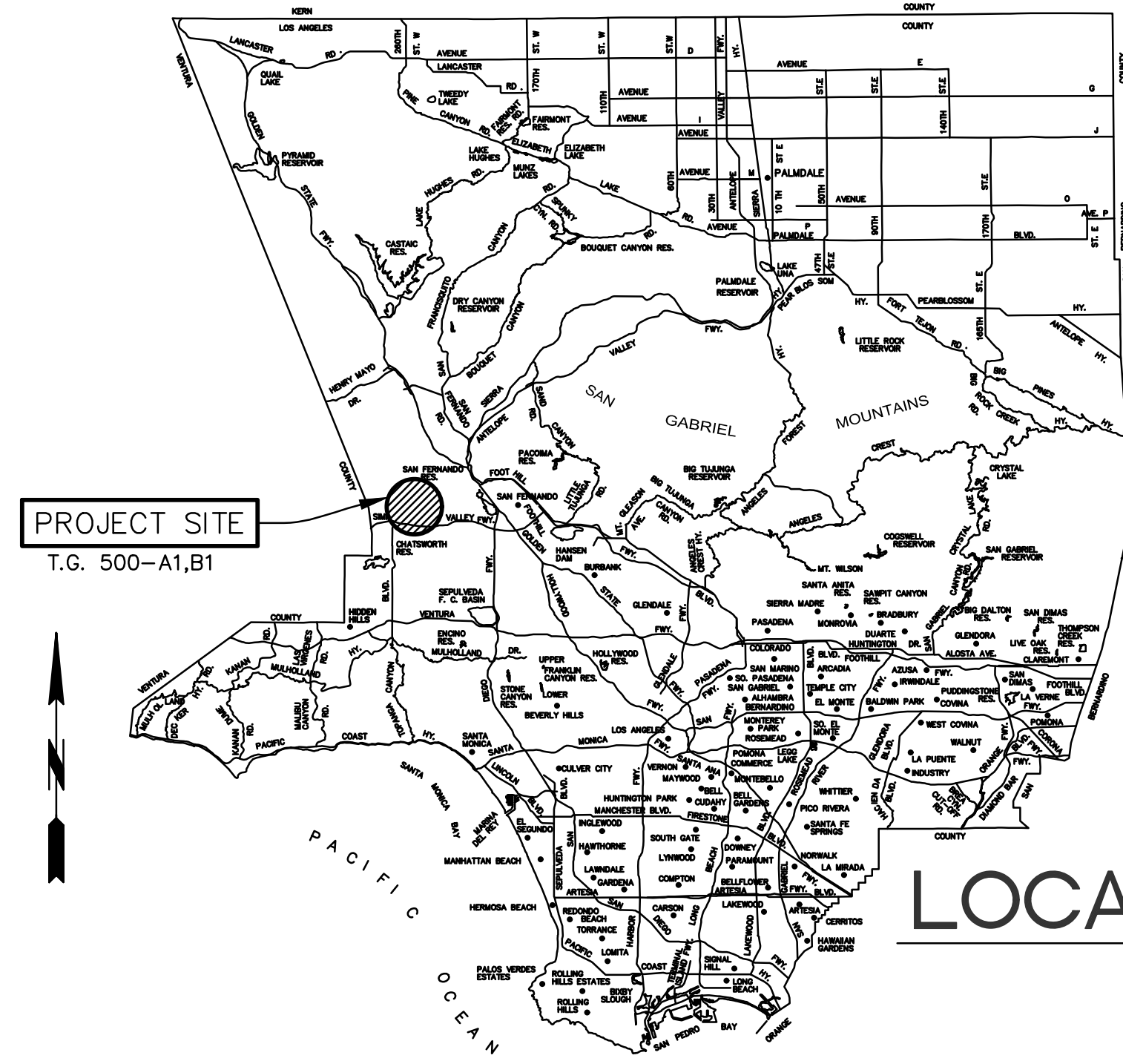


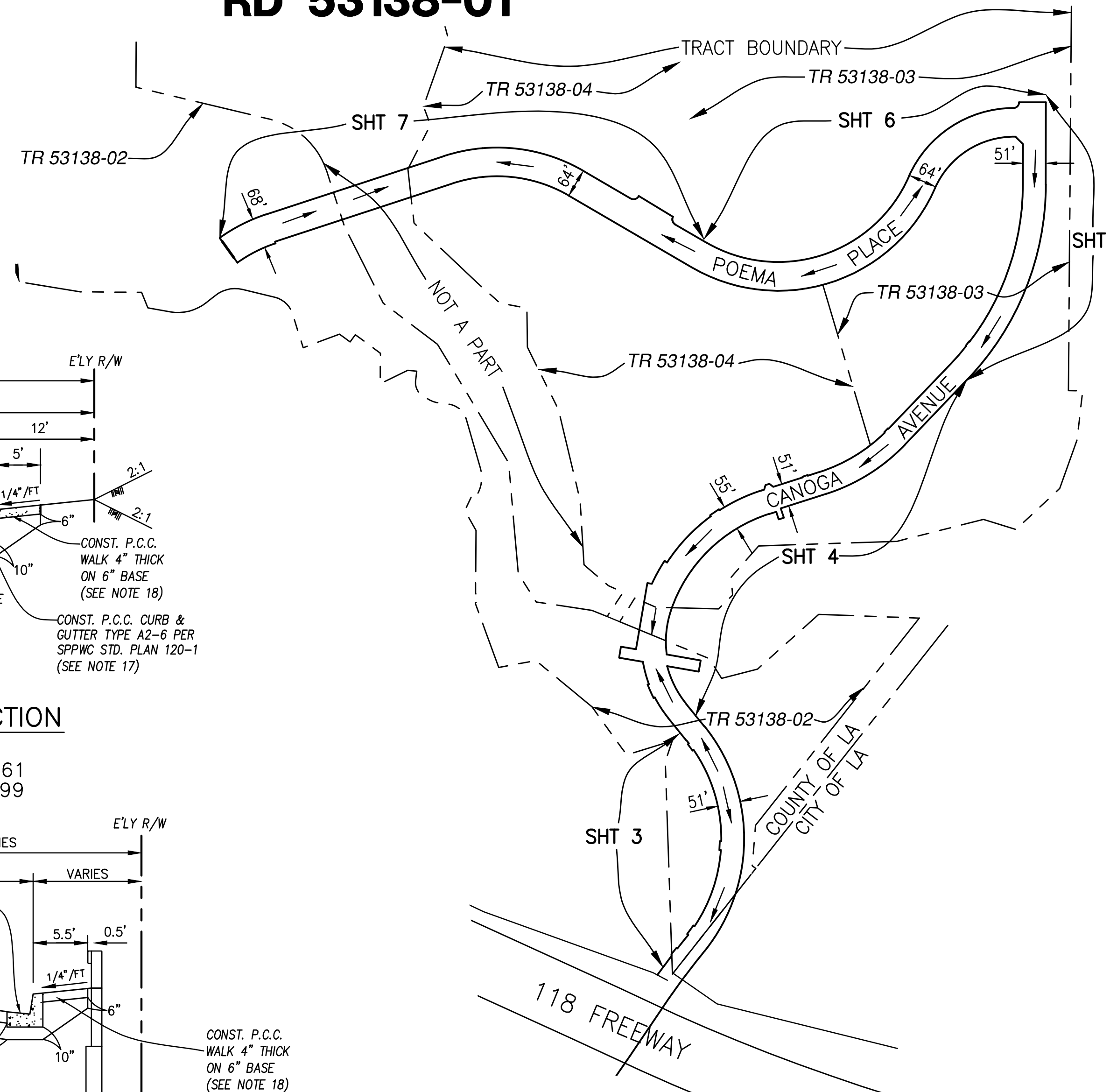
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS STREET IMPROVEMENTS PLAN TRACT NO 53138-02, 53138-03, 53138-04 RD 53138-01

INDEX TO PROJECT DRAWINGS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	GENERAL NOTES, CMB NOTES, WATER QUALITY NOTES AND DETAILS
3	CANOGA AVE (STA. 12+87.42 TO 19+57.34)
4	CANOGA AVE (STA. 19+57.34 TO 30+90.19)
5	CANOGA AVE (STA. 30+90.19 TO 37+30.99)
6	POEMA PL (STA. 39+08.02 TO 47+98.40)
7	POEMA PL (STA. 27+70.38 TO 39+08.02)
8	TRINITY SHORTTRACC BARRIER END PROTECTION DETAILS
9	RETAINING WALL 'A'
10	STRUCTURAL DETAILS
11	STRUCTURAL DETAILS
12	STRUCTURAL DETAILS

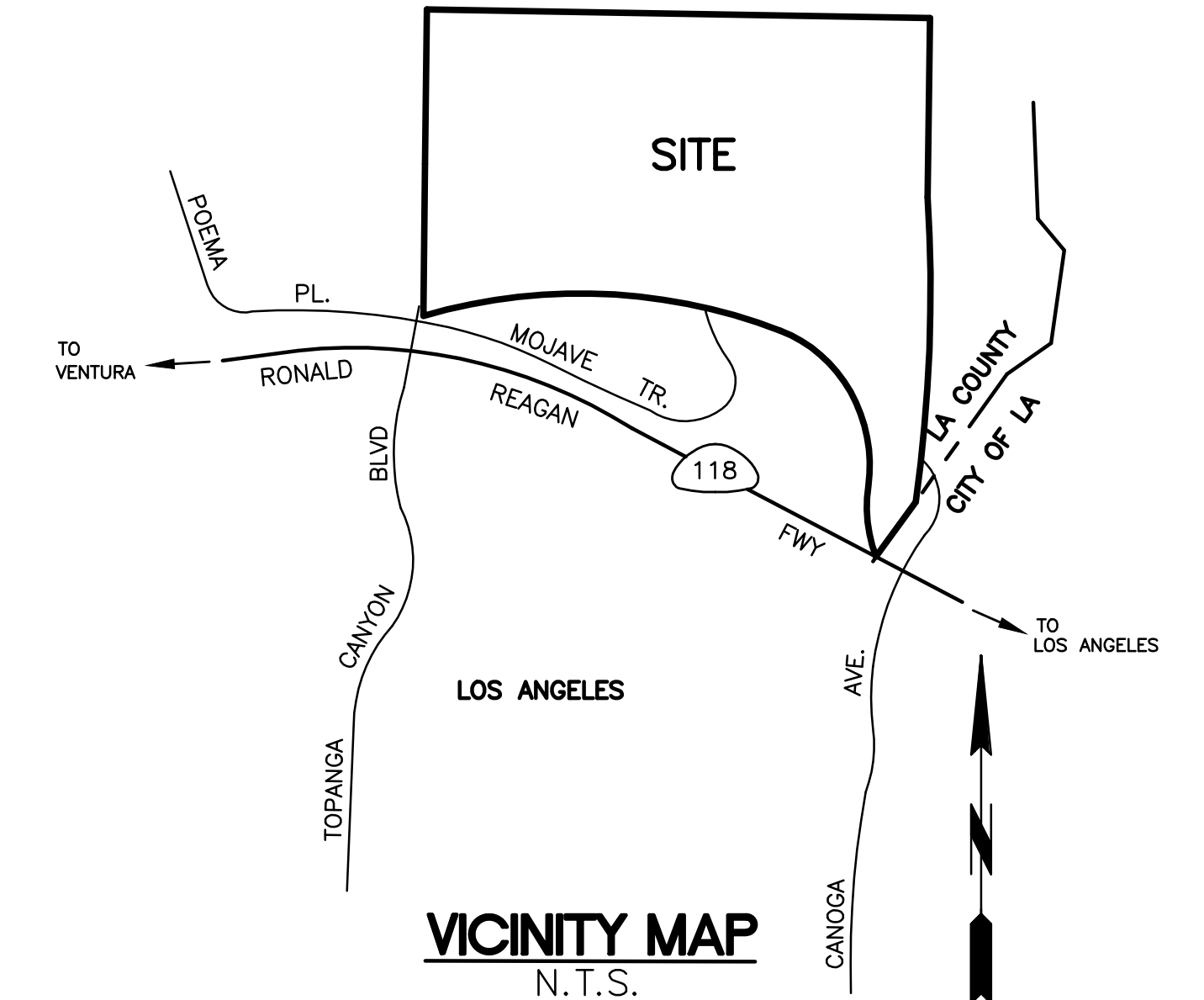


LOCATION MAP

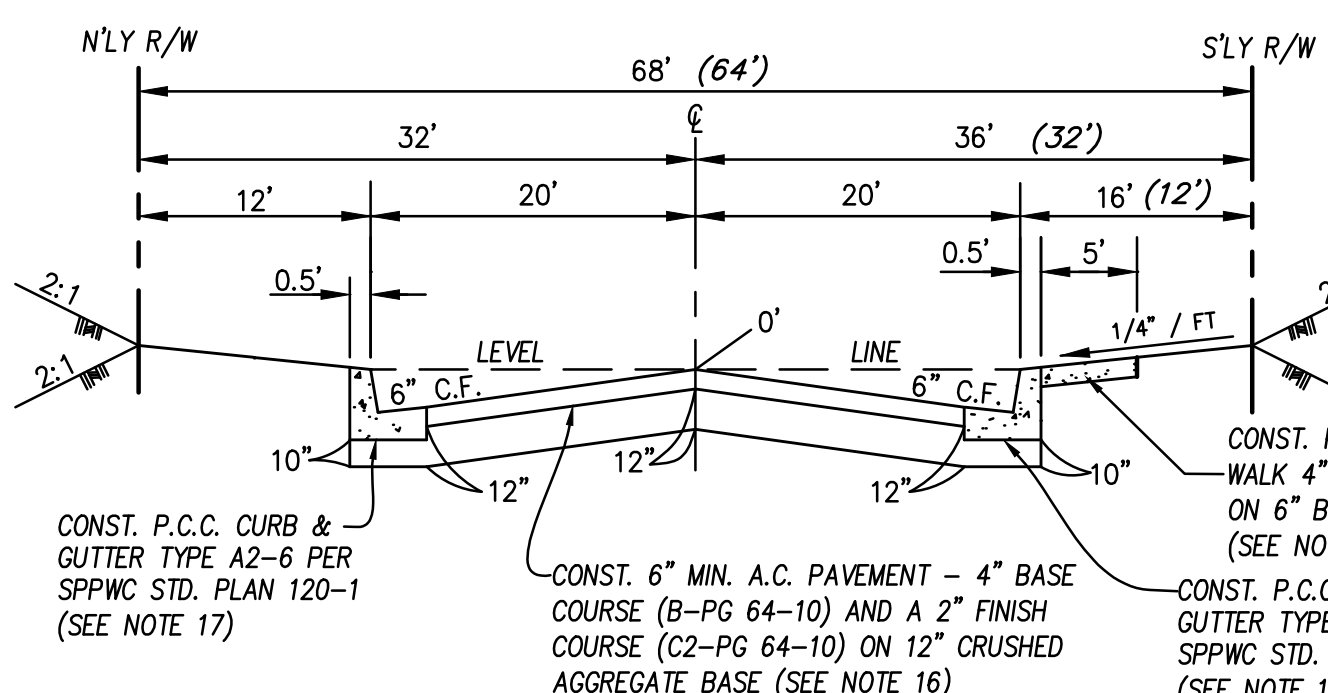


KEY MAP

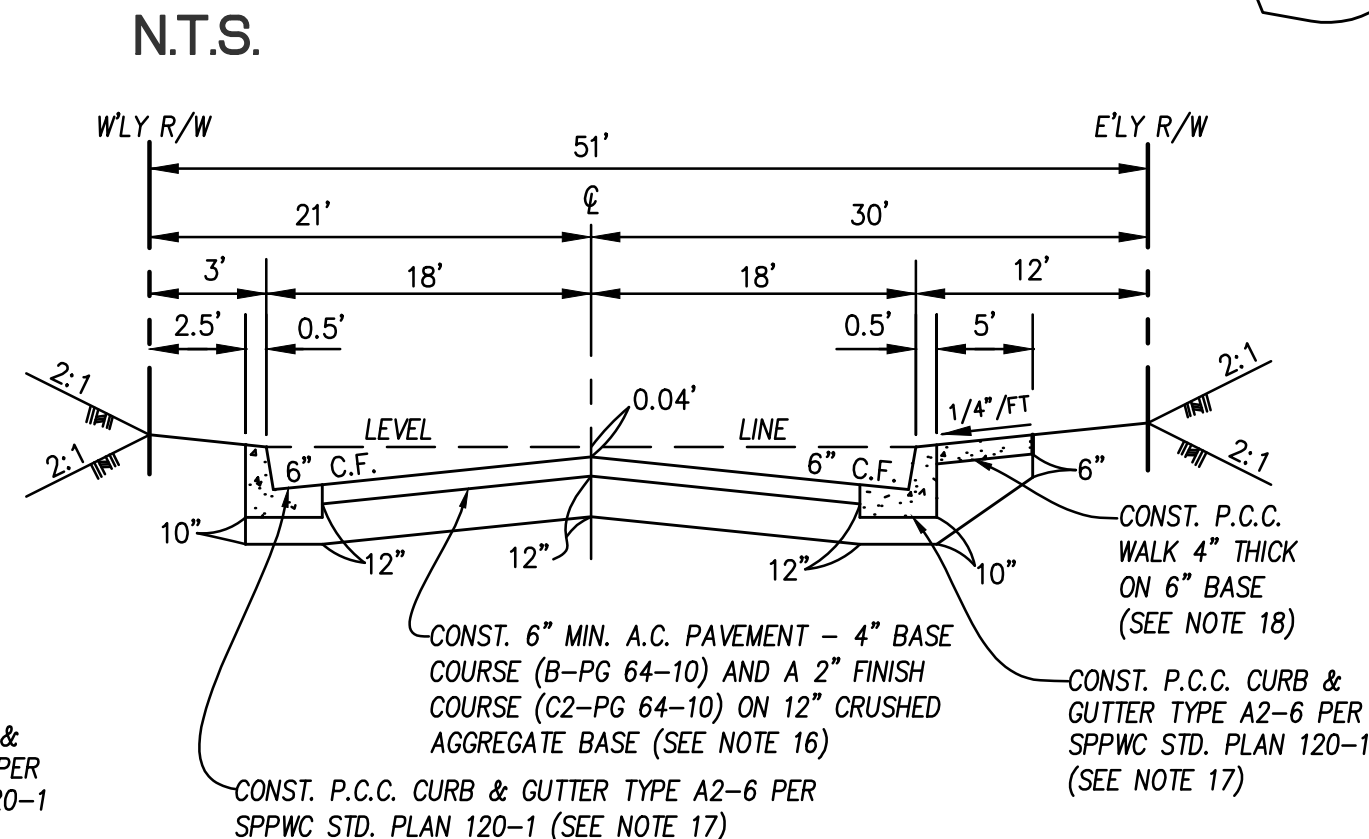
SCALE: 1"=200'
Road Maintenance District 539



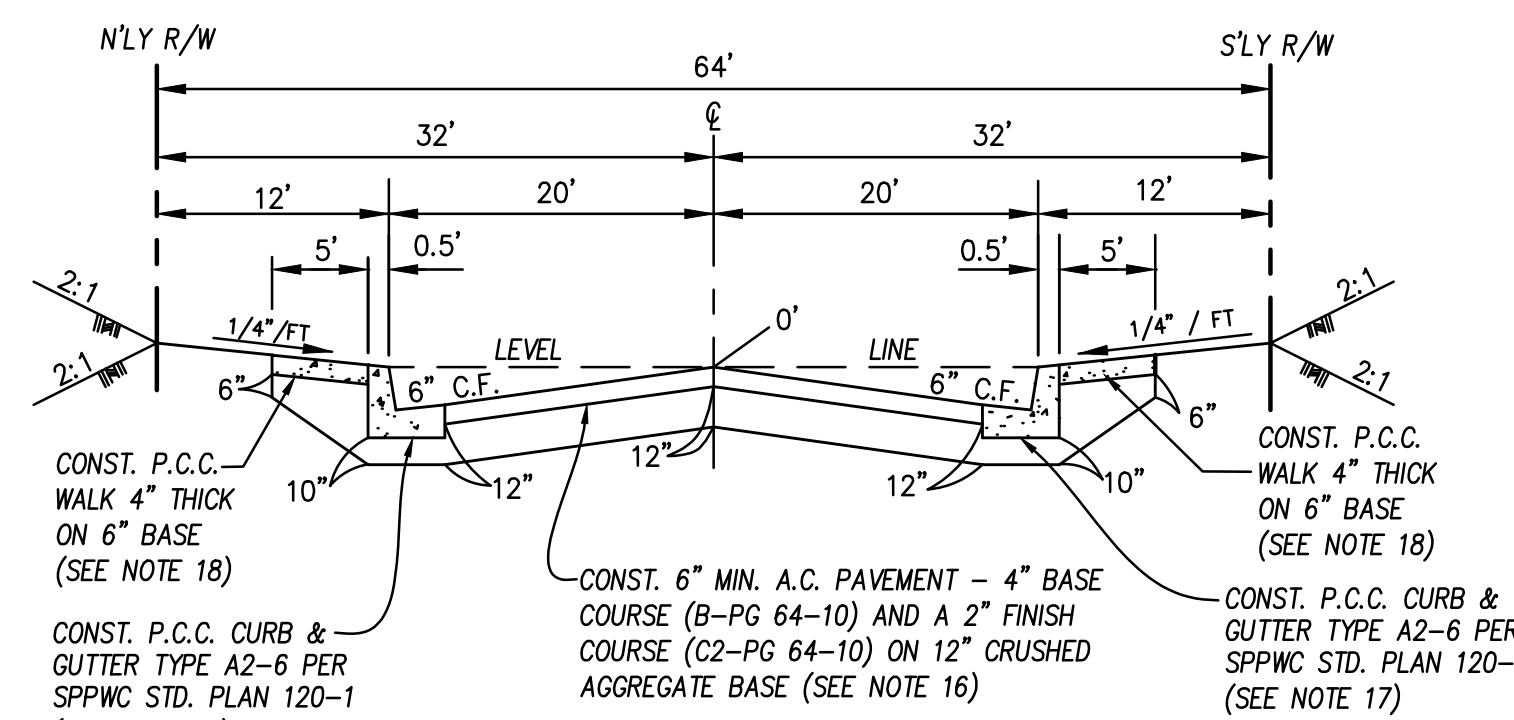
VICINITY MAP
N.T.S.



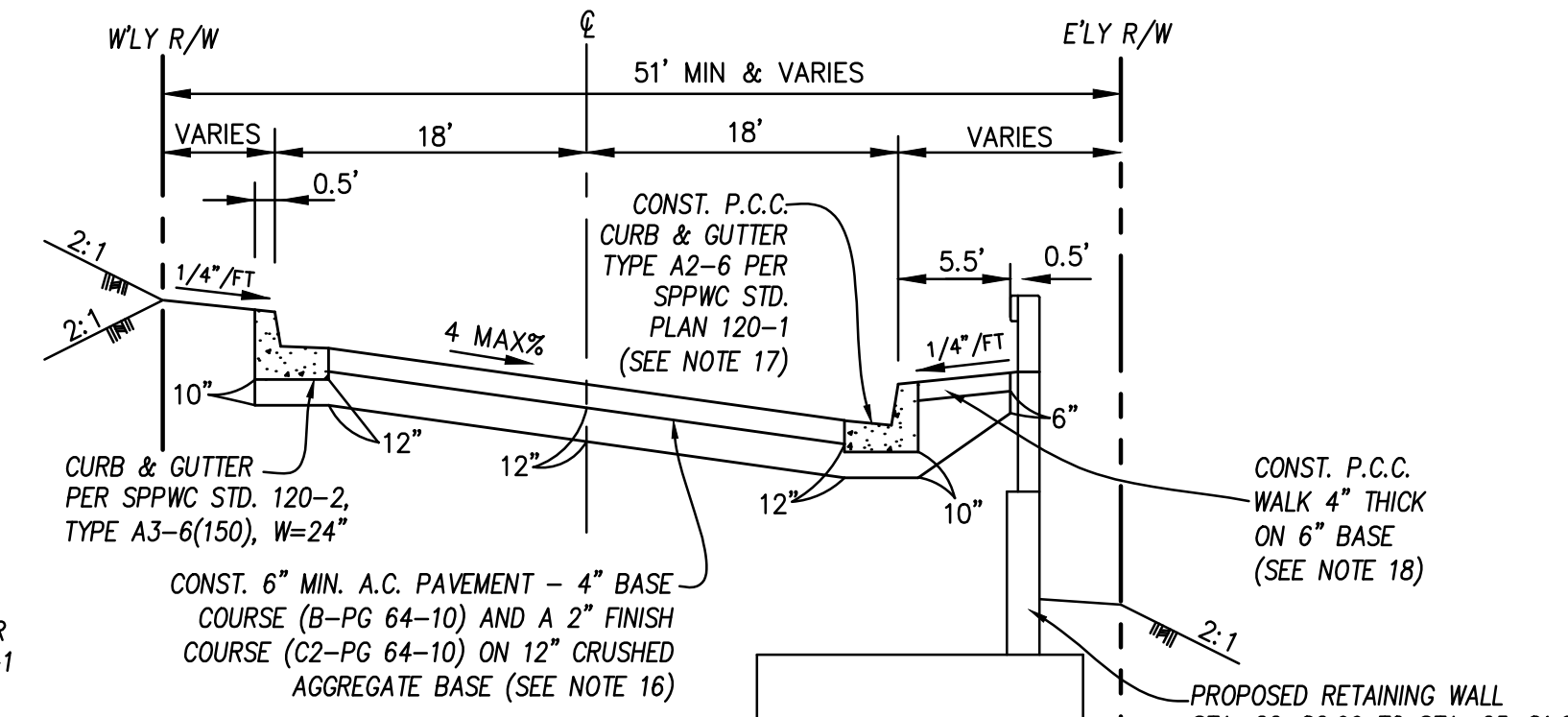
TYPICAL 68' (64') R/W SECTION
POEMA PLACE
STA. 27+70.38 - 28+49.78
(STA. 33+42.78 - 33+69.71)



TYPICAL 51' R/W SECTION
CANOGA AVE.
STA. 12+87.42 - 18+92.61
STA. 26+59.39 - 37+30.99



TYPICAL 64' R/W SECTION
POEMA PLACE
STA. 33+69.71 - 47+98.40



SUPERELEVATED SECTION
CANOGA AVE.
STA. 18+92.61 - 20+69.62
STA. 22+56.85 - 26+59.39

CATCH BASIN NOTE
ALL CURB OPENING CATCH BASINS PER SPPWC STD. 300 SHALL HAVE A MINIMUM DIMENSION B=3'8" AND A MINIMUM DIMENSION W=2'6" UNLESS OTHERWISE NOTED ON THE PROJECT PLANS AND EXCLUDING CATCH BASINS MODIFIED PER SPPWC STD. 314.

ENGINEERS NOTICE TO CONTRACTORS:

PRIVATE AND PUBLIC UTILITIES AS SHOWN REFLECT AVAILABLE RECORD INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL LINES AFFECTING THIS WORK AND ANY DAMAGE OR PROTECTION TO THESE LINES. PRIOR TO STARTING CONSTRUCTION OF THIS PROJECT THE CONTRACTOR SHALL VERIFY THE EXISTING ELEVATIONS OF THE EXISTING MAINS WHEN MAKING CONNECTIONS AND UNCOVERING ALL EXISTING UTILITY LINES AFFECTING THIS WORK. IF A CONFLICT IN LOCATION IS NOTED, THE ENGINEER MUST BE NOTIFIED BEFORE PROCEEDING. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, THE CONSULTING ENGINEER AND ALL PUBLIC AGENCIES HARMLESS FROM ANY AND ALL LIABILITY REAL OR ALLEGED IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, THE CONSULTING ENGINEER OR ANY PUBLIC AGENCY.

Michael A. Kennada 2-7-2017
SIEW HUAT NG R.C.E. 46026

APPROVED	NO.	REVISIONS	REVISED BY	APPROVED BY	DATE
<p>APPROVED MARK PESTRELLA, ACTING DIRECTOR OF PUBLIC WORKS</p> <p>BY: <i>[Signature]</i> 2/9/2017 ASSISTANT DIVISION ENGINEER DATE</p> <p>RECOMMENDED LAND DEVELOPMENT DIVISION</p> <p>BY: <i>[Signature]</i> 02/09/2017 ROAD AND GRADING SECTION DATE</p> <p>REVIEWED LAND DEVELOPMENT DIVISION</p> <p>BY: <i>[Signature]</i> 2/7/2017 ROAD AND GRADING SECTION DATE</p>					



Michael A. Kennada 2-7-2017
SIEW HUAT NG DATE
R.C.E. 46026 EXP. 12/31/2018

ENGINEER'S/ SURVEYOR'S STATEMENT REGARDING THE PRESENCE OF MONUMENTS WITHIN PROJECT LIMITS

I HEREBY ATTEST THAT I HAVE LOCATED AND REFERENCED ON THESE PLANS THE MONUMENTS EXISTING PRIOR TO CONSTRUCTION TO ENSURE PERPETUATION OF THEIR LOCATION IN ACCORDANCE WITH SECTION 88771 OF THE BUSINESS AND PROFESSIONS CODE. I FURTHER ATTEST THAT I HAVE PERFORMED A RECORD SEARCH AND FIELD INSPECTION TO IDENTIFY EXISTING MONUMENTS; SHALL SET SUFFICIENT CONTROLLING, WITNESS, AND PERMANENT MONUMENTS; AND SHALL FILE THE REQUISITE CORNER RECORD OR RECORD OF SURVEY OF THE REFERENCES WITH THE COUNTY SURVEYOR.

Michael A. Kennada 2-7-2017
MICHAEL A. KENNADA DATE
L.S. 5642

BENCH MARK

BENCH MARK: 24.9M (81.7FT) NORTH OF THE CENTER OF THE WESTBOUND LANES OF FREEWAY 118, 17.5M (57.4FT) NORTH OF THE NORTHWEST CORNER OF THE WESTBOUND FREEWAY OVERPASS OF THE WESTBOUND FREEWAY ON-RAMP, 0.8M (2.6FT) ABOVE THE LEVEL OF THE RAMP AND 0.3M (1.0FT) WEST OF A WITNESS POST. USGS C1452

ELEV. 1247.92 FEET ADJUSTMENT 1995

T.G. 500-A1, B1

TITLE SHEET

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

PLAN PREPARED BY:



UNITED CIVIL, INC.
30141 AGOURA ROAD, SUITE 215
AGOURA HILLS, CA 91301
PH: (818) 707-8648
FAX: (818) 707-8649

RD 53138-01 PH085314 SHEET 1 OF 12



DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS
BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

ROAD STANDARD NOTES

- The following general notes are to be included on the 2nd sheet of all Road Plans:
1. A permit shall be obtained and fees paid for construction inspection to the Department of Public Works at the Permit Counter, 900 South Fremont Avenue, 8th Floor, Alhambra at least 72 hours prior to starting work under this contract.
 2. ~~When work is within a contract city, the contractor must contact the Director of Public Works of that City to determine the location to pay the inspection fees.~~
 3. The Contractor shall contact the district office listed on the permit application to arrange for an acceptable construction start date.
 4. A permit must be obtained from the Los Angeles County Department of Public Works, Construction Division at (626) 458-3129 for all storm drain connections.
 5. For all work within Caltrans R/W or incorporated cities, subject to inspection and approval of Caltrans or cities, obtain a permit from Caltrans or other cities 30 days prior to construction within their right-of-way.
 6. All work shall conform to the "SPPWC" (Standard Plans for Public Works Construction, also commonly referred to as "APWA") and the Standard Specifications for Public Works Construction, supplemented with the Los Angeles County Department of Public Works Standard Plans 2000 edition. The latest editions of these manuals shall be used unless otherwise noted on the plans.
 7. Work in public streets, once begun, shall be prosecuted to completion without delay to avoid unnecessary inconvenience to adjacent property owners and to the traveling public. Failure to comply with this requirement is a violation of Title 16 of the County Code, Highway Permit Code.
 8. The contractor shall take all necessary and proper precautions to protect adjacent properties from all damage that may occur from storm water runoff and/or deposition of debris resulting from any and all work in connection with subdivision construction.
 9. There shall be no above-ground obstruction in any portion of the sidewalk except where the width, exclusive of top of curb, is 6 feet or greater.
 10. Mail receptacles will be neighborhood box units installed per post office regulations as shown hereon. Mailbox receptacles shall not be located within the radius of cur-de-sac bulbs and knuckles. Where mail receptacles and sidewalks are located behind the curb, provide sidewalk transitions at all mailbox locations per details shown hereon.
 11. At the earliest opportunity or prior to forming sidewalks, the contractor shall contact the local Postal Office for location approval and type of mailbox receptacles to be installed.
 12. Construct walk returns and transitions per DPW Standard Plan 1130-1.
 13. Construct commercial driveways (6" PCC on 6" base) per SPPWC Standard Plan 110-2 unless otherwise shown. Prior to forming curb and gutter, the contractor shall confer with the County Inspector to secure approval for all driveway locations and widths. Where sidewalks are adjacent to curb, provide sidewalk transitions at all driveway locations per detail shown hereon.
 14. Construct street name signs per locations as shown on plan in accordance with current County specifications and standard plans for street name signs. Installations shall conform to "Type B" for streets classified as residential and "Type A" for streets classified as any other classification above residential. All street name signs at an intersection shall be of the same type and shall have ASTM Type IX retro-reflective sheeting with an anti-graffiti overlay film. Contact the L.A. Co DPW Sign Shop at (626)458-1700 for specifications and standard plans. Street name signs shall be posted prior to occupancy of buildings.
 15. Provide a street lighting system approved by the Street Lighting Section, Traffic and Lighting Division; and provide for the temporary operations of the street lighting system.
 16. Thickness of base materials will be determined by the Department of Public Works CBR soil test and established by the Materials Laboratory. Subdivider's engineer shall request test by the Department of Public Works, Materials Laboratory at (626) 458-4928, after streets have been rough graded. Plans must be revised to show actual base to be placed.
 17. Crushed Miscellaneous Base may be used under curb and gutter in lieu of Crushed Aggregate Base.
 18. Crushed Miscellaneous Base or Select Material with expansion of 3% or less by the Department of Public Works CBR soil test may be used in lieu of Crushed Aggregate Base under walks.
 19. Driveways shall not encroach in the five (5) feet gutter portion of local depressions.
 20. Plant Street Trees per Los Angeles County Department of Public Works "Special provisions for tree planting-subdivision," SPPWC Standard Plan 518-3 through 524-2 as required, and prior to occupancy of Buildings. See Street Tree List hereon.
 21. All utility lines shall be underground per Section 21.24.400 of Title 21 of the Los Angeles County Code. Contact Land Development Division at (626) 458-3141 for new location of any above ground utility structure in parkway.
 22. Where grades exceed 6%, place parkway protectors on downstream side of all driveways per LADPW Standard Plan 1150-1 and at all lot lines, unless driveways are constructed within 50 feet of lot lines. See details hereon.
 23. No driveways should be located within 25 feet upstream of a catch basin when street grades is 6% or greater.
 24. Rip-Rap Notes:
 - a. ~~Rocks for grouted rip-rap shall be good quality broken concrete and/or river run rock. The smallest dimension shall not be less than six (6) inches nor greater than 18 inches unless otherwise specified. The largest dimension shall not exceed four (4) times the smallest dimension.~~
 - b. ~~There shall be a grout bed at least two (2) inches beneath the first layer of rock. All the voids between the rocks shall be filled with grout. Maximum spacing between rocks shall be two (2) inches.~~
 - c. ~~Surface rocks shall be embedded from 1/2 to 2/3 of their maximum dimension.~~
 25. Pipe bedding shall be:
 - a. ~~In accordance with Los Angeles County Engineer Case A Bedding per DPW Standard Plan 3002-1 unless otherwise noted. The bedding material placed from the bottom of the pipe to 1 foot over the top of the pipe shall be sand, crushed aggregate, or native free draining granular material and shall have a sand equivalent of 20 or greater.~~
 - b. ~~OR~~
 - c. ~~According to DPW Standard Plan 3080-1, Case 3, except bell and spigot pipe which shall be Case 2 bedding, unless otherwise shown. All values shall be as specified in DPW Standard Plan 3080-1 for Case 3 bedding. Notes (a), (b), and (c) if the "W" value at the tip of the pipe is exceeded, the bedding shall be modified, and/or pipe of additional strength shall be provided. The proposed modification shall be approved by the Department.~~
 26. All construction joints for P.C.C. curbs, gutters, driveways and sidewalks shall be in accordance with SPPWC Standard Plan No. 112-2.
 27. The latest revised standard plan or drawing shall be used unless otherwise specifically noted.



28. Repair any broken or damaged curb, gutter, sidewalk, and pavement on streets within or abutting the subdivision.
29. A signing and striping plan is required. The applicant shall submit signing and striping plans for approval to Land Development Division (if not already approved) and shall conform with the approved signing and striping plan prior to the acceptance of the streets for public maintenance. After obtaining the Construction Permit, the applicant shall contact Operational Services Division at (626) 458-1700 to request the fabrication and installation of required signage and the completion of striping per approved plans. The applicant shall deposit appropriate fees with Construction Division when applying for the permit to allow completion of the necessary work.
30. A Traffic Control Plan may be required for work within public right of way. Prior to securing a construction or excavation permit, the applicant/contractor should contact Construction Division at (626) 458-3129 at the earliest possible opportunity to determine if such a plan is required based on the proposed scope of work. If a Traffic Control Plan is determined to be necessary, the applicant/contractor shall submit plans to Construction Division for approval.
31. All existing signs and posts located within the public right of way that interfere with proposed work shall be removed prior to work commencing and replaced in kind once work has been completed. Please call County of Los Angeles Department of Public Works Operational Services Division at (626) 458-1708 5 days prior to coordinate.

STORMWATER POLLUTION PLAN NOTES

- A. NOTES
1. EVERY EFFORT SHOULD BE MADE TO ELIMINATE THE DISCHARGE OF NON-STORMWATER FROM THE PROJECT SITE AT ALL TIMES.
 2. ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON-SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEETFLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND.
 3. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
 4. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
 5. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON-SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
 6. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
 7. SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEEPED UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
 8. ANY SLOPES WITH DISTURBED SOILS OR DENUED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.
- B. THE FOLLOWING BMPs AS OUTLINED IN, BUT NOT LIMITED TO, THE LATEST EDITION OF THE CALIFORNIA BMP HANDBOOK (CONSTRUCTION) OR CALTRANS STORMWATER QUALITY HANDBOOKS (CONSTRUCTION SITE BMP MANUAL), MAY APPLY DURING THE CONSTRUCTION OF THIS PROJECT (ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY THE PROJECT ENGINEER OR THE BUILDING OFFICAL):

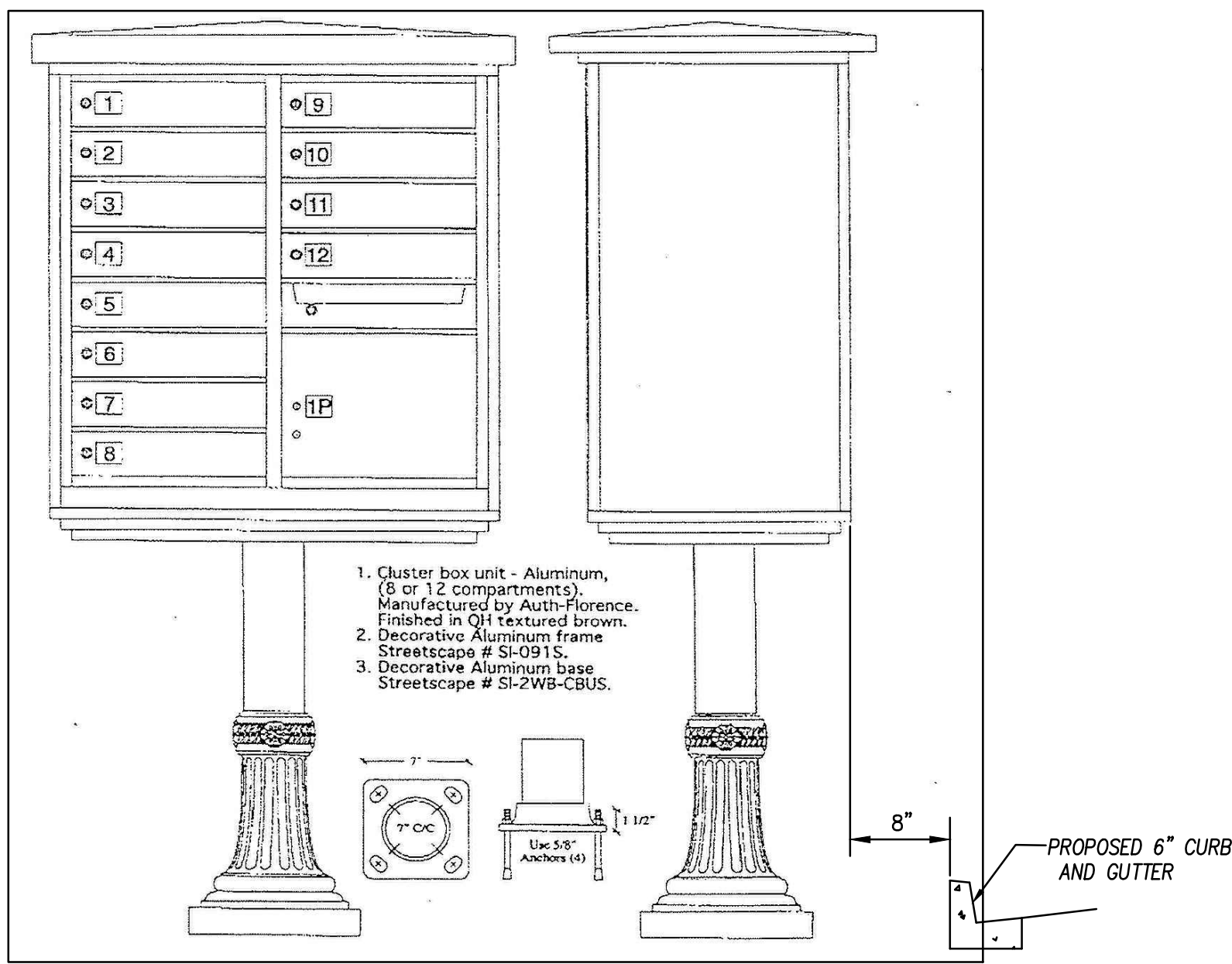
- EROSION CONTROL**
- EC1 - SCHEDULING
 - EC2 - PRESERVATION OF EXISTING VEGETATION
 - EC3 - HYDRAULIC MULCH
 - EC4 - HYDROSEEDING
 - EC5 - SOIL BINDERS
 - EC6 - STRAW MULCH
 - EC7 - GEOTEXTILES & MATS
 - EC8 - WOOD MULCHING
 - EC9 - EARTH DIKES AND DRAINAGE SWALES
 - EC10 - VELOCITY DISSIPATION DEVICES
 - EC11 - SLOPE DRAINS
 - EC12 - STREAMBANK STABILIZATION
 - EC13 - RESERVED
 - EC14 - COMPOST BLANKETS
 - EC15 - SOIL PREPARATION/ROUGHENING
 - EC16 - NON-VEGETATED STABILIZATION
- NON-STORMWATER MANAGEMENT**
- NS1 - WATER CONSERVATION PRACTICES
 - NS2 - DEWATERING OPERATIONS
 - NS3 - PAVING AND GRINDING OPERATIONS
 - NS4 - TEMPORARY STREAM CROSSING
 - NS5 - CLEAR WATER DIVERSION
 - NS6 - ILLICIT CONNECTION/DISCHARGE
 - NS7 - POTABLE WATER/IRRIGATION
 - NS8 - VEHICLE AND EQUIPMENT CLEANING
 - NS9 - VEHICLE AND EQUIPMENT FUELING
 - NS10 - VEHICLE AND EQUIPMENT MAINTENANCE
 - NS11 - PILE DRIVING OPERATIONS
 - NS12 - CONCRETE CURING
 - NS13 - CONCRETE FINISHING
 - NS14 - MATERIAL AND EQUIPMENT USE
 - NS15 - DEMOLITION ADJACENT TO WATER
 - NS16 - TEMPORARY BATCH PLANTS

- TEMPORARY SEDIMENT CONTROL**
- SE1 - SILT FENCE
 - SE2 - SEDIMENT BASIN
 - SE3 - SEDIMENT TRAP
 - SE4 - CHECK DAM
 - SE5 - FIBER ROLLS
 - SE6 - GRAVEL BAG BERM
 - SE7 - STREET SWEEPING AND VACUUMING
 - SE8 - SANDBAG BARRIER
 - SE9 - STRAW GALE BARRIER
 - SE10 - STORM DRAIN INLET PROTECTION
 - SE11 - ACTIVE TREATMENT SYSTEMS
 - SE12 - TEMPORARY SILT DIKE
 - SE13 - COMPOST SOCKS & BERMS SE14
 - SE14 - BIOFILTER BAGS

- WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL**
- WM1- MATERIAL DELIVERY AND STORAGE
 - WM2- MATERIAL USE
 - WM3- STOCKPILE MANAGEMENT
 - WM4- SPILL PREVENTION AND CONTROL
 - WM5- SOLIDWASTE MANAGEMENT
 - WM6- HAZARDOUS WASTE MANAGEMENT
 - WM7- CONTAMINATION SOIL MANAGEMENT
 - WM8- CONCRETE WASTE MANAGEMENT
 - WM9- SANITARY/SEPTIC WASTE MANAGEMENT
 - WM10- LIQUIDWASTE MANAGEMENT
- WIND EROSION CONTROL**
- WE1- WIND EROSION CONTROL
- EQUIPMENT TRACKING CONTROL**
- TC1- STABILIZED CONSTRUCTION ENTRANCE/EXIT
 - TC2- STABILIZED CONSTRUCTION ROADWAY
 - TC3- ENTRANCE/OUTLET TIRE WASH



ALL CATCH BASINS AND INLETS THAT DISCHARGE INTO AN EXISTING OR PROPOSED STORM DRAIN MUST BE STENCILED TO DISCOURAGE ILLEGAL DUMPING OF POLLUTANTS. THIS STENCIL SHALL HAVE A MINIMUM DIAMETER OF 30 INCHES.



MAILBOX DETAIL

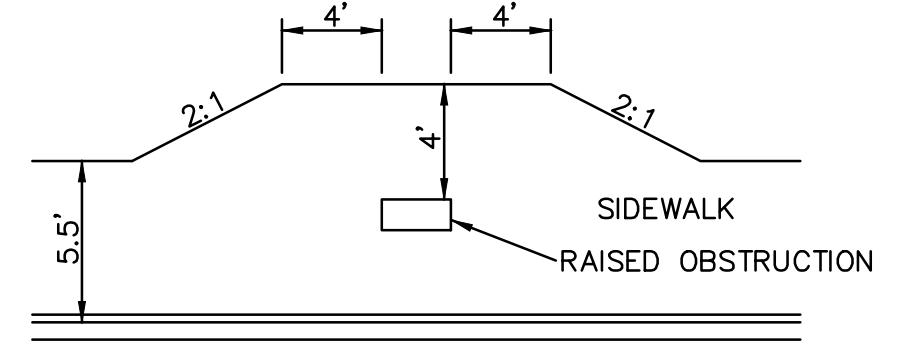
STREET TREE LIST *

Street	Limits	No. Trees		Botanical Name	Common Name	Size
		LT.	RT.			
CANOGA AVE	BEG. OF IMPVTS TO BRIDGE	0	24	- RHUS LANCEA	- AFRICAN SUMAC	- 24" BOX
		10	0	- QUERCUS AGRIFOLIA	- LIVE OAK	- 36" BOX
		20	0	- PLATANUS RACEMOSA	- CALIFORNIA SYCAMORE	- 24" BOX
POEMA PL	BRIDGE TO POEMA PL	36	29	- RHUS LANCEA	- AFRICAN SUMAC	- 24" BOX
		3	4	- QUERCUS AGRIFOLIA	- LIVE OAK	- 36" BOX
		3	14	- PLATANUS RACEMOSA	- CALIFORNIA SYCAMORE	- 24" BOX
POEMA PL	BRIDGE TO CANOGA AVE	0	0	-	-	-
		10	0	- RHUS LANCEA	- AFRICAN SUMAC	- 24" BOX
		11	3	- QUERCUS AGRIFOLIA	- LIVE OAK	- 36" BOX
		20	3	- PLATANUS RACEMOSA	- CALIFORNIA SYCAMORE	- 24" BOX

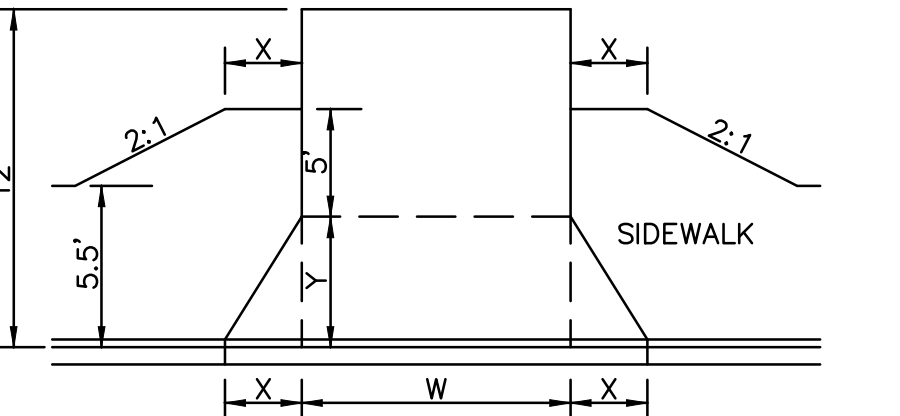
*THE INSPECTOR MAY USE HIS/HER DISCRETION TO CHANGE LOCATION, SPACING, AND NUMBER OF STREET TREES AS DICTATED BY FIELD CONDITIONS.

CRUSHED MISCELLANEOUS BASE (CMB) NOTES

- Prior to Construction
1. The use of CMB will be determined through the Department of Public Works' CBR soil test and established by the Materials Laboratory. Subdivider's engineer shall request test by the Department of Public Works, Materials Laboratory at (626) 458-1707, after streets have been rough graded. A notification of the CBR test request shall be provided to the County Inspector.
 2. CMB shall comply with the requirements of Section 200-2.4 of the "Greenbook" Standard Specifications for Public Works Construction, 2003 Edition or latest edition.
 3. Place a deposit with Geotechnical and Materials Engineering Division (GMED) to include the cost of reviewing the submittal and quality assurance testing. Contact GMED at (626) 458-4928 Extension 3687 for a copy of the current cost estimate worksheet.
 4. Submit the following items to GMED for review and approval.* Allow a minimum of two (2) working days for review of submittal(s). Certificate of Compliance will not be accepted as a substitute for these tests.
 - Source Location of CMB
 - CMB Gradation (ASTM C 131 Test Grading)
 - R-value (CT 301)
 - Sand Equivalent (SE) (CT 217)
 - Percentage Wear at 100 and at 500 revolutions (ASTM C 131) per sample
- *Note: Any item not in compliance with Section 200-2.4 of the Greenbook may be resubmitted for review.
- During Construction
1. Preliminary stamped approval from GMED will be given when all CMB items are in compliance with Section 200-2.4 of the Greenbook.
 2. Submit a Quality Control (QC) plan to GMED for review and approval.
- After Construction
1. Contact GMED at (626) 458-1707 to schedule the Quality Assurance (QA) testing of CMB. Provide a minimum of 48 hours advance notice.
 2. For every 1,000 tons of CMB, a 100 lb. sample shall be obtained and the following quality tests performed by GMED:
 - Sand Equivalent (CT 217) and gradation per sample
 - One (1) R-value tests per sample (CT 301)**
 - Sand Equivalent (SE) (CT 217)
 - Percentage Wear @ 100 and @ 500 Revolutions (ASTM C 131)
 3. For every 2,500 square feet of CMB, an in-situ density test shall be performed by GMED using the nuclear gauge per CT 231. Please notify GMED a minimum of 24 hour notice to schedule this test.
 4. Final approval is contingent upon the QA test results provided by GMED.
- ** The R-value requirement may be waived provided the material has a SE of 40 or more.



TYP. SIDEWALK TRANSITION DETAIL AT RAISED OBSTRUCTION



TYP. SIDEWALK TRANSITION DETAIL AT DRIVEWAY

SIDEWALK TRANSITION DETAILS

N.T.S.

T.G. 500-A1, B1

GENERAL NOTES, CMB NOTES, WATER QUALITY NOTES AND DETAILS
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

PLAN PREPARED BY:

UNITED CIVIL, INC.
30141 AGOURA ROAD, SUITE 215
AGOURA HILLS, CA 91301
PH: (818) 707-8648
FAX: (818) 707-8649

RD 53138-01	PH085314	SHEET 2 OF 12
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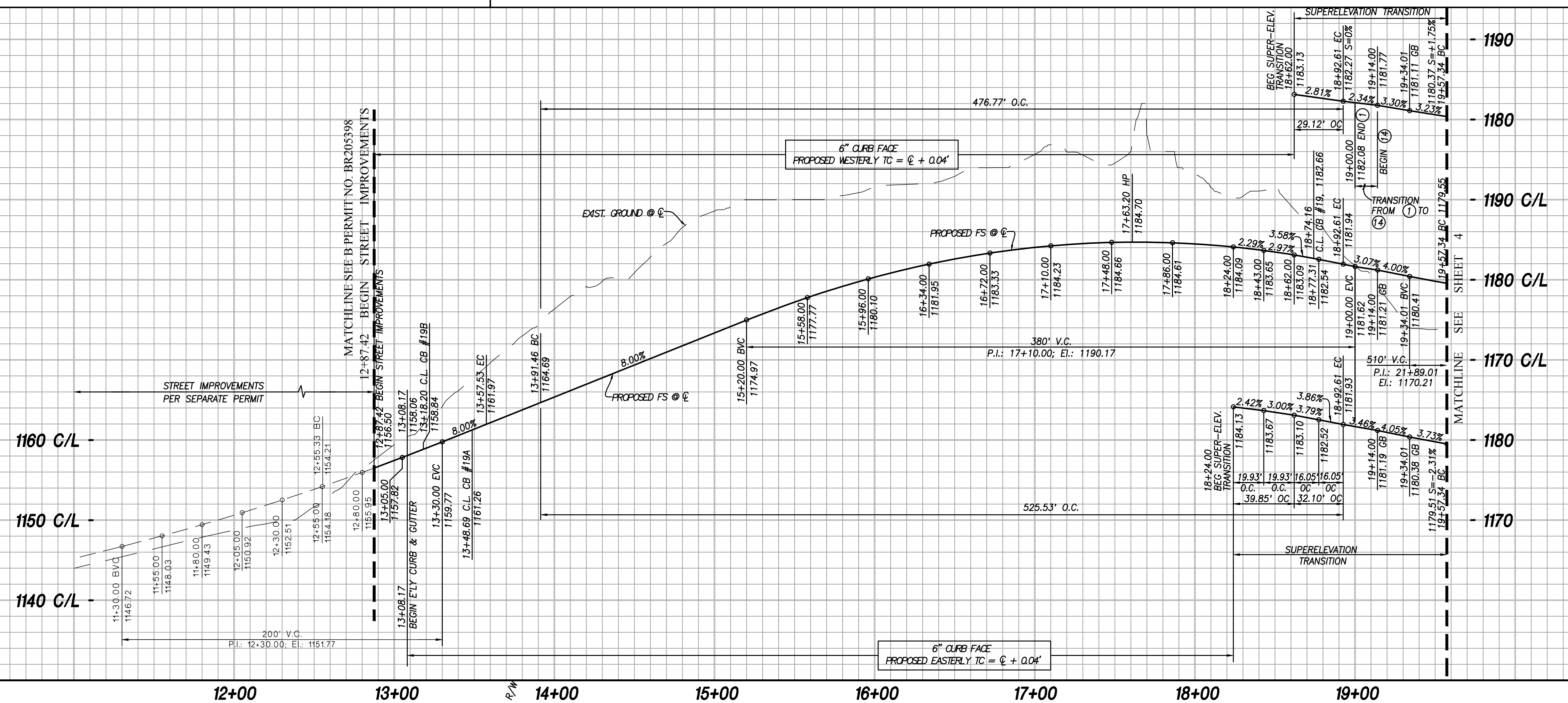
REVIEWED LAND DEVELOPMENT DIVISION
BY: *Joseph Nguyen* DATE: 2/7/2017
ROAD AND GRADING SECTION

NO.	REVISIONS	REVISED BY	APPROVED BY	DATE

REGISTERED PROFESSIONAL ENGINEER
SHEW HUAT NG
NO. 46026
EXP. 12-31-18
STATE OF CALIFORNIA

Shew Huat Ng 2-7-2017
SHEW HUAT NG DATE
R.C.E. 46026 EXP. 12/31/2018

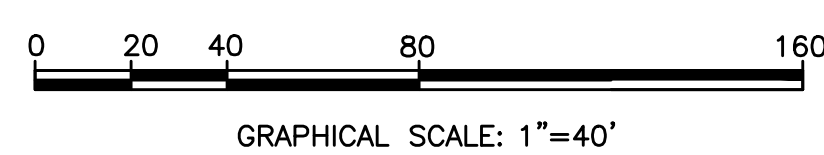
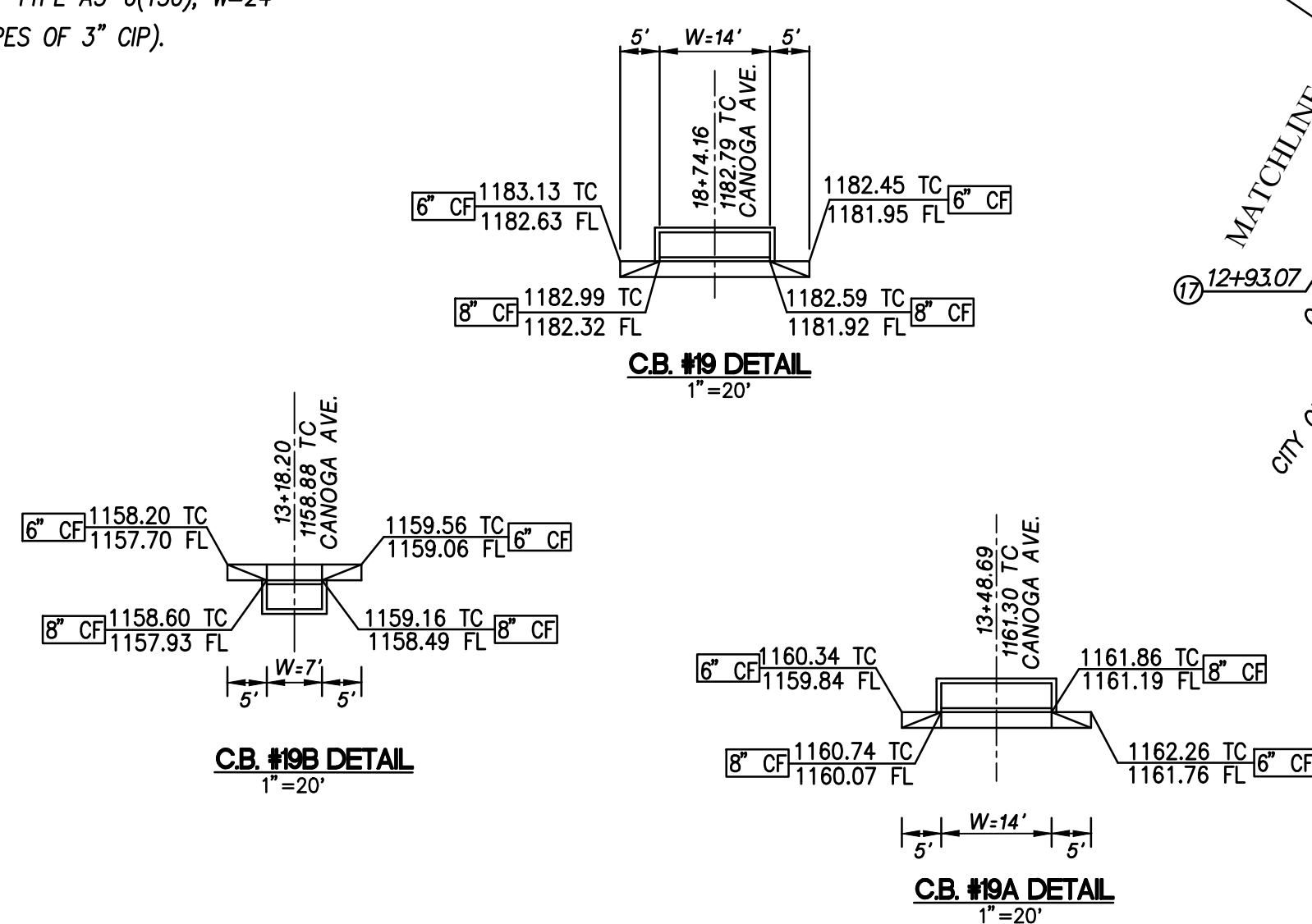
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VERT. 1"=8'
DOUBLE VERTICAL



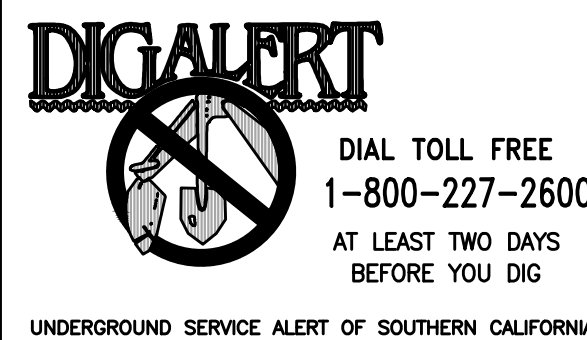
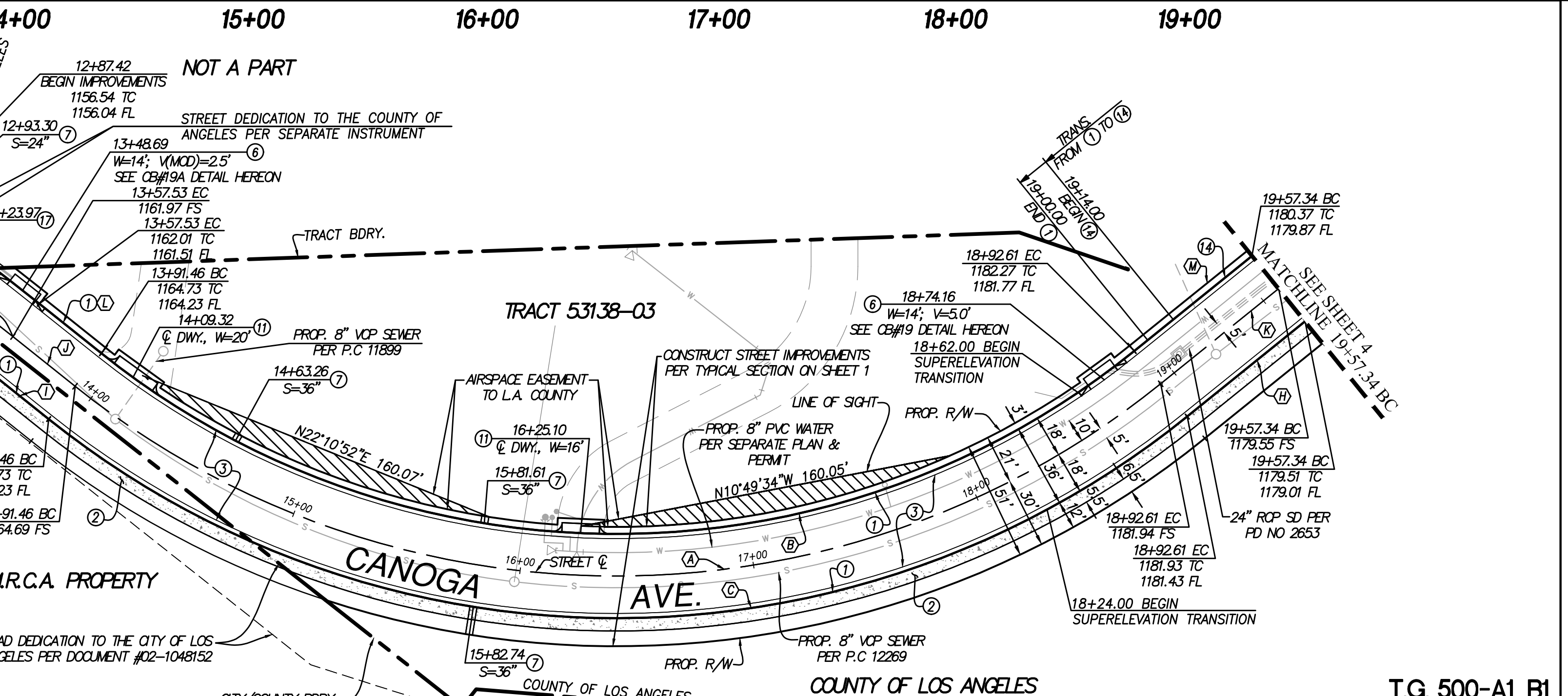
CONSTRUCTION NOTES

- ① CONSTRUCT CURB AND GUTTER PER SPPWC STD. PLAN 120-2, TYPE A2-150(6), W=24"
- ② CONSTRUCT 4" P.C.C. SIDEWALK ON 6" CMB (SEE GENERAL NOTE 18 ON SHEET 2)
- ③ CONST. 6" MIN. A.C. PAVEMENT - 4" BASE COURSE (B-PG 64-10) AND A 2" FINISH COURSE (C2-PG 64-10) ON 12" CRUSHED AGGREGATE BASE (SEE NOTE 16)
- ④ CONSTRUCT LOCAL DEPRESSION AT CATCH BASIN CASE E PER SPPWC STD. PLAN 313-3.
- ⑤ CONSTRUCT PARKWAY DRAIN PER SPPWC STD. 151-2, INLET TYPE 2, WIDTH (S) PER PLAN (PRIVATELY MAINTAINED BY HOA)
- ⑥ CONSTRUCT COMMERCIAL DWY APPROACH PER SPPWC STD. PLAN 110-2, TYPE C, R=4', Y=4', WIDTH PER PLAN
- ⑦ CONSTRUCT CURB AND GUTTER PER SPPWC STD. PLAN 120-2, TYPE A3-6(150), W=24"
- ⑧ CONSTRUCT CURB DRAIN PER SPPWC STD. PLAN 150-3 (3 PIPES OF 3" CIP).

CURVE/LINE DATA				
NO.	RADIUS	DELTA	LENGTH	TANGENT
A	370.00'	77°36'18"	501.15'	297.51'
B	352.00'	77°36'18"	476.77'	283.04'
C	388.00'	77°36'18"	525.53'	311.99'
D	1300.00'	01°05'57"	24.94'	12.47'
E	1318.00'	03°11'26"	73.39'	36.71'
F	1281.37'	02°10'35"	48.67'	24.34'
G	1300.00'	01°59'27"	45.17'	22.59'
H	-	N38°55'58"W	64.73'	-
I	-	N38°40'20"E	33.93'	-
J	-	N38°40'20"E	33.93'	-
K	-	N38°55'58"W	64.73'	-
L	-	N38°40'20"E	33.93'	-
M	-	N38°55'58"W	64.73'	-



REVIEWED, LAND DEVELOPMENT DIVISION
BY: Joseph Nguyen DATE: 2/7/2017
ROAD AND GRADING SECTION

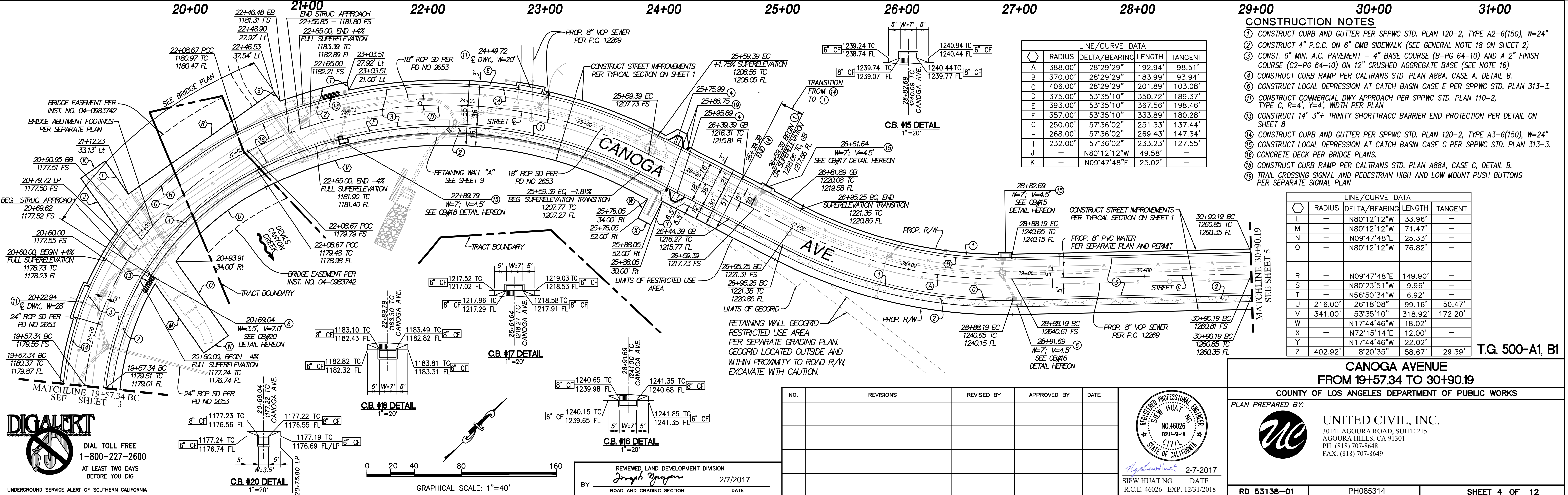
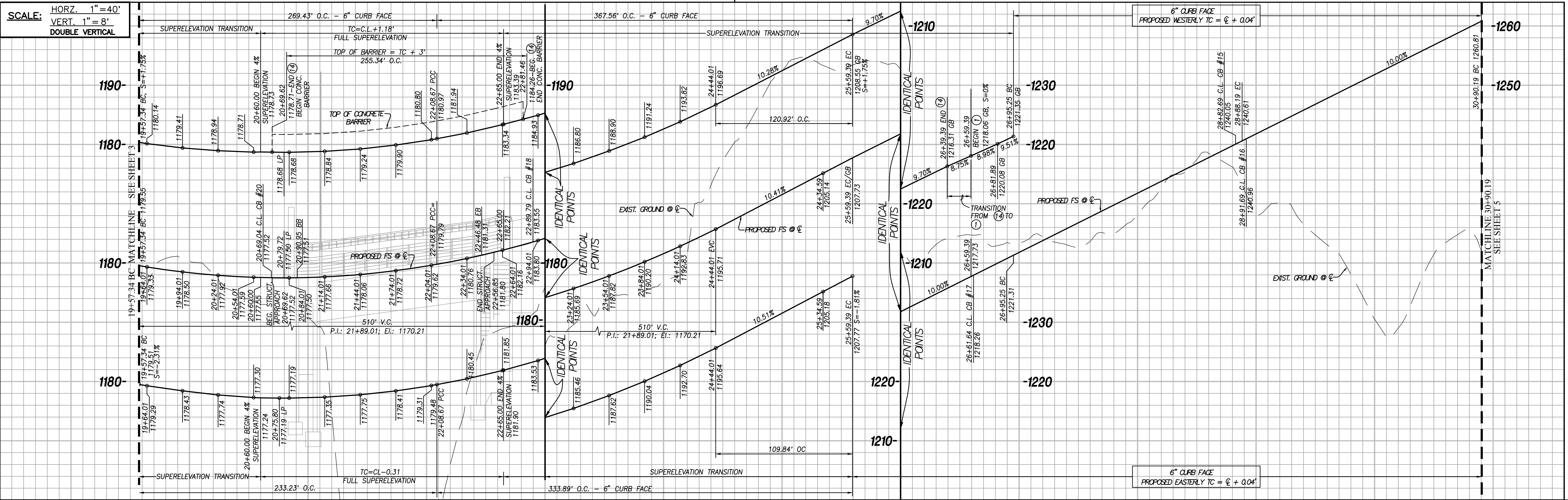


CANOGA AVENUE
FROM 12+87.42 TO 19+57.34
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

PLAN PREPARED BY:
UNITED CIVIL, INC.
30141 AGOURA ROAD, SUITE 215
AGOURA HILLS, CA 91301
PH: (818) 707-8648
FAX: (818) 707-8649

RD 53138-01 PH085314 SHEET 3 OF 12

SCALE: HORZ. 1"=40'
VERT. 1"=8'
DOUBLE VERTICAL



LINE/CURVE DATA

LINE/CURVE DATA	RADIUS	DELTA/BEARING	LENGTH	TANGENT
A	388.00'	28°29'29"	192.94'	98.51'
B	370.00'	28°29'29"	183.99'	93.94'
C	406.00'	28°29'29"	201.89'	103.08'
D	375.00'	53°35'10"	350.72'	189.37'
E	393.00'	53°35'10"	367.56'	198.46'
F	357.00'	53°35'10"	333.89'	180.28'
G	250.00'	57°36'02"	251.33'	137.44'
H	268.00'	57°36'02"	269.43'	147.34'
I	232.00'	57°36'02"	233.23'	127.55'
J	-	N80°12'12"W	49.58'	-
K	-	N09°47'48"E	25.02'	-

- CONSTRUCTION NOTES**
- CONSTRUCT CURB AND GUTTER PER SPPWC STD. PLAN 120-2, TYPE A2-6(150), W=24"
 - CONSTRUCT 4" P.C.C. ON 6" CMB SIDEWALK (SEE GENERAL NOTE 18 ON SHEET 2)
 - CONST. 6" MIN. A.C. PAVEMENT - 4" BASE COURSE (B-PG 64-10) AND A 2" FINISH COURSE (C2-PG 64-10) ON 12" CRUSHED AGGREGATE BASE (SEE NOTE 16)
 - CONSTRUCT CURB RAMP PER CALTRANS STD. PLAN AB8A, CASE A, DETAIL B.
 - CONSTRUCT LOCAL DEPRESSION AT CATCH BASIN CASE E PER SPPWC STD. PLAN 313-3.
 - CONSTRUCT COMMERCIAL DWY APPROACH PER SPPWC STD. PLAN 110-2, TYPE C, R=4', Y=4', WIDTH PER PLAN
 - CONSTRUCT 14'-3"± TRINITY SHORTTRACC BARRIER END PROTECTION PER DETAIL ON SHEET 8
 - CONSTRUCT CURB AND GUTTER PER SPPWC STD. PLAN 120-2, TYPE A3-6(150), W=24"
 - CONSTRUCT LOCAL DEPRESSION AT CATCH BASIN CASE G PER SPPWC STD. PLAN 313-3.
 - CONCRETE DECK PER BRIDGE PLANS.
 - CONSTRUCT CURB RAMP PER CALTRANS STD. PLAN AB8A, CASE C, DETAIL B.
 - TRAIL CROSSING SIGNAL AND PEDESTRIAN HIGH AND LOW MOUNT PUSH BUTTONS PER SEPARATE SIGNAL PLAN

LINE/CURVE DATA

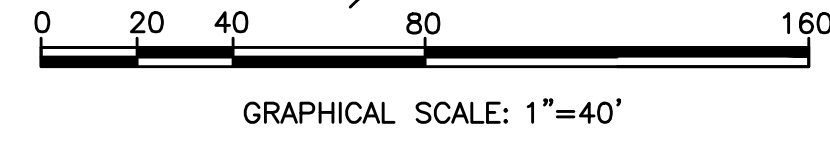
LINE/CURVE DATA	RADIUS	DELTA/BEARING	LENGTH	TANGENT
L	-	N80°12'12"W	33.96'	-
M	-	N80°12'12"W	71.47'	-
N	-	N09°47'48"E	25.33'	-
O	-	N80°12'12"W	76.82'	-
R	-	N09°47'48"E	149.90'	-
S	-	N80°23'51"W	9.96'	-
T	-	N56°50'34"W	6.92'	-
U	216.00'	26°18'08"	99.16'	50.47'
V	341.00'	53°35'10"	318.92'	172.20'
W	-	N17°44'46"W	18.02'	-
X	-	N72°15'14"E	12.00'	-
Y	-	N17°44'46"W	22.02'	-
Z	402.92'	8°20'35"	58.67'	29.39'

CANOGA AVENUE
FROM 19+57.34 TO 30+90.19

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
PLAN PREPARED BY:
UNITED CIVIL, INC.
30141 AGOURA ROAD, SUITE 215
AGOURA HILLS, CA 91301
PH: (818) 707-8648
FAX: (818) 707-8649

RD 53138-01 PH085314 SHEET 4 OF 12

DIGALERT
DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

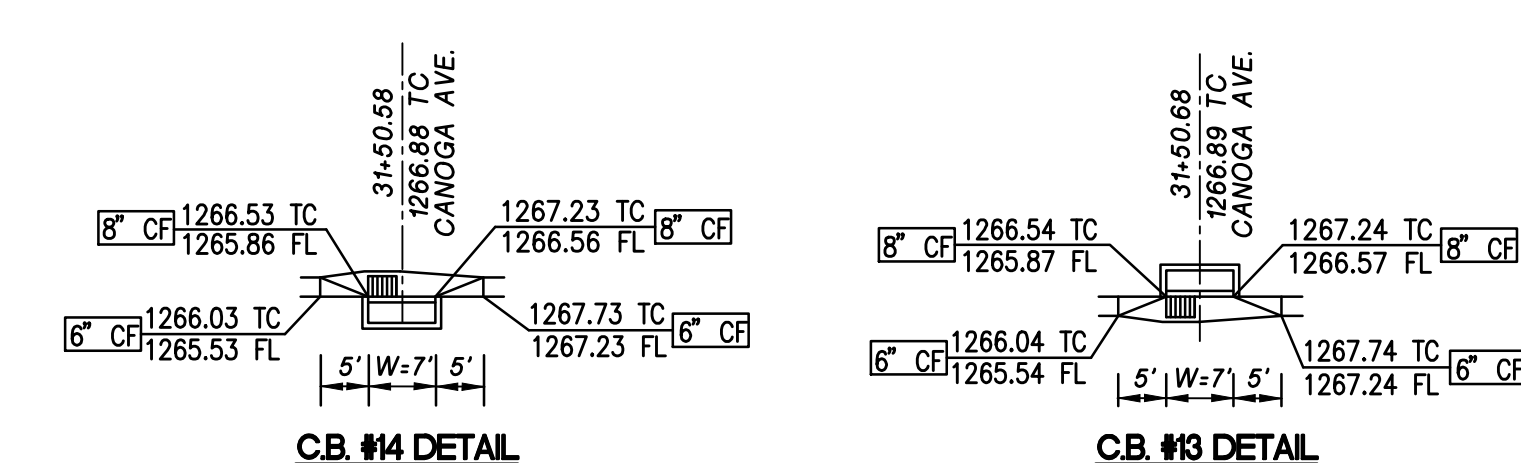
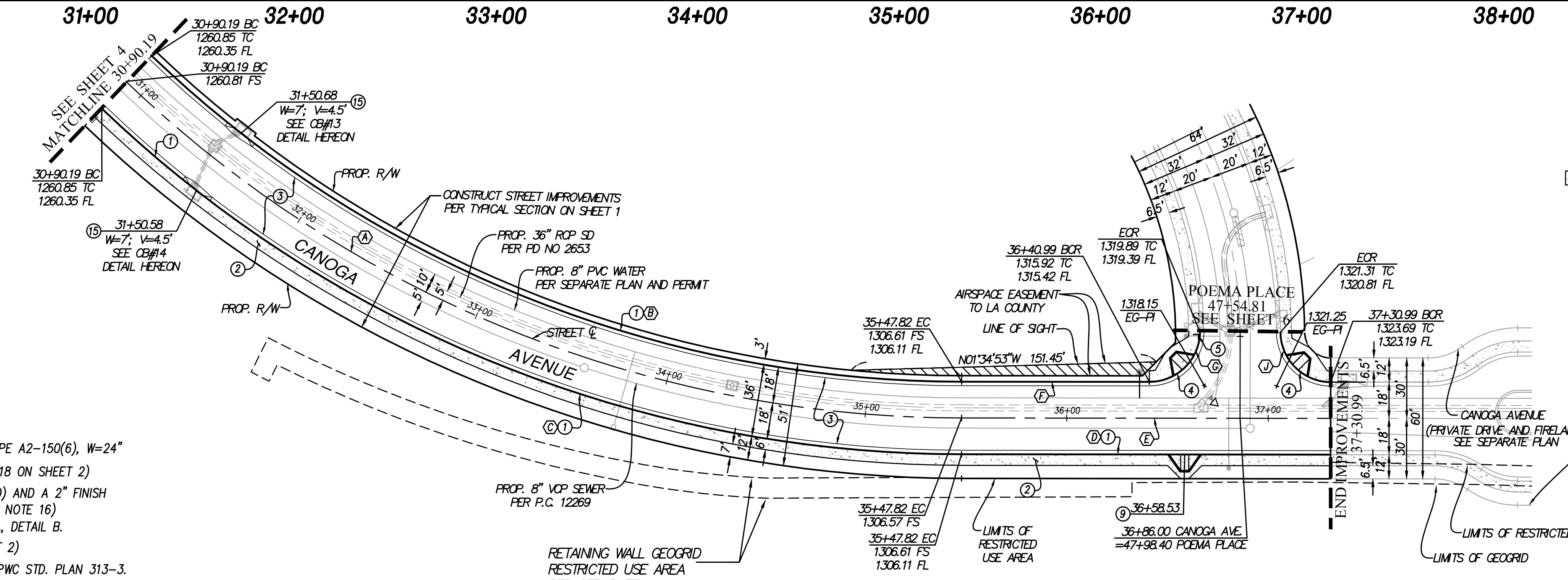
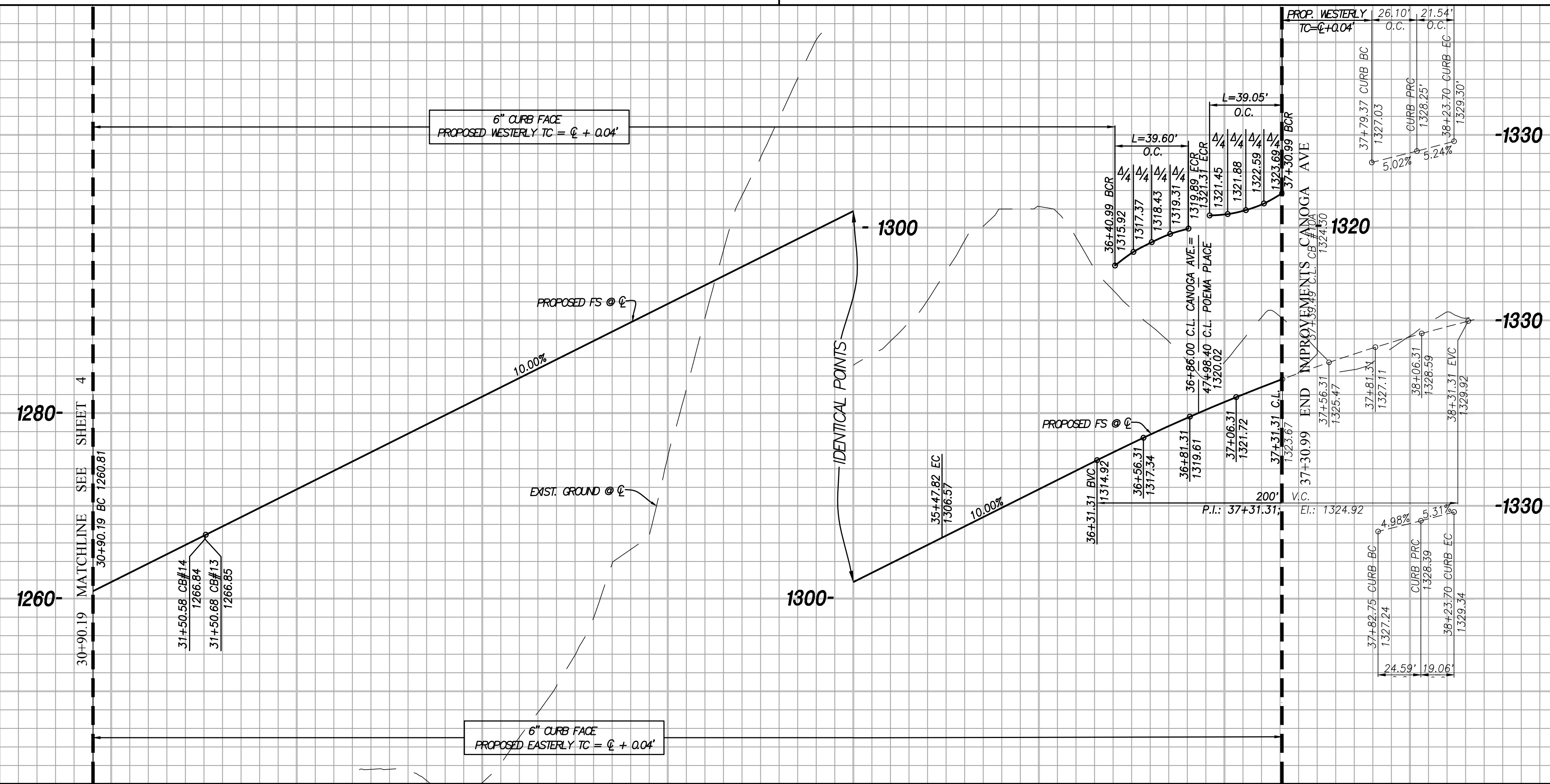


REVIEWED, LAND DEVELOPMENT DIVISION
BY: Joseph Nguyen
DATE: 2/7/2017
ROAD AND GRADING SECTION

NO.	REVISIONS	REVISED BY	APPROVED BY	DATE

REGISTERED PROFESSIONAL ENGINEER
NO. 46026
EXP. 12-31-18
STATE OF CALIFORNIA
2-7-2017
SHEW HUAT NG DATE
R.C.E. 46026 EXP. 12/31/2018

SCALE: HORZ. 1"=40'
VERT. 1"=8'
DOUBLE VERTICAL

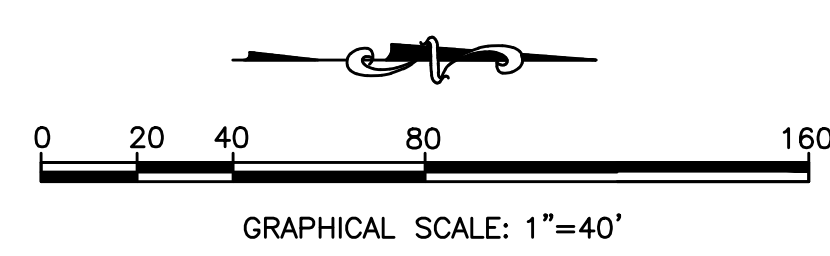


CURVE/LINE DATA				
NO.	RADIUS	DELTA	LENGTH	TAN
A	600.00'	43°42'00"	457.62'	240.59'
B	582.00'	43°42'00"	443.90'	233.37'
C	618.00'	43°42'00"	471.35'	247.81'
D	—	N00°03'45"W	183.20'	—
E	—	N00°03'45"W	45.44'	—
F	—	N00°03'45"W	93.17'	—
G	25.00'	90°45'26"	39.60'	25.33'
J	25.00'	89°29'43"	39.05'	24.78'

CONSTRUCTION NOTES

- ① CONSTRUCT CURB AND GUTTER PER SPPWC STD. PLAN 120-2, TYPE A2-150(6), W=24"
- ② CONSTRUCT 4" P.C.C. ON 6" CMB SIDEWALK (SEE GENERAL NOTE 18 ON SHEET 2)
- ③ CONST. 6" MIN. A.C. PAVEMENT - 4" BASE COURSE (B-PG 64-10) AND A 2" FINISH COURSE (C2-PG 64-10) ON 12" CRUSHED AGGREGATE BASE (SEE NOTE 16)
- ④ CONSTRUCT CURB RAMP PER CALTRANS STD. PLAN A88A, CASE A, DETAIL B.
- ⑤ CONSTRUCT STREET NAME SIGN (SEE GENERAL NOTE 14 ON SHEET 2)
- ⑥ CONSTRUCT LOCAL DEPRESSION AT CATCH BASIN CASE E PER SPPWC STD. PLAN 313-3.
- ⑦ CONSTRUCT CURB RAMP PER CALTRANS STD. PLAN A88A, CASE D
- ⑧ CONSTRUCT LOCAL DEPRESSION AT CATCH BASIN CASE G PER SPPWC STD. PLAN 313-3.

RETAINING WALL GEOGRID RESTRICTED USE AREA PER SEPARATE GRADING PLAN. GEOGRID LOCATED OUTSIDE AND WITHIN PROXIMITY TO ROAD R/W. EXCAVATE WITH CAUTION.



REVIEWED LAND DEVELOPMENT DIVISION
BY: Joseph Nguyen DATE: 2/7/2017
ROAD AND GRADING SECTION

NO.	REVISIONS	REVISED BY	APPROVED BY	DATE



2-7-2017
SIEW HUAT NG DATE
R.C.E. 46026 EXP. 12/31/2018

CANOGA AVENUE
FROM 30+90.19 TO 37+30.99

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

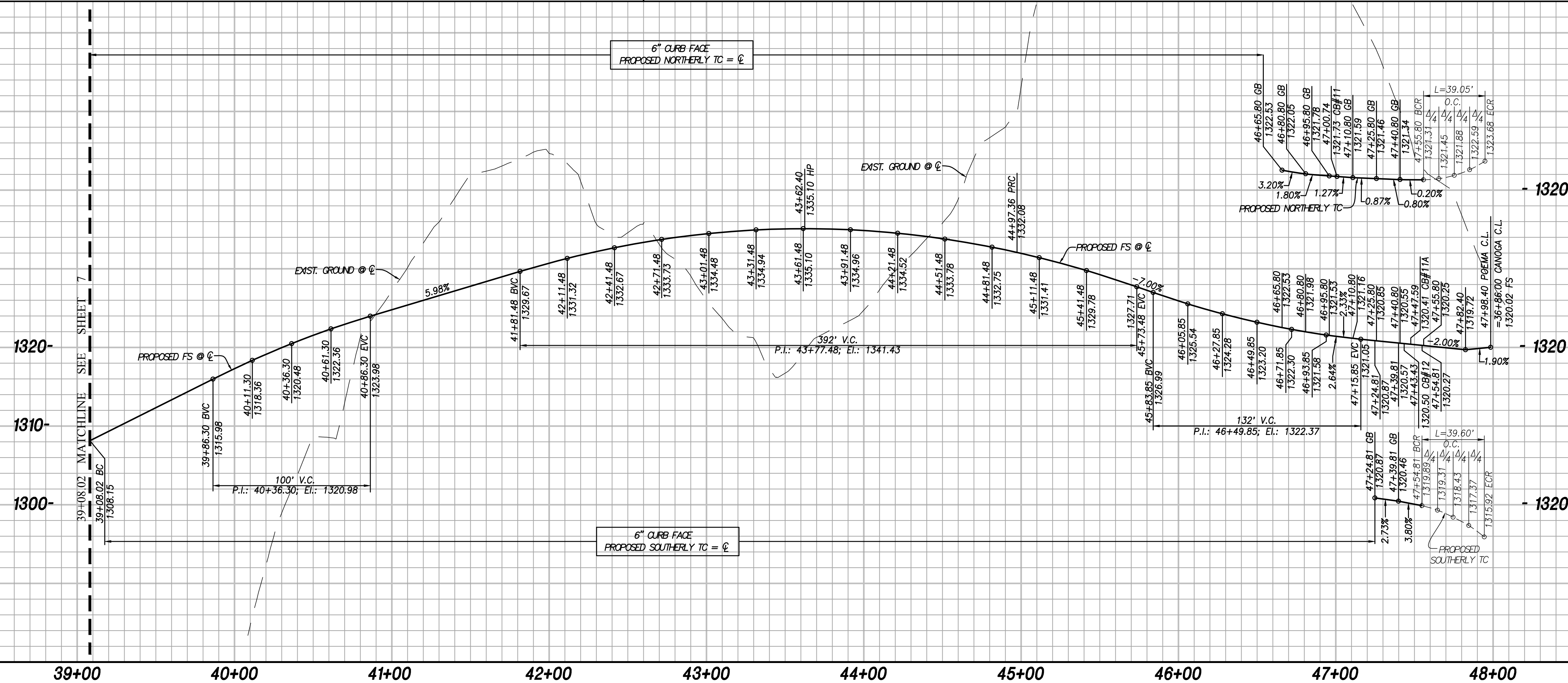
PLAN PREPARED BY:

UNITED CIVIL, INC.
30141 AGOURA ROAD, SUITE 215
AGOURA HILLS, CA 91301
PH: (818) 707-8648
FAX: (818) 707-8649

T.G. 500-A1, B1

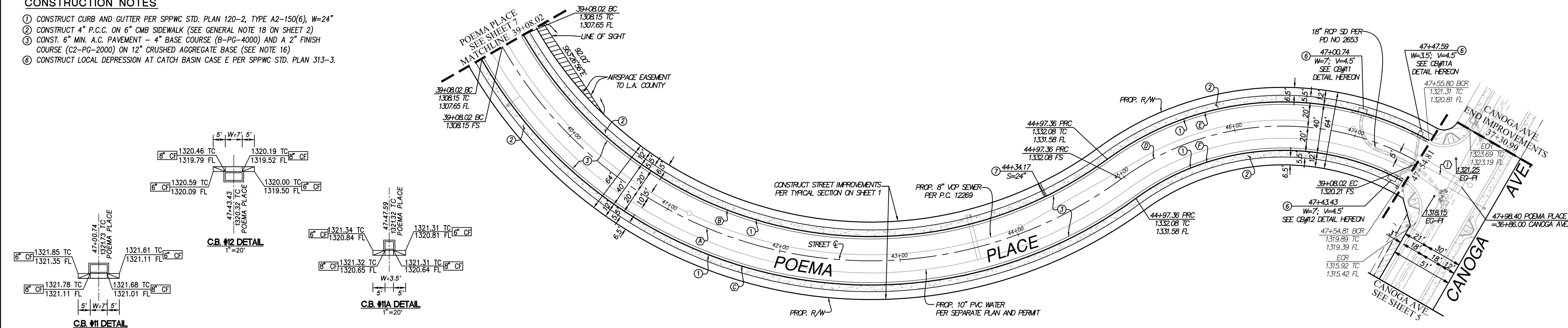
RD 53138-01	PH085314	SHEET 5 OF 12
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SCALE: HORZ. 1"=40'
VERT. 1"=8'
DOUBLE VERTICAL

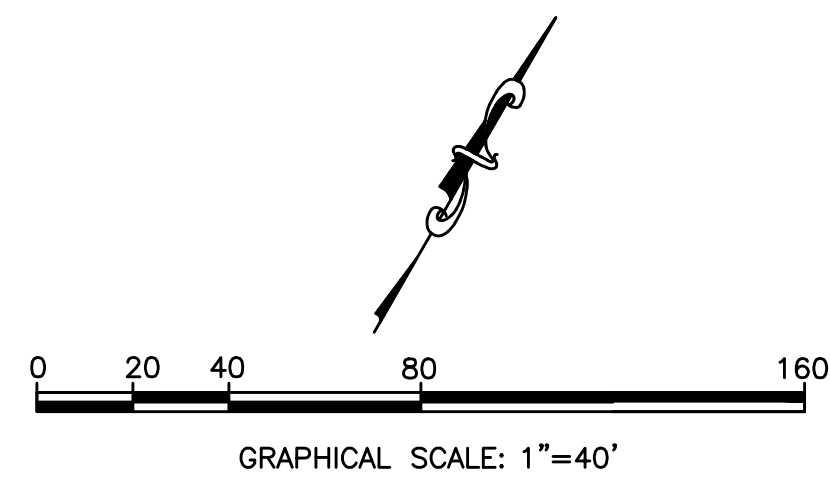


CONSTRUCTION NOTES

- CONSTRUCT CURB AND GUTTER PER SPPWC STD. PLAN 120-2, TYPE A2-150(6), W=24"
- CONSTRUCT 4" P.C.C. ON 6" CMB SIDEWALK (SEE GENERAL NOTE 18 ON SHEET 2)
- CONST. 6" MIN. A.C. PAVEMENT - 4" BASE COURSE (B-PG-4000) AND A 2" FINISH COURSE (C2-PG-2000) ON 12" CRUSHED AGGREGATE BASE (SEE NOTE 16)
- CONSTRUCT LOCAL DEPRESSION AT CATCH BASIN CASE E PER SPPWC STD. PLAN 313-3.



CURVE DATA			
RADIUS	DELTA	LENGTH	TANGENT
A 350.00'	96°28'35"	589.34'	391.98'
B 330.00'	96°28'35"	555.67'	369.58'
C 370.00'	96°28'35"	623.02'	414.38'
D 225.00'	78°58'10"	310.11'	185.38'
E 245.00'	65°22'00"	279.51'	157.19'
F 205.00'	65°33'30"	234.56'	132.01'
I -	N89°56'15"W	40.62'	-



DIG ALERT
DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

REVIEWED LAND DEVELOPMENT DIVISION
BY: Joseph Nguyen
ROAD AND GRADING SECTION
DATE: 2/7/2017

NO.	REVISIONS	REVISED BY	APPROVED BY	DATE



2-7-2017
SHEW HUAT NG DATE
R.C.E. 46026 EXP. 12/31/2018

POEMA PLACE
FROM 39+08.02 TO 47+98.40

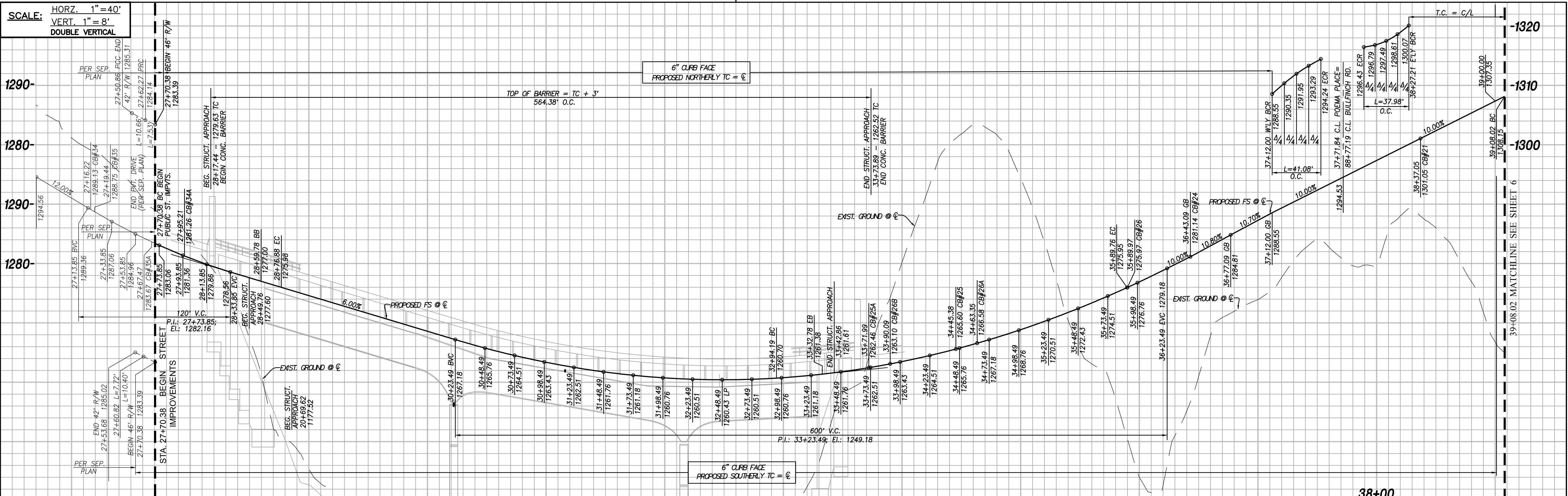
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

PLAN PREPARED BY:
UNITED CIVIL, INC.
30141 AGOURA ROAD, SUITE 215
AGOURA HILLS, CA 91301
PH: (818) 707-8648
FAX: (818) 707-8649

T.G. 500-A1, B1

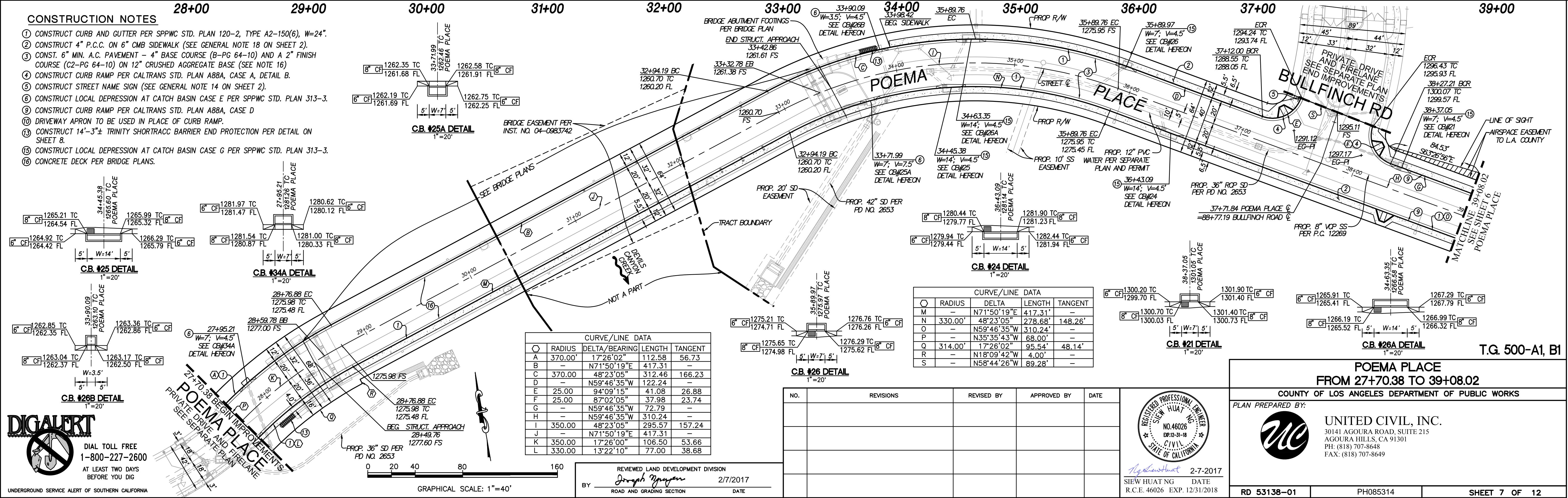
RD 53138-01 PH085314 SHEET 6 OF 12

SCALE: HORZ. 1"=40'
VERT. 1"=8'
DOUBLE VERTICAL



CONSTRUCTION NOTES

- 1 CONSTRUCT CURB AND GUTTER PER SPPWC STD. PLAN 120-2, TYPE A2-150(6), W=24"
- 2 CONSTRUCT 4" P.C.C. ON 6" CMB SIDEWALK (SEE GENERAL NOTE 18 ON SHEET 2)
- 3 CONST. 6" MIN. A.C. PAVEMENT - 4" BASE COURSE (B-PG 64-10) AND A 2" FINISH COURSE (C2-PG 64-10) ON 12" CRUSHED AGGREGATE BASE (SEE NOTE 16)
- 4 CONSTRUCT CURB RAMP PER CALTRANS STD. PLAN AB8A, CASE A, DETAIL B.
- 5 CONSTRUCT STREET NAME SIGN (SEE GENERAL NOTE 14 ON SHEET 2)
- 6 CONSTRUCT LOCAL DEPRESSION AT CATCH BASIN CASE E PER SPPWC STD. PLAN 313-3.
- 9 CONSTRUCT CURB RAMP PER CALTRANS STD. PLAN AB8A, CASE D
- 10 DRIVEWAY APRON TO BE USED IN PLACE OF CURB RAMP.
- 11 CONSTRUCT 14'-3"± TRINITY SHORTRACC BARRIER END PROTECTION PER DETAIL ON SHEET 8.
- 15 CONSTRUCT LOCAL DEPRESSION AT CATCH BASIN CASE G PER SPPWC STD. PLAN 313-3.
- 16 CONCRETE DECK PER BRIDGE PLANS.



CURVE/LINE DATA

NO.	RADIUS	DELTA/BEARING	LENGTH	TANGENT
A	370.00'	17°28'02"	112.58	56.73
B	-	N71°50'19"E	417.31	-
C	370.00	48°23'05"	312.46	166.23
D	-	N59°46'35"W	122.24	-
E	25.00	94°09'15"	41.08	26.88
F	25.00	87°02'05"	37.98	23.74
G	-	N59°46'35"W	72.79	-
H	-	N59°46'35"W	310.24	-
I	350.00	48°23'05"	295.57	157.24
J	-	N71°50'19"E	417.31	-
K	350.00	17°26'00"	106.50	53.66
L	330.00	13°22'10"	77.00	38.68

CURVE/LINE DATA

NO.	RADIUS	DELTA	LENGTH	TANGENT
M	330.00'	N71°50'19"E	417.31	-
N	-	48°23'05"	278.65'	148.26'
O	-	N59°46'35"W	310.24'	-
P	-	N35°35'43"W	68.00'	-
Q	314.00'	17°26'02"	95.54'	48.14'
R	-	N18°09'42"W	4.00'	-
S	-	N58°44'26"W	89.28'	-

REVISIONS

NO.	REVISIONS	REVISED BY	APPROVED BY	DATE



POEMA PLACE
FROM 27+70.38 TO 39+08.02

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

PLAN PREPARED BY:

UNITED CIVIL, INC.
30141 AGOURA ROAD, SUITE 215
AGOURA HILLS, CA 91301
PH: (818) 707-8648
FAX: (818) 707-8649

RD 53138-01 PH085314 SHEET 7 OF 12

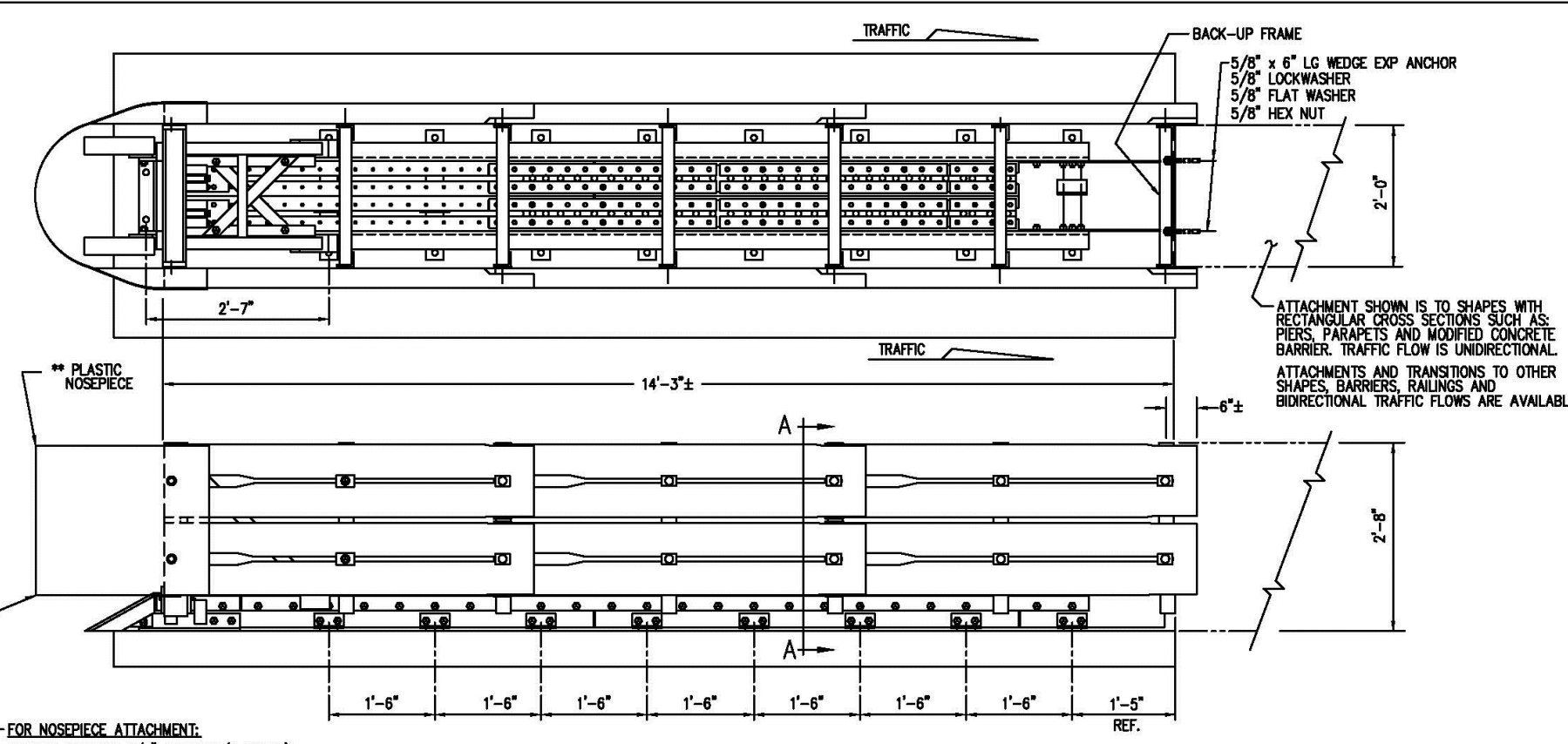
DIGALERT

DIAL TOLL FREE
1-800-227-2600

AT LEAST TWO DAYS
BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

REVIEWED LAND DEVELOPMENT DIVISION
BY: Joseph Nguyen DATE: 2/7/2017
ROAD AND GRADING SECTION



TRACC BILL OF MATERIAL

PART NUMBER	QTY	DESCRIPTION
50997A	1	TRACC UNIT (FULLY ASSEMBLED)
3310G	4	5/8" LOCKWASHER
4451C	4	5/8" x 6" WEDGE EXP ANCHOR
8825B	4	REFLECTIVE TAPE
6532B	1	PLASTIC NOSEPIECE

EACH TRACC UNIT SHIPS 100% ASSEMBLED (PLASTIC NOSE INSTALLED AFTER PLACEMENT)

ANCHOR HARDWARE (FULL CONCRETE BASE)

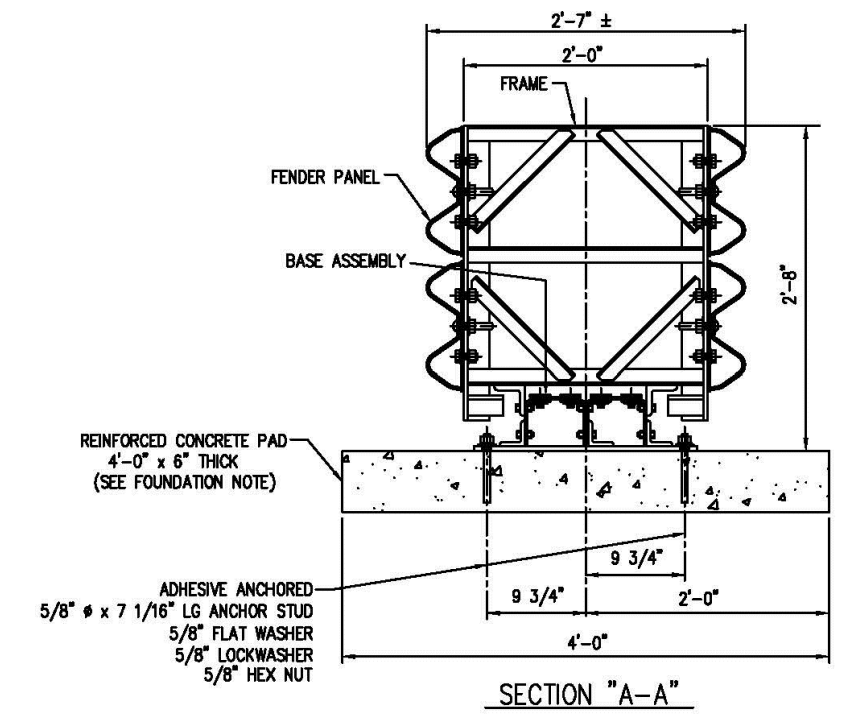
PART NUMBER	QTY	DESCRIPTION
3300G	18	5/8" x 7 1/2" ANCHOR STUD
3310G	18	5/8" LOCKWASHER
3361C	18	5/8" HEX NUT
3300G	18	5/8" FLAT WASHER
5009B	2	ADHESIVE HIT HY 150 (CARTRIDGE)

ANCHOR HARDWARE (ASPHALT BASE)

PART NUMBER	QTY	DESCRIPTION
4360G	18	5/8" x 5" ALL THD ROD
3310G	18	5/8" LOCKWASHER
3361C	18	5/8" HEX NUT
3300G	18	5/8" FLAT WASHER
5009B	4	ADHESIVE HIT HY 150 (CARTRIDGE)

SEE PRODUCT MANUAL

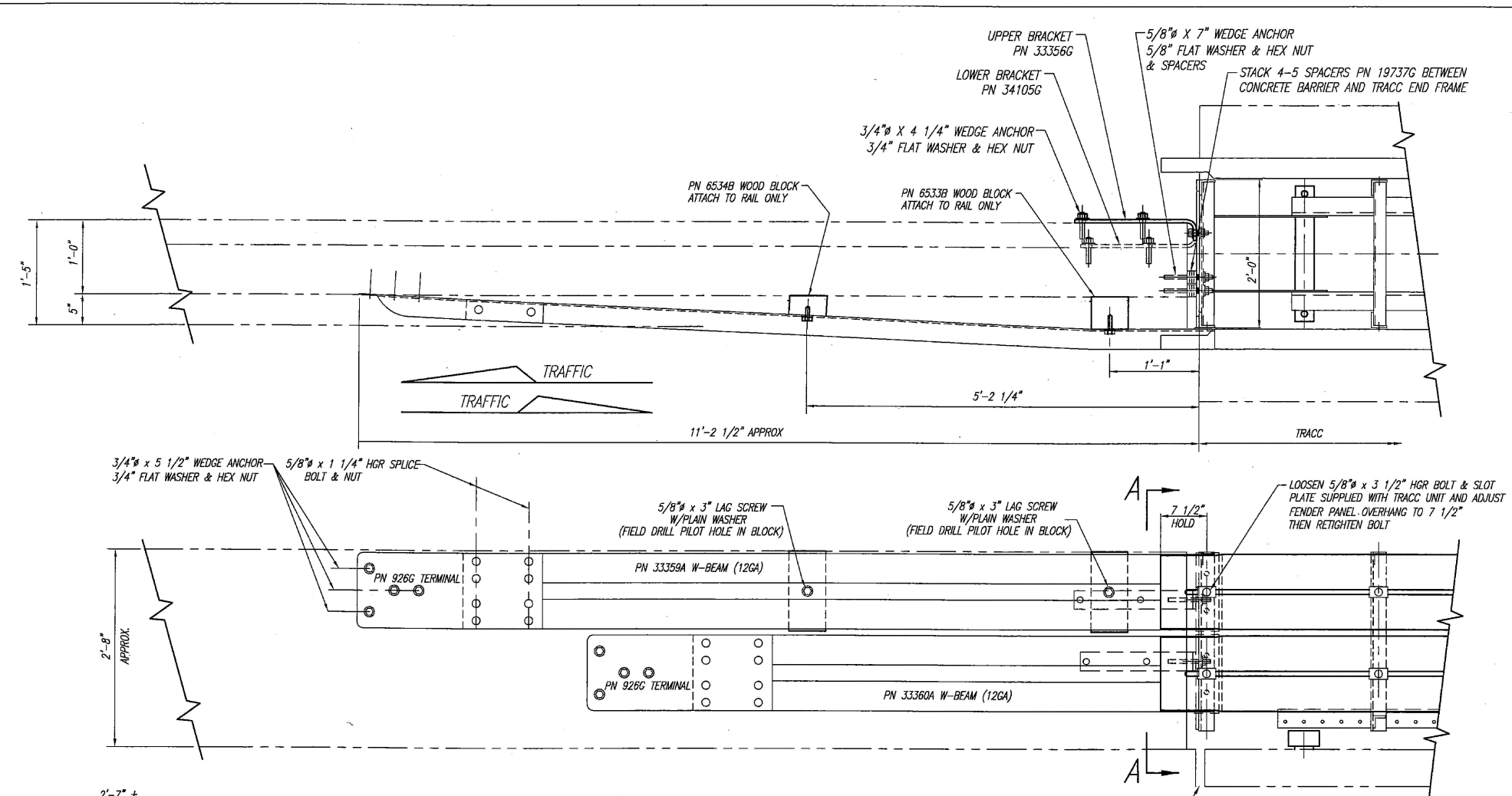
* EACH CARTRIDGE INCLUDES 1 EACH MIXER HY 150 CARTRIDGE (NOZZLE) FILLER HIT HY 150 (FILLER TUBE)



FOUNDATION NOTE:
 6" REINFORCED CONCRETE PAD IS SHOWN
 OTHER OPTIONS ARE:
 a) 8" THICK MINIMUM UNREINFORCED CONCRETE
 b) 8" MINIMUM THICK ASPHALT
 c) 3" THICK (MIN) ASPHALT OVER 3" (MIN) CONCRETE
 d) 6" THICK ASPHALT OVER 6" COMPACTED SUBGRADE

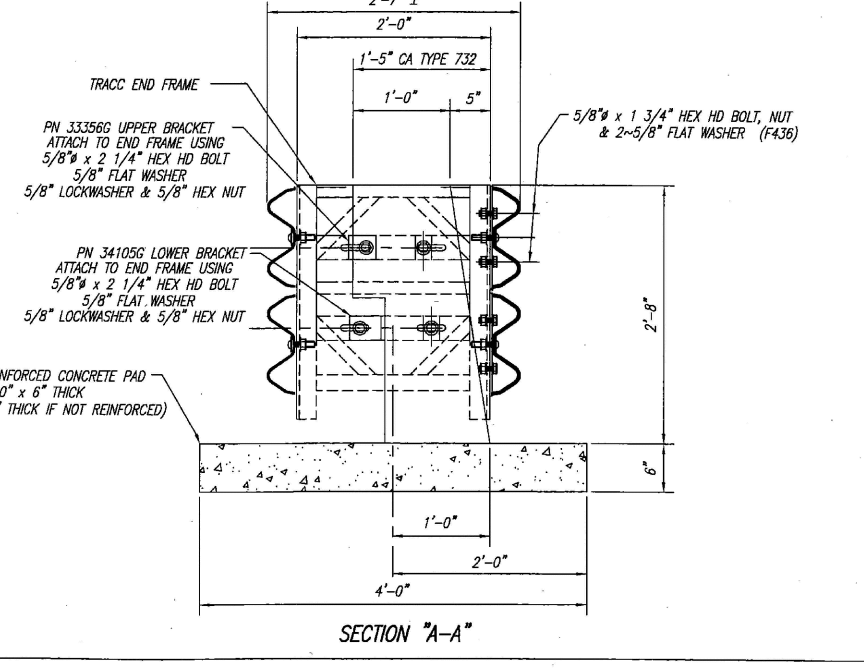
TRACC
 SHORTTRACC
 CRASH-CUSHION ATTENUATING TERMINAL
 PLAN, ELEVATION & SECTIONS
 (UNIDIRECTIONAL, DIRECT ATTACHMENT)

TRINITY INDUSTRIES, INC.
 HIGHWAY SAFETY PRODUCTS
 2025 STEWARTS FREIGHTWAY, DALLAS, TX 75267



TRACC TRANSITION BILL OF MATERIAL

P/N	QTY	DESCRIPTION
3200G	2	10" END GATE
2530B	1	ANCHOR W/ BELT 1" x 1" (8' x 2' B)
2534B	1	ANCHOR W/ BELT 1" x 1" (8' x 2' S)
2150B	1	TRUCK/FRONT TURNER SUBASSEMBLY
2150B	1	TRUCK/FRONT TURNER SUBASSEMBLY
3300G	1	ANCHOR STUD
3310G	1	LOCKWASHER
3361C	1	HEX NUT
3300G	1	FLAT WASHER
4370G	1	WASHER PLATE
3300G	1	ANCHOR STUD
3310G	1	LOCKWASHER
3361C	1	HEX NUT
4700G	1	WASHER PLATE
4451C	1	WEDGE EXP ANCHOR
4700G	1	WASHER PLATE
4451C	1	WEDGE EXP ANCHOR
3300G	1	ANCHOR STUD
3310G	1	LOCKWASHER
3361C	1	HEX NUT
3300G	1	FLAT WASHER



TRACC
 TRACC TRANSITION TO
 CONCRETE BARRIER CA TYPE 732
 PLAN, ELEVATION & SECTIONS

TRINITY INDUSTRIES, INC.
 HIGHWAY SAFETY PRODUCTS
 2025 STEWARTS FREIGHTWAY, DALLAS, TX 75267

TRINITY SHORTTRACC BARRIER END PROTECTION



REVIEWED, LAND DEVELOPMENT DIVISION
 BY: *Joseph Nguyen* DATE: 2/7/2017
 ROAD AND GRADING SECTION

NO.	REVISIONS	REVISED BY	APPROVED BY	DATE

REGISTERED PROFESSIONAL ENGINEER
 STATE OF CALIFORNIA
 NO. 46026
 DR. 12-31-18
 CIVIL

1-4-2017
 SHEW HUAT NG DATE
 R.C.E. 46026 EXP. 12/31/2018

**TRINITY SHORTTRACC BARRIER
 END PROTECTION DETAILS**

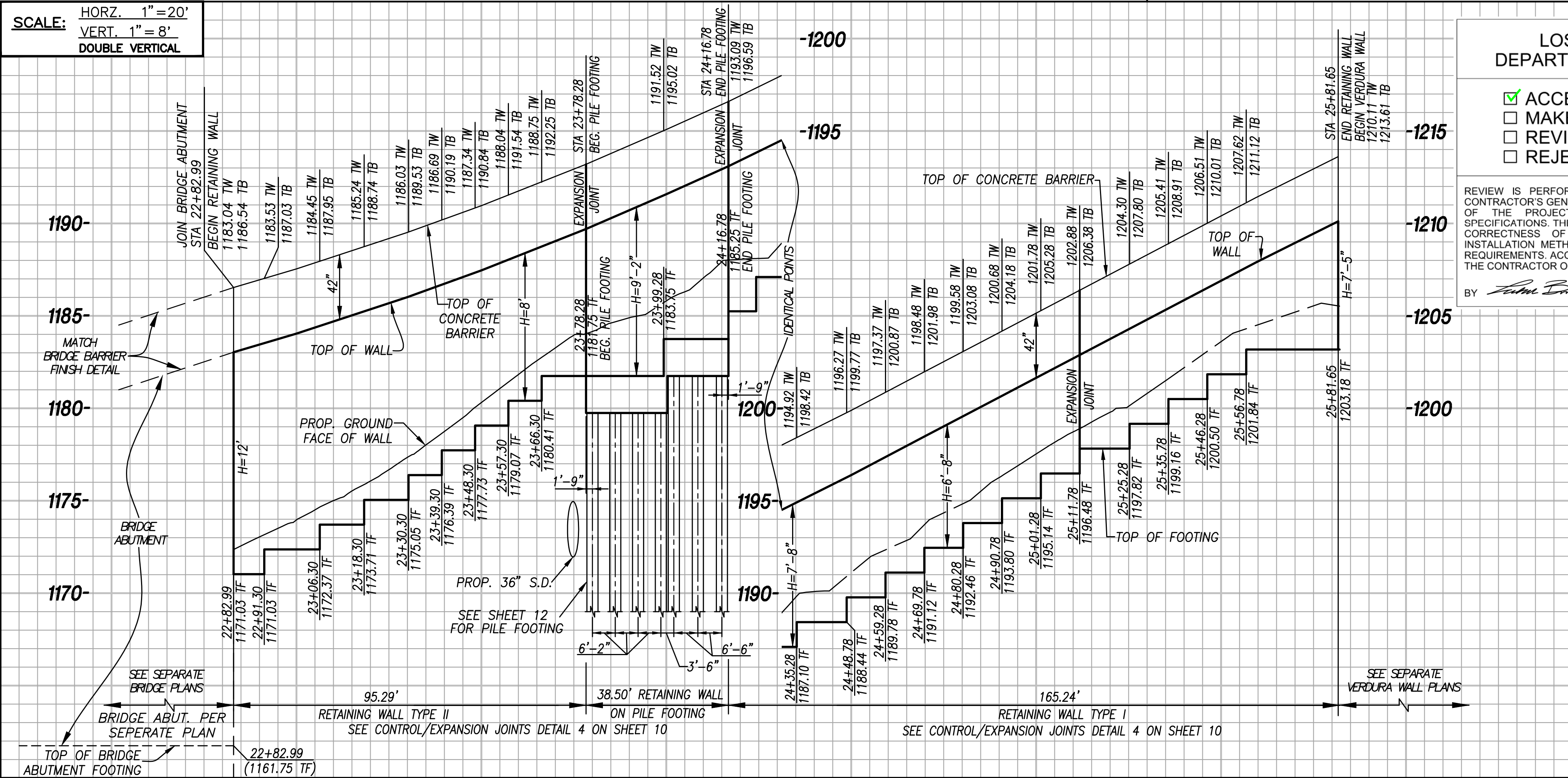
COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

PLAN PREPARED BY:
 UNITED CIVIL, INC.
 30141 AGOURA ROAD, SUITE 215
 AGOURA HILLS, CA 91301
 PH: (818) 707-8648
 FAX: (818) 707-8649

RD 53138-01 PH085314 SHEET 8 OF 12

T.G. 500-A1, B1

SCALE: HORZ. 1"=20'
VERT. 1"=8'
DOUBLE VERTICAL

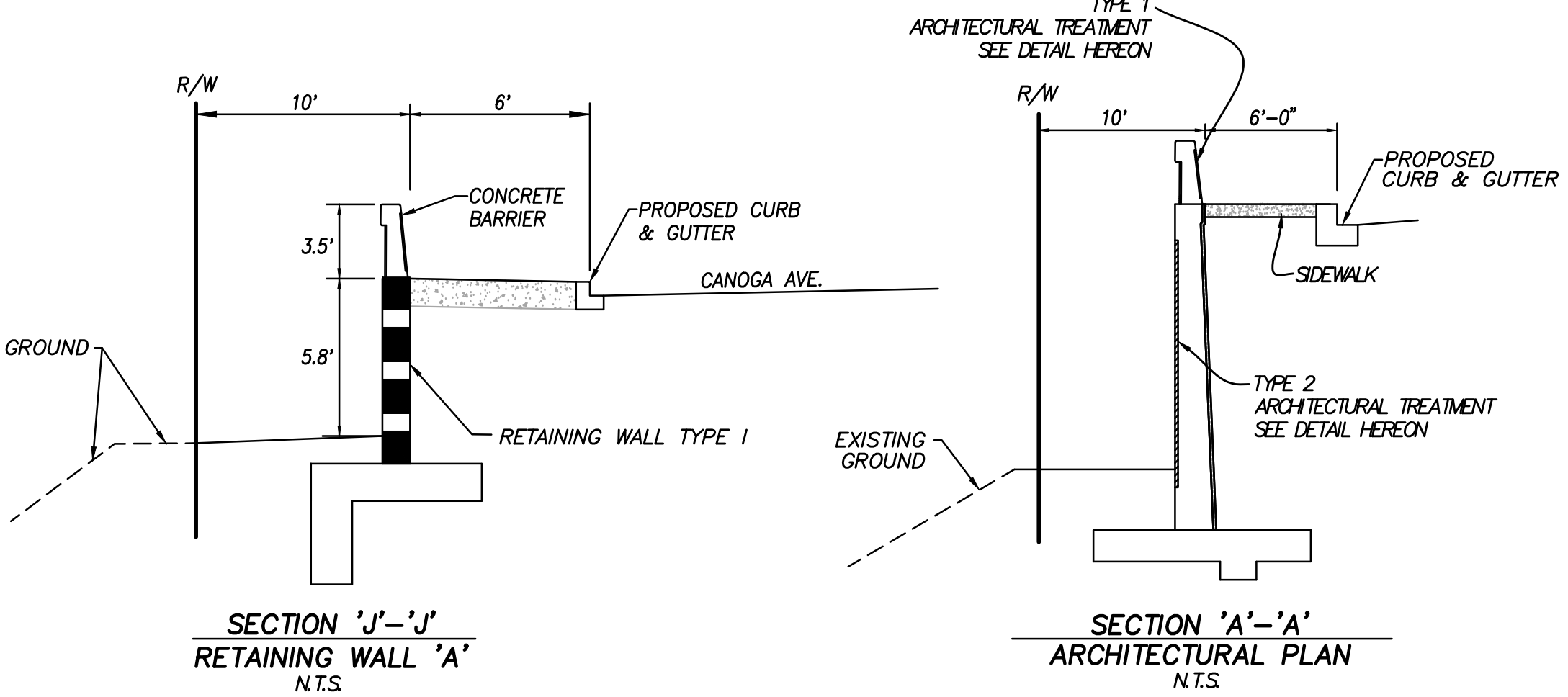
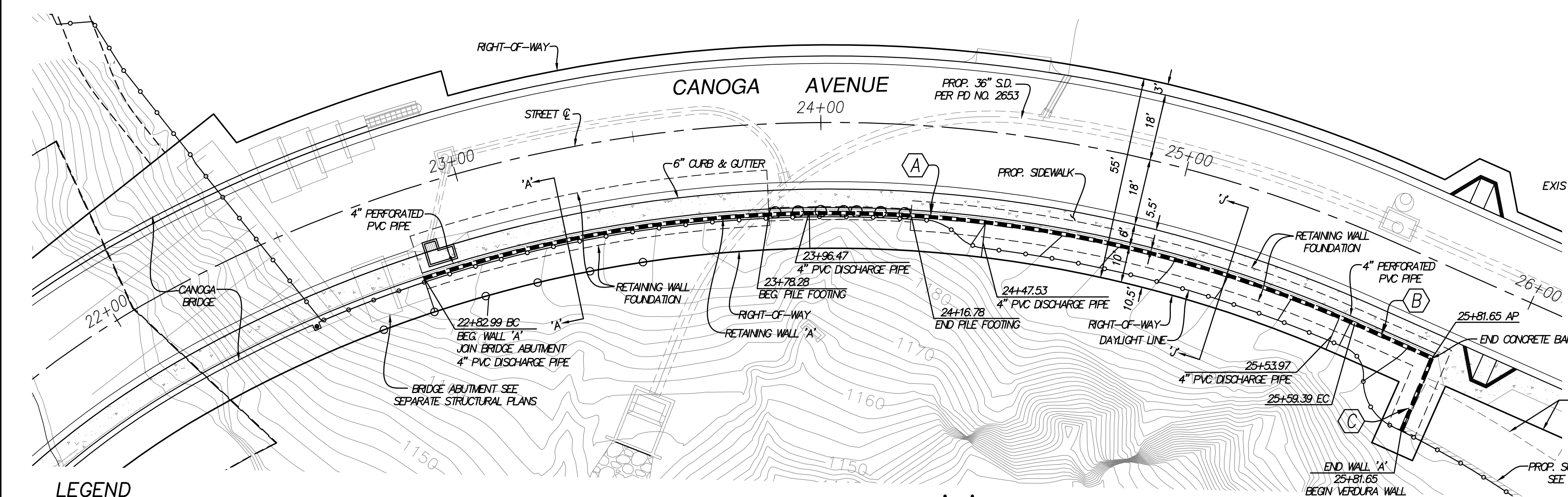
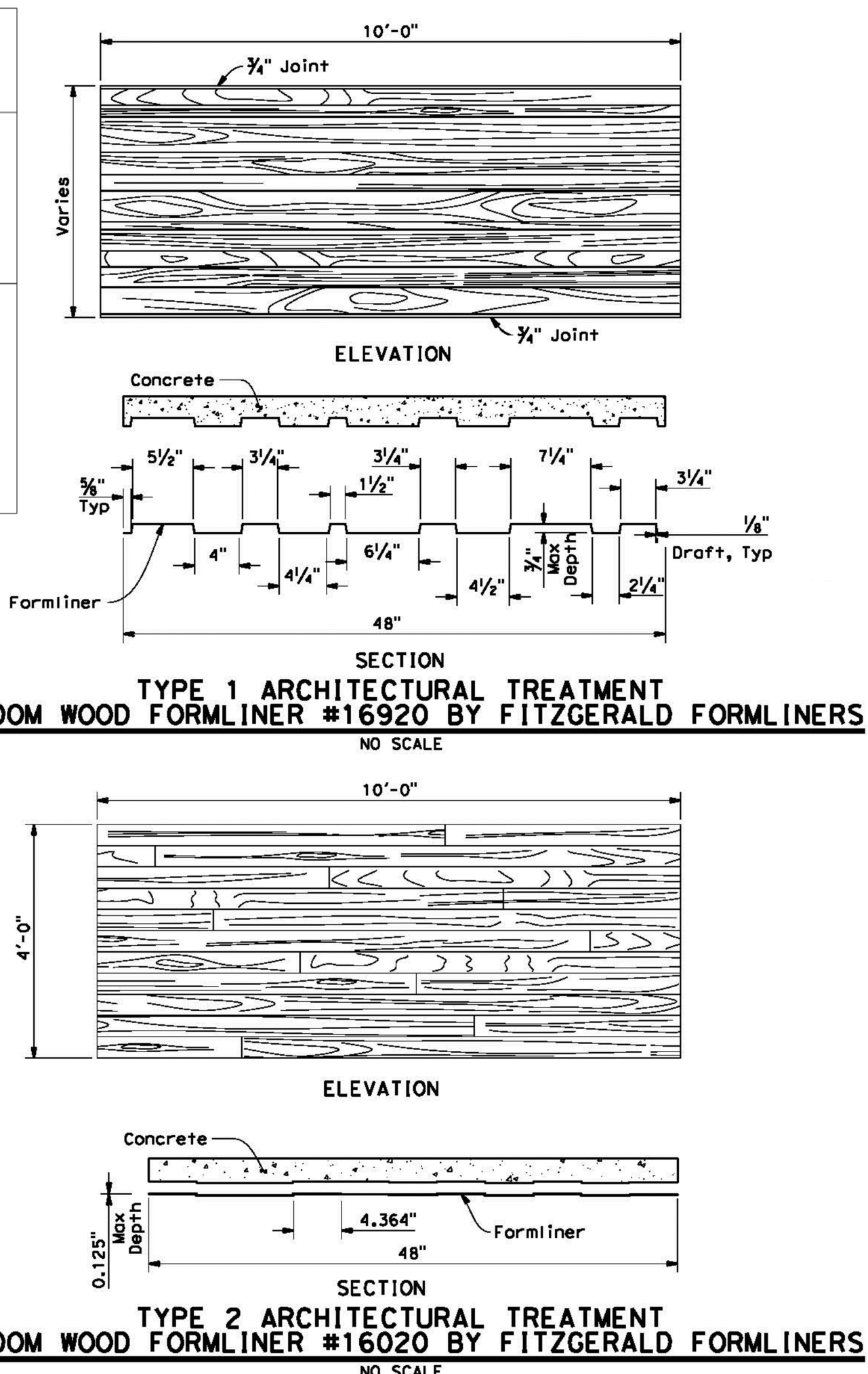


LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS

ACCEPTED
 MAKE CORRECTIONS NOTED
 REVISE CALCULATIONS
 REJECTED

REVIEW IS PERFORMED BY THE DEPARTMENT TO ENSURE THE CONTRACTOR'S GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE SPECIFICATIONS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE CORRECTNESS OF DIMENSIONS, PROPER CONSTRUCTION AND INSTALLATION METHODS, AND FOR FULFILLING ALL CONTRACTUAL REQUIREMENTS. ACCEPTANCE INDICATED HEREON DOES NOT RELIEVE THE CONTRACTOR OF THESE OBLIGATIONS.

BY *[Signature]* DATE 1/25/2017

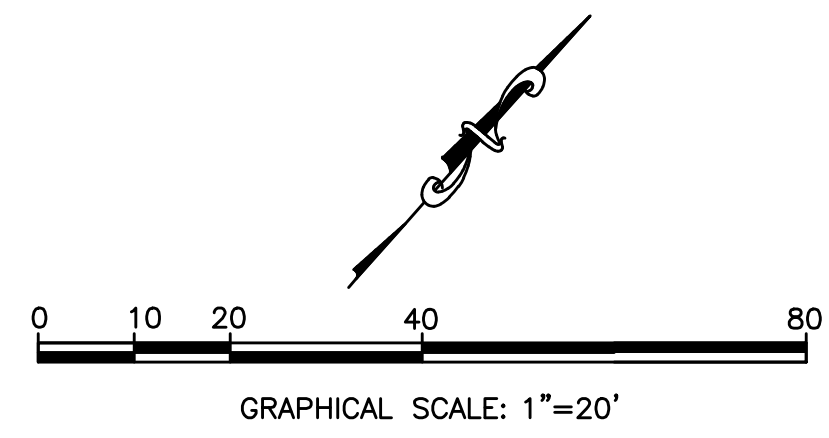


LEGEND

TW - TOP OF WALL
TF - TOP OF FOOTING
TB - TOP OF CONCRETE BARRIER
AP - ANGLE POINT

DIGALERT
DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS
BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

CURVE/LINE DATA			
RADIUS	DELTA/BEARING	LENGTH	TAN
A 350.50'	42°13'53"	258.35'	135.36'
B -	N72°15'14"E	22.25'	-
C -	N18°50'57"W	21.24'	-



NO.	REVISIONS	REVISED BY	APPROVED BY	DATE

REGISTERED PROFESSIONAL ENGINEER
SHEW HUAT NG
NO. 46026
08-12-31-18
CIVIL
STATE OF CALIFORNIA

[Signature] 1-4-2017
SHEW HUAT NG DATE
R.C.E. 46026 EXP. 12/31/2018

RETAINING WALL 'A'

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

PLAN PREPARED BY:
UNITED CIVIL, INC.
30141 AGOURA ROAD, SUITE 215
AGOURA HILLS, CA 91301
PH: (818) 707-8648
FAX: (818) 707-8649

RD 53138-01 PH085314 SHEET 9 OF 12

T.G. 500-A1, B1

AUTOCAD CONTROL
 CREATED: 8-29-15 FILE: M15.00851 L.C.: 07-25-16
 BY: MP PLOT: 1=16 TIME: 12:20pm
 CHKD: MP

STRUCTURAL NOTES

CODE CONFORMANCE/DESIGN CRITERIA
 ALL WORK SHALL CONFORM TO THE 2013 EDITION OF THE CALIFORNIA BUILDING CODE.

REINFORCING STEEL:
 SHALL BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60 UNLESS NOTED OTHERWISE. ASTM GRADE 40 MAY BE USED FOR #4 AND SMALLER BARS. REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A706 (GRADE 60). WELDING ELECTRODES FOR REINFORCING STEEL SHALL CONFORM TO AWS E90 SERIES. FOR BAR SPLICES, SEE 1/10.

CONCRETE COVERAGE FOR REINFORCEMENT:
 FOUNDATIONS/AGAINST EARTH.....3 INCHES CLEAR
 FOUNDATIONS BELOW GRADE WALLS/AGAINST FORMS.....2 INCHES CLEAR

CONCRETE:
 ALL CONCRETE SHALL BE MIXED, FORMED, PLACED, CURED, FINISHED AND PROTECTED IN CONFORMANCE WITH THE RECOMMENDATIONS OF THE PORTLAND CEMENT ASSOCIATION AND THE AMERICAN CONCRETE INSTITUTE UNLESS OTHERWISE SHOWN OR NOTED HEREIN.

MIN. ULT. COMP. STRENGTH (28 DAYS) 2500 PSI
 MAXIMUM SLUMP: 4"
 MIN. CEMENT CONTENT (SACKS PER CU. YD.) 5.5
 CEMENT TYPE II
 MAXIMUM W/C RATIO .50
 MAXIMUM AGGREGATE SIZE 1"

A WATER-REDUCING ADMIXTURE SUCH AS GRACE WRDA-79 OR MASTER BUILDER'S POZZOLITH 322N (AND CONFORMING TO ASTM C494) MAY BE USED IN EACH OF THE CONCRETE MIXES IN PROPORTIONS RECOMMENDED BY THE MANUFACTURER. THE AMOUNT AND TYPE SHALL BE INDICATED IN THE MIX DESIGN.

FOUNDATION:
 MAXIMUM DESIGN BEARING PRESSURE: 3000 PSF (1/3 INCREASE WITH WIND/SEISMIC LOAD)
 EQUIVALENT FLUID DENSITY: 43 PCF (LEVEL)
 COEFFICIENT OF FRICTION: 0.40
 PASSIVE PRESSURE: 250 PSF/FT

THE BOTTOMS OF ALL FOOTINGS SHALL BE PLACED A MINIMUM OF 1'-6" INTO BEDROCK. FOOTINGS SHALL BE PLACED ONLY ON BEDROCK AND NOT ON LOOSE OR UNCOMPACTED FILL.
 SEE SOIL REPORT PREPARED BY GEOSOILS CONSULTANT INC. W.O. 6707A DATED: MAY 28, 2015

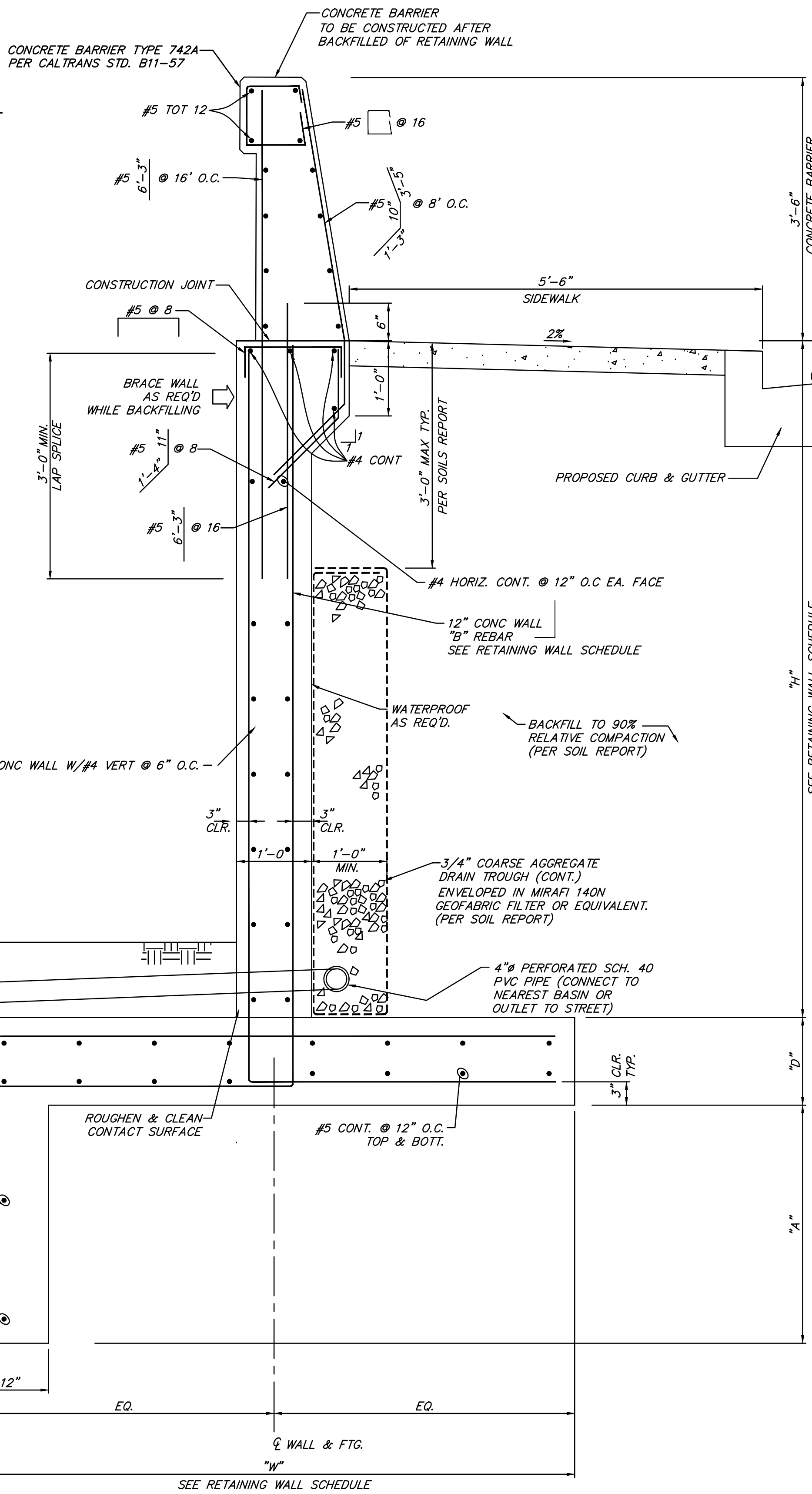
EXCAVATION, BACKFILL AND RECOMPACTION:
 REFER TO THE SOIL REPORT AND GRADING PLAN FOR THE EXTENT AND DEPTH OF THE REQUIRED EXCAVATION, BACKFILL AND RECOMPACTION. COORDINATE & VERIFY. SPECIAL INSPECTION REQUIRED FOR SOILS CONDITIONS/PREPARATION.

LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS

- ACCEPTED
- MAKE CORRECTIONS NOTED
- REVISE CALCULATIONS
- REJECTED

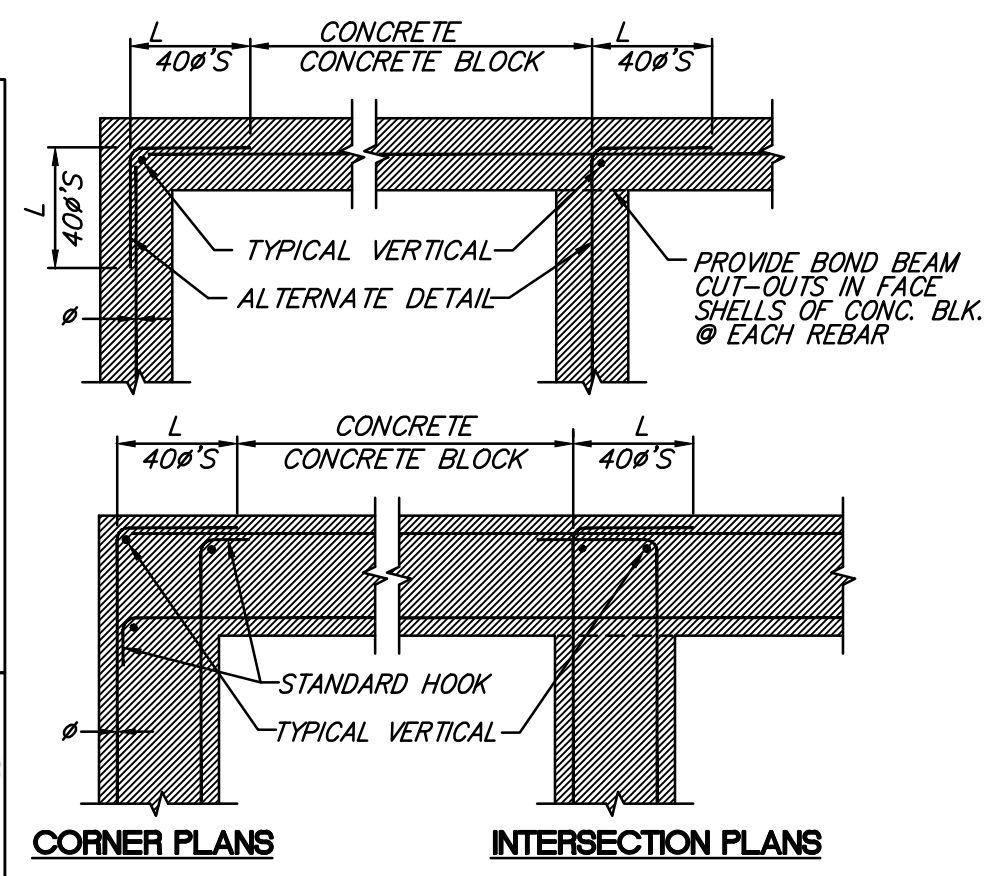
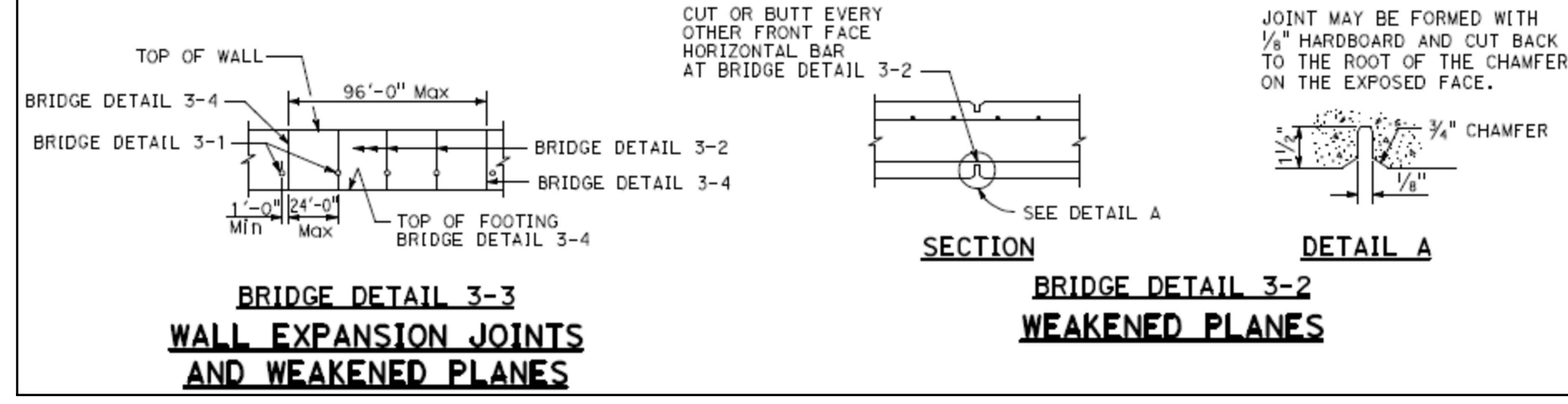
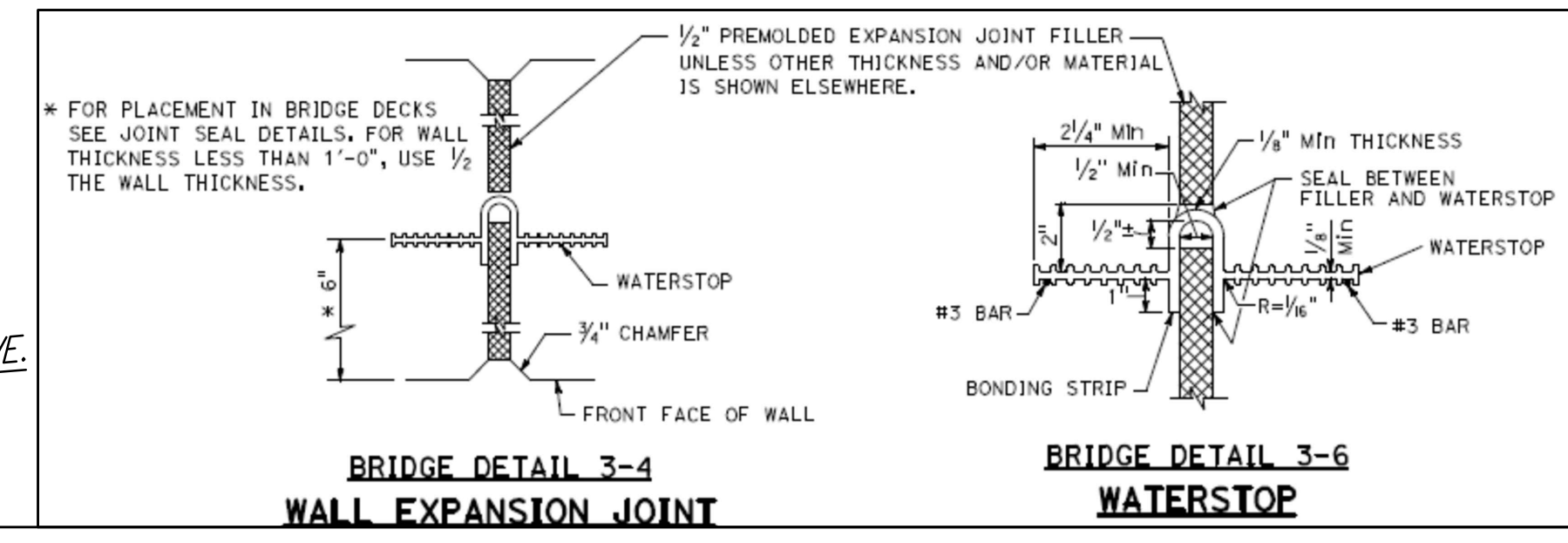
REVIEW IS PERFORMED BY THE DEPARTMENT TO ENSURE THE CONTRACTOR'S GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE SPECIFICATIONS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE CORRECTNESS OF DIMENSIONS, PROPER CONSTRUCTION AND INSTALLATION METHODS, AND FOR FULFILLING ALL CONTRACTUAL REQUIREMENTS. ACCEPTANCE INDICATED HEREON DOES NOT RELIEVE THE CONTRACTOR OF THESE OBLIGATIONS.

BY: *[Signature]* DATE 1/25/2017

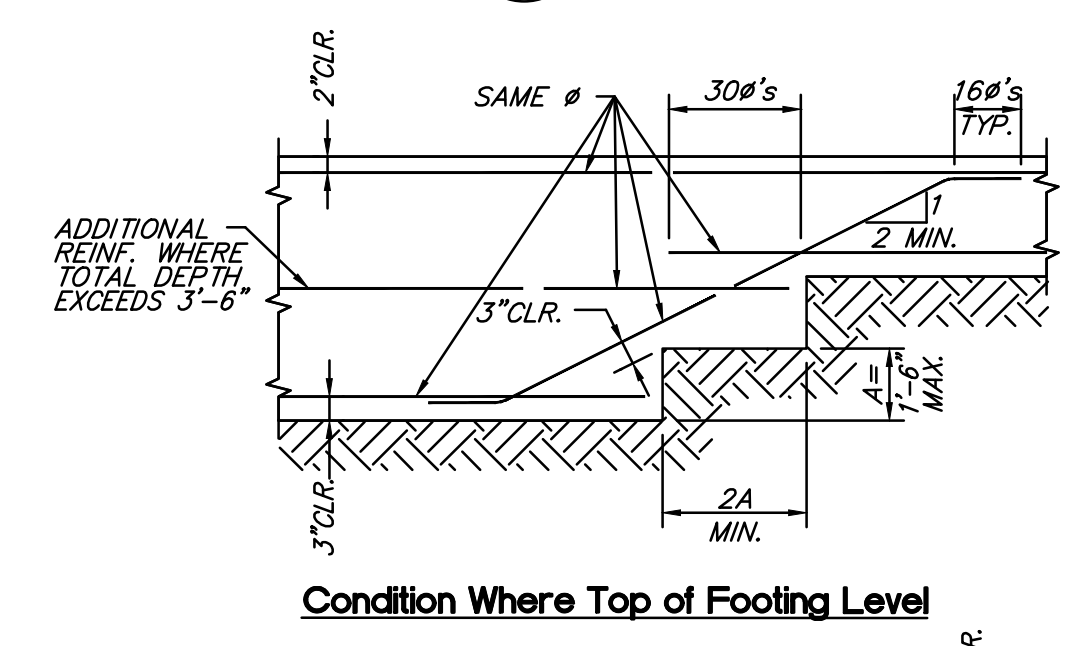


RETAINING WALL SCHEDULE

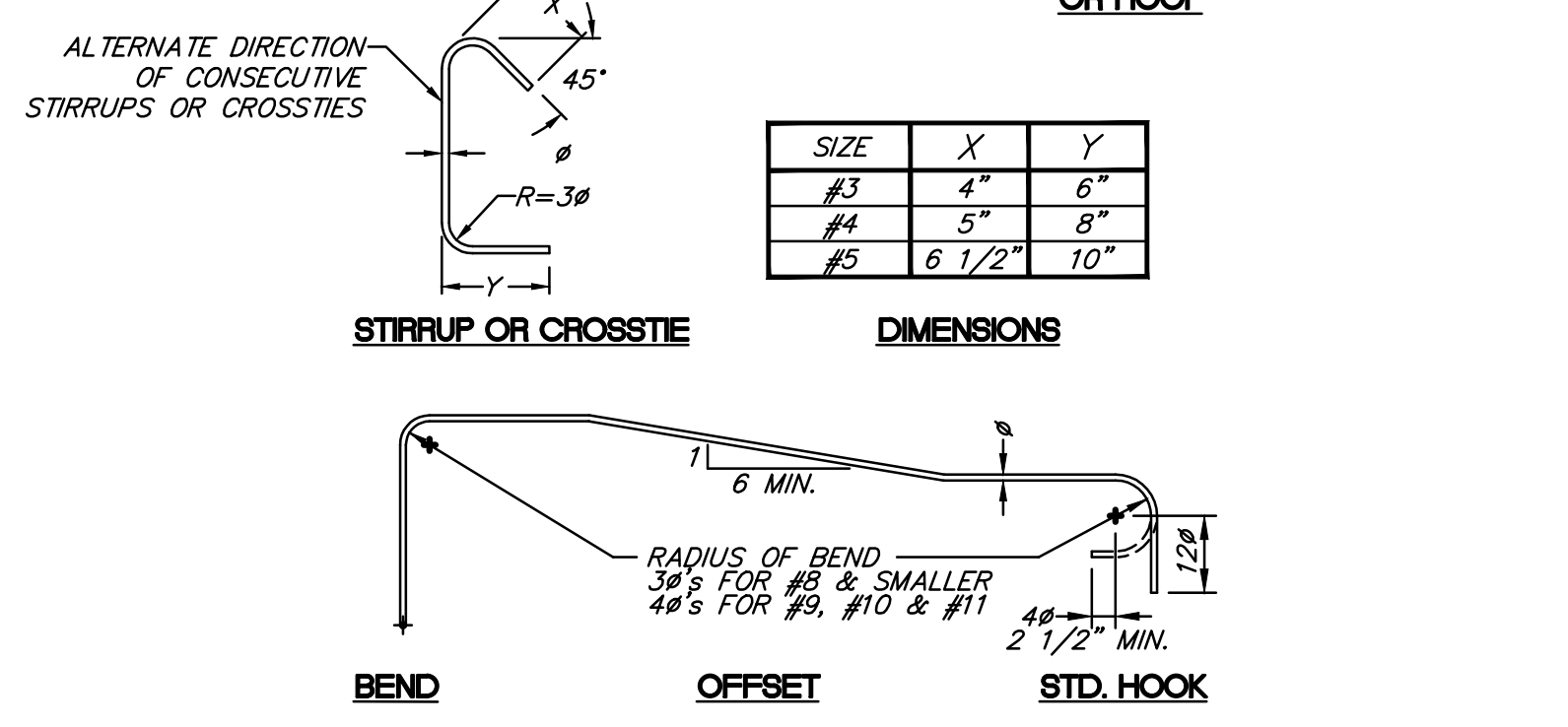
"H"	"W"	"B" REBAR	"D"	"A"	REMARKS
5'-0"	6'-8"	#4 @ 6" O.C.	12"	12"	TYPE I
9'-0"	8'-0"	#5 @ 6" O.C.	14"	38"	TYPE I



4 TYPICAL CONTROL / EXPANSION JOINTS
 CALTRANS STD. B0-3 N.T.S.



2 TYP. FOOTING STEPS (F.S.)
 N.T.S.



L = Bar Lap Splice Lengths (Class "B") for f'c = 2500 psi.

Bar No.	#3	#4	#5	#6	#7	#8	#9	#10	#11
Top Bars	1'-9"	2'-4"	2'-11"	3'-6"	4'-1"	4'-11"	6'-2"	7'-10"	9'-8"
Other bars	1'-4"	1'-9"	2'-3"	2'-8"	3'-1"	3'-9"	4'-9"	6'-0"	7'-5"

* Horiz. bars with more than 12" of conc. cast in member below bar. No more than 50% of the bars shall be spliced at any one section and splices shall be staggered at least 6'-0".
SPlice REINFORCING STEEL ONLY WHERE SHOWN ON THE DRAWINGS.

Reinforcing Placing Tolerances
 1. Depth: ± 1/4" for members 24" or less in depth.
 2. Depth: ± 1/2" for members larger than 24" in depth.
 3. Length: ± 1"

1 TYPICAL REINFORCING STEEL DETAILS
 N.T.S.



3 TYPE I RETAINING WALL
 STA. 24+16.78 TO STA. 25+81.65 N.T.S.

NO.	REVISIONS	REVISED BY	APPROVED BY	DATE



SIEW HUAT NG DATE 1-4-2017
 R.C.E. 46026 EXP. 12/31/2018

STRUCTURAL DETAILS
 COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
 PLAN PREPARED BY:

UNITED CIVIL, INC.
 30141 AGOURA ROAD, SUITE 215
 AGOURA HILLS, CA 91301
 PH: (818) 707-8648
 FAX: (818) 707-8649

RD 53138-01	PH085314	SHEET 10 OF 12
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AUTOCAD CONTROL
 CREATED: 8-29-18 FILE: M15.00852 L.C.: 07-25-16
 BY: MP PLOT: 1=16 TIME: 12:21pm
 CHKD: MP

RETAINING WALL SCHEDULE

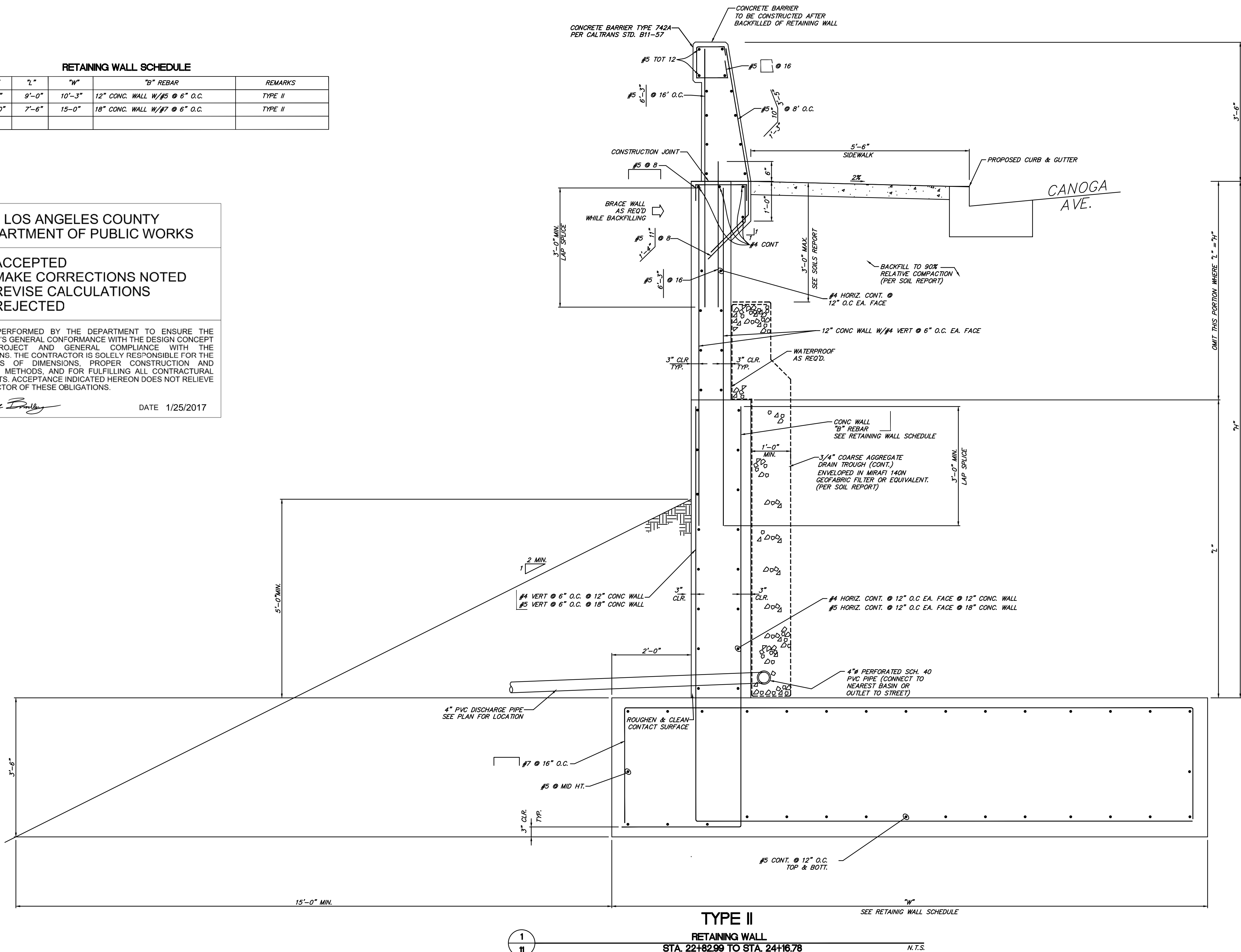
"H"	"L"	"W"	"R" REBAR	REMARKS
9'-0"	9'-0"	10'-3"	12" CONC. WALL W/#5 @ 6" O.C.	TYPE II
13'-0"	7'-6"	15'-0"	18" CONC. WALL W/#7 @ 6" O.C.	TYPE II

**LOS ANGELES COUNTY
DEPARTMENT OF PUBLIC WORKS**

- ACCEPTED
- MAKE CORRECTIONS NOTED
- REVISE CALCULATIONS
- REJECTED

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BY *[Signature]* DATE 1/25/2017



TYPE II

RETAINING WALL
 STA. 22+82.99 TO STA. 24+16.78

T.G. 500-A1, B1


STRUCTURAL DETAILS

COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS

PLAN PREPARED BY:

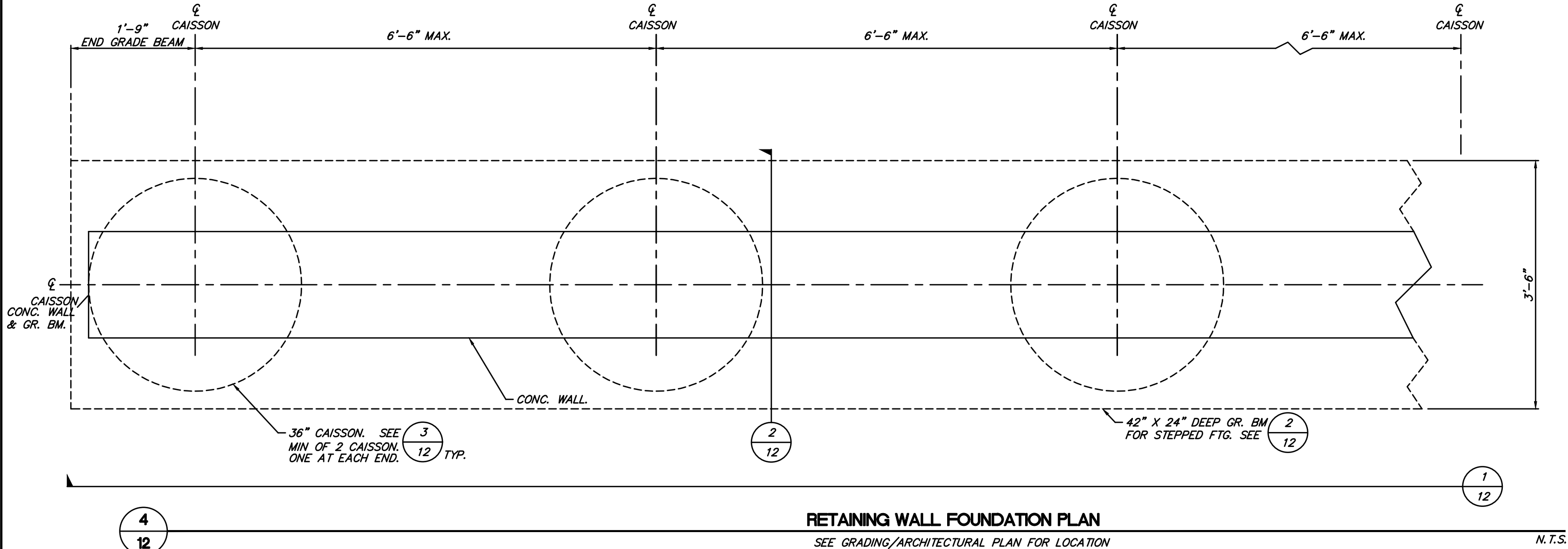
UNITED CIVIL, INC.
 30141 AGOURA ROAD, SUITE 215
 AGOURA HILLS, CA 91301
 PH: (818) 707-8648
 FAX: (818) 707-8649

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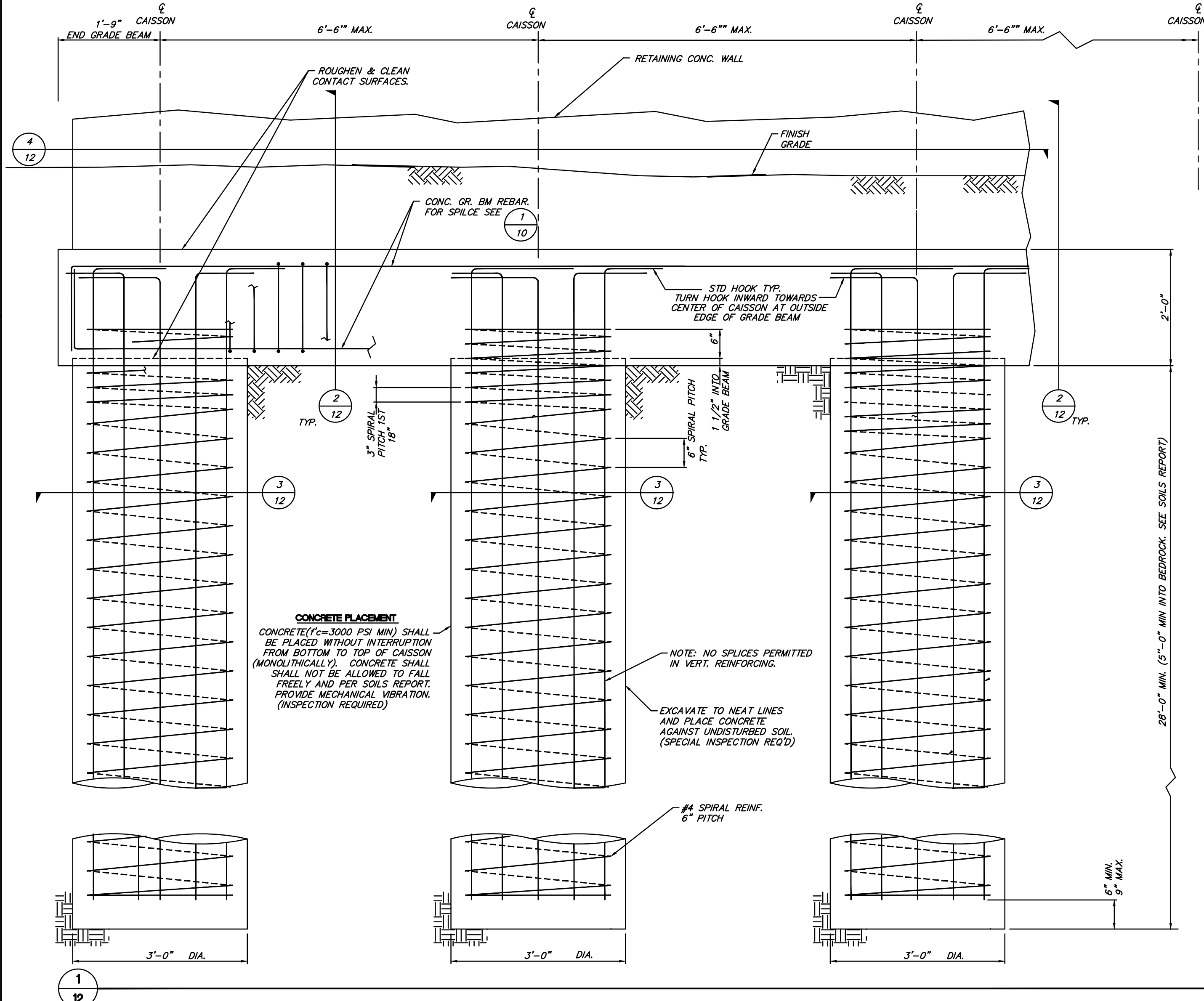

 REGISTERED PROFESSIONAL ENGINEER
 SHEU HUAT NG, INC.
 NO. 46026
 EXP. 12-31-18
 CIVIL
 STATE OF CALIFORNIA
 1-4-2017
 SHEU HUAT NG DATE
 R.C.E. 46026 EXP. 12/31/2018



AUTOCAD CONTROL
 CREATED: 12-13-15 FILE: M15.00858 L.C.: 07-25-16
 BY: MP PLOT: 1-16 TIME: 12:23pm
 CHKD: MP



RETAINING WALL FOUNDATION PLAN
 SEE GRADING/ARCHITECTURAL PLAN FOR LOCATION N.T.S.



CONCRETE PLACEMENT
 CONCRETE (f' = 3000 PSI MIN) SHALL BE PLACED WITHOUT INTERRUPTION FROM BOTTOM TO TOP OF CAISSON (MONOLITHICALLY). CONCRETE SHALL NOT BE ALLOWED TO FALL FREELY AND PER SOILS REPORT, PROVIDE MECHANICAL VIBRATION. (INSPECTION REQUIRED)

NOTE: NO SPLICES PERMITTED IN VERT. REINFORCING.
 EXCAVATE TO NEAT LINES AND PLACE CONCRETE AGAINST UNDISTURBED SOIL. (SPECIAL INSPECTION REQ'D)

DIG ALERT
 DIAL TOLL FREE
 1-800-227-2600
 AT LEAST TWO DAYS BEFORE YOU DIG
 UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

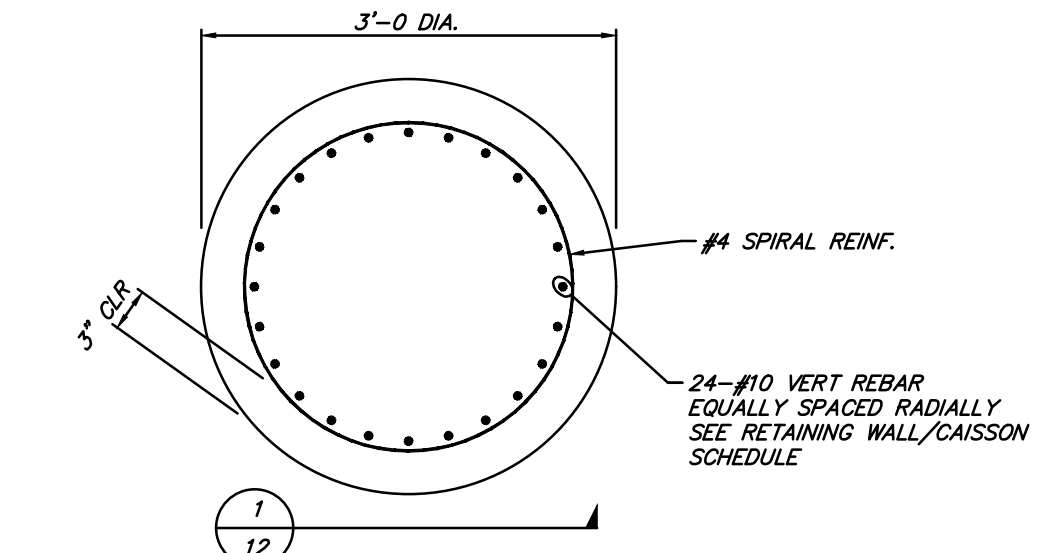
LOS ANGELES COUNTY
 DEPARTMENT OF PUBLIC WORKS

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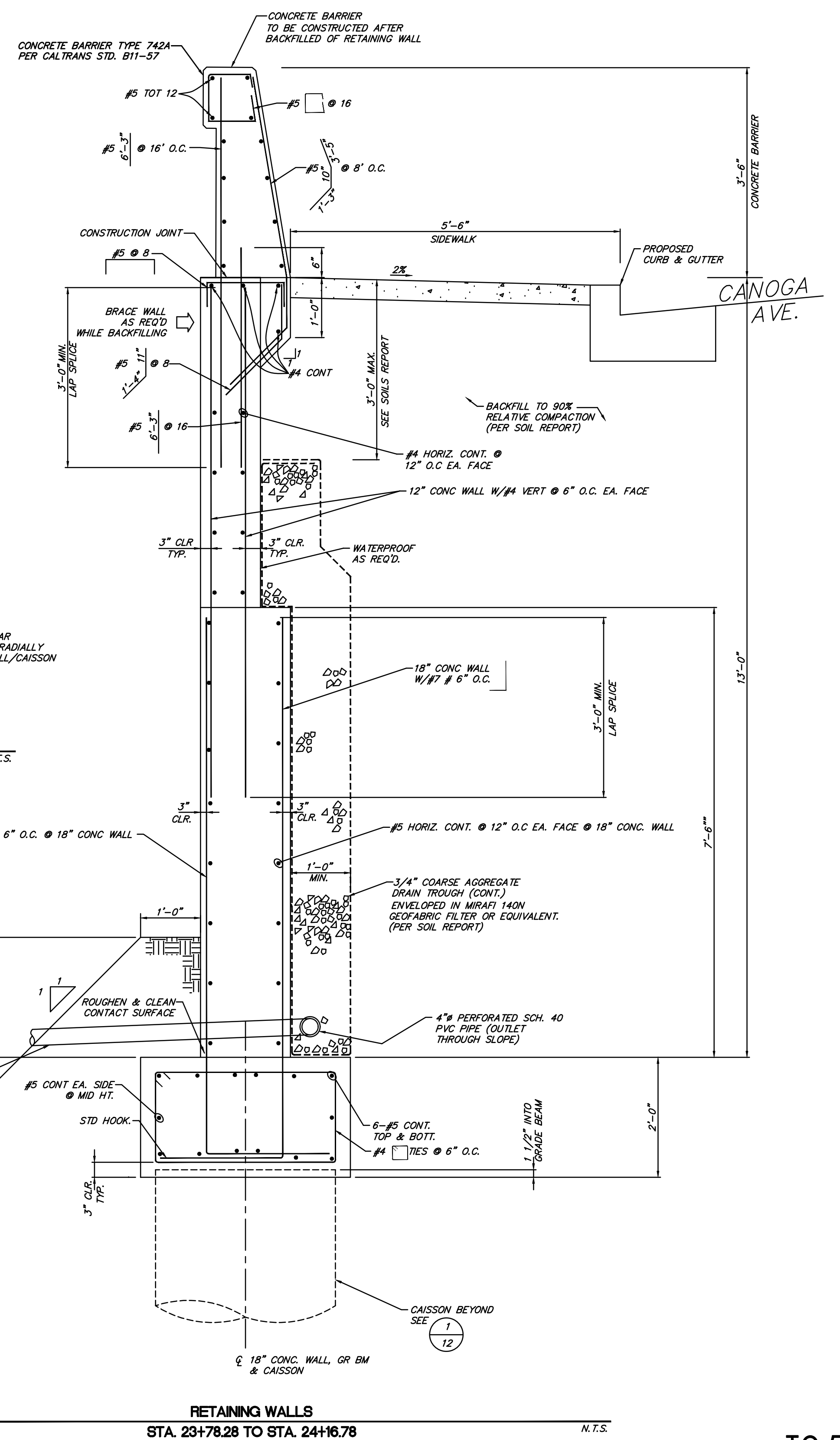
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BY: *[Signature]* DATE 1/25/2017

NOTE:
 THE GRADE BEAM/FOOTING STEPS AT CAISSON ONLY.



PLAN SECTION N.T.S.



RETAINING WALLS
 STA. 23+78.28 TO STA. 24+16.78 N.T.S.

NO.	REVISIONS	REVISED BY	APPROVED BY	DATE



SIEW HUAT NG DATE 1-4-2017
 R.C.E. 46026 EXP. 12/31/2018

STRUCTURAL DETAILS

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RD 53138-01	PH085314	SHEET 12 OF 12
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