

GRADING PLAN NOTES

- Grading operations shall be conducted in accordance with the code of the City of Torrance and all revisions thereto.
- A Pre-Job meeting with the Grading Inspector, (310) 618-5915, is required prior to the start of grading operations. Subsequent inspections shall be requested in accordance with the Inspector's instructions of the first inspection.
- Estimated earthwork yardage including recompaction of sumps or existing loose fill:
 Fill in Lots: 5 Cubic Yards
 Maximum Depth of Fill: 1.5 Feet
 Cut in Lots: 15 Cubic Yards
 Maximum Depth of Cut: 2 Feet
 Overexcavation & Recompanction: 0 Cubic Yards
 Paving Area: 1,123 Square Feet
- Existing ground upon which fill or base is to be placed shall be cleared of weeds, debris, topsoil, and all other deleterious materials; no fill shall be placed until preparation of the existing ground has been approved by the Soils Engineer of record and by the Inspector.
- Protective measures shall be taken by the contractor and the owner to protect adjacent property, public and utilities during grading operations. The contractor assumes all liability for the underground utility pipes, conduits, or structures, whether shown or not on the plan.
- Water content shall be controlled as determined by the Soils Engineer and the Inspector.
- Permission shall be secured from the Engineering Department if the trucks are loaded in the street.
- Unsuitable material shall be disposed of off-site. The location of dumping excess soil shall be approved by the Grading Inspector prior to starting excavation.
- If a grading job extends over a period of time exceeding six months, the Department may require planting of those portions of the job where all other grading requirements have been met in order to prevent dust and erosion.
- Loose material shall not exceed 3" in depth on a filled slope.
- All slopes so designated shall be planted with an approved perennial for erosion control. Planting shall be sprinklered and maintained until planting has reached mature growth.
- All loose on site fill shall be removed and compacted.
- All work shall be accomplished in accordance with recommendations set forth in the soils report by dated and the Geological Report by
- All man-made fill shall be compacted to a minimum 90 percent of the maximum dry density of the fill material per the latest version of ASTM D1557.
- Sufficient tests of the fill soils shall be made to determine the relative compaction of the fill in accordance with the following minimum guidelines:
 A. One test for each two foot vertical lift.
 B. One test for each 500 cubic yards of material placed.
 C. One test at the location of the final fill slope for each building site (Lot) in each four foot vertical lift of portion thereof.
 D. One test in the vicinity of each building pad for each four foot vertical lift or portion thereof.
- Import Soils should consist of clean, compactable materials possessing expansion characteristics similar to or better than the upper on-site Soils. Import soils should be free of trash, debris or other objectionable materials. Contractor shall notify the Project Geotechnical Engineer not less than 72 hours in advance of the location of any soils proposed for Import. Each proposed Import source shall be sampled, tested, and approved prior to delivery of soils for use on the site.

- All fill under the building foundation must be certified by the Soils Engineer as to proper bearing value design and its compliance with the preliminary soils report on note 13.
- All subgrade under areas to be paved shall be certified by the Soils Engineer in compliance with Section 81.2.34(g) of the Torrance Municipal Code.
- The engineering Geologist, Soils Engineer and Civil Engineer, in compliance with Section 81.2.37(g) of the Torrance Municipal Code, shall provide the Department with a grading certification upon completion of the job.
- An as-graded plan prepared by the Civil Engineer of record shall be submitted with the required grading certifications to the Department upon job completion.
- Approval of this plan is for grading and paving on site only and does not constitute approval of any building, wall or other structure shown on site nor any off-site improvements shown.
- No fill shall be placed during unfavorable weather conditions. The Soils Engineer and Grading Inspector shall verify moisture content and density prior to placement of additional fill after heavy rains.
- All construction in public right of way shall be under separate permit and approved by the Engineering Department.

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS

- Owner shall keep the construction area sufficiently dampened to control dust caused by grading and construction. Owner shall, at all times, provide reasonable control of dust caused by wind.
- The export or import material in each truckload shall be kept low enough to prevent spillage and shall be sufficiently wet down to prevent dust.
- A staging area shall be designated where each truck is prepared for road travel and all loose material removed. Any substance to drop from the body, tires, or wheels of any vehicle upon the public right of way shall be removed immediately and permanently.
- Erosion control measures shall be in place from November 15 through April 15.

**CITY OF TORRANCE
COMMUNITY DEVELOPMENT DEPARTMENT**

BEST MANAGEMENT PRACTICES FOR ALL FOR CONSTRUCTION ACTIVITIES*

Project Address: 5205 CALLE MAYOR Case No. _____

The Following are Minimum Water Quality Protection Requirements for All Development Construction Projects:

- 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.
- Stockpiles of earth and other construction related materials must be protected from being transported from the site by the forces of wind or water.
- 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.
- Non-stormwater runoff from equipment and vehicle washing and any other activity shall be contained at the project site.
- 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.
- Trash and construction related solid wastes must be deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind.
- 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 swept up immediately and may not be washed down by rain or other means.
- Any slopes with disturbed soils or denuded of vegetation must be stabilized so as to inhibit erosion by wind and water.
- Other: _____

As the project owner or authorized agent of the owner, I have read and understand the requirements listed above, necessary to control storm water pollution from sediments, erosion, and construction materials, and I certify that I will comply with these requirements.

Print Name: Jim Fuentes
(Owner or authorized agent of the owner)
 Signature: Jim Fuentes Date: 5/13/2021
(Owner or authorized agent of the owner)

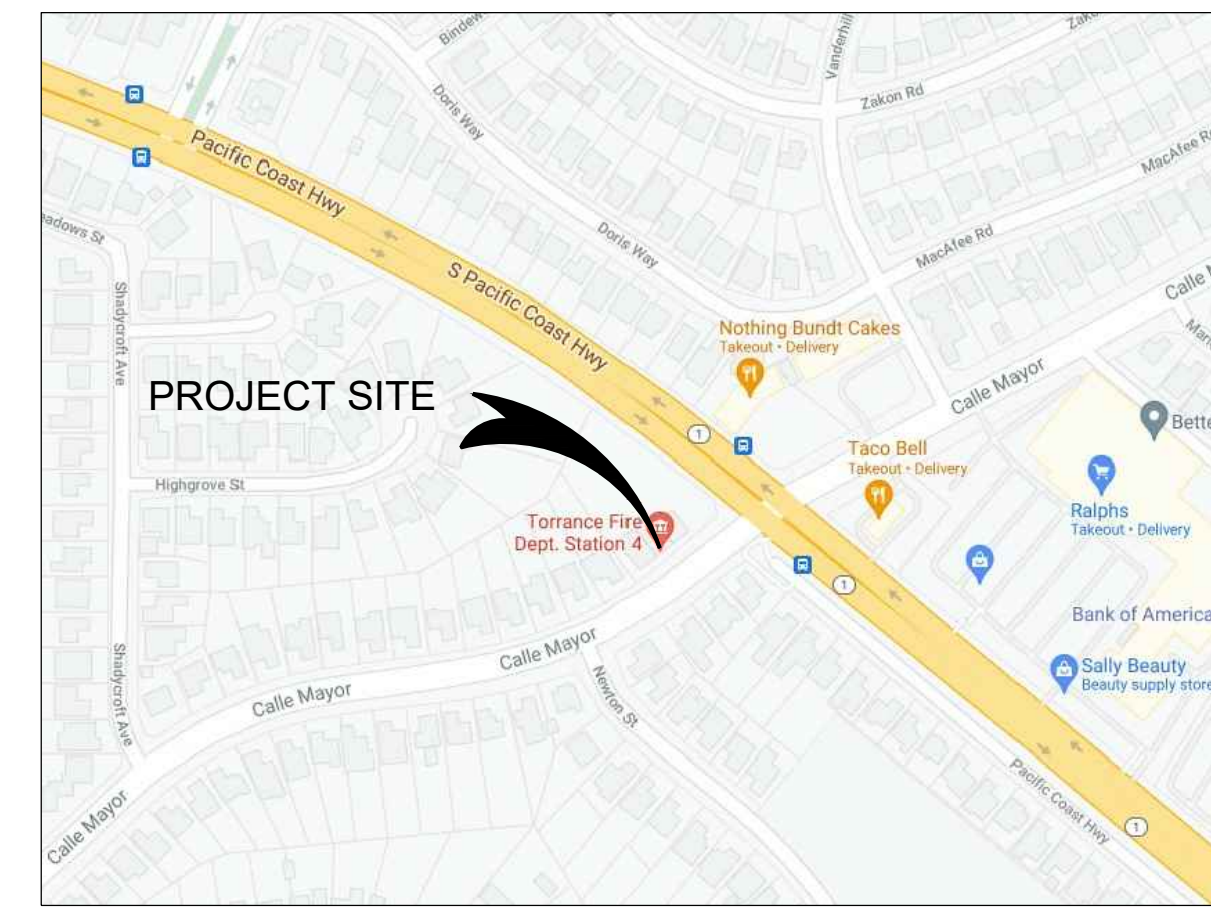
*The above Best Management Practices are detailed in the California Storm Water Best Management Practices Handbook, January 2003. www.cabmphandbook.com

ABBREVIATION:

- AREA DRAIN AD
- ASPHALT CONCRETE AC
- BACK OF WALK BW
- BOTTOM LANDING BL
- BOTTOM OF BOTTOM STEP BBS
- BOTTOM OF EXCAVATED PLANE BEP
- BOTTOM OF PUMP HOUSING BPH
- CAST IRON PIPE CIP
- CEMENT CONCRETE CC
- CENTER LINE CL
- CHAIN LINK FENCE CLF
- CLEANOUT CO
- DOWNSPOUT DS
- DRIVEWAY DWY
- EDGE OF GUTTER EG
- EXISTING EX
- FINISHED FLOOR FF
- FINISHED SURFACE FS
- FIRE HYDRANT FH
- FLOW LINE FL
- GARAGE FINISHED FLOOR GFF
- GAS METER GM
- GROUND GND
- HOUSE LATERAL HL
- INVERT INV
- LIGHT STANDARD LS
- NATURAL GRADE NG
- PLANTING AREA PA
- POINT OF CONNECTION POC
- POWER POLE PP
- REINFORCED CONCRETE PIPE RCP
- RIDGE R
- STREET SIGN SS
- TOP OF AREA DRAIN TAD
- TOP OF CATCH BASIN TCB
- TOP OF CURB TC
- TOP OF FLOOR DRAIN TFD
- TOP OF LANDING TL
- TOP OF TOP STEP TTS
- TOP OF SEWER MANHOLE TSMH
- TOP OF STEM WALL TSW
- TOP OF WALL TW
- WATER METER WM
- WROUGHT IRON FENCE WIF
- YARD BOX, LIGHT STANDARD YBLS

LEGEND:

- PROPERTY LINE OR R
- CENTERLINE OR C
- EXISTING SEWER LINE S
- EXISTING WATER LINE W
- EXISTING GAS LINE G
- NEW GAS LINE G
- NEW WATER LINE W
- FLOW LINE OR FL
- RIDGE LINE/RIDGE R
- GRADE CHANGE OR GC
- STORM DRAIN LINE SD
- NEW SEWER LINE S
- NEW IRRIGATION LINE IRR
- EXISTING SPOT ELEVATION (XXX.XX)
- NEW SPOT ELEVATION (XXX.XX)
- EXISTING GRADE CONTOUR (196.5)
- FINISHED GRADE CONTOUR 195.0
- BOTTOM OF EXCAVATED PLANE
- LIMIT OF GRADING



VICINITY MAP

INDEX OF SHEETS

SHEET	DESCRIPTION
C0.01	TITLE SHEET
C1.01	DEMOLITION
C2.01	GRADING & DRAINAGE PLAN AND DETAILS
C3.01	EROSION CONTROL NOTES, PLAN, AND DETAILS
--	TOPOGRAPHIC SURVEY (FOR REFERENCE ONLY)

LEGAL DESCRIPTION:

TRACT NO 18249 LOTS 13,14 AND LOT 15

BENCHMARK:

CITY OF TORRANCE BENCHMARK NO. 252

CHIS " " IN E'LY CURB CALLE MAYOR +/- S'LY OF CL OF MARION 15' S'LY OF S/E BCR (ADJUSTED 1960)

ELEVATION = 74.15'

SUBSTRUCTURE NOTICES:

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES OR SUBSTRUCTURE SHOWN ON THESE PLANS ARE OBTAINED FROM A SEARCH OF AVAILABLE RECORDS AND POTHOLES SHOWN ON PLANS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE UTILITIES OR SUBSTRUCTURE SHOWN AND ANY OTHERS NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

UNDERGROUND SERVICE ALERT

 Call: TOLL FREE 1-800-422-4133
 TWO WORKING DAYS BEFORE YOU DIG

EARTHWORK QUANTITIES NOTICE:

ALL EARTHWORK AND OTHER QUANTITIES ARE ESTIMATED FOR BONDING AND PLAN CHECKING FEE PURPOSES ONLY -- NOT FOR BIDDING PURPOSES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE ACCURACY OF THE ESTIMATE.

THE CONTRACTOR SHALL MAKE HIS OWN INDEPENDENT DETERMINATION OF THE AMOUNT OF EARTHWORK INVOLVED BEFORE SUBMITTING A BID. THE ENGINEERING ESTIMATE OF THE EARTHWORK QUANTITIES ARE ARE TOTAL RAW VOLUME ONLY AND ARE TO BE USED FOR GRADING PERMIT AND PLAN CHECK FEES ONLY.

THE EARTHWORK QUANTITIES SHOWN DO NOT ACCOUNT FOR THE IMPACTS OF THE FINAL EARTH MOVING QUANTITIES OF THE FOLLOWING ITEMS:

- SHRINK OF SWELL OF THE NATIVE OR IMPORTED MATERIAL
- EXCAVATION OF BUILDING AND COLUMN FOOTINGS
- SPOIL MATERIAL CREATED FROM PIPE TRENCHING
- EXCAVATION AND SPOIL MATERIAL FROM L.I.D. BMP CONSTRUCTION
- PLACEMENT OF LANDSCAPING TOP SOILS.

THE CONTRACTOR IS RESPONSIBLE FOR HAULING AND DISPOSAL OF ALL EXCESS SOIL FROM EARTH MOVING OPERATIONS INCLUDING TRENCHING SPOILS AND FOUNDATION SPOILS. THE CONTRACTOR SHALL PREPARE SEPARATE EARTHWORK QUANTITY CALCULATIONS PRIOR TO BIDDING AND SHALL BASE HIS/HER BASE BID EXCLUSIVELY ON HIS/HER OWN COMPUTATION.

DATE: 05/05/2021
 AS SHOWN
 DRAWN: N.R.A.
 DESIGNER: P.A.A.
 CHECKED: P.A.A.
 JOB NO.: AEI 21-0222

DATE: 05/05/2021
 TITLE SHEET
 FIRE STATION #4
 5205 CALLE MAYOR
 TORRANCE, CA 90505

OWNER/CLIENT:
 WILLIAM LOYD JONES
 9415 CULVER BOULEVARD
 CULVER CITY, CA 90232

PROJECT:
 TRACT NO 18249 LOTS 13,14 AND LOT 15

STAMP:

 PERFECTO A. ARCA
 2898
 66 5-2-20
 CIVIL ENGINEER / LAND SURVEYOR

REVISIONS:

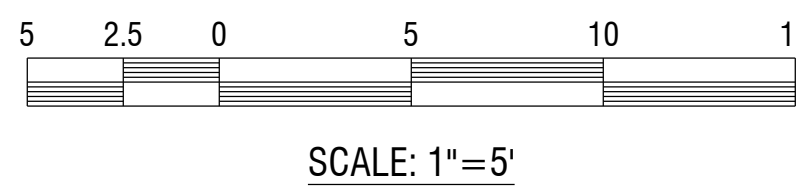
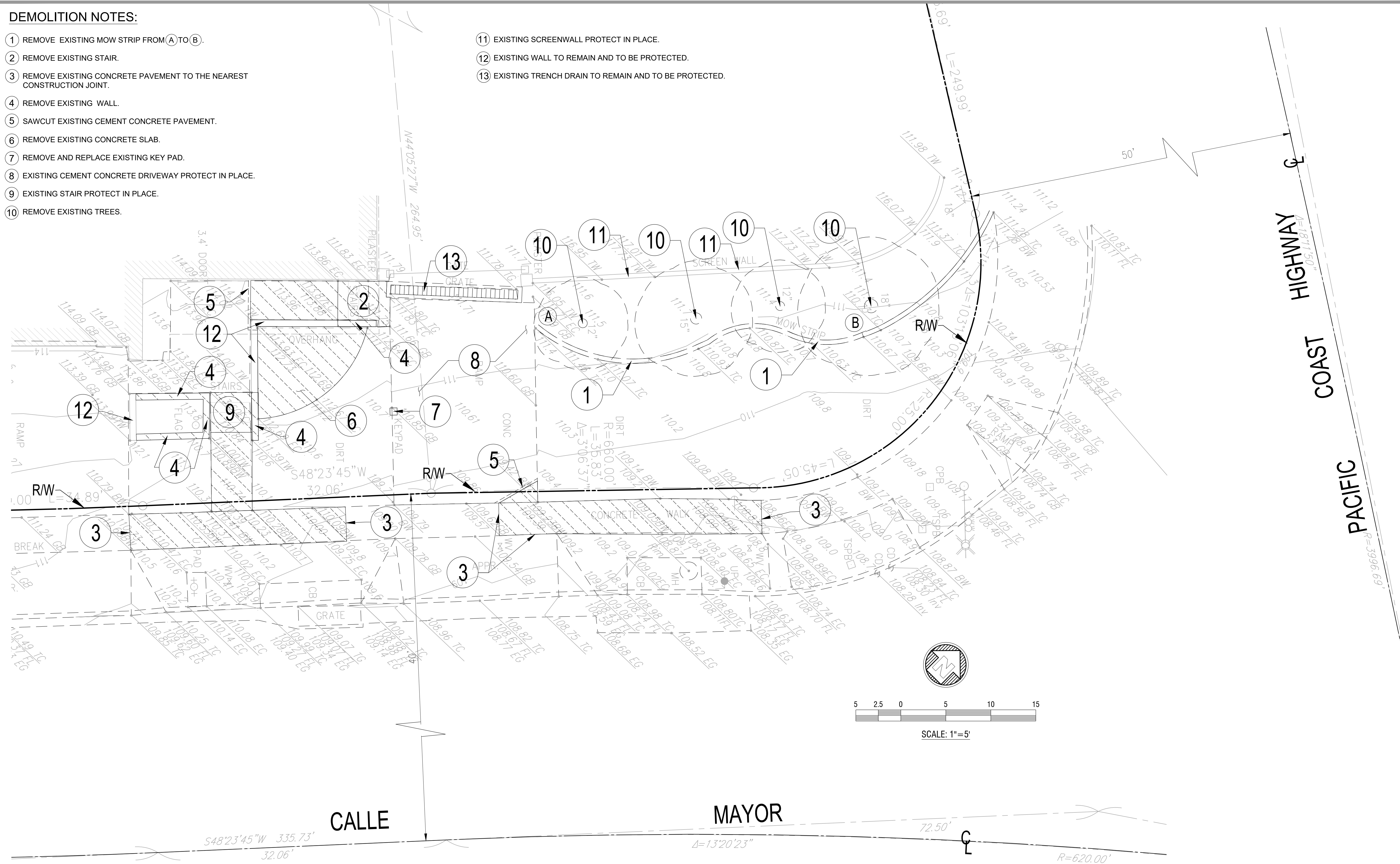
NO.	DATE	DESCRIPTION

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DEMOLITION NOTES:

- ① REMOVE EXISTING MOW STRIP FROM (A) TO (B).
- ② REMOVE EXISTING STAIR.
- ③ REMOVE EXISTING CONCRETE PAVEMENT TO THE NEAREST CONSTRUCTION JOINT.
- ④ REMOVE EXISTING WALL.
- ⑤ SAWCUT EXISTING CEMENT CONCRETE PAVEMENT.
- ⑥ REMOVE EXISTING CONCRETE SLAB.
- ⑦ REMOVE AND REPLACE EXISTING KEY PAD.
- ⑧ EXISTING CEMENT CONCRETE DRIVEWAY PROTECT IN PLACE.
- ⑨ EXISTING STAIR PROTECT IN PLACE.
- ⑩ REMOVE EXISTING TREES.

- ⑪ EXISTING SCREENWALL PROTECT IN PLACE.
- ⑫ EXISTING WALL TO REMAIN AND TO BE PROTECTED.
- ⑬ EXISTING TRENCH DRAIN TO REMAIN AND TO BE PROTECTED.



DEMOLITION LEGEND :

REMOVE EXISTING CEMENT CONCRETE AND DISPOSE LEGALLY OFF-SITE.
 REMOVE EXISTING BASE MATERIALS AND SOIL AS REQUIRED FOR NEW DESIGN GRADES.

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DATE	BY

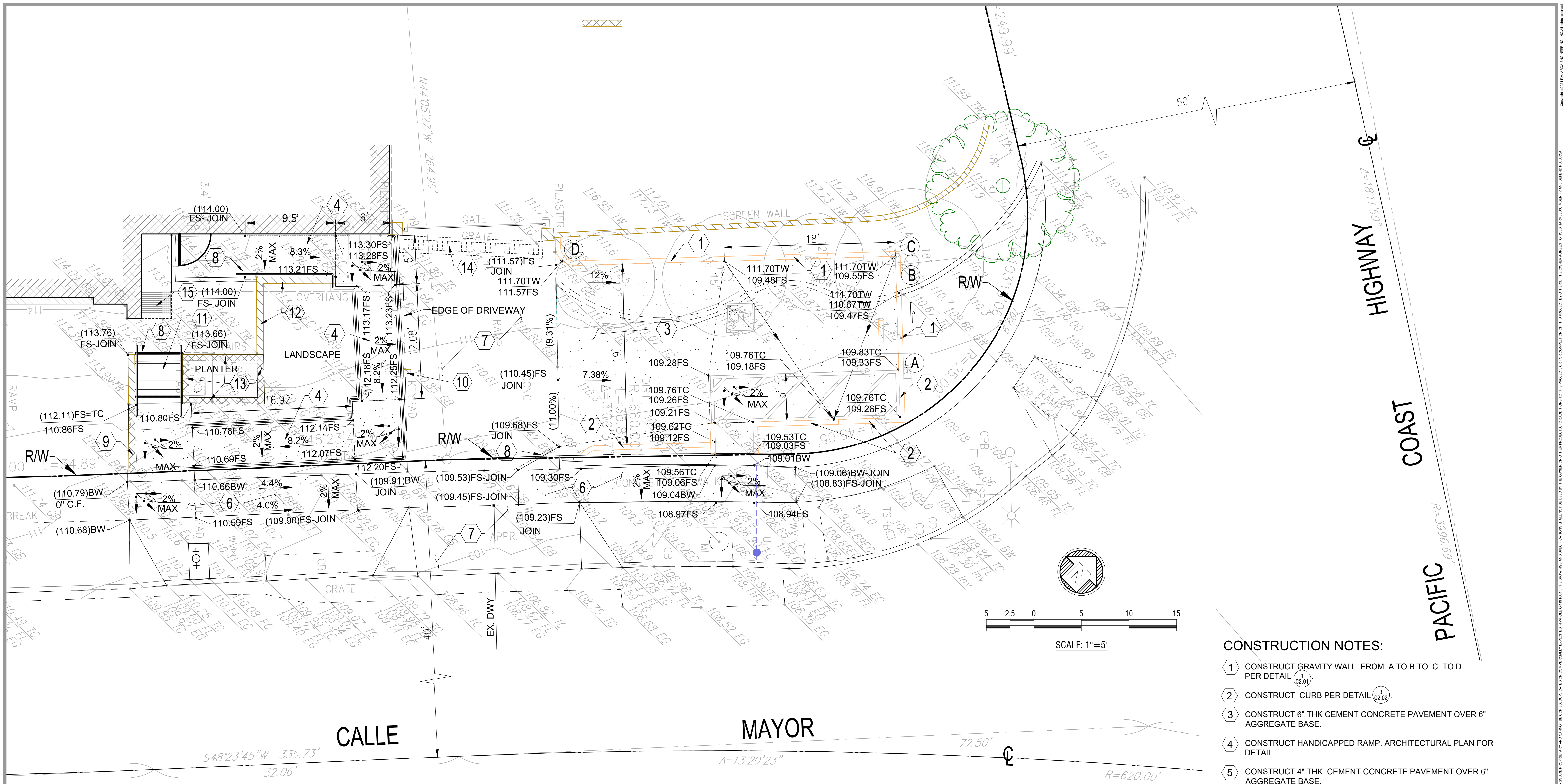
REVISIONS
 OWNER/CLIENT: WILLIAM LOYD JONES
 9415 CULVER BOULEVARD
 CULVER CITY, CA 90232

PROJECT: DEMOLITION PLAN
 FIRE STATION #4
 5205 CALLE MAYOR
 TORRANCE, CA 90505

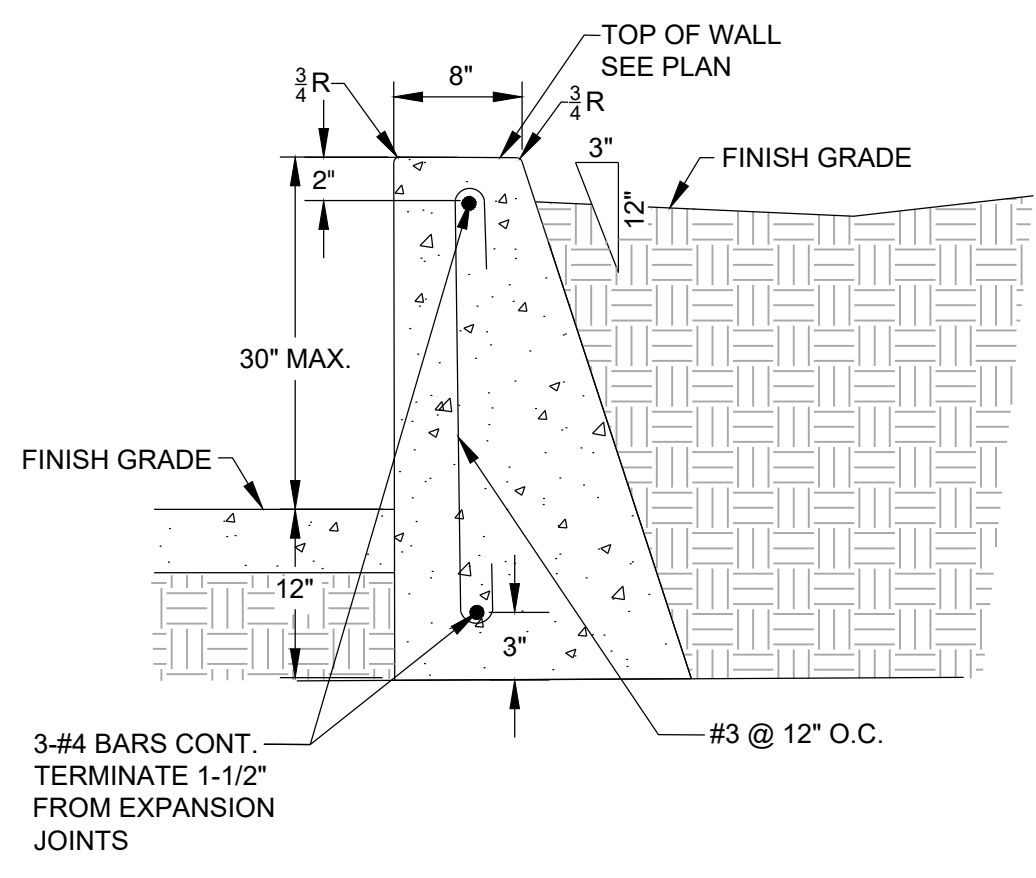
STAMP:

DATE: 05/05/2021
SCALE: AS SHOWN
DRAWN: N.R.A.
DESIGNER: P.A.A.
CHECKED: P.A.A.
JOB NO.: AEI 21-0222

INDEX: C1.01
 SHEET 2 OF 4 SHEETS(S)

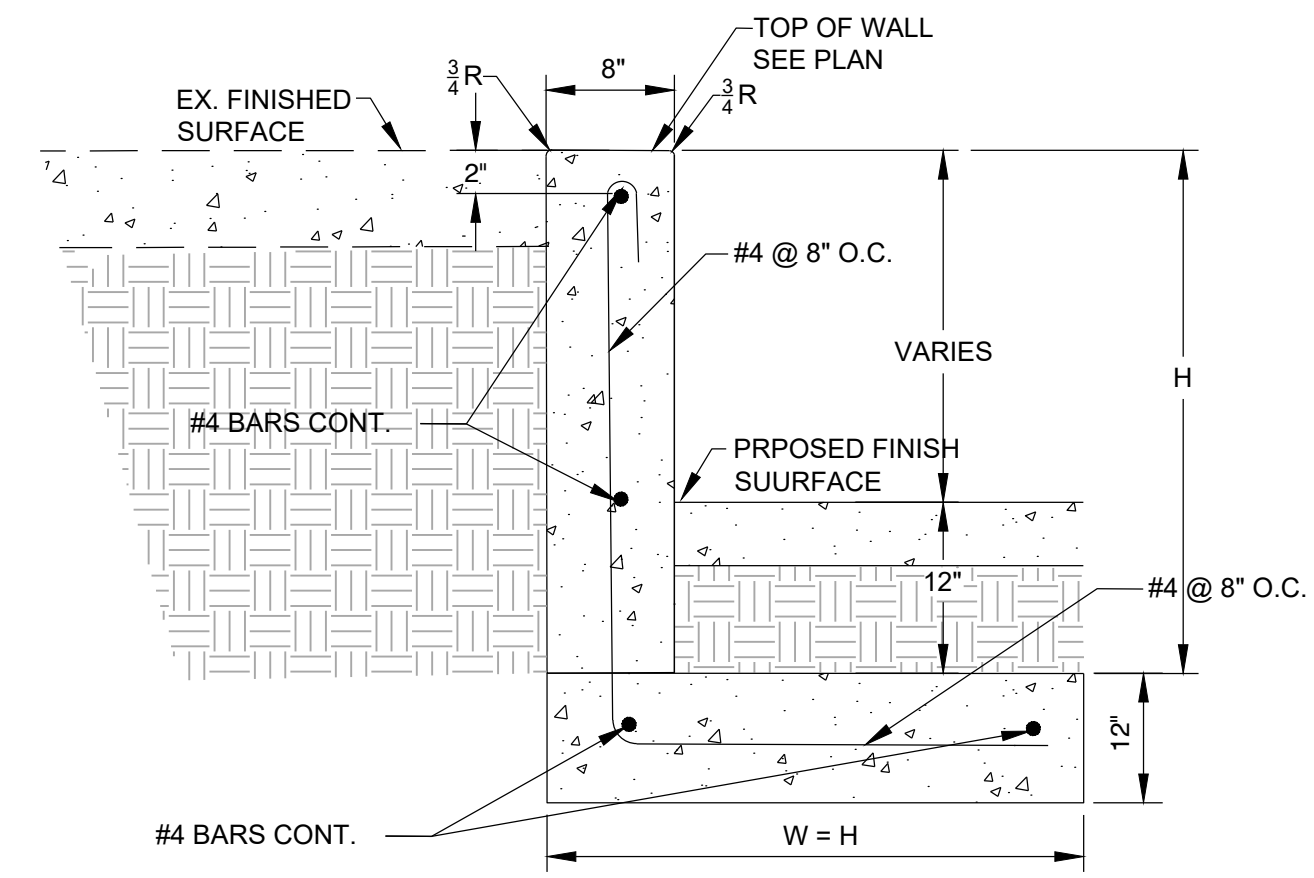


- CONSTRUCTION NOTES:**
- 1 CONSTRUCT GRAVITY WALL FROM A TO B TO C TO D PER DETAIL (C2.01).
 - 2 CONSTRUCT CURB PER DETAIL (C0.02).
 - 3 CONSTRUCT 6" THK CEMENT CONCRETE PAVEMENT OVER 6" AGGREGATE BASE.
 - 4 CONSTRUCT HANDICAPPED RAMP. ARCHITECTURAL PLAN FOR DETAIL.
 - 5 CONSTRUCT 4" THK. CEMENT CONCRETE PAVEMENT OVER 6" AGGREGATE BASE.
 - 6 CONSTRUCT 4" THK CEMENT CONCRETE SIDEWALK AND 6" THICK AT THE DRIVEWAY AREA TO MEET THE CROSS SLOPE OF 2% MAXIMUM.
 - 7 EXISTING CEMENT CONCRETE DRIVEWAY TO REMAIN AND TO BE PROTECTED.
 - 8 SAWCUT AND JOIN.
 - 9 CONSTRUCT VARIABLE CURB WALL PER DETAIL (C2.01).
 - 10 EXISTING KEY PAD TO BE REMOVED AND REPLACED.
 - 11 CONSTRUCT STAIR PER ARCHITECTURAL PLAN
 - 12 EXISTING WALL TO REMAIN AND TO BE PROTECTED.
 - 13 CONSTRUCT RETAINING WALL PER STRUCTURAL PLAN.
 - 14 EXISTING TRENCH DRAIN TO REMAIN AND TO BE PROTECTED.
 - 15 CONSTRUCT CEMENT CONCRETE TO MATCH THE EXISTING.



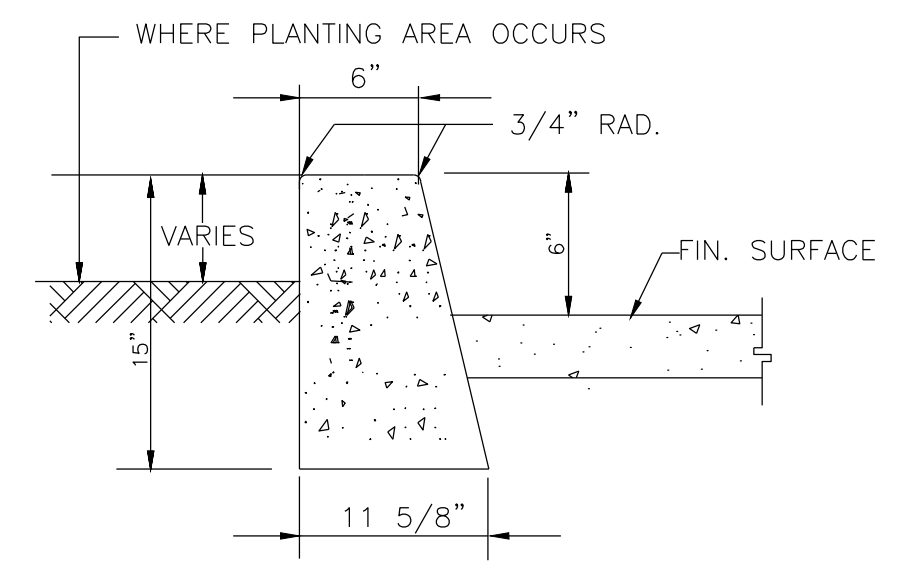
GRAVITY WALL TYPICAL SECTION
NOT TO SCALE

1
C2.01



VARIABLE CURB WALL TYPICAL SECTION
NOT TO SCALE

2
C2.01



CONCRETE CURB
NOT TO SCALE

3
C0.02

NOTES:

1 PROVIDE EXPANSION JOINTS at 30'-0" O.C. MAX.

DATE: 05/05/2021	SCALE: AS SHOWN	DRAWN: NRA	DESIGNER: P.A.A.	CHECKED: P.A.A.	JOB NO.: AEI 21-0222
INDEX					
C2.01					
SHEET 3 OF 4 SHEETS(S)					
P.A. ARCA ENGINEERING, INC.					
500 East Carson Plaza Drive, Suite 201, Carson, CA 90746 Office (310) 592-8888 Fax (310) 766-9977 www.paa-arca.com					
PERFECTO A. ARCA RCE # 28618					
PROJECT: GRADING AND DRAINAGE PLAN					
OWNER/CLIENT: WILLIAM LOYD JONES 9415 CULVER BOULEVARD CULVER CITY, CA 90232					
FIRE STATION #4 5205 CALLE MAYOR TORRANCE, CA 90505					
REVISIONS:					
DATE	BY				

