FIELD TO PRODUCE A SMOOTH SECTION.
8. ALL TRAFFIC SIGNS SHALL BE INSTALLED PRIOR TO OPENING THE STREETS TO TRAFFIC.
9. ANY TRAFFIC CONTROL STRIPING OBLITERATED AND/OR BADLY WORN DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR WITHIN 24 HOURS AFTER NOTIFICATION FROM THE CITY INSPECTORS.
10. STREET IMPROVEMENT WORK THAT WILL CAUSE DAMAGE TO THE DETECTOR LOOP(S) SHALL NOT BE PERFORMED UNTIL TRAFFIC SIGNAL MAINTENANCE PERSONNEL HAVE BEEN NOTIFIED AND THE NECESSARY TIMING ADJUSTMENTS ARE MADE TO MAINTAIN SIGNAL OPERATION.
11. FINAL STRIPING FOR TRAFFIC CONTROL AND/OR PAVEMENT MARKING TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
12. CONTRACTOR IS TO VERIFY EXISTING SEWER MAIN AND EXISTING SEWER LATERAL ELEVATIONS PRIOR TO CONSTRUCTION.
13. LOCATION OF LATERALS TO BE DETERMINED IN THE FIELD AT THE DIRECTION OF THE ENGINEER. AVOID CONFLICT WITH PROPOSED AND/OR EXISTING FACILITIES.
14. A PLUG SHALL BE INSTALLED AND WILL REMAIN IN PLACE WHERE THE NEW SEWER CONNECTS WITH THE EXISTING SEWER UNTIL THE NEW SEWER IS ACCEPTED BY THE CITY.
15. THE CONTRACTOR SHALL ADJUST MANHOLES TO FINAL GRADE AFTER PAVING IS COMPLETED.
16. IN PAVEMENT OVERLAY AREAS, ANY DISTRESSED EXISTING PAVEMENT SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE INSPECTOR PRIOR TO OVERLAYING WITH A.C. PAVING.
17. ALL ELEVATIONS AND OFFSETS SHOWN ON THE PLANS SHALL BE STAKED IN THE FIELD AND VERIFIED PRIOR TO CONSTRUCTION BY CONTRACTOR. ALL ELEVATIONS, OFFSETS, AND DIMENSIONS SHOWN FOR RETAINING WALLS AND DRIVEWAYS ON OR ADJACENT TO PRIVATE PROPERTY SHALL BE VERIFIED PRIOR TO CONSTRUCTION BY CONTRACTOR.
18. PRIME CONTRACTORS BIDDING THIS WORK SHALL HAVE A CLASS "A" CONTRACTORS LICENSE.
19. PRIOR TO ISSUANCE OF GRADE SHEETS FOR ANY PROPOSED SEWER AND STROM DRAIN FACILITIES CONTRACTOR SHALL EXPOSE ALL UTILITIES WHICH CROSS OR MAY BE IN CONFLICT WITH THE PROPOSED SEWER AND STROM DRAIN FACILITIES AND COORDINATE WITH THE INSPECTOR TO HAVE THE LOCATION AND ELEVATION VERIFIED BY CITY'S/CONTRACTOR'S SURVEYORS.
20. CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL SAFETY CODES AND REGULATIONS AND THE SPECIFICATION FOR THIS CONTRACT.

GENERAL NOTES: (CONT.)

21. ALL CONSTRUCTION ACTIVITIES SHALL BE SCHEDULED AND COORDINATED THROUGH THE ENGINEER, INCLUDING THE VARIOUS COMPANIES, AGENCIES AND OTHER CONTRACTORS WHO MAY BE AFFECTED BY THIS WORK. ALL REQUIRED PERMITS INCLUDING RAILROAD RIGHT-OF-WAY PERMITS NEEDED FOR THE WORK SHALL BE OBTAINED BY THE CONTRACTOR UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL COMPLY WITH ALL RAILROAD OCCUPANCY REQUIREMENTS INCLUDING INSURANCE REQUIREMENTS. REQUIRED SAFETY TRAINING AND USE OF AND PAYMENT FOR RAILROAD FLAGMEN.
22. HORIZONTAL AND VERTICAL CONTROLS POINTS FOR THE TRACK LAYOUT ARE IDENTIFIED IN THE CONTRACT DOCUMENTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO UTILIZE THESE CONTROL POINTS TO ASSURE THAT ALL FACILITIES INCLUDED IN THIS PROJECT ARE CONSTRUCTED AT CORRECT VERTICAL AND HORIZONTAL LOCATIONS.
23. SUBGRADE BELOW TRACK (I.E. WITHIN 14' OF THE CENTERLINE OF TRACK). SHALL BE COMPACTED TO 95% OF THE MAXIMUM PROCTOR DENSITY. ALL OTHER SUBGRADE WORK SHALL BE COMPACTED TO A MINIMUM OF 90% OF THE MAXIMUM PROCTOR DENSITY.
24. POSITIVE DRAINAGE MUST BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION TO PREVENT PONDING OF WATER.
25. THE CONTRACTOR SHALL COMPLY WITH THE STATE OF CALIFORNIA NPDES PERMIT REGARDING THE TREATMENT OF WATER BEFORE DISCHARGING OFF THE UPRR R/W.
26. THE CONTRACTOR SHALL PROTECT ALL UPRR SIGNAL FACILITIES IN PLACE. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS FOR CONFLICTS WITH EXISTING UTILITIES, SIGNAL CABLES/EQUIPMENT AND/OR OTHER ITEMS THAT MIGHT IMPAIR CONSTRUCTION ACTIVITIES. INCONSISTENCIES FOUND SHALL BE REPORTED TO THE ENGINEER.
27. REPAIRS TO FACILITIES, DAMAGED BY THE CONTRACTOR, INTENDED TO REMAIN IN PLACE SHALL BE MADE BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE UNLESS OTHERWISE STATED IN THE CONTRACT DOCUMENTS OR BY THE ENGINEER.
28. ALL EXCAVATED WASTE MATERIAL SHALL BE IMMEDIATELY REMOVED FROM THE SITE. ON SITE STORAGE OF EXCAVATED WASTE MATERIAL SHALL NOT BE PERMITTED AT ANY TIME. SUITABLE EXCAVATED MATERIAL SHALL BE STOCKPILED PER APPROVAL BY THE ENGINEER.
29. ON-SITE CONSTRUCTION BY OTHERS, INCLUDING ROUTINE MAINTENANCE WORK, (UPRR FORCES, UPRR SIGNAL CONTRACTOR, SCRRRA, UTILITIES, ETC.) MAY OCCUR DURING THE CONSTRUCTION PERIOD OF THIS CONTRACT. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES THROUGH THE ENGINEER SO AS TO MINIMIZE INTERFERENCE WITH OTHERS.
30. PRIOR TO COMMENCING WORK, ALL EXISTING SITE CONDITIONS SHALL BE FIELD VERIFIED WITH THE ENGINEER TO ASCERTAIN THE LIMITS OF WORK ACTIVITIES, THE CONTRACTOR SHALL SUBMIT AND RECIEVE THE ENGINEER'S APPROVAL OF THE CONTRACTOR'S PROJECT SCHEDULE AND OPERATIONS PLAN. EACH ITEM OF WORK SHALL BE DESCRIBED AND ACCOUNTED FOR IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL REFER TO THE SPECIFICATIONS FOR FURTHER INFORMATION REGARDING SUBMITTAL REQUIREMENTS.
31. RAIL TRAFFIC DISRUPTIONS SHALL BE KEPT TO A MINIMUM. DISRUPTIONS IN RAIL TRAFFIC THAT MAY BE REQUIRED SHALL BE COORDINATED WITH THE ENGINEER BEFOREHAND. NO SUCH WORK SHALL BE COMMENCED WITHOUT THE ENGINEER'S APPROVAL WORK AFFECTING SCRRRA COMMUTER TRAIN OPERATIONS AND UPRR FREIGHT TRAFFIC MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
32. THE CONTACTOR SHALL NOT PLACE MATERIAL AND/OR EQUIPMENT WITHINN 25 FEET OF ANY TRACK ANYTIME WITHOUT PRIOR APPROVAL OF THE ENGINEER OR RAILROAD.
33. EXISTING RAILROAD SIGNAGE (INCLUDING SPEED SIGNS) SHALL BE MAINTAINED DURING THE CONSTRUCTION PERIOD. ALL RAILROAD SIGNAGE SHALL BE FULLY RESTORED UPON COMPLETION OF EACH DAYS WORK IN ACCORDANCE WITH UPRR ENGINEERING STANDARDS. PRIOR TO CONSTRUCTION, NO TRESPASSING SIGNS SHALL BE PLACED IN ACCORDANCE WITH UPRR STD DWG 0538A AND AS SHOWN ON THE DRAWINGS.
34. ALL WORK SHALL BE COORDINATED WITH UPRR'S SIGNAL ENGINEER. SIGNAL FORCES AND SIGNAL CONTRACTOR THRU THE ENGINEER. WORK WILL BE PHASED TO EFFECT THE CONTINUED OPERATION OF EXISTING SIGNAL SYSTEM DURING CONSTRUCTION. IN NO INSTANCE MAY WORK PROCEED IN ANY AREA WITHOUT ADVANCED APPROVAL OF UPRR'S SIGNAL ENGINEER. THE CONTRACTOR SHALL LOCATE ALL SIGNAL AND COMMUNICATION SONDUITS, CABLES, WIRES, OR OTHER TRACK, TRACK BED, AND RIGHT-OF-WAY.
35. WALKWAYS SHALL BE PLACED AS REQUIRED BY CALIFORNIA PUBLIC UTILITIES COMMISSION GENERAL ORDER NO. 188 AND 260 FOR ALL NEW CONSTRUCTION, UNLESS NOTED OTHERWISE.
36. DIMENSIONS SHOWN IN PARENTHESSES INDICATED APPROXIMATE EXISTING DIMENSIONS. WHERE ELEVATIONS ARE SHOWN IN PARENTHESSES AT JOIN LOCATIONS, THE CONTRACTOR SHALL VERIFY THESE ELEVATIONS PRIOR TO CONSTRUCTION AND JOIN FEATURES AT EXISTING ELEVATIONS.

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

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 <p>IMPORTANT NOTICE Section 4516.4217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be voided. For your Dig Alert ID, Member cost CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600</p>	<p>TYLIN INTERNATIONAL</p> <p>3550 VINE STREET, SUITE 120 RIVERSIDE, CA 92507 TEL (951) 788-4688 www.tylin.com</p>	<p>DATE <u>8-7-12</u></p>		<p>CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT</p> <p>STREETER AVENUE UNDERPASS</p> <p>GENERAL NOTES</p> <p>DESIGNED BY <u>FP</u> DRAWN BY <u>FP</u> CHECKED BY <u>RG</u></p>	<p>R-4180</p> <p>SHEET <u>2</u> OF <u>191</u></p>
				<p>HORIZ. SCALE: VERT. SCALE: N/A</p>	<p>FILE NO.</p>

CONSTRUCTION NOTES

- ① CONSTRUCT 0.40' DGAC OVER 1.6' CRUSHED AGGREGATE BASE (CLASS II)
- ①A CONSTRUCT 0.40' DGAC OVER 0.8' CRUSHED AGGREGATE BASE (CLASS II)
- ② CONSTRUCT 6" PCC PAVEMENT
- ③ COLD MILL 1.5" MIN. EXISTING AC PAVEMENT AND PLACE 1.5" AC OVERLAY
- ④ CONSTRUCT TYPE I - 6" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- ⑥ CONSTRUCT TYPE II - 8" MEDIAN CURB PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑦ CONSTRUCT TYPE I - 8" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑧ CONSTRUCT TYPE I WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304
- ⑨ CONSTRUCT TYPE II WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304
- ⑩ CONSTRUCT TYPE II-A WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304
- ⑪ CONSTRUCT PCC RESIDENTIAL DRIVEWAY APPROACH PER CITY OF RIVERSIDE STD PLAN NO. 302
- ⑫ CONSTRUCT CROSS GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 220
- ⑬ CONSTRUCT CURB TRANSITION FROM 6" TO 8" PER CITY OF RIVERSIDE STD PLAN NO. 210
- ⑭ CONSTRUCT CONSTANT HEIGHT RETAINING WALL PER CONSTRUCTION DETAIL ON SHEET CD-13
- ⑮ CONSTRUCT WALL GUTTER PER CALTRANS STD PLAN NO. B3-6 AND CONSTRUCTION DETAIL ON SHEET CD-13
- ⑯ CONSTRUCT WALL DRAIN PER CALTRANS STD PLAN NO. B3-6 AND CONSTRUCTION DETAIL ON SHEET CD-13
- ⑰ CONSTRUCT TYPE A HAND RAILING PER APWA STD PLAN NO. 606-3 ALL METAL HAND RAILING SHALL RECEIVE (2) COATS OF POLYURETHANE PAINT PER PROJECT SPECIFICATIONS
- ⑱ CONSTRUCT TYPE V WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304
- ⑲ CONSTRUCT MBGR (TYPE 12B) PER CALTRANS STD PLAN A77F1. INSTALL FLARED TERMINAL SYSTEM (TYPE SRT) PER PROJECT SPECIFICATIONS AND TRANSITION RAILING (TYPE WB) PER STD A77J4.
- ⑳ RELOCATE EXISTING FIRE HYDRANT
- ㉑ RELOCATE EXISTING WATER METER
- ㉒ PROTECT IN PLACE
- ㉓ EXISTING WATER VALVE TO BE REMOVED. SEE RPU WATER IMPROVEMENTS
- ㉔ RELOCATE EXISTING MAILBOX
- ㉕ CONSTRUCT STANDARD PIPE GATE FOR ACCESS ROAD PER APWA STD PLAN NO. 602-3 (SINGLE GATE)
- ㉖ CONSTRUCT BLOCK RETAINING WALL. SEE ELECTRIC PLANS FOR LOCATION & DETAILS
- ㉗ INSTALL CHAIN LINK FENCE PER CITY OF RIVERSIDE STD PLAN NO. 380
- ㉘ INSTALL BOLLARDS PER RIVERSIDE PUBLIC UTILITIES STD PLAN UGS-290
- ㉙ CONSTRUCT REVERSE TAPER PER CITY OF RIVERSIDE STD PLAN NO. 122
- ㉚ CONSTRUCT PARABOLIC FLARE PER CITY OF RIVERSIDE STD PLAN NO. 123

CONSTRUCTION NOTES - SIGNING & STRIPING

- ⑦0 APPLY PAVEMENT MARKINGS AS SHOWN PER CALTRANS STD PLAN A24A
- ⑦1 APPLY 12-INCH SOLID WHITE STRIPE PER CALTRANS STD PLAN A24E
- ⑦2 INSTALL STREET SIGN & POST
- ⑦3 APPLY PAVEMENT MARKINGS AS SHOWN PER CALTRANS STD PLAN A24D
- ⑦4 APPLY 4-INCH DASHED WHITE STRIPE PER CALTRANS STD PLAN A20A, DETAIL 9
- ⑦5 APPLY 4-INCH SOLID DOUBLE YELLOW STRIPE PER CALTRANS STD PLAN A20A, DETAIL 21
- ⑦6 APPLY 4-INCH SOLID DOUBLE YELLOW STRIPE PER CALTRANS STD PLAN A20A, DETAIL 22
- ⑦7 APPLY EDGE LINE PER CALTRANS STD PLAN A20B, DETAIL 26
- ⑦8 APPLY 4-INCH SOLID WHITE STRIPE PER CALTRANS STD PLAN A20B, DETAIL 27B
- ⑦9 APPLY 4-INCH SOLID DOUBLE YELLOW MEDIAN STRIPE PER CALTRANS STD PLAN A20B, DETAIL 29
- ⑧0 APPLY 8-INCH SOLID WHITE STRIPE PER CALTRANS STD PLAN A20D, DETAIL 38
- ⑧1 INSTALL STREET NAME SIGNS PER CITY OF RIVERSIDE STD DWG 662A
- ⑧2 INSTALL BUS STOP SIGN & PAINT BUS ZONE CURB MARKING, CONTRACTOR TO COORDINATE WITH RIVERSIDE TRANSIT AUTHORITY

REMOVAL NOTES

- ① REMOVE EXISTING AC PAVEMENT
- ② SAWCUT EXISTING PAVEMENT
- ③ REMOVE EXISTING CONCRETE
- ④ NOT USED
- ⑤ NOT USED
- ⑥ REMOVE CURB & GUTTER
- ⑦ REMOVE TREE
- ⑧ REMOVE & SALVAGE STREET LIGHT
- ⑩ REMOVE EXISTING CROSS GUTTER
- ⑪ REMOVE EXISTING CONCRETE SIDEWALK
- ⑫ REMOVE AND SALVAGE SIGN
- ⑬ REMOVE EXISTING POWER POLE
- ⑭ REMOVE EXISTING WATER METER
- ⑮ REMOVE AND SALVAGE EXISTING SIGNAL EQUIPMENT
- ⑯ REMOVE EXISTING DRAINAGE INLET
- ⑰ REMOVE EXISTING AC DIKE

ABBREVIATIONS

DGAC	DENSELY GRADE ASPHALT CONCRETE
PG	PRECISE GRADE
(E)	EXISTING
TEMP	TEMPORARY
PVMT	PAVEMENT
PL	PROPERTY LINE
CIP	CAST IN PLACE
RW	RETAINING WALL
R/W	RIGHT OF WAY
HSS	HOLLOW STRUCTURAL STEEL
SST	STAINLESS STEEL TEFLON
NTS	NOT TO SCALE
FL	FLOW LINE
WTR	WATER
EXIST	EXISTING
TOR	TOP OF RAIL
PROP	PROPOSED
CB	CATCH BASIN
TCE	TEMPORARY CONSTRUCTION EASEMENT

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

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TEL (951) 788-4688
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REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
No. C56574
STATE OF CALIFORNIA

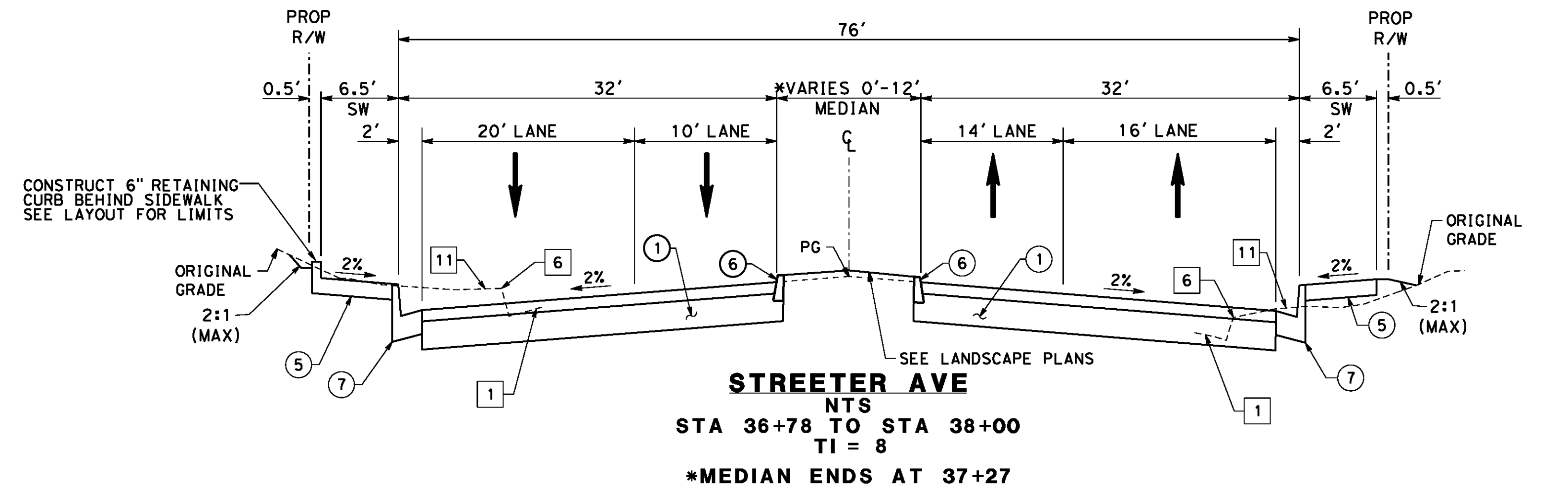
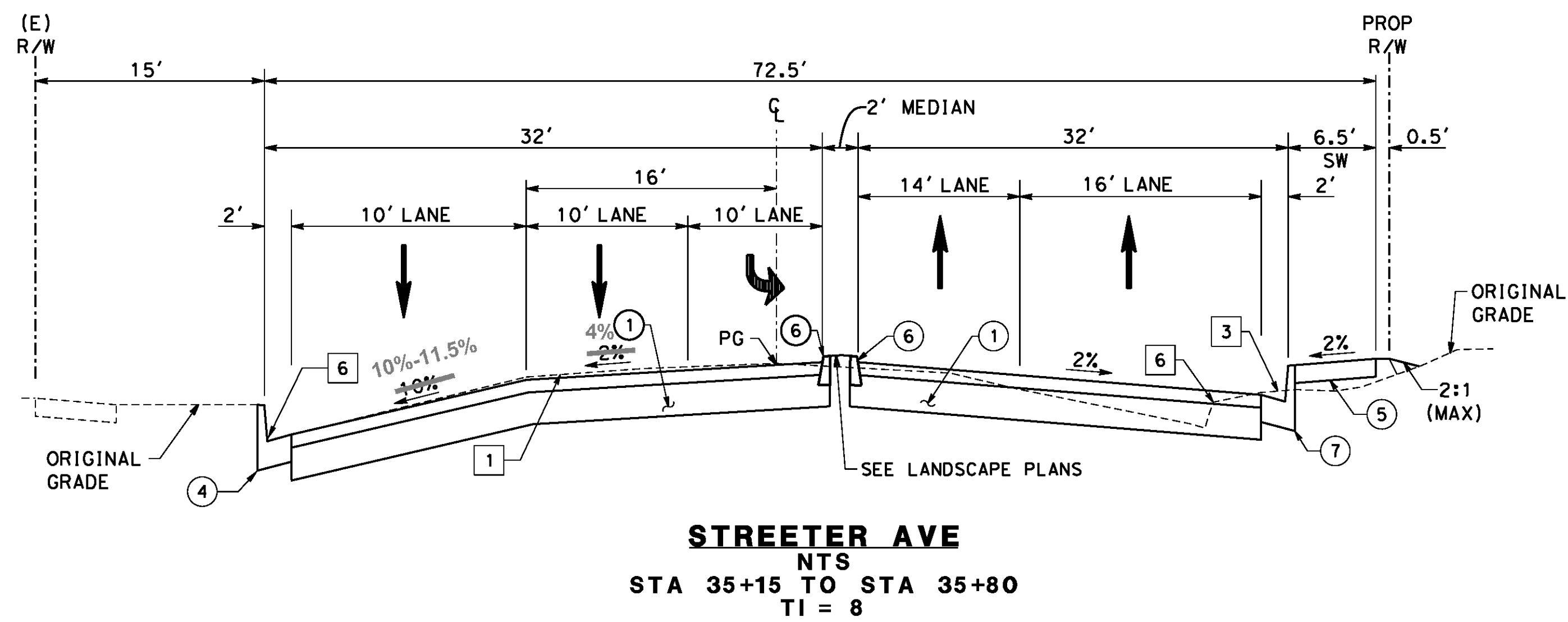
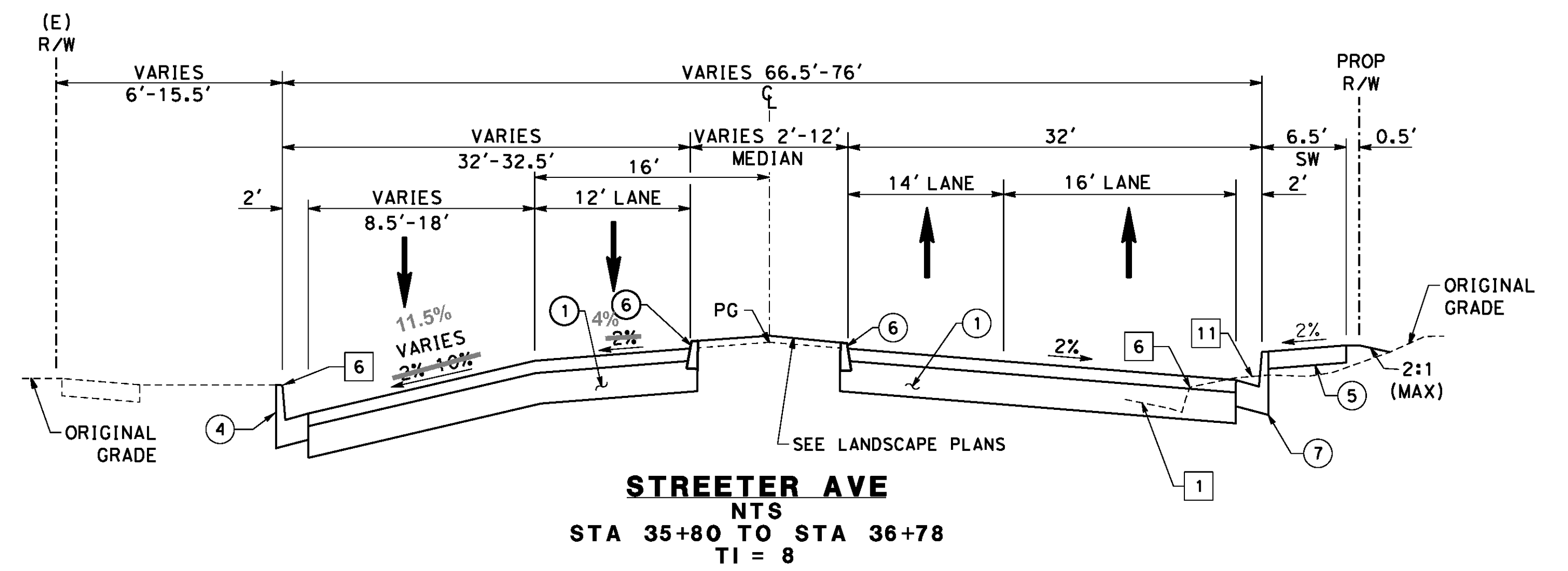
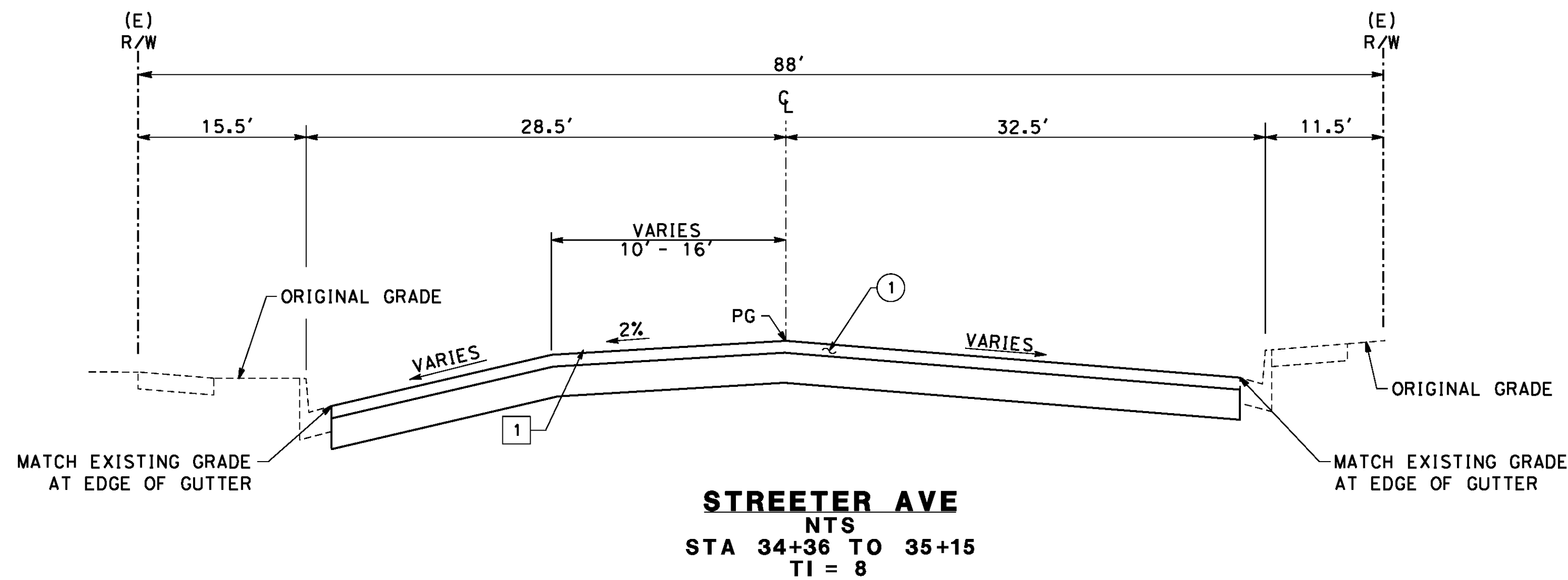
MARK	REVISIONS	APPR.	DATE
DESIGNED BY	FP	DRAWN BY	FP
CHECKED BY	RG		

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS

GENERAL NOTES

HORIZ. SCALE: VERT. SCALE: N/A

FILE NO. R-4180 SHEET 3 OF 191



CONSTRUCTION NOTES

- ① CONSTRUCT 0.40' DGAC OVER 1.6' CRUSHED AGGREGATE BASE (CLASS II)
- ④ CONSTRUCT TYPE I - 6" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- ⑥ CONSTRUCT TYPE II - 8" MEDIAN CURB PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑦ CONSTRUCT TYPE I - 8" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200

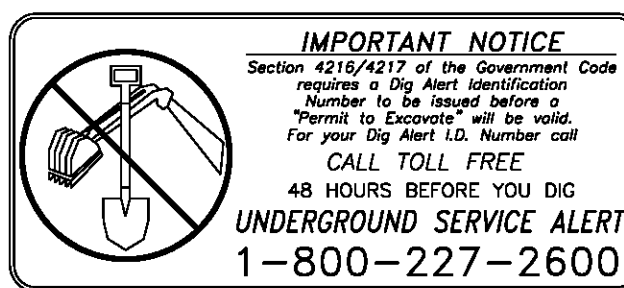
REMOVAL NOTES

- ① REMOVE EXISTING AC PAVEMENT
- ③ REMOVE EXISTING CONCRETE
- ⑥ REMOVE CURB & GUTTER
- ⑪ REMOVE EXISTING CONCRETE SIDEWALK

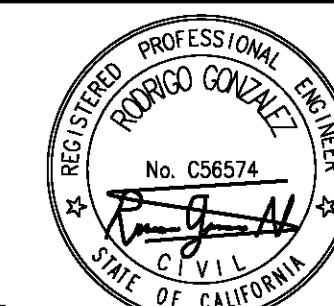
AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

NO SCALE

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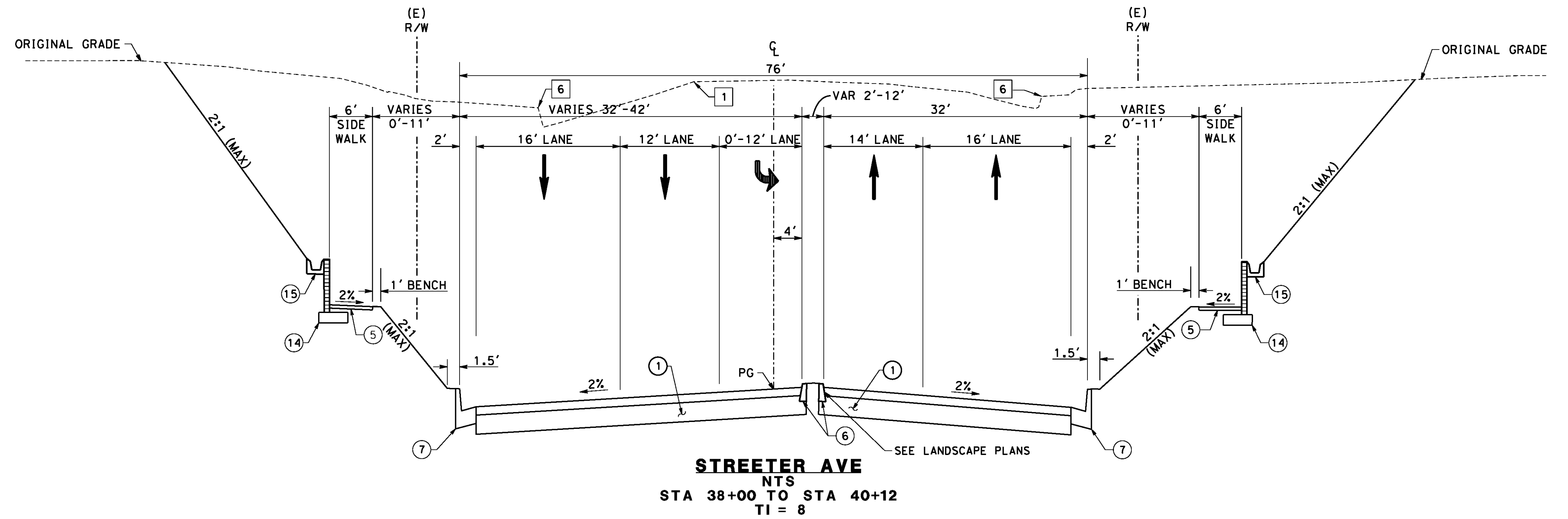
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MARK	REVISIONS	APPR.	DATE

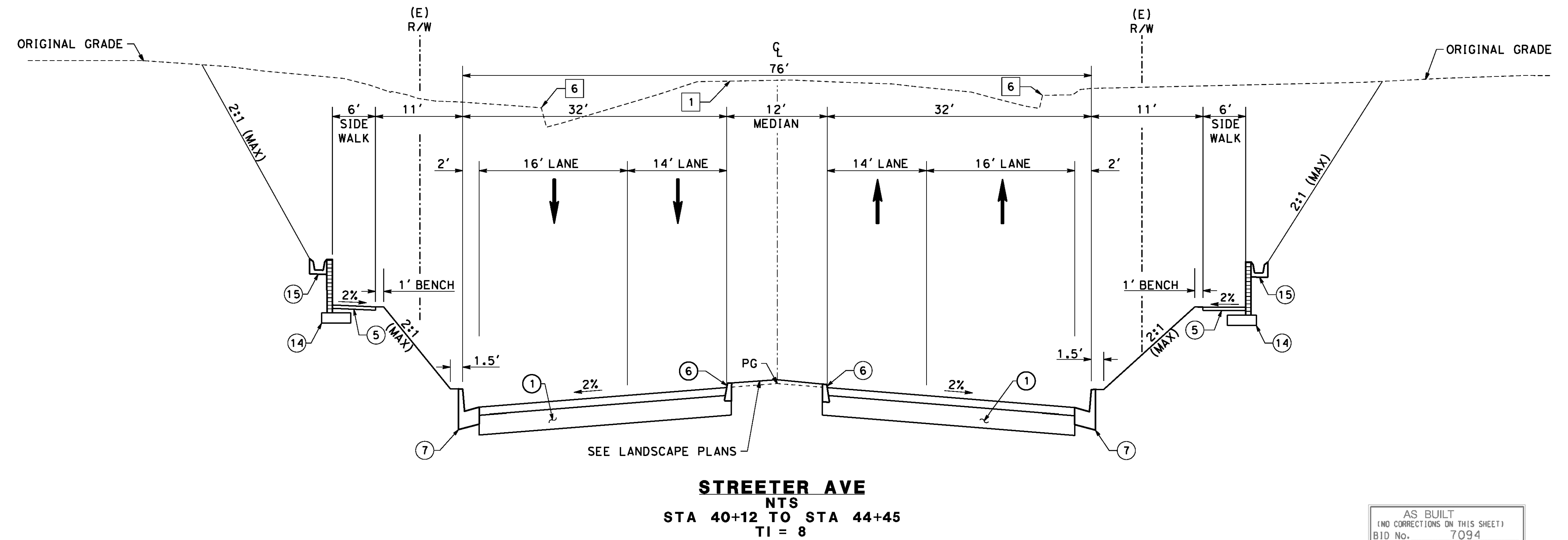
CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
TYPICAL CROSS SECTIONS

R-4180
 SHEET 4 OF 191
 FILE NO.



CONSTRUCTION NOTES

- ① CONSTRUCT 0.40' DGAC OVER 1.6' CRUSHED AGGREGATE BASE (CLASS II)
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- ⑥ CONSTRUCT TYPE II - 8" MEDIAN CURB PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑦ CONSTRUCT TYPE I - 8" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑭ CONSTRUCT CONSTANT HEIGHT RETAINING WALL PER CONSTRUCTION DETAIL ON SHEET CD-13
- ⑮ CONSTRUCT WALL GUTTER PER CALTRANS STD PLAN NO. B3-6 AND CONSTRUCTION DETAIL ON SHEET CD-13



REMOVAL NOTES

- ① REMOVE EXISTING AC PAVEMENT
- ⑥ REMOVE CURB & GUTTER

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

NO SCALE

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IMPORTANT NOTICE
 Section 43164.0217 of the Government Code requires a Dig Alert identification Number to be placed before a "Permit to Excavate" will be void. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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REGISTERED PROFESSIONAL ENGINEER
 RODRIGO GONZALEZ
 No. C56574
 CIVIL
 STATE OF CALIFORNIA

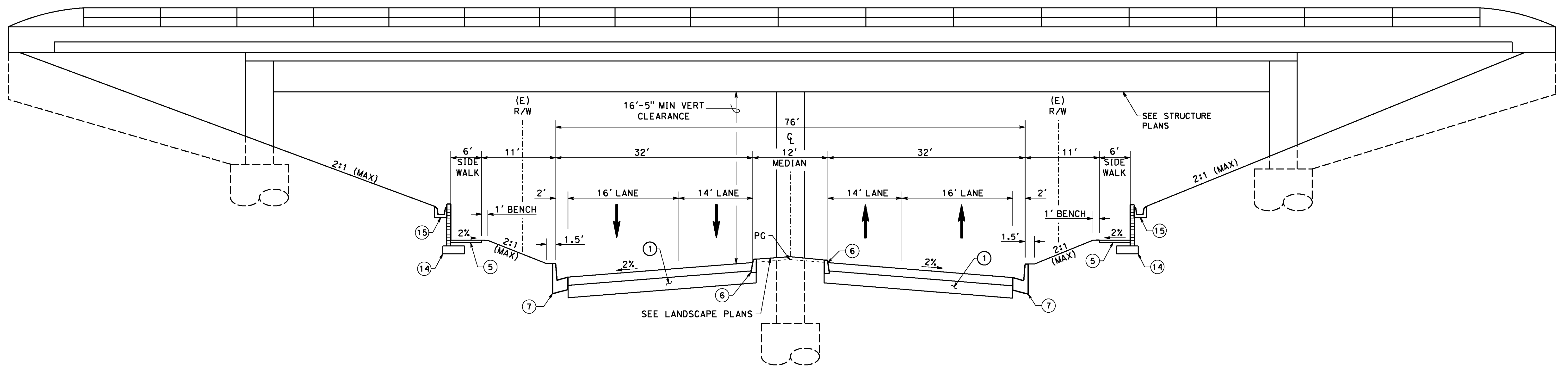
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DESIGNED BY FD DRAWN BY FD CHECKED BY RG

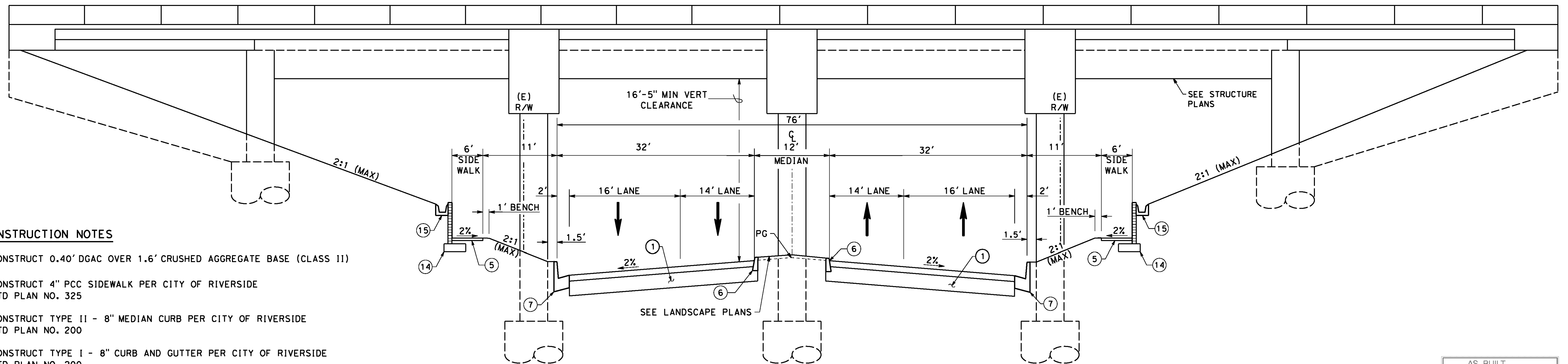
CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
TYPICAL CROSS SECTIONS

HORIZ. SCALE: VERT. SCALE: N/A

R-4180
 SHEET **5** OF **191**
 FILE NO.



STREETER AVE AT DEWEY AVE UNDERCROSSING
 NTS
 STA 40+92 TO STA 41+39
 TI = 8



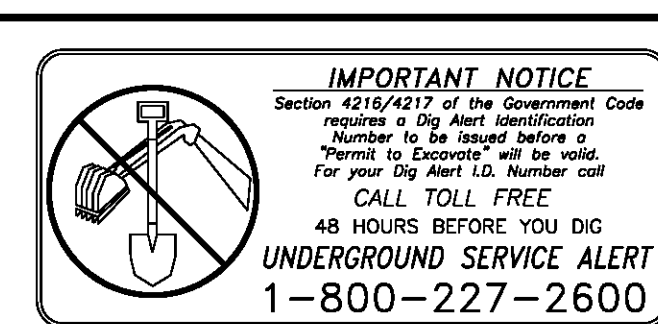
STREETER AVE AT UPRR UNDERCROSSING
 NTS
 STA 41+74 TO STA 42+16
 TI = 8

CONSTRUCTION NOTES

- ① CONSTRUCT 0.40' DGAC OVER 1.6' CRUSHED AGGREGATE BASE (CLASS II)
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- ⑥ CONSTRUCT TYPE II - 8" MEDIAN CURB PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑦ CONSTRUCT TYPE I - 8" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑭ CONSTRUCT CONSTANT HEIGHT RETAINING WALL PER CONSTRUCTION DETAIL ON SHEET CD-13
- ⑮ CONSTRUCT WALL GUTTER PER CALTRANS STD PLAN NO. B3-6 AND CONSTRUCTION DETAIL ON SHEET CD-13

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

NO SCALE



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STREETER AVENUE UNDERPASS
TYPICAL CROSS SECTIONS

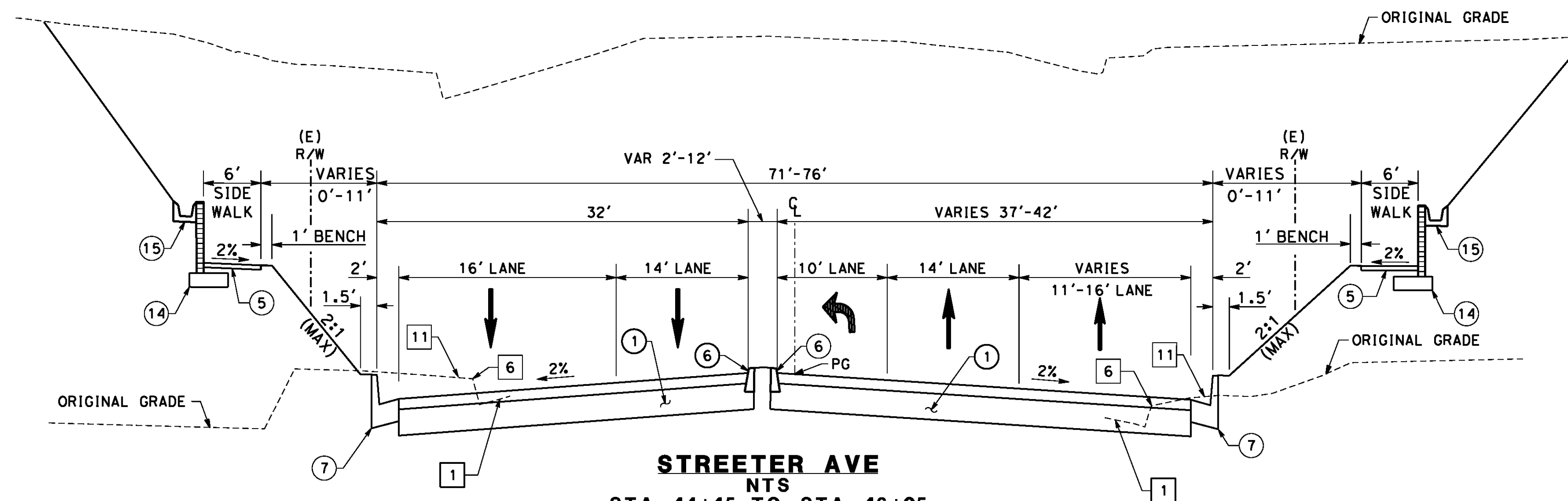
R-4180
 SHEET 6 OF 191
 FILE NO.

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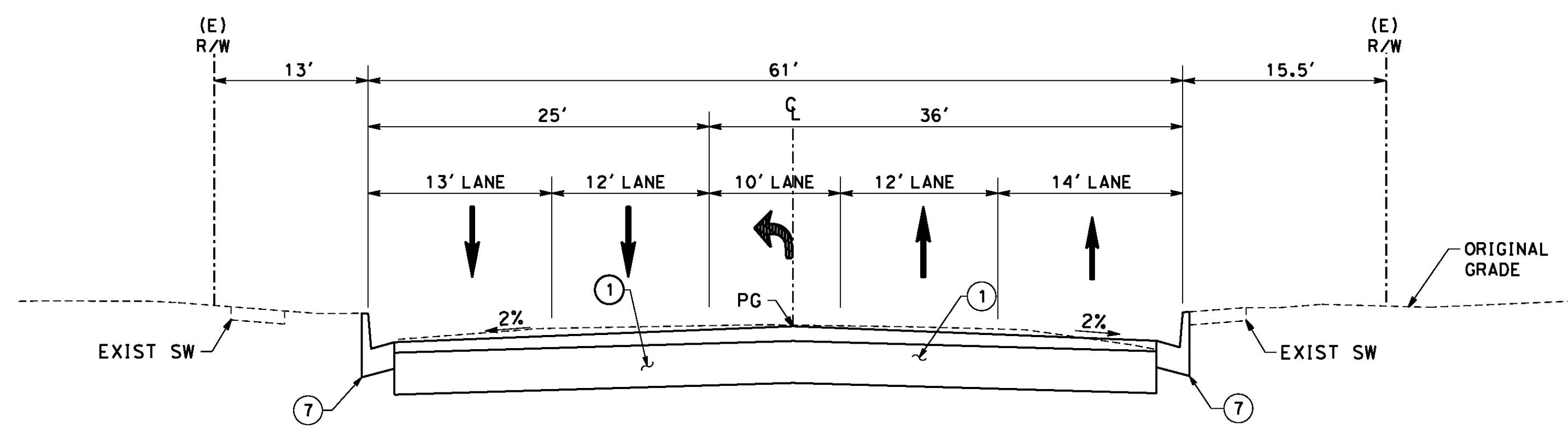
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STREETER AVE
 NTS
 STA 44+45 TO STA 46+05
 TI = 8
 *WEST SIDE CURB ADJACENT
 SIDEWALK BEGINS @ STA 45+57
 *EAST SIDE CURB ADJACENT
 SIDEWALK BEGINS @ STA 45+00



STREETER AVE
 NTS
 STA 46+05 TO STA 47+25
 TI = 8

CONSTRUCTION NOTES

- ① CONSTRUCT 0.40' DGAC OVER 1.6' CRUSHED AGGREGATE BASE (CLASS II)
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- ⑥ CONSTRUCT TYPE II - 8" MEDIAN CURB PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑦ CONSTRUCT TYPE I - 8" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑭ CONSTRUCT CONSTANT HEIGHT RETAINING WALL PER CONSTRUCTION DETAIL ON SHEET CD-13
- ⑮ CONSTRUCT WALL GUTTER PER CALTRANS STD PLAN NO. B3-6 AND CONSTRUCTION DETAIL ON SHEET CD-13

REMOVAL NOTES

- ① REMOVE EXISTING AC PAVEMENT
- ⑥ REMOVE CURB & GUTTER
- ⑪ REMOVE EXISTING CONCRETE SIDEWALK

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

NO SCALE

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IMPORTANT NOTICE
 Section 4216.4217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

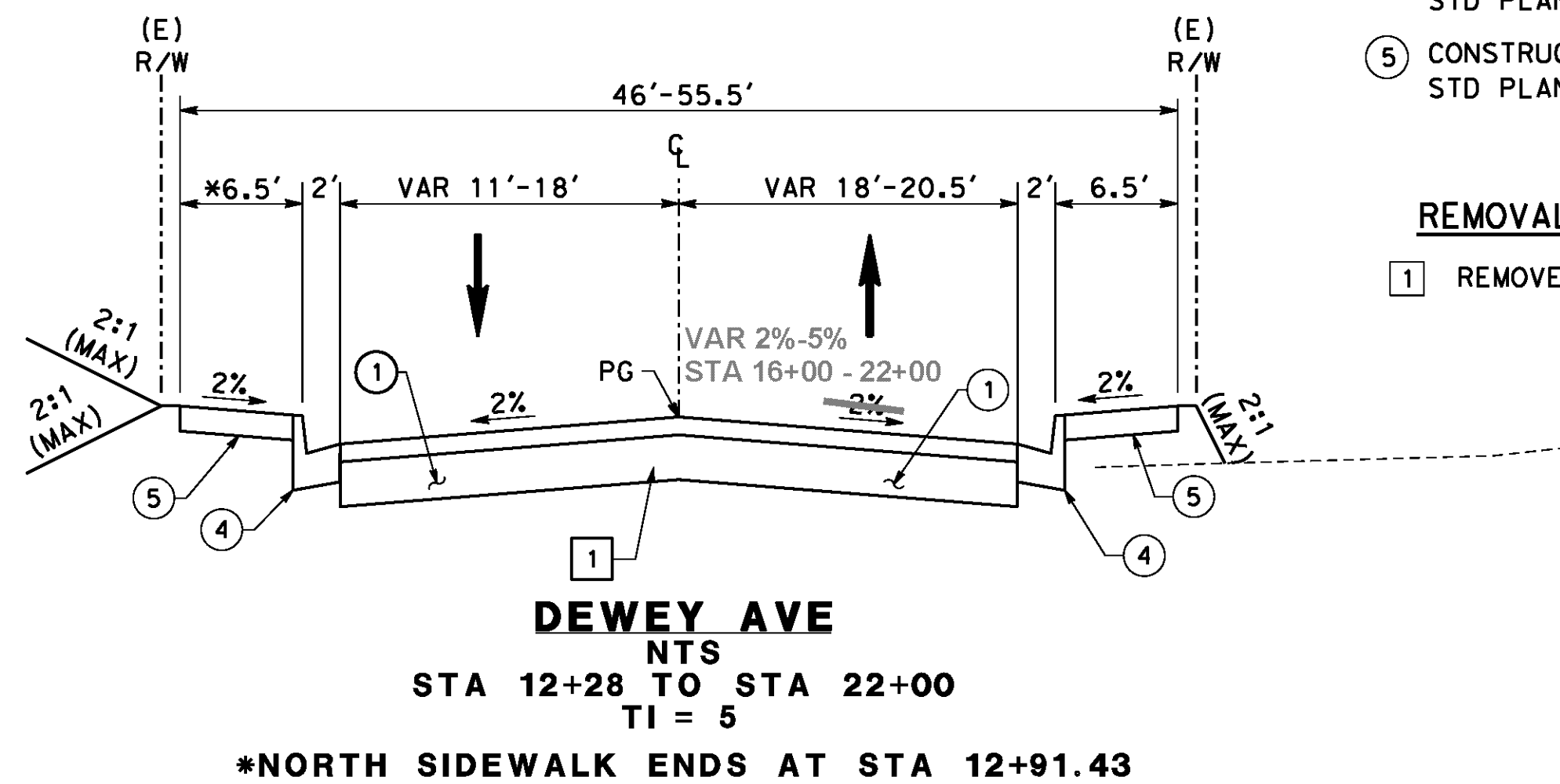
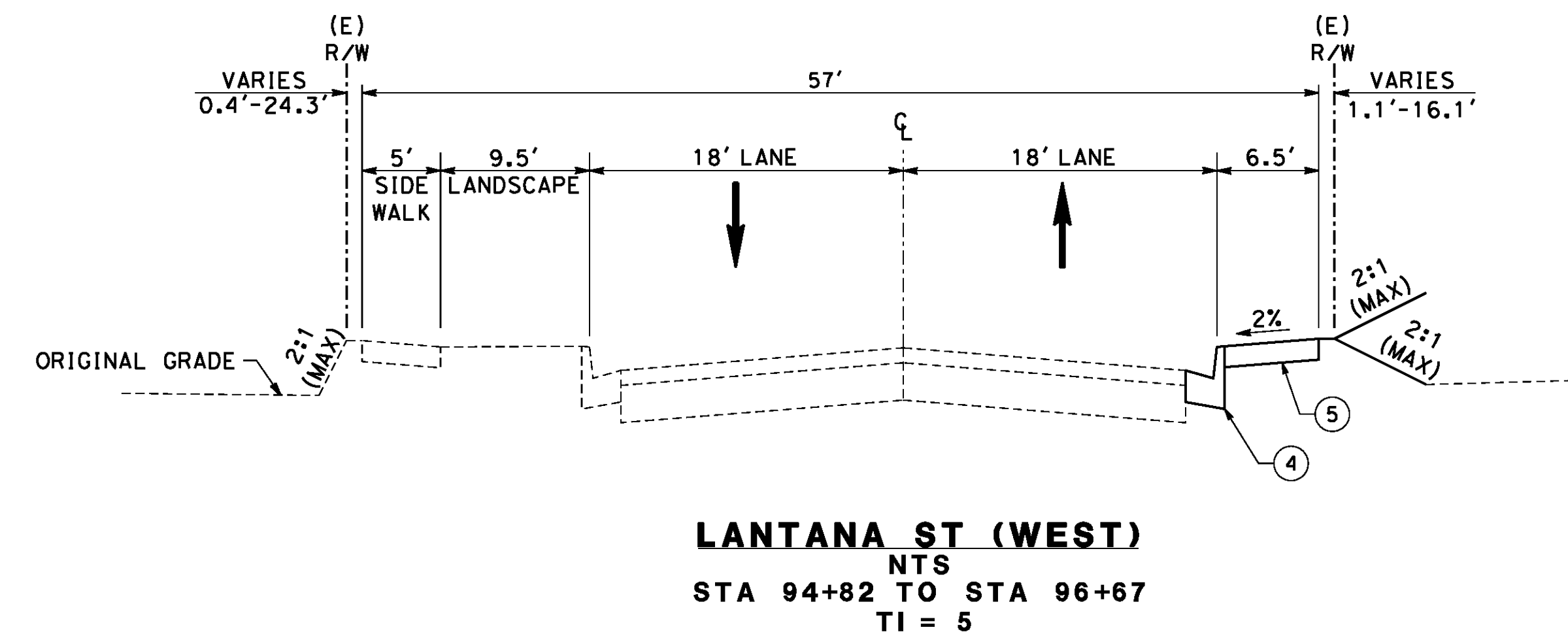
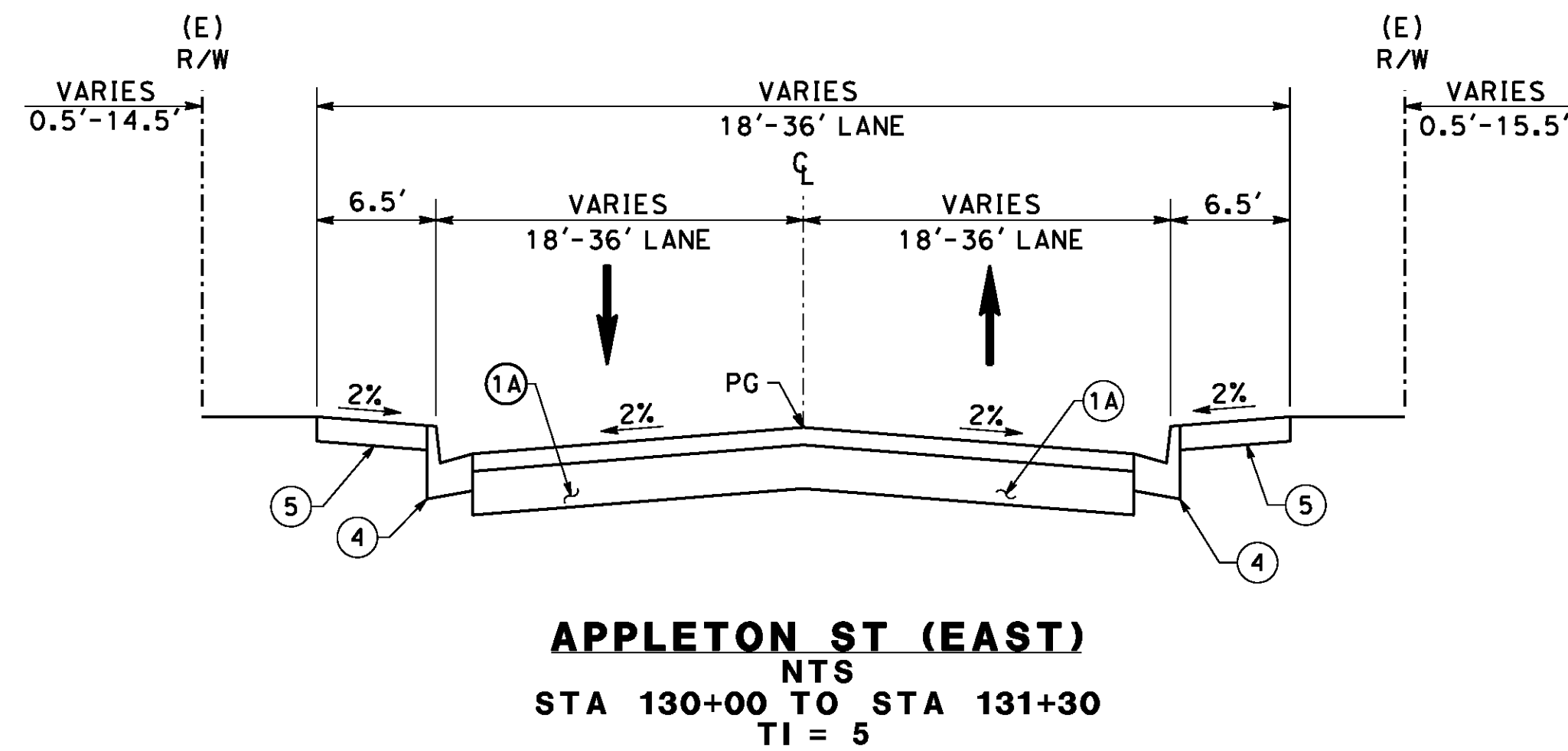
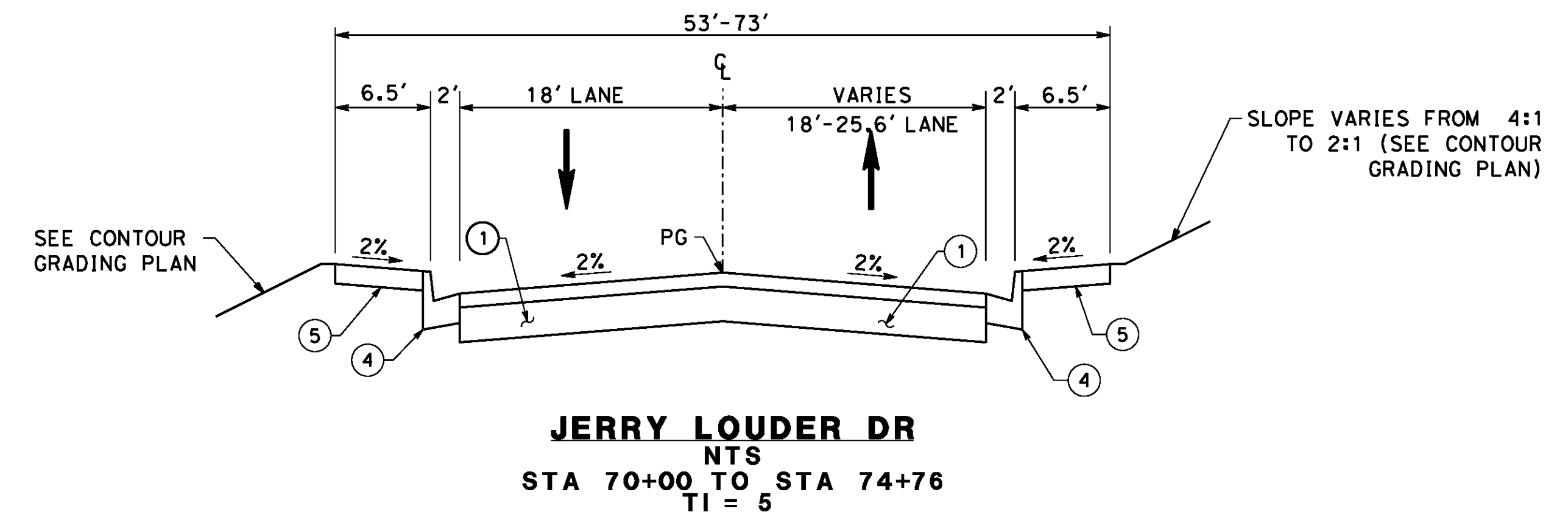
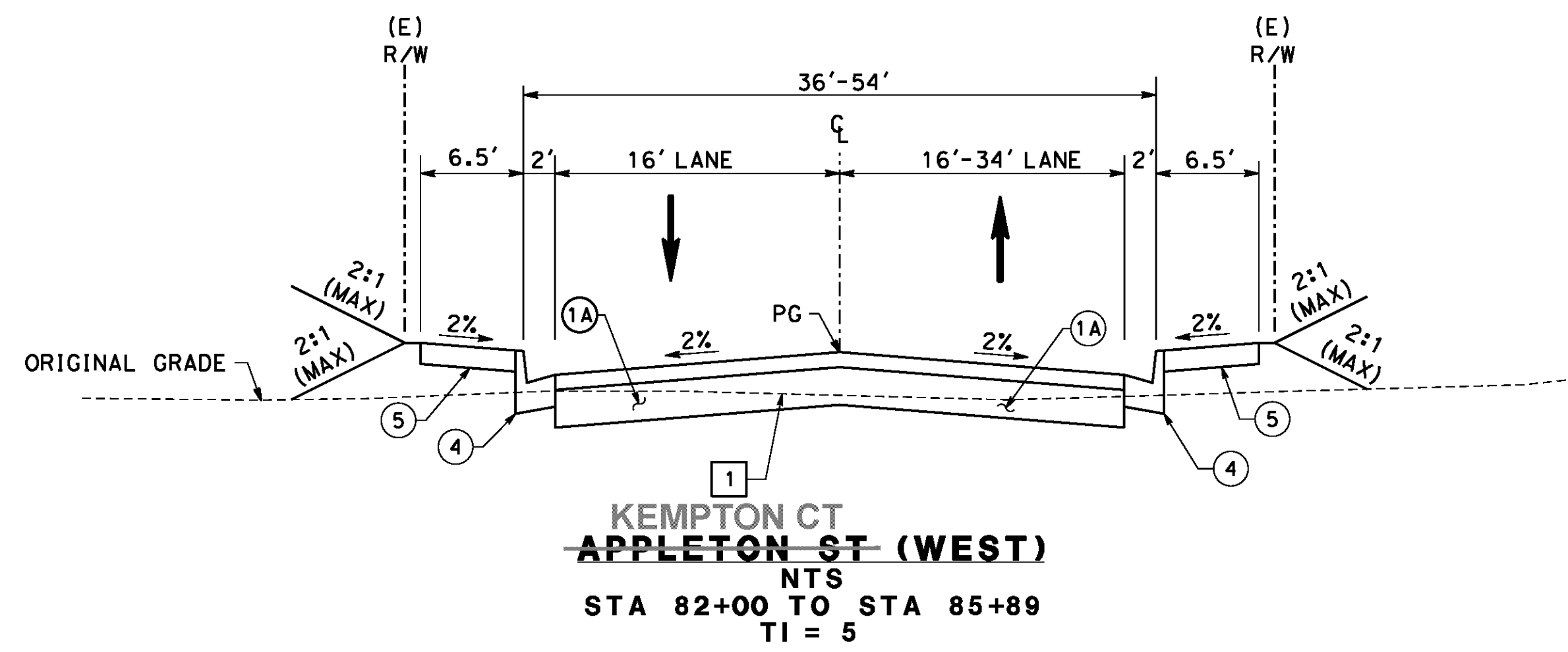
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 3550 VINE STREET, SUITE 120
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REGISTERED PROFESSIONAL ENGINEER
 RODRIGO GONZALEZ
 No. C56574
 CIVIL
 STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
TYPICAL CROSS SECTIONS

R-4180
 SHEET 7 OF 191
 FILE NO.

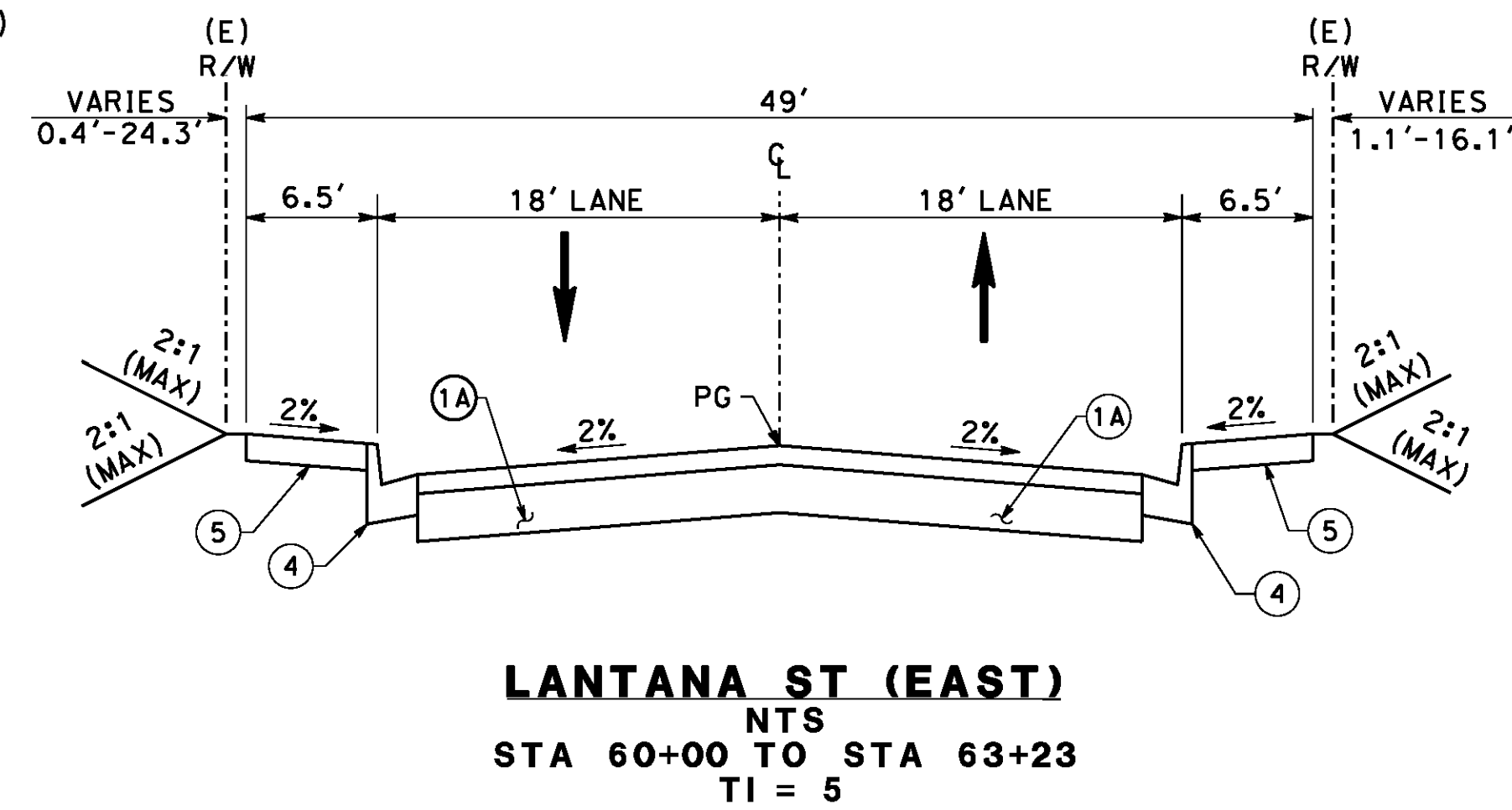


CONSTRUCTION NOTES

- ① CONSTRUCT 0.40' DGAC OVER 1.6' CRUSHED AGGREGATE BASE (CLASS II)
- ①A CONSTRUCT 0.40' DGAC OVER 0.8' CRUSHED AGGREGATE BASE (CLASS II)
- ④ CONSTRUCT TYPE I - 6" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325

REMOVAL NOTES

- ① REMOVE EXISTING AC PAVEMENT



AS BUILT
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

NO SCALE

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IMPORTANT NOTICE
Section 4118.0217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

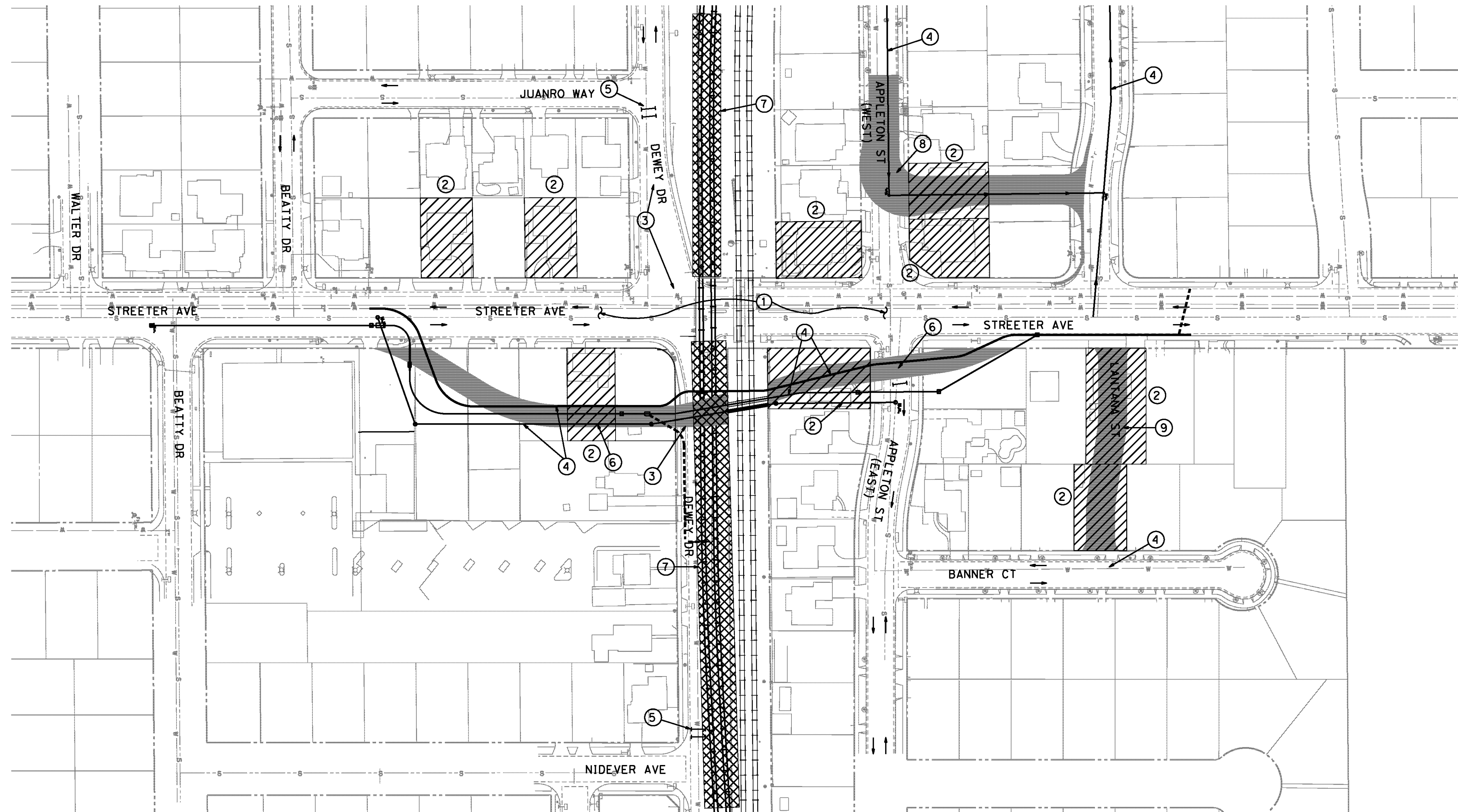
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RODRIGO GONZALEZ
No. C56574
STATE OF CALIFORNIA

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CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
TYPICAL CROSS SECTIONS

R-4180
SHEET **8** OF 191
FILE NO.



PHASE 1 STAGING SEQUENCE

PHASE 1A:

- ① RELOCATE OR ABANDON UTILITIES ON STREETER AVE
- ② DEMOLISH ALL FULL TAKE STRUCTURES AND FOUNDATIONS, COMPLETELY CLEAR LOTS, BUILD MASONRY BLOCK WALLS AS SHOWN ON SHEET CD-16.
- ③ RELOCATE OR ABANDON UTILITIES ON DEWEY AVE
- ④ CONSTRUCT UTILITIES ON STREETER AVE DETOUR ROAD. CONSTRUCT SEWER IMPROVEMENTS ON APPLETON ST (WEST) AND LANTANA ST

PHASE 1B:

- ⑤ CLOSE DEWEY AVE AT JUANRO WAY AND AT NIDEVER TO VEHICULAR TRAFFIC. CONTRACTOR TO MAINTAIN PEDESTRIAN AND RESIDENT ACCESS (SEE DETOUR PLAN)
- ⑥ CONSTRUCT PORTION OF STREETER AVE DETOUR RD
- ⑦ CONSTRUCT RR SHOOFLY 1 & 2 (SEE RR STAGING & CS-8 FOR DEWEY TEMPORARY IMPROVEMENTS)
- ⑧ CONSTRUCT APPLETON ST(WEST)
- ⑨ CONSTRUCT LANTANA ST (EAST)

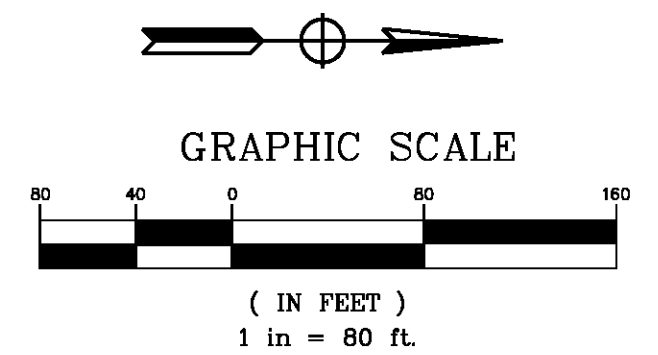
NOTES:

- 1. CONTRACTOR TO MAINTAIN VEHICULAR AND ADA COMPLIANT ACCESS. LOCAL RESIDENCE AND BUSINESS ACCESS TO BE MAINTAINED DURING ALL STAGES.
- 2. STAGE CONSTRUCTION PLANS SHOWN HEREIN SHOULD BE USED AS A GUIDE ONLY. CONTRACTOR SHALL SUBMIT DETAILED TRAFFIC HANDLING PLANS AND STAGE CONSTRUCTION PLANS, INCLUDING ALL SIGNING, STRIPING, AND TRAFFIC SIGNAL WORK REQUIRED PER MUTCD STANDARDS TO SHOW EACH STAGE OF CONSTRUCTION TO THE ENGINEER FOR APPROVAL. NO WORK SHALL COMMENCE PRIOR TO SUCH APPROVAL.
- 3. CONTRACTOR TO MAINTAIN SUMP DRAINAGE THROUGHOUT DURATION OF PROJECT.

LEGEND

- ⊕ BY CONTRACTOR
- ▨ BUILDINGS AND FOUNDATIONS TO BE DEMOLISHED BY THE CONTRACTOR
- DIRECTION OF TRAFFIC (DETOUR)
- I BARRICADE

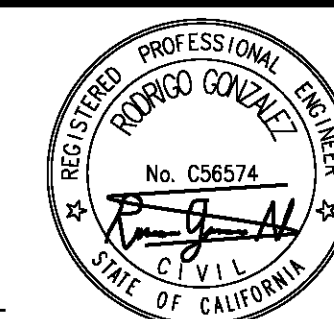
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 BID No. 7094
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 R.E. NAME MICHAEL WOLFF



NOTE:
 SEVERAL BUILDINGS MAY BE DEMOLISHED BEFORE PROJECT CONSTRUCTION BEGINS

IMPORTANT NOTICE
 Section 5316217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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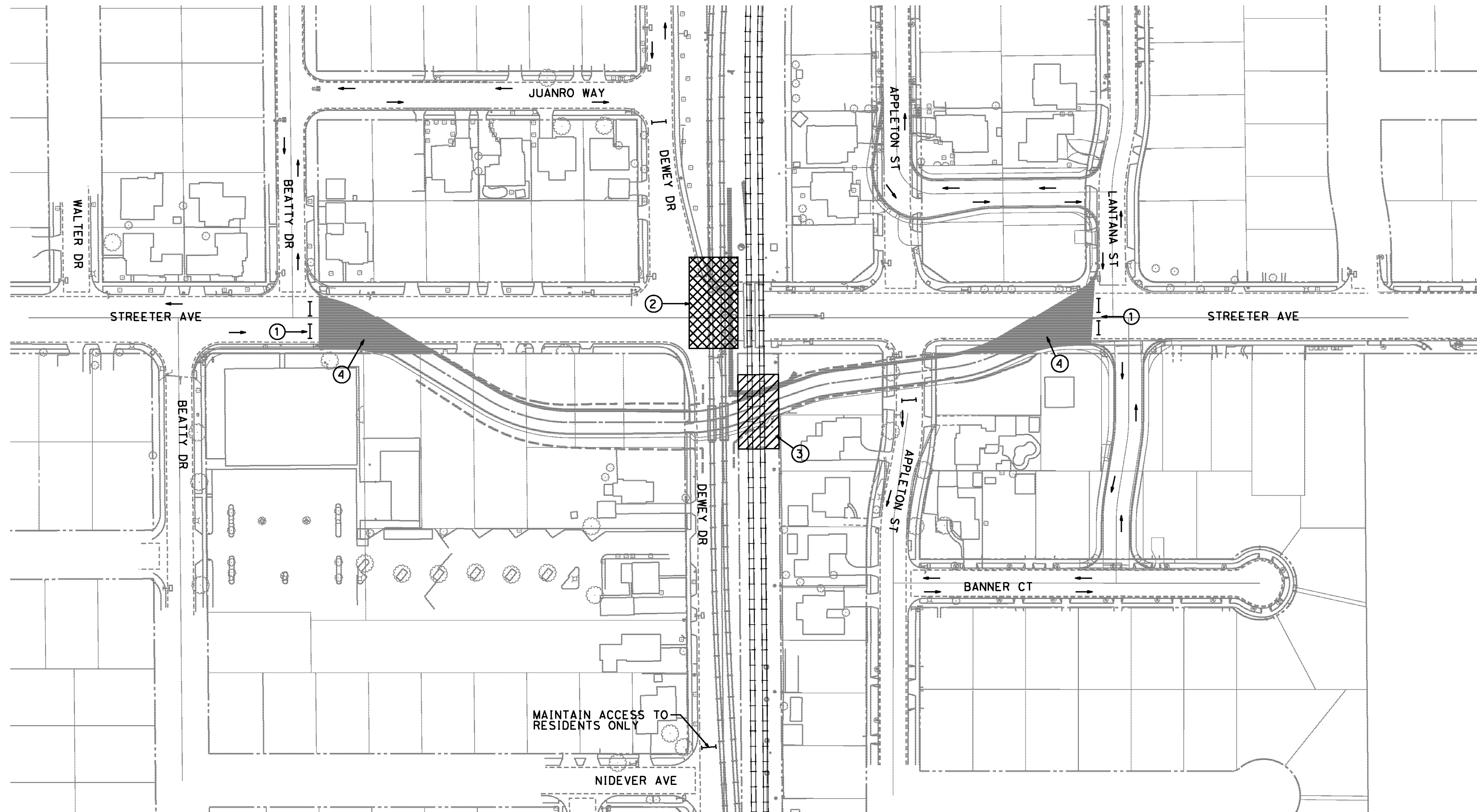


CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT				R-4180
STREETER AVENUE UNDERPASS				SHEET 9 OF 191
PHASE 1 STAGING SEQUENCE CS-1				
MARK	REVISIONS	APPR. DATE	HORIZ. SCALE:	FILE NO.
			VERT. SCALE: N/A	

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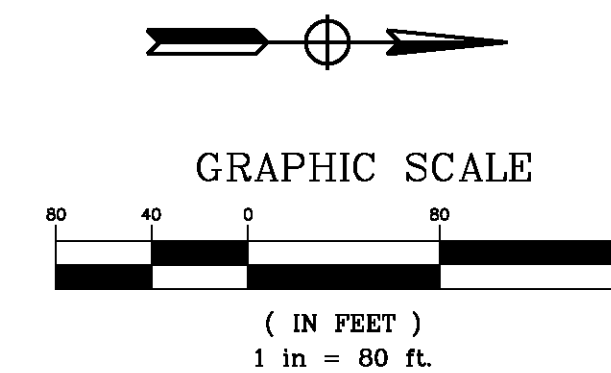
PHASE 2 STAGING SEQUENCE

- ① CLOSE STREETER AVE (WEEKEND CLOSURE) AT BEATTY AND AT LANTANA (SEE DETOUR PLAN)
- ② CONSTRUCT SHOOFLY ACROSS CLOSED PORTION OF STREETER AVE (SEE RR STAGING)
- ③ CONSTRUCT STREETER AVE DETOUR ROAD ACROSS RAILROAD MAINLINE (SEE RR STAGING)
- ④ CONSTRUCT REMAINING PORTIONS OF DETOUR ROAD. OPEN STREETER AVE DETOUR RD

NOTES:

1. CONTRACTOR TO MAINTAIN VEHICULAR AND ADA COMPLIANT ACCESS. LOCAL RESIDENCE AND BUSINESS ACCESS TO BE MAINTAINED DURING ALL STAGES.
2. STAGE CONSTRUCTION PLANS SHOWN HEREIN SHOULD BE USED AS A GUIDE ONLY. CONTRACTOR SHALL SUBMIT DETAILED TRAFFIC HANDLING PLANS AND STAGE CONSTRUCTION PLANS, INCLUDING ALL SIGNING, STRIPING, AND TRAFFIC SIGNAL WORK REQUIRED PER MUTCD STANDARDS TO SHOW EACH STAGE OF CONSTRUCTION TO THE ENGINEER FOR APPROVAL. NO WORK SHALL COMMENCE PRIOR TO SUCH APPROVAL.
3. CONTRACTOR TO MAINTAIN SUMP DRAINAGE THROUGHOUT DURATION OF PROJECT.

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF



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IMPORTANT NOTICE
Section 4216.4217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert I.D. Number call
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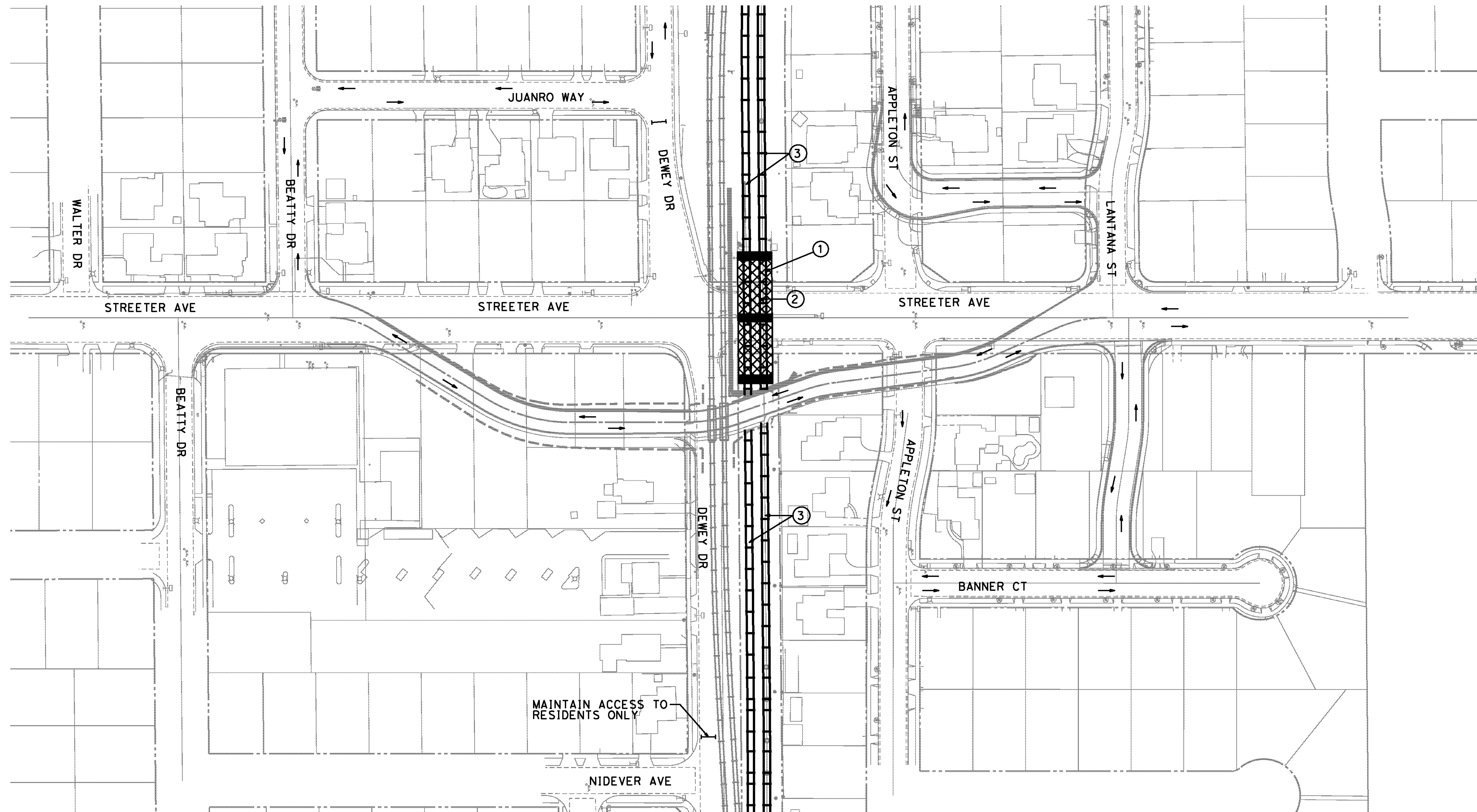
REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
No. C56574
CIVIL
STATE OF CALIFORNIA

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CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PHASE 2 STAGING SEQUENCE CS-2

R-4180
SHEET **10** OF **191**
FILE NO.



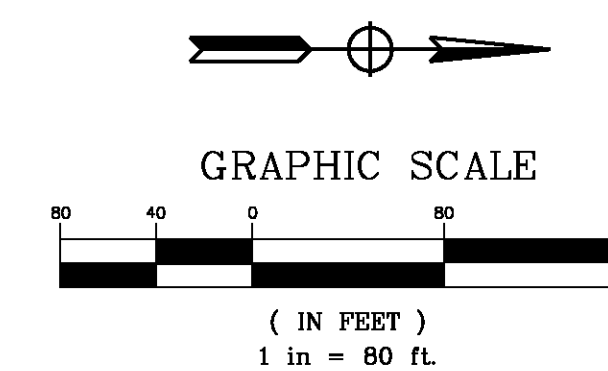
PHASE 3 STAGING SEQUENCE

- ① CONSTRUCT STREETER RR BRIDGE (TOP DOWN CONSTRUCTION)
- ② CONSTRUCT ML1 & ML2 ON RR BRIDGE
- ③ CONSTRUCT ML1 & ML2

NOTES:

1. CONTRACTOR TO MAINTAIN VEHICULAR AND ADA COMPLIANT ACCESS. LOCAL RESIDENCE AND BUSINESS ACCESS TO BE MAINTAINED DURING ALL STAGES.
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3. CONTRACTOR TO MAINTAIN SUMP DRAINAGE THROUGHOUT DURATION OF PROJECT.

AS BUILT
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BID No. 7094
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R.E. NAME MICHAEL WOLFF



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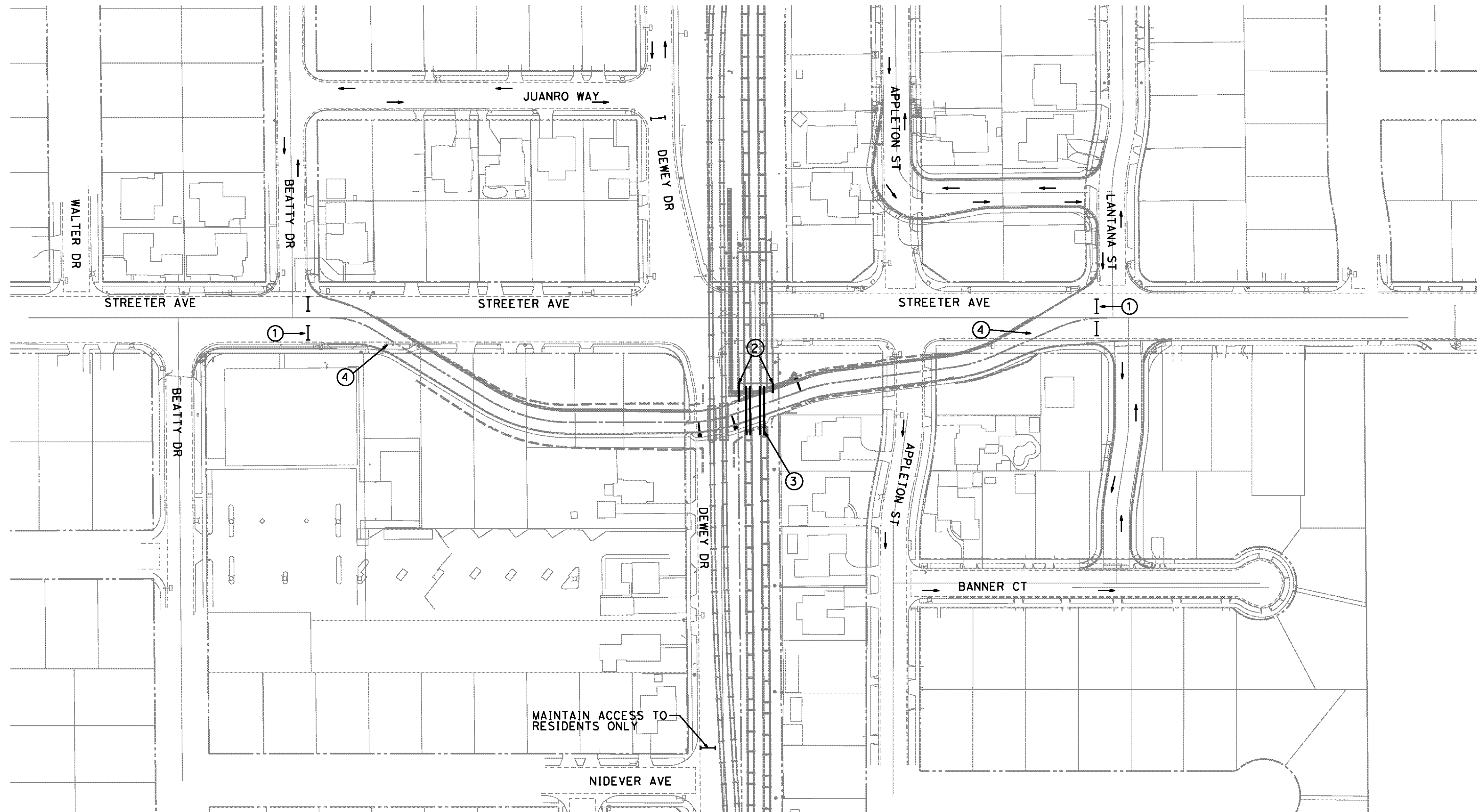
REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
No. C56574
CLVLL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

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PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PHASE 3 STAGING SEQUENCE CS-3

R-4180
SHEET **11** OF **191**
FILE NO.



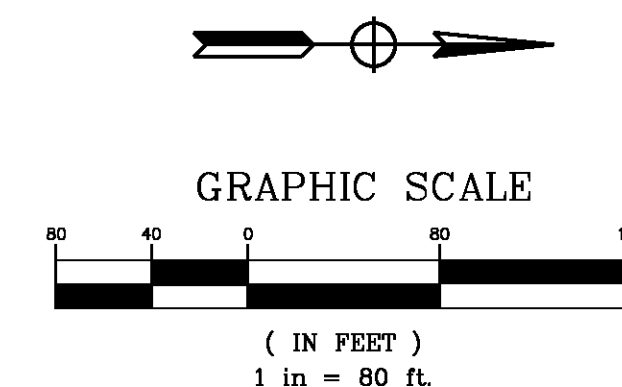
PHASE 4 STAGING SEQUENCE

- ① SHIFT STREETER TRAFFIC TO THE OFFSITE STREETER AVE DETOUR ROUTE (SEE DETOUR PLAN)
CLOSE STREETER AVE DETOUR ROAD AT BEATTY AND AT LANTANA
- ② REMOVE PORTION OF ASPHALT FROM DETOUR RD AND CONSTRUCT EAST WINGWALLS FOR UP BRIDGE
- ③ CONSTRUCT ML1 & ML2 AT STREETER DETOUR ROAD (SEE RR STAGING)
- ④ REOPEN STREETER AVE DETOUR ROAD

NOTES:

- 1. CONTRACTOR TO MAINTAIN VEHICULAR AND ADA COMPLIANT ACCESS. LOCAL RESIDENCE AND BUSINESS ACCESS TO BE MAINTAINED DURING ALL STAGES.
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- 3. CONTRACTOR TO MAINTAIN SUMP DRAINAGE THROUGHOUT DURATION OF PROJECT.

AS BUILT
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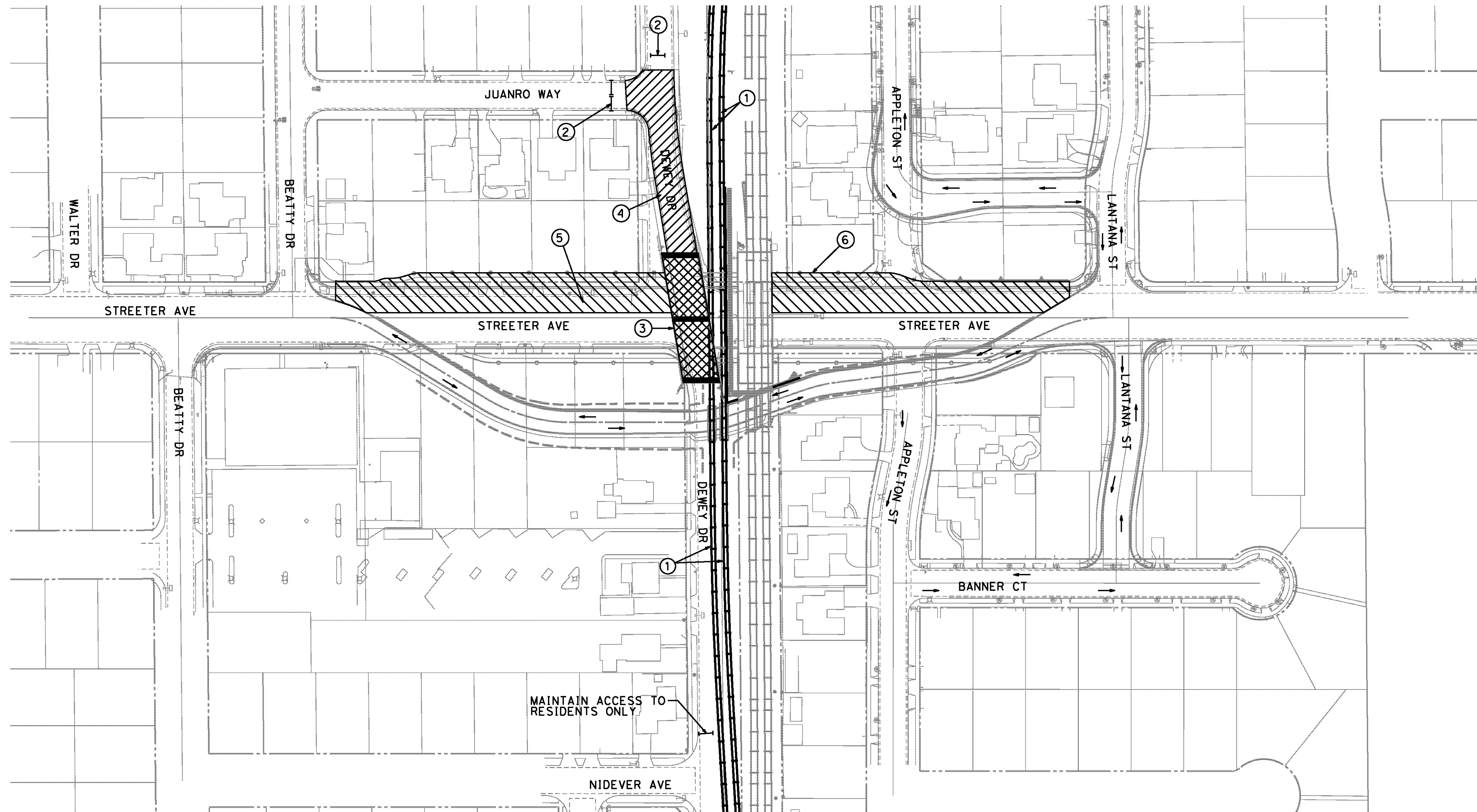
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RODRIGO GONZALEZ
No. C56574
STATE OF CALIFORNIA

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CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PHASE 4 STAGING SEQUENCE CS-4

R-4180
SHEET 12 OF 191
FILE NO.

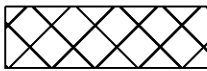



PHASE 5 STAGING SEQUENCE


PHASE 5A:

- ① DEMOLISH SHOOFLY 1 AND 2 (SEE RR STAGING)
- ② CLOSE DEWEY AND JUANRO (SEE DETOUR PLANS)

PHASE 5B:

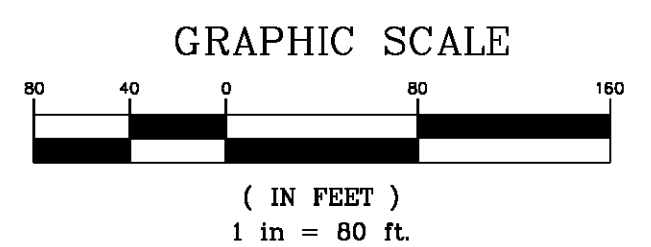
-  ③ CONSTRUCT DEWEY BRIDGE (TOP DOWN CONSTRUCTION)
-  ④ CONSTRUCT DEWEY AVE (WEST OF STREETER)

PHASE 5C:

-  ⑤ EXCAVATE WEST HALF OF STREETER AVE
- ⑥ CONSTRUCT WEST HALF OF STREETER AVE CURBS, PAVEMENT, SIDEWALK, LIGHTING, STORM DRAIN, AND APPURTENANCES

NOTES:

1. CONTRACTOR TO MAINTAIN VEHICULAR AND ADA COMPLIANT ACCESS. LOCAL RESIDENCE AND BUSINESS ACCESS TO BE MAINTAINED DURING ALL STAGES.
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AS BUILT
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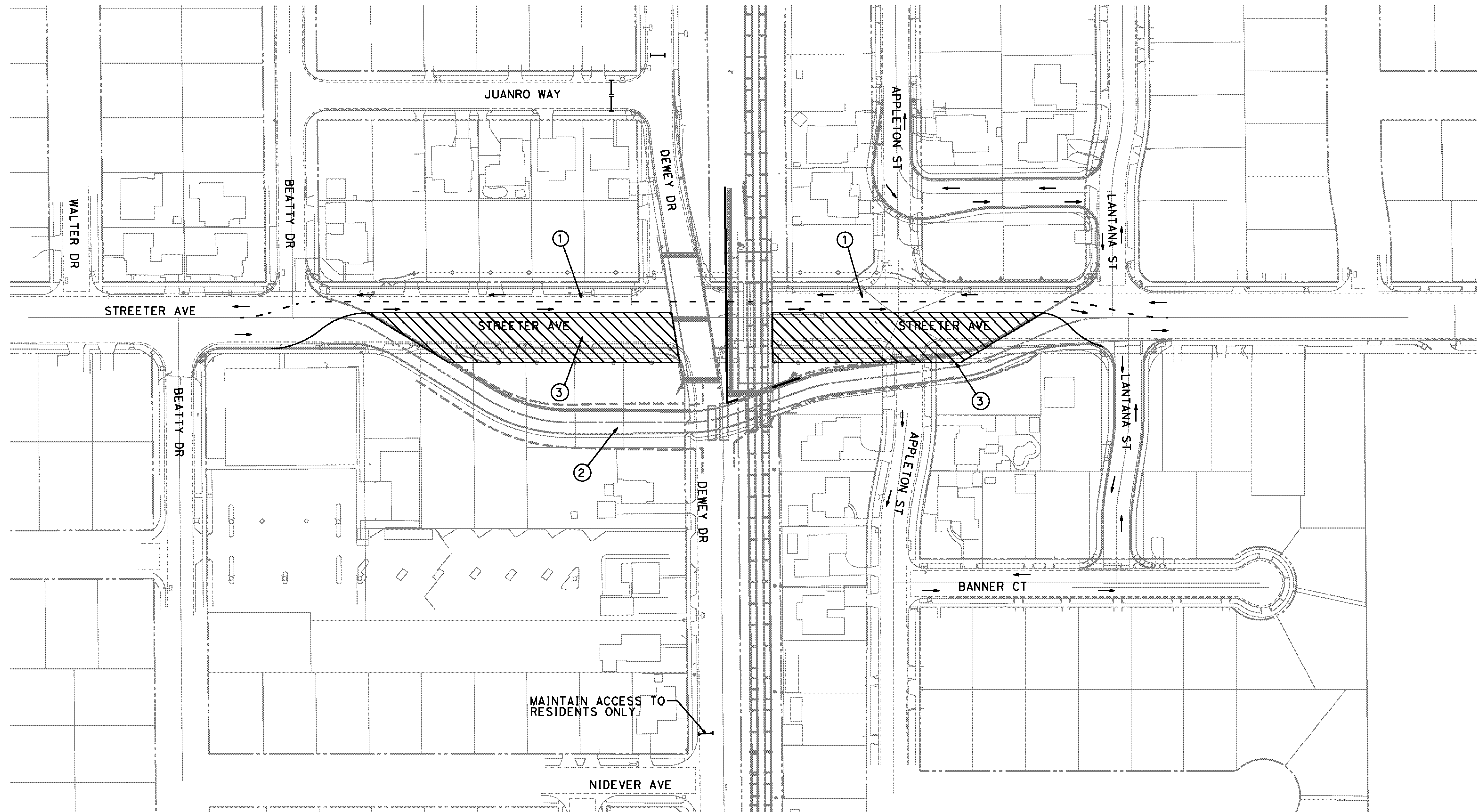
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RIVERSIDE, CA 92507
TEL (951) 788-4688
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CHECKED BY	RG	DATE	8-7-12

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PHASE 5 STAGING SEQUENCE CS-5

R-4180
SHEET 13 OF 191
FILE NO.



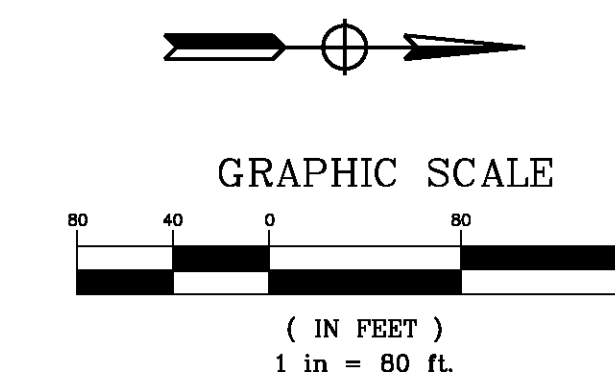
PHASE 6 STAGING SEQUENCE

- ① CLOSE DETOUR RD AND SHIFT STREETER TRAFFIC FROM DETOUR ROAD TO WEST HALF OF NEWLY CONSTRUCTED STREETER AVE AND CLOSE DETOUR
- ② REMOVE DETOUR RD, TEMPORARY CROSSING PANELS, GATES, AND HORNS
- ③ EXCAVATE EAST HALF OF STREETER AVE AND CONSTRUCT EAST HALF OF CURBS, PAVEMENT, SIDEWALK, LIGHTING, STORM DRAIN, LIFT STATION, AND APPURTENANCES

NOTES:

- 1. CONTRACTOR TO MAINTAIN VEHICULAR AND ADA COMPLAINT ACCESS. LOCAL RESIDENCE AND BUSINESS ACCESS TO BE MAINTAINED DURING ALL STAGES.
- 2. STAGE CONSTRUCTION PLANS SHOWN HEREIN SHOULD BE USED AS A GUIDE ONLY. CONTRACTOR SHALL SUBMIT DETAILED TRAFFIC HANDLING PLANS AND STAGE CONSTRUCTION PLANS, INCLUDING ALL SIGNING, STRIPING, AND TRAFFIC SIGNAL WORK REQUIRED PER MUTCD STANDARDS TO SHOW EACH STAGE OF CONSTRUCTION TO THE ENGINEER FOR APPROVAL. NO WORK SHALL COMMENCE PRIOR TO SUCH APPROVAL.
- 3. CONTRACTOR TO MAINTAIN SUMP DRAINAGE THROUGHOUT DURATION OF PROJECT.

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF



D:\Projects\1066_Streeter\ dgn\Contract Plans\vg-Stage Construction Plans-sheet14\1066_sc-06.dgn

IMPORTANT NOTICE
 Section 43161-0217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

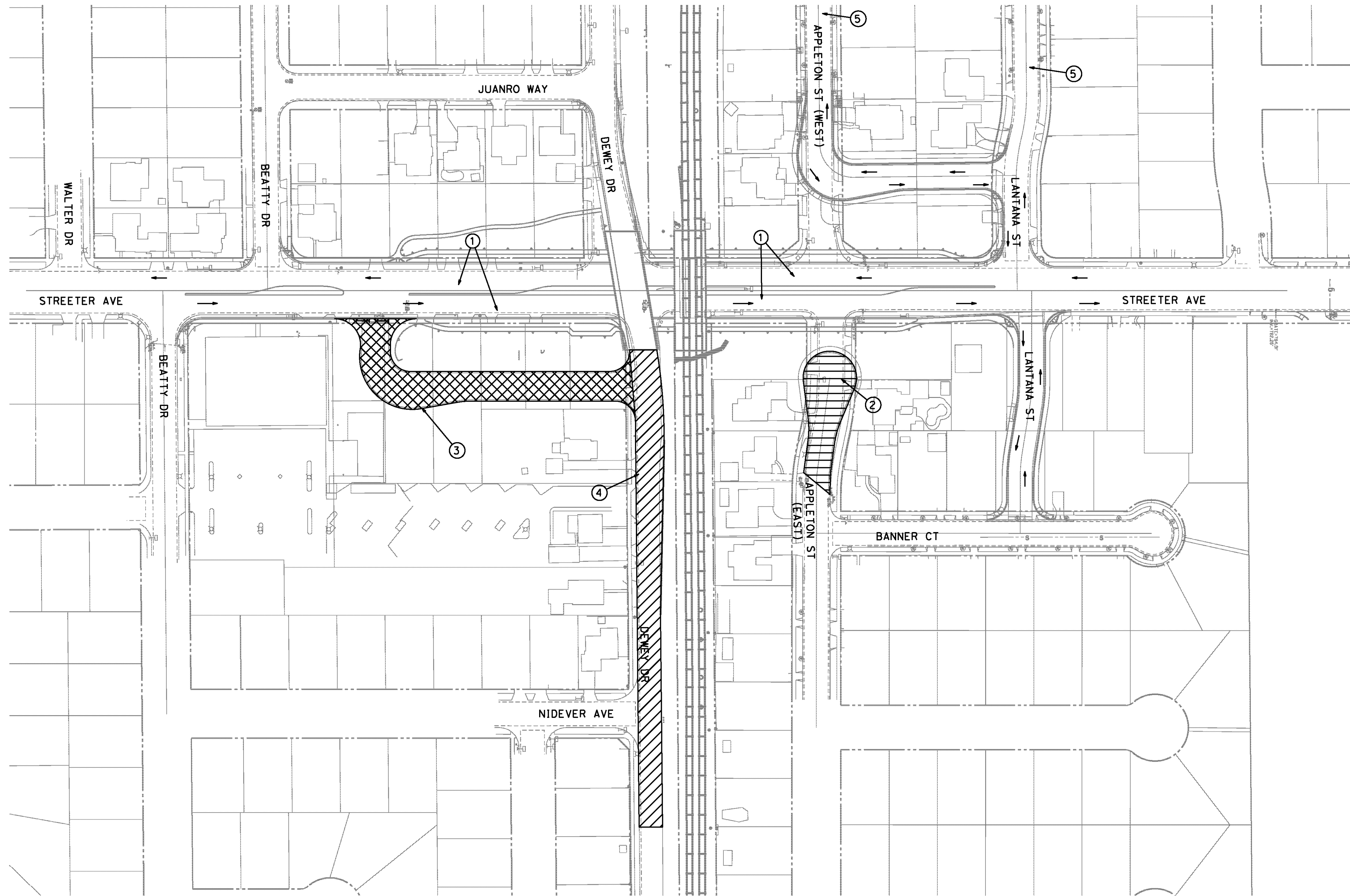
TYLIN INTERNATIONAL
 3550 VINE STREET, SUITE 120
 RIVERSIDE, CA 92507
 TEL (951) 788-4688
 www.tylin.com

REGISTERED PROFESSIONAL ENGINEER
 RODRIGO GONZALEZ
 No. C56574
 CIVIL
 STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE
DESIGNED BY	FP	DRAWN BY	FP
CHECKED BY	RG	DATE	8-7-12

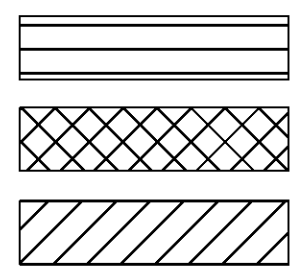
CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PHASE 6 STAGING SEQUENCE CS-6

R-4180
 SHEET 14 OF 191
 FILE NO.



PHASE 7 STAGING SEQUENCE

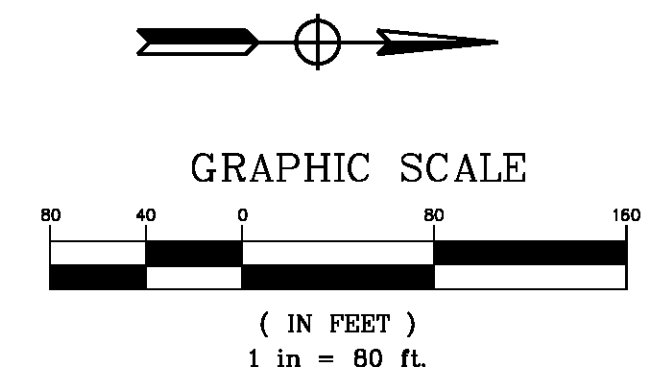
- ① OPEN STREETER AVE AND REMOVE TRAFFIC HANDLING SIGNS FROM OFFSITE STREETER DETOUR ROUTE
- ② REMOVE STREETER DETOUR RD
- ③ CONSTRUCT APPLETON ST (EAST)
- ④ CONSTRUCT JERRY LOUDER DR
- ⑤ CONSTRUCT DEWEY AVE (EAST OF STREETER)
- ⑥ CONSTRUCT PAVEMENT REHABILITATION ON LANTANA ST (WEST) AND APPLETON ST (WEST) SEE SHEET CD-14 FOR LIMITS



NOTES:

- 1. CONTRACTOR TO MAINTAIN VEHICULAR AND ADA COMPLAINT ACCESS. LOCAL RESIDENCE AND BUSINESS ACCESS TO BE MAINTAINED DURING ALL STAGES.
- 2. STAGE CONSTRUCTION PLANS SHOWN HEREIN SHOULD BE USED AS A GUIDE ONLY. CONTRACTOR SHALL SUBMIT DETAILED TRAFFIC HANDLING PLANS AND STAGE CONSTRUCTION PLANS, INCLUDING ALL SIGNING, STRIPING, AND TRAFFIC SIGNAL WORK REQUIRED PER MUTCD STANDARDS TO SHOW EACH STAGE OF CONSTRUCTION TO THE ENGINEER FOR APPROVAL. NO WORK SHALL COMMENCE PRIOR TO SUCH APPROVAL.
- 3. CONTRACTOR TO MAINTAIN SUMP DRAINAGE THROUGHOUT DURATION OF PROJECT.

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF



D:\Projects\1066_Streeter\ dgn\Contract Plans\g-Staging Construction Plans-sheet15\1066_sc-07.dgn

IMPORTANT NOTICE
Section 4216.4217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

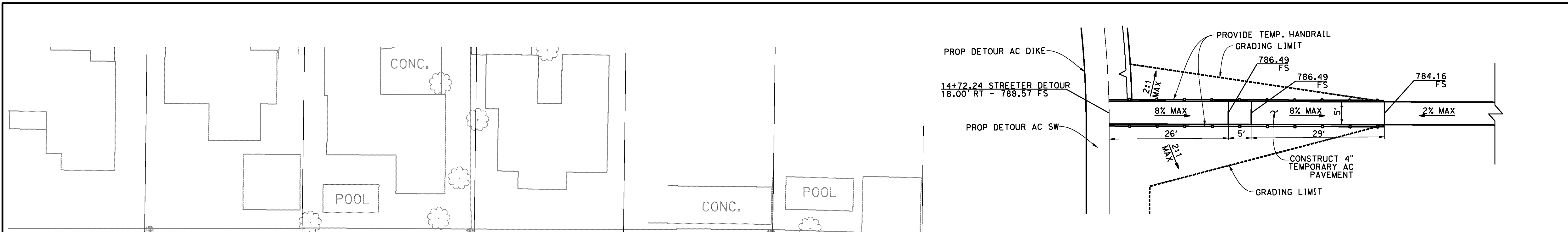
TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com

REGISTERED PROFESSIONAL ENGINEER
No. C56574
R. J. GONZALEZ
STATE OF CALIFORNIA

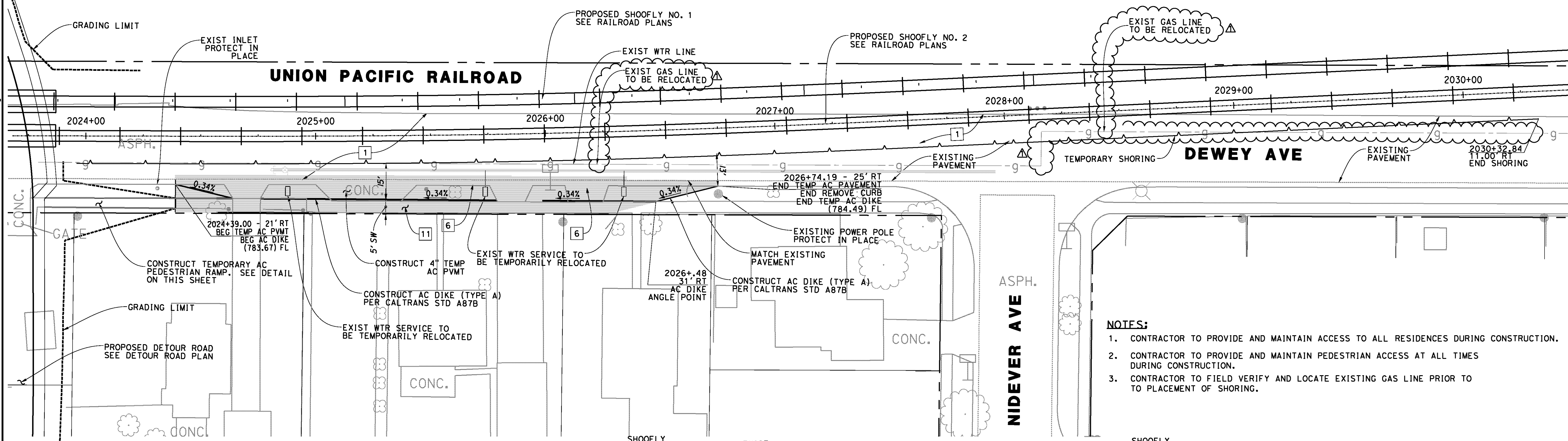
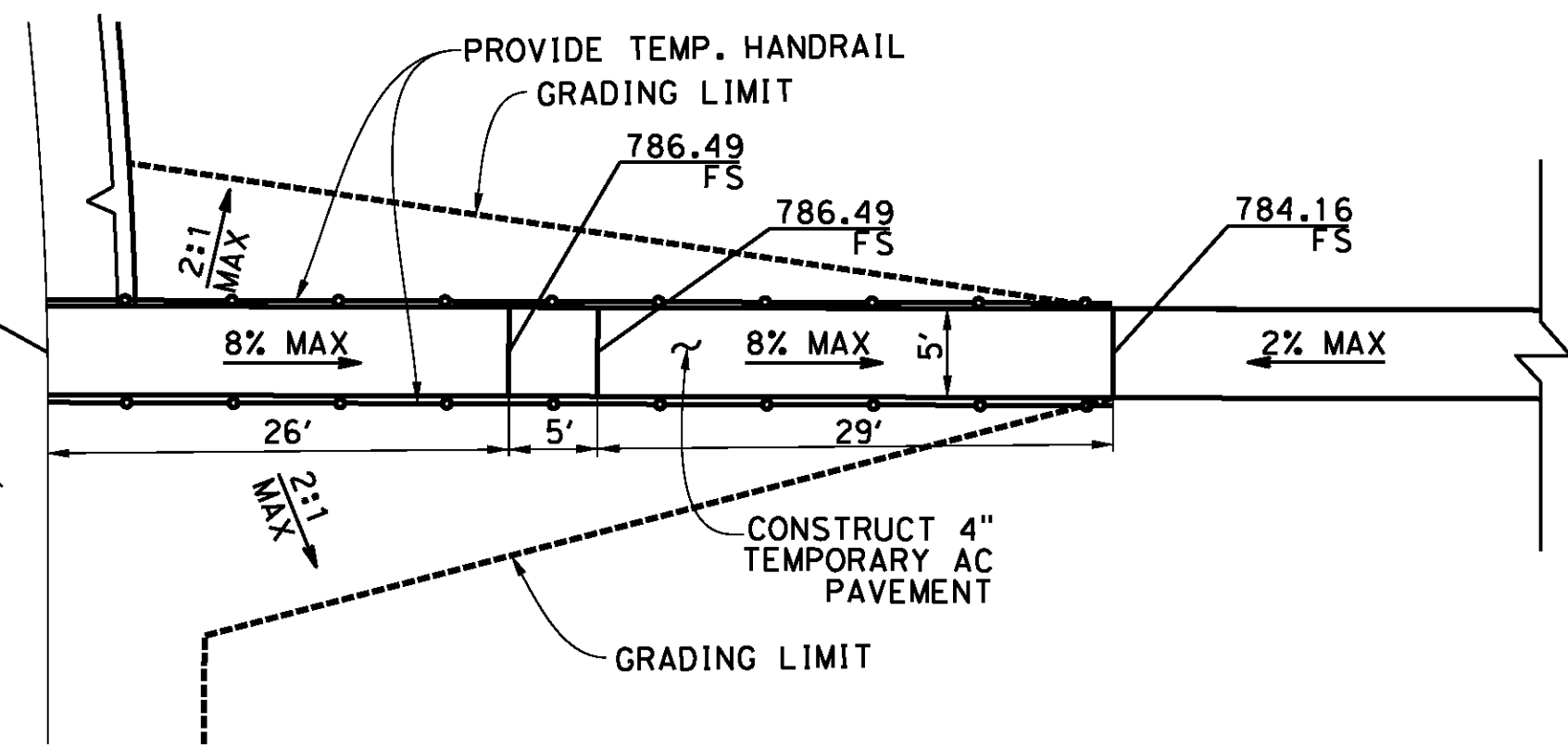
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PHASE 7 STAGING SEQUENCE CS-7

R-4180
SHEET 15 OF 191
FILE NO.



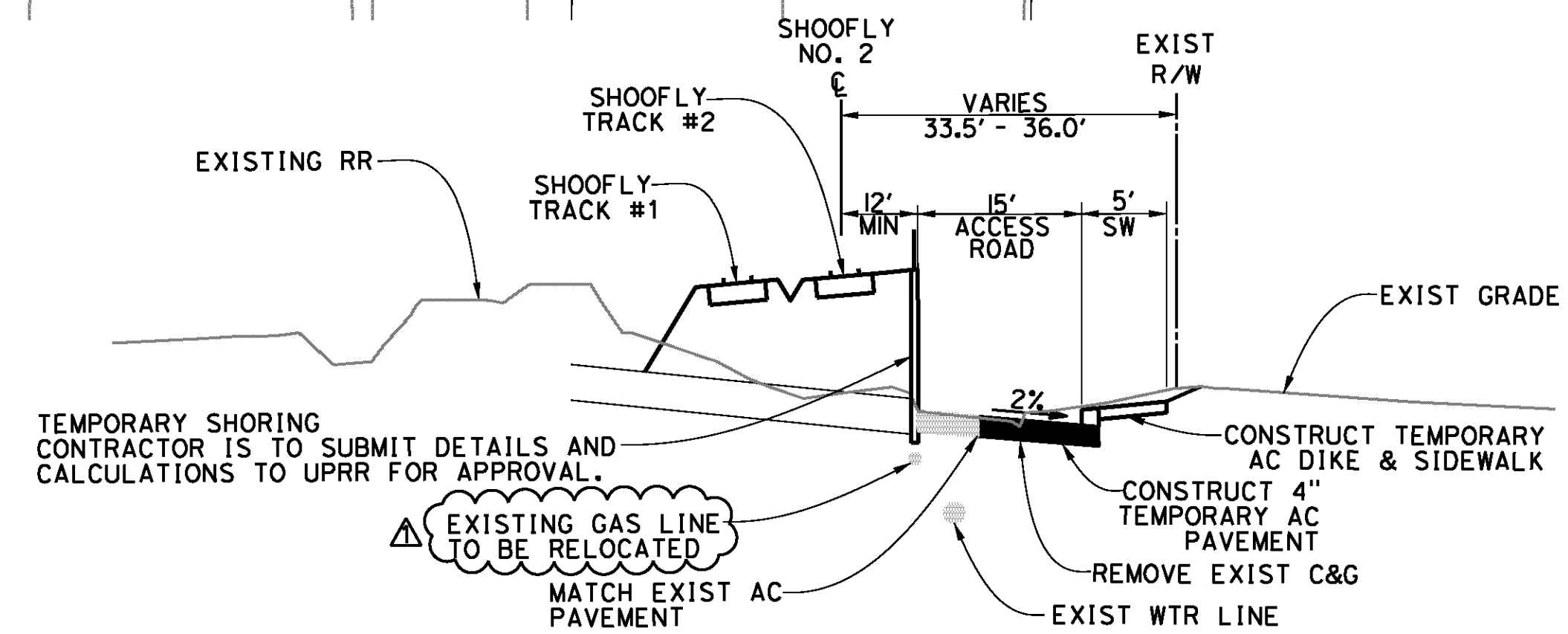
PEDESTRIAN RAMP DETAIL
SCALE: 1"=10'



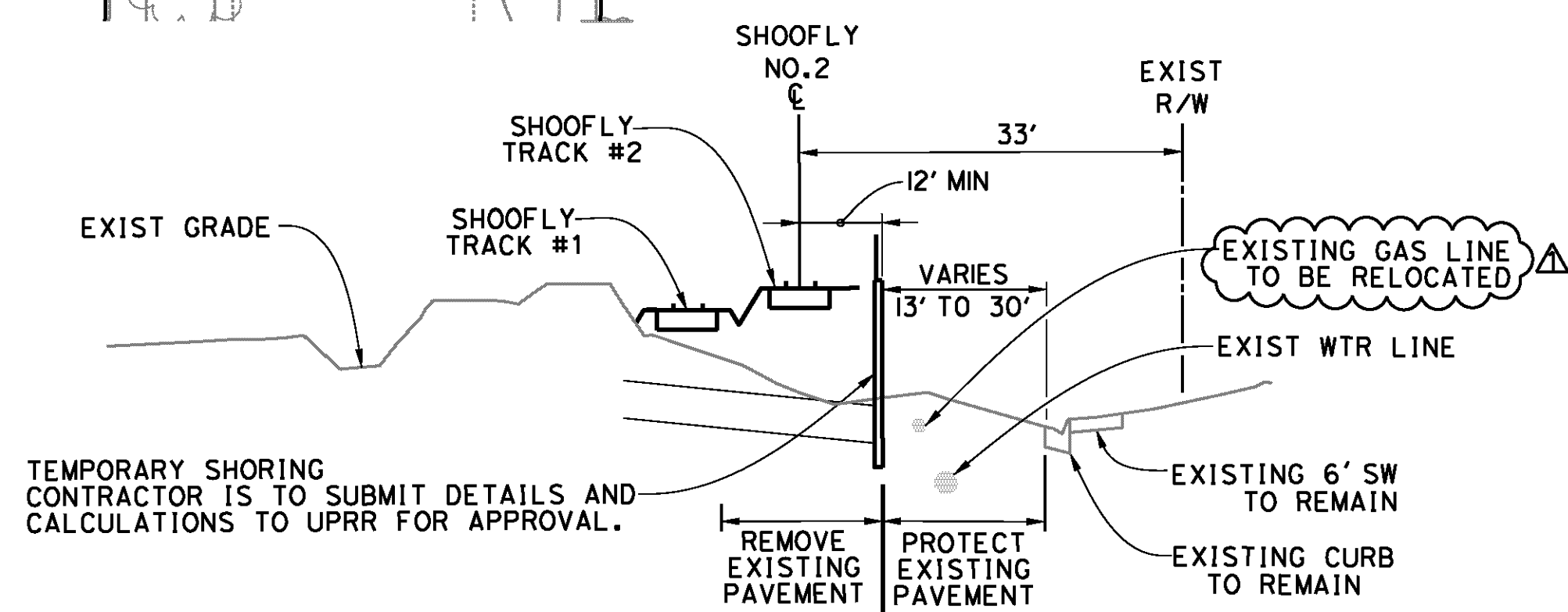
- NOTES:**
1. CONTRACTOR TO PROVIDE AND MAINTAIN ACCESS TO ALL RESIDENCES DURING CONSTRUCTION.
 2. CONTRACTOR TO PROVIDE AND MAINTAIN PEDESTRIAN ACCESS AT ALL TIMES DURING CONSTRUCTION.
 3. CONTRACTOR TO FIELD VERIFY AND LOCATE EXISTING GAS LINE PRIOR TO PLACEMENT OF SHORING.

- LEGEND**
- GRADING LIMIT
 - SPECIAL DESIGN RETAINING WALL
 - ▨ 4" TEMPORARY AC PAVEMENT
 - DRAINAGE FLOW PATH

- REMOVAL NOTES**
- 1 REMOVE EXISTING AC PAVEMENT
 - 6 REMOVE CURB & GUTTER
 - 11 REMOVE EXISTING CONCRETE SIDEWALK

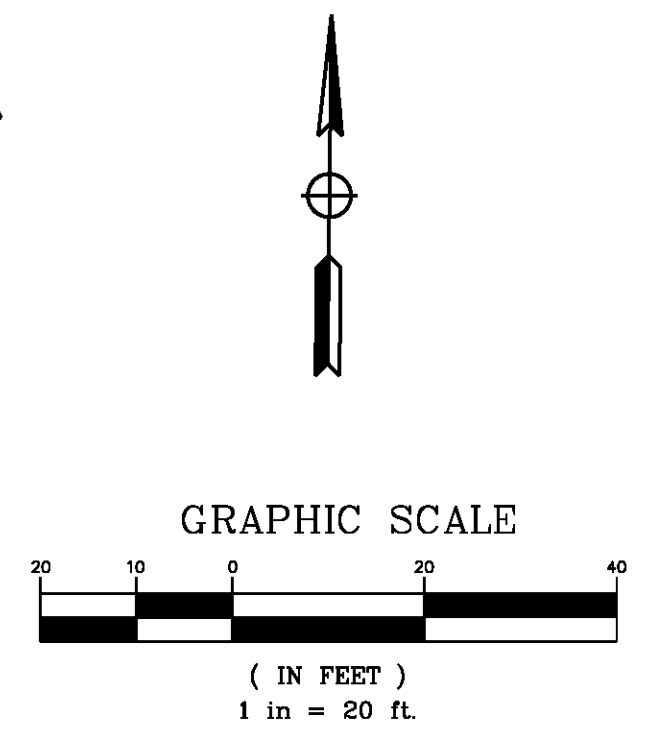


TYPICAL SECTION
STA 2024+39 TO STA 2026+25
NO SCALE



TYPICAL SECTION
STA 2026+25 TO STA 2030+33
NO SCALE

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF



IMPORTANT NOTICE
Section 42116.0217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID, Member cost CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com
DATE 8-7-12

REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
No. C56574
CLALL
STATE OF CALIFORNIA

DESIGNED BY	PD	DRAWN BY	PD	CHECKED BY	RG
LOCATION OF EXISTING GAS LINE REVISD	RG	09/12			
MARK	REVISIONS	APPR.	DATE		

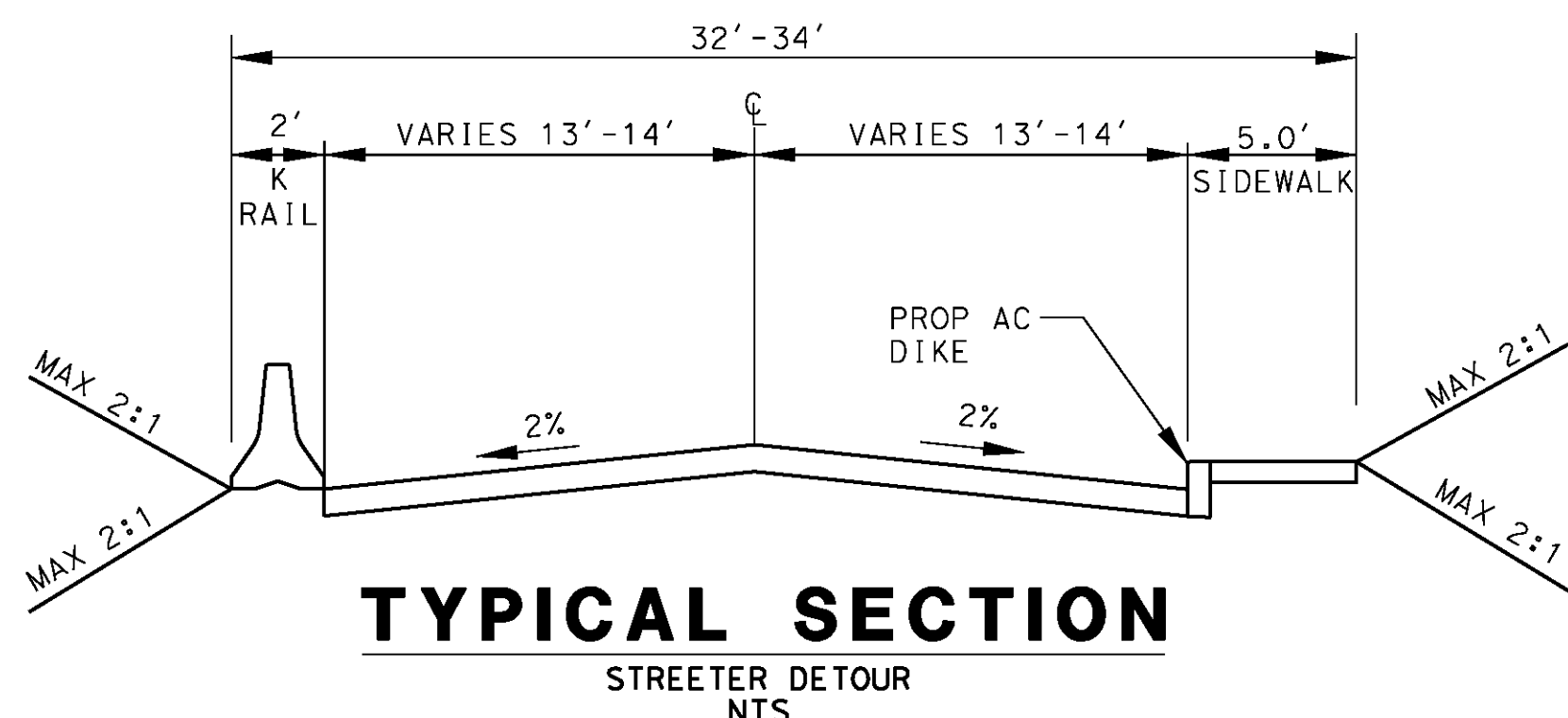
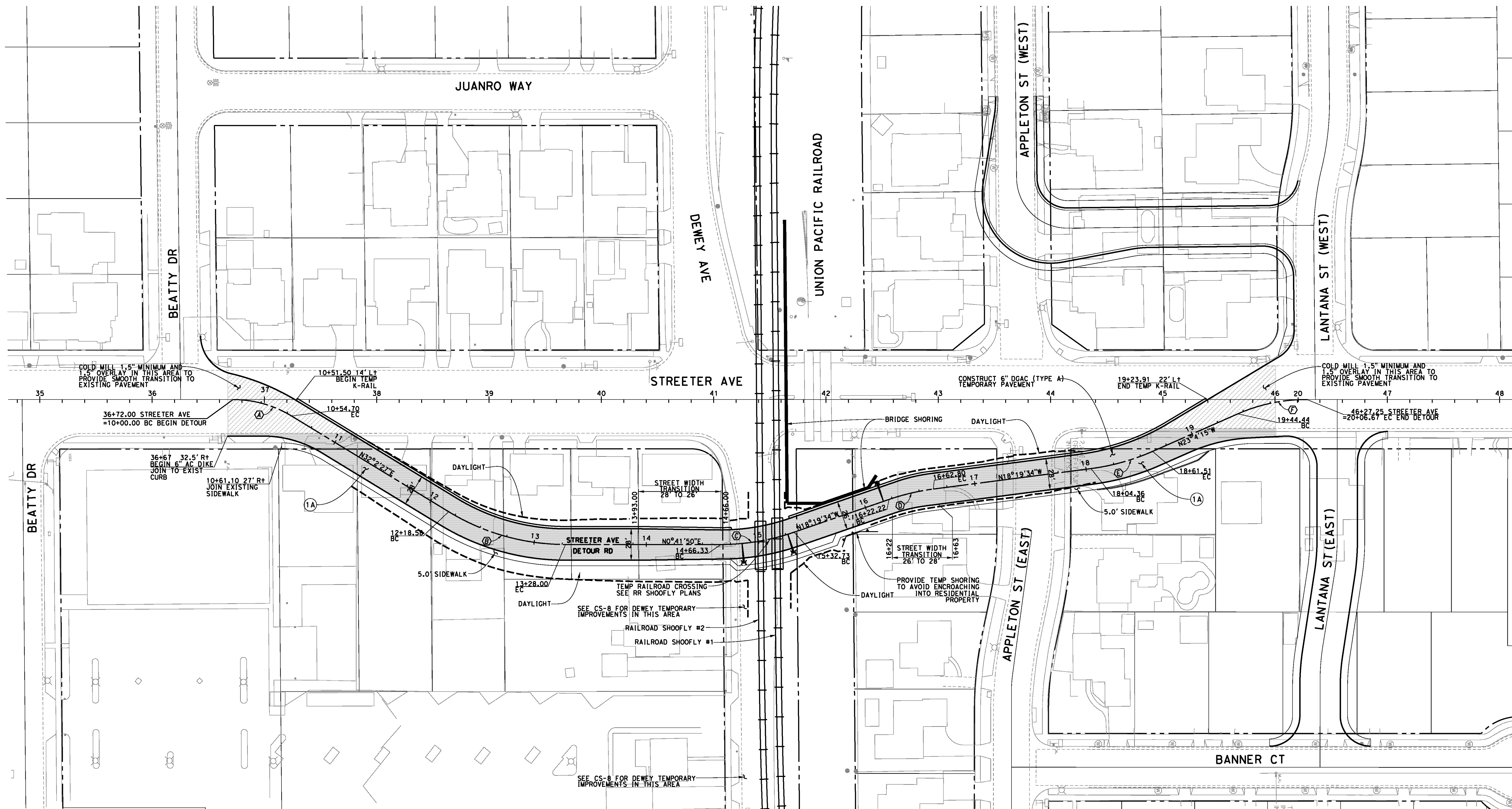
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
DEWEY TEMPORARY IMP. CS-8
HORIZ. SCALE: VERT. SCALE: N/A

R-4180
SHEET 16 OF 191
FILE NO.

D:\Projects\1066_Streeter\ dgn\Contract Plans\1066_Streeter\1066_ac-08.dgn

DATE: 9/14/2012
TIME: 9:28:24 AM

User: pboctor
1066_ac-08.dgn



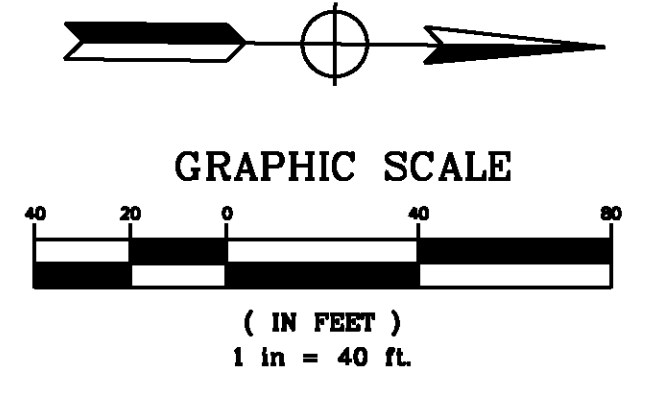
CURVE DATA

Curve	Δ	R	T	L
A	30°20'37"	100.00'	28.06'	54.70'
B	31°20'37"	200.00'	56.11'	109.41'
C	19°01'24"	200.00'	33.51'	66.40'
D	11°37'30"	200.00'	20.40'	40.58'
E	16°22'11"	200.00'	28.76'	57.14'
F	23°46'05"	150.00'	31.56'	62.23'

CONSTRUCTION NOTES

- 1A CONSTRUCT 0.40' DGAC OVER 0.8' CRUSHED AGGREGATE BASE (CLASS 11)

AS BUILT
(AND CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF



D:\Projects\1066_Streeter\Drawings\Contract\Plans\Streeter\Detour\Plans\streeter\1066_d1-01.dgn

DATE: 8/8/2012
TIME: 6:38:22 PM

IMPORTANT NOTICE
Section 4316.4217 of the Government Code requires a Dig Alert identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com

REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
No. C56574
CLAYTON
STATE OF CALIFORNIA

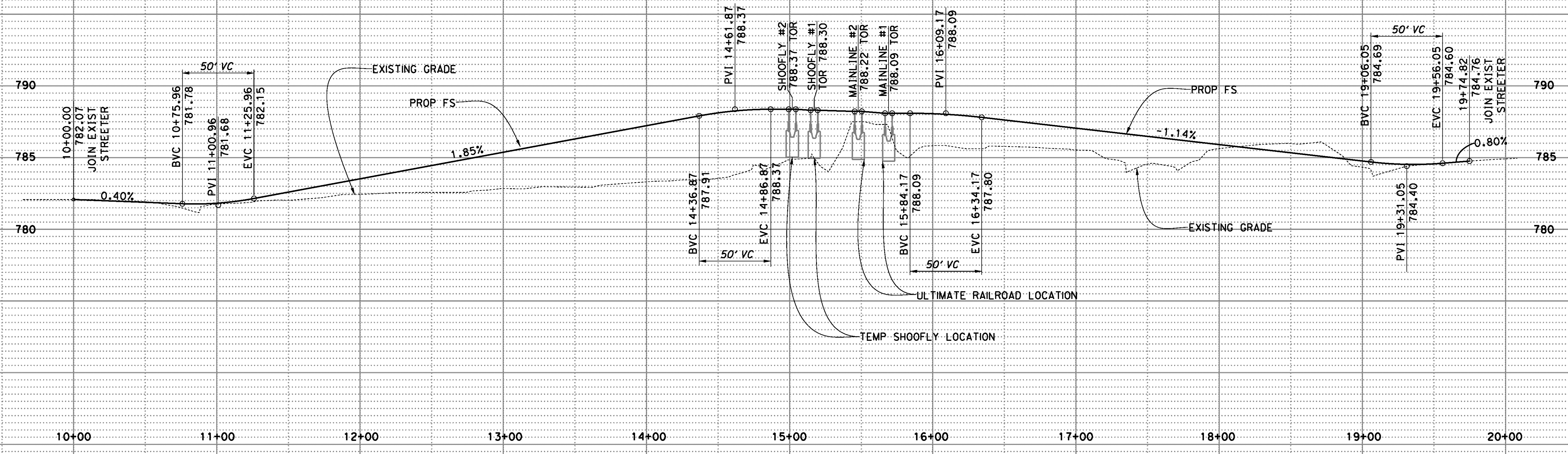
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
STREETER DETOUR ROAD

R-4180
SHEET 17 OF 191
FILE NO.

DESIGNED BY FD DRAWN BY FD CHECKED BY RG HORIZ. SCALE: VERT. SCALE: N/A

User: pboctor
1066_d1-01.dgn



AS BUILT
 AND CORRECTIONS ON THIS SHEET:
 BID NO. 7094
 E.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

SCALE
 Horiz: 1"=40'
 Vert: 1"=4'

D:\Projects\1066_Streeter.dgn\Contract Plans\Streeter.dgn\1066_d1-02.dgn

IMPORTANT NOTICE
 Section 9114.0117 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be issued. For your Dig Alert ID, Member cost CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
 3550 VINE STREET, SUITE 120
 RIVERSIDE, CA 92507
 TEL (951) 788-4688
 www.tylin.com



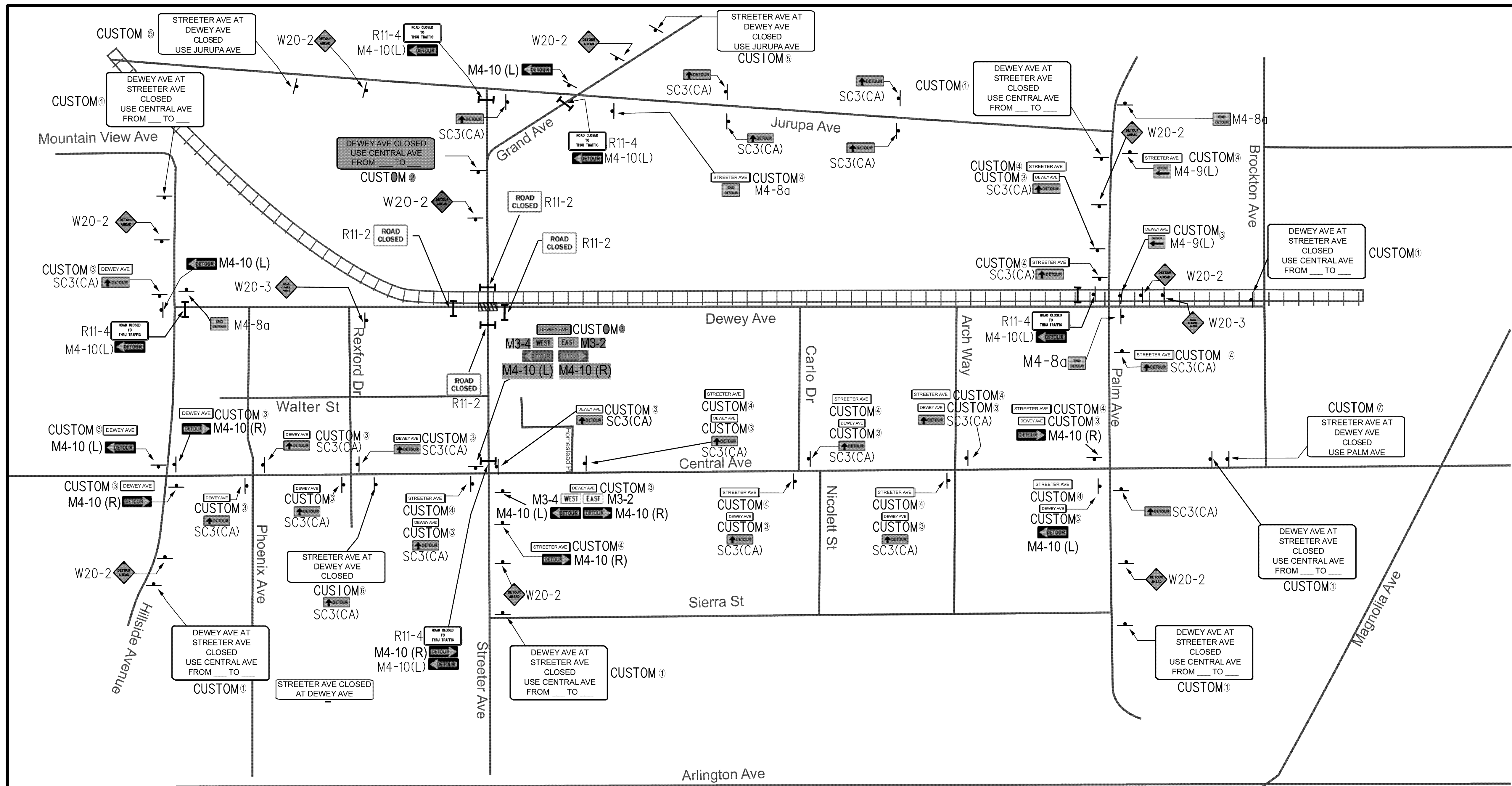
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
STREETER DETOUR PROFILE

R-4180
 SHEET **18** OF **191**
 FILE NO.

DATE: 8/8/2012
 TIME: 6:38:41 PM

User: pboctor
 1066_d1-02.dgn



Construction Note; Streeter Avenue closure is to be completed during Non-School Days to minimize impact to school children who walk to school, school bus routes, parent who drop off/pick up, etc.

SIGN	CODE	DIMENSIONS	QUANTITY
	M4-10(L)	48"x18"	5
	M4-10(R)	48"x18"	1
	SC3(CA)	36"x12"	18
	W20-2	36"x36"	7
	M4-8a	24"x18"	6
	W20-3	36"x36"	2

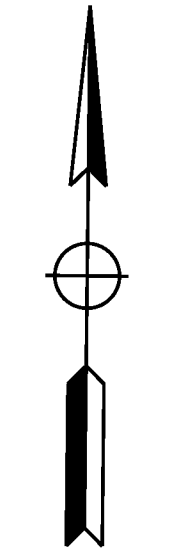
SIGN	CODE	DIMENSIONS	QUANTITY
	R11-4	60"x30"	5
	R11-2	48"x30"	4
	M3-2	24"x12"	1
	M3-4	24"x12"	2
	M3-1	24"x12"	2
	M3-3	24"x12"	1
	CUSTOM ①	-	6
	CUSTOM ②	-	1

SIGN	CODE	DIMENSIONS	QUANTITY
	CUSTOM ③	-	22
	CUSTOM ④	-	20
	CUSTOM ⑤	-	2
	CUSTOM ⑥	-	1
	CUSTOM ⑦	-	1

LEGEND
 TYPE III BARRICADE WITH FLASHING WARNING LIGHTS
 WORK ZONE
 DEWEY AVE CLOSED USE CENTRAL AVE FROM TO SIGNS COVERED DURING STREETER AVE CLOSURE

NOT TO SCALE

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF



NO SCALE

G:\projects\1066_Streeter\ghn\Contract Plans\K-Traffic Handling and Detour Plans\Sheets\1066_ktd-01.dgn

IMPORTANT NOTICE
 Section 4914.4217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be issued. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
 3550 VINE STREET, SUITE 120
 RIVERSIDE, CA 92507
 TEL (951) 788-4688
 www.tylin.com DATE 8-7-12

REGISTERED PROFESSIONAL ENGINEER
 RODRIGO GONZALEZ
 No. C56574
 STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
STREETER DETOUR PLAN

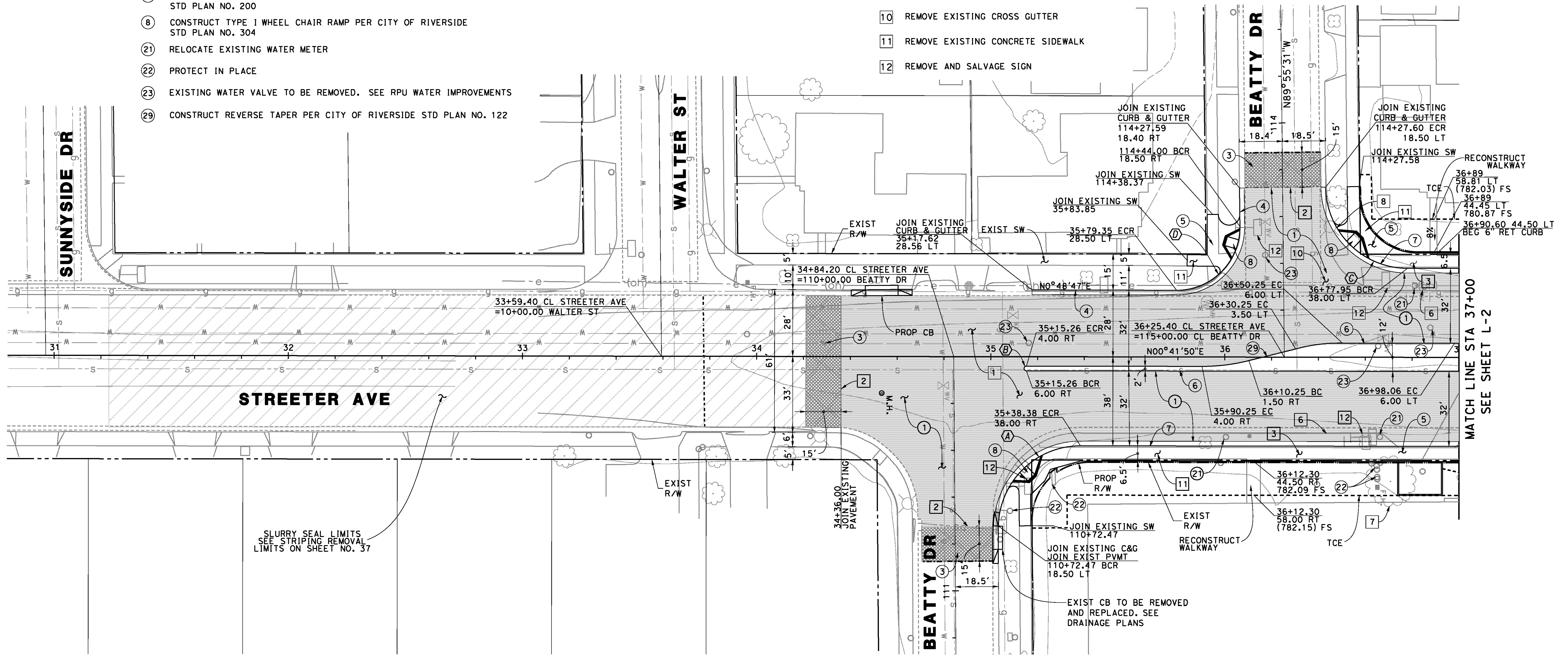
R-4180
 SHEET 19 OF 191
 FILE NO.

CONSTRUCTION NOTES

- ① CONSTRUCT 0.40' DGAC OVER 1.6' CRUSHED AGGREGATE BASE (CLASS II)
- ③ COLD MILL 1.5" MIN. EXISTING AC PAVMENT AND PLACE 1.5" MIN. AC OVERLAY
- ④ CONSTRUCT TYPE I - 6" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- ⑥ CONSTRUCT TYPE II - 8" MEDIAN CURB PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑦ CONSTRUCT TYPE I - 8" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑧ CONSTRUCT TYPE I WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304
- ⑫ RELOCATE EXISTING WATER METER
- ⑬ PROTECT IN PLACE
- ⑭ EXISTING WATER VALVE TO BE REMOVED. SEE RPU WATER IMPROVEMENTS
- ⑮ CONSTRUCT REVERSE TAPER PER CITY OF RIVERSIDE STD PLAN NO. 122

REMOVAL NOTES

- ① REMOVE EXISTING AC PAVEMENT
- ② SAWCUT EXISTING PAVEMENT
- ③ REMOVE EXISTING CONCRETE
- ⑥ REMOVE CURB & GUTTER
- ⑦ REMOVE TREE
- ⑧ REMOVE & SALVAGE STREET LIGHT
- ⑩ REMOVE EXISTING CROSS GUTTER
- ⑪ REMOVE EXISTING CONCRETE SIDEWALK
- ⑫ REMOVE AND SALVAGE SIGN



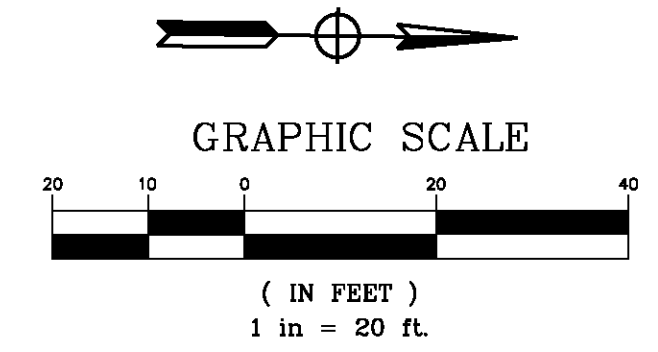
SLURRY SEAL LIMITS
SEE STRIPING REMOVAL
LIMITS ON SHEET NO. 37

CURVE DATA

Δ	R	T	L
A 88°51'23"	35.00'	34.31'	54.28'
B 180°00'00"	1.00'	--	3.15'
C 89°22'38"	35.00'	34.62'	54.60'
D 89°22'38"	27.00'	27.37'	42.78'

LEGEND

- EXISTING R/W
- PROPOSED R/W
- PROPOSED TOP OF SLOPE



AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

D:\Projects\1066_Streeter\Drawn\Layout\Plan\sheet19\1066_81-01.dgn

DATE: 8/8/2012
TIME: 6:25:07 PM

IMPORTANT NOTICE
Section 4214.6217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com

REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
No. C56574
CLVLL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LAYOUT - STREETER AVE L-1

R-4180
SHEET **20** OF **191**
FILE NO.

DESIGNED BY FD DRAWN BY FD CHECKED BY RG HORIZ. SCALE: VERT. SCALE: N/A

User: pboctor
1066_81-01.dgn

NOTE

SEE CD-10 & CD-13 FOR RETAINING WALL AND SIDEWALK LIMITS AND DETAILS

CONSTRUCTION NOTES

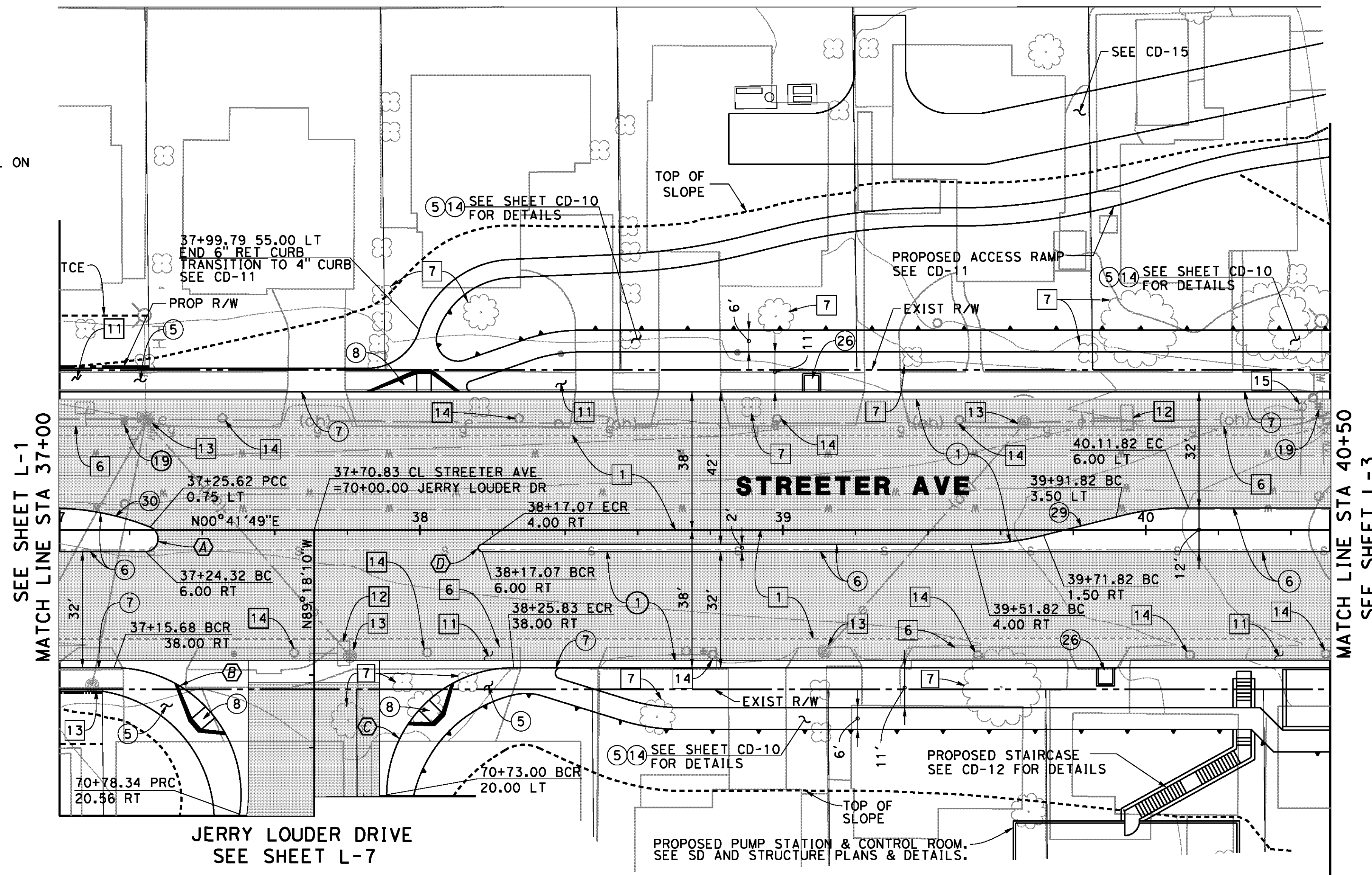
- ① CONSTRUCT 0.40' DGAC OVER CRUSHED 1.6' AGGREGATE BASE (CLASS II)
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- ⑥ CONSTRUCT TYPE II - 8" MEDIAN CURB PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑦ CONSTRUCT TYPE I - 8" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑧ CONSTRUCT TYPE I WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304
- ⑭ CONSTRUCT CONSTANT HEIGHT RETAINING WALL PER CONSTRUCTION DETAIL ON SHEET CD-13
- ⑰ RELOCATE EXISTING FIRE HYDRANT
- ⑳ CONSTRUCT BLOCK RETAINING WALL. SEE ELECTRICAL PLANS FOR LOCATIONS & DETAILS
- ㉑ CONSTRUCT REVERSE TAPER PER CITY OF RIVERSIDE STD PLAN NO. 122
- ⑳ CONSTRUCT PARABOLIC FLARE PER CITY OF RIVERSIDE STD PLAN NO. 123

REMOVAL NOTES

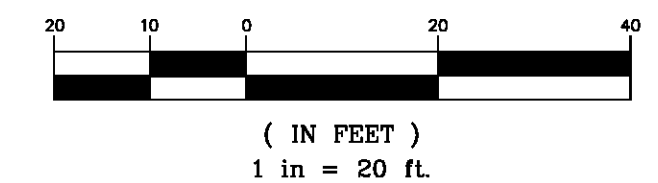
- ① REMOVE EXISTING AC PAVEMENT
- ⑥ REMOVE CURB & GUTTER
- ⑦ REMOVE TREE
- ⑧ REMOVE & SALVAGE STREET LIGHT
- ⑪ REMOVE EXISTING CONCRETE SIDEWALK
- ⑫ REMOVE AND SALVAGE SIGN
- ⑬ REMOVE EXISTING POWER POLE
- ⑭ REMOVE EXISTING WATER METER
- ⑮ REMOVE AND SALVAGE EXISTING SIGNAL EQUIPMENT

CURVE DATA

△	R	T	L
A 158°03'07"	3.50'	18.05'	9.65'
B 98°46'42"	35.00'	40.82'	60.34'
C 90°00'00"	35.00'	27.00'	54.98'
D 180°13'32"	1.00'	--	3.15'



GRAPHIC SCALE



AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

D:\Projects\1066_Streeter\Drawn\Contract Plans\1066_81-02.dgn

IMPORTANT NOTICE
Section 4218.0217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com

REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
No. C56574
CIVIL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LAYOUT - STREETER AVE L-2

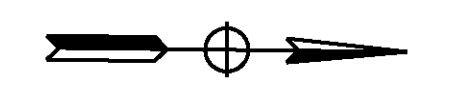
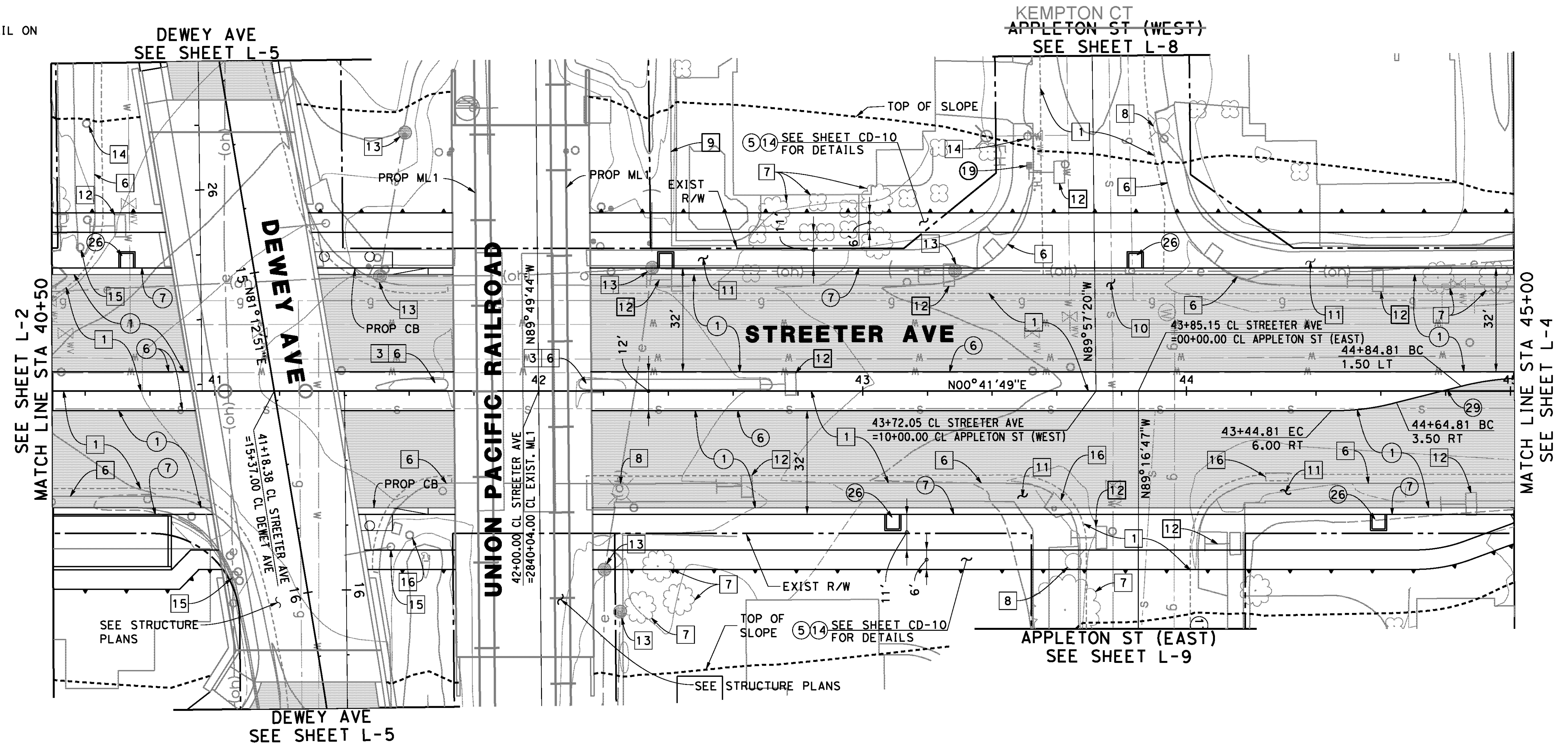
R-4180
SHEET **21** OF **191**
FILE NO.

CONSTRUCTION NOTES

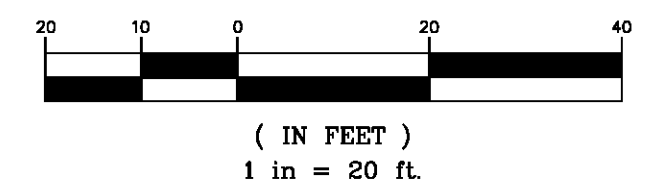
- ① CONSTRUCT 0.40' DGAC OVER CRUSHED 1.6' AGGREGATE BASE (CLASS II)
- ④ CONSTRUCT TYPE I - 6" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- ⑥ CONSTRUCT TYPE II - 8" MEDIAN CURB PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑦ CONSTRUCT TYPE I - 8" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑭ CONSTRUCT CONSTANT HEIGHT RETAINING WALL PER CONSTRUCTION DETAIL ON SHEET CD-13
- ⑰ RELOCATE EXISTING FIRE HYDRANT
- ⑳ CONSTRUCT BLOCK RETAINING WALL. SEE ELECTRICAL PLANS FOR LOCATIONS & DETAILS
- ㉑ CONSTRUCT REVERSE TAPER PER CITY OF RIVERSIDE STD PLAN NO. 122

REMOVAL NOTES

- ① REMOVE EXISTING AC PAVEMENT
- ⑥ REMOVE CURB & GUTTER
- ⑦ REMOVE TREE
- ⑧ REMOVE & SALVAGE STREET LIGHT
- ⑨ REMOVE EXISTING FENCE
- ⑩ REMOVE EXISTING CROSS GUTTER
- ⑪ REMOVE EXISTING CONCRETE SIDEWALK
- ⑫ REMOVE AND SALVAGE SIGN
- ⑬ REMOVE EXISTING POWER POLE
- ⑭ REMOVE EXISTING WATER METER
- ⑮ REMOVE AND SALVAGE EXISTING SIGNAL EQUIPMENT
- ⑯ REMOVE EXISTING DRAINAGE INLET



GRAPHIC SCALE



AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

D:\Projects\1066_Streeter\Ugn\Contract Plans\Ac-Layout\Plans-sheets\1066_81-03.dgn

IMPORTANT NOTICE
 Section 4214.217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID, Member cost CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

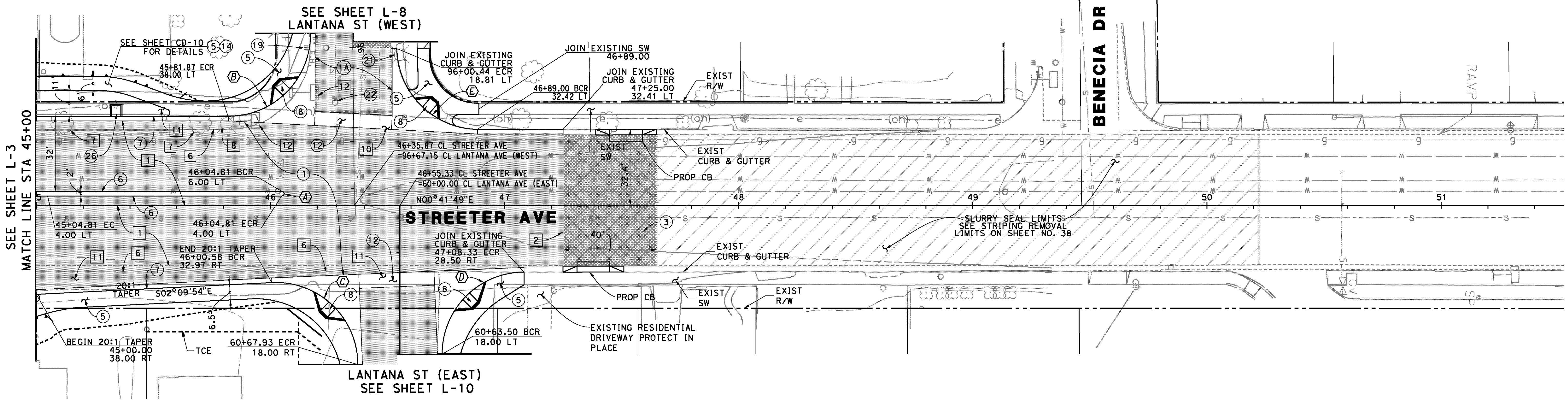
TYLIN INTERNATIONAL
 3550 VINE STREET, SUITE 120
 RIVERSIDE, CA 92507
 TEL (951) 788-4688
 www.tylin.com

REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
 No. C56574
 CIVIL
 STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LAYOUT - STREETER AVE L-3

R-4180
 SHEET **22** OF **191**
 FILE NO.



CONSTRUCTION NOTES

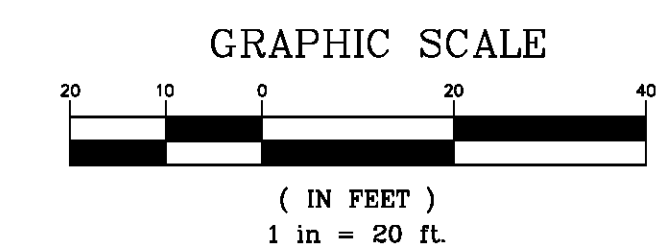
- ① CONSTRUCT 0.40' DGAC OVER CRUSHED 1.6' AGGREGATE BASE (CLASS II)
- ①A CONSTRUCT 0.40' DGAC OVER CRUSHED 0.8' AGGREGATE BASE (CLASS II)
- ③ COLD MILL 1.5" MIN. EXISTING AC PAVMENT AND PLACE 1.5" MIN. OVERLAY
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- ⑥ CONSTRUCT TYPE II - 8" MEDIAN CURB PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑦ CONSTRUCT TYPE I - 8" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑧ CONSTRUCT TYPE I WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304
- ⑫ CONSTRUCT CROSS GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 220
- ⑭ CONSTRUCT CONSTANT HEIGHT RETAINING WALL PER CONSTRUCTION DETAIL ON SHEET CD-13
- ⑰ RELOCATE EXISTING FIRE HYDRANT
- ⑳ PROTECT IN PLACE
- ㉑ ADJUST/MODIFY WATER VALVE COVER TO GRADE
- ㉒ CONSTRUCT BLOCK RETAINING WALL. SEE ELECTRICAL PLANS FOR LOCATIONS & DETAILS

REMOVAL NOTES

- ① REMOVE EXISTING AC PAVMENT
- ② SAWCUT EXISTING PAVEMENT
- ⑥ REMOVE CURB & GUTTER
- ⑦ REMOVE TREE
- ⑧ REMOVE & SALVAGE STREET LIGHT
- ⑩ REMOVE EXISTING CROSS GUTTER
- ⑪ REMOVE EXISTING CONCRETE SIDEWALK
- ⑫ REMOVE AND SALVAGE SIGN

CURVE DATA

Curve	Δ	R	T	L
A	180°00'00"	1.00'	--	3.15'
B	90°37'04"	35.00'	35.37'	55.36'
C	92°51'45"	35.00'	36.79'	56.73'
D	90°00'00"	35.00'	27.00'	54.98'
E	89°07'46"	35.00'	34.41'	54.45'



AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7054
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

D:\Projects\1066_Streeter\Drawn\Layout\Plans\sheet1066_81-04.dgn

IMPORTANT NOTICE
Section 4216.4217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

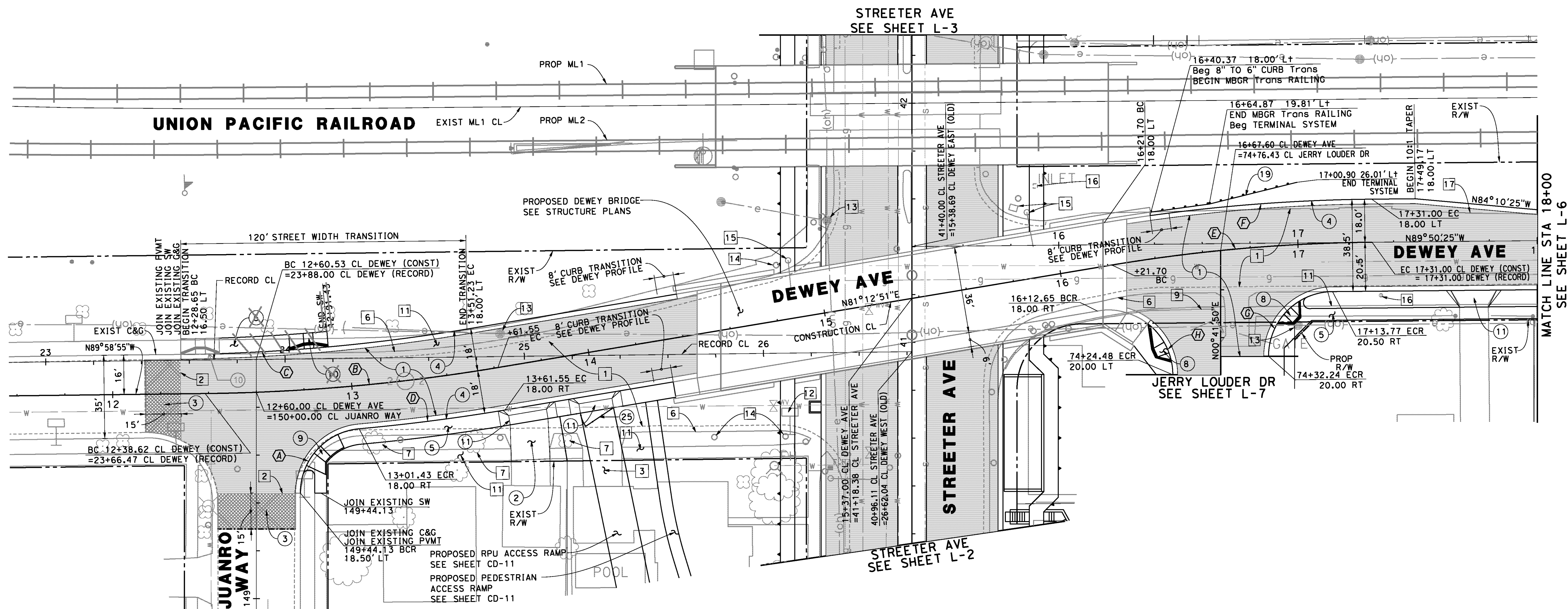
TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com

REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
No. C26574
CIVIL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LAYOUT - STREETER AVE L-4

R-4180
SHEET **23** OF **191**
FILE NO.



CONSTRUCTION NOTES

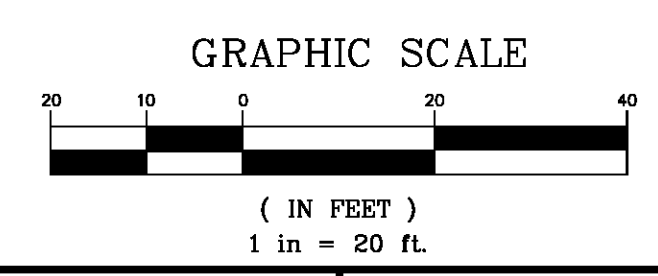
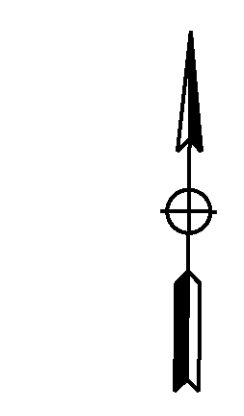
- ① CONSTRUCT 0.40' DGAC OVER CRUSHED 1.6' AGGREGATE BASE (CLASS II)
- ② CONSTRUCT 6" PCC PAVEMENT
- ③ COLD MILL 1.5" MIN. EXISTING AC PAYMENT AND PLACE 1.5" MIN. OVERLAY
- ④ CONSTRUCT TYPE I - 6" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- ⑧ CONSTRUCT TYPE I WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304
- ⑨ CONSTRUCT TYPE II WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304
- ⑩ CONSTRUCT TYPE II-A WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304
- ⑪ CONSTRUCT PCC RESIDENTIAL DRIVEWAY APPROACH PER CITY OF RIVERSIDE STD PLAN NO. 302
- ⑲ CONSTRUCT MBGR (TYPE 12B) PER CALTRANS STD PLAN A77F1. INSTALL FLARED TERMINAL SYSTEM (TYPE SRT) PER PROJECT SPECIFICATIONS AND TRANSITION RAILING (TYPE WB) PER STD A77J4.
- ⑳ CONSTRUCT STANDARD PIPE GATE FOR ACCESS ROAD PER APWA STD PLAN NO. 602-3 (SINGLE GATE)

REMOVAL NOTES

- ① REMOVE EXISTING AC PAVEMENT
- ② SAWCUT EXISTING PAVEMENT
- ③ REMOVE EXISTING CONCRETE
- ⑥ REMOVE CURB & GUTTER
- ⑦ REMOVE TREE
- ⑨ REMOVE EXISTING FENCE
- ⑪ REMOVE EXISTING CONCRETE SIDEWALK
- ⑫ REMOVE AND SALVAGE SIGN
- ⑬ REMOVE EXISTING POWER POLE
- ⑭ REMOVE EXISTING WATER METER
- ⑮ REMOVE AND SALVAGE EXISTING SIGNAL EQUIPMENT
- ⑯ REMOVE EXISTING DRAINAGE INLET
- ⑰ REMOVE EXISTING AC DIKE

CURVE DATA

Δ	R	T	L
A 09°12'43"	27.00'	24.67'	39.96'
B 08°48'14"	800.00'	61.58'	122.93'
C 08°48'13"	782.00'	61.20'	120.16'
D 04°18'51"	818.00'	30.75'	61.47'
E 08°56'43"	700.00'	54.76'	109.29'
F 08°56'43"	718.00'	56.16'	112.09'
G 89°27'44"	27.00'	26.75'	42.16'
H 99°28'59"	27.00'	31.88'	46.88'



AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
 Section 4218.4217 of the Government Code requires a Dig Alert identification Number to be placed before a "Permit to Excavate" will be void. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
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REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
 No. C56574
 CIVIL
 STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LAYOUT - DEWEY AVENUE AVE L-5

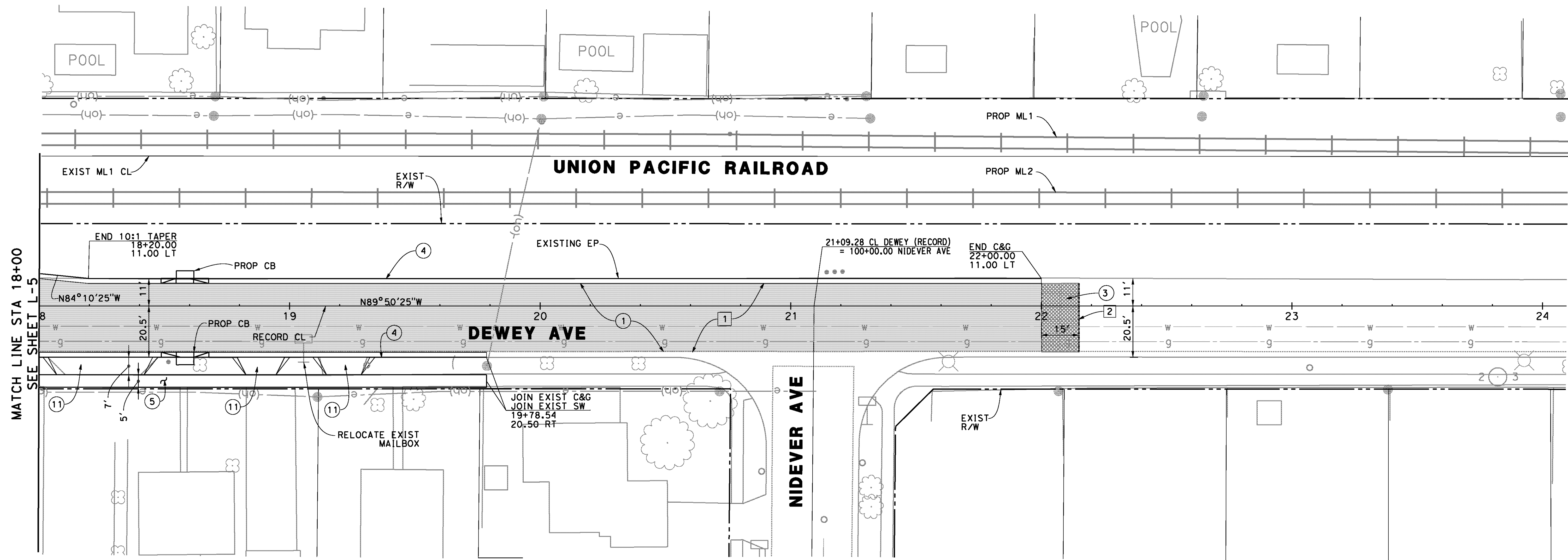
R-4180
 SHEET 24 OF 191
 FILE NO.

HORIZ. SCALE: VERT. SCALE: N/A

D:\Projects\1066_Streeter\sgn\Contract\Plans\Layout\Plans-sheet19-1066_81-05.dgn

DATE: 8/8/2012
 TIME: 6:26:26 PM

USER: pboctor
 1066_81-05.dgn



MATCH LINE STA 18+00
SEE SHEET L-5

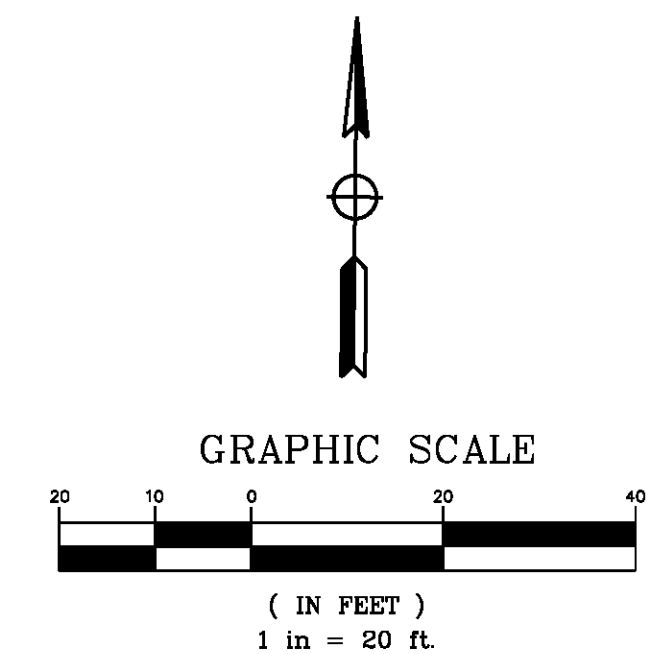
CONSTRUCTION NOTES

- ① CONSTRUCT 0.40' DGAC OVER CRUSHED 1.6' AGGREGATE BASE (CLASS II)
- ③ COLD MILL 1.5" MIN. EXISTING AC PAVMENT AND PLACE 1.5" MIN. OVERLAY
- ④ CONSTRUCT TYPE I - 6" CURB AND GUTTER PER CITY OF RIVERSIDE
STD PLAN NO. 200
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE
STD PLAN NO. 325
- ⑪ CONSTRUCT PCC RESIDENTIAL DRIVEWAY APPROACH PER CITY OF RIVERSIDE
STD PLAN NO. 302

REMOVAL NOTES

- ① REMOVE EXISTING AC PAVEMENT
- ② SAWCUT EXISTING PAVEMENT

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF



D:\Projects\1066_Street\Asgn\Contract Plans\Ac-Layout Plans\sheet's\1066_81-06.dgn

IMPORTANT NOTICE
Section 4214.0217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

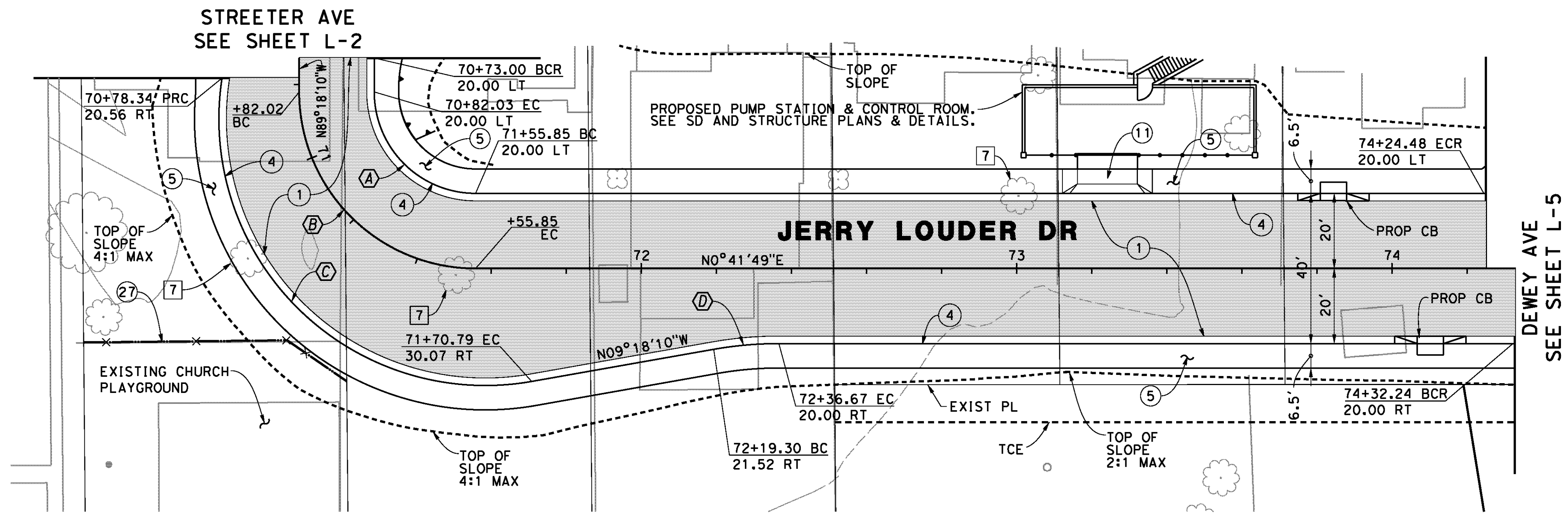
TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LAYOUT - DEWEY AVENUE AVE L-6

R-4180
SHEET **25** OF **191**
FILE NO.



CONSTRUCTION NOTES

- ① CONSTRUCT 0.40' DGAC OVER 1.6' CRUSHED AGGREGATE BASE (CLASS 11)
- ④ CONSTRUCT TYPE I - 6" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- ⑪ CONSTRUCT PCC RESIDENTIAL DRIVEWAY APPROACH PER CITY OF RIVERSIDE STD PLAN NO. 302
- ⑳ INSTALL CHAIN LINK FENCE PER CITY OF RIVERSIDE STD PLANS NO. 380

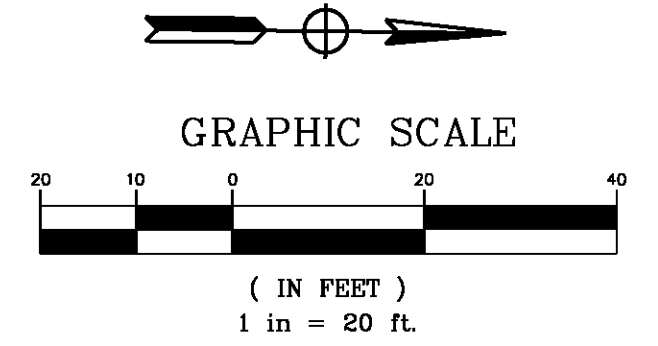
REMOVAL NOTES

- ⑦ REMOVE TREE

CURVE DATA

△	R	T	L
A 90°00'00"	27.00'	27.00'	42.41'
B 90°00'00"	47.00'	47.00'	73.83'
C 108°46'42"	71.00'	99.13'	134.80'
D 10°00'00"	100.00'	8.75'	17.45'

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF



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IMPORTANT NOTICE
Section 42164.217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
No. C56574
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LAYOUT - JERRY LOUDER DR L-7

R-4180
SHEET **26** OF 191
FILE NO.

CONSTRUCTION NOTES

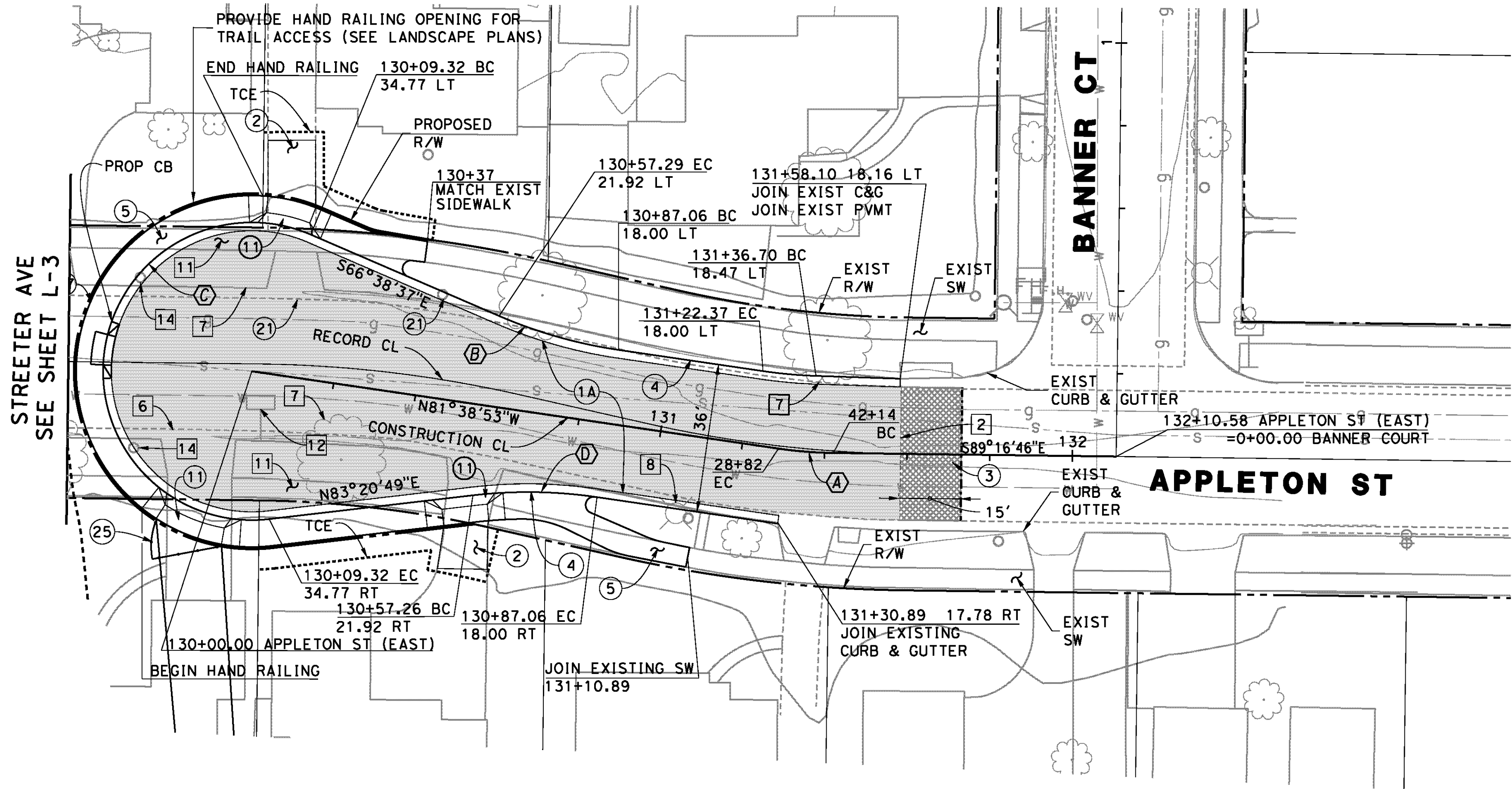
- ①A CONSTRUCT 0.40' DGAC OVER 0.8' CRUSHED AGGREGATE BASE (CLASS II)
- ② CONSTRUCT 6" PCC PAVEMENT
- ③ COLD MILL 1.5" MIN. EXISTING AC PAVMENT AND PLACE 1.5" MIN. AC OVERLAY
- ④ CONSTRUCT TYPE 1 - 6" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- ⑪ CONSTRUCT PCC RESIDENTIAL DRIVEWAY APPROACH PER CITY OF RIVERSIDE STD PLAN NO. 302
- ⑰ CONSTRUCT TYPE A HAND RAILING PER APWA STD PLAN NO. 606-3 ALL METAL HAND RAILING SHALL RECEIVE (2) COATS OF POLYURETHANE PAINT PER PROJECT SPECIFICATIONS
- ⑳ RELOCATE EXISTING WATER METER
- ㉓ CONSTRUCT STANDARD PIPE GATE FOR ACCESS ROAD PER APWA STD PLAN NO. 602-3 (SINGLE GATE)

REMOVAL NOTES

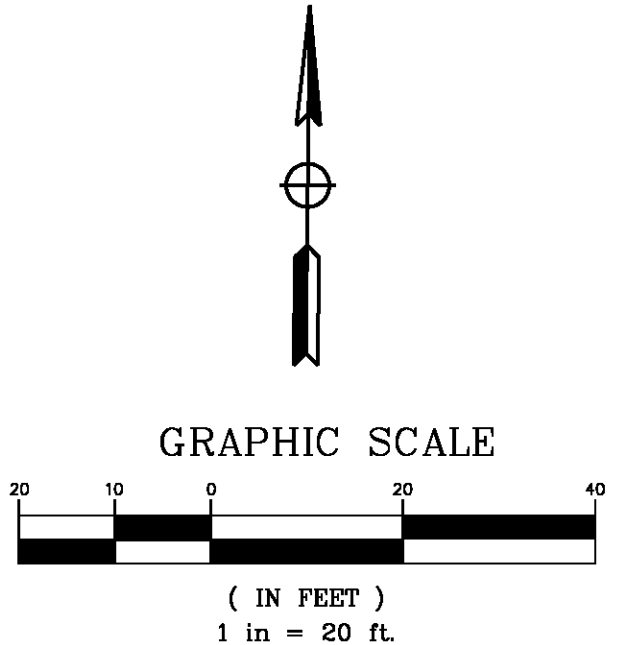
- ② SAWCUT EXISTING PAVEMENT
- ⑥ REMOVE CURB & GUTTER
- ⑦ REMOVE TREE
- ⑧ REMOVE & SALVAGE STREET LIGHT
- ⑪ REMOVE EXISTING CONCRETE SIDEWALK
- ⑫ REMOVE AND SALVAGE SIGN
- ⑭ REMOVE EXISTING WATER METER

CURVE DATA

△	R	T	L
A 07°37'53"	100.00'	6.67'	13.32'
B 15°00'00"	115.00'	15.14'	30.10'
C 210°00'00"	36.00'	--	131.95'
D 15°00'00"	115.00'	15.14'	30.10'



AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF



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IMPORTANT NOTICE
 Section 42164.217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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 RIVERSIDE, CA 92507
 TEL (951) 788-4688
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 DATE 8-7-12

REGISTERED PROFESSIONAL ENGINEER
 RODRIGO GONZALEZ
 No. C56574
 CIVIL
 STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LAYOUT - APPLETON STREET L-9

R-4180
 SHEET 28 OF 191
 FILE NO.

HORIZ. SCALE: VERT. SCALE: N/A

CONSTRUCTION NOTES

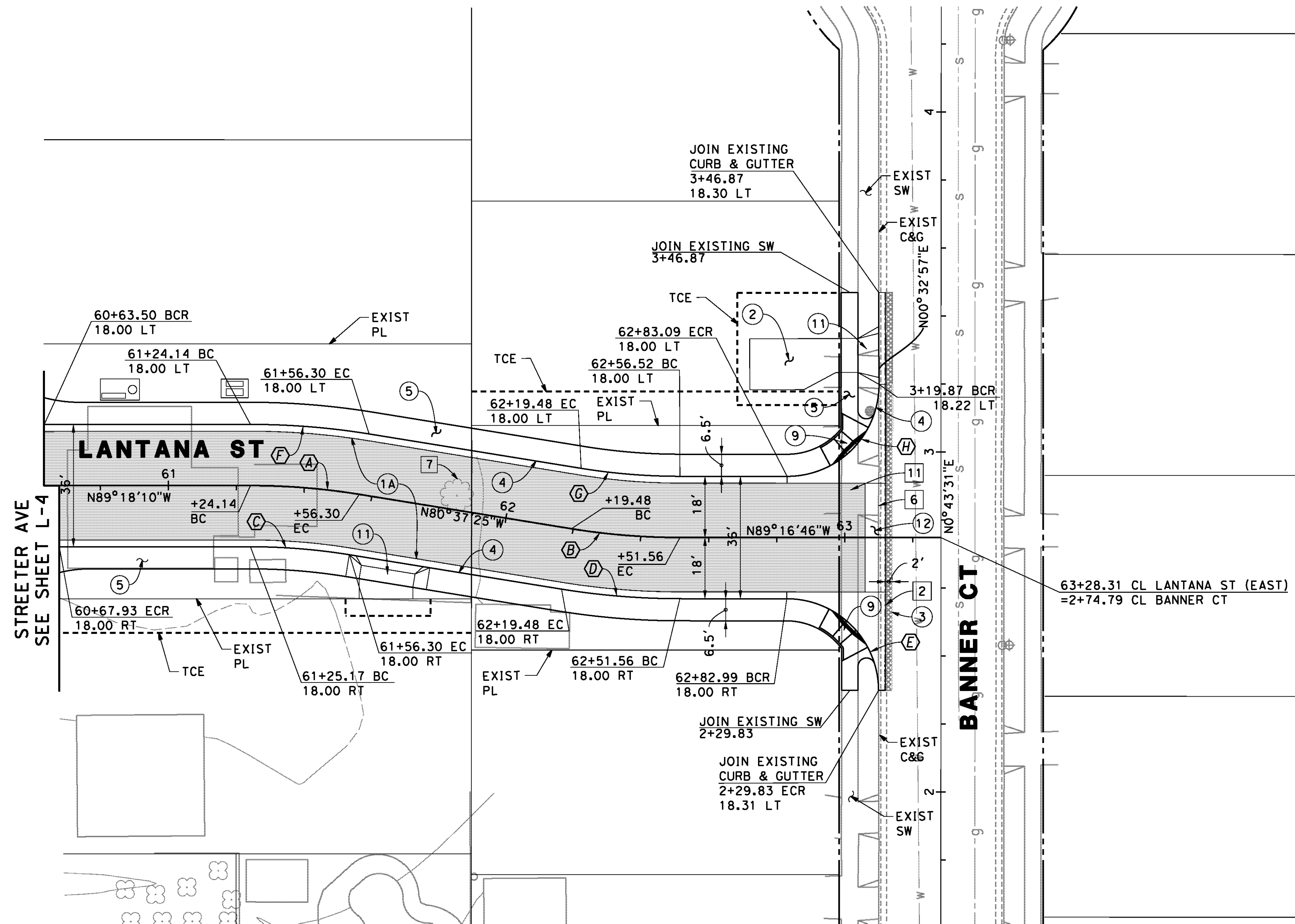
- ① CONSTRUCT 0.40' DGAC OVER 0.8' CRUSHED AGGREGATE BASE (CLASS 11)
- ② CONSTRUCT 6" PCC PAVEMENT
- ③ COLD MILL 1.5" MIN. EXISTING AC PAVEMENT AND PLACE 1.5" MIN. OVERLAY
- ④ CONSTRUCT TYPE I - 6" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- ⑨ CONSTRUCT TYPE II WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304
- ⑪ CONSTRUCT PCC RESIDENTIAL DRIVEWAY APPROACH PER CITY OF RIVERSIDE STD PLAN NO. 302
- ⑫ CONSTRUCT CROSS GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 220

REMOVAL NOTES

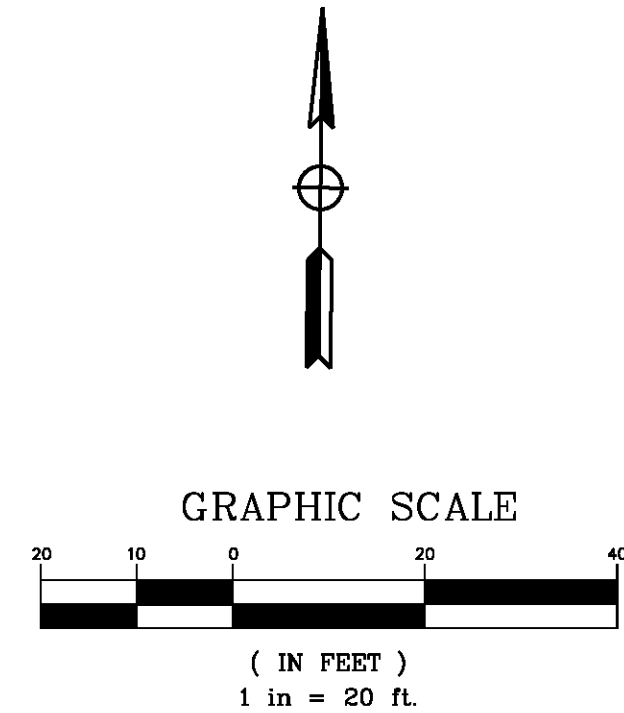
- ② SAWCUT EXISTING PAVEMENT
- ⑥ REMOVE CURB & GUTTER
- ⑦ REMOVE TREE
- ⑪ REMOVE EXISTING CONCRETE SIDEWALK

CURVE DATA

△	R	T	L
A 89°18'10"	200.00'	16.11'	32.15'
B 09°11'19"	200.00'	16.07'	32.07'
C 09°12'43"	182.00'	14.66'	29.26'
D 09°11'19"	218.00'	17.52'	34.96'
E 89°54'57"	27.00'	26.96'	42.37'
F 09°12'43"	218.00'	17.56'	35.05'
G 09°11'19"	182.00'	14.62'	29.19'
H 90°10'16"	27.00'	27.08'	42.49'



AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF



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IMPORTANT NOTICE
 Section 43164.217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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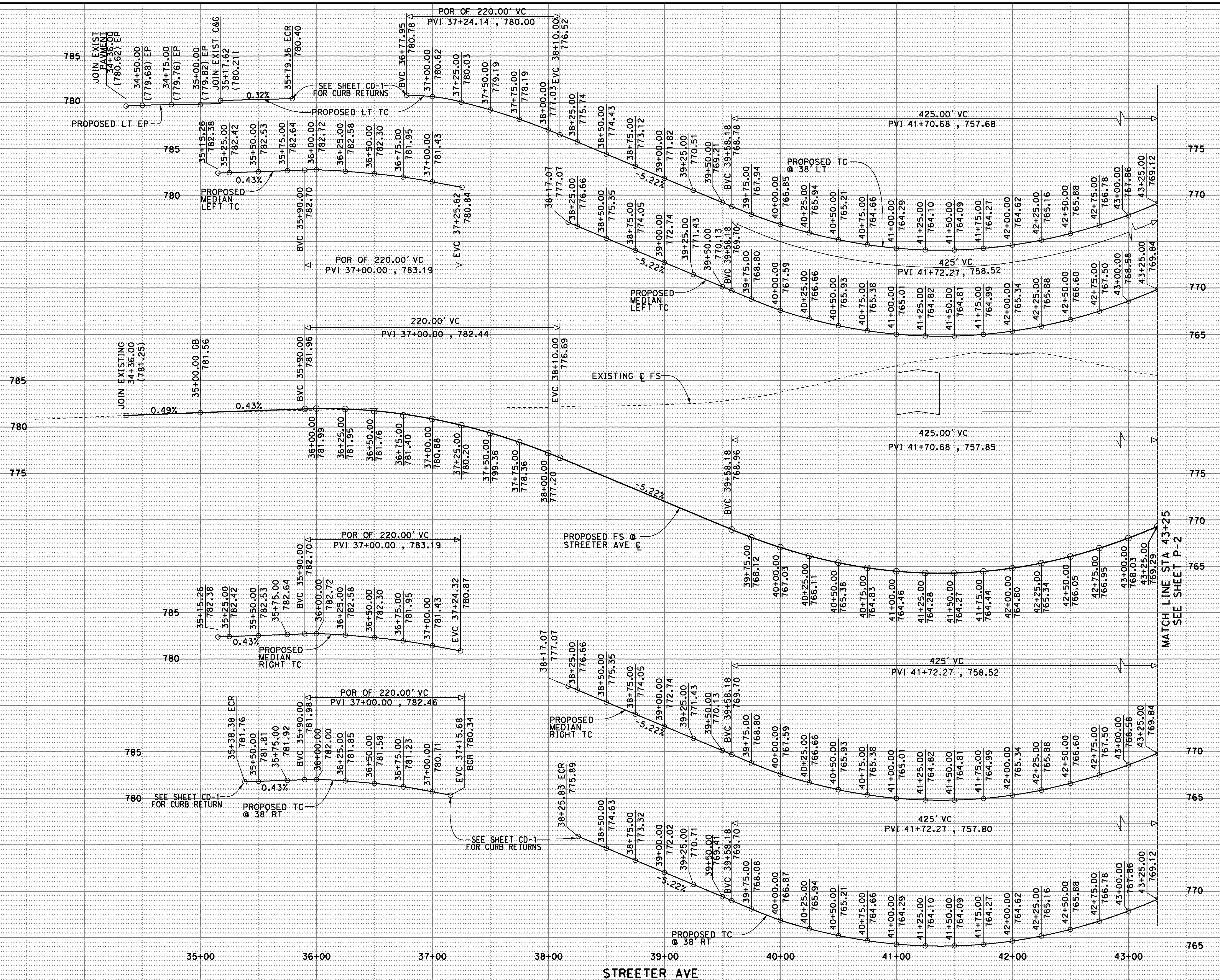
REGISTERED PROFESSIONAL ENGINEER
 RODRIGO GONZALEZ
 No. C56574
 CIVIL
 STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LAYOUT - LANTANA ST (EAST) L-10

R-4180
 SHEET **29** OF **191**
 FILE NO.

D:\Projects\1066_Streeter.dgn\Contract Plans\Profile sheets\1066_P-01.dgn

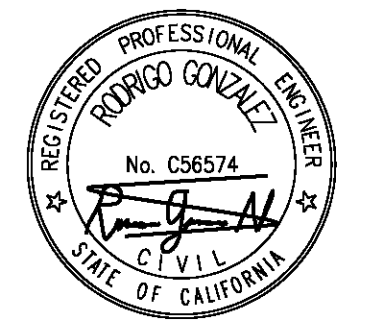


AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 B.T.D. NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

SCALE
 Horiz: 1"=40'
 Vert: 1"=5'

IMPORTANT NOTICE
 Section 5314613 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be issued. For your Dig Alert ID, please call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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 TEL (951) 788-4688
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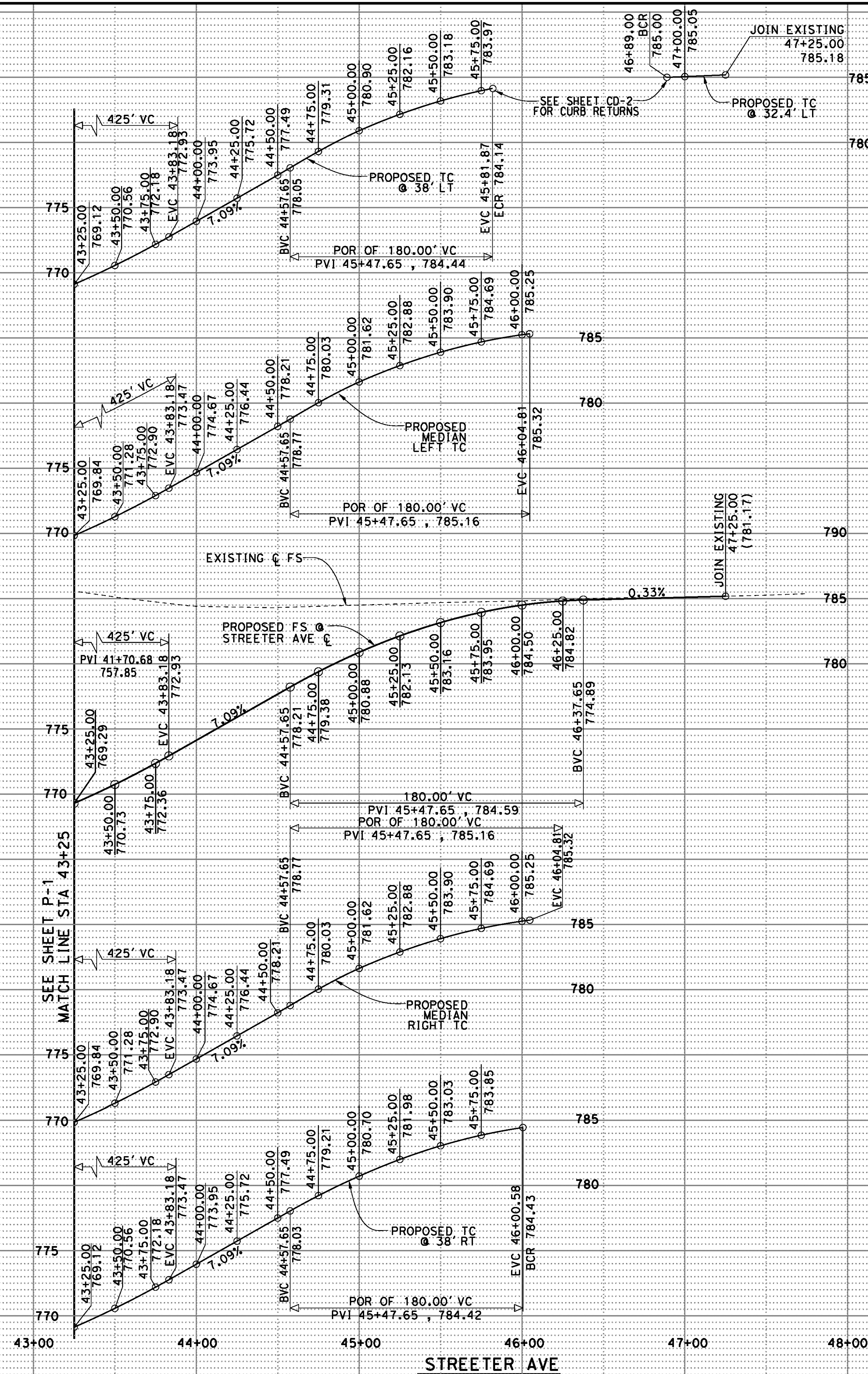


MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PROFILES - STREETER AVE P-1

R-4180
 SHEET **30** OF 191
 FILE NO.

03:\projects\1066_Streeter.dgn\Contract Plans\Profile sheets\1066_P-02.dgn

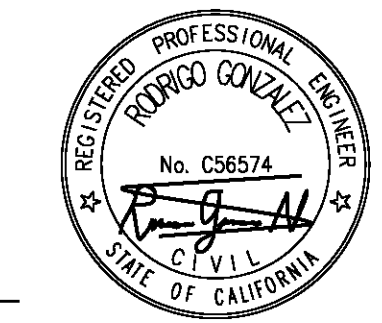


AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

SCALE
 Horiz: 1"=40'
 Vert: 1"=5'

IMPORTANT NOTICE
 Section 8114613 of the Government Code requires a Dig Alert Identification Number to be displayed on all excavation sites. "Permit to Excavate" will be void. For your Dig Alert ID, Member cost CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
 3550 VINE STREET, SUITE 120
 RIVERSIDE, CA 92507
 TEL (951) 788-4688
 www.tylin.com DATE 8-7-12



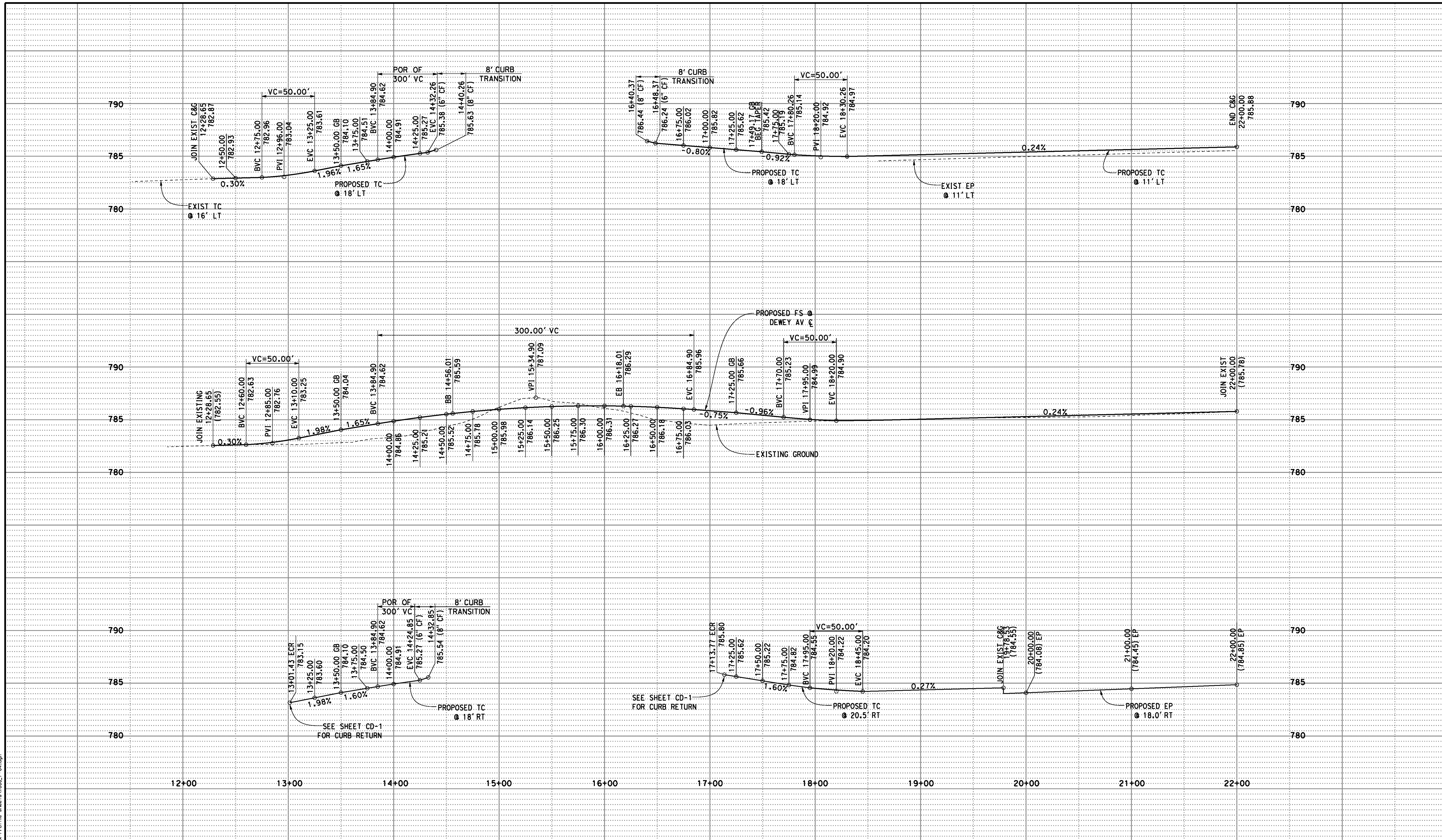
MARK	REVISIONS	APPR.	DATE

DESIGNED BY FD DRAWN BY FD CHECKED BY RG

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PROFILES - STREETER AVE P-2

R-4180
 SHEET **31** OF **191**
 FILE NO.

D:\Projects\1066_Street\Drawn\Profile sheets\1066_P-04.dgn

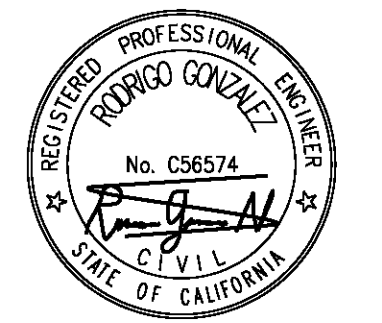


AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

SCALE
 Horiz: 1"=40'
 Vert: 1"=4'

IMPORTANT NOTICE
 Section 5316413 of the Government Code requires a Dig Alert identification number to be placed before a permit to excavate will be issued. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
 3550 VINE STREET, SUITE 120
 RIVERSIDE, CA 92507
 TEL (951) 788-4688
 www.tylin.com DATE 8-7-12



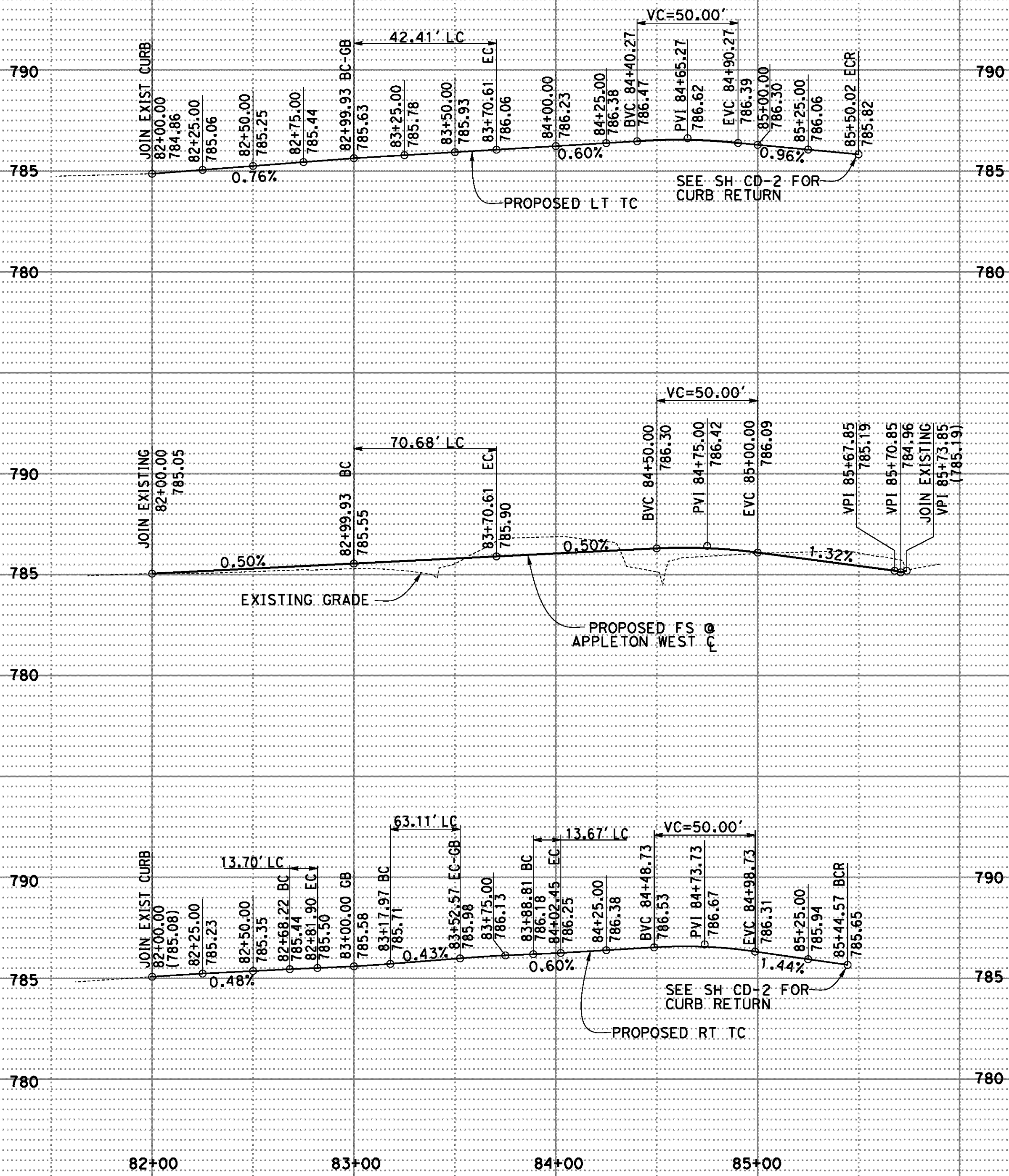
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PROFILES - DEWEY AVE P-4

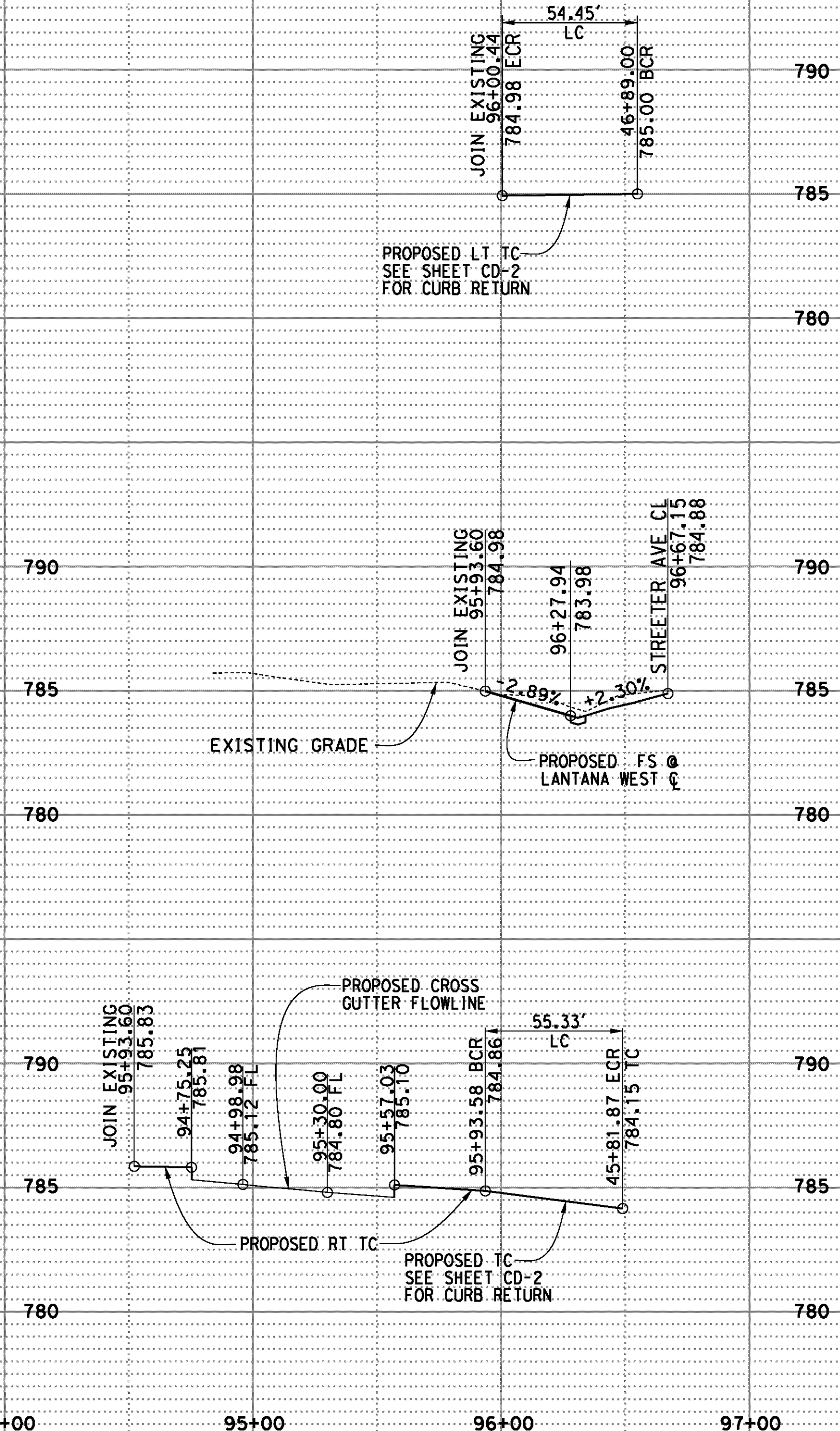
R-4180
 SHEET **33** OF **191**
 FILE NO.

03:\projects\1066_Street\p\Profile sheets\1066_P-05.dgn

DATE: 8/8/2012
TIME: 6:44:52 PM



APPLETON ST (WEST)



LANTANA ST (WEST)

AS-BUILT - NO CORRECTIONS ON THIS SHEET
BID NO. 7034
C.E.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

SCALE
Horiz: 1"=40'
Vert: 1"=4'

IMPORTANT NOTICE
Section 5316413 of the Government Code requires a Dig Alert identification number to be placed in a "Permit to Excavate" will be void. For your Dig Alert ID, Member call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com

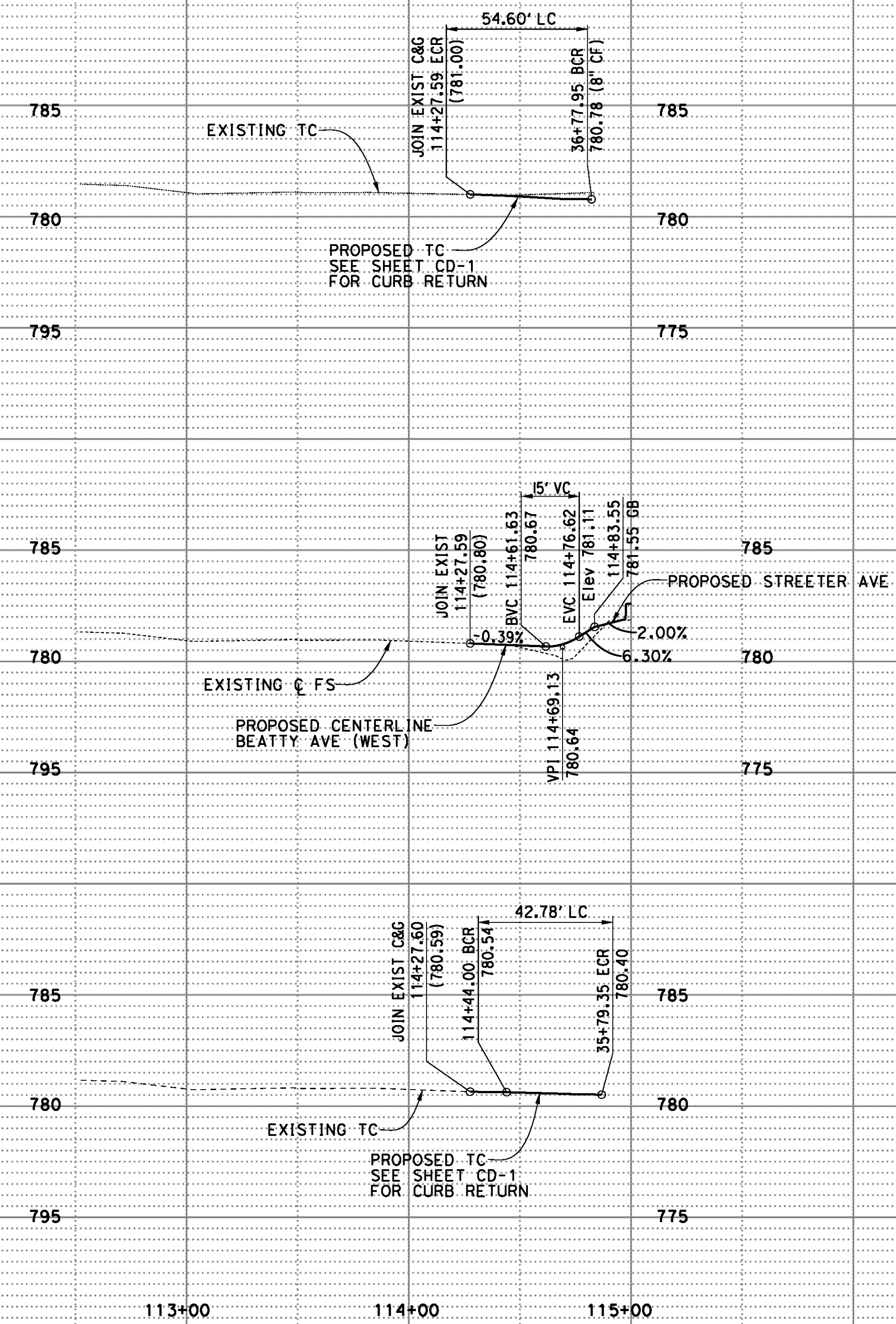
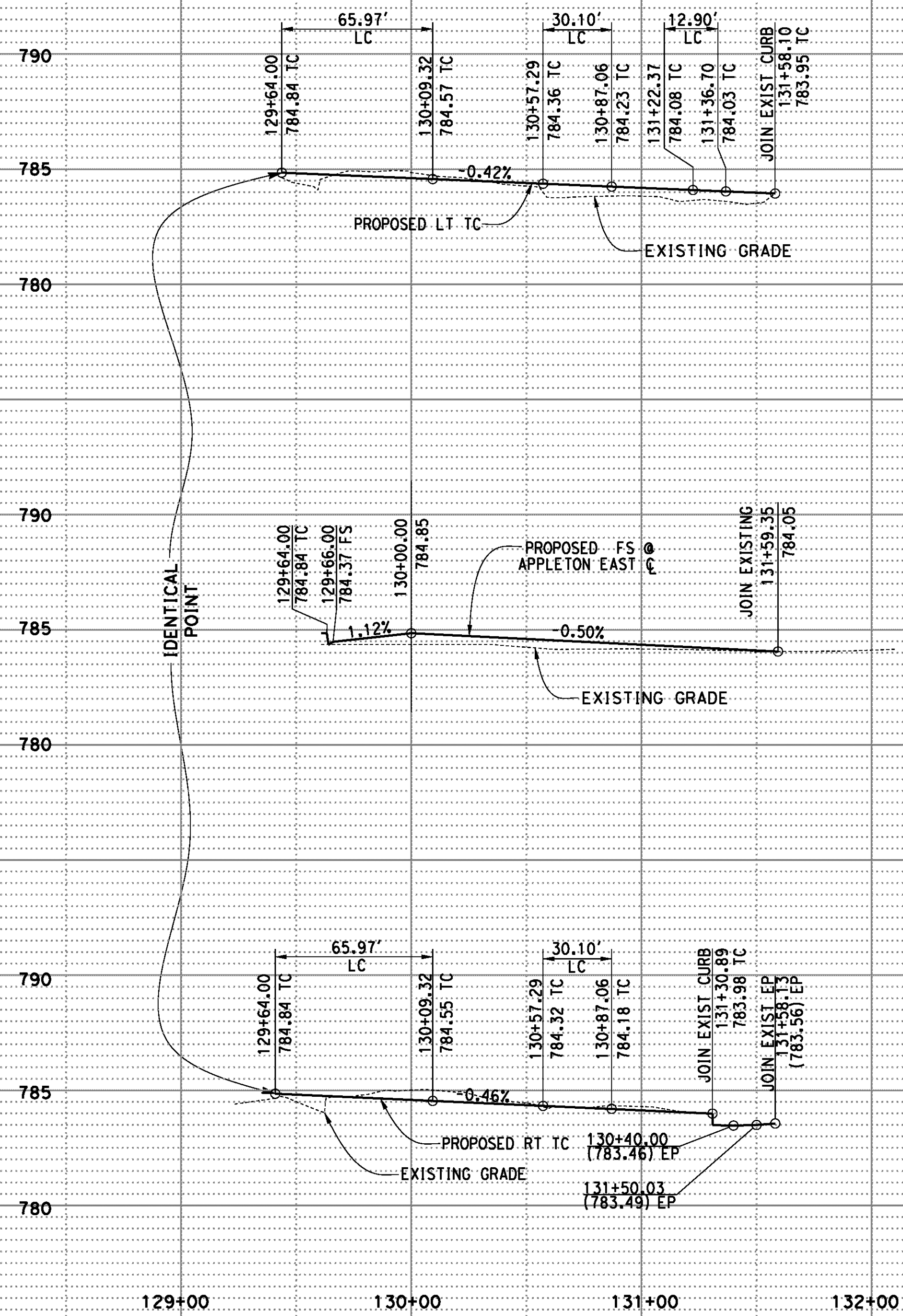
PROFESSIONAL ENGINEER
RUDOLFO GONZALEZ
No. C36574
CIVIL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PROFILES - APPLETON ST & LANTANA ST P-5
HORIZ. SCALE: VERT. SCALE: N/A

R-4180
SHEET 34 OF 191
FILE NO.

User: pboctor
1066_P-05.dgn



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DATE: 8/8/2012
TIME: 6:45:08 PM

IMPORTANT NOTICE
Section 45164.01 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be issued. For your Dig Alert ID, Member cost CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com

REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
No. C56574
CIVIL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

DESIGNED BY FD DRAWN BY FD CHECKED BY RG

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PROFILES - APPLETON ST EAST P-6

SCALE
Horiz: 1"=40'
Vert: 1"=4'

R-4180
SHEET **35** OF 191
FILE NO.

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

HORIZ. SCALE: VERT. SCALE: N/A

User: pboctor
1066_P-06.dgn

EQUIPMENT SCHEDULE

NO.	SIGNAL TYPE	STANDARD HGT., M.A.	LUMINAIRE M.A.	L.E.D.	I.T.S.N.S. LEGEND	SIGNAL MOUNTINGS			P.P.B.	
						VEH.	PED.	AUDIBLE		
(A)	29-5-100	30'	50'	12'	250W Jerry Louder	Dr #####	2-MAS			
(B)	16-3-100	18'-6"	15'		Streeter	Ave 6400	MAS			
(C)	26-4-100	30'	40'	12'	250W Jerry Louder	Dr #####	2-MAS			
(D)	15TS	30'		12'	250W		SV-1-T	SP-1-T	(P)	Ø8
(E)	1A	7'					SV-1-T	SP-1-T	(C)	Ø8
							TP-1-T	(P)		Ø2

- THE CONTRACTOR SHALL COORDINATE WITH THE CITY FOR BLOCK NUMBER INFORMATION.

PEDESTRIAN AUDIBLES: C=CUCKOO (NORTH/SOUTH), P=PEEP PEEP (EAST/WEST)

- ALL VEHICULAR HEADS SHALL HAVE 12" LENSES.
- PEDESTRIAN PUSH BUTTONS SHALL BE INSTALLED ON THE POLE IN THE QUADRANT NEAREST THE CROSSWALK SERVING THE PHASE.
- ALL PEDESTRIAN HEADS SHALL BE LED COUNTDOWN HEADS.
- ALL LEFT TURN VEHICLE HEADS SHALL HAVE ALL ARROWS.

CONDUCTOR TABLE

CONTROL FUNCTION	CONDUCTORS	CONDUCTOR RUNS			
		1	2	3	4
VEHICLE & PEDESTRIAN HEADS, PEDESTRIAN PUSH BUTTONS, SPARES & COMMONS	12 WIRE IMSA	2	6	3	2
	3 WIRE IMSA	1(F)	6	3	2
CAMERA CABLE VIDEO DETECTION CAMERA POWER CABLE	ITERIS SPECIFICATION	1	3	1	-
	POWER CABLE	1	3	1	-
VEHICLE PREEMPTION	#20/4	1	3	2	1
I.T.S.N.S.	#12	2	-	2	2
LUMINAIRES	#8	2	-	2	2
SIGNAL SERVICE	#6	-	2	-	-
RADIO (SIC)	CAT-5E	1	1	-	-

CONDUIT SIZE	3"	2-4"	3"	3"

- SIGNAL SYSTEM SHALL HAVE ALL NEW CABLES, CONDUCTORS AND CONDUIT.
 - SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION ON I.M.S.A. CABLE.
- (F) FUTURE

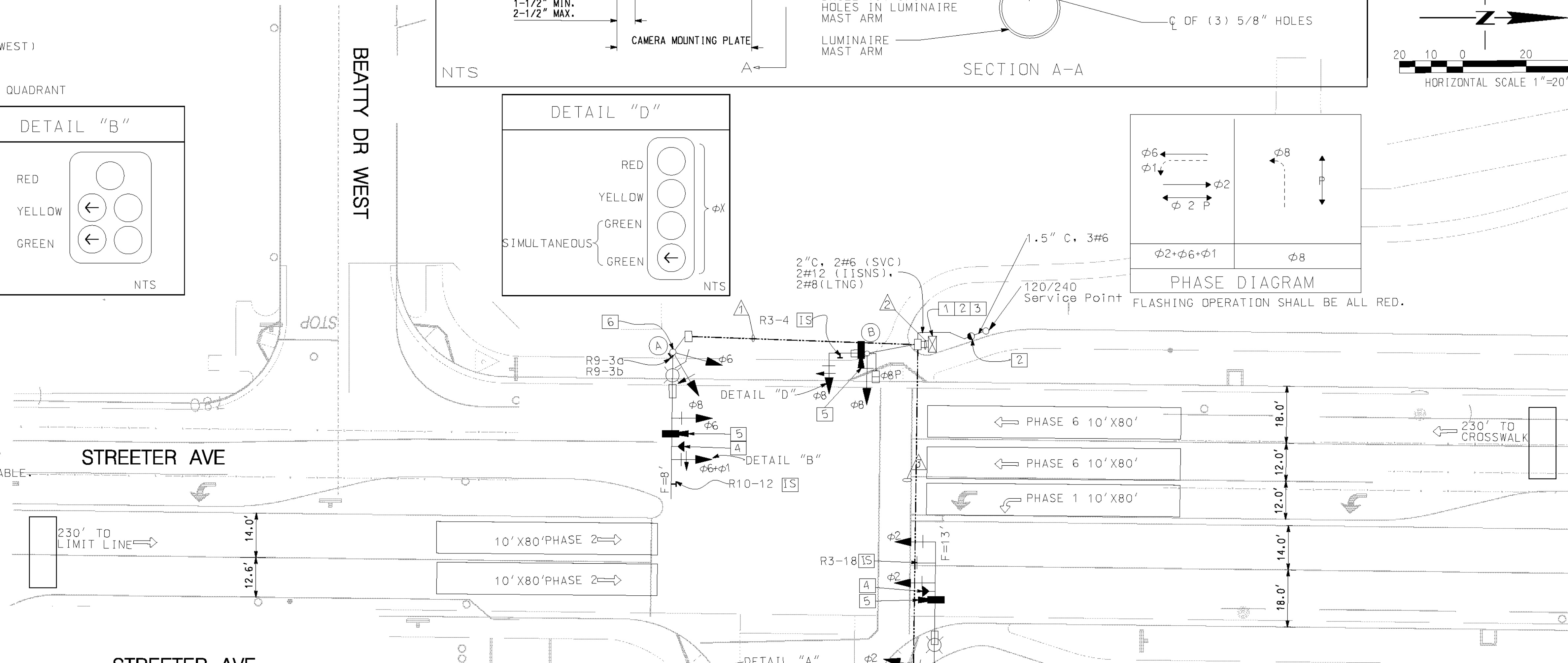
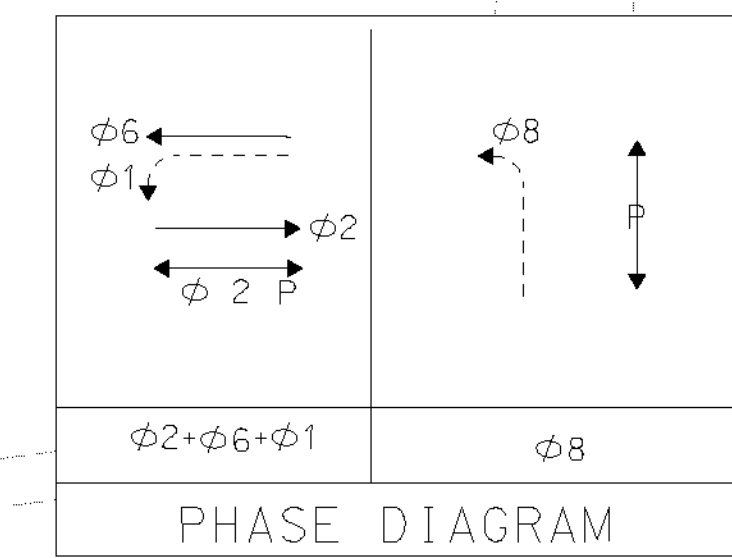
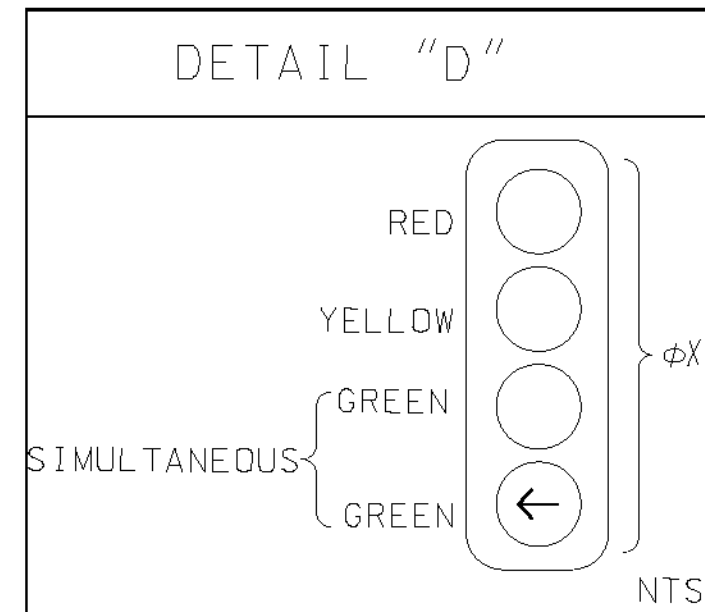
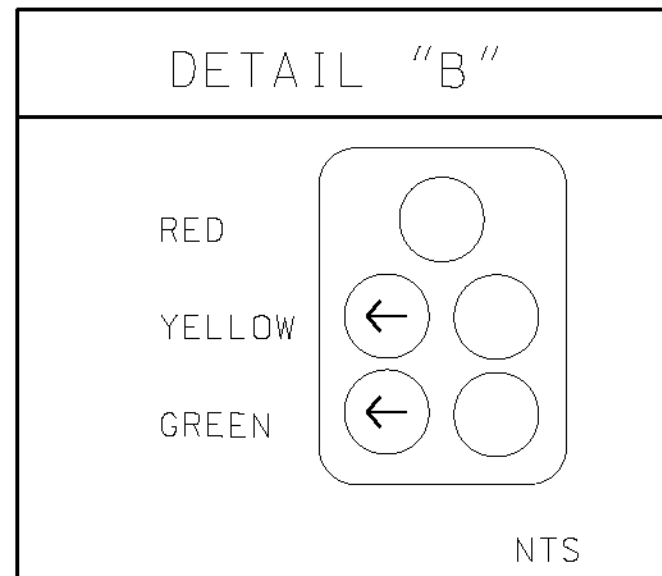
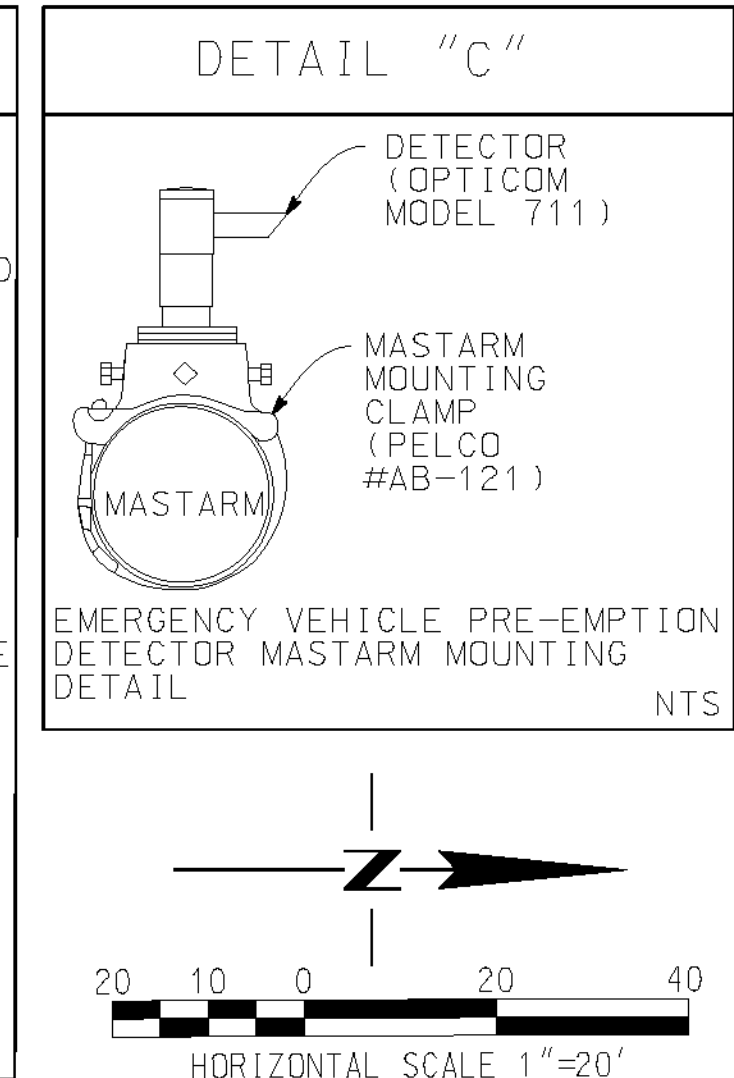
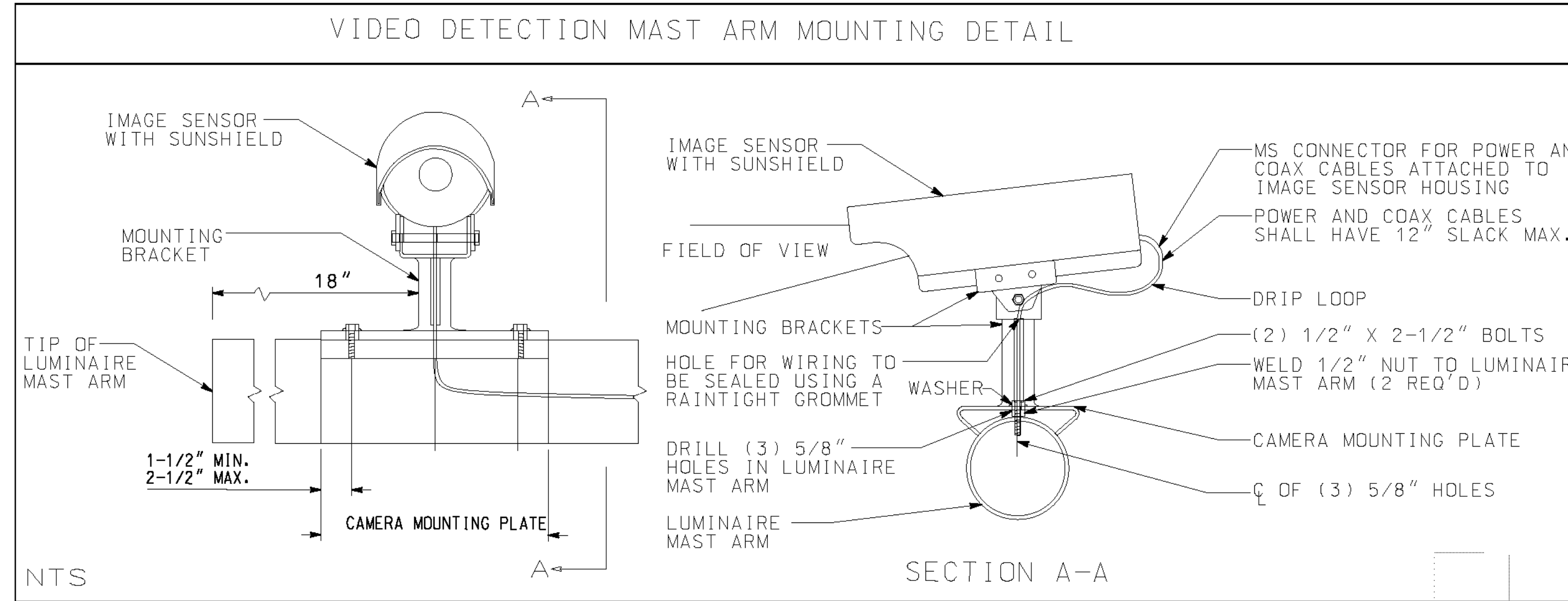
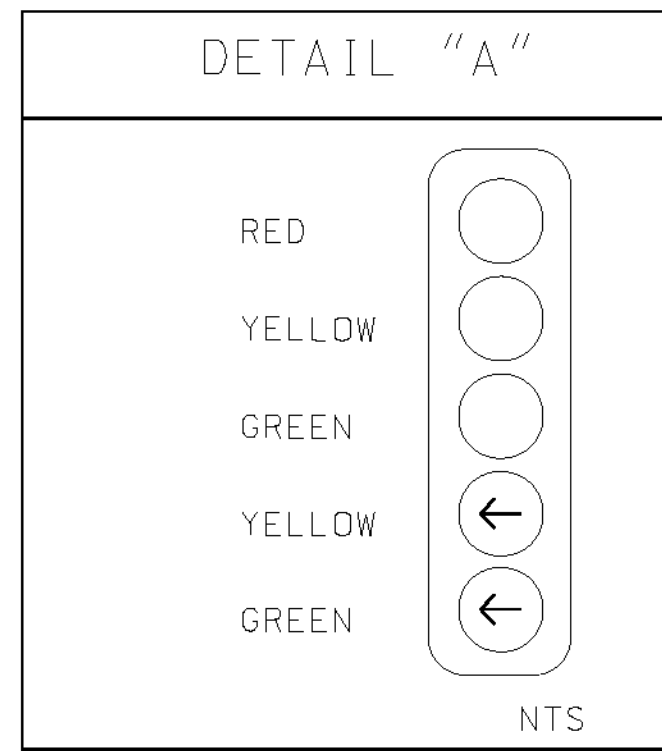
TRAFFIC SIGNAL GENERAL NOTES:

- ALL ITEMS FURNISHED AND ALL WORK TO BE DONE SHALL CONFORM TO THE REQUIREMENTS OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS AND SPECIFICATIONS, DATED MAY 2006; THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES ADOPTED 2010; AND THE SPECIAL PROVISIONS.
- UTILITIES SHOWN ON THE PLAN ARE CORRECT AND ACCURATE TO THE EXTENT OF AVAILABLE RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE STEPS TO ASCERTAIN THE EXACT LOCATION OF ALL KNOWN SUBSTRUCTURES PRIOR TO DOING WORK THAT MAY DAMAGE OR INTERFERE WITH SUCH FACILITIES ("UNDERGROUND SERVICE ALERT" (800) 227-2600).
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS TO NOTIFY ALL AFFECTED AGENCIES AND THE RIVERSIDE UTILITY COMPANIES A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION.
- CONDUCTOR SCHEDULE IS FURNISHED AS AN INSTALLATION GUIDELINE ONLY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CORRECT CONDUCTORS REQUIRED FOR THE INTENDED OPERATION.
- CONDUIT BETWEEN ADJOINING PULL BOXES SHALL BE 2" UNLESS SHOWN OTHERWISE. ALL CONDUIT AND FITTINGS SHALL BE RIGID METAL, UNLESS SHOWN OTHERWISE (BURIED IN A MINIMUM OF 30" OF COVER IN THE STREET AND PARKWAY).
- UNDERGROUND SIGNAL CONDUCTORS SHALL NOT BE SPLICED.
- PULL BOXES SHALL BE NO. 6 WITH FIBERLITE LIDS LABELED "TRAFFIC" UNLESS OTHERWISE NOTED ON THE PLAN.
- PULL BOXES SHALL NOT BE LOCATED IN OR WITHIN 1' OF ANY CURB ACCESS RAMP OR DRIVEWAY.
- THE CONTRACTOR SHALL VERIFY WITH THE ENGINEER THE PRECISE FIELD LOCATIONS OF ALL TRAFFIC SIGNAL EQUIPMENT PRIOR TO THE INSTALLATION.
- ALL LANDSCAPING WHICH IS DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE CITY AND THE PROPERTY OWNER.

TRAFFIC SIGNAL GENERAL NOTES CONT.

- NEW MAST ARM MOUNTED SIGN SHALL BE FABRICATED WITH 3M DG3 (ASTM TYPE XI) REFLECTIVE SHEETING OR APPROVED EQUAL MINIMUM SIGN SIZE SHALL BE 30" X 30".
- VEHICLE HEADS SHALL BE 12" LED TYPE. THE HOUSING, BACKPLATES AND VISORS SHALL BE METAL.
- INTERNALLY ILLUMINATED STREET NAME SIGNS (IISNS) SHALL BE TYPE "A" WITH L.E.D. LIGHTING SYSTEMS. STREET NAME LEGENDS SHALL BE UPPER/LOWER CASE AND SHALL INCLUDE BLOCK NUMBERS AND ROAD NAME SUFFIXES.
- ALL CONTRACTORS WORKING ON OR AROUND THE CITY OF RIVERSIDE'S UNDERGROUND ELECTRICAL FACILITIES MUST HAVE THE PROPERLY QUALIFIED PERSONNEL AND EQUIPMENT TO PERFORM THE SPECIFIED WORK. THE CONTRACTOR WILL BE SOLELY RESPONSIBLE TO ESTABLISH AND MAINTAIN A SAFE WORKING ENVIRONMENT INCLUDING, BUT NOT LIMITED TO WORK AROUND ENERGIZED HIGH VOLTAGE FACILITIES, GAS TESTING OF CONFINED SPACES, TRAFFIC AND PROTECTION. EVERY ENTRY BY ANY PERSONNEL INTO A PUBLIC UTILITIES HIGH VOLTAGE STRUCTURE WILL REQUIRE THE PRESENCE OF A QUALIFIED ELECTRICAL WORKER IN ACCORDANCE WITH OSHA. ALL DEVELOPERS AND CONTRACTORS ARE REQUIRED TO SUBMIT REQUIRED DOCUMENTATION AND FOLLOW REQUIRED PROCEDURES. COPIES OF THE POLICY AND DOCUMENTS MAY BE OBTAINED AT 3901 ORANGE ST. RIVERSIDE, CA OR AT WWW.RIVERSIDEPUBLICUTILITIES.COM.

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF



CONSTRUCTION NOTES:

- CONTRACTOR SHALL CONSTRUCT (TYPE 332 CABINET) FOUNDATION. CONTRACTOR SHALL FURNISH AND INSTALL MODEL 170ATC-OF CONTROLLER ASSEMBLY IN MODEL 332 ANODIZED ALUMINUM CABINET, COMPLETE WITH DETECTION SHOWN AND AUXILIARY EQUIPMENT WITHIN A TYPE 332 CABINET PER CITY OF RIVERSIDE SPECIFICATIONS. CONTRACTOR SHALL PROVIDE A 17" LCD FLIP UP VIDEO DETECTION MONITOR, RACK MOUNTED.
- INSTALL ELECTRICAL SERVICE PER CITY OF RIVERSIDE STANDARD DRAWING NO. 667. CONTRACTOR SHALL COORDINATE WITH CITY OF RIVERSIDE ELECTRICAL UTILITY DEPARTMENT AT (951) 826-5452 FOR ELECTRICAL SERVICE A MINIMUM OF THREE WEEKS PRIOR TO TRAFFIC SIGNAL TURN ON.
- CONTRACTOR SHALL PROVIDE AND INSTALL AN UNINTERRUPTED POWER SUPPLY (UPS). THE UPS UNIT AND BATTERIES SHALL BE INSTALLED IN A CABINET, EXTERNALLY MOUNTED TO THE CONTROLLER CABINET.
- INSTALL ONE (1) GTT MODEL No. 711 (OR CITY-APPROVED EQUAL) EMERGENCY VEHICLE PRE-EMPTION DETECTOR ASSEMBLY (INCLUDING MOUNTING HARDWARE AND CABLE) FOR EACH DIRECTION, OR OPTICOM MODEL No. 722 (DUAL DIRECTION) AS SHOWN ON PLAN. E.V.P.E. SHALL BE MOUNTED ON THE MAST ARM PER DETAIL "C".
- INSTALL VIDEO DETECTION CAMERA ON LUMINAIRE MAST ARM PER DETAIL. CAMERAS SHALL BE PROGRAMMED BY THE CONTRACTOR. SEE SPECIAL PROVISIONS FOR SPECIFICATIONS. IF NEEDED, CONTRACTOR SHALL PROVIDE RISERS FOR VIDEO DETECTION CAMERAS.
- THE CONTRACTOR SHALL PROVIDE A SHAFT MOUNTED TRANSCEIVER PER THE SPECIAL PROVISIONS. CONTRACTOR SHALL POSITION RADIO TOWARDS NEAREST ACCESS POINT TO ENSURE PROPER RF LEVELS.
- INSTALL MAST ARM SIGN AS NOTED.

IMPORTANT NOTICE
Section 4716.4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
625 E. CARNEGIE DRIVE SUITE 100
SAN BERNARDINO, CA 92408
(909) 806-8000
www.wilsonco.com

Professional Engineer Seal for Marc T. Medina, No. 67501, State of California.

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PROPOSED SIGNAL IMPROVEMENTS
HORIZ. SCALE: 1" = 20' VERT. SCALE: 1" = 20'

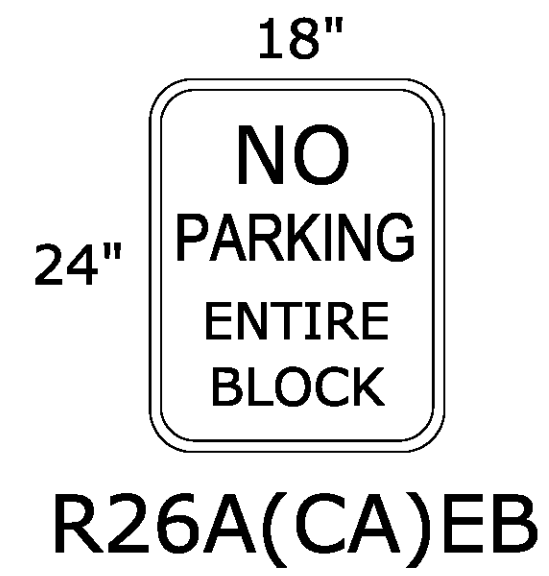
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USER: altymchek signal sheet.dgn

CONSTRUCTION NOTES - SIGNING & STRIPING

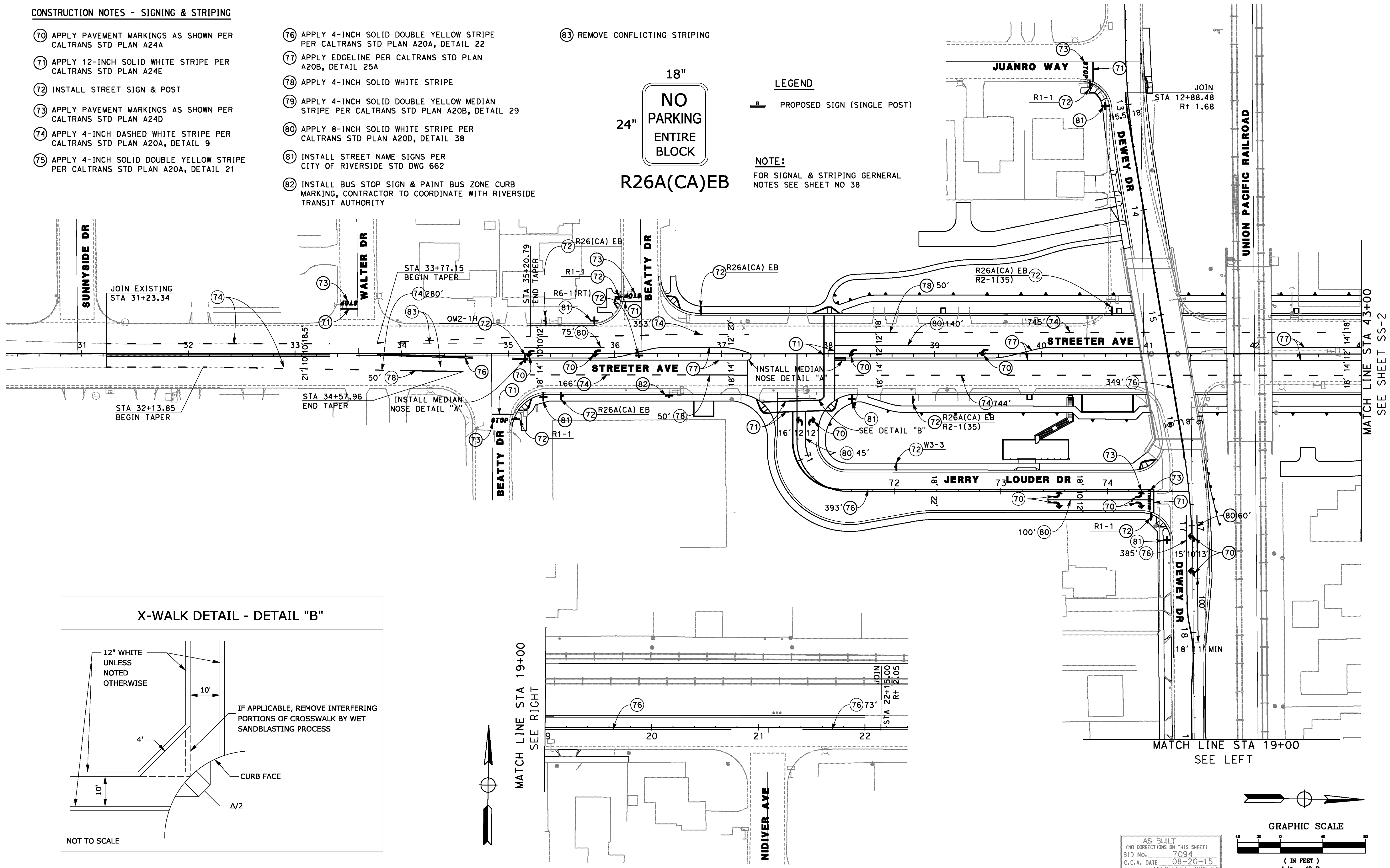
- 70 APPLY PAVEMENT MARKINGS AS SHOWN PER CALTRANS STD PLAN A24A
- 71 APPLY 12-INCH SOLID WHITE STRIPE PER CALTRANS STD PLAN A24E
- 72 INSTALL STREET SIGN & POST
- 73 APPLY PAVEMENT MARKINGS AS SHOWN PER CALTRANS STD PLAN A24D
- 74 APPLY 4-INCH DASHED WHITE STRIPE PER CALTRANS STD PLAN A20A, DETAIL 9
- 75 APPLY 4-INCH SOLID DOUBLE YELLOW STRIPE PER CALTRANS STD PLAN A20A, DETAIL 21
- 76 APPLY 4-INCH SOLID DOUBLE YELLOW STRIPE PER CALTRANS STD PLAN A20A, DETAIL 22
- 77 APPLY EDGELINE PER CALTRANS STD PLAN A20B, DETAIL 25A
- 78 APPLY 4-INCH SOLID WHITE STRIPE
- 79 APPLY 4-INCH SOLID DOUBLE YELLOW MEDIAN STRIPE PER CALTRANS STD PLAN A20B, DETAIL 29
- 80 APPLY 8-INCH SOLID WHITE STRIPE PER CALTRANS STD PLAN A20D, DETAIL 38
- 81 INSTALL STREET NAME SIGNS PER CITY OF RIVERSIDE STD DWG 662
- 82 INSTALL BUS STOP SIGN & PAINT BUS ZONE CURB MARKING, CONTRACTOR TO COORDINATE WITH RIVERSIDE TRANSIT AUTHORITY
- 83 REMOVE CONFLICTING STRIPING



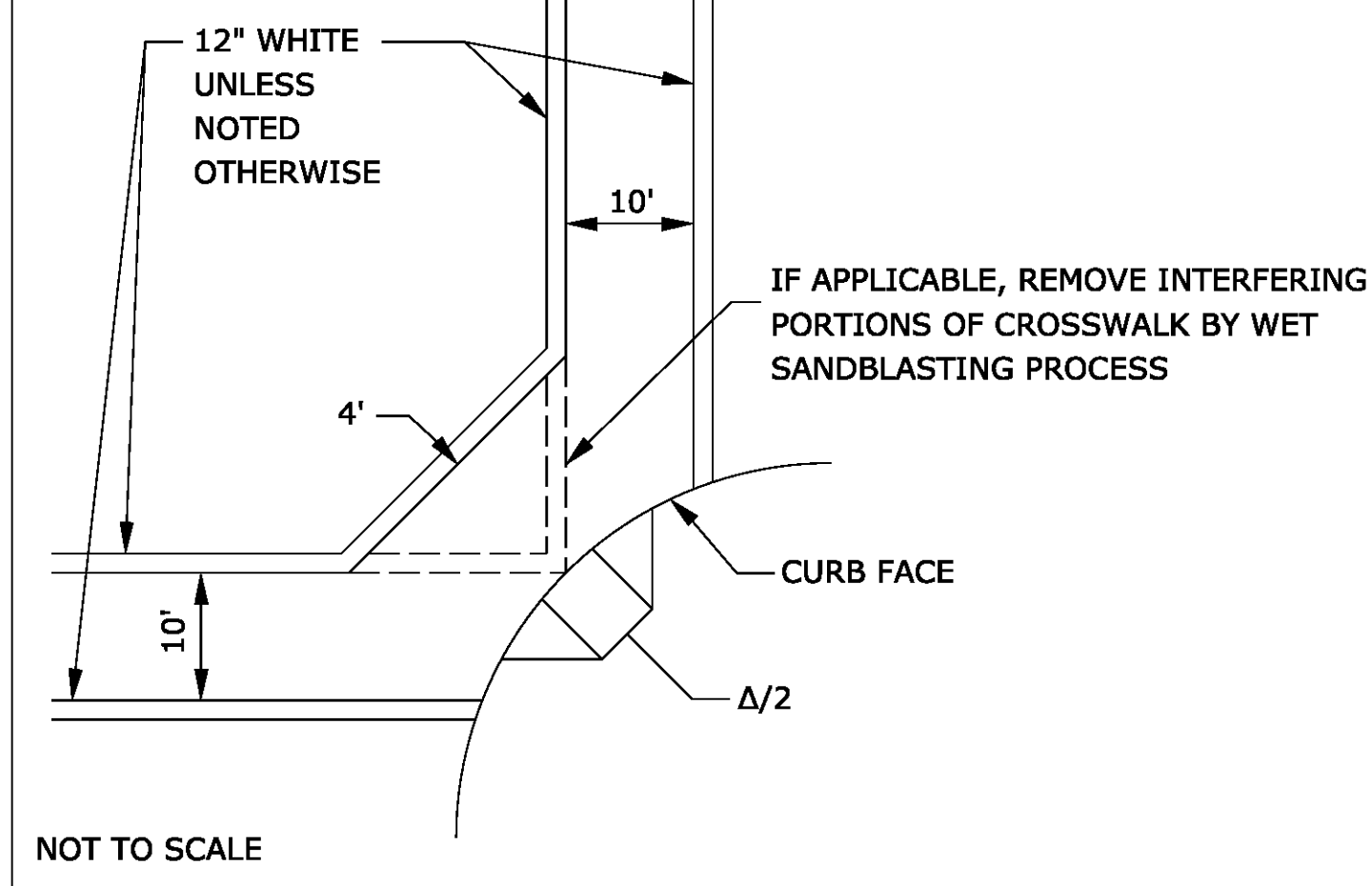
LEGEND

— PROPOSED SIGN (SINGLE POST)

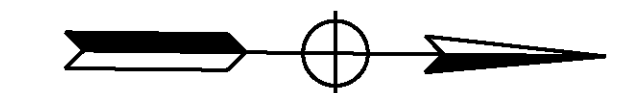
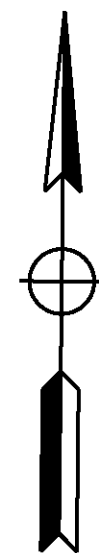
NOTE:
FOR SIGNAL & STRIPING GENERAL NOTES SEE SHEET NO 38



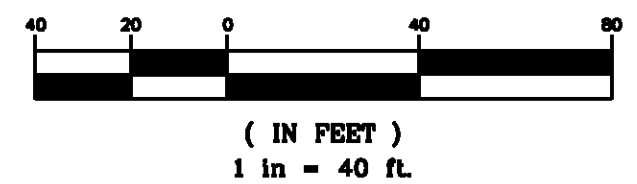
X-WALK DETAIL - DETAIL "B"



MATCH LINE STA 19+00
SEE RIGHT



GRAPHIC SCALE



AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

D:\Projects\1066_Streeter\Signing and Striping\sheet\1066_ss-01.dgn

IMPORTANT NOTICE
Section 41314.213 of the Government Code requires a Dig Alert identification Number to be placed before a "Permit to Excavate" will be void. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
No. C56574
STATE OF CALIFORNIA

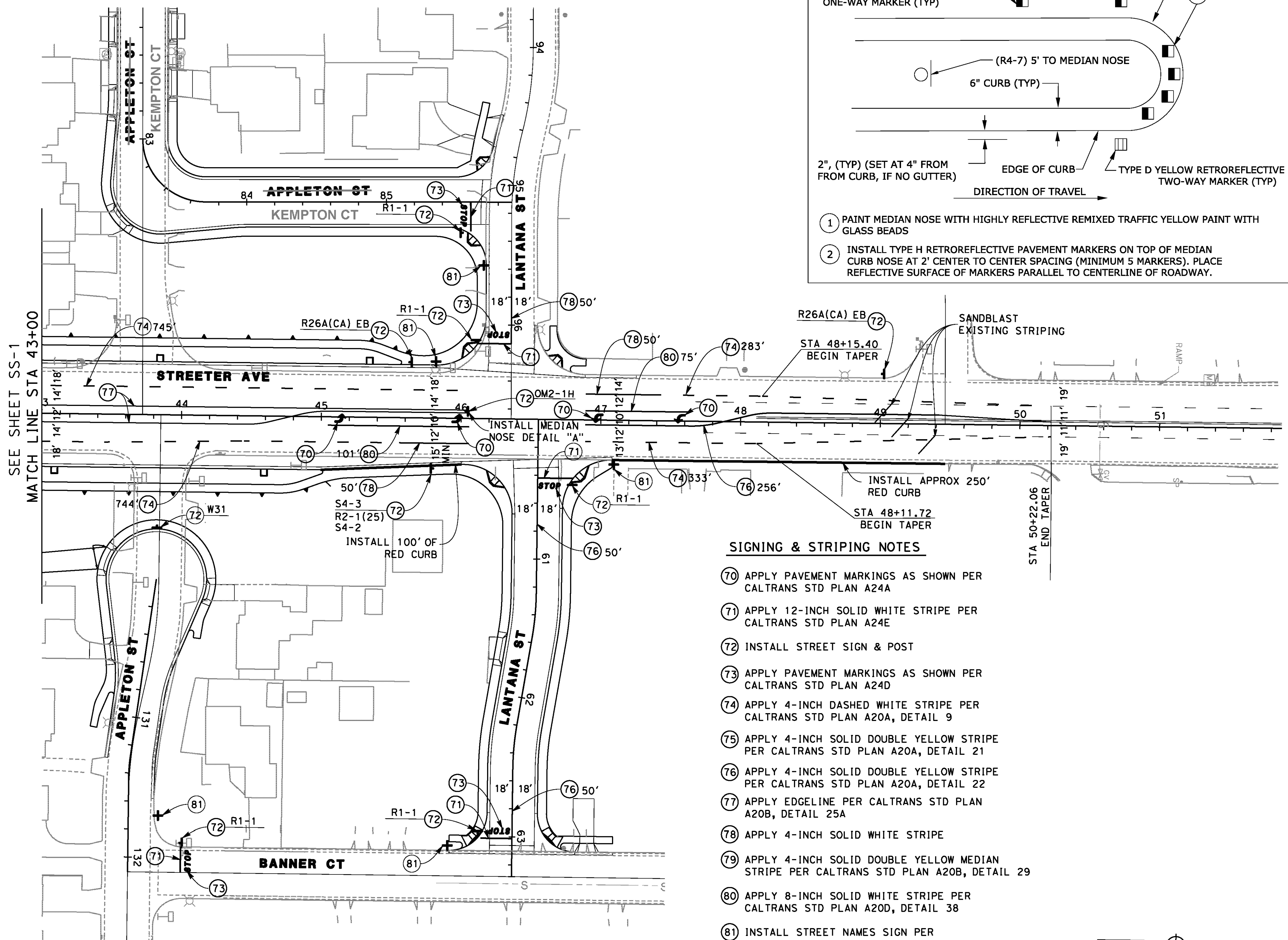
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SIGNING & STRIPING PLAN SS-1

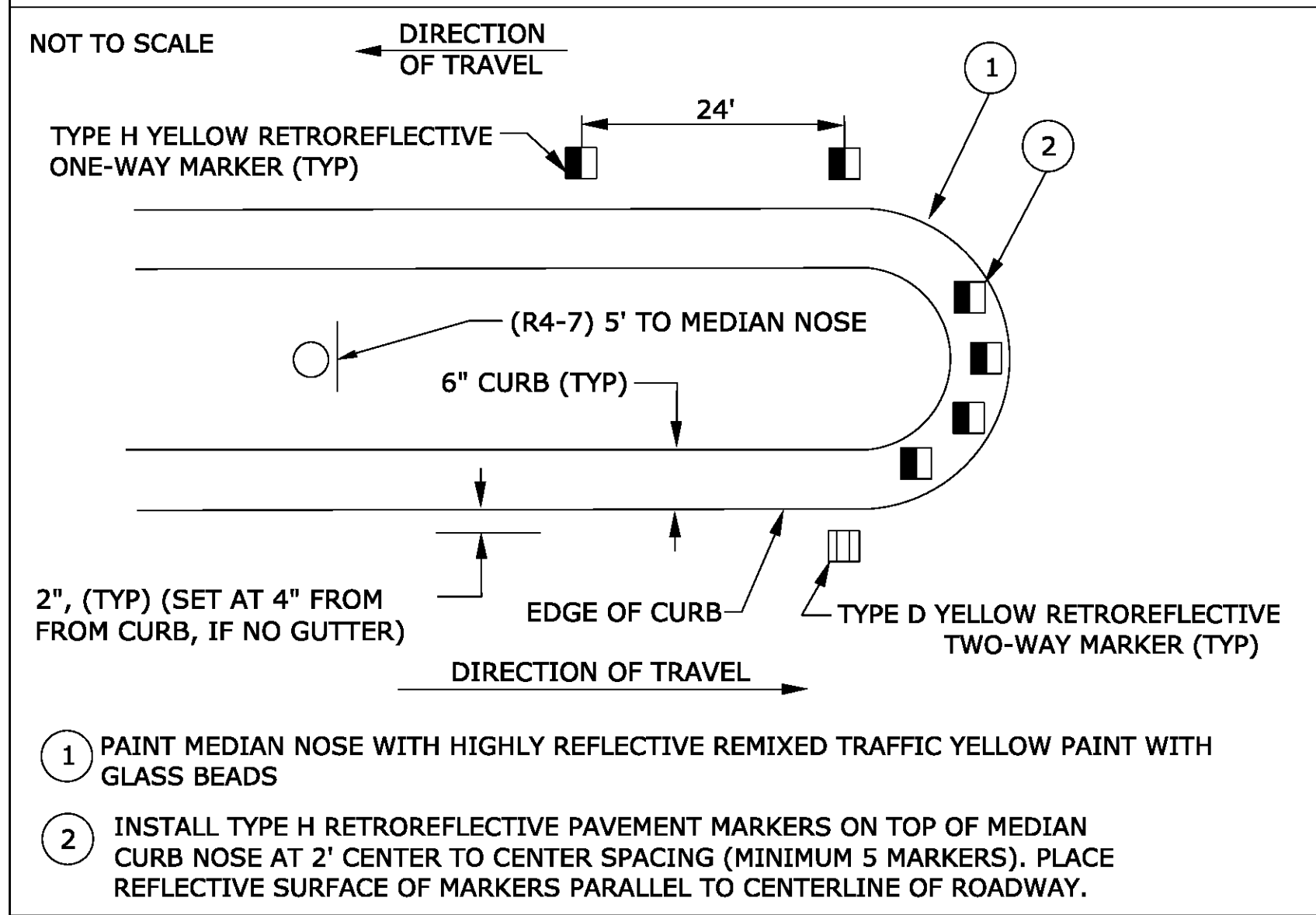
XL-624
SHEET 37 OF 191
FILE NO.

SIGNING & STRIPING GENERAL NOTES

- SIGNING AND STRIPING INSTALLATIONS SHALL CONFORM TO THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD), THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS AND SPECIFICATIONS DATED MAY 2006, AND ALL ADDENDUMS THERETO, AND THE CITY OF RIVERSIDE PUBLIC WORKS DEPARTMENT STANDARD DRAWINGS, CURRENT EDITION.
- ALL STRIPING, MARKINGS, AND LEGENDS SHALL BE REFLECTORIZED THERMOPLASTIC UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL PROVIDE AND INSTALL RAISED PAVEMENT MARKERS FOR ALL STRIPING. STRIPING, MARKINGS, AND LEGENDS SHALL CONFORM TO THE LATEST CALTRANS STANDARD PLANS A20A THRU A24E.
- PRIOR TO FINAL ACCEPTANCE OF STREET IMPROVEMENTS, ALL PAVEMENT STRIPING AND STENCILING WITHIN THE PERIMETER OF THE CONSTRUCTION AREA SHALL BE RESTORED TO LIKE NEW CONDITION, IN A MANNER MEETING APPROVAL OF THE CITY OF RIVERSIDE.
- THE CONTRACTOR SHALL RE-STRIP EXISTING STRIPING AND CURB MARKINGS OBLITERATED BY NEW CONSTRUCTION, WHETHER OR NOT SHOWN ON THE PLANS FOR REPLACEMENT, AT NO COST TO THE CITY.
- AT LOCATIONS WHERE EXISTING PAINTED CURB IS TO BE RECONSTRUCTED, THE CONTRACTOR SHALL PAINT THE NEW CURB AS SHOWN ON THE PLANS WITHIN 10 WORKING DAYS OF CURB CONSTRUCTION OR AS DIRECTED BY ENGINEER. THE PAINT SHALL BE WATER-BASED WITH 2-YEAR GUARANTEE AGAINST COLOR FADING. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE CITY WRITTEN PROOF OF THE MANUFACTURER'S 2-YEAR GUARANTEE.
- ALL STRIPING SHALL BE "CAT TACKED" AND APPROVED BY THE ENGINEER PRIOR TO FINAL INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AFTER COMPLETING LAYOUT AND AT LEAST 3 WORKING DAYS BEFORE COMMENCING INSTALLATION OF STRIPING, MARKINGS AND MARKERS.
- TRAFFIC SIGN FACE REFLECTIVE SHEETING SHALL BE 3M DG3 (ASTM XI) OR APPROVED EQUAL WITH PROTECTIVE GRAFFITI OVERLAY FILM OR AS OTHERWISE NOTED. ALL WARNING SIGNS SHALL HAVE A FLUORESCENT BACKGROUND AND SCHOOL SIGNS NOTED SHALL HAVE A FLUORESCENT YELLOW-GREEN BACKGROUND.
- SIGNS SHALL BE STANDARDIZED UNLESS NOTED OTHERWISE. PRIOR TO INSTALLATION, NEW SIGNS SHALL BE APPROVED BY THE CITY OF RIVERSIDE. EXACT LOCATIONS SHALL BE DETERMINED BY THE CITY ENGINEER.
- SALVAGED SIGNS AND SIGN POSTS SHALL BE DELIVERED TO THE CITY OF RIVERSIDE SIGN DEPARTMENT.
- WHEN PAINT IS SPECIFIED, TRAFFIC STRIPES AND MARKINGS SHALL BE APPLIED IN TWO COATS. A MINIMUM OF SEVEN DAYS SHALL BE PROVIDED BETWEEN FIRST AND SECOND COATS.
- STRIPING SHALL BE APPLIED WITHIN 48 HOURS OF SURFACE COURSE REPLACEMENT ON STREETS OPEN TO THE PUBLIC. IN NO CASE SHALL A NEWLY PAVED STREET OPEN TO THE PUBLIC BE LEFT UNSTRIPED OVER A WEEKEND OR HOLIDAY.
- CONTRACTOR SHALL INSTALL NEW SIGN(S) AND/OR POST(S) PER CITY OF RIVERSIDE STANDARD DRAWING NO. 666.
- ALL CONFLICTING STRIPING, PAVEMENT MARKINGS, LEGENDS, AND RAISED PAVEMENT MARKERS SHALL BE REMOVED EVEN IF NOT SHOWN ON PLANS. REMOVALS OR PAINTED STRIPING, THERMOPLASTIC STRIPING, PAVEMENT MARKINGS AND LEGENDS SHALL BE REMOVED BY WET SANDBLASTING, GRINDING OR OTHER APPROVED METHOD AND SHALL NOT DAMAGE THE PAVEMENT. "BLACK OUT" OF EXISTING DELINEATION IS NOT PERMITTED. ALL DAMAGED PAVEMENT DUE TO REMOVALS SHALL BE REPAIRED AS NECESSARY TO MAINTAIN A SMOOTH AND UNIFORM SURFACE OR AS DIRECTED BY THE ENGINEER, ALL STRIPING REMOVALS AND LEGENDS SHALL BE "FOG SEALED".
- WHERE APPLICABLE, OUTBOUND LANE LINE DETAILS SHALL COMMENCE AT THE CROSSWALK MEANING THE PAINTED PORTION OF THE DETAIL SHALL JOIN THE CROSSWALK.



MEDIAN NOSE DETAIL - DETAIL "A"

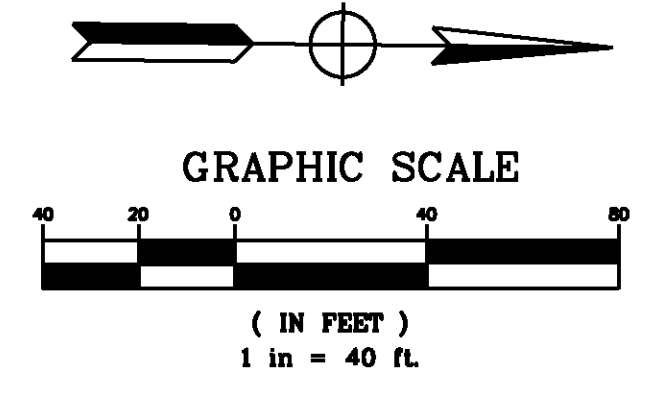


SIGNING & STRIPING NOTES

- APPLY PAVEMENT MARKINGS AS SHOWN PER CALTRANS STD PLAN A24A
- APPLY 12-INCH SOLID WHITE STRIPE PER CALTRANS STD PLAN A24E
- INSTALL STREET SIGN & POST
- APPLY PAVEMENT MARKINGS AS SHOWN PER CALTRANS STD PLAN A24D
- APPLY 4-INCH DASHED WHITE STRIPE PER CALTRANS STD PLAN A20A, DETAIL 9
- APPLY 4-INCH SOLID DOUBLE YELLOW STRIPE PER CALTRANS STD PLAN A20A, DETAIL 21
- APPLY 4-INCH SOLID DOUBLE YELLOW STRIPE PER CALTRANS STD PLAN A20A, DETAIL 22
- APPLY EDGELINE PER CALTRANS STD PLAN A20B, DETAIL 25A
- APPLY 4-INCH SOLID WHITE STRIPE
- APPLY 4-INCH SOLID DOUBLE YELLOW MEDIAN STRIPE PER CALTRANS STD PLAN A20B, DETAIL 29
- APPLY 8-INCH SOLID WHITE STRIPE PER CALTRANS STD PLAN A20D, DETAIL 38
- INSTALL STREET NAMES SIGN PER CITY OF RIVERSIDE STD DWG 622A
- INSTALL BUS STOP SIGN & PAINT BUS ZONE CURB MARKING, CONTRACTOR TO COORDINATE WITH RIVERSIDE TRANSIT AUTHORITY

LEGEND

PROPOSED SIGN (SINGLE POST)



AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
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 www.tylin.com

REGISTERED PROFESSIONAL ENGINEER
 RICHARD GONZALEZ
 No. C56574
 CIVIL
 STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SIGNING & STRIPING PLAN SS-2

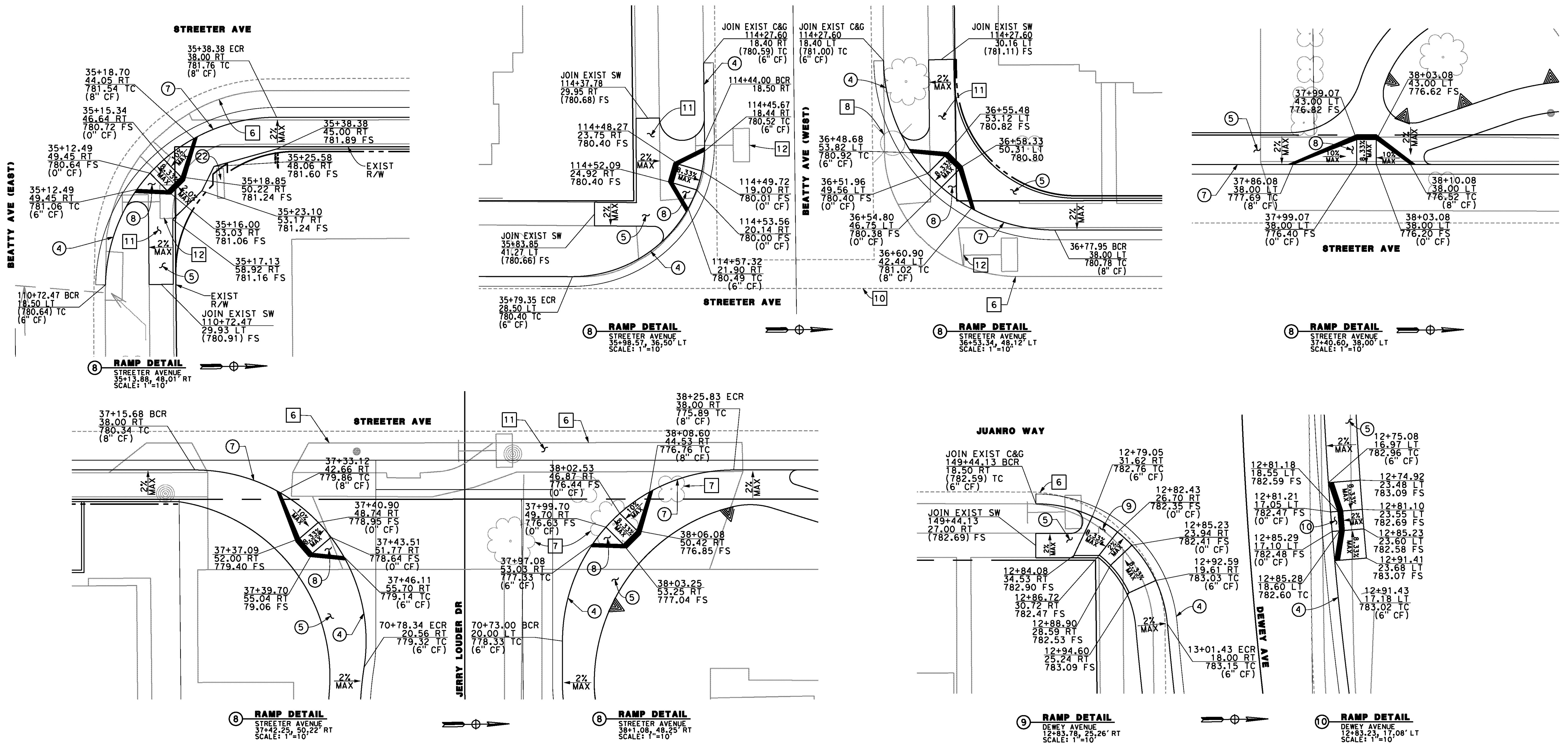
XL-624
 SHEET **38** OF **191**
 FILE NO.

HORIZ. SCALE: 1"=40' VERT. SCALE: N/A

D:\projects\1066_Streeter\Sign\Contract Plans\N-Signing and Striping\sheet1066_ss-02.dgn

DATE: 8/8/2012
 TIME: 6:42:05 PM

USER: pboctor
 1066_ss-02.dgn



RAMP DETAIL
STREETER AVENUE
35+13.88, 48.01 RT
SCALE: 1"=10'

RAMP DETAIL
STREETER AVENUE
35+98.57, 36.50 LT
SCALE: 1"=10'

RAMP DETAIL
STREETER AVENUE
36+53.34, 48.12 LT
SCALE: 1"=10'

RAMP DETAIL
STREETER AVENUE
37+40.60, 38.00 LT
SCALE: 1"=10'

RAMP DETAIL
STREETER AVENUE
37+42.25, 50.22 RT
SCALE: 1"=10'

RAMP DETAIL
STREETER AVENUE
38+1.06, 48.25 RT
SCALE: 1"=10'

RAMP DETAIL
DEWEY AVENUE
12+83.78, 25.26 RT
SCALE: 1"=10'

RAMP DETAIL
DEWEY AVENUE
12+83.23, 17.08 LT
SCALE: 1"=10'

RAMP DETAIL
DEWEY AVENUE
16+33.73, 27.45 RT
SCALE: 1"=10'

CONSTRUCTION NOTES

- ④ CONSTRUCT TYPE I - 6" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- ⑦ CONSTRUCT TYPE I - 8" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- ⑧ CONSTRUCT TYPE I WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304
- ⑨ CONSTRUCT TYPE II WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304
- ⑩ CONSTRUCT TYPE II-A WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304
- ⑫ CONSTRUCT CROSS GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 220
- ⑬ CONSTRUCT TYPE V WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304

REMOVAL NOTES

- ⑥ REMOVE CURB & GUTTER
- ⑦ REMOVE TREE
- ⑩ REMOVE EXISTING CROSS GUTTER
- ⑪ REMOVE EXISTING CONCRETE SIDEWALK
- ⑫ REMOVE AND SALVAGE SIGN

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
Section 93114.0212 of the Government Code requires a Dig Alert identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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RIVERSIDE, CA 92507
TEL (951) 788-4688
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REGISTERED PROFESSIONAL ENGINEER
RANFORD GONZALEZ
No. C56574
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
CURB RAMP DETAILS CD-1

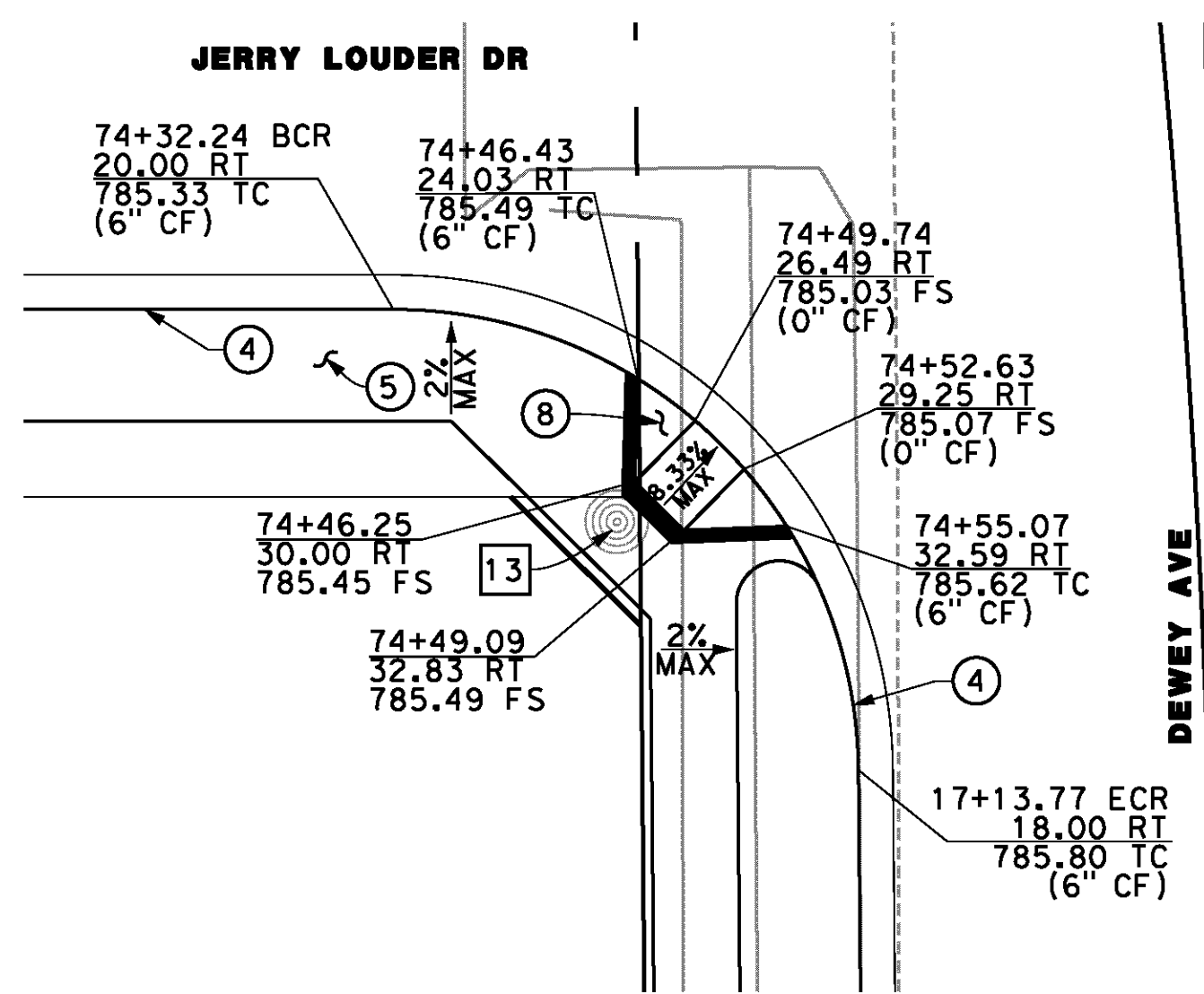
R-4180
SHEET 39 OF 191
FILE NO.

HORIZ. SCALE: VERT. SCALE: N/A

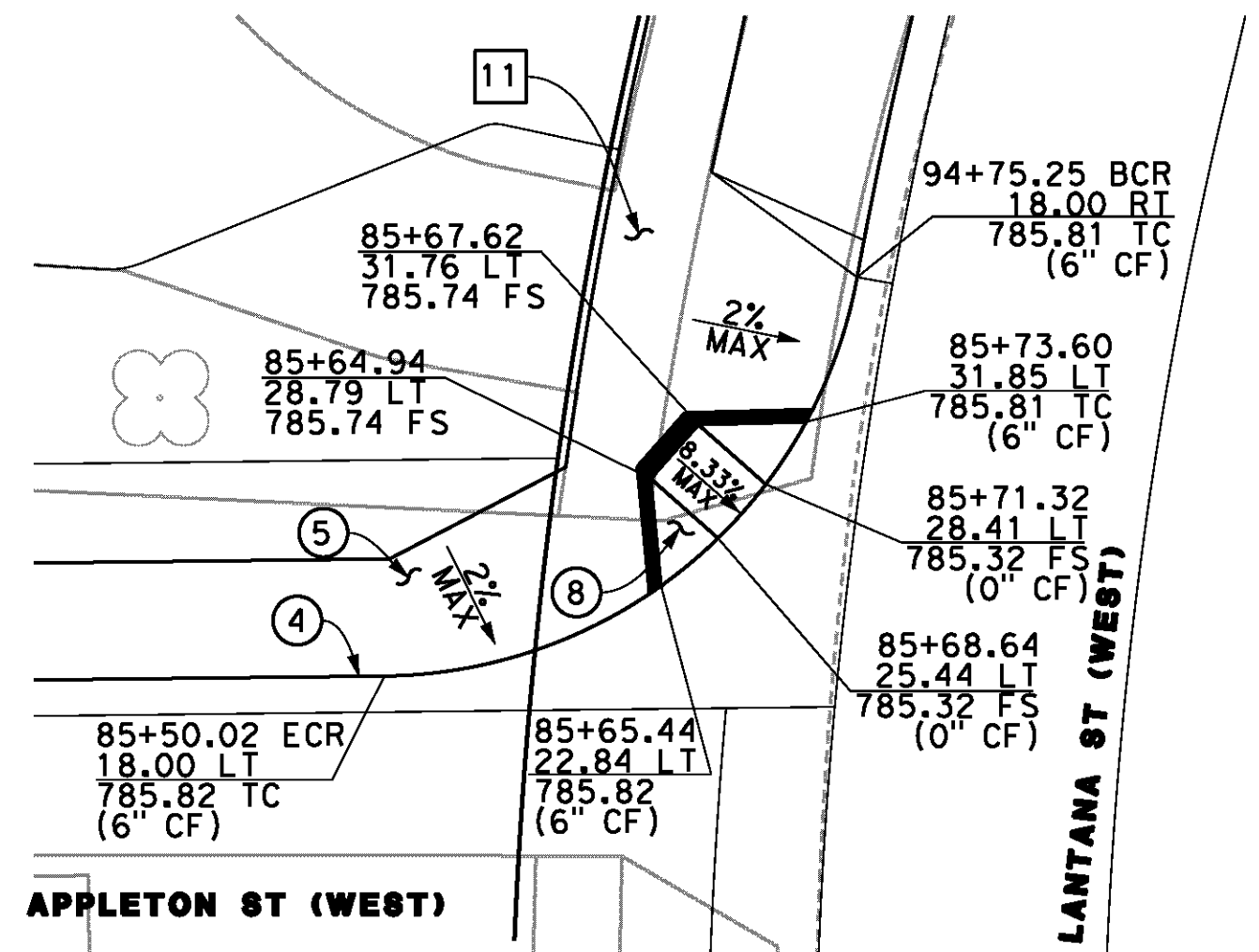
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TIME: 6:28:26 PM

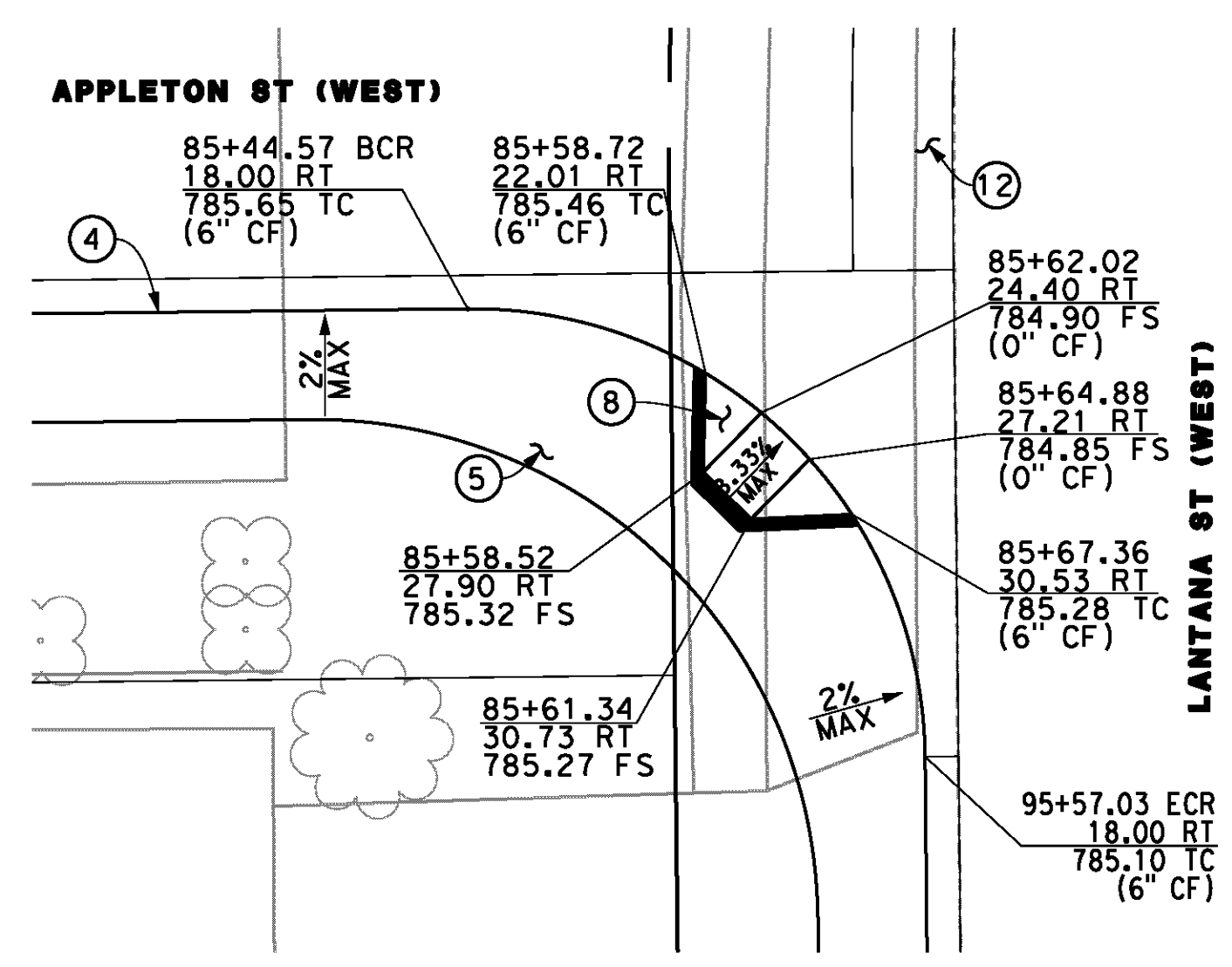
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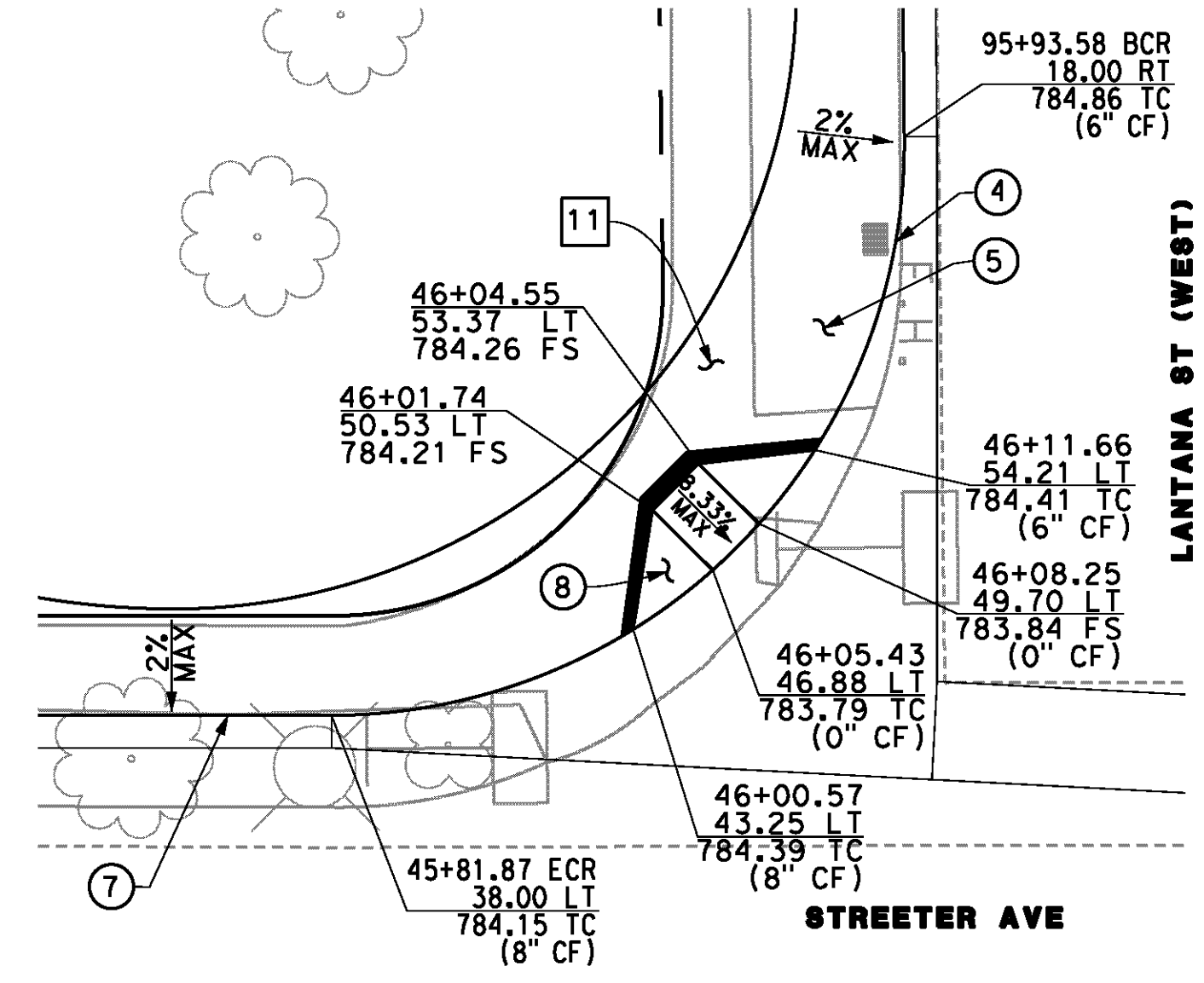
8 RAMP DETAIL
DEWEY AVENUE
16+93.80, 27.37' RT
SCALE: 1"=10'



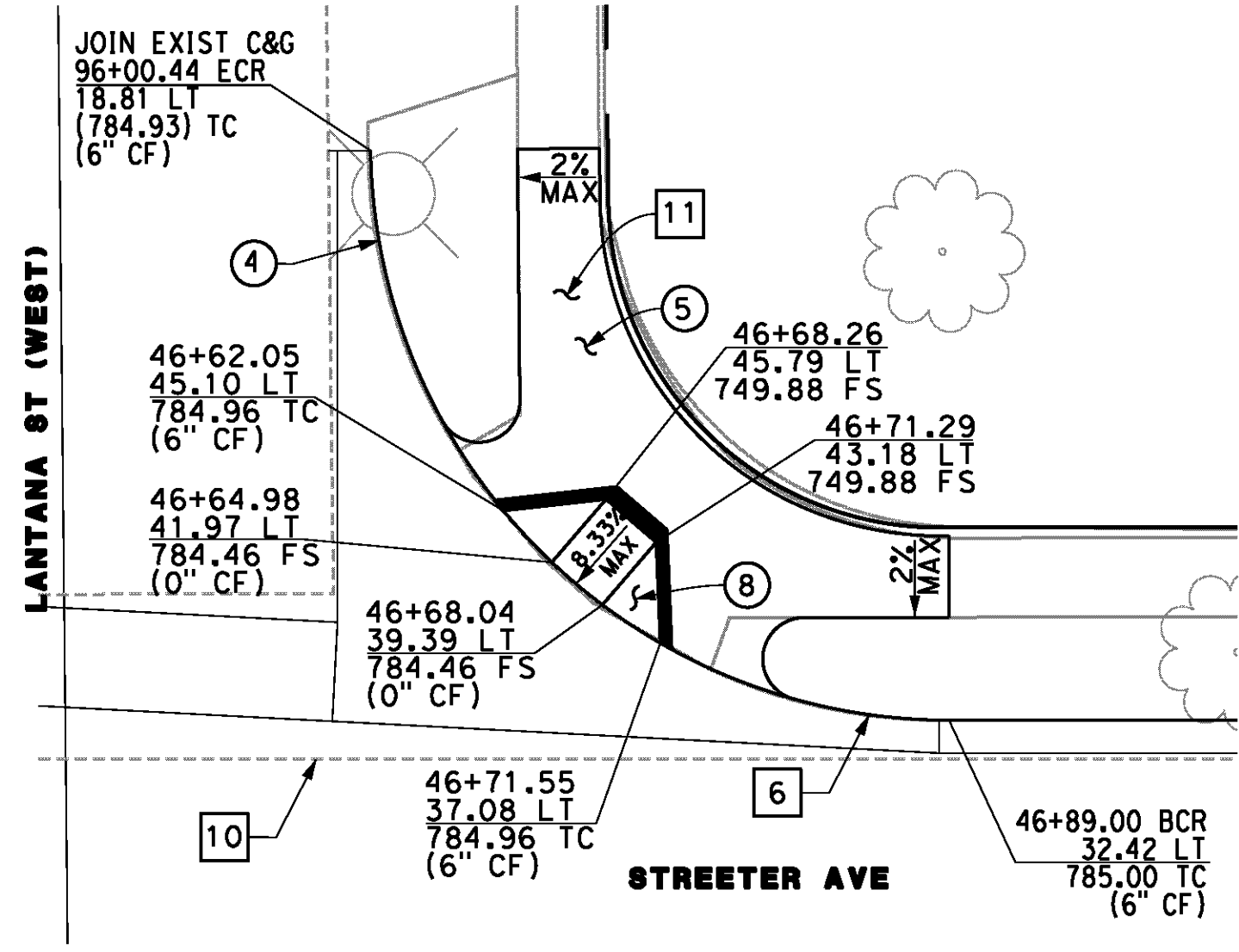
8 RAMP DETAIL
LANTANA STREET
94+91.13, 24.64' RT
SCALE: 1"=10'



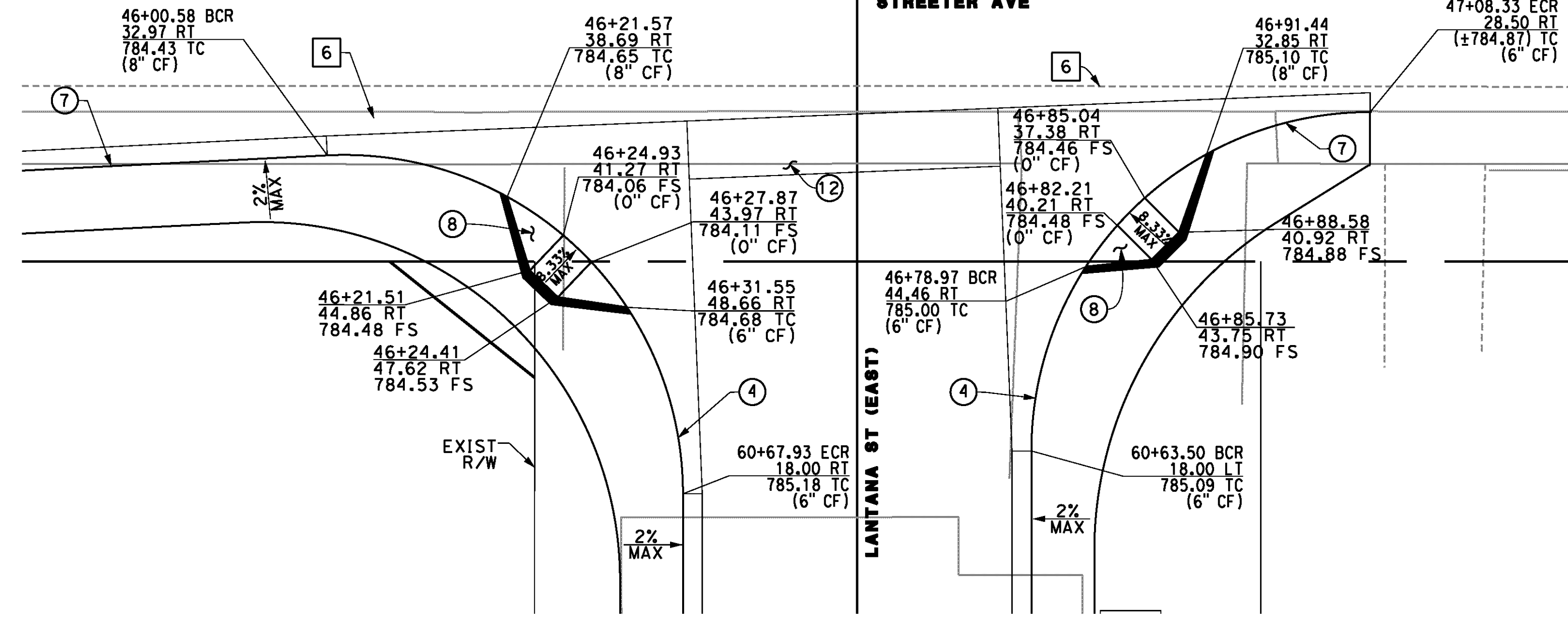
8 RAMP DETAIL
LANTANA STREET
95+37.92, 26.22' RT
SCALE: 1"=10'



8 RAMP DETAIL
STREETER AVENUE
46+6.75, 48.39' LT
SCALE: 1"=10'

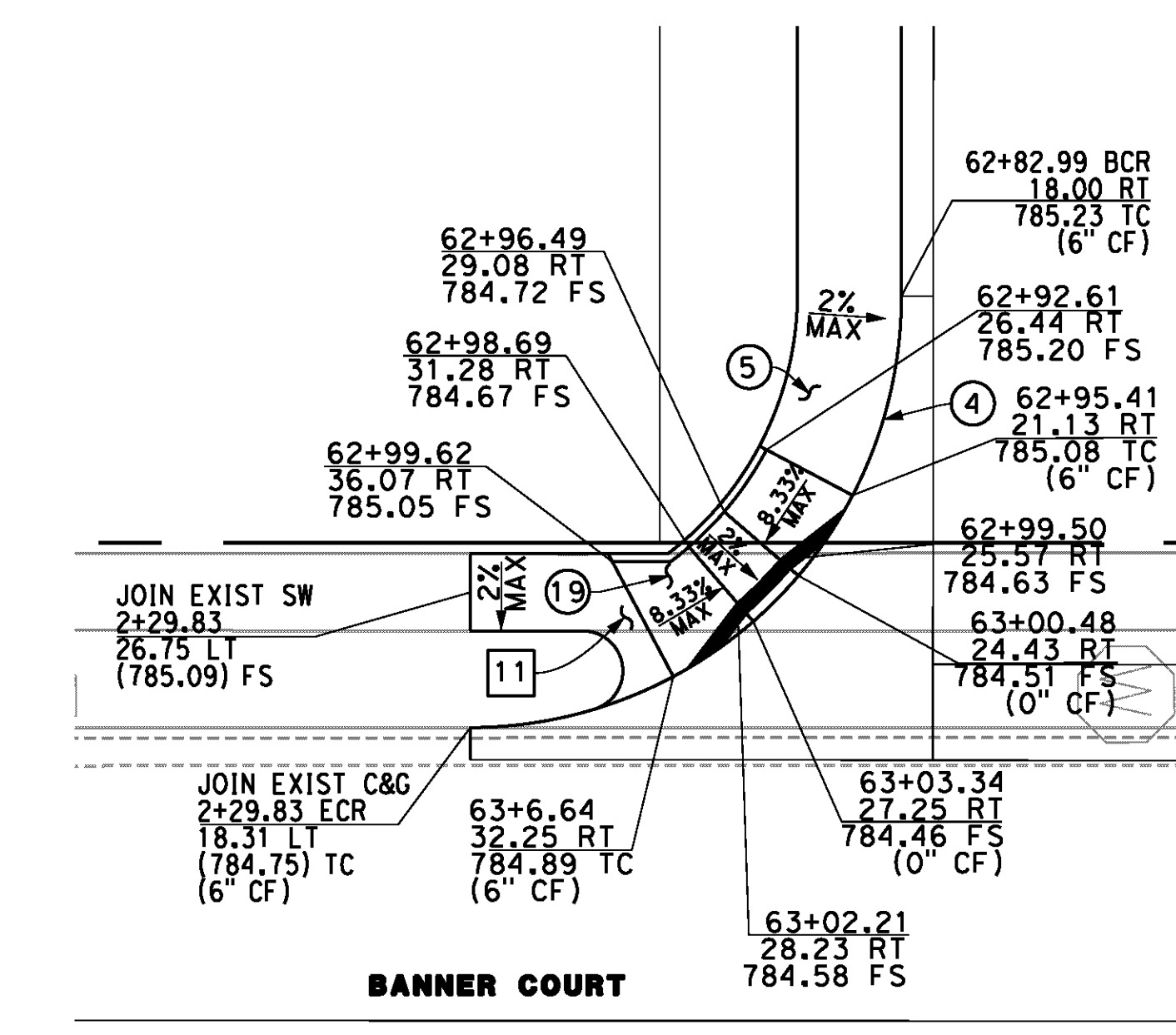


8 RAMP DETAIL
STREETER AVENUE
46+64.45, 42.48' LT
SCALE: 1"=10'

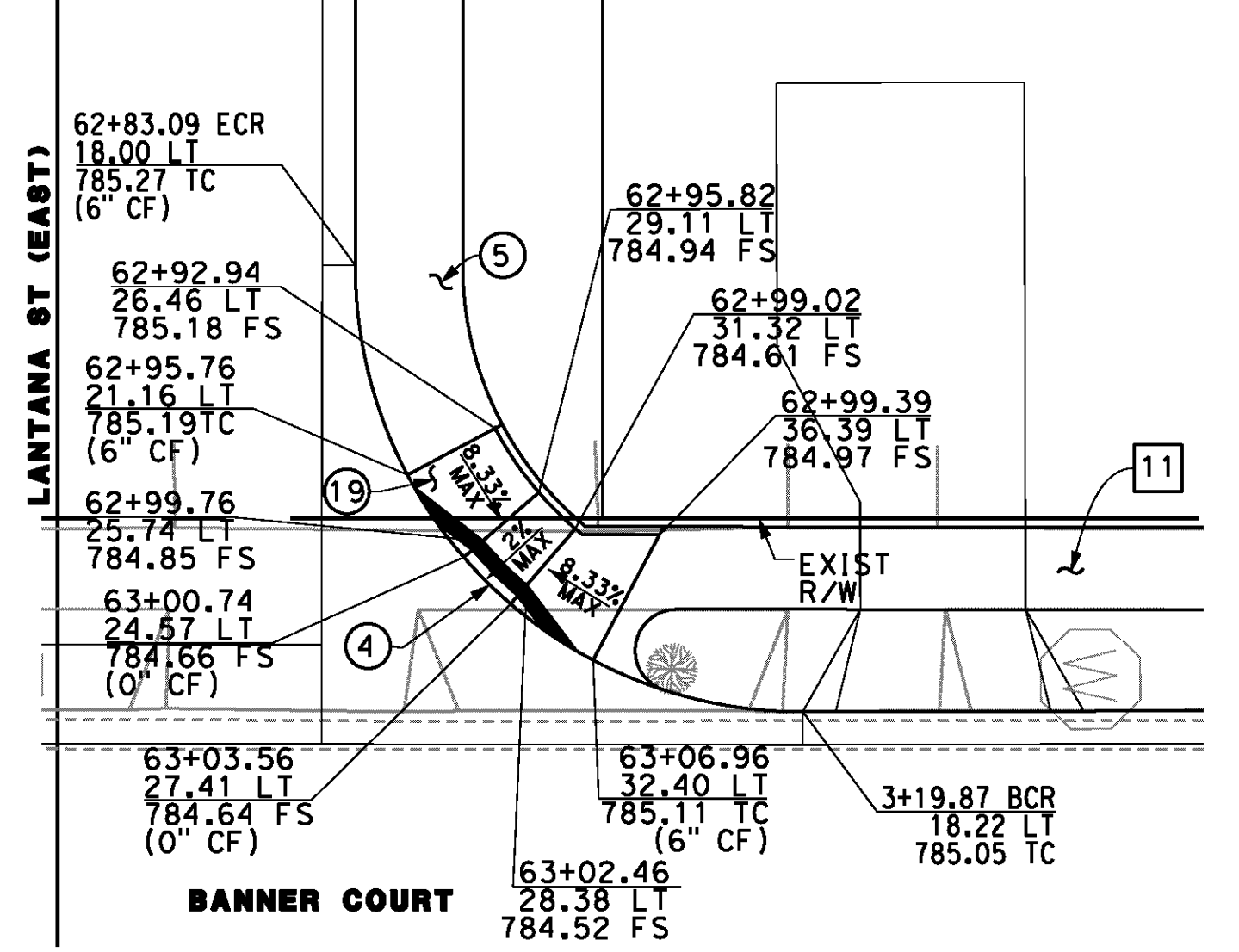


8 RAMP DETAIL
STREETER AVENUE
46+26.46, 42.57' RT
SCALE: 1"=10'

8 RAMP DETAIL
STREETER AVENUE
46+83.60, 38.66' RT
SCALE: 1"=10'



9 RAMP DETAIL
LANTANA STREET
63+1.87, 25.89' RT
SCALE: 1"=10'



9 RAMP DETAIL
LANTANA STREET
63+2.21, 25.94' LT
SCALE: 1"=10'

CONSTRUCTION NOTES

- 4 CONSTRUCT TYPE I - 6" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- 5 CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- 7 CONSTRUCT TYPE I - 8" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- 8 CONSTRUCT TYPE I WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304
- 9 CONSTRUCT TYPE II WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304
- 12 CONSTRUCT CROSS GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 220
- 19 CONSTRUCT TYPE V WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304

REMOVAL NOTES

- 6 REMOVE CURB & GUTTER
- 10 REMOVE EXISTING CROSS GUTTER
- 11 REMOVE EXISTING CONCRETE SIDEWALK

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
Section 4114.017 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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TEL (951) 788-4688
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REGISTERED PROFESSIONAL ENGINEER
RIVARDO GONZALEZ
No. C56574
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

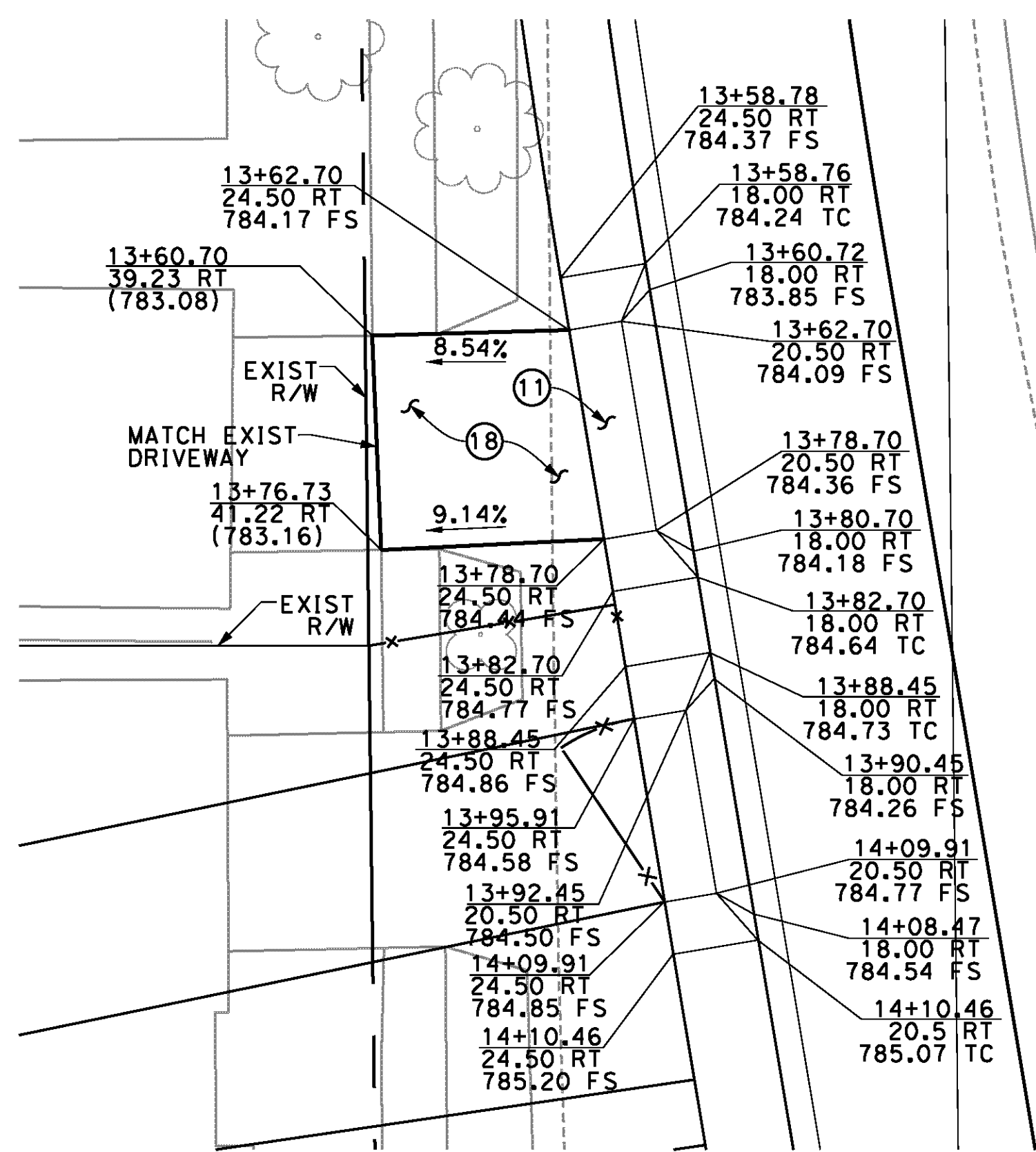
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
CURB RAMP DETAILS CD-2

R-4180
SHEET 40 OF 191
FILE NO.

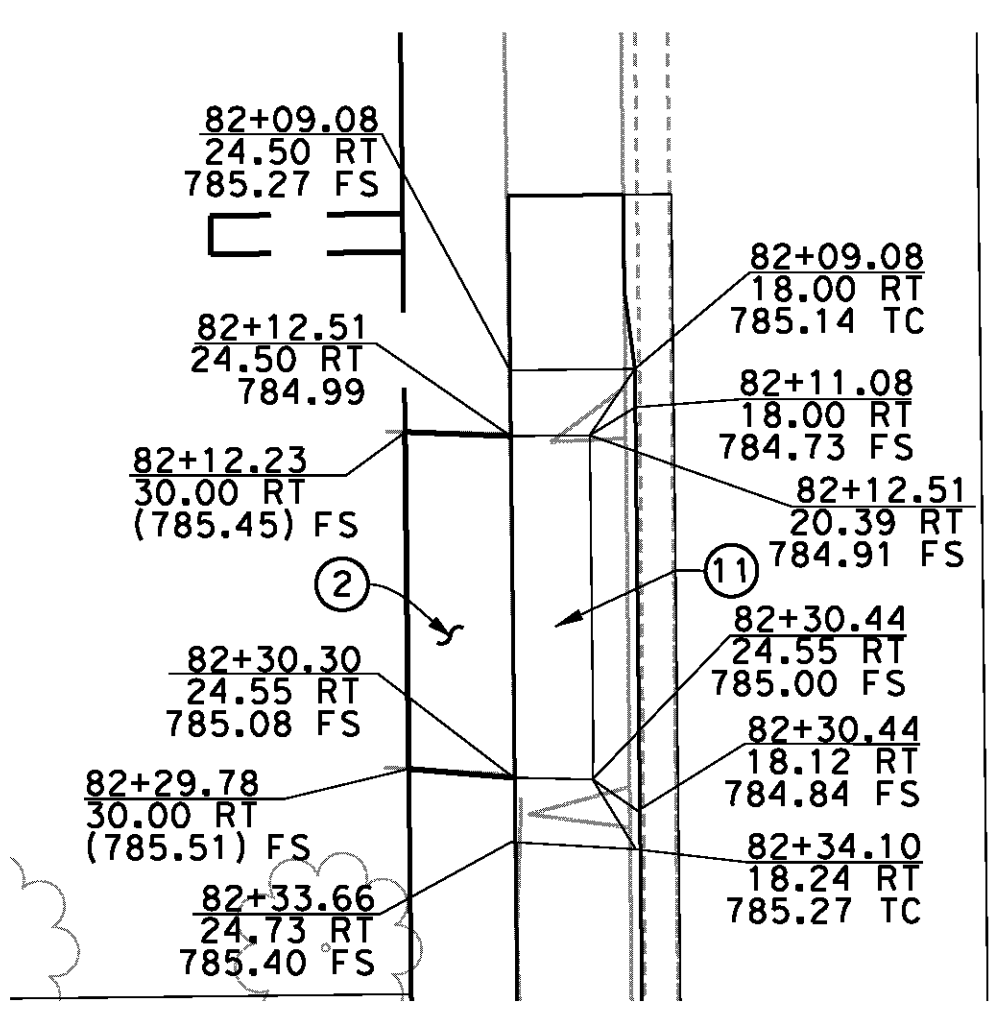
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TIME: 6:28:45 PM

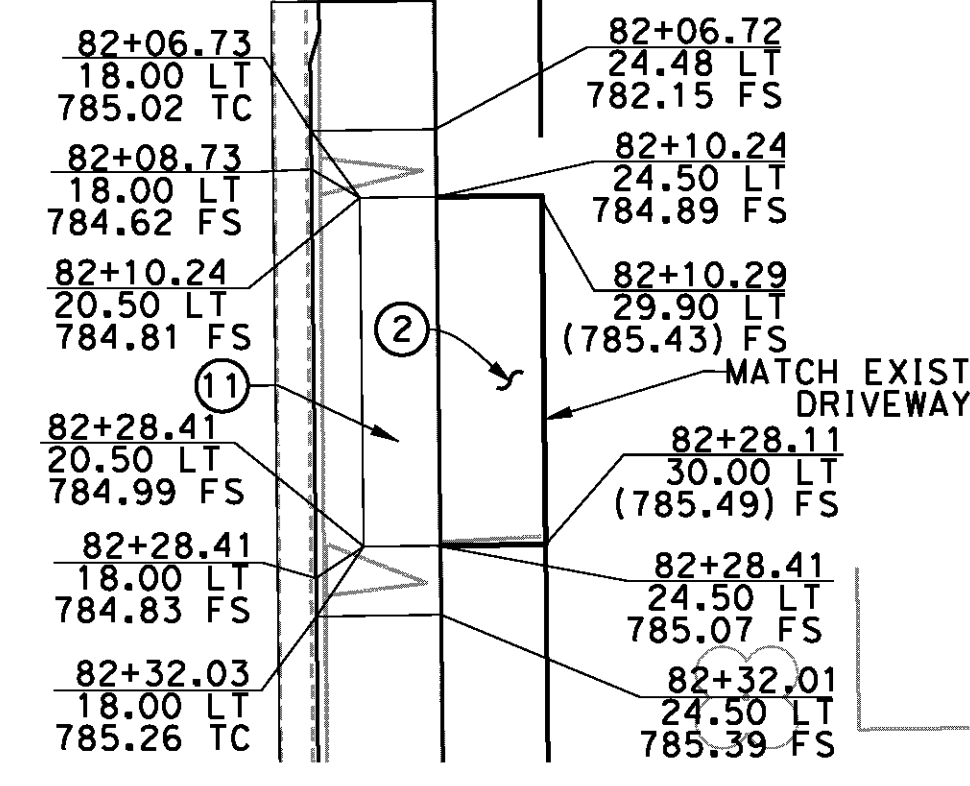
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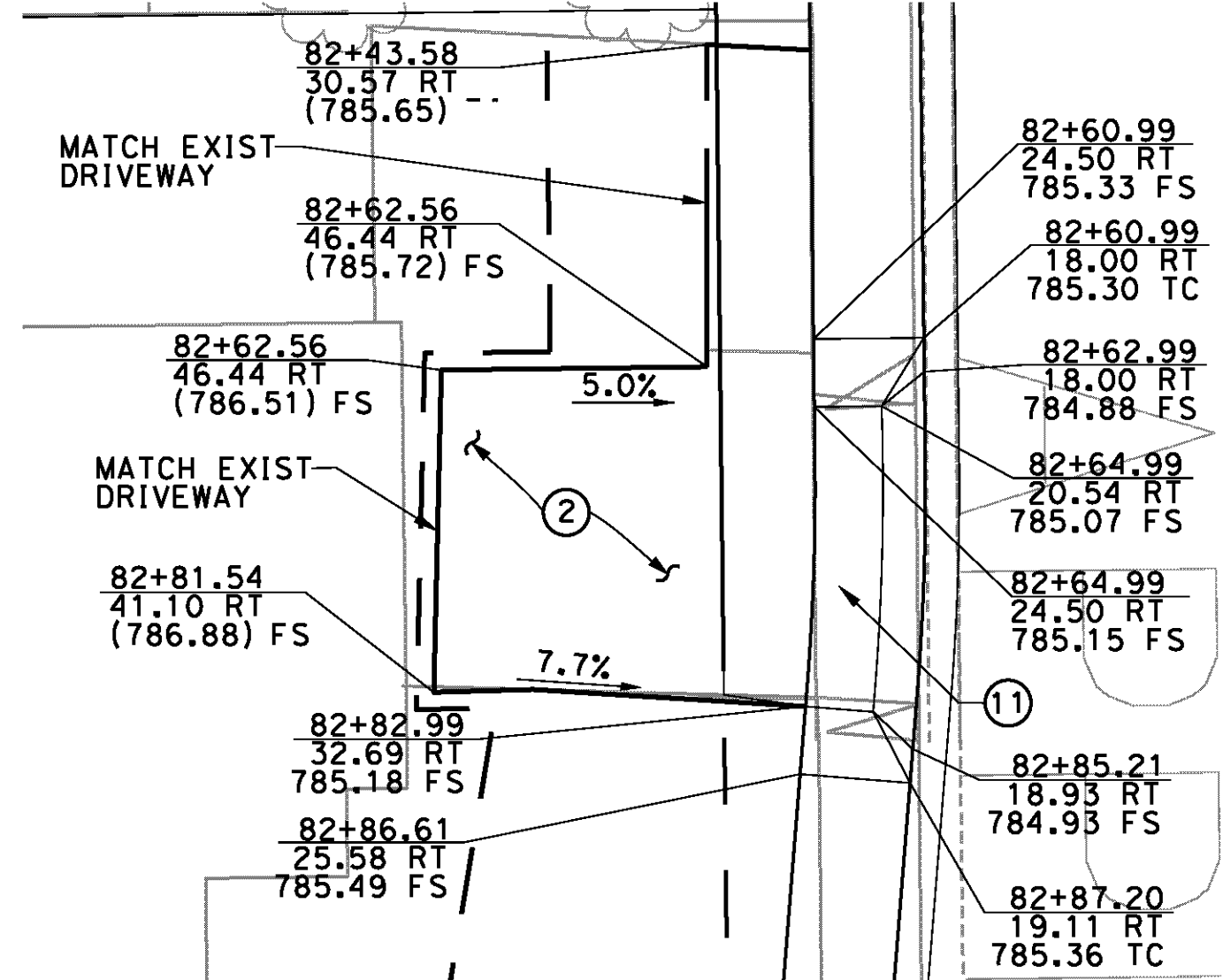
DRIVEWAY DETAIL
DEWEY AVENUE
13+70.70 & 13+99.45, 20.50 RT
SCALE: 1"=10'



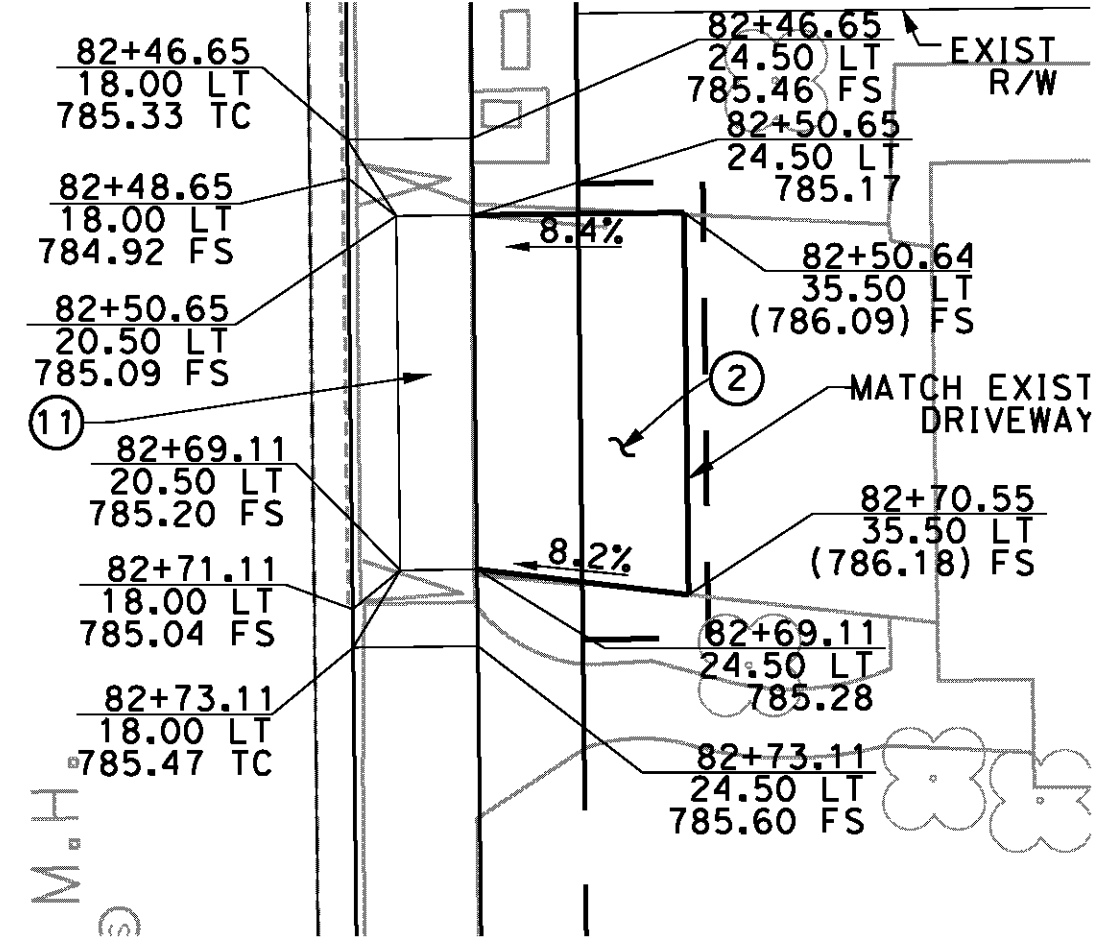
DRIVEWAY DETAIL
APPLETON STREET
82+21.48, 20.42 RT
SCALE: 1"=10'



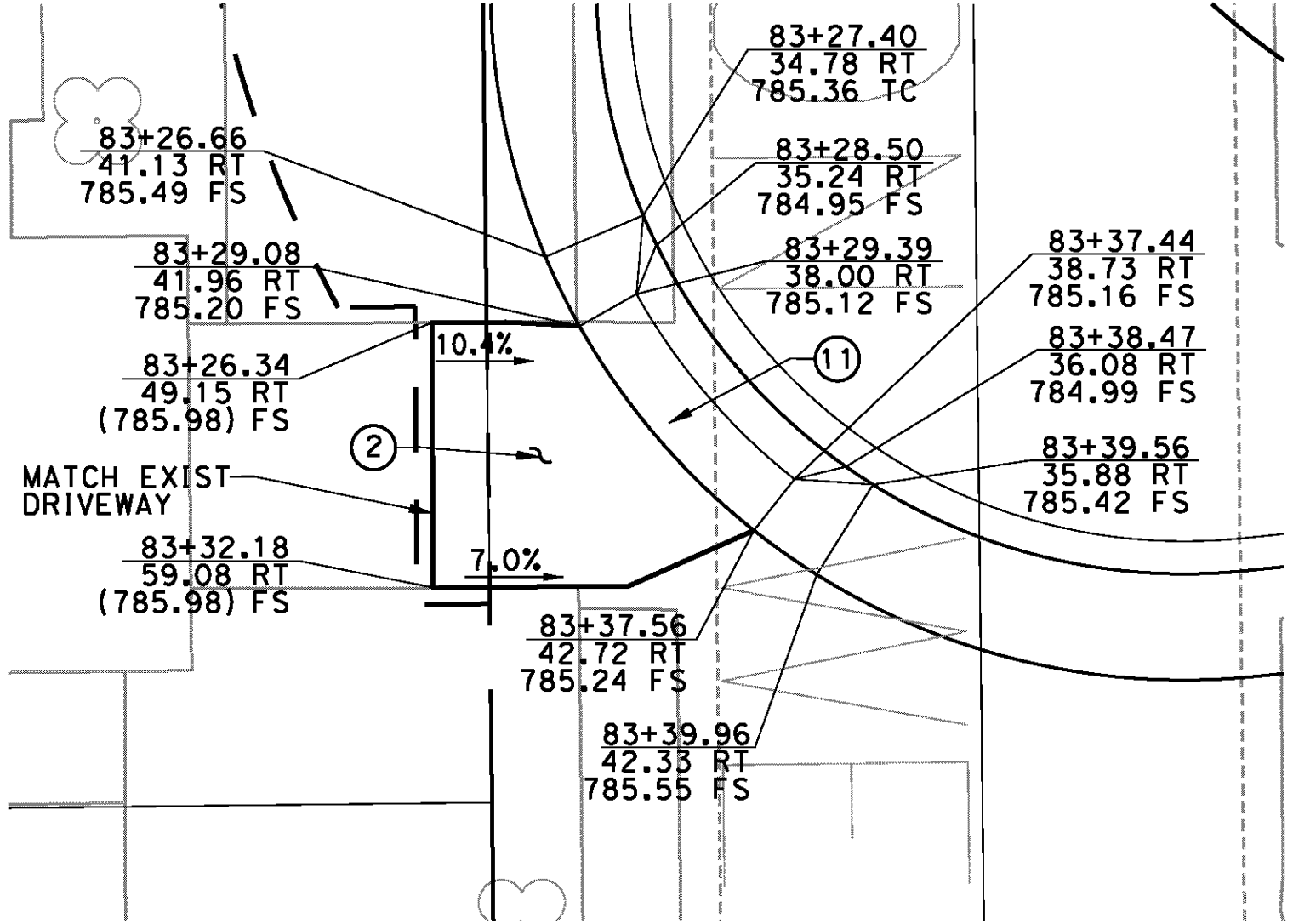
DRIVEWAY DETAIL
APPLETON STREET
82+19.33, 20.50 LT
SCALE: 1"=10'



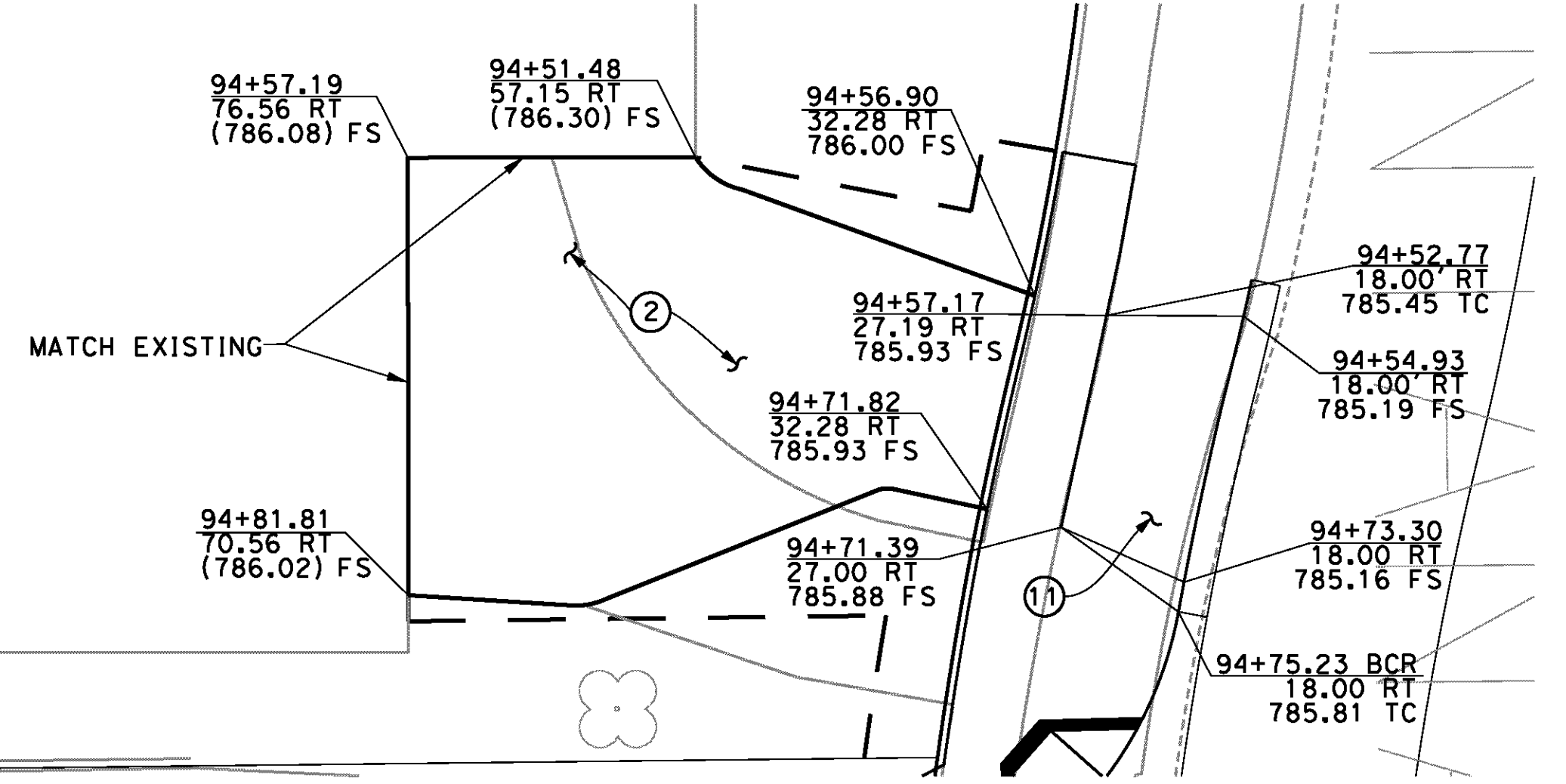
DRIVEWAY DETAIL
APPLETON STREET
82+73.62, 27.08 RT
SCALE: 1"=10'



DRIVEWAY DETAIL
APPLETON STREET
82+59.88, 20.50 LT
SCALE: 1"=10'



DRIVEWAY DETAIL
APPLETON STREET
83+33.21, 39.64 RT
SCALE: 1"=10'



DRIVEWAY DETAIL
LANTANA STREET
94+64.80, 20.02 RT
SCALE: 1"=10'

CONSTRUCTION NOTES

- ② CONSTRUCT 6" PCC PAVEMENT
- ⑪ CONSTRUCT PCC RESIDENTIAL DRIVEWAY APPROACH PER CITY OF RIVERSIDE STD PLAN NO. 302
- ⑱ CONSTRUCT TYPE V WHEEL CHAIR RAMP PER CITY OF RIVERSIDE STD PLAN NO. 304

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF



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RIVERSIDE, CA 92507
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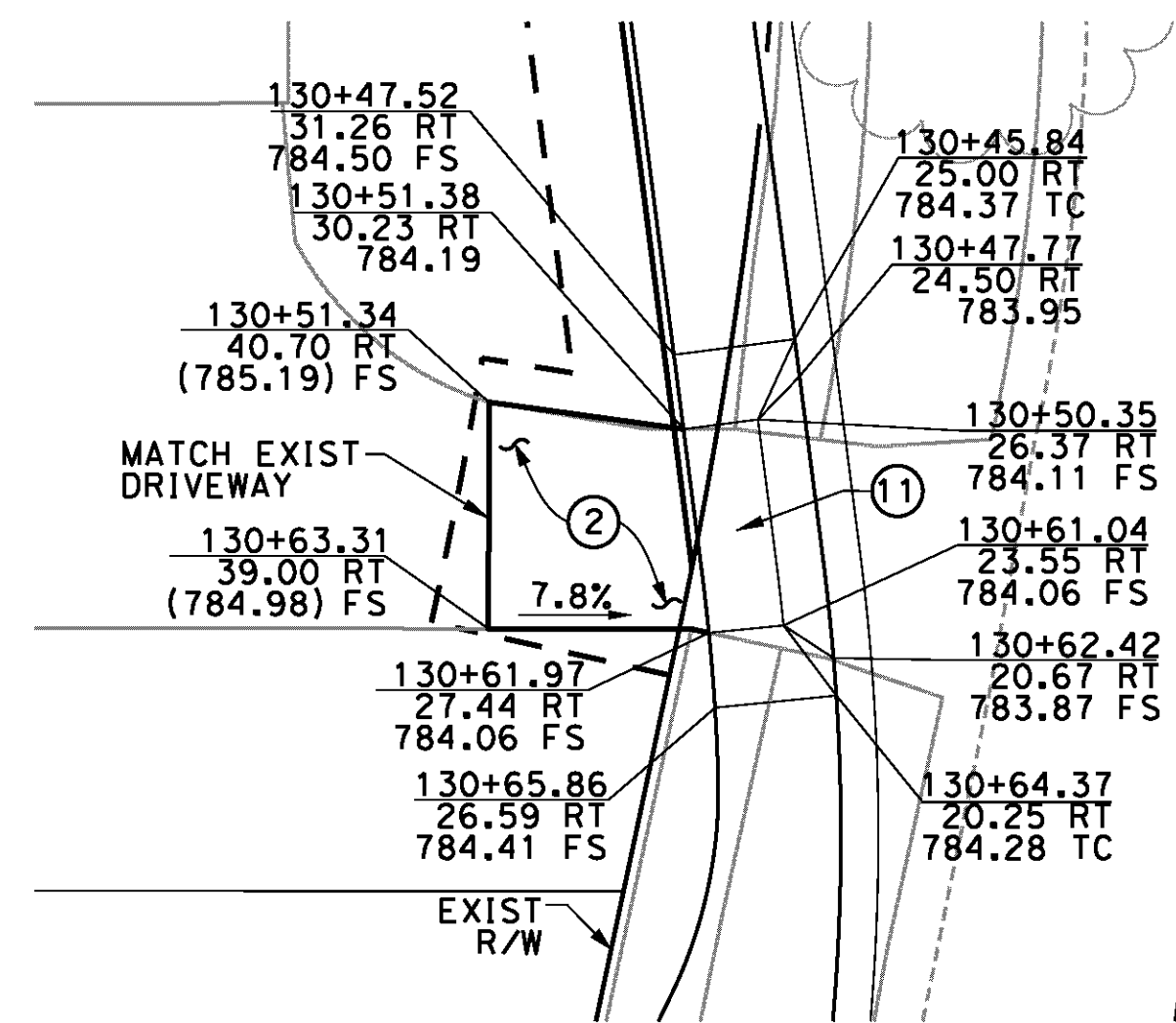
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
DRIVEWAY DETAILS CD-3

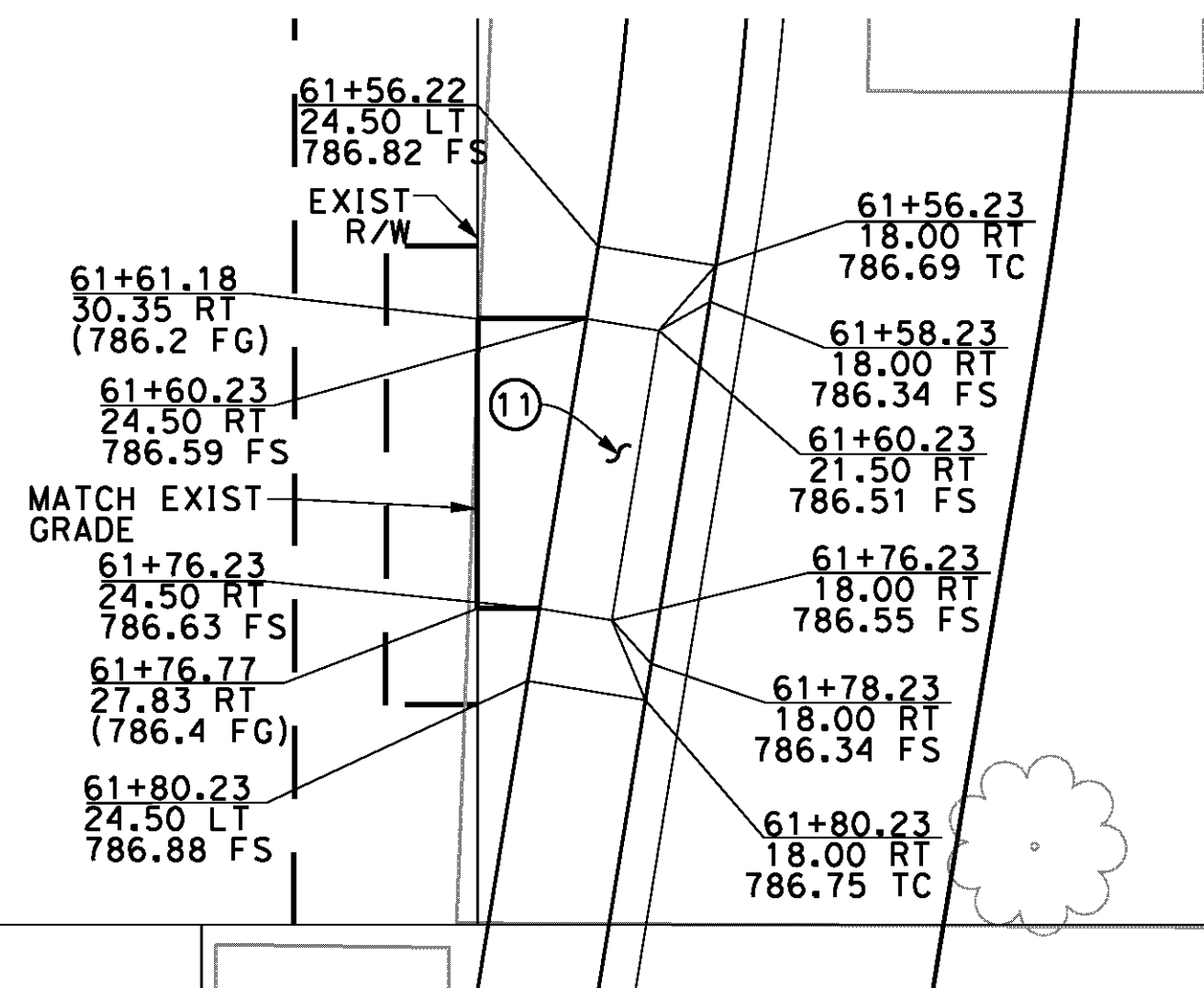
R-4180
SHEET **41** OF **191**
FILE NO.

DESIGNED BY FD DRAWN BY FD CHECKED BY RG HORIZ. SCALE: VERT. SCALE: N/A

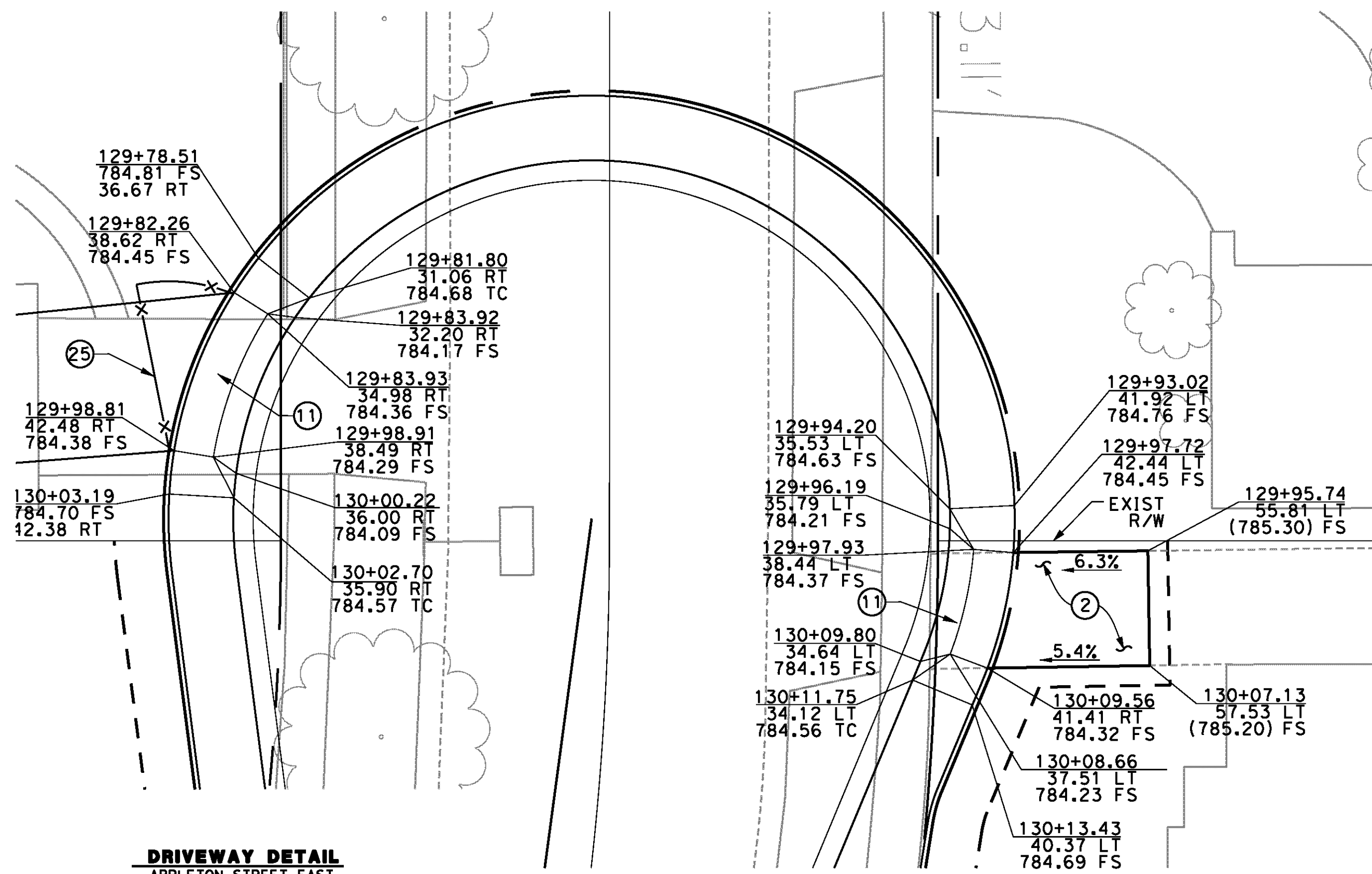
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DRIVEWAY DETAIL
APPLETON STREET EAST
130+55.70, 24.96 RT
SCALE: 1"=10'

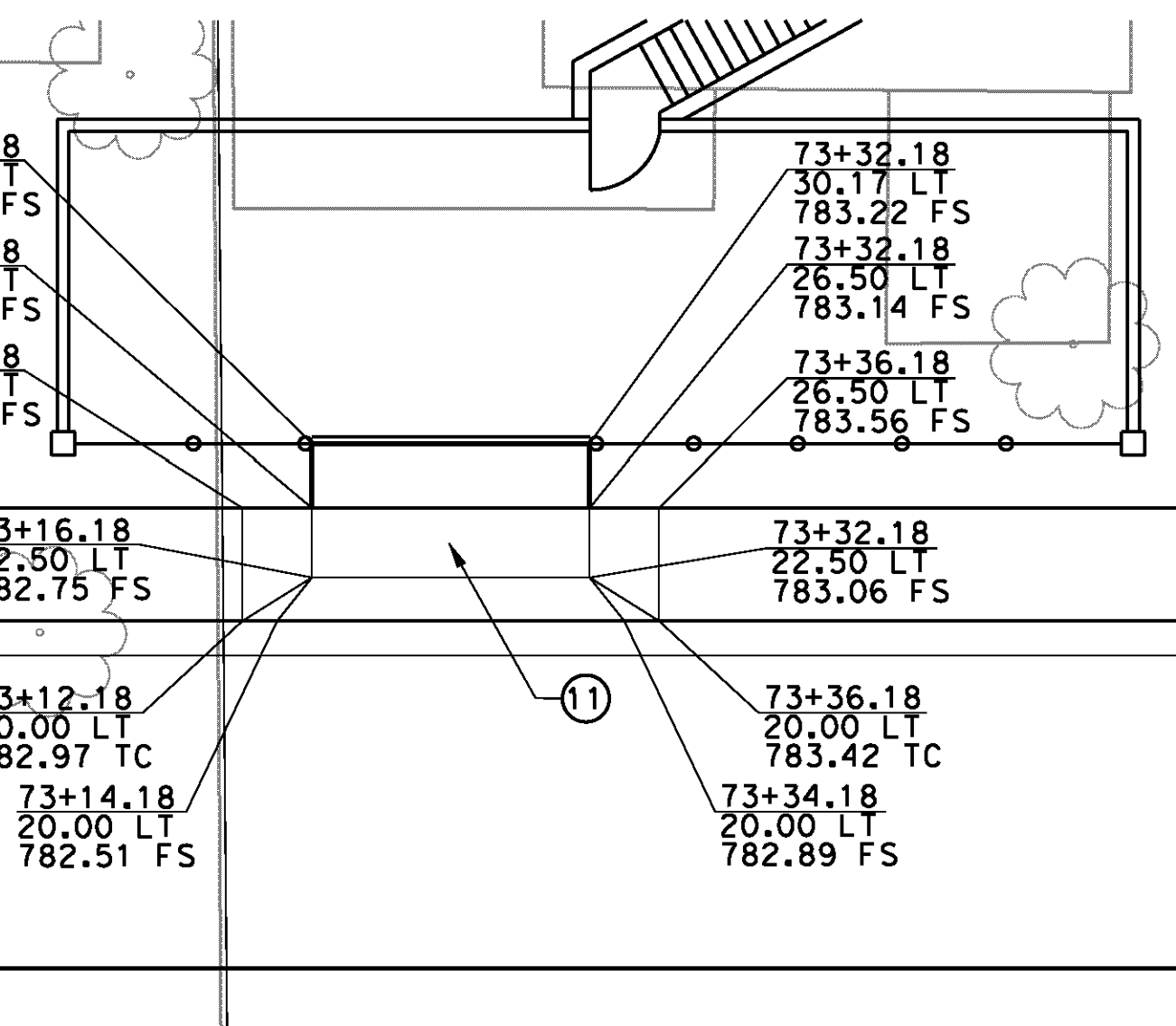


DRIVEWAY DETAIL
APPLETON STREET EAST
SOUTH SIDE CUL-DE-SAC
SCALE: 1"=10'

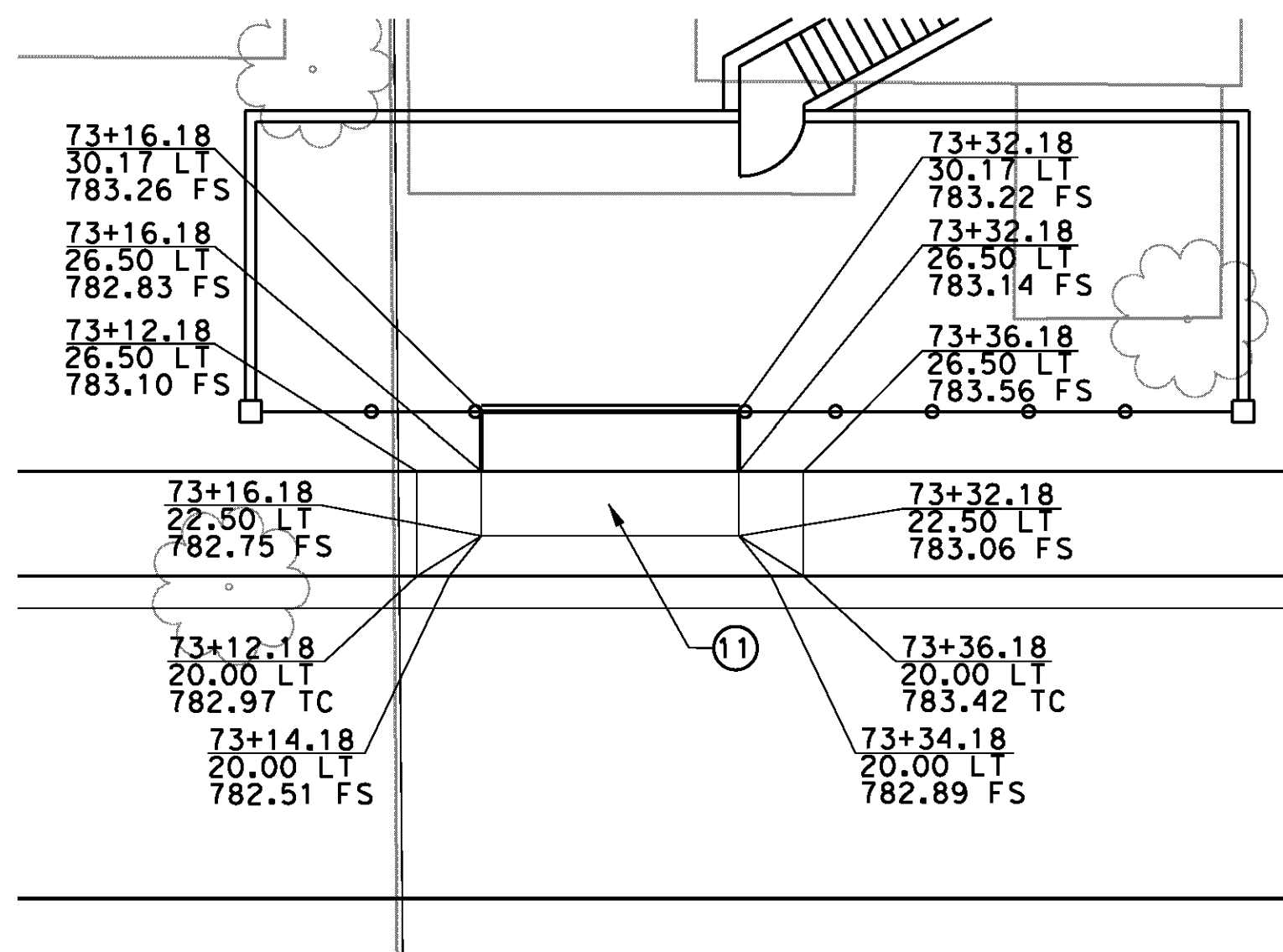


DRIVEWAY DETAIL
APPLETON STREET EAST
SOUTH SIDE CUL-DE-SAC
SCALE: 1"=10'

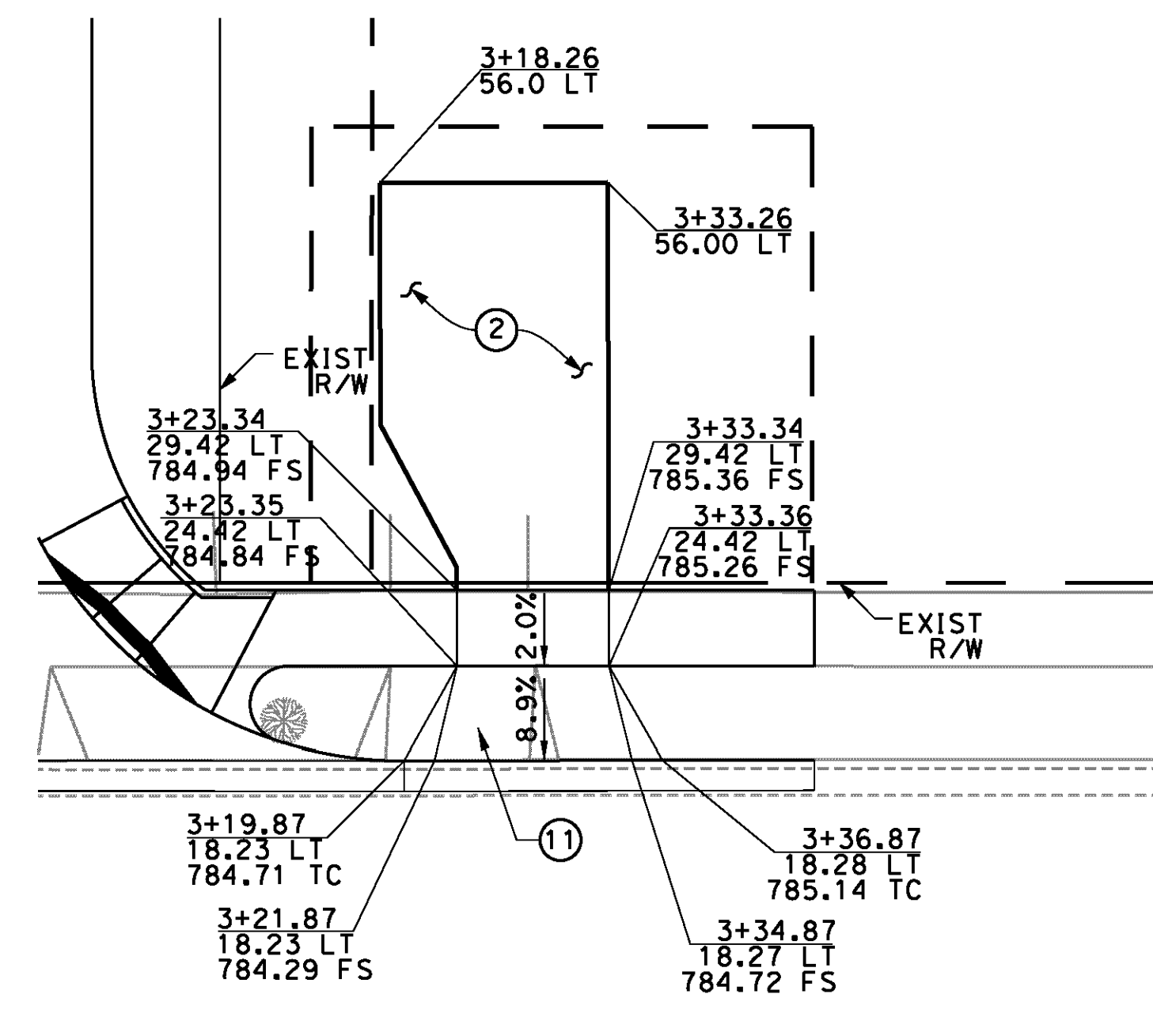
DRIVEWAY DETAIL
APPLETON STREET EAST
NORTH SIDE CUL-DE-SAC
SCALE: 1"=10'



DRIVEWAY DETAIL
LANTANA STREET
61+68.23, 20.50 RT
SCALE: 1"=10'



DRIVEWAY DETAIL
JERRY LOUDER DRIVE
73+18.85, 20.50 LT
SCALE: 1"=10'



DRIVEWAY DETAIL
BANNER COURT
3+28.36, 24.43 LT
SCALE: 1"=10'

CONSTRUCTION NOTES

- ② CONSTRUCT 6" PCC PAVEMENT
- ⑪ CONSTRUCT PCC RESIDENTIAL DRIVEWAY APPROACH PER CITY OF RIVERSIDE STD PLAN NO. 302
- ⑫ CONSTRUCT STANDARD PIPE GATE FOR ACCESS ROAD PER APWA STD PLAN NO. 602-3 (SINGLE GATE)

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

D:\Projects\1066_Street\Asgn\Contract_Plan\As-Construction\Detail\1066_cd04.dgn

IMPORTANT NOTICE
Section 4216.0217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

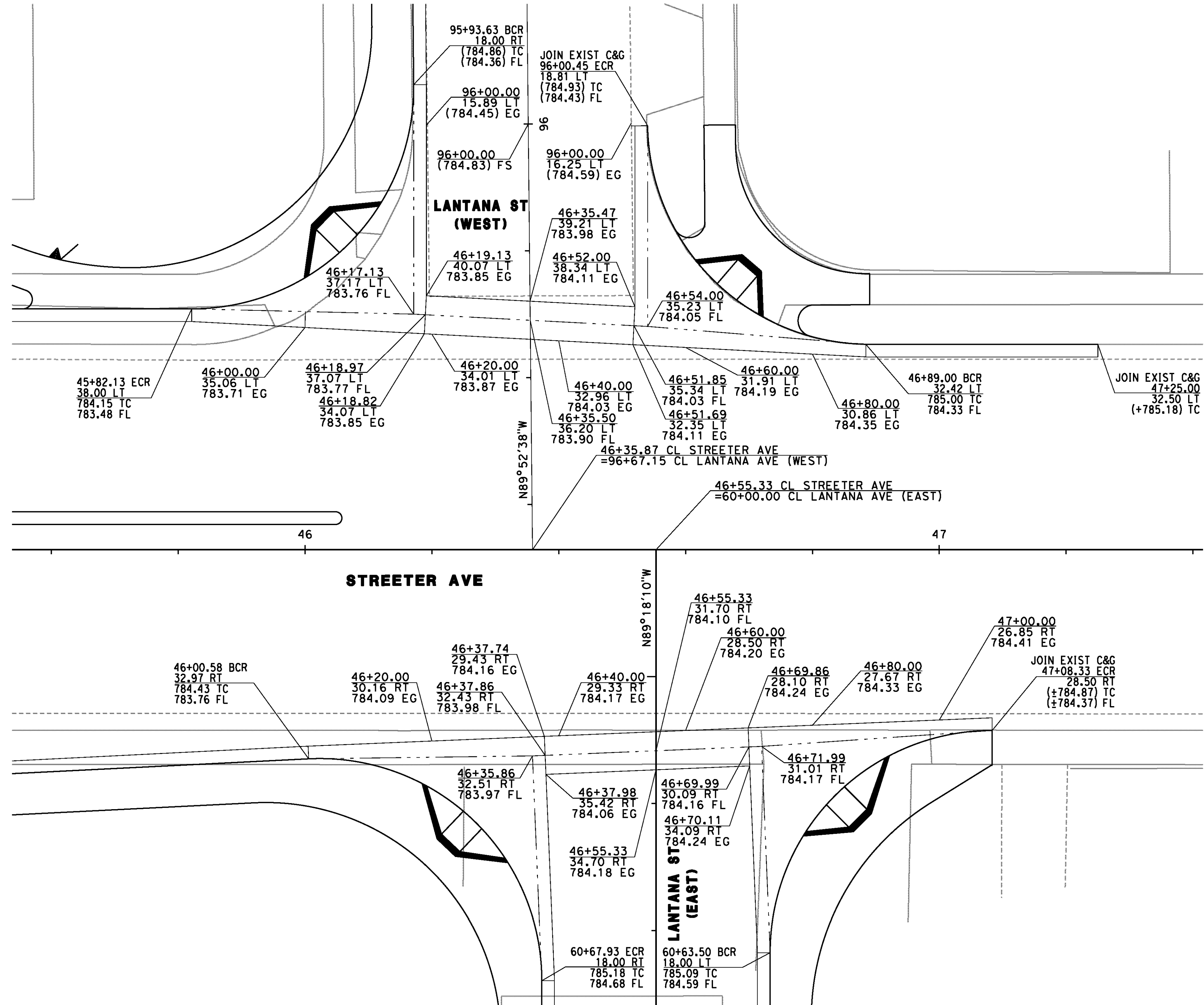
TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com

REGISTERED PROFESSIONAL ENGINEER
RIGOBERTO GONZALEZ
No. C56574
CLVLL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
DRIVEWAY DETAILS CD-4

R-4180
SHEET 42 OF 191
FILE NO.



CROSS GUTTER DETAIL
 STREETER AVENUE
 AT LANTANA ST
 SCALE: 1"=10'

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
 Section 4216.4217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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 RIVERSIDE, CA 92507
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REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
 No. C56574
 CIVIL
 STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

DESIGNED BY FP DRAWN BY FP CHECKED BY RG

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
CROSS GUTTER DETAILS CD-5

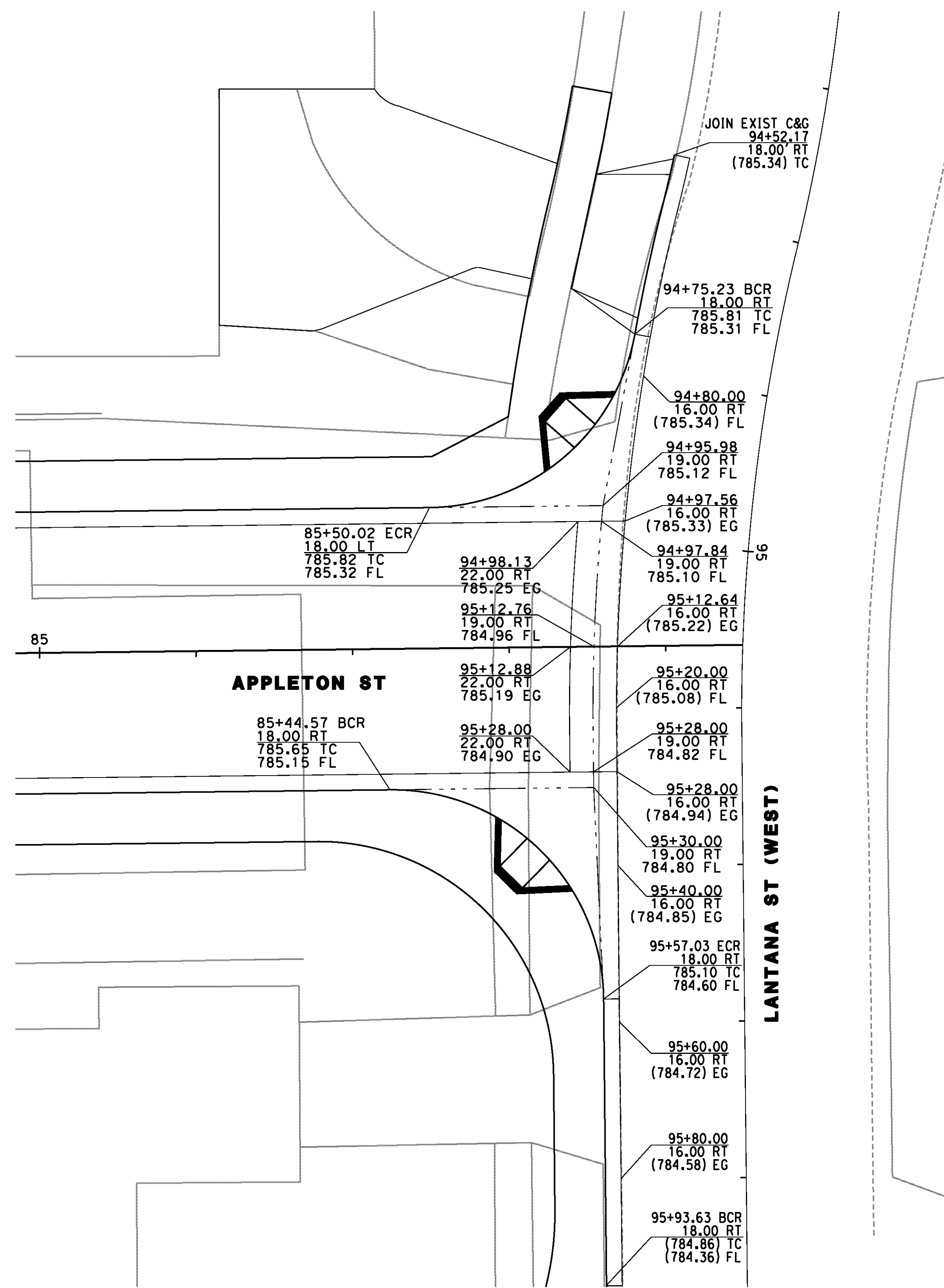
R-4180
 SHEET **43** OF **191**
 FILE NO.

HORIZ. SCALE: VERT. SCALE: N/A

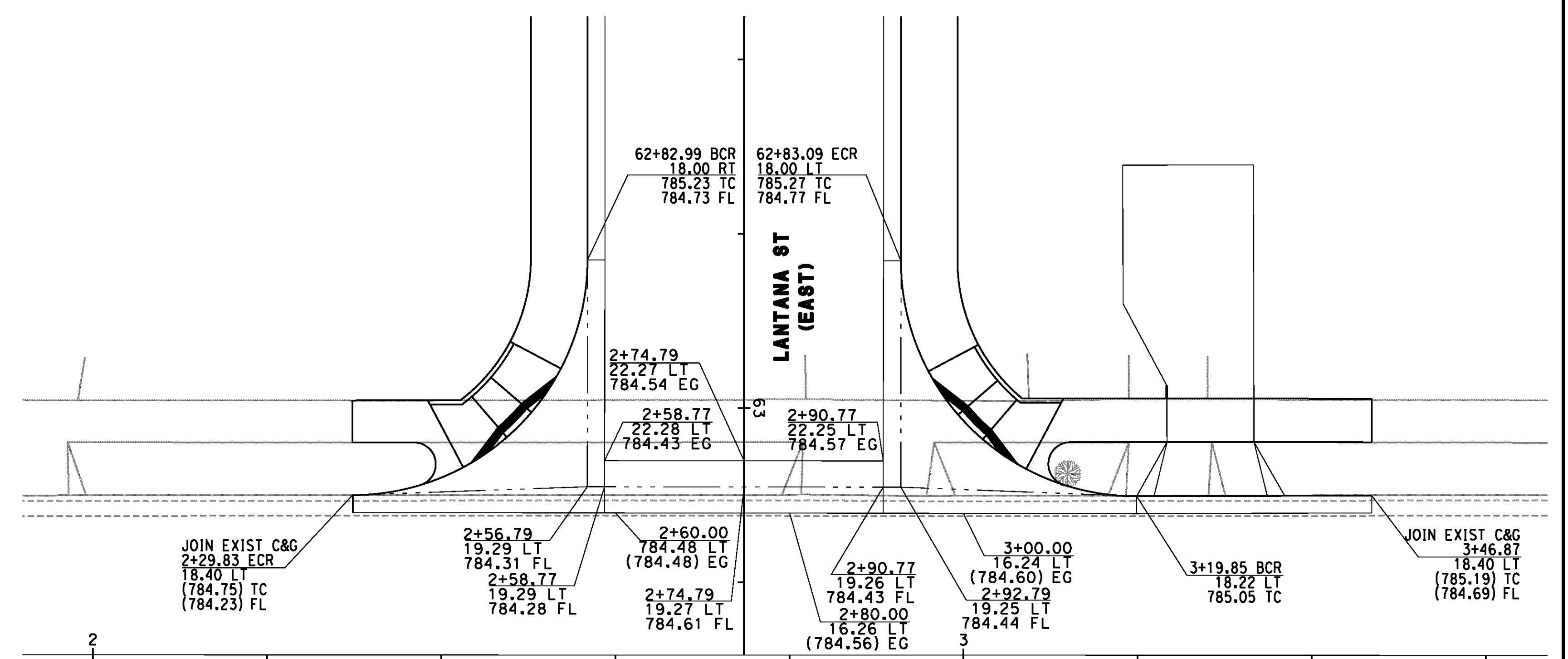
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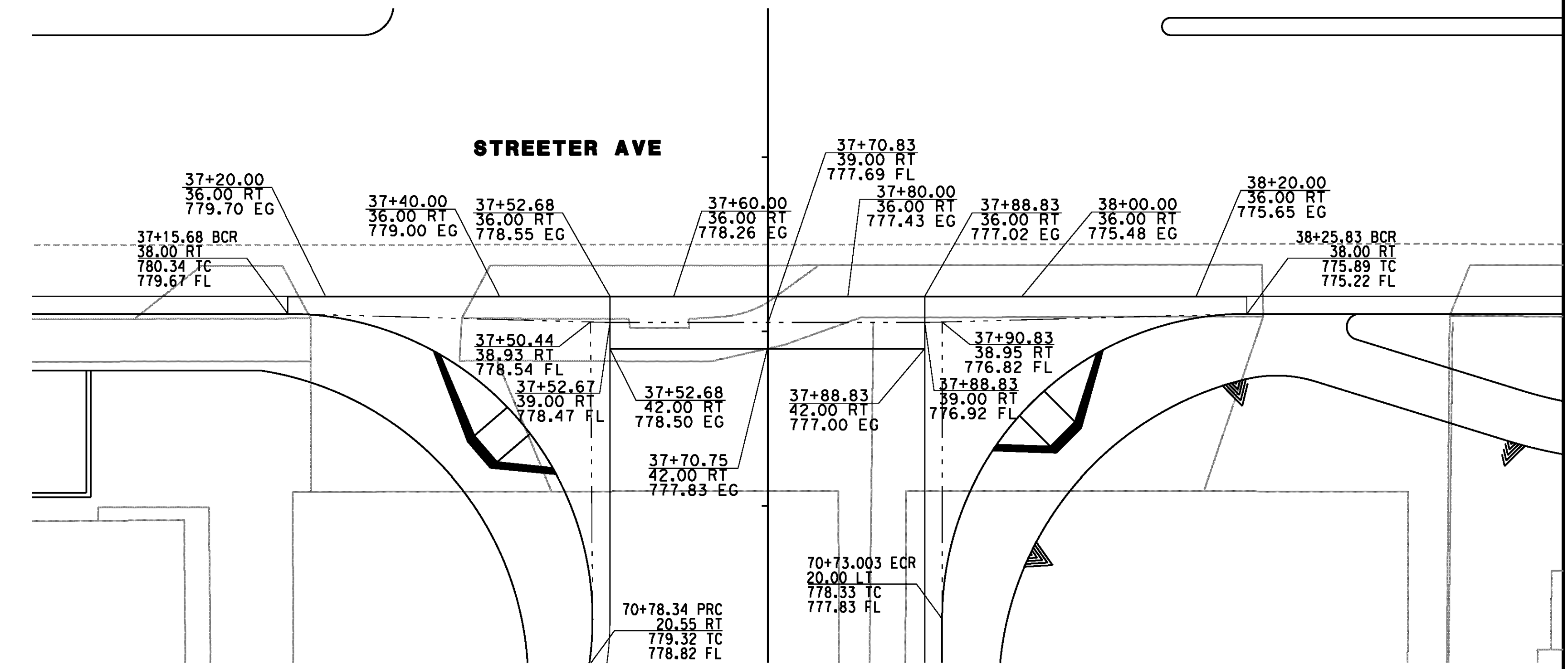
User: pboctor
 1066_cd05.dgn



CROSS GUTTER DETAIL
LANTANA AVE/APPLETON ST
SCALE: 1"=10'



CROSS GUTTER DETAIL
LANTANA AVE/BANNER CT
SCALE: 1"=10'



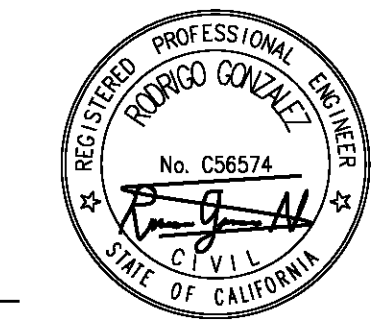
CROSS GUTTER DETAIL
JERRY LOUDER DR./STREETER AVE
SCALE: 1"=10'

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

D:\Projects\1066_Streeter\Drawings\1066_cd06.dgn

IMPORTANT NOTICE
Section 4316.0217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be issued. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

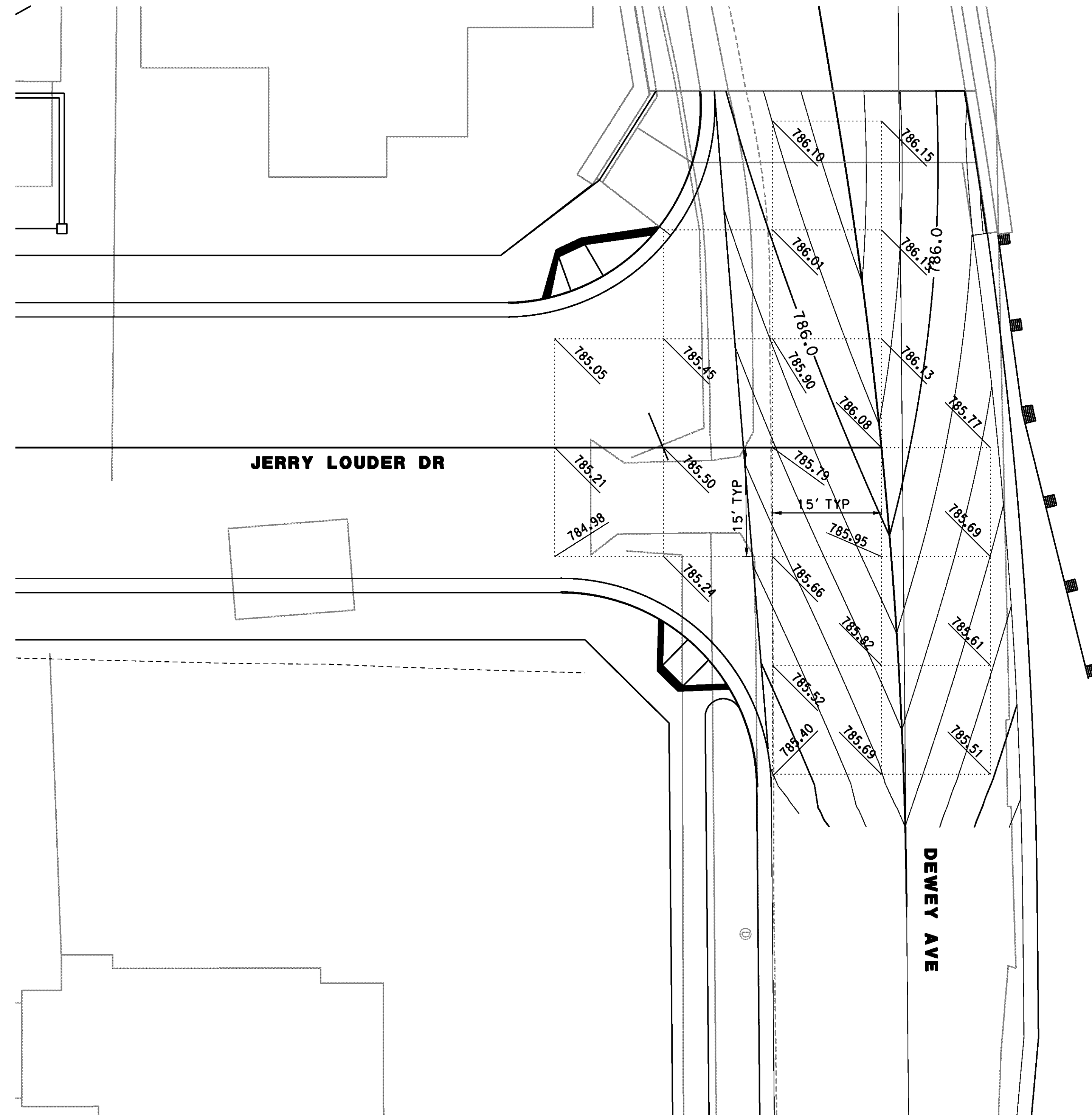
TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
CROSS GUTTER DETAILS CD-6

R-4180
SHEET **44** OF 191
FILE NO.



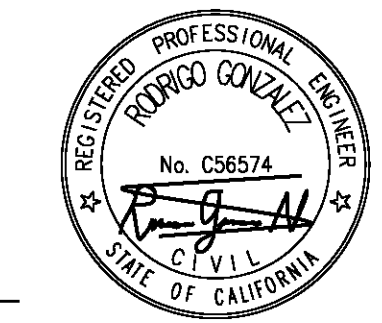
INTERSECTION DETAIL
 DEWEY AVENUE AT
 JERRY LOUDER DR
 SCALE: 1"=10'

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

D:\projects\1066_Street\ugm\Contract_Plan\ugm-Construction_details\sheet\1066_cd08.dgn

IMPORTANT NOTICE
 Section 4214.4217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

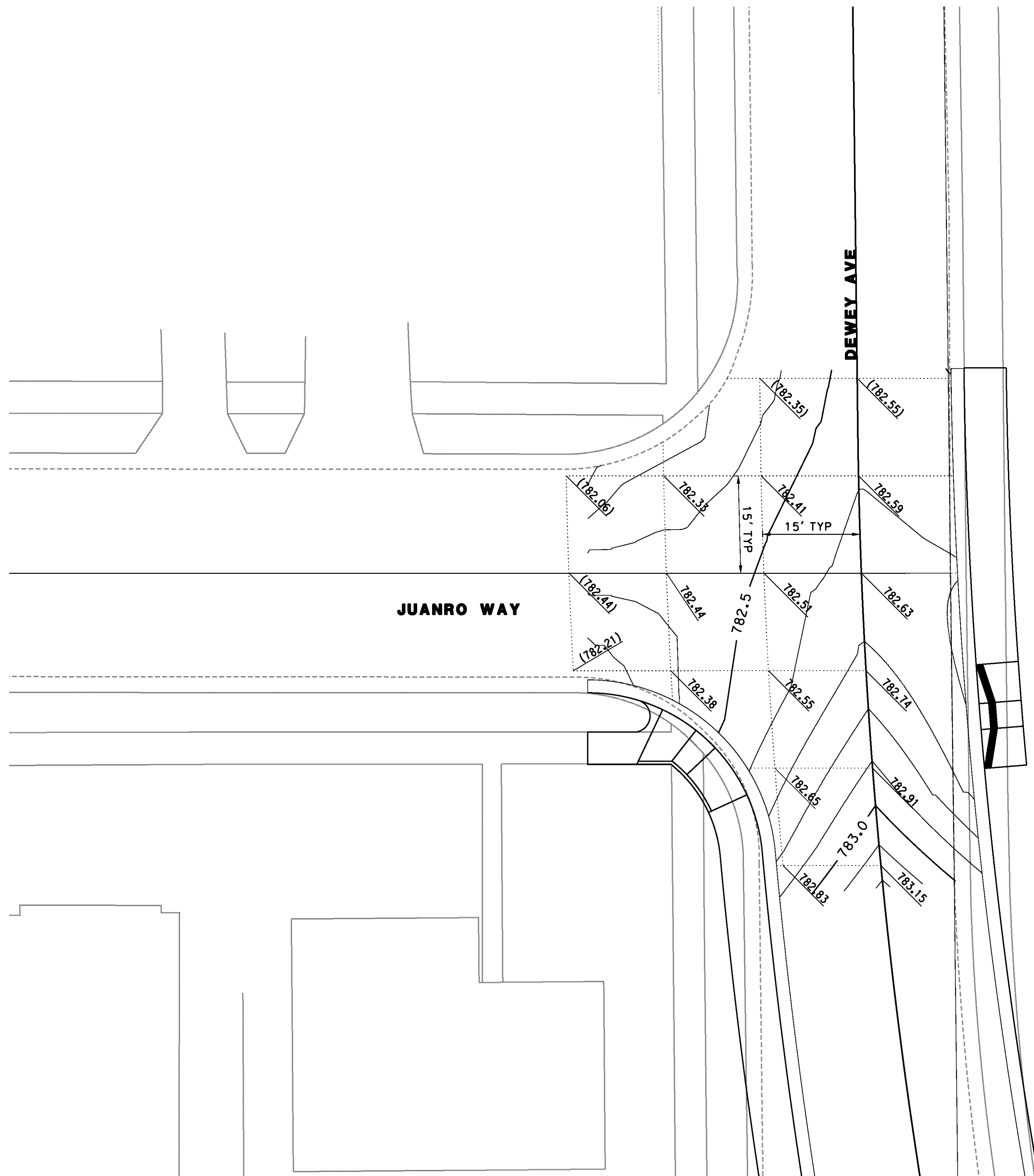
TYLIN INTERNATIONAL
 3550 VINE STREET, SUITE 120
 RIVERSIDE, CA 92507
 TEL (951) 788-4688
 www.tylin.com



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
INTERSECTION DETAIL CD-8

R-4180
 SHEET **46** OF 191
 FILE NO.



AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

D:\Projects\1066_Street\Asgn\Contract_Plan\As-Construction\Detail\Sheet\1066_cd09.dgn

IMPORTANT NOTICE
 Section 42164.217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Expose" will be void. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

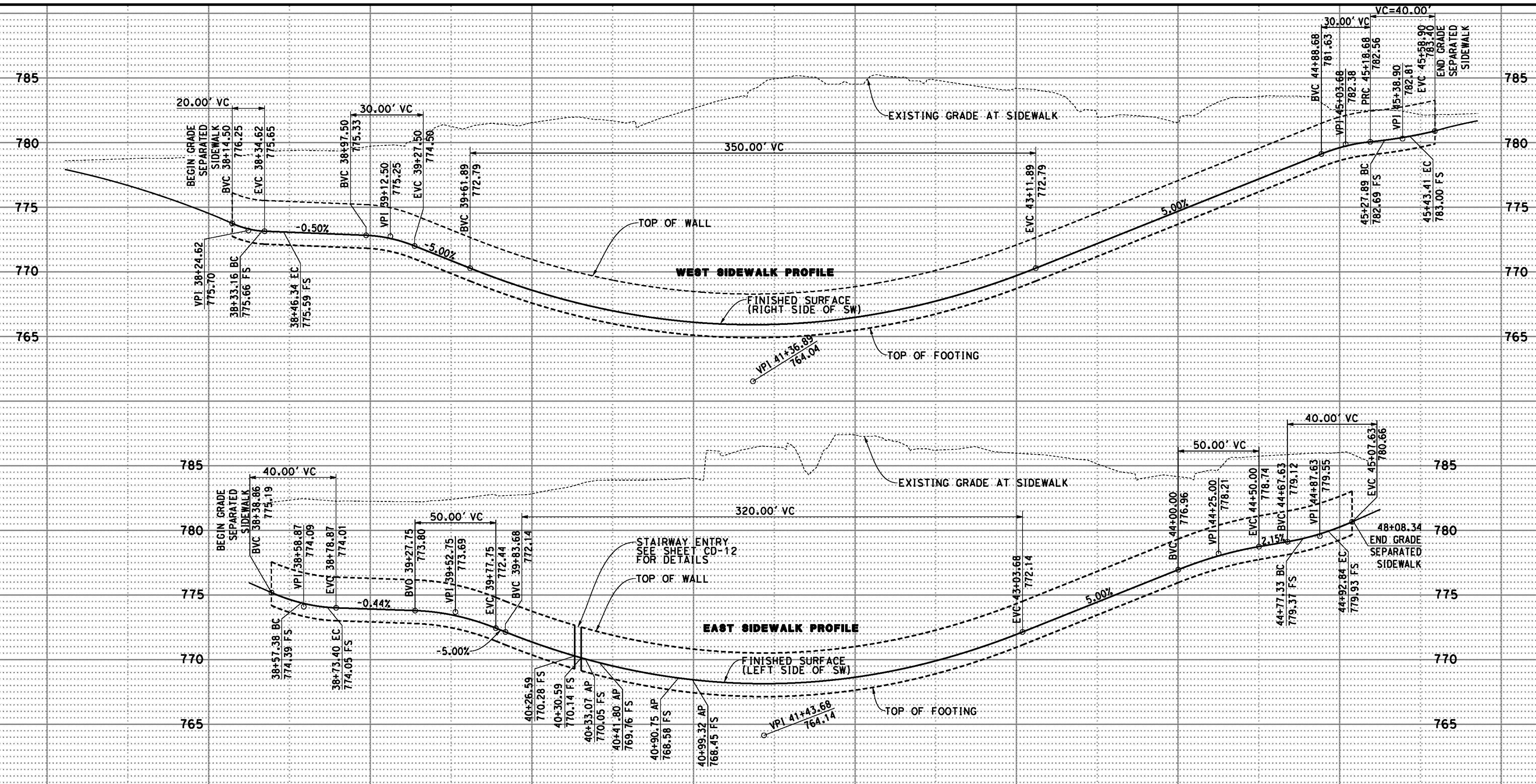
TYLIN INTERNATIONAL
 3550 VINE STREET, SUITE 120
 RIVERSIDE, CA 92507
 TEL (951) 788-4688
 www.tylin.com



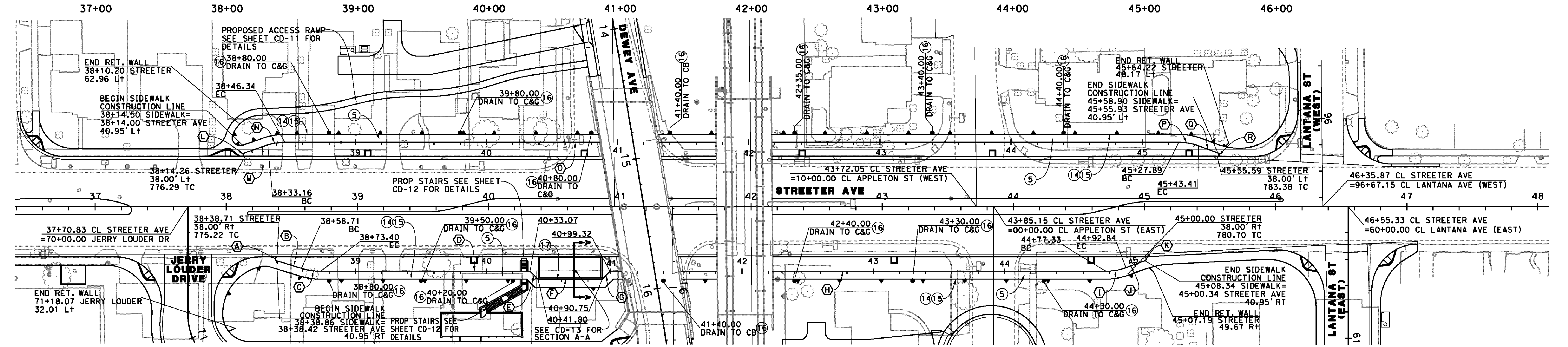
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
INTERSECTION DETAIL CD-9

R-4180
 SHEET **47** OF 191
 FILE NO.



SCALE
 Horiz: 1"=40'
 Vert: 1"=5'

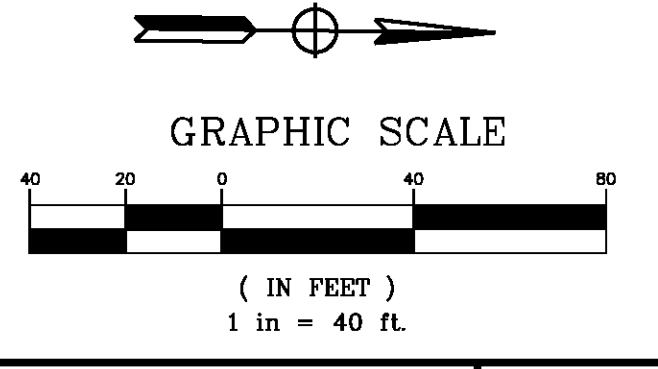


SIDEWALK LAYOUT LINE DATA

Δ	R	T	L	Δ	R	T	L
A	162°49'30"	1.50'	9.95'	4.26'	J	N19°30'39"W	--
B	N17°52'19"E	--	--	19.84'	K	159°47'32"	1.50'
C	17°10'29"	49.00'	7.40'	14.69'	L	162°49'31"	1.50'
D	N45°41'50"E	--	--	159.73'	M	N18°17'01"W	--
E	N45°41'50"E	--	--	8.74'	N	17°10'30"	44.00'
F	N0°41'50"E	--	--	48.92'	O	N00°41'50"	--
G	N45°11'3"W	--	--	8.60'	P	20°12'28"	44.00'
H	N0°41'50"E	--	--	383.09'	Q	N20°54'18"E	--
I	20°12'28"	44.00'	7.84'	15.52'	R	159°47'32"	1.50'

- CONSTRUCTION NOTES**
- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
 - ⑭ CONSTRUCT CONSTANT HEIGHT RETAINING WALL PER CONSTRUCTION DETAIL ON SHEET CD-13
 - ⑮ CONSTRUCT WALL GUTTER PER CALTRANS STD PLAN NO. B3-6 AND CONSTRUCTION DETAIL ON SHEET CD-13
 - ⑯ CONSTRUCT WALL DRAIN PER CALTRANS STD PLAN NO. B3-6 AND CONSTRUCTION DETAIL ON SHEET CD-13
 - ⑰ CONSTRUCT TYPE A HAND RAILING PER APWA STD PLAN NO. 606-3 ALL METAL HAND RAILINGS SHALL RECEIVE (2) COATS OF POLYURETHANE PAINT PER PROJECT SPECIFICATIONS

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAMMICHAEL WOLFF



IMPORTANT NOTICE
 Section 53164.013 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be issued. For your Dig Alert ID, Member cost CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
 3550 VINE STREET, SUITE 120
 RIVERSIDE, CA 92507
 TEL (951) 788-4688
 www.tylin.com DATE 8-7-12



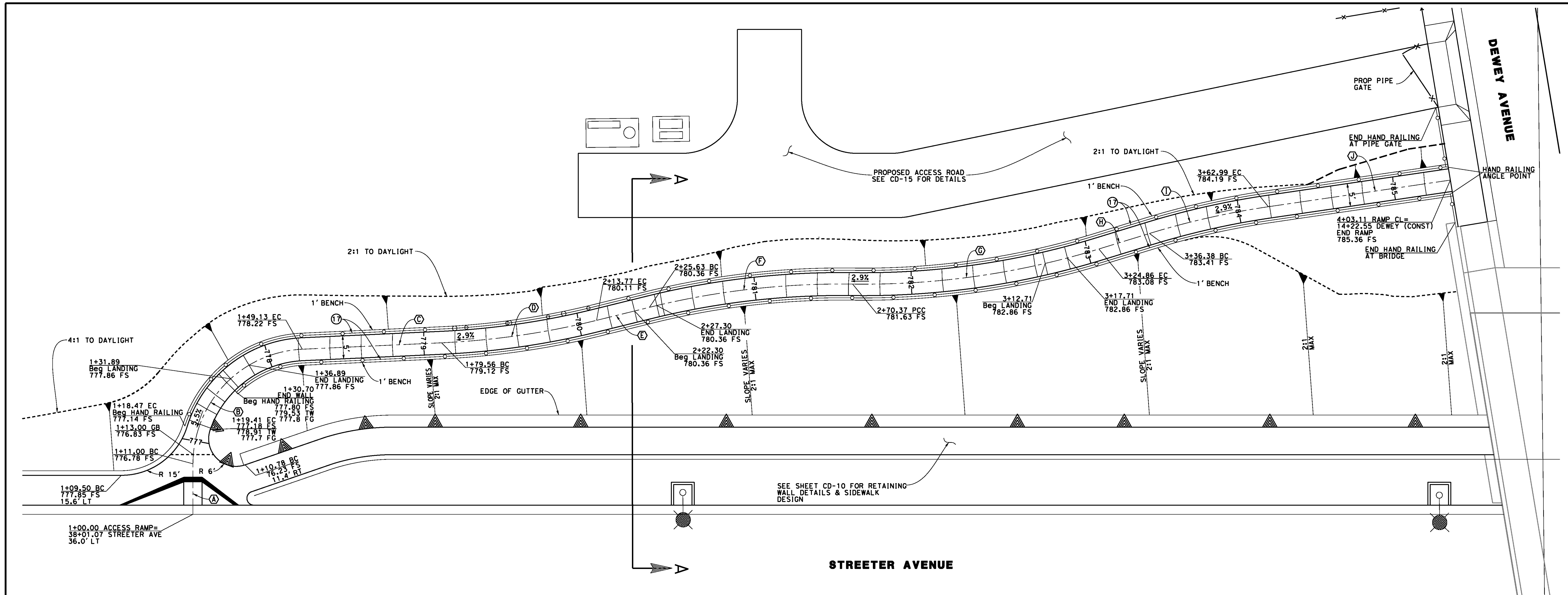
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SIDEWALK & RET. WALL DETAILS CD-10
 SHEET 48 OF 191
 R-4180
 HORIZ. SCALE: VERT. SCALE: N/A
 FILE NO.

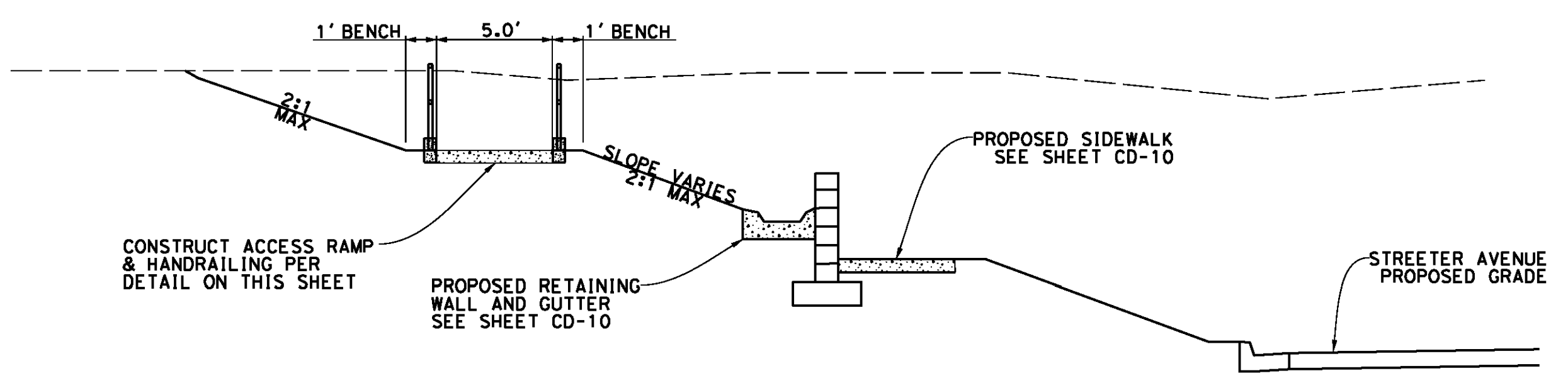
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DATE: 8/8/2012
 TIME: 6:31:24 PM

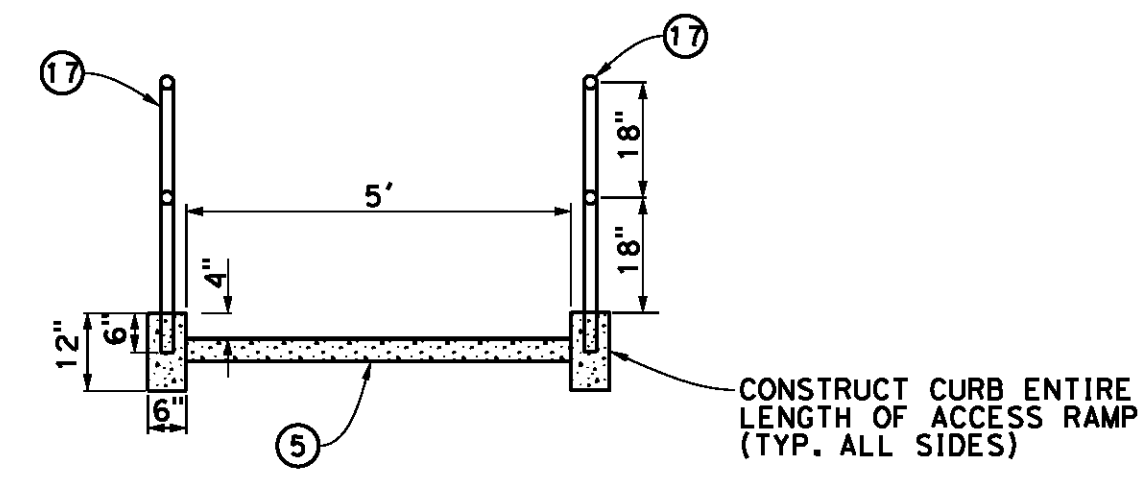
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ACCESS RAMP DETAIL
SCALE 1"=10'



SECTION A-A
NTS



ACCESS RAMP DETAIL
NTS

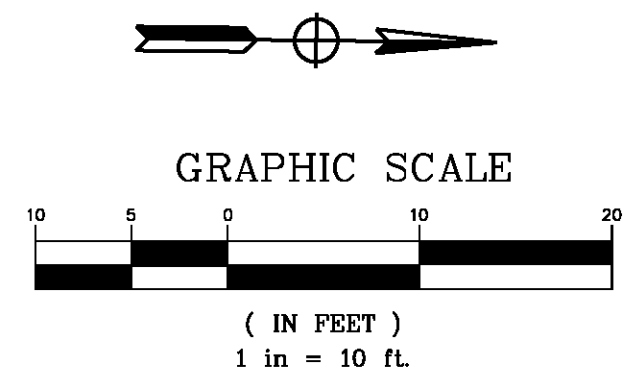
CONSTRUCTION NOTES

- ⑤ CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- ⑰ CONSTRUCT TYPE A HAND RAILING PER APWA STD PLAN NO. 606-3 ALL METAL HAND RAILING SHALL RECEIVE (2) COATS OF POLYURETHANE PAINT PER PROJECT SPECIFICATIONS

RAMP CENTERLINE DATA

Station	Δ	R	T	L
A	N89°18'10"W	--	--	11.00'
B	87°21'36"	25.00'	23.87'	38.12'
C	N01°56'35"W	--	--	20.16'
D	11°12'01"	175.00'	--	34.20'
E	N13°08'36"W	--	--	11.87'
F	14°38'54"	175.00'	22.50'	44.74'
G	17°50'21"	175.00'	27.47'	54.49'
H	N16°20'20"W	--	--	11.52'
I	8°42'39"	175.00'	13.32'	26.60'
J	N07°37'24"W	--	--	40.12'

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF



IMPORTANT NOTICE
Section 4214.0217 of the Government Code requires a Dig Alert identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com

REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
No. C56574
CIVIL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
ACCESS RAMP DETAIL CD-11

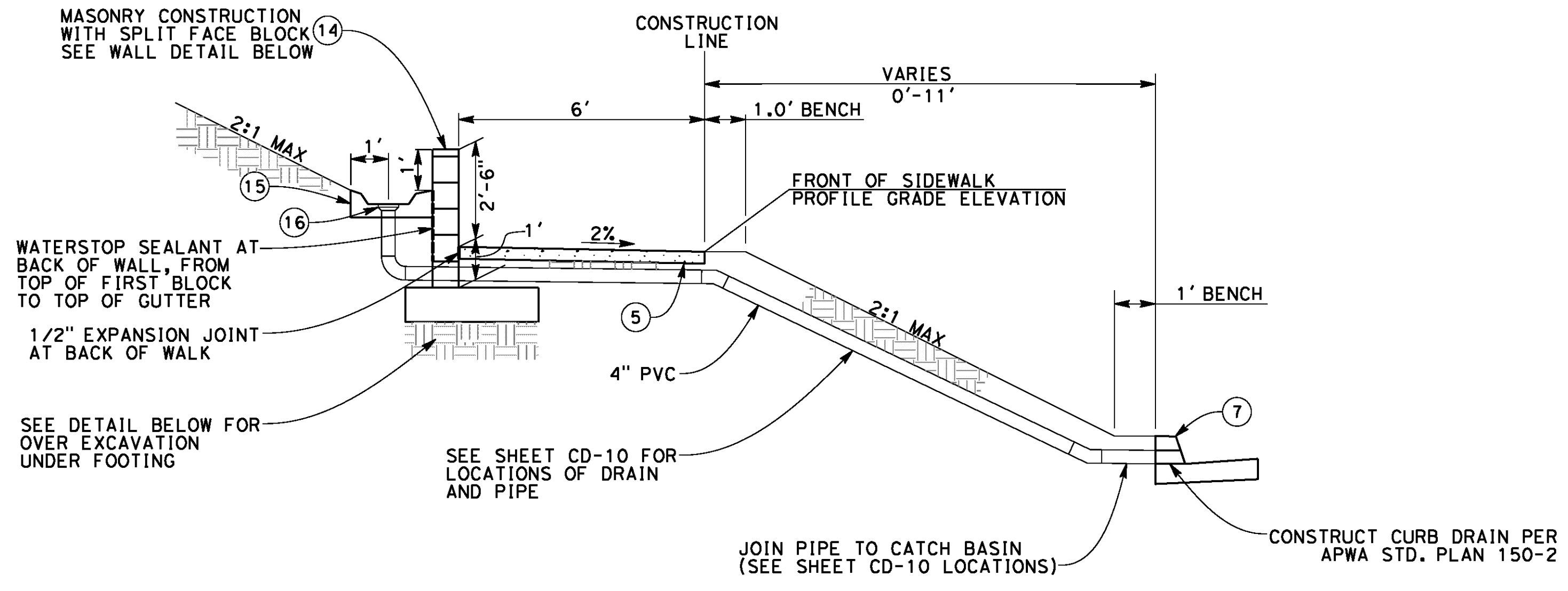
R-4180
SHEET **49** OF **191**
FILE NO.

DESIGNED BY FD DRAWN BY FD CHECKED BY RG HORIZ. SCALE: VERT. SCALE: N/A

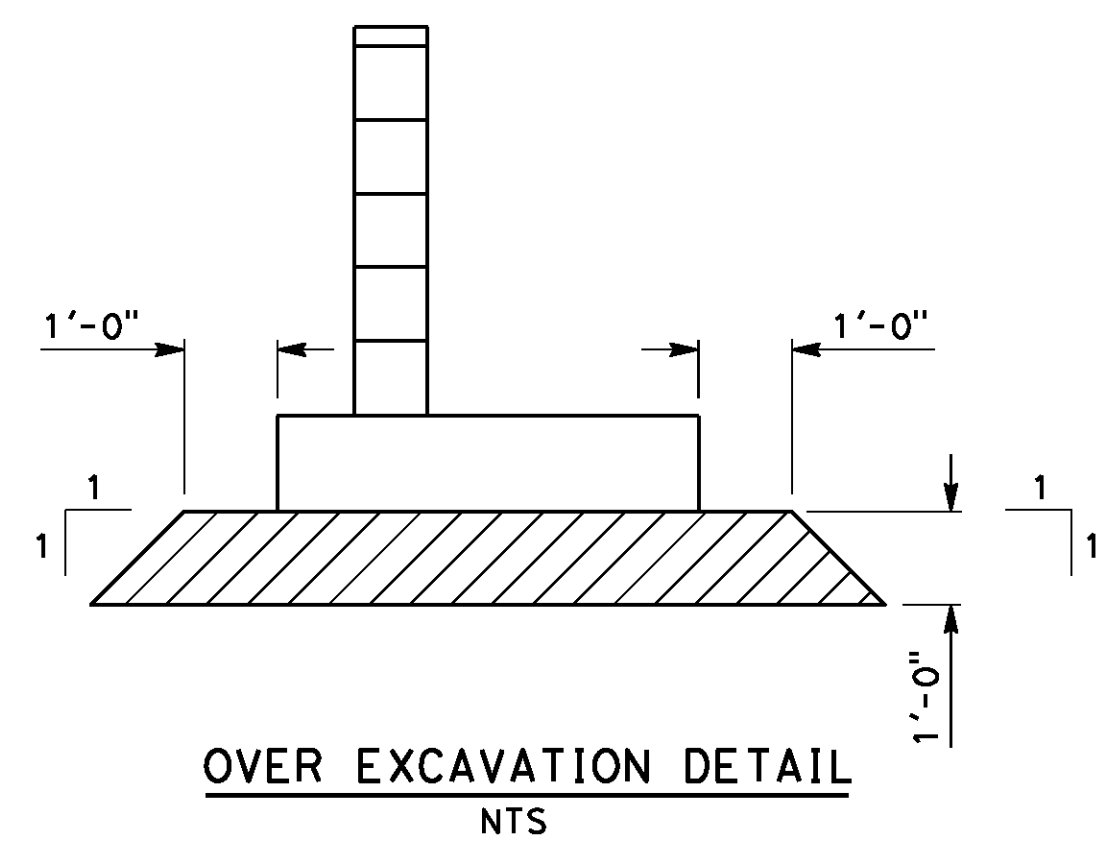
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DATE: 8/8/2012
TIME: 6:31:46 PM

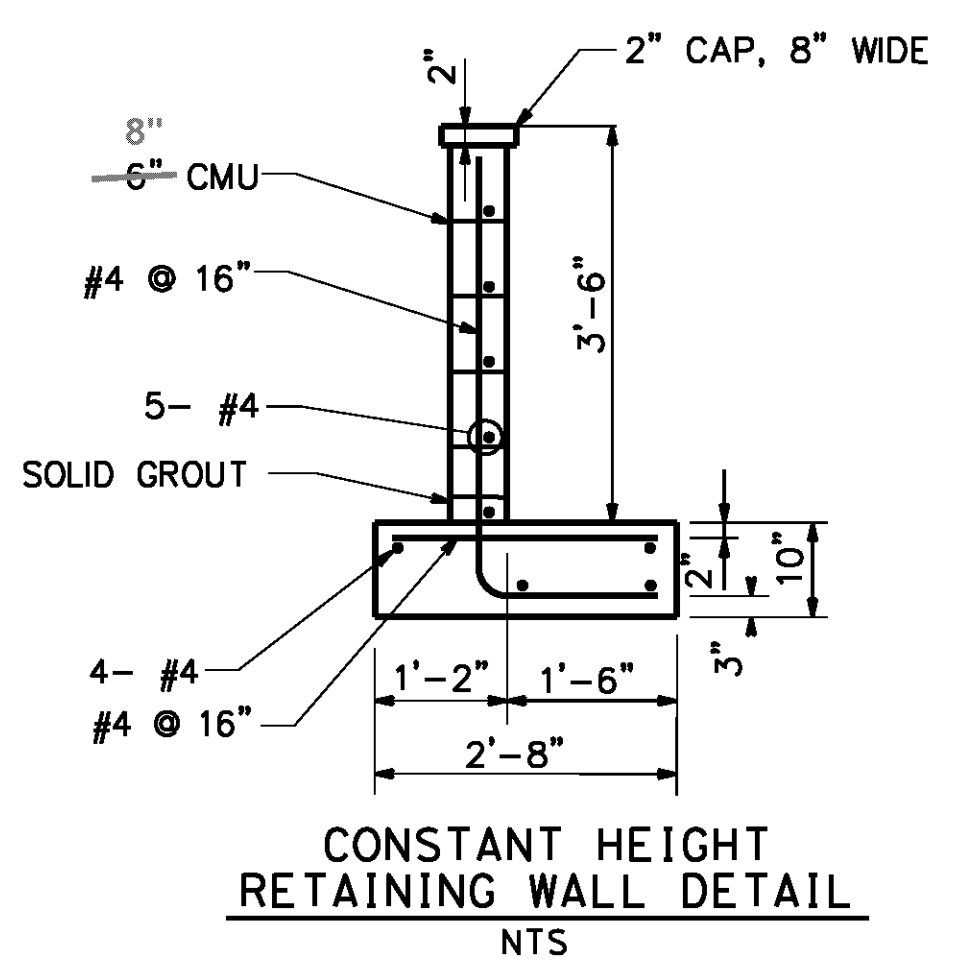
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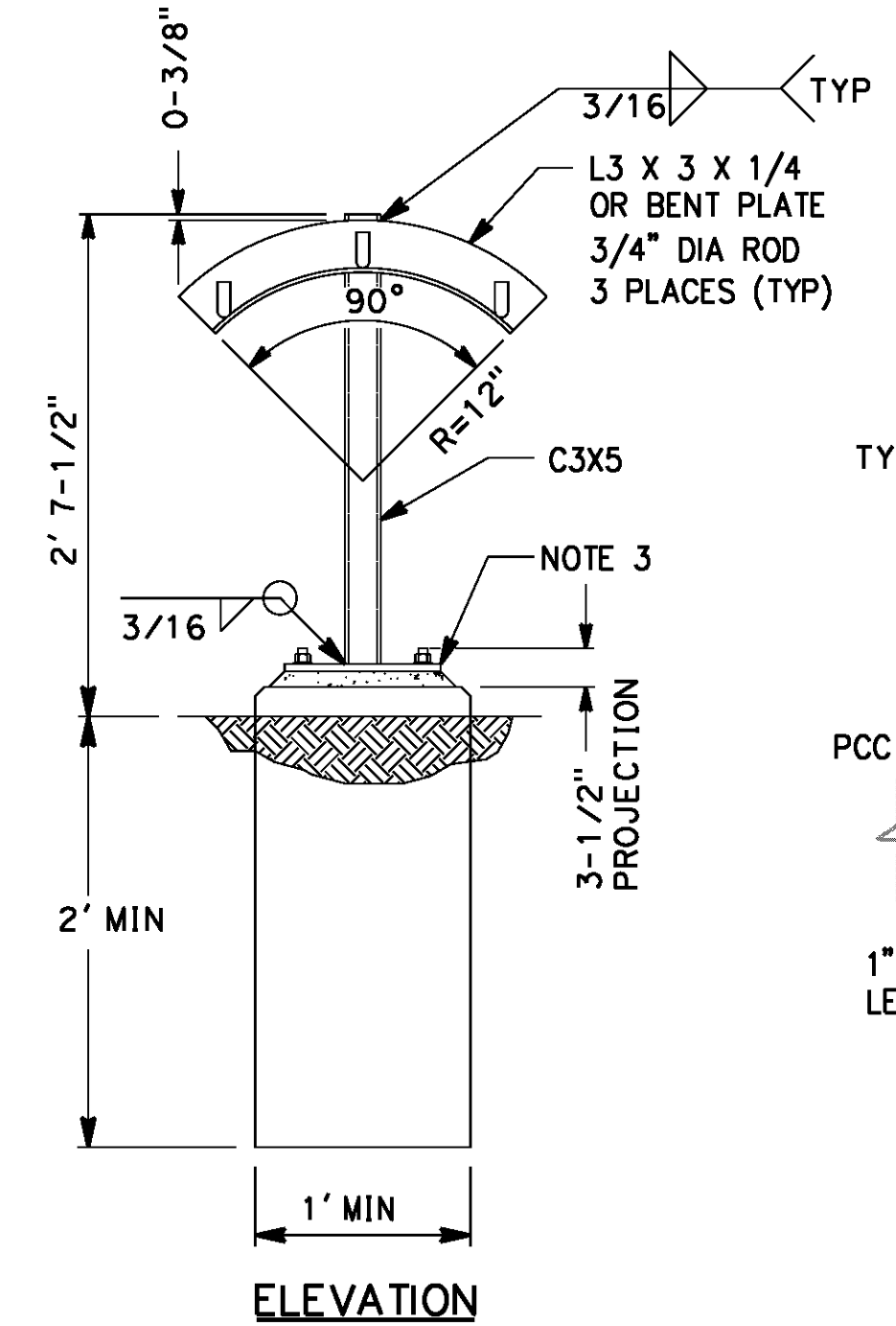
RETAINING WALL SECTION
NTS



OVER EXCAVATION DETAIL
NTS



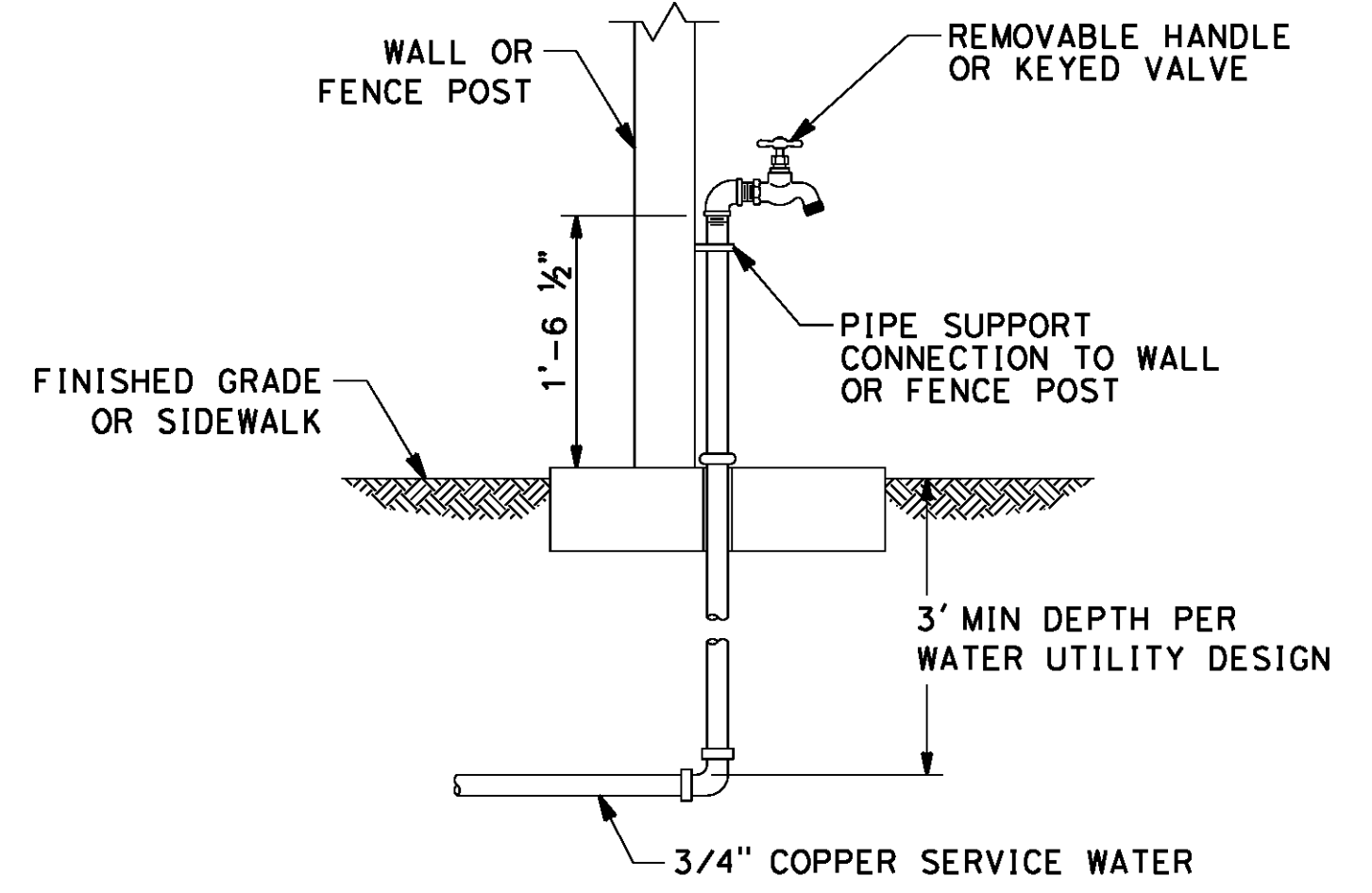
CONSTANT HEIGHT RETAINING WALL DETAIL
NTS



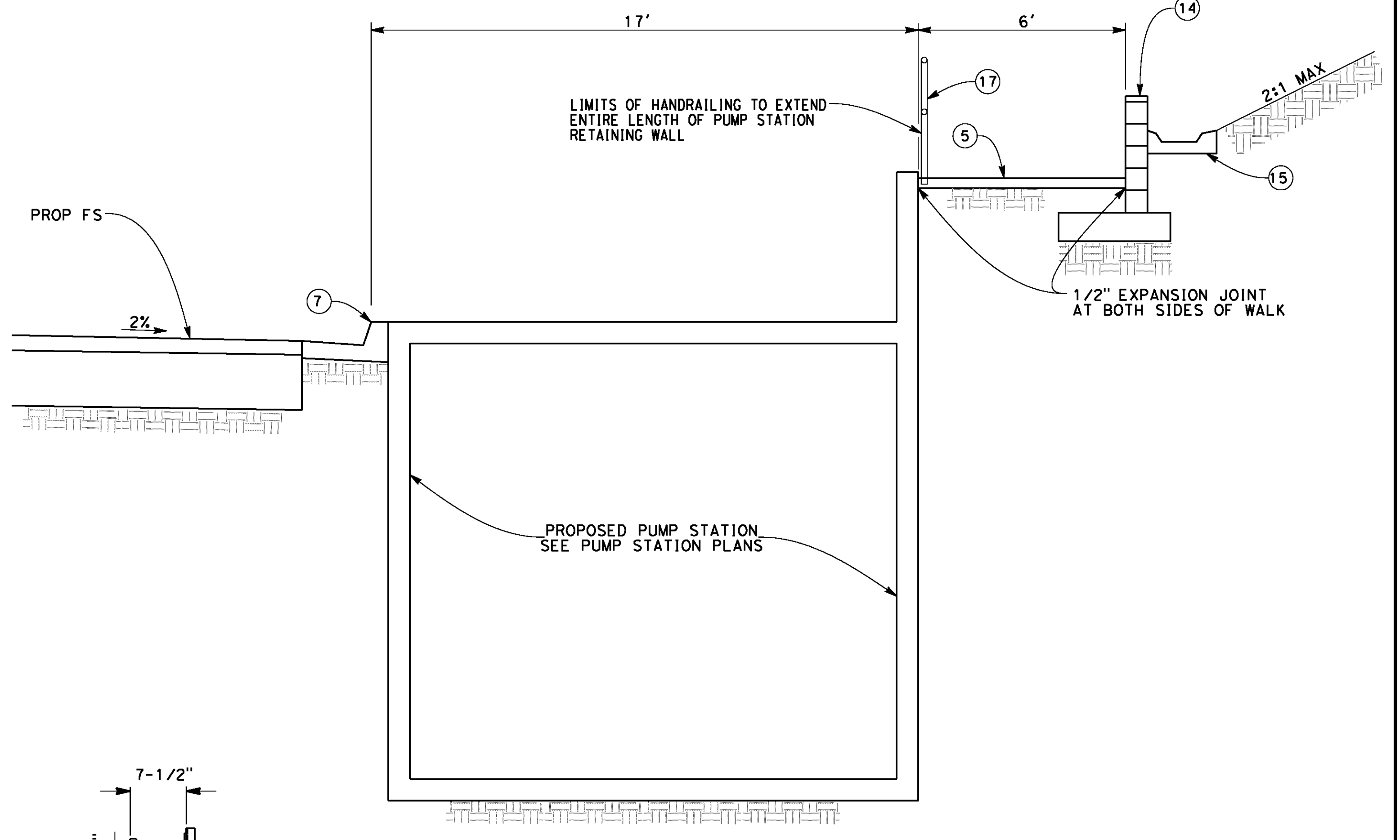
ELEVATION
NTS

- NOTES:**
1. HOT DIP GALVANIZE AFTER FABRICATION.
 2. 1/2" X 8" X 8" STEEL PLATE W/HOLES FOR 3/4" DIA ANCHOR RODS.
 3. PROVIDE (4) 3/4" DIA X 1'-2" SST 316 HEADED ANCHOR RODS.

LIGHT DUTY YARD HOSE RACK
NTS



HOSE BIB & WASHDOWN
NTS



SECTION A-A (SEE CD-10)
NTS

CONSTRUCTION NOTES

- (5) CONSTRUCT 4" PCC SIDEWALK PER CITY OF RIVERSIDE STD PLAN NO. 325
- (7) CONSTRUCT TYPE I - 8" CURB AND GUTTER PER CITY OF RIVERSIDE STD PLAN NO. 200
- (14) CONSTRUCT CONSTANT HEIGHT RETAINING WALL PER CONSTRUCTION DETAIL ON THIS SHEET
- (15) CONSTRUCT WALL GUTTER PER CALTRANS STD PLAN NO. B3-6 AND CONSTRUCTION DETAIL ON THIS SHEET
- (16) CONSTRUCT WALL DRAIN PER CALTRANS STD PLAN NO. B3-6 AND CONSTRUCTION DETAIL ON THIS SHEET
- (17) CONSTRUCT TYPE A HAND RAILING PER APWA STD PLAN NO. 606-3 ALL METAL HAND RAILING SHALL RECEIVE (2) COATS OF POLYURETHANE PAINT PER PROJECT SPECIFICATIONS

AS BUILT
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

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DATE: 8/8/2012
TIME: 6:32:31 PM

IMPORTANT NOTICE
Section 4216.4217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com
DATE 8-7-12

REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
No. C56574
CLVLL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

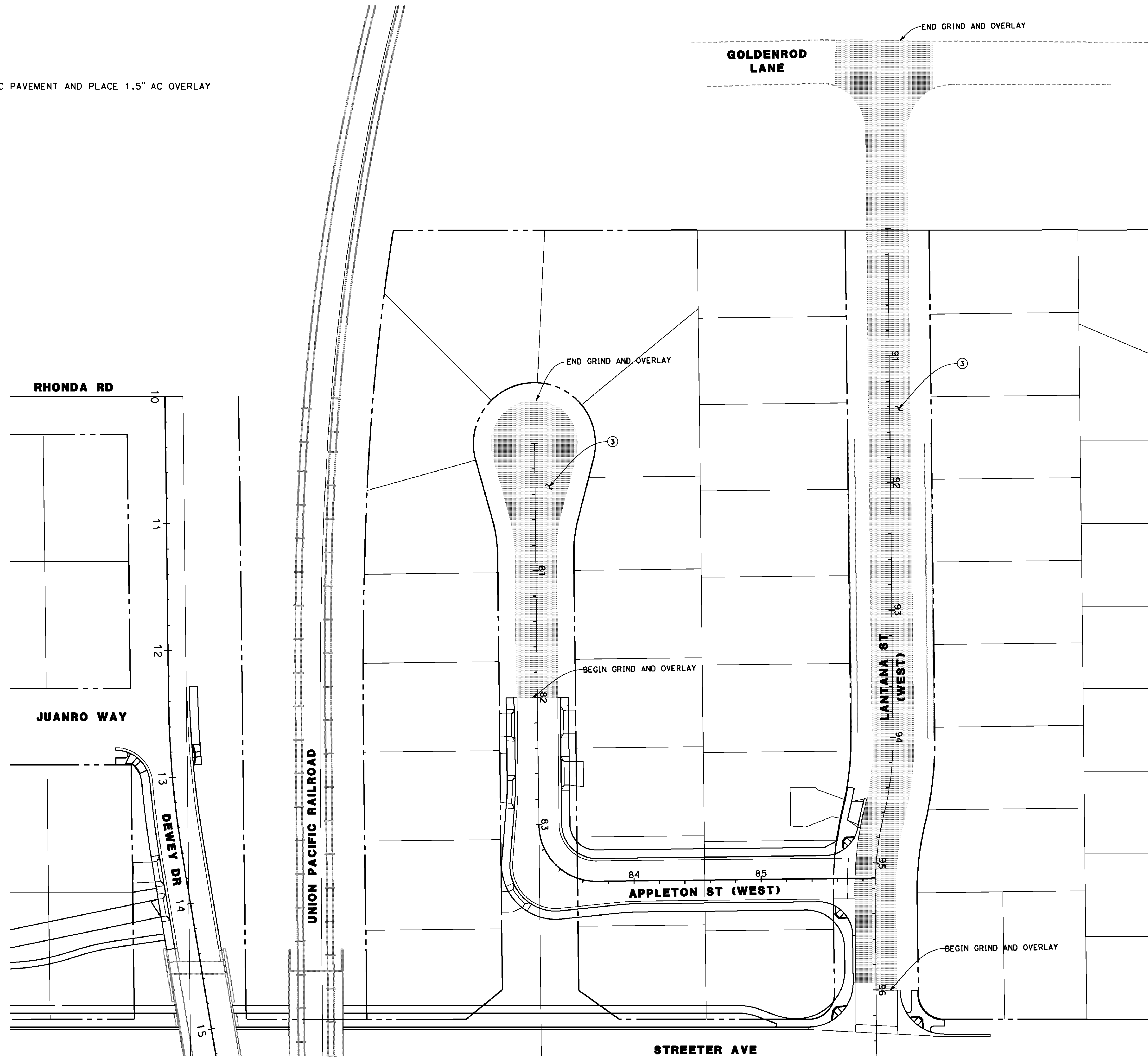
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SECTIONS AND DETAILS CD-13
HORIZ. SCALE: VERT. SCALE: N/A

R-4180
SHEET 51 OF 191
FILE NO.

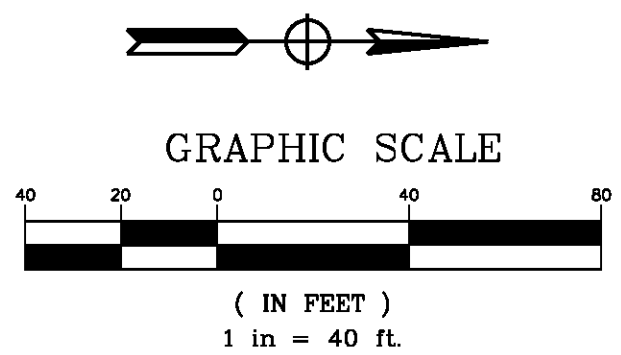
Users: pboctor
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CONSTRUCTION NOTES

- ③ COLD MILL 1.5" MIN. EXISTING AC PAVEMENT AND PLACE 1.5" AC OVERLAY

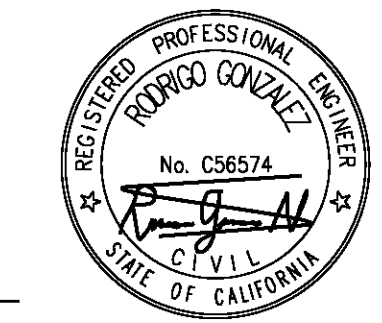


AS BUILT
(NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF



IMPORTANT NOTICE
 Section 41161-4217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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 RIVERSIDE, CA 92507
 TEL (951) 788-4688
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 DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

DESIGNED BY FD DRAWN BY FD CHECKED BY RG

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PAVEMENT REHABILITATION CD-14

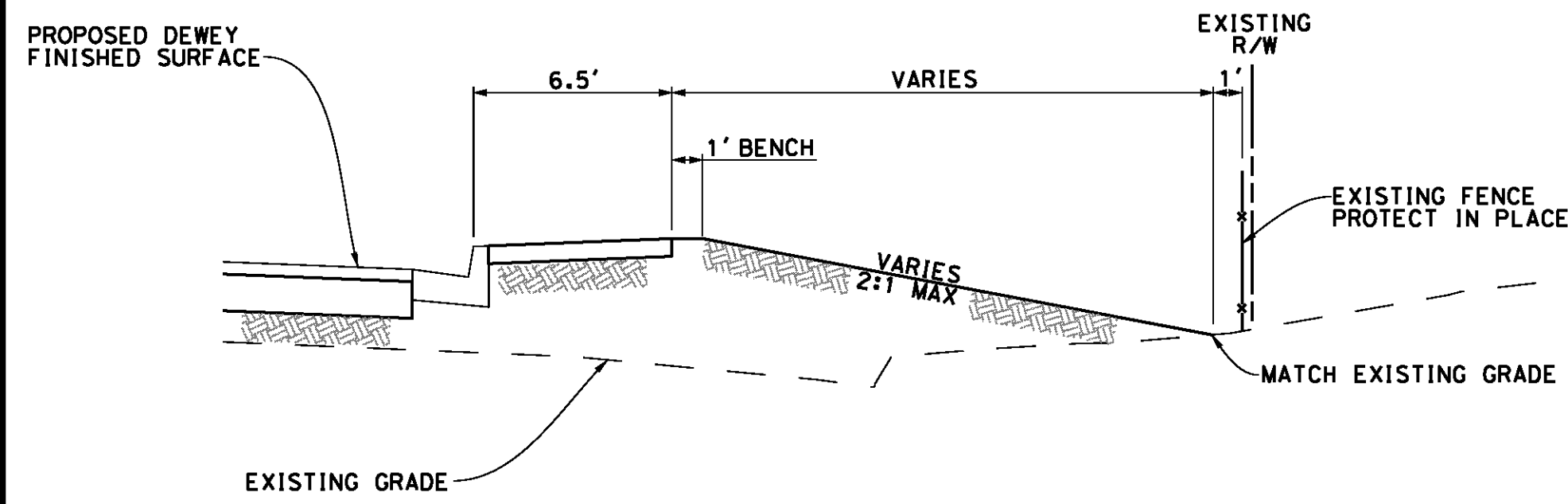
R-4180
 SHEET **52** OF **191**
 FILE NO.

HORIZ. SCALE: VERT. SCALE: N/A

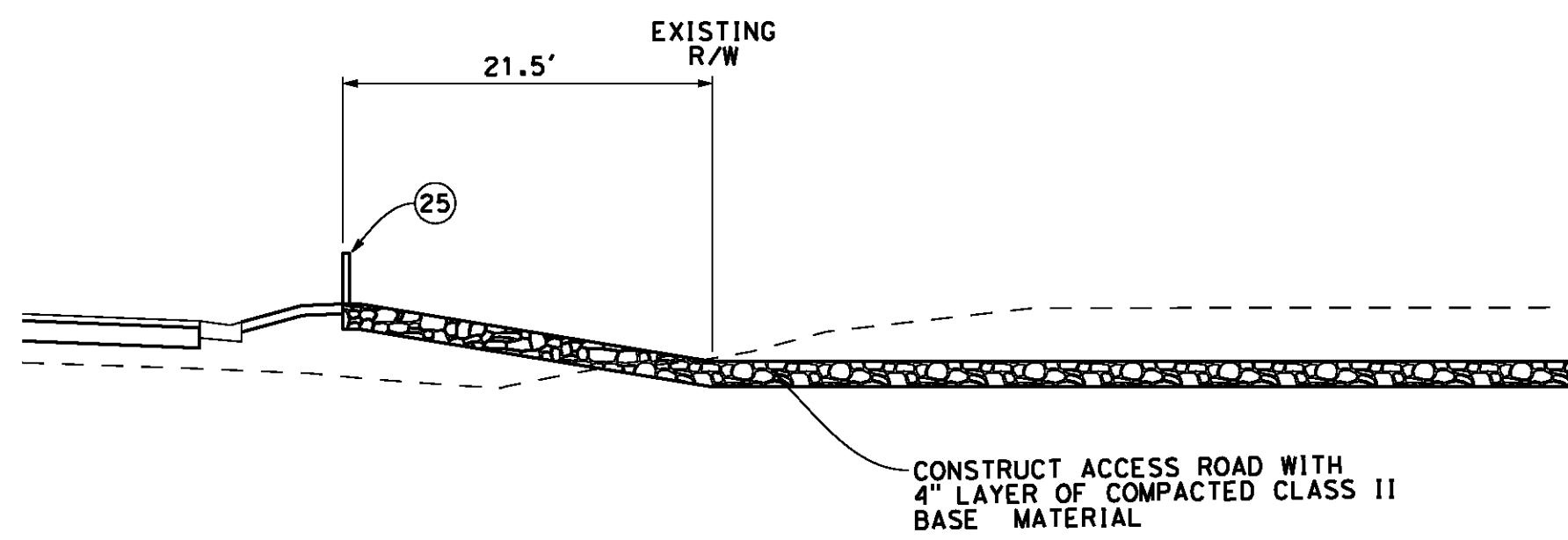
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SECTION A-A
NTS



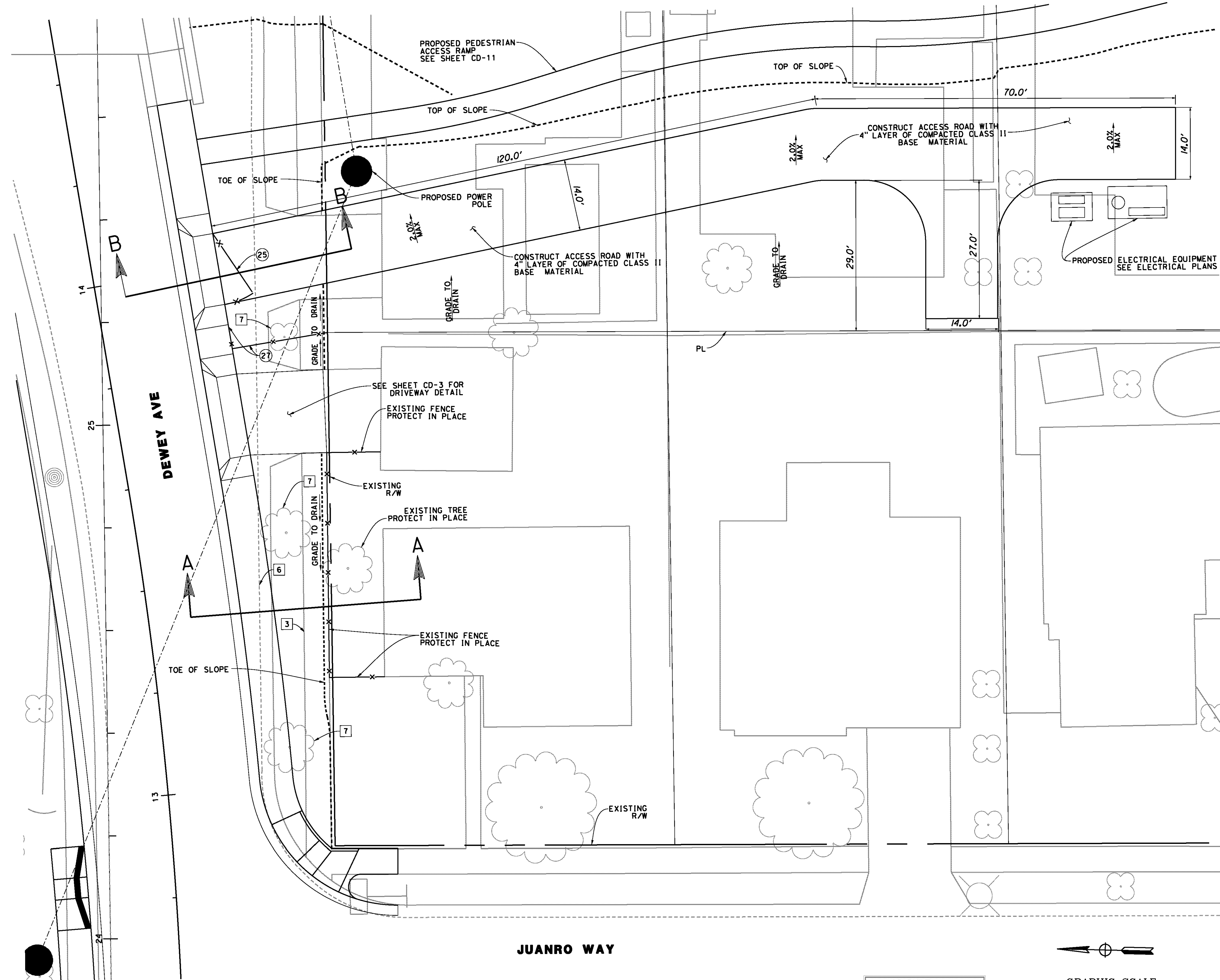
SECTION B-B
NTS

CONSTRUCTION NOTES

- 25 CONSTRUCT STANDARD PIPE GATE FOR ACCESS ROAD PER APWA STD PLAN NO. 602-3 (SINGLE GATE)
- 27 INSTALL CHAIN LINK FENCE PER CITY OF RIVERSIDE STD PLAN NO. 380

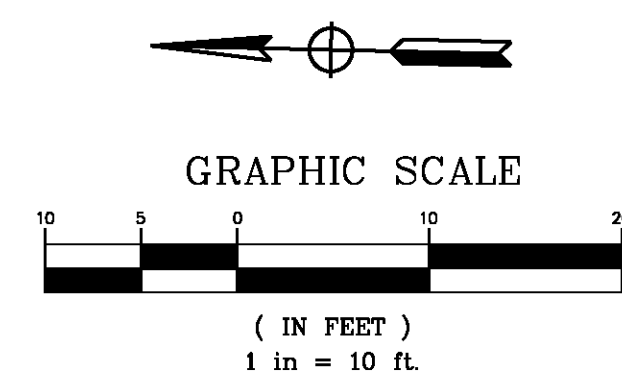
REMOVAL NOTES

- 3 REMOVE EXISTING CONCRETE
- 6 REMOVE CURB & GUTTER
- 7 REMOVE TREE



DEWEY IMPROVEMENT DETAIL
SCALE 1"=10'

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF



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IMPORTANT NOTICE
Section 4218.4217 of the Government Code requires a Dig Alert identification Number to be placed before a "Permit to Excavate" will be void. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

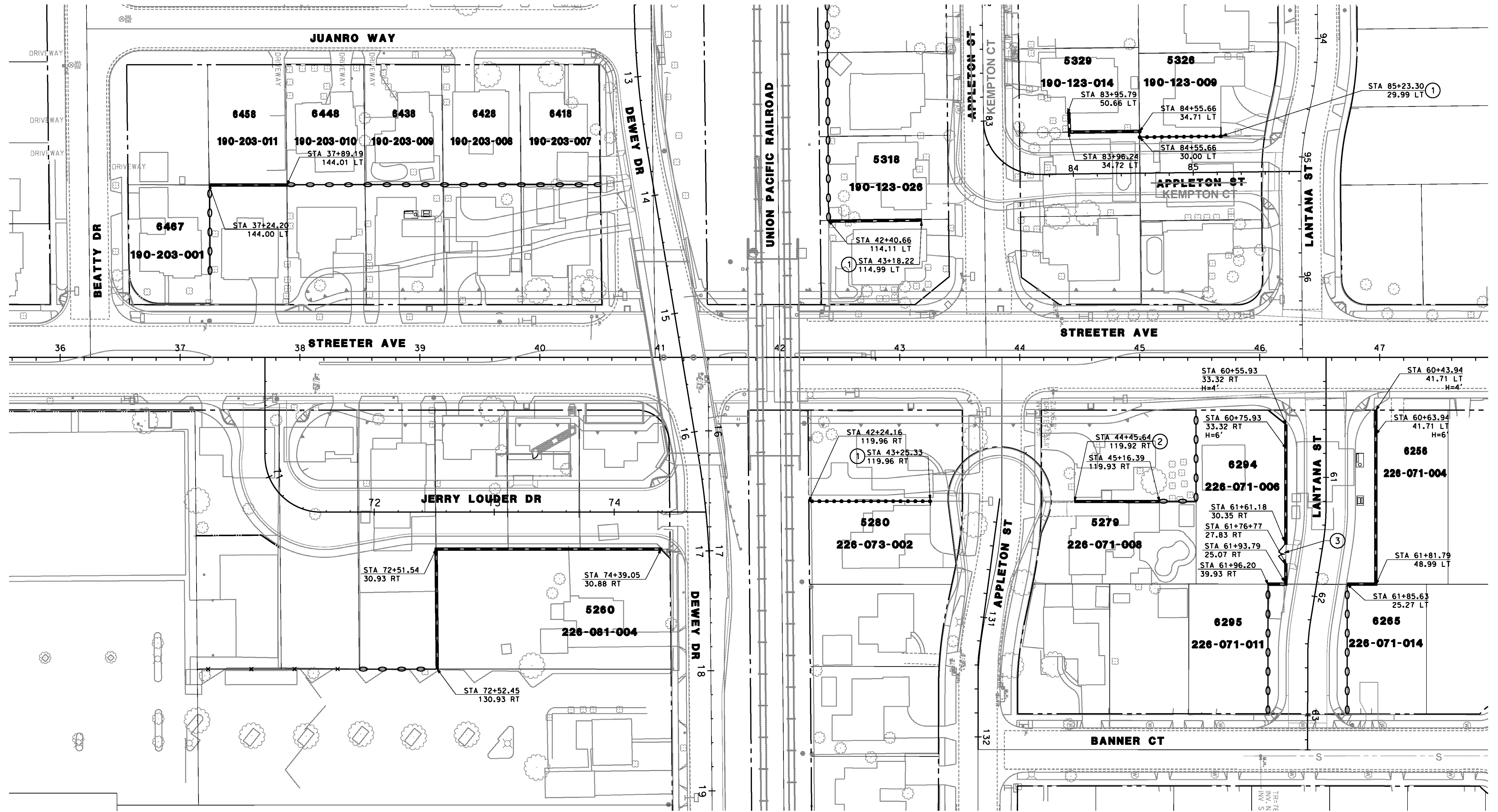
TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com
DATE 8-7-12

REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
No. C56574
CIVIL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
DEWEY IMP. DETAIL CD-15

R-4180
SHEET 53 OF 191
FILE NO.



LEGEND

- 1234** STREET ADDRESS
- 123-456-789** APN (ASSESSORS PARCEL NUMBER)
- EXISTING BLOCK WALLS (PROTECT IN PLACE)
- EXISTING BLOCK WALLS (REMOVE & REPLACE)
- REMOVE EXISTING WOOD/CHAIN LINK FENCE AND CONSTRUCT BLOCK WALL
- EXISTING CHAIN LINK FENCE (PIP)

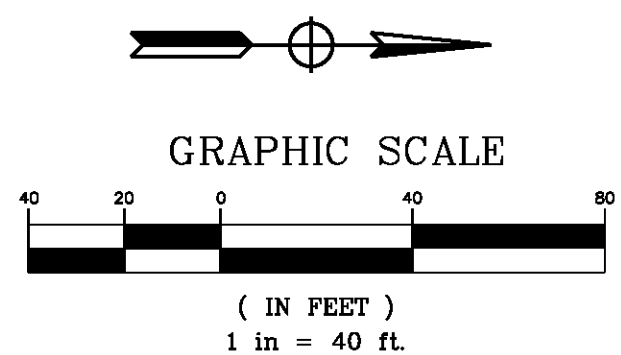
NOTE

1. SEE SPECIAL PROVISIONS FOR CITY OF RIVERSIDE BUILDING DEPARTMENT FREESTANDING BLOCK WALL DETAILS, BLOCK TYPE, AND COLOR. H=6' UNLESS OTHERWISE NOTED.
2. ALL NEW GATES SHALL BE APPROVED BY THE ENGINEER PRIOR TO FABRICATION AND INSTALLATION.

CONSTRUCTION NOTES - WALL LOCATION

- ① INSTALL NEW GATE TO MATCH EXISTING
- ② REMOVE & REINSTALL GATE
- ③ INSTALL 6' HIGH BY 16' WIDE WOOD DRIVEWAY (DOUBLE SWING) GATE. FINISHED COLOR SHALL MATCH BLOCK WALL COLOR.

AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF



IMPORTANT NOTICE
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REGISTERED PROFESSIONAL ENGINEER
RODRIGO GONZALEZ
 No. C56574
 CIVIL
 STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
BLOCK WALL LOCATION PLAN CD-16

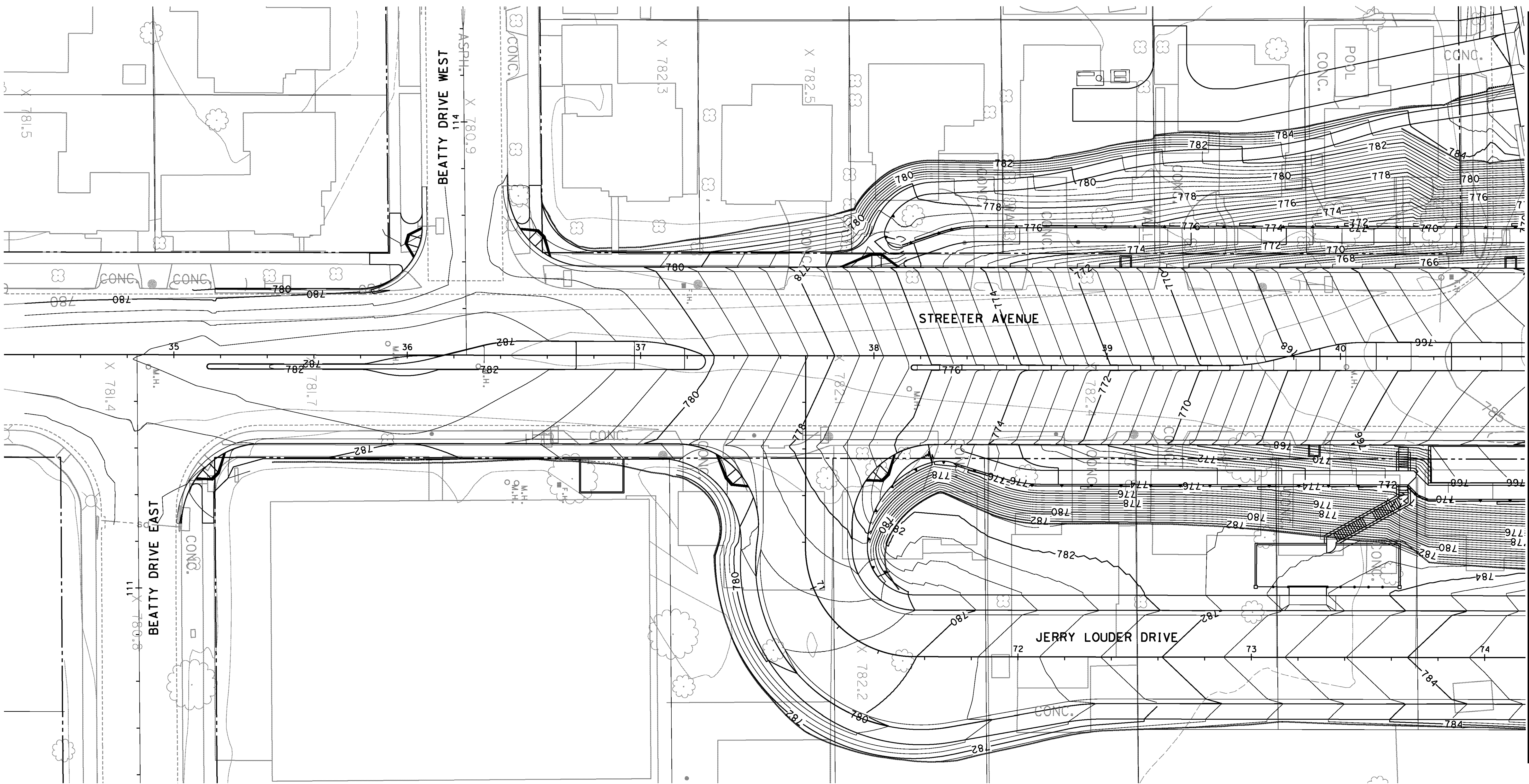
R-4180
 SHEET **54** OF **191**
 FILE NO.

DESIGNED BY FD DRAWN BY FD CHECKED BY RG
 HORIZ. SCALE: VERT. SCALE: N/A

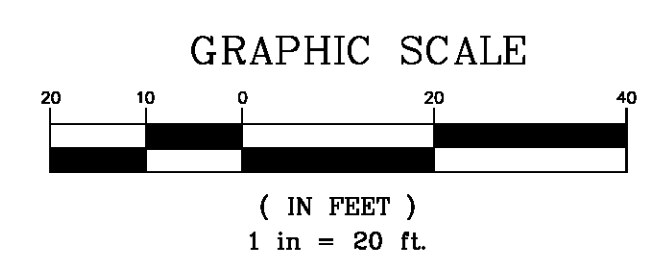
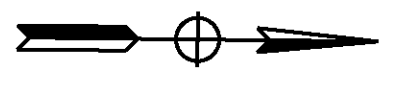
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DATE: 8/9/2012
 TIME: 2:46:25 PM

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MATCH LINE - SEE SHEET CG-2



AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
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RIVERSIDE, CA 92507
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MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
CONTOUR GRADING CG-1

R-4180
SHEET **55** OF **191**
FILE NO.

HORIZ. SCALE: VERT. SCALE: N/A

DESIGNED BY FD DRAWN BY FD CHECKED BY RG

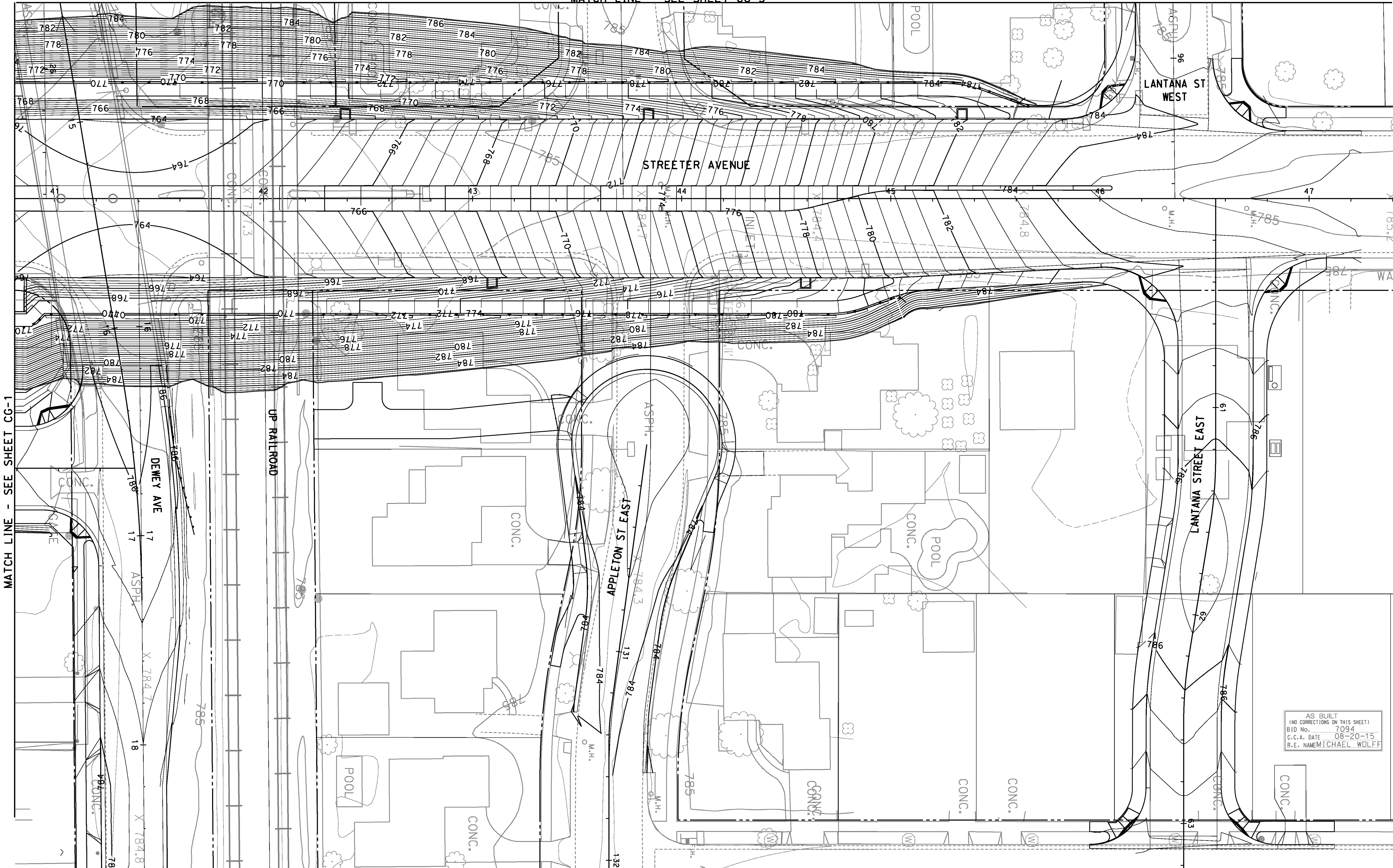
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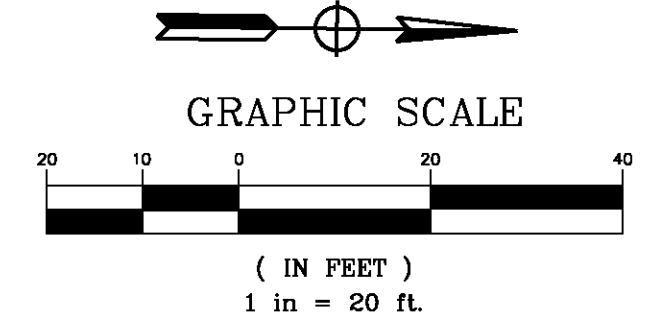
User: pboctor
1066_cg-01.dgn

MATCH LINE - SEE SHEET CG-3



MATCH LINE - SEE SHEET CG-1

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF



IMPORTANT NOTICE
 Section 4514.4217 of the Government Code requires a Dig Alert identification number to be placed in the ground. "Permit to Excavate" will be void. For your Dig Alert ID, Member cost CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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 3550 VINE STREET, SUITE 120
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MARK	REVISIONS	APPR.	DATE

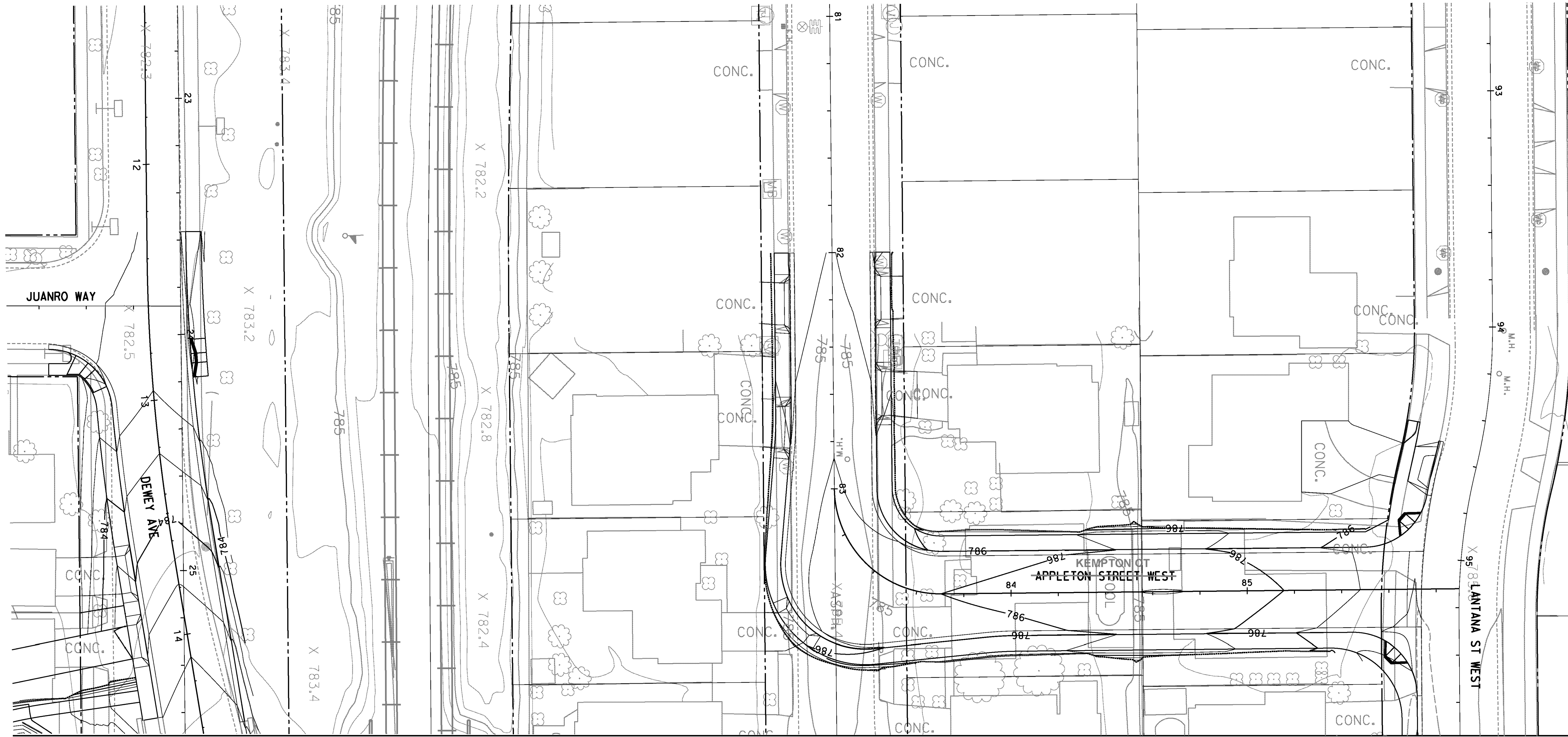
CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
CONTOUR GRADING CG-2

R-4180
 SHEET **56** OF 191
 FILE NO.

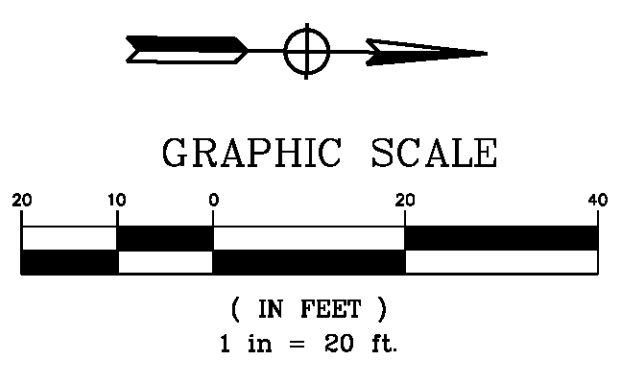
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 TIME: 6:37:37 PM

USER: pboctor
 1066_cg-02.dgn



MATCH LINE - SEE SHEET CG-2



AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
 Section 41314.0217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be void. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
 3550 VINE STREET, SUITE 120
 RIVERSIDE, CA 92507
 TEL (951) 788-4688
 www.tylin.com
 DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
CONTOUR GRADING CG-3

R-4180
 SHEET 57 OF 191
 FILE NO.

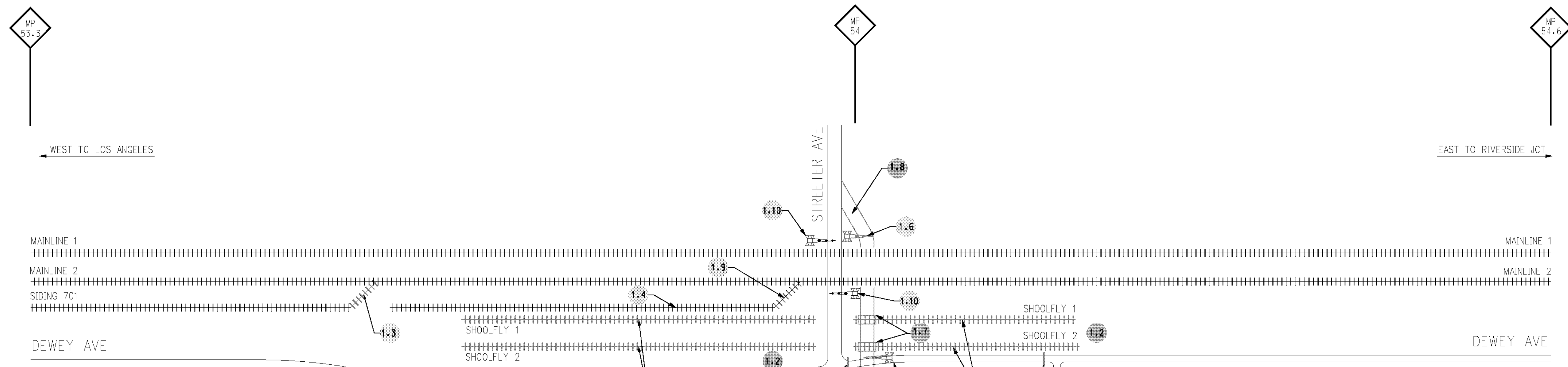
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DATE: 8/8/2012
 TIME: 6:37:55 PM

USER: pboctor
 1066_cg-03.dgn

2807+00 2810+00 2815+00 2820+00 2825+00 2830+00 2835+00 2840+00 2845+00 2850+00 2855+00 2860+00 2865+00 2870+00
EXISTING MAINLINE 1 STATIONING



- 1.1 CLOSE DEWEY AVE
- 1.2 CONSTRUCT ALL CIVIL IMPROVEMENTS
- 1.3 PLACE NEW SWITCH BETWEEN SIDING 701 AND ML2
- 1.4 REMOVE PORTION OF SIDING 701
- 1.5 BUILD PORTIONS OF SHOOLFLY 1 AND SHOOLFLY 2
- 1.6 INSTALL NO. 9 GATES WITH FLASHERS AND WAYSIDE HORNS
- 1.7 INSTALL CONCRETE CROSSING PANELS
- 1.8 PAVE/STRIPE PROPOSED DETOUR ROAD
- 1.9 REMOVE EX. #10 TURNOUT
- 1.10 REMOVE EXISTING CROSSING WARNING DEVICES

- LEGEND**
- EXISTING TRACK
 - PROPOSED TRACK
 - EXISTING CROSSING GATES
 - PROPOSED CROSSING GATES
 - ROAD CLOSED BARRICADES (TYP.)
 - WORK PERFORMED BY CONTRACTOR
 - WORK PERFORMED BY UPRR

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.G.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

WORK BY UPRR	
Station 2839+16 - Remove Existing #10 Turnout	Remove 2,232' of siding track 701
Station 2818+16 - Install new #11 Turnout	Install New Crossing Warning Devices
	Remove Existing Crossing Warning Devices

IMPORTANT NOTICE
Section 4316.4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG **UNDERGROUND SERVICE ALERT** 1-800-227-2600

WILSON & COMPANY
625 E. CARNEGIE DRIVE SUITE 100
SAN BERNARDINO, CA 92408
(909) 806-8000
www.wilsonco.com

DATE 8-7-12



MARK	REVISIONS	APPR.	DATE
DESIGNED BY <i>MWP</i> DRAWN BY <i>SRP</i> CHECKED BY <i>JNY</i>			

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PHASE 1

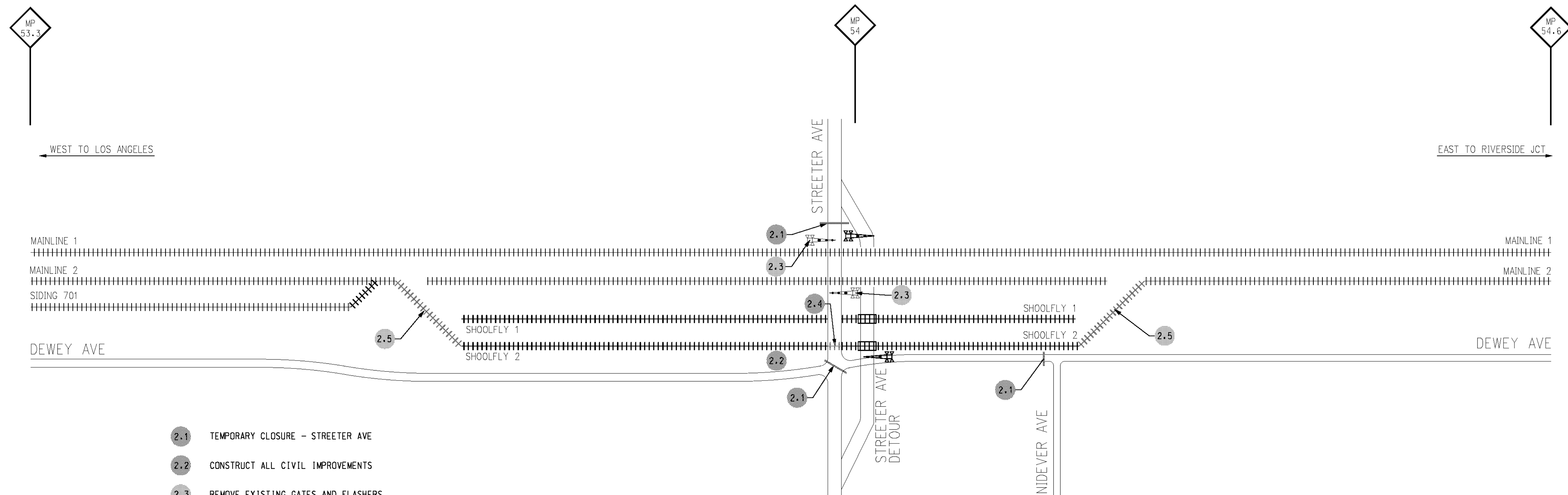
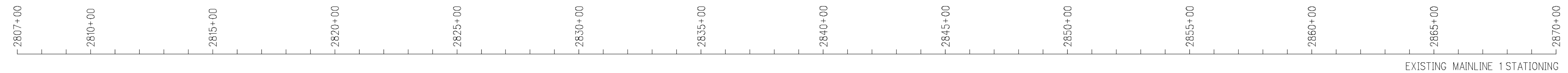
R-4180
SHEET **58** OF **191**
FILE NO.

HORIZ. SCALE: NTS VERT. SCALE: NTS

ms:wpf-08-400-139-00-roadworksheet-phase-1.dgn

DATE: 8/7/2012
TIME: 11:07:42 AM

USER: altychek
PHASE-1.dgn



- 2.1 TEMPORARY CLOSURE - STREETER AVE
- 2.2 CONSTRUCT ALL CIVIL IMPROVEMENTS
- 2.3 REMOVE EXISTING GATES AND FLASHERS
- 2.4 CONSTRUCT SHOOLFLY 2 ACROSS DEMOLISHED STREETER AVE (CONTRACTOR-SUPPLIED TRACK PANEL)
- 2.5 SHIFT ML2 TO SHOOLFLY 2 (CONTRACTOR WILL SUPPLY MATERIAL)

- LEGEND**
- EXISTING TRACK
 - PROPOSED TRACK
 - EXISTING CROSSING GATES
 - PROPOSED CROSSING GATES
 - ROAD CLOSED BARRICADES (TYP.)
 - WORK PERFORMED BY CONTRACTOR
 - WORK PERFORMED BY UPRR

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

WORK BY UPRR

On East end, shift 489' of existing ML#2
 and connect to Shoofly #2

On West end, shift 1,131' of existing ML#2
 and connect to Shoofly #2

Remove existing crossing warning devices

IMPORTANT NOTICE
 Section 43164.217 of the Government Code
 requires a Dig Alert Identification
 Number to be placed before a
 "Permit to Excavate" will be valid.
 For your Dig Alert I.D. Number call
 CALL TOLL FREE
 48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
 1-800-227-2600

WILSON & COMPANY
 625 E. CARNEGIE DRIVE SUITE 100
 SAN BERNARDINO, CA 92408
 (909) 806-8000
 www.wilsonco.com

DATE 8-7-12

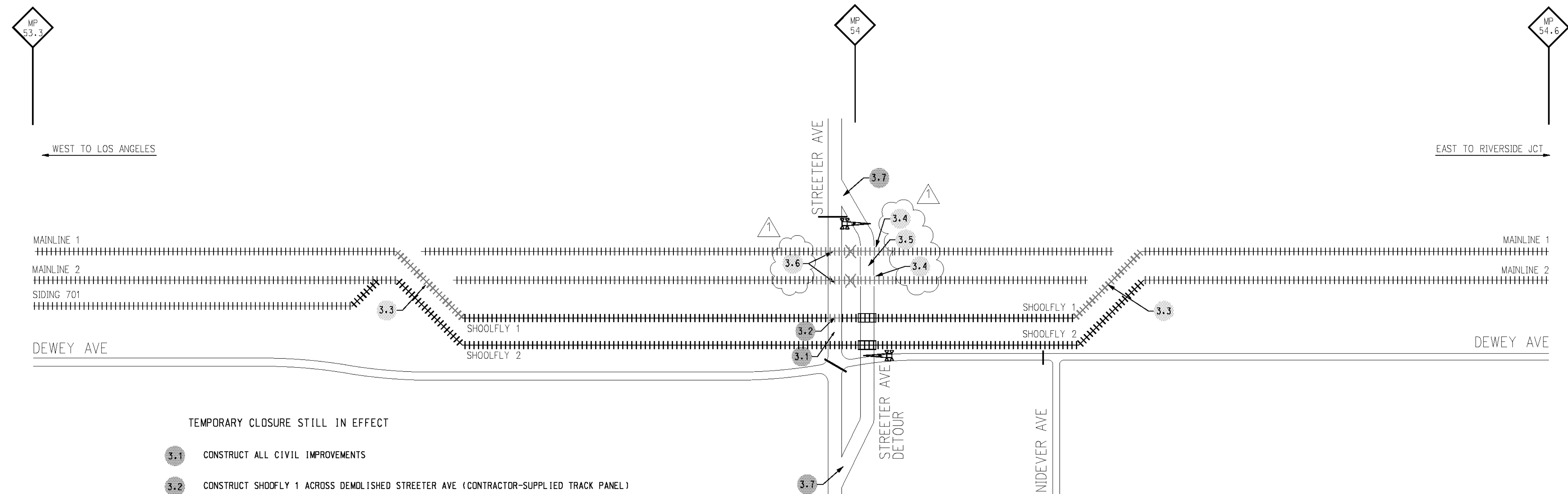
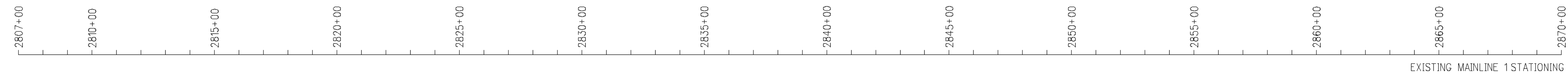


MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PHASE 2

R-4180
 SHEET **59** OF **191**
 FILE NO.

DATE: 8/7/2012
 TIME: 11:07:46 AM
 USER: altychek
 PHASE_2.dwt



- TEMPORARY CLOSURE STILL IN EFFECT
- 3.1 CONSTRUCT ALL CIVIL IMPROVEMENTS
 - 3.2 CONSTRUCT SHOOLFLY 1 ACROSS DEMOLISHED STREETER AVE (CONTRACTOR-SUPPLIED TRACK PANEL)
 - 3.3 SHIFT ML1 TO SHOOLFLY 1
 - 3.4 REMOVE TRACK PANELS
 - 3.5 CONSTRUCT STREETER DETOUR AT ML1 & ML2
 - 3.6 REMOVE CROSSING PANELS AND TRACK ML1 & ML2 FROM EXISTING STREETER AVE
 - 3.7 OPEN STREETER DETOUR ROAD TO VEHICULAR TRAFFIC.

- LEGEND
- EXISTING TRACK
 - PROPOSED TRACK
 - EXISTING CROSSING GATES
 - PROPOSED CROSSING GATES
 - ROAD CLOSED BARRICADES (TYP.)
 - WORK PERFORMED BY CONTRACTOR
 - WORK PERFORMED BY UPRR

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

WORK BY UPRR

On East end, Shift 443' of existing ML#1
and connect to Shoofly #1

On West end, Shift 1069' of existing ML#1
and connect to Shoofly #1

Remove track panels at Streeter Ave

Construct detour at Streeter Ave

Remove 80 TF crossing panel

IMPORTANT NOTICE
 Section 4270/4271 of the Department Code
 requires a Dig Alert identification
 number on the initial notice of
 "Permit to Excavate" will be valid
 for your Dig Alert Co. Number call
 CALL TOLL FREE
 48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
 1-800-227-2600

WILSON & COMPANY
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DATE 8-7-12



MARK	REVISIONS	APPR.	DATE
	PHASING CHANGE	TBJ	9/12

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT

STREETER AVENUE UNDERPASS

PHASE 3

HORIZ. SCALE: NTS VERT. SCALE: NTS

R-4180

SHEET **60** OF **191**

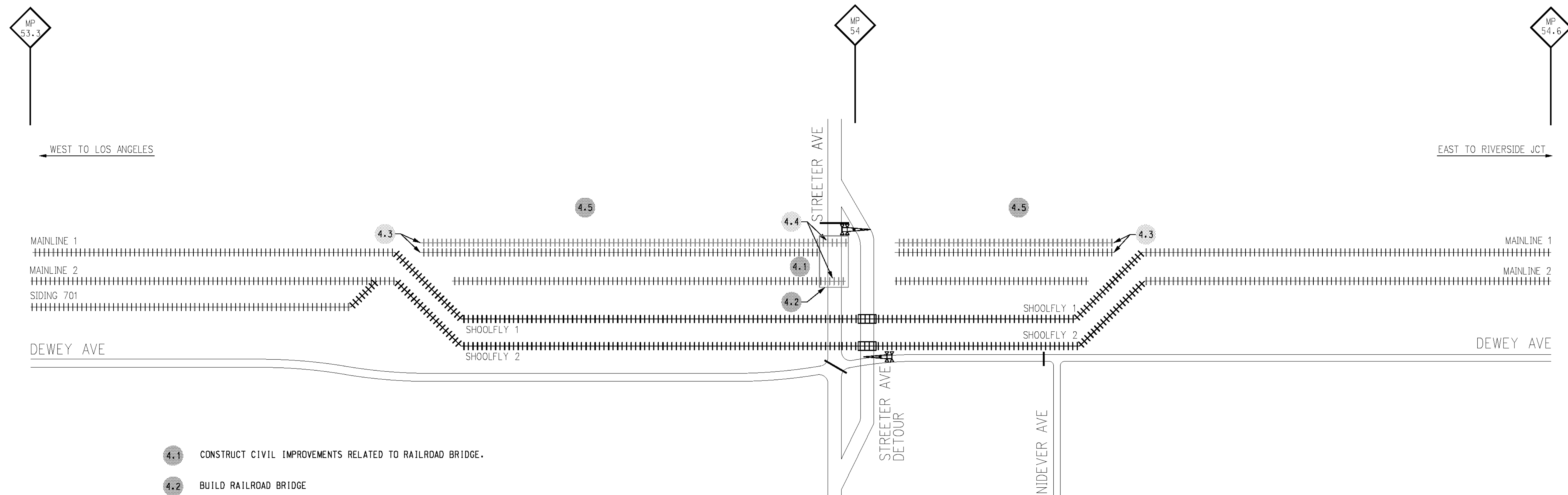
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DATE: 9/17/2012
 TIME: 9:57:43 AM

USER = 0CPop
 PHASE 3.rvt

2807+00 2810+00 2815+00 2820+00 2825+00 2830+00 2835+00 2840+00 2845+00 2850+00 2855+00 2860+00 2865+00 2870+00
EXISTING MAINLINE 1 STATIONING



- 4.1 CONSTRUCT CIVIL IMPROVEMENTS RELATED TO RAILROAD BRIDGE.
- 4.2 BUILD RAILROAD BRIDGE
- 4.3 SHIFT EXISTING ML1 NORTH TO NEW LOCATION
- 4.4 BUILD TRACK ON RAILROAD BRIDGE
- 4.5 CONSTRUCT CIVIL IMPROVEMENTS RELATED TO TRACK SHIFT

- LEGEND**
- EXISTING TRACK
 - PROPOSED TRACK
 - EXISTING CROSSING GATES
 - PROPOSED CROSSING GATES
 - ROAD CLOSED BARRICADES (TYP.)
 - WORK PERFORMED BY CONTRACTOR
 - WORK PERFORMED BY UPRR

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

WORK BY UPRR
 Shift 2,500' of track
 Install 328' of ML1 & ML2 on bridge

IMPORTANT NOTICE
 Section 4134.4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG **UNDERGROUND SERVICE ALERT 1-800-227-2600**

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DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PHASE 4

R-4180
 SHEET **61** OF **191**
 FILE NO.

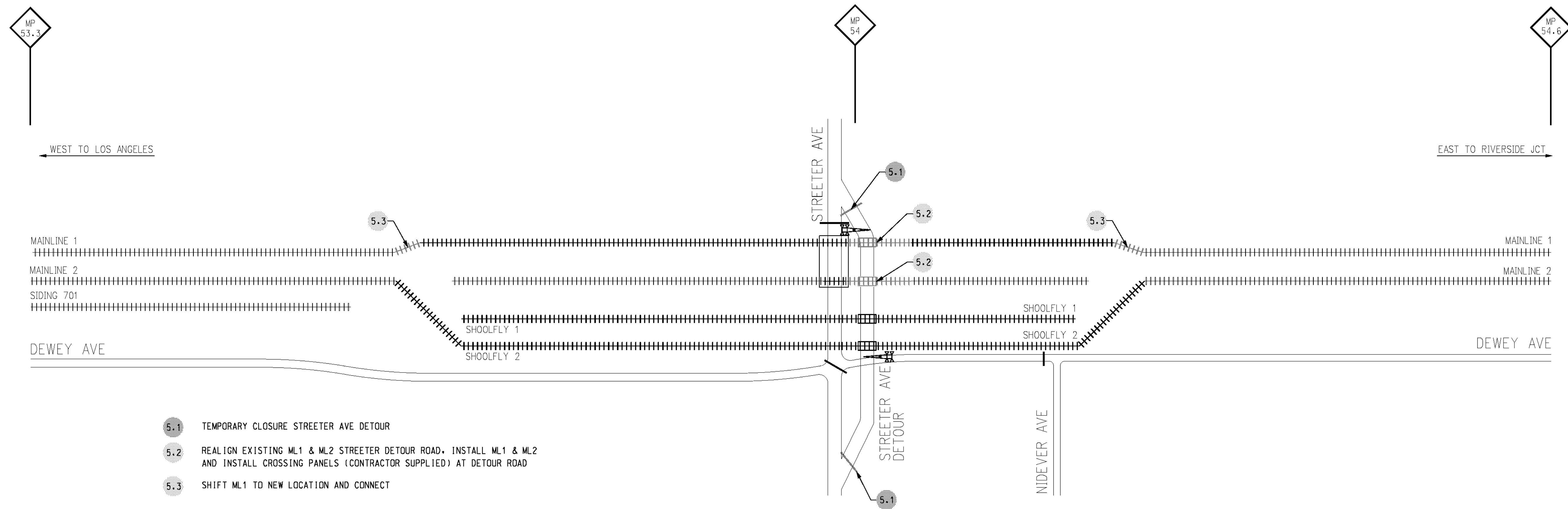
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DATE: 8/7/2012
 TIME: 11:07:53 AM

USER: altyshak
 PHASE_4.dwg

2807+00 2810+00 2815+00 2820+00 2825+00 2830+00 2835+00 2840+00 2845+00 2850+00 2855+00 2860+00 2865+00 2870+00
EXISTING MAINLINE 1 STATIONING



- 5.1 TEMPORARY CLOSURE STREETER AVE DETOUR
- 5.2 REALIGN EXISTING ML1 & ML2 STREETER DETOUR ROAD, INSTALL ML1 & ML2 AND INSTALL CROSSING PANELS (CONTRACTOR SUPPLIED) AT DETOUR ROAD
- 5.3 SHIFT ML1 TO NEW LOCATION AND CONNECT

- LEGEND**
- EXISTING TRACK
 - PROPOSED TRACK
 - EXISTING CROSSING GATES
 - PROPOSED CROSSING GATES
 - ROAD CLOSED BARRICADES (TYP.)
 - WORK PERFORMED BY CONTRACTOR
 - WORK PERFORMED BY UPRR

WORK BY UPRR

On East end, Shift 443' of Shoofly#1
and connect to ML#1 at new location

On West end, Shift 1,069' of Shoofly#1
and connect to ML#1 at new location

Line over/Surface 450' +/- of main tracks 1 & 2

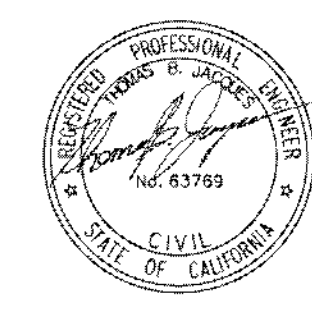
Install 100' of ML1 & ML2

Install Crossing Panels

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
Section 4316.4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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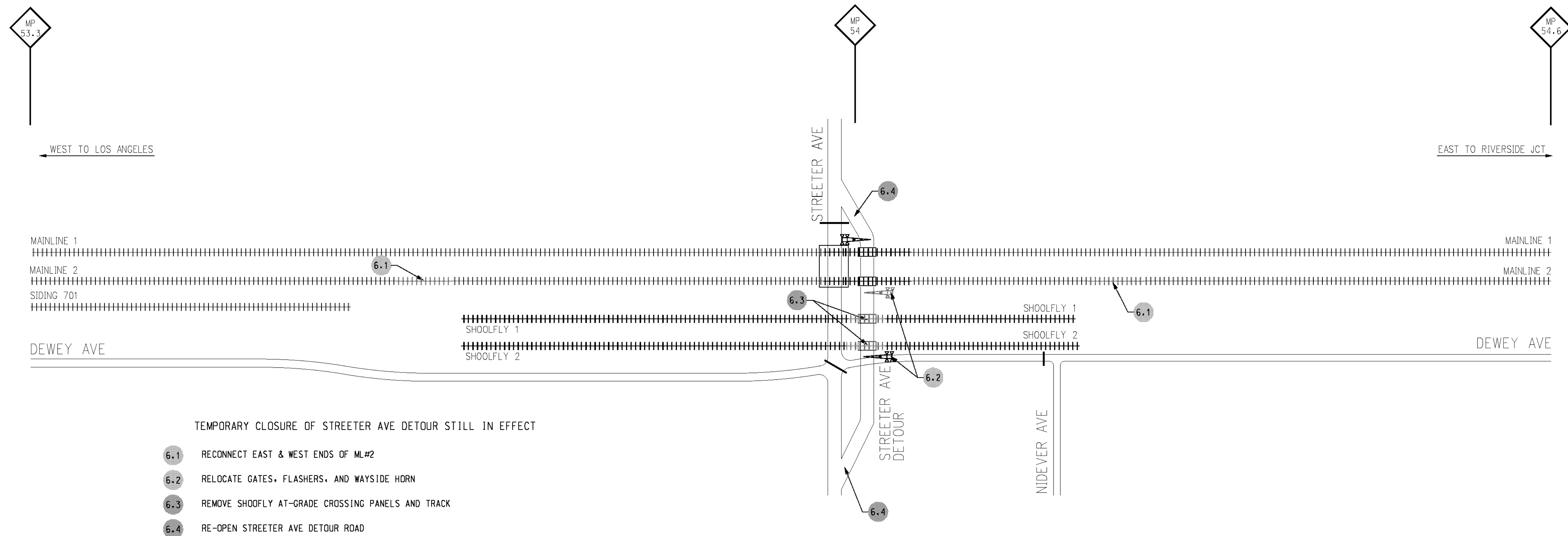
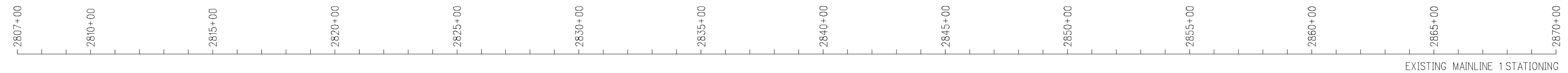
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PHASE 5

R-4180
SHEET **62** OF **191**
FILE NO.

DATE: 8/7/2012 TIME: 11:07:57 AM

USER: altyshak



TEMPORARY CLOSURE OF STREETER AVE DETOUR STILL IN EFFECT

- 6.1 RECONNECT EAST & WEST ENDS OF ML#2
- 6.2 RELOCATE GATES, FLASHERS, AND WAYSIDE HORN
- 6.3 REMOVE SHOOLFLY AT-GRADE CROSSING PANELS AND TRACK
- 6.4 RE-OPEN STREETER AVE DETOUR ROAD

- LEGEND**
- EXISTING TRACK
 - PROPOSED TRACK
 - EXISTING CROSSING GATES
 - PROPOSED CROSSING GATES
 - ROAD CLOSED BARRICADES (TYP.)
 - WORK PERFORMED BY CONTRACTOR
 - WORK PERFORMED BY UPRR

WORK BY UPRR

On East end, Shift 489' of Shoofly#2
and connect to ML#2 at new location

On West end, Shift 1,131' of Shoofly#2
and connect to ML#2 at new location

Relocate New Temporary Crossing Warning
Devices

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
Section 43164.217 of the Government Code
requires a Dig Alert Identification
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For your Dig Alert I.D. Number call
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600

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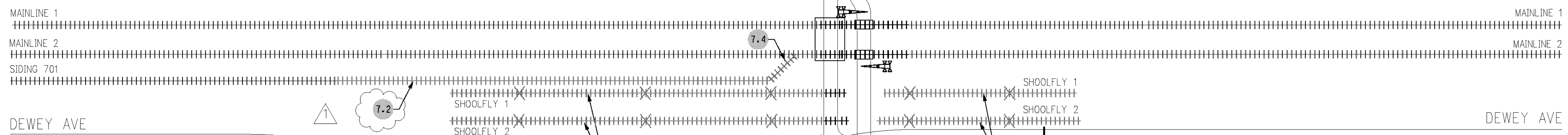
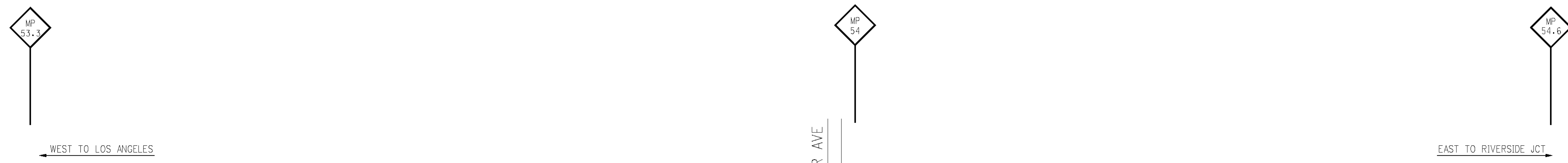
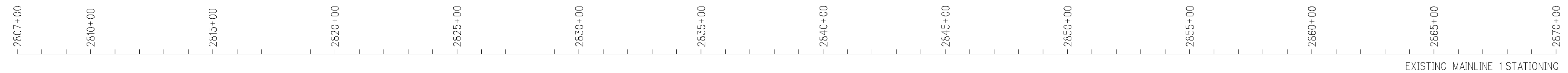
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT		R-4180
STREETER AVENUE UNDERPASS		
PHASE 6		SHEET 63 OF 191
DESIGNED BY <i>MWP</i>	DRAWN BY <i>SRP</i>	CHECKED BY <i>JNY</i>
HORIZ. SCALE: NTS		VERT. SCALE: NTS
FILE NO.		

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DATE: 8/7/2012
TIME: 11:08:01 AM

USER: altychek
PHASE_6.dwg



- 7.1 DEMOLISH SHOOLFLY'S 1 AND 2
- 7.2 REPLACE SIDING 701
- 7.3 CLOSE DEWEY AVE RIGHT TURN ACCESS TO STREETER AVE
- 7.4 INSTALL RELOCATED #11 TURNOUT AND PORTION OF SIDING

- LEGEND**
- EXISTING TRACK
 - PROPOSED TRACK
 - EXISTING CROSSING GATES
 - PROPOSED CROSSING GATES
 - ROAD CLOSED BARRICADES (TYP.)
 - WORK PERFORMED BY CONTRACTOR
 - WORK PERFORMED BY UPRR

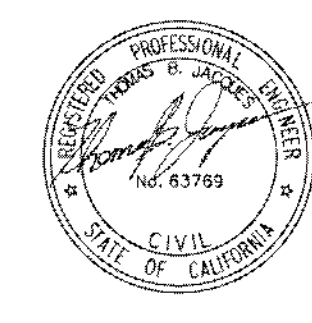
AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

WORK BY UPRR
 Station 2818+16 - Remove new temporary #11 Turnout
 Station 2839+16 - Install relocated #11 Turnout
 Install 1635' of Siding Track 701

IMPORTANT NOTICE
 Section 4316.4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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 625 E. CARNEGIE DRIVE SUITE 100
 SAN BERNARDINO, CA 92408
 (909) 806-8000
 www.wilsonco.com

DATE 8-7-12



DESIGNED BY	MMW	DRAWN BY	SRP	CHECKED BY	JNY
PHASING CHANGE		TBJ	9/12		
MARK		REVISIONS		APPR.	DATE

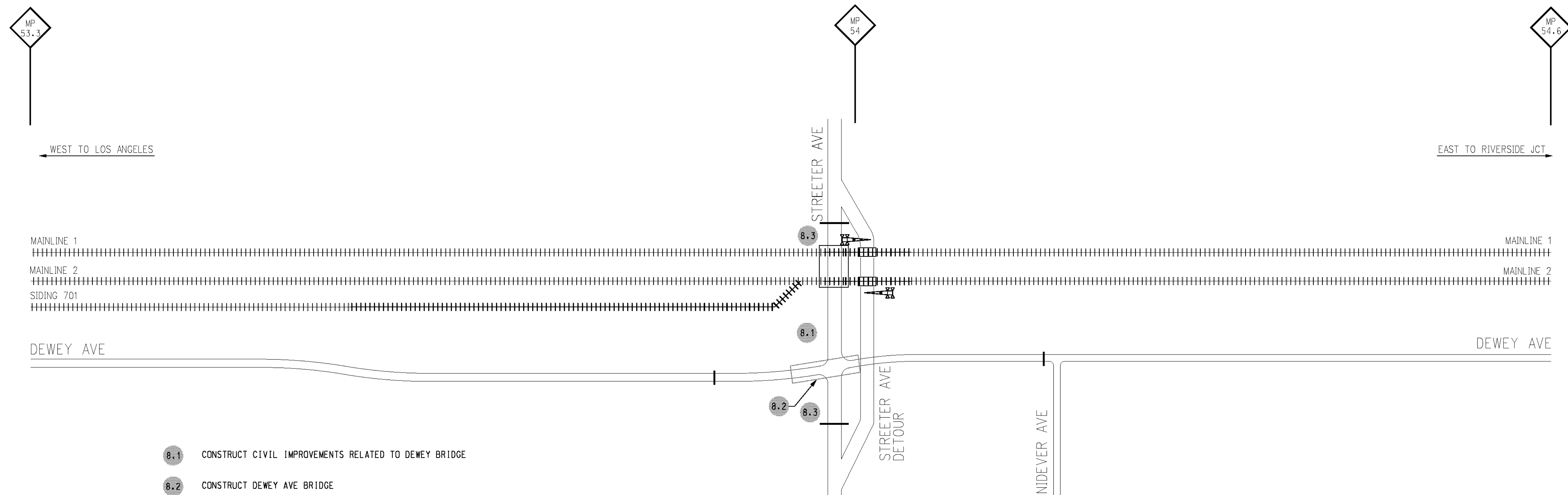
CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
 STREETER AVENUE UNDERPASS

PHASE 7
 HORIZ. SCALE: NTS VERT. SCALE: NTS

R-4180
 SHEET 64 OF 191
 FILE NO.

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2807+00 2810+00 2815+00 2820+00 2825+00 2830+00 2835+00 2840+00 2845+00 2850+00 2855+00 2860+00 2865+00 2870+00
EXISTING MAINLINE 1 STATIONING



- 8.1 CONSTRUCT CIVIL IMPROVEMENTS RELATED TO DEWEY BRIDGE
- 8.2 CONSTRUCT DEWEY AVE BRIDGE
- 8.3 COMPLETE ALL OTHER CIVIL IMPROVEMENTS TO STREETER AVE

- LEGEND**
- EXISTING TRACK
 - PROPOSED TRACK
 - EXISTING CROSSING GATES
 - PROPOSED CROSSING GATES
 - ROAD CLOSED BARRICADES (TYP.)
 - WORK PERFORMED BY CONTRACTOR
 - WORK PERFORMED BY UPRR

AS BUILT
NO CORRECTIONS ON THIS SHEET
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

WORK BY UPRR
None

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IMPORTANT NOTICE
Section 43164.217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
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DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

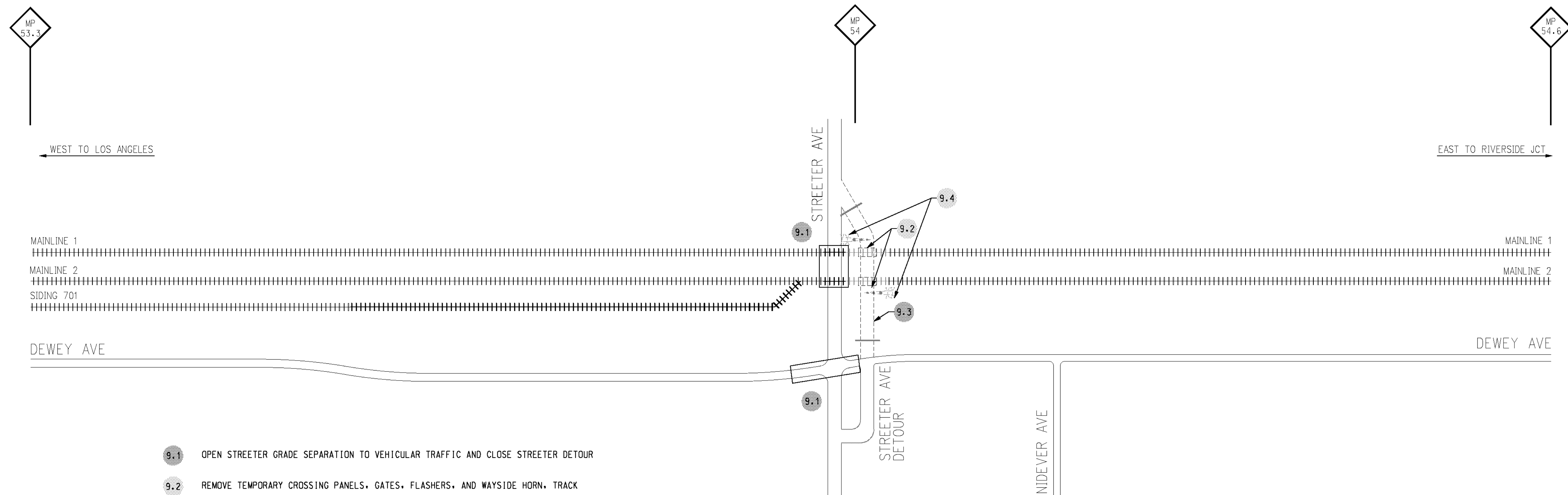
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS

R-4180

PHASE 8
HORIZ. SCALE: NTS VERT. SCALE: NTS

SHEET 65 OF 191
FILE NO.

2807+00 2810+00 2815+00 2820+00 2825+00 2830+00 2835+00 2840+00 2845+00 2850+00 2855+00 2860+00 2865+00 2870+00
EXISTING MAINLINE 1 STATIONING



- 9.1 OPEN STREETER GRADE SEPARATION TO VEHICULAR TRAFFIC AND CLOSE STREETER DETOUR
- 9.2 REMOVE TEMPORARY CROSSING PANELS, GATES, FLASHERS, AND WAYSIDE HORN, TRACK
- 9.3 REMOVE STREETER DETOUR NORTH OF DEWEY AVE
- 9.4 REMOVE CROSSING WARNING DEVICES

- LEGEND**
- EXISTING TRACK
 - PROPOSED TRACK
 - EXISTING CROSSING GATES
 - PROPOSED CROSSING GATES
 - ROAD CLOSED BARRICADES (TYP.)
 - WORK PERFORMED BY CONTRACTOR
 - WORK PERFORMED BY UPRR

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

WORK BY UPRR
Remove Temporary Crossing Warning Devices
Replace 170 ft +/- At Grade xing cross ties with concrete ties

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IMPORTANT NOTICE
Section 43164.217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
625 E. CARNEGIE DRIVE SUITE 100
SAN BERNARDINO, CA 92408
(909) 806-8000
www.wilsonco.com

DATE 8-7-12

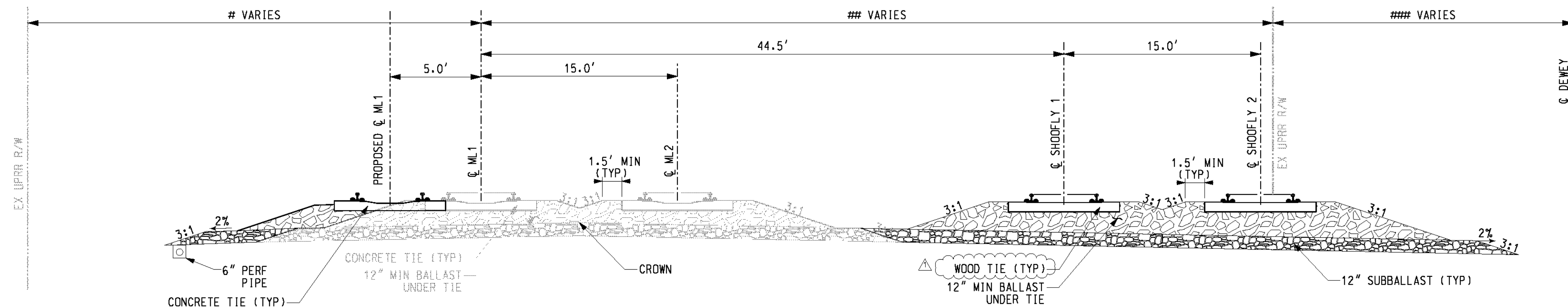


MARK	REVISIONS	APPR.	DATE

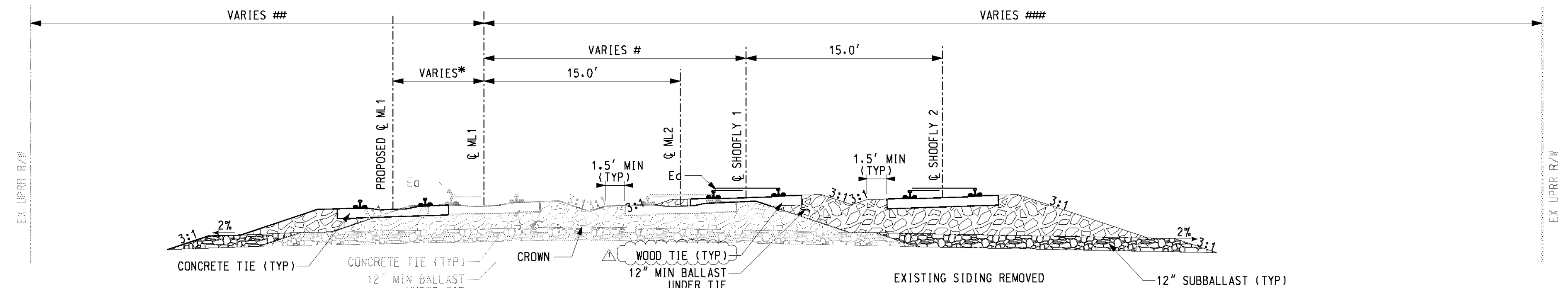
DESIGNED BY *MWP* DRAWN BY *SRP* CHECKED BY *JNY*

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PHASE 9

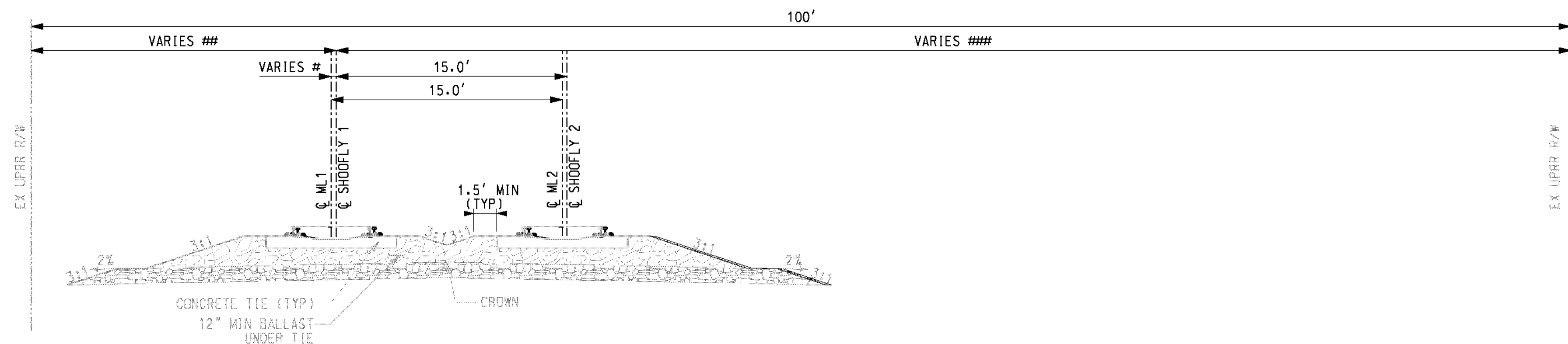
R-4180
SHEET 66 OF 191
FILE NO.



TYPICAL SECTION 3 - 2 TRACKS - STA 2838+34 TO STA 2841+66
SCALE: NTS



TYPICAL SECTION 2 - 2 TRACKS - STA 2820+56 TO STA 2838+34
SCALE: NTS



TYPICAL SECTION 1 - 2 TRACKS - STA 2817+95 TO STA 2820+56
SCALE: NTS

# ROW DIMENSION VARIES	
STATION	DIMENSION
2838+34-2839+79	34.6'-35.0'
2840+29-2841+66	22.0'-23.0'

## ROW DIMENSION VARIES	
STATION	DIMENSION
2838+34-2839+79	59.6'
2840+29-2841+66	26.9'

#### CL DISTANCE VARIES	
STATION	DIMENSION
2838+34-2839+79	41.9'-43.7'
2840+29-2841+66	33.0'

NOTE: 1. RAIL BRIDGE SECTION FROM STA 2839+26.8 TO STA 2840+81.3 SEE SHEET XX-XX
2. 6" PERFORATED PIPE STA 2840+90 TO 2851+10

# TRACK ALIGNMENT VARIES	
STATION	DIMENSION
2820+56-2822+48	0.3'-2.8'
2820+48-2823+66	2.8'-3.1'
2820+66-2834+44	3.1'-34.1'
2834+44-2836+53	34.1'-42.8'
2836+53-2838+34	42.8'-44.5'
* TRACK ALIGNMENT VARIES	
2820+56-2838+34	0.0'-5.0'

### ROW DIMENSION VARIES	
STATION	DIMENSION
2820+56-2822+48	42.7'-36.0'
2822+48-2823+66	36.0'-35.7'
2823+66-2834+44	35.7'-29.3'
2834+44-2836+53	29.3'-29.5'
2836+53-2838+34	29.5'-32.4'

#### ROW DIMENSION VARIES	
STATION	DIMENSION
2820+56-2822+48	57.7'-63.9'
2822+48-2823+66	63.9'-64.3'
2823+66-2834+44	64.3'-82.6'
2834+44-2836+53	82.6'-66.6'
2836+53-2838+34	66.6'-62.5'

# TRACK ALIGNMENT VARIES	
STATION	DIMENSION
2817+95-2819+46	0.0'
2819+46-2820+56	0.0'-0.3'

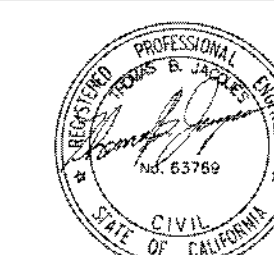
## ROW DIMENSION VARIES	
STATION	DIMENSION
2817+95-2819+46	16.3'-18.1'
2819+46-2820+56	18.1'-19.2'

#### ROW DIMENSION VARIES	
STATION	DIMENSION
2817+95-2819+46	83.7'-81.8'
2819+46-2820+56	81.8'-80.8'

AS BUILT
(AND CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
Section 4276/4217 of the Government Code requires a Dig Alert identification "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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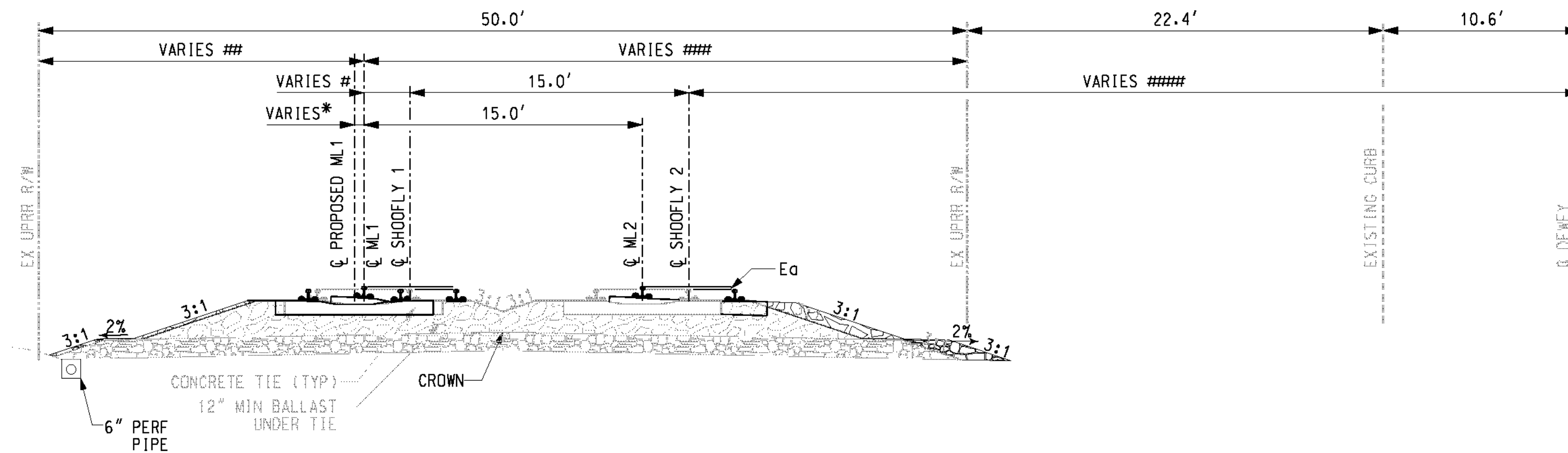


MARK	REVISIONS	APPR.	DATE
		TBJ	9/12

DESIGNED BY *TWP* DRAWN BY *SPB* CHECKED BY *JMY*

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
TYPICAL SECTIONS TD-01
HORIZ. SCALE: VERT. SCALE:

R-4180
SHEET 67 OF 191
FILE NO.



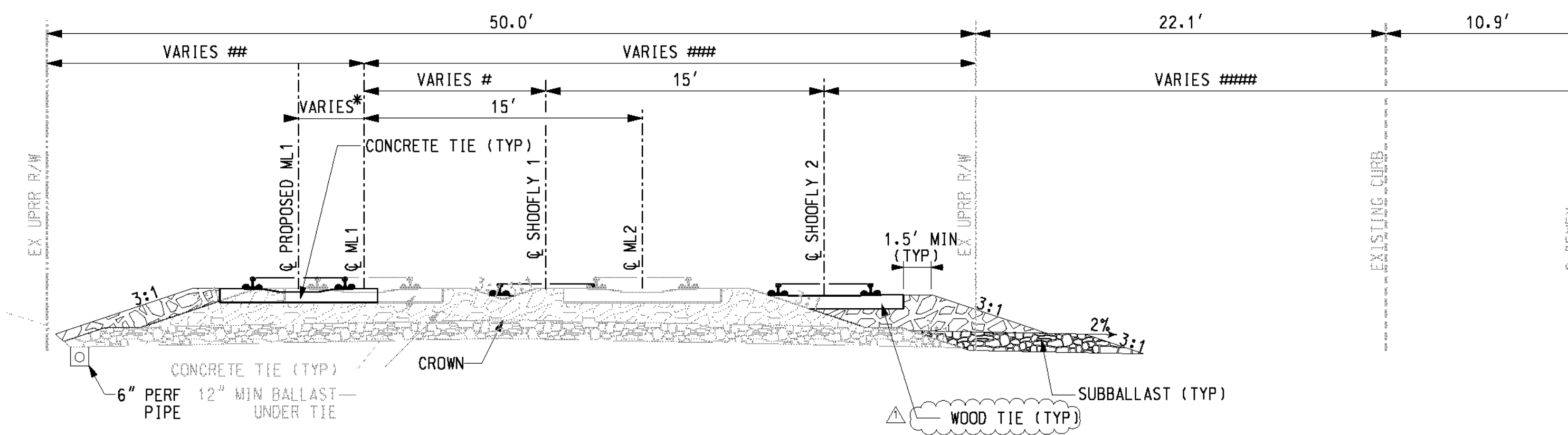
TYPICAL SECTION 6 - 2 TRACKS - STA 2850+70 TO STA 2854+68
SCALE: NTS

# TRACK ALIGNMENT VARIES	
STATION	DIMENSION
2850+70-2852+42	9.8'
2852+42-2852+95	2.4' -1.1'
2852+95-2854+68	1.1' -0.0'
* TRACK ALIGNMENT VARIES	
2850+70-2854+68	0.0' -0.5'

## ROW DIMENSION VARIES	
STATION	DIMENSION
2850+70-2852+42	23.4'
2852+42-2852+95	23.4' -23.5'
2852+95-2854+68	23.5'

#### ROW DIMENSION VARIES	
STATION	DIMENSION
2850+70-2852+42	26.6'
2852+42-2852+95	26.6' -26.5'
2852+95-2854+68	26.5'

##### CL DEWEY OFFSET VARIES	
STATION	DIMENSION
2850+70-2852+42	33.4' -38.8'
2852+42-2852+95	38.8' -41.0'
2852+95-2854+68	41.0' -43.5'



TYPICAL SECTION 5 - 2 TRACKS - STA 2844+33 TO STA 2850+70
SCALE: NTS

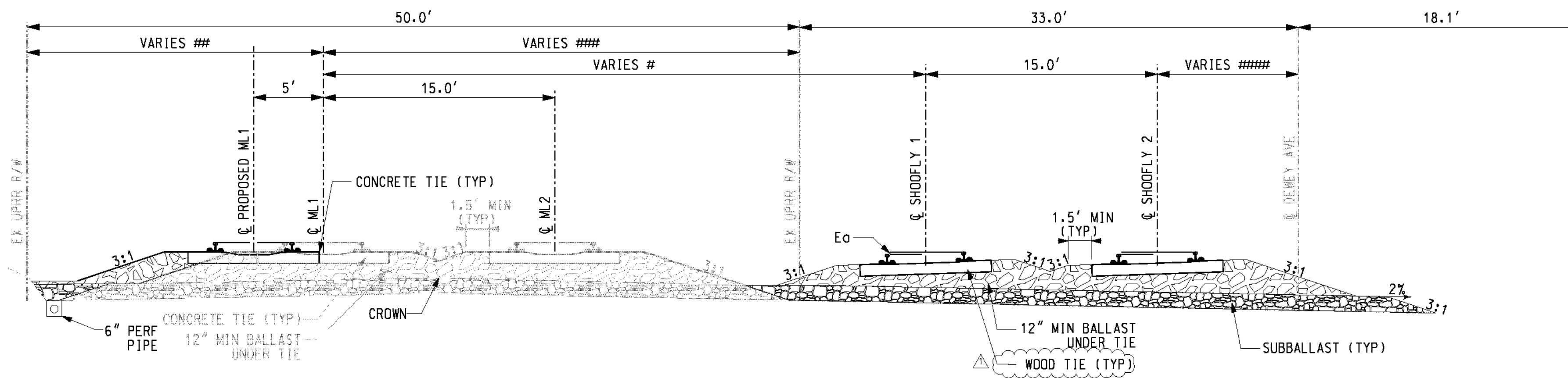
# TRACK ALIGNMENT VARIES	
STATION	DIMENSION
2845+63-2850+70	34.7' -9.8'
* TRACK ALIGNMENT VARIES	
2845+63-2850+70	0.5' -4.5'

## ROW DIMENSION VARIES	
STATION	DIMENSION
2845+63-2850+70	23.1' -23.4'

#### ROW DIMENSION VARIES	
STATION	DIMENSION
2845+63-2850+70	26.9' -26.6'

##### CL DEWEY OFFSET VARIES	
STATION	DIMENSION
2845+63-2850+70	4.2' -10.2'

NOTE: 6" PERFORATED PIPE STA 2840+90 TO 2851+10



TYPICAL SECTION 4 - 2 TRACKS - STA 2841+66 TO STA 2844+33
SCALE: NTS

# TRACK ALIGNMENT VARIES	
STATION	DIMENSION
2841+66-2843+39	44.5' -43.4'
2843+39-2843+90	43.4' -42.1'
2843+90-2845+63	42.1' -34.7'

## ROW DIMENSION VARIES	
STATION	DIMENSION
2841+66-2843+39	23.0' -23.1'
2843+39-2843+90	23.1'
2843+90-2845+63	23.1' -23.2'

#### ROW DIMENSION VARIES	
STATION	DIMENSION
2841+66-2843+39	27.0' -26.9'
2843+39-2843+90	26.9'
2843+90-2845+63	26.9' -26.8'

##### CL DEWEY OFFSET VARIES	
STATION	DIMENSION
2841+66-2843+39	0.5' -1.6'
2843+39-2843+90	1.6' -2.8'
2843+90-2845+63	2.8' -9.7'

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
Section 4276/4277 of the Government Code requires a Dig Alert identification "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
625 E. CARNEGIE DRIVE SUITE 100
SAN BERNARDINO, CA 92408
(909) 806-8000
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DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

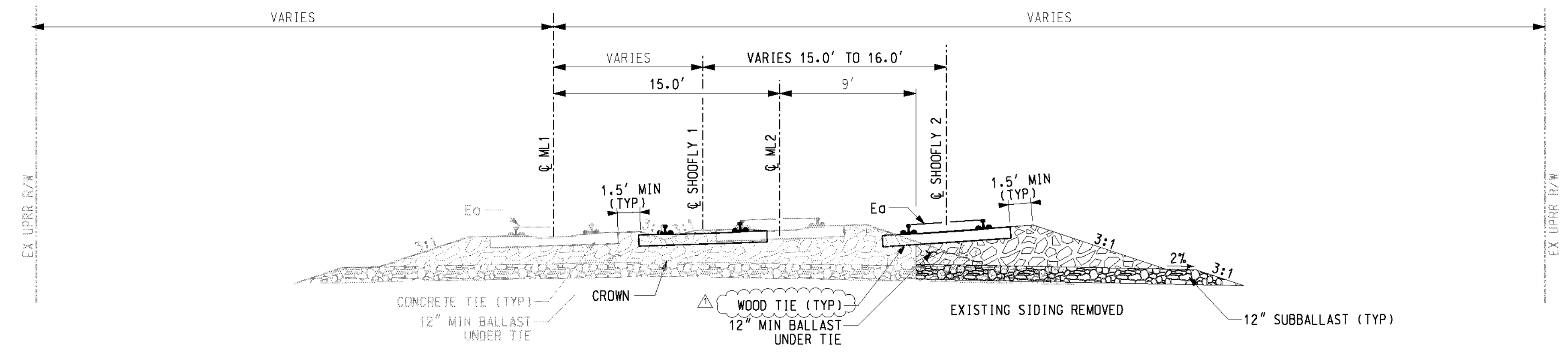
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
TYPICAL SECTIONS TD-02
HORIZ. SCALE: VERT. SCALE:

R-4180
SHEET 68 OF 191
FILE NO.

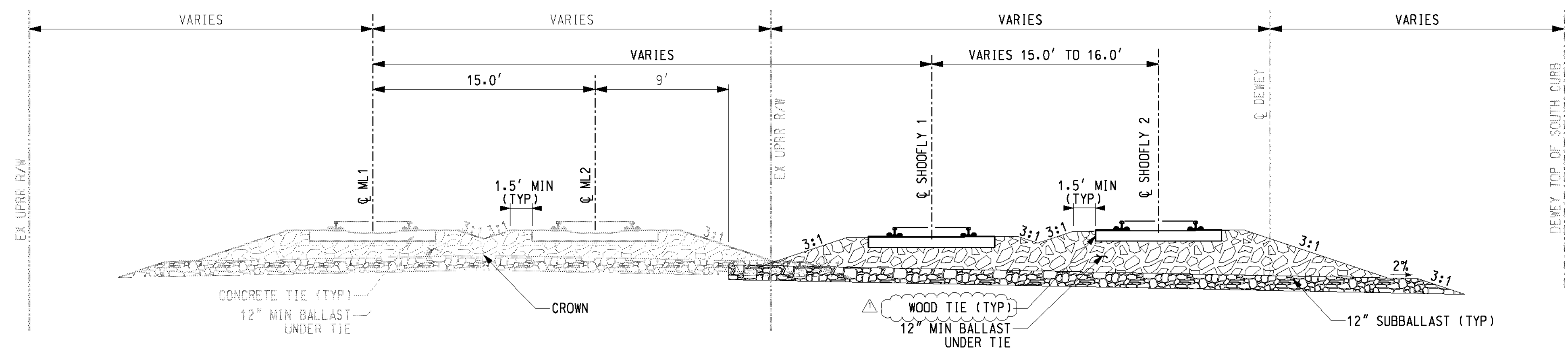
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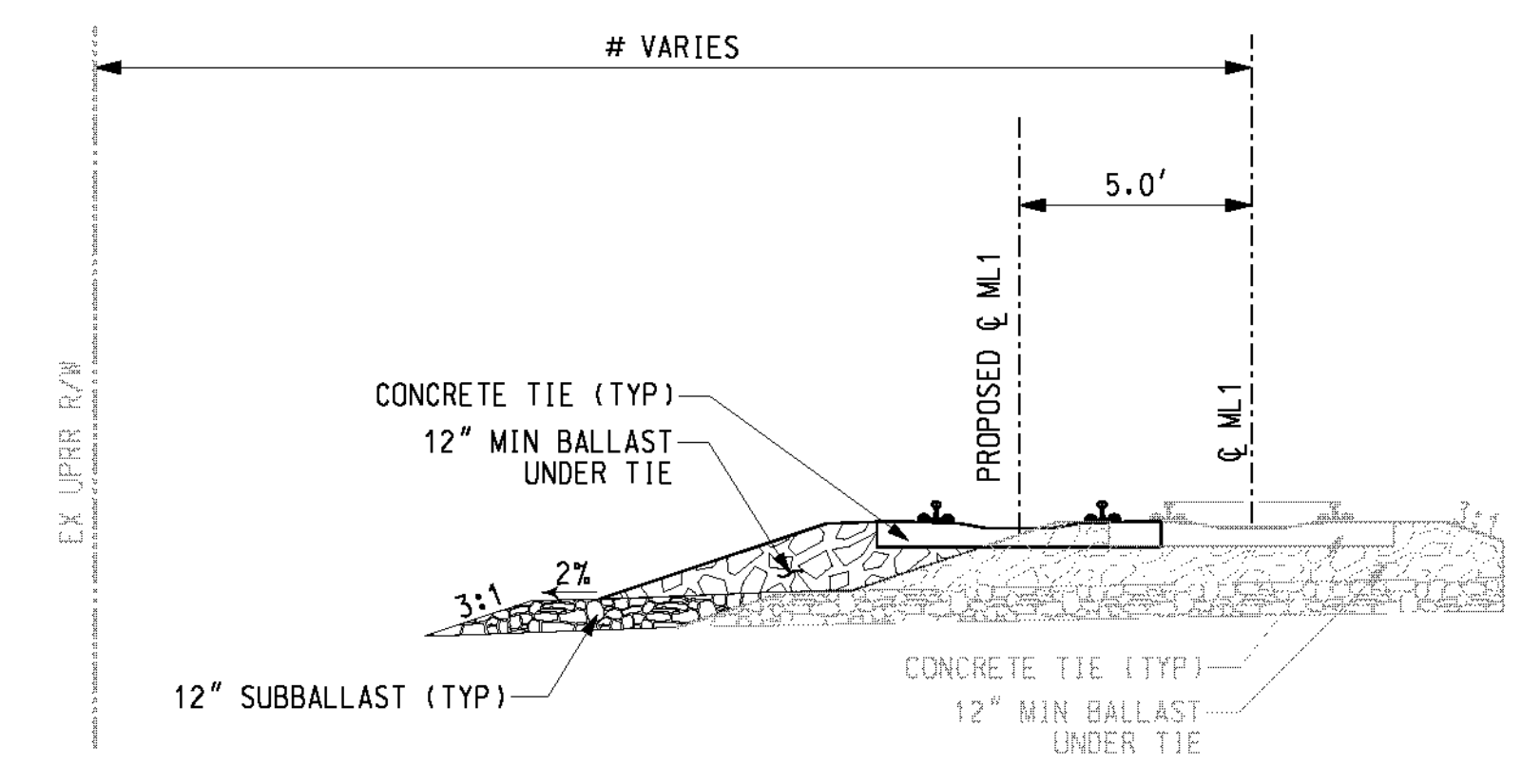
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SHOOFLY TYPICAL SECTION - 2 TRACKS
SCALE: NTS



SHOOFLY TYPICAL SECTION - 2 TRACKS
SCALE: NTS



PROPOSED ML1 TYPICAL SECTION
SCALE: NTS

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
Section 4276/4277 of the Government Code requires a Dig Alert identification number to be placed on all utility lines before excavation. For your Dig Alert, call 1-800-227-2600. CALL TOLL FREE 48 HOURS BEFORE YOU DIG **UNDERGROUND SERVICE ALERT** 1-800-227-2600

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CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
TYPICAL SECTIONS TD-03
HORIZ. SCALE: VERT. SCALE:

R-4180
SHEET 69 OF 191
FILE NO.

M:\RR\08-400-139-00\AC\ADD\SHSHEETS\TD03.dwg

DATE: 9/17/2012
TIME: 8:36:40 AM

USER = DCPop
1003.sht

CURVE DATA - 08400139 Shooflies											
CURVE ID	TRACK	TS/SC/PI/CS/ST OR PC/PT STA	NORTHING	EASTING	BEARING	DC	R	I	TC	Ls	Lc
POB	Shoofly 1	POB 1000+00.00	2294723.302	6205333.252	S 44°13'45" E	N/A	N/A	N/A	N/A	N/A	N/A
Curve #1	Shoofly 1	TS 1002+32.44	2294556.747	6205495.385	S 44°13'45" E	2°50'00"	2022.41'	45°35'40" Left	706.49	250	1359.38'
		SC 1004+82.44	2294381.269	6205673.391							
		PI 1012+07.99	2293857.711	6206175.862							
		CS 1018+41.68	2293860.626	6206901.522							
		ST 1020+91.68	2293854.708	6207151.41	S 89°49'25" E						
Curve #2	Shoofly 1	TS 1024+10.85	2293853.725	6207470.58	S 89°49'25" E	1°15'00"	4583.75'	2°48'36" Left	52.41	120	104.81'
		SC 1025+30.85	2293853.879	6207590.579							
		PI 1025+83.28	2293853.194	6207643.01							
		CS 1026+35.66	2293856.127	6207695.364							
		ST 1027+55.66	2293861.118	6207815.259	N 87°21'59" E						
Curve #3	Shoofly 1	TS 1033+15.67	2293886.851	6208374.678	N 87°21'59" E	1°15'00"	4583.75'	2°48'51" Right	52.57	120	105.15'
		SC 1034+35.67	2293891.841	6208494.573							
		PI 1034+88.27	2293894.782	6208547.093							
		CS 1035+40.81	2293894.092	6208599.692							
		ST 1036+60.81	2293894.238	6208719.691	S 89°49'10" E						
POE	Shoofly 1	POE 1036+87.31	2293894.154	6208746.193	S 89°49'10" E	N/A	N/A	N/A	N/A	N/A	N/A

POB	Shoofly 2	POB 2000+00.00	2294712.897	6205322.565	S 44°14'19" E	N/A	N/A	N/A	N/A	N/A	N/A
Curve #1	Shoofly 2	TS 2002+39.22	2294541.512	6205489.455	S 44°14'19" E	2°50'00"	2022.41'	45°35'06" Left	706.3	250	1359.04'
		SC 2004+89.22	2294366.063	6205667.49							
		PI 2012+14.57	2293842.729	6206169.911							
		CS 2018+48.12	2293845.645	6206895.374							
		ST 2020+98.12	2293839.726	6207145.261	S 89°49'25" E						
Curve #2	Shoofly 2	TS 2024+28.20	2293838.71	6207475.333	S 89°49'25" E	1°14'45"	4598.75'	2°41'27" Left	47.99	120	95.97'
		SC 2025+48.20	2293838.863	6207595.332							
		PI 2025+96.20	2293838.193	6207643.34							
		CS 2026+44.17	2293840.821	6207891.281							
		ST 2027+64.17	2293845.564	6207811.187	N 87°29'08" E						
Curve #3	Shoofly 2	TS 2033+72.42	2293872.248	6208418.857	N 87°29'08" E	1°15'15"	4568.75'	2°41'38" Right	47.4	120	94.80'
		SC 2034+92.42	2293876.988	6208538.763							
		PI 2035+39.85	2293879.593	6208586.119							
		CS 2035+87.22	2293878.92	6208633.543							
		ST 2037+07.22	2293879.069	6208753.542	S 89°49'14" E						
POE	Shoofly 2	POE 2037+52.23	2293878.928	6208798.546	S 89°49'14" E	N/A	N/A	N/A	N/A	N/A	N/A

CURVE DATA - 08400139 Proposed											
CURVE ID	TRACK	TS/SC/PI/CS/ST OR PC/PT STA	NORTHING	EASTING	BEARING	DC	R	I	TC	Ls	Lc
POB	Arlington Team Track	POB 4815+80.00	2294855.207	6205161.448	S 44°12'43" E	N/A	N/A	N/A	N/A	N/A	N/A
Curve #1	Arlington Team Track	TS 4820+25.29	2294536.037	6205471.957	S 44°12'43" E	2°59'08"	1919.39'	43°48'29" Left	702.89	240	1347.55'
		SC 4822+85.29	2294367.567	6205642.831							
		PI 4829+15.72	2293897.81	6206092.864							
		PT 4836+12.69	2293871.08	6206865.95	S 88°01'11" E						
		PC 4836+76.14	2293868.889	6206929.365	S 88°01'11" E						
Curve #2	Arlington Team Track	PT 4837+49.89	2293870.849	6207003.121	N 84°58'28" E	9°30'00"	603.8	7°00'21"	36.96	-----	73.83
POE	Arlington Team Track	POE 4839+32.15	2293883.98	6207184.803	S 89°49'14" E	N/A	N/A	N/A	N/A	N/A	N/A

POB	ML1 Proposed	POB 2804+97.85	2295652.545	6204428.681	S 44°13'45" E	N/A	N/A	N/A	N/A	N/A	N/A
Curve #1	ML1 Proposed	TS 2819+42.15	2294617.625	6205436.124	S 44°13'45" E	3°04'28"	1863.82'	45°35'29" Left	592.91	420	1148.08'
		SC 2823+62.15	2294328.046	6205740.008							
		PI 2829+33.47	2293907.29	6206127.599							
		CS 2835+10.23	2293910.803	6206790.169							
		ST 2837+60.23	2293904.434	6207040.038	S 89°49'14" E						
Curve #2	ML1 Proposed	TS 2844+33.74	2293902.325	6207713.545	S 89°49'14" E	0°30'00"	11459.19'	0°26'02" Right	10.9	65	21.79'
		SC 2844+98.74	2293902.06	6207778.544							
		PI 2845+09.63	2293902.088	6207789.44							
		CS 2845+20.53	2293901.91	6207800.335							
		ST 2845+85.53	2293901.275	6207865.332	S 89°23'12" E						
Curve #3	ML1 Proposed	TS 2850+85.03	2293895.928	6208364.808	S 89°23'12" E	0°30'00"	11459.19'	0°25'58" Left	10.78	65	21.56'
		SC 2851+50.03	2293895.294	6208429.805							
		PI 2851+60.81	2293895.117	6208440.582							
		CS 2851+71.59	2293895.145	6208451.361							
		ST 2852+36.59	2293894.878	6208516.36	S 89°49'10" E						
POE	ML1 Proposed	POE 2872+21.41	2293888.624	6210501.167	S 89°49'10" E	N/A	N/A	N/A	N/A	N/A	N/A

POB	ML2 Proposed	POB 3804+97.85	2295641.723	6204418.1	S 44°14'19" E	N/A	N/A	N/A	N/A	N/A	N/A
Curve #1	ML2 Proposed	TS 3819+49.75	2294601.526	6205431.015	S 44°14'19" E	3°03'07"	1877.55'	45°34'55" Left	598.46	420	1158.69'
		SC 3823+69.75	2294311.912	6205734.87							
		PI 3829+46.67	2293887.294	6206126.515							
		CS 3835+28.44	2293890.748	6206794.64							
		ST 3837+78.44	2293884.42	6207044.511	S 89°49'14" E						
POE	ML2 Proposed	POE 3872+35.27	2293873.597	6210501.329	S 89°49'14" E	N/A	N/A	N/A	N/A	N/A	N/A

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

ms:\p\08-400-139-00\road\sheet\084001.dwg

DATE: 8/7/2012
 TIME: 10:17:52 AM

IMPORTANT NOTICE
 Section 4716.0217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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DATE 8-7-12



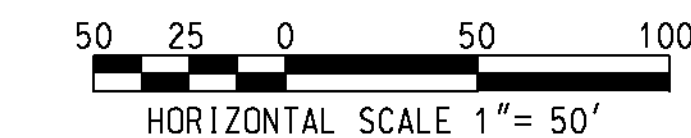
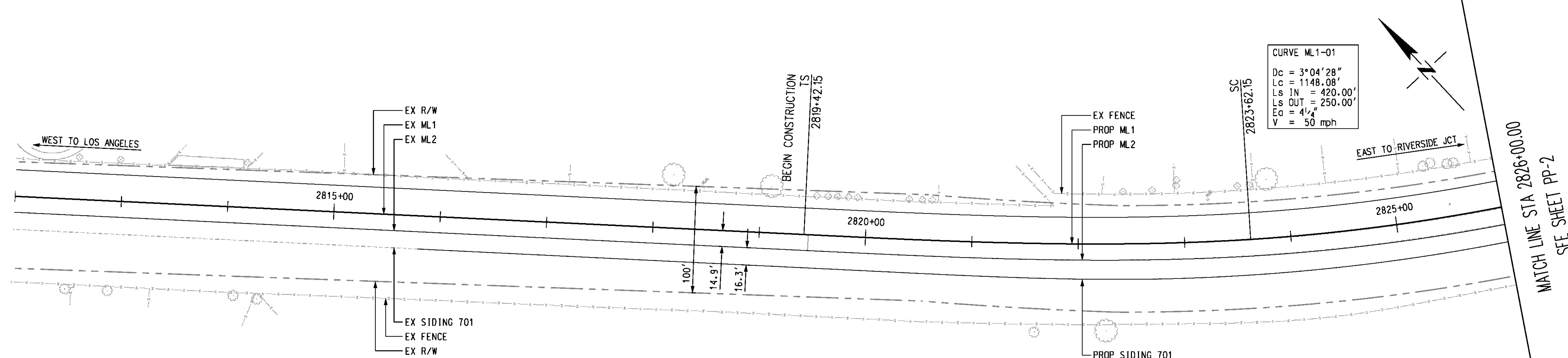
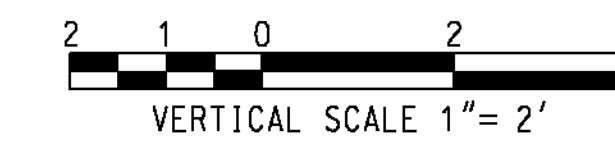
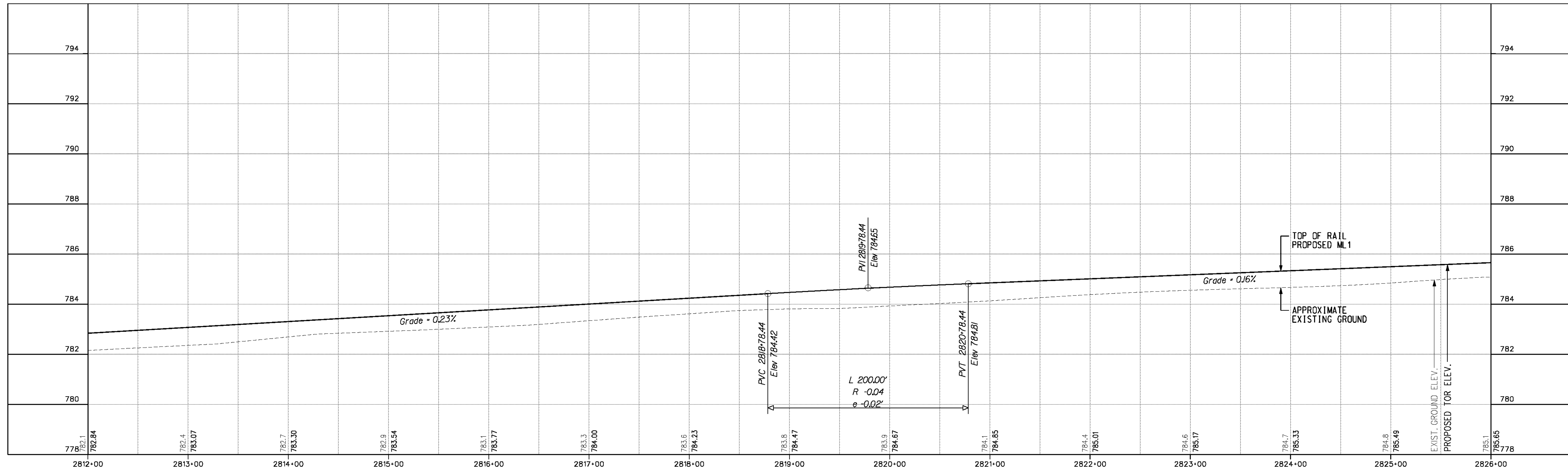
MARK	REVISIONS	APPR.	DATE

DESIGNED BY *MWP* DRAWN BY *SRP* CHECKED BY *AWP*

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
 STREETER AVENUE UNDERPASS
 PROPOSED TRACK GEOMETRY G-01
 HORIZ. SCALE: N/A VERT. SCALE: N/A

R-4180
 SHEET 70 OF 191
 FILE NO.

USER: altyrchk

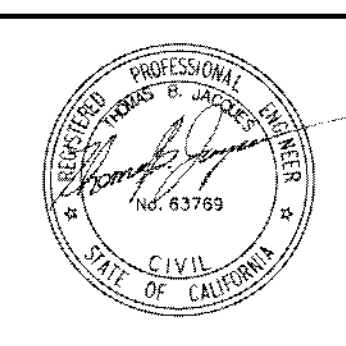


AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

NICHOLS PARK

IMPORTANT NOTICE
Section 43161-217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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MARK	REVISIONS	APPR.	DATE

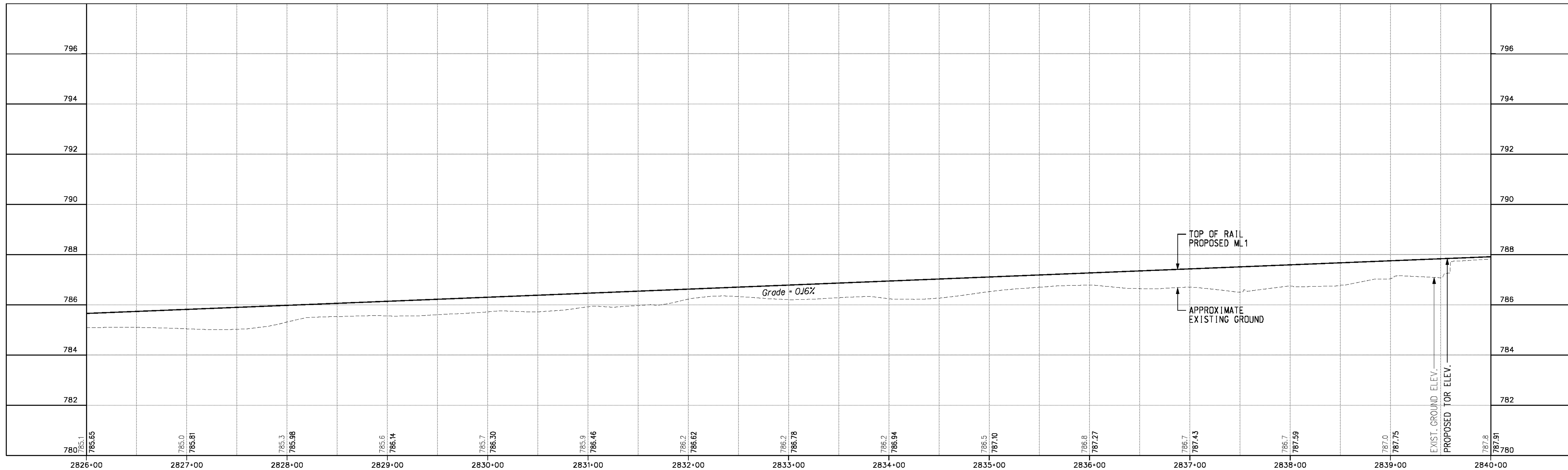
DESIGNED BY *MWP* DRAWN BY *SRP* CHECKED BY *JMT*

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
ML1 TRACK PLAN & PROFILE PP-01

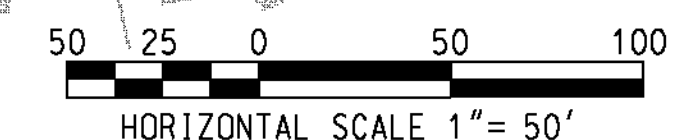
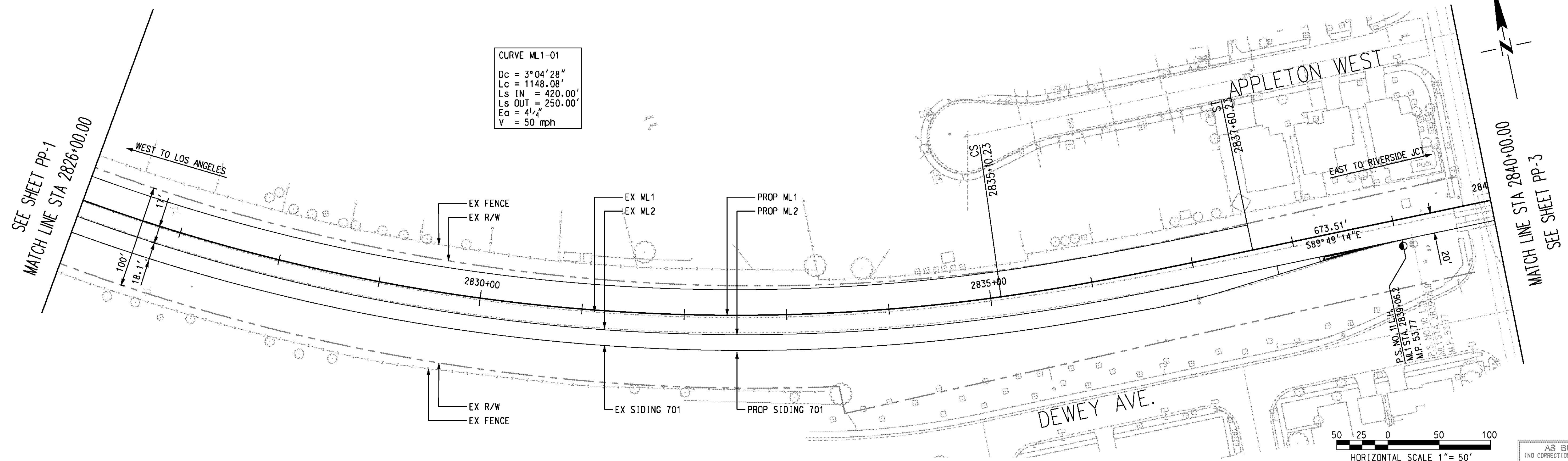
R-4180
SHEET **71** OF **191**
FILE NO.

DATE: 8/7/2012 TIME: 10:18:37 AM

USER: a11ymchek PF001.dwt



CURVE ML1-01
 Dc = 3°04'28"
 Lc = 1148.08'
 Ls IN = 420.00'
 Ls OUT = 250.00'
 Ea = 4 1/4"
 V = 50 mph



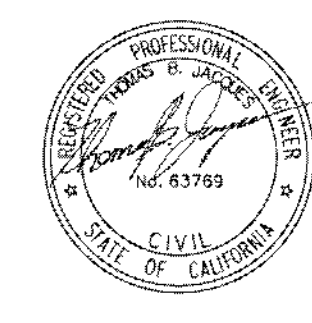
AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

ml: w:\p\08-10-13-00\road\sheet\swpp02.dgn
 DATE: 8/7/2012
 TIME: 10:18:40 AM

IMPORTANT NOTICE
 Section 4134-4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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DATE 8-7-12



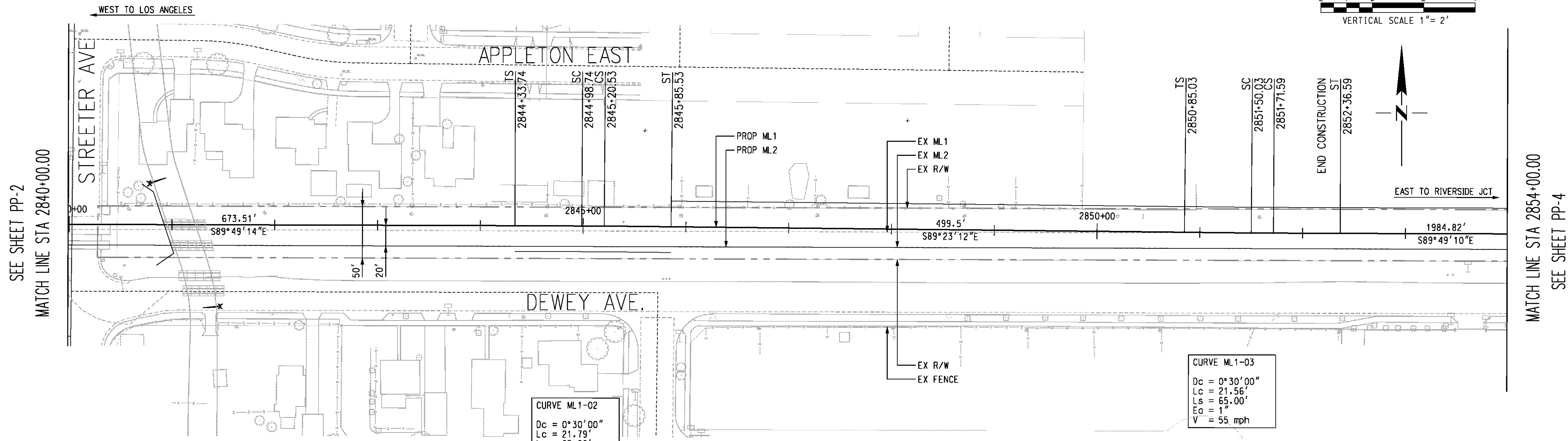
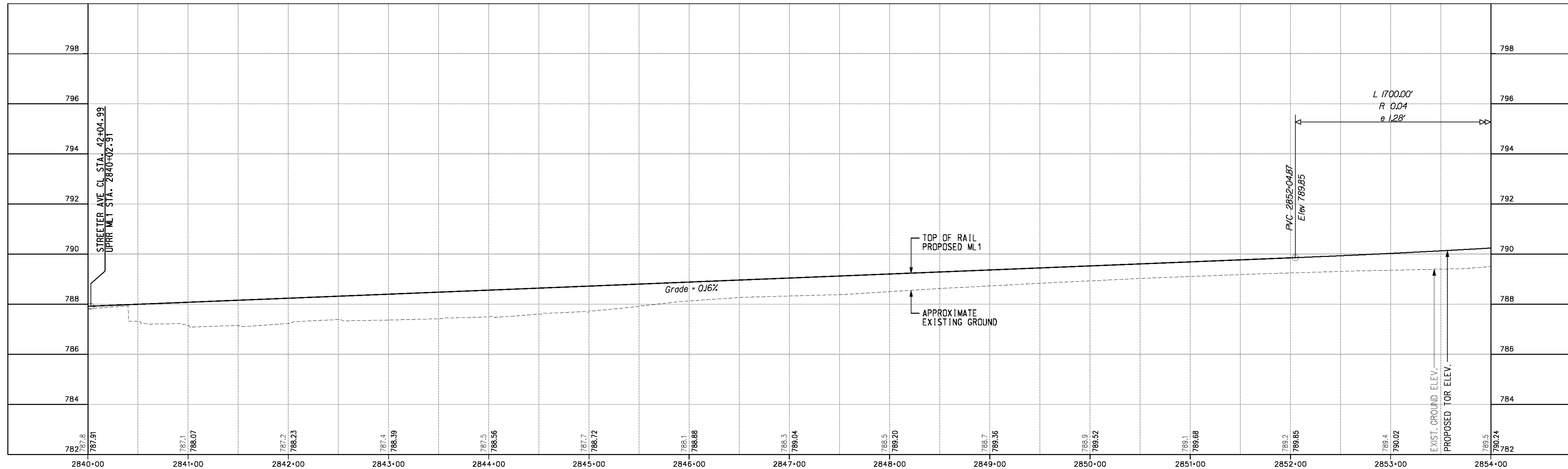
MARK	REVISIONS	APPR.	DATE

DESIGNED BY *MWP* DRAWN BY *SRP* CHECKED BY *JMT*

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
 STREETER AVENUE UNDERPASS
ML1 TRACK PLAN & PROFILE PP-02

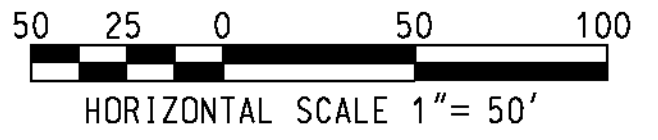
R-4180
 SHEET **72** OF **191**
 FILE NO.

USER = a11ymchek
 PP002.dgn



CURVE ML1-02
 Dc = 0° 30' 00"
 Lc = 21.79'
 Ls = 65.00'
 Ea = 1"
 V = 55 mph

CURVE ML1-03
 Dc = 0° 30' 00"
 Lc = 21.56'
 Ls = 65.00'
 Ea = 1"
 V = 55 mph



AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

ml: m:\p\08-100-139-00\road\sheet\swpp003.dgn
 DATE: 8/7/2012
 TIME: 10:18:43 AM

IMPORTANT NOTICE
 Section 4134.0217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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 625 E. CARNEGIE DRIVE SUITE 100
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DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

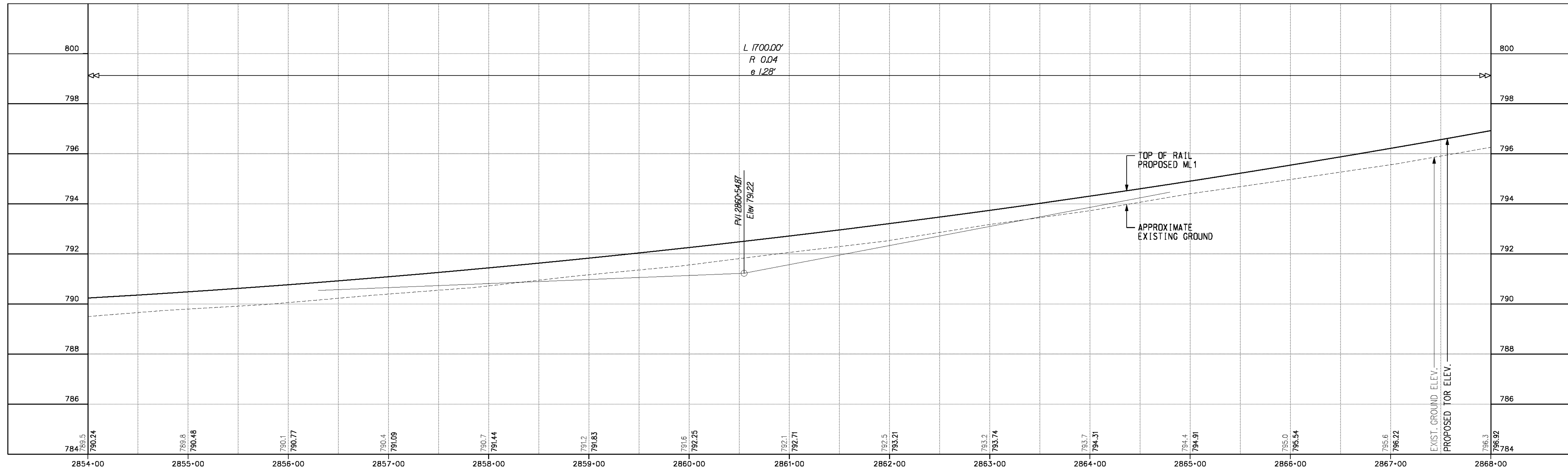
DESIGNED BY *MWP* DRAWN BY *SRP* CHECKED BY *JMT*

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
ML1 TRACK PLAN & PROFILE PP-03

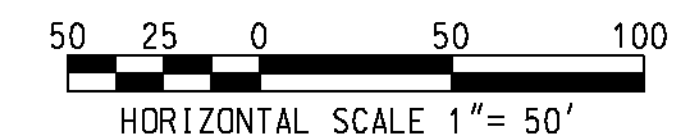
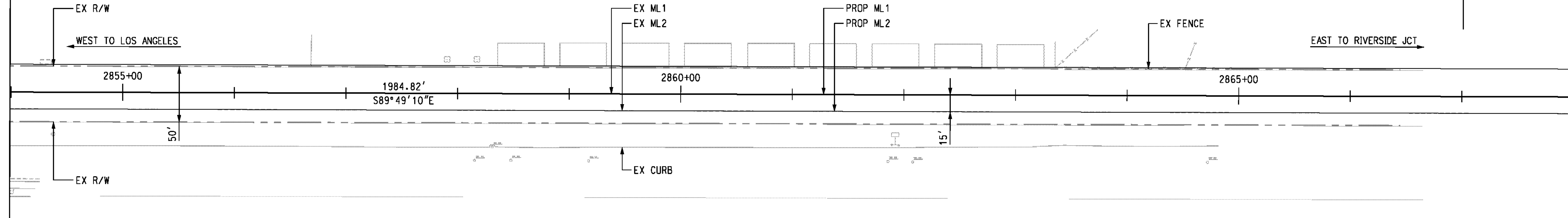
R-4180
 SHEET **73** OF **191**
 FILE NO.

HORIZ. SCALE: VERT. SCALE:

USER = a11ymchek PF003.dgn



SEE SHEET PP-3
MATCH LINE STA 2854+00.00



AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

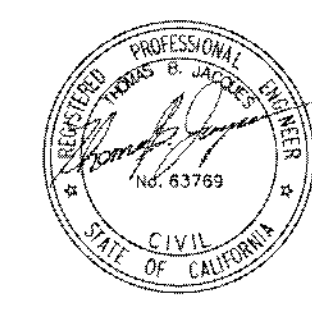
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DATE: 8/7/2012
TIME: 10:18:47 AM

IMPORTANT NOTICE
Section 43164.0217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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DATE 8-7-12



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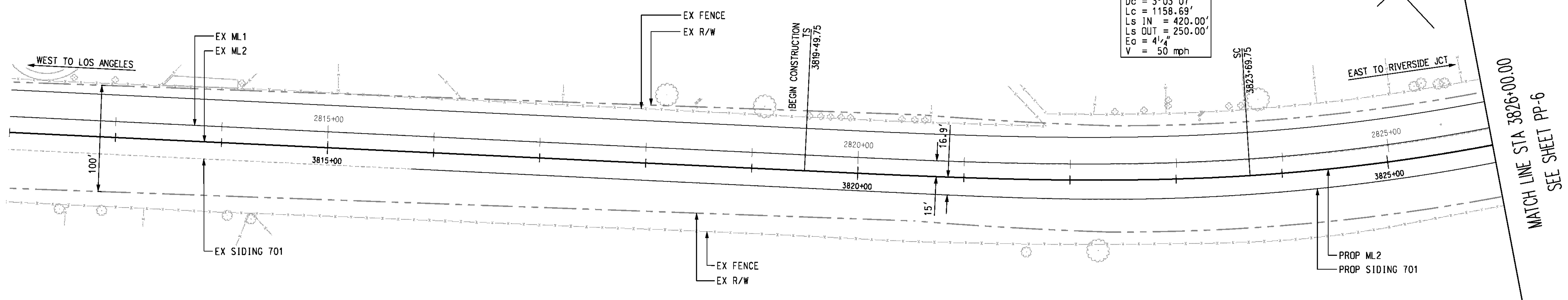
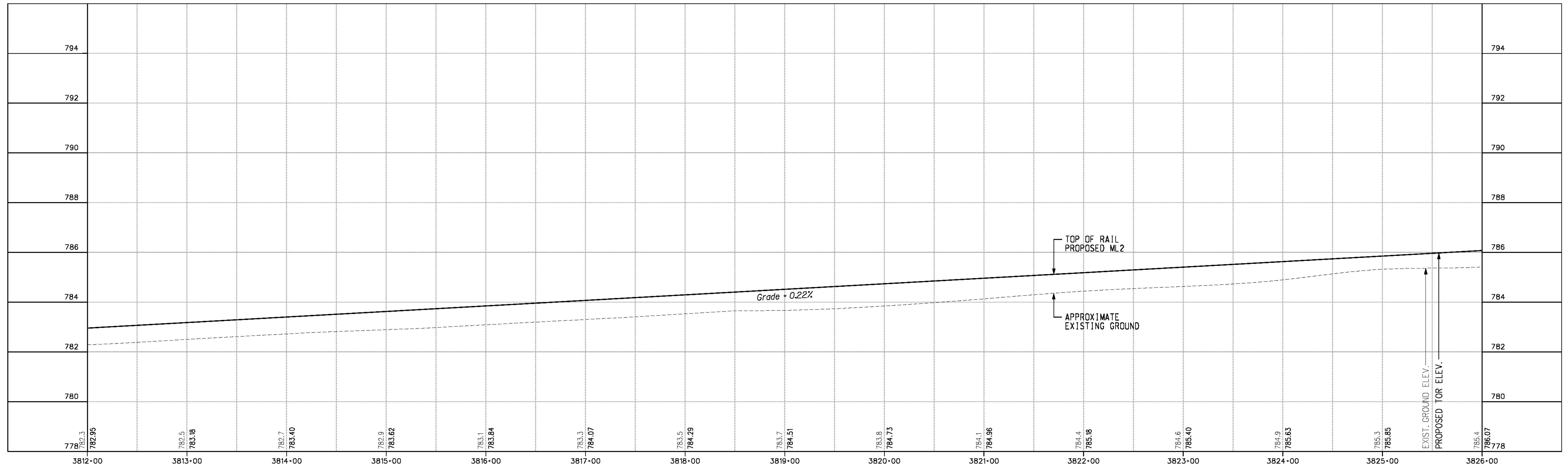
DESIGNED BY *MMP* DRAWN BY *SRP* CHECKED BY *JMT*

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
ML1 TRACK PLAN & PROFILE PP-04

R-4180
SHEET **74** OF **191**
FILE NO.

HORIZ. SCALE: VERT. SCALE:

USER = altymchek
PF004.dgn



NICHOLS PARK

MATCH LINE STA 3826+00.00
SEE SHEET PP-6

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
Section 4116.4217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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DATE 8-7-12



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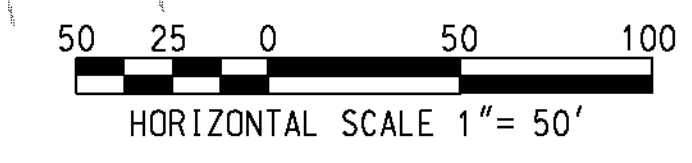
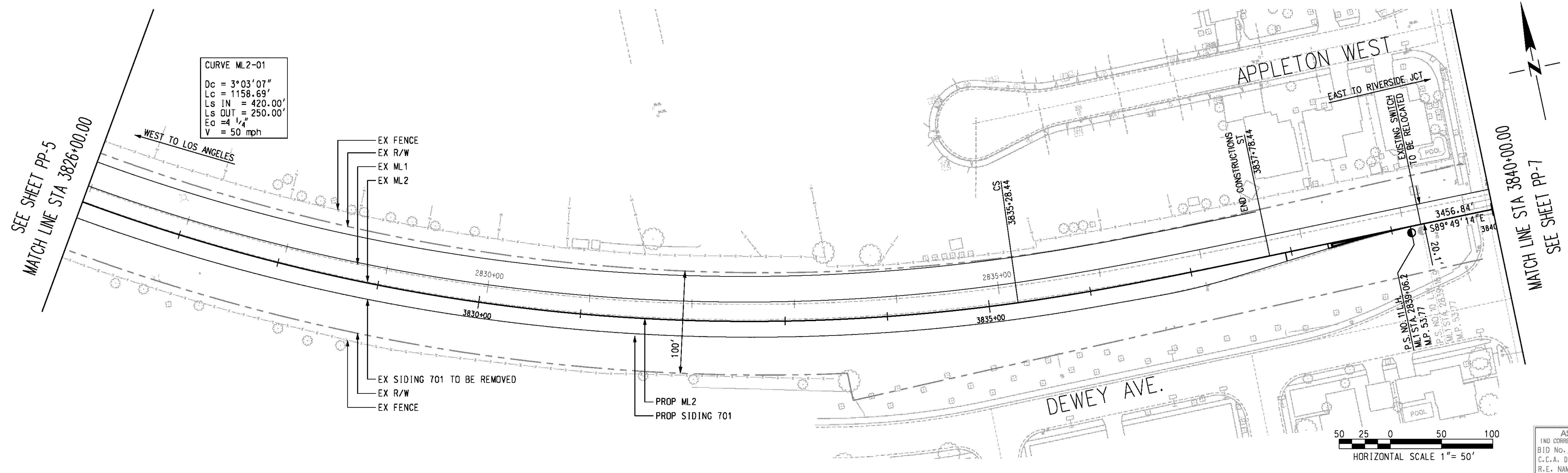
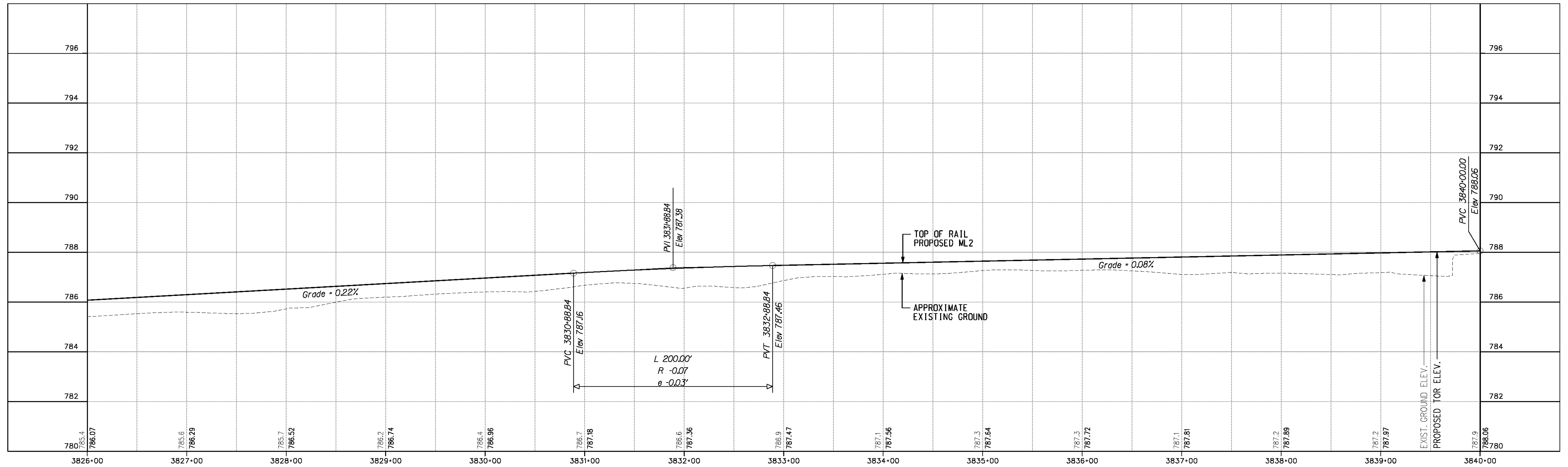
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
ML2 TRACK PLAN & PROFILE PP-05

R-4180
SHEET 75 OF 191
FILE NO.

HORIZ. SCALE: VERT. SCALE:

DATE: 8/7/2012
TIME: 10:18:51 AM

USER: a11ymchek
PP005.dwt



AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

ml: rfp-08-100-139-00-rdgs-sheets-wfp006.dht
 DATE: 8/7/2012
 TIME: 10:18:56 AM

IMPORTANT NOTICE
 Section 4134.4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
 625 E. CARNEGIE DRIVE SUITE 100
 SAN BERNARDINO, CA 92408
 (909) 806-8000
 www.wilsonco.com

DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

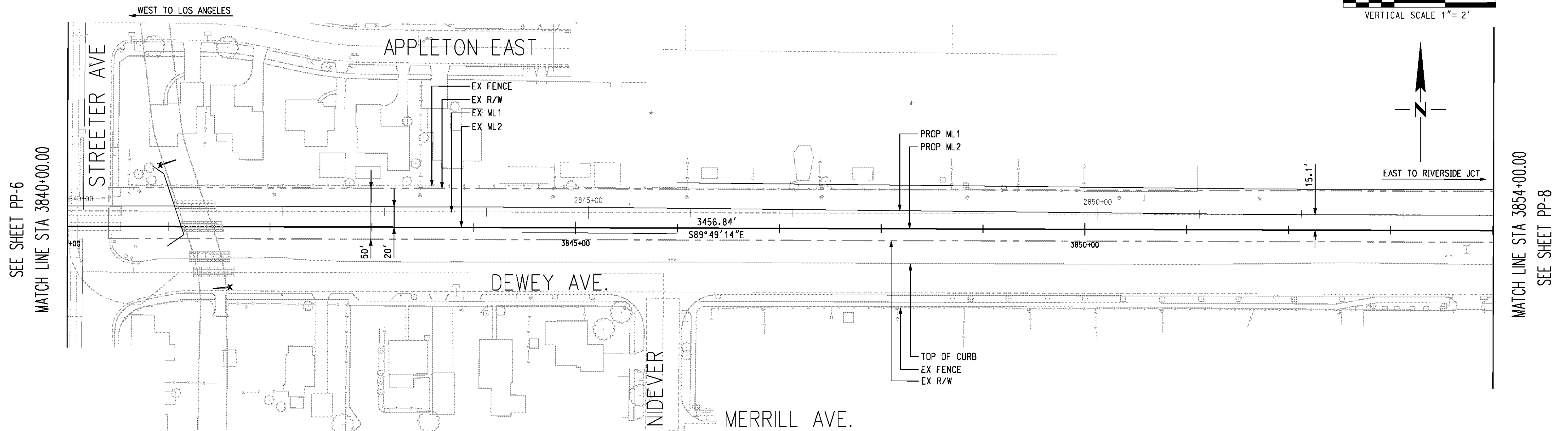
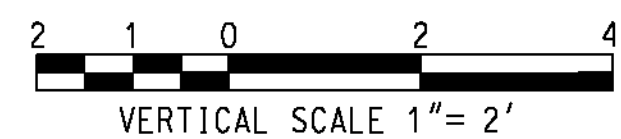
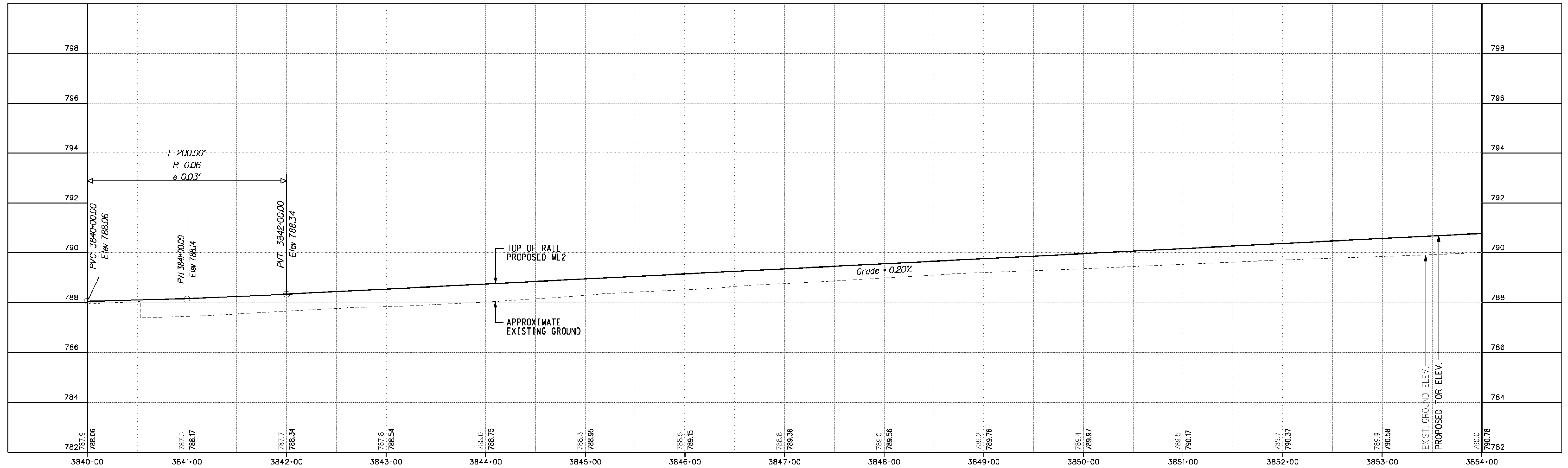
DESIGNED BY *MWP* DRAWN BY *SRD* CHECKED BY *JMT*

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
ML2 TRACK PLAN & PROFILE PP-06

R-4180
 SHEET **76** OF **191**
 FILE NO.

HORIZ. SCALE: VERT. SCALE:

USER = altychek PF006.dht



AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

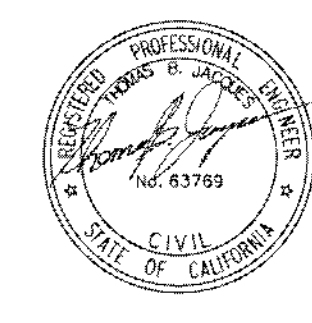
ms:\p\108-100-139-00\road\sheet\swpp007.dgn

DATE: 8/7/2012
 TIME: 10:18:59 AM

IMPORTANT NOTICE
 Section 4134-4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
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 SAN BERNARDINO, CA 92408
 (909) 806-8000
 www.wilsonco.com

DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

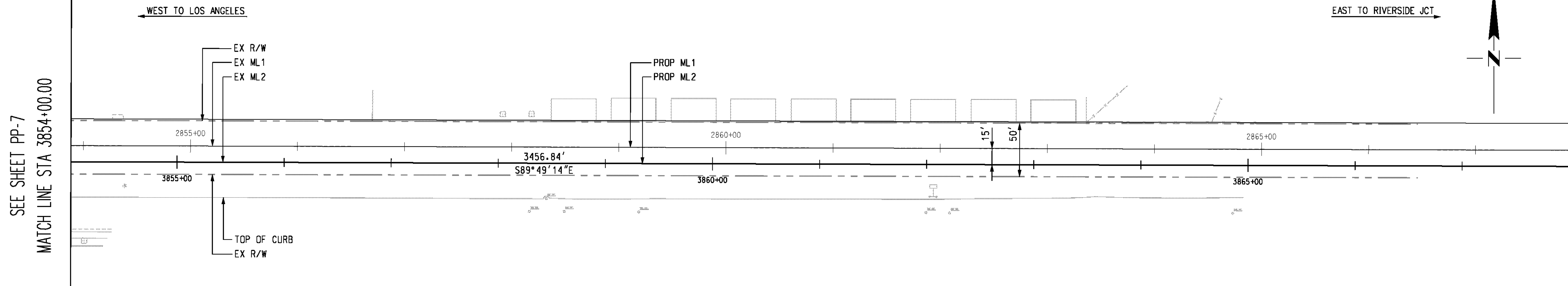
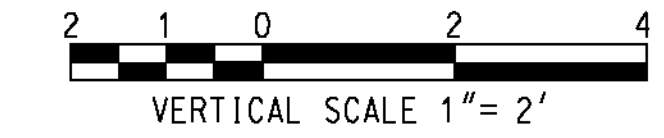
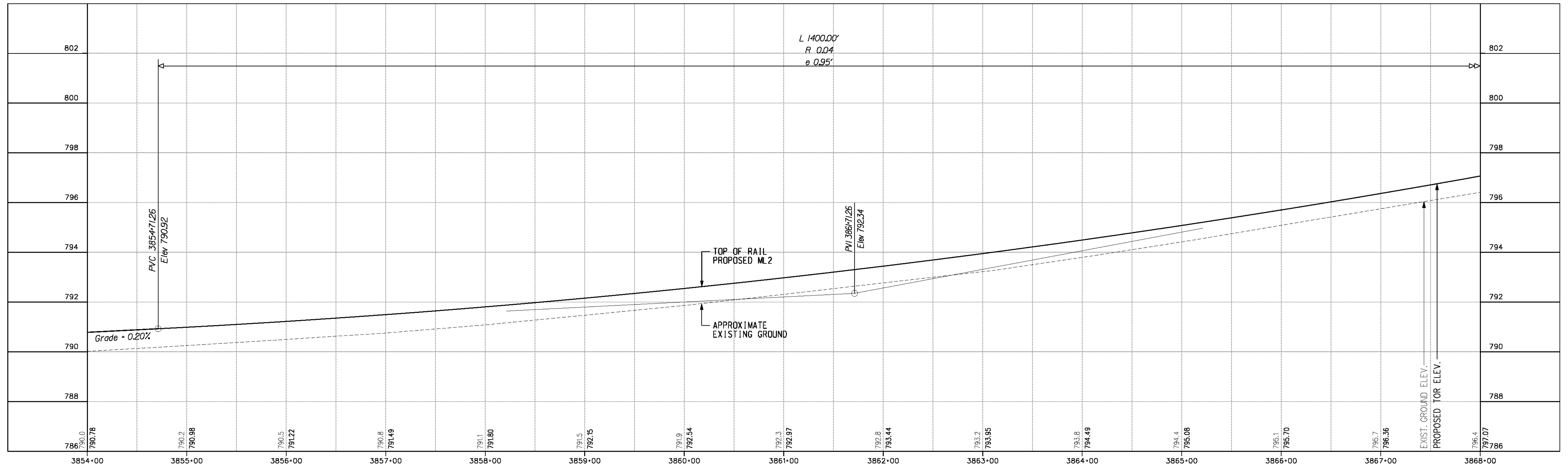
DESIGNED BY *MWP* DRAWN BY *SRP* CHECKED BY *JMT*

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
 STREETER AVENUE UNDERPASS
ML2 TRACK PLAN & PROFILE PP-07

R-4180
 SHEET **77** OF **191**
 FILE NO.

HORIZ. SCALE: VERT. SCALE:

USER = a11ymchek PF007.dgn



AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

DATE: 8/7/2012
 TIME: 10:19:02 AM
 USER: a11ymchek
 PP008.dwt

IMPORTANT NOTICE
 Section 43161-4212 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
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 SAN BERNARDINO, CA 92408
 (909) 806-8000
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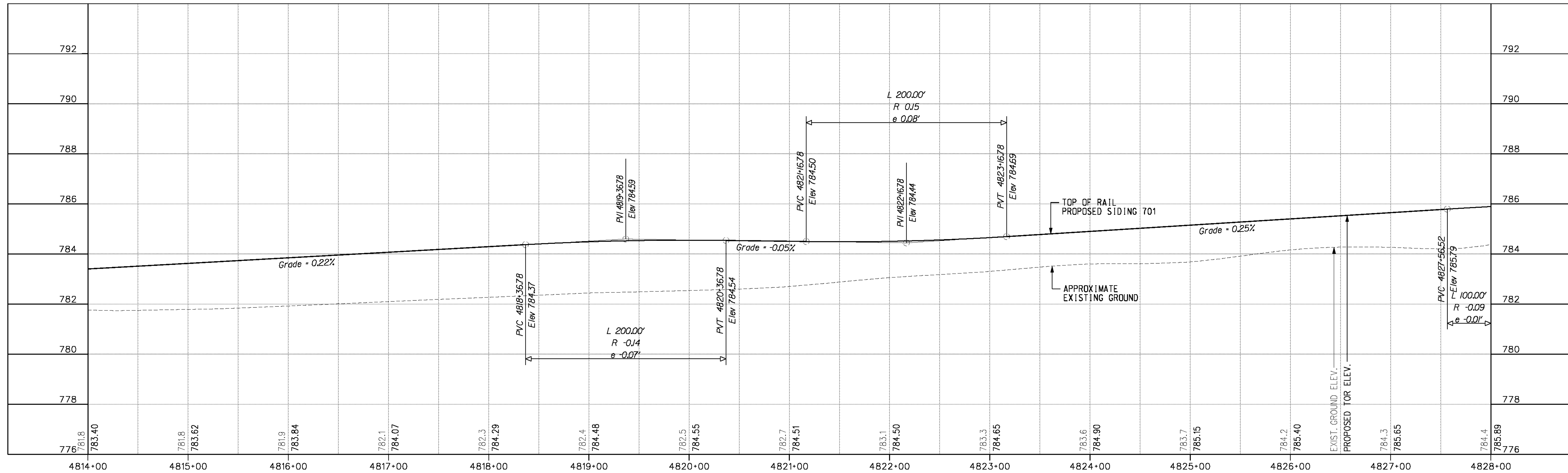
DESIGNED BY *MVP* DRAWN BY *SRP* CHECKED BY *JMT*
 DATE 8-7-12

MARK	REVISIONS	APPR.	DATE

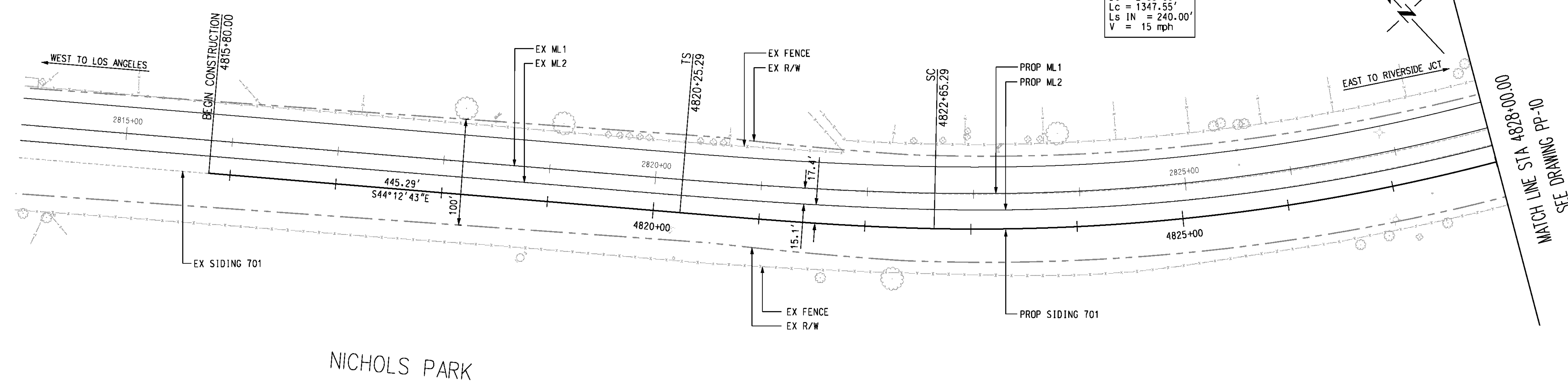
CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
ML2 TRACK PLAN & PROFILE PP-08

R-4180
 SHEET **78** OF **191**
 FILE NO.

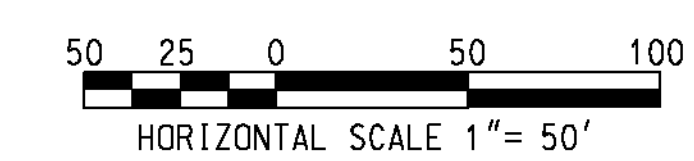
HORIZ. SCALE: VERT. SCALE:



CURVE S-01
 $D_c = 2^\circ 59' 08''$
 $L_c = 1347.55'$
 $L_s IN = 240.00'$
 $V = 15 \text{ mph}$



NICHOLS PARK



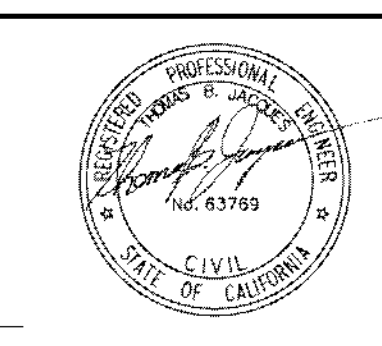
AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

m:\p\08-100-139-00\road\sheet\pp009.dwt
 DATE: 8/7/2012
 TIME: 10:19:05 AM

IMPORTANT NOTICE
 Section 4316.4217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
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 SAN BERNARDINO, CA 92408
 (909) 806-8000
 www.wilsonco.com

DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

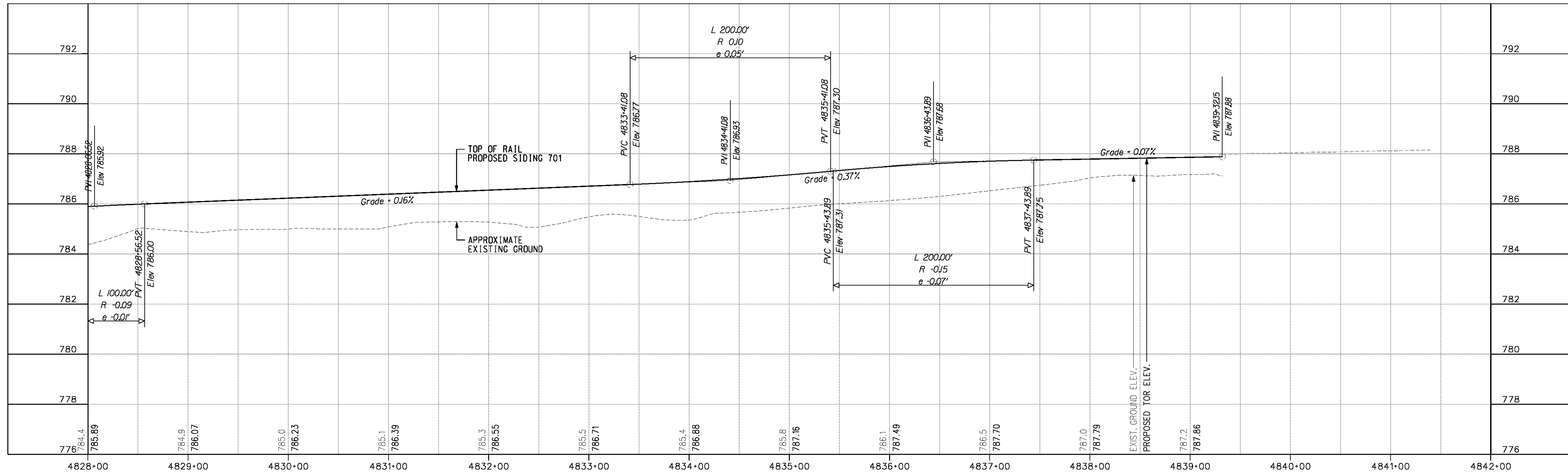
DESIGNED BY *MWP* DRAWN BY *SRP* CHECKED BY *JMT*

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
 STREETER AVENUE UNDERPASS
SIDING 701 TRACK PLAN & PROFILE PP-09

R-4180
 SHEET **79** OF **191**
 FILE NO.

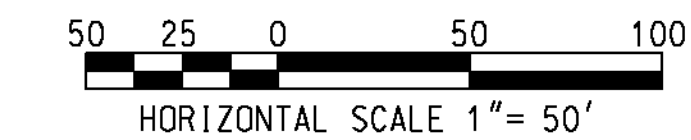
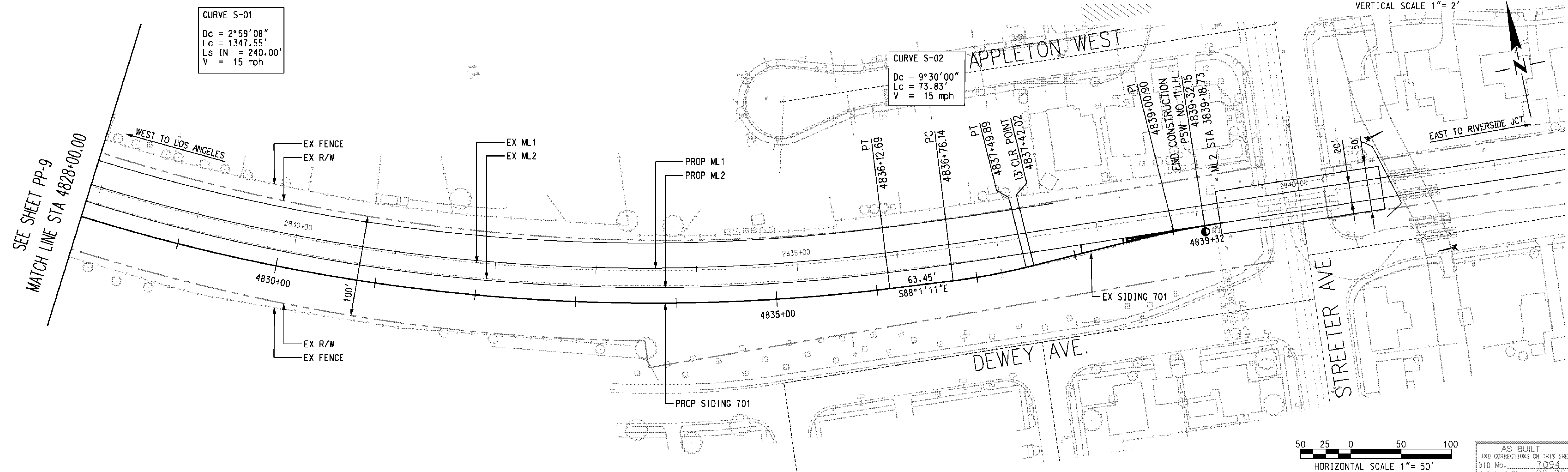
HORIZ. SCALE: VERT. SCALE:

USER = a11ymchek
 PP009.dwt



CURVE S-01
 $D_c = 2^\circ 59' 08''$
 $L_c = 1347.55'$
 $L_s IN = 240.00'$
 $V = 15 \text{ mph}$

CURVE S-02
 $D_c = 9^\circ 30' 00''$
 $L_c = 73.83'$
 $V = 15 \text{ mph}$



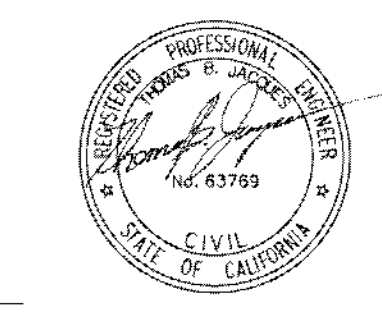
AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

m:\p\108-400-139-00\road\sheet\pp10.dwg
 DATE: 8/7/2012
 TIME: 10:19:09 AM

IMPORTANT NOTICE
 Section 414.0217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

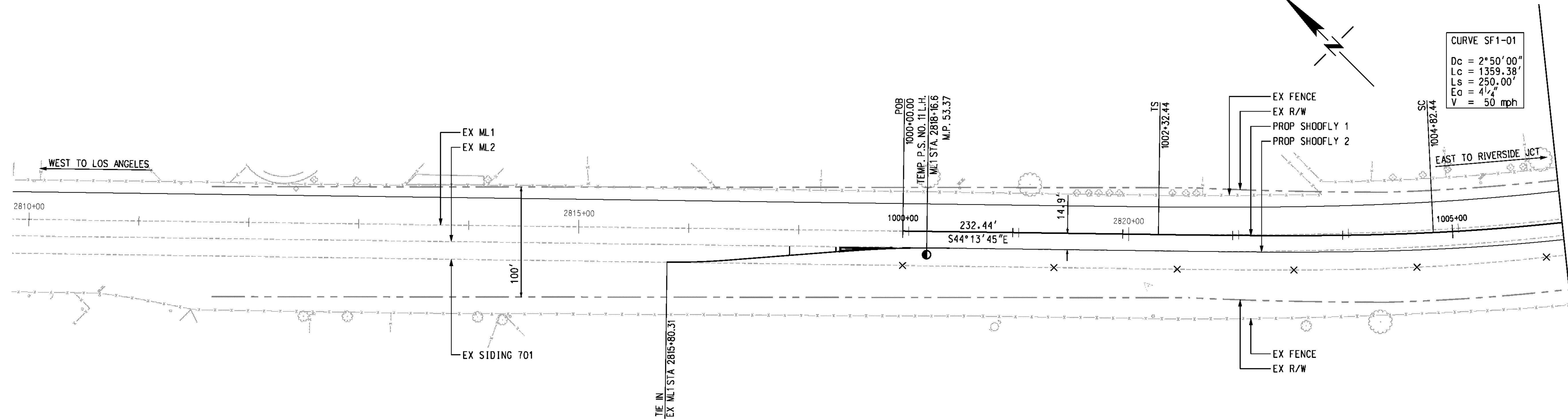
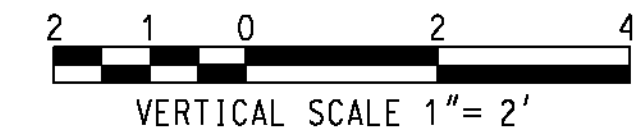
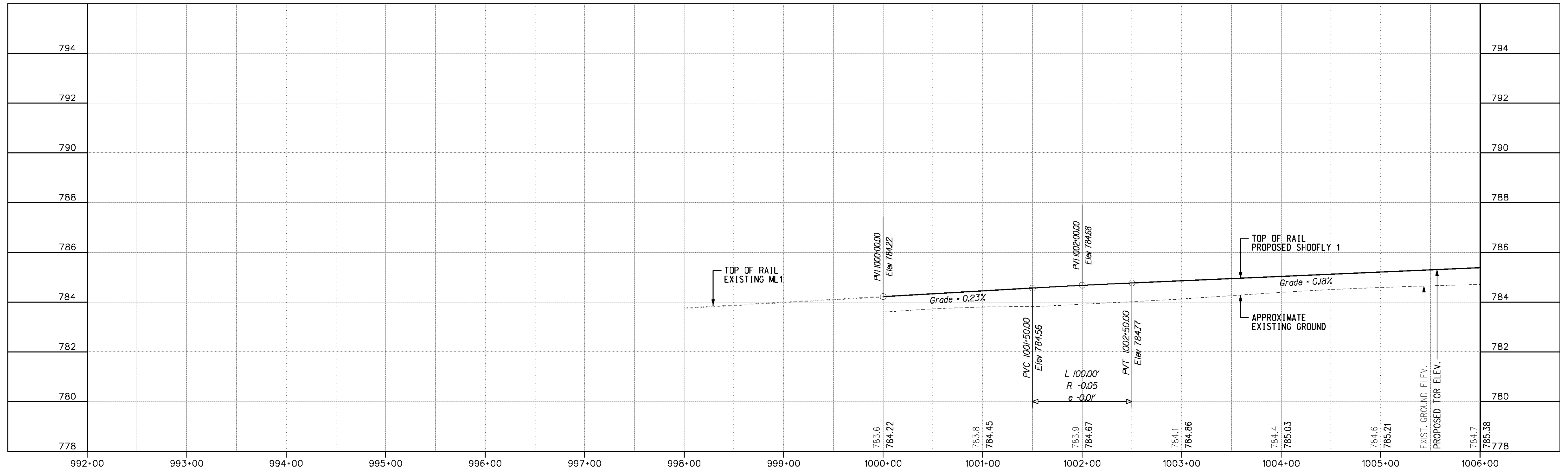
DESIGNED BY *MWP* DRAWN BY *SRP* CHECKED BY *JMT*

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SIDING 701 TRACK PLAN & PROFILE PP-10

R-4180
 SHEET **80** OF **191**
 FILE NO.

HORIZ. SCALE: VERT. SCALE:

USER = altychek PF010.dwg

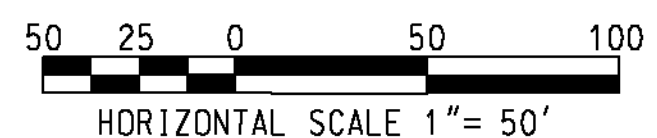


CURVE SF1-01

Dc	= 2° 50' 00"
Lc	= 1359.38'
Ls	= 250.00'
Ea	= 4 1/2'
V	= 50 mph

NICHOLS PARK

LEGEND
 x x x EXISTING SIDING TRACK TO BE REMOVED DURING SHOOFLIES



AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

m:\p\108-400-139-00\road\sheet\pp011.dwt
 DATE: 8/7/2012
 TIME: 10:19:12 AM

IMPORTANT NOTICE
 Section 43161-217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
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 SAN BERNARDINO, CA 92408
 (909) 806-8000
 www.wilsonco.com

DATE 8-7-12



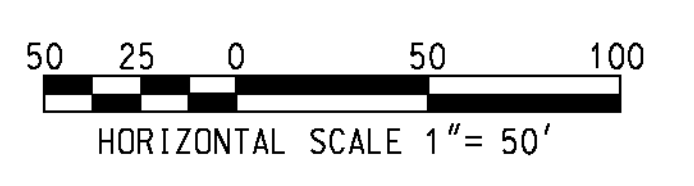
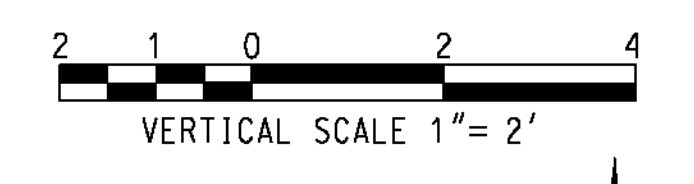
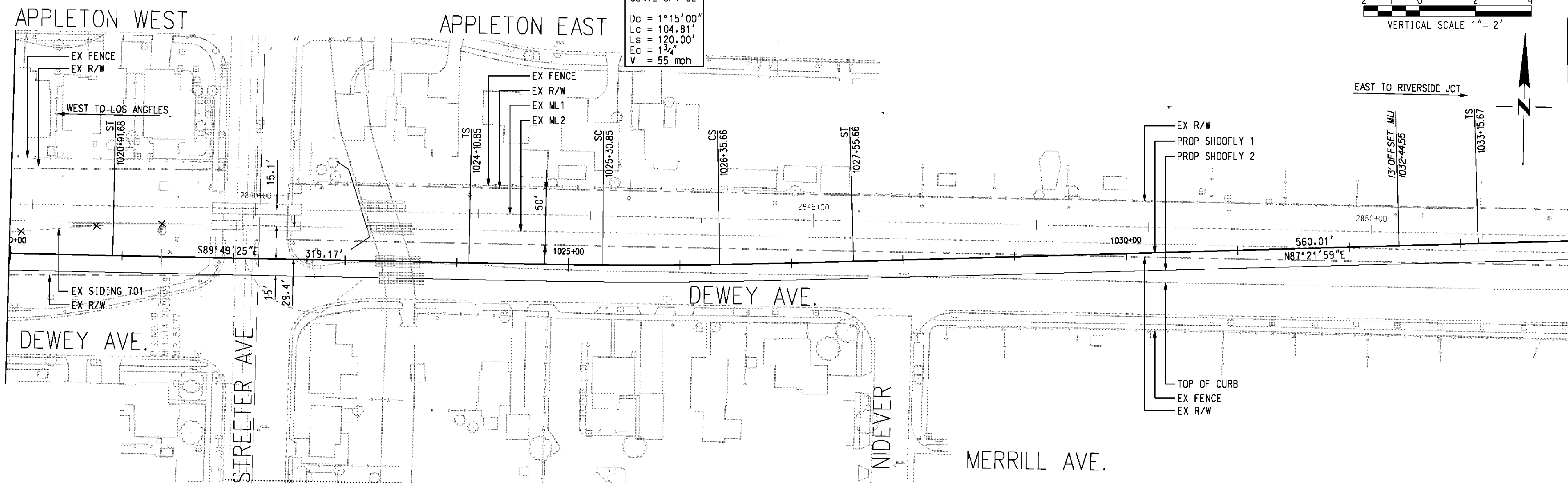
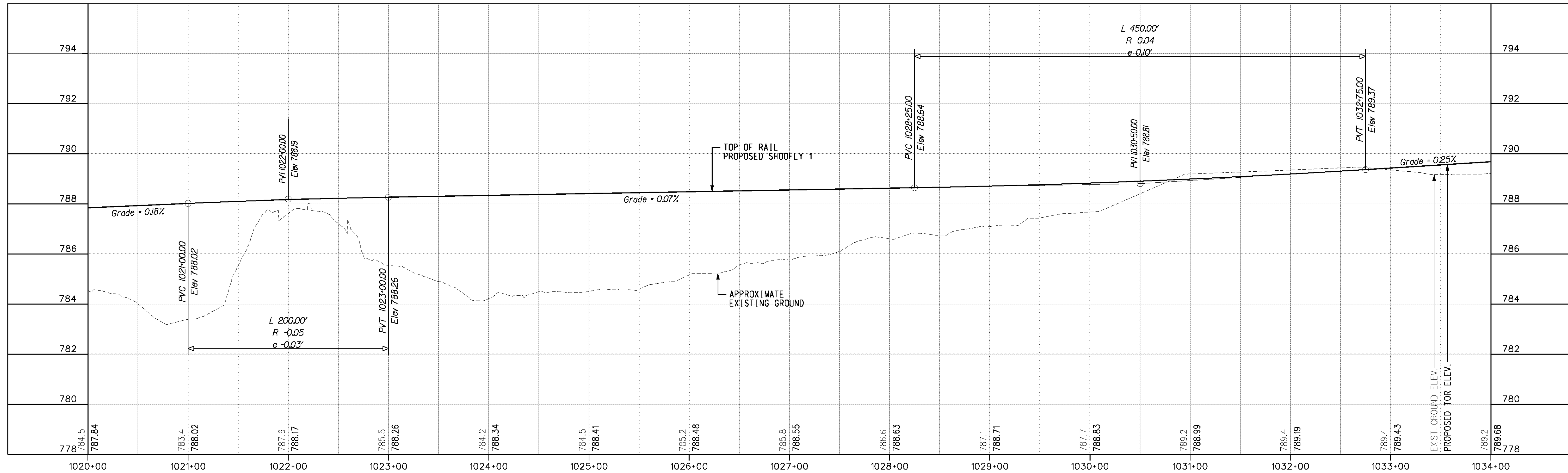
MARK	REVISIONS	APPR.	DATE

DESIGNED BY *MWP* DRAWN BY *SRP* CHECKED BY *JMT*

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SHOOFLY TRACK 1 PLAN & PROFILE PP-11

R-4180
 SHEET **81** OF **191**
 FILE NO.

USER = altymchek PP011.dwt



CURVE SF1-02
 Dc = 1'15.00"
 Lc = 104.81'
 Ls = 120.00'
 Ea = 13.4'
 V = 55 mph

LEGEND
 x x x EXISTING SIDING TRACK TO BE REMOVED DURING SHOOFLIES

SEE SHEET PP-12
 MATCH LINE STA 1020+00.00

MATCH LINE STA 1034+00.00
 SEE SHEET PP-14

AS BUILT
 (AND CORRECTIONS ON THIS SHEET)
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

m:\p1\108-100-139-00\road\sheet\swpp013.dwt DATE: 8/7/2012 TIME: 10:19:19 AM

IMPORTANT NOTICE
 Section 4134.4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
 625 E. CARNEGIE DRIVE SUITE 100
 SAN BERNARDINO, CA 92408
 (909) 806-8000
 www.wilsonco.com

DATE 8-7-12



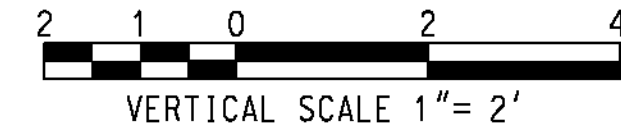
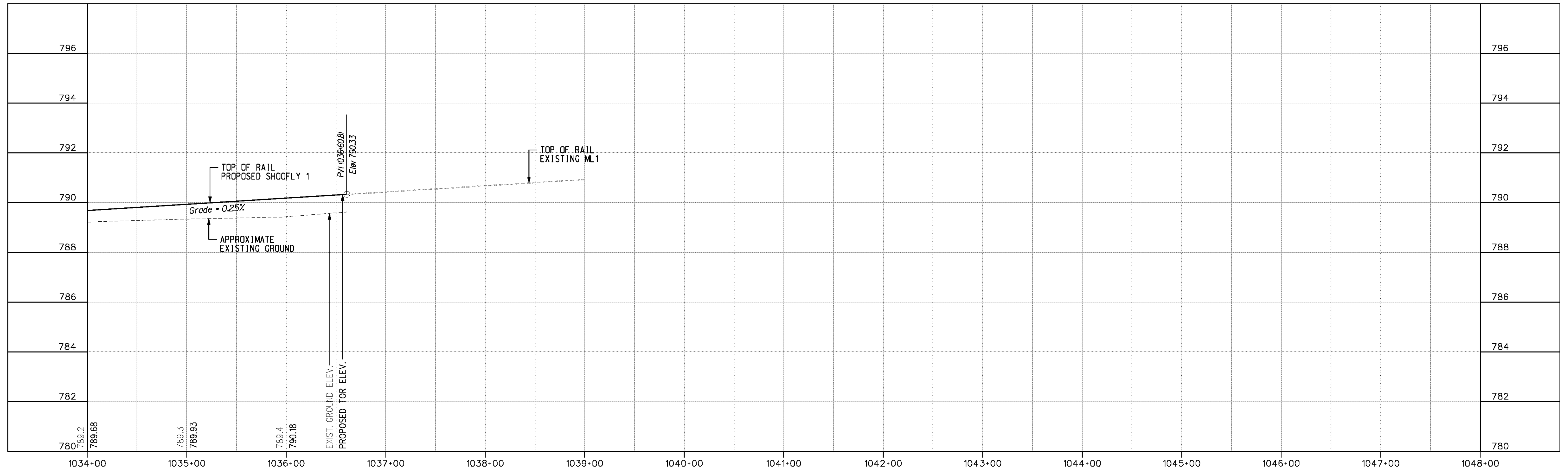
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SHOOFLY TRACK 1 PLAN & PROFILE PP-13

R-4180
 SHEET **83** OF **191**
 FILE NO.

HORIZ. SCALE: VERT. SCALE:

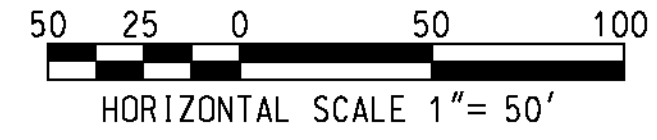
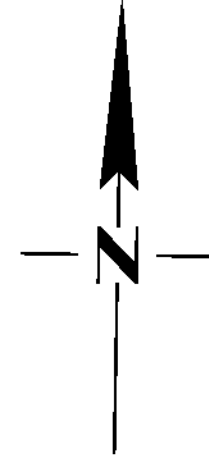
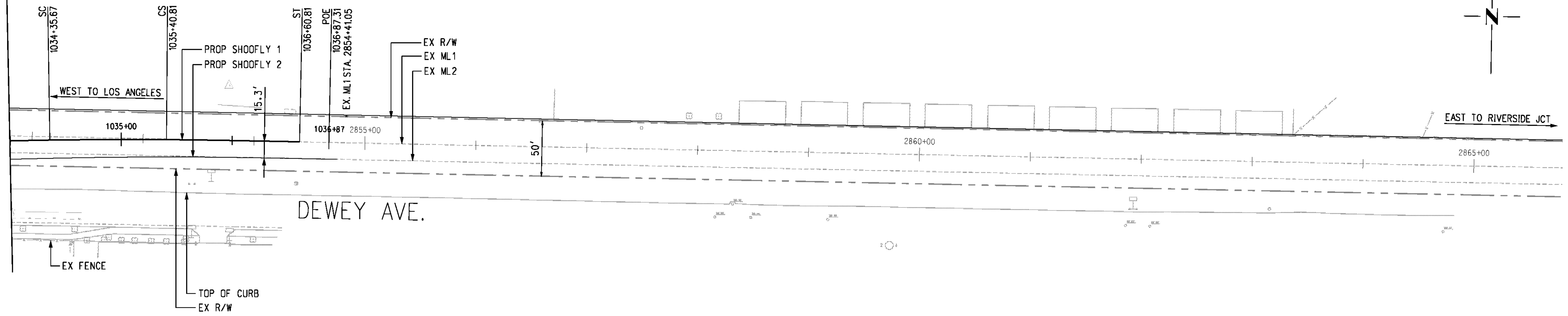
USER = altymchek PF013.dwt



CURVE SF1-03

Dc	= 1°15'00"
Lc	= 105.15'
Ls	= 120.00'
Ea	= 1 3/4"
V	= 55 mph

SEE SHEET PP-13
MATCH LINE STA 1034+00.00



AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLEF

IMPORTANT NOTICE
Section 4314-4212 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
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SAN BERNARDINO, CA 92408
(909) 806-8000
www.wilsonco.com

DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

DESIGNED BY *MWP* DRAWN BY *SRP* CHECKED BY *JNY*

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SHOOFLY TRACK 1 PLAN & PROFILE PP-14

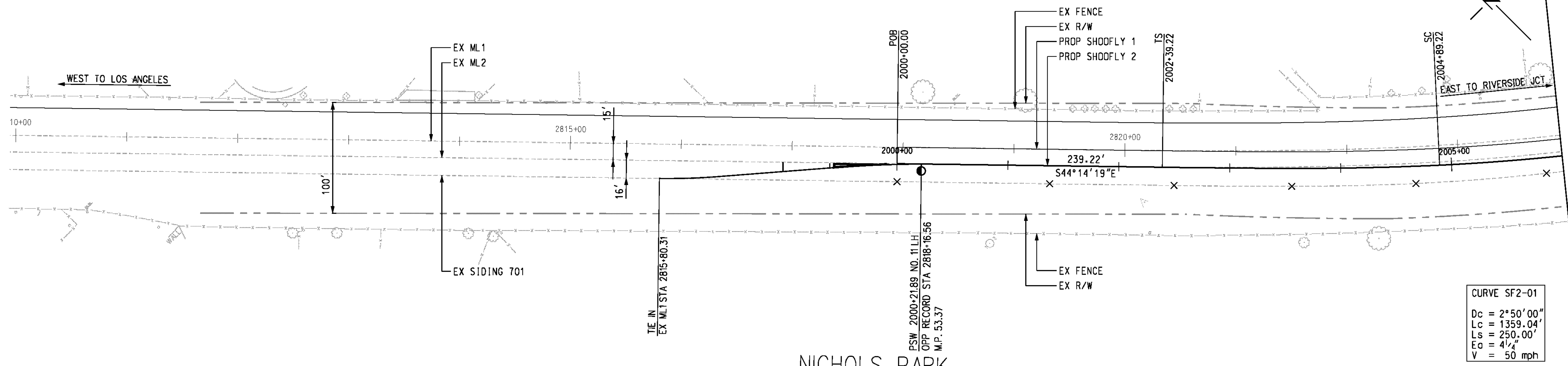
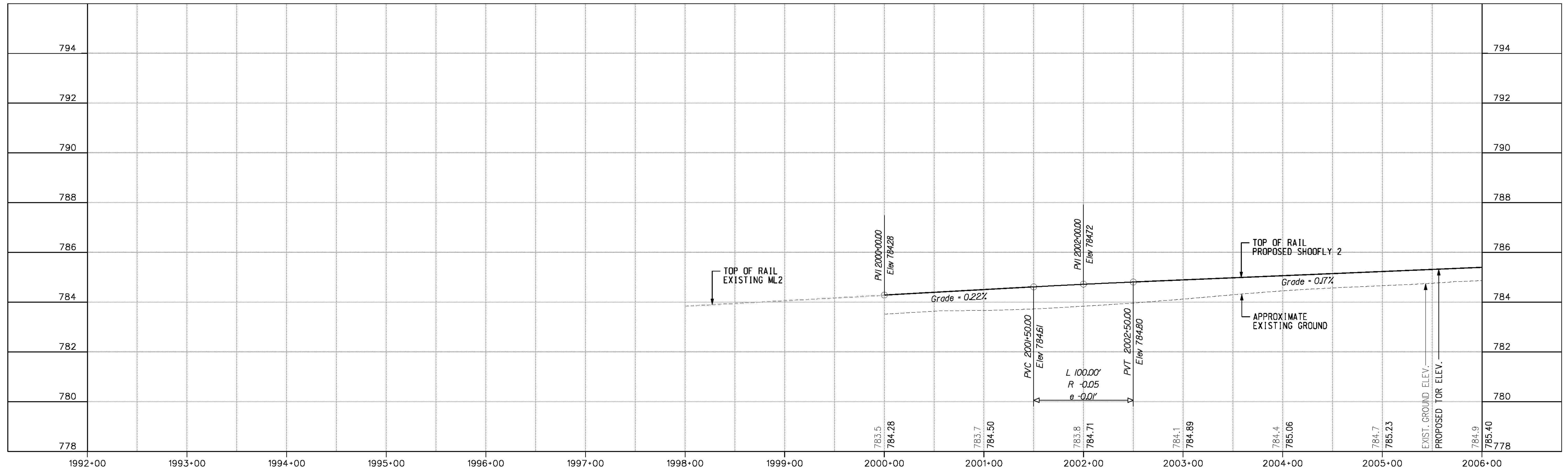
R-4180
SHEET **84** OF **191**
FILE NO.

HORIZ. SCALE: VERT. SCALE:

ms:\p1\08-100-139-00\road\sheet\swpp014.dgn

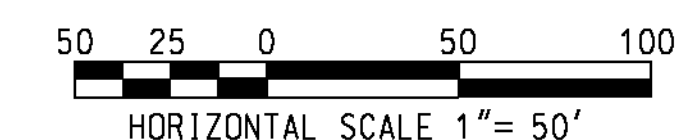
DATE: 8/7/2012
TIME: 10:19:22 AM

USER: al1ymchek
PP014.dgn



MATCH LINE STA 2006+00.00
SEE SHEET PP-16

LEGEND
 x x x EXISTING SIDING TRACK TO BE REMOVED DURING SHOOFLIES



AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

m:\p\108-400-139-00\road\sheet\swpp015.dwt DATE: 8/7/2012 TIME: 10:19:25 AM

IMPORTANT NOTICE
 Section 4314-4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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DATE 8-7-12



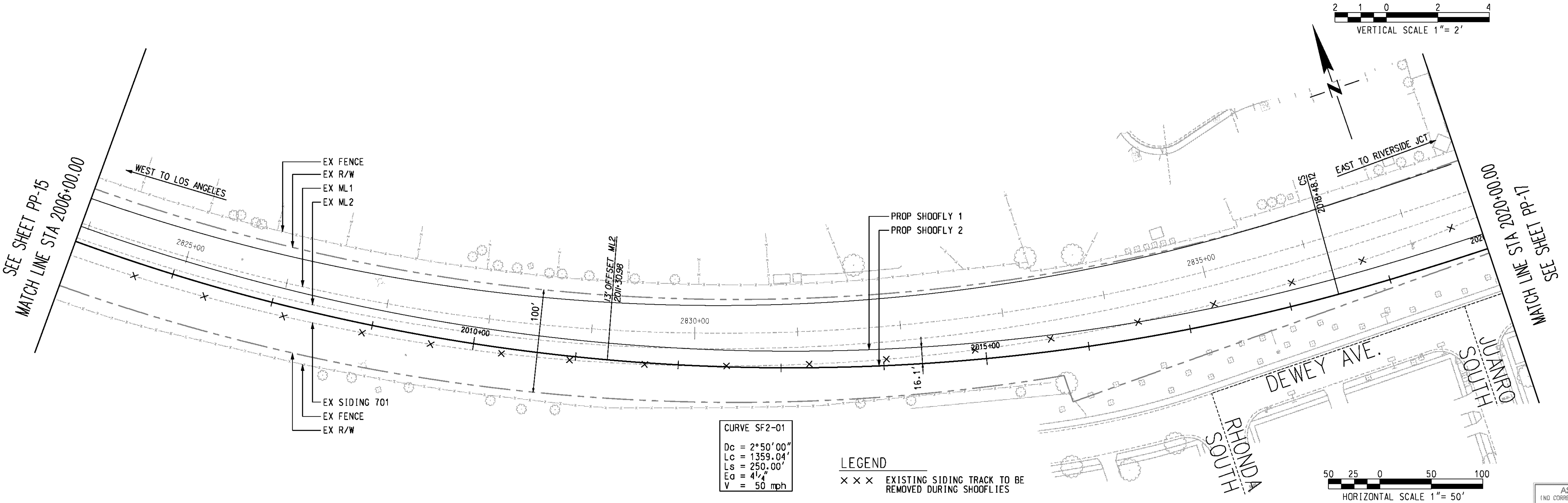
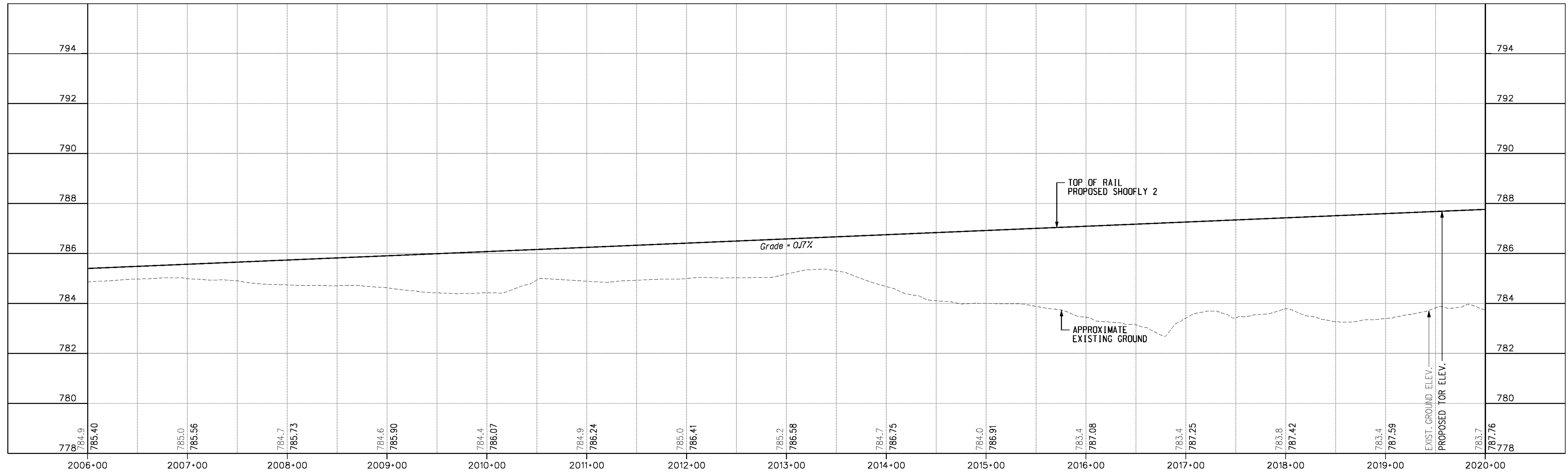
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
 STREETER AVENUE UNDERPASS
SHOOFLY TRACK 2 PLAN & PROFILE PP-15

R-4180
 SHEET **85** OF **191**
 FILE NO.

HORIZ. SCALE: VERT. SCALE:

USER: a11ymchek PF015.dwt



AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

m:\p11\08-100-139-00\road\sheet\SWP016.dgn
 DATE: 8/7/2012
 TIME: 10:15:28 AM
 USER: altyshchek
 PP016.dgn

IMPORTANT NOTICE
 Section 4316.4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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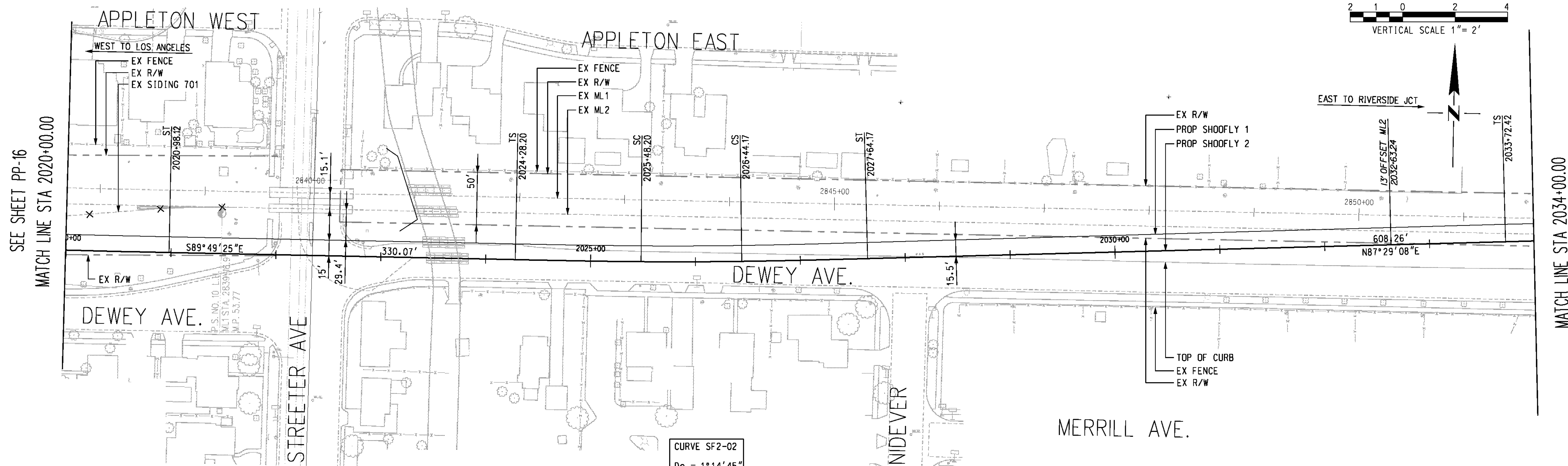
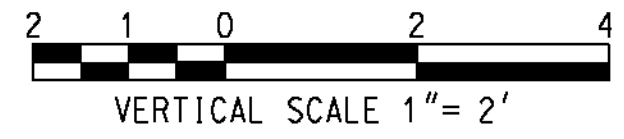
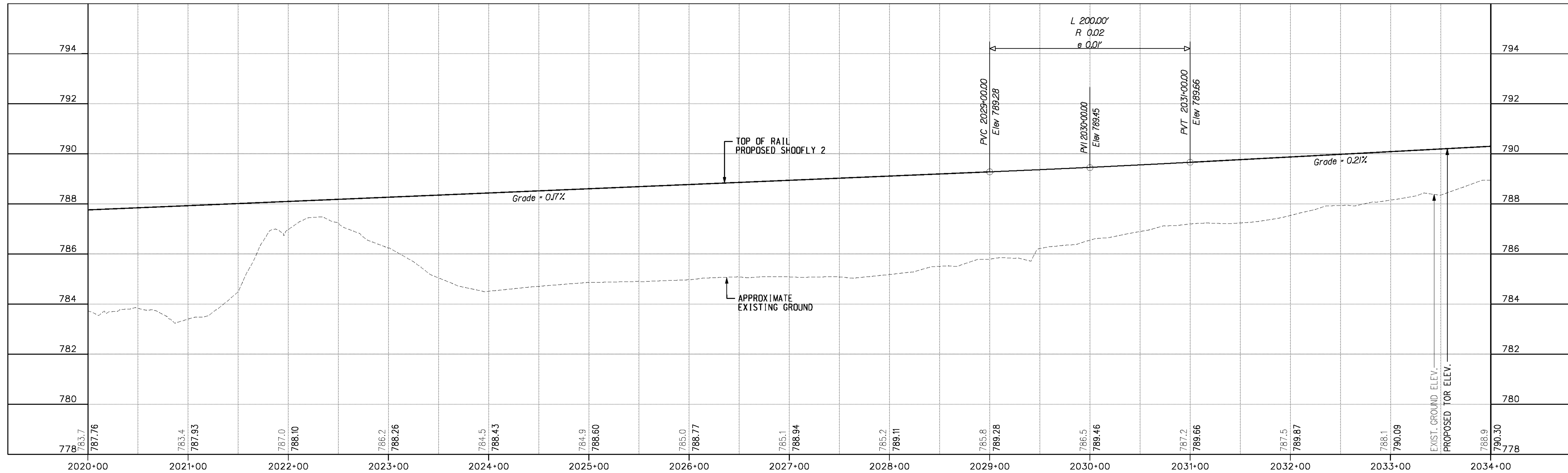
PROFESSIONAL ENGINEER
 MICHAEL WOLFF
 No. 43789
 CIVIL
 STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

DESIGNED BY *MMP* DRAWN BY *SRD* CHECKED BY *JNY*

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SHOOFLY TRACK 2 PLAN & PROFILE PP-16

R-4180
 SHEET **86** OF **191**
 FILE NO.



SEE SHEET PP-16
MATCH LINE STA 2020+00.00

MATCH LINE STA 2034+00.00
SEE SHEET PP-18

CURVE SF2-02
 Dc = 1°14'45"
 Lc = 95.97'
 Ls = 120.00'
 Ea = 13 3/4"
 V = 55 mph

LEGEND
 X X X EXISTING SIDING TRACK TO BE REMOVED DURING SHOOFLIES



AS BUILT
 (AND CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

m:\p1\108-100-139-00\road\sheet\pp017.dwt

DATE: 8/7/2012
 TIME: 10:19:32 AM

IMPORTANT NOTICE
 Section 4136.0217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

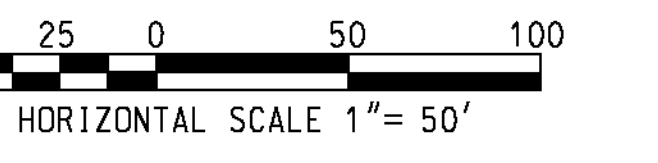
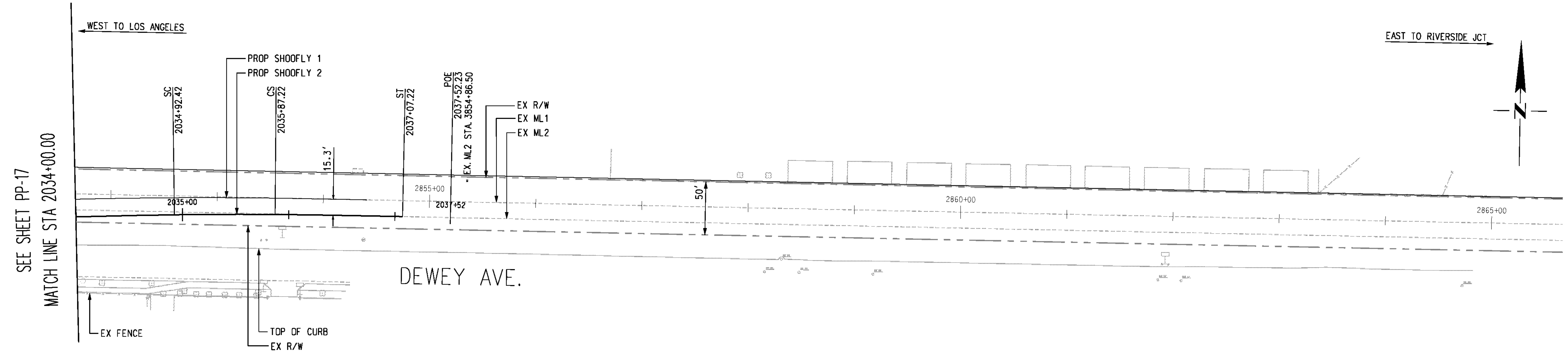
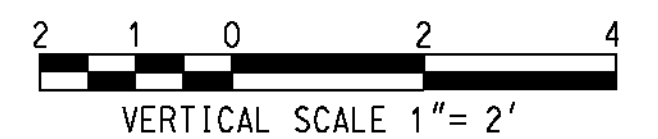
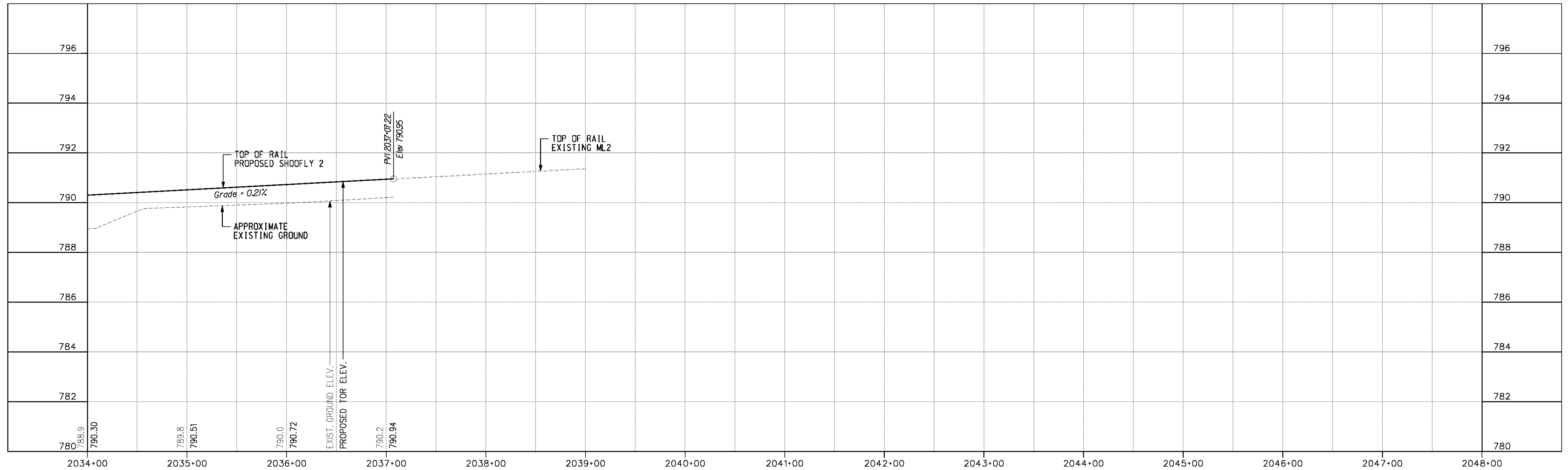
DESIGNED BY *MMP* DRAWN BY *SRP* CHECKED BY *JMT*

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SHOOFLY TRACK 2 PLAN & PROFILE PP-17

R-4180
 SHEET **87** OF **191**
 FILE NO.

HORIZ. SCALE: VERT. SCALE:

USER = altymchek PF017.dwt



CURVE SF2-03	
Dc	= 1°15'15"
Lc	= 94.80'
Ls	= 120.00'
Ea	= 1 1/4"
V	= 55 mph

SEE SHEET PP-17
MATCH LINE STA 2034+00.00

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
Section 4316-4212 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
625 E. CARNEGIE DRIVE SUITE 100
SAN BERNARDINO, CA 92408
(909) 806-8000
www.wilsonco.com

DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

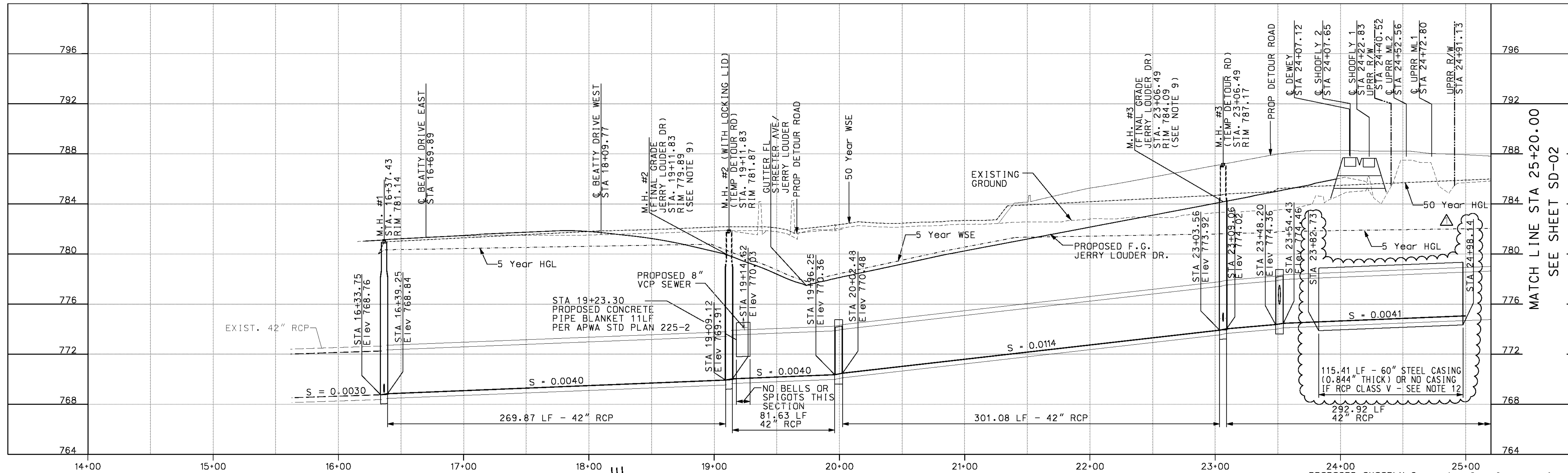
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SHOOFLY TRACK 2 PLAN & PROFILE PP-18

R-4180
SHEET 88 OF 191
FILE NO.

HORIZ. SCALE: VERT. SCALE:

DATE: 8/7/2012 TIME: 10:19:35 AM

USER: altychek PF018.dwt

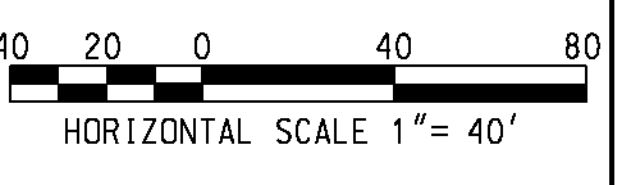
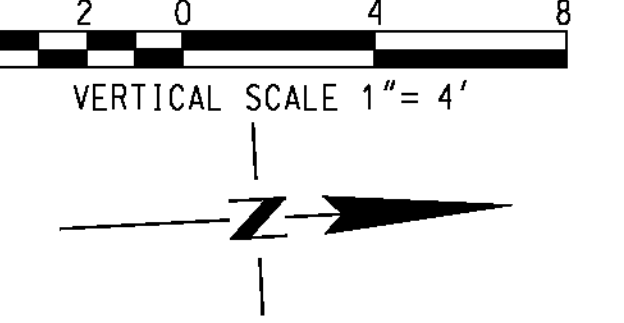
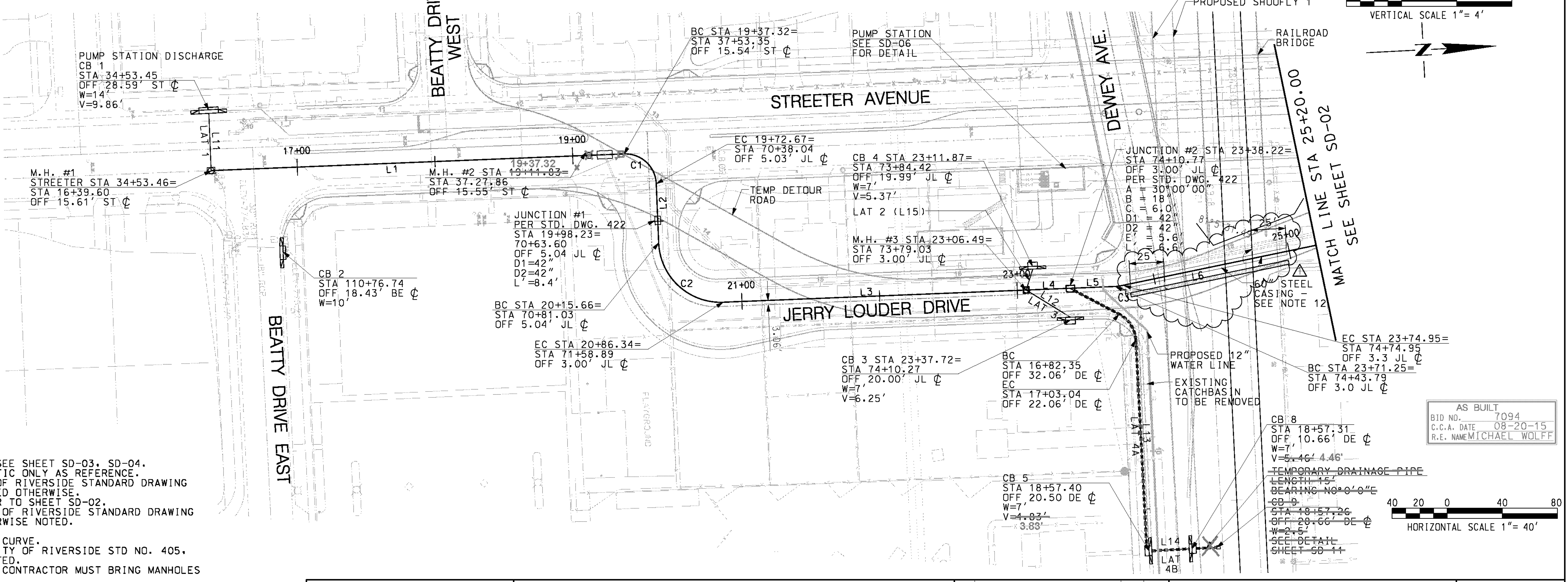


LATERAL STATION & OFFSETS *

LAT 1	- STA 16+37.43 STA 16+37.43 OFF 41.62'
LAT 2	- STA 23+06.49 STA 23+11.87 OFF 15.02'
LAT 3	- STA 23+06.49 STA 23+37.72 OFF 21.00'
LAT 4A	- STA 23+38.22 STA 23+72.85 OFF 189.92'
LAT 4B	- STA 23+73.20 OFF 193.66' STA 23+85.06 OFF 197.13'

- * 1. FOR STORM DRAIN GEOMETRY SEE TABLE 1 ON SHEET SD-02
- 2. ZERO OFFSETS NOT SHOWN

- NOTE:**
- FOR THE STORM DRAIN LATERAL PROFILES SEE SHEET SD-03, SD-04.
 - STORM DRAIN LIFT STATION SHOWN SCHEMATIC ONLY AS REFERENCE.
 - ALL MANHOLES SHALL BE BUILT PER CITY OF RIVERSIDE STANDARD DRAWING NO. 430 (CURRENT EDITION), UNLESS NOTED OTHERWISE.
 - FOR LINE BEARINGS AND CURVE DATA REFER TO SHEET SD-02.
 - ALL JUNCTIONS SHALL BE BUILT PER CITY OF RIVERSIDE STANDARD DRAWING NO. 421 (CURRENT EDITION), UNLESS OTHERWISE NOTED.
 - NOT USED
 - USE 5° BEVEL PIPE SEGMENTS TO ACHIEVE CURVE.
 - ALL CATCH BASINS SHALL BE BUILT PER CITY OF RIVERSIDE STD NO. 405, (CURRENT EDITION) UNLESS OTHERWISE NOTED.
 - ONCE TEMPORARY DETOUR ROAD IS REMOVED CONTRACTOR MUST BRING MANHOLES UP TO GRADE ON JERRY LOUDER DRIVE.
 - LOCAL DEPRESSIONS PER COUNTY OF RIVERSIDE STD. DRAWING LD201 (CASE C) (CURRENT EDITION) UNLESS OTHERWISE NOTED.
 - ALL REINFORCED CONCRETE PIPE (RCP) SHOULD BE CLASS IV, 2000-DLOAD U.O.N.
 - MIN CASING LENGTH SHALL BE 25' PERP. TO TK CL. AND 2' BEYOND TOE OF SLOPE AND 3' BEYOND DRAINAGE DITCH. STORM DRAIN CASING MAY BE OMITTED IF RCP CLASS V IS USED.



AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

M:\RR\03-400-139-00\CAD\SD\SHEET\SD001.dwg

DATE: 9/11/2012
 TIME: 8:00:18 AM

IMPORTANT NOTICE
 Section 4376.021 of the Government Code requires a Dig Alert identification number to be placed before a permit to excavate will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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DATE 8-7-12



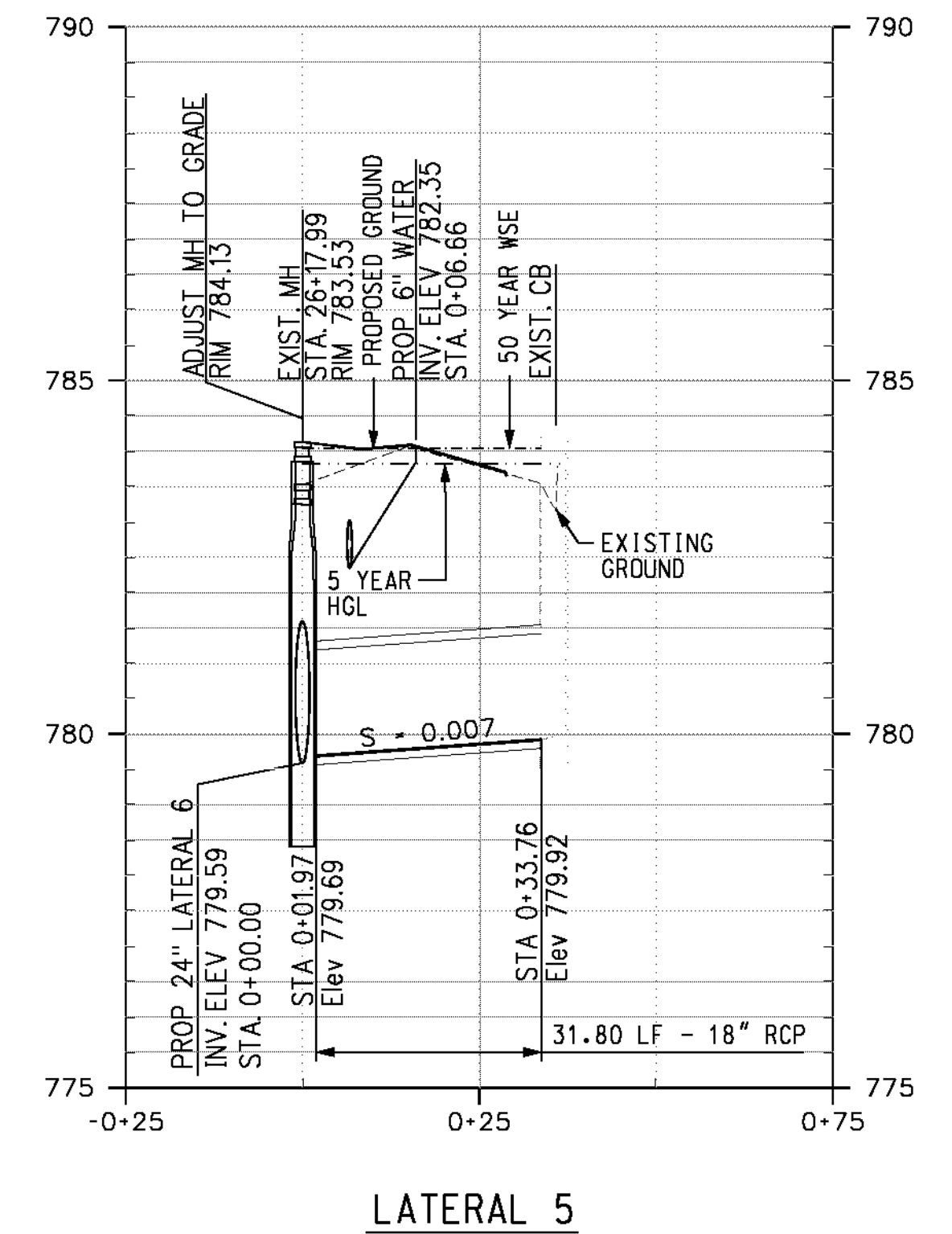
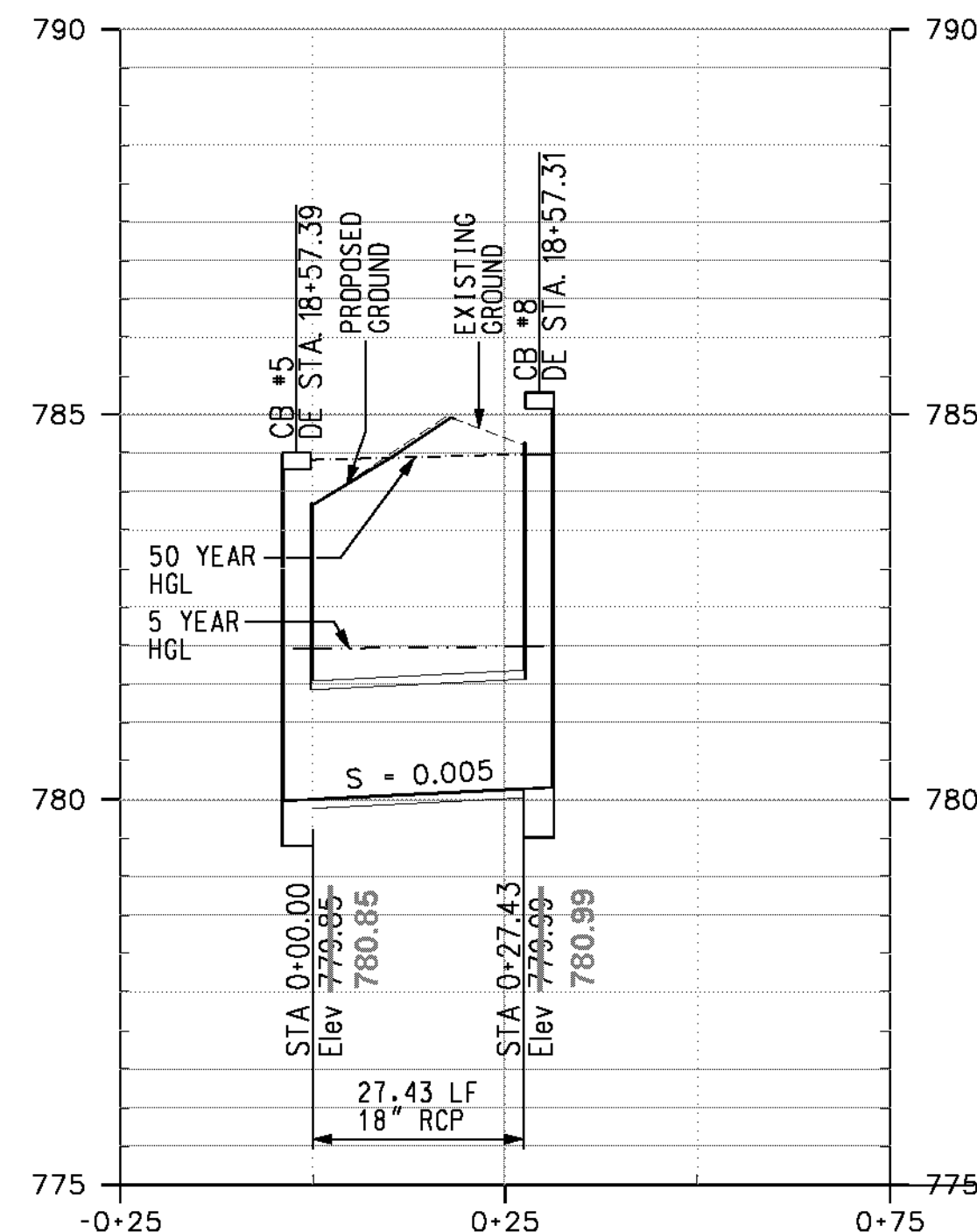
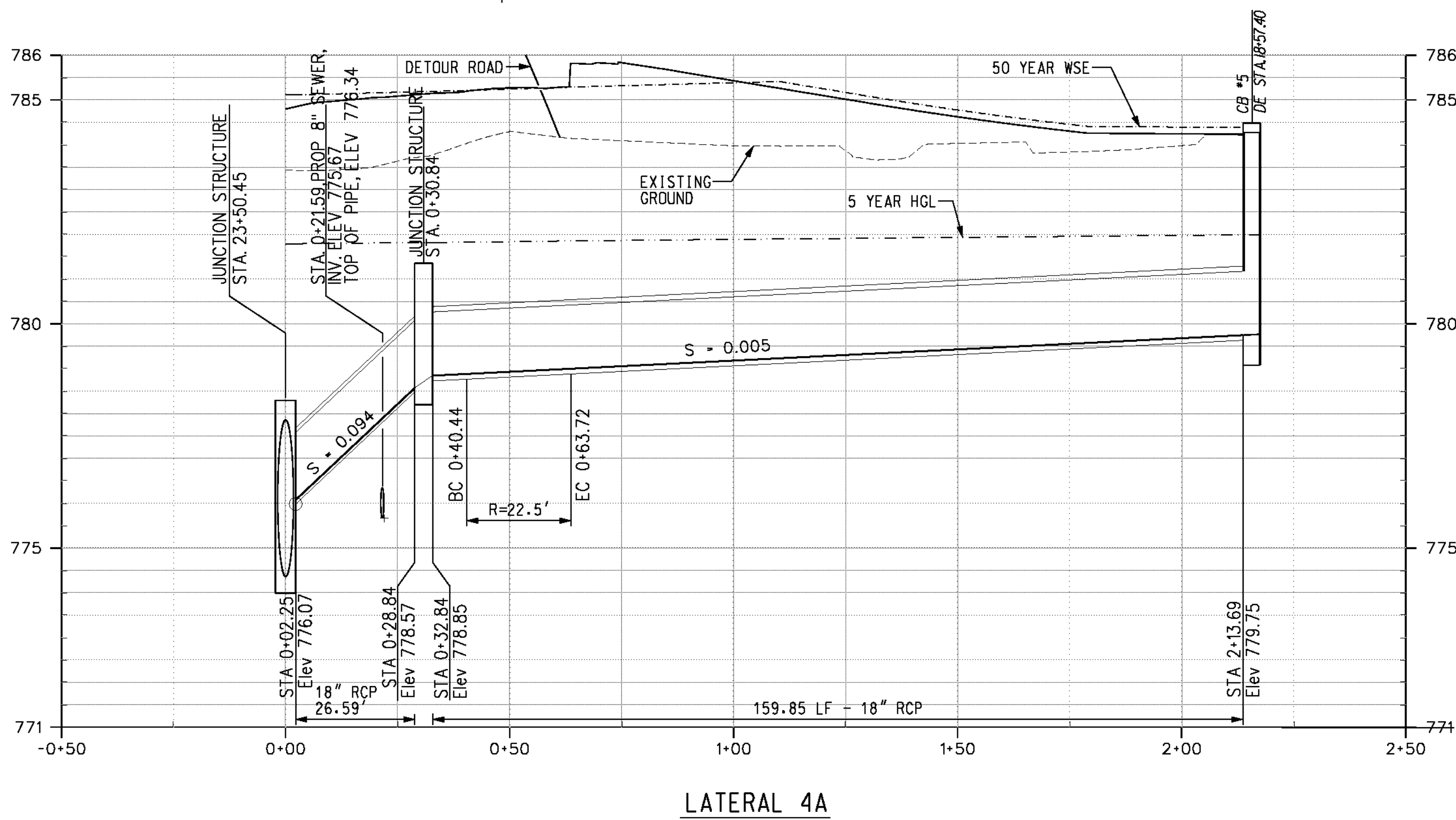
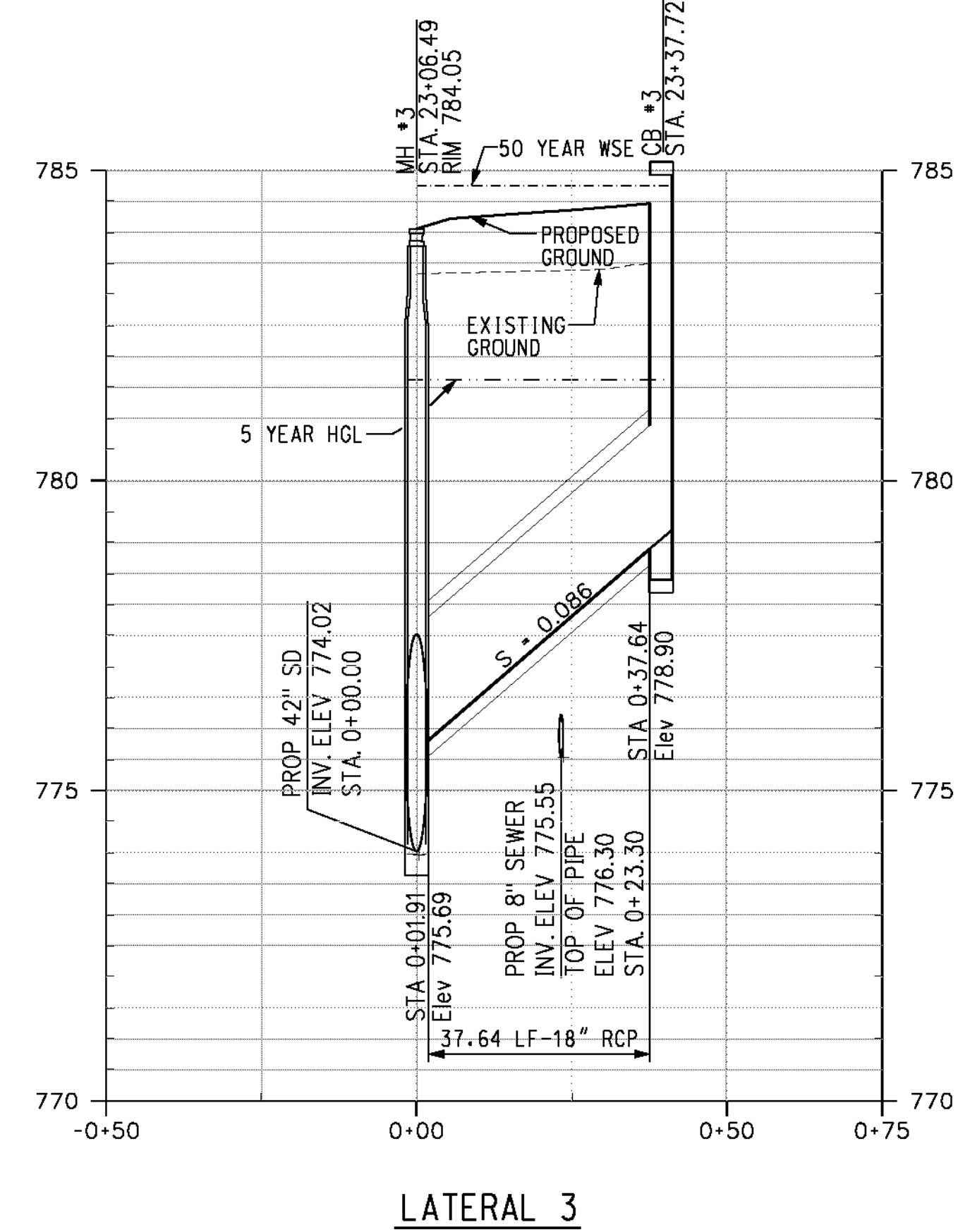
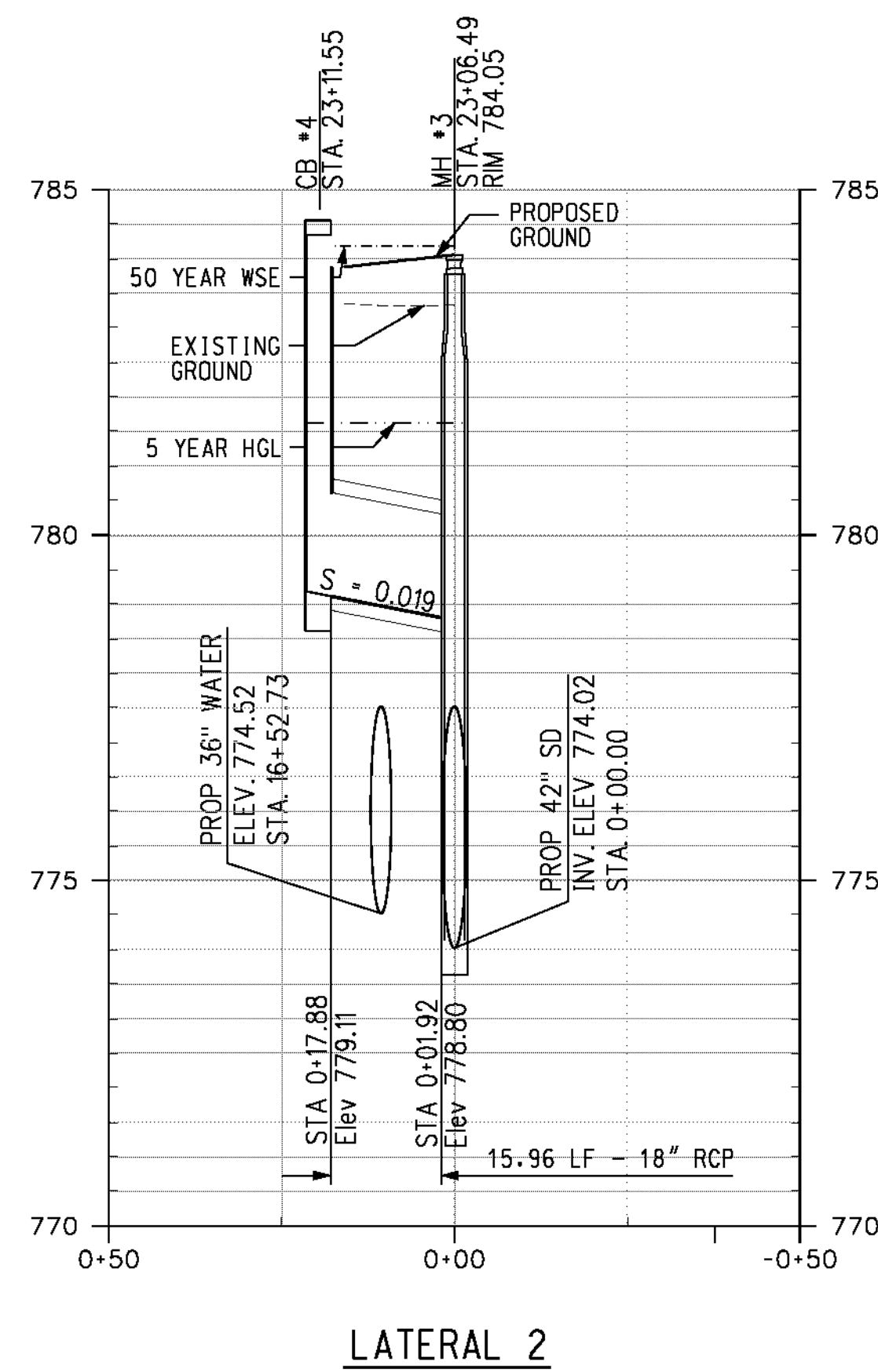
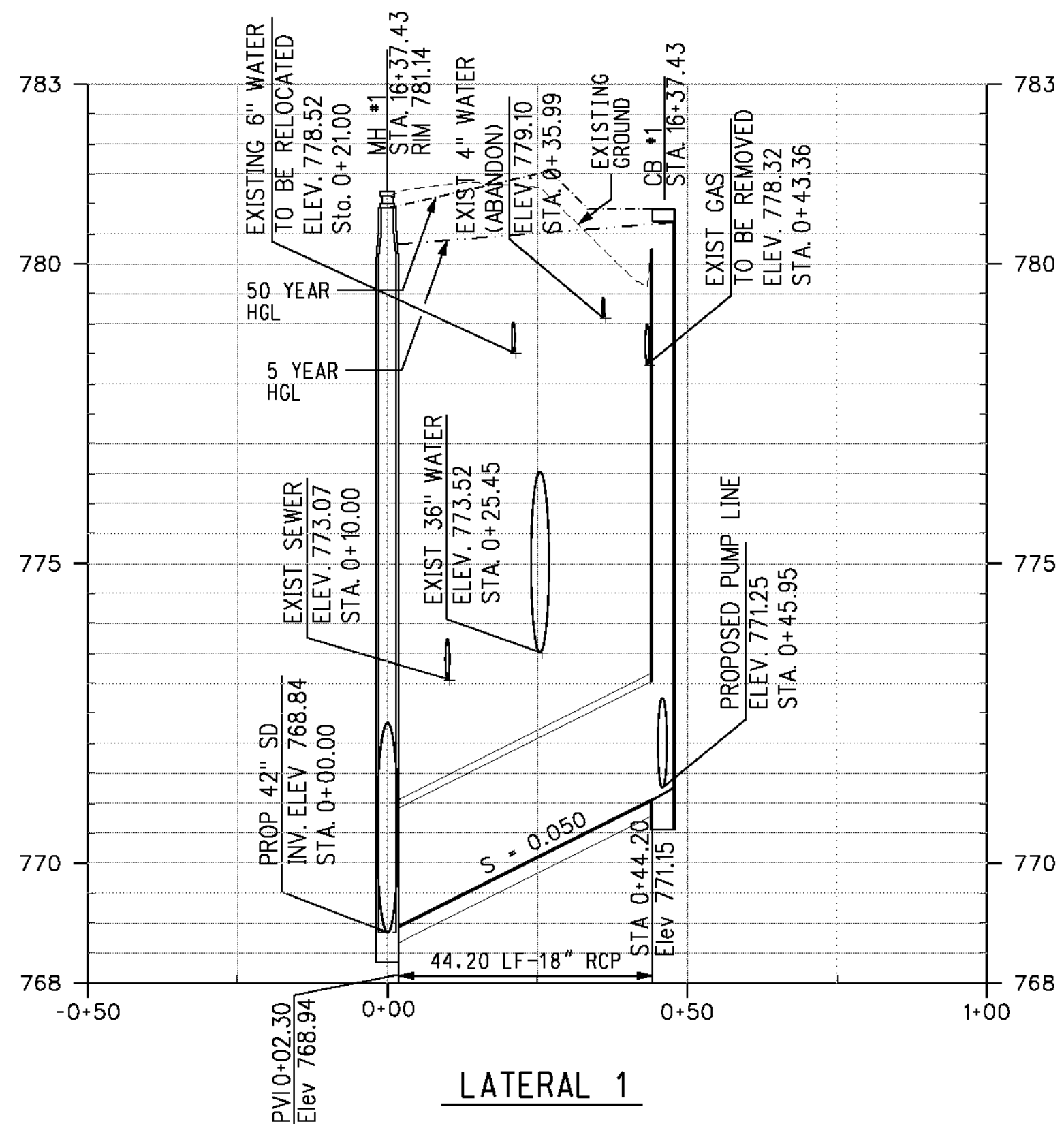
DESIGNED BY	MMF	DRAWN BY	SRB	CHECKED BY	JMT
MARK	STEEL CASING UPGRADED/UPRR GUIDELINES	TBJ	08/12	REVISIONS	APPR. DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
STORM DRAIN PLAN & PROFILE SD-01

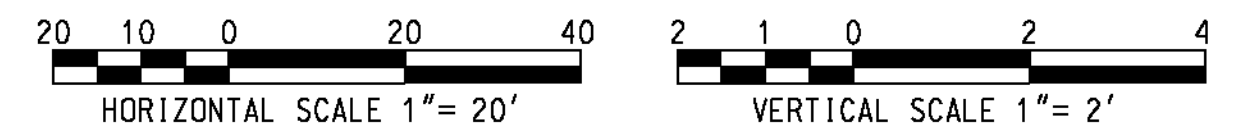
D-848
 SHEET 89 OF 191
 FILE NO.

HORIZ. SCALE: VERT. SCALE:

USER = jacobgrove 50001.dwg



AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF



IMPORTANT NOTICE
 Section 4216.4217 of the Department Code requires a Dig Alert identification number. Dig Alert identification numbers are issued by the Department of Public Works. For more information, call 1-800-227-2600. CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT

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MARK	REVISIONS	APPR.	DATE

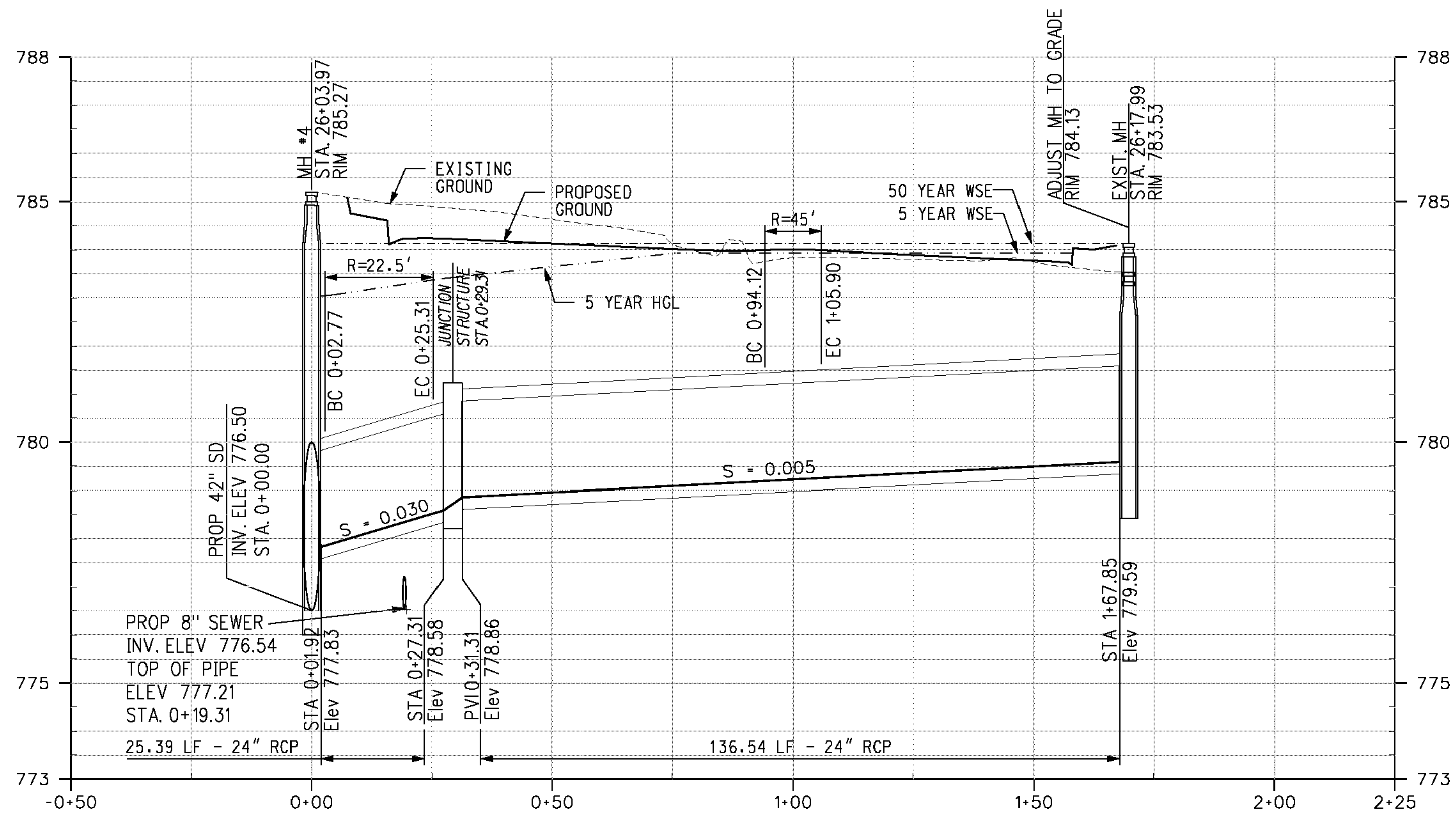
CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
STORM DRAIN LATERAL PROFILES SD-03

D-848
 SHEET 91 OF 191
 FILE NO.

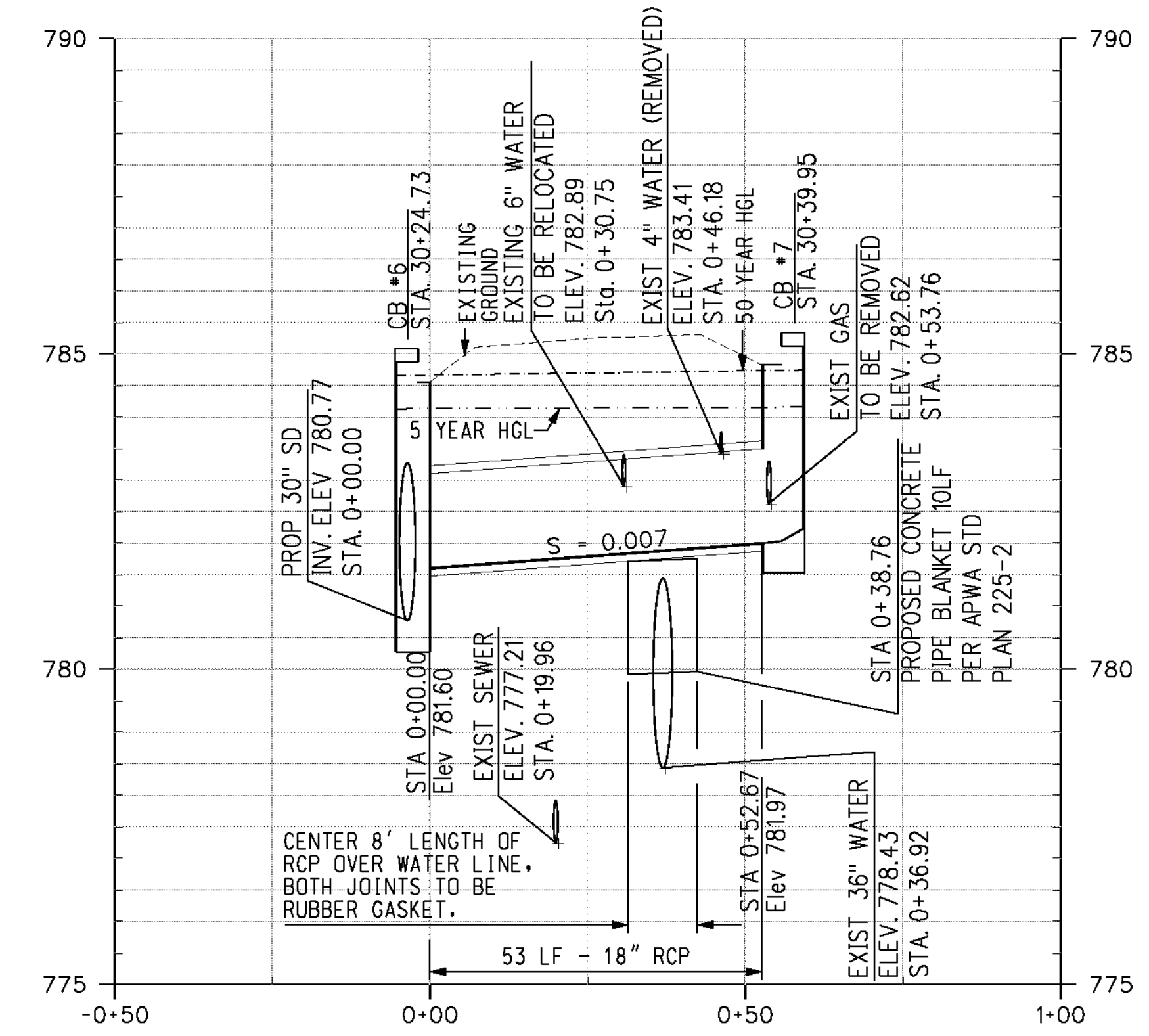
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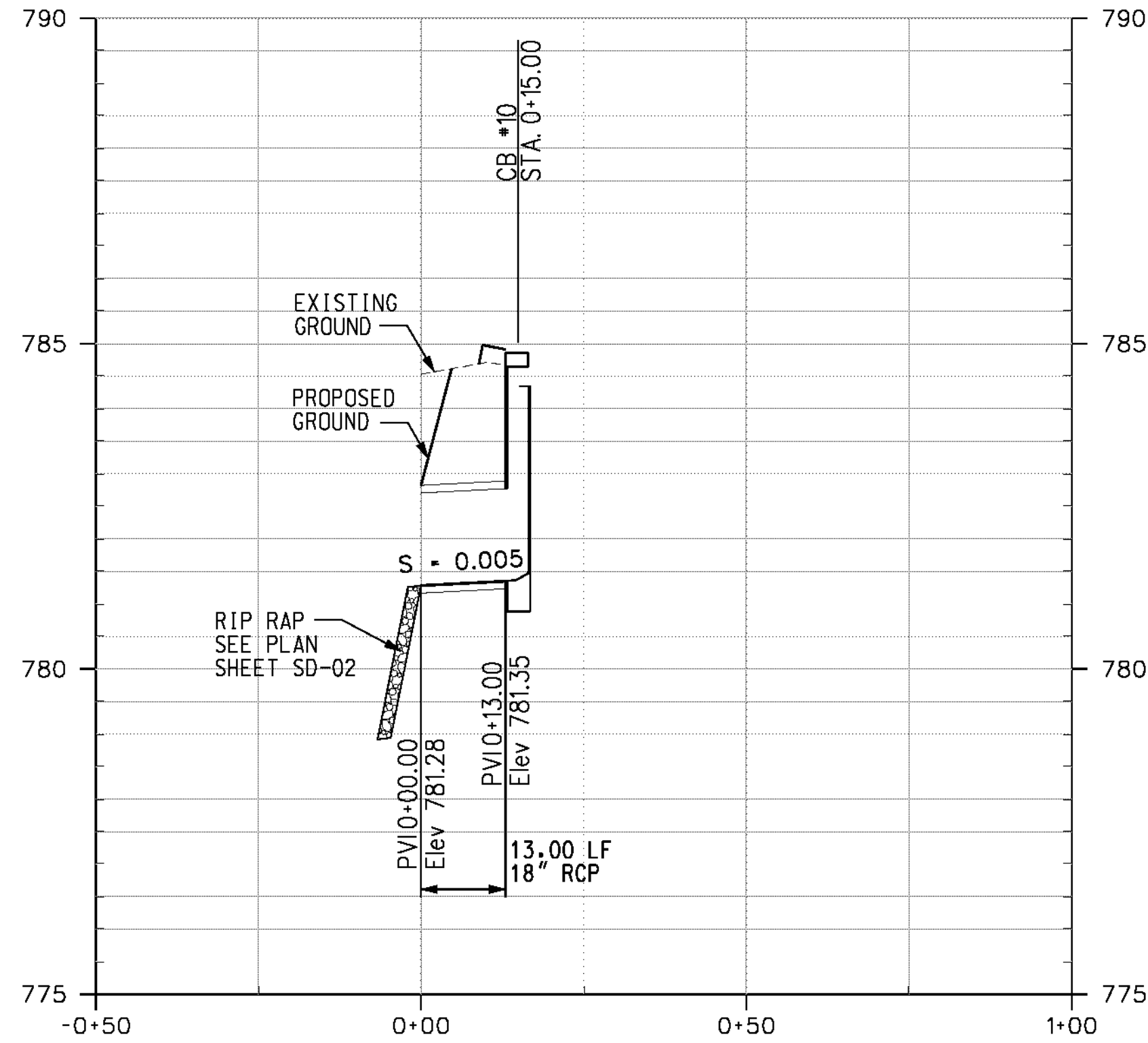
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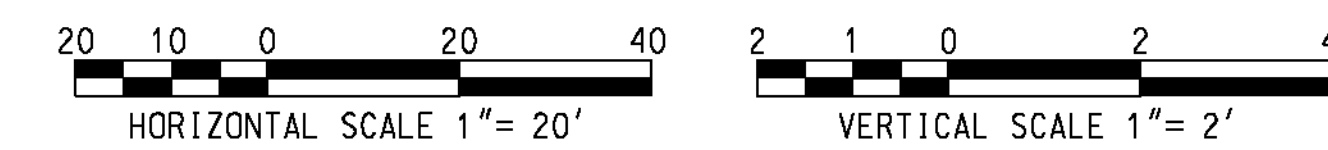
LATERAL 6



LATERAL 7



LATERAL 8



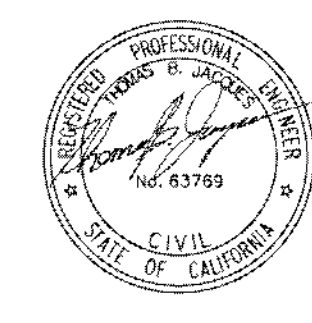
AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

ms:\p\p\08-140-139-00\road\sheet\SD-004.dwt

IMPORTANT NOTICE
 Section 413.4212 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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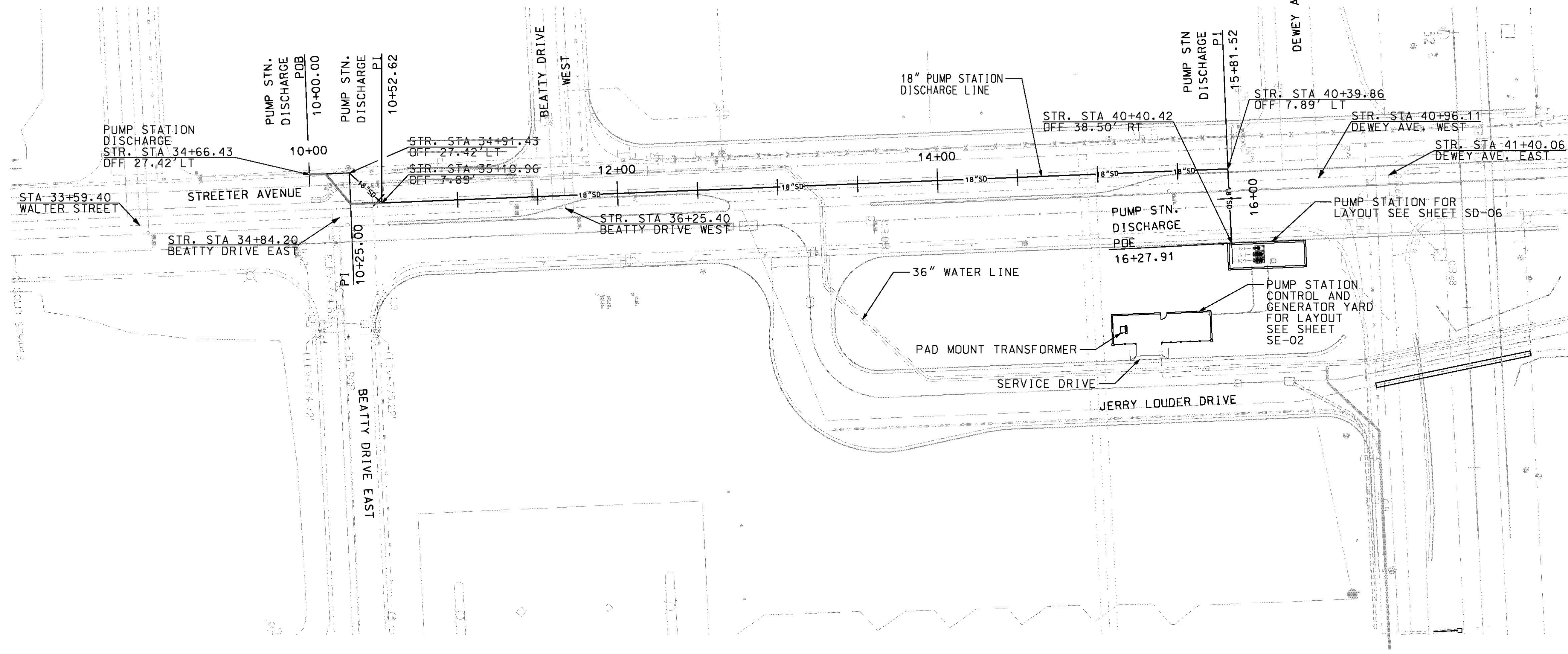
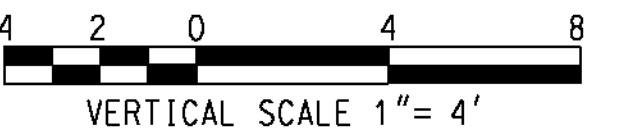
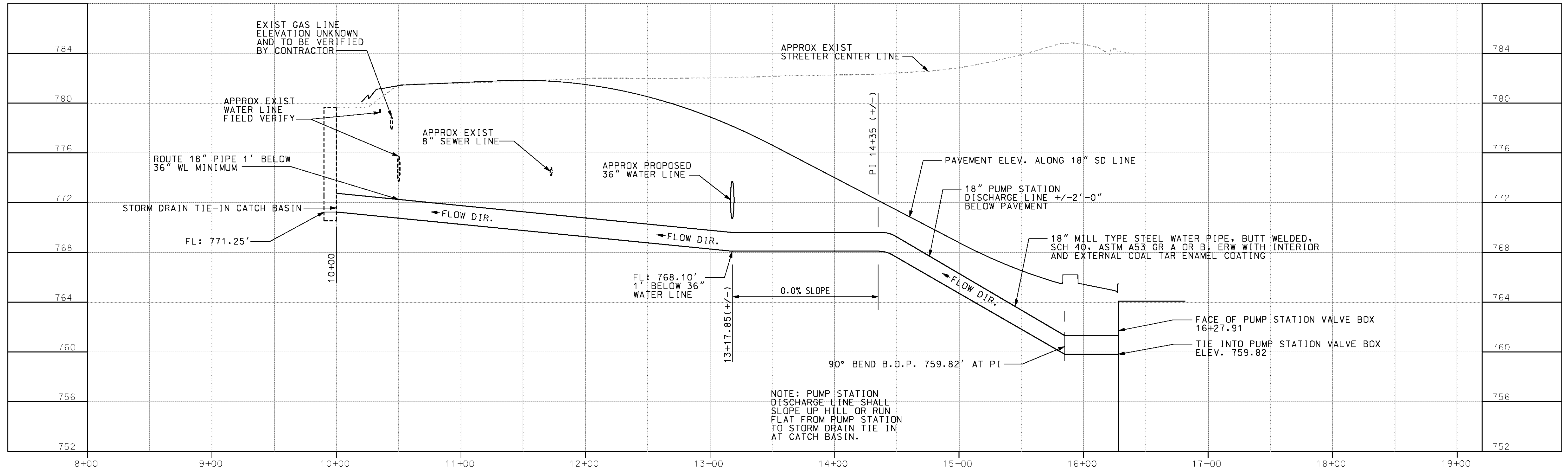
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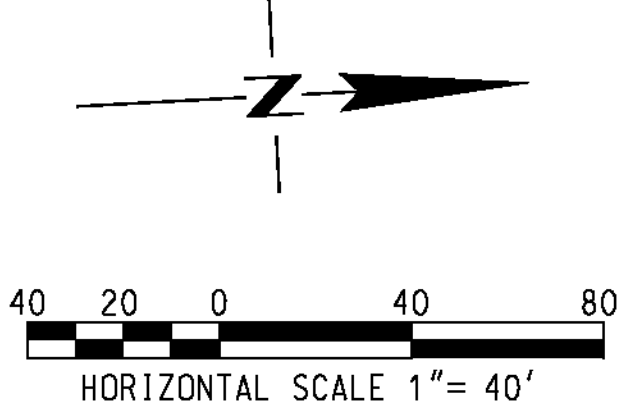
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
STORM DRAIN LATERAL PROFILES SD-04

D-848
 SHEET 92 OF 191
 FILE NO.



AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF



IMPORTANT NOTICE
 Section 414.0217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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DATE 8-7-12



MARK	REVISIONS	APPR.	DATE
DESIGNED BY	DJM	DRAWN BY	SRP
CHECKED BY	MMW		

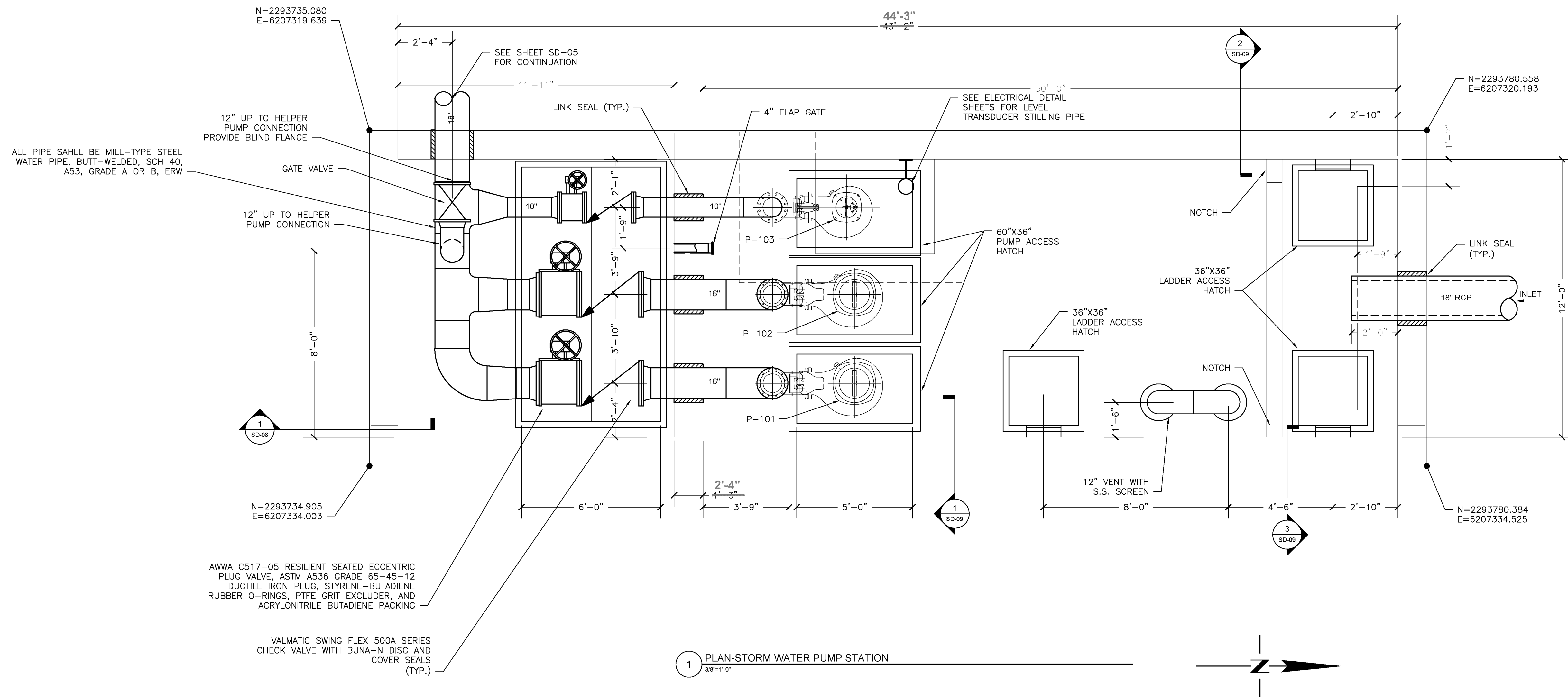
CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
MECHANICAL / ELECTRICAL SITE PLAN & PROFILE SD-05

D-848
 SHEET 93 OF 191
 FILE NO.

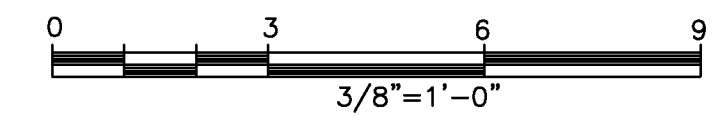
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AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF



IMPORTANT NOTICE
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 SAN BERNARDINO, CA 92408
 (909) 806-8000
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DATE 8-7-12
 8-7-2012

MARK	REVISIONS	APPR.	DATE

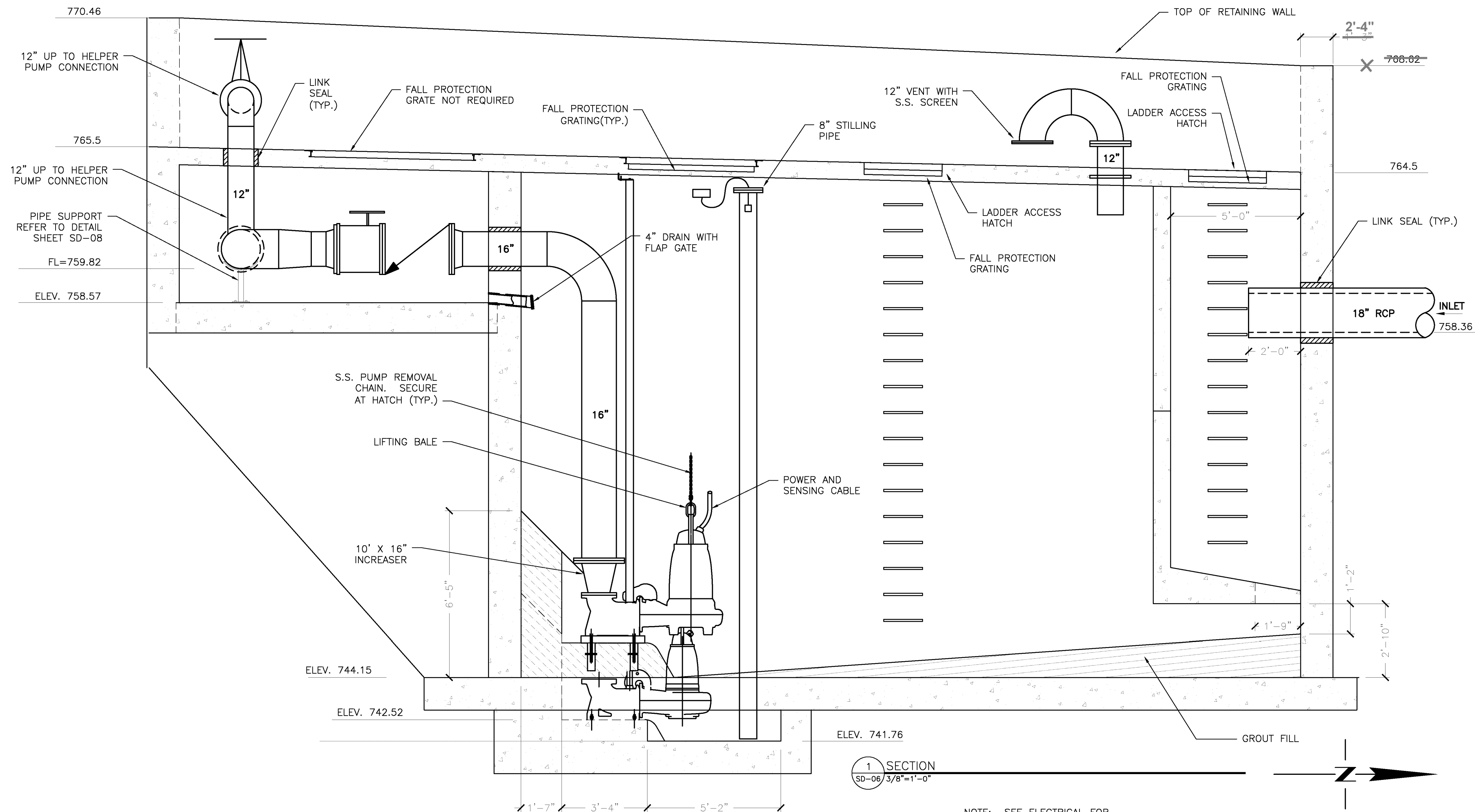
CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
 STREETER AVENUE UNDERPASS
 STORMWATER PUMP STATION DETAIL SD-06
 DESIGNED BY *[Signature]* DRAWN BY *[Signature]* CHECKED BY *[Signature]*

D-848
 SHEET 94 OF 191
 FILE NO.

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DATE: 6/2012

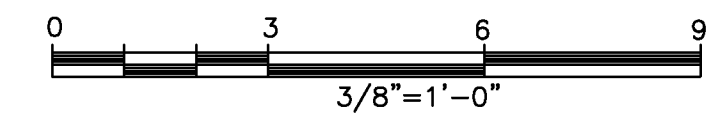
COLGROVE, JOHN A. S0006.dwg



1 SECTION
SD-06 3/8"=1'-0"

NOTE: SEE ELECTRICAL FOR PUMP CONTROL ELEVATIONS

AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF



IMPORTANT NOTICE
 Section 42161.4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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 625 E. CARNEGIE DRIVE SUITE 100
 SAN BERNARDINO, CA 92408
 (909) 806-8000
 www.wilsonco.com

DATE 8-7-12

REGISTERED PROFESSIONAL ENGINEER
 MARK W. WENZEL
 M 32987
 EXP. 12-31-12
 STATE OF CALIFORNIA
 CIVIL ENGINEER

MARK	REVISIONS	APPR.	DATE

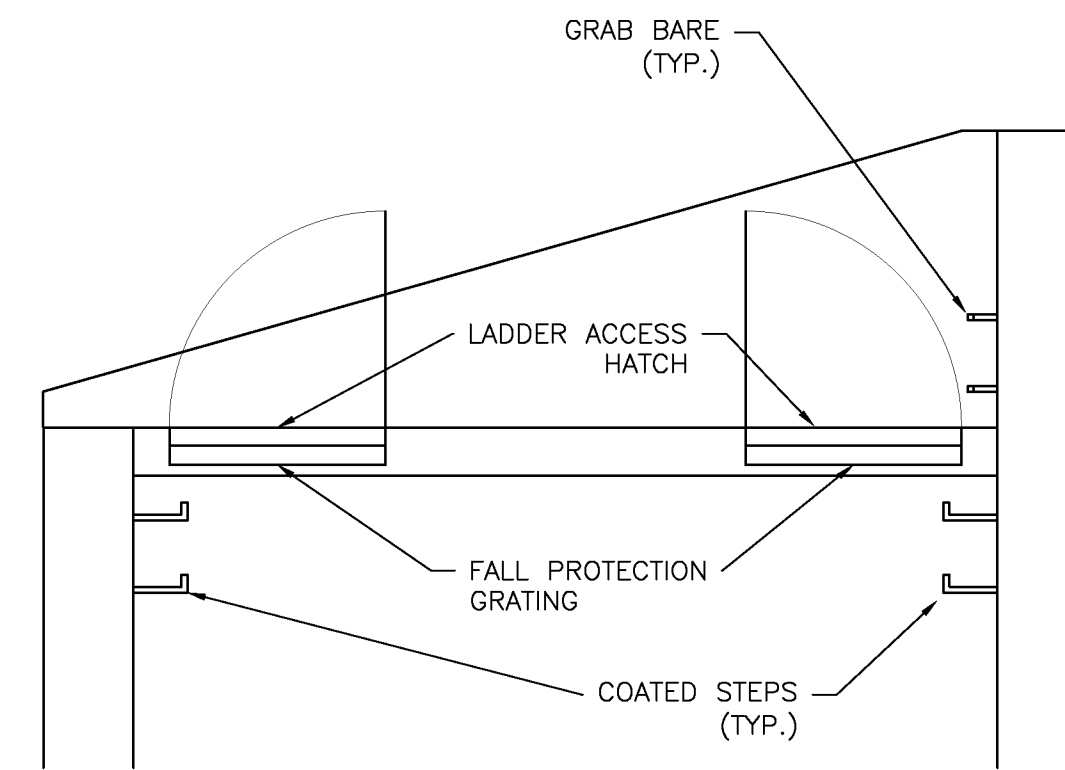
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
STORMWATER PUMP STATION DETAIL SD-08

D-848
 SHEET 96 OF 191
 FILE NO.

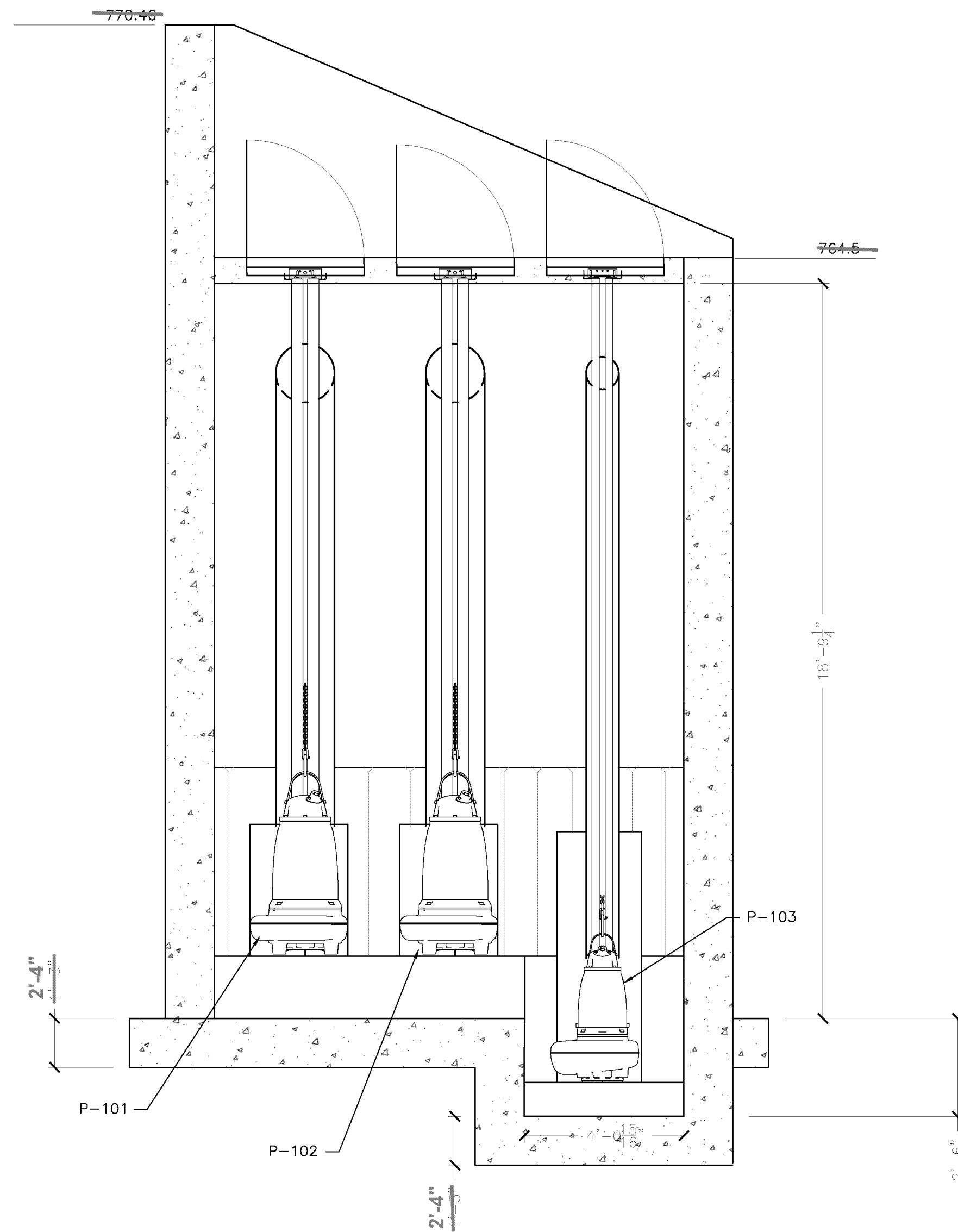
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DATE: 6/2012

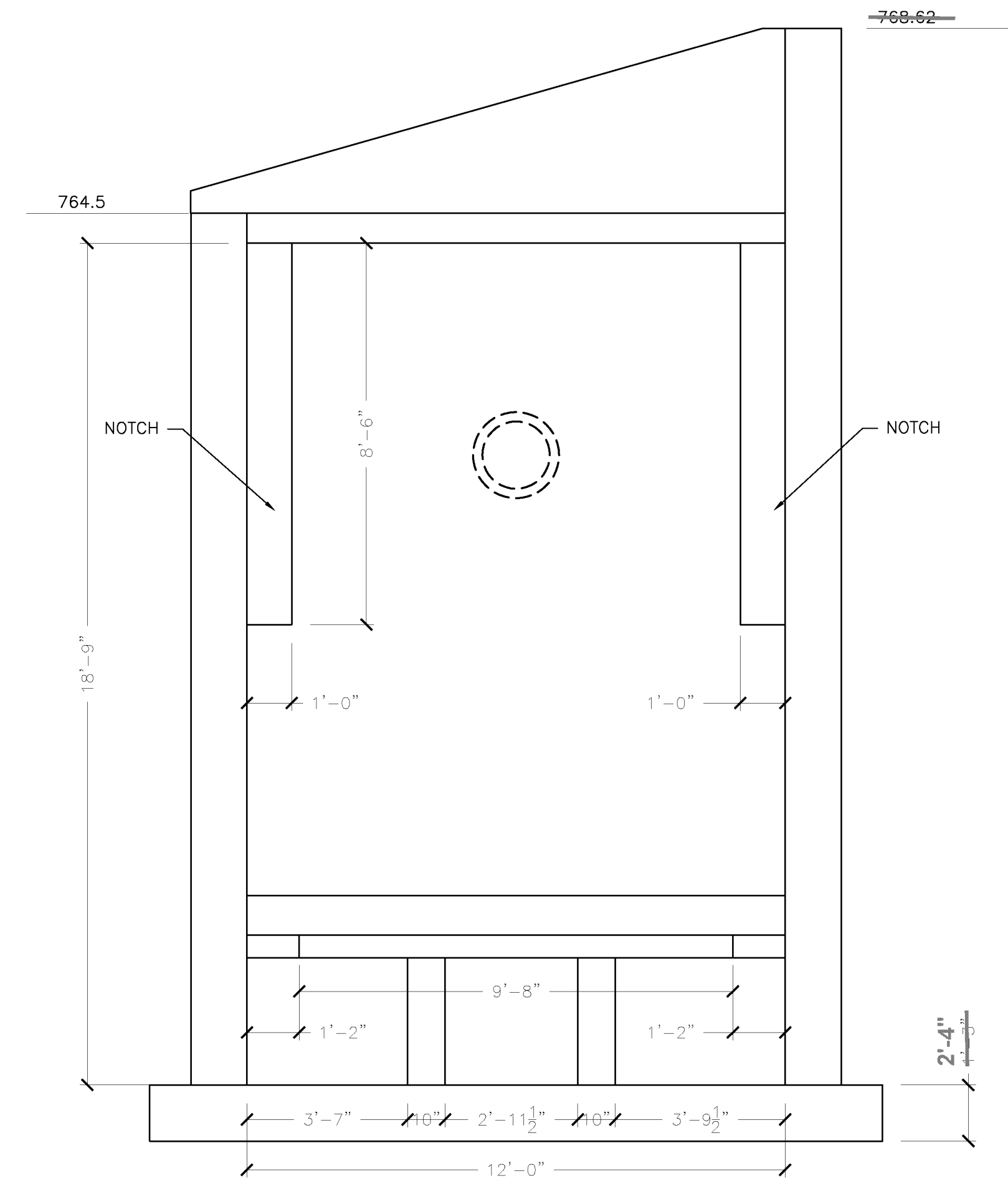
COLGROVE, JOHN A. S0008.dwg



3 SECTION
SD-06 3/8"=1'-0"



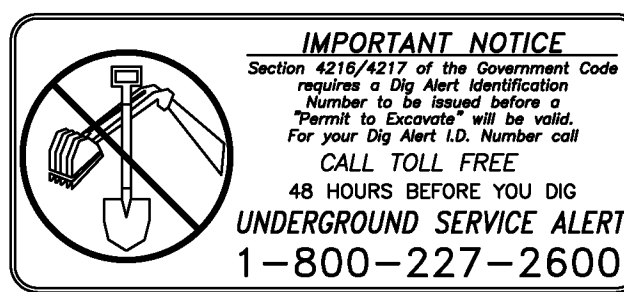
1 SECTION
SD-06 3/8"=1'-0"



2 SECTION
SD-06 3/8"=1'-0"

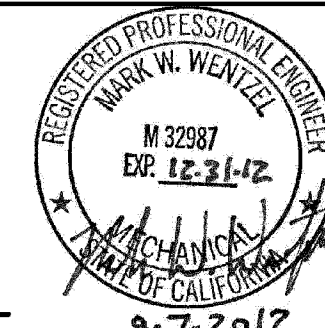
NOTES:
SEE DRAWING SD-06 FOR DETAILS
SEE PUMP STATION DETAIL 5 SHEET S-10

AS BUILT
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF



WILSON & COMPANY
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(909) 806-8000
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DATE 8-7-12



8-7-2012

MARK	REVISIONS	APPR.	DATE

DESIGNED BY *DM* DRAWN BY *ML* CHECKED BY *JMM*

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

STREETER AVENUE UNDERPASS

STORMWATER PUMP STATION DETAIL SD-09

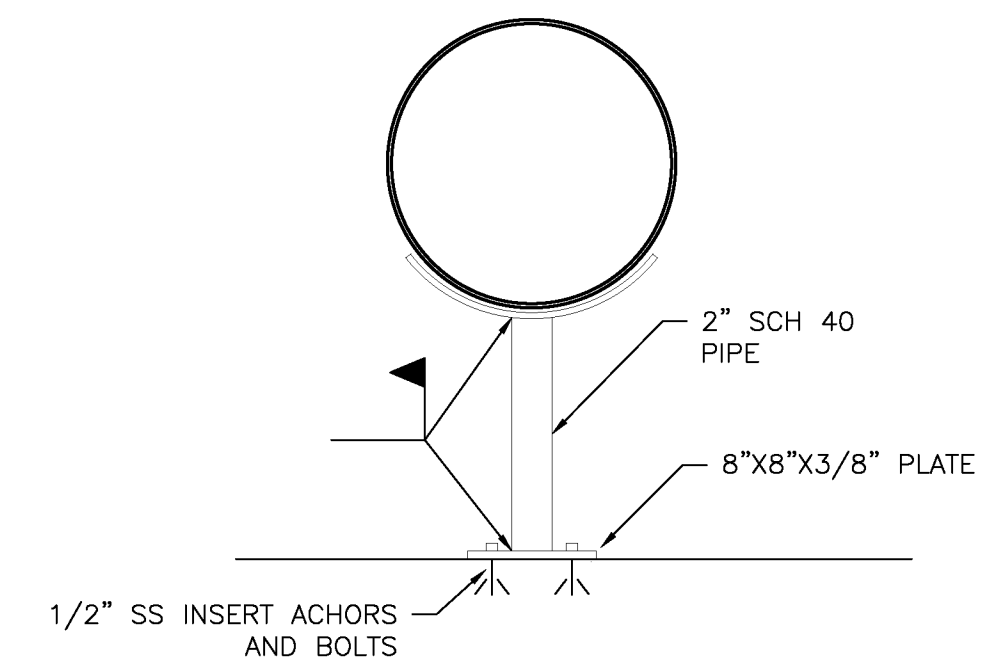
HORIZ. SCALE: VERT. SCALE: N/A

D-848
SHEET 97 OF 191

FILE NO.

PUMP SCHEDULE										
MARK	LOCATION	SERVICE	PUMP TYPE	GPM	HEAD (FEET OF WATER)	RPM	ELECTRICAL			REMARKS
							HP	VOLT	PH	
P-101	STORMWATER PUMP STATION	STORM WATER	NON-CLOG SUBMERSIBLE WASTEWATER	3,500	41	1185	70	460	3	SECONDARY OPERATING POINT 5,200 GPM @ 28'
P-102	STORMWATER PUMP STATION	STORM WATER	NON-CLOG SUBMERSIBLE WASTEWATER	3,500	41	1185	70	460	3	SECONDARY OPERATING POINT 5,200 GPM @ 28'
P-103	STORMWATER PUMP STATION	STORM WATER	NON-CLOG SUBMERSIBLE WASTEWATER	1,100	38	1160	25	460	3	SECONDARY OPERATING POINT 3,600 GPM @ 20'

GENERAL NOTES:
 A. PROVIDE HIGH EFFICIENCY MOTORS.



1 PIPE STAND DETAIL
 NTS

AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

I:\V\08-100-18-00\DWG\WORKSHEETS\SD-10.dwg

IMPORTANT NOTICE
 Section 42161.4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
 625 E. CARNEGIE DRIVE SUITE 100
 SAN BERNARDINO, CA 92408
 (909) 806-8000
 www.wilsonco.com

DATE 8-7-12

REGISTERED PROFESSIONAL ENGINEER
 MARK W. WENZEL
 M 32987
 EXP. 12-31-12
 STATE OF CALIFORNIA
 8-7-2012

MARK	REVISIONS	APPR.	DATE

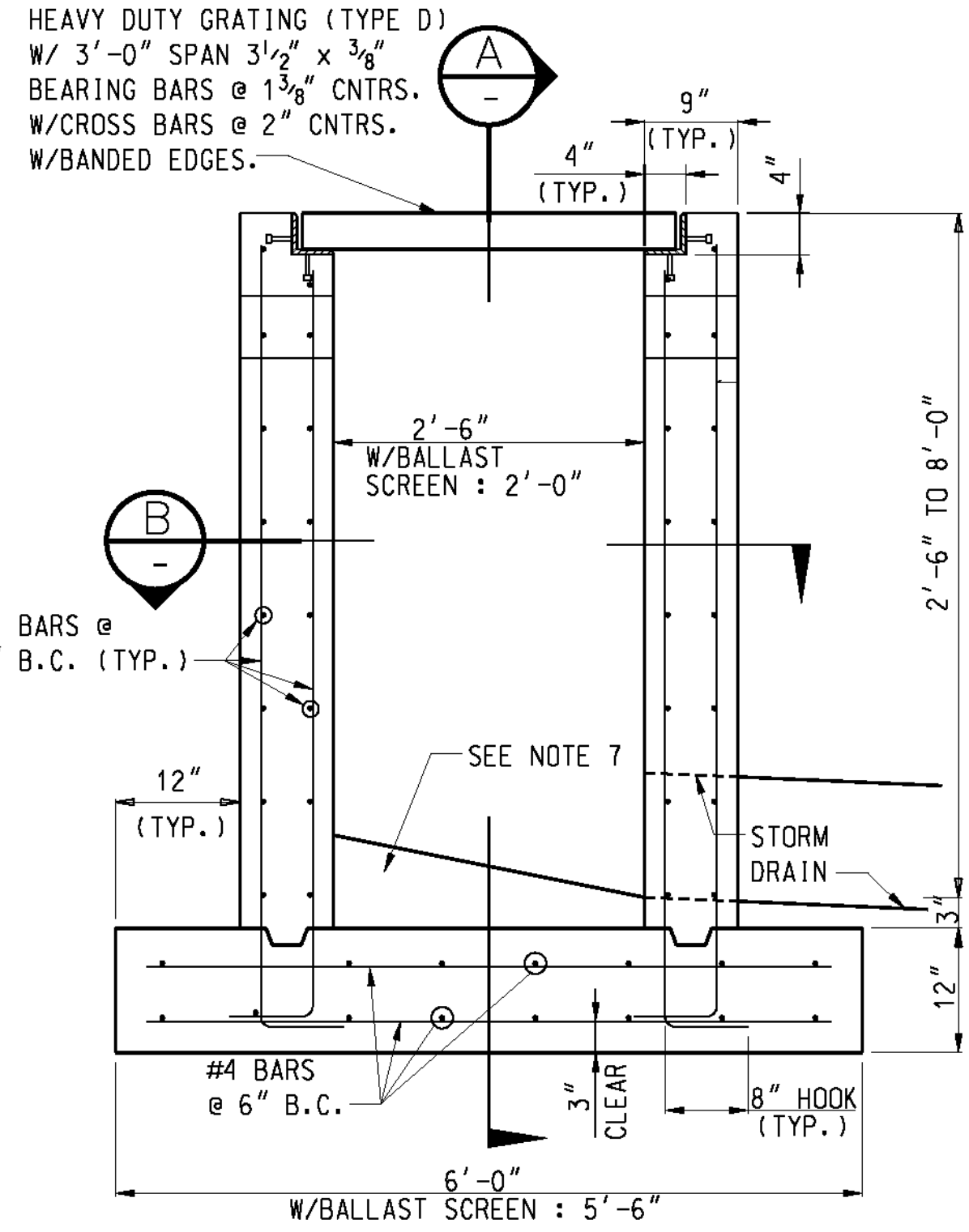
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CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
 STORMWATER PUMP STATION DETAIL SD-10

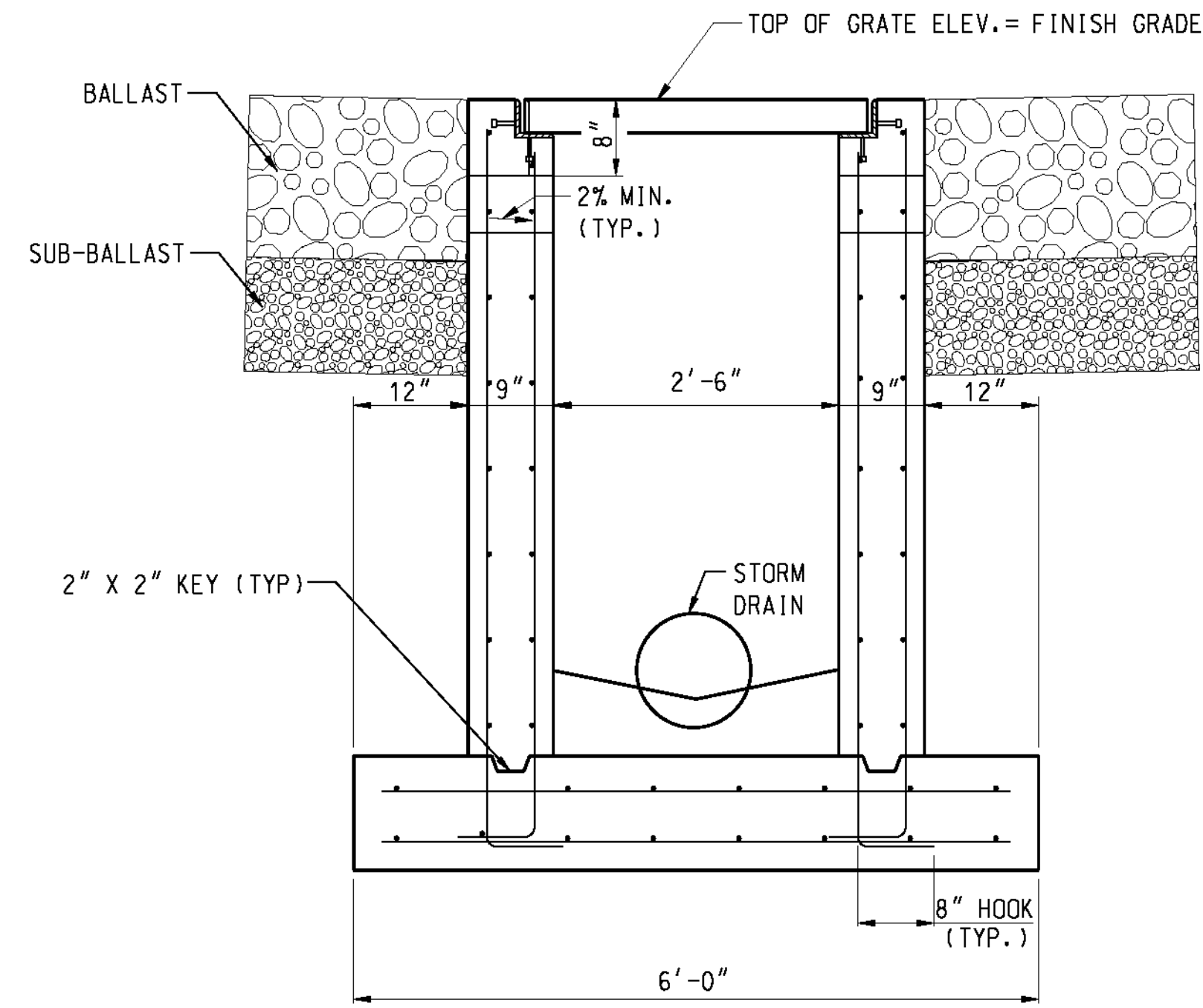
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D-848
 SHEET 98 OF 191
 FILE NO.

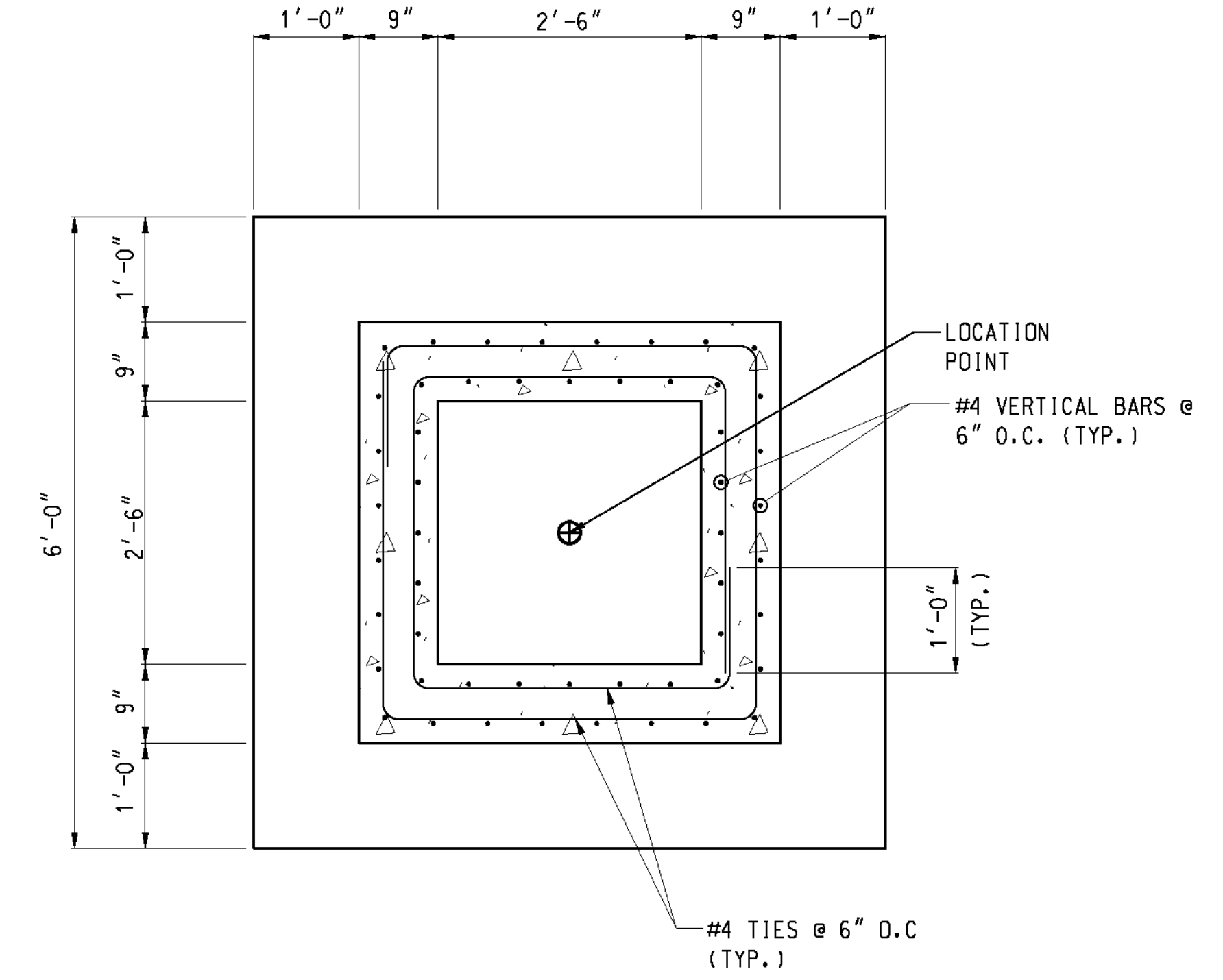
COLGROVE, JOHN A.
 S0010.dwg



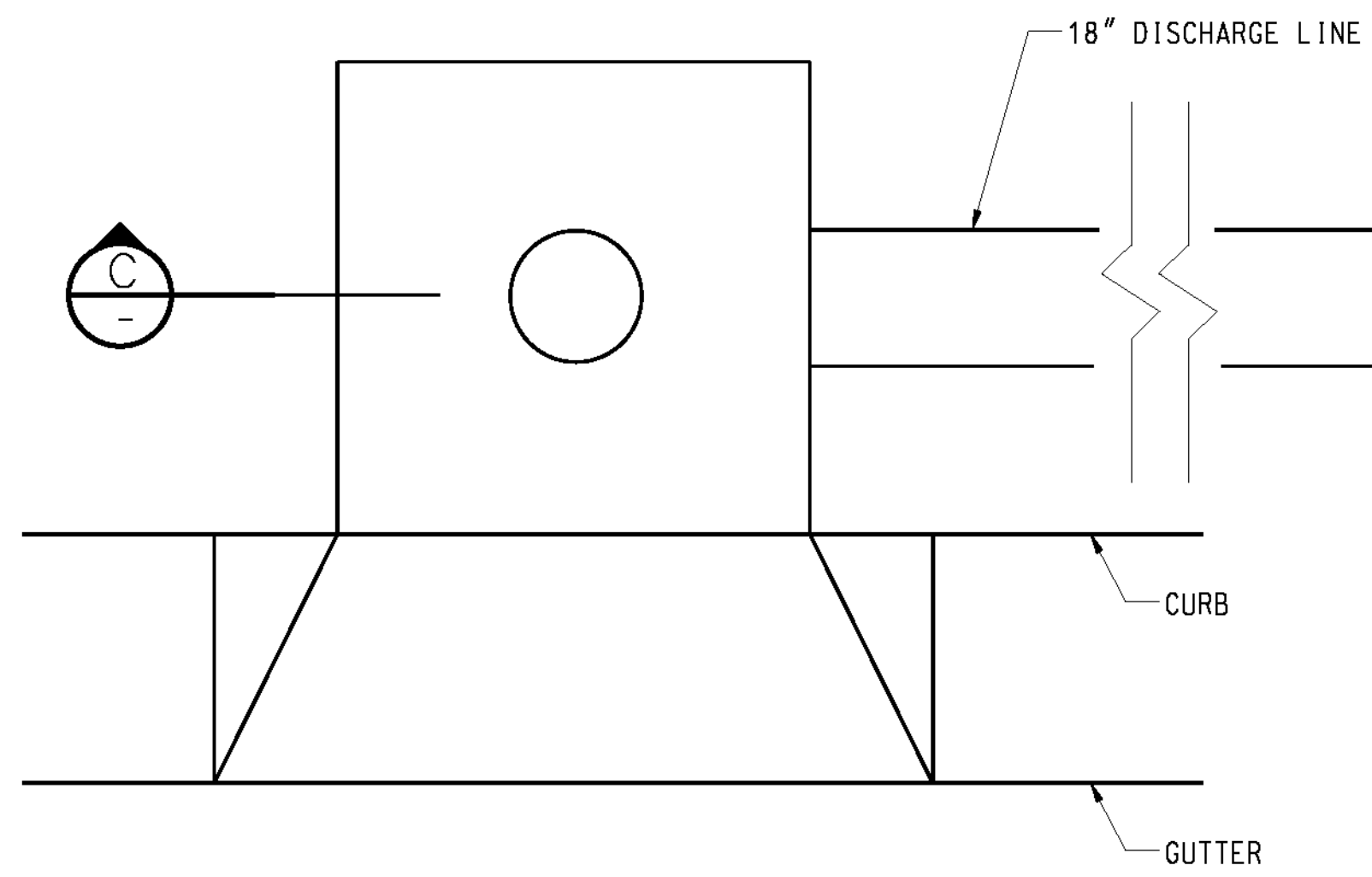
HEAVY DUTY CATCH BASIN DETAIL
NTS



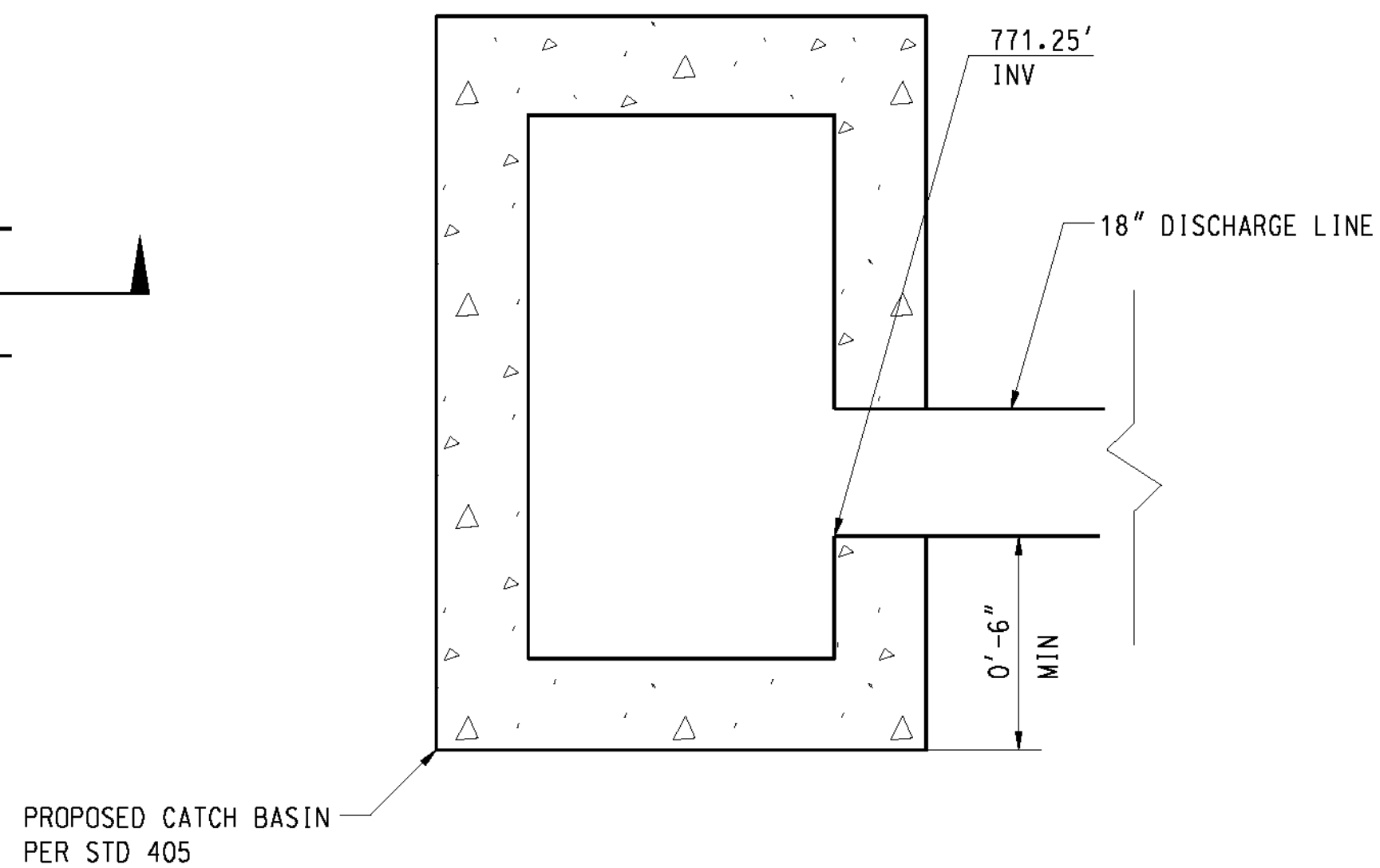
SECTION A
NTS



SECTION B
NTS



DISCHARGE LINE TIE-IN
NTS



SECTION C
NTS

HEAVY DUTY CATCH BASIN NOTES:

1. REINFORCEMENT: MILD STEEL REINFORCEMENT SHALL MEET THE REQUIREMENTS OF THE CURRENT A.S.T.M. DESIGNATIONS: A706, GRADE 60.
2. FABRICATION FOR REINFORCEMENT SHALL BE IN ACCORDANCE WITH CHAPTER 7 OF THE CONCRETE REINFORCING STEEL INSTITUTE (C.R.S.I.) MANUAL FOR STANDARD PRACTICE. DIMENSIONS OF BENDING ARE OUT TO OUT OF BAR.
3. MINIMUM CONCRETE COVER ON REINFORCEMENT SHALL BE TWO (2) INCHES UNLESS NOTED OTHERWISE.
4. MAXIMUM SIZE AGGREGATE SHALL BE ONE (1) INCH.
5. CONCRETE SHALL HAVE AN ULTIMATE COMPRESSIVE STRENGTH OF NO LESS THAN 4000 PSI IN 28 DAYS.
6. ALL HEAVY DUTY GRATING AND ANGLES SHALL BE GALVANIZED IN ACCORDANCE WITH SECTION 75 OF THE CALTRANS SPECIFICATIONS.
7. GROUT INVERT: INVERT OF CATCH BASIN SHALL BE GIVEN A STEEL TROWEL FINISH AND SHALL HAVE A LONGITUDINAL AND LATERAL SLOPE OF 1:12 MINIMUM AND 1:3 MAXIMUM.
8. ALL CAST-IN-PLACE, PRE-CAST ALTERNATE CONCRETE, REINFORCING STEEL, AND LIFTING DEVICE NOTES ON SHEET C1-50D ALSO APPLY.

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFE

IMPORTANT NOTICE
Section 4314-4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
625 E. CARNEGIE DRIVE SUITE 100
SAN BERNARDINO, CA 92408
(909) 806-8000
www.wilsonco.com

REGISTERED PROFESSIONAL ENGINEER
MICHAEL WOLFE
M 32397
EXP. 12-31-2016

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
HEAVY DUTY CATCH BASIN DETAILS SD-11

D-848
SHEET 99 OF 191
FILE NO.

ms:wpf-008-400-139-00-rev04-SHEET 99 OF 191.dgn

DATE: 8/7/2012
TIME: 10:20:07 AM

USER: altyrshak
S0011.dgn

ABBREVIATIONS

AC	AIR COOLED CHILLER
AHU	AIR HANDLING UNIT
AFF	ABOVE FINISHED FLOOR
B	BOILER
BC	BLOWER COIL
BFP	BOILER FEEDWATER PUMP
C	CONVECTOR (HOT WATER)
CHU	CABINET/UNIT HEATER
CRU	COMPUTER ROOM UNIT
CU	CONDENSING UNIT
CWP	COLD WATER PUMP
DMPR	DAMPER
(E)	EXISTING
(EX)	EXISTING
EDF	ELECTRIC DRINKING FOUNTAIN
EF	EXHAUST FAN
EW	ELECTRIC WATER COOLER
EX	EXISTING
FCU	FAN COIL UNIT
FPVAV	FAN POWERED VAV BOX
G	GUARD
GFI	GROUND FAULT INTERRUPTER
H-O-A	HAND-OFF-AUTOMATIC
HWP	HOT WATER PUMP
L	LOUVER
MAU	MAKE UP AIR UNIT
O-O	ON-OFF
PF	PHASE FAILURE
RCP	RECIRCULATING PUMP
RTU	ROOF TOP UNIT
SB	STEAM BOILER
SP	SUMP PUMP
UH	UNIT HEATER
VAV	VAV BOX
WH	WATER HEATER
WP	INDICATES WEATHERPROOF
WS	WATER SOFTENER

GENERAL ELECTRICAL NOTES:

- COMPLETE ALL WORK IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL ELECTRICAL SAFETY CODE (NESC), AND LOCAL REGULATIONS.
- ALL ELECTRICAL EQUIPMENT SHALL BE U.L. LISTED.
- SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- THE CONSTRUCTION DRAWINGS ARE DIAGRAMMATIC IN NATURE AND SHOW RELATIVE LOCATIONS OF DEVICES AND EQUIPMENT. COORDINATE WITH THE ACTUAL EQUIPMENT INSTALLED.
- COORDINATE ELECTRICAL WORK WITH THE WORK OF OTHER TRADES.
- ALL CONDUCTORS SHALL BE COPPER.
- ALL 120 VOLT AND 277 VOLT CIRCUITS SHALL HAVE INDIVIDUAL NEUTRAL CONDUCTORS. NEUTRALS SHALL NOT BE SHARED ON MULTI-PHASE HOMERUN CIRCUITS.
- ALL CONDUCTORS OPERATING ABOVE 100 VOLTS SHALL BE INSTALLED IN CONDUIT OR RACEWAY.
- PROVIDE CONDUIT EXPANSION FITTINGS AT ALL BUILDING EXPANSION JOINTS.
- SEE SHEET SD-05 FOR SITE ELECTRICAL WORK
- CONTRACTOR IS RESPONSIBLE TO LOCATE AND PROTECT UTILITY LINES AND PIPING IN THE AREA UNDER CONSTRUCTION.
- ALL STARTERS AND CONTACTORS SHALL HAVE 120 VOLT CONTROLS. PROVIDE FUSED CONNECTION FOR UNITS OPERATING AT 120 VOLTS LINE TO NEUTRAL. PROVIDE FUSED CONTROL POWER TRANSFORMERS FOR UNITS OPERATING ABOVE 120 VOLTS.
- SEE SPECIFICATIONS FOR ALTERNATE WORK ITEMS.
- ALL WORK SHALL BE SUITABLE FOR APPLICABLE SEISMIC ZONE.
- ALL WORK SHALL BE SUITABLE FOR 90 MPH WIND LOADING.
- PERFORM SHORT CIRCUIT STUDY AND ARC FLASH STUDY - SEE SPECIFICATIONS SECTION 16057. SET PROTECTIVE DEVICES, PROVIDE AND INSTALL LABELS ON EQUIPMENT IN ACCORDANCE WITH THE STUDY.

ELECTRICAL LEGEND	
	(2X4) LIGHTING FIXTURE (TYPICAL SYMBOLS) REFER TO LIGHTING FIXTURE SCHEDULE THIS SHEET.
	(1X4)
	(STRIP)
	(CAN)
	(WALL MTD)
	(EMERGENCY)
	EXIT SIGN, CEILING MOUNTED. PROVIDE ARROWS AS SHOWN
	EXIT SIGN, WALL MOUNTED. PROVIDE ARROWS AS SHOWN.
	EXIT SIGN, DOUBLE FACED, CEILING MOUNTED. PROVIDE ARROWS AS SHOWN.
	EMERGENCY BATTERY UNIT, WALL MOUNTED
	CONDUIT AND WIRING - ARROWS INDICATE HOMERUN TO PANEL. HATCH MARKS INDICATE NUMBER OF CONDUCTORS IF MORE THAN TWO PLUS ONE GROUND. NUMBER INDICATES SIZE IF OTHER THAN #12 AWG. DOES NOT APPLY TO CONDUCTORS USED FOR LIGHTING CIRCUITS- FOR LIGHTING CIRCUITS, PLANS SHOW SPECIFIC CONDUCTORS ONLY FOR UNSWITCHED POWER FEED TO FIXTURES OR GROUPS OF FIXTURES. PLANS DO NOT SHOW WHAT CONDUCTORS ARE REQUIRED TO ACCOMPLISH LIGHTING SCHEMES SHOWN. CONTRACTOR MUST DETERMINE WHAT CONDUCTORS ARE NEEDED AMONG FIXTURES, SWITCHES, ETC. AND INCLUDE REQUIRED WIRING IN HIS BID.
	LETTER AND NUMBER DENOTES PANELBOARD AND CIRCUIT. LETTER DENOTES SUB CIRCUIT AND SWITCHING. (IF REQUIRED)
	UNDERGROUND CONDUIT AND WIRING
	ELECTRICAL DUCT BANK
	SWITCH, SINGLE POLE
	MANUAL STARTER
	SWITCH, DOUBLE POLE
	SWITCH, THREE WAY
	SWITCH, FOUR WAY
	SWITCH, DIMMABLE
	WALL MOUNTED OCCUPANCY SENSOR
	CEILING MOUNTED OCCUPANCY SENSOR
	THERMOSTAT
	DUPLEX RECEPTACLE 20A, NEMA CONFIGURATION 5-20R
	DUPLEX RECEPTACLE, GROUND FAULT INTERRUPTING
	INDICATES WEATHERPROOF
	QUADRUPLEX RECEPTACLE
	SIMPLEX RECEPTACLE 20A, NEMA CONFIGURATION 5-20R
	SPECIALTY RECEPTACLE AS INDICATED ON SHEETS
	JUNCTION BOX
	EQUIPMENT CONNECTION
	SAFETY SWITCH, NUMBER INDICATES FUSE SIZE. (N) INDICATES NON FUSED.
	COMBINATION MAGNETIC MOTOR STARTER (SS) INDICATES SOLID STATE TYPE
	MAGNETIC MOTOR STARTER
	CIRCUIT BREAKER, TRIP RATING/NUMBER OF POLES INDICATED
	MOTOR, HP INDICATED, (* - INDICATES 1/8 HP OR LESS)
	PANELBOARD, SURFACE MOUNTED
	PANELBOARD, FLUSH MOUNTED
	PHOTOCELL
	SURGE PROTECTIVE DEVICE. NUMBER INDICATES LEVEL. SEE SPECIFICATIONS.
	PHASE FAULT
	GROUND FAULT
	SHUNT TRIP
	PILOT LIGHT, COLOR INDICATED
	SELECTOR SWITCH
	REMOTE STOP PUSHBUTTON STATION

LIGHTING FIXTURE SCHEDULE

MARK	LAMP			VOLTS	MOUNTING		MANUFACTURER OR EQUAL	NOTES
	TYPE	NO.	WATTS		TYPE	HEIGHT		
A	HPS	1	100	120	POLE	16 FEET	LITHONIA AS1 100S SR4SC SPA PER PE1 VG	A,B
---							POLE - LITHONIA SSS 16 4C	C,D

LAMP TYPES:	F	FLUORESCENT	HPS	HIGH PRESSURE SODIUM
	CF	COMPACT FLUORESCENT	MH	METAL HALIDE
	INC	INCANDESCENT	LED	LIGHT EMITTING DIODE

NOTES:

- PROVIDE FIXTURE WITH TWIST LOCK RECEPTACLE AND TWIST LOCK PHOTOCELL
- PROVIDE FIXTURE WITH POLYCARBONATE VANDAL GUARD OVER LENSE.
- PROVIDE POLE COMPLETE WITH ANCHOR BOLTS, BASE COVER, HANDHOLE, GROUND LUG, AND FIXTURE MOUNTING HARDWARE.
- POLE COLOR TO MATCH LIGHT FIXTURE

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

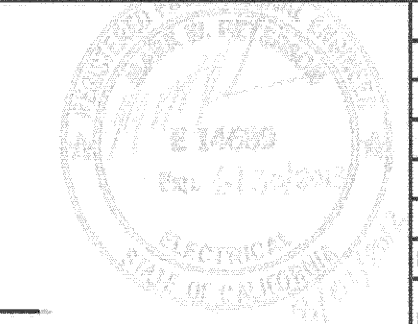
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DATE: 6/2012

IMPORTANT NOTICE
Section 4216/4217 of the Government Code requires a Dig Alert identification Number to be placed before a "Permit to Excavate" will be issued. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
625 E. CARNEGIE DRIVE SUITE 100
SAN BERNARDINO, CA 92408
(909) 806-8000
www.wilsonco.com

DATE 8-7-12



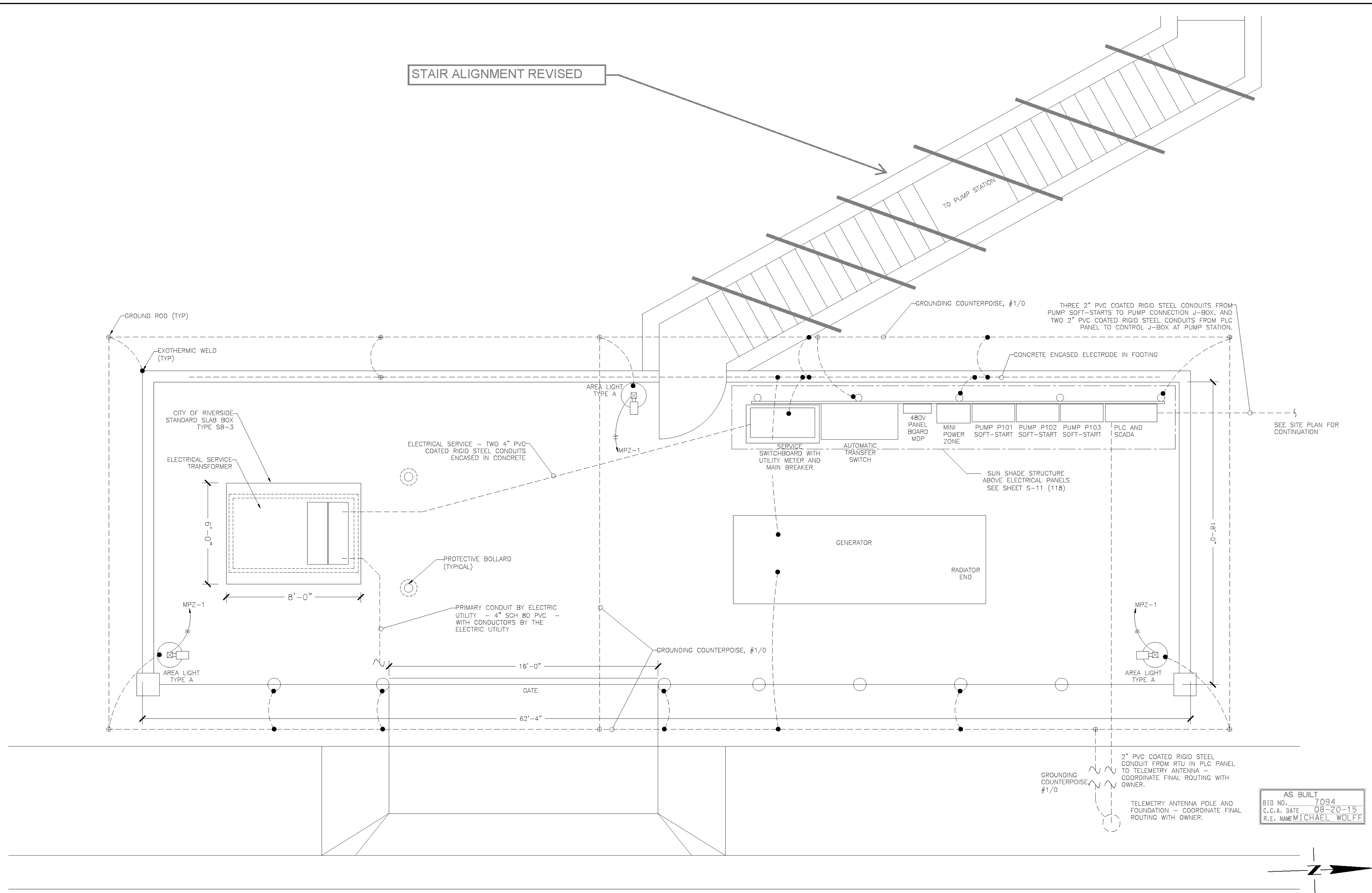
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
ELECTRICAL LEGEND AND GENERAL NOTES SE-01

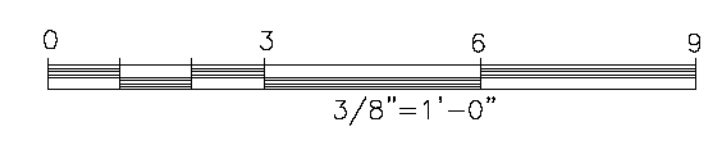
D-848
SHEET 100 OF 191
FILE NO.

HORIZ. SCALE: VERT. SCALE: N/A

BOCKENSTETTE, ROBERT CURTIS SE001.dwg



1 PUMP STATION CONTROL AND GENERATOR YARD PLAN
SCALE: 3/8" = 1'-0"



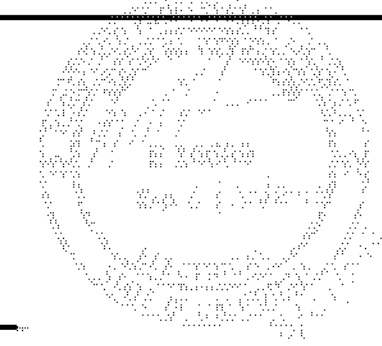
AS BUILT
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

S:\V\108-100-138-00\DWG\108-100-138-00.dwg

IMPORTANT NOTICE
Section 92161-6217 of the Government Code requires a Dig Alert identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

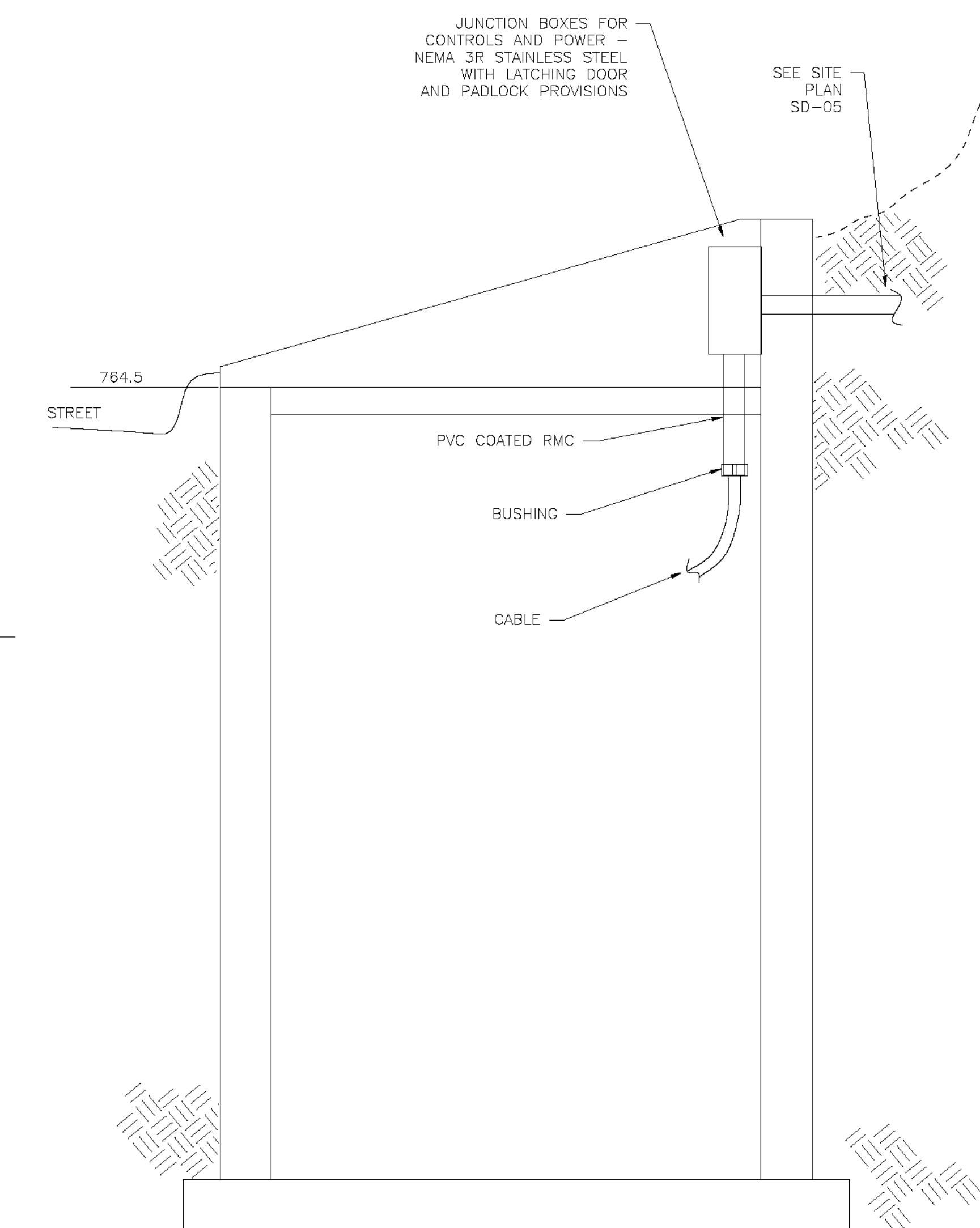
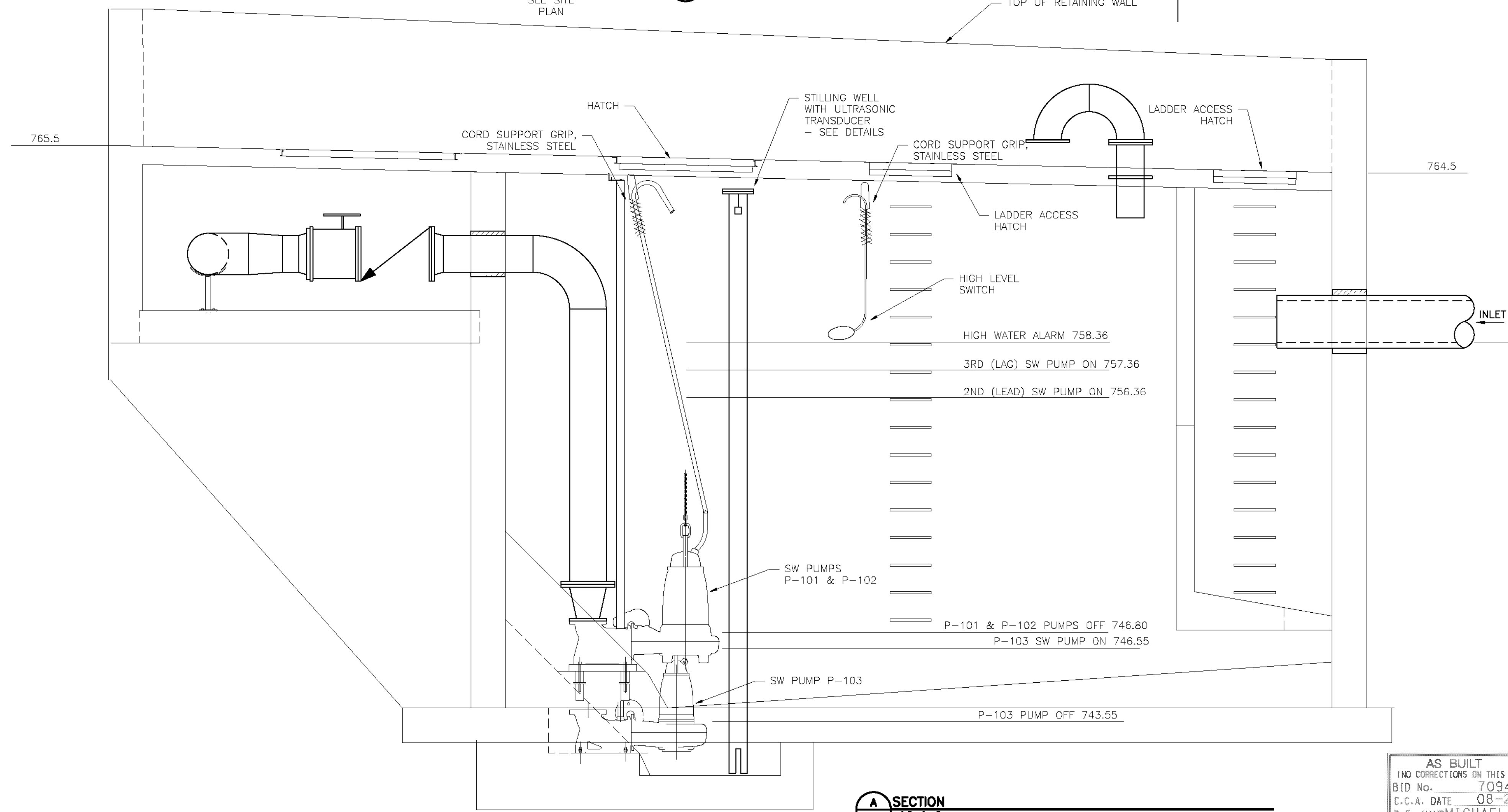
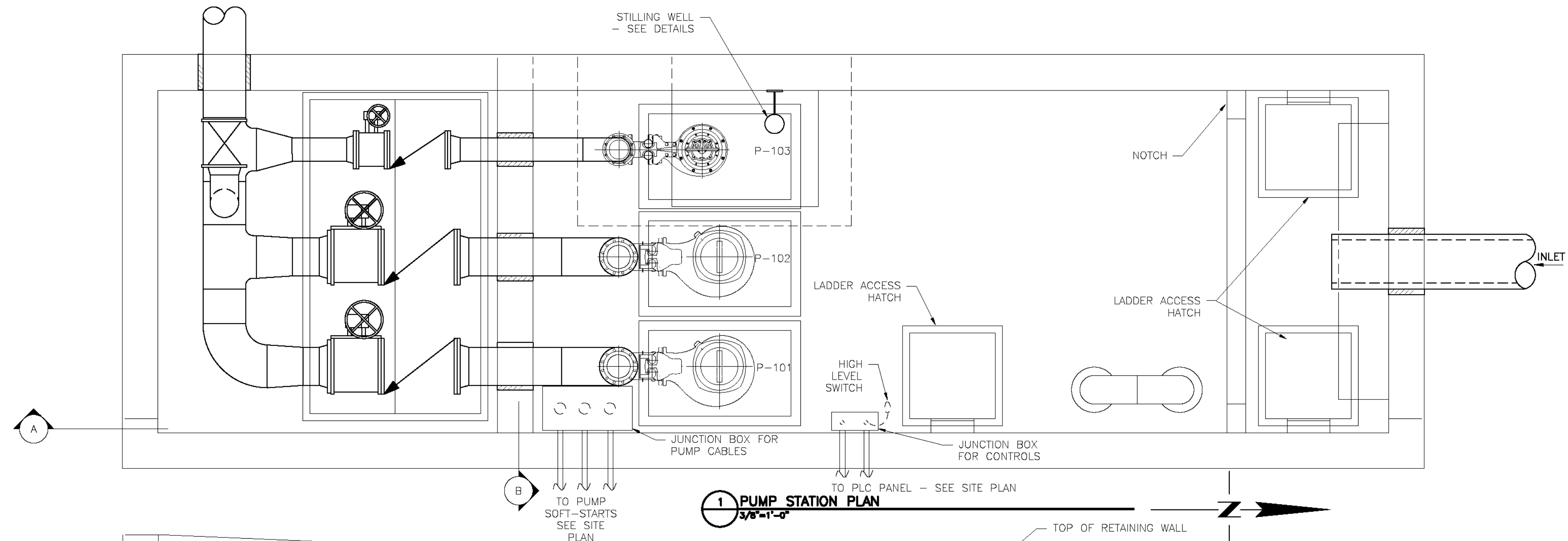
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PUMP STATION CONTROL AND GENERATOR PLAN SE-02

D-848
SHEET 101 OF 191
FILE NO.

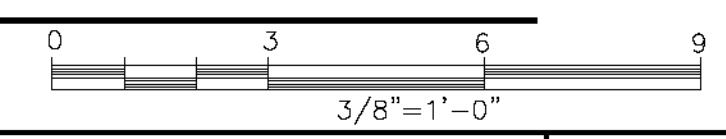
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BOOKENSTETTE, ROBERT CURTIS
SE02.dwg

DATE: 6/2012



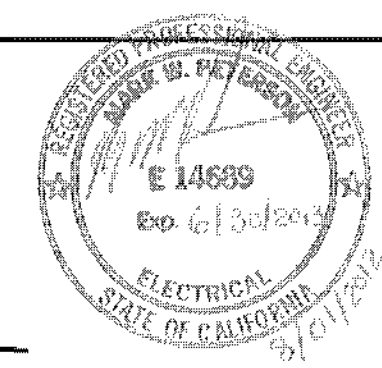
AS BUILT
(NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF



IMPORTANT NOTICE
 Section 42161.4217 of the Government Code requires a Dig Alert identification Number to be placed on the ground before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
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DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

DESIGNED BY *MW* DRAWN BY *DC* CHECKED BY _____

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PUMP STATION PLAN SE-03
 HORIZ. SCALE: VERT. SCALE: N/A

D-848
 SHEET 102 OF 191
 FILE NO.

DATE: 6/2012

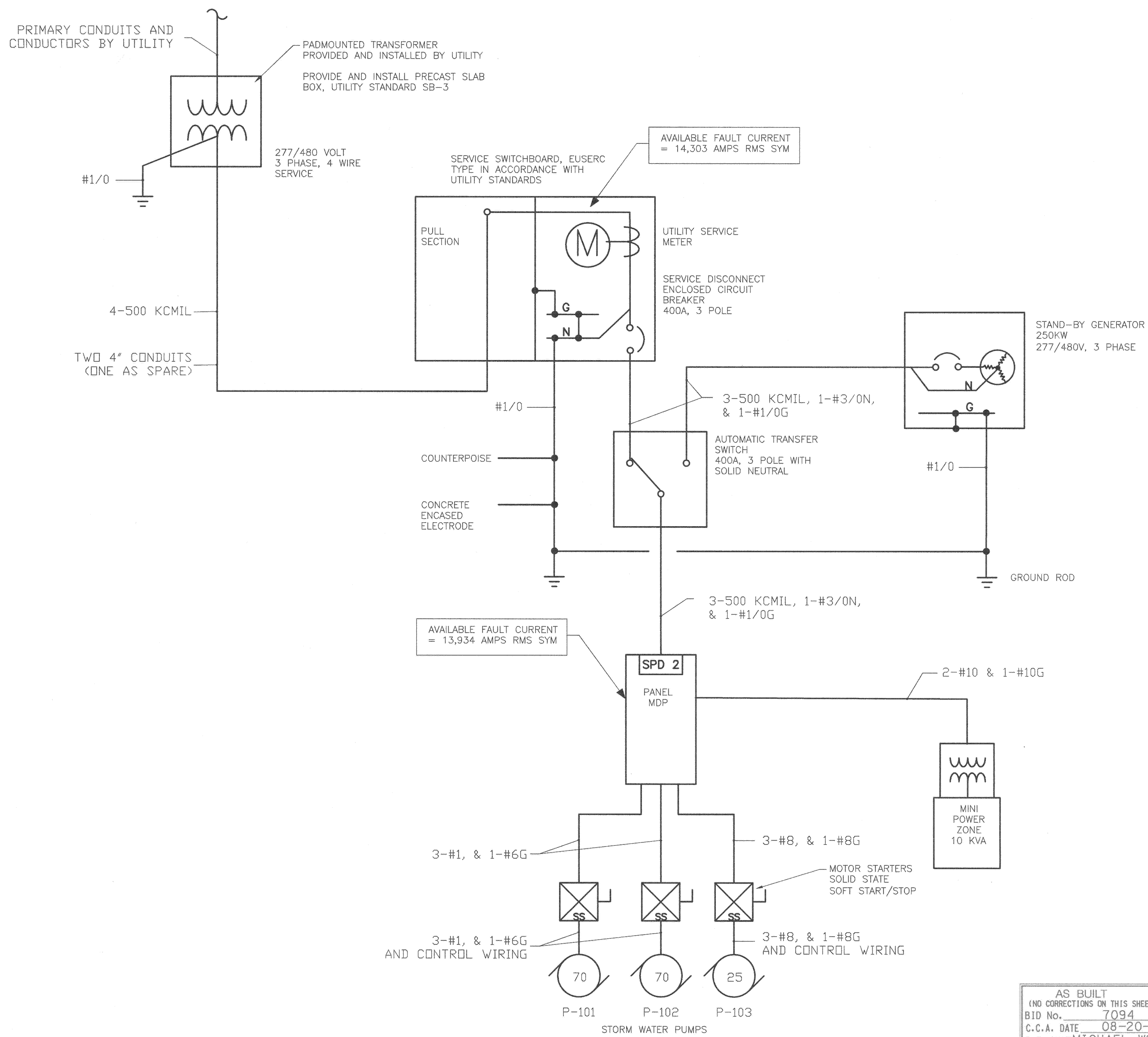
PANELBOARD MDP SCHEDULE													
480/277 VOLTS, 3 PHASE, 4 WIRE LOCATION - PUMP STATION			400 AMPERES EMD = 192 KVA			MAIN CIRCUIT BREAKER ENCLOSURE - NEMA 3R/12			22,000 AIC SURFACE MOUNTED				
DEMAND LOAD	DEMAND FACTOR	CONNECT LOAD	LOAD	BKR	CKT	PH	CKT	BKR	LOAD	CONNECT LOAD	DEMAND FACTOR	DEMAND LOAD	
89.0	1.0	89.0	PUMP P-101	150/3	1	A	2	30/2	MINI POWER ZONE	21.0	1.0	21.0	
89.0	1.0	89.0		3	B	4			21.0	1.0	21.0		
89.0	1.0	89.0		5	C	6			0.0	0.5	0.0		
89.0	1.0	89.0	PUMP P-102	150/3	7	A	8		SPACE	0.0	0.5	0.0	
89.0	1.0	89.0		9	B	10			0.0	0.5	0.0		
89.0	1.0	89.0		11	C	12			0.0	0.5	0.0		
32.0	1.0	32.0	PUMP P-103	70/3	13	A	14		SPACE	0.0	0.5	0.0	
32.0	1.0	32.0		15	B	16			0.0	0.5	0.0		
32.0	1.0	32.0		17	C	18			0.0	0.5	0.0		
0.0	0.5	0.0	SPACE		19	A	20		SPACE	0.0	0.5	0.0	
0.0	0.5	0.0	SPACE		21	B	22		SPACE	0.0	0.5	0.0	
0.0	0.5	0.0	SPACE		23	C	24		SPACE	0.0	0.5	0.0	
0.0	0.5	0.0	SPACE		25	A	26		SPACE	0.0	0.5	0.0	
0.0	0.5	0.0	SPACE		27	B	28		SPACE	0.0	0.5	0.0	
0.0	0.5	0.0	SPACE		29	C	30		SPACE	0.0	0.5	0.0	
				A	YES	FEED-THRU LUGS							
				B	NO	X	TO ?						
				C									
210.0	A	210.0	PANEL	231.0	A	231.0	PANEL		21.0	A	21.0		
210.0	B	210.0	CONNECTED	231.0	B	231.0	DEMAND		21.0	B	21.0		
210.0	C	210.0	AMPS	210.0	C	210.0	AMPS		0.0	C	0.0		
EST MAX DEMAND = VOLTS x 1.732 x MAX DEMAND AMPS = 480 x 1.732 x 231 = 192 KVA													
MINIMUM AMPACITY = 1.25 x MAX DEMAND AMPS = 1.25 x 231 = 289 AMPS													

NOTES: "G" IN THE CIRCUIT BREAKER COLUMN INDICATES A GFCI TYPE CIRCUIT BREAKER
 "*" IN THE CIRCUIT BREAKER COLUMN INDICATES A CIRCUIT BREAKER HANDLE LOCK

OPTIONS: PROVIDE FACTORY BUILT-IN SURGE PROTECTIVE DEVICE (LEVEL 2 - 160,000 AMPERES) - SEE SPECIFICATIONS

MINI POWER ZONE SCHEDULE													
480 VOLTS TO 120/240 VOLTS, 1 PHASE, 3 WIRE, 10KVA LOCATION - PUMP STATION			60 AMPERES, 240 V EMD = 9 KVA			MAIN CIRCUIT BREAKER ENCLOSURE - NEMA 3R			14,000 AIC, 480 VOLTS SURFACE MOUNTED				
DEMAND LOAD	DEMAND FACTOR	CONNECT LOAD	LOAD	BKR	CKT	PH	CKT	BKR	LOAD	CONNECT LOAD	DEMAND FACTOR	DEMAND LOAD	
3.0	1.0	3.0	AREA LIGHTING	15	1	A	2	20	RECEPTACLE AT RACK	8.3	0.5	4.2	
2.0	1.0	2.0	GENERATOR BATTERY CHARGE	15	3	B	4	20	RECEPTACLE AT RACK	8.3	0.5	4.2	
12.0	1.0	12.0	GENERATOR BLOCK HEATER	20/2	5	A	6	20	CONTROL PANEL	10.0	1.0	10.0	
12.0	1.0	12.0	SPARE		7	B	8	20	SPARE	8.3	0.5	4.2	
4.2	0.5	8.3			20	9	A	10	20	SPARE	8.3	0.5	4.2
				A	YES	FEED-THRU LUGS							
				B	NO	X	TO ?						
19.2	A	23.3	PANEL	49.9	A	37.5	PANEL		26.6	A	18.3		
14.0	B	14.0	CONNECTED	30.6	B	22.3	DEMAND		16.6	B	8.3		
EST MAX DEMAND = VOLTS x MAX DEMAND AMPS = 240 x 37 = 9 KVA													
MINIMUM AMPACITY = 1.25 x MAX DEMAND AMPS = 1.25 x 37 = 47 AMPS													

NOTES: "G" IN THE CIRCUIT BREAKER COLUMN INDICATES A GFCI TYPE CIRCUIT BREAKER
 "*" IN THE CIRCUIT BREAKER COLUMN INDICATES A CIRCUIT BREAKER HANDLE LOCK
 "E" IN THE CIRCUIT BREAKER COLUMN INDICATES AN EQUIPMENT PROTECTION GROUND FAULT BREAKER (30 mA TRIP)



ELECTRICAL ONE-LINE
 NTS

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

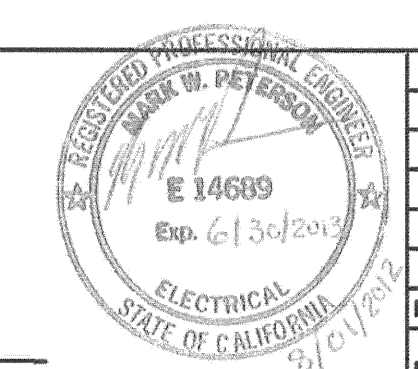
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DATE: 6/2012



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 625 E. CARNEGIE DRIVE SUITE 100
 SAN BERNARDINO, CA 92408
 (909) 806-8000
 www.wilsonco.com

DATE 8-7-12



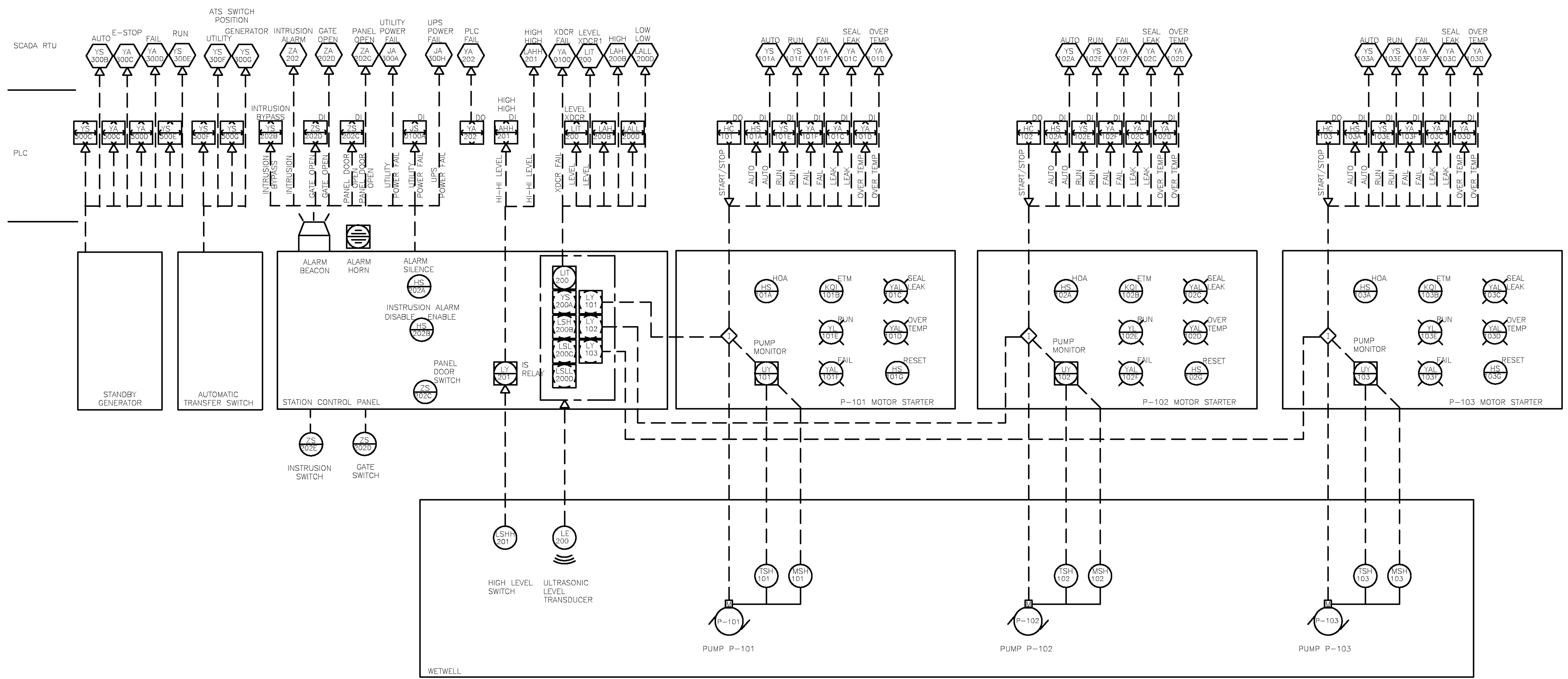
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
ELECTRICAL ONE LINE SE-04

D-848
 SHEET 103 OF 191

HORIZ. SCALE: VERT. SCALE: N/A

FILE NO. BOCKENSTETTE, ROBERT CURTIS SE004.dwg

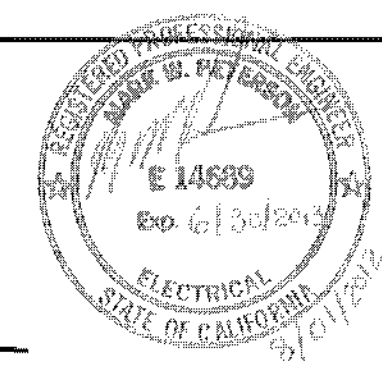


PUMP STATION CONTROLS
MS

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
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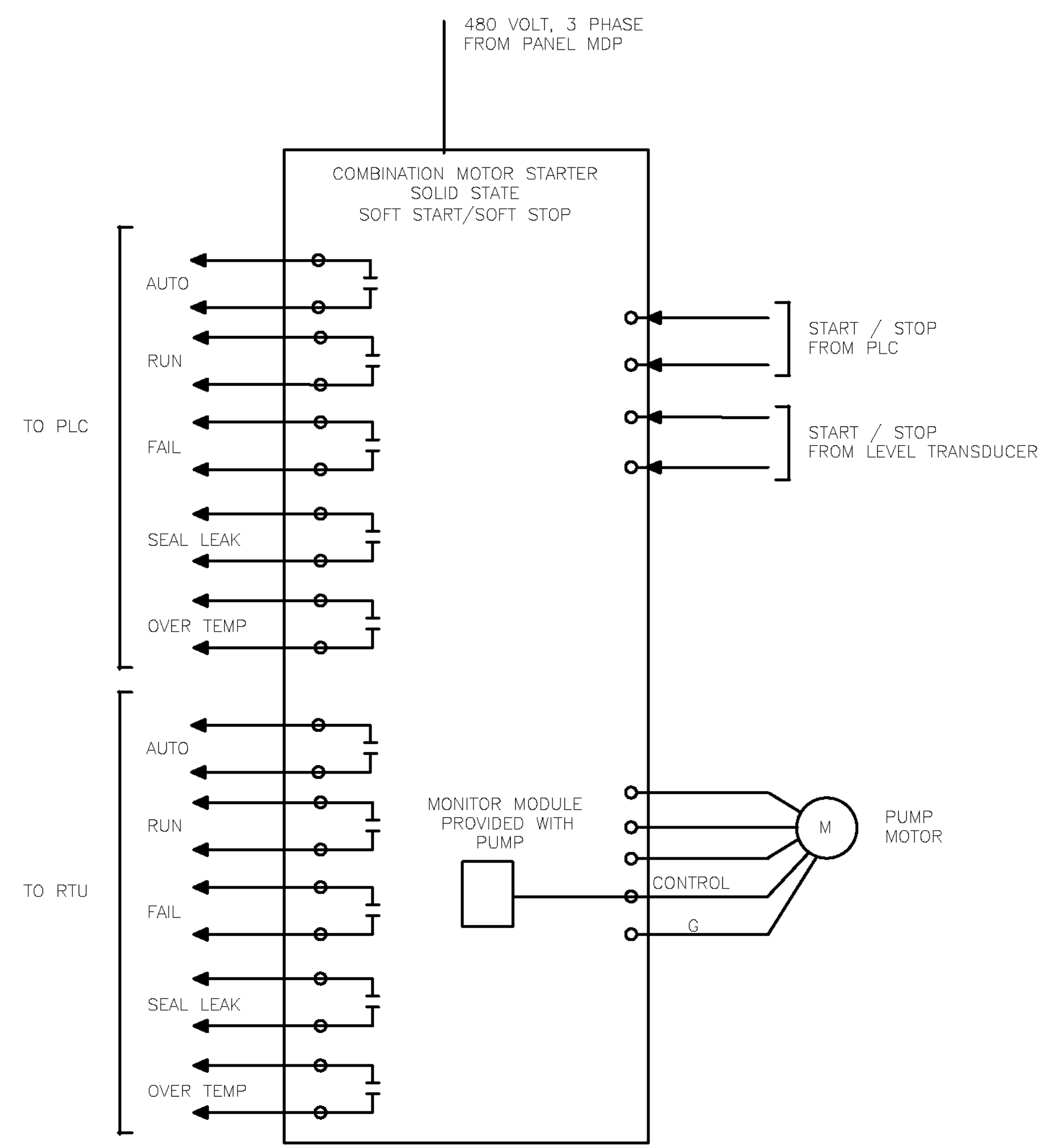


MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PUMP STATION CONTROLS SE-05
DESIGNED BY *MS* DRAWN BY *MS* CHECKED BY *MS*

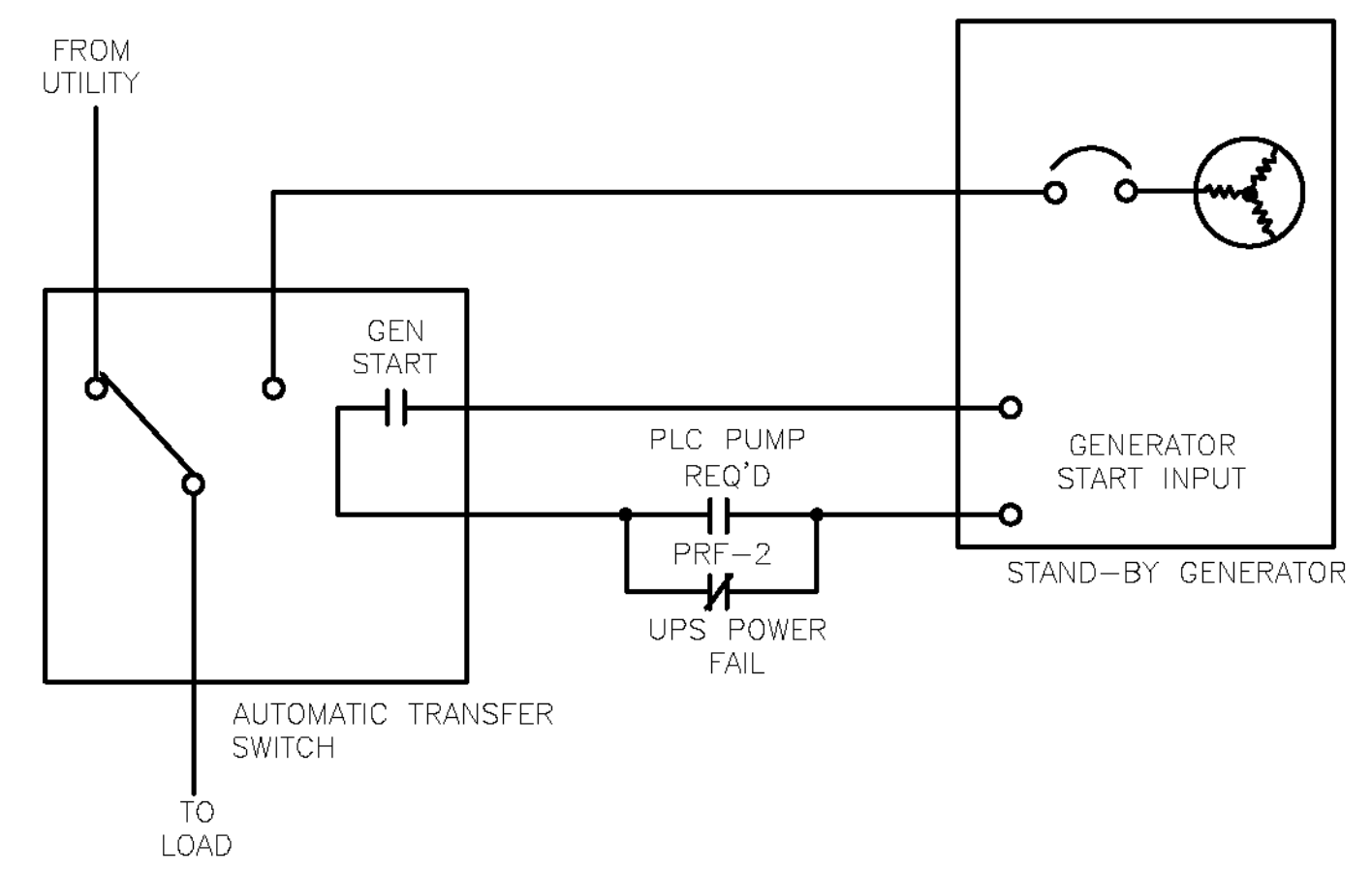
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SHEET 104 OF 191
HORIZ. SCALE: VERT. SCALE: N/A
FILE NO.

DATE: 6/2012



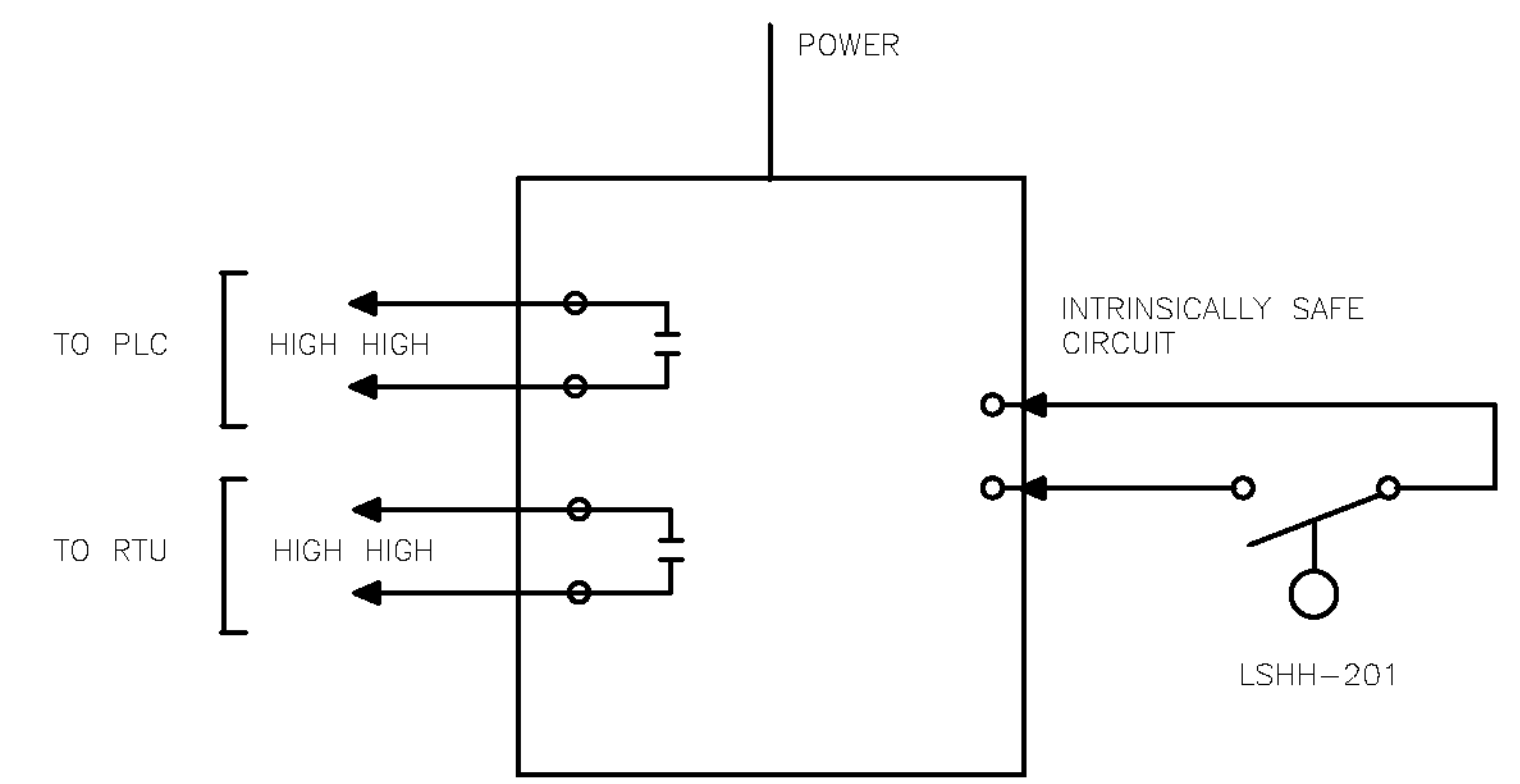
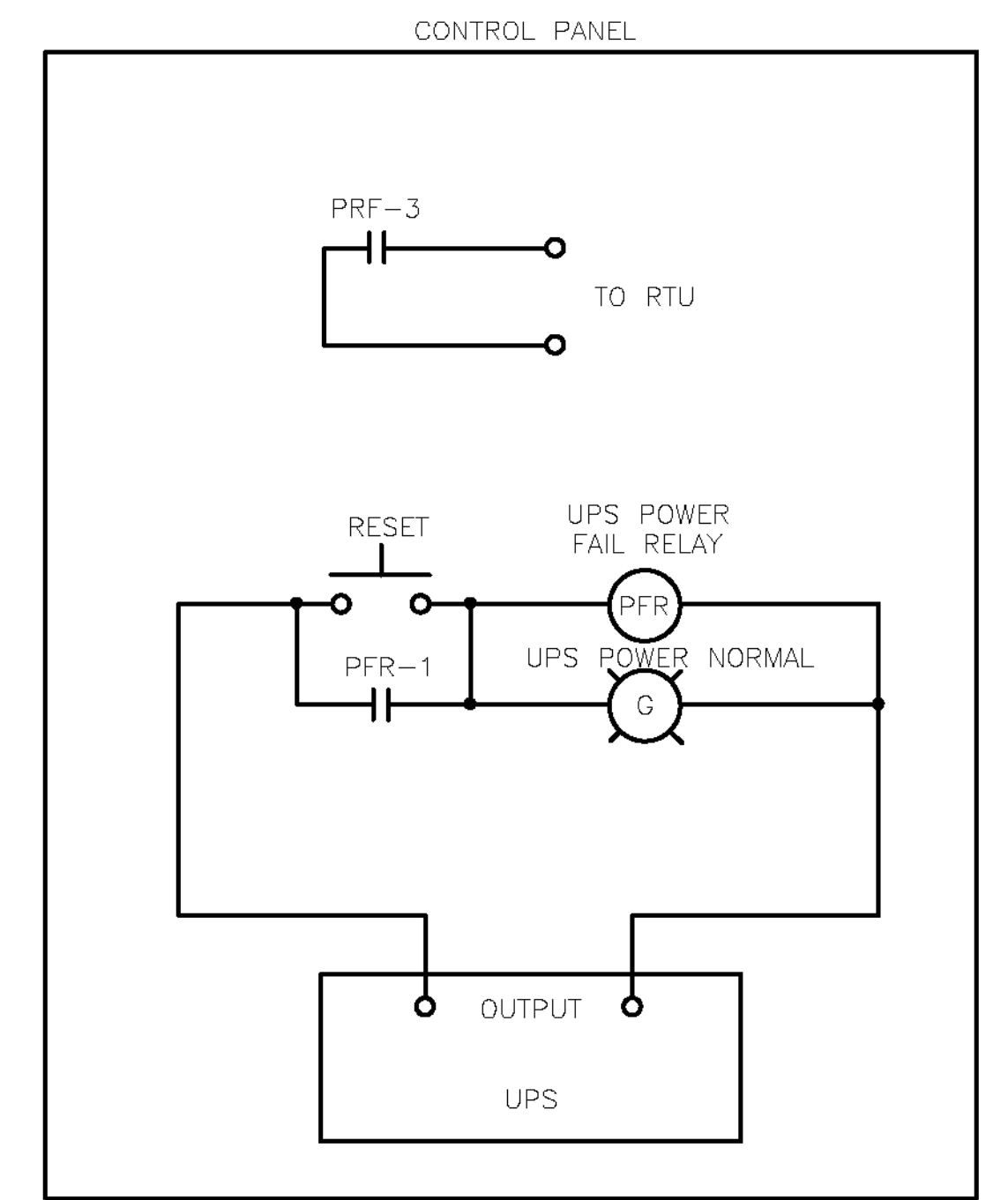
- NOTES:
1. TYPICAL FOR STORMWATER PUMPS P-101, P-102, AND P-103
 2. CONNECT BOTH START CONTROL CONTACTS IN PARALLEL ON "AUTO" SIDE OF H-0-A.

STORMWATER PUMP MOTOR STARTER
NTS



- GENERATOR START CONTROLS:
1. GENERATOR WILL BE STARTED IF UTILITY POWER FAILS AND THE PLC CALLS FOR A PUMP TO RUN.
 - OR
 2. GENERATOR WILL BE STARTED IF UTILITY POWER FAILS AND UPS POWER FAILS.
- RELAY PFR IS NORMALLY ENERGIZED.
- NOTE: GENERATOR WILL BE MANUALLY EXERCISED BY THE OWNER. SET EXERCISE CONTROLS TO "OFF".

GENERATOR START CONTROLS
NTS



- NOTES:
1. PROVIDE INTRINSICALLY SAFE RELAY
 2. ROUTE ALL INTRINSICALLY SAFE WIRING SEPARATED FROM OTHER WIRING.
 3. INSTALL IN ACCORDANCE WITH U.L. AND NATIONAL ELECTRICAL CODE ARTICLE 504.

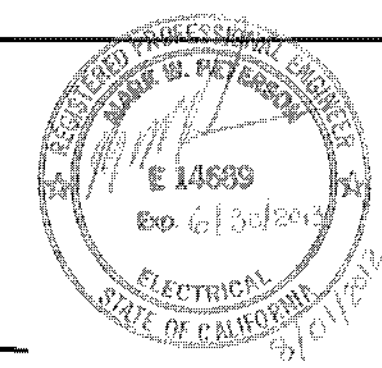
AS BUILT
(NO CORRECTIONS ON THIS SHEET)
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C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

WET WELL HIGH HIGH LEVEL SWITCH
NTS



WILSON & COMPANY
625 E. CARNEGIE DRIVE SUITE 100
SAN BERNARDINO, CA 92408
(909) 806-8000
www.wilsonco.com

DATE 8-7-12



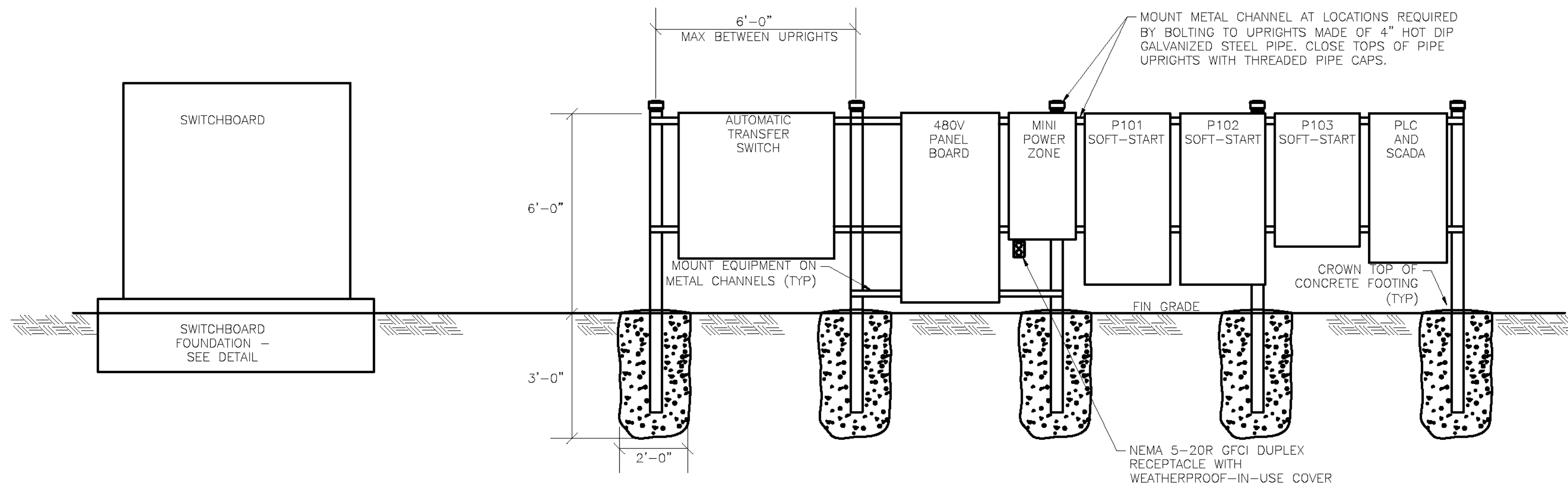
MARK	REVISIONS	APPR.	DATE

**CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT**
STREETER AVENUE UNDERPASS
CONTROL DIAGRAMS SE-06
HORIZ. SCALE: VERT. SCALE: N/A

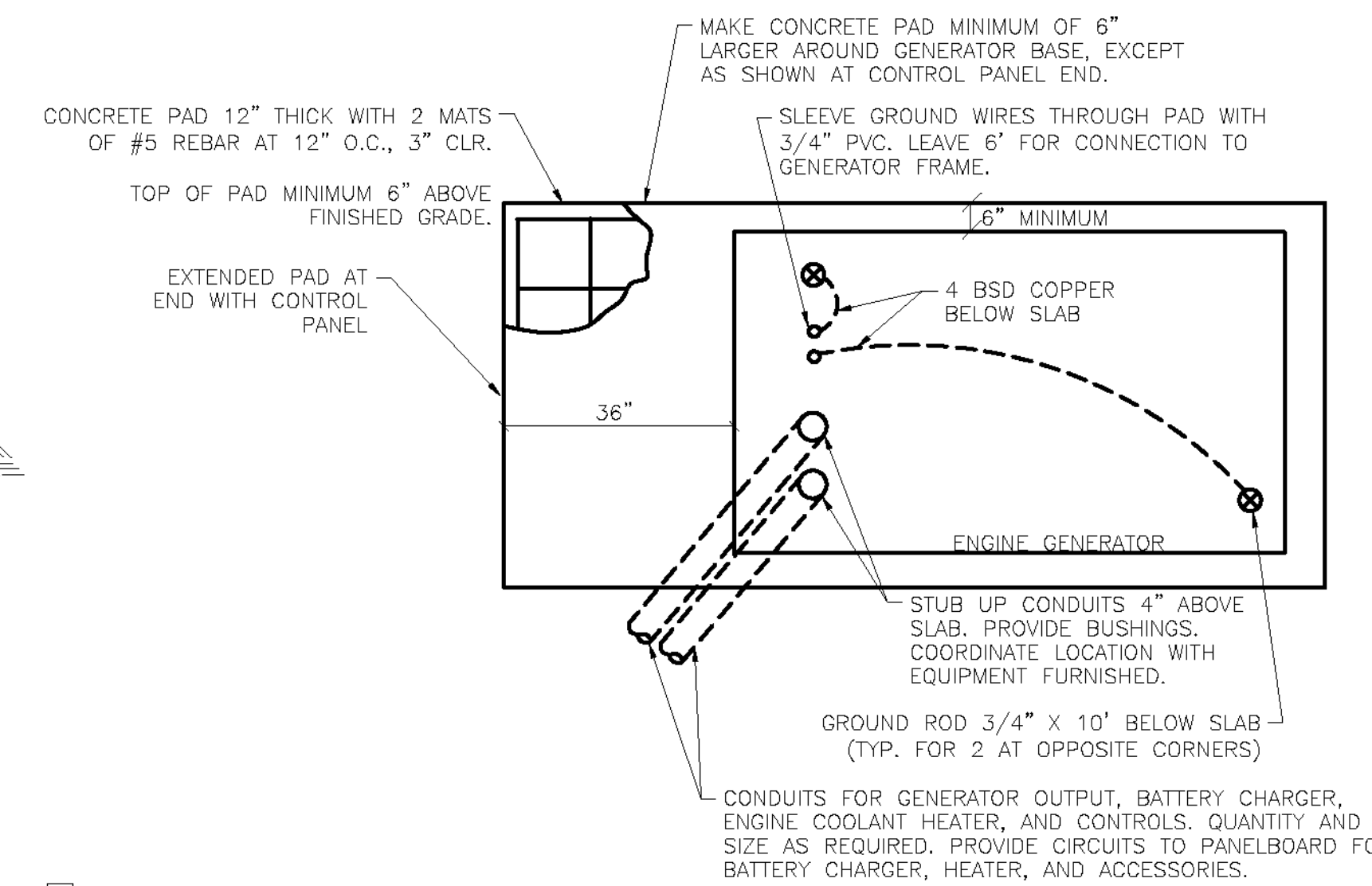
D-848
SHEET 105 OF 191
FILE NO.

DATE: 6/2012

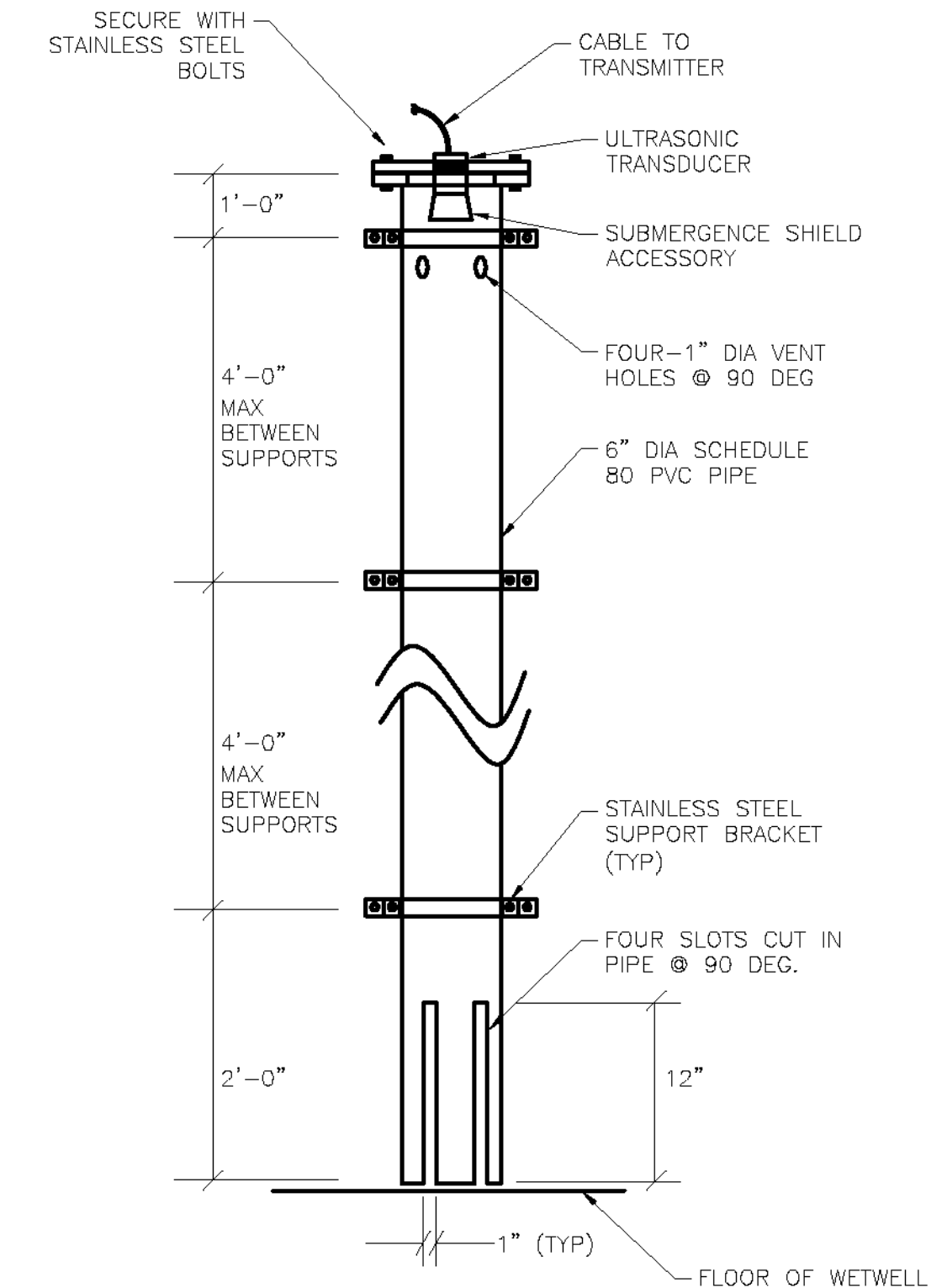
BOOKENSTETTE, ROBERT CURTIS
SE006.dwg



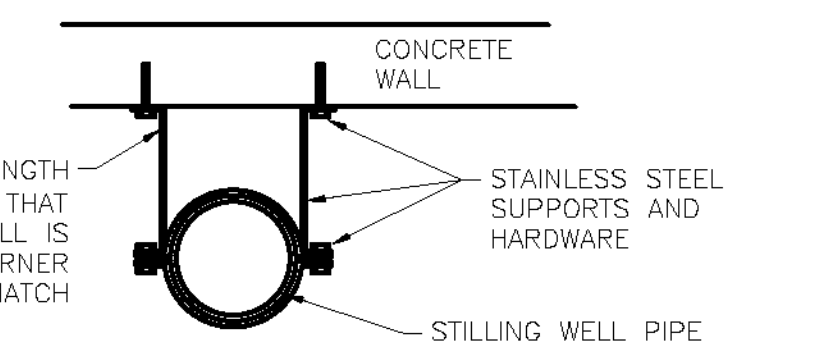
SWITCHBOARD ELEVATION
NTS



ENGINE GENERATOR FOUNDATION PLAN
NTS

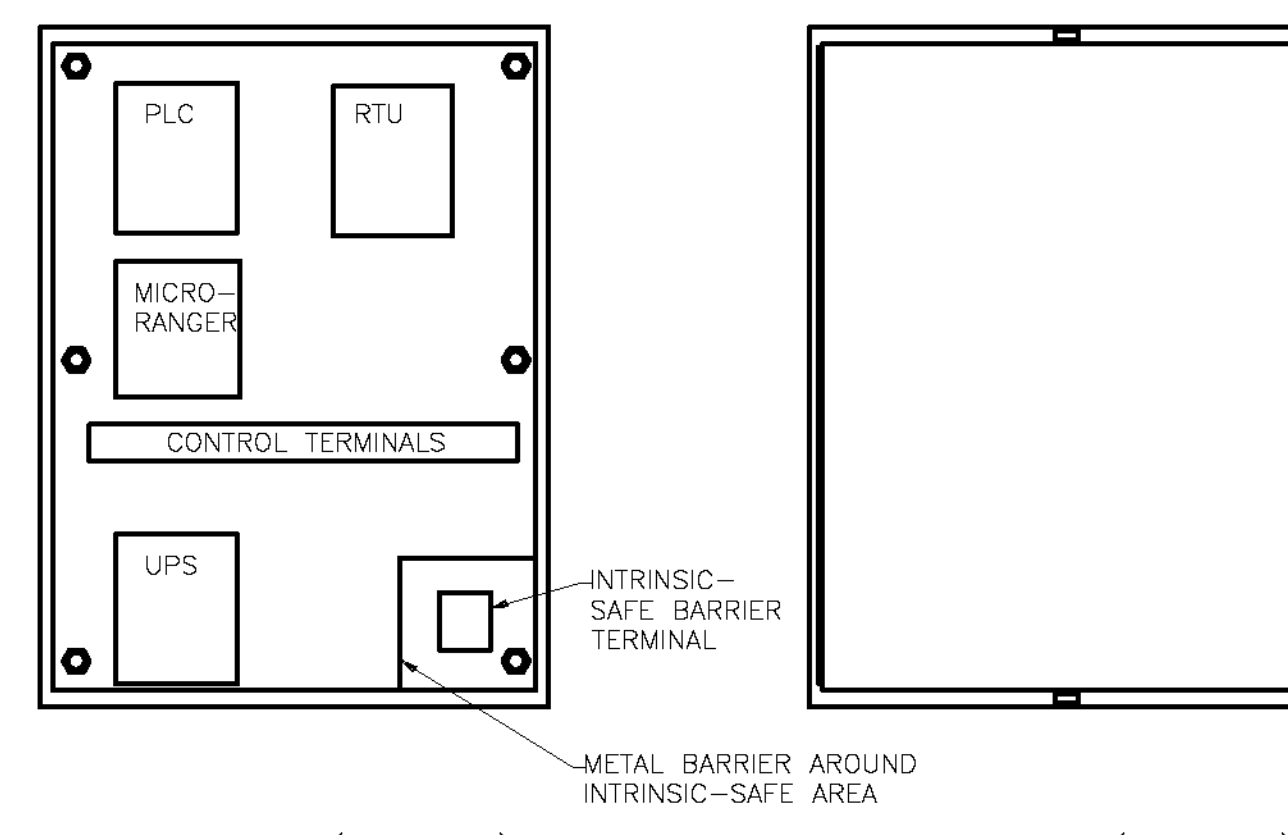


STILLING WELL ELEVATION
NTS

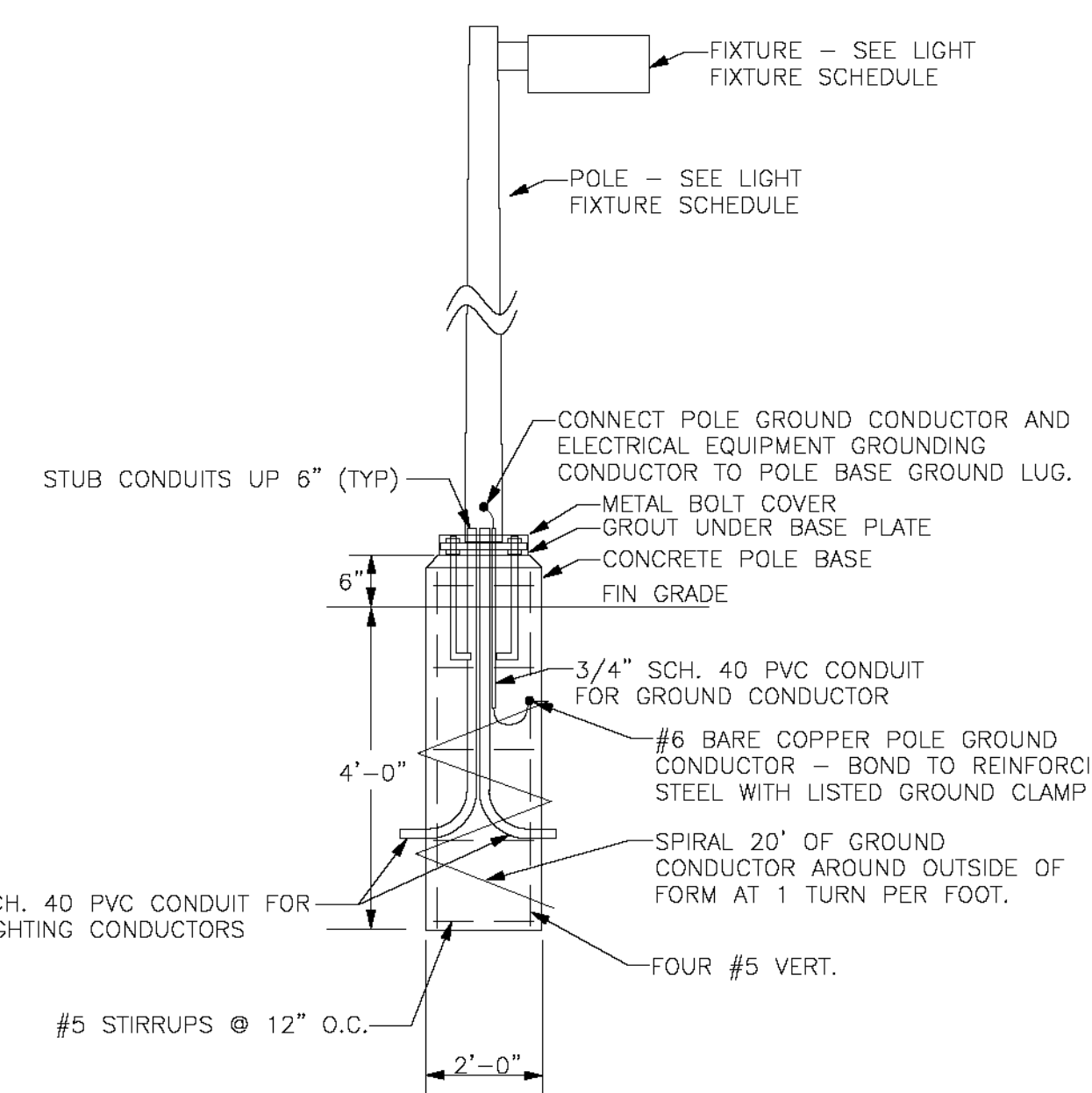


PLAN VIEW
NTS

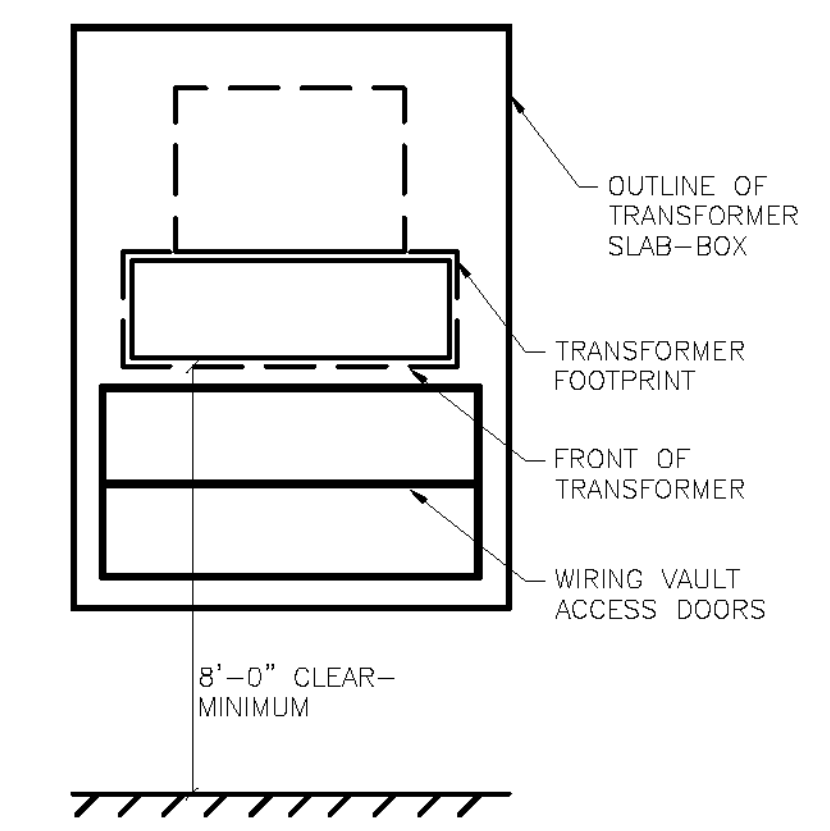
ELECTRICAL EQUIPMENT RACK ELEVATION
NTS



NOTE:
PANEL LAYOUTS SHOWN ARE SUGGESTIONS ONLY. FINAL LAYOUT TO BE DETERMINED BY PANEL BUILDER- SUBMIT FOR APPROVAL. PANEL TO BE NEMA 4X STAINLESS STEEL ENCLOSURE- SIZE AS REQUIRED WITH INTERIOR MOUNTING PLATE. EXTERIOR FINISH TO BE BRUSHED STAINLESS STEEL. FINISH ON INTERIOR MOUNTING PLATE TO BE WHITE ENAMEL. PANEL BUILDER TO COORDINATE ALL WIRING AND OTHER REQUIREMENTS WITH CITY OF RIVERSIDE TELEMETRY DEPARTMENT.

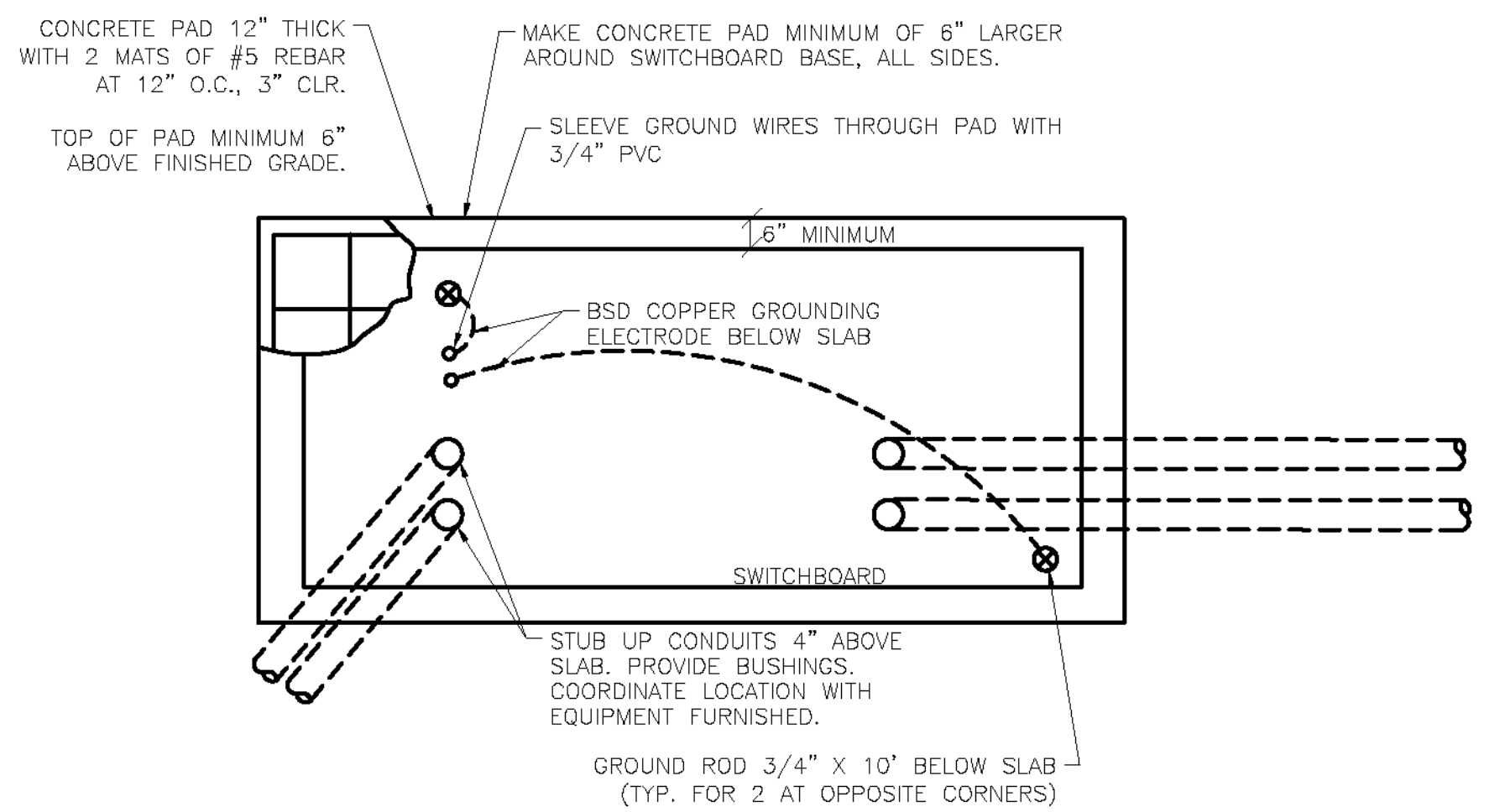


LIGHT POLE AND BASE DETAIL
NTS

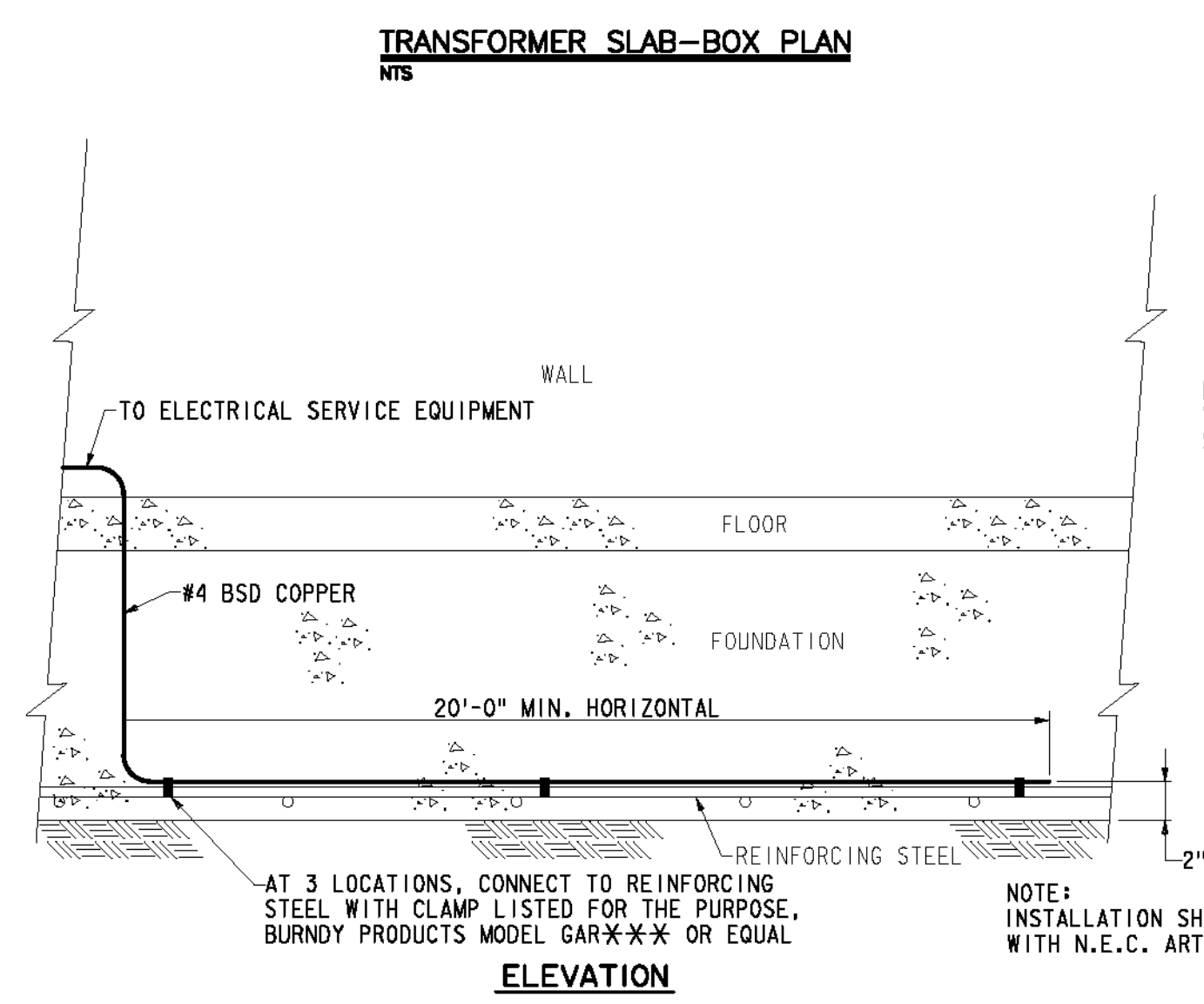


TRANSFORMER SLAB-BOX PLAN
NTS

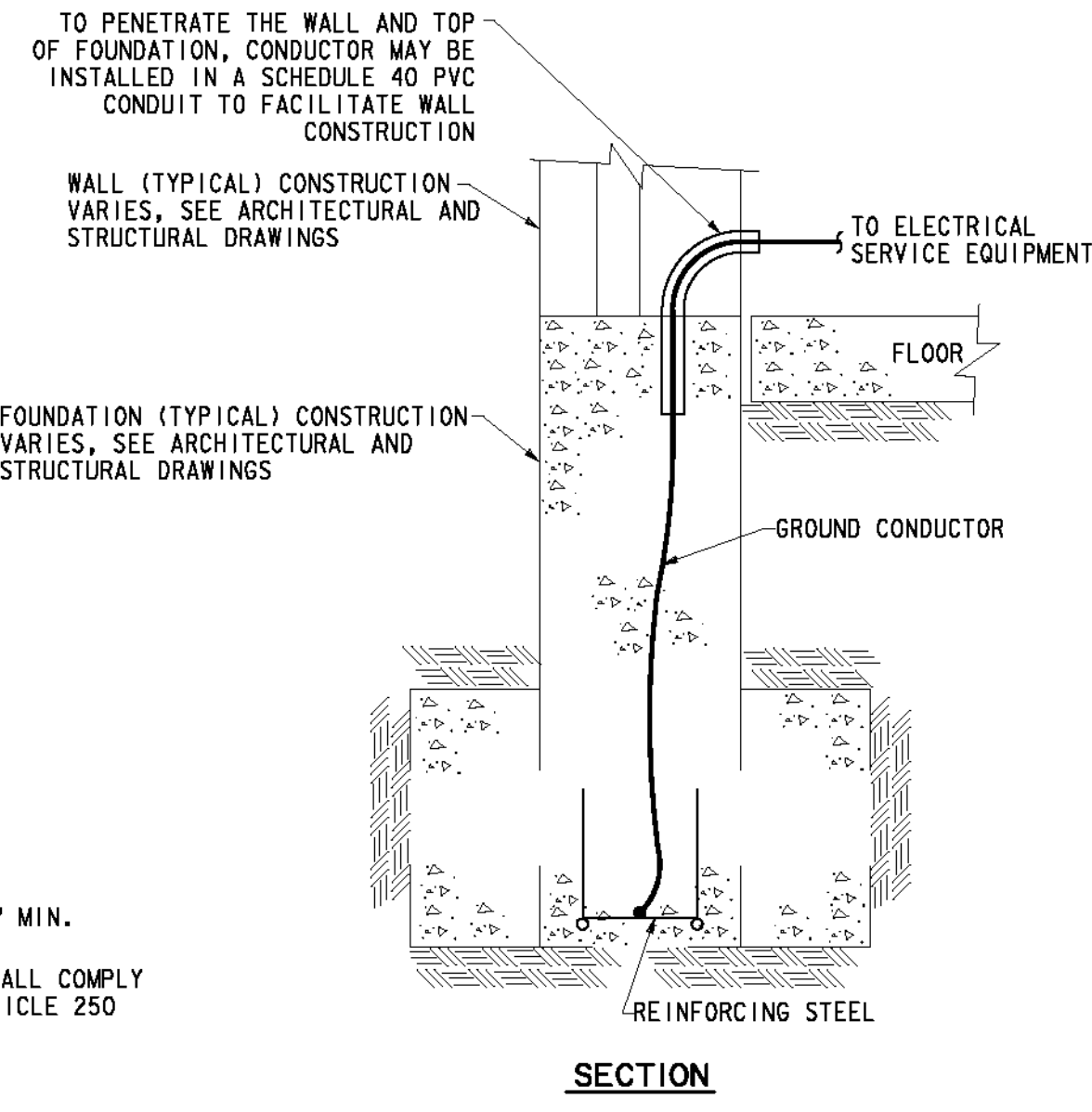
PLC AND SCADA PANEL LAYOUTS
NTS



SWITCHBOARD FOUNDATION PLAN
NTS



CONCRETE ENCASED ELECTRODE DETAIL
NTS



SECTION

AS BUILT
(AND CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
Section 42161.617 of the Government Code requires a Dig Alert Identification Number to be placed on all excavation permits to facilitate a "Call Before You Dig" service. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
625 E. CARNEGIE DRIVE SUITE 100
SAN BERNARDINO, CA 92408
(909) 806-8000
www.wilsonco.com

Professional Engineer Seal for Michael Wolff, State of California, License No. E 14689, Exp. 6/30/2015.

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
ELECTRICAL DETAILS SE-07

D-848
SHEET 106 OF 191
FILE NO.

DATE: 6/2012

BOOKENSTETTE, ROBERT CURTIS 5/20/12

SEQUENCE OF OPERATIONS:

DESCRIPTION:

THE STORMWATER PUMP STATION IS EQUIPPED WITH THREE (3) PUMPS - P-101, P-102, P-103. PUMP P-101 AND P-102 ARE THE LARGER PUMPS (70 HP EACH) AND HANDLE THE LARGE VOLUMES OF STORMWATER FLOW. P-103 IS A SMALLER PUMP (25 HP) AND HANDLES THE LOW VOLUME STORMWATER AND IS USED TO COMPLETELY DRAIN THE WET WELL AT THE END OF A STORM EVENT.

LEVEL TRANSDUCER:

WATER LEVEL IN THE WET WELL IS MONITORED BY AN ULTRASONIC LEVEL TRANSDUCER THAT MEASURES THE WATER LEVEL. THIS LEVEL MEASUREMENT IS TRANSMITTED TO THE PLC AS AN ANALOG VALUE AND THE VARIOUS START AND STOP ELEVATIONS ARE PROGRAMMED INTO THE PLC. AS A REDUNDANT CONTROL, CONTROL DRY CONTACTS IN THE ULTRASONIC LEVEL TRANSDUCER ARE ALSO WIRED DIRECTLY TO THE MOTOR STARTERS TO CAUSE THE PUMPS TO OPERATE BASED UPON WET WELL LEVEL EVEN WHEN THE PLC IS NOT OPERATIONAL.

P-103:

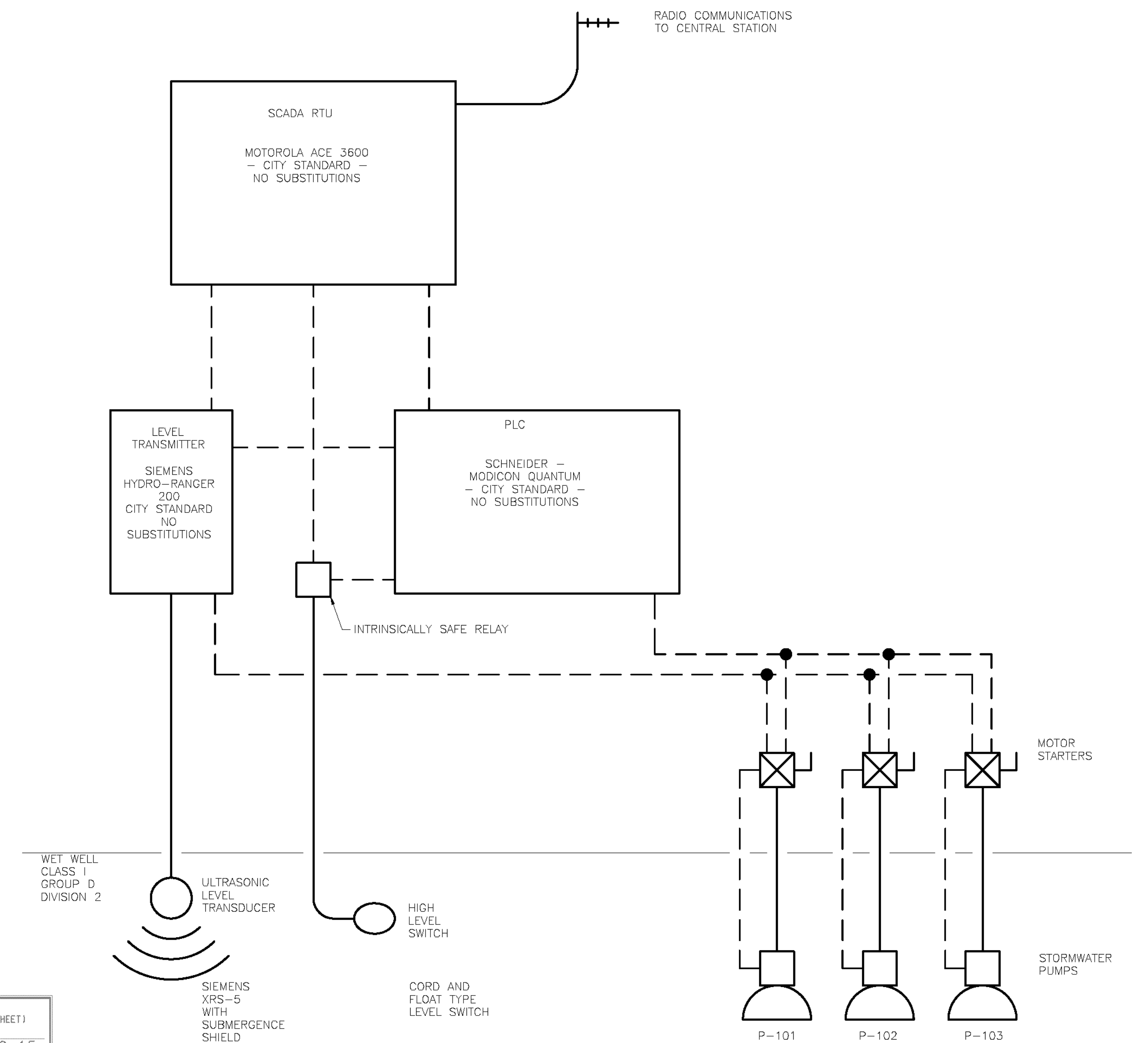
PUMP P-103 IS EQUIPPED WITH A HAND-OFF-AUTO SELECTOR SWITCH. WHEN THE SWITCH IS IN THE "HAND" POSITION, THE PUMP WILL RUN AND WHEN IN THE "OFF" THE PUMP WILL REMAIN OFF. WHEN THE SWITCH IS IN THE "AUTO" POSITION, THE PUMP IS CONTROLLED BY THE PLC AND THE ULTRASONIC LEVEL TRANSDUCER. WHEN THE WATER LEVEL IN THE WET WELL RISES TO THE P-103 (THE SMALLER PUMP) START LEVEL, THE PUMP P-103 IS STARTED AND OPERATES UNTIL THE LEVEL DROPS TO THE P-103 STOP LEVEL. IF THE LEVEL RISES AGAIN, THE PUMP CYCLES ON AND OFF IN RESPONSE TO THE LEVEL. THE CYCLE WILL REPEAT AS NEEDED.

P-101 AND P102:

PUMPS P-101 AND P-102 ARE ALSO EQUIPPED WITH HAND-OFF-AUTO SELECTOR SWITCHES. WHEN THE SWITCHES ARE IN THE "AUTO" POSITION, THE PUMPS ARE CONTROLLED BY THE PLC AND THE ULTRASONIC LEVEL TRANSDUCER. WHEN THE WET WELL LEVEL RISES ABOVE THE RANGE OF THE P-103 CONTROLS (BECAUSE THE INFLOW OF STORMWATER IS GREATER THAN PUMP P-103 CAN PUMP), PUMP P-103 IS STOPPED AND PUMPS P-101 AND P-102 ARE OPERATED IN A LEAD - LAG, ALTERNATING SEQUENCE. WHEN THE LEVEL REACHES THE LAG PUMP START ELEVATION BOTH PUMPS P-101 AND P-102 WILL RUN. WHEN THE WET WELL DROPS TO THE P-101 AND P-102 STOP ELEVATION, BOTH PUMPS P-101 AND P-102 WILL BE STOPPED AND P-103 WILL BE STARTED AND OPERATE AS DESCRIBED ABOVE. THE CYCLE WILL REPEAT AS NEEDED.

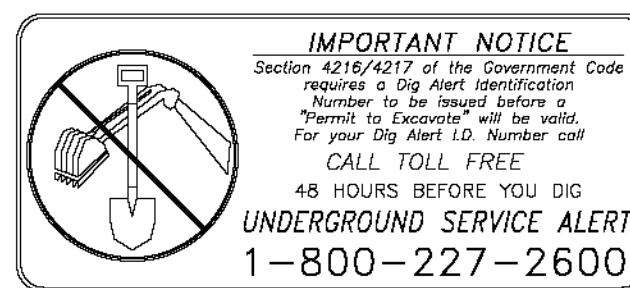
WET WELL HIGH LEVEL:

HIGH WATER LEVEL IN THE WET WELL IS MONITORED BY A LEVEL SWITCH LOCATED IN THE WET WELL. WHEN A HIGH LEVEL OF WATER IS PRESENT IN THE WET WELL (ABOVE THE NORMAL OPERATING RANGE OF THE PUMPS) THE LEVEL SWITCH IS ACTIVATED. THE LEVEL SWITCH SIGNALS BOTH THE PLC AND THE SCADA RTU THAT A HIGH LEVEL CONDITION IS PRESENT. THE PLC WILL COMMAND BOTH STORMWATER PUMPS P-101 AND P-102 TO OPERATE UNTIL THE WET WELL LEVEL DROPS TO THE RESPECTIVE PUMP STOP ELEVATIONS.



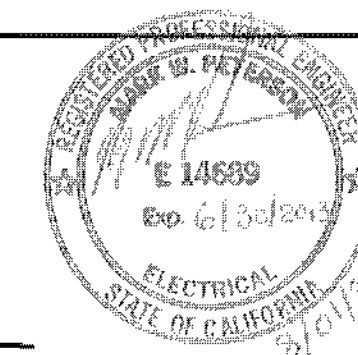
AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

CONTROL SCHEMATIC
NTS



WILSON & COMPANY
625 E. CARNEGIE DRIVE SUITE 100
SAN BERNARDINO, CA 92408
(909) 806-8000
www.wilsonco.com

DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
CONTROL DETAILS SE-08
HORIZ. SCALE: VERT. SCALE: N/A

D-848
SHEET 107 OF 191
FILE NO.

BOOKENSTETTE, ROBERT CURTIS
SE006.dwg

SPLITDRIVAS

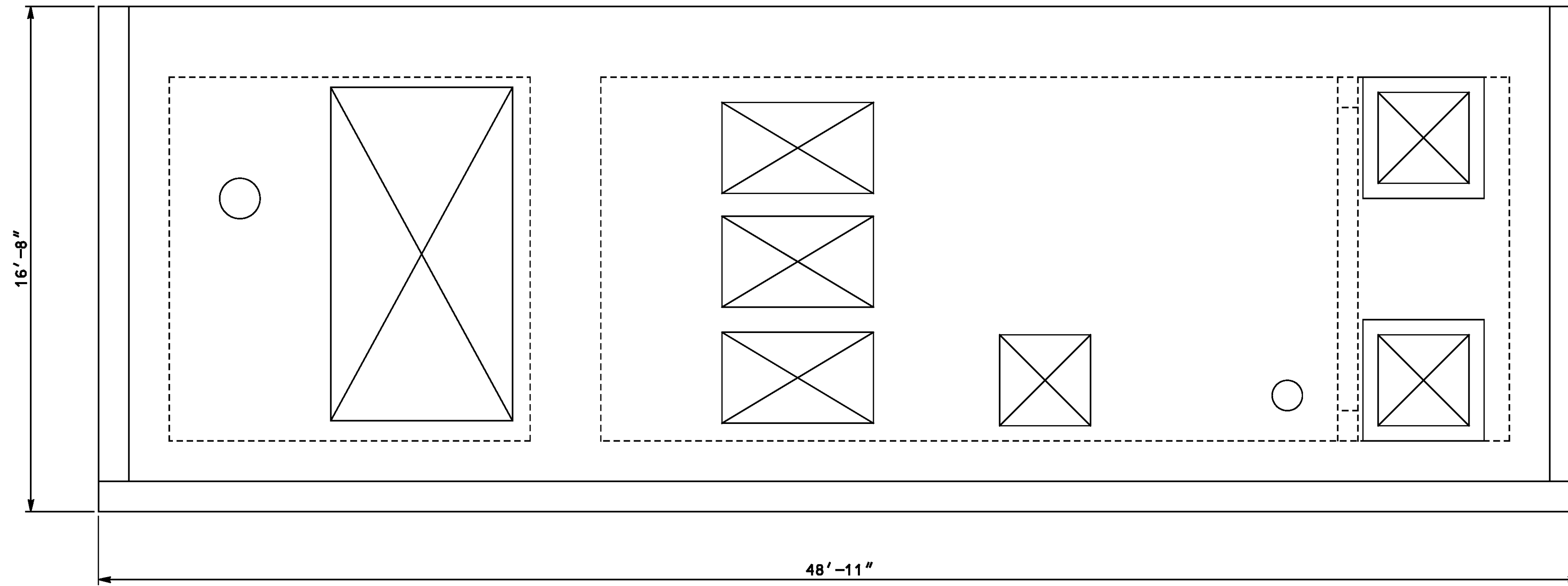
SPLITDRIVAS

SPLITDRIVAS

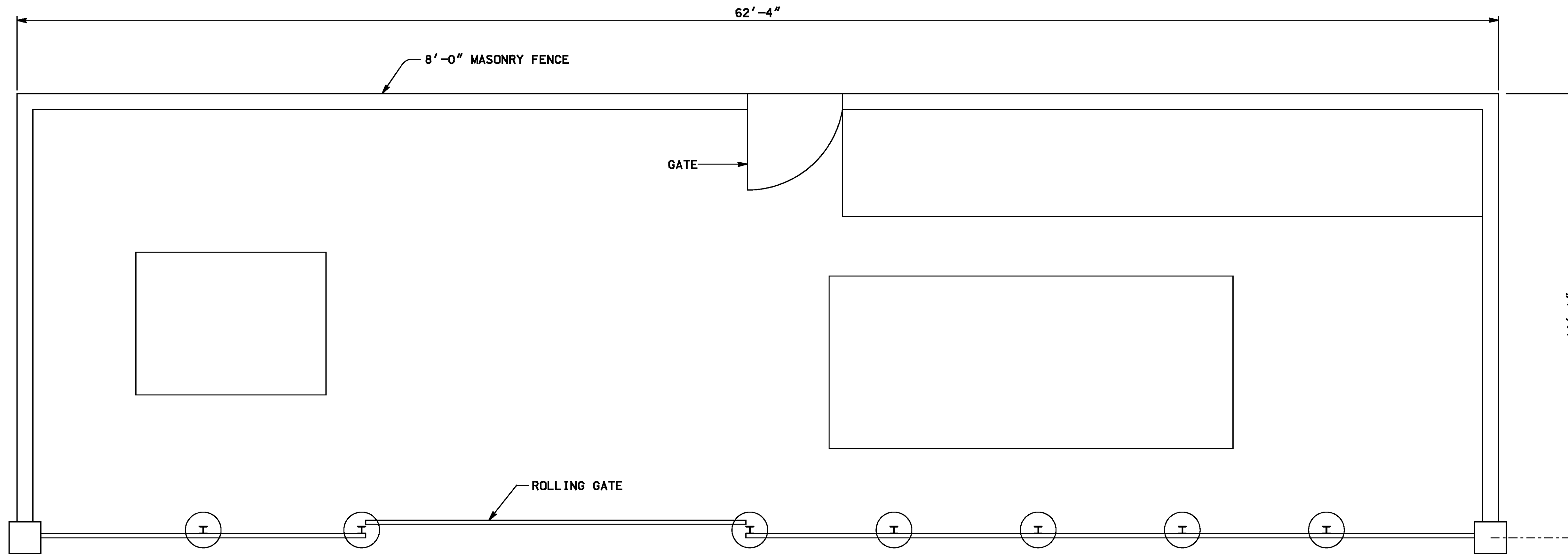
SFILES

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1/8/2012



PUMP STATION PLAN
SCALE 3/8"=1'-0"



CONTROL ROOM PLAN
SCALE 3/8"=1'-0"

GENERAL NOTES:

DESIGN SPECIFICATIONS - CALTRANS BRIDGE DESIGN SPECIFICATIONS
APRIL 2000 (LFD) (1996 AASHTO WITH INTERIMS AND REVISIONS BY CALTRANS).

LIVE LOAD - H20-44 ON ROOF.

REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A615. ALL
REINFORCING SHALL BE FURNISHED AS GRADE 60.

ALL BENDS AND HOOKS SHALL MEET THE REQUIREMENTS OF AASHTO ARTICLE 8.23.
ALL BEND DIMENSIONS FOR REINFORCING STEEL SHALL BE OUT-TO-OUT OF BARS.
ALL PLACEMENT DIMENSIONS FOR REINFORCING STEEL SHALL BE TO CENTER OF
BARS UNLESS NOTED OTHERWISE.

ALL REINFORCING STEEL SHALL HAVE 2 INCHES CLEAR COVER UNLESS SURFACES
CAST AGAINST EARTH SHALL HAVE 3 INCHES CLEAR COVER.

CONCRETE MASONRY DESIGN, MATERIALS AND CONSTRUCTION SHALL CONFORM TO
THE 2007 CALIFORNIA BUILDING CODE (CBC).
CONCRETE MASONRY UNITS SHALL BE NORMAL WEIGHT CONFORMING TO HOLLOW,
LOAD BEARING AND STRUCTURAL - ASTM C90 GRADE N-1.
MORTAR FOR BLOCK WALLS - ASTM C270 TYPE "S".
CONCRETE MASONRY SHALL BE LAID IN STACK BOND AND SHALL BE REINFORCED
AS SHOWN ON THE DRAWINGS.

STRESSES:

MASONRY.....f'm = 1,500 PSI
CONCRETE.....f'c = 3,500 PSI
EXCEPT FOR UNREINFORCED SLAB ON GRADE.....f'c = 3,000 PSI
GRADE 60 REINF.....fy = 60,000 PSI

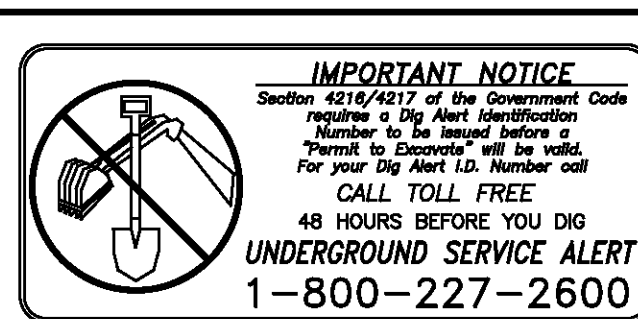
CHAMFER ALL EXPOSED CORNERS 1/2" UNLESS NOTED OTHERWISE.

DIMENSIONS SHALL NOT BE SCALED FROM DRAWINGS.

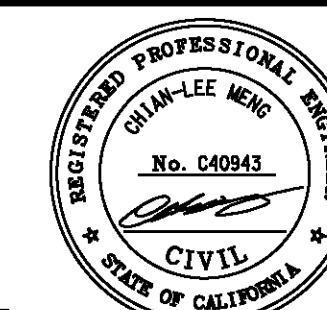
INDEX OF SHEETS

SHEET NO	TITLE
S-01	PUMP STATION PLAN AND GENERAL NOTES
S-02	PUMP STATION STRCT EX & STRCT BKFILL
S-03	PUMP STATION FOUNDATION PLAN
S-04	PUMP STATION FLOOR PLAN
S-05	PUMP STATION ROOF PLAN
S-06	PUMP STATION DETAILS 1
S-07	PUMP STATION DETAILS 2
S-08	PUMP STATION DETAILS 3
S-09	PUMP STATION DETAILS 4
S-10	PUMP STATION DETAILS 5
S-11	PUMP STATION CONTROL ROOM DETAILS 1
S-12	PUMP STATION CONTROL ROOM DETAILS 2

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA



TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com



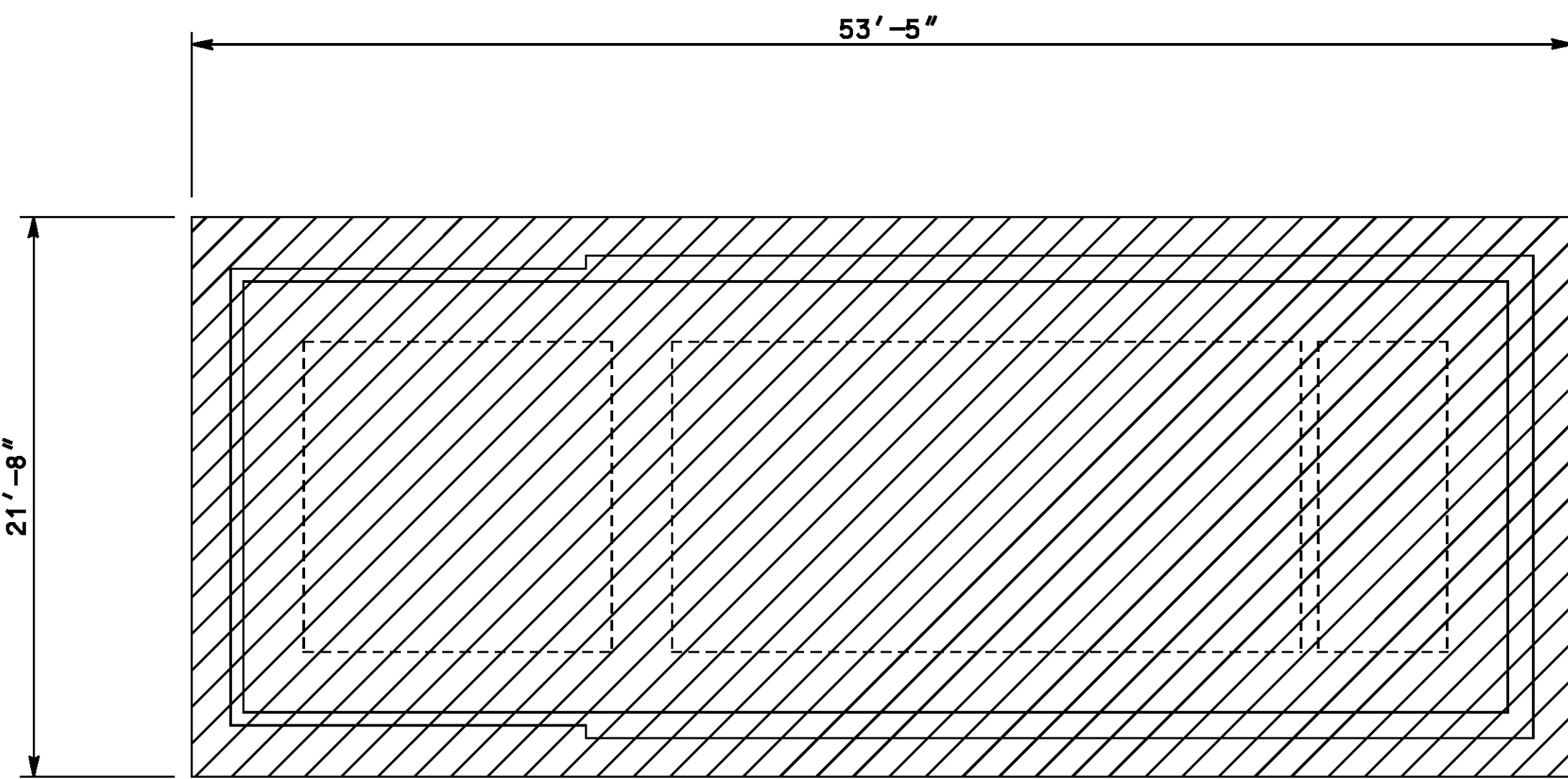
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PUMP STATION PLAN AND GENERAL NOTES S-01

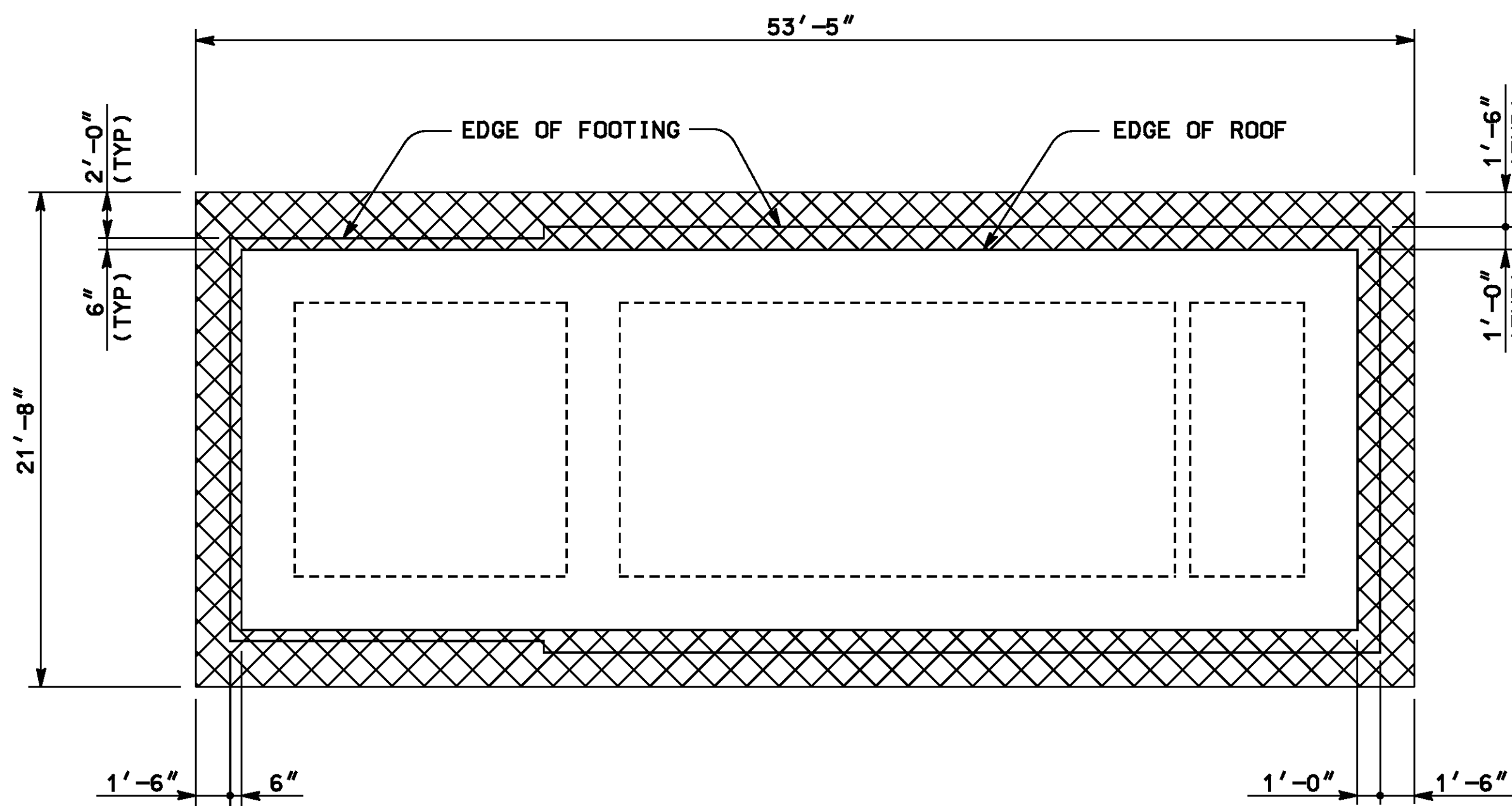
R-4180
SHEET 108 OF 191
FILE NO.

DESIGNED BY *CLM* DRAWN BY *AJM* CHECKED BY *JM*
HORIZ. SCALE: 3/8"=1'-0" VERT. SCALE: N/A

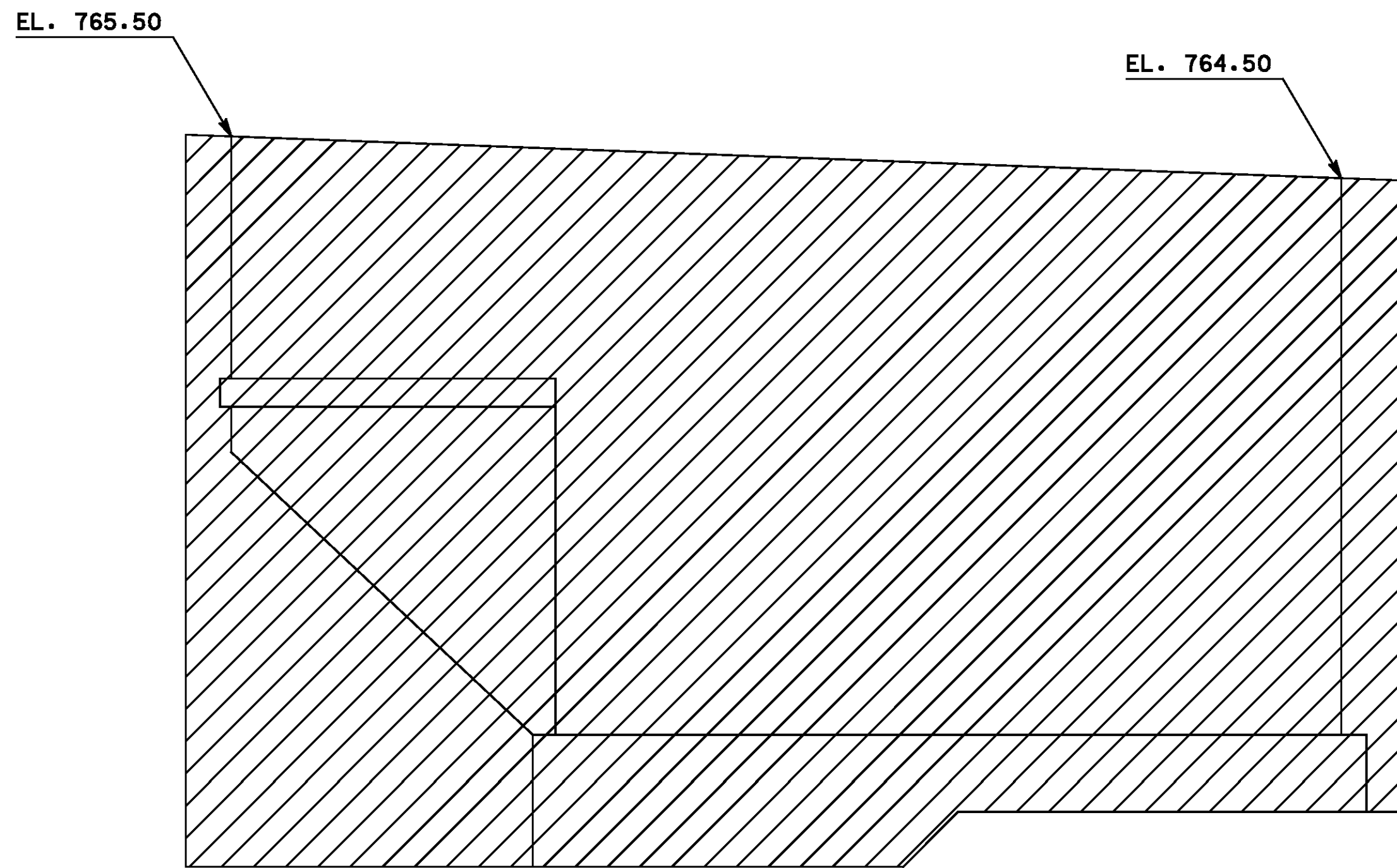
DATE 8-7-12



PLAN

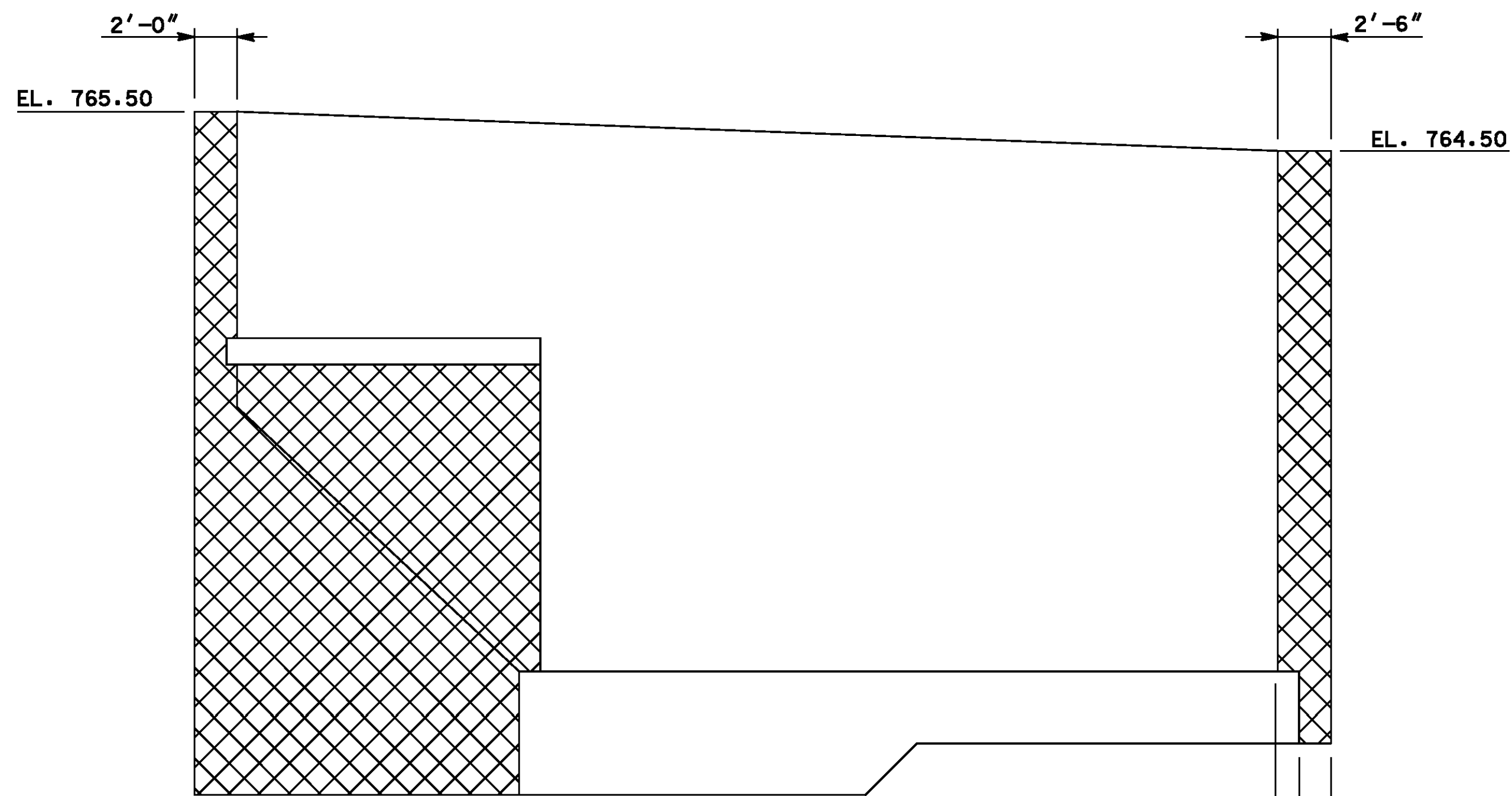


PLAN



ELEVATION

STRUCTURE EXCAVATION
NTS



ELEVATION

STRUCTURE BACKFILL
NTS

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

CONSTRUCTION SEQUENCE NOTES:

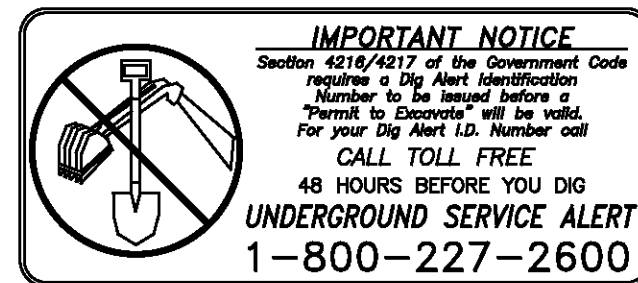
THERE ARE 8 CONCRETE POURS WITH FORM PLACEMENT, REMOVAL AND BACKFILL IN BETWEEN STAGES.

1. EXCAVATE AND PREPARE FOUNDATION SUBGRADE PER THE GEOTECHNICAL REPORT.
2. CONSTRUCT FOUNDATION (1).
3. CONSTRUCT WET WELL WALLS (2) AND ROOF (3).
4. CONSTRUCT BUTRESSES (4).
5. PLACE BACKFILL AROUND WET WELL EVENLY AT THE SAME HEIGHT TO REACH DISCHARGE ROOM BOTTOM ELEVATION.
6. CONSTRUCT DISCHARGE ROOM SLAB (5).
7. CONSTRUCT DISCHARGE ROOM WALLS (6).
8. CONSTRUCT DISCHARGE ROOM ROOF (7) AND PARAPET (8).
9. PLACE REMAINING BACKFILL.

APPROXIMATE QUANTITIES		
ITEM	QUANTITY	UNIT
STRUCTURAL CONCRETE (f'c = 3,000)	15	CU. YD.
STRUCTURAL CONCRETE (f'c = 3,500)	384	CU. YD.
DRILLED SHAFT (18" DIA)	42	L. FT.
REINFORCING STEEL	69,100	LBS.
MISCELLANEOUS ITEM (ROLLING GATE)	1	EA
MISCELLANEOUS ITEM (4' WIDE STEEL GATE)	1	EA
MISCELLANEOUS ITEM (STEEL FENCE)	45	L. FT.
MISCELLANEOUS ITEM (ROOF HATCH)	1	L. SUM
MISCELLANEOUS ITEM (LADDER)	1	L. SUM
STRUCTURE EXCAVATION	1,265	CU. YD.
STRUCTURE BACKFILL	504	CU. YD.
MASONRY WALL	100	L. FT.
SLAB BOX TYPE SB-3	1	EA
CONTROL PANEL SHADE	1	EA

NOTE:

MASONRY WALL QUANTITY INCLUDES FOOTING CONCRETE, REINF, EXCAVATION, AND BACKFILL.



TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com
DATE 8-7-12



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DESIGNED BY	DRAWN BY	CHECKED BY	

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS

PUMP STATION STRCT EX & STRCT BKFILL S-02

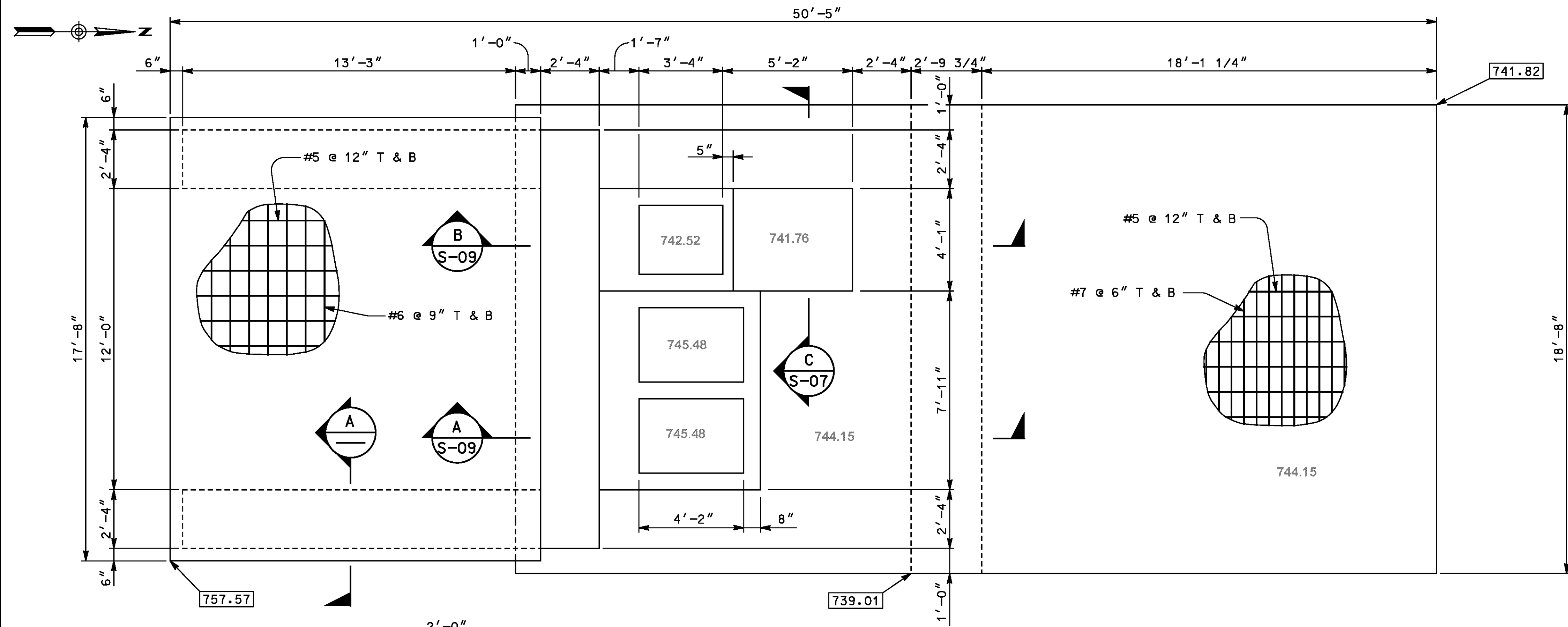
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R-4180

SHEET 109 OF 191

FILE NO.

8/29/2012 5:46:07 PM \$FILES \$PROGCS \$SPRINGS \$SPENTBLESS



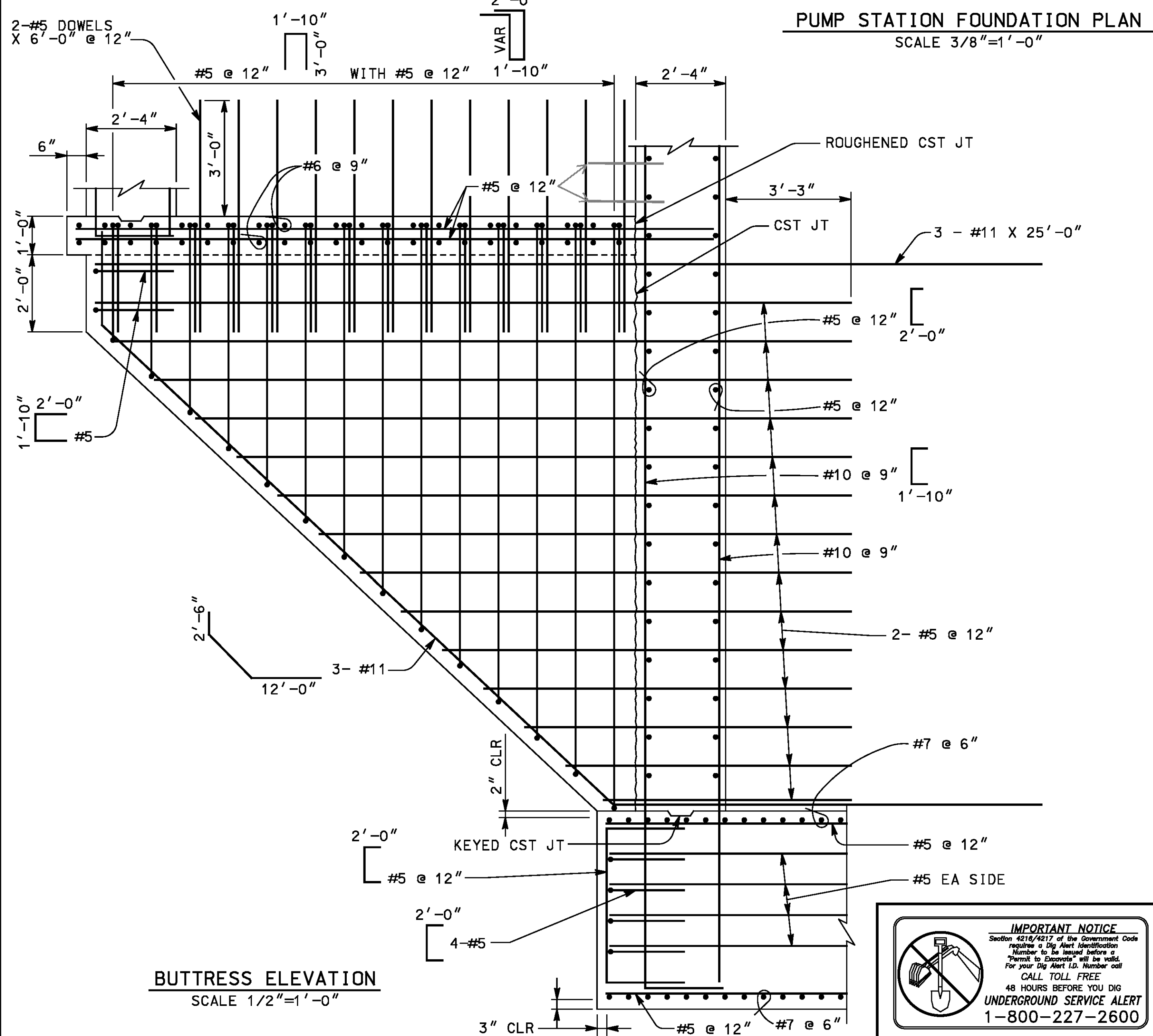
PUMP STATION FOUNDATION PLAN
SCALE 3/8" = 1'-0"

LEGEND

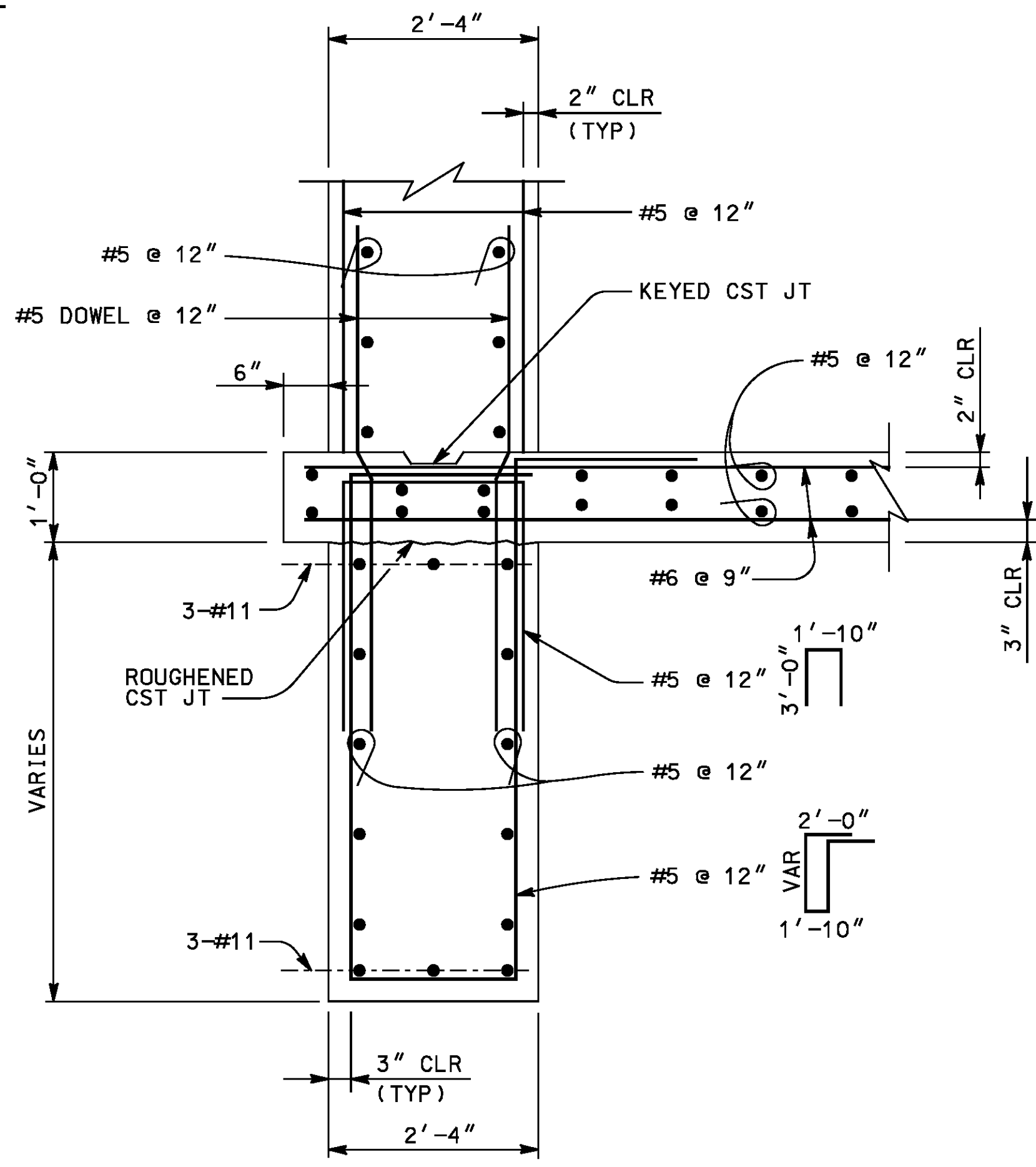
INDICATES ELEVATION AT BOTTOM OF FOOTING

NOTE:

COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH STORM DRAIN PLANS.



BUTTRESS ELEVATION
SCALE 1/2" = 1'-0"



SECTION A
SCALE 3/4" = 1'-0"

AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME JOSE CORONA

IMPORTANT NOTICE
 Section 4216.017 of the Government Code requires a Dig Alert Identification Number to be located before a "Permit to Excavate" will be valid. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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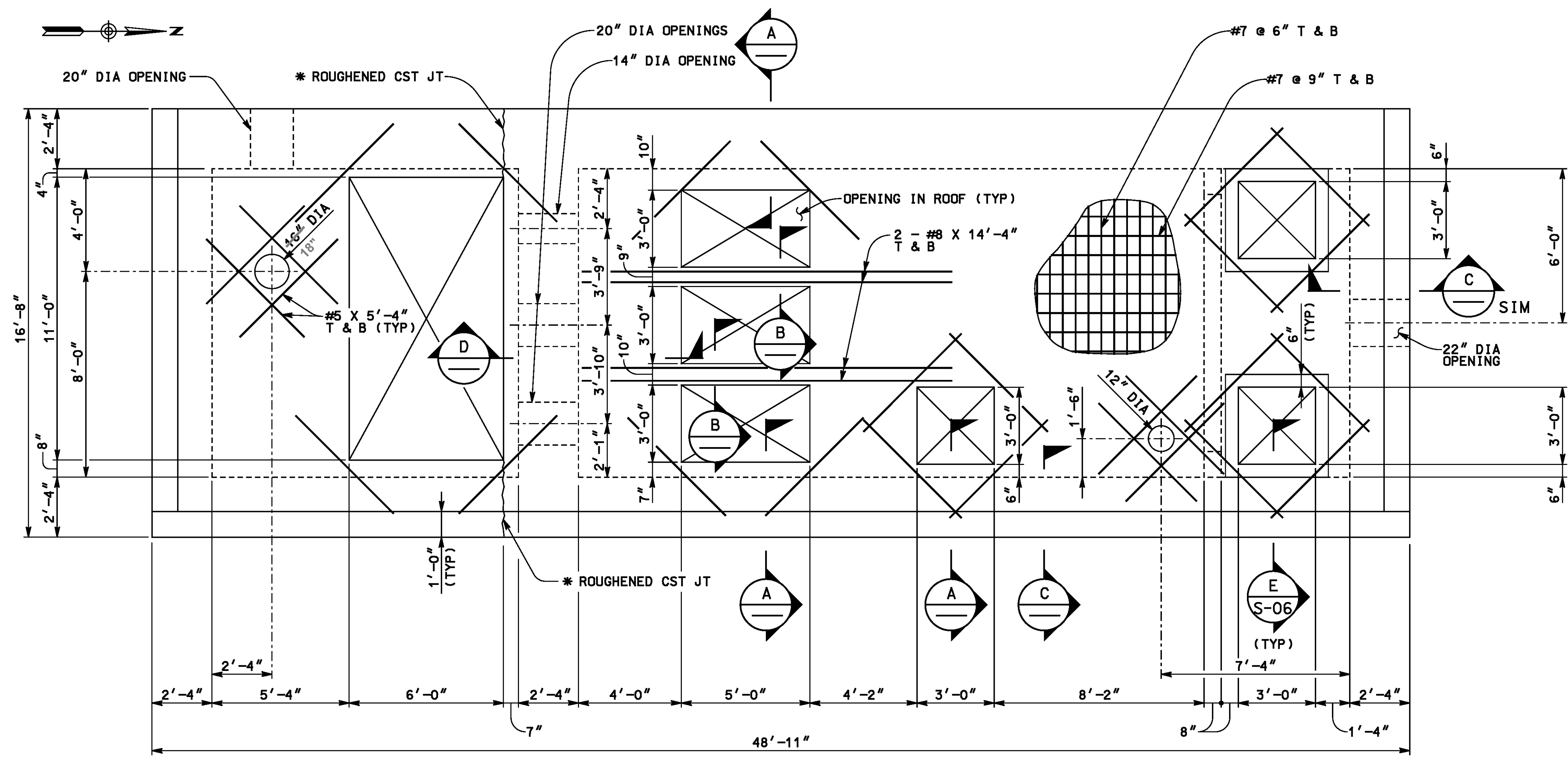
MARK	REVISIONS	APPR.	DATE

DESIGNED BY *CLM* DRAWN BY *AJM* CHECKED BY *JIT*

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PUMP STATION FOUNDATION PLAN S-03
 HORIZ. SCALE: VARIES VERT. SCALE: N/A

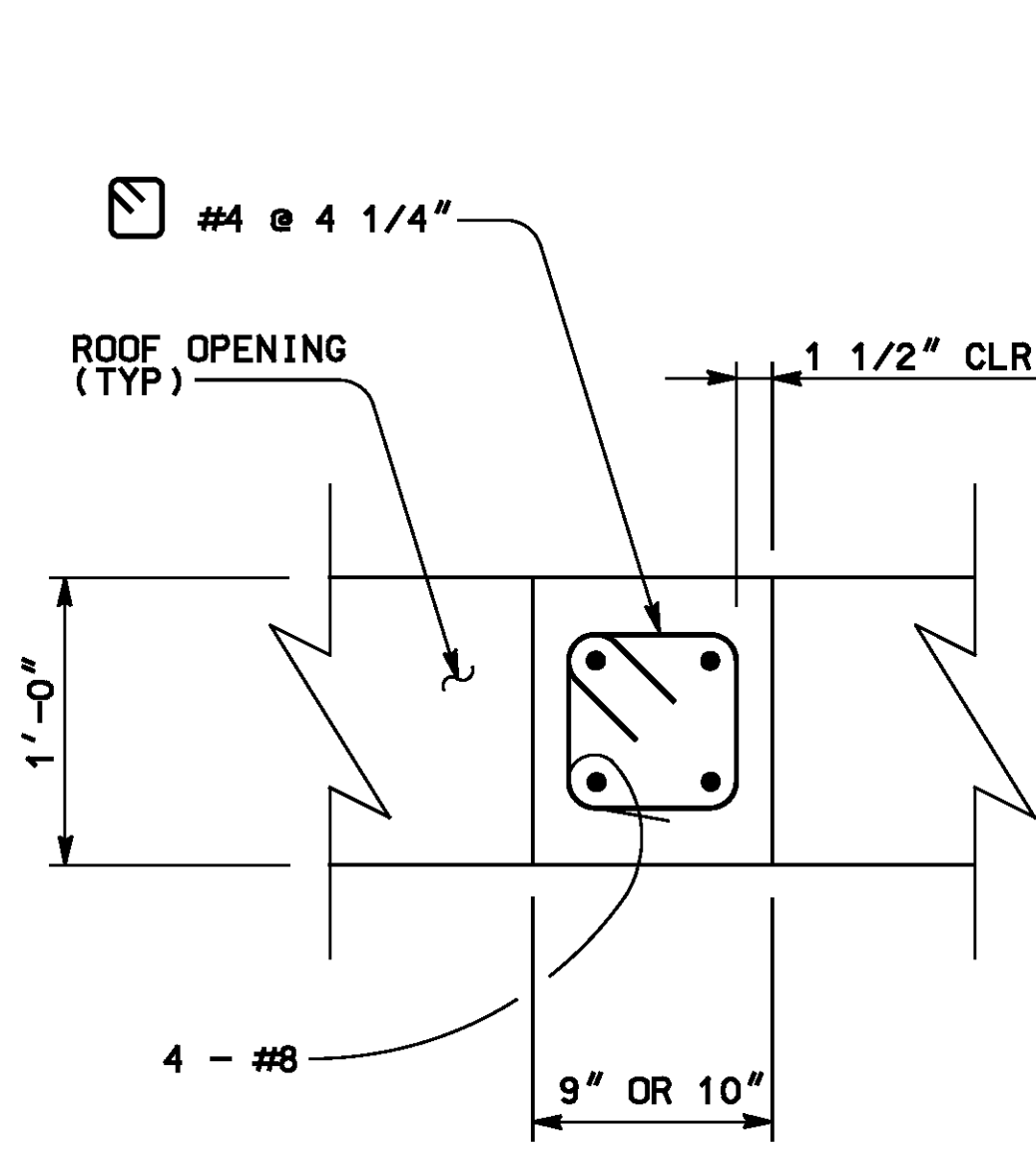
R-4180
 SHEET 110 OF 191
 FILE NO.

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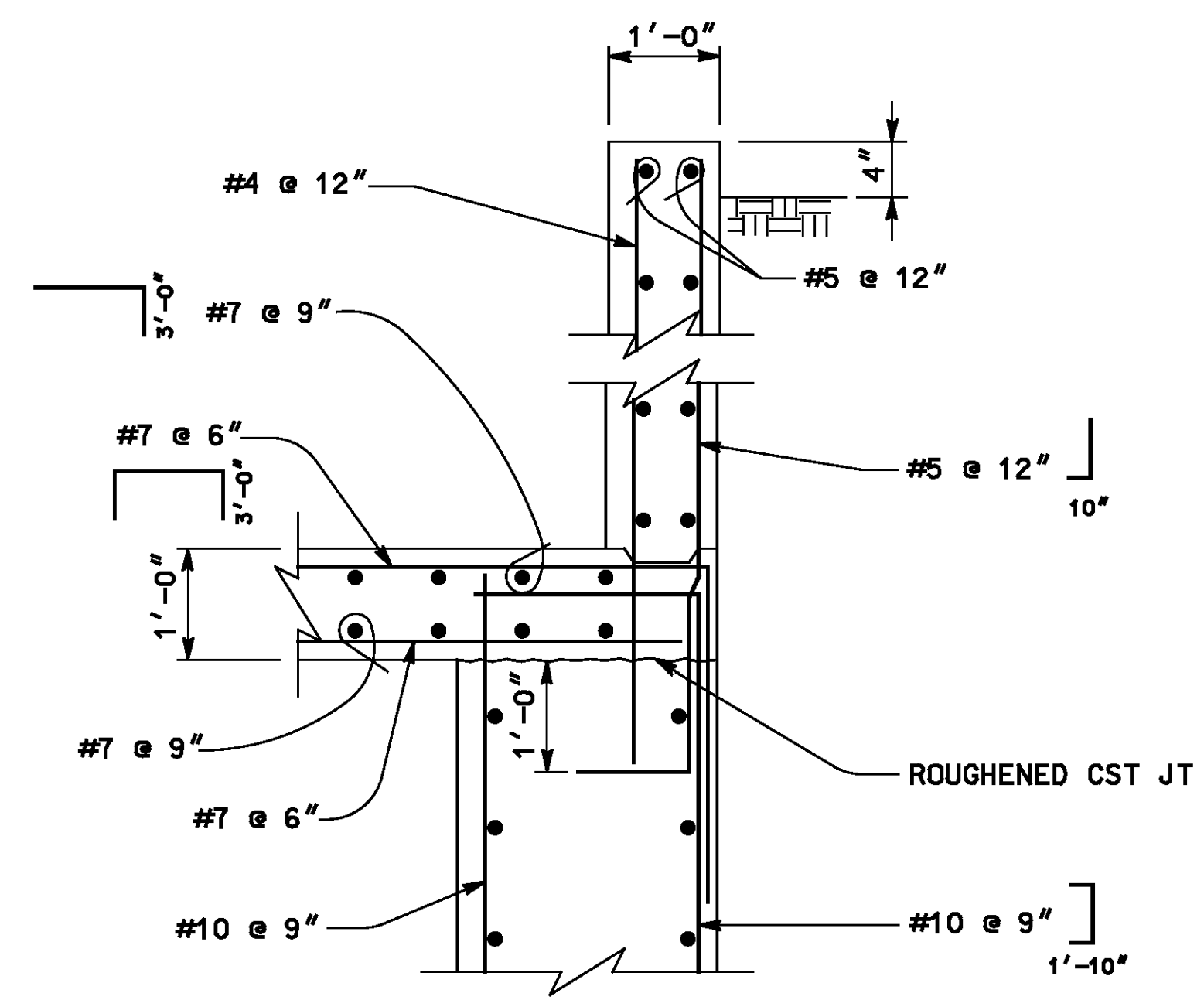


* ALL HORIZONTAL REINF CONTINUOUS THRU CST JT

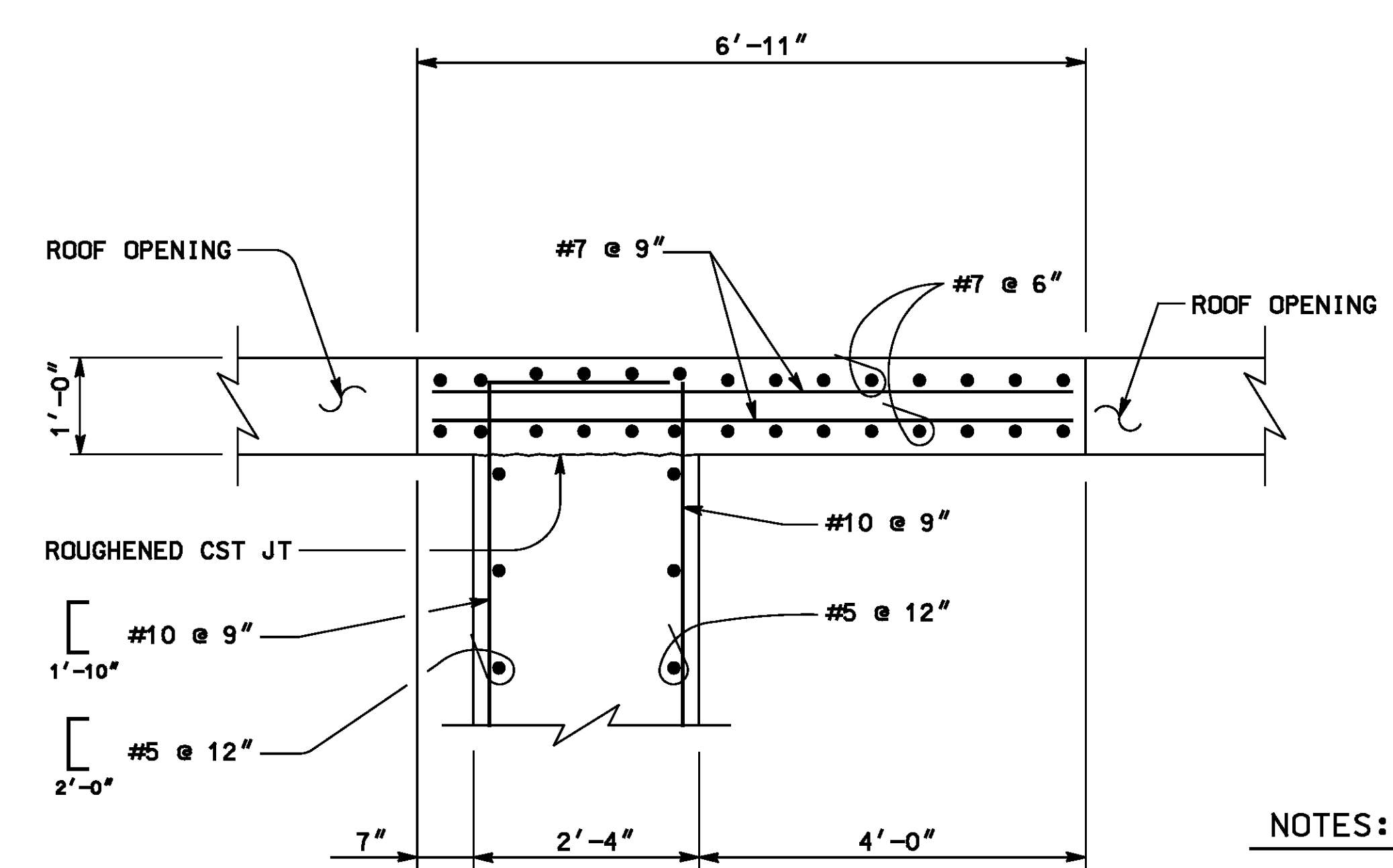
ROOF PLAN
SCALE 3/8" = 1'-0"



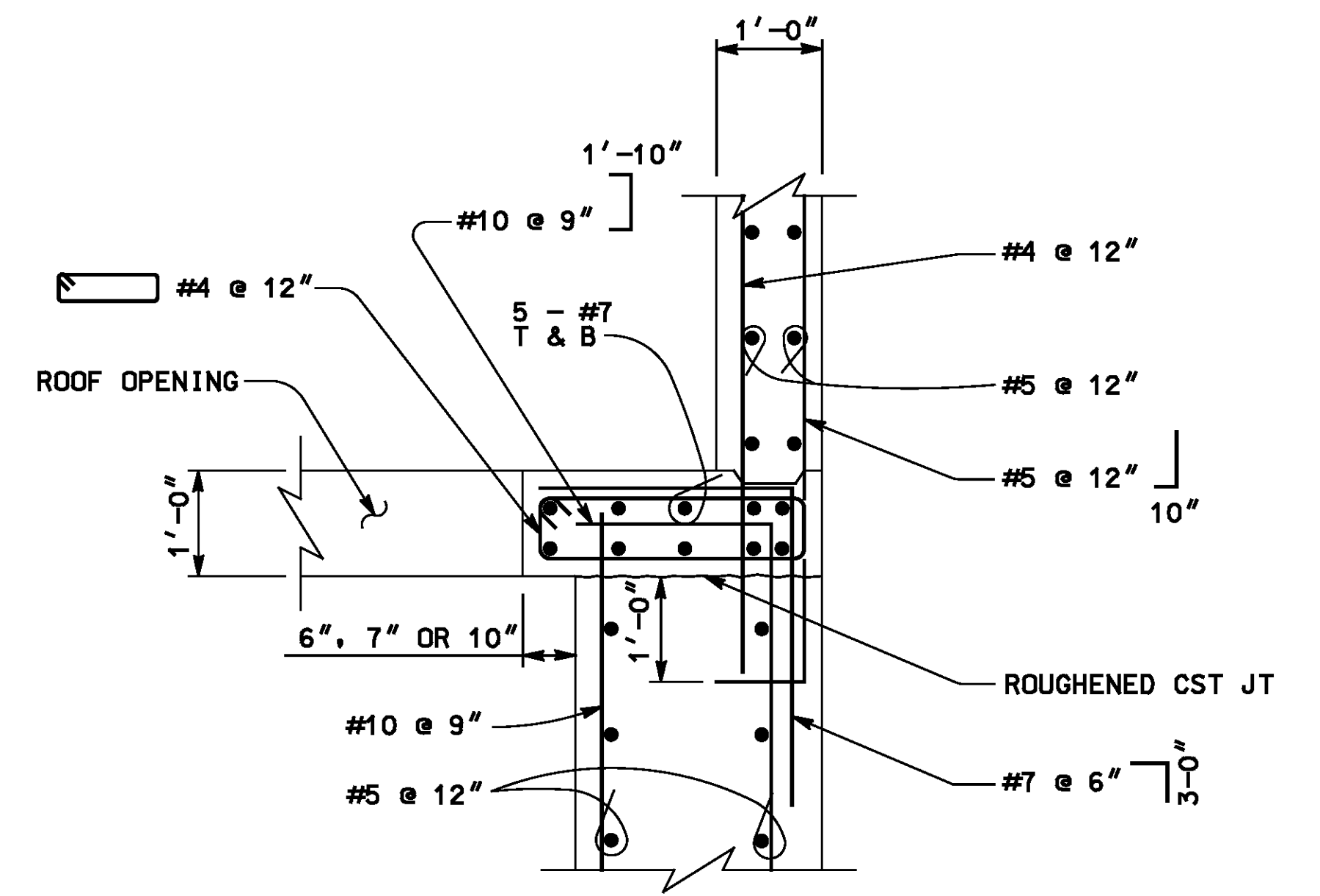
SECTION B
SCALE 1 1/2" = 1'-0"



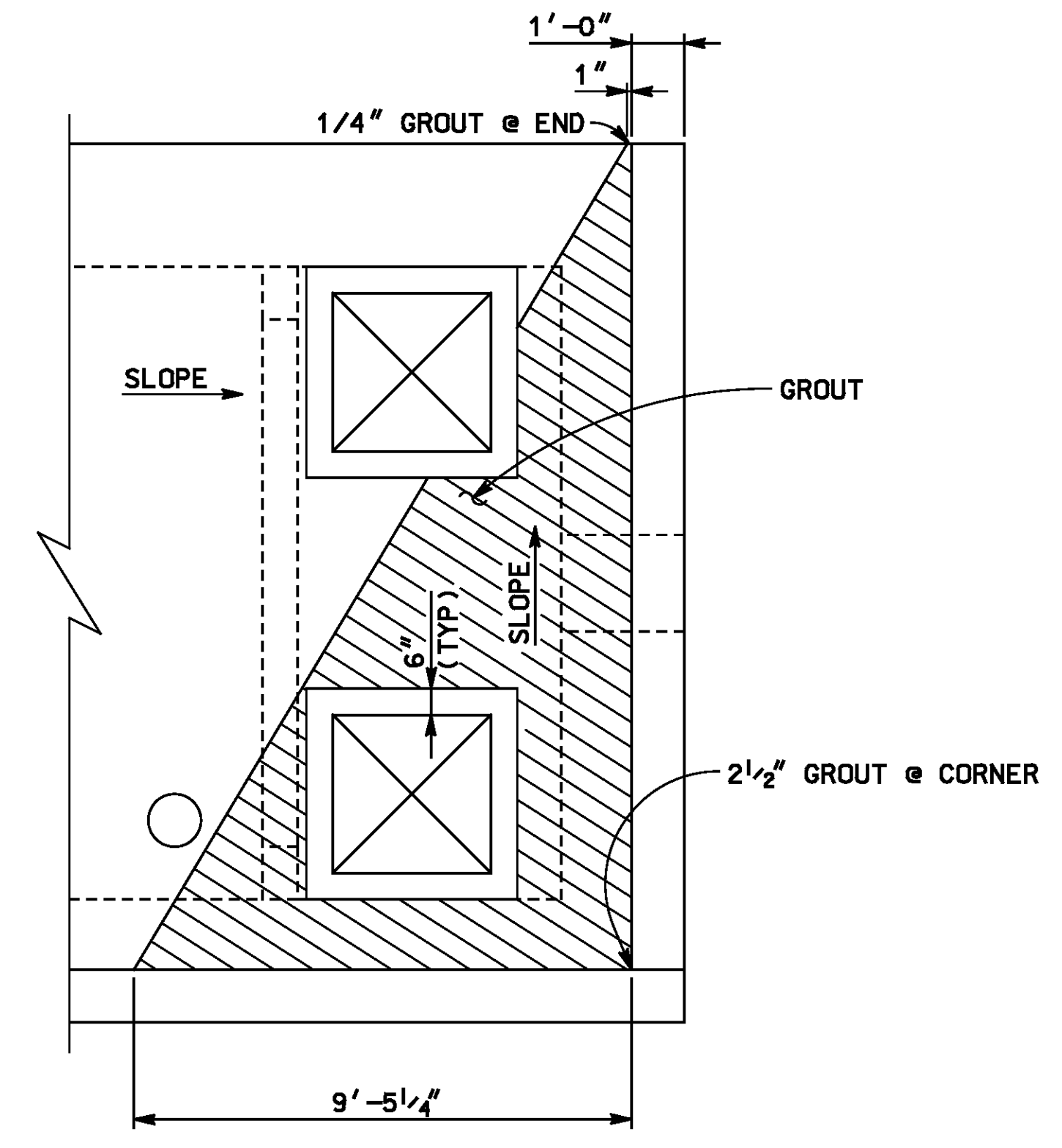
SECTION C
SCALE 3/4" = 1'-0"



SECTION D
SCALE 3/4" = 1'-0"



SECTION A
SCALE 3/4" = 1'-0"



PARTIAL ROOF PLAN
SCALE 3/8" = 1'-0"

NOTES:

ROOF HATCHES SHALL BE H20 RATED WITH SAFETY GRATING.

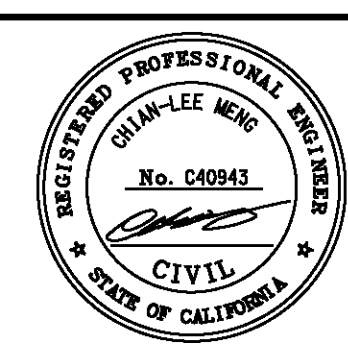
HATCHES NOT SHOWN FOR CLARITY. THE CONTRACTOR SHALL SUBMIT HATCH DESIGN AND DETAILS TO THE ENGINEER FOR APPROVAL.

COORDINATE ALL DIMENSIONS WITH WILSON & COMPANY PLANS.

AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME JOSE CORONA



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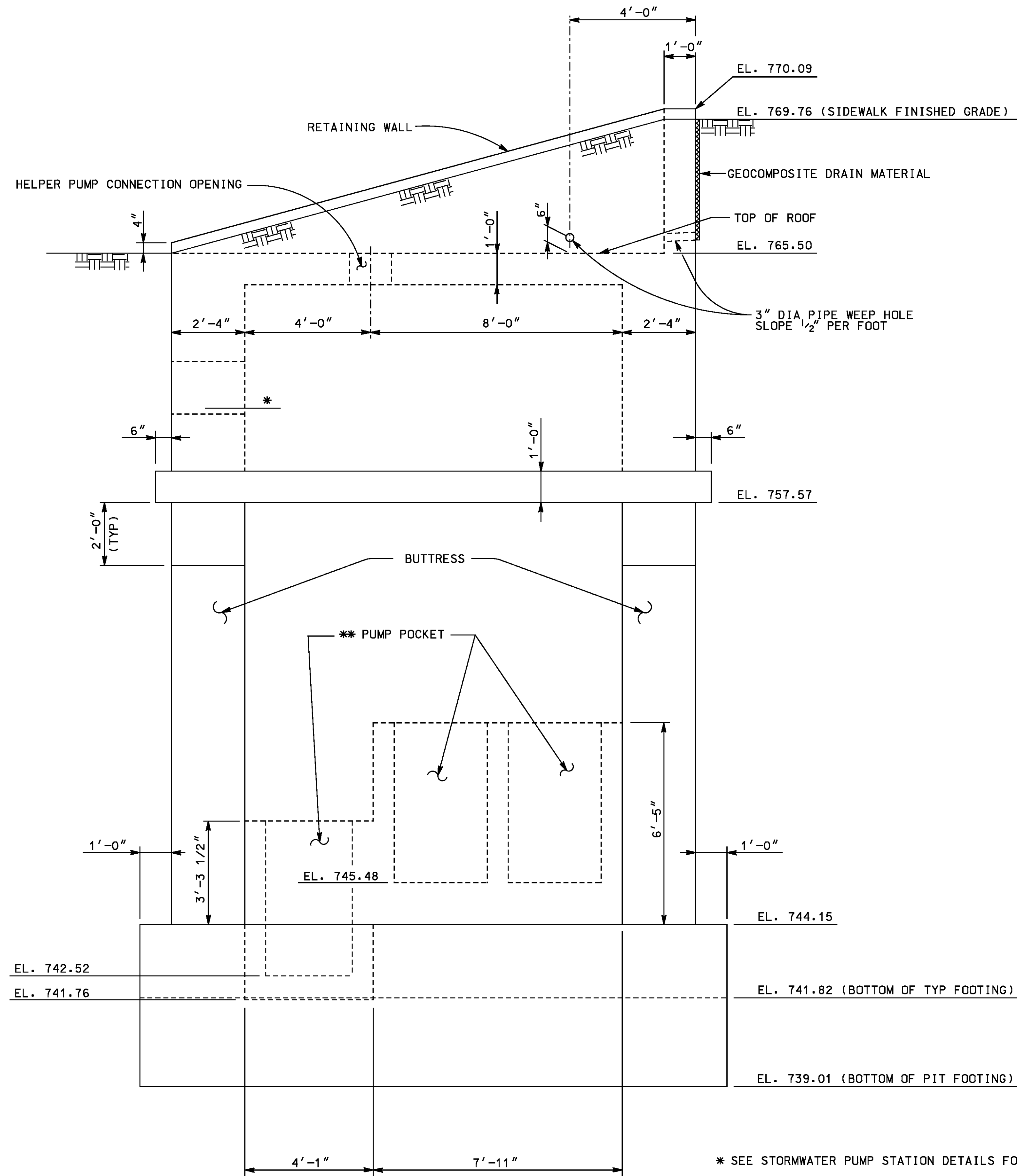
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PUMP STATION ROOF PLAN S-05

R-4180
 SHEET 112 OF 191
 FILE NO.

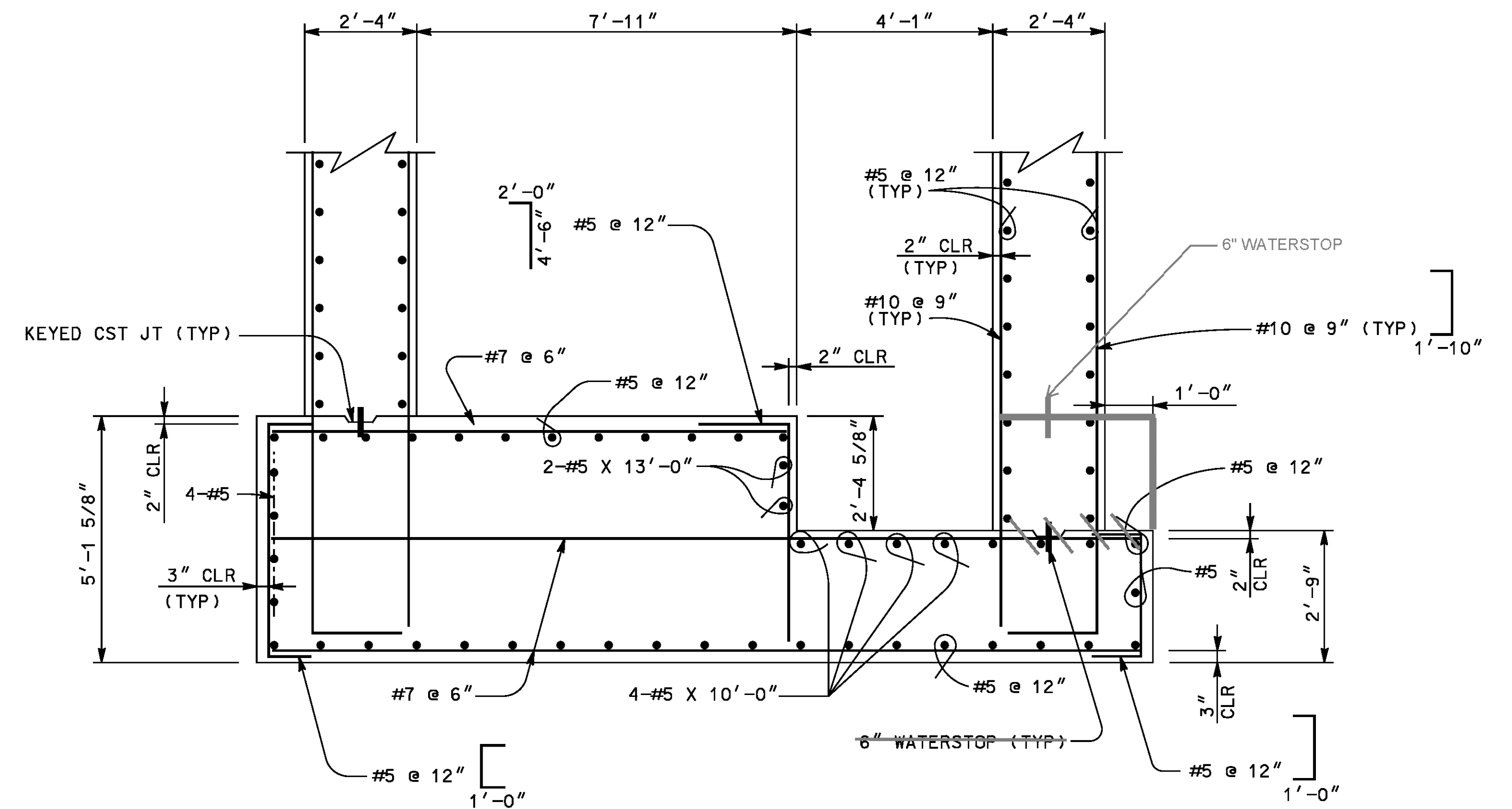
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DATE 8-7-12



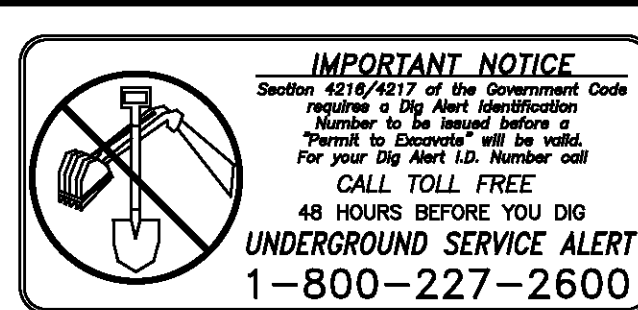
SOUTH ELEVATION
SCALE 1/2"=1'-0"

* SEE STORMWATER PUMP STATION DETAILS FOR PIPE ELEVATIONS.
** SEE STORMWATER PUMP STATION DETAILS FOR POCKET SIZE.

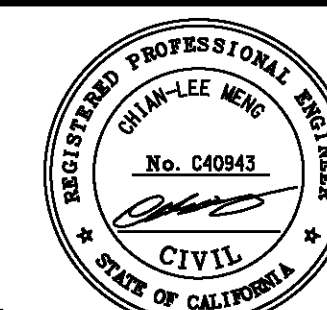


SECTION C
SCALE 1/2" = 1'-0" S-03

AS BUILT
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA



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MARK	REVISIONS	APPR.	DATE

DESIGNED BY CLM DRAWN BY AJM CHECKED BY JM

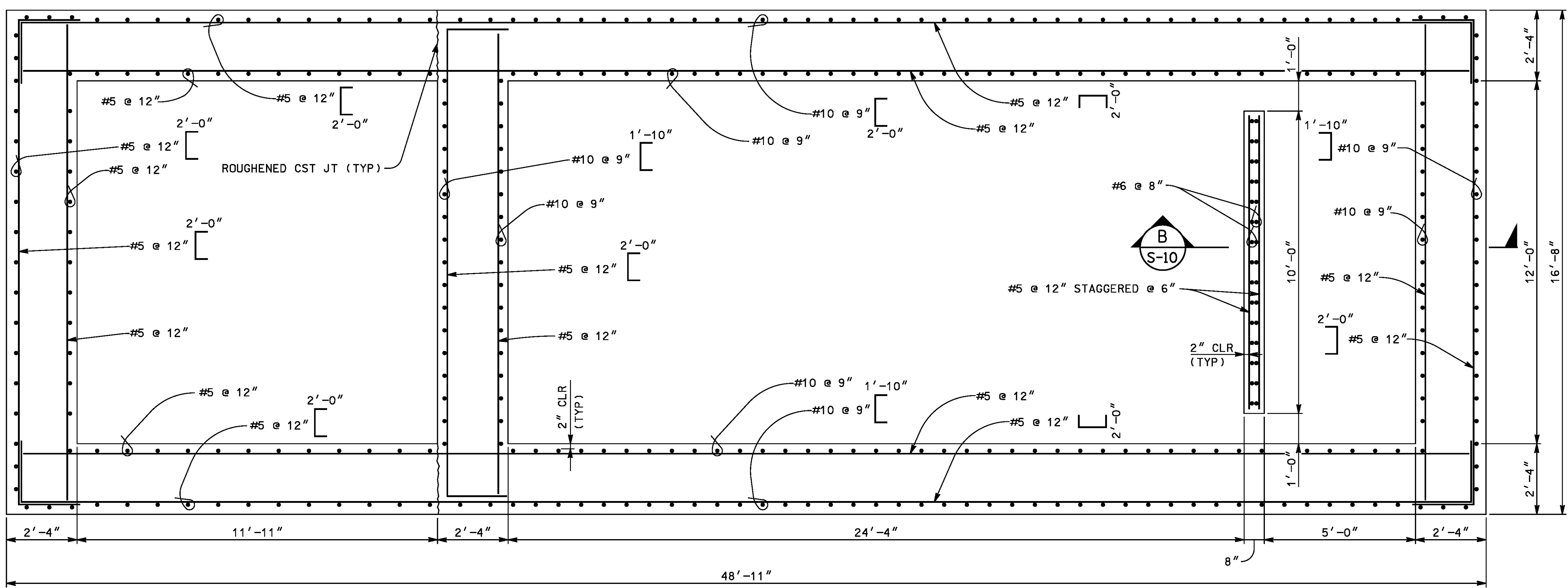
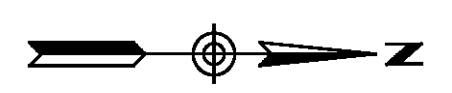
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PUMP STATION DETAILS 2 S-07

R-4180
SHEET 114 OF 191
FILE NO.

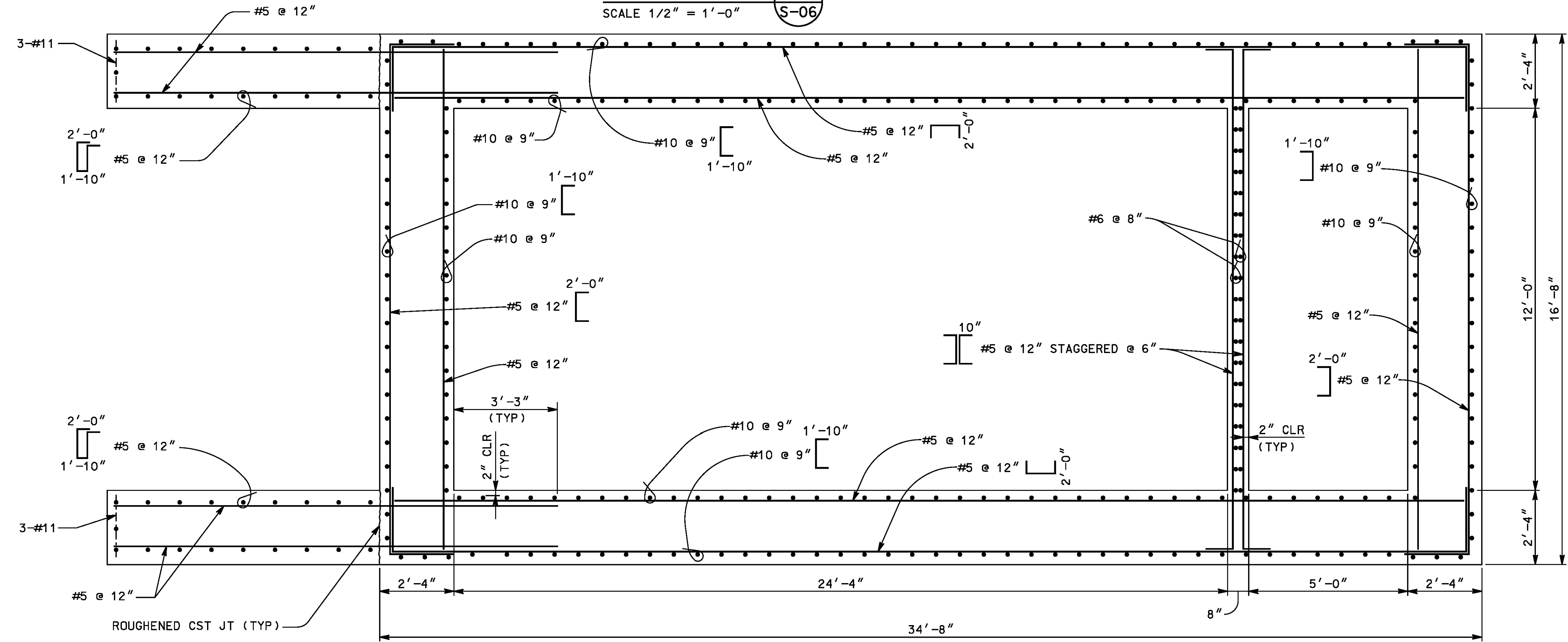
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DATE 8-7-12

User: amc111 8/29/2012 5:50:56 PM \$FILES \$PROJECTS \$PENTABLES



SECTION A
SCALE 1/2" = 1'-0"
S-06



SECTION B
SCALE 1/2" = 1'-0"
S-06

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
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R.E. NAME JOSE CORONA



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3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
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www.tylin.com
DATE 8-7-12



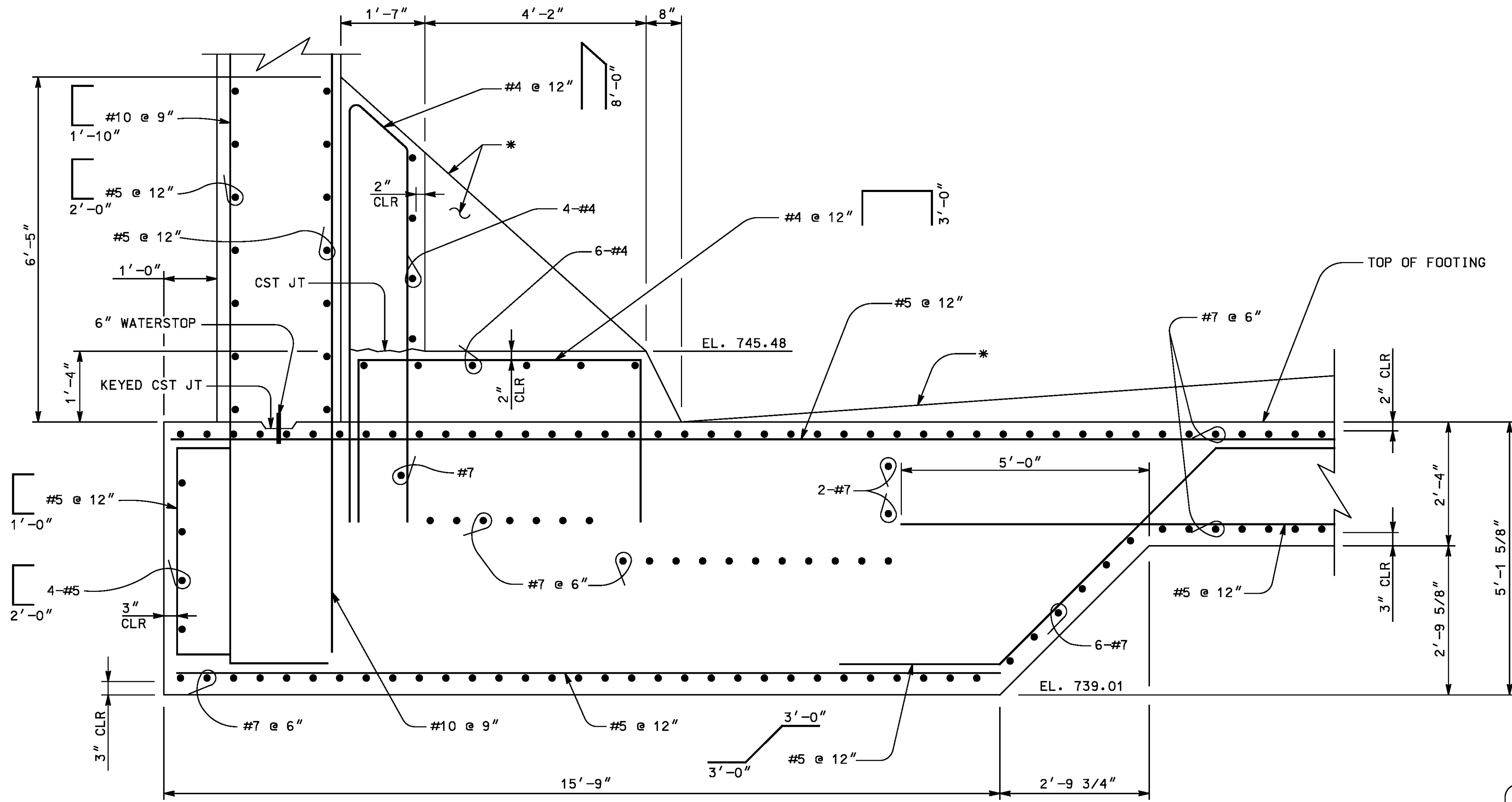
MARK	REVISIONS	APPR.	DATE

DESIGNED BY CLM DRAWN BY AJM CHECKED BY JM

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PUMP STATION DETAILS 3 S-08

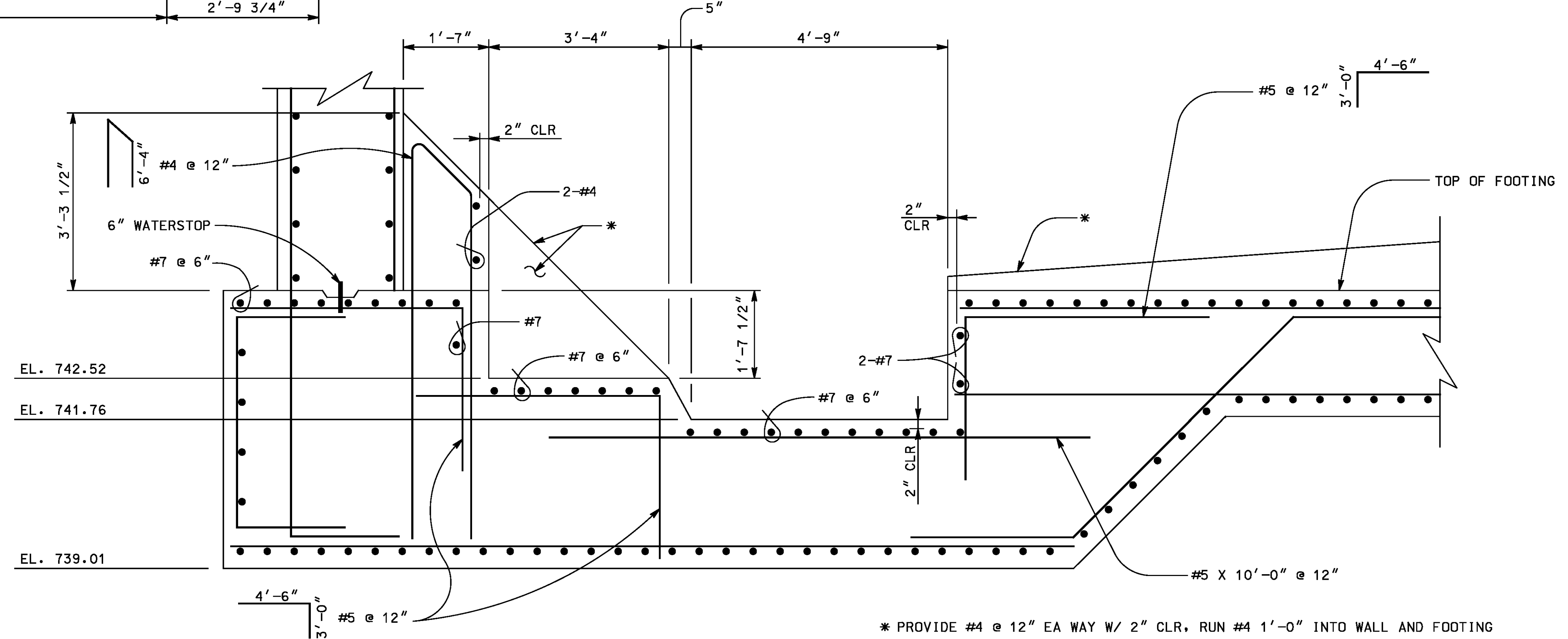
R-4180
SHEET 115 OF 191
FILE NO.

HORIZ. SCALE: 1/2" = 1'-0" VERT. SCALE: N/A



* PROVIDE #4 @ 12" EA WAY W/ 2" CLR,
 RUN #4 1'-0" INTO WALL AND FOOTING.

SECTION A
 SCALE 3/4" = 1'-0" S-03



* PROVIDE #4 @ 12" EA WAY W/ 2" CLR, RUN #4 1'-0" INTO WALL AND FOOTING
 SEE SECTION A FOR ADDITIONAL REBAR CALLOUTS

SECTION B
 SCALE 3/4" = 1'-0" S-03

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
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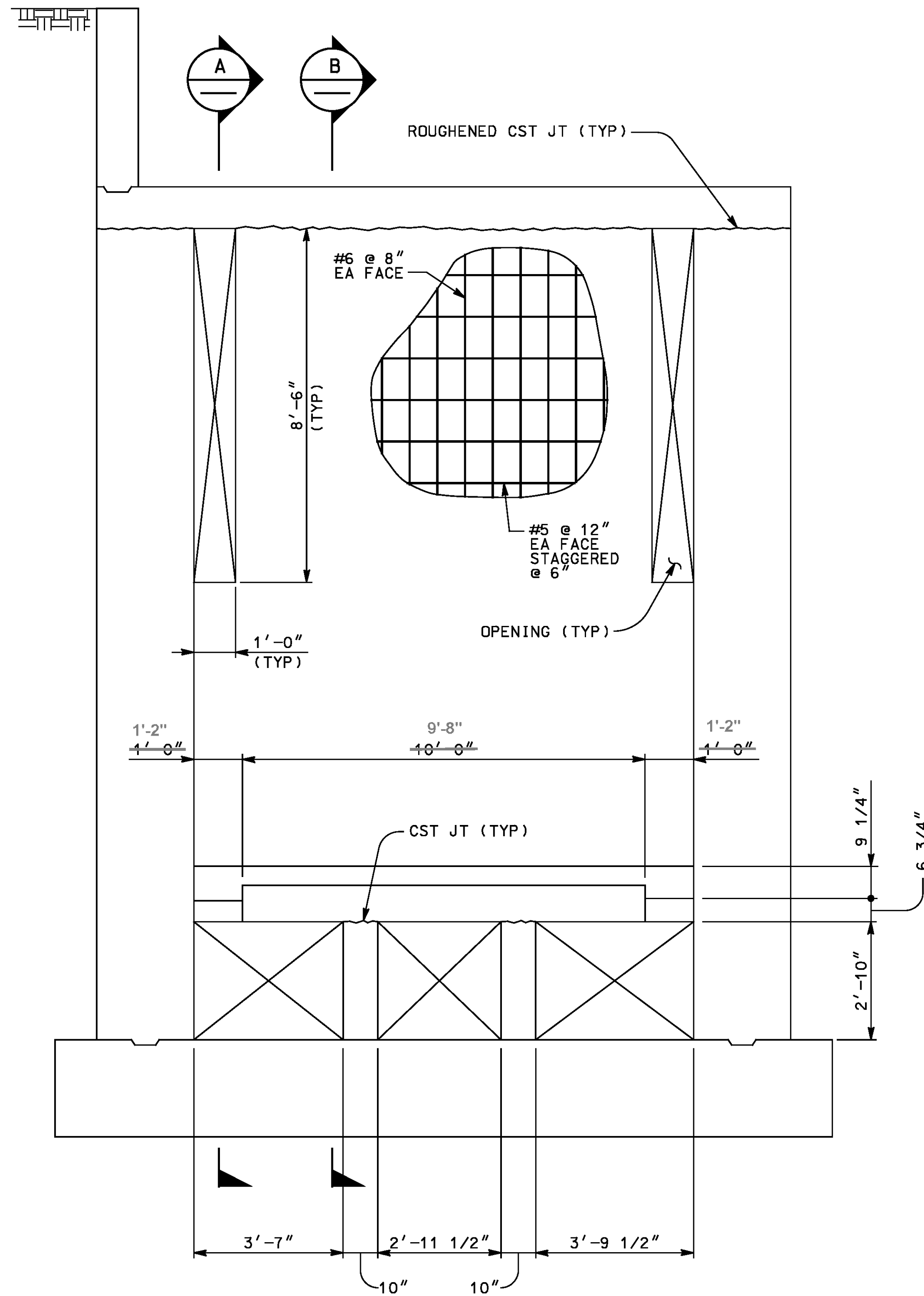
MARK	REVISIONS	APPR.	DATE

DESIGNED BY *CLM* DRAWN BY *AJM* CHECKED BY *JM*

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PUMP STATION DETAILS 4 S-09

R-4180
 SHEET 116 OF 191
 FILE NO.

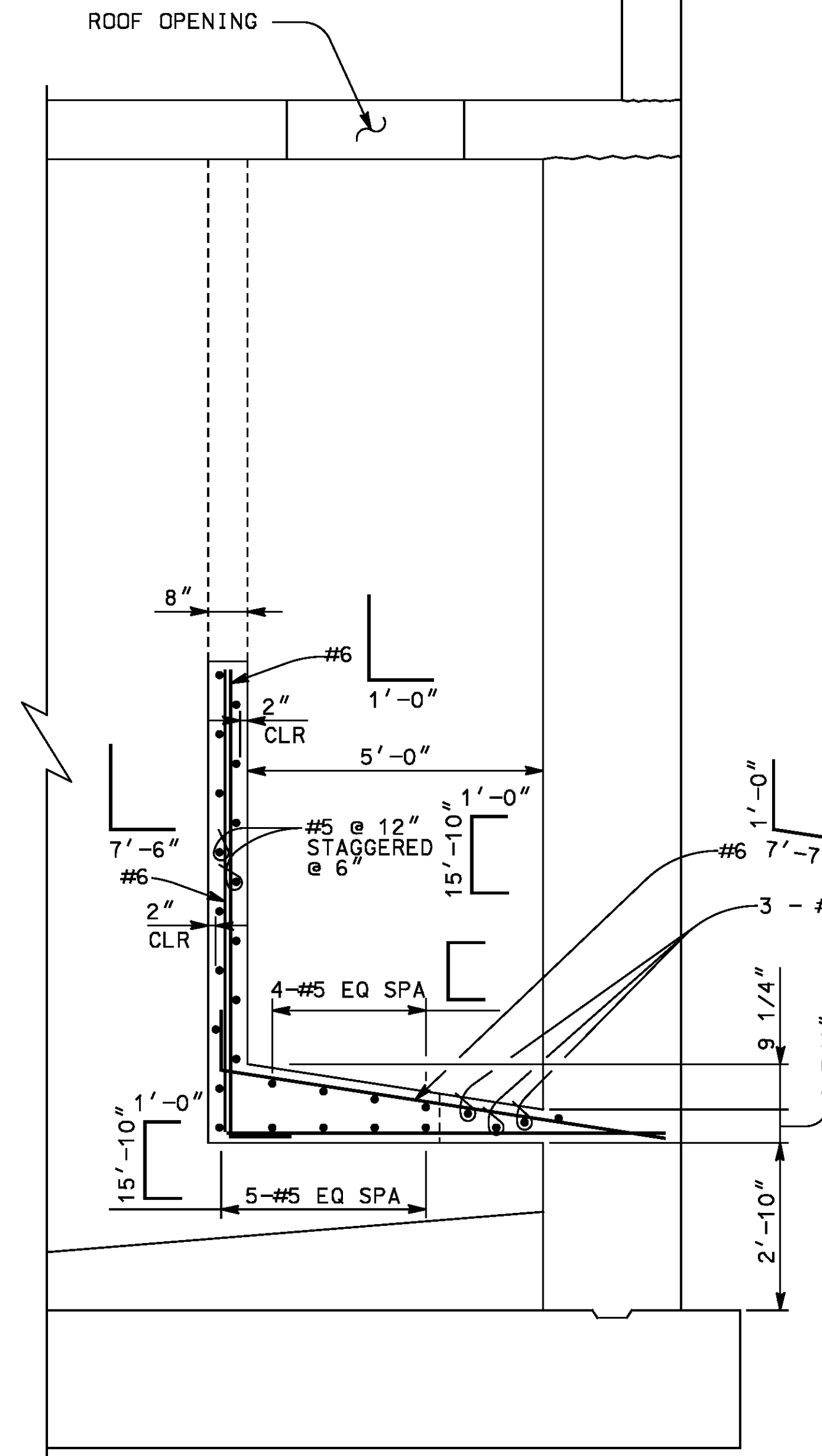
HORIZ. SCALE: 3/4"=1'-0" VERT. SCALE: N/A



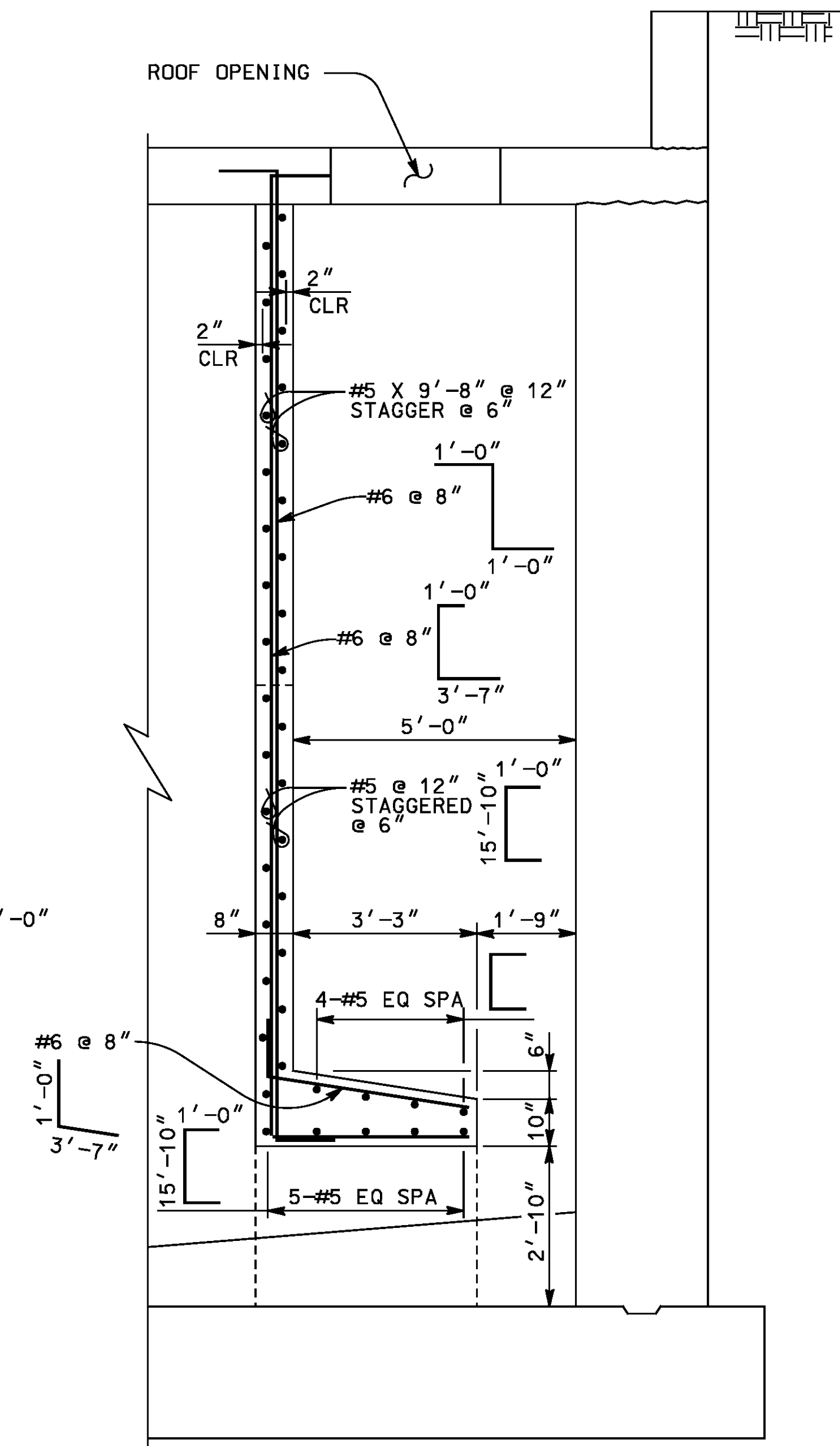
BAFFLE WALL ELEVATION
SCALE 1/2" = 1'-0"

NOTE:

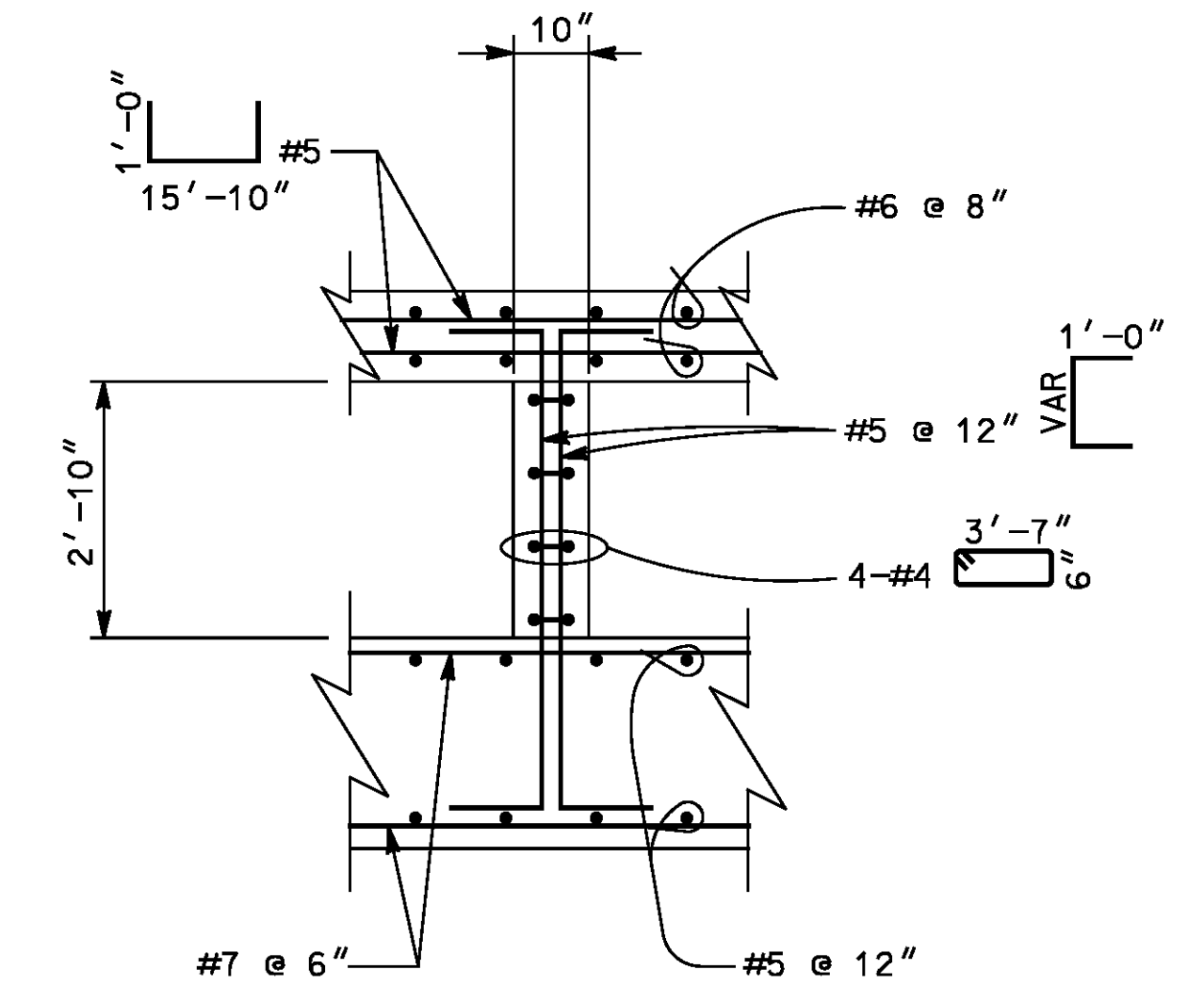
ROOF, EXTERIOR WALL, AND FOOTING REINF NOT SHOWN FOR CLARITY



SECTION A
SCALE 1/2" = 1'-0"

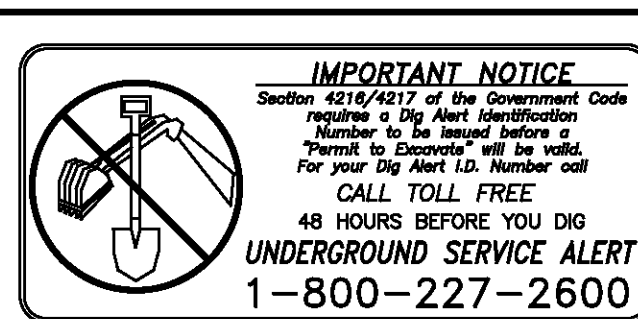


SECTION B
SCALE 1/2" = 1'-0"



SECTION C
SCALE 1/2" = 1'-0"

AS BUILT
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA



TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com



DATE 8-7-12

MARK	REVISIONS	APPR.	DATE

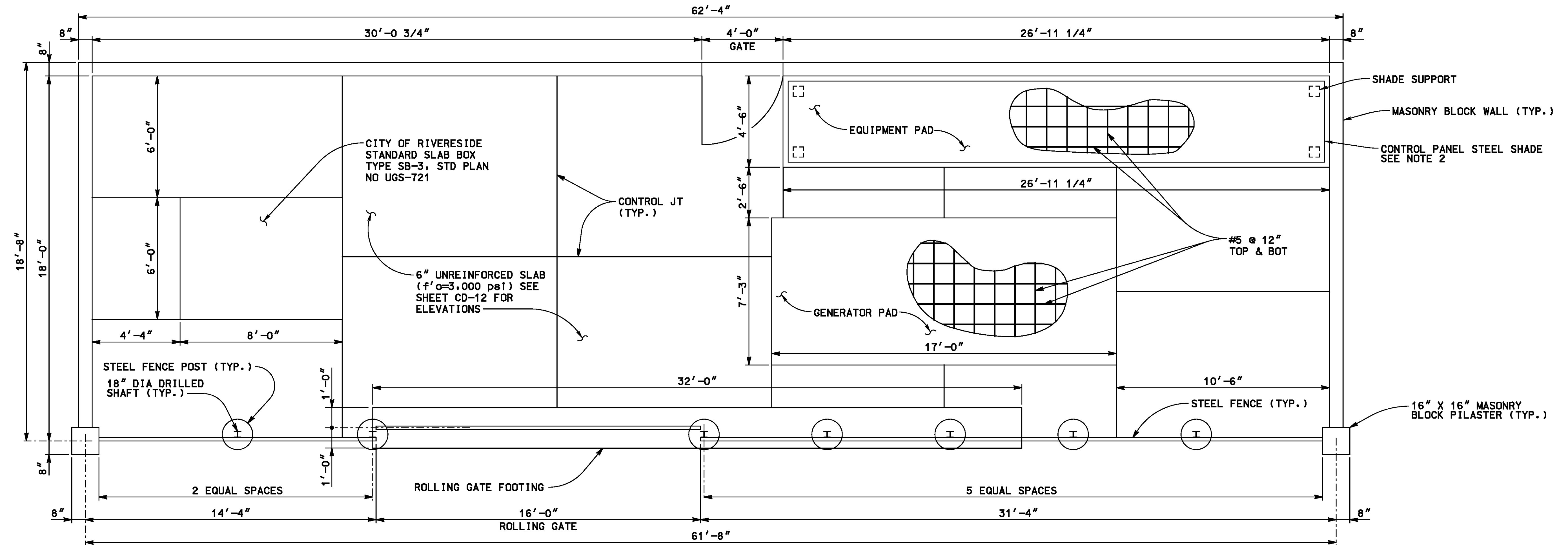
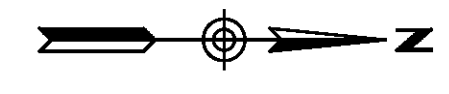
DESIGNED BY *CLM* DRAWN BY *AJM* CHECKED BY *JIT*

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS

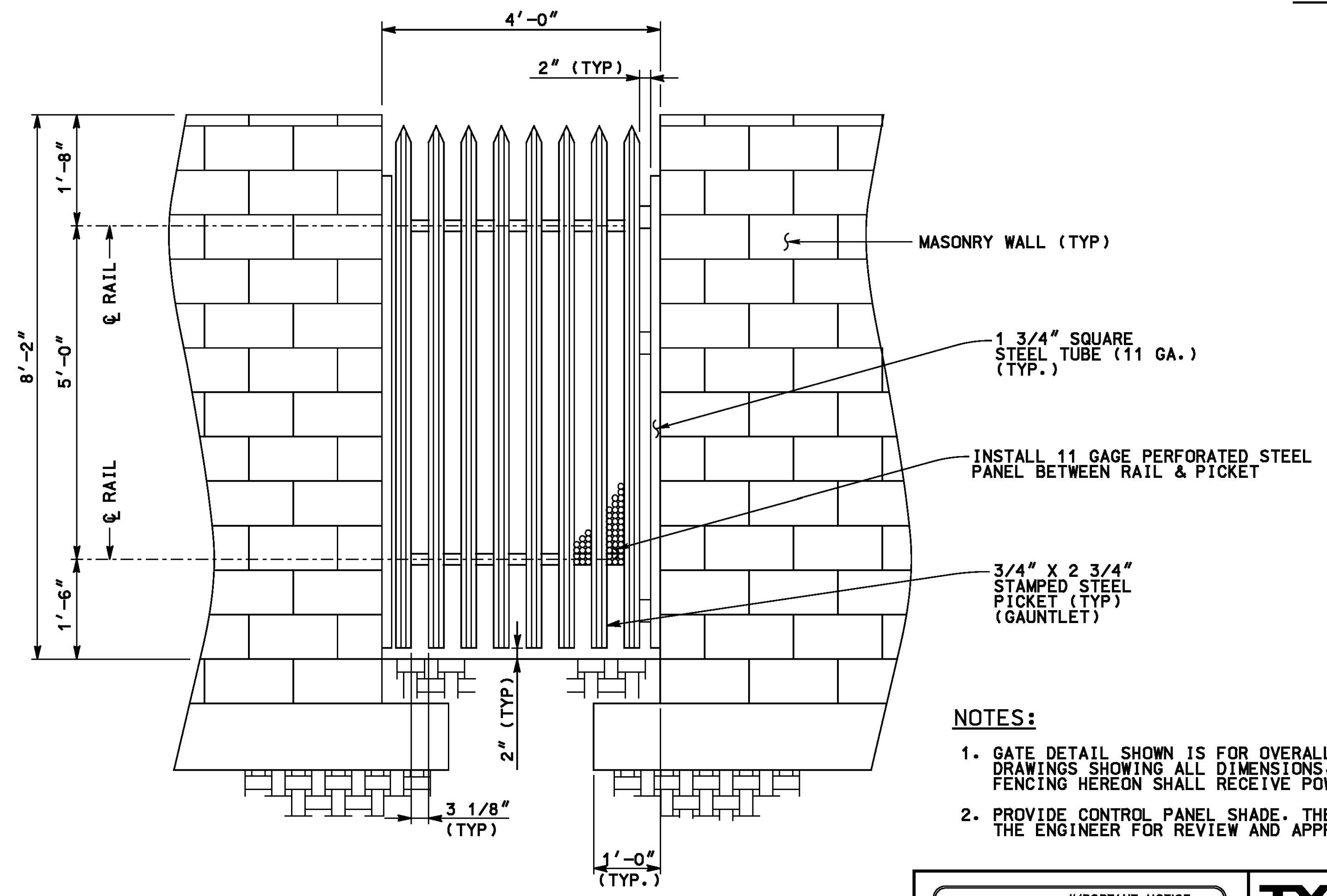
PUMP STATION DETAILS 5 S-10
HORIZ. SCALE: 1/2" = 1'-0" VERT. SCALE: N/A

R-4180
SHEET 117 OF 191
FILE NO.

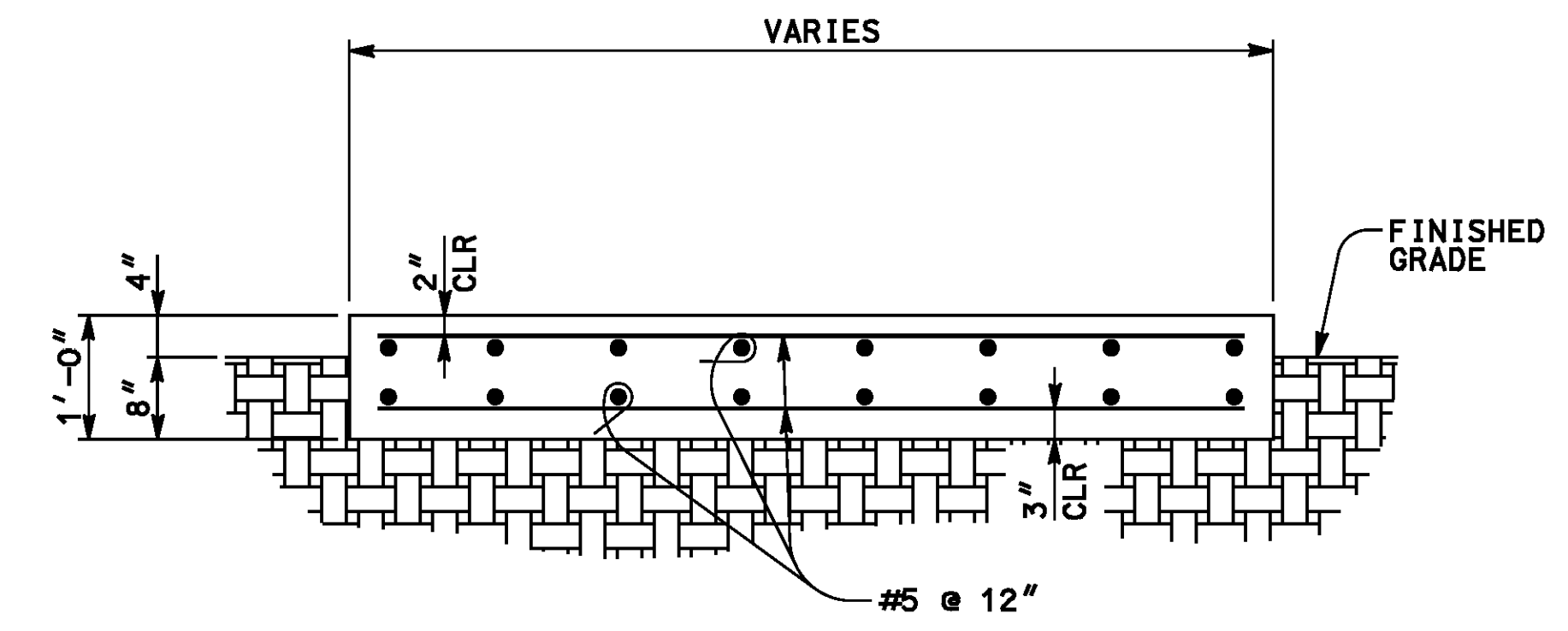
User: amc101 | 8/29/2012 5:52:41 PM \$FILES \$PROCS \$PENTABLES \$FILES



CONTROL ROOM PLAN
SCALE 3/8" = 1'-0"



STEEL GATE DETAIL
SCALE 3/4" = 1'-0"



TYPICAL PAD DETAIL
SCALE 3/4" = 1'-0"

NOTES:

- GATE DETAIL SHOWN IS FOR OVERALL DIMENSIONS AND APPEARANCE. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS SHOWING ALL DIMENSIONS, MATERIAL AND HARDWARE FOR APPROVAL BY THE ENGINEER. ALL METAL FENCING HEREON SHALL RECEIVE POWDER COATING.
- PROVIDE CONTROL PANEL SHADE. THE CONTRACTOR SHALL SUBMIT MATERIAL AND CONNECTION DETAILS TO THE ENGINEER FOR REVIEW AND APPROVAL.

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

IMPORTANT NOTICE
 Section 41216/4117 of the Government Code requires a Dig Alert Identification Number to be located before a "Permit to Excavate" will be valid. For your Dig Alert ID, Member call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
 3550 VINE STREET, SUITE 120
 RIVERSIDE, CA 92507
 TEL (951) 788-4688
 www.tylin.com



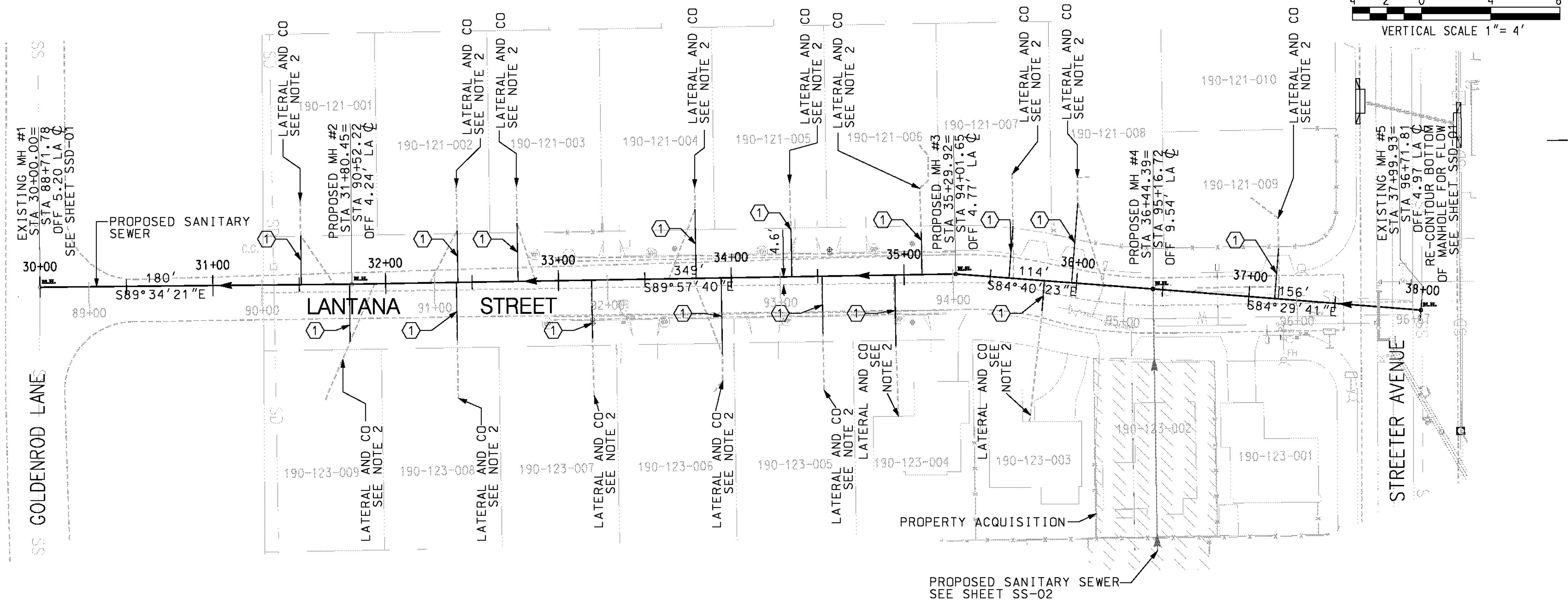
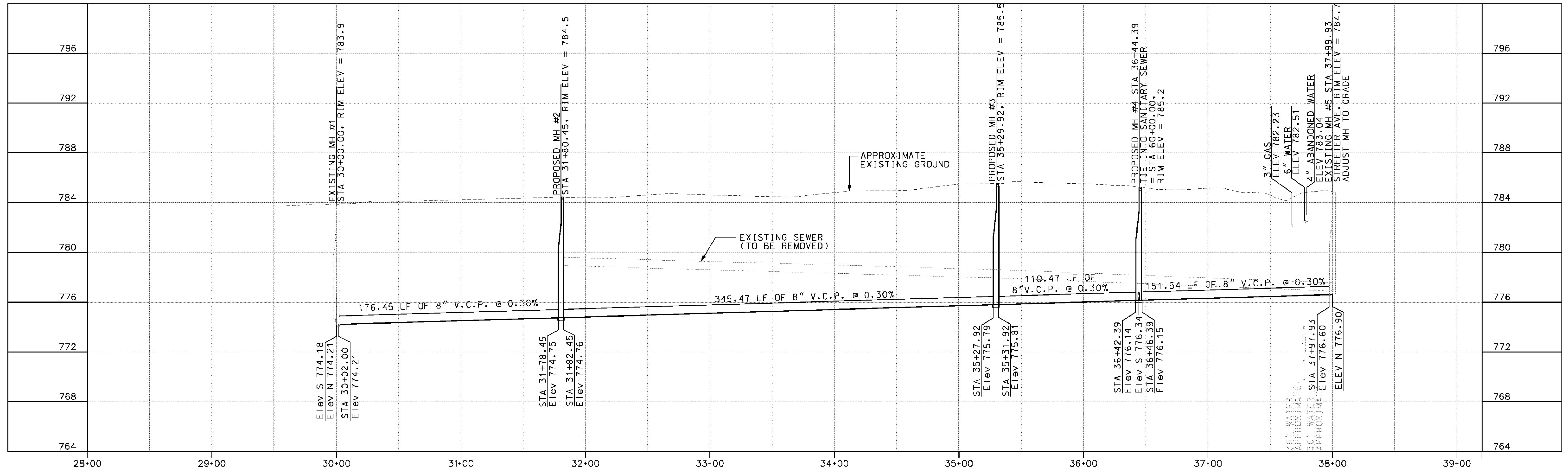
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PUMP STATION CONTROL ROOM DETAILS 1 S-11

R-4180
 SHEET 118 OF 191
 FILE NO.

HORIZ. SCALE: VARIES VERT. SCALE: N/A

DATE 8-7-12



NOTE: LATERAL LOCATIONS ARE BASED ON SEWER CONNECTION PERMIT RECORDS AND MIGHT NOT BE WHERE INDICATED ON PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE THEM IN THE FIELD.

- NOTE:
- BEDDING FOR SEWER LINE SHALL BE PER CITY OF RIVERSIDE STANDARD DRAWING NO. 452 CASE II, OR CASE IV IF COVER IS LESS THAN 12".
 - EXISTING LATERALS TO BE REMOVED AND REPLACED, CONNECTING THEM TO NEW 8" VCP SEWER PER CITY OF RIVERSIDE STANDARD DRAWING 554. CONSTRUCT CO PER CITY OF RIVERSIDE STANDARD DRAWING NO. 562
 - ALL MANHOLES TO BE PER CITY OF RIVERSIDE STANDARD DRAWING NO. 500.

IMPORTANT NOTICE
 Section 4316-4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

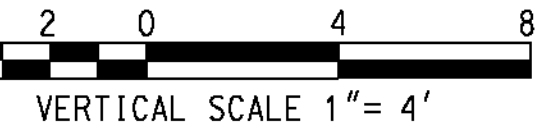
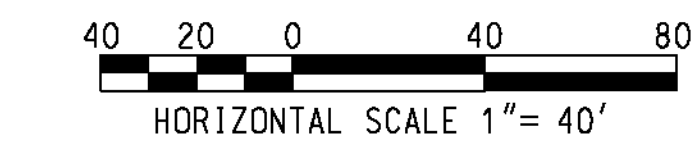
WILSON & COMPANY
 625 E. CARNEGIE DRIVE SUITE 100
 SAN BERNARDINO, CA 92408
 (909) 806-8000
 www.wilsonco.com



MARK	REVISIONS	APPR.	DATE

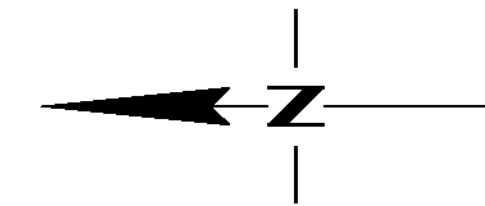
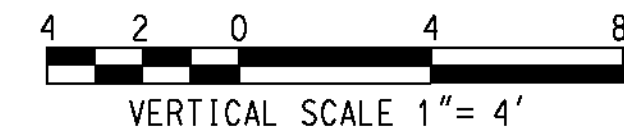
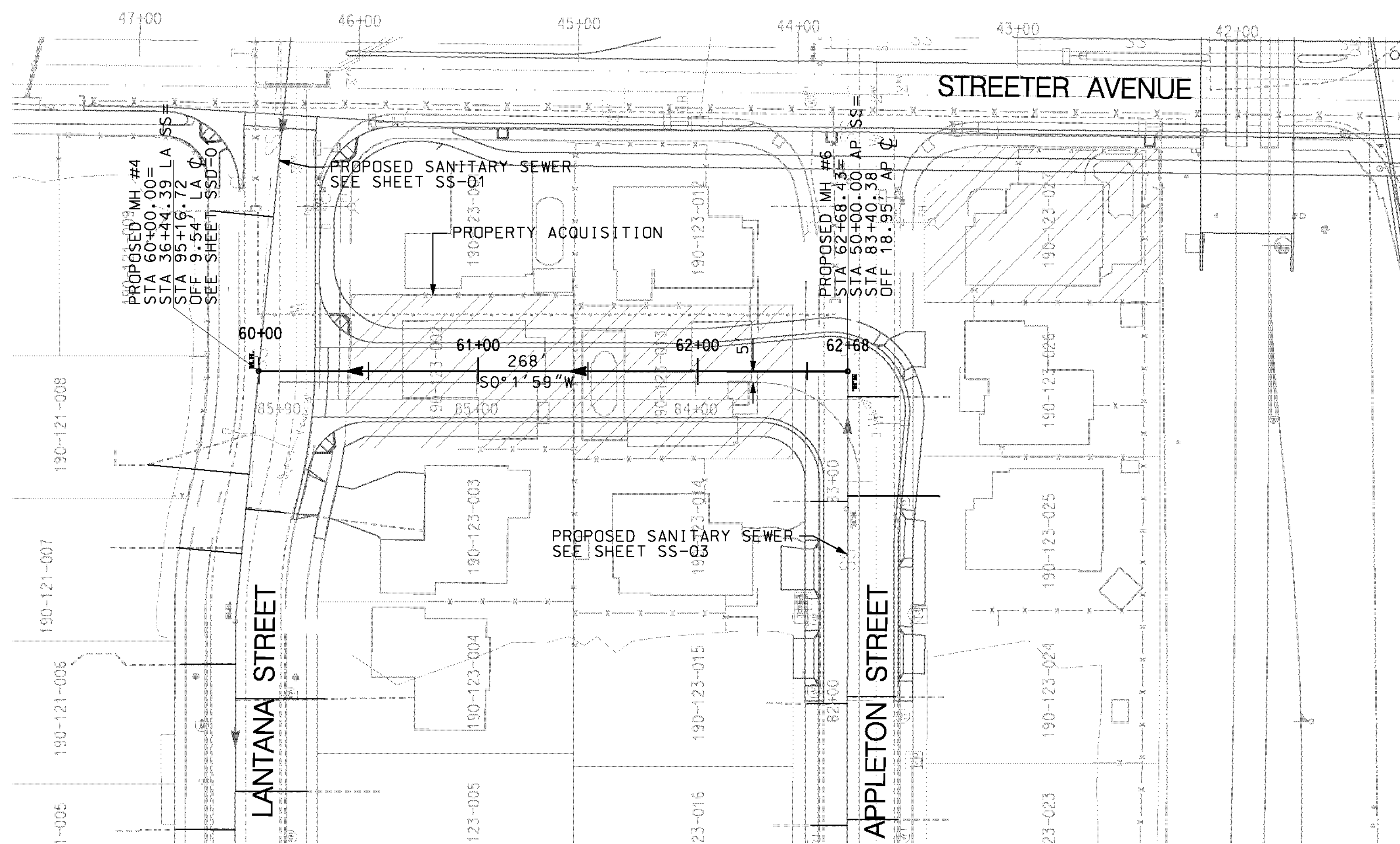
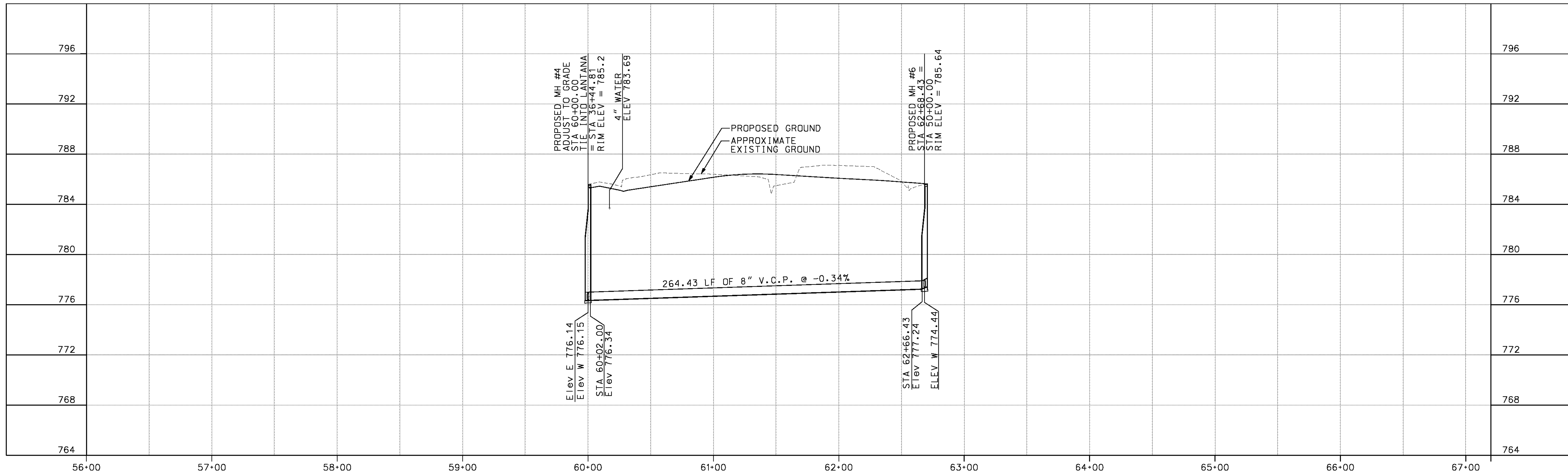
CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SEWER IMPROVEMENTS LANTANA ST. SS-01

S-2081
 SHEET 120 OF 191
 FILE NO.



DATE: 8/7/2012 TIME: 10:20:13 AM

USER: altyrnehk SS001.dgn



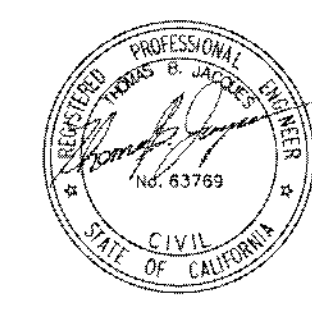
NOTE: LATERAL LOCATIONS ARE BASED ON SEWER CONNECTION PERMIT RECORDS AND MIGHT NOT BE WHERE INDICATED ON PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE THEM IN THE FIELD.

- NOTE:
- BEDDING FOR SEWER LINE SHALL BE PER CITY OF RIVERSIDE STANDARD DRAWING NO. 452 CASE II, OR CASE IV IF COVER IS LESS THAN 12".
 - EXISTING LATERALS TO BE PROTECTED AND RECONNECTED TO NEW APPLETON SEWER PER CITY OF RIVERSIDE STANDARD DRAWING 554 AND 562.
 - ALL MANHOLES TO BE PER CITY OF RIVERSIDE STANDARD DRAWING NO. 500.

IMPORTANT NOTICE
 Section 4134.2 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
 625 E. CARNEGIE DRIVE SUITE 100
 SAN BERNARDINO, CA 92408
 (909) 806-8000
 www.wilsonco.com

DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

DESIGNED BY *MMP* DRAWN BY *SRP* CHECKED BY *JMT*

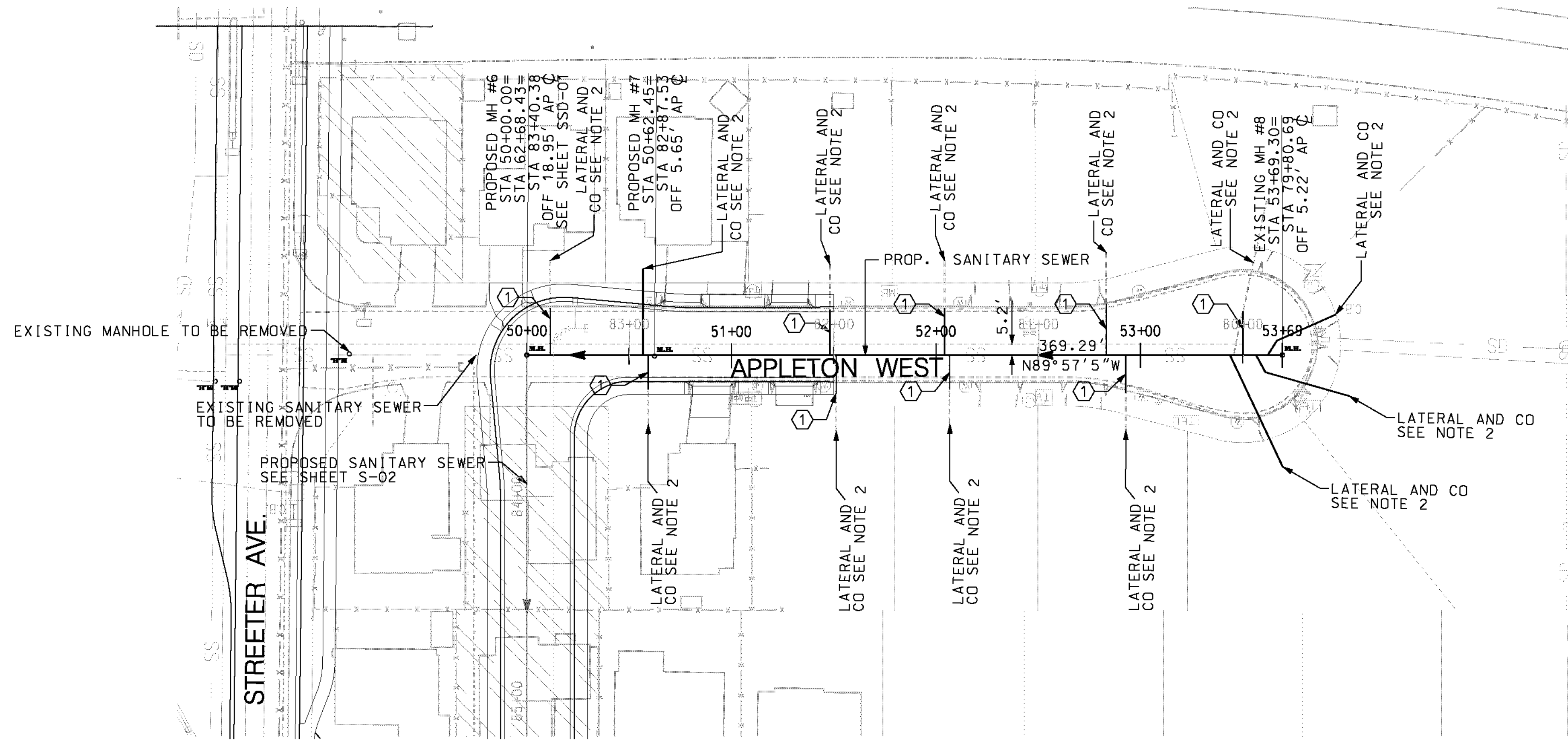
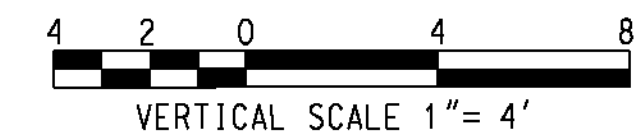
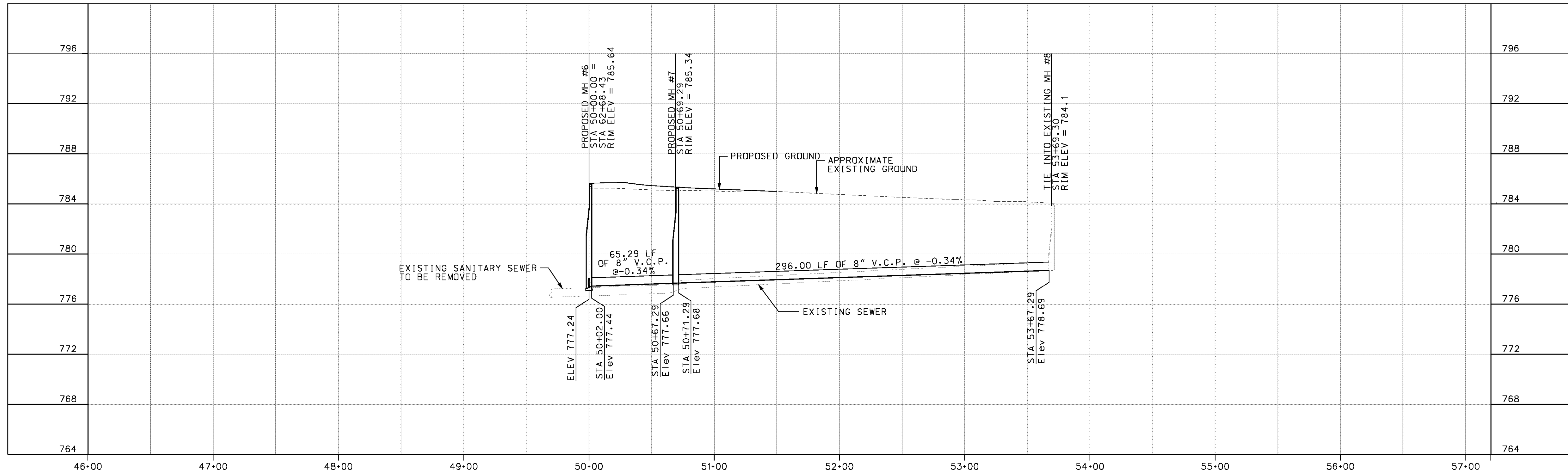
CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SEWER IMPROVEMENTS NEW ROAD SS-02

S-2081
 SHEET 121 OF 191
 FILE NO.

ms:wpf-08-100-139-00:roadshsht121-ss02.dgn

DATE: 8/7/2012
 TIME: 10:20:17 AM

USER: a11ymchek
 SS002.dgn



NOTE: LATERAL LOCATIONS ARE BASED ON SEWER CONNECTION PERMIT RECORDS AND MIGHT NOT BE WHERE INDICATED ON PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE THEM IN THE FIELD.

- NOTE:
- BEDDING FOR SEWER LINE SHALL BE PER CITY OF RIVERSIDE STANDARD DRAWING NO. 452 CASE II, OR CASE IV IF COVER IS LESS THAN 12".
 - EXISTING LATERALS TO BE REMOVED AND REPLACED, CONNECTING THEM TO NEW 8" VCP SEWER PER CITY OF RIVERSIDE STANDARD DRAWING 554. CONSTRUCT CO PER CITY OF RIVERSIDE STANDARD DRAWING NO. 562
 - ALL MANHOLES TO BE PER CITY OF RIVERSIDE STANDARD DRAWING NO. 500.
 - HOUSES WHERE NO LATERAL WAS FOUND HAVE HAD LATERALS SHOWN AT EDGE OF PROPERTY. LATERALS TO BE FIELD LOCATED AND REPLACED PER NOTE 2.

IMPORTANT NOTICE
 Section 5124.021 of the Government Code
 requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
 625 E. CARNEGIE DRIVE SUITE 100
 SAN BERNARDINO, CA 92408
 (909) 806-8000
 www.wilsonco.com

DATE 8-7-12

PROFESSIONAL ENGINEER
 MICHAEL WOLFF
 CIVIL
 STATE OF CALIFORNIA
 No. 43789

MARK	REVISIONS	APPR.	DATE

DESIGNED BY *MVP* DRAWN BY *SRP* CHECKED BY *JMT*

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT

STREETER AVENUE UNDERPASS

SEWER IMPROVEMENTS APPLETON ST. SS-03

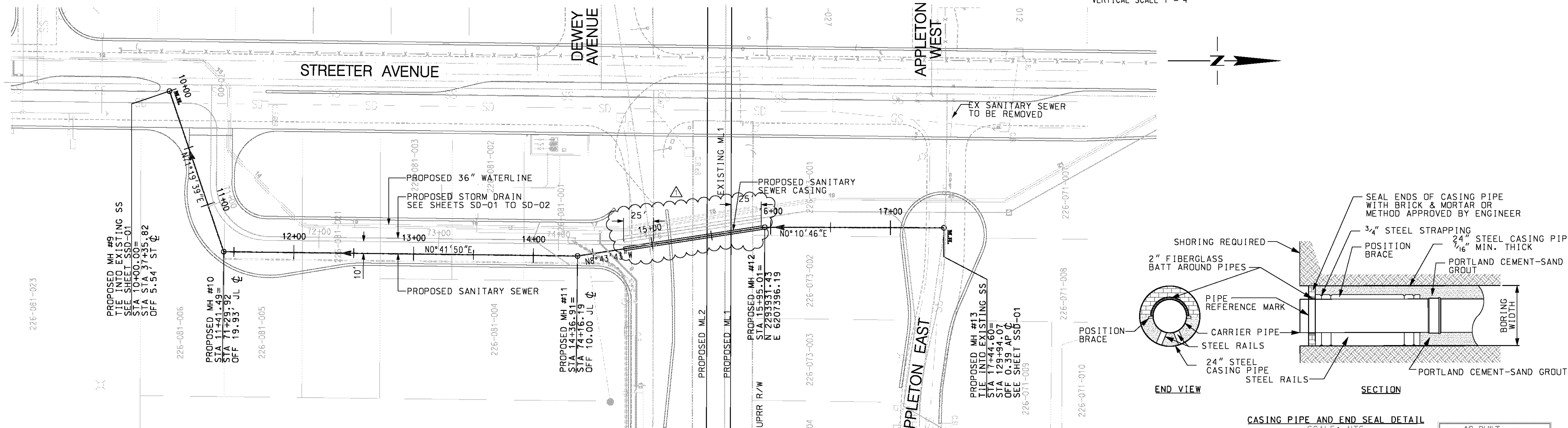
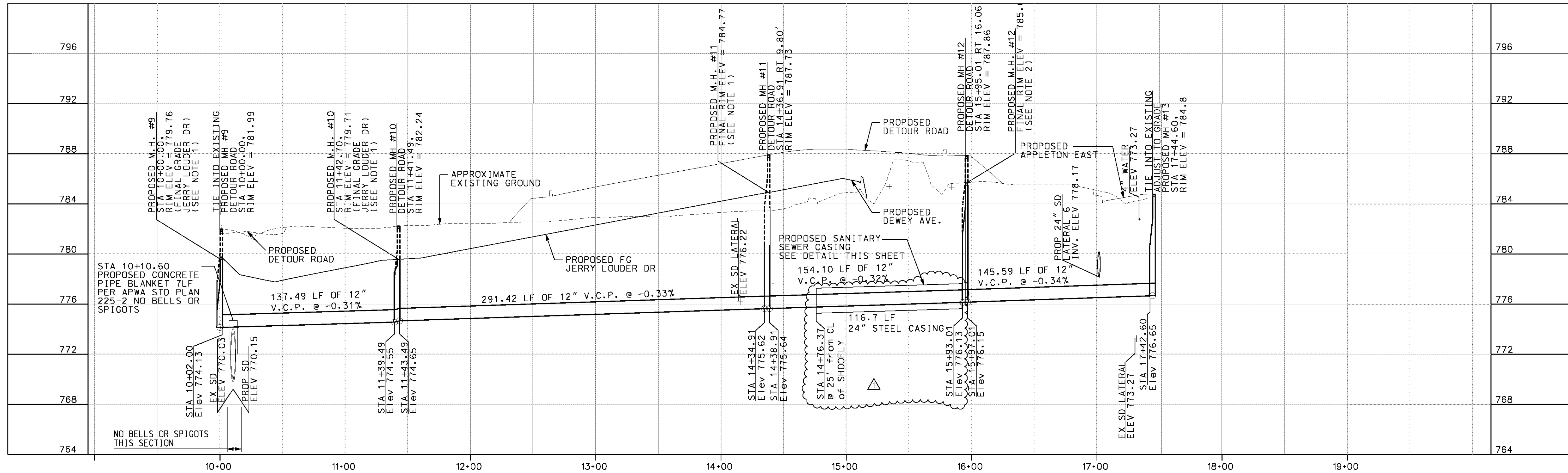
HORIZ. SCALE: VERT. SCALE:

AS BUILT
 NO CORRECTIONS ON THIS SHEET!
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

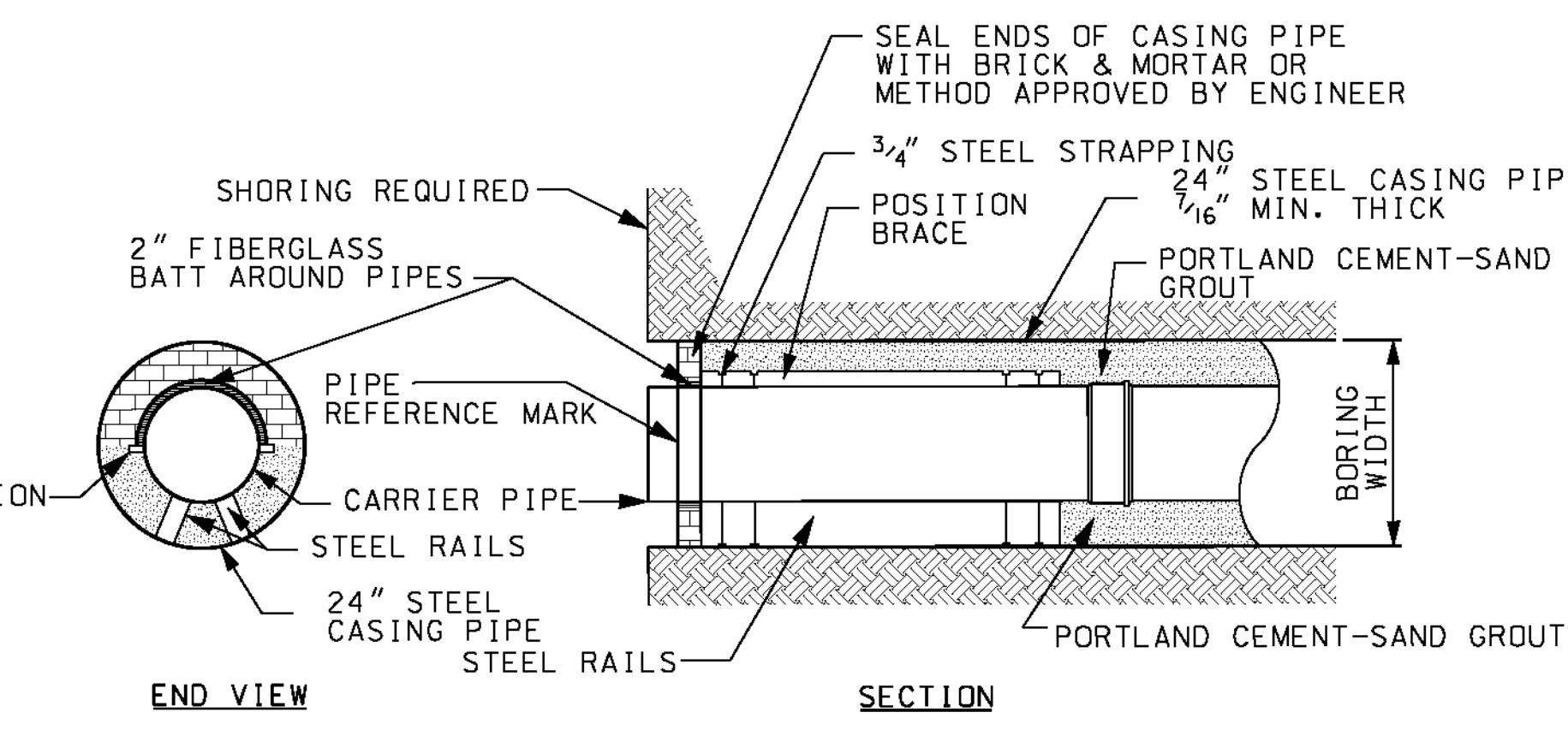
S-2081
 SHEET 122 OF 191
 FILE NO.

DATE: 8/7/2012
 TIME: 10:20:20 AM

USER: a11ymchek
 SS003.dgn



- NOTE:**
- ONCE TEMPORARY DETOUR ROAD IS REMOVED CONTRACTOR MUST BRING MANHOLES UP TO GRADE ON JERRY LOUDER DRIVE.
 - ONCE TEMPORARY DETOUR ROAD IS REMOVED CONTRACTOR MUST BRING MANHOLES UP TO GRADE ON DEWEY AVE.
 - BEDDING FOR SEWER LINE SHALL BE PER CITY OF RIVERSIDE STANDARD DRAWING NO. 452 CASE II, OR CASE IV IF COVER IS LESS THAN 12".
 - ALL MANHOLES TO BE PER CITY OF RIVERSIDE STANDARD DRAWING NO. 500.



AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

M:\RR\08-140D-139-03C\ADD\SHEET\SS-004.dgn

IMPORTANT NOTICE
Section 91421 of the Government Code requires a Big Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Big Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
625 E. CARNEGIE DRIVE SUITE 100
SAN BERNARDINO, CA 92408
(909) 806-8000
www.wilsonco.com

DATE 8-7-12

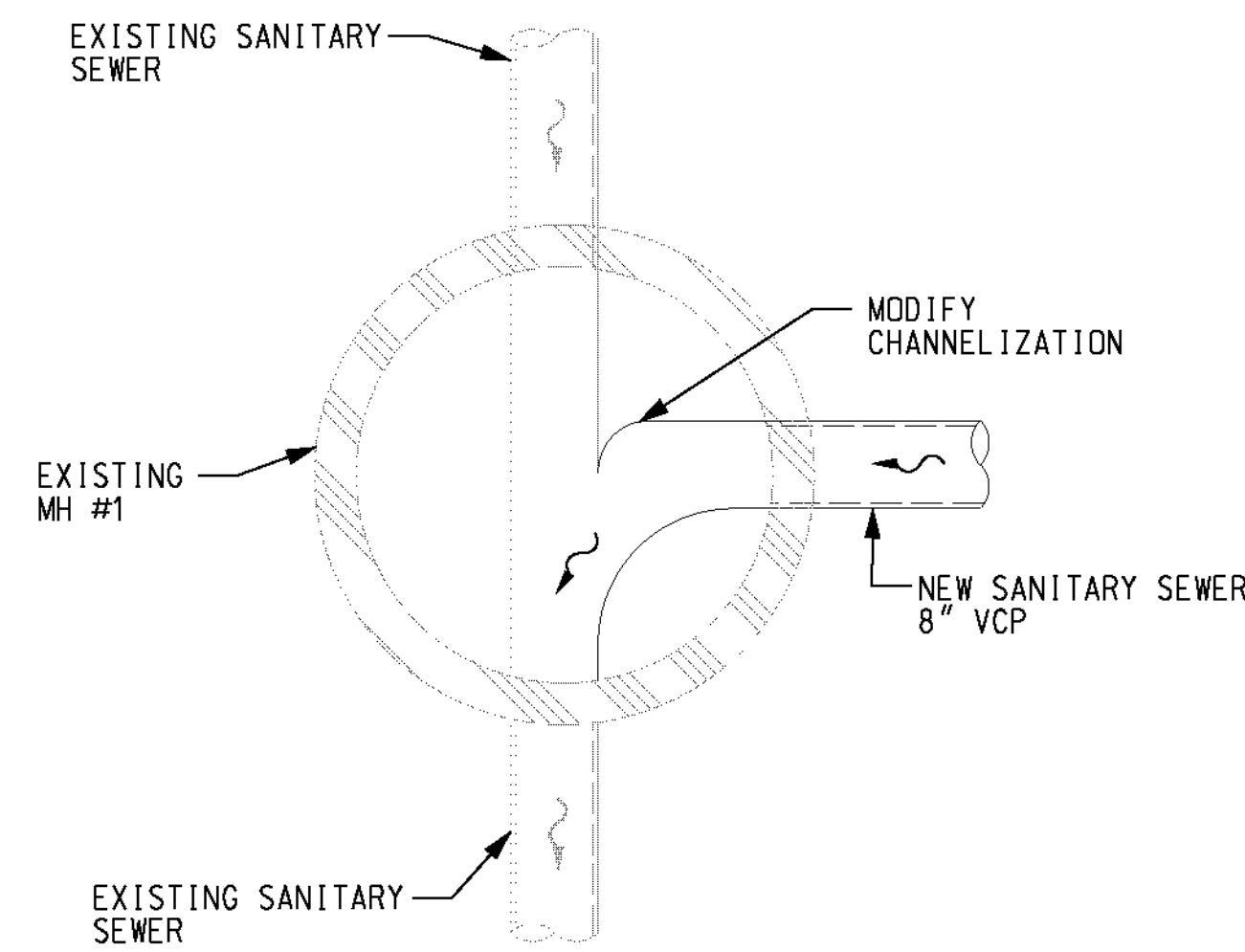


DESIGNED BY	MMF	DRAWN BY	SRP	CHECKED BY	JMT
MARK	CASING LENGTH INCREASED	TBJ	9/12	APPR.	DATE
	REVISIONS				

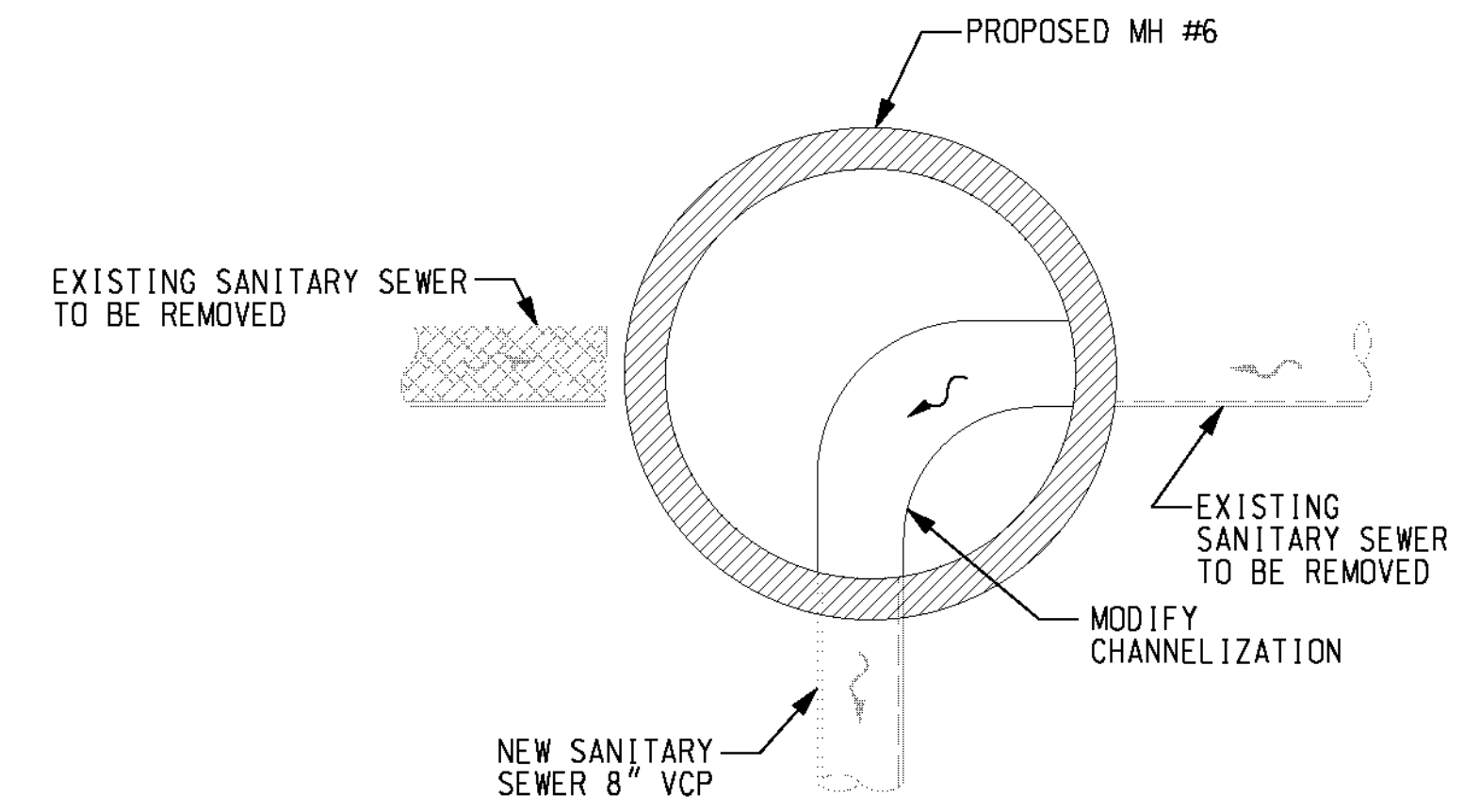
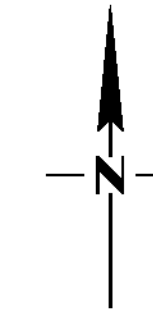
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SEWER IMPROVEMENTS NEW RD. & DETOUR RD SS-04

S-2081
SHEET 123 OF 191
FILE NO.

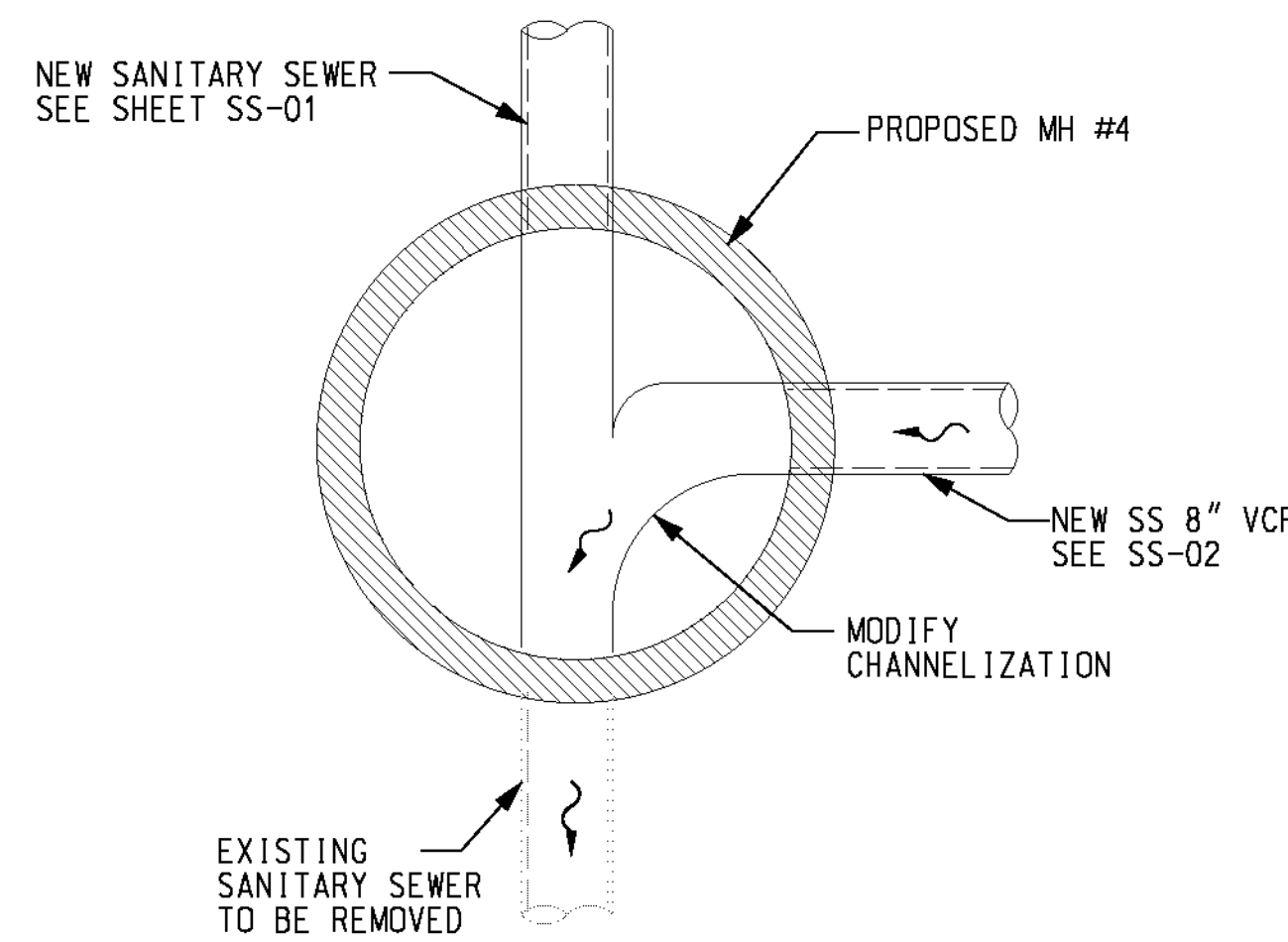
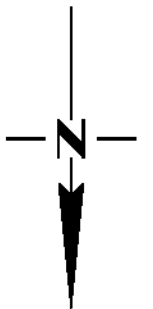
HORIZ. SCALE: VERT. SCALE:



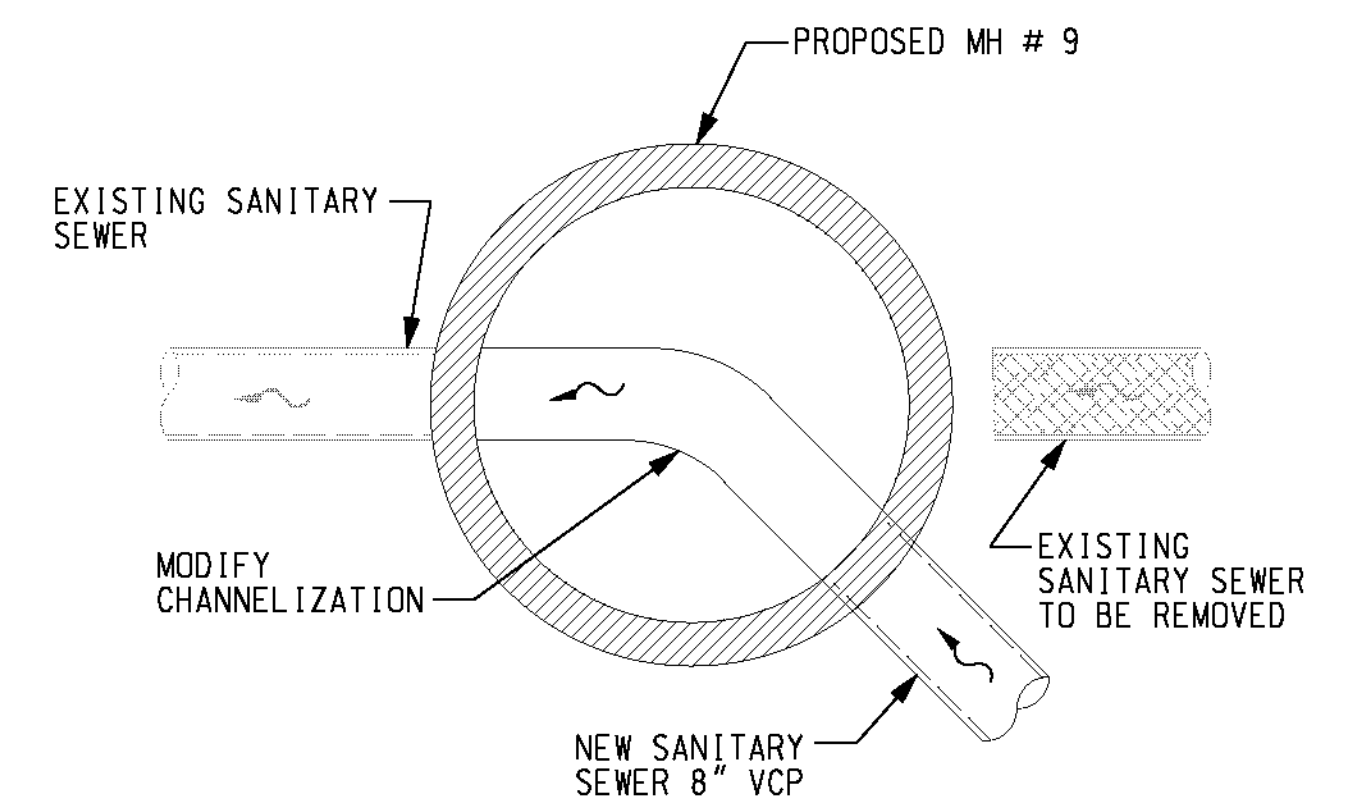
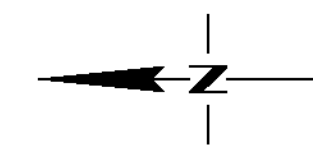
MANHOLE NO. 1 DETAIL
N.T.S.



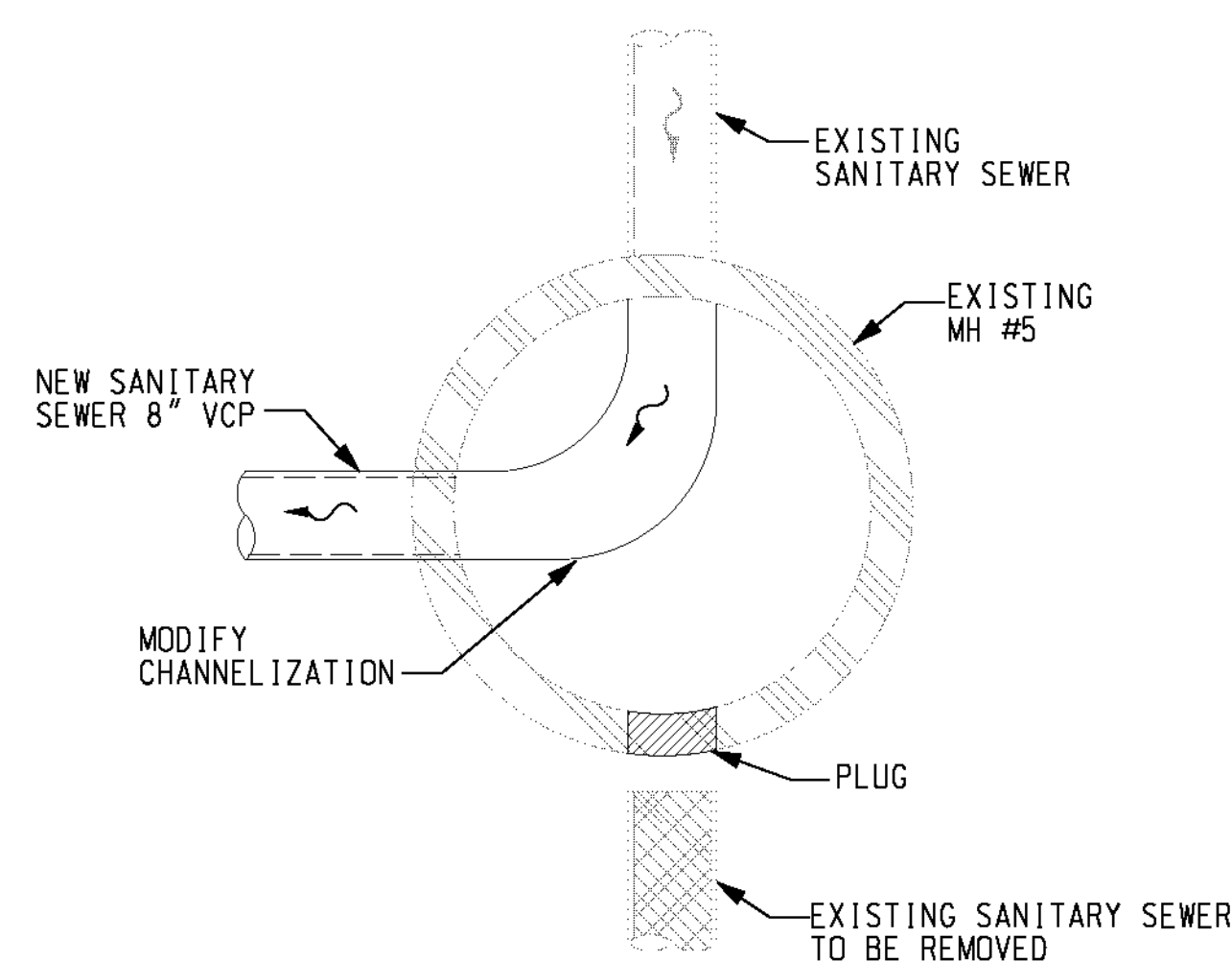
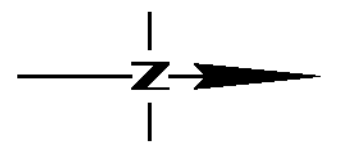
MANHOLE NO. 6 DETAIL
N.T.S.



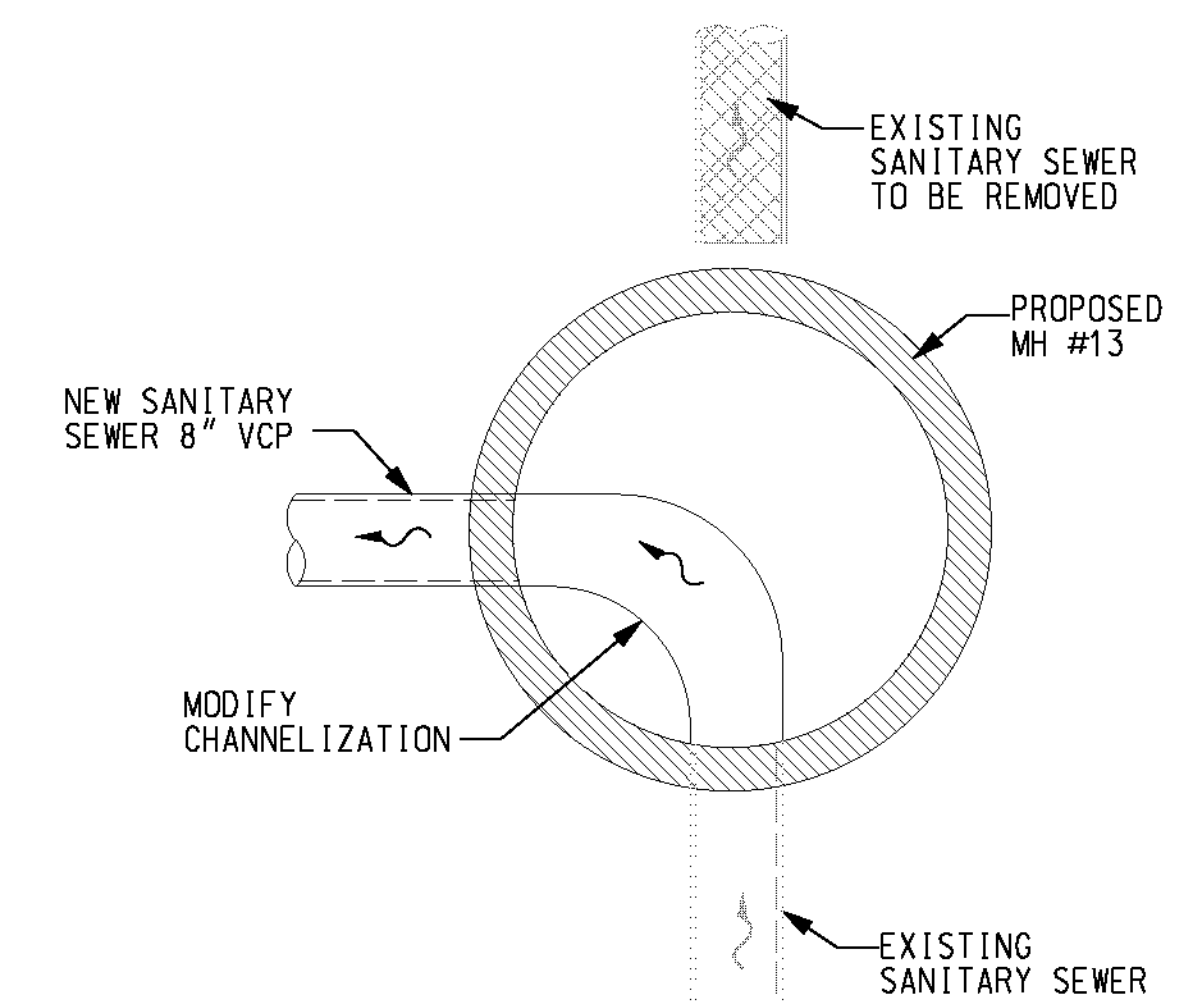
MANHOLE NO. 4 DETAIL
N.T.S.



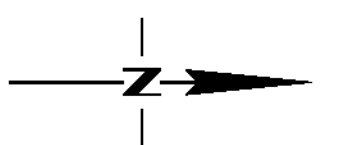
MANHOLE NO. 9 DETAIL
N.T.S.



MANHOLE NO. 5 DETAIL
N.T.S.



MANHOLE NO. 13 DETAIL
N.T.S.



AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

ms:wpf-08-400-139-00:roadshsht13k55005.dgn

IMPORTANT NOTICE
Section 43164.0217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
625 E. CARNEGIE DRIVE SUITE 100
SAN BERNARDINO, CA 92408
(909) 806-8000
www.wilsonco.com

DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SEWER IMPROVEMENTS SANITARY SEWER DETAILS SSD-01




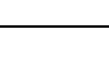
S-2081
SHEET 124 OF 191
FILE NO.

DATE: 8/7/2012
TIME: 10:20:28 AM

USER: altyrnhak
SS005.dgn

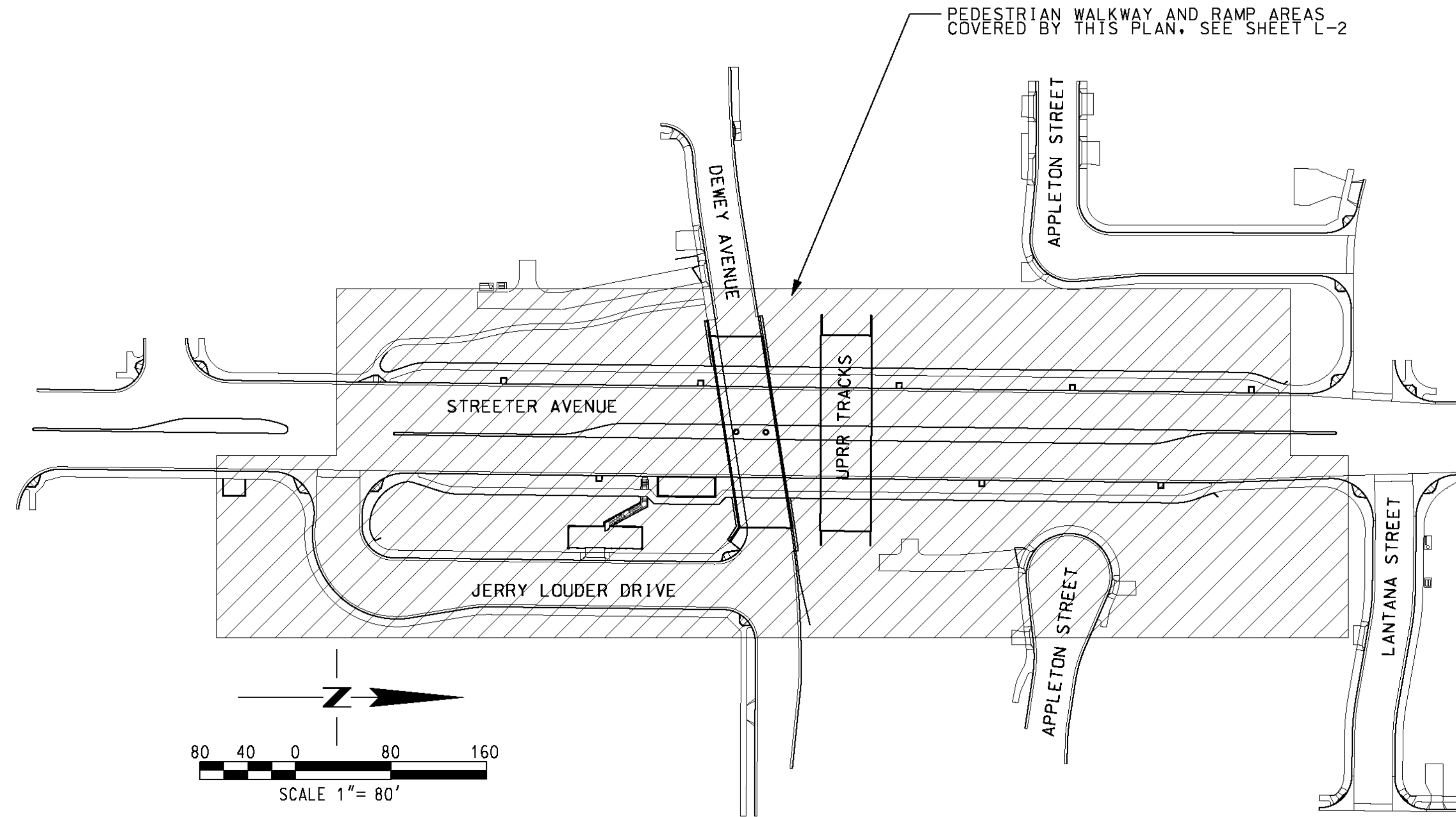
STREETER AVE UNDERPASS PEDESTRIAN LIGHTING PLAN

PEDESTRIAN LIGHTING LEGEND

-  NEW CONCRETE POST TOP STANDARD FOR PEDESTRIAN LIGHTING
PEDESTRIAN LIGHTS, SEE DETAIL ON SHEET L-3.
NEED TO BE ON A LLC (LIGHTING CONTROLLER
CABINET) (BY OTHERS) CIRCUIT AND COORDINATED
WITH STREET LIGHT PROJECT.
-  PULLBOX (10" X 17" X 12")
PER ITEM #P-1 OF UGS-800, INSTALL PER UGS-320
-  ELECTRIC SERVICE BOX (17" X 30" X 24")
PER ITEM ESB-6 OF UGS-009, INSTALL PER
UGS-320
-  1" DIRECT-BURIED SCHEDULE 40 PVC CONDUIT W/ 3-#8 CU
600V CABLES (UNLESS OTHERWISE NOTED)

DEPARTMENT PARTICIPATION

1. PROVIDE AND INSTALL ALL POLE RISER CONDUITS, CABLES, TERMINATIONS, AND TRANSFORMERS FROM SOURCE TO TERMINATING PULLSECTION OR PULLBOX AS SHOWN IN CONFORMANCE WITH STANDARD CONSTRUCTION METHODS (STREET LIGHT FACILITIES EXCEPTED). MATERIALS TO BE SPECIFIED ON JOB MATERIAL LISTS.
2. OBTAIN CIRCUIT NUMBER AND RECLOSER TYPE FROM SUBSTATION OPERATOR.
3. CALL PUBLIC WORKS DEPARTMENT INSPECTION DIVISION (PH. 826-5671) FOR INSPECTION OF STREET OR ALLEY RIGHT-OF-WAY EXCAVATIONS.
4. FOR ENGINEERING INFORMATION CONTACT ADDIE REVUELTA AT 826-5484 OR VANESSA SCOTT AT 826-2123.



STREET LIGHTING GENERAL NOTES

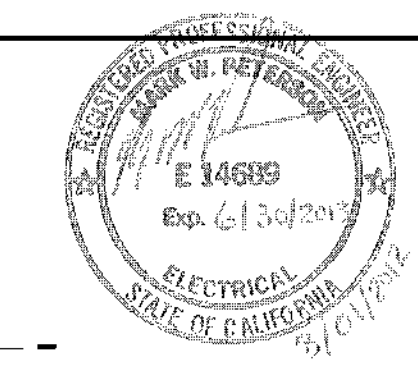
1. ALL FACILITIES INSTALLED BY CONTRACTOR SHALL BE INSPECTED AND APPROVED BY THE DEPARTMENT CONSTRUCTION INSPECTOR (PH. 826-2416). ANY CHANGES SHALL BE APPROVED BY THE DEPARTMENT PRIOR TO EXECUTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL PHASES OF CONSTRUCTION WITH THE DEPARTMENT CONSTRUCTION INSPECTOR.
2. PROVIDE AND INSTALL ALL STREET LIGHT FACILITIES SHOWN INCLUDING STREET LIGHT CABLE, AS SHOWN IN CONFORMANCE WITH THE FOLLOWING STANDARD DRAWINGS: UGS-100, UGS-800, 801, & STREET LIGHT SPECIFICATION #2-6.
3. EXCAVATION FOR STREET LIGHT CONDUIT AND PEDESTRIAN LIGHT FOUNDATIONS MUST BE DONE AFTER INSTALLATION OF CURBS AND GUTTERS, BUT BEFORE INSTALLATION OF CURB RETURNS WITH SPANDRELS, CROSS GUTTERS, SIDEWALKS, AND DRIVE APRONS.
4. INSTALL A WATERPROOF "IN-LINE" FUSE HOLDER ON THE PHASE LEG CONDUCTOR(S) IN THE BASE OF EACH STREET LIGHT STANDARD. FUSE HOLDER TO BE "BUSSMAN TRON" #HEB COMPATIBLE WITH SIZE AND TYPE OF WIRE, WITH A "BUSSMAN" FNM 10 AMP 250V FUSE OR APPROVED EQUAL.
5. MARK INSTALLATION DATE ON PHOTO CONTROLS AND LAMPS AS PROVIDED FOR BY MFR.
6. ACQUIRE A STREET OPENING PERMIT PRIOR TO EXCAVATING IN STREET RIGHT-OF-WAY.
7. THIS PLAN IS ACCURATE FOR STREET LIGHT FACILITIES ONLY. SEE STREET IMPROVEMENT PLAN R-4081 FOR STREET IMPROVEMENT DETAILS.
8. ALL STREET LIGHT FEED POINTS TO BE CONNECTED BY PUBLIC UTILITIES AND ENERGIZED WHEN CLEARED BY DEPARTMENT INSPECTOR.
9. STREET LIGHT SERVICE POINTS ARE 3 WIRE, 240V SYSTEM. THE THIRD STREET LIGHT WIRE IS TO BE USED AS A BOND WIRE ONLY, AS NOTED IN SPECIFICATION # 2-6. FEED POINTS TO BE CONFIRMED AT THE TIME OF CONSTRUCTION.
10. DEPARTMENT CONSTRUCTION INSPECTOR MAY REQUIRE ALL PROPERTY LINES TO BE STAKED PRIOR TO EXCAVATION FOR STREET LIGHT FACILITIES.
11. ALL CABLE TO BE AWG. #8 COPPER AS SPECIFIED IN STREET LIGHT SPECIFICATION #2-6. (STREET LIGHT CABLE)
12. CONDUIT AND FITTINGS TO BE IN CONFORMANCE WITH UGS-100. BACKFILL TO BE TYPE AND COMPACTED AS SPECIFIED IN UGS-100.1.

M:\RR\03-400-139-00\CD\00\SHETS\K.L001.dgn

DATE: 8/7/2012
TIME: 5:50:54 PM

IMPORTANT NOTICE
Section 4316.0217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
625 E. CARNEGIE DRIVE SUITE 100
SAN BERNARDINO, CA 92408
(909) 806-8000
www.wilsonco.com



MARK	REVISIONS	APPR.	DATE

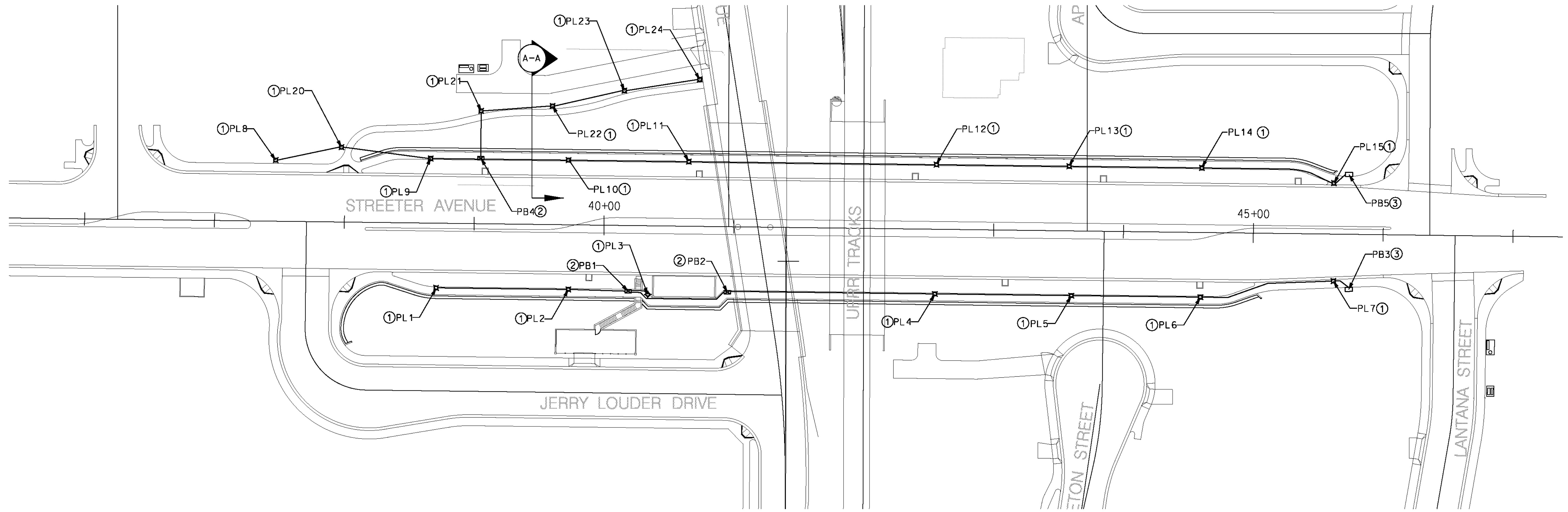
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
STREET LIGHTING LEGEND

L-1
R-4180
SHEET 125 OF 191
FILE NO. L001

HORIZ. SCALE: 1"=80' VERT. SCALE: N/A

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

USER = rcbokenstette L001.dgn



LIGHTING SITE PLAN PEDESTRIAN LIGHTS
SEE SCALE

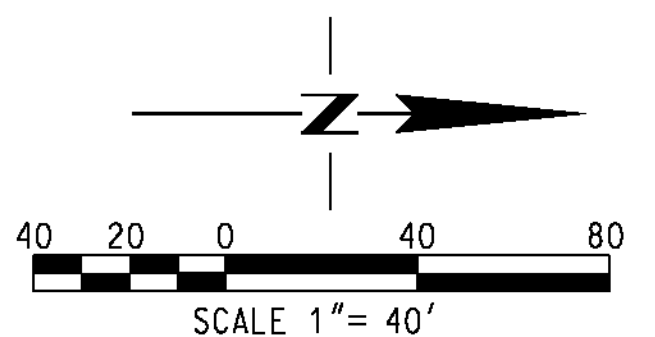
PEDESTRIAN LIGHTING SCHEDULE			
ID	STATION	OFFSET	REMARKS
PL1	38 + 71.24	49.75' RT	STREET SIDE
PL2	39 + 73.06	49.75' RT	STREET SIDE
PL3	40 + 35.37	52.83' RT	STREET SIDE
PL4	42 + 55.30	49.75' RT	STREET SIDE
PL5	43 + 60.35	49.75' RT	STREET SIDE
PL6	44 + 59.78	49.75' RT	STREET SIDE
PL7	45 + 62.07	36.15' RT	STREET SIDE
PL8	37 + 46.53	47.10' LT	STREET SIDE
PL9	38 + 65.87	49.75' LT	STREET SIDE
PL10	39 + 72.05	49.75' LT	STREET SIDE
PL11	40 + 64.65	49.75' LT	STREET SIDE
PL12	42 + 55.36	49.75' LT	STREET SIDE
PL13	43 + 57.59	49.75' LT	STREET SIDE
PL14	44 + 59.77	49.75' LT	STREET SIDE
PL15	45 + 61.57	39.27' LT	STREET SIDE
PL20	37 + 97.08	57.66' LT	WALKWAY
PL21	39 + 04.33	86.85' LT	WALKWAY
PL22	39 + 59.25	91.31' LT	WALKWAY
PL23	40 + 14.40	103.82' LT	WALKWAY
PL24	40 + 72.31	113.09' LT	WALKWAY

PULL BOX SCHEDULE			
ID	STATION	OFFSET	REMARKS
PB1	40 + 19.20	50.48' RT	
PB2	40 + 95.54	50.36' RT	
PB3	45 + 73.97	42.39' RT	ELECTRIC SERVICE BOX
PB4	39 + 04.44	50.44' LT	
PB5	45 + 73.22	46.08' LT	ELECTRIC SERVICE BOX

STREET LIGHTING NOTES

1. PROVIDE NEW CONCRETE POST TOP STANDARD FOR PEDESTRIAN LIGHTING. SEE SHEET L-3 FOR MORE INFORMATION.
2. PROVIDE PULLBOX. FOR MORE INFORMATION, SEE STREET LIGHTING LEGEND, SHEET L-1.
3. PROVIDE ELECTRIC SERVICE BOX. COORDINATE SYSTEM TIE IN POINT BACK TO AREA LIGHTING CONTROLLER CENTER (CONTROLLER BY OTHERS). FOR MORE INFORMATION, SEE STREET LIGHTING LEGEND, SHEET L-1

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF



M:\RR\03-400-139-00\CAD\SSHEETS\SK-002.dgn

IMPORTANT NOTICE
Section 4116-4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

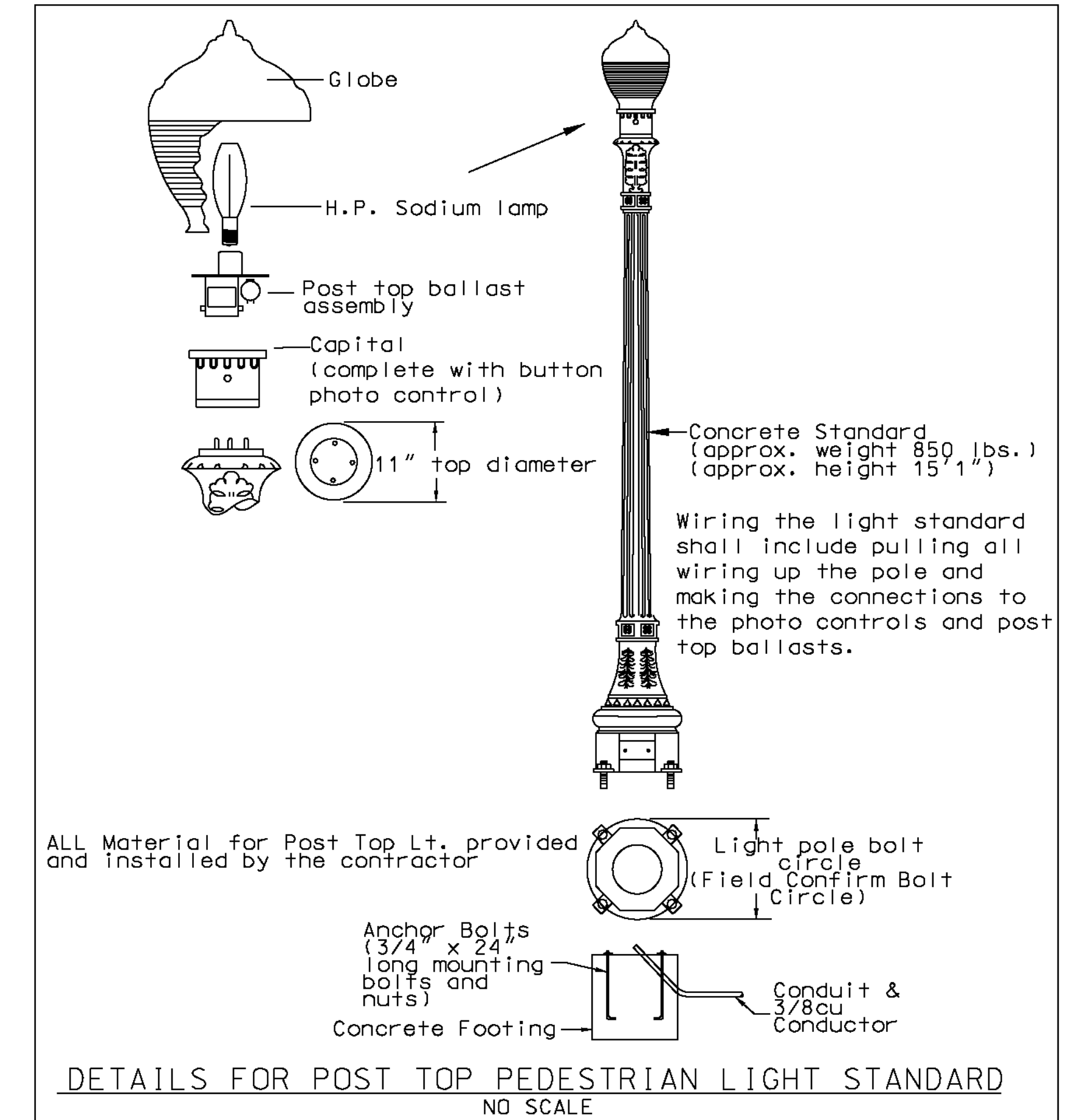
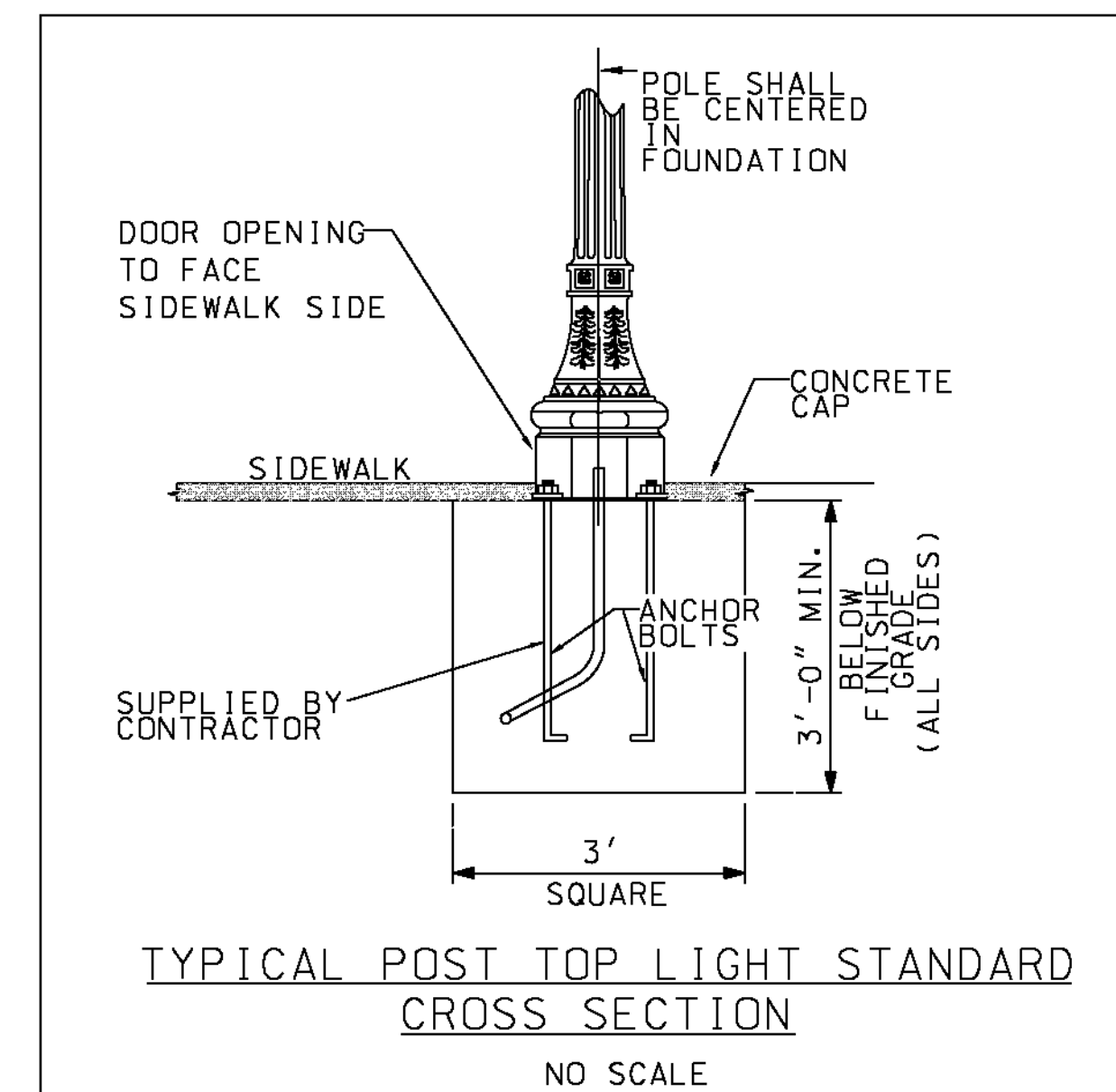
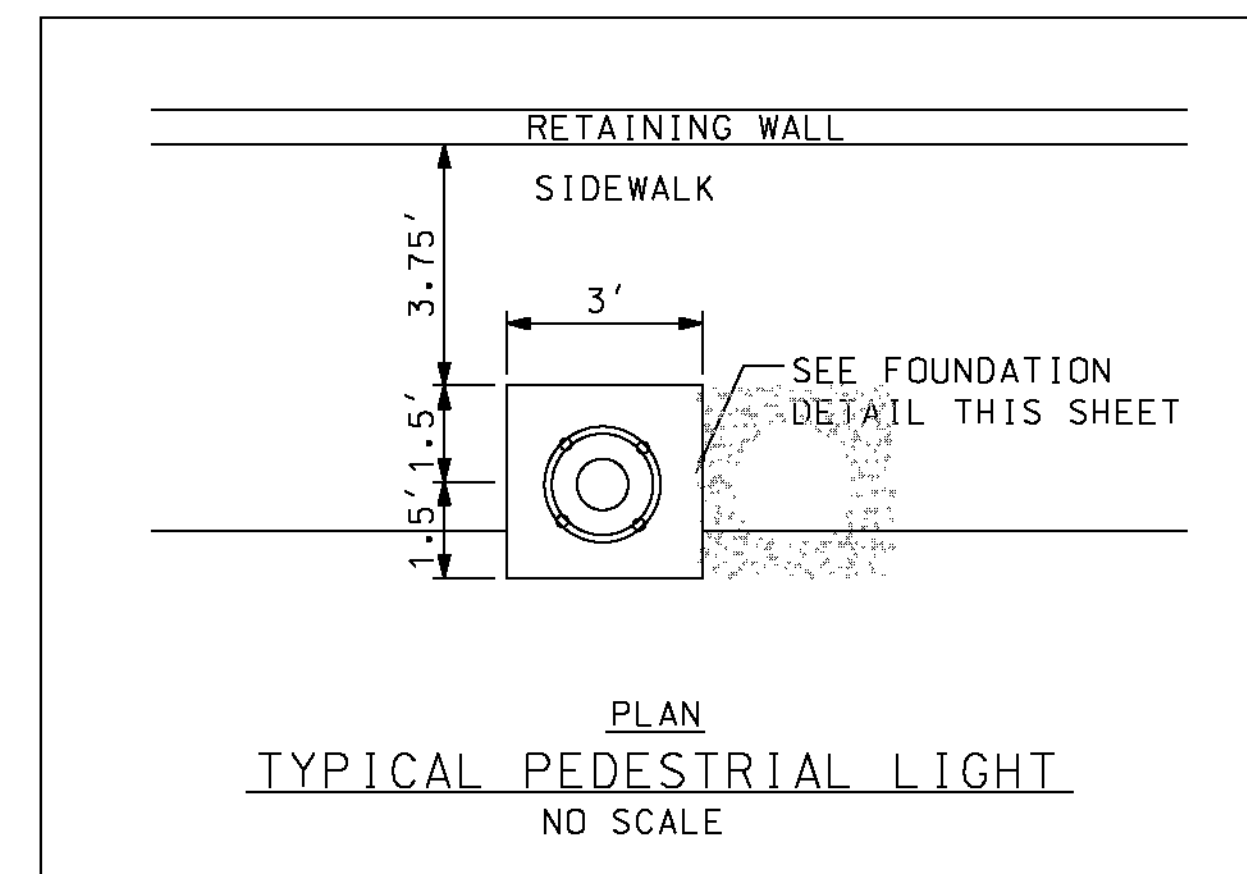
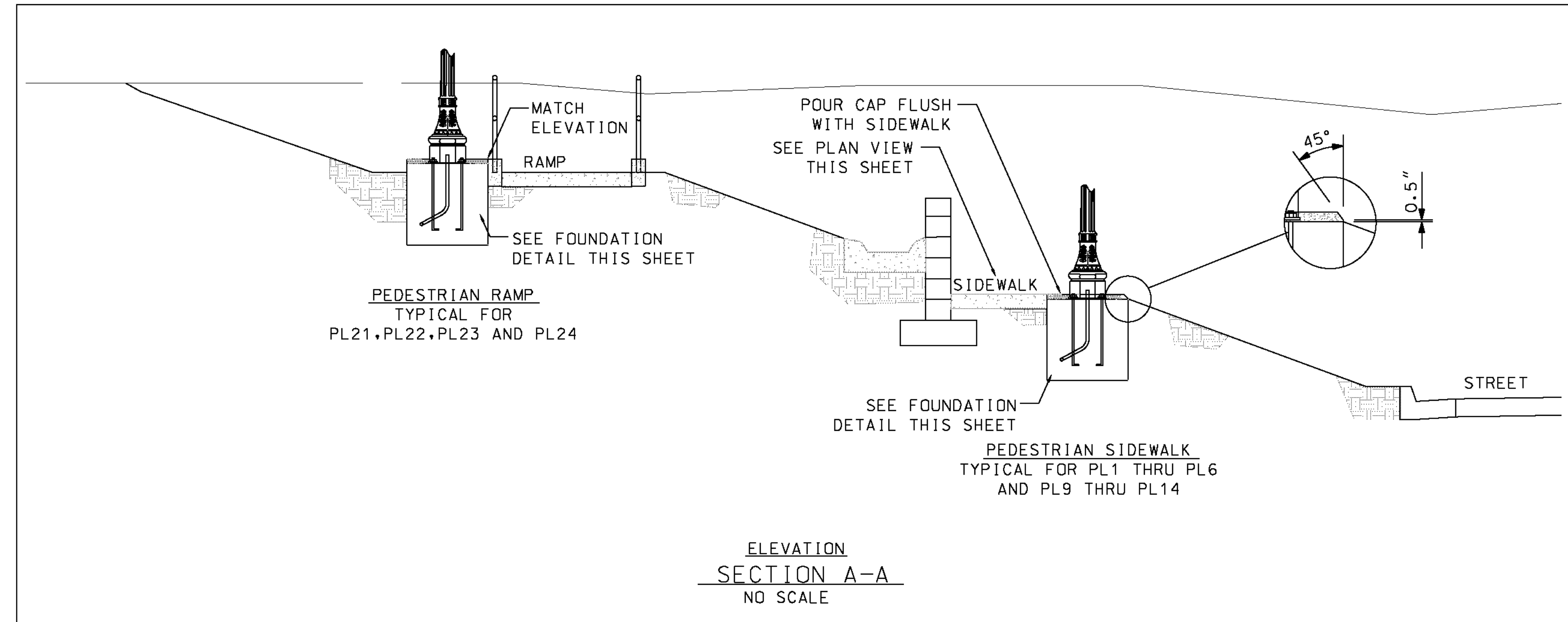
WILSON & COMPANY
625 E. CARNEGIE DRIVE SUITE 100
SAN BERNARDINO, CA 92408
(909) 806-8000
www.wilsonco.com

REGISTERED PROFESSIONAL ENGINEER
E 14659
Exp. 6/30/2018
ELECTRICAL
STATE OF CALIFORNIA
64117272

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
STREET LIGHTING PLAN

L-2
R-4180
SHEET 126 OF 191
FILE NO. L002



ITEM SCHEDULE FOR POST TOP LIGHT				
	POST TOP LUMINAIRE			
	MANUFACTURER	QTY	HT.	DESCRIPTION
	King Luminaire Company Inc.	1		Complete with polycarb. globe, 100w, 240v regulator type ballast assembly, and cast aluminum capital with built in button photocell.
	Antique St. Lamps Inc.			ANTIQUE - RSL30/ cc - sam 100/240 - III
	CONCRETE STANDARD			
	MANUFACTURER	QTY	HT.	DESCRIPTION
	Ameron Inc. Pole Products Division.	1	15'1"	Concrete Aggregate with graffiti-resistant surface and adaptor plate which fits the appropriate luminaire.
	DISTRIBUTED THRU: Pacific Lighting Sales Inc. (714)752-3085			
	HIGH PRESSURE SODIUM LAMP			
	MANUFACTURERS	QTY	DESCRIPTION	SIZE
	G.E. Sylvania	1	clear 55v	100w
				MANUFACTURER'S CATALOG NUMBER
				G.E. Sylvania S54 S54

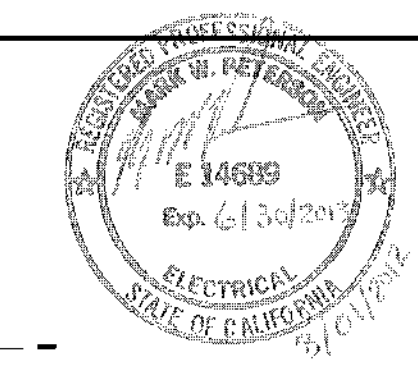
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DATE: 8/7/2012
TIME: 5:58:45 PM

IMPORTANT NOTICE
Section 4316-4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

WILSON & COMPANY
625 E. CARNEGIE DRIVE SUITE 100
SAN BERNARDINO, CA 92408
(909) 806-8000
www.wilsonco.com

DATE 07-24-2012



DESIGNED BY *MWP* DRAWN BY *SRP* CHECKED BY *AWP*

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
STREET LIGHTING DETAILS

L-3
R-4180
SHEET 127 OF 191

HORIZ. SCALE: NTS VERT. SCALE: NTS FILE NO. L003

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

USER = rcbckenstatta L003.dgn

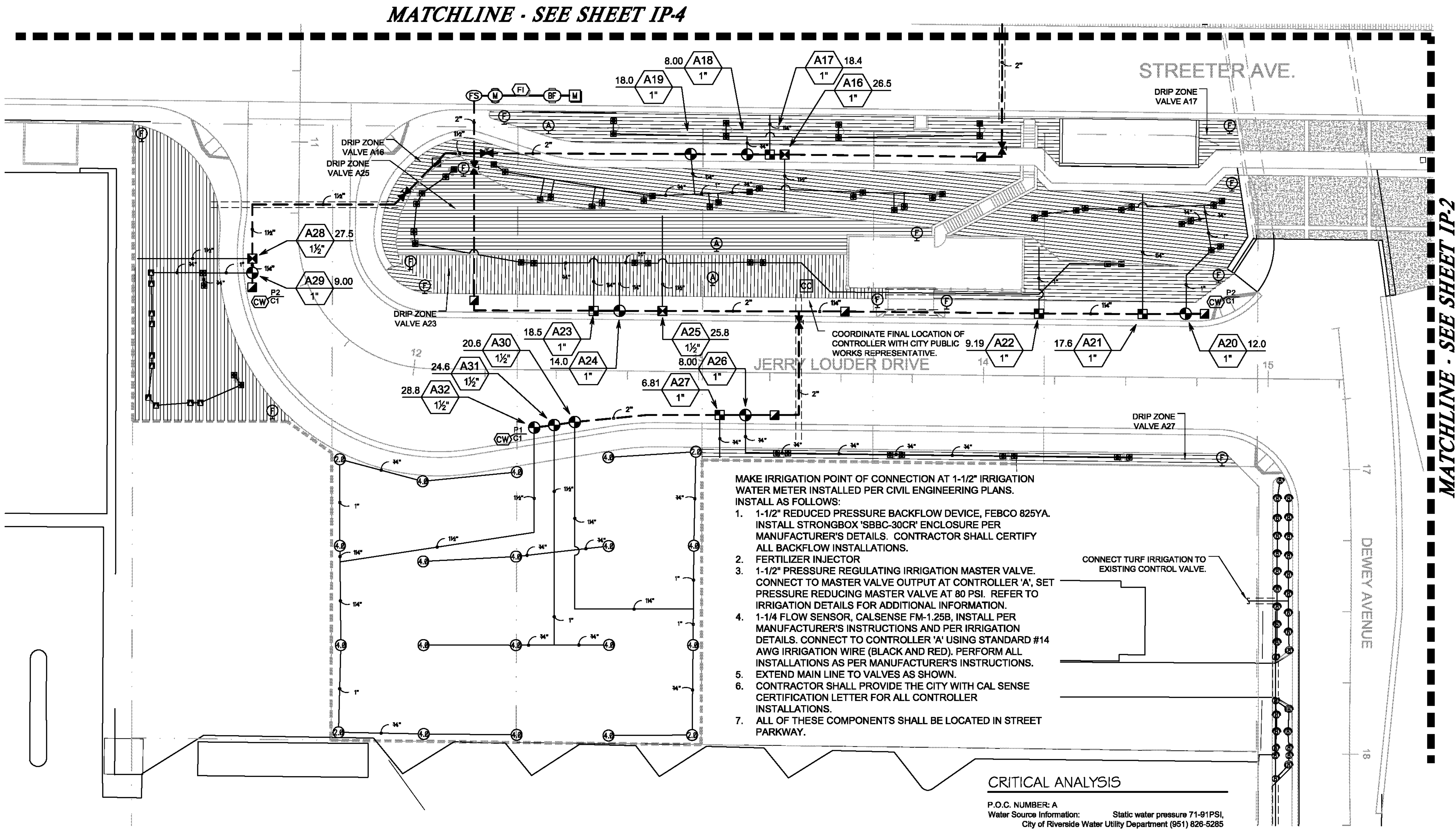
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	PSI	DETAIL
	TORO O-T-570Z-6P PR COM 5 SERIES TURF SPRAY, 6" POPUP WITH PRESSURE REGULATOR AND CHECK VALVE, PRECISION SERIES SPRAY NOZZLES.	30	STD. 2013
	TORO O-T-570Z-6P PR COM 8 SERIES TURF SPRAY, 6" POPUP WITH PRESSURE REGULATOR AND CHECK VALVE, PRECISION SERIES SPRAY NOZZLES.	30	STD. 2013
	TORO O-T-570Z-6P PR COM 10 SERIES TURF SPRAY, 6" POPUP WITH PRESSURE REGULATOR AND CHECK VALVE, PRECISION SERIES SPRAY NOZZLES.	30	STD. 2013
	HUNTER MP1000 W/MPR40-06-CV-R TURF SPRAY 6" POPUP WITH CHECK VALVE, MP ROTATOR NOZZLE. M=MARCONI ADJ ARC 90 TO 210, O=OLIVE 360 ARC, ON MPR40 6" POPUP BODY WITH PURPLE RECLAIMED BODY CAP.	40	STD. 2013
	HUNTER MP2000 W/MPR40-06-CV-R TURF SPRAY 6" POPUP WITH CHECK VALVE, MP ROTATOR NOZZLE. K=BLACK ADJ ARC 90-210, G=GREEN ADJ ARC 210-270, R=RED 360 ARC, ON MPR40 6" POPUP BODY WITH PURPLE RECLAIMED BODY CAP.	40	STD. 2013
	HUNTER MP3000 W/MPR40-06-CV-R TURF SPRAY 6" POPUP WITH CHECK VALVE, MP ROTATOR NOZZLE. B=BLUE ADJ ARC 90-210, Y=YELLOW ADJ ARC 210-270, A=GRAY 360 ARC, ON MPR40 6" POPUP BODY WITH PURPLE RECLAIMED BODY CAP.	40	STD. 2013
	RAIN BIRD RWS-B-C-P-SOCK ROOT WATERING SYSTEM WITH 4" DIAMETER X 36" LONG WITH LOCKING GRATE, SEMI-RIGID MESH TUBE (FILLED WITH 5/8" PEA GRAVEL), CHECK VALVE AND PURPLE RECLAIMED WATER SOCK, WITH SAND SOCK AND RAIN BIRD BUBBLER OPTION AS INDICATED. 1401 (0.25GPM), 1402 (0.5GPM), 1404 (1.0GPM), 1408 (2.0GPM).	30	STD. 2011

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	PSI	GPM	RADIUS	DETAIL
	TORO TSP-CK-E TURF ROTOR, 5" (127MM) POPUP, PLASTIC RISER, ADJUSTABLE FROM 40 TO 360 DEGREES, WITH CHECK-O-MATIC VALVE AND PURPLE CAP FOR EFFLUENT WATER, 102-7712-T5 NOZZLE TREE KIT FOR NOZZLE AS INDICATED.	45	2.12	31"	STD. 2013
	TORO TSP-CK-E TURF ROTOR, 5" (127MM) POPUP, PLASTIC RISER, ADJUSTABLE FROM 40 TO 360 DEGREES, WITH CHECK-O-MATIC VALVE AND PURPLE CAP FOR EFFLUENT WATER, 102-7712-T5 NOZZLE TREE KIT FOR NOZZLE AS INDICATED.	45	4.10	35"	STD. 2013

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL
	TORO DRIP ZONE VALVE KIT DZK-TPV-1-MF, 1" TPV VALVE, 1" FILTER, AND 25PSI PRESSURE REGULATOR, 1" BALL VALVE. INSTALL PURPLE RECLAIMED WATER ID ON VALVE.	STD. 2019
	HIGH FLOW ZONE CONTROL VALVE 1" TORO TPV VALVE, 1" TORO T-ALFS10150-L FILTER AND T-PR25-HF 25PSI PRESSURE REGULATOR. INSTALL IN JUMBO VALVE BOX WITH PURPLE RECLAIMED WATER ID ON VALVE.	STD. 2019
	TORO FLUSH VALVE T-FCH-H-FIPT AND COMPRESSION FITTING COUPLER. INSTALL VALVE AT THE END EACH DRIP LATERAL RUN IN A 6" ROUND PURPLE VALVE BOX.	STD. 2021
	TORO AIR VENT T-YD-500-34. INSTALL IN 6" PURPLE DRIP VALVE BOX AT HIGHEST POINT IN VALVE ZONE.	STD. 2020
	AREA TO RECEIVE DRIPLINE TORO RGP-418-F (18) LANDSCAPE DRIPLINE 5/8" WITH ROOTGUARD PROTECTION AND 1.02GPH EMITTERS AT 18" O.C., WITH PURPLE TUBING FOR NON-POTABLE WATER. DRIPLINE LATERAL ROWS SPACED AT 18" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN.	STD. 2022 STD. 2023

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL
	TORO 220-27-06 EFT-KIT-60HZ ELECTRIC REMOTE CONTROL VALVE FOR RECLAIMED WATER APPLICATIONS.	STD. 2010
	TORO 100-2SLLVC 1" QUICK COUPLER VALVE, TWO PIECE BODY, SINGLE LUG, LOCKING COVER, WITH NON-POTABLE PURPLE LOCKING COVER. VALVE BOX SHALL HAVE PURPLE LID.	STD. 2014
	NIBCO T-113-K CLASS 125 BRONZE GATE SHUT OFF VALVE WITH WHEEL HANDLE. SAME SIZE AS PIPE DIAMETER. VALVE BOX LID SHALL BE PURPLE.	STD. 2015
	IRRITROL 102P1.5 MASTER VALVE 1-1/2" NORMALLY OPEN, ELECTRIC REMOTE CONTROL MASTER VALVE, 80 HZ SPIKEGUARD SOLENOID, OMNIREG PRESSURE REGULATOR AND EFFLUENT WATER SOLENOID ASSEMBLY AND WARNING TAG. SET PRESSURE REGULATOR TO 80PSI.	STD. 2007
	FEBC0 825YA 1-1/2" REDUCED PRESSURE BACKFLOW PREVENTER INSTALLED WITH A STRONGBOX SBBC-30CR BACKFLOW ENCLOSURE. WATER LINE BETWEEN METER AND BACKFLOW SHALL BE COPPER PIPE.	STD. 2002
	FEBC0 825YA 1-1/2" REDUCED PRESSURE BACKFLOW PREVENTER INSTALLED WITH A STRONGBOX SBBC-30CR BACKFLOW ENCLOSURE. WATER LINE BETWEEN METER AND BACKFLOW SHALL BE COPPER PIPE.	STD. 2002



SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL
	CALSENSE CENTRAL CONTROLLER (QTY. 2) ET2000E-40-LR-RRE/FM1.25B. 40 STATION CONTROLLER INSTALLED IN STAINLESS STEEL ENCLOSURE. ENCLOSURE SHALL BE MYERS MEL222X-ENC-RIV S.S. WITH MYERS PADMOUNT BASE ENCASED IN CONCRETE. COORDINATE 120VAC ELECTRICAL POWER WITH CIVIL ENGINEERING PLAN AND CITY OF RIVERSIDE ELECTRICAL UTILITY. 14AWG WIRE FOR FLOW SENSOR SHALL BE INSTALLED IN 1-1/4" PVC CONDUIT. CONTROLLER AND SENSORS SHALL BE INSTALLED PER CITY AND MANUFACTURER'S DETAILS AND SPECIFICATIONS. CONTACT ERIN HAGEN OF CALSENSE 760-580-1835.	STD. 2018
	CALSENSE FM-1.25B 1-1/4" FLOW METER BRONZE, MIN. FLOW 5GPM, MAX FLOW 81GPM.	STD. 2007
	WIRE BUNDLE (AS INDICATED FOR FUTURE USE) SPARE CONTROL WIRE BUNDLE FOR FUTURE USE IN JUNCTION BOX. P=PILOT WIRES, C=COMMON WIRES BUNDLED. COIL WIRES IN VALVE BOX, AND RUN CONTINUOUS WIRE BACK TO CONTROLLER. LABEL EACH WIRE WITH A PLASTIC I.D. TAG AT THE WIRE BUNDLE AND AT THE CONTROLLER.	STD. 2004
	EZ-FLO FERTILIZER INJECTOR MODEL EX001-CX WITH EZ COUPLING CONNECTOR. INSTALLED BELOW GRADE IN A CONCRETE VALVE BOX. EZ-FLO 866-393-5601.	STD. 2024

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL
	WATER METER 1-1/2" STATIC WATER PRESSURE 71-91PSI, CITY OF RIVERSIDE WATER UTILITY DEPARTMENT (951) 826-5285	STD. 2001
	WATER METER 1-1/2" STATIC WATER PRESSURE 71-91PSI, CITY OF RIVERSIDE WATER UTILITY DEPARTMENT (951) 826-5285	STD. 2001
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40 ALL PIPE SHALL BE PURPLE AND MARKED FOR RECLAIMED WATER USE.	STD. 2001
	IRRIGATION MAINLINE: PVC SCHEDULE 40/CLASS 315 USE SCH. 40 PVC FOR 1-1/2" AND SMALLER, CLASS 315 PVC FOR 2" AND LARGER. USE SOLVENT WELD SCH. 80 PVC FOR ALL MAINLINE FITTINGS. ALL PIPE SHALL BE PURPLE AND MARKED FOR RECLAIMED WATER USE.	STD. 2001
	PIPE SLEEVE: PVC SCHEDULE 40 TYPICAL PIPE SLEEVE FOR IRRIGATION PIPE. PIPE SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION.	STD. 2003

CRITICAL ANALYSIS

P.O.C. NUMBER: A
Water Source Information: Static water pressure 71-91PSI, City of Riverside Water Utility Department (951) 826-5285

FLOW AVAILABLE	Water Meter Size: 1-1/2"
	Flow Available: 70.55 gpm
PRESSURE AVAILABLE	Static Pressure at POC: 80.00 psi
	Service Line Size: 2"
	Length of Service Line: 20.00 ft
	Pressure Available: 77.00 psi
DESIGN ANALYSIS	Maximum Station Flow: 38.25 gpm
	Flow Available at POC: 70.55 gpm
	Residual Flow Available: 32.29 gpm
Critical Station:	A32
	Design Pressure: 45.00 psi
	Pipe Loss Critical Head: 5.59 psi
	Loss Fitting Factor: 0.56 psi
	Loss through Valve: 3.15 psi
	Pressure Req. at Critical Station: 54.30 psi
	Loss for Fittings: 0.25 psi
	Loss for Main Line: 2.47 psi
	Loss for Backflow: 11.59 psi
	Loss for Water Meter: 1.68 psi
	Critical Station Pressure at POC: 70.29 psi
	Pressure Available: 77.00 psi
	Residual Pressure Available: 6.71 psi

IRRIGATION POINT OF CONNECTION SHALL BE AT POTABLE WATER METER PER CIVIL ENGINEERING PLAN. IRRIGATION SYSTEM EQUIPMENT DESIGNED FOR FUTURE CONVERSION TO RECYCLED WATER. ALL EQUIPMENT INSTALLED DOWNSTREAM OF BACKFLOW DEVICE SHALL BE COLORED PURPLE AND MARKED FOR RECYCLED WATER USE. NOTE: IRRIGATION EQUIPMENT INSTALLED AND MAINTAINED IN PRIVATE RESIDENTIAL LOTS NEED NOT BE MARKED AND COLORED FOR RECYCLED WATER.

AS BUILT (NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

PLAN CROSS REFERENCE
IRRIGATION LEGEND, REFER TO SHEET IP-1
PLANTING PLAN, REFER TO SHEET PP-1

REFER TO CITY OF RIVERSIDE PUBLIC WORKS LANDSCAPE SPECIFICATIONS AND GUIDELINES FOR INSTALLATION DETAILS.



CITY OF RIVERSIDE
ELECTRICAL SERVICE APPROVAL BLOCK
APPROVED BY: _____
DATE: _____

CITY OF RIVERSIDE
WATER SERVICE APPROVAL BLOCK
APPROVED BY: _____
DATE: _____

IMPORTANT NOTICE
Section 4218/4217 of the Government Code requires a dig alert identification number to be issued before a permit to excavate and be valid for your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

RA
LANDSCAPE ARCHITECTS
6216 BROCKTON AVE., SUITE 212
RIVERSIDE, CALIFORNIA 92506
LIC. #1512
PH. (951) 781-1930
FAX (951) 686-8091

LANDSCAPE ARCHITECT
MICHAEL WOLFF
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

DESIGNED BY: DD DRAWN BY: DD CHECKED BY: DD

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LANDSCAPE IRRIGATION PLAN IP-1
HORIZ. SCALE: 1" = 20' VERT. SCALE: N/A

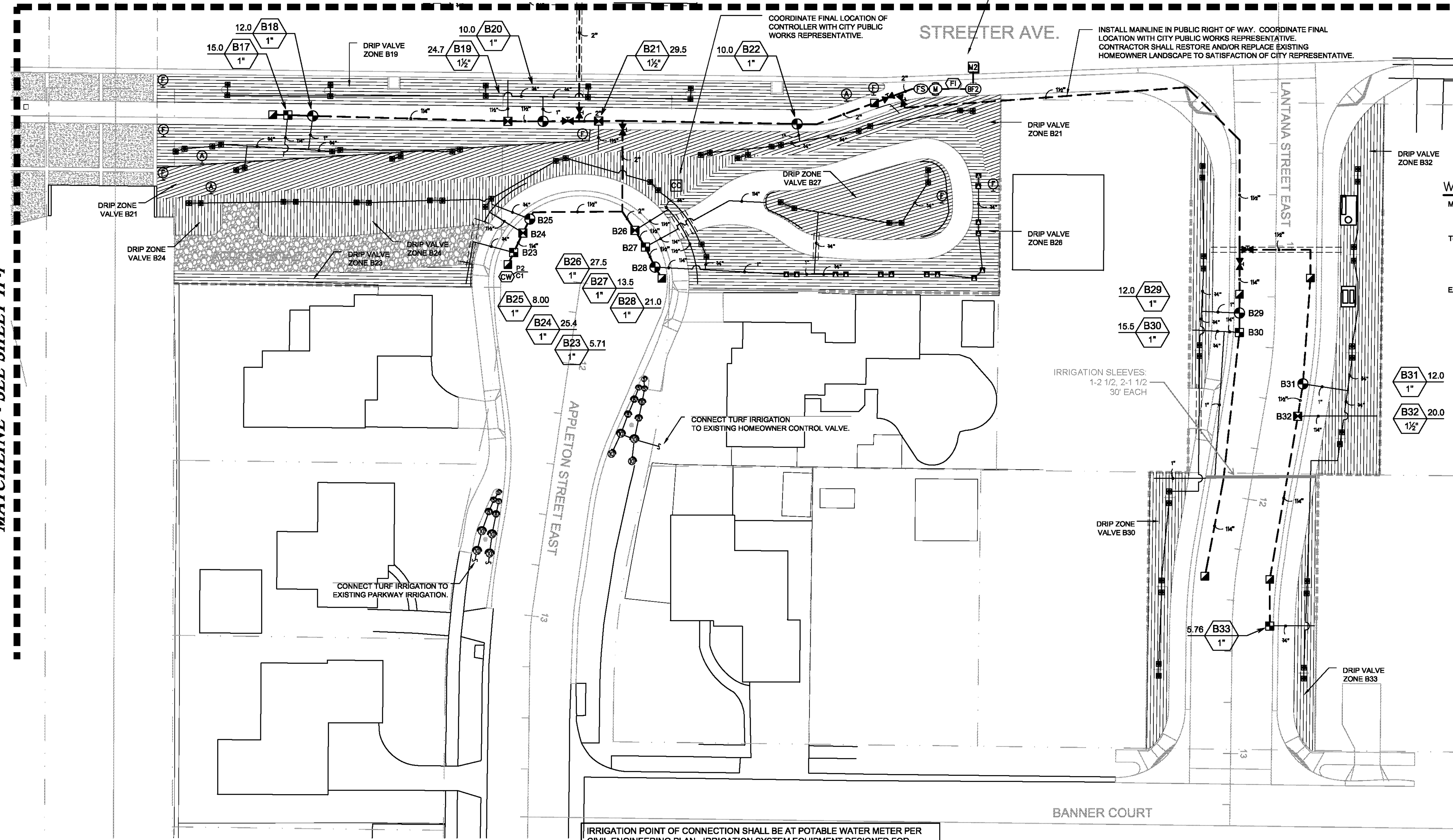
R-4180L
SHEET 128 OF 191
FILE NO.

One inch on Original Sheet Drawing File: N:\Projects\09\proj09\42\Streeter_Crossing\Separation\AutoCAD\DWG\IP-1.dwg Aug 08, 2015 - 3:25pm

MATCHLINE - SEE SHEET IP-1

MATCHLINE - SEE SHEET IP-3

- MAKE IRRIGATION POINT OF CONNECTION AT 1-1/2" IRRIGATION WATER METER INSTALLED PER CIVIL ENGINEERING PLANS. INSTALL AS FOLLOWS:
- 1-1/2" REDUCED PRESSURE BACKFLOW DEVICE, FEBCO B25YA. INSTALL STRONGBOX 'SBBC-30CR' ENCLOSURE PER MANUFACTURER'S DETAILS. CONTRACTOR SHALL CERTIFY ALL BACKFLOW INSTALLATIONS.
 - FERTILIZER INJECTOR
 - 1-1/2" PRESSURE REGULATING IRRIGATION MASTER VALVE. CONNECT TO MASTER VALVE OUTPUT AT CONTROLLER 'B', SET PRESSURE REDUCING MASTER VALVE AT 80 PSI. REFER TO IRRIGATION DETAILS FOR ADDITIONAL INFORMATION.
 - 1-1/4" FLOW SENSOR, CALSENSE FM-1.25B, INSTALL PER MANUFACTURER'S INSTRUCTIONS AND PER IRRIGATION DETAILS. CONNECT TO CONTROLLER 'B' USING STANDARD #14 AWG IRRIGATION WIRE (BLACK AND RED). PERFORM ALL INSTALLATIONS AS PER MANUFACTURER'S INSTRUCTIONS.
 - EXTEND MAIN LINE TO VALVES AS SHOWN.
 - CONTRACTOR SHALL PROVIDE THE CITY WITH CAL SENSE CERTIFICATION LETTER FOR ALL CONTROLLER INSTALLATIONS.
 - ALL OF THESE COMPONENTS SHALL BE LOCATED IN STREET PARKWAY.



WATER ALLOWANCE

MAAWU for Project Name	
Square Footages	
Fescue Turf:	18,365 s.f. 0.42 ac
Shrubs & Ground Covers:	87,480 s.f. 2.01 ac
Total Landscape Area (TLA) Square Footage:	105,825 s.f. 2.43 ac
MAAWU =	56.6 x 0.70 x 105,825 x 0.62
MAAWU =	2,599,528 gal per year
	347,505 cubic feet per year
EAWU for Project Name	
Square Footages	
Fescue Turf:	18,365 s.f. 0.42 ac
Shrubs & Ground Covers:	87,480 s.f. 2.01 ac
Total Square Footage	105,825 s.f.
Total Acres:	2.43 ac
Hydrozone 1 - Fescue Turf areas	
EAWU =	56.6 x 0.80 x 18,365 x 0.62
	0.90 x 0.85
EAWU =	515,950
	0.77
EAWU =	673,950 gal per year
	90,094 cubic feet per year
Hydrozone 2 - Shrub & Ground Cover Areas	
EAWU =	55.6 x 0.45 x 87,480 x 0.62
	0.9 x 0.85
EAWU =	1,381,116
	0.77
EAWU =	1,805,380 gal per year
	241,343 cubic feet per year
Total EAWU for site	1,805,380 gal per year
	241,343 cubic feet per year

CRITICAL ANALYSIS

P.O.C. NUMBER: B

Water Source Information: Static water pressure 71-91PSI, City of Riverside Water Utility Department (951) 826-5285

FLOW AVAILABLE

Water Meter Size: 1-1/2"

Flow Available: 70.55 gpm

PRESSURE AVAILABLE

Static Pressure at POC: 80.00 psi

Length of Service Line: 20.00 ft

Pressure Available: 77.00 psi

DESIGN ANALYSIS

Maximum Station Flow: 32.06 gpm

Flow Available at POC: 70.55 gpm

Residual Flow Available: 38.49 gpm

Critical Station: B6

Design Pressure: 40.00 psi

Pipe Loss Critical Head: 6.45 psi

Loss Fitting Factor: 0.65 psi

Loss through Valve: 3.10 psi

Pressure Req. at Critical Station: 50.20 psi

Loss for Fittings: 0.25 psi

Loss for Main Line: 2.49 psi

Loss for Backflow: 11.80 psi

Loss for Water Meter: 1.79 psi

Critical Station Pressure at POC: 68.33 psi

Pressure Available: 77.00 psi

Residual Pressure Available: 10.67 psi

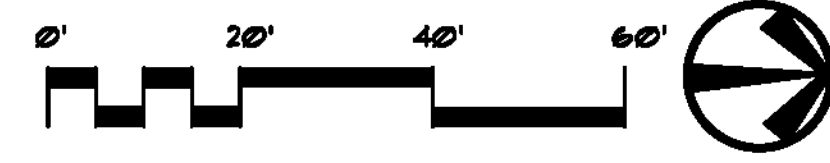
IRRIGATION POINT OF CONNECTION SHALL BE AT POTABLE WATER METER PER CIVIL ENGINEERING PLAN. IRRIGATION SYSTEM EQUIPMENT DESIGNED FOR FUTURE CONVERSION TO RECYCLED WATER. ALL EQUIPMENT INSTALLED DOWNSTREAM OF BACKFLOW DEVICE SHALL BE COLORED PURPLE AND MARKED FOR RECYCLED WATER USE.

NOTE: IRRIGATION EQUIPMENT INSTALLED AND MAINTAINED IN PRIVATE RESIDENTIAL LOTS NEED NOT BE MARKED AND COLORED FOR RECYCLED WATER.

AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

PLAN CROSS REFERENCE
 IRRIGATION LEGEND, REFER TO SHEET IP-1
 PLANTING PLAN, REFER TO SHEET PP-2

REFER TO CITY OF RIVERSIDE PUBLIC WORKS LANDSCAPE SPECIFICATIONS AND GUIDELINES FOR INSTALLATION DETAILS.



CITY OF RIVERSIDE
 ELECTRICAL SERVICE APPROVAL BLOCK

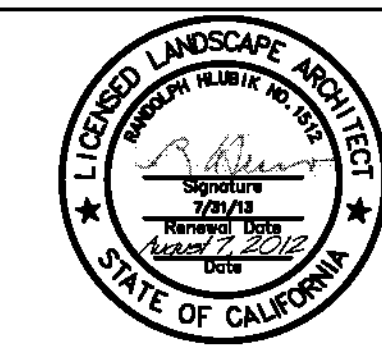
APPROVED BY: _____
 DATE: _____

CITY OF RIVERSIDE
 WATER SERVICE APPROVAL BLOCK

APPROVED BY: _____
 DATE: _____



RA
 LANDSCAPE ARCHITECTS
 6216 BROCKTON AVE., SUITE 212
 RIVERSIDE, CALIFORNIA 92506
 LIC. #1512
 PH. (951) 781-1930
 FAX (951) 686-8091



MARK	REVISIONS	APPR.	DATE
DESIGNED BY: <u>DD</u>	DRAWN BY: <u>DD</u>	CHECKED BY: <u>DD</u>	

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT

STREETER AVENUE UNDERPASS

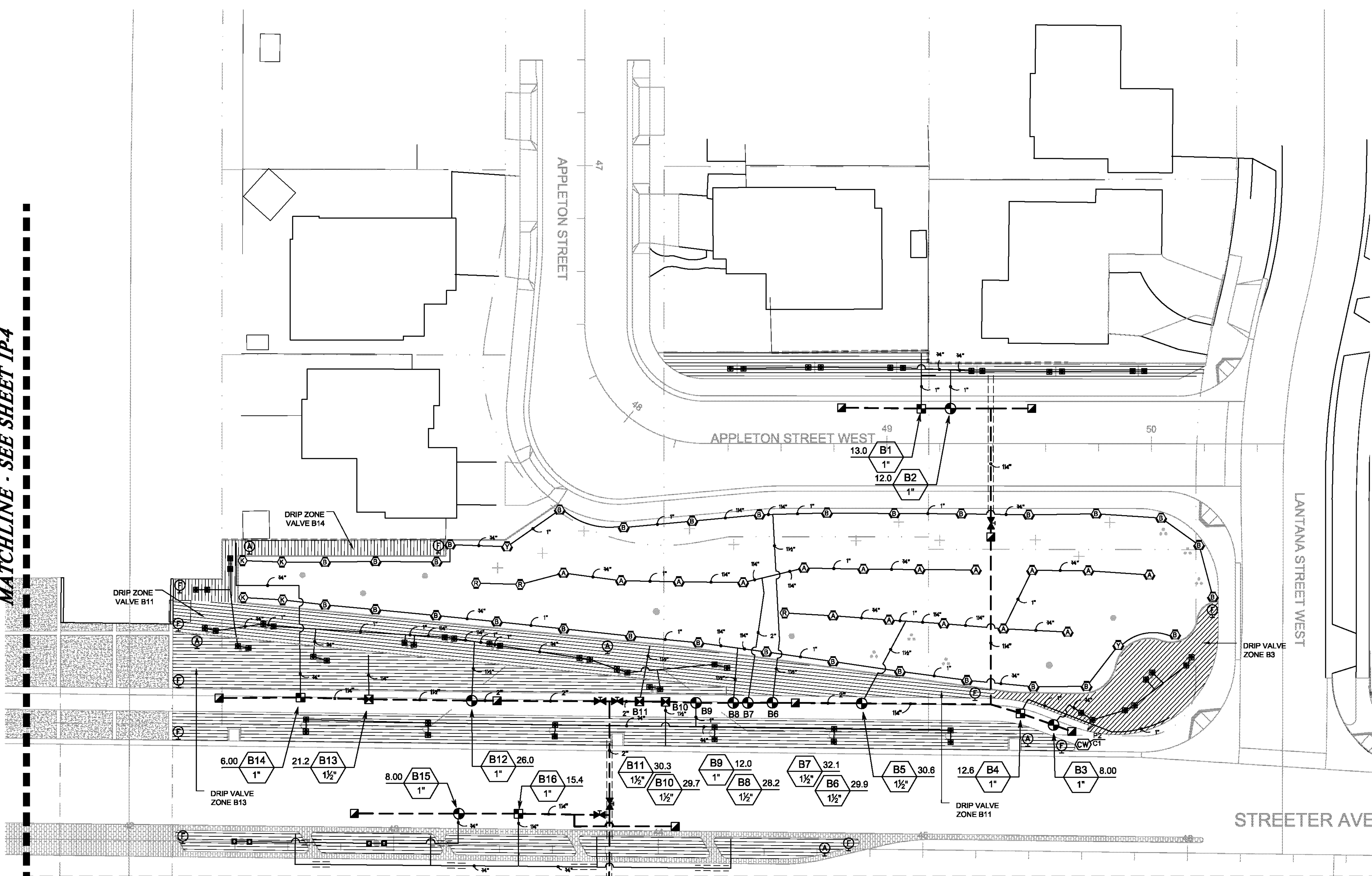
LANDSCAPE IRRIGATION PLAN IP-2

HORIZ. SCALE: 1" = 20' VERT. SCALE: N/A

R-4180L
 SHEET 129 OF 191
 FILE NO.

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MATCHLINE - SEE SHEET IP-4



MATCHLINE - SEE SHEET IP-2

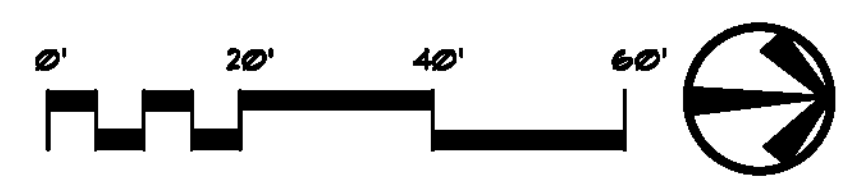
VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	PSI	PSI @ POC	GPM	PREC
A1	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	44.92	59.26	14.90	0.80 IF
A2	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	45.49	62.30	22.04	0.80 IF
A3	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	38.50	57.04	26.00	30.64
A4	TORO 220-27-06 EFT-KIT-60HZ	1-1/2"	BUBBLER	38.91	58.91	30.00	19.98
A5	HIGH FLOW ZONE CONTROL VALVE	1-1/2"	AREA FOR DRIPLINE	42.33	66.59	38.25	0.80 IF
A6	HIGH FLOW ZONE CONTROL VALVE	1-1/2"	AREA FOR DRIPLINE	37.26	55.00	26.49	0.80 IF
A7	TORO 220-27-06 EFT-KIT-60HZ	1"	TURF ROTARY	45.35	67.13	37.14	0.56 IF
A8	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	37.15	50.18	16.00	30.64
A9	HIGH FLOW ZONE CONTROL VALVE	1-1/2"	AREA FOR DRIPLINE	36.14	51.27	23.61	0.80 IF
A10	HIGH FLOW ZONE CONTROL VALVE	1-1/2"	AREA FOR DRIPLINE	37.54	53.42	26.77	0.80 IF
A11	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	38.22	53.79	26.00	30.64
A12	HIGH FLOW ZONE CONTROL VALVE	1-1/2"	AREA FOR DRIPLINE	40.39	58.45	34.58	0.80 IF
A13	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	38.01	49.29	6.46	0.80 IF
A14	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	33.59	44.77	4.00	61.27
A15	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	37.29	48.86	5.87	0.80 IF
A16	HIGH FLOW ZONE CONTROL VALVE	1-1/2"	AREA FOR DRIPLINE	37.22	51.31	26.48	0.80 IF
A17	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	45.29	57.94	18.40	0.80 IF
A18	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	33.98	45.19	8.00	30.64
A19	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	35.37	47.85	18.00	30.64
A20	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	35.57	48.58	12.00	30.64
A21	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	45.83	60.93	17.81	0.80 IF
A22	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	41.02	52.83	9.19	0.80 IF
A23	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	45.41	58.05	18.49	0.80 IF
A24	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	36.49	48.40	14.00	30.64
A25	HIGH FLOW ZONE CONTROL VALVE	1-1/2"	AREA FOR DRIPLINE	37.21	51.25	25.77	0.80 IF
A26	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	38.48	47.78	8.00	30.64
A27	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	38.53	49.78	6.81	0.80 IF
A28	HIGH FLOW ZONE CONTROL VALVE	1-1/2"	AREA FOR DRIPLINE	38.07	53.82	27.52	0.80 IF
A29	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	35.44	46.90	9.00	19.70
A30	TORO 220-27-06 EFT-KIT-60HZ	1-1/2"	TURF ROTOR	53.70	67.48	20.64	0.68 IF
A31	TORO 220-27-06 EFT-KIT-60HZ	1-1/2"	TURF ROTOR	51.68	66.47	24.60	0.36 IF
A32	TORO 220-27-06 EFT-KIT-60HZ	1-1/2"	TURF ROTOR	54.29	70.29	28.84	0.71 IF
B1	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	44.21	58.41	12.96	0.80 IF
B2	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	34.66	48.27	12.00	30.64
B3	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	34.74	46.44	8.00	30.64
B4	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	45.42	58.08	12.57	0.80 IF
B5	TORO 220-27-06 EFT-KIT-60HZ	1-1/2"	TURF ROTARY	46.95	63.60	30.59	0.36 IF
B6	TORO 220-27-06 EFT-KIT-60HZ	1-1/2"	TURF ROTARY	50.20	66.33	29.89	0.31 IF
B7	TORO 220-27-06 EFT-KIT-60HZ	1-1/2"	TURF ROTARY	45.55	62.35	32.06	0.32 IF
B8	TORO 220-27-06 EFT-KIT-60HZ	1-1/2"	TURF ROTARY	48.05	63.59	28.15	0.32 IF
B9	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	35.90	47.70	12.00	30.64
B10	HIGH FLOW ZONE CONTROL VALVE	1-1/2"	AREA FOR DRIPLINE	38.39	54.12	29.68	0.80 IF
B11	HIGH FLOW ZONE CONTROL VALVE	1-1/2"	AREA FOR DRIPLINE	38.79	54.64	30.33	0.80 IF
B12	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	38.08	53.09	26.00	30.64
B13	HIGH FLOW ZONE CONTROL VALVE	1-1/2"	AREA FOR DRIPLINE	35.71	50.06	21.22	0.80 IF
B14	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	39.77	51.12	6.00	0.80 IF
B15	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	36.04	47.56	8.00	61.27
B16	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	47.20	60.04	15.45	0.80 IF
B17	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	44.85	58.37	14.95	0.80 IF
B18	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	34.37	46.83	12.00	30.64
B19	HIGH FLOW ZONE CONTROL VALVE	1-1/2"	AREA FOR DRIPLINE	36.50	50.75	24.73	0.80 IF
B20	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	35.03	46.35	10.00	30.64
B21	HIGH FLOW ZONE CONTROL VALVE	1-1/2"	AREA FOR DRIPLINE	38.18	52.76	29.46	0.80 IF
B22	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	33.66	44.84	10.00	30.64
B23	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	37.73	48.97	5.71	0.80 IF
B24	HIGH FLOW ZONE CONTROL VALVE	1-1/2"	AREA FOR DRIPLINE	36.81	51.62	25.41	0.80 IF
B25	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	36.60	47.91	8.00	30.64
B26	HIGH FLOW ZONE CONTROL VALVE	1-1/2"	AREA FOR DRIPLINE	38.19	52.64	27.47	0.80 IF
B27	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	44.29	58.22	13.53	0.80 IF
B28	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	36.63	50.06	21.00	22.98
B29	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	37.22	49.72	12.00	30.64
B30	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	46.76	60.49	15.47	0.80 IF
B31	TORO 220-27-06 EFT-KIT-60HZ	1"	BUBBLER	35.33	47.95	12.00	30.64
B32	HIGH FLOW ZONE CONTROL VALVE	1-1/2"	AREA FOR DRIPLINE	35.69	51.49	20.05	0.80 IF
B33	TORO DRIP ZONE VALVE KIT	1"	AREA FOR DRIPLINE	37.31	48.97	5.76	0.80 IF

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

PLAN CROSS REFERENCE
 IRRIGATION LEGEND, REFER TO SHEET IP-1
 PLANTING PLAN, REFER TO SHEET PP-3

REFER TO CITY OF RIVERSIDE PUBLIC WORKS
 LANDSCAPE SPECIFICATIONS AND GUIDELINES
 FOR INSTALLATION DETAILS.



CITY OF RIVERSIDE
 ELECTRICAL SERVICE APPROVAL BLOCK
 APPROVED BY: _____
 DATE: _____

CITY OF RIVERSIDE
 WATER SERVICE APPROVAL BLOCK
 APPROVED BY: _____
 DATE: _____

IMPORTANT NOTICE
 Section 4216/4217 of the Government Code
 requires a Dig Alert identification
 Number to be issued before a
 permit to dig is issued. Call for more
 information. For your Dig Alert I.D. Number call
 CALL TOLL FREE
 48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
 1-800-227-2600

RA
 LANDSCAPE ARCHITECTS
 6216 BROCKTON AVE., SUITE 212
 RIVERSIDE, CALIFORNIA 92506
 LIC. #1512
 PH. (951) 781-1930
 FAX (951) 686-8091



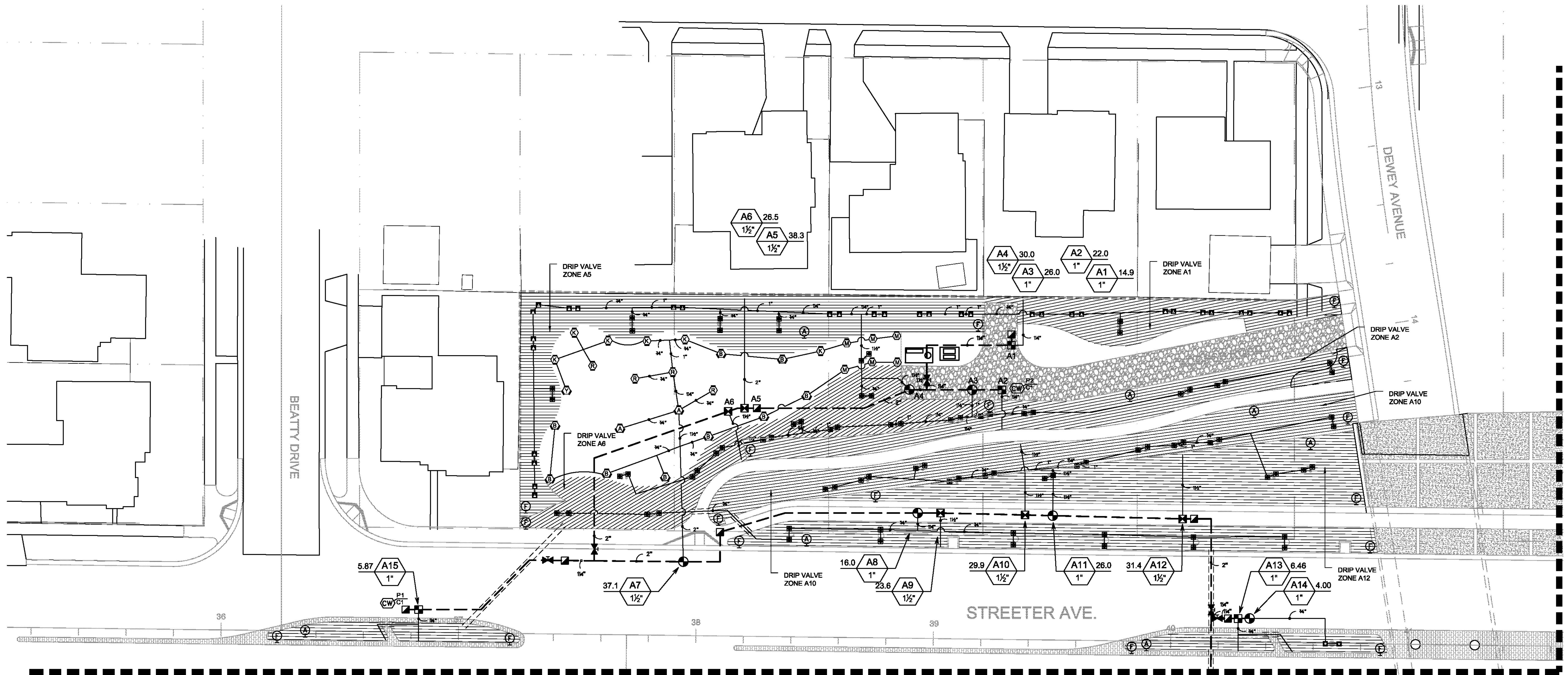
MARK	REVISIONS	APPR.	DATE

DESIGNED BY: DD DRAWN BY: DD CHECKED BY: DD

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LANDSCAPE IRRIGATION PLAN IP-3

R-4180L
 SHEET 130 OF 191
 FILE NO. _____

(One inch on Original Sheet) Drawing File: N:\Projects\09\proj08142 Streeter Avenue Underpass\AUCAD\RR\ACD\08142 IP-3.dwg Aug 08, 2015 1:22pm



MATCHLINE - SEE SHEET IP-1

MATCHLINE - SEE SHEET IP-3

AS BUILT
END CORRECTIONS ON THIS SHEET!
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

PLAN CROSS REFERENCE
IRRIGATION LEGEND, REFER TO SHEET IP-1
PLANTING PLAN, REFER TO SHEET PP-4

REFER TO CITY OF RIVERSIDE PUBLIC WORKS
LANDSCAPE SPECIFICATIONS AND GUIDELINES
FOR INSTALLATION DETAILS.



CITY OF RIVERSIDE
ELECTRICAL SERVICE APPROVAL BLOCK
APPROVED BY: _____
DATE: _____

CITY OF RIVERSIDE
WATER SERVICE APPROVAL BLOCK
APPROVED BY: _____
DATE: _____



RA
LANDSCAPE ARCHITECTS
6216 BROCKTON AVE., SUITE 212
RIVERSIDE, CALIFORNIA 92506
LIC. #1512
PH. (951) 781-1930
FAX (951) 686-8091

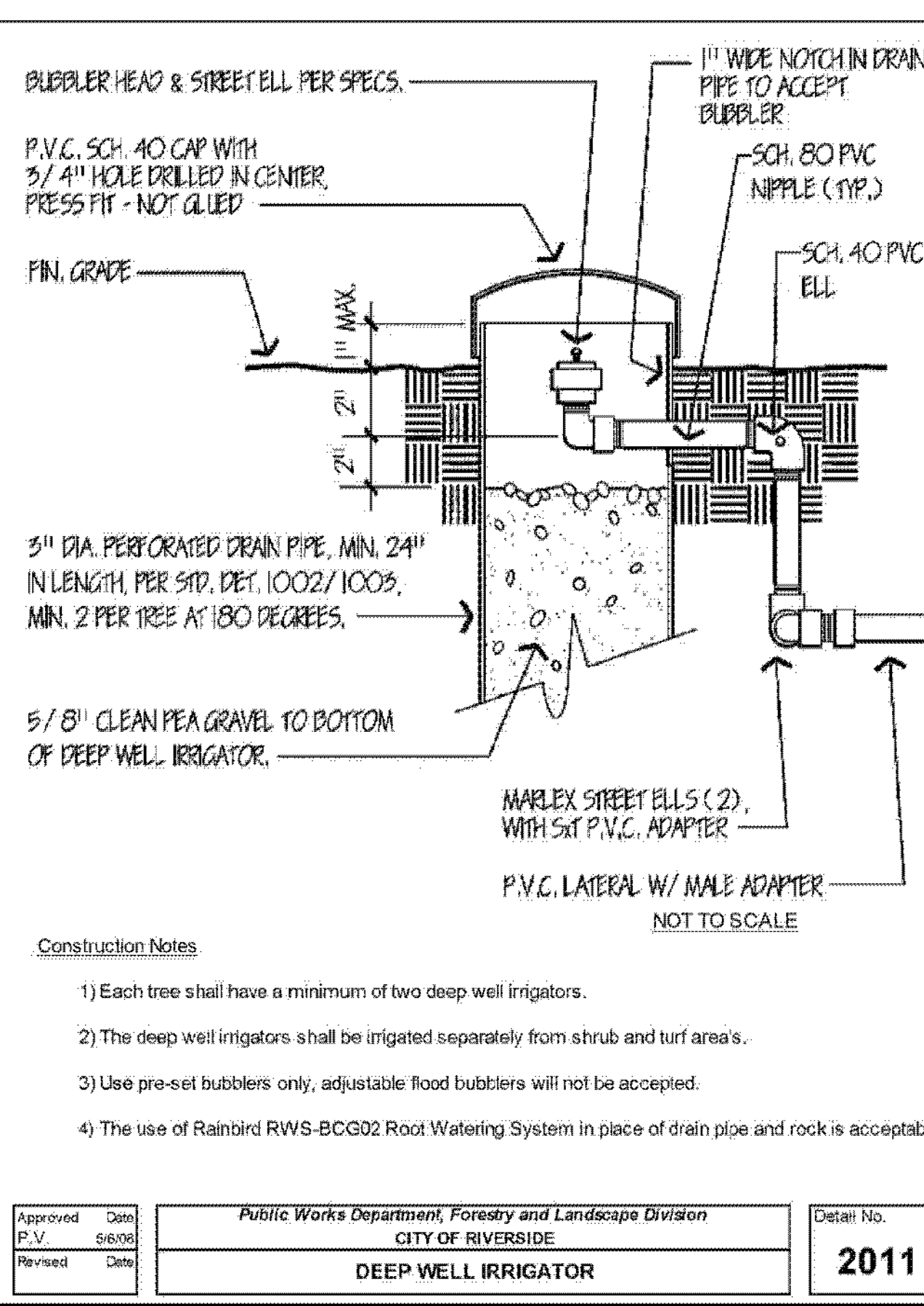
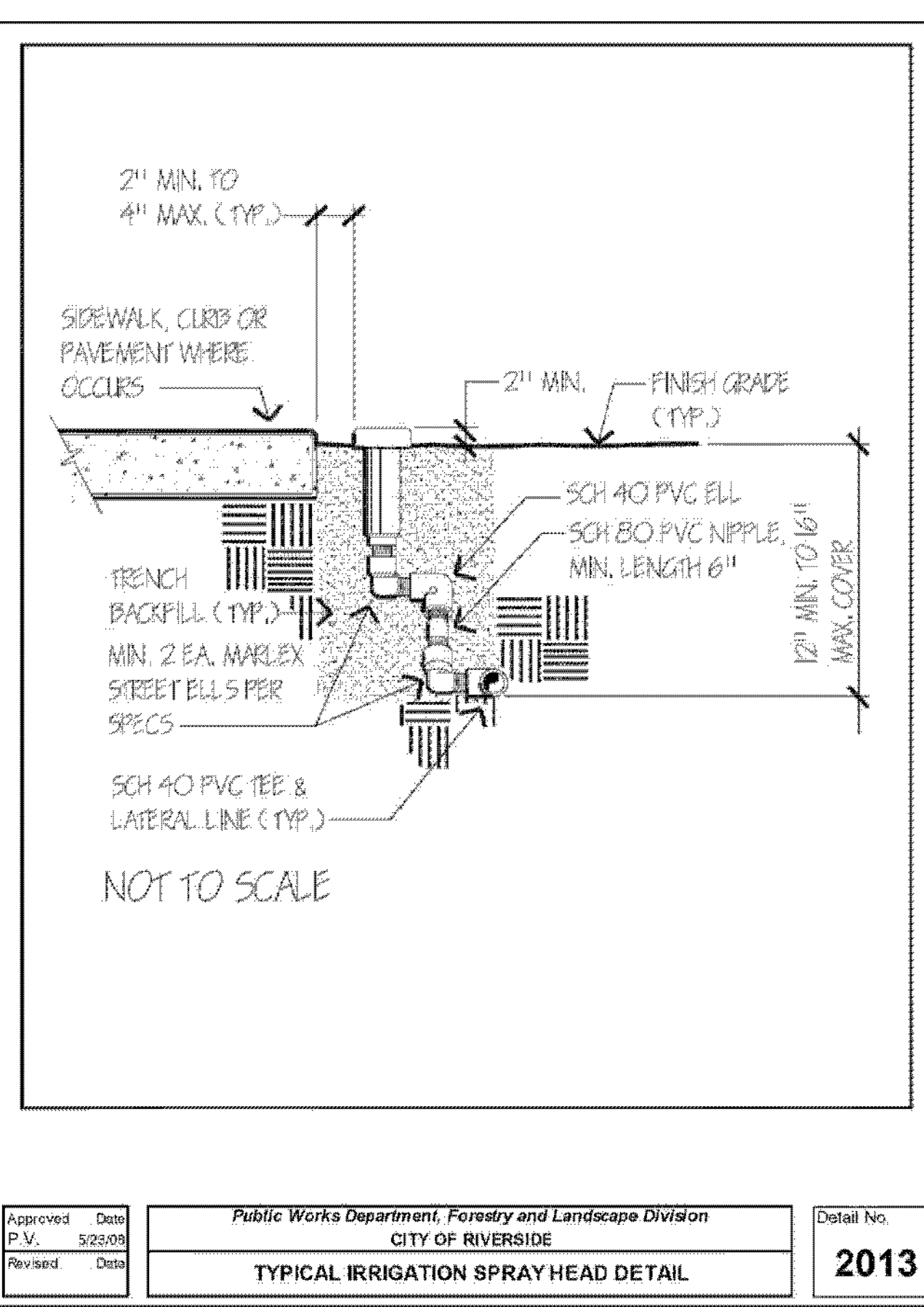
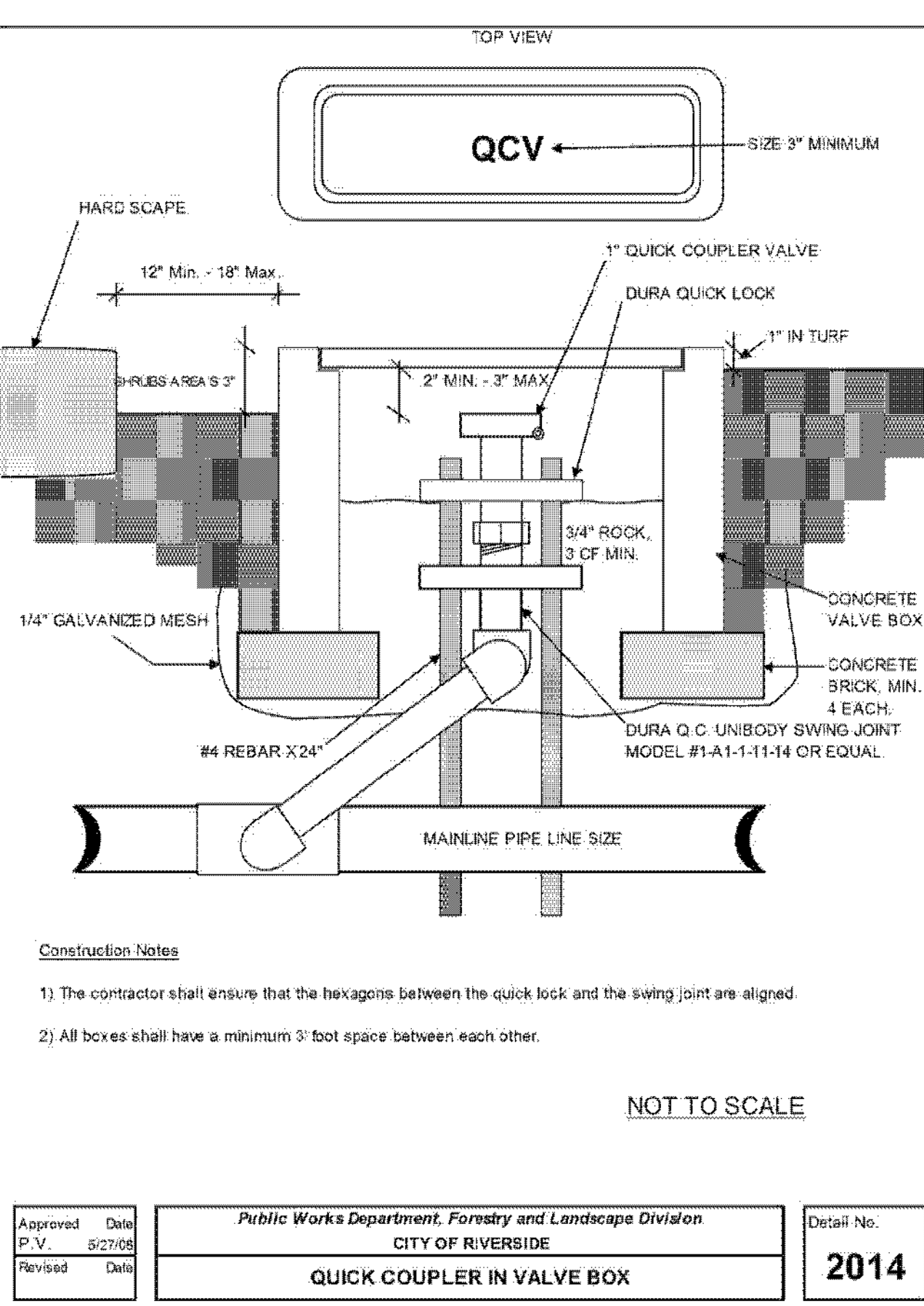
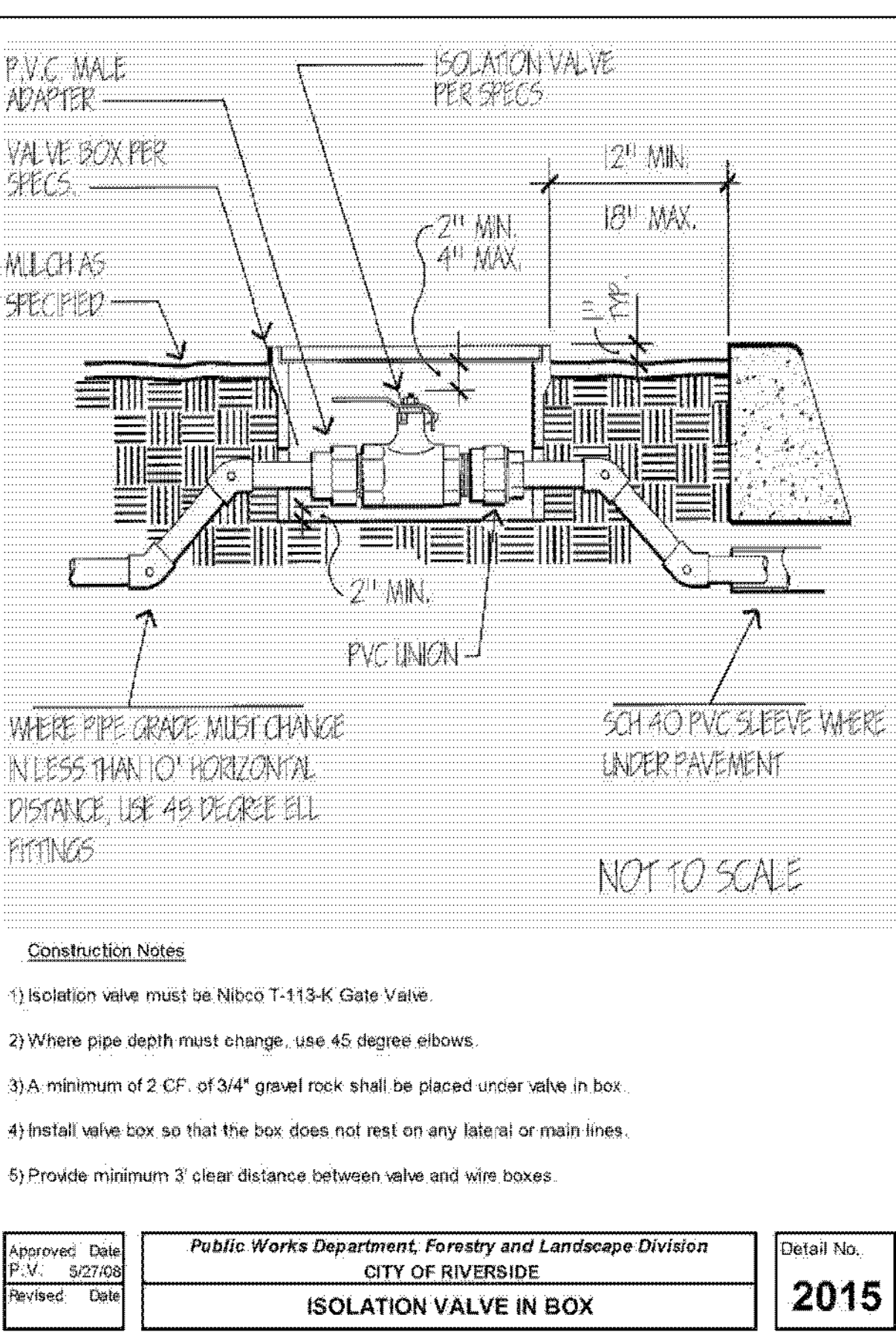
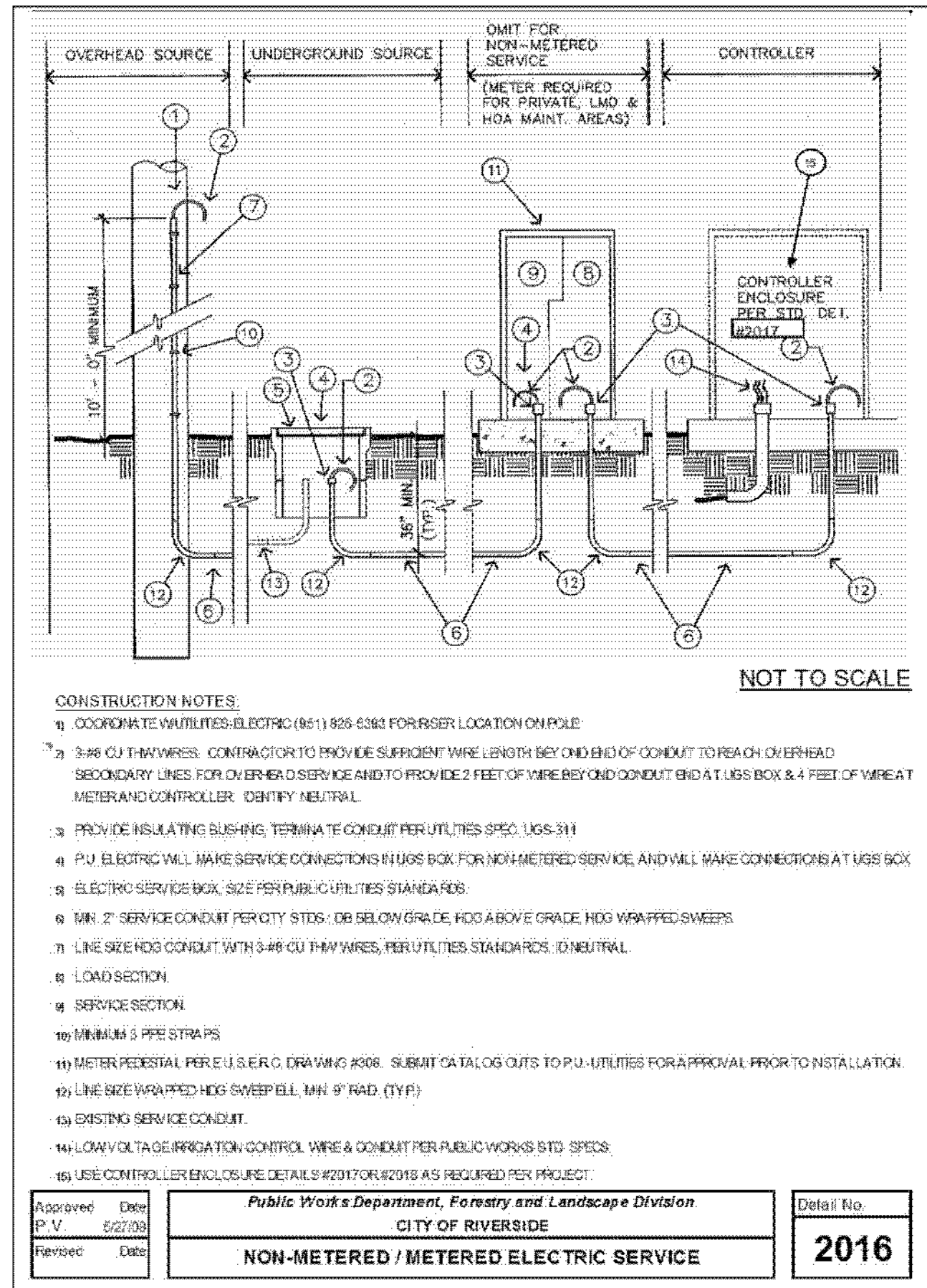
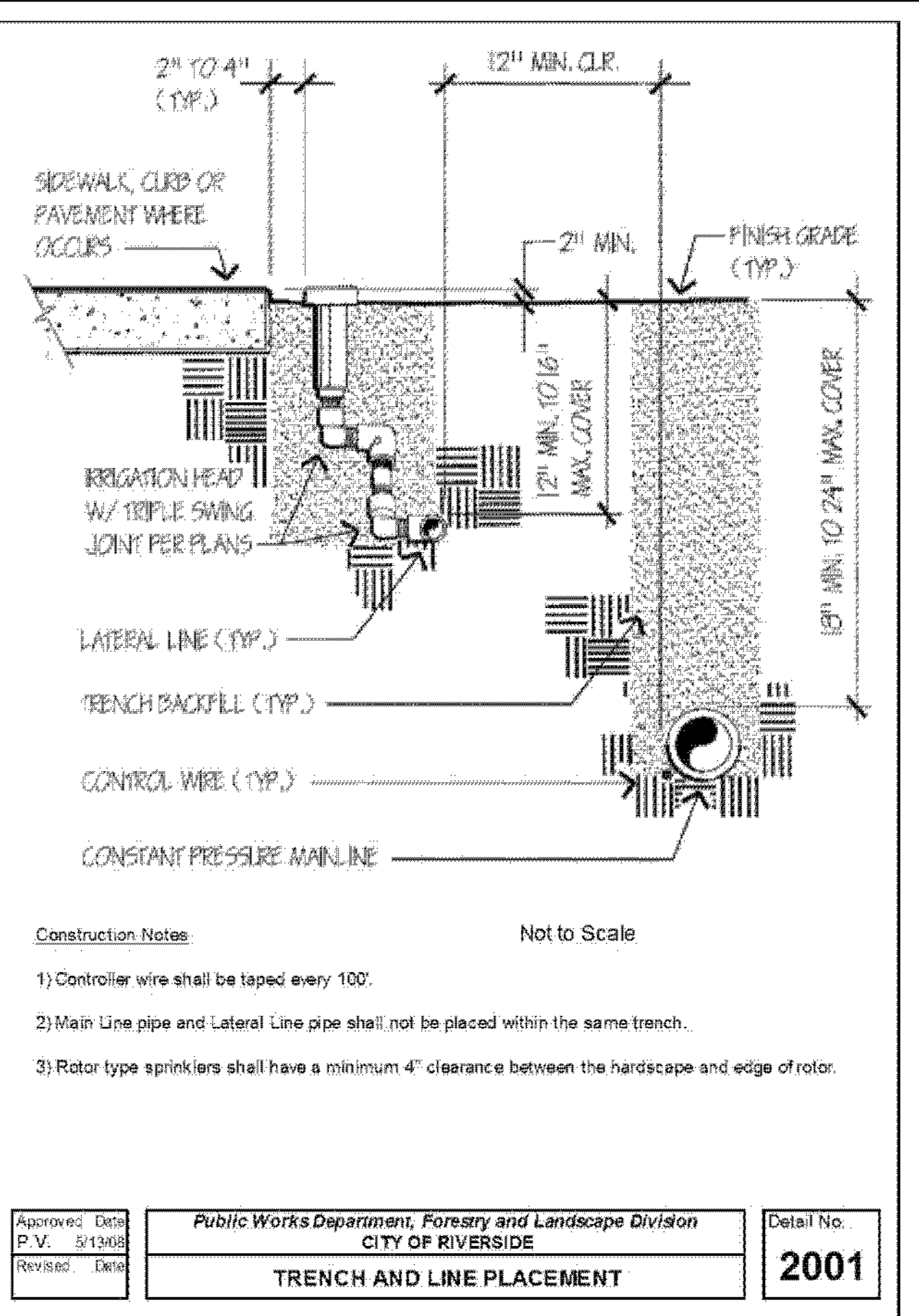
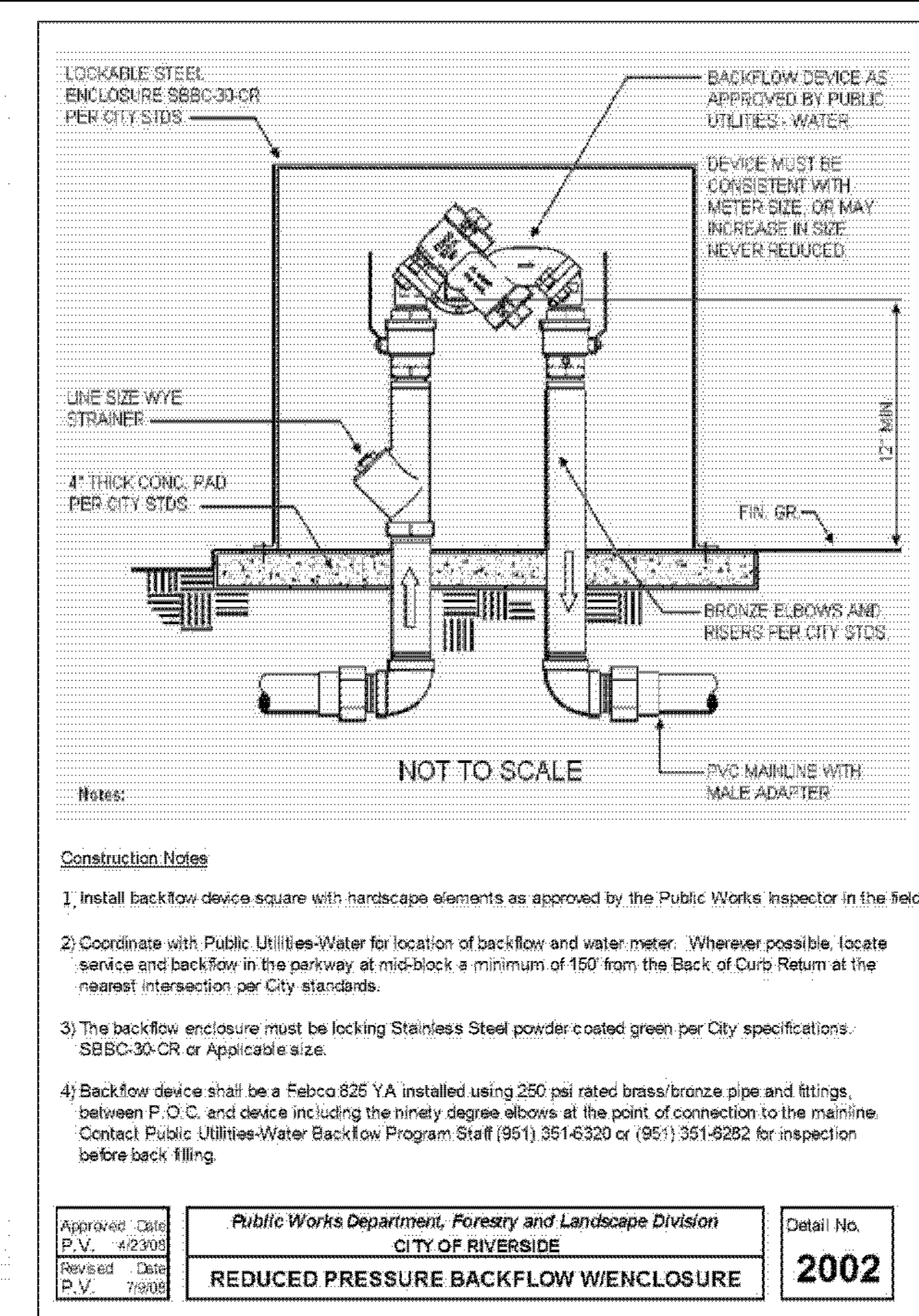
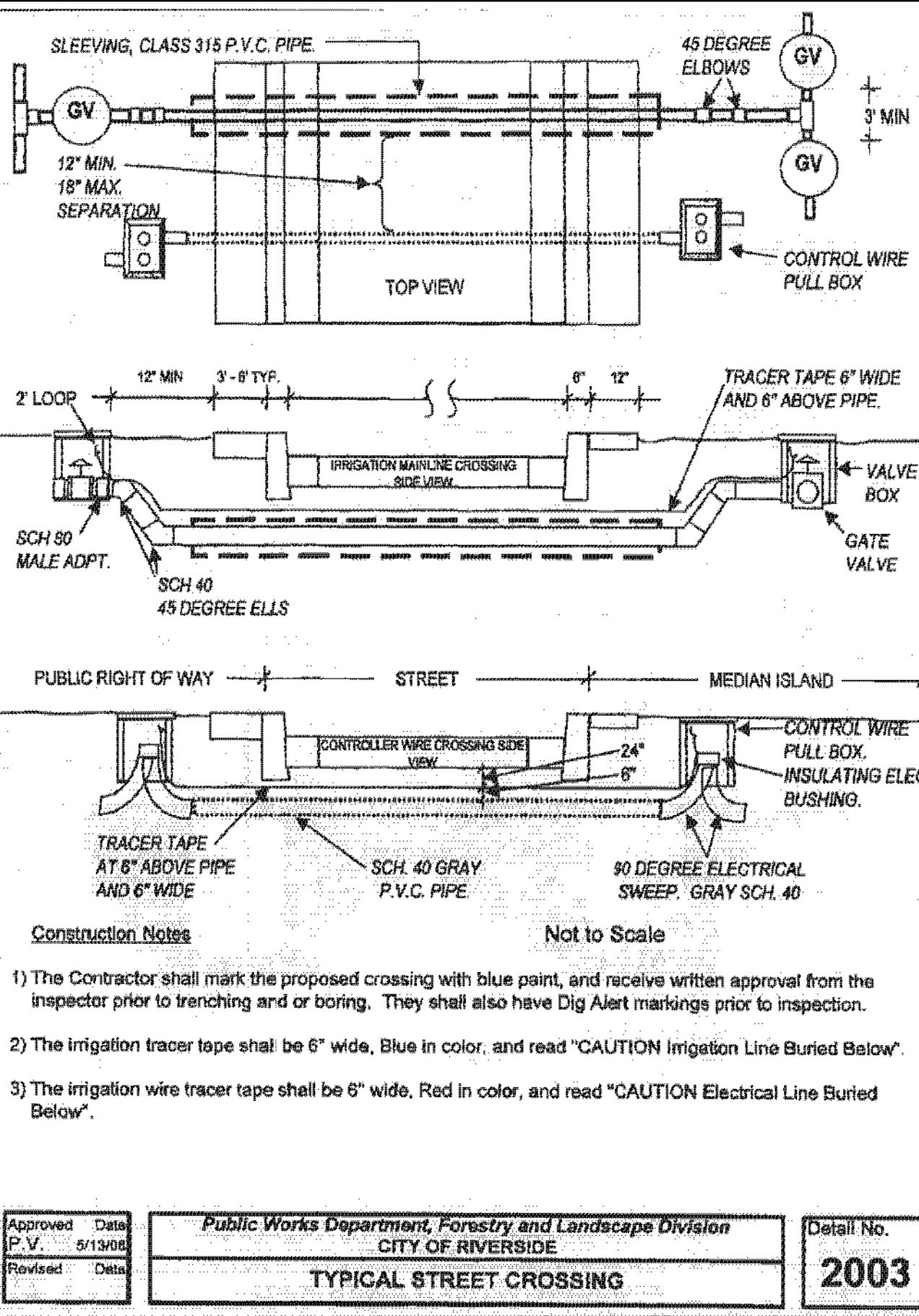
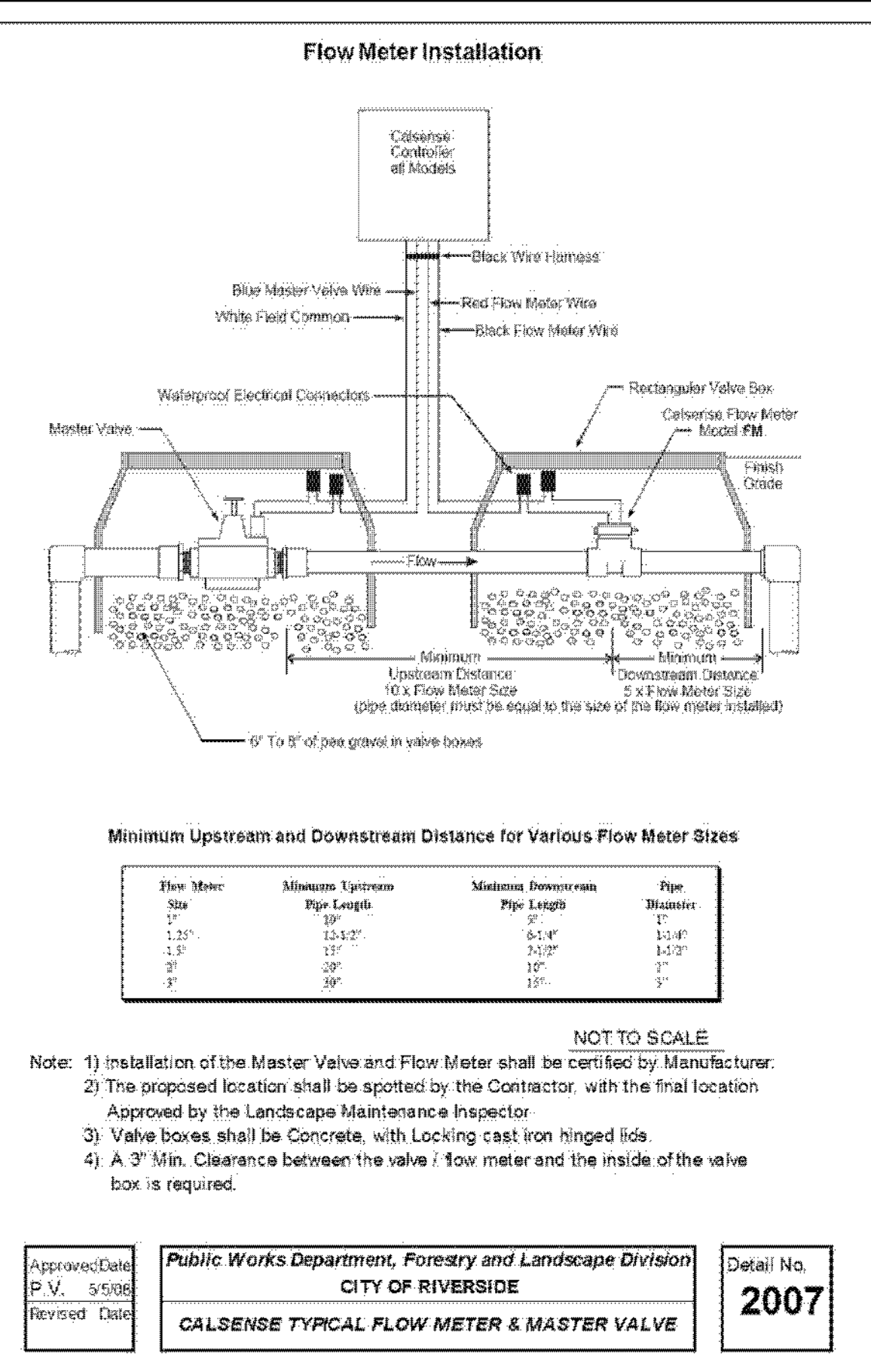
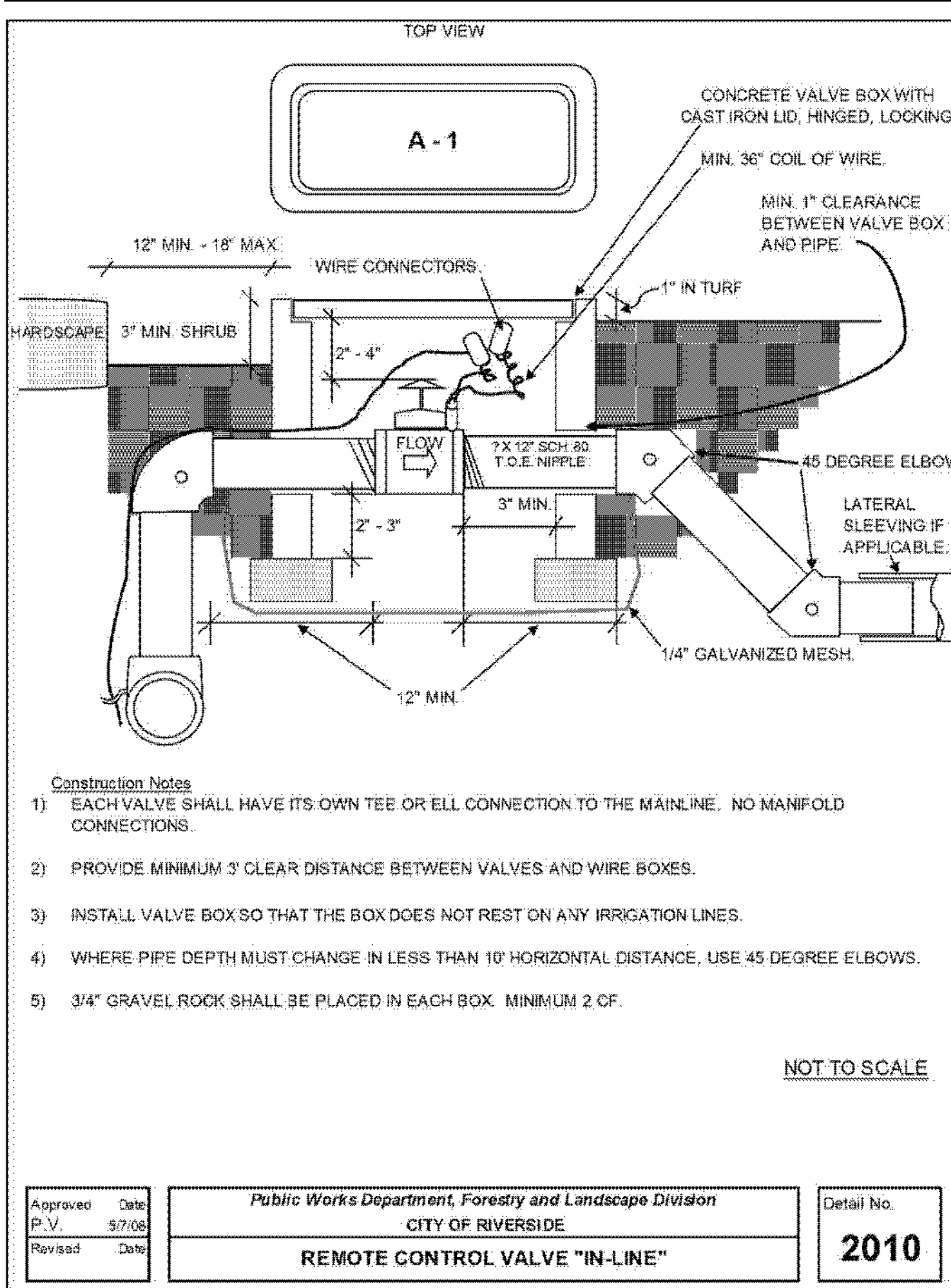


MARK	REVISIONS	APPR.	DATE

DESIGNED BY DD DRAWN BY DD CHECKED BY RT

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LANDSCAPE IRRIGATION PLAN IP-4
HORIZ. SCALE: 1" = 20' VERT. SCALE: N/A

R-4180L
SHEET 131 OF 191
FILE NO.



CITY OF RIVERSIDE
ELECTRICAL SERVICE APPROVAL BLOCK

APPROVED BY: _____
DATE: _____

CITY OF RIVERSIDE
WATER SERVICE APPROVAL BLOCK

APPROVED BY: _____
DATE: _____

IMPORTANT NOTICE
Section 416/417 of the Government Code requires a permit to be issued before a trench is dug. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

RA
LANDSCAPE ARCHITECTS
6216 BROCKTON AVE., SUITE 212
RIVERSIDE, CALIFORNIA 92506
LIC. #1512
PH. (951) 781-1930
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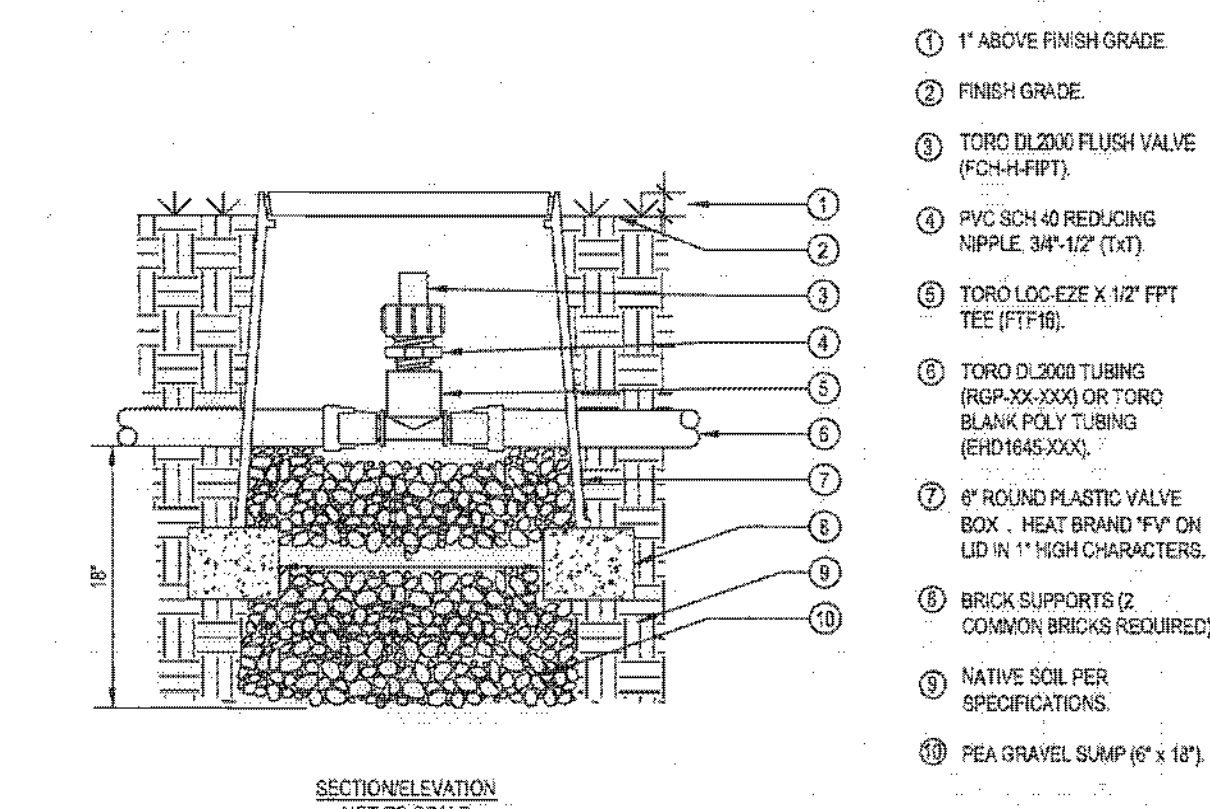
LANDSCAPE ARCHITECT
MICHAEL WOLFF
STATE OF CALIFORNIA

MARK _____ REVISIONS _____ APPR. DATE _____
DESIGNED BY _____ DRAWN BY _____ CHECKED BY _____

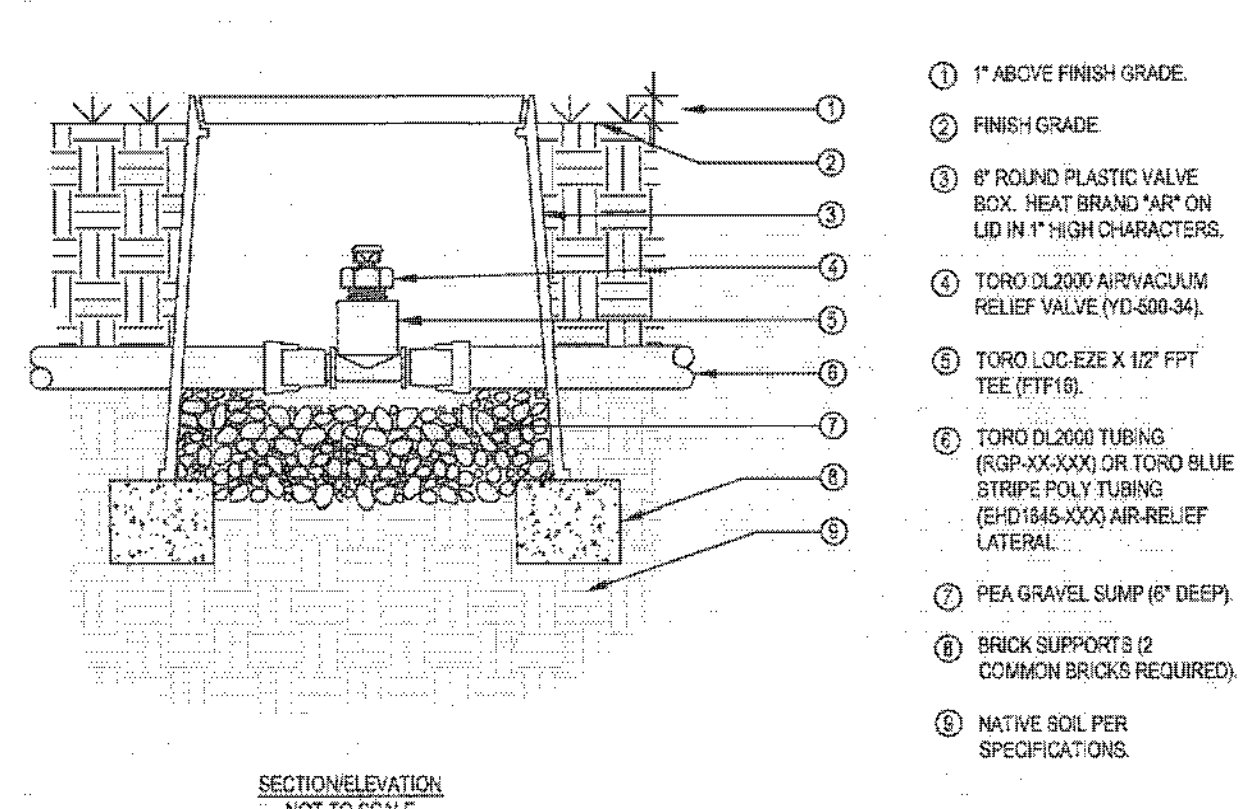
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
IRRIGATION DETAILS ID-1
HORIZ. SCALE: 1" = 20' VERT. SCALE: N/A

R-4180L
SHEET 132 OF 191
FILE NO. _____

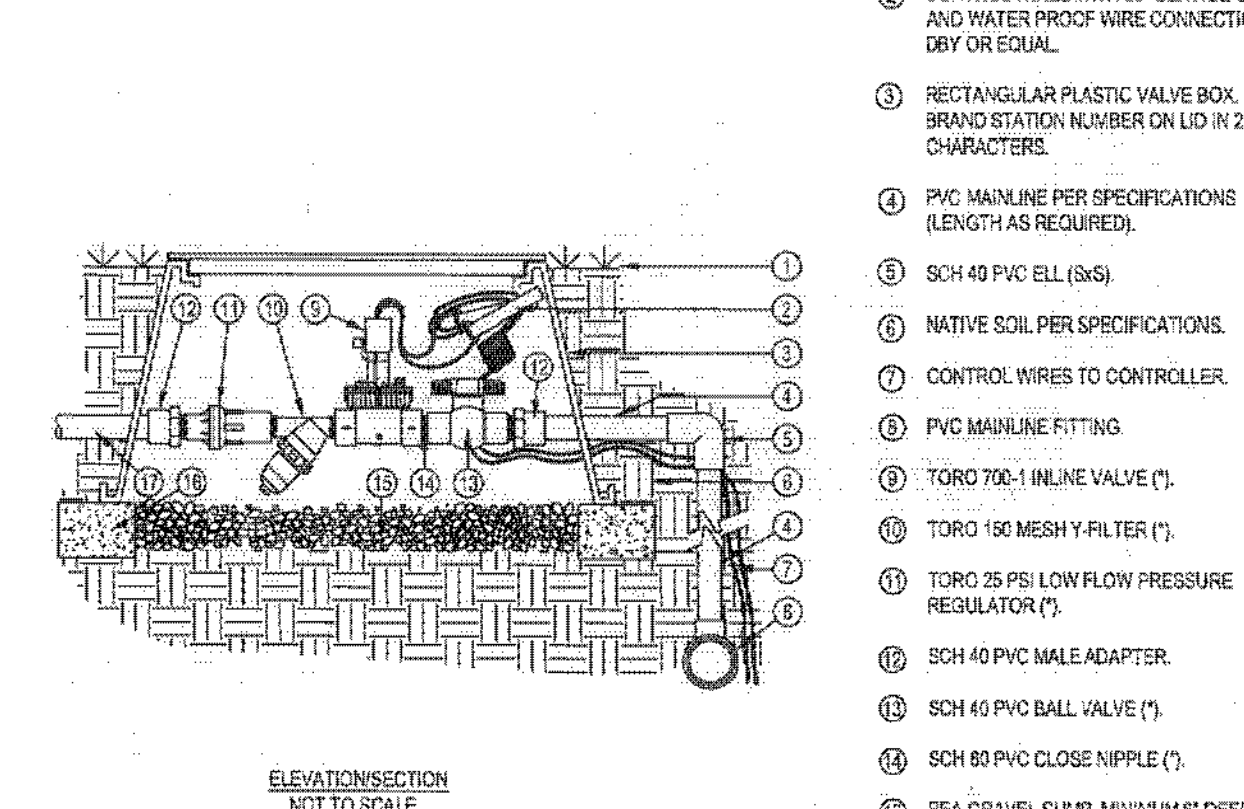
AS BUILT
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF



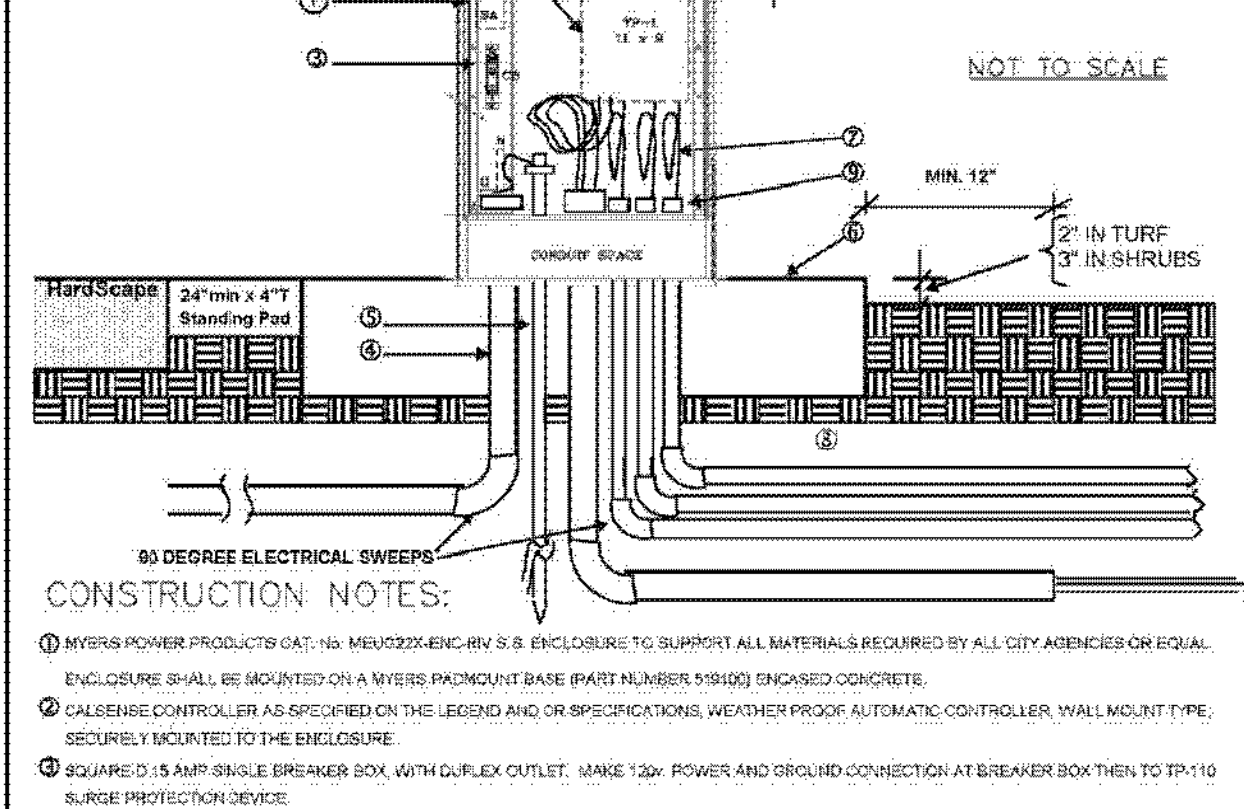
- 1) 1" ABOVE FINISH GRADE
- 2) FINISH GRADE
- 3) TORO DL2000 FLUSH VALVE (FCH-H-FPT)
- 4) PVC SCH 40 REDUCING NIPPLE 3/4" x 1/2" (T&T)
- 5) TORO LOC-EZE X 1/2" FPT TEE (FTT16)
- 6) TORO DL2000 TUBING (RGP-XXX-XXX) OR TORO BLANK POLY TUBING (EHD1845-XXX)
- 7) 6" ROUND PLASTIC VALVE BOX - HEAT BRAND "M" ON LID IN 1" HIGH CHARACTERS
- 8) BRICK SUPPORTS (2 COMMON BRICKS REQUIRED)
- 9) NATIVE SOIL PER SPECIFICATIONS
- 10) PEA GRAVEL SUMP (6" x 12")



- 1) 1" ABOVE FINISH GRADE
- 2) FINISH GRADE
- 3) 6" ROUND PLASTIC VALVE BOX - HEAT BRAND "M" ON LID IN 1" HIGH CHARACTERS
- 4) TORO DL2000 AIRVACUUM RELIEF VALVE (YD-500-34)
- 5) TORO LOC-EZE X 1/2" FPT TEE (FTT16)
- 6) TORO DL2000 TUBING (RGP-XXX-XXX) OR TORO BLUE STRIPE POLY TUBING (EHD1845-XXX) AIR-RELIEF LATERAL
- 7) PEA GRAVEL SUMP (6" DEEP)
- 8) BRICK SUPPORTS (2 COMMON BRICKS REQUIRED)
- 9) NATIVE SOIL PER SPECIFICATIONS



- 1) FINISH GRADE
- 2) CONTROL WIRES WITH 36" SERVICE COIL AND WATER PROOF WIRE CONNECTIONS, DEV OR EQUAL
- 3) RECTANGULAR PLASTIC VALVE BOX - HEAT BRAND STATION NUMBER ON LID IN 2" HIGH CHARACTERS
- 4) PVC MAINLINE PER SPECIFICATIONS (LENGTH AS REQUIRED)
- 5) SCH 40 PVC ELL (S&S)
- 6) NATIVE SOIL PER SPECIFICATIONS
- 7) CONTROL WIRES TO CONTROLLER
- 8) PVC MAINLINE FITTING
- 9) TORO 700-1 INLINE VALVE (*)
- 10) TORO 150 MESH Y-FILTER (*)
- 11) TORO 25 PSI LOW FLOW PRESSURE REGULATOR (*)
- 12) SCH 40 PVC MALE ADAPTER
- 13) SCH 40 PVC BALL VALVE (*)
- 14) SCH 80 PVC CLOSE NIPPLE (*)
- 15) PEA GRAVEL SUMP, MINIMUM 6" DEEP
- 16) BRICK SUPPORTS (4 COMMON BRICKS REQUIRED)
- 17) LATERAL LINE TO DRIP SYSTEM



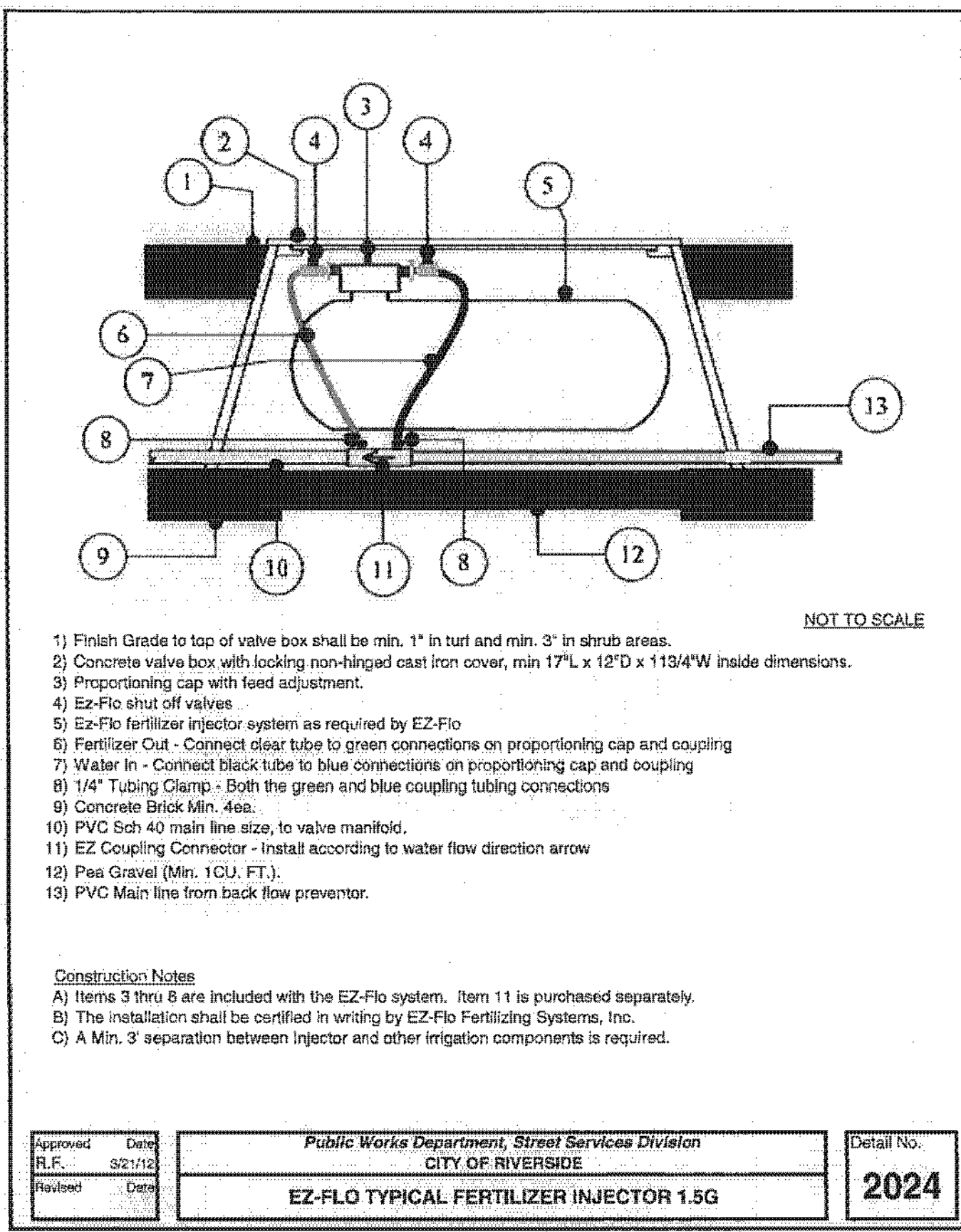
- CONSTRUCTION NOTES:**
- 1) METER POWER PRODUCTS CAT. NO. MFD922-ENC-1/8 ENCLOSURE TO SUPPORT ALL MATERIALS REQUIRED BY ALL CITY AGENCIES OR EQUAL. ENCLOSURE SHALL BE MOUNTED ON A WIRE MOUNT AT BASE PART NUMBER 198000 ENCASED CONCRETE.
 - 2) CALIBRE CONTROLLER AS SPECIFIED ON THIS LEGEND AND/OR SPECIFICATIONS WEATHER PROOF AUTOMATIC CONTROLLER, WALL MOUNT TYPE, SECURELY MOUNTED TO THE ENCLOSURE.
 - 3) SQUARE 0.15 AMP SURGE BREAKER BOX WITH DUPLEX OUTLET. MAKE 120V POWER AND GROUND CONNECTION AT BREAKER BOX THEN TO TP-10 SURGE PROTECTION DEVICES.
 - 4) 1/8" CU 1/4" WIRE IN MIN. 2" SCH 40 PVC CONDUIT FROM CONTROLLER TO POWER SOURCE. SEND SERVICE TO BREAKER BOX.
 - 5) 1/8" CU COPPER GROUND WIRE AND MIN. (6) 1/8" BY 6" LONG GREEN COPPER GROUNDING ROD WITHIN ENCLOSURE. DRIVE ROD PRIOR TO INSTALLATION OF ENCLOSURE.
 - 6) CONCRETE PAD, EXTEND EDGE MIN. 2" FROM ENCLOSURE TO ALLOW UNOBSTRUCTED AREA FOR DOOR TO SWING FREE. MIN. 6" THICK. NO PLUMBING WITHIN 15" FROM THE FOOTING ON ALL SIDES.
 - 7) LOW VOLTAGE ELECTRICAL SYSTEM TO EXTEND MIN. 12" FROM EDGE OF FOOTING. THREE FOOT EXPANSION LOOP ON ALL CONTROLLER WIRES. SEND SERVICE TO BREAKER BOX.
 - 8) 1/8" CU COPPER GROUND WIRE AND MIN. (6) 1/8" BY 6" LONG GREEN COPPER GROUNDING ROD WITHIN ENCLOSURE. DRIVE ROD PRIOR TO INSTALLATION OF ENCLOSURE.
 - 9) PROVIDE RESISTIVE ELECTRICAL BUSHINGS AT CONTROLLER END OF CONDUITS.
 - 10) UNIDIRECTIONAL ANTENNA
 - 11) TP-1 BOARD - THE DISTANCE BETWEEN THE CONTROLLER AND THE TP-1 BOARD SHALL NOT EXCEED 12".
 - 12) TP-10 LINE SURGE PROTECTION
- INSTALLATION SHALL BE CERTIFIED BY THE CONTROLLER MANUFACTURER IN WRITING!

Approved R.F. Revised	Date 3/21/12 Date	Public Works Department, Forestry and Landscape Division CITY OF RIVERSIDE	Detail No. 2021
TORO TYPICAL FLUSH VALVE ON TUBING			

Approved R.F. Revised	Date 3/21/12 Date	Public Works Department, Forestry and Landscape Division CITY OF RIVERSIDE	Detail No. 2020
TORO TYPICAL AIRVACUUM RELIEF VALVE			

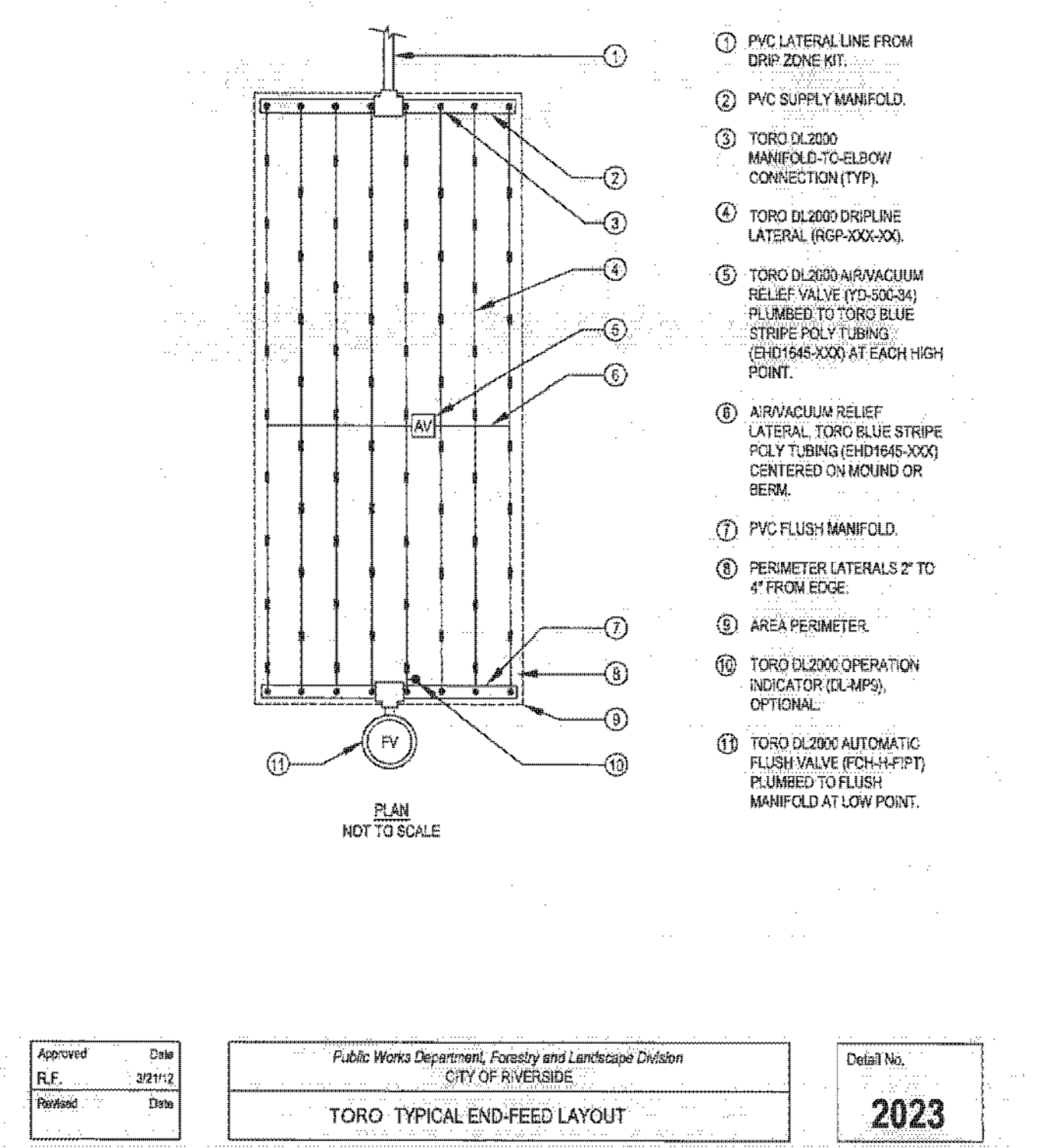
Approved R.F. Revised	Date 3/21/12 Date	Public Works Department, Forestry and Landscape Division CITY OF RIVERSIDE	Detail No. 2019
TORO TYPICAL DRIP ZONE KIT DETAIL			

Approved R.F. Revised	Date 3/21/12 Date	Public Works Department, Forestry and Landscape Division CITY OF RIVERSIDE	Detail No. 2018
IRRIGATION CONTROLLER (NON-METERED) DETAIL (CS)			



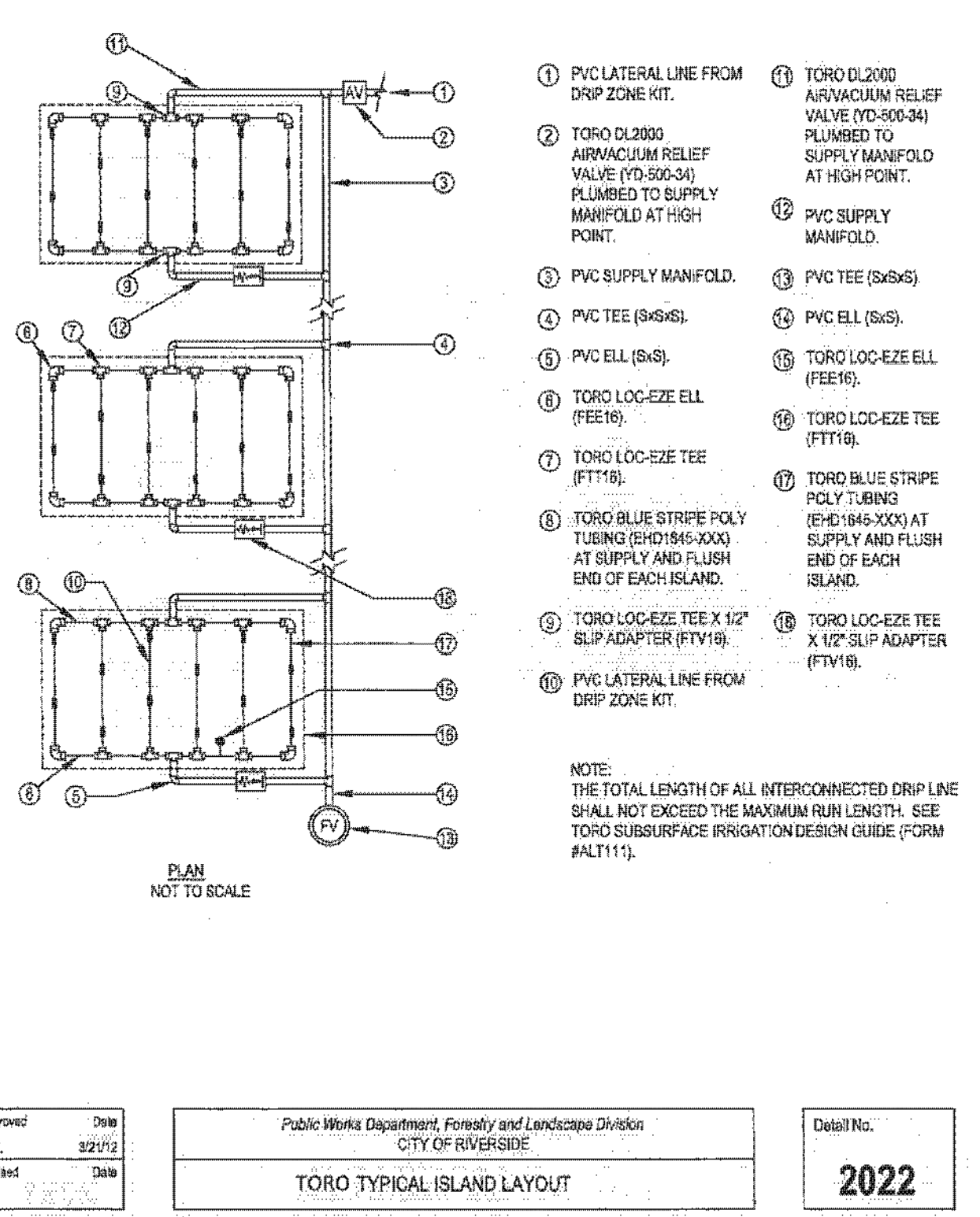
- 1) Finish Grade to top of valve box shall be min. 1" in turf and min. 3" in shrub areas.
 - 2) Concrete valve box with locking non-hinged cast iron cover, min 17L x 12D x 113/4W" inside dimensions.
 - 3) Proportioning cap with feed adjustment.
 - 4) EZ-Flo shut off valves
 - 5) EZ-Flo fertilizer injector system as required by EZ-Flo
 - 6) Fertilizer Out - Connect clear tube to green connections on proportioning cap and coupling
 - 7) Water In - Connect black tube to blue connections on proportioning cap and coupling
 - 8) 1/4" Tubing Clamp - Both the green and blue coupling tubing connections
 - 9) Concrete Brick Min. 4ea.
 - 10) PVC Sch 40 main line size, to valve manifold.
 - 11) EZ Coupling Connector - Install according to water flow direction arrow
 - 12) Pea Gravel (Min. 1CU, FT.)
 - 13) PVC Main line from back flow preventor.
- Construction Notes**
 A) Items 3 thru 5 are included with the EZ-Flo system. Item 11 is purchased separately.
 B) The installation shall be certified in writing by EZ-Flo Fertilizing Systems, Inc.
 C) A Min. 3' separation between injector and other irrigation components is required.

Approved R.F. Revised	Date 3/21/12 Date	Public Works Department, Street Services Division CITY OF RIVERSIDE	Detail No. 2024
EZ-FLO TYPICAL FERTILIZER INJECTOR 1.5G			



- 1) PVC LATERAL LINE FROM DRIP ZONE KIT.
- 2) PVC SUPPLY MANIFOLD
- 3) TORO DL2000 MANIFOLD-TO-ELBOW CONNECTION (TTP)
- 4) TORO DL2000 DRIPLINE LATERAL (RGP-XXX-XXX)
- 5) TORO DL2000 AIRVACUUM RELIEF VALVE (YD-500-34) PLUMBED TO TORO BLUE STRIPE POLY TUBING (EHD1845-XXX) CENTERED ON MOUND OR BERM.
- 6) AIRVACUUM RELIEF LATERAL, TORO BLUE STRIPE POLY TUBING (EHD1845-XXX)
- 7) PVC FLUSH MANIFOLD.
- 8) PERIMETER LATERALS 2" TO 4" FROM EDGE.
- 9) AREA PERIMETER.
- 10) TORO DL2000 OPERATION INDICATOR (L-AMP), OPTIONAL.
- 11) TORO DL2000 AUTOMATIC FLUSH VALVE (FCH-H-FPT) PLUMBED TO FLUSH MANIFOLD AT LOW POINT.

Approved R.F. Revised	Date 3/21/12 Date	Public Works Department, Forestry and Landscape Division CITY OF RIVERSIDE	Detail No. 2023
TORO TYPICAL END-FEED LAYOUT			



- 1) PVC LATERAL LINE FROM DRIP ZONE KIT.
 - 2) TORO DL2000 AIRVACUUM RELIEF VALVE (YD-500-34) PLUMBED TO SUPPLY MANIFOLD AT HIGH POINT.
 - 3) TORO DL2000 MANIFOLD-TO-ELBOW CONNECTION (TTP)
 - 4) PVC SUPPLY MANIFOLD.
 - 5) PVC TEE (S&S)
 - 6) PVC ELL (S&S)
 - 7) TORO LOC-EZE ELL (FEE16)
 - 8) TORO LOC-EZE TEE (FTT16)
 - 9) TORO LOC-EZE TEE (FTT16)
 - 10) TORO LOC-EZE TEE (FTT16)
 - 11) TORO LOC-EZE TEE (FTT16)
 - 12) TORO LOC-EZE TEE (FTT16)
 - 13) TORO LOC-EZE TEE (FTT16)
 - 14) TORO LOC-EZE TEE (FTT16)
 - 15) TORO LOC-EZE TEE (FTT16)
 - 16) TORO LOC-EZE TEE (FTT16)
 - 17) TORO LOC-EZE TEE (FTT16)
 - 18) TORO LOC-EZE TEE (FTT16)
- NOTE:**
 THE TOTAL LENGTH OF ALL INTERCONNECTED DRIP LINE SHALL NOT EXCEED THE MAXIMUM RUN LENGTH. SEE TORO SURFACE IRRIGATION DESIGN GUIDE (FORM #ALT111).

Approved R.F. Revised	Date 3/21/12 Date	Public Works Department, Forestry and Landscape Division CITY OF RIVERSIDE	Detail No. 2022
TORO TYPICAL ISLAND LAYOUT			

AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

CITY OF RIVERSIDE
 ELECTRICAL SERVICE APPROVAL BLOCK

APPROVED BY: _____
 DATE: _____

CITY OF RIVERSIDE
 WATER SERVICE APPROVAL BLOCK

APPROVED BY: _____
 DATE: _____

IMPORTANT NOTICE
 Section 4216/4217 of the Government Code
 Number to be issued before a
 permit is issued and for use
 For your Dig Alert I.D. Number call
 CALL TOLL FREE
 48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
 1-800-227-2600

RA
 LANDSCAPE ARCHITECTS
 6216 BROCKTON AVE., SUITE 212
 RIVERSIDE, CALIFORNIA 92506
 LIC. #1512
 PH. (951) 781-1930
 FAX (951) 686-8091

LICENCED LANDSCAPE ARCHITECT
 MICHAEL WOLFF
 7/15/12
 License No. 12122
 State of California

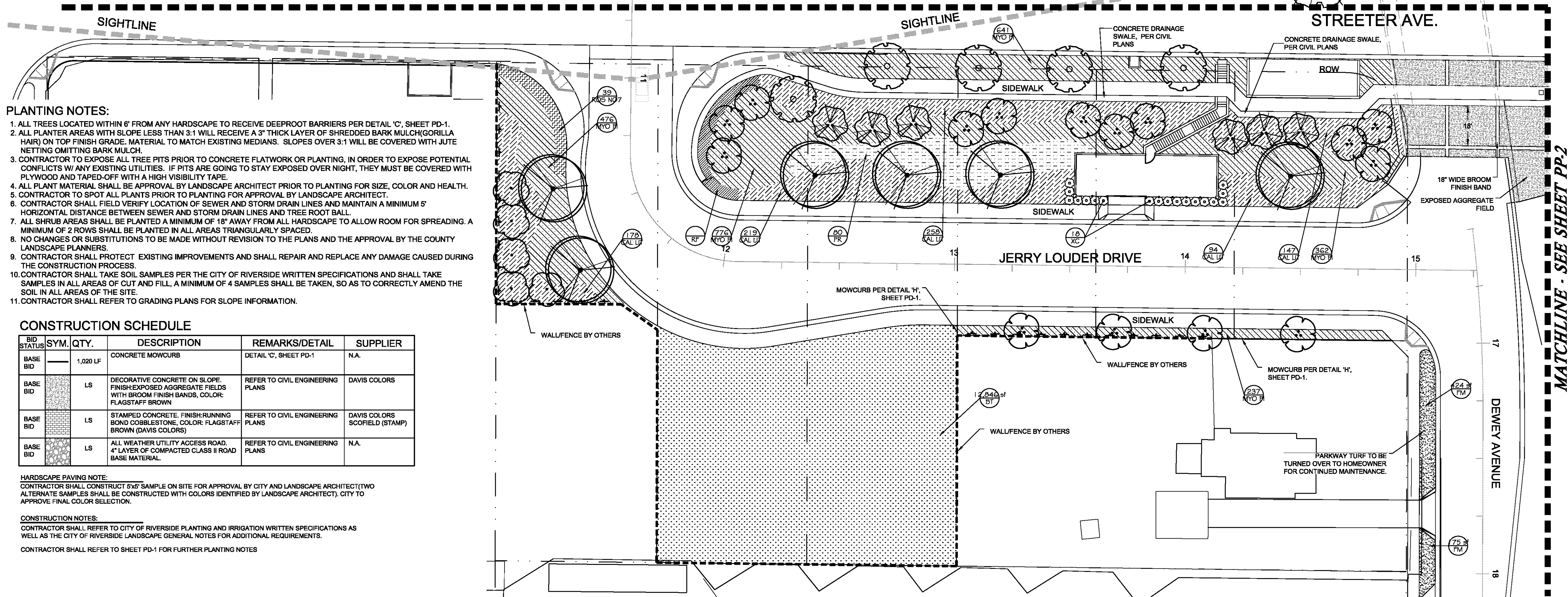
MARK	REVISIONS	APPR.	DATE
DESIGNED BY	DD	DRAWN BY	DD
CHECKED BY			

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
IRRIGATION DETAILS ID-2

R-4180L
 SHEET 133 OF 191
 FILE NO.

One Inch on Original Sheet Drawing File: N:\Projects\08 prj08142 Streetside Grading\AutoCAD\DWG\08142 ID Aug 08, 2012 - 3:55pm

MATCHLINE - SEE SHEET PP-4



PLANTING NOTES:

- ALL TREES LOCATED WITHIN 6' FROM ANY HARDSCAPE TO RECEIVE DEEPROOT BARRIERS PER DETAIL 'C', SHEET PD-1.
- ALL PLANTER AREAS WITH SLOPE LESS THAN 3:1 WILL RECEIVE A 3" THICK LAYER OF SHREDDED BARK MULCH (GORILLA HAIR) ON TOP FINISH GRADE. MATERIAL TO MATCH EXISTING MEDIANS. SLOPES OVER 3:1 WILL BE COVERED WITH JUTE NETTING OMITTING BARK MULCH.
- CONTRACTOR TO EXPOSE ALL TREE PITS PRIOR TO CONCRETE FLATWORK OR PLANTING, IN ORDER TO EXPOSE POTENTIAL CONFLICTS W/ ANY EXISTING UTILITIES. IF PITS ARE GOING TO STAY EXPOSED OVER NIGHT, THEY MUST BE COVERED WITH PLYWOOD AND TAPED-OFF WITH A HIGH VISIBILITY TAPE.
- ALL PLANT MATERIAL SHALL BE APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO PLANTING FOR SIZE, COLOR AND HEALTH.
- CONTRACTOR TO SPOT ALL PLANTS PRIOR TO PLANTING FOR APPROVAL BY LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL FIELD VERIFY LOCATION OF SEWER AND STORM DRAIN LINES AND MAINTAIN A MINIMUM 5' HORIZONTAL DISTANCE BETWEEN SEWER AND STORM DRAIN LINES AND TREE ROOT BALL.
- ALL SHRUB AREAS SHALL BE PLANTED A MINIMUM OF 18" AWAY FROM ALL HARDSCAPE TO ALLOW ROOM FOR SPREADING. A MINIMUM OF 2 ROWS SHALL BE PLANTED IN ALL AREAS TRIANGULARLY SPACED.
- NO CHANGES OR SUBSTITUTIONS TO BE MADE WITHOUT REVISION TO THE PLANS AND THE APPROVAL BY THE COUNTY LANDSCAPE PLANNERS.
- CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS AND SHALL REPAIR AND REPLACE ANY DAMAGE CAUSED DURING THE CONSTRUCTION PROCESS.
- CONTRACTOR SHALL TAKE SOIL SAMPLES PER THE CITY OF RIVERSIDE WRITTEN SPECIFICATIONS AND SHALL TAKE SAMPLES IN ALL AREAS OF CUT AND FILL, A MINIMUM OF 4 SAMPLES SHALL BE TAKEN, SO AS TO CORRECTLY AMEND THE SOIL IN ALL AREAS OF THE SITE.
- CONTRACTOR SHALL REFER TO GRADING PLANS FOR SLOPE INFORMATION.

CONSTRUCTION SCHEDULE

BID STATUS	SYM.	QTY.	DESCRIPTION	REMARKS/DETAIL	SUPPLIER
BASE BID		1,020 LF	CONCRETE MOWCURB	DETAIL 'C', SHEET PD-1	N.A.
BASE BID		LS	DECORATIVE CONCRETE ON SLOPE. FINISH EXPOSED AGGREGATE FIELDS WITH BROOM FINISH BANDS, COLOR: FLAGSTAFF BROWN	REFER TO CIVIL ENGINEERING PLANS	DAVIS COLORS
BASE BID		LS	STAMPED CONCRETE. FINISH-RUNNING BOND COBBLESTONE, COLOR: FLAGSTAFF BROWN (DAVIS COLORS)	REFER TO CIVIL ENGINEERING PLANS	DAVIS COLORS SCOFIELD (STAMP)
BASE BID		LS	ALL WEATHER UTILITY ACCESS ROAD. 4" LAYER OF COMPACTED CLASS II ROAD BASE MATERIAL.	REFER TO CIVIL ENGINEERING PLANS	N.A.

HARDSCAPE PAVING NOTE:
CONTRACTOR SHALL CONSTRUCT 5'x5' SAMPLE ON SITE FOR APPROVAL BY CITY AND LANDSCAPE ARCHITECT (TWO ALTERNATE SAMPLES SHALL BE CONSTRUCTED WITH COLORS IDENTIFIED BY LANDSCAPE ARCHITECT). CITY TO APPROVE FINAL COLOR SELECTION.

CONSTRUCTION NOTES:
CONTRACTOR SHALL REFER TO CITY OF RIVERSIDE PLANTING AND IRRIGATION WRITTEN SPECIFICATIONS AS WELL AS THE CITY OF RIVERSIDE LANDSCAPE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.

CONTRACTOR SHALL REFER TO SHEET PD-1 FOR FURTHER PLANTING NOTES

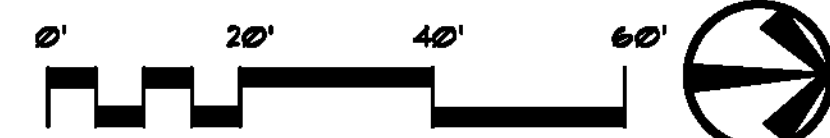
PLANT SCHEDULE

TREES	QTY	BOTANICAL NAME / COMMON NAME	CONTAINER	SIZE	WUCOLS	DETAIL
	27	CERCIS CANADENSIS 'FLAME' / EASTERN RED BUD	36" BOX	11-12'H/5-6"W	MEDIUM	STD. 1001
	29	KOELREUTERIA BIPINNATA / CHINESE FLAME TREE	36" BOX	12-14'H/6-7"W	MEDIUM	STD. 1001
	41	LAGERSTROEMIA X 'NATCHEZ' / CRAPE MYRTLE MULTI-TRUNK	24" BOX	9-10'H/3-4"W	MEDIUM	STD. 1001
	30	LAGERSTROEMIA X 'TUSCARORA' / CRAPE MYRTLE CORAL PINK MULTI-TRUNK	24" BOX	9-10'H/3-4"W	MEDIUM	STD. 1003
	23	MAGNOLIA GRANDIFLORA / BULL BAY	36" BOX	12-14'H/6-7"W	MEDIUM	STD. 1001
	3	MAGNOLIA GRANDIFLORA 'ST. MARY' / SOUTHERN MAGNOLIA	24" BOX	9-11'H/4-5"W	MEDIUM	STD. 1001
	7	PLATANUS MEXICANA / MEXICAN SYCAMORE 'LB' LOW BRANCHING ON SLOPES, 'HB' HIGH BRANCHING WITHIN 10' OF ROADWAY.	36" BOX	12-14'H/6-7"W	MEDIUM	STD. 1001
	17	PODOCARPUS HENKELII / LONG LEAFED YELLOW WOOD COLUMN	15 GAL	7-8'H/2-3"W	MEDIUM	STD. 1001
	13	PRUNUS CAROLINIANA / CAROLINA LAUREL CHERRY	24" BOX	9-11'H/4-5"W	MEDIUM	STD. 1001
	2	RHUS LANCEA / AFRICAN SUMAC	24" BOX	9-10'H/3-4"W	MEDIUM	STD. 1001
	6	SAPIUM SEBIFERUM / CHINESE TALLOW TREE	36" BOX	12-14'H/6-7"W	MEDIUM	STD. 1001

SHRUBS	QTY	BOTANICAL NAME / COMMON NAME	CONT	WUCOLS	DETAIL
	142	XYLOSMA CONGESTUM 'COMPACTA' / COMPACT XYLOSMA	5 GAL	MEDIUM	STD. 1004
VINE/ESPALIER	QTY	BOTANICAL NAME / COMMON NAME	CONT	WUCOLS	DETAIL
	53	FICUS REPEN / CREEPING FIG	1 GAL	MEDIUM	F / PD-1
SHRUB AREAS	QTY	BOTANICAL NAME / COMMON NAME	CONT	WUCOLS	DETAIL
	1,637	CALLISTEMON CITRINUS 'LITTLE JOHN' / DWARF BOTTLE BRUSH *CONTRACTOR SHALL HAND BROADCAST GAZANIA SPLENDENS DWARF 'MIXED COLOR' NURSE CROP SEED MIX AT A RATE OF 0.4LBS. PER 1,000S.F. FROM STOVER SEED CO. 800-621-0315	5 GAL @ 36" OC	MEDIUM	STD. 1004
	654	COTONEASTER DAMMERI 'LOWFAST' / LOWFAST BEARBERRY COTONEASTER *CONTRACTOR SHALL HAND BROADCAST GAZANIA SPLENDENS DWARF 'MIXED COLOR' NURSE CROP SEED MIX AT A RATE OF 0.4LBS. PER 1,000S.F. FROM STOVER SEED CO. 800-621-0315	5 GAL @ 36" OC	MEDIUM	STD. 1004
	151	FESTUCA GLAUCA 'ELIJAH BLUE' / ELIJAH BLUE FESCUE	1 GAL @ 12" OC	MEDIUM	STD. 1004
	1,081	HELICTOTRICHON SEMPERVIRENS 'SAPPHIRE' / BLUE OAT GRASS	5 GAL @ 24" OC	MEDIUM	STD. 1004
	400	HEMEROCALLIS HYBRID 'PEGGY'S PINK' / PINK DAYLILY	5 GAL @ 24" OC	MEDIUM	STD. 1004
	9,601	MYOPORUM PARVIFOLIUM 'PINK' / TRAILING MYOPORUM	1 GAL @ 24" OC	LOW	STD. 1004

SHRUB AREAS	QTY	BOTANICAL NAME / COMMON NAME	CONT	WUCOLS	DETAIL
	457	NANDINA DOMESTICA 'GULF STREAM' / GULF STREAM HEAVENLY BAMBOO	5 GAL @ 36" OC	MEDIUM	STD. 1004
	584	PLUMBAGO AURICULATA 'ROYAL CAPE' TM / CAPE PLUMBAGO *CONTRACTOR SHALL HAND BROADCAST GAZANIA SPLENDENS DWARF 'MIXED COLOR' NURSE CROP SEED MIX AT A RATE OF 0.4LBS. PER 1,000S.F. FROM STOVER SEED CO. 800-621-0315	5 GAL @ 60" OC	LOW	STD. 1004
	625	ROSA X 'NOASCHNEE' / FLOWER CARPET WHITE GROUND COVER ROSE	5 GAL @ 36" OC	MEDIUM	STD. 1004
MULCH	QTY	BOTANICAL NAME / COMMON NAME	CONT	WUCOLS	DETAIL
	4,890 SF	GOLD STRIKE DECOMPOSED GRANITE / BY DECORATIVE STONE SOLUTIONS 3" THICK STABILIZED DG. INSTALL IN 1" LIFTS AND COMPACT	MULCH		D/PD-1
SOD/SEED	QTY	BOTANICAL NAME / COMMON NAME	CONT	WUCOLS	DETAIL
	18,731 SF	BUCHLOE DACTYLOIDES 'TEXHOKA' / BUFFALO GRASS STOVER SEED COMPANY, 800-621-0315. INSTALL AT A RATE OF 1 LB. PER 250 S.F. BETWEEN MARCH AND SEPTEMBER.	HYDROSEED	LOW	
	18,385 SF	FESTUCA ARUNDINACEA 'MARATHON II' / DWARF COOL SEASON TURF	SOD	HIGH	

REFER TO CITY OF RIVERSIDE PUBLIC WORKS LANDSCAPE SPECIFICATIONS AND GUIDELINES FOR INSTALLATION DETAILS.
PLAN CROSS REFERENCE
PLANTING DETAILS, REFER TO SHEET PD-1
IRRIGATION PLAN, REFER TO SHEET IP-1



AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

CITY OF RIVERSIDE
ELECTRICAL SERVICE APPROVAL BLOCK
APPROVED BY: _____
DATE: _____

CITY OF RIVERSIDE
WATER SERVICE APPROVAL BLOCK
APPROVED BY: _____
DATE: _____

IMPORTANT NOTICE
Section 4216/4217 of the Government Code
Number to be issued before a permit to dig shall be valid for your Dig Alert I.D. Number call
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600

RA
LANDSCAPE ARCHITECTS
6216 BROCKTON AVE., SUITE 212
RIVERSIDE, CALIFORNIA 92506
LIC. #1512
PH. (951) 781-1930
FAX (951) 686-8091

LICENCED LANDSCAPE ARCHITECT
MICHAEL WOLFF
August 19, 2012
State of California

MARK	REVISIONS	APPR.	DATE

DESIGNED BY: DD DRAWN BY: DD CHECKED BY: DD

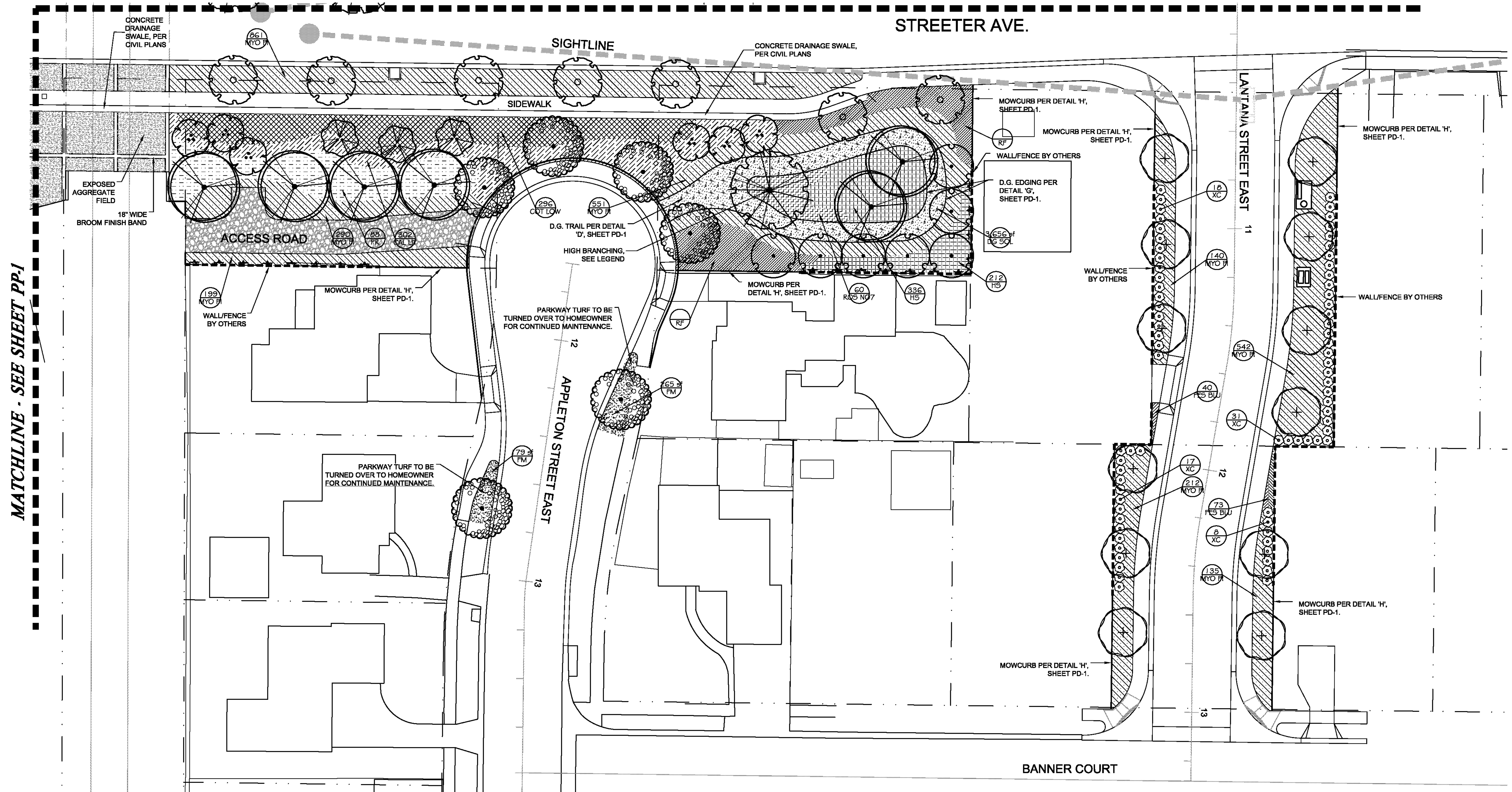
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LANDSCAPE PLANTING PLAN PP-1
HORIZ. SCALE: 1" = 20' VERT. SCALE: N/A

R-4180L
SHEET 134 OF 191
FILE NO.

One inch on Original Sheet Drawing File: N:\Projects\09 prj08142 Streeter Avenue Underpass\AutoCAD\PP-1.dwg Aug 08, 2012 3:45pm

MATCHLINE - SEE SHEET PP-3

STREETER AVE.



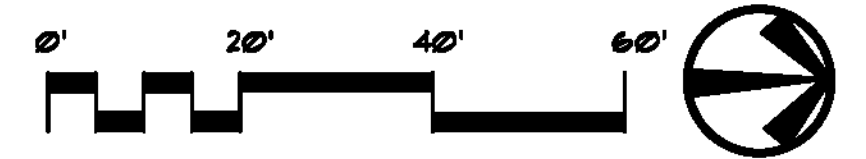
MATCHLINE - SEE SHEET PP-1

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

PLAN CROSS REFERENCE

PLANT LEGEND, REFER TO SHEET PP-1
 PLANTING DETAILS, REFER TO SHEET PD-1
 IRRIGATION PLAN, REFER TO SHEET IP-2

REFER TO CITY OF RIVERSIDE PUBLIC WORKS
 LANDSCAPE SPECIFICATIONS AND GUIDELINES
 FOR INSTALLATION DETAILS.



CITY OF RIVERSIDE
 ELECTRICAL SERVICE APPROVAL BLOCK
 APPROVED BY: _____
 DATE: _____

CITY OF RIVERSIDE
 WATER SERVICE APPROVAL BLOCK
 APPROVED BY: _____
 DATE: _____

IMPORTANT NOTICE
 Section 4216/4217 of the Government Code requires a Dig Alert identification Number to be issued before a "Dig" is commenced and be valid for your Dig Alert I.D. Number call 48 HOURS BEFORE YOU DIG CALL TOLL FREE 1-800-227-2600 UNDERGROUND SERVICE ALERT

RA
 LANDSCAPE ARCHITECTS
 6216 BROCKTON AVE., SUITE 212
 RIVERSIDE, CALIFORNIA 92506
 LIC. #1512
 PH. (951) 781-1930
 FAX (951) 686-8091



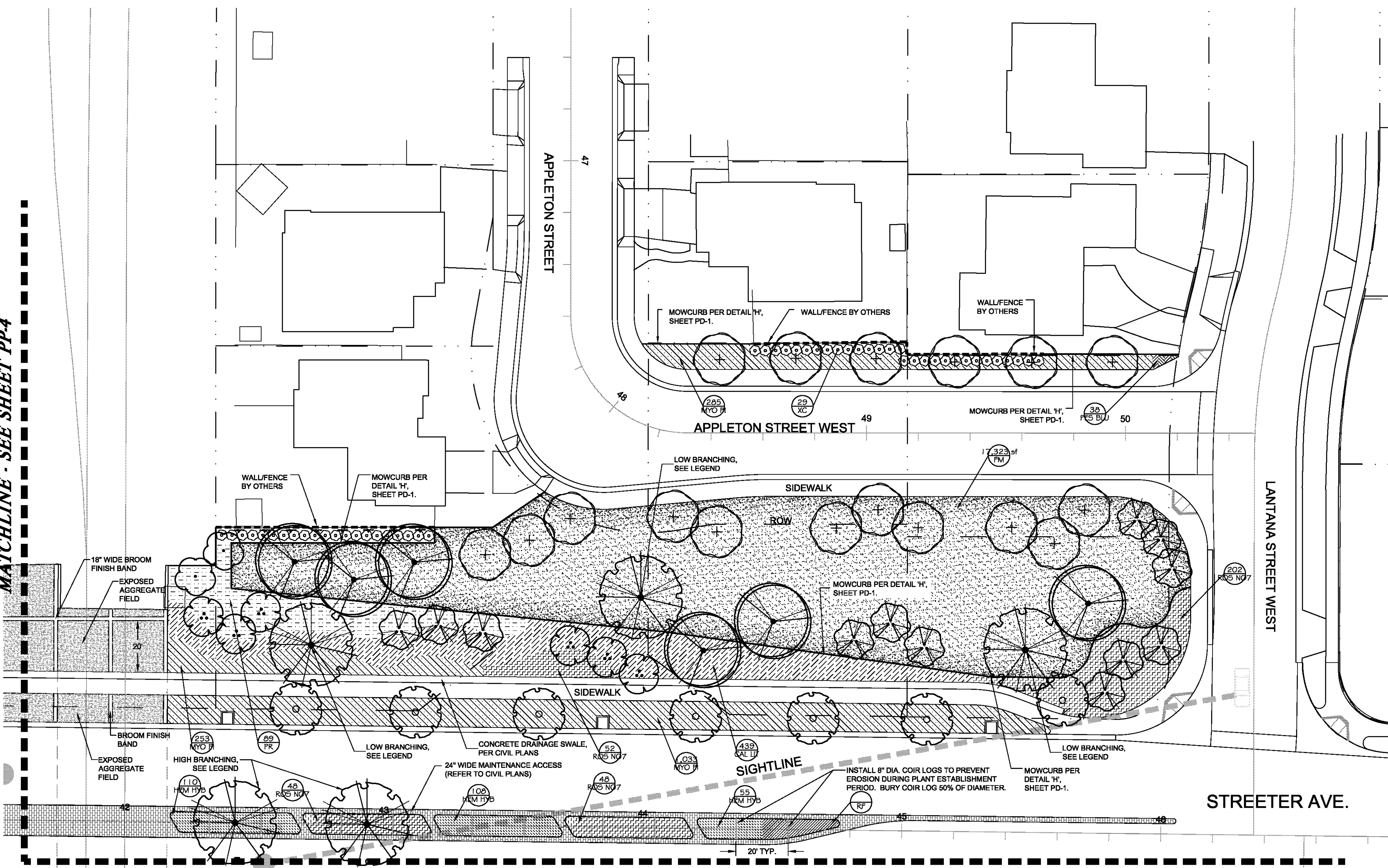
MARK	REVISIONS	APPR.	DATE

DESIGNED BY DP DRAWN BY DP CHECKED BY MT

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LANDSCAPE PLANTING PLAN PP-2

R-4180L
 SHEET 135 OF 191
 FILE NO.

MATCHLINE - SEE SHEET PP-4

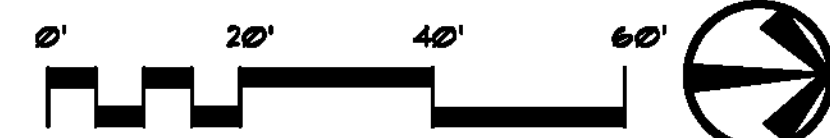


MATCHLINE - SEE SHEET PP-2

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

PLAN CROSS REFERENCE
 PLANT LEGEND, REFER TO SHEET PP-1
 PLANTING DETAILS, REFER TO SHEET PD-1
 IRRIGATION PLAN, REFER TO SHEET IP-3

REFER TO CITY OF RIVERSIDE PUBLIC WORKS
 LANDSCAPE SPECIFICATIONS AND GUIDELINES
 FOR INSTALLATION DETAILS.



CITY OF RIVERSIDE
 ELECTRICAL SERVICE APPROVAL BLOCK
 APPROVED BY: _____
 DATE: _____

CITY OF RIVERSIDE
 WATER SERVICE APPROVAL BLOCK
 APPROVED BY: _____
 DATE: _____

IMPORTANT NOTICE
 Section 4218/4217 of the Government Code requires a Dig Alert identification Number to be issued before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG **UNDERGROUND SERVICE ALERT 1-800-227-2600**

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 RIVERSIDE, CALIFORNIA 92506
 LIC. #1512
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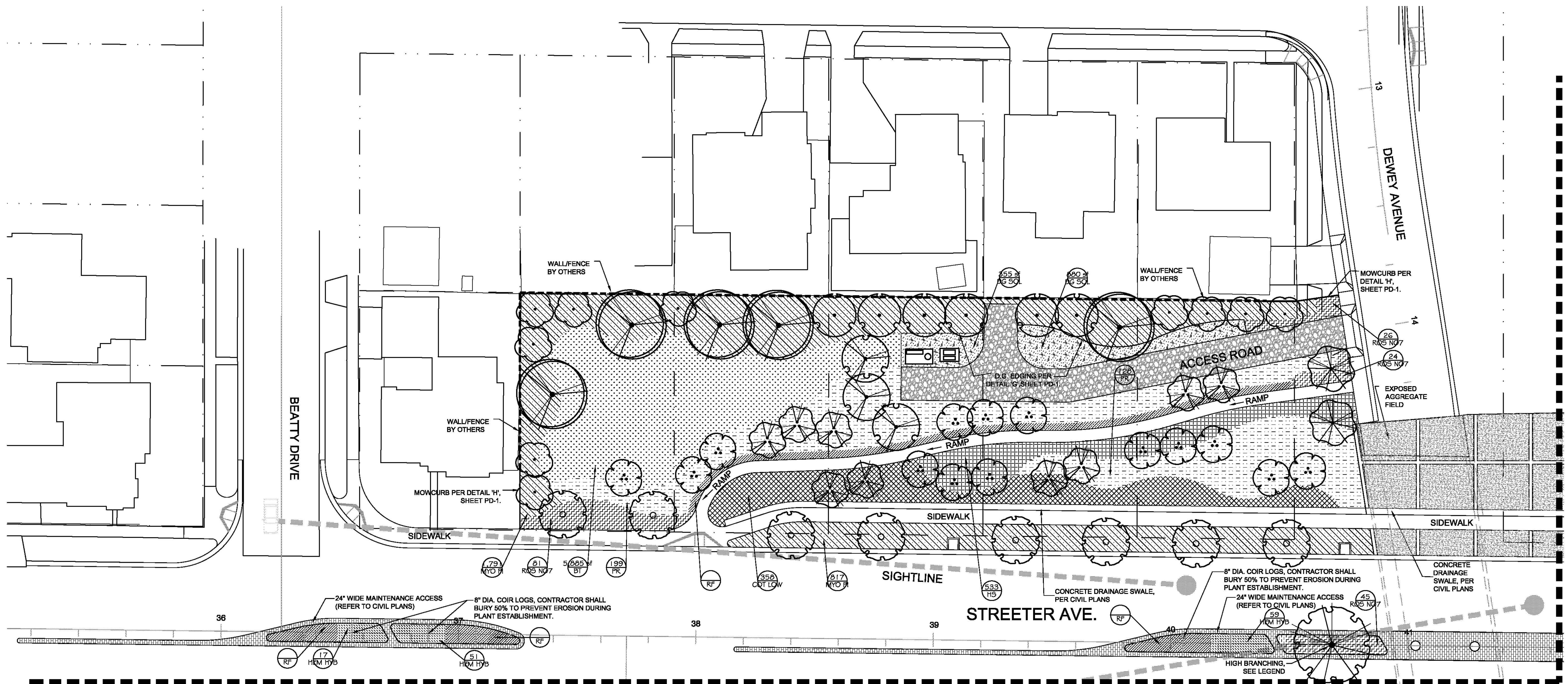
MARK	REVISIONS	APPR.	DATE

DESIGNED BY DD DRAWN BY DD CHECKED BY DD

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LANDSCAPE PLANTING PLAN PP-3

R-4180L
 SHEET 136 OF 191
 FILE NO.

(One inch on Original Sheet) Drawing File: N:\Projects\09 pp\08142 Streeter Avenue Underpass\CAD\PP\ACD\08142 PP Aug 08, 2012 3:46pm



MATCHLINE - SEE SHEET PP-1

MATCHLINE - SEE SHEET PP-3

CITY OF RIVERSIDE GENERAL LANDSCAPING NOTES

- a. All related work shall conform to the City of Riverside Public Works Department Standards and Specifications for Planting and Irrigation work. (Sections 02441 and 02483).
- b. A "Public Landscape" permit, as issued by the Public Works Department is required. Contact the Public Works Landscape Inspector at (951) 351-6313 to schedule a preconstruction meeting and to obtain the permit.
- c. When calling for inspections contact the Public Works Landscape Inspector a minimum of 48 hours in advance to schedule an inspection. A written approval will be provided on the Public Landscape Permit card for each stage of inspection. A verbal approval will not be acceptable. Inspections are required per the standard specifications, and include but are not necessarily limited to the following:
 - After completion of final grading and when all utility services have been marked, but prior to initiating any landscape work within the public right of way;
 - At time of installation of irrigation sleeves and constant pressure mainlines, but prior to backfill of trenches for same (Note: mainlines must be pressure tested in the presence of the Public Works Landscape Inspector);
 - At time of installation of irrigation valves, laterals and heads;

- For spotting of all trees prior to digging planting pits;
- While digging plant pits and planting/relocating trees;
- After planting and all other indicated or specified work has been completed, for start of maintenance;
- At substantial completion of the project for City's acceptance to start the required maintenance period;
- At the end of the Maintenance Period, the Contractor/Developer shall call the Public Works Landscape Inspector at the number listed above for a final acceptance inspection in order to be released from maintenance. Contractor's bond will not be released until after City's issuance of written notification that the project has passed final inspection and the Public Works Department is assuming maintenance responsibilities.

The Developer shall be responsible to acceptably maintain all plantings for a minimum period as specified in the bid documents.

PLAN CROSS REFERENCE

PLANT LEGEND, REFER TO SHEET PP-1
 PLANTING DETAILS, REFER TO SHEET PD-1
 IRRIGATION PLAN, REFER TO SHEET IP-4
 REFER TO CITY OF RIVERSIDE PUBLIC WORKS LANDSCAPE SPECIFICATIONS AND GUIDELINES FOR INSTALLATION DETAILS.

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

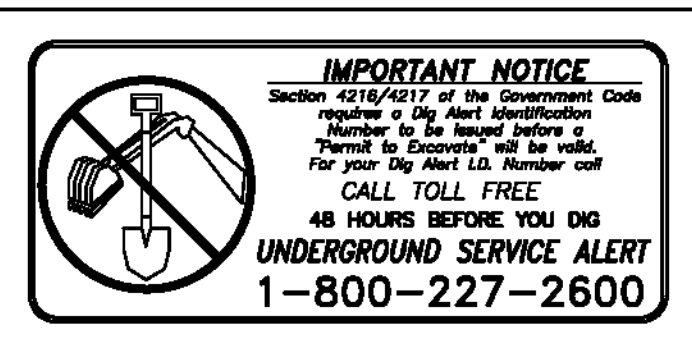


CITY OF RIVERSIDE
 ELECTRICAL SERVICE APPROVAL BLOCK

APPROVED BY: _____
 DATE: _____

CITY OF RIVERSIDE
 WATER SERVICE APPROVAL BLOCK

APPROVED BY: _____
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 LANDSCAPE ARCHITECTS
 6216 BROCKTON AVE., SUITE 212
 RIVERSIDE, CALIFORNIA 92506
 LIC. #1512
 PH. (951) 781-1930
 FAX (951) 686-8091



MARK	REVISIONS	APPR.	DATE

DESIGNED BY DD DRAWN BY DD CHECKED BY RT

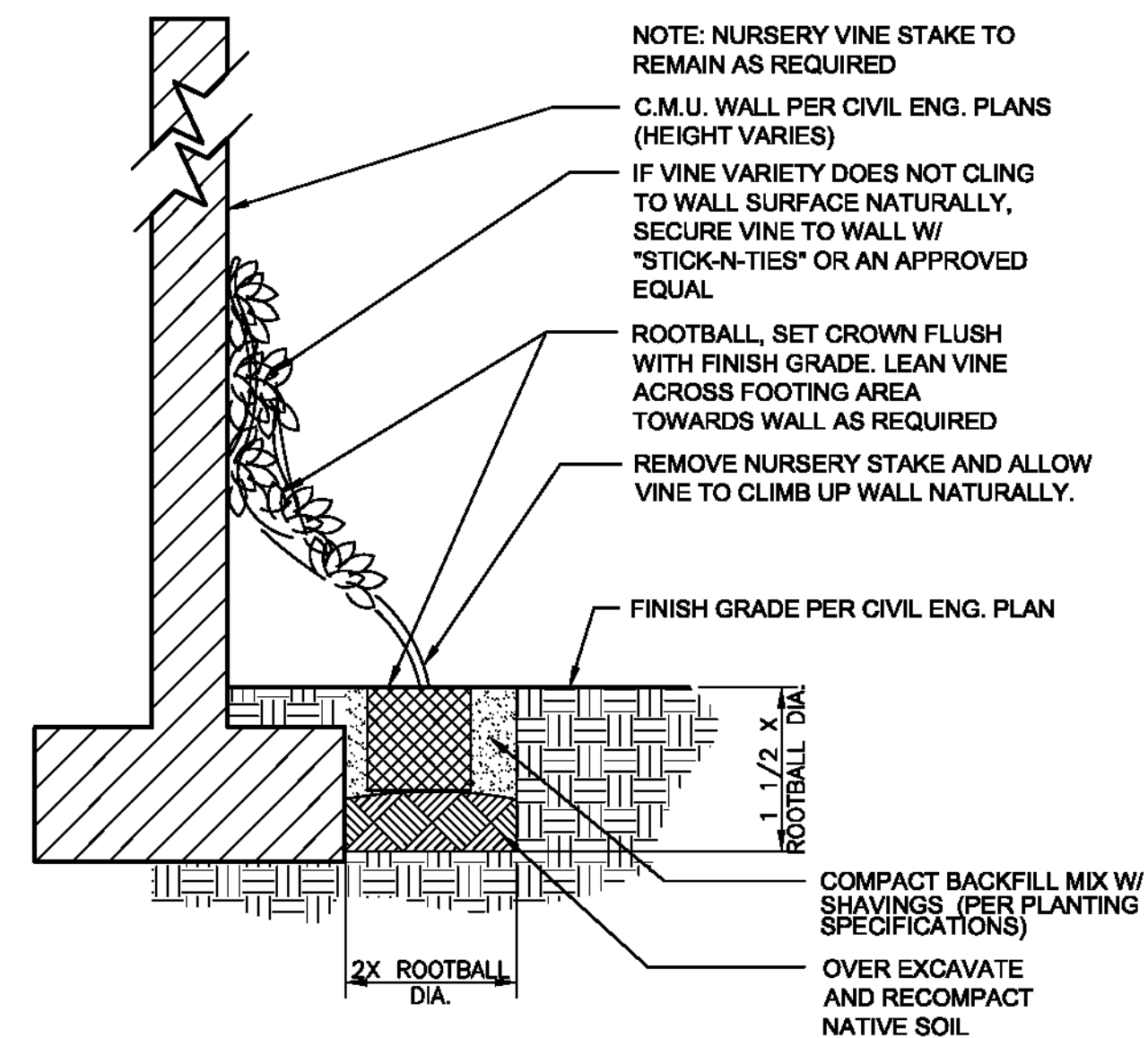
CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT

STREETER AVENUE UNDERPASS

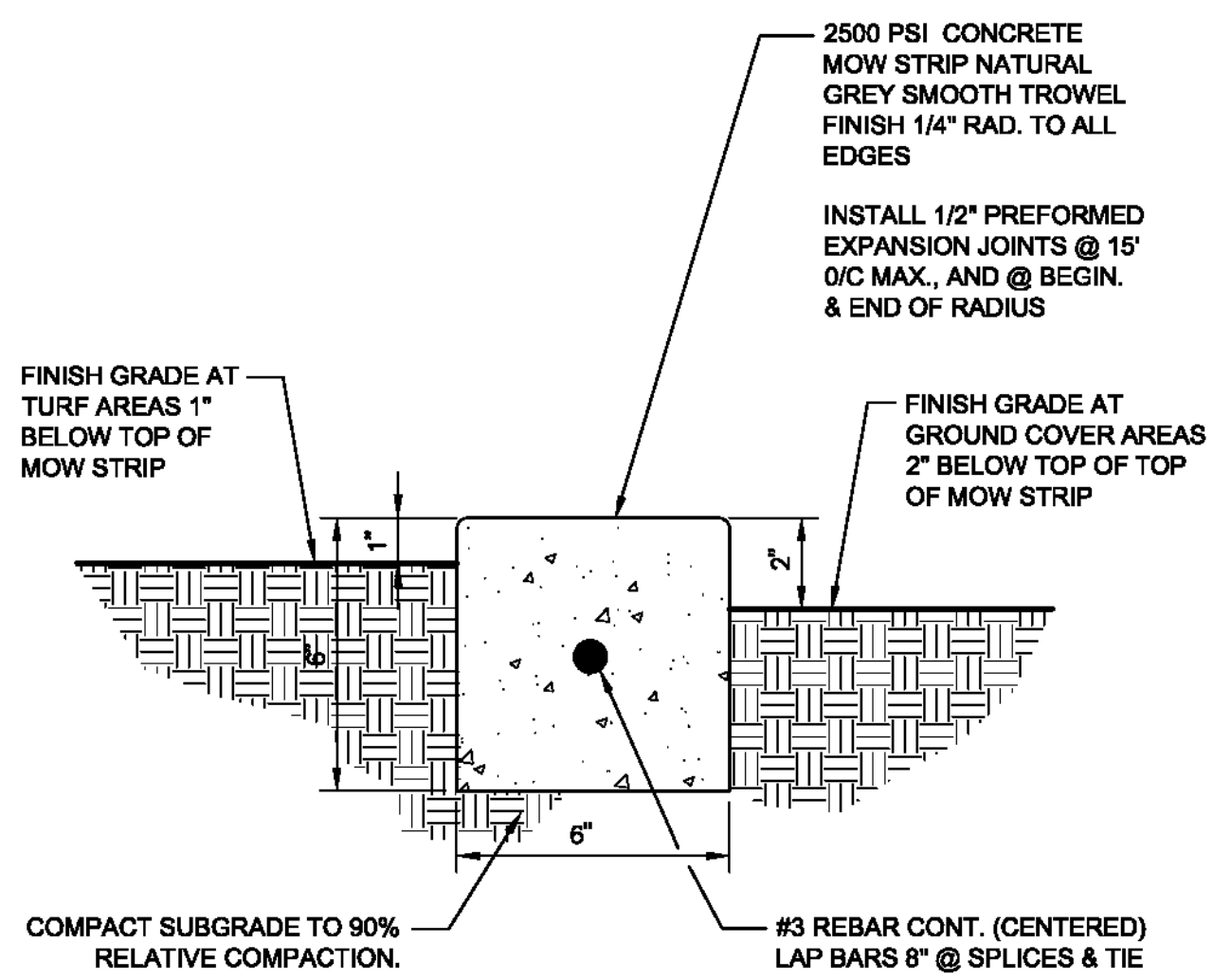
LANDSCAPE PLANTING PLAN PP-4

HORIZ. SCALE: 1" = 20' VERT. SCALE: N/A

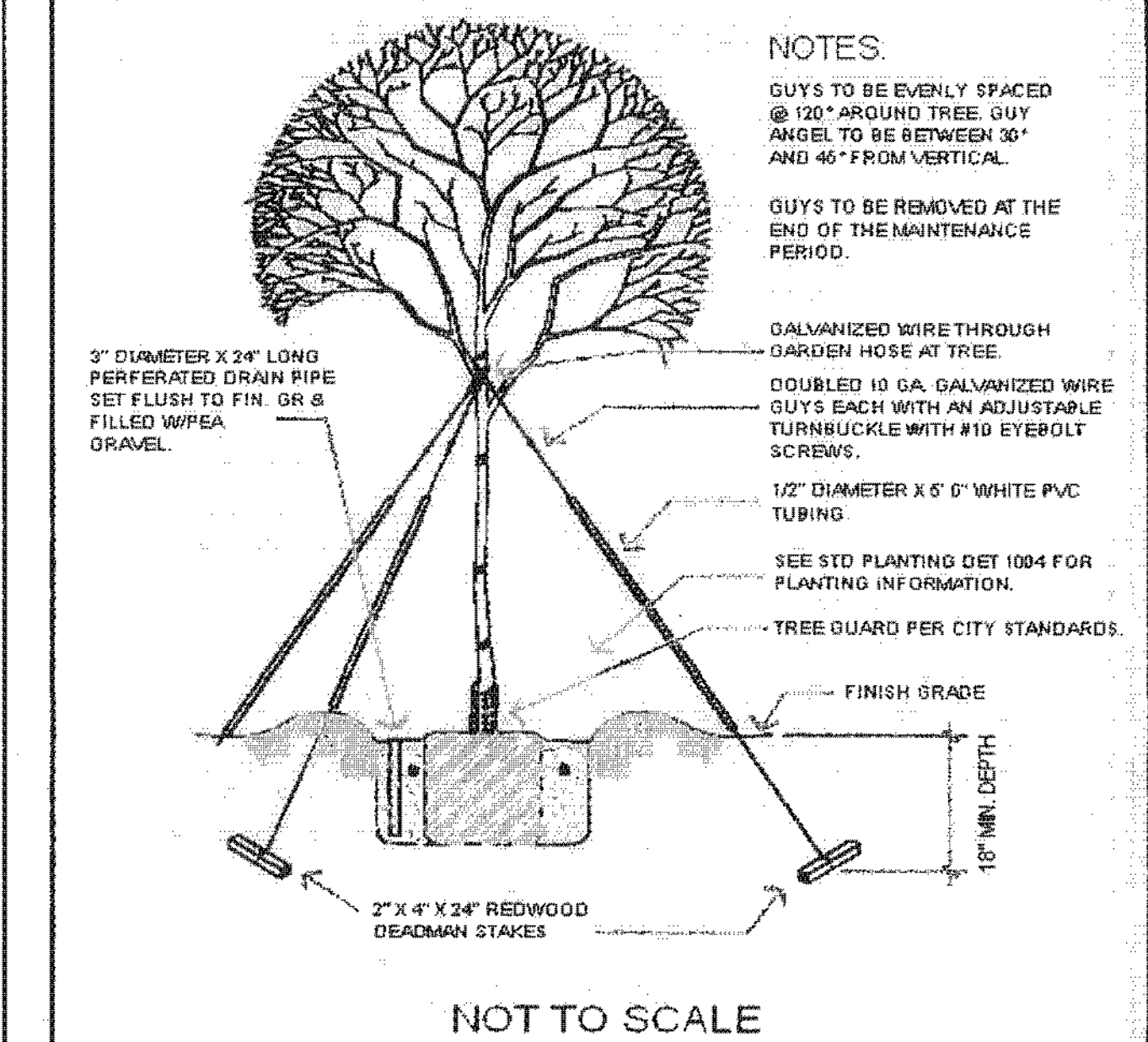
R-4180L
 SHEET 137 OF 191
 FILE NO.



F VINE PLANTING NEAR FOOTING
1/4" = 1'-0" 329353-05

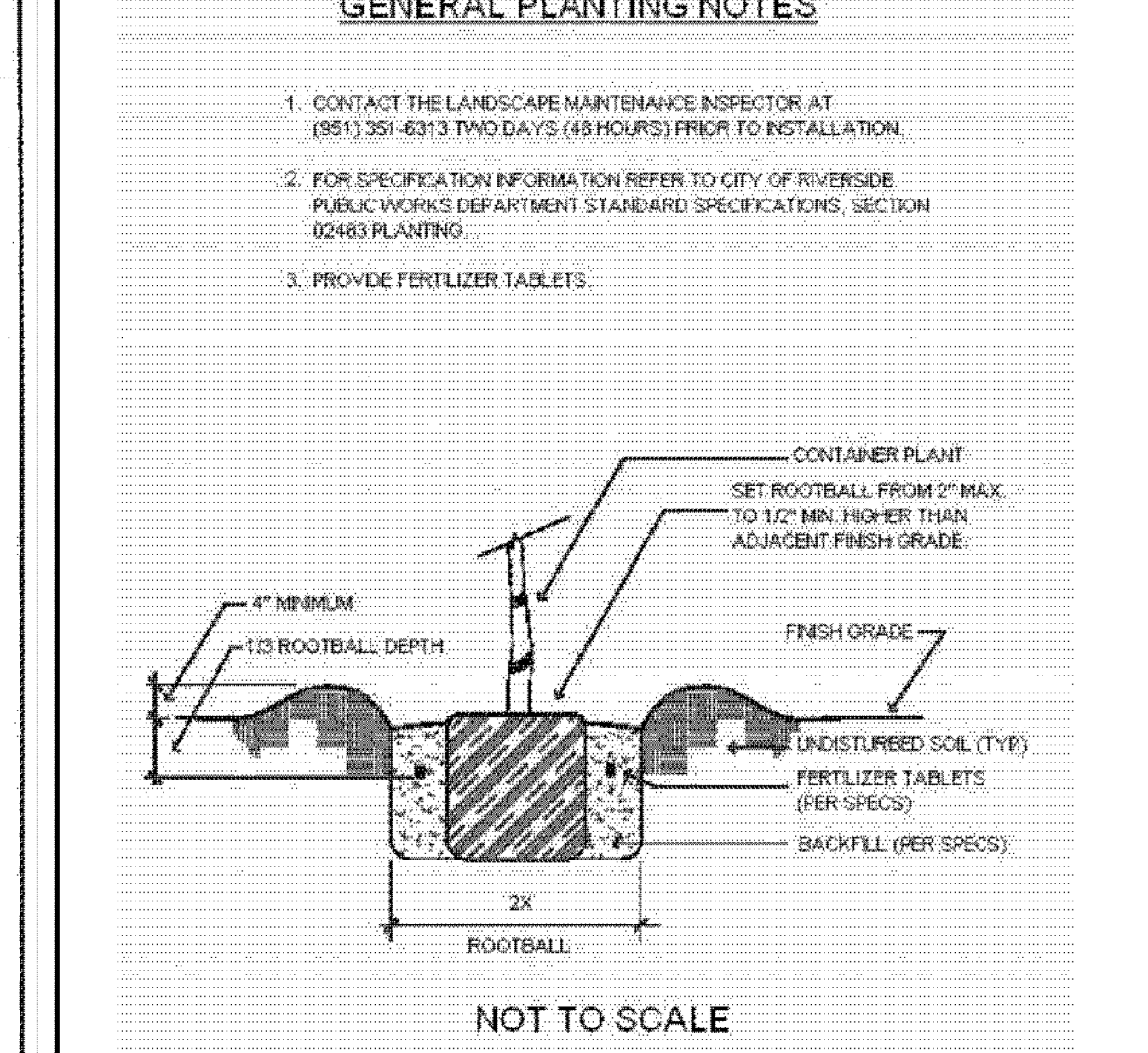


H MOW CURB
3" = 1'-0" 321613.16-10



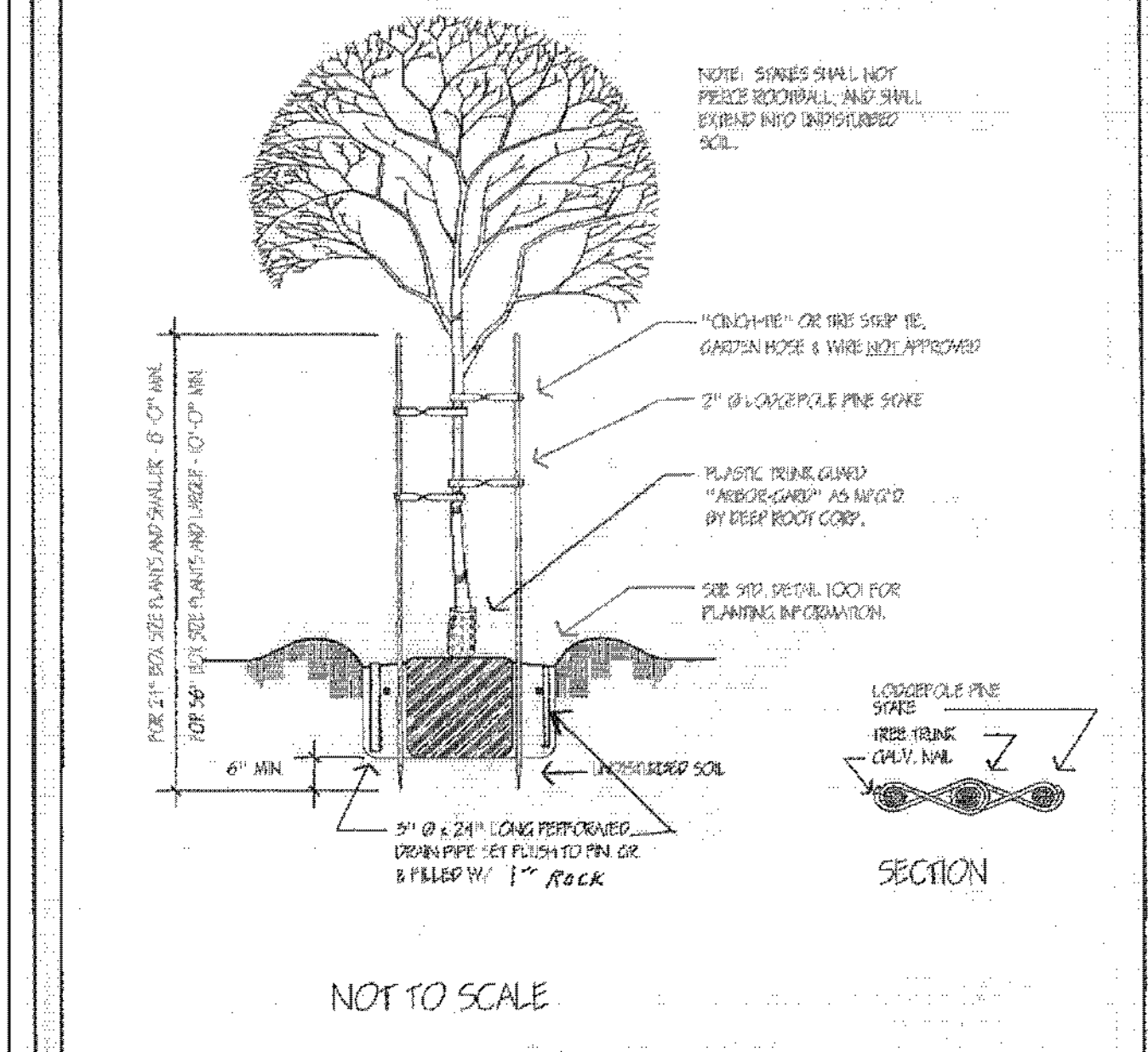
E TREE GUYING DETAIL
Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE
Detail No. 1003

E TREE GUYING DETAIL
1" = 1'-0" 32 9343.39-02



B PLANTING DETAIL WITH NOTES
Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE
Detail No. 1004

B PLANTING DETAIL WITH NOTES
1" = 1'-0" 32 9343.39-02



A TREE PLANTING DETAIL
Public Works Department, Forestry and Landscape Division
CITY OF RIVERSIDE
Detail No. 1001

A TREE PLANTING DETAIL
1" = 1" 32 9343.39-03

Linear Style Planting with DeepRoot Barriers

Determine the correct number of panels to be used. Depending upon the actual planting plan and the number of trees involved the length of linear barrier will vary, but as a general rule of thumb take the anticipated mature canopy diameter of the tree and add 2 feet (61cm). This will be the number of feet necessary for a Linear style planting application. (See chart below.)

A. Choose the barrier that best suits the application. Generally if a sidewalk, patio or driveway is to be protected, 18" (46cm) (LB 18-2) is sufficient depth with 12" (30cm) (LB 12-2) as an alternate choice for non-aggressive, deeper rooting trees. However for curb and gutter protection or more aggressive roots 24" (61cm) (UB 24-2) is generally the better choice.

B. Dig the trench to the depth based upon the particular barrier chosen.

C. Install the barrier. When using DeepRoot Linear Barriers simply pull the appropriate number of panels out of the box (they come pre-assembled) and separate the joint at the correct length. When installing DeepRoot Universal Barriers in a linear fashion you will need to join the appropriate number of panels together.

C ROOT BARRIER

N.T.S.

D. Next place the barrier in the trench with the vertical ribs facing toward the tree and align in a straight fashion. It is helpful to place the barrier against the hardscape. Use the hardscape as a guide and backfill against the barriers to promote a clean smooth fit to the hardscape. Be sure to keep the barrier's double top edge at least 1/2" (13mm) above grade to ensure roots do not grow over the top.

E. Plant the tree(s). The Linear style offers a more expansive rooting growth area, however adverse soil and drainage conditions may exist in the actual planting area. Take steps to ensure healthy growth of the tree at planting. Consult with a local Arborist for planting tips and recommendations.

F. If the tree(s) will be subject to maintenance work such as lawn mowing or weed trimming we strongly recommend the installation of ArborGard+ Tree Trunk Protectors which is placed around the base of young trees to protect them from damage by weed trimmers, lawn mowers and small rodents.

For additional information please consult the 16 page DeepRoot Product Selection and Installation Guidelines.

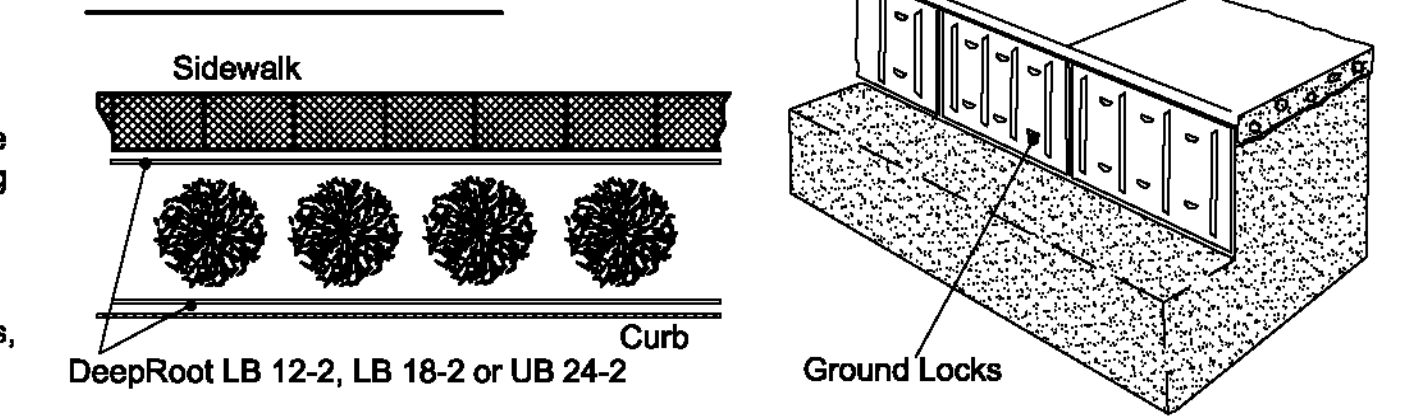
C ROOT BARRIER

N.T.S.

For a simple formula to determine the quantity of panels required for a Linear application use: Estimated Diameter of the Tree Canopy at Maturity + 2' (61cm) = Length of Barrier per Side.

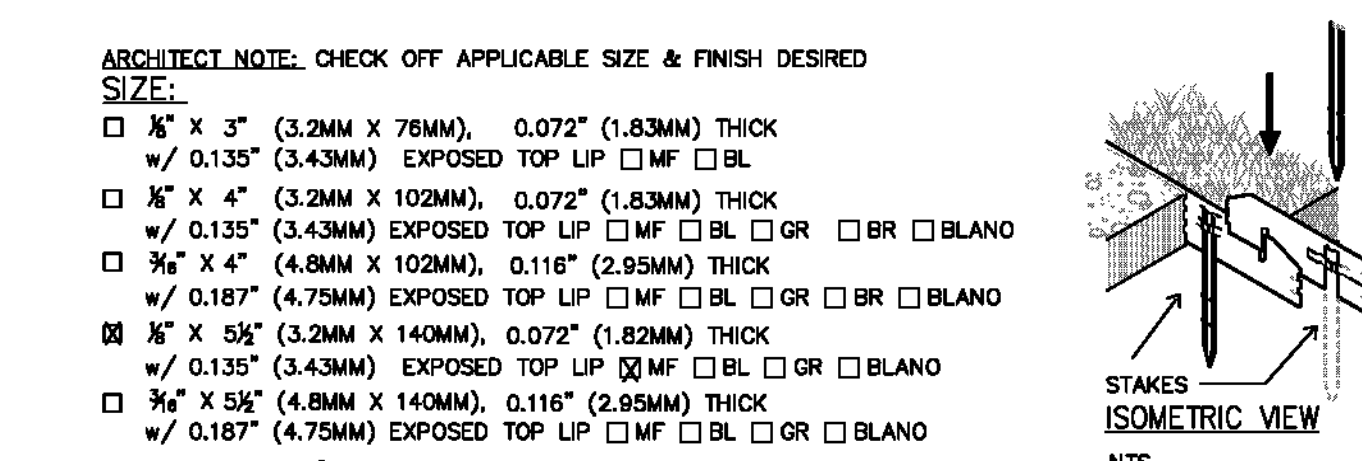
As little as one side of the tree may need barrier for root direction as there may be no hardscape elsewhere requiring protection.	For One Side of Tree Expected Tree Canopy at Maturity	Number of Feet of Linear Barrier (LB 12 or LB 18)	Optional Universal Barrier (UB) in number of Panels
Note: Linear Barriers (LB 12-2 and LB 18-2) are packaged in 2' (61cm) long panels with pre-attached flexible joiners ready to pull out of the carton and install in one continuous line of up to: LB 12-2 80' (24 m) per Carton LB 18-2 52' (16 m) per Carton	12' (3.6m) Diameter +2' (61cm) = 14' (4.2m) 18' (5.5m) Diameter +2' (61cm) = 20' (6.1m) 24' (7.3m) Diameter +2' (61cm) = 26' (7.9m)	7 Panels 10 Panels 13 Panels	

DeepRoot LB 12-2, LB 18-2 or UB 24-2
Line can be separated at any two foot interval.

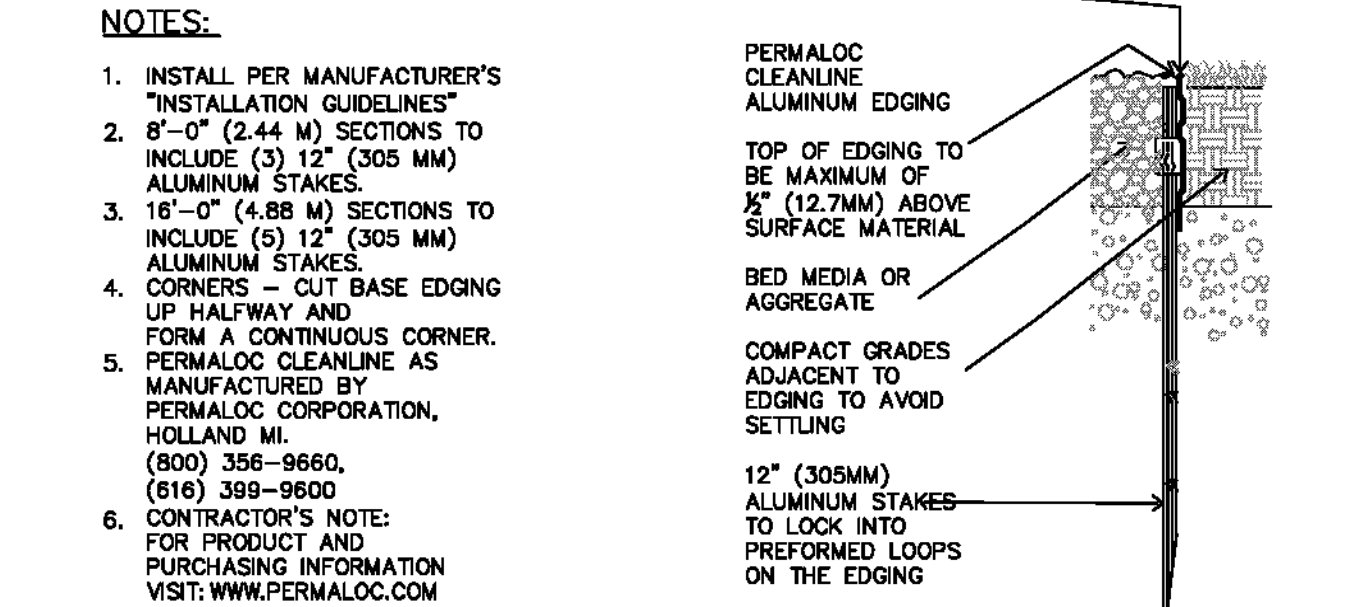


For information regarding distributors please call: 1 800 ILV ROOT (458.7668). For help with difficult drainage or other difficult installation questions please call DeepRoot Technical Support at: 1 800 ROOT TEK (766.8835).

329343.05-01



G ALUMINUM EDGING
3" = 1'-0" 52 9413.23-01



D DG PATH
N.T.S.

CITY OF RIVERSIDE
ELECTRICAL SERVICE APPROVAL BLOCK
APPROVED BY: _____
DATE: _____

CITY OF RIVERSIDE
WATER SERVICE APPROVAL BLOCK
APPROVED BY: _____
DATE: _____

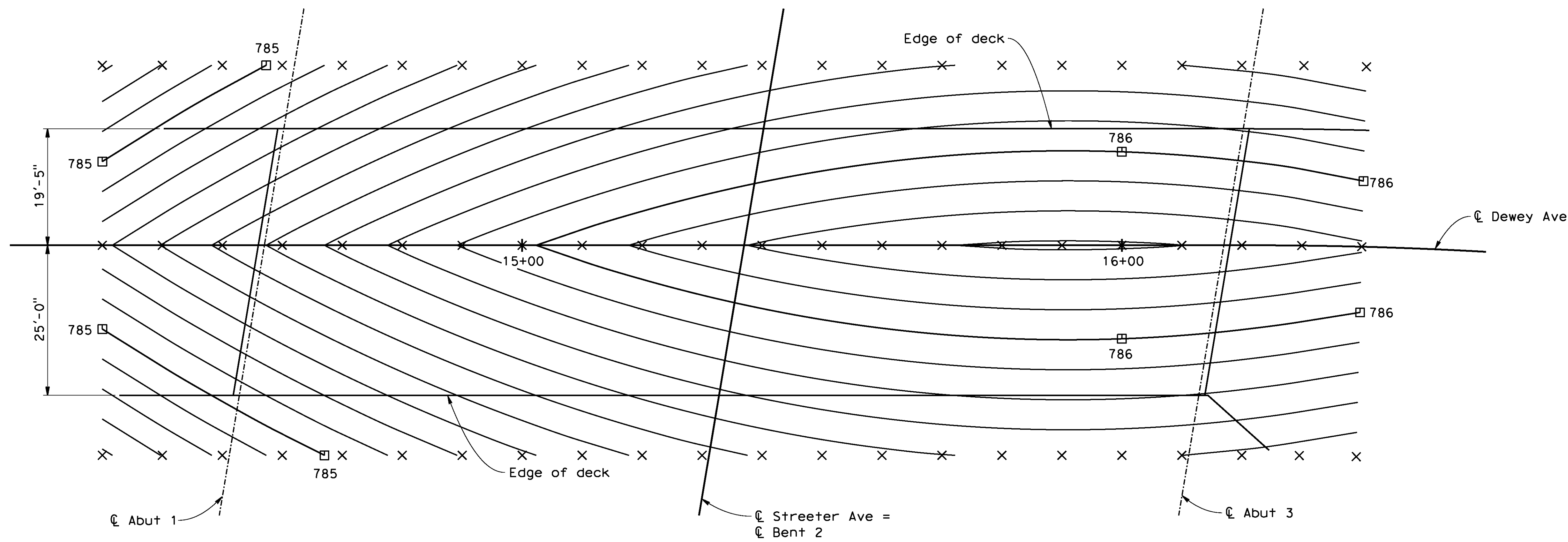
IMPORTANT NOTICE
Section 4216/4217 of the Government Code
Number to be issued before a permit is issued and before you dig. Call 800-227-2600
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600

RA
LANDSCAPE ARCHITECTS
6216 BROCKTON AVE., SUITE 212
RIVERSIDE, CALIFORNIA 92506
LIC. #1512
PH. (951) 781-1930
FAX (951) 686-8091

STATE OF CALIFORNIA
LICENSED LANDSCAPE ARCHITECT
MICHAEL WOLFF
DESIGNED BY: DD DRAWN BY: DD CHECKED BY: DD

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LANDSCAPE PLANTING DETAILS PD-1
HORIZ. SCALE: 1" = 20' VERT. SCALE: N/A
AS BUILT
T094
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF
R-4180L
SHEET 138 OF 191
FILE NO.



PLAN
1"=10'-0"

GENERAL NOTES LOAD AND RESISTANCE FACTOR DESIGN

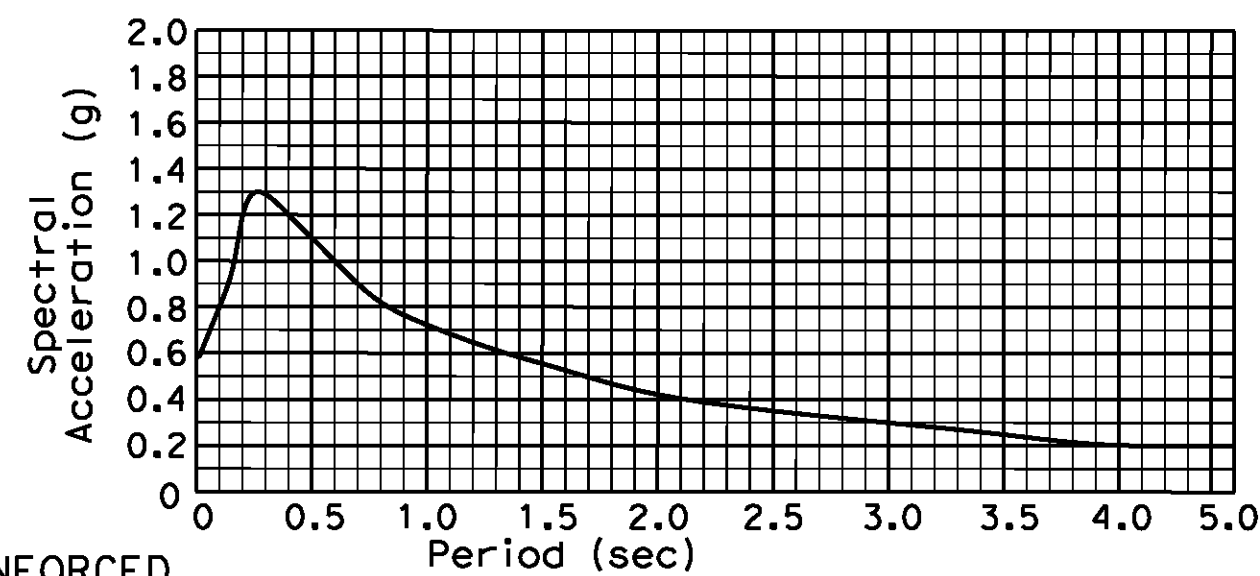
DESIGN: AASHTO LRFD Bridge Design Specifications 4th edition with Interims through 2007 and the CALTRANS Amendments Fourth Edition dated December 2008 except that details taken from Standard Plans dated May 2006 and Standard Bridge Details XS sheets, are designed using Bridge Design Specifications April 2000 ('96 AASHTO w/ Revisions by CALTRANS)

SEISMIC DESIGN: 2009 Caltrans Seismic Design Criteria (SDC), Version 1.5 April 2010 with Appendix B ARS updates

DEAD LOAD: Includes 35 psf for future wearing surface

LIVE LOADING: HL93 and permit design load

SEISMIC LOADING: SDC ARS Online
Vs30 = 920 ft/sec
Latitude = 33.957
Longitude = -117.419
PGA = 0.58g



REINFORCED CONCRETE: ASTM A706
f_y = 60 ksi
f'_c = 3.6 ksi
n = 8



NOTES:

1. Contour interval = 0.10 ft.
2. Contours do not include camber.
3. □ - Indicates even foot contour.
4. X - Indicates 10' intervals along \bar{C} Dewey Ave.

CONSTRUCTION SPECIFICATIONS

California Department of transportation (Caltrans) Standard Specifications dated May 2006. Special Provisions for the construction of this project.

INDEX TO BRIDGE PLANS

SHEET NO.	TITLE
139	GENERAL PLAN
140	DECK CONTOURS
141	FOUNDATION PLAN
142	ABUTMENT LAYOUT NO.1
143	ABUTMENT LAYOUT NO.2
144	ABUTMENT DETAILS
145	BENT DETAILS NO.1
146	BENT DETAILS NO.2
147	TYPICAL SECTION
148	GIRDER LAYOUT
149	GIRDER REINFORCEMENT
150	STRUCTURE APPROACH TYPE EQ(10)
151	STRUCTURE APPROACH DRAINAGE DETAILS
152	SLOPE PAVING - FULL SLOPE
153	LOG OF TEST BORINGS-1
154	LOG OF TEST BORINGS-2
155	LOG OF TEST BORINGS-3
156	LOG OF TEST BORINGS-4
157	LOG OF TEST BORINGS-5

PLAN SYMBOLS

- ⊙ — Section Identification
- ⊙ — Caltrans Standard Plan (May 2006) Sheet No.
- ⊙ — Detail No.

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS (DATED MAY 2006)

- A10A ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
- A10B ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
- A10C SYMBOLS (SHEET 1 OF 2)
- A10D SYMBOLS (SHEET 2 OF 2)
- A62C LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
- B0-1 BRIDGE DETAILS
- B0-3 BRIDGE DETAILS
- B0-5 BRIDGE DETAILS
- B0-13 BRIDGE DETAILS
- B7-1 BOX GIRDER DETAILS
- B7-10 UTILITY OPENINGS BOX GIRDER
- B11-51 TUBULAR HAND RAILING
- B11-54 CONCRETE BARRIER TYPE 26
- B11-55 CONCRETE BARRIER TYPE 732

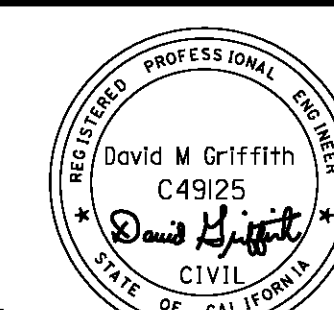
BR. NO 56C0600

IMPORTANT NOTICE
Section 4210/4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "permit to excavate" will be valid. For your Dig Alert I.D. Number call
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600

TYLIN INTERNATIONAL

3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com

DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

DEWEY AVE GRADE SEPARATION

DECK CONTOURS

HORIZ. SCALE: VERT. SCALE: N/A

R-4180

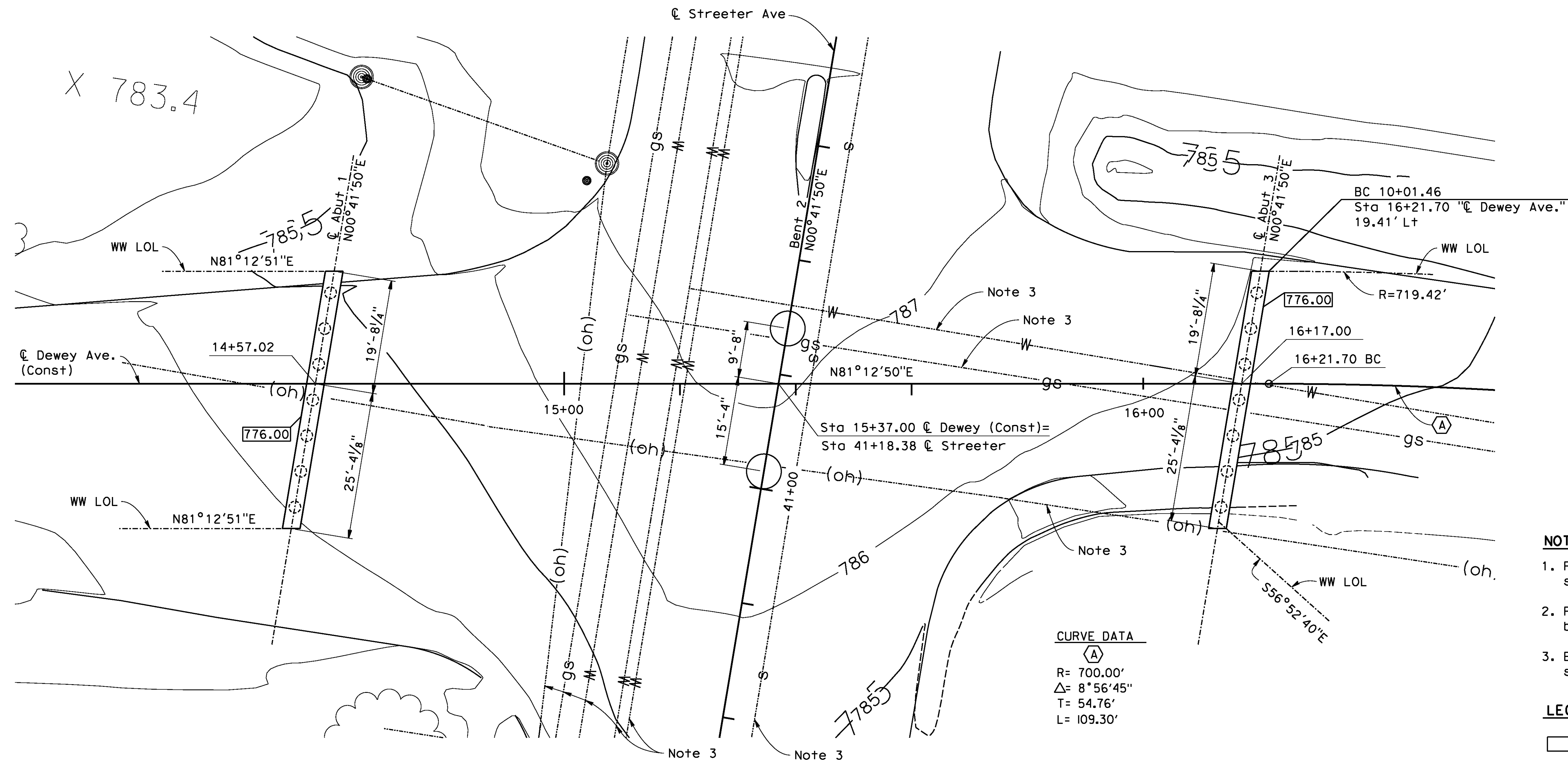
SHEET 140 OF 191

FILE NO.

d:\projects\1066_Streeter-Vgn\Bridges\106630a-cr-cd01.dgn

DATE: 8/9/2012
TIME: 6:49:14 AM

User: untitled
106630a-cr-cd01.dgn



- NOTES:**
1. For CIDH pile cut-off elevation, see "PILE DATA TABLE".
 2. For limits of excavation and backfill not shown, see A62C
 3. Existing utilities to be relocated, see "ROAD PLANS".

LEGEND

- indicates bottom of Abutment diaphragm elevation.

BENCHMARK

City of Riverside Benchmark H5-F3
 Railroad spike in power pole, 1 foot above ground.
 Northwest of the intersection of Streeter Avenue and the UPRR
 Elevation 788.643 (NAVD 1929)

BASIS OF BEARING:

The bearings show hereon are based on the line between City of Riverside Survey Control Points 0179 and 2086 on record at the city of Riverside, N66°32'14.4"E, a distance of 3,683.80 feet. City of Riverside control datum was used for this project.



PLAN
 1"=10'-0"

PILE DATA TABLE

Location	Pile Type	Nominal Resistance		Cut-off Elevation	Design Tip Elevations (FT)	Specified Tip Elevations (FT)
		Compression	Tension			
Abut 1	24" CIDH	260 Kips	N/A	776.25	746(a), 760(c), 756(d)	746
Bent 2	72" CIDH	2660 Kips	N/A	761.5	683(a), 728(c), 701(d)	683
Abut 3	24" CIDH	260 Kips	N/A	776.25	746(a), 760(c), 756(d)	746

Design tip elevation is controlled by the following demands: (a) Compression, (b) Tension, (c) Settlement, and (d) Lateral Loads

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME JOSE CORONA

BR. NO 56C0600

D:\projects\1066_Streeter\Asn\Gr\106630a-er-fap01.dgn

DATE: 8/9/2012
 TIME: 6:49:42 AM

IMPORTANT NOTICE
 Section 4216.4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "permit to excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
 3550 VINE STREET, SUITE 120
 RIVERSIDE, CA 92507
 TEL (951) 788-4688
 www.tylin.com

PROFESSIONAL ENGINEER
 David M. Griffith
 C49125
 CIVIL
 STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

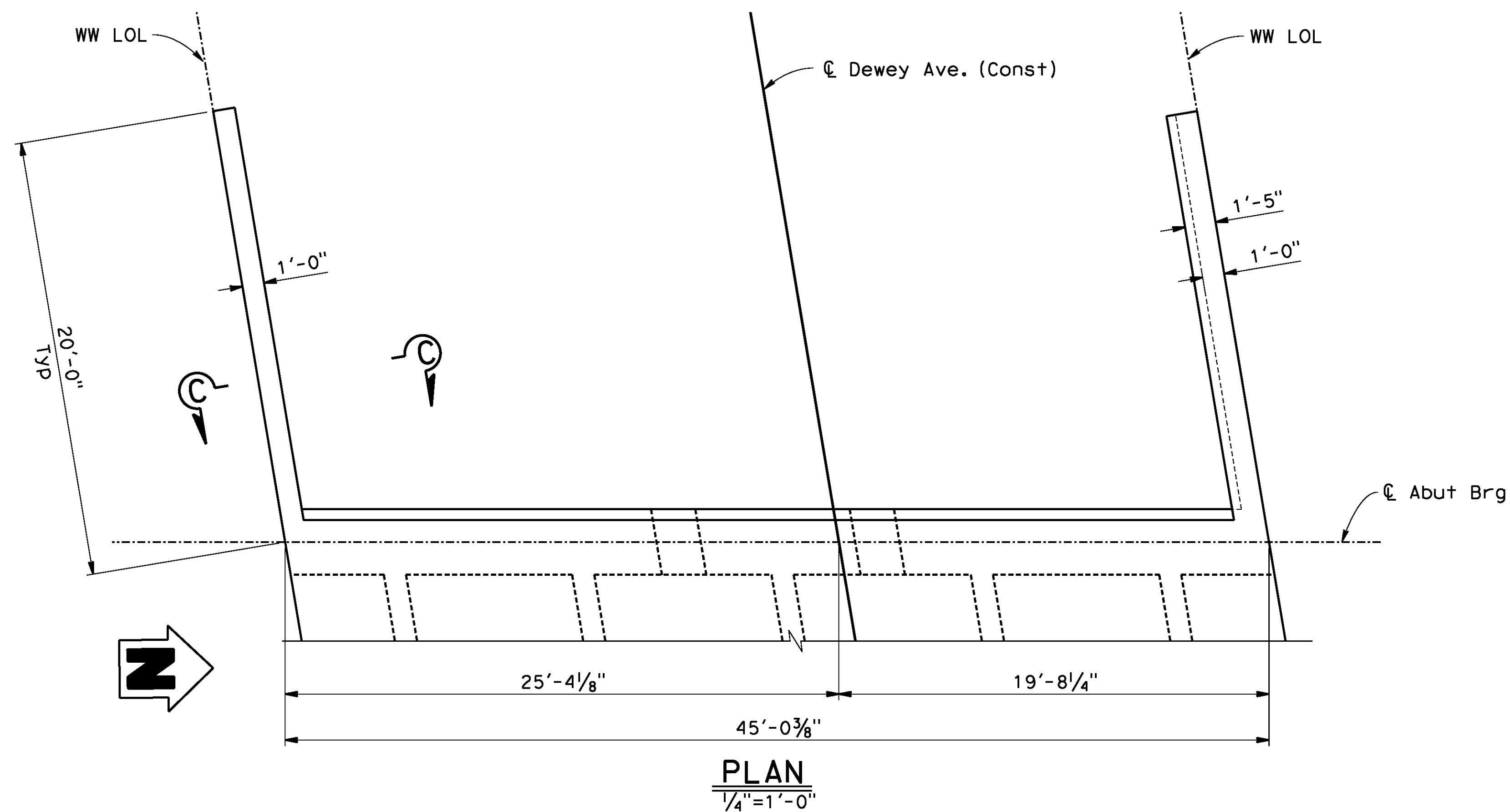
DESIGNED BY *RS* DRAWN BY *MY* CHECKED BY *DS*

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
DEWEY AVE GRADE SEPARATION
FOUNDATION PLAN

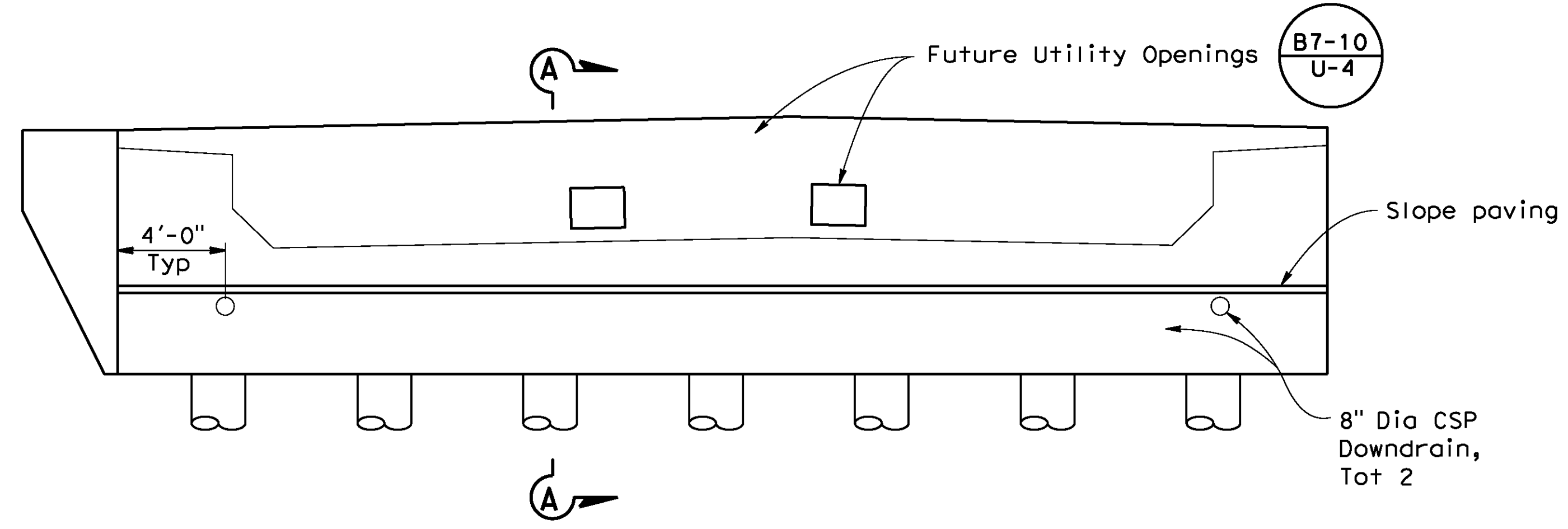
HORIZ. SCALE: VERT. SCALE: N/A

R-4180
 SHEET 141 OF 191
 FILE NO.

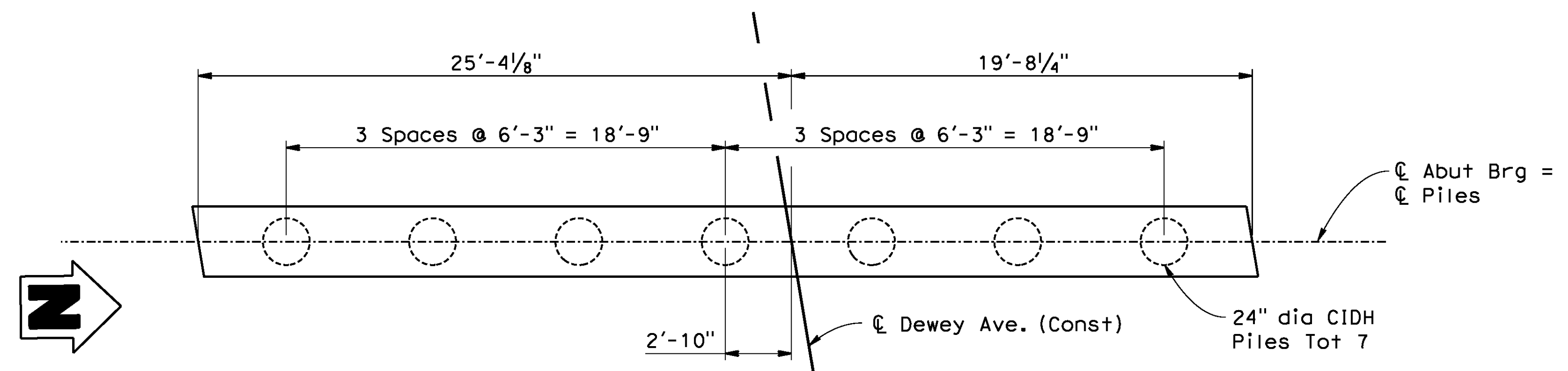
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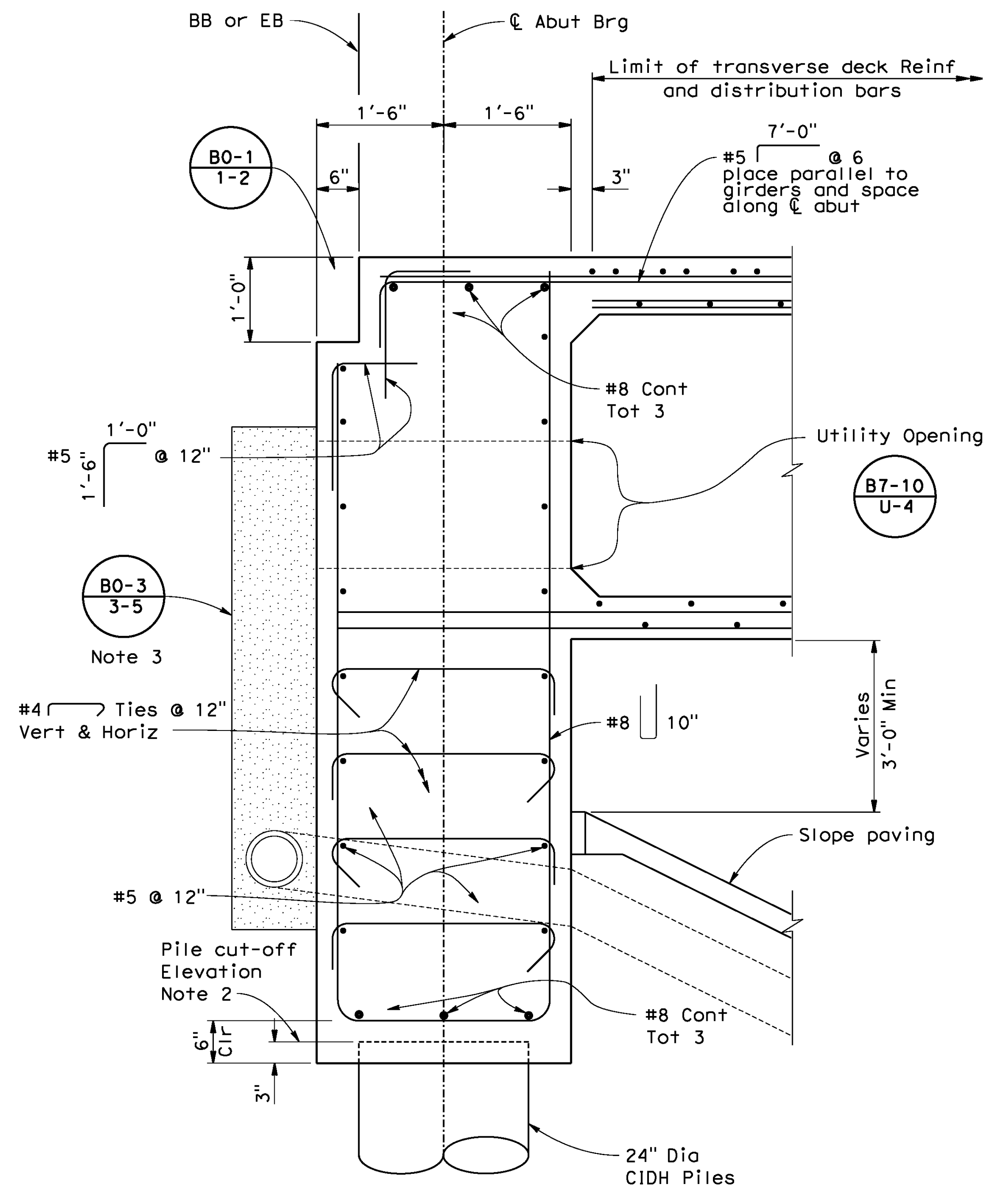
PLAN
1/4"=1'-0"



ELEVATION
1/4"=1'-0"



PILE LAYOUT
1/4"=1'-0"



SECTION A-A
1/2"=1'-0"

NOTES:

- Concrete barrier not shown.
- See "FOUNDATION PLAN" for "PILE DATA TABLE".
- See "SLOPE PAVING - FULL SLOPE" sheet for "DRAINAGE DETAIL".
- See "ABUTMENT LAYOUT NO.2" sheet for "SECTION C-C"

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

BR. NO 56C0600

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RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com
DATE 8-7-12

PROFESSIONAL ENGINEER
David M. Griffith
C49125
David Griffith
CIVIL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

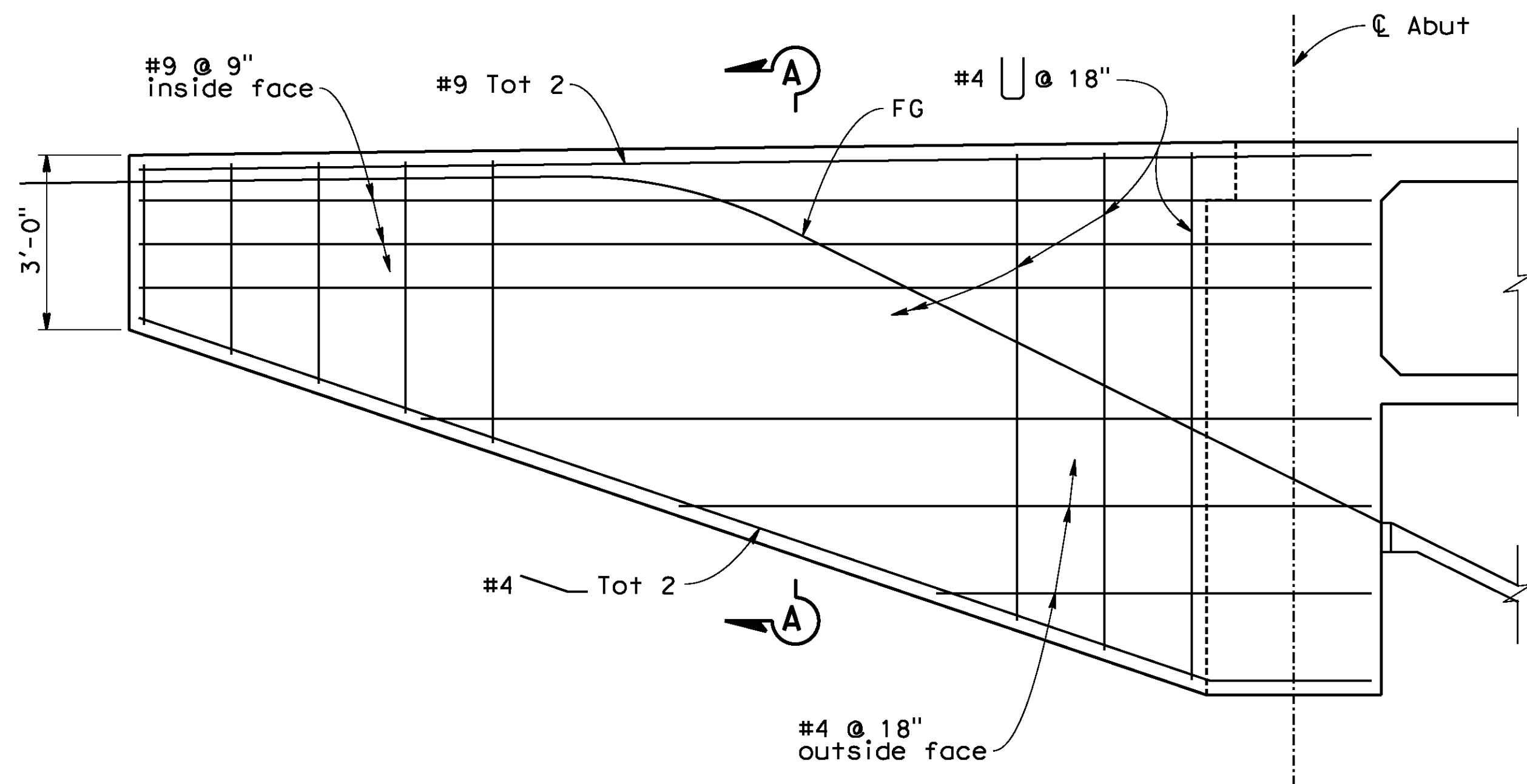
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
DEWEY AVE GRADE SEPARATION
ABUTMENT LAYOUT NO.1

R-4180
SHEET 142 OF 191
FILE NO.

D:\projects\1066_Sreeter\app\br-lga\dwg\106630e-r-c01_1.dgn

DATE: 8/9/2012
TIME: 6:50:05 AM

106630e-r-c01_1.dgn

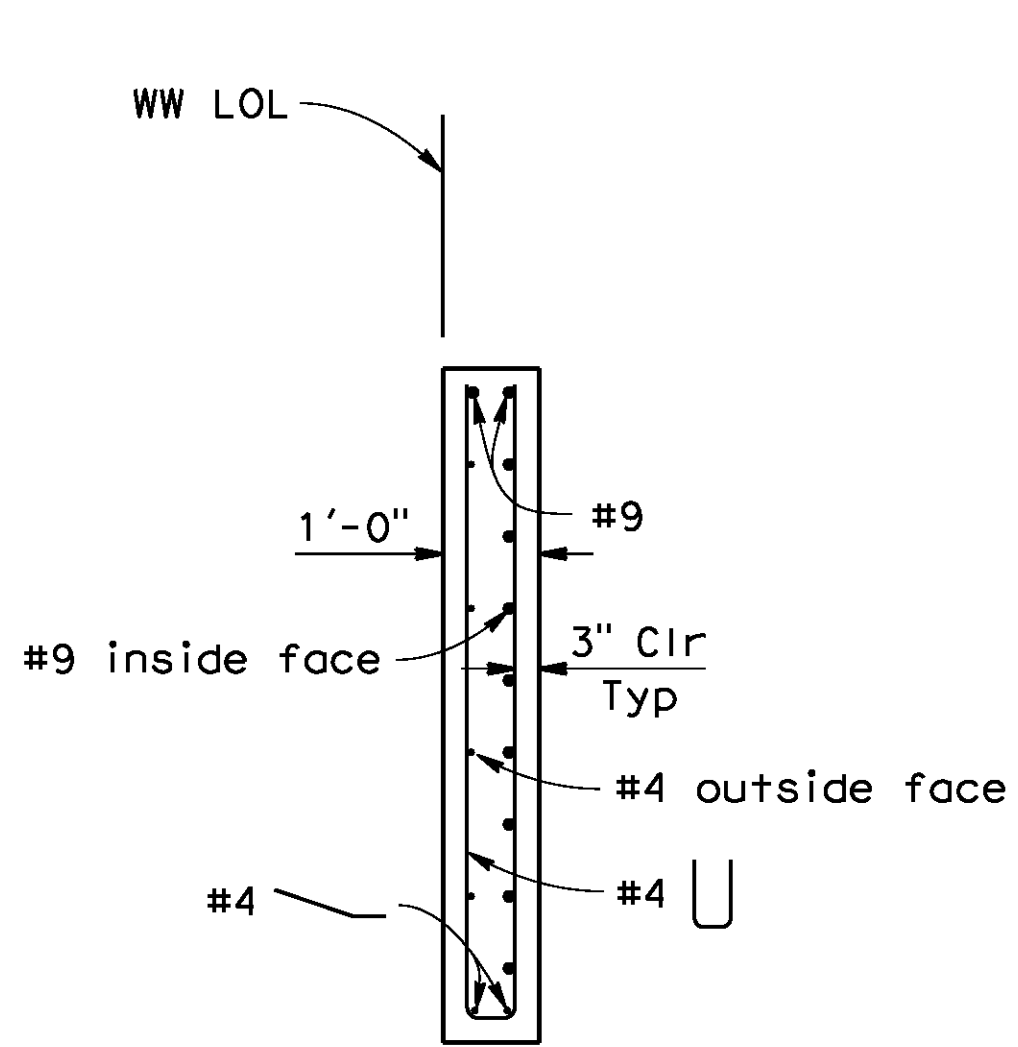


NOTES:

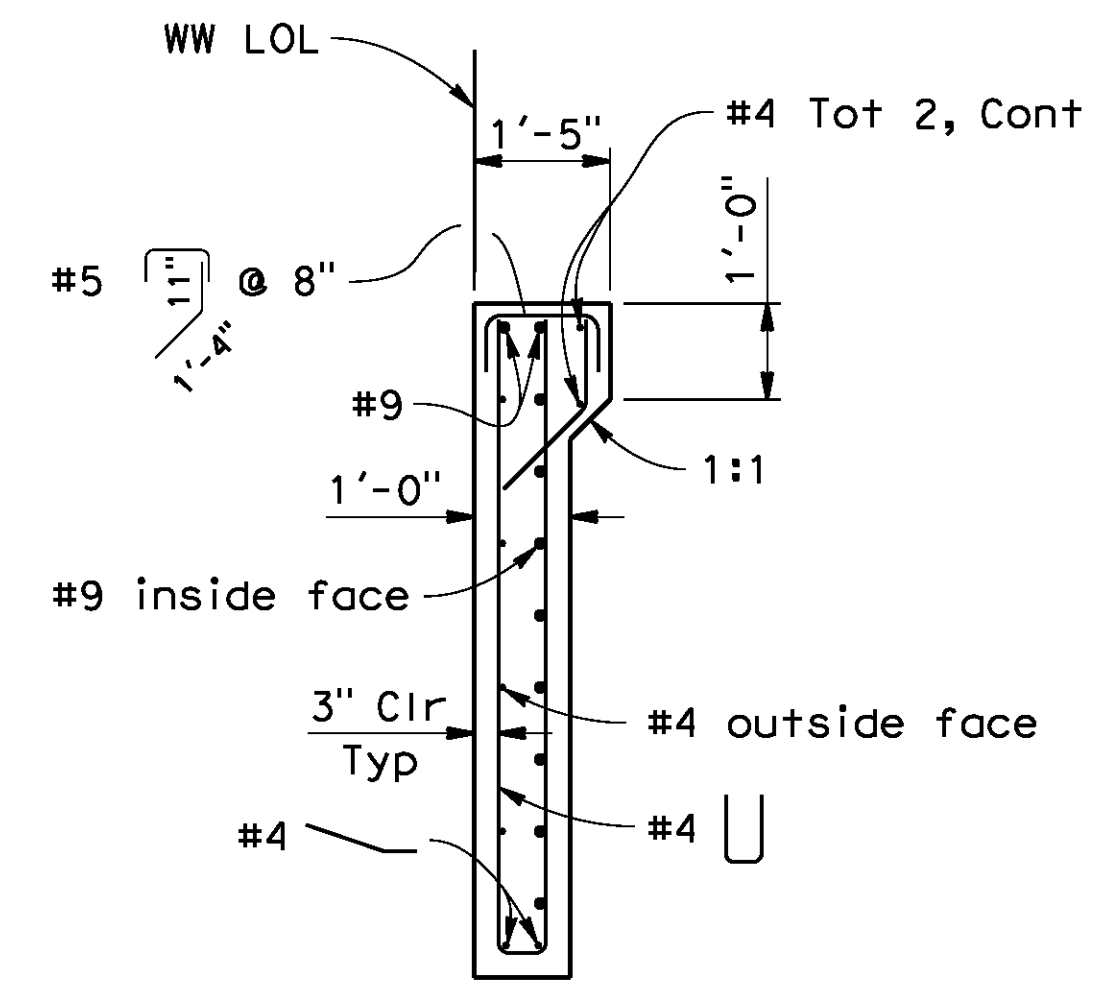
1. Abutment 1 Wingwall shown, Abutment 3 Wingwall similar.
2. Barrier not shown.
3. For details not shown, see B0-1
1-5

ABUTMENT WINGWALL ELEVATION

1/2"=1'-0"



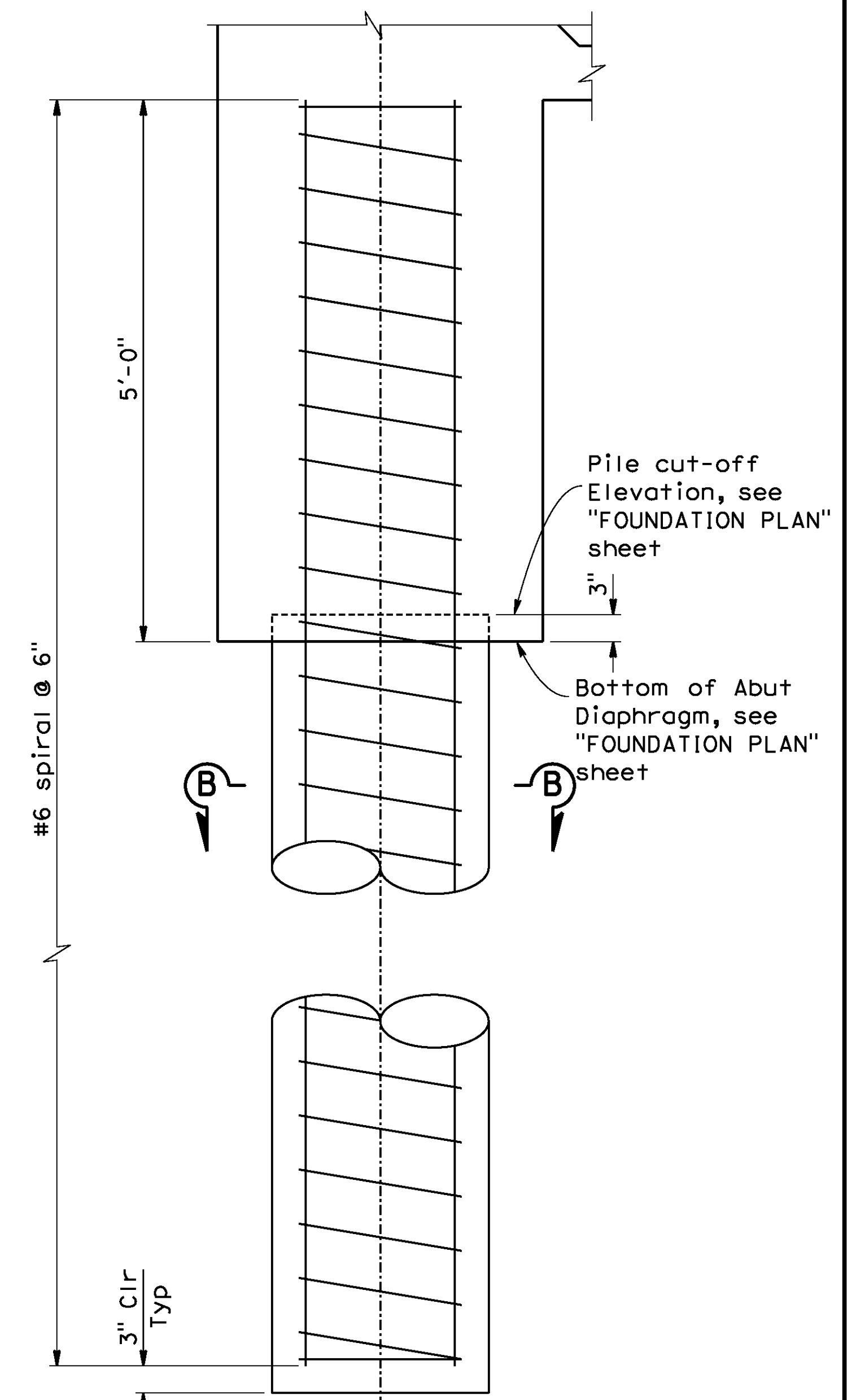
RIGHT EDGE OF DECK



LEFT EDGE OF DECK

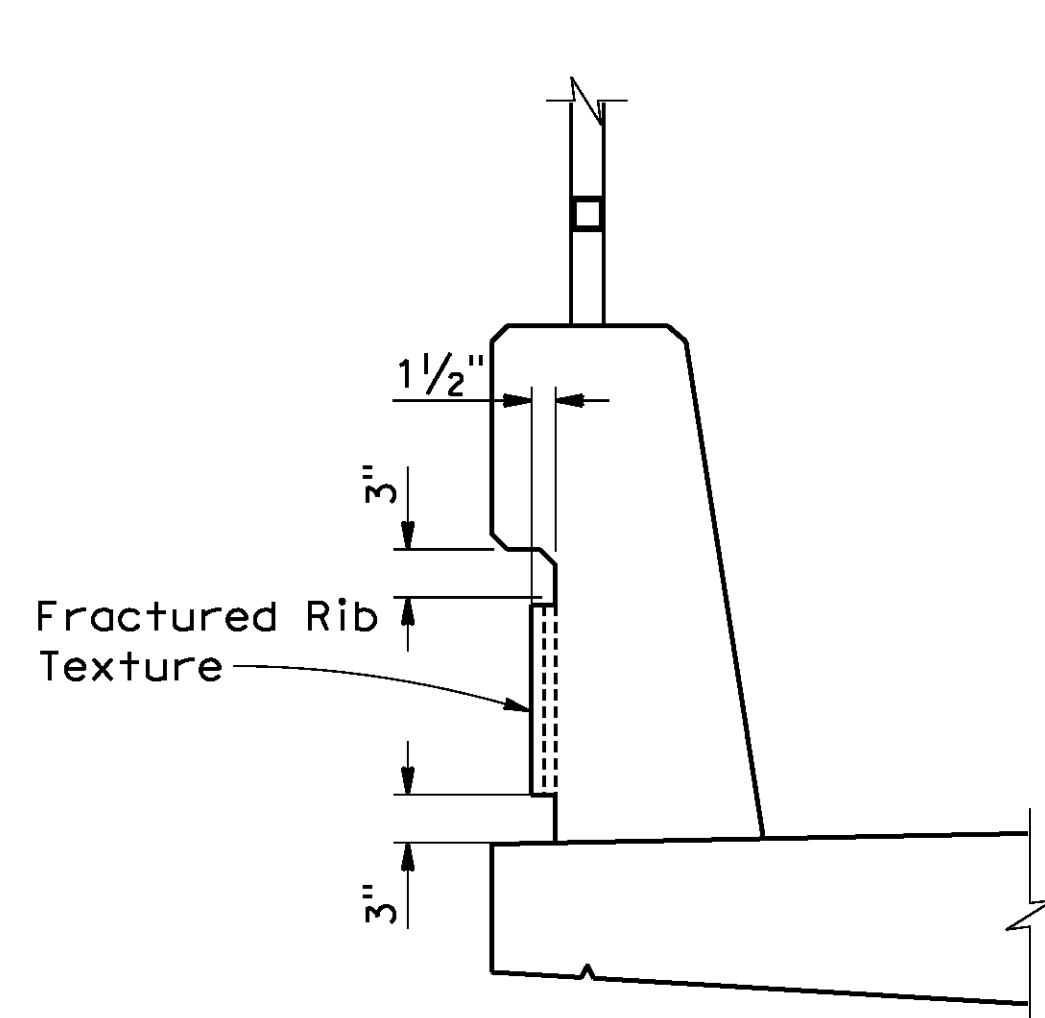
SECTION A-A

1/2"=1'-0"

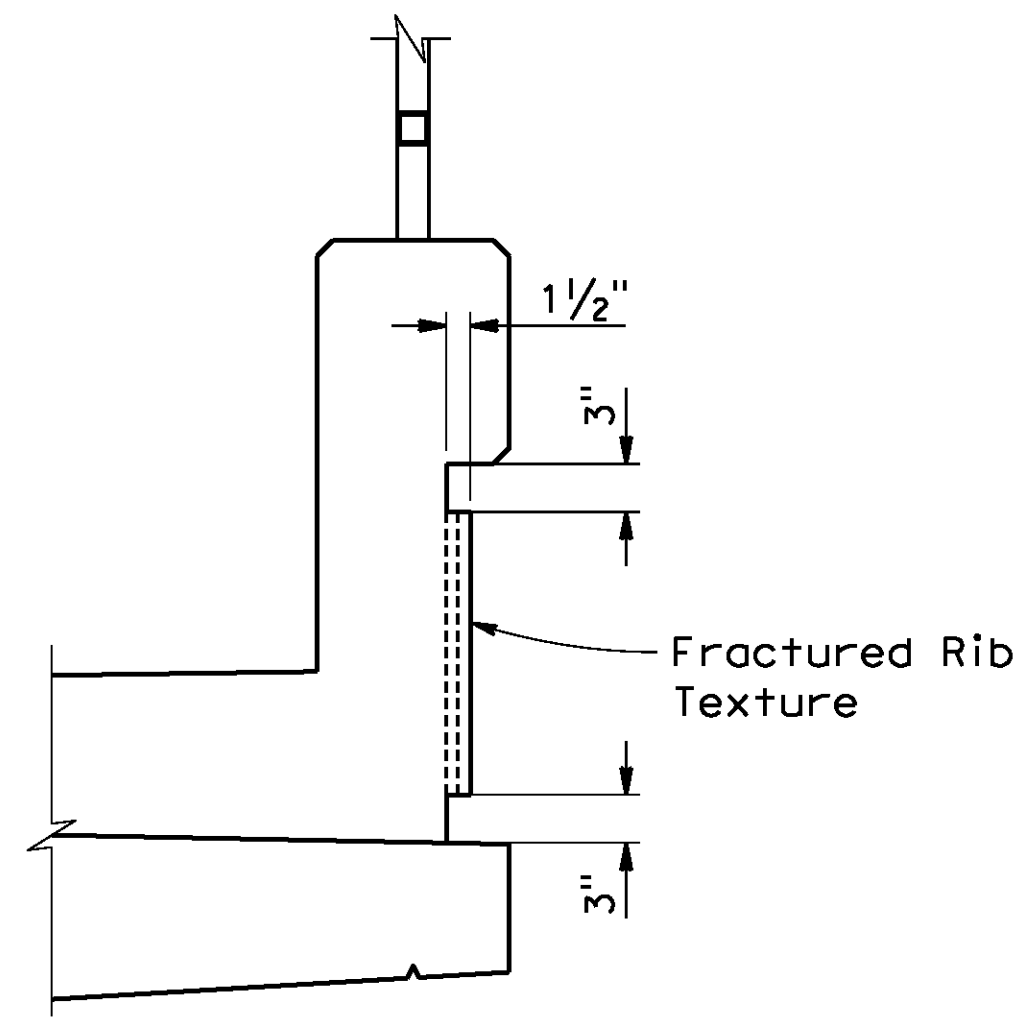


PILE DETAIL

1"=1'-0"



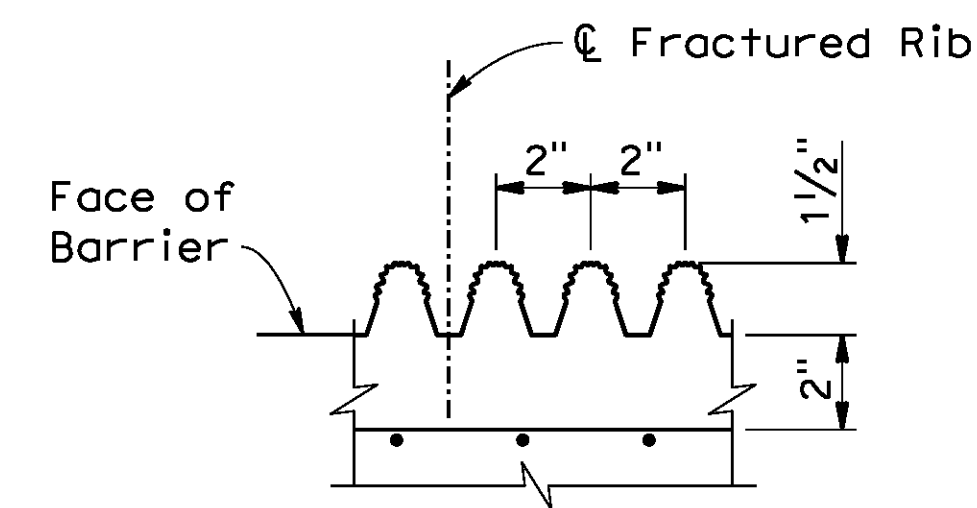
*** TYPE 732 AND 732A BARRIER**



**** TYPE 26 AND 26A BARRIER (MOD)**

CONCRETE BARRIER ARCHITECTURAL TREATMENT

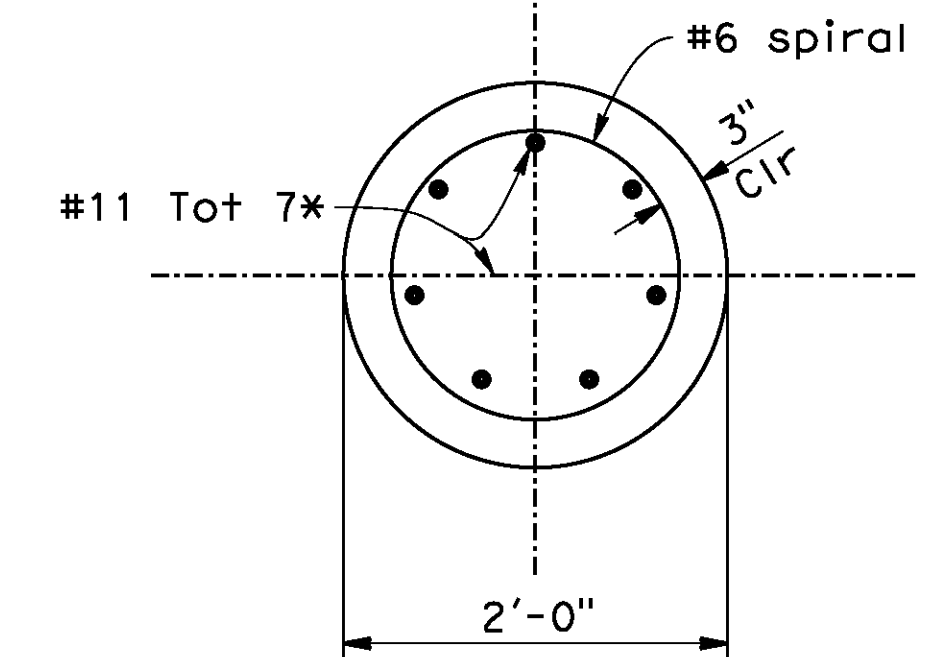
1"=1'-0"



FRACTURED RIB TEXTURE

3"=1'-0"

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

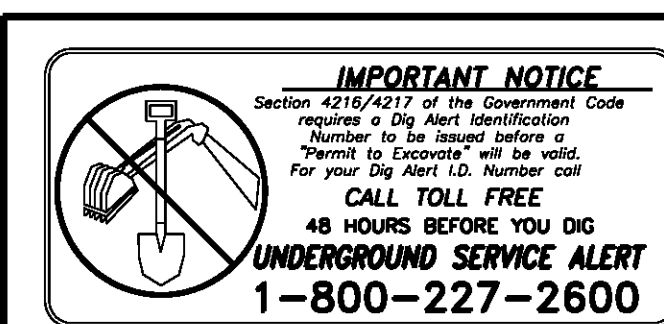


SECTION B-B

1"=1'-0"

* - No lap splice is allowed

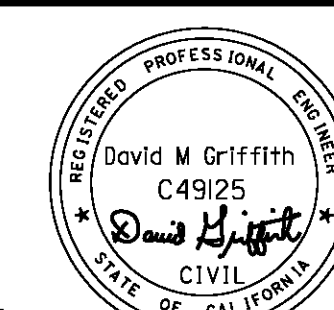
- * - TYPE 732 BARRIER shown, TYPE 732A BARRIER similar
- ** - Type 26 BARRIER shown, TYPE 26A BARRIER similar



TYLIN INTERNATIONAL

3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
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www.tylin.com

DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

DEWEY AVE GRADE SEPARATION

ABUTMENT DETAILS

HORIZ. SCALE: VERT. SCALE: N/A

BR. NO 56C0600

R-4180

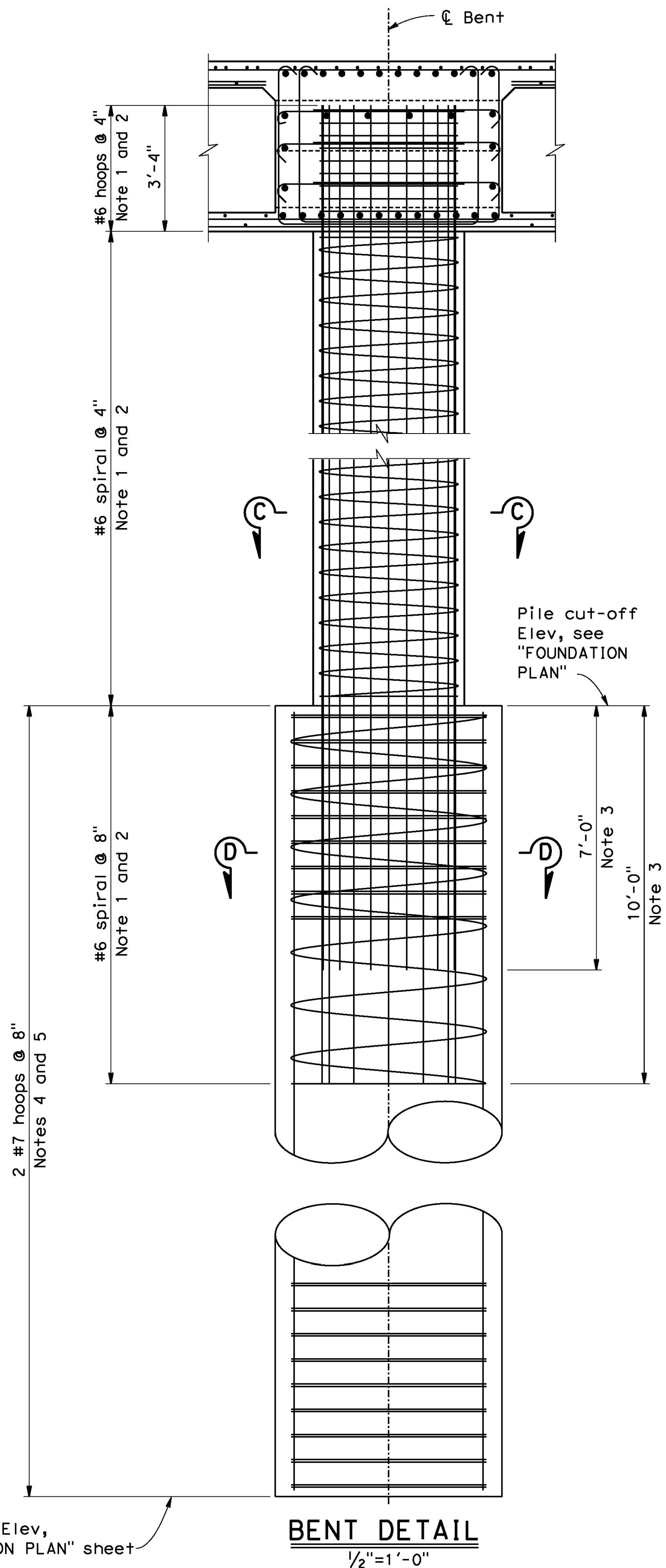
SHEET 144 OF 191

FILE NO.

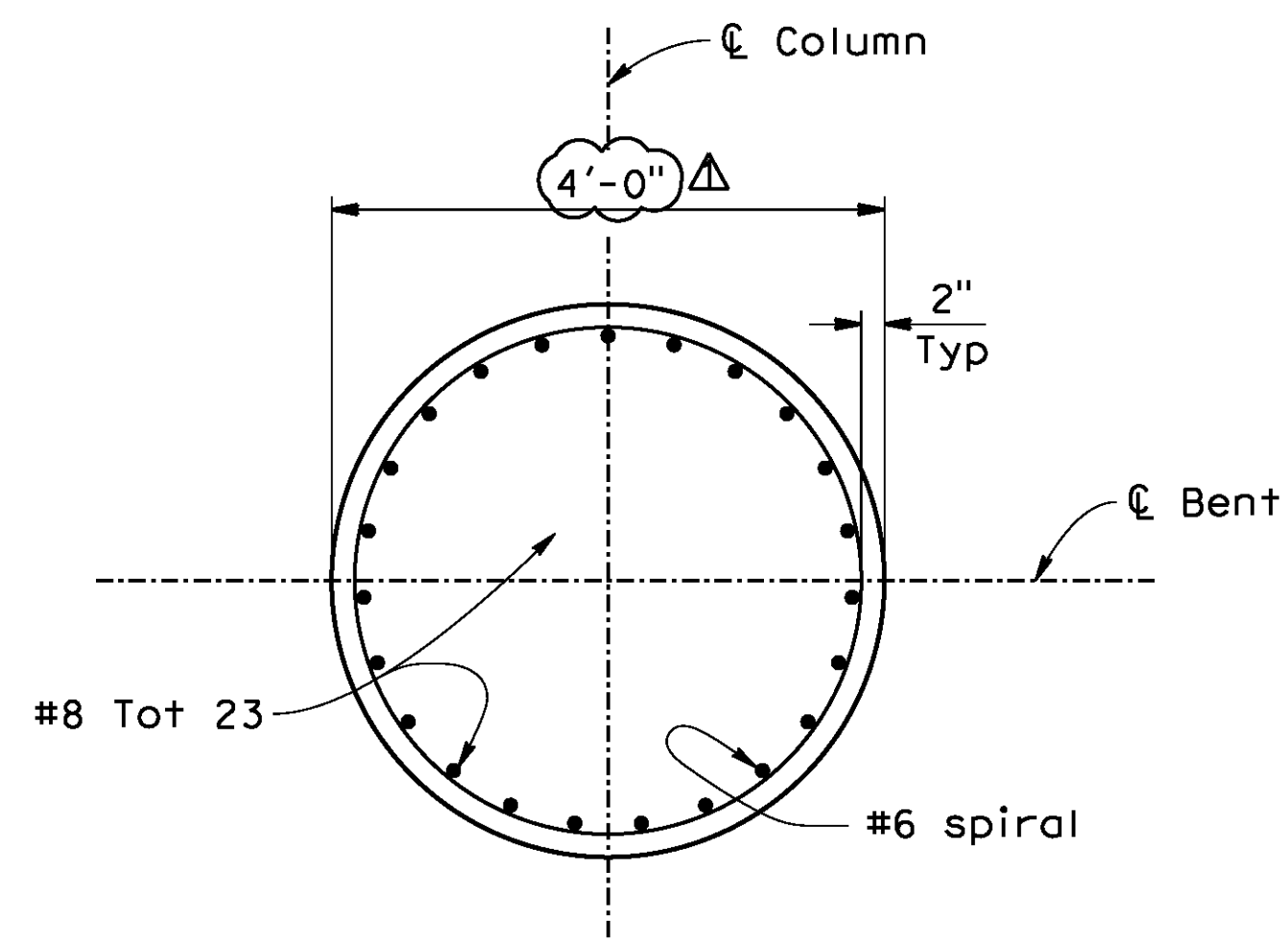
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TIME: 6:50:47 AM

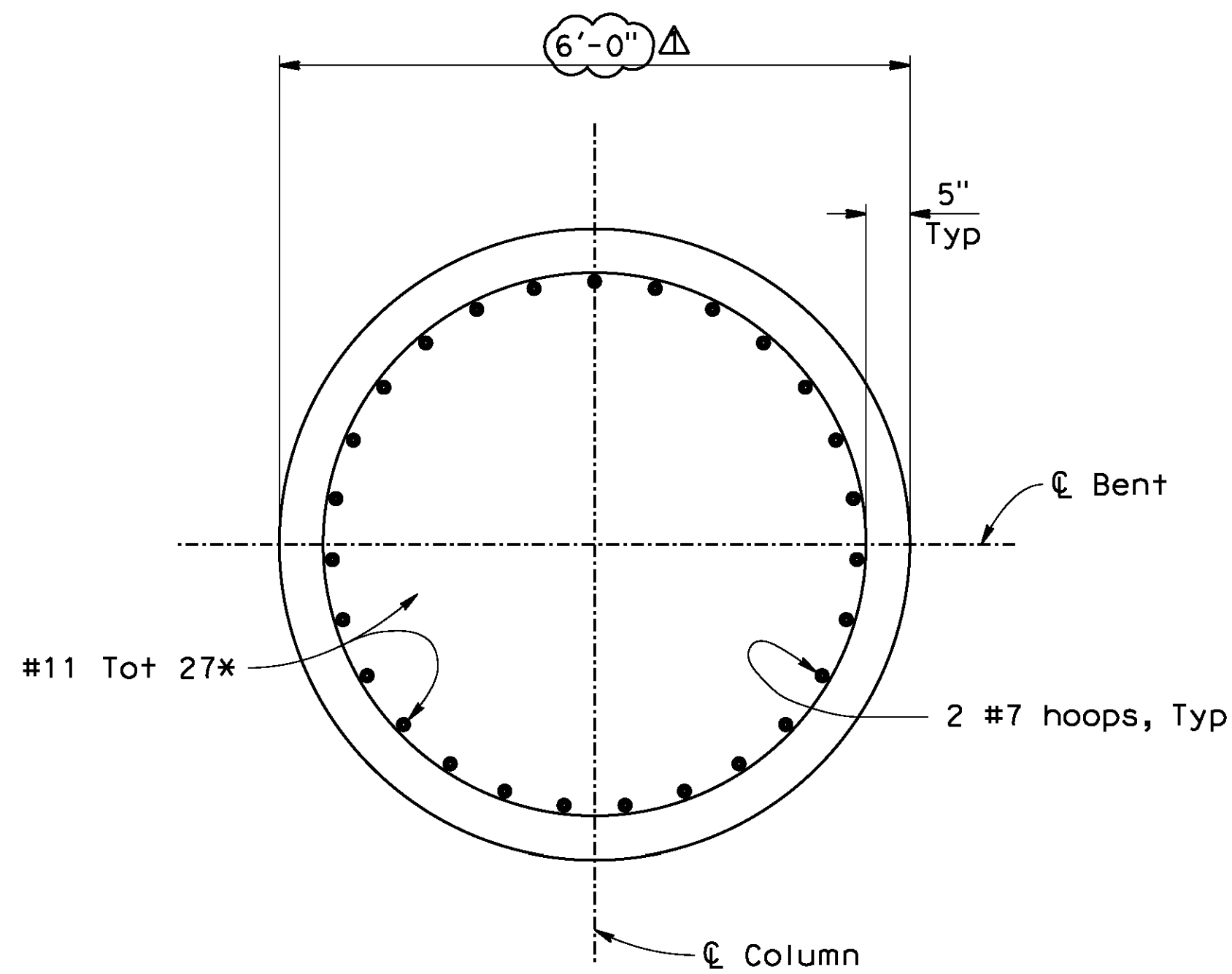
106630a-r-c01.dgn



BENT DETAIL
1/2"=1'-0"



SECTION C-C
3/4"=1'-0"



* - No lap splice is allowed

SECTION D-D
3/4"=1'-0"

NOTES:

1. No splice is allowed in column #8 bars
2. Only ultimate butt splice is allowed in column spiral and/or hoops.
3. Extend column bars 7'-0" and 10'-0" into pile, alternate.
4. Only service butt splice is allowed in pile hoops.
5. Only service splice is allowed in pile #11 bars.

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

BR. NO 56C0600

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1-800-227-2600

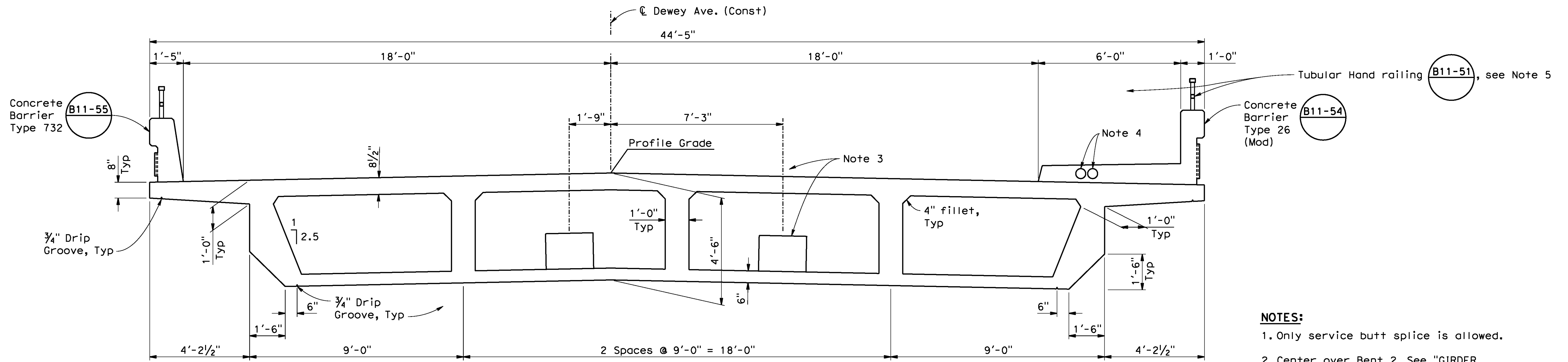
TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com
DATE 8-7-12

REGISTERED PROFESSIONAL ENGINEER
David M. Griffith
C49125
CIVIL
STATE OF CALIFORNIA

DESIGNED BY	RB	DRAWN BY	MT	CHECKED BY	DS
REVISIONS		APPR.	DATE		

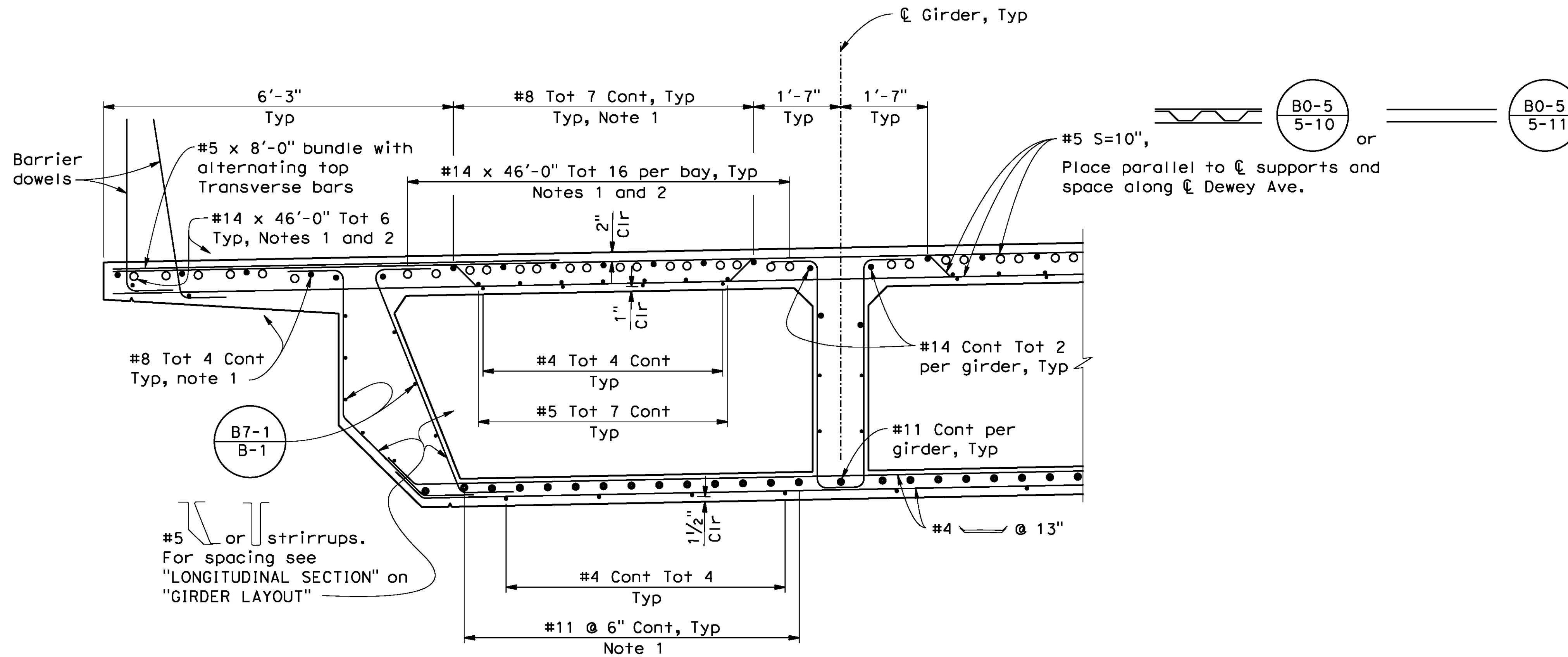
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
DEWEY AVE GRADE SEPARATION
BENT DETAILS NO. 2
HORIZ. SCALE: VERT. SCALE: N/A

R-4180
SHEET 146 OF 191
FILE NO.



TYPICAL SECTION
1/2"=1'-0"

- NOTES:**
1. Only service butt splice is allowed.
 2. Center over Bent 2. See "GIRDER REINFORCEMENT" sheet.
 3. Future Utility Opening, see (B7-10 U-4) and (B7-10 U-7)
 4. 2-5" Dia Future Utility openings
 5. Paint hand railing black with Polyurethane paint, see Specifications.



PART TYPICAL SECTION (B0-5) (B7-1) (B7-10)
3/4"=1'-0"

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

BR. NO 56C0600

IMPORTANT NOTICE
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PROFESSIONAL ENGINEER
David M. Griffith
C49125
CIVIL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
DEWEY AVE GRADE SEPARATION
TYPICAL SECTION

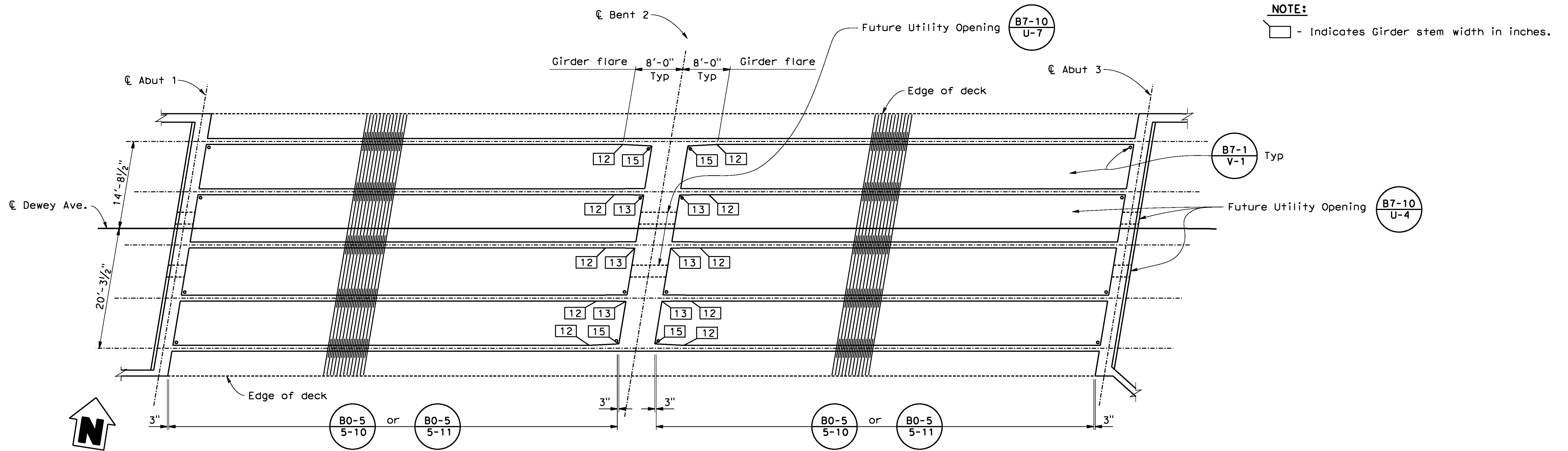
R-4180
SHEET 147 OF 191
FILE NO.

HORIZ. SCALE: VERT. SCALE: N/A

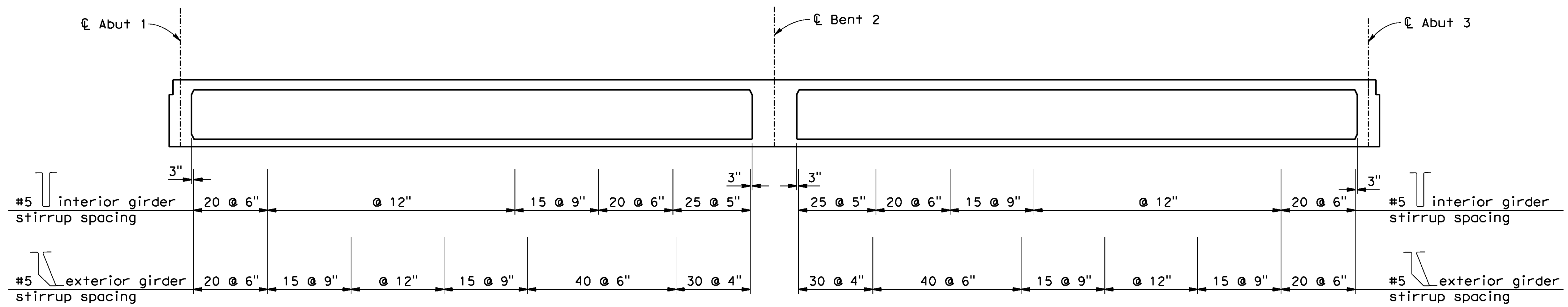
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DATE: 8/9/2012
TIME: 6:51:58 AM

User: untitled
106630a-k-rs01.dgn



PLAN
1/8" = 1'-0"



LONGITUDINAL SECTION
No Scale

B0-5 B7-1 B7-10

NOTE:
[] - Indicates Girder stem width in inches.

AS BUILT
NO CORRECTIONS ON THIS SHEET!
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

BR. NO 56C0600

IMPORTANT NOTICE
Section 4110/4217 of the Government Code requires a Dig Alert Identification Number to be placed before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call **CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600**

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RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com

PROFESSIONAL ENGINEER
David M. Griffithh
C49125
CIVIL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
DEWEY AVE GRADE SEPARATION
GIRDER LAYOUT

R-4180
SHEET 148 OF 191
FILE NO.

HORIZ. SCALE: VERT. SCALE: N/A

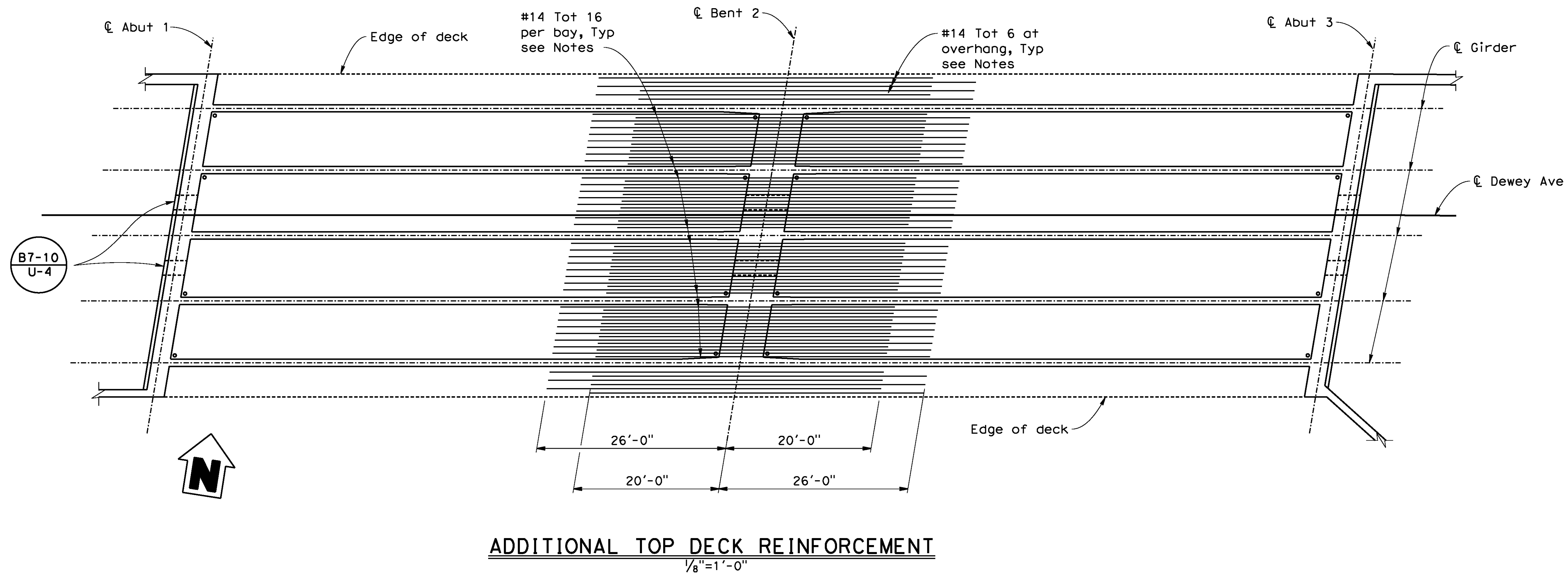
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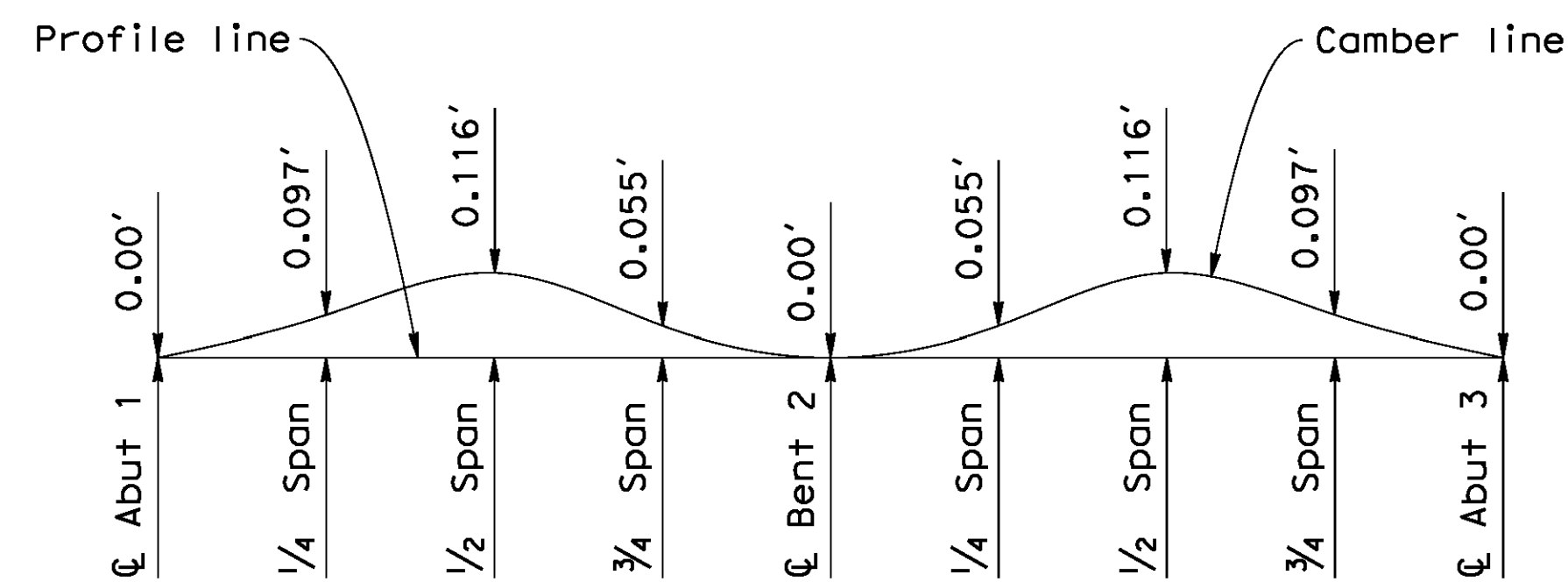
NOTES:

1. No splice is allowed in #14 bars.
2. Stagger bars
3. Bar reinforcement shown is in addition to top slab #8 continuous bars, not shown here for clarity.



ADDITIONAL TOP DECK REINFORCEMENT

1/8" = 1'-0"

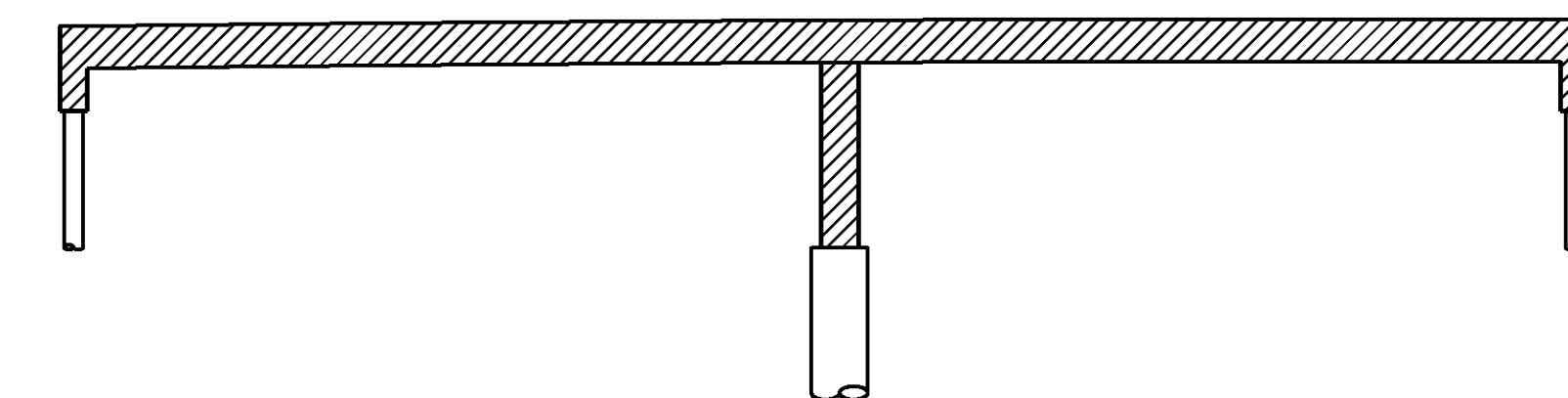


CAMBER DIAGRAM

No Scale

(Does not include allowance for falsework settlement)

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA



LEGEND

- Structural Concrete, Bridge (3600 psi @ 28 days)
- Cast-in-Drilled-Hole Concrete Pile (3600 psi @ 28 days)

CONCRETE STRENGTH AND TYPE LIMITS

No Scale

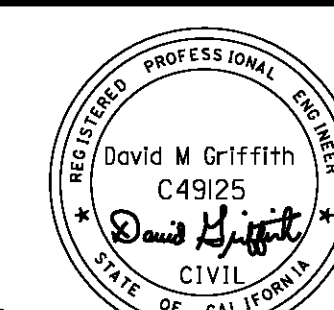
BR. NO 56C0600

IMPORTANT NOTICE
Section 4210/4217 of the Government Code requires a Dig Alert Identification Number to be placed on any "permit to excavate" will be void. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL

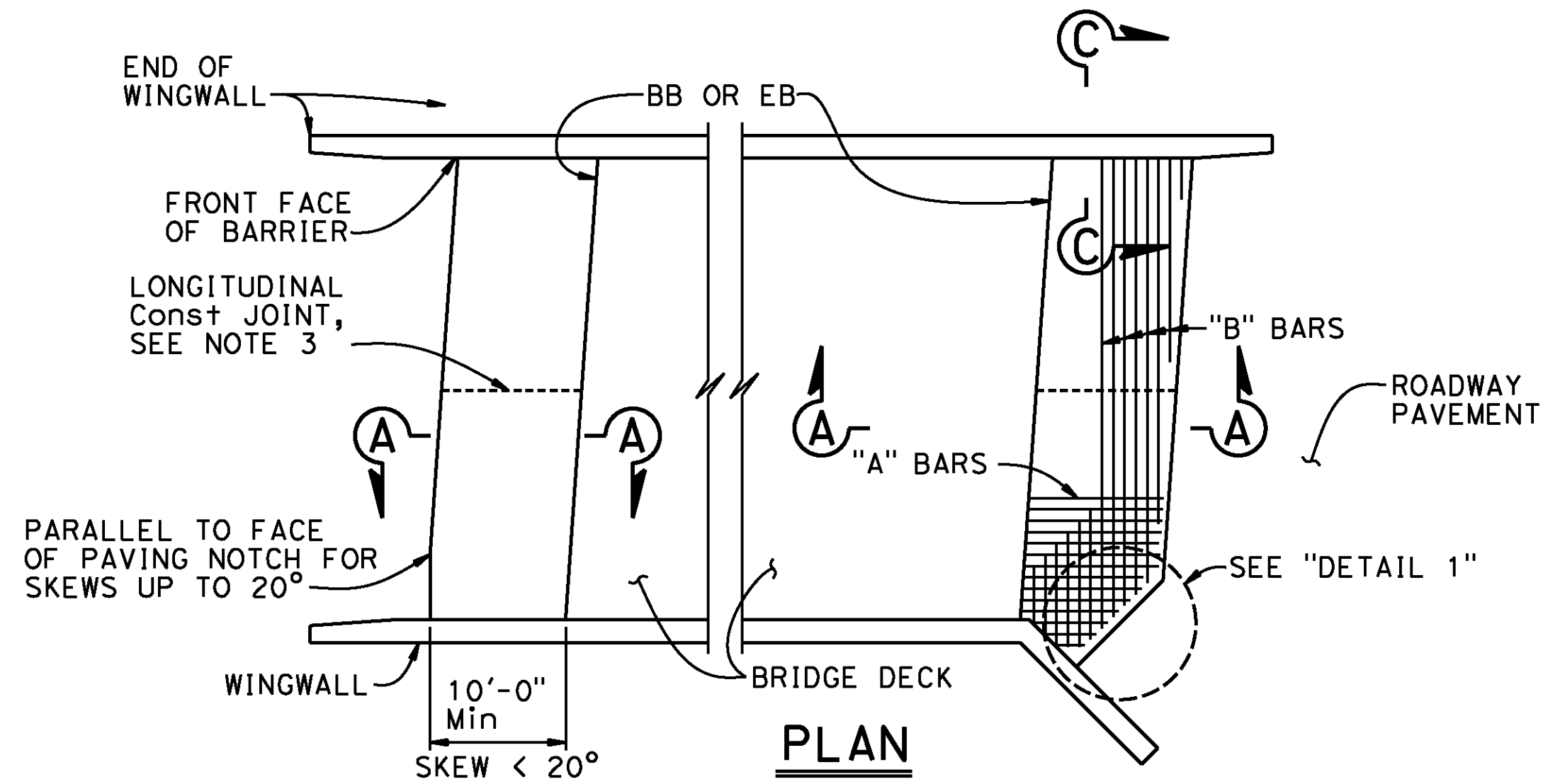
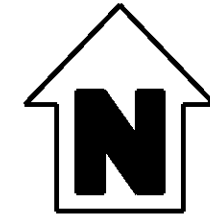
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com

DATE 8-7-12



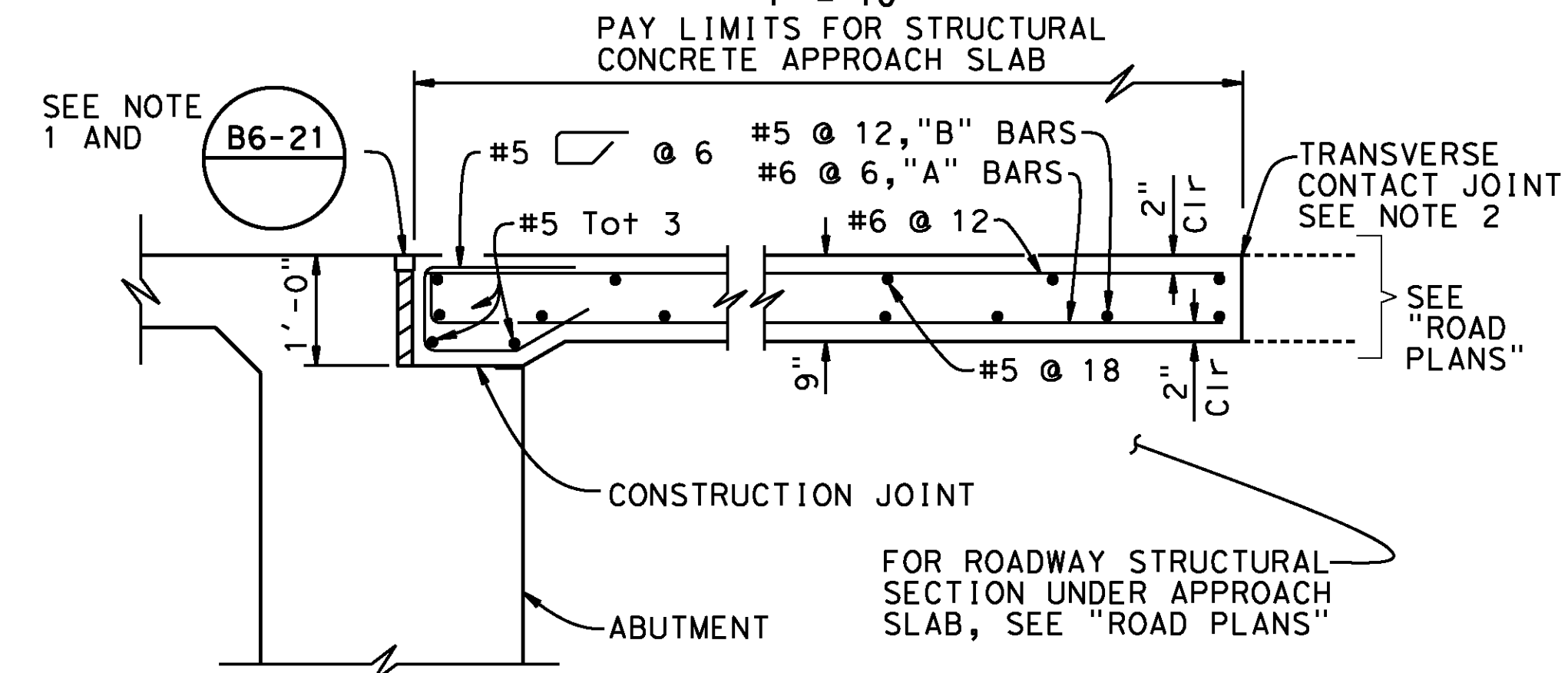
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT		R-4180
DEWEY AVE GRADE SEPARATION		
GIRDER REINFORCEMENT		SHEET 149 OF 191
DESIGNED BY <i>RS</i>	DRAWN BY <i>MY</i>	CHECKED BY <i>DS</i>
HORIZ. SCALE:		VERT. SCALE: N/A
FILE NO.		



PLAN

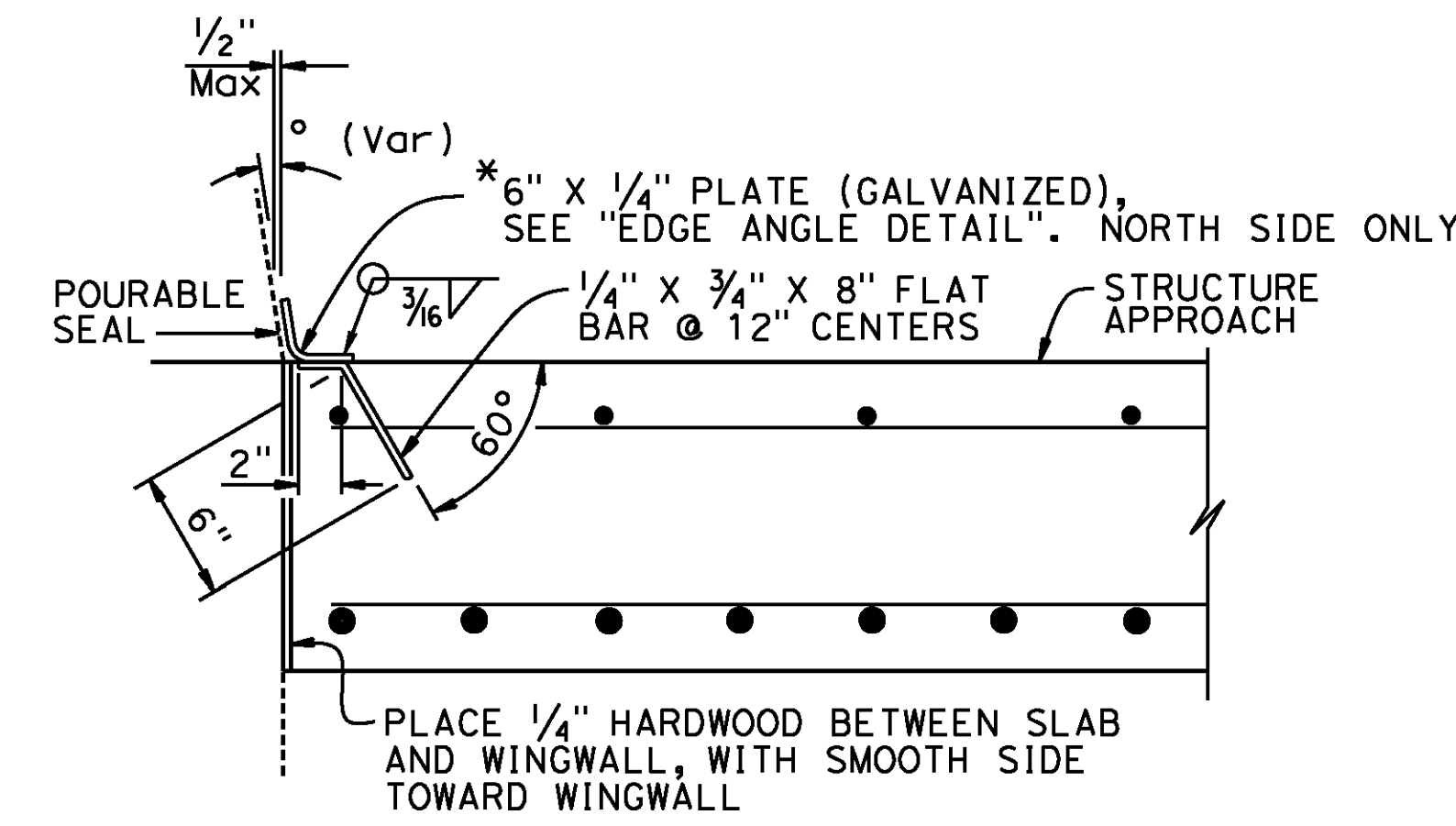
1" = 10'



SECTION A-A

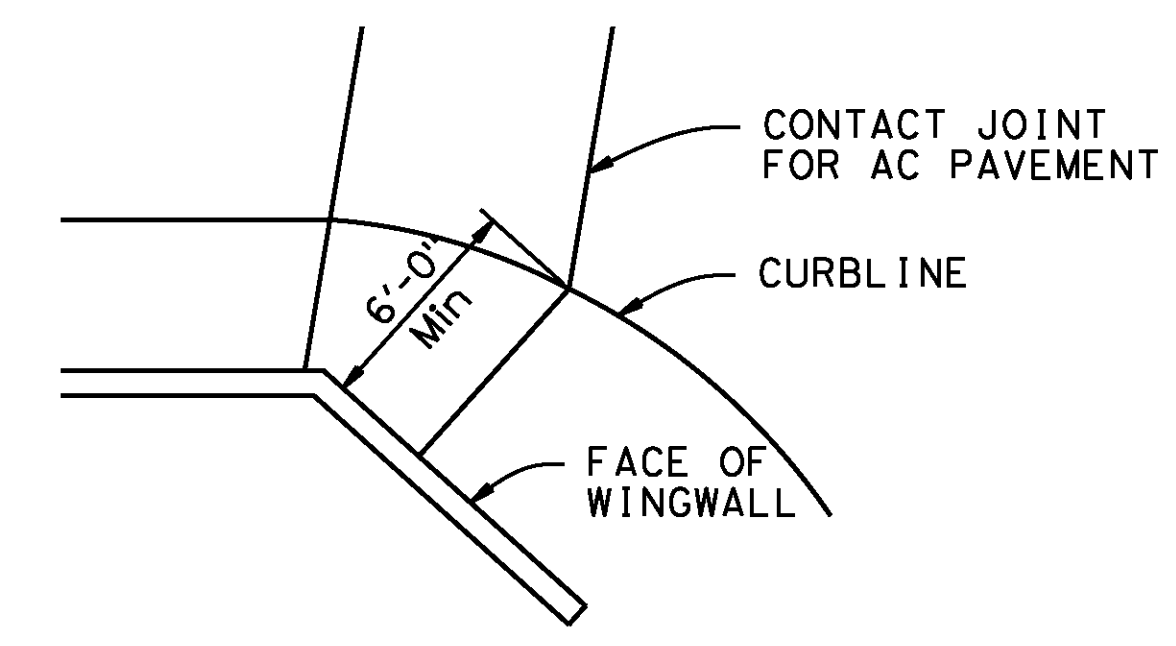
3/4" = 1'-0"

NOTE: For connection of Approach Slab to abutment, see "ABUTMENT TIE DETAILS"



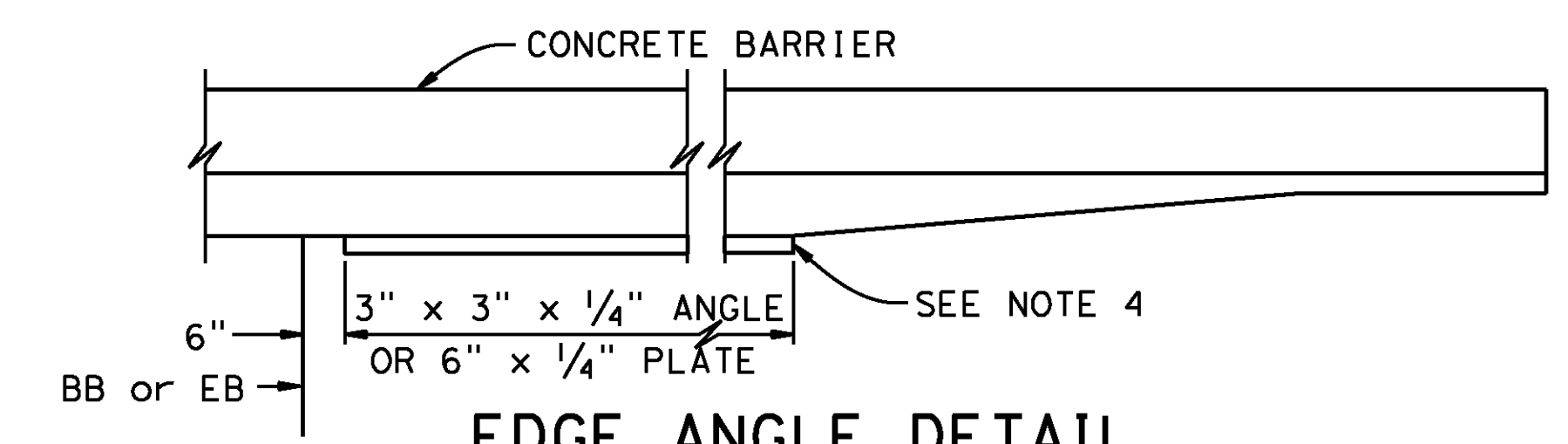
DETAIL 2

1 1/2" = 1'-0"



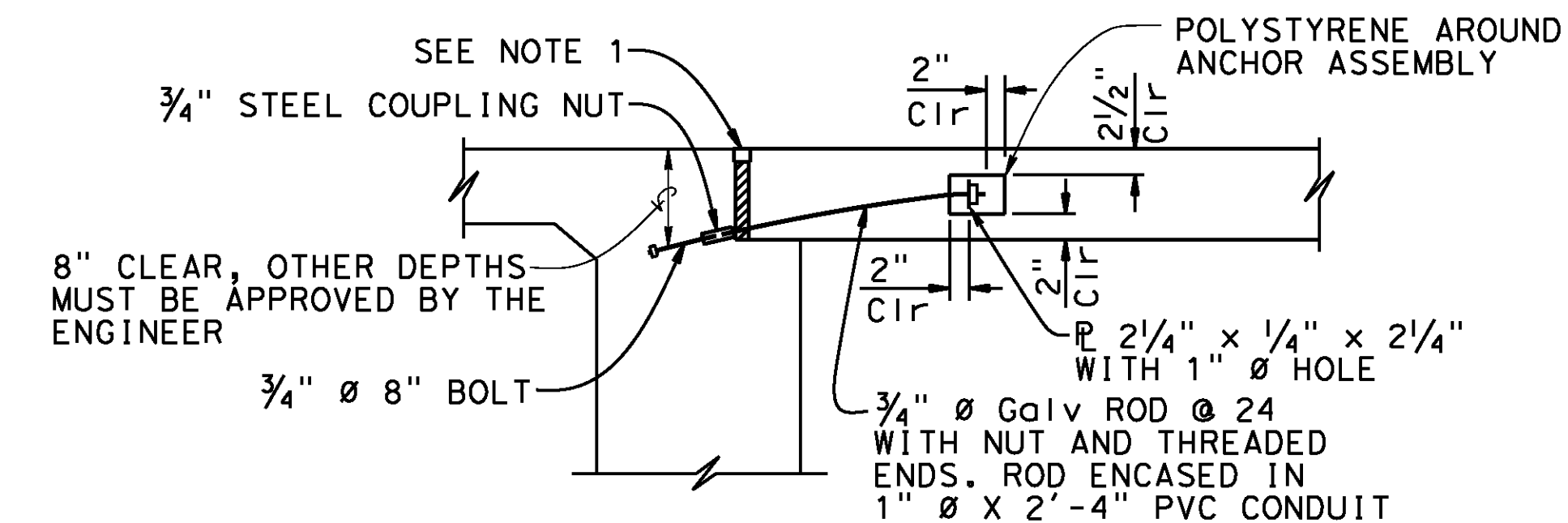
DETAIL 1

No Scale



EDGE ANGLE DETAIL

1/2" = 1'-0"

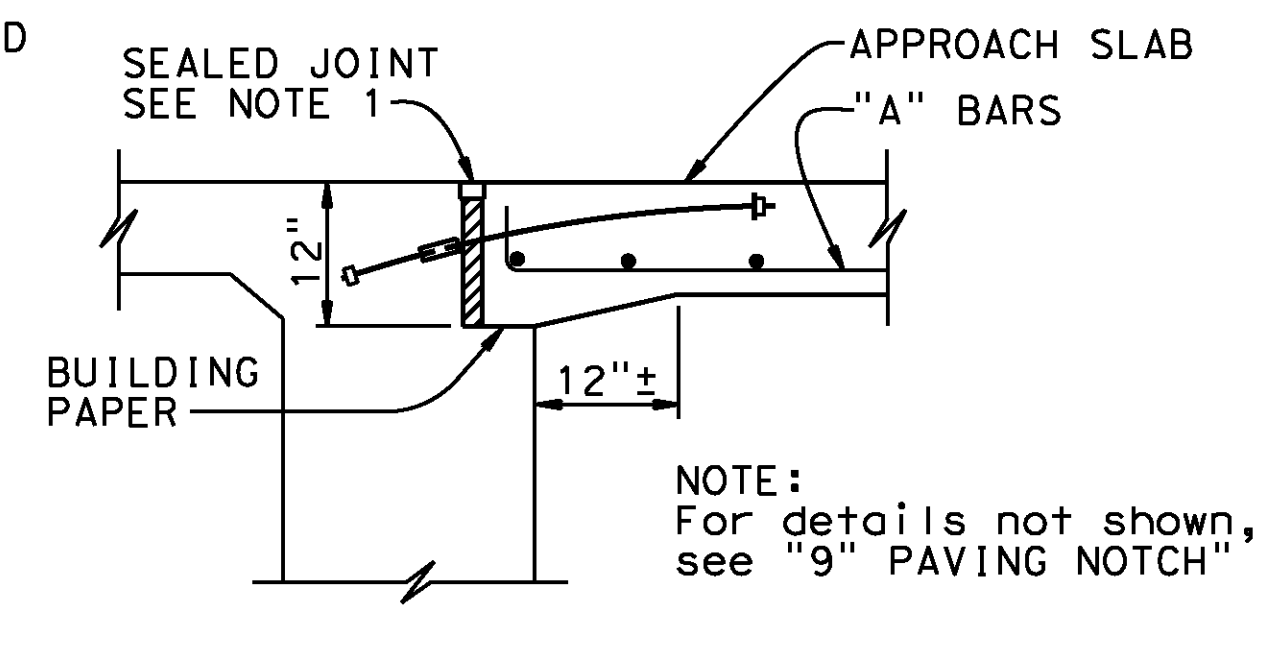


9" PAVING NOTCH

DIAPHRAGM TYPE ABUTMENT

ABUTMENT TIE DETAILS

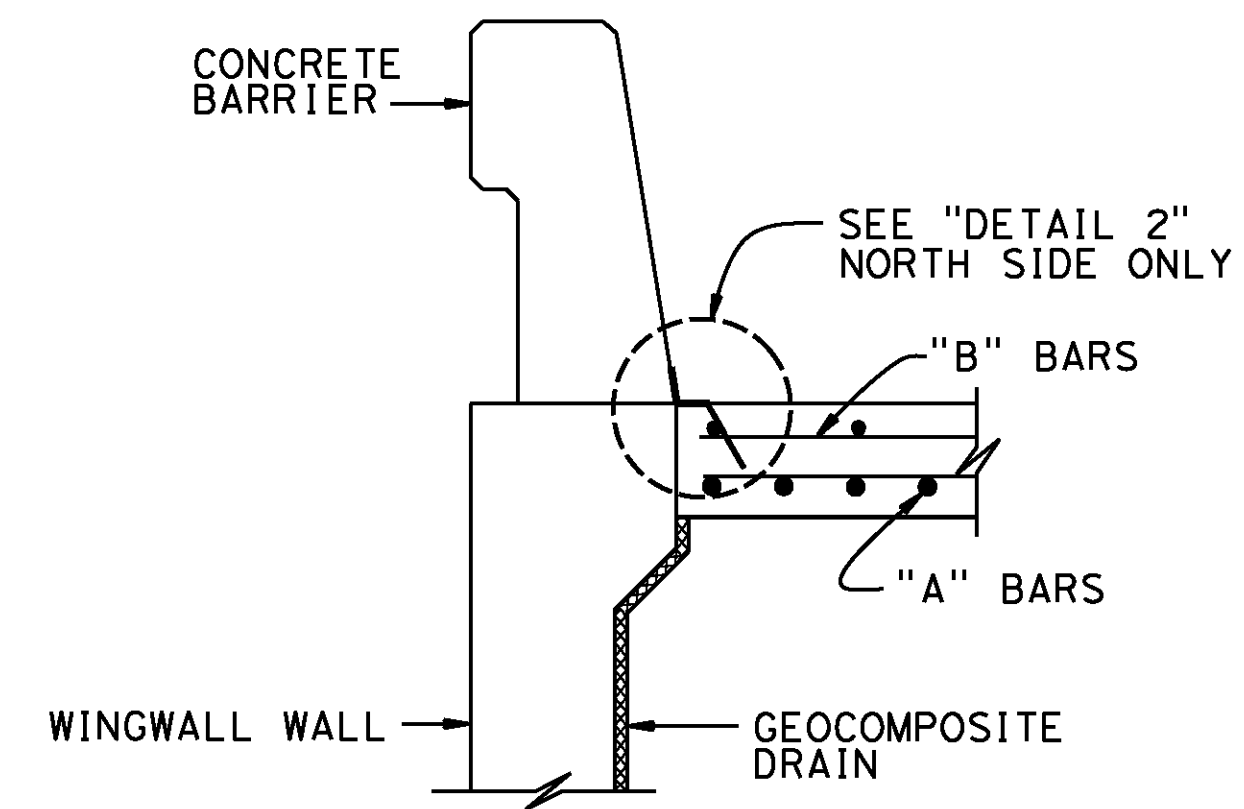
3/4" = 1'-0"



12" PAVING NOTCH

NOTES:

1. For details not noted or shown, see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required
2. For transverse contact joint with new PCC paving, refer to Standard Plan P10
3. Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines
4. End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable
5. At the Contractor's option, approach slab transverse reinforcement may be placed parallel to paving notch. Spacing of transverse reinforcement is measured along roadway
6. For drainage details, see "STRUCTURE APPROACH DRAINAGE DETAILS" Sheet.



SECTION C-C

3/4" = 1'-0"

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

BR. NO 56C0600

IMPORTANT NOTICE
Section 4210/4217 of the Government Code requires a Dig Alert Identification Number to be located before a "permit to excavate" will be valid. For your Dig Alert ID, Number call
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600

TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com

PROFESSIONAL ENGINEER
David M. Griffith
C49125
CIVIL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
DEWEY AVE GRADE SEPARATION
STRUCTURE APPROACH TYPE EQ(10)

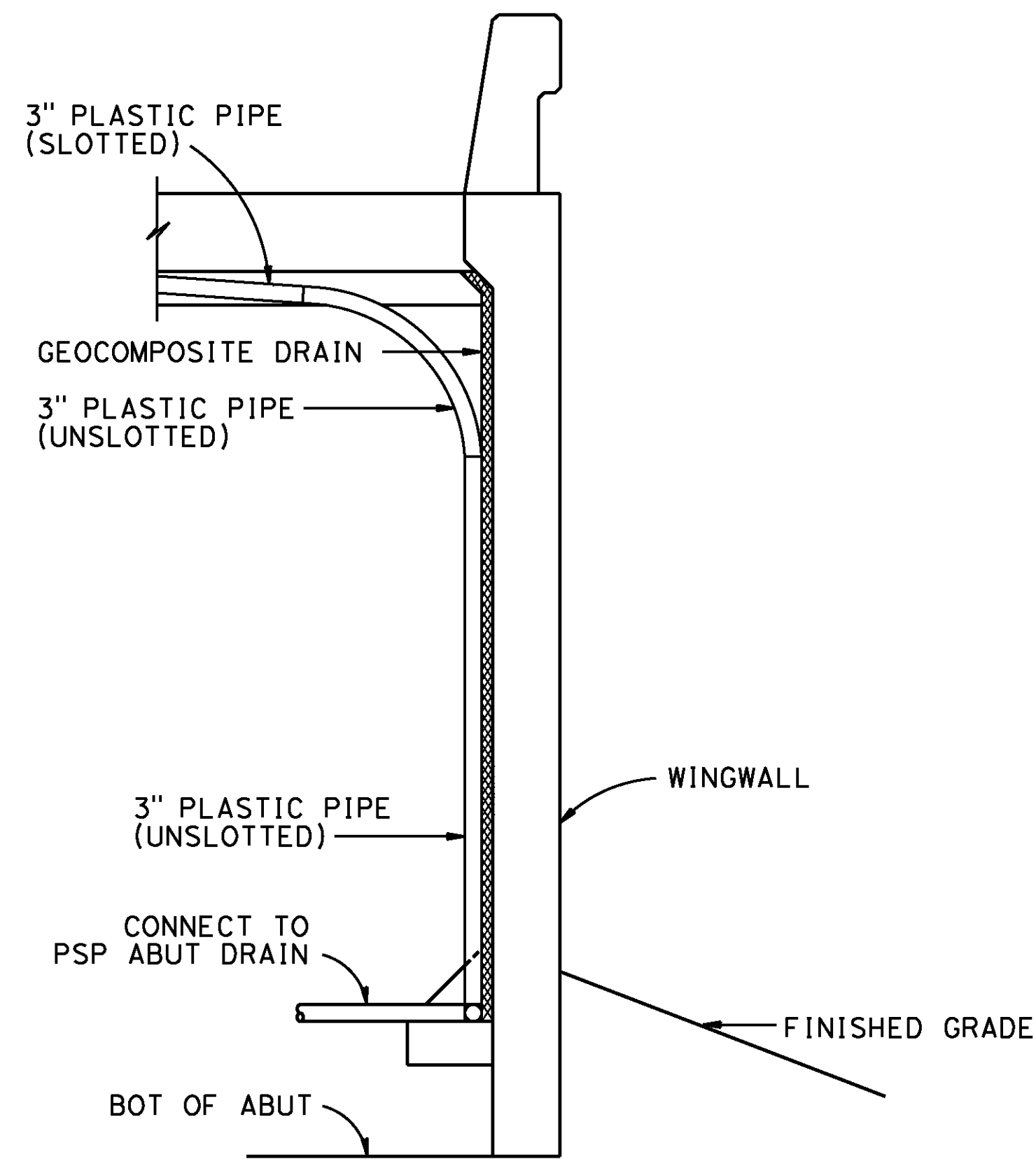
R-4180
SHEET **150** OF **191**
FILE NO.

HORIZ. SCALE: VERT. SCALE: N/A

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DATE: 8/9/2012
TIME: 6:53:23 AM

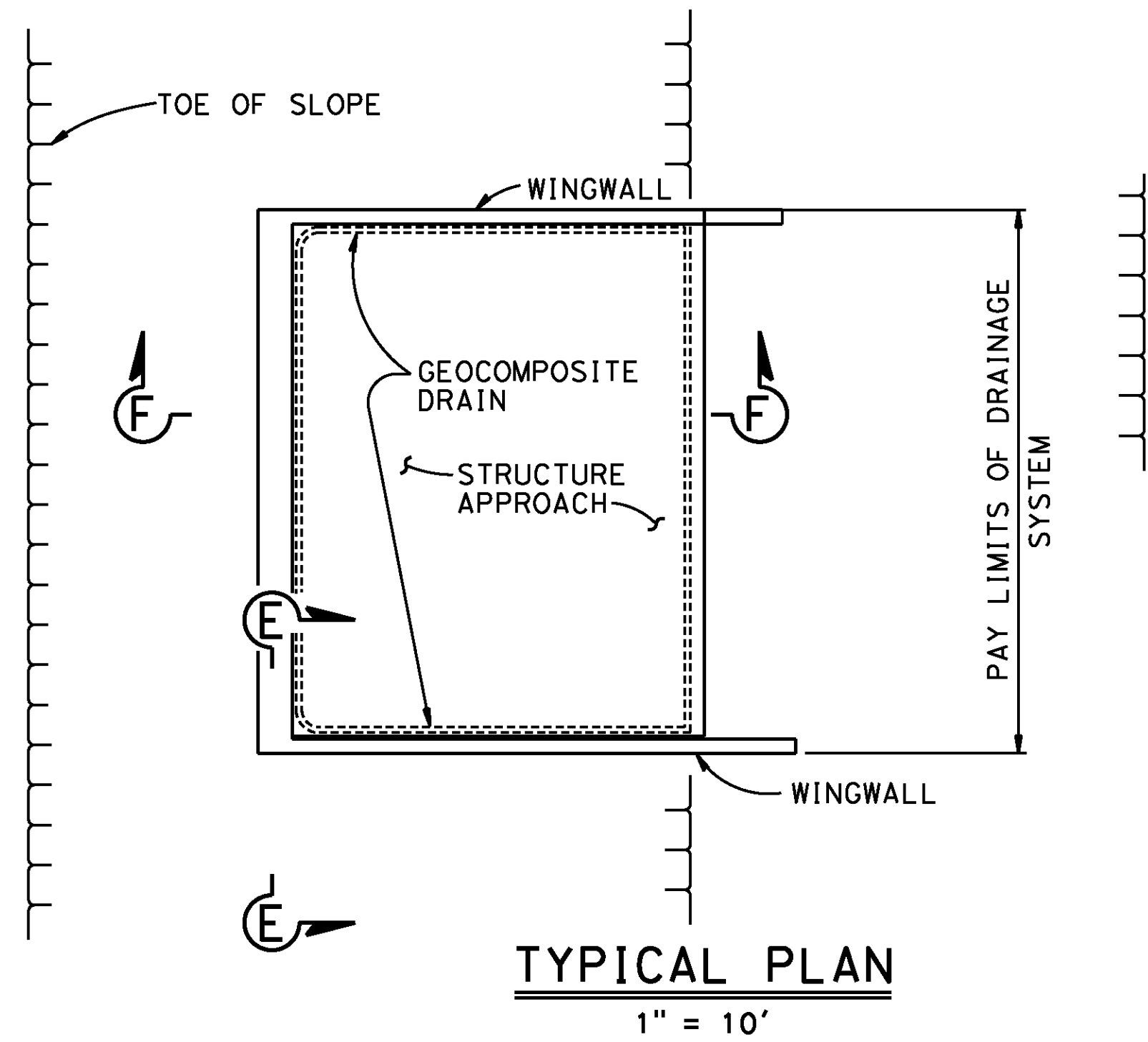
User: unfitted
approach_detail.dgn



SECTION E-E

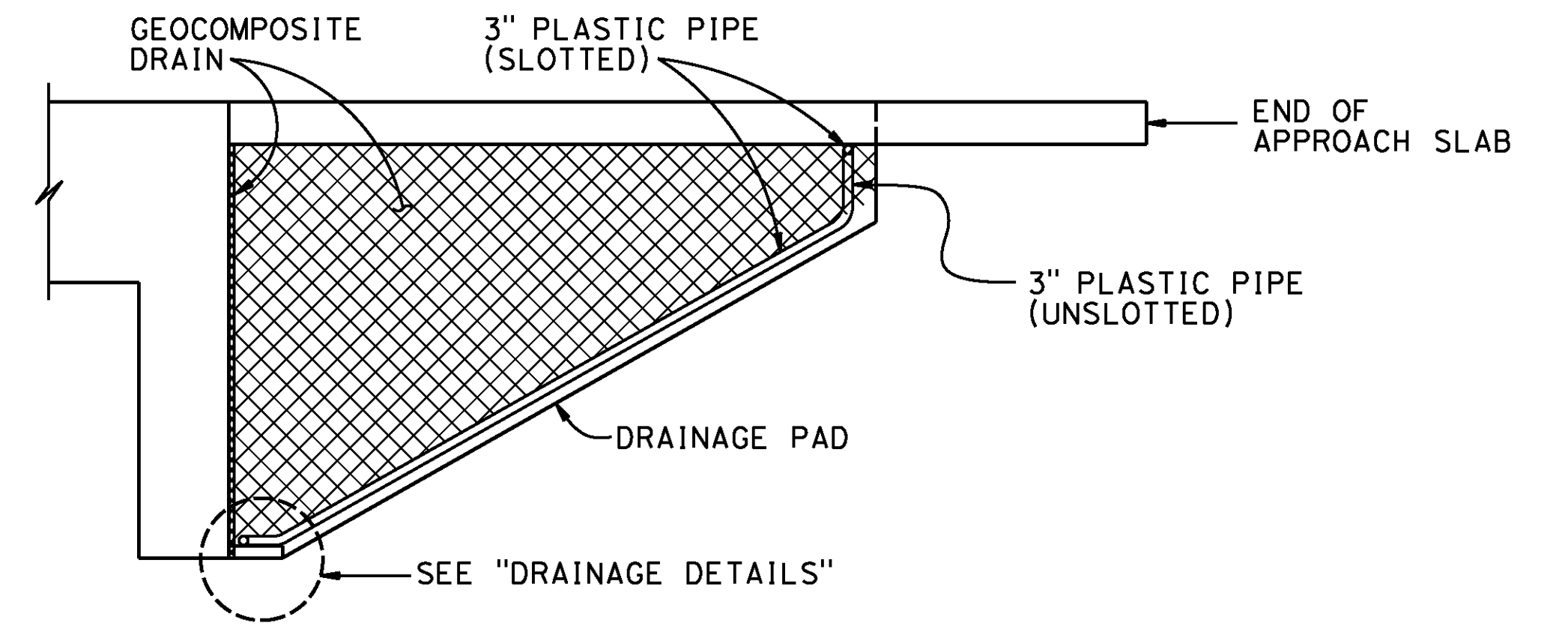
1/2" = 1'-0"

NOTE: Bends and junctions in 3" plastic pipe are 30" radius Min



TYPICAL PLAN

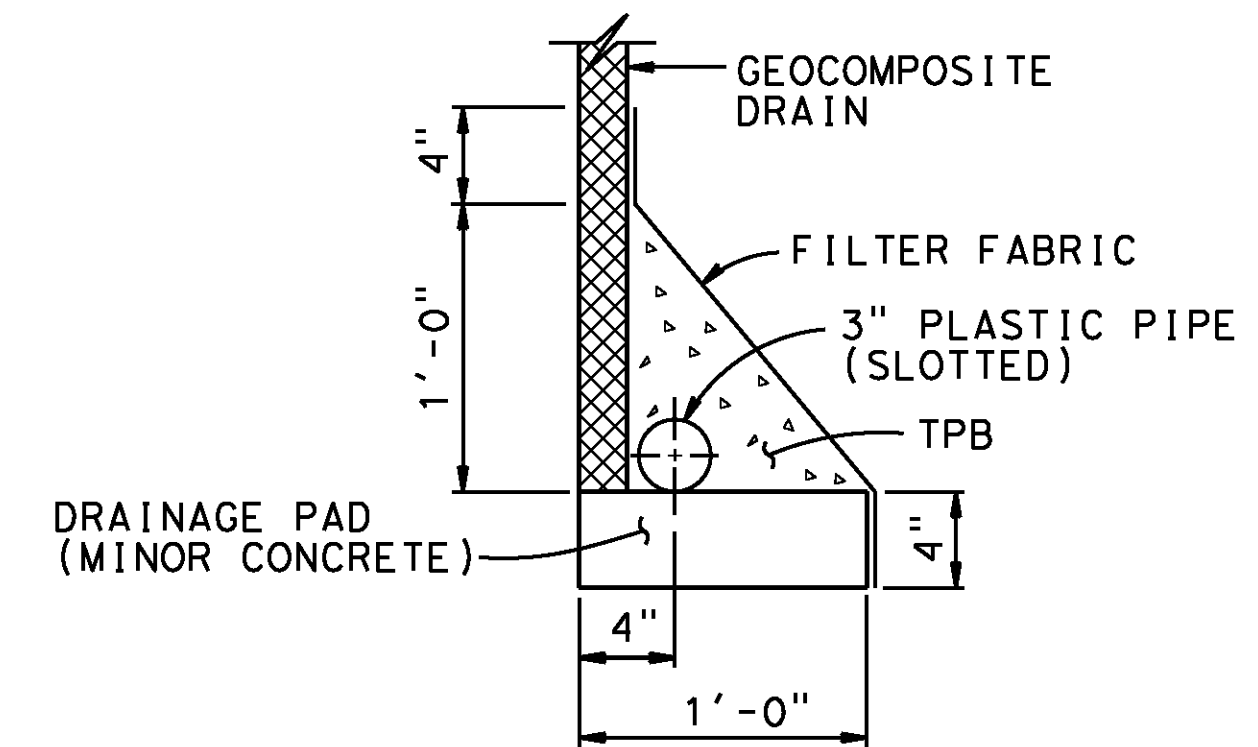
1" = 10'



CANTILEVER WINGWALL

SECTION F-F

1/4" = 1'-0"



WITHOUT FOOTING

DRAINAGE DETAILS

1/2" = 1'-0"

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

BR. NO 56C0600

d:\projects\1066_Street\Asph\Bridges\Devey\Approach_drainage_detail.dgn

DATE: 8/9/2012
TIME: 6:53:45 AM

IMPORTANT NOTICE
Section 4210/4217 of the Government Code requires a Dig Alert Identification Number to be located before a "permit to excavate" will be valid. For your Dig Alert ID Number call
CALL TOLL FREE 1-800-227-2600
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT

TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com

REGISTERED PROFESSIONAL ENGINEER
David M. Griffith
C49125
CIVIL
STATE OF CALIFORNIA

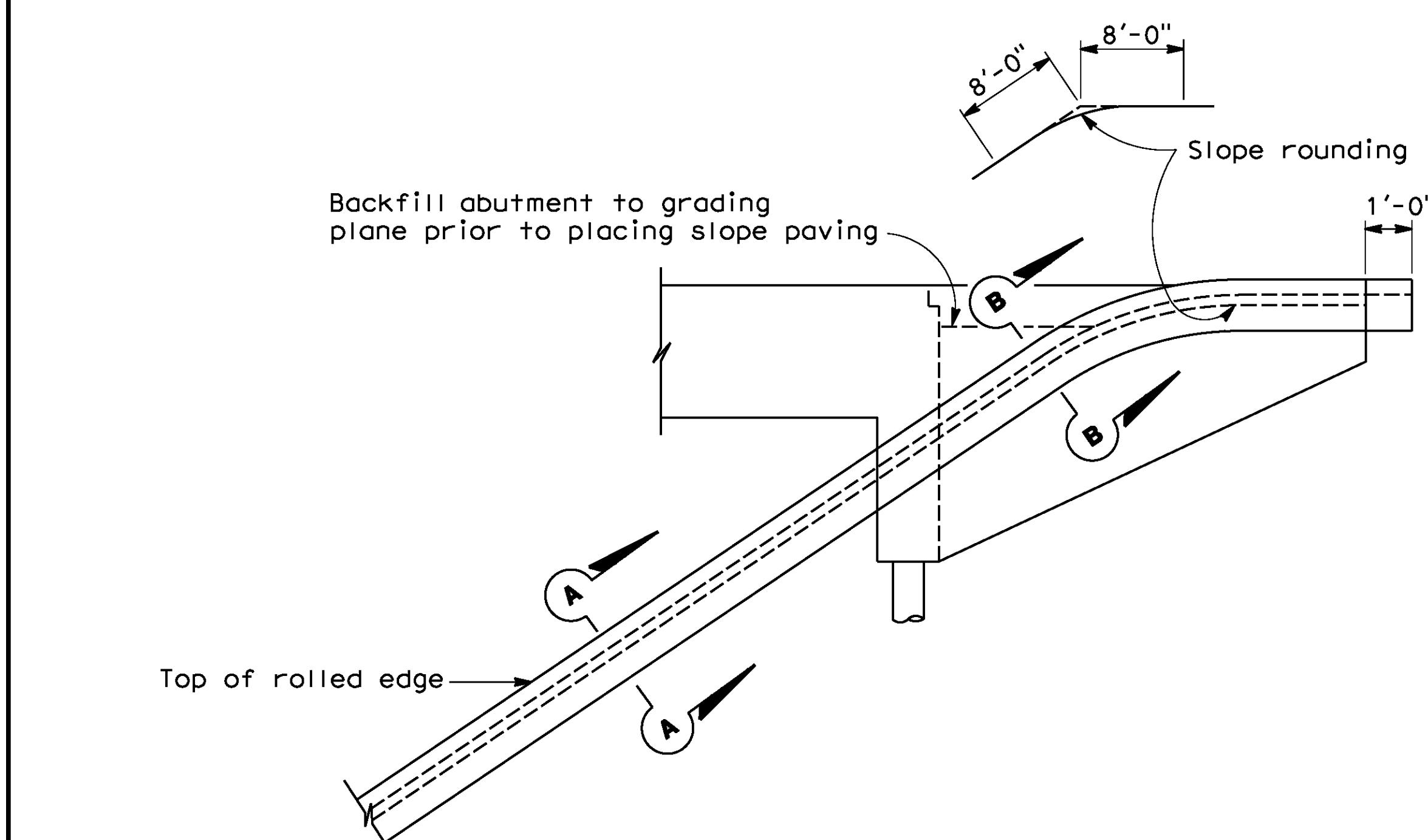
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
DEWEY AVE GRADE SEPARATION
STRUCTURE APPROACH DRAINAGE DETAILS

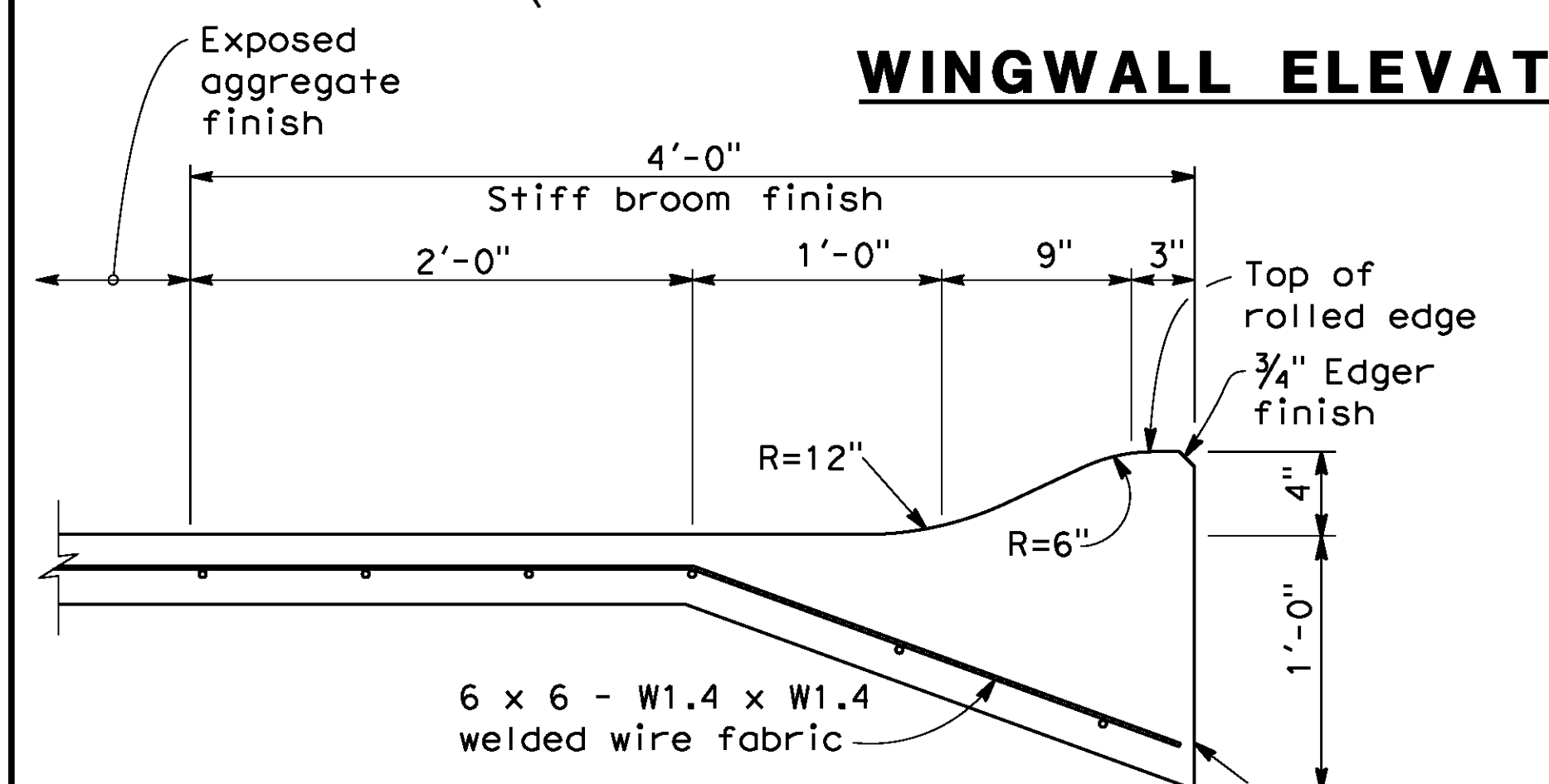
R-4180
SHEET **151** OF **191**
FILE NO.

DESIGNED BY *RS* DRAWN BY *MY* CHECKED BY *DS* HORIZ. SCALE: VERT. SCALE: N/A

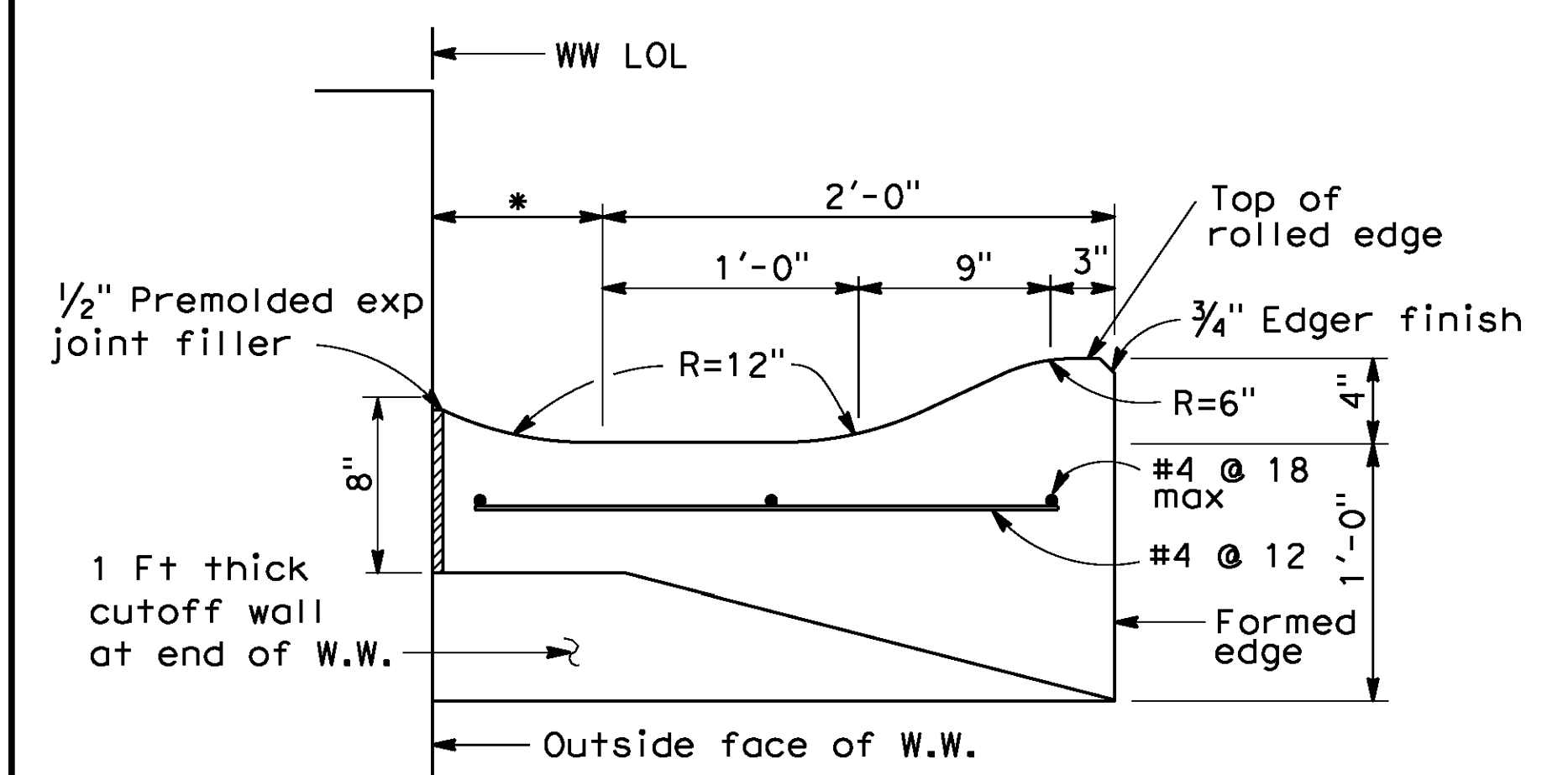
User: untitled approach_drainage_detail.dgn



WINGWALL ELEVATION

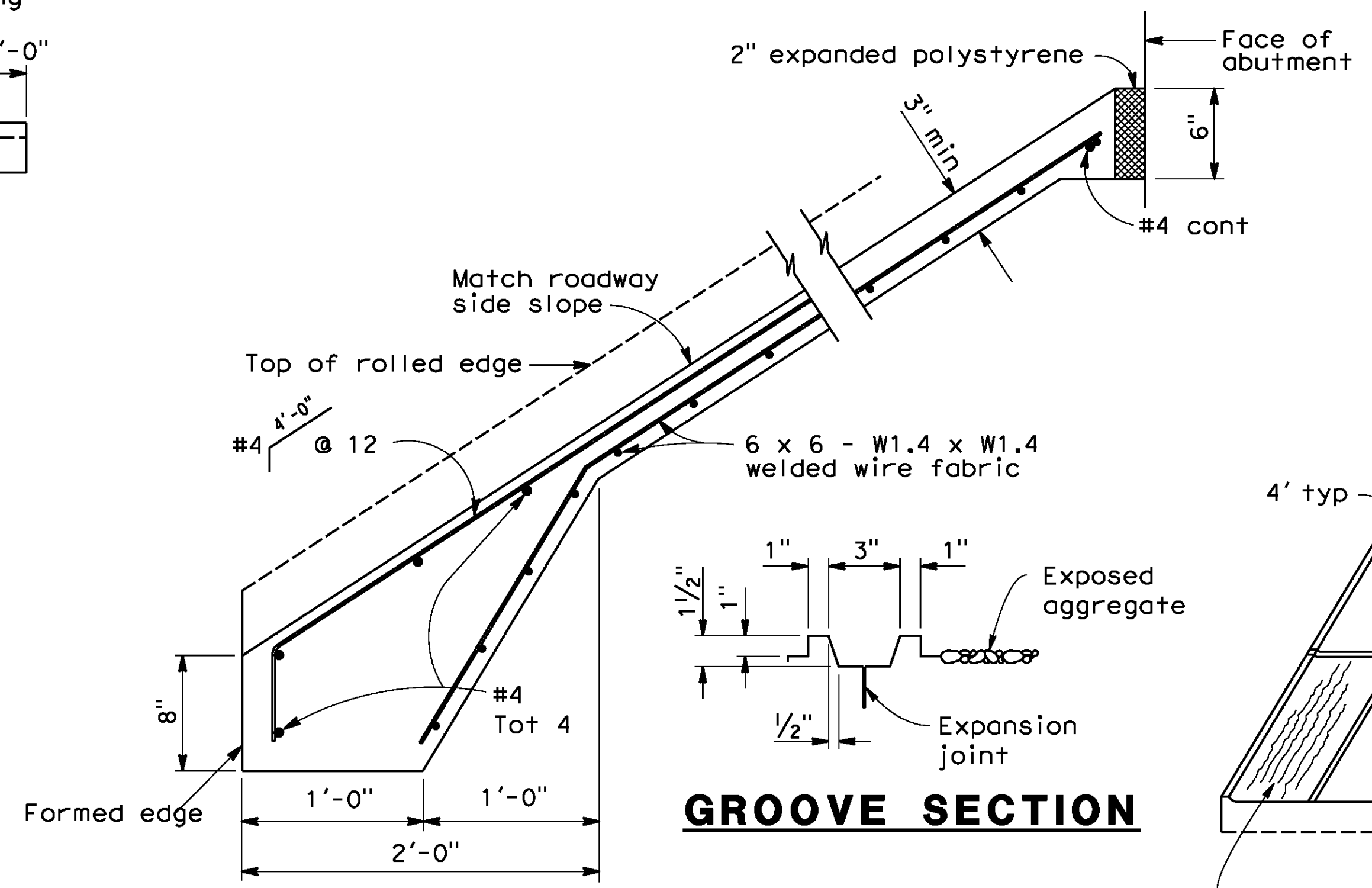


SECTION A-A

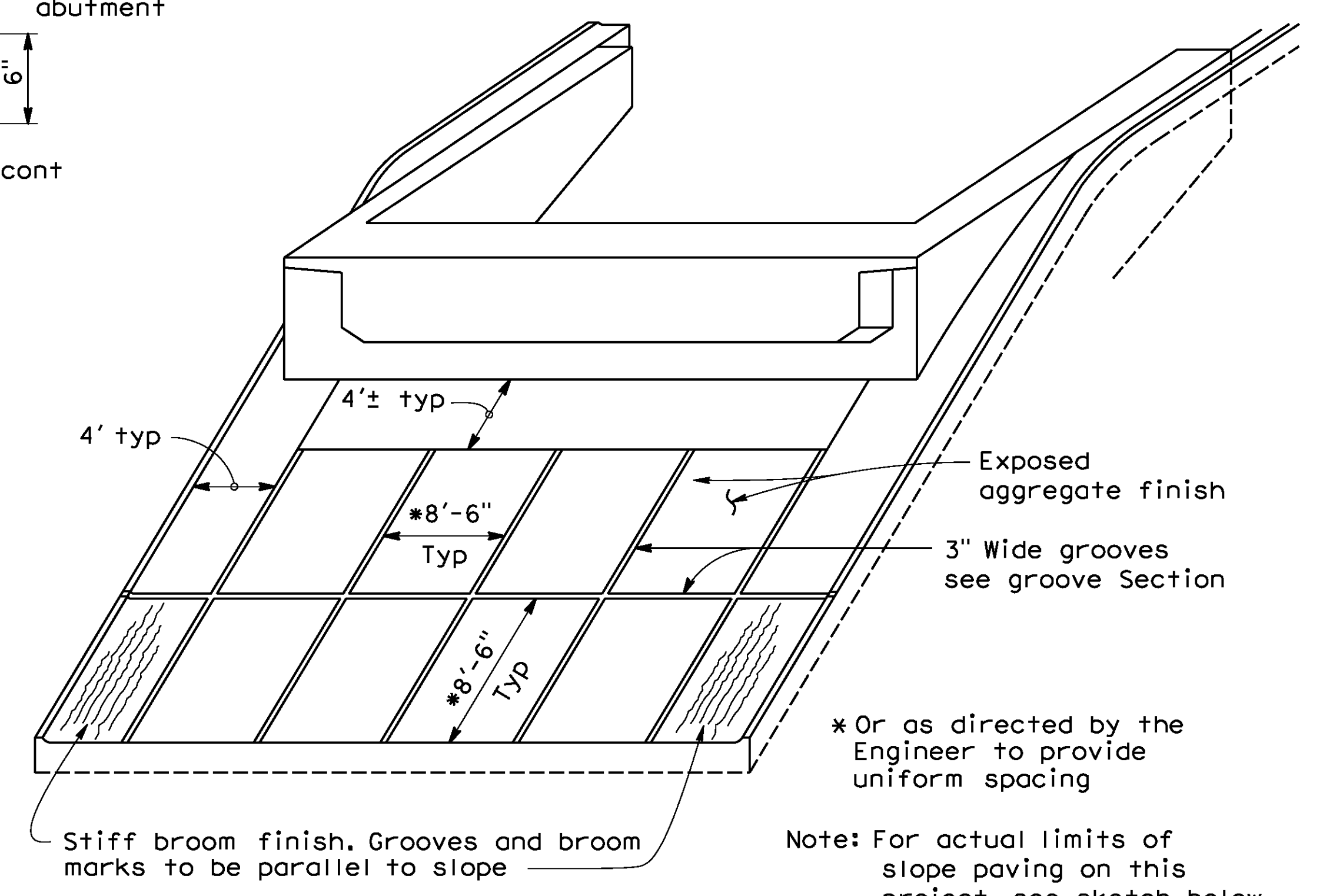


SECTION B-B

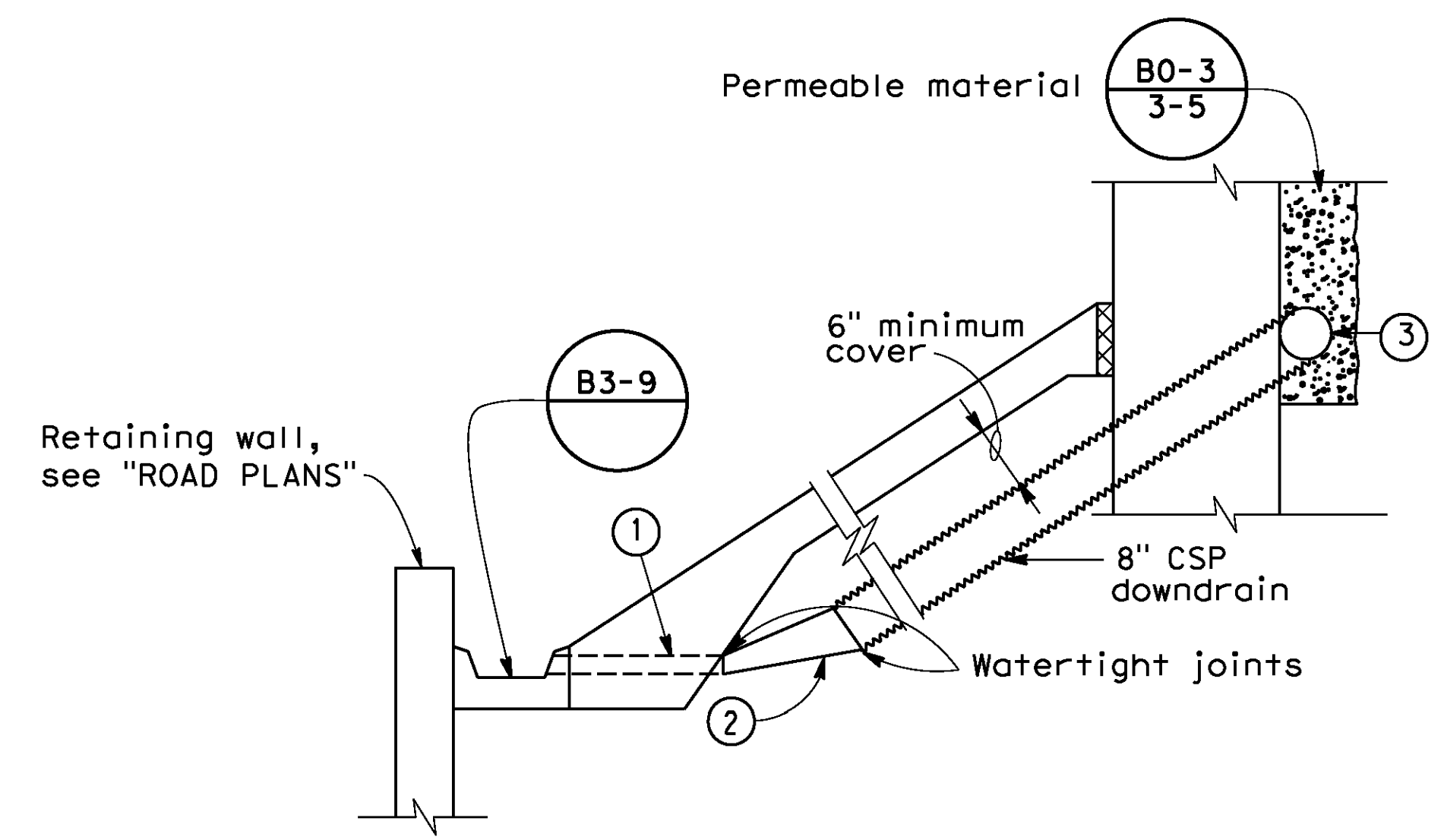
* This dimension becomes zero when edge of deck is at outside face of W.W.



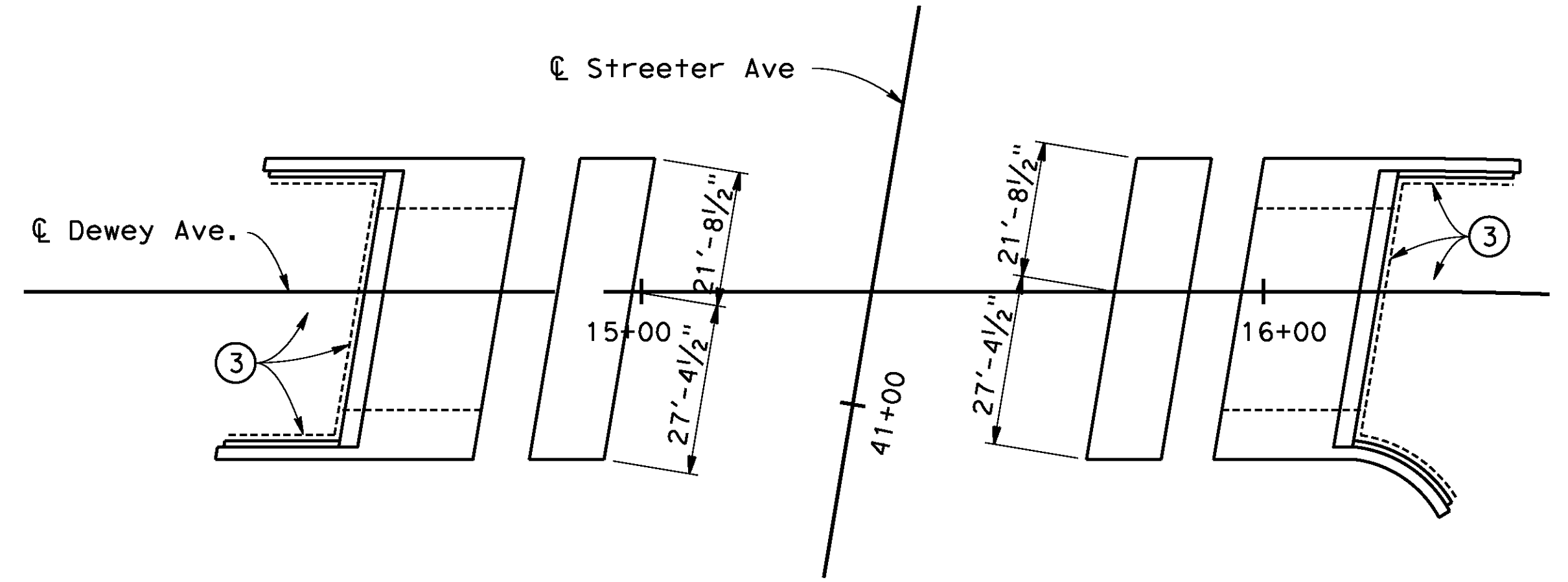
TYPICAL SECTION - CONCRETE PAVING



PICTORIAL VIEW OF TYPICAL INSTALLATION



DRAINAGE DETAILS



LIMITS OF SLOPE PAVING & DRAINAGE LAYOUT

- ① Conduit: 0.064" galv corrugated steel or 0.109" smooth galv steel
- ② Taper: 0.064" galv corrugated steel or 0.109" smooth galv steel
- ③ 8" perforated steel pipe (0.064" thick) underdrain behind abutment. Connect to down drain as shown on limits of Slope Paving & Drainage layout.

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

d:\projects\1066_Streeter\Asph\Gr\Edge\Drawings\106630d-s-slip01.dgn

DATE: 8/9/2012
TIME: 6:53:02 AM

IMPORTANT NOTICE
Section 4210/4217 of the Government Code requires a Dig Alert Identification Number to be located before a "Permit to Excavate" will be valid. For your Dig Alert I.D. Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com

PROFESSIONAL ENGINEER
David M. Griffith
C49125
CIVIL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
DEWEY AVE GRADE SEPARATION
SLOPE PAVING - FULL SLOPE

BR. NO 56C0600

R-4180

SHEET 152 OF 191

HORIZ. SCALE: VERT. SCALE: N/A

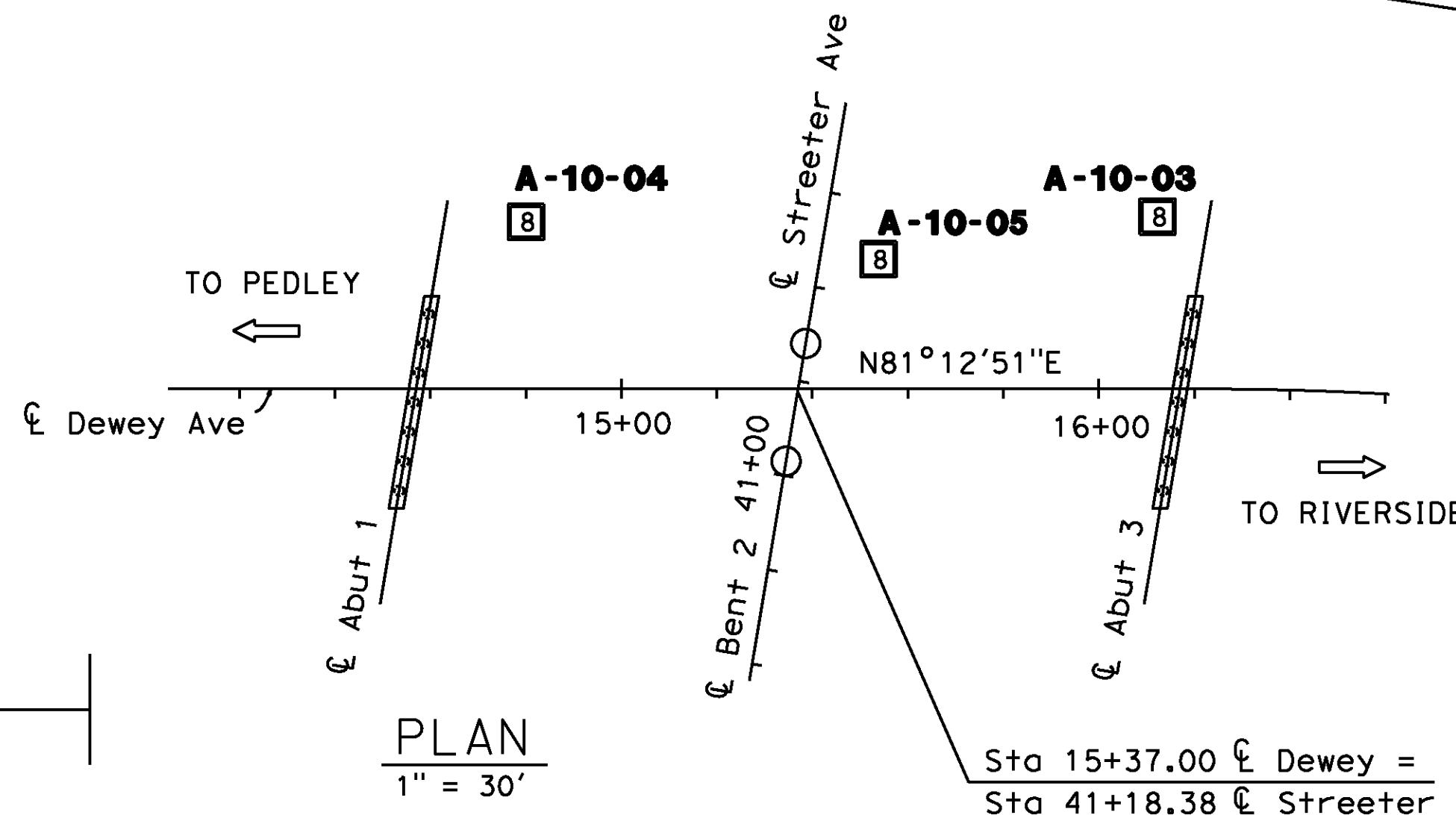
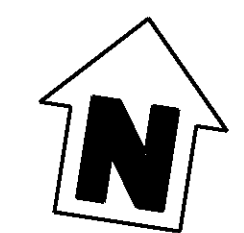
FILE NO.

User: untitled
106630d-s-slip01.dgn

BENCHMARK

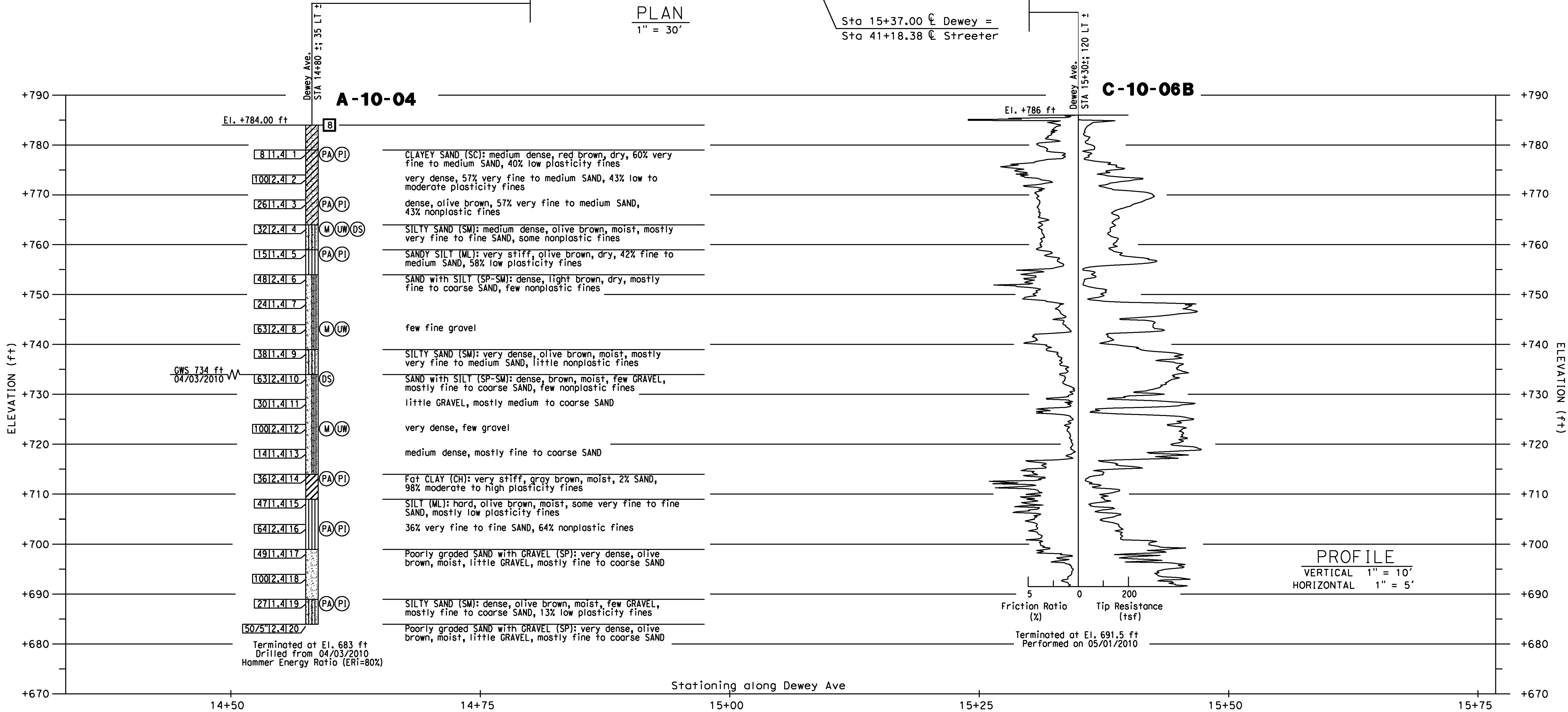
City of Riverside Benchmark H5-F3
 Railroad spike in power pole, 1 foot
 above ground.
 Northwest of the intersection of
 Streeter Avenue and the UPRR
 Elevation 788.643 (NAVD 1929)

R-10-12
 C-10-06B
 C-10-06A



PLAN
 1" = 30'

Sta 15+37.00 ϕ Dewey =
 Sta 41+18.38 ϕ Streeter



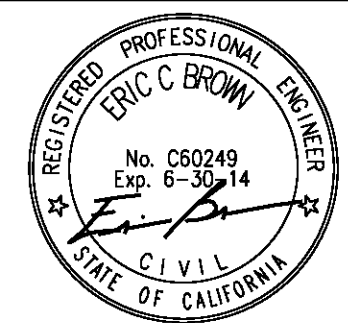
PROFILE
 VERTICAL 1" = 10'
 HORIZONTAL 1" = 5'

Terminated at El. 691.5 ft
 Performed on 05/01/2010

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME JOSE CORONA

IMPORTANT NOTICE
 Section 41304217 of the Government Code
 requires a Dig Alert identification
 number to be placed before a
 "Permit to Excavate" will be valid.
 For your Dig Alert ID Number call
 CALL TOLL FREE
 48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
 1-800-227-2600

Earth Mechanics, Inc.
 Geotechnical and Earthquake Engineering
 Earth Mechanics, Inc.
 17800 Newhope Street, Suite B
 Fountain Valley, CA 92708
 DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
DEWEY AVE GRADE SEPARATION
LOG OF TEST BORINGS (1 OF 5)

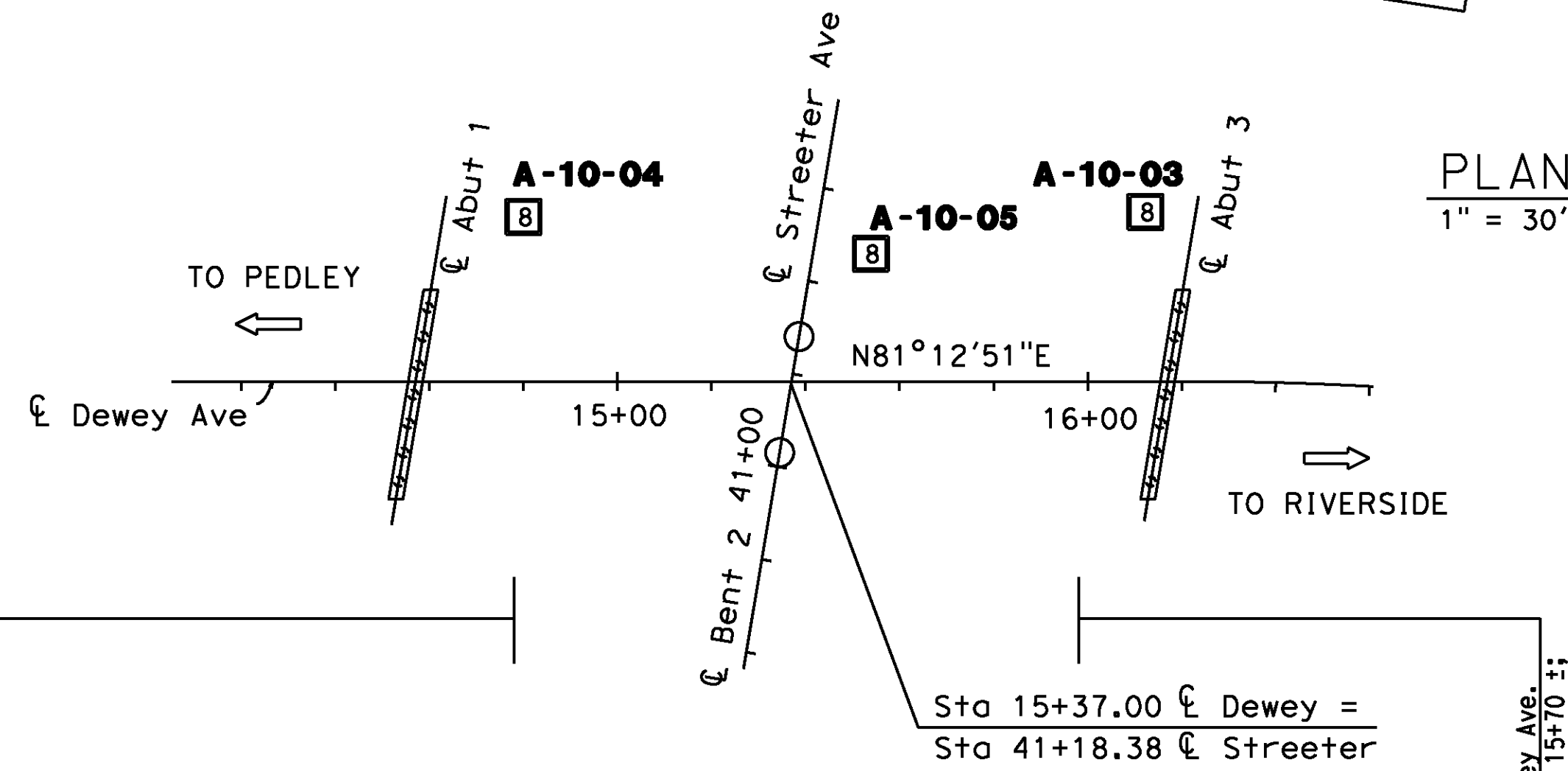
R-4180
 SHEET 153 OF 191
 FILE NO.

G:\Projects\1066_Streeter\ dgn\Contract - Plans\z-LOB Sheets - EM\Dewey\Dewey-1.dgn

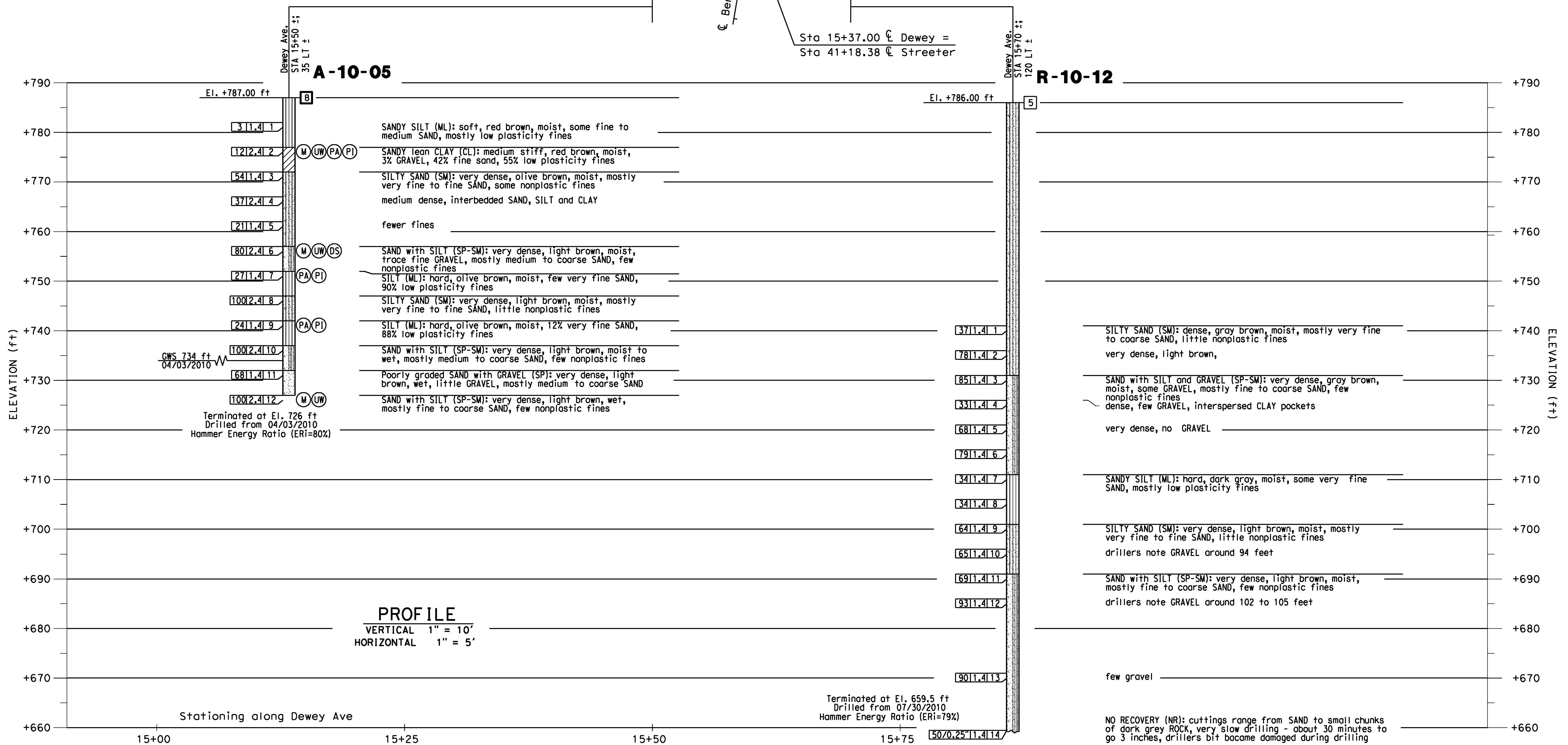
BENCHMARK

City of Riverside Benchmark H5-F3
 Railroad spike in power pole, 1 foot
 above ground.
 Northwest of the intersection of
 Streeter Avenue and the UPRR
 Elevation 788.643 (NAVD 1929)

▲ R-10-12
 C-10-06B ▲
 C-10-06A



PLAN
 1" = 30'



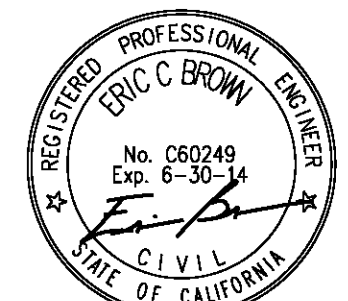
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AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME JOSE CORONA

IMPORTANT NOTICE
 Section 43164217 of the Government Code
 requires a Dig Alert identification
 Number to be placed before a
 "Permit to Excavate" will be issued.
 For your Dig Alert ID Number call
 CALL TOLL FREE
 48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
 1-800-227-2600

Earth Mechanics, Inc.
 Geotechnical and Earthquake Engineering

Earth Mechanics, Inc
 17800 Newhope Street, Suite B
 Fountain Valley, CA 92708
 DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT

DEWEY AVE GRADE SEPARATION

LOG OF TEST BORINGS (2 OF 5)

DESIGNED BY FP DRAWN BY FP CHECKED BY RG

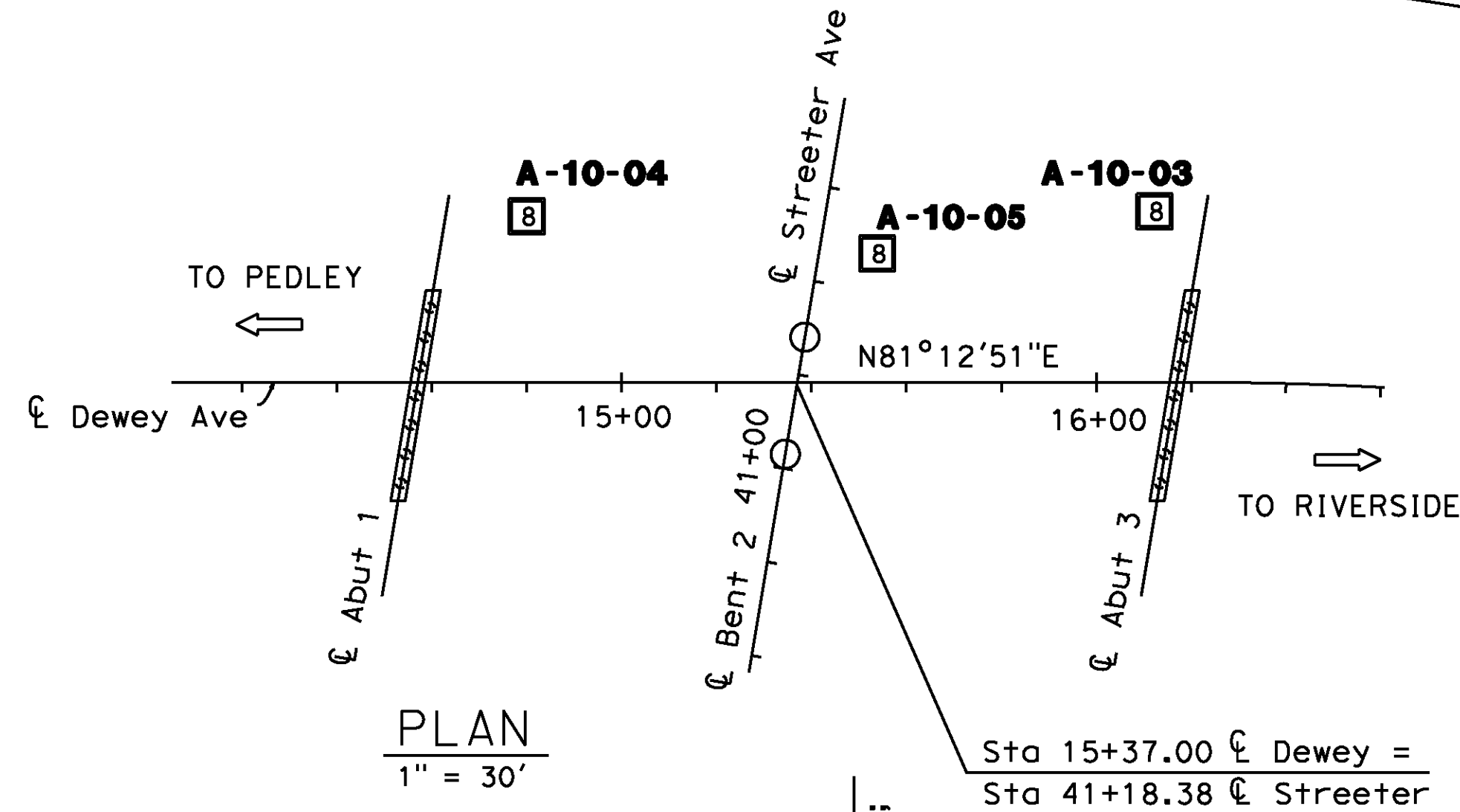
HORIZ. SCALE: 1"=30' VERT. SCALE: N/A

FILE NO.

BENCHMARK

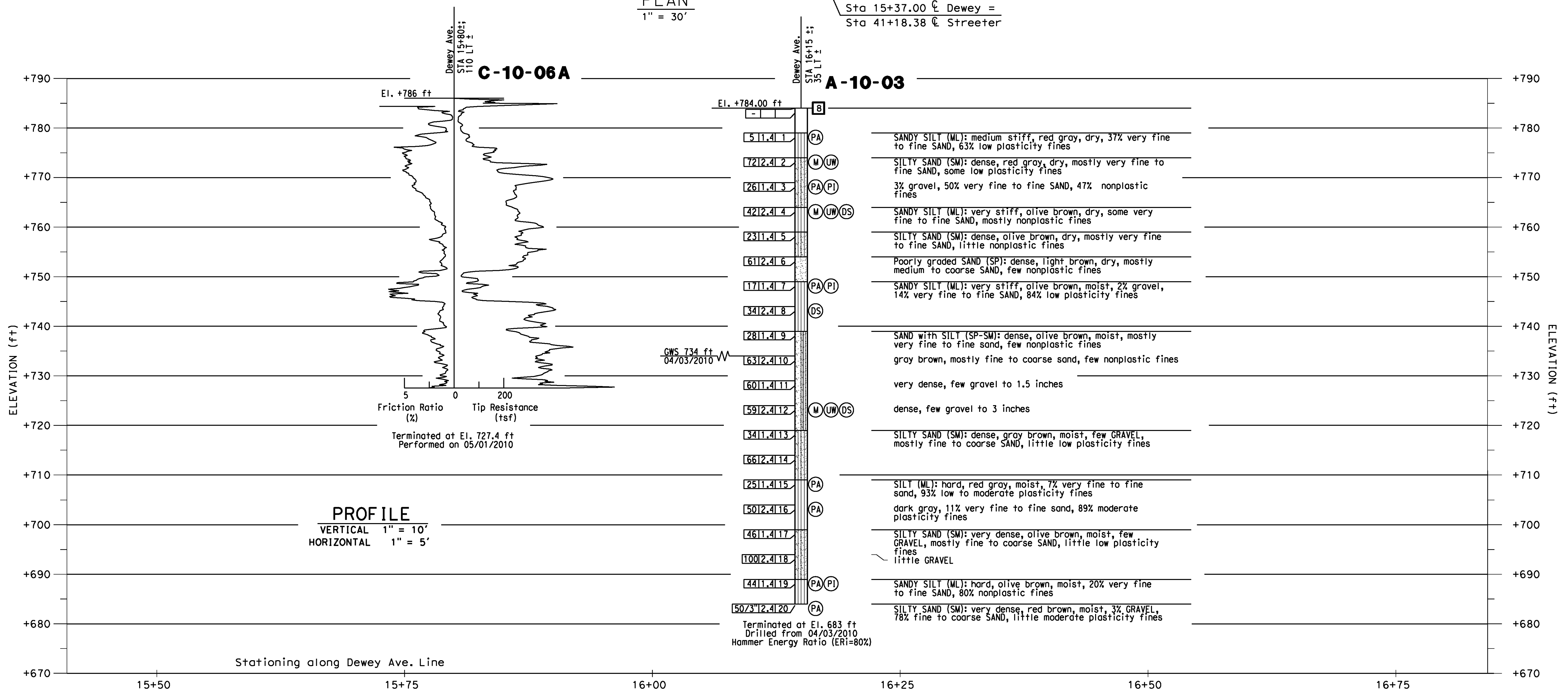
City of Riverside Benchmark H5-F3
 Railroad spike in power pole, 1 foot
 above ground.
 Northwest of the intersection of
 Streeter Avenue and the UPRR
 Elevation 788.643 (NAVD 1929)

R-10-12
 C-10-06B
 C-10-06A



PLAN
 1" = 30'

Sta 15+37.00 @ Dewey =
 Sta 41+18.38 @ Streeter



PROFILE
 VERTICAL 1" = 10'
 HORIZONTAL 1" = 5'

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID NO. 7094
 C.C.A. DATE 06-20-15
 R.E. NAME JOSE CORONA

IMPORTANT NOTICE
 Section 4216-4217 of the Government Code requires a Dig Alert identification Number to be placed before a "Permit to Excavate" will be issued. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

Earth Mechanics, Inc.
 Geotechnical and Earthquake Engineering
 Earth Mechanics, Inc.
 17800 Newhope Street, Suite B
 Fountain Valley, CA 92708
 DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
DEWEY AVE GRADE SEPARATION
LOG OF TEST BORINGS (3 OF 5)
 HORIZ. SCALE: 1"=30' VERT. SCALE: N/A

R-4180
 SHEET 155 OF 191
 FILE NO.

D:\projects\1066_Streeter\ dgn\Contract Plans\z-108 Sheets - BM\06wey\06wey-3.dgn

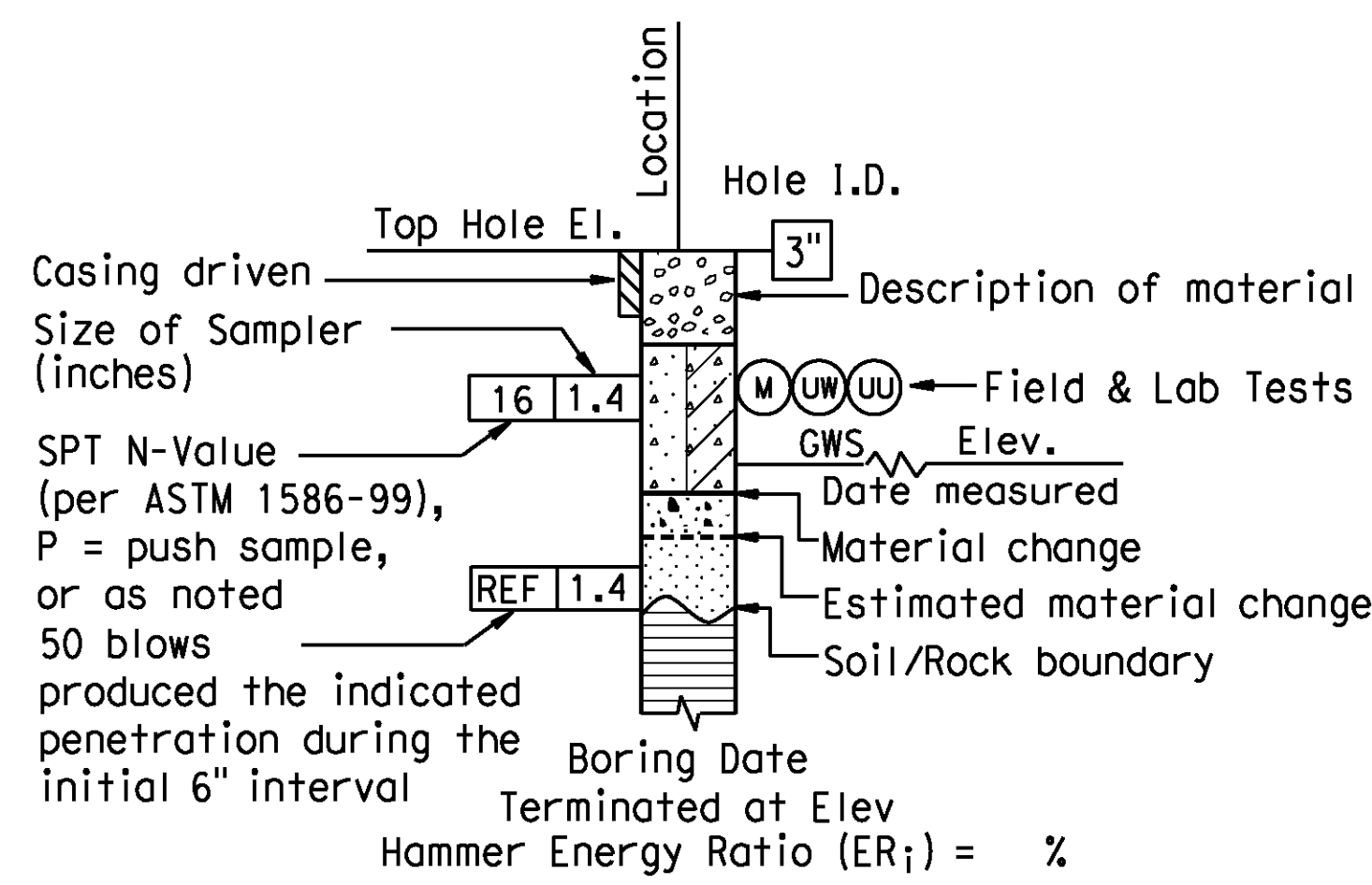
CEMENTATION	
Description	Criteria
Weak	Crumbles or breaks with handling or little finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

CONSISTENCY OF COHESIVE SOILS				
Description	Unconfined Compressive Strength (tsf)	Pocket Penetrometer Measurement (tsf)	Torvane Measurement (tsf)	Field Approximation
Very Soft	< 0.25	< 0.25	< 0.12	Easily penetrated several inches by fist
Soft	0.25 to 0.50	0.25 to 0.50	0.12 to 0.25	Easily penetrated several inches by thumb
Medium Stiff	0.50 to 1.0	0.50 to 1.0	0.25 to 0.50	Penetrated several inches by thumb with moderate effort
Stiff	1 to 2	1 to 2	0.50 to 1.0	Readily indented by thumb but penetrated only with great effort
Very Stiff	2 to 4	2 to 4	1.0 to 2.0	Readily indented by thumbnail
Hard	> 4.0	> 4.0	> 2.0	Indented by thumbnail with difficulty

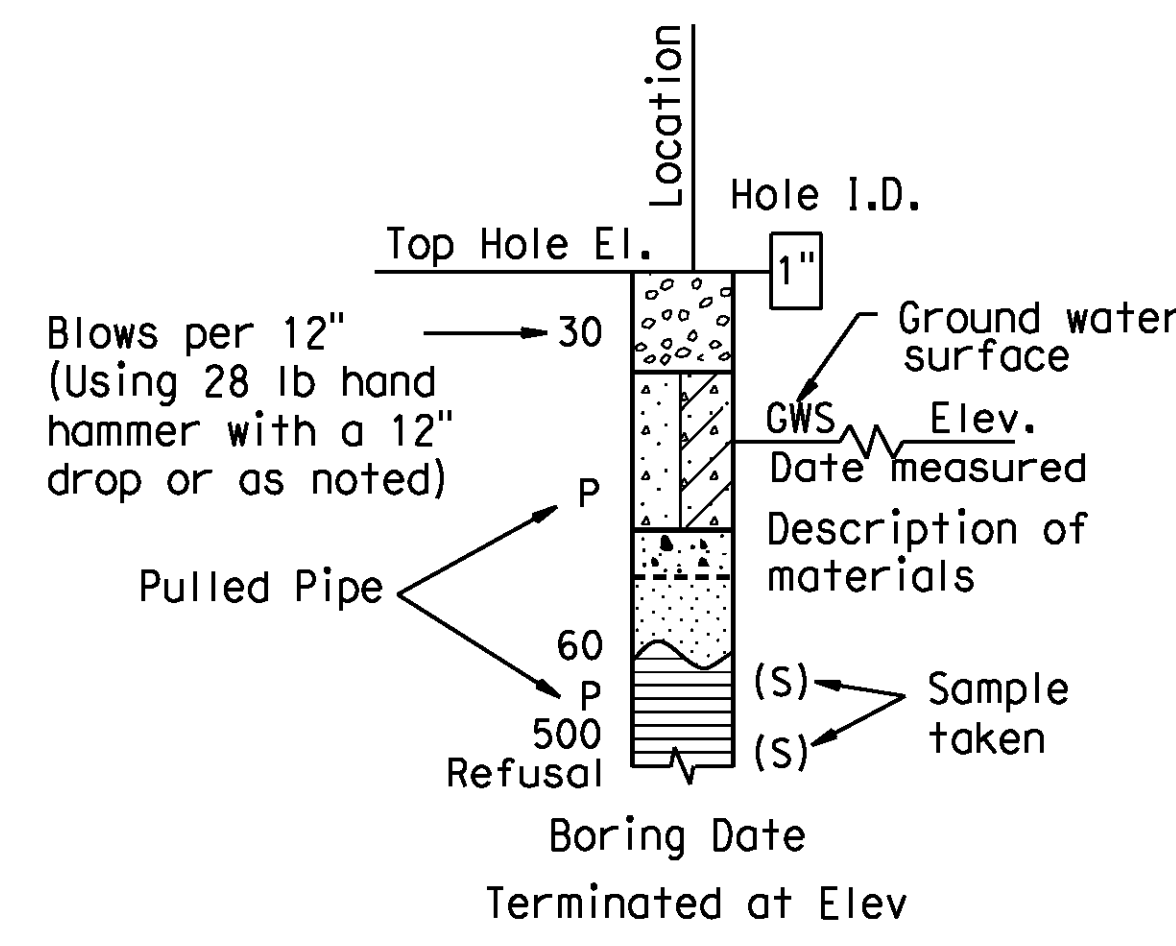
BOREHOLE IDENTIFICATION		
Symbol	Hole Type	Description
	A	Auger Boring
	R	Rotary drilled boring
	P	Rotary percussion boring (air)
	R	Rotary drilled diamond core
	HD	Hand driven (1-inch soil tube)
	HA	Hand Auger
	D	Dynamic Cone Penetration Boring
	CPT	Cone Penetration Test (ASTM D 5778-95)
	O	Other

Note: Size in inches.

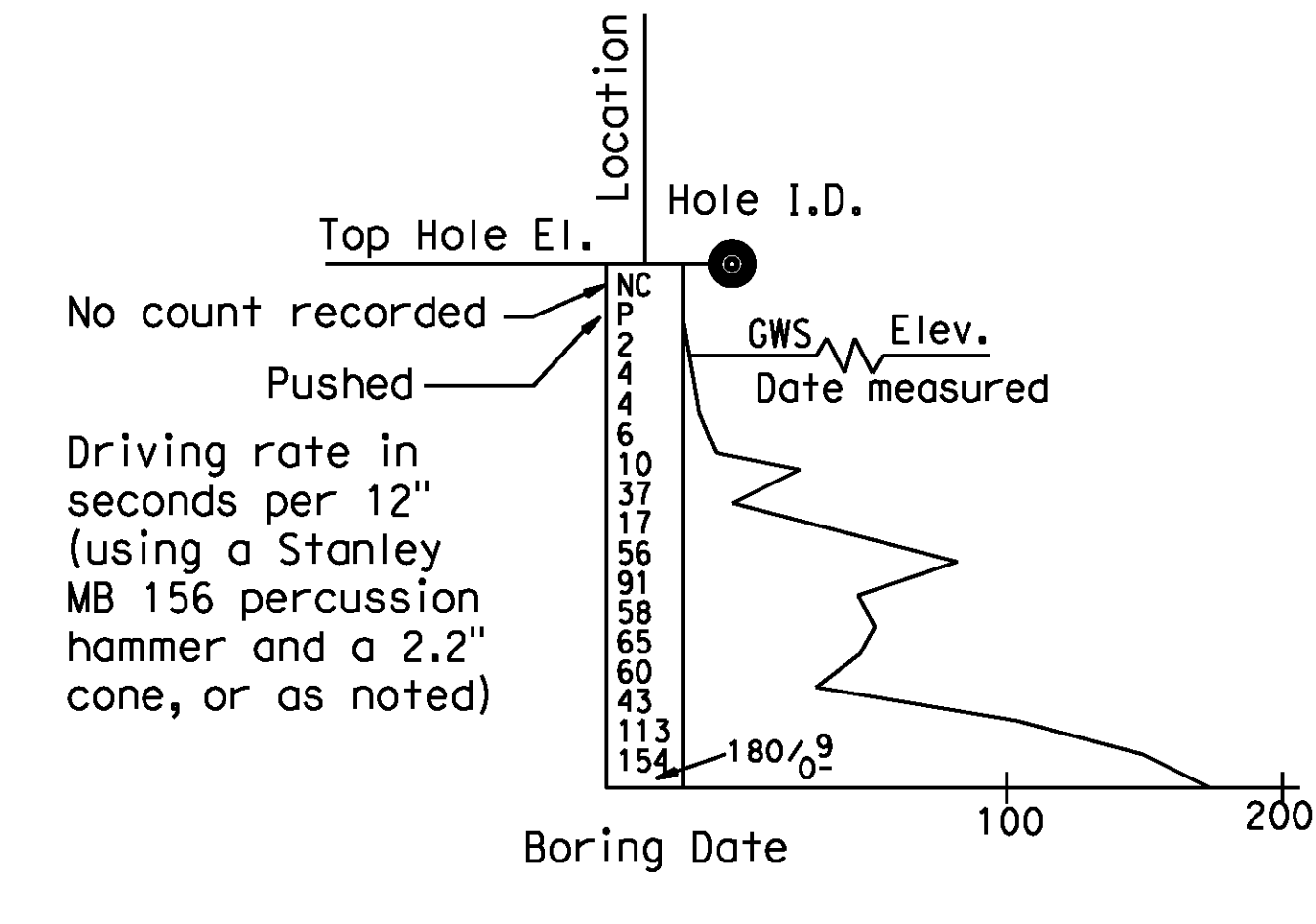
PLASTICITY OF FINE-GRAINED SOILS	
Description	Criteria
Nonplastic	A 1/8-inch thread cannot be rolled at any water content.
Low	The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit.
Medium	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit.
High	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit.



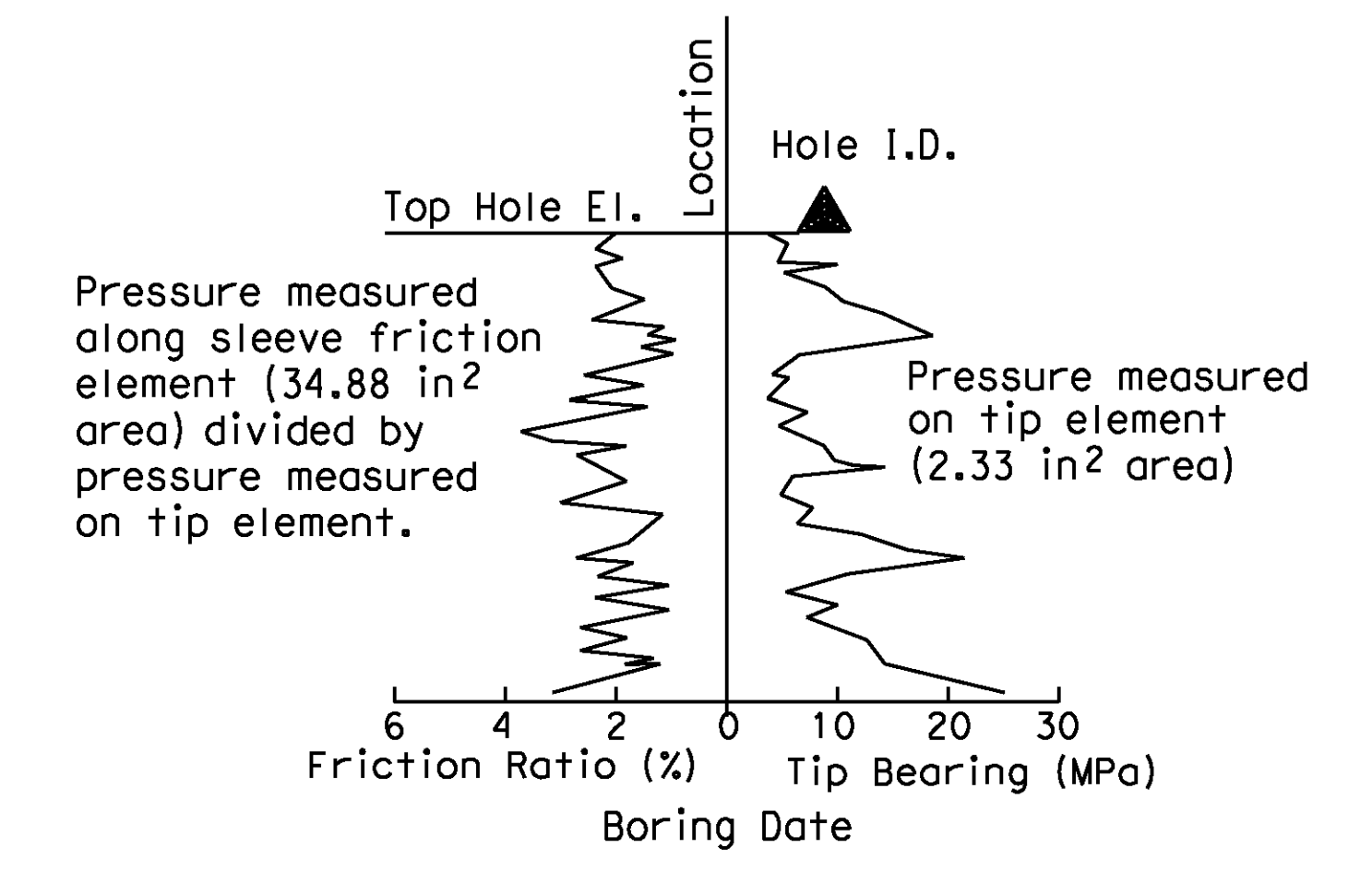
ROTARY BORING



HAND BORING



DYNAMIC CONE PENETRATION BORING

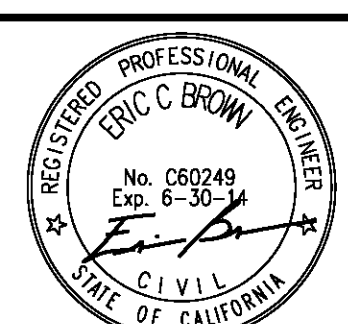


CONE PENETRATION TEST (CPT) SOUNDING

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

IMPORTANT NOTICE
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Earth Mechanics, Inc.
Geotechnical and Earthquake Engineering
Earth Mechanics, Inc
17800 Newhope Street, Suite B
Fountain Valley, CA 92708
DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
DEWEY AVE GRADE SEPARATION
LOG OF TEST BORINGS (4 OF 5)
HORIZ. SCALE: 1"=30' VERT. SCALE: N/A

R-4180
SHEET 156 OF 191
FILE NO.

D:\Projects\1066_Sreeter\sgn\Contract Plans\2-108 Sheets - BM\Dewey\Dewey-4.dgn

GROUP SYMBOLS AND NAMES			
Graphic/Symbol	Group Names	Graphic/Symbol	Group Names
	Well-graded GRAVEL		Lean CLAY
	Well-graded GRAVEL with SAND		Lean CLAY with SAND
	Poorly graded GRAVEL		Lean CLAY with GRAVEL
	Poorly graded GRAVEL with SAND		SANDY lean CLAY
	Well-graded GRAVEL with SILT		SILTY CLAY
	Well-graded GRAVEL with SILT and SAND		SILTY CLAY with SAND
	Well-graded GRAVEL with CLAY (or SILTY CLAY)		SILTY CLAY with GRAVEL
	Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		SANDY SILTY CLAY
	Poorly graded GRAVEL with SILT		SANDY SILTY CLAY with GRAVEL
	Poorly graded GRAVEL with SILT and SAND		GRAVELLY SILTY CLAY
	Poorly graded GRAVEL with CLAY (or SILTY CLAY)		GRAVELLY SILTY CLAY with SAND
	Poorly graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		SILT
	SILTY GRAVEL		SILT with SAND
	SILTY GRAVEL with SAND		SILT with GRAVEL
	CLAYEY GRAVEL		SANDY SILT
	CLAYEY GRAVEL with SAND		SANDY SILT with GRAVEL
	SILTY, CLAYEY GRAVEL		GRAVELLY SILT
	SILTY, CLAYEY GRAVEL with SAND		GRAVELLY SILT with SAND
	Well-graded SAND		ORGANIC lean CLAY
	Well-graded SAND with GRAVEL		ORGANIC lean CLAY with SAND
	Poorly graded SAND		ORGANIC lean CLAY with GRAVEL
	Poorly graded SAND with GRAVEL		SANDY ORGANIC lean CLAY
	Well-graded SAND with SILT		SANDY ORGANIC lean CLAY with GRAVEL
	Well-graded SAND with SILT and GRAVEL		GRAVELLY ORGANIC lean CLAY
	Well-graded SAND with CLAY (or SILTY CLAY)		GRAVELLY ORGANIC lean CLAY with SAND
	Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)		ORGANIC SILT
	Poorly graded SAND with SILT		ORGANIC SILT with SAND
	Poorly graded SAND with SILT and GRAVEL		ORGANIC SILT with GRAVEL
	Poorly graded SAND with CLAY (or SILTY CLAY)		SANDY ORGANIC SILT
	Poorly graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)		SANDY ORGANIC SILT with GRAVEL
	SILTY SAND		GRAVELLY ORGANIC SILT
	SILTY SAND with GRAVEL		GRAVELLY ORGANIC SILT with SAND
	CLAYEY SAND		ORGANIC fat CLAY
	CLAYEY SAND with GRAVEL		ORGANIC fat CLAY with SAND
	SILTY, CLAYEY SAND		ORGANIC fat CLAY with GRAVEL
	SILTY, CLAYEY SAND with GRAVEL		SANDY ORGANIC fat CLAY
	PEAT		SANDY ORGANIC fat CLAY with GRAVEL
	COBBLES		GRAVELLY ORGANIC fat CLAY
	COBBLES and BOULDERS		GRAVELLY ORGANIC fat CLAY with SAND
	BOULDERS		ORGANIC elastic SILT

FIELD AND LABORATORY TESTING	
(C)	Consolidation (ASTM D 2435)
(CL)	Collapse Potential (ASTM D 5333)
(CP)	Compaction Curve (CTM 216)
(CR)	Corrosivity Testing (CTM 643, CTM 422, CTM 417)
(CU)	Consolidated Undrained Triaxial (ASTM D 4767)
(DS)	Direct Shear (ASTM D 3080)
(EI)	Expansion Index (ASTM D 4829)
(M)	Moisture Content (ASTM D 2216)
(OC)	Organic Content-% (ASTM D 2974)
(P)	Permeability (CTM 220)
(PA)	Particle Size Analysis (ASTM D 422)
(PI)	Plasticity Index (AASHTO T 90) Liquid Limit (AASHTO T 89)
(PL)	Point Load Index (ASTM D 5731)
(PM)	Pressure Meter
(PP)	Pocket Penetrometer
(R)	R-Value (CTM 301)
(SE)	Sand Equivalent (CTM 217)
(SG)	Specific Gravity (AASHTO T 100)
(SL)	Shrinkage Limit (ASTM D 427)
(SW)	Swell Potential (ASTM D 4546)
(TV)	Pocket Torvane
(UC)	Unconfined Compression-Soil (ASTM D 2166)
	Unconfined Compression-Rock (ASTM D 2938)
(UU)	Unconsolidated Undrained Triaxial (ASTM D 2850)
(UW)	Unit Weight (ASTM D 4767)
(VS)	Vane Shear (AASHTO T 223)

APPARENT DENSITY OF COHESIONLESS SOILS	
Description	SPT N ₆₀ (Blows / 12 inches)
Very loose	0 - 4
Loose	5 - 10
Medium Dense	11 - 30
Dense	31 - 50
Very Dense	> 50

MOISTURE	
Description	Criteria
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, usually soil is below water table

PERCENT OR PROPORTION OF SOILS	
Description	Criteria
Trace	Particles are present but estimated to be less than 5%
Few	5 to 10%
Little	15 to 25%
Some	30 to 45%
Mostly	50 to 100%

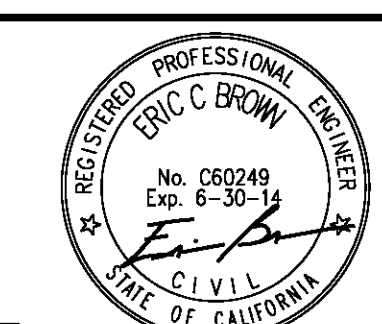
PARTICLE SIZE		
Description	Size	
Boulder	> 12"	
Cobble	3" to 12"	
Gravel	Coarse	3/4" to 3"
	Fine	No. 4 to 3/4"
Sand	Coarse	No. 10 to No. 4
	Medium	No. 40 to No. 10
	Fine	No. 200 to No. 40

D:\Projects\1066_Sreeter\sgn\Contract Plans\2-LOB Sheets - BM\066\066-5.dgn

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

IMPORTANT NOTICE
Section 0510-017 of the Government Code requires a Dig Alert identification "Permit to Excavate" will be valid for your Dig Alert ID Number only.
CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

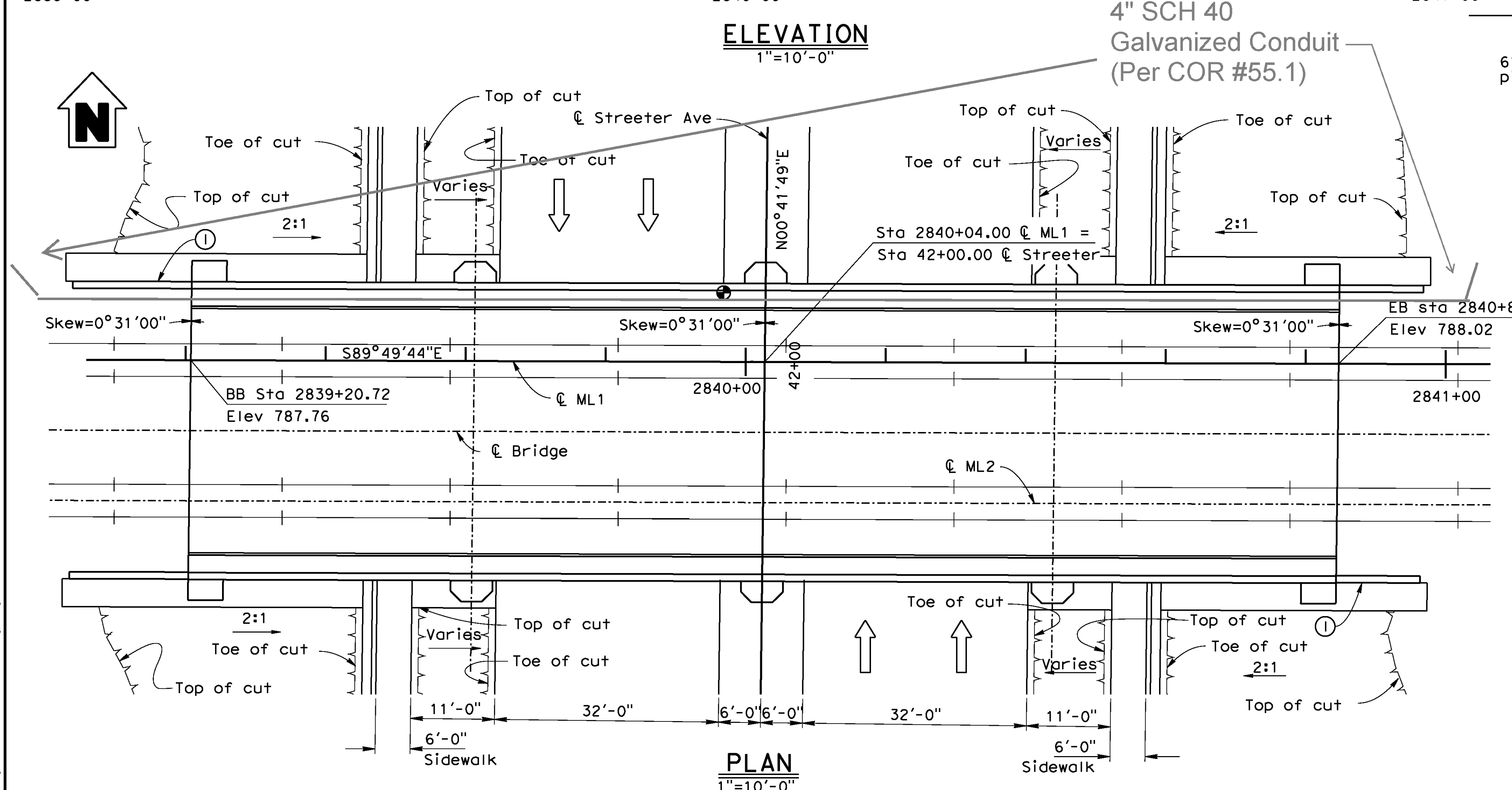
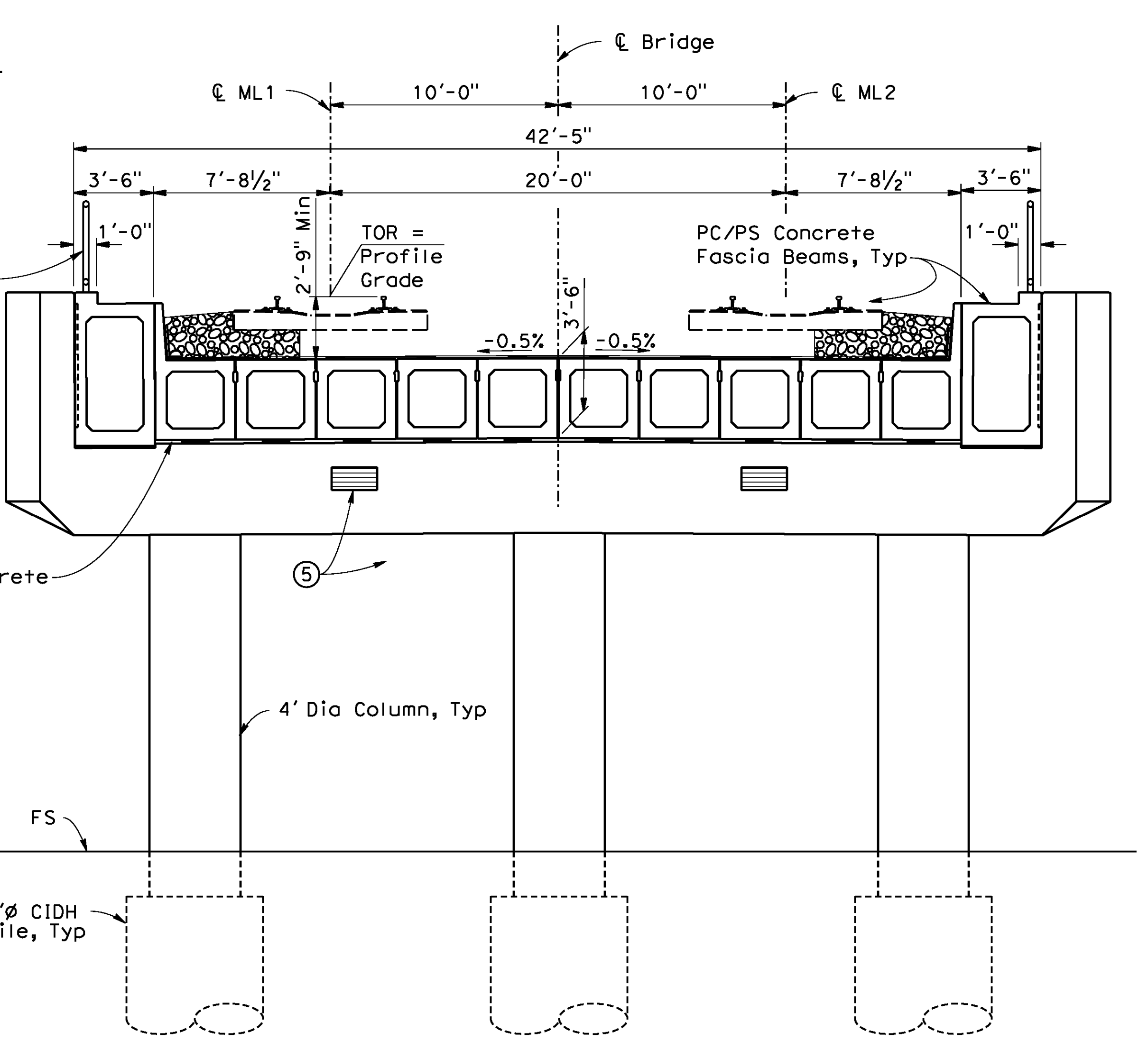
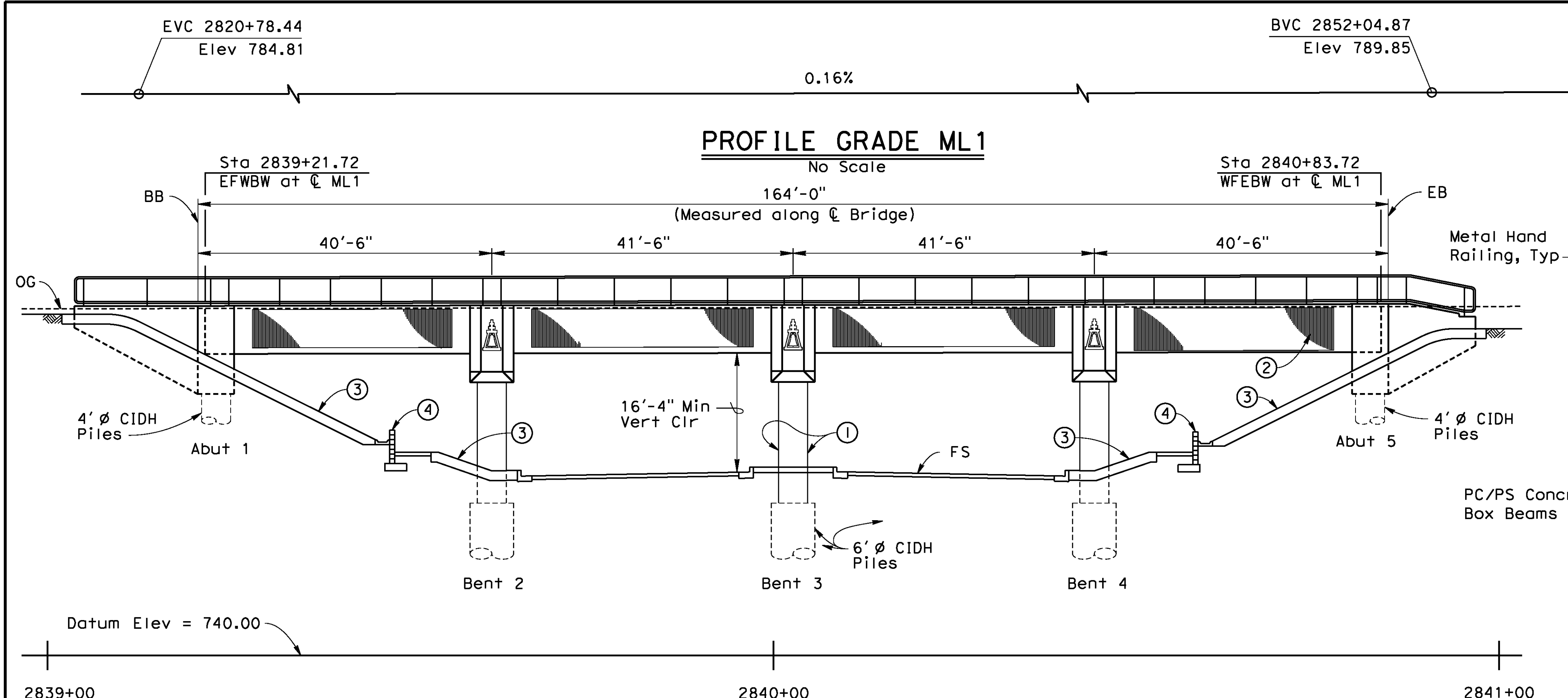
Earth Mechanics, Inc.
Geotechnical and Earthquake Engineering
Earth Mechanics, Inc.
17800 Newhope Street, Suite B
Fountain Valley, CA 92708
DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
DEWEY AVE GRADE SEPARATION
LOG OF TEST BORINGS (5 OF 5)
HORIZ. SCALE: N/A VERT. SCALE: N/A
FILE NO. R-4180 SHEET 157 OF 191

UNCHECKED DETAILS



- LEGEND**
- Point of min vert clearance
 - ➔ Direction of traffic
- NOTES:**
- ① - Paint "STREETER AVENUE UNDERPASS" and "BRIDGE NO. 56C-0599" and Year Completed
 - ② - Architectural Texture
 - ③ - Slope Paving
 - ④ - CMU retaining wall with concrete gutter, see "ROAD PLANS"
 - ⑤ - Luminaires, see "STREET LIGHTING PLANS" by Riverside Public Utilities (RPU)
 - ⑥ - See "GENERAL NOTES" sheet for "INDEX TO BRIDGE PLANS"

AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME JOSE CORONA

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DATE: 8/9/2012
 TIME: 6:54:14 AM

IMPORTANT NOTICE
 Section 4210.4211 of the Government Code requires a Dig Alert Identification Number to be issued before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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 RIVERSIDE, CA 92507
 TEL (951) 788-4688
 www.tylin.com

PROFESSIONAL ENGINEER
 David M. Griffith
 C49125
 CIVIL
 STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

UPRR BRIDGE MP 56.4 LOS ANGELES SUB BR. NO 56C0599

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT

STREETER AVENUE UNDERPASS

GENERAL PLAN

HORIZ. SCALE: VERT. SCALE: N/A

R-4180
 SHEET 158 OF 191
 FILE NO.

User: untitled
 106630a-r-gp01.dgn

GENERAL NOTES

DESIGN: American railway Engineering and Maintenance-of-way Association (AREMA) 2010 Edition, Load Factor Design.
BNSF - Union Pacific Railroad Guidelines for railroad Grade Separation Projects, 2007 Edition.

SEISMIC DESIGN: AREMA, 2009 Edition, Chapter 9.

SEISMIC LOADING: AREMA ARS Curve based on site coefficient of $s = 1.0$ and Peak Ground Acceleration of:

PGA=0.309g	Serviceability
PGA=0.461g	Ultimate
PGA=0.618g	Survivability

DEAD LOAD: Include up to 30 inches of ballast from top of beams to top of ties.

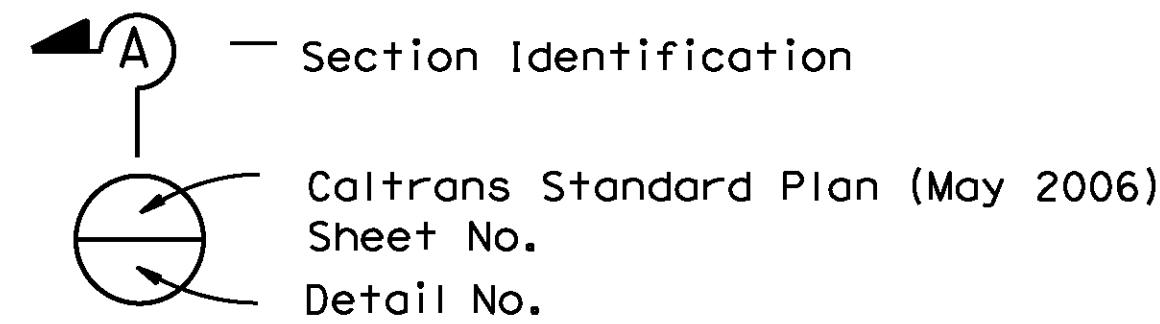
LIVE LOAD: Cooper E-80 loading for two tracks
Impact $I = 225/\sqrt{L}$

REINFORCED CONCRETE: $f'_c = 4000$ psi

PRESTRESSED CONCRETE: See "PRESTRESSING NOTES" on "PRECAST BOX BEAM DETAILS NO.3" and FASCIA BEAM DETAILS" sheet.

REINFORCEMENT: All reinforcing bars shall be ASTM A615 Grade 60

PLAN SYMBOLS



CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS (DATED MAY 2006)

- A10A ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
- A10B ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
- A10C SYMBOLS (SHEET 1 OF 2)
- A10D SYMBOLS (SHEET 2 OF 2)
- A62B LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL - BRIDGE SURCHARGE AND WALL
- A62C LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL - BRIDGE
- B0-1 BRIDGE DETAILS
- B0-3 BRIDGE DETAILS
- B0-13 BRIDGE DETAILS
- ES-9B ELECTRICAL SYSTEMS (ELECTRICAL DETAILS STRUCTURAL INSTALLATIONS)
- ES-9D ELECTRICAL SYSTEMS (ELECTRICAL DETAILS STRUCTURAL INSTALLATIONS)
- B3-9 RETAINING WALL DETAILS No. 2

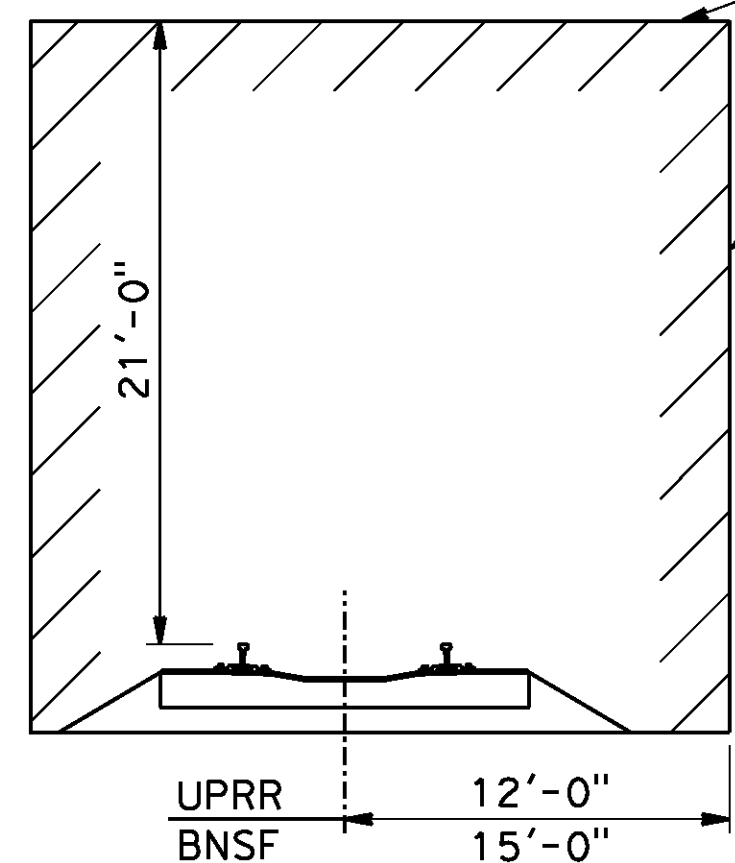
INDEX TO BRIDGE PLANS

SHEET NO.	TITLE
158	GENERAL PLAN
159	GENERAL NOTES
160	FOUNDATION PLAN
161	ABUTMENT LAYOUT
162	ABUTMENT DETAILS NO.1
163	ABUTMENT DETAILS NO.2
164	BENT LAYOUT
165	BENT DETAILS
166	TYPICAL SECTION
167	PRECAST BOX BEAM DETAILS NO.1
168	PRECAST BOX BEAM DETAILS NO.2
169	PRECAST BOX BEAM DETAILS NO.3
170	PRECAST BOX BEAM DETAILS NO.4
171	SHEAR KEY DETAILS
172	FASCIA BEAM DETAILS
173	WATERPROOFING DETAILS
174	DECK DRAIN DETAILS
175	ARCHITECTURAL DETAILS
176	HANDRAILING DETAILS
177	SLOPE PAVING - FULL SLOPE
178	LOG OF TEST BORINGS-1
179	LOG OF TEST BORINGS-2
180	LOG OF TEST BORINGS-3
181	LOG OF TEST BORINGS-4
182	LOG OF TEST BORINGS-5

CONSTRUCTION SPECIFICATIONS

California Department of transportation (Caltrans) Standard Specifications dated May 2006.
Special Provisions for the construction of this project.

No construction activities or other obstructions may be placed within these limits.



MINIMUM CONSTRUCTION CLEARANCES

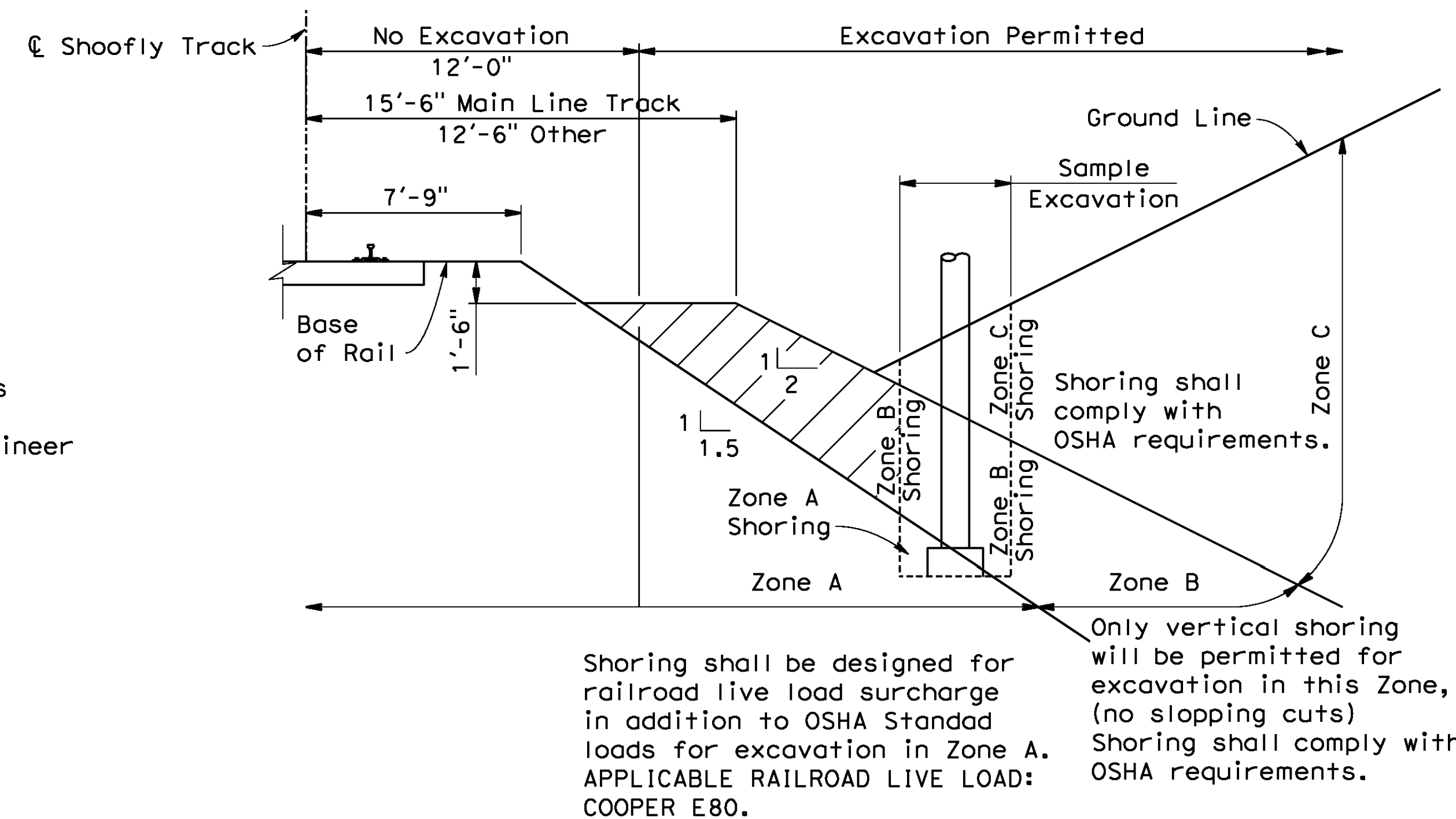
(Normal to railroad) Not to Scale

NOTES:

All Dimensions are measured perpendicular to C of track.

Prior to commencing any work, the contractor shall submit for approval by the railroad detailed plans indicating the nature and extent of the track protection shoring proposed. The contractor shall install the temporary shoring system per the approved plans. Design of the temporary shoring system shall comply with "GUIDELINES FOR TEMPORARY SHORING"

For excavations which encroach into zone A or B, shoring plans shall be accompanied by design calculations, Plans and calculations must be signed and stamped by a Professional Engineer registered in the state of California.



GENERAL EXCAVATION ZONES

No Scale

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

BR. NO 56C0599

IMPORTANT NOTICE
Section 4210.4217 of the Government Code requires a Dig Alert Identification Number to be issued before a "Permit to Excavate" will be valid. For your Dig Alert ID Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TYLIN INTERNATIONAL
3550 VINE STREET, SUITE 120
RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com DATE 8-7-12

PROFESSIONAL ENGINEER
David M. Griffith
C49125
CIVIL
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

DESIGNED BY *RS* DRAWN BY *MY* CHECKED BY *DS*

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
GENERAL NOTES

HORIZ. SCALE: VERT. SCALE: N/A

R-4180
SHEET 159 OF 191
FILE NO.

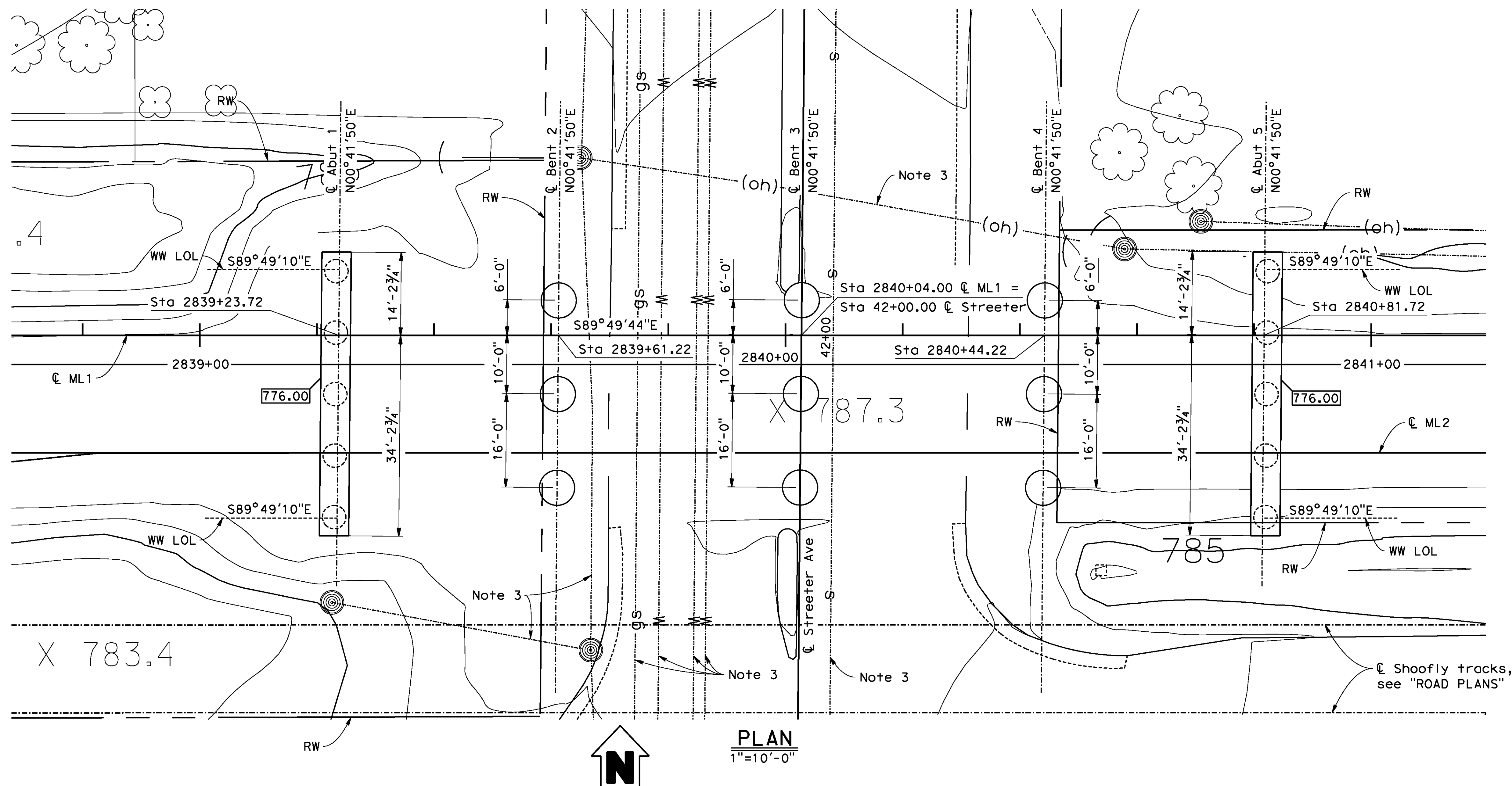
BENCHMARK

City of Riverside Benchmark H5-F3
 Railroad spike in power pole, 1 foot
 above ground.
 Northwest of the intersection of
 Streeter Avenue and the UPRR
 Elevation 788.643 (NAVD 1929)

BASIS OF BEARING:

The bearings show hereon are based
 on the line between City of Riverside
 Survey Control Points 0179 and 2086
 on record at the city of Riverside,
 N66°32'14.4"E, a distance of
 3,683.80 feet. City of Riverside control
 datum was used for this project.

☉ ML1:
 Longitude 117°25'7.1"
 Latitude 33°57'25.8"



PILE DATA TABLE

Location	Pile Type	Nominal Resistance		Cut-off Elevation	Design Tip Elevations (FT)	Specified Tip Elevations (FT)
		Compression	Tension			
Abut 1	48" CIDH	800 Kips	N/A	776.25	739(a), 756(c), 742(d)	739
Bent 2	Left	72" CIDH	2680 Kips	N/A	761.6	672(a), 726(c), 701(d)
	Center	72" CIDH	3750 Kips	N/A	761.6	663(a), 716(c), 701(d)
	Right	72" CIDH	2680 Kips	N/A	761.6	672(a), 726(c), 701(d)
Bent 3	Left	72" CIDH	2680 Kips	N/A	761.6	672(a), 726(c), 701(d)
	Center	72" CIDH	3750 Kips	N/A	761.6	663(a), 716(c), 701(d)
	Right	72" CIDH	2680 Kips	N/A	761.6	672(a), 726(c), 701(d)
Bent 4	Left	72" CIDH	2680 Kips	N/A	761.6	672(a), 726(c), 701(d)
	Center	72" CIDH	3750 Kips	N/A	761.6	663(a), 716(c), 701(d)
	Right	72" CIDH	2680 Kips	N/A	761.6	672(a), 726(c), 701(d)
Abut 5	48" CIDH	800 Kips	N/A	776.25	739(a), 756(c), 742(d)	739

Design tip elevation is controlled by the following demands: (a) Compression, (b) Tension, (c) Settlement, and (d) Lateral Loads

NOTES:

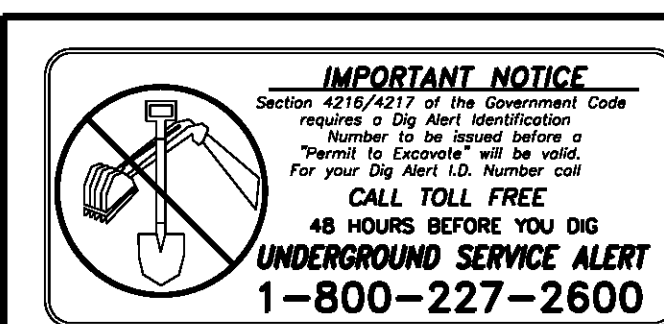
- For CIDH pile cut-off elevation see "PILE DATA TABLE".
- For limits of excavation and backfill not shown, see **A62C**.
- Existing utility's to be relocated, see "ROAD PLANS".

LEGEND

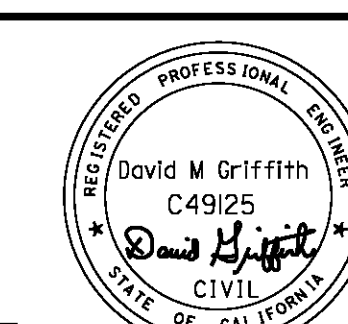
- indicates bottom of Abutment stem elevation.

AS BUILT
 AND CORRECTIONS ON THIS SHEET
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME JOSE CORONA

BR. NO 56C0599



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 www.tylin.com



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT

STREETER AVENUE UNDERPASS

FOUNDATION PLAN

DESIGNED BY *RS* DRAWN BY *MY* CHECKED BY *DS*

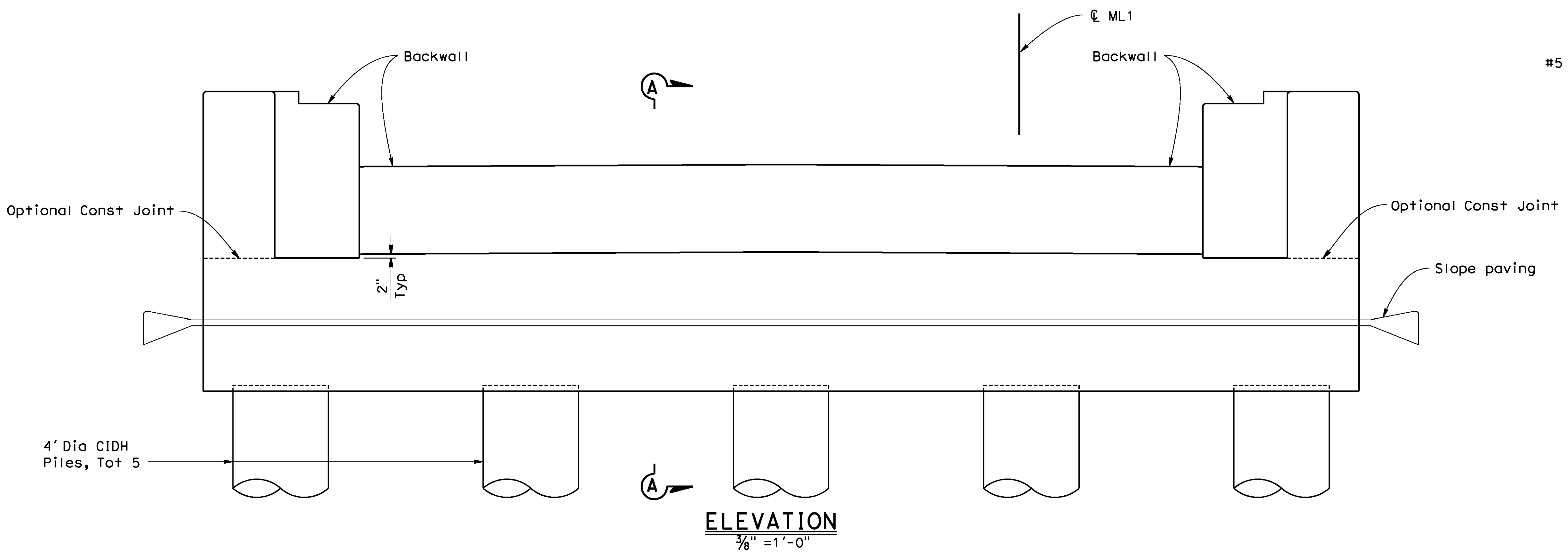
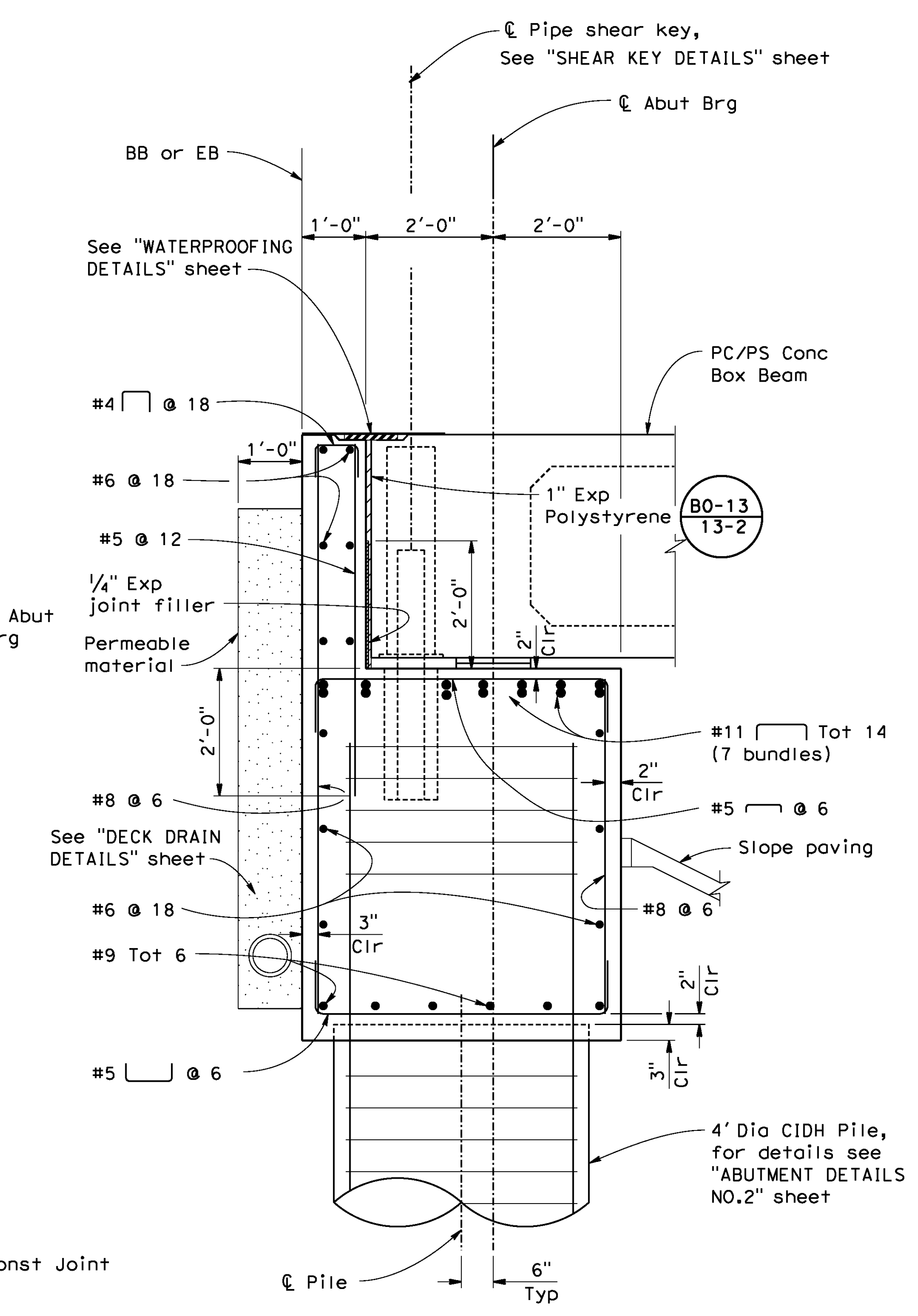
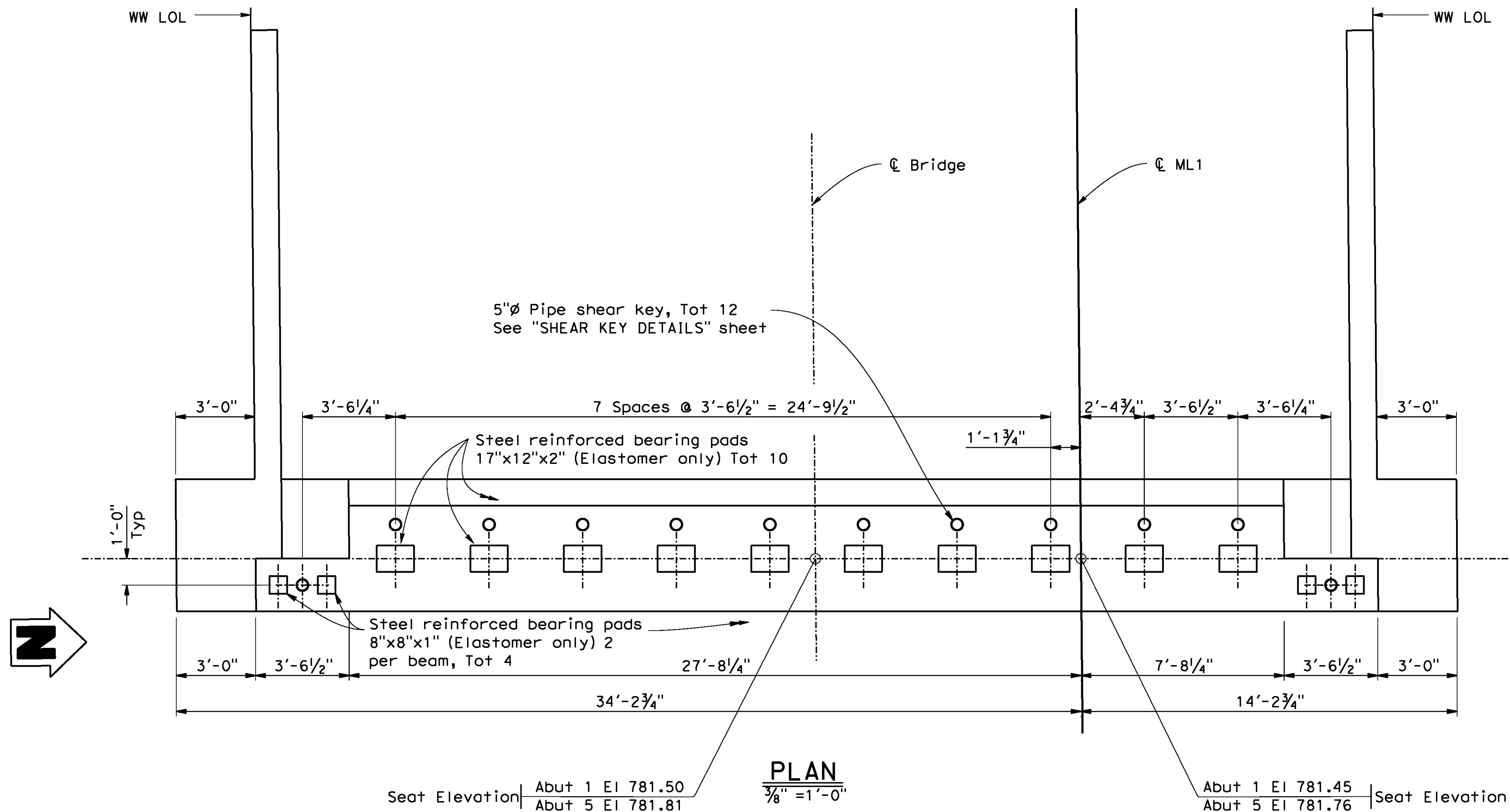
HORIZ. SCALE: VERT. SCALE: N/A

R-4180
 SHEET 160 OF 191
 FILE NO.

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DATE: 8/9/2012
 TIME: 6:55:06 AM

User: unfitted
 106630a-e-fap01.dgn



Note: Abutment 1 shown, Abutment 5 similar

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
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 R.E. NAME JOSE CORONA

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IMPORTANT NOTICE
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PROFESSIONAL ENGINEER
 David M. Griffith
 C49125
 CIVIL
 STATE OF CALIFORNIA

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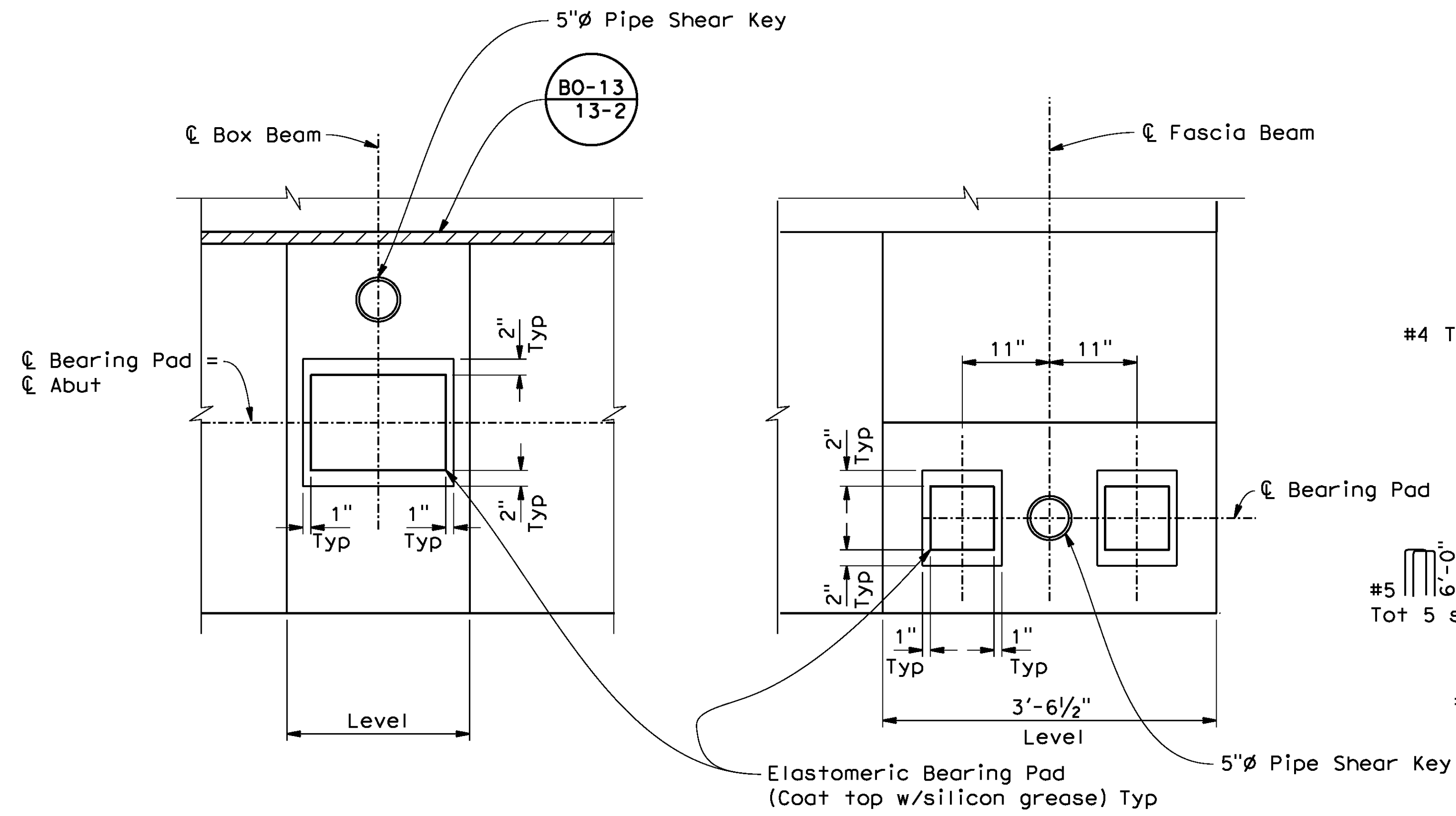
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
ABUTMENT LAYOUT

R-4180
 SHEET 161 OF 191
 FILE NO.

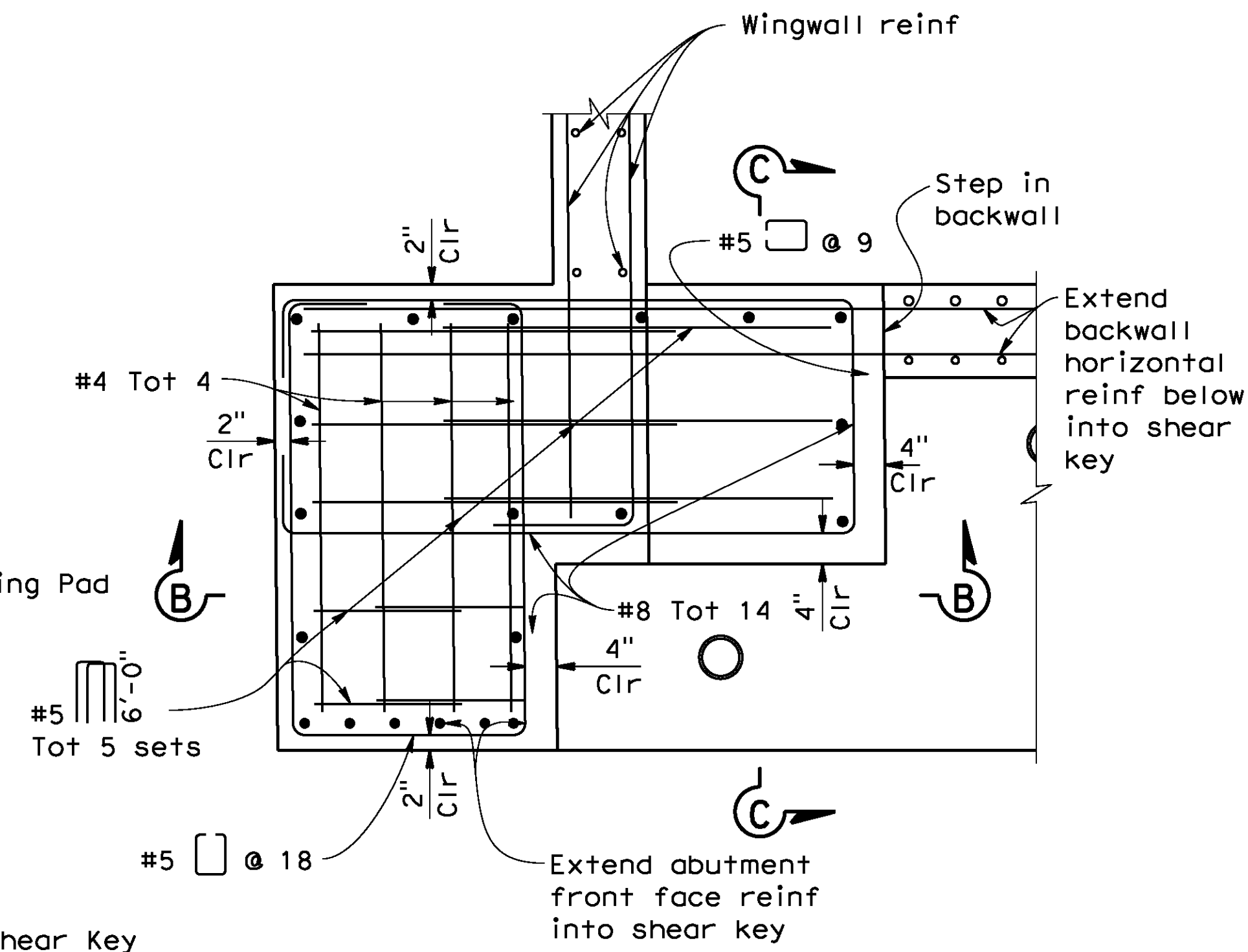
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DATE: 8/9/2012
 TIME: 6:55:28 AM

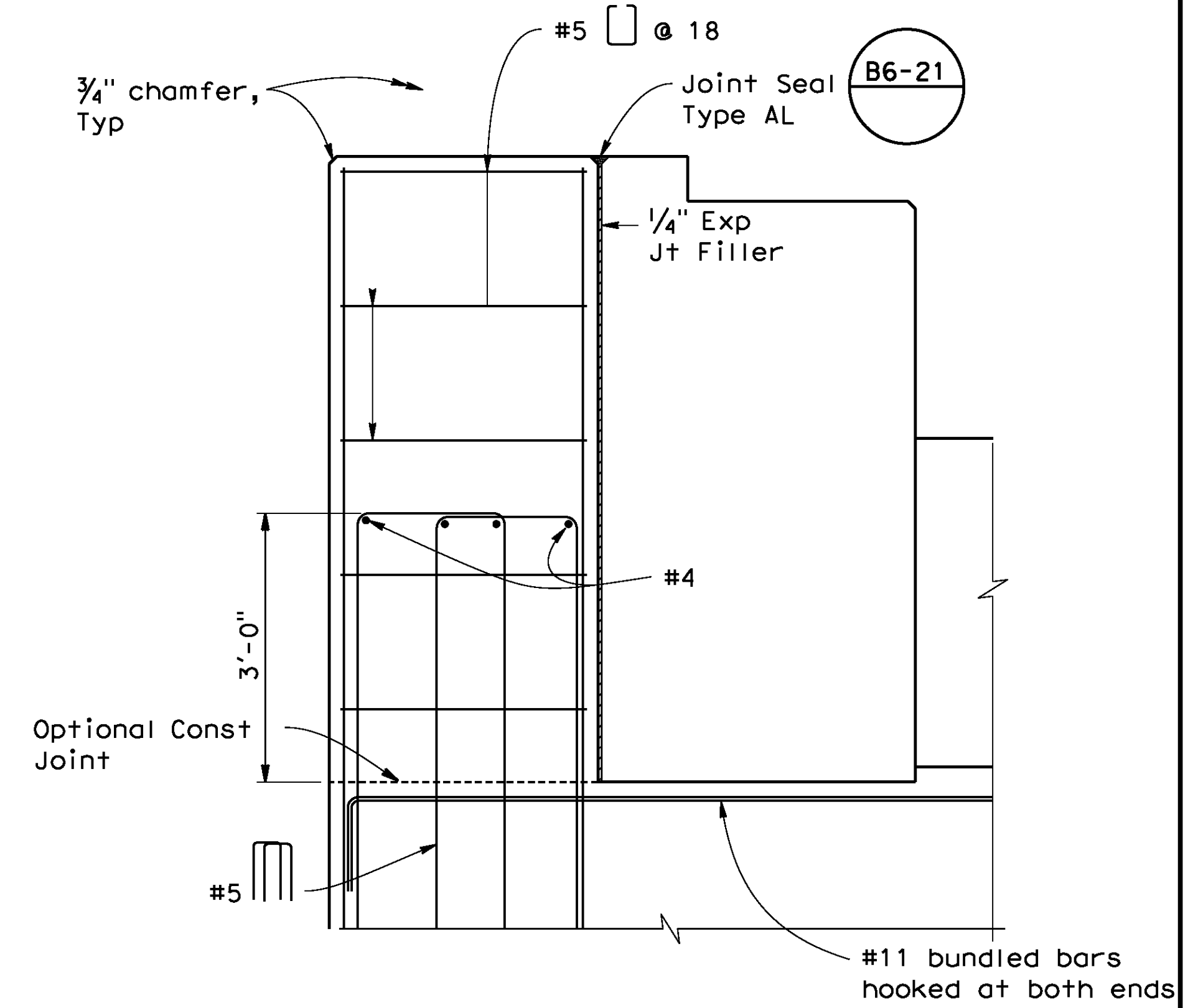
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BEARING SEAT DETAILS
No Scale

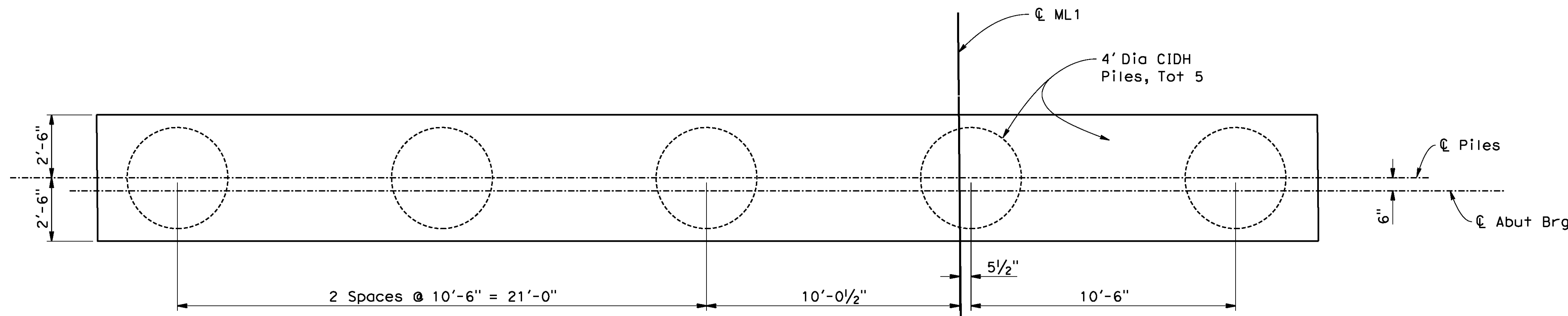


PLAN
3/4" = 1'-0"

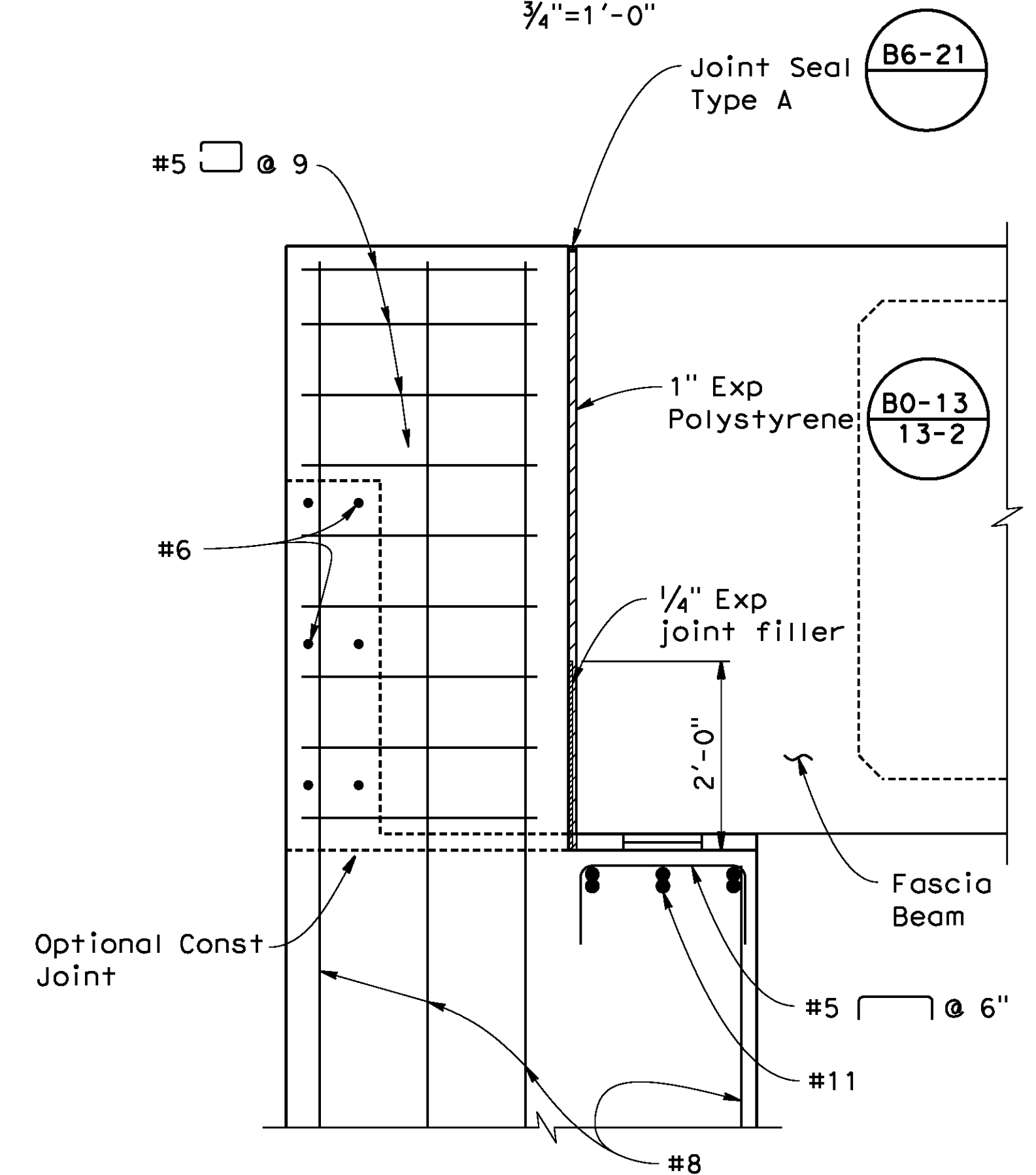


SECTION B-B
3/4" = 1'-0"

SHEAR KEY DETAILS



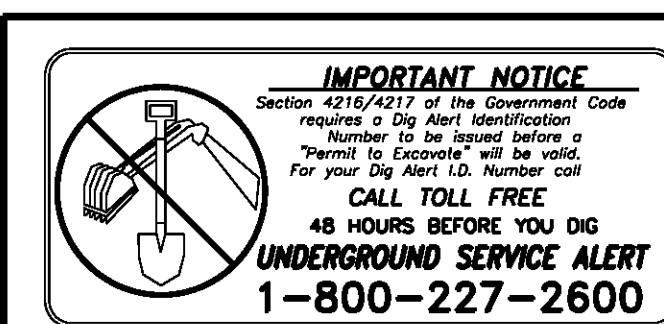
ABUTMENT PILE LAYOUT
3/8" = 1'-0"



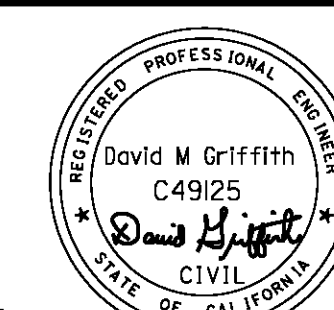
SECTION C-C
3/4" = 1'-0"

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

BR. NO 56C0599



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CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
ABUTMENT DETAILS NO.1

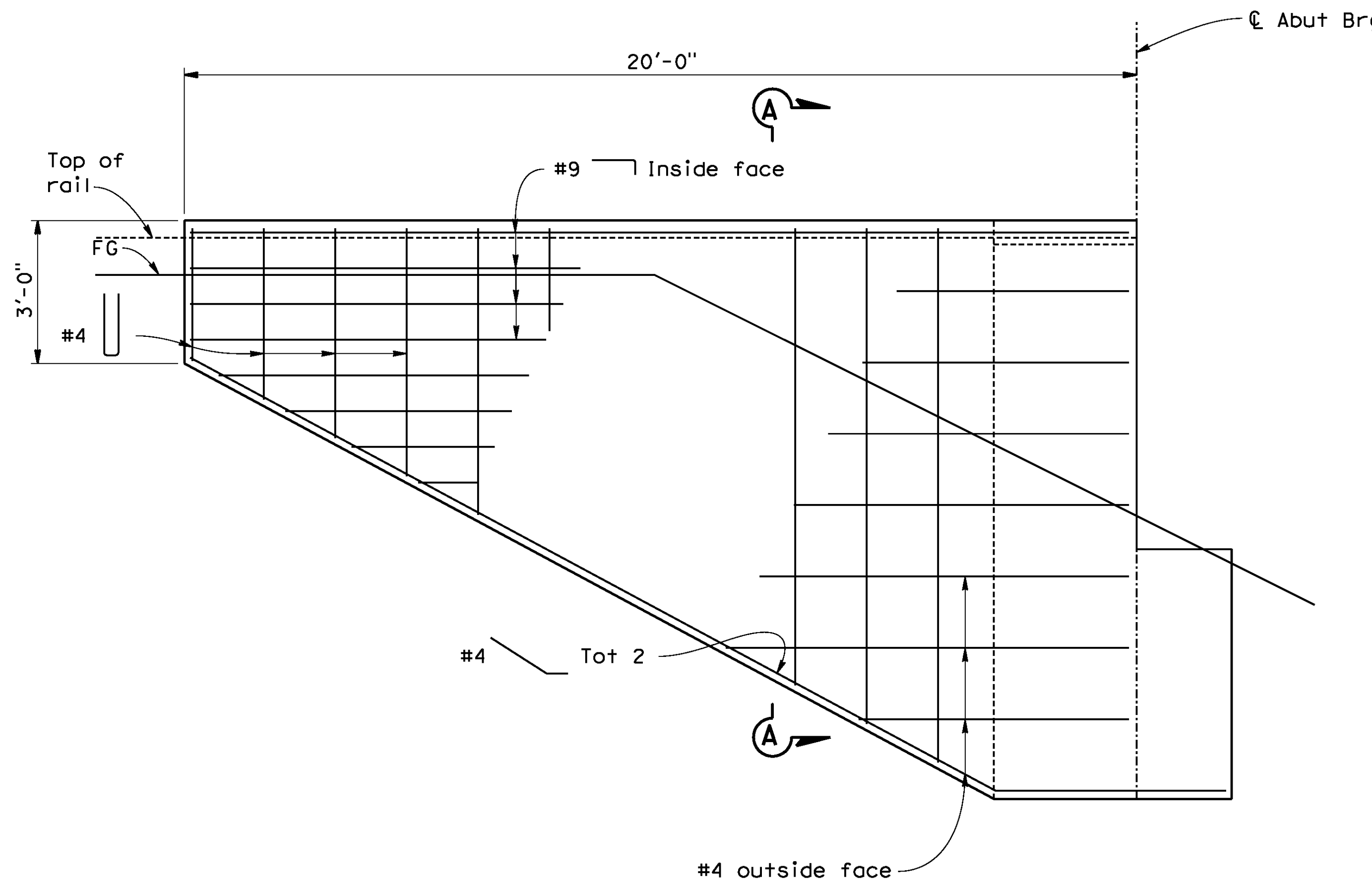
R-4180
SHEET 162 OF 191
FILE NO.

HORIZ. SCALE: VERT. SCALE: N/A

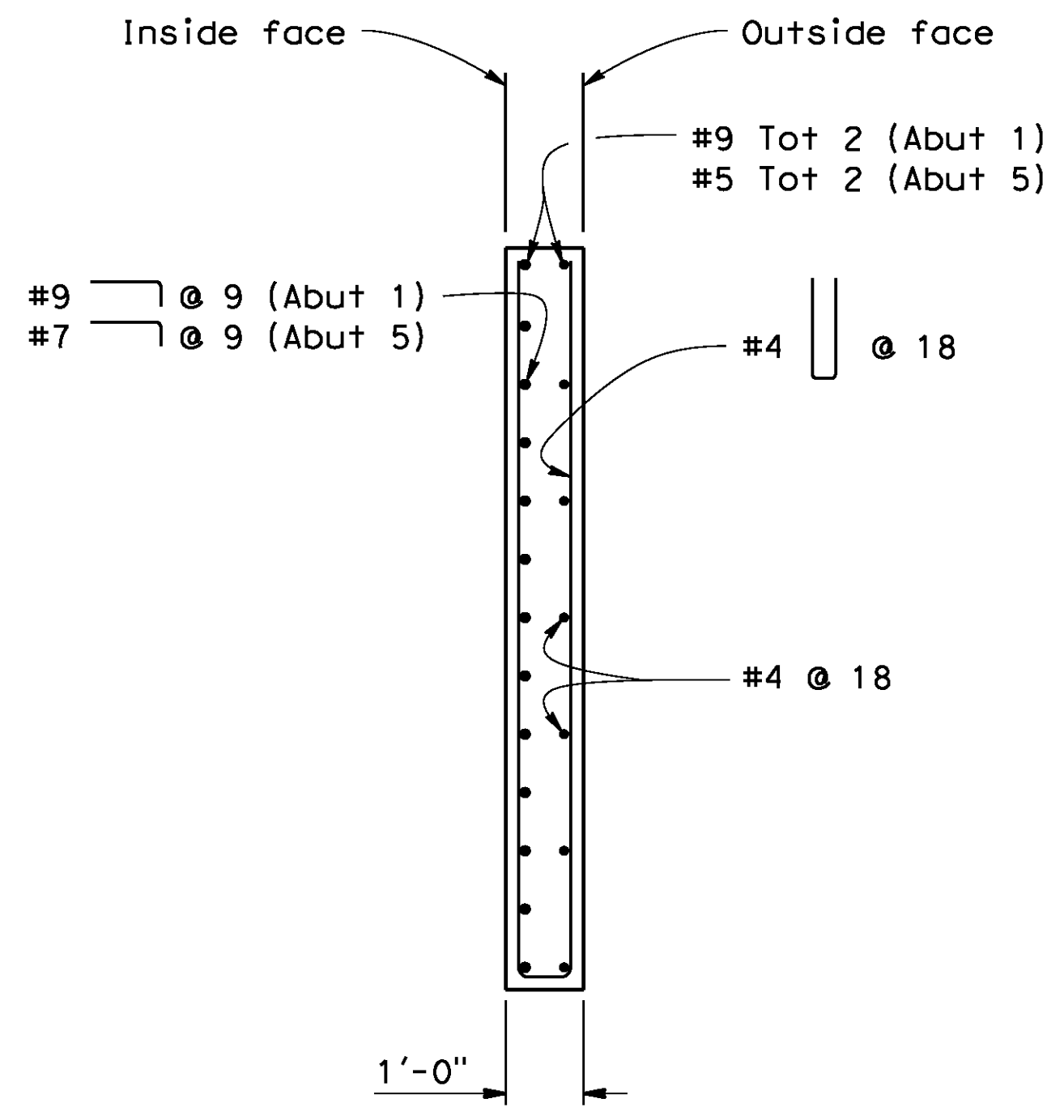
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TIME: 6:56:33 AM

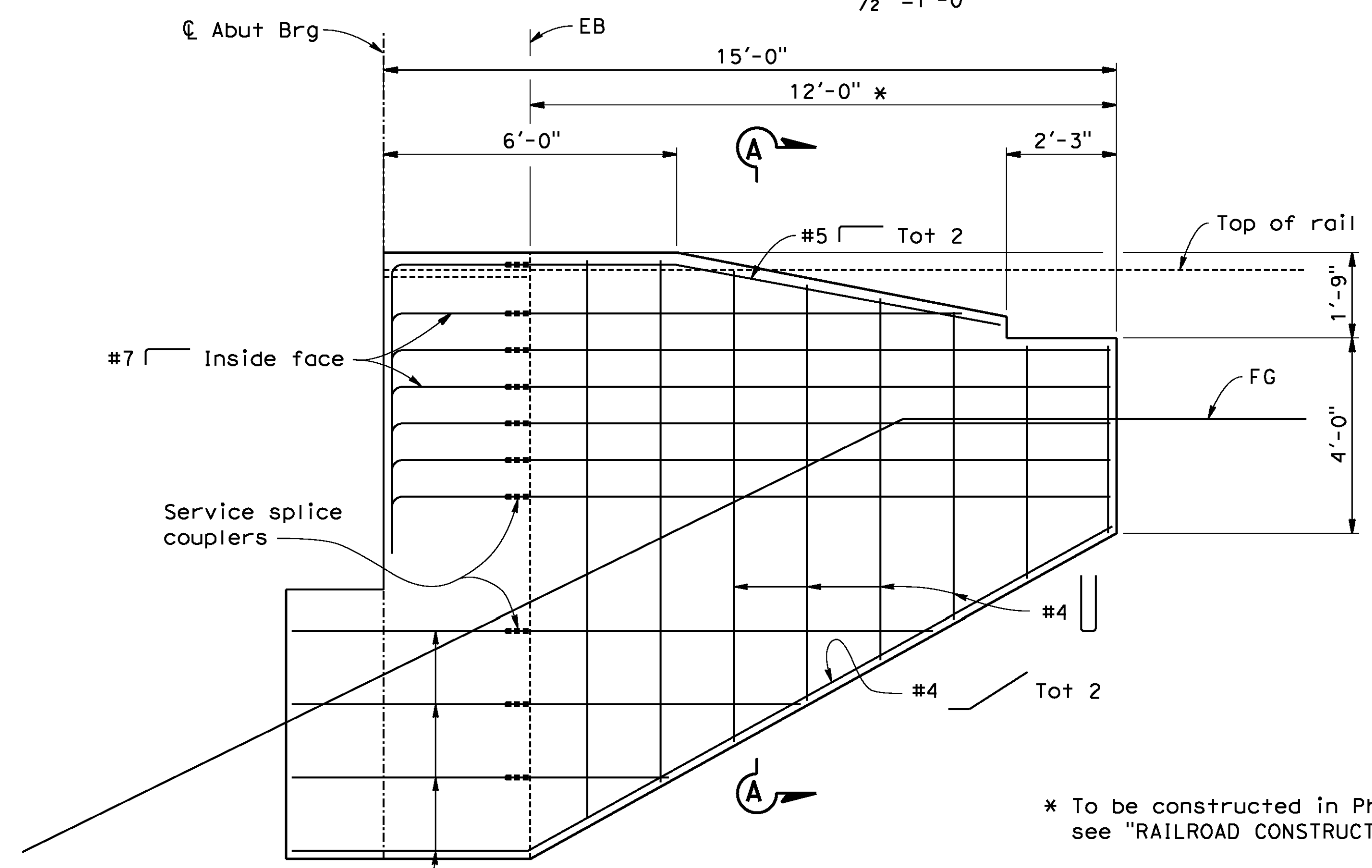
User: untitled
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**ABUTMENT 1
WINGWALL ELEVATION**
1/2" = 1'-0"

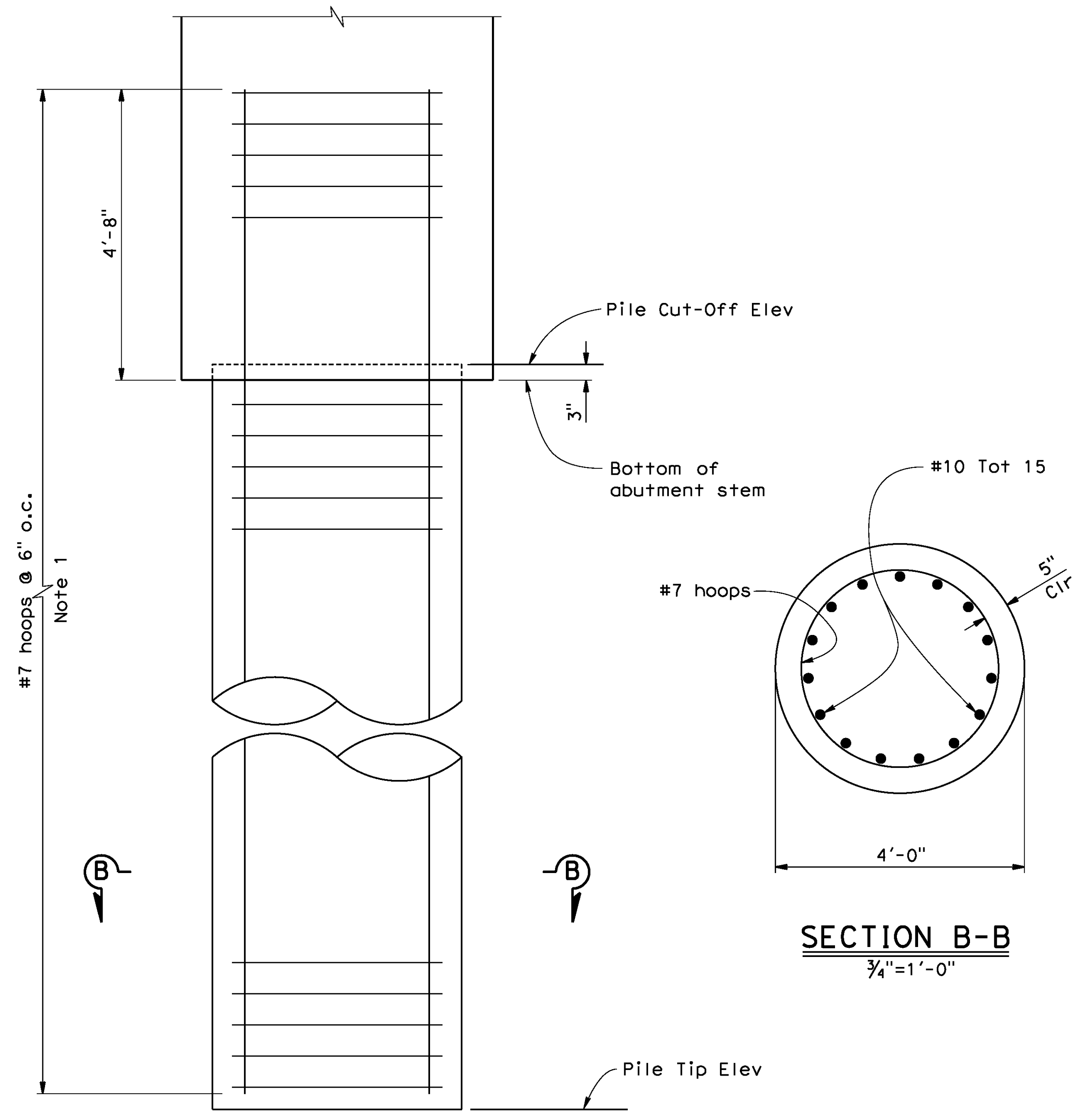


SECTION A-A
1/2" = 1'-0"



**ABUTMENT 5
WINGWALL ELEVATION**
1/2" = 1'-0"

* To be constructed in Phase 5
see "RAILROAD CONSTRUCTION PHASING" plans



ELEVATION
3/4" = 1'-0"

SECTION B-B
3/4" = 1'-0"

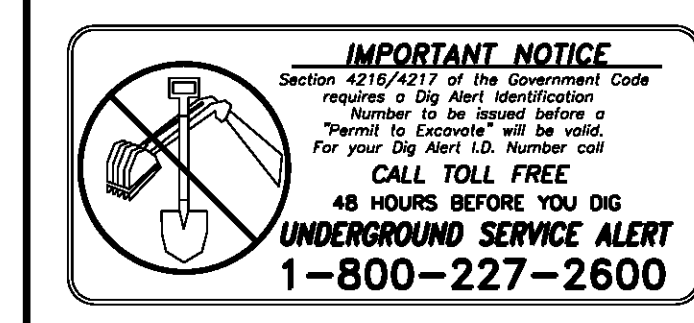
NOTE:
1. No lap splice is allowed in #10 pile reinf.

4' Ø CIDH PILE DETAILS

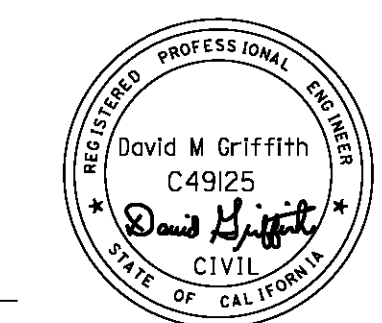
AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

D:\projects\1066_StreetRamp\bridge\from_S01120614\106630a-r-01.dwg

DATE: 8/9/2012
TIME: 6:56:13 AM



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RIVERSIDE, CA 92507
TEL (951) 788-4688
www.tylin.com



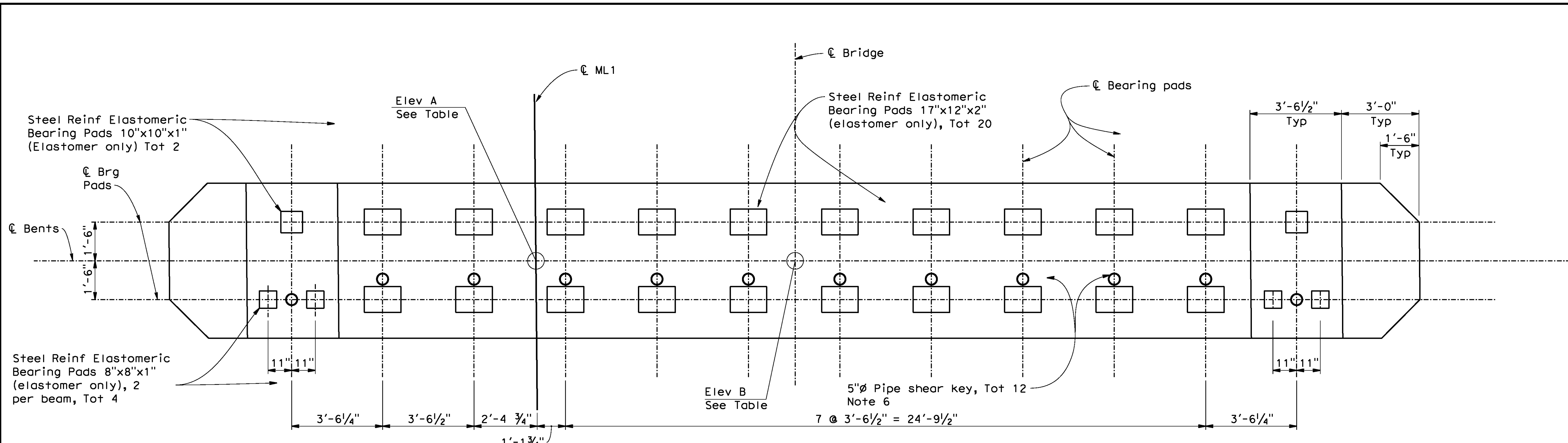
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
ABUTMENT DETAILS NO.2

BR. NO 56C0599
R-4180
SHEET 163 OF 191
FILE NO.

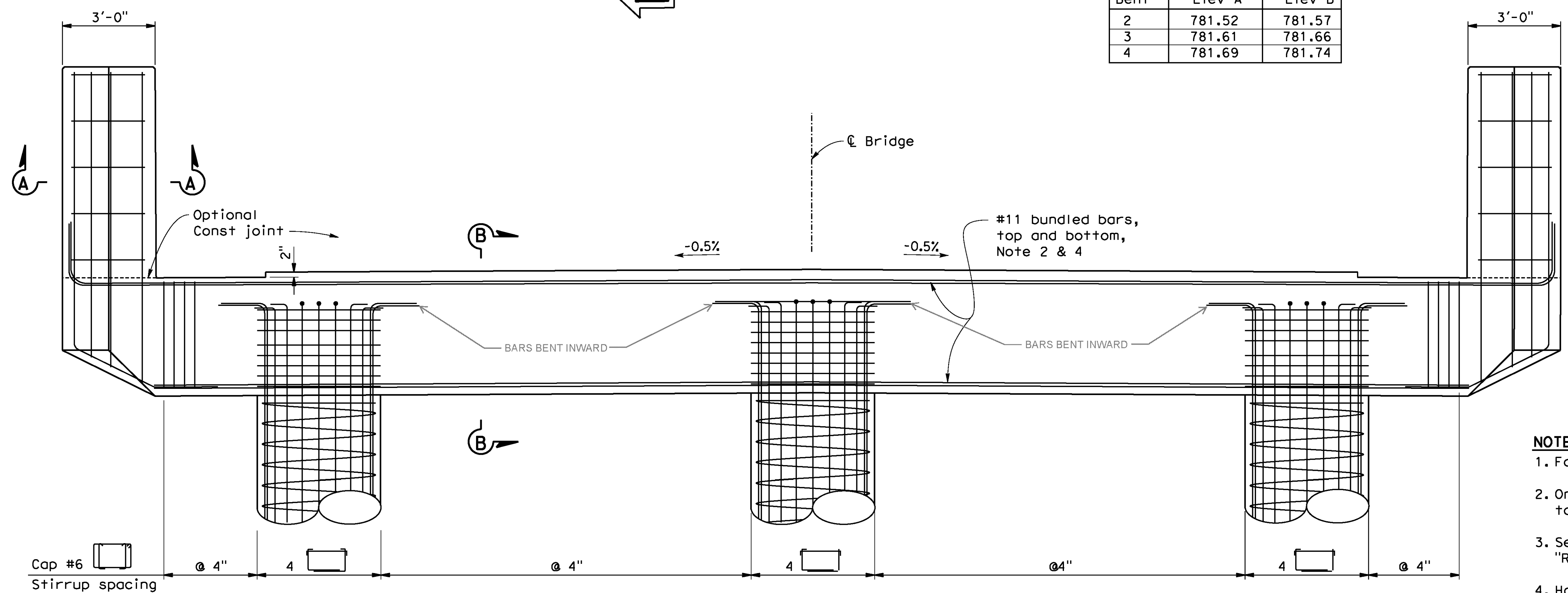
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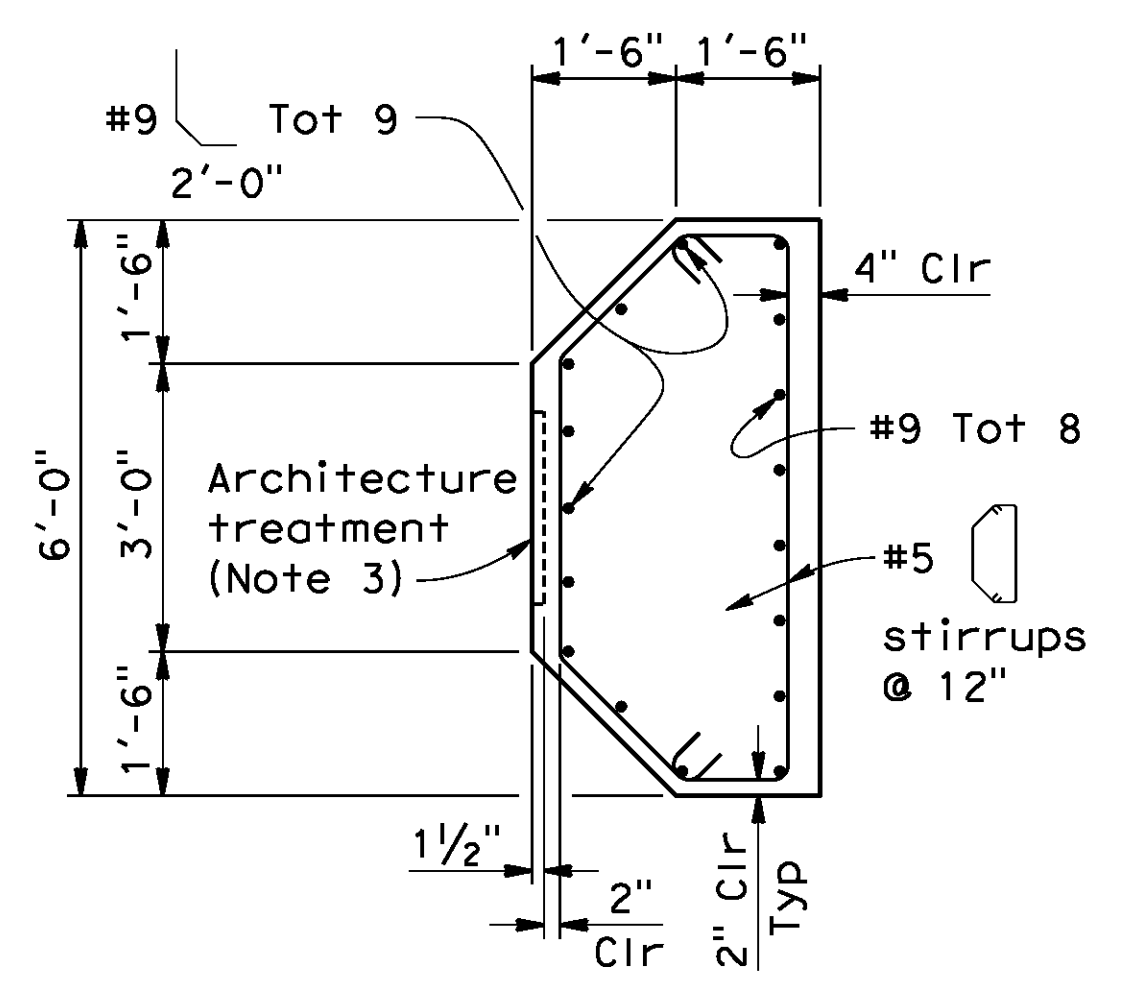


PLAN
1/2"=1'-0"

Bent	Elev A	Elev B
2	781.52	781.57
3	781.61	781.66
4	781.69	781.74



ELEVATION
1/2"=1'-0"



SECTION A-A
1/2"=1'-0"

- NOTES:**
1. For "SECTION B-B", see "BENT DETAILS" sheet.
 2. Only ultimate butt splice is allowed in #11 top and bottom cap reinforcement.
 3. See "ARCHITECTURAL DETAILS" sheet for "RAINCROSS" texture.
 4. Hook top #11 bars at both ends
 5. See "BENT DETAILS" sheet for "BEARING SEAT DETAIL"
 6. See "SHEAR KEY DETAILS" sheet for location.

AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME JOSE CORONA

BR. NO 56C0599

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 www.tylin.com

REGISTERED PROFESSIONAL ENGINEER
 David M. Griffith
 C49125
 CIVIL
 STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
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STREETER AVENUE UNDERPASS
BENT LAYOUT

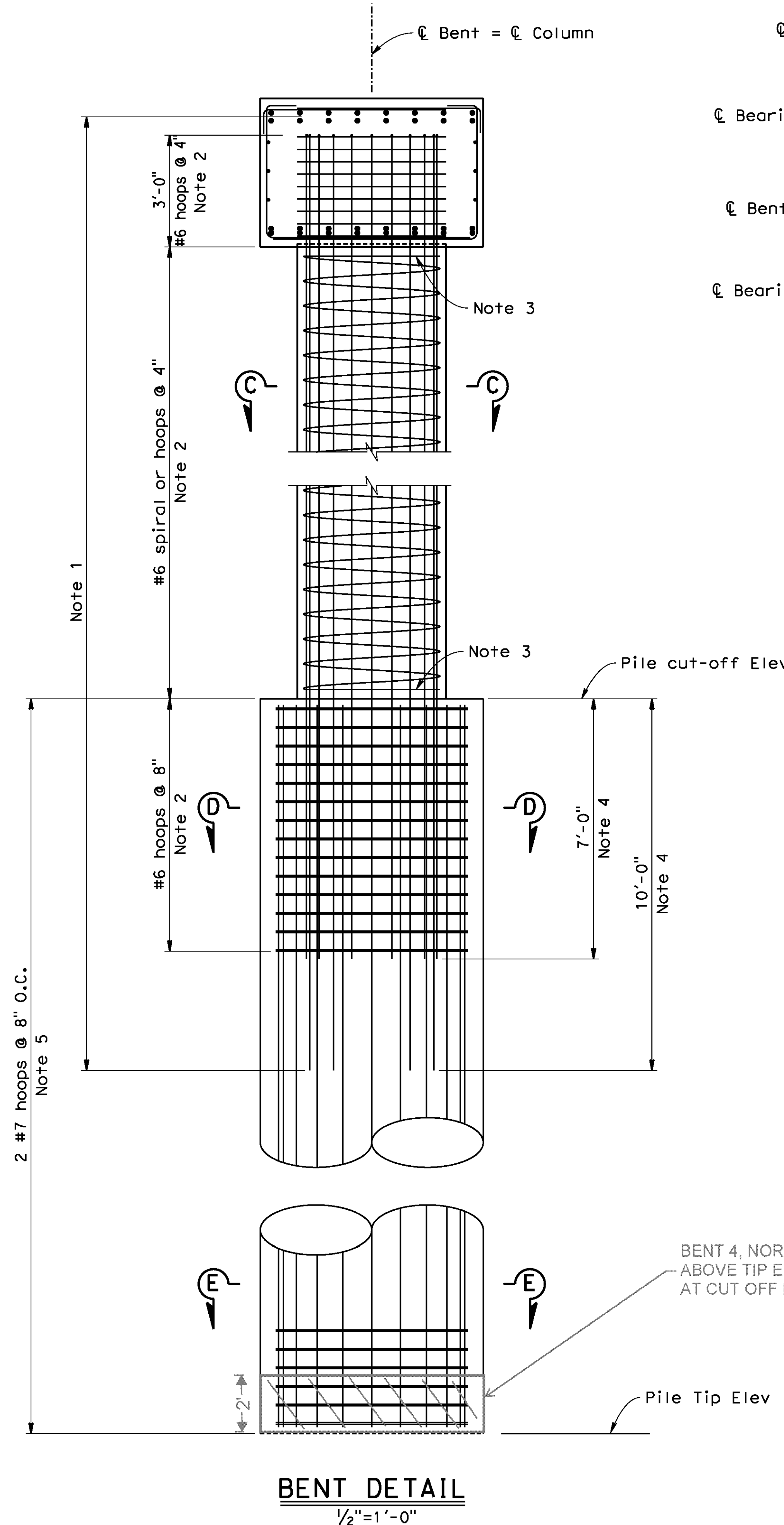
R-4180
 SHEET 164 OF 191
 FILE NO.

HORIZ. SCALE: VERT. SCALE: N/A

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DATE: 8/9/2012
 TIME: 6:56:55 AM

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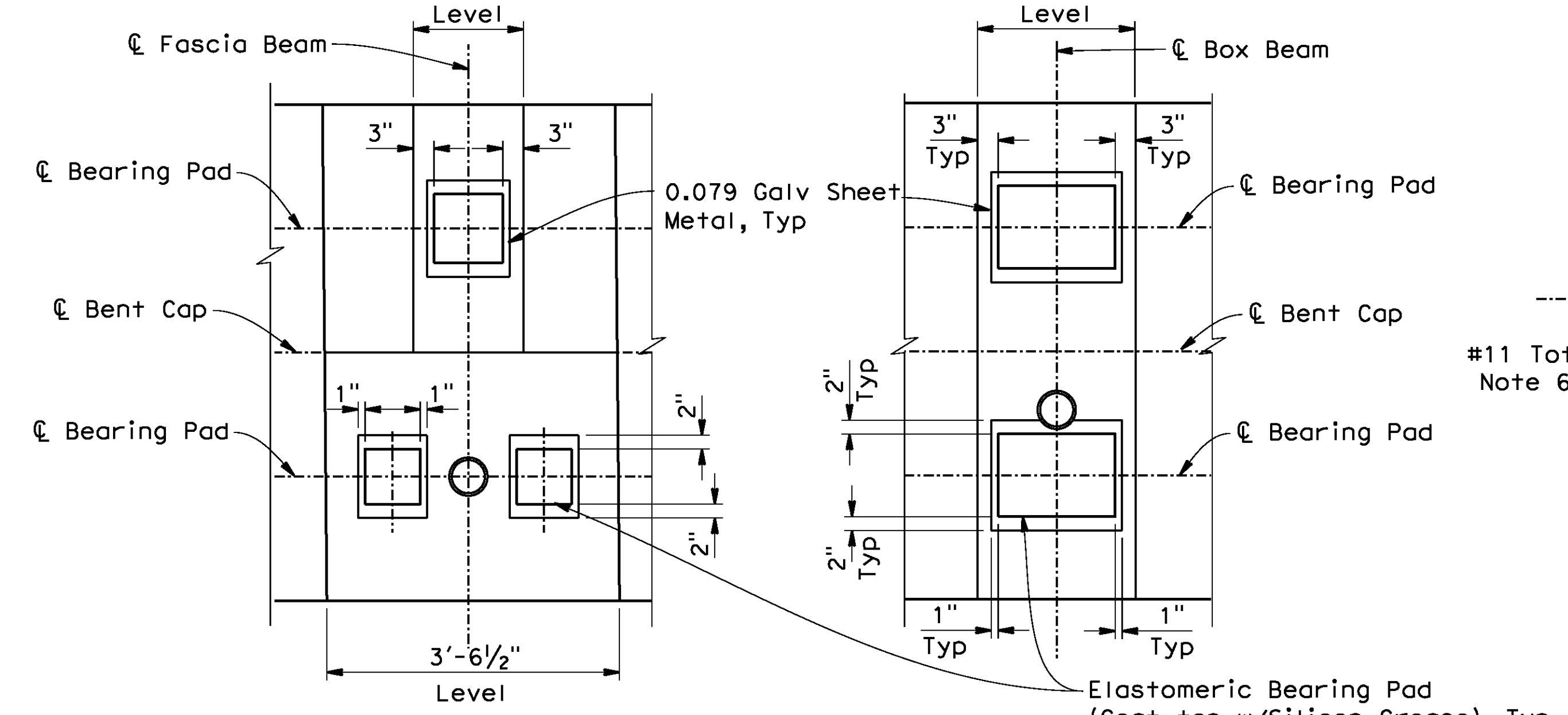


BENT DETAIL
1/2"=1'-0"

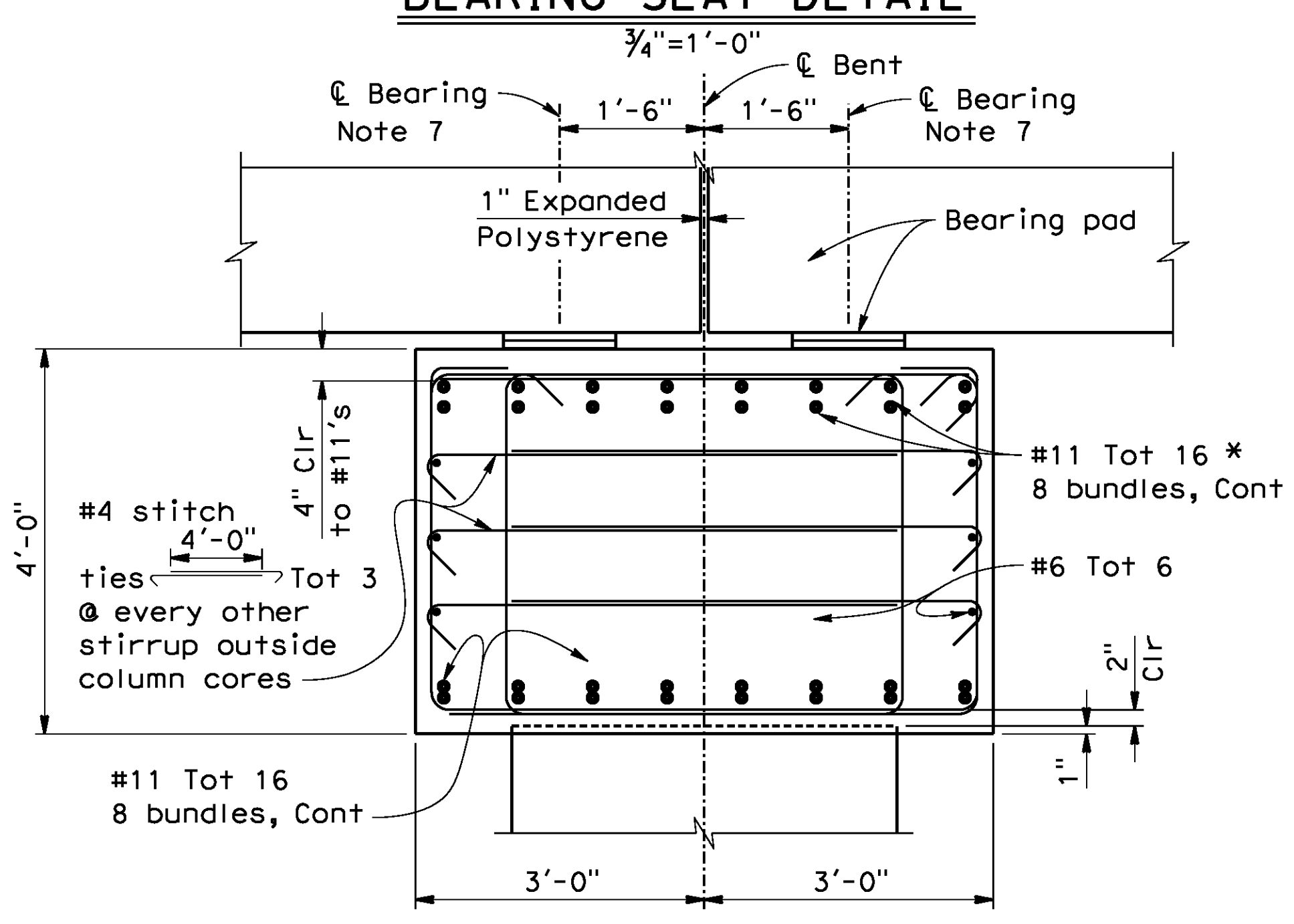
BENT 4, NORTH PILE CAGE SET 2' ABOVE TIP ELEVATION. PILE CAGE CUT AT CUT OFF ELEVATION PER RF# 59

Pile Tip Elev

Pile cut-off Elev

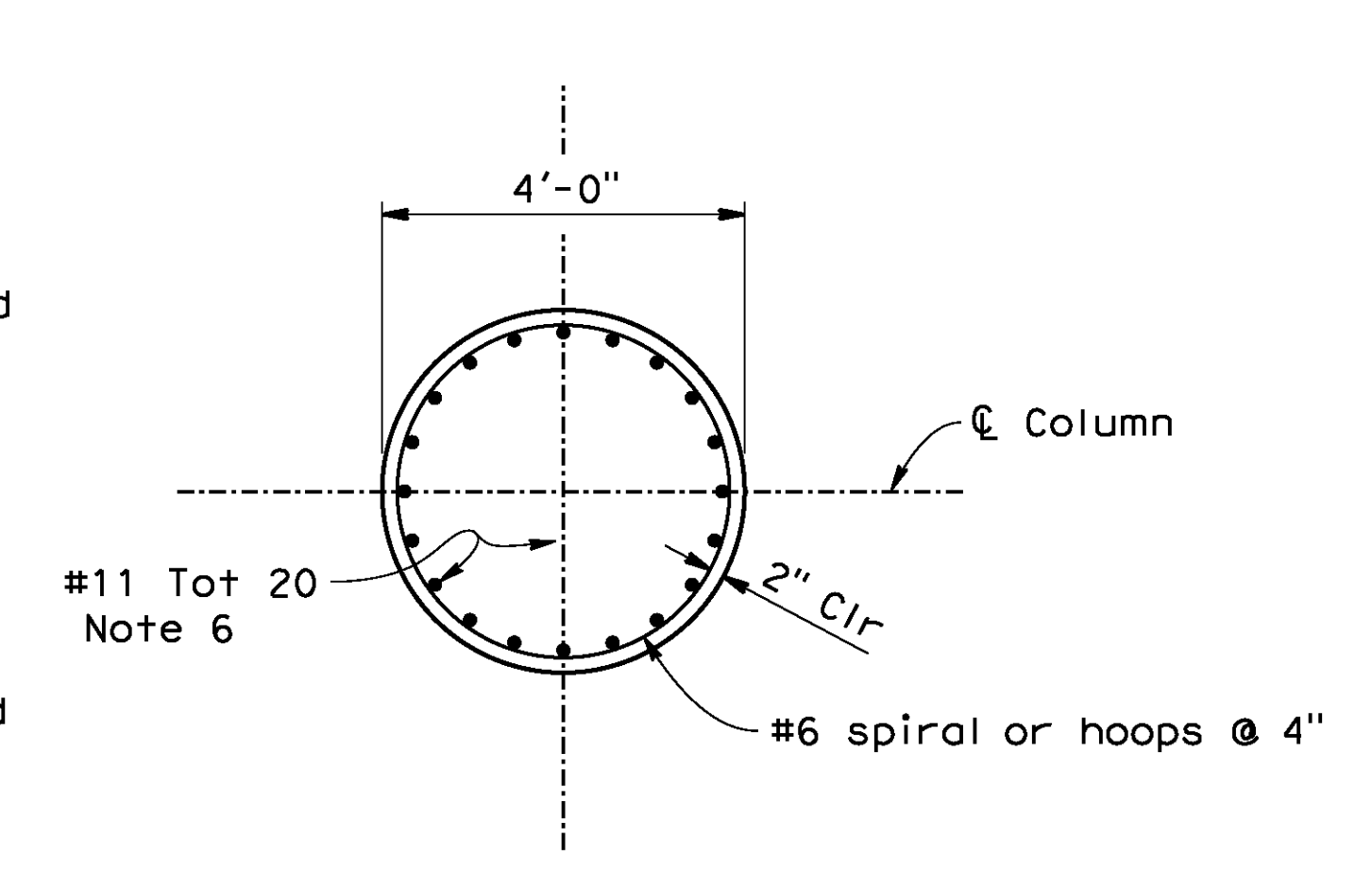


BEARING SEAT DETAIL



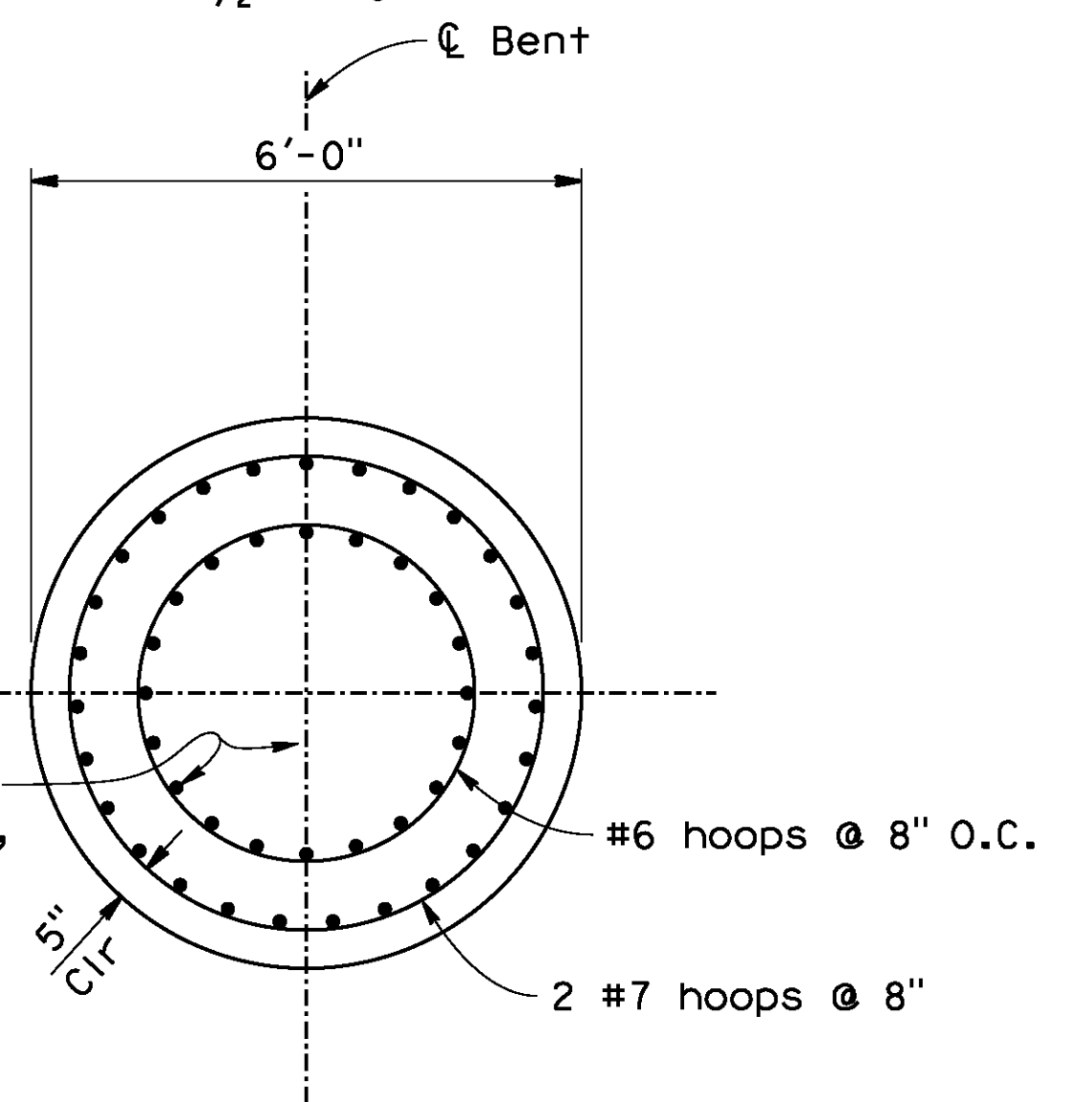
SECTION B-B
3/4"=1'-0"

* Adjust location to clear pipe shear keys

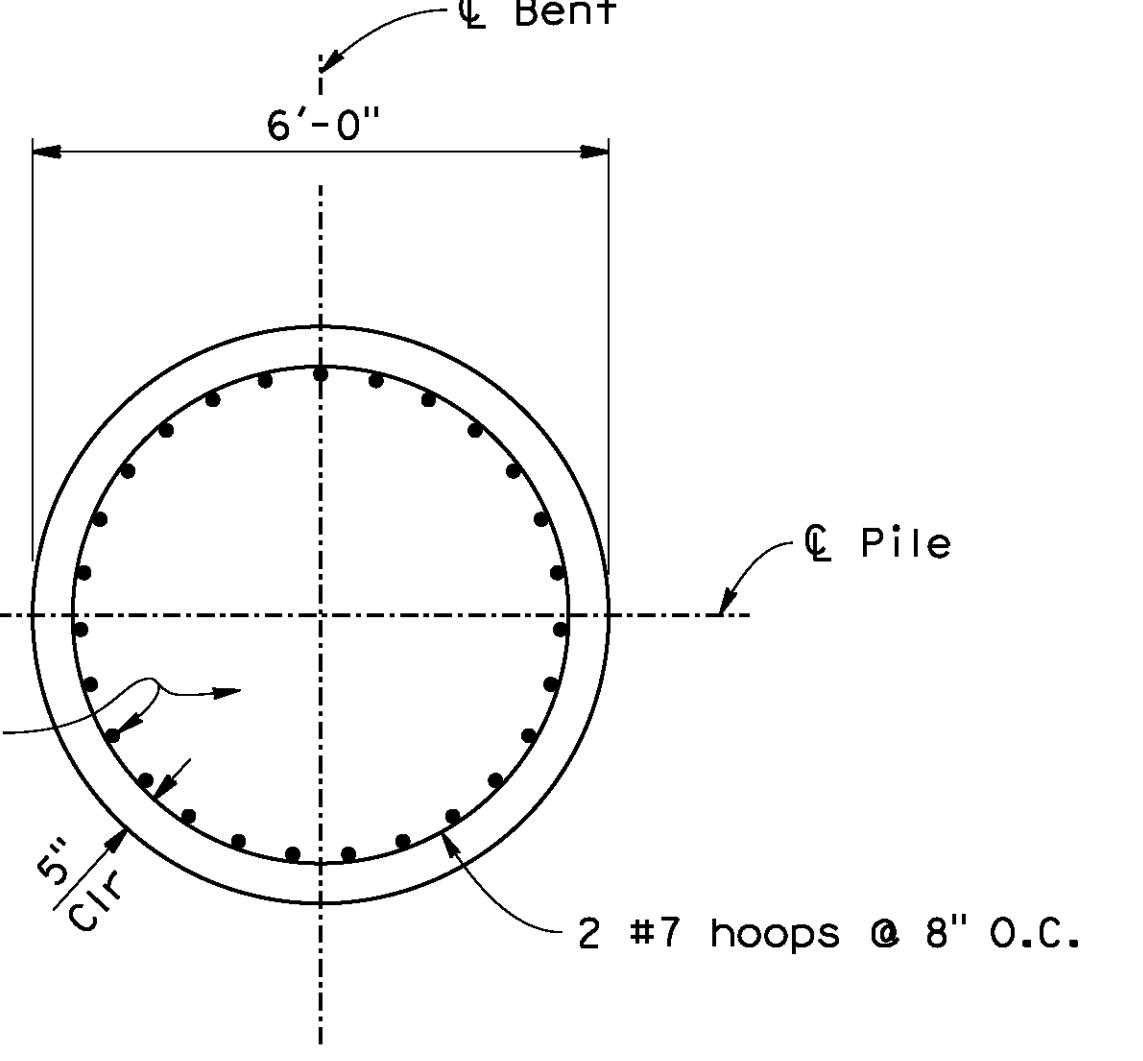


SECTION C-C
1/2"=1'-0"

Extend Column bars into pile, Note 4



SECTION D-D
1/2"=1'-0"



SECTION E-E
1/2"=1'-0"

NOTES:

1. No splice allowed in column #11 bars.
2. Only ultimate butt splice is allowed in spiral and hoops
3. Hook spiral by an extra turn in spiral coil with a tail equal in length to diameter of rebar cage passing through core of column.
4. Extend column #11 bars 7'-0" and 10'-0" straggled, into pile.
5. Only service butt splice allowed in pile #11 bars and #7 hoops.
6. Hook #11 column bars into bent cap
7. See "SHEAR KEY DETAIL" sheet

AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME JOSE CORONA

BR. NO 56C0599

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MARK	REVISIONS	APPR.	DATE

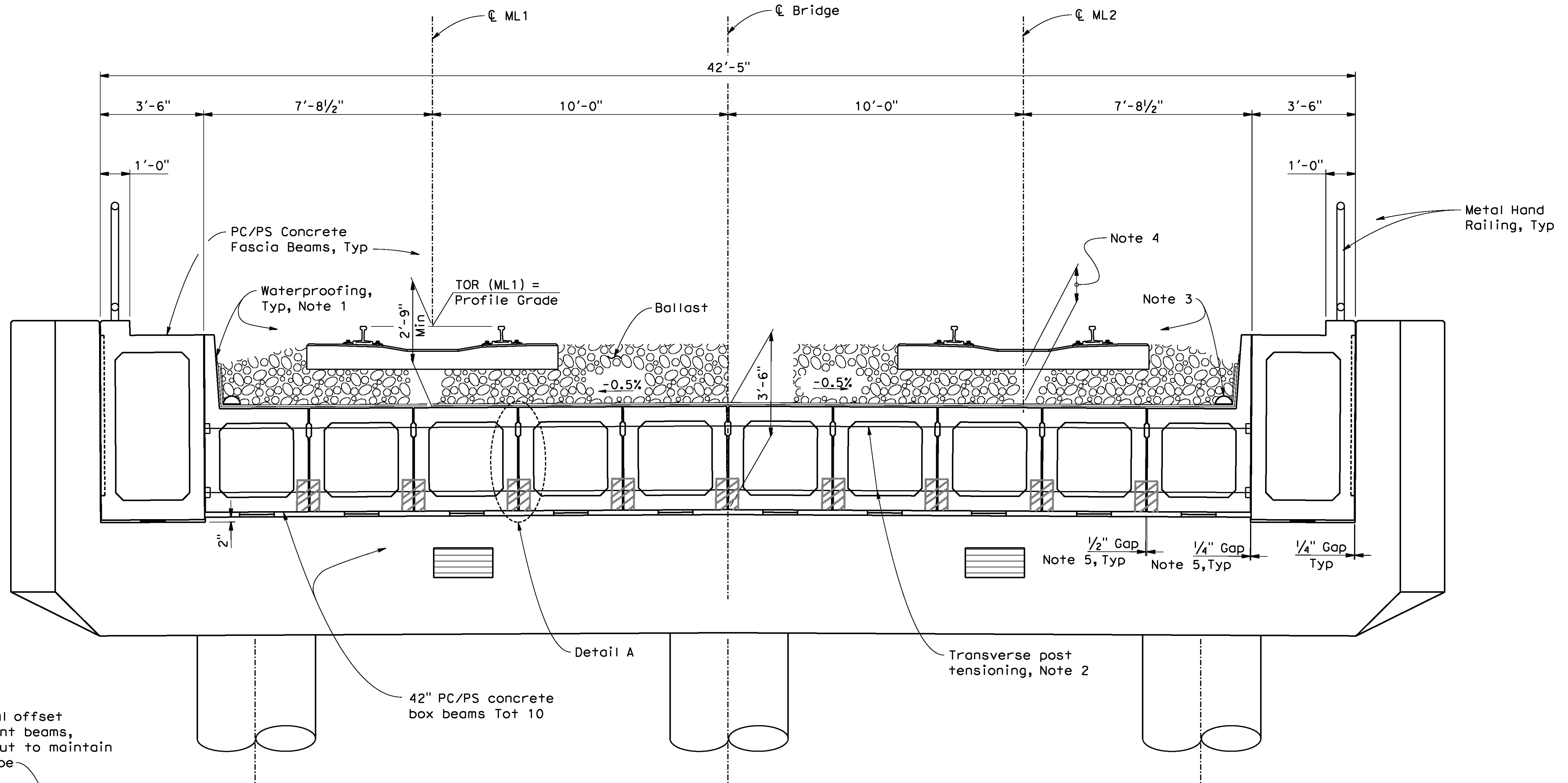
CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
BENT DETAILS

R-4180
 SHEET 165 OF 191
 FILE NO.

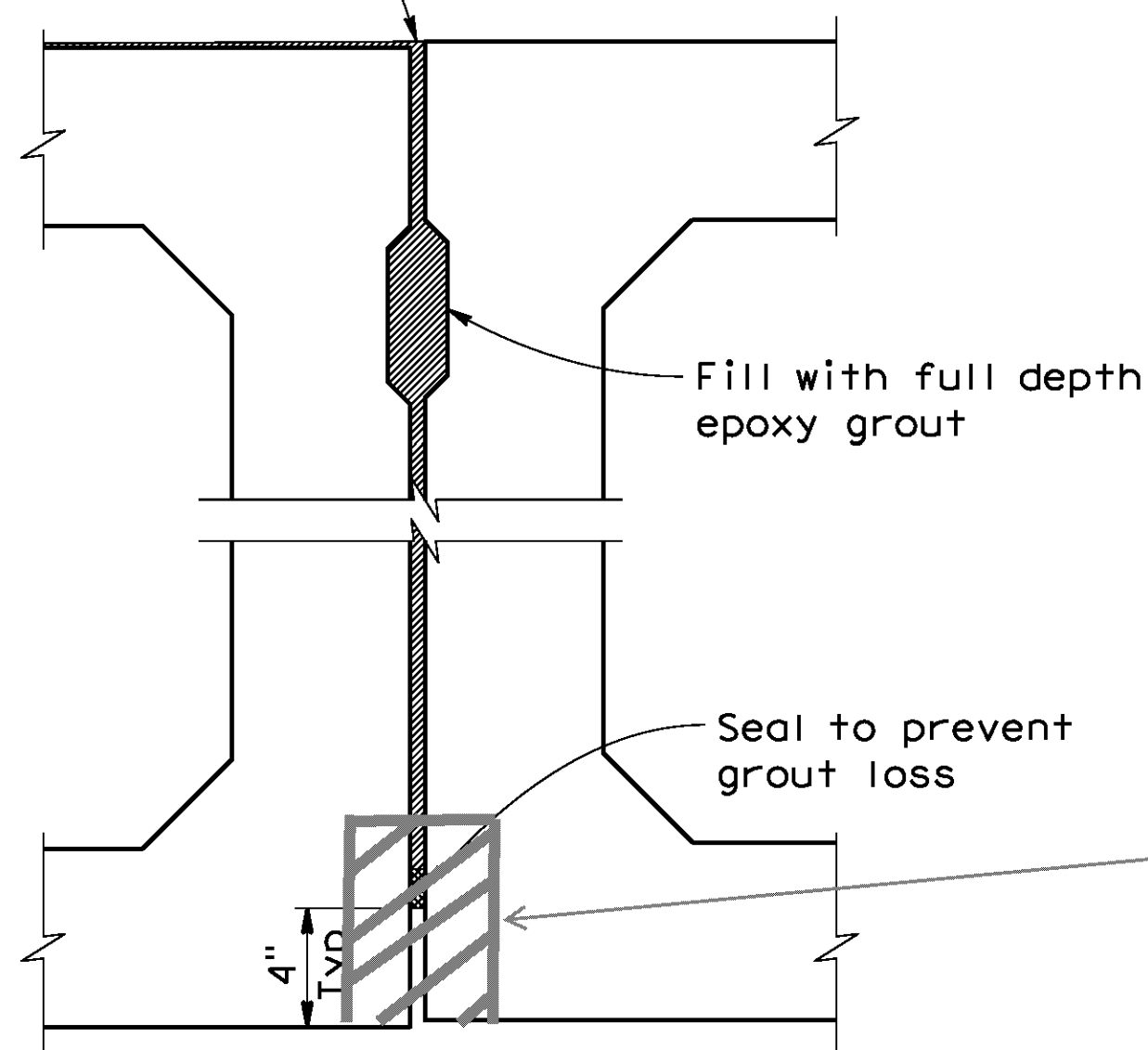
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02:\projects\1066_Sreeter\Asp\Bent.dwg From: SDI(120614)\106630a-h-101.dwg
 DATE: 8/9/2012 TIME: 6:57:17 AM

106630a-h-101.dwg



Smooth vertical offset between adjacent beams, with epoxy grout to maintain 0.5% cross slope



DETAIL A
2"=1'-0"

TYPICAL SECTION
1/2"=1'-0"

ADDED HANDHOLE BLOCKOUT TO SEAL PT DUCTS PRIOR TO GROUTING PER RFI# 9

NOTES:

1. See "WATERPROOFING DETAILS" sheet.
2. See "PRECAST BOX BEAMS DETAILS NO.3" sheet.
3. See "DECK DRAIN DETAILS" sheet.
4. Minimum depth of ballast shall not be less than 12".
5. Fill joint with full depth epoxy grout. See "DETAIL A".

AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME JOSE CORONA

BR. NO 56C0599

D:\projects\1066_StreetRamp\bridge\from_S01120614\106630a-k-rs01.dgn

DATE: 8/9/2012
 TIME: 6:57:40 AM

IMPORTANT NOTICE
 Section 4210.4211 of the Government Code requires a Dig Alert Identification Number to be issued before a "Permit to Excavate" will be valid. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

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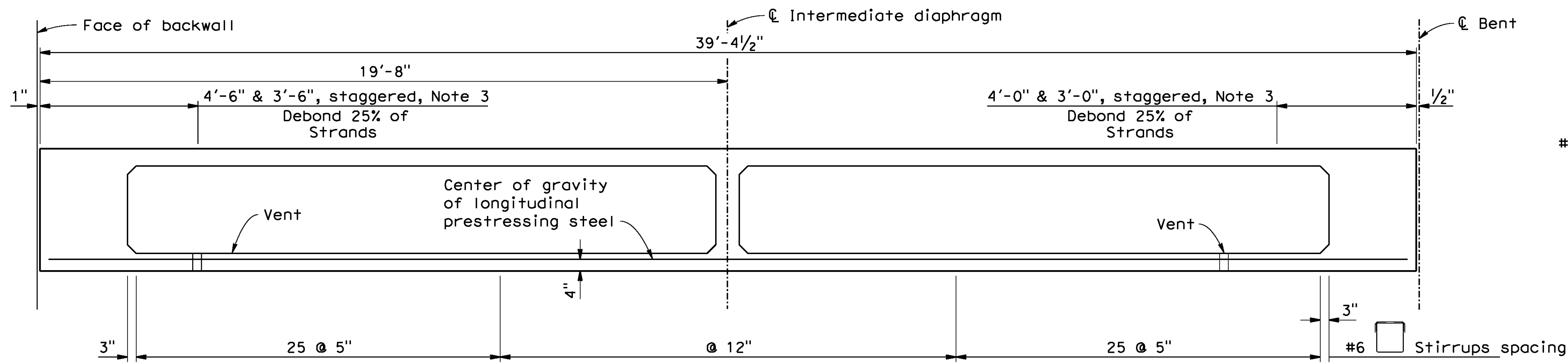
CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
TYPICAL SECTION

R-4180
 SHEET 166 OF 191
 FILE NO.

HORIZ. SCALE: VERT. SCALE: N/A

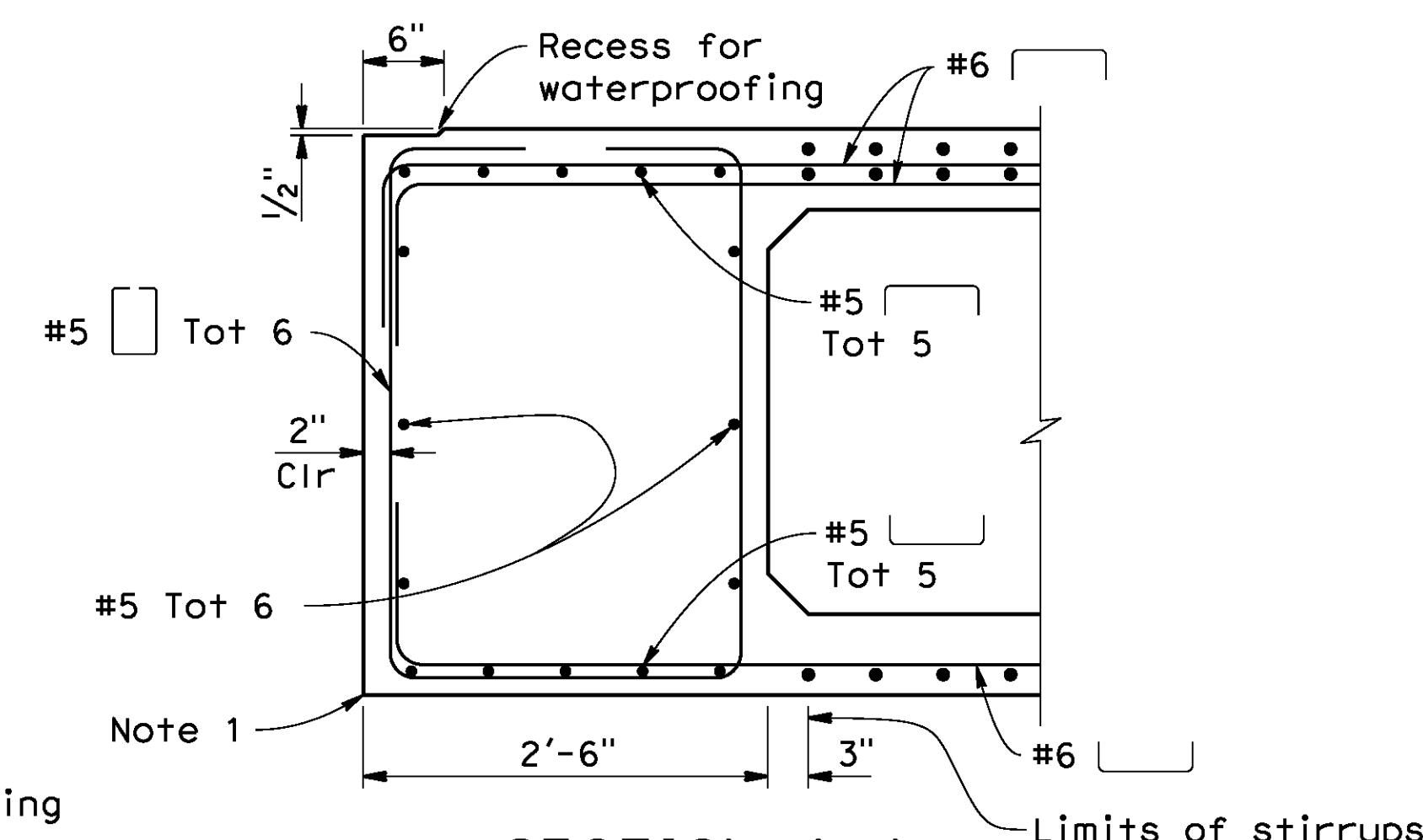
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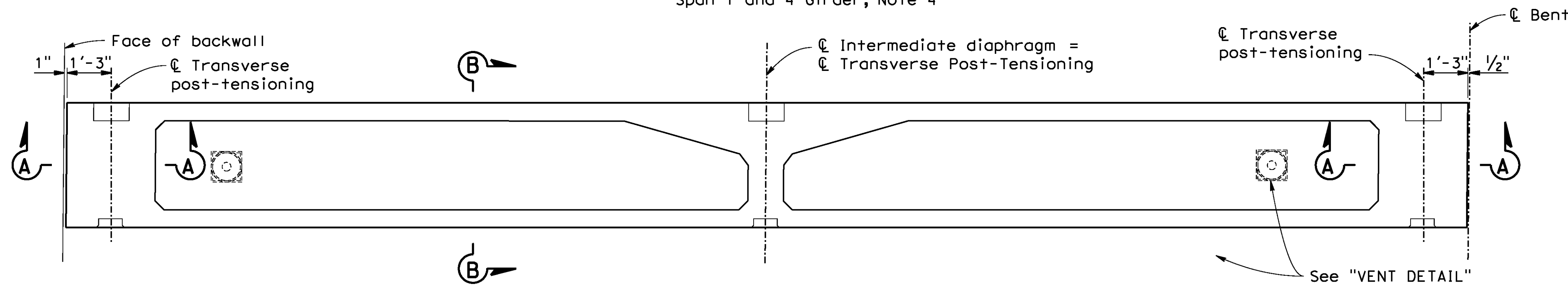
ELEVATION

1/2"=1'-0"
Span 1 and 4 Girder, Note 4



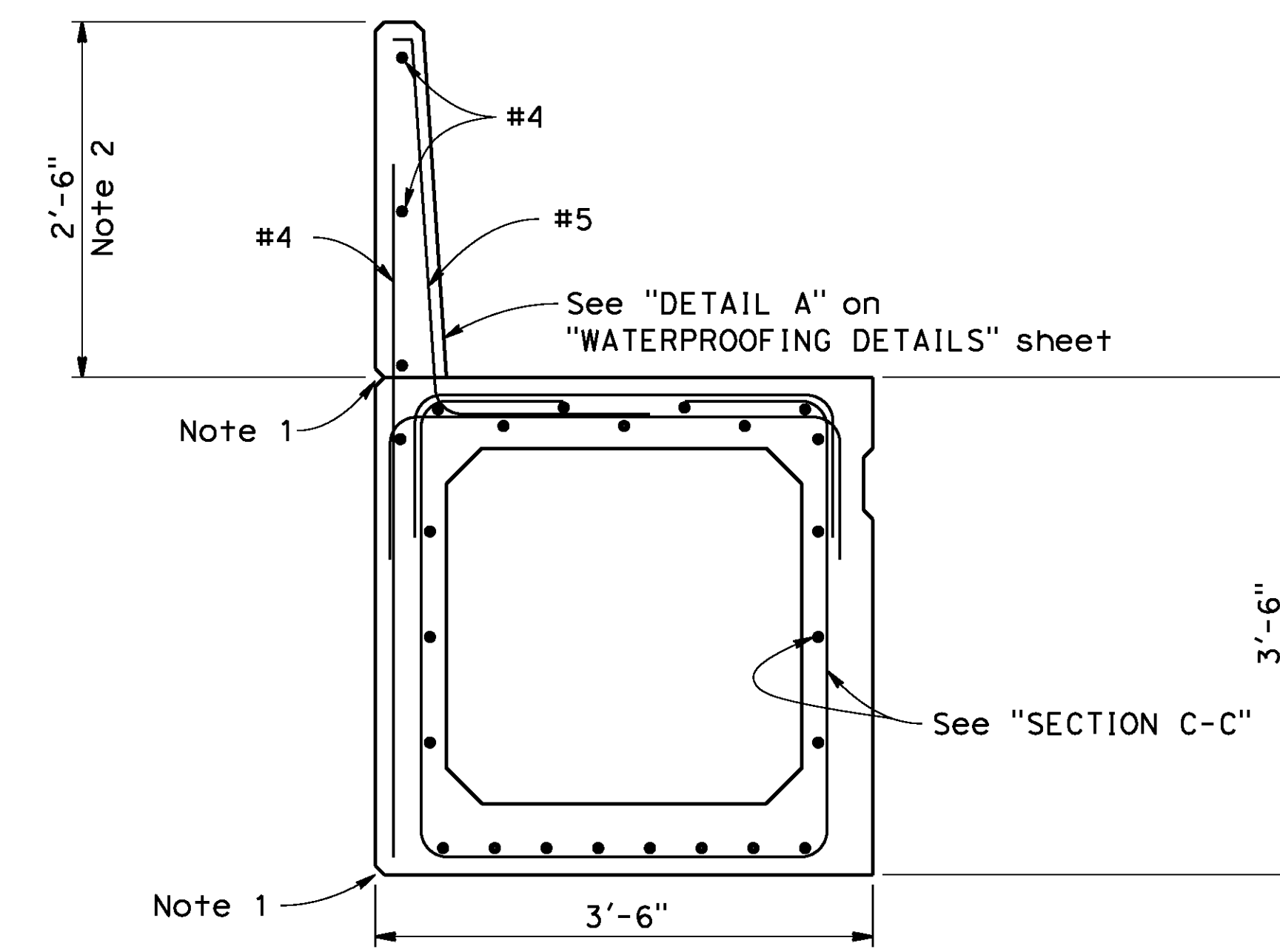
SECTION A-A

1"=1'-0"



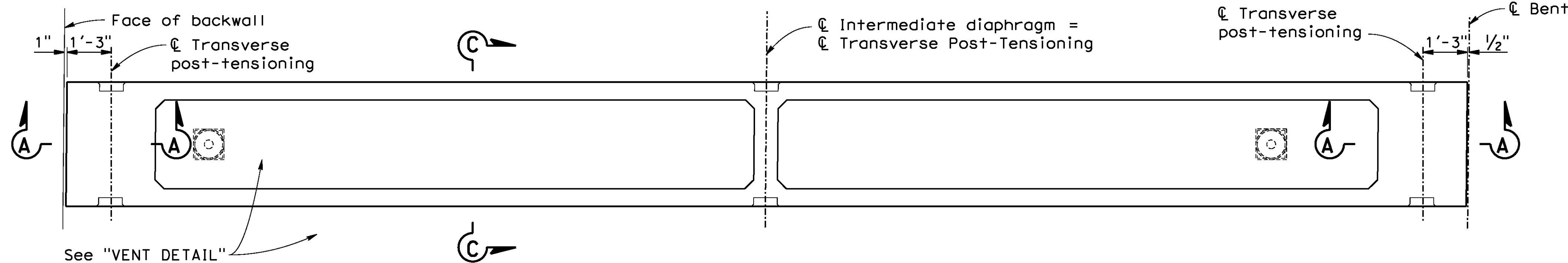
PLAN

1/2"=1'-0"
Exterior girders, span 1 and 4, Note 4



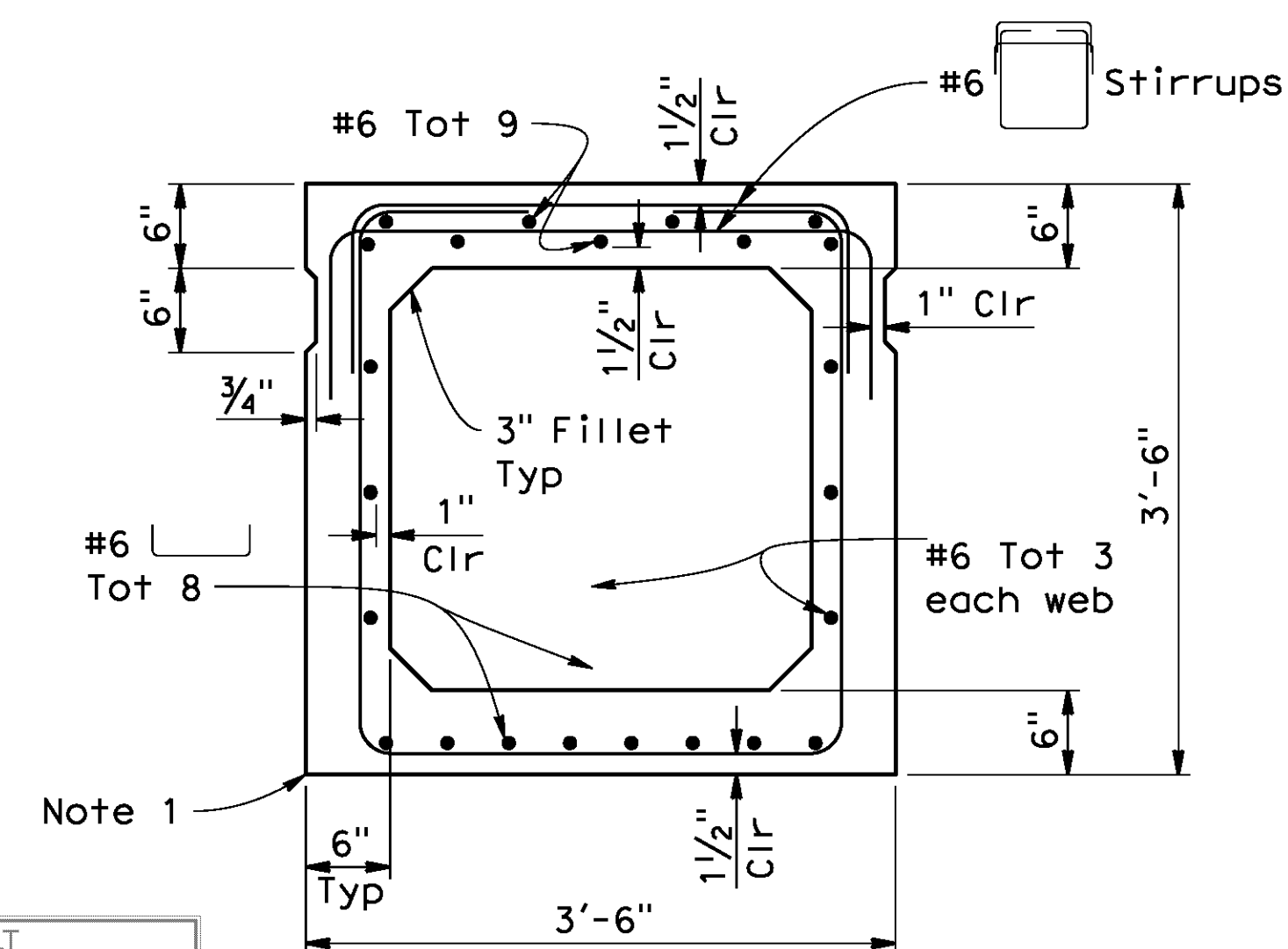
SECTION B-B

1"=1'-0"



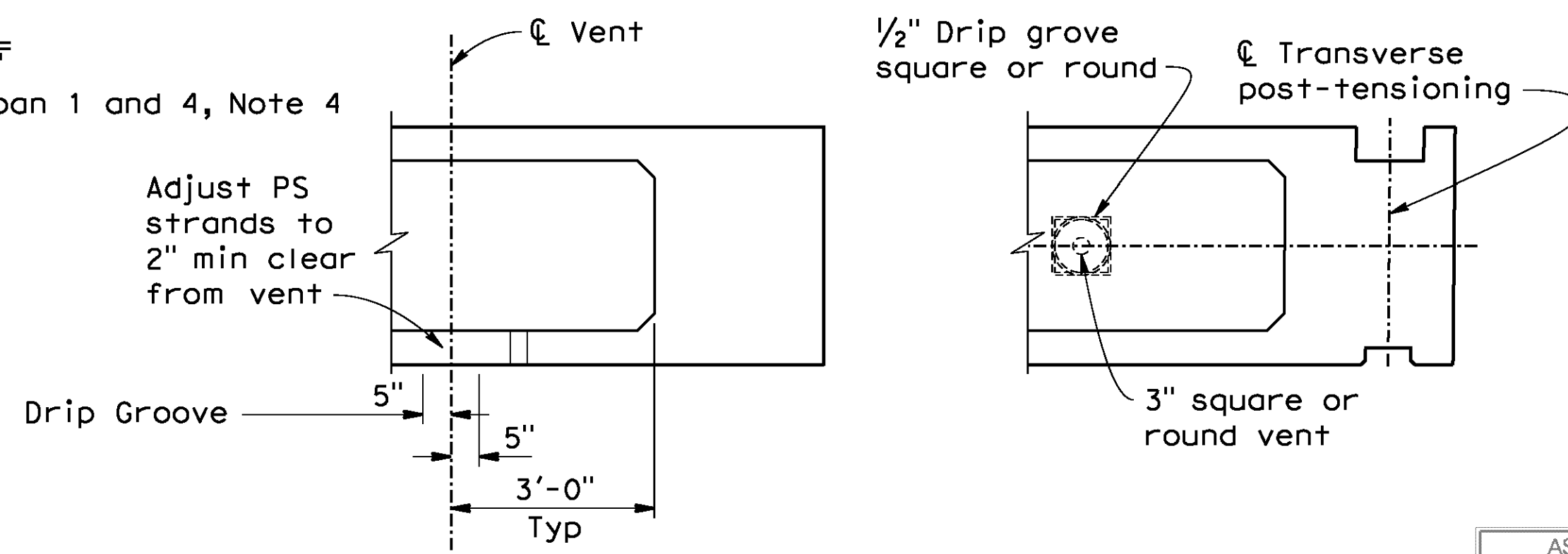
PLAN

1/2"=1'-0"
Interior girders span 1 and 4, Note 4



SECTION C-C

1"=1'-0"



ELEVATION

VENT DETAIL

1/2"=1'-0"

SOFFIT PLAN

NOTES:

- All exposed edges shall be chamfered 3/4".
- Cast-in-place curb, see "PRECAST BOX BEAM DETAIL NO. 4" sheet.
- See "DEBONDING NOTES" on "PRECAST BOX BEAM DETAILS NO. 2" sheet
- Span 1 shown, Span 4 similar
- See "SHEAR KEY DETAILS" sheet for pipe shear key location and details.

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

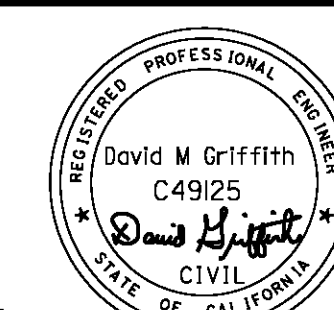
BR. NO 56C0599

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DATE 8-7-12



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PUBLIC WORKS DEPARTMENT

STREETER AVENUE UNDERPASS

PRECAST BOX BEAMS DETAILS NO.1

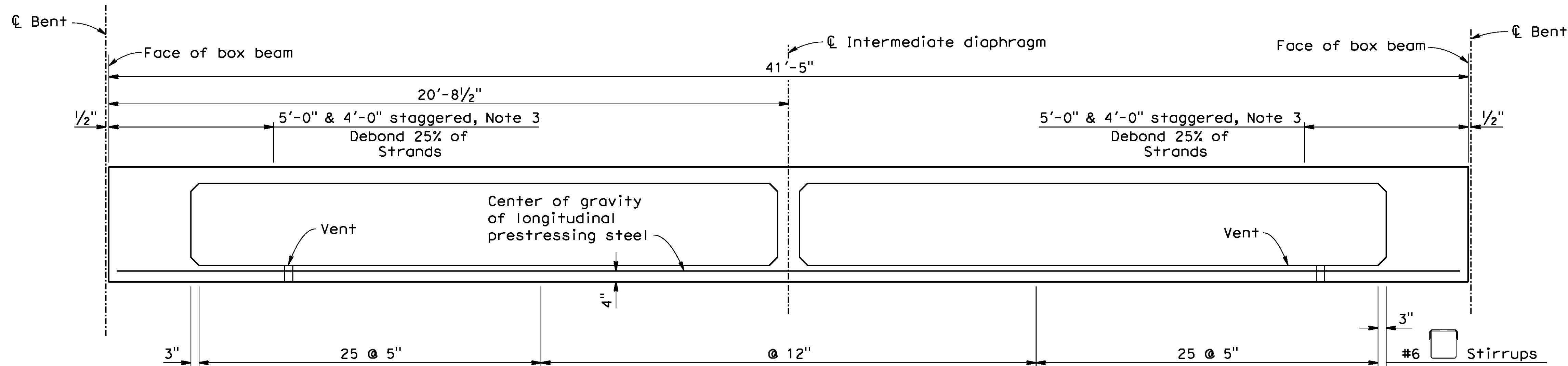
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R-4180
SHEET 167 OF 191
FILE NO.

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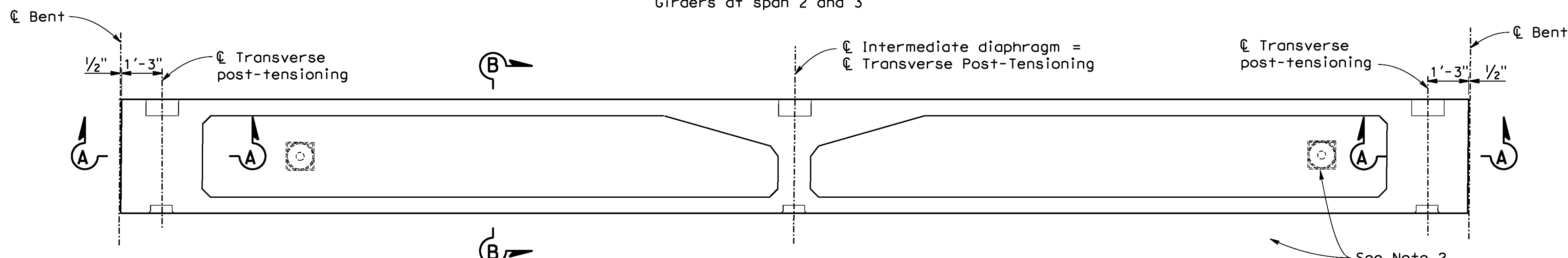
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1066308-1-bbd01.dgn



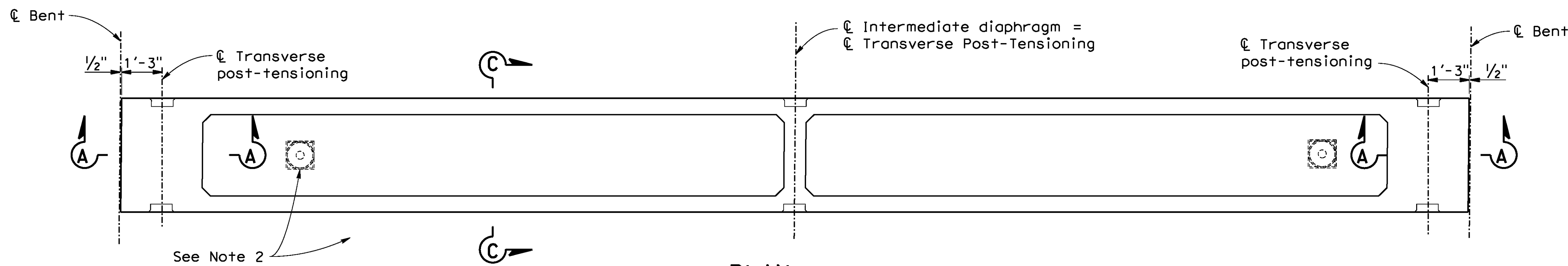
ELEVATION

1/2" = 1'-0"
Girders at span 2 and 3



PLAN

1/2" = 1'-0"
Exterior girders at span 2 and 3



PLAN

1/2" = 1'-0"
Interior girder at span 2 and 3

NOTES:

1. For "SECTION A-A", "SECTION B-B" AND "SECTION C-C", see "PRECAST BOX BEAMS DETAILS NO.1" sheet
2. For "VENT DETAIL", see "PRECAST BOX BEAMS DETAILS NO.1" sheet
3. See "DEBONDING NOTES".
4. See "SHEAR KEY DETAILS" sheet for pipe shear key location and details.

PRESTRESSING NOTES

All prestressing strands shall be 1/2" diameter, 7 wire, uncoated, low-relaxation, $f'_s = 270$ ksi, meeting all requirements of the current ASTM A416.

Initial stress shall be $0.75 f'_s = 31$ kips per strand. Working force (P_f): The force remaining per box beam after all losses at transfer:

Span 1 and 4: $P_f = 530k$
Span 2 and 3: $P_f = 590k$

Concrete strength:

$f'_{ci} = 4500$ psi at time of initial stressing
 $f'_c = 5000$ psi at 28 days

All strands shall be straight and symmetrical about \bar{C} box beam. Post-tensioning is not permitted for longitudinal prestressing.

DEBONDING NOTES

Not more than 4 strands shall have the bonding terminated at any section.

Debanded strands shall be symmetrically distributed about the centerline of the beam.

Debanded lengths of pairs of strands that are symmetrically positioned about the centerline of the beam shall be equal.

Exterior strands in each horizontal row shall be fully bonded.

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

BR. NO 56C0599

IMPORTANT NOTICE
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CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PRECAST BOX BEAMS DETAILS NO.2

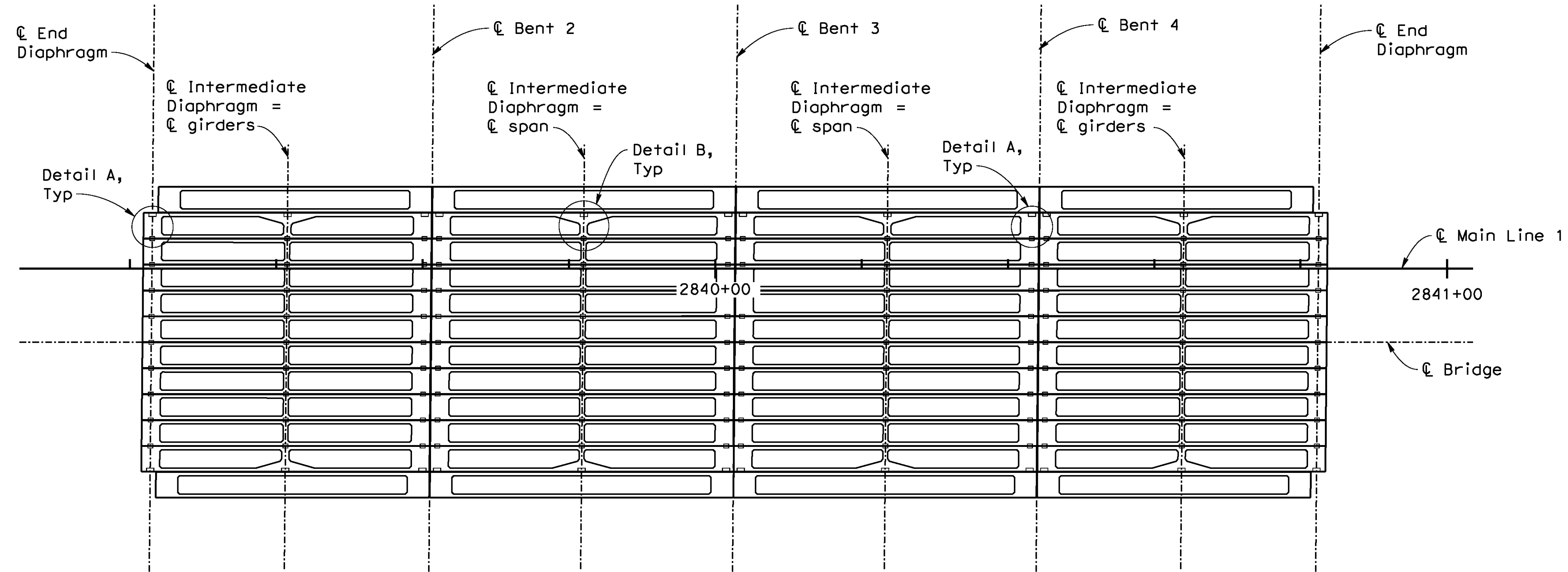
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R-4180
SHEET 168 OF 191
FILE NO.

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DATE: 8/9/2012
TIME: 6:58:22 AM

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106630a-1-bbd102.dgn





PLAN
 1"=10'-0"

POST-TENSIONING NOTES

270 ksi low relaxation strand.
 Pj = 1920 kips total (80 kips per tendon)
 Total number of tendons = 24
 Total number of ducts per diaphragm = 2

Jacking stress shall not exceed 190 ksi

Anchor set = 3/8"

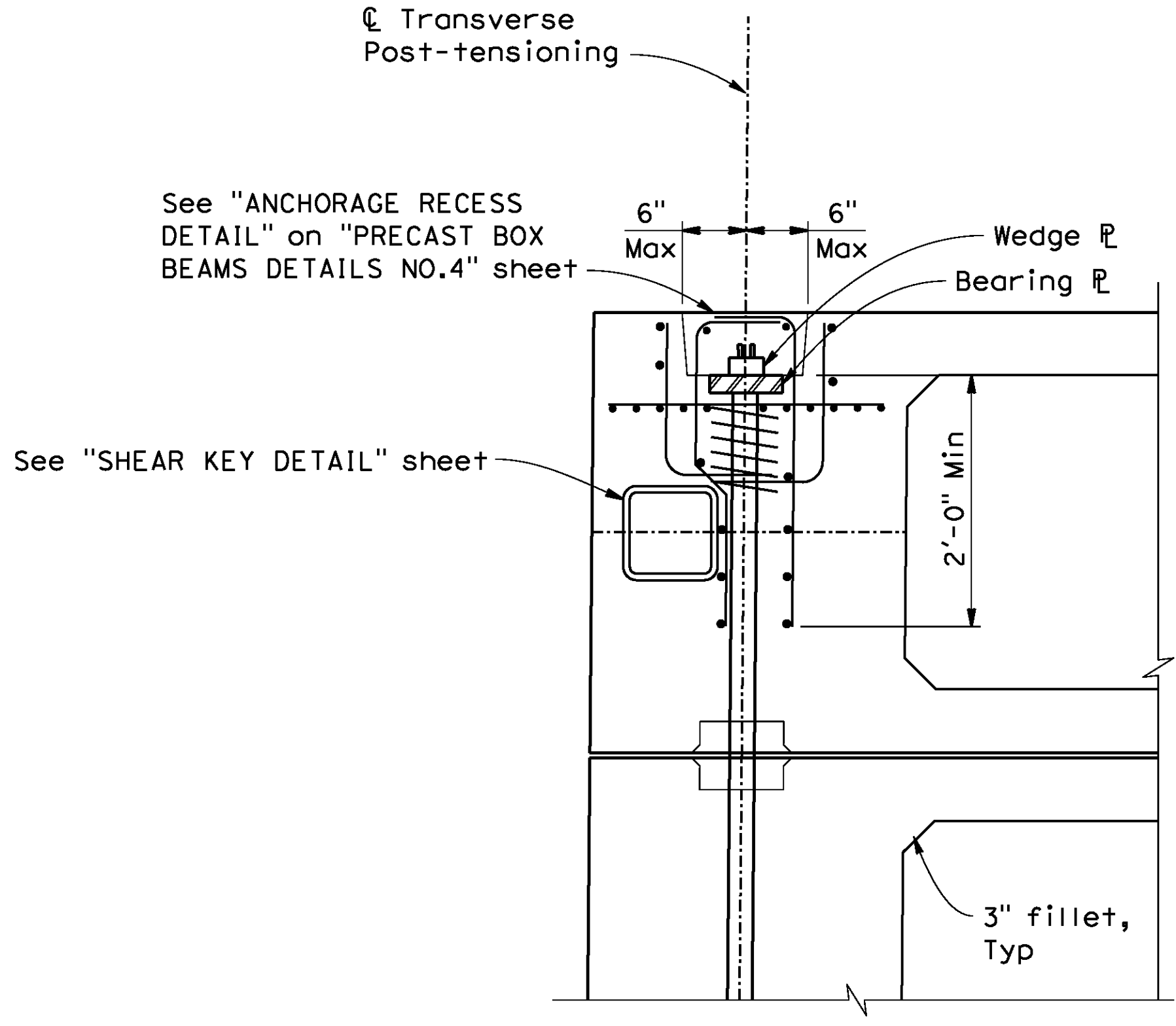
Contractor shall submit elongation and jacking calculations based on initial stress $\sigma = 0.995$ times jacking stress.

One-end post-tensioning shall be performed from either end.

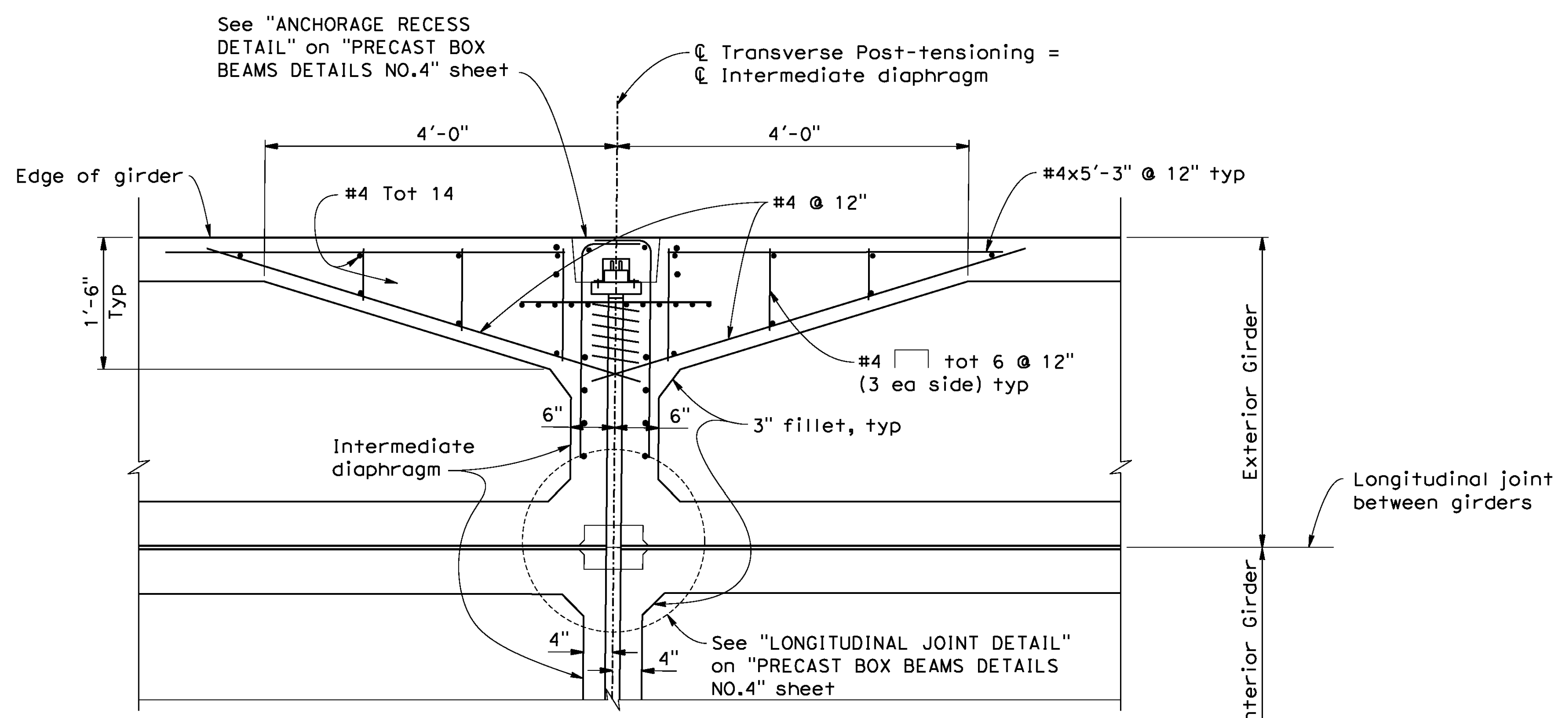
At no time during stressing operations shall more than 50% of the total prestressing force be applied eccentrically about the mid-height and/or mid-span of the structure.

At the option of the contractor, each tendon may be replaced by an 1/8" diameter uncoated high strength steel bar.

Non-shrink Epoxy Grout between girders, f'c=4000 psi at the time of stressing.



DETAIL A
1"=1'-0"



DETAIL B
1"=1'-0"

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME JOSE CORONA

D:\Projects\1066_Sreeter\Asph\1066.dgn From: SDI(10614)\1066.dgn - 1-bbd103.dgn

DATE: 8/9/2012
 TIME: 6:58:50 AM

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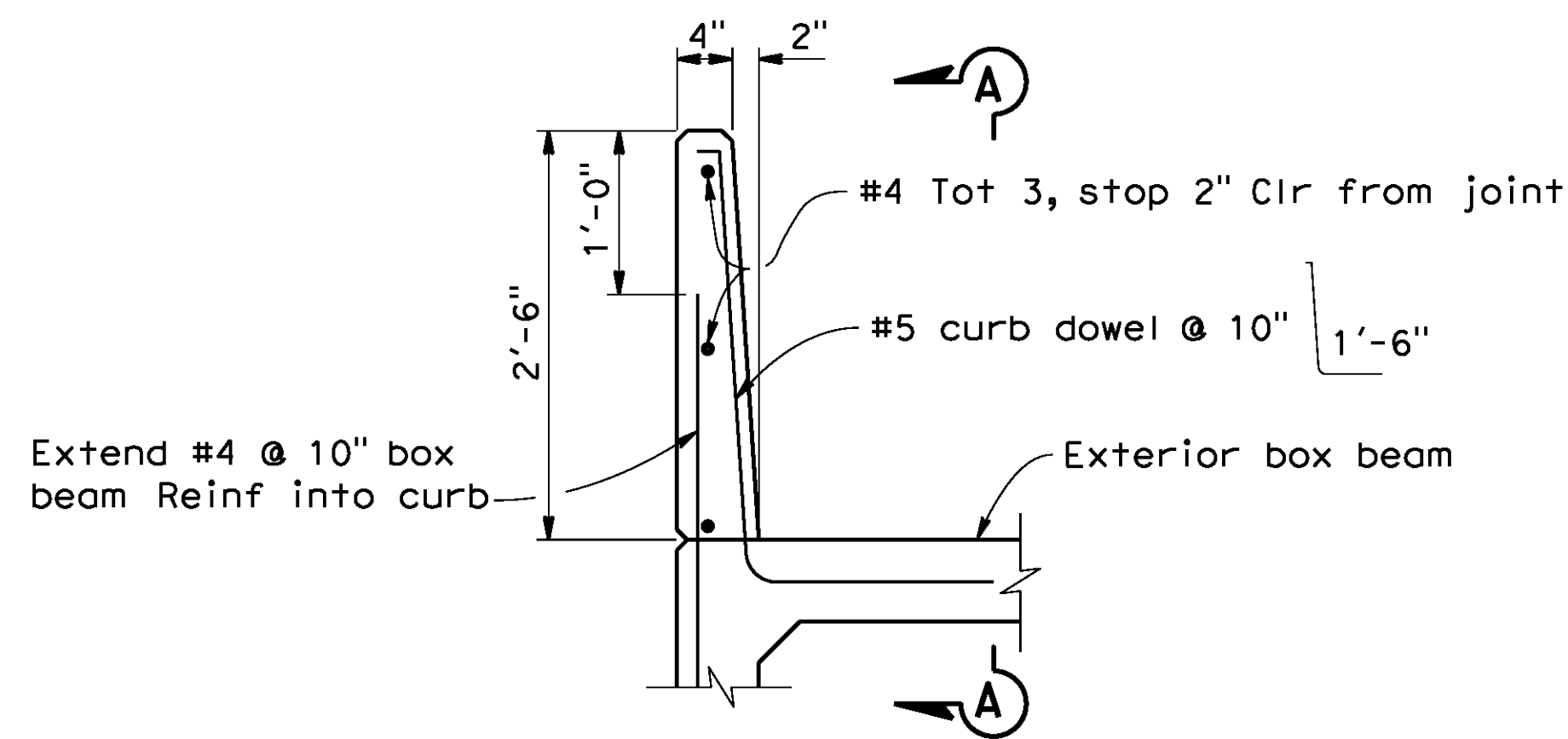
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PRECAST BOX BEAMS DETAILS NO.3

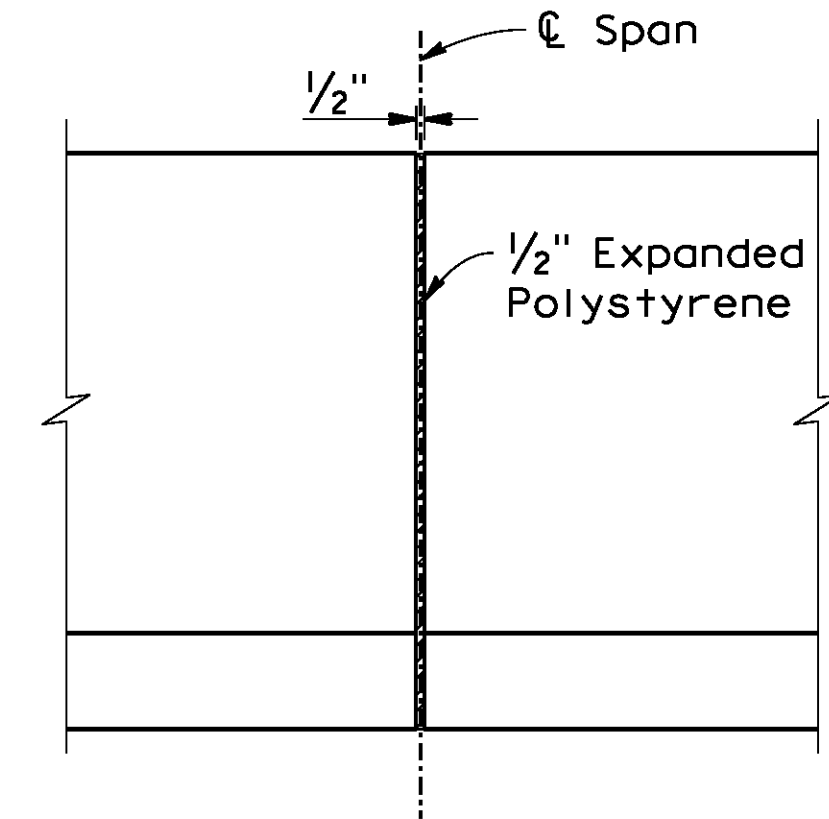
BR. NO 56C0599
 R-4180
 SHEET 169 OF 191
 FILE NO.

DESIGNED BY *RS* DRAWN BY *MY* CHECKED BY *DS*
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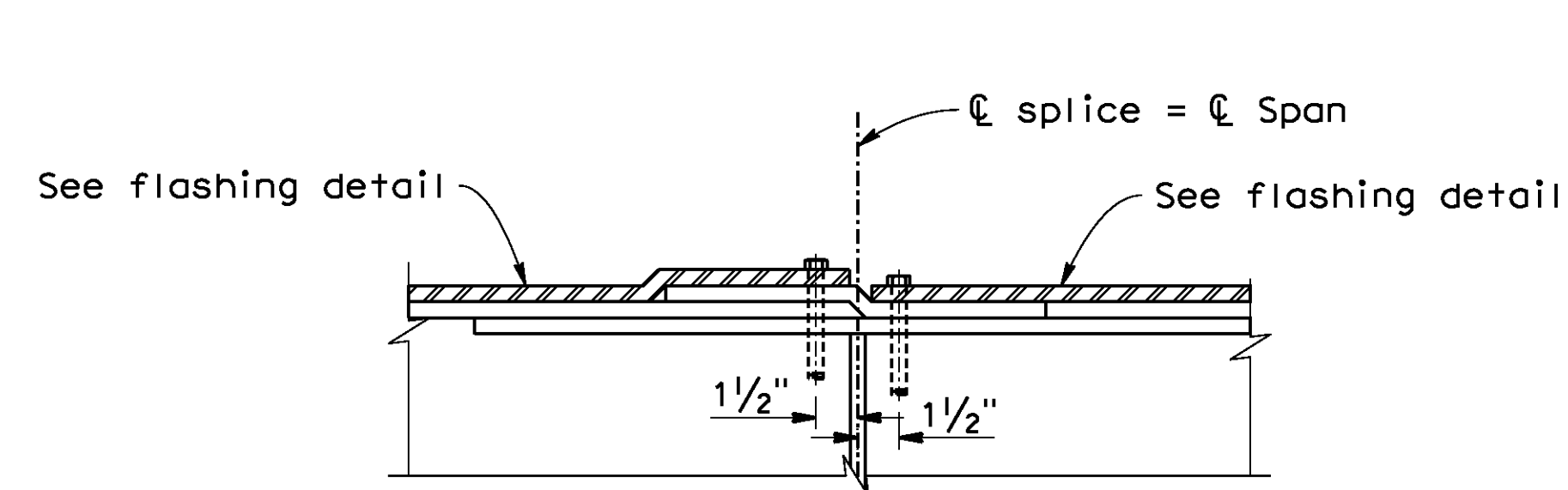
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CURB DETAIL
1"=1'-0"



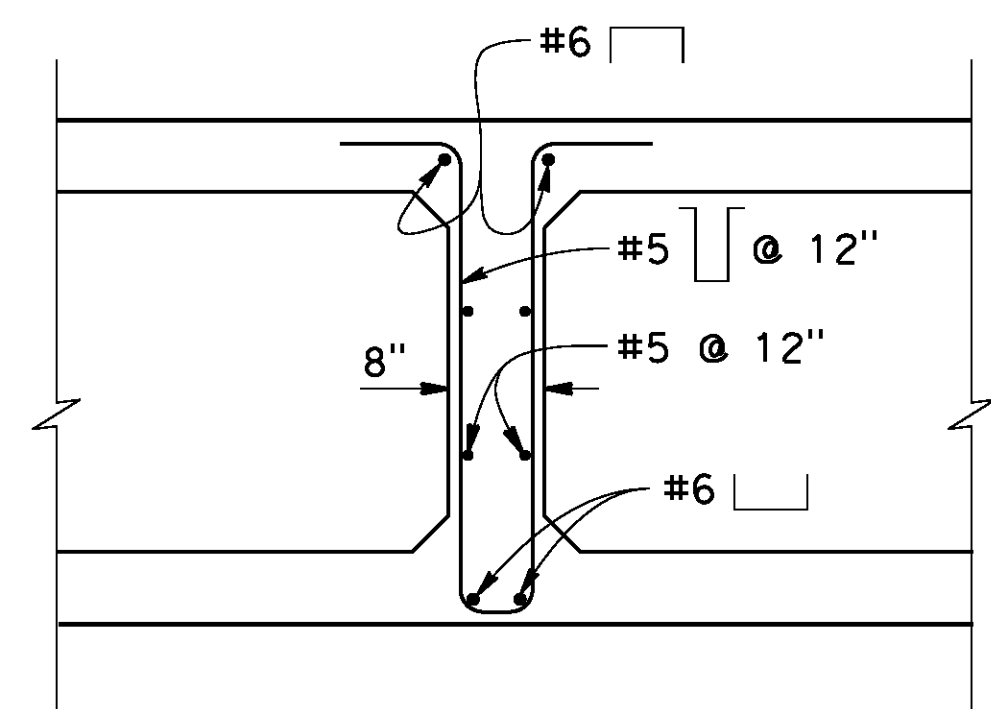
SECTION A-A
1"=1'-0"



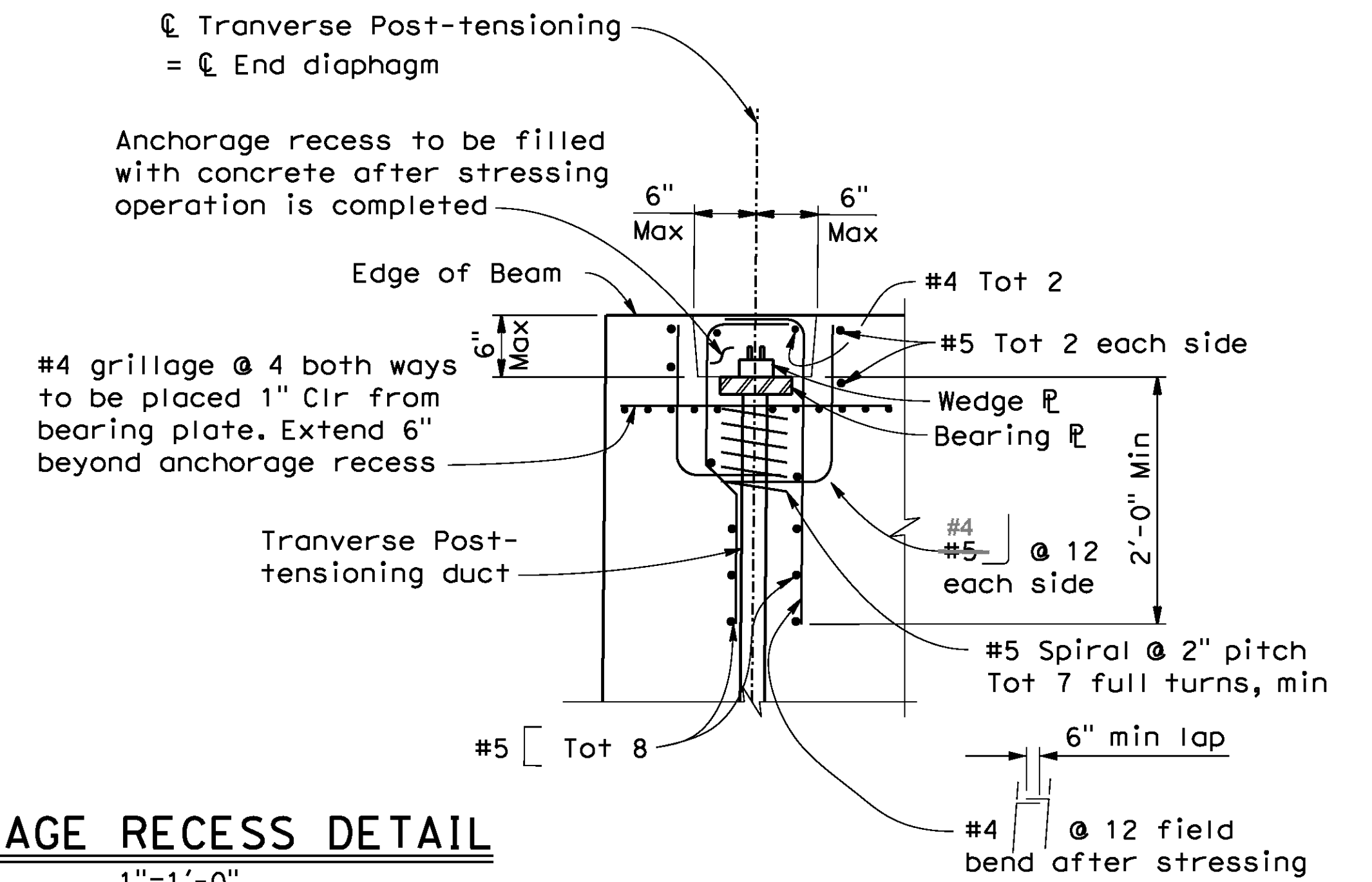
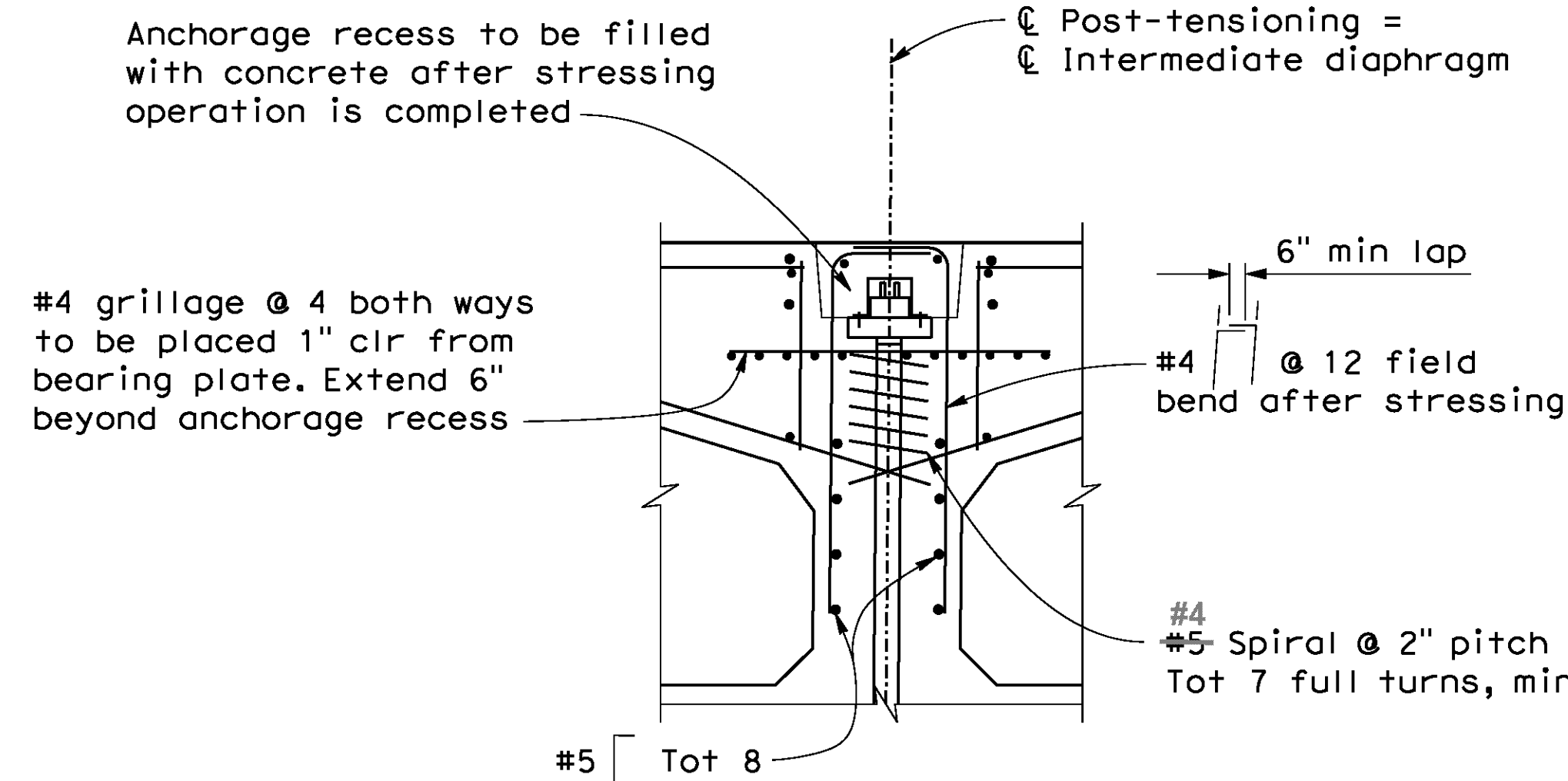
WATERPROOFING SPLICE DETAIL

No Scale
Note: See "WATERPROOFING DETAILS" sheet

CAST-IN-PLACE CURB DETAILS

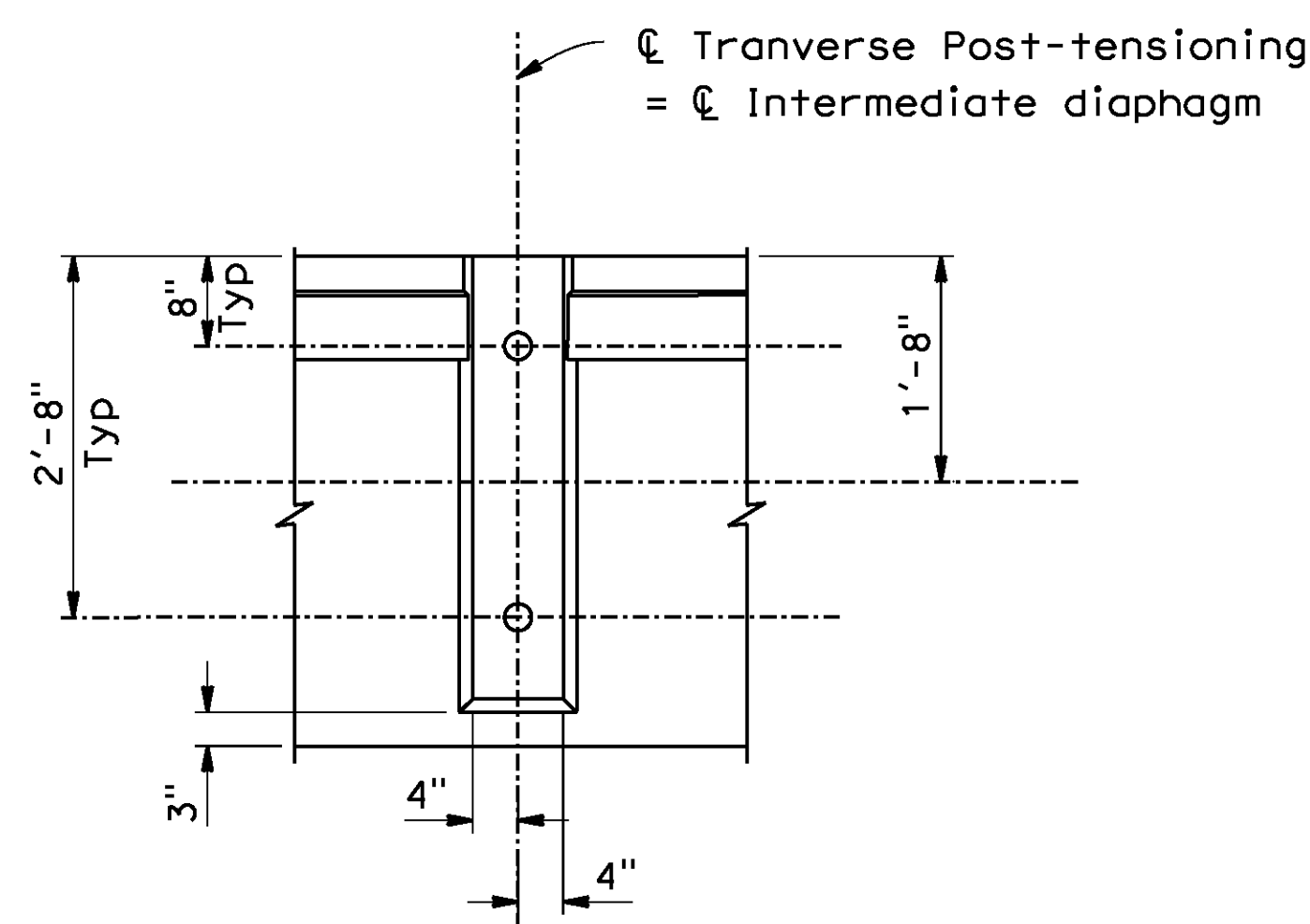


INTERMEDIATE DIAPHRAGM
3/4"=1'-0"

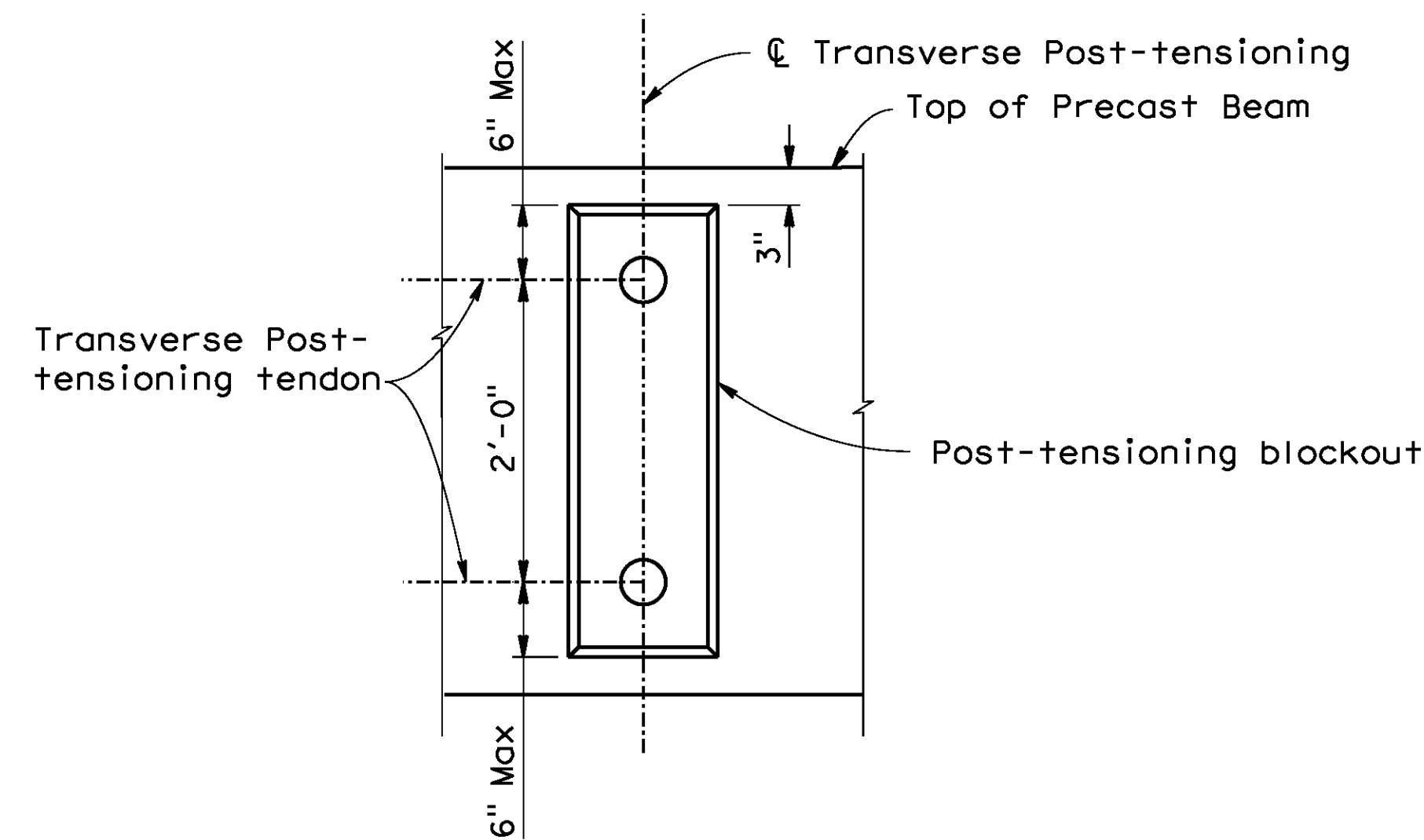


ANCHORAGE RECESS DETAIL
1"=1'-0"

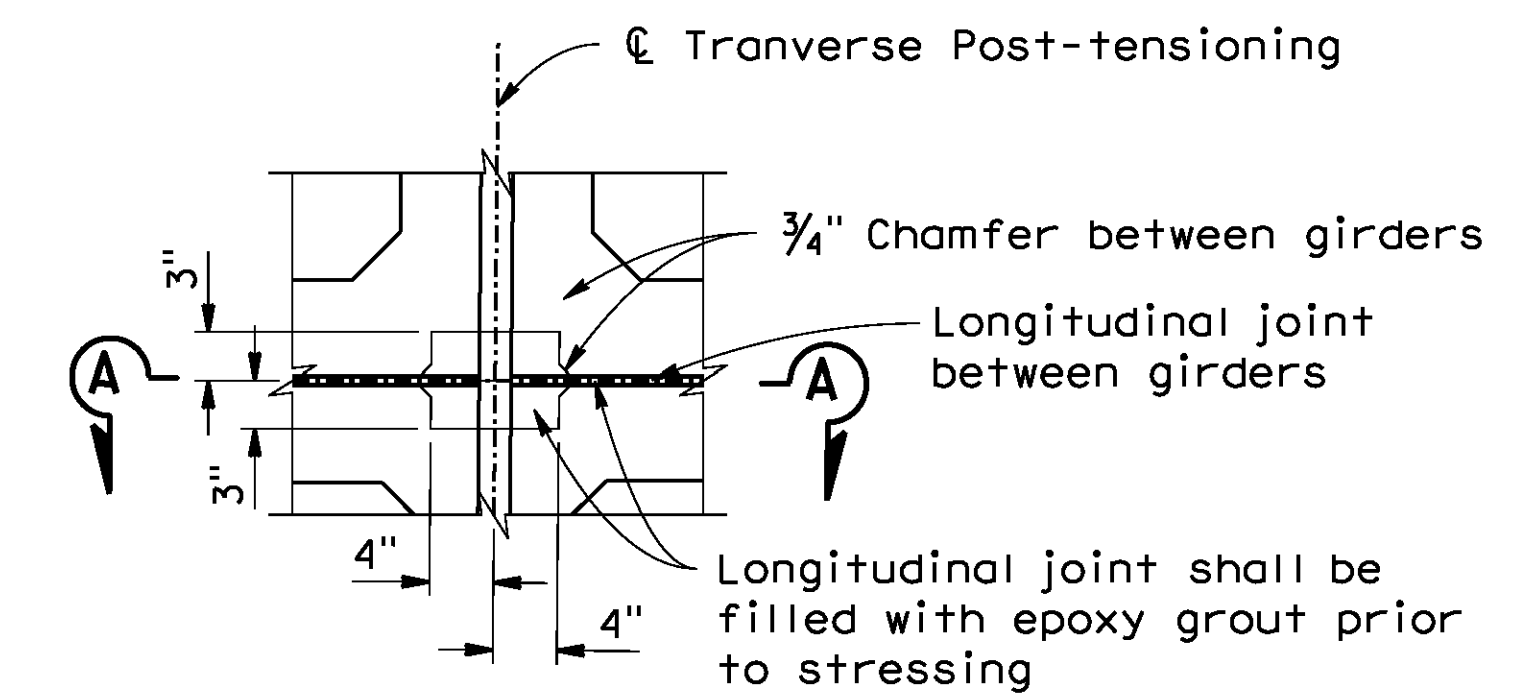
Note: Reinforcement shown is in addition to that shown elsewhere.



SECTION A-A
No Scale



ELEVATION
1"=1'-0"



LONGITUDINAL JOINT DETAIL
1"=1'-0"

AS BUILT
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

BR. NO 56C0599

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DATE: 8/9/2012
TIME: 6:59:35 AM

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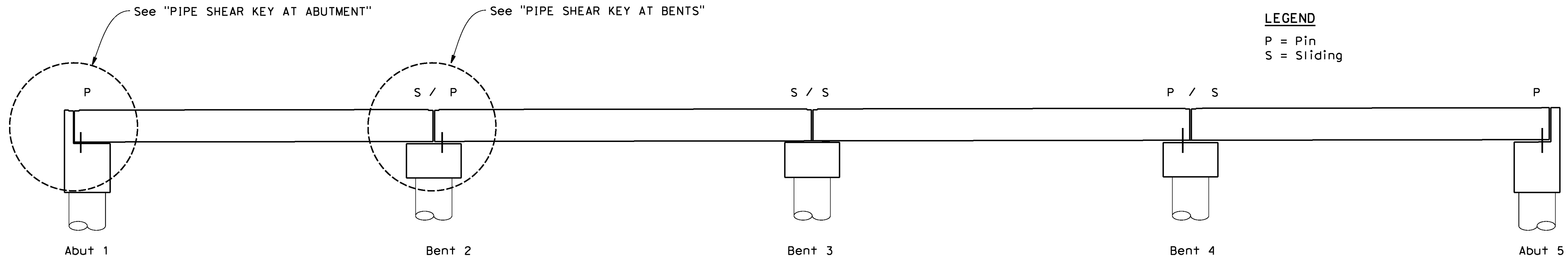
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CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
PRECAST BOX BEAMS DETAILS NO.4

R-4180
SHEET 170 OF 191
FILE NO.

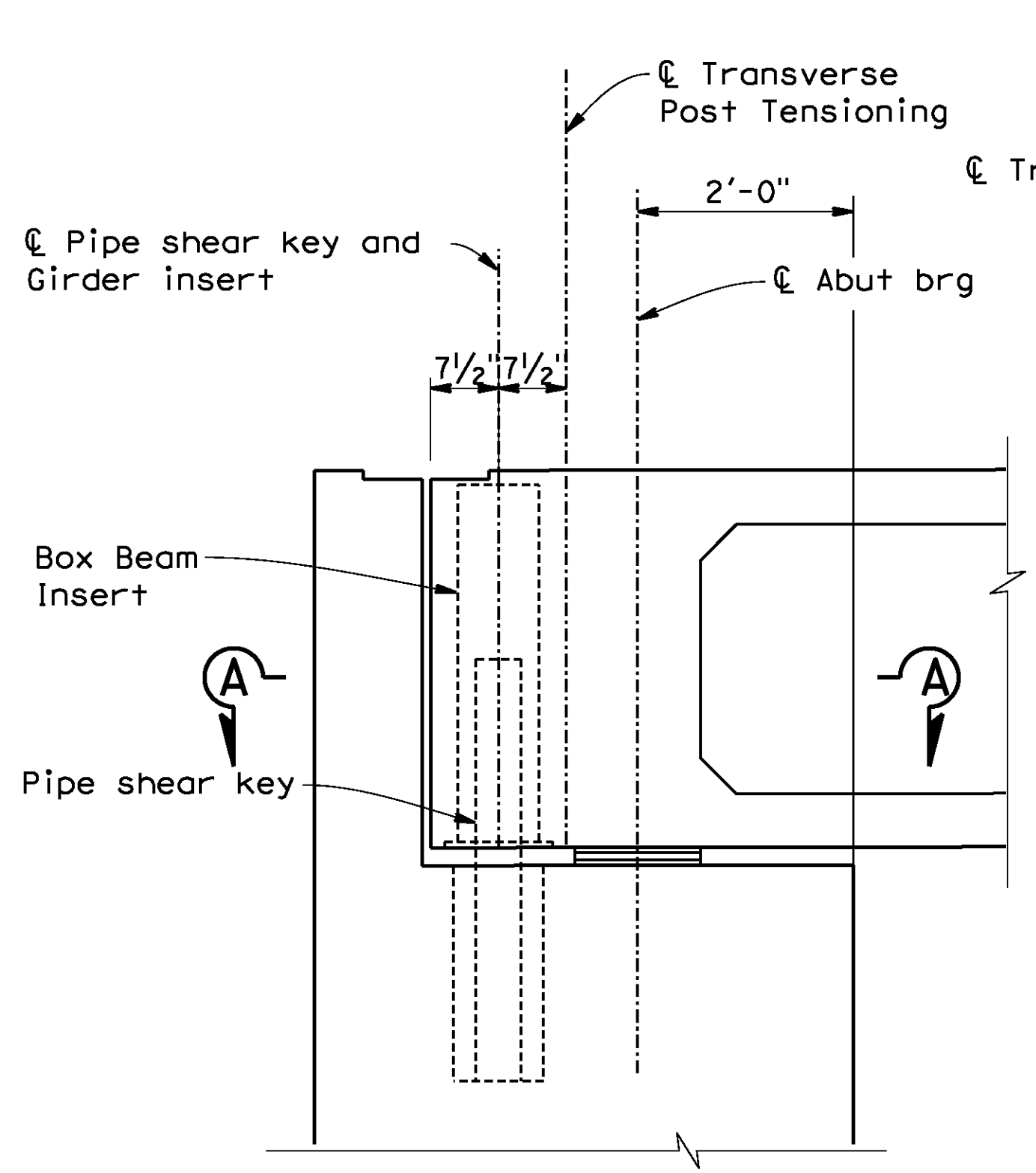
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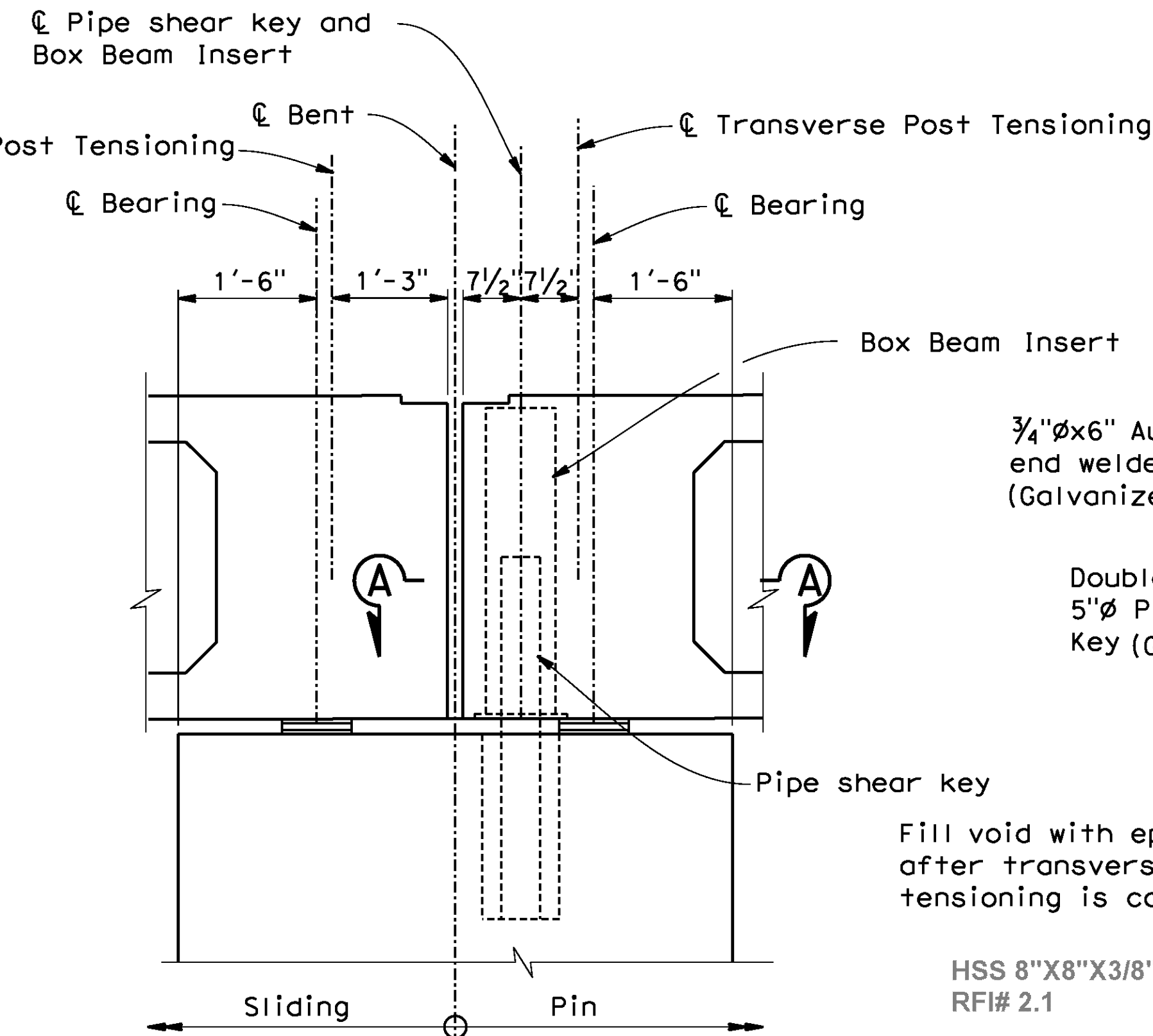


LEGEND
P = Pin
S = Sliding

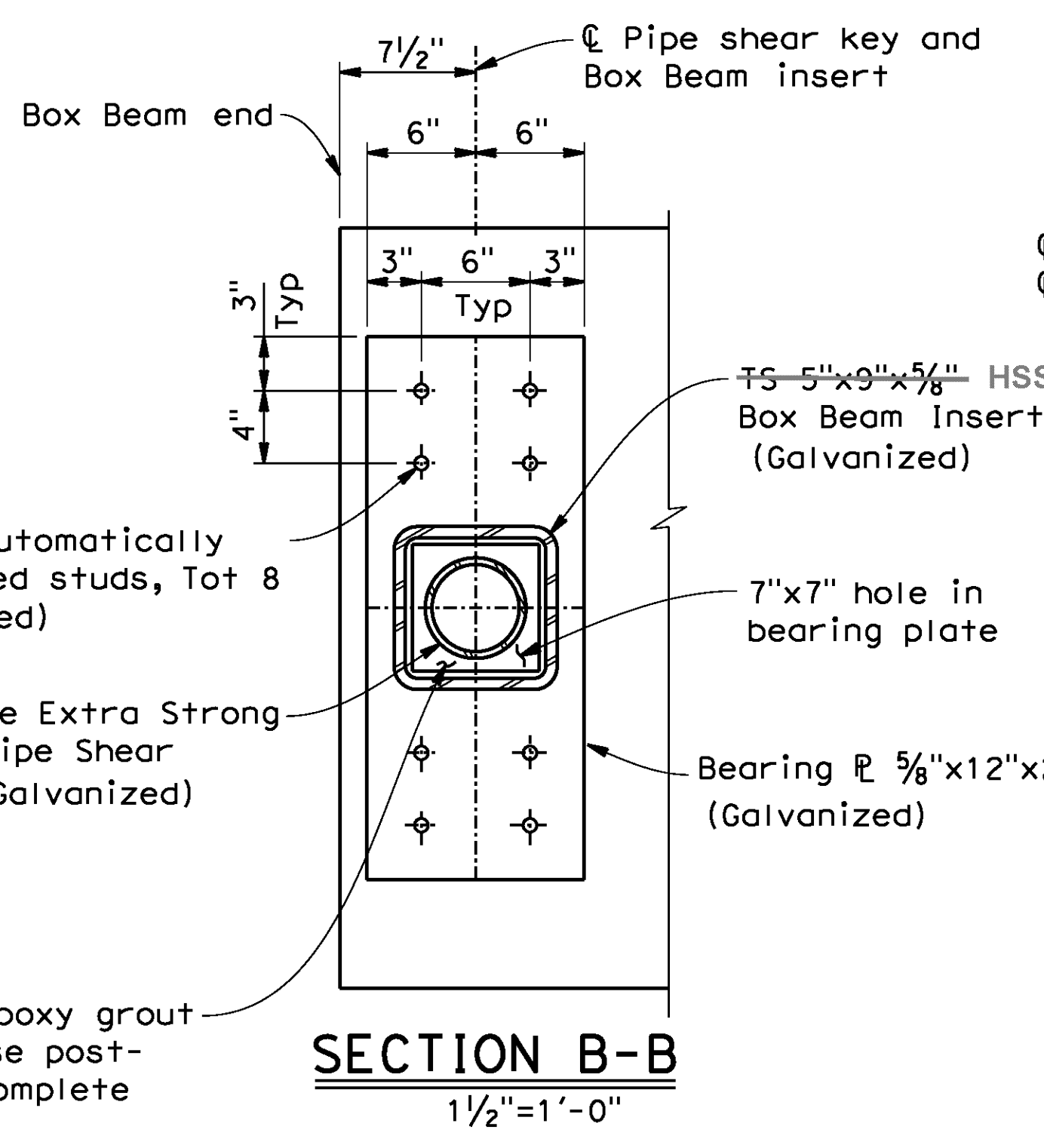
BEARING TYPE AT EACH SUPPORT
No Scale



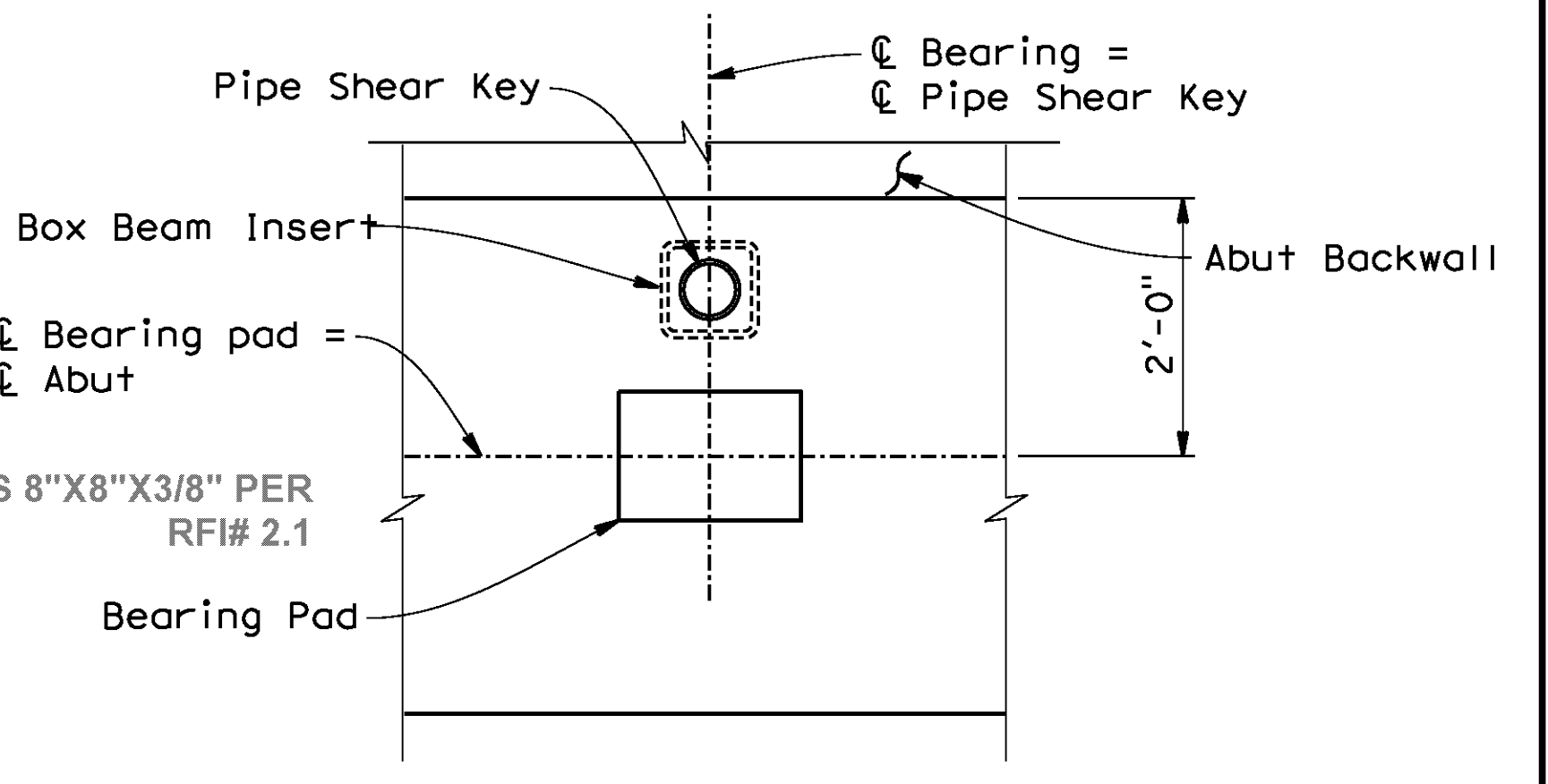
PIPE SHEAR KEY AT ABUTMENTS
3/4"=1'-0"



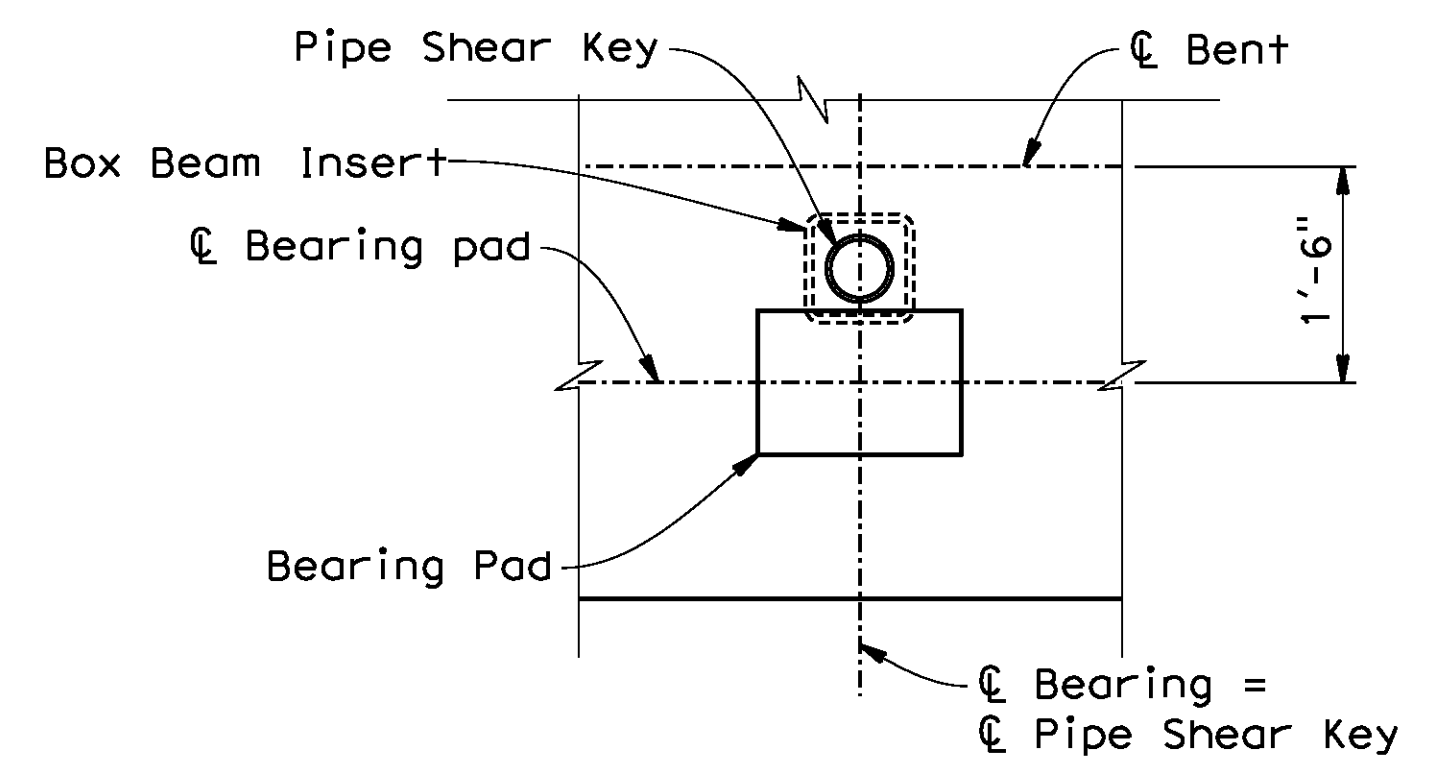
PIPE SHEAR KEY AT BENTS
3/4"=1'-0"



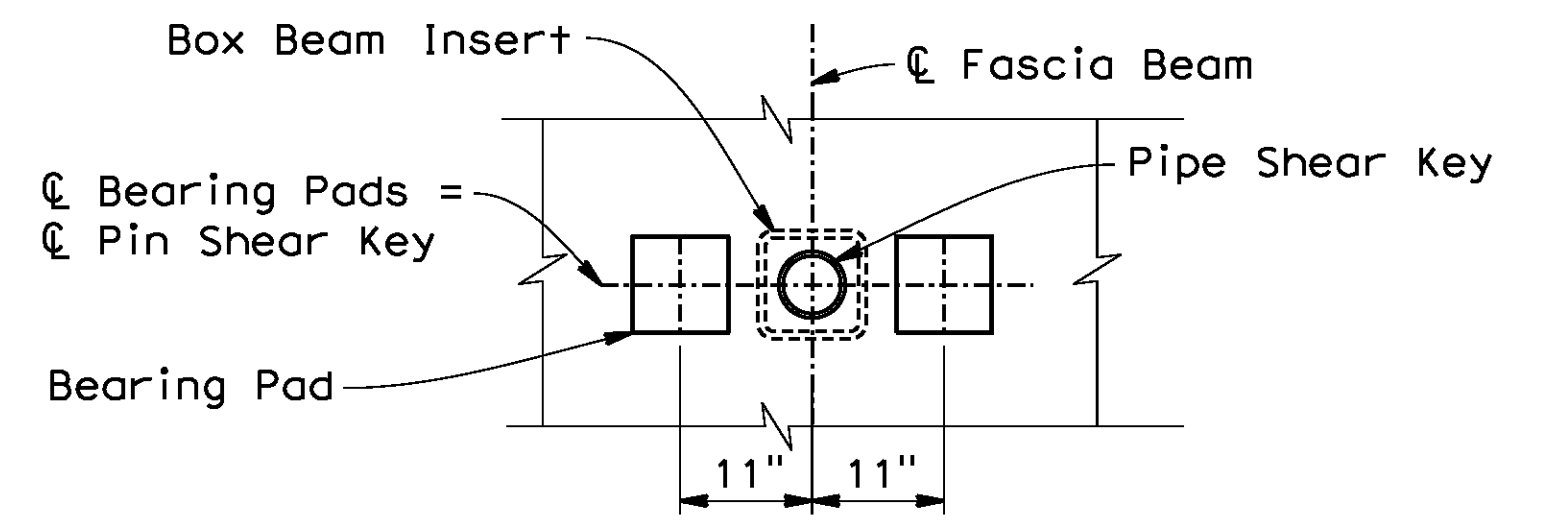
SECTION B-B
1 1/2"=1'-0"



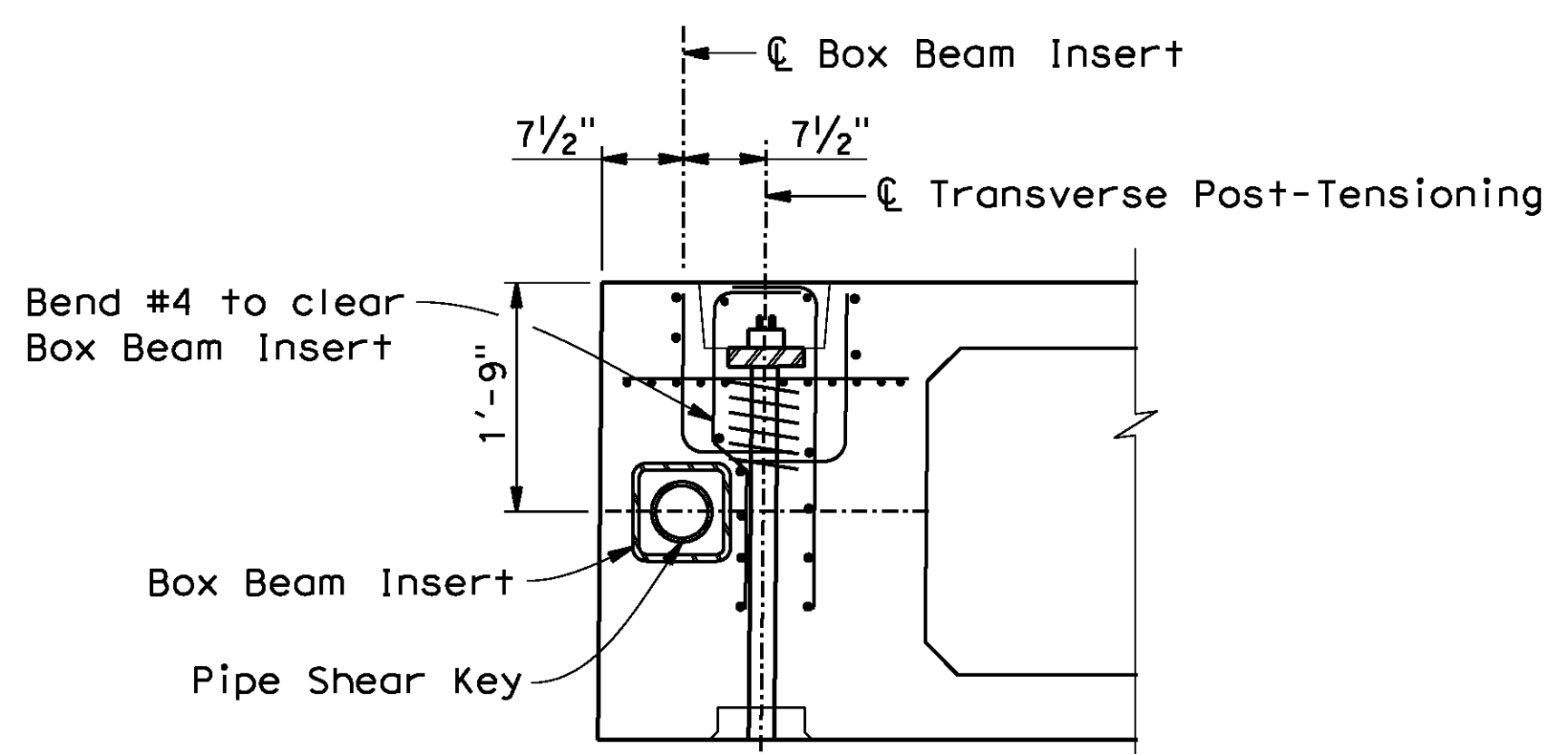
PIN CONNECTION - ABUTMENTS
3/4"=1'-0"



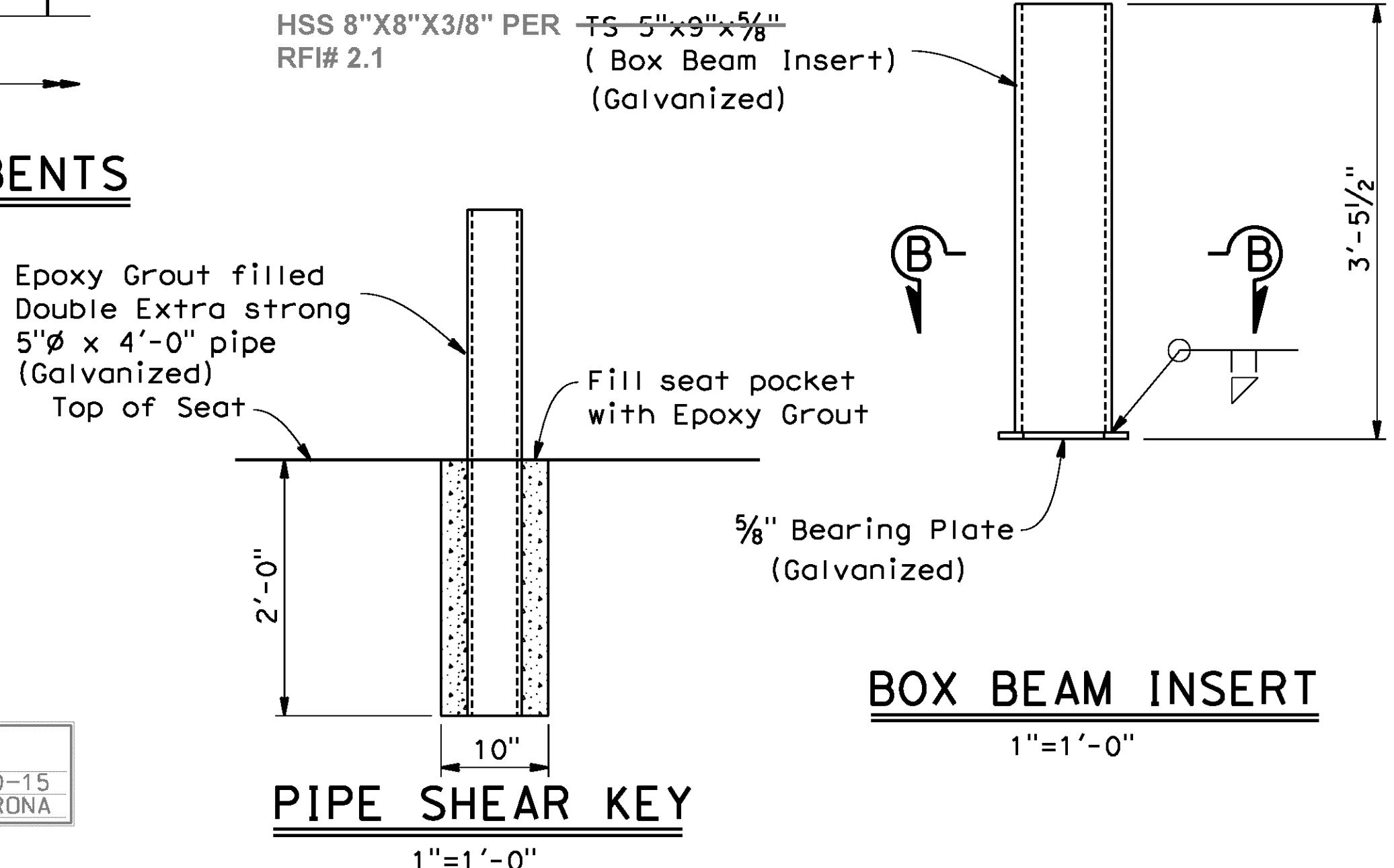
PIN CONNECTION - BENT CAPS
3/4"=1'-0"



PIN CONNECTION - FASCIA BEAM
3/4"=1'-0"



SECTION A-A
3/4"=1'-0"



BOX BEAM INSERT
1"=1'-0"

PIPE SHEAR KEY
1"=1'-0"

AS BUILT
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

NOTE: For details not shown, see "PRECAST BOX BEAM DETAILS No. 4" sheet

IMPORTANT NOTICE
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PROFESSIONAL ENGINEER
David M. Griffith
C49125
Civil
STATE OF CALIFORNIA

MARK	REVISIONS	APPR.	DATE

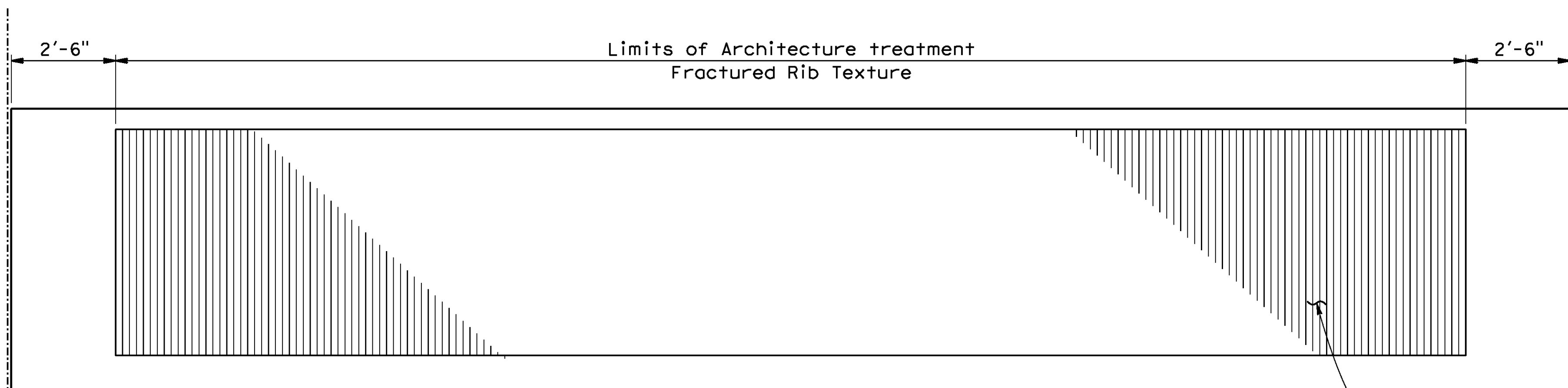
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SHEAR KEY DETAILS

BR. NO 56C0599
R-4180
SHEET 171 OF 191
FILE NO.

D:\projects\1066_Streetier\app\br-ligne\From_S01120614\106630a-1-br-gdet01.dgn

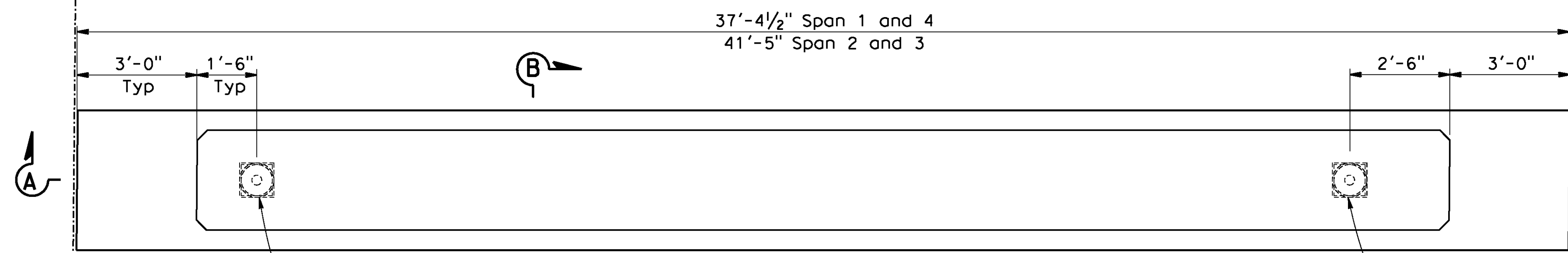
DATE: 8/9/2012
TIME: 6:59:59 AM

106630a-1-br-gdet01.dgn



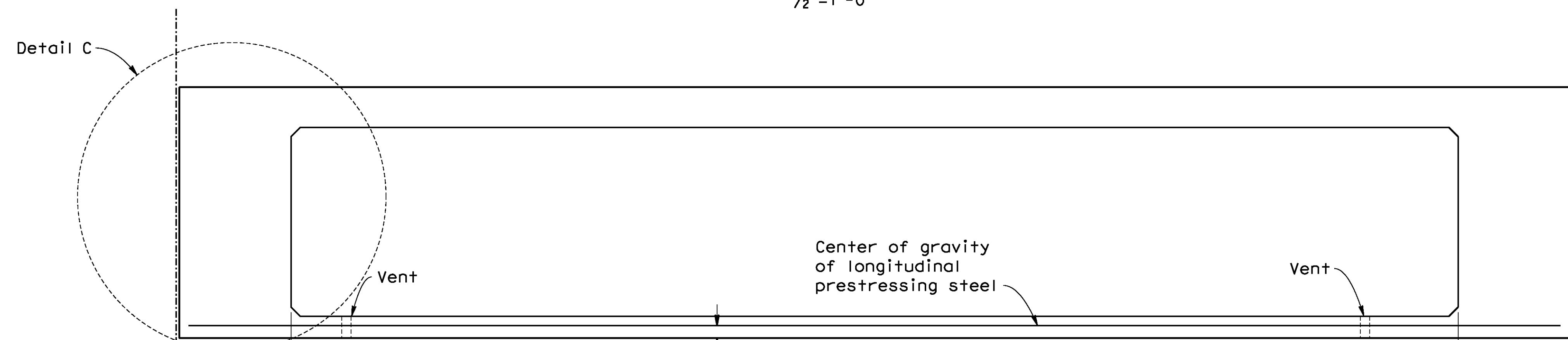
ELEVATION-EXPOSED FACE

1/2"=1'-0"



PLAN

1/2"=1'-0"



SECTION A-A

1/2"=1'-0"

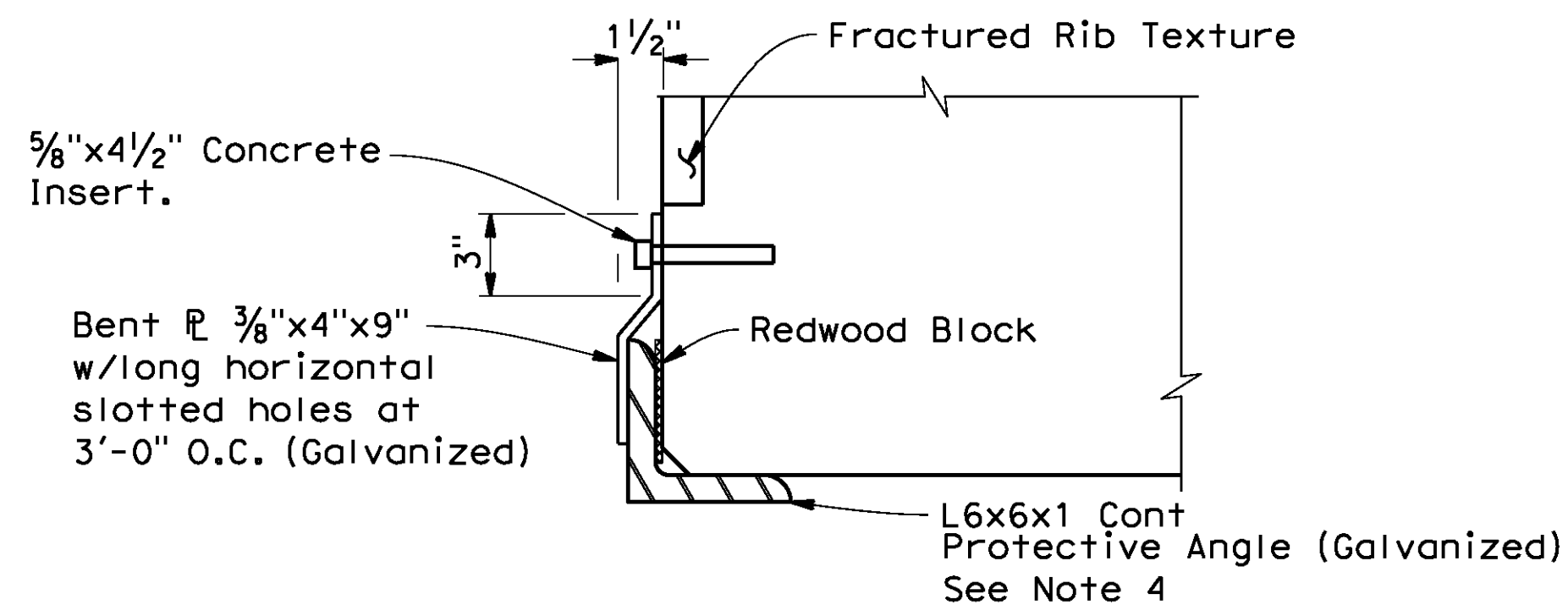
PRESTRESSING NOTES

All prestressing strands shall be 1/2" diameter, 7 wire, uncoated, low-relaxation, $f'_s = 270$ ksi, meeting all requirements of the current ASTM A416.

Initial stress shall be $0.75 f'_s = 31$ Kips per strand. Working force (P_f): The force remaining per box beam after all losses at transfer = 600k
Concrete Strength:

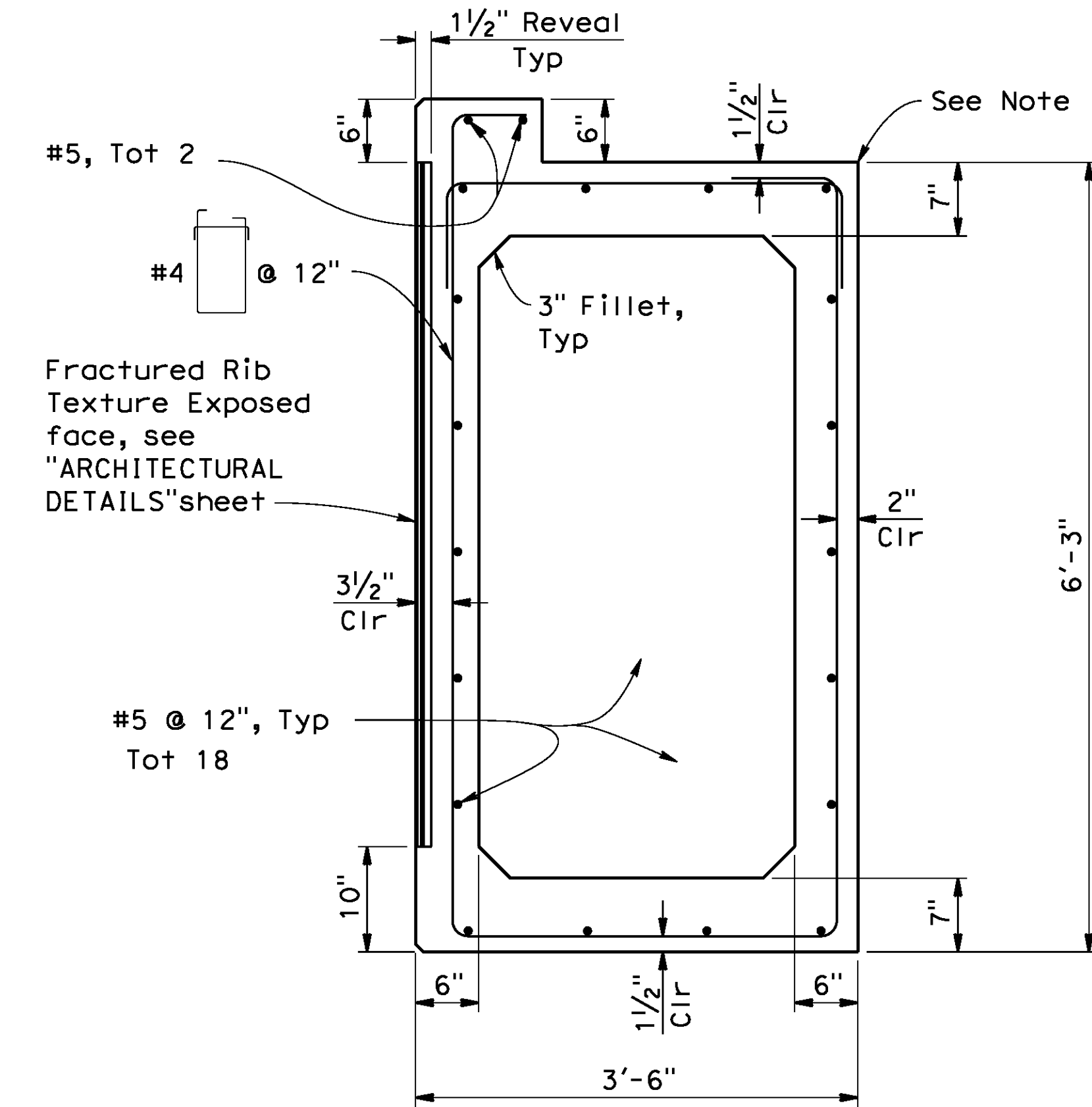
$f'_{ci} = 4500$ psi at time of initial stressing
 $f'_c = 5000$ psi at 28 days

post-tensioning is allowed.



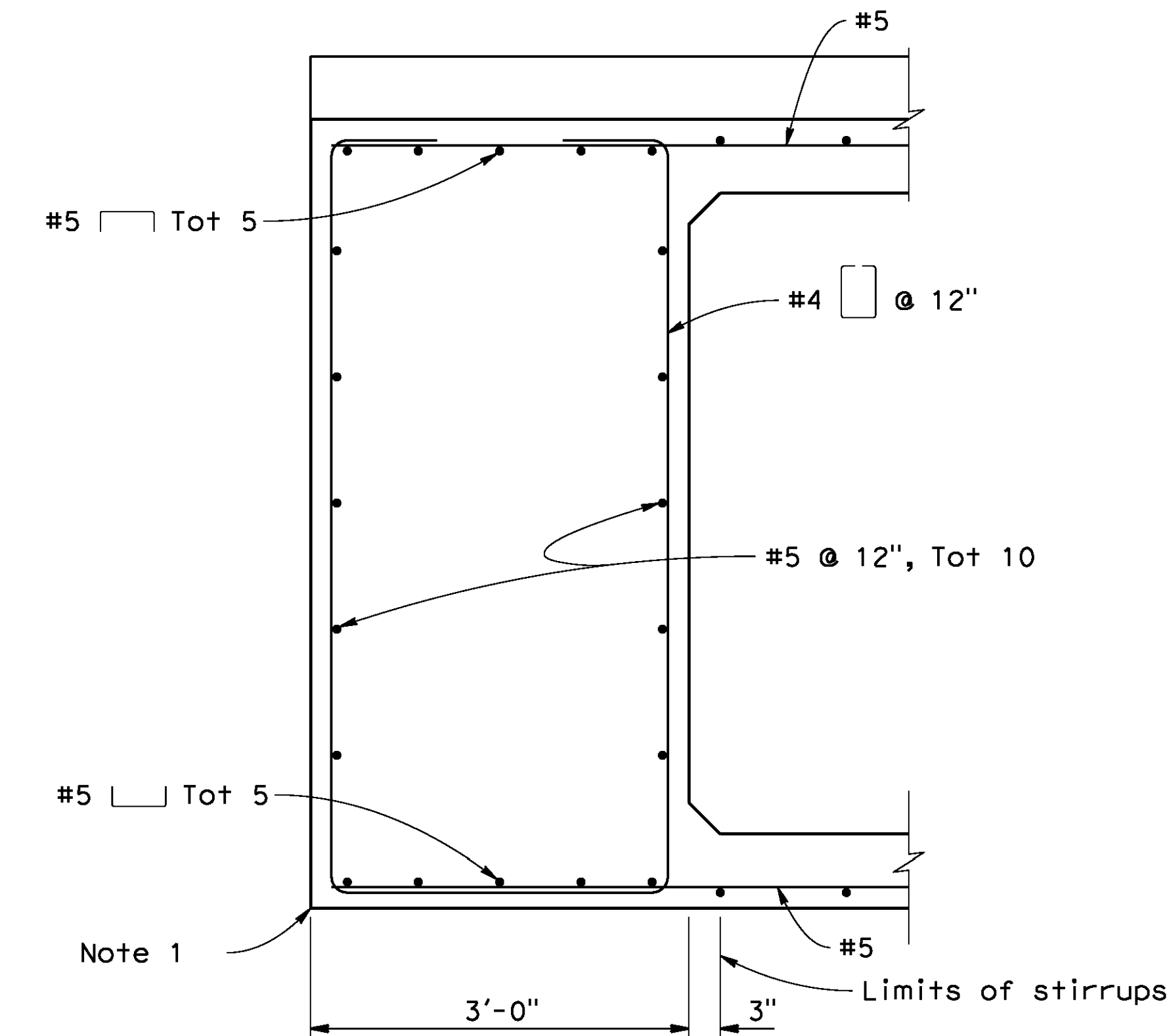
CONTINUOUS PROTECTIVE ANGLE DETAIL

No Scale



SECTION B-B

1"=1'-0"



DETAIL C

1"=1'-0"

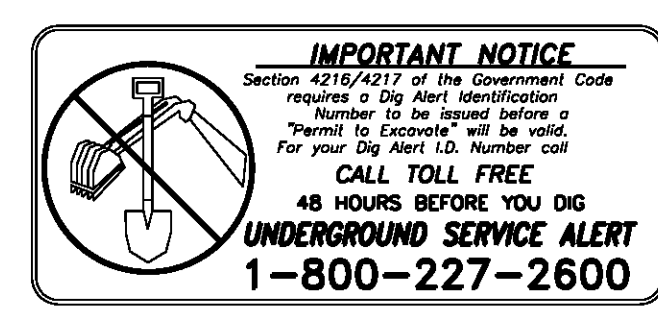
NOTES:

1. All exposed edges shall be chamfered 3/4".
2. See "PRECAST BOX BEAMS NO. 1" sheet.
3. See "DEBONDING NOTES" on "PRECAST BOX BEAM DETAILS NO. 2" sheet
4. Install Continuous Protective Angle along exterior face of Fascia Beams on Spans 2 and 3. Stop Protective Angle 4 feet from each end of girder.

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

D:\Projects\1066_Street-Avg\B-1.dgn From: SDI(20614)\1066.dgn-1-1.dwg

DATE: 8/9/2012
TIME: 7:00:21 AM



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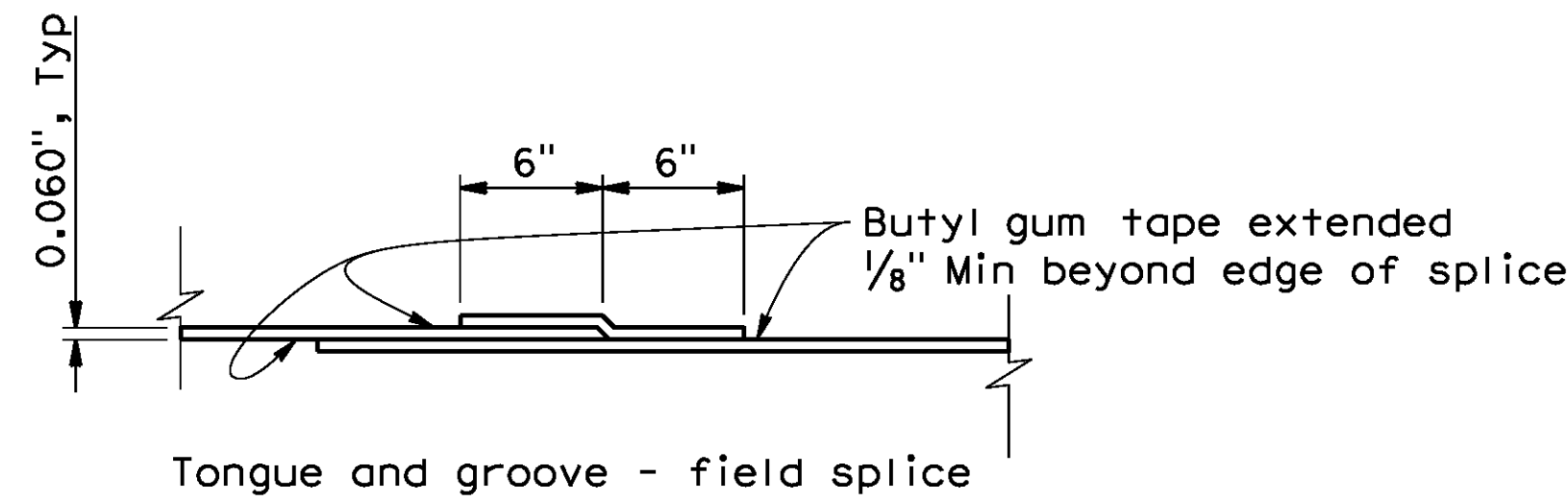


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CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
FASCIA BEAM DETAILS

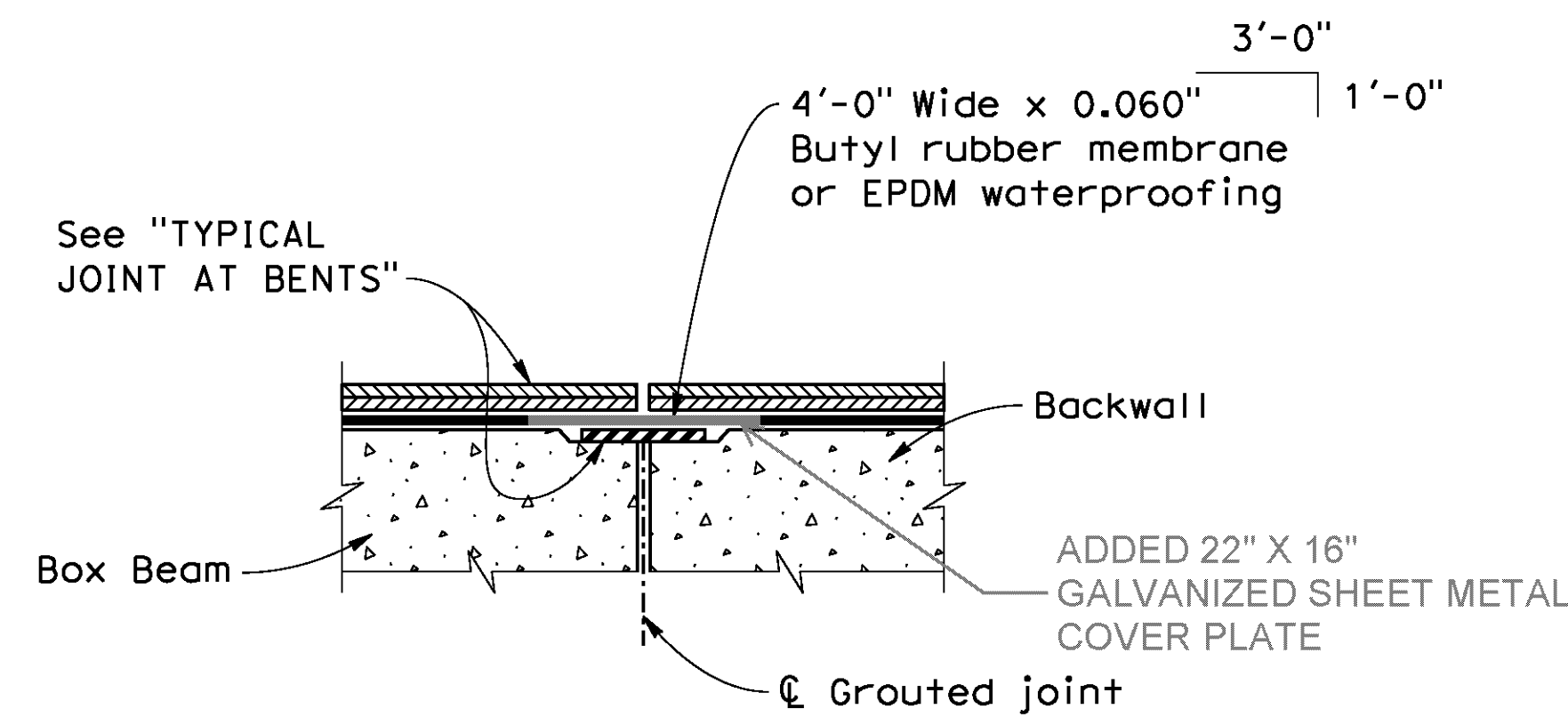
BR. NO 56C0599
R-4180
SHEET 172 OF 191
FILE NO.

User: untitled
1066308-1-Fbd101.dgn



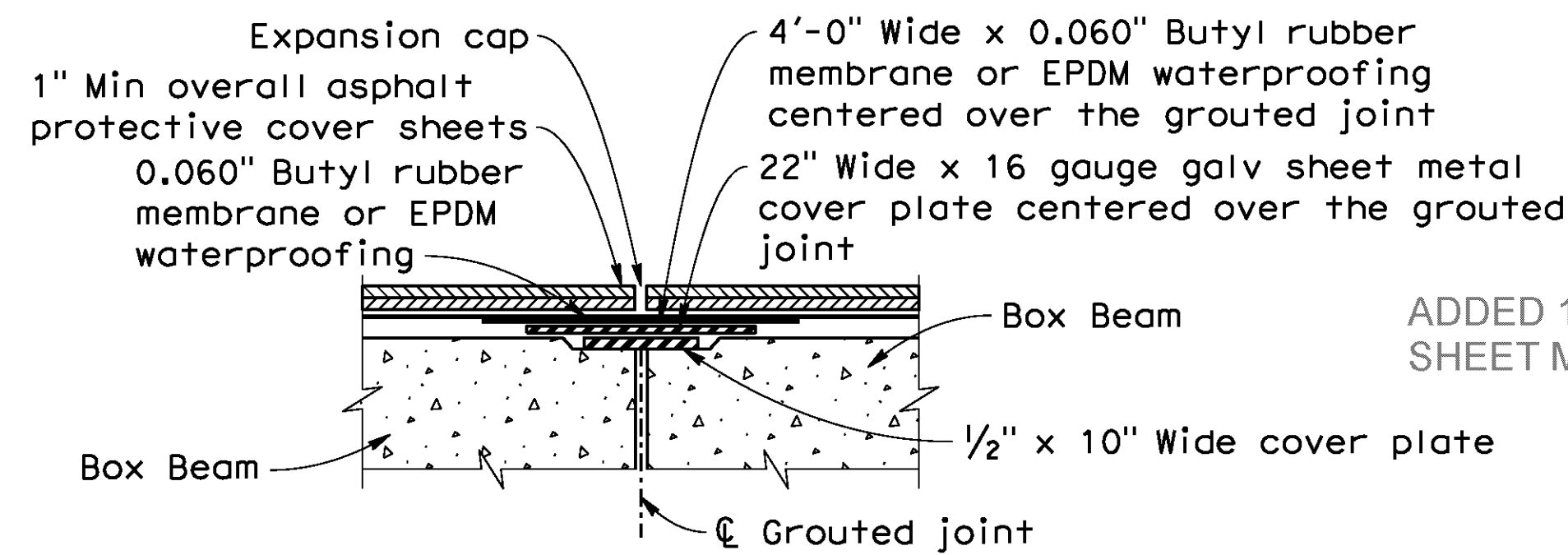
BUTYL RUBBER MEMBRANE OR EPDM WATERPROOFING SPLICE DETAIL

No Scale



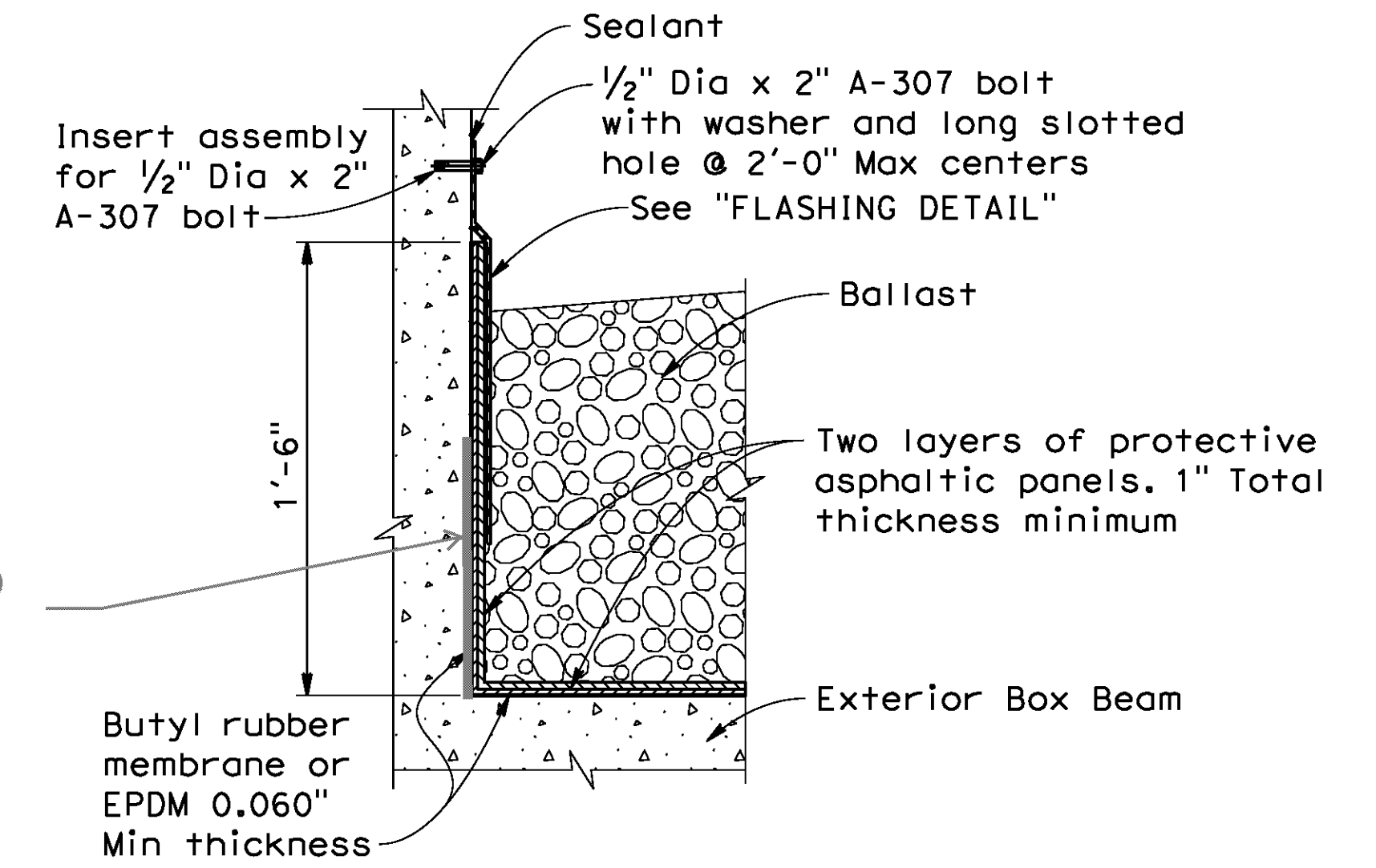
JOINT AT BACKWALL

No Scale



TYPICAL JOINT AT BENTS

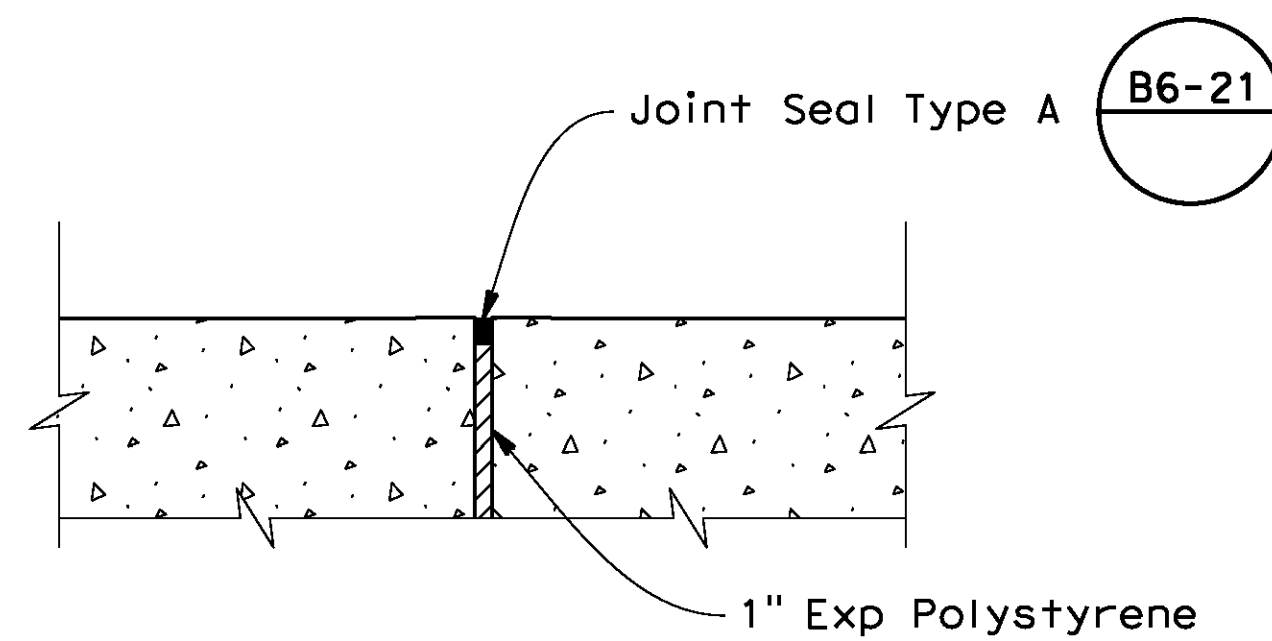
No Scale



DETAIL A

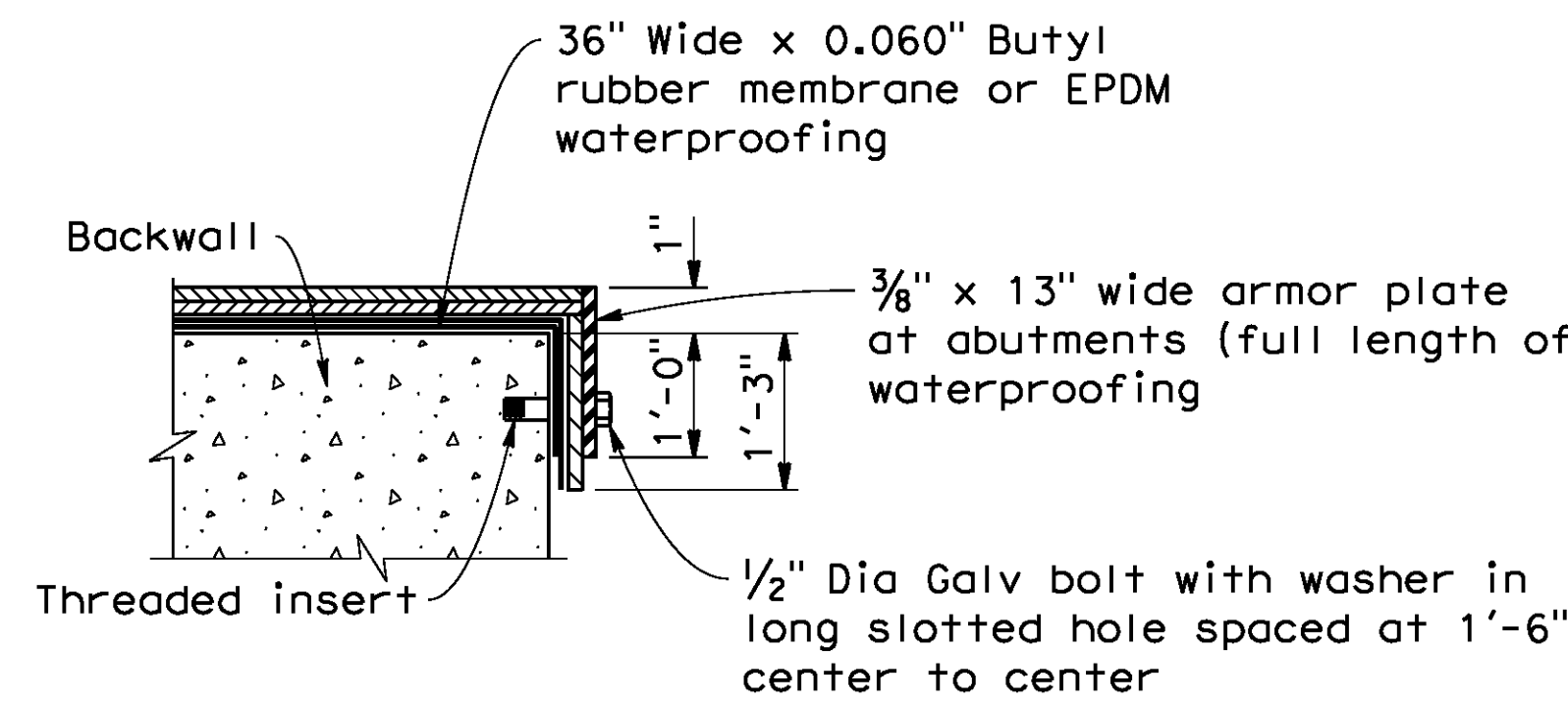
No Scale

Note: Deck drain not shown.



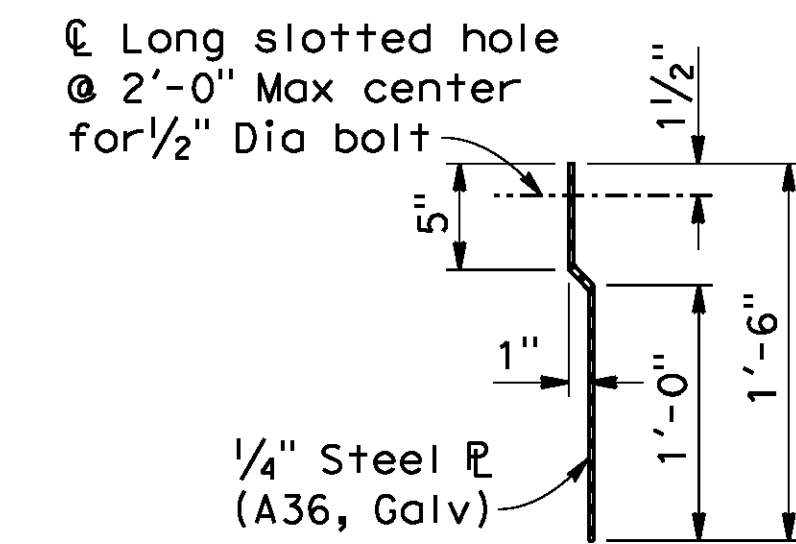
TYPICAL FASCIA BEAM JOINT AT BENTS

No Scale



TYPICAL SECTION AT END OF BACKWALL

No Scale



FLASHING DETAIL

No Scale

AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME JOSE CORONA

BR. NO 56C0599

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PROFESSIONAL ENGINEER
 David M. Griffith
 C49125
 CIVIL
 STATE OF CALIFORNIA

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DESIGNED BY *RS* DRAWN BY *LY* CHECKED BY *DS*

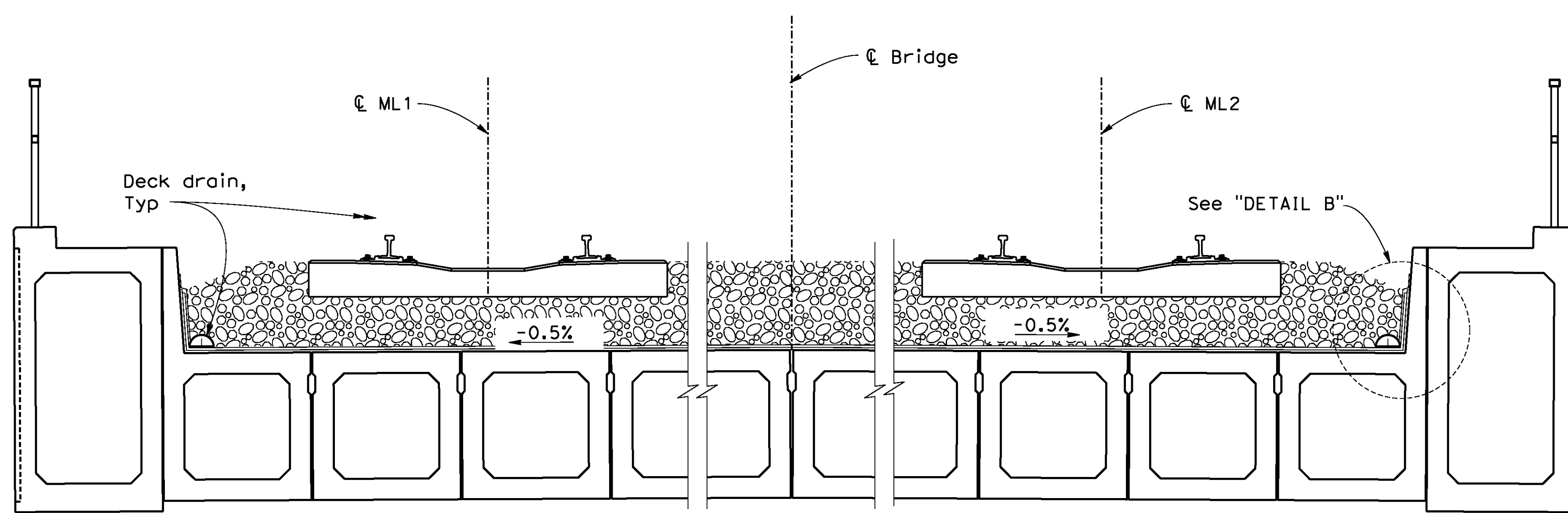
CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
WATERPROOFING DETAILS

R-4180
 SHEET 173 OF 191
 FILE NO.

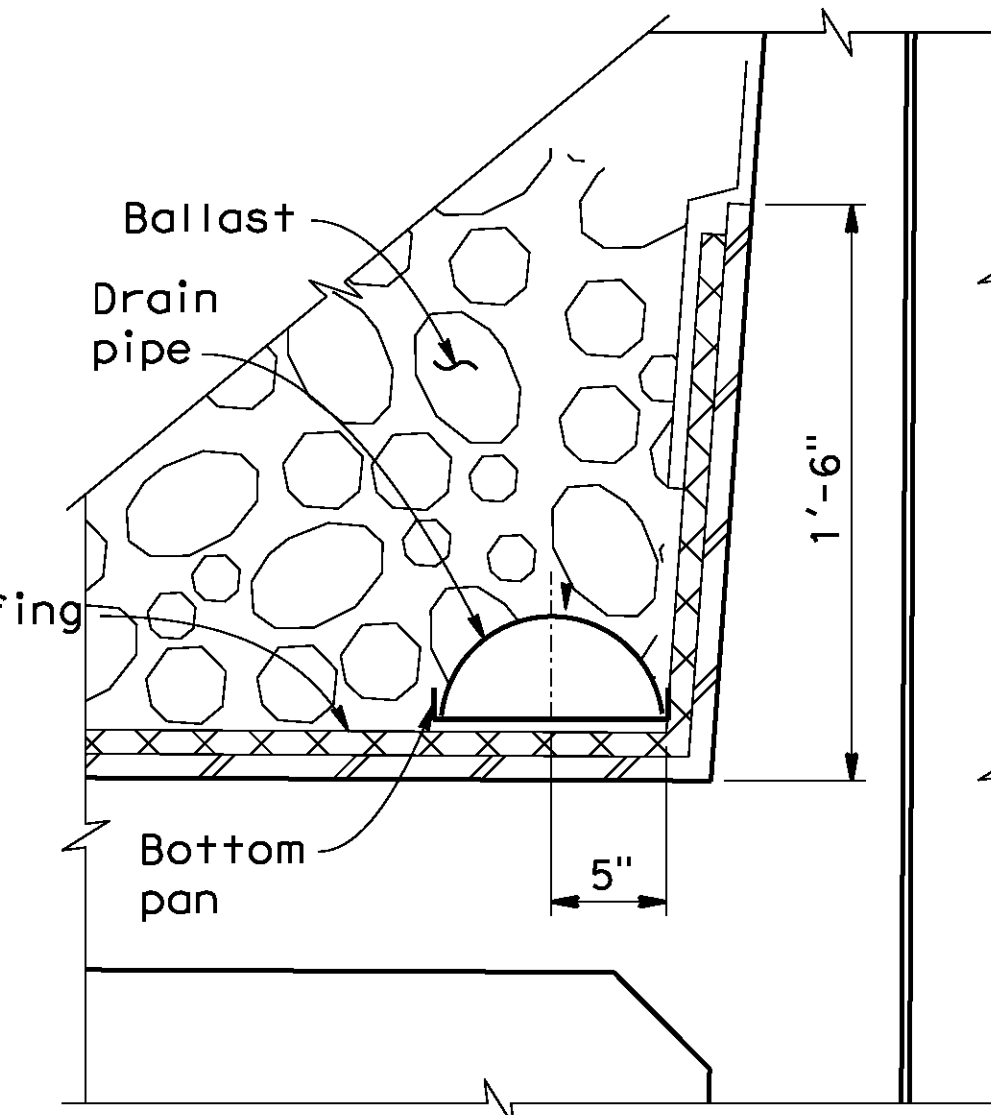
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DATE: 8/9/2012
 TIME: 7:00:43 AM

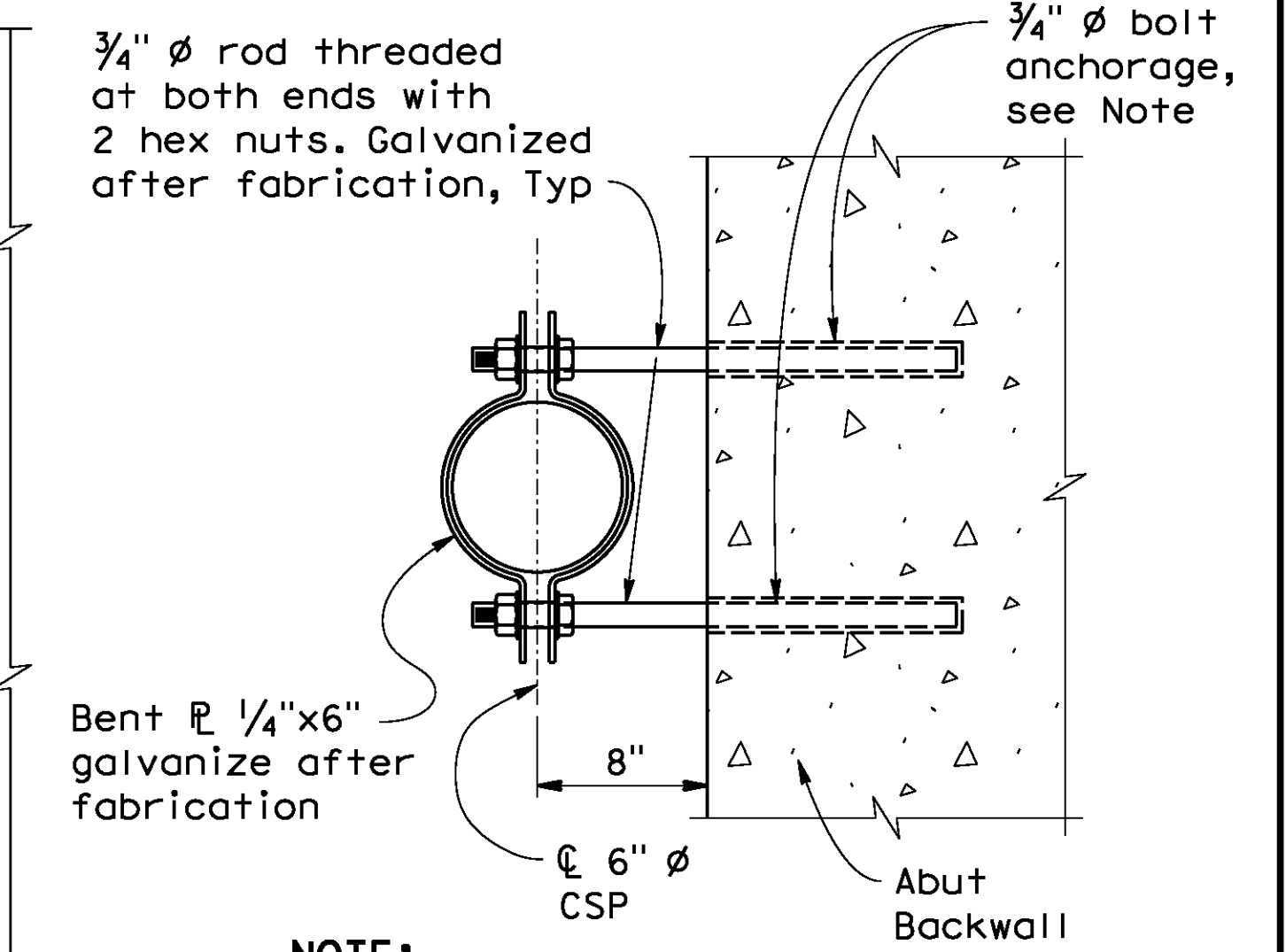
User: unfitted
 106630e-q-wtrprfgdr.dgn



TYPICAL SECTION
No Scale

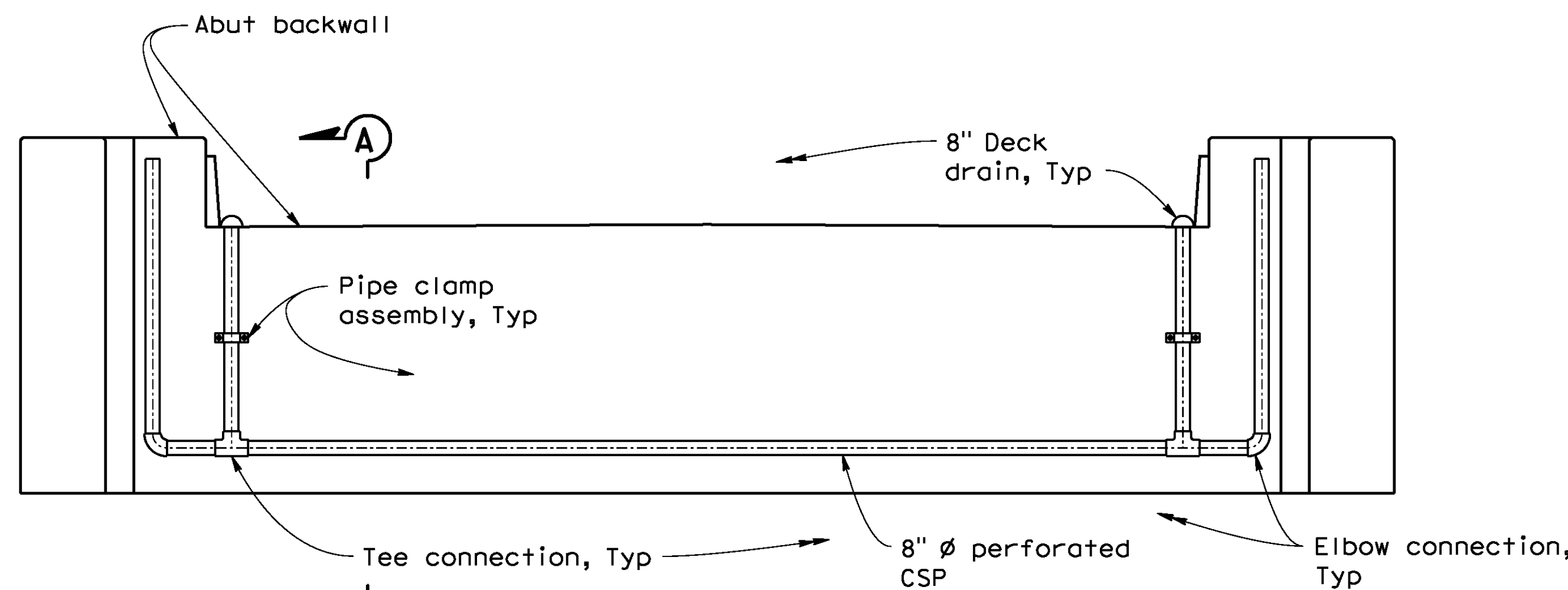


DETAIL B
No Scale

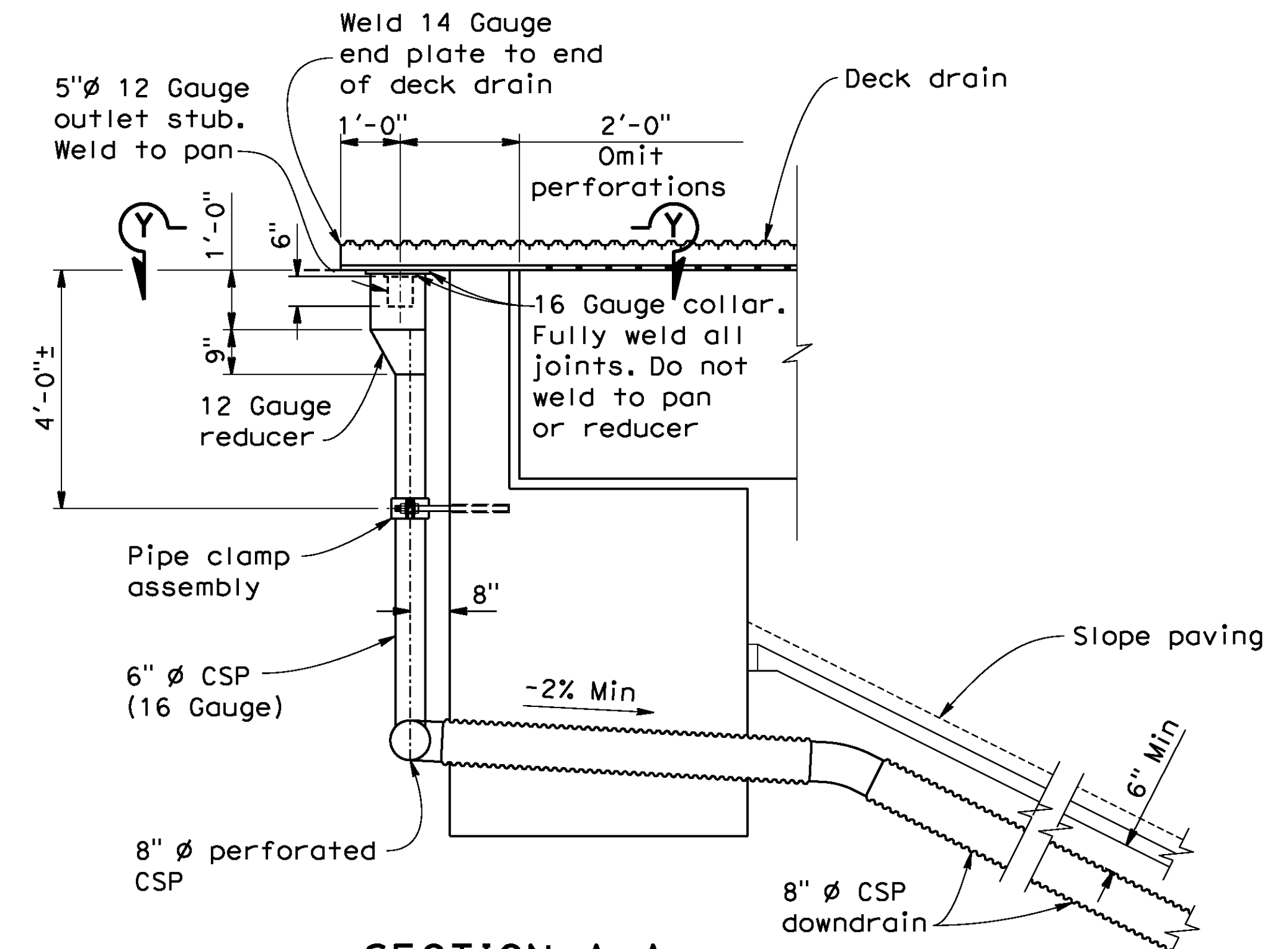


NOTE:
Assembly shall be carefully placed to avoid conflict with backwall reinforcing

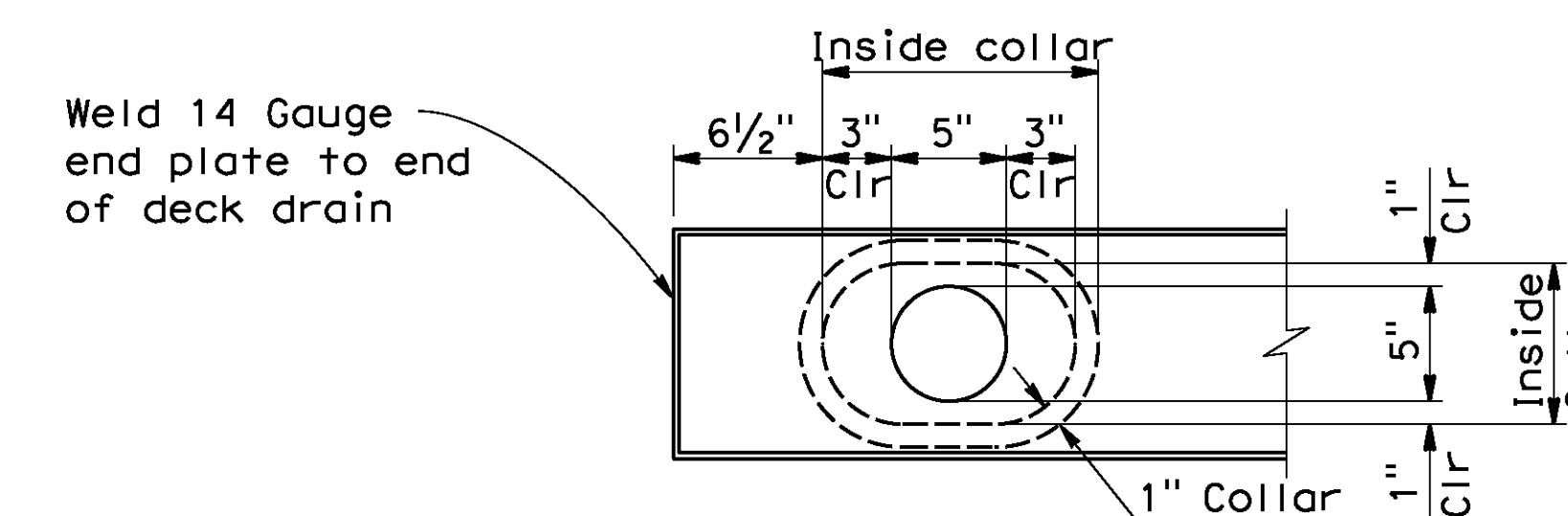
PIPE CLAMP ASSEMBLY
1/2" = 1'-0"



BACKWALL ELEVATION
1/4" = 1'-0"

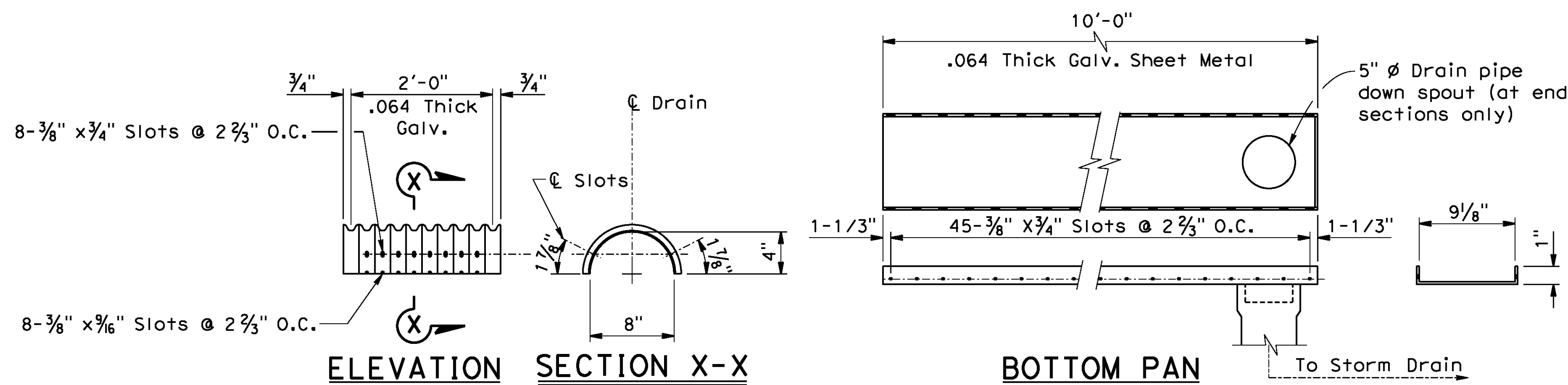


SECTION A-A
1/2" = 1'-0"



SECTION Y-Y
1/2" = 1'-0"

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA



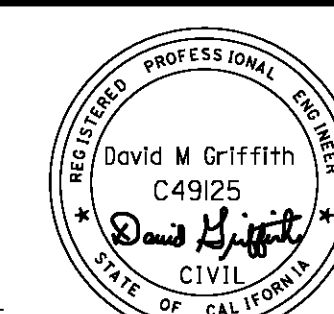
8" DECK DRAIN DETAILS
Not To Scale

NOTE:
Lap drain pipe one corrugation at each end.

BR. NO 56C0599



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CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
DECK DRAIN DETAILS

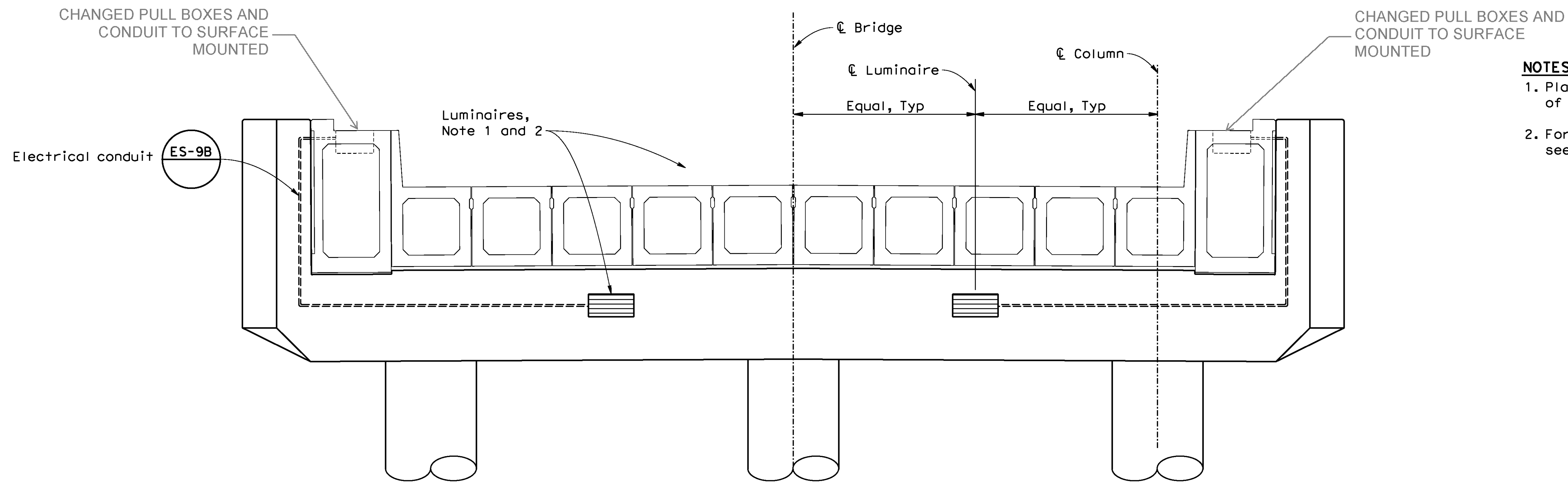
R-4180
SHEET 174 OF 191
FILE NO.

HORIZ. SCALE: VERT. SCALE: N/A

D:\Projects\1066_Streeter\app\Bridges\From_S01120614\106630a-r-r-01.dgn

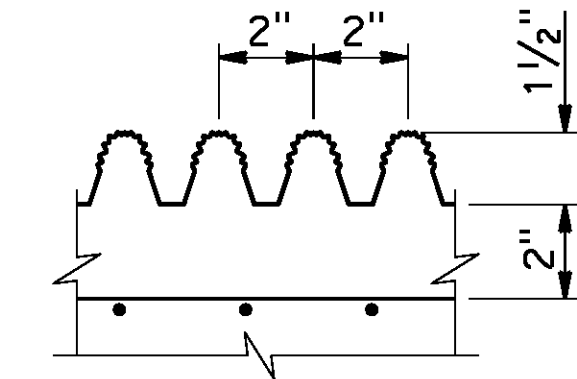
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106630a-r-r-dde01.dgn



NOTES:

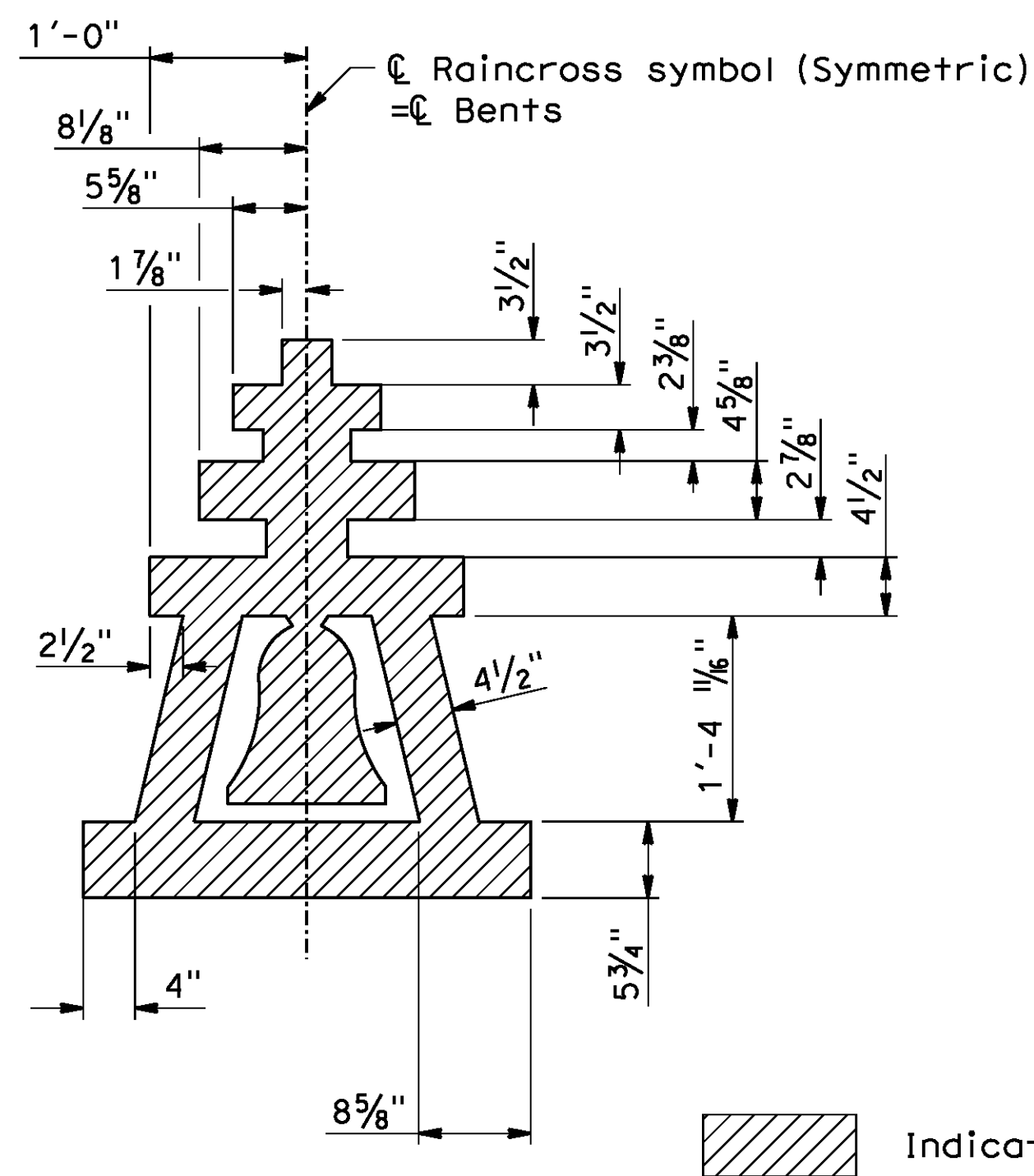
1. Place luminaires on "Streeter Avenue" side of bent 2 and 4 and both sides of Bent 3.
2. For luminaires and other lighting details, see "STREET LIGHTING PLANS" by RPU.



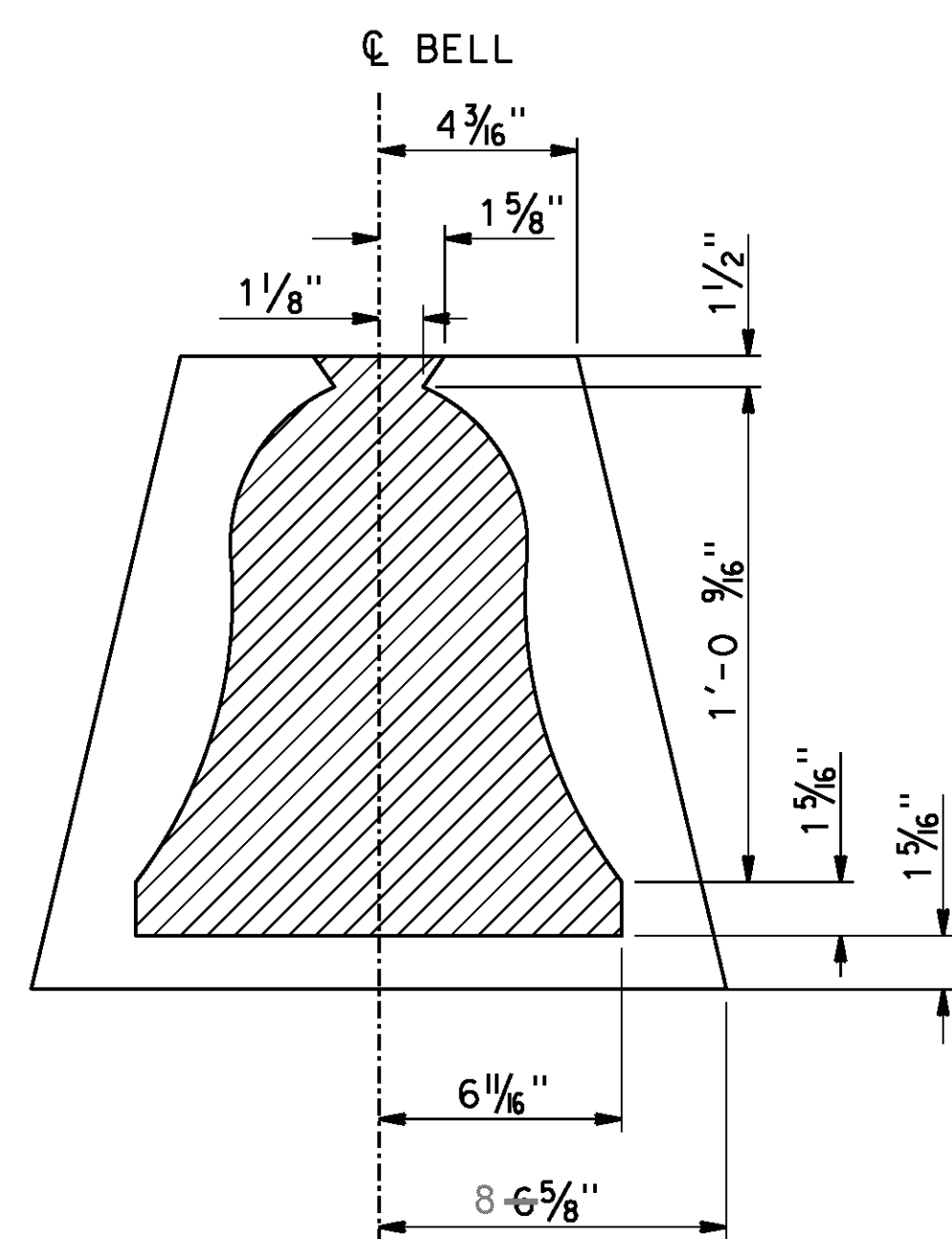
**FRACTURED RIB
TEXTURE FASCIA BEAMS**
3"=1'-0"

BENT CAP MOUNTED LUMINAIRES

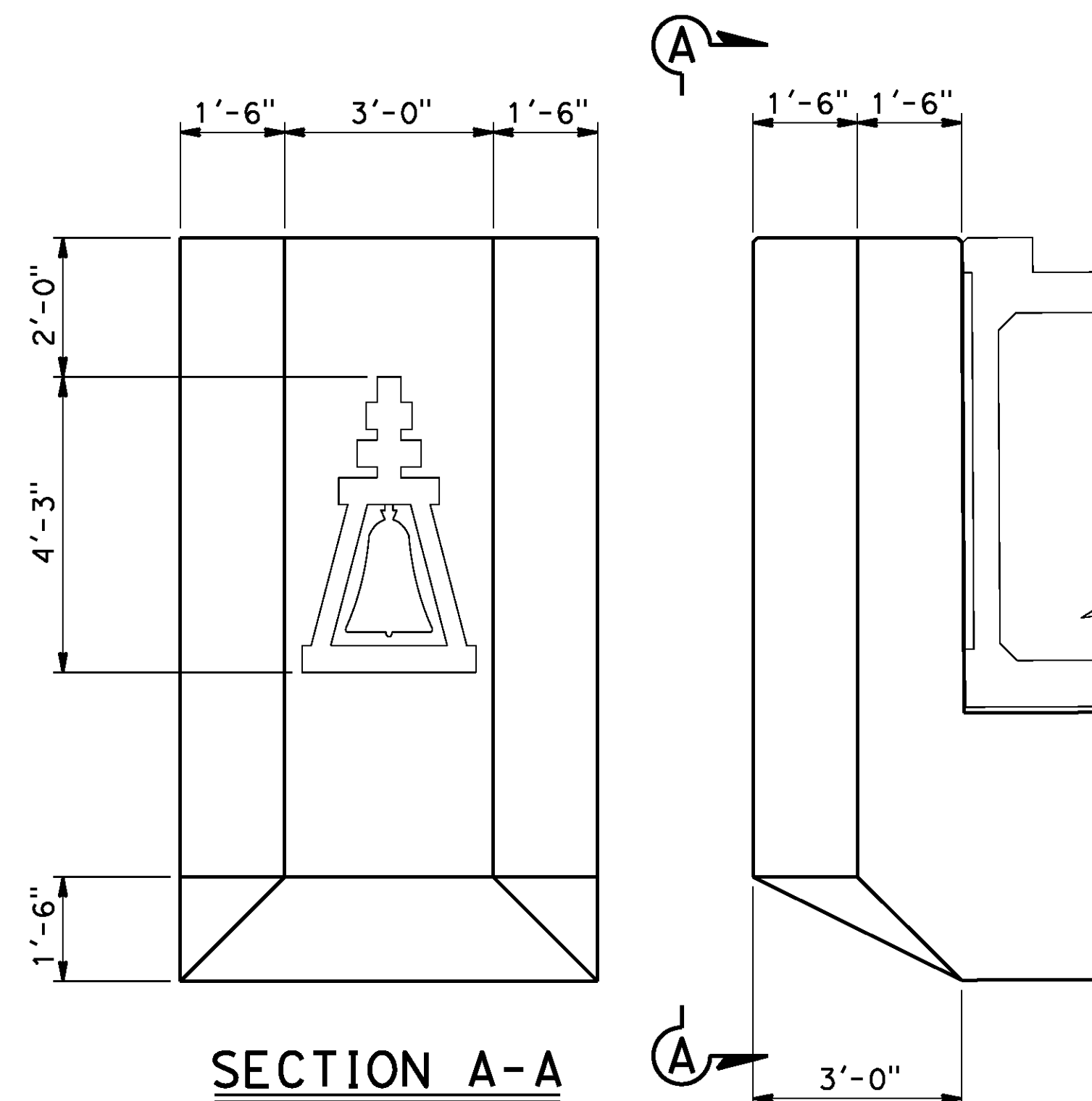
3/8"=1'-0"



**RAIN CROSS
DETAIL SECTION**
NO SCALE

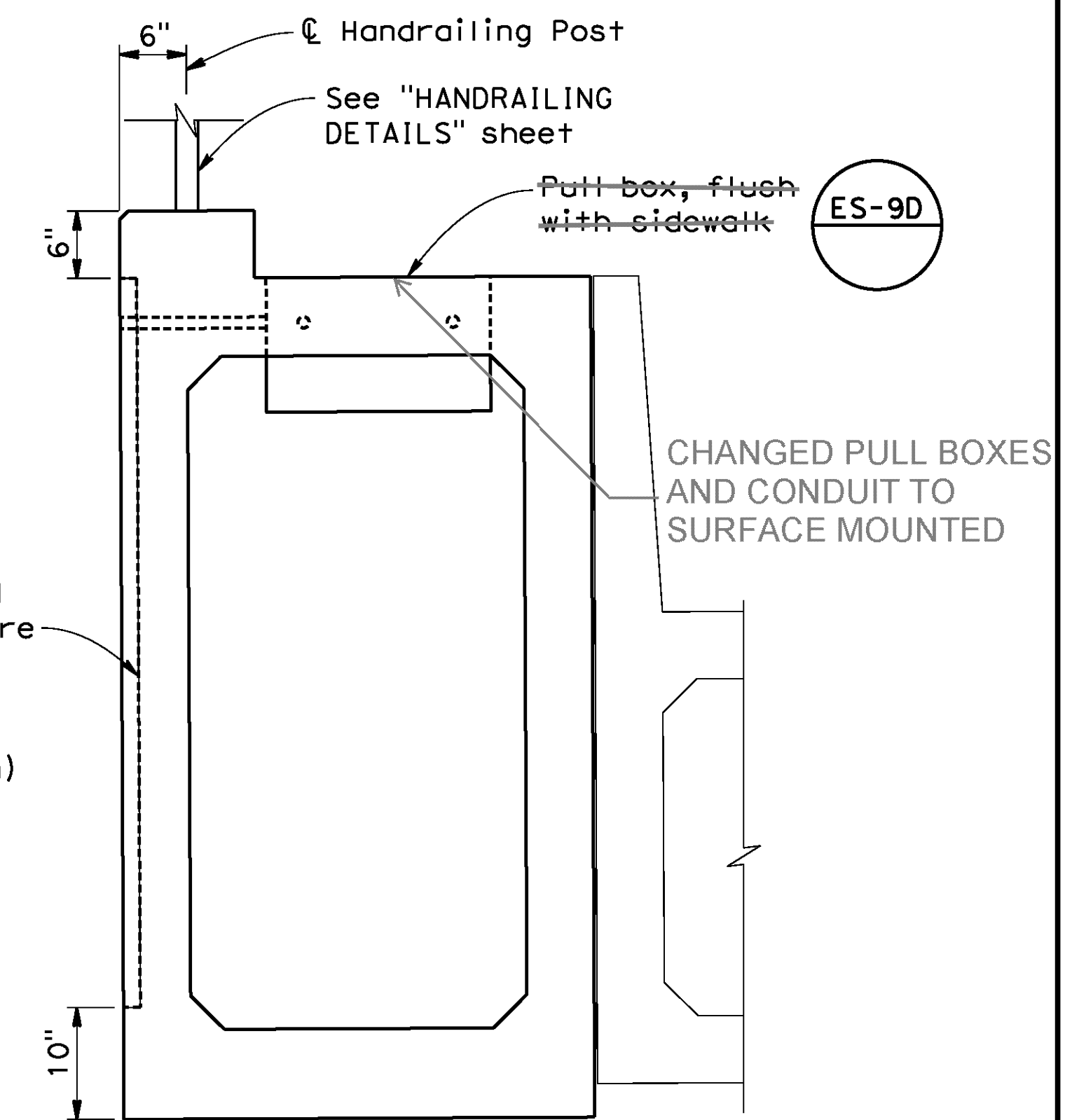


BELL DETAIL
NO SCALE



**BENT CAP
ARCHITECTURAL TREATMENT**

1/2"=1'-0"



FASCIA BEAM DETAIL

1"=1'-0"

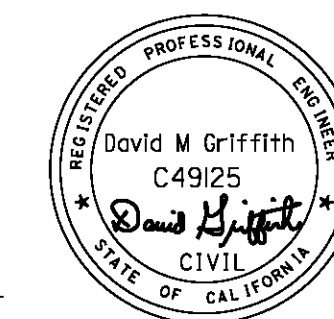
AS BUILT
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

IMPORTANT NOTICE
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DATE 8-7-12



DESIGNED BY *RS* DRAWN BY *MT* CHECKED BY *DS*

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

STREETER AVENUE UNDERPASS

ARCHITECTURAL DETAILS

HORIZ. SCALE:

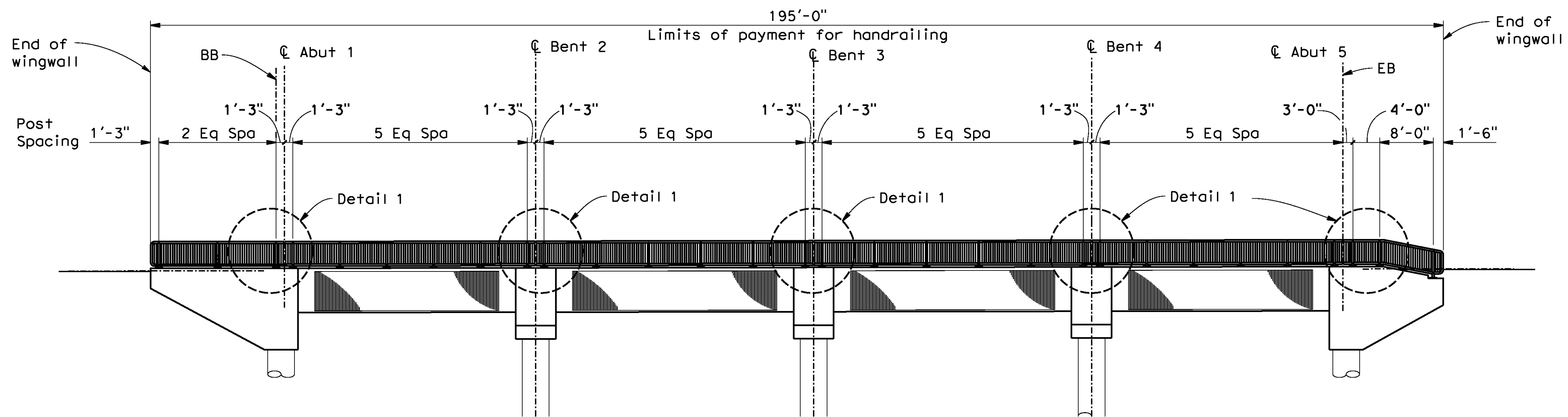
VERT. SCALE: N/A

BR. NO 56C0599

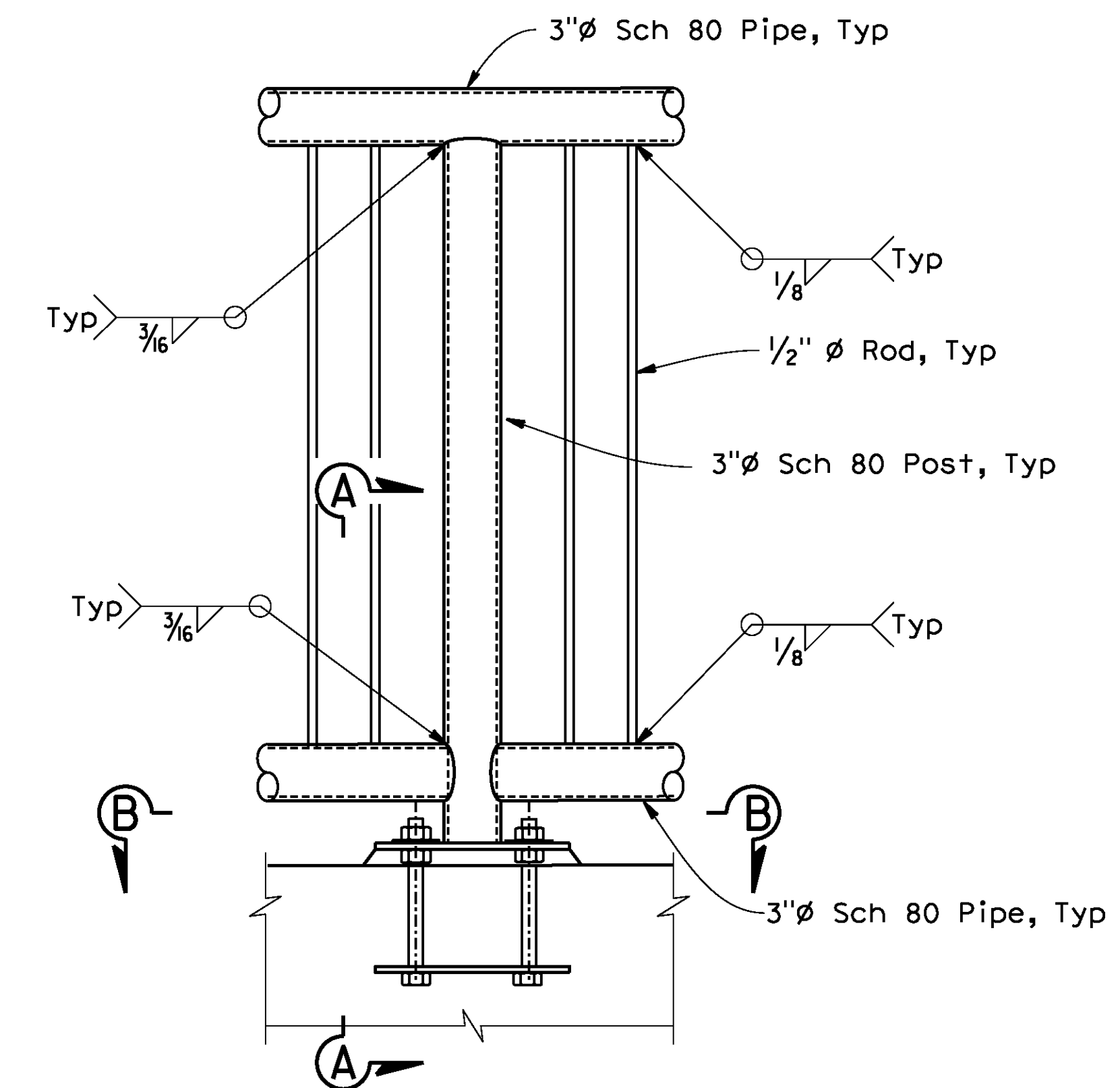
R-4180

SHEET 175 OF 191

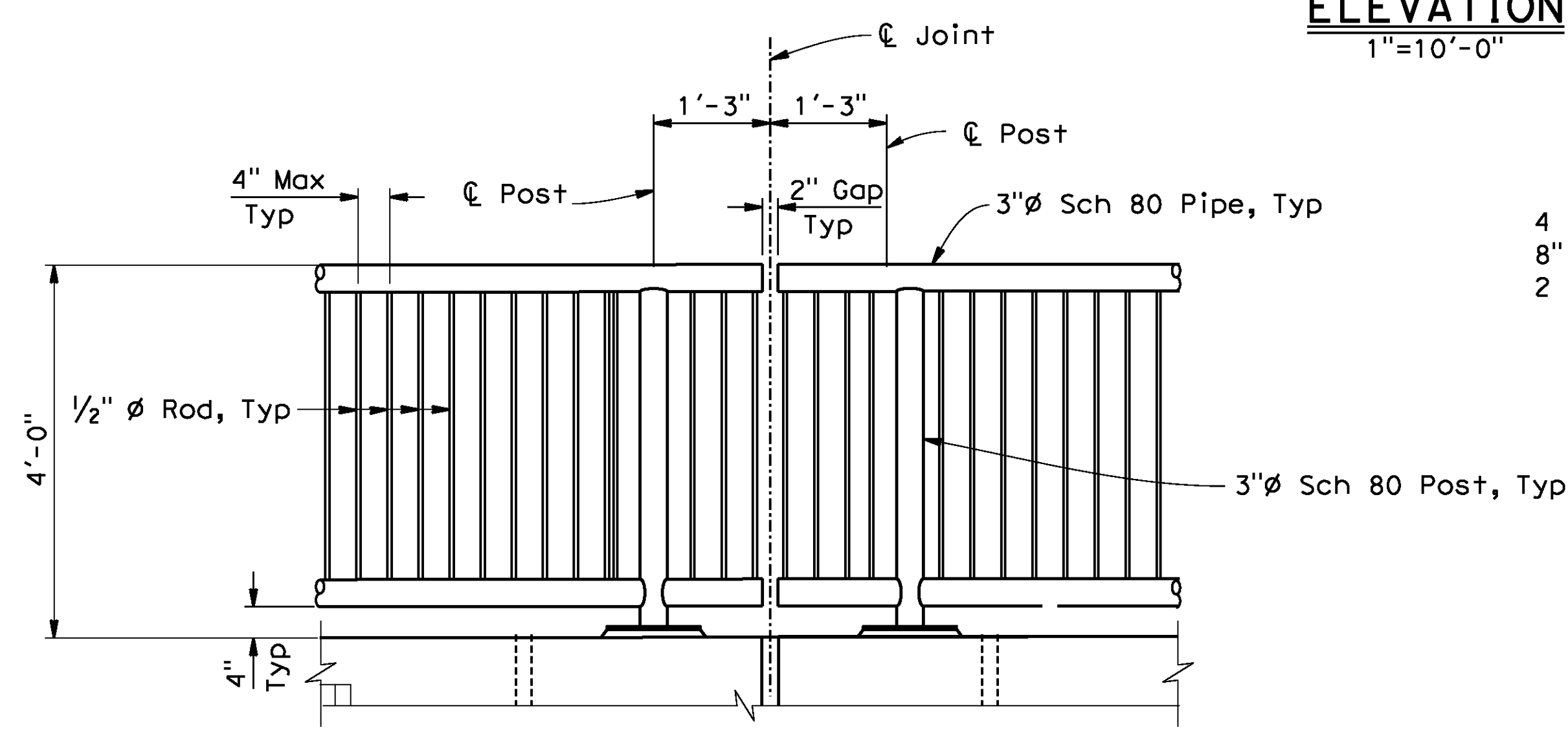
FILE NO.



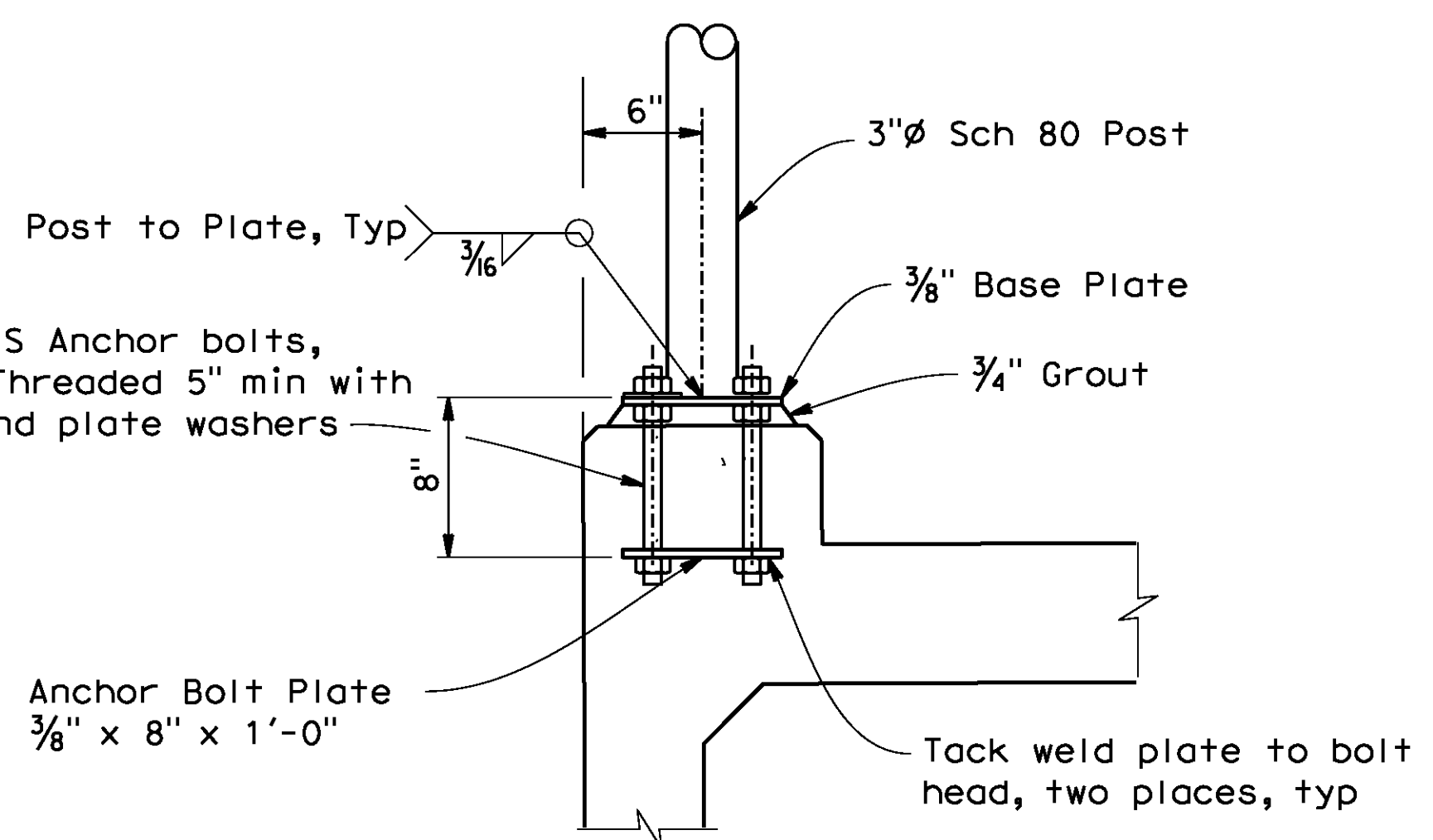
ELEVATION
1"=10'-0"



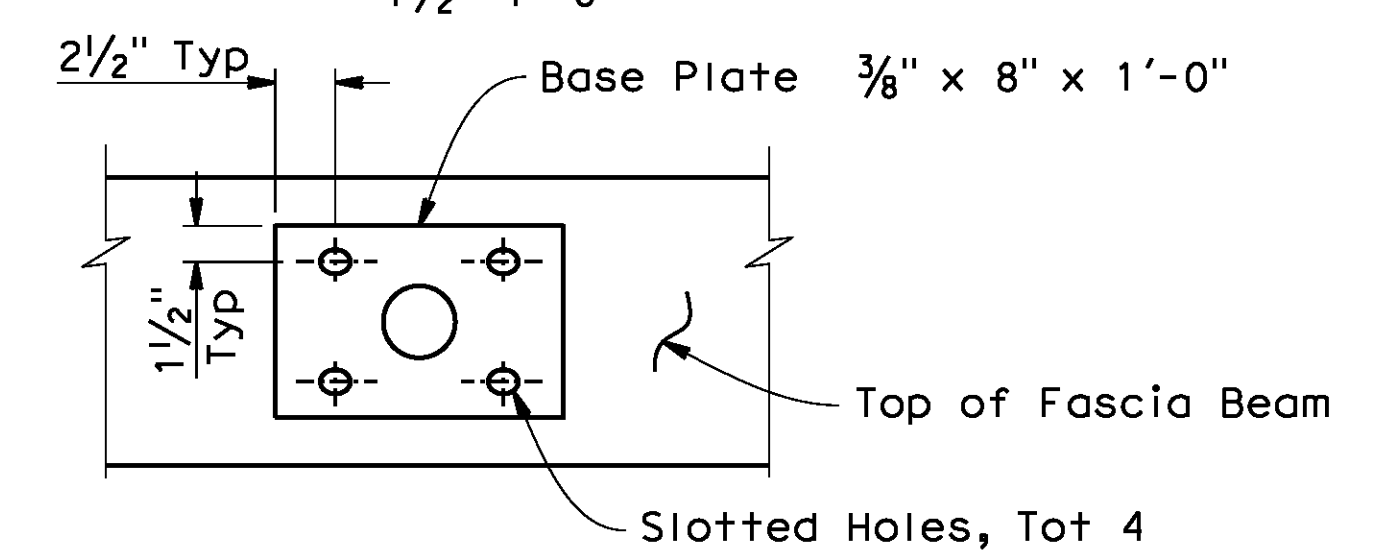
DETAIL 2
1/2"=1'-0"



DETAIL 1
3/4"=1'-0"

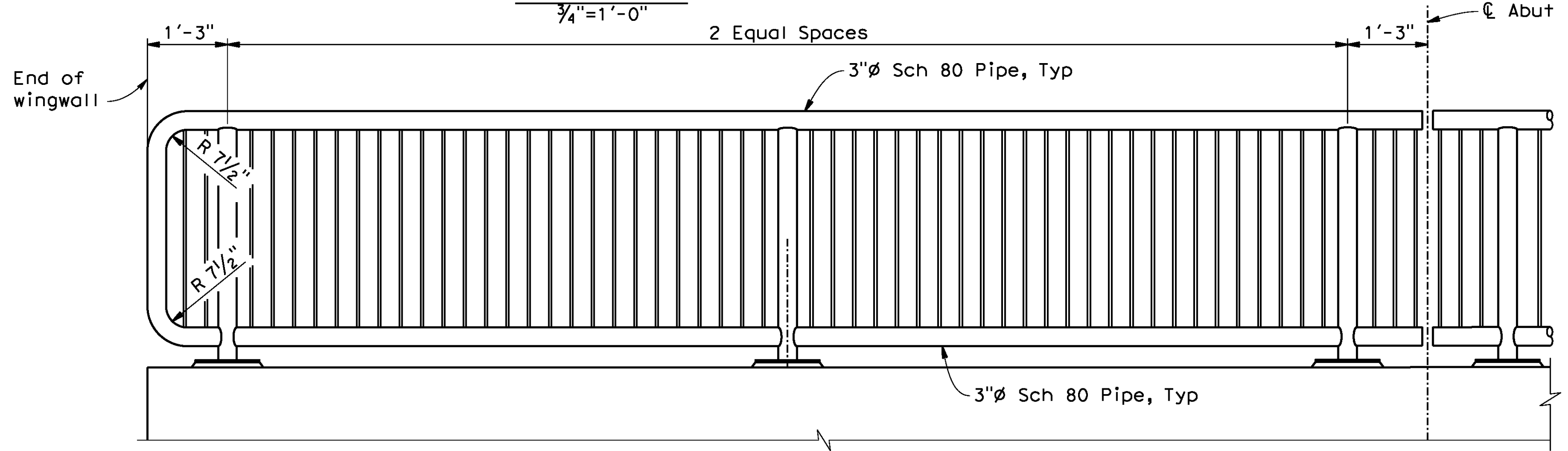


SECTION A-A
1/2"=1'-0"

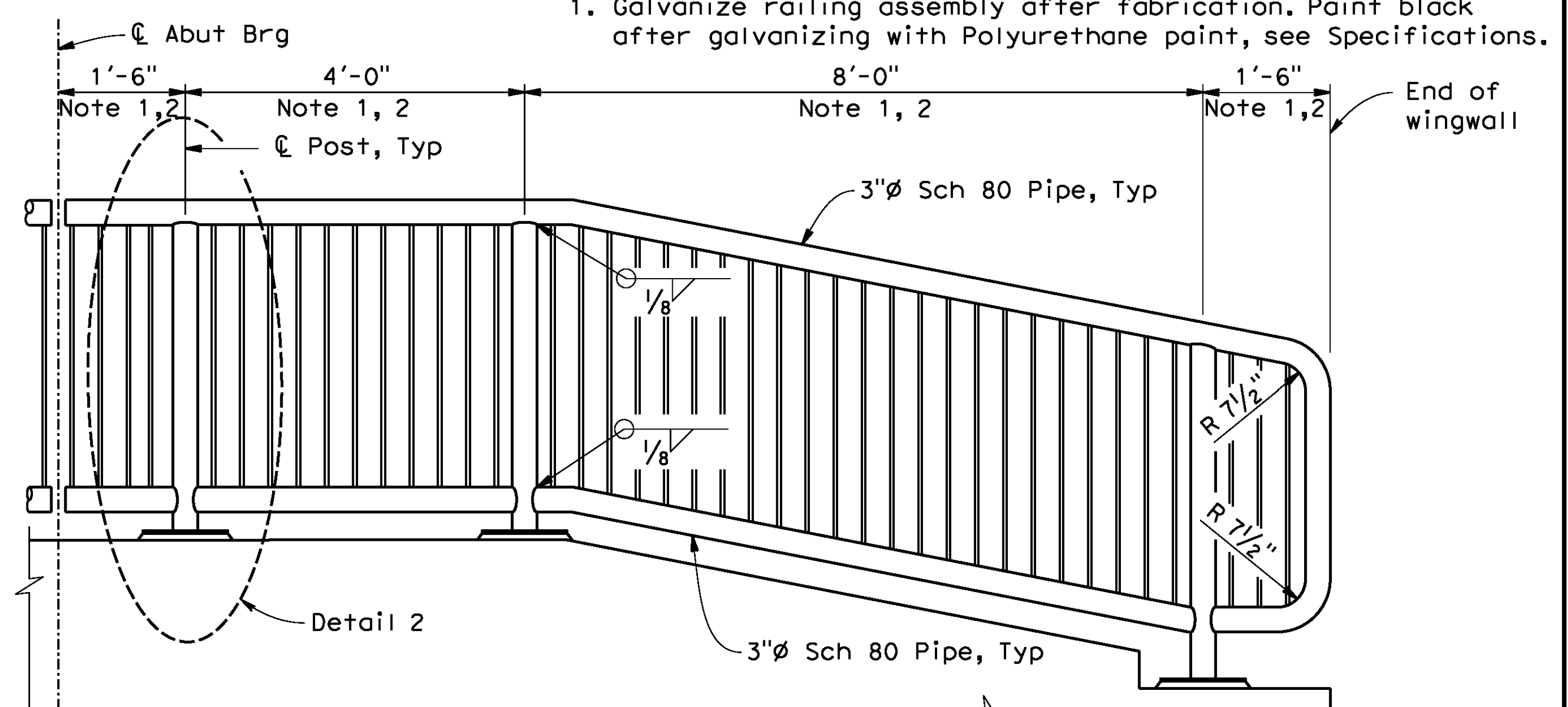


SECTION B-B
1/2"=1'-0"

NOTE:
1. Galvanize railing assembly after fabrication. Paint black after galvanizing with Polyurethane paint, see Specifications.



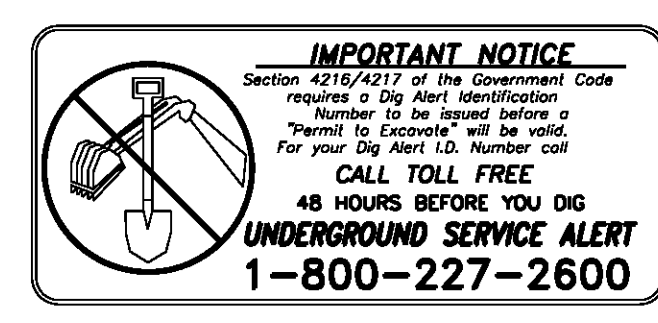
END SECTION - ABUTMENT 1
3/4"=1'-0"



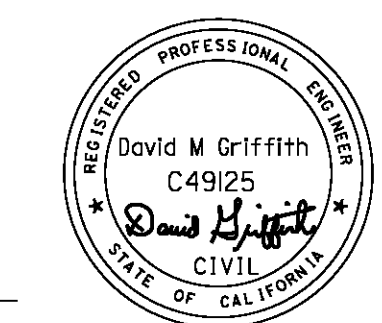
END SECTION - ABUTMENT 5
3/4"=1'-0"

NOTES:
1. Abutment 5 handrailing shall be constructed in Phase 9, See "RAILROAD CONSTRUCTION PHASING" plans.
2. See "END SECTION - ABUTMENT 1" for other information not shown.

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA



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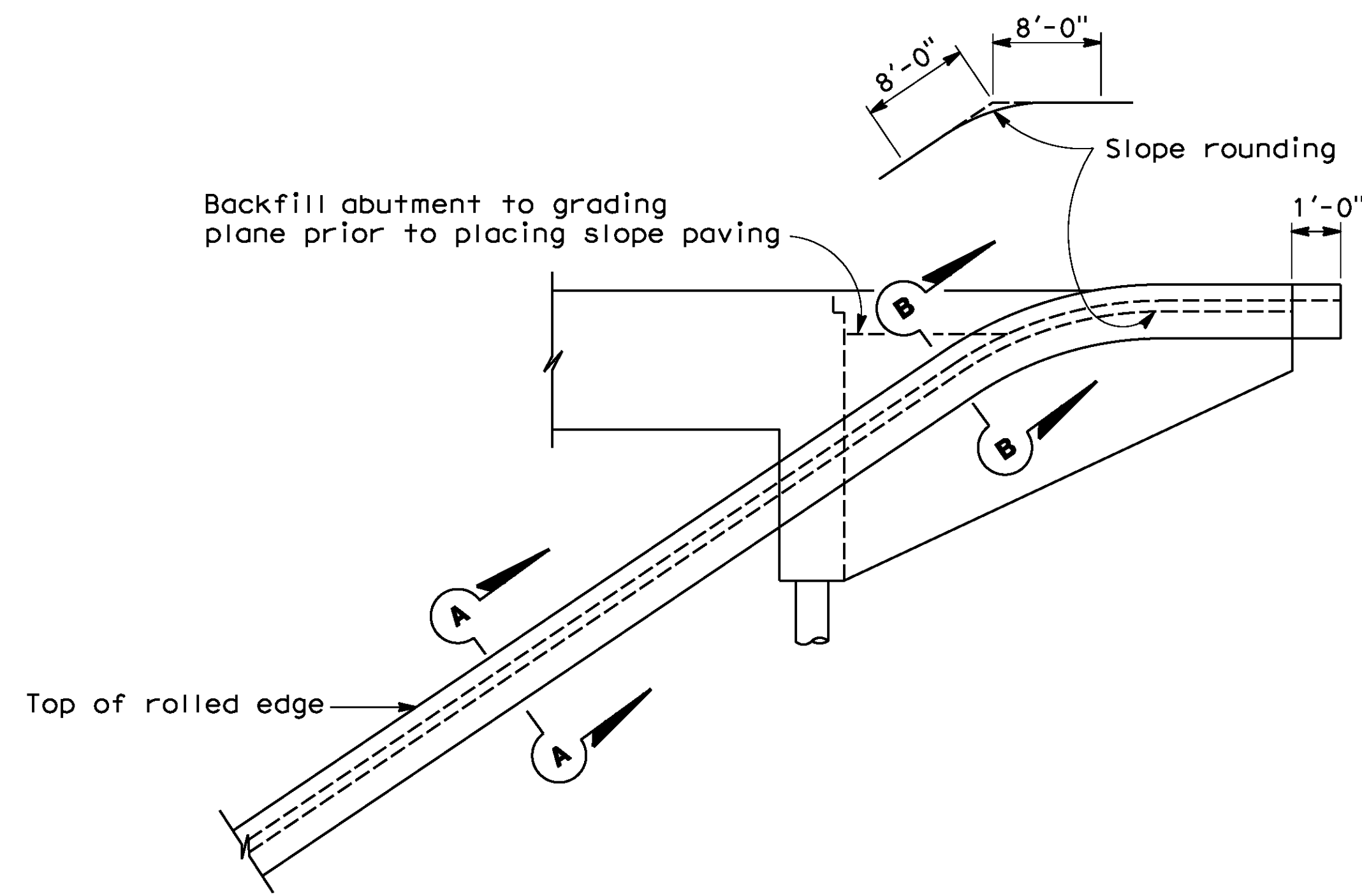
CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
HANDRAILING DETAILS

BR. NO 56C0599
R-4180
SHEET 176 OF 191
FILE NO.

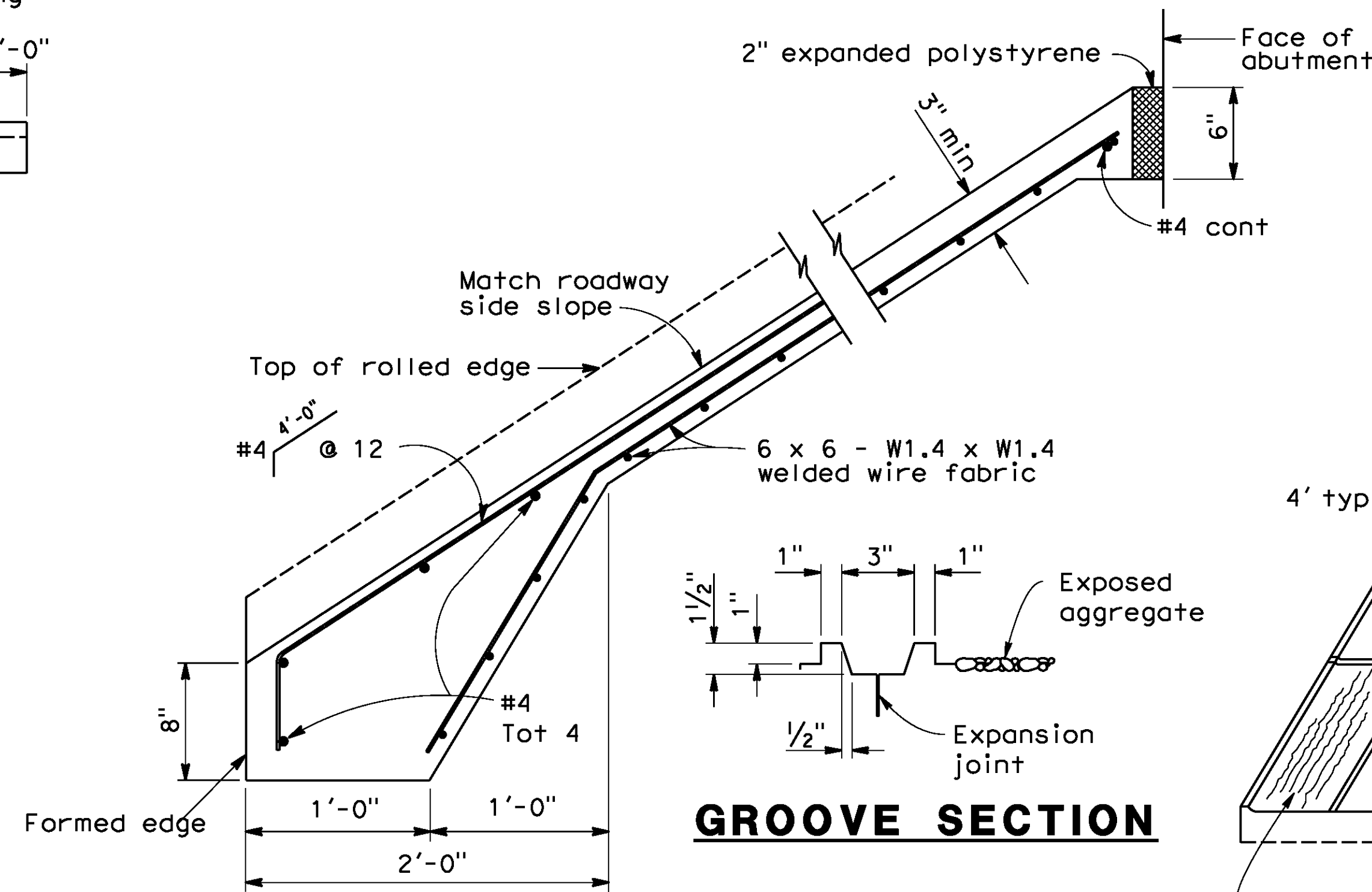
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DATE: 8/9/2012
TIME: 7:01:50 AM

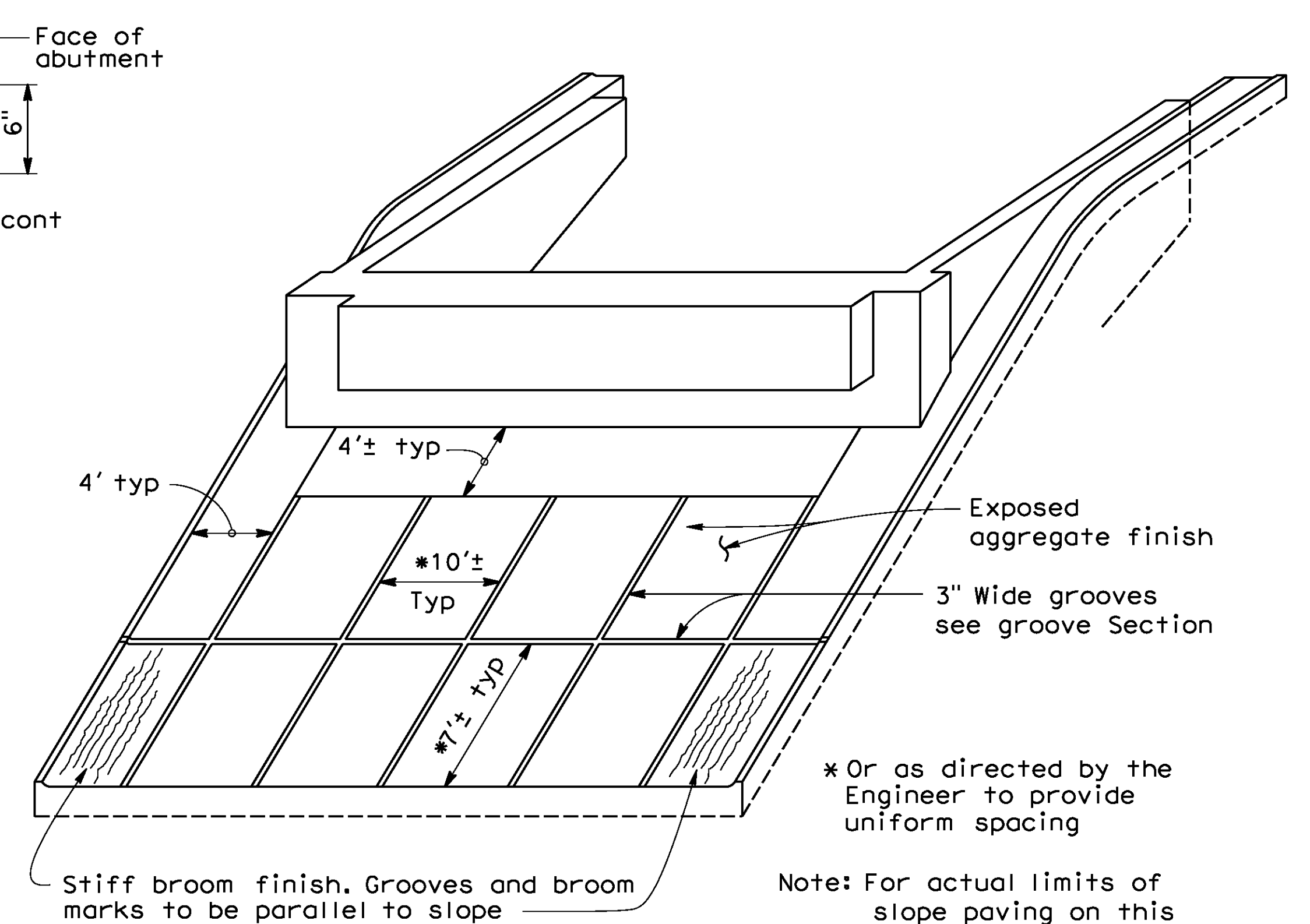
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1066308-1-raildr.dgn



WINGWALL ELEVATION



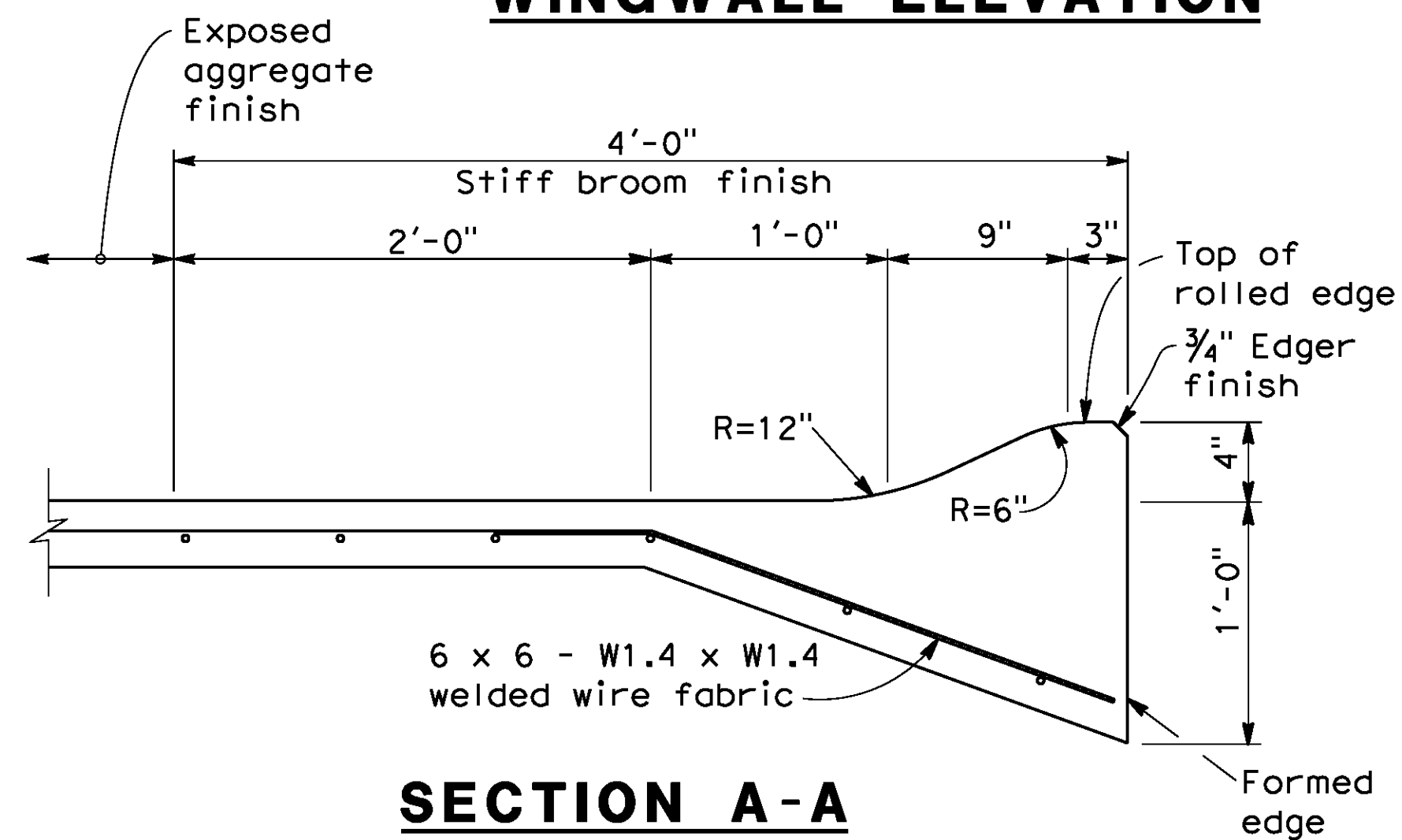
GROOVE SECTION



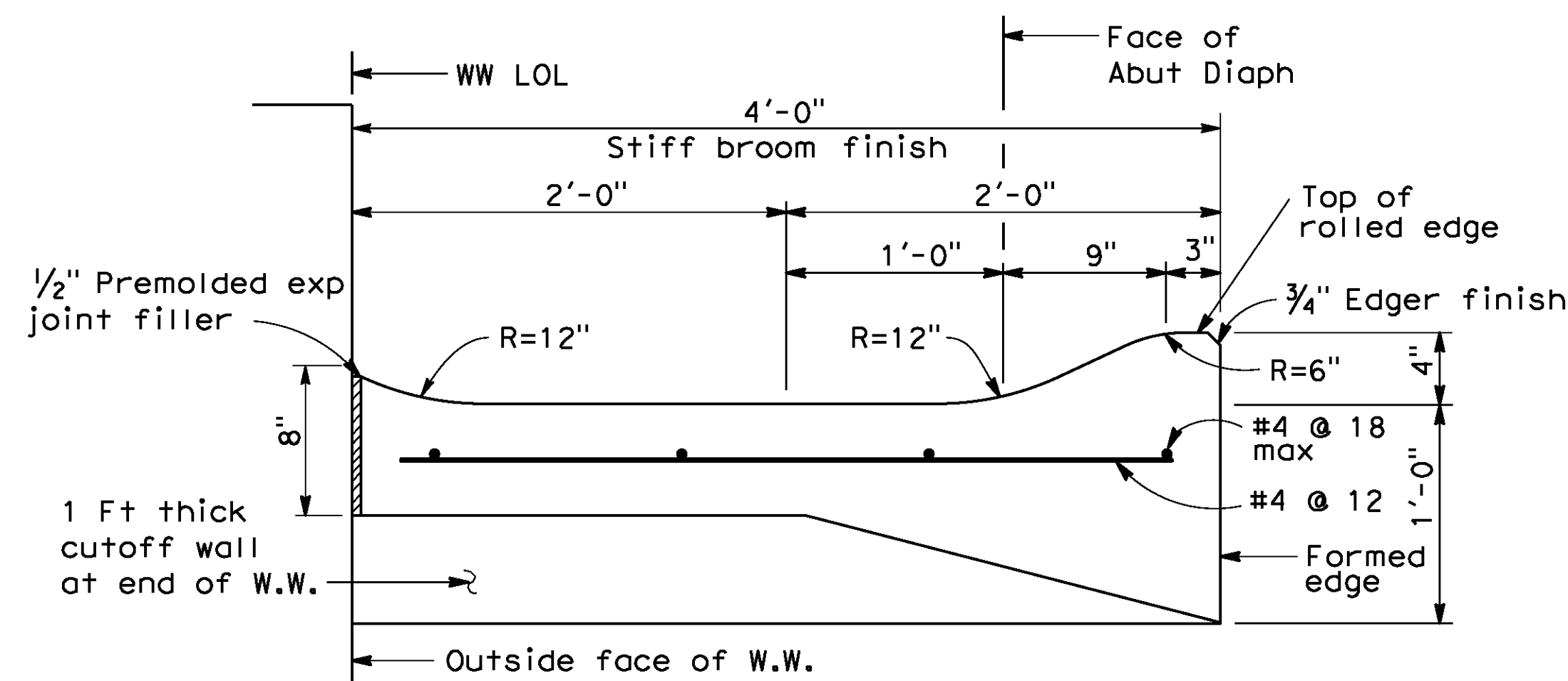
PICTORIAL VIEW OF TYPICAL INSTALLATION

* Or as directed by the Engineer to provide uniform spacing
 Note: For actual limits of slope paving on this project, see sketch below.

TYPICAL SECTION - CONCRETE PAVING

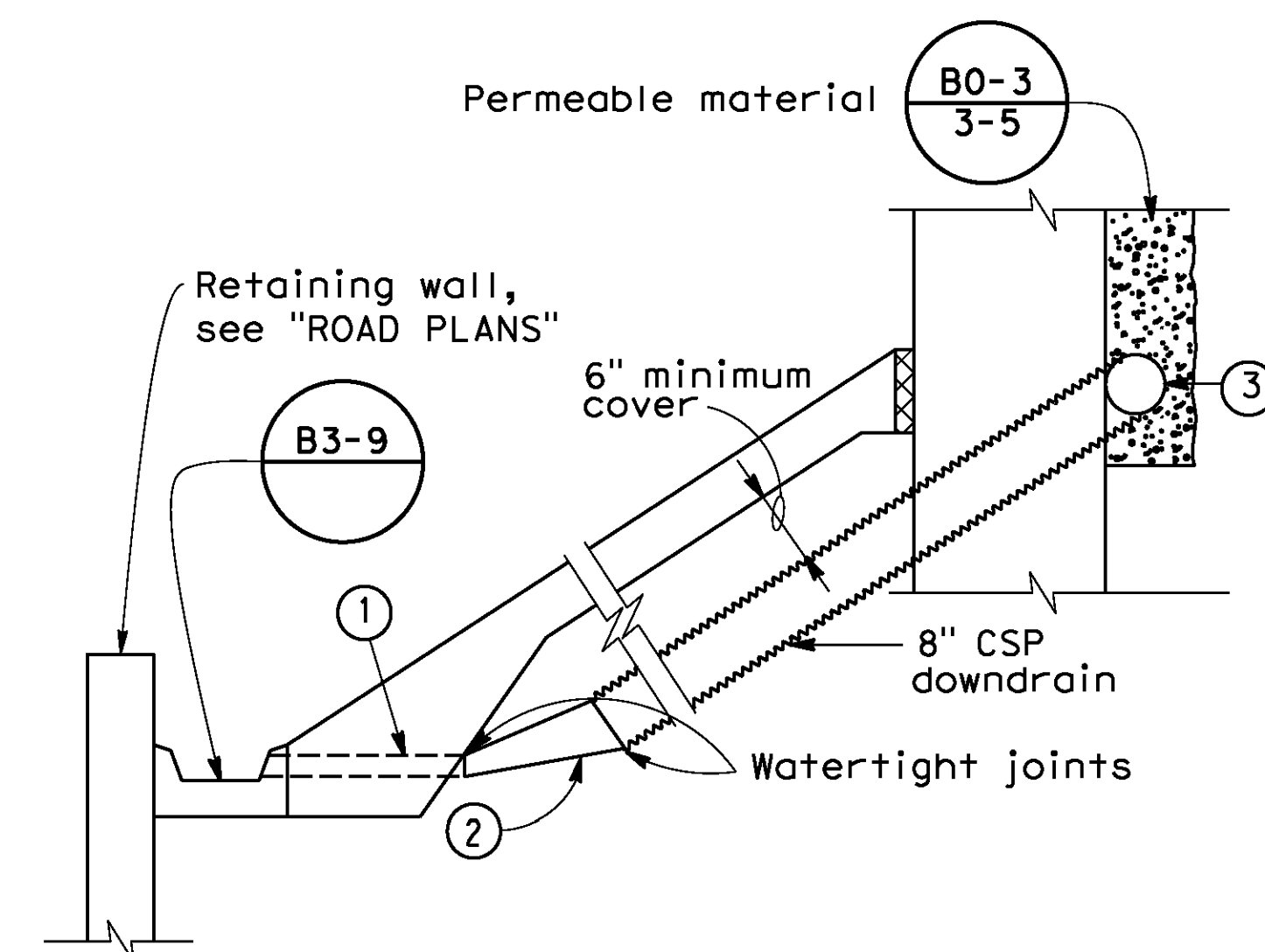


SECTION A-A

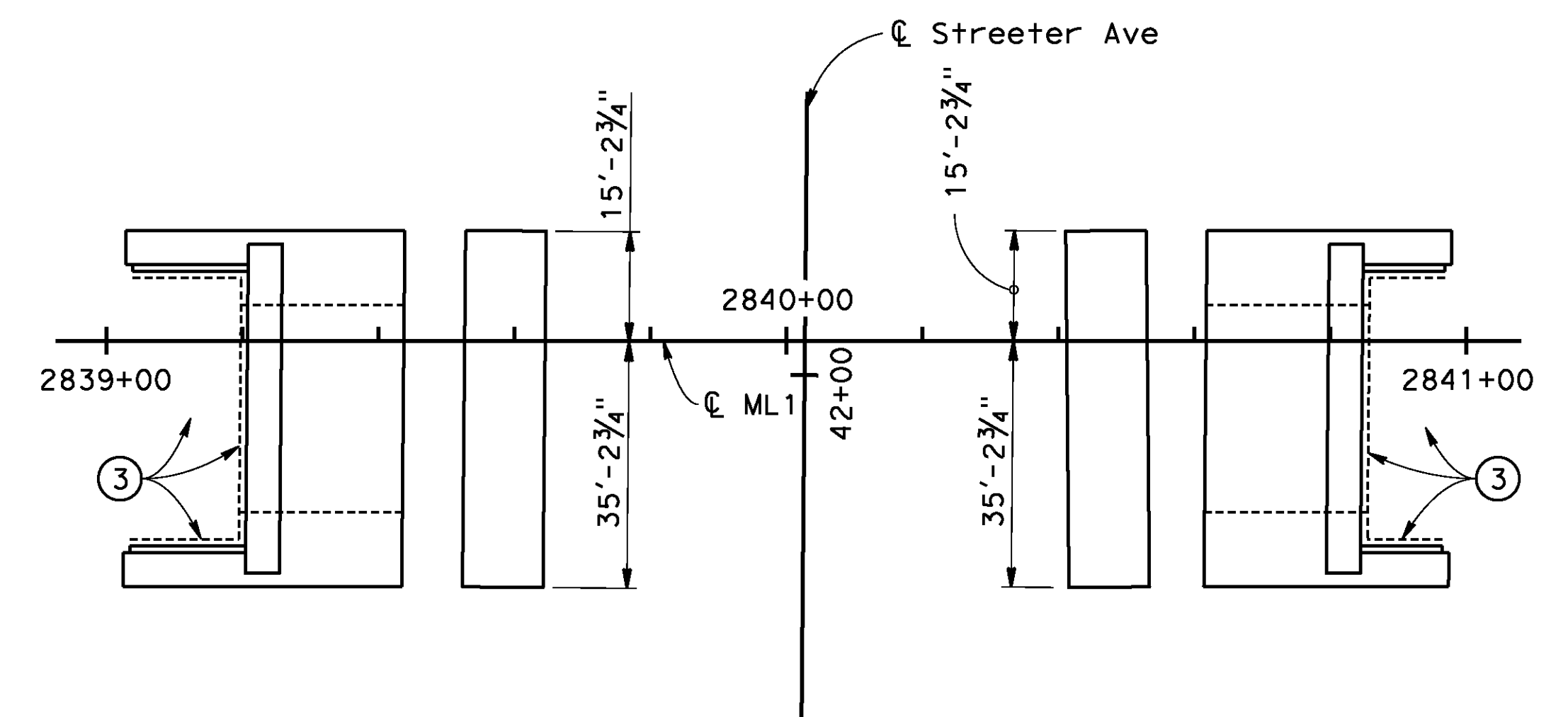


SECTION B-B

* This dimension becomes zero when edge of deck is at outside face of W.W.



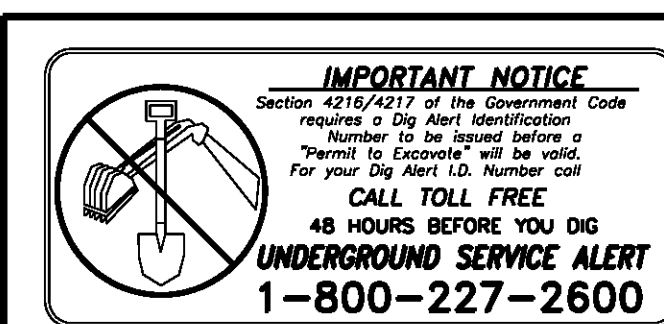
DRAINAGE DETAILS



LIMITS OF SLOPE PAVING & DRAINAGE LAYOUT

- Conduit:
0.064" galv corrugated steel or 0.109" smooth galv steel
- Taper:
0.064" galv corrugated steel or
0.109" smooth galv steel
- 8" perforated steel pipe (0.064" thick) underdrain behind abutment. Connect to down drain as shown on limits of Slope Paving & Drainage layout.

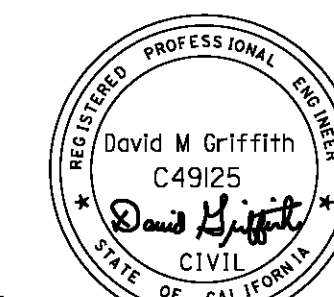
AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME JOSE CORONA



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DATE 8-7-12



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CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SLOPE PAVING - FULL SLOPE

HORIZ. SCALE: VERT. SCALE: N/A

BR. NO 56C0599

R-4180
 SHEET 177 OF 191
 FILE NO.

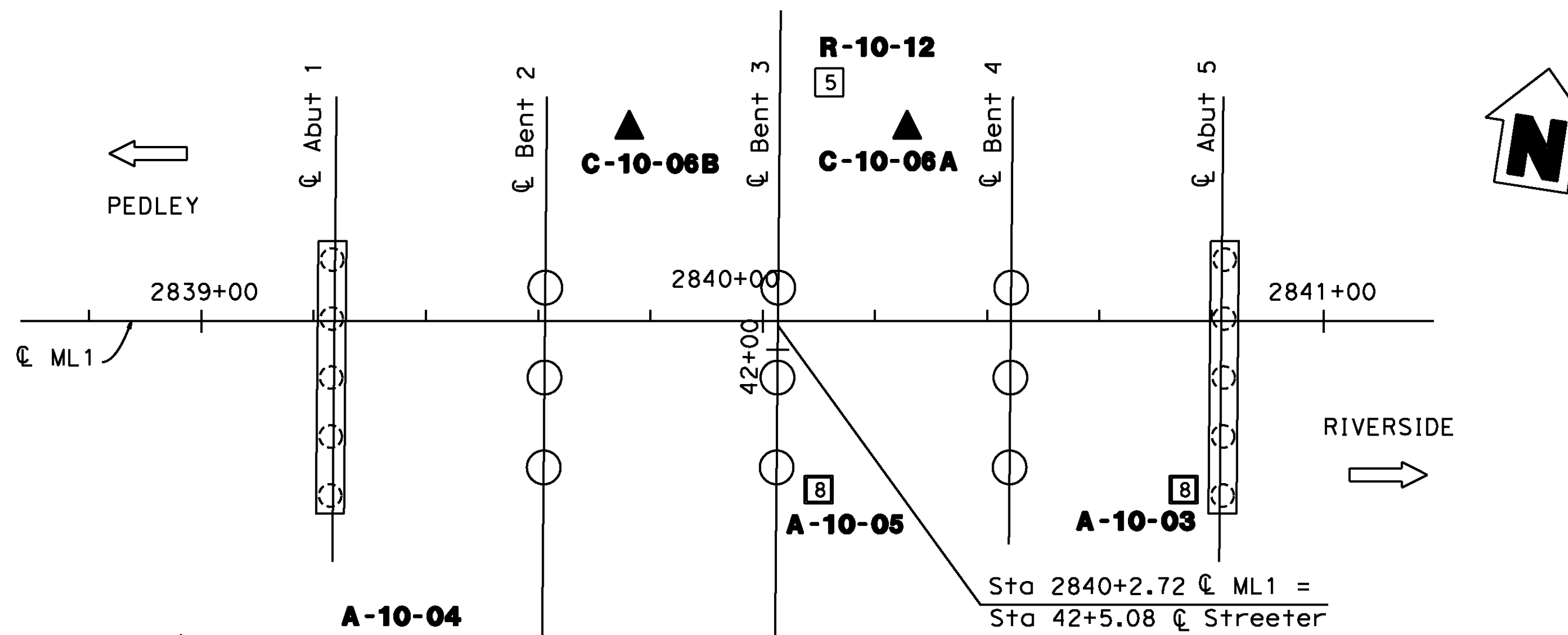
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DATE: 8/9/2012
 TIME: 7:02:10 AM

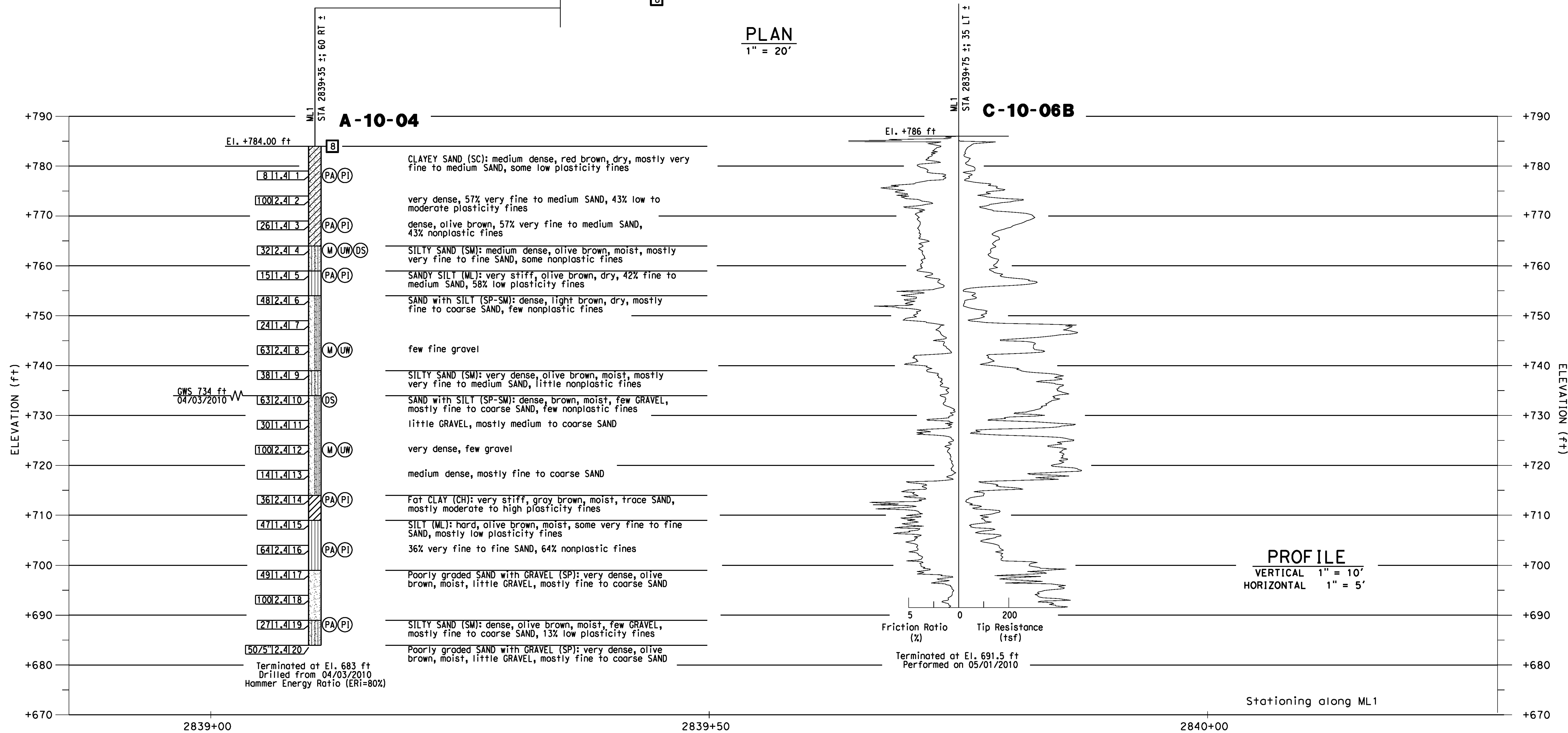
User: unfitted
 106630a-u-slpp01.dgn

BENCHMARK

City of Riverside Benchmark H5-F3
 Railroad spike in power pole, 1 foot
 above ground.
 Northwest of the intersection of
 Streeter Avenue and the UPRR
 Elevation 788.643 (NAVD 1929)



PLAN
 1" = 20'



PROFILE
 VERTICAL 1" = 10'
 HORIZONTAL 1" = 5'

AS BUILT
 (AND CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME JOSE CORONA

IMPORTANT NOTICE
 Section 43164217 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be issued. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

Earth Mechanics, Inc.
 Geotechnical and Earthquake Engineering
 Earth Mechanics, Inc
 17800 Newhope Street, Suite B
 Fountain Valley, CA 92708
 DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LOG OF TEST BORINGS (1 OF 5)

R-4180
 SHEET 178 OF 191
 FILE NO.

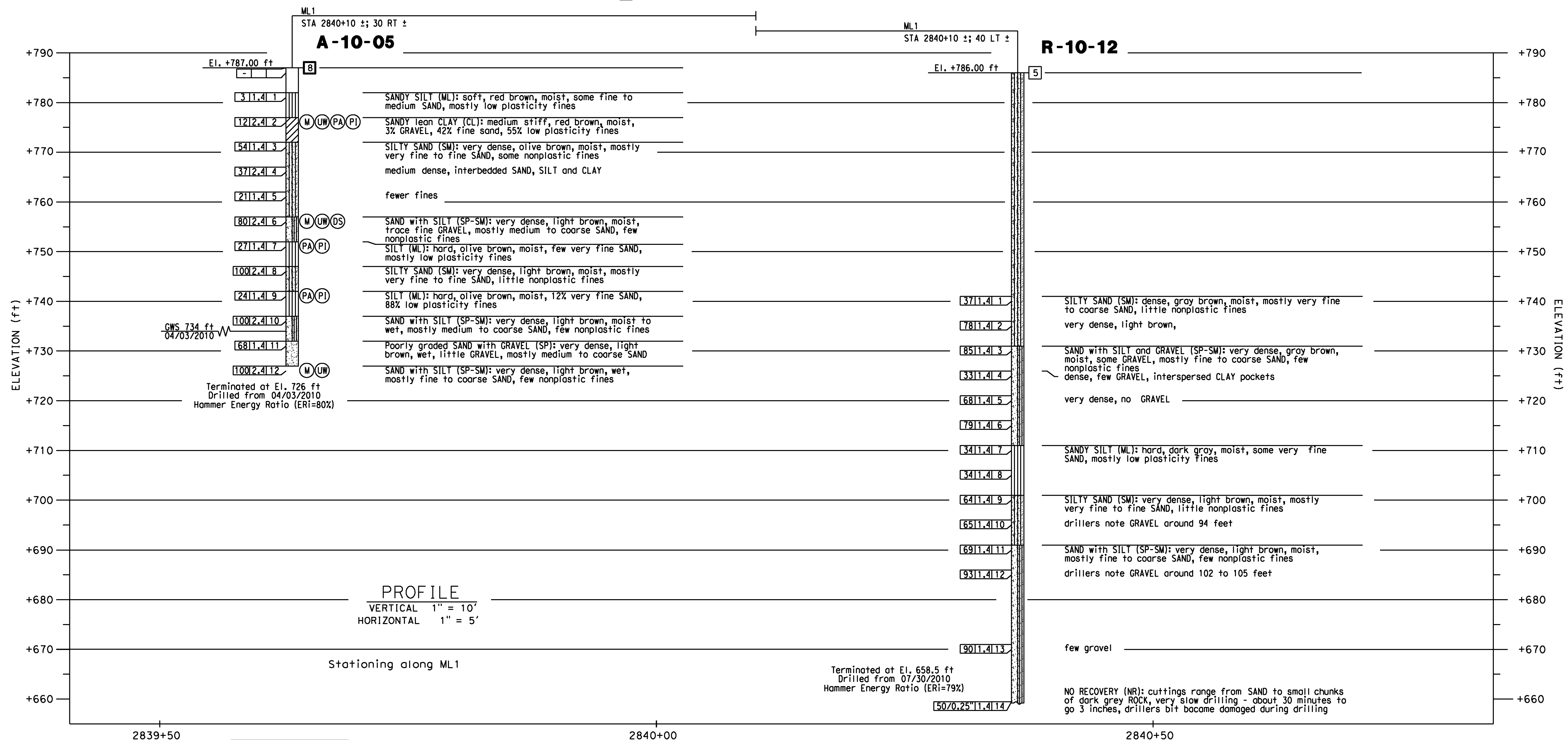
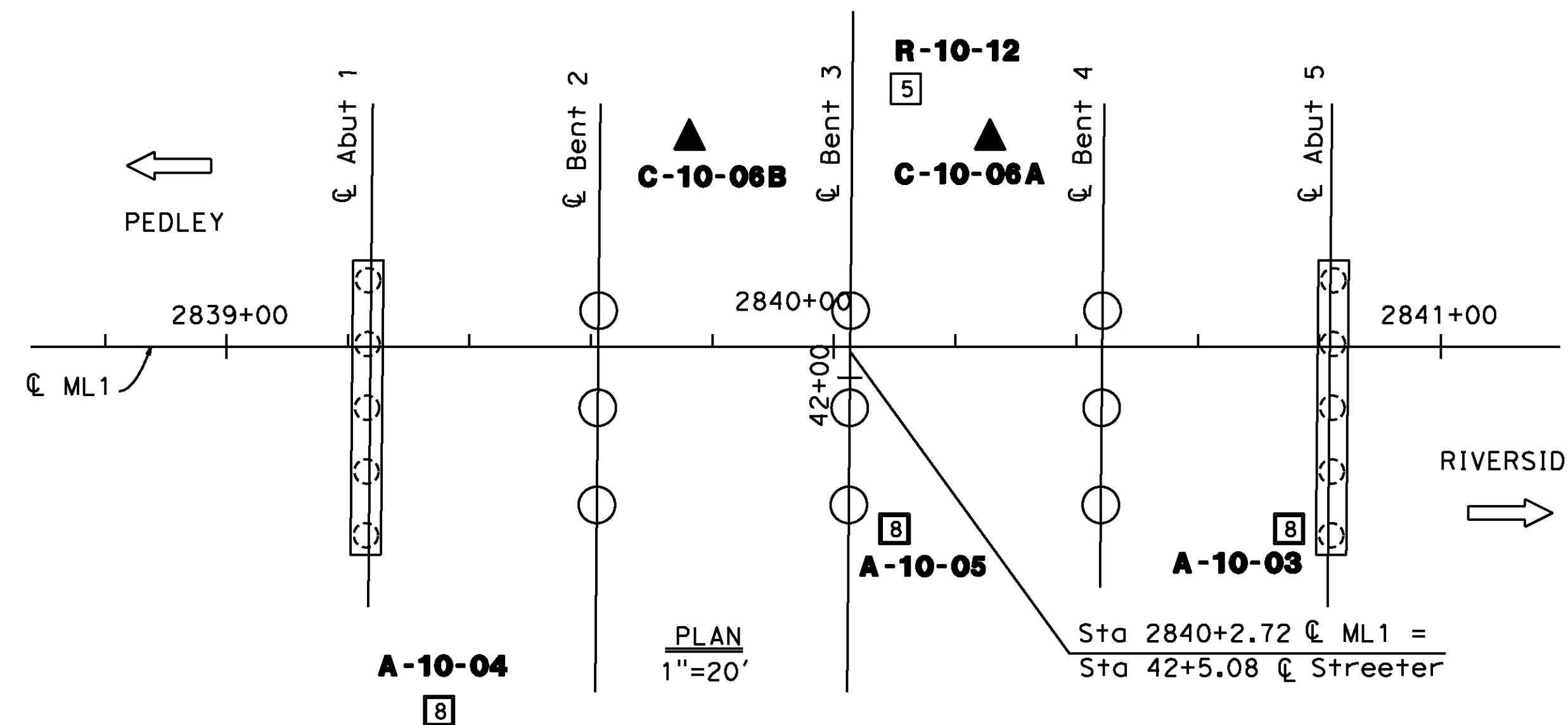
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DATE: 8/8/2012
 TIME: 6:47:19 PM

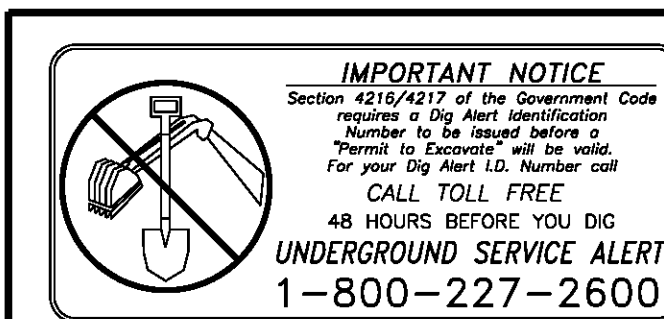
User: pboctor
 Streeter-1.dgn

BENCHMARK

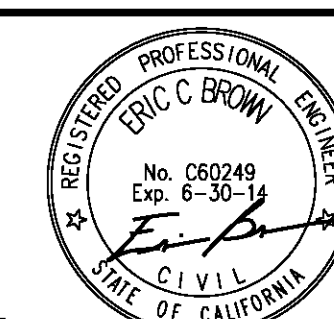
City of Riverside Benchmark H5-F3
 Railroad spike in power pole, 1 foot
 above ground.
 Northwest of the intersection of
 Streeter Avenue and the UPRR
 Elevation 788.643 (NAVD 1929)



AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME JOSE CORDONA



Earth Mechanics, Inc.
 Geotechnical and Earthquake Engineering
 Earth Mechanics, Inc
 17800 Newhope Street, Suite B
 Fountain Valley, CA 92708
 DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT		R-4180
STREETER AVENUE UNDERPASS		
LOG OF TEST BORINGS (2 OF 5)		SHEET 179 OF 191
DESIGNED BY <u>FP</u> DRAWN BY <u>FP</u> CHECKED BY <u>RG</u>		FILE NO.

HORIZ. SCALE: 1"=20' VERT. SCALE: N/A

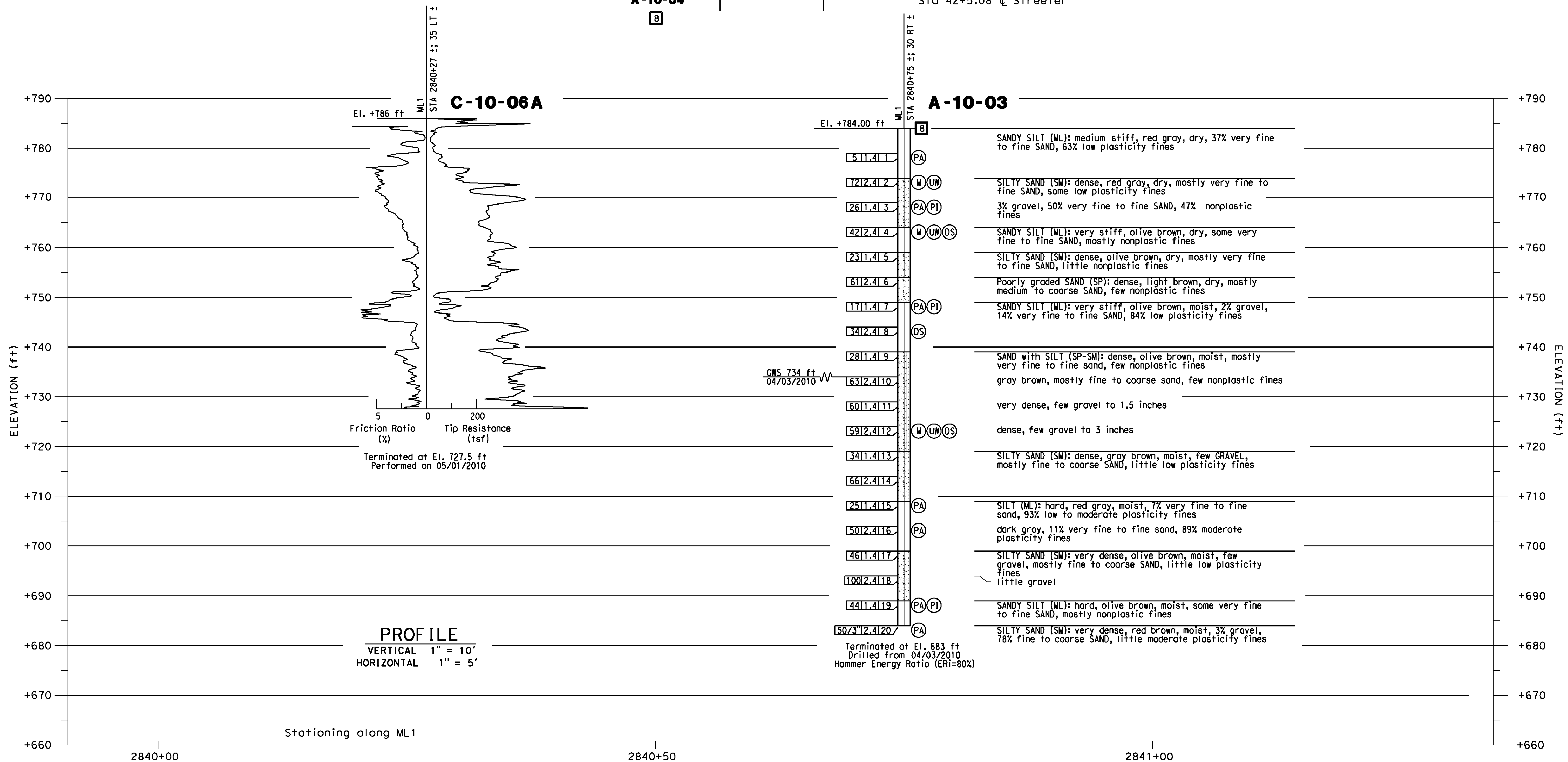
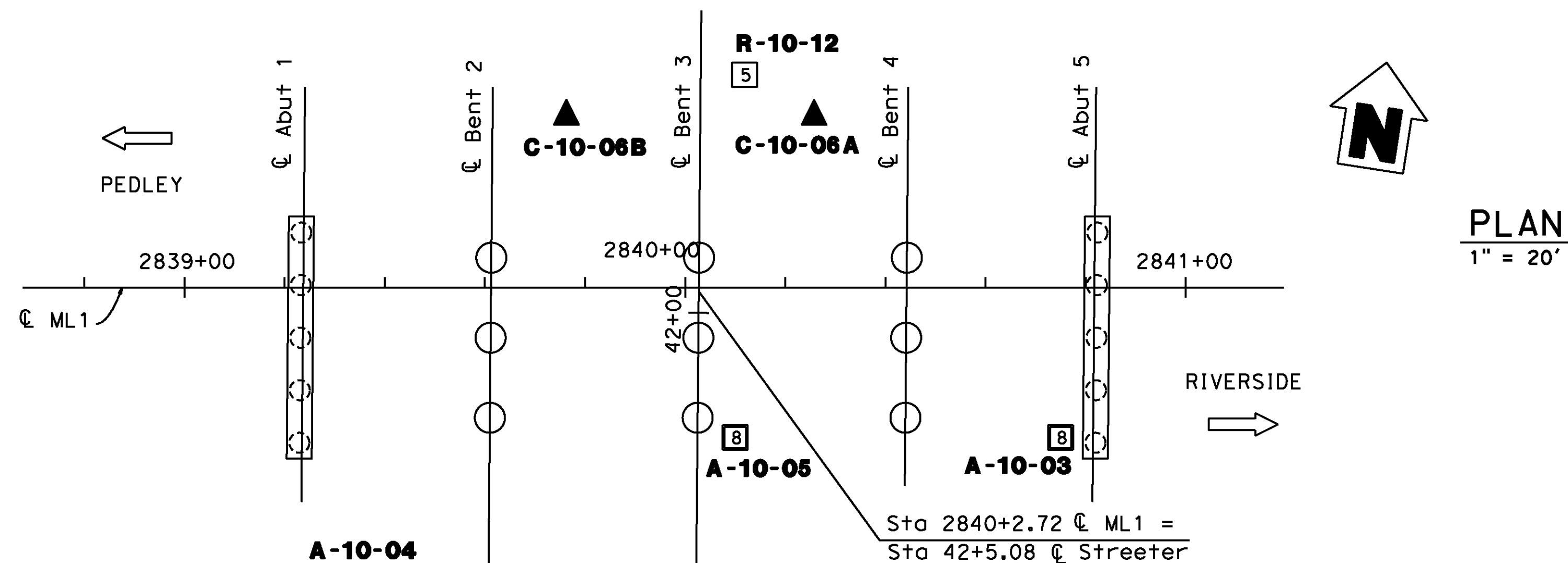
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DATE: 8/8/2012
 TIME: 6:47:40 PM

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 Streeter-2.dgn

BENCHMARK

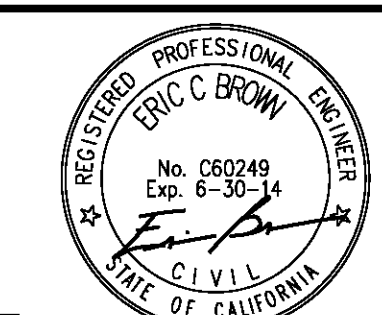
City of Riverside Benchmark H5-F3
 Railroad spike in power pole, 1 foot
 above ground.
 Northwest of the intersection of
 Streeter Avenue and the UPRR
 Elevation 788.643 (NAVD 1929)



AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME JOSE CORONA

IMPORTANT NOTICE
 Section 43164.013 of the Government Code requires a Dig Alert identification number to be placed before a "Permit to Excavate" will be issued. For your Dig Alert ID, Number call CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

Earth Mechanics, Inc.
 Geotechnical and Earthquake Engineering
 Earth Mechanics, Inc
 17800 Newhope Street, Suite B
 Fountain Valley, CA 92708
 DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
 PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LOG OF TEST BORINGS (3 OF 5)
 R-4180
 SHEET 180 OF 191
 FILE NO. _____

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DATE: 8/8/2012
 TIME: 6:47:58 PM

User: pboctor
 Streeter-3.dgn

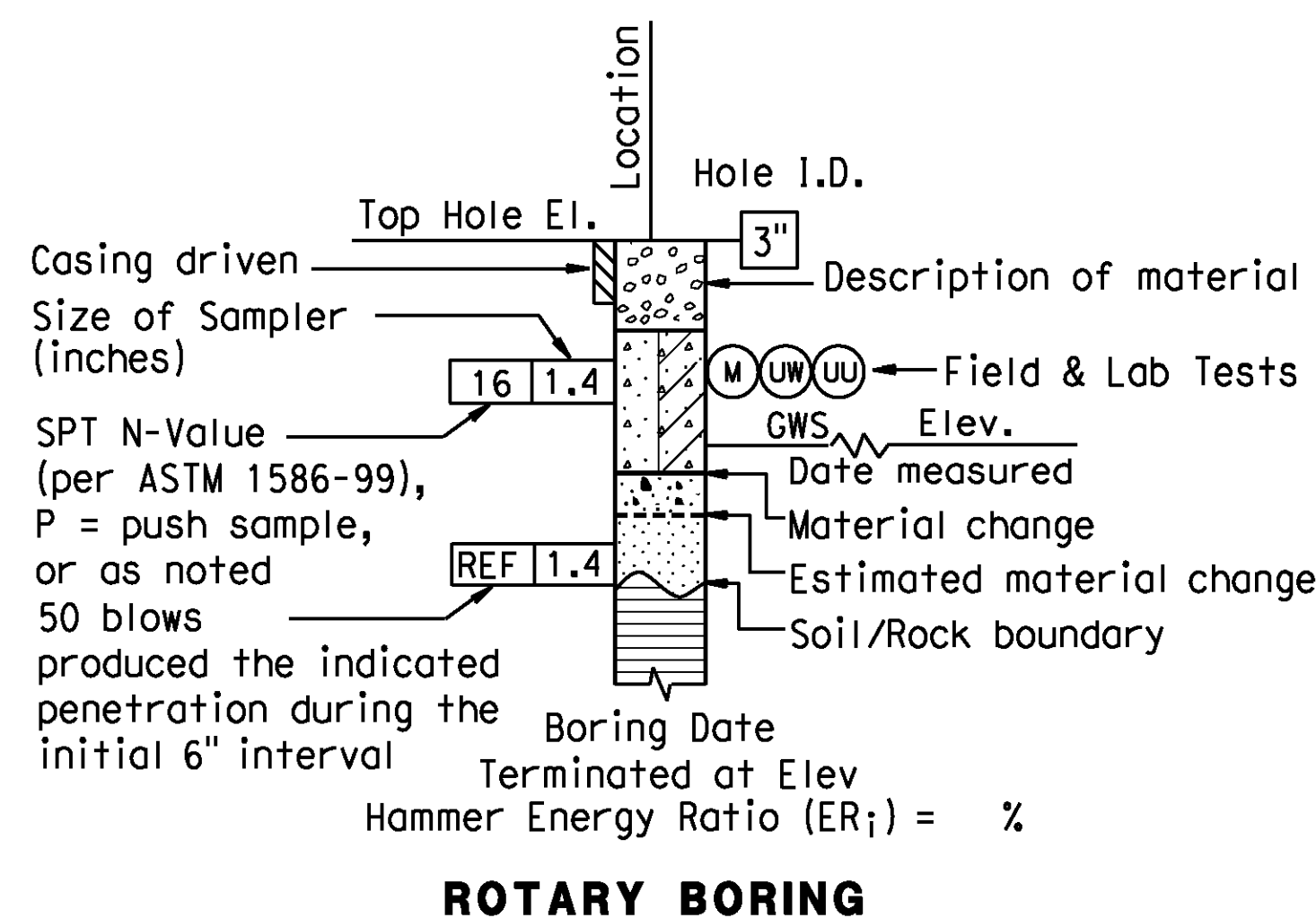
CEMENTATION	
Description	Criteria
Weak	Crumbles or breaks with handling or little finger pressure.
Moderate	Crumbles or breaks with considerable finger pressure.
Strong	Will not crumble or break with finger pressure.

CONSISTENCY OF COHESIVE SOILS				
Description	Unconfined Compressive Strength (tsf)	Pocket Penetrometer Measurement (tsf)	Torvane Measurement (tsf)	Field Approximation
Very Soft	< 0.25	< 0.25	< 0.12	Easily penetrated several inches by fist
Soft	0.25 to 0.50	0.25 to 0.50	0.12 to 0.25	Easily penetrated several inches by thumb
Medium Stiff	0.50 to 1.0	0.50 to 1.0	0.25 to 0.50	Penetrated several inches by thumb with moderate effort
Stiff	1 to 2	1 to 2	0.50 to 1.0	Readily indented by thumb but penetrated only with great effort
Very Stiff	2 to 4	2 to 4	1.0 to 2.0	Readily indented by thumbnail
Hard	> 4.0	> 4.0	> 2.0	Indented by thumbnail with difficulty

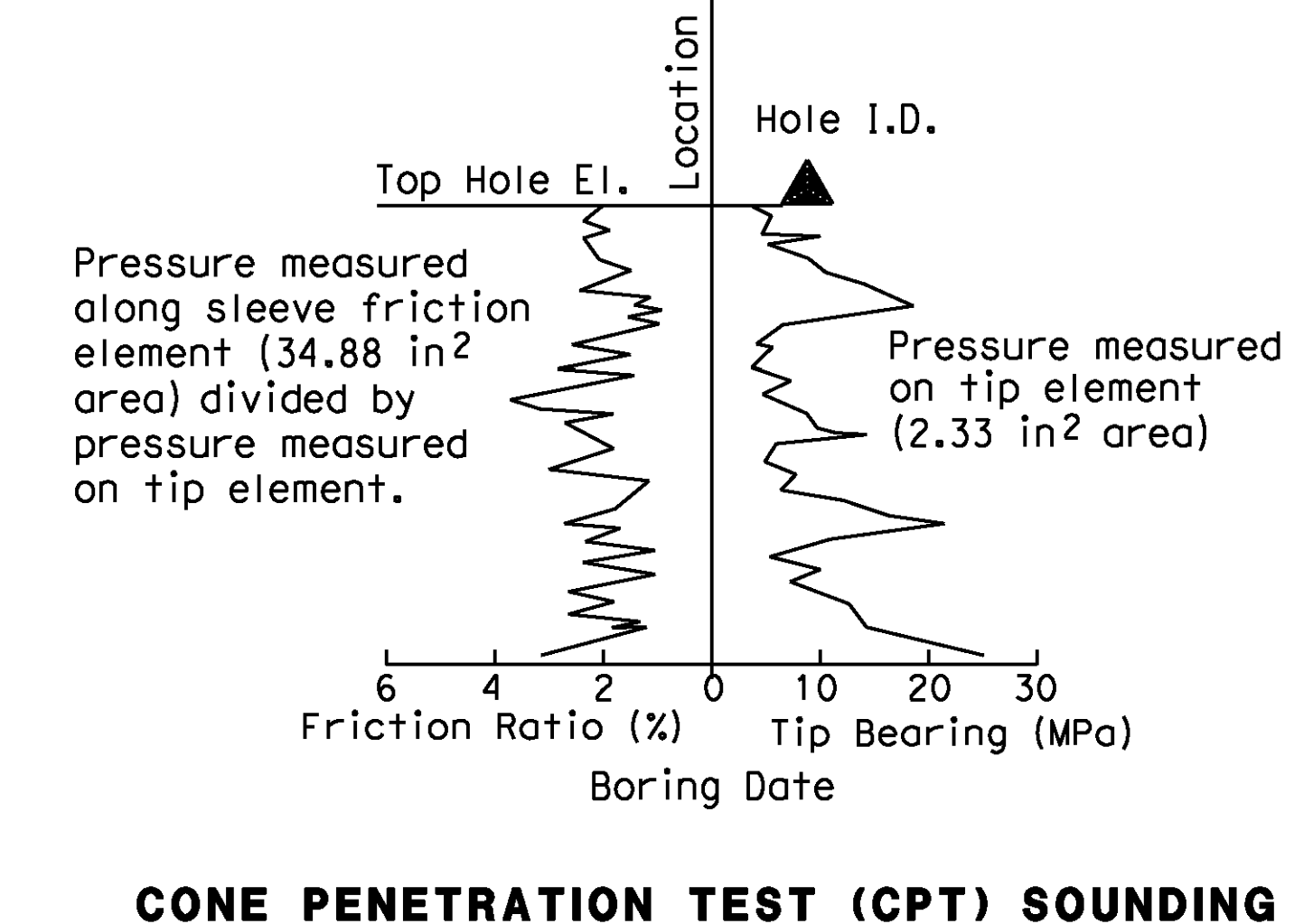
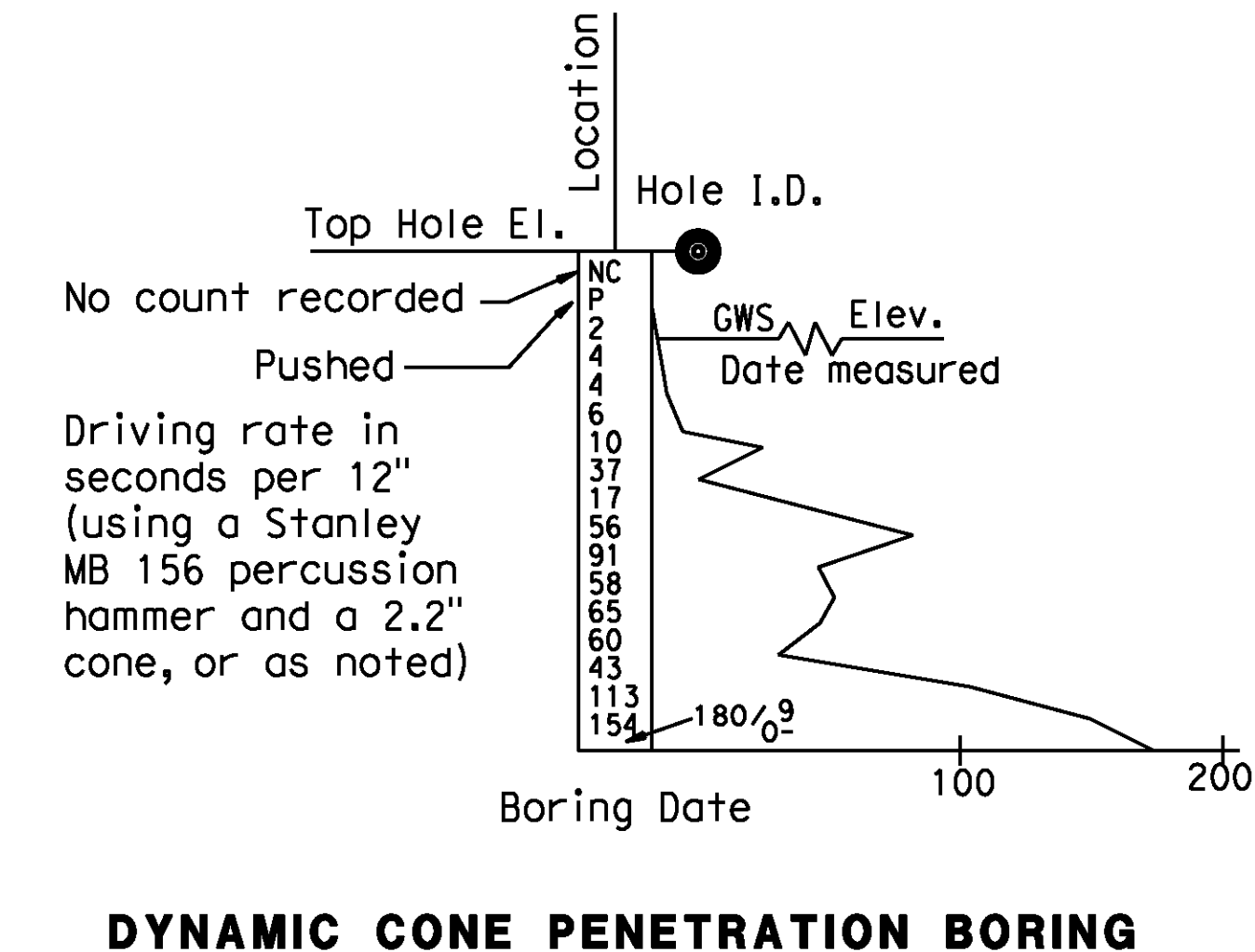
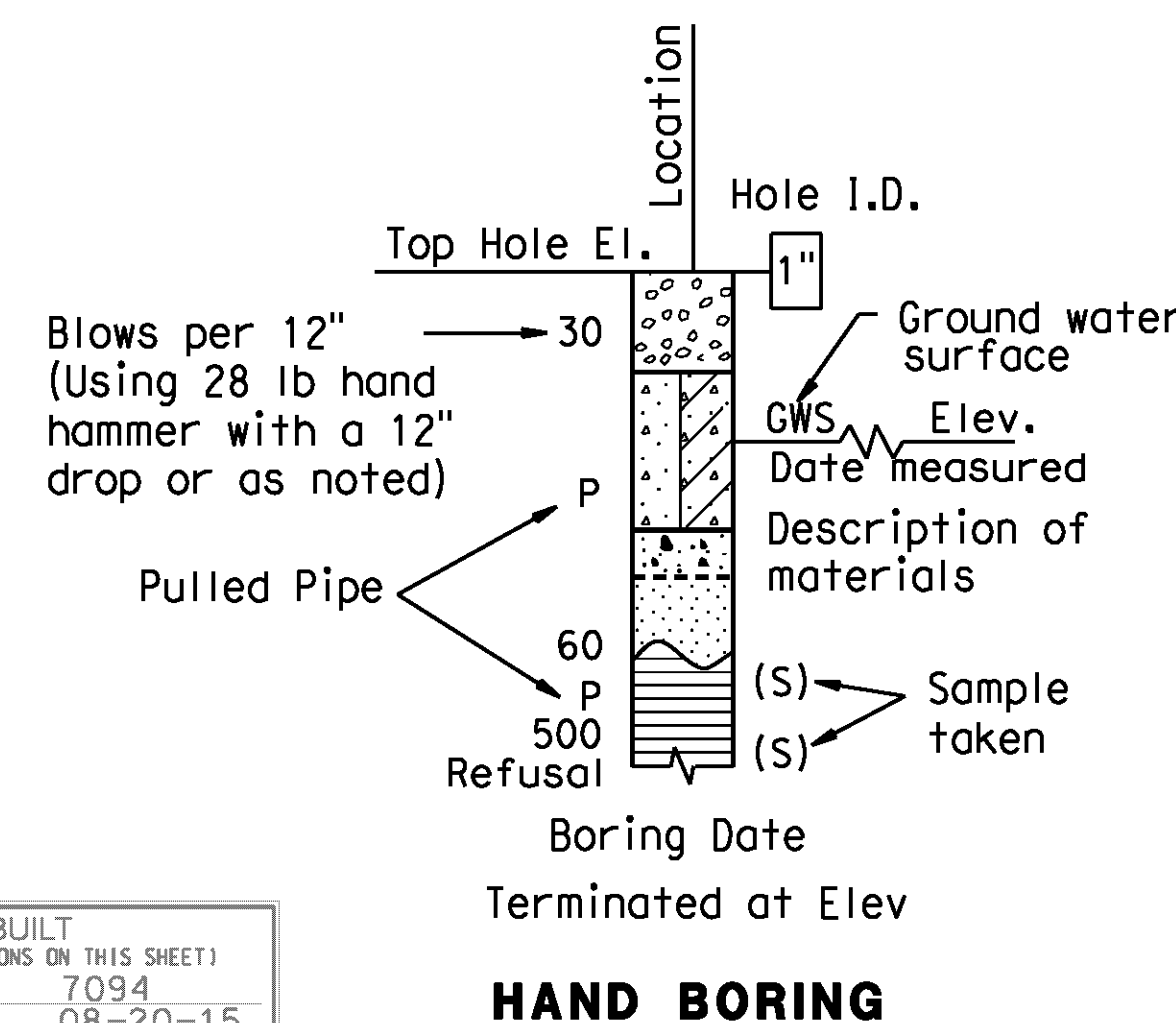
BOREHOLE IDENTIFICATION		
Symbol	Hole Type	Description
	A	Auger Boring
	R	Rotary drilled boring
	P	Rotary percussion boring (air)
	R	Rotary drilled diamond core
	HD	Hand driven (1-inch soil tube)
	HA	Hand Auger
	D	Dynamic Cone Penetration Boring
	CPT	Cone Penetration Test (ASTM D 5778-95)
	O	Other

Note: Size in inches.

PLASTICITY OF FINE-GRAINED SOILS	
Description	Criteria
Nonplastic	A 1/8-inch thread cannot be rolled at any water content.
Low	The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit.
Medium	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit.
High	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit.



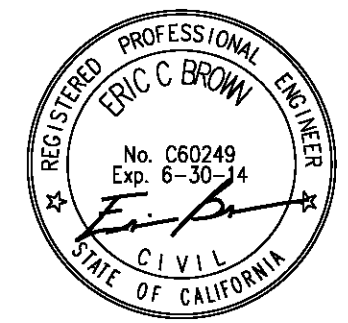
AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA



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IMPORTANT NOTICE
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Earth Mechanics, Inc.
Geotechnical and Earthquake Engineering
Earth Mechanics, Inc
17800 Newhope Street, Suite B
Fountain Valley, CA 92708
DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

DESIGNED BY FP DRAWN BY FP CHECKED BY RG

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LOG OF TEST BORINGS (4 OF 5)
HORIZ. SCALE: N/A VERT. SCALE: N/A

R-4180
SHEET 181 OF 191
FILE NO.

GROUP SYMBOLS AND NAMES			
Graphic/Symbol	Group Names	Graphic/Symbol	Group Names
	GW Well-graded GRAVEL Well-graded GRAVEL with SAND		CL Lean CLAY Lean CLAY with SAND Lean CLAY with GRAVEL SANDY lean CLAY SANDY lean CLAY with GRAVEL GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND
	GP Poorly graded GRAVEL Poorly graded GRAVEL with SAND		
	GW-GM Well-graded GRAVEL with SILT Well-graded GRAVEL with SILT and SAND		
	GW-GC Well-graded GRAVEL with CLAY (or SILTY CLAY) Well-graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)		
GP-GM Poorly graded GRAVEL with SILT Poorly graded GRAVEL with SILT and SAND		OL ORGANIC SILT ORGANIC SILT with SAND ORGANIC SILT with GRAVEL SANDY ORGANIC SILT SANDY ORGANIC SILT with GRAVEL GRAVELLY ORGANIC SILT GRAVELLY ORGANIC SILT with SAND	
GP-GC Poorly graded GRAVEL with CLAY (or SILTY CLAY) Poorly graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)			CH Fat CLAY Fat CLAY with SAND Fat CLAY with GRAVEL SANDY fat CLAY SANDY fat CLAY with GRAVEL GRAVELLY fat CLAY GRAVELLY fat CLAY with SAND
GM SILTY GRAVEL SILTY GRAVEL with SAND			MH Elastic SILT Elastic SILT with SAND Elastic SILT with GRAVEL SANDY elastic SILT SANDY elastic SILT with GRAVEL GRAVELLY elastic SILT GRAVELLY elastic SILT with SAND
GC CLAYEY GRAVEL CLAYEY GRAVEL with SAND			OH ORGANIC fat CLAY ORGANIC fat CLAY with SAND ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY SANDY ORGANIC fat CLAY with GRAVEL GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND
GC-GM SILTY, CLAYEY GRAVEL SILTY, CLAYEY GRAVEL with SAND			OH ORGANIC elastic SILT ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL SANDY ORGANIC elastic SILT SANDY ORGANIC elastic SILT with GRAVEL GRAVELLY ORGANIC elastic SILT GRAVELLY ORGANIC elastic SILT with SAND
SW Well-graded SAND Well-graded SAND with GRAVEL			OL/OH ORGANIC SOIL ORGANIC SOIL with SAND ORGANIC SOIL with GRAVEL SANDY ORGANIC SOIL SANDY ORGANIC SOIL with GRAVEL GRAVELLY ORGANIC SOIL GRAVELLY ORGANIC SOIL with SAND
SP Poorly graded SAND Poorly graded SAND with GRAVEL			PT PEAT
SW-SM Well-graded SAND with SILT Well-graded SAND with SILT and GRAVEL			COBBLES COBBLES and BOULDERS BOULDERS
SW-SC Well-graded SAND with CLAY (or SILTY CLAY) Well-graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)			
SP-SM Poorly graded SAND with SILT Poorly graded SAND with SILT and GRAVEL			
SP-SC Poorly graded SAND with CLAY (or SILTY CLAY) Poorly graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)			
SM SILTY SAND SILTY SAND with GRAVEL			
SC CLAYEY SAND CLAYEY SAND with GRAVEL			
SC-SM SILTY, CLAYEY SAND SILTY, CLAYEY SAND with GRAVEL			

FIELD AND LABORATORY TESTING	
(C)	Consolidation (ASTM D 2435)
(CL)	Collapse Potential (ASTM D 5333)
(CP)	Compaction Curve (CTM 216)
(CR)	Corrosivity Testing (CTM 643, CTM 422, CTM 417)
(CU)	Consolidated Undrained Triaxial (ASTM D 4767)
(DS)	Direct Shear (ASTM D 3080)
(EI)	Expansion Index (ASTM D 4829)
(M)	Moisture Content (ASTM D 2216)
(OC)	Organic Content-% (ASTM D 2974)
(P)	Permeability (CTM 220)
(PA)	Particle Size Analysis (ASTM D 422)
(PI)	Plasticity Index (AASHTO T 90) Liquid Limit (AASHTO T 89)
(PL)	Point Load Index (ASTM D 5731)
(PM)	Pressure Meter
(PP)	Pocket Penetrometer
(R)	R-Value (CTM 301)
(SE)	Sand Equivalent (CTM 217)
(SG)	Specific Gravity (AASHTO T 100)
(SL)	Shrinkage Limit (ASTM D 427)
(SW)	Swell Potential (ASTM D 4546)
(TV)	Pocket Torvane
(UC)	Unconfined Compression-Soil (ASTM D 2166) Unconfined Compression-Rock (ASTM D 2938)
(UU)	Unconsolidated Undrained Triaxial (ASTM D 2850)
(UW)	Unit Weight (ASTM D 4767)
(VS)	Vane Shear (AASHTO T 223)

APPARENT DENSITY OF COHESIONLESS SOILS	
Description	SPT N ₆₀ (Blows / 12 inches)
Very loose	0 - 4
Loose	5 - 10
Medium Dense	11 - 30
Dense	31 - 50
Very Dense	> 50

MOISTURE	
Description	Criteria
Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, usually soil is below water table

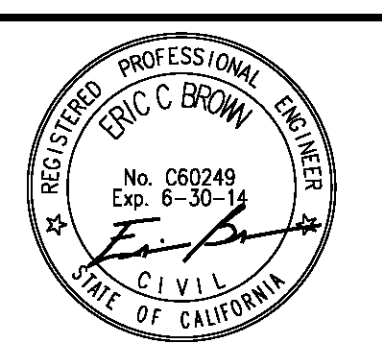
PERCENT OR PROPORTION OF SOILS	
Description	Criteria
Trace	Particles are present but estimated to be less than 5%
Few	5 to 10%
Little	15 to 25%
Some	30 to 45%
Mostly	50 to 100%

PARTICLE SIZE		
Description	Size	
Boulder	> 12"	
Cobble	3" to 12"	
Gravel	Coarse	3/4" to 3"
	Fine	No. 4 to 3/4"
Sand	Coarse	No. 10 to No. 4
	Medium	No. 40 to No. 10
	Fine	No. 200 to No. 40

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME JOSE CORONA

IMPORTANT NOTICE
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Earth Mechanics, Inc.
Geotechnical and Earthquake Engineering
Earth Mechanics, Inc
17800 Newhope Street, Suite B
Fountain Valley, CA 92708
DATE 8-7-12



MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
LOG OF TEST BORINGS (5 OF 5)
HORIZ. SCALE: N/A VERT. SCALE: N/A
R-4180
SHEET 182 OF 191
FILE NO.

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UNCHECKED DETAILS

PRIMARY CONTROL PT# G2073
FOUND 1" PIPE NO ID
INTERSECTION OF JURUPA
AND TUCSON

PRIMARY CONTROL PT# G2074
FOUND 3/4" IRON PIPE
WITH NAIL AND TAG
INTERSECTION OF HILLSIDE
AND ANTIOCH

AERIAL CONTROL PT# G12
SET 5/8" REBAR WITH
ALUMINUM CAP
STAMPED "WCI-12"
16' S.W. OF SOUTHWEST TRACK

PRIMARY CONTROL PT# 178
FOUND BRASS NAIL WITH NO ID
INTERSECTION OF HILLSIDE
AND DEWEY AVE.

Delta=45°35'03.84"
Dc=3°04'15.17"
T(1)=987.32' T(2)=973.58'
L=1094.59'
R=1866.00'
Ls=405.00'(1) Ls=375.00'(2)

PRIMARY CONTROL PT# G2072
FOUND 3/4" IRON PIPE NO ID
300' W. STREETER AVE.
ON MOUNTAIN VIEW

CENTERLINE MON. PT# 308
FOUND 1-1/2" IRON PIPE
AT INTERSECTION OF
STREETER AVE. AND
MOUNTAIN VIEW AVE.

PRIMARY CONTROL PT# H5-G3
FOUND SPIKE/NAIL WITH
TAG STAMPED "RIVERSIDE
CITY ENGR"

PROJECT CONTROL PT#
WCI 102
SET SPIKE/NAIL WITH
TAG STAMPED "WCI-102"
AT N.W. CORNER OF
LANTANA ST. AND
STREETER AVE.

PROJECT CONTROL PT# WCI 103
SET ALUMINUM CAP
STAMPED "WCI-103"

PROJECT CONTROL PT#
WCI 100
SET ALUMINUM CAP
STAMPED "WCI-100"
INTERSECTION OF DEWEY
AVE. AND RHONDA RD.

PROJECT CONTROL PT# WCI 200
SET 5/8" REBAR ALUMINUM TAG
STAMPED "WCI-200"

PROJECT CONTROL PT# WCI 104
SET SPIKE/NAIL WITH TAG
STAMPED "WCI-104"
AT N.W. CORNER OF
STREETER AVE. AND BEATTY DR. WEST

AERIAL CONTROL PT# G14
SET SPIKE/NAIL WITH TAG
STAMPED "WCI AT14"

CENTERLINE MON.
PT# 310
FOUND 1/2" REBAR
AT INTERSECTION OF
STREETER AVE.
AND DEWEY AVE.

CENTERLINE MON.
PT# 309
FOUND 1-1/4"
IRON PIPE AT
INTERSECTION
OF STREETER AVE.
AND DEWEY AVE.

PRIMARY CONTROL PT# G0179
FOUND TACK AND TAG
INTERSECTION OF MERRILL AVE.
AND CAPISTRANO WAY

PROJECT CONTROL
PT# WCI 101
SET ALUMINUM CAP
STAMPED "WCI-101"
9' N. OF EDGE OF
PAVEMENT ON DEWEY
AVE.

AERIAL CONTROL PT# G17
SET SPIKE/NAIL WITH TAG
STAMPED "WCI AT17"

CONTROL POINTS				
PT NO.	NORTHING	EASTING	ELEVATION	TYPE
H5-G3	2295235.30(M)	6207362.29(M)	787.25	CITY CP
G2072	2295161.67	6207048.54	787.49(M)	CITY CP
G2073	2295875.94	6204867.36	774.11(M)	CITY CP
G2074	2294996.59	6204720.73	775.67(M)	CITY CP
G0179	2293672.50	6208382.52	785.10	CITY CP
G2086	2292205.79	6205003.30	773.29(M)	CITY CP
G12	2294530.39	6205455.64	780.41	WCI AT
G13	2294655.75	6206759.34	784.83	WCI AT
G14	2293028.78	6206411.20	778.83	WCI AT
G15	2293943.83	6208655.51	782.99	WCI AT
G16	2294405.44	6210098.74	788.48	WCI AT
G17	2293050.27	6209936.03	795.22	WCI AT

CONTROL POINTS				
PT NO.	NORTHING	EASTING	ELEVATION	TYPE
WCI100	2293840.32	6206727.66	782.54	WCI CP
WCI101	2293856.69	6207860.74	785.51	WCI CP
WCI102	2294369.57	6207240.35	785.19	WCI CP
WCI103	2293915.37	6207324.17	787.23	WCI CP
WCI104	2293369.94	6207233.63	781.06	WCI CP
WCI200	2293819.36	6207159.07	784.12	WCI CP
178	2293867.85	6204638.96	781.71	-
308	2295161.05	6207298.00	787.39	CL MON
309	2293794.77	6207281.35	786.19	CL MON
310	2293838.75	6204638.96	787.16	CL MON

NOTES:

- (M) - INDICATES COORDINATE MEASURED BY WILSON AND COMPANY
- COORDINATE SYSTEM: CITY OF RIVERSIDE CONTROL NETWORK BASED ON NAD 83, NGVD 29.

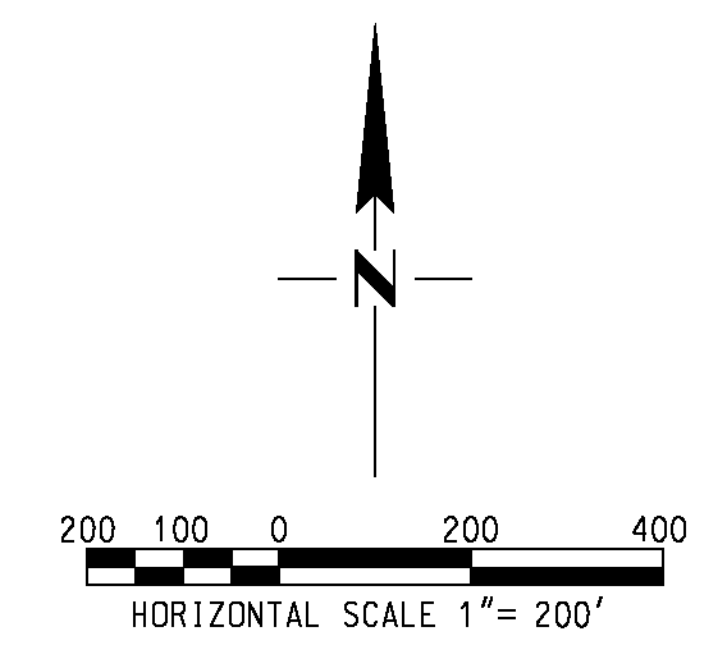
LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE
L1	S00°41'50"W	516.00'	L16	N00°46'10"E	248.00'	L31	N00°41'35"E	470.61'
L2	S00°41'50"W	310.60'	L17	N89°52'38"W	144.29'	L32	N89°58'15"W	260.00'
L3	S00°41'50"W	250.72'	L18	N89°52'38"W	399.06'	L33	N89°58'15"W	274.01'
L4	S00°41'50"W	13.10'	L19	N89°57'20"W	497.10'	L34	N00°41'35"E	470.65'
L5	S00°41'50"W	231.99'	L20	S89°16'47"E	119.76'	L35	S89°50'26"E	570.60'
L6	S00°41'50"W	43.95'	L21	S77°16'47"E	32.08'	L36	N00°40'10"E	163.00'
L7	S00°41'50"W	470.71'	L22	S89°16'47"E	51.23'	L37	S89°50'00"E	532.00'
L8	S00°41'50"W	141.20'	L23	S89°16'47"E	262.00'	L38	N00°40'10"E	493.17'
L9	S00°41'50"W	124.80'	L24	S89°16'47"E	262.00'	L39	S89°49'15"E	266.00'
L10	S00°41'50"W	263.00'	L25	S89°16'47"E	131.40'	L40	S89°49'15"E	266.00'
L11	N89°51'50"W	534.03'	L26	N00°43'32"E	451.82'	L41	S89°49'15"E	570.91'
L12	S00°46'10"W	527.00'	L27	N00°43'13"E	461.54'	L42	N00°40'10"E	493.06'
L13	N89°51'50"W	260.01'	L28	N00°43'13"E	451.54'	L43	N00°40'10"E	218.11'
L14	N89°51'50"W	79.53'	L29	N89°58'55"W	274.04'	L44	N89°58'15"W	571.19'
L15	N89°51'50"W	80.92'	L30	N89°58'55"W	260.00'	L45	N89°58'15"W	571.49'

PI	RADIUS	LENGTH	CENTRAL ANGLE	CHORD BEARING	CHORD DISTANCE
C1	300.00'	57.52'	10°59'08"	S84°38'36"W	57.43'
C2	300.00'	57.52'	10°59'08"	S84°38'36"W	57.43'
C3	250.00'	61.90'	14°11'11"	N82°47'03"W	61.74'
C4	250.00'	61.90'	14°11'11"	N82°47'03"W	61.74'
C5	300.00'	62.83'	11°59'59"	S83°16'47"E	62.72'
C6	300.00'	62.83'	11°59'59"	S83°16'47"E	62.72'

PRIMARY CONTROL PT# G2086
FOUND 1" PIPE WITH NAIL NO ID
INTERSECTION OF EL CAJON AND PORTOLA

BENCHMARK:
CITY OF RIVERSIDE BENCHMARK H5-F3
RAILROAD SPIKE IN POWER POLE,
1 FOOT ABOVE GROUND,
NORTHWEST OF THE INTERSECTION OF
STREETER AVENUE AND THE UPRR
ELEVATION 788.643 (NGVD 1929)

BASIS OF BEARING:
THE BEARINGS SHOWN HEREON ARE
BASED ON THE LINE BETWEEN CITY OF
RIVERSIDE SURVEY CONTROL POINTS Q179
AND 2086 ON RECORD AT THE CITY OF
RIVERSIDE, BEING NORTH 66 DEGREES
32 MINUTES 14.4 SECONDS EAST,
A DISTANCE OF 3,683.80 FEET.
CITY OF RIVERSIDE CONTROL DATUM
WAS USED FOR THIS PROJECT.



AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

CONTROL POINT

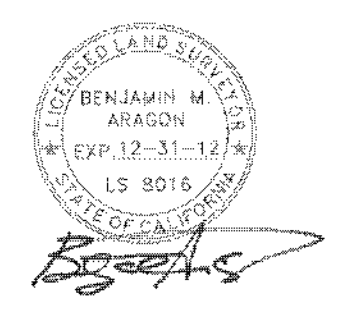
m:\p\p\08-100-139-00\road\sheet\sc01.dwg

DATE: 8/7/2012
TIME: 10:19:38 AM

IMPORTANT NOTICE
Section 4136.0217 of the Government Code
requires a Dig Alert identification
number to be placed before a
"permit to excavate" will be valid.
For your Dig Alert ID Number call
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600

WILSON & COMPANY
625 E. CARNEGIE DRIVE SUITE 100
SAN BERNARDINO, CA 92408
(909) 806-8000
www.wilsonco.com

DATE 8-7-12



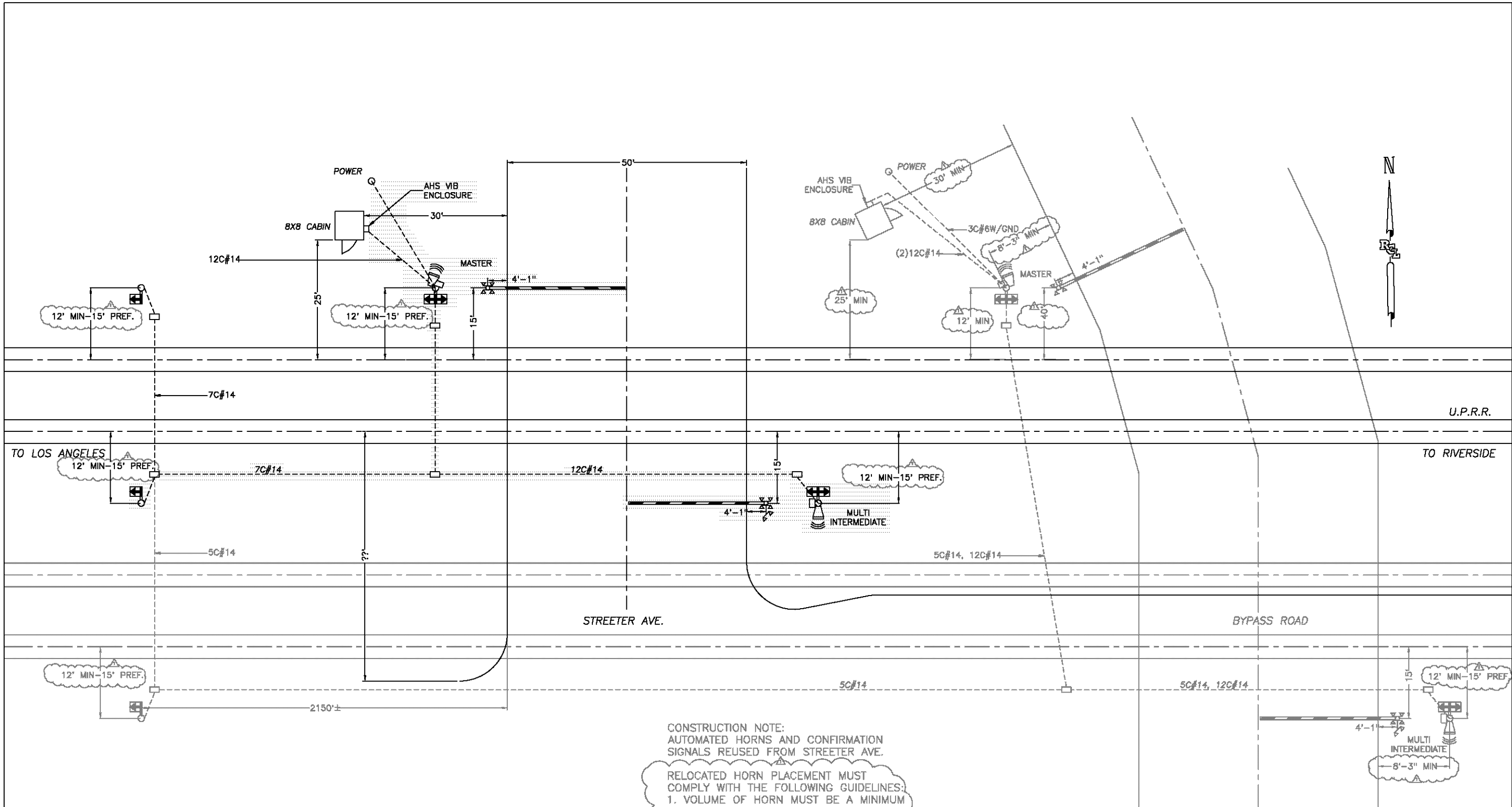
MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT
STREETER AVENUE UNDERPASS
SURVEY CONTROL SHEET SC-01

R-4180
SHEET 183 OF 191
FILE NO.

HORIZ. SCALE: AS SHOWN VERT. SCALE:

USER: s11ymchak SC001.dwg



CONSTRUCTION NOTE:
 AUTOMATED HORNS AND CONFIRMATION SIGNALS REUSED FROM STREETER AVE.

RELOCATED HORN PLACEMENT MUST COMPLY WITH THE FOLLOWING GUIDELINES:
 1. VOLUME OF HORN MUST BE A MINIMUM OF 100dB IN THE DIRECTION OF ONCOMING TRAFFIC MEASURED AT A DISTANCE OF 100' FROM THE CENTERLINE OF TRACK.
 2. LED "X" HORN CONFIRMATION SIGNS MUST HAVE AN UNOBSTRUCTED VIEW FROM THE TRAIN ENGINEER.

- = AUTOMATED HORN
- = DUAL CONFIRMATION SIGNAL
- = SINGLE CONFIRMATION SIGNAL

AS BUILT
 BID NO. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

IMPORTANT NOTICE
 Underground Service Alert
 48 HOURS BEFORE YOU DIG
 CALL TOLL FREE 1-800-227-2600

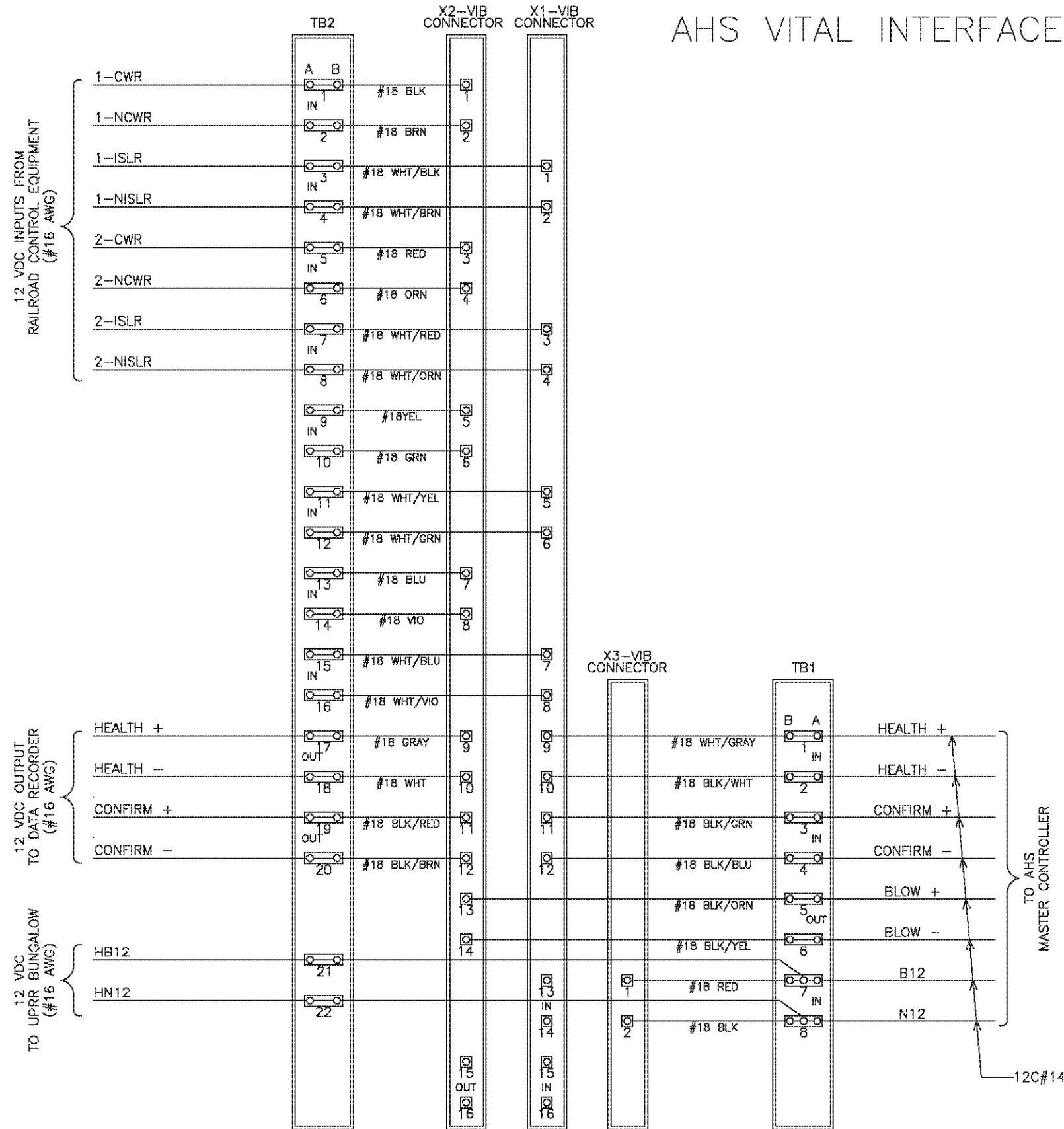
ORIGINAL DATE	07/21/03		
DRAFTSMAN	RCL	LOCATION	STREETER AVE RIVERSIDE, CA
DESIGNER	KMW	TITLE	SITE LAYOUT
CHECKER	RJA	NO. 0965	SCALE 1"=20'
CHANGE FROM TYPICAL	N	DOT NO. 811 008U	SHEET 1 OF 8
REVISION	B	DATE 07/31/14	BY TCS
			MOVE AUTO HORNS & SIGS TO BYPASS

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT		R-4180
STREETER AVENUE UNDERPASS		SHEET 184 OF 191
AHS SYSTEM SITE LAYOUT		FILE NO.
HORIZ. SCALE:	VERT. SCALE: N/A	

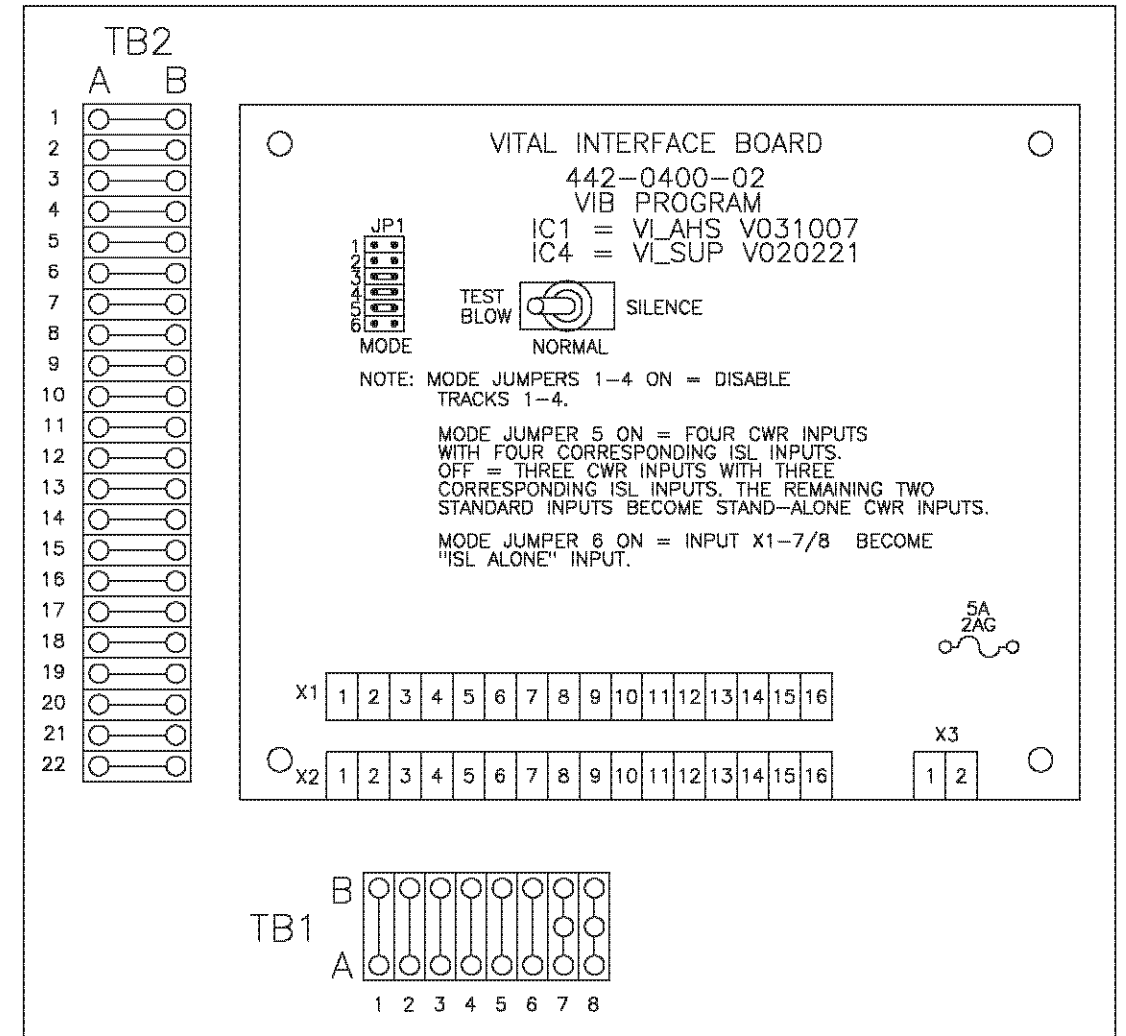
DATE: 08/20/15
 TIME: 10:00 AM

DATE: 08/20/15
 TIME: 10:00 AM

AHS VITAL INTERFACE



AHS VITAL INTERFACE ASSEMBLY



NOTE: MOUNT VITAL INTERFACE ENCLOSURE ON SIDE OF HIGHWAY CROSSING BUNGALOW/CABIN.

* ALL WIRING TO BE #18 AWG UNLESS OTHERWISE NOTED.

AS BUILT
 (NO CORRECTIONS ON THIS SHEET)
 BID No. 7094
 C.C.A. DATE 08-20-15
 R.E. NAME MICHAEL WOLFF

ORIGINAL DATE	07/21/03	RCL Railroad Controls Limited	HORN SIGNALS
DRAWN BY	RCL	LOCATION	STREETER AVE RIVERSIDE, CA UNION PACIFIC RAILROAD
DESIGNER	KMW	TITLE	AHS VIB
CHECKER	RJA	REV. NO.	0965
CHANGE FROM TYPICAL	N	SCALE	53.80
REV. NO.	XXXX	SCALE	N.T.S.
REV. DATE	07/31/14	REV. NO.	811 008U
REV. DESCRIPTION	MOVE AUTO HORNS & SIGS TO BYPASS	SCALE	2 OF 8

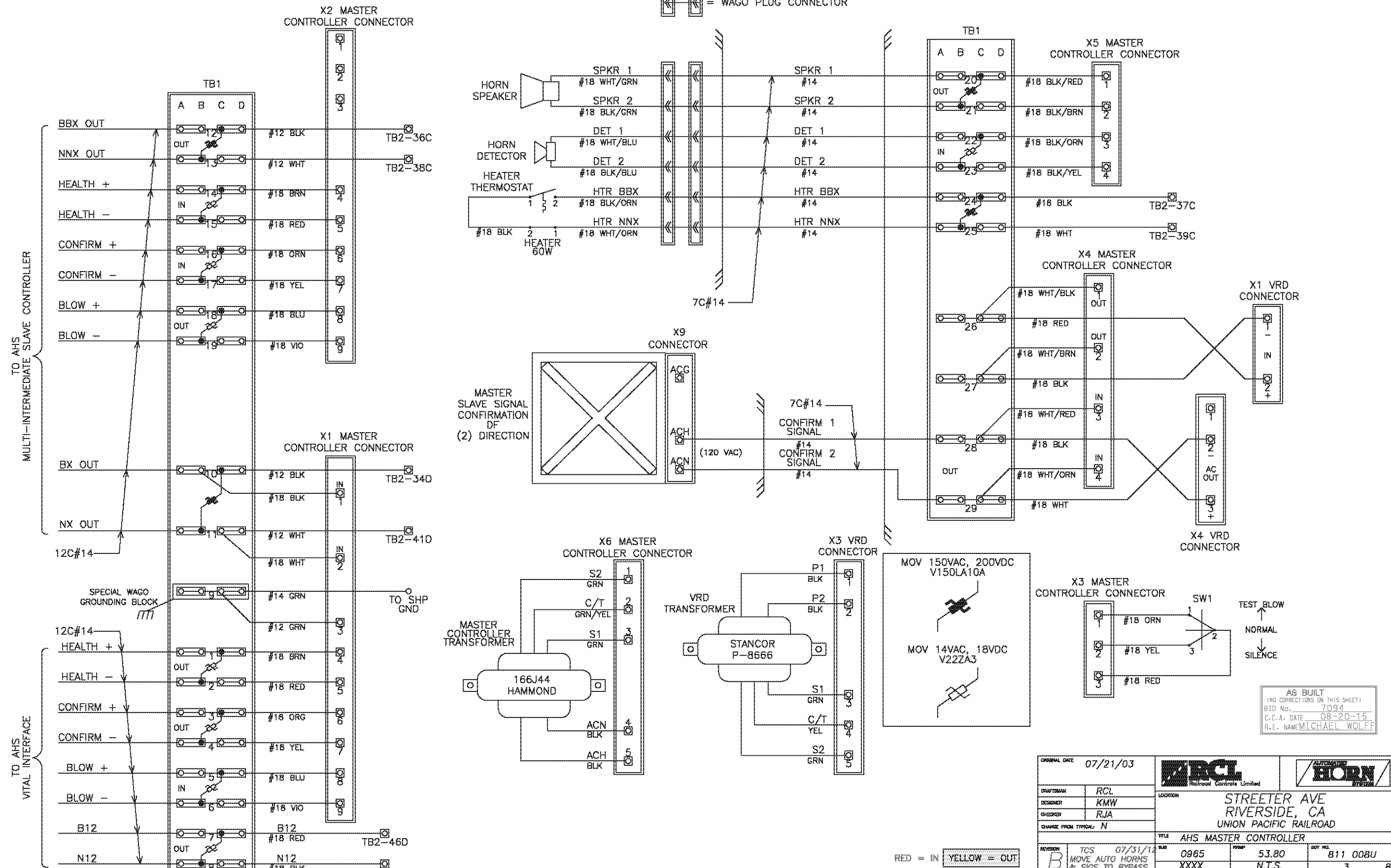
RED = IN YELLOW = OUT

IMPORTANT NOTICE
 Section 4511.011 of the Government Code requires that all electrical equipment installed in California be marked with the Underwriters Laboratories (UL) logo. For your safety, please use only UL listed equipment.
 CALL TOLL FREE
 48 HOURS BEFORE YOU BID
 UNDERGROUND SERVICE ALERT
 1-800-227-2600

DATE _____

DESIGNED BY	DRAWN BY	CHECKED BY	CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT
			STREETER AVENUE UNDERPASS
			AHS VIB
			R-4180
			SHEET 185 OF 191
			HORIZ. SCALE: VERT. SCALE: N/A FILE NO.

AHS MASTER CONTROLLER



TO AHS
MULTI-INTERMEDIATE SLAVE CONTROLLER

TO AHS
VITAL INTERFACE

WAGO PLUG CONNECTOR

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID NO. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

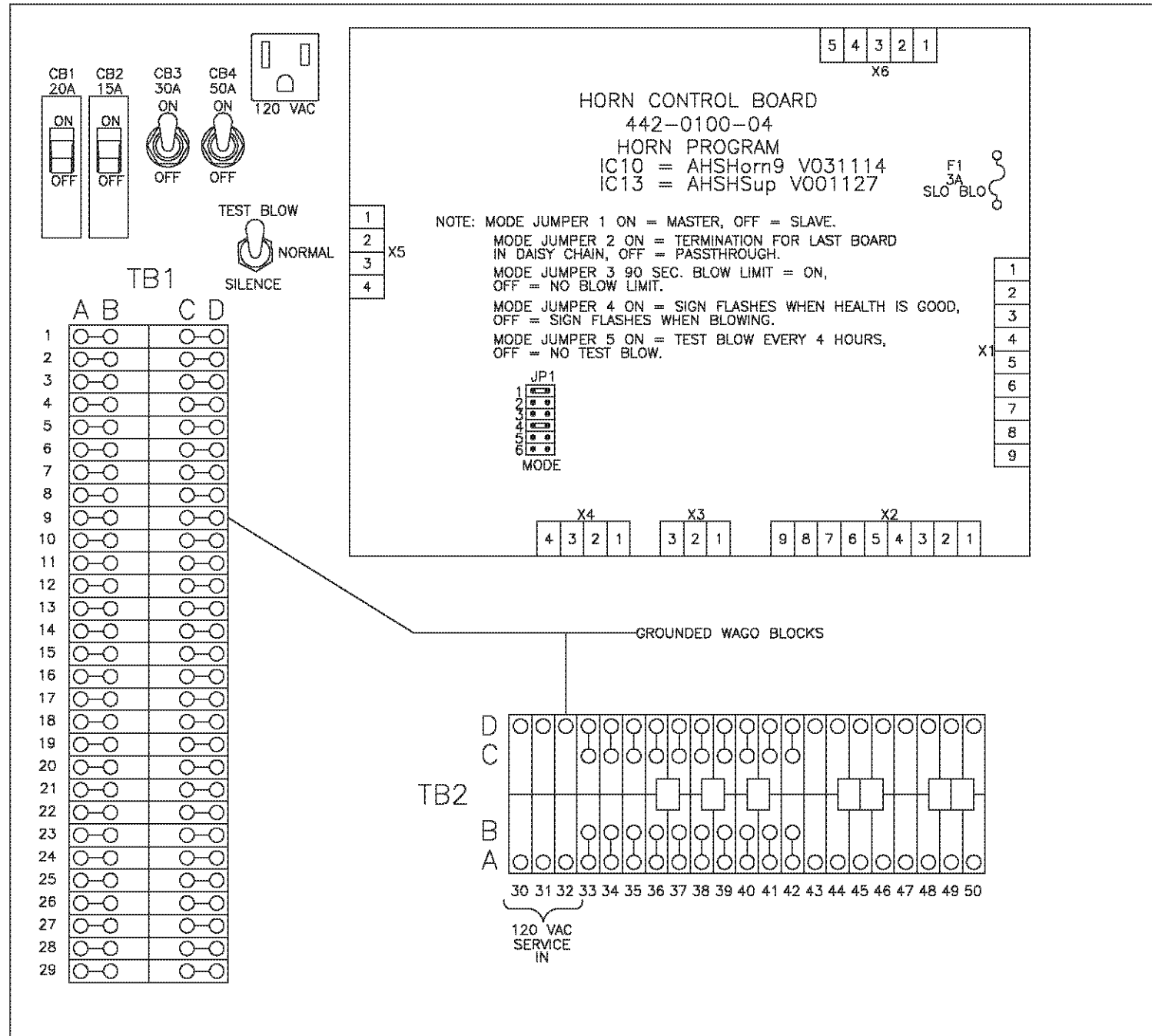
ORIGINAL DATE	07/21/03	RCL Railroad Controls Limited	HORN Railroad Controls Limited
DRAFTSMAN	RCL	LOCATION STREETER AVE RIVERSIDE, CA UNION PACIFIC RAILROAD	
DESIGNER	KMW	TITLE AHS MASTER CONTROLLER	
CHECKER	RJA	REV. NO. 0965	SCALE 53.80
CHANGE FROM TYPICAL	N	REV. NO. XXXX	SCALE N.T.S.
REVISION	B	DATE 07/31/14	BY 0965
TCS MOVE AUTO HORNS & SIGS TO BYPASS		SCALE	DOT NO. 811 008U
CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT		SHEET 3 OF 8	
STREETER AVENUE UNDERPASS		R-4180	
AHS MASTER CONTROLLER		SHEET 186 OF 191	
DESIGNED BY		FILE NO.	

IMPORTANT NOTICE
Section 1871.011 of the Government Code requires that all electrical equipment be labeled with the manufacturer's name, model number, and serial number. For your safety, please call the manufacturer's name, model number, and serial number on the equipment label.
CALL TOLL FREE
48 HOURS BEFORE YOU GO
UNDERGROUND SERVICE ALERT
1-800-227-2600

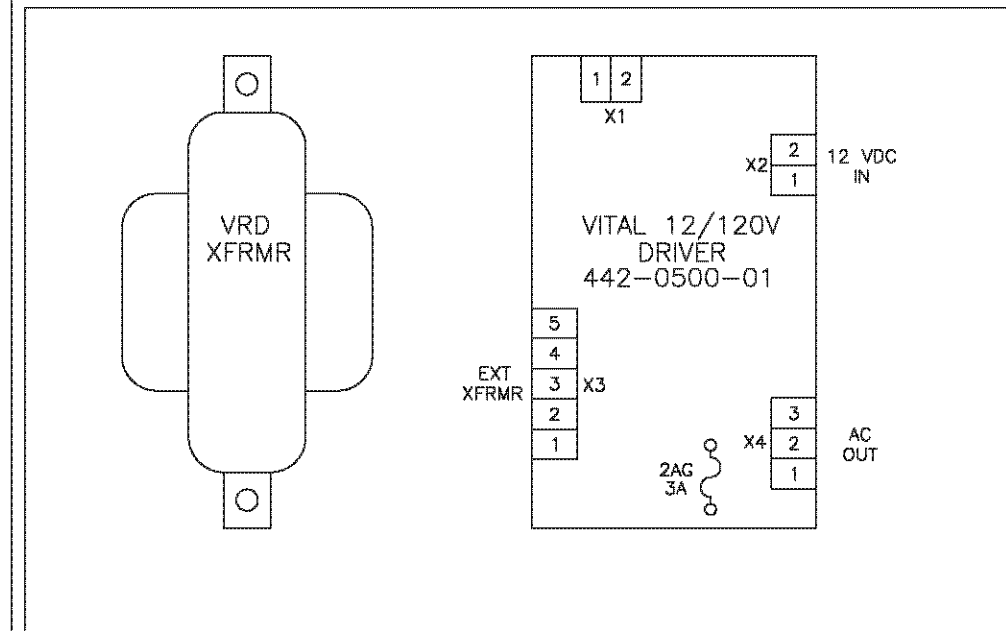
DATE: 08/20/15
TIME: 10:00 AM

DATE: 08/20/15
TIME: 10:00 AM

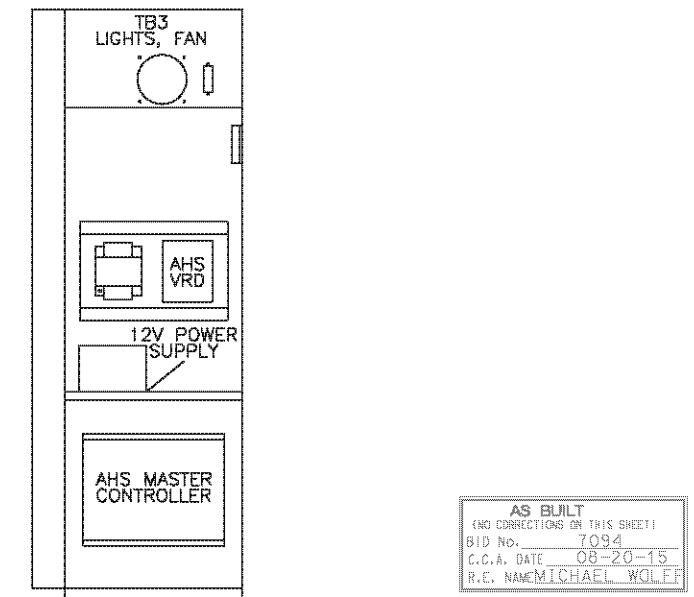
AHS MASTER CONTROLLER



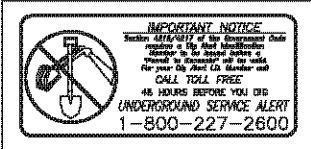
AHS VITAL RELAY DRIVER



MASTER CASE LAYOUT



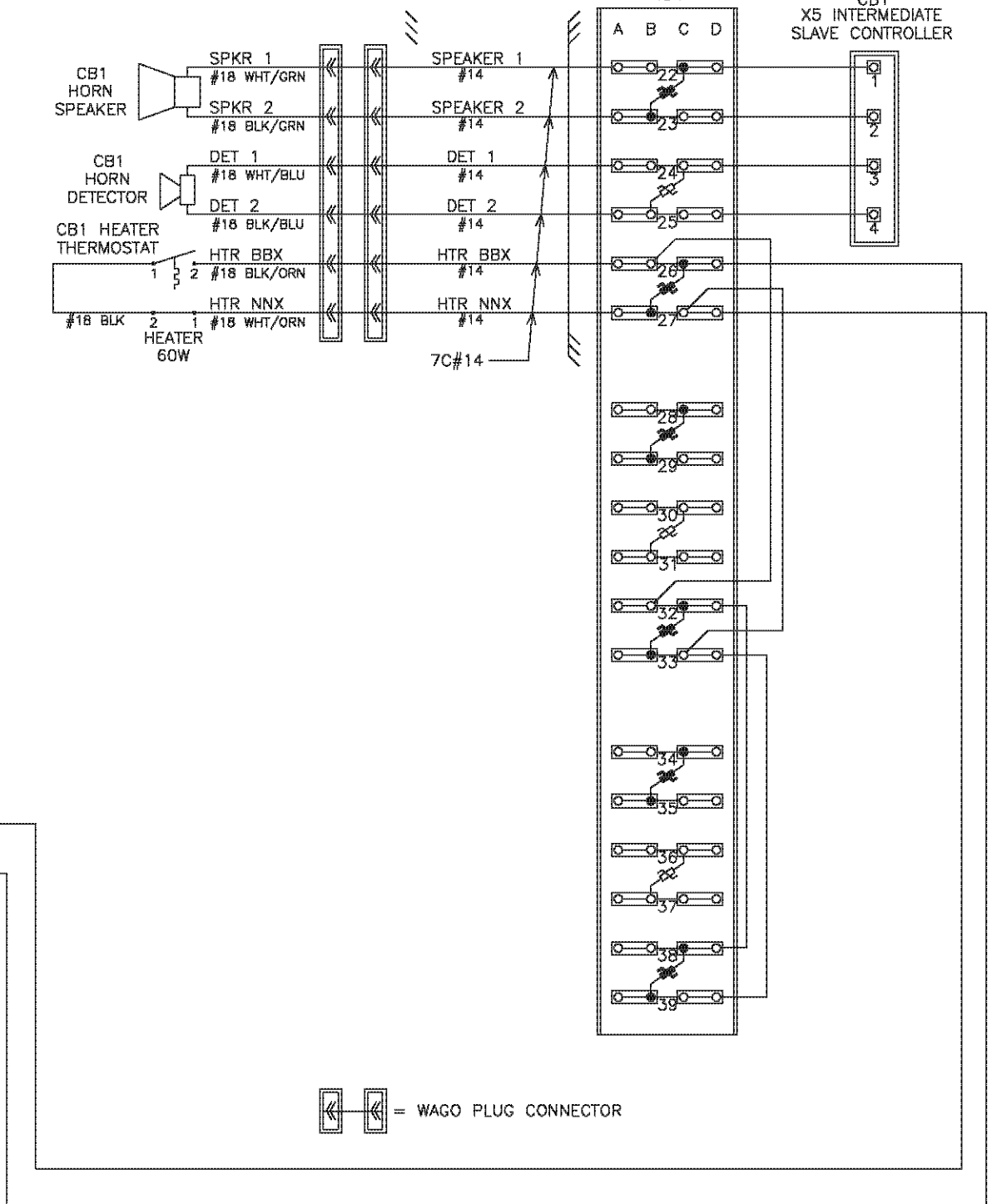
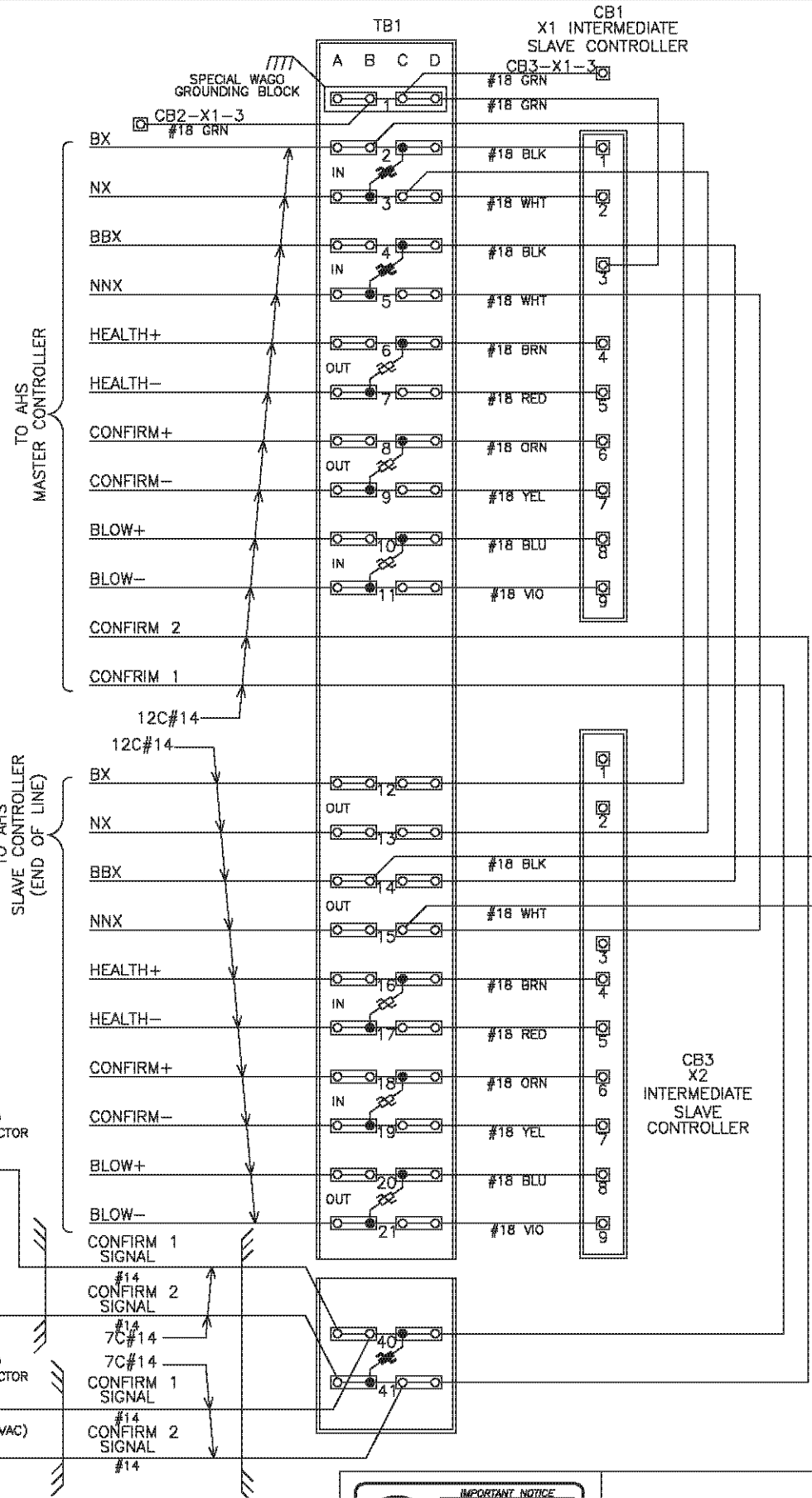
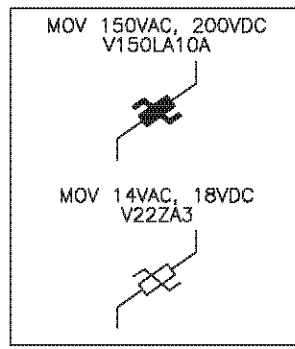
RED = IN YELLOW = OUT



ORIGINAL DATE	07/21/03	RCL Railroad Controls Limited	HORN AUTOMATIC SIGNALING
DRAFTSMAN	RCL	LOCATION	STREETER AVE RIVERSIDE, CA UNION PACIFIC RAILROAD
DESIGNER	KMW	TITLE	AHS MASTER CONTROLLER LAYOUT
CHECKER	RJA	REVISION	B TCS 07/31/12 MOVE AUTO HORNS & SIGS TO BYPASS
CHANGE FROM TYPICAL	N	NO. NO.	0965
		SCALE	53.80 N.T.S.
		DOY NO.	811 008U
		SHEET	5 OF 8
CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT		R-4180	
STREETER AVENUE UNDERPASS		SHEET 188 OF 191	
AHS MASTER CONTROLLER LAYOUT		FILE NO.	
DESIGNED BY	DRAWN BY	CHECKED BY	HORIZ. SCALE: VERT. SCALE: N/A

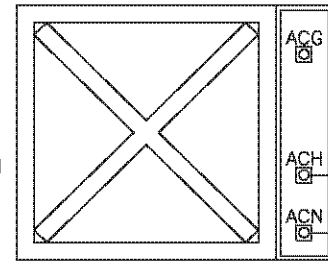
DATE _____

AHS MULTI-INTERMEDIATE SLAVE CONTROLLER

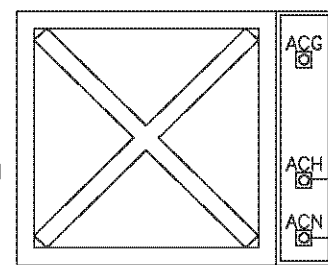


WAGO PLUG CONNECTOR

MULTI-INTERMEDIATE SLAVE SIGNAL CONFIRMATION DF (2) DIRECTION



MULTI-INTERMEDIATE SLAVE SIGNAL CONFIRMATION SF (1) DIRECTION



AS BUILT (NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

ORIGINAL DATE	07/21/03				
DRAFTSMAN	RCL	LOCATION STREETER AVE RIVERSIDE, CA UNION PACIFIC RAILROAD			
DESIGNER	KMW	TITLE AHS MULTI-INTERMEDIATE			
CHECKER	RJA	REV. NO.	0965	SCALE	53.80
CHANGE FROM TYPICAL	N	REV. NO.	XXXX	SCALE	N.T.S.
REVISION	B	DATE	07/31/14	REV. NO.	811 008U
MOVE AUTO HORNS & SIGS TO BYPASS		SCALE	N.T.S.	SHEET	6 OF 8

RED = IN YELLOW = OUT

IMPORTANT NOTICE
Underground Service Alert
48 HOURS BEFORE YOU DIG
CALL TOLL FREE
1-800-227-2600

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT		R-4180
STREETER AVENUE UNDERPASS		SHEET 189 OF 191
AHS MULTI-INTERMEDIATE		FILE NO.
DESIGNED BY	DRAWN BY	CHECKED BY
DATE		
HORIZ. SCALE:	VERT. SCALE:	N/A

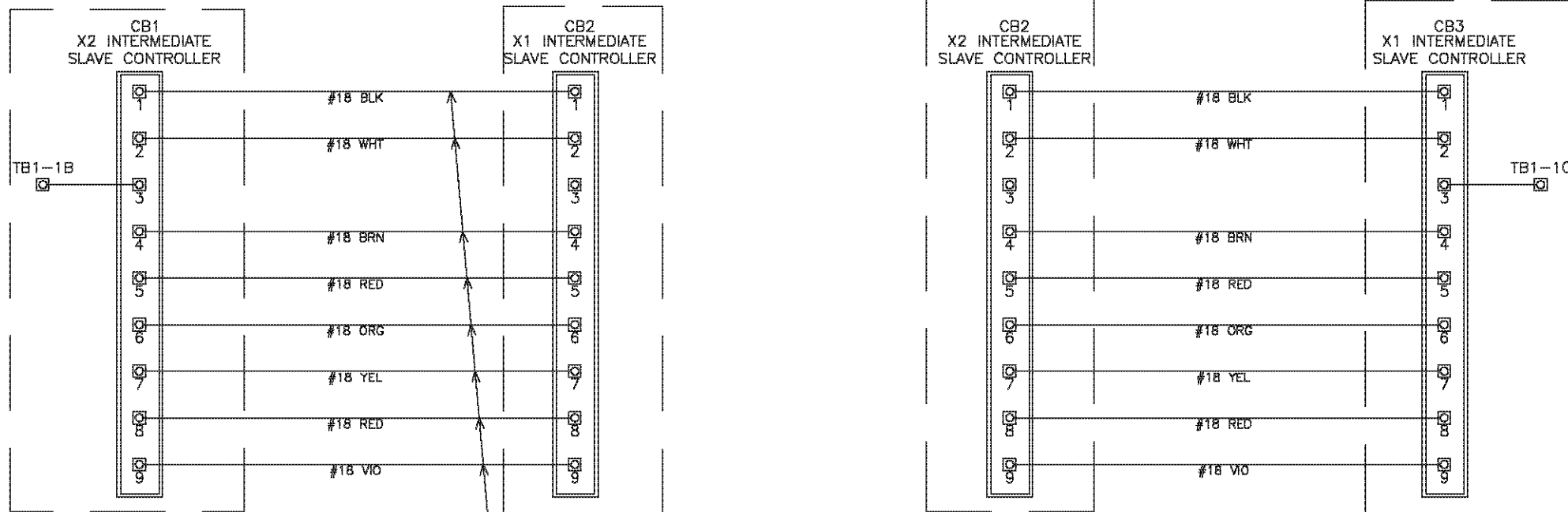
DATE: 07/21/03

DATE: _____

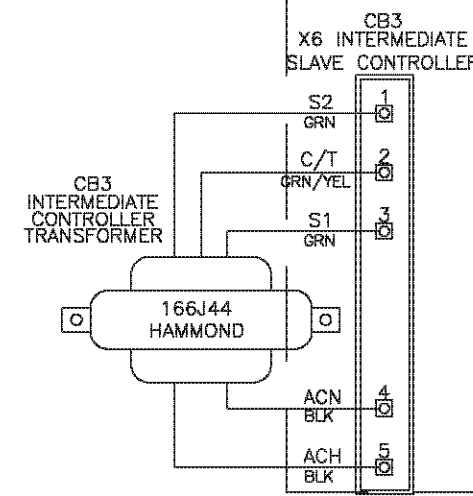
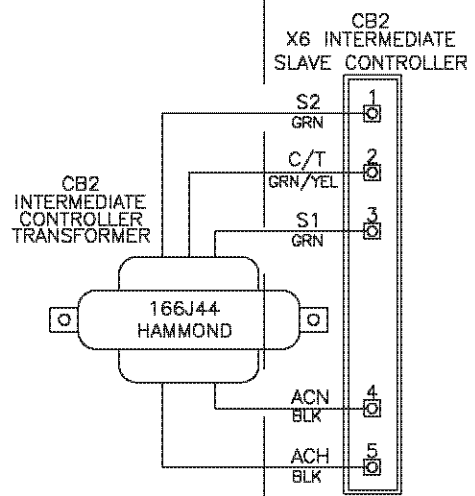
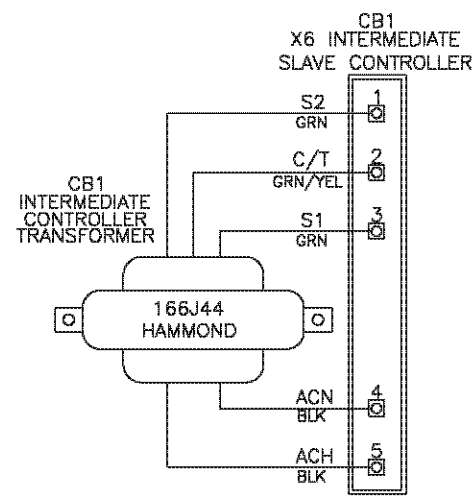
DATE: _____

PLUG CONNECTOR MAY BE LEFT IN PLACE

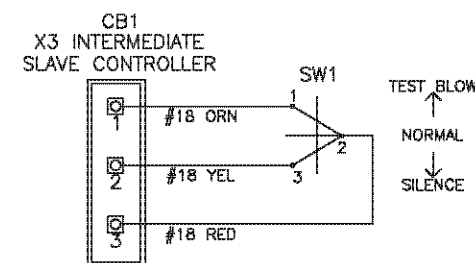
AHS MULTI-INTERMEDIATE SLAVE CONTROLLER



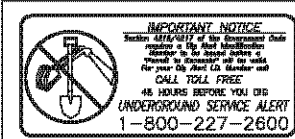
NOTE 1



AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF



NOTE 1: THE WIRING HARNESS RUNNING FROM CB1-X2 TO CB2-X1 SHALL BE MADE LONG ENOUGH TO RUN FROM CB1-X2 TO CB3-X1 AND SHALL BE EXTERNAL FROM THE BACKPANEL. THIS WILL FACILITATE THE REMOVAL OF CB2 IN THE EVENT ONLY 2 HORNS ARE REQUIRED.



ORIGINAL DATE	07/21/03		
DRAFTSMAN	RCL	LOCATION STREETER AVE RIVERSIDE, CA UNION PACIFIC RAILROAD	
DESIGNER	KMW	TITLE AHS MULTI-INTERMEDIATE	
CHECKER	RJA	REV. NO.	0965
CHANGE FROM TYPICAL	N	SCALE	53.80
		SCALE	N.T.S.
		REV. NO.	811 008U
		SCALE	N.T.S.
		REV. NO.	7 of 8
		CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT	
		STREETER AVENUE UNDERPASS	
		AHS MULTI-INTERMEDIATE	
		R-4180	
		SHEET 190 OF 191	
		HORIZ. SCALE: VERT. SCALE: N/A	
		FILE NO.	

RED = IN YELLOW = OUT

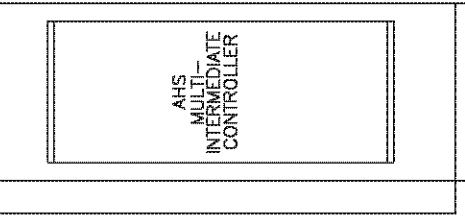
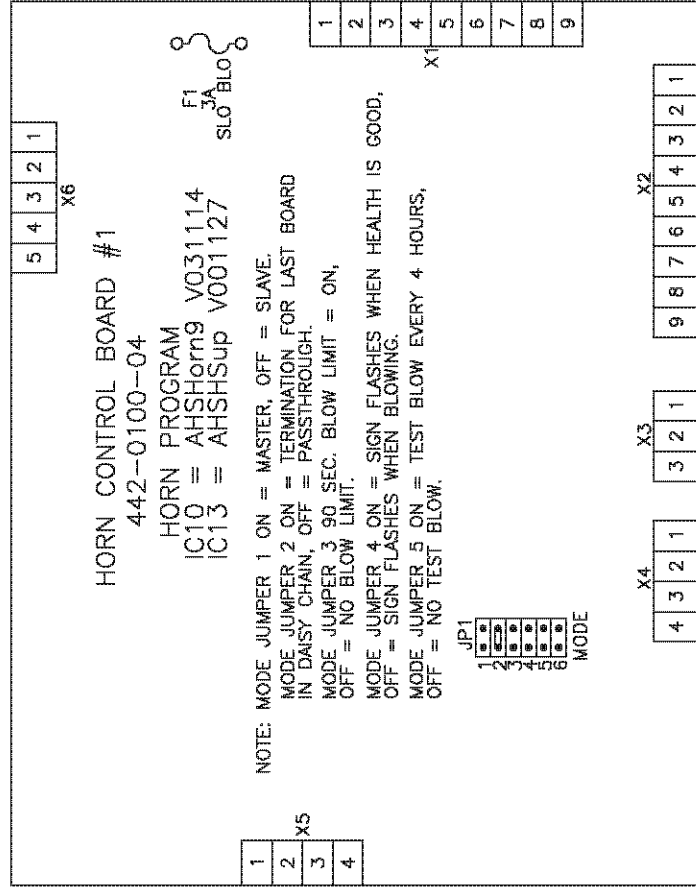
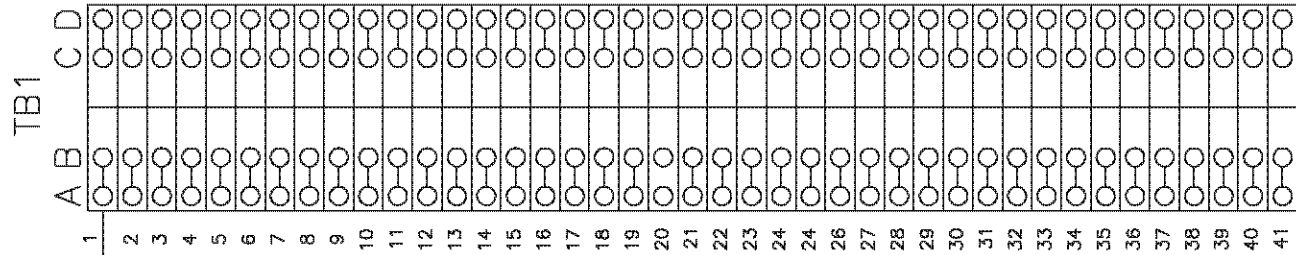
DATE _____

DESIGNED BY _____ DRAWN BY _____ CHECKED BY _____

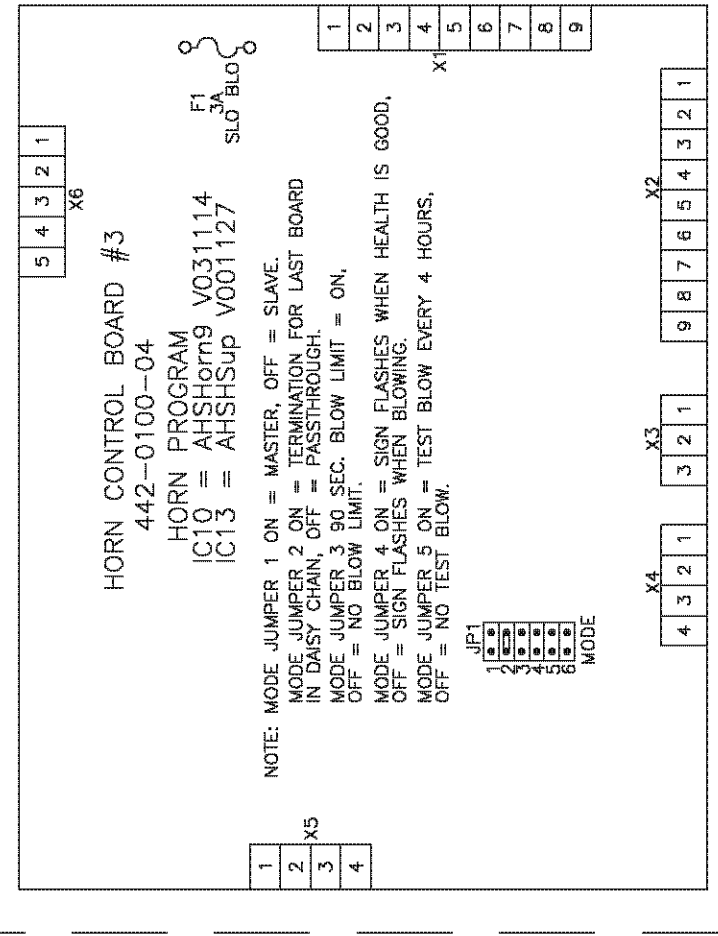
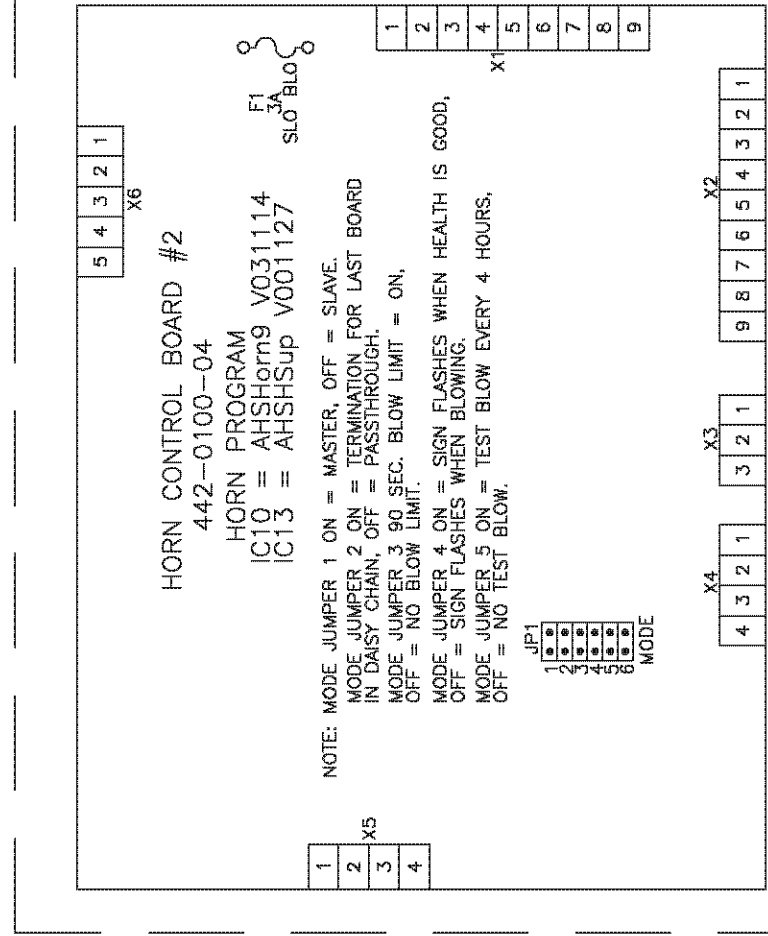
DATE: 08/20/15
TIME: 09:00 AM

DATE: 08/20/15
TIME: 09:00 AM

AHS MULTI-INTERMEDIATE LAYOUT



IMPORTANT NOTICE
Section 191.001 of the Regulations of the State of California requires that the contractor provide a 24-hour emergency telephone number for the project. For your information, the number is 1-800-227-2600.
CALL TOLL FREE
48 HOURS BEFORE YOU GO
UNDERGROUND SERVICE ALERT
1-800-227-2600



HORN BOARDS MAY BE LEFT IN PLACE

AHS MULTI-INTERMEDIATE

GROUNDING WAGO BLOCK

AS BUILT
(NO CORRECTIONS ON THIS SHEET)
BID No. 7094
C.C.A. DATE 08-20-15
R.E. NAME MICHAEL WOLFF

ORIGINAL DATE	07/21/03		
DRAFTSMAN	RCL		
DESIGNER	KMW	LOCATION STREETER AVE RIVERSIDE, CA UNION PACIFIC RAILROAD	
CHECKER	RJA	TITLE AHS MULTI-INTERMEDIATE LAYOUT	
CHANGE FROM TYPICAL	N	REVISION B	REVISED 07/31/14 MOVE AUTO HORNS & SIGS TO BYPASS
		NO. 0965	SCALE 53.80 N.T.S.
		NO. XXXX	SCALE N.T.S.
		NO. 811 008U	SHEET 8 OF 8

RED = IN YELLOW = OUT

CITY OF RIVERSIDE, CALIFORNIA PUBLIC WORKS DEPARTMENT	R-4180
STREETER AVENUE UNDERPASS	SHEET 191 OF 191
AHS MULTI-INTERMEDIATE LAYOUT	FILE NO.
HORIZ. SCALE:	VERT. SCALE: N/A

DATE _____

DESIGNED BY: _____ DRAWN BY: _____ CHECKED BY: _____