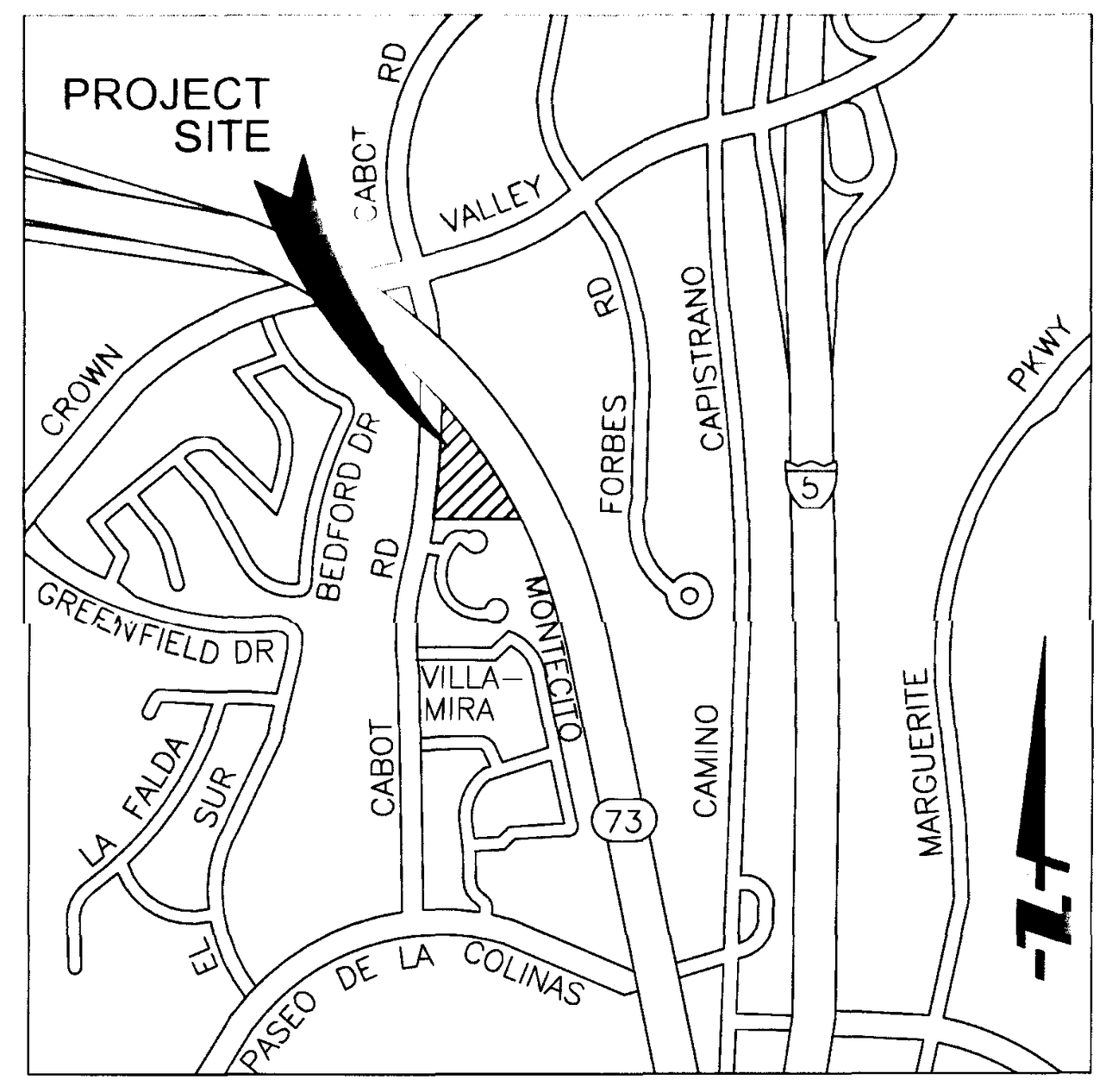
PRECISE GRADING PLANS
FOR
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

2013/03/12

CAREER LOFTS
PRECISE GRADING PLAN

3RD GRADING PLAN CHECK SUBMITTAL



VICINITY MAP
NTS

CITY OF LAGUNA NIGUEL STANDARD GRADING NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE GRADING CODE OF THE CITY OF LAGUNA NIGUEL, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION, AND ANY SPECIAL REQUIREMENTS OF THE PERMIT. A COPY OF THE GRADING CODE AND MANUAL SHALL BE RETAINED ON THE JOB SITE WHILE WORK IS IN PROGRESS. WHEN REFERENCED ON THE PLANS, A COPY OF OC PUBLIC WORKS STANDARD PLANS SHALL ALSO BE RETAINED ON THE SITE.
2. GRADING SHALL NOT BE STARTED WITHOUT FIRST NOTIFYING THE CITY GRADING INSPECTOR, A PRE GRADING MEETING ON THE SITE IS REQUIRED BEFORE START OF GRADING WITH THE FOLLOWING PEOPLE PRESENT: OWNER, GRADING CONTRACTOR, DESIGN CIVIL ENGINEER, SOIL ENGINEER, GEOLOGIST, CITY GRADING INSPECTOR AND WHEN REQUIRED THE ARCHAEOLOGIST AND PALEONTOLOGIST. THE REQUIRED INSPECTIONS FOR GRADING WILL BE EXPLAINED AT THIS MEETING.
3. AN APPROVED COPY OF THE GRADING PLAN SHALL BE ON THE PERMITTED SITE WHILE WORK IS IN PROGRESS.
4. CUT AND FILL SLOPES SHALL BE NO STEEPER THAN 2 FOOT HORIZONTAL TO 1 FOOT VERTICAL (2:1).
5. FILLS SHALL BE COMPACTED THROUGHOUT TO A MINIMUM OF 90% RELATIVE DENSITY. AGGREGATE BASE FOR ASPHALTIC AREAS SHALL BE COMPACTED TO MINIMUM OF 95% RELATIVE DENSITY. MAXIMUM DENSITY SHALL BE DETERMINED BY CALIFORNIA BUILDING CODE STANDARD NO. 70–1 OR APPROVED EQUIVALENT, AND FIELD DENSITY BY CALIFORNIA BUILDING CODE STANDARD NO. 70–2 OR APPROVED EQUIVALENT.
6. AREAS TO RECEIVE FILL SHALL BE PROPERLY PREPARED AND APPROVED IN WRITING BY THE SOIL ENGINEER AND THE BUILDING OFFICIAL PRIOR TO PLACING FILL.
7. FILLS SHALL BE BENCHED INTO COMPETENT MATERIAL PER OC PUBLIC WORKS STANDARD PLAN NO. 1322.
8. ALL EXISTING FILLS SHALL BE APPROVED BY THE BUILDING OFFICIAL OR REMOVED PRIOR TO PLACING ADDITIONAL FILLS.
9. ANY EXISTING IRRIGATION LINES AND CISTERNS SHALL BE REMOVED, OR CRUSHED IN PLACE, AND APPROVED BY THE BUILDING OFFICIAL AND SOIL ENGINEER.
10. STOCKPILING OF EXCESS MATERIAL SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO EXCAVATION.
11. THE DESIGN ENGINEER, AS A CONDITION OF ROUGH GRADE APPROVAL, SHALL PROVIDE BLUE TOP WITH ACCOMPANYING WITNESS STAKE, SET AT THE CENTER OF EACH PAD REFLECTING THE PAD ELEVATION FOR PRECISE PERMITS AND A BLUE TOP WITH WITNESS STAKE SET AT THE DRAINAGE SWALES HIGH POINT REFLECTING THE HIGH POINT ELEVATION FOR PRELIMINARY PERMITS.
12. ALL TRENCH BACKFILLS SHALL BE TESTED AND APPROVED BY THE SOIL ENGINEER PER THE GRADING CODE,
13. THE ENGINEERING GEOLOGIST AND SOIL ENGINEER SHALL AFTER CLEARING AND PRIOR TO THE PLACEMENT OF FILL IN CANYONS, INSPECT EACH CANYON FOR AREAS OF ADVERSE STABILITY AND TO DETERMINE THE PRESENCE OR ABSENCE OF SUBSURFACE WATER OR SPRING FLOW, IF NEEDED, SUBDRAINS WILL BE DESIGNED AND CONSTRUCTED PRIOR TO THE PLACEMENT OF FILL IN EACH RESPECTIVE CANYON.
14. SUBDRAIN OUTLETS SHALL BE COMPLETED AT THE BEGINNING OF THE SUBDRAIN CONSTRUCTION.
15. THE EXACT LOCATION OF THE SUBDRAINS SHALL BE SURVEYED IN THE FIELD FOR LINE/GRADE AND REFLECTED ON AS–GRADED PLANS.
16. ALL CUT SLOPES SHALL BE INVESTIGATED BOTH DURING AND AFTER GRADING BY THE ENGINEERING GEOLOGIST TO DETERMINE IF ANY SLOPE STABILITY PROBLEMS EXIST. SHOULD EXCAVATION DISCLOSE ANY GEOLOGICAL HAZARDS OR POTENTIAL GEOLOGICAL HAZARDS, THE ENGINEERING GEOLOGIST SHALL SUBMIT RECOMMENDED TREATMENT TO THE BUILDING OFFICIAL FOR APPROVAL.
17. WHERE SUPPORT OR BUTTRESSING OF CUT AND NATURAL SLOPES IS DETERMINED TO BE NECESSARY BY THE ENGINEERING GEOLOGIST AND SOIL ENGINEER, THE SOIL ENGINEER SHALL SUBMIT DESIGN, LOCATIONS AND CALCULATIONS TO THE BUILDING OFFICIAL PRIOR TO CONSTRUCTION. THE ENGINEERING GEOLOGIST AND SOIL ENGINEER SHALL INSPECT AND CONTROL THE CONSTRUCTION OF THE BUTTRESSING AND CERTIFY TO THE STABILITY OF THE SLOPE AND ADJACENT STRUCTURES UPON COMPLETION,
18. WHEN CUT PADS ARE BROUGHT TO NEAR GRADE, THE ENGINEERING GEOLOGIST SHALL DETERMINE IF THE BEDROCK IS EXTENSIVELY FRACTURED OR FAULTED AND WILL READILY TRANSMIT WATER. IF CONSIDERED NECESSARY BY THE ENGINEERING GEOLOGIST AND SOIL ENGINEER, A COMPACTED FILL BLANKET WILL BE PLACED,
19. THE ENGINEERING GEOLOGIST SHALL PERFORM PERIODIC INSPECTIONS AND SUBMIT A COMPLETE REPORT AND MAP UPON COMPLETION OF THE ROUGH GRADING,
20. THE COMPACTION REPORT AND APPROVAL FOR THE SOIL ENGINEER SHALL INDICATE THE TYPE OF FIELD–TESTING PERFORMED. EACH TEST SHALL BE IDENTIFIED WITH A METHOD OF OBTAINING THE IN–PLACE DENSITY, WHETHER SAND CONE OR DRIVE RING AND SHALL BE SO NOTED FOR EACH TEST. SUFFICIENT MAXIMUM DENSITY DETERMINATIONS SHALL BE PERFORMED TO VERIFY THE ACCURACY OF THE MAXIMUM DENSITY CURVES USED BY THE FIELD TECHNICIAN.
21. THE SOIL ENGINEER AND ENGINEERING GEOLOGIST SHALL PERFORM SUFFICIENT INSPECTIONS AND BE AVAILABLE DURING GRADING AND CONSTRUCTION TO VERIFY COMPLIANCE WITH THE PLANS, SPECIFICATIONS AND THE CODE WITHIN THEIR PURVIEW.
22. THE CIVIL ENGINEER SHALL BE AVAILABLE DURING GRADING TO VERIFY COMPLIANCE WITH THE PLANS, SPECIFICATIONS, CODE AND ANY SPECIAL CONDITIONS OF THE PERMIT WITHIN THE PURVIEW.
23. THE PERMITTEE IS RESPONSIBLE FOR DUST CONTROL MEASURES.
24. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE.
25. THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE PERMITTEE.
26. APPROVED PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS SHALL BE USED TO PROTECT ADJOINING PROPERTIES DURING GRADING.
27. ANY EXISTING WATER WELLS SHALL BE ABANDONED IN COMPLIANCE WITH THE SPECIFICATIONS APPROVED BY COUNTY OF ORANGE, HUMAN SERVICES AGENCY, DIVISION OF ENVIRONMENTAL HEALTH.
28. ANY EXISTING OIL WELLS SHALL BE ABANDONED IN COMPLIANCE WITH THE ORANGE COUNTY OIL CODE TO THE APPROVAL OF OC PUBLIC WORKS/REGULATIONS SPECIAL SERVICE SECTION.
29. ANY EXISTING CESSPOOLS AND SEPTIC TANKS SHALL BE ABANDONED IN COMPLIANCE WITH THE CALIFORNIA PLUMBING CODE TO THE APPROVAL OF CITY PLANNING/BUILDING DIVISIONS, SPECIAL SERVICE SECTION.
30. PRIOR TO FINAL APPROVAL, THE CIVIL ENGINEER SHALL CERTIFY TO THE BUILDING OFFICIAL THE AMOUNT OF EARTH MOVED DURING THE GRADING OPERATION.
31. THE PERMITTEE SHALL COMPLY WITH THE GRADING CODE REQUIREMENTS WHEN AN EXCESS OF 5,000 CUBIC YARDS OF EACH IS TRANSPORTED TO OR FROM A PERMITTED SITE ON PUBLIC ROADWAYS.
32. ASPHALT CONCRETE SHALL BE CONSTRUCTED PER THE REQUIREMENTS OF OC PUBLIC WORKS STANDARD PLAN NO. 1805.
33. AGGREGATE BASE SECTION SHALL BE CONSTRUCTED PER OC PUBLIC WORKS STANDARD NO. 1804.
34. ALL CONCRETE STRUCTURES THAT COME IN CONTACT WITH THE ON–SITE SOILS SHALL BE CONSTRUCTED WITH TYPE V CEMENT, UNLESS DEEMED UNNECESSARY BY SOLUBLE SULPHATE–CONTENT TESTS CONDUCTED BY THE SOIL ENGINEER.
35. EXPORT SOIL MUST BE TRANSPORTED TO A LEGAL DUMP OR TO A PERMITTED SITE APPROVED BY THE DISTRICT GRADING INSPECTOR.
36. SLOPES EXCEEDING 5 FEET IN HEIGHT SHALL BE PLANTED WITH APPROVED PLANT MATERIAL. IN ADDITION, EXCEEDING 15 FEET IN HEIGHT SHALL BE PROVIDED WITH AN APPROVED IRRIGATION SYSTEM, UNLESS OTHERWISE APPROVED BY THE HE BUILDING OFFICIAL.
37. THE GRADING CONTRACTOR SHALL SUBMIT A STATEMENT OF COMPLIANCE TO THE APPROVED GRADING PLAN PRIOR TO FINAL APPROVAL.
38. ASPHALT SECTIONS MUST BE PER CODE: PARKING STALLS = 3" A/C OVER 6" CALC, DRIVES 3" A/C OVER 10" (COMM.) 12" (INDUSTRIAL). OR: PRIOR TO ROUGH GRADE RELEASE FOR BUILDING PERMITS BY THE DISTRICT GRADING INSPECTOR, THE SOIL ENGINEER SHALL SUBMIT FOR APPROVAL, PAVEMENT SECTION RECOMMENDATIONS BASED ON 'R' VALUE ANALYSIS OF THE SUB–GRADE SOILS, AND EXPECTED TRAFFIC INDICES.
39. PRELIMINARY SOIL AND GEOLOGY REPORTS AND ALL SUBSEQUENT REPORTS AS APPROVED BY THE CITY GRADING SECTION ARE CONSIDERED A PART OF THE APPROVED GRADING PLAN.
40. ALL EXISTING DRAINAGE COURSES THROUGH THIS SITE SHALL REMAIN OPEN UNTIL FACILITIES TO HANDLE STORM WATER ARE APPROVED AND FUNCTIONAL; HOWEVER, IN ANY CASE, THE PERMITTEE SHALL BE HELD LIABLE FOR ANY DAMAGE DUE TO OBSTRUCTING NATURAL DRAINAGE PATTERNS,
41. GRADING OPERATIONS INCLUDING MAINTENANCE OF EQUIPMENT WITHIN ONE–HALF MILE OF A HUMAN OCCUPANCY SHALL NOT BE CONDUCTED BETWEEN THE HOURS OF 8 P.M, AND 7 A.M. DAILY, ON SUNDAY OR ON A FEDERAL HOLIDAY.
42. ROOF GUTTERS SHALL BE INSTALLED TO PREVENT ROOF DRAINAGE FROM FALLING ON MANUFACTURED SLOPES.
43. THE PERMITTEE SHALL BE GIVEN REASONABLE NOTICE TO THE OWNER OF ADJOINING LANDS AND BUILDINGS PRIOR TO BEGINNING EXCAVATIONS WHICH MAY AFFECT THE LATERAL AND SUBJACENT SUPPORT OF THE ADJOINING PROPERTY. THE NOTICE SHALL STATE THE INTENDED DEPTH OF EXCAVATION AND WHEN THE EXCAVATION WILL COMMENCE. THE ADJOINING OWNER SHALL BE ALLOWED AT LEAST 30 DAYS AND REASONABLE ACCESS OF THE PERMITTED PROPERTY TO PROTECT HIS STRUCTURE, IF HE SO DESIRES, UNLESS OTHERWISE PROTECTED BY LAW.
44. IN CASE OF EMERGENCY, CALL: GREG CLAYTON CELL PHONE: (702) 525–2461
45. SEDIMENTS FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON–SITE USING AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE, AND STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, SIDEWALKS, GUTTERS, DRAIN INLETS OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING OR WIND.
46. ALL SEDIMENT AND CONSTRUCTION DEBRIS WHICH IS TRACKED OR DEPOSITED ONTO PUBLIC OR PRIVATE SIDEWALKS, GUTTERS OR PAVED ROADS SHALL BE REMOVED ON A DAILY BASIS BY SWEEPING OR VACUUMING AND DISPOSED OF PROPERLY. SEDIMENT AND CONSTRUCTION DEBRIS SHALL NOT BE WASHED INTO THE STORM DRAIN SYSTEM, INCLUDING THE GUTTER AND STORM DRAIN INLETS.
47. SANDBAGS, GRAVEL BAGS OR OTHER EFFECTIVE FILTER OR TRAP–TYPE BARRIERS SHALL BE USED WHERE APPROPRIATE TO INTERCEPT AND SLOW THE FLOW OF RUNOFF FROM THE CONSTRUCTION SITE AND TO TRAP SEDIMENT BEFORE IT ENTERS THE STORM DRAIN SYSTEM, INCLUDING GUTTERS AND INLETS. ALL ON–SITE STORM DRAIN INLETS SHALL BE PROTECTED AND OFF–SITE INLETS SHALL BE PROTECTED IN AREAS WHERE CONSTRUCTION ACTIVITY TRACKS SEDIMENT ON PAVED AREAS OR WHERE INLETS RECEIVE RUNOFF FROM DISTURBED AREAS.
48. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
49. EROSION CONTROL DEVICES SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE BUILDING OFFICIAL.
50. DURING THE WET SEASON, BETWEEN OCTOBER 1ST AND APRIL 30TH, EROSION CONTROL PROTECTIVE DEVICES AND MEASURES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE 5–DAY PROBABILITY–OF–RAIN EXCEEDS 40%. DURING THE REMAINDER OF THE YEAR, THE EROSION CONTROL PROTECTIVE DEVICES AND MEASURES SHALL BE ONSITE AND READY FOR INSTALLATION WHEN THE 5–DAY PROBABILITY–OF–RAIN EXCEED 50% AND IN PLACE AT THE END OF EACH DAY WHEN THE 48 HOUR PROBABILITY–OF–RAIN EXCEEDS 50%.
51. AFTER A RAINSTORM ALL SILT AND DEBRIS SHALL BE REMOVED FROM STREETS, CHECK BERMS AND BASINS.
52. GRADED AREAS ON THE PERMITTED AREA PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE TO BE DIRECTED TOWARD DE–SILTING FACILITIES.
53. ALL BARE SLOPES, INCLUDING MANUFACTURED SLOPES, SHALL BE PROVIDED WITH PROTECTIVE EROSION CONTROL MEASURES.
54. EROSION CONTROL SYSTEMS ARE DYNAMIC AND WILL CHANGE BASED ON CHANGES IN SITE DEVELOPMENT AND WEATHER CONDITIONS. THEREFORE, UPON INSPECTION, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAYBE REQUIRED BY THE CITY INSPECTOR TO MINIMIZE EROSION AND SEDIMENT TRANSPORT FROM AREAS OF THE SITE TO STREETS, SIDEWALKS, GUTTERS, DRAIN INLETS OR ADJACENT PROPERTIES.
55. THE PERMITTEE AND CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.
56. THE PERMITTEE AND CONTRACTOR SHALL INSPECT THE EROSION CONTROL WORK AND INSURE THAT THE WORK IS IN ACCORDANCE WITH THE APPROVED PLANS. UNDERGROUND STORAGE TANK REMOVAL

UNDERGROUND STORAGE TANK REMOVAL

57. IN THE EVENT THAT SOIL CONTAMINATION IS DISCOVERED DURING EXCAVATION AND REMOVAL OF AN EXISTING TANK, WORK SHALL BE STOPPED UNTIL A SITE ASSESSMENT AND MITIGATION PLAN HAS BEEN PREPARED, SUBMITTED AND APPROVED BY HCA/ENVIRONMENTAL HEALTH AND THE GRADING SECTION.
58. ISSUANCE OF A GRADING PERMIT DOES NOT ELIMINATE THE NEED FOR PERMITS FROM OTHER AGENCIES WITH REGULATORY RESPONSIBILITIES FOR CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE WORK AUTHORIZE ON THIS PLAN.

SPECIAL NOTE

59. SURVEY MONUMENTS SHALL BE PRESERVED AND REFERENCED BEFORE CONSTRUCTION AND REPLACED AFTER CONSTRUCTION PURSUANT TO SECTION 8771 OF THE BUSINESS AND PROFESSIONAL CODE."

WATER QUALITY

60. SEDIMENTS FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON SITE USING AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE; AND STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, SIDEWALKS, GUTTERS, DRAIN INLETS OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING OR WIND.
61. ALL SEDIMENT AND CONSTRUCTION DEBRIS WHICH IS TRACKED OR DEPOSITED ONTO PUBLIC OR PRIVATE SIDEWALKS, GUTTERS OR PAVED ROADS SHALL BE REMOVED ON A DAILY BASIS BY SWEEPING OR VACUUMING AND DISPOSED OF PROPERLY. SEDIMENT AND CONSTRUCTION DEBRIS SHALL NOT BE WASHED INTO THE STORM–DRAIN SYSTEM, INCLUDING THE GUTTER AND STORM–DRAIN INLETS.
62. SANDBAGS, GRAVEL–BAGS OR OTHER EFFECTIVE FILTER OR TRAP–TYPE BARRIERS SHALL BE USED WHERE APPROPRIATE TO INTERCEPT AND SLOW THE FLOW OF RUNOFF FROM THE CONSTRUCTION SITE AND TO TRAP SEDIMENT BEFORE IT ENTERS THE STORM–DRAIN SYSTEM, INCLUDING GUTTERS AND INLETS, ALL ON–SITE STORM–DRAIN INLETS SHALL BE PROTECTED AND OFF–SITE INLETS SHALL BE PROTECTED IN AREAS WHERE CONSTRUCTION ACTIVITY TRACKS SEDIMENT ON PAVED AREAS OR WHERE INLETS RECEIVE RUNOFF FROM DISTURBED AREAS,
63. WATER AND/OR OTHER DUST PALLIATIVE AND STABILIZATION METHODS SHOULD BE USED TO PREVENT OR ALLEVIATE DUST NUISANCES (DUST CONTROL) GENERATED BY CONSTRUCTION ACTIVITIES. COVERING SMALL STOCKPILES OF SOIL AND DEBRIS OR AREAS WITH UN–STABILIZED SOIL IS AN ALTERNATIVE TO APPLYING WATER OR OTHER DUST PALLIATIVES.
64. CONSTRUCTION–RELATED MATERIALS, WASTES, SPILLS OR RESIDUES SHALL BE RETAINED ON SITE TO MINIMIZE TRANSPORT FROM THE SITE TO STREETS, SIDEWALKS, GUTTERS, DRAIN INLETS OR ADJOINING PROPERTIES BY WIND OR RUNOFF,
65. TO PREVENT THE DISCHARGE OF POLLUTANTS FROM MATERIAL DELIVERY AND STORAGE TO THE STORM–WATER SYSTEM OR WATERCOURSES, ALL MATERIALS SHALL BE PROPERLY STORED TO PREVENT SOIL CONTAMINATION AND CONTACT WITH STORM–WATER RUNOFF, WHICH MAY INCLUDE APPROPRIATE COVERS, CONTAINMENT AREAS OR SURFACES AND INDOOR STORAGE.
66. STOCKPILES OF SOIL, PAVING MATERIALS, AND PRESSURE–TREATED WOOD SHALL BE MANAGED TO PREVENT AIR AND WATER POLLUTION. STOCKPILES SHOULD BE LOCATED 50 FEET AWAY FROM CONCENTRATED FLOWS OF STORM WATER, WATERCOURSES AND DRAIN INLETS, PRIOR TO THE ONSET OF PRECIPITATION, STOCKPILES SHALL BE COVERED AND PROTECTED BY A TEMPORARY PERIMETER SEDIMENT BARRIER AT ALL TIMES.
67. HAZARDOUS–MATERIAL WASTE, INCLUDING BUT NOT LIMITED TO PETROLEUM PRODUCTS, ROOFING TAR, PAINTS, SOLVENTS, STAINS, ACIDS, WOOD PRESERVATIVES, SEPTIC WASTES AND ASPHALT PRODUCTS, SHALL NOT BE ALLOWED TO ENTER THE STORM–DRAIN SYSTEM OR WATERCOURSES AND SHALL BE PROPERLY TRANSPORTED, USED, STORED AND DISPOSED AS REQUIRED BY FEDERAL AND STATE LAW. PAINT BRUSHES AND EQUIPMENT FOR WATER–AND OIL–BASED PAINTS SHALL BE CLEANED WITHIN A CONTAINED AREA AND SHALL NOT BE ALLOWED TO CONTAMINATE SITE SOIL, WATERCOURSES OR STORM–DRAIN SYSTEMS, WATERBASED PAINTS SHALL BE RINSED INTO THE SANITARY–SEWER SYSTEM; AND THINNERS, SOLVENTS, EXCESS OIL–BASED PAINTS AND SLUDGE SHALL BE DISPOSED AS HAZARDOUS WASTE,
68. CEMENTACEOUS PRODUCTS SUCH AS CONCRETE , MORTAR OR STUCCO FROM CONCRETE TRUCKS, POTABLE MIXERS AND MISCELLANEOUS CONTAINERS SHALL NOT BE WASHED–OUT INTO THE STORM–DRAIN SYSTEM OR WATERCOURSES. DESIGNATED WASHOUT AREAS SHALL BE LOCATED AT LEAST 50 FEET FROM CONCENTRATED FLOWS OF STORM WATER, WATERCOURSES AND STORM–DRAIN INLETS, AND RUNOFF FROM WASHOUT–AREAS SHALL BE CONTAINED BY CONSTRUCTING A TEMPORARY PIT OR BERM AREA LARGE ENOUGH TO CAPTURE THE LIQUID AND SOLID WASTE MATERIALS,
69. SAW–CUT–CEMENT CONCRETE AND ASPHALT–CONCRETE SLURRY SHALL NOT BE ALLOWED TO ENTER THE STORM–DRAIN SYSTEM OR WATERCOURSES, RESIDUE FROM GRINDING OPERATIONS SHALL BE PICKED UP BY MEANS OF A VACUUM ATTACHMENT TO THE GRINDING MACHINE AND NOT ALLOWED TO FLOW ACROSS THE PAVEMENT OR BE LEFT ON THE SURFACE OF THE PAVEMENT.
70. PRIOR TO DISCHARGE OF GROUNDWATER AND ASSOCIATED WASTE, THE DISCHARGER SHALL MAKE APPLICATION TO THE SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD AND OBTAIN COVERAGE UNDER ORDER NO, R9–2008–0002, DISCHARGES FROM GROUNDWATER EXTRACTION TO SURFACE WATERS IN THE SAN DIEGO REGION EXCEPT SAN DIEGO BAY.

FOR BMP NOTES, DUST CONTROL, AIR QUALITY AND NOISE CONTROL, SEE SHEET 2

ENGINEER'S NOTICE TO CONTRACTOR

1. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES AND/OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. APPROVAL OF THESE PLANS DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OR COMPLETENESS OF THE LOCATION OR THE EXISTENCE OR NONEXISTENCE OF ANY UTILITY AND/OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THE CONTRACTOR IS REQUIRED TO TAKE ALL DUE PRECAUTIONARY MEANS TO PROTECT THE UTILITIES OF RECORD OR NOT OF RECORD OR NOT SHOWN ON THESE PLANS, AND IS RESPONSIBLE FOR THE PROTECTION OF, AND ANY DAMAGE TO THESE LINES OR STRUCTURES.
2. RELOCATION OR REMOVAL OF ANY EXISTING UTILITIES SHALL BE PERFORMED BY THE RESPECTIVE UTILITY OWNERS, AT THE EXPENSE OF THE DEVELOPER.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS PRIOR TO COMMENCEMENT OF THESE IMPROVEMENTS.
4. UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS AND THE CITY OF LAGUNA NIGUEL.
5. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THESE REQUIREMENTS SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND THAT THE CONTRACTORS SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER, ENGINEER, AND THE CITY OF LAGUNA NIGUEL 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 OR THE ENGINEER, OR ANY PUBLIC AGENCY.
6. THE IMPROVEMENT QUANTITIES AS SHOWN ON SHEET 2 ARE PROVIDED ONLY FOR THE PURPOSE OF SATISFYING THE CITY OF LAGUNA NIGUEL PLAN INFORMATION REQUIREMENTS. THE CONTRACTOR SHALL PERFORM AN INDEPENDENT ESTIMATE OF ALL EARTHWORK AND IMPROVEMENT QUANTITIES AND SHALL USE SAME AS A BASIS FOR THIS BID(S) AND CONTRACT(S).
7. THE TOPOGRAPHIC INFORMATION CONTAINED IN THESE PLANS WAS OBTAINED BY AERIAL AND/OR FIELD SURVEY DATA, AND DISCREPANCIES BETWEEN PLAN ELEVATIONS AND ACTUAL ELEVATIONS ARE TO BE ANTICIPATED. THE CONTRACTOR SHALL REMAIN ALERT FOR AND PROMPTLY REPORT ANY AND ALL SUBSTANTIAL DISCREPANCIES (SUFFICIENT TO CAUSE A CHANGE IN THE PLANS AND/OR AN INCREASE IN COST(S) TO THE OWNER AND TO THE ENGINEER OF RECORD, AND SHALL NOT PROCEED WITH AN AFFECTED WORK AREA UNTIL DIRECTED TO DO SO BY AN APPROPRIATE OWNER REPRESENTATIVE.
8. QUANTITY CALCULATIONS ARE BASED UPON AERIAL TOPOGRAPHY AND ESTIMATED SOILS INFORMATION, AND SHOULD BE CONSIDERED ONLY A ROUGH APPROXIMATION OF ACTUAL QUANTITIES.
9. CONTRACTOR ASSUMES SOLE AND COMPLETE RESPONSIBILITY FOR THE PROTECTION AND PRESERVATION OF ALL SURVEY MONUMENTS, AND SHALL HAVE ANY DISTURBED OR COVERED MONUMENT RESET BY A QUALIFIED REGISTERED CIVIL ENGINEER OR LICENSED LAND SURVEYOR AT THE DIRECTION OF THE GOVERNING AGENCY.
10. DEMOLITION OF ALL LABELED ITEMS WILL INVOLVE REMOVAL OF ALL SUB SURFACE FOOTINGS AND SUBSTRUCTURES (IF APPLICABLE).
11. THE CONTRACTOR TO POTHOLE AND VERIFY THE LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES AND UTILITY CROSSINGS PRIOR TO START OF CONSTRUCTION. CONTRACTOR SHALL CONTACT CIVIL ENGINEER IN THE EVENT OF ANY CONFLICTS PRIOR TO CONSTRUCTION.
12. THE CONTRACTOR MUST NOTIFY UNDERGROUND ALERT AT 1–800–227–2600 A MINIMUM OF TWO FULL WORKING DAYS PRIOR TO START OF DEMOLITION, GRADING OR CONSTRUCTION OF ANY KIND. THE USA TICKET NUMBER MUST BE AVAILABLE AT THE CONSTRUCTION SITE PRIOR TO START OF ANY WORK SHOWN ON THIS SET OF PLANS.

SURVEY MONUMENTATION

LOCATION AND INSTALLATION OF ALL SURVEY MONUMENTS AND TIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE PERFORMED BY A QUALIFIED LICENSED SURVEYOR OR ENGINEER. THE CONTRACTOR'S SURVEYOR SHALL BE RESPONSIBLE FOR FILING CORNER TIES OR RECORD OF SURVEYS WITH THE COUNTY SURVEYOR AND THE CITY FOR ALL DISTURBED CORNER TIES AND MONUMENTS. THE CONTRACTOR SHALL NOTIFY THE CITY BEFORE REMOVAL OF ANY EXISTING SURVEY MONUMENTS OR TIES.

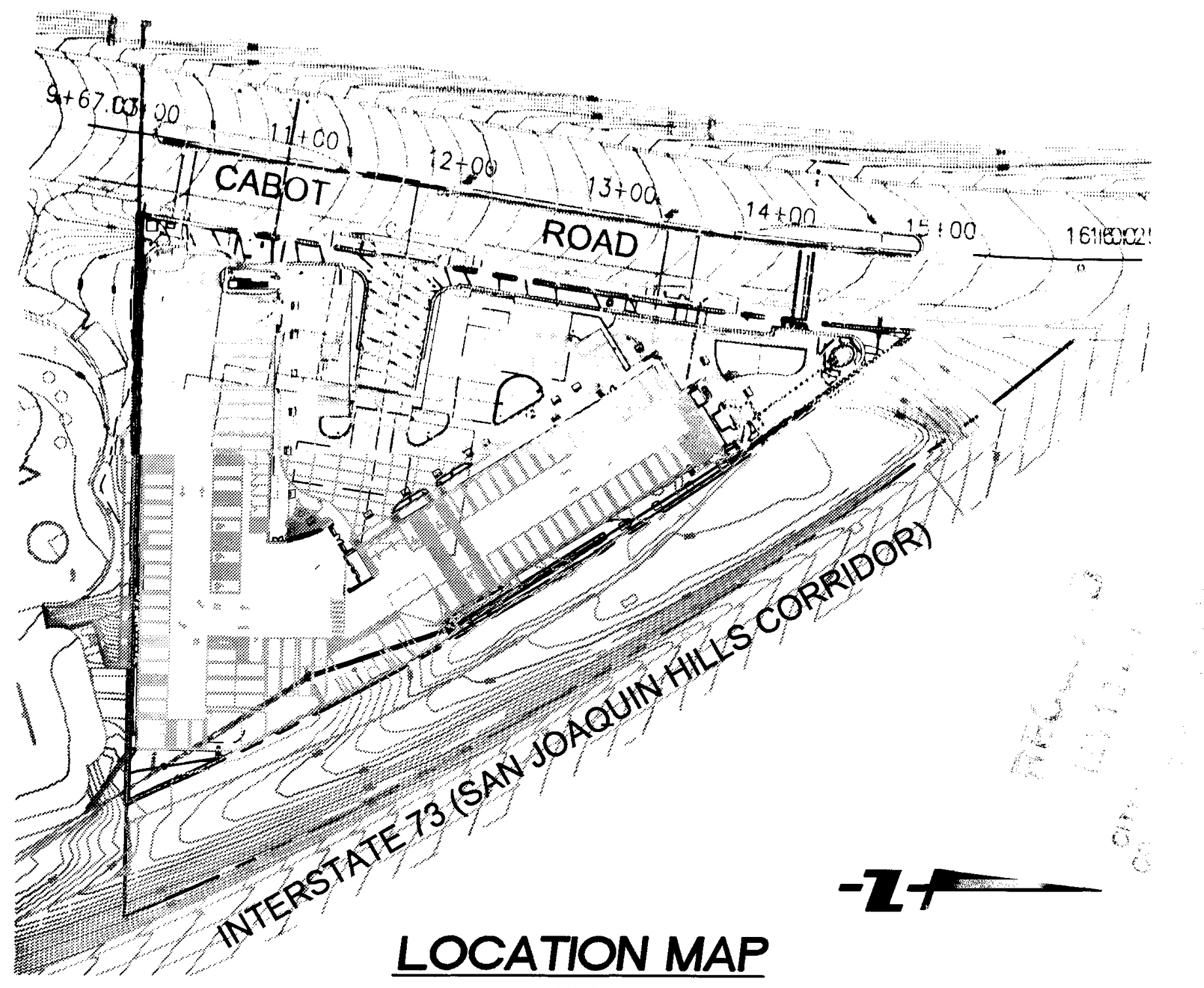
WHEN MONUMENTS EXIST THAT CONTROL THE LOCATION OF SUBDIVISIONS, TRACTS, BOUNDARIES, ROADS, STREETS, OR HIGHWAYS OR PROVIDE SURVEY CONTROL, THE MONUMENTS SHALL BE LOCATED AND REFERENCED BY OR UNDER THE DIRECTION OF A LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING WITHIN THE STATE, RETAINED AND PAID FOR BY THE CONTRACTOR. THIS WORK SHALL BE DONE SEVEN (7) CALENDAR DAYS PRIOR TO THE TIME WHEN ANY STREETS, HIGHWAYS, OTHER RIGHTS–OF–WAY, OR EASEMENTS ARE IMPROVED, CONSTRUCTED, RECONSTRUCTED, OR RELOCATED AND A CORNER RECORD OR RECORD OF SURVEY OF THE REFERENCES SHALL BE FILED WITH THE COUNTY SURVEYOR AND THE CITY. THEY SHALL BE RESET IN THE SURFACE OF THE NEW CONSTRUCTION, A SUITABLE MONUMENT BOX PLACED THEREON, OR PERMANENT WITNESS MONUMENTS SET TO PERPETUATE THEIR LOCATION AND A CORNER RECORD OR RECORD OF SURVEY FILED WITH THE COUNTY SURVEYOR AND THE CITY PRIOR TO THE RECORDING OF A CERTIFICATE OF COMPLETION FOR THE PROJECT. SUFFICIENT CONTROLLING MONUMENTS SHALL BE RETAINED OR REPLACED IN THEIR ORIGINAL POSITIONS TO ENABLE PROPERTY, RIGHT–OF–WAY AND EASEMENT LINES, PROPERTY CORNERS, AND SUBDIVISION AND TRACT BOUNDARIES TO BE REESTABLISHED WITHOUT DEVIOUS SURVEYS NECESSARILY ORIGINATING ON MONUMENTS DIFFERING FROM THOSE THAT CURRENTLY CONTROL THE AREA. MONUMENTS SET TO MARK THE LIMITING LINES OF HIGHWAYS, ROADS, STREETS OR RIGHT–OF–WAY OR EASEMENT LINES SHALL NOT BE DEEMED ADEQUATE FOR THIS PURPOSE UNLESS SPECIFICALLY NOTED ON THE CORNER RECORD OR RECORD OF SURVEY OF THE IMPROVEMENTS WORKS WITH DIRECT TIES IN BEARING OR AZIMUTH AND DISTANCE BETWEEN THESE AND OTHER MONUMENTS OF RECORD. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, THE MONUMENT COVER SHALL BE ADJUSTED TO THE NEW GRADE WITHIN SEVEN (7) CALENDAR DAYS OF FINISHED PAVING.

FLOOD HAZARD STATEMENT

SAID PROPERTY IS NOT INCLUDED IN A FLOOD HAZARD AREA AS DESIGNATED BY THE FEDERAL INSURANCE ADMINISTRATION.

THE FLOOD ZONE DESIGNATION IS: ZONE X, FEMA FLOOD MAP # 06059C0441H, EFFECTIVE FEBRUARY 18, 2004.

ZONE X: AREAS DETERMINED TO BE OUTSIDE 500–YEAR FLOODPLAIN.



LOCATION MAP
NTS

SHEET INDEX

TITLE SHEET	1
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EROSION CONTROL PLAN – EXCAVATION PHASE	6
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SECTIONS	13 – 14
TOTAL SITE PRECISE GRADING	15

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE BASED ON THE CENTERLINE OF CABOT ROAD BEING NORTH 9°22'00" EAST PER PARCEL MAP NO. 88–274, FILED IN BOOK 253, PAGES 1 THROUGH 5, INCLUSIVE, OF PARCEL MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA.

BENCH MARK:

BENCHMARK DESIGNATION: 3–3/4" ORANGE COUNTY SURVEYOR ALUMINUM DISK STAMPED "3U–4–70"

MONUMENT RECOVERY: SET IN THE NORTHWESTERLY CORNER OF A CONCRETE BRIDGE ABUTMENT; NORTHWESTERLY CORNER OF THE INTERSECTION OF FORBES ROAD AND CROWN VALLEY PARKWAY, 150 FT. WESTERLY OF THE CENTERLINE OF FORBES ROAD AND 22.6 FT. NORTHERLY OF CROWN VALLEY PARKWAY. MONUMENT IS LEVEL WITH THE BRIDGE DECK.

ELEVATION = 392.547 FEET (NAVD 88 DATUM, O.C.S. ADJUSTMENT 1995)

LEGAL DESCRIPTION:

REAL PROPERTY IN THE CITY OF LAGUNA NIGUEL, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL 2 PARCEL MAP NO. 88–274, AS SHOWN ON A MAP FILED IN BOOK 253, PAGES 1 THROUGH 5, INCLUSIVE, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF ORANGE COUNTY, CALIFORNIA.

APN: 637–202–14

CIVIL ENGINEER

ORIANA SLASOR, P.E.
FUSCOE ENGINEERING, INC.
16795 VON KARMAN, SUITE 100
IRVINE, CA 92606
PHONE: (949) 474–1960
FAX: (949) 474–5315

SOILS ENGINEER

DAVID ALBUS
ALBUS–KEEFE & ASSOCIATES, INC
1011 N. ARMANDO ST
ANAHEIM, CA 92705
(714) 630–1626

OWNER

UNITED AMERICAN PROPERTIES
4699 JAMBOREE RD,
NEWPORT BEACH, CA 92660
TEL: (949) 756–8800
FAX: (949) 756–8811

PLANNING & ZONE CLEARANCE

This Plan was inspected on 11-20-13 and found to comply with applicable City land-use regulations.

This clearance is only valid for the life of the building permit.

The occupancy of this building shall not be changed from the use stated in the permit application except by issuance of a new Certificate of Use and Occupancy. Deviation from the approved plan shall be cause for stopping construction.

WARNING: This stamp indicates partial review only and does not constitute a building permit.

Laguna Niguel Community Development Department

EARTHWORK QTY.

DESCRIPTION	CUT		FILL
MASS EXCAVATION	27,342 CY		6,569 CY
SHRINKAGE 7%	–1,914 CY		
REMEDIAL GRADING	2,818 CY	REPLACE	3,156 CY
TOTAL EARTHWORK	28,246 CY		9,725 CY

EXPORT: 18,521 CY

GRADING QUANTITIES SHOWN ABOVE ARE FOR BONDING PURPOSES ONLY. SITE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES PRIOR TO BIDDING AND CONSTRUCTION.

DEBRA VALLE SCHALES
NO. 43101
11/4/13
CIVIL

DAVID E. ALBUS
No. 2455
Exp. 12/31/14
GEOTECHNICAL

DIG ALERT

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

CALL BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CALL USA DIG ALERT AT 1–800–227–2600, 48 HOURS BEFORE ANY EXCAVATION.

NO.	DATE	REVISIONS	APP'D.	DATE
△1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ○ fax 949.474.5315 ○ www.fuscoe.com

DEBRA VALLE SCHALES RCE#043101 11/4/13
DATE

DEBRA VALLE SCHALES
NO. 43101
EXP. 03/31/14
CIVIL

TITLE SHEET
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

PERMIT # G12–23

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

SHEET 1 OF 15

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG01TS.DWG (11–04–13 3:02:13PM) Plotted by: Eric Lissner

CITY OF LAGUNA NIGUEL STORM DRAIN GENERAL NOTES:

1. ALL CONCRETE IN REINFORCED CONCRETE STRUCTURES MUST BE 3250 POUNDS PER SQUARE INCH. IN 28 DAYS; TYPE OF PORTLAND CEMENT CONCRETE TO BE DETERMINED BY PF & RD MATERIALS LAB.
2. ALL PIPE LENGTHS ARE HORIZONTAL PROJECTIONS, UNLESS OTHERWISE SHOWN.
3. FOR TRENCH EXCAVATIONS IN NATIVE SOIL, SHORING SHALL BE PROVIDED TO SATISFY STATE OF CALIFORNIA REQUIREMENTS.
4. PIPE CONSTRUCTION IN FILL AREA MUST BE COORDINATED WITH THE GRADING TO INSURE THAT WHEN THE FILL OPERATION HAS BEEN COMPLETED AT GRADE THERE IS A MINIMUM OF 2 FEET OF FILL ABOVE THE TOP OF PIPE.
5. ALL WORK MUST BE IN CONFORMANCE WITH THE ORANGE COUNTY PF & RD STANDARD SPECIFICATIONS AND MUST BE KEPT ON THE JOB AT ALL TIMES.
6. THE CONTRACTOR MUST NOTIFY THE CITY OF LAGUNA NIGUEL INSPECTOR AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION BY TELEPHONING.
7. ALL FILLS MUST BE COMPACTED TO 90% RELATIVE COMPACTION AS DETERMINED BY THE CALIFORNIA TEST METHOD NO. 216, 1978 "FIVE LAYER METHOD" ALL BACKFILL MUST BE FREE OF VEGETABLE MATTER.
8. ALL SURVEYING REQUIRED FOR VERTICAL AND HORIZONTAL ALIGNMENT MUST BE PROVIDED BY THE CONTRACTOR OR DEVELOPER AND SUFFICIENT REFERENCE STAKING MUST BE IN ACCORDANCE WITH THE REQUEST OF THE CITY INSPECTOR.
9. ALL REINFORCED CONCRETE PIPE MUST BE BEDDED IN ACCORDANCE WITH PIPE BEDDING DETAIL PER PF & RD STANDARD PLAN 1319.
10. CONTRACTOR WILL NOTIFY PF & RD MATERIALS LAB (714) 567-7805 48 HOURS PRIOR TO D-LOAD TESTING OF R.C.P. FOR VERIFICATION OF RESULTS.
11. PRIOR TO THE PLACEMENT OF STORM DRAIN IMPROVEMENTS, THE DEVELOPER'S SOIL ENGINEER SHALL CERTIFY IN WRITING TO THE CITY INSPECTOR THAT THE STORM DRAIN'S SUBGRADE IS OF ADEQUATE STRENGTH TO SUPPORT THE STRUCTURES AND ANY ANTICIPATED LOADS.
12. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE DEVELOPER'S CONTRACTOR SHALL OBTAIN A PERMIT FROM THE STATE DIVISION OF INDUSTRIAL SAFETY. A COPY OF THE PERMIT SHALL BE KEPT ON THE JOB SITE AT ALL TIMES.
13. WHENEVER APPLICABLE, THE DEVELOPER SHALL OBTAIN A PERMIT FROM THE STATE DEPARTMENT OF FISH AND GAME IN ACCORDANCE WITH SECTION 1602 OF THE CALIFORNIA FISH AND GAME CODE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
14. ALL STEEL THAT IS TO BE CONTINUOUS SHALL BE LAPPED A MINIMUM OF 45 BAR DIAMETERS.
15. ALL MATERIALS TESTING FOR THE DRAINAGE FACILITIES SHALL BE PROVIDED BY THE DEVELOPER OR CONTRACTOR IN ACCORDANCE WITH THE NUMBER, LOCATION AND FREQUENCY REQUESTED BY THE CITY INSPECTOR.
16. CHAMFER ALL EXPOSED EDGES OF CONCRETE 3/4"' MIN.
17. A PERMIT FOR WORK WITHIN EXISTING STREET RIGHT OF WAY IS REQUIRED FROM THE CITY FOR ANY ENCROACHMENT NECESSARY FOR CONSTRUCTION IN PUBLIC RIGHT OF WAY.
18. LENGTH OF MANHOLE STRUCTURES MAY BE INCREASED TO MEET PIPE ENDS AT OPTION OF CONTRACTOR AS LONG AS REINFORCING STEEL IS CONTINUED AS REQUIRED. ANY CHANGE IN SPUR LOCATION MUST BE APPROVED BY THE ENGINEER.
19. FLOOR OF MANHOLE STRUCTURE SHALL BE STEEL TROWELLED TO SPRING LINE.
20. BODY OF MANHOLE STRUCTURE, INCLUDING SPUR, MUST BE POURED IN ONE CONTINUOUS OPERATION, EXCEPT THAT CONSTRUCTION JOINT AT THE SPRING LINE WITH A LONGITUDINAL KEYWAY IS PERMITTED.
21. ALL REINFORCING BARS MUST BE SECURELY HELD IN PLACE IN THE FORMS. TWO-WAY MATS OF STEEL MUST BE WIRED TOGETHER BOTH WAYS AT ALTERNATE INTERSECTIONS.
22. STORM DRAIN BACKFILL FOR ALL FACILITIES WITHIN STREET RIGHT OF WAY IS TO BE PLACED AND COMPACTED UNDER CITY INSPECTION AND MEET OR EXCEED CITY MINIMUM STANDARDS.
23. ALL PIPE TO BE BANDED AND GROUTED.
24. RCP SHALL COMPLY WITH ALL A.S.T.M. APPLICABLE STANDARDS.
25. WORKING WITHIN ORANGE COUNTY FLOOD CONTROL FACILITIES IS RESTRICTED TO THE PERIOD OF APRIL 15 TO OCTOBER 15.
26. ALL LOCAL DEPRESSIONS SHALL BE CONSTRUCTED PER STREET IMPROVEMENT PLANS IN ACCORDANCE WITH PF & RD STD. PLANS HOWEVER, ALL CATCH BASINS WILL BE SHOWN ON STREET IMPROVEMENT PLANS.
27. THE CONTRACTOR SHALL CONDUCT CONSTRUCTION OPERATIONS IN SUCH A MANNER THAT STORM OR OTHER WATERS MAY PROCEED UNINTERRUPTED ALONG THEIR EXISTING STREET OR DRAINAGE COURSES.
28. IN THE COURSE OF WATER CONTROL, THE CONTRACTOR SHALL CONDUCT CONSTRUCTION OPERATIONS TO PROTECT WATERS FROM POLLUTION WITH FUELS, OILS, BITUMENS OR HARMFUL MATERIALS.
29. LOCAL DEPRESSIONS AND DECKS OF CURB INLETS SHALL NOT BE POURED UNTIL ADJACENT CURB AND GUTTER HAS BEEN POURED.
30. IF A DRIVEWAY ENCROACHES WITHIN A LOCAL DEPRESSION TRANSITION USE PF & RD STANDARD PLAN NO.1308 - TYPE A.
31. CATCH BASIN CURB SUPPORT SHALL BE CONSTRUCTED PER DETAIL "A" AS SHOWN ON PF & RD STD. PLAN NO. 1306, SHEET 2 OF 3.

NOTICE TO CONTRACTOR

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
PRIOR TO CONSTRUCTION OF ANY CONCRETE STRUCTURE, THE CONTRACTOR SHALL VERIFY WITH THE SOILS ENGINEER, THE TYPE OF CONCRETE RECOMMENDED.
EXISTING UNDERGROUND STRUCTURES:
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES OR CONDUITS SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE THE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LIENS NOT OF RECORD OR NOT SHOWN ON THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK. CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS.

BMP NOTES, DUST CONTROL, AIR QUALITY AND NOISE CONTROL:

1. Best Management Practices, Noise Control (GSP MM 4.10-1 -- MM4.10-4) - Prior to issuance of grading or building permits, the project applicant shall document on the grading and building plans the following construction best management practices (BMPs), to be implemented by contractors to reduce construction noise levels:

   (MM4.10-1)

   a. Ensure that construction equipment is properly muffled according to industry standards and in good working condition.
   b. Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible.
   c. Schedule high noise-producing activities between the hours of 8:00 AM and 5:00 PM to minimize disruption on sensitive uses, Monday through Saturday.
   d. Implement noise attenuation measures, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources, where feasible.
   e. Use electric air compressors and similar power tools rather than diesel equipment, where feasible.
   f. Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 10 minutes.
   g. Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow for surrounding owners and residents to contact the job superintendent. If the City or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party.
   h. MM4.10-2) Construction staging areas along with the operation of earthmoving equipment within the project area would be located as far away from vibration and noise sensitive sites as possible.
   i. (MM4.10-3) Heavily loaded trucks used during construction would be routed away from residential streets.
   j. (MM4.10-4) Use of noise-reducing pile driving techniques if nearby structures are subject to pile driving noise and vibration. These techniques include pre-drilling pile holes (if feasible, based on soils) to the maximum feasible depth, installing state-of-the-art intake and exhaust mufflers on pile driving equipment, vibrating piles into place when feasible, and installing shrouds around the pile driving hammer where feasible. Pile driving activities shall be scheduled between the hours of 8:00 AM and 4:00 PM on Mondays through Fridays only.

2. Air Pollutants -The project shall comply with the South Coast Air Quality Management District (SCAQMD) Rule 402, which prohibits the discharge from a facility of air pollutants that cause injury, detriment, nuisance or annoyance to the public or that damage business or property.

3. Best Management Practices Air Quality (GSP MM4.2-1 -- MM4 2-14) - Prior to issuance of a grading and/or a building permit, the following BMPs shall be included on the project grading and/or building plans, as determined appropriate by the Community Development Director or Building Official:

   a. (MM4.2-1) Name and phone number of the contractor's superintendent hired by the Applicant shall be submitted to the Community Development and Public Works Departments. In addition, clearly visible signs shall be posted on the perimeter of the site indicating who shall be contacted for information regarding this development and any construction/grading related concerns. This contact person shall be available immediately to address any concerns or issues raised by adjacent property owners during the construction activity. S/he will be responsible for ensuring compliance with the conditions herein, specifically, grading activities, truck routes, construction hours, noise, etc. Signs shall include the Applicant's contact number regarding grading and construction activities, and "1-800-CUTSMOG" in the event there are concerns regarding fugitive dust and compliance with SCAQMD Rule No. 403.
   b. (MM4.2-2) Wind barriers shall be installed along the perimeter of the site and/or around areas being graded.
   c. (MM4.2-3) Project Applicant shall establish an on-site construction equipment staging area and construction worker parking, located on either paved surfaces or unpaved surfaces subjected to soil stabilization treatments, as close as possible to a public roadway.
   d. (MM4.2-4) Project Applicant shall control access to the public by limiting curb cuts/driveways to minimize project construction impacts upon roadway traffic operations.
   e. (MM4.2-5) Project Applicant shall properly maintain non-vehicular equipment engines to minimize the volume of exhaust emissions.
   f. (MM4.2-6) Project Applicant shall use electricity from power poles, rather than temporary diesel or gasoline powered generators, as feasible.
   g. (MM4.2-7) Project Applicant shall use on-site mobile equipment powered by alternative fuel sources (i.e., methanol, natural gas, propane, or butane) as feasible.
   h. (MM4.2-8) Project Applicant shall pave all construction roads as feasible.
   i. (MM4.2-9) Project Applicant shall provide ridesharing or shuttle service for construction workers, as feasible.
   j. (MM4.2-101 Project Applicant shall provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow, as deemed necessary by the Public Works Director.
   k. (MM4.2-11) Project Applicant shall provide dedicated turn lanes for movement of construction trucks and equipment on and off site, as deemed necessary by the Public Works Director.
   l. (MM4.2-12) Project Applicant shall reroute construction trucks away from congested streets or sensitive receptor areas, as feasible;
   m. (MM4.2-13) Project Applicant shall require the use of cleanest burning diesel haul trucks available, such as trucks that meet 2010 model year EPA standards.
   n. (MM4.2-14) Project Applicant shall ensure that all architectural coating (paint and primer) products applied during construction have a low to no VOC rating.

4. Dust Control - During clearing, grading, earth-moving, or excavation operations, excessive fugitive dust emissions shag be controlled by regular watering or other dust-preventive measures using the following procedures, as specified in the SCAQMD Rule 403 listed below. Prior to grading permit issuance, these control techniques shall be noted on the project grading plans. Compliance with the measure shall be subject to periodic silt inspections by the City.

   a. On-site vehicle speed shall be limited to 15 miles per hour.
   b. Material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering shall occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day.
   c. Streets adjacent to the project site shag are swept as needed to remove silt that may have accumulated from construction activities so as to prevent excessive amounts of dust.
   d. All trucks hauling dirt, sand, soil, or other loose materials shall be securely covered, or maintain at least 0.6 meters (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code (CVC) Section 23114.
   e. The area disturbed by clearing, grading, earth-moving, or excavation operations shall be minimized so as to prevent excessive amounts of dust.
   f. Visible dust beyond the property line emanating from the project shall be prevented to the maximum extent feasible.

PRECISE GRADING CONSTRUCTION NOTES

(34) CONSTRUCT WALL W/FOUNTAIN PER LANDSCAPE PLAN LC-01 & LC-03
(35) CONSTRUCT LOCK & LOAD RETAINING WALL PER ABI ENGINEERING
(36) INSTALL "ENTRANCE" FIRE LANE PER FIRE MASTER PLANINSTALL "NO PARKING - FIRE LANE" SIGN PER FIRE MASTER PLAN
(37) INSTALL KNOX KEY BOX PER FIRE MASTER PLAN
(38) INSTALL "NO PARKING - FIRE LANE" SIGN PER FIRE MASTER PLAN
(39) CONSTRUCT 6" PCC OVER 4" AB DRIVEWAY
(40) CONSTRUCT 6" CURB (A1-6(150)) PER SWPPC STD PLAN 120-2
(41) CONSTRUCT 12" CURB PER MODIFIED SWPPC STD PLAN 120-2 & DETAIL J ON SHT 2
(42) CONSTRUCT VARIED HT CURB (A1-6(150)) PER MODIFIED SPPWC STD PLAN 120-2 - SEE DETAIL A ON SHT 2
(43) CONSTRUCT 4" PLANTER CURB PER LANDSCAPE PLAN LC-01
(44) CONSTRUCT COLORED CONCRETE PAVING - 6" PCC OVER 4" AB PER LANDSCAPE PLAN LC-01
(45) CONSTRUCT INTERLOCKING PAVING SIDEWALK PER LANDSCAPE PLAN LC-01
(46) CONSTRUCT 4" PCC OVER 4" AB SIDEWALK - SEE DETAIL C ON SHT 2
(47) CONSTRUCT COLORED CONCRETE PAVING (POOL DECK) PER LANDSCAPE ARCH PLAN NO. LC-02
(48) CONSTRUCT CONCRETE TRANSITION SWALE PER DETAIL F ON SHT 9
(49) CONSTRUCT HANDICAP RAMP AND RAILING PER ARCH PLAN NO.
(50) CONSTRUCT STUCCO RETAINING WALL WITH GLASS FENCING PER ARCHITECT PLAN
(51) CONSTRUCT RETAINING WALL WITH 8' (MIN) SOUND WALL PER ARCHITECT PLAN
(52) CONSTRUCT STUCCO RETAINING WALL W/BLOCK OR GLASS WALL PER ARCHITECT PLAN
(53) CONSTRUCT RETAINING WALL PER SEPARATE PLANS & PERMIT
(54) LANDSCAPE PER LANDSCAPE PLAN NO. LC-01
(55) CONSTRUCT CORTEEN STEEL PLANTER PER LANDSCAPE ARCH PLAN NO. LC-01
(56) INSTALL TREE PER LANDSCAPE PLAN LP-01INSTALL "NO PARKING - FIRE LANE" SIGN PER FIRE MASTER PLAN
(57) CONSTRUCT STAIRS PER ARCH PLAN
(58) CONSTRUCT BIORETENTION PER DETAIL D1 - D3 ON SHT 3
(59) PROTECT IN PLACE
(60) CONSTRUCT GATE PER LANDSCAPE PLAN NO. LC-01
(61) DG SIDEWALK PER LANDSCAPE PLAN NO. LC-01
(62) CONSTRUCT CONCRETE SWALE PER DETAIL E ON SHT 3
(63) CREATE A SWALE PER DETAIL HEREON
(64) CONSTRUCT 8" CURB (A1-8(200) PER SWPPC STD PLAN 120-2

ALBUS-KEEFE & ASSOCIATES, INC
GEOTECHNICAL CONSULTANTS

March 7, 2013
J.N.: 1806.00

Mr. Phil Andoniu
United American Properties
4699 Jamboree Road
Newport Beach, California 92660

Subject: **Recommendations for Storm Drain Trench Backfill, Career Lofts Development, 28100 Cabot Road, Laguna Niguel, California.**

Reference: *Updated Geotechnical Report in Support of Construction Drawings, Career Lofts, Proposed Apartment Complex, 28100 Cabot Road, Laguna Niguel, California*, dated June 19, 2012, prepared by Albus-Keefe & Associates, Inc. (J.N.: 1806.00).

Dear Mr. Andoniu,

We are providing herein our recommendations for the backfill and compaction of storm drain pipes at the subject site. General recommendations were provided in the referenced report and are further detailed herein. Please find attached as Plate 1 our recommended detail for bedding, shading, and backfilling.

We hope this correspondence provides you the information required at this time. If there are any questions regarding the contents discussed herein, please do not hesitate to call.

Sincerely yours,

ALBUS-KEEFE & ASSOCIATES, INC.

David E. Albus
Principal Engineer
G.E. 2455

No. 2455
Exp. 12/31/14

Enclosure: Plate 1- Typical Pipe Trench Detail

1011 North Armando Street, Anaheim CA 92806-2606 (714) 630-1626 FAX (714) 630-1916

ALBUS-KEEFE & ASSOCIATES, INC
GEOTECHNICAL CONSULTANTS

March 7, 2013
J.N.: 1806.00

Mr. Phil Andoniu
United American Properties
4699 Jamboree Road
Newport Beach, California 92660

Subject: **Clarification to Requirements for Concrete, Career Lofts Development, 28100 Cabot Road, Laguna Niguel, California.**

Reference: *Updated Geotechnical Report in Support of Construction Drawings, Career Lofts, Proposed Apartment Complex, 28100 Cabot Road, Laguna Niguel, California*, dated June 19, 2012, prepared by Albus-Keefe & Associates, Inc. (J.N.: 1806.00).

Dear Mr. Andoniu,

We are providing herein clarification to the requirements for concrete used at the subject site that will be placed on or below grade. As indicated in our referenced report, laboratory testing of site soils indicates water-soluble sulfate content varies between 0.2% and 2.00%. As such, we recommend following the procedures provided in ACI 318, Section 4.3, Table 4.3.1 for **severe** sulfate exposure. Additional testing for soluble sulfate content will be required subsequent to rough grading and prior to construction of foundations and retaining walls to confirm these conditions. As indicate in ACI, structural concrete that will be in direct contact with site soils should have a minimum compressive strength of 4,500 psi at 28 days, a maximum water cement ratio of 0.45, and utilize Type V cement. These requirements should be applied to building structural elements such as footings and retaining wall components. These requirements need not be applied to concrete drives or flatwork, concrete curbs and gutters, or concrete storm drain pipes that are surrounded by at least 6 inches of granular material. Such non-structural elements may be constructed using concrete with those characteristics required for a non-corrosive environment.

We hope this correspondence provides you the information required at this time. If there are any questions regarding the contents discussed herein, please do not hesitate to call.

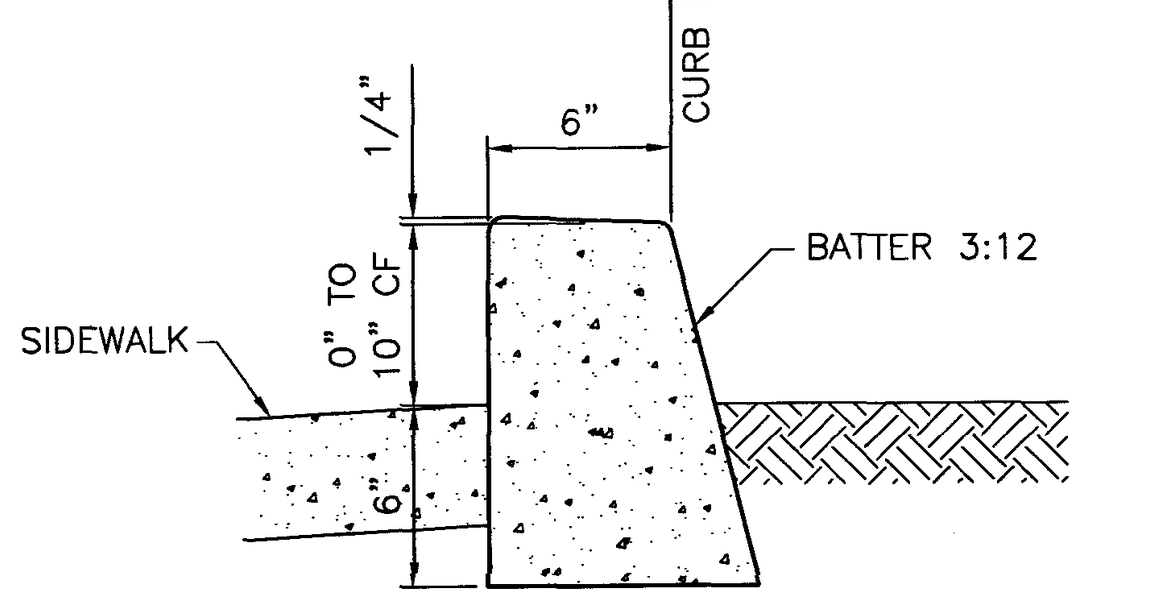
Sincerely yours,

ALBUS-KEEFE & ASSOCIATES, INC.

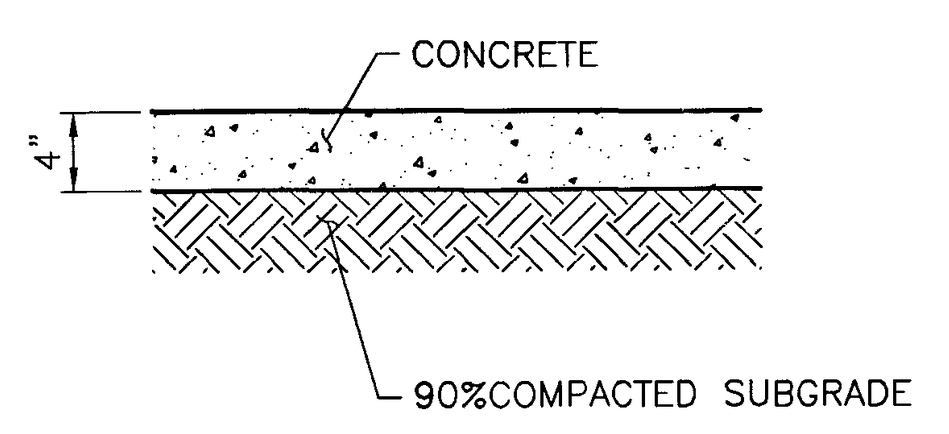
David E. Albus
Principal Engineer
G.E. 2455

No. 2455
Exp. 12/31/14

1011 North Armando Street, Anaheim CA 92806-2606 (714) 630-1626 FAX (714) 630-1916



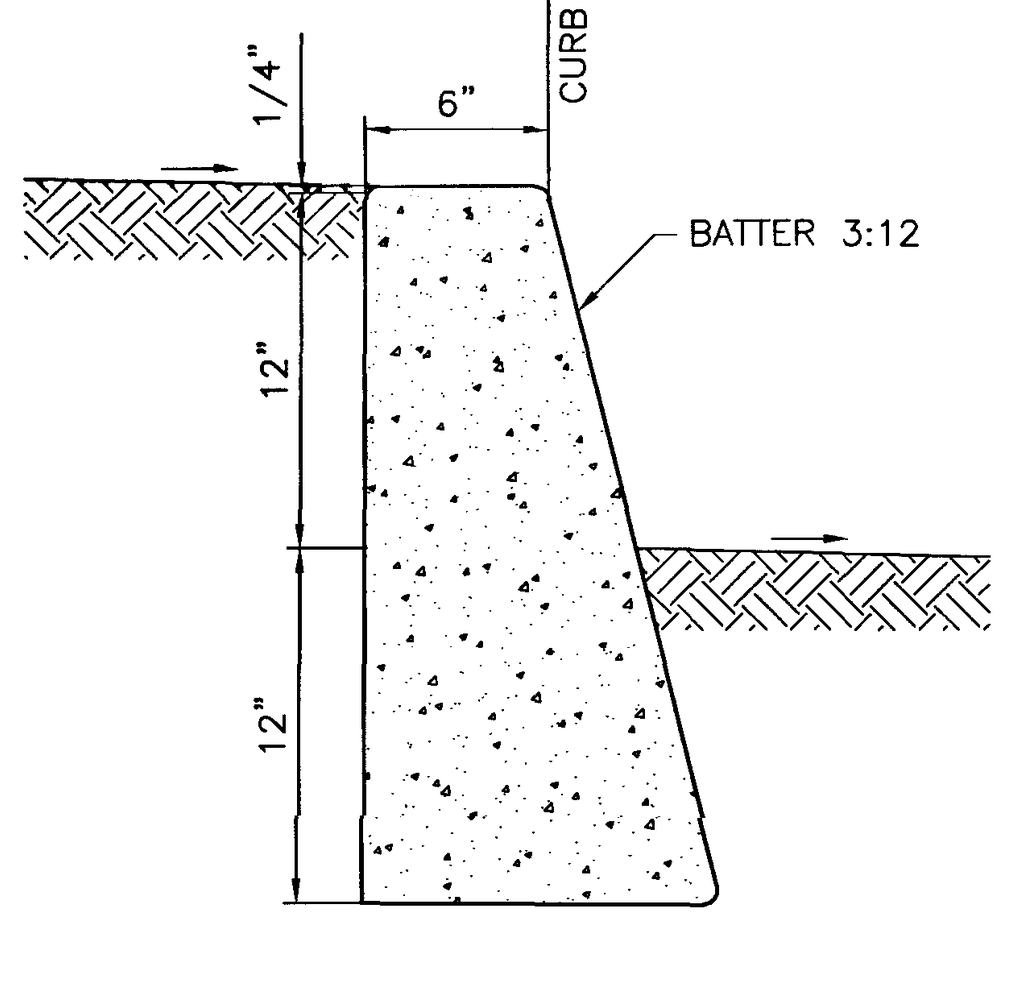
VARIED HEIGHT CURB (A1-6(150)) (A)
NOT TO SCALE



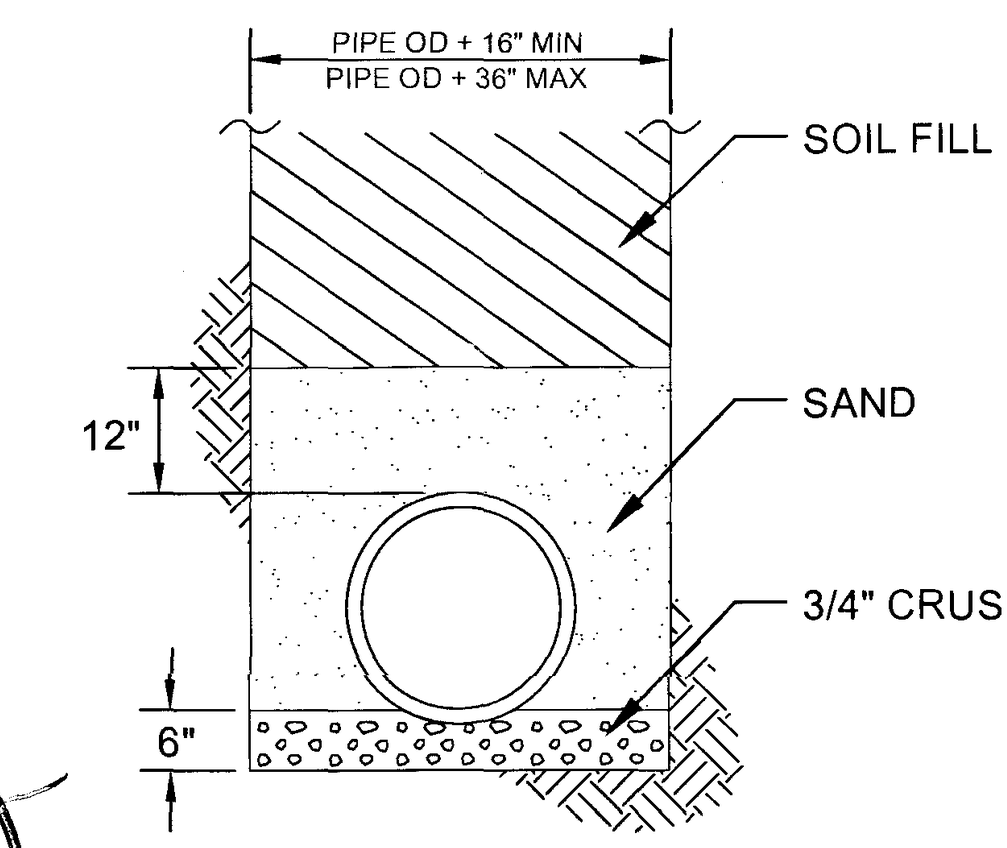
NOTES:

1. ALL TREAD SURFACES SHALL BE SLIP-RESISTANT.
2. WEAKENED PLANE JOINT (WPJ) AND EXPANSION JOINTS (EXPJT) SHALL BE ACCORDING TO APWA STD. DWG#112-1.
3. CONCRETE SHALL BE CLASS 310-C-17 (520-C-2500 CONFORMING TO SSPWC 201-1.1.2 AND SHALL BE 4" THICK
4. SUBGRADE PREPARATION: PRESATURATE SUBGRADE SOIL 1.35xOPTIMUM MOISTURE TO A DEPTH OF 12INCHES

4"PCC SIDEWALK (C)
NOT TO SCALE



12" CURB (MODIFIED) (J)
NOT TO SCALE



NOTES:

3/4" CRUSHED ROCK: PER GREENBOOK 200 - 1.2, COMPACTED TO 90% OF ASTM D1557 MIN.

SAND: PER GREENBOOK 200 - 1.5.1, SAND EQUIVALENCE (SE) > 30, COMPACTED TO 90% OF ASTM D1557 MIN.

SOIL FILL: ONSITE OR IMPORTED SOIL WITH MAX. PARTICLE SIZE OF 4", NO DELETERIOUS MATERIAL, COMPACTED TO 90% OF ASTM D1557 MIN.

TYPICAL PIPE TRENCH DETAIL (Y)
NOT TO SCALE

No. 2455
Exp. 12/31/14

NO. 43101
11/4/13

DIG ALERT

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

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CALL USA DIG ALERT AT 1-800-227-2600, 48 HOURS BEFORE ANY EXCAVATION.

NO.	DATE	REVISIONS	APP'D.	DATE
⚠1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE
ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ○ fax 949.474.5315 ○ www.fuscoe.com
Debra Valle Schales 11/4/13
DEBRA VALLE SCHALES RCE#043101 DATE

NO. 43101
EXP. 03/31/14

PERMIT # G12-23

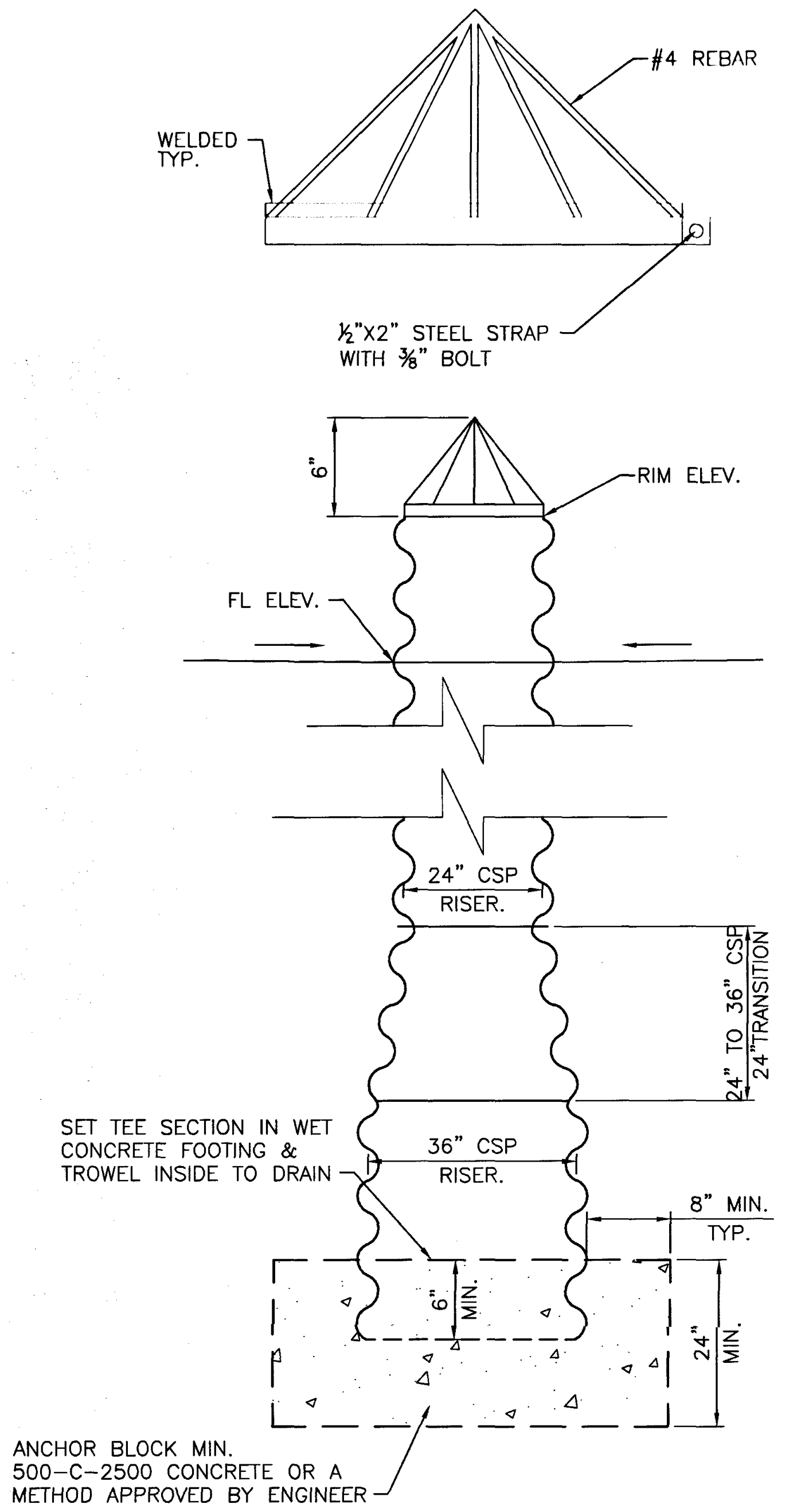
DETAIL SHEET

CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

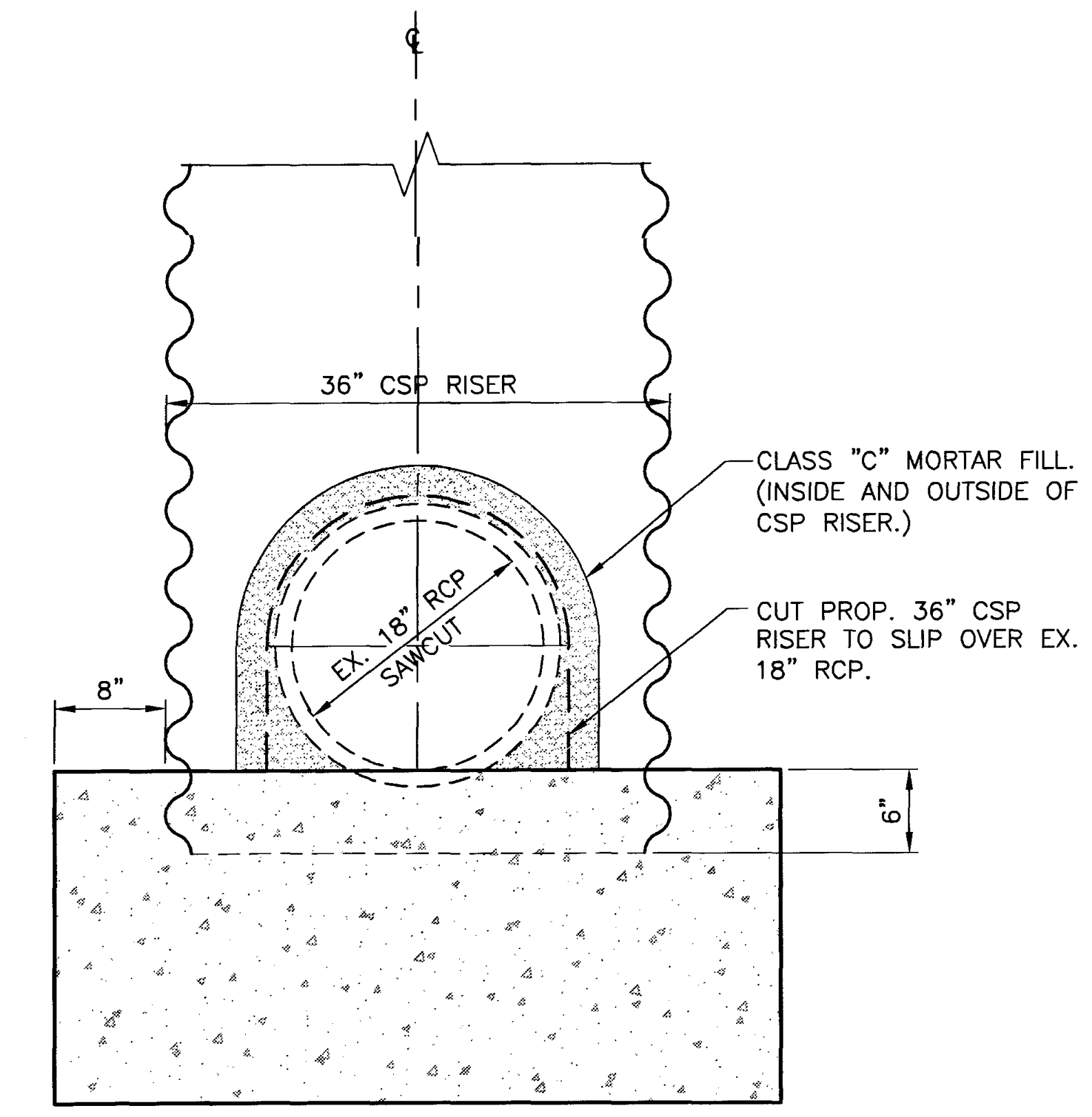
DRAWN: MI
DESIGN: DS
CHECKED: OS
SCALE: AS SHOWN
JOB NO.: 1213.01
DATE: 2013/03/12
SHEET 2 OF 15

2013/03/12
CAREER LOFTS
PRECISE GRADING PLAN
3RD GRADING PLAN CHECK SUBMITTAL

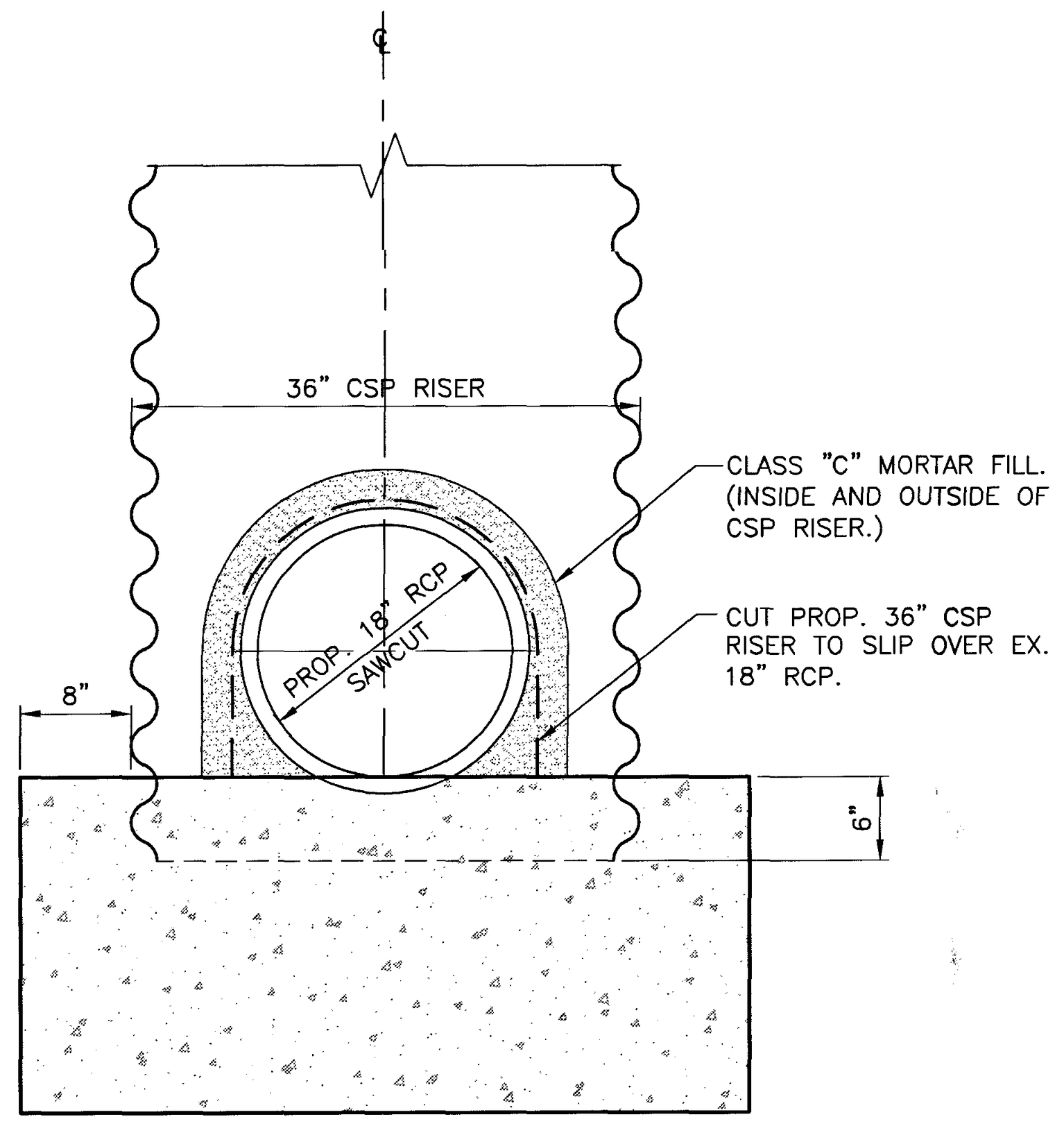
P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG02DT.DWG (11-04-13 3:02:19PM) Plotted by: Eric Lissner


WELDED TYP.
#4 REBAR
½"X2" STEEL STRAP WITH ⅜" BOLT
6"
RIM ELEV.
FL ELEV.
24" CSP RISER.
24" TO 36" CSP 24" TRANSITION
SET TEE SECTION IN WET CONCRETE FOOTING & TROWEL INSIDE TO DRAIN
36" CSP RISER.
8" MIN. TYP.
6" MIN.
24" MIN.
ANCHOR BLOCK MIN. 500-C-2500 CONCRETE OR A METHOD APPROVED BY ENGINEER

CSP RISER (H)
NOT TO SCALE


℄
36" CSP RISER
CLASS "C" MORTAR FILL. (INSIDE AND OUTSIDE OF CSP RISER.)
CUT PROP. 36" CSP RISER TO SLIP OVER EX. 18" RCP.
EX. 18" RCP
SAWCUT
8"
6"

DETAIL SECTION FOR EX. 18" RCP
NOT TO SCALE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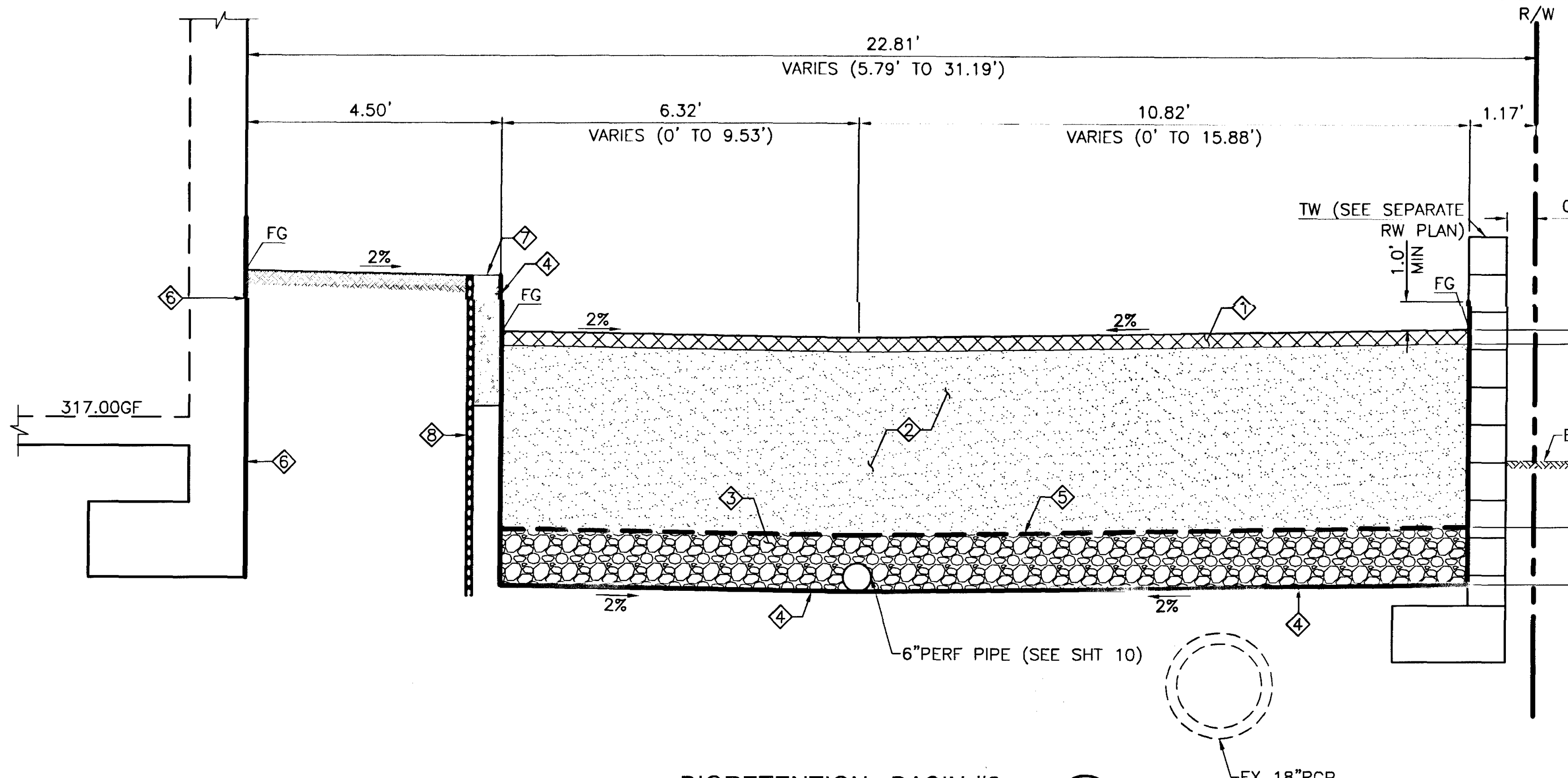
36" CSP RISER
CLASS "C" MORTAR FILL. (INSIDE AND OUTSIDE OF CSP RISER.)
CUT PROP. 36" CSP RISER TO SLIP OVER EX. 18" RCP.
PROP. 18" RCP
SAWCUT
8"
6"

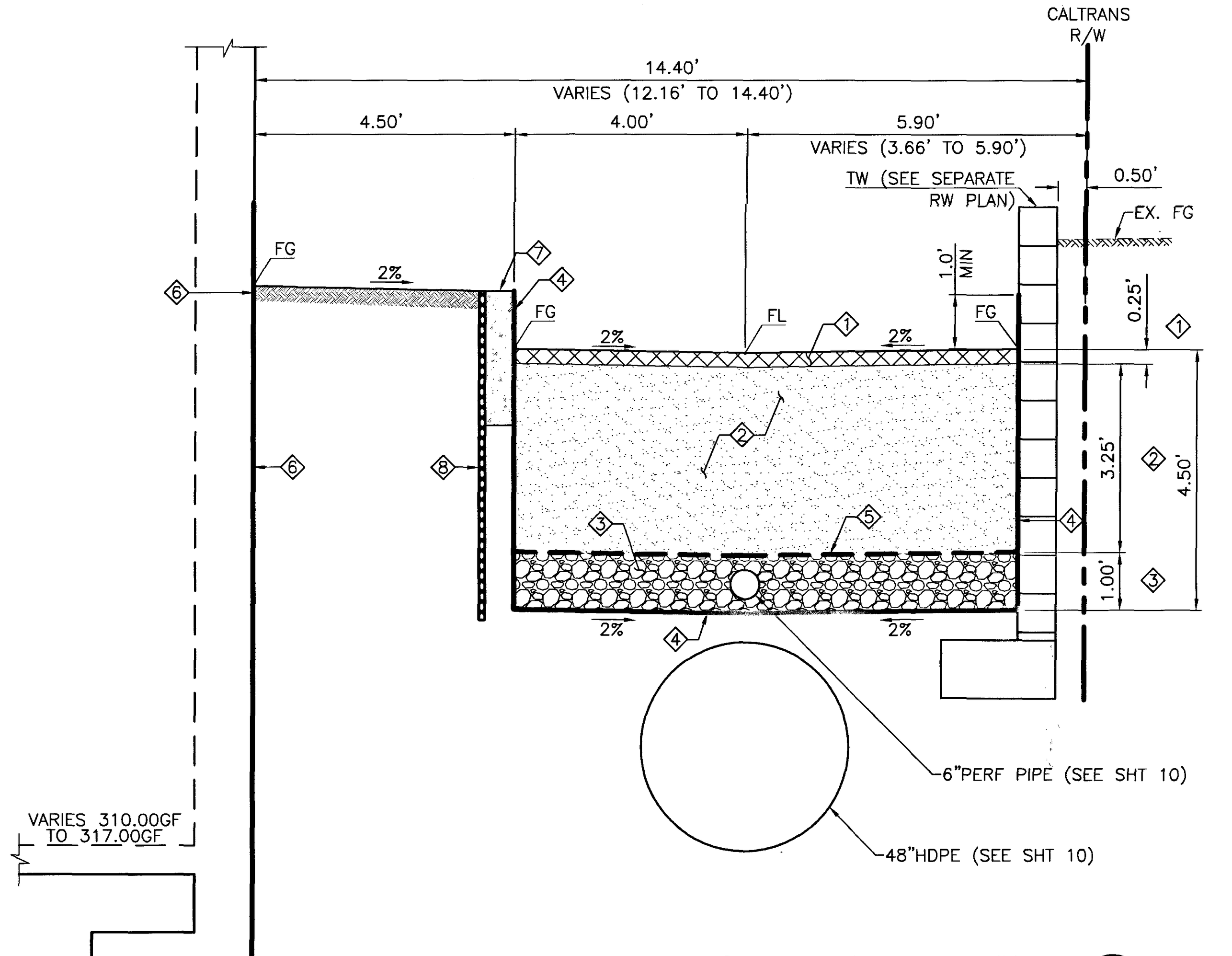
DETAIL SECTION FOR PROP. 18" RCP
NOT TO SCALE

THIS CONNECTION TO BE FIELD INSPECTED AND APPROVED BY THE PROJECT CIVIL ENGINEER, AND REPORT SHOULD BE GIVEN TO THE CITY INSPECTOR.


CALTRANS R/W
22.81'
VARIES (5.79' TO 31.19')
4.50'
6.32'
VARIES (0' TO 9.53')
10.82'
VARIES (0' TO 15.88')
1.17'
0.50'
TW (SEE SEPARATE RW PLAN)
1.0' MIN
FG
2%
7
4
6
8
1
2
3
5
317.00GF
0.25'
3.25'
4.50'
1.00'
EX. FG
6"PERF PIPE (SEE SHT 10)
EX 18"RCP

BIORETENTION - BASIN #2 (D2)
NOT TO SCALE

ALL WATER QUALITY FEATURES, HYDROMODIFICATION FEATURES, AND BIORETENTION SYSTEMS SHALL BE FIELD INSPECTED AND APPROVED BY THE PROJECT CIVIL ENGINEER, AND REPORT SHOULD BE GIVEN TO THE CITY INSPECTOR.


CALTRANS R/W
14.40'
VARIES (12.16' TO 14.40')
4.50'
4.00'
5.90'
VARIES (3.66' TO 5.90')
TW (SEE SEPARATE RW PLAN)
0.50'
EX. FG
1.0' MIN
FG
2%
FL
0.25'
3.25'
4.50'
1.00'
6"PERF PIPE (SEE SHT 10)
48"HDPE (SEE SHT 10)
VARIES 310.00GF TO 317.00GF

BIORETENTION - BASIN #1 (D1)
NOT TO SCALE

NOTES FOR DETAILS D1 TO D3

① 3" MULCH

② 39" PLANTING MEDIA TO BE HIGHLY PERMEABLE AND HIGH IN ORGANIC MATTER (E.G., LOAMY SAND MIXED THOROUGHLY WITH COMPOST AMENDMENTS WITH COMPOST AMENDMENTS). PLANTING MEDIA MIXTURE TO CONSIST OF 60–70% SAND, 15–25% COMPOST, AND 10–20% CLEAN TOPSOIL. THE ORGANIC CONTENT OF THE SOIL MIXTURE SHOULD BE 8% TO 12%; THE PH RANGE SHOULD BE 5.5–7.5. THE SOIL MUST BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS, OR OTHER SIMILAR OBJECTS LARGER THAN 2 INCHES

SOIL TESTING
CONTRACTOR SHALL SUBMIT SOIL TESTS RESULTS TO THE ENGINEER (ONE TEST PER BIO-RETENTION CELL) PRIOR TO INSTALLATION. TESTING SHALL INCLUDE:
a. GRANULOMETRIC ANALYSIS (SAND, SILT & CLAY) PER WEIGHT (SAND BETWEEN 60%–70%; CLAY LESS THAN 5%)
b. PH (5.5 TO 7.5)
c. PERCENTAGE OF ORGANIC MATTER IN THE SOIL (8% TO 12%)
d. SIEVE ANALYSIS
e. SATURATED HYDRAULIC CONDUCTIVITY TEST (HIGH THAN 0.5 IN/HR)

SOIL PLACEMENT
PLACEMENT OF THE PLANTING MEDIA IN THE BIO-RETENTION AREA SHOULD BE AFTER SCARIFYING THE INVERT AREA OF THE PROPOSED FACILITY, AND BE IN LIFTS OF 12 TO 18 INCHES AND MINIMALLY COMPACTED TO REDUCE THE POSSIBILITY OF EXCESSIVE SETTLEMENT. NO ADDITIONAL COMPACTION OF SOIL IS NECESSARY. INSTALLATION OF PLANTING MEDIA MUST BE DONE IN A MANNER THAT WILL ENSURE ADEQUATE FILTRATION.

③ PEA GRAVEL SIZE FROM 0.5" TO 1" DIAMETER

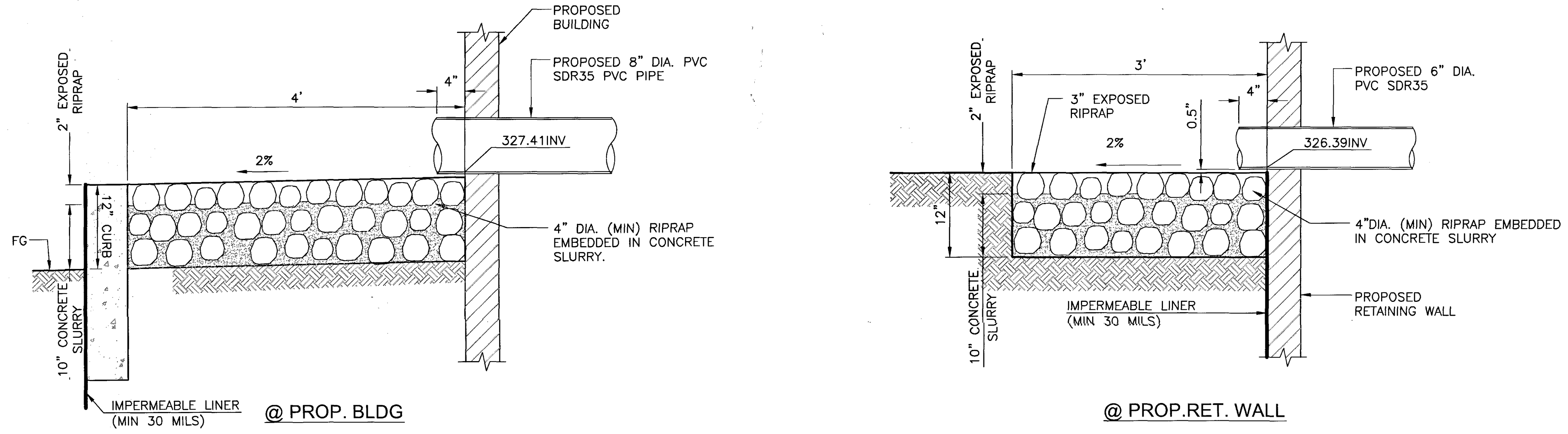
④ IMPERMEABLE LINER (MIN 30 MILS) AS RECOMMENDED & APPROVED BY SOIL ENGINEER

⑤ FILTER FABRIC MIRAFIL 160N OR EQUIVALENT

⑥ WATER PROOFING PER ARCH PLAN AND APPROVED BY SOIL ENGINEER

⑦ 12" CURB PER MODIFIED SWPPC STD PLAN 120-2 & DETAIL J ON SHT 2

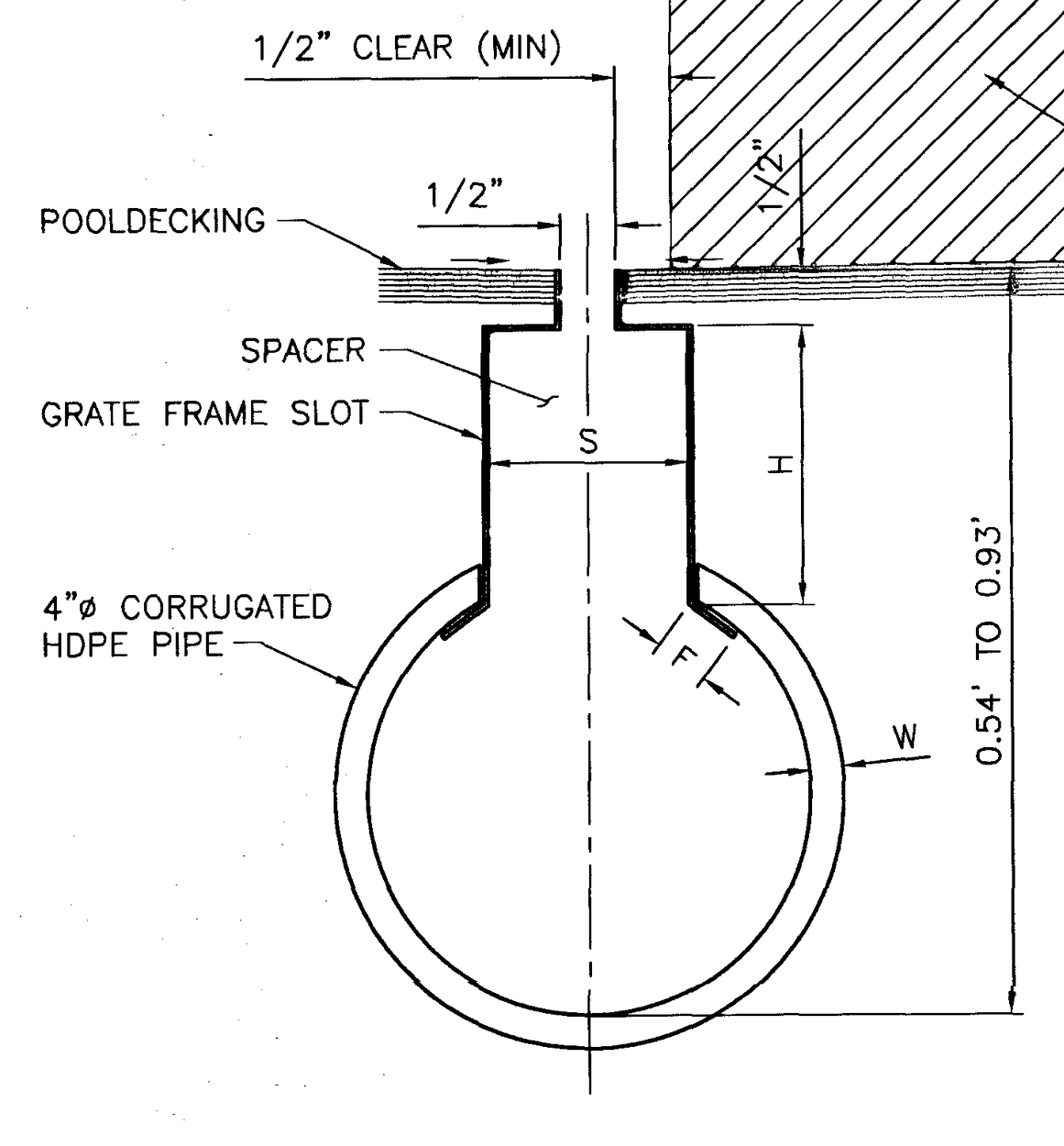
⑧ TREE ROOT BARRIER PER LANDSCAPE PLAN


PROPOSED BUILDING
PROPOSED 8" DIA. PVC SDR35 PVC PIPE
2" EXPOSED RIPRAP
4'
4"
327.41INV
2%
12" CURB
FG
10" CONCRETE SLURRY
4" DIA. (MIN) RIPRAP EMBEDDED IN CONCRETE SLURRY.
IMPERMEABLE LINER (MIN 30 MILS)
3'
3" EXPOSED RIPRAP
0.5"
PROPOSED 6" DIA. PVC SDR35
326.39INV
12"
4"DIA. (MIN) RIPRAP EMBEDDED IN CONCRETE SLURRY
PROPOSED RETAINING WALL

@ PROP. BLDG

@ PROP.RET. WALL

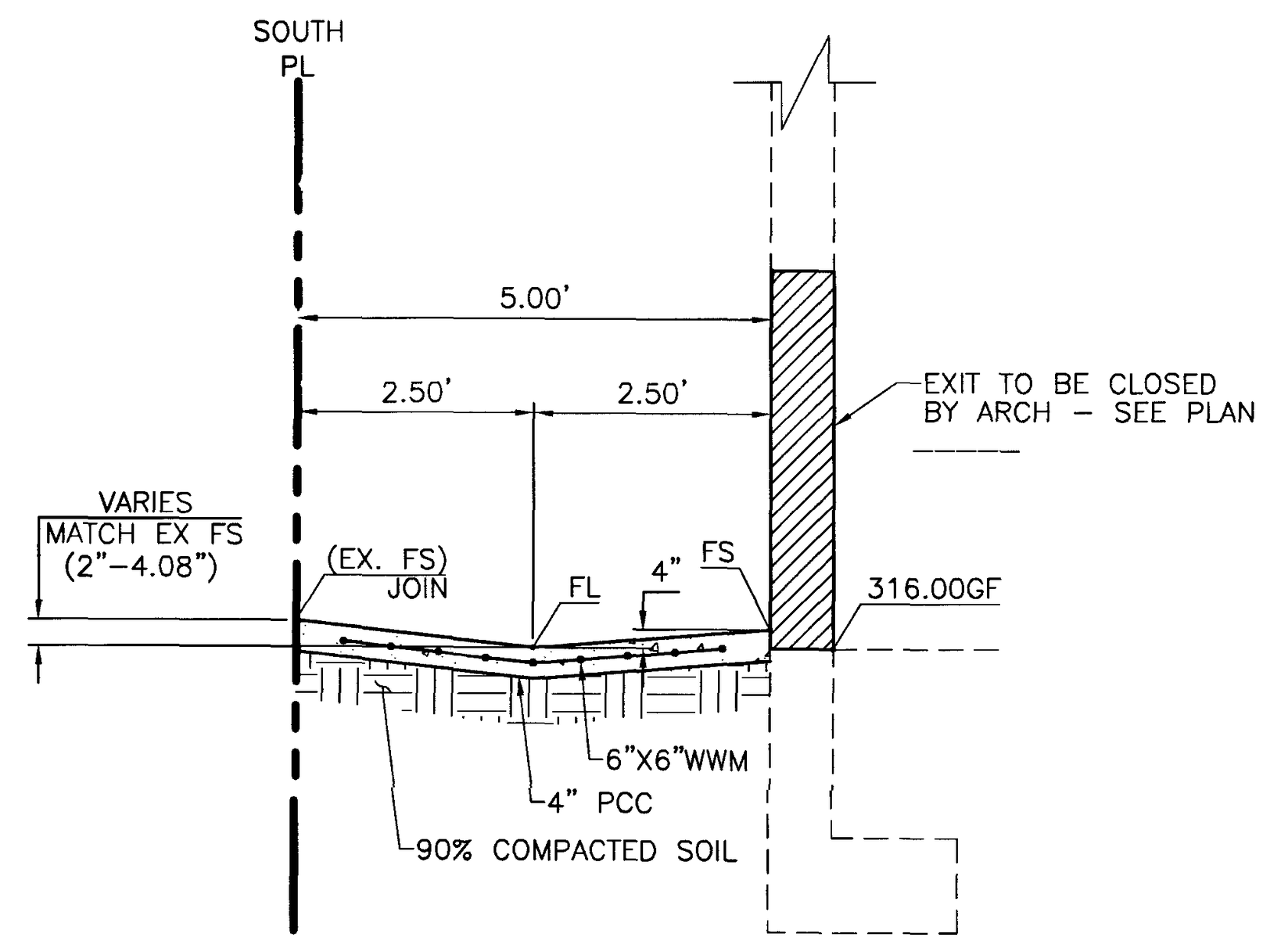
SPLASH BLOCK DETAIL (I)
NOT TO SCALE


1/2" CLEAR (MIN)
POOLDECKING
1/2"
1/2"
SPACER
GRATE FRAME SLOT
S
H
F
W
4"ø CORRUGATED HDPE PIPE
0.54' TO 0.93'
4" PLANTER CURB PER LANDSCAPE ARCH PLAN (WHERE OCCURS)

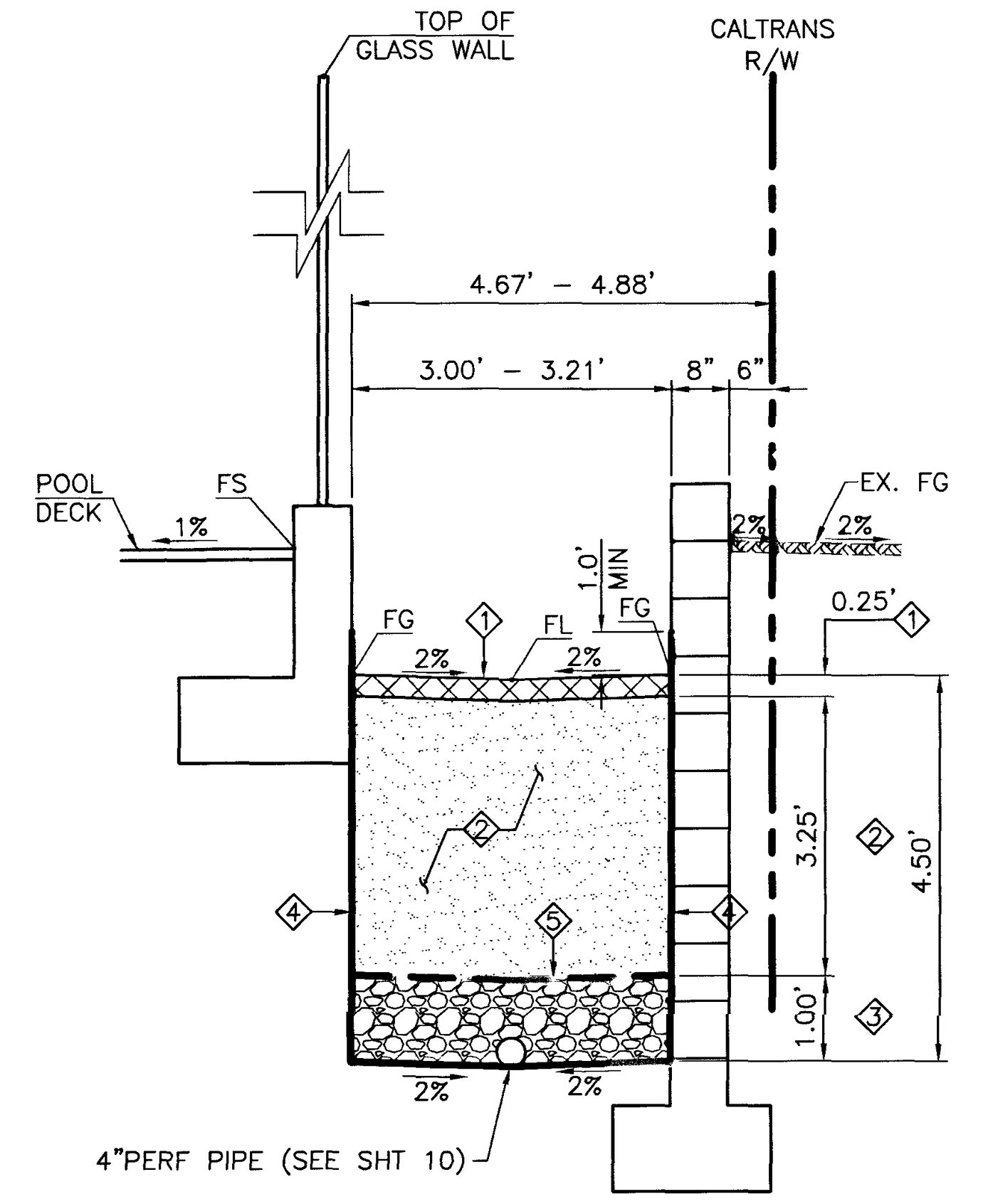
PIPE DIA.	W	F	S	H
4"	3/8"	1/2"	1 3/4"	VARIES

W=PIPE WALL THICKNESS
F=FLANGE WIDTH
S=THROAT (SPACER WIDTH)
H=VARIES (SPECIAL ORDER)

DURASLOT TRACKSLOT (G)
NOT TO SCALE

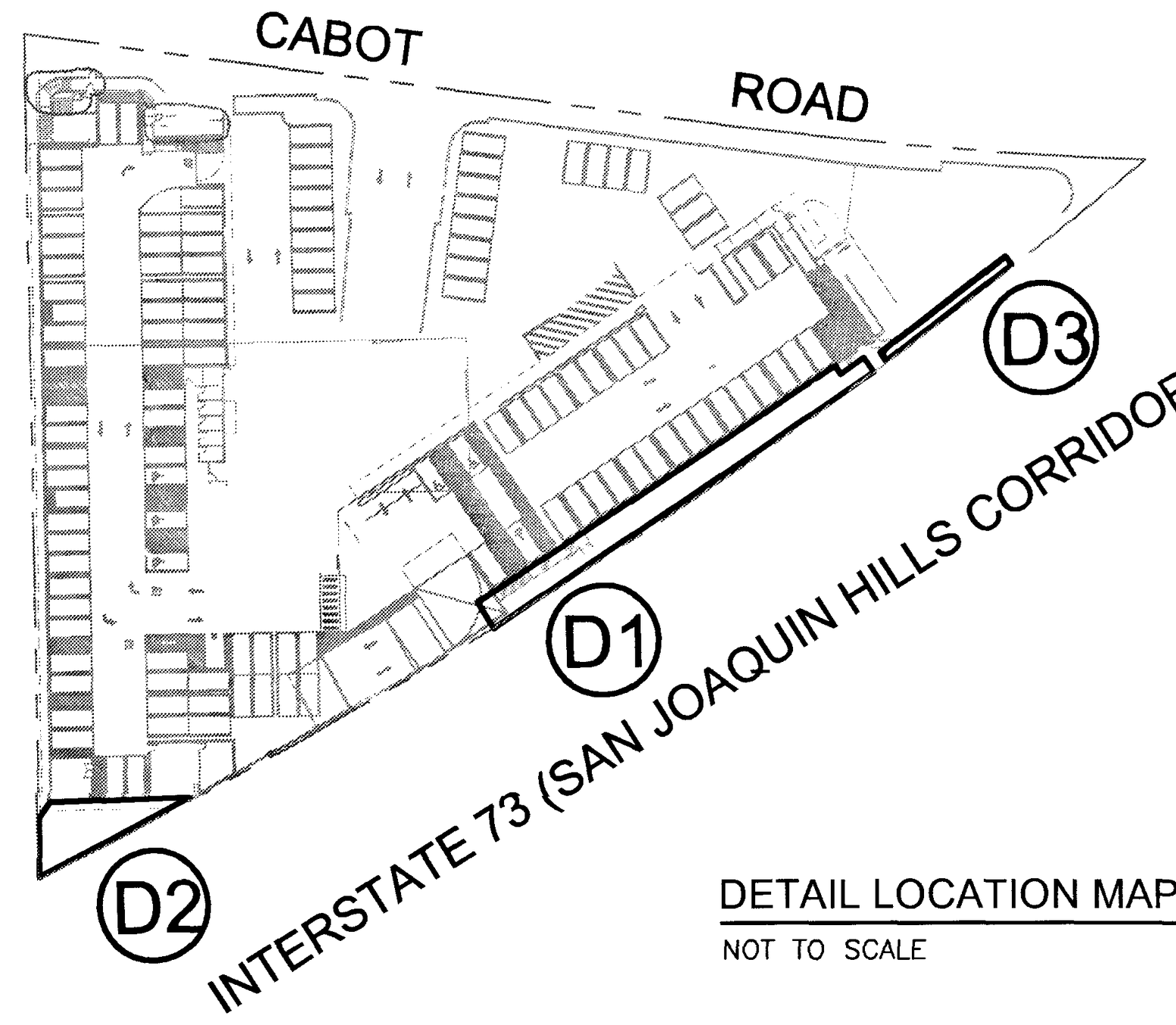

SOUTH PL
5.00'
2.50'
2.50'
EXIT TO BE CLOSED BY ARCH – SEE PLAN
VARIES MATCH EX FS (2"–4.08")
(EX. FS) JOIN
FL
4"
FS
316.00GF
6"X6"WWM
4" PCC
90% COMPACTED SOIL

CONCRETE SWALE (E)


TOP OF GLASS WALL
CALTRANS R/W
4.67' – 4.88'
3.00' – 3.21'
8"
6"
POOL DECK
FS
1%
EX. FG
2%
1.0' MIN
FG
FL
0.25'
3.25'
4.50'
1.00'
4"PERF PIPE (SEE SHT 10)

BIORETENTION - BASIN #3 (D3)
NOT TO SCALE

NO. 43101
11/4/13


CABOT
ROAD
D3
D1
D2
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)

DETAIL LOCATION MAP
NOT TO SCALE

DAVID E. ALBUS
No. 2455
Exp. 12/31/14

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

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DEBRA VALLE SCHALES RCE#043101 11/4/13 DATE

NO. 43101
EXP. 03/31/14

PERMIT # G12-23

DETAIL SHEET

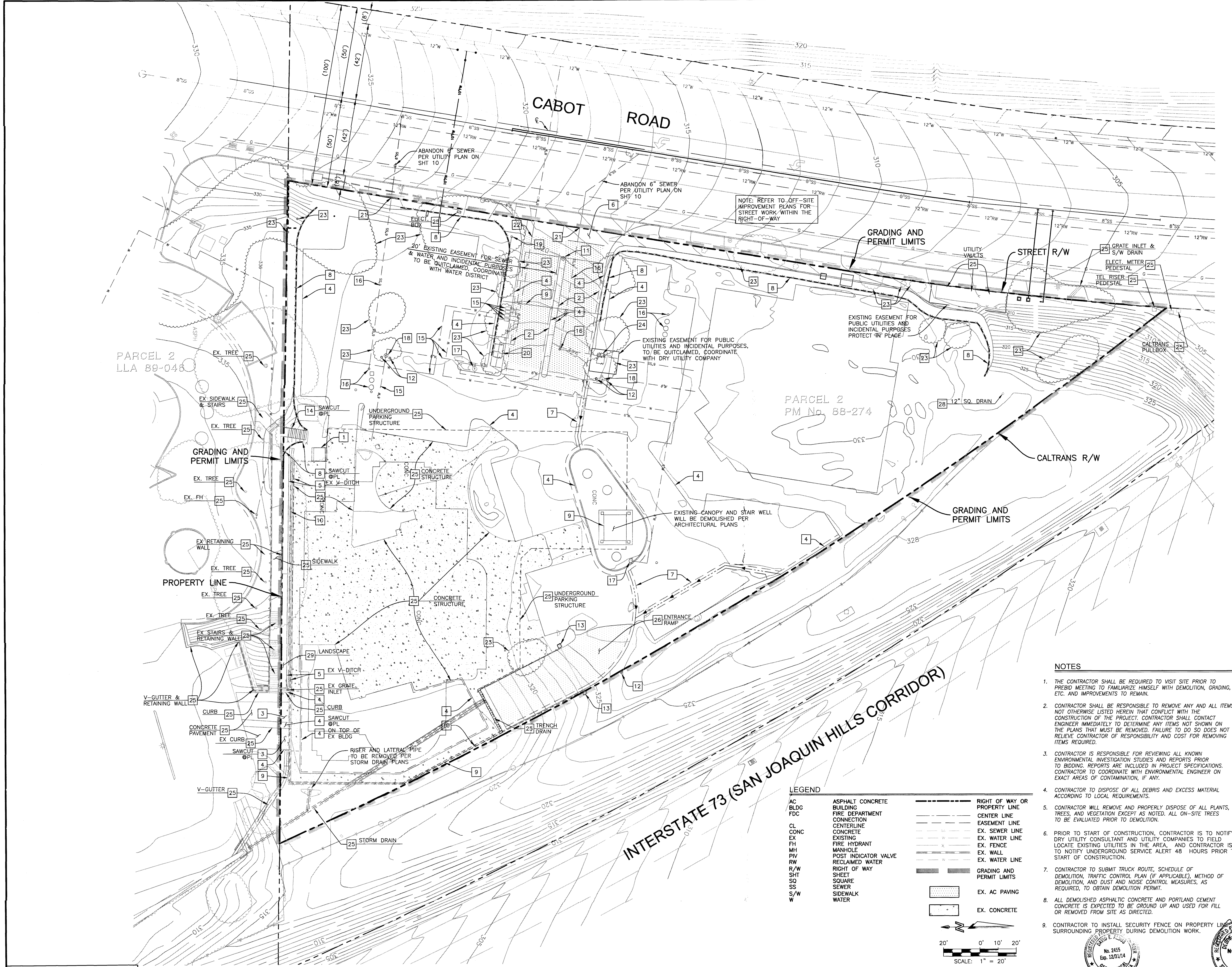
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

SHEET 3 OF 15

3RD GRADING PLAN CHECK SUBMITTAL
CAREER LOFTS
PRECISE GRADING PLAN
2013/03/12

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG03DT.DWG (11-04-13 3:02:37PM) Plotted by: Eric Lissner


CABOT ROAD
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
PARCEL 2
LLA 89-046
PARCEL 2
PM No. 88-274
ABANDON 6" SEWER PER UTILITY PLAN ON SHT 10
ABANDON 6" SEWER PER UTILITY PLAN ON SHT 10
NOTE: REFER TO OFF-SITE IMPROVEMENT PLANS FOR STREET WORK WITHIN THE RIGHT-OF-WAY
GRADING AND PERMIT LIMITS
STREET R/W
UTILITY VAULTS
GRATE INLET & S/W DRAIN
ELECT. METER PEDESTAL
TEL RISER PEDESTAL
CALTRANS PULLBOX
CALTRANS R/W
ELECT. BOX
20' EXISTING EASEMENT FOR SEWER & WATER AND INCIDENTAL PURPOSES TO BE QUITCLAIMED, COORDINATE WITH WATER DISTRICT
EXISTING EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES, TO BE QUITCLAIMED, COORDINATE WITH DRY UTILITY COMPANY
EXISTING EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES PROTECT IN PLACE
12" SQ. DRAIN
UNDERGROUND PARKING STRUCTURE
CONCRETE STRUCTURE
EXISTING CANOPY AND STAIR WELL WILL BE DEMOLISHED PER ARCHITECTURAL PLANS
ENTRANCE RAMP
TRENCH DRAIN
RISER AND LATERAL PIPE TO BE REMOVED PER STORM DRAIN PLANS
STORM DRAIN
EX. TREE
EX. SIDEWALK & STAIRS
GRADING AND PERMIT LIMITS
EX. FH
EX RETAINING WALL
SIDEWALK
PROPERTY LINE
EX. STAIRS & RETAINING WALL
LANDSCAPE
EX V-DITCH
EX GRATE INLET
CURB
SAWCUT @PL
ON TOP OF EX BLDG
SAWCUT @PL
EX V-DITCH
V-GUTTER & RETAINING WALL
CONCRETE PAVEMENT
EX CURB
V-GUTTER
CONC
12"W
12"RW
8"SS
G
(100')
(50')
(42')
(8')
330
325
320
315
310
305
328

CONSTRUCTION NOTES

1. DEMOLISH EXISTING CONCRETE STRUCTURE, UTILITY SHAFT
2. REMOVE AND DISPOSE OF AC PAVING AND BASE COURSE
3. REMOVE AND DISPOSE OF CONCRETE PAVEMENT
4. REMOVE AND DISPOSE OF CURB AND/OR GUTTER
5. REMOVE AND DISPOSE OF V-DITCH
6. REMOVE AND DISPOSE OF DRIVEWAY APRON (UP TO R/W)
7. REMOVE AND DISPOSE OF RIBBON GUTTER
8. REMOVE AND DISPOSE OF RETAINING WALL
9. REMOVE AND DISPOSE OF CHAIN LINK FENCE
10. REMOVE AND DISPOSE OF METAL RAILING
11. REMOVE AND DISPOSE OF SIGN AND POST
12. CONSTRUCT 4" CIP
13. REMOVE AND DISPOSE OF COLUMN AND METAL CROSS BEAM
14. REMOVE AND DISPOSE OF STAIRS, CONCETE PAD AND RAILINGS
15. REMOVE AND DISPOSE OF WATER METER AND SERVICE
16. REMOVE AND DISPOSE OF SEWER MANHOLE, CLEANOUT & LATERAL
17. REMOVE AND DISPOSE OF FIRE HYDRANT
18. REMOVE AND DISPOSE OF POST INDICATOR VALVE (PIV)
19. REMOVE AND DISPOSE OF FIRE DEPARTMENT CONNECTION (FDC)
20. REMOVE AND DISPOSE OF DECTECTOR CHECK ASSEMBLY
21. CAP AND PLUG EXISTING SEWER LATERAL AT PROPERTY LINE
22. CAP AND PLUG EXISTING WATER LATERAL
23. REMOVE AND DISPOSE TREE. COORDINATE WITH OWNER PRIOR TO REMOVAL
24. REMOVE AND DISPOSE OF VAULT PER DRY UTILITY COMPANY'S REQUIREMENTS, CAP AND PLUG AT PROPERTY LINE
25. PROTECT IN PLACE ITEM AS NOTED
26. REMOVE AND DISPOSE OF PORTION OF OF EX. BUILDING PER ARCHITECT PLANS
28. REMOVE AND DISPOSE OF EX. GRATE
29. REMOVE AND DISPOSE OF LANDSCAPE. TO BE COORDINATED W/LANDSCAPE PLANS.

NOTES

1. *THE CONTRACTOR SHALL BE REQUIRED TO VISIT SITE PRIOR TO PREBID MEETING TO FAMILIARIZE HIMSELF WITH DEMOLITION, GRADING, ETC. AND IMPROVEMENTS TO REMAIN.*
2. *CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE ANY AND ALL ITEMS NOT OTHERWISE LISTED HEREIN THAT CONFLICT WITH THE CONSTRUCTION OF THE PROJECT. CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY TO DETERMINE ANY ITEMS NOT SHOWN ON THE PLANS THAT MUST BE REMOVED. FAILURE TO DO SO DOES NOT RELIEVE CONTRACTOR OF RESPONSIBILITY AND COST FOR REMOVING ITEMS REQUIRED.*
3. *CONTRACTOR IS RESPONSIBLE FOR REVIEWING ALL KNOWN ENVIRONMENTAL INVESTIGATION STUDIES AND REPORTS PRIOR TO BIDDING. REPORTS ARE INCLUDED IN PROJECT SPECIFICATIONS. CONTRACTOR TO COORDINATE WITH ENVIRONMENTAL ENGINEER ON EXACT AREAS OF CONTAMINATION, IF ANY.*
4. *CONTRACTOR TO DISPOSE OF ALL DEBRIS AND EXCESS MATERIAL ACCORDING TO LOCAL REQUIREMENTS.*
5. *CONTRACTOR WILL REMOVE AND PROPERLY DISPOSE OF ALL PLANTS, TREES, AND VEGETATION EXCEPT AS NOTED. ALL ON-SITE TREES TO BE EVALUATED PRIOR TO DEMOLITION.*
6. PRIOR TO START OF CONSTRUCTION, CONTRACTOR IS TO NOTIFY DRY UTILITY CONSULTANT AND UTILITY COMPANIES TO FIELD LOCATE EXISTING UTILITIES IN THE AREA, AND CONTRACTOR IS TO NOTIFY UNDERGROUND SERVICE ALERT 48 HOURS PRIOR TO START OF CONSTRUCTION.
7. *CONTRACTOR TO SUBMIT TRUCK ROUTE, SCHEDULE OF DEMOLITION, TRAFFIC CONTROL PLAN (IF APPLICABLE), METHOD OF DEMOLITION, AND DUST AND NOISE CONTROL MEASURES, AS REQUIRED, TO OBTAIN DEMOLITION PERMIT.*
8. *ALL DEMOLISHED ASPHALTIC CONCRETE AND PORTLAND CEMENT CONCRETE IS EXPECTED TO BE GROUND UP AND USED FOR FILL OR REMOVED FROM SITE AS DIRECTED.*
9. CONTRACTOR TO INSTALL SECURITY FENCE ON PROPERTY LINE SURROUNDING PROPERTY DURING DEMOLITION WORK.
10. *THE CONTRACTOR SHALL TAKE EFFECTIVE ACTION TO PREVENT THE FORMATION OF ANY AIRBORNE DUST NUISANCE AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM FAILURE TO FOLLOW CITY GUIDELINES.*
11. *EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF PLANS. LOCATIONS HAVE NOT BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES UPON THE REMOVAL OF UTILITIES IN ADVANCE OF DEMOLITION CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THOSE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF CONTRACTOR'S FAILURE TO VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT.*
12. *ALL EXISTING REMAINING UTILITIES AND REMAINING IMPROVEMENTS IN PUBLIC RIGHT OF WAY THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE LOCAL AGENCY ENGINEER, AT THE CONTRACTOR'S SOLE EXPENSE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DOCUMENT PRIOR DAMAGES.*
13. *IF ARCHAEOLOGICAL MATERIALS ARE UNCOVERED DURING GRADING, TRENCHING OR OTHER EXCAVATION, EARTHWORK WITHIN 100 FEET OF THESE MATERIALS SHALL BE STOPPED UNTIL A PROFESSIONAL ARCHAEOLOGIST WHO IS CERTIFIED BY THE SOCIETY OF PROFESSIONAL ARCHAEOLOGY (SOPA) HAS HAD AN OPPORTUNITY TO EVALUATE THE SIGNIFICANCE OF THE FIND AND SUGGEST APPROPRIATE MITIGATION MEASURES, IF THEY ARE DEEMED NECESSARY.*
14. *ALL FOOTINGS, FOUNDATIONS, AND PILE CAPS ARE TO BE REMOVED IN THEIR ENTIRETY.*
15. *DEMOLITION OF ON-SITE WET AND DRY UTILITIES TO BE CAPPED AT PROPERTY LINE PER UTILITY COMPANY'S REQUIREMENTS.*

REFER TO STRUCTURAL AND ARCHITECTURAL DETAILS FOR DEMOLITION OF RETAINING AND BUILDING FEATURES.

LEGEND

AC	ASPHALT CONCRETE
BLDG	BUILDING
FDC	FIRE DEPARTMENT CONNECTION
CL	CENTERLINE
CONC	CONCRETE
EX	EXISTING
FH	FIRE HYDRANT
MH	MANHOLE
PIV	POST INDICATOR VALVE
RW	RECLAIMED WATER
R/W	RIGHT OF WAY
SHT	SHEET
SQ	SQUARE
SS	SEWER
S/W	SIDEWALK
W	WATER

▬ ▬ ▬	RIGHT OF WAY OR PROPERTY LINE
— - —	CENTER LINE
— — —	EASEMENT LINE
--- SS ---	EX. SEWER LINE
--- W ---	EX. WATER LINE
--- X ---	EX. FENCE
▨	EX. WALL
--- W ---	EX. WATER LINE
▨ ▨	GRADING AND PERMIT LIMITS
⁘	EX. AC PAVING
☐	EX. CONCRETE

N

20' 0' 10' 20'

SCALE: 1" = 20'

No. 2455
Exp. 12/31/14
DAVID E. ALBUS
GEOTECHNICAL

DEBRA VALLE SCHALES
NO. 43101
11/4/13
CIVIL

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AT LEAST TWO DAYS BEFORE YOU DIG

CALL BEFORE YOU DIG

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11/4/13
DATE

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EXP. 03/31/14
CIVIL

PERMIT # G12-23

DEMOLITION PLAN

(PER SEPARATE PERMIT, SHOWN FOR REFRENCE ONLY)

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28100 CABOT ROAD
LAGUNA NIGUEL, CA

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
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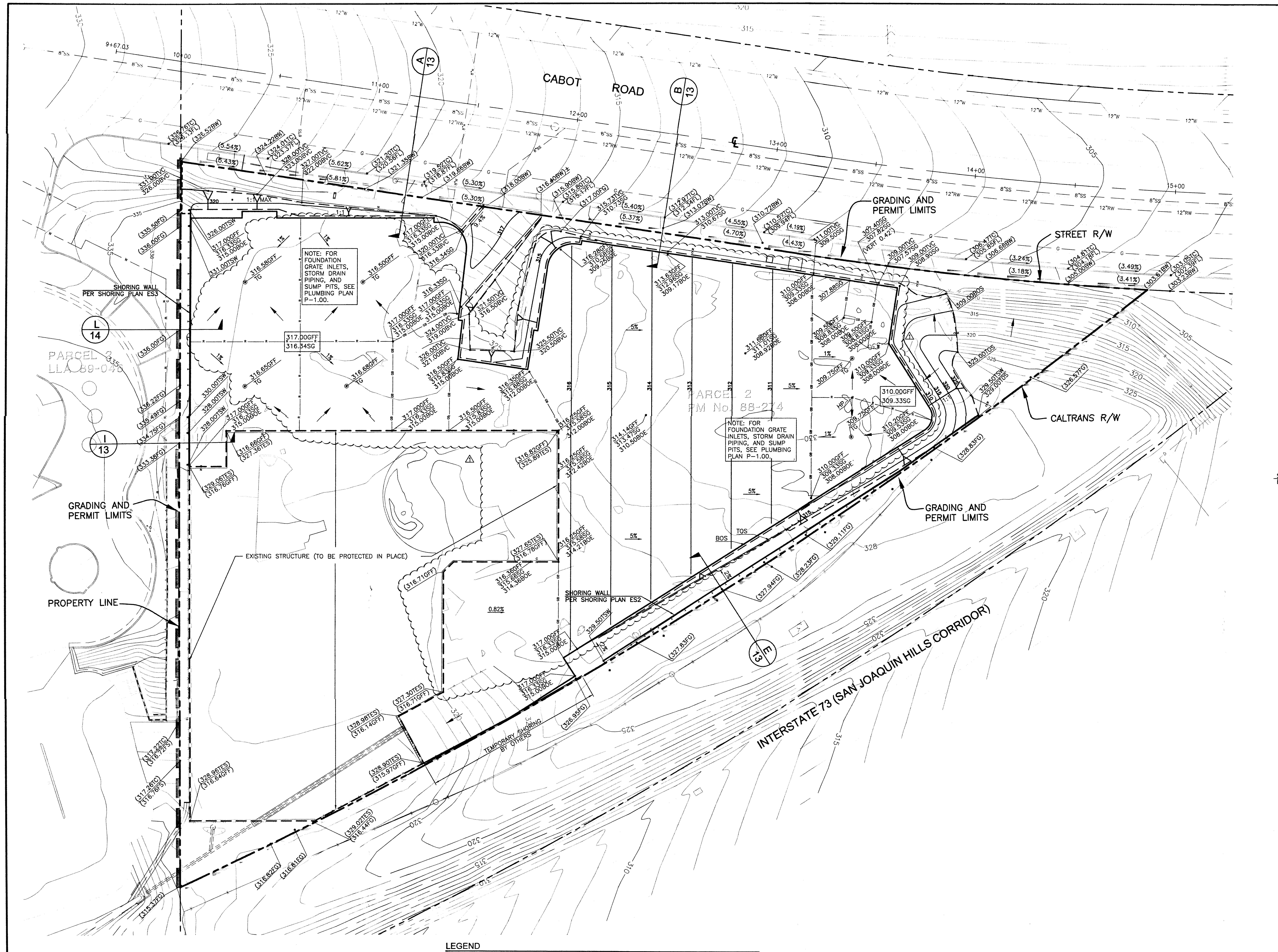
SHEET 4 OF 15

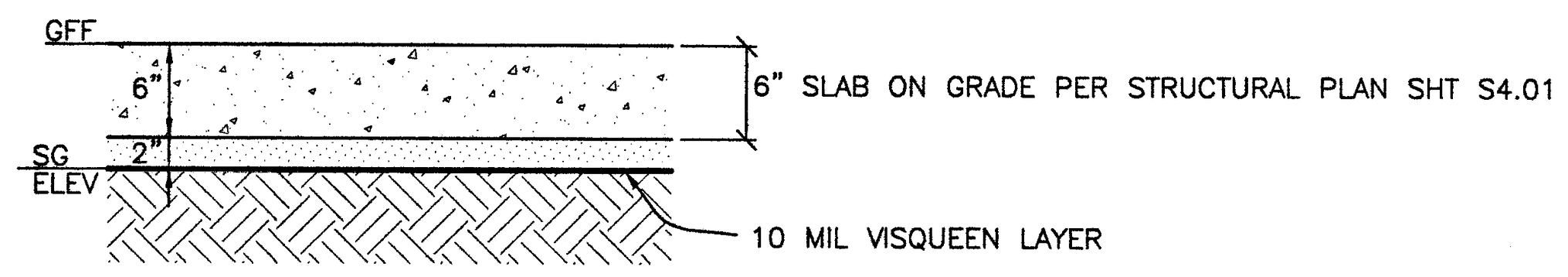
3RD GRADING PLAN CHECK SUBMITTAL

2013/03/12

CAREER LOFTS
PRECISE GRADING PLAN

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG04DM.DWG (11-04-13 3:02:45PM) Plotted by: Eric Lissner


CABOT ROAD
9+67.03
10+00
11+00
12+00
13+00
14+00
15+00
8"SS
12"W
12"RW
G
A
13
B
13
L
14
I
13
E
13
GRADING AND PERMIT LIMITS
STREET R/W
CALTRANS R/W
PROPERTY LINE
PARCEL 3
LLA 89-04
PARCEL 2
PM No. 88-274
SHORING WALL
PER SHORING PLAN ES3
SHORING WALL
PER SHORING PLAN ES2
TEMPORARY SHORING BY OTHERS
EXISTING STRUCTURE (TO BE PROTECTED IN PLACE)
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
NOTE: FOR FOUNDATION GRATE INLETS, STORM DRAIN PIPING, AND SUMP PITS, SEE PLUMBING PLAN P-1.00.
NOTE: FOR FOUNDATION GRATE INLETS, STORM DRAIN PIPING, AND SUMP PITS, SEE PLUMBING PLAN P-1.00.
317.00GFF
316.34SG
310.00GFF
309.33SG
1:1 MAX
BOS
TOS
5%
0.82%
310
315
320
325
328
335


GFF
6"
2"
SG
ELEV
6" SLAB ON GRADE PER STRUCTURAL PLAN SHT S4.01
10 MIL VISQUEEN LAYER

FOUNDATION SYSTEM SECTION

NOTES:

1. PRIOR TO FINAL GRADING, CONTRACTOR TO VERIFY GFF GRADES WITH ARCHITECT.
2. 6" FOUNDATION THICKNESS PER STRUCTURAL ENGINEER'S RECOMMENDATION. FINAL THICKNESS OF FOUNDATION SYSTEM WILL BE DETERMINED BY SOILS ENGINEER AND STRUCTURAL ENGINEER IN THE FIELD.
3. SEE STRUCTURAL PLANS FOR FOUNDATION PLAN AND DETAILS. NOTE: SG ELEVATION DOES NOT INCLUDE FOOTING DEPTHS
4. TEMPORARY SLOPE 1:1 AND A 5' VERTICAL CUT AT TOP OF TEMPORARY SLOPE PER GEOTECHNICAL REPORT DATED 6/19/2012, SECTION 6.1.7, TEMPORARY EXCAVATION, PAGE 18.

LEGEND

BLDG	BUILDING
BOS	BOTTOM OF SLOPE
BVC	BOTTOM OF VERTICAL CUT
BW	BACK OF WALK
C	CUT
CL	CENTERLINE
ELEV	ELEVATION
EX	EXISTING
FF	FINISHED FLOOR
FG	FINISHED GRADE
FL	FLOW LINE
FS	FINISHED SURFACE
GB	GRADE BREAK
GFF	GARAGE FINISHED FLOOR
MAX	MAXIMUM
N	NATURAL
PROP	PROPOSED
SG	SUB-GRADE
TC	TOP OF CURB
TES	TOP OF EXISTING STRUCTURE
TOS	TOP OF SLOPE
TSW	TOP OF SHORING WALL
TVC	TOP OF VERTICAL CUT

▬ ▬ ▬	RIGHT OF WAY OR PROPERTY LINE
— - —	CENTERLINE
—— R ——	RIDGE LINE
—— v ——	VALLEY LINE
—— GB ——	GRADE BREAK
— — —	TOP/TOE OF SLOPE
▬ ▬ ▬	EX BLDG STRUCTURE
———	PROP BLDG STRUCTURE

NO. 43101
CIVIL
4/12/13

20' 0' 10' 20'
SCALE: 1" = 20'

DIG ALERT

DIAL TOLL FREE
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AT LEAST TWO DAYS BEFORE YOU DIG

CALL BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

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NO.	DATE	REVISIONS	APP'D.	DATE
1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL. REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE
ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ◦ fax 949.474.5315 ◦ www.fuscoe.com
4/12/13
DEBRA VALLE SCHALES RCE#043101 DATE

NO. 43101
EXP. 03/31/14
CIVIL

EXCAVATION PLAN

CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

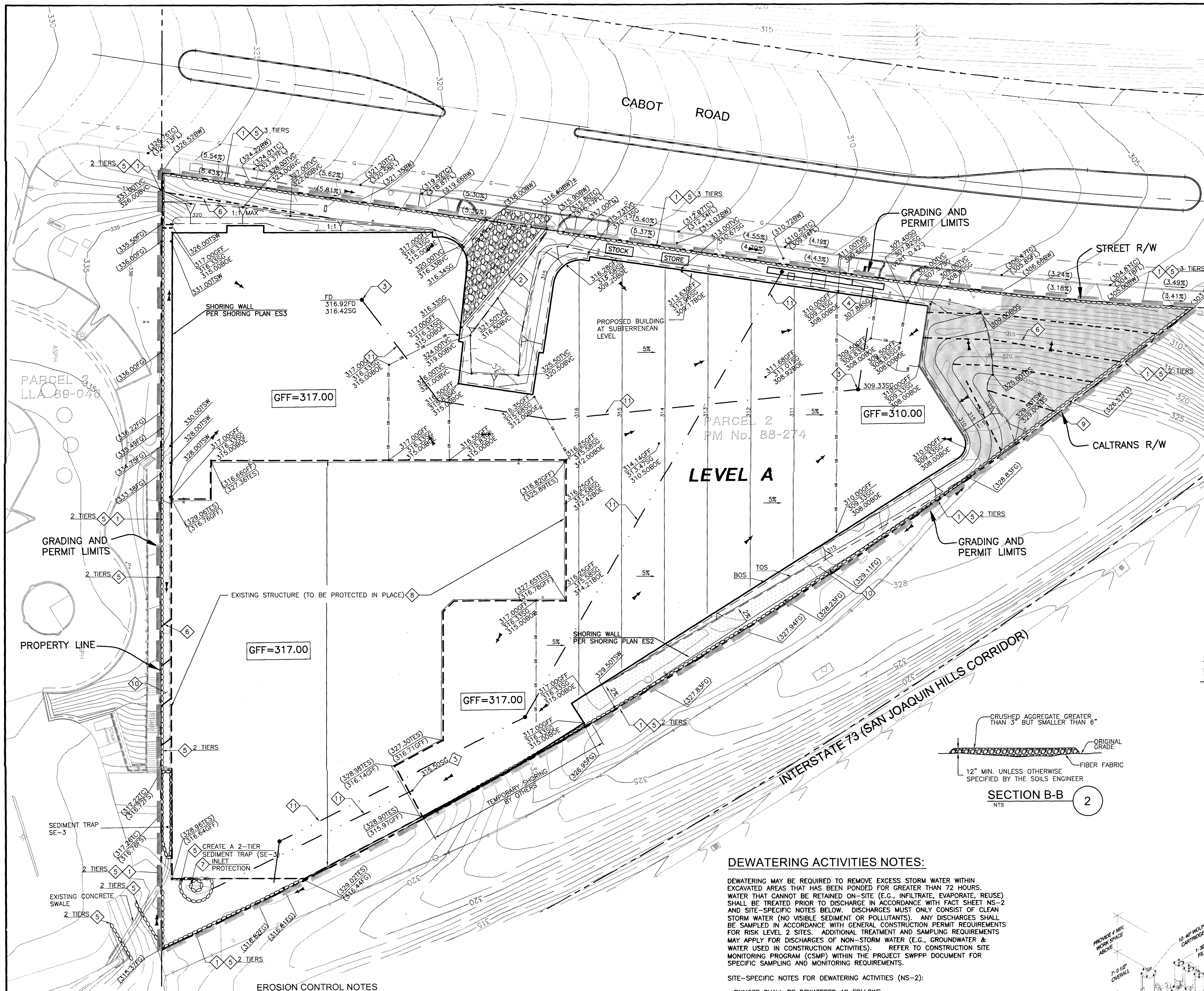
PERMIT # G12-23

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

SHEET 5 OF 15

2013/03/12
CAREER LOFTS
PRECISE GRADING PLAN
3RD GRADING PLAN CHECK SUBMITTAL

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG05EV.DWG (11-13-13 1:28:46PM) Plotted by: Eric Lissner


CABOT ROAD
GRADING AND PERMIT LIMITS
STREET R/W
CALTRANS R/W
PROPERTY LINE
GRADING AND PERMIT LIMITS
PARCEL 3 LLA 89-046
PARCEL 2 PM No. 88-274
LEVEL A
GFF=317.00
GFF=310.00
PROPOSED BUILDING AT SUBTERRENEAN LEVEL
SHORING WALL PER SHORING PLAN ES3
SHORING WALL PER SHORING PLAN ES2
EXISTING STRUCTURE (TO BE PROTECTED IN PLACE)
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
TEMPORARY SHORING BY OTHERS
SEDIMENT TRAP SE-3
EXISTING CONCRETE SWALE
CREATE A 2-TIER SEDIMENT TRAP (SE-3) INLET PROTECTION
STOCK
STORE
2 TIERS
3 TIERS
1:1 MAX
5%
TOS
BOS

BMP TABLE:

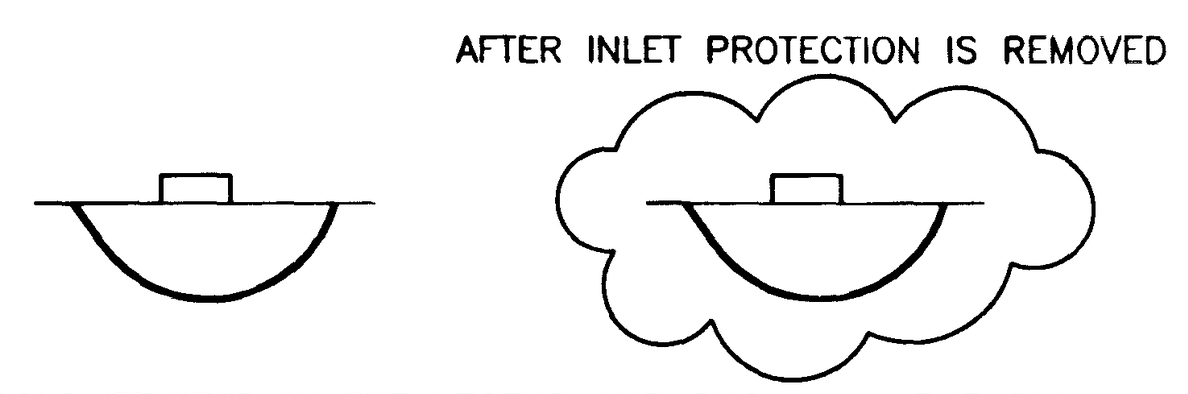
	DESCRIPTION
EC-1	SCHEDULING
EC-2	PRESERVATION OF EXISTING VEGETATION
EC-4	HYDROSEEDING
EC-14	COMPOST BLANKETS
SE-5	FIBER ROLLS
SE-6	GRAVEL BAG BERM
SE-7	STREET SWEEPING
SE-8	SANDBAG BARRIER
SE-10	STORM DRAIN INLET PROTECTION
TC-1	STABILIZED CONSTRUCTION ENTRANCE
TC-2	STABILIZED CONSTRUCTION ROADWAY
WE-1	WIND EROSION CONTROLS
NS-6	ILLICIT CONNECTION – ILLEGAL DISCHARGE
NS-8	VEHICLE AND EQUIPMENT CLEANING
NS-9	VEHICLE AND EQUIPMENT FUELING
NS-10	VEHICLE AND EQUIPMENT MAINTENANCE
WM-1	MATERIAL DELIVERY AND STORAGE
WM-2	MATERIAL USE
WM-3	STOCKPILE MANAGEMENT
WM-4	SPILL PRESERVATION AND CONTROL
WM-5	SOLID WASTE MANAGEMENT
WM-6	HAZARDOUS WASTE MANAGEMENT
WM-8	CONCRETE WASTE MANAGEMENT
WM-9	SANITARY-SEPTIC WASTE MANAGEMENT
WM-10	LIQUID WASTE MANAGEMENT

BMP DETAILS CAN BE OBTAINED IN THE SWPPP PREPARED FOR THIS PROJECT BY FUSCOE ENGINEERING OR http://www.ocwatershed.com/constructionactivities.aspx

SUPERVISOR'S INSTRUCTIONS

1. IMPLEMENTATION OF THIS PLAN SHALL BE THE RESPONSIBILITY OF THE CONSTRUCTION SUPERVISOR. THIS PLAN SHALL BE REVISED BY THE CONSTRUCTION SUPERVISOR AS AUTHORIZED AGENT OF THE OWNER TO REFLECT THE CURRENT STATUS OF THE CONSTRUCTION SITE.

EXAMPLE:


AFTER INLET PROTECTION IS REMOVED

2. THE SYMBOLS ITEMIZED IN THE LEGEND AND SHOWN ON THE PLAN WILL BE MODIFIED BY THE CONSTRUCTION SUPERVISOR WHEN CONSTRUCTION CONDITIONS CHANGE BY USING A MARKING PEN ON THIS PLAN AND NOTING THE CHANGE AND DATE AS FOLLOWS:

   USING A MARKING PEN, CROSS OUT ITEMS SHOWN ON THE PLAN THAT ARE NO LONGER NECESSARY DUE TO THE CONSTRUCTION OF IMPROVEMENTS, ELIMINATION FROM THE SITE, OR RELOCATION OF THE ITEM. SYMBOLS SHOULD BE ADDED TO THE PLAN TO DELINEATE NEW ITEMS OR RELOCATIONS ON THE SITE.

   USING A MARKING PEN, DASH THE STORM DRAIN LINE AFTER THE CONSTRUCTION OF THE STORM DRAIN LINE.

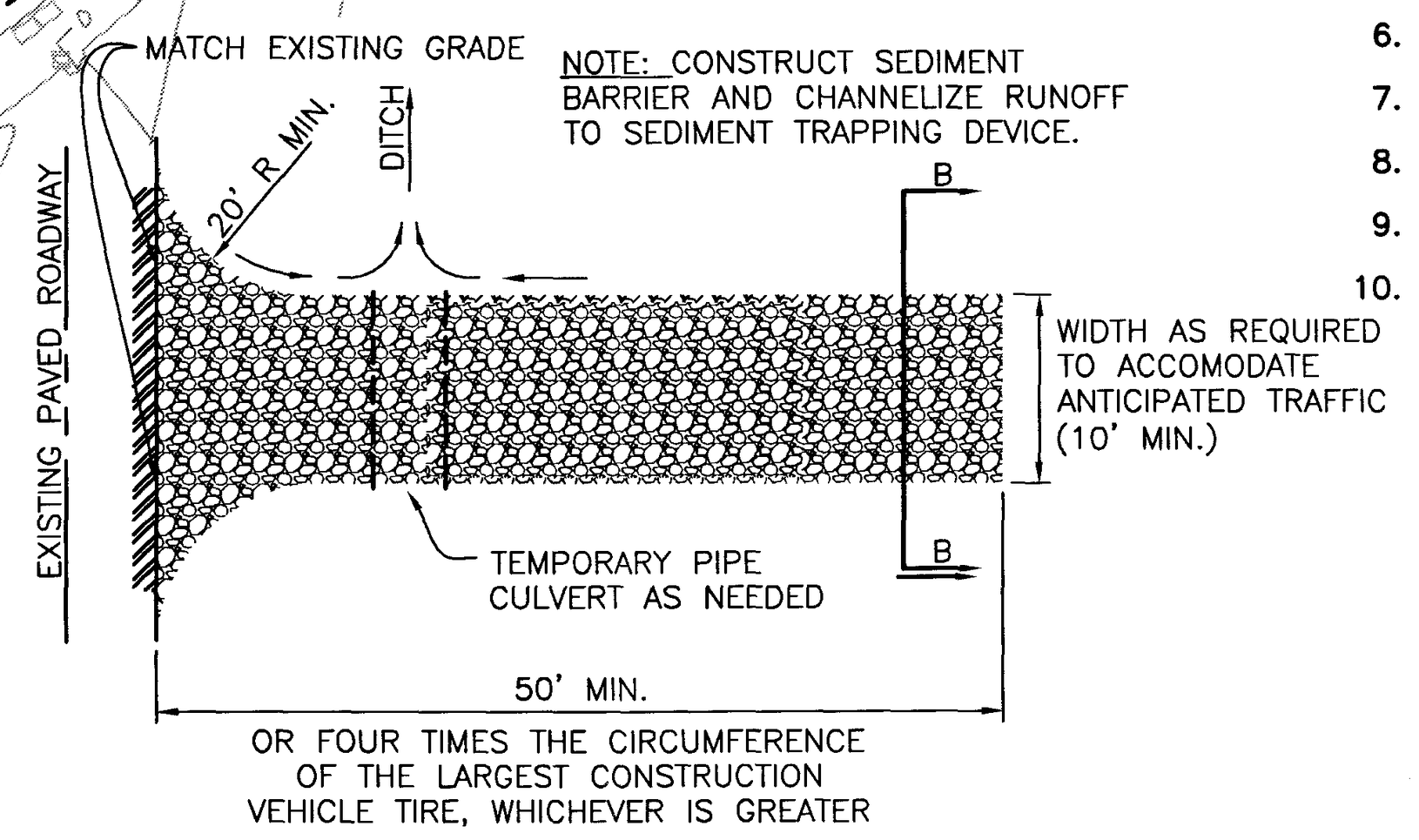
   USING A MARKING PEN, DARKEN IN THE CATCH BASIN SYMBOL ON THE PLAN AFTER CONSTRUCTION IS COMPLETED.

   USING A MARKING PEN, CLOUD LANDSCAPE AREAS WHICH HAVE BEEN PLANTED AND LABEL THE AREA WITH A CIRCLED LETTER FOR REFERENCE.
3. WHEN MARKING ANY CHANGES ON THE PLAN, BE SURE TO NOTE THE DATE ADJACENT TO THE MARKED REVISION.
4. WHEN MAKING ANY REVISIONS ON THE PLAN, THE SUPERVISOR SHALL NOTE THE DATE ON THE SUPERVISOR'S "LATEST REVISION" LOG.

LIST OF CONTRACTORS

THE FOLLOWING CONTRACTORS AND/OR SUBCONTRACTORS HAVE BEEN MADE AWARE OF THE CONDITIONS OF THIS PLAN AND RESPONSIBLE FOR COMPLIANCE OF ITEMS SPECIFIED IN THE GENERAL CONSTRUCTION ACTIVITY STORM WATER PERMIT AS THEY RELATE TO THEIR SPECIFIC MATERIALS AND/OR TASKS.

	NAME / COMPANY	SIGNATURE / DATE
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		


MATCH EXISTING GRADE
NOTE: CONSTRUCT SEDIMENT BARRIER AND CHANNELIZE RUNOFF TO SEDIMENT TRAPPING DEVICE.
20' R MIN.
DITCH
EXISTING PAVED ROADWAY
B
WIDTH AS REQUIRED TO ACCOMODATE ANTICIPATED TRAFFIC (10' MIN.)
TEMPORARY PIPE CULVERT AS NEEDED
B
50' MIN.
OR FOUR TIMES THE CIRCUMFERENCE OF THE LARGEST CONSTRUCTION VEHICLE TIRE, WHICHEVER IS GREATER

STABILIZED CONSTRUCTION ENTRANCE/EXIT DETAIL ①

NTS

BMP LEGEND

CT	* CONSTRUCTION TRAILER
C/C W	* CHEMICAL/CONCRETE WASHOUT
P/P W	* PAINT/PLASTER WASHOUT
STOCK	* SAND/GRAVEL BAG STOCKPILE
STORE	* STORAGE AREA
CONST	* ACTIVE CONSTRUCTION AREA
DONE	* COMPLETED/OCCUPIED AREA
VEH	* VEHICLE/STAGING AREA

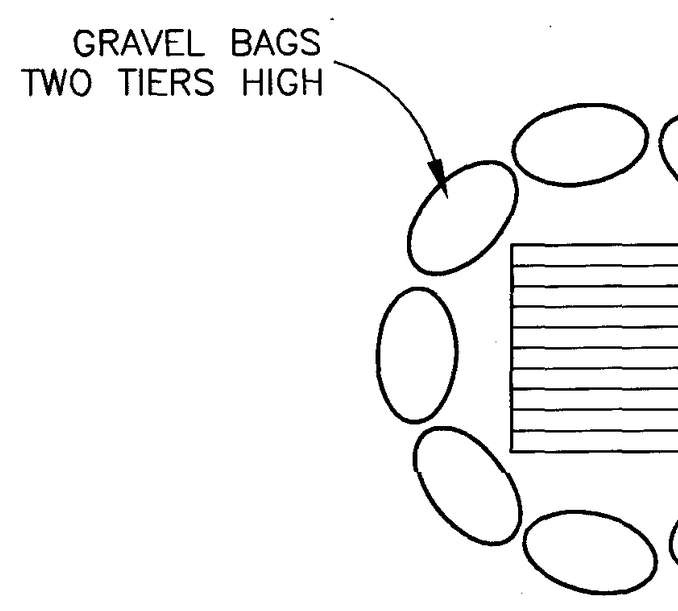
* TO BE DETERMINED ON-SITE BY PROJECT SUPERINTENDENT AND UPDATED HEREON

IT IS THE CONTRACTOR'S RESPONSIBILITY TO KEEP THIS ECP MAP CURRENT, ADDING ITEMS AND MOVING THEM AS NECESSARY AND/OR REMOVING ITEMS WHEN NO LONGER NEEDED. THE CONTRACTOR MAY BE ASKED AT ANY TIMETO PRODUCE THIS MAP TO CITY OF REGULATORY OFFICIALS. FAILURE TO KEEP IT CURRENT CAN RESULT IN A FINE. HAND-MARKED ALTERATIONS WITH INITIALS AND DATE ARE SUFFICIENT.

CRUSHED AGGREGATE GREATER THAN 3" BUT SMALLER THAN 6"
ORIGINAL GRADE
FIBER FABRIC
12" MIN. UNLESS OTHERWISE SPECIFIED BY THE SOILS ENGINEER

SECTION B-B ②

NTS


GRAVEL BAGS TWO TIERS HIGH
3" MIN.

TYPICAL GRATE INLET PROTECTION ③

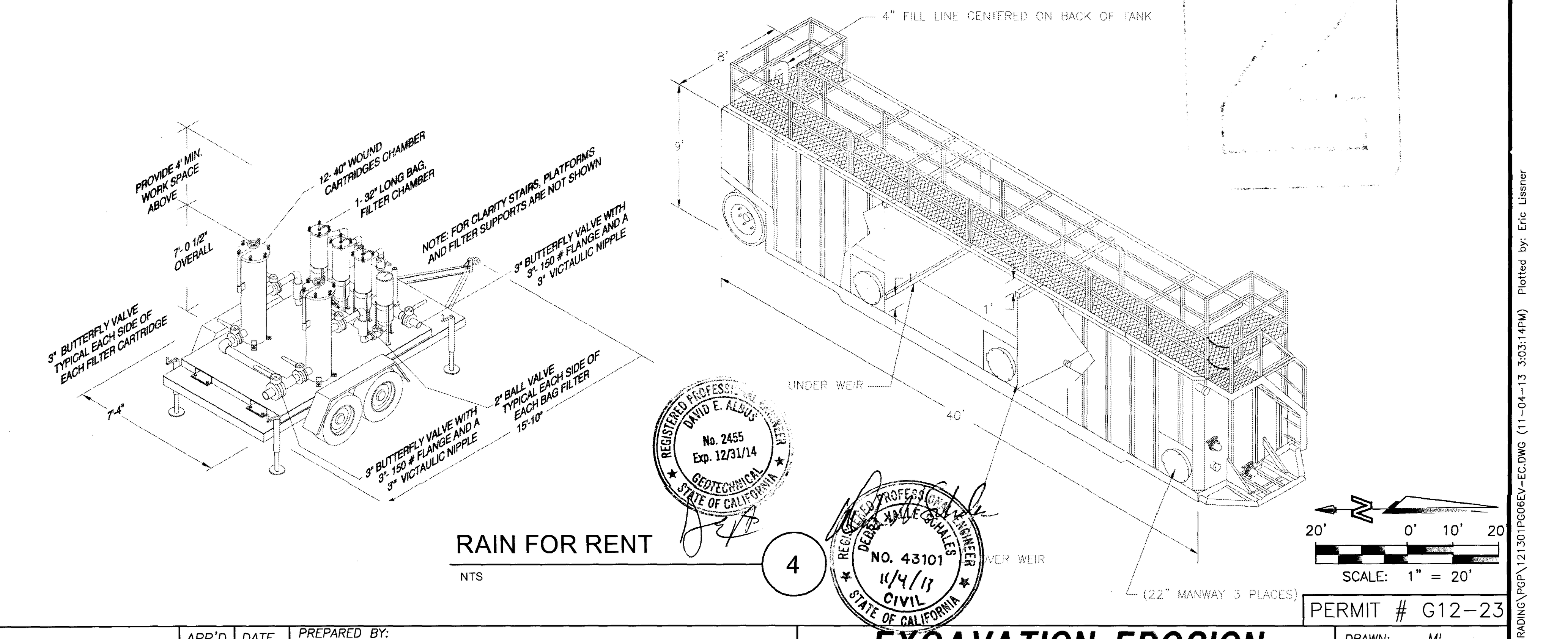
NTS

DEWATERING ACTIVITIES NOTES:

DEWATERING MAY BE REQUIRED TO REMOVE EXCESS STORM WATER WITHIN EXCAVATED AREAS THAT HAS BEEN PONDED FOR GREATER THAN 72 HOURS. WATER THAT CANNOT BE RETAINED ON-SITE (E.G., INFILTRATE, EVAPORATE, REUSE) SHALL BE TREATED PRIOR TO DISCHARGE IN ACCORDANCE WITH FACT SHEET NS-2 AND SITE-SPECIFIC NOTES BELOW. DISCHARGES MUST ONLY CONSIST OF CLEAN STORM WATER (NO VISIBLE SEDIMENT OR POLLUTANTS). ANY DISCHARGES SHALL BE SAMPLED IN ACCORDANCE WITH GENERAL CONSTRUCTION PERMIT REQUIREMENTS FOR RISK LEVEL 2 SITES. ADDITIONAL TREATMENT AND SAMPLING REQUIREMENTS MAY APPLY FOR DISCHARGES OF NON-STORM WATER (E.G., GROUNDWATER & WATER USED IN CONSTRUCTION ACTIVITIES). REFER TO CONSTRUCTION SITE MONITORING PROGRAM (CSMP) WITHIN THE PROJECT SWPPP DOCUMENT FOR SPECIFIC SAMPLING AND MONITORING REQUIREMENTS.

SITE-SPECIFIC NOTES FOR DEWATERING ACTIVITIES (NS-2):

RUNOFF SHALL BE DEWATERED AS FOLLOWS:
- PRE-TREATMENT VIA SEDIMENT TRAP AT LOW-POINT IN EXCAVATED AREA.
- PUMPED TO WEIR TANK (18,100 GALLON OPEN-TOP BY RAIN FOR RENT) FOR PARTICULATE SETTLING.
- FILTRATION VIA PF400 PARTICULATE FILTER (CONTAINS TWO CARTRIDGE FILTER TANKS AND 4 BAG FILTER TANKS FOR FILTRATION FROM 100 TO 0.5 MICRONS FOR FLOWS UP TO 400 GPM).
- CONDUCT SAMPLING FOR TURBIDITY & PH LEVELS PER RISK LEVEL 2 REQUIREMENTS AND DOCUMENT RESULTS IN SWPPP.
- IF EXCEEDANCES OF TURBIDITY AND PH NUMERIC ACTION LEVELS NALS) ARE OBSERVED, REPORT EXCEEDANCES THROUGH SMARTS ONLINE SYSTEM AND IN ACCORDANCE WITH SWPPP DOCUMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING CORRECTIVE ACTIONS TO IMPROVE TREATMENT EFFECTIVENESS OF DEWATERING SYSTEM PRIOR TO NEXT STORM EVENT (E.G., INCREASED SETTLING TIME, ADDITIONAL SETTLING TANKS, FILTERS OR OTHER BMPS).
- LIMIT DISCHARGES TO CABOT ROAD. UTILIZE EXISTING ON-SITE STORM DRAIN SYSTEM.


4" FILL LINE CENTERED ON BACK OF TANK
PROVIDE 4' MIN. WORK SPACE ABOVE
12-40" WOUND CARTRIDGES CHAMBER
1-30" LONG BAG FILTER CHAMBER
NOTE: FOR CLARITY STAIRS, PLATFORMS AND FILTER SUPPORTS ARE NOT SHOWN
7'-4"
UNDER WEIR
OVER WEIR
40'
(22" MANWAY 3 PLACES)
20' 0' 10' 20'
SCALE: 1" = 20'

RAIN FOR RENT ④

NTS

EROSION CONTROL NOTES

① INSTALL TEMPORARY CONSTRUCTION FENCE.
② INSTALL "TREK TRAK" PLATE OR APPROVED EQUAL TO PROTECT INGRESS/EGRESS ROUTES PER DETAIL 1, SHT.-6. EXACT LOCATION TO BE DETERMINED BY CONTRACTOR (EC-1, EC-2).
③ INSTALL TEMPORARY PORTABLE PUMP TO BE UTILIZED ON AN AS NEEDED BASIS.
④ INSTALL ONE DESILTING TANK (18,100 GALLONS) & FILTER/PUMP PER RAIN FOR RENT (SEE DETAIL 4, SHT 6).
⑤ INSTALL ONE ROW OF GRAVEL BAGS, TWO OR THREE TIERS HIGH, AS INDICATED (SE-6).
⑥ INSTALL FIBER ROLL EVERY 15-FEET WHERE SHOWN AND PER DETAIL 3, SHT.-14 TO DISTURBED SLOPE (SE-5).
⑦ INSTALL GRAVEL BAGS AROUND EXISTING INLET. SEE DETAIL 3, SHT. 6 (SE-10).
⑧ PROTECT IN PLACE.
⑨ INSTALL COMPOST BLANKET (EC-14).
⑩ INSTALL HYDROSEEDING ON SLOPE (EC-4).
⑪ INSTALL TEMPORARY PUMPLINE.

LEGEND

- CENTERLINE
- EXISTING PROPERTY LINE
- DIRECTION OF FLOW
- PUMP LINE (INLET)
- PUMP LINE (OUTLET)
- TEMPORARY CONSTRUCTION FENCE
- GRAVEL BAGS

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AT LEAST TWO DAYS BEFORE YOU DIG

CALL BEFORE YOU DIG

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NO.	DATE	REVISIONS	APP'D.	DATE
1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE
ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ◦ fax 949.474.5315 ◦ www.fuscoe.com
Debra Schales 11/4/13
DEBRA VALLE SCHALES RCE#043101 DATE

DEBRA VALLE SCHALES NO. 43101 EXP. 03/31/14 CIVIL

DEBRA VALLE SCHALES NO. 43101 11/4/13 CIVIL

DAVID E. ALBUS No. 2455 Exp. 12/31/14 GEOTECHNICAL

PERMIT # G12-23

EXCAVATION EROSION CONTROL PLAN
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

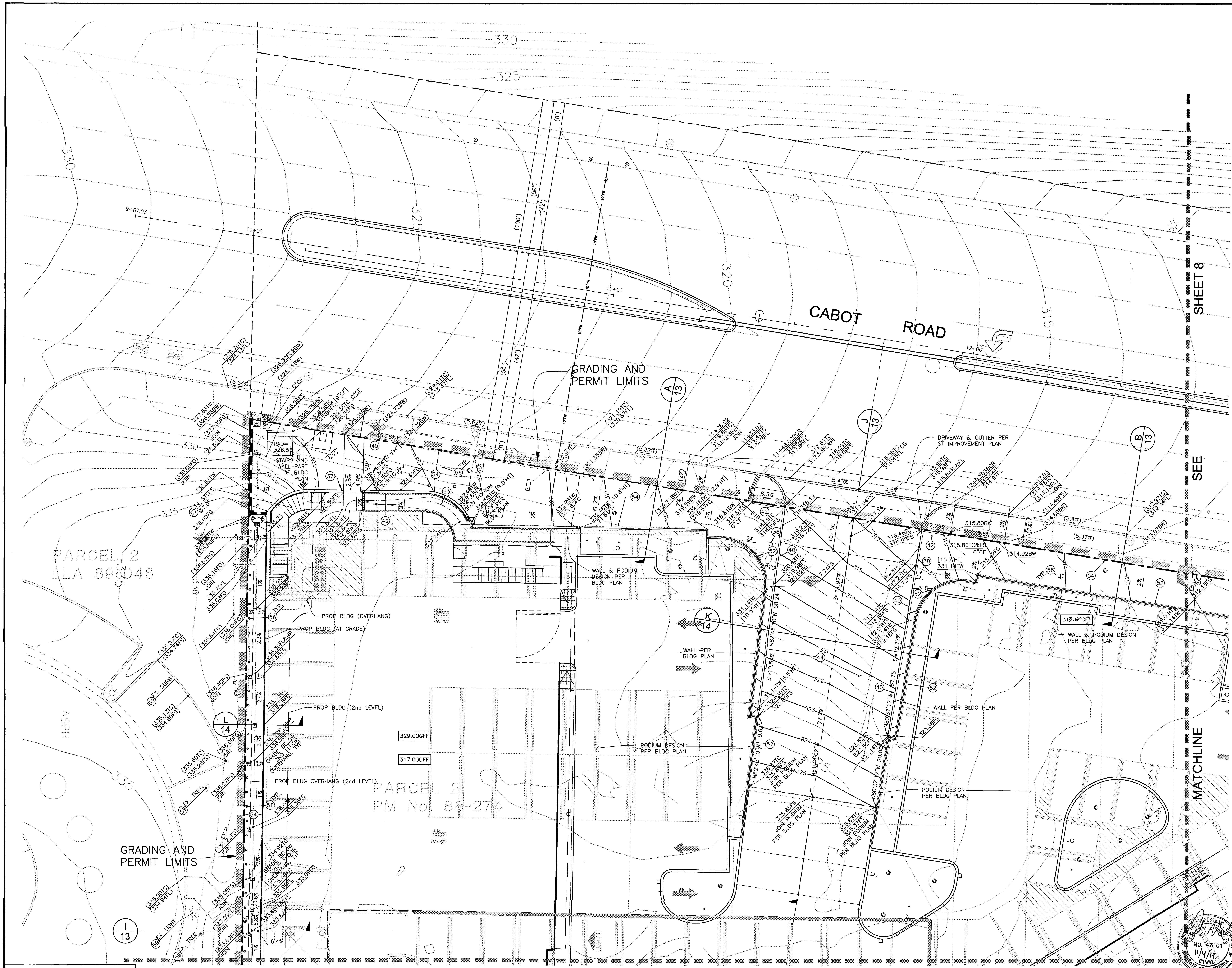
DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12
SHEET 6 OF 15	

2013/03/12

CAREER LOFTS
PRECISE GRADING PLAN

3RD GRADING PLAN CHECK SUBMITTAL

P:\PROJECTS\1213\01\ENG\GRADING\PGP\1213.01PG06EV-EC.DWG (11-04-13 3:03:14PM) Plotted by: Eric Lissner


CABOT ROAD
GRADING AND PERMIT LIMITS
PARCEL 2 LLA 89-046
PARCEL 2 PM No. 88-274
SHEET 8 SEE MATCHLINE
DRIVEWAY & GUTTER PER ST IMPROVEMENT PLAN
WALL & PODIUM DESIGN PER BLDG PLAN
PROP BLDG (OVERHANG)
PROP BLDG (AT GRADE)
PROP BLDG (2nd LEVEL)
PROP BLDG OVERHANG (2nd LEVEL)
WALL PER BLDG PLAN
PODIUM DESIGN PER BLDG PLAN
STAIRS AND WALL PART OF BLDG PLAN
PAD= 326.56
329.00GFF
317.00GFF
ASPH
BOILER TANK ROOM

MATCHLINE SEE SHEET 9

CONSTRUCTION NOTES

(36) INSTALL "ENTRANCE" FIRE LANE PER FIRE MASTER PLAN

(37) INSTALL KNOX KEY BOX PER FIRE MASTER PLAN

(38) INSTALL "NO PARKING – FIRE LANE" SIGN PER FIRE MASTER PLAN

(40) CONSTRUCT 6" CURB (A1-6(150)) PER SWPPC STD PLAN 120-2

(42) CONSTRUCT VARIED HT CURB (A1-6(150)) PER MODIFIED SPPWC STD PLAN 120-2 – SEE DETAIL A ON SHT 2

(44) CONSTRUCT COLORED CONCRETE PAVING - 6" PCC OVER 4" AB PER LANDSCAPE PLAN LC-01

(45) CONSTRUCT INTERLOCKING PAVING SIDEWALK PER LANDSCAPE PLAN LC-01

(46) CONSTRUCT 4" PCC OVER 4" AB SIDEWALK - SEE DETAIL C ON SHT 2

(49) CONSTRUCT HANDICAP RAMP AND RAILING PER ARCH PLAN NO.

(52) CONSTRUCT STUCCO RETAINING WALL W/BLOCK OR GLASS WALL PER ARCHITECT PLAN

(53) CONSTRUCT RETAINING WALL PER SEPARATE PLANS & PERMIT

(54) LANDSCAPE PER LANDSCAPE PLAN NO. LC-01

(56) INSTALL TREE PER LANDSCAPE PLAN LP-01

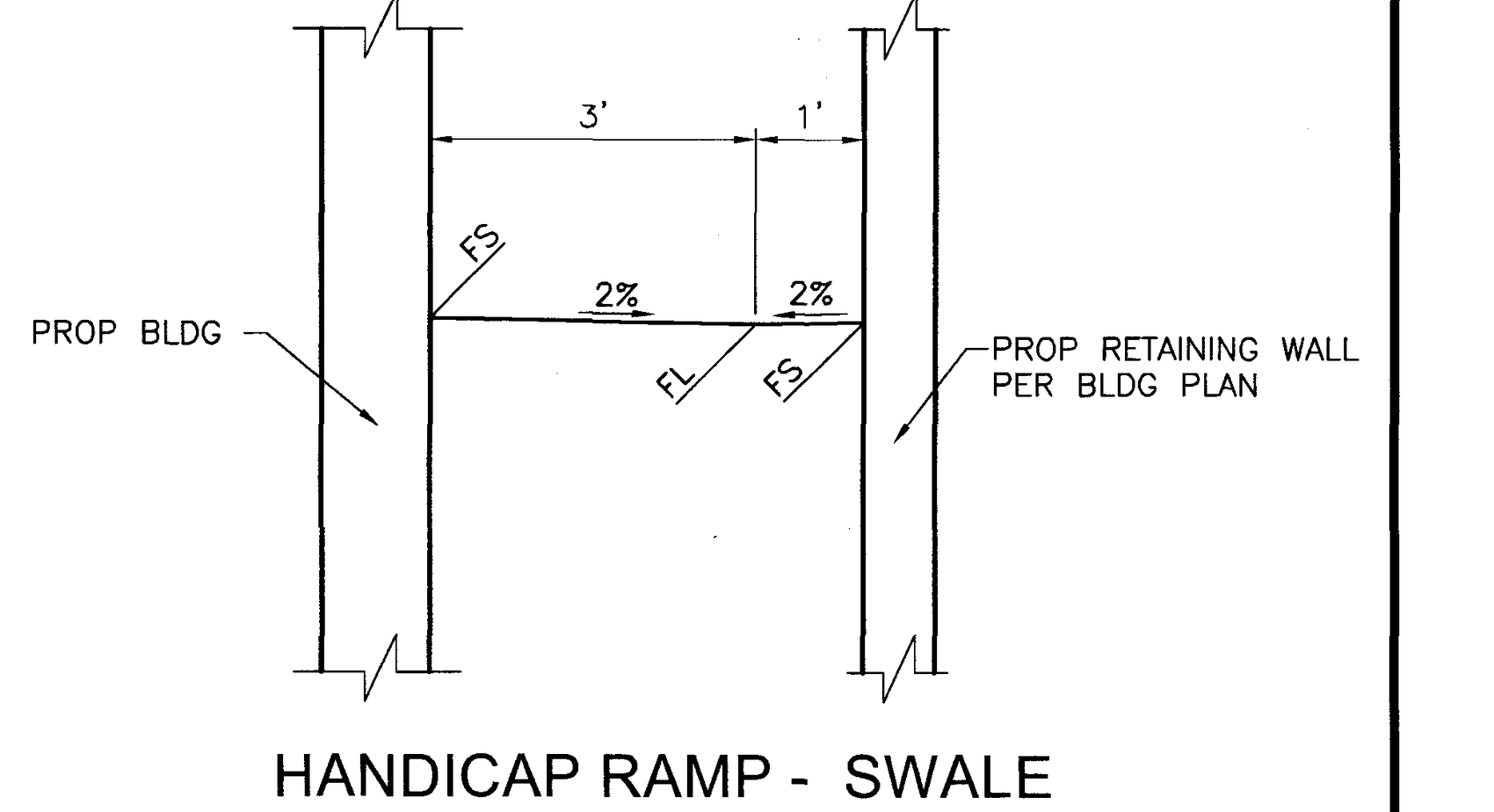
(57) CONSTRUCT STAIRS PER ARCH PLAN

(59) PROTECT IN PLACE

(60) CONSTRUCT GATE PER LANDSCAPE PLAN NO. LC-01

(61) DG SIDEWALK PER LANDSCAPE PLAN NO. LC-01

(63) CREATE A SWALE PER DETAIL HEREON


PROP BLDG
3'
1'
FS
2%
2%
FL
FS
PROP RETAINING WALL PER BLDG PLAN

HANDICAP RAMP - SWALE

NTS

ALL RETAINING WALLS, POOLS, AND SPAS TO BE CONSTRUCTED PER SEPARATE PLANS & PERMITS. SHOWN FOR REFERENCE ONLY.

LEGEND

AB	AGGREGATE BASE
BCR	BEGIN CURB RETURN
BLDG	BUILDING
BW	BACK OF WALK
CL	CENTERLINE
CF	CURB FACE
ECR	END CURVE RETURN
EX	EXISTING
FF	FINISH FLOOR
FL	FLOW LINE
FS	FINISH SURFACE
GB	GRADE BREAK
HP	HIGH POINT
HT	HEIGHT
MIN	MINIMUM
NO	NUMBER
PCC	PORTLAND CEMENT CONCRETE
PI	POINT OF INTERSECTION (VC)
PL	PROPERTY LINE
PROP	PROPOSED
R	RIDGE
R/W	RIGHT OF WAY
STD	STANDARD
SW	SIDEWALK
TC	TOP OF CURB
TG	TOP OF GRATE
TRANS	TRANSFORMER
TW	TOP OF WALL
TYP	TYPICAL
VC	VERTICAL CURVE

▬ ▬ ▬ ▬	RIGHT OF WAY
— - — - —	CENTER LINE
—— R ——	RIDGE LINE
—— GB ——	GRADE BREAK
▨ ▨ ▨	GRADING AND PERMIT LIMITS
⊘	PROP TREE

N

10' 0' 5' 10'

SCALE: 1" = 10'

DAVID E. ALBUS No. 2455 Exp. 12/31/14

PERMIT # G12-23

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AT LEAST TWO DAYS BEFORE YOU DIG

CALL BEFORE YOU DIG

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NO.	DATE	REVISIONS	APP'D.	DATE
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PREPARED BY:
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16795 Von Karman, Suite 100, Irvine, California 92606
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Debra V Schales 11/4/13
DEBRA VALLE SCHALES RCE#043101 DATE

DEBRA VALLE SCHALES NO. 43101 EXP. 03/31/14 CIVIL

NO. 43101 11/4/13 CIVIL

PRECISE GRADING

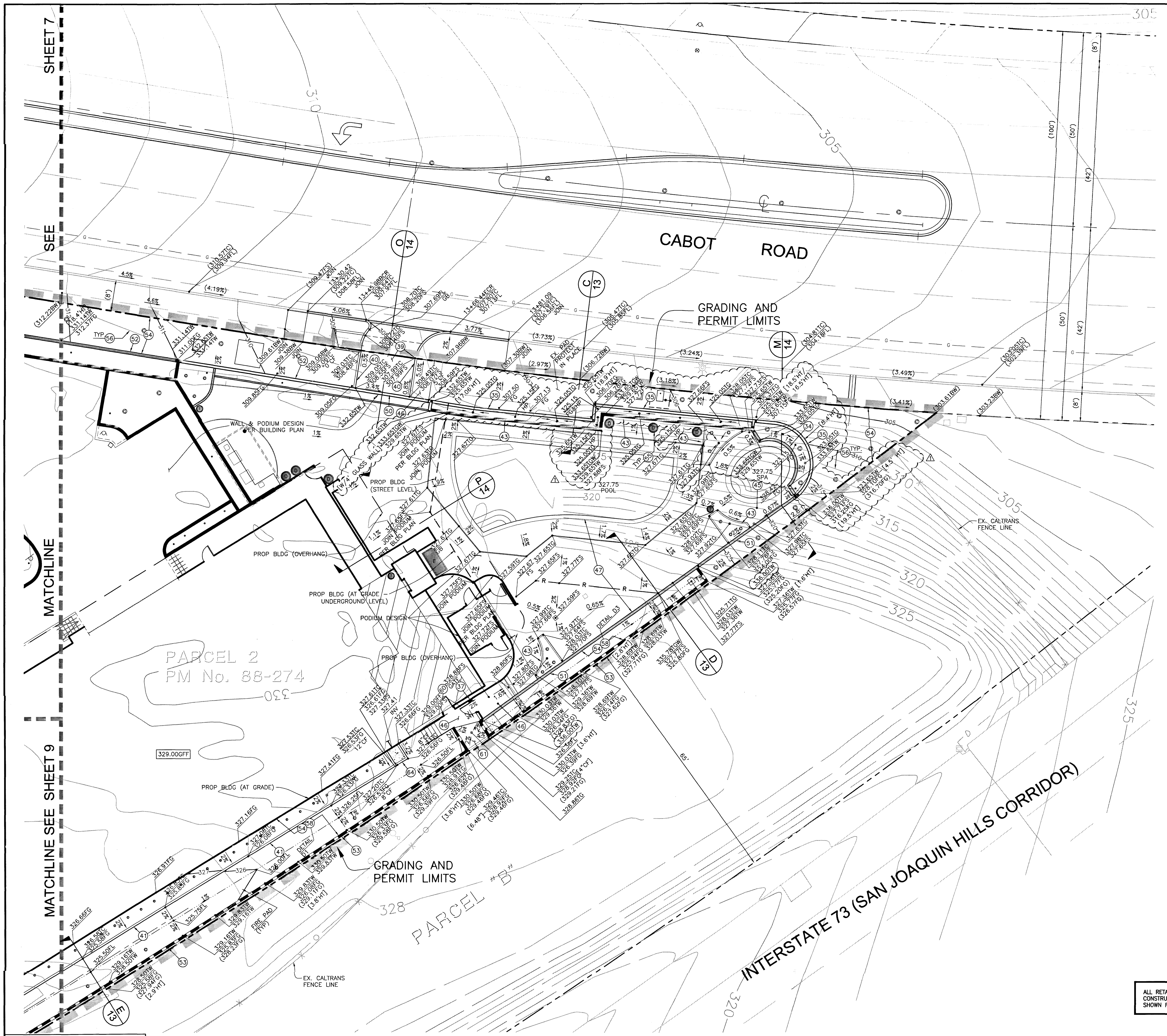
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

SHEET 7 OF 15

3RD GRADING PLAN CHECK SUBMITTAL
2013/03/12
CAREER LOFTS
PRECISE GRADING PLAN

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG07PG.DWG (11-04-13 3:03:33PM) Plotted by: Eric Lissner


SEE SHEET 7
MATCHLINE
MATCHLINE SEE SHEET 9
CABOT ROAD
GRADING AND PERMIT LIMITS
WALL & PODIUM DESIGN PER BUILDING PLAN
PROP BLDG (STREET LEVEL)
PROP BLDG (OVERHANG)
PROP BLDG (AT GRADE UNDERGROUND LEVEL)
PODIUM DESIGN
PROP BLDG (AT GRADE)
PARCEL 2
PM No. 88-274
329.00GFF
327.75 POOL
327.75 SPA
EX. CALTRANS FENCE LINE
PARCEL "B"
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
305
310
315
320
325
328
330
O 14
C 13
M 14
P 14
D 13
E 13

CONSTRUCTION NOTES

(34) CONSTRUCT WALL W/FOUNTAIN PER LANDSCAPE PLAN LC-01 & LC-03

(35) CONSTRUCT LOCK & LOAD RETAINING WALL PER ABI ENGINEERING

(37) INSTALL KNOX KEY BOX PER FIRE MASTER PLAN

(39) CONSTRUCT 6" PCC OVER 4" AB DRIVEWAY

(40) CONSTRUCT 6" CURB (A1-6(150)) PER SWPPC STD PLAN 120-2

(41) CONSTRUCT 12" CURB PER MODIFIED SWPPC STD PLAN 120-2 & DETAIL J ON SHT 2

(43) CONSTRUCT 4" PLANTER CURB PER LANDSCAPE PLAN LC-01

(45) CONSTRUCT INTERLOCKING PAVING SIDEWALK PER LANDSCAPE PLAN LC-01

(46) CONSTRUCT 4" PCC OVER 4" AB SIDEWALK - SEE DETAIL C ON SHT 2

(47) CONSTRUCT COLORED CONCRETE PAVING (POOL DECK) PER LANDSCAPE ARCH PLAN NO. LC-02

(50) CONSTRUCT STUCCO RETAINING WALL WITH GLASS FENCING PER ARCHITECT PLAN

(51) CONSTRUCT RETAINING WALL WITH 8' (MIN) SOUND WALL PER ARCHITECT PLAN

(52) CONSTRUCT STUCCO RETAINING WALL W/BLOCK OR GLASS WALL PER ARCHITECT PLAN

(53) CONSTRUCT RETAINING WALL PER SEPARATE PLANS & PERMIT

(54) LANDSCAPE PER LANDSCAPE PLAN NO. LC-01

(55) CONSTRUCT CORTEEN STEEL PLANTER PER LANDSCAPE ARCH PLAN NO. LC-01

(56) INSTALL TREE PER LANDSCAPE PLAN LP-01

(58) CONSTRUCT BIORETENTION PER DETAIL D1 - D3 ON SHT 3

(60) CONSTRUCT GATE PER LANDSCAPE PLAN NO. LC-01

(61) DG SIDEWALK PER LANDSCAPE PLAN NO. LC-01

(64) CONSTRUCT 8" CURB (A1-8(200) PER SWPPC STD PLAN 120-2

2013/03/12

CAREER LOFTS
PRECISE GRADING PLAN

3RD GRADING PLAN CHECK SUBMITTAL

LEGEND

AB	AGGREGATE BASE
BCR	BEGIN CURB RETURN
BLDG	BUILDING
BW	BACK OF WALK
CL	CENTERLINE
DG	DECOMPOSED GRANITE
ECR	END CURVE RETURN
EX	EXISTING
FF	FINISHED FLOOR
FG	FINISHED GRADE
FL	FLOW LINE
FS	FINISH SURFACE
GB	GRADE BREAK
HP	HIGH POINT
HT	HEIGHT
INV	INVERT
MIN	MINIMUM
PA	PLANTER AREA
PCC	PORTLAND CEMENT CONCRETE
PL	PROPERTY LINE
PROP	PROPOSED
R/W	RIGHT OF WAY
SHT	SHEET
TC	TOP OF CURB
TG	TOP OF GRATE
TGW	TOP OF GLASS WALL
TW	TOP OF WALL
TYP	TYPICAL
W/	WITH

— — —	RIGHT OF WAY
— - —	CENTER LINE
— R —	RIDGE LINE
— v —	VALLEY LINE
— GB —	GRADE BREAK
▨ ▨ ▨	GRADING AND PERMIT LIMITS
●	PROP TREE

ALL RETAINING WALLS, POOLS, AND SPAS TO BE CONSTRUCTED PER SEPARATE PLANS & PERMITS. SHOWN FOR REFERENCE ONLY.

N

10' 0' 5' 10'
SCALE: 1" = 10'

REGISTERED PROFESSIONAL ENGINEER
DEBRA VALLE SCHALES
NO. 43101
11/4/13
CIVIL
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
DAVID E. ALBUS
No. 2455
Exp. 12/31/14
GEOTECHNICAL
STATE OF CALIFORNIA

PERMIT # G12-23

DIG ALERT

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

CALL BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

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NO.	DATE	REVISIONS	APP'D.	DATE
1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE
ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ○ fax 949.474.5315 ○ www.fuscoe.com
Debra V Schales 11/4/13
DEBRA VALLE SCHALES RCE#043101 DATE

REGISTERED PROFESSIONAL ENGINEER
DEBRA VALLE SCHALES
NO. 43101
EXP. 03/31/14
CIVIL
STATE OF CALIFORNIA

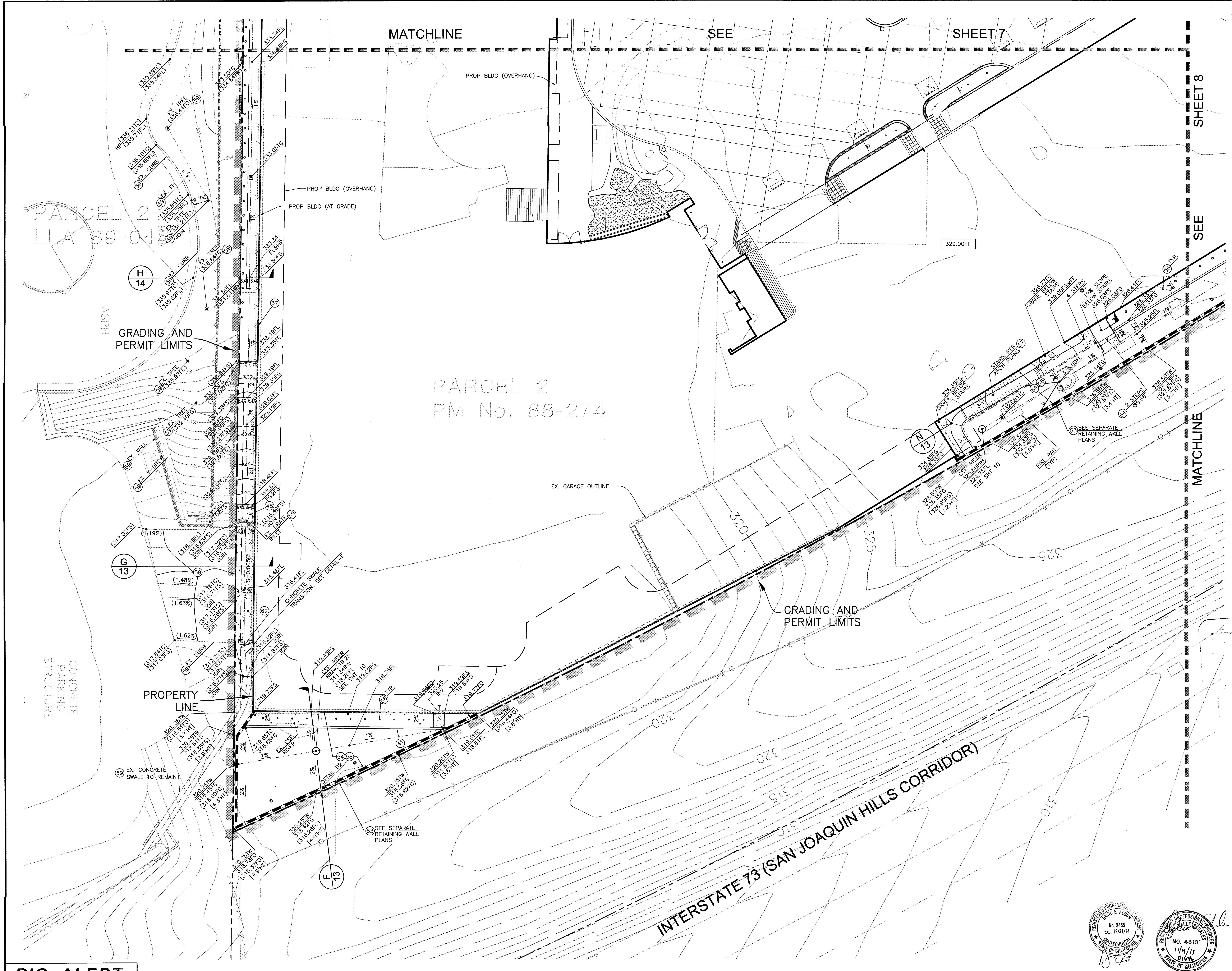
PRECISE GRADING

CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

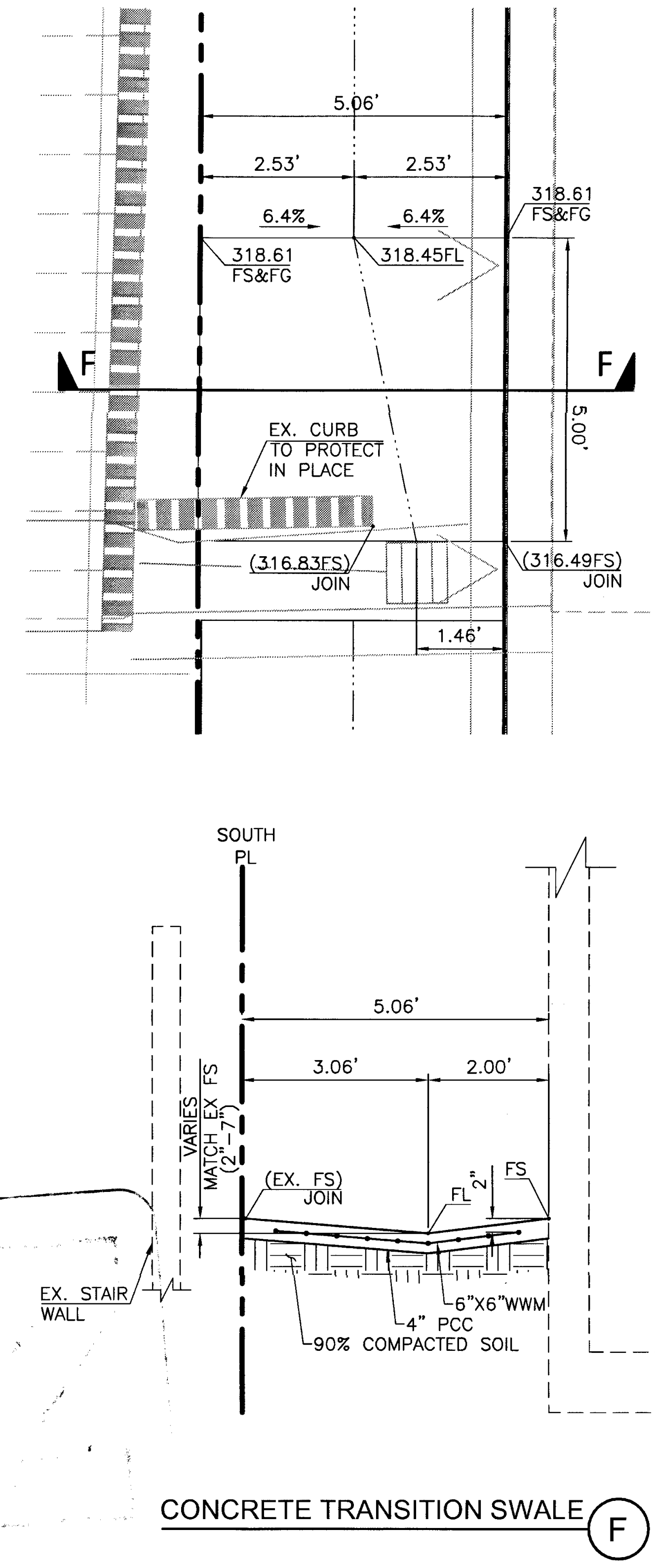
SHEET 8 OF 15

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG08PG.DWG (11-04-13 3:03:52PM) Plotted by: Eric Lissner


MATCHLINE SEE SHEET 7
SEE SHEET 8 MATCHLINE
PROP BLDG (OVERHANG)
PROP BLDG (AT GRADE)
PARCEL 2 LLA 89-046
PARCEL 2 PM No. 88-274
329.00FF
GRADING AND PERMIT LIMITS
PROPERTY LINE
EX. GARAGE OUTLINE
CONCRETE SWALE TRANSITION, SEE DETAIL-F
CSP RISER SEE SHT. 10
STAIRS PER ARCH PLANS
SEE SEPARATE RETAINING WALL PLANS
FIRE PAD (TYP)
EX. CONCRETE SWALE TO REMAIN
CONCRETE PARKING STRUCTURE
ASPH
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
H 14
G 13
N 13
F 13
320
325
315
310

CONSTRUCTION NOTES

- (37) INSTALL KNOX KEY BOX PER FIRE MASTER PLAN
- (41) CONSTRUCT 12" CURB PER MODIFIED SWPPC STD PLAN 120-2 & DETAIL J ON SHT 2
- (48) CONSTRUCT CONCRETE TRANSITION SWALE PER DETAIL F ON SHT 9
- (53) CONSTRUCT RETAINING WALL PER SEPARATE PLANS & PERMIT
- (54) LANDSCAPE PER LANDSCAPE PLAN NO. LC-01
- (56) INSTALL TREE PER LANDSCAPE PLAN LP-01
- (57) CONSTRUCT STAIRS PER ARCH PLAN
- (58) CONSTRUCT BIORETENTION PER DETAIL D1 – D3 ON SHT 3
- (59) PROTECT IN PLACE
- (62) CONSTRUCT CONCRETE SWALE PER DETAIL E ON SHT 3
- (64) CONSTRUCT 8" CURB (A1-8(200) PER SWPPC STD PLAN 120-2


5.06'
2.53'
2.53'
6.4%
6.4%
318.61 FS&FG
318.61 FS&FG
318.45FL
F
F
5.00'
EX. CURB TO PROTECT IN PLACE
(316.83FS) JOIN
(316.49FS) JOIN
1.46'
SOUTH PL
5.06'
3.06'
2.00'
MATCH EX FS VARIES (2"-7")
(EX. FS) JOIN
FL
2%
FS
EX. STAIR WALL
6"X6"WWM
4" PCC
90% COMPACTED SOIL

CONCRETE TRANSITION SWALE (F)

ALL RETAINING WALLS, POOLS, AND SPAS TO BE CONSTRUCTED PER SEPARATE PLANS & PERMITS. SHOWN FOR REFERENCE ONLY.

LEGEND

BLDG	BUILDING	▬ ▬ ▬	RIGHT OF WAY
CSP	CORRUGATED STEEL PIPE	— - —	CENTER LINE
EX	EXISTING	—— R ——	RIDGE LINE
FF	FINISHED FLOOR	—— GB ——	GRADE BREAK
FG	FINISHED GRADE	▨ ▨ ▨	GRADING AND PERMIT LIMITS
FH	FIRE HYDRANT	●	PROP TREE
FL	FLOW LINE		
FS	FINISHED SURFACE		
GB	GRADE BREAK		
HP	HIGH POINT		
HT	HEIGHT		
MIN	MINIMUM		
PROP	PROPOSED		
R	RIDGE		
SHT	SHEET		
STD	STANDARD		
TC	TOP OF CURB		
TG	TOP OF GRATE		
TW	TOP OF WALL		
TYP	TYPICAL		

N

10' 0' 5' 10'

SCALE: 1" = 10'

No. 2455 Exp. 12/31/14 GEOTECHNICAL DAVID E. ALBUS

NO. 43101 11/4/13 CIVIL

PERMIT # G12-23

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AT LEAST TWO DAYS BEFORE YOU DIG

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NO.	DATE	REVISIONS	APP'D.	DATE
1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ○ fax 949.474.5315 ○ www.fuscoe.com

NO. 43101 EXP. 03/31/14 CIVIL

DEBRA VALLE SCHALES RCE#043101 11/4/13 DATE

PRECISE GRADING

CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

SHEET 9 OF 15

3RD GRADING PLAN CHECK SUBMITTAL
2013/03/12
CAREER LOFTS
PRECISE GRADING PLAN

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2013/03/12

CAREER LOFTS
PRECISE GRADING PLAN

3RD GRADING PLAN CHECK SUBMITTAL

330
325
320
315
310
305
300
PL
BASIN # 2
PROP. RET WALL
EX. GROUND
℄ CSP RISER 5+56.77 RIM=319.25 318.25FL
EX. BLDG.
PROP. FINISH GROUND
98 6" PERFORATED PIPE 313.75INV
312.76 HGL (100YR)
312.56 HGL (25YR)
5+10.00 (310.95TW)
Q100 HGL
Q25 HGL
(S=0.1092)
(S=0.005)
(S=0.0075)
308.08 HGL (100YR)
307.97 HGL (25YR)
5+10.00 EX SD STA (307.21INV) PER PLAN BC-1573
5+48.12 EX SD STA (±311.29INV)
5+55.27 311.34INV
5+58.27 311.37INV
Q25(ADJ) = 3.79 CFS
Q100(ADJ) = 4.92 CFS
45.27 LF EX 18" RCP
91
Q25(ADJ) = 2.02 CFS
Q100(ADJ) = 2.62 CFS
104.38 LF OF EX. 18" RCP
SEE DETAIL H ON SHT 3
EX. LINE "A"
EX. BASEMENT PARKING STRUCTURE
EX. TRENCH DRAIN 9+99.43 (316.14TG)
9+99.43 CONCRETE COLLAR
EXISTING GROUND OVER STORM DRAIN
PROTECT IN PLACE EX. 8" DRAIN CONNECTION TO EX. 18" RCP
PROPOSED FINISH FLOOR (BASEMENT)
317.00FS
PROPOSED BUILDING
6" PERFORATED PIPE 320.24INV
℄ CSP RISER 10+98.15 RIM=325.50 324.75FL
℄ 18"X18" ATRIUM GRATE 11+04.89 324.81TG
11+00.15 ANGLE PT 320.26INV
11+07.15 ANGLE PT 320.33INV
11+09.14 ANGLE PT 320.36INV
313.55 HGL (100YR)
313.45 HGL (25YR)
S=0.0080
STATION EQUATION ✱ EX. PIPE 6+62.65
9+99.43 BEGIN PIPE (312.15INV)
EX. 18" RCP PIPE WITH CONCRETE ENCASEMENT
Q25(ADJ) = 2.02 CFS Q100(ADJ) = 2.62 CFS
97.21 LF-18" RCP WITH 6" CONCRETE ENCASEMENT
D-2000
LINE "A"
END PIPE 10+96.65 312.93INV
BEGIN PIPE 10+99.65 315.42INV
98
89
319.55INV
S=0.0200
END PIPE 11+03.16 315.50INV BEGIN PIPE
3.50 LF-3" PVC, SDR35
100.00 LF-48" HDPE
PIPE STORAGE
S=0.0100
END CAP
END PIPE 12+03.14 316.50INV
BASIN # 1
6" PVC PERFORATED PIPE
EXISTING GROUND OVER STORM DRAIN
FINISH GRADE OVER STORM DRAIN
12+28.13 ANGLE PT 321.55INV
12+63.13 ANGLE PT 321.90INV
PROP. RET WALL
12+84.89 END PIPE 322.12INV
CONCRETE ENCASED IN CLASS "C" MORTAR
RUBBER SLEEVE – ASTMF477
BAND – 301SS
HOUSING – 301SS
GASKET ASTMF477
3" PVC SDR 35
4" TO 3" REDUCER
4" "INSERTATEE"
48" HDPE END CAP
4"
8"
8" PVC SDR 35
8" "INSERTATEE"
CONCRETE ENCASED IN CLASS "C" MORTAR
48" SMOOTH HDPE
36" CSP RISER
3" PVC SDR 35
24" CSP RISER
6"
6" PVC SDR 35
6" "INSERTATEE"
5+00
5+50
10+00
10+50
11+00
11+50
12+00
12+50
12+75

✱ NOTE:
CONTRACTOR TO VERIFY EXISTING ALIGNMENT & INVERTS OF 18"RCP PRIOR TO CONSTRUCTION, IF DISCREPANCY ARISES, CONTRACTOR TO CONTACT ENGINEER OF RECORD.
AS-BUILT PLAN OF EX 18"RCP IS A DIFFERENT ALIGNMENT THAN FIELD CONDITION

LINE "A"

48" HDPE END CAP TO 3" PVC

48" HDPE TO 8" PVC

36" CSP TO 3" PVC

24" CSP TO 6" PVC

CONNECTION DETAILS (X)
NOT TO SCALE

PROFILE SCALES:
HORIZONTAL 1"= 10'
VERTICAL 1"= 4'

ALIGNMENT OF EX. SD ADJUSTED TO REFLECT FIELD CONDITIONS. (SEE NOTE BELOW)
PROP. BLDG
BIORETENTION – BASIN #2
(310.95TW)
313.98 INV
92
91
97
N09°33'41"W
314.68 INV
5+10.00 EX SD STA PER PLAN BC-1573 (307.21INV)
S=0.0100 L=20.00
74
5+48.12 EX SD STA PER PLAN BC-1573 (±311.29INV)
℄ 24" CSP RISER 5+56.77 EX SD STA
86
S=0.0100 L=32.50
74
(316.15TG)
(316.14TG)
18" RCP
(312.15INV)
REFER TO STRUCTURAL AND PLUMBING PLANS FOR ADDITIONAL CONNECTION DETAILS TO THE EXISTING 18" RCP ENCASED PIPE INSIDE THE BUILDING.
N19°03'55"W
90 76
(316.07TG)
PROP. BLDG
STATION EQUATION 6+62.65 EX SD STA
9+99.43 LINE A BEGIN 18" RCP
87
REFER TO STRUCTURAL PLANS FOR FOOTING DETAIL AND PROP. 18" RCP ENCASED PIPE CROSSING
320.24INV
70
10+98.14 ∠POINT ℄ 24" CSP RISER
86
S=0.0200 L=3.50'
70
11+03.14 BEGIN 48" HDPE
10+04.89 324.81 TG ℄ 18"X18" ATRIUM GRATE
75
84
11+09.14-0.08'OFFSET ∠POINT 6" SUBDRAIN
EX. FLOWLINE
PROP. BLDG
326
77
N32°08'43"W
S=0.0100 N31°42'21"W, L=119
74
12+03.14 END OF 48" HDPE
PROP. GARAGE PARKING
BIORETENTION – BASIN #1
12+28.13-0.92'OFFSET ∠POINT 6" SUBDRAIN 321.55INV
S=0.0100 N32°35'47"W, L=35'
74
12+63.13-0.92'OFFSET ∠POINT 6" SUBDRAIN 321.90INV
S=0.0100 N33°48'03"W, L=21.77'
74
12+84.89 END OF 6" PERF. PIPE 322.12INV
SEE SHT. 11

25-YEAR HYDRAULIC DATA									
LINE	STATIONING	Q_{25}-ADJ	DIA	S_O	n	D_c (FT)	D_n (FT)	V_c (FPS)	V_n (FPS)
EX LINE "A"	5+10.00 TO 5+55.27	3.79 CFS	18"	0.1092	0.013	0.74	0.33	4.33	12.89
EX LINE "A"	5+58.27 TO 9+99.43	2.02 CFS	18"	0.0075	0.013	0.54	0.48	3.56	4.14
LINE A	9.99.43 TO 10+96.65	2.02 CFS	18"	0.0080	0.013	0.54	0.48	3.56	4.24

100-YEAR HYDRAULIC DATA									
LINE	STATIONING	Q_{100}-ADJ	DIA	S_O	n	D_c (FT)	D_n (FT)	V_c (FPS)	V_n (FPS)
EX LINE "A"	5+10.00 TO 5+55.27	4.92 CFS	18"	0.1092	0.013	0.85	0.38	4.74	13.90
EX LINE "A"	5+58.27 TO 9+99.43	2.62 CFS	18"	0.0075	0.013	0.61	0.55	3.85	4.45
LINE A	9.99.43 TO 10+96.65	2.62 CFS	18"	0.0080	0.013	0.61	0.58	3.85	4.56

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LEGEND

∠	ANGLE
CB	CATCH BASIN
CL	CENTERLINE
CFS	CUBIC FEET PER SECOND
CSP	CORRUGATED STEEL PIPE
EX	EXISTING
FL	FLOW LINE
FS	FINISH SURFACE
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
INV	INVERT
JS	JUNCTION STRUCTURE
L	LENGTH
LF	LINEAR FEET
PROP	PROPOSED
PVC	POLYVINYL CHLORIDE
RET	RETAINING
RCP	REINFORCED CONCRETE PIPE
S	SLOPE
SD	STORM DRAIN
SHT	SHEET
STA	STATION
STD	STANDARD
TG	TOP OF GRATE
TW	TOP OF WALL

— - - — - - —	RIGHT OF WAY
—— - —— - ——	STORM DRAIN CENTER LINE
- - - - - - - -	TOP/TOE OF SLOPE
—— —— ——	SUBDRAIN
▬ ▬ ▬ ▬	RET. WALL

Q25 (ADJ) = 25 YEAR FREQ. FLOW ADJUSTED FOR BASIN AND PIPE STORAGE

Q100 (ADJ) = 100 YEAR FREQ. FLOW ADJUSTED FOR BASIN AND PIPE STORAGE

STORM DRAIN CONSTRUCTION NOTES

(70) CONSTRUCT 3" PVC, SDR35 INCLUDING FITTINGS

(74) CONSTRUCT 6" PERF PVC PIPE (SCH 80), WRAPPED WITH 140 MIRAFI PERMEABLE GEOTEXTILE OR EQUAL

(75) CONSTRUCT 8" PVC, SDR35 INCLUDING FITTINGS

(76) CONSTRUCT 18" RCP – D – 2000 & BEDDING PER DETAIL Y ON SHT 2

(77) CONSTRUCT 48" HDPE-S (SMOOTH) PIPE W/WELDED END CAPS (HANCOR FC-EOT-48-0000 OR EQUAL) & BEDDING PER DETAIL Y ON SHT 2

(84) CONSTRUCT 18" X 18" ATRIUM GRATE PER NDS PART NO 1891

(86) CONSTRUCT 24" TO 36" CSP RISER WITH 36" CSP/CONCRETE BASE PER DETAIL H ON SHT 3

(87) CONSTRUCT CONCRETE COLLAR PER APWA STD PLAN 380-4

(89) CONNECT PVC TO HDPE END CAP W/"INSERTATEE" PER DETAIL X HEREON

(90) CONSTRUCT 6" THICK CONCRETE ENCASEMENT

(91) SAWCUT AND REMOVE EX 18" RCP

(92) REMOVE AND DISPOSE EX CSP RISER

(97) CONSTRUCT BRICK & MORTAR PLUG

(98) CONNECT PVC PIPE TO CSP RISER W/INSERTION TEE PER DETAIL X HEREON

(99) CONSTRUCT PVC HDPE W/INSIDE TEE PER DETAIL X HEREON

DAVID E. ALBUS
No. 2455
Exp. 12/31/14
GEOTECHNICAL

DEBRA VALLE SCHALES
NO. 43101
11/4/13
CIVIL

APP PVC/HDPE & RCP CONNECTIONS TO CSP RISER, 48" HDPE & EX. RCP SHALL BE FIELD INSPECTED AND APPROVED BY THE PROJECT CIVIL ENGINEER, AND MEMOS SHALL BE GIVEN TO THE CITY INSPECTOR.

ALL PVC PIPES WITHIN BUILDING FOOTPRINT SHALL BE SCH 40.

ALL RETAINING WALLS, POOLS, AND SPAS TO BE CONSTRUCTED PER SEPARATE PLANS & PERMITS. SHOWN FOR REFERENCE ONLY.

N

10' 0' 5' 10'
SCALE: 1" = 10'

PERMIT # G12-23

NO.	DATE	REVISIONS	APP'D.	DATE
1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
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ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ○ fax 949.474.5315 ○ www.fuscoe.com
11/4/13
DEBRA VALLE SCHALES RCE#043101 DATE

DEBRA VALLE SCHALES
NO. 43101
EXP. 03/31/14
CIVIL

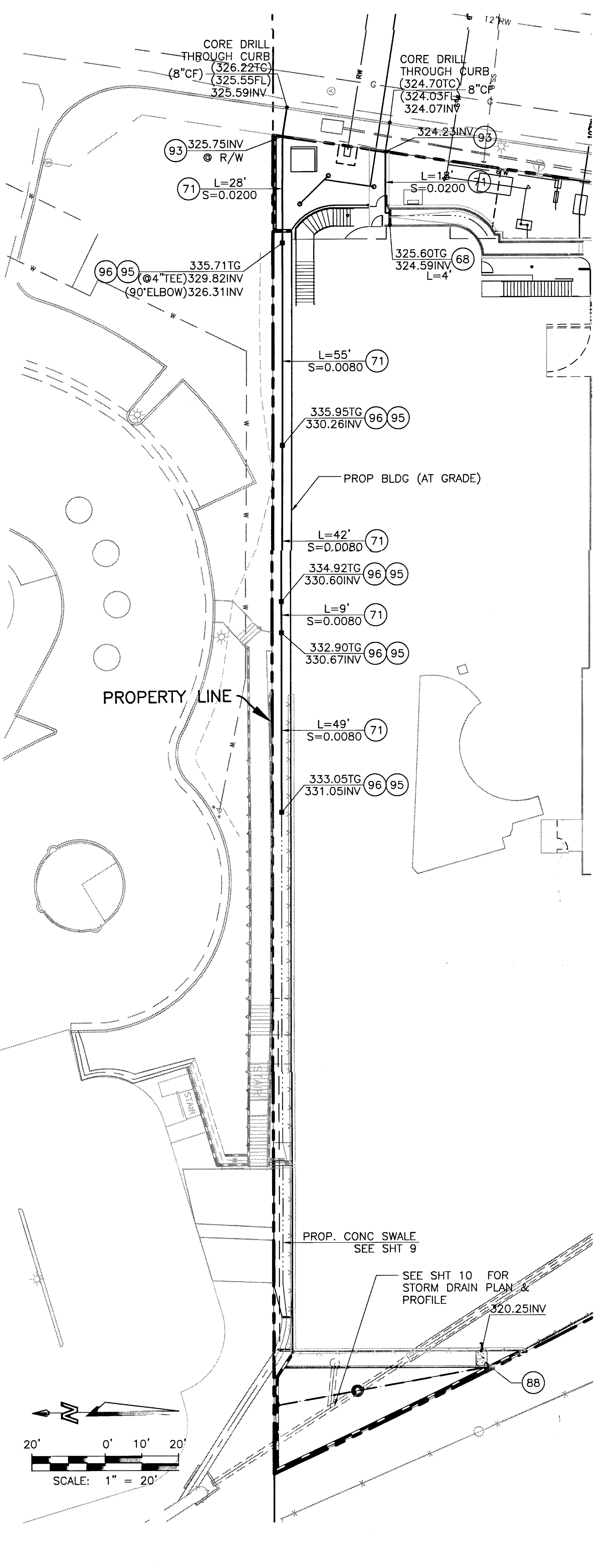
STORM DRAIN PLAN

CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

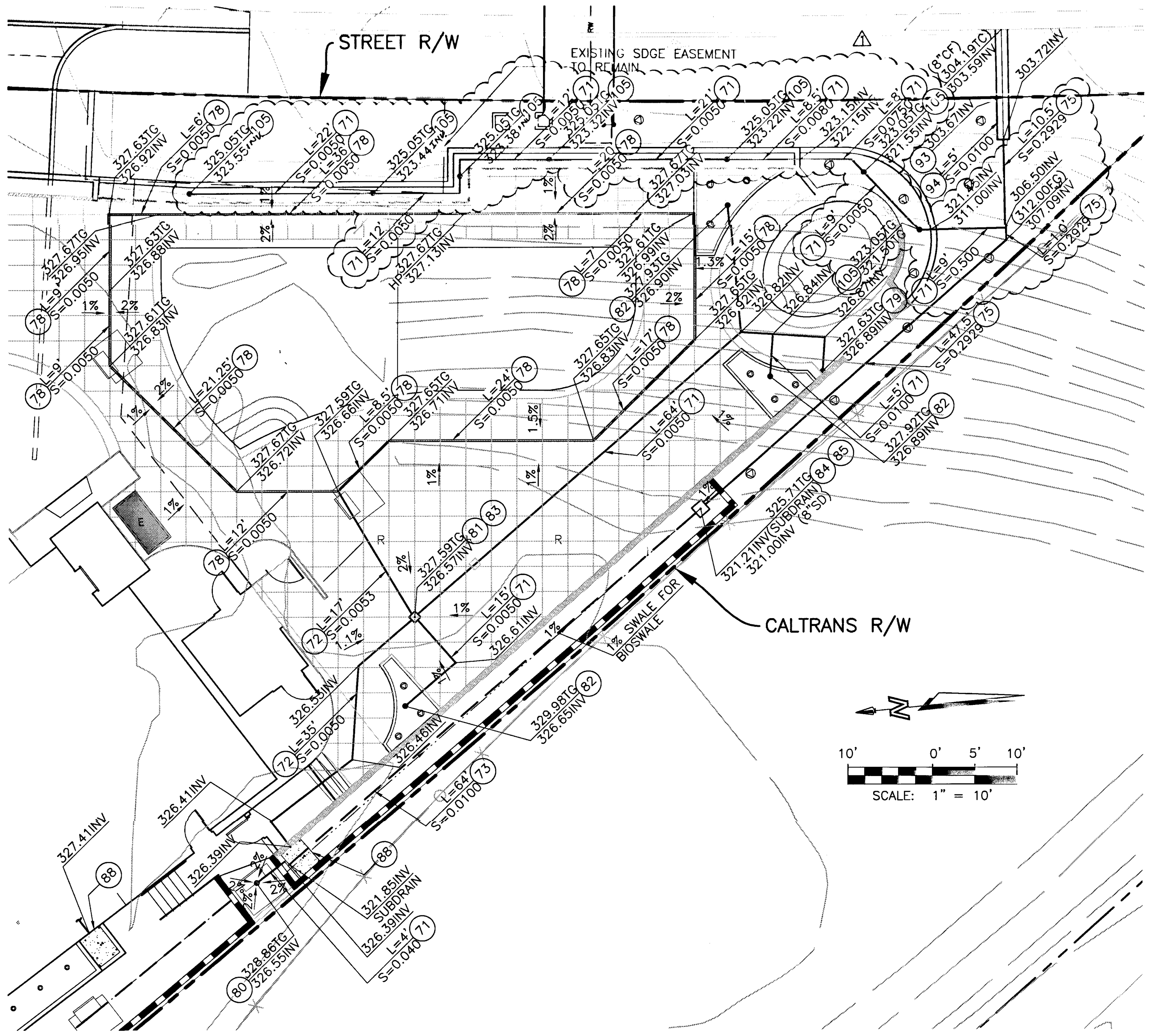
DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

SHEET 10 OF 15

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG10SD.DWG (11-04-13 3:04:53PM) Plotted by: Eric Lissner


CORE DRILL THROUGH CURB
(8"CF)
326.22TC
325.55FL
325.59INV
CORE DRILL THROUGH CURB
324.70TC
324.03FL
324.07INV
8"CF
324.23INV
93
325.75INV @ R/W
71
L=28'
S=0.0200
L=18'
S=0.0200
96 95
335.71TG
(@4"TEE)329.82INV
(90°ELBOW)326.31INV
325.60TG
324.59INV
68
L=4'
L=55'
S=0.0080
335.95TG
330.26INV
PROP BLDG (AT GRADE)
L=42'
S=0.0080
334.92TG
330.60INV
L=9'
S=0.0080
332.90TG
330.67INV
PROPERTY LINE
L=49'
S=0.0080
333.05TG
331.05INV
PROP. CONC SWALE SEE SHT 9
SEE SHT 10 FOR STORM DRAIN PLAN & PROFILE
320.25INV
88
20' 0' 10' 20'
SCALE: 1" = 20'

DETAIL A
SCALE: 1"=20'


STREET R/W
EXISTING SDGE EASEMENT TO REMAIN
CALTRANS R/W
1% SWALE FOR BIOSWALE
10' 0' 5' 10'
SCALE: 1" = 10'

DETAIL B
SCALE: 1"=10'

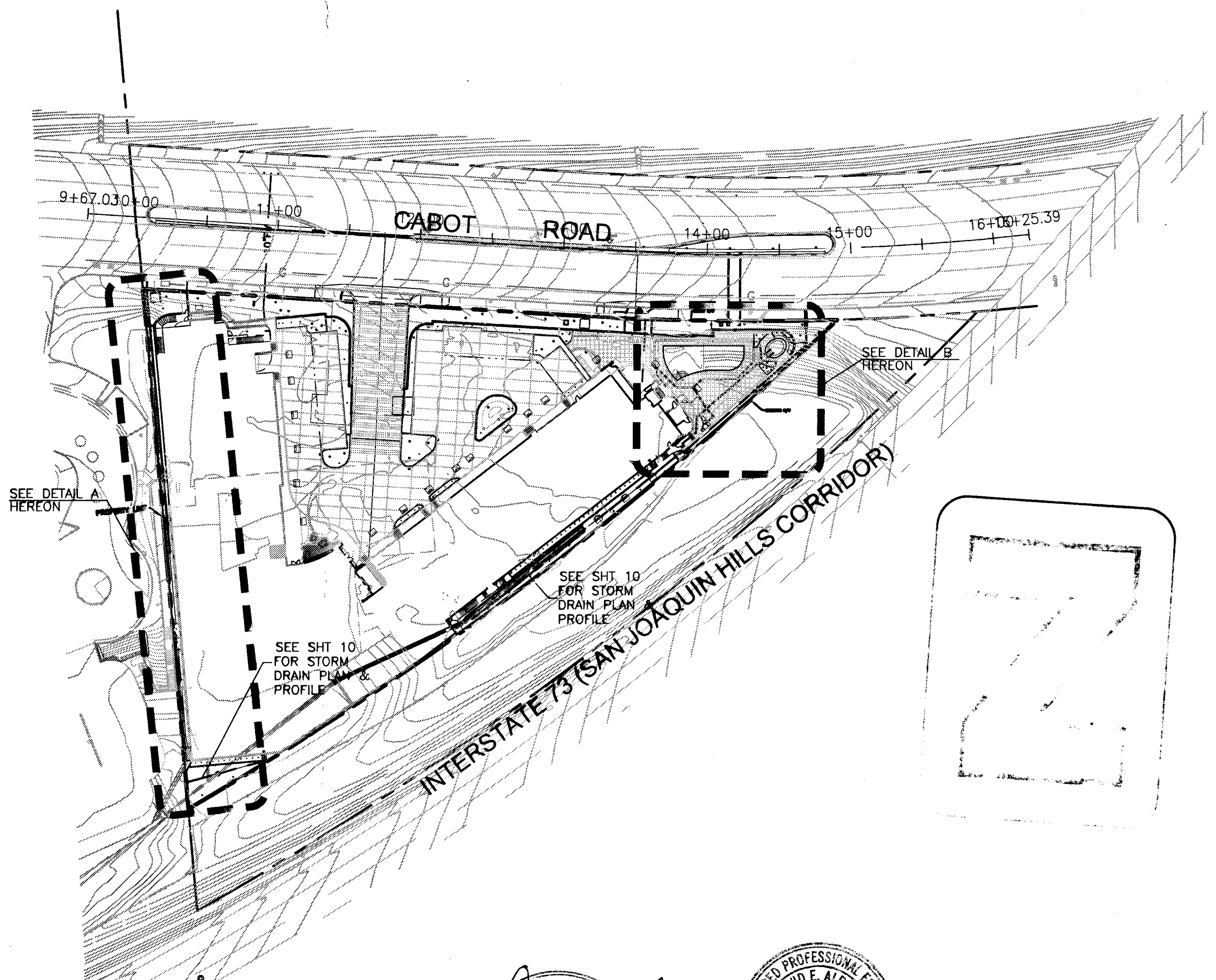
STORM DRAIN CONSTRUCTION NOTES

- (69) CONSTRUCT MINI CHANNEL TRENCH DRAIN PER NDS PART NO 500 & 552B W/BOTTOM OUTLET
- (71) CONSTRUCT 4" PVC, SDR35 INCLUDING FITTINGS
- (72) CONSTRUCT 6" PVC, SDR35 INCLUDING FITTINGS
- (73) CONSTRUCT 4" PERF PVC PIPE (SCH 80) WRAPPED WITH 140 MIRAFI PERMEABLE GEOTEXTILE OR EQUAL
- (75) CONSTRUCT 8" PVC, SDR35 INCLUDING FITTINGS
- (78) CONSTRUCT ½" DURASLOT SLOT DRAIN WITH 4" DIA DRAIN (SPECIAL ORDER) OR EQUAL (SEE DETAIL G – ON SHT 3)
- (79) CONSTRUCT 4" GRATE INLET PER NDS PART NO 917SC (SATIN CHROME)
- (80) CONSTRUCT 6" GRATE INLET AND ADAPTER PER NDS PART NO 642
- (81) CONSTRUCT 12" X 12" GRATE INLET PER NDS PART NO 1210
- (82) CONSTRUCT 4" ATRIUM GRATE PER NDS PART 75
- (83) CONSTRUCT 12" CATCH BASIN PER NDS PART NO 1200 NGB
- (84) CONSTRUCT 18" X 18" ATRIUM GRATE PER NDS PART NO 1891
- (85) CONSTRUCT 18" X 18" LOW PROFILE ADAPTER PER NDS PART NO 1830
- (88) CONSTRUCT 3' X 4' RIPRAP WITH CONCRETE SLURRY – SEE DETAIL I ON SHT 3, 6" DIA (MIN)
- (89) CONNECT PVC TO HDPE END CAP W/"INSERTATEE" PER DETAIL X HEREON
- (93) POINT OF CONNECTION @ R/W
- (94) CONSTRUCT 3"X17" CURB–O–LET (CP–SP 317) WITH STRAIGHT ADAPTOR (CP–SPA 17)
- (95) CONSTRUCT 12"X12" ATRIUM GRATE PER NDS PART 1280
- (96) CONSTRUCT 12"X12" CATCH BASIN WITH BOTTOM OPENING PER NDS PART NO. 1200 NGB
- △1 (105) CONSTRUCT 4" ATRIUM GRATE WHICH CONNECTS TO STRUCTURAL WALL SUBDRAIN SYSTEM WITH VERTICAL 4" PVC (SDR 35)

LEGEND

BLDG	BUILDING
DIA	DIAMETER
FW	FIRE WATER
HP	HIGH POINT
INV	INVERT
L	LENGTH
MIN	MINIMUM
NO	NUMBER
PERF	PERFORATED
PROP	PROPOSED
PVC	POLYVINYL CHLORIDE
R/W	RIGHT OF WAY
RW	RECLAIMED WATER
S	SLOPE
SS	SEWER
SHT	SHEET
TG	TOP OF GRATE
W	WATER
— - - —	RIGHT OF WAY
— - —	CENTER LINE

ALL RETAINING WALLS, POOLS, AND SPAS TO BE CONSTRUCTED PER SEPARATE PLANS & PERMITS. SHOWN FOR REFERENCE ONLY.


9+67.03
10+00
11+00
CABOT ROAD
14+00
15+00
16+00
16+25.39
SEE DETAIL B HEREON
SEE DETAIL A HEREON
SEE SHT 10 FOR STORM DRAIN PLAN & PROFILE
SEE SHT 10 FOR STORM DRAIN PLAN & PROFILE
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
N

DEBRA VALLE SCHALES
NO. 43101
11/4/13
CIVIL

DAVID E. ALBUS
No. 2455
Exp. 12/31/14
GEOTECHNICAL

PERMIT # G12-23

DIG ALERT

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

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

CALL BEFORE YOU DIG

CAUTION - NOTICE TO CONTRACTOR

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NO.	DATE	REVISIONS	APP'D.	DATE
△1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE
ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ◦ fax 949.474.5315 ◦ www.fuscoe.com
DEBRA VALLE SCHALES RCE#043101 11/4/13
DATE

DEBRA VALLE SCHALES
NO. 43101
EXP. 03/31/14
CIVIL

YARD DRAIN PLAN

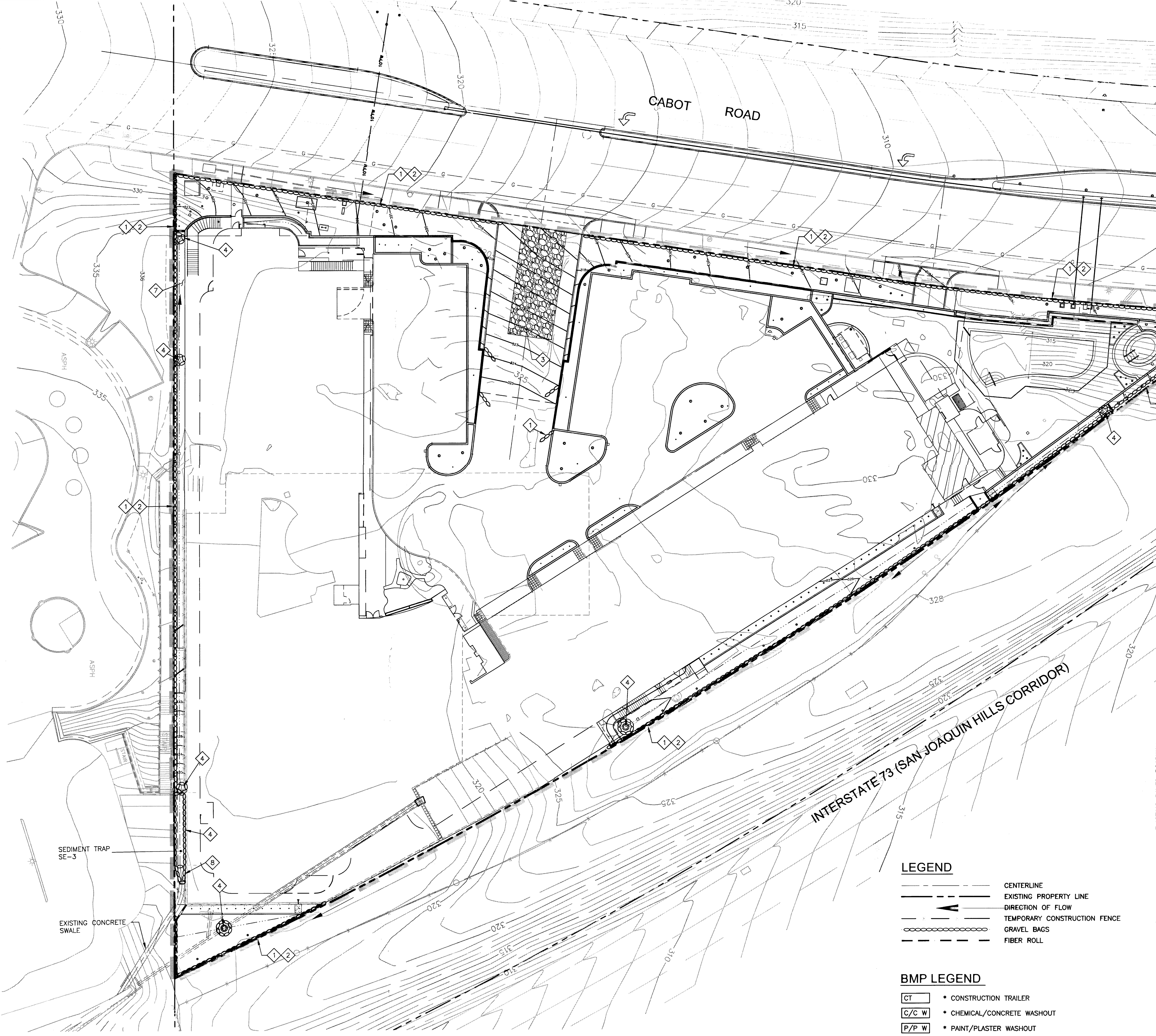
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

SHEET 11 OF 15

2013/03/12
CAREER LOFTS
PRECISE GRADING PLAN
3RD GRADING PLAN CHECK SUBMITTAL

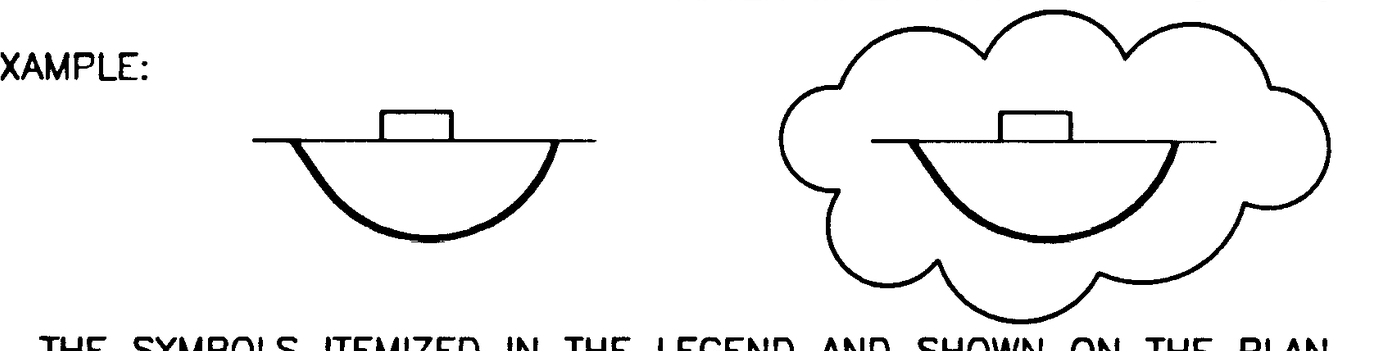
P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG11YD.DWG (11-04-13 3:05:15PM) Plotted by: Eric Lissner


CABOT ROAD
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
SEDIMENT TRAP SE-3
EXISTING CONCRETE SWALE
ASPH
330
325
320
315
310
305
335
328

SUPERVISOR'S INSTRUCTIONS

1. IMPLEMENTATION OF THIS PLAN SHALL BE THE RESPONSIBILITY OF THE CONSTRUCTION SUPERVISOR. THIS PLAN SHALL BE REVISED BY THE CONSTRUCTION SUPERVISOR AS AUTHORIZED AGENT OF THE OWNER TO REFLECT THE CURRENT STATUS OF THE CONSTRUCTION SITE.

EXAMPLE:


AFTER INLET PROTECTION IS REMOVED

2. THE SYMBOLS ITEMIZED IN THE LEGEND AND SHOWN ON THE PLAN WILL BE MODIFIED BY THE CONSTRUCTION SUPERVISOR WHEN CONSTRUCTION CONDITIONS CHANGE BY USING A MARKING PEN ON THIS PLAN AND NOTING THE CHANGE AND DATE AS FOLLOWS:

   USING A MARKING PEN, CROSS OUT ITEMS SHOWN ON THE PLAN THAT ARE NO LONGER NECESSARY DUE TO THE CONSTRUCTION OF IMPROVEMENTS, ELIMINATION FROM THE SITE, OR RELOCATION OF THE ITEM. SYMBOLS SHOULD BE ADDED TO THE PLAN TO DELINEATE NEW ITEMS OR RELOCATIONS ON THE SITE.

   USING A MARKING PEN, DASH THE STORM DRAIN LINE AFTER THE CONSTRUCTION OF THE STORM DRAIN LINE.

   USING A MARKING PEN, DARKEN IN THE CATCH BASIN SYMBOL ON THE PLAN AFTER CONSTRUCTION IS COMPLETED.

   USING A MARKING PEN, CLOUD LANDSCAPE AREAS WHICH HAVE BEEN PLANTED AND LABEL THE AREA WITH A CIRCLED LETTER FOR REFERENCE.
3. WHEN MARKING ANY CHANGES ON THE PLAN, BE SURE TO NOTE THE DATE ADJACENT TO THE MARKED REVISION.
4. WHEN MAKING ANY REVISIONS ON THE PLAN, THE SUPERVISOR SHALL NOTE THE DATE ON THE SUPERVISOR'S "LATEST REVISION" LOG.

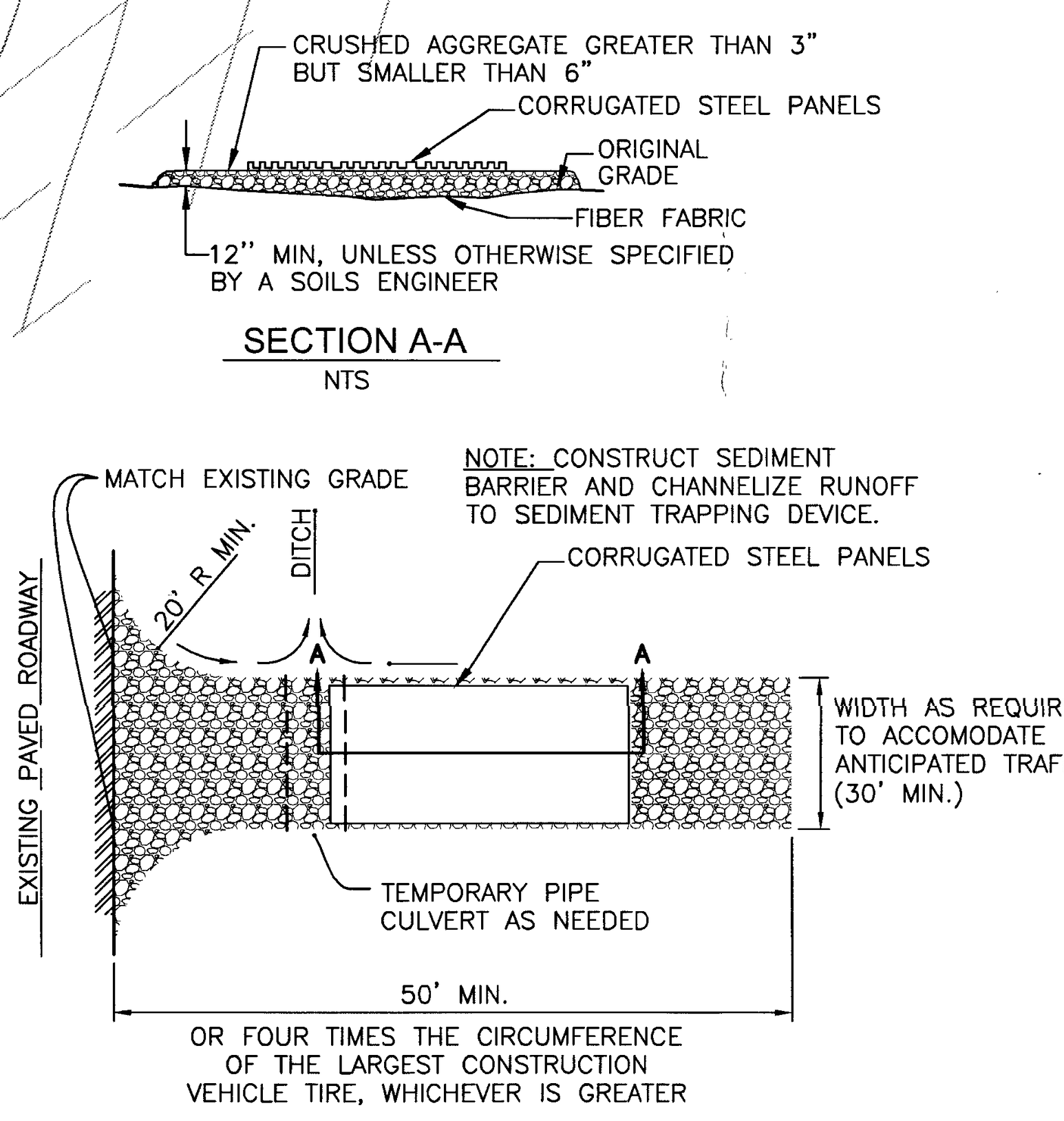
LIST OF CONTRACTORS

THE FOLLOWING CONTRACTORS AND/OR SUBCONTRACTORS HAVE BEEN MADE AWARE OF THE CONDITIONS OF THIS PLAN AND RESPONSIBLE FOR COMPLIANCE OF ITEMS SPECIFIED IN THE GENERAL CONSTRUCTION ACTIVITY STORM WATER PERMIT AS THEY RELATE TO THEIR SPECIFIC MATERIALS AND/OR TASKS.

	NAME / COMPANY	SIGNATURE / DATE
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

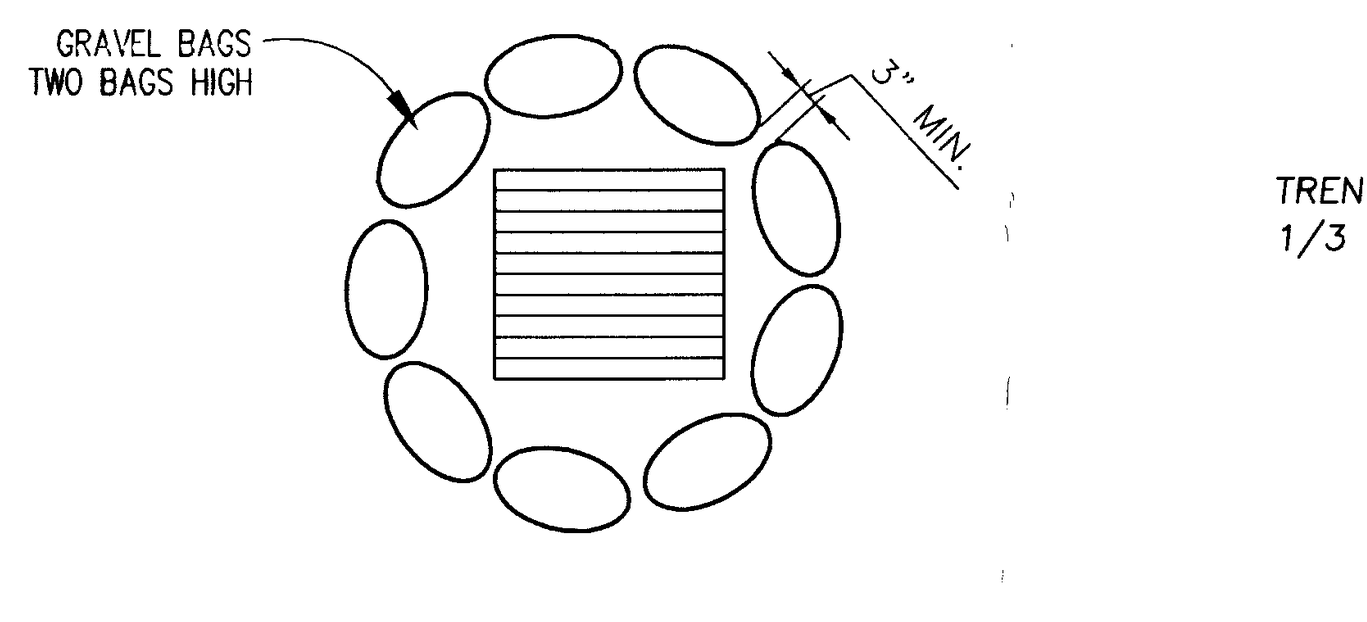
EROSION CONTROL NOTES

1. INSTALL ONE ROW OF GRAVEL BAGS, TWO TIERS HIGH
2. INSTALL TEMPORARY CONSTRUCTION FENCE
3. INSTALL "TREK-TRAK" PLATE OR APPROVED EQUAL TO PROTECT INGRESS/EGRESS ROUTES PER DETAIL 1, SHT.-14. EXACT LOCATION TO BE DETERMINED BY CONTRACTOR.
4. INSTALL GRAVEL BAGS AT PROPOSED GRATE INLET PER DETAIL 2, SHT.-14.
5. INSTALL FIBER ROLL EVERY 15-FEET WHERE SHOWN AND PER DETAIL 3, SHT.-14 TO DISTURBED SLOPE.
6. INSTALL COMPOST BLANKET (EC-14).
7. INSTALL HYDROSEEDING (EX-4)
8. INSTALL TEMPORARY 6" PVC PIPE W/ATRIUM GRATE INLET (SEE DETAIL 4)


CRUSHED AGGREGATE GREATER THAN 3" BUT SMALLER THAN 6"
CORRUGATED STEEL PANELS
ORIGINAL GRADE
FIBER FABRIC
12" MIN, UNLESS OTHERWISE SPECIFIED BY A SOILS ENGINEER
SECTION A-A
NTS
MATCH EXISTING GRADE
NOTE: CONSTRUCT SEDIMENT BARRIER AND CHANNELIZE RUNOFF TO SEDIMENT TRAPPING DEVICE.
20' R MIN.
DITCH
A
A
CORRUGATED STEEL PANELS
EXISTING PAVED ROADWAY
WIDTH AS REQUIRED TO ACCOMODATE ANTICIPATED TRAFFIC (30' MIN.)
TEMPORARY PIPE CULVERT AS NEEDED
50' MIN.
OR FOUR TIMES THE CIRCUMFERENCE OF THE LARGEST CONSTRUCTION VEHICLE TIRE, WHICHEVER IS GREATER

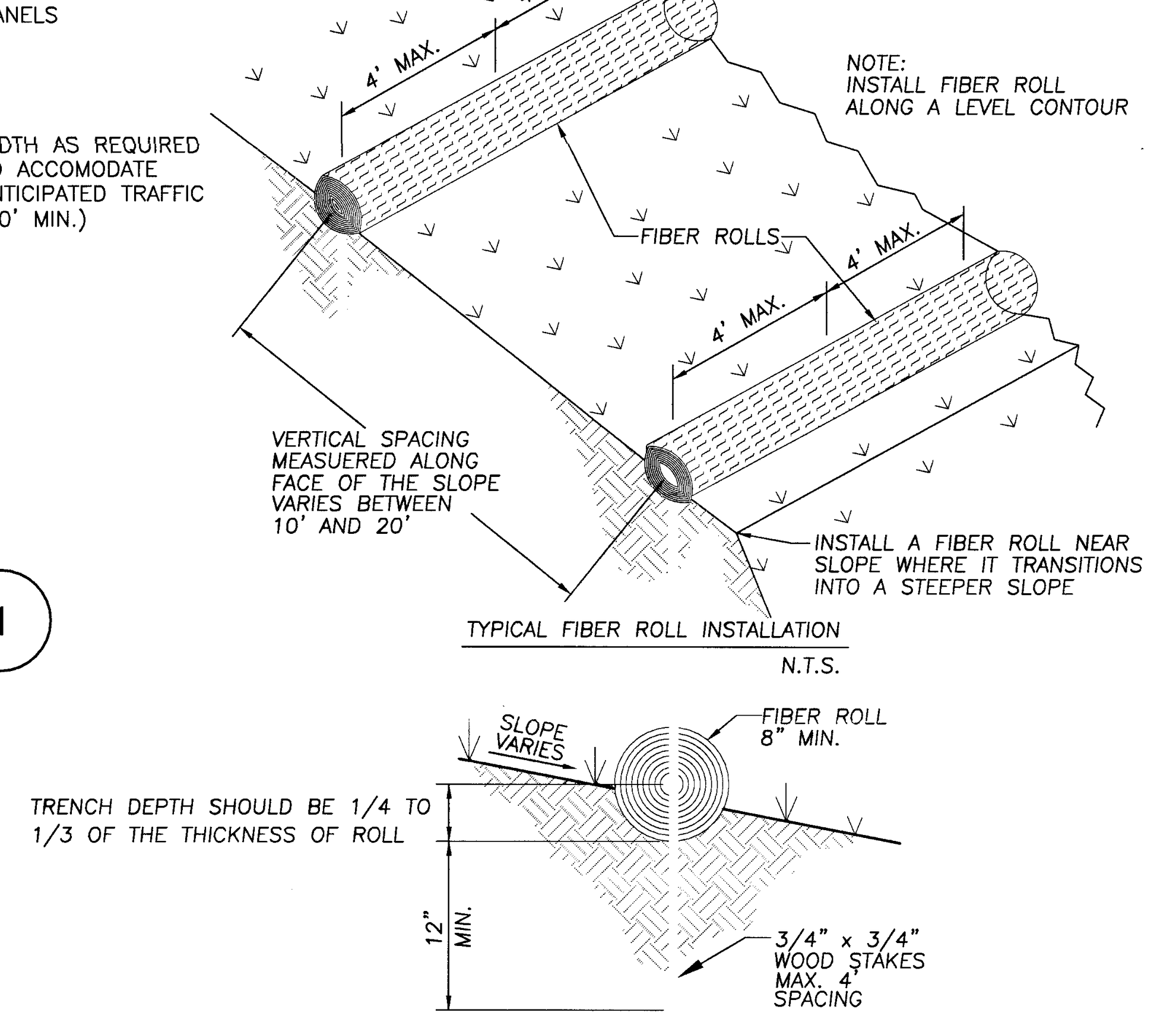
STABILIZED CONSTRUCTION ENTRANCE/EXIT DETAIL
1

NTS


GRAVEL BAGS TWO BAGS HIGH
3" MIN.

TYPICAL GRATE INLET PROTECTION
2

NTS


4' MAX.
4' MAX.
NOTE: INSTALL FIBER ROLL ALONG A LEVEL CONTOUR
FIBER ROLLS
4' MAX.
4' MAX.
VERTICAL SPACING MEASUERED ALONG FACE OF THE SLOPE VARIES BETWEEN 10' AND 20'
INSTALL A FIBER ROLL NEAR SLOPE WHERE IT TRANSITIONS INTO A STEEPER SLOPE
TYPICAL FIBER ROLL INSTALLATION
N.T.S.
SLOPE VARIES
FIBER ROLL 8" MIN.
TRENCH DEPTH SHOULD BE 1/4 TO 1/3 OF THE THICKNESS OF ROLL
12" MIN.
3/4" x 3/4" WOOD STAKES MAX. 4' SPACING

TYPICAL FIBER ROLL INSTALLATION
3

NTS

LEGEND

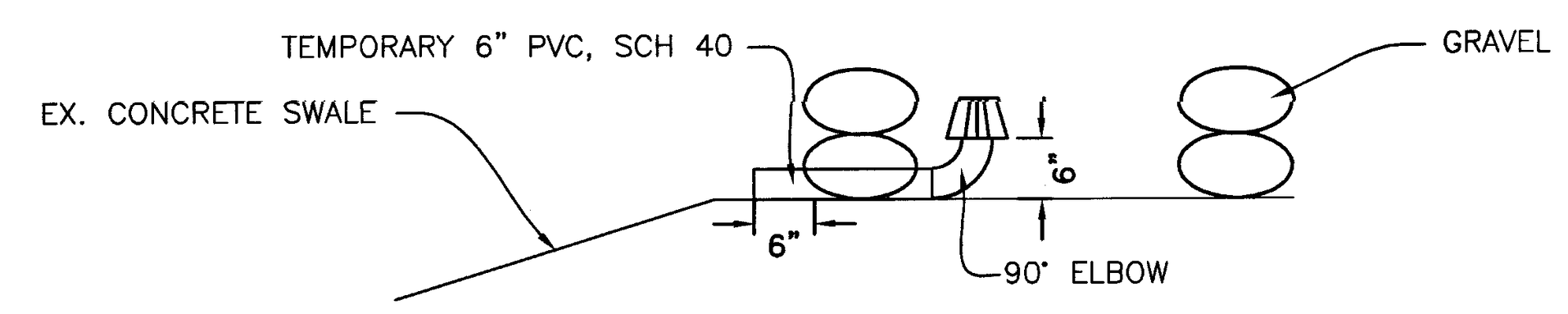
— - — - —	CENTERLINE
━━ ━ ━ ━━	EXISTING PROPERTY LINE
◀──	DIRECTION OF FLOW
—x—x—	TEMPORARY CONSTRUCTION FENCE
○○○○○○○○	GRAVEL BAGS
━ ━ ━ ━	FIBER ROLL

BMP LEGEND

CT	* CONSTRUCTION TRAILER
C/C W	* CHEMICAL/CONCRETE WASHOUT
P/P W	* PAINT/PLASTER WASHOUT
STOCK	* SAND/GRAVEL BAG STOCKPILE
STORE	* STORAGE AREA
CONST	* ACTIVE CONSTRUCTION AREA
DONE	* COMPLETED/OCCUPIED AREA
VEH	* VEHICLE/STAGING AREA

* TO BE DETERMINED ON-SITE BY PROJECT SUPERINTENDENT AND UPDATED HEREON

IT IS THE CONTRACTOR'S RESPONSIBILITY TO KEEP THIS ECP MAP CURRENT, ADDING ITEMS AND MOVING THEM AS NECESSARY AND/OR REMOVING ITEMS WHEN NO LONGER NEEDED. THE CONTRACTOR MAY BE ASKED AT ANY TIMETO PRODUCE THIS MAP TO CITY OF REGULATORY OFFICIALS. FAILURE TO KEEP IT CURRENT CAN RESULT IN A FINE. HAND-MARKED ALTERATIONS WITH INITIALS AND DATE ARE SUFFICIENT.


TEMPORARY 6" PVC, SCH 40
EX. CONCRETE SWALE
GRAVEL BAGS
6"
6"
90° ELBOW

TEMPORARY PIPE W/ GRATE INLET
4

NTS

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AT LEAST TWO DAYS BEFORE YOU DIG

CALL BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

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DEBRA VALLE SCHALES NO. 43101 11/4/13 CIVIL

DAVID E. ALBUS No. 2455 Exp. 12/31/14 GEOTECHNICAL

20' 0' 10' 20'
SCALE: 1" = 20'

PERMIT # G12-23

NO.	DATE	REVISIONS	APP'D.	DATE
1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE
ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ∘ fax 949.474.5315 ∘ www.fuscoe.com
11/4/13
DEBRA VALLE SCHALES RCE#043101 DATE

NO. 43101
EXP. 03/31/14

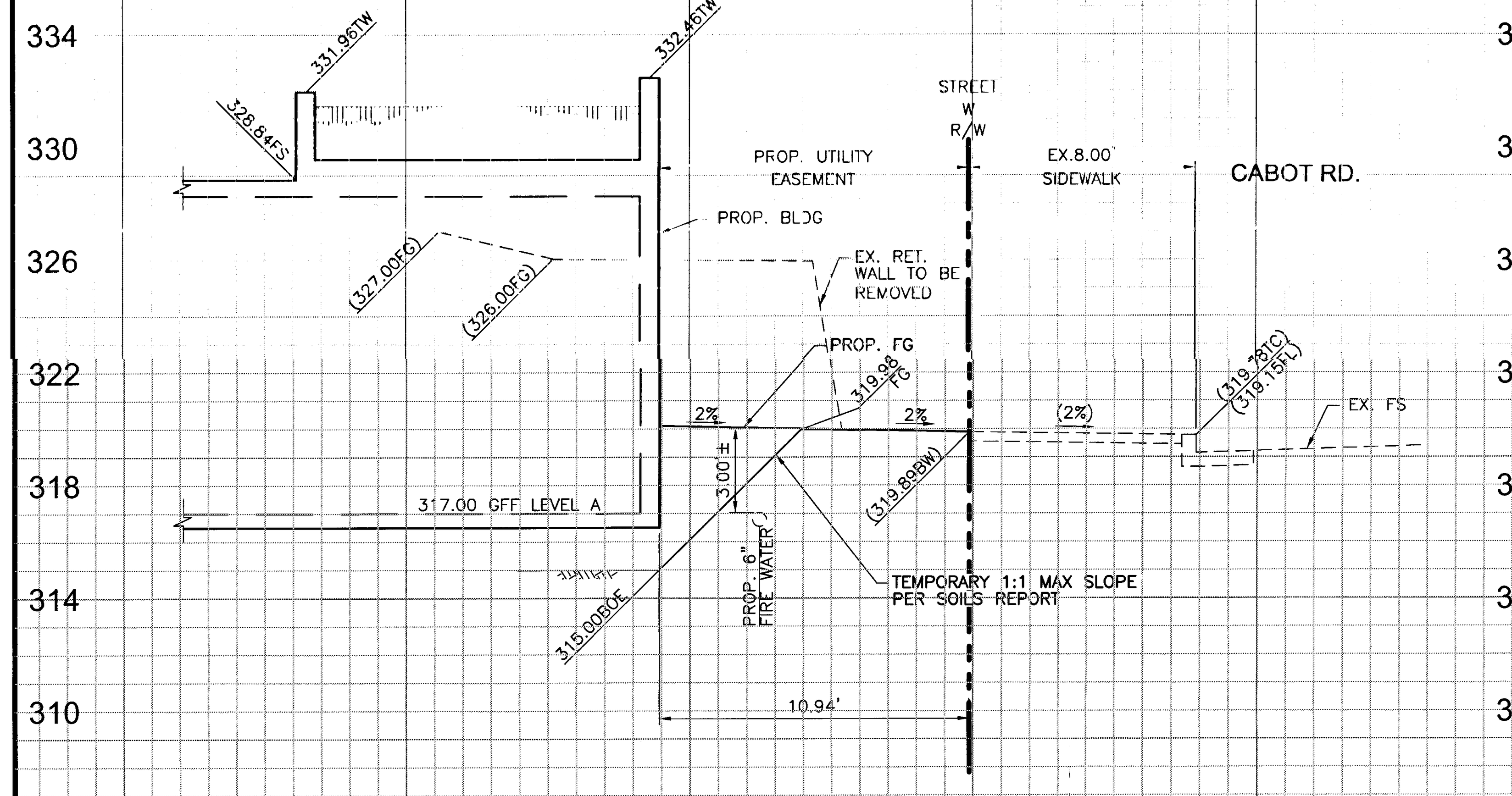
EROSION CONTROL PLAN
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

SHEET 12 OF 15

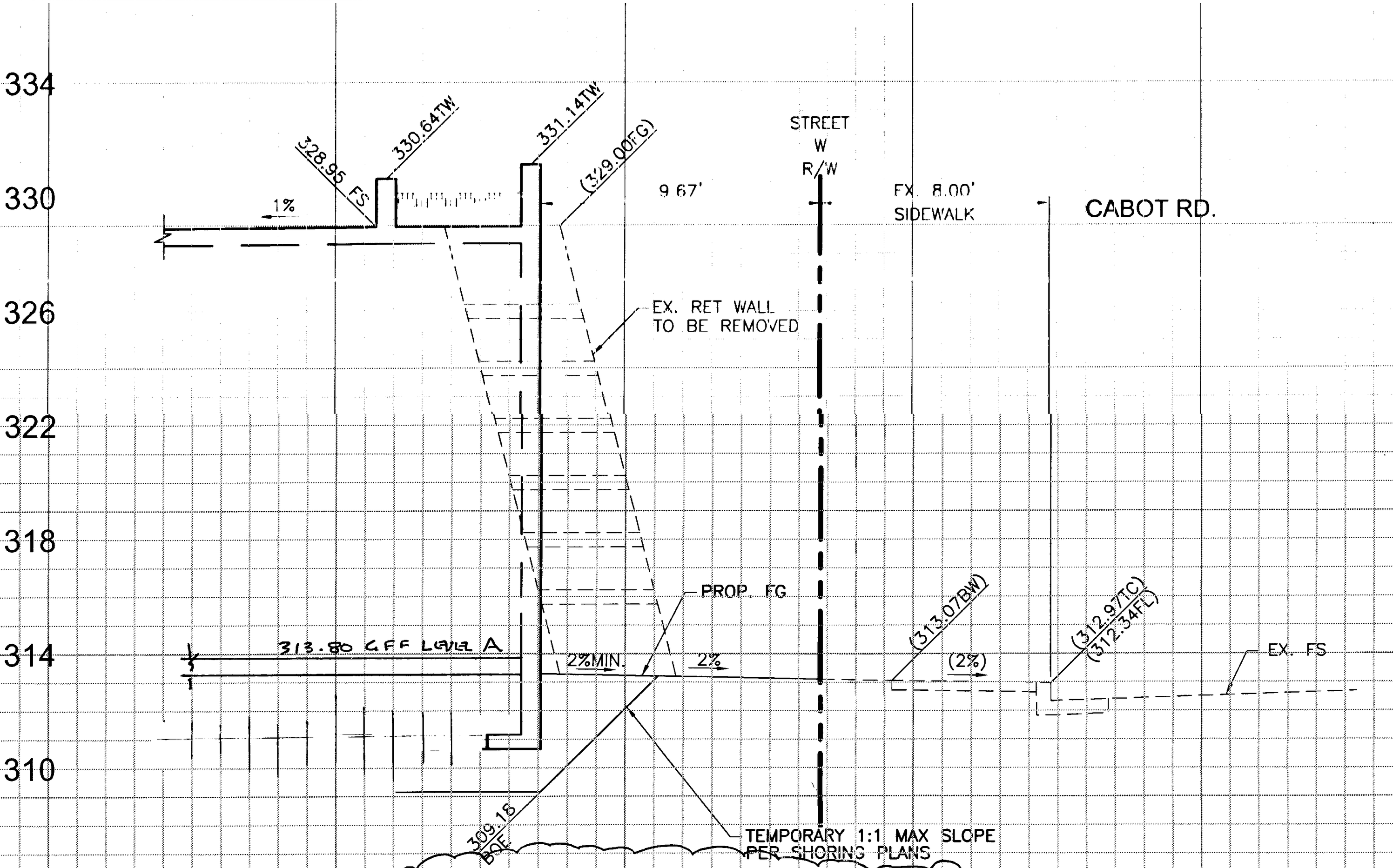
2013/03/12
CAREER LOFTS
PRECISE GRADING PLAN
3RD GRADING PLAN CHECK SUBMITTAL

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG12EC.DWG (11-04-13 3:05:34PM) Plotted by: Eric Lissner


334
330
326
322
318
314
310
306
331.86TW
332.45TW
328.64FS
STREET
W
R/W
PROP. UTILITY EASEMENT
EX. 8.00' SIDEWALK
CABOT RD.
PROP. BLDG
(327.00FG)
(326.00FG)
EX. RET. WALL TO BE REMOVED
PROP. FG
319.08 FG
(319.28TC)
(319.15FL)
2%
(2%)
EX. FS
3.00'±
317.00 GFF LEVEL A
(319.89BW)
PROP. 6" FIRE WATER
TEMPORARY 1:1 MAX SLOPE PER SOILS REPORT
315.00BOE
10.94'

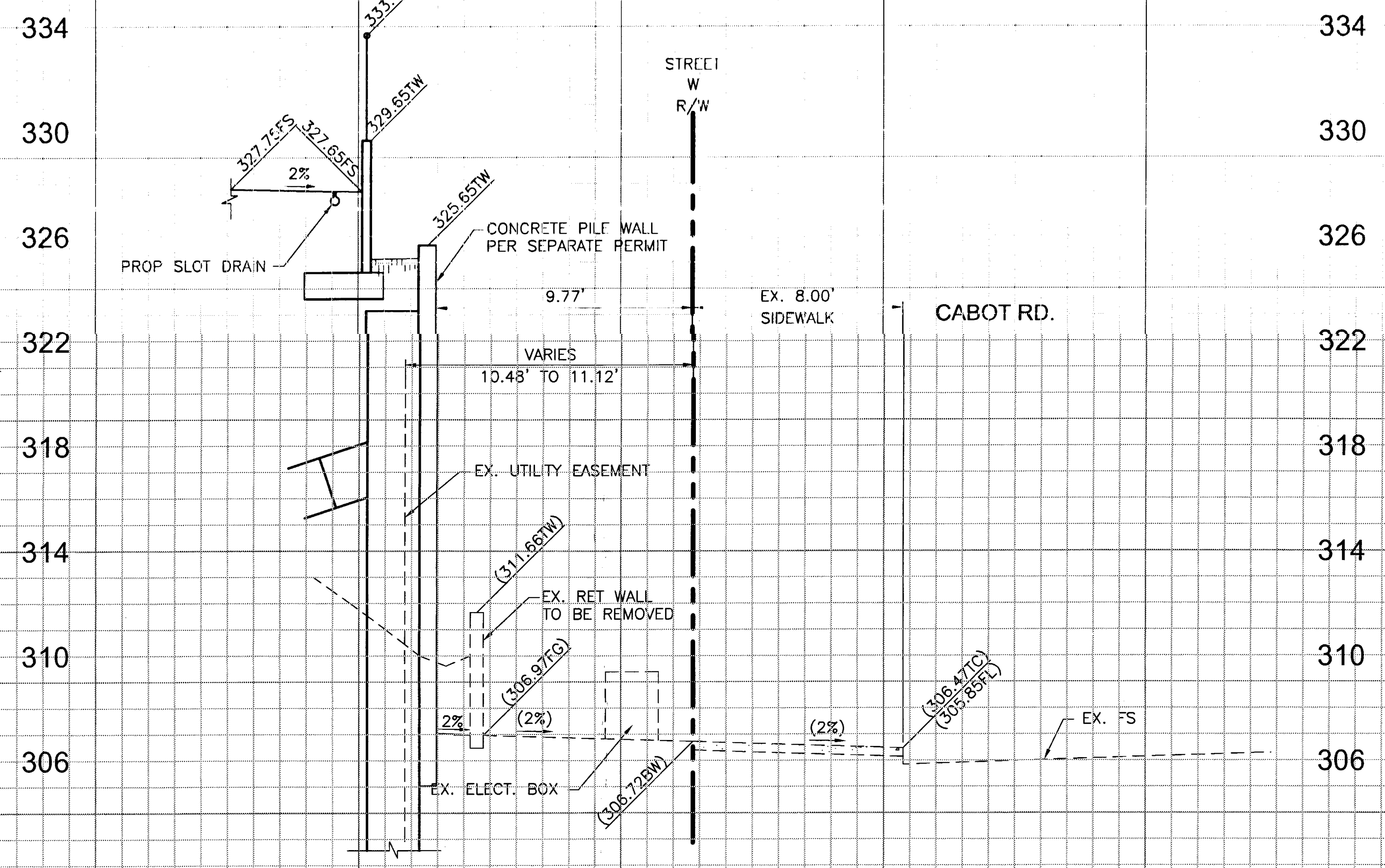
CABOT ROAD-STA 11+25.00 Ⓐ

SCALE: 1"=4'


334
330
326
322
318
314
310
306
328.95 FS
330.64TW
331.14TW
1%
(329.00FG)
9.67'
STREET
W
R/W
EX. 8.00' SIDEWALK
CABOT RD.
EX. RET WALL TO BE REMOVED
PROP. FG
313.80 GFF Level A
2%MIN.
2%
(313.07BW)
(312.97TC)
(312.34FL)
(2%)
EX. FS
309.18 BOE
TEMPORARY 1:1 MAX SLOPE PER SHORING PLANS

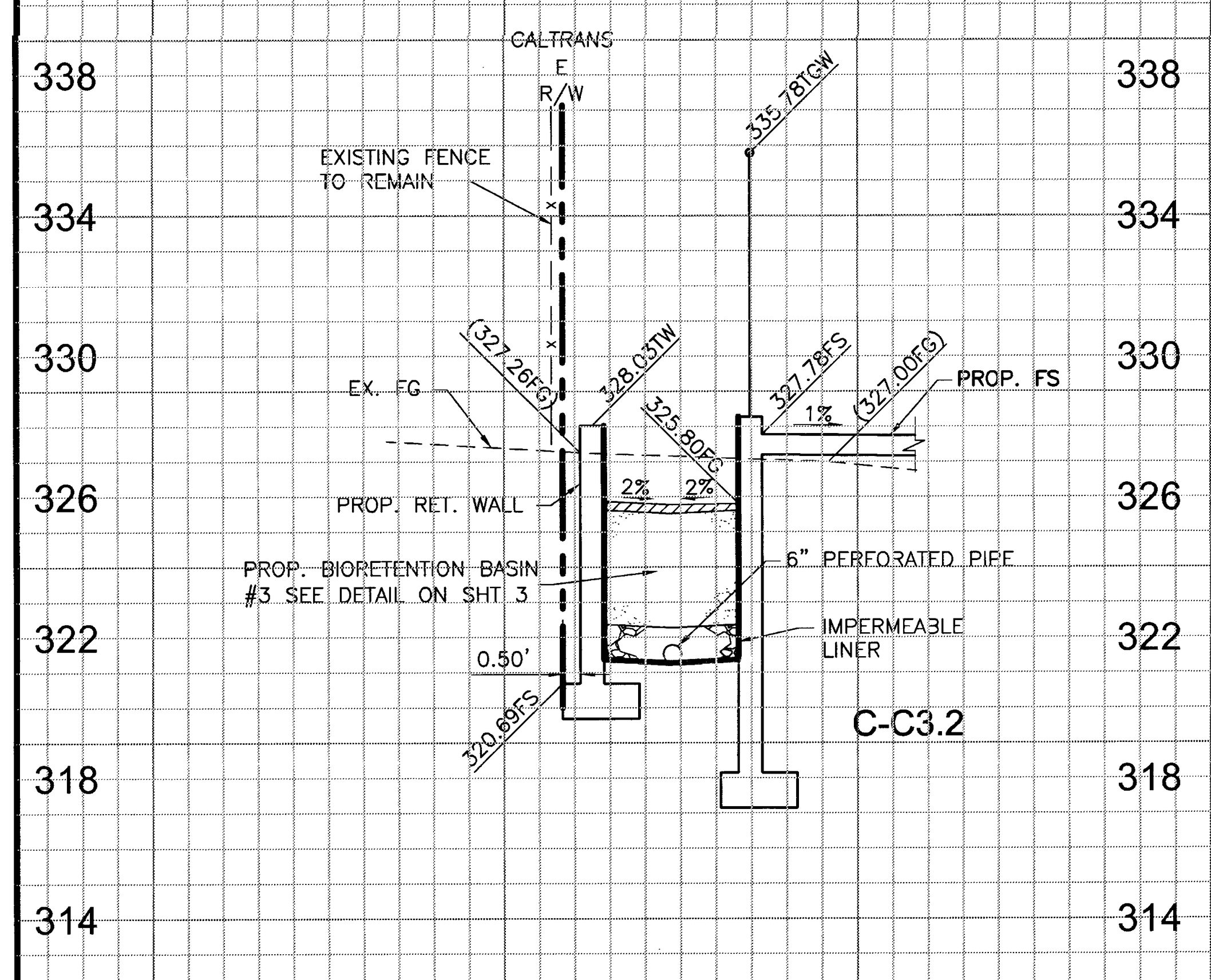
CABOT ROAD-STA 12+50.00 Ⓑ

SCALE: 1"=4'


334
330
326
322
318
314
310
306
333.10TW
329.65TW
327.75FS
327.65FS
2%
PROP SLOT DRAIN
325.65TW
CONCRETE PILE WALL PER SEPARATE PERMIT
STREET
W
R/W
9.77'
EX. 8.00' SIDEWALK
CABOT RD.
VARIES 10.48' TO 11.12'
EX. UTILITY EASEMENT
(311.66TW)
EX. RET WALL TO BE REMOVED
(306.97FG)
2%
(2%)
(306.47TC)
(305.85FL)
EX. FS
EX. ELECT. BOX
(305.72BW)

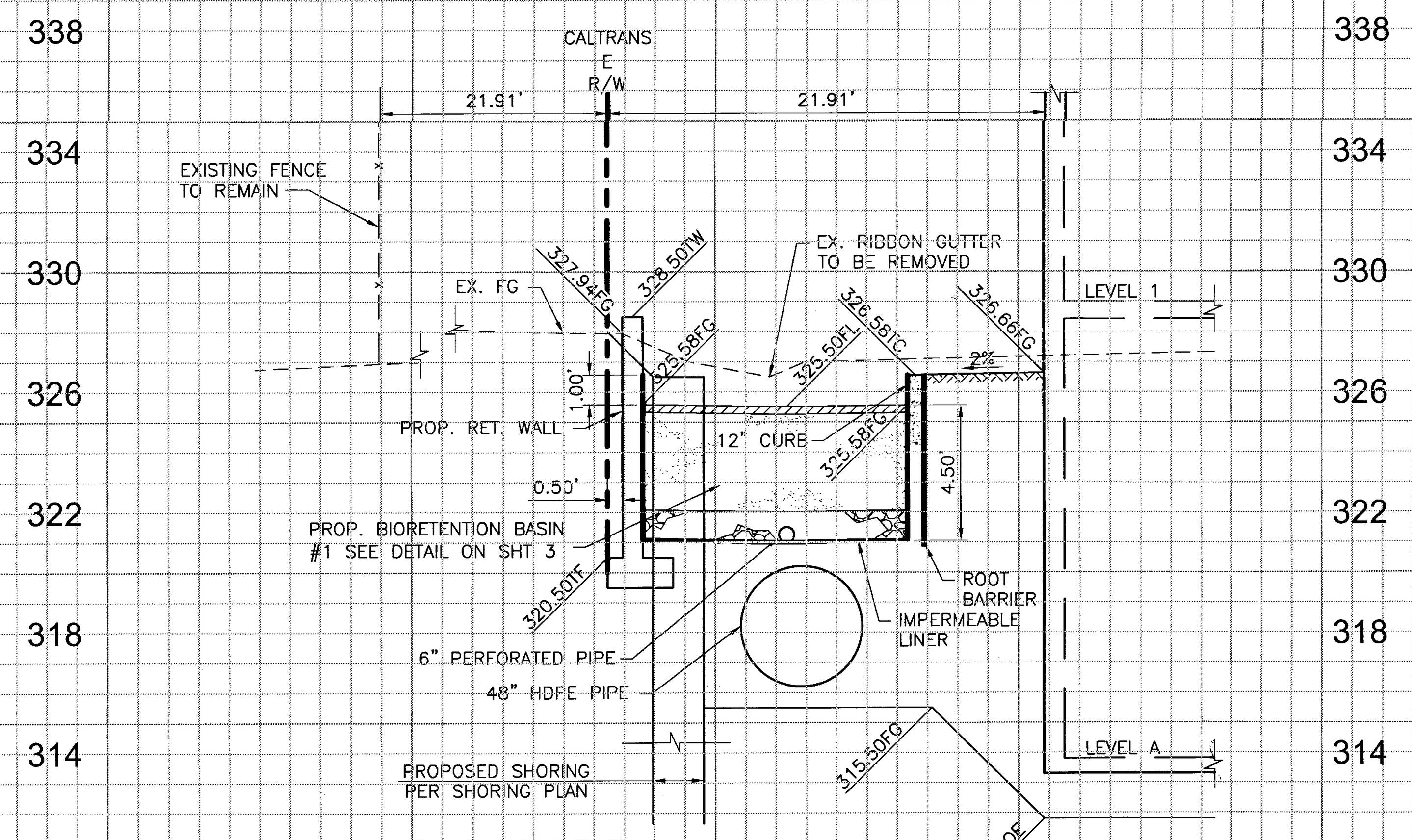
CABOT ROAD-STA 14+00.00 Ⓒ

SCALE: 1"=4'


338
334
330
326
322
318
314
310
CALTRANS
R/W
335.78TW
EXISTING FENCE TO REMAIN
EX. FG
(327.26FG)
328.03TW
327.78FS
(327.00FG)
1%
PROP. FS
2%
PROP. RET. WALL
325.80FS
PROP. BIORETENTION BASIN #3 SEE DETAIL ON SHT 3
6" PERFORATED PIPE
IMPERMEABLE LINER
0.50'
320.89FS
C-C3.2

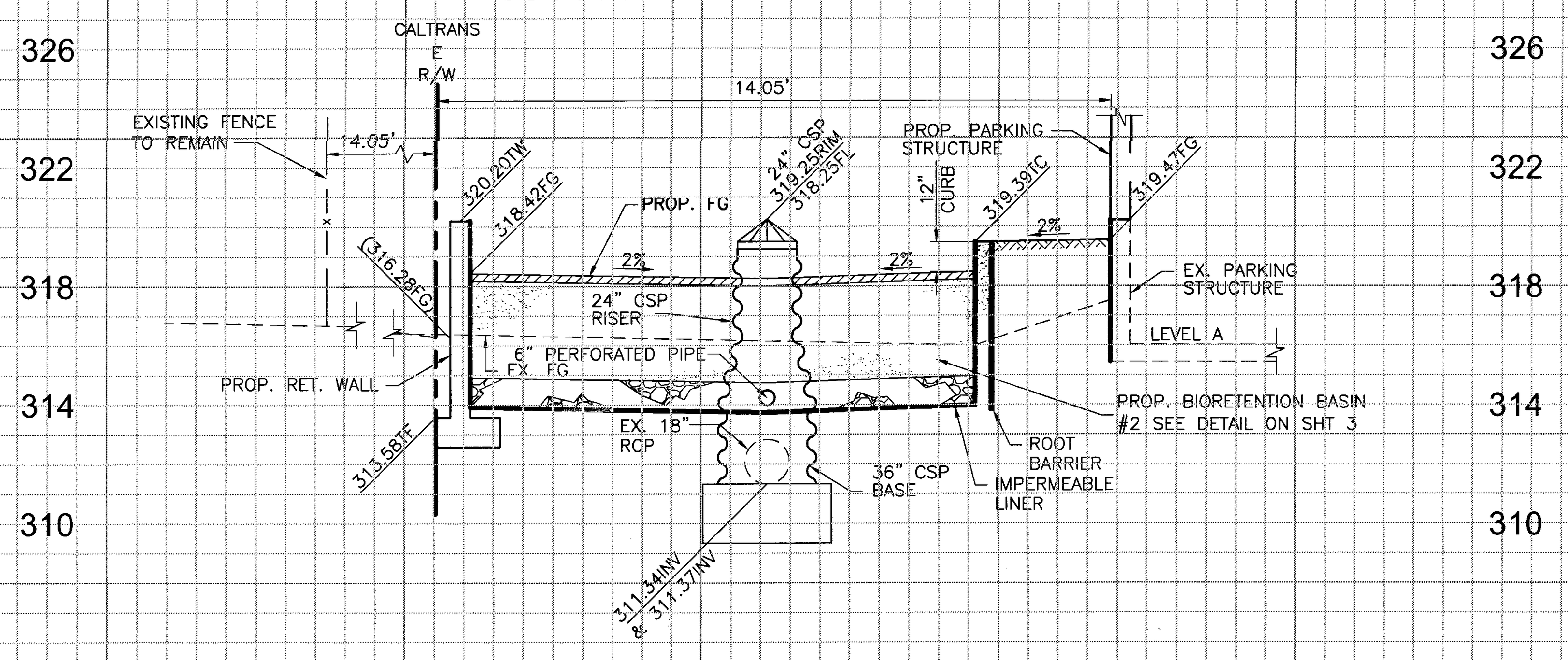
SECTION D-D Ⓓ

SCALE: 1"=4'


338
334
330
326
322
318
314
CALTRANS
R/W
21.91'
21.91'
EXISTING FENCE TO REMAIN
EX. FG
327.84FG
328.50TW
325.58FG
EX. RIBBON GUTTER TO BE REMOVED
326.66FG
LEVEL 1
325.50FL
325.58FG
2%
1.00'
PROP. RET. WALL
12" CURB
0.50'
4.50
PROP. BIORETENTION BASIN #1 SEE DETAIL ON SHT 3
320.50FF
ROOT BARRIER
IMPERMEABLE LINER
6" PERFORATED PIPE
48" HDPE PIPE
LEVEL A
PROPOSED SHORING PER SHORING PLAN
315.50FG
311.81BOE

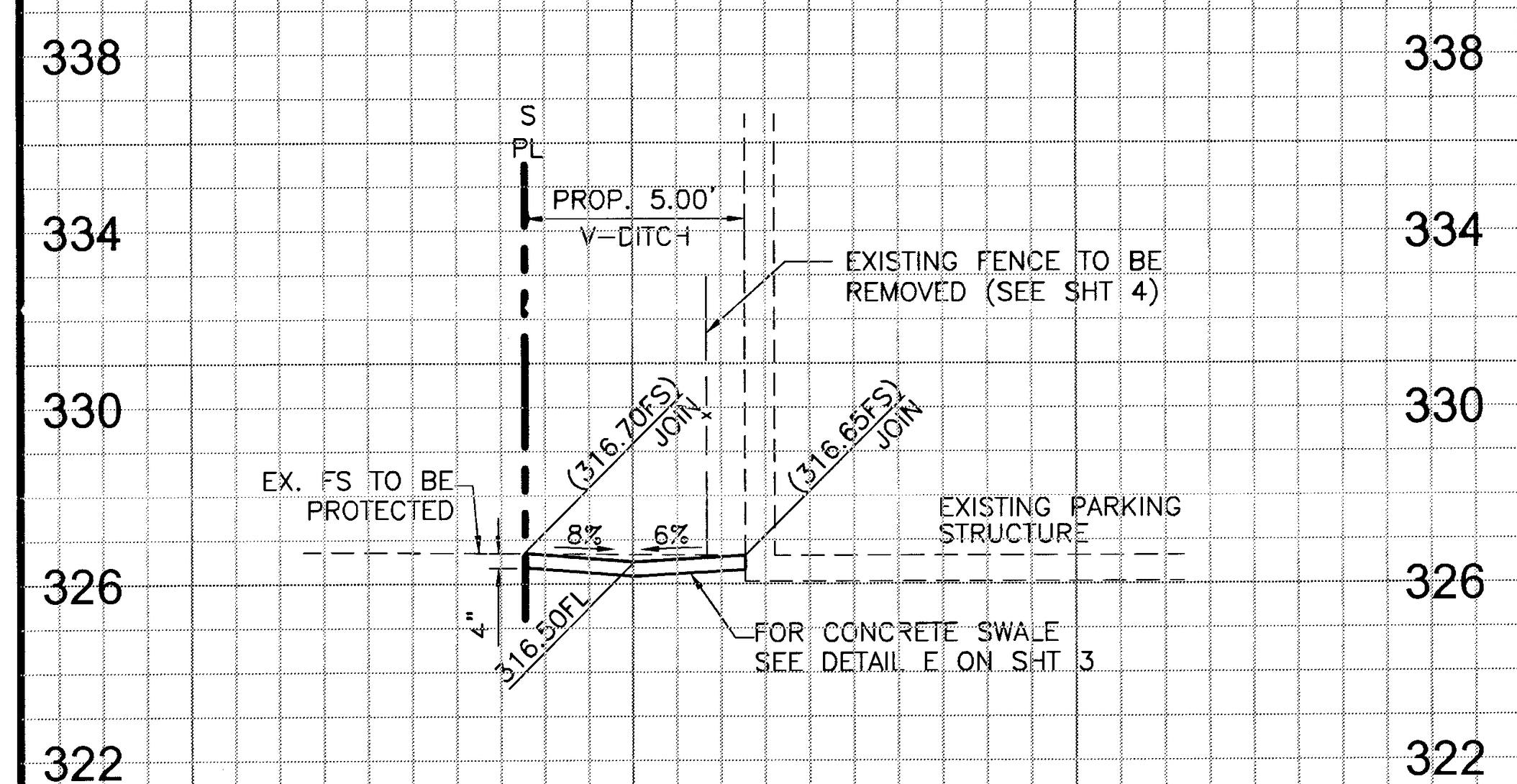
SECTION E-E Ⓔ

SCALE: 1"=4'


326
322
318
314
310
CALTRANS
R/W
14.05'
EXISTING FENCE TO REMAIN
4.05'
320.20TW
318.42FG
PROP. FG
24" CSP
319.25RIM
318.25FG
12" CURB
PROP. PARKING STRUCTURE
319.39TC
319.47FG
2%
2%
2%
(316.28FG)
24" CSP RISER
EX. PARKING STRUCTURE
LEVEL A
6" PERFORATED PIPE
EX. FG
PROP. RET. WALL
PROP. BIORETENTION BASIN #2 SEE DETAIL ON SHT 3
EX. 18" RCP
ROOT BARRIER
IMPERMEABLE LINER
36" CSP BASE
313.58FF
311.34INV
& 311.37INV

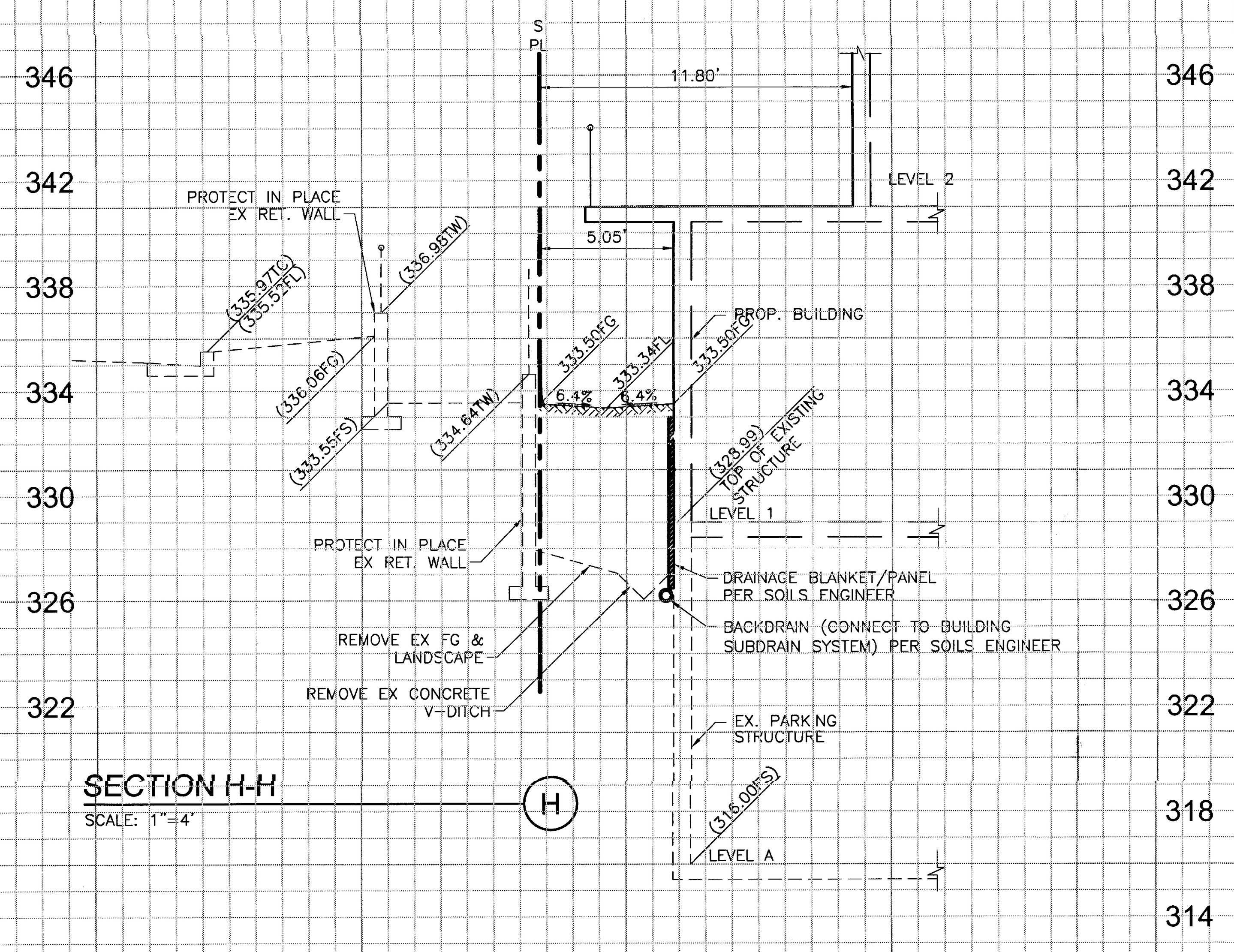
SECTION F-F Ⓕ

SCALE: 1"=4'


338
334
330
326
322
S
PL
PROP. 5.00' V-DITCH
EXISTING FENCE TO BE REMOVED (SEE SHT 4)
EX. FS TO BE PROTECTED
(316.70FS) JOIN
(316.65FS) JOIN
EXISTING PARKING STRUCTURE
8%
6%
316.50FL
FOR CONCRETE SWALE SEE DETAIL E ON SHT 3

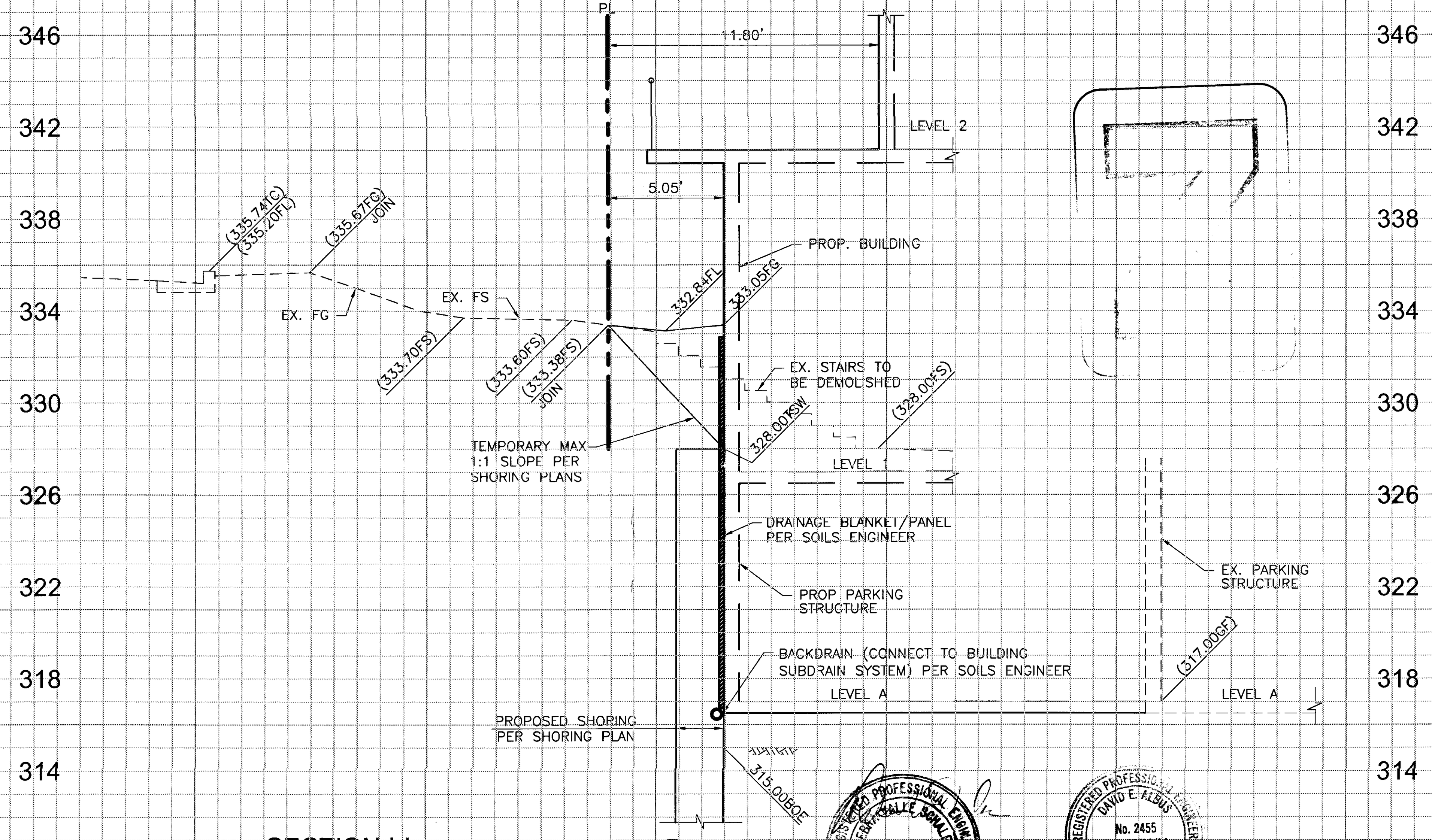
SECTION G-G Ⓖ

SCALE: 1"=4'


346
342
338
334
330
326
322
318
314
S
PL
11.80'
LEVEL 2
5.05'
PROTECT IN PLACE EX RET. WALL
(335.07TC)
(335.52FL)
(336.98TW)
(336.06FG)
(333.55FS)
(334.64TW)
333.50FG
333.34FS
PROP. BUILDING
333.30FF
6.5%
4%
(328.90) TOP OF EXISTING STRUCTURE
LEVEL 1
PROTECT IN PLACE EX RET. WALL
DRAINAGE BLANKET/PANEL PER SOILS ENGINEER
BACKDRAIN (CONNECT TO BUILDING SUBDRAIN SYSTEM) PER SOILS ENGINEER
REMOVE EX FG & LANDSCAPE
REMOVE EX CONCRETE V-DITCH
EX. PARKING STRUCTURE
(316.00FS)
LEVEL A

SECTION H-H Ⓗ

SCALE: 1"=4'


346
342
338
334
330
326
322
318
314
S
PL
11.80'
LEVEL 2
5.05'
(335.74FC)
(335.20FL)
(335.67FG) JOIN
PROP. BUILDING
EX. FS
EX. FG
332.84FL
333.05FG
(333.70FS)
(333.80FS)
(333.38FS) JOIN
EX. STAIRS TO BE DEMOLISHED
(328.00FS)
328.00BSW
TEMPORARY MAX 1:1 SLOPE PER SHORING PLANS
LEVEL 1
DRAINAGE BLANKET/PANEL PER SOILS ENGINEER
PROP PARKING STRUCTURE
EX. PARKING STRUCTURE
BACKDRAIN (CONNECT TO BUILDING SUBDRAIN SYSTEM) PER SOILS ENGINEER
(317.00SF)
LEVEL A
PROPOSED SHORING PER SHORING PLAN
315.00BOE

SECTION I-I Ⓘ

SCALE: 1"=4'

DEBRA VALLE SCHALES NO. 43101 11/4/13

DAVID E. ALBUS No. 2455 Exp. 12/31/14

PERMIT # G12-23

NO.	DATE	REVISIONS	APP'D.	DATE
⚠	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:

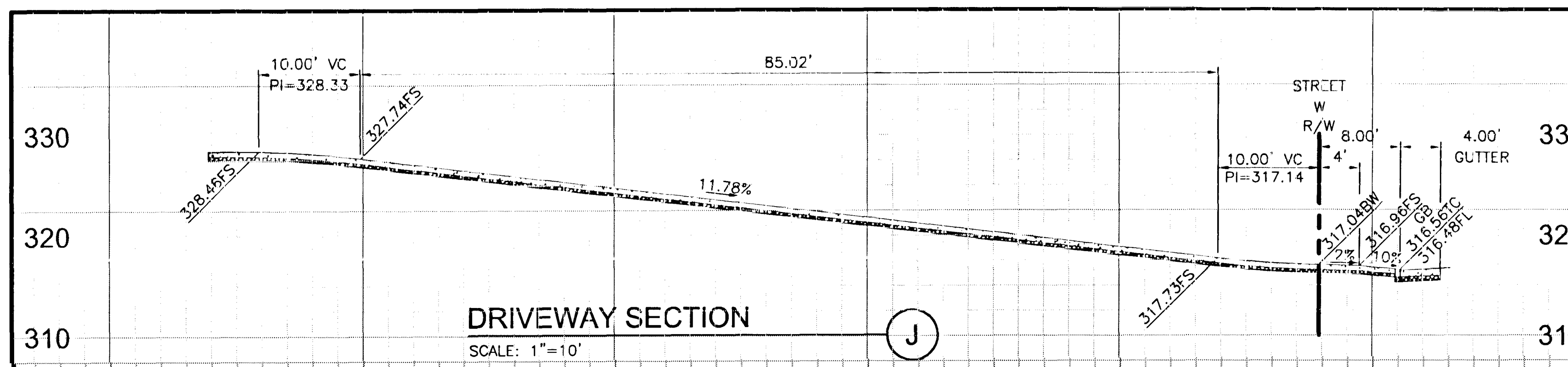
FUSCOE ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ∘ fax 949.474.5315 ∘ www.fuscoe.com

Debra Valle Schales 11/4/13
DEBRA VALLE SCHALES RCE#043101 DATE

DEBRA VALLE SCHALES NO. 43101 EXP. 03/31/14

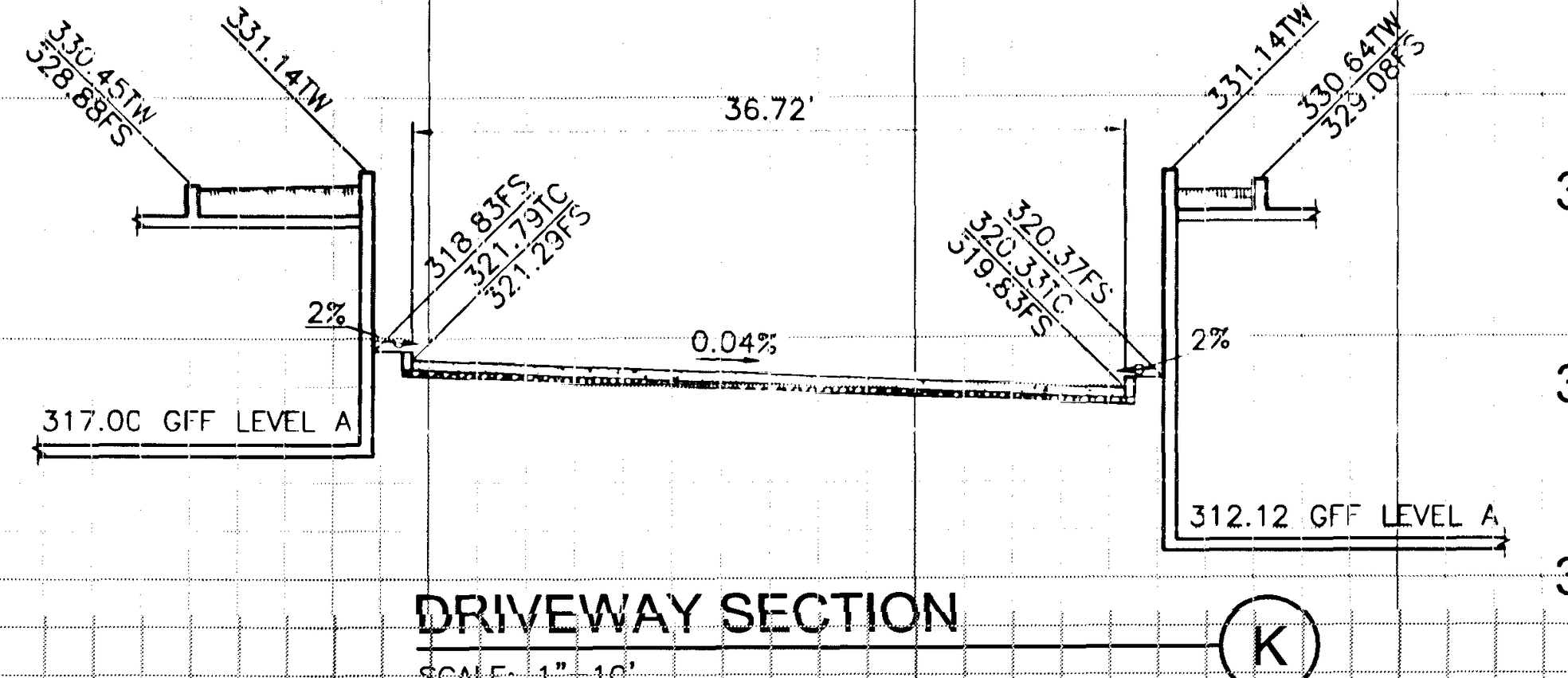
SECTIONS
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12
SHEET 13 OF 15	


10.00' VC
PI=328.33
85.02'
327.74FS
328.45FS
11.78%
STREET
R/W
10.00' VC
PI=317.14
8.00'
4'
4.00'
GUTTER
317.73FS
317.04BW
316.96FS
316.89TC
316.78FL
2%
330
320
310

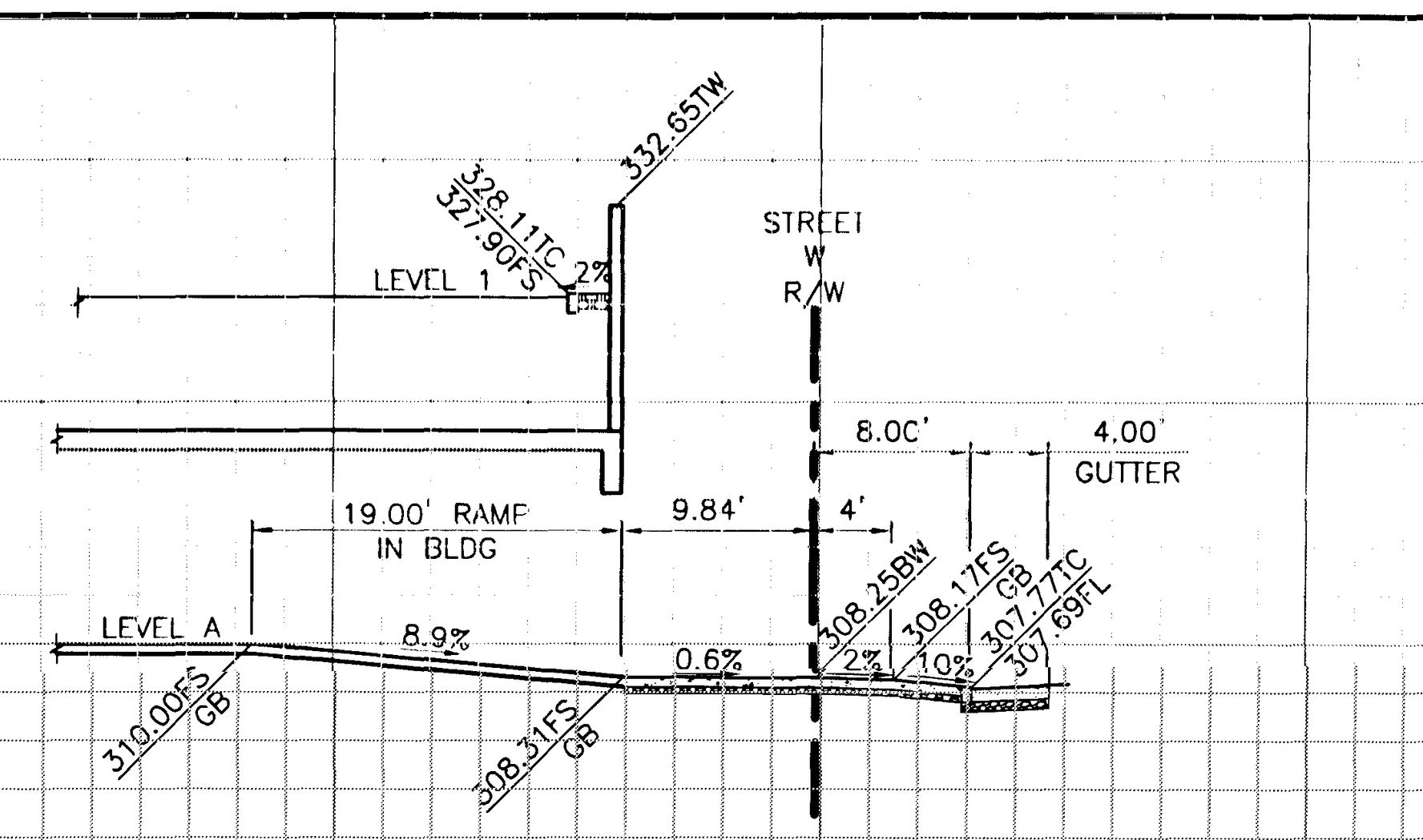
DRIVEWAY SECTION (J)

SCALE: 1"=10'


36.72'
331.14TW
331.14TW
330.64TW
2%
0.04%
2%
317.00 GFF LEVEL A
312.12 GFF LEVEL A
330
320
310

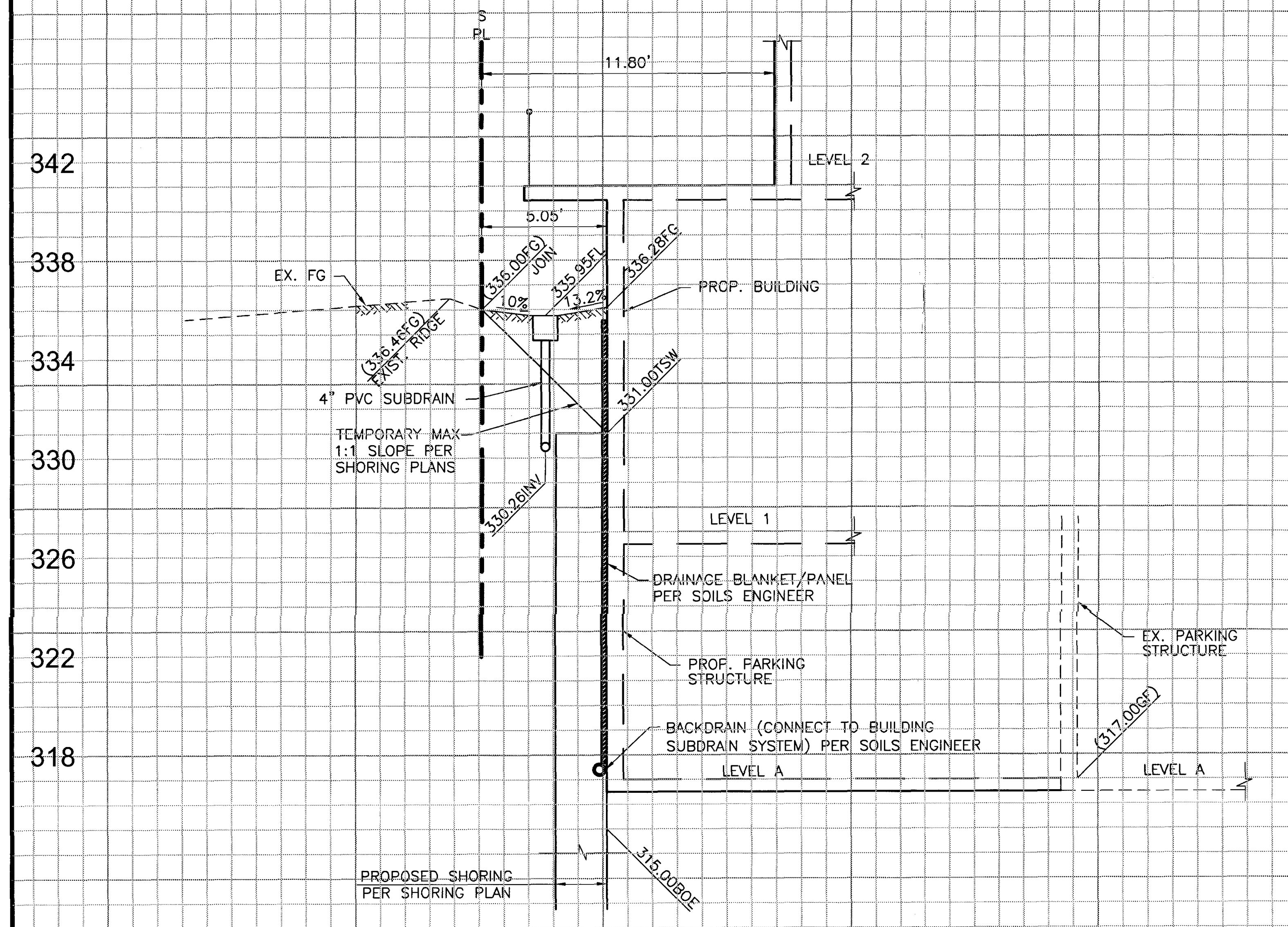
DRIVEWAY SECTION (K)

SCALE: 1"=10'


332.65TW
STREET
R/W
LEVEL 1
6.00'
4.00'
GUTTER
19.00' RAMP
IN BLDG
9.84'
4'
LEVEL A
8.9%
0.6%
2%
310.00FS
GB
308.31FS
GB
308.25BW
308.17FS
307.77TC
307.69FL
330
320
310

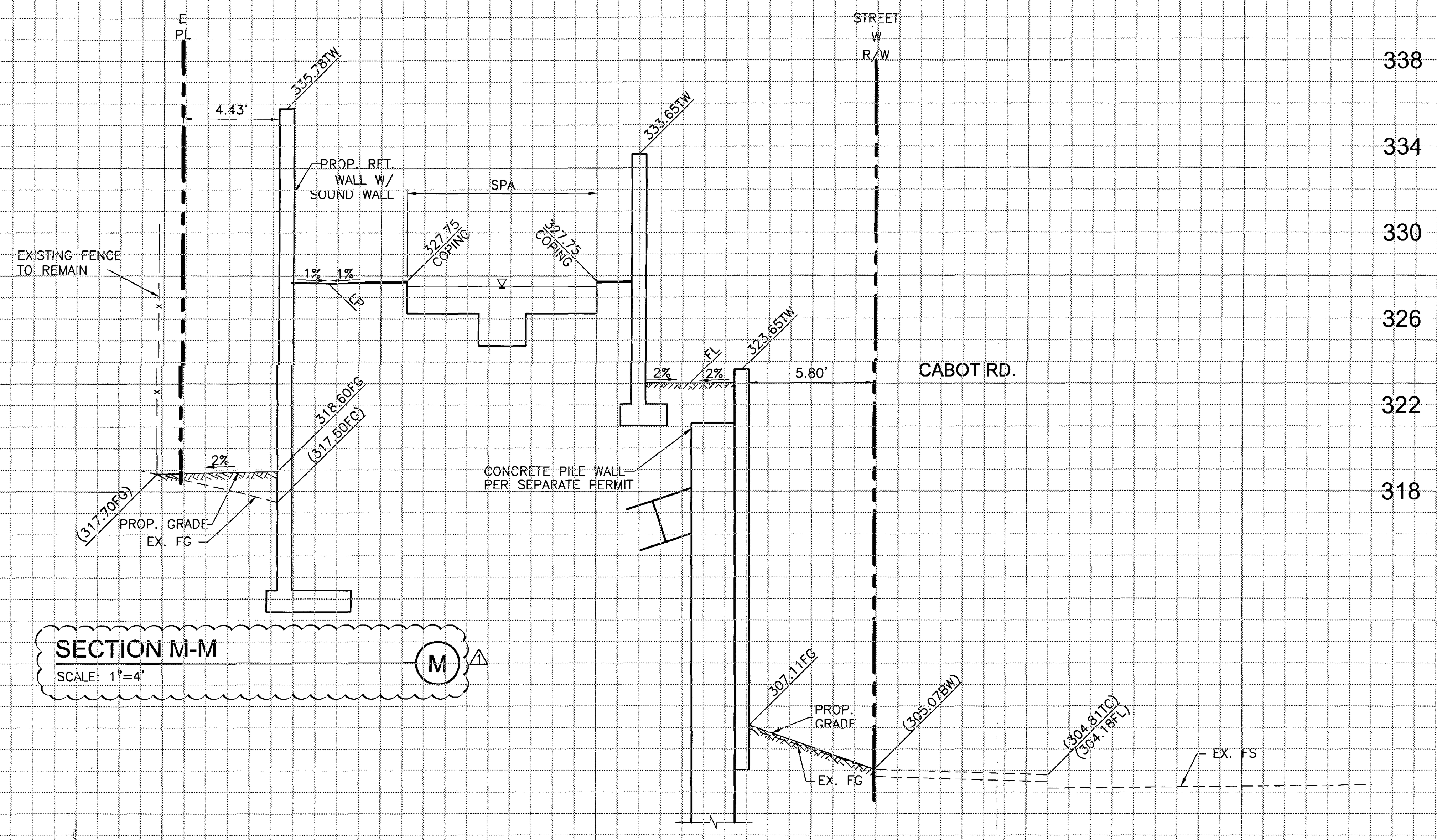
DRIVEWAY SECTION (O)

SCALE: 1"=10'


S
PL
11.80'
LEVEL 2
5.05'
EX. FG
336.00FG
JOIN
335.95FL
336.28FG
10%
13.2%
PROP. BUILDING
4" PVC SUBDRAIN
331.00TSW
TEMPORARY MAX 1:1 SLOPE PER SHORING PLANS
330.38INV
LEVEL 1
DRAINAGE BLANKET/PANEL PER SOILS ENGINEER
EX. PARKING STRUCTURE
PROP. PARKING STRUCTURE
BACKDRAIN (CONNECT TO BUILDING SUBDRAIN SYSTEM) PER SOILS ENGINEER
LEVEL A
(317.00GF)
LEVEL A
PROPOSED SHORING PER SHORING PLAN
315.00BOE
342
338
334
330
326
322
318

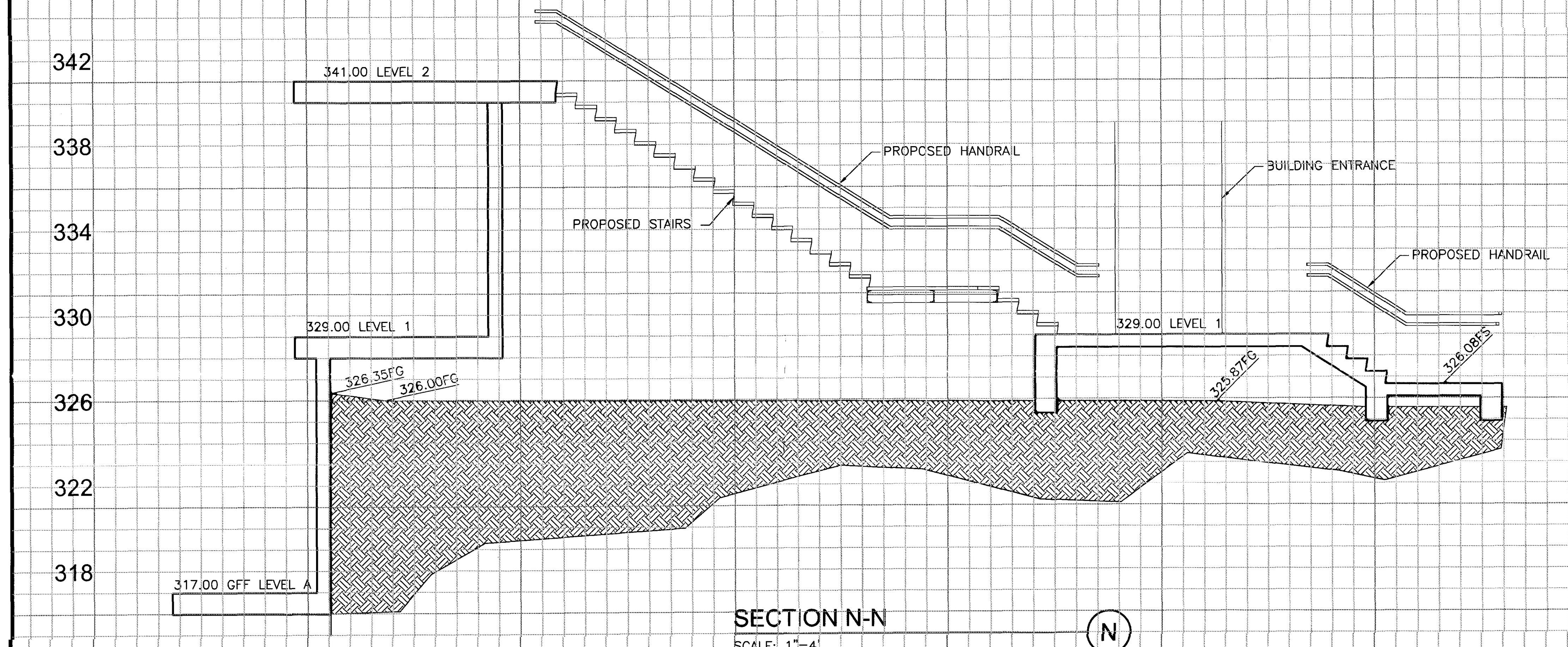
SECTION L-L (L)

SCALE: 1"=4'


E
PL
4.43'
335.78TW
PROP. RET WALL W/ SOUND WALL
SPA
333.65TW
STREET
R/W
EXISTING FENCE TO REMAIN
327.75 COPING
327.75 COPING
1%
1%
2%
2%
323.65TW
5.80'
CABOT RD.
318.60FS
(317.90FS)
2%
(317.70FG)
PROP. GRADE
EX. FG
CONCRETE PILE WALL PER SEPARATE PERMIT
307.11FS
PROP. GRADE
(305.07BW)
(304.81TC)
(304.16FL)
EX. FG
EX. FS
342
338
334
330
326
322
318

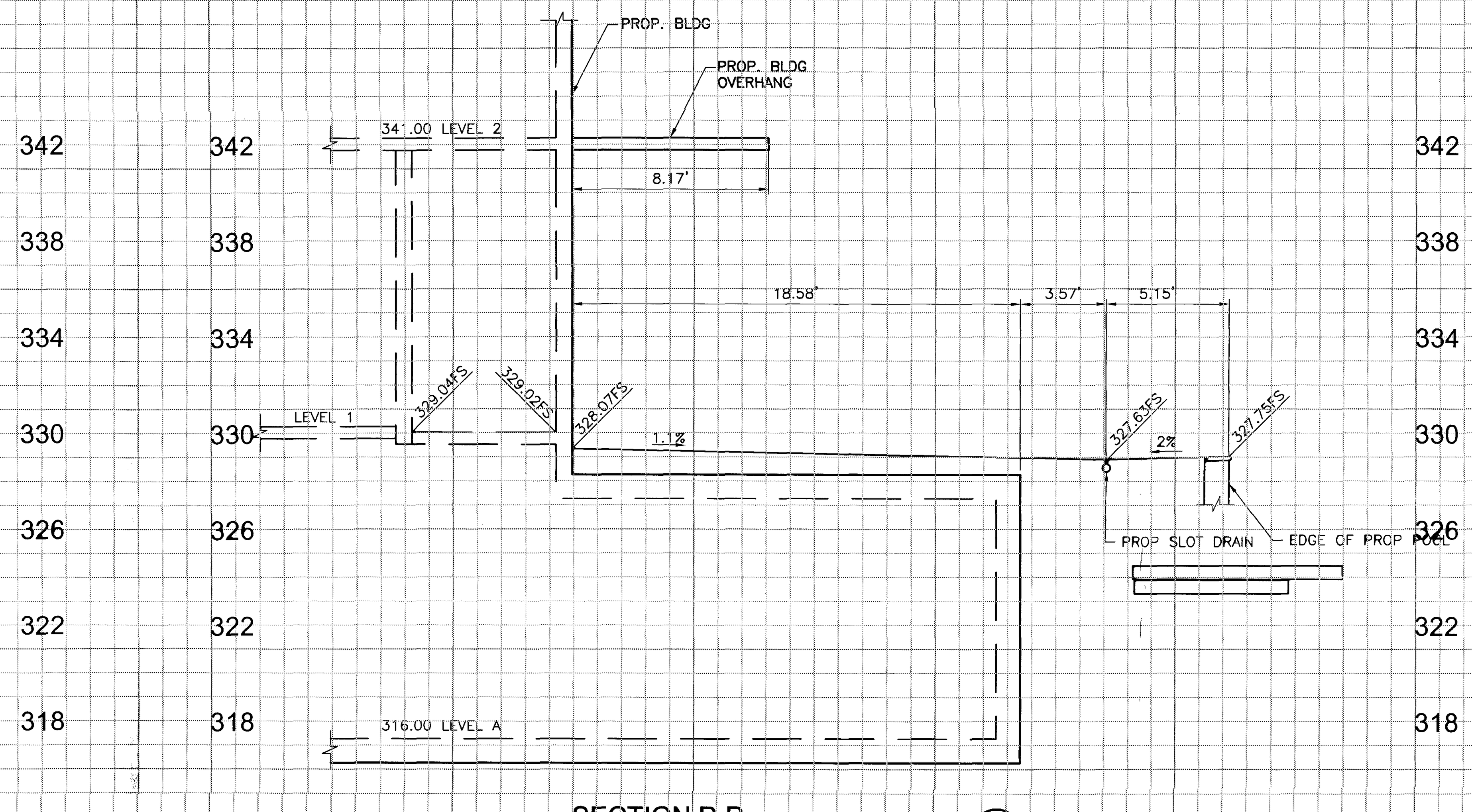
SECTION M-M (M)

SCALE: 1"=4'


341.00 LEVEL 2
PROPOSED HANDRAIL
BUILDING ENTRANCE
PROPOSED STAIRS
PROPOSED HANDRAIL
329.00 LEVEL 1
329.00 LEVEL 1
326.35FG
326.00FG
325.67FG
326.08FS
317.00 GFF LEVEL A
342
338
334
330
326
322
318

SECTION N-N (N)

SCALE: 1"=4'


PROP. BLDG
PROP. BLDG OVERHANG
341.00 LEVEL 2
8.17'
18.58'
3.57'
5.15'
LEVEL 1
329.04FS
329.02FS
328.07FS
1.1%
327.63FS
2%
327.75FS
PROP SLOT DRAIN
EDGE OF PROP POOL
316.00 LEVEL A
342
338
334
330
326
322
318

SECTION P-P (P)

SCALE: 1"=4'

REGISTERED PROFESSIONAL ENGINEER
DEBRA VALLE SCHALES
NO. 43101
11/4/13
CIVIL
STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER
DAVID E. ALBUS
No. 2455
Exp. 12/31/14
GEOTECHNICAL
STATE OF CALIFORNIA

PERMIT # G12-23

NO.	DATE	REVISIONS	APP'D.	DATE
1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE
ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ○ fax 949.474.5315 ○ www.fuscoe.com
DEBRA VALLE SCHALES RCE#043101
11/4/13
DATE

DEBRA VALLE SCHALES
NO. 43101
EXP. 03/31/14
CIVIL

SECTIONS

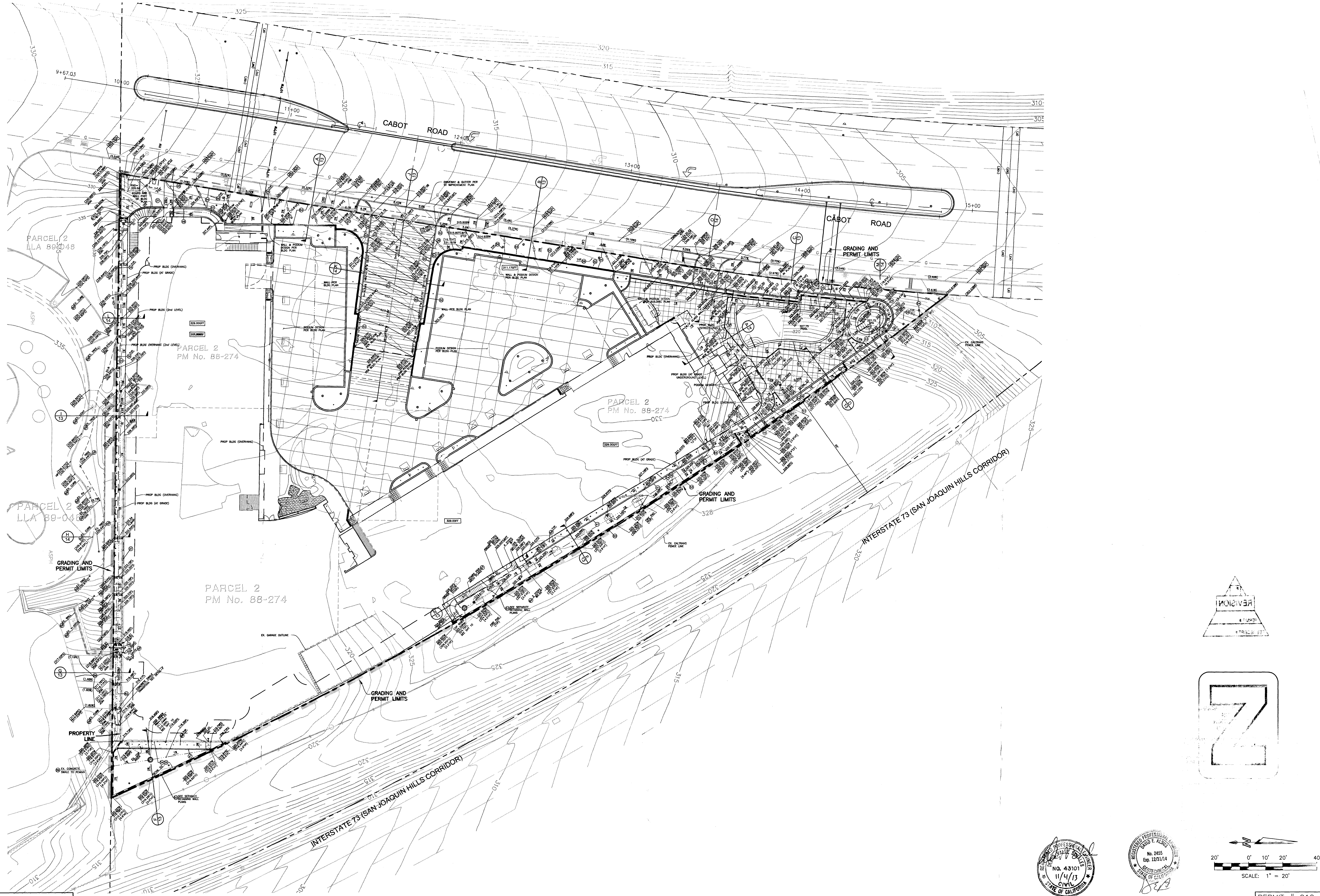
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

SHEET **14** OF **15**

2013/03/1
CAREER LOFTS
PRECISE GRADING PLAN
3RD GRADING PLAN CHECK SUBMITTAL

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG14DT.DWG (11-04-13 3:05:52PM) Plotted by: Eric Lisener


CABOT ROAD
CABOT ROAD
PARCEL 2
LLA 89-046
PARCEL 2
PM No. 88-274
PARCEL 2
PM No. 88-274
PARCEL 2
PM No. 88-274
PARCEL 2
LLA 89-046
GRADING AND PERMIT LIMITS
GRADING AND PERMIT LIMITS
GRADING AND PERMIT LIMITS
GRADING AND PERMIT LIMITS
PROPERTY LINE
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
9+67.03
10+00
11+00
12+00
13+00
14+00
15+00
325
320
315
310
305
330
335
20'
0'
10'
20'
40'
SCALE: 1" = 20'

3RD GRADING PLAN CHECK SUBMITTAL

CAREER LOFTS
PRECISE GRADING PLAN

2013/03/12

No. 43101
11/4/13
CIVIL

DAVID E. ALBUS
No. 2455
Exp. 12/31/14
GEOTECHNICAL

PERMIT # G12-23

DIG ALERT

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

CALL BEFORE YOU DIG

UNDERGROUND SERVICE ALERT
OF SOUTHERN CALIFORNIA

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CALL USA DIG ALERT AT 1-800-227-2600, 48 HOURS BEFORE ANY EXCAVATION.

NO.	DATE	REVISIONS	APP'D.	DATE
1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE
ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ○ fax 949.474.5315 ○ www.fuscoe.com
11/4/13
DEBRA VALLE SCHALES RCE#043101 DATE

DEBRA VALLE SCHALES
NO. 43101
EXP. 03/31/14
CIVIL

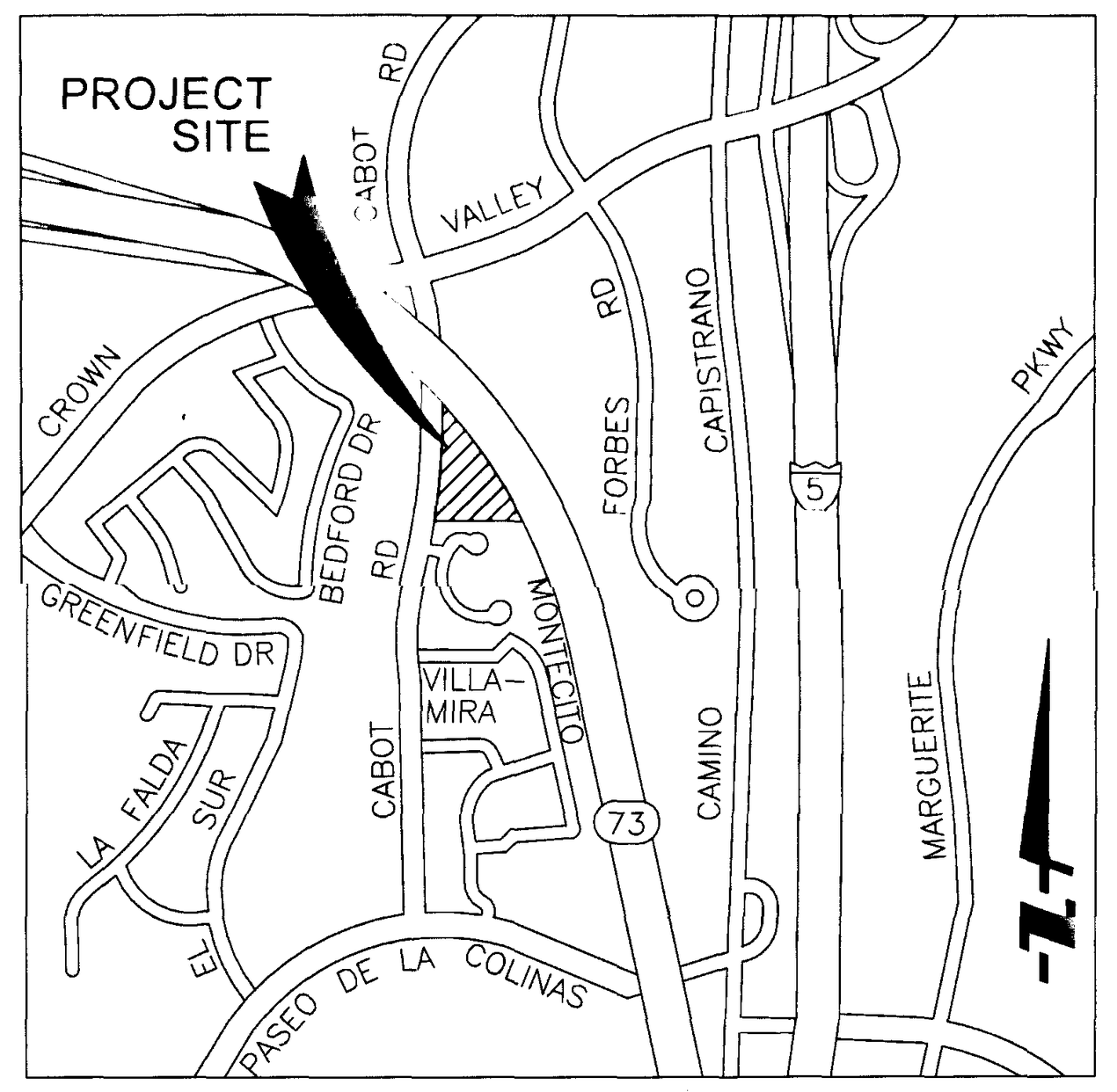
PRECISE GRADING
TOTAL SITE
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

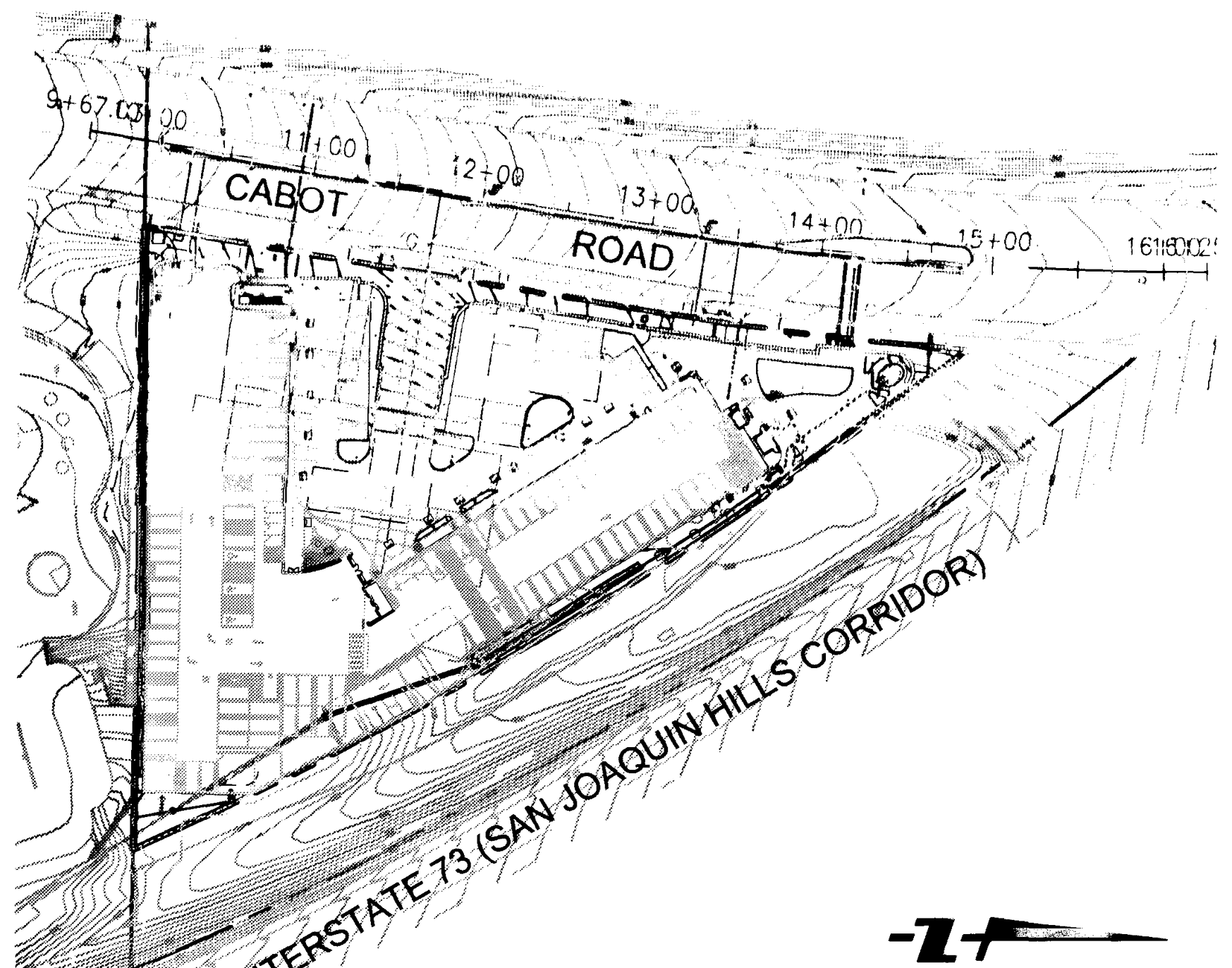
SHEET 15 OF 15

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG15TO.DWG (11-04-13 3:06:15PM) Plotted by: Eric Lissner

PRECISE GRADING PLANS
FOR
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA



VICINITY MAP
NTS



LOCATION MAP
NTS

CITY OF LAGUNA NIGUEL STANDARD GRADING NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE GRADING CODE OF THE CITY OF LAGUNA NIGUEL, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION, AND ANY SPECIAL REQUIREMENTS OF THE PERMIT. A COPY OF THE GRADING CODE AND MANUAL SHALL BE RETAINED ON THE JOB SITE WHILE WORK IS IN PROGRESS. WHEN REFERENCED ON THE PLANS, A COPY OF OC PUBLIC WORKS STANDARD PLANS SHALL ALSO BE RETAINED ON THE SITE.
2. GRADING SHALL NOT BE STARTED WITHOUT FIRST NOTIFYING THE CITY GRADING INSPECTOR, A PRE GRADING MEETING ON THE SITE IS REQUIRED BEFORE START OF GRADING WITH THE FOLLOWING PEOPLE PRESENT: OWNER, GRADING CONTRACTOR, DESIGN CIVIL ENGINEER, SOIL ENGINEER, GEOLOGIST, CITY GRADING INSPECTOR AND WHEN REQUIRED THE ARCHAEOLOGIST AND PALEONTOLOGIST. THE REQUIRED INSPECTIONS FOR GRADING WILL BE EXPLAINED AT THIS MEETING.
3. AN APPROVED COPY OF THE GRADING PLAN SHALL BE ON THE PERMITTED SITE WHILE WORK IS IN PROGRESS.
4. CUT AND FILL SLOPES SHALL BE NO STEEPER THAN 2 FOOT HORIZONTAL TO 1 FOOT VERTICAL (2:1).
5. FILLS SHALL BE COMPACTED THROUGHOUT TO A MINIMUM OF 90% RELATIVE DENSITY. AGGREGATE BASE FOR ASPHALTIC AREAS SHALL BE COMPACTED TO MINIMUM OF 95% RELATIVE DENSITY. MAXIMUM DENSITY SHALL BE DETERMINED BY CALIFORNIA *BUILDING CODE STANDARD NO. 70–1 OR* APPROVED EQUIVALENT, AND FIELD DENSITY BY CALIFORNIA BUILDING CODE STANDARD NO. 70–2 OR APPROVED EQUIVALENT.
6. AREAS TO RECEIVE FILL SHALL BE PROPERLY PREPARED AND APPROVED IN WRITING BY THE SOIL ENGINEER AND THE BUILDING OFFICIAL PRIOR TO PLACING FILL.
7. FILLS SHALL BE BENCHED INTO COMPETENT MATERIAL PER OC PUBLIC WORKS STANDARD PLAN NO. 1322.
8. ALL EXISTING FILLS SHALL BE APPROVED BY THE BUILDING OFFICIAL OR REMOVED PRIOR TO PLACING ADDITIONAL FILLS.
9. ANY EXISTING IRRIGATION LINES AND CISTERNS SHALL BE REMOVED, OR CRUSHED IN PLACE, AND APPROVED BY THE BUILDING OFFICIAL AND SOIL ENGINEER.
10. STOCKPILING OF EXCESS MATERIAL SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO EXCAVATION.
11. THE DESIGN ENGINEER, AS A CONDITION OF ROUGH GRADE APPROVAL, SHALL PROVIDE BLUE TOP WITH ACCOMPANYING WITNESS STAKE, SET AT THE CENTER OF EACH PAD REFLECTING THE PAD ELEVATION FOR PRECISE PERMITS AND A BLUE TOP WITH WITNESS STAKE SET AT THE DRAINAGE SWALES HIGH POINT REFLECTING THE HIGH POINT ELEVATION FOR PRELIMINARY PERMITS.
12. ALL TRENCH BACKFILLS SHALL BE TESTED AND APPROVED BY THE SOIL ENGINEER PER THE GRADING CODE,
13. THE ENGINEERING GEOLOGIST AND SOIL ENGINEER SHALL AFTER CLEARING AND PRIOR TO THE PLACEMENT OF FILL IN CANYONS, INSPECT EACH CANYON FOR AREAS OF ADVERSE STABILITY AND TO DETERMINE THE PRESENCE OR ABSENCE OF SUBSURFACE WATER OR SPRING FLOW, IF NEEDED, SUBDRAINS WILL BE DESIGNED AND CONSTRUCTED PRIOR TO THE PLACEMENT OF FILL IN EACH RESPECTIVE CANYON.
14. SUBDRAIN OUTLETS SHALL BE COMPLETED AT THE BEGINNING OF THE SUBDRAIN CONSTRUCTION.
15. THE EXACT LOCATION OF THE SUBDRAINS SHALL BE SURVEYED IN THE FIELD FOR LINE/GRADE AND REFLECTED ON AS–GRADED PLANS.
16. ALL CUT SLOPES SHALL BE INVESTIGATED BOTH DURING AND AFTER GRADING BY THE ENGINEERING GEOLOGIST TO DETERMINE IF ANY SLOPE STABILITY PROBLEMS EXIST. SHOULD EXCAVATION DISCLOSE ANY GEOLOGICAL HAZARDS OR POTENTIAL GEOLOGICAL HAZARDS, THE ENGINEERING GEOLOGIST SHALL SUBMIT RECOMMENDED TREATMENT TO THE BUILDING OFFICIAL FOR APPROVAL.
17. WHERE SUPPORT OR BUTTRESSING OF CUT AND NATURAL SLOPES IS DETERMINED TO BE NECESSARY BY THE ENGINEERING GEOLOGIST AND SOIL ENGINEER, THE SOIL ENGINEER SHALL SUBMIT DESIGN, LOCATIONS AND CALCULATIONS TO THE BUILDING OFFICIAL PRIOR TO CONSTRUCTION. THE ENGINEERING GEOLOGIST AND SOIL ENGINEER SHALL INSPECT AND CONTROL THE CONSTRUCTION OF THE BUTTRESSING AND CERTIFY TO THE STABILITY OF THE SLOPE AND ADJACENT STRUCTURES UPON COMPLETION,
18. WHEN CUT PADS ARE BROUGHT TO NEAR GRADE, THE ENGINEERING GEOLOGIST SHALL DETERMINE IF THE BEDROCK IS EXTENSIVELY FRACTURED OR FAULTED AND WILL READILY TRANSMIT WATER. IF CONSIDERED NECESSARY BY THE ENGINEERING GEOLOGIST AND SOIL ENGINEER, A COMPACTED FILL BLANKET WILL BE PLACED,
19. THE ENGINEERING GEOLOGIST SHALL PERFORM PERIODIC INSPECTIONS AND SUBMIT A COMPLETE REPORT AND MAP UPON COMPLETION OF THE ROUGH GRADING,
20. THE COMPACTION REPORT AND APPROVAL FOR THE SOIL ENGINEER SHALL INDICATE THE TYPE OF FIELD–TESTING PERFORMED. EACH TEST SHALL BE IDENTIFIED WITH A METHOD OF OBTAINING THE IN–PLACE DENSITY, WHETHER SAND CONE OR DRIVE RING AND SHALL BE SO NOTED FOR EACH TEST. SUFFICIENT MAXIMUM DENSITY DETERMINATIONS SHALL BE PERFORMED TO VERIFY THE ACCURACY OF THE MAXIMUM DENSITY CURVES USED BY THE FIELD TECHNICIAN.
21. THE SOIL ENGINEER AND ENGINEERING GEOLOGIST SHALL PERFORM SUFFICIENT INSPECTIONS AND BE AVAILABLE DURING GRADING AND CONSTRUCTION TO VERIFY COMPLIANCE WITH THE PLANS, SPECIFICATIONS AND THE CODE WITHIN THEIR PURVIEW.
22. THE CIVIL ENGINEER SHALL BE AVAILABLE DURING GRADING TO VERIFY COMPLIANCE WITH THE PLANS, SPECIFICATIONS, CODE AND ANY SPECIAL CONDITIONS OF THE PERMIT WITHIN THE PURVIEW.
23. THE PERMITTEE IS RESPONSIBLE FOR DUST CONTROL MEASURES.
24. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE.
25. THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE PERMITTEE.
26. APPROVED PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS SHALL BE USED TO PROTECT ADJOINING PROPERTIES DURING GRADING.
27. ANY EXISTING WATER WELLS SHALL BE ABANDONED IN COMPLIANCE WITH THE SPECIFICATIONS APPROVED BY COUNTY OF ORANGE, HUMAN SERVICES AGENCY, DIVISION OF ENVIRONMENTAL HEALTH.
28. ANY EXISTING OIL WELLS SHALL BE ABANDONED IN COMPLIANCE WITH THE ORANGE COUNTY OIL CODE TO THE APPROVAL OF OC PUBLIC WORKS/REGULATIONS SPECIAL SERVICE SECTION.
29. ANY EXISTING CESSPOOLS AND SEPTIC TANKS SHALL BE ABANDONED IN COMPLIANCE WITH THE CALIFORNIA PLUMBING CODE TO THE APPROVAL OF CITY PLANNING/BUILDING DIVISIONS, SPECIAL SERVICE SECTION.
30. PRIOR TO FINAL APPROVAL, THE CIVIL ENGINEER SHALL CERTIFY TO THE BUILDING OFFICIAL THE AMOUNT OF EARTH MOVED DURING THE GRADING OPERATION.
31. THE PERMITTEE SHALL COMPLY WITH THE GRADING CODE REQUIREMENTS WHEN AN EXCESS OF 5,000 CUBIC YARDS OF EACH IS TRANSPORTED TO OR FROM A PERMITTED SITE ON PUBLIC ROADWAYS.
32. ASPHALT CONCRETE SHALL BE CONSTRUCTED PER THE REQUIREMENTS OF OC PUBLIC WORKS STANDARD PLAN NO. 1805.
33. AGGREGATE BASE SECTION SHALL BE CONSTRUCTED PER OC PUBLIC WORKS STANDARD NO. 1804.
34. ALL CONCRETE STRUCTURES THAT COME IN CONTACT WITH THE ON–SITE SOILS SHALL BE CONSTRUCTED WITH TYPE V CEMENT, UNLESS DEEMED UNNECESSARY BY SOLUBLE SULPHATE–CONTENT TESTS CONDUCTED BY THE SOIL ENGINEER.
35. EXPORT SOIL MUST BE TRANSPORTED TO A LEGAL DUMP OR TO A PERMITTED SITE APPROVED BY THE DISTRICT GRADING INSPECTOR.
36. SLOPES EXCEEDING 5 FEET IN HEIGHT SHALL BE PLANTED WITH APPROVED PLANT MATERIAL. IN ADDITION, EXCEEDING 15 FEET IN HEIGHT SHALL BE PROVIDED WITH AN APPROVED IRRIGATION SYSTEM, UNLESS OTHERWISE APPROVED BY THE HE BUILDING *OFFICIAL.*
37. THE GRADING CONTRACTOR SHALL SUBMIT A STATEMENT OF COMPLIANCE TO THE APPROVED GRADING PLAN PRIOR TO FINAL APPROVAL.
38. ASPHALT SECTIONS MUST BE PER CODE: PARKING STALLS = 3" A/C OVER 6" CALC, DRIVES 3" A/C OVER 10" (COMM.) 12" (INDUSTRIAL). OR: PRIOR TO ROUGH GRADE RELEASE FOR BUILDING PERMITS BY THE DISTRICT GRADING INSPECTOR, THE SOIL ENGINEER SHALL SUBMIT FOR APPROVAL, PAVEMENT SECTION RECOMMENDATIONS BASED ON 'R' VALUE ANALYSIS OF THE SUB–GRADE SOILS, AND EXPECTED TRAFFIC INDICES.
39. PRELIMINARY SOIL AND GEOLOGY REPORTS AND ALL SUBSEQUENT REPORTS AS APPROVED BY THE CITY GRADING SECTION ARE CONSIDERED A PART OF THE APPROVED GRADING PLAN.
40. ALL EXISTING DRAINAGE COURSES THROUGH THIS SITE SHALL REMAIN OPEN UNTIL FACILITIES TO HANDLE STORM WATER ARE APPROVED AND FUNCTIONAL; HOWEVER, IN ANY CASE, THE PERMITTEE SHALL BE HELD LIABLE FOR ANY DAMAGE DUE TO OBSTRUCTING NATURAL DRAINAGE PATTERNS,
41. GRADING OPERATIONS INCLUDING MAINTENANCE OF EQUIPMENT WITHIN ONE–HALF MILE OF A HUMAN OCCUPANCY SHALL NOT BE CONDUCTED BETWEEN THE HOURS OF 8 P.M, AND 7 A.M. DAILY, ON SUNDAY OR ON A FEDERAL HOLIDAY.
42. ROOF GUTTERS SHALL BE INSTALLED TO PREVENT ROOF DRAINAGE FROM FALLING ON MANUFACTURED SLOPES.
43. THE PERMITTEE SHALL BE GIVEN REASONABLE NOTICE TO THE OWNER OF ADJOINING LANDS AND BUILDINGS PRIOR TO BEGINNING EXCAVATIONS WHICH MAY AFFECT THE LATERAL AND SUBJACENT SUPPORT OF THE ADJOINING PROPERTY. THE NOTICE SHALL STATE THE INTENDED DEPTH OF EXCAVATION AND WHEN THE EXCAVATION WILL COMMENCE. THE ADJOINING OWNER SHALL BE ALLOWED AT LEAST 30 DAYS AND REASONABLE ACCESS OF THE PERMITTED PROPERTY TO PROTECT HIS STRUCTURE, IF HE SO DESIRES, UNLESS OTHERWISE PROTECTED BY LAW.
44. IN CASE OF EMERGENCY, CALL: GREG CLAYTON CELL PHONE: (702) 525–2461
45. SEDIMENTS FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON–SITE USING AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE, AND STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, SIDEWALKS, GUTTERS, DRAIN INLETS OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING OR WIND.
46. ALL SEDIMENT AND CONSTRUCTION DEBRIS WHICH IS TRACKED OR DEPOSITED ONTO PUBLIC OR PRIVATE SIDEWALKS, GUTTERS OR PAVED ROADS SHALL BE REMOVED ON A DAILY BASIS BY SWEEPING OR VACUUMING AND DISPOSED OF PROPERLY. SEDIMENT AND CONSTRUCTION DEBRIS SHALL NOT BE WASHED INTO THE STORM DRAIN SYSTEM, INCLUDING THE GUTTER AND STORM DRAIN INLETS.
47. SANDBAGS, GRAVEL BAGS OR OTHER EFFECTIVE FILTER OR TRAP–TYPE BARRIERS SHALL BE USED WHERE APPROPRIATE TO INTERCEPT AND SLOW THE FLOW OF RUNOFF FROM THE CONSTRUCTION SITE AND TO TRAP SEDIMENT BEFORE IT ENTERS THE STORM DRAIN SYSTEM, INCLUDING GUTTERS AND INLETS. ALL ON–SITE STORM DRAIN INLETS SHALL BE PROTECTED AND OFF–SITE INLETS SHALL BE PROTECTED IN AREAS WHERE CONSTRUCTION ACTIVITY TRACKS SEDIMENT ON PAVED AREAS OR WHERE INLETS RECEIVE RUNOFF FROM DISTURBED AREAS.
48. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
49. EROSION CONTROL DEVICES SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE BUILDING OFFICIAL.
50. DURING THE WET SEASON, BETWEEN OCTOBER 1ST AND APRIL 30TH, EROSION CONTROL PROTECTIVE DEVICES AND MEASURES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN THE 5–DAY PROBABILITY–OF–RAIN EXCEEDS 40%. DURING THE REMAINDER OF THE YEAR, THE EROSION CONTROL PROTECTIVE DEVICES AND MEASURES SHALL BE ONSITE AND READY FOR INSTALLATION WHEN THE 5–DAY PROBABILITY–OF–RAIN EXCEED 50% AND IN PLACE AT THE END OF EACH DAY WHEN THE 48 HOUR PROBABILITY–OF–RAIN EXCEEDS 50%.
51. AFTER A RAINSTORM ALL SILT AND DEBRIS SHALL BE REMOVED FROM STREETS, CHECK BERMS AND BASINS.
52. GRADED AREAS ON THE PERMITTED AREA PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE TO BE DIRECTED TOWARD DE–SILTING FACILITIES.
53. ALL BARE SLOPES, INCLUDING MANUFACTURED SLOPES, SHALL BE PROVIDED WITH PROTECTIVE EROSION CONTROL MEASURES.
54. EROSION CONTROL SYSTEMS ARE DYNAMIC AND WILL CHANGE BASED ON CHANGES IN SITE DEVELOPMENT AND WEATHER CONDITIONS. THEREFORE, UPON INSPECTION, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAYBE REQUIRED BY THE CITY INSPECTOR TO MINIMIZE EROSION AND SEDIMENT TRANSPORT FROM AREAS OF THE SITE TO STREETS, SIDEWALKS, GUTTERS, DRAIN INLETS OR ADJACENT PROPERTIES.
55. THE PERMITTEE AND CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATER CREATES A HAZARDOUS CONDITION.
56. THE PERMITTEE AND CONTRACTOR SHALL INSPECT THE EROSION CONTROL WORK AND INSURE THAT THE WORK IS IN ACCORDANCE WITH THE APPROVED PLANS. UNDERGROUND STORAGE TANK REMOVAL

UNDERGROUND STORAGE TANK REMOVAL

57. IN THE EVENT THAT SOIL CONTAMINATION IS DISCOVERED DURING EXCAVATION AND REMOVAL OF AN EXISTING TANK, WORK SHALL BE STOPPED UNTIL A SITE ASSESSMENT AND MITIGATION PLAN HAS BEEN PREPARED, SUBMITTED AND APPROVED BY HCA/ENVIRONMENTAL HEALTH AND THE GRADING SECTION.
58. ISSUANCE OF A GRADING PERMIT DOES NOT ELIMINATE THE NEED FOR PERMITS FROM OTHER AGENCIES WITH REGULATORY RESPONSIBILITIES FOR CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE WORK AUTHORIZE ON THIS PLAN.

SPECIAL NOTE

59. SURVEY MONUMENTS SHALL BE PRESERVED AND REFERENCED BEFORE CONSTRUCTION AND REPLACED AFTER CONSTRUCTION PURSUANT TO SECTION 8771 OF THE BUSINESS AND PROFESSIONAL CODE."

WATER QUALITY

60. SEDIMENTS FROM AREAS DISTURBED BY CONSTRUCTION SHALL BE RETAINED ON SITE USING AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROLS TO THE MAXIMUM EXTENT PRACTICABLE; AND STOCKPILES OF SOIL SHALL BE PROPERLY CONTAINED TO MINIMIZE SEDIMENT TRANSPORT FROM THE SITE TO STREETS, SIDEWALKS, GUTTERS, DRAIN INLETS OR ADJACENT PROPERTIES VIA RUNOFF, VEHICLE TRACKING OR WIND.
61. ALL SEDIMENT AND CONSTRUCTION DEBRIS WHICH IS TRACKED OR DEPOSITED ONTO PUBLIC OR PRIVATE SIDEWALKS, GUTTERS OR PAVED ROADS SHALL BE REMOVED ON A DAILY BASIS BY SWEEPING OR VACUUMING AND DISPOSED OF PROPERLY. SEDIMENT AND CONSTRUCTION DEBRIS SHALL NOT BE WASHED INTO THE STORM–DRAIN SYSTEM, INCLUDING THE GUTTER AND STORM–DRAIN INLETS.
62. SANDBAGS, GRAVEL–BAGS OR OTHER EFFECTIVE FILTER OR TRAP–TYPE BARRIERS SHALL BE USED WHERE APPROPRIATE TO INTERCEPT AND SLOW THE FLOW OF RUNOFF FROM THE CONSTRUCTION SITE AND TO TRAP SEDIMENT BEFORE IT ENTERS THE STORM–DRAIN SYSTEM, INCLUDING GUTTERS AND INLETS, ALL ON–SITE STORM–DRAIN INLETS SHALL BE PROTECTED AND OFF–SITE INLETS SHALL BE PROTECTED IN AREAS WHERE CONSTRUCTION ACTIVITY TRACKS SEDIMENT ON PAVED AREAS OR WHERE INLETS RECEIVE RUNOFF FROM DISTURBED AREAS,
63. WATER AND/OR OTHER DUST PALLIATIVE AND STABILIZATION METHODS SHOULD BE USED TO PREVENT OR ALLEVIATE DUST NUISANCES (DUST CONTROL) GENERATED BY CONSTRUCTION ACTIVITIES. COVERING SMALL STOCKPILES OF SOIL AND DEBRIS OR AREAS WITH UN–STABILIZED SOIL IS AN ALTERNATIVE TO APPLYING WATER OR OTHER DUST PALLIATIVES.
64. CONSTRUCTION–RELATED MATERIALS, WASTES, SPILLS OR RESIDUES SHALL BE RETAINED ON SITE TO MINIMIZE TRANSPORT FROM THE SITE TO STREETS, SIDEWALKS, GUTTERS, DRAIN INLETS OR ADJOINING PROPERTIES BY WIND OR RUNOFF,
65. TO PREVENT THE DISCHARGE OF POLLUTANTS FROM MATERIAL DELIVERY AND STORAGE TO THE STORM–WATER SYSTEM OR WATERCOURSES, ALL MATERIALS SHALL BE PROPERLY STORED TO PREVENT SOIL CONTAMINATION AND CONTACT WITH STORM–WATER RUNOFF, WHICH MAY INCLUDE APPROPRIATE COVERS, CONTAINMENT AREAS OR SURFACES AND INDOOR STORAGE.
66. STOCKPILES OF SOIL, PAVING MATERIALS, AND PRESSURE–TREATED WOOD SHALL BE MANAGED TO PREVENT AIR AND WATER POLLUTION. STOCKPILES SHOULD BE LOCATED 50 FEET AWAY FROM CONCENTRATED FLOWS OF STORM WATER, WATERCOURSES AND DRAIN INLETS, PRIOR TO THE ONSET OF PRECIPITATION, STOCKPILES SHALL BE COVERED AND PROTECTED BY A TEMPORARY PERIMETER SEDIMENT BARRIER AT ALL TIMES.
67. HAZARDOUS–MATERIAL WASTE, INCLUDING BUT NOT LIMITED TO PETROLEUM PRODUCTS, ROOFING TAR, PAINTS, SOLVENTS, STAINS, ACIDS, WOOD PRESERVATIVES, SEPTIC WASTES AND ASPHALT PRODUCTS, SHALL NOT BE ALLOWED TO ENTER THE STORM–DRAIN SYSTEM OR WATERCOURSES AND SHALL BE PROPERLY TRANSPORTED, USED, STORED AND DISPOSED AS REQUIRED BY FEDERAL AND STATE LAW. PAINT BRUSHES AND EQUIPMENT FOR WATER–AND OIL–BASED PAINTS SHALL BE CLEANED WITHIN A CONTAINED AREA AND SHALL NOT BE ALLOWED TO CONTAMINATE SITE SOIL, WATERCOURSES OR STORM–DRAIN SYSTEMS, WATERBASED PAINTS SHALL BE RINSED INTO THE SANITARY–SEWER SYSTEM; AND THINNERS, SOLVENTS, EXCESS OIL–BASED PAINTS AND SLUDGE SHALL BE DISPOSED AS HAZARDOUS WASTE,
68. CEMENTACEOUS PRODUCTS SUCH AS CONCRETE , MORTAR OR STUCCO FROM CONCRETE TRUCKS, POTABLE MIXERS AND MISCELLANEOUS CONTAINERS SHALL NOT BE WASHED–OUT INTO THE STORM–DRAIN SYSTEM OR WATERCOURSES. DESIGNATED WASHOUT AREAS SHALL BE LOCATED AT LEAST 50 FEET FROM CONCENTRATED FLOWS OF STORM WATER, WATERCOURSES AND STORM–DRAIN INLETS, AND RUNOFF FROM WASHOUT–AREAS SHALL BE CONTAINED BY CONSTRUCTING A TEMPORARY PIT OR BERM AREA LARGE ENOUGH TO CAPTURE THE LIQUID AND SOLID WASTE MATERIALS,
69. SAW–CUT–CEMENT CONCRETE AND ASPHALT–CONCRETE SLURRY SHALL NOT BE ALLOWED TO ENTER THE STORM–DRAIN SYSTEM OR WATERCOURSES, RESIDUE FROM GRINDING OPERATIONS SHALL BE PICKED UP BY MEANS OF A VACUUM ATTACHMENT TO THE GRINDING MACHINE AND NOT ALLOWED TO FLOW ACROSS THE PAVEMENT OR BE LEFT ON THE SURFACE OF THE PAVEMENT.
70. PRIOR TO DISCHARGE OF GROUNDWATER AND ASSOCIATED WASTE, THE DISCHARGER SHALL MAKE APPLICATION TO THE SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD AND OBTAIN COVERAGE UNDER ORDER NO, R9–2008–0002, DISCHARGES FROM GROUNDWATER EXTRACTION TO SURFACE WATERS IN THE SAN DIEGO REGION EXCEPT SAN DIEGO BAY.

FOR BMP NOTES, DUST CONTROL, AIR QUALITY AND NOISE CONTROL, SEE SHEET 2

ENGINEER'S NOTICE TO CONTRACTOR

1. THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES AND/OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. APPROVAL OF THESE PLANS DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OR COMPLETENESS OF THE LOCATION OR THE EXISTENCE OR NONEXISTENCE OF ANY UTILITY AND/OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THE CONTRACTOR IS REQUIRED TO TAKE ALL DUE PRECAUTIONARY MEANS TO PROTECT THE UTILITIES OF RECORD OR NOT OF RECORD OR NOT SHOWN ON THESE PLANS, AND IS RESPONSIBLE FOR THE PROTECTION OF, AND ANY DAMAGE TO THESE LINES OR STRUCTURES.
2. RELOCATION OR REMOVAL OF ANY EXISTING UTILITIES SHALL BE PERFORMED BY THE RESPECTIVE UTILITY OWNERS, AT THE EXPENSE OF THE DEVELOPER.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS PRIOR TO COMMENCEMENT OF THESE IMPROVEMENTS.
4. UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS AND THE CITY OF LAGUNA NIGUEL.
5. THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THESE REQUIREMENTS SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND THAT THE CONTRACTORS SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER, ENGINEER, AND THE CITY OF LAGUNA NIGUEL 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 OR THE ENGINEER, OR ANY PUBLIC AGENCY.
6. THE IMPROVEMENT QUANTITIES AS SHOWN ON SHEET 2 ARE PROVIDED ONLY FOR THE PURPOSE OF SATISFYING THE CITY OF LAGUNA NIGUEL PLAN INFORMATION REQUIREMENTS. THE CONTRACTOR SHALL PERFORM AN INDEPENDENT ESTIMATE OF ALL EARTHWORK AND IMPROVEMENT QUANTITIES AND SHALL USE SAME AS A BASIS FOR THIS BID(S) AND CONTRACT(S).
7. THE TOPOGRAPHIC INFORMATION CONTAINED IN THESE PLANS WAS OBTAINED BY AERIAL AND/OR FIELD SURVEY DATA, AND DISCREPANCIES BETWEEN PLAN ELEVATIONS AND ACTUAL ELEVATIONS ARE TO BE ANTICIPATED. THE CONTRACTOR SHALL REMAIN ALERT FOR AND PROMPTLY REPORT ANY AND ALL SUBSTANTIAL DISCREPANCIES (SUFFICIENT TO CAUSE A CHANGE IN THE PLANS AND/OR AN INCREASE IN COST(S) TO THE OWNER AND TO THE ENGINEER OF RECORD, AND SHALL NOT PROCEED WITH AN AFFECTED WORK AREA UNTIL DIRECTED TO DO SO BY AN APPROPRIATE OWNER REPRESENTATIVE.
8. QUANTITY CALCULATIONS ARE BASED UPON AERIAL TOPOGRAPHY AND ESTIMATED SOILS INFORMATION, AND SHOULD BE CONSIDERED ONLY A ROUGH APPROXIMATION OF ACTUAL QUANTITIES.
9. CONTRACTOR ASSUMES SOLE AND COMPLETE RESPONSIBILITY FOR THE PROTECTION AND PRESERVATION OF ALL SURVEY MONUMENTS, AND SHALL HAVE ANY DISTURBED OR COVERED MONUMENT RESET BY A QUALIFIED REGISTERED CIVIL ENGINEER OR LICENSED LAND SURVEYOR AT THE DIRECTION OF THE GOVERNING AGENCY.
10. DEMOLITION OF ALL LABELED ITEMS WILL INVOLVE REMOVAL OF ALL SUB SURFACE FOOTINGS AND SUBSTRUCTURES (IF APPLICABLE).
11. THE CONTRACTOR TO POTHOLE AND VERIFY THE LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES AND UTILITY CROSSINGS PRIOR TO START OF CONSTRUCTION. CONTRACTOR SHALL CONTACT CIVIL ENGINEER IN THE EVENT OF ANY CONFLICTS PRIOR TO CONSTRUCTION.
12. THE CONTRACTOR MUST NOTIFY UNDERGROUND ALERT AT 1–800–227–2600 A MINIMUM OF TWO FULL WORKING DAYS PRIOR TO START OF DEMOLITION, GRADING OR CONSTRUCTION OF ANY KIND. THE USA TICKET NUMBER MUST BE AVAILABLE AT THE CONSTRUCTION SITE PRIOR TO START OF ANY WORK SHOWN ON THIS SET OF PLANS.

SURVEY MONUMENTATION

LOCATION AND INSTALLATION OF ALL SURVEY MONUMENTS AND TIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE PERFORMED BY A QUALIFIED LICENSED SURVEYOR OR ENGINEER. THE CONTRACTOR'S SURVEYOR SHALL BE RESPONSIBLE FOR FILING CORNER TIES OR RECORD OF SURVEYS WITH THE COUNTY SURVEYOR AND THE CITY FOR ALL DISTURBED CORNER TIES AND MONUMENTS. THE CONTRACTOR SHALL NOTIFY THE CITY BEFORE REMOVAL OF ANY EXISTING SURVEY MONUMENTS OR TIES.

WHEN MONUMENTS EXIST THAT CONTROL THE LOCATION OF SUBDIVISIONS, TRACTS, BOUNDARIES, ROADS, STREETS, OR HIGHWAYS OR PROVIDE SURVEY CONTROL, THE MONUMENTS SHALL BE LOCATED AND REFERENCED BY OR UNDER THE DIRECTION OF A LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING WITHIN THE STATE, RETAINED AND PAID FOR BY THE CONTRACTOR. THIS WORK SHALL BE DONE SEVEN (7) CALENDAR DAYS PRIOR TO THE TIME WHEN ANY STREETS, HIGHWAYS, OTHER RIGHTS–OF–WAY, OR EASEMENTS ARE IMPROVED, CONSTRUCTED, RECONSTRUCTED, OR RELOCATED AND A CORNER RECORD OR RECORD OF SURVEY OF THE REFERENCES SHALL BE FILED WITH THE COUNTY SURVEYOR AND THE CITY. THEY SHALL BE RESET IN THE SURFACE OF THE NEW CONSTRUCTION, A SUITABLE MONUMENT BOX PLACED THEREON, OR PERMANENT WITNESS MONUMENTS SET TO PERPETUATE THEIR LOCATION AND A CORNER RECORD OR RECORD OF SURVEY FILED WITH THE COUNTY SURVEYOR AND THE CITY PRIOR TO THE RECORDING OF A CERTIFICATE OF COMPLETION FOR THE PROJECT. SUFFICIENT CONTROLLING MONUMENTS SHALL BE RETAINED OR REPLACED IN THEIR ORIGINAL POSITIONS TO ENABLE PROPERTY, RIGHT–OF–WAY AND EASEMENT LINES, PROPERTY CORNERS, AND SUBDIVISION AND TRACT BOUNDARIES TO BE REESTABLISHED WITHOUT DEVIOUS SURVEYS NECESSARILY ORIGINATING ON MONUMENTS DIFFERING FROM THOSE THAT CURRENTLY CONTROL THE AREA. MONUMENTS SET TO MARK THE LIMITING LINES OF HIGHWAYS, ROADS, STREETS OR RIGHT–OF–WAY OR EASEMENT LINES SHALL NOT BE DEEMED ADEQUATE FOR THIS PURPOSE UNLESS SPECIFICALLY NOTED ON THE CORNER RECORD OR RECORD OF SURVEY OF THE IMPROVEMENTS WORKS WITH DIRECT TIES IN BEARING OR AZIMUTH AND DISTANCE BETWEEN THESE AND OTHER MONUMENTS OF RECORD. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, THE MONUMENT COVER SHALL BE ADJUSTED TO THE NEW GRADE WITHIN SEVEN (7) CALENDAR DAYS OF FINISHED PAVING.

FLOOD HAZARD STATEMENT

SAID PROPERTY IS NOT INCLUDED IN A FLOOD HAZARD AREA AS DESIGNATED BY THE FEDERAL INSURANCE ADMINISTRATION.

THE FLOOD ZONE DESIGNATION IS: ZONE X, FEMA FLOOD MAP # 06059C0441H, EFFECTIVE FEBRUARY 18, 2004.

ZONE X: AREAS DETERMINED TO BE OUTSIDE 500–YEAR FLOODPLAIN.

SHEET INDEX

TITLE SHEET 1
DETAILS 2 – 3
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EROSION CONTROL PLAN – EXCAVATION PHASE 6
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SECTIONS 13 – 14
TOTAL SITE PRECISE GRADING 15

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE BASED ON THE CENTERLINE OF CABOT ROAD BEING NORTH 9°22'00" EAST PER PARCEL MAP NO. 88–274, FILED IN BOOK 253, PAGES 1 THROUGH 5, INCLUSIVE, OF PARCEL MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA.

BENCH MARK:

BENCHMARK DESIGNATION: 3–3/4" ORANGE COUNTY SURVEYOR ALUMINUM DISK STAMPED "3U–4–70"

MONUMENT RECOVERY: SET IN THE NORTHWESTERLY CORNER OF A CONCRETE BRIDGE ABUTMENT; NORTHWESTERLY CORNER OF THE INTERSECTION OF FORBES ROAD AND CROWN VALLEY PARKWAY, 150 FT. WESTERLY OF THE CENTERLINE OF FORBES ROAD AND 22.6 FT. NORTHERLY OF CROWN VALLEY PARKWAY. MONUMENT IS LEVEL WITH THE BRIDGE DECK.

ELEVATION = 392.547 FEET (NAVD 88 DATUM, O.C.S. ADJUSTMENT 1995)

LEGAL DESCRIPTION:

REAL PROPERTY IN THE CITY OF LAGUNA NIGUEL, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL 2 PARCEL MAP NO. 88–274, AS SHOWN ON A MAP FILED IN BOOK 253, PAGES 1 THROUGH 5, INCLUSIVE, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF ORANGE COUNTY, CALIFORNIA.

APN: 637–202–14

CIVIL ENGINEER

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SOILS ENGINEER

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(714) 630–1626

OWNER

UNITED AMERICAN PROPERTIES
4699 JAMBOREE RD,
NEWPORT BEACH, CA 92660
TEL: (949) 756–8800
FAX: (949) 756–8811

CITY LAGUNA NIGUEL
RECEIVED
MAR 09 2016
COMMUNITY DEVELOPMENT

EARTHWORK QTY.

DESCRIPTION	CUT	FILL
MASS EXCAVATION	27,342 CY	6,569 CY
SHRINKAGE 7%	–1,914 CY	
REMEDIAL GRADING	2,818 CY	REPLACE 3,156 CY
TOTAL EARTHWORK	28,246 CY	9,725 CY

EXPORT: 18,521 CY

GRADING QUANTITIES SHOWN ABOVE ARE FOR BONDING PURPOSES ONLY. SITE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES PRIOR TO BIDDING AND CONSTRUCTION.

DIG ALERT

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

CALL BEFORE YOU DIG

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CALL USA DIG ALERT AT 1–800–227–2600, 48 HOURS BEFORE ANY EXCAVATION.

AS-BUILT

NO.	DATE	REVISIONS	APP'D.	DATE
2	10/05/15	UPDATED DRAIN ADJACENT TO POOL, REVISED ELEVATION AND CONST. NOTES (SHEETS 3,8 &11)		
1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ○ fax 949.474.5315 ○ www.fuscoe.com
Debra Valle Schales 3/9/16
DEBRA VALLE SCHALES RCE#043101 DATE

REGISTERED PROFESSIONAL ENGINEER DEBRA VALLE SCHALES no. 43101 CIVIL STATE OF CALIFORNIA
3/9/16

PERMIT # G12–23

TITLE SHEET

CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12
SHEET	1 OF 15

3/8/2016
CAREER LOFTS PRECISE GRADING PLAN
AS-BUILT

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG01TS.DWG (03–08–16 7:25:21PM) Plotted by: fuscoe

CITY OF LAGUNA NIGUEL STORM DRAIN GENERAL NOTES:

1. ALL CONCRETE IN REINFORCED CONCRETE STRUCTURES MUST BE 3250 POUNDS PER SQUARE INCH. IN 28 DAYS; TYPE OF PORTLAND CEMENT CONCRETE TO BE DETERMINED BY PF & RD MATERIALS LAB.
2. ALL PIPE LENGTHS ARE HORIZONTAL PROJECTIONS, UNLESS OTHERWISE SHOWN.
3. FOR TRENCH EXCAVATIONS IN NATIVE SOIL, SHORING SHALL BE PROVIDED TO SATISFY STATE OF CALIFORNIA REQUIREMENTS.
4. PIPE CONSTRUCTION IN FILL AREA MUST BE COORDINATED WITH THE GRADING TO INSURE THAT WHEN THE FILL OPERATION HAS BEEN COMPLETED AT GRADE THERE IS A MINIMUM OF 2 FEET OF FILL ABOVE THE TOP OF PIPE.
5. ALL WORK MUST BE IN CONFORMANCE WITH THE ORANGE COUNTY PF & RD STANDARD SPECIFICATIONS AND MUST BE KEPT ON THE JOB AT ALL TIMES.
6. THE CONTRACTOR MUST NOTIFY THE CITY OF LAGUNA NIGUEL INSPECTOR AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION BY TELEPHONING.
7. ALL FILLS MUST BE COMPACTED TO 90% RELATIVE COMPACTION AS DETERMINED BY THE CALIFORNIA TEST METHOD NO. 216, 1978 "FIVE LAYER METHOD" ALL BACKFILL MUST BE FREE OF VEGETABLE MATTER.
8. ALL SURVEYING REQUIRED FOR VERTICAL AND HORIZONTAL ALIGNMENT MUST BE PROVIDED BY THE CONTRACTOR OR DEVELOPER AND SUFFICIENT REFERENCE STAKING MUST BE IN ACCORDANCE WITH THE REQUEST OF THE CITY INSPECTOR.
9. ALL REINFORCED CONCRETE PIPE MUST BE BEDDED IN ACCORDANCE WITH PIPE BEDDING DETAIL PER PF & RD STANDARD PLAN 1319.
10. CONTRACTOR WILL NOTIFY PF & RD MATERIALS LAB (714) 567–7805 48 HOURS PRIOR TO D–LOAD TESTING OF R.C.P. FOR VERIFICATION OF RESULTS.
11. PRIOR TO THE PLACEMENT OF STORM DRAIN IMPROVEMENTS, THE DEVELOPER'S SOIL ENGINEER SHALL CERTIFY IN WRITING TO THE CITY INSPECTOR THAT THE STORM DRAIN'S SUBGRADE IS OF ADEQUATE STRENGTH TO SUPPORT THE STRUCTURES AND ANY ANTICIPATED LOADS.
12. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE DEVELOPER'S CONTRACTOR SHALL OBTAIN A PERMIT FROM THE STATE DIVISION OF INDUSTRIAL SAFETY. A COPY OF THE PERMIT SHALL BE KEPT ON THE JOB SITE AT ALL TIMES.
13. WHENEVER APPLICABLE, THE DEVELOPER SHALL OBTAIN A PERMIT FROM THE STATE DEPARTMENT OF FISH AND GAME IN ACCORDANCE WITH SECTION 1602 OF THE CALIFORNIA FISH AND GAME CODE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
14. ALL STEEL THAT IS TO BE CONTINUOUS SHALL BE LAPPED A MINIMUM OF 45 BAR DIAMETERS.
15. ALL MATERIALS TESTING FOR THE DRAINAGE FACILITIES SHALL BE PROVIDED BY THE DEVELOPER OR CONTRACTOR IN ACCORDANCE WITH THE NUMBER, LOCATION AND FREQUENCY REQUESTED BY THE CITY INSPECTOR.
16. CHAMFER ALL EXPOSED EDGES OF CONCRETE 3/4'" MIN.
17. A PERMIT FOR WORK WITHIN EXISTING STREET RIGHT OF WAY IS REQUIRED FROM THE CITY FOR ANY ENCROACHMENT NECESSARY FOR CONSTRUCTION IN PUBLIC RIGHT OF WAY.
18. LENGTH OF MANHOLE STRUCTURES MAY BE INCREASED TO MEET PIPE ENDS AT OPTION OF CONTRACTOR AS LONG AS REINFORCING STEEL IS CONTINUED AS REQUIRED. ANY CHANGE IN SPUR LOCATION MUST BE APPROVED BY THE ENGINEER.
19. FLOOR OF MANHOLE STRUCTURE SHALL BE STEEL TROWELLED TO SPRING LINE.
20. BODY OF MANHOLE STRUCTURE, INCLUDING SPUR, MUST BE POURED IN ONE CONTINUOUS OPERATION, EXCEPT THAT CONSTRUCTION JOINT AT THE SPRING LINE WITH A LONGITUDINAL KEYWAY IS PERMITTED.
21. ALL REINFORCING BARS MUST BE SECURELY HELD IN PLACE IN THE FORMS. TWO–WAY MATS OF STEEL MUST BE WIRED TOGETHER BOTH WAYS AT ALTERNATE INTERSECTIONS.
22. STORM DRAIN BACKFILL FOR ALL FACILITIES WITHIN STREET RIGHT OF WAY IS TO BE PLACED AND COMPACTED UNDER CITY INSPECTION AND MEET OR EXCEED CITY MINIMUM STANDARDS.
23. ALL PIPE TO BE BANDED AND GROUTED.
24. RCP SHALL COMPLY WITH ALL A.S.T.M. APPLICABLE STANDARDS.
25. WORKING WITHIN ORANGE COUNTY FLOOD CONTROL FACILITIES IS RESTRICTED TO THE PERIOD OF APRIL 15 TO OCTOBER 15.
26. ALL LOCAL DEPRESSIONS SHALL BE CONSTRUCTED PER STREET IMPROVEMENT PLANS IN ACCORDANCE WITH PF & RD STD. PLANS HOWEVER, ALL CATCH BASINS WILL BE SHOWN ON STREET IMPROVEMENT PLANS.
27. THE CONTRACTOR SHALL CONDUCT CONSTRUCTION OPERATIONS IN SUCH A MANNER THAT STORM OR OTHER WATERS MAY PROCEED UNINTERRUPTED ALONG THEIR EXISTING STREET OR DRAINAGE COURSES.
28. IN THE COURSE OF WATER CONTROL, THE CONTRACTOR SHALL CONDUCT CONSTRUCTION OPERATIONS TO PROTECT WATERS FROM POLLUTION WITH FUELS, OILS, BITUMENS OR HARMFUL MATERIALS.
29. LOCAL DEPRESSIONS AND DECKS OF CURB INLETS SHALL NOT BE POURED UNTIL ADJACENT CURB AND GUTTER HAS BEEN POURED.
30. IF A DRIVEWAY ENCROACHES WITHIN A LOCAL DEPRESSION TRANSITION USE PF & RD STANDARD PLAN NO.1308 –TYPE A.
31. CATCH BASIN CURB SUPPORT SHALL BE CONSTRUCTED PER DETAIL "A" AS SHOWN ON PF & RD STD. PLAN NO. 1306, SHEET 2 OF 3.

NOTICE TO CONTRACTOR

CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT DISCREPANCIES TO THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
PRIOR TO CONSTRUCTION OF ANY CONCRETE STRUCTURE, THE CONTRACTOR SHALL VERIFY WITH THE SOILS ENGINEER, THE TYPE OF CONCRETE RECOMMENDED.
EXISTING UNDERGROUND STRUCTURES:
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES OR CONDUITS SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE THE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LIENS NOT OF RECORD OR NOT SHOWN ON THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNERS OF THE UTILITIES OR STRUCTURES CONCERNED BEFORE STARTING WORK. CONTRACTOR FURTHER ASSUMES ALL LIABILITY AND RESPONSIBILITY FOR THE UNDERGROUND UTILITY PIPES, CONDUITS OR STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS.

BMP NOTES, DUST CONTROL, AIR QUALITY AND NOISE CONTROL:

1. Best Management Practices, Noise Control (GSP MM 4.10–1 –– MM4.10–4) – Prior to issuance of grading or building permits, the project applicant shall document on the grading and building plans the following construction best management practices (BMPs), to be implemented by contractors to reduce construction noise levels:

   (MM4.10–1)

   a. Ensure that construction equipment is properly muffled according to industry standards and in good working condition.
   b. Place noise–generating construction equipment and locate construction staging areas away from sensitive uses, where feasible.
   c. Schedule high noise–producing activities between the hours of 8:00 AM and 5:00 PM to minimize disruption on sensitive uses, Monday through Saturday.
   d. Implement noise attenuation measures, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources, where feasible.
   e. Use electric air compressors and similar power tools rather than diesel equipment, where feasible.
   f. Construction–related equipment, including heavy–duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 10 minutes.
   g. Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow for surrounding owners and residents to contact the job superintendent. If the City or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party.
   h. MM4.10–2) Construction staging areas along with the operation of earthmoving equipment within the project area would be located as far away from vibration and noise sensitive sites as possible.
   i. (MM4.10–3) Heavily loaded trucks used during construction would be routed away from residential streets.
   j. (MM4.10–4) Use of noise–reducing pile driving techniques if nearby structures are subject to pile driving noise and vibration. These techniques include pre–drilling pile holes (if feasible, based on soils) to the maximum feasible depth, installing state–of–the–art intake and exhaust mufflers on pile driving equipment, vibrating piles into place when feasible, and installing shrouds around the pile driving hammer where feasible. Pile driving activities shall be scheduled between the hours of 8:00 AM and 4:00 PM on Mondays through Fridays only.

2. Air Pollutants –The project shall comply with the South Coast Air Quality Management District (SCAQMD) Rule 402, which prohibits the discharge from a facility of air pollutants that cause injury, detriment, nuisance or annoyance to the public or that damage business or property.

3. Best Management Practices Air Quality (GSP MM4.2–1 –– MM4 2–14) – Prior to issuance of a grading and/or a building permit, the following BMPs shall be included on the project grading and/or building plans, as determined appropriate by the Community Development Director or Building Official:

   a. (MM4.2–1) Name and phone number of the contractor's superintendent hired by the Applicant shall be submitted to the Community Development and Public Works Departments. In addition, clearly visible signs shall be posted on the perimeter of the site indicating who shall be contacted for information regarding this development and any construction/grading related concerns. This contact person shall be available immediately to address any concerns or issues raised by adjacent property owners during the construction activity. S/he will be responsible for ensuring compliance with the conditions herein, specifically, grading activities, truck routes, construction hours, noise, etc. Signs shall include the Applicant's contact number regarding grading and construction activities, and "1–800–CUTSMOG" in the event there are concerns regarding fugitive dust and compliance with SCAQMD Rule No. 403.
   b. (MM4.2–2) Wind barriers shall be installed *along the perimeter of the site and/or around areas* being graded.
   c. (MM4.2–3) Project Applicant shall establish an on–site construction equipment staging area and construction worker parking, located on either paved surfaces or unpaved surfaces subjected to soil stabilization treatments, as close as possible to a public roadway.
   d. (MM4.2–4) Project Applicant shall control access to the public by limiting curb cuts/driveways to minimize project construction impacts upon roadway traffic operations.
   e. (MM4.2–5) Project Applicant shall properly maintain non–vehicular equipment engines to minimize the volume of exhaust emissions.
   f. (MM4.2–6) Project Applicant shall use electricity from power poles, rather than temporary diesel or gasoline powered generators, as feasible.
   g. (MM4.2–7) Project Applicant shall use on–site mobile equipment powered by alternative fuel sources (i.e., methanol, natural gas, propane, or butane) as feasible.
   h. (MM4.2–8) Project Applicant shall pave all construction roads as feasible.
   i. (MM4.2–9) Project Applicant shall provide ridesharing or shuttle service for construction workers, as feasible.
   j. (MM4.2–101 Project Applicant shall provide temporary traffic controls such as a flag person, during all phases of construction to maintain smooth traffic flow, as deemed necessary by the Public Works Director.
   k. (MM4.2–11) Project Applicant shall provide dedicated turn lanes for movement of construction trucks and equipment on and off site, as deemed necessary by the Public Works Director.
   l. (MM4.2–12) Project Applicant shall reroute construction trucks away from congested streets or sensitive receptor areas, as feasible;
   m. (MM4.2–13) Project Applicant shall require the use of cleanest burning diesel haul trucks available, such as trucks that meet 2010 model year EPA standards.
   n. (MM4.2–14) Project Applicant shall ensure that all architectural coating (paint and primer) products applied during construction have a low to no VOC rating.

4. Dust Control – During clearing, grading, earth–moving, or excavation operations, excessive fugitive dust emissions shag be controlled by regular watering or other dust–preventive measures using the following procedures, as specified in the SCAQMD Rule 403 listed below. Prior to grading permit issuance, these control techniques shall be noted on the project grading plans. Compliance with the measure shall be subject to periodic silt inspections by the City.

   a. On–site vehicle speed shall be limited to 15 miles per hour.
   b. Material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering shall occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day.
   c. Streets adjacent to the project site shag are swept as needed to remove silt that may have accumulated from construction activities so as to prevent excessive amounts of dust.
   d. All trucks hauling dirt, sand, soil, or other loose materials shall be securely covered, or maintain at least 0.6 meters (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code (CVC) Section 23114.
   e. The area disturbed by clearing, grading, earth–moving, or excavation operations shall be minimized so as to prevent excessive amounts of dust.
   f. Visible dust beyond the property line emanating from the project shall be prevented to the maximum extent feasible.

PRECISE GRADING CONSTRUCTION NOTES

㉞ CONSTRUCT WALL W/FOUNTAIN PER LANDSCAPE PLAN LC–01 & LC–03
㉟ CONSTRUCT LOCK & LOAD RETAINING WALL PER ABI ENGINEERING
㊱ INSTALL "ENTRANCE" FIRE LANE PER FIRE MASTER PLANINSTALL "NO PARKING – FIRE LANE" SIGN PER FIRE MASTER PLAN
㊲ INSTALL KNOX KEY BOX PER FIRE MASTER PLAN
㊳ INSTALL "NO PARKING – FIRE LANE" SIGN PER FIRE MASTER PLAN
㊴ CONSTRUCT 6" PCC OVER 4" AB DRIVEWAY
㊵ CONSTRUCT 6" CURB (A1–6(150)) PER SWPPC STD PLAN 120–2
㊶ CONSTRUCT 12" CURB PER MODIFIED SWPPC STD PLAN 120–2 & DETAIL J ON SHT 2
㊷ CONSTRUCT VARIED HT CURB (A1–6(150)) PER MODIFIED SPPWC STD PLAN 120–2 – SEE DETAIL A ON SHT 2
㊸ CONSTRUCT 4" PLANTER CURB PER LANDSCAPE PLAN LC–01
㊹ CONSTRUCT COLORED CONCRETE PAVING – 6" PCC OVER 4" AB PER LANDSCAPE PLAN LC–01
㊺ CONSTRUCT INTERLOCKING PAVING SIDEWALK PER LANDSCAPE PLAN LC–01
㊻ CONSTRUCT 4" PCC OVER 4" AB SIDEWALK –SEE DETAIL C ON SHT 2
㊼ CONSTRUCT COLORED CONCRETE PAVING (POOL DECK) PER LANDSCAPE ARCH PLAN NO. LC–02
㊽ CONSTRUCT CONCRETE TRANSITION SWALE PER DETAIL F ON SHT 9
㊾ CONSTRUCT HANDICAP RAMP AND RAILING PER ARCH PLAN NO.
㊿ CONSTRUCT STUCCO RETAINING WALL WITH GLASS FENCING PER ARCHITECT PLAN
(51) CONSTRUCT RETAINING WALL WITH 8' (MIN) SOUND WALL PER ARCHITECT PLAN
(52) CONSTRUCT STUCCO RETAINING WALL W/BLOCK OR GLASS WALL PER ARCHITECT PLAN
(53) CONSTRUCT RETAINING WALL PER SEPARATE PLANS & PERMIT
(54) LANDSCAPE PER LANDSCAPE PLAN NO. LC–01
(55) CONSTRUCT CORTEEN STEEL PLANTER PER LANDSCAPE ARCH PLAN NO. LC–01
(56) INSTALL TREE PER LANDSCAPE PLAN LP–01INSTALL "NO PARKING – FIRE LANE" SIGN PER FIRE MASTER PLAN
(57) CONSTRUCT STAIRS PER ARCH PLAN
(58) CONSTRUCT BIORETENTION PER DETAIL D1 – D3 ON SHT 3
(59) PROTECT IN PLACE
(60) CONSTRUCT GATE PER LANDSCAPE PLAN NO. LC–01
(61) DG SIDEWALK PER LANDSCAPE PLAN NO. LC–01
(62) CONSTRUCT CONCRETE SWALE PER DETAIL E ON SHT 3
(63) CREATE A SWALE PER DETAIL HEREON
(64) CONSTRUCT 8" CURB (A1–8(200) PER SWPPC STD PLAN 120–2
(65) CONSTRUCT CONCRETE SPLASH BLOCK PER DETAIL I ON SHT 3
(66) INSTALL 18"X18" CONCRETE SPLASH BLOCK

ALBUS-KEEFE & ASSOCIATES, INC
GEOTECHNICAL CONSULTANTS

March 7, 2013
J.N.: 1806.00

Mr. Phil Andoniu
United American Properties
4699 Jamboree Road
Newport Beach, California 92660

Subject: **Recommendations for Storm Drain Trench Backfill, Career Lofts Development, 28100 Cabot Road, Laguna Niguel, California.**

Reference: *Updated Geotechnical Report in Support of Construction Drawings, Career Lofts, Proposed Apartment Complex, 28100 Cabot Road, Laguna Niguel, California,* dated June 19, 2012, prepared by Albus-Keefe & Associates, Inc. (J.N.: 1806.00).

Dear Mr. Andoniu,

We are providing herein our recommendations for the backfill and compaction of storm drain pipes at the subject site. General recommendations were provided in the referenced report and are further detailed herein. Please find attached as Plate 1 our recommended detail for bedding, shading, and backfilling.

We hope this correspondence provides you the information required at this time. If there are any questions regarding the contents discussed herein, please do not hesitate to call.

Sincerely yours,

ALBUS-KEEFE & ASSOCIATES, INC.

David E. Albus
Principal Engineer
G.E. 2455

No. 2455
Exp. 12/31/14

Enclosure: Plate 1- Typical Pipe Trench Detail

1011 North Armando Street, Anaheim CA 92806-2606 (714) 630-1626 FAX (714) 630-1916

ALBUS-KEEFE & ASSOCIATES, INC
GEOTECHNICAL CONSULTANTS

March 7, 2013
J.N.: 1806.00

Mr. Phil Andoniu
United American Properties
4699 Jamboree Road
Newport Beach, California 92660

Subject: **Clarification to Requirements for Concrete, Career Lofts Development, 28100 Cabot Road, Laguna Niguel, California.**

Reference: *Updated Geotechnical Report in Support of Construction Drawings, Career Lofts, Proposed Apartment Complex, 28100 Cabot Road, Laguna Niguel, California,* dated June 19, 2012, prepared by Albus-Keefe & Associates, Inc. (J.N.: 1806.00).

Dear Mr. Andoniu,

We are providing herein clarification to the requirements for concrete used at the subject site that will be placed on or below grade. As indicated in our referenced report, laboratory testing of site soils indicates water-soluble sulfate content varies between 0.2% and 2.00%. As such, we recommend following the procedures provided in ACI 318, Section 4.3, Table 4.3.1 for **severe** sulfate exposure. Additional testing for soluble sulfate content will be required subsequent to rough grading and prior to construction of foundations and retaining walls to confirm these conditions. As indicate in ACI, structural concrete that will be in direct contact with site soils should have a minimum compressive strength of 4,500 psi at 28 days, a maximum water cement ratio of 0.45, and utilize Type V cement. These requirements should be applied to building structural elements such as footings and retaining wall components. These requirements need not be applied to concrete drives or flatwork, concrete curbs and gutters, or concrete storm drain pipes that are surrounded by at least 6 inches of granular material. Such non-structural elements may be constructed using concrete with those characteristics required for a non-corrosive environment.

We hope this correspondence provides you the information required at this time. If there are any questions regarding the contents discussed herein, please do not hesitate to call.

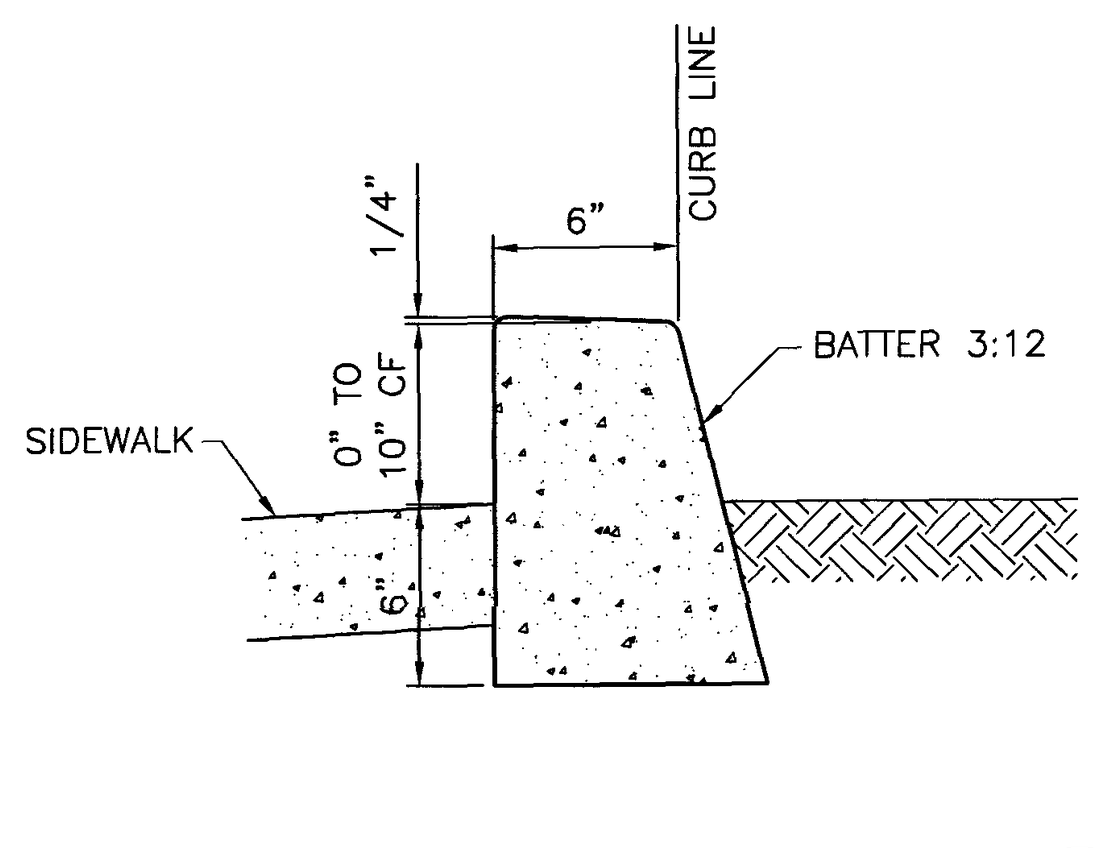
Sincerely yours,

ALBUS-KEEFE & ASSOCIATES, INC.

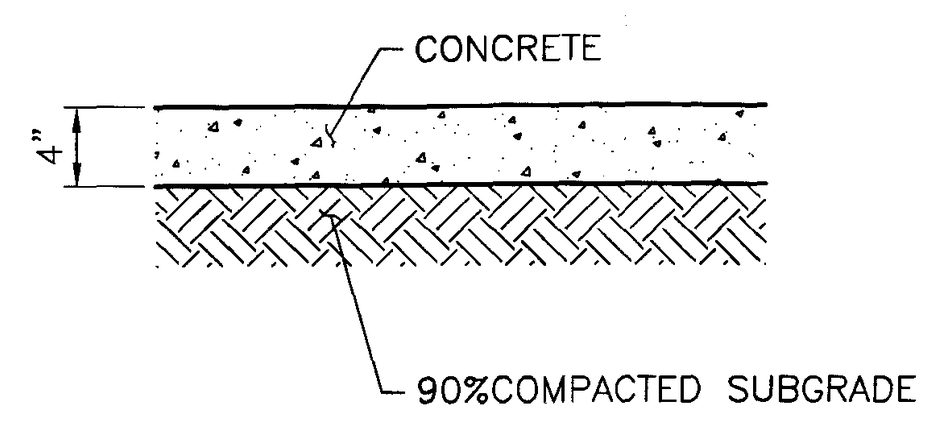
David E. Albus
Principal Engineer
G.E. 2455

No. 2455
Exp. 12/31/14

1011 North Armando Street, Anaheim CA 92806-2606 (714) 630-1626 FAX (714) 630-1916



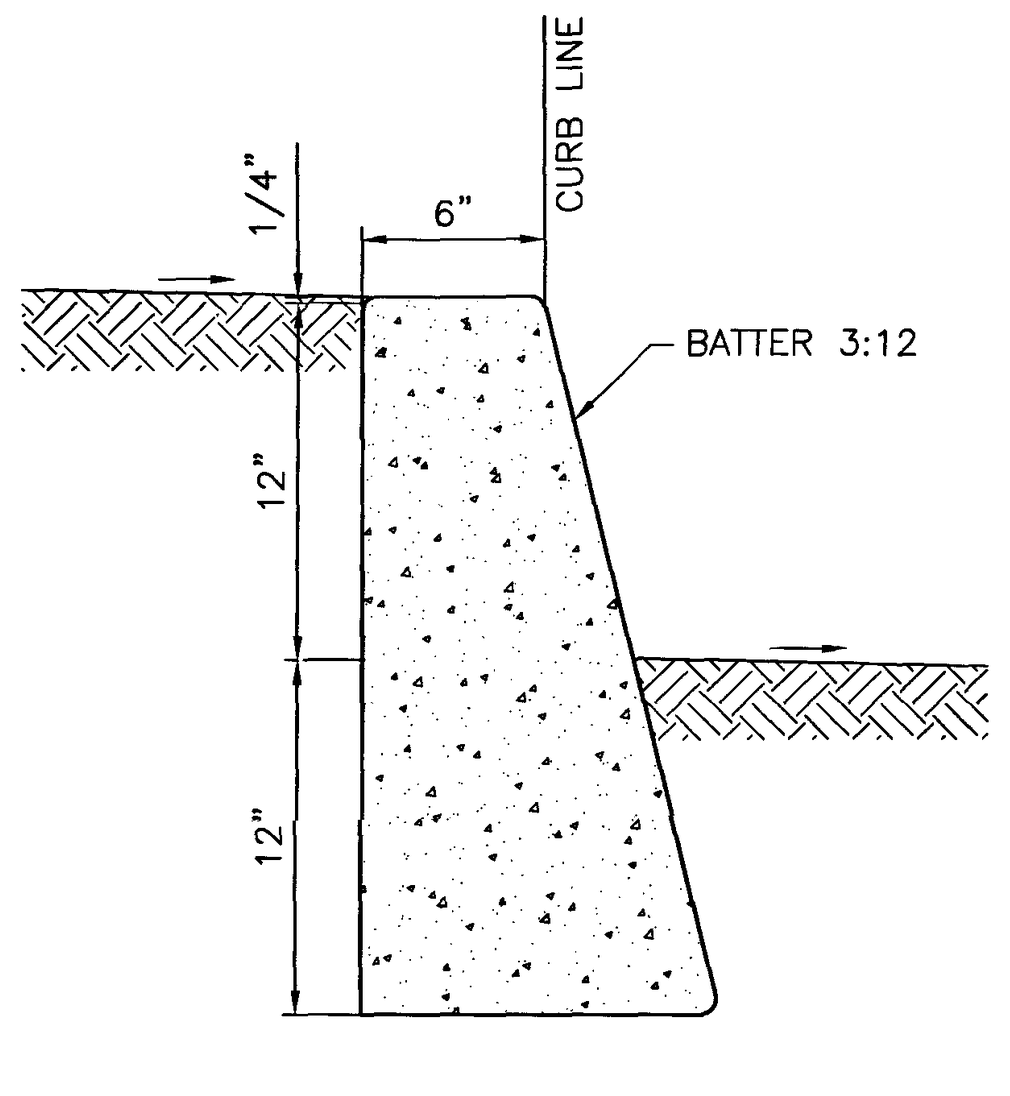
VARIED HEIGHT CURB (A1-6(150)) (A)
NOT TO SCALE



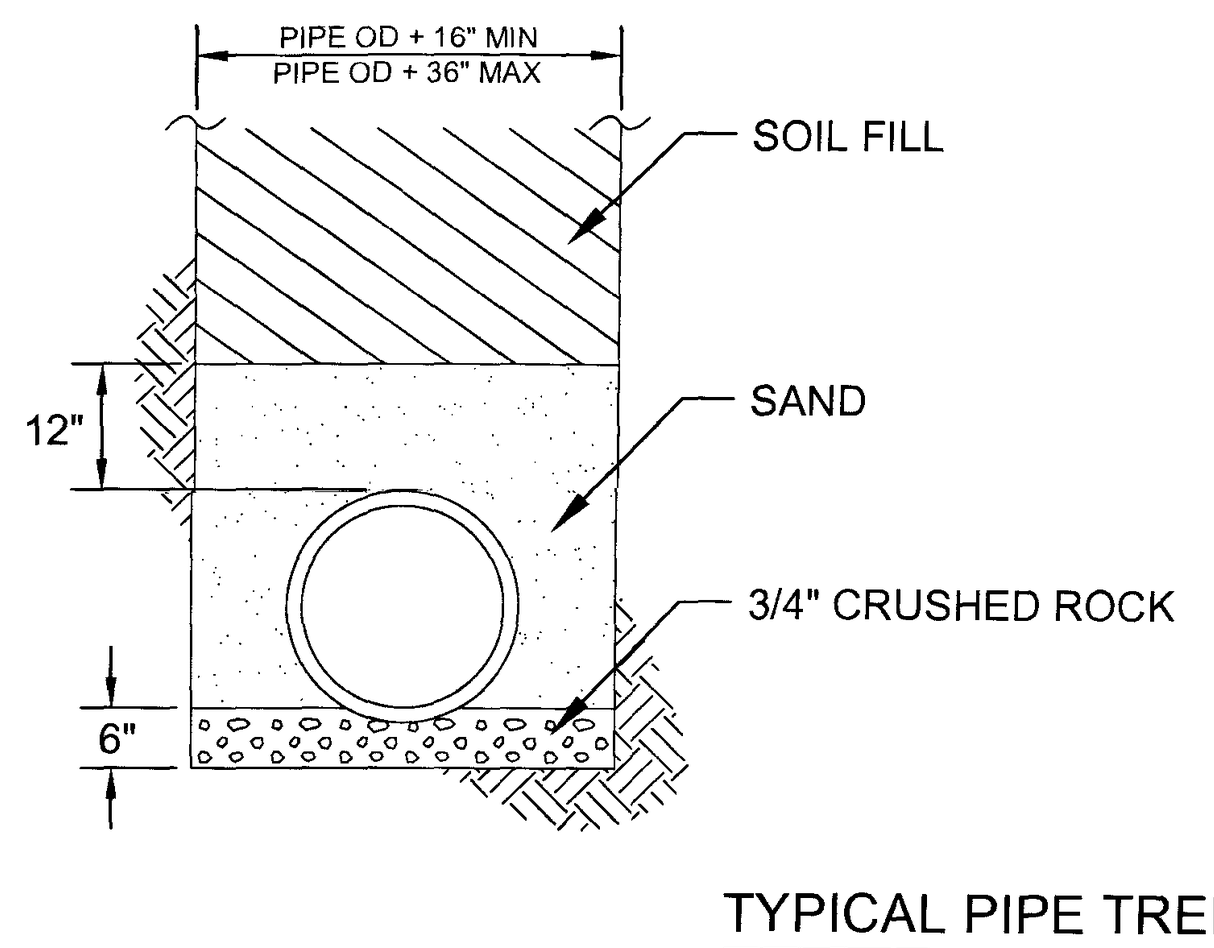
NOTES:

1. ALL TREAD SURFACES SHALL BE SLIP–RESISTANT.
2. WEAKENED PLANE JOINT (WPJ) AND EXPANSION JOINTS (EXPJT) SHALL BE ACCORDING TO APWA STD. DWG#112–1.
3. CONCRETE SHALL BE CLASS 310–C–17 (520–C–2500 CONFORMING TO SSPWC 201–1.1.2 AND SHALL BE 4" THICK
4. SUBGRADE PREPARATION: PRESATURATE SUBGRADE SOIL 1.35xOPTIMUM MOISTURE TO A DEPTH OF 12INCHES

4"PCC SIDEWALK (C)
NOT TO SCALE



12" CURB (MODIFIED) (J)
NOT TO SCALE



NOTES:

3/4" CRUSHED ROCK: PER GREENBOOK 200 - 1.2, COMPACTED TO 90% OF ASTM D1557 MIN.

SAND: PER GREENBOOK 200 - 1.5.1, SAND EQUIVALENCE (SE) > 30, COMPACTED TO 90% OF ASTM D1557 MIN.

SOIL FILL: ONSITE OR IMPORTED SOIL WITH MAX. PARTICLE SIZE OF 4", NO DELETERIOUS MATERIAL, COMPACTED TO 90% OF ASTM D1557 MIN.

TYPICAL PIPE TRENCH DETAIL (Y)
NOT TO SCALE

DIG ALERT

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

CALL BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CALL USA DIG ALERT AT 1–800–227–2600, 48 HOURS BEFORE ANY EXCAVATION.

AS-BUILT

NO.	DATE	REVISIONS	APP'D.	DATE
2	10/05/15	UPDATED DRAIN ADJACENT TO POOL, REVISED ELEVATION AND CONST. NOTES (SHEETS 3,8 &11)		
1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFE & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ∘ fax 949.474.5315 ∘ www.fuscoe.com
3/9/16
DEBRA VALLE SCHALES RCE#043101 DATE

no. 43101
3/9/16

DETAIL SHEET
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

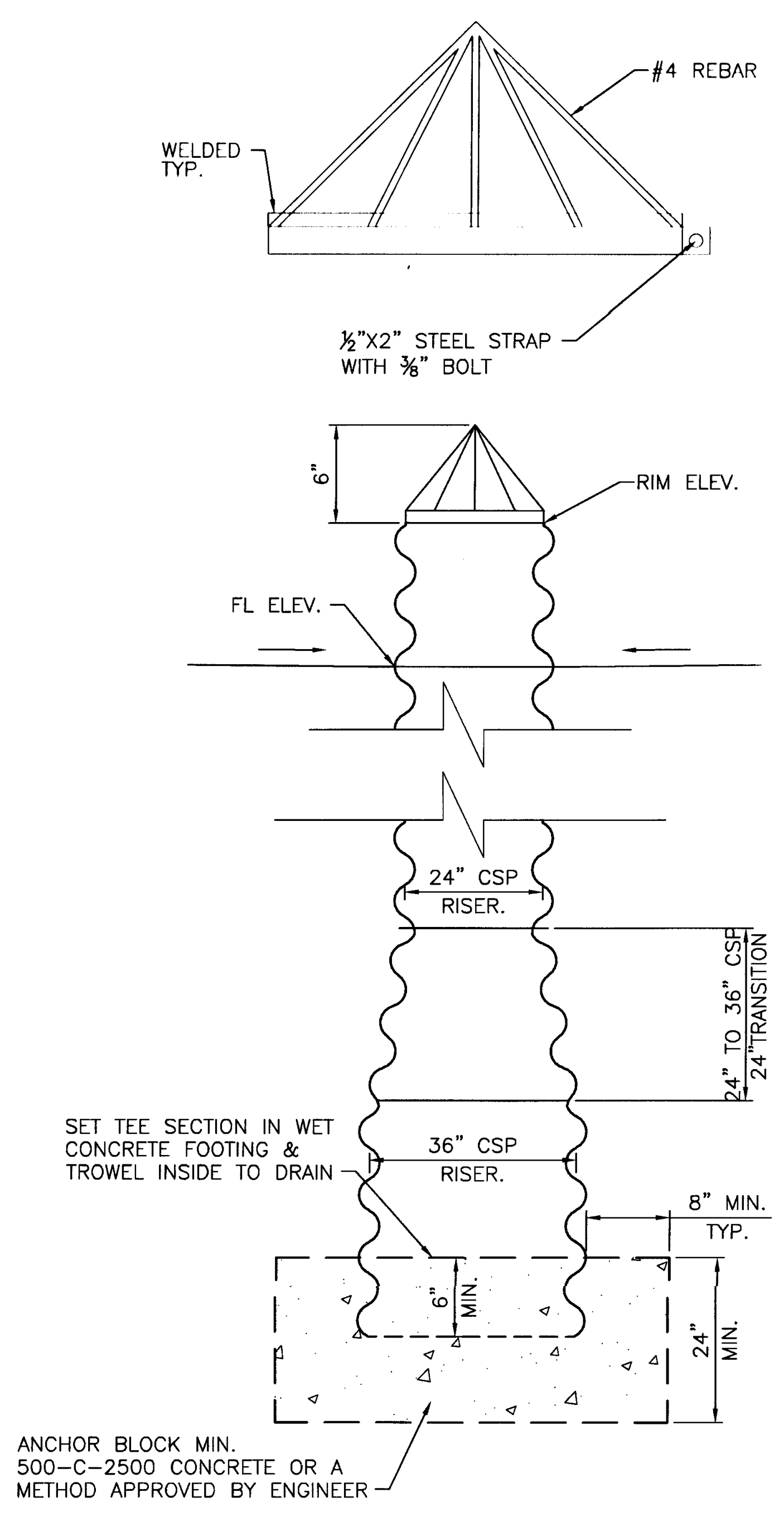
PERMIT # G12–23

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

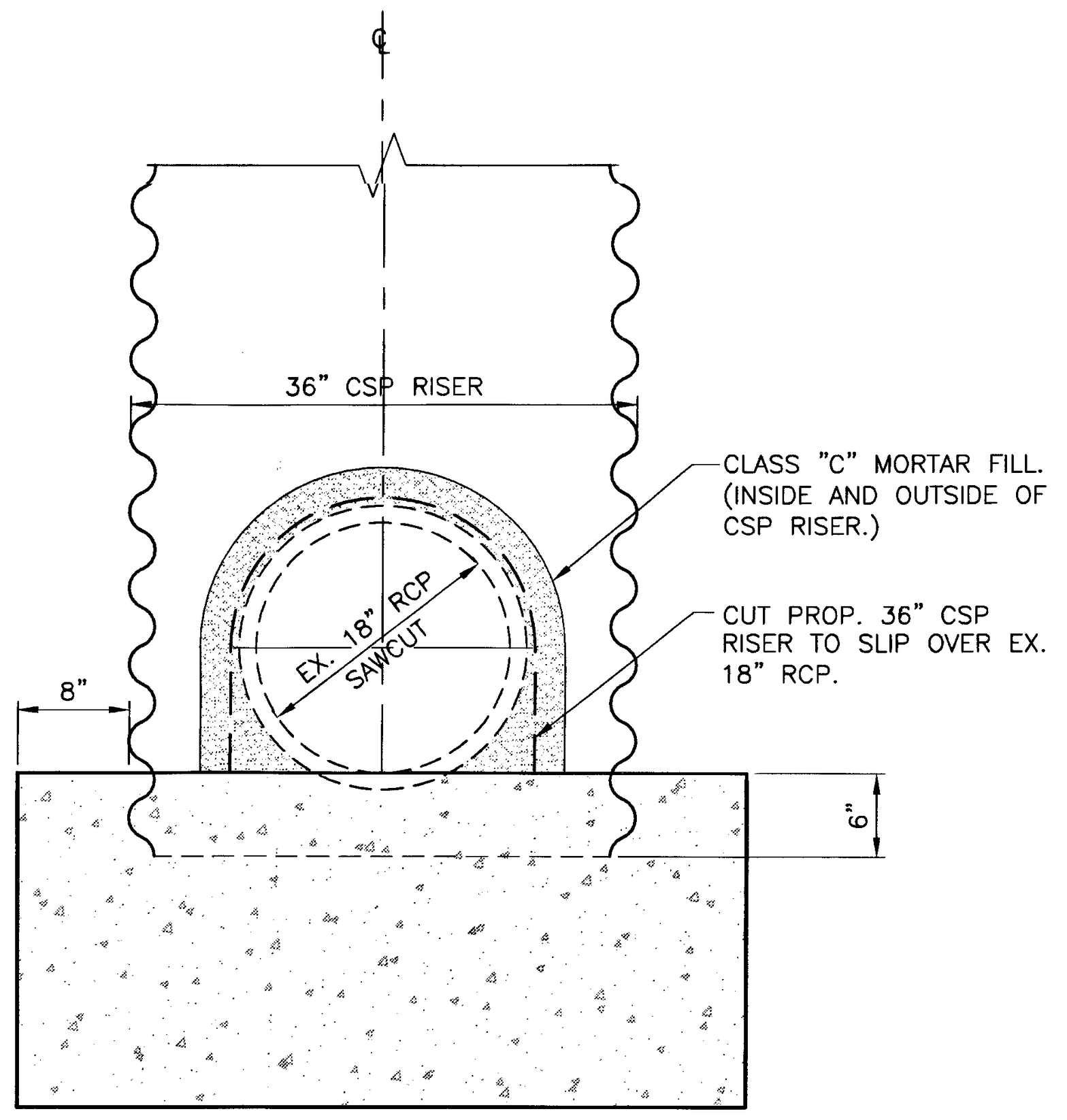
SHEET 2 OF 15

3/8/2016
CAREER LOFTS
PRECISE GRADING PLAN
AS-BUILT

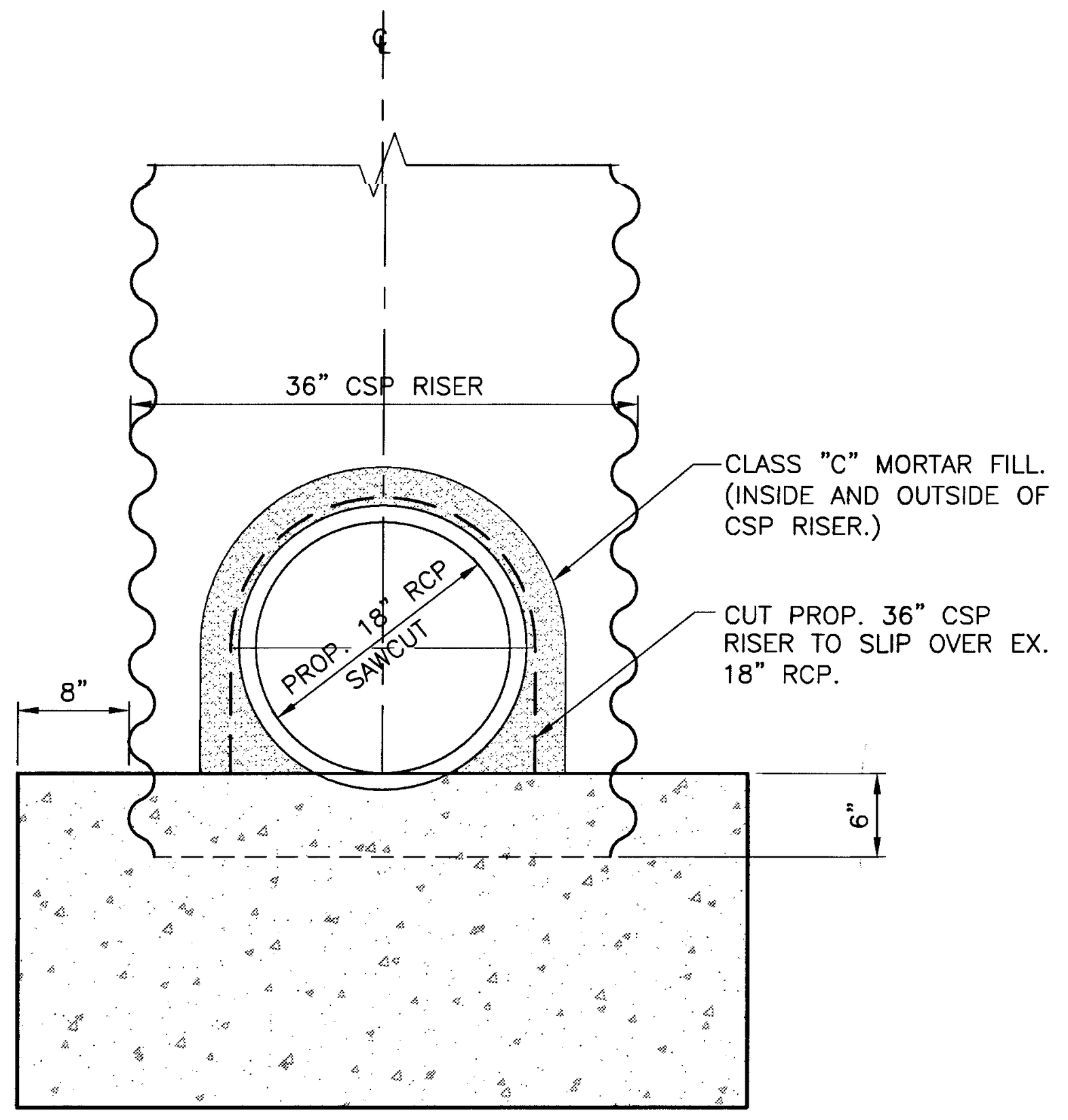
P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG02DT.DWG (03–08–16 7:25:33PM) Plotted by: fuscoe


#4 REBAR
WELDED TYP.
½"X2" STEEL STRAP WITH ⅜" BOLT
6"
RIM ELEV.
FL ELEV.
24" CSP RISER.
24" TO 36" CSP 24" TRANSITION
SET TEE SECTION IN WET CONCRETE FOOTING & TROWEL INSIDE TO DRAIN
36" CSP RISER.
8" MIN. TYP.
6" MIN.
24" MIN.
ANCHOR BLOCK MIN. 500-C-2500 CONCRETE OR A METHOD APPROVED BY ENGINEER

CSP RISER (H)
NOT TO SCALE

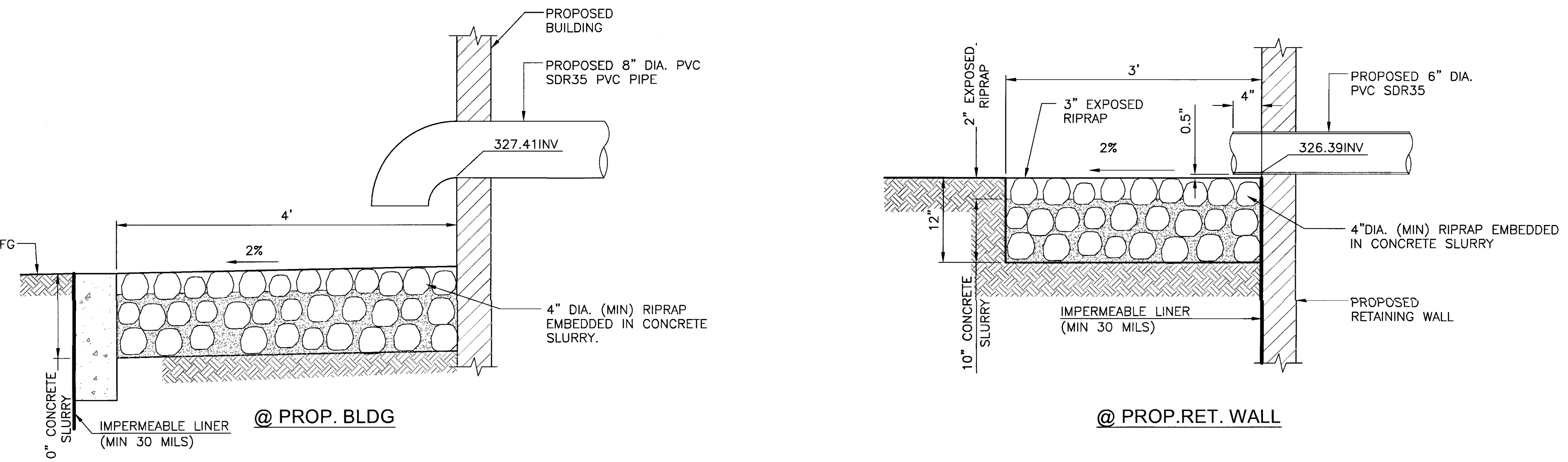

℄
36" CSP RISER
EX. 18" RCP
SAWCUT
CLASS "C" MORTAR FILL. (INSIDE AND OUTSIDE OF CSP RISER.)
CUT PROP. 36" CSP RISER TO SLIP OVER EX. 18" RCP.
8"
6"

DETAIL SECTION FOR EX. 18" RCP
NOT TO SCALE


℄
36" CSP RISER
PROP. 18" RCP
SAWCUT
CLASS "C" MORTAR FILL. (INSIDE AND OUTSIDE OF CSP RISER.)
CUT PROP. 36" CSP RISER TO SLIP OVER EX. 18" RCP.
8"
6"

DETAIL SECTION FOR PROP. 18" RCP
NOT TO SCALE

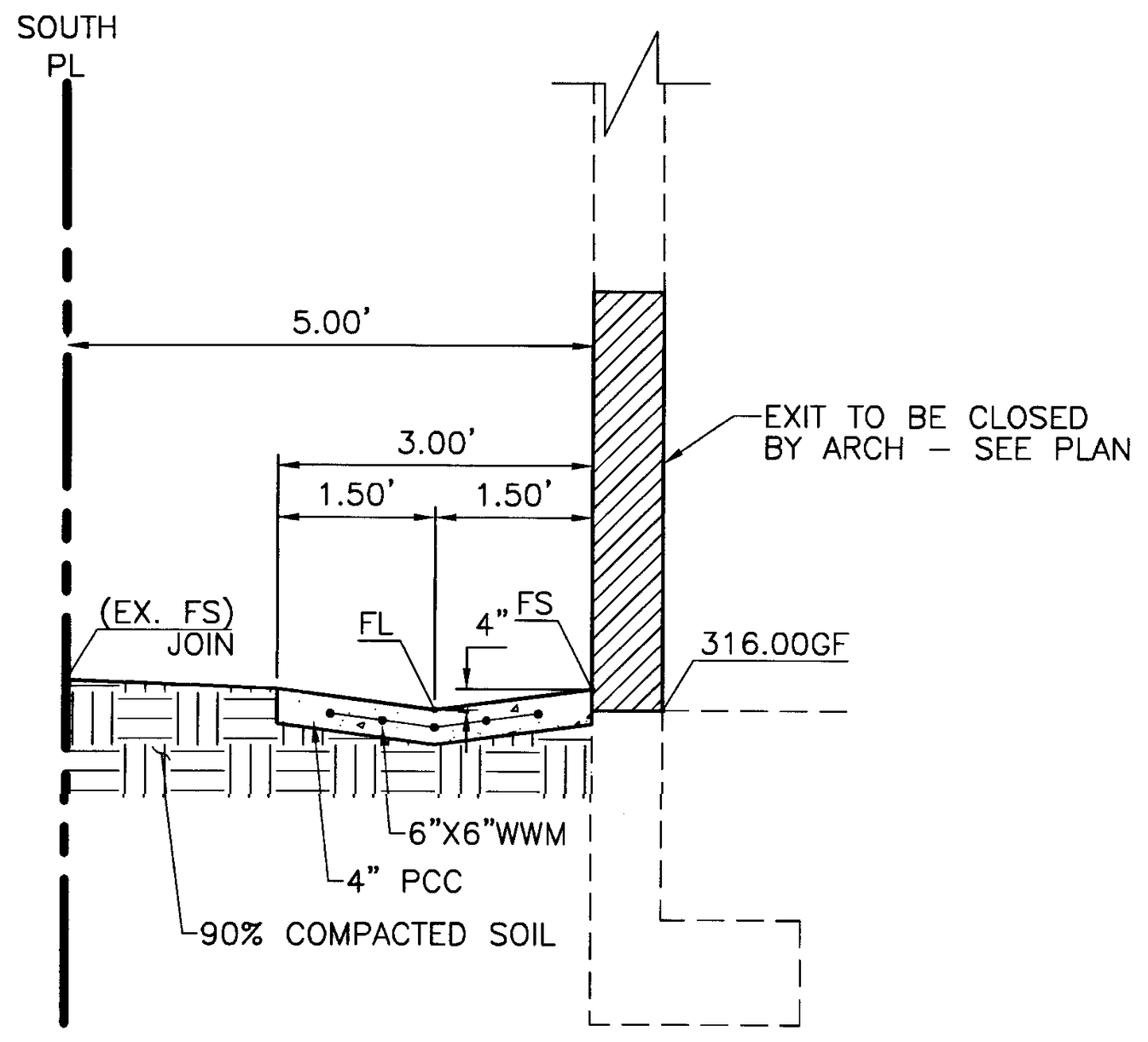
THIS CONNECTION TO BE FIELD INSPECTED AND APPROVED BY THE PROJECT CIVIL ENGINEER, AND REPORT SHOULD BE GIVEN TO THE CITY INSPECTOR.


PROPOSED BUILDING
PROPOSED 8" DIA. PVC SDR35 PVC PIPE
327.41INV
4'
2%
FG
4" DIA. (MIN) RIPRAP EMBEDDED IN CONCRETE SLURRY.
10" CONCRETE SLURRY
IMPERMEABLE LINER (MIN 30 MILS)
2" EXPOSED RIPRAP
3'
3" EXPOSED RIPRAP
0.5'
4"
PROPOSED 6" DIA. PVC SDR35
326.39INV
12"
4"DIA. (MIN) RIPRAP EMBEDDED IN CONCRETE SLURRY
PROPOSED RETAINING WALL
10" CONCRETE SLURRY
IMPERMEABLE LINER (MIN 30 MILS)

@ PROP. BLDG

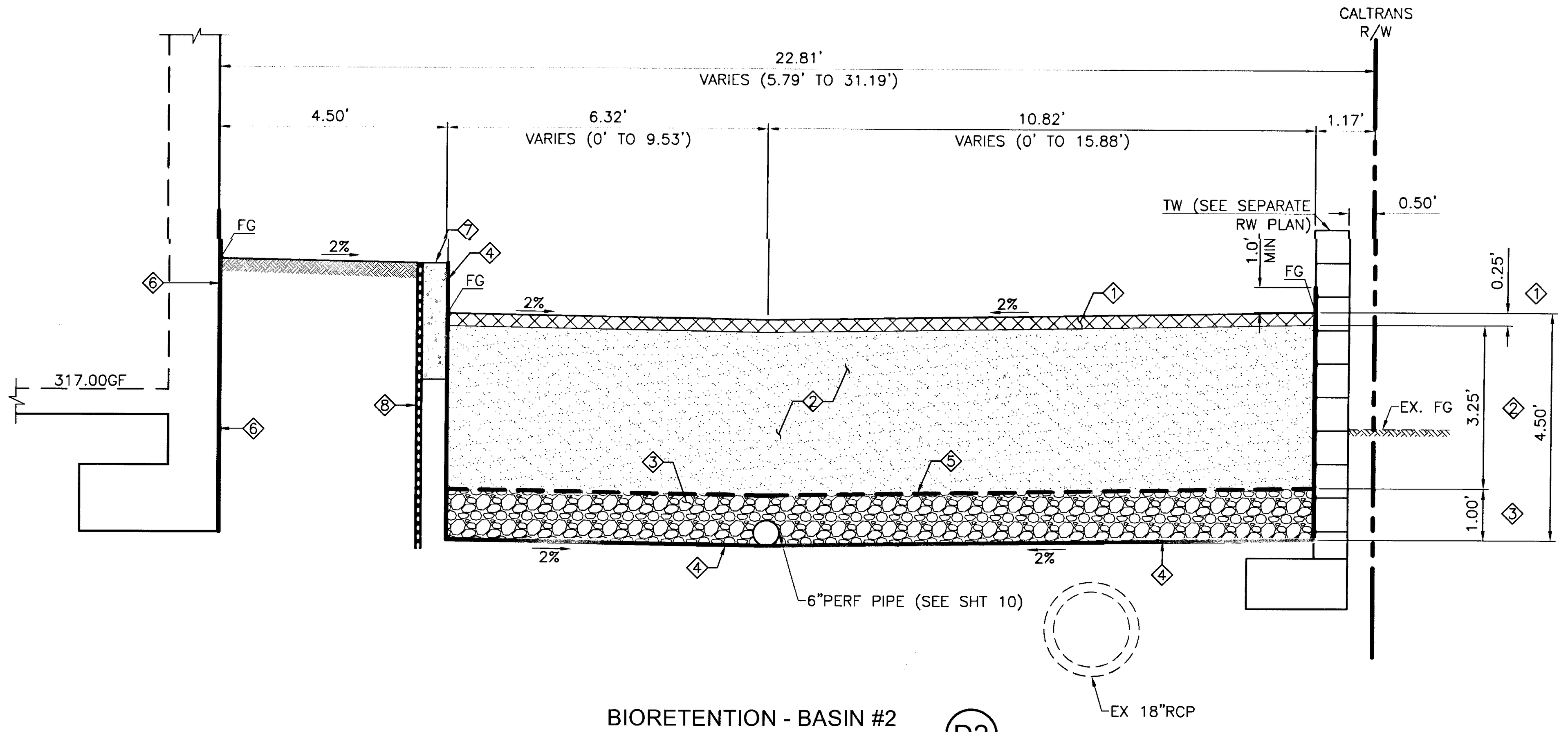
@ PROP.RET. WALL

SPLASH BLOCK DETAIL (I)
NOT TO SCALE

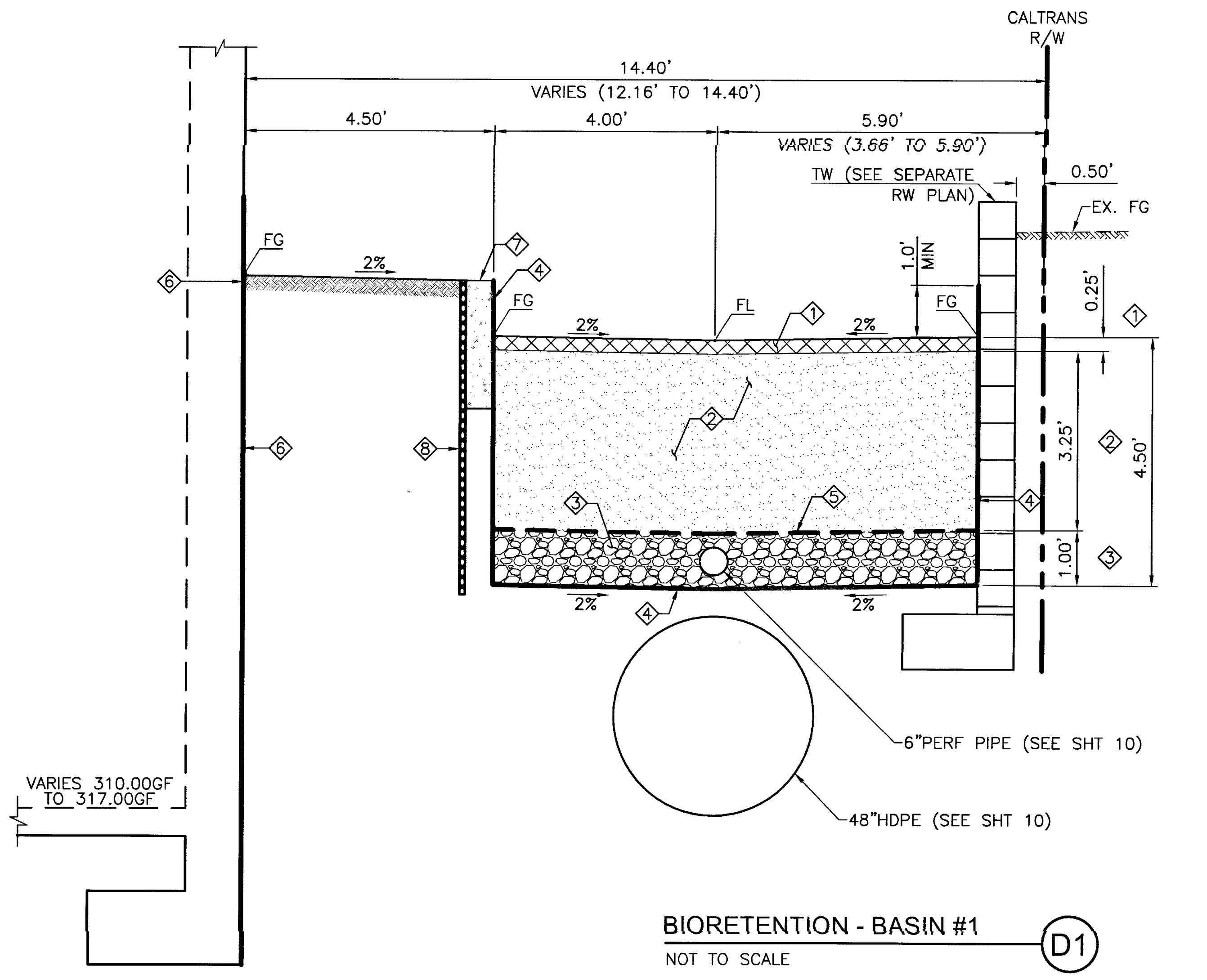

SOUTH PL
5.00'
3.00'
1.50'
1.50'
EXIT TO BE CLOSED BY ARCH – SEE PLAN
(EX. FS) JOIN
FL
4" FS
316.00GF
6"X6"WWM
4" PCC
90% COMPACTED SOIL

CONCRETE SWALE (E)

NOT USED (G)
NOT TO SCALE


CALTRANS R/W
22.81'
VARIES (5.79' TO 31.19')
4.50'
6.32'
VARIES (0' TO 9.53')
10.82'
VARIES (0' TO 15.88')
1.17'
TW (SEE SEPARATE RW PLAN)
0.50'
FG
2%
1.0' MIN
317.00GF
EX. FG
0.25'
3.25'
4.50'
1.00'
6"PERF PIPE (SEE SHT 10)
EX 18"RCP

BIORETENTION - BASIN #2 (D2)
NOT TO SCALE


CALTRANS R/W
14.40'
VARIES (12.16' TO 14.40')
4.50'
4.00'
5.90'
VARIES (3.66' TO 5.90')
TW (SEE SEPARATE RW PLAN)
0.50'
EX. FG
FG
2%
FL
1.0' MIN
0.25'
3.25'
4.50'
1.00'
VARIES 310.00GF TO 317.00GF
6"PERF PIPE (SEE SHT 10)
48"HDPE (SEE SHT 10)

BIORETENTION - BASIN #1 (D1)
NOT TO SCALE

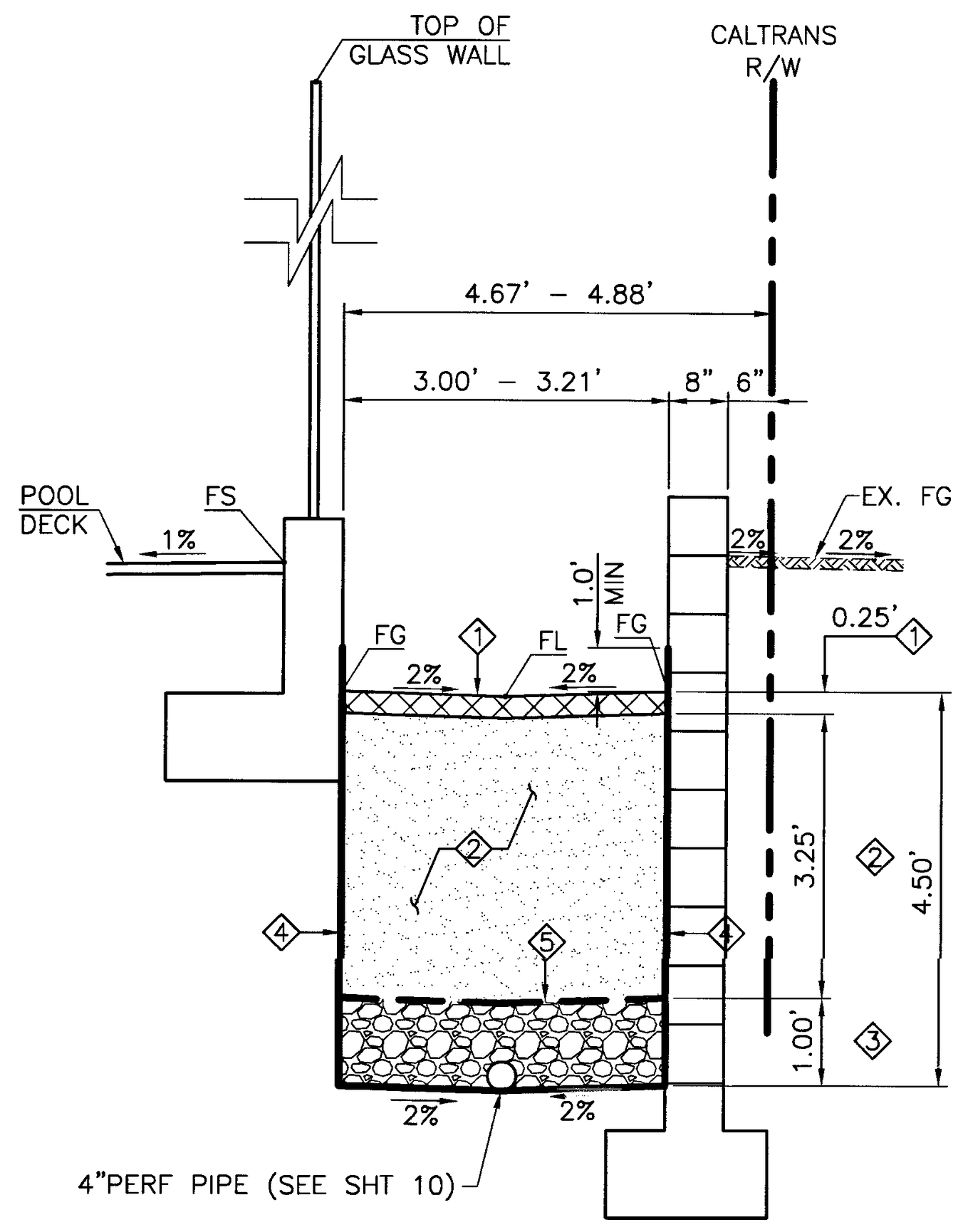
ALL WATER QUALITY FEATURES, HYDROMODIFICATION FEATURES, AND BIORETENTION SYSTEMS SHALL BE FIELD INSPECTED AND APPROVED BY THE PROJECT CIVIL ENGINEER, AND REPORT SHOULD BE GIVEN TO THE CITY INSPECTOR.

NOTES FOR DETAILS D1 TO D3

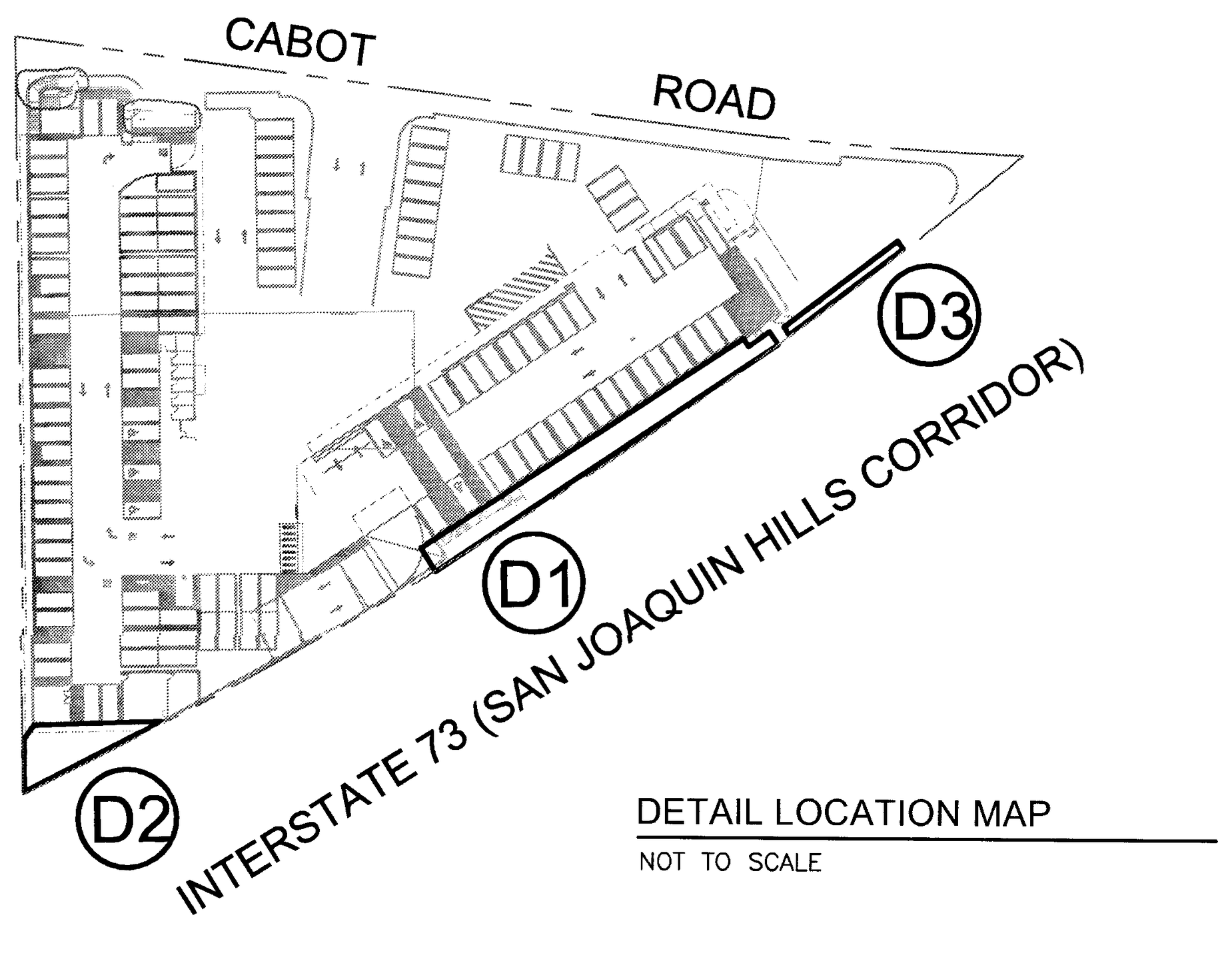
- ① 3" MULCH
- ② 39" PLANTING MEDIA TO BE HIGHLY PERMEABLE AND HIGH IN ORGANIC MATTER (E.G., LOAMY SAND MIXED THOROUGHLY WITH COMPOST AMENDMENTS WITH COMPOST AMENDMENTS). PLANTING MEDIA MIXTURE TO CONSIST OF 60–70% SAND, 15–25% COMPOST, AND 10–20% CLEAN TOPSOIL. THE ORGANIC CONTENT OF THE SOIL MIXTURE SHOULD BE 8% TO 12%; THE PH RANGE SHOULD BE 5.5–7.5. THE SOIL MUST BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS, OR OTHER SIMILAR OBJECTS LARGER THAN 2 INCHES

  SOIL TESTING
  CONTRACTOR SHALL SUBMIT SOIL TESTS RESULTS TO THE ENGINEER (ONE TEST PER BIO–RETENTION CELL) PRIOR TO INSTALLATION. TESTING SHALL INCLUDE:
  a. GRANULOMETRIC ANALYSIS (SAND, SILT & CLAY) PER WEIGHT (SAND BETWEEN 60%–70%; CLAY LESS THAN 5%)
  b. PH (5.5 TO 7.5)
  c. PERCENTAGE OF ORGANIC MATTER IN THE SOIL (8% TO 12%)
  d. SIEVE ANALYSIS
  e. SATURATED HYDRAULIC CONDUCTIVITY TEST (HIGH THAN 0.5 IN/HR)

  SOIL PLACEMENT
  PLACEMENT OF THE PLANTING MEDIA IN THE BIO–RETENTION AREA SHOULD BE AFTER SCARIFYING THE INVERT AREA OF THE PROPOSED FACILITY, AND BE IN LIFTS OF 12 TO 18 INCHES AND MINIMALLY COMPACTED TO REDUCE THE POSSIBILITY OF EXCESSIVE SETTLEMENT. NO ADDITIONAL COMPACTION OF SOIL IS NECESSARY. INSTALLATION OF PLANTING MEDIA MUST BE DONE IN A MANNER THAT WILL ENSURE ADEQUATE FILTRATION.
- ③ PEA GRAVEL SIZE FROM 0.5" TO 1" DIAMETER
- ④ IMPERMEABLE LINER (MIN 30 MILS) AS RECOMMENDED & APPROVED BY SOIL ENGINEER
- ⑤ FILTER FABRIC MIRAFIL 160N OR EQUIVALENT
- ⑥ WATER PROOFING PER ARCH PLAN AND APPROVED BY SOIL ENGINEER
- ⑦ 12" CURB PER MODIFIED SWPPC STD PLAN 120–2 & DETAIL J ON SHT 2
- ⑧ TREE ROOT BARRIER PER LANDSCAPE PLAN


TOP OF GLASS WALL
CALTRANS R/W
4.67' – 4.88'
3.00' – 3.21'
8"
6"
POOL DECK
FS
1%
EX. FG
2%
0.25'
FG
FL
1.0' MIN
3.25'
4.50'
1.00'
4"PERF PIPE (SEE SHT 10)

BIORETENTION - BASIN #3 (D3)
NOT TO SCALE


CABOT ROAD
D3
D1
D2
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)

DETAIL LOCATION MAP
NOT TO SCALE

AS-BUILT

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

CAUTION - NOTICE TO CONTRACTOR
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NO.	DATE	REVISIONS	APP'D.	DATE
2	10/05/15	UPDATED DRAIN ADJACENT TO POOL, REVISED ELEVATION AND CONST. NOTES (SHEETS 3,8 &11)		
1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ◦ fax 949.474.5315 ◦ www.fuscoe.com
Debra V Schales 3/9/16
DEBRA VALLE SCHALES RCE#043101 DATE
no. 43101
3/9/16

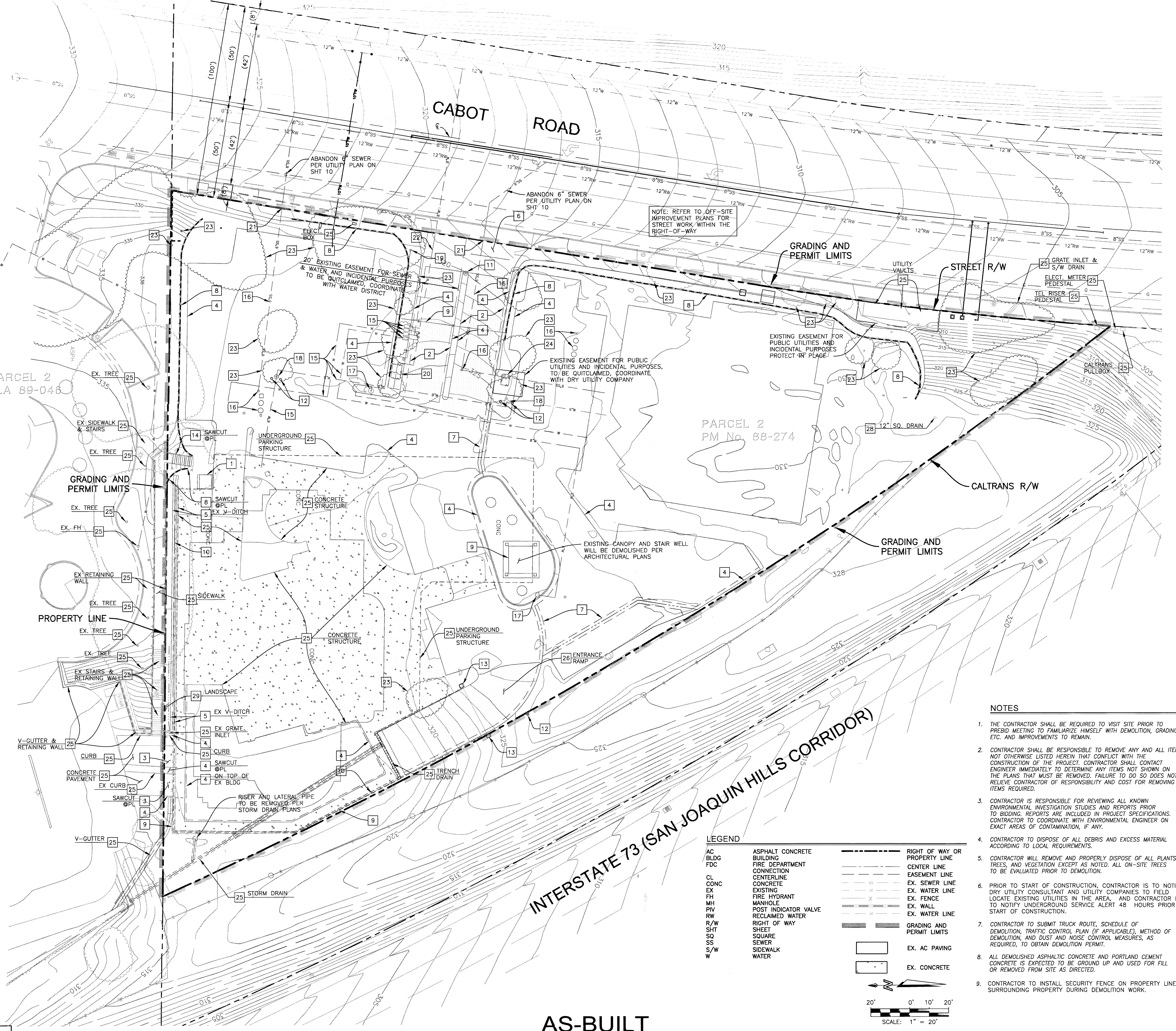
PERMIT # G12-23

DETAIL SHEET
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12
SHEET 3 OF 15	

3/8/2016
CAREER LOFTS
PRECISE GRADING PLAN
AS-BUILT

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG03DT.DWG (03-08-16 7:25:54PM) Plotted by: fuscoe


CABOT ROAD
(100')
(50')
(42')
(8')
ABANDON 6" SEWER PER UTILITY PLAN ON SHT 10
NOTE: REFER TO OFF-SITE IMPROVEMENT PLANS FOR STREET WORK WITHIN THE RIGHT-OF-WAY
GRADING AND PERMIT LIMITS
STREET R/W
UTILITY VAULTS
GRATE INLET & S/W DRAIN
ELECT. METER PEDESTAL
TEL RISER PEDESTAL
CALTRANS PULLBOX
ELECT. BOX
20' EXISTING EASEMENT FOR SEWER & WATER AND INCIDENTAL PURPOSES TO BE QUITCLAIMED, COORDINATE WITH WATER DISTRICT
EXISTING EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES, TO BE QUITCLAIMED, COORDINATE WITH DRY UTILITY COMPANY
EXISTING EASEMENT FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES PROTECT IN PLACE
PARCEL 2 LLA 89-046
PARCEL 2 PM No. 88-274
12" SQ. DRAIN
CALTRANS R/W
EX. TREE
EX SIDEWALK & STAIRS
SAWCUT @PL
UNDERGROUND PARKING STRUCTURE
CONCRETE STRUCTURE
EX V-DITCH
EX. FH
EX RETAINING WALL
SIDEWALK
PROPERTY LINE
EX STAIRS & RETAINING WALL
LANDSCAPE
V-GUTTER & RETAINING WALL
EX GRATE INLET
CURB
CONCRETE PAVEMENT
EX CURB
ON TOP OF EX BLDG
RISER AND LATERAL PIPE TO BE REMOVED PER STORM DRAIN PLANS
V-GUTTER
STORM DRAIN
TRENCH DRAIN
EXISTING CANOPY AND STAIR WELL WILL BE DEMOLISHED PER ARCHITECTURAL PLANS
ENTRANCE RAMP
CONC
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
8"SS
12"RW
12"W
6"W
G
W
335
330
325
320
315
310
305
328

CONSTRUCTION NOTES

1	DEMOLISH EXISTING CONCRETE STRUCTURE, UTILITY SHAFT
2	REMOVE AND DISPOSE OF AC PAVING AND BASE COURSE
3	REMOVE AND DISPOSE OF CONCRETE PAVEMENT
4	REMOVE AND DISPOSE OF CURB AND/OR GUTTER
5	REMOVE AND DISPOSE OF V-DITCH
6	REMOVE AND DISPOSE OF DRIVEWAY APRON (UP TO R/W)
7	REMOVE AND DISPOSE OF RIBBON GUTTER
8	REMOVE AND DISPOSE OF RETAINING WALL
9	REMOVE AND DISPOSE OF CHAIN LINK FENCE
10	REMOVE AND DISPOSE OF METAL RAILING
11	REMOVE AND DISPOSE OF SIGN AND POST
12	CONSTRUCT 4" CIP
13	REMOVE AND DISPOSE OF COLUMN AND METAL CROSS BEAM
14	REMOVE AND DISPOSE OF STAIRS, CONCETE PAD AND RAILINGS
15	REMOVE AND DISPOSE OF WATER METER AND SERVICE
16	REMOVE AND DISPOSE OF SEWER MANHOLE, CLEANOUT & LATERAL
17	REMOVE AND DISPOSE OF FIRE HYDRANT
18	REMOVE AND DISPOSE OF POST INDICATOR VALVE (PIV)
19	REMOVE AND DISPOSE OF FIRE DEPARTMENT CONNECTION (FDC)
20	REMOVE AND DISPOSE OF DECTECTOR CHECK ASSEMBLY
21	CAP AND PLUG EXISTING SEWER LATERAL AT PROPERTY LINE
22	CAP AND PLUG EXISTING WATER LATERAL
23	REMOVE AND DISPOSE TREE. COORDINATE WITH OWNER PRIOR TO REMOVAL
24	REMOVE AND DISPOSE OF VAULT PER DRY UTILITY COMPANY'S REQUIREMENTS, CAP AND PLUG AT PROPERTY LINE
25	PROTECT IN PLACE ITEM AS NOTED
26	REMOVE AND DISPOSE OF PORTION OF OF EX. BUILDING PER ARCHITECT PLANS
28	REMOVE AND DISPOSE OF EX. GRATE
29	REMOVE AND DISPOSE OF LANDSCAPE. TO BE COORDINATED W/LANDSCAPE PLANS.

3/8/2016

CAREER LOFTS
PRECISE GRADING PLAN

AS-BUILT

NOTES

1. *THE CONTRACTOR SHALL BE REQUIRED TO VISIT SITE PRIOR TO PREBID MEETING TO FAMILIARIZE HIMSELF WITH DEMOLITION, GRADING, ETC. AND IMPROVEMENTS TO REMAIN.*
2. *CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE ANY AND ALL ITEMS NOT OTHERWISE LISTED HEREIN THAT CONFLICT WITH THE CONSTRUCTION OF THE PROJECT. CONTRACTOR SHALL CONTACT ENGINEER IMMEDIATELY TO DETERMINE ANY ITEMS NOT SHOWN ON THE PLANS THAT MUST BE REMOVED. FAILURE TO DO SO DOES NOT RELIEVE CONTRACTOR OF RESPONSIBILITY AND COST FOR REMOVING ITEMS REQUIRED.*
3. *CONTRACTOR IS RESPONSIBLE FOR REVIEWING ALL KNOWN ENVIRONMENTAL INVESTIGATION STUDIES AND REPORTS PRIOR TO BIDDING. REPORTS ARE INCLUDED IN PROJECT SPECIFICATIONS. CONTRACTOR TO COORDINATE WITH ENVIRONMENTAL ENGINEER ON EXACT AREAS OF CONTAMINATION, IF ANY.*
4. *CONTRACTOR TO DISPOSE OF ALL DEBRIS AND EXCESS MATERIAL ACCORDING TO LOCAL REQUIREMENTS.*
5. *CONTRACTOR WILL REMOVE AND PROPERLY DISPOSE OF ALL PLANTS, TREES, AND VEGETATION EXCEPT AS NOTED. ALL ON-SITE TREES TO BE EVALUATED PRIOR TO DEMOLITION.*
6. PRIOR TO START OF CONSTRUCTION, CONTRACTOR IS TO NOTIFY DRY UTILITY CONSULTANT AND UTILITY COMPANIES TO FIELD LOCATE EXISTING UTILITIES IN THE AREA, AND CONTRACTOR IS TO NOTIFY UNDERGROUND SERVICE ALERT 48 HOURS PRIOR TO START OF CONSTRUCTION.
7. *CONTRACTOR TO SUBMIT TRUCK ROUTE, SCHEDULE OF DEMOLITION, TRAFFIC CONTROL PLAN (IF APPLICABLE), METHOD OF DEMOLITION, AND DUST AND NOISE CONTROL MEASURES, AS REQUIRED, TO OBTAIN DEMOLITION PERMIT.*
8. *ALL DEMOLISHED ASPHALTIC CONCRETE AND PORTLAND CEMENT CONCRETE IS EXPECTED TO BE GROUND UP AND USED FOR FILL OR REMOVED FROM SITE AS DIRECTED.*
9. CONTRACTOR TO INSTALL SECURITY FENCE ON PROPERTY LINE SURROUNDING PROPERTY DURING DEMOLITION WORK.
10. *THE CONTRACTOR SHALL TAKE EFFECTIVE ACTION TO PREVENT THE FORMATION OF ANY AIRBORNE DUST NUISANCE AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM FAILURE TO FOLLOW CITY GUIDELINES.*
11. *EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF PLANS. LOCATIONS HAVE NOT BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES UPON THE REMOVAL OF UTILITIES IN ADVANCE OF DEMOLITION CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THOSE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF CONTRACTOR'S FAILURE TO VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED IN THE CONTRACT.*
12. *ALL EXISTING REMAINING UTILITIES AND REMAINING IMPROVEMENTS IN PUBLIC RIGHT OF WAY THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE LOCAL AGENCY ENGINEER, AT THE CONTRACTOR'S SOLE EXPENSE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DOCUMENT PRIOR DAMAGES.*
13. *IF ARCHAEOLOGICAL MATERIALS ARE UNCOVERED DURING GRADING, TRENCHING OR OTHER EXCAVATION, EARTHWORK WITHIN 100 FEET OF THESE MATERIALS SHALL BE STOPPED UNTIL A PROFESSIONAL ARCHAEOLOGIST WHO IS CERTIFIED BY THE SOCIETY OF PROFESSIONAL ARCHAEOLOGY (SOPA) HAS HAD AN OPPORTUNITY TO EVALUATE THE SIGNIFICANCE OF THE FIND AND SUGGEST APPROPRIATE MITIGATION MEASURES, IF THEY ARE DEEMED NECESSARY.*
14. *ALL FOOTINGS, FOUNDATIONS, AND PILE CAPS ARE TO BE REMOVED IN THEIR ENTIRETY.*
15. *DEMOLITION OF ON-SITE WET AND DRY UTILITIES TO BE CAPPED AT PROPERTY LINE PER UTILITY COMPANY'S REQUIREMENTS.*
16. *REFER TO STRUCTURAL AND ARCHITECTURAL DETAILS FOR DEMOLITION OF RETAINING AND BUILDING FEATURES.*

LEGEND

AC	ASPHALT CONCRETE
BLDG	BUILDING
FDC	FIRE DEPARTMENT CONNECTION
CL	CENTERLINE
CONC	CONCRETE
EX	EXISTING
FH	FIRE HYDRANT
MH	MANHOLE
PIV	POST INDICATOR VALVE
RW	RECLAIMED WATER
R/W	RIGHT OF WAY
SHT	SHEET
SQ	SQUARE
SS	SEWER
S/W	SIDEWALK
W	WATER

— — - - — — - -	RIGHT OF WAY OR PROPERTY LINE
—— - —— -	CENTER LINE
— — — —	EASEMENT LINE
---- SS ----	EX. SEWER LINE
---- W ----	EX. WATER LINE
---- X ----	EX. FENCE
▨	EX. WALL
---- W ----	EX. WATER LINE
▨ ▨	GRADING AND PERMIT LIMITS
☐	EX. AC PAVING
☐	EX. CONCRETE

N

20' 0' 10' 20'

SCALE: 1" = 20'

AS-BUILT

NO.	DATE	REVISIONS	APP'D.	DATE
2	10/05/15	UPDATED DRAIN ADJACENT TO POOL, REVISED ELEVATION AND CONST. NOTES (SHEETS 3,8 &11)		
1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE
ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ◦ fax 949.474.5315 ◦ www.fuscoe.com

Debra Valle Schales 3/8/16
DEBRA VALLE SCHALES RCE#043101 DATE

DEBRA VALLE SCHALES
no. 43101
CIVIL
3/8/16

DEMOLITION PLAN
(PER SEPARATE PERMIT, SHOWN FOR REFRENCE ONLY)

CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

PERMIT # G12-23

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

SHEET 4 OF 15

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG04DM.DWG (03-08-16 7:26:10PM) Plotted by: fuscoe

DIG ALERT

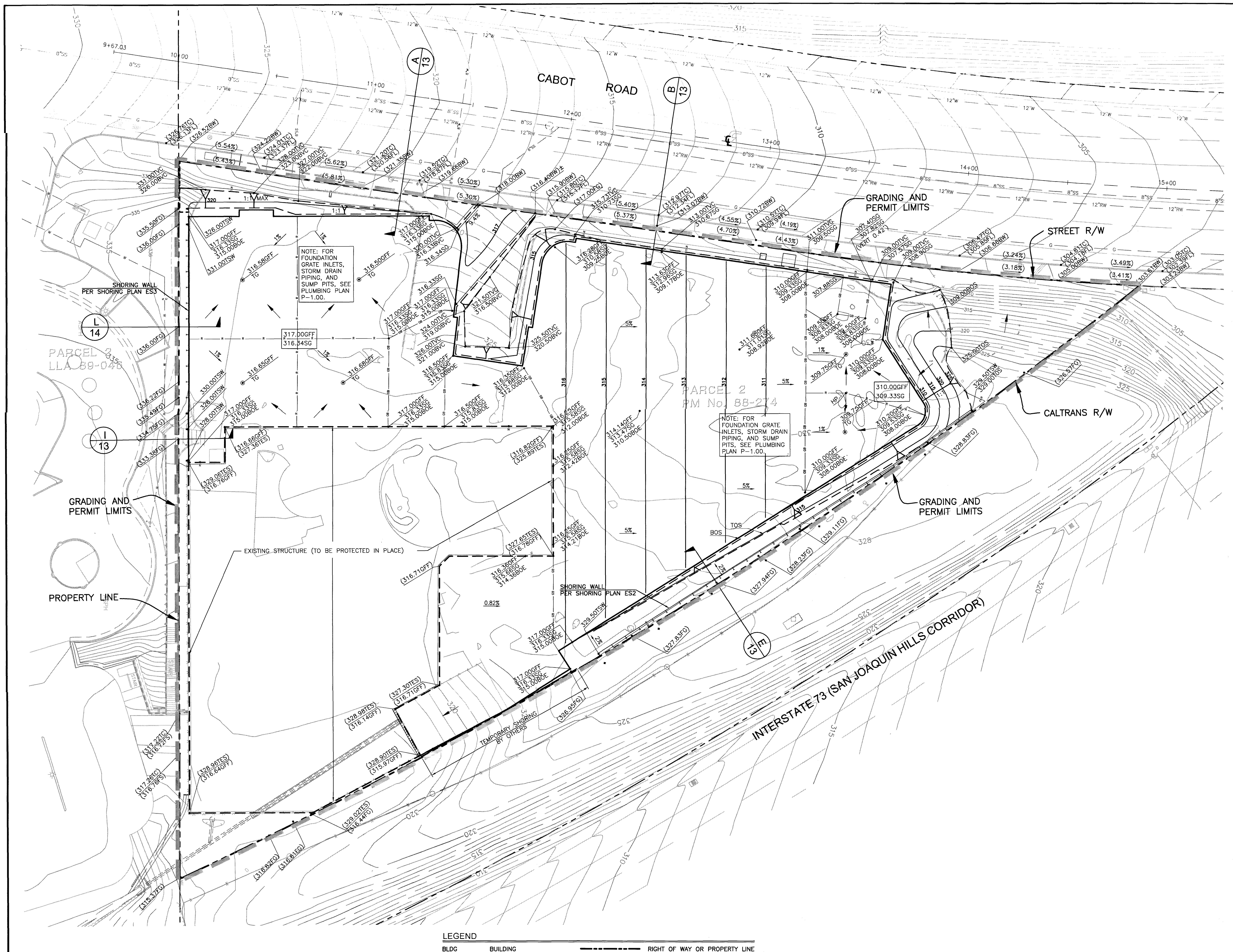
DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS BEFORE YOU DIG

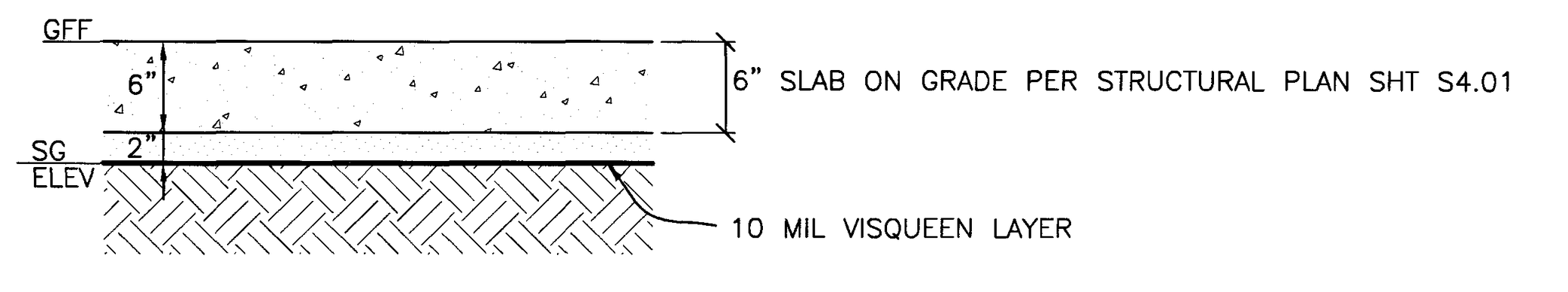
CALL BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CALL USA DIG ALERT AT 1-800-227-2600, 48 HOURS BEFORE ANY EXCAVATION.


CABOT ROAD
STREET R/W
GRADING AND PERMIT LIMITS
CALTRANS R/W
PROPERTY LINE
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
PARCEL 2
PM No. 88-274
PARCEL 3
LLA 89-046
SHORING WALL PER SHORING PLAN ES3
SHORING WALL PER SHORING PLAN ES2
EXISTING STRUCTURE (TO BE PROTECTED IN PLACE)
TEMPORARY SHORING BY OTHERS
NOTE: FOR FOUNDATION GRATE INLETS, STORM DRAIN PIPING, AND SUMP PITS, SEE PLUMBING PLAN P-1.00.
NOTE: FOR FOUNDATION GRATE INLETS, STORM DRAIN PIPING, AND SUMP PITS, SEE PLUMBING PLAN P-1.00.
317.00GFF
316.34SG
310.00GFF
309.33SG
A 13
B 13
E 13
I 13
L 14
1:1 MAX
BOS
TOS
0.82%


GFF
6"
SG ELEV
2"
6" SLAB ON GRADE PER STRUCTURAL PLAN SHT S4.01
10 MIL VISQUEEN LAYER

FOUNDATION SYSTEM SECTION

NOTES:

1. PRIOR TO FINAL GRADING, CONTRACTOR TO VERIFY GFF GRADES WITH ARCHITECT.
2. 6" FOUNDATION THICKNESS PER STRUCTURAL ENGINEER'S RECOMMENDATION. FINAL THICKNESS OF FOUNDATION SYSTEM WILL BE DETERMINED BY SOILS ENGINEER AND STRUCTURAL ENGINEER IN THE FIELD.
3. SEE STRUCTURAL PLANS FOR FOUNDATION PLAN AND DETAILS. NOTE: SG ELEVATION DOES NOT INCLUDE FOOTING DEPTHS
4. TEMPORARY SLOPE 1:1 AND A 5' VERTICAL CUT AT TOP OF TEMPORARY SLOPE PER GEOTECHNICAL REPORT DATED 6/19/2012, SECTION 6.1.7, TEMPORARY EXCAVATION, PAGE 18.

LEGEND

BLDG	BUILDING
BOS	BOTTOM OF SLOPE
BVC	BOTTOM OF VERTICAL CUT
BW	BACK OF WALK
C	CUT
CL	CENTERLINE
ELEV	ELEVATION
EX	EXISTING
FF	FINISHED FLOOR
FG	FINISHED GRADE
FL	FLOW LINE
FS	FINISHED SURFACE
GB	GRADE BREAK
GFF	GARAGE FINISHED FLOOR
MAX	MAXIMUM
N	NATURAL
PROP	PROPOSED
SG	SUB-GRADE
TC	TOP OF CURB
TES	TOP OF EXISTING STRUCTURE
TOS	TOP OF SLOPE
TSW	TOP OF SHORING WALL
TVC	TOP OF VERTICAL CUT

▬ ‒ ‒ ▬	RIGHT OF WAY OR PROPERTY LINE
— - —	CENTERLINE
— R —	RIDGE LINE
— v —	VALLEY LINE
— GB —	GRADE BREAK
— — —	TOP/TOE OF SLOPE
▬ ▬ ▬	EX BLDG STRUCTURE
▬▬▬	PROP BLDG STRUCTURE

20' 0' 10' 20'
SCALE: 1" = 20'

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AS-BUILT

NO.	DATE	REVISIONS	APP'D.	DATE
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1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
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16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ◦ fax 949.474.5315 ◦ www.fuscoe.com
3/9/16
DEBRA VALLE SCHALES RCE#043101 DATE

DEBRA VALLE SCHALES
no. 43101
3/9/16

PERMIT # G12-23

EXCAVATION PLAN

CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

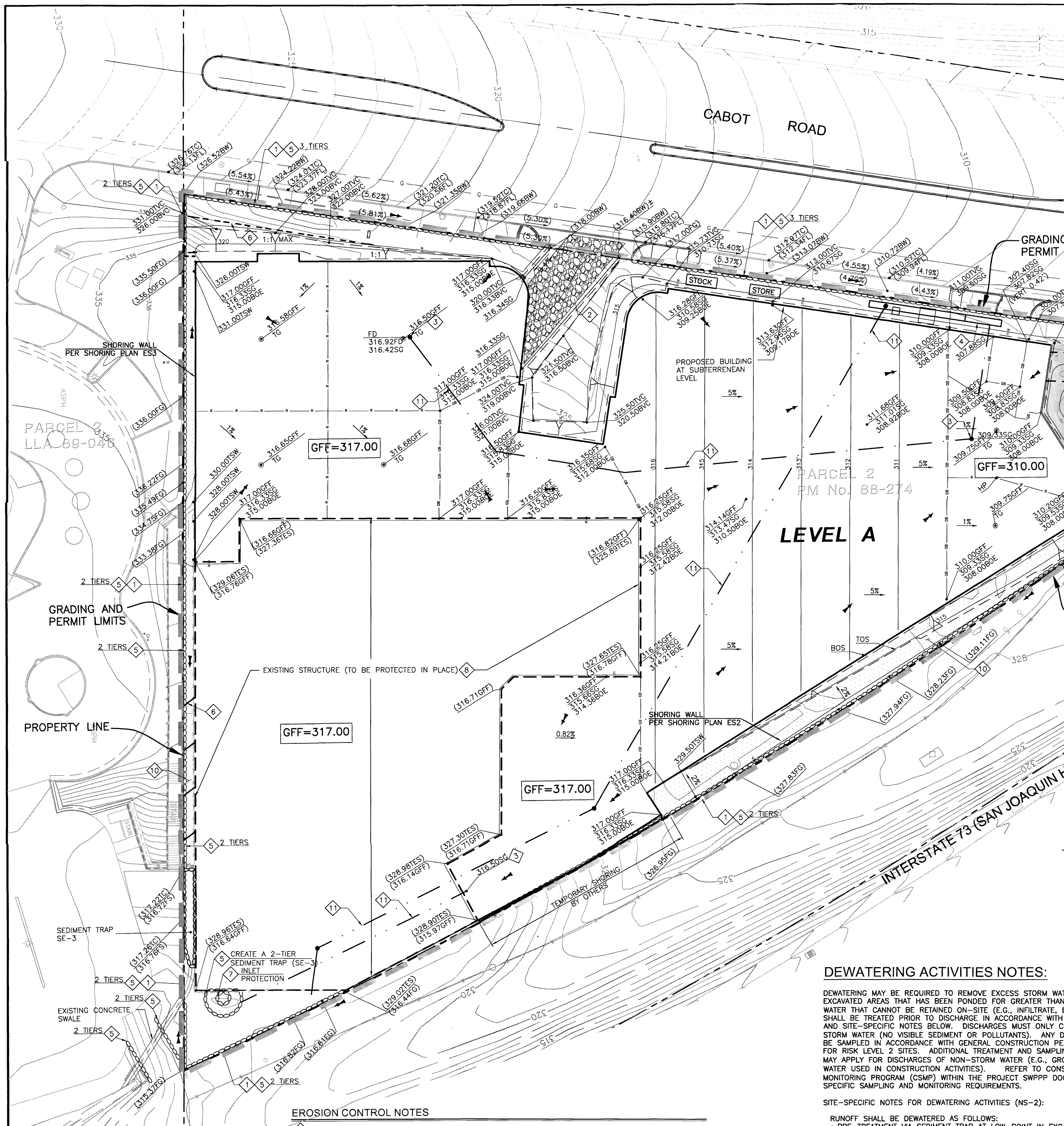
DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12
SHEET 5 OF 15	

3/8/2016

CAREER LOFTS
PRECISE GRADING PLAN

AS-BUILT

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG05EV.DWG (03-08-16 7:26:34PM) Plotted by: fuscoe


CABOT ROAD
GRADING AND PERMIT LIMITS
STREET R/W
CALTRANS R/W
STOCK
STORE
PROPOSED BUILDING AT SUBTERRENEAN LEVEL
PARCEL 2 PM No. 88-274
LEVEL A
GFF=317.00
GFF=310.00
PARCEL 2 LLA 89-048
SHORING WALL PER SHORING PLAN ES3
SHORING WALL PER SHORING PLAN ES2
PROPERTY LINE
EXISTING STRUCTURE (TO BE PROTECTED IN PLACE)
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
TEMPORARY SHORING BY OTHERS
SEDIMENT TRAP SE-3
CREATE A 2-TIER SEDIMENT TRAP (SE-3)
INLET PROTECTION
EXISTING CONCRETE SWALE
2 TIERS
3 TIERS
1:1 MAX
1:1
5%
1%
0.82%
HP
BOS
TOS
20' 0' 10' 20'
SCALE: 1" = 20'

BMP TABLE:

	DESCRIPTION
EC-1	SCHEDULING
EC-2	PRESERVATION OF EXISTING VEGETATION
EC-4	HYDROSEEDING
EC-14	COMPOST BLANKETS
SE-5	FIBER ROLLS
SE-6	GRAVEL BAG BERM
SE-7	STREET SWEEPING
SE-8	SANDBAG BARRIER
SE-10	STORM DRAIN INLET PROTECTION
TC-1	STABILIZED CONSTRUCTION ENTRANCE
TC-2	STABILIZED CONSTRUCTION ROADWAY
WE-1	WIND EROSION CONTROLS
NS-6	ILLICIT CONNECTION – ILLEGAL DISCHARGE
NS-8	VEHICLE AND EQUIPMENT CLEANING
NS-9	VEHICLE AND EQUIPMENT FUELING
NS-10	VEHICLE AND EQUIPMENT MAINTENANCE
WM-1	MATERIAL DELIVERY AND STORAGE
WM-2	MATERIAL USE
WM-3	STOCKPILE MANAGEMENT
WM-4	SPILL PRESERVATION AND CONTROL
WM-5	SOLID WASTE MANAGEMENT
WM-6	HAZARDOUS WASTE MANAGEMENT
WM-8	CONCRETE WASTE MANAGEMENT
WM-9	SANITARY-SEPTIC WASTE MANAGEMENT
WM-10	LIQUID WASTE MANAGEMENT

BMP DETAILS CAN BE OBTAINED IN THE SWPPP PREPARED FOR THIS PROJECT BY FUSCOE ENGINEERING OR http://www.ocwatershed.com/constructionactivities.aspx

SUPERVISOR'S INSTRUCTIONS

1. IMPLEMENTATION OF THIS PLAN SHALL BE THE RESPONSIBILITY OF THE CONSTRUCTION SUPERVISOR. THIS PLAN SHALL BE REVISED BY THE CONSTRUCTION SUPERVISOR AS AUTHORIZED AGENT OF THE OWNER TO REFLECT THE CURRENT STATUS OF THE CONSTRUCTION SITE.

EXAMPLE: AFTER INLET PROTECTION IS REMOVED

2. THE SYMBOLS ITEMIZED IN THE LEGEND AND SHOWN ON THE PLAN WILL BE MODIFIED BY THE CONSTRUCTION SUPERVISOR WHEN CONSTRUCTION CONDITIONS CHANGE BY USING A MARKING PEN ON THIS PLAN AND NOTING THE CHANGE AND DATE AS FOLLOWS:

   USING A MARKING PEN, CROSS OUT ITEMS SHOWN ON THE PLAN THAT ARE NO LONGER NECESSARY DUE TO THE CONSTRUCTION OF IMPROVEMENTS, ELIMINATION FROM THE SITE, OR RELOCATION OF THE ITEM. SYMBOLS SHOULD BE ADDED TO THE PLAN TO DELINEATE NEW ITEMS OR RELOCATIONS ON THE SITE.

   USING A MARKING PEN, DASH THE STORM DRAIN LINE AFTER THE CONSTRUCTION OF THE STORM DRAIN LINE.

   USING A MARKING PEN, DARKEN IN THE CATCH BASIN SYMBOL ON THE PLAN AFTER CONSTRUCTION IS COMPLETED.

   USING A MARKING PEN, CLOUD LANDSCAPE AREAS WHICH HAVE BEEN PLANTED AND LABEL THE AREA WITH A CIRCLED LETTER FOR REFERENCE.

3. WHEN MARKING ANY CHANGES ON THE PLAN, BE SURE TO NOTE THE DATE ADJACENT TO THE MARKED REVISION.
4. WHEN MAKING ANY REVISIONS ON THE PLAN, THE SUPERVISOR SHALL NOTE THE DATE ON THE SUPERVISOR'S "LATEST REVISION" LOG.

3/8/2016

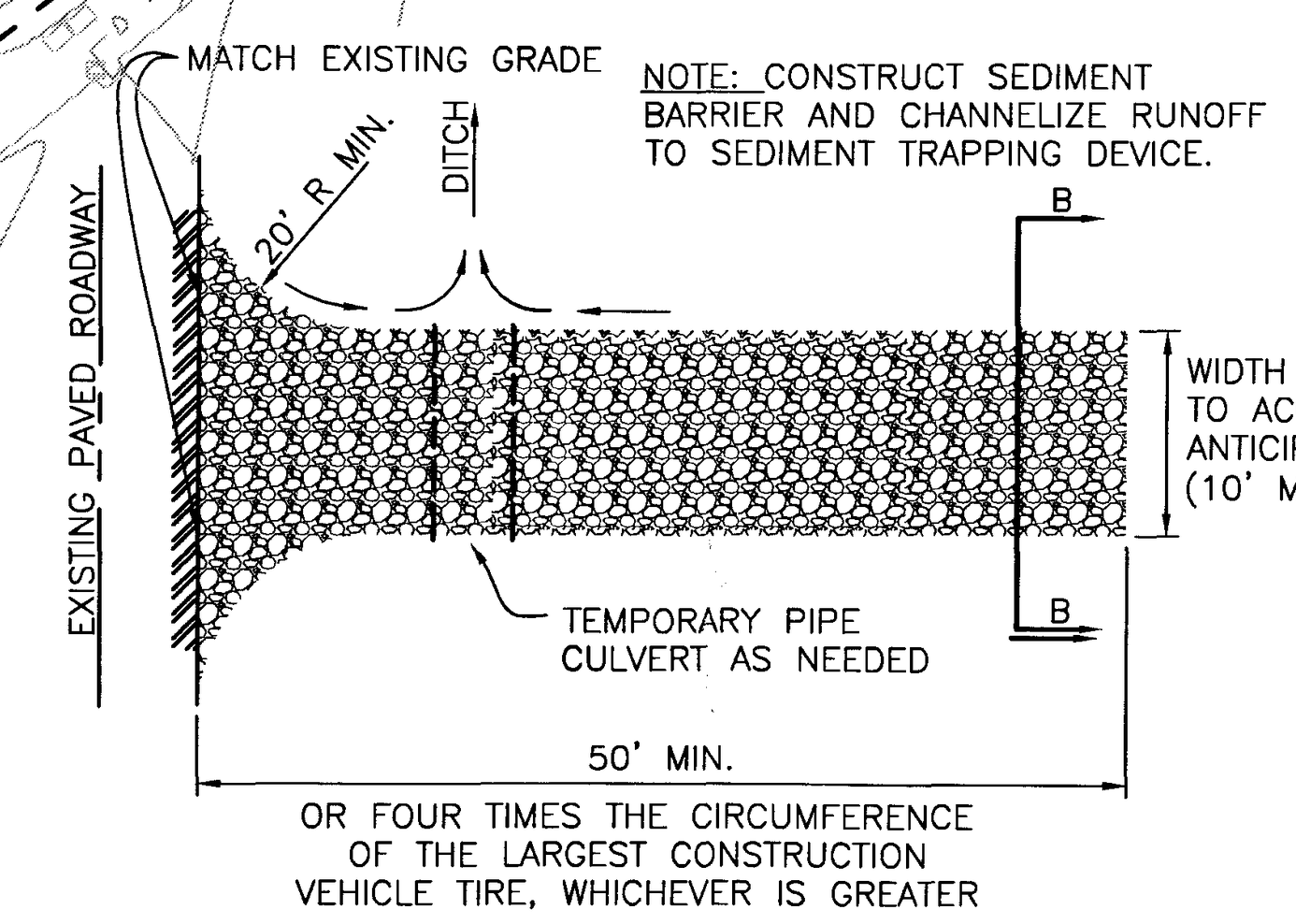
CAREER LOFTS
PRECISE GRADING PLAN

AS-BUILT

LIST OF CONTRACTORS

THE FOLLOWING CONTRACTORS AND/OR SUBCONTRACTORS HAVE BEEN MADE AWARE OF THE CONDITIONS OF THIS PLAN AND RESPONSIBLE FOR COMPLIANCE OF ITEMS SPECIFIED IN THE GENERAL CONSTRUCTION ACTIVITY STORM WATER PERMIT AS THEY RELATE TO THEIR SPECIFIC MATERIALS AND/OR TASKS.

	NAME / COMPANY	SIGNATURE / DATE
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		


MATCH EXISTING GRADE
NOTE: CONSTRUCT SEDIMENT BARRIER AND CHANNELIZE RUNOFF TO SEDIMENT TRAPPING DEVICE.
20' R MIN.
DITCH
EXISTING PAVED ROADWAY
B
B
WIDTH AS REQUIRED TO ACCOMODATE ANTICIPATED TRAFFIC (10' MIN.)
TEMPORARY PIPE CULVERT AS NEEDED
50' MIN.
OR FOUR TIMES THE CIRCUMFERENCE OF THE LARGEST CONSTRUCTION VEHICLE TIRE, WHICHEVER IS GREATER

STABILIZED CONSTRUCTION ENTRANCE/EXIT DETAIL

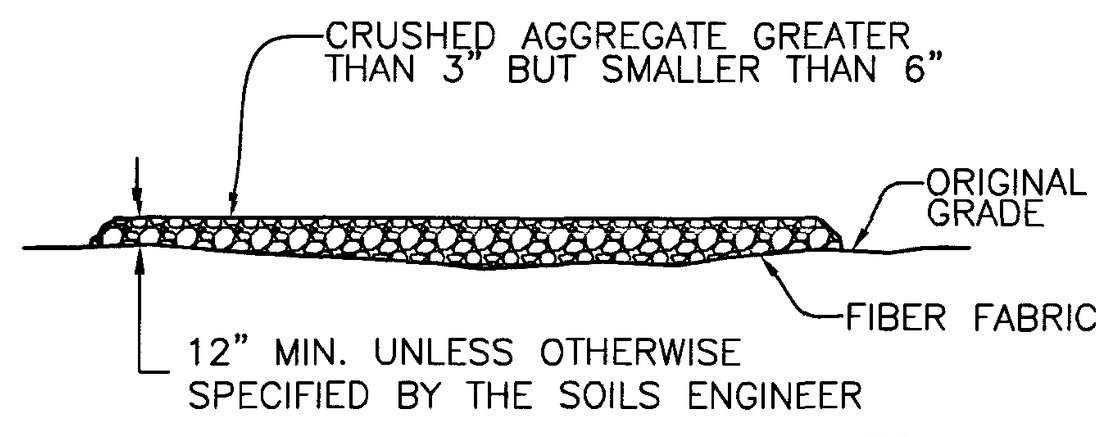
1

NTS

BMP LEGEND

CT	* CONSTRUCTION TRAILER
C/C W	* CHEMICAL/CONCRETE WASHOUT
P/P W	* PAINT/PLASTER WASHOUT
STOCK	* SAND/GRAVEL BAG STOCKPILE
STORE	* STORAGE AREA
CONST	* ACTIVE CONSTRUCTION AREA
DONE	* COMPLETED/OCCUPIED AREA
VEH	* VEHICLE/STAGING AREA

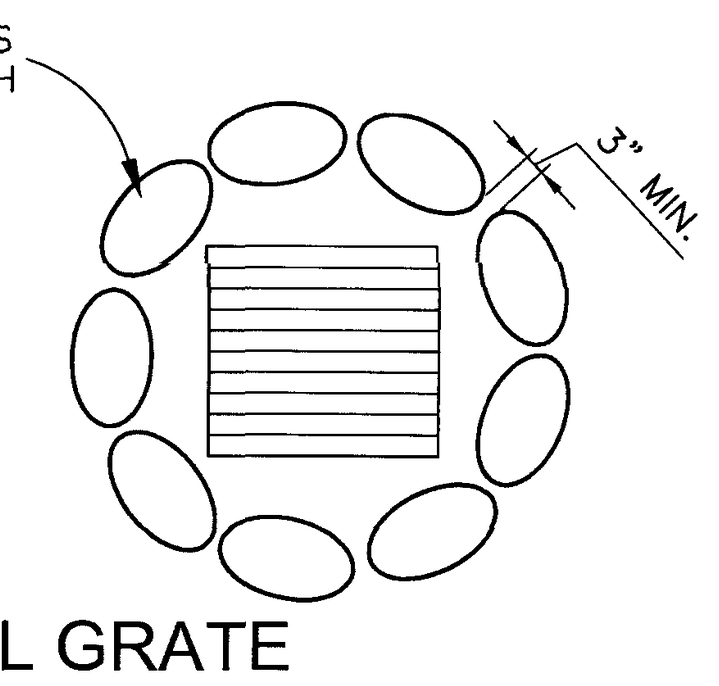
* TO BE DETERMINED ON-SITE BY PROJECT SUPERINTENDENT AND UPDATED HEREON


CRUSHED AGGREGATE GREATER THAN 3" BUT SMALLER THAN 6"
ORIGINAL GRADE
FIBER FABRIC
12" MIN. UNLESS OTHERWISE SPECIFIED BY THE SOILS ENGINEER

SECTION B-B

2

NTS


GRAVEL BAGS TWO TIERS HIGH
3" MIN.

TYPICAL GRATE INLET PROTECTION

3

NTS

IT IS THE CONTRACTOR'S RESPONSIBILITY TO KEEP THIS ECP MAP CURRENT, ADDING ITEMS AND MOVING THEM AS NECESSARY AND/OR REMOVING ITEMS WHEN NO LONGER NEEDED. THE CONTRACTOR MAY BE ASKED AT ANY TIMETO PRODUCE THIS MAP TO CITY OF REGULATORY OFFICIALS. FAILURE TO KEEP IT CURRENT CAN RESULT IN A FINE. HAND-MARKED ALTERATIONS WITH INITIALS AND DATE ARE SUFFICIENT.

EROSION CONTROL NOTES

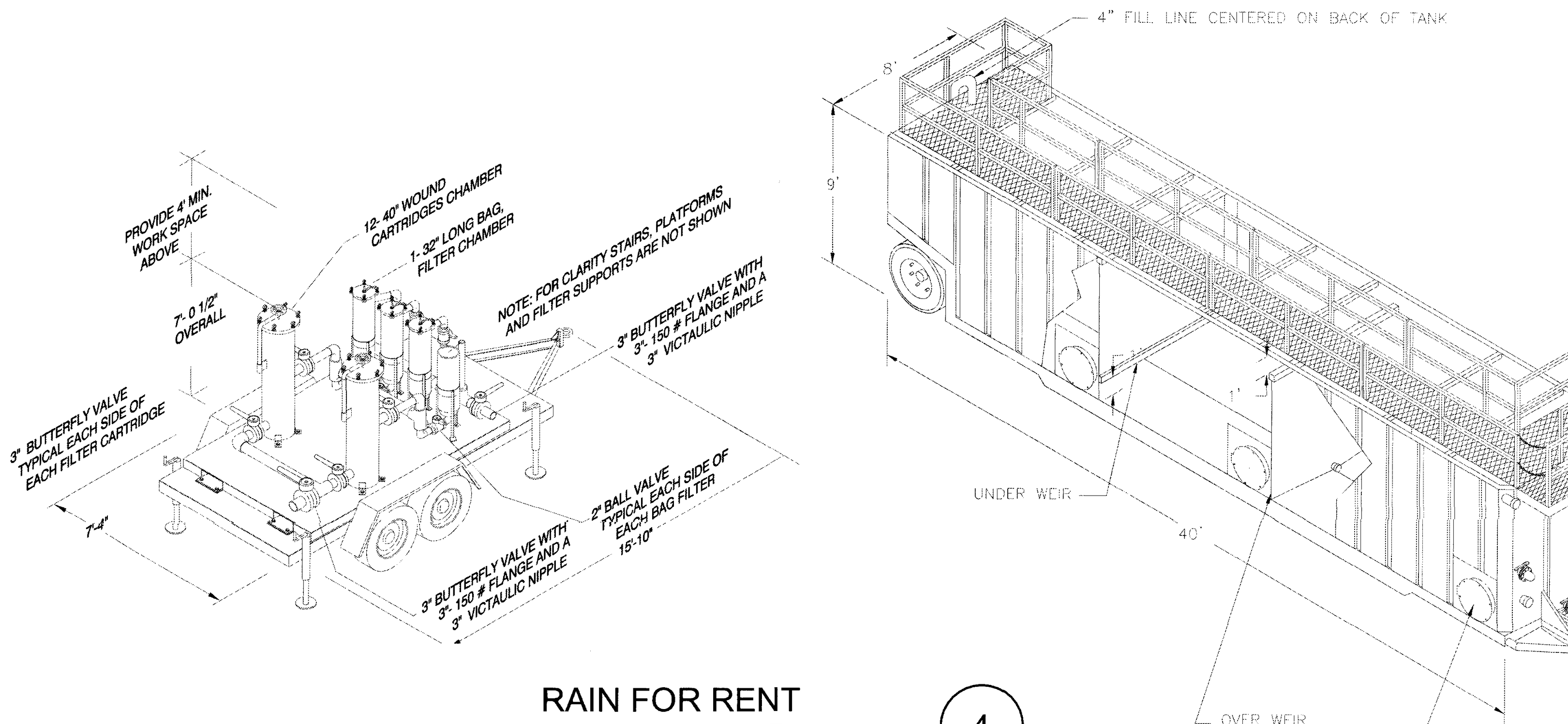
1. INSTALL TEMPORARY CONSTRUCTION FENCE.
2. INSTALL "TREK TRAK" PLATE OR APPROVED EQUAL TO PROTECT INGRESS/EGRESS ROUTES PER DETAIL 1, SHT.-6. EXACT LOCATION TO BE DETERMINED BY CONTRACTOR (EC-1, EC-2).
3. INSTALL TEMPORARY PORTABLE PUMP TO BE UTILIZED ON AN AS NEEDED BASIS.
4. INSTALL ONE DESILTING TANK (18,100 GALLONS) & FILTER/PUMP PER RAIN FOR RENT (SEE DETAIL 4, SHT 6).
5. INSTALL ONE ROW OF GRAVEL BAGS, TWO OR THREE TIERS HIGH, AS INDICATED (SE-6).
6. INSTALL FIBER ROLL EVERY 15-FEET WHERE SHOWN AND PER DETAIL 3, SHT.-14 TO DISTURBED SLOPE (SE-5).
7. INSTALL GRAVEL BAGS AROUND EXISTING INLET. SEE DETAIL 3, SHT. 6 (SE-10).
8. PROTECT IN PLACE.
9. INSTALL COMPOST BLANKET (EC-14).
10. INSTALL HYDROSEEDING ON SLOPE (EC-4).
11. INSTALL TEMPORARY PUMPLINE.

DEWATERING ACTIVITIES NOTES:

DEWATERING MAY BE REQUIRED TO REMOVE EXCESS STORM WATER WITHIN EXCAVATED AREAS THAT HAS BEEN PONDED FOR GREATER THAN 72 HOURS. WATER THAT CANNOT BE RETAINED ON-SITE (E.G., INFILTRATE, EVAPORATE, REUSE) SHALL BE TREATED PRIOR TO DISCHARGE IN ACCORDANCE WITH FACT SHEET NS-2 AND SITE-SPECIFIC NOTES BELOW. DISCHARGES MUST ONLY CONSIST OF CLEAN STORM WATER (NO VISIBLE SEDIMENT OR POLLUTANTS). ANY DISCHARGES SHALL BE SAMPLED IN ACCORDANCE WITH GENERAL CONSTRUCTION PERMIT REQUIREMENTS FOR RISK LEVEL 2 SITES. ADDITIONAL TREATMENT AND SAMPLING REQUIREMENTS MAY APPLY FOR DISCHARGES OF NON-STORM WATER (E.G., GROUNDWATER & WATER USED IN CONSTRUCTION ACTIVITIES). REFER TO CONSTRUCTION SITE MONITORING PROGRAM (CSMP) WITHIN THE PROJECT SWPPP DOCUMENT FOR SPECIFIC SAMPLING AND MONITORING REQUIREMENTS.

SITE-SPECIFIC NOTES FOR DEWATERING ACTIVITIES (NS-2):

RUNOFF SHALL BE DEWATERED AS FOLLOWS:
- PRE-TREATMENT VIA SEDIMENT TRAP AT LOW-POINT IN EXCAVATED AREA.
- PUMPED TO WEIR TANK (18,100 GALLON OPEN-TOP BY RAIN FOR RENT) FOR PARTICULATE SETTLING.
- FILTRATION VIA PF400 PARTICULATE FILTER (CONTAINS TWO CARTRIDGE FILTER TANKS AND 4 BAG FILTER TANKS FOR FILTRATION FROM 100 TO 0.5 MICRONS FOR FLOWS UP TO 400 GPM).
- CONDUCT SAMPLING FOR TURBIDITY & PH LEVELS PER RISK LEVEL 2 REQUIREMENTS AND DOCUMENT RESULTS IN SWPPP.
- IF EXCEEDANCES OF TURBIDITY AND PH NUMERIC ACTION LEVELS NALS) ARE OBSERVED, REPORT EXCEEDANCES THROUGH SMARTS ONLINE SYSTEM AND IN ACCORDANCE WITH SWPPP DOCUMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING CORRECTIVE ACTIONS TO IMPROVE TREATMENT EFFECTIVENESS OF DEWATERING SYSTEM PRIOR TO NEXT STORM EVENT (E.G., INCREASED SETTLING TIME, ADDITIONAL SETTLING TANKS, FILTERS OR OTHER BMPS).
- LIMIT DISCHARGES TO CABOT ROAD. UTILIZE EXISTING ON-SITE STORM DRAIN SYSTEM.


PROVIDE 4' MIN. WORK SPACE ABOVE
12- 40" WOUND CARTRIDGES CHAMBER
1- 32" LONG BAG, FILTER CHAMBER
NOTE: FOR CLARITY STAIRS, PLATFORMS AND FILTER SUPPORTS ARE NOT SHOWN
7'- 0 1/2" OVERALL
3" BUTTERFLY VALVE WITH 3"- 150 # FLANGE AND A 3" VICTAULIC NIPPLE
3" BUTTERFLY VALVE TYPICAL EACH SIDE OF EACH FILTER CARTRIDGE
2" BALL VALVE TYPICAL EACH SIDE OF EACH BAG FILTER
15'-10"
7'-4"
3" BUTTERFLY VALVE WITH 3"- 150 # FLANGE AND A 3" VICTAULIC NIPPLE
4" FILL LINE CENTERED ON BACK OF TANK
8'
9'
1'
40'
UNDER WEIR
OVER WEIR
(22" MANWAY 3 PLACES)

RAIN FOR RENT

4

NTS

LEGEND

— - —— - —	CENTERLINE
—— — — ——	EXISTING PROPERTY LINE
◄◄	DIRECTION OF FLOW
— · — · —	PUMP LINE (INLET)
—— · · ——	PUMP LINE (OUTLET)
— x — x —	TEMPORARY CONSTRUCTION FENCE
○○○○○○○○	GRAVEL BAGS

DIG ALERT

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

CALL BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

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AS-BUILT

NO.	DATE	REVISIONS	APP'D.	DATE
2	10/05/15	UPDATED DRAIN ADJACENT TO POOL, REVISED ELEVATION AND CONST. NOTES (SHEETS 3,8 &11)		
1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE
E N G I N E E R I N G
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ◦ fax 949.474.5315 ◦ www.fuscoe.com

Debra Valle Schales 3/9/16
DEBRA VALLE SCHALES RCE#043101 DATE

no. 43101 3/9/16

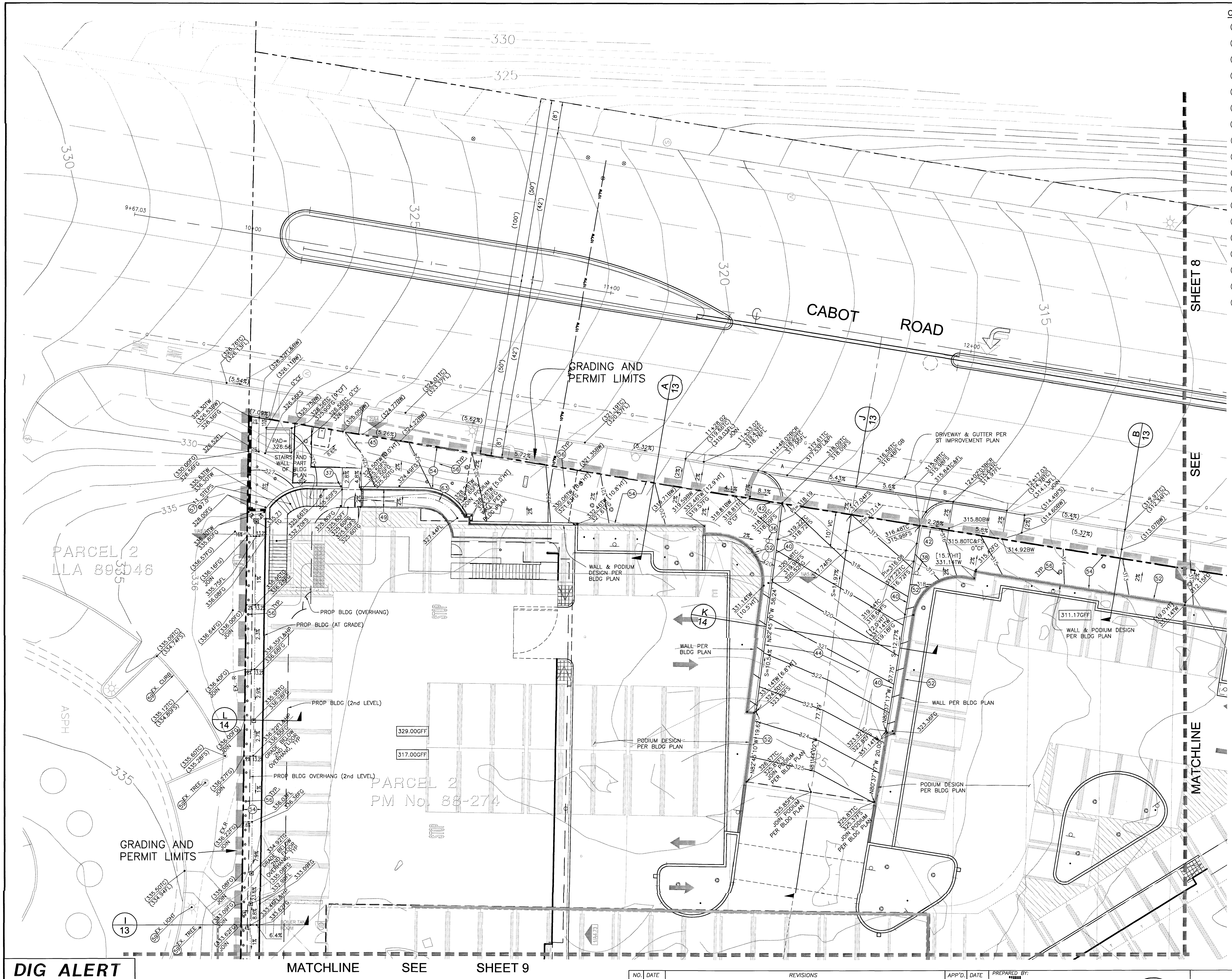
EXCAVATION EROSION CONTROL PLAN
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

PERMIT # G12-23

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

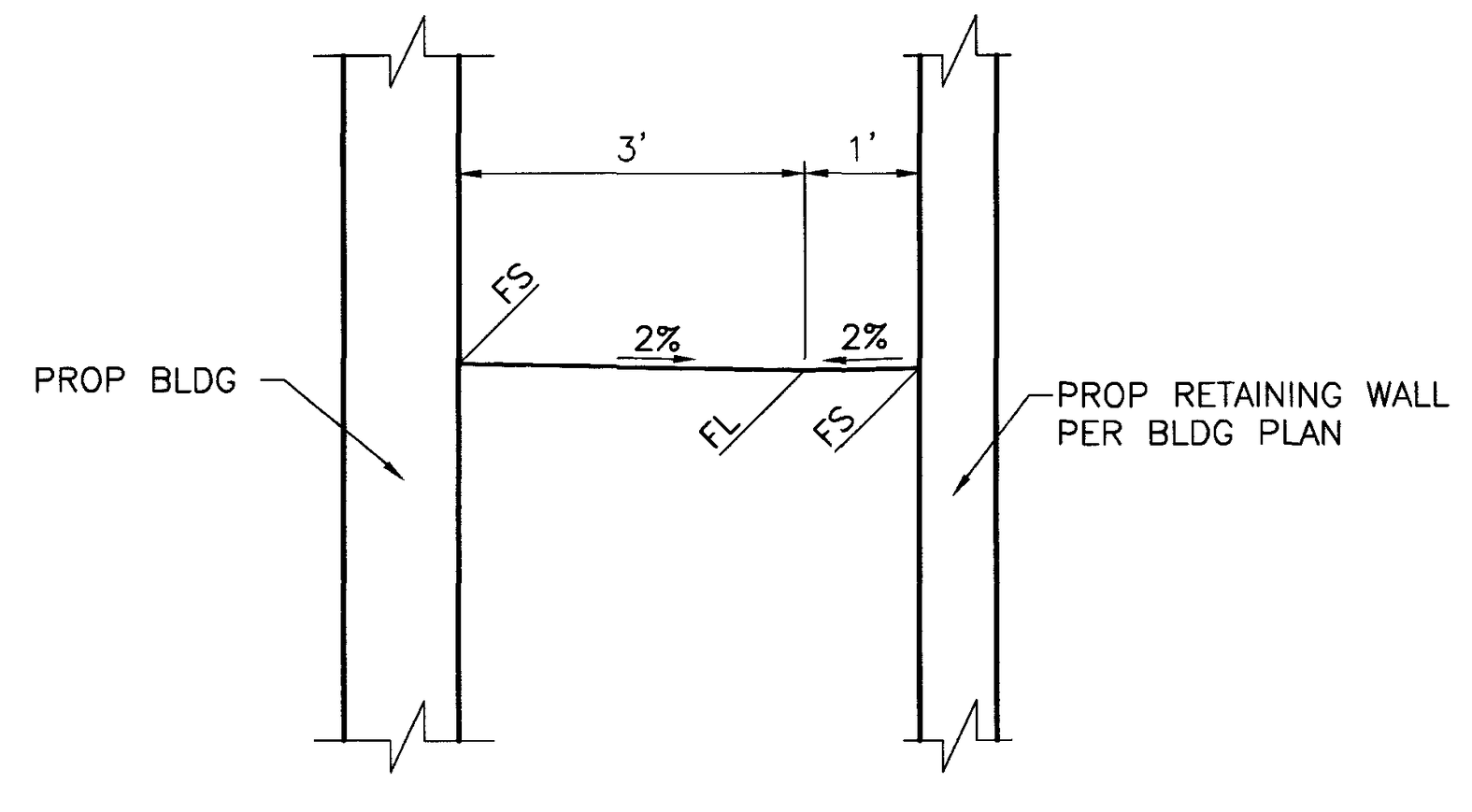
SHEET 6 OF 15

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG06EV-EC.DWG (03-08-16 7:26:55PM) Plotted by: fuscoe


330
325
320
315
335
CABOT ROAD
9+67.03
10+00
11+00
12+00
GRADING AND PERMIT LIMITS
PARCEL 2 LLA 89-046
PARCEL 2 PM No. 88-274
ASPH
DRIVEWAY & GUTTER PER ST IMPROVEMENT PLAN
WALL & PODIUM DESIGN PER BLDG PLAN
PROP BLDG (OVERHANG)
PROP BLDG (AT GRADE)
PROP BLDG (2nd LEVEL)
PROP BLDG OVERHANG (2nd LEVEL)
STAIRS AND WALL PART OF BLDG PLAN
PAD=326.56
329.00GFF
317.00GFF
311.17GFF
WALL PER BLDG PLAN
PODIUM DESIGN PER BLDG PLAN
A 13
J 13
B 13
K 14
L 14
I 13
MATCHLINE SEE SHEET 8
MATCHLINE SEE SHEET 9

CONSTRUCTION NOTES

- (36) INSTALL "ENTRANCE" FIRE LANE PER FIRE MASTER PLAN
- (37) INSTALL KNOX KEY BOX PER FIRE MASTER PLAN
- (38) INSTALL "NO PARKING – FIRE LANE" SIGN PER FIRE MASTER PLAN
- (40) CONSTRUCT 6" CURB (A1–6(150)) PER SWPPC STD PLAN 120–2
- (42) CONSTRUCT VARIED HT CURB (A1–6(150)) PER MODIFIED SPPWC STD PLAN 120–2 – SEE DETAIL A ON SHT 2
- (44) CONSTRUCT COLORED CONCRETE PAVING – 6" PCC OVER 4" AB PER LANDSCAPE PLAN LC–01
- (45) CONSTRUCT INTERLOCKING PAVING SIDEWALK PER LANDSCAPE PLAN LC–01
- (46) CONSTRUCT 4" PCC OVER 4" AB SIDEWALK – SEE DETAIL C ON SHT 2
- (49) CONSTRUCT HANDICAP RAMP AND RAILING PER ARCH PLAN NO.
- (52) CONSTRUCT STUCCO RETAINING WALL W/BLOCK OR GLASS WALL PER ARCHITECT PLAN
- (53) CONSTRUCT RETAINING WALL PER SEPARATE PLANS & PERMIT
- (54) LANDSCAPE PER LANDSCAPE PLAN NO. LC–01
- (56) INSTALL TREE PER LANDSCAPE PLAN LP–01
- (57) CONSTRUCT STAIRS PER ARCH PLAN
- (59) PROTECT IN PLACE
- (60) CONSTRUCT GATE PER LANDSCAPE PLAN NO. LC–01
- (61) DG SIDEWALK PER LANDSCAPE PLAN NO. LC–01
- (63) CREATE A SWALE PER DETAIL HEREON


PROP BLDG
PROP RETAINING WALL PER BLDG PLAN
3'
1'
FS
2%
2%
FL
FS

HANDICAP RAMP - SWALE
NTS

ALL RETAINING WALLS, POOLS, AND SPAS TO BE CONSTRUCTED PER SEPARATE PLANS & PERMITS. SHOWN FOR REFERENCE ONLY.

LEGEND

AB	AGGREGATE BASE
BCR	BEGIN CURB RETURN
BLDG	BUILDING
BW	BACK OF WALK
CL	CENTERLINE
CF	CURB FACE
ECR	END CURVE RETURN
EX	EXISTING
FF	FINISH FLOOR
FL	FLOW LINE
FS	FINISH SURFACE
GB	GRADE BREAK
HP	HIGH POINT
HT	HEIGHT
MIN	MINIMUM
NO	NUMBER
PCC	PORTLAND CEMENT CONCRETE
PI	POINT OF INTERSECTION (VC)
PL	PROPERTY LINE
PROP	PROPOSED
R	RIDGE
R/W	RIGHT OF WAY
STD	STANDARD
SW	SIDEWALK
TC	TOP OF CURB
TG	TOP OF GRATE
TRANS	TRANSFORMER
TW	TOP OF WALL
TYP	TYPICAL
VC	VERTICAL CURVE

━ ━ ━	RIGHT OF WAY
— - —	CENTER LINE
—— R ——	RIDGE LINE
—— GB ——	GRADE BREAK
▨ ▨ ▨	GRADING AND PERMIT LIMITS
●	PROP TREE

10' 0' 5' 10'
SCALE: 1" = 10'

PERMIT # G12–23

DIG ALERT

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1-800-227-2600
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CALL BEFORE YOU DIG

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OF SOUTHERN CALIFORNIA

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AS-BUILT

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PREPARED BY:
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16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ∘ fax 949.474.5315 ∘ www.fuscoe.com
3/9/16
DEBRA VALLE SCHALES RCE#043101 DATE

no. 43101
3/9/16

PRECISE GRADING

CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

SHEET 7 OF 15

3/8/2016
CAREER LOFTS
PRECISE GRADING PLAN
AS-BUILT

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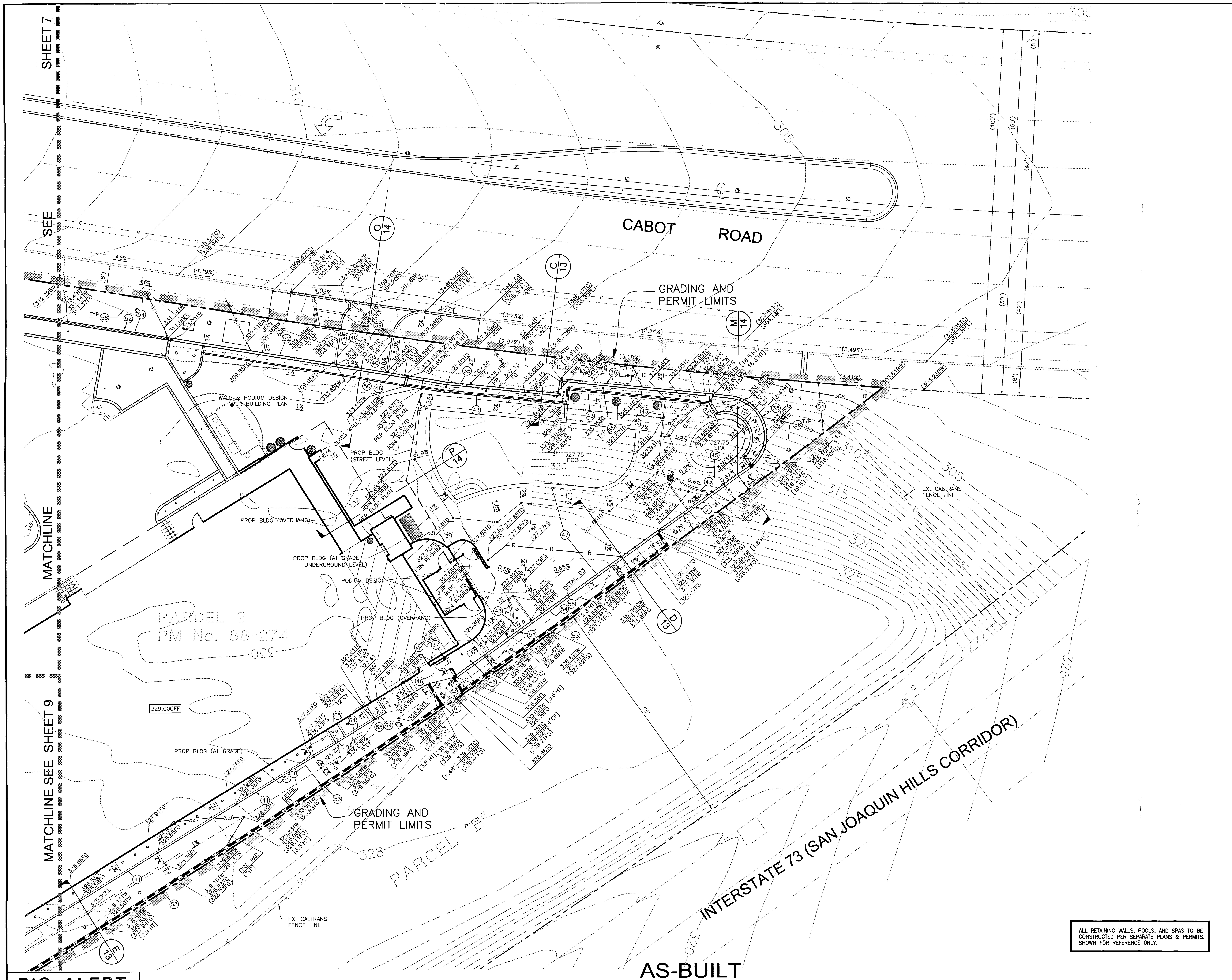
SEE SHEET 7
MATCHLINE
MATCHLINE SEE SHEET 9
CABOT ROAD
GRADING AND PERMIT LIMITS
GRADING AND PERMIT LIMITS
WALL & PODIUM DESIGN PER BUILDING PLAN
PROP BLDG (STREET LEVEL)
PROP BLDG (OVERHANG)
PROP BLDG (AT GRADE UNDERGROUND LEVEL)
PODIUM DESIGN
PROP BLDG (OVERHANG)
PROP BLDG (AT GRADE)
327.75 POOL
327.75 SPA
329.00GFF
PARCEL 2 PM No. 88-274
PARCEL "B"
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
EX. CALTRANS FENCE LINE
EX. CALTRANS FENCE LINE
O 14
C 13
M 14
P 14
D 13
E 13
305
310
315
320
325
330
328

CONSTRUCTION NOTES

(34) CONSTRUCT WALL W/FOUNTAIN PER LANDSCAPE PLAN LC-01 & LC-03

(35) CONSTRUCT LOCK & LOAD RETAINING WALL PER ABI ENGINEERING

(37) INSTALL KNOX KEY BOX PER FIRE MASTER PLAN

(39) CONSTRUCT 6" PCC OVER 4" AB DRIVEWAY

(40) CONSTRUCT 6" CURB (A1-6(150)) PER SWPPC STD PLAN 120-2

(41) CONSTRUCT 12" CURB PER MODIFIED SWPPC STD PLAN 120-2 & DETAIL J ON SHT 2

(43) CONSTRUCT 4" PLANTER CURB PER LANDSCAPE PLAN LC-01

(45) CONSTRUCT INTERLOCKING PAVING SIDEWALK PER LANDSCAPE PLAN LC-01

(46) CONSTRUCT 4" PCC OVER 4" AB SIDEWALK - SEE DETAIL C ON SHT 2

(47) CONSTRUCT COLORED CONCRETE PAVING (POOL DECK) PER LANDSCAPE ARCH PLAN NO. LC-02

(50) CONSTRUCT STUCCO RETAINING WALL WITH GLASS FENCING PER ARCHITECT PLAN

(51) CONSTRUCT RETAINING WALL WITH 8' (MIN) SOUND WALL PER ARCHITECT PLAN

(52) CONSTRUCT STUCCO RETAINING WALL W/BLOCK OR GLASS WALL PER ARCHITECT PLAN

(53) CONSTRUCT RETAINING WALL PER SEPARATE PLANS & PERMIT

(54) LANDSCAPE PER LANDSCAPE PLAN NO. LC-01

(55) CONSTRUCT CORTEEN STEEL PLANTER PER LANDSCAPE ARCH PLAN NO. LC-01

(56) INSTALL TREE PER LANDSCAPE PLAN LP-01

(58) CONSTRUCT BIORETENTION PER DETAIL D1 - D3 ON SHT 3

(60) CONSTRUCT GATE PER LANDSCAPE PLAN NO. LC-01

(61) DG SIDEWALK PER LANDSCAPE PLAN NO. LC-01

(64) CONSTRUCT 8" CURB (A1-8(200) PER SWPPC STD PLAN 120-2

(65) CONSTRUCT CONCRETE SPLASH BLOCK PER DETAIL I ON SHT 3

3/8/2016

CAREER LOFTS
PRECISE GRADING PLAN

AS-BUILT

LEGEND

AB	AGGREGATE BASE
BCR	BEGIN CURB RETURN
BLDG	BUILDING
BW	BACK OF WALK
CL	CENTERLINE
DG	DECOMPOSED GRANITE
ECR	END CURVE RETURN
EX	EXISTING
FF	FINISHED FLOOR
FG	FINISHED GRADE
FL	FLOW LINE
FS	FINISH SURFACE
GB	GRADE BREAK
HP	HIGH POINT
HT	HEIGHT
INV	INVERT
MIN	MINIMUM
PA	PLANTER AREA
PCC	PORTLAND CEMENT CONCRETE
PL	PROPERTY LINE
PROP	PROPOSED
R/W	RIGHT OF WAY
SHT	SHEET
TC	TOP OF CURB
TD	TOP OF DRAIN
TG	TOP OF GRATE
TGW	TOP OF GLASS WALL
TW	TOP OF WALL
TYP	TYPICAL
W/	WITH

━ ━ ━	RIGHT OF WAY
—— - ——	CENTER LINE
—— R ——	RIDGE LINE
—— v ——	VALLEY LINE
—— GB ——	GRADE BREAK
▨ ▨ ▨	GRADING AND PERMIT LIMITS
●	PROP TREE

N

10' 0' 5' 10'
SCALE: 1" = 10'

ALL RETAINING WALLS, POOLS, AND SPAS TO BE CONSTRUCTED PER SEPARATE PLANS & PERMITS. SHOWN FOR REFERENCE ONLY.

AS-BUILT

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tel 949.474.1960 ◦ fax 949.474.5315 ◦ www.fuscoe.com

Debra V. Schales 3/9/16
DEBRA VALLE SCHALES RCE#043101 DATE

DEBRA VALLE SCHALES
No. 43101
3/9/16

PRECISE GRADING

CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

PERMIT # G12-23

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

SHEET 8 OF 15

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DIG ALERT

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

CALL BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

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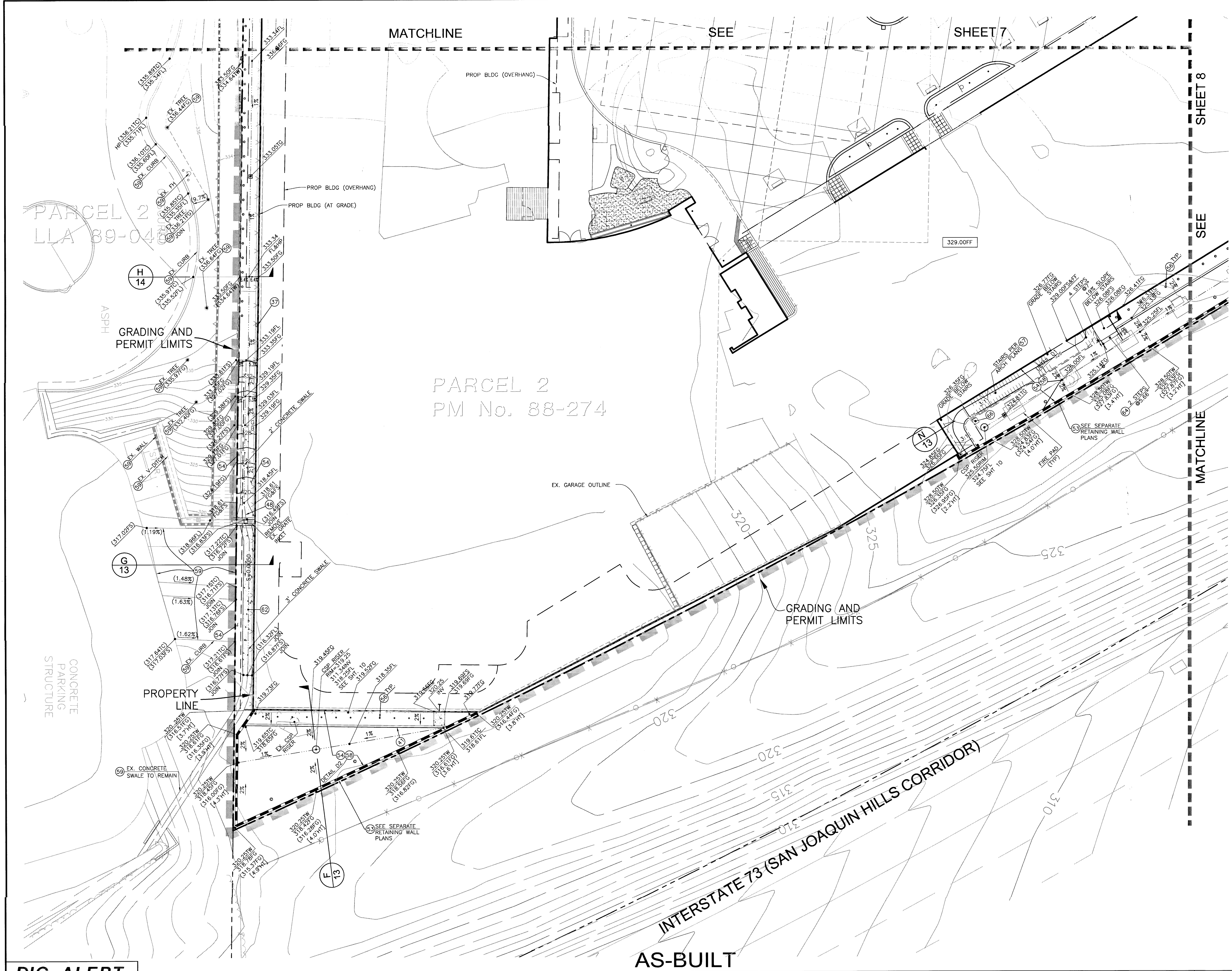
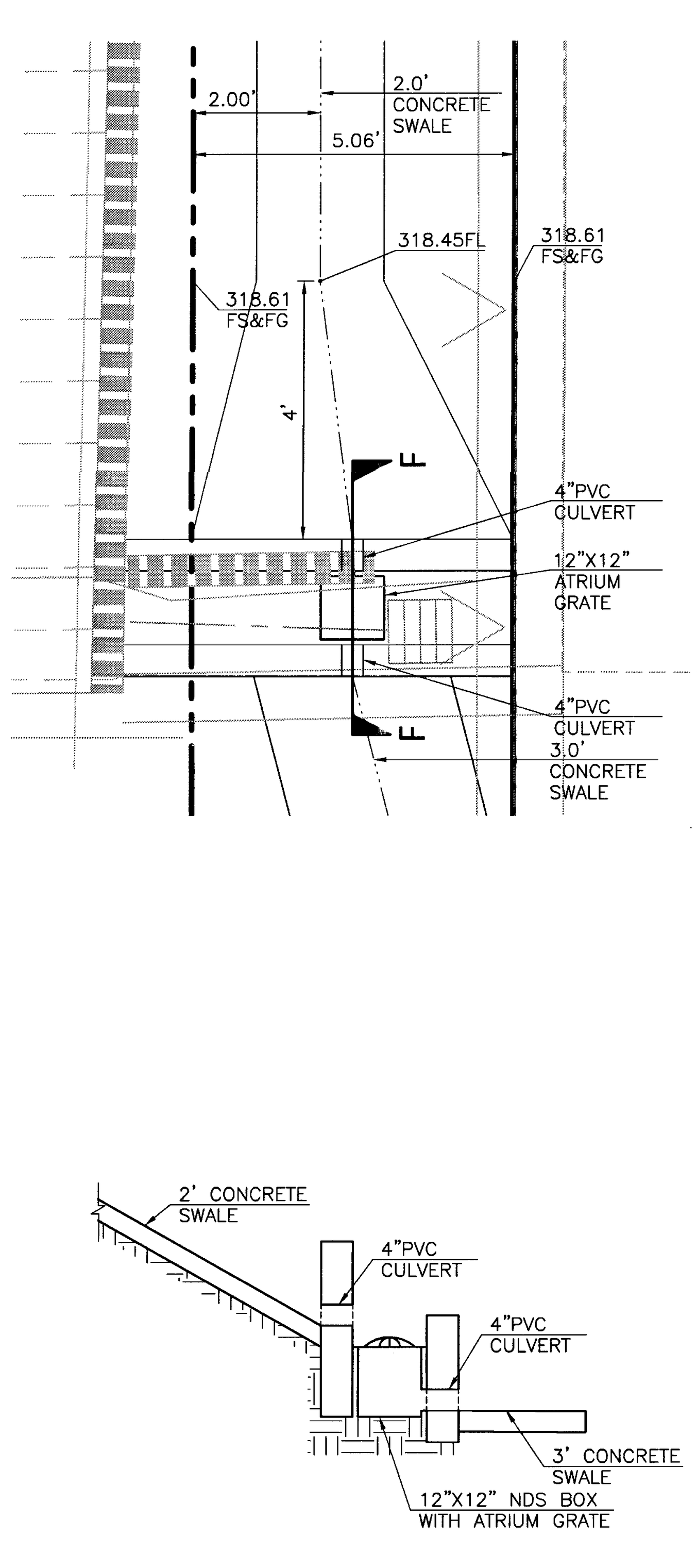

MATCHLINE SEE SHEET 7
MATCHLINE SEE SHEET 8
PROP BLDG (OVERHANG)
PROP BLDG (AT GRADE)
PARCEL 2 LLA 89-046
PARCEL 2 PM No. 88-274
ASPH
GRADING AND PERMIT LIMITS
PROPERTY LINE
EX. GARAGE OUTLINE
CONCRETE PARKING STRUCTURE
2' CONCRETE SWALE
3' CONCRETE SWALE
STAIRS PER ARCH PLANS
FIRE PAD (TYP)
SEE SEPARATE RETAINING WALL PLANS
CSP RISER
EX. CONCRETE SWALE TO REMAIN
329.00FF
320
325
315
310
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
AS-BUILT

CONSTRUCTION NOTES

- (37) INSTALL KNOX KEY BOX PER FIRE MASTER PLAN
- (41) CONSTRUCT 12" CURB PER MODIFIED SWPPC STD PLAN 120-2 & DETAIL J ON SHT 2
- (48) CONSTRUCT CONCRETE TRANSITION SWALE PER DETAIL F ON SHT 9
- (53) CONSTRUCT RETAINING WALL PER SEPARATE PLANS & PERMIT
- (54) LANDSCAPE PER LANDSCAPE PLAN NO. LC-01
- (56) INSTALL TREE PER LANDSCAPE PLAN LP-01
- (57) CONSTRUCT STAIRS PER ARCH PLAN
- (58) CONSTRUCT BIORETENTION PER DETAIL D1 – D3 ON SHT 3
- (59) PROTECT IN PLACE
- (62) CONSTRUCT CONCRETE SWALE PER DETAIL E ON SHT 3
- (64) CONSTRUCT 8" CURB (A1-8(200) PER SWPPC STD PLAN 120-2
- (66) INSTALL 18"X18" CONCRETE SPLASH BLOCK


2.00'
2.0' CONCRETE SWALE
5.06'
318.45FL
318.61 FS&FG
318.61 FS&FG
4'
F
F
4"PVC CULVERT
12"X12" ATRIUM GRATE
4"PVC CULVERT
3.0' CONCRETE SWALE
2' CONCRETE SWALE
4"PVC CULVERT
4"PVC CULVERT
3' CONCRETE SWALE
12"X12" NDS BOX WITH ATRIUM GRATE

CONCRETE TRANSITION SWALE (F)

ALL RETAINING WALLS, POOLS, AND SPAS TO BE CONSTRUCTED PER SEPARATE PLANS & PERMITS. SHOWN FOR REFERENCE ONLY.

LEGEND

BLDG	BUILDING
CSP	CORRUGATED STEEL PIPE
EX	EXISTING
FF	FINISHED FLOOR
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOW LINE
FS	FINISHED SURFACE
GB	GRADE BREAK
HP	HIGH POINT
HT	HEIGHT
MIN	MINIMUM
PROP	PROPOSED
R	RIDGE
SHT	SHEET
STD	STANDARD
TC	TOP OF CURB
TG	TOP OF GRATE
TW	TOP OF WALL
TYP	TYPICAL

▬ ▬ ▬	RIGHT OF WAY
— - —	CENTER LINE
— R —	RIDGE LINE
— GB —	GRADE BREAK
▨ ▨ ▨	GRADING AND PERMIT LIMITS
⊙	PROP TREE

N

10' 0' 5' 10'
SCALE: 1" = 10'

AS-BUILT

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Debra V Schales 3/9/16
DEBRA VALLE SCHALES RCE#043101 DATE

REGISTERED PROFESSIONAL ENGINEER
DEBRA VALLE SCHALES
no. 43101
CIVIL
STATE OF CALIFORNIA
3/9/16

PRECISE GRADING

CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

PERMIT # G12-23

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

SHEET 9 OF 15

3/8/2016
CAREER LOFTS
PRECISE GRADING PLAN
AS-BUILT

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3/8/2016

CAREER LOFTS
PRECISE GRADING PLAN

AS-BUILT

330
325
320
315
310
305
300
PL
PROP. RET WALL
BASIN # 2
EX. GROUND
6" CSP RISER 5+56.77 RIM=319.25 318.25FL
EX. BLDG.
PROP. FINISH GROUND
98 6" PERFORATED PIPE 313.75INV
312.76 HGL (100YR)
312.56 HGL (25YR)
Q100 HGL
Q25 HGL
(S=0.005)
(S=0.0075)
(S=0.1092)
308.08 HGL (100YR)
307.97 HGL (25YR)
5+10.00 (310.95TW)
5+10.00 EX SD STA (307.21INV) PER PLAN BC-1573
5+48.12 EX SD STA (±311.29INV)
5+55.27 311.34INV
5+58.27 311.37INV
Q25(ADJ) = 3.79 CFS
Q100(ADJ) = 4.92 CFS
45.27 LF EX 18" RCP
Q25(ADJ) = 2.02 CFS
Q100(ADJ) = 2.62 CFS
104.38 LF OF EX. 18" RCP
SEE DETAIL H ON SHT 3
91
EX. LINE "A"
EX. LINE "A"
EX. BASEMENT PARKING STRUCTURE
EX. TRENCH DRAIN 9+99.43 (316.14TG)
9+99.43 CONCRETE COLLAR
EXISTING GROUND OVER STORM DRAIN
PROTECT IN PLACE EX. 8" DRAIN CONNECTION TO EX. 18" RCP
PROPOSED FINISH FLOOR (BASEMENT)
PROPOSED BUILDING
6" PERFORATED PIPE
98 320.24INV
317.00FS
313.55 HGL (100YR)
313.45 HGL (25YR)
S=0.0075
S=0.0080
EX. 18" RCP PIPE WITH CONCRETE ENCASEMENT
STATION EQUATION 6+62.65 EX SD STA
9+99.43 BEGIN PIPE (312.15INV)
Q25(ADJ) = 2.02 CFS
Q100(ADJ) = 2.62 CFS
97.21 LF-18" RCP WITH 6" CONCRETE ENCASEMENT
D-2000
LINE "A"
3:1
CSP RISER 10+98.14 RIM=325.50 324.75FL
18"X18" ATRIUM GRATE 11+04.89 324.81TG
11+00.15 ANGLE PT 320.26INV
11+07.15 ANGLE PT 320.33INV
11+09.14 ANGLE PT 320.36INV
319.55INV
S=0.0200
89
END PIPE 10+96.65 312.93INV
BEGIN PIPE 10+99.65 315.42INV
98
END PIPE 11+03.16 315.50INV BEGIN PIPE
3.50 LF-3" PVC, SDR35
100.00 LF-48" HDPE
END PIPE 12+03.14 316.50INV
BASIN # 1
6" PVC PERFORATED PIPE
S=0.0100
PIPE STORAGE
S=0.0100
END CAP
EXISTING GROUND OVER STORM DRAIN
FINISH GRADE OVER STORM DRAIN
12+28.13 ANGLE PT 321.55INV
12+63.13 ANGLE PT 321.90INV
12+84.89 END PIPE 322.12INV
PROP. RET WALL
CONCRETE ENCASED IN CLASS "C" MORTAR
RUBBER SLEEVE – ASTMF477
BAND – 301SS
HOUSING – 301SS
GASKET ASTMF477
3" PVC SDR 35
4" TO 3" REDUCER
4" "INSERTATEE"
48" HDPE END CAP
4"
48" HDPE END CAP TO 3" PVC
8" PVC SDR 35
8"
8" "INSERTATEE"
48" SMOOTH HDPE
48" HDPE TO 8" PVC
36" CSP RISER
36" CSP TO 3" PVC
24" CSP RISER
6" PVC SDR 35
6" "INSERTATEE"
6"
24" CSP TO 6" PVC
CONNECTION DETAILS X
NOT TO SCALE
LINE "A"
PROFILE SCALES:
HORIZONTAL 1"= 10'
VERTICAL 1"= 4'
5+00
5+50
10+00
10+50
11+00
11+50
12+00
12+50
12+75

* NOTE:
CONTRACTOR TO VERIFY EXISTING ALIGNMENT & INVERTS OF 18"RCP PRIOR TO CONSTRUCTION, IF DISCREPANCY ARISES, CONTRACTOR TO CONTACT ENGINEER OF RECORD.
AS-BUILT PLAN OF EX 18"RCP IS A DIFFERENT ALIGNMENT THAN FIELD CONDITION

PROP. BLDG
BIORETENTION – BASIN #2
ALIGNMENT OF EX. SD ADJUSTED TO REFLECT FIELD CONDITIONS. (SEE NOTE BELOW)
(310.95TW)
313.9INV
314.94INV
N09°33'41"W
92
91
97
5+10.00 EX SD STA PER PLAN BC-1573 (307.21INV)
5+48.12 EX SD STA PER PLAN BC-1573 (±311.29INV)
5+56.77 24" CSP RISER 86 5+56.77 EX SD STA
74 S=0.0100 L=20.00'
74 S=0.0100 L=32.50'
(316.15TG)
(316.14TG)
(312.15INV) 8" PVC & 18" RCP
(316.02TG)
REFER TO STRUCTURAL AND PLUMBING PLANS FOR ADDITIONAL CONNECTION DETAILS TO THE EXISTING 18" RCP ENCASED PIPE INSIDE THE BUILDING.
N19°03'55"W
90 76
REFER TO STRUCTURAL PLANS FOR FOOTING DETAIL AND PROP. 18" RCP ENCASED PIPE CROSSING
PROP. BLDG
STATION EQUATION 6+62.65 EX SD STA 9+99.43 LINE A BEGIN 18"RCP
87
320.24INV
S=0.0100 N19°43'E L=2.83'
11+00.15 1.95'OFFSET ∠POINT 6" SUBDRAIN 320.26INV
11+07.15 1.94'OFFSET ∠POINT 6" SUBDRAIN 320.33INV
S=0.0100 N31°17'39"E L=2.83'
70
10+98.14 ∠POINT ℄ 24" CSP RISER 86
S=0.0200 L=3.50' 70
11+03.14 BEGIN 48"HDPE
10+04.89 324.81 TG ℄ 18"X18" ATRIUM GRATE 75 84
11+09.14 0.08'OFFSET ∠POINT 6" SUBDRAIN
EX. FLOWLINE
PROP. BLDG
77
N32°06'43"W
S=0.0100 N31°42'21"W, L=119' 74
12+03.14 END OF 48" HDPE
PROP. GARAGE PARKING
BIORETENTION – BASIN #1
12+28.13 0.92'OFFSET ∠POINT 6" SUBDRAIN 321.55INV
S=0.0100 N32°35'47"W, L=35' 74
12+63.13 0.90'OFFSET ∠POINT 6" SUBDRAIN 321.90INV
S=0.0100 N33°48'03"W, L=21.77 74
12+84.89 END 6" PERF. PIPE 322.12INV
SEE SHT 11
326

25-YEAR HYDRAULIC DATA									
LINE	STATIONING	Q_{25}–ADJ	DIA	S_0	n	D_c (FT)	D_n (FT)	V_c (FPS)	V_n (FPS)
EX LINE "A"	5+10.00 TO 5+55.27	3.79 CFS	18"	0.1092	0.013	0.74	0.33	4.33	12.89
EX LINE "A"	5+58.27 TO 9+99.43	2.02 CFS	18"	0.0075	0.013	0.54	0.48	3.56	4.14
LINE A	9.99.43 TO 10+96.65	2.02 CFS	18"	0.0080	0.013	0.54	0.48	3.56	4.24

100-YEAR HYDRAULIC DATA									
LINE	STATIONING	Q_{100}–ADJ	DIA	S_0	n	D_c (FT)	D_n (FT)	V_c (FPS)	V_n (FPS)
EX LINE "A"	5+10.00 TO 5+55.27	4.92 CFS	18"	0.1092	0.013	0.85	0.38	4.74	13.90
EX LINE "A"	5+58.27 TO 9+99.43	2.62 CFS	18"	0.0075	0.013	0.61	0.55	3.85	4.45
LINE A	9.99.43 TO 10+96.65	2.62 CFS	18"	0.0080	0.013	0.61	0.58	3.85	4.56

DIG ALERT

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

CALL BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

CAUTION - NOTICE TO CONTRACTOR

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LEGEND

∠	ANGLE
CB	CATCH BASIN
CL	CENTERLINE
CFS	CUBIC FEET PER SECOND
CSP	CORRUGATED STEEL PIPE
EX	EXISTING
FL	FLOW LINE
FS	FINISH SURFACE
HDPE	HIGH DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
INV	INVERT
JS	JUNCTION STRUCTURE
L	LENGTH
LF	LINEAR FEET
PROP	PROPOSED
PVC	POLYVINYL CHLORIDE
RET	RETAINING
RCP	REINFORCED CONCRETE PIPE
S	SLOPE
SD	STORM DRAIN
SHT	SHEET
STA	STATION
STD	STANDARD
TG	TOP OF GRATE
TW	TOP OF WALL

━ ━ ━ ━	RIGHT OF WAY
—— - ——	STORM DRAIN CENTER LINE
– – – –	TOP/TOE OF SLOPE
—— ——	SUBDRAIN
▬ ▭ ▬ ▭	RET. WALL

Q_{25} (ADJ) = 25 YEAR FREQ. FLOW ADJUSTED FOR BASIN AND PIPE STORAGE

Q_{100} (ADJ) = 100 YEAR FREQ. FLOW ADJUSTED FOR BASIN AND PIPE STORAGE

AS-BUILT

STORM DRAIN CONSTRUCTION NOTES

(70) CONSTRUCT 3" PVC, SDR35 INCLUDING FITTINGS
(74) CONSTRUCT 6" PERF PVC PIPE (SCH 80), WRAPPED WITH 140 MIRAFI *PERMEABLE GEOTEXTILE OR EQUAL*
(75) CONSTRUCT 8" PVC, SDR35 INCLUDING FITTINGS
(76) CONSTRUCT 18" RCP – D – 2000 & BEDDING PER DETAIL Y ON SHT 2
(77) CONSTRUCT 48" HDPE-S (SMOOTH) PIPE W/WELDED END CAPS (HANCOR FC-EOT-48-0000 OR EQUAL) & BEDDING PER DETAIL Y ON SHT 2
(84) CONSTRUCT 18" X 18" ATRIUM GRATE PER NDS PART NO 1891
(86) CONSTRUCT 24" TO 36" CSP RISER WITH 36" CSP/CONCRETE BASE PER DETAIL H ON SHT 3
(87) CONSTRUCT CONCRETE COLLAR PER APWA STD PLAN 380-4
(89) CONNECT PVC TO HDPE END CAP W/"INSERTATEE" PER DETAIL X HEREON
(90) *CONSTRUCT 6" THICK CONCRETE ENCASEMENT*
(91) SAWCUT AND REMOVE EX 18" RCP
(92) REMOVE AND DISPOSE EX CSP RISER
(97) CONSTRUCT BRICK & MORTAR PLUG
(98) CONNECT PVC PIPE TO CSP RISER W/INSERTION TEE PER DETAIL X HEREON
(99) CONSTRUCT PVC HDPE W/INSIDE TEE PER DETAIL X HEREON

APP PVC/HDPE & RCP CONNECTIONS TO CSP RISER, 48" HDPE & EX. RCP SHALL BE FIELD INSPECTED AND APPROVED BY THE PROJECT CIVIL ENGINEER, AND MEMOS SHALL BE GIVEN TO THE CITY INSPECTOR.

ALL PVC PIPES WITHIN BUILDING FOOTPRINT SHALL BE SCH 40.

ALL RETAINING WALLS, POOLS, AND SPAS TO BE CONSTRUCTED PER SEPARATE PLANS & PERMITS. SHOWN FOR REFERENCE ONLY.

N

10' 0' 5' 10'
SCALE: 1" = 10'

PERMIT # G12-23

NO.	DATE	REVISIONS	APP'D.	DATE
2	10/05/15	UPDATED DRAIN ADJACENT TO POOL, REVISED ELEVATION AND CONST. NOTES (SHEETS 3,8 &11)		
1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE
ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ◦ fax 949.474.5315 ◦ www.fuscoe.com

Debra V Schales 3/9/16
DEBRA VALLE SCHALES RCE#043101 DATE

DEBRA VALLE SCHALES no. 43101 CIVIL
3/9/16

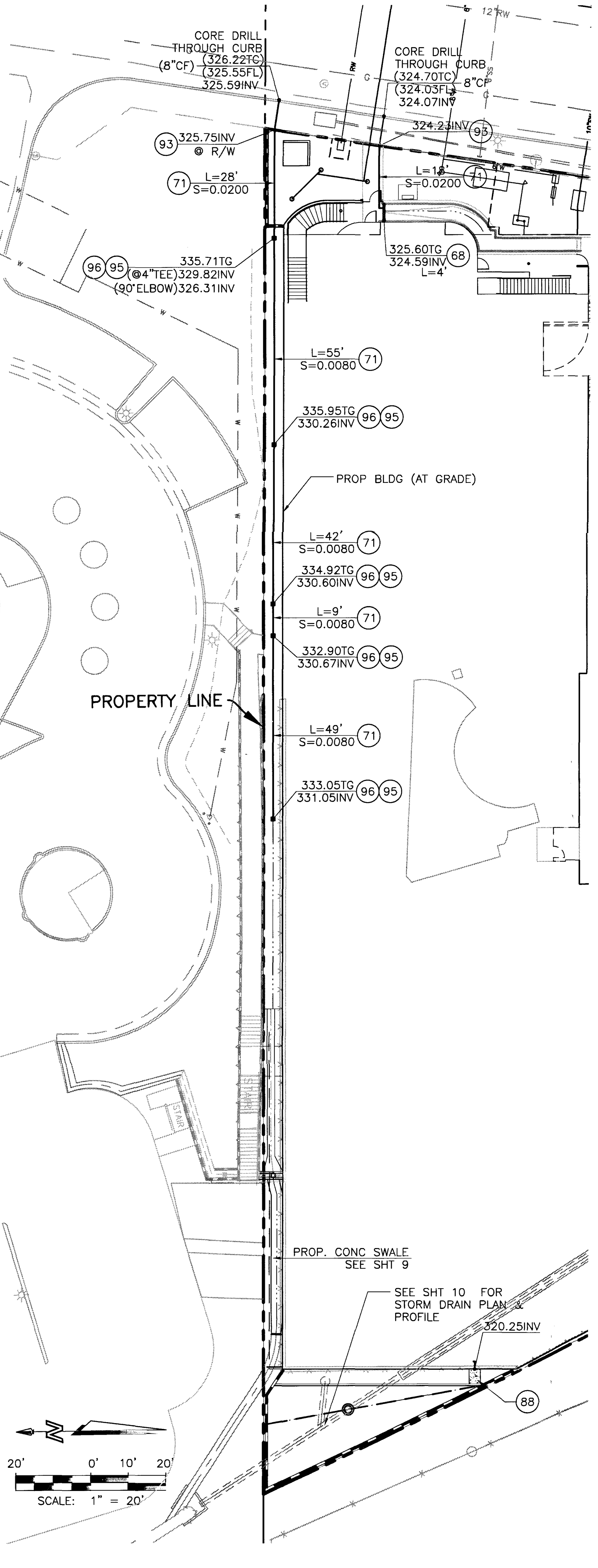
STORM DRAIN PLAN

CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

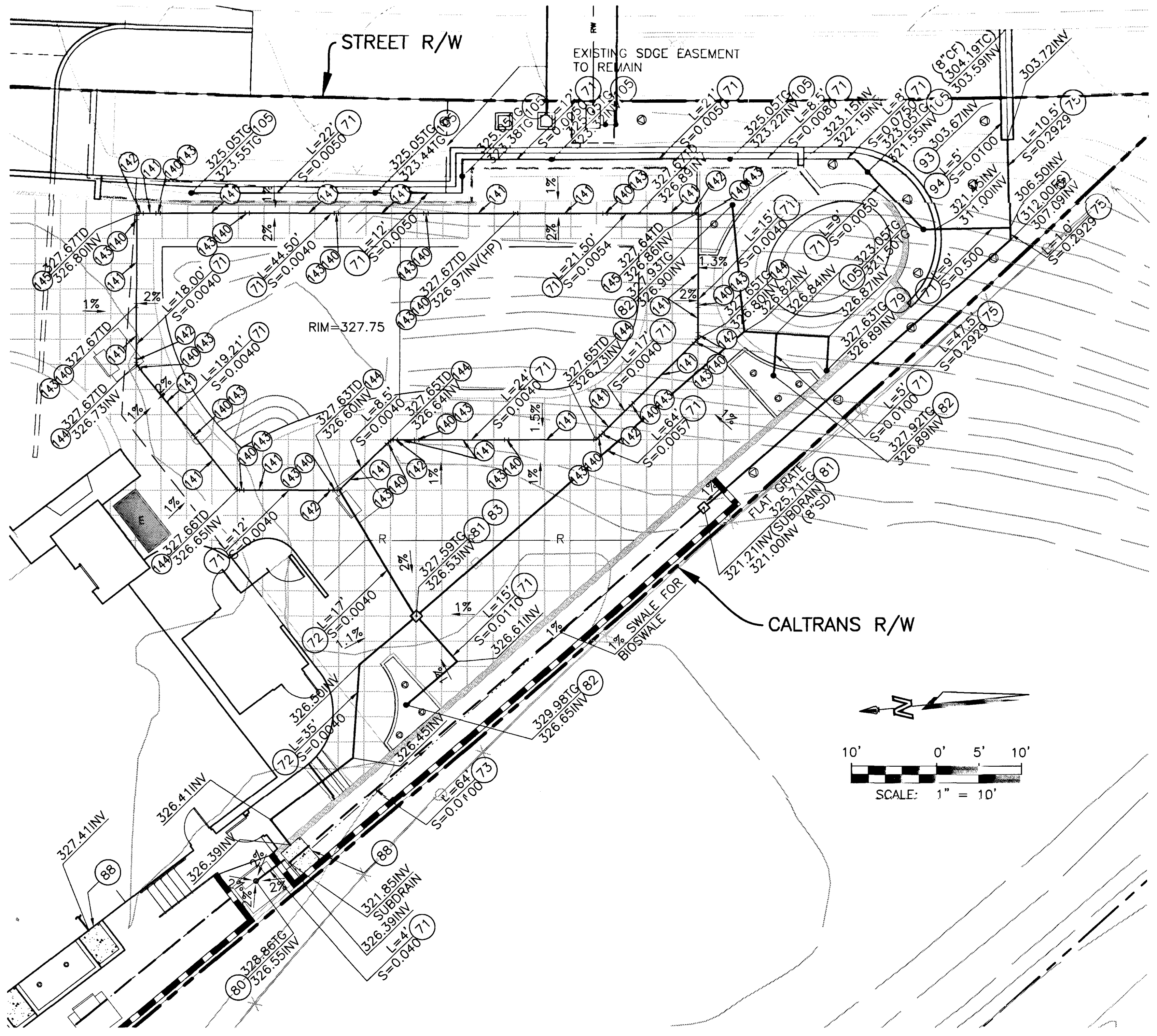
SHEET 10 OF 15

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG10SD.DWG (03-08-16 7:28:46PM) Plotted by: fuscoe


CORE DRILL
THROUGH CURB
(8"CF)
(326.22TC)
(325.55FL)
325.59INV
CORE DRILL
THROUGH CURB
(324.70TC) 8"CF
(324.03FL)
324.07INV
324.23INV
93
325.75INV
@ R/W
71
L=28'
S=0.0200
L=18'
S=0.0200
96 95
335.71TG
(@4"TEE)329.82INV
(90°ELBOW)326.31INV
325.60TG
324.59INV
L=4'
68
L=55'
S=0.0080
335.95TG
330.26INV
PROP BLDG (AT GRADE)
L=42'
S=0.0080
334.92TG
330.60INV
L=9'
S=0.0080
332.90TG
330.67INV
PROPERTY LINE
L=49'
S=0.0080
333.05TG
331.05INV
PROP. CONC SWALE
SEE SHT 9
SEE SHT 10 FOR
STORM DRAIN PLAN &
PROFILE
320.25INV
88
20' 0' 10' 20'
SCALE: 1" = 20'

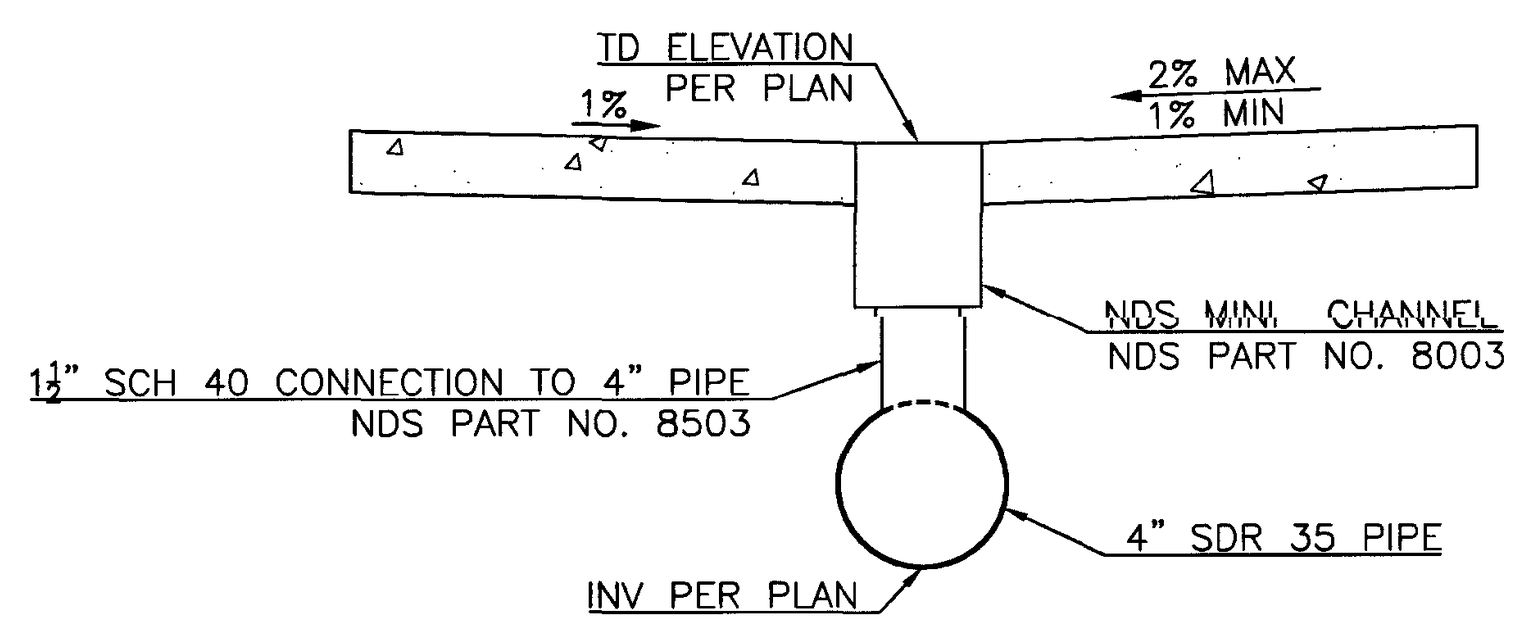
DETAIL A

SCALE: 1"=20'


STREET R/W
EXISTING SDGE EASEMENT
TO REMAIN
RIM=327.75
CALTRANS R/W
FLAT GRATE
1% SWALE FOR
BIOSWALE
10' 0' 5' 10'
SCALE: 1" = 10'

DETAIL B

SCALE: 1"=10'


TD ELEVATION
PER PLAN
1%
2% MAX
1% MIN
NDS MINI CHANNEL
NDS PART NO. 8003
1½" SCH 40 CONNECTION TO 4" PIPE
NDS PART NO. 8503
4" SDR 35 PIPE
INV PER PLAN

SLOT DRAIN DETAIL

NOT TO SCALE

STORM DRAIN CONSTRUCTION NOTES

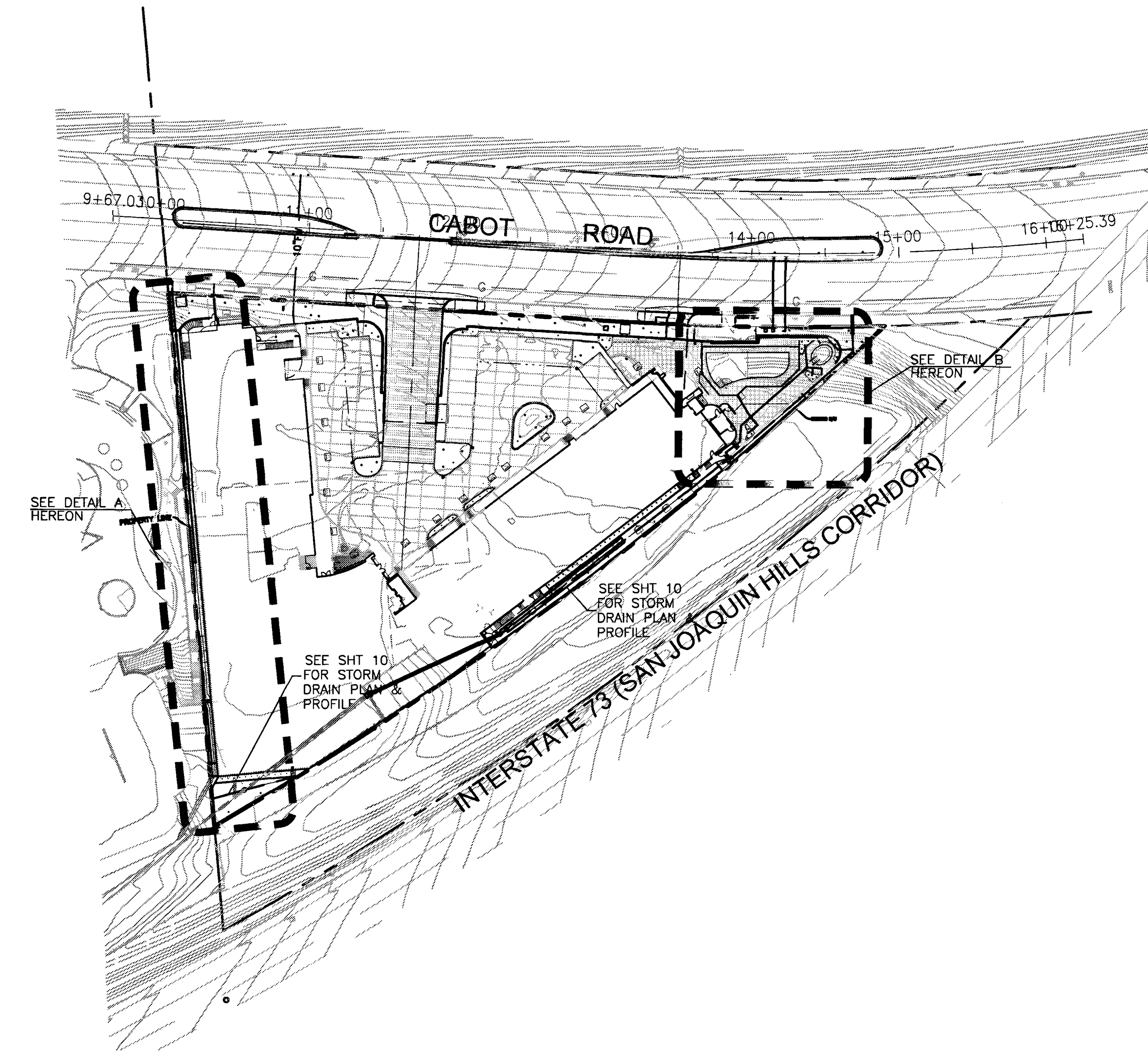
- (69) CONSTRUCT MINI CHANNEL TRENCH DRAIN PER NDS PART NO 500 & 552B W/BOTTOM OUTLET
- (71) CONSTRUCT 4" PVC, SDR35 INCLUDING FITTINGS
- (72) CONSTRUCT 6" PVC, SDR35 INCLUDING FITTINGS
- (73) CONSTRUCT 4" PERF PVC PIPE (SCH 80) WRAPPED WITH 140 MIRAFI PERMEABLE GEOTEXTILE OR EQUAL
- (75) CONSTRUCT 8" PVC, SDR35 INCLUDING FITTINGS
- (78) NOT USED
- (79) CONSTRUCT 4" GRATE INLET PER NDS PART NO 917SC (SATIN CHROME)
- (80) CONSTRUCT 6" GRATE INLET AND ADAPTER PER NDS PART NO 642
- (81) CONSTRUCT 12" X 12" GRATE INLET PER NDS PART NO 1210
- (82) CONSTRUCT 4" ATRIUM GRATE PER NDS PART 75
- (83) CONSTRUCT 12" CATCH BASIN PER NDS PART NO 1200 NGB
- (84) CONSTRUCT 18" X 18" ATRIUM GRATE PER NDS PART NO 1891
- (85) CONSTRUCT 18" X 18" LOW PROFILE ADAPTER PER NDS PART NO 1830
- (88) CONSTRUCT 3' X 4' RIPRAP WITH CONCRETE SLURRY - SEE DETAIL I ON SHT 3, 6" DIA (MIN)
- (89) CONNECT PVC TO HDPE END CAP W/"INSERTATEE" PER DETAIL X HEREON
- (93) POINT OF CONNECTION @ R/W
- (94) CONSTRUCT 3"X17" CURB-O-LET (CP-SP 317) WITH STRAIGHT ADAPTOR (CP-SPA 17)
- (95) CONSTRUCT 12"X12" FLAT GRATE PER NDS PART 1280
- (96) CONSTRUCT 12"X12" CATCH BASIN WITH BOTTOM OPENING PER NDS PART NO. 1200 NGB
- (105) CONSTRUCT 4" ATRIUM GRATE WHICH CONNECTS TO STRUCTURAL WALL SUBDRAIN SYSTEM WITH VERTICAL 4" PVC (SDR 35)
- (140) DOWN CONNECTION TO 4" SDR DRAIN PIPE PER NDS PART NO. 8503
- (141) 10FT (OR CUT TO LENGTH) MICRO CHANNEL DRAIN PER NDS PART NO. 8003
- (142) MICRO CHANNEL CLEAN OUT PER NDS PART NO. 8653
- (143) 1 1/2" SCH 40 PIPE CONNECTED TO 4" SDR DRAIN-SEAL ALL JOINTS WATER TIGHT
- (144) MICRO CHANNEL 45° ELBOW PER NDS PART NO.8303
- (145) MICRO CHANNEL 90° ELBOW PER NDS PART NO. 8383

LEGEND

BLDG	BUILDING
DIA	DIAMETER
FW	FIRE WATER
HP	HIGH POINT
INV	INVERT
L	LENGTH
MIN	MINIMUM
NO	NUMBER
PERF	PERFORATED
PROP	PROPOSED
PVC	POLYVINYL CHLORIDE
R/W	RIGHT OF WAY
RW	RECLAIMED WATER
S	SLOPE
SS	SEWER
SHT	SHEET
TD	TOP OF DRAIN
TG	TOP OF GRATE
W	WATER

— — - — —	RIGHT OF WAY
—— - ——	CENTER LINE

ALL RETAINING WALLS, POOLS, AND SPAS TO BE CONSTRUCTED PER SEPARATE PLANS & PERMITS. SHOWN FOR REFERENCE ONLY.


9+67.03
10+00
CABOT ROAD
14+00
15+00
16+00
16+25.39
SEE DETAIL B
HEREON
SEE DETAIL A
HEREON
SEE SHT 10
FOR STORM
DRAIN PLAN
PROFILE
SEE SHT 10
FOR STORM
DRAIN PLAN &
PROFILE
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)

DIG ALERT

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

CALL BEFORE YOU DIG

UNDERGROUND SERVICE ALERT
OF SOUTHERN CALIFORNIA

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AS-BUILT

NO.	DATE	REVISIONS	APP'D.	DATE
2	10/05/15	UPDATED DRAIN ADJACENT TO POOL, REVISED ELEVATION AND CONST. NOTES (SHEETS 3,8 &11)		
1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:

FUSCOE
ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ◦ fax 949.474.5315 ◦ www.fuscoe.com

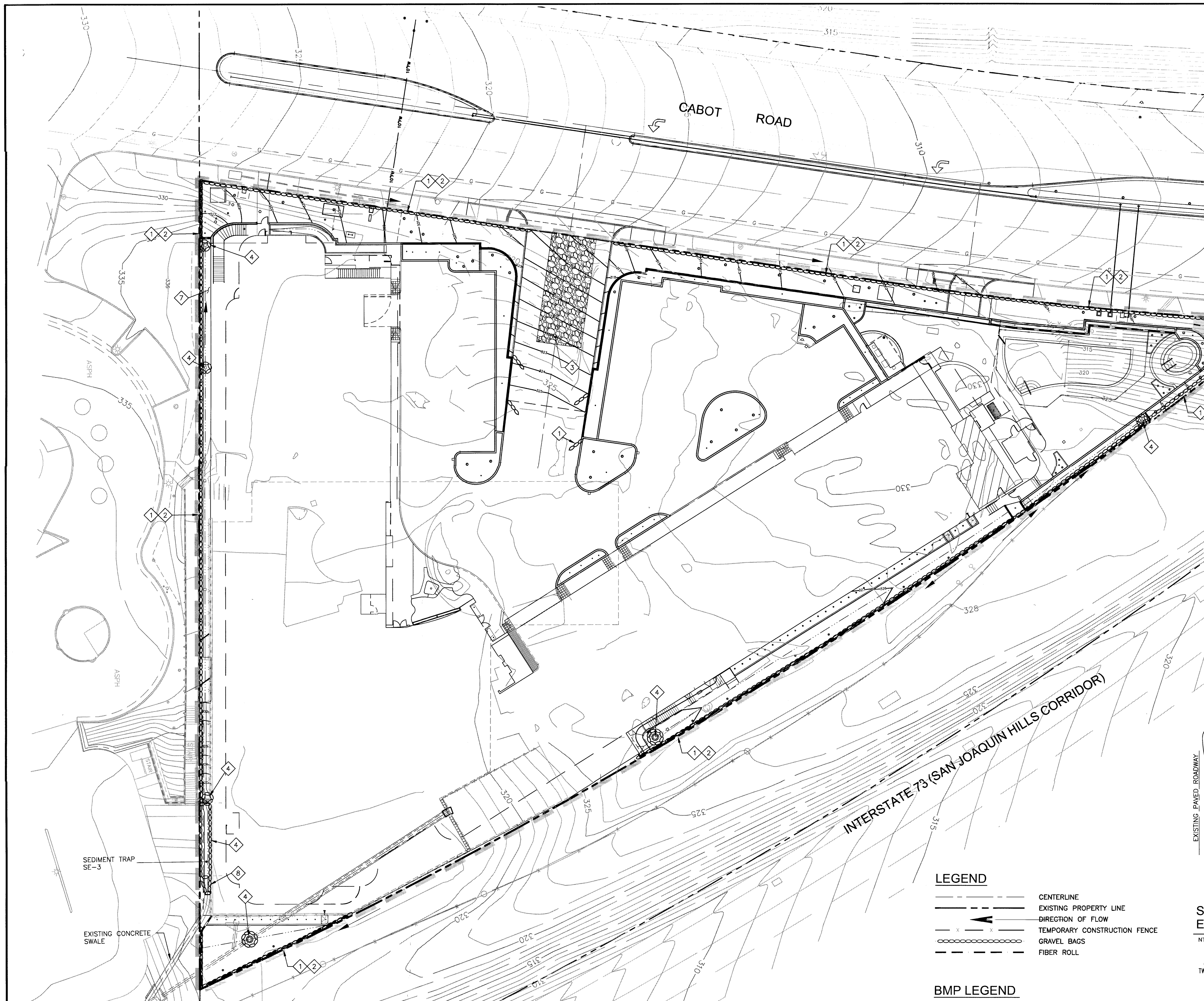
3/9/16
DEBRA VALLE SCHALES RCE#043101 DATE

No. 43101
3/9/16

YARD DRAIN PLAN

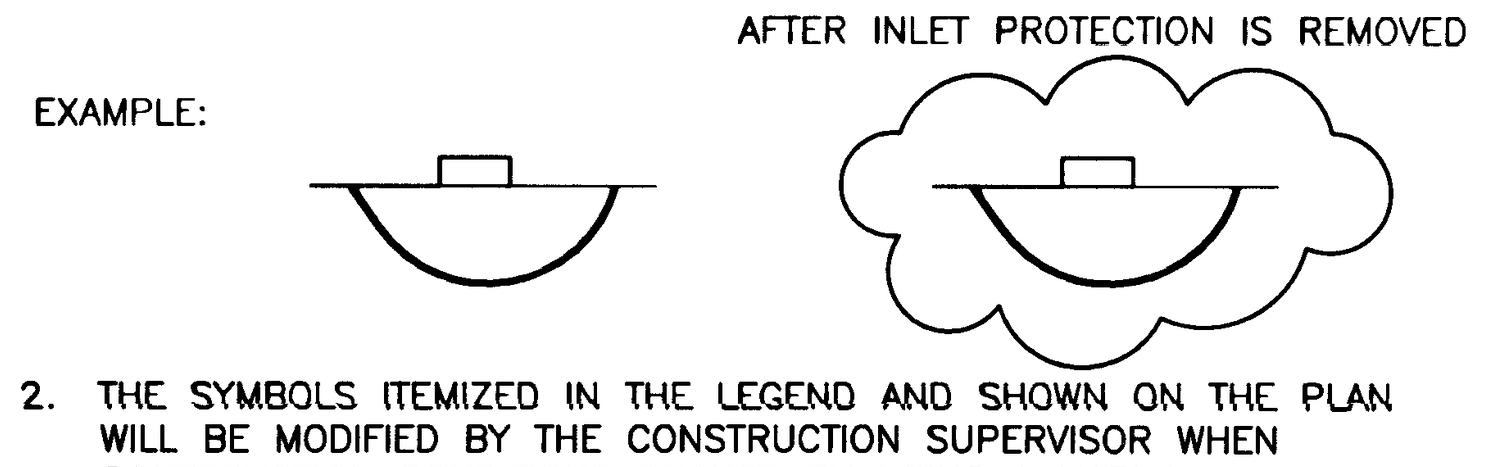
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

PERMIT #	G12-23
DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12
SHEET	11 OF 15


CABOT ROAD
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
SEDIMENT TRAP
SE-3
EXISTING CONCRETE
SWALE
ASPH
330
335
320
315
310
305
325
328

SUPERVISOR'S INSTRUCTIONS

1. IMPLEMENTATION OF THIS PLAN SHALL BE THE RESPONSIBILITY OF THE CONSTRUCTION SUPERVISOR. THIS PLAN SHALL BE REVISED BY THE CONSTRUCTION SUPERVISOR AS AUTHORIZED AGENT OF THE OWNER TO REFLECT THE CURRENT STATUS OF THE CONSTRUCTION SITE.


EXAMPLE:
AFTER INLET PROTECTION IS REMOVED

2. THE SYMBOLS ITEMIZED IN THE LEGEND AND SHOWN ON THE PLAN WILL BE MODIFIED BY THE CONSTRUCTION SUPERVISOR WHEN CONSTRUCTION CONDITIONS CHANGE BY USING A MARKING PEN ON THIS PLAN AND NOTING THE CHANGE AND DATE AS FOLLOWS:

   USING A MARKING PEN, CROSS OUT ITEMS SHOWN ON THE PLAN THAT ARE NO LONGER NECESSARY DUE TO THE CONSTRUCTION OF IMPROVEMENTS, ELIMINATION FROM THE SITE, OR RELOCATION OF THE ITEM. SYMBOLS SHOULD BE ADDED TO THE PLAN TO DELINEATE NEW ITEMS OR RELOCATIONS ON THE SITE.

   USING A MARKING PEN, DASH THE STORM DRAIN LINE AFTER THE CONSTRUCTION OF THE STORM DRAIN LINE.

   USING A MARKING PEN, DARKEN IN THE CATCH BASIN SYMBOL ON THE PLAN AFTER CONSTRUCTION IS COMPLETED.

   USING A MARKING PEN, CLOUD LANDSCAPE AREAS WHICH HAVE BEEN PLANTED AND LABEL THE AREA WITH A CIRCLED LETTER FOR REFERENCE.
3. WHEN MARKING ANY CHANGES ON THE PLAN, BE SURE TO NOTE THE DATE ADJACENT TO THE MARKED REVISION.
4. WHEN MAKING ANY REVISIONS ON THE PLAN, THE SUPERVISOR SHALL NOTE THE DATE ON THE SUPERVISOR'S "LATEST REVISION" LOG.

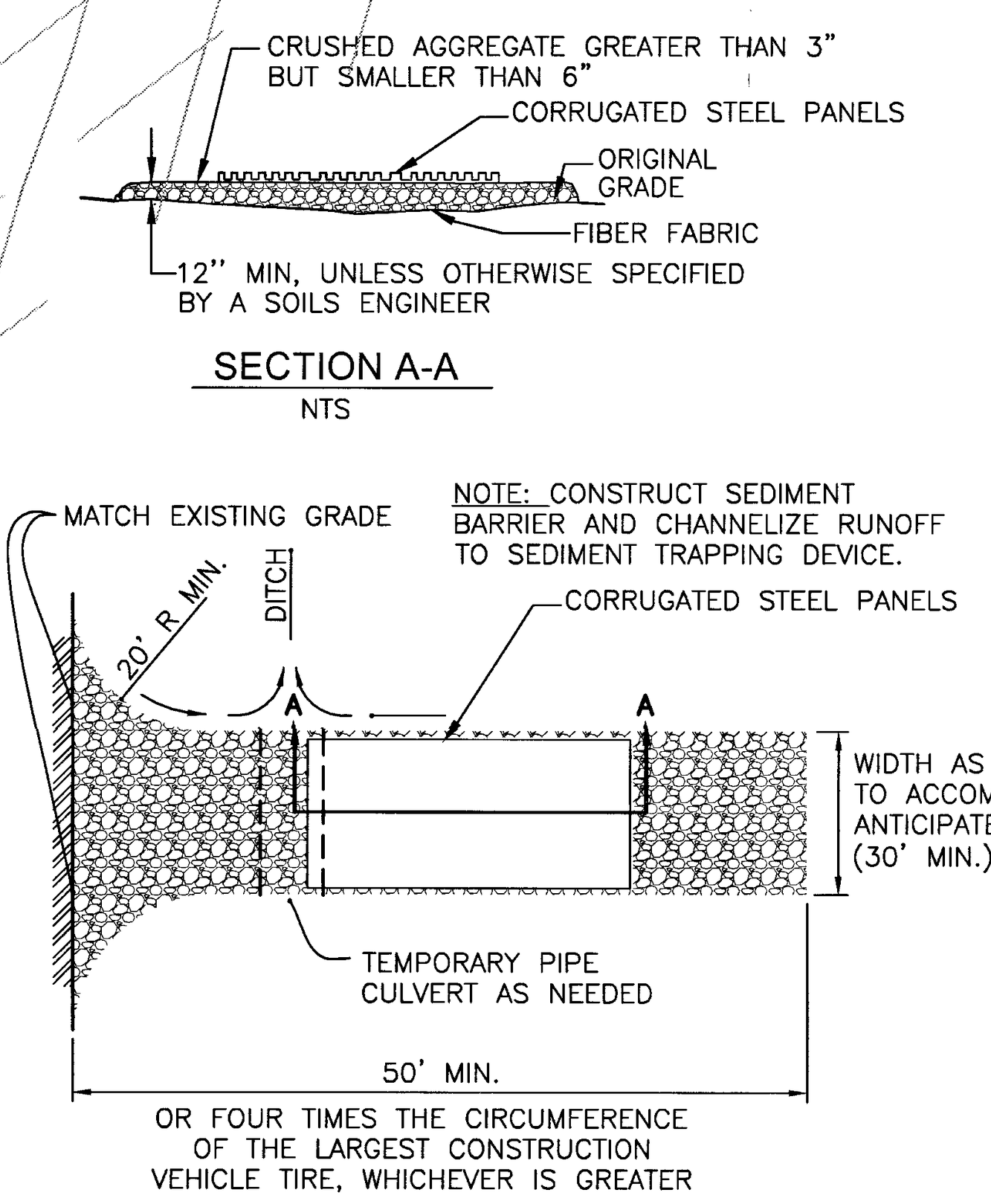
LIST OF CONTRACTORS

THE FOLLOWING CONTRACTORS AND/OR SUBCONTRACTORS HAVE BEEN MADE AWARE OF THE CONDITIONS OF THIS PLAN AND RESPONSIBLE FOR COMPLIANCE OF ITEMS SPECIFIED IN THE GENERAL CONSTRUCTION ACTIVITY STORM WATER PERMIT AS THEY RELATE TO THEIR SPECIFIC MATERIALS AND/OR TASKS.

	NAME / COMPANY	SIGNATURE / DATE
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

EROSION CONTROL NOTES

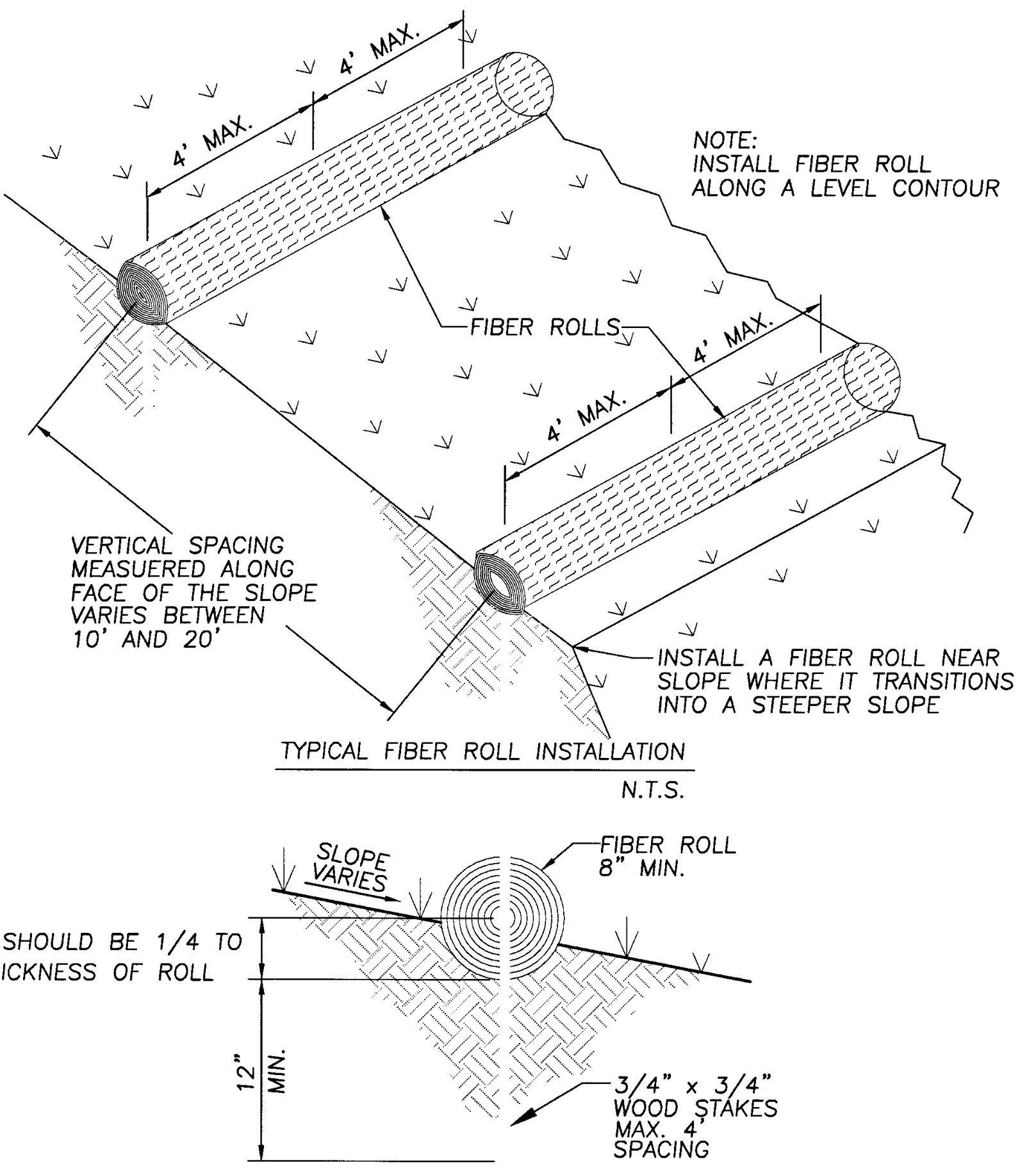
1. INSTALL ONE ROW OF GRAVEL BAGS, TWO TIERS HIGH
2. INSTALL TEMPORARY CONSTRUCTION FENCE
3. INSTALL "TREK-TRAK" PLATE OR APPROVED EQUAL TO PROTECT INGRESS/EGRESS ROUTES PER DETAIL 1, SHT.-14. EXACT LOCATION TO BE DETERMINED BY CONTRACTOR.
4. INSTALL GRAVEL BAGS AT PROPOSED GRATE INLET PER DETAIL 2, SHT.-14.
5. INSTALL FIBER ROLL EVERY 15-FEET WHERE SHOWN AND PER DETAIL 3, SHT.-14 TO DISTURBED SLOPE.
6. INSTALL COMPOST BLANKET (EC-14).
7. INSTALL HYDROSEEDING (EX-4)
8. INSTALL TEMPORARY 6" PVC PIPE W/ATRIUM GRATE INLET (SEE DETAIL 4)


CRUSHED AGGREGATE GREATER THAN 3" BUT SMALLER THAN 6"
CORRUGATED STEEL PANELS
ORIGINAL GRADE
FIBER FABRIC
12" MIN, UNLESS OTHERWISE SPECIFIED BY A SOILS ENGINEER
SECTION A-A
NTS
MATCH EXISTING GRADE
NOTE: CONSTRUCT SEDIMENT BARRIER AND CHANNELIZE RUNOFF TO SEDIMENT TRAPPING DEVICE.
CORRUGATED STEEL PANELS
EXISTING PAVED ROADWAY
20' R MIN.
DITCH
A
A
WIDTH AS REQUIRED TO ACCOMODATE ANTICIPATED TRAFFIC (30' MIN.)
TEMPORARY PIPE CULVERT AS NEEDED
50' MIN.
OR FOUR TIMES THE CIRCUMFERENCE OF THE LARGEST CONSTRUCTION VEHICLE TIRE, WHICHEVER IS GREATER

STABILIZED CONSTRUCTION ENTRANCE/EXIT DETAIL

NTS

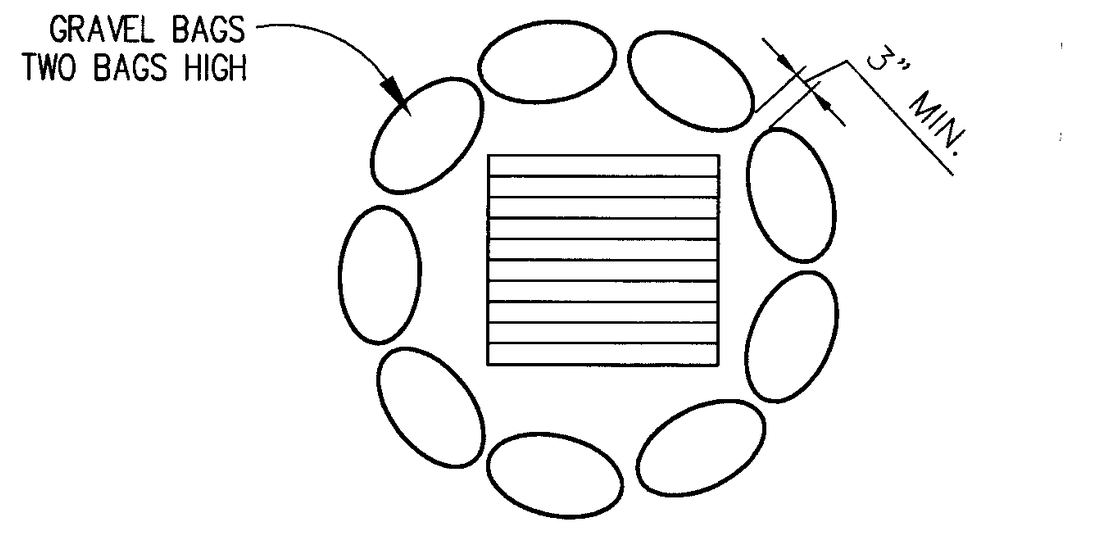
1


4' MAX.
4' MAX.
NOTE:
INSTALL FIBER ROLL ALONG A LEVEL CONTOUR
FIBER ROLLS
4' MAX.
4' MAX.
VERTICAL SPACING MEASURED ALONG FACE OF THE SLOPE VARIES BETWEEN 10' AND 20'
INSTALL A FIBER ROLL NEAR SLOPE WHERE IT TRANSITIONS INTO A STEEPER SLOPE
TYPICAL FIBER ROLL INSTALLATION
N.T.S.
SLOPE VARIES
FIBER ROLL 8" MIN.
TRENCH DEPTH SHOULD BE 1/4 TO 1/3 OF THE THICKNESS OF ROLL
12" MIN.
3/4" x 3/4" WOOD STAKES MAX. 4' SPACING

TYPICAL FIBER ROLL INSTALLATION

NTS

3


GRAVEL BAGS TWO BAGS HIGH
3" MIN.

TYPICAL GRATE INLET PROTECTION

NTS

2

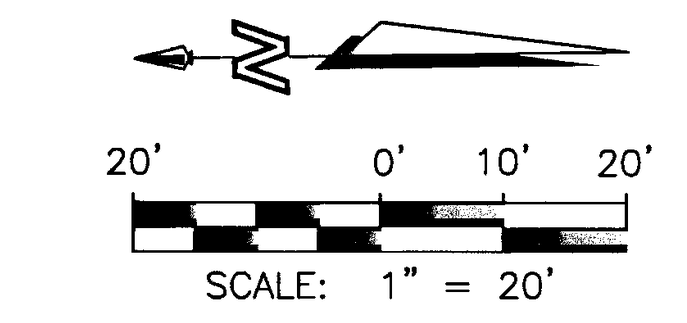
LEGEND

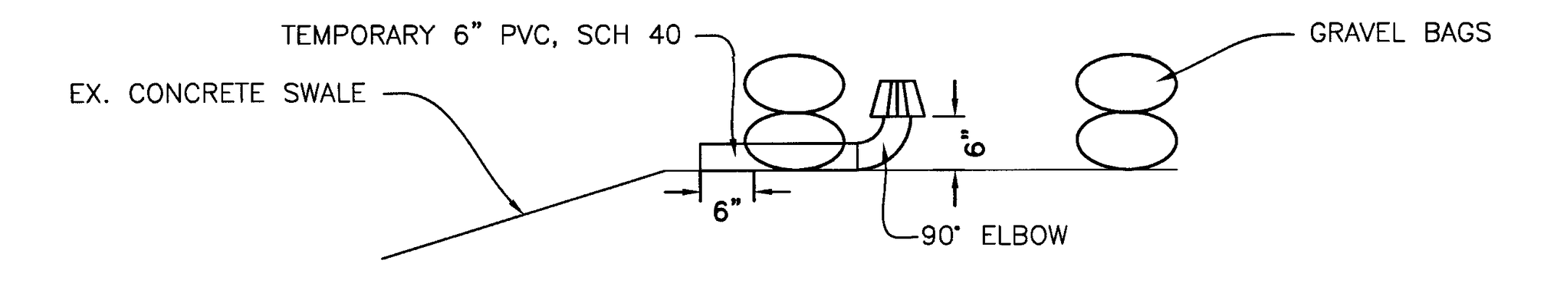
— - — - —	CENTERLINE
━ ━ ━ ━	EXISTING PROPERTY LINE
◄	DIRECTION OF FLOW
—x—x—	TEMPORARY CONSTRUCTION FENCE
oooooooo	GRAVEL BAGS
— — — —	FIBER ROLL

BMP LEGEND

CT	* CONSTRUCTION TRAILER
C/C W	* CHEMICAL/CONCRETE WASHOUT
P/P W	* PAINT/PLASTER WASHOUT
STOCK	* SAND/GRAVEL BAG STOCKPILE
STORE	* STORAGE AREA
CONST	* ACTIVE CONSTRUCTION AREA
DONE	* COMPLETED/OCCUPIED AREA
VEH	* VEHICLE/STAGING AREA

* TO BE DETERMINED ON-SITE BY PROJECT SUPERINTENDENT AND UPDATED HEREON


20'
0'
10'
20'
SCALE: 1" = 20'


TEMPORARY 6" PVC, SCH 40
GRAVEL BAGS
EX. CONCRETE SWALE
6"
6"
90° ELBOW

TEMPORARY PIPE W/ GRATE INLET

NTS

4

IT IS THE CONTRACTOR'S RESPONSIBILITY TO KEEP THIS ECP MAP CURRENT, ADDING ITEMS AND MOVING THEM AS NECESSARY AND/OR REMOVING ITEMS WHEN NO LONGER NEEDED. THE CONTRACTOR MAY BE ASKED AT ANY TIMETO PRODUCE THIS MAP TO CITY OF REGULATORY OFFICIALS. FAILURE TO KEEP IT CURRENT CAN RESULT IN A FINE. HAND-MARKED ALTERATIONS WITH INITIALS AND DATE ARE SUFFICIENT.

DIG ALERT

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

CALL BEFORE YOU DIG

UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

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AS-BUILT

NO.	DATE	REVISIONS	APP'D.	DATE
2	10/05/15	UPDATED DRAIN ADJACENT TO POOL, REVISED ELEVATION AND CONST. NOTES (SHEETS 3,8 &11)		
1	11/04/13	REPLACED LOCK & LOAD WALL W/CONCRETE PILE WALL, REVISED GFF & SUBGRADE ELEVATIONS		

PREPARED BY:
FUSCOE
ENGINEERING
16795 Von Karman, Suite 100, Irvine, California 92606
tel 949.474.1960 ◦ fax 949.474.5315 ◦ www.fuscoe.com
3/9/16
DEBRA VALLE SCHALES RCE#043101 DATE

DEBRA VALLE SCHALES
no. 43101
3/9/16

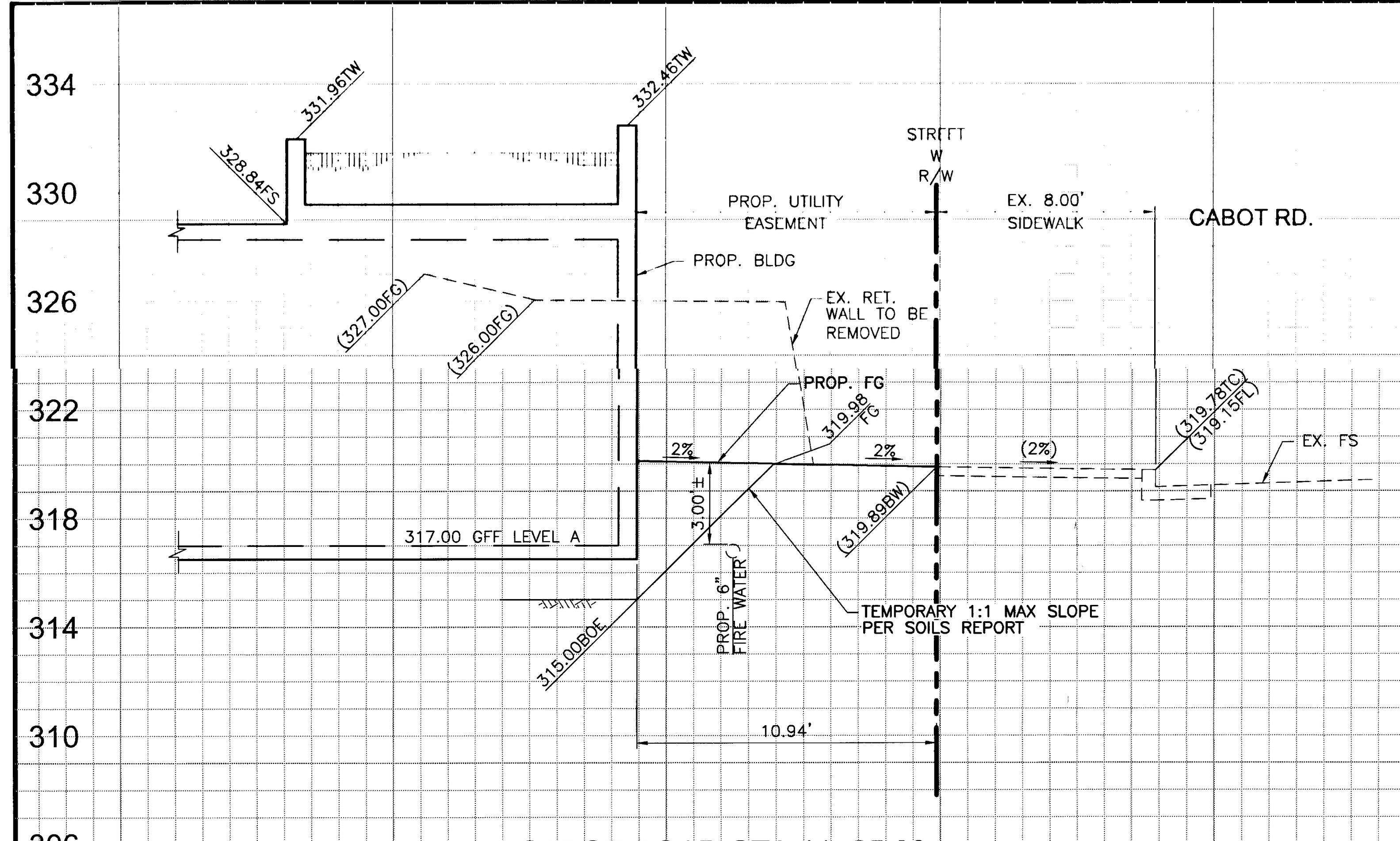
PERMIT # G12-23

EROSION CONTROL PLAN
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

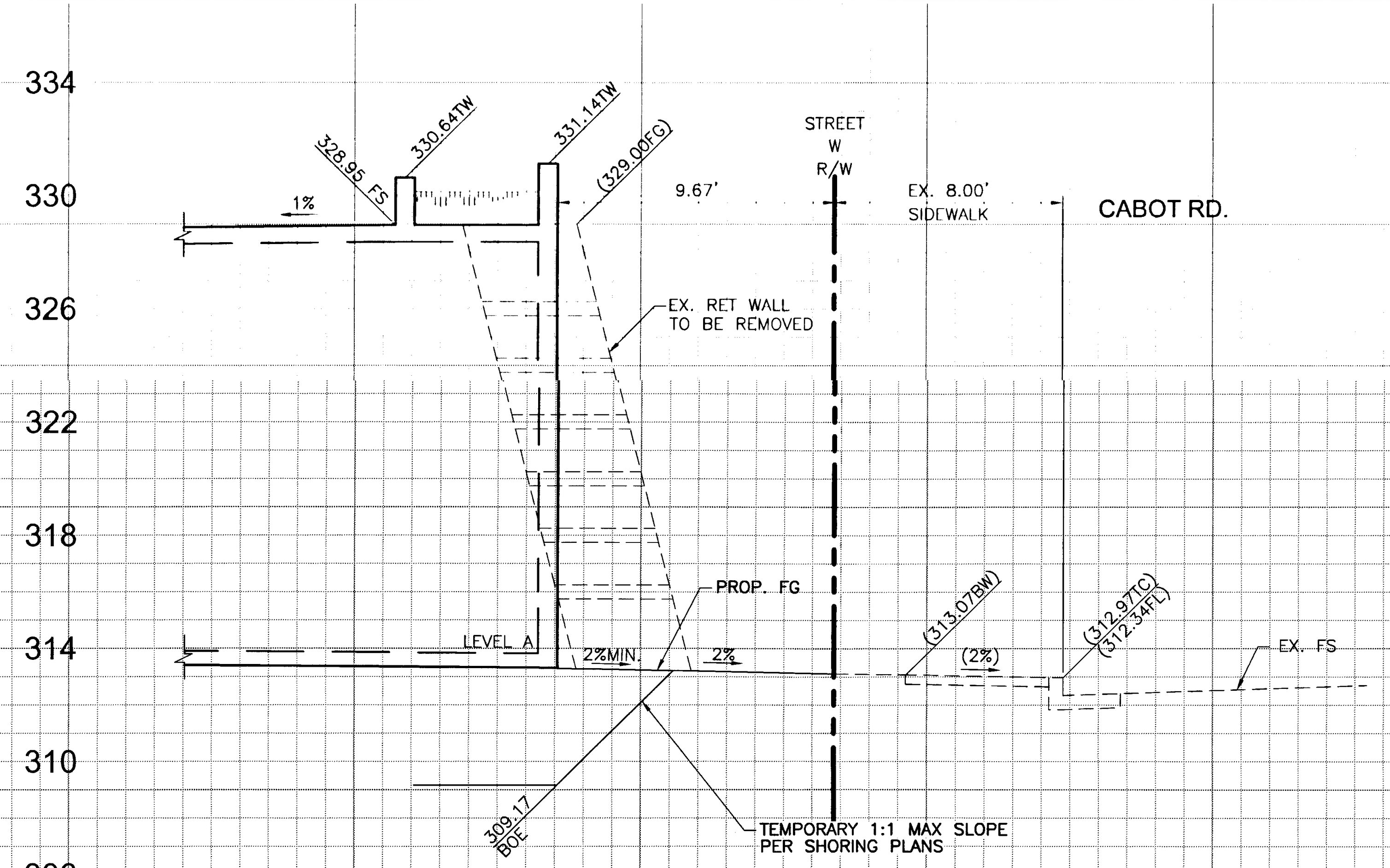
DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12
SHEET 12 OF 15	

3/8/2016
CAREER LOFTS
PRECISE GRADING PLAN
AS-BUILT

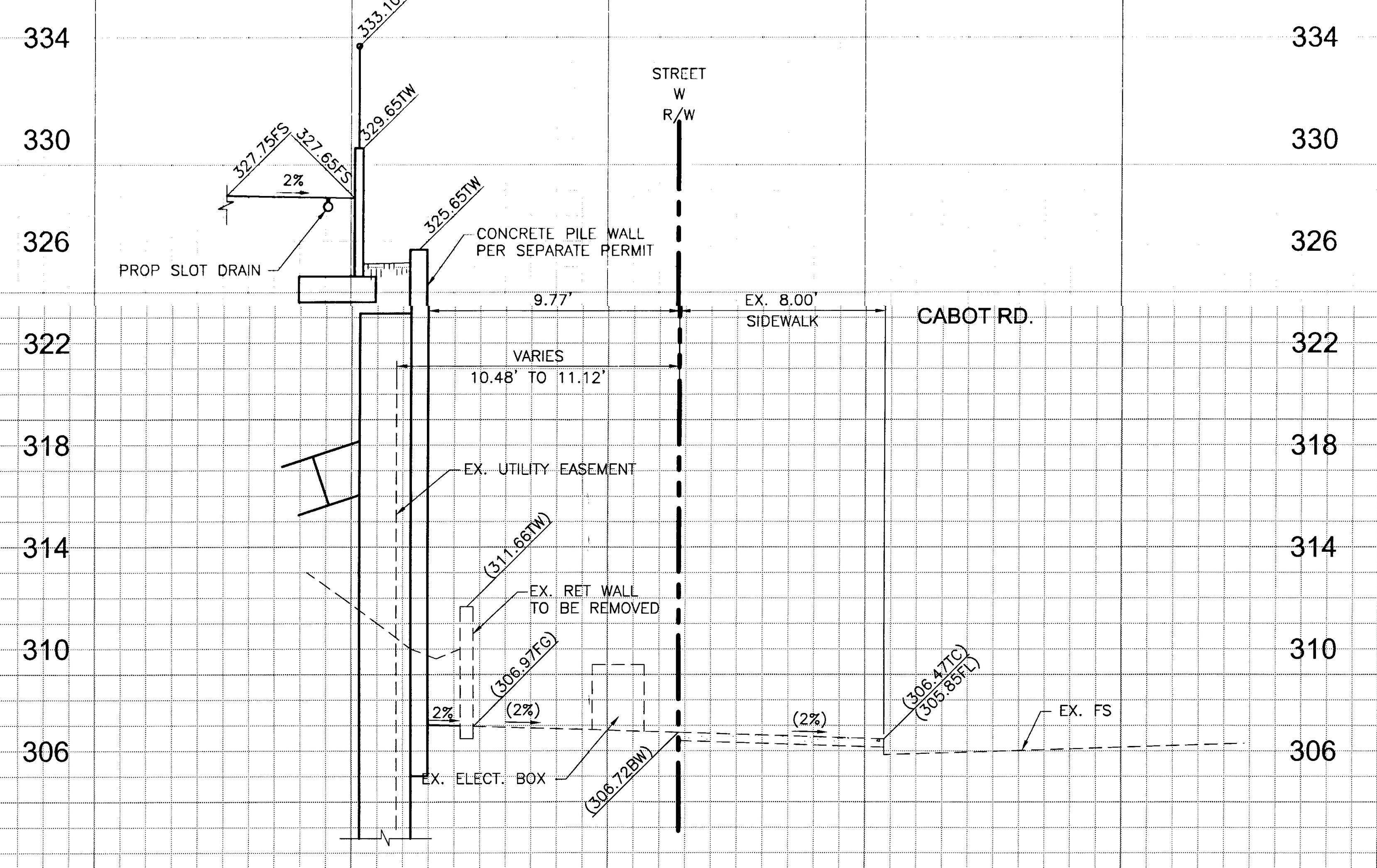
P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG12EC.DWG (03-08-16 7:29:45PM) Plotted by: fuscoe


331.9FTW
332.4FTW
328.84FS
PROP. UTILITY EASEMENT
STREET W R/W
EX. 8.00' SIDEWALK
CABOT RD.
PROP. BLDG
(327.00FG)
(326.00FG)
EX. RET. WALL TO BE REMOVED
PROP. FG
319.98 FG
2%
(2%)
(319.28TC)
(319.75FL)
EX. FS
3.00'±
(319.89BW)
317.00 GFF LEVEL A
PROP. 6" FIRE WATER
315.00BOE
TEMPORARY 1:1 MAX SLOPE PER SOILS REPORT
10.94'

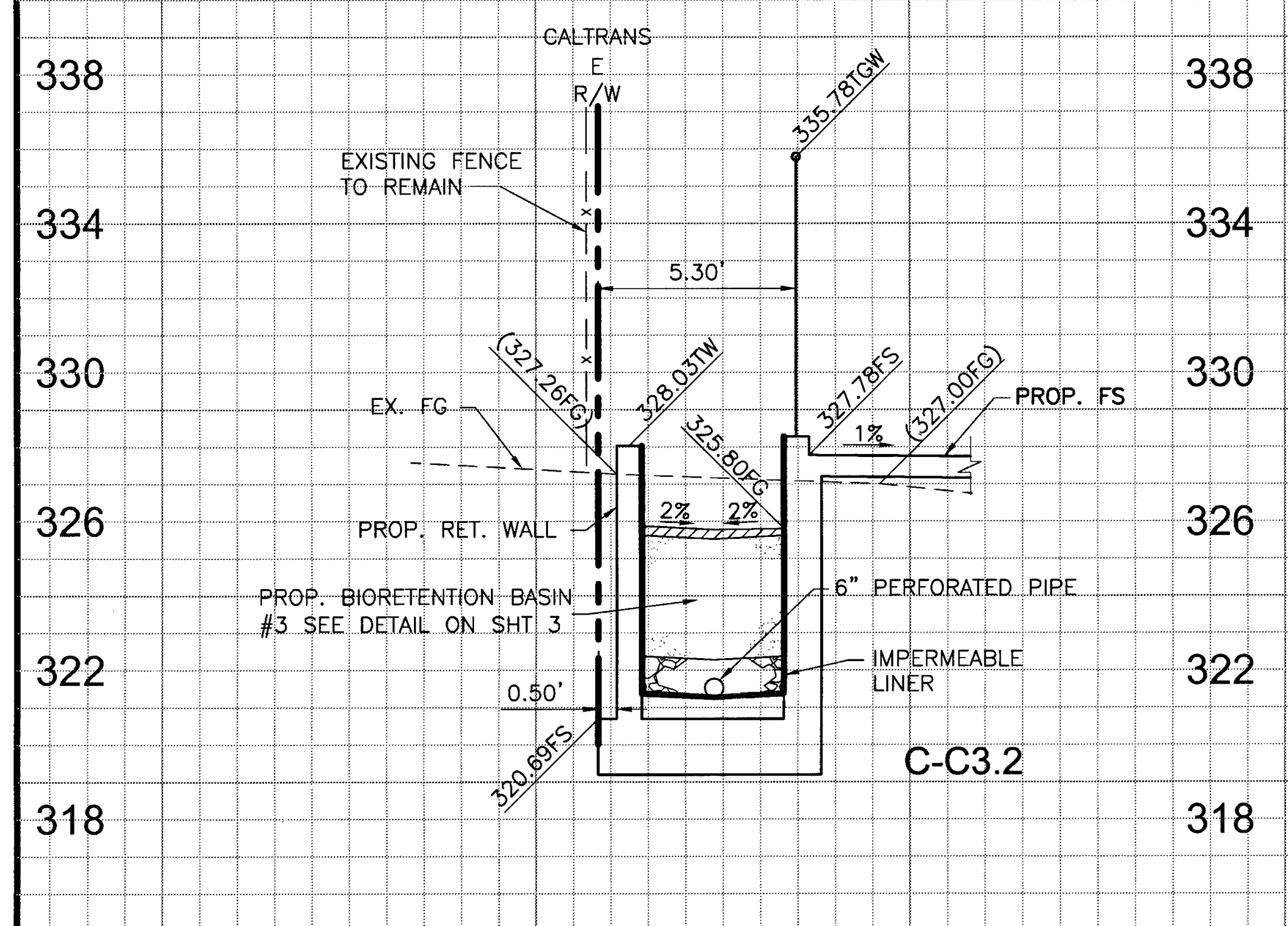
CABOT ROAD-STA 11+25.00 (A)
SCALE: 1"=4'


328.85 FS
330.64TW
331.14TW
1%
(329.00FG)
STREET W R/W
9.67'
EX. 8.00' SIDEWALK
CABOT RD.
EX. RET WALL TO BE REMOVED
PROP. FG
(313.07BW)
(312.97TC)
(312.34FL)
EX. FS
LEVEL A
2% MIN.
2%
(2%)
309.17 BOE
TEMPORARY 1:1 MAX SLOPE PER SHORING PLANS

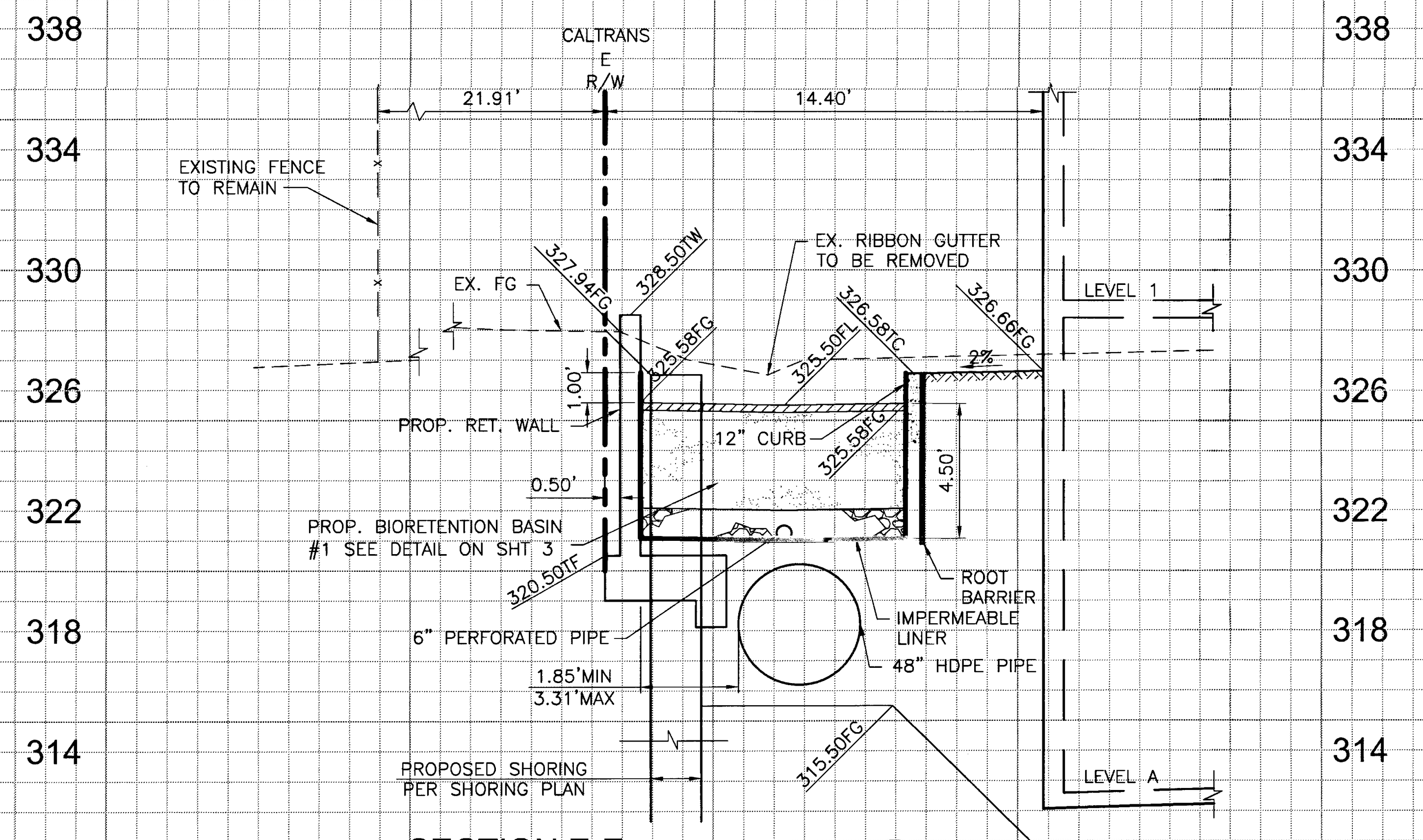
CABOT ROAD-STA 12+50.00 (B)
SCALE: 1"=4'


333.10TGW
327.75FS
327.65FS
329.65TW
2%
PROP SLOT DRAIN
325.65TW
CONCRETE PILE WALL PER SEPARATE PERMIT
STREET W R/W
9.77'
EX. 8.00' SIDEWALK
CABOT RD.
VARIES 10.48' TO 11.12'
EX. UTILITY EASEMENT
(311.66TW)
EX. RET WALL TO BE REMOVED
(306.97FG)
2%
(2%)
(306.47TC)
(305.85FL)
EX. FS
EX. ELECT. BOX
(306.72BW)

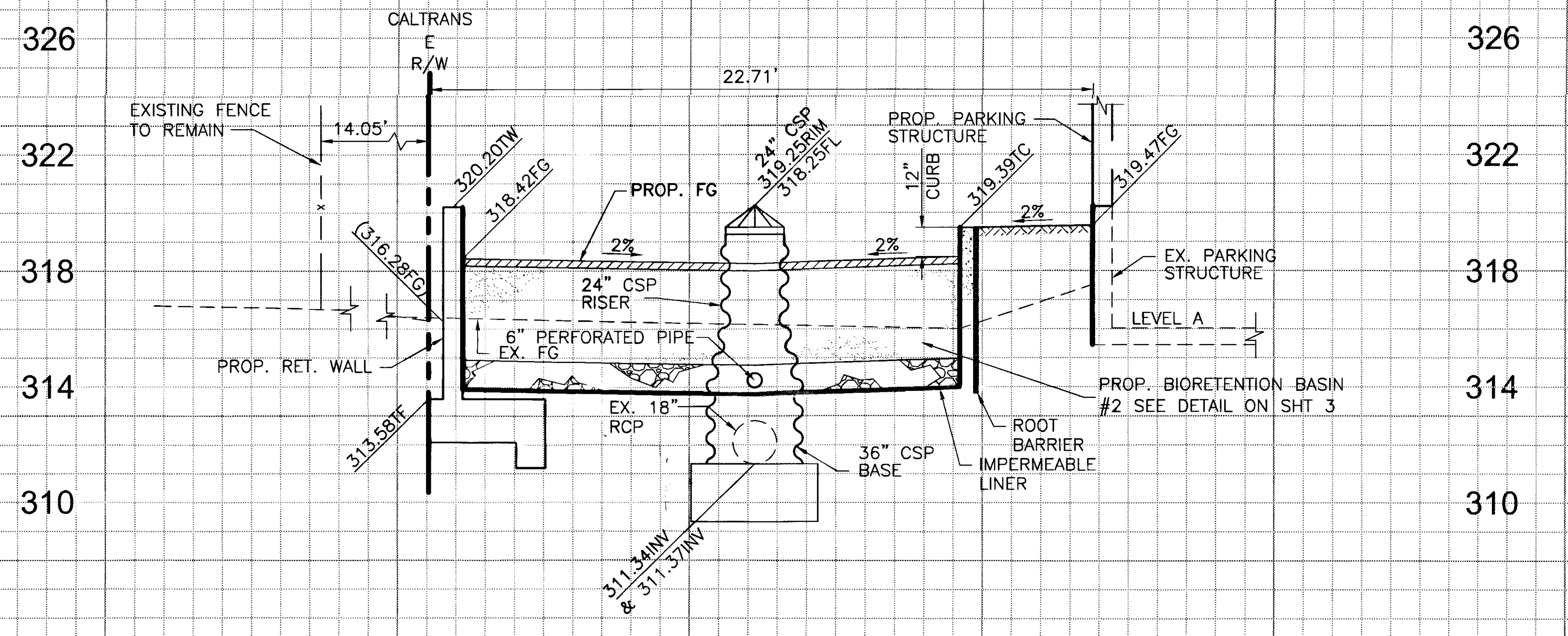
CABOT ROAD-STA 14+00.00 (C)
SCALE: 1"=4'


CALTRANS E R/W
EXISTING FENCE TO REMAIN
335.78TGW
5.30'
(327.26FG)
328.03TW
327.78FS
(327.00FG)
PROP. FS
EX. FG
325.80FG
1%
PROP. RET. WALL
2%
PROP. BIORETENTION BASIN #3 SEE DETAIL ON SHT 3
6" PERFORATED PIPE
IMPERMEABLE LINER
0.50'
320.89FS
C-C3.2

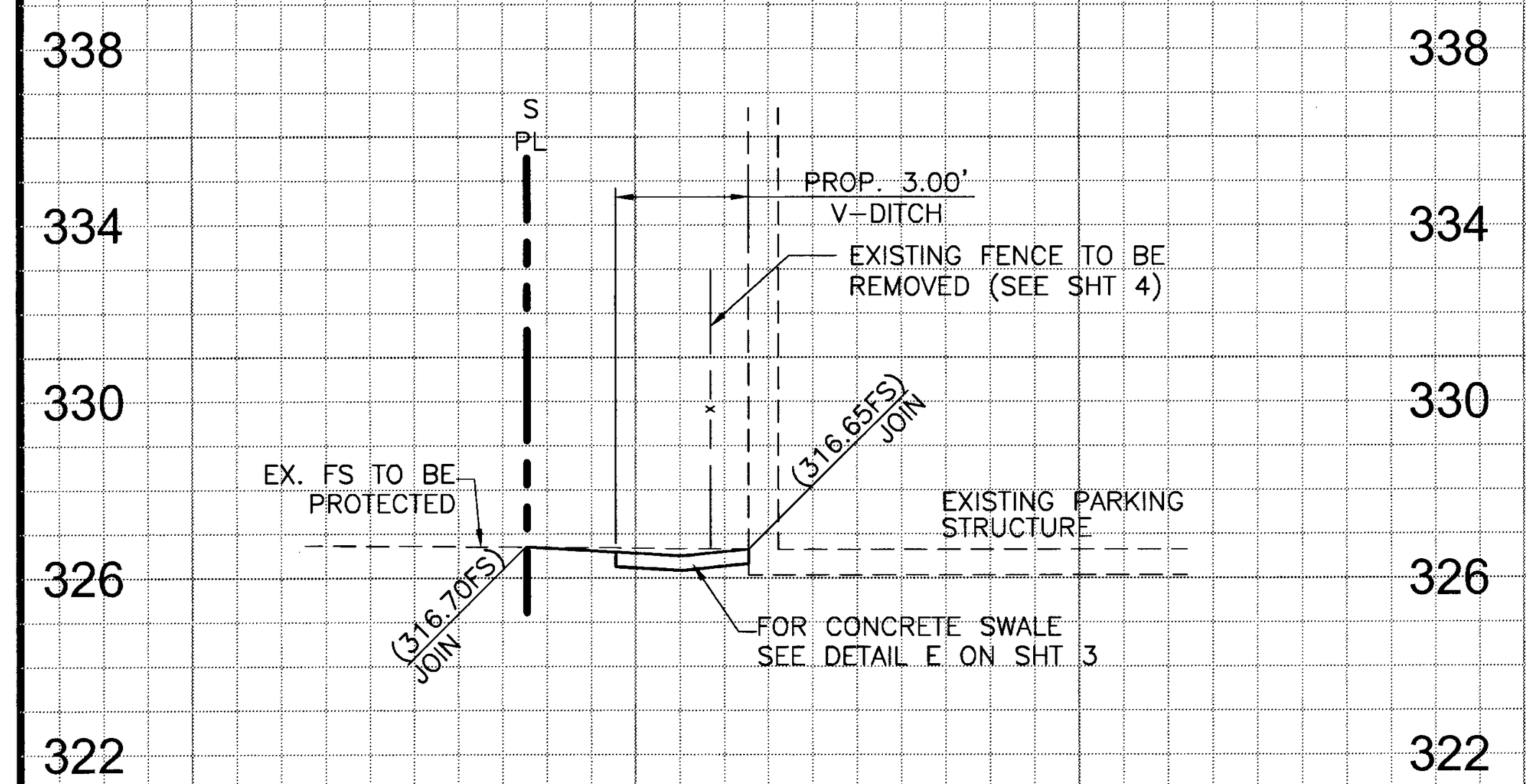
SECTION D-D (D)
SCALE: 1"=4'


CALTRANS E R/W
21.91'
14.40'
EXISTING FENCE TO REMAIN
EX. FG
327.64FG
328.50TW
EX. RIBBON GUTTER TO BE REMOVED
LEVEL 1
325.58FG
325.50FL
326.58TC
326.66FG
2%
PROP. RET. WALL
1.00'
12" CURB
325.58FG
4.50'
0.50'
PROP. BIORETENTION BASIN #1 SEE DETAIL ON SHT 3
320.50FF
ROOT BARRIER
IMPERMEABLE LINER
6" PERFORATED PIPE
48" HDPE PIPE
1.85' MIN
3.31' MAX
PROPOSED SHORING PER SHORING PLAN
315.50FG
LEVEL A
310.57BOE

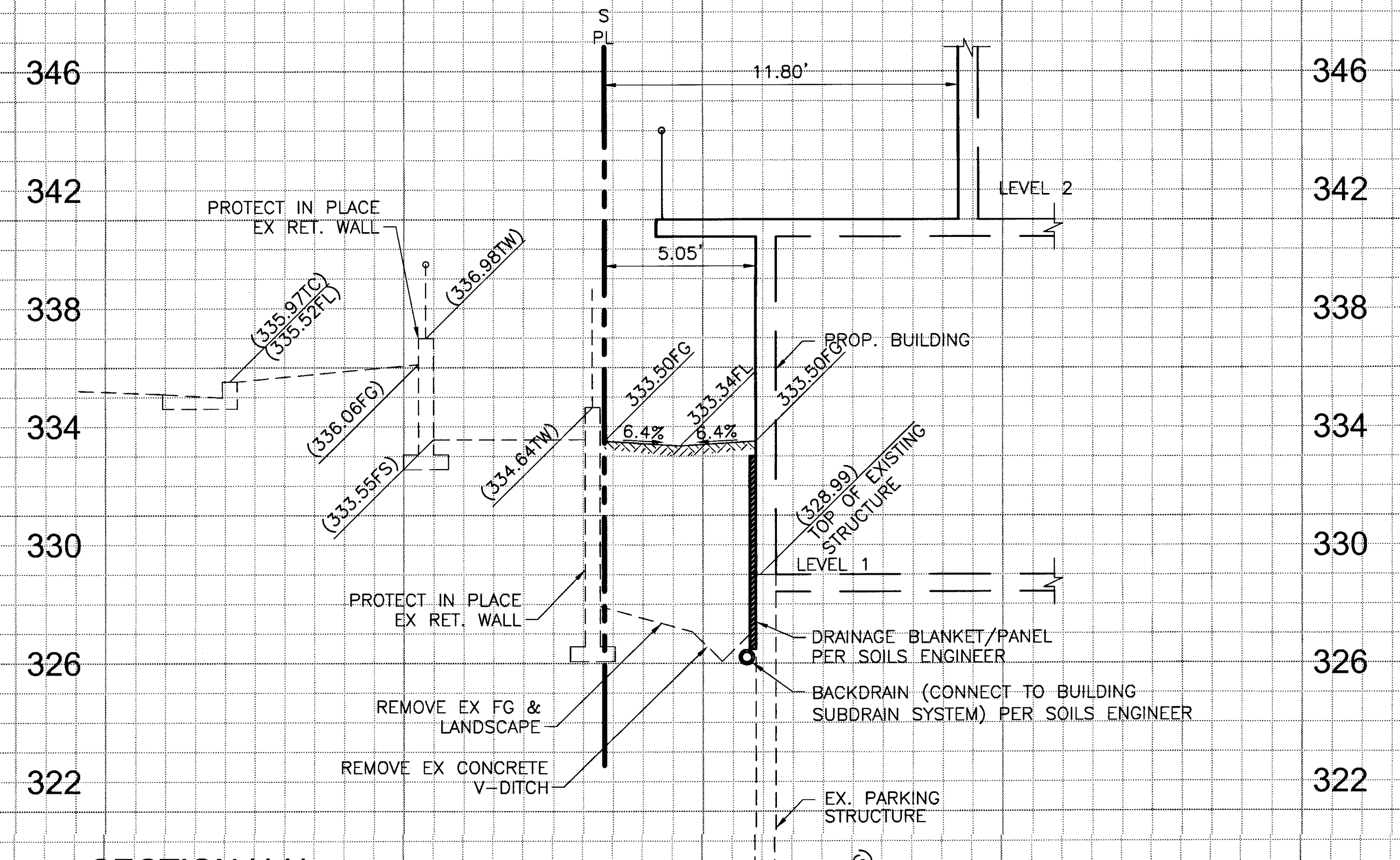
SECTION E-E (E)
SCALE: 1"=4'


CALTRANS E R/W
22.71'
EXISTING FENCE TO REMAIN
14.05'
320.20TW
318.42FG
PROP. FG
24" CSP
319.25RIM
318.25FL
12" CURB
319.39TC
PROP. PARKING STRUCTURE
319.47FG
(316.28FG)
2%
2%
24" CSP RISER
EX. PARKING STRUCTURE
6" PERFORATED PIPE
EX. FG
LEVEL A
PROP. RET. WALL
EX. 18" RCP
PROP. BIORETENTION BASIN #2 SEE DETAIL ON SHT 3
ROOT BARRIER
IMPERMEABLE LINER
36" CSP BASE
313.58FF
311.34INV
& 311.37INV

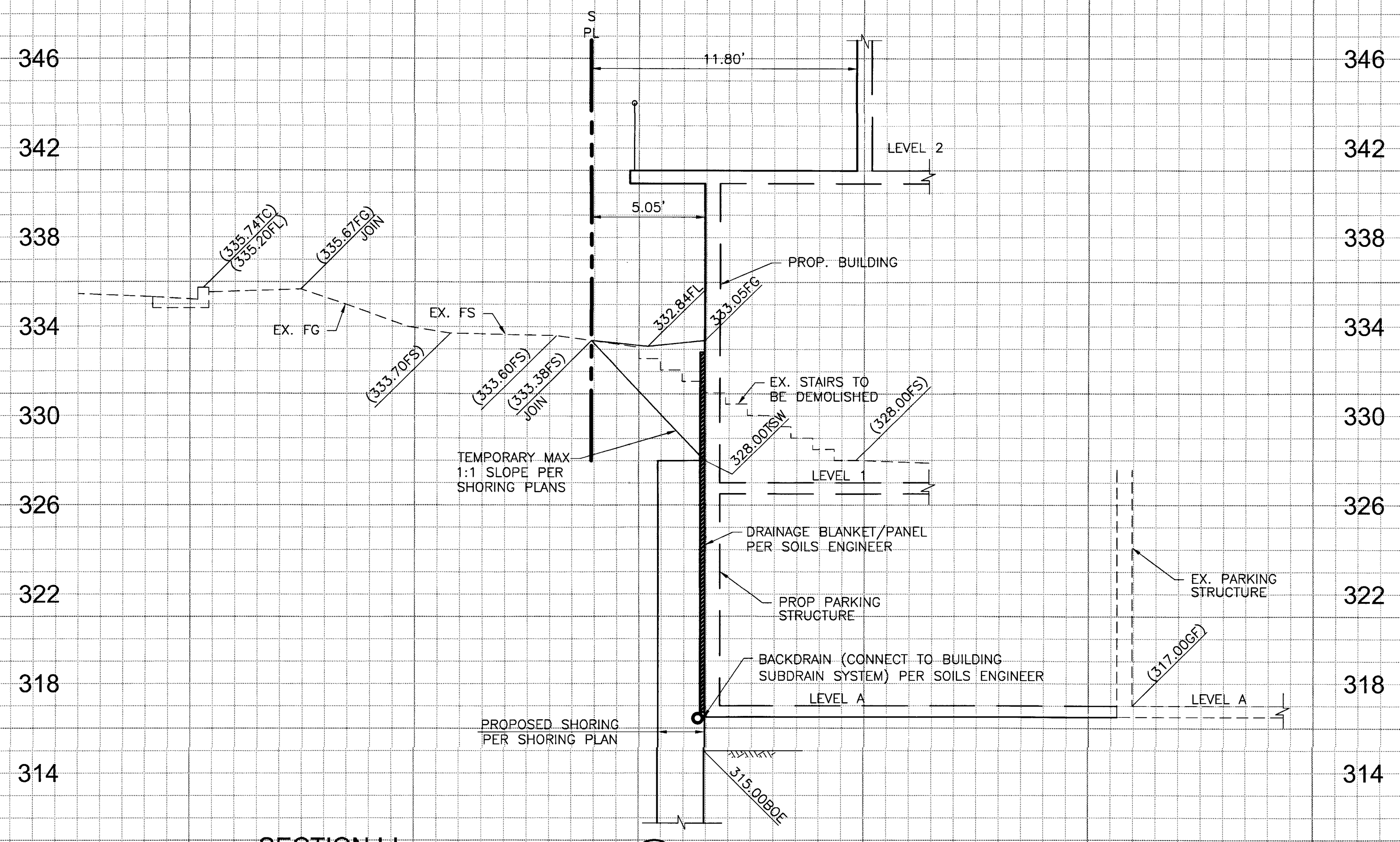
SECTION F-F (F)
SCALE: 1"=4'


S PL
PROP. 3.00' V-DITCH
EXISTING FENCE TO BE REMOVED (SEE SHT 4)
(316.65FS) JOIN
EXISTING PARKING STRUCTURE
EX. FS TO BE PROTECTED
(316.76FS) JOIN
FOR CONCRETE SWALE SEE DETAIL E ON SHT 3

SECTION G-G (G)
SCALE: 1"=4'


S PL
11.80'
LEVEL 2
5.05'
PROTECT IN PLACE EX RET. WALL
(335.97TC)
(335.52FL)
(336.98TW)
(336.06FG)
(333.55FS)
(334.64TW)
333.50FG
333.34FL
333.50FG
6.4%
2.4%
PROP. BUILDING
(328.99) TOP OF EXISTING STRUCTURE
LEVEL 1
PROTECT IN PLACE EX RET. WALL
DRAINAGE BLANKET/PANEL PER SOILS ENGINEER
REMOVE EX FG & LANDSCAPE
BACKDRAIN (CONNECT TO BUILDING SUBDRAIN SYSTEM) PER SOILS ENGINEER
REMOVE EX CONCRETE V-DITCH
EX. PARKING STRUCTURE
(316.00FS)
LEVEL A

SECTION H-H (H)
SCALE: 1"=4'


S PL
11.80'
LEVEL 2
5.05'
(335.74TC)
(335.20FL)
(335.67FG) JOIN
PROP. BUILDING
EX. FG
EX. FS
(333.70FS)
(333.60FS)
(333.38FS)
332.84FL
333.05FG
EX. STAIRS TO BE DEMOLISHED
(328.00FS)
TEMPORARY MAX 1:1 SLOPE PER SHORING PLANS
328.00TSW
LEVEL 1
DRAINAGE BLANKET/PANEL PER SOILS ENGINEER
PROP PARKING STRUCTURE
EX. PARKING STRUCTURE
BACKDRAIN (CONNECT TO BUILDING SUBDRAIN SYSTEM) PER SOILS ENGINEER
(317.00FF)
LEVEL A
PROPOSED SHORING PER SHORING PLAN
315.00BOE

SECTION I-I (I)
SCALE: 1"=4'

3/8/2016

CAREER LOFTS
PRECISE GRADING PLAN

AS-BUILT

AS-BUILT

PERMIT # G12-23

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Debra Valle Schales 3/9/16
DEBRA VALLE SCHALES RCE#043101 DATE

DEBRA VALLE SCHALES no. 43101 CIVIL
3/9/16

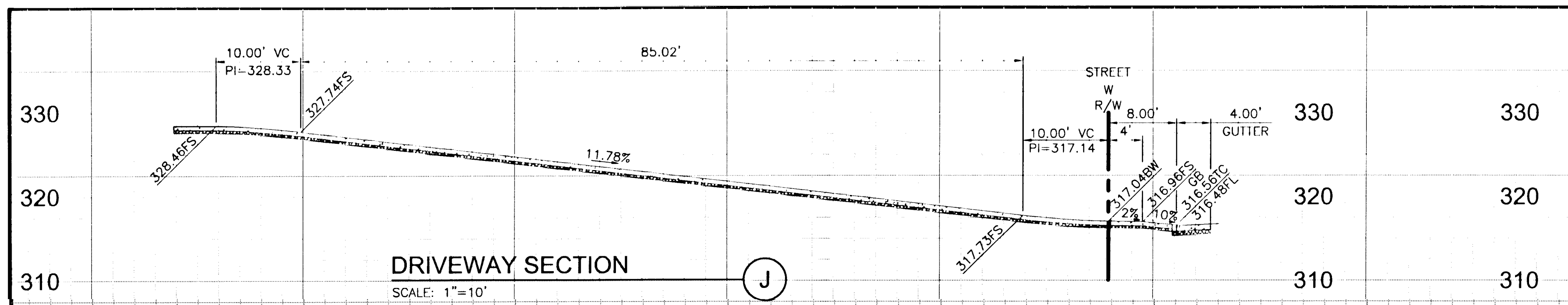
SECTIONS

CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

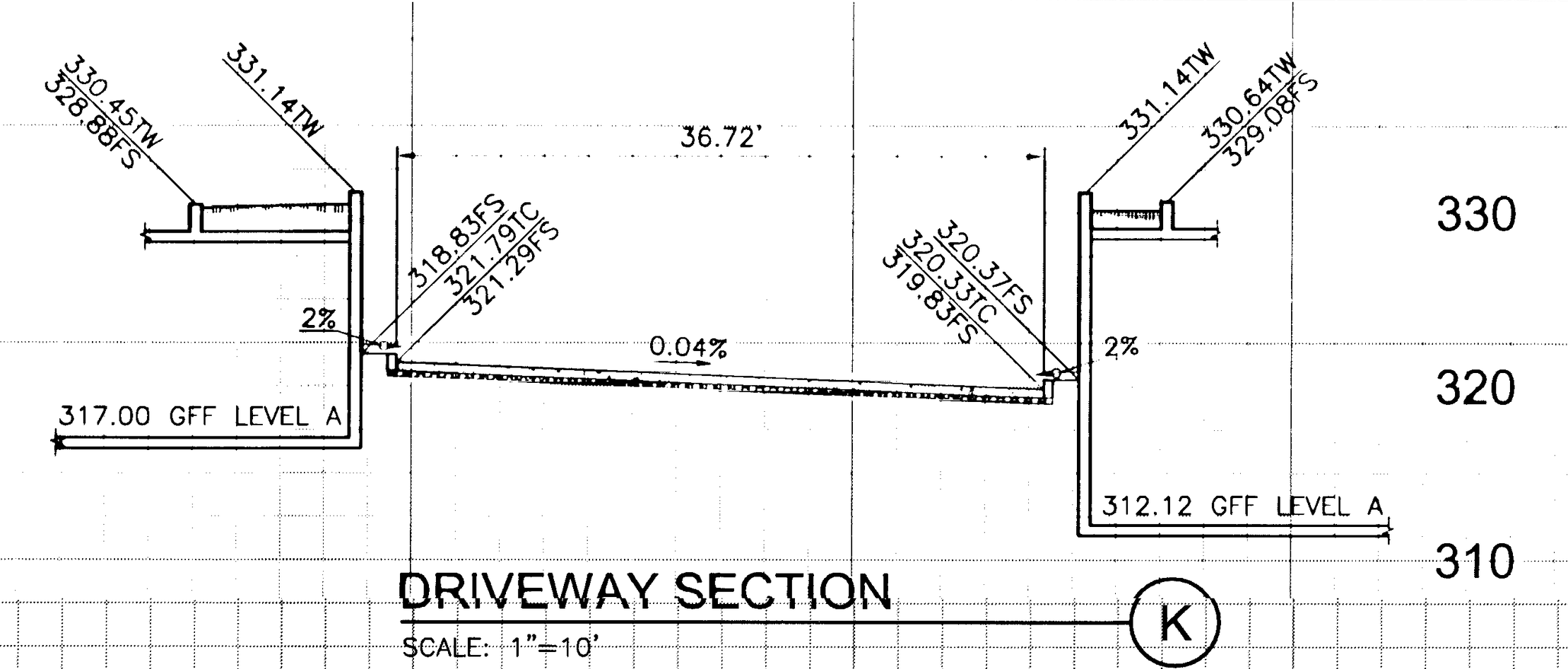
DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

SHEET 13 OF 15

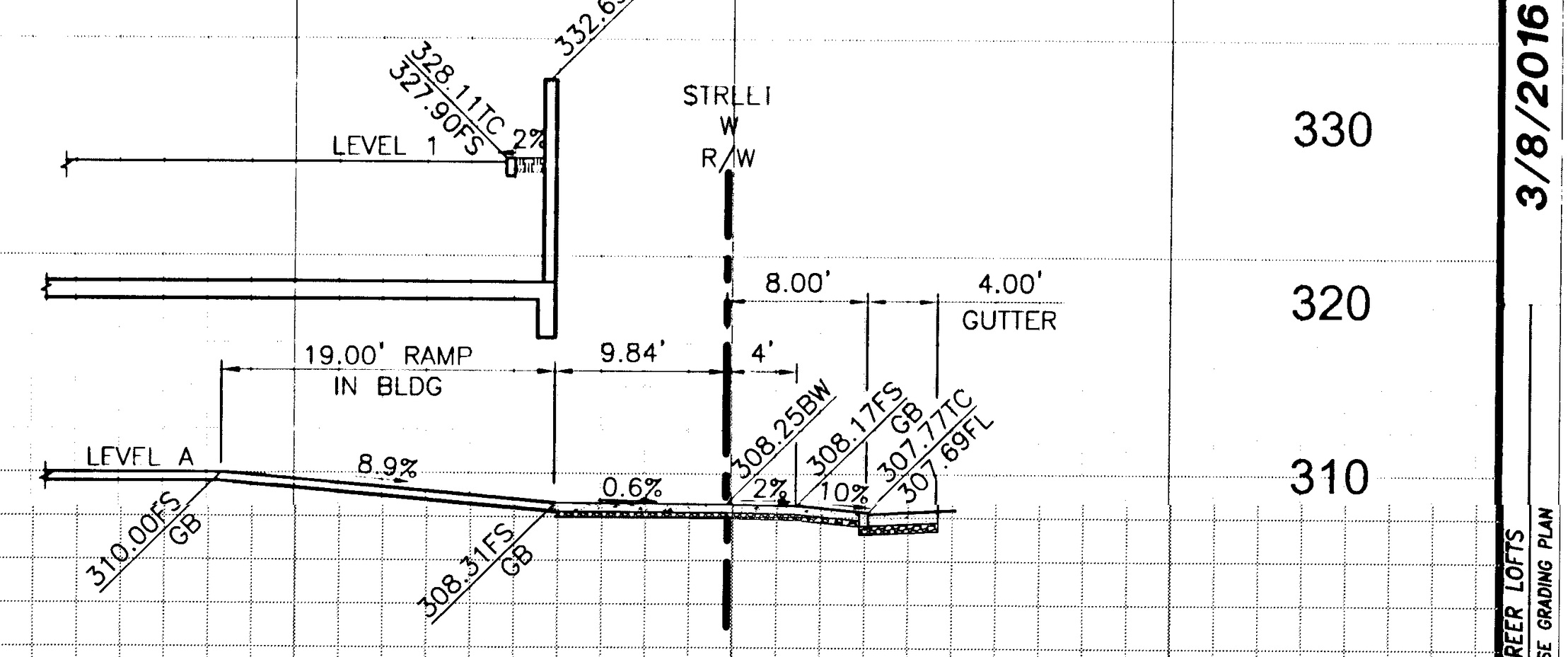
P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG13DT.DWG


10.00' VC
PI=328.33
85.02'
327.74FS
328.46FS
11.78%
STREET
W
R/W
8.00'
4'
4.00'
GUTTER
10.00' VC
PI=317.14
317.04BW
316.96FS
316.58TC
316.48FL
2%
10%
317.73FS
330
320
310
330
320
310

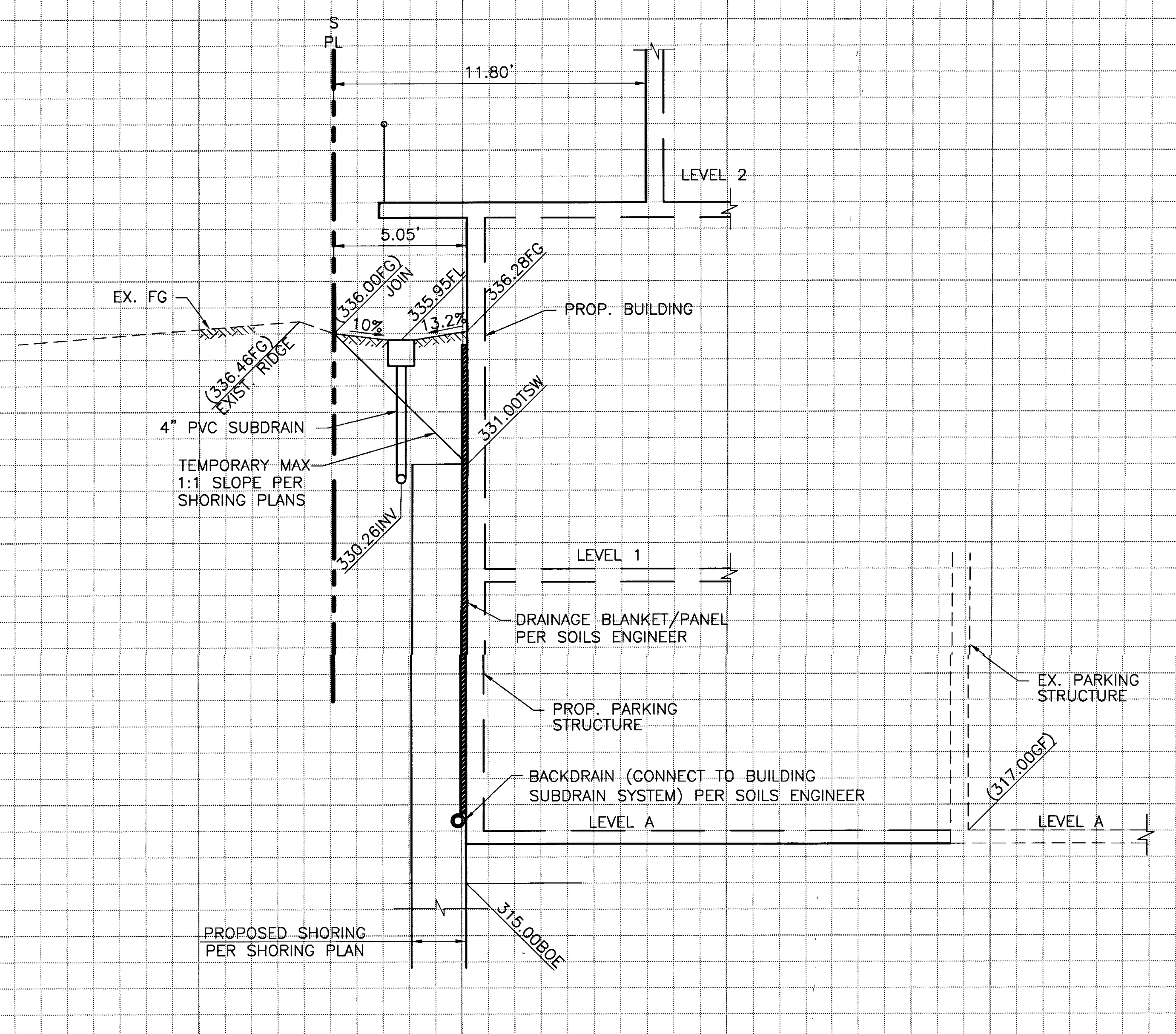
DRIVEWAY SECTION (J)
SCALE: 1"=10'


330.45TW
328.88FS
331.14TW
36.72'
331.14TW
330.64TW
329.08FS
318.83FS
2%
0.04%
320.37FS
2%
317.00 GFF LEVEL A
312.12 GFF LEVEL A
330
320
310

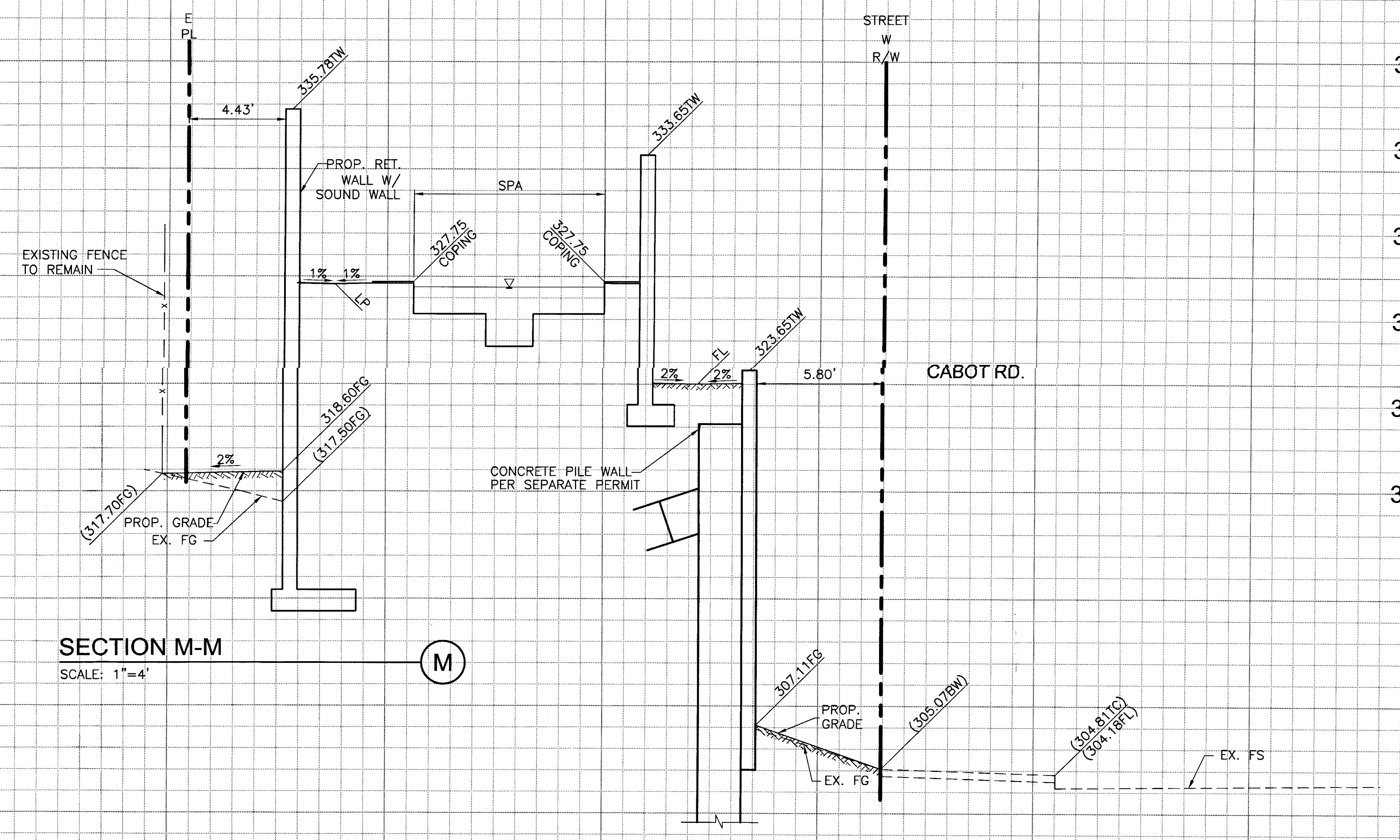
DRIVEWAY SECTION (K)
SCALE: 1"=10'


332.65TW
LEVEL 1
2%
STREET
W
R/W
8.00'
4'
4.00'
GUTTER
19.00' RAMP IN BLDG
9.84'
LEVEL A
8.9%
0.6%
2%
10%
310.00FS GB
308.31FS GB
308.25BW
308.17FS
307.77TC
307.69FL
330
320
310

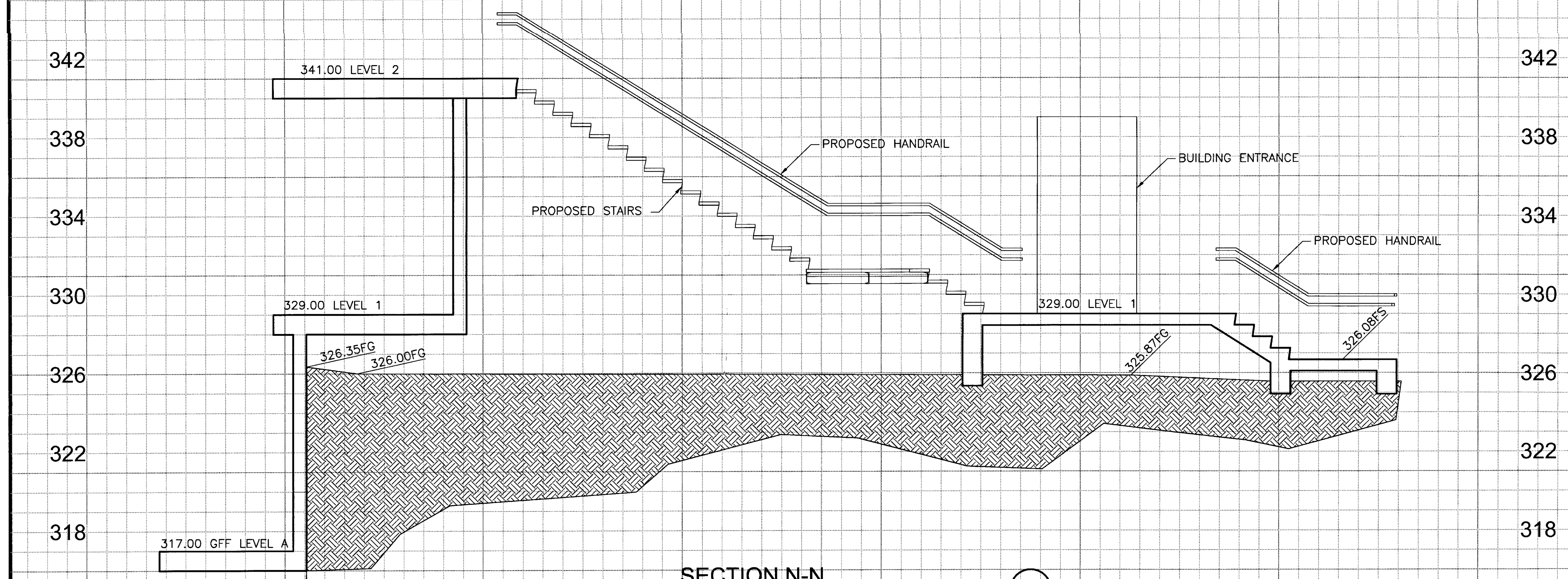
DRIVEWAY SECTION (O)
SCALE: 1"=10'


S
PL
11.80'
LEVEL 2
5.05'
EX. FG
(336.00FG)
JOIN
335.95FL
336.28FG
10%
1.2%
PROP. BUILDING
(336.46FG)
EXIST RIDGE
4" PVC SUBDRAIN
331.00TSW
TEMPORARY MAX 1:1 SLOPE PER SHORING PLANS
330.26INV
LEVEL 1
DRAINAGE BLANKET/PANEL PER SOILS ENGINEER
EX. PARKING STRUCTURE
PROP. PARKING STRUCTURE
BACKDRAIN (CONNECT TO BUILDING SUBDRAIN SYSTEM) PER SOILS ENGINEER
(317.00GF)
LEVEL A
LEVEL A
PROPOSED SHORING PER SHORING PLAN
315.00BOF
342
338
334
330
326
322
318

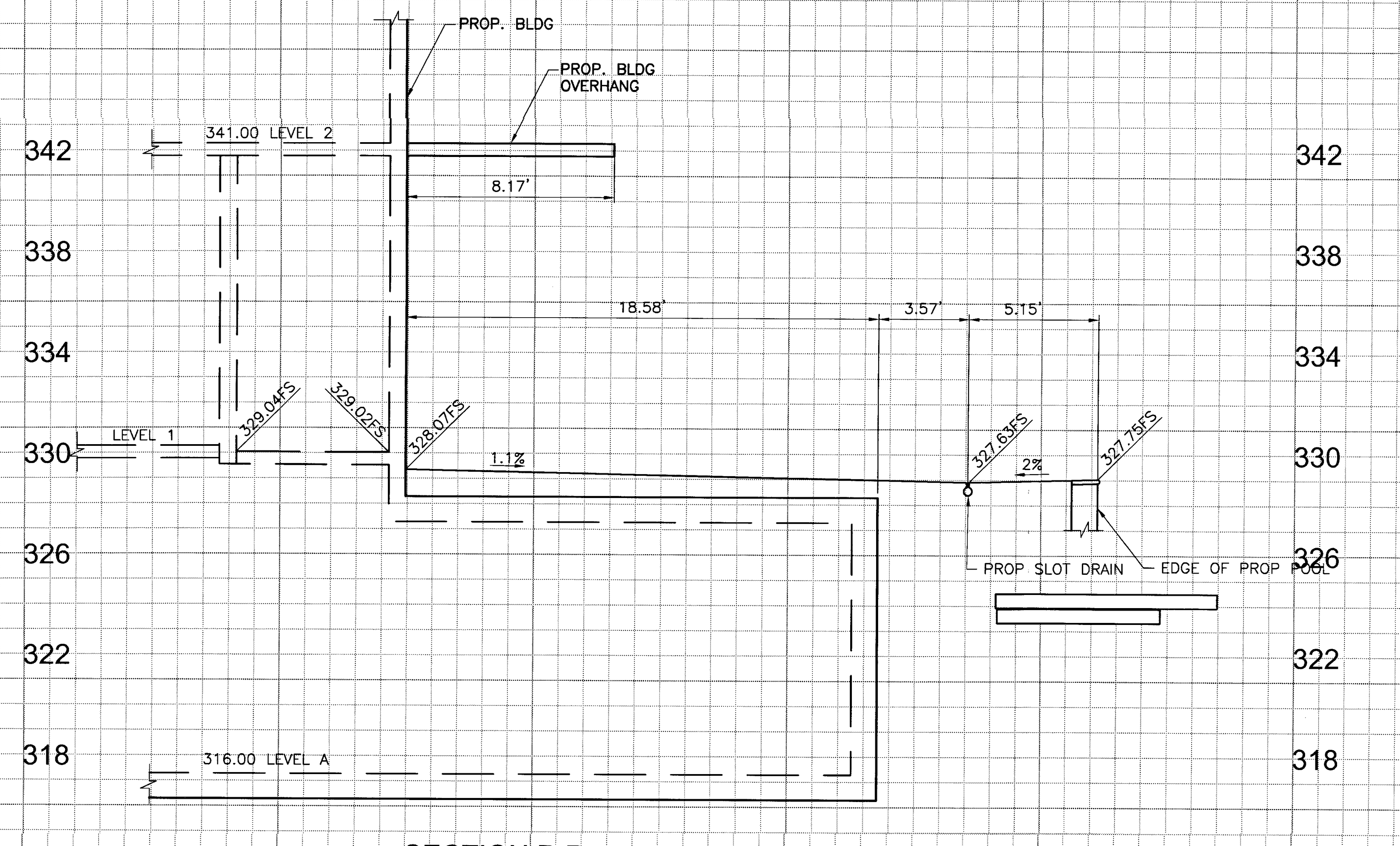
SECTION L-L (L)
SCALE: 1"=4'


E
PL
4.43'
335.78TW
STREET
W
R/W
333.65TW
PROP. RET. WALL W/ SOUND WALL
SPA
EXISTING FENCE TO REMAIN
327.75 COPING
327.75 COPING
1%
1%
LP
FL
2%
2%
323.65TW
5.80'
CABOT RD.
318.60FS
(317.50FS)
2%
(317.70FG)
PROP. GRADE
EX. FG
CONCRETE PILE WALL PER SEPARATE PERMIT
307.11FG
PROP. GRADE
(305.07BW)
(304.81TC)
(304.18FL)
EX. FG
EX. FS
342
338
334
330
326
322
318

SECTION M-M (M)
SCALE: 1"=4'


341.00 LEVEL 2
PROPOSED HANDRAIL
BUILDING ENTRANCE
PROPOSED STAIRS
PROPOSED HANDRAIL
329.00 LEVEL 1
329.00 LEVEL 1
326.35FG
326.00FG
325.87FG
326.08FS
317.00 GFF LEVEL A
342
338
334
330
326
322
318

SECTION N-N (N)
SCALE: 1"=4'


PROP. BLDG
PROP. BLDG OVERHANG
341.00 LEVEL 2
8.17'
18.58'
3.57'
5.15'
LEVEL 1
329.04FS
329.03FS
328.07FS
1.1%
327.63FS
2%
327.75FS
PROP SLOT DRAIN
EDGE OF PROP POOL
316.00 LEVEL A
342
338
334
330
326
322
318

SECTION P-P (P)
SCALE: 1"=4'

AS-BUILT

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DEBRA VALLE SCHALES
no. 43101
CIVIL
3/9/16

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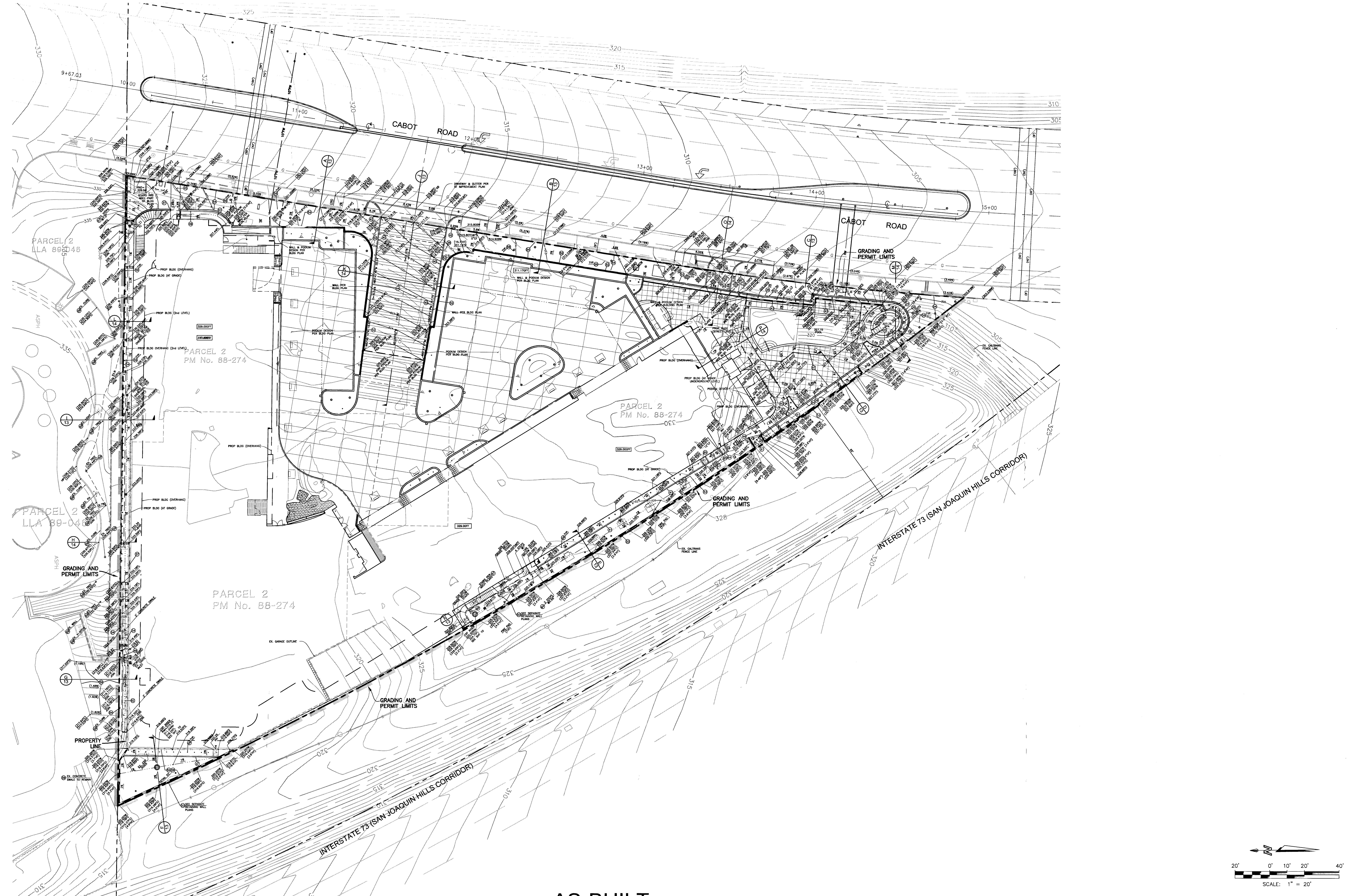
28100 CABOT ROAD
LAGUNA NIGUEL, CA

PERMIT # G12-23

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12
SHEET 14 OF 15	

3/8/2016
CAREER LOFTS
PRECISE GRADING PLAN
AS-BUILT

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG14DT.DWG


CABOT ROAD
CABOT ROAD
9+67.03
10+00
11+00
12+00
13+00
14+00
15+00
PARCEL 2
LLA 89-046
PARCEL 2
PM No. 88-274
PARCEL 2
PM No. 88-274
PARCEL 2
PM No. 88-274
PARCEL 2
LLA 89-046
GRADING AND PERMIT LIMITS
GRADING AND PERMIT LIMITS
GRADING AND PERMIT LIMITS
GRADING AND PERMIT LIMITS
PROPERTY LINE
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
INTERSTATE 73 (SAN JOAQUIN HILLS CORRIDOR)
EX. CALTRANS FENCE LINE
EX. GARAGE OUTLINE
EX. CONCRETE SWALE TO REMAIN
SEE SEPARATE RETAINING WALL PLANS
PROP BLDG (OVERHANG)
PROP BLDG (AT GRADE)
PODIUM DESIGN PER BLDG PLAN
WALL PER BLDG PLAN
329.00FF
ASPH
20' 0' 10' 20' 40'
SCALE: 1" = 20'

AS-BUILT

3/8/2016

CAREER LOFTS
PRECISE GRADING PLAN

AS-BUILT

PERMIT # G12-23

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

CALL BEFORE YOU DIG

UNDERGROUND SERVICE ALERT
OF SOUTHERN CALIFORNIA

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3/9/16
DEBRA VALLE SCHALES RCE#043101 DATE

DEBRA VALLE SCHALES
no. 43101
CIVIL
3/9/16

PRECISE GRADING
TOTAL SITE
CAREER LOFTS
28100 CABOT ROAD
LAGUNA NIGUEL, CA

DRAWN:	MI
DESIGN:	DS
CHECKED:	OS
SCALE:	AS SHOWN
JOB NO.:	1213.01
DATE:	2013/03/12

SHEET 15 OF 15

P:\PROJECTS\1213\01\ENG\GRADING\PGP\121301PG15TO.DWG (03-08-16 7:30:53PM) Plotted by: fuscoe