© BKF ENGINEERS

IMPROVEMENT PLANS FOR

HIGHLAND ESTATES - LOT 7 TICONDEROGA DRIVE

COUNTY OF SAN MATEO, CALIFORNIA

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EARTHWORK

CUT	11,400 CY
FILL	200 CY
NET	11,200 CY CUT

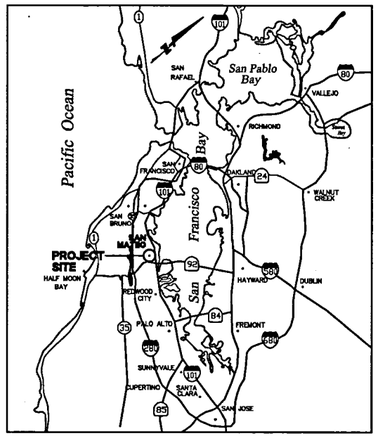
EARTHWORK NOTES:

1. THE QUANTITIES SHOWN ABOVE EXCLUDE EARTHWORK FROM GEOTECHNICAL SLOPE REMEDIATION ACTIVITIES PER CONDITION OF APPROVAL ITEM NO. 4.M, INCLUDING EARTHWORK SWELLING AND SHRINKAGE FACTORS ASSOCIATED WITH GEOTECHNICAL SLOPE REMEDIATION MITIGATION.

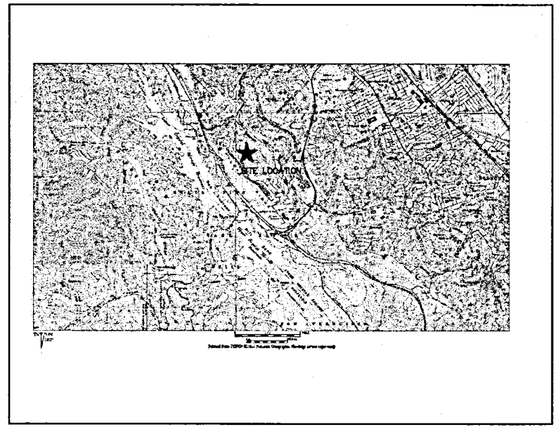
2. THE EARTHWORK QUANTITIES SHOWN ABOVE ARE IN-PLACE QUANTITIES AND HAVE BEEN ESTIMATED BY THE ENGINEER WITH THE FOLLOWING ASSUMPTIONS:

   A. EARTHWORK QUANTITIES DO NOT ACCOUNT FOR SITE STRIPINGS.
   B. THE UNIT PAD SECTION IS ASSUMED TO BE A 12" THICK CONCRETE SECTION.
   C. EARTHWORK QUANTITIES DO NOT ACCOUNT FOR FILL SHRINKAGE FACTORS.
   D. EARTHWORK QUANTITIES DO NOT ACCOUNT FOR UTILITY TRENCHING AND SPOILS.
   E. EARTHWORK QUANTITIES DO NOT ACCOUNT FOR SOIL STABILIZATION FACTORS AND LANDSCAPING PLANTING SOILS.
   F. EARTHWORK QUANTITIES DO NOT ACCOUNT FOR RETAINING WALLS AND BUILDING FOOTINGS AND BACKFILL.

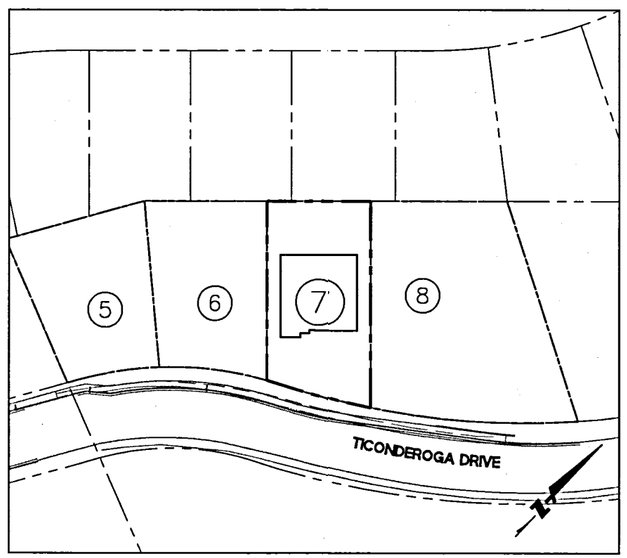
2. ACTUAL QUANTITIES MAY VARY DUE TO FIELD CONDITIONS OR CONSTRUCTION TECHNIQUES. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES BASED UPON APPROVED PLANS AND INDEPENDENT CALCULATIONS.



VICINITY MAP
NTS



LOCATION MAP
NTS



SITE PLAN
SCALE: 1" = 50'

PROJECT DATA

SITE AREA:	10,720 SF
EXISTING LAND USE:	UNDEVELOPED LAND
PROPOSED USE:	RESIDENTIAL (LOT 7)
EXISTING ZONE:	RMD – RESOURCE MANAGEMENT DISTRICT
PROPOSED ZONE:	R-1
PROPOSED USE:	1 RESIDENTIAL LOT
OWNER:	TICONDEROGA PARTNERS, A CALIFORNIA LIMITED LIABILITY CORPORATION C/O THE CHAMBERLAIN GROUP 655 SKYWAY, SUITE 230 SAN CARLOS, CA 94070 (650) 595-5582 ATTN: JACK CHAMBERLAIN
DEVELOPER:	THE CHAMBERLAIN GROUP 655 SKYWAY, SUITE 230 SAN CARLOS, CA 94070 (650) 595-5582 ATTN: JACK CHAMBERLAIN
CIVIL ENGINEER:	BKF ENGINEERS 255 SHORELINE DRIVE, SUITE 200 REDWOOD CITY, CA 94065 (650) 482-6300
GEOTECHNICAL ENGINEER:	CORNERSTONE EARTH GROUP 1259 OAKMEAD PARKWAY SUNNYVALE, CA 94085 (408) 245-4600
WATER SUPPLY:	CAL WATER SERVICE 341 N. DELAWARE STREET SAN MATEO, CA 94401-1808 (650) 343-1808
SEWAGE DISPOSAL:	CITY OF SAN MATEO & CRYSTAL SPRINGS COUNTY SANITATION DISTRICT
GAS & ELECTRIC	PG&E
TELEPHONE:	AT&T
FIRE PROTECTION:	CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION
CABLE:	COMCAST
STORM DRAINAGE:	COUNTY OF SAN MATEO CITY OF SAN MATEO
TOPOGRAPHIC BASE MAP:	AERO-GEODIC COROP. JOB NO. 950168 DATE OF PHOTOGRAPHY 9/18/87
EROSION CONTROL POINT OF CONTACT:	NOEL CHAMBERLAIN, NEXGEN BUILDERS INC. 225 DEMETER STREET EAST PALO ALTO, CA 94303 PHONE #: (650) 322-5800 CELL #: (650) 444-3089 EMAIL: noel@nexgenbuilders.com

ENGINEER'S STATEMENT

THESE IMPROVEMENT PLANS HAVE BEEN PREPARED BY ME OR UNDER MY DIRECTION IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICE..

ROLAND N.V. HAGA
R.C.E NO. 43971
BKF ENGINEERS

DATE

REGISTERED PROFESSIONAL ENGINEER
ROLAND N.V. HAGA
No. C043971
CIVIL
STATE OF CALIFORNIA

BKF ENGINEERS / SURVEYORS / PLANNERS
255 SHORELINE DRIVE, SUITE 200
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HIGHLAND ESTATES
LOT 7 IMPROVEMENT PLANS
TITLE SHEET
SAN MATEO COUNTY CALIFORNIA

CITY OF SAN MATEO

Revisions	No.

Date	08/05/2016
Scale	NTS
Design	JT
Drawn	MD
Approved	RH
Job No	950168-16

Sheet Number:
C7.10
OF

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PLOT DATE: 08-02-16 PLOTTED BY: trat

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NOTES:

I. GENERAL NOTES

1. WORK SHALL CONFORM TO TTHE COUNTY OF SAN MATEO PUBLIC WORKS STANDARD DRAWINGS FOR PUBLIC IMPROVEMENTS, REVISED SEPTEMBER 2007 AND THE SAN MATEO COUNTY SEWER AND SANITATION DISTRICTS STANDARD SPECIFICATIONS, DATED JUNE 1995.
2. PERFORM WORK IN CONFORMANCE WITH THE RECOMMENDATION OF THE PROJECT GEOTECHNICAL ENGINEERING REPORT TITLED "UPDATED GEOTECHNICAL INVESTIGATION, HIGHLAND ESSTATES LOTS 5 THROUGH 11, TICONDEROGA DRIVE/COBBLEHILL PLACE/COWPENS WAY, SAN MATEO COUNTY, CALIFORNIA" PREPARED BY CORNERSTONE EARTH GROUP, DATED OCTOBER 30, 2015. GRADING WORK WILL BE SUBJECT TO APPROVAL OF GEOTECHNICAL ENGINEER.
3. ARRANGE FOR REQUIRED INSPECTIONS BY COUNTY ENGINEER. NO DELAY OF WORK CLAIM WILL BE ALLOWED DUE TO CONTRACTOR'S FAILURE TO ARRANGE FOR REQUIRED COUNTY INSPECTIONS IN ADVANCE. PROVIDE NOTICE TO COUNTY ENGINEER A MINIMUM OF 2 WORKING DAYS IN ADVANCE OF REQUIRED INSPECTIONS.
4. REVISIONS TO THESE PLANS: MUST BE REVIEWED AND APPROVED IN WRITING BY ENGINEER, WHO WILL OBTAIN APPROVAL FROM COUNTY ENGINEER PRIOR TO CONSTRUCTION OF AFFECTED ITEMS. REVISIONS SHALL BE ACCURATELY SHOWN ON REVISED PLANS, WHICH SHALLL BE REVIEWED AND APPROVED BY THE ENGINEER AND COUNTY ENGINEER PRIOR TO INSTALLATION OF THE IMPROVEMENTS.
5. REPLACE OR REPAIR EXISTING UTILITIES, IMPROVEMENTS OR FEATURES DAMAGED, REMOVED, OR DISTURBED BY CONSTRUCTION TO THEIR ORIGINAL CONDITION, WHETHER SHOWN ON PLANS: OR NOT.
6. REPLACE STREET MONUMENTS, LOT CORNERS PIPES AND OTHER PERMANENT MONUMENTS DISTURBED DURRING CONSTRUCTION. MONUMENTS SHALL BE SET BY A SURVEYOR REGISTERED IN THE STATE OF CALIFORNIA.
7. PREPARE TRAFFIC CONTROL PLAN AND OBTAIN APPROVAL FROM COUNTY ENGINEER BEFORE COMMENCING WORK.. PROVIDE FLAG MEN, CONES, BARRICADES AND OTHER TRAFFIC CONTROL MEASURESS NECESSARY TO PROVIDE SAFE LANE CLOSURE IN CONFORMANCE WITH CALTRANS STANDARDS AND AS APPROVED BY COUNTY ENGINEER.
8. PEDESTRIAN TRAFFIC CONTRROL TO BE PROVIDED WHEN EXISTING SIDEWALKS CANNOT BE MAINTAINED DURRING CONSTRUCTION.
9. DO NOT LEAVE TRENCHES OXPEN OVERNIGHT IN EXISTING STREET AREAS. BACKFILL OR COVER OPEN TRENCHES AT THE END OF WORK EVERY WORK DAY.
10. PREPARE SHORING PLAN ANID SUBMIT TO THE COUNTY ENGINEER FOR REVIEW AND APPROVAL. ADEQUATELY SHORE EXCAVATIONS TO PREVENT EARTH FROM SLIDING OR SETTLING AND TO PROTECCT EXISTING ADJACENT IMPROVEMENTS FROM DAMAGE. DAMAGE RESULTING FROM A\ LACK OF ADEQUATE SHORING SHALL BE THE CONTRACTOR'S RESPONSIBILITY. PROVIDE SHORING IN CONFORMANCE WITH APPLICABLE CONSTRUCTION SAFETY ORDERS OF THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY AND OSHA WHERE EXCAVATIONS ARE 5 FEET OR MORE IN DEPTH.
11. IMPLEMENT CONSTRUCTION DUST CONTROL MEASURES TO REDUCE PARTICULATE GENERATION TO A LESS THAAN SIGNIFICANT LEVEL. PROVIDE DUST CONTROL IN CONFORMANCE WITH BAY AREA AIR QUALITY MANAGEMENT DISTRICT MINIMUM REQUIREMENTS. IMPLEMENT THE FOLLOWING CONSTRUCTION PRACTICES EXCEPT WHEN IT IS RAINING.
    - 11.A. WATER ACTIVE EXTERIOR SOIL AREAS AT LEAST TWICE DAILY.
    - 11.B. COVER TRUCKS HAULING SOIL, SAND AND OTHER LOOSE MATERIAL OR PROVIDE 2 FEET OF FREEBOARD.
    - 11.C. PAVE, APPLY WATER THREE TIMES DAILY OR APPLY NON-TOXIC SOIL STABILIZER ON UNPAVEID ACCESS ROADS, PARKING AREAS AND STAGING AREAS.
    - 11.D. SWEEP PAVED ACCESS IROADS, PARKING AREAS AND STAGING AREAS DAILY.
    - 11.E. APPLY HYDROSEED OR INON-TOXIC SOIL STABILIZER TO INACTIVE CONSTRUCTION AREAS.
    - 11.F. ENCLOSE, COVER, WATETR TWICE DAILY OR APPLY NON-TOXIC SOIL STABILIZER TO EXPOSED SOIL STOCKPILES.
    - 11.G. INSTALL SANDBAGS AND OTHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TTO PUBLIC ROADWAYS.
    - 11.H. LIMIT TRAFFIC SPEED ONN UNPAVED ROADS TO 15 MPH.
    - 11.I. REPLANT VEGETATION INN DISTURBED AREAS AS QUICKLY AS POSSIBLE.
12. KEEP STREETS CLEAN OF DIRT, MUD AND OTHER CONSTRUCTION DEBRIS. CLEAN AND SWEEP STREETS ON A IDAILY BASIS DURING THE WORK WEEK.
13. SHOULD IT APPEAR THAT THHE WORK IS NOT SUFFICIENTLY DETAILED OR SPECIFIED IN CONSTRUCTION DOCUMENTTS, NOTIFY ENGINEER AND OBTAIN CLARIFICATION BEFORE PROCEEDING WITH WWORK IN QUESTION.
14. CONSTRUCTION STAKING SHALL BE DONE BY A CIVIL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OOF CALIFORNIA.
15. IF BKF ENGINEERS IS RETAINNED TO PROVIDE CONSTRUCTION STAKING SERVICES, CONTRACTOR WILL BE PROVIDED WITH ONE SET OF SURVEY STAKES FOR LAYOUT PURPOSES. PRESERVE AND FPROTECT THESE STAKES UNTIL THEY ARE NO LONGER NEEDED. RESTAKING SHALL EBE AT CONTRACTOR'S EXPENSE.
16. MATCH EXISTING PAVEMENT, CURB AND GUTTER, SIDEWALK, ADJACENT LANDSCAPE AND OTHER IMPROVEMENTS WITH SMOOTH TRANSITION TO AVOID ABRUPT OR APPARENT CHANGES IN GRAIDES, CROSS SLOPES, LOW SPOTS OR HAZARDOUS CONDITIONS.
17. VISIT SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND OVERALL PROJECT REQUIREMENT PRIOR TO BIDDING PROJECT.
18. OBTAIN AND PAY FOR PERMITS AND LICENSES AS REQUIRED TO PERFORM WORK WITHIN THE COUNTY OF SANI MATEO PRIOR TO START OF WORK. PERMITS MAY INCLUDE ENCROACHMENT PEERMIT FOR WORK WITHIN COUNTY RIGHT-OF-WAY AND GRADING/UTILITY PERMIT.
19. CONTRACTOR IS RESPONSIBLE FOR TRAFFIC AND PEDESTRIAN CONTROL DURING CONSTRUCTION.
20. OBTAIN APPROVAL OF IMPORT SOIL MATERIAL FROM GEOTECHNICAL ENGINEER PRIOR TO DISTRIBUTING MATTERIAL OVER SITE.
21. PROTECT ADJOINING PREMISES, TREES, LANDSCAPING, UTILITIES, SIDEWALKS, STREETS AND OTHER FEATUIRES FROM DAMAGE BY CONTRACTOR'S OPERATIONS. REPAIR, REPLACE OR CLEANI ADJOINING PREMISES, TREES, LANDSCAPING, UTILITIES, SIDEWALKS, STREETS AND OITHER FEATURES TO SATISFACTION OF OWNER.
22. MAINTAIN AND MANAGE CONSTRUCTION MATERIALS, EQUIPMENT AND VEHICLES AT THE CONSTRUCTION SITE.
23. NOTIFY COUNTY ENGINEER A\ MINIMUM OF 24 HOURS PRIOR TO STARTING WORK ON OFF-SITE DRAINAGE AND SEWER FACILITIES, GRADING, PAVING, OR WORK IN THE COUNTY RIGHT-OF-WAY.
24. MAKE EFFORTS TO MINIMIZE CONSTRUCTION NOISE.
    - 24.A. MAINTAIN EQUIPMENT USED ON SITE IN GOOD MECHANICAL CONDITION TO MINIMIZE NOISE CREATED BY FAULTY OR POORLY MAINTAINED ENGINE, DRIVE-TRAIN AND OTHER COMPONENTS.
    - 24.B. EQUIPMENT EXCEEDING 110 DBA MEASURED 25 FEET FROM THE PIECE OF EQUIPMENT WILL NOT BE ALLOWED ON SITE.
    - 24.C. SELECT APPROPRIATE EQUIPMENT TO MINIMIZE NOISE GENERATION. USE THE FOLLOWNG TECHNIQUES TO MINIMIZE NOISE GENERATION SUBJECT TO EQUIPMENT AVAILABILITY AND COST CONSIDERATIONS. USE SCRAPERS AS MUCH AS POSSIBLE FOR EARTH REMOVAL, RATHER THAN NOISIER LOADERS AND HAUL TRUCKS. USE BACKHOES FOR BACKFILLING AS IT IS QUIETER THAN DOZERS OR LOADERS. USE MOTOR GRADERS RATHER THAN BULLDOZERS FOR FINAL GRADING.

II. EXISTING CONDITIONS

1. EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS IS BASED UPON A FIELD TOPOGRAPHIC SURVEY OF THE PROJECT SITE BY BKF ENGINEERS, DATED JUNE 2009. ACTUAL CONDITIONS ENCOUNTERED ON SITE MAY VARY FROM THOSE SHOWN ON THE PLANS. CONTRACTOR SHALL REVIEW CONSTRUCTION DOCUMENTS AND CONDUCT THEIR OWN INVESTIGATIONS TO UNDERSTAND AND VERIFY EXISTING CONDITIONS AT THE SITE.
2. EXISTING SUBSURFACE IMPROVEMENTS AND UTILITIES SHOWN ON THESE PLANS WERE TAKEN FROM RECORD INFORMATION KNOWN TO THE ENGINEER AND FIELD SURVEY OF ABOVE GRADE FEATURES. THESE PLANS ARE NOT MEANT TO BE A FULL CATALOG OF EXISTING SUBSURFACE CONDITIONS. CONDUCT FIELD INVESTIGATION TO VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING SUBSURFACE IMPROVEMENTS AND UTILITIES, WHETHER SHOWN ON PLANS OR NOT, PRIOR TO START OF EXCAVATION. IF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THESE PLANS ARE DISCOVERED, NOTIFY ENGINEER IMMEDIATELY AND REQUEST DISCREPANCY BE RESOLVED.
3. VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AFFECTING UTILITIES. POTHOLE WHERE NEEDED TO VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES.
4. CONTACT USA (UNDERGROUND SERVICES ALERT) AT 1-800-227-2600, AND AFFECTED UTILITY COMPANIES A MINIMUM OF 2 WORKING DAYS PRIOR TO STARTING WORK TO REQUEST UTILITIES BE MARKED.

III. DEMOLITION

1. REMOVE FROM SITE AND DISPOSE OF IN LAWFUL MANNER EXISTING STRUCTURES, UTILITIES, AND OTHER FEATURES NOT REMOVED DURING DEMOLITION OR ROUGH GRADING AND ENCOUNTERED DURING WORK ON SITE.
    - 1.A. REMOVE WOOD OR CONCRETE STRUCTURES, SLABS, FOOTINGS, GRADE BEAMS, DECKS, DOCKS, AND OTHER SIMILAR STRUCTURES.
    - 1.B. REMOVE LANDSCAPING, UTILITIES AND IRRIGATION LINES AS SPECIFIED BY GEOTECHNICAL ENGINEER.
    - 1.C. REMOVE ABANDONED IN-GROUND STRUCTURES, SUCH AS CULVERTS, UTILITY VAULTS, AND FOUNDATIONS AS SPECIFIED BY GEOTECHNICAL ENGINEER.

IV. DEWATERING

1. DEWATER AREAS COVERED WITH STANDING WATER PRIOR TO PLACEMENT OF FILL.
2. DISPOSE OF WATER FROM DEWATERING OPERATION IN CONFORMANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

V. UTILITIES

1. DO NOT OPERATE WATER VALVES OR OTHER WATER DISTRICT FACILITIES. REQUIRED OPERATION WILL BE PERFORMED BY UTILITY DISTRICT PERSONNEL ONLY. NOTIFY UTILITY DISTRICT 2 WORKING DAYS PRIOR TO REQUIRING FACILITY OPERATION.
2. PROVIDE MINIMUM 12 INCH VERTICAL CLEARANCE BETWEEN ADJACENT UTILITY PIPES AT UTILITY CROSSINGS UNLESS OTHERWISE NOTED.
3. COMPLETE ELECTRIC, GAS, TELEPHONE, CABLE AND OTHER JOINT TRENCH WORK IN CONFORMANCE WITH THE REQUIREMENTS OF THE RESPECTIVE UTILITY PROVIDER. NOTIFY UTILITY PROVIDER MINIMUM 2 WORKING DAYS PRIOR TO COMMENCING WORK. IF EXISTING WATER, SEWER, GAS OR OTHER UTILITY SERVICES ARE DISTURBED OR DAMAGED DURING CONSTRUCTION, NOTIFY UTILITY OWNER IMMEDIATELY.
4. PROTECT UTILITIES FROM DAMAGE CAUSED BY CONTRACTOR'S WORK.
5. PROVIDE UTILITY STRUCTURES IN PAVED AREAS SUITABLE FOR H-20 LOADING.
6. PIPE LENGTHS SHOWN ON PLANS ARE FOR ENGINEERING CALCULATIONS ONLY AND ARE NOT INTENDED AS BID QUANTITIES OR FOR ORDERING MATERIALS.
7. CONSTRUCT GRAVITY FLOW UTILITIES FROM DOWNSTREAM CONNECTION POINT TO UPSTREAM TERMINUS.
8. COORDINATE WITH COUNTY OF SAN MATEO AND CRYSTAL SPRINGS SANITATION DISTRICT FOR INSPECTION OF WORK ON DISTRICT FACILITIES.
9. ALL WATER LATERALS AND SERVICES SHALL BE INSTALLED TO THE STANDARDS OF THE CALIFORNIA WATER SERVICE COMPANY. EXISTING WATER MAINS OR LATERALS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AND TESTED TO THE SATISFACTION OF THE WATER COMPANY.

VI. EARTHWORK AND GRADING

1. OFF-SITE IMPORT FILL MATERIAL SHALL CONFORM TO THE SPECIFICATIONS AND THE REQUIREMENTS OF THE GEOTECHNICAL REPORT.
2. TOPSOIL, ROOTS, VEGETABLE MATTER, TRASH AND DEBRIS WILL NOT BE CONSIDERED ACCEPTABLE FILL MATERIAL.
3. REMOVE DEBRIS FROM AREAS OF EARTHWORK PRIOR TO PLACING FILL OR STARTING GRADING OPERATIONS.
4. PLACE AND COMPACT FILL MATERIAL AS RECOMMENDED IN GEOTECHNICAL REPORT. PLACE FILL MATERIAL IN MAXIMUM 8 INCH UNCOMPACTED THICKNESS. COMPACTION BY FLOODING, PONDING OR JETTING WILL NOT BE PERMITTED.
5. CONTRACTOR SHALL MAKE HIS OWN DETERMINATION OF EARTHWORK QUANTITIES.

VII RECORD DRAWINGS

1. KEEP ACCURATE RECORD OF THE FINAL LOCATION, ELEVATION AND DESCRIPTION OF WORK ON A COPY OF THE FINAL APPROVED CONSTRUCTION DOCUMENTS. NOTE THE LOCATIONS AND ELEVATIONS OF EXISTING IMPROVEMENTS ENCOUNTERED THAT VARY FROM THE LOCATIONS SHOWN ON THE IMPROVEMENT PLANS. PROVIDE COPY OF RECORD INFORMATION TO OWNER AT COMPLETION OF PROJECT AND WHEN REQUESTED.

VII. STATEMENT OF RESPONSIBILITY

1. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEIND, INDEMNIFY AND HOLD BOTH DESIGN PROFESSIONAL AND THE COUNTY OF SAN MATEO HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF EITHER THE DESIGN PROFESSIONAL OR THE COUNTY OF SAN MATEO, RESPECTIVELY.

IX. UNAUTHORIZED CHANGES AND USES

1. 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 REQUIRE WRITTEN APPROVAL OF THE COUNTY ENGINEER AND THE PREPARER OF THESE PLANS.

X. DRAWING LANGUAGE

1. NOTES AND CALLOUTS ON DRAWINGS MAY USE IMPERATIVE LANGUAGE. REQUIREMENTS EXPRESSED IMPERATIVELY ARE TO BE PERFORMED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

CONDITIONS OF APPROVAL NOTES

CONSTRUCTION NOTES

1. THE FIRST PHASE OF CONSTRUCTION SHALL REQUIRE 300 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY. THE REMAINDER OF CONSTRUCTIONI EQUIPMENT (70 PERCENT), WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL BE REQUIRED TO USE EMULSIFIED FUELS.
2. THE SECOND PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 2 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY AND 50 PERCENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS. THE REMAINING 20 PERCENT OF CONSTRUCTION EQUIPMENT, WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL USE EMULSIFIED FUELS.
3. FOR ALL LARGER VEHICLES, INCLUDING CEMENT MIXERS OR OTHER DEVICES THAT MUST BE DELIVERED BY LARGE TRUCKS, VEHICLES SHALLL BE EQUIPPED WITH CARB LEVEL THREE VERIFIED CONTROL DEVICES.
4. WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
5. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEETT OF FREEBOARD.
6. PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY NOON-TOXIC SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
7. SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
8. SWEEP PUBLIC STREETS ADJACENT TO CONSTRUCTION SITES DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO THE STREETS.
9. HYDROSEED OR APPLY NON-TOXIC SOIL STABILIZERS TO INACTIVE CONSTRUCTION AREAS (PREVIOUSLY GRADED AREAS INACTIVE FOR TEN DAYS OR MORE).
10. ENCLOSE, COVER, WATER TWICE DAILY, OR APPLY NON-TOXIC SOIL BINDERS TO EXPOSED STOCKPILES (DIRT, SAND, ETC.). LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
11. LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
12. INSTALL SANDBAGS OR OTHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
13. REPLANT VEGETATION IN DISTURBED AREAS AS SOON AS POSSIBLE.
14. INSTALL WHEEL WASHERS FOR ALL EXITING TRUCKS OR WASH OFF THE TIRES OR TRACKS OF ALL TRUCKS AND EQUIPMENT LEAVING THE CONSTRUCTION SITE.
15. INSTALL WIND BREAKS AT THE WINDWARD SIDES OF THE CONSTRUCTION AREAS.
16. SUSPEND EXCAVATION AND GRADING ACTIVITIES WHEN WIND (AS INSTANTANEOUS GUSTS) EXCEEDS 25 MILES PER HOUR.

NOISE NOTES

1. EQUIPMENT AND TRUCKS USED FOR PROJECT GRADING AND CONSTRUCTION WOULD UTILIZE THE BEST AVAILABLE NOISE CONTROL TECHNIQUES (E.G., IMPROVED EXHAUST MUFFLERS, EQUIPMENT REDESIGN, USE OF INTAKE SILENCERS, DUCTS, ENGINE ENCLOSURES, AND ACOUSTICALLY-ATTENUATING SHIELDS OR SHROUDS) IN ORDER TO MINIMIZE CONSTRUCTION NOISE IMPACTS.
2. EQUIPMENT USED FOR PROJECT GRADING AND CONSTRUCTION WOULD BE HYDRAULICALLY OR ELECTRICALLY POWERED IMPACT TOOLS (E.G., JACK HAMMERS AND PAVEMENT BREAKERS) WHEREVER POSSIBLE TO AVOID NOISE ASSOCIATED WITH COMPRESSED AIR EXHAUST FROM PNEUMATICALLY-POWERED TOOLS. COMPRESSED AIR EXHAUST SILENCERS WOULD BE USED ON OTHER EQUIPMENT. OTHER QUIETER PROCEDURES WOULD BE USED SUCH AS DRILLING RATHER THAN IMPACT EQUIPMENT WHENEVER FEASIBLE.
3. THE GRADING AND CONSTRUCTION ACTIVITY WOULD BE KEPT TO THE HOURS OF 7:00 AM TO 7:00 PM, MONDAY THROUGH FRIDAY. SATURDAY HOURS (8:00 AM TO 5:00 PM) ARE PERMITTED UPON THE DISCRETION OF COUNTY APPROVAL BASED ON INPUT FROM NEARBY RESIDENTS AND BUSINESSES. SATURDAY CONSTRUCTION (8:00 AM TO 5:00 PM) WOULD BE ALLOWED ONCE THE BUILDINGS ARE FULLY ENCLOSED. NOISE GENERATING GRADING AND CONSTRUCTION ACTIVITIES SHALL NOT OCCUR AT ANY TIME ON SUNDAYS, THANKSGIVING AND CHRISTMAS.
4. RESIDENTIAL PROPERTY OWNERS WITHIN 200 FEET OF PLANNED CONSTRUCTION AREAS SHALL BE NOTIFIED OF THE CONSTRUCTION SCHEDULE IN WRITING, PRIOR TO CONSTRUCTION; THE PROJECT SPONSOR SHALL DESIGNATE A "DISTURBANCE COORDINATOR" WHO SHALL BE RESPONSIBLE FOR RESPONDING TO ANY LOCAL COMPLAINTS REGARDING CONSTRUCTION NOISE; THE COCORDINATOR (WHO MAY BE AN EMPLOYEE OF THE DEVELOPER OR GENERAL CONTRACTOR) SHALL DETERMINE THE CAUSE OF THE COMPLAINT AND SHALL REQUIRE THAT REASONABLE MEASURES WARRANTED TO CORRECT THE PROBLEM BE IMPLEMENTED; A TELEPHONE NUMBER OF THE NOISE DISTURBANCE COORDINATOR SHALL BE CONSPICUOUSLY POSTED AT THE CONSTRUCTION SITE FENCE AND ON THE NOTIFICATION SENT TO NEIGHBORS ADJACENT TO THE SITE.

ASBESTOS NOTES

1. IF NATURALLY OCCURRING ASBESTOS IS IDENTIFIED AT THE SITE, A SITE HEALTH AND SAFETY (H&S) PLAN INCLUDING METHODS FOR CONTROL OF AIRBORNE DUST SHALL BE PREPARED. THIS PLAN SHALL BE REVIEWED AND APPROVED BY THE COUNTY OF SAN MATEO PRIOR TO GRADING IN AREAS UNDERLAIN BY SERPENTINE-BEARING SOILS OR BEDROCK AND NATURALLY OCCURRING ASBESTOS. THE H&S PLAN SHALL STRICTLY CONTROL DUST-GENERATING EXCAVATION AND COMPACTION OF MATERIAL CONTAINING NATURALLY OCCURRING ASBESTOS. THE PLAN SHALL ALSO IDENTIFY SITE-MONITORING ACTIVITIES DEEMED NECESSARY DURING CONSTRUCTION (E.G., AIR MONITORING). WORKER MONITORING SHALL ALSO BE PERFORMED AS APPROPRIATE. THE PLAN SHALL DEFINE PERSONAL PROTECTION METHODS TO BE USED BY CONSTRUCTION WORKERS. ALL WORKER PROTECTION AND MONITORING SHALL COMPLY WITH PROVISIONS OF THE MINING SAFETY AND HEALTH ADMINISTRATION (MSHA) GUIDELINES, CALIFORNIA DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (DOSH), AND THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
2. IF NATURALLY OCCURRING ASBESTOS IS FOUND AT THE SITE, A SOIL MANAGEMENT PLAN SHALL BE DEVELOPED AND APPROVED BY THE COUNTY PLANNING DEPARTMENT TO PROVIDE DETAILED DESCRIPTIONS OF THE CONTROL AND DISPOSITION OF SOILS CONTAINING NATURALLY OCCURRING ASBESTOS. SERPENTINE MATERIAL PLACED AS FILL SHALL BE SUFFICIENTLY BURIED IN ORDER TO PREVENT EROSION BY WIND OR SURFACE WATER RUNOFF, OR EXPOSURE TO FUTURE HUMAN ACTIVITIES, SUCH AS LANDSCAPING OR SHALLOW TRENCHES. ADDITIONALLY, THE BAAQMD SHALL BE NOTIFIED PRIOR TO THE START OF ANY EXCAVATION IN AREAS CONTAINING NATURALLY OCCURRING ASBESTOS.

GRADING NOTES

1. NO GRADING SHALL BE ALLOWED DURING THE WINTER SEASON (OCTOBER 15 TO APRIL 30) TO AVOID POTENTIAL SOIL EROSION UNLESS APPROVED, IN WRITING, BY THE COMMUNITY DEVELOPMENT DIRECTOR. THE PROPERTY OWNERS SHALL SUBMIT A LETTER TO THE CURRENT PLANNING SECTION, AT LEAST TWO WEEKS PRIOR TO COMMENCEMENT OF GRADING, STATING THE DATE WHEN GRADING WILL BEGIN.

TREE PROTECTION NOTES

1. THE APPLICANT SHALL ESTABLISH AND MAINTAIN TREE PROTECTION ZONES THROUGHOUT THE ENTIRE LENGTH OF THE PROJECT. TREE PROTECTION ZONES SHALL BE DELINEATED USING 4-FOOT TALL ORANGE PLASTIC FENCING SUPPORTED BY POLES POUNDED INTO THE GROUND, LOCATED AS CLOSE TO THE DRIPLINES AS POSSIBLE WHILE STILL ALLOWING ROOM FOR CONSTRUCTION/GRADING TO SAFELY CONTINUE. THE APPLICANT SHALL MAINTAIN TREE PROTECTION ZONES FREE OF EQUIPMENT AND MATERIALS STORAGE AND SHALL NOT CLEAN ANY EQUIPMENT WITHIN THESE AREAS. SHOULD ANY LARGE ROOTS OR LARGE MASSES OF ROOTS NEED TO BE CUT, THE ROOTS SHALL BE INSPECTED BY A CERTIFIED ARBORIST OR REGISTERED FORESTER PRIOR TO CUTTING. ANY ROOT CUTTING SHALL BE MONITORED BY AN ARBORIST OR FORESTER AND DOCUMENTED. ROOTS TO BE CUT SHOULD BE SEVERED CLEANLY WITH A SAW OR TOPPERS. NORMAL IRRIGATION SHALL BE MAINTAINED, BUT OAKS SHOULD NOT NEED SUMMER IRRIGATION. THE ABOVE INFORMATION SHALL BE ON-SITE AT ALL TIMES.

VEGETATION REMOVAL/REPLACEMENT NOTES

1. VEGETATION REMOVED IN AREAS OUTSIDE OF BUILDING FOOTPRINTS, DRIVEWAYS, AND CONSTRUCTION ACCESS AREAS SHALL BE REPLACED WITH DROUGHT-TOLERANT, NON-INVASIVE PLANTS, IMMEDIATELY AFTER GRADING IS COMPLETE IN THAT AREA. PRIOR TO THE ISSUANCE OF ANY BUILDING PERMITS, THE APPLICANT SHALL SUBMIT PHOTOGRAPHS DEMONSTRATING COMPLIANCE WITH THIS CONDITION TO THE CURRENT PLANNING SECTION, SUBJECT TO REVIEW AND APPROVAL BY THE COMMUNITY DEVELOPMENT DIRECTOR.
2. THE APPLICANT SHALL REPLACE ALL VEGETATION REMOVED IN ALL AREAS NOT COVERED BY CONSTRUCTION WITH DROUGHT-TOLERANT, NON-INVASIVE PLANTS, ONCE CONSTRUCTION IS COMPLETED. PRIOR TO THE CURRENT PLANNING SECTION'S FINAL APPROVAL OF ANY BUILDING PERMIT, THE APPLICANT SHALL SUBMIT PHOTOGRAPHS DEMONSTRATING COMPLIANCE WITH THIS CONDITION, SUBJECT TO REVIEW AND APPROVAL BY THE COMMUNITY DEVELOPMENT DIRECTOR.

DUST CONTROL NOTES

1. ALL GRADED SURFACES AND MATERIALS, WHETHER FILLED, EXCAVATED, TRANSPORTED OR STOCKPILED, SHALL BE WETTED, PROTECTED OR CONTAINED IN SUCH A MANNER AS TO PREVENT ANY SIGNIFICANT NUISANCE FROM DUST, OR SPILLAGE UPON ADJOINING WATER BODY, PROPERTY, OR STREETS. EQUIPMENT AND MATERIALS ON THE SITE SHALL BE USED IN SUCH A MANNER AS TO AVOID EXCESSIVE DUST. A DUST CONTROL PLAN MAY BE REQUIRED AT ANYTIME DURING THE COURSE OF THE PROJECT.
2. A DUST PALLIATIVE SHALL BE APPLIED TO THE SITE WHEN REQUIRED BY THE COUNTY. THE TYPE AND RATE OF APPLICATION SHALL BE RECOMMENDED BY THE SOILS ENGINEER AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS, THE PLANNING AND BUILDING DEPARTMENT'S GEOTECHNICAL SECTION, AND THE REGIONAL WATER QUALITY CONTROL BOARD.

DISCOVERY OF HUMAN REMAINS NOTE

1. THE APPLICANT AND CONTRACTORS MUST BE PREPARED TO CARRY OUT THE REQUIREMENTS OF CALIFORNIA STATE LAW WITH REGARD TO THE DISCOVERY OF HUMAN REMAINS DURING CONSTRUCTION, WHETHER HISTORIC OR PREHISTORIC. IN THE EVENT THAT ANY HUMAN REMAINS ARE ENCOUNTERED DURING SITE DISTURBANCE, ALL GROUND-DISTURBING WORK SHALL CEASE IMMEDIATELY AND THE COUNTY CORONER SHALL BE NOTIFIED IMMEDIATELY. IF THE CORONER DETERMINES THE REMAINS TO BE NATIVE AMERICAN, THE NATIVE AMERICAN HERITAGE COMMISSION SHALL BE CONTACTED WITHIN 24 HOURS. A QUALIFIED ARCHAEOLOGIST, IN CONSULTATION WITH THE NATIVE AMERICAN HERITAGE COMMISSION, SHALL RECOMMEND SUBSEQUENT MEASURES FOR DISPOSITION OF THE REMAINS.

GEOTECHNICAL INSPECTION NOTE

1. PRIOR TO ISSUANCE OF BUILDING PERMITS, THE PROJECT GEOTECHNICAL CONSULTANT SHALL FIELD INSPECT (AND INVESTIGATE, AS NEEDED) ALL PROPOSED DRAINAGE DISCHARGE LOCATIONS AND VERIFY THAT PROPOSED DRAINAGE DESIGNS ARE ACCEPTABLE FROM A SLOPE STABILITY/EROSION PERSPECTIVE OR RECOMMEND APPROPRIATE MODIFICATIONS.

LEGEND

EXISTING

- EXISTING PROPERTY LINE BOUNDRY
- EXISTING SANITARY SEWER W/MANHOLE
- EXISTING STORM DRAIN DRAIN W/ MANHOLIE
- EXISTING WATERLINE
- EXISTING CATCH BASIN
- EXISTING GAS LINE
- ALL UTILITIES ARE APPROXIMATELY LOCAITED

PROPOSED

- PROPOSED PROPERTY LINE BOUNDRY
- SANITARY SEWER W/ MANHOLE
- STORM DRAIN W/ MANHOLE & CATCH BASIN
- WATER LINE W/ FIRE HYDRANT
- GAS MAIN
- UNDERGROUND ELECTRIC, TELEPHONE, & C.A.T.V.
- S.D.E. STORM DRAIN EASEMENT
- S.S.E. SANITARY SEWER EASEMENT
- 509.3 #4 OAK — EXISTING TREE & ELEVATION (TREE NO. REFERS TO TREE IDENTIFICATION TAG PER (TREE REPORT PREPAIRED BY HABITAT RESTORATION GROUP)
- 509.3 #3 OAK — INDICATES TREE TO BE REMOVED
- L.W. LEATHERWOOD BUSH
- EUC. EUCALYPTUS TREE
- P.O.C. POINT OF CONNECTION
- FDZ FIRE DEFENSE ZONE
- FLOW-THROUGH PLANTER. PROPOSED FOR TREATMENT OF ROOF AND DRIVEWAY STORM WATER RUNOFF.

ABBREVIATIONS

AC	ASPHALTIC CONCRETE	L	LENGTH
BEG	BEGINNING	LF	LINEAR FEET
BL	BAY LAUREL	LG	LIP OF GUTTER
BLDG COR	BUILDING CORNER	NIC	NOT IN CONTRACT
BOT	BOTTOM	O	OAK TREE
BOW	GRADE AT BOTTOM OF WALL	P	PEPPEIR TREE
BW	BACK OF WALK	PD	PLANNIED DEVELOPMENT
CB	CATCH BASIN	PINE	PINE TIREE
CL	CENTERLINE	PUE	PUBLIC UTILITY EASEMENT
CLF	CHAIN LINK FENCE	PVC	POLYVINYL CHLORIDE PIPE
CMP	CORRUGATED METAL PIPE	RCP	REINFORCED CONCRET

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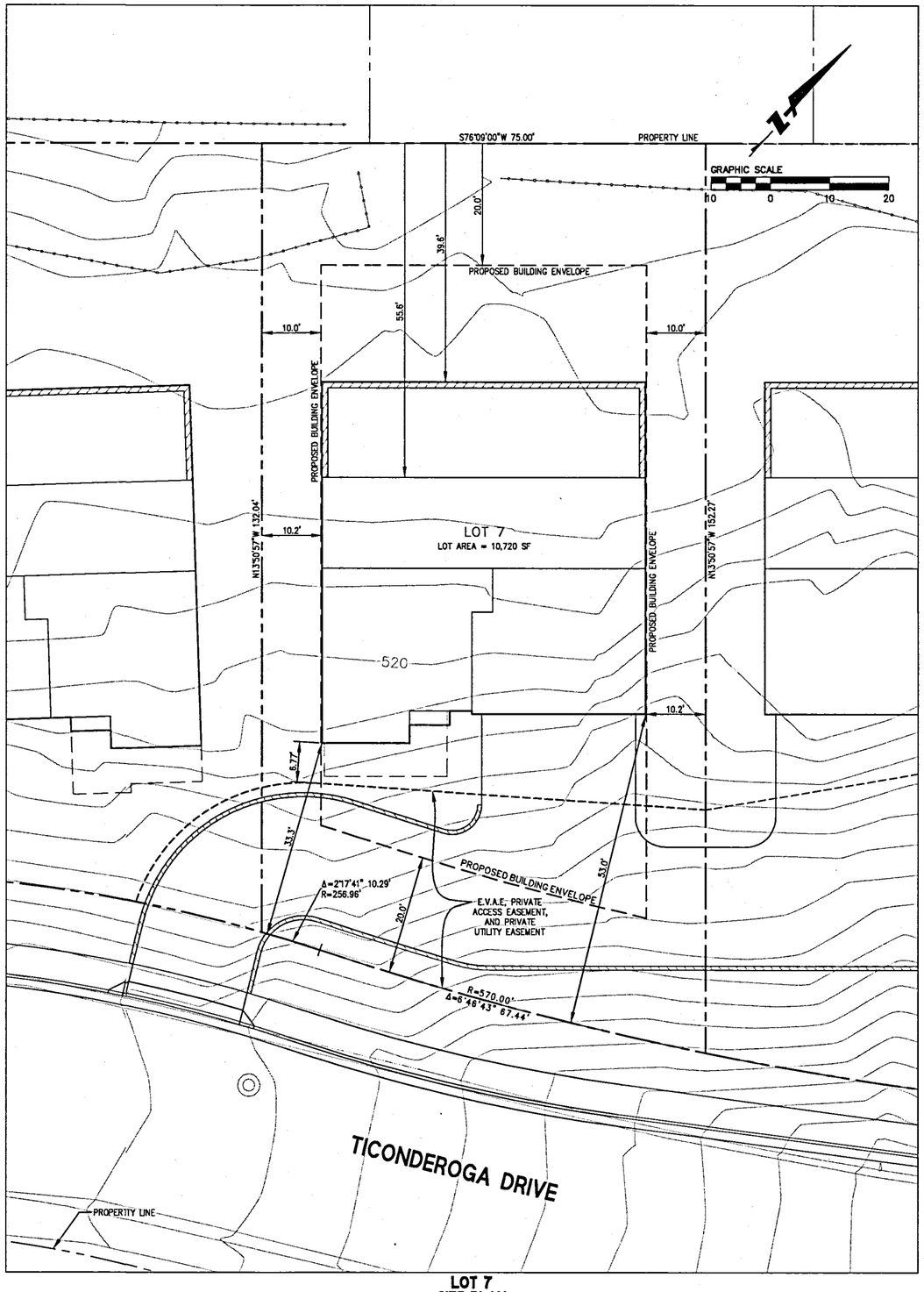
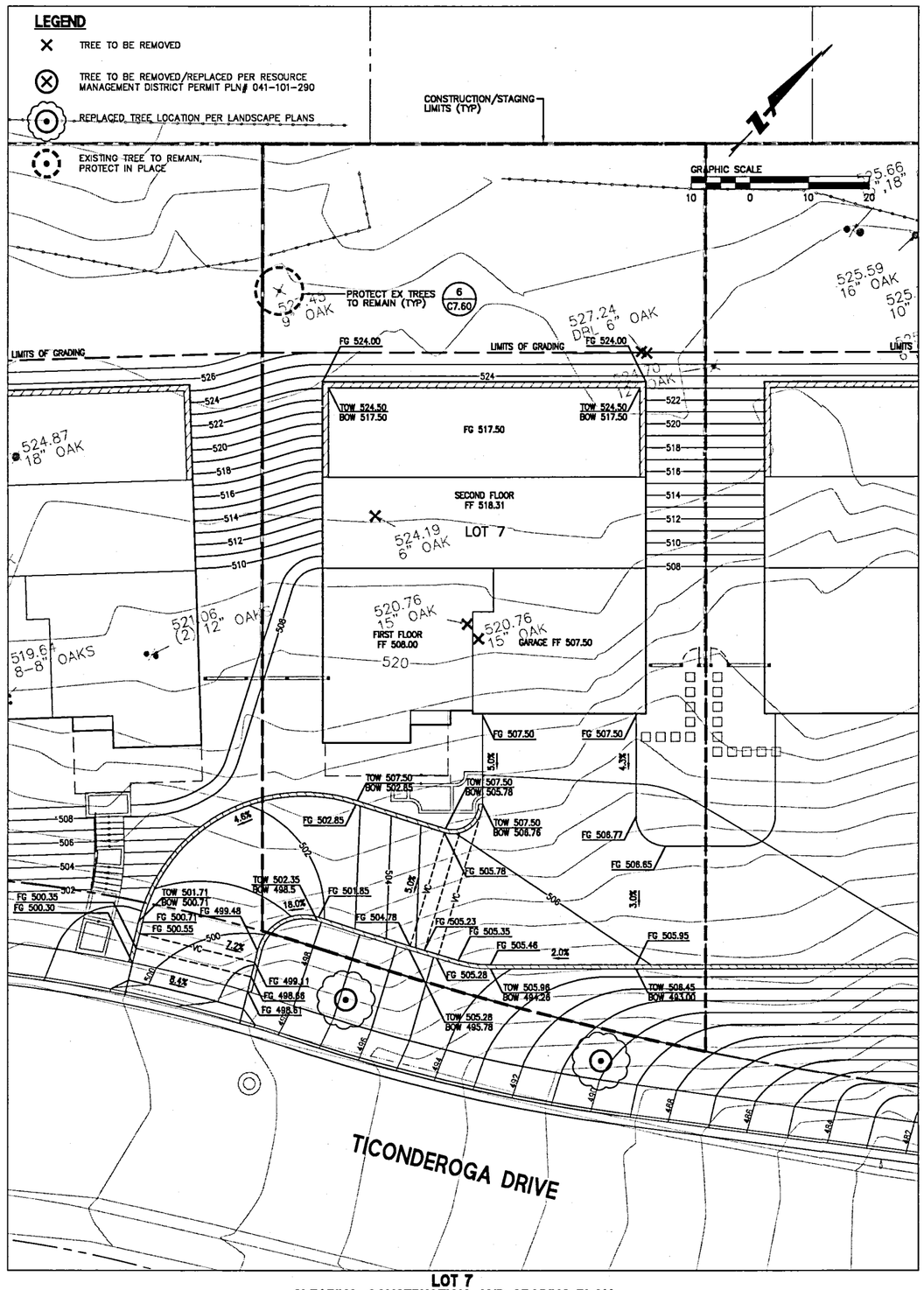


LOT 7
SITE PLAN
SCALE: 1"=10'



LOT 7
CLEARING, CONSTRUCTION, AND GRADING PLAN
SCALE: 1"=10'

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HIGHLAND ESTATES
LOT 7 IMPROVEMENT PLANS
SITE & CLEARING, CONSTRUCTION AND GRADING PLANS
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

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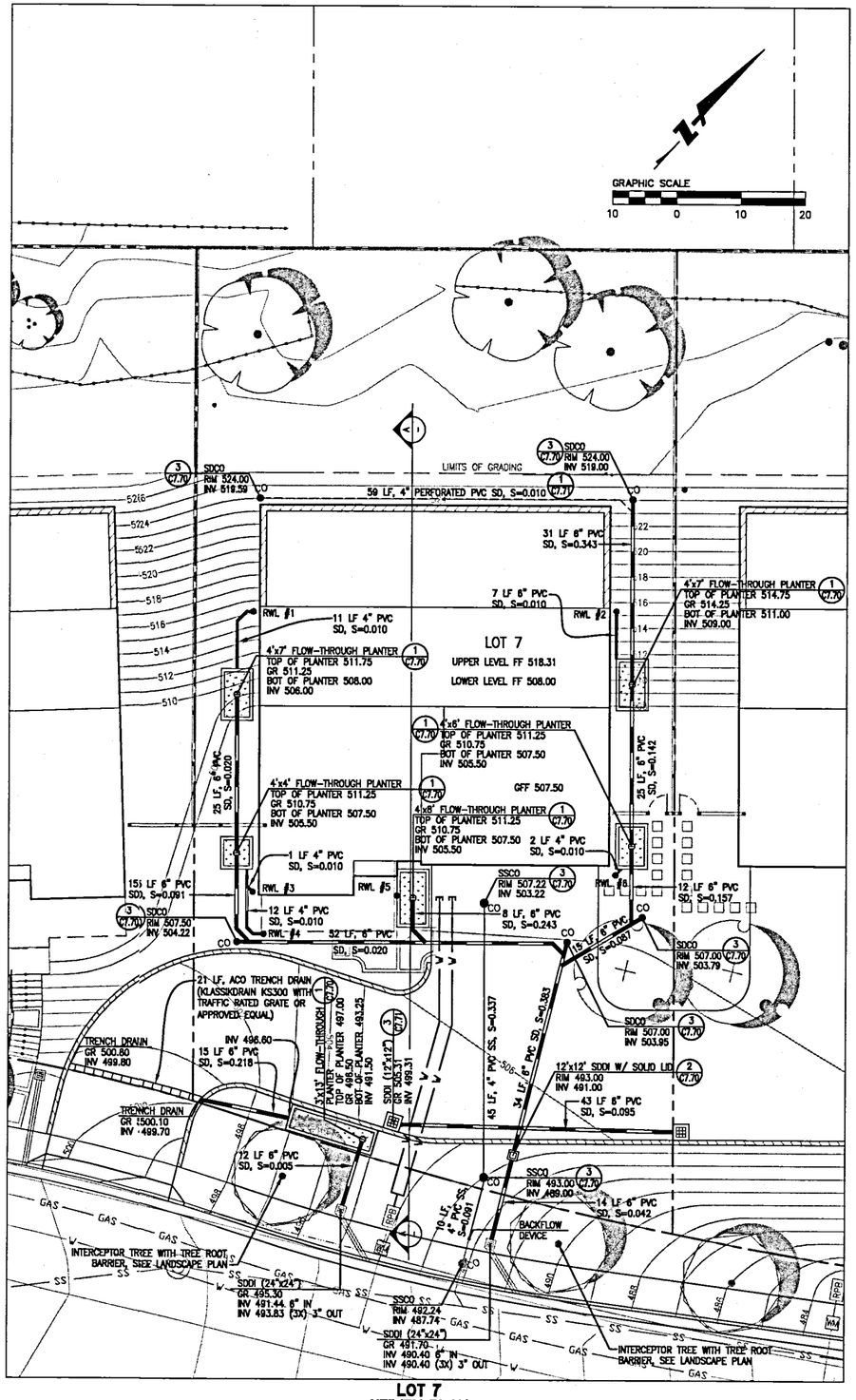
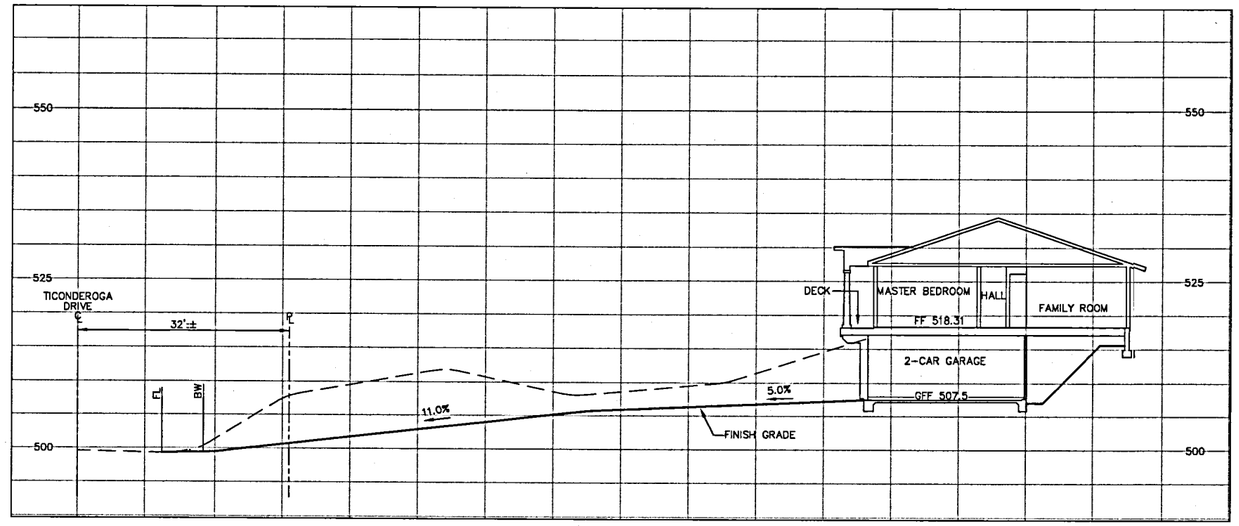


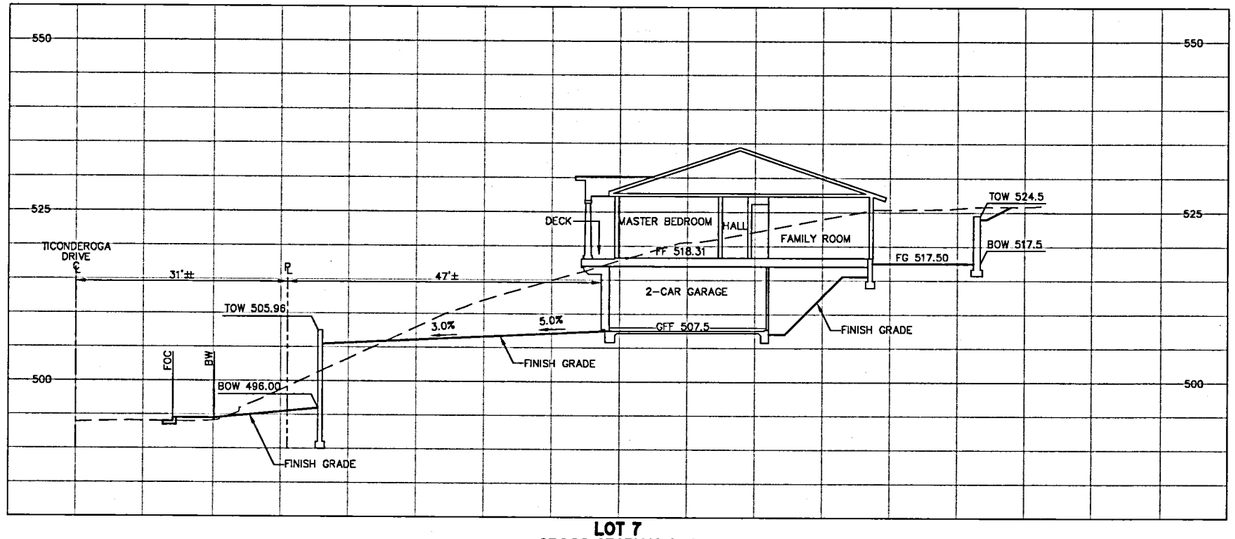
LOT 7
UTILITY PLAN
SCALE: 1"=10'



LOT 7
CROSS SECTION DWY CENTERLINE
SCALE: 1"=10'

NOTES:

1. PER THE GEOTECHNICAL REPORT, UNDOCUMENTED FILL WAS MAPPED AT LOT 7 AND IF THIS FILL IS TO BE LEFT IN PLACE DURING HOUSE AND DRIVEWAY GRADING, IT SHOULD BE REMOVED AND REPLACED AS PROPERLY COMPACTED ENGINEERED FILL.
2. PER THE GEOTECHNICAL REPORT, ALL EXISTING FILLS SHOULD BE COMPLETELY REMOVED FROM WITHIN PROPOSED HOUSE FOOTPRINT AND DRIVEWAY AREAS AND TO A LATERAL DISTANCE OF AT LEAST 2 FEET BEYOND THE EDGE OF THE IMPROVEMENTS. ANY EXCESS MATERIAL SHALL BE DISPOSED OF OFF-SITE IN A LAWFUL MANNER.
3. PER THE GEOTECHNICAL REPORT, ALL BUILDING AND RETAINING WALLS SHOULD BE SUPPORTED ON DRILLED PIERS. THE FOUNDATION SHOWN ON THIS PLAN ARE SCHEMATIC. REFER TO THE PROJECT STRUCTURAL PLANS FOR DETAILS ON THE DRILLED PIERS.



LOT 7
CROSS SECTION A-A
SCALE: 1"=10'

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HIGHLAND ESTATES
LOT 7 IMPROVEMENT PLANS
UTILITY PLAN AND CROSS SECTION
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

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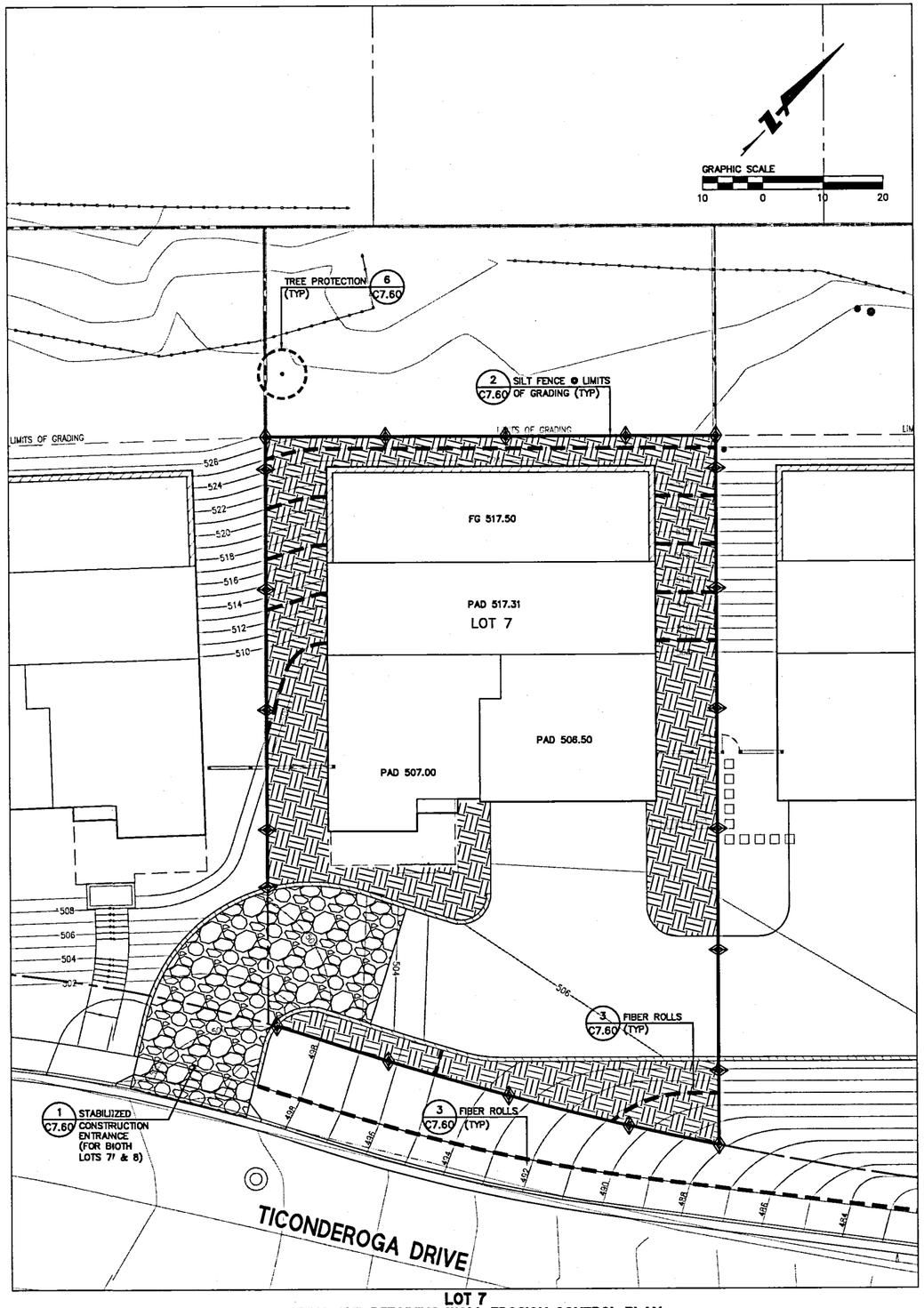
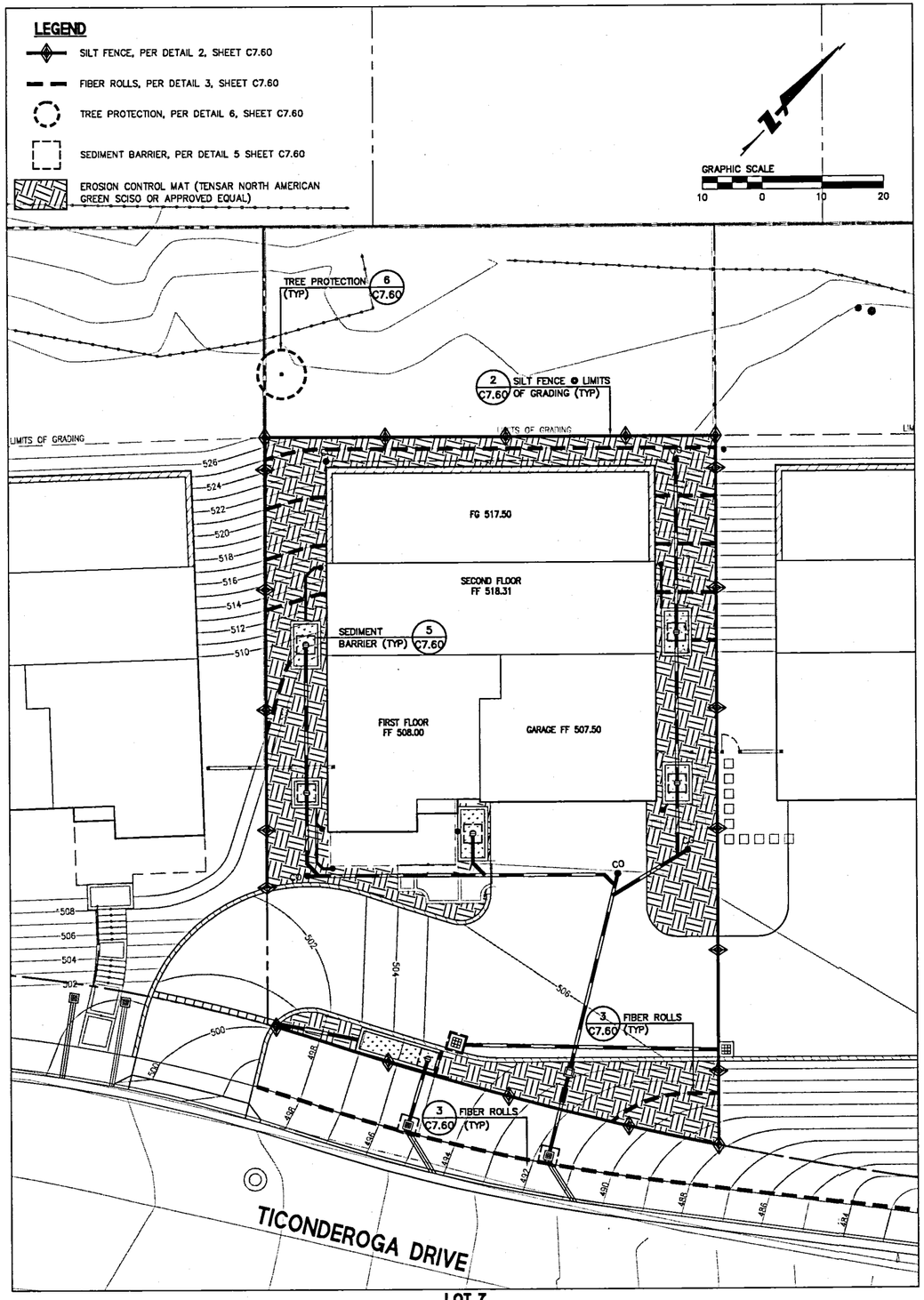


LOT 7
GRADING AND RETAINING WALL EROSION CONTROL PLAN
SCALE: 1"=10'



LOT 7
FOUNDATION AND CONSTRUCTION EROSION CONTROL PLAN
SCALE: 1"=10'

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HIGHLAND ESTATES
LOT 7 IMPROVEMENT PLANS
EROSION CONTROL PLANS

CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

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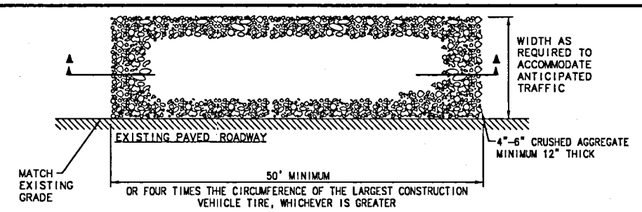
EROSION CONTROL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
2. ALTHOUGH SPECIFIC LOCATIONS FOR SEDIMENT CONTROL FACILITIES ARE SHOWN ON THESE PLANS, IT IS INTENDED THIS EROSION CONTROL PLAN BE MODIFIED WHEN NECESSARY TO MEET FIELD CONDITIONS. BASIN AND TRAP SIZES AND ELEVATIONS MAY BE ADJUSTED AS LONG AS THE MINIMUM AREAS AND DEPTHS FOR SEDIMENT SETTLING AND STORAGE AIRE NOT REDUCED.
3. THE INTENT OF THESE PLANS IS TO PROVIDE THE INITIAL CONCEPT FOR INTERIM EROSION CONTROL. THE CCONTRACTOR SHALL UPDATE THE PLANS TO REFLECT CHANGING SITE CONDITIONS. PLAN UPDATES SHALL BE BASED UPON GENERAL SURVEY DATA. EROSION CCONTROL EFFECTIVENESS SHALL ALSO BE MONITORED AND THE PLANS UPGRADED AS: REQUIRED TO PREVENT SIGNIFICANT QUANTITIES OF SEDIMENT FROM ENTERING: THE DOWNSTREAM DRAINAGE SYSTEM.
4. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. IN GENERAL, THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE STORM RUN OFF FROM LEAVING THE SITE. FIBER ROLLS, SAND BAGS, AND SILT FENCES SHALL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. ALL EXISTING, TEMPORARY, OR PERMANENT CATCH BASINS SHALL USE ONE OF THE SEDIMENT BARRIERS SHOWN.
5. THE CONTRACTOR WILL BE: LIABLE FOR ANY AND ALL DAMAGES TO PUBLIC AND/OR PRIVATE OWNED AND MAINTAINED ROAD CAUSED BY THE CONTRACTOR'S GRADING ACTIVITIES, AND WILL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAUL ROUTE. ADJACENT PUBLIC ROADS SHALL BE CLEANED AT THE END OF EACH WORKING DAY.
6. BEST MANAGEMENT PRACTICES SHALL BE OPERABLE YEAR AROUND.
7. DURING THE RAINY SEASON, ALL PAVED AREAS ARE TO BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THHE SITE IS TO BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.
8. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED DAILY DURING THE RAINY SEASON. ALL SLOPES SHALL BE REPAIRED AS SOON AS POSSIBLE WHEN DAMAGED..
9. THE FIRST PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENTI TO MEET TIER 1 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY. THE IREMAINDER OF CONSTRUCTION EQUIPMENT (70 PERCENT), WHICH WOULD CONSIST OF: OLDER TECHNOLOGIES, SHALL BE REQUIRED TO USE EMULSIFIED FUELS.
10. THE SECOND PHASE OF CCONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENTI TO MEET TIER 2 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY AND !50 PERCENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS. THE REMAINING 20 PERCENT OF CONSTRUCTION EQUIPMENT, WHICH WOULD CONSIST OF OLDERI TECHNOLOGIES, SHALL USE EMULSIFIED FUELS.
11. FOR ALL LARGER VEHICLESS, INCLUDING CEMENT MIXERS OR OTHER DEVICES THAT MUST BE DELIVERED BY LARGE TRUCKS, VEHICLES SHALL BE EQUIPPED WITH CARB LEVEL THREE VERIFIED CONNTROL DEVICES.
12. WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
13. COVER ALL TRUCKS HAULIING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO IMAINTAIN AT LEAST TWO FEET OF FREEBOARD.
14. PAVE, APPLY WATER THREEE TIMES DAILY, OR APPLY NON-TOXIC SOIL STABILIZERS ON ALL UNPAVED ACCESS: ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
15. SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT TIHE CONSTRUCTION SITES.
16. SWEEP PUBLIC STREETS ADJACENT TO CONSTRUCTION SITES DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIIL MATERIAL IS CARRIED ONTO THE STREETS.
17. HYDROSEED OR APPLY NOON-TOXIC SOIL STABILIZERS TO INACTIVE CONSTRUCTION AREAS (PREVIOUSLY GRADED AREAS INACTIVE FOR TEN DAYS OR MORE).
18. TEMPORARY AND PERMANENT SLOPES GREATER THAN 3 FEET SHALL BE SEEDED UNLESS ALTERNATIVE MEASSURES ARE USED.
19. SEED MIX FOR REVEGETATION AND HYDROSEEDING:
    NORTHERN CALIFORNIA COVER MIX BY ACBRIGHT OR EQUAL

    30% BLUE WILDRYE
    30% MEADOW BARLEY
    20% ZORRO FESCUE
    10% PURPLE NEEDLE GRVASS
    10% CALIFORNIA NATIVE WILDFLOWERS

    APPLY AT 40 POUNDS PEIR ACRE MINIMUM
20. ENCLOSE, COVER, WATER TWICE DAILY, OR APPLY NON-TOXIC SOIL BINDERS TO EXPOSED STOCKPILES (DIRT, SAND, ETC.). LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
21. DISPOSAL AREAS FOR SEDIMENT TO BE DETERMINED IN FIELD. WHEN MATERIAL IS STOCKPILED, IT SHALL BE SURROUNDED BY A SILT FENCE/FIBER ROLLS.
22. LIMIT TRAFFIC SPEEDS ON: UNPAVED ROADS TO 15 MILES PER HOUR.
23. INSTALL SANDBAGS OR OTHHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
24. REPLANT VEGETATION IN DISTURBED AREAS AS SOON AS POSSIBLE.
25. INSTALL WHEEL WASHERS: FOR ALL EXITING TRUCKS OR WASH OFF THE TIRES OR TRACKS OF ALL TRUCKS AND EQUIPMENT LEAVING THE CONSTRUCTION SITE.
26. INSTALL WIND BREAKS AT THE WINDWARD SIDES OF THE CONSTRUCTION AREAS.
27. SUSPEND EXCAVATION AND GRADING ACTIVITIES WHEN WIND (AS INSTANTANEOUS GUSTS) EXCEEDS 25 MILESS PER HOUR.
28. NO GRADING SHALL BE ALLLOWED DURING THE WINTER SEASON (OCTOBER 15 TO APRIL 30) TO AVOID POTENTIAL SOIL EROSION UNLESS APPROVED, IN WRITING, BY THE COMMUNITY DEVELOPMENT DIRECTOR. THE PROPERTY OWNERS SHALL SUBMIT A LETTER TO THE CURRENT PLANNING SECTION, AT LEAST TWO WEEKS PRIOR TO COMMENCEMENT OF GRADING, STATING THE DATE WHEN GRADING WILL BEGIN.
29. STABILIZE ALL DENUDED AREAS AND MAINTAIN EROSION CONTROL MEASURES CONTINUOUSLY BETWEEN OCTOBER 15 AND APRIL 30. STABILIZING SHALL INCLUDE BOTH PROACTIVE MEASURES, SUCH AS THE PLACEMENT OF STRAW BALES OR COIR NETTING, AND PASSIVE MEASURES, SUCH AS MINIMIZING VEGETATION REMOVAL AND REVEGETATING DISTURBED AREAS WITH VEGETATION THAT IS COMPATIBLE WITH THE SURROUNDING ENVIRONMENT.
30. STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.
31. CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING PAVEMENT CUTTING WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICALS, WASH WATER OR SEDIMENTS, AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATERCOURSES.
32. USE SEDIMENT CONTROLS OR FILTRATION TO REMOVE SEDIMENT WHEN DEWATERING SITE AND OBTAINING ALL NECESSARY PERMITS.
33. AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON-SITE, EXCEPT IN A DESIGNATED AREA WHERE WASH WATER IS CONTAINED AND TREATED.
34. DELINEATE WITH FIELD MARKERS CLEARING LIMITS, SETBACKS, AND DRAINAGE COURSES.
35. PROTECT ADJACENT PROPERTIES AND UNDISTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE BUFFER STRIPS, SEDIMENT BARRIERS OR FILTERS, DIKES, MULCHING, OR OTHER MEASURES AS APPROPRIATE.
36. PERFORM CLEARING AND EARTH-MOVING ACTIVITIES ONLY DURING DRY WEATHER.
37. LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF.
38. LIMIT CONSTRUCTION ACCESS ROUTES AND STABILIZE DESIGNATED ACCESS POINTS.
39. ALL GRADED SURFACES AND MATERIALS, WHETHER FILLED, EXCAVATED, TRANSPORTED OR STOCKPILED, SHALL BE WETTED, PROTECTED OR CONTAINED IN SUCH A MANNER AS TO PREVENT ANY SIGNIFICANT NUISANCE FROM DUST, OR SPILLAGE UPON ADJOINING WATER BODY, PROPERTY, OR STREETS. EQUIPMENT AND MATERIALS ON THE SITE SHALL BE USED IN SUCH A MANNER AS TO AVOID EXCESSIVE DUST. A DUST CONTROL PLAN MAY BE REQUIRED AT ANYTIME DURING THE COURSE OF THE PROJECT.
40. A DUST PALLIATIVE SHALL BE APPLIED TO THE SITE WHEN REQUIRED BY THE COUNTY. THE TYPE AND RATE OF APPLICATION SHALL BE RECOMMENDED BY THE SOILS ENGINEER AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS, THE PLANNING AND BUILDING DEPARTMENT'S GEOTECHNICAL SECTION, AND THE REGIONAL WATER QUALITY CONTROL BOARD.
41. IF NO WORK HAS PROGRESSED FOR A PERIOD OF 6-WEEKS, FINAL DRAINAGE AND EROSION CONTROL IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH AN APPROVED WINTERIZATION PLAN.
42. PADS SHALL BE GRADED TO MINIMIZE STANDING WATER. SPECIFIC LOCATIONS REQUIRING SUPPLEMENTAL GRADING TO ACHIEVE ACCEPTABLE DRAINAGE SHALL BE DETERMINED BY THE CONSTRUCTION MANAGER. ALL SPOILS AND SOIL STOCKPILES REMAINING ON SITE SHALL BE ENCIRCLED BY SILT FENCES/FIBER ROLLS.
43. STUBBED OUT ENDS OF PARTIALLY COMPLETED SUBDRAINS SHALL BE WRAPPED WITH AN APPROVED FABRIC TO PREVENT SOIL AND DEBRIS FROM ENTERING THE PIPE.
44. HAUL ROADS ARE CURRENTLY NOT SHOWN ON THE PLANS. EROSION CONTROL MEASURES SHALL BE TAKEN TO MINIMIZE EROSION RELATED TO HAUL ROADS.
45. GRADING SCHEDULE SHALL BE SUBMITTED FOR APPROVAL TO SAN MATEO COUNTY PUBLIC WORKS BY AUGUST 15.
46. EROSION CONTROL POINT OF CONTACT:
    NOEL CHAMBERLAIN, NEXGEN BUILDERS INC.
    225 DEMETER STREET
    EAST PALO ALTO, CA 94303
    PHONE #: 650-322-5800
    CELL #: 650-444-3089
    EMAIL: noel@nexgenbuilders.com
47. SHOULD IT APPEAR THAT THE EROSION CONTROL PLAN, OR ANY OTHER MATTER THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE BKF PROJECT ENGINEER AT (650) 482-6300 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
48. AREAS DELINEATED ON PLANS FOR PARKING, CLEARING & GRUBBING, STORAGE, ETC. SHALL NOT BE ENLARGED OR "RUN OVER."
49. CONSTRUCTION SITES ARE REQUIRED TO HAVE EROSION CONTROL MATERIALS ON-SITE DURING THE "OFF-SEASON."
50. DUST CONTROL IS REQUIRED YEAR-ROUND.
51. EROSION CONTROL MATERIALS SHALL BE STORED ON-SITE.
52. USE OF PLASTIC SHEETING BETWEEN OCTOBER 1ST AND APRIL 30TH IS NOT ACCEPTABLE, UNLESS FOR USE ON STOCKPILES WHERE THE STOCKPILE IS ALSO PROTECTED WITH FIBER ROLLS CONTAINING THE BASE OF THE STOCKPILE.
53. TREE PROTECTION SHALL BE IN PLACE BEFORE ANY GRADING, EXCAVATING OR GRUBBING IS STARTED.

ALL EROSION CONTROL MEASURES SHALL BE IN PLACE BY OCTOBER 15 AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.



NOTES:

1. ALL CONSTRUCTION ENTRANCES SHALL BE MAINTTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USE TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS SHALL BE REMOVED IMMEDIATELY.
2. WHEELS SHALL BE CLEAN PRIOR TO ENTRANCE CONTO PUBLIC RIGHT-OF-WAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF INLET PROTECTION (E.G. SAND BAGS OR OTHER APPROVED METHODS).
3. THE MATERIAL FOR CONSTRUCTION OF THE PAD SHALL BE 4" TO 6" STONE.
4. THE THICKNESS OF THE PAD SHALL NOT BE LESSS THAN 12".
5. THE WIDTH OF THE PAD SHALL NOT BE LESS THHAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
6. THE LENGTH OF THE PAD SHALL NOT BE LESS TTHAN 50'.

1/– STABILIZED CONSTRUCTION ENTRANCE

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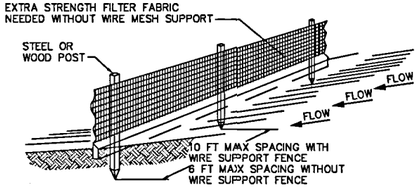
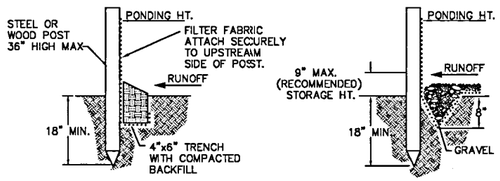


NOTES:

1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE TO MAXIMIZE PONDING EFFICIENCY.



2/– SILT FENCE

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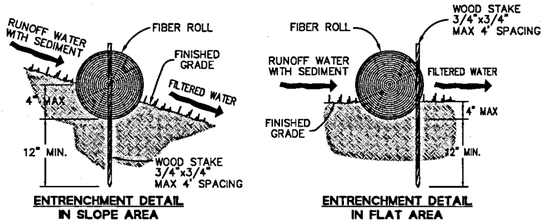
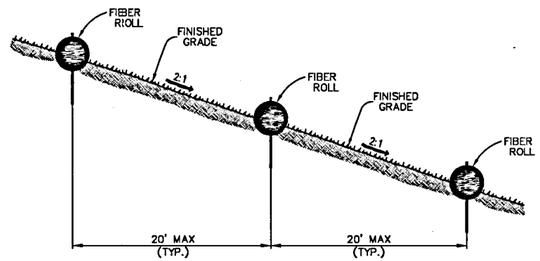


NOTES:

1. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" TO 4" DEEP, DUG ON CONTOUR.
2. ADJACENT ROLLS SHALL TIGHTLY ABUT.
3. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.

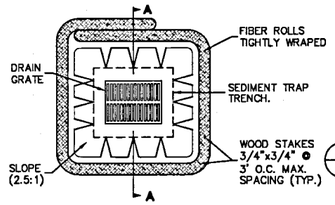
3/– FIBER ROLL

NTS



4/– FIBER ROLL INSTALLATION ON SLOPE

(TIME FRAME: BETWEEN FINAL PAVING OPERATIONS AND PROJECT COMPLETION)
NTS

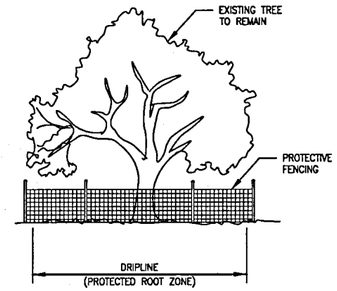


NOTES:

1. PLACE FIBER ROLLS AROUND THE INLET CONSISTENT WITH EBASIN SEDIMENT BARRIER DETAIL ON THIS SHEET. (FIBER ROLLS ARE TUBES MADE FROM STRAW BOUND W/ PLASTIC NETTING. THEY ARE APPROX. 8" DIA. AND 20 - 30 FT. LONG.)
2. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SIECURE STAKING OF THE FIBER ROLL IN A TRENCH, 3" - 4" DEEP, DUG ON CONTOUR. RUNIOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.
3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE !WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING: THE INLET. EXCAVATION OF A BASIN ADJACENT TO THE DROP INLET OR A TEMPORARY DIKE CAN THE DOWNSLOPE OF THE STRUCTURE MAY BIE NECESSARY.

5/– SEDIMENT BARRIER

(TIME FRAME: AREA DRAINS - BETWEEN AREA DRAIN INSTALLATION AND PROJECT COMPLETION
CURB INLETS - BETWEEN CURB INLET INSTALLATION AND FINAL PAVING OPERATIONS)
NTS



NOTES:

1. THE APPLICANT SHALL ESTABLISH AND! MAINTAIN TREE PROTECTION ZONES THROUGHOUT THE ENTIRE LENGTH OF THE PROJECT.
2. TREE PROTECTION ZONES SHALL BE DIELINEATED USING 4-FOOT TALL ORANGE PLASTIC FENCING SUPPORTED BY POLES POUNDED INTO THE GROUND, LOCATED AS CLOSE TO THE DRIPLINES AS POSSIBLE WHILE: STILL ALLOWING ROOM FOR CONSTRUCTION/GRADING TO SAFELY CONTINUE.
3. THE APPLICANT SHALL MAINTAIN TREE: PROTECTION ZONES FREE OF EQUIPMENT AND MATERIALS STORAGE AND SHALL NOT CLEAN ANY EQUIPMENT WITHIN THESE AREAS.
4. SHOULD ANY LARGE ROOTS OR LARGE: MASSES OF ROOTS NEED TO BE CUT, THE ROOTS SHALL IBE INSPECTED BY A CERTIFIED ARBORIST OR REGISTERED FIORESTER PRIOR TO CUTTING. ANY ROOT CUTTING SHALL BIE MONITORED BY AN ARBORIST OR FORESTER AND DOCUMENTED.
5. ROOTS TO BE CUT SHOULD BE SEVERED CLEANLY WITH A SAW OR TOPPERS.
6. NORMAL IRRIGATION SHALL BE MAINTAUNED, BUT OAKS SHOULD NOT NEED SUMMER IRRIGATION.
7. THE ABOVE INFORMATION SHALL BE ON-SITE AT ALL TIMES.

6/– TREE PROTECTION FENCE

NTS

CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA) STANDARD DETAIL REFERENCES

(CALIFORNIA STORMWATER BMP HANDBOOK CONSTRUCTION, DATED NOVEMBER 2009)

NOTE: ALTHOUGH SPECIFIC LOCATIONS FOR SPECIFIC BMPS ARE SHOWN ON THESE PLANS,, IT IS INTENDED FOR THE CONTRACTOR TO APPLY APPROPRIATE BMPS WHEN NECESSAIRY TO MEET FIELD CONDITIONS.

EROSION CONTROL BMPS:

EC-1	SCHEDULING
EC-2	PRESERVATION OF EXISTING VEGETATION
EC-3	HYDRAULIC MULCH
EC-4	HYDROSEEDING
EC-5	SOIL BINDERS
EC-6	STRAW MULCH
EC-7	GEOTEXTILES & MATS
EC-8	WOOD MULCHING
EC-9	EARTH DIKES AND DRAINAGE SWALES
EC-10	VELOCITY DISSIPATION DEVICES
EC-11	SLOPE DRAINS
EC-12	STREAMBANK STABILIZATION
EC-14	COMPOST BLANKETS
EC-15	SOIL PREPARATION/ROUGHENING
EC-16	NON-VEGETATIVE STABILIZATION

TEMPORARY SEDIMENT CONTROL BMPS:

SE-1	SILT FENCE
SE-2	SEDIMENT BASIN
SE-3	SEDIMENT TRAP
SE-4	CHECK DAM
SE-5	FIBER ROLLS
SE-6	GRAVEL BAG BERM
SE-7	STREET SWEEPING AND VACUUMING
SE-8	SANDBAG BARRIER
SE-9	STRAW BALE BARRIER
SE-10	STORM DRAIN INLET PROTECTION
SE-11	ACTIVE TREATMENT SYSTEMS
SE-12	TEMPORARY SILT DIKE
SE-13	COMPOST SOCKS AND BERMS
SE-14	BIOFILTER BAGS

WIND EROSION CONTROL BMPS:

WE-1	WIND EROSION CONTROL

TEMPORARY TRACKING CONTROL BMPS:

TC-1	STABILIZED CONSTRUCTION ENTRANCE/EXIT
TC-2	STABILIZED CONSTRUCTION IROADWAY
TC-3	ENTRANCE/OUTLET TIRE WAISH

NON-STORMWATER MANAGEMENT BMPS:

NS-1	WATER CONSERVATION PRACTICES
NS-2	DEWATERING OPERATIONS
NS-3	PAVING AND GRINDING OPERATIONS
NS-4	TEMPORARY STREAM CROSSING
NS-5	CLEAR WATER DIVERSION
NS-6	ILLICIT CONNECTION/DISCHAIRGE
NS-7	POTABLE WATER/IRRIGATION!
NS-8	VEHICLE AND EQUIPMENT CLEANING
NS-9	VEHICLE AND EQUIPMENT FUELING
NS-10	VEHICLE AND EQUIPMENT MAINTENANCE
NS-11	PILE DRIVING OPERATIONS
NS-12	CONCRETE CURING
NS-13	CONCRETE FINISHING
NS-14	MATERIAL AND EQUIPMENT IUSE
NS-15	DEMOLITION ADJACENT TO WATER
NS-16	TEMPORARY BATCH PLANTS!

WASTE MANAGEMENT & MATERIALS !POLLUTION CONTROL BMPS:

WM-1	MATERIAL DELIVERY AND STORAGE
WM-2	MATERIAL USE
WM-3	STOCKPILE MANAGEMENT
WM-4	SPILL PREVENTION AND CONNTROL
WM-5	SOLID WASTE MANAGEMENT
WM-6	HAZARDOUS WASTE MANAGEMENT
WM-7	CONTAMINATED SOIL MANAGEMENT
WM-8	CONCRETE WASTE MANAGEMENT
WM-9	SANITARY/SEPTIC WASTE MANAGEMENT
WM-10	LIQUID WASTE MANAGEMENT

BKF ENGINEERS | SURVEYORS | PLANNERS
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FAX: (650) 482-6399

PROFESSIONAL ENGINEER * NOEL W. KELLEY * No. 044971 * CIVIL * STATE OF CALIFORNIA

HIGHLAND ESTATES
LOT 7 IMPROVEMENT PLANS
EROSION CONTROL DETAILS AND NOTES

CITY OF SAN MATEO — SAN MATEO COUNTY — CALIFORNIA

No.	Revisions

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Job No 95018-20

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PLOT DATE: 07-29-16
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SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS
REDWOOD CITY CALIFORNIA

DRAWN BY: N.M.A.
CHECK BY: R.D.
APPROVED BY: N.R.C.
SCALE: NONE
DATE: 6/95
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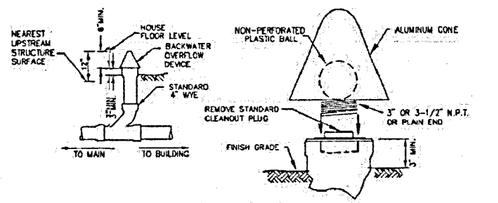
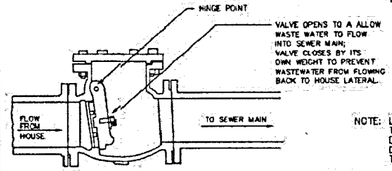


OVERFLOW DEVICE

NOTE: LOCATION OF DEVICE TO APPROVAL OF DISTRICT AND BUILDING DEPARTMENT PRIOR TO INSTALLATION



NOTE: LOCATION OF DEVICE TO APPROVAL OF DISTRICT AND BUILDING DEPARTMENT PRIOR TO INSTALLATION

BACKFLOW DEVICE

OVERFLOW AND BACKFLOW DEVICE DETAIL

C-9

SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS
REDWOOD CITY CALIFORNIA

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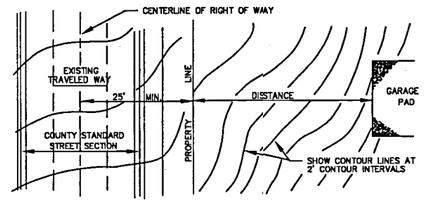
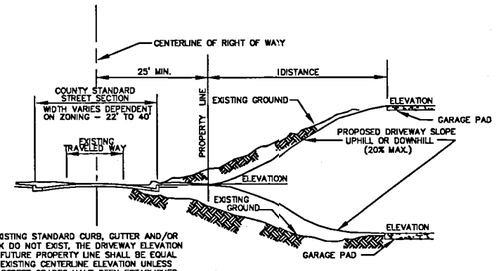


DRIVEWAY PLAN VIEW



NOTE:
WHEN EXISTING STANDARD CURB, GUTTER AND/OR SIDEWALK DO NOT EXIST, THE DRIVEWAY ELEVATION AT THE FUTURE PROPERTY LINE SHALL BE EQUAL TO THE EXISTING CENTERLINE ELEVATION UNLESS FUTURE STREET GRADES HAVE BEEN ESTABLISHED BY THE COUNTY.

DRIVEWAY PROFILLE VIEW

D-7

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REDWOOD CITY CALIFORNIA

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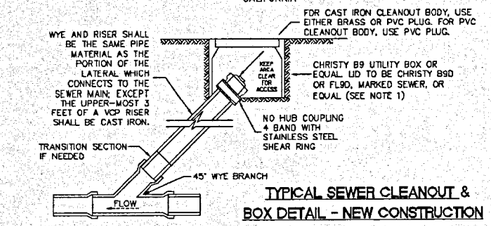
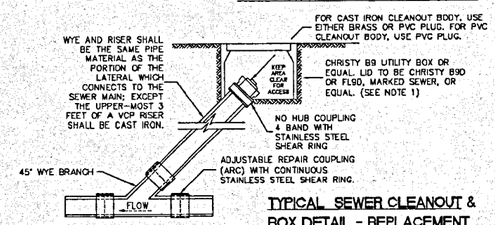


TYPICAL SEWER CLEANOUT & BOX DETAIL - NEW CONSTRUCTION



TYPICAL SEWER CLEANOUT & BOX DETAIL - REPLACEMENT

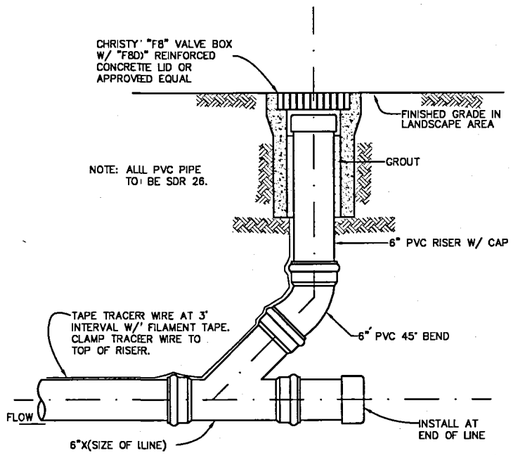
NOTES:
1. WHEN BOX IS SUBJECT TO TRAFFIC LOADING, PROVIDE CAST IRON LID.
2. BOX TO BE PLACED SUCH THAT CLEANOUT CAP CAN BE EASILY REMOVED. SEE ILLUSTRATION.
3. PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING LATERAL FROM THE PROPERTY STRUCTURE TO DISTRICT MAIN. DISTRICT PROVIDES COURTESY SERVICE FROM DISTRICT STANDARD PROPERTY LINE CLEANOUT TO THE MAIN.
4. SDR-26 WYE, RISER, CLEANOUT BODY AND CAP CAN BE USED ONLY WHEN LATERAL FROM PROPERTY LINE TO MAIN LINE IS REPLACED WITH SDR-26.
5. WHEN ENTIRE LATERAL IS REPLACED, LATERAL FROM PROPERTY LINE CLEANOUT TO MAIN LINE SHALL HAVE A 14-1-UF GUAGE MINIMUM SINGLE CONDUCTOR TRACER WIRE TAPED TO THE ENTIRE LENGTH OF THE PIPE.

CONSTRUCTION OF A STANDARD CLEANOUT REQUIRES MULTIPLE INSPECTIONS BY DISTRICT PERSONEL:
1. FIRST INSPECTION - TO INSPECT WYE AND RISER. WYE AND RISER MUST BE EXPOSED.
2. SECOND INSPECTION - TO INSPECT PLACEMENT OF BOX, LID AND LOCATION OF CLEANOUT WITHIN BOX.

C-3

6 SAN MATEO COUNTY OVERFLOW AND BACKFLOW DEVICE DETAIL

NTS

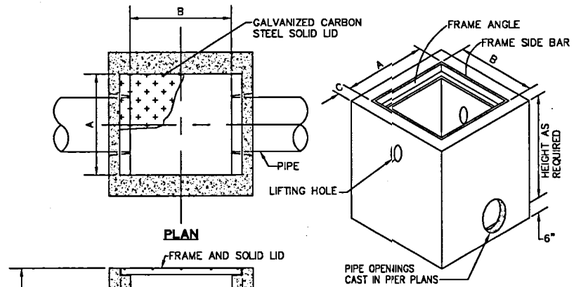


3 CLEANOUT

NTS

5 SAN MATEO COUNTY DRIVEWAY PLAN AND PROFILE VIEWS

NTS



CENTRAL PRECAST

MODEL	A	B	C
CP1212	12	12	4

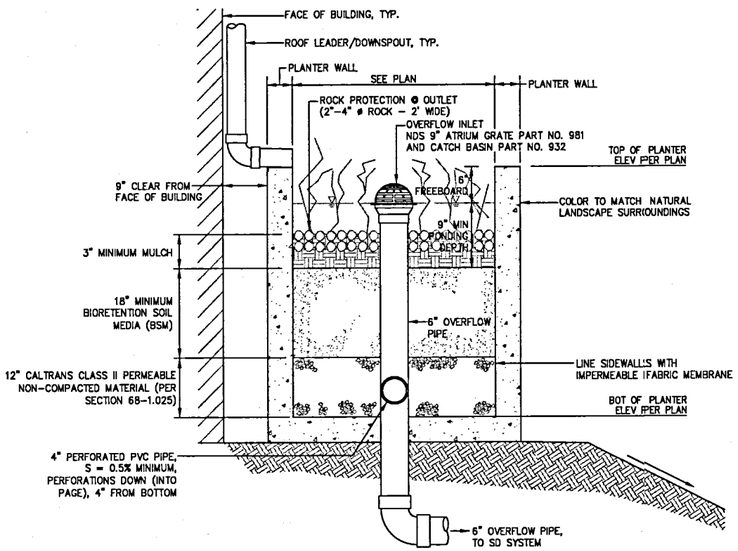
NOTES:
1. DROP INLET SHALL BE CENTRAL PRECAST OR APPROVED EQUAL.
2. AN ENGINEERED PRECAST DROP INLET UNIT CAN BE USED AS AN ALTERNATE.

2 DROP INLET

NTS

4 SAN MATEO COUNTY TYPICAL SEWER CLEANOUT & BOX DETAIL

NTS



1 FLOW-THROUGH PLANTER (FTP)

NTS

BKF ENGINEERS
255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE: (650) 482-6300
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ENGINEERS | SURVEYORS | PLANNERS

REGISTERED PROFESSIONAL ENGINEER — NOLAN K. HAGA — No. 034371 — CIVIL — STATE OF CALIFORNIA

HIGHLAND ESTATES
LOT 7 IMPROVEMENT PLANS
CONSTRUCTION DETAILS
CITY OF SAN MATEO — SAN MATEO COUNTY — CALIFORNIA

No.	Revisions

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REDWOOD CITY
CALIFORNIA

DRAWN BY: M.L.
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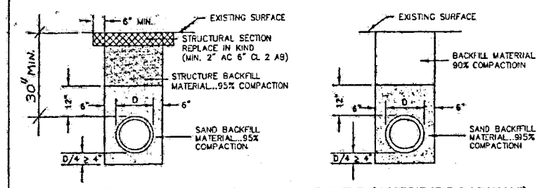


TYPE A (IN ROADWAY) TYPE B (OUTSIDE ROADWAY)

NOTES

1. SAND.... MATERIAL FREE FROM ORGANIC MATTER AND CLAY WITH A SIEVE GRADATION BY WEIGHT AS FOLLOWS:

SIEVE SIZE	% PASSING SIEVE
No. 4	100
No. 200	0-5

2. STRUCTURE BACKFILL MATERIAL.... MATERIAL WITH SAND EQUIVALENT NOT LESS THAN 20 AND SIEVE GRADATION BY WEIGHT AS FOLLOWS:

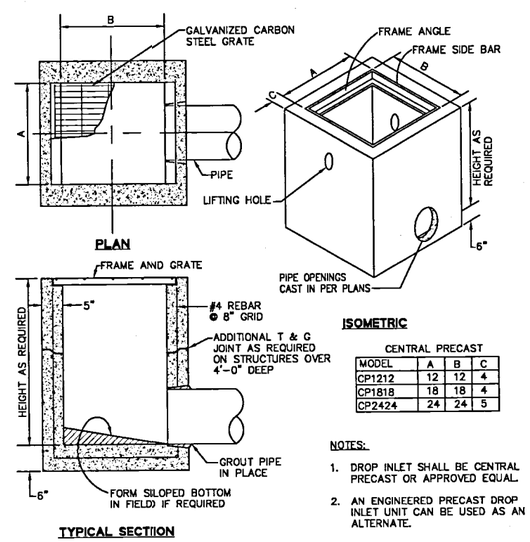
SIEVE SIZE	% PASSING SIEVE
3"	100
No. 4	35-100
No. 30	20-100

3. BACKFILL MATERIAL.... MATERIAL FROM EXCAVATION, FREE FROM STONES OR LUMPS EXCEEDING 3 INCHES GREATEST DIMENSION, ORGANIC MATTER, OR OTHER UNSATISFACTORY MATERIAL.

STANDARD TRENCH BACKFILL
AND BEDDING DETAIL

W-10

2 SAN MATEO COUNTY
STANDARD TRENCH BACKFILL & BEDDING DETAIL
NTS



PLAN

ISOMETRIC

TYPICAL SECTION

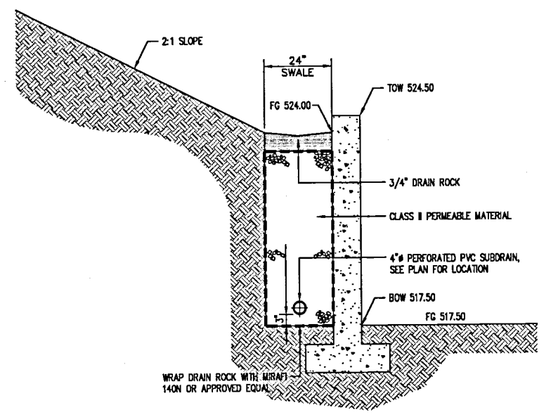
CENTRAL PRECAST

MODEL	A	B	C
CP1212	12	12	4
CP1818	18	18	4
CP2424	24	24	5

NOTES:

1. DROP INLET SHALL BE CENTRAL PRECAST OR APPROVED EQUAL.
2. AN ENGINEERED PRECAST DROP INLET UNIT CAN BE USED AS AN ALTERNATE.

3 DROP INLET
NTS



1 SUBDRAIN
NTS

BKF ENGINEERS | SURVEYORS | PLANNERS
255 SHORELINE DRIVE, SUITE 200
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REGISTERED PROFESSIONAL ENGINEER
ROLAND W.V. NAGA
No. C043971
CIVIL
STATE OF CALIFORNIA

HIGHLAND ESTATES
LOT 7 IMPROVEMENT PLANS
CONSTRUCTION DETAILS

CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

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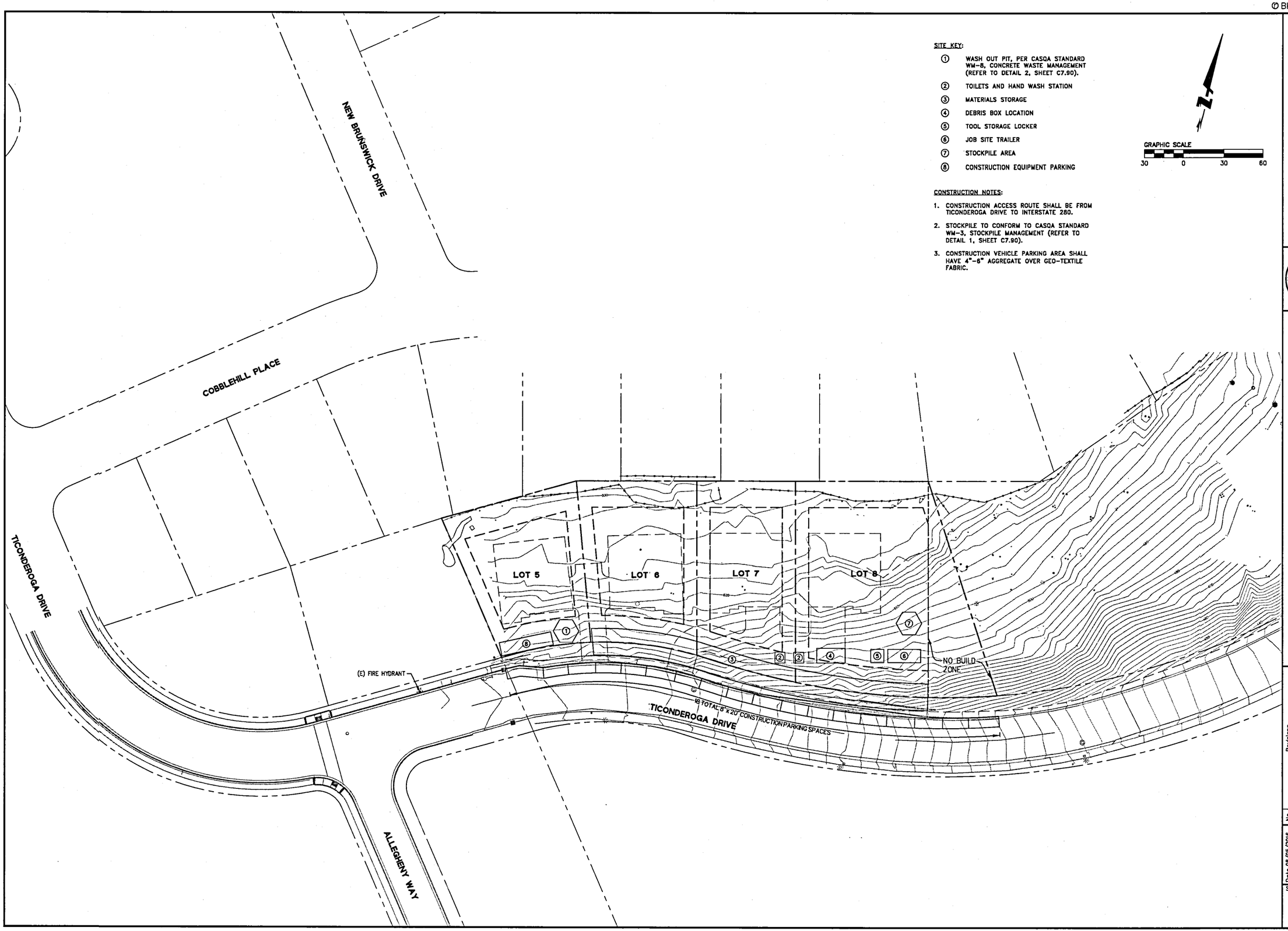


SITE KEY:

1. WASH OUT PIT, PER CASQA STANDARD WM-8, CONCRETE WASTE MANAGEMENT (REFER TO DETAIL 2, SHEET C7.90).
2. TOILETS AND HAND WASH STATION
3. MATERIALS STORAGE
4. DEBRIS BOX LOCATION
5. TOOL STORAGE LOCKER
6. JOB SITE TRAILER
7. STOCKPILE AREA
8. CONSTRUCTION EQUIPMENT PARKING

CONSTRUCTION NOTES:

1. CONSTRUCTION ACCESS ROUTE SHALL BE FROM TICONDEROGA DRIVE TO INTERSTATE 280.
2. STOCKPILE TO CONFORM TO CASQA STANDARD WM-3, STOCKPILE MANAGEMENT (REFER TO DETAIL 1, SHEET C7.90).
3. CONSTRUCTION VEHICLE PARKING AREA SHALL HAVE 4"-6" AGGREGATE OVER GEO-TEXTILE FABRIC.

BKF ENGINEERS / SURVEYORS / PLANNERS
255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE: (650) 482-6300
FAX: (650) 482-6399

REGISTERED PROFESSIONAL ENGINEER
KOLAND R.V. MAGA
No. C043971
CIVIL
STATE OF CALIFORNIA

HIGHLAND ESTATES
LOT 7 IMPROVEMENT PLANS
LOGISTICS PLAN

CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

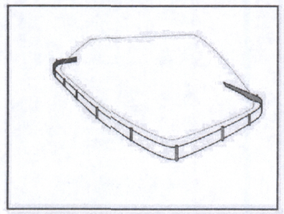
No.	Revisions

Date 08/05/2016
Scale 1"=30'
Design JT
Drawn MD
Approved RH
Job No 950168-20

Sheet Number:
C7.80
OF

DRAWING NAME: J:\Eng95\950168\dwg\CD\Lot_7\C7.80-HECDLP.dwg
PLOT DATE: 07-29-16 PLOTTED BY: trat

Stockpile Management WM-3



Categories

EC	Erosion Control	
SE	Sediment Control	☒
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	☒
WM	Waste Management and Materials Pollution Control	☑

Legend:
☑ Primary Category
☒ Secondary Category

Targeted Constituents

Sediment	☑
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	
Oil and Grease	☑
Organics	☑

Potential Alternatives

None

Description and Purpose

Stockpile management proocoduras and practices are designed to reduce or eliminate air and stormwater pollution from stockpiles of soil, soil amendments, sand, paving materials such as portland cement concrete (PCC) rubbie, asphalt concrete (AC), asphalt concrete rubble, aggregate base, aggregate sub base or pre-mixed aggregate, asphalt mulder (so called "cold mix" asphalt), and pressure treated wood.

Suitable Applications

Implement in all projects that stockpile soil and other loose materials.

Limitations

- Plastic sheeting as a stockpile protection is temporary and hard to manage in windy conditions. Where plastic is used, consider use of plastic tarps with nylon reinforcement which may be more durable than standard sheeting.
- Plastic sheeting can i increase runoff volums dus to lack of infiltration and potentially cause perimeter control failure.
- Plastic sheeting breaks down faster in sunlight.
- The use of plastic materials should be avoided when feasible and photodegradable plastics should not be used.

Implementation

Protection of stockpiles i is a year-round requirement. To properly manage stockpiles:

Stockpile Management WM-3

- On larger sites, a minimum of 50 ft separation from concentrated flows of stormwater, drainage courses, and inlets is recommended.
- All stockpiles are required to be protected immediately if they are not scheduled to be used within 14 days.
- Protect all stockpiles from stormwater run-on using temporary perimeter sediment barriers such as compost berms (SE-13), temporary silt dikes (SE-12), fiber rolls (SE-5), silt fences (SE-1), sandbags (SE-8), gravel bags (SE-6), or biofilter bags (SE-14). Refer to the individual fact sheet for each of these controls for installation information.
- Implement wind erosion control practices as appropriate on all stockpiled material. For specific information, see WE-1, Wind Erosion Control.
- Manage stockpiles of contaminated soil in accordance with WM-7, Contaminated Soil Management.
- Place bagged materials on pallets and under cover.
- Ensure that stockpile coverings are installed securely to protect from wind and rain.
- Some plastic covers withstand weather and sunlight better than others. Select cover materials or methods based on anticipated duration of use.

Protection of Non-Active Stockpiles

Non-active stockpiles of the identified materials should be protected furtiver as follows:

Soil stockpiles

- Cover and project soil stockpiles with soil stabilization measures and a temporary perimeter sediment barrier at all times.
- Consider temporary vegetation for topsoil piles that will be stockpiled for extended periods.

Stockpiles of Portland cement concrete rubble, asphalt concrete, asphalt concrete rubble, aggregate base, or aggregate sub base

- Provide covers and protect these stockpiles with a temporary perimeter sediment barrier at all times.

Stockpiles of "cold mix"

- Cover cold mix stockpiles and place them on plastic sheeting (or comparable material) and surround the stockpiles with a berm all times.

Stockpiles of fly ash, stucco, hydrated lime

- Cover stockpiles of materials that may raise the pH of runoff (i.e., basic materials) with plastic and surround the stockpiles with a berm at all times.

Stockpile Management WM-3

Stockpiles/Storage of wood (Pressure treated with chromated copper arsenate or ammoniacal copper zinc arsenate)

- Cover treated wood with plastic sheeting (or comparable material) and surround with a berm at all times.

Protection of Active Stockpiles

Active stockpiles of the identified materials should be protected as follows:

- All stockpiles should be covered and protected with a temporary linear sediment barrier prior to the onset of precipitation.
- Stockpiles of "cold mix" and treated wood, and basic materials should be placed on and covered with plastic sheeting or comparable material and surrounded by a berm prior to the onset of precipitation.
- The downstream perimeter of an active stockpile should be protected with a linear sediment barrier or berm and runoff should be diverted around or away from the stockpile on the upstream perimeter.

Costs

For cost information associated with stockpile protection refer to the individual erosion or sediment control BMP fact sheet considered for implementation (For example, refer to SE-1 Silt Fence for installation of silt fence around the perimeter of a stockpile.)

Inspection and Maintenance

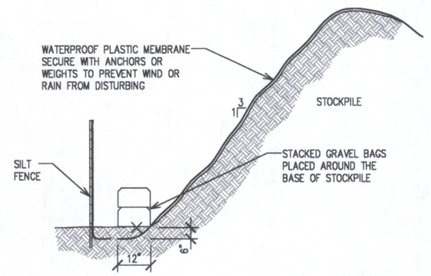
- Stockpiles must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- It may be necessary to inspect stockpiles covered with plastic sheeting more frequently during certain conditions (for example, high winds or extreme heat).
- Repair and/or replace perimeter controls and covers as needed to keep them functioning properly.
- Sediment shall be removed when it reaches one-third of the barrier height.

References

Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.

WM-3 – STOCKPILE MANAGEMENT

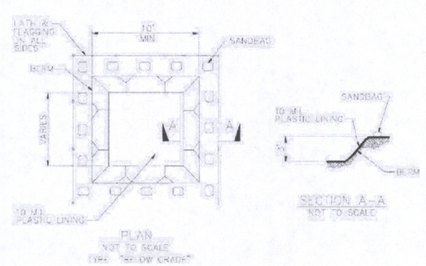
NTS



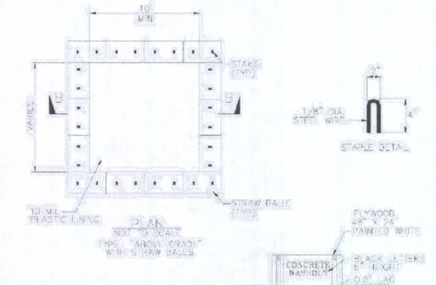
1 — **STOCKPILE COVERING**

(PER CASQA STANDARD WM-3, STOCKPILE MANAGEMENT, SEE LEFT)
NTS

Concrete Waste Management WM-8

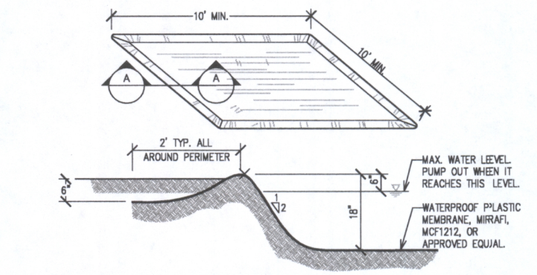


Concrete Waste Management WM-8



WM-8 – CONCRETE WASTE MANAGEMENT

NTS



2 — **TEMPORARY WASHOUT PIT**

(PER CASQA STANDARD WM-8, CONCRETE WASTE MANAGEMENT, SEE ILEFT)
NTS

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REGISTERED PROFESSIONAL ENGINEER RICHARD W.F. NAGA No. C34971 CIVIL STATE OF CALIFORNIA

HIGHLAND ESTATES
LOT 7 IMPROVEMENT PLANS
CASQA STANDARD DETAILS

CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

No.	Revisions

Date 08/05/2016
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IMPROVEMENT PLANS FOR

HIGHLAND ESTATES - LOT 8 TICONDEROGA DRIVE

COUNTY OF SAN MATEO, CALIFORNIA

SHEET INDEX

SHEET NO	DESCRIPTION
C8.10	TITLE SHEET
C8.20	GENERAL NOTES, LEGEND AND ABBREVIATIONS
C8.30	SITE AND CLEARING, CONSTRUCTION AND GRADING PLANS
C8.40	UTILITY PLAN AND CROSS SECTION
C8.50	EROSION CONTROL PLANS
C8.60	EROSION CONTROL DETAILS AND NOTES
C8.70	CONSTRUCTION DETAILS
C8.71	CONSTRUCTION DETAILS
C8.80	LOGISTICS PLAN
C8.90	CASQA STANDARD DETAILS

EARTHWORK

CUT	8100	CY
FILL	3100	CY
NET	5100	CY CUT

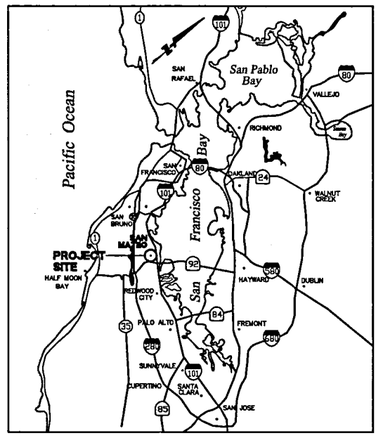
EARTHWORK NOTES:

1. THE QUANTITIES SHOWN ABOVE EXCLUDE EARTHWORK FROM GEOTECHNICAL SLOPE REMEDIATION ACTIVITIES PER CONDITION OF APPROVAL ITEM NO. 4.M, INCLUDING EARTHWORK SWELLING AND SHRINKAGE FACTORS ASSOCIATED WITH GEOTECHNICAL SLOPE REMEDIATION MITIGATION.

2. THE EARTHWORK QUANTITIES SHOWN ABOVE ARE IN-PLACE QUANTITIES AND HAVE BEEN ESTIMATED BY THE ENGINEER WITH THE FOLLOWING ASSUMPTIONS:

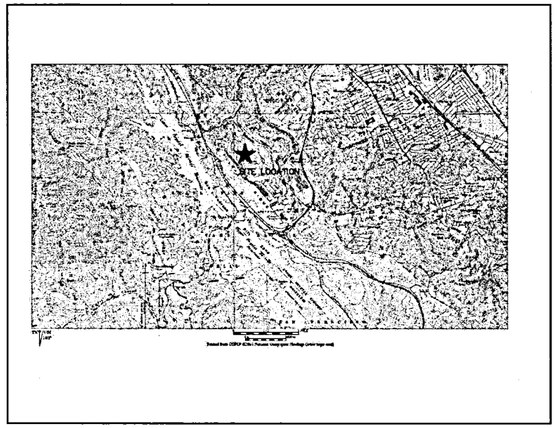
   A. EARTHWORK: QUANTITIES DO NOT ACCOUNT FOR SITE STRIPINGS.
   B. THE UNIT PAD SECTION IS ASSUMED TO BE A 12" THICK CONCRETE SECTION.
   C. EARTHWORK: QUANTITIES DO NOT ACCOUNT FOR FILL SHRINKAGE FACTORS.
   D. EARTHWORK: QUANTITIES DO NOT ACCOUNT FOR UTILITY TRENCHING AND SPOILS.
   E. EARTHWORK: QUANTITIES DO NOT ACCOUNT FOR SOIL STABILIZATION FACTORS AND LANDSCAPING PLANTING SOILS.
   F. EARTHWORK: QUANTITIES DO NOT ACCOUNT FOR RETAINING WALLS AND BUILDING FOOTINGS AND BACKFILL.

2. ACTUAL QUANTITIES MAY VARY DUE TO FIELD CONDITIONS OR CONSTRUCTION TECHNIQUES. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES BASED UPON APPROVED PLANS AND INDEPENDENT CALCULATIONS.



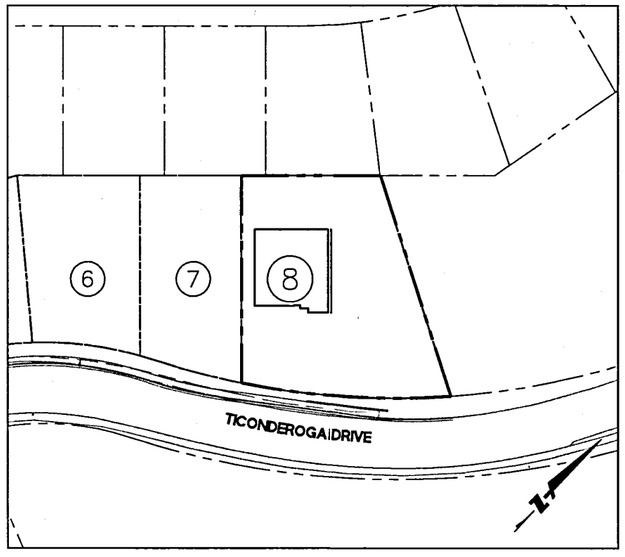
VICINITY MAP

NTS



LOCATION MAP

NTS



SITE PLAN

SCALE: 1" = 50'

PROJECT DATA

SITE AREA:	20,394 SF
EXISTING LAND USE:	UNDEVELOPED LAND
PROPOSED USE:	RESIDENTIAL (LOT 8)
EXISTING ZONE:	RMD – RESOURCE MANAGEMENT DISTRICT
PROPOSED ZONE:	R-1
PROPOSED USE:	1 RESIDENTIAL LOT
OWNER:	TICONDEROGA PARTNERS, A CALIFORNIA LIMITED LIABILITY CORPORATION C/O THE CHAMBERLAIN GROUP 655 SKYWAY, SUITE 230 SAN CARLOS, CA 94070 (650) 595-5582 ATTN: JACK CHAMBERLAIN
DEVELOPER:	THE CHAMBERLAIN GROUP 655 SKYWAY, SUITE 230 SAN CARLOS, CA 94070 (650) 595-5582 ATTN: JACK CHAMBERLAIN
CIVIL ENGINEER:	BKF ENGINEERS 255 SHORELINE DRIVE, SUITE 200 REDWOOD CITY, CA 94065 (650) 482-6300
GEOTECHNICAL ENGINEER:	CORNERSTONE EARTH GROUP 1259 OAKMEAD PARKWAY SUNNYVALE, CA 94085 (408) 245-4600
WATER SUPPLY:	CAL WATER SERVICE 341 N. DELAWARE STREET SAN MATEO, CA 94401-1808 (650) 343-1808
SEWAGE DISPOSAL:	CITY OF SAN MATEO & CRYSTAL SPRINGS COUNTY SANITATION DISTRICT
GAS & ELECTRIC	PG&E
TELEPHONE:	AT&T
FIRE PROTECTION:	CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION
CABLE:	COMCAST
STORM DRAINAGE:	COUNTY OF SAN MATEO CITY OF SAN MATEO
TOPOGRAPHIC BASE MAP:	AERO-GEODIC COROP. JOB NO. 950168 DATE OF PHOTOGRAPHY 9/18/87
EROSION CONTROL POINT OF CONTACT:	NOEL CHAMBERLAIN, NEXGEN BUILDERS INC. 225 DEMETER STREET EAST PALO ALTO, CA 94303 PHONE #: (650) 322-5800 CELL #: (650) 444-3089 EMAIL: noel@nexgenbuilders.com

ENGINEER'S STATEMENT

THESE IMPROVEMENT PLANS HAVE BEEN PREPARED BY ME OR UNDER MY DIRECTION IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICE.

ROLAND N.V. HAGA
R.C.E NO. 43971
BKF ENGINEERS

DATE

REGISTERED PROFESSIONAL ENGINEER
ROLAND N.V. HAGA
No. C043971
CIVIL
STATE OF CALIFORNIA

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FAX: (650) 482-6399

BKF ENGINEERS | SURVEYORS | PLANNERS

HIGHLAND ESTATES
LOT 8 IMPROVEMENT PLANS
TITLE SHEET
SAN MATEO COUNTY CALIFORNIA

CITY OF SAN MATEO

Revisions	No.

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PLOT DATE: 08-02-16 PLOTTED BY: trat

NOTES:

I. GENERAL NOTES

1. WORK SHALL CONFORM TO THE COUNTY OF SAN MATEO PUBLIC WORKS STANDARD DRAWINGS FOR PUBLIC IMPROVEMENTS, REVISED SEPTEMBER 2007 AND THE SAN MATEO COUNTY SEWER AND SANITATION DISTRICTS STANDARD SPECIFICATIONS, DATED JUNE 1995.
2. PERFORM WORK IN CONFORMANCE WITH THE RECOMMENDATION OF THE PROJECT GEOTECHNICAL ENGINEERING REPORT TITLED "UPDATED GEOTECHNICAL INVESTIGATION, HIGHLAND ESTATES LOTS 5 THROUGH 11, TICONDEROGA DRIVE/COBBLEHILL PLACE/COMPENS WAY, SAN MATEO COUNTY, CALIFORNIA" PREPARED BY CORNERSTONE EARTH GROUP, DATED OCTOBER 30, 2015. GRADING WORK WILL BE SUBJECT TO APPROVAL OF GEOTECHNICAL ENGINEER.
3. ARRANGE FOR REQUIRED INSPECTIONS BY COUNTY ENGINEER. NO DELAY OF WORK CLAIM WILL BE ALLOWED DUE TO CONTRACTOR'S FAILURE TO ARRANGE FOR REQUIRED COUNTY INSPECTIONS IN ADVANCE. PROVIDE NOTICE TO COUNTY ENGINEER A MINIMUM OF 2 WORKING DAYS IN ADVANCE OF REQUIRED INSPECTIONS.
4. REVISIONS TO THESE PLANS MUST BE REVIEWED AND APPROVED IN WRITING BY ENGINEER, WHO WILL OBTAIN APPROVAL FROM COUNTY ENGINEER PRIOR TO CONSTRUCTION OF AFFECTED ITEMS. REVISIONS SHALL BE ACCURATELY SHOWN ON REVISED PLANS, WHICH SHALL BE REVIEWED AND APPROVED BY THE ENGINEER AND COUNTY ENGINEER PRIOR TO INSTALLATION OF THE IMPROVEMENTS.
5. REPLACE OR REPAIR EXISTING UTILITIES, IMPROVEMENTS OR FEATURES DAMAGED, REMOVED, OR DISTURBED BY CONSTRUCTION TO THEIR ORIGINAL CONDITION, WHETHER SHOWN ON PLANS OR NOT.
6. REPLACE STREET MONUMENTS, LOT CORNERS PIPES AND OTHER PERMANENT MONUMENTS DISTURBED DURING CONSTRUCTION. MONUMENTS SHALL BE SET BY A SURVEYOR REGISTERED IN THE STATE OF CALIFORNIA.
7. PREPARE TRAFFIC CONTROL PLAN AND OBTAIN APPROVAL FROM COUNTY ENGINEER BEFORE COMMENCING WORK. PROVIDE FLAG MEN, CONES, BARRICADES AND OTHER TRAFFIC CONTROL MEASURES NECESSARY TO PROVIDE SAFE LANE CLOSURE IN CONFORMANCE WITH CALTRANS STANDARDS AND AS APPROVED BY COUNTY ENGINEER.
8. PEDESTRIAN TRAFFIC CONTROL, TO BE PROVIDED WHEN EXISTING SIDEWALKS CANNOT BE MAINTAINED DURING CONSTRUCTION.
9. DO NOT LEAVE TRENCHES OPEN OVERNIGHT IN EXISTING STREET AREAS. BACKFILL OR COVER OPEN TRENCHES AT THE END OF WORK EVERY WORK DAY.
10. PREPARE SHORING PLAN AND SUBMIT TO THE COUNTY ENGINEER FOR REVIEW AND APPROVAL. ADEQUATELY SHORE EXCAVATIONS TO PREVENT EARTH FROM SLIDING OR SETTLING AND TO PROTECT EXISTING ADJACENT IMPROVEMENTS FROM DAMAGE. DAMAGE RESULTING FROM A LACK OF ADEQUATE SHORING SHALL BE THE CONTRACTOR'S RESPONSIBILITY. PROVIDE SHORING IN CONFORMANCE WITH APPLICABLE CONSTRUCTION SAFETY ORDERS OF THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY AND OSHA WHERE EXCAVATIONS ARE 5 FEET OR MORE IN DEPTH.
11. IMPLEMENT CONSTRUCTION DUST CONTROL MEASURES TO REDUCE PARTICULATE GENERATION TO A LESS THAN SIGNIFICANT LEVEL. PROVIDE DUST CONTROL IN CONFORMANCE WITH BAY AREA AIR QUALITY MANAGEMENT DISTRICT MINIMUM REQUIREMENTS. IMPLEMENT THE FOLLOWING CONSTRUCTION PRACTICES EXCEPT WHEN IT IS RAINING.
    - 11.A. WATER ACTIVE EXTERIOR SOIL AREAS AT LEAST TWICE DAILY.
    - 11.B. COVER TRUCKS HAULING SOIL, SAND AND OTHER LOOSE MATERIAL OR PROVIDE 2 FEET OF FREEBOARD.
    - 11.C. PAVE, APPLY WATER THREE TIMES DAILY OR APPLY NON-TOXIC SOIL STABILIZER ON UNPAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS.
    - 11.D. SWEEP PAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS DAILY.
    - 11.E. APPLY HYDROSEED OR NON-TOXIC SOIL STABILIZER TO INACTIVE CONSTRUCTION AREAS.
    - 11.F. ENCLOSE, COVER, WATER TWICE DAILY OR APPLY NON-TOXIC SOIL STABILIZER TO EXPOSED SOIL STOCKPILES.
    - 11.G. INSTALL SANDBAGS AND OTHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
    - 11.H. LIMIT TRAFFIC SPEED ON UNPAVED ROADS TO 15 MPH.
    - 11.I. REPLANT VEGETATION IN DISTURBED AREAS AS QUICKLY AS POSSIBLE.
12. KEEP STREETS CLEAN OF DIRT, MUD AND OTHER CONSTRUCTION DEBRIS. CLEAN AND SWEEP STREETS ON A DAILY BASIS DURING THE WORK WEEK.
13. SHOULD IT APPEAR THAT THE WORK IS NOT SUFFICIENTLY DETAILED OR SPECIFIED IN CONSTRUCTION DOCUMENTS, NOTIFY ENGINEER AND OBTAIN CLARIFICATION BEFORE PROCEEDING WITH WORK IN QUESTION.
14. CONSTRUCTION STAKING SHALL BE DONE BY A CIVIL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF CALIFORNIA.
15. IF BKF ENGINEERS IS RETAINED TO PROVIDE CONSTRUCTION STAKING SERVICES, CONTRACTOR WILL BE PROVIDED WITH ONE SET OF SURVEY STAKES FOR LAYOUT PURPOSES. PRESERVE AND PROTECT THESE STAKES UNTIL THEY ARE NO LONGER NEEDED. RESTAKING SHALL BE AT CONTRACTOR'S EXPENSE.
16. MATCH EXISTING PAVEMENT, CURB AND GUTTER, SIDEWALK, ADJACENT LANDSCAPE AND OTHER IMPROVEMENTS WITH SMOOTH TRANSITION TO AVOID ABRUPT OR APPARENT CHANGES IN GRADIES, CROSS SLOPES, LOW SPOTS OR HAZARDOUS CONDITIONS.
17. VISIT SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND OVERALL PROJECT REQUIREMENT PRIOR TO BIDDING PROJECT.
18. OBTAIN AND PAY FOR PERMITS AND LICENSES AS REQUIRED TO PERFORM WORK WITHIN THE COUNTY OF SAN MATEO PRIOR TO START OF WORK. PERMITS MAY INCLUDE ENCROACHMENT PERMIT FOR WORK WITHIN COUNTY RIGHT-OF-WAY AND GRADING/UTILITY PERMIT.
19. CONTRACTOR IS RESPONSIBLE FOR TRAFFIC AND PEDESTRIAN CONTROL DURING CONSTRUCTION.
20. OBTAIN APPROVAL OF IMPORTED SOIL MATERIAL FROM GEOTECHNICAL ENGINEER PRIOR TO DISTRIBUTING MATERIAL OVER SITE.
21. PROTECT ADJOINING PREMISES, TREES, LANDSCAPING, UTILITIES, SIDEWALKS, STREETS AND OTHER FEATURES FROM DAMAGE BY CONTRACTOR'S OPERATIONS. REPAIR, REPLACE OR CLEAN ADJOINING PREMISES, TREES, LANDSCAPING, UTILITIES, SIDEWALKS, STREETS AND OTHER FEATURES TO SATISFACTION OF OWNER.
22. MAINTAIN AND MANAGE CONSTRUCTION MATERIALS, EQUIPMENT AND VEHICLES AT THE CONSTRUCTION SITE.
23. NOTIFY COUNTY ENGINEER A MINIMUM OF 24 HOURS PRIOR TO STARTING WORK ON OFF-SITE DRAINAGE AND SEWER FACILITIES, GRADING, PAVING, OR WORK IN THE COUNTY RIGHT-OF-WAY.
24. MAKE EFFORTS TO MINIMIZE CONSTRUCTION NOISE.
    - 24.A. MAINTAIN EQUIPMENT USED ON SITE IN GOOD MECHANICAL CONDITION TO MINIMIZE NOISE CREATED BY FAULTY OR POORLY MAINTAINED ENGINE, DRIVE-TRAIN AND OTHER COMPONENTS.
    - 24.B. EQUIPMENT EXCEEDING 110 DBA MEASURED 25 FEET FROM THE PIECE OF EQUIPMENT WILL NOT BE ALLOWED ON SITE.
    - 24.C. SELECT APPROPRIATE EQUIPMENT TO MINIMIZE NOISE GENERATION. USE THE FOLLOWING TECHNIQUES TO MINIMIZE NOISE GENERATION SUBJECT TO EQUIPMENT AVAILABILITY AND COST CONSIDERATIONS. USE SCRAPERS AS MUCH AS POSSIBLE FOR EARTH REMOVAL, RATHER THAN NOISIER LOADERS AND HAUL TRUCKS. USE BACKHOES FOR BACKFILLING AS IT IS QUIETER THAN DOZERS OR LOADERS. USE MOTOR GRADERS RATHER THAN BULLDOZERS FOR FINAL GRADING.

II. EXISTING CONDITIONS

1. EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS IS BASED UPON A FIELD TOPOGRAPHIC SURVEY OF THE PROJECT SITE BY BKF ENGINEERS, DATED JUNE 2009. ACTUAL CONDITIONS ENCOUNTERED ON SITE MAY VARY FROM THOSE SHOWN ON THE PLANS. CONTRACTOR SHALL REVIEW CONSTRUCTION DOCUMENTS AND CONDUCT THEIR OWN INVESTIGATIONS TO UNDERSTAND AND VERIFY EXISTING CONDITIONS AT THE SITE.
2. EXISTING SUBSURFACE IMPROVEMENTS AND UTILITIES SHOWN ON THESE PLANS WERE TAKEN FROM RECORD INFORMATION KNOWN TO THE ENGINEER AND FIELD SURVEY OF ABOVE GRADE FEATURES. THESE PLANS ARE NOT MEANT TO BE A FULL CATALOG OF EXISTING SUBSURFACE CONDITIONS. CONDUCT FIELD INVESTIGATION TO VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING SUBSURFACE IMPROVEMENTS AND UTILITIES, WHETHER SHOWN ON PLANS OR NOT, PRIOR TO START OF EXCAVATION. IF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THESE PLANS ARE DISCOVERED, NOTIFY ENGINEER IMMEDIATELY AND REQUEST DISCREPANCY BE RESOLVED.
3. VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AFFECTING UTILITIES. POTHOLE WHERE NEEDED TO VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES.
4. CONTACT USA (UNDERGROUND SERVICES ALERT) AT 1-800-227-2600, AND AFFECTED UTILITY COMPANIES A MINIMUM OF 2 WORKING DAYS PRIOR TO STARTING WORK TO REQUEST UTILITIES BE MARKED.

III. DEMOLITION

1. REMOVE FROM SITE AND DISPOSE OF IN LAWFUL MANNER EXISTING STRUCTURES, UTILITIES, AND OTHER FEATURES NOT REMOVED DURING DEMOLITION OR ROUGH GRADING AND ENCOUNTERED DURING WORK ON SITE.
    - 1.A. REMOVE WOOD OR CONCRETE STRUCTURES, SLABS, FOOTINGS, GRADE BEAMS, DECKS, DOCKS, AND OTHER SIMILAR STRUCTURES.
    - 1.B. REMOVE LANDSCAPING, UTILITIES AND IRRIGATION LINES AS SPECIFIED BY GEOTECHNICAL ENGINEER.
    - 1.C. REMOVE ABANDONED IN-GROUND STRUCTURES, SUCH AS CULVERTS, UTILITY VAULTS, AND FOUNDATIONS AS SPECIFIED BY GEOTECHNICAL ENGINEER.

IV. DEWATERING

1. DEWATER AREAS COVERED WITH STANDING WATER PRIOR TO PLACEMENT OF FILL.
2. DISPOSE OF WATER FROM DEWATERING OPERATION IN CONFORMANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

V. UTILITIES

1. DO NOT OPERATE WATER VALVES OR OTHER WATER DISTRICT FACILITIES. REQUIRED OPERATION WILL BE PERFORMED BY UTILITY DISTRICT PERSONNEL ONLY. NOTIFY UTILITY DISTRICT 2 WORKING DAYS PRIOR TO REQUIRING FACILITY OPERATION.
2. PROVIDE MINIMUM 12 INCH VERTICAL CLEARANCE BETWEEN ADJACENT UTILITY PIPES AT UTILITY CROSSINGS UNLESS OTHERWISE NOTED.
3. COMPLETE ELECTRIC, GAS, TELEPHONE, CABLE AND OTHER JOINT TRENCH WORK IN CONFORMANCE WITH THE REQUIREMENTS OF THE RESPECTIVE UTILITY PROVIDER. NOTIFY UTILITY PROVIDER MINIMUM 2 WORKING DAYS PRIOR TO COMMENCING WORK. IF EXISTING WATER, SEWER, GAS OR OTHER UTILITY SERVICES ARE DISTURBED OR DAMAGED DURING CONSTRUCTION, NOTIFY UTILITY OWNER IMMEDIATELY.
4. PROTECT UTILITIES FROM DAMAGE CAUSED BY CONTRACTOR'S WORK.
5. PROVIDE UTILITY STRUCTURES IN PAVED AREAS SUITABLE FOR H-20 LOADING.
6. PIPE LENGTHS SHOWN ON PLANS ARE FOR ENGINEERING CALCULATIONS ONLY AND ARE NOT INTENDED AS BID QUANTITIES OR FOR ORDERING MATERIALS.
7. CONSTRUCT GRAVITY FLOW UTILITIES FROM DOWNSTREAM CONNECTION POINT TO UPSTREAM TERMINUS.
8. COORDINATE WITH COUNTY OF SAN MATEO AND CRYSTAL SPRINGS SANITATION DISTRICT FOR INSPECTION OF WORK ON DISTRICT FACILITIES.
9. ALL WATER LATERALS AND SERVICES SHALL BE INSTALLED TO THE STANDARDS OF THE CALIFORNIA WATER SERVICE COMPANY. EXISTING WATER MAINS OR LATERALS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AND TESTED TO THE SATISFACTION OF THE WATER COMPANY.

VI. EARTHWORK AND GRADING

1. OFF-SITE IMPORT FILL MATERIAL SHALL CONFORM TO THE SPECIFICATIONS AND THE REQUIREMENTS OF THE GEOTECHNICAL REPORT.
2. TOPSOIL, ROOTS, VEGETABLE MATTER, TRASH AND DEBRIS WILL NOT BE CONSIDERED ACCEPTABLE FILL MATERIAL.
3. REMOVE DEBRIS FROM AREAS OF EARTHWORK PRIOR TO PLACING FILL OR STARTING GRADING OPERATIONS.
4. PLACE AND COMPACT FILL MATERIAL AS RECOMMENDED IN GEOTECHNICAL REPORT. PLACE FILL MATERIAL IN MAXIMUM 8 INCH UNCOMPACTED THICKNESS. COMPACTION BY FLOODING, PONDING OR JETTING WILL NOT BE PERMITTED.
5. CONTRACTOR SHALL MAKE HIS OWN DETERMINATION OF EARTHWORK QUANTITIES.

VII RECORD DRAWINGS

1. KEEP ACCURATE RECORD OF THE FINAL LOCATION, ELEVATION AND DESCRIPTION OF WORK ON A COPY OF THE FINAL APPROVED CONSTRUCTION DOCUMENTS. NOTE THE LOCATIONS AND ELEVATIONS OF EXISTING IMPROVEMENTS ENCOUNTERED THAT VARY FROM THE LOCATIONS SHOWN ON THE IMPROVEMENT PLANS. PROVIDE COPY OF RECORD INFORMATION TO OWNER AT COMPLETION OF PROJECT AND WHEN REQUESTED.

VII. STATEMENT OF RESPONSIBILITY

1. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND), INDEMNIFY AND HOLD BOTH DESIGN PROFESSIONAL AND THE COUNTY OF SAN MATEO HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF EITHER THE DESIGN PROFESSIONAL OR THE COUNTY OF SAN MATEO, RESPECTIVELY.

IX. UNAUTHORIZED CHANGES AND USES

1. 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 REQUIRE WRITTEN APPROVAL OF THE COUNTY ENGINEER AND THE PREPARER OF THESE PLANS.

X. DRAWING LANGUAGE

1. NOTES AND CALLOUTS ON DRAWINGS MAY USE IMPERATIVE LANGUAGE. REQUIREMENTS EXPRESSED IMPERATIVELY ARE TO BE PERFORMED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

CONDITIONS OF APPROVAL NOTES

CONSTRUCTION NOTES

1. THE FIRST PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY. THE REMAINDER OF CONSTRUCTION EQUIPMENT (70 PERCENT), WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL BE REQUIRED TO USE EMULSIFIED FUELS.
2. THE SECOND PHASE OF CONSTRUCTION SHALL REQUIRE 100 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 2 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY AND 50 PERCENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS. THE REMAINING 20 PERCENT OF CONSTRUCTION EQUIPMENT, WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL USE EMULSIFIED FUELS.
3. FOR ALL LARGER VEHICLES, INCLUDING CEMENT MIXERS OR OTHER DEVICES THAT MUST BE DELIVERED BY LARGE TRUCKS, VEHICLES SHALL BE EQUIPPED WITH CARB LEVEL THREE VERIFIED CONTROL DEVICES.
4. WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
5. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
6. PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY NON-TOXIC SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
7. SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
8. SWEEP PUBLIC STREETS ADJACENT TO CONSTRUCTION SITES DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO THE STREETS.
9. HYDROSEED OR APPLY NON-TOXIC SOIL STABILIZERS TO INACTIVE CONSTRUCTION AREAS (PREVIOUSLY GRADED AREAS INACTIVE FOR TEN DAYS OR MORE).
10. ENCLOSE, COVER, WATER TWICE DAILY, OR APPLY NON-TOXIC SOIL BINDERS TO EXPOSED STOCKPILES (DIRT, SAND, ETC.). LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
11. LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
12. INSTALL SANDBAGS OR OTHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
13. REPLANT VEGETATION IN DISTURBED AREAS AS SOON AS POSSIBLE.
14. INSTALL WHEEL WASHERS FOR ALL EXITING TRUCKS OR WASH OFF THE TIRES OR TRACKS OF ALL TRUCKS AND EQUIPMENT LEAVING THE CONSTRUCTION SITE.
15. INSTALL WIND BREAKS AT THE WINDWARD SIDES OF THE CONSTRUCTION AREAS.
16. SUSPEND EXCAVATION AND GRADING ACTIVITIES WHEN WIND (AS INSTANTANEOUS GUSTS) EXCEEDS 25 MILES PER HOUR.

NOISE NOTES

1. EQUIPMENT AND TRUCKS USED FOR PROJECT GRADING AND CONSTRUCTION WOULD UTILIZE THE BEST AVAILABLE NOISE CONTROL TECHNIQUESS (E.G., IMPROVED EXHAUST MUFFLERS, EQUIPMENT REDESIGN, USE OF INTAKE SILENCERS, DUCTS, ENGINE ENCLOSURES, AND ACOUSTICALLY-ATTENUATING SHIELDS OR SHROUDS) IN ORDER TO MINIMIZE CONSTRUCTION NOISE IMPACTS.
2. EQUIPMENT USED FOR PROJECT GRADING AND CONSTRUCTION WOULD BE HYDRAULICALLY OR ELECTRICALLY POWERED IMPACT TOOLS (E.G., JACK HAMMERS AND PAVEMENT BREAKERS) WHEREVER POSSIBLE TO AVOID NOISE ASSOCIATED WITH COMPRESSED AIR EXHAUST FROM PNEUMATICALLY-POWERED TOOLS. COMPRESSED AIR EXHAUST SILENCERS WOULD BE USED ON OTHER EQUIPMENT. OTHER QUIETER PROCEDURES WOULD BE USED SUCH AS DRILLING RATHER THAN IMPACT EQUIPMENT WHENEVER FEASIBLE.
3. THE GRADING AND CONSTRUCTION ACTIVITY WOULD BE KEPT TO THE HOURS OF 7:00 AM TO 7:00 PM, MONDAY THROUGH FRIDAY. SATURDAY HOURS (8:00 AM TO 5:00 PM) ARE PERMITTED UPON THE DISCRETION OF COUNTY APPROVAL BASED ON INPUT FROM NEARBY RESIDENTS AND BUSINESSES. SATURDAY CONSTRUCTION (8:00 AM TO 5:00 PM) WOULD BE ALLOWED ONCE THE BUILDINGS ARE FULLY ENCLOSED. NOISE GENERATING GRADING AND CONSTRUCTION ACTIVITIES SHALL NOT OCCUR AT ANY TIME ON SUNDAYS, THANKSGIVING AND CHRISTMAS.
4. RESIDENTIAL PROPERTY OWNERS WITHIN 200 FEET OF PLANNED CONSTRUCTION AREAS SHALL BE NOTIFIED OF THE CONSTRUCTION SCHEDULE IN WRITING, PRIOR TO CONSTRUCTION; THE PROJECT SPONSOR SHALL DESIGNATE A "DISTURBANCE COORDINATOR" WHO SHALL BE RESPONSIBLE FOR RESPONDING TO ANY LOCAL COMPLAINTS REGARDING CONSTRUCTION NOISE; THE COORDINATOR (WHO MAY BE AN EMPLOYEE OF THE DEVELOPER OR GENERAL CONTRACTOR) SHALL DETERMINE THE CAUSE OF THE COMPLAINT AND SHALL REQUIRE THAT REASONABLE MEASURES WARRANTED TO CORRECT THE PROBLEM BE IMPLEMENTED; A TELEPHONE NUMBER OF THE NOISE DISTURBANCE COORDINATOR SHALL BE CONSPICUOUSLY POSTED AT THE CONSTRUCTION SITE FENCE AND ON THE NOTIFICATION SENT TO NEIGHBORS ADJACENT TO THE SITE.

ASBESTOS NOTES

1. IF NATURALLY OCCURRING ASBESTOS IS IDENTIFIED AT THE SITE, A SITE HEALTH AND SAFETY (H&S) PLAN INCLUDING METHODS FOR CONTROL OF AIRBORNE DUST SHALL BE PREPARED. THIS PLAN SHALL BE REVIEWED AND APPROVED BY THE COUNTY OF SAN MATEO PRIOR TO GRADING IN AREAS UNDERLAIN BY SERPENTINE-BEARING SOILS OR BEDROCK AND NATURALLY OCCURRING ASBESTOS. THE H&S PLAN SHALL STRICTLY CONTROL DUST-GENERATING EXCAVATION AND COMPACTION OF MATERIAL CONTAINING NATURALLY OCCURRING ASBESTOS. THE PLAN SHALL ALSO IDENTIFY SITE-MONITORING ACTIVITIES DEEMED NECESSARY DURING CONSTRUCTION (E.G., AIR MONITORING). WORKER MONITORING SHALL ALSO BE PERFORMED AS APPROPRIATE. THE PLAN SHALL DEFINE PERSONAL PROTECTION METHODS TO BE USED BY CONSTRUCTION WORKERS. ALL WORKER PROTECTION AND MONITORING SHALL COMPLY WITH PROVISIONS OF THE MINING SAFETY AND HEALTH ADMINISTRATION (MSHA) GUIDELINES, CALIFORNIA DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (DOSH), AND THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
2. IF NATURALLY OCCURRING ASBESTOS IS FOUND AT THE SITE, A SOIL MANAGEMENT PLAN SHALL BE DEVELOPED AND APPROVED BY THE COUNTY PLANNING DEPARTMENT TO PROVIDE DETAILED DESCRIPTIONS OF THE CONTROL AND DISPOSITION OF SOILS CONTAINING NATURALLY OCCURRING ASBESTOS. SERPENTINE MATERIAL PLACED AS FILL SHALL BE SUFFICIENTLY BURIED IN ORDER TO PREVENT EROSION BY WIND OR SURFACE WATER RUNOFF, OR EXPOSURE TO FUTURE HUMAN ACTIVITIES, SUCH AS LANDSCAPING OR SHALLOW TRENCHES. ADDITIONALLY, THE BAAQMD SHALL BE NOTIFIED PRIOR TO THE START OF ANY EXCAVATION IN AREAS CONTAINING NATURALLY OCCURRING ASBESTOS.

GRADING NOTES

1. NO GRADING SHALL BE ALLOWED DURING THE WINTER SEASON (OCTOBER 15 TO APRIL 30) TO AVOID POTENTIAL SOIL EROSION UNLESS APPROVED, IN WRITING, BY THE COMMUNITY DEVELOPMENT DIRECTOR. THE PROPERTY OWNERS SHALL SUBMIT A LETTER TO THE CURRENT PLANNING SECTION, AT LEAST TWO WEEKS PRIOR TO COMMENCEMENT OF GRADING, STATING THE DATE WHEN GRADING WILL BEGIN.

TREE PROTECTION NOTES

1. THE APPLICANT SHALL ESTABLISH AND MAINTAIN TREE PROTECTION ZONES THROUGHOUT THE ENTIRE LENGTH OF THE PROJECT. TREE PROTECTION ZONES SHALL BE DELINEATED USING 4-FOOT TALL ORANGE PLASTIC FENCING SUPPORTED BY POLES POUNDED INTO THE GROUND, LOCATED AS CLOSE TO THE DRIPLINES AS POSSIBLE WHILE STILL ALLOWING ROOM FOR CONSTRUCTION/GRADING TO SAFELY CONTINUE. THE APPLICANT SHALL MAINTAIN TREE PROTECTION ZONES FREE OF EQUIPMENT AND MATERIALS STORAGE AND SHALL NOT CLEAN ANY EQUIPMENT WITHIN THESE AREAS. SHOULD ANY LARGE ROOTS OR LARGE MASSES OF ROOTS NEED TO BE CUT, THE ROOTS SHALL BE INSPECTED BY A CERTIFIED ARBORIST OR REGISTERED FORESTER PRIOR TO CUTTING. ANY ROOT CUTTING SHALL BE MONITORED BY AN ARBORIST OR FORESTER AND DOCUMENTED. ROOTS TO BE CUT SHOULD BE SEVERED CLEANLY WITH A SAW OR TOPPERS. NORMAL IRRIGATION SHALL BE MAINTAINED, BUT OAKS SHOULD NOT NEED SUMMER IRRIGATION. THE ABOVE INFORMATION SHALL BE ON-SITE AT ALL TIMES.

VEGETATION REMOVAL/REPLACEMENT NOTES

1. VEGETATION REMOVED IN AREAS OUTSIDE OF BUILDING FOOTPRINTS, DRIVEWAYS, AND CONSTRUCTION ACCESS AREAS SHALL BE REPLACED WITH DROUGHT-TOLERANT, NON-INVASIVE PLANTS, IMMEDIATELY AFTER GRADING IS COMPLETE IN THAT AREA PRIOR TO THE ISSUANCE OF ANY BUILDING PERMITS. THE APPLICANT SHALL SUBMIT PHOTOGRAPHS DEMONSTRATING COMPLIANCE WITH THIS CONDITION TO THE CURRENT PLANNING SECTION, SUBJECT TO REVIEW AND APPROVAL BY THE COMMUNITY DEVELOPMENT DIRECTOR.
2. THE APPLICANT SHALL REPLACE ALL VEGETATION REMOVED IN ALL AREAS NOT COVERED BY CONSTRUCTION WITH DROUGHT-TOLERANT, NON-INVASIVE PLANTS, ONCE CONSTRUCTION IS COMPLETED. PRIOR TO THE CURRENT PLANNING SECTION'S FINAL APPROVAL OF ANY BUILDING PERMIT, THE APPLICANT SHALL SUBMIT PHOTOGRAPHS DEMONSTRATING COMPLIANCE WITH THIS CONDITION, SUBJECT TO REVIEW AND APPROVAL BY THE COMMUNITY DEVELOPMENT DIRECTOR.

DUST CONTROL NOTES

1. ALL GRADED SURFACES AND MATERIALS, WHETHER FILLED, EXCAVATED, TRANSPORTED OR STOCKPILED, SHALL BE WETTED, PROTECTED OR CONTAINED IN SUCH A MANNER AS TO PREVENT ANY SIGNIFICANT NUISANCE FROM DUST, OR SPILLAGE UPON ADJOINING WATER BODY, PROPERTY, OR STREETS. EQUIPMENT AND MATERIALS ON THE SITE SHALL BE USED IN SUCH A MANNER AS TO AVOID EXCESSIVE DUST. A DUST CONTROL PLAN MAY BE REQUIRED AT ANYTIME DURING THE COURSE OF THE PROJECT.
2. A DUST PALLIATIVE SHALL BE APPLIED TO THE SITE WHEN REQUIRED BY THE COUNTY. THE TYPE AND RATE OF APPLICATION SHALL BE RECOMMENDED BY THE SOILS ENGINEER AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS, THE PLANNING AND BUILDING DEPARTMENT'S GEOTECHNICAL SECTION, AND THE REGIONAL WATER QUALITY CONTROL BOARD.

DISCOVERY OF HUMAN REMAINS NOTE

1. THE APPLICANT AND CONTRACTORS MUST BE PREPARED TO CARRY OUT THE REQUIREMENTS OF CALIFORNIA STATE LAW WITH REGARD TO THE DISCOVERY OF HUMAN REMAINS DURING CONSTRUCTION, WHETHER HISTORIC OR PREHISTORIC. IN THE EVENT THAT ANY HUMAN REMAINS ARE ENCOUNTERED DURING SITE DISTURBANCE, ALL GROUND-DISTURBING WORK SHALL CEASE IMMEDIATELY AND THE COUNTY CORONER SHALL BE NOTIFIED IMMEDIATELY. IF THE CORONER DETERMINES THE REMAINS TO BE NATIVE AMERICAN, THE NATIVE AMERICAN HERITAGE COMMISSION SHALL BE CONTACTED WITHIN 24 HOURS. A QUALIFIED ARCHAEOLOGIST, IN CONSULTATION WITH THE NATIVE AMERICAN HERITAGE COMMISSION, SHALL RECOMMEND SUBSEQUENT MEASURES FOR DISPOSITION OF THE REMAINS.

GEOTECHNICAL INSPECTION NOTE

1. PRIOR TO ISSUANCE OF BUILDING PERMITS, THE PROJECT GEOTECHNICAL CONSULTANT SHALL FIELD INSPECT (AND INVESTIGATE, AS NEEDED) ALL PROPOSED DRAINAGE DISCHARGE LOCATIONS AND VERIFY THAT PROPOSED DRAINAGE DESIGNS ARE ACCEPTABLE FROM A SLOPE STABILITY/EROSION PERSPECTIVE OR RECOMMEND APPROPRIATE MODIFICATIONS.

LEGEND

EXISTING

- EXISTING PROPERTY LINE BOUNDRY
- EXISTING SANITARY SEWER W/MANHOLE
- EXISTING STORM DRAIN DRAIN W/ MANHOLE
- EXISTING WATERLINE
- EXISTING CATCH BASIN
- EXISTING GAS LINE
- ALL UTILITIES ARE APPROXIMATELY LOCATED

PROPOSED

- PROPOSED PROPERTY LINE BOUNDRY
- SANITARY SEWER W/ MANHOLE
- STORM DRAIN W/ MANHOLE & CATCH BASIN
- WATER LINE W/ FIRE HYDRANT
- GAS MAIN
- UNDERGROUND ELECTRIC, TELEPHONE, & C.A.T.V.
- S.D.E. STORM DRAIN EASEMENT
- S.S.E. SANITARY SEWER EASEMENT
- 509.3 #4 OAK — EXISTING TREE & ELEVATION (TREE NO. REFERS TO TREE IDENTIFICATION TAG PER (TREE REPORT PREPARED BY HABITAT RESTORATION GROUP)
- 509.3 #3 OAK — INDICATES TREE TO BE REMOVED
- L.W. LEATHERWOOD BUSH
- EUC. EUCALYPTUS TREE
- P.O.C. POINT OF CONNECTION
- FDZ FIRE DEFENSE ZONE
- FLOW-THROUGH PLANTER. PROPOSED FOR TREATMENT OF ROOF AND DRIVEWAY STORM WATER RUNOFF.

ABBREVIATIONS

AC	ASPHALTIC CONCRETE	L	LENGTH
BEG	BEGINNING	LF	LINEAR FEET
BL	BAY LAUREL	LG	LIP OF GUTTER
BLDG COR	BUILDING CORNER	NIC	NOT IN CONTRACT
BOT	BOTTOM	O	OAK TREE
BOW	GRADE AT BOTTOM OF WALL	P	PEPPER TREE
BW	BACK OF WALK	PD	PLANNED DEVELOPMENT
CB	CATCH BASIN	PINE	PINE TREE
CL	CENTERLINE	PUE	PUBLIC UTILITY EASEMENT
CLF	CHAIN LINK FENCE	PVC	POLYVINYL CHLORIDE PIPE
CMP	CORRUGATED METAL PIPE	RCP	REINFORCED CONCRETE PIPE
CO	CLEANOUT	RDW	REDWOOD TREE
CONC	CONCRETE	RET WAL

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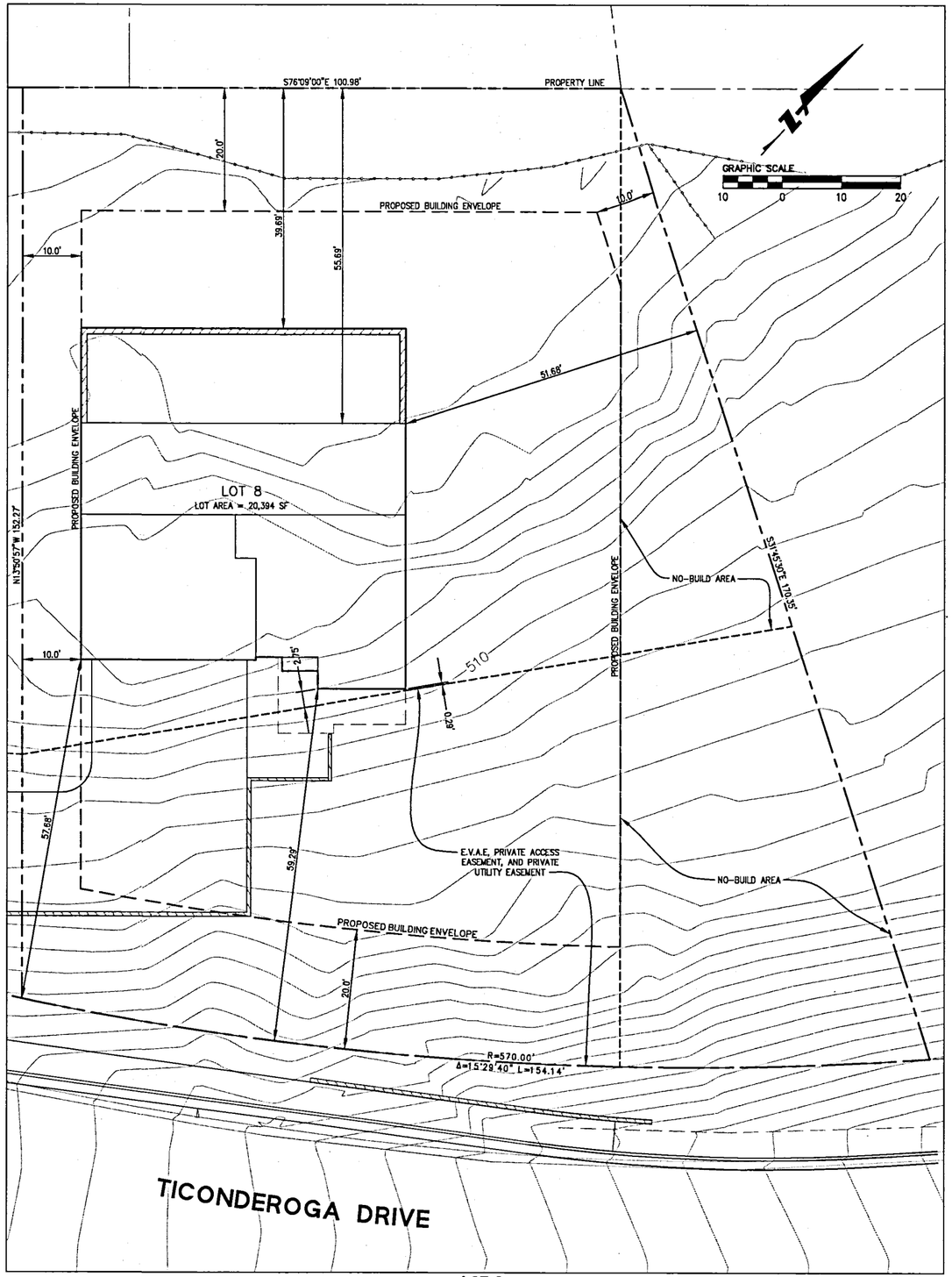
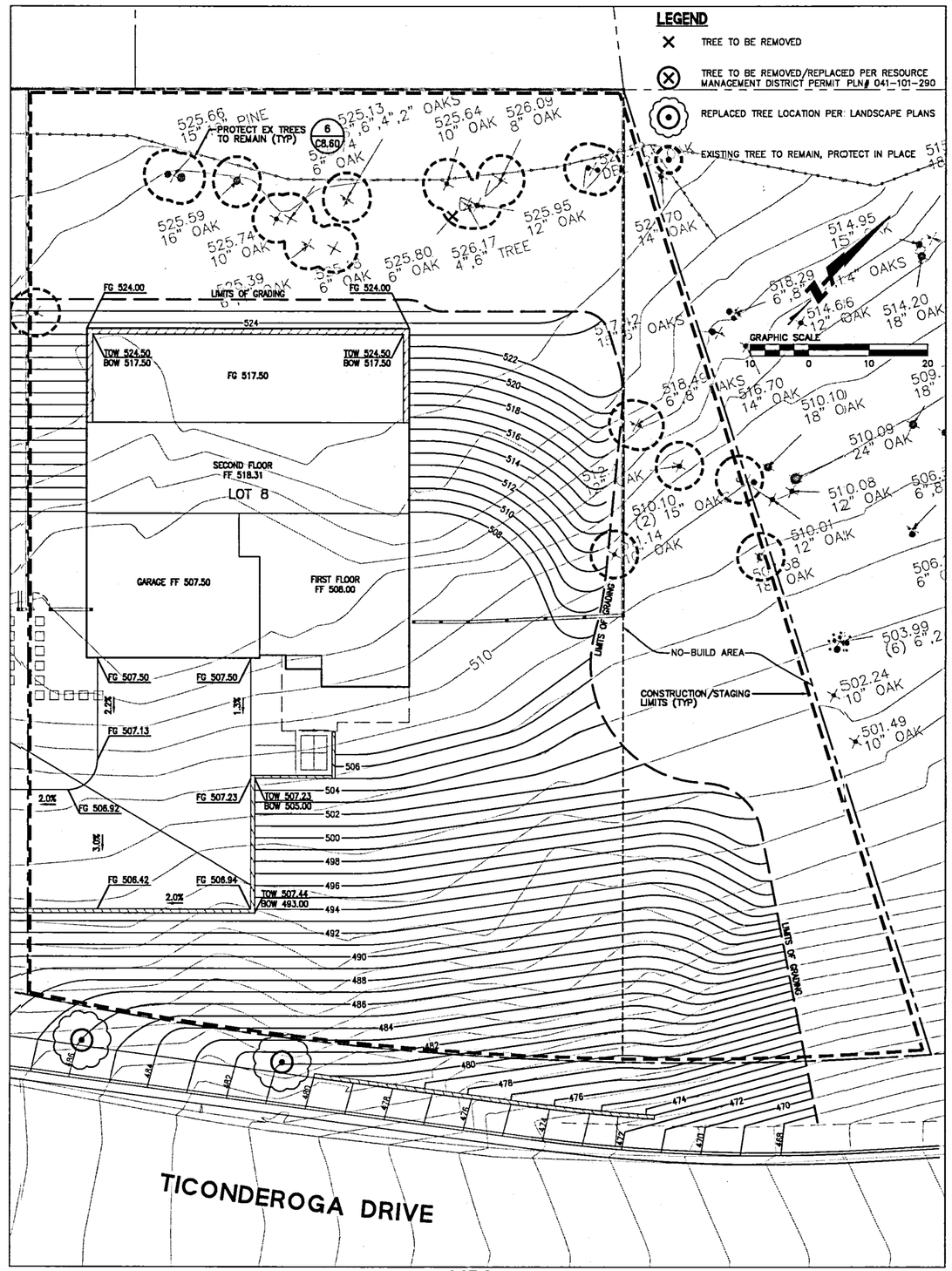


LOT 8
SITE PLAN
SCALE: 1"=10'



LOT 8
CLEARING, CONSTRUCTION, AND GRADING PLAN
SCALE: 1"=10'

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LOT 8 IMPROVEMENT PLANS
SITE & CLEARING, CONSTRUCTION AND GRADING PLANS
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

No.	Revisions

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Drawn LE
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PLOT DATE: 08-02-16 PLOTTED BY: trat

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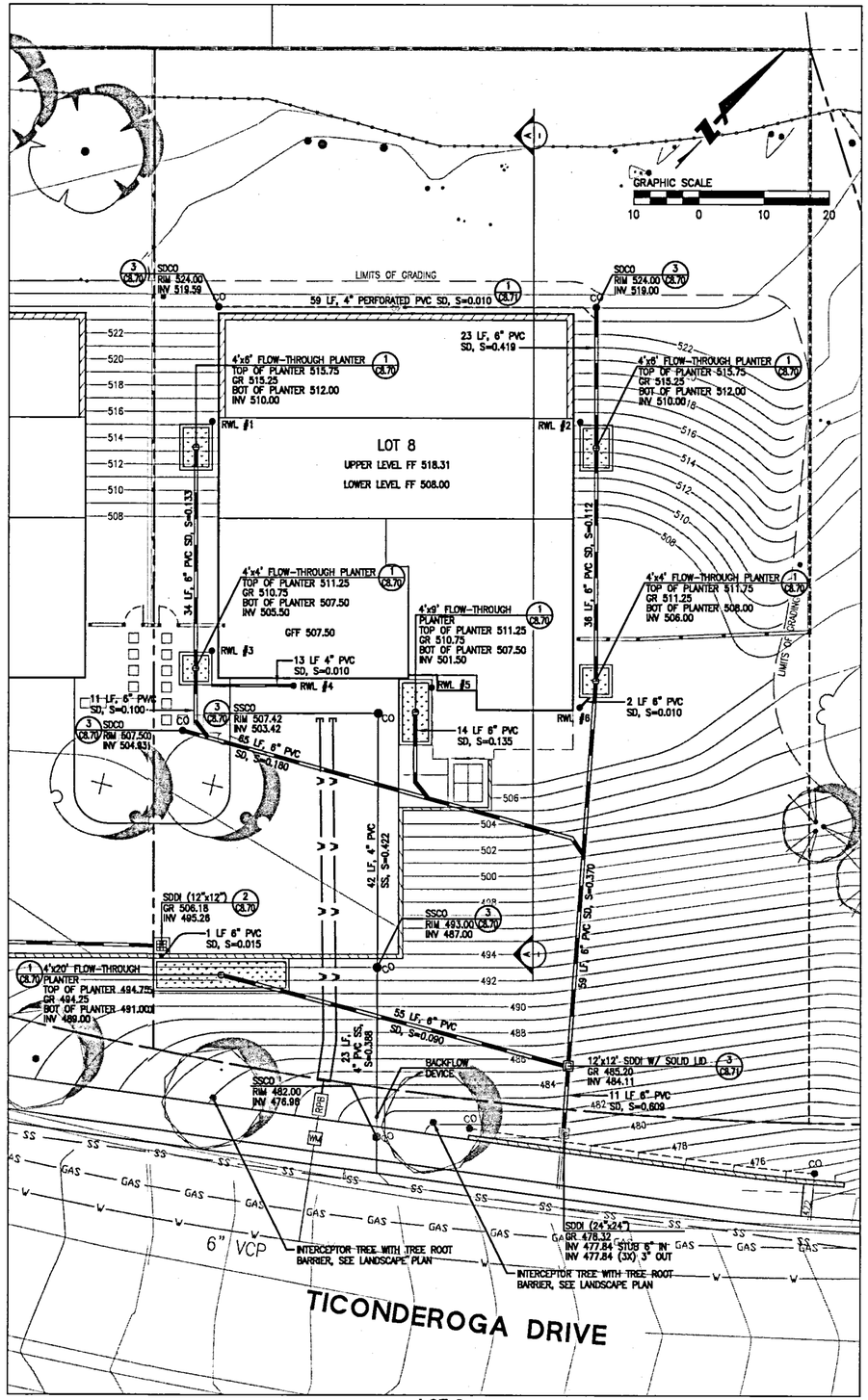
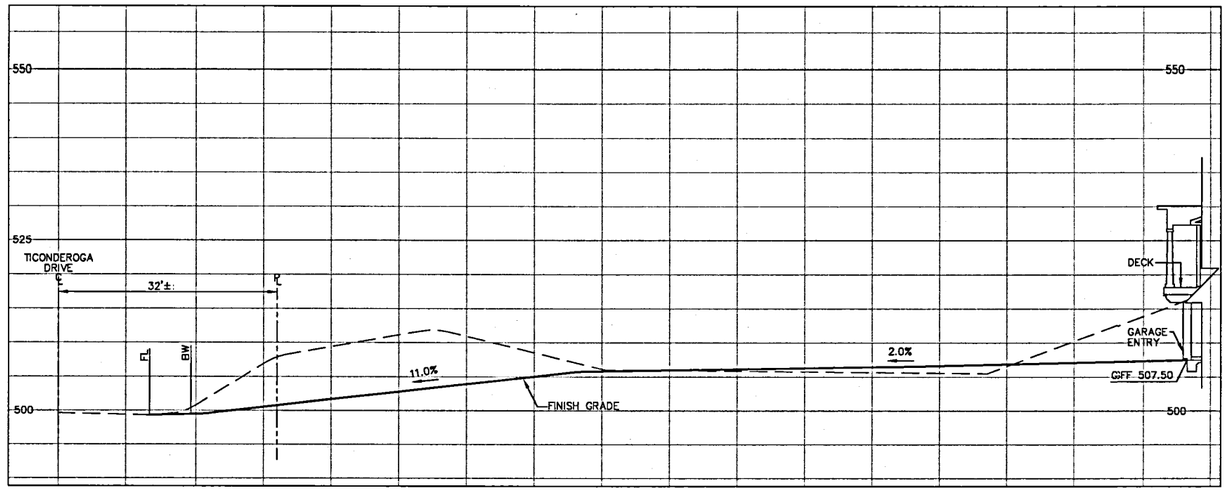


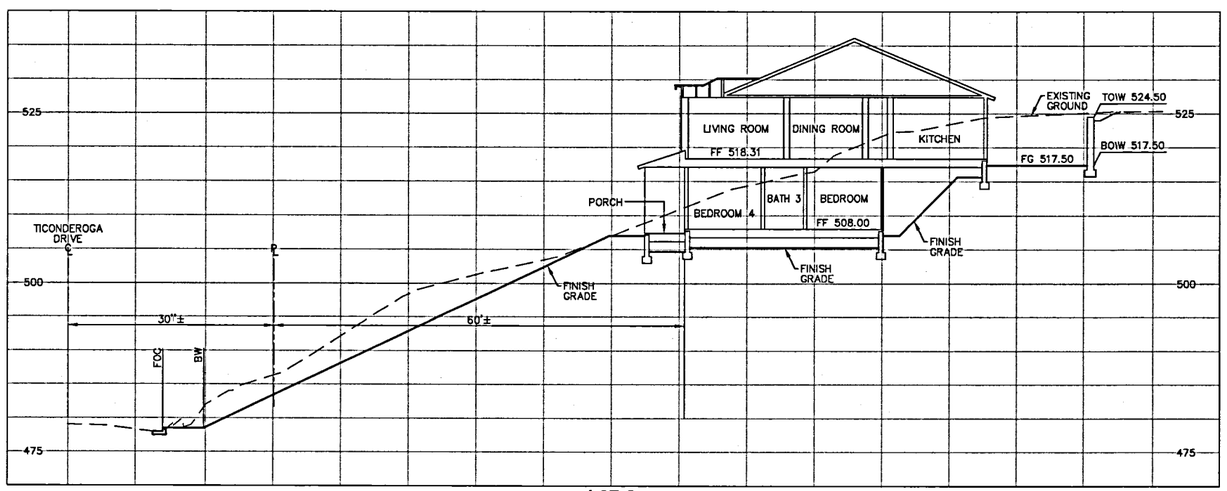
LOT 8
UTILITY PLAN
SCALE: 1"=10'



LOT 8
CROSS SECTION DWY CENTERLINE
SCALE: 1"=10'

NOTES:

1. PER THE GEOTECHNICAL REPORT, UNDOCUMENTED FILL WAS MAPPED AT LOT 8 AND IF THIS FILL IS TTO BE LEFT IN PLACE DURING HOUSE AND DRIVEWAY GRADING, IT SHOULD BE REMOVED AND REPLACED AS PROPERLY COMPACTED ENGINEERED FILL.
2. PER THE GEOTECHNICAL REPORT, ALL EXISTING FILLS SHOULD BE COMPLETELY REMOVED FROM/ WITHIN PROPOSED HOUSE FOOTPRINT AND DRIVEWAY AREAS AND TO A LATERAL DISTANCE OF AT LEAST 2 FEET BEYOND THE EDGE OF THE IMPROVEMENTS. ANY EXCESS MATERIAL SHALL BE DISPOSED OF OFF-SITE IN A LAWFUL MANNER.
3. PER THE GEOTECHNICAL REPORT, ALL BUILDING AND RETAINING WALLS SHOULD BE SUPPORTED ON DRILLED PIERS. THE FOUNDATION SHOWN ON THIS PLAN ARE SCHEMATIC. REFER TO THE PROJECT STRUCTURAL PLANS FOR DETAILS ON THE DRILLED PIERS.



LOT 8
CROSS SECTION A-A
SCALE: 1"=10'

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HIGHLAND ESTATES
LOT 7 IMPROVEMENT PLANS
UTILITY PLAN AND CROSS SECTION

CITY OF SAN MATEO — SAN MATEO COUNTY — CALIFORNIA

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PLOTTED BY: Trek

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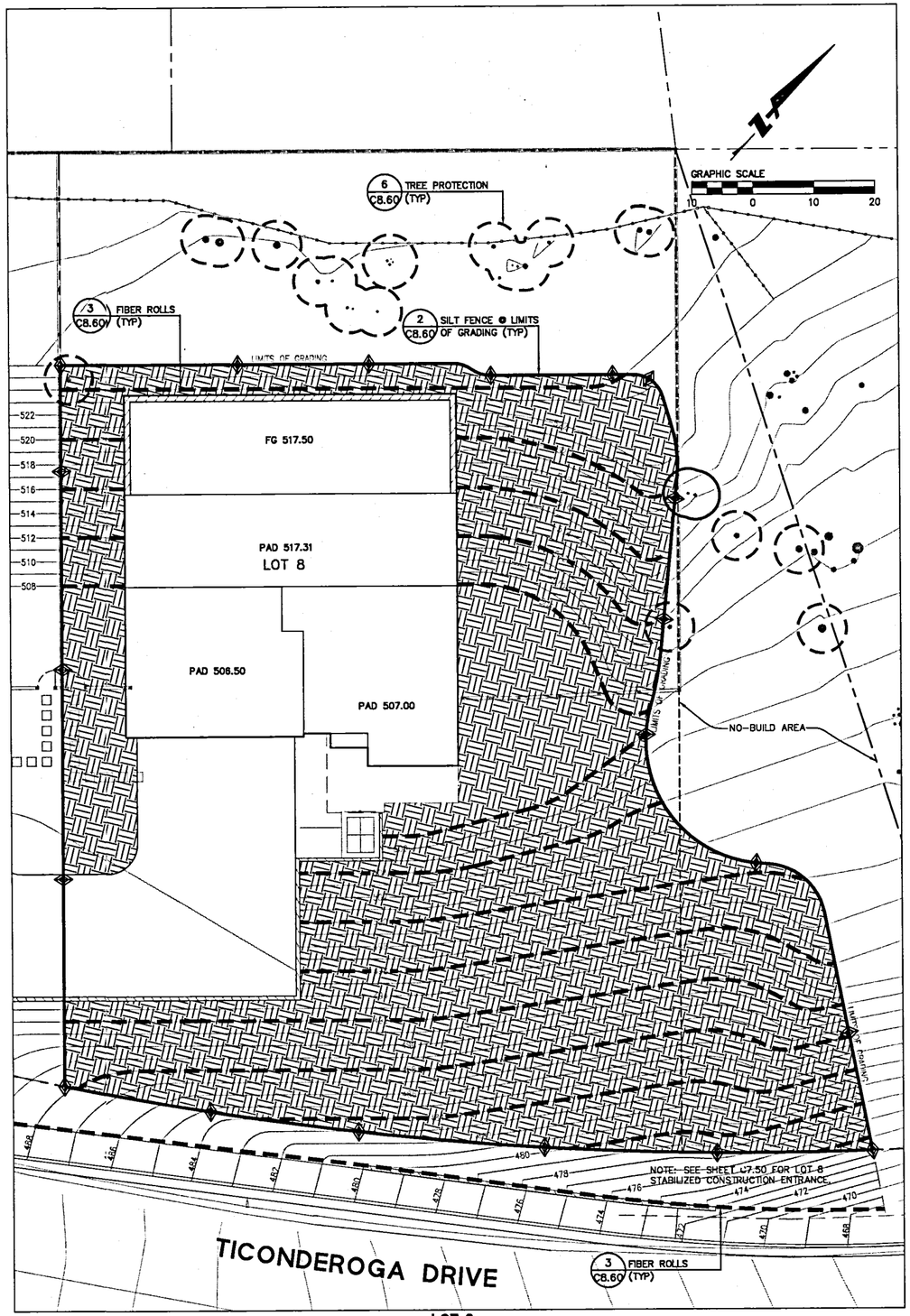
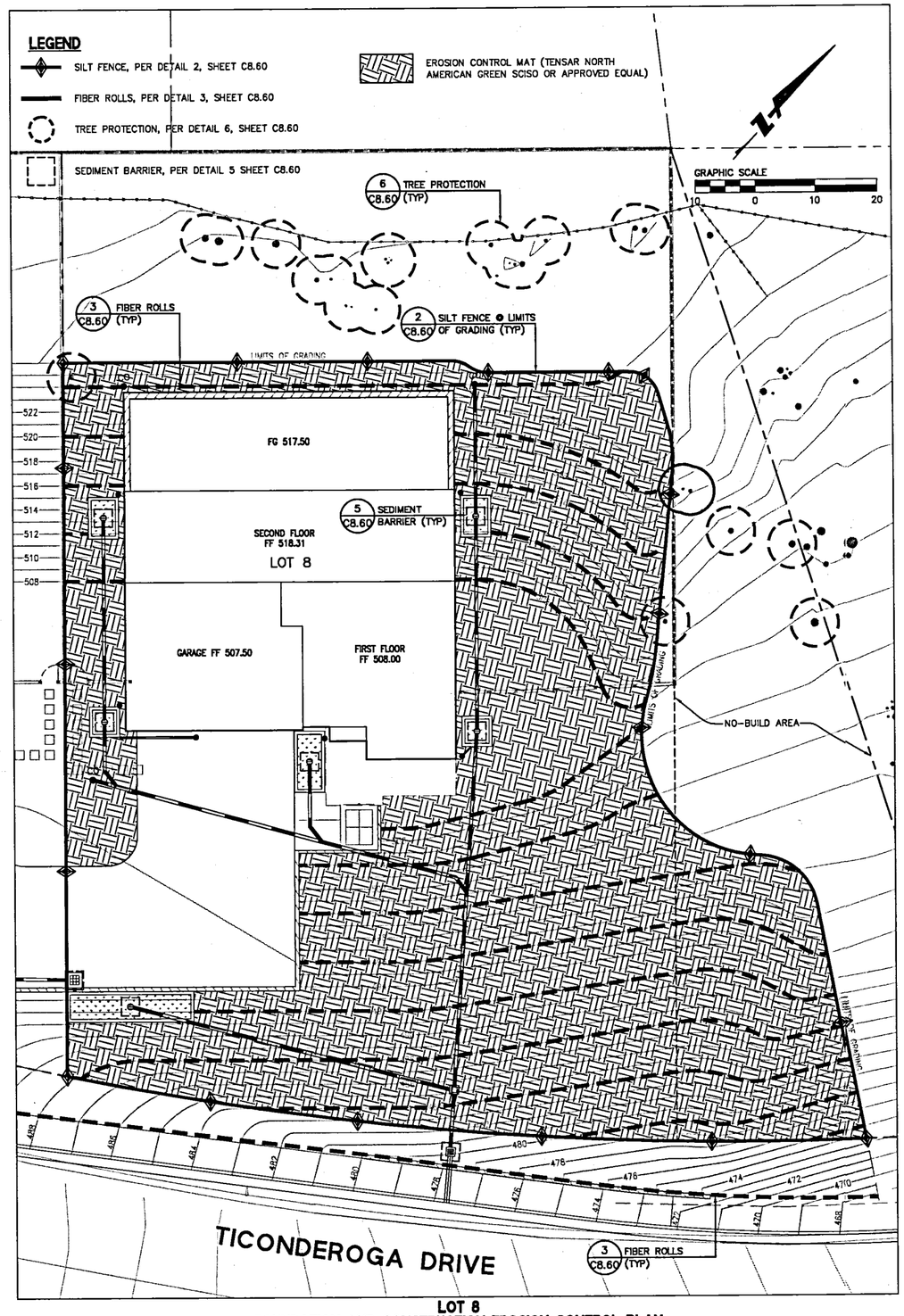


LOT 8
GRADING AND RETAINING WALL EROSION CONTROL PLAN
SCALE: 1"=10'



LOT 8
FOUNDATION AND CONSTRUCTION EROSION CONTROL PLAN
SCALE: 1"=10'

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PLOT DATE: 08-05-16 PLOTTED BY: Trot

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HIGHLAND ESTATES
LOT 8 IMPROVEMENT PLANS
EROSION CONTROL PLANS
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

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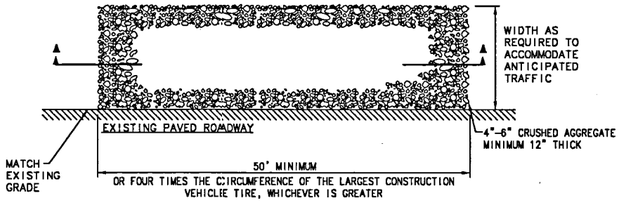
EROSION CONTROL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
2. ALTHOUGH SPECIFIC LOCATIONS FOR SEDIMENT CONTROL FACILITIES ARE SHOWN ON THESE PLANS, IT IS INTENDED THIS EROSION CONTROL PLAN BE MODIFIED WHEN NECESSARY TO MEET FIELD CONDITIONS. BASIN AND TRAP SIZES AND ELEVATIONS MAY BE ADJUSTED AS LONG AS THE MINIMUM AREAS AND DEPTHS FOR SEDIMENT SETTLING AND STORAGE ARE NOT REDUCED.
3. THE INTENT OF THESE PLANS IS TO PROVIDE THE INITIAL CONCEPT FOR INTERIM EROSION CONTROL. THE CONTRACTOR SHALL UPDATE THE PLANS TO REFLECT CHANGING SITE CONDITIONS. PLAN UPDATES SHALL BE BASED UPON GENERAL SURVEY DATA. EROSION CONTROL EFFECTIVENESS SHALL ALSO BE MONITORED AND THE PLANS UPGRADED AS REQUIRED TO PREVENT SIGNIFICANT QUANTITIES OF SEDIMENT FROM ENTERING THE DOWNSTREAM DRAINAGE SYSTEM.
4. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. IN GENERAL, THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE STORM RUN OFF FROM LEAVING THE SITE. FIBER ROLLS, SAND BAGS, AND SILT FENCES SHALL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. ALL EXISTING, TEMPORARY, OR PERMANENT CATCH BASINS SHALL USE ONE OF THE SEDIMENT BARRIERS SHOWN.
5. THE CONTRACTOR WILL BE LIABLE FOR ANY AND ALL DAMAGES TO PUBLIC AND/OR PRIVATE OWNED AND MAINTAINED ROAD CAUSED BY THE CONTRACTOR'S GRADING ACTIVITIES, AND WILL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAUL ROUTE. ADJACENT PUBLIC ROADS SHALL BE CLEANED AT THE END OF EACH WORKING DAY.
6. BEST MANAGEMENT PRACTICES SHALL BE OPERABLE YEAR AROUND.
7. DURING THE RAINY SEASON, ALL PAVED AREAS ARE TO BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.
8. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED DAILY DURING THE RAINY SEASON. ALL SLOPES SHALL BE REPAIRED AS SOON AS POSSIBLE WHEN DAMAGED.
9. THE FIRST PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY. THE REMAINDER OF CONSTRUCTION EQUIPMENT (70 PERCENT), WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL BE REQUIRED TO USE EMULSIFIED FUELS.
10. THE SECOND PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 2 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY AND 50 PERCENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS. THE REMAINING 210 PERCENT OF CONSTRUCTION EQUIPMENT, WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL USE EMULSIFIED FUELS.
11. FOR ALL LARGER VEHICLES, INCLUDING CEMENT MIXERS OR OTHER DEVICES THAT MUST BE DELIVERED BY LARGE TRUCKS, VEHICLES SHALL BE EQUIPPED WITH CARB LEVEL THREE VERIFIED CONTROL DEVICES.
12. WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
13. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
14. PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY NON-TOXIC SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
15. SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
16. SWEEP PUBLIC STREETS ADJACENT TO CONSTRUCTION SITES DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO THE STREETS.
17. HYDROSEED OR APPLY NON-TOXIC SOIL STABILIZERS TO INACTIVE CONSTRUCTION AREAS (PREVIOUSLY GRADED AREAS INACTIVE FOR TEN DAYS OR MORE).
18. TEMPORARY AND PERMANENT SLOPES GREATER THAN 3 FEET SHALL BE SEEDED UNLESS ALTERNATIVE MEASURES ARE USED.
19. SEED MIX FOR REVEGETATION AND HYDROSEEDING:
    NORTHERN CALIFORNIA COVER MIX BY ACBRIGHT OR EQUAL

    30% BLUE WILDRYE
    30% MEADOW BARLEY
    20% ZORRO FESCUE
    10% PURPLE NEEDLE GRASS
    10% CALIFORNIA NATIVE WILDFLOWERS

    APPLY AT 40 POUNDS PER ACRE MINIMUM
20. ENCLOSE, COVER, WATER TWICE DAILY, OR APPLY NON-TOXIC SOIL BINDERS TO EXPOSED STOCKPILES (DIRT, SAND, ETC.). LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
21. DISPOSAL AREAS FOR SEDIMENT TO BE DETERMINED IN FIELD. WHEN MATERIAL IS STOCKPILED, IT SHALL BE SURROUNDED BY A SILT FENCE/FIBER ROLLS.
22. LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
23. INSTALL SANDBAGS OR OTHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
24. REPLANT VEGETATION IN DISTURBED AREAS AS SOON AS POSSIBLE.
25. INSTALL WHEEL WASHERS FOR ALL EXITING TRUCKS OR WASH OFF THE TIRES OR TRACKS OF ALL TRUCKS AND EQUIPMENT LEAVING THE CONSTRUCTION SITE.
26. INSTALL WIND BREAKS AT THE WINDWARD SIDES OF THE CONSTRUCTION AREAS.
27. SUSPEND EXCAVATION AND GRADING ACTIVITIES WHEN WIND (AS INSTANTANEOUS GUSTS) EXCEEDS 25 MILES PER HOUR.
28. NO GRADING SHALL BE ALLOWED DURING THE WINTER SEASON (OCTOBER 15 TO APRIL 30) TO AVOID POTENTIAL SOIL EROSION UNLESS APPROVED, IN WRITING, BY THE COMMUNITY DEVELOPMENT DIRECTOR. THE PROPERTY OWNERS SHALL SUBMIT A LETTER TO THE CURRENT PLANNING SECTION, AT LEAST TWO WEEKS PRIOR TO COMMENCEMENT OF GRADING, STATING THE DATE WHEN GRADING WILL BEGIN.
29. STABILIZE ALL DENUDED AREAS AND MAINTAIN EROSION CONTROL MEASURES CONTINUOUSLY BETWEEN OCTOBER 15 AND APRIL 30. STABILIZING SHALL INCLUDE BOTH PROACTIVE MEASURES, SUCH AS THE PLACEMENT OF STRAW BALES OR COIR NETTING, AND PASSIVE MEASURES, SUCH AS MINIMIZING VEGETATION REMOVAL AND REVEGETATING DISTURBED AREAS WITH VEGETATION THAT IS COMPATIBLE WITH THE SURROUNDING ENVIRONMENT.
30. STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.
31. CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING PAVEMENT CUTTING WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICALS, WASH WATER OR SEDIMENTS, AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATERCOURSES.
32. USE SEDIMENT CONTROLS OR FILTRATION TO REMOVE SEDIMENT WHEN DEWATERING SITE AND OBTAINING ALL NECESSARY PERMITS.
33. AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON-SITE, EXCEPT IN A DESIGNATED AREA WHERE WASH WATER IS CONTAINED AND TREATED.
34. DELINEATE WITH FIELD MARKERS CLEARING LIMITS, SETBACKS, AND DRAINAGE COURSES.
35. PROTECT ADJACENT PROPERTIES AND UNDISTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE BUFFER STRIPS, SEDIMENT BARRIERS OR FILTERS, DIKES, MULCHING, OR OTHER MEASURES AS APPROPRIATE.
36. PERFORM CLEARING AND EARTH-MOVING ACTIVITIES ONLY DURING DRY WEATHER.
37. LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF.
38. LIMIT CONSTRUCTION ACCESS ROUTES AND STABILIZE DESIGNATED ACCESS POINTS.
39. ALL GRADED SURFACES AND MATERIALS, WHETHER FILLED, EXCAVATED, TRANSPORTED OR STOCKPILED, SHALL BE WETTED, PROTECTED OR CONTAINED IN SUCH A MANNER AS TO PREVENT ANY SIGNIFICANT NUISANCE FROM DUST, OR SPILLAGE UPON ADJOINING WATER BODY, PROPERTY, OR STREETS. EQUIPMENT AND MATERIALS ON THE SITE SHALL BE USED IN SUCH A MANNER AS TO AVOID EXCESSIVE DUST. A DUST CONTROL PLAN MAY BE REQUIRED AT ANYTIME DURING THE COURSE OF THE PROJECT.
40. A DUST PALLIATIVE SHALL BE APPLIED TO THE SITE WHEN REQUIRED BY THE COUNTY. THE TYPE AND RATE OF APPLICATION SHALL BE RECOMMENDED BY THE SOILS ENGINEER AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS, THE PLANNING AND BUILDING DEPARTMENT'S GEOTECHNICAL SECTION, AND THE REGIONAL WATER QUALITY CONTROL BOARD.
41. IF NO WORK HAS PROGRESSED FOR A PERIOD OF 6-WEEKS, FINAL DRAINAGE AND EROSION CONTROL IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH AN APPROVED WINTERIZATION PLAN.
42. PADS SHALL BE GRADED TO MINIMIZE STANDING WATER. SPECIFIC LOCATIONS REQUIRING SUPPLEMENTAL GRADING TO ACHIEVE ACCEPTABLE DRAINAGE SHALL BE DETERMINED BY THE CONSTRUCTION MANAGER. ALL SPOILS AND SOIL STOCKPILES REMAINING ON SITE SHALL BE ENCIRCLED BY SILT FENCES/FIBER ROLLS.
43. STUBBED OUT ENDS OF PARTIALLY COMPLETED SUBDRAINS SHALL BE WRAPPED WITH AN APPROVED FABRIC TO PREVENT SOIL AND DEBRIS FROM ENTERING THE PIPE.
44. HAUL ROADS ARE CURRENTLY NOT SHOWN ON THE PLANS. EROSION CONTROL MEASURES SHALL BE TAKEN TO MINIMIZE EROSION RELATED TO HAUL ROADS.
45. GRADING SCHEDULE SHALL BE SUBMITTED FOR APPROVAL TO SAN MATEO COUNTY PUBLIC WORKS BY AUGUST 15.
46. EROSION CONTROL POINT OF CONTACT:
    NOEL CHAMBERLAIN, NEXGEN BUILDERS INC.
    225 DEMETER STREET
    EAST PALO ALTO, CA 94303
    PHONE #: 650-322-5800
    CELL #: 650-444-3089
    EMAIL: noel@nexgenbuilders.com
47. SHOULD IT APPEAR THAT THE EROSION CONTROL PLAN, OR ANY OTHER MATTER THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE BKF PROJECT ENGINEER AT (650) 482-6300 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
48. AREAS DELINEATED ON PLANS FOR PARKING, CLEARING & GRUBBING, STORAGE, ETC. SHALL NOT BE ENLARGED OR "RUN OVER."
49. CONSTRUCTION SITES ARE REQUIRED TO HAVE EROSION CONTROL MATERIALS ON-SITE DURING THE "OFF-SEASON."
50. DUST CONTROL IS REQUIRED YEAR-ROUND.
51. EROSION CONTROL MATERIALS SHALL BE STORED ON-SITE.
52. USE OF PLASTIC SHEETING BETWEEN OCTOBER 1ST AND APRIL 30TH IS NOT ACCEPTABLE, UNLESS FOR USE ON STOCKPILES WHERE THE STOCKPILE IS ALSO PROTECTED WITH FIBER ROLLS CONTAINING THE BASE OF THE STOCKPILE.
53. TREE PROTECTION SHALL BE IN PLACE BEFORE ANY GRADING, EXCAVATING OR GRUBBING IS STARTED.

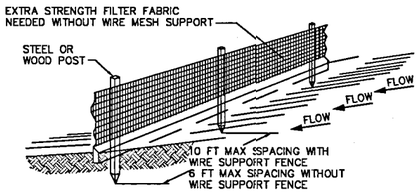
ALL EROSION CONTROL MEASURES SHALL BE IN PLACE BY OCTOBER 15 AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.



NOTES:

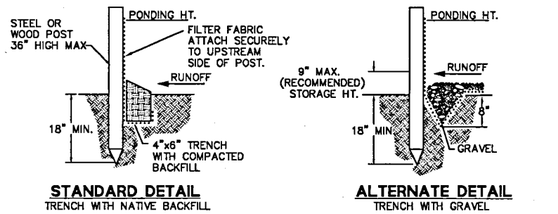
1. ALL CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USE TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS SHALL BE REMOVED IMMEDIATELY.
2. WHEELS SHALL BE CLEAN PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF INLET PROTECTION (E.G. SAND BAGS OR OTHER APPROVED METHODS).
3. THE MATERIAL FOR CONSTRUCTION OF THE PAD SHALL BE 4" TO 6" STONE.
4. THE THICKNESS OF THE PAD SHALL NOT BE LESS THAN 12".
5. THE WIDTH OF THE PAD SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
6. THE LENGTH OF THE PAD SHALL NOT BE LESS THAN 50'.

1 / – STABILIZED CONSTRUCTION ENTRANCE
NTS

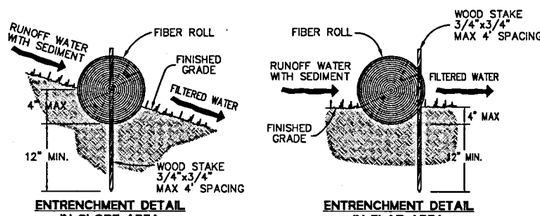


NOTES:

1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE TO MAXIMIZE PONDING EFFICIENCY.



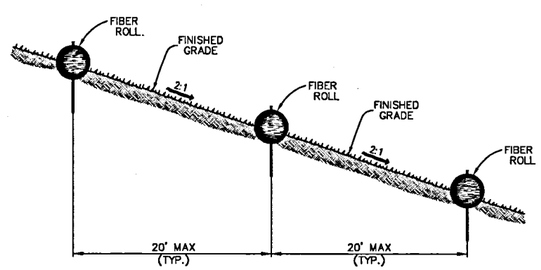
2 / – SILT FENCE
NTS



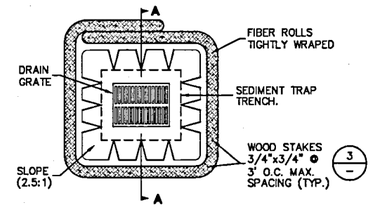
NOTES:

1. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" TO 4" DEEP, DUG ON CONTOUR.
2. ADJACENT ROLLS SHALL TIGHTLY ABUT.
3. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.

3 / – FIBER ROLL
NTS



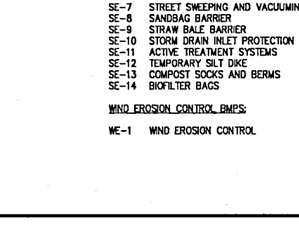
4 / – FIBER ROLL INSTALLATION ON SLOPE
(TIME FRAME: BETWEEN FINAL PAVING OPERATIONS AND PROJECT COMPLETION)
NTS



NOTES:

1. PLACE FIBER ROLLS AROUND THE INLET CONSISTENT WITH BASIN SEDIMENT BARRIER DETAIL ON THIS SHEET. (FIBER ROLLS ARE TUBES MADE FROM STRAW BOUND W/ PLASTIC NETTING. THEY ARE APPROX. 8" DIA. AND 20 – 30 FT. LONG.)
2. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE FIBER ROLL IN A TRENCH, 3" – 4" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.
3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET. EXCAVATION OF A BASIN ADJACENT TO THE DROP INLET OR A TEMPORARY DIKE ON THE DOWNSLOPE OF THE STRUCTURE MAY BE NECESSARY.

5 / – SEDIMENT BARRIER
(TIME FRAME: AREA DRAINS – BETWEEN AREA DRAIN INSTALLATION AND PROJECT COMPLETION
CURB INLETS – BETWEEN CURB INLET INSTALLATION AND FINAL PAVING OPERATIONS)
NTS



NOTES:

1. THE APPLICANT SHALL ESTABLISH AND MAINTAIN TREE PROTECTION ZONES THROUGHOUT THE ENTIRE LENGTH OF THE PROJECT.
2. TREE PROTECTION ZONES SHALL BE DELINEATED USING 4-FOOT TALL ORANGE PLASTIC FENCING SUPPORTED BY POLES POUNDED INTO THE GROUND, LOCATED AS CLOSE TO THE DRIPLINES AS POSSIBLE WHILE STILL ALLOWING ROOM FOR CONSTRUCTION/GRADING TO SAFELY CONTINUE.
3. THE APPLICANT SHALL MAINTAIN TREE PROTECTION ZONES FREE OF EQUIPMENT AND MATERIALS STORAGE AND SHALL NOT CLEAN ANY EQUIPMENT WITHIN THESE AREAS.
4. SHOULD ANY LARGE ROOTS OR LARGE MASSES OF ROOTS NEED TO BE CUT, THE ROOTS SHALL BE INSPECTED BY A CERTIFIED ARBORIST OR REGISTERED FORESTER PRIOR TO CUTTING. ANY ROOT CUTTING SHALL BE MONITORED BY AN ARBORIST OR FORESTER AND DOCUMENTED.
5. ROOTS TO BE CUT SHOULD BE SEVERED CLEANLY WITH A SAW OR TOPPERS.
6. NORMAL IRRIGATION SHALL BE MAINTAINED,, BUT OAKS SHOULD NOT NEED SUMMER IRRIGATION.
7. THE ABOVE INFORMATION SHALL BE ON-SITE AT ALL TIMES.

6 / – TREE PROTECTION FENCE
NTS

CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQIA) STANDARD DETAIL REFERENCES

(CALIFORNIA STORMWATER BMP HANDBOOK CONSTRUCTION, DATED NOVEMBER 2009)

NOTE: ALTHOUGH SPECIFIC LOCATIONS FOR SPECIFIC BMPS ARE SHOWN ON THESE PLANS, IT IS INTENDED FOR THE CONTRACTOR TO APPLY APPROPRIATE BMPS WHEN NECESSARY TO MEET FIELD CONDITIONS.

EROSION CONTROL BMPS:

EC-1	SCHEDULING
EC-2	PRESERVATION OF EXISTING VEGETATION
EC-3	HYDRAULIC MULCH
EC-4	HYDROSEEDING
EC-5	SOIL BINDERS
EC-6	STRAW MULCH
EC-7	GEOTEXTILES & MATS
EC-8	WOOD MULCHING
EC-9	EARTH DIKES AND DRAINAGE SWALES
EC-10	VELOCITY DISSIPATION DEVICES
EC-11	SLOPE DRAINS
EC-12	STREAMBANK STABILIZATION
EC-14	COMPOST BLANKETS
EC-15	SOIL PREPARATION/ROUGHENING
EC-16	NON-VEGETATIVE STABILIZATION

TEMPORARY SEDIMENT CONTROL BMPS:

SE-1	SILT FENCE
SE-2	SEDIMENT BASIN
SE-3	SEDIMENT TRAP
SE-4	CHECK DAM
SE-5	FIBER ROLLS
SE-6	GRAVEL BAG BERM
SE-7	STREET SWEEPING AND VACUUMING
SE-8	SANDBAG BARRIER
SE-9	STRAW BALE BARRIER
SE-10	STORM DRAIN INLET PROTECTION
SE-11	ACTIVE TREATMENT SYSTEMS
SE-12	TEMPORARY SILT DIKE
SE-13	COMPOST SOCKS AND BERMS
SE-14	BIOFILTER BAGS

WIND EROSION CONTROL BMPS:

WE-1	WIND EROSION CONTROL

TEMPORARY TRACKING CONTROL BMPS:

TC-1	STABILIZED CONSTRUCTION ENTRANCE/EXIT
TC-2	STABILIZED CONSTRUCTION ROADWAY
TC-3	ENTRANCE/OUTLET TIRE WASH

NON-STORMWATER MANAGEMENT BMPS:

NS-1	WATER CONSERVATION PRACTICES
NS-2	DEWATERING OPERATIONS
NS-3	PAVING AND GRINDING OPERATIONS
NS-4	TEMPORARY STREAM CROSSING
NS-5	CLEAR WATER DIVERSION
NS-6	ILLICIT CONNECTION/DISCHARGE
NS-7	POTABLE WATER/IRRIGATION
NS-8	VEHICLE AND EQUIPMENT CLEANING
NS-9	VEHICLE AND EQUIPMENT FUELING
NS-10	VEHICLE AND EQUIPMENT MAINTENANCE
NS-11	PILE DRIVING OPERATIONS
NS-12	CONCRETE CURING
NS-13	CONCRETE FINISHING
NS-14	MATERIAL AND EQUIPMENT USE
NS-15	DEMOLITION ADJACENT TO WATER
NS-16	TEMPORARY BATCH PLANTS

WASTE MANAGEMENT & MATERIALS POLLUTION CONTROL BMPS:

WM-1	MATERIAL DELIVERY AND STORAGE
WM-2	MATERIAL USE
WM-3	STOCKPILE MANAGEMENT
WM-4	SPILL PREVENTION AND CONTROL
WM-5	SOLID WASTE MANAGEMENT
WM-6	HAZARDOUS WASTE MANAGEMENT
WM-7	CONTAMINATED SOIL MANAGEMENT
WM-8	CONCRETE WASTE MANAGEMENT
WM-9	SANITARY/SEPTIC WASTE MANAGEMENT
WM-10	LIQUID WASTE MANAGEMENT

BKF ENGINEERS
255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE: (650) 482-6300
FAX: (650) 482-6399
ENGINEERS | SURVEYORS | PLANNERS

REGISTERED PROFESSIONAL ENGINEER — No. 043671 — CIVIL — STATE OF CALIFORNIA

HIGHLAND ESTATES
LOT 8 IMPROVEMENT PLANS
EROSION CONTROL DETAILS AND NOTES
CITY OF SAN MATEO — SAN MATEO COUNTY — CALIFORNIA

No.	Revisions

Date 08/05/2016
Scale AS SHOWN
Design JT
Drawn LE
Approved RH
Job No 950168-20

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PLOT DATE: 07-29-16 PLOTTED BY: Trot

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CHECK BY: R.T.O.
APPROVED BY: N.R.C.

SCALE: NONE
DATE: 6/95
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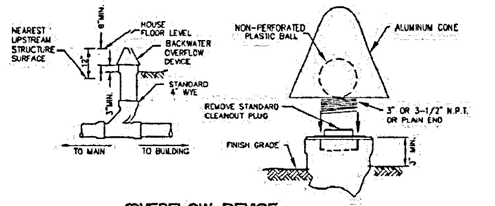
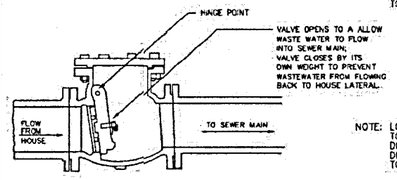


OVERFLOW DEVICE

NOTE: LOCATION OF DEVICE TO APPROVAL OF DISTRICT AND BUILDING DEPARTMENT PRIOR TO INSTALLATION



NOTE: LOCATION OF DEVICE TO APPROVAL OF DISTRICT AND BUILDING DEPARTMENT PRIOR TO INSTALLATION

BACKFLOW DEVICE

OVERFLOW AND BACKFLOW DEVICE DETAIL

C-9

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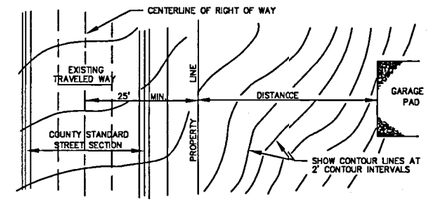
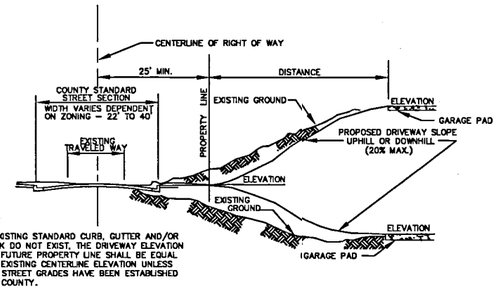


DRIVEWAY PLAN VIEW



NOTE:
WHEN EXISTING STANDARD CURB, GUTTER AND/OR SIDEWALK DO NOT EXIST, THE DRIVEWAY ELEVATION AT THE FUTURE PROPERTY LINE SHALL BE EQUAL TO THE EXISTING CENTERLINE ELEVATION UNLESS FUTURE STREET GRADES HAVE BEEN ESTABLISHED BY THE COUNTY.

DRIVEWAY PROFILE VIEW

D-7

SAN MATEO COUNTY DEPARTMENT
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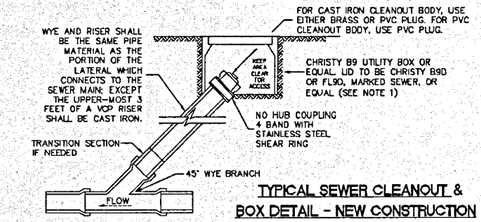
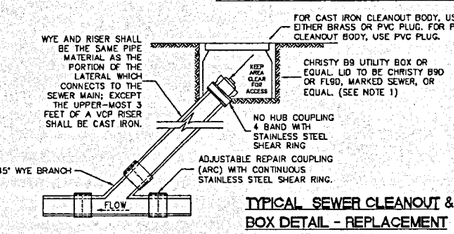


TYPICAL SEWER CLEANOUT & BOX DETAIL - NEW CONSTRUCTION



TYPICAL SEWER CLEANOUT & BOX DETAIL - REPLACEMENT

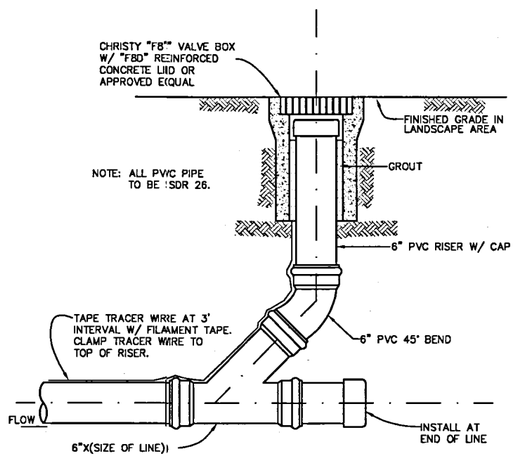
NOTES:
1. WHEN BOX IS SUBJECT TO TRAFFIC LOADING, PROVIDE CAST IRON LID.
2. BOX TO BE PLACED SUCH THAT CLEANOUT CAP CAN BE EASILY REMOVED, SEE ILLUSTRATION.
3. PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING LATERAL FROM THE PROPERTY STRUCTURE TO DISTRICT MAIN. DISTRICT PROVIDES COURTESY SERVICE FROM DISTRICT STANDARD PROPERTY LINE CLEANOUT TO THE MAIN.
4. SDR-26 WYE, RISER, CLEANOUT BODY AND CAP CAN BE USED ONLY WHEN LATERAL FROM PROPERTY LINE TO MAIN LINE IS REPLACED WITH SDR-26.
5. WHEN ENTIRE LATERAL IS REPLACED, LATERAL FROM PROPERTY LINE CLEANOUT TO MAIN LINE SHALL HAVE A 14-1-UF GUAGE MINIMUM SINGLE CONDUCTOR TRACER WIRE TAPED TO THE ENTIRE LENGTH OF THE PIPE.

CONSTRUCTION OF A STANDARD CLEANOUT REQUIRES MULTIPLE INSPECTIONS BY DISTRICT PERSONEL:
1. FIRST INSPECTION – TO INSPECT WYE AND RISER. WYE AND RISER MUST BE EXPOSED.
2. SECOND INSPECTION – TO INSPECT PLACEMENT OF BOX, LID AND LOCATION OF CLEANOUT WITHIN BOX.

C-3

6 SAN MATEO COUNTY OVERFLOW AND BACKFLOW DEVICE DETAIL

NTS

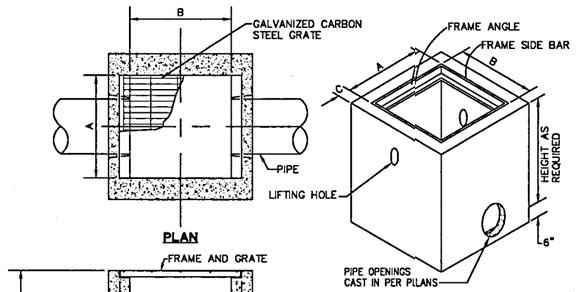


3 CLEANOUT

NTS

5 SAN MATEO COUNTY DRIVEWAY PLAN AND PROIFILE VIEWS

NTS



TYPICAL SECTION

CENTRAL PRECAST

MODEL	A	B	C
CP1212	12	12	4
CP1818	18	18	4
CP2424	24	24	5

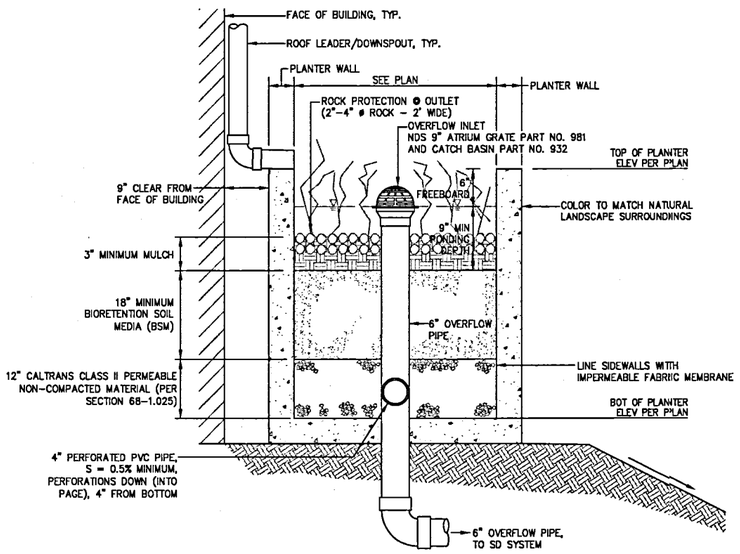
NOTES:
1. DROP INLET SHALL BE CENTRAL PRECAST OR APPROVED EQUAL.
2. AN ENGINEERED PRECAST DROP INLET UNIT CAN BE USED AS AN ALTERNATE.

2 DROP INLET

NTS

4 SAN MATEO COUNTY TYPICAL SEWER CLEANOUT & BOX DETAIL

NTS



1 FLOW-THROUGH PLANTER (FTP)

BKF ENGINEERS
255 SHORELINE DRIVE, SUITE 200
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ENGINEERS | SURVEYORS | PLANNERS

REGISTERED PROFESSIONAL ENGINEER
No. 034371
CIVIL
STATE OF CALIFORNIA

HIGHLAND ESTATES
LOT 8 IMPROVEMENT PLANS
CONSTRUCTION DETAILS

CITY OF SAN MATEO
SAN MATEO COUNTY
CALIFORNIA

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OF
PUBLIC WORKS
REDWOOD CITY
CALIFORNIA

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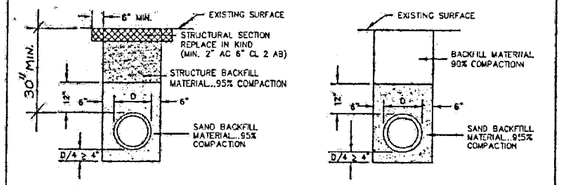
CHECK BY: D.M.W.
APPROVED BY: N.R.C.

SCALE: NONE
DATE: 6/95
REVISED: 7/97



TYPE A (IN ROADWAY) TYPE B (OUTSIDE ROADWAY))

NOTES

1. SAND.... MATERIAL FREE FROM ORGANIC MATTER AND CLAY WITH A SIEVE GRADATIION BY WEIGHT AS FOLLOWS:

SIEVE SIZE	% PASSING SIEVE
No. 4	100
No. 200	0–5

2. STRUCTURE BACKFILL MATERIAL... MATERIAL WITH SAND EQUIVALENT NOT LESS THAN 20 AND SIEVE GRADATION BY WEIGHT AS FOLLOWS:

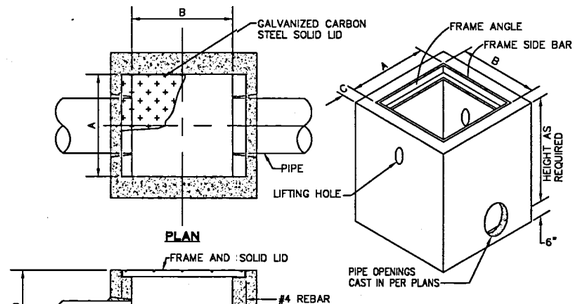
SIEVE SIZE	% PASSING SIEVE
3"	100
No. 4	35–100
No. 30	20–100

3. BACKFILL MATERIAL... MATERIAL FROM EXCAVATION, FREE FROM STONES OR LUMPS EXCEEDING 3 INCHES GREATEST DIMENSION, ORGANIC MATTER, OR OTHER UNSATISFACTORY MATERIAL.

STANDARD TRENCH BACKFILL AND BEDDING DETAIL

W–10

2 — SAN MATEO COUNTY STANDARD TRENCH BACKFILL & BEDDING DETAIL
NTS



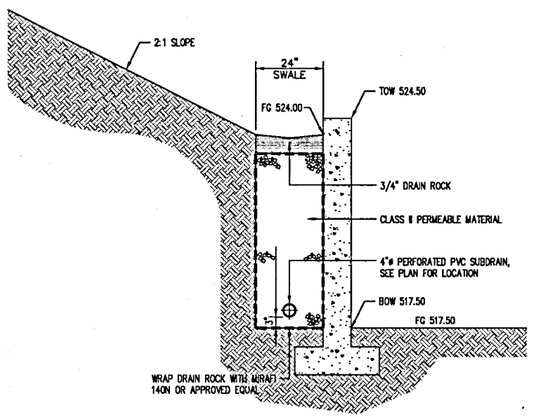
CENTRAL PRECAST

MODEL	A	B	C
CP1212	12	12	4

NOTES:

1. DROP INLET SHALL BE CENTRAL PRECAST OR APPROVED EQUAL.
2. AN ENGINEERED PRECAST DROP INLET UNIT CAN BE USED AS AN ALTERNATE.

3 — DROP INLET
NTS



1 — SUBDRAIN
NTS

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FAX: (650) 482-6399
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REGISTERED PROFESSIONAL ENGINEER — NICHOLAS R. CHAVE — No. 036371 — CIVIL — STATE OF CALIFORNIA

HIGHLAND ESTATES
LOT 8 IMPROVEMENT PLANS
CONSTRUCTION DETAILS

CITY OF SAN MATEO — SAN MATEO COUNTY — CALIFORNIA

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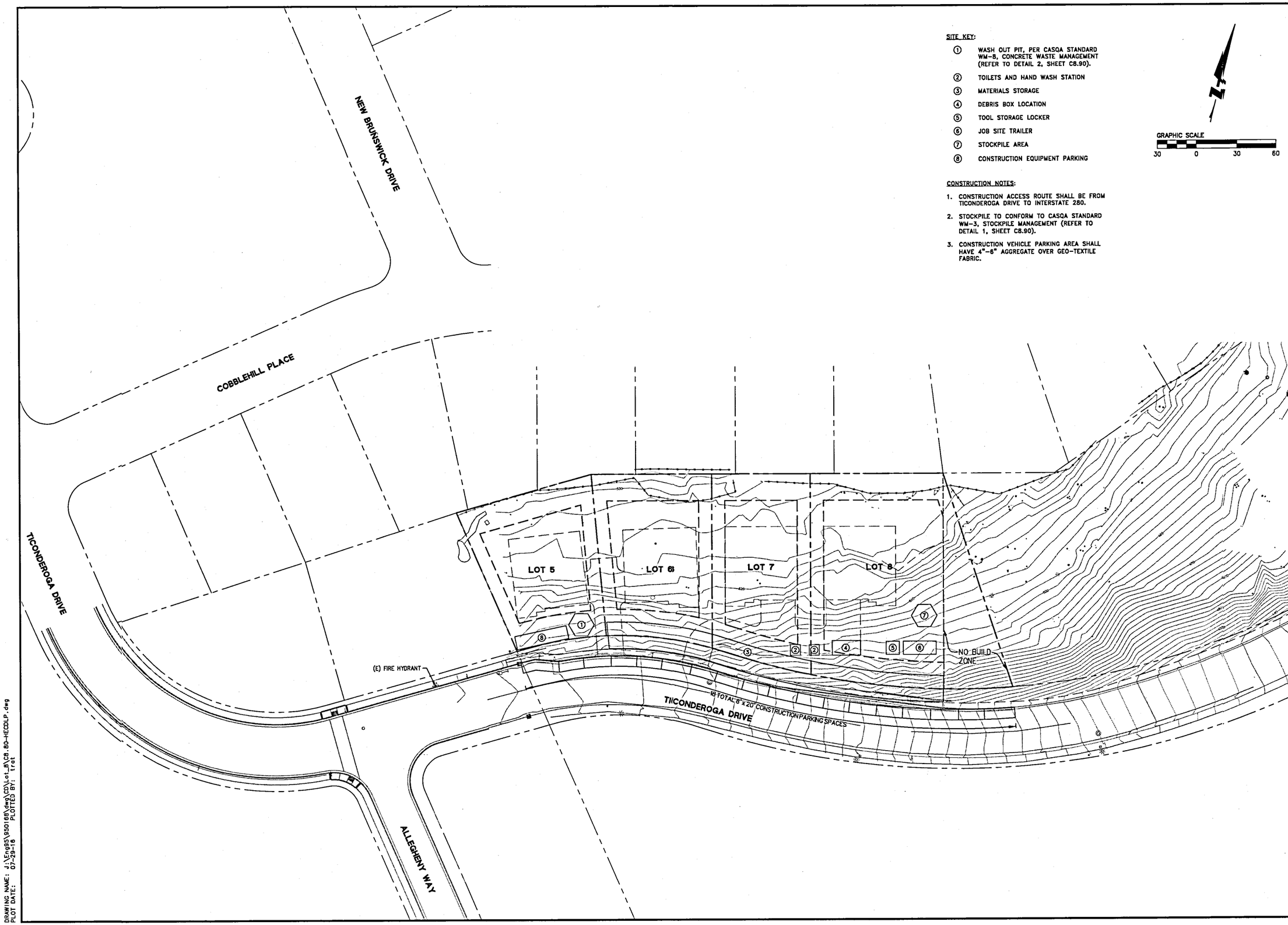

SITE KEY:

1. WASH OUT PIT, PER CASQA STANDARD WM-8, CONCRETE WASTE MANAGEMENT (REFER TO DETAIL 2, SHEET C8.90).
2. TOILETS AND HAND WASH STATION
3. MATERIALS STORAGE
4. DEBRIS BOX LOCATION
5. TOOL STORAGE LOCKER
6. JOB SITE TRAILER
7. STOCKPILE AREA
8. CONSTRUCTION EQUIPMENT PARKING

CONSTRUCTION NOTES:

1. CONSTRUCTION ACCESS ROUTE SHALL BE FROM TICONDEROGA DRIVE TO INTERSTATE 280.
2. STOCKPILE TO CONFORM TO CASQA STANDARD WM-3, STOCKPILE MANAGEMENT (REFER TO DETAIL 1, SHEET C8.90).
3. CONSTRUCTION VEHICLE PARKING AREA SHALL HAVE 4"-6" AGGREGATE OVER GEO-TEXTILE FABRIC.

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STATE OF CALIFORNIA

HIGHLAND ESTATES
LOT 8 IMPROVEMENT PLANS
LOGISTICS PLAN

CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

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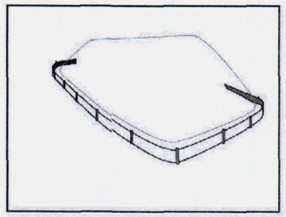
Stockpile Management WM-3



Categories

EC	Erosion Control	
SE	Sediment Control	☒
TC	Tracking Control	
WE	Wind Erosion Control	
NS	Non-Stormwater Management Control	☒
WM	Waste Management and Materials Pollution Control	☑

Legend:
☑ Primary Category
☒ Secondary Category

Targeted Constituents

Sediment	☑
Nutrients	☑
Trash	☑
Metals	☑
Bacteria	
Oil and Grease	☑
Organics	☑

Potential Alternatives

None

Description and Purpose

Stockpile management proceadures and practices are designed to reduce or eliminate air and stormwater pollution from stockpiles of soil, soil amendments, sand, paving materials such as portland cement concrete (PCC) rubble, asphalt concrete (AC), asphalt concrete rubble, aggregate base, aggregate sub base or pre-mixed aggregate, asphalt mender (so called "cold mix" asphalt), and pressure treated wood.

Suitable Applications

Implement in all projects that stockpile soil and other loose materials.

Limitations

- Plastic sheeting as a stockpile protection is temporary and hard to manage in windy conditions. Where plastic is used, consider use of plastic tarps with nylon reinforcement which may be more durable than standard sheeting.
- Plastic sheeting can increase runoff volume due to lack of infiltration and potentially cause perimeter control failure.
- Plastic sheeting breaks down faster in sunlight.
- The use of plastic materials should be avoided when feasible and photodegradables plastics should not be used.

Implementation

Protection of stockpiles is a year-round requirement. To properly manage stockpiles:

Stockpile Management WM-3

- On larger sites, a minimum of 50 ft separation from concentrated flows of stormwater, drainage courses, and inlets is recommended.
- All stockpiles are required to be protected immediately if they are not scheduled to be used within 14 days.
- Protect all stockpiles from stormwater run-on using temporary perimeter sediment barriers such as compost berms (SE-13), temporary silt dikes (SE-12), fiber rolls (SE-5), silt fences (SE-1), sandbags (SE-8), gravel bags (SE-6), or biofilter bags (SE-14). Refer to the individual fact sheet for each of these controls for installation information.
- Implement wind erosion control practices as appropriate on all stockpiled material. For specific information, see WE-1, Wind Erosion Control.
- Manage stockpiles of contaminated soil in accordance with WM-7, Contaminated Soil Management.
- Place bagged materials on pallets and under cover.
- Ensure that stockpile coverings are installed securely to protect from wind and rain.
- Some plastic covers withstand weather and sunlight better than others. Select cover materials or methods based on anticipated duration of use.

Protection of Non-Active Stockpiles

Non-active stockpiles of the identified materials should be protected further as follows:

Soil stockpiles

- Cover and protect soil stockpiles with soil stabilization measures and a temporary perimeter sediment barrier at all times.
- Consider temporary vegetation for topsoil piles that will be stockpiled for extended periods.

Stockpiles of Portland cement concrete rubble, asphalt concrete, asphalt concrete rubble, aggregate base, or aggregate sub base

- Provide covers and protect these stockpiles with a temporary perimeter sediment barrier at all times.

Stockpiles of "cold mix"

- Cover cold mix stockpiles and place them on plastic sheeting (or comparable material) and surround the stockpiles with a berm all times.

Stockpiles of fly ash, stucco, hydrated lime

- Cover stockpiles of materials that may raise the pH of runoff (i.e., basic materials) with plastic and surround the stockpiles with a berm at all times.

Stockpile Management WM-3

Stockpiles/Storage of wood (Pressure treated with chromated copper arsenate or ammoniacal copper zinc arsenate)

- Cover treated wood with plastic sheeting (or comparable material) and surround with a berm at all times.

Protection of Active Stockpiles

Active stockpiles of the identified materials should be protected as follows:

- All stockpiles should be covered and protected with a temporary linear sediment barrier prior to the onset of precipitation.
- Stockpiles of "cold mix" and treated wood, and basic materials should be placed on and covered with plastic sheeting or comparable material and surrounded by a berm prior to the onset of precipitation.
- The downstream perimeter of an active stockpile should be protected with a linear sediment barrier or berm and runoff should be diverted around or away from the stockpile on the upstream perimeter.

Costs

For cost information associated with stockpile protection refer to the individual erosion or sediment control BMP fact sheet considered for implamentation (For example, refer to SE-1 Silt Fence for installation of silt fence around the perimeter of a stockpile.)

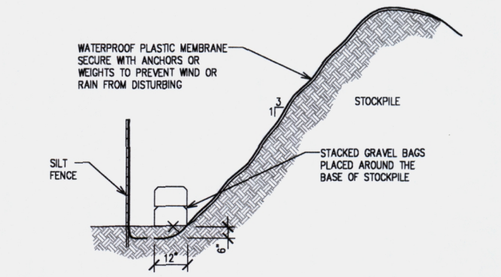
Inspection and Maintenance

- Stockpiles must be inspected in accordance with General Permit requirements for the associated project type and risk level. It is recommended that at a minimum, BMPs be inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- It may be necessary to inspect stockpiles covered with plastic sheeting more frequently during certain conditions (for example, high winds or extreme heat).
- Repair and/or replace perimeter controls and covers as needed to keep them functioning properly.
- Sediment shall be removed when it reaches one-third of the barrier height.

References

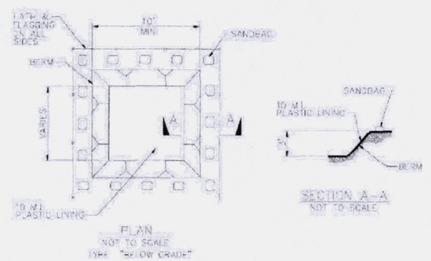
Stormwater Quality Handbooks - Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2003.

WM-3 – STOCKPILE MANAGEMENT
NTS

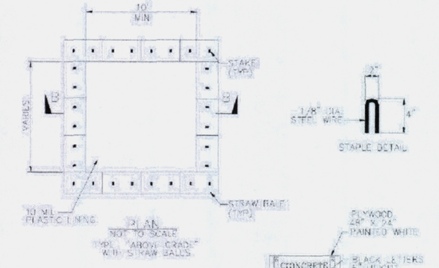


1 — **STOCKPILE COVERING**
(PER CASQA STANDARD WM-3, STOCKPILE MANAGEMENT, SEE LEFT)
NTS

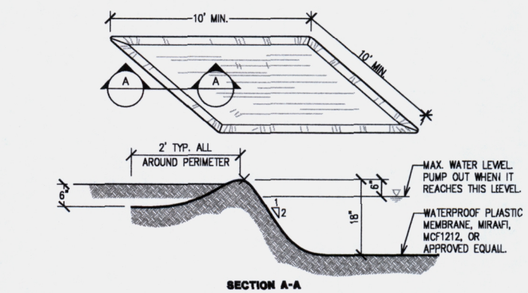
Concrete Waste Management WM-8



Concrete Waste Management WM-8



WM-8 – CONCRETE WASTE MANAGEMENT
NTS



2 — **TEMPORARY WASHOUT PIT**
(PER CASQA STANDARD WM-8, CONCRETE WASTE MANAGEMENT, SEE LEFT)
NTS

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HIGHLAND ESTATES
LOT 8 IMPROVEMENT PLANS
CASQA STANDARD DETAILS

CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

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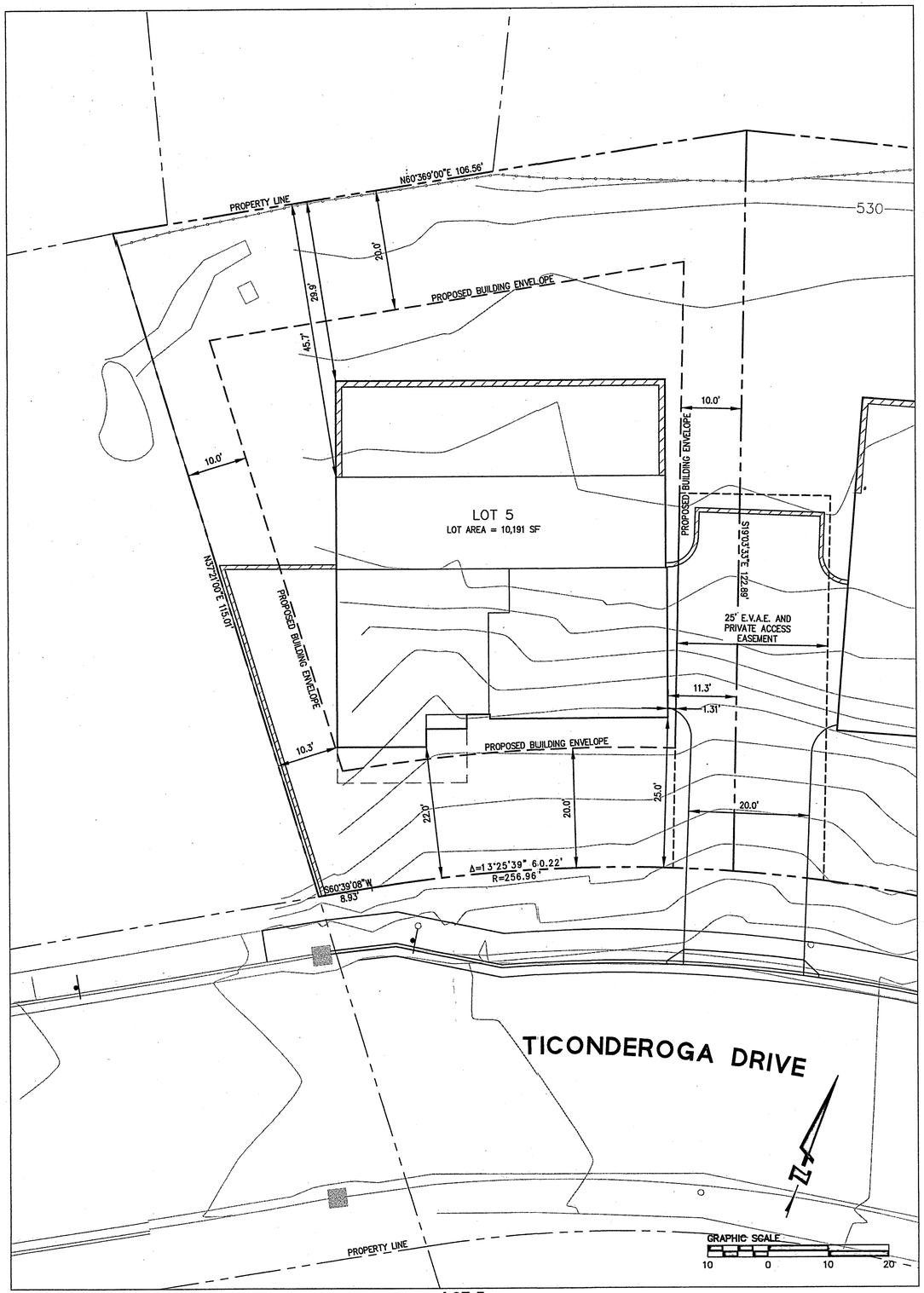

LOT 5
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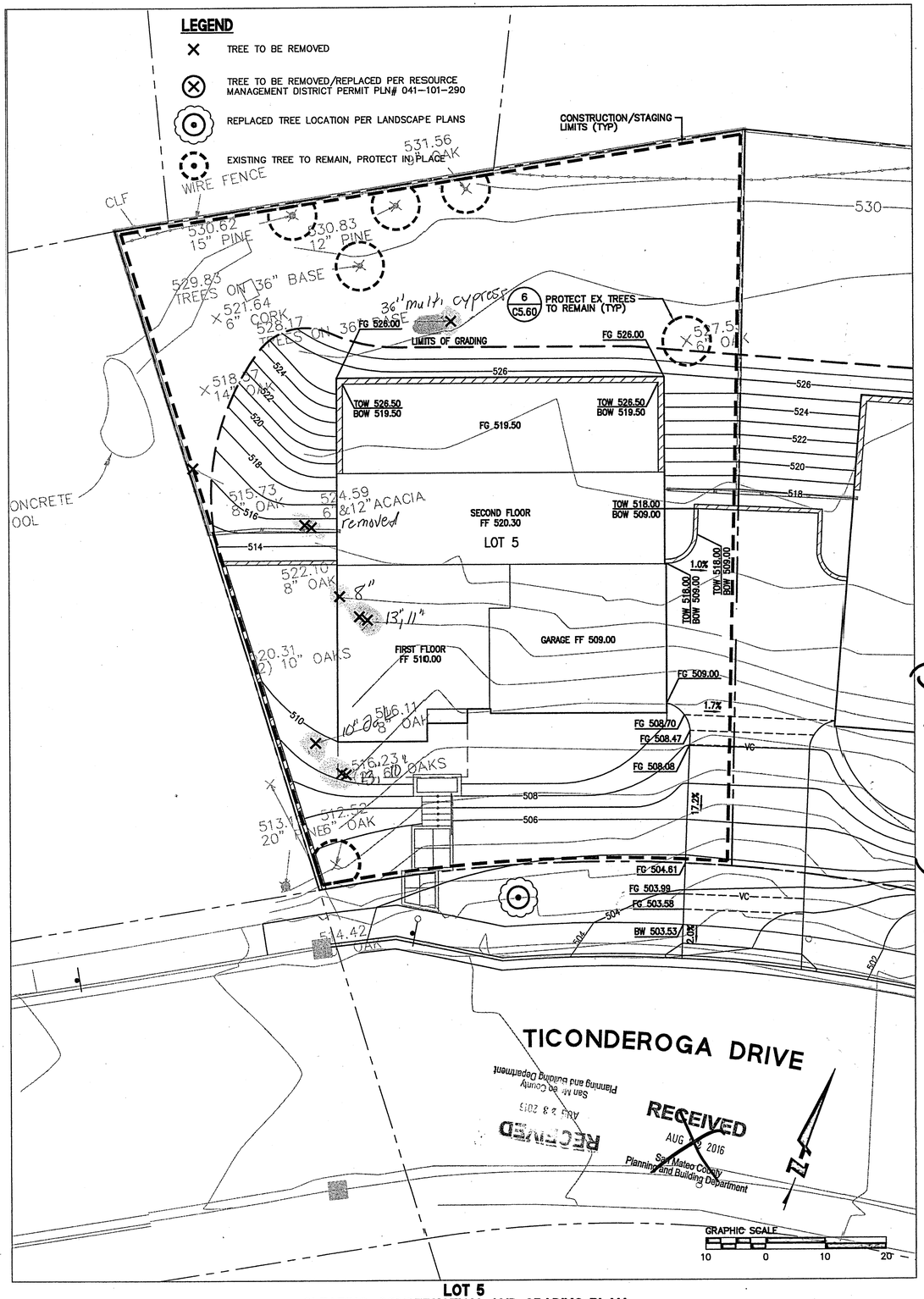

LOT 5
CLEARING, CONSTRUCTION, AND GRADING PLAN
SCALE: 1"=10'

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THESE SURVEY (OSTERLING)

HIGHLAND ESTATES
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SITE & CLEARING, CONSTRUCTION AND GRADING PLANS
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

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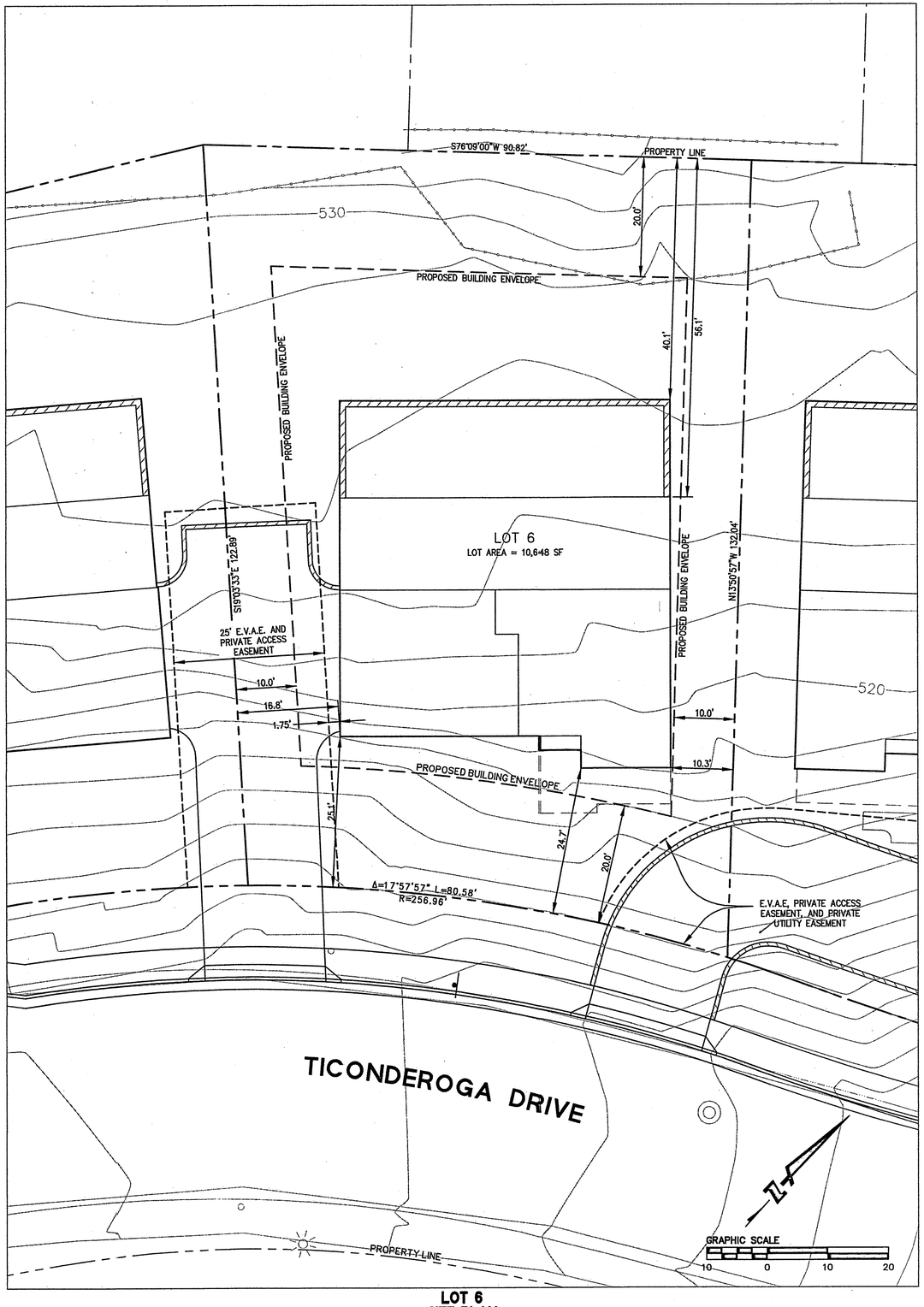

LOT 6
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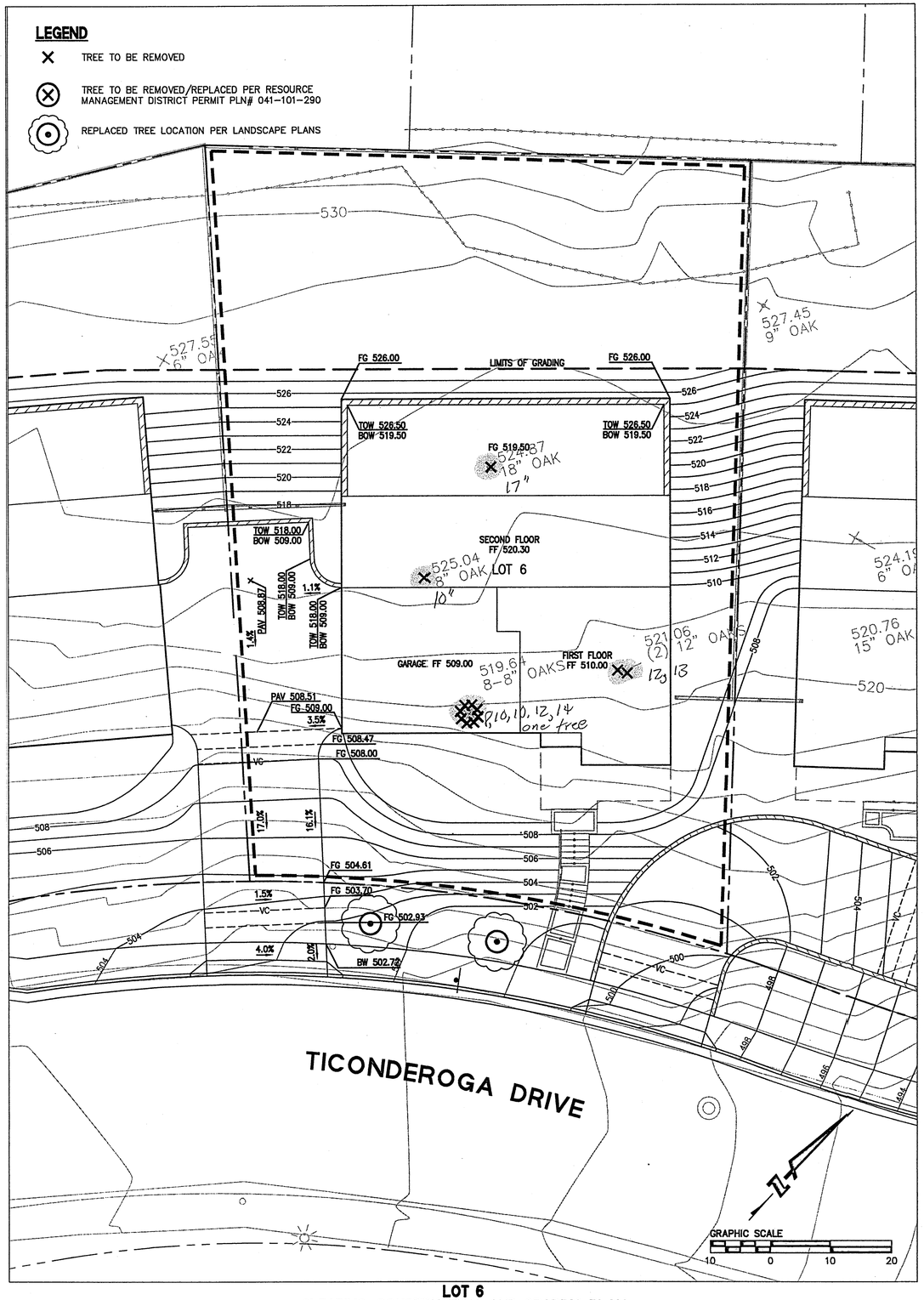

LOT 6
CLEARING, CONSTRUCTION, AND GRADING PLAN
SCALE: 1"=10'

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HIGHLAND ESTATES
LOT 6 IMPROVEMENT PLANS
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CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

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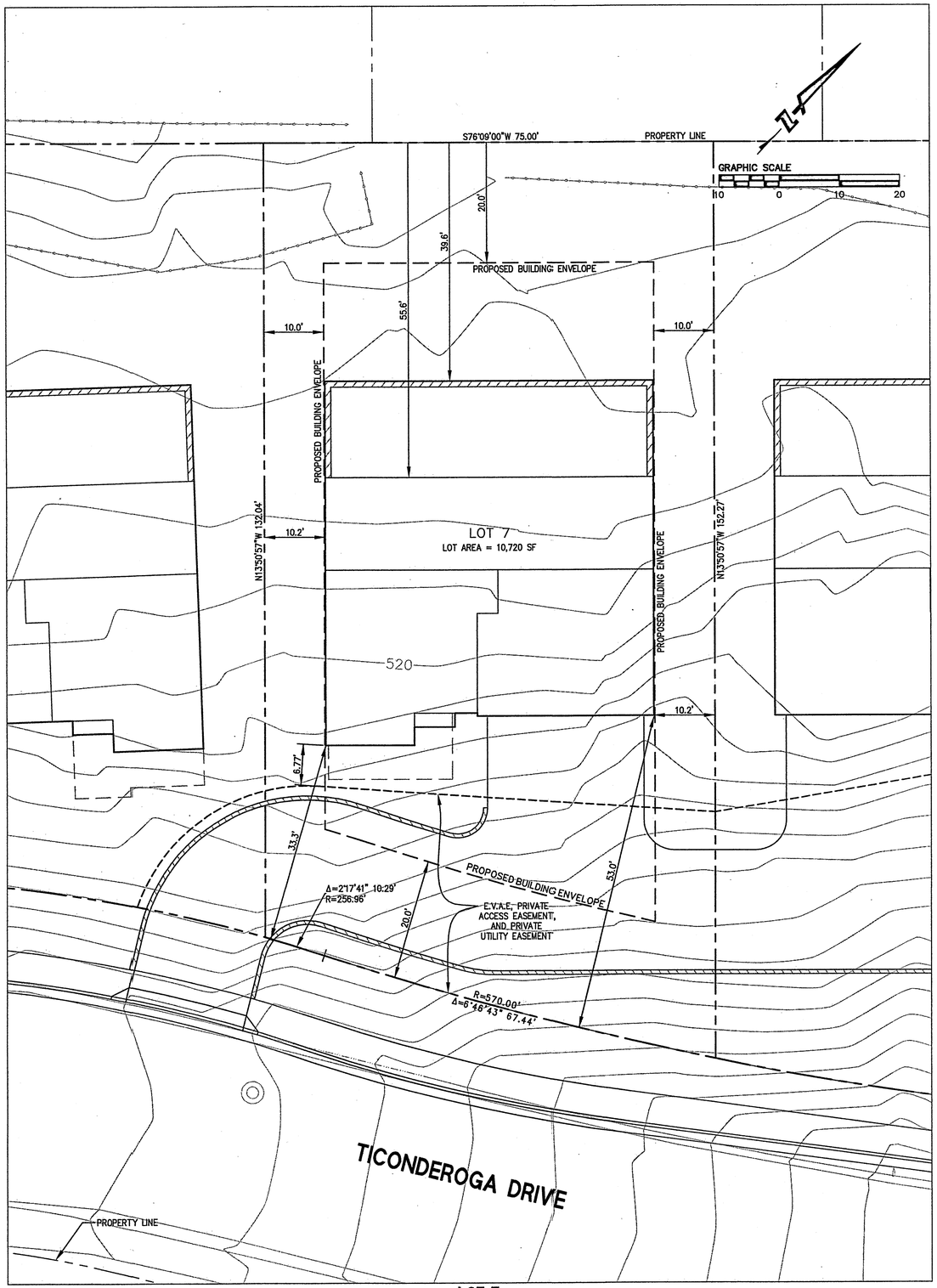

LOT 7
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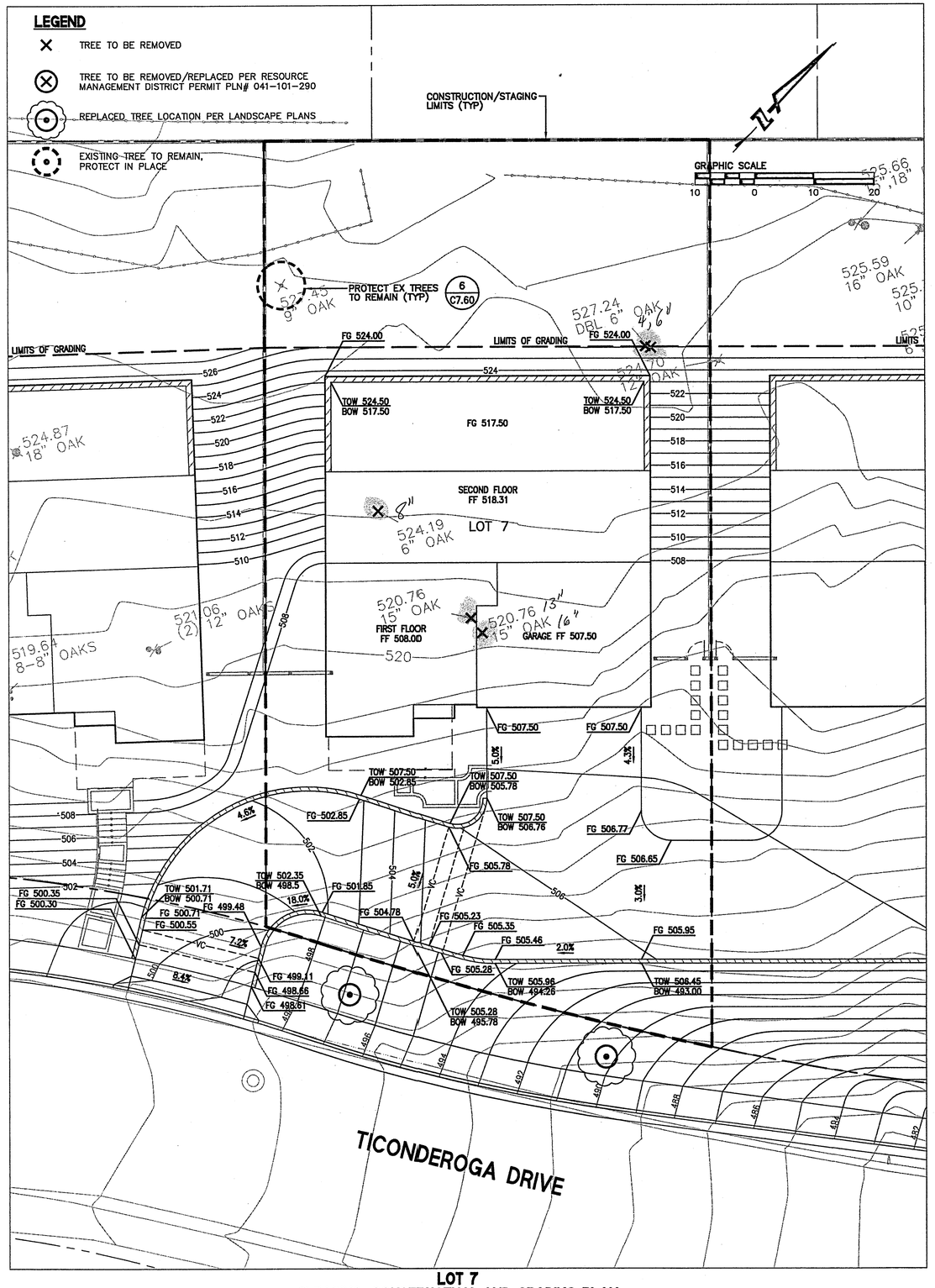

LOT 7
CLEARING, CONSTRUCTION, AND GRADING PLAN
SCALE: 1"=10'

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HIGHLAND ESTATES
LOT 7 IMPROVEMENT PLANS
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CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

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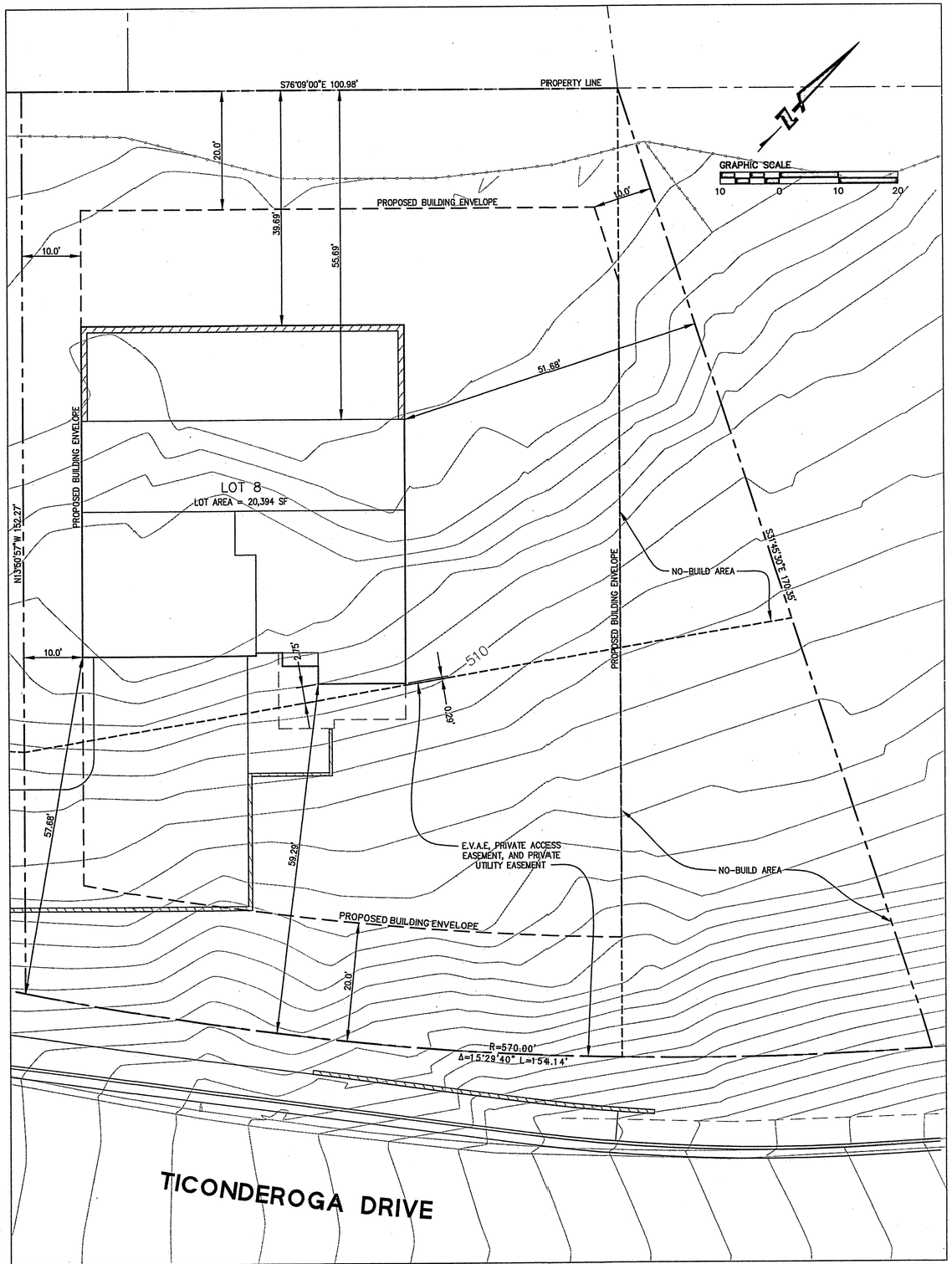

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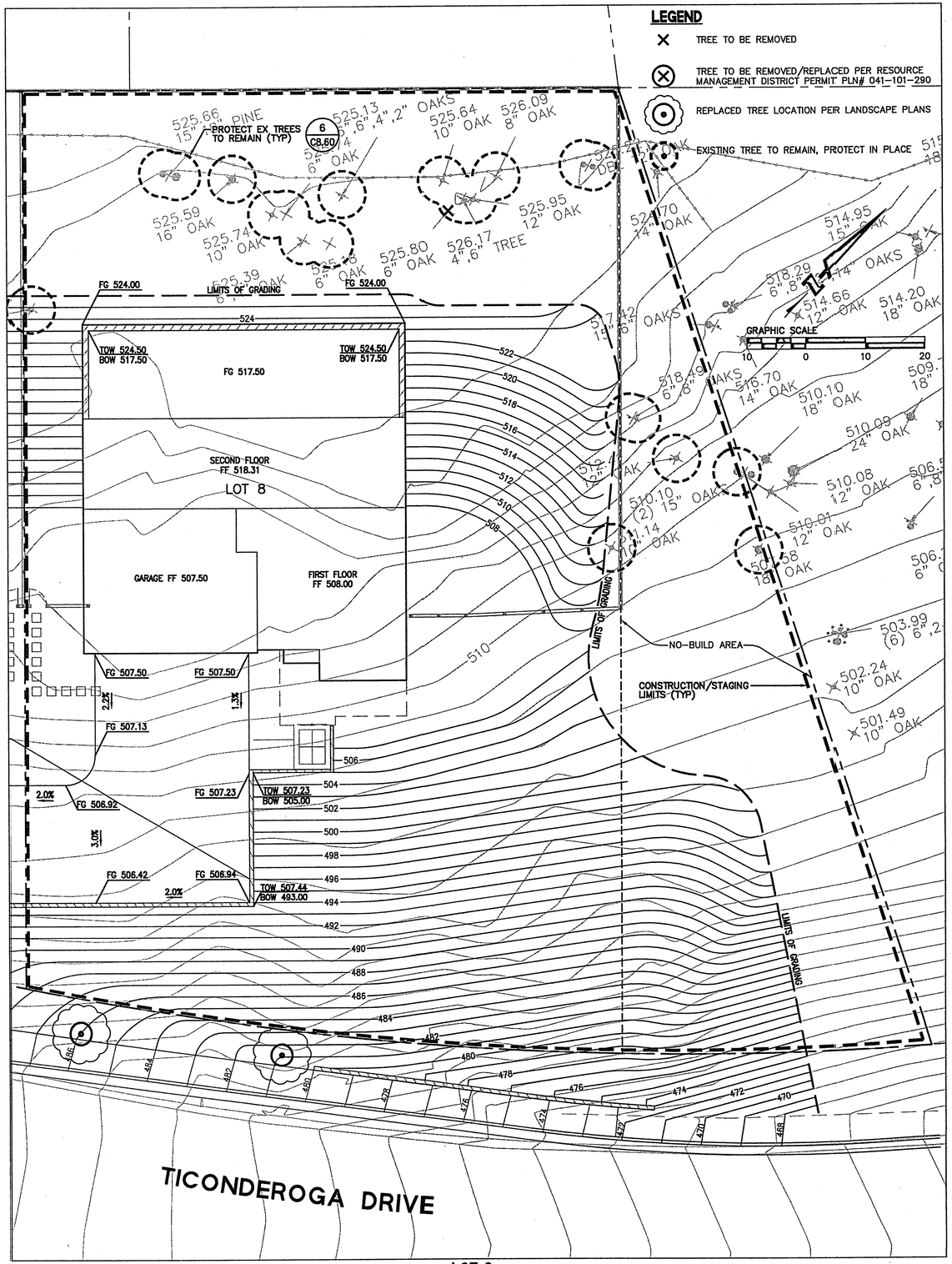

LOT 8
CLEARING, CONSTRUCTION, AND GRADING PLAN
SCALE: 1"=10'

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HIGHLAND ESTATES
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CITY OF SAN MATEO — SAN MATEO COUNTY — CALIFORNIA

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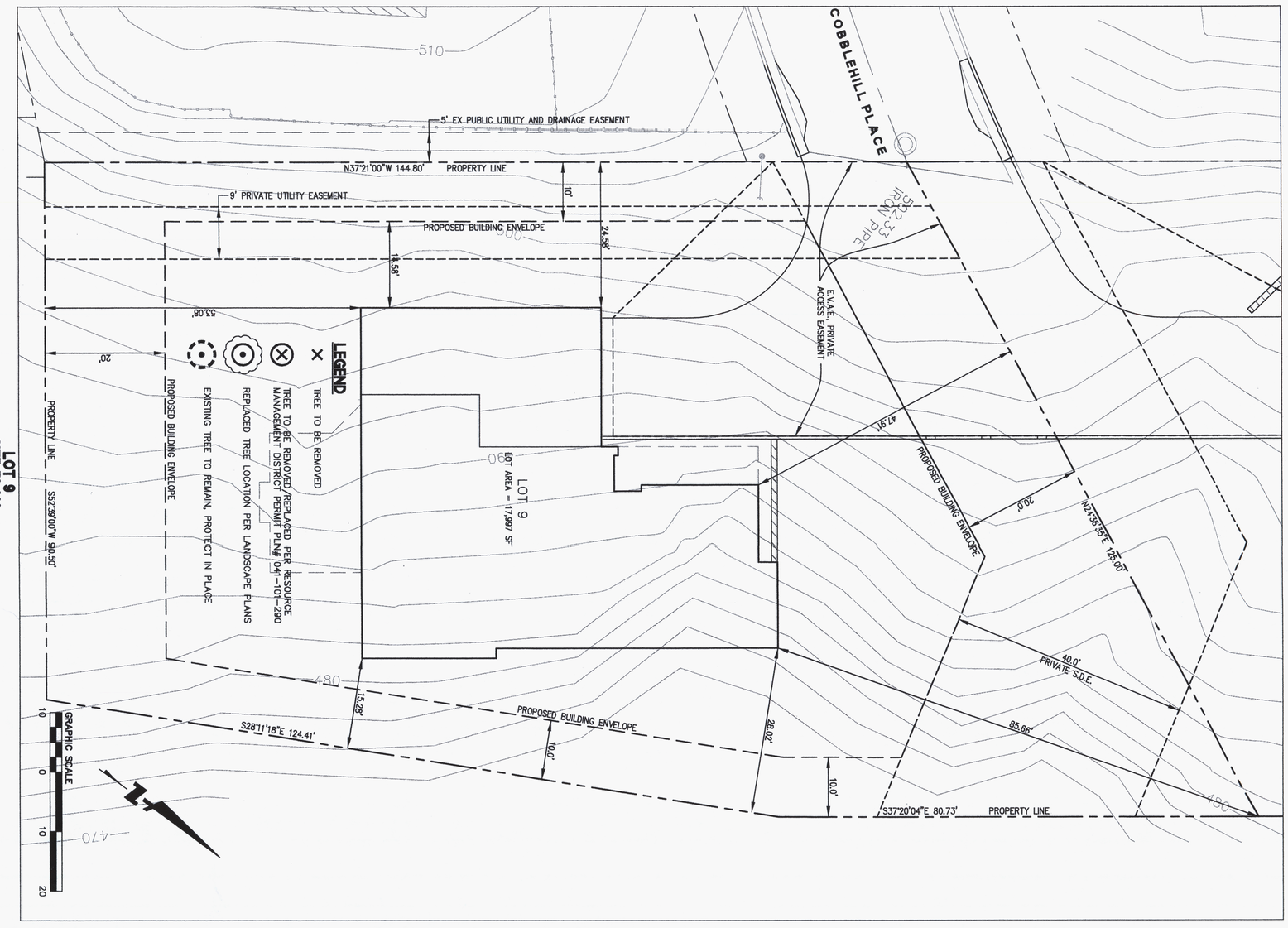
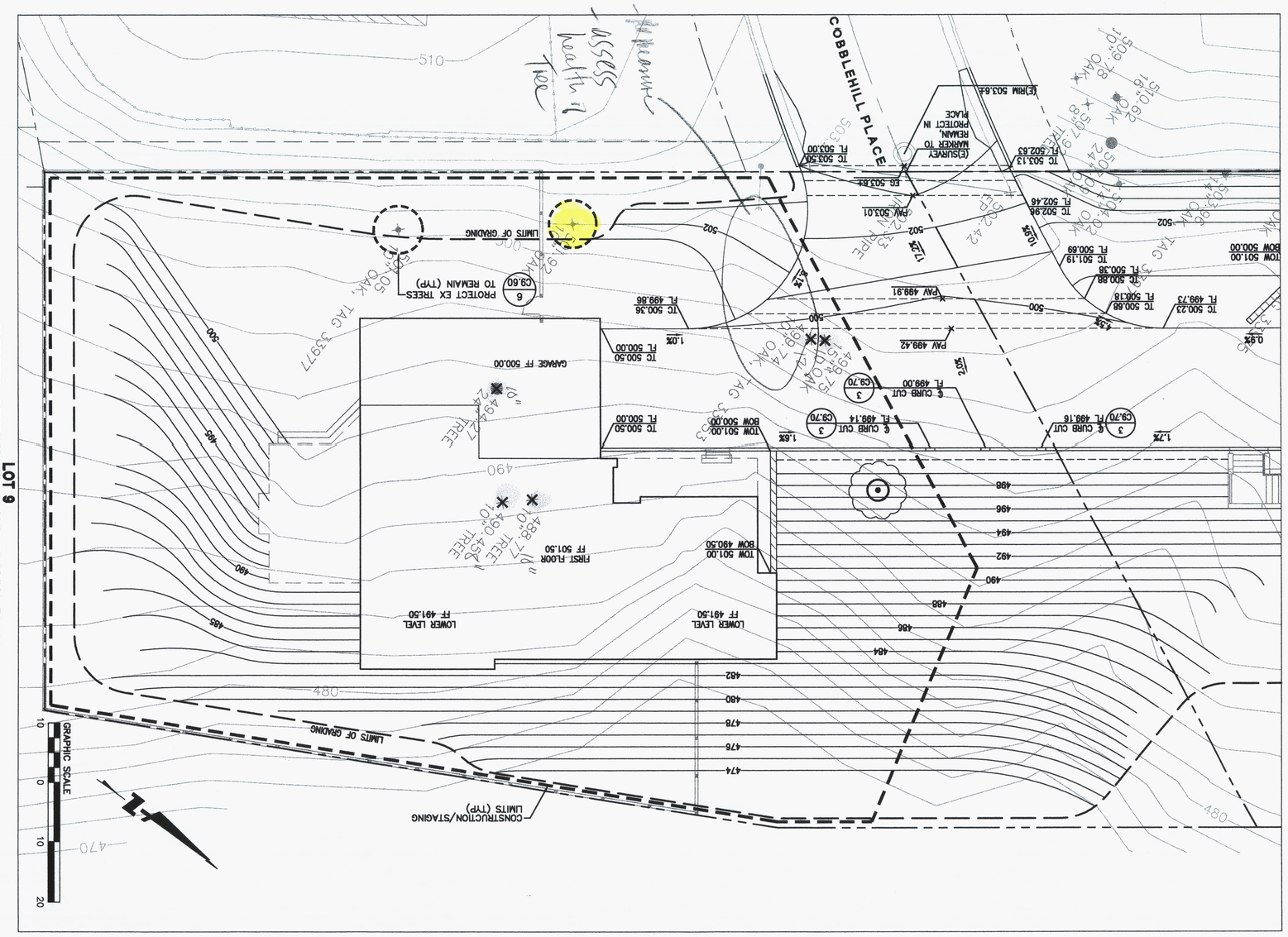


LOT 9
SITE PLAN
SCALE: 1"=10'



LOT 9
CLEARING, CONSTRUCTION, AND GRADING PLAN
SCALE: 1"=10'

Sheet Number: C9.30 OF	Date 07/22/2016	No.	Revisions
	Scale AS SHOWN		
	Design JT		
	Drawn LE		
	Approved RH		
	Job No 950168-20		

HIGHLAND ESTATES
LOT 9 IMPROVEMENT PLANS
SITE & CLEARING, CONSTRUCTION AND GRADING PLANS

CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

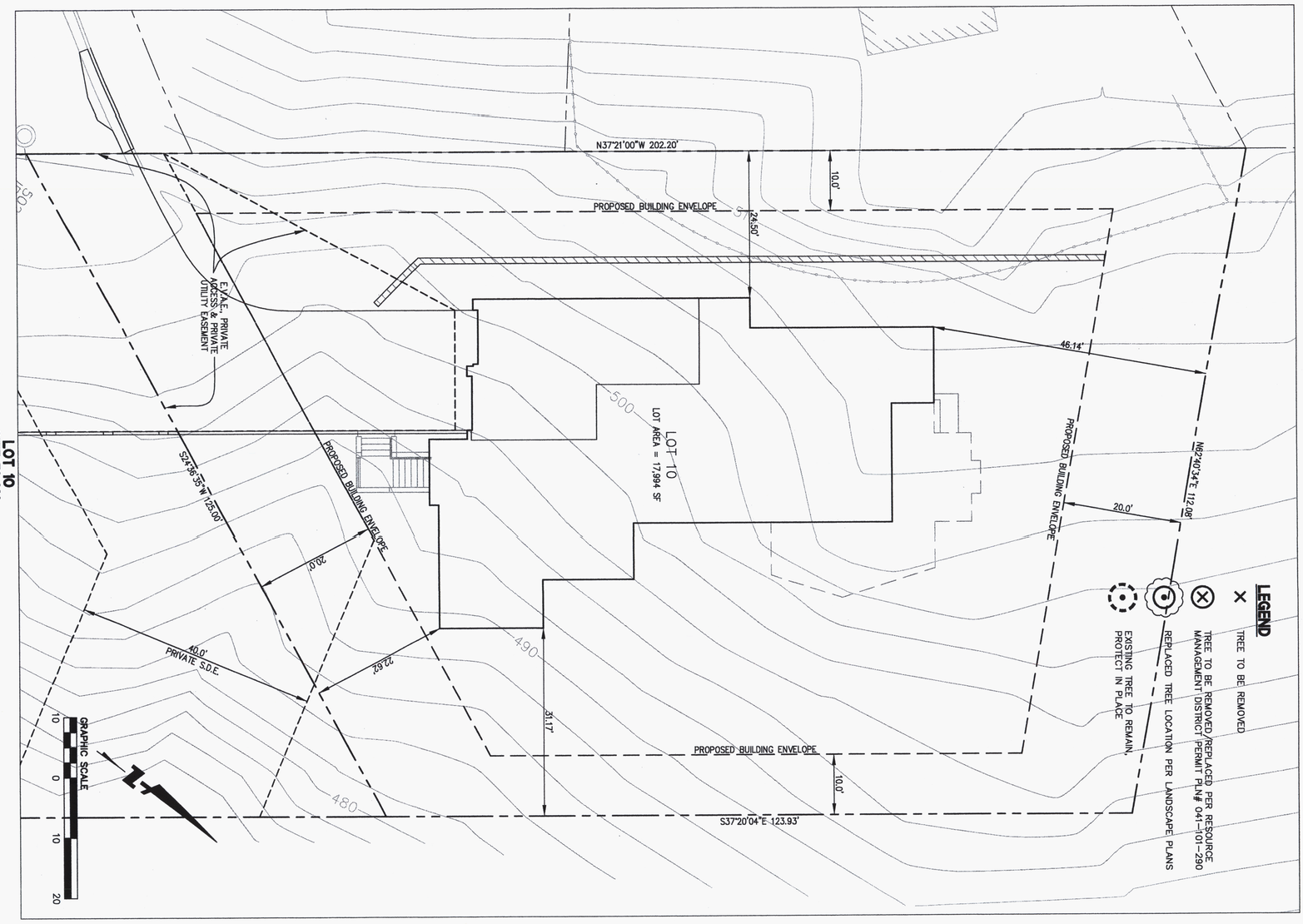
REGISTERED PROFESSIONAL ENGINEER RAYMOND L. HAYES No. C043971 CIVIL STATE OF CALIFORNIA

BKF ENGINEERS / SURVEYORS / PLANNERS
255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE: (650) 482-6300
FAX: (650) 482-6399

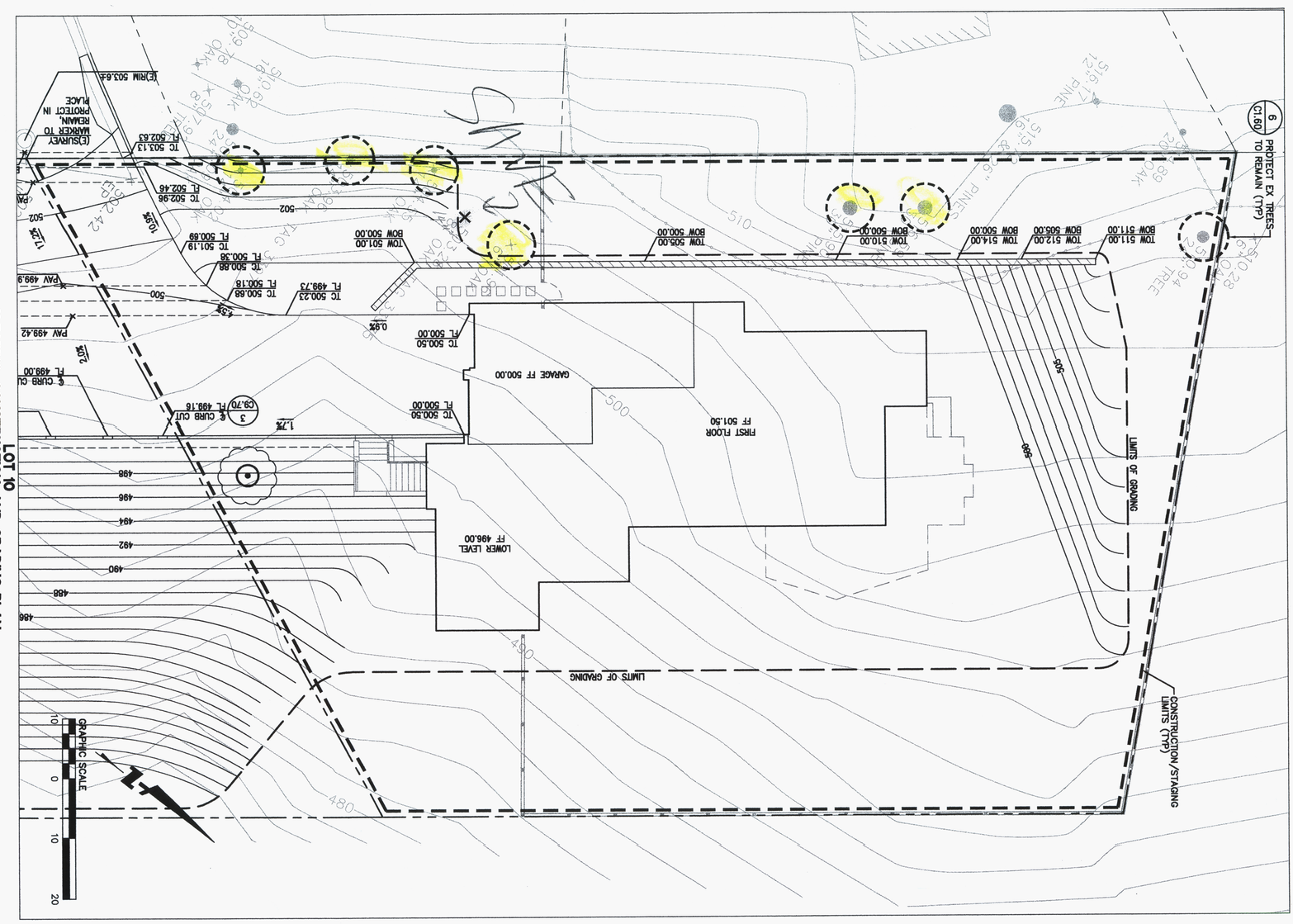
© BKF ENGINEERS

DRAWING NAME: J:\Eng95\950168\dwg\CD\Lot_10\C10.30-HECDSP.dwg
PLOT DATE: 07-27-16 PLOTTED BY: trat

LOT 10 SITE PLAN
SCALE: 1"=10'



LOT 10 CLEARING, CONSTRUCTION, AND GRADING PLAN
SCALE: 1"=10'



Sheet Number: C10.30 OF	Date 07/22/2016	No.	Revisions
	Scale AS SHOWN		
	Design JT		
	Drawn LE		
	Approved RH		
	Job No 950168-20		

HIGHLAND ESTATES
LOT 10 IMPROVEMENT PLANS
SITE & CLEARING, CONSTRUCTION AND GRADING PLANS
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER ROLAND N.V. RIVERA No. C043971 CIVIL STATE OF CALIFORNIA

BKF ENGINEERS / SURVEYORS / PLANNERS
255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE: (650) 482-6300
FAX: (650) 482-6399

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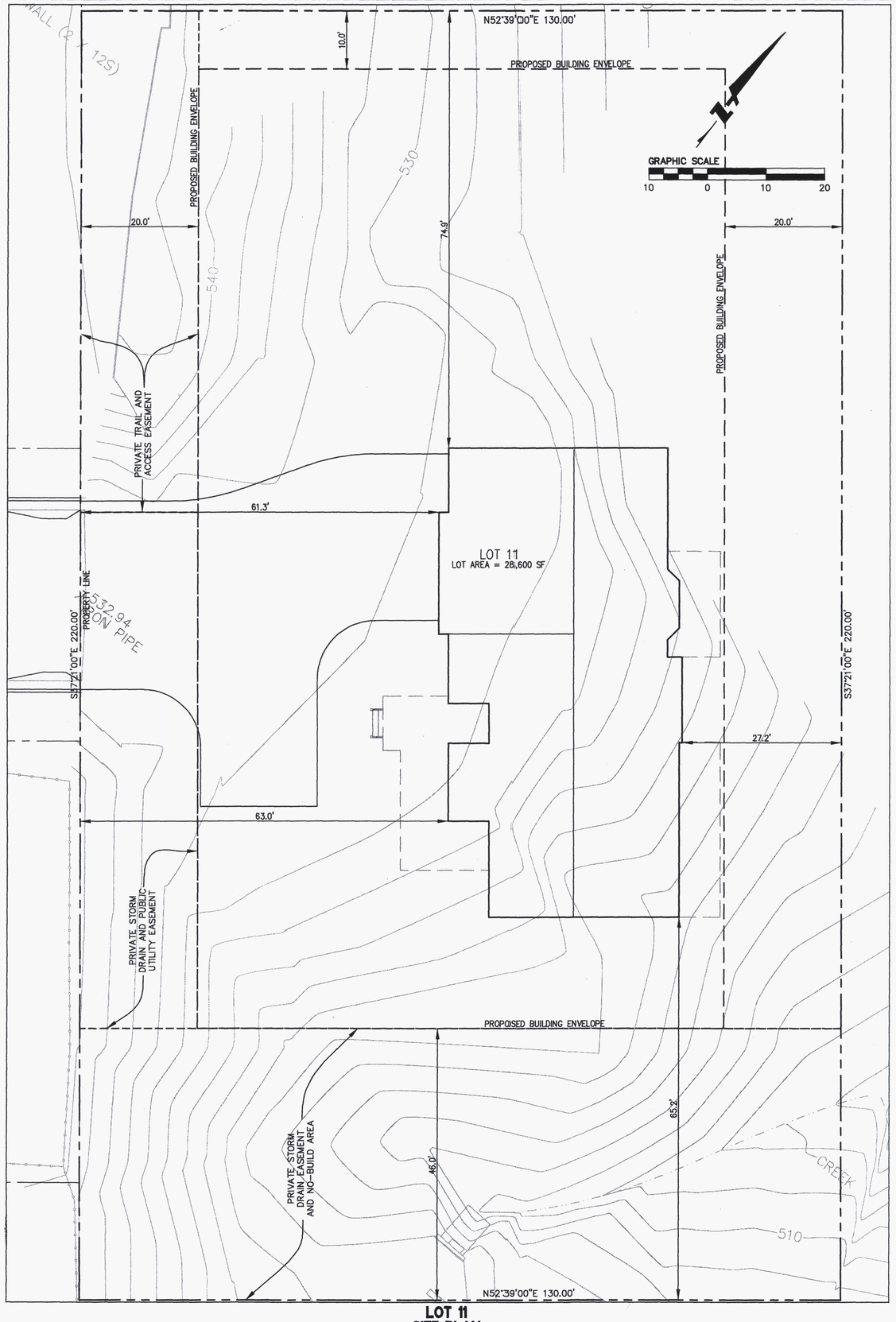
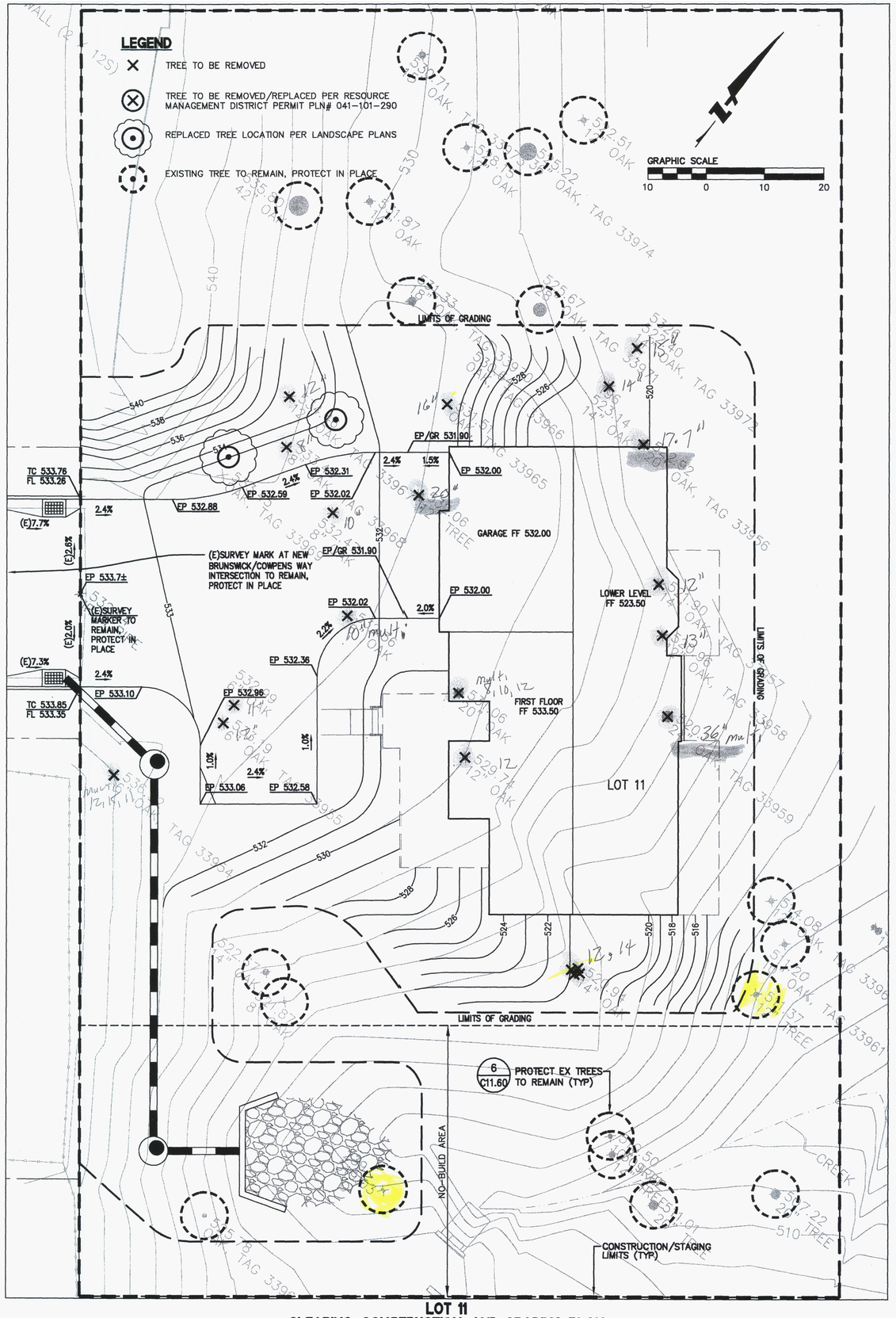


LOT 11
SITE PLAN
SCALE: 1"=10'



LOT 11
CLEARING, CONSTRUCTION, AND GRADING PLAN
SCALE: 1"=10'

BKF
ENGINEERS / SURVEYORS / PLANNERS
255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE: (650) 482-6300
FAX: (650) 482-6399

REGISTERED PROFESSIONAL ENGINEER ROLAND N.V. NAGA No. C043971 CIVIL STATE OF CALIFORNIA

HIGHLAND ESTATES
LOT 11 IMPROVEMENT PLANS
SITE & CLEARING, CONSTRUCTION AND GRADING PLANS
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

No.	Revisions

Date	07/22/2016
Scale	AS SHOWN
Design	JT
Drawn	LE
Approved	RH
Job No	950168-20

Sheet Number:
C11.30
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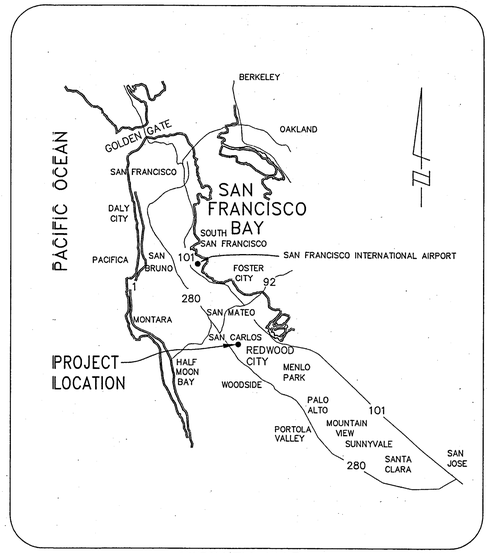
PLOT DATE: 07-27-16 PLOTTED BY: trat

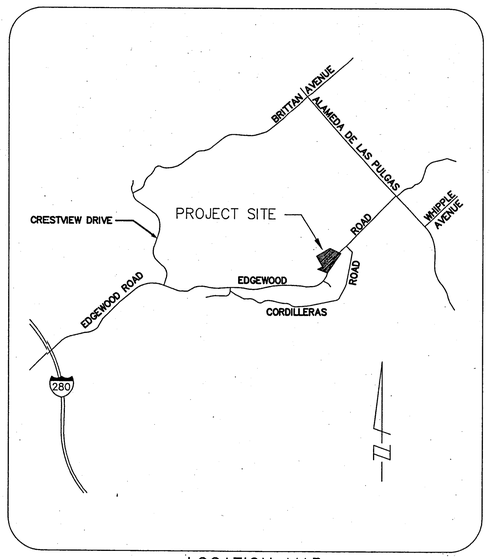
ON-SITE IMPROVEMENT PLANS
PALOMAR OAKS
SAN MATEO COUNTY, CALIFORNIA

ABBREVIATIONS

@	AT
AB	AGGREGATE BASE
AC, A/C	ASPHALT CONCRETE
ANG.PT.	ANGLE POINT
APN	ASSESSORS PARCEL NUMBER
APPROX	APPROXIMATE
ASB	AGGREGATE SUB-BASE
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
BC	BEGINNING OF CURVE OR BACK OF CURB
BCR	BEGIN CURB RETURN
BEG	BEGINNING
BLDG	BUILDING
BVC	BEGIN VERTICAL CURVE
BM	BENCH MARK
BOP	BOTTOM OF PIPE
BW	BOTTOM OF WALL OR BACK OF WALK
CB	CATCH BASIN
C.C.	CENTER TO CENTER or CENTER OF CURVE
CDF	CALIFORNIA DEPARTMENT OF FORESTRY
CF	CUBIC FEET
CIP	CAST IRON PIPE
CL, C/L	CENTERLINE OR CONTROL LINE
CMP	CORRUGATED METAL PIPE
CONC	CONCRETE
CO	CLEANOUT
COA	CONDITIONS OF APPROVAL
CONN	CONNECT(ION)
CONST	CONSTRUCTION
CONT	CONTINUOUS, CONTINUATION
CR	CURB RETURN
CUL	CULVERT
CY	CUBIC YARD
D	DELTA
DI	DUCTILE IRON OR DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DIV.	DIVISION
DW	DOMESTIC WATER
D/W, DWY	DRIVEWAY
E	ELECTRICAL
EA	EACH
EC	END OF CURVE
ECR	END OF CURB RETURN ELEVATION
EG	EXISTING GROUND OR GRADE
EL	ELEVATION
EM	ELECTRIC METER
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
EVC	END OF VERTICAL CURVE
EVCE	END VERTICAL CURVE ELEVATION
EVCS	END VERTICAL CURVE STATION
EW	EACH WAY
EX, (E)	EXISTING
FC	FACE OF CURB
FD	FOUND
FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FI	FIELD INLET
FL	FLOW LINE OR FLANGE
FP	FINISHED PAVEMENT
FS	FINISHED SURFACE
FT	FEET
G	GAS
GA	GUY ANCHOR
GB	GRADE BREAK
GM	GAS METER
GND, GRD	GROUND
GR	GRADE
GRVL	GRAVEL
GV	GATE VALVE
HDWL	HEADWALL
HORIZ	HORIZONTAL
HP	HIGH POINT
HV	HIGH VOLTAGE
ID	INSIDE DIAMETER
IN	INCHES
INV	INVERT
IP	IRON PIPE
IRR	IRRIGATION
JB	JUNCTION BOX
JP	JOINT POLE
JT	JOINT TRENCH
L	LENGTH
LAT	LATERAL
LB	POUND(S)
LF	LINEAR FEET
D/L	DAYLIGHT CUT/FILL
NIC	NOT IN CONTRCT
LG	LIP OF GUTTER
LOW	LIMIT OF WORK
LP	LOW POINT
LT	LEFT
MAX	MAXIMUM
MH	MANHOLE
MID	MIDDLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MON	SURVEY MONUMENT
(N)	NEW
#	NUMBER
NTS	NOT TO SCALE
O.C.	ON CENTER
O/H	OVERHEAD
O.S.	OFF-SET
P	PAVEMENT
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVE or PORTLAND CEMENT CONCRETE
PCR	POINT OF CURB RETURN
PE	PAD ELEVATION OR POLYETHYLENE
PG	PROPOSED GRADE
PG&E	PACIFIC GAS AND ELECTRIC
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PP	POWER POLE
PRC	POINT OF REVERSE CURVE
PSI	POUNDS PER SQUARE INCH
PT	POINT
PT&T	PACIFIC TELEPHONE AND TELEGRAPH, PACIFIC BELL
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
(R)	RECORD INFORMATION OR PLANS
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RET WALL	RETAINING WALL
RIM	RIM ELEVATION
RT	RIGHT
R/W	RIGHT OF WAY
S	SLOPE
SBD	SUBDRAIN
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SERV	SERVICE LINE
SF	SQUARE FEET
SG	SUBGRADE
SGR	SEE GEOTECHNICAL REPORT
SHLDR	SHOULDER
SHT	SHEET
SNS	STREET NAME SIGN
SOSP	SEE OFF-SITE PLANS
SRCP	SANTA ROSA CAST PRODUCTS (OR EQUAL)
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSD	SEE STRUCTURAL DRAWINGS
SSE	SANITARY SEWER EASEMENT
SSMH	SANITARY SEWER MANHOLE
STA	STATION
STD	STANDARD
SWPPP	STORM WATER POLLUTION PREVENTION PLAN
T	TELEPHONE
TB	TOP A/C BERM
TEMP	TEMPORARY
TG	TOP OF GRATE
TOP	TOP OF PIPE
TP	TOP OF PAVEMENT
TW, T/W	TOP OF WALL OR TRAVELED WAY
TYP	TYPICAL
UG	UNDERGROUND
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
U/G	UNDERGROUND
W/	WITH
W/O	WITHOUT
WL	WATERLINE
WM	WATER METER
WV	WATER VALVE
UNO	UNLESS NOTED OTHERWISE



VICINITY MAP
NTS



LOCATION MAP
NTS

LEGEND

	PROPOSED	EXISTING
SUBDIVISION BOUNDARY AND/OR RIGHT-OF-WAY		
EASEMENT		
CONTROL LINE & STREET CENTERLINE	10+00	NONE
CONTOUR LINE	160	160
STORM DRAIN LINE	12"	SD
SANITARY SEWER LINE	6" SS	SS
WATER LINE	W	W
AC IDIKE (FLOW LINE LOCATION)		
OVERHEAD LINE	NONE	O/H
GAS LINE	IN JOINT TRENCH	G
TELEPHONE	IN JOINT TRENCH	SBC
JOINT TRENCH	JT	NONE

	PROPOSED	EXISTING
SANITARY SEWER MANHOLE (ECCENTRIC)	○	○
CLEANOUT	○ CO	○
DROP INLET	□	□
SURVEY MONUMENT	⊙	
REDUCER	◁	
WATER VALVE	○	
BLOW OFF VALVE	⋉	
FIRE HYDRANT	⊙	
STUB AND CAP LATERAL	E	
PAD MOUNTED TRANSFORMER	[A]	
17"x30" ELECTRIC BOX WITH "ELECTRIC" ON COVER	E	
10 5/8"x17 1/4" TELEPHONE BOX WITH "TELEPHONE" ON COVER	◪	
10 5/8"x17 1/4" CABLE TV BOX WITH "TV" ON COVER	TV	
BLUE REFLECTOR NEAR FIRE HYDRANT	■	
TREE TO BE REMOVED	⊗	
DETAIL 1 ON SHEET 12	1/12	

RECEIVED
DEPARTMENT OF PUBLIC WORKS
AUG 1 - 2005
DEVELOPMENT REVIEW SECTION
COUNTY OF SAN MATEO

UTILITY PLAN INFORMATION

1. SEE PACIFIC GAS AND ELECTRIC COMPANY'S DRAWING NO. PM 30387167, DATED 1/06/2005 FOR GAS MAIN EXTENSION AND DRAWING NO. PM 30387827 DATED 11/24/04 FOR PM-TX AND UG SERVICES (INCLUDING TELEPHONE AND CABLE TV).

2. SEE CALIFORNIA WATER SERVICE COMPANY'S

   DRAWING NO. MPS-4781, DATED 3/30/05
   DRAWING NO. CW-832-R3, DATED 9/02
   DRAWING NO. CWDWGS, DATED 6/02, 1 OF 2
   DRAWING NO. CWDWGS, DATED 3/03, 2 OF 2

OFF-SITE WORK

SEE EDGEWOOD ROAD WIDENING IMPROVEMENT PLANS BY BKF JOB NO. 2004-0052-10, DATED 01/04/05 AND LATEST REVISIONS.

Construction contractor agrees that in accordance with generally accepted construction practices, construction contractor will be required to assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property; that this requirement shall be made to apply continuously and not be limited to normal working hours, and construction contractor further agrees to defend, indemnify and hold design professional harmless from any and all liability, real or alleged, in connection with the performance of work on this project, excepting liability arising from the sole negligence of design professional.

CELSOC
CONSULTING ENGINEERS AND LAND SURVEYORS OF CALIFORNIA

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.

CELSOC
CONSULTING ENGINEERS AND LAND SURVEYORS OF CALIFORNIA

ENGINEERS' STATEMENTS

CIVIL ENGINEER

THESE IMPROVEMENT PLANS HAVE BEEN PREPARED UNDER MY DIRECTION IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICE.

7/25/05
LOUIS ATTILIO ARATA — DATE
PRINCIPAL
R.C.E. 11413, Lic. Exp. 12/31/06

REGISTERED PROFESSIONAL ENGINEER
LOUIS A. ARATA
No. 11413
CIVIL
STATE OF CALIFORNIA

GEOTECHNICAL ENGINEER

THE GEOTECHNICAL ASPECTS OF THESE IMPROVEMENT PLANS HAVE BEEN REVIEWED AND ARE IN GENERAL CONFORMANCE WITH THE GEOTECHNICAL REPORTS ENTITLED "GEOTECHNICAL INVESTIGATION PROPOSED EDGEWOOD ESTATES, 1520 EDGEWOOD ROAD, SAN MATEO COUNTY, CALIFORNIA", PREPARED BY BAY AREA GEOTECHNICAL GROUP, THEIR JOB NO. SUNSE-01-00, DATED NOV. 3, 2000 AND "REPORT ADDENDUM AND RESPONSE TO THIRD PARTY GEOTECHNICAL/GEOLOGICAL REVIEW PROPOSED EDGEWOOD ESTATES PROJECT, SAN MATEO COUNTY, CALIFORNIA" DATED SEPT. 4, 2001, PREPARED FOR SUNSET REAL PROPERTIES.

JASON VAN ZWOL, GEOTECHNICAL ENGINEER — DATE
BAY AREA GEOTECHNICAL GROUP (BAGG)
G.E. #854

APPROVALS

EDGEWOOD SEWER MAINTENANCE DISTRICT

ANN MADER STILLMAN — DATE
PRINCIPAL CIVIL ENGINEER, SAN MATEO CO. DEPT. OF PUBLIC WORKS
P.E. C47882 . EXP. 12/31/05

SAN MATEO COUNTY PUBLIC WORKS

THESE IMPROVEMENT PLANS FOR THE PALOMAR OAKS SUBDIVISION HAVE BEEN REVIEWED AND APPROVED BY THE COUNTY OF SAN MATEO AND ARE IN GENERAL CONFORMANCE WITH STANDARD ENGINEERING PRACTICE.

NEIL CULLEN — DATE
DIRECTOR OF PUBLIC WORKS, SAN MATEO COUNTY
R.C.E. C19109 EXP. 9/30/05

DEVELOPER'S CONTACT INFORMATION

PROJECT ADDRESS: 1520 EDGEWOOD ROAD
OWNER: MAX A. KEECH
SUNSET REAL PROPERTIES
540 PRICE AVENUE
REDWOOD CITY, CA 94063
(650) 482-6354

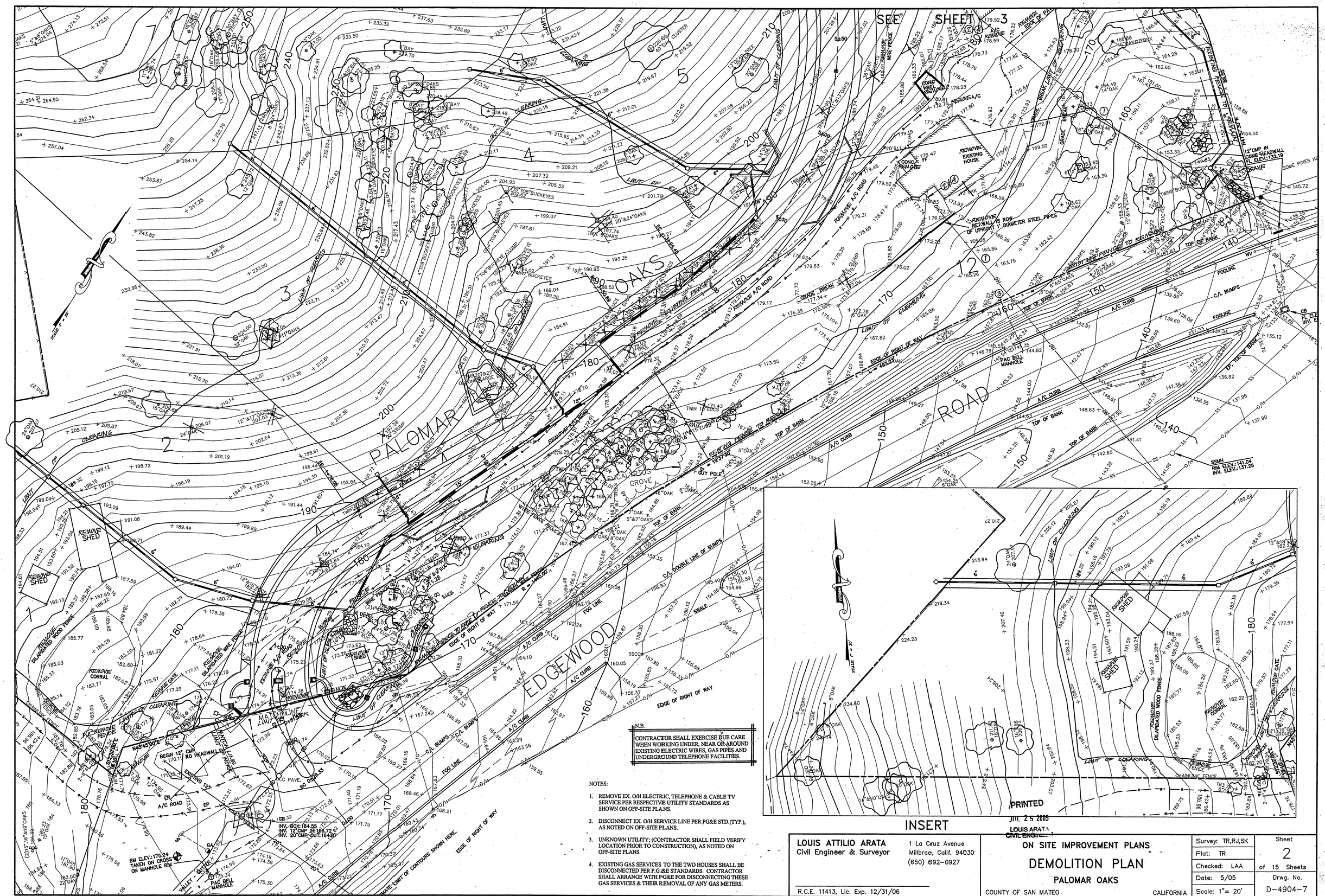
SHEET INDEX

NO.	TITLE
1	TITLE SHEET, LEGEND AND ABBREVIATIONS
2	DEMOLITION PLAN AND MAJOR TREES
3	DEMOLITION PLAN AND MAJOR TREES
4	GRADING & DRAINAGE PLAN
5	GRADING & DRAINAGE PLAN
6	GENERAL PLAN
7	GENERAL PLAN
8	PROFILES
9	PROFILES
10	DETAILS
11	DETAILS
12	EROSION CONTROL PLAN
13	EROSION CONTROL PLAN
14	STORM WATER POLLUTION PREVENTION PROGRAM PLAN-DETAILS & NOTES
15	SAN MATEO COUNTYWIDE STORM WATER PREVENTION PROGRAM

PRINTED
JUL 25 2005
LOUIS ARATA
CIVIL ENGINEER

LOUIS ATTILIO ARATA Civil Engineer & Surveyor	1 La Cruz Avenue Millbrae, Calif. 94030 (650) 692-0927	ON SITE IMPROVEMENT PLANS TITLE SHEET, LEGEND & ABBREVIATIONS PALOMAR OAKS COUNTY OF SAN MATEO CALIFORNIA	Survey: TR,RJ,SK Plat: TR Checked: LAA Date: 7/22/05 Scale: NO SCALE
R.C.E. 11413, Lic. Exp. 12/31/06			Sheet 1 of 15 Sheets Drwg. No. D-4904-7

JOB: 4904-2
DWG: 5004-TITLE-MAY23



N.B.

CONTRACTOR SHALL EXERCISE DUE CARE WHEN WORKING UNDER, NEAR OR AROUND EXISTING ELECTRIC WIRES, GAS PIPES AND UNDERGROUND TELEPHONE FACILITIES.

NOTES:

1. REMOVE EX. O/H ELECTRIC, TELEPHONE & CABLE TV SERVICE PER RESPECTIVE UTILITY STANDARDS AS SHOWN ON OFF-SITE PLANS.
2. DISCONNECT EX. O/H SERVICE LINE PER PG&E STD.(TYP.), AS NOTED ON OFF-SITE PLANS.
3. UNKNOWN UTILITY; (CONTRACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION), AS NOTED ON OFF-SITE PLANS.
4. EXISTING GAS SERVICES TO THE TWO HOUSES SHALL BE DISCONNECTED PER P.G.&E STANDARDS. CONTRACTOR SHALL ARRANGE WITH PG&E FOR DISCONNECTING THESE GAS SERVICES & THEIR REMOVAL OF ANY GAS METERS.

INSERT

LOUIS ATTILIO ARATA
Civil Engineer & Surveyor
1 La Cruz Avenue
Millbrae, Calif. 94030
(650) 692-0927
R.C.E. 11413, Lic. Exp. 12/31/06

ON SITE IMPROVEMENT PLANS

DEMOLITION PLAN

PALOMAR OAKS

COUNTY OF SAN MATEO CALIFORNIA

Survey: TR,RJ,SK	Sheet 2 of 15 Sheets
Plat: TR	
Checked: LAA	
Date: 5/05	Drwg. No. D-4904-7
Scale: 1"= 20'	

JOB: 4904-2
DWG: 5004-DEMOL4

NOTES:

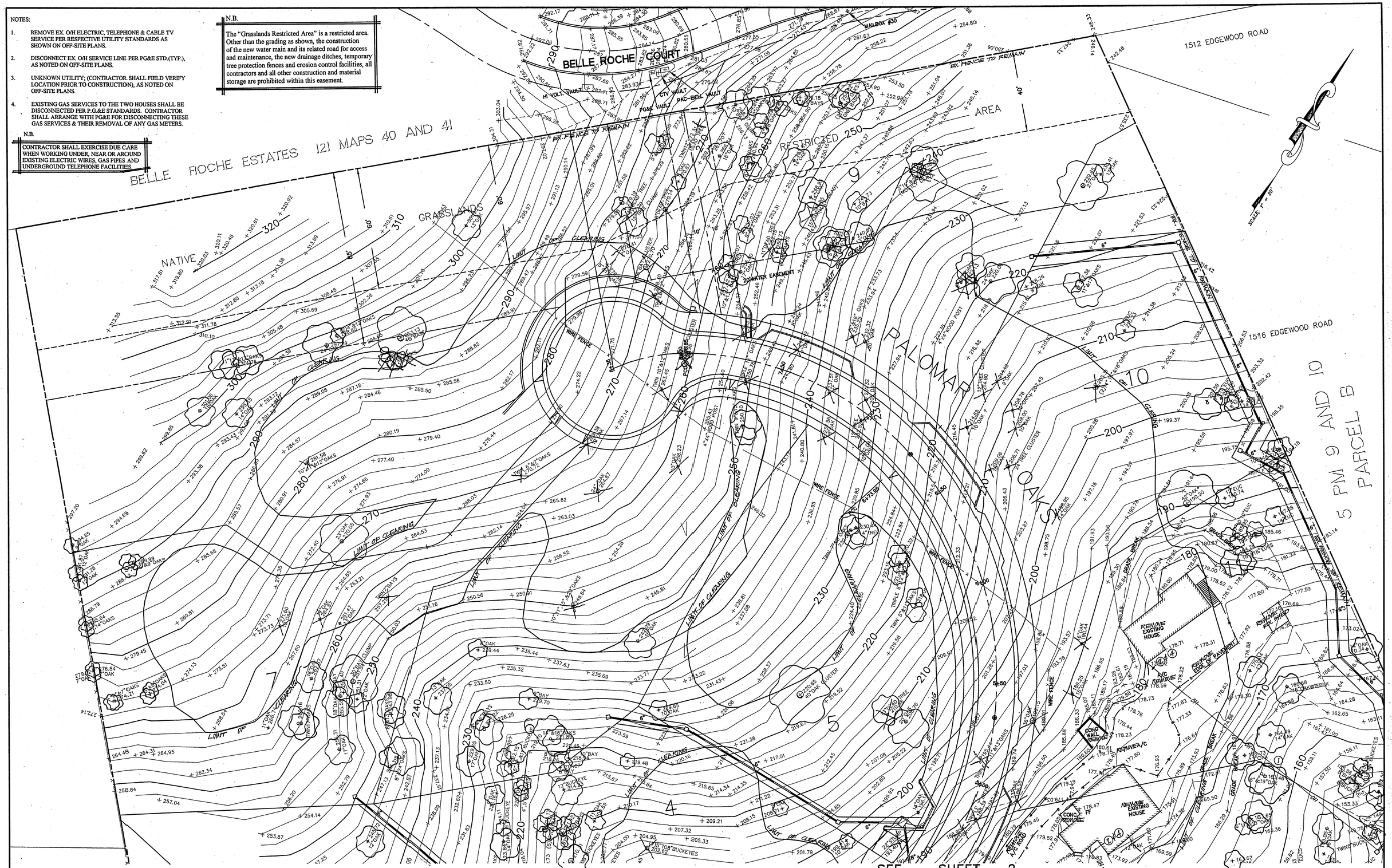
1. REMOVE EX. O/H ELECTRIC, TELEPHONE & CABLE TV SERVICE PER RESPECTIVE UTILITY STANDARDS AS SHOWN ON OFF-SITE PLANS.
2. DISCONNECT EX. O/H SERVICE LINE PER PG&E STD.(TYP.), AS NOTED ON OFF-SITE PLANS.
3. UNKNOWN UTILITY; (CONTRACTOR SHALL FIELD VERIFY LOCATION PRIOR TO CONSTRUCTION), AS NOTED ON OFF-SITE PLANS.
4. EXISTING GAS SERVICES TO THE TWO HOUSES SHALL BE DISCONNECTED PER P.G.&E STANDARDS. CONTRACTOR SHALL ARRANGE WITH PG&E FOR DISCONNECTING THESE GAS SERVICES & THEIR REMOVAL OF ANY GAS METERS.

N.B.

CONTRACTOR SHALL EXERCISE DUE CARE WHEN WORKING UNDER, NEAR OR AROUND EXISTING ELECTRIC WIRES, GAS PIPES AND UNDERGROUND TELEPHONE FACILITIES.

N.B.

The "Grasslands Restricted Area" is a restricted area. Other than the grading as shown, the construction of the new water main and its related road for access and maintenance, the new drainage ditches, temporary tree protection fences and erosion control facilities, all contractors and all other construction and material storage are prohibited within this easement.

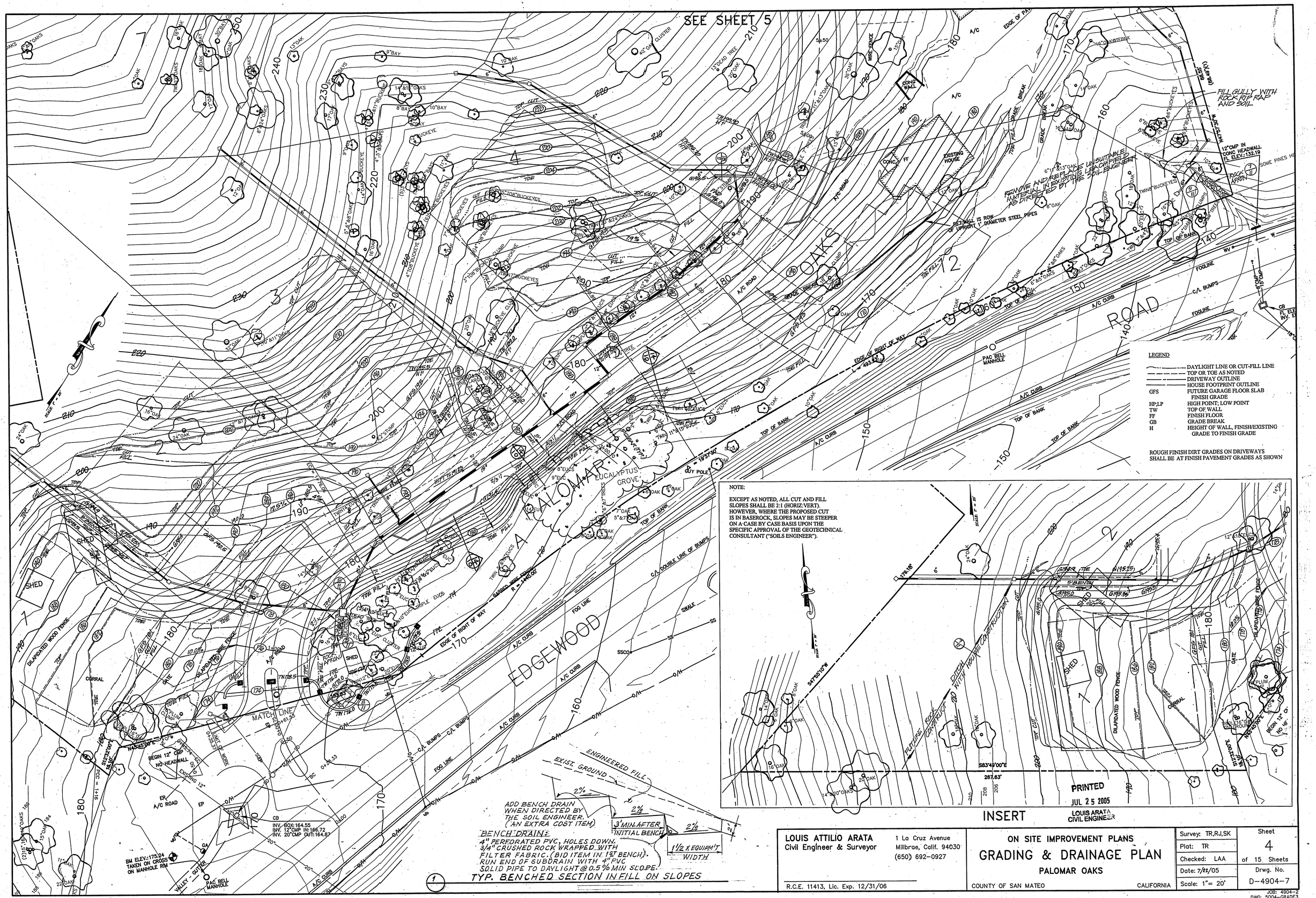


SEE SHEET 2

PRINTED
JUL 25 2005
LOUIS ARATA
CIVIL ENGINEER

LOUIS ATTILIO ARATA Civil Engineer & Surveyor R.C.E. 11413, Lic. Exp. 12/31/06	1 La Cruz Avenue Millbrae, Calif. 94030 (650) 692-0927	ON SITE IMPROVEMENT PLANS DEMOLITION PLAN PALOMAR OAKS COUNTY OF SAN MATEO CALIFORNIA	Survey: TR,RJ,SK Plat: TR Checked: LAA Date: 5/05 Scale: 1"= 20'	Sheet 3 of 15 Sheets Drwg. No. D-4904-7

JOB: 4904-2
DWG: 5004-DEMOL4



LEGEND

	DAYLIGHT LINE OR CUT-FILL LINE
	TOP OR TOE AS NOTED
	DRIVEWAY OUTLINE
	HOUSE FOOTPRINT OUTLINE
GFS	FUTURE GARAGE FLOOR SLAB FINISH GRADE
HP;LP	HIGH POINT; LOW POINT
TW	TOP OF WALL
FF	FINISH FLOOR
GB	GRADE BREAK
H	HEIGHT OF WALL, FINISH/EXISTING GRADE TO FINISH GRADE

ROUGH FINISH DIRT GRADES ON DRIVEWAYS SHALL BE AT FINISH PAVEMENT GRADES AS SHOWN

NOTE:

EXCEPT AS NOTED, ALL CUT AND FILL SLOPES SHALL BE 2:1 (HORIZ:VERT). HOWEVER, WHERE THE PROPOSED CUT IS IN BASEROCK, SLOPES MAY BE STEEPER ON A CASE BY CASE BASIS UPON THE SPECIFIC APPROVAL OF THE GEOTECHNICAL CONSULTANT ("SOILS ENGINEER").

INSERT

LOUIS ATTILIO ARATA Civil Engineer & Surveyor R.C.E. 11413, Lic. Exp. 12/31/06	1 La Cruz Avenue Millbrae, Calif. 94030 (650) 692-0927	ON SITE IMPROVEMENT PLANS GRADING & DRAINAGE PLAN PALOMAR OAKS COUNTY OF SAN MATEO CALIFORNIA	Survey: TR,RJ,SK Plat: TR Checked: LAA Date: 7/22/05 Scale: 1"= 20'

Sheet 4 of 15 Sheets

Drwg. No. D-4904-7

JOB: 4904-2
DWG: 5004-GRADE3

LEGEND

———	DAYLIGHT LINE OR CUT-FILL LINE
— — —	TOP OR TOE AS NOTED
— — —	DRIVEWAY OUTLINE
———	HOUSE FOOTPRINT OUTLINE
GFS	FUTURE GARAGE FLOOR SLAB FINISH GRADE
HP,LP	HIGH POINT; LOW POINT
TW	TOP OF WALL
FF	FINISH FLOOR
GB	GRADE BREAK
H	HEIGHT OF WALL, FINISH/EXISTING GRADE TO FINISH GRADE

ROUGH FINISH DIRT GRADES ON DRIVEWAYS SHALL BE AT FINISH PAVEMENT GRADES AS SHOWN

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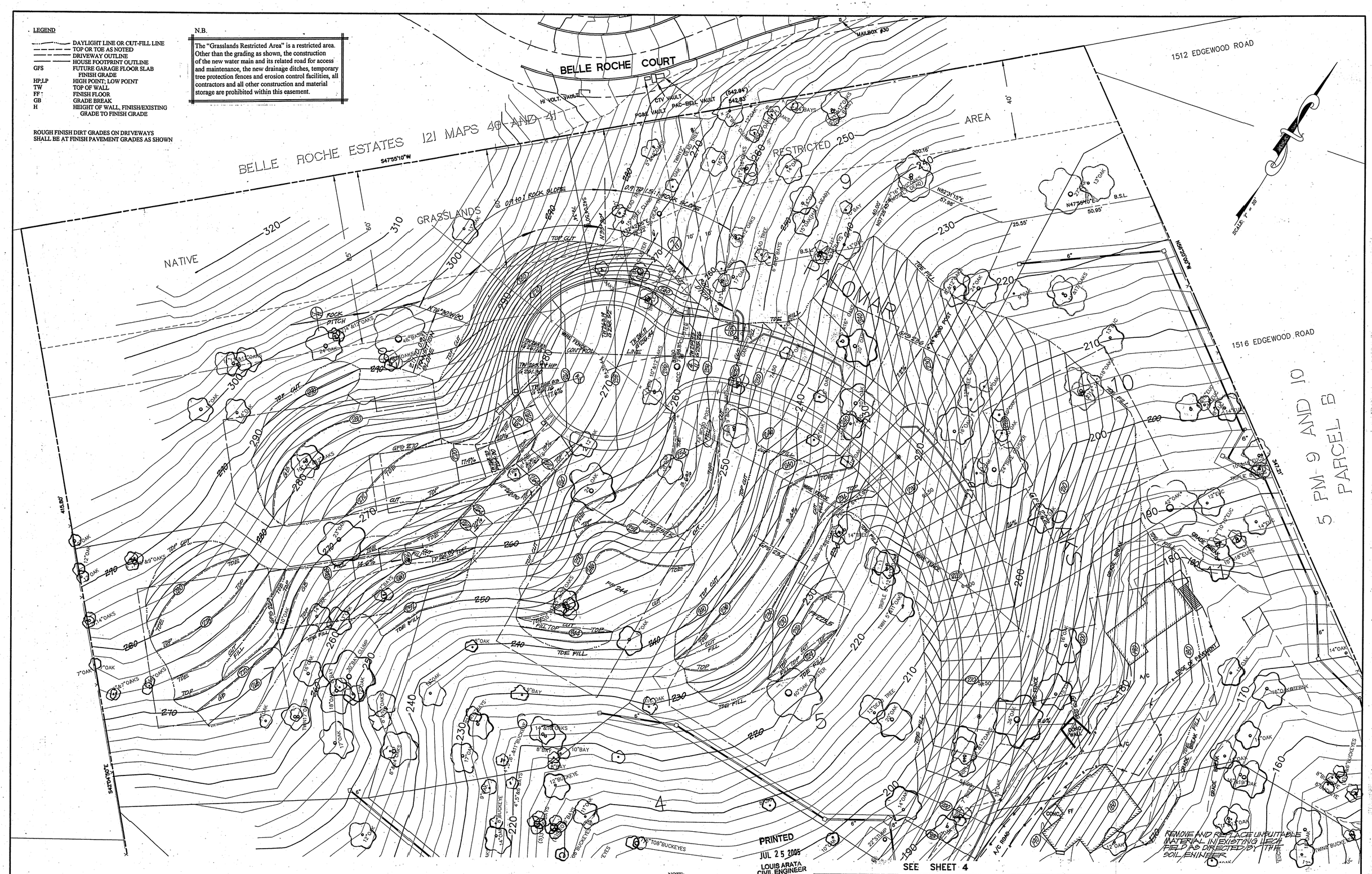


SEE SHEET 4

NOTE:

EXCEPT AS NOTED, ALL CUT AND FILL SLOPES SHALL BE 2:1 (HORIZ:VERT). HOWEVER, WHERE THE PROPOSED CUT IS IN BASEROCK, SLOPES MAY BE STEEPER ON A CASE BY CASE BASIS UPON THE SPECIFIC APPROVAL OF THE GEOTECHNICAL CONSULTANT ("SOILS ENGINEER").

LOUIS ATTILIO ARATA
Civil Engineer & Surveyor
1 La Cruz Avenue
Millbrae, Calif. 94030
(650) 692-0927
R.C.E. 11413, Lic. Exp. 12/31/06

ON SITE IMPROVEMENT PLANS

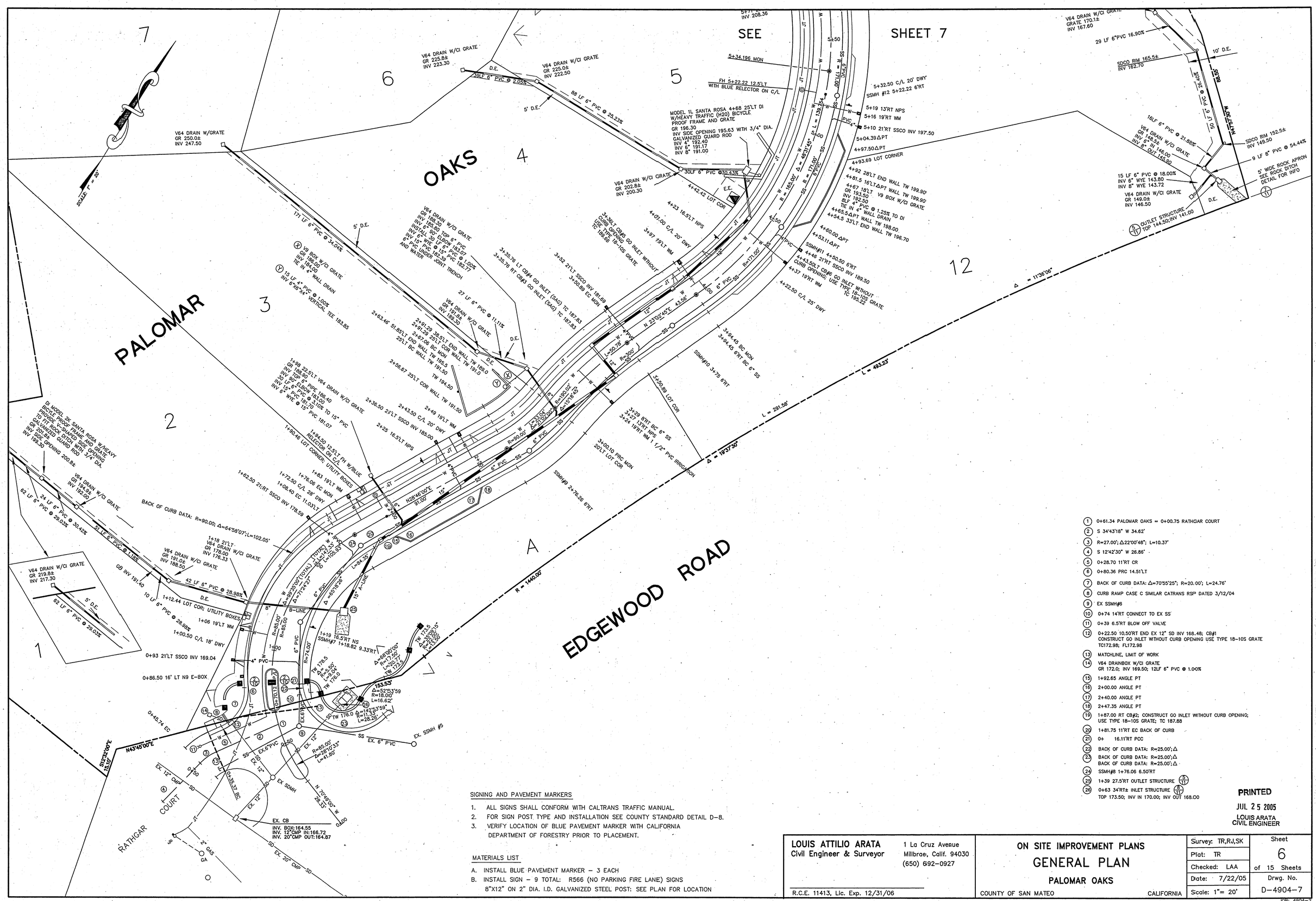
GRADING & DRAINAGE PLAN

PALOMAR OAKS

COUNTY OF SAN MATEO CALIFORNIA

Survey: TR,RJ,SK	Sheet 5 of 15 Sheets
Plat: TR	
Checked: LAA	
Date: 7/22/05	Drwg. No. D-4904-7
Scale: 1"= 20'	

JOB: 4904-2
DWG: 5004-GRADE3



1. 0+61.34 PALOMAR OAKS = 0+00.75 RATHGAR COURT
2. S 34°43'18" W 34.62'
3. R=27.00'; Δ22°00'48"; L=10.37'
4. S 12°42'30" W 26.86'
5. 0+28.70 11'RT CR
6. 0+80.36 PRC 14.51'LT
7. BACK OF CURB DATA: Δ=70°55'25"; R=20.00'; L=24.76'
8. CURB RAMP CASE C SIMILAR CATRANS RSP DATED 3/12/04
9. EX SSMH#6
10. 0+74 14'RT CONNECT TO EX SS
11. 0+39 6.5'RT BLOW OFF VALVE
12. 0+22.50 10.50'RT END EX 12" SD INV 168.48; CB#1 CONSTRUCT GO INLET WITHOUT CURB OPENING USE TYPE 18-10S GRATE TC172.98; FL172.98
13. MATCHLINE, LIMIT OF WORK
14. V64 DRAINBOX W/CI GRATE GR 172.0; INV 169.50; 12LF 6" PVC @ 1.00%
15. 1+92.65 ANGLE PT
16. 2+00.00 ANGLE PT
17. 2+40.00 ANGLE PT
18. 2+47.35 ANGLE PT
19. 1+87.00 RT CB#2; CONSTRUCT GO INLET WITHOUT CURB OPENING; USE TYPE 18-10S GRATE; TC 187.88
20. 1+81.75 11'RT EC BACK OF CURB
21. 0+ 16.11'RT PCC
22. BACK OF CURB DATA: R=25.00';Δ
23. BACK OF CURB DATA: R=25.00';Δ
    BACK OF CURB DATA: R=25.00';Δ
24. SSMH#8 1+76.06 6.50'RT
25. 1+39 27.5'RT OUTLET STRUCTURE (5/11)
26. 0+63 34'RT± INLET STRUCTURE (6/11)
    TOP 173.50; INV IN 170.00; INV OUT 168.00

SIGNING AND PAVEMENT MARKERS

1. ALL SIGNS SHALL CONFORM WITH CALTRANS TRAFFIC MANUAL.
2. FOR SIGN POST TYPE AND INSTALLATION SEE COUNTY STANDARD DETAIL D-8.
3. VERIFY LOCATION OF BLUE PAVEMENT MARKER WITH CALIFORNIA DEPARTMENT OF FORESTRY PRIOR TO PLACEMENT.

MATERIALS LIST

A. INSTALL BLUE PAVEMENT MARKER - 3 EACH
B. INSTALL SIGN - 9 TOTAL: R566 (NO PARKING FIRE LANE) SIGNS 8"X12" ON 2" DIA. I.D. GALVANIZED STEEL POST: SEE PLAN FOR LOCATION

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CIVIL ENGINEER

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ON SITE IMPROVEMENT PLANS
GENERAL PLAN
PALOMAR OAKS
COUNTY OF SAN MATEO CALIFORNIA

Survey: TR,RJ,SK	Sheet 6 of 15 Sheets
Plat: TR	
Checked: LAA	Drwg. No. D-4904-7
Date: 7/22/05	
Scale: 1"= 20'	

JOB: 4904-2
DWG: 5004-GEN3

BELLE ROCHE COURT

(542.94')
542.83'

BELLE ROCHE ESTATES 121 MAPS 40 AND 41

S47°55'10"W

NATIVE

GRASSLANDS

RESTRICTED AREA

20'WATER EASEMENT

40'

60'

85'

80'

3.4%

3.0%

200.16'

1512 EDGEWOOD ROAD

1516 EDGEWOOD ROAD

PALOMAR OAKS 10

8

9

7

6

5

4

11

5 PM 9 AND 10
5 PARCEL B

C/L

B.S.L.

50.95'

N82°31'15"E
57.98'

N07°28'45"W
40.00'

N47°55'10"E

N82°20'00"W

177.92'

98 LF 6"PVC @ 3.53%

SCALE: 1" = 20'

V64 DRAIN W/CI GRATE
GRATE 219.0±
INV 216.50

V64 DRAIN W/CI GRATE
GRATE 222.1±
INV 219.00

73 LF 6"PVC @3.42%

10' D.E.

SDCO
RIM 198.1±
INV 195.40

16 LF 6"PVC 19.50%

V64 DRAIN W/CI GRATE
GRATE 195.2±
INV 192.70

6"X6"X6" WYE
INV 192.28

24 LF 6"PVC 13.83%

SDCO RIM 192.2±
INV 189.38

347.21'

132.08'

52 LF 6"PVC 24.00%

10' D.E.

SDCO RIM 177.5±
INV 174.50

32 LF 6" PVC @ 21.56%

V64 DRAIN W/CI GRATE
GRATE 170.1±
INV 167.60

29 LF 6"PVC 16.90%

SDCO RIM 165.5±
INV 162.70

16LF 6" PVC, @ 21.88%

V64 DRAIN W/CI GRATE
GR 149.5±
INV 6" W 146.00
INV 8" OUT 145.80

15 LF 6" PVC @ 18.00%
INV 6" WYE 143.80
INV 8" WYE 143.72

V64 DRAIN W/CI GRATE
GR 149.0±
INV 146.50

(A) SEE SMCO. "DRAINAGE UNDER SIDEWALK" DETAIL D-6; USE 3-3" ID PVC SCHEDULE 40

(B) CONCRETE CHANNEL SEE 12/10
7+70 11'RT C/L CHANNEL
7+72 24'LT C/L Δ PT CHANNEL
DEFLECT LEFT 70° AND USE C/L OF 4' RADIUS TO END OF CHANNEL

BACK OF CURB DATA
Δ = 283°55'53"
R = 35.00'
L = 173.44'

BACK OF CURB DATA
Δ = 41°39'07"
R = 25.00'
L = 18.18'

BACK OF CURB DATA
Δ = 69°07'13"
R = 25.00'
L = 30.16'

8+62 CONTROL LINE 8'RT FLUSHING INLET
8+74 CONTROL LINE NPS
8+64 CONTROL LINE 8'LT BLOW OFF VALVE
N49°15'44"E(R) DWY
ΔPT WALL N46°18'58"E(R) (FRONT)
V64 DRAIN W/CI GRATE
GR 262.91
INV BOX 261.91
INV 3-90°BENDS 260.76
N10°32'00"E 15.00'
8+70 CONTROL LINE 23'LT WM
8+67 CONTROL LINE 33'LT SSCO
INV 255.00
18+66 CONTROL LINE 35'LT
V64 DRAIN W/CI GRATE
GR 260.84±
INV 260.34 (3" PIPES) (A)
INV BOX 258.30
LOT CORNER W17°08'45"E(R)
8+59 CONTROL LINE 41'LT SSCO INV 254.34
8+53.5 CONTROL LINE 42'LT WM
N70°27'E(R) DWY
N12°08'02"E(R) LOT CORNER
8+41 CONTROL LINE 46'RT UTILITY BOXES
8+35 CONTROL LINE 44.5± LT FH WITH BLUE RELECTOR 15'LT
8+02.5 CONTROL LINE 32'LT NPS
N89°48'49"W(R) DWY
7+99 25'LT WM
7+79.5'LT 8"x8"x8" TEE
7+76.88 PCC
7+74.86 DWY
7+30 21'LT SSCO INV 238.00
LOT COR 7+26.18
7+00 UTILITY BOXES
6+94 19'LT WM
6+84.00 C/L 21' DWY
MON
PCC 6+73.95
6+19.00 C/L 25' DWY
6+14 16.5'LT NPS
6+00 UTILITY BOXES
5+71 21'LT SSCO
INV 208.36
5+34.196 MON
FH 5+22.22 12.5'LT
WITH BLUE RELECTOR ON C/L
5+32.50 C/L 20' DWY
SSMH #12 5+22.22 6'RT
5+19 13'RT NPS
5+16 19'RT WM
5+10 21'RT SSCO INV 197.50
5+04.39ΔPT
4+97.50ΔPT
4+93.69 LOT CORNER
4+92 28'LT END WALL TW 199.90
4+81.5 16'LT ΔPT WALL TW 199.90
4+67 18'LT
GR 193.50
INV 192.50
SSMH #13
5+94.22 6'RT
5+90 21'RT SSCO INV 211.50
7+23.00ΔPT
7+16.15ΔPT
7+12 15'RT NPS
7+11 19'RT WM
6+98.00 C/L 25' DWY
6+85.34 ΔPT
6+78.49 ΔPT
6+75 21'RT SSCO INV 220.00
6+41.00ΔPT
6+34.11 ΔPT
6+34 19'RT WM
7+57.12 PT
7+60.27 PT
V64 DRAIN W/CI GRATE
GR 225.8±
INV 223.30
V64 DRAIN W/CI GRATE
GR 225.0±
INV 222.50
39LF 6" PVC @ 2.05%
D.E.
5' D.E.
98 LF 6" PVC @ 25.23%
V64 DRAIN W/GRATE
GR 250.0±
INV 247.50
V64 DRAIN W/CI GRATE
GR 202.8±
INV 200.30
30LF 6" PVC @30.43%
E.E.
4+42.42 LOT COR
MODEL 1L SANTA ROSA 4+68 25'LT DI W/HEAVY TRAFFIC (H20) BICYCLE PROOF FRAME AND GRATE
GR 196.30
INV SIDE OPENING 195.63 WITH 3/4" DIA. GALVANIZED GUARD ROD
INV 4" 192.40
INV 6" 191.17
INV 8" 191.00

R=11.69'
FACE OF WALL
V64 DRAIN W/CI GRATE
GR 256.75
INV BOT 254.25
3-90° BENDS
7+94.20 20'RT ΔPT WALL
7+94.20 PVC
7+90 #14 SSMH
7+90 20'RT
3-90° BEND 255.04
7+70 11'RT END WALL
R=45.00'
FACE OF WALL
R = 161.00'
Δ = 45°56'35"
L = 129.10'
R = 150.00'
Δ = 46°56'30"
L = 122.99'
R = 139.00'
Δ = 39°14'35"
L = 95.20'
R = 156.00'
Δ = 46°56'30"
L = 127.75'
R = 165.00'
Δ = 49°31'45"
L = 142.64'
R = 171.00'
Δ = 49°31'45"
L = 147.78'
R = 156.00'
Δ = 46°56'30"
L = 127.75'
R = 165.00'
Δ = 49°31'45"
L = 142.64'
R = 171.00'
Δ = 49°31'45"
L = 147.78'
CONTROL LINE
N59°02'45"E
R = 90.00'
Δ = 24°34'07"
L = 38.59'
8+35.44
8+50
6"PVC
8"PVC
4"PVC
6"PVC
JT
SS
W
SD
TV

SEE SHEET 6

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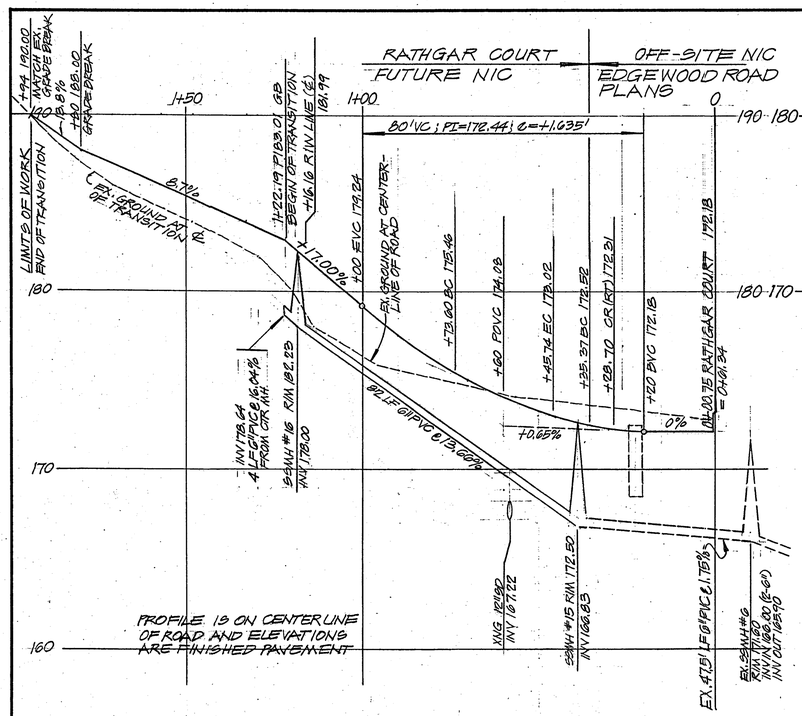
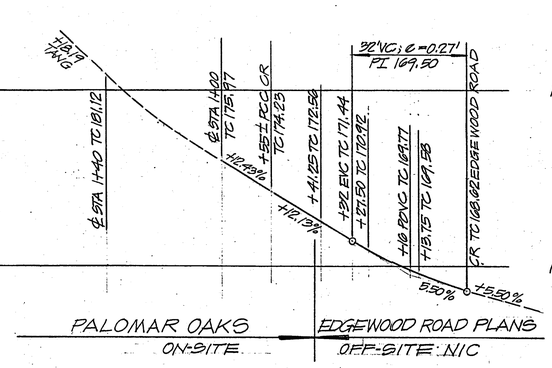
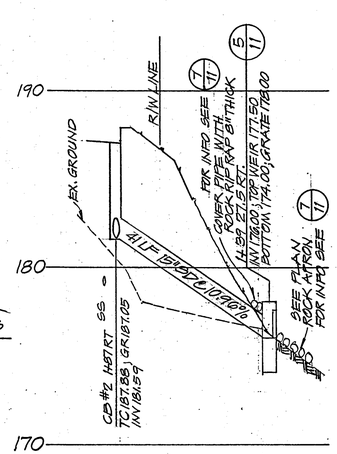
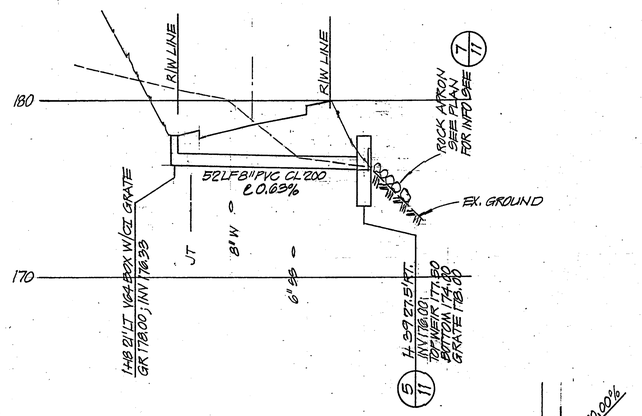
LOUIS ATTILIO ARATA Civil Engineer & Surveyor	1 La Cruz Avenue Millbrae, Calif. 94030 (650) 692-0927	ON SITE IMPROVEMENT PLANS GENERAL PLAN PALOMAR OAKS COUNTY OF SAN MATEO CALIFORNIA	Survey: TR,RJ,SK Plat: TR Checked: LAA Date: 7/22/05 Scale: 1"= 20'
R.C.E. 11413, Lic. Exp. 12/31/06			Sheet 7 of 15 Sheets Drwg. No. D-4904-7

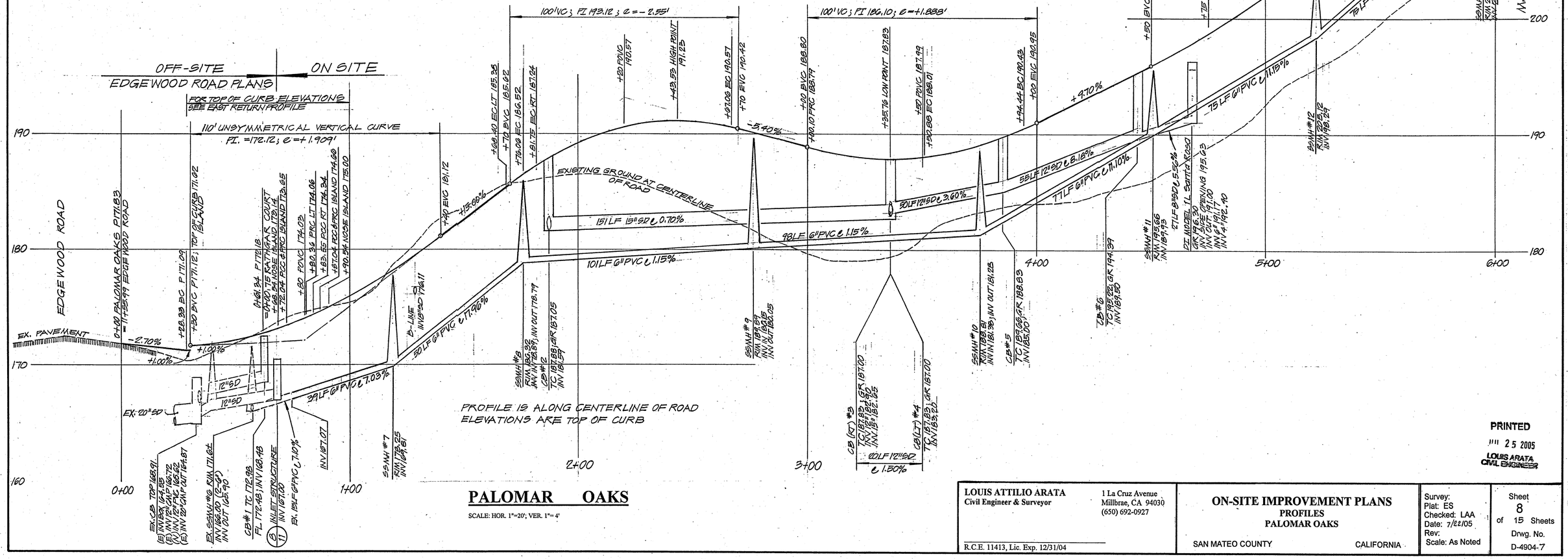
JOB: 4904-2
DWG: 5004-GEN3











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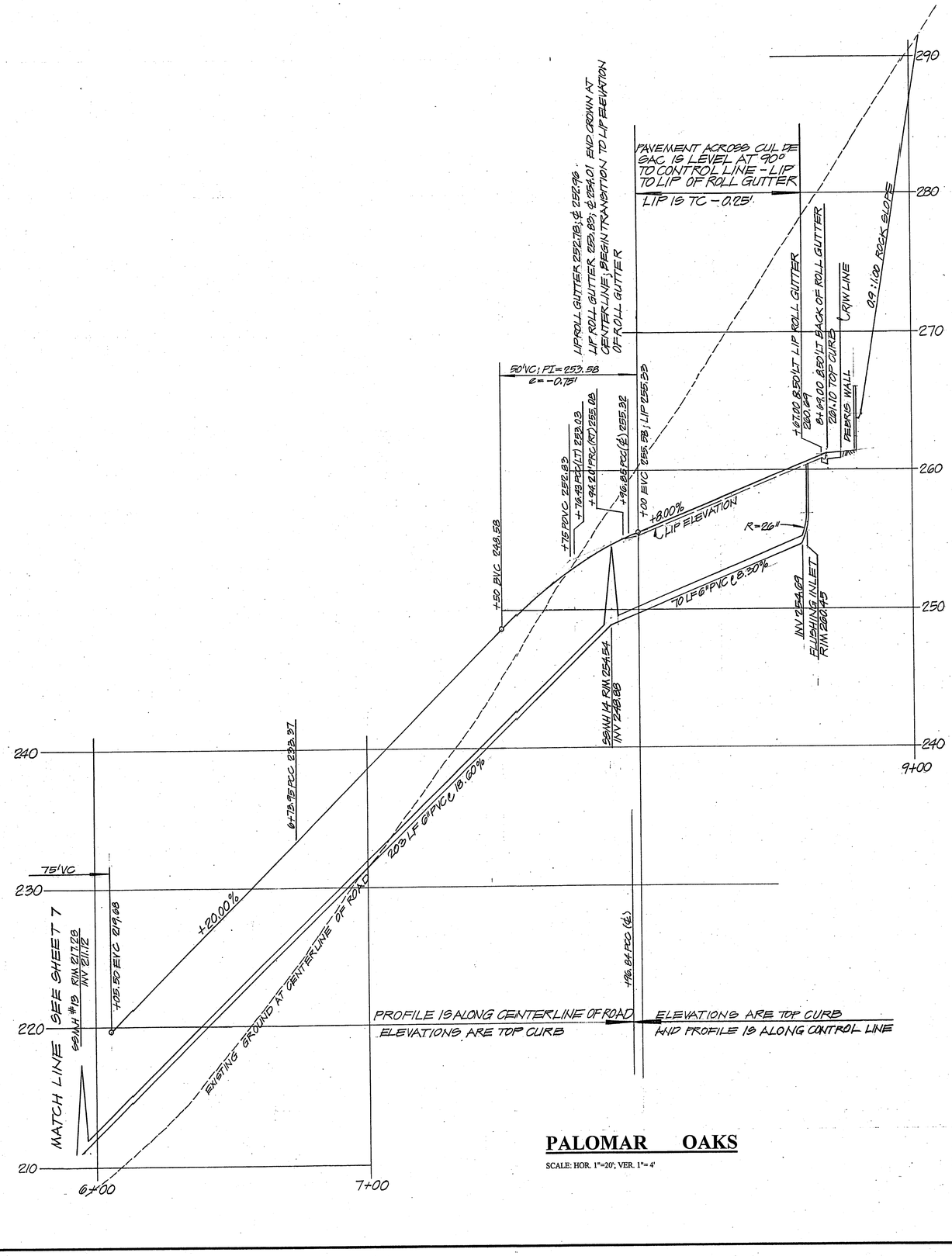
ON-SITE IMPROVEMENT PLANS
PROFILES
PALOMAR OAKS
SAN MATEO COUNTY CALIFORNIA

Survey:
Plat: ES
Checked: LAA
Date: 7/22/05
Rev:
Scale: As Noted

Sheet 8 of 15 Sheets
Drwg. No. D-4904-7



PALOMAR OAKS

SCALE: HOR. 1"=20'; VER. 1"= 4'

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ON-SITE IMPROVEMENT PLANS
PROFILES
PALOMAR OAKS
SAN MATEO COUNTY CALIFORNIA

Survey:
Plat: ES
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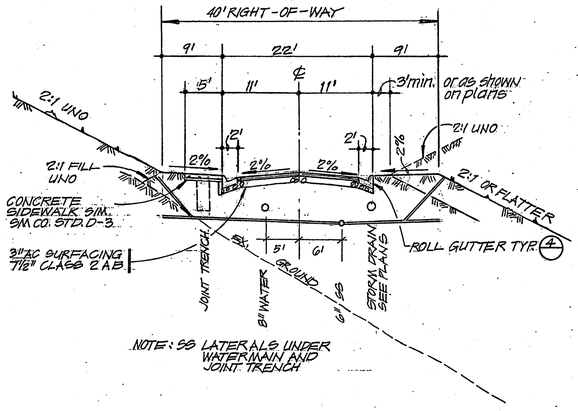
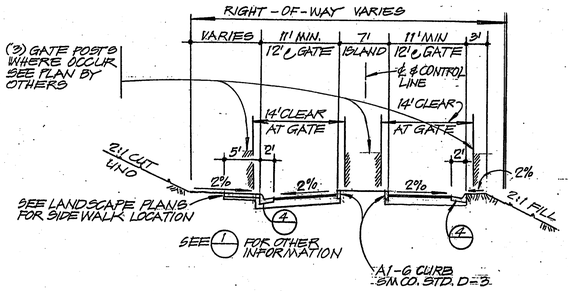
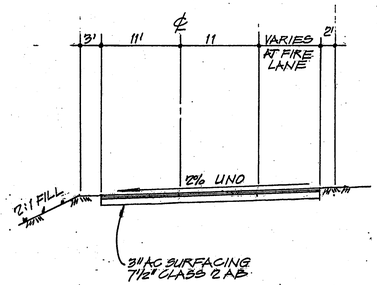
Sheet 9 of 15 Sheets
Drwg. No. D-4904-7



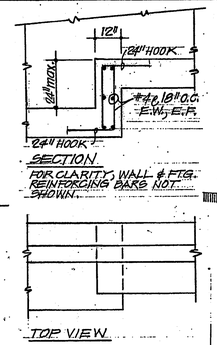
1 TYPICAL STREET SECTION
NTS



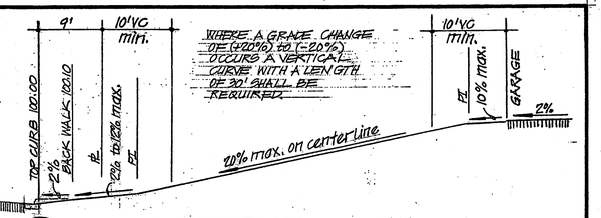
TYPICAL STREET SECTION AT CENTER ISLAND
2 NTS



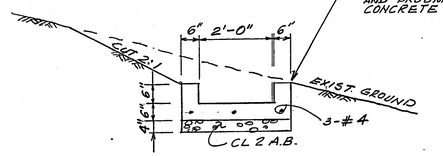
FUTURE NIC
TYPICAL SECTION
RATHGAR COURT
3 NTS



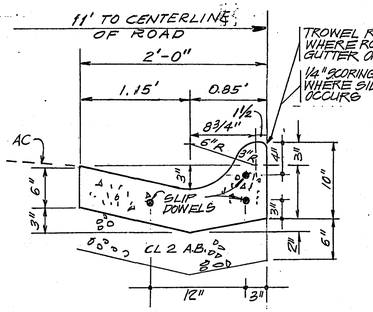
CONC. RETAINING WALL FOOTING STEP
11 NTS



9 UPHILL DRIVEWAY
NTS

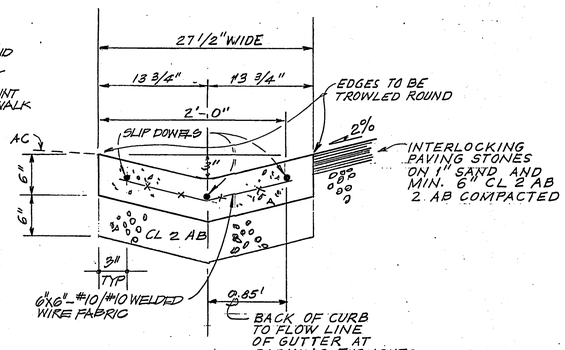


12 CONCRETE CHANNEL
NTS



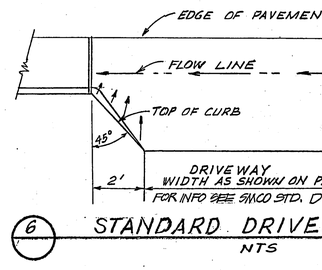
4 ROLL GUTTER
NTS

½"x18" DOWELS AT 20' ON CENTER WITH ½" THICK EXPANSION JOINTS CONTINUE EXPANSION JOINT ½" THICK ACROSS WIDTH OF SIDEWALK. PLACE 3-½"x18" DOWELS; SEE SM CO. STD. D-3

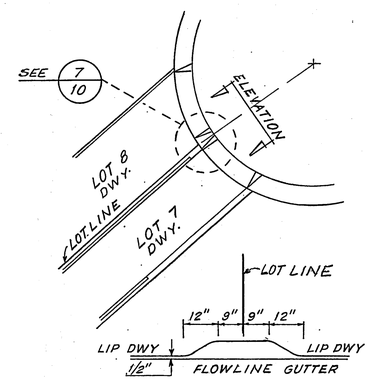


5 VALLEY GUTTER
NTS

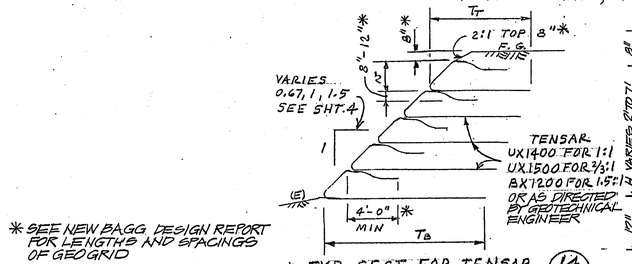
PLACE ½"x18" LONG DOWELS ON CENTER WITH ¼" THICK EXPANSION JOINTS FULL WIDTH 20' ON CENTER. DEEP SCORE AT 10' INTERVALS BETWEEN EXPANSION JOINTS; SEE SM CO. STD. D-5



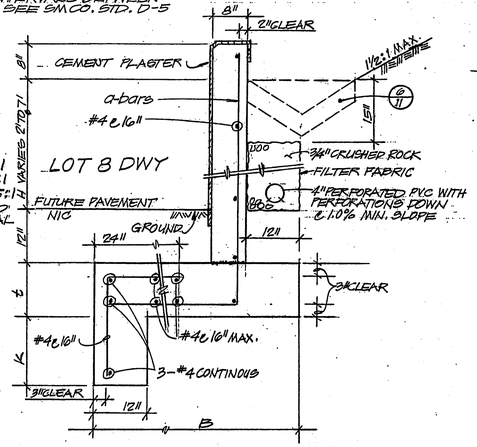
6 STANDARD DRIVEWAY APPROACH
NTS



7 ELEVATION AT DWY.
NTS



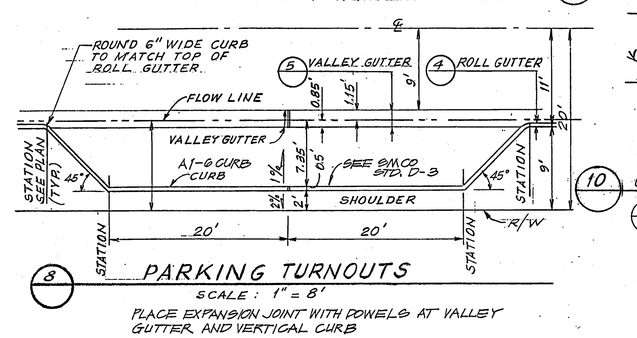
* TYP. SECT. FOR TENSAR REINFORCED FILL SLOPES
14



CONCRETE RETAINING WALL UPHILL SIDE OF LOT 8
10

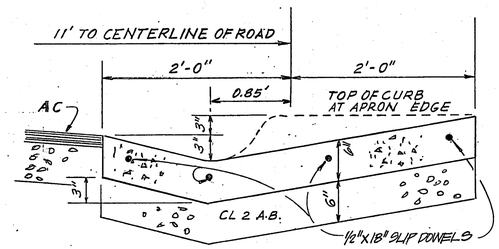
10

CONCRETE RETAINING WALL WALL DIMENSIONS STEEL REINFORCEMENT SCHEDULE					
H	B	t	K	a-bars, G60	
2'	3'-6"	12"	0	#4 @ 18"	
3'	3'-6"	12"	0	#4 @ 18"	
4'	4'-3"	12"	6"	#4 @ 18"	
5'	5'-6"	12"	9"	#4 @ 12"	
6'	6'-0"	15"	15"	#4 @ 10"	
7'	6'-8"	15"	1'-8"	#4 @ 6 1/2"	

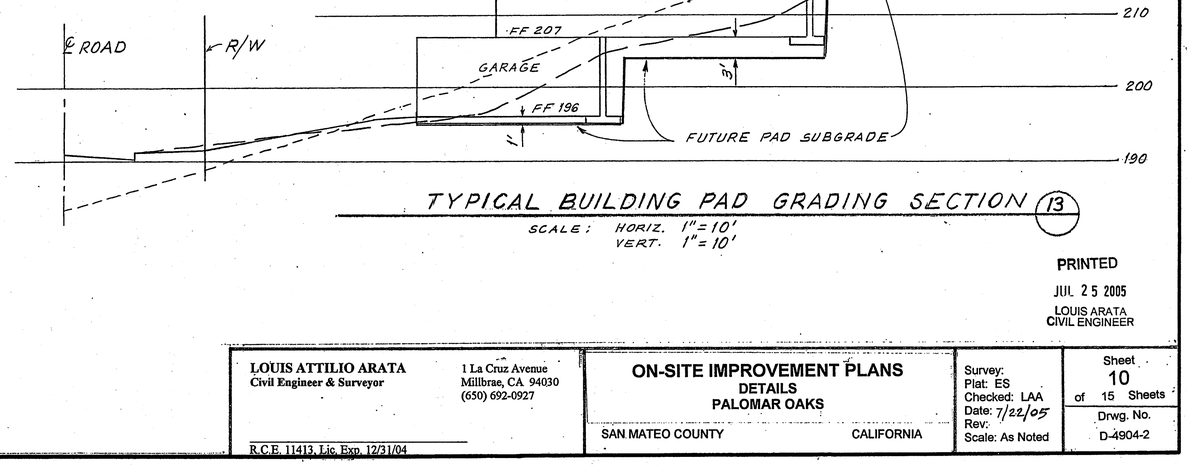


8 PARKING TURNOUTS
SCALE: 1" = 8'

PLACE EXPANSION JOINT WITH DOWELS AT VALLEY GUTTER AND VERTICAL CURB



SECTION A-A
NTS



TYPICAL BUILDING PAD GRADING SECTION
13

SCALE: HORIZ. 1" = 10'
VERT. 1" = 10'

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ON-SITE IMPROVEMENT PLANS
DETAILS
PALOMAR OAKS

SAN MATEO COUNTY CALIFORNIA

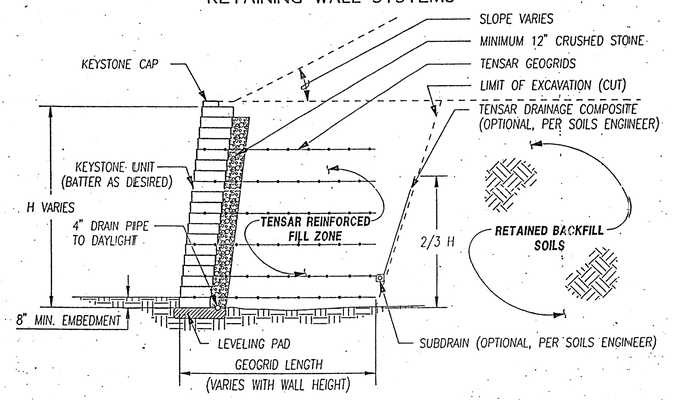
Survey:
Plat: ES
Checked: LAA
Date: 7/22/05
Rev:
Scale: As Noted

Sheet 10 of 15 Sheets
Drwg. No. D-4904-2

BASALITE

KEYSTONE™ RETAINING WALL SYSTEMS

TENSAR



TYPICAL CROSS SECTION

NOT TO SCALE

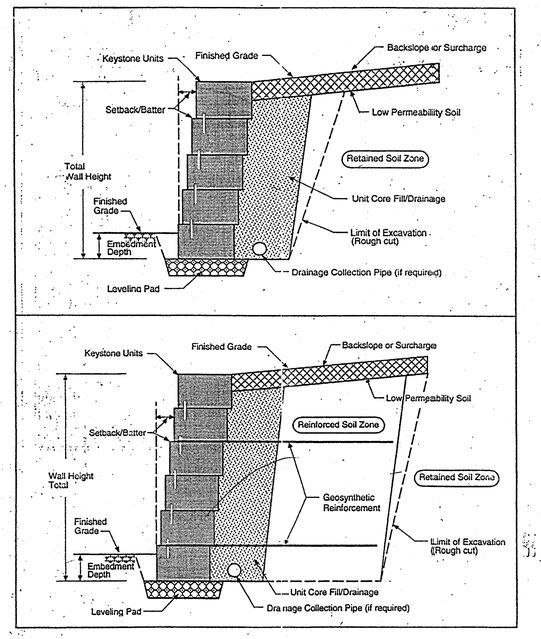


FIGURE 4—TYPICAL WALL SECTIONS

UBC Type 3

This soil type includes Sandy GRAVEL and/or GRAVEL (GW and GP) type soils

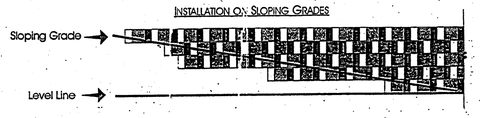
UBC Type 4

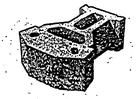
This soil type includes SAND, Silty SAND, Clayey SAND Silty GRAVEL and Clayey GRAVEL (SW, SP, SC, GM and GC) type soils.

Keystone Unit -	Standard, [redacted] pinned units.
Keystone Cap -	Cap units - 3", 4" or 8" in height. Cap units are secured to upper wall units with KapSeal adhesive per manufacturer's recommendations.
Setback/Batter -	Wall setback is determined by the multiple pin locations in each unit as required by the wall geometry and design. Wall batter can also be accomplished by slightly tilting the blocks.
Embedment -	Embedment required is a function of wall height and toe slope. General recommendation is a one block minimum embedment of 6" or 8" below the grade in front of the wall.
Wall Height -	Wall height is defined as the total wall height from top of leveling pad to top of wall.
Limits of Excavation -	The limit of excavation is defined as the excavation necessary to install the wall system leveling pad, drainage fill, and the geogrid reinforcement when required.
Leveling Pad -	Leveling pad is typically constructed of compacted crushed stone or gravel, 6" deep and 6" wider than the wall units front and back. Concrete may also be used.
Drain Pipe	4" perforated pipe placed behind bottom of wall to provide additional drainage. Pipe should be discharged to drainage swale or storm drainage system.
Unit Drainage Fill -	Drainage fill is a free draining crushed stone that is placed within units and for a distance of 12" behind the wall units.
Reinforced Soil -	Reinforced soil backfill is placed and compacted in 8" thick lifts with geogrid levels included at the design locations and lengths.
Geogrid -	Geogrid is Stratagrid SG150 polyester grid. Grid lengths are measured from the pin to the end of reinforcement. Geogrid is placed on level compacted backfill behind wall.
Finished Backslope -	Finished backslope shall be low permeable soil to prevent surface runoff into wall backfill.

Step the base at 4" or 8" increments that will allow minimum subgrade, as shown.

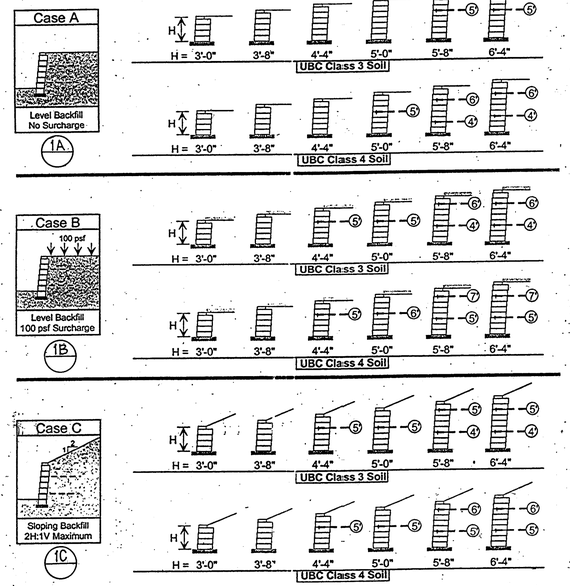
INSTALLATION ON SLOPING GRADES





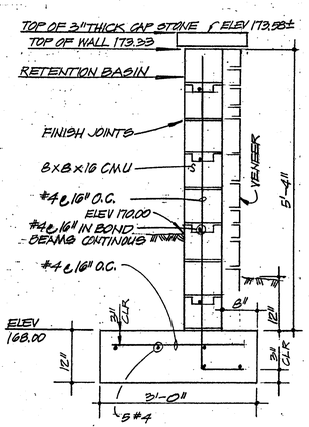
Keystone Standard Unit

Soil Reinforced Walls



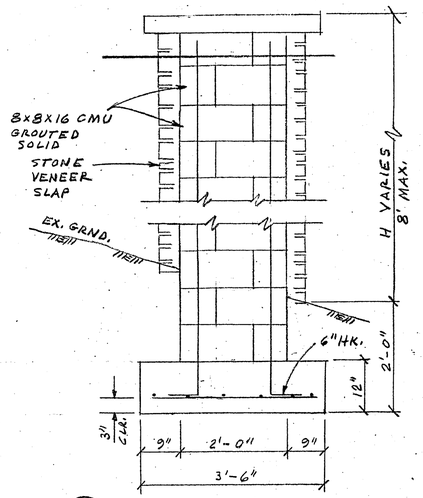
1 KEYSTONE RETAINING WALL SYSTEMS

NTS



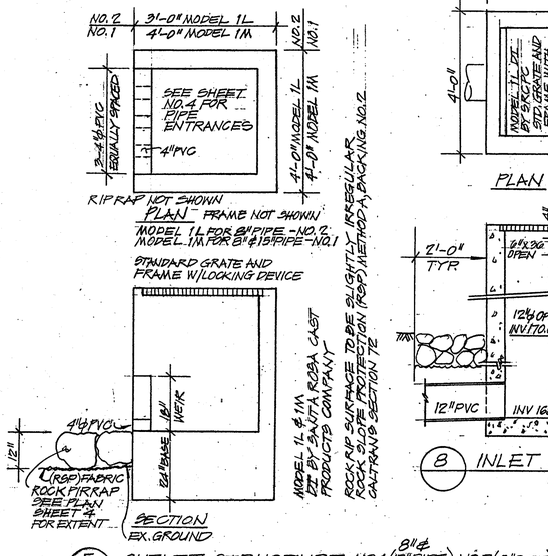
3 CMU RETAINING WALL

NTS



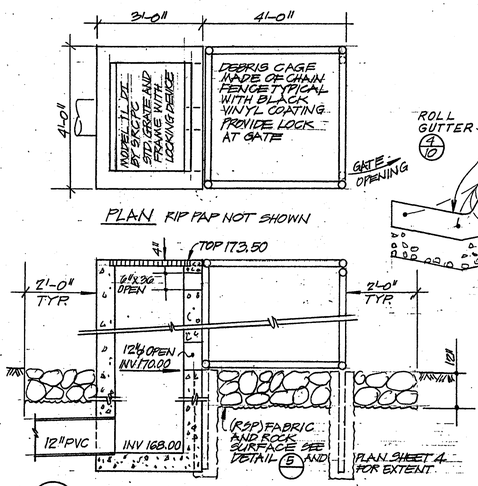
8 CMU COLUMN

No Scale



5 OUTLET STRUCTURE NO.1 (15" PIPE) NO.2 (8" PIPE)

NTS



8 INLET STRUCTURE

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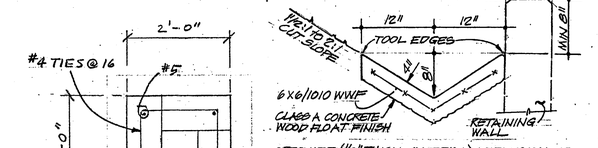
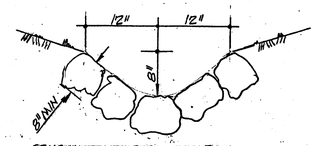


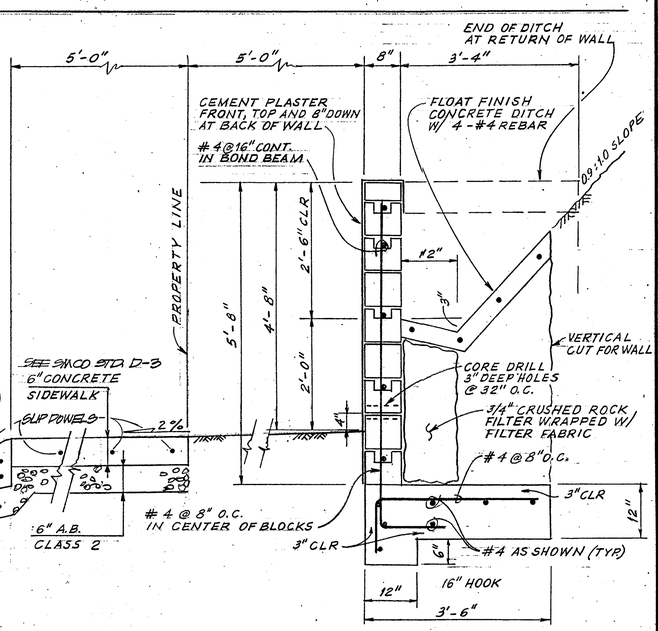
6 CONCRETE DITCH

NTS



7 ROCK DITCH

NTS



4 CMU DEBRIS WALL AT CUL DE SAC

SCALE: 3/4" = 1'

PRINTED

JUL 25 2005

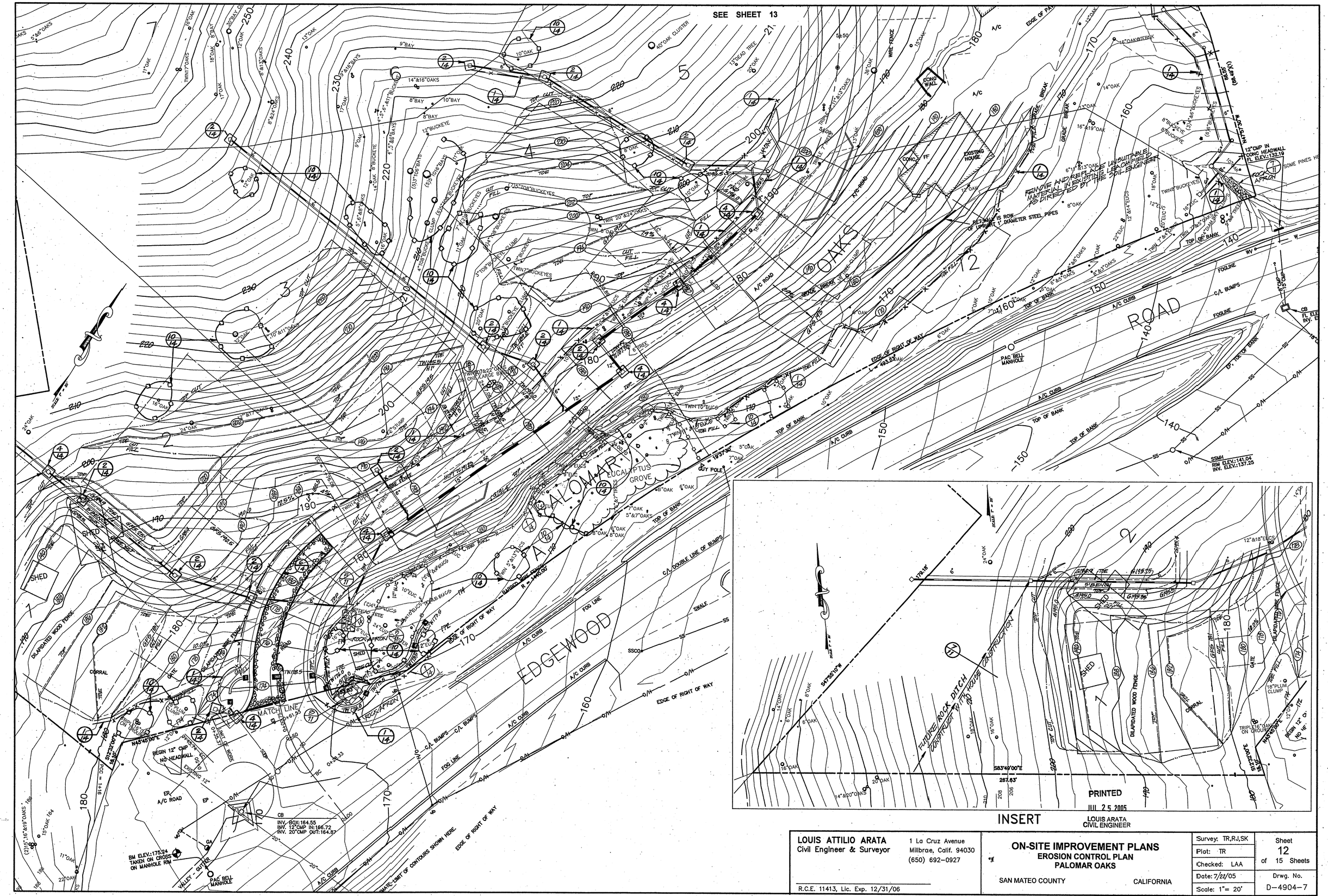
LOUIS ARATA
CIVIL ENGINEER

LOUIS ATTILIO ARATA
Civil Engineer & Surveyor
1 La Cruz Avenue
Millbrae, CA 94030
(650) 692-0927
R.C.E. 11413, Lic. Exp. 12/31/04

ON-SITE IMPROVEMENT PLANS
DETAILS
PALOMAR OAKS
SAN MATEO COUNTY — CALIFORNIA

Survey:
Plat: ES
Checked: LAA
Date: 7/22/05
Rev:
Scale: As Noted

Sheet 11 of 15 Sheets
Drwg. No. D-4904-2



INSERT

LOUIS ARATA
CIVIL ENGINEER

LOUIS ATTILIO ARATA Civil Engineer & Surveyor R.C.E. 11413, Lic. Exp. 12/31/06	1 La Cruz Avenue Millbrae, Calif. 94030 (650) 692-0927	**ON-SITE IMPROVEMENT PLANS** **EROSION CONTROL PLAN** **PALOMAR OAKS** SAN MATEO COUNTY CALIFORNIA	Survey: TR,RJ,SK Plat: TR Checked: LAA Date: 7/22/05 Scale: 1"= 20'
			Sheet 12 of 15 Sheets Drwg. No. D-4904-7

JOB: 4904-2

The "Grasslands Restricted Area" is a restricted area. Other than the grading as shown, the construction of the new water main and its related road for access and maintenance, the new drainage ditches, temporary tree protection fences and erosion control facilities, all contractors and all other construction and material storage are prohibited within this easement.



SEE SHEET 12

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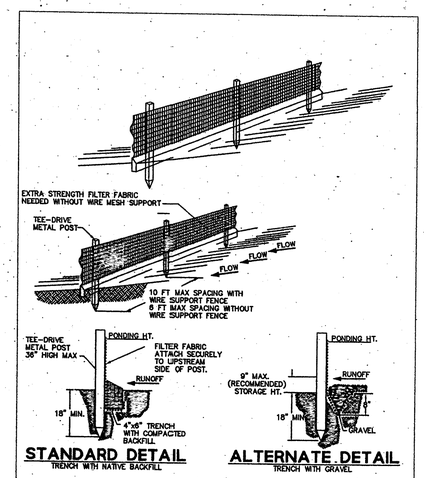
JUL 25 2005
LOUIS ARATA
CIVIL ENGINEER

LOUIS ATTILIO ARATA Civil Engineer & Surveyor R.C.E. 11413, Lic. Exp. 12/31/06	1 La Cruz Avenue Millbrae, Calif. 94030 (650) 692-0927	**ON-SITE IMPROVEMENT PLANS** **EROSION CONTROL PLAN** **PALOMAR OAKS** SAN MATEO COUNTY CALIFORNIA	Survey: TR,RJ,SK Plat: TR Checked: LAA Date: 7/22/05 Scale: 1"= 20'

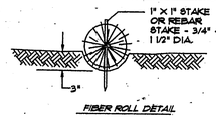
Sheet 13 of 15

Drwg D-49

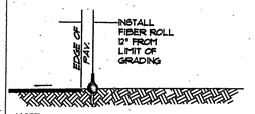


NOTE:
1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

1 SILT FENCE
NO SCALE



FIBER ROLL DETAIL



NOTE:
1. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.

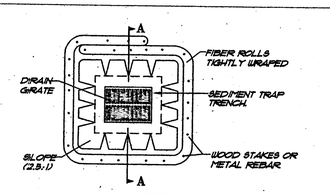
2 FIBER ROLLS
NO SCALE

EROSION CONTROL NOTES

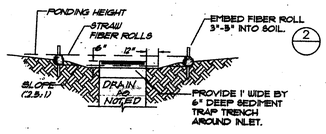
1. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. IN GENERAL, THE CONTRACTOR IS RESPONSIBLE FOR KEEPING SEDIMENT STORM RUN OFF FROM LEAVING THE SITE. FIBER ROLLS, AND SILT FENCES SHALL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGES TO PUBLIC AND/OR PRIVATELY OWNED AND MAINTAINED ROADS CAUSED BY THE CONTRACTOR'S GRADING ACTIVITIES, AND SHALL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAUL ROUTE. ADJACENT PUBLIC ROADS SHALL BE CLEANED, AS NECESSARY, DURING ALL GRADING AND EXCAVATION ACTIVITIES.
3. EROSION CONTROL FACILITIES SHALL BE MAINTAINED DAILY. THE NAME OF THE PERSON RESPONSIBLE FOR THE DAILY MAINTENANCE OF THESE FACILITIES SHALL BE ON RECORD WITH THE CO OF SAN MATEO DEPARTMENT OF PUBLIC WORKS ALONG WITH A PHONE NUMBER WHERE THEY CAN BE REACHED 24 HOURS A DAY. THESE FACILITIES SHALL CONTROL AND CONTAIN EROSION-CAUSED SILT DEPOSITS AND PROVIDE FOR THE SAFE DISCHARGE OF SILT-FREE STORM WATER INTO EXISTING AND PROPOSED STORM DRAIN FACILITIES. DESIGN OF THESE FACILITIES MUST BE APPROVED AND UPDATED EACH YEAR BY THE COUNTY ENGINEER.
4. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SUB-CONTRACTORS AND SUPPLIERS ARE AWARE OF ALL STORM WATER QUALITY MEASURES & IMPLEMENT SUCH MEASURES. FAILURE TO COMPLY WITH THE APPROVED CONSTRUCTION WILL RESULT IN THE ISSUANCE OF CORRIECTION NOTICES, CITATIONS AND/OR A PROJECT STOP ORDER.
5. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE OPERABLE YEAR AROUND OR UNTIL VEGETATION IS ESTABLISHED ON SLOPED SURFACES.
6. EXPOSED EARTHEN AREAS TO BE STABILIZED SHALL BE SEEDED AND MULCHED IMMEDIATELY AFTER EACH AREA HAS BEEN GRADED. SEED MIXTURE MAY BE EITHER HYDROSEEDED OR HAND SEEDED, INCLUDING A TACKIFIER, PER THE MANUFACTURES RECOMMENDATION. CONTRACTOR SHALL BE RESPONSIBLE FOR INITIAL WATERING OF AREAS TO ESTABLISH GROWTH AND STABILIZE THE SLOPES OF THE THE GRADED AREAS WITH VEGETATION, AND TO RE-SEED ANY AREAS IN WHICH VEGETATION DOES NOT TAKE HOLD.
7. DURING THE RAINY SEASON, ALL PAVED AREAS ARE TO BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED SO AS TO MINIMIZE SEDIMENT RUNOFF TO ANY STORM DRAIN SYSTEM.
8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT ALL EROSION CONTROL FACILITIES DAILY AND REPAIR ANY DAMAGED FACILITIES IMMEDIATELY.
9. BORROW AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES (TARPS, FIBER ROLLS, SILT FENCES ETC.) TO ENSURE SILT DOES NOT LEAVE THE SITE OR ENTER THE STORM DRAIN SYSTEM. REFER TO EROSION CONTROL AND SEDIMENT CONTROL FIELD MANUAL, 3RD EDITION, PREPARED BY THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, SAN FRANCISCO BAY REGION.
10. ALL TRUCK TIRES SHALL BE CLEANED PRIOR TO EXITING THE SITE.
11. ALL DIRT PILES / STOCKPILES AND HAUL TRUCKS SHALL BE COVERED.
12. THE CONTRACTOR SHALL IMPLEMENT EROSION AND SEDIMENT CONTROL PRACTICES DETAILED IN THE EROSION CONTROL AND SEDIMENT CONTROL FIELD MANUAL, 3RD EDITION.
13. DURING PERIODS WHEN STORMS ARE FORECAST -
    a. EXCAVATED SOILS SHOULD NOT BE PLACED IN STREETS OR ON PAVED AREAS.
    b. ANY EXCAVATED SOILS SHOULD BE REMOVED FROM THE SITE BY THE END OF THE DAY.
    c. WHERE STOCKPILING IS NECESSARY, USE A TARPAULIN OR SURROUND THE STOCKPILED MATERIAL WITH FIBER ROLES, GRAVEL SEDIMENT BARRIER, SILT FENCE, OR OTHER RUNOFF CONTROLS.
    d. USE INLET CONTROLS AS NEEDED (E.G. BLOCK & GRAVEL SEDIMENT BARRIER OR FOSSIL FILTER) FOR STORM DRAIN ADJACENT TO THE PROJECT SITE OR STOCKPILED SOIL.
    e. THOROUGHILY SWEEP ALL PAVED AREAS EXPOSED TO SOIL EXCAVATION AND PLACEMENT.
14. DURING PERIODS WHEN STORMS ARE NOT FORECAST -
    a. PREVENT STOCKPILED MATERIAL FROM ENTERING THE STORM DRAIN SYSTEM.
    b. THOROUGHILY REMOVE LOOSE SOIL VIA SWEEPING FOLLOWING REMOVAL OF DIRT.
15. DUST CONTROL SHOULD BE PRACTICED ON ALL CONSTRUCTION SITES WITH EXPOSED SOILS AS NEEDED. IT IS IMPORTANT IN WINDY OR WIND-PRONE AREAS. DUST CONTROL IS CONSIDERED A TEMPORARY MEASURE AND AS AS INTERMEDIATE TREATMENT BETWEEN SITE DISTURBANCE AND CONSTRUCTION, PAVING, OR REVEGETATION. REFER TO EROSION CONTROL AND SEDIMENT CONTROL FIELD MANUAL, 3RD EDITION, PREPARED BY THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, SAN FRANCISCO BAY REGION.

DRAINAGE INLET SEDIMENT BARRIERS

1. DRAINAGE INLET SEDIMENT BARRIERS SHALL BE INSTALLED AS SOON AS THE STORM DRAINAGE SYSTEM IS INSTALLED.
2. PRIOR TO PAVING, FIBER ROLLS SHALL BE INSTALLED AROUND EACH DROP INLET PER DETAIL 5. AFTER PAVING IS COMPLETE AROUND EACH DROP INLET, PLACE ¾"GRAVEL IN BURLAP BAGS WRAPPED IN FILTER FABRIC UNTIL ALL EXPOSED EARTHEN AREAS HAVE BEEN STABILIZED AND THE PROJECT SITE FACILITIES ARE OPERATIONAL, AT WHICH TIME THESE FACILITIES SHALL BE REMOVED.
3. CONTRACTOR SHALL STENCIL ALL DRAINAGE INLETS WITH NPDES STATEMENT OF "NO DUMPING - FLOWS TO CORDILLERAS CREEK.



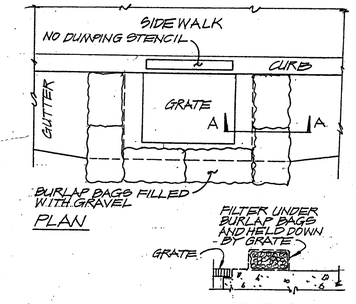
PLAN VIEW



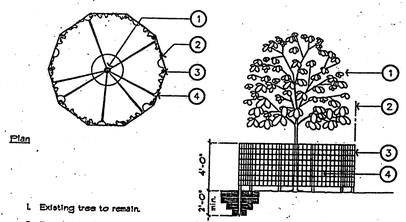
SECTION A - A

5 FIBER ROLLS
DROP INLET
SEDIMENT BARRIER
NO SCALE

NOTES:
1. PLACE FIBER ROLLS AROUND THE INLET CONSISTENT WITH BASIN SEDIMENT BARRIER DETAIL ON THIS SHEET. FIBER ROLLS ARE TUBES MADE FROM STRAW BOUND W/ PLASTIC NETTING. THEY ARE APPROX. 8" DIA. AND 20 - 30 FT. LONG.
2. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE FIBER ROLL IN A TRENCH, 3" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.
3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET. EXCAVATION OF A BASIN ADJACENT TO THE DROP INLET OR A TEMPORARY DIKE ON THE DOWNSLOPE OF THE STRUCTURE MAY BE NECESSARY.



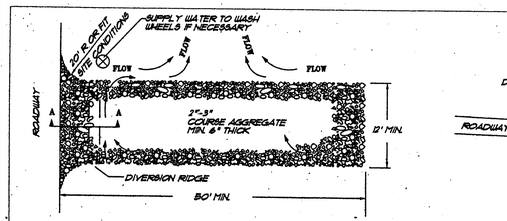
4 DRAINAGE INLET SEDIMENT BARRIER



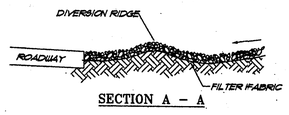
1. Existing tree to remain.
2. Drip Line.
3. Steel stake, 6'-0"o.c. max.
4. Plastic mesh construction fencing extend to drip line. Maintain until start of irrigation work. Fencing is diagrammatic.

10 TREE PROTECTIVE FENCING
NO SCALE

TREE PROTECTIVE FENCING



PLAN



SECTION A - A

NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

6 TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT & WASHDOWN AREA
NO SCALE

LEGEND

- TEMPORARY CONSTRUCTION FENCE
- SILT FENCE
- FIBER ROLL
- TREE PROTECTION FENCE

PRINTED
JUL 25 2005
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ON-SITE IMPROVEMENT PLANS
STORMWATER POLLUTION PREVENTION PROGRAM PLAN-DETAILS AND NOTES
PALOMAR OAKS
SAN MATEO COUNTY CALIFORNIA

Survey:
Plat: ES
Checked: LAA
Date: 7/22/05
Rev:
Scale: As Noted

Sheet 14 of 15 Sheets
Drwg. No. D-4904-7

San Mateo Countywide Stormwater Pollution Prevention Program

San Mateo Countywide Stormwater Pollution Prevention Program

Program Participants: Atherton, Belmont, Brisbane, Burlingame, Colma, Daly City, East Palo Alto, Foster City, Half Moon Bay, Hillsborough, Menlo Park, Millbrae, Pacifica, Portola Valley, Redwood City, San Bruno, San Carlos, San Mateo, South San Francisco, Woodside, County of San Mateo.

ON-SITE IMPROVEMENT PLANS
PALOMAR OAKS
SAN MATEO COUNTY CALIFORNIA

Sheet 15 of 15 Sheets
Drwg. No. D-4904-7

LOUIS ATTILIO ARATA
Civil Engineer & Surveyor
1 La Cruz Avenue
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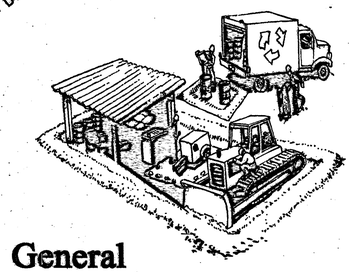
(650) 692-0927

R.C.E. 11413, Lic. Exp. 12/31/06

Pollution Prevention – It's Part of the Plan

It is your responsibility to do the job right!



Runoff from streets and other paved areas is a major source of pollution in local creeks, San Francisco Bay and the Pacific Ocean. Construction activities can directly affect the health of our waters unless contractors and crews plan ahead to keep dirt, debris, and other construction waste away from storm drains and creeks. Following these guidelines will ensure your compliance with local stormwater ordinance requirements. Remember, ongoing monitoring and maintenance of installed controls is crucial to proper implementation.

General Construction & Site Supervision

Advance planning prevents pollution

✓**Schedule excavation and grading activities for dry weather periods.** To reduce soil erosion, plant temporary vegetation or place other erosion controls before rain begins.

✓**Locate and protect storm drains** in the vicinity of the site with berms or filters during wet weather periods.

✓**Control the amount of runoff crossing your site** (especially during excavation) by using berms or temporary or permanent drainage ditches to divert water flow around the site. Reduce stormwater runoff velocities by constructing temporary check dams or berms where appropriate.

✓**Train your employees and subcontractors.** Make these brochures available to everyone who works on the construction site. Inform subcontractors about the new stormwater requirements and their responsibilities.

Good housekeeping practices

✓**Designate one completely contained area for auto parking, vehicle refueling, and routine equipment maintenance.** The designated area should be well away from streams or storm drain inlets, and bermed if necessary. Make major repairs off site.

✓**Keep materials out of the rain – prevent runoff contamination at the source.** Cover exposed piles of soil or construction materials with plastic sheeting or temporary roofs.

✓**Keep pollutants off exposed surfaces.** Place trash cans and recycling receptacles around the site to minimize litter.

✓**Dry sweep paved surfaces** that drain to storm drains, creeks, or channels. If pavement flushing is necessary, use silt ponds or other techniques to trap sediment and other pollutants.

✓**Clean up leaks, drips and other spills immediately** so they do not contaminate soil or groundwater or leave residue on paved surfaces. Use dry cleanup methods whenever possible. If you must use water, use just enough to keep the dust down.

✓**Cover and maintain dumpsters.** Check frequently for leaks. Place dumpsters under roofs or cover with tarps or plastic sheeting secured around the outside of the dumpster. A plastic liner is recommended to prevent leakage of liquids. **Never clean out a dumpster by hosing it down on the construction site.**

✓**Make sure portable toilets are maintained in good working order** by the leasing company and that wastes are disposed of properly. Check toilets frequently for leaks.

Materials/waste handling

✓**Practice source reduction – minimize waste when you order materials.** Order only the amount you need to finish the job.

✓**Use recyclable materials** whenever possible. Arrange for pick-up of recyclable materials such as concrete, asphalt, scrap metal, solvents, degreasers, cleared vegetation, paper, rock, and vehicle maintenance materials such as used oil, antifreeze, batteries, and tires.

✓**Dispose of all wastes and demolition debris properly.** Many construction materials and wastes can be recycled, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation. Materials and debris that cannot be recycled must be taken to an appropriate landfill or disposed of as hazardous waste. **Never bury waste materials or leave them in the street or near a creek or stream bed.**

Heavy Equipment Operation



Site planning and preventive vehicle maintenance

✓Designate a completely contained area of the construction site, well away from streams or storm drain inlets, for auto and equipment parking, refueling, and routine vehicle and equipment maintenance.

✓ Maintain all vehicles and heavy equipment. Inspect frequently for and repair leaks.

✓ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.

✓ If you must drain and replace motor oil, radiator coolant, or other fluids on site, use drip pans or drop cloths to catch drips and spills. Collect all spent fluids, store in separate containers, and recycle whenever possible, or dispose of fluids as hazardous waste.

✓ Do not use diesel oil to lubricate or clean equipment or parts.

✓ Recycle used vehicle batteries.

Clean up spills immediately when they happen

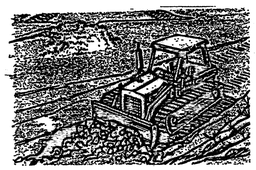
✓Never hose down "dirty" pavement or impermeable surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags) whenever possible. If you must use water, use just enough to keep the dust down.

✓ Sweep up spilled dry materials immediately. Never attempt to "wash them away" with water, or bury them. Use as little water as possible for dust control.

✓ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.

✓ Report significant spills to the appropriate spill response agencies immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill, call the following agencies: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earth-Moving Activities



During Construction

✓Remove existing vegetation only when absolutely necessary.

✓Seed or plant *temporary* vegetation for erosion control on slopes or where construction is not immediately planned.

✓Protect downslope drainage courses, streams, and storm drains with hay bales, temporary drainage swales, silt fences, berms or storm drain inlet filters.

✓Use check dams or ditches to divert runoff around excavations and graded areas.

✓ Cover stockpiles and excavated soil with secured tarps or plastic sheeting.

✓ Properly monitor and maintain all erosion and sediment controls.

✓ Properly report failures of erosion and sediment controls to the local stormwater authority.

General Business Practices

✓Schedule excavation and grading work for dry weather.

✓Perform major equipment repairs away from the job site.

✓When refueling or when vehicle/equipment maintenance must be done on site, work within a completely bermed area away from storm drains.

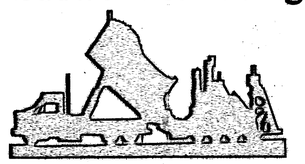
✓Do not use diesel oil to lubricate or clean equipment or parts.

Watch for soil and ponded groundwater that may be contaminated.

If any of these conditions are observed, test for contamination and contact the Regional Water Quality Control Board:

- Unusual soil conditions, discoloration, or odor
- Abandoned underground tanks
- Abandoned wells
- Buried barrels, debris, or trash.

Roadwork & Paving



✓ Develop and implement erosion/sediment control plans for roadway embankments.

✓ Schedule excavation and grading work for dry weather.

✓ Check all equipment for leaks and repair leaking equipment promptly.

✓ Perform major maintenance, repairs, and washing of equipment away from the construction site.

✓ When refueling or vehicle/equipment maintenance must be done on site, designate a completely contained area away from storm drains and creeks.

✓ Do not use diesel oil to lubricate or clean equipment or parts.

✓ Recycle used oil, batteries, concrete, broken asphalt, etc. whenever possible.

✓ Train employees in using these best management practices.

During Construction

✓ Avoid paving and seal coating in wet weather, or when rain is forecast before fresh pavement will have time to cure.

✓ Cover and seal catch basins and manholes when applying seal coat, slurry seal, fog seal, etc.

✓ Use check dams, ditches, or berms to divert runoff around excavations.

✓ Never wash excess material from exposed- aggregate concrete or similar treatments into a street or storm drain. Collect and recycle, or dispose to dirt area.

✓ Cover stockpiles and other construction materials with plastic tarps. Protect from rainfall and prevent runoff with temporary roofs or plastic sheets and berms.

✓ Catch drips from paver with drip pans or absorbent material (cloth, rags, etc.) placed under machine when not in use.

✓ Clean up all spills and leaks using "dry" methods (with absorbent materials/rags), or dig up and remove contaminated soil.

✓ Collect and recycle or appropriately dispose of excess abrasive gravel or sand.

✓ Avoid over-application by water trucks for dust control.

Asphalt/Concrete Removal

✓ Avoid creating excess dust when breaking asphalt or concrete.

✓ After breaking up old pavement, be sure to remove all chunks and pieces from the site.

✓ Make sure broken pavement does not come in contact with rainfall or runoff.

✓ Protect nearby storm drain inlets during saw-cutting. Shovel or vacuum saw-cut slurry deposits and remove from the site.

✓ Never hose down streets to clean up tracked dirt. Use dry sweep methods.

Fresh Concrete & Mortar Application



General Business Practices

✓ Both at your yard and the construction site, always store both dry and wet materials under cover, protected from rainfall and runoff. Protect dry materials from wind.

✓ Secure bags of cement after they are open. Be sure to keep wind-blown cement powder away from gutters, storm drains, rainfall, and runoff.

✓ Wash out concrete mixers only in designated wash-out areas in your yard, where the water will flow into containment ponds or onto dirt. Let concrete harden and dispose of as garbage. Whenever possible, recycle washout by pumping back into mixers for reuse. **Never dispose of washout into the street, storm drains, drainage ditches, or streams.**

During Construction

✓ Don't mix up more fresh concrete or cement than you will use in a day.

✓ Set up and operate small mixers on tarps or heavy plastic drop cloths.

✓ When cleaning up after driveway or sidewalk construction, wash fines onto dirt areas, not down the driveway or into the street or storm drain.

✓ Prevent aggregate wash from driveway/patio construction from entering storm drains. Hose aggregate wash onto dirt areas and spade into dirt.

✓ Place hay bales or other erosion controls downslope to capture runoff carrying mortar or cement before it reaches the storm drain.

✓ When breaking up paving, be sure to pick up all the pieces and dispose properly.

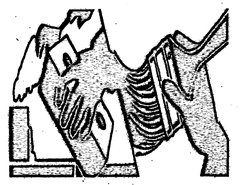
✓ Recycle large chunks of broken concrete at a landfill.

✓ Dispose of small amounts of excess dry concrete, grout, and mortar in the trash.

✓ Never bury solid or hazardous waste material.

PRINTED
JUL 25 2005
LOUIS ARATA
CIVIL ENGINEER

Painting & Application of Solvents & Adhesives



Handling Paint Products

✓ **Keep all liquid paint products and wastes away from the gutter, street, and storm drains.** Liquid residues from paints, thinners, solvents, glues, and cleaning fluids are hazardous wastes and must be disposed of at a hazardous waste collection facility (contact your local stormwater program).

Painting cleanup

✓ **Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.**

✓ For **water-based paints**, paint out brushes to the extent possible. Rinse to the sanitary sewer once you have gained permission from the local wastewater treatment authority. Never pour paint down a drain.

✓ For **oil-based paints**, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids and residue as hazardous waste.

Paint removal

✓ **Paint chips and dust from non-hazardous dry stripping and sand blasting** may be swept up or collected in plastic drop cloths and disposed of as trash.

✓ **Chemical paint stripping residue** and chips and dust from **marine paints or paints containing lead or tributyl tin** must be disposed of as hazardous wastes.

✓ When stripping or cleaning **building exteriors** with high-pressure water, block storm drains. Wash water onto a dirt area and spade into soil. Or, check with the local wastewater treatment authority to find out if you can collect (mop or vacuum) building cleaning water and dispose to the sanitary sewer. Sampling of the water may be required to assist the wastewater treatment authority in making its decision.

Recycle/reuse leftover paints whenever possible.

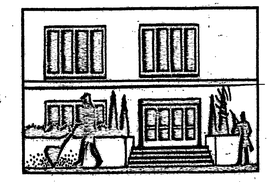
✓ Recycle or dispose of excess **water-based paint** at a household hazardous waste collection facility, or use up. When they are thoroughly dry, empty paint cans, used brushes, rags, and drop cloths may be disposed of as garbage in a sanitary landfill.

✓ Reuse leftover **oil-based paint**. Dispose of excess liquid, including sludges, as hazardous waste.

✓ Small quantity generators should check with the San Mateo County Environmental Health Division regarding recycling or hazardous waste disposal.

✓ Unopened cans of paint may be able to be returned to the paint vendor. Check with the vendor regarding its "buy-back" policy.

Landscaping, Gardening, and Pool Maintenance



✓ Protect stockpiles and landscaping materials from wind and rain by storing them under tarps or secured plastic sheeting.

✓ Store pesticides, fertilizers, and other chemicals indoors or in a shed or storage cabinet.

✓ Schedule grading and excavation projects for dry weather.

✓ Use temporary check dams or ditches to divert runoff away from storm drains.

✓ Protect storm drain inlets with hay bales, berms, filter mats or other inlet protection measures.

✓ **Revegetation is an excellent form of erosion control for any site.**

Landscaping/Garden Maintenance

✓ Use up pesticides and follow label directions. Rinse containers, and use rinsewater as product. Dispose of rinsed containers in the trash.

✓ Dispose of unused pesticides as hazardous waste.

✓ Collect lawn and garden clippings, pruning waste, and tree trimmings. Chip if necessary, and compost.

✓ Do not place yard waste in gutters. In communities with curbside yard waste recycling, leave clippings and pruning waste for pickup in approved bags or containers. Or, take to a landfill that composts yard waste.

✓ **Do not blow or rake leaves, etc. into the street.**

Pool/Fountain/Spa Maintenance

✓ Never discharge chlorinated pool or spa water to a street or storm drain.

✓ When emptying a pool or spa, let chlorine dissipate for 5 to 7 days. Then recycle water by draining it gradually onto a landscaped area, or drain the dechlorinated water to a storm drain.

✓ Chlorinated water may be to discharged to the sanitary sewer (if allowed by the local sewage treatment authority) by running a hose to a utility sink or sewer pipe cleanout junction.

✓ **Do not use copper-based algaecides.** Control algae with chlorine or other alternatives to copper-based pool chemicals. **Copper is harmful to aquatic life and cannot be completely removed by the sewage treatment plant.**

Storm drain polluters may be liable for fines of up to $25,000 per day!

Jan 2002

© BKF ENGINEERS

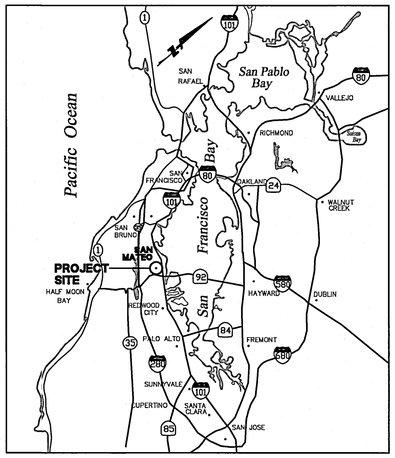
STREET IMPROVEMENT PLANS FOR

HIGHLAND ESTATES - TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY

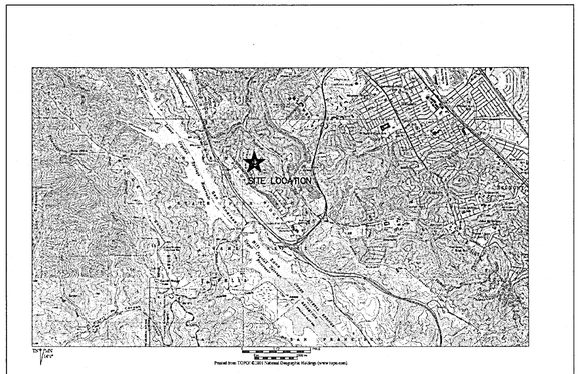
COUNTY OF SAN MATEO, CALIFORNIA

SHEET INDEX

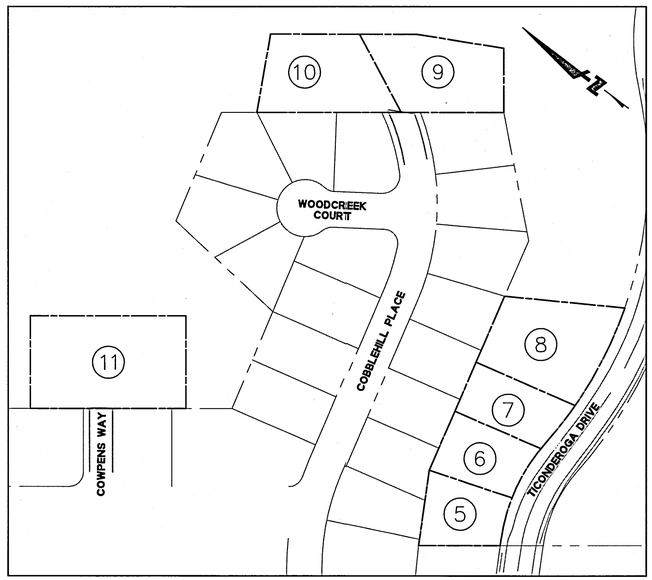
SHEET NO	DESCRIPTION
C1.00	COVER SHEET
C2.00	GENERAL NOTES, LEGEND AND ABBREVIATIONS
C3.00	PLAN & PROFILE
C3.10	PLAN & PROFILE
C3.20	PLAN & PROFILE
C4.00	CONSTRUCTION STAGING & EROSION CONTROL
C4.10	CONSTRUCTION STAGING & EROSION CONTROL
C4.20	CONSTRUCTION STAGING & EROSION CONTROL
C5.00	EROSION CONTROL DETAILS AND NOTES
C6.00	CONSTRUCTION DETAILS
C6.10	CONSTRUCTION DETAILS
C6.20	CONSTRUCTION DETAILS



VICINITY MAP
NTS



LOCATION MAP
NTS



SITE PLAN
SCALE: 1" = 100'

PROJECT DATA

ENGINEER:	BKF ENGINEERS 255 SHORELINE DRIVE, SUITE 200 REDWOOD CITY, CA 94065 (650) 482-6300
WATER SUPPLY:	CAL WATER SERVICE 341 N. DELAWARE STREET SAN MATEO, CA 94401-1808 (650) 343-1808
SEWAGE DISPOSAL:	CITY OF SAN MATEO & CRYSTAL SPRINGS COUNTY SANITATION DISTRICT
GAS & ELECTRIC	PG&E
TELEPHONE:	AT&T
FIRE PROTECTION:	CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION
CABLE:	COMCAST
STORM DRAINAGE:	COUNTY OF SAN MATEO CITY OF SAN MATEO
TOPOGRAPHIC BASE MAP:	AERO-GEODIC CORP. JOB NO. 950168 DATE OF PHOTOGRAPHY 9/18/87

RECEIVED
FEB 19 2015
San Mateo County
Planning and Building Department

ENGINEER'S STATEMENT

THESE IMPROVEMENT PLANS HAVE BEEN PREPARED BY ME OR UNDER MY DIRECTION IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICE.

ROLAND N.V. HAGA
R.C.E NO. 43971 EXP 06/30/15
BKF ENGINEERS

DATE

REGISTERED PROFESSIONAL ENGINEER
ROLAND N.V. HAGA
No. C043971
CIVIL
STATE OF CALIFORNIA

BKF ENGINEERS / SURVEYORS / PLANNERS
255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE: (650) 482-6300
FAX: (650) 482-6399

HIGHLAND ESTATES - STREET IMPROVEMENT PLANS
TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY
TITLE SHEET
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

Revisions	No.

Date	02/18/15
Scale	NTS
Design	JT
Drawn	AG
Approved	RH
Job No	950168-20

Sheet Number:
C1.00
OF

DRAWING NAME: J:\Eng95\950168\dwg\CD\Off-Site for Lots 5 - 11\C1.00-HECDTS.dwg
PLOT DATE: 02-18-15 PLOTTED BY: tong

NOTES:

I. GENERAL NOTES

1. WORK SHALL CONFORM TO THE COUNTY OF SAN MATEO PUBLIC WORKS STANDARD DRAWINGS FOR PUBLIC IMPROVEMENTS, REVISED SEPTEMBER 2007 AND THE SAN MATEO COUNTY SEWER AND SANITATION DISTRICTS STANDARD SPECIFICATIONS, DATED JUNE 1995.
2. PERFORM WORK IN CONFORMANCE WITH THE RECOMMENDATION OF THE PROJECT GEOTECHNICAL ENGINEERING REPORT TITLED "GEOTECHNICAL INVESTIGATION AND GEOLOGIC HAZARDS REVIEW, FOUR SINGLE-FAMILY HOMES, TICONDEROGA DRIVE, SAN MATEO COUNTY, CALIFORNIA" PREPARED BY THE CHAMBERLAIN GROUP, DATED FEBRUARY 7, 2006. GRADING WORK WILL BE SUBJECT TO APPROVAL OF GEOTECHNICAL ENGINEER.
3. ARRANGE FOR REQUIRED INSPECTIONS BY COUNTY ENGINEER. NO DELAY OF WORK CLAIM WILL BE ALLOWED DUE TO CONTRACTOR'S FAILURE TO ARRANGE FOR REQUIRED COUNTY INSPECTIONS IN ADVANCE. PROVIDE NOTICE TO COUNTY ENGINEER A MINIMUM OF 2 WORKING DAYS IN ADVANCE OF REQUIRED INSPECTIONS.
4. REVISIONS TO THESE PLANS MUST BE REVIEWED AND APPROVED IN WRITING BY ENGINEER, WHO WILL OBTAIN APPROVAL FROM COUNTY ENGINEER PRIOR TO CONSTRUCTION OF AFFECTED ITEMS. REVISIONS SHALL BE ACCURATELY SHOWN ON REVISED PLANS, WHICH SHALL BE REVIEWED AND APPROVED BY THE ENGINEER AND COUNTY ENGINEER PRIOR TO INSTALLATION OF THE IMPROVEMENTS.
5. REPLACE OR REPAIR EXISTING UTILITIES, IMPROVEMENTS OR FEATURES DAMAGED, REMOVED, OR DISTURBED BY CONSTRUCTION TO THEIR ORIGINAL CONDITION, WHETHER SHOWN ON PLANS OR NOT.
6. REPLACE STREET MONUMENTS, LOT CORNERS PIPES AND OTHER PERMANENT MONUMENTS DISTURBED DURING CONSTRUCTION. MONUMENTS SHALL BE SET BY A SURVEYOR REGISTERED IN THE STATE OF CALIFORNIA.
7. PREPARE TRAFFIC CONTROL PLAN AND OBTAIN APPROVAL FROM COUNTY ENGINEER BEFORE COMMENCING WORK. PROVIDE FLAG MEN, CONES, BARRICADES AND OTHER TRAFFIC CONTROL MEASURES NECESSARY TO PROVIDE SAFE LANE CLOSURE IN CONFORMANCE WITH CALTRANS STANDARDS AND AS APPROVED BY COUNTY ENGINEER.
8. PEDESTRIAN TRAFFIC CONTROL TO BE PROVIDED WHEN EXISTING SIDEWALKS CANNOT BE MAINTAINED DURING CONSTRUCTION.
9. DO NOT LEAVE TRENCHES OPEN OVERNIGHT IN EXISTING STREET AREAS. BACKFILL OR COVER OPEN TRENCHES AT THE END OF WORK EVERY WORK DAY.
10. PREPARE SHORING PLAN AND SUBMIT TO THE COUNTY ENGINEER FOR REVIEW AND APPROVAL. ADEQUATELY SHORE EXCAVATIONS TO PREVENT EARTH FROM SLIDING OR SETTLING AND TO PROTECT EXISTING ADJACENT IMPROVEMENTS FROM DAMAGE. DAMAGE RESULTING FROM A LACK OF ADEQUATE SHORING SHALL BE THE CONTRACTOR'S RESPONSIBILITY. PROVIDE SHORING IN CONFORMANCE WITH APPLICABLE CONSTRUCTION SAFETY ORDERS OF THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY AND OSHA WHERE EXCAVATIONS ARE 5 FEET OR MORE IN DEPTH.
11. IMPLEMENT CONSTRUCTION DUST CONTROL MEASURES TO REDUCE PARTICULATE GENERATION TO A LESS THAN SIGNIFICANT LEVEL. PROVIDE DUST CONTROL IN CONFORMANCE WITH BAY AREA AIR QUALITY MANAGEMENT DISTRICT MINIMUM REQUIREMENTS. IMPLEMENT THE FOLLOWING CONSTRUCTION PRACTICES EXCEPT WHEN IT IS RAINING.
    - 11.A. WATER ACTIVE EXTERIOR SOIL AREAS AT LEAST TWICE DAILY.
    - 11.B. COVER TRUCKS HAULING SOIL, SAND AND OTHER LOOSE MATERIAL OR PROVIDE 2 FEET OF FREEBOARD.
    - 11.C. PAVE, APPLY WATER THREE TIMES DAILY OR APPLY NON-TOXIC SOIL STABILIZER ON UNPAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS.
    - 11.D. SWEEP PAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS DAILY.
    - 11.E. APPLY HYDROSEED OR NON-TOXIC SOIL STABILIZER TO INACTIVE CONSTRUCTION AREAS.
    - 11.F. ENCLOSE, COVER, WATER TWICE DAILY OR APPLY NON-TOXIC SOIL STABILIZER TO EXPOSED SOIL STOCKPILES.
    - 11.G. INSTALL SANDBAGS AND OTHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
    - 11.H. LIMIT TRAFFIC SPEED ON UNPAVED ROADS TO 15 MPH.
    - 11.I. REPLANT VEGETATION IN DISTURBED AREAS AS QUICKLY AS POSSIBLE.
12. KEEP STREETS CLEAN OF DIRT, MUD AND OTHER CONSTRUCTION DEBRIS. CLEAN AND SWEEP STREETS ON A DAILY BASIS DURING THE WORK WEEK.
13. SHOULD IT APPEAR THAT THE WORK IS NOT SUFFICIENTLY DETAILED OR SPECIFIED IN CONSTRUCTION DOCUMENTS, NOTIFY ENGINEER AND OBTAIN CLARIFICATION BEFORE PROCEEDING WITH WORK IN QUESTION.
14. CONSTRUCTION STAKING SHALL BE DONE BY A CIVIL ENGINEER OR LAND SURVEYOR REGISTERED IN THE STATE OF CALIFORNIA.
15. IF BKF ENGINEERS IS RETAINED TO PROVIDE CONSTRUCTION STAKING SERVICES, CONTRACTOR WILL BE PROVIDED WITH ONE SET OF SURVEY STAKES FOR LAYOUT PURPOSES. PRESERVE AND PROTECT THESE STAKES UNTIL THEY ARE NO LONGER NEEDED. RESTAKING SHALL BE AT CONTRACTOR'S EXPENSE.
16. MATCH EXISTING PAVEMENT, CURB AND GUTTER, SIDEWALK, ADJACENT LANDSCAPE AND OTHER IMPROVEMENTS WITH SMOOTH TRANSITION TO AVOID ABRUPT OR APPARENT CHANGES IN GRADES, CROSS SLOPES, LOW SPOTS OR HAZARDOUS CONDITIONS.
17. VISIT SITE TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND OVERALL PROJECT REQUIREMENT PRIOR TO BIDDING PROJECT.
18. OBTAIN AND PAY FOR PERMITS AND LICENSES AS REQUIRED TO PERFORM WORK WITHIN THE COUNTY OF SAN MATEO PRIOR TO START OF WORK. PERMITS MAY INCLUDE ENCROACHMENT PERMIT FOR WORK WITHIN COUNTY RIGHT-OF-WAY AND GRADING/UTILITY PERMIT.
19. CONTRACTOR IS RESPONSIBLE FOR TRAFFIC AND PEDESTRIAN CONTROL DURING CONSTRUCTION.
20. OBTAIN APPROVAL OF IMPORT SOIL MATERIAL FROM GEOTECHNICAL ENGINEER PRIOR TO DISTRIBUTING MATERIAL OVER SITE.
21. PROTECT ADJOINING PREMISES, TREES, LANDSCAPING, UTILITIES, SIDEWALKS, STREETS AND OTHER FEATURES FROM DAMAGE BY CONTRACTOR'S OPERATIONS. REPAIR, REPLACE OR CLEAN ADJOINING PREMISES, TREES, LANDSCAPING, UTILITIES, SIDEWALKS, STREETS AND OTHER FEATURES TO SATISFACTION OF OWNER.
22. MAINTAIN AND MANAGE CONSTRUCTION MATERIALS, EQUIPMENT AND VEHICLES AT THE CONSTRUCTION SITE.
23. NOTIFY COUNTY ENGINEER A MINIMUM OF 24 HOURS PRIOR TO STARTING WORK ON OFF-SITE DRAINAGE AND SEWER FACILITIES, GRADING, PAVING, OR WORK IN THE COUNTY RIGHT-OF-WAY.
24. MAKE EFFORTS TO MINIMIZE CONSTRUCTION NOISE.
    - 24.A. MAINTAIN EQUIPMENT USED ON SITE IN GOOD MECHANICAL CONDITION TO MINIMIZE NOISE CREATED BY FAULTY OR POORLY MAINTAINED ENGINE, DRIVE-TRAIN AND OTHER COMPONENTS.
    - 24.B. EQUIPMENT EXCEEDING 110 DBA MEASURED 25 FEET FROM THE PIECE OF EQUIPMENT WILL NOT BE ALLOWED ON SITE.
    - 24.C. SELECT APPROPRIATE EQUIPMENT TO MINIMIZE NOISE GENERATION. USE THE FOLLOWING TECHNIQUES TO MINIMIZE NOISE GENERATION SUBJECT TO EQUIPMENT AVAILABILITY AND COST CONSIDERATIONS. USE SCRAPERS AS MUCH AS POSSIBLE FOR EARTH REMOVAL, RATHER THAN NOISIER LOADERS AND HAUL TRUCKS. USE BACKHOES FOR BACKFILLING AS IT IS QUIETER THAN DOZERS OR LOADERS. USE MOTOR GRADERS RATHER THAN BULLDOZERS FOR FINAL GRADING.

II. EXISTING CONDITIONS

1. EXISTING TOPOGRAPHIC INFORMATION SHOWN ON THESE PLANS IS BASED UPON A FIELD TOPOGRAPHIC SURVEY OF THE PROJECT SITE BY BKF ENGINEERS, DATED JUNE 2009. ACTUAL CONDITIONS ENCOUNTERED ON SITE MAY VARY FROM THOSE SHOWN ON THE PLANS. CONTRACTOR SHALL REVIEW CONSTRUCTION DOCUMENTS AND CONDUCT THEIR OWN INVESTIGATIONS TO UNDERSTAND AND VERIFY EXISTING CONDITIONS AT THE SITE.
2. EXISTING SUBSURFACE IMPROVEMENTS AND UTILITIES SHOWN ON THESE PLANS WERE TAKEN FROM RECORD INFORMATION KNOWN TO THE ENGINEER AND FIELD SURVEY OF ABOVE GRADE FEATURES. THESE PLANS ARE NOT MEANT TO BE A FULL CATALOG OF EXISTING SUBSURFACE CONDITIONS. CONDUCT FIELD INVESTIGATION TO VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING SUBSURFACE IMPROVEMENTS AND UTILITIES, WHETHER SHOWN ON PLANS OR NOT, PRIOR TO START OF EXCAVATION. IF DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THESE PLANS ARE DISCOVERED, NOTIFY ENGINEER IMMEDIATELY AND REQUEST DISCREPANCY BE RESOLVED.
3. VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AFFECTING UTILITIES. POTHOLE WHERE NEEDED TO VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES.
4. CONTACT USA (UNDERGROUND SERVICES ALERT) AT 1-800-227-2600, AND AFFECTED UTILITY COMPANIES A MINIMUM OF 2 WORKING DAYS PRIOR TO STARTING WORK TO REQUEST UTILITIES BE MARKED.

III. DEMOLITION

1. REMOVE FROM SITE AND DISPOSE OF IN LAWFUL MANNER EXISTING STRUCTURES, UTILITIES, AND OTHER FEATURES NOT REMOVED DURING DEMOLITION OR ROUGH GRADING AND ENCOUNTERED DURING WORK ON SITE.
    - 1.A. REMOVE WOOD OR CONCRETE STRUCTURES, SLABS, FOOTINGS, GRADE BEAMS, DECKS, DOCKS, AND OTHER SIMILAR STRUCTURES.
    - 1.B. REMOVE LANDSCAPING, UTILITIES AND IRRIGATION LINES AS SPECIFIED BY GEOTECHNICAL ENGINEER.
    - 1.C. REMOVE ABANDONED IN-GROUND STRUCTURES, SUCH AS CULVERTS, UTILITY VAULTS, AND FOUNDATIONS AS SPECIFIED BY GEOTECHNICAL ENGINEER.

IV. DEWATERING

1. DEWATER AREAS COVERED WITH STANDING WATER PRIOR TO PLACEMENT OF FILL.
2. DISPOSE OF WATER FROM DEWATERING OPERATION IN CONFORMANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

V. UTILITIES

1. DO NOT OPERATE WATER VALVES OR OTHER WATER DISTRICT FACILITIES. REQUIRED OPERATION WILL BE PERFORMED BY UTILITY DISTRICT PERSONNEL ONLY. NOTIFY UTILITY DISTRICT 2 WORKING DAYS PRIOR TO REQUIRING FACILITY OPERATION.
2. PROVIDE MINIMUM 12 INCH VERTICAL CLEARANCE BETWEEN ADJACENT UTILITY PIPES AT UTILITY CROSSINGS UNLESS OTHERWISE NOTED.
3. COMPLETE ELECTRIC, GAS, TELEPHONE, CABLE AND OTHER JOINT TRENCH WORK IN CONFORMANCE WITH THE REQUIREMENTS OF THE RESPECTIVE UTILITY PROVIDER. NOTIFY UTILITY PROVIDER MINIMUM 2 WORKING DAYS PRIOR TO COMMENCING WORK. IF EXISTING WATER, SEWER, GAS OR OTHER UTILITY SERVICES ARE DISTURBED OR DAMAGED DURING CONSTRUCTION, NOTIFY UTILITY OWNER IMMEDIATELY.
4. PROTECT UTILITIES FROM DAMAGE CAUSED BY CONTRACTOR'S WORK.
5. PROVIDE UTILITY STRUCTURES IN PAVED AREAS SUITABLE FOR H-20 LOADING.
6. PIPE LENGTHS SHOWN ON PLANS ARE FOR ENGINEERING CALCULATIONS ONLY AND ARE NOT INTENDED AS BID QUANTITIES OR FOR ORDERING MATERIALS.
7. CONSTRUCT GRAVITY FLOW UTILITIES FROM DOWNSTREAM CONNECTION POINT TO UPSTREAM TERMINUS.
8. COORDINATE WITH COUNTY OF SAN MATEO AND CRYSTAL SPRINGS SANITATION DISTRICT FOR INSPECTION OF WORK ON DISTRICT FACILITIES.
9. ALL WATER LATERALS AND SERVICES SHALL BE INSTALLED TO THE STANDARDS OF THE CALIFORNIA WATER SERVICE COMPANY. EXISTING WATER MAINS OR LATERALS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AND TESTED TO THE SATISFACTION OF THE WATER COMPANY.
10. SANITARY SEWER CONNECTIONS AND TESTING MUST BE MADE IN THE PRESENCE OF A SEWER DISTRICT REPRESENTATIVE.
11. THE SEWER DISTRICT OFFICE SHALL BE CONTACTED (650-363-4100) TO SCHEDULE INSPECTIONS. INSPECTIONS MUST BE SCHEDULED A MINIMUM OF ONE WORKING DAY PRIOR TO THE INSPECTION. NO INSPECTIONS SHALL OCCUR ON FRIDAYS, WEEKENDS OR HOLIDAYS UNLESS SPECIAL ARRANGEMENTS ARE MADE WITH THE SEWER DISTRICT.
12. A VIDEO INSPECTION OF THE SEWER MAIN (MANHOLE TO MANHOLE) WHERE THE NEW LATERALS CONNECT TO THE SEWER DISTRICT MAIN SHALL BE PERFORMED BY THE APPLICANT OR CONTRACTOR AND SUBMITTED TO THE SEWER DISTRICT FOR REVIEW AFTER LATERAL CONNECTIONS HAVE BEEN MADE. THE VIDEO INSPECTION SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS DESCRIBED IN THE SPECIAL PROVISIONS FOR CLOSED CIRCUIT TELEVISION INSPECTION OF SANITARY SEWER MAINS (A COPY CAN BE OBTAINED FROM THE COUNTY'S WEBSITE AT WWW.CO.SANMATEO.CA.US/SEWERS). THE SEWER DISTRICT WILL REVIEW THE VIDEO INSPECTION TO DETERMINE WHETHER THE WORK PERFORMED IS ACCEPTABLE. ALL UNACCEPTABLE WORK SHALL BE CORRECTED TO THE SEWER DISTRICT'S SATISFACTION AT THE APPLICANT'S EXPENSE.
13. CARE MUST BE TAKEN TO PROTECT THE EXISTING SEWER DISTRICT FACILITIES WHEN NEW SEWER LATERALS AND CONNECTIONS ARE INSTALLED. ANY DAMAGES TO THE SEWER DISTRICT FACILITIES DURING THE INSTALLATION OF THE NEW LATERALS SHALL BE REPAIRED BY THE APPLICANT PER THE SEWER DISTRICT STANDARD DETAILS AND AT THE APPLICANT'S EXPENSE. THE SEWER DISTRICT MUST BE NOTIFIED OF ANY DAMAGES TO THE SANITARY SEWER FACILITIES AND ANY REPAIRS MUST BE INSPECTED BY A SEWER DISTRICT REPRESENTATIVE.

VI. EARTHWORK AND GRADING

1. OFF-SITE IMPORT FILL MATERIAL SHALL CONFORM TO THE SPECIFICATIONS AND THE REQUIREMENTS OF THE GEOTECHNICAL REPORT.
2. TOPSOIL, ROOTS, VEGETABLE MATTER, TRASH AND DEBRIS WILL NOT BE CONSIDERED ACCEPTABLE FILL MATERIAL.
3. REMOVE DEBRIS FROM AREAS OF EARTHWORK PRIOR TO PLACING FILL OR STARTING GRADING OPERATIONS.
4. PLACE AND COMPACT FILL MATERIAL AS RECOMMENDED IN GEOTECHNICAL REPORT. PLACE FILL MATERIAL IN MAXIMUM 8 INCH UNCOMPACTED THICKNESS. COMPACTION BY FLOODING, PONDING OR JETTING WILL NOT BE PERMITTED.
5. CONTRACTOR SHALL MAKE HIS OWN DETERMINATION OF EARTHWORK QUANTITIES.

VII. RECORD DRAWINGS

1. KEEP ACCURATE RECORD OF THE FINAL LOCATION, ELEVATION AND DESCRIPTION OF WORK ON A COPY OF THE FINAL APPROVED CONSTRUCTION DOCUMENTS. NOTE THE LOCATIONS AND ELEVATIONS OF EXISTING IMPROVEMENTS ENCOUNTERED THAT VARY FROM THE LOCATIONS SHOWN ON THE IMPROVEMENT PLANS. PROVIDE COPY OF RECORD INFORMATION TO OWNER AT COMPLETION OF PROJECT AND WHEN REQUESTED.

VII. STATEMENT OF RESPONSIBILITY

1. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD BOTH DESIGN PROFESSIONAL AND THE COUNTY OF SAN MATEO HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF EITHER THE DESIGN PROFESSIONAL OR THE COUNTY OF SAN MATEO, RESPECTIVELY.

IX. UNAUTHORIZED CHANGES AND USES

1. 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 REQUIRE WRITTEN APPROVAL OF THE COUNTY ENGINEER AND THE PREPARER OF THESE PLANS.

X. DRAWING LANGUAGE

1. NOTES AND CALLOUTS ON DRAWINGS MAY USE IMPERATIVE LANGUAGE. REQUIREMENTS EXPRESSED IMPERATIVELY ARE TO BE PERFORMED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

CONDITIONS OF APPROVAL NOTES

CONSTRUCTION NOTES

1. THE FIRST PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY. THE REMAINDER OF CONSTRUCTION EQUIPMENT (70 PERCENT), WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL BE REQUIRED TO USE EMULSIFIED FUELS.
2. THE SECOND PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 2 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY AND 50 PERCENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS. THE REMAINING 20 PERCENT OF CONSTRUCTION EQUIPMENT, WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL USE EMULSIFIED FUELS.
3. FOR ALL LARGER VEHICLES, INCLUDING CEMENT MIXERS OR OTHER DEVICES THAT MUST BE DELIVERED BY LARGE TRUCKS, VEHICLES SHALL BE EQUIPPED WITH CARB LEVEL THREE VERIFIED CONTROL DEVICES.
4. WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
5. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
6. PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY NON-TOXIC SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
7. SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
8. SWEEP PUBLIC STREETS ADJACENT TO CONSTRUCTION SITES DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO THE STREETS.
9. HYDROSEED OR APPLY NON-TOXIC SOIL STABILIZERS TO INACTIVE CONSTRUCTION AREAS (PREVIOUSLY GRADED AREAS INACTIVE FOR TEN DAYS OR MORE).
10. ENCLOSE, COVER, WATER TWICE DAILY, OR APPLY NON-TOXIC SOIL BINDERS TO EXPOSED STOCKPILES (DIRT, SAND, ETC.). LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
11. LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
12. INSTALL SANDBAGS OR OTHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
13. REPLANT VEGETATION IN DISTURBED AREAS AS SOON AS POSSIBLE.
14. INSTALL WHEEL WASHERS FOR ALL EXITING TRUCKS OR WASH OFF THE TIRES OR TRACKS OF ALL TRUCKS AND EQUIPMENT LEAVING THE CONSTRUCTION SITE.
15. INSTALL WIND BREAKS AT THE WINDWARD SIDES OF THE CONSTRUCTION AREAS.
16. SUSPEND EXCAVATION AND GRADING ACTIVITIES WHEN WIND (AS INSTANTANEOUS GUSTS) EXCEEDS 25 MILES PER HOUR.

NOISE NOTES

1. EQUIPMENT AND TRUCKS USED FOR PROJECT GRADING AND CONSTRUCTION WOULD UTILIZE THE BEST AVAILABLE NOISE CONTROL TECHNIQUES (E.G., IMPROVED EXHAUST MUFFLERS, EQUIPMENT REDESIGN, USE OF INTAKE SILENCERS, DUCTS, ENGINE ENCLOSURES, AND ACOUSTICALLY-ATTENUATING SHIELDS OR SHROUDS) IN ORDER TO MINIMIZE CONSTRUCTION NOISE IMPACTS.
2. EQUIPMENT USED FOR PROJECT GRADING AND CONSTRUCTION WOULD BE HYDRAULICALLY OR ELECTRICALLY POWERED IMPACT TOOLS (E.G., JACK HAMMERS AND PAVEMENT BREAKERS) WHEREVER POSSIBLE TO AVOID NOISE ASSOCIATED WITH COMPRESSED AIR EXHAUST FROM PNEUMATICALLY-IPOWERED TOOLS. COMPRESSED AIR EXHAUST SILENCERS WOULD BE USED ON OTHER EQUIPMENT. OTHER QUIETER PROCEDURES WOULD BE USED SUCH AS DRILLING RATHER THAN IMPACT EQUIPMENT WHENEVER FEASIBLE.
3. THE GRADING AND CONSTRUCTION ACTIVITY WOULD BE KEPT TO THE HOURS OF 7:00 AM TO 7:00 PM, MONDAY THROUGH FRIDAY. SATURDAY HOURS (8:00 AM TO 5:00 PM) ARE PERMITTED UPON THE DISCRETION OF COUNTY APPROVAL BASED ON INPUT FROM NEARBY RESIDENTS AND BUSINESSES. SATURDAY CONSTRUCTION (8:00 AM TO 5:00 PM) WOULD BE ALLOWED ONCE THE BUILDINGS ARE FULLY ENCLOSED. NOISE GENERATING GRADING AND CONSTRUCTION ACTIVITIES SHALL NOT OCCUR AT ANY TIME ON SUNDAYS, THANKSGIVING AND CHRISTMAS.
4. RESIDENTIAL PROPERTY OWNERS WITHIN 200 FEET OF PLANNED CONSTRUCTION AREAS SHALL BE NOTIFIED OF THE CONSTRUCTION SCHEDULE IN WRITING, PRIOR TO CONSTRUCTION; THE PROJECT SPONSOR SHALL DESIGNATE A "DISTURBANCE COORDINATOR" WHO SHALL BE RESPONSIBLE FOR RESPONDING TO ANY LOCAL COMPLAINTS REGARDING CONSTRUCTION NOISE; THE COORDINATOR (WHO MAY BE AN EMPLOYEE OF THE DEVELOPER OR GENERAL CONTRACTOR) SHALL DETERMINE THE CAUSE OF THE COMPLAINT AND SHALL REQUIRE THAT REASONABLE MEASURES WARRANTED TO CORRECT THE PROBLEM BE IMPLEMENTED; A TELEPHONE NUMBER OF THE NOISE DISTURBANCE COORDINATOR SHALL BE CONSPICUOUSLY POSTED AT THE CONSTRUCTION SITE FENCE AND ON THE NOTIFICATION SENT TO NEIGHBORS ADJACENT TO THE SITE.

ASBESTOS NOTES

1. IF NATURALLY OCCURRING ASBESTOS IS IDENTIFIED AT THE SITE, A SITE HEALTH AND SAFETY (H&S) PLAN INCLUDING METHODS FOR CONTROL OF AIRBORNE DUST SHALL BE PREPARED. THIS PLAN SHALL BE REVIEWED AND APPROVED BY THE COUNTY OF SAN MATEO PRIOR TO GRADING IN AREAS UNDERLAIN BY SERPENTINE-BEARING SOILS OR BEDROCK AND NATURALLY OCCURRING ASBESTOS. THE H&S PLAN SHALL STRICTLY CONTROL DUST-GENERATING EXCAVATION AND COMPACTION OF MATERIAL CONTAINING NATURALLY OCCURRING ASBESTOS. THE PLAN SHALL ALSO IDENTIFY SITE-MONITORING ACTIVITIES DEEMED NECESSARY DURING CONSTRUCTION (E.G., AIR MONITORING). WORKER MONITORING SHALL ALSO BE PERFORMED AS APPROPRIATE. THE PLAN SHALL DEFINE PERSONAL PROTECTION METHODS TO BE USED BY CONSTRUCTION WORKERS. ALL WORKER PROTECTION AND MONITORING SHALL COMPLY WITH PROVISIONS OF THE MINING SAFETY AND HEALTH ADMINISTRATION (MSHA) GUIDELINES, CALIFORNIA DIVISION OF OCCUPA-TIONAL SAFETY AND HEALTH (DOSH), AND THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
2. IF NATURALLY OCCURRING ASBESTOS IS FOUND AT THE SITE, A SOIL MANAGEMENT PLAN SHALL BE DEVELOPED AND APPROVED BY THE COUNTY PLANNING DEPARTMENT TO PROVIDE DETAILED DESCRIPTIONS OF THE CONTROL AND DISPOSITION OF SOILS CONTAINING NATURALLY OCCURRING ASBESTOS. SERPENTINE MATERIAL PLACED AS FILL SHALL BE SUFFICIENTLY BURIED IN ORDER TO PREVENT EROSION BY WIND OR SURFACE WATER RUNOFF, OR EXPOSURE TO FUTURE HUMAN ACTIVITIES, SUCH AS LANDSCAPING OR SHALLOW TRENCHES. ADDITIONALLY, THE BAAQMD SHALL BE NOTIFIED PRIOR TO THE START OF ANY EXCAVATION IN AREAS CONTAINING NATURALLY OCCURRING ASBESTOS.

GRADING NOTES

1. NO GRADING SHALL BE ALLOWED DURING THE WINTER SEASON (OCTOBER 15 TO APRIL 15) TO AVOID POTENTIAL SOIL EROSION UNLESS APPROVED, IN WRITING, BY THE COMMUNITY DEVELOPMENT DIRECTOR. THE PROPERTY OWNERS SHALL SUBMIT A LETTER TO THE CURRENT PLANNING SECTION, AT LEAST TWO WEEKS PRIOR TO COMMENCEMENT OF GRADING, STATING THE DATE WHEN GRADING WILL BEGIN.

TREE PROTECTION NOTES

1. THE APPLICANT SHALL ESTABLISH AND MAINTAIN TREE PROTECTION ZONES THROUGHOUT THE ENTIRE LENGTH OF THE PROJECT. TREE PROTECTION ZONES SHALL BE DELINEATED USING 4-FOOT TALL ORANGE PLASTIC FENCING SUPPORTED BY POLES POUNDED INTO THE GROUND, LOCATED AS CLOSE TO THE DRIPLINES AS POSSIBLE WHILE STILL ALLOWING ROOM FOR CONSTRUCTION/GRADING TO SAFELY CONTINUE. THE APPLICANT SHALL MAINTAIN TREE PROTECTION ZONES FREE OF EQUIPMENT AND MATERIALS STORAGE AND SHALL NOT CLEAN ANY EQUIPMENT WITHIN THESE AREAS. SHOULD ANY LARGE ROOTS OR LARGE MASSES OF ROOTS NEED TO BE CUT, THE ROOTS SHALL BE INSPECTED BY A CERTIFIED ARBORIST OR REGISTERED FORESTER PRIOR TO CUTTING. ANY ROOT CUTTING SHALL BE MONITORED BY AN ARBORIST OR FORESTER AND DOCUMENTED. ROOTS TO BE CUT SHOULD BE SEVERED CLEANLY WITH A SAW OR TOPPERS. NORMAL IRRIGATION SHALL BE MAINTAINED, BUT OAKS SHOULD NOT NEED SUMMER IRRIGATION. THE ABOVE INFORMATION SHALL BE ON-SITE AT ALL TIMES.

VEGETATION REMOVAL/REPLACEMENT NOTES

1. VEGETATION REMOVED IN AREAS OUTSIDE OF BUILDING FOOTPRINTS, DRIVEWAYS, AND CONSTRUCTION ACCESS AREAS SHALL BE REPLACED WITH DROUGHT-TOLERANT, NON-INVASIVE PLANTS, IMMEDIATELY AFTER GRADING IS COMPLETE IN THAT AREA. PRIOR TO THE ISSUANCE OF ANY BUILDING PERMITS, THE APPLICANT SHALL SUBMIT PHOTOGRAPHS DEMONSTRATING COMPLIANCE WITH THIS CONDITION TO THE CURRENT PLANNING SECTION, SUBJECT TO REVIEW AND APPROVAL BY THE COMMUNITY DEVELOPMENT DIRECTOR.
2. THE APPLICANT SHALL REPLACE ALL VEGETATION REMOVED IN ALL AREAS NOT COVERED BY CONSTRUCTION WITH DROUGHT-TOLERANT, NON-INVASIVE PLANTS, ONCE CONSTRUCTION IS COMPLETED. PRIOR TO THE CURRENT PLANNING SECTION'S FINAL APPROVAL OF ANY BUILDING PERMIT, THE APPLICANT SHALL SUBMIT PHOTOGRAPHS DEMONSTRATING COMPLIANCE WITH THIS CONDITION, SUBJECT TO REVIEW AND APPROVAL BY THE COMMUNITY DEVELOPMENT DIRECTOR.

DUST CONTROL NOTES

1. ALL GRADED SURFACES AND MATERIALS, WHETHER FILLED, EXCAVATED, TRANSPORTED OR STOCKPILED, SHALL BE WETTED, PROTECTED OR CONTAINED IN SUCH A MANNER AS TO PREVENT ANY SIGNIFICANT NUISANCE FROM DUST, OR SPILLAGE UPON ADJOINING WATER BODY, PROPERTY, OR STREETS. EQUIPMENT AND MATERIALS ON THE SITE SHALL BE USED IN SUCH A MANNER AS TO AVOID EXCESSIVE DUST. A DUST CONTROL PLAN MAY BE REQUIRED AT ANYTIME DURING THE COURSE OF THE PROJECT.
2. A DUST PALLIATIVE SHALL BE APPLIED TO THE SITE WHEN REQUIRED BY THE COUNTY. THE TYPE AND RATE OF APPLICATION SHALL BE RECOMMENDED BY THE SOILS ENGINEER AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS, THE PLANNING AND BUILDING DEPARTMENT'S GEOTECHNICAL SECTION, AND THE REGIONAL WATER QUALITY CONTROL BOARD.

DISCOVERY OF HUMAN REMAINS NOTE

1. THE APPLICANT AND CONTRACTORS MUST BE PREPARED TO CARRY OUT THE REQUIREMENTS OF CALIFORNIA STATE LAW WITH REGARD TO THE DISCOVERY OF HUMAN REMAINS DURING CONSTRUCTION, WHETHER HISTORIC OR PREHISTORIC. IN THE EVENT THAT ANY HUMAN REMAINS ARE ENCOUNTERED DURING SITE DISTURBANCE, ALL GROUND-DISTURBING WORK SHALL CEASE IMMEDIATELY AND THE COUNTY CORONER SHALL BE NOTIFIED IMMEDIATELY. IF THE CORONER DETERMINES THE REMAINS TO BE NATIVE AMERICAN, THE NATIVE AMERICAN HERITAGE COMMISSION SHALL BE CONTACTED WITHIN 24 HOURS. A QUALIFIED ARCHAEOLOGIST, IN CONSULTATION WITH THE NATIVE AMERICAN HERITAGE COMMISSION, SHALL RECOMMEND SUBSEQUENT MEASURES FOR DISPOSITION OF THE REMAINS.

GEOTECHNICAL INSPECTION NOTE

1. PRIOR TO ISSUANCE OF BUILDING PERMITS, THE PROJECT GEOTECHNICAL CONSULTANT SHALL FIELD INSPECT (AND INVESTIGATE, AS NEEDED) ALL PROPOSED DRAINAGE DISCHARGE LOCATIONS AND VERIFY THAT PROPOSED DRAINAGE DESIGNS ARE ACCEPTABLE FROM A SLOPE STABILITY/EROSION PERSPECTIVE OR RECO

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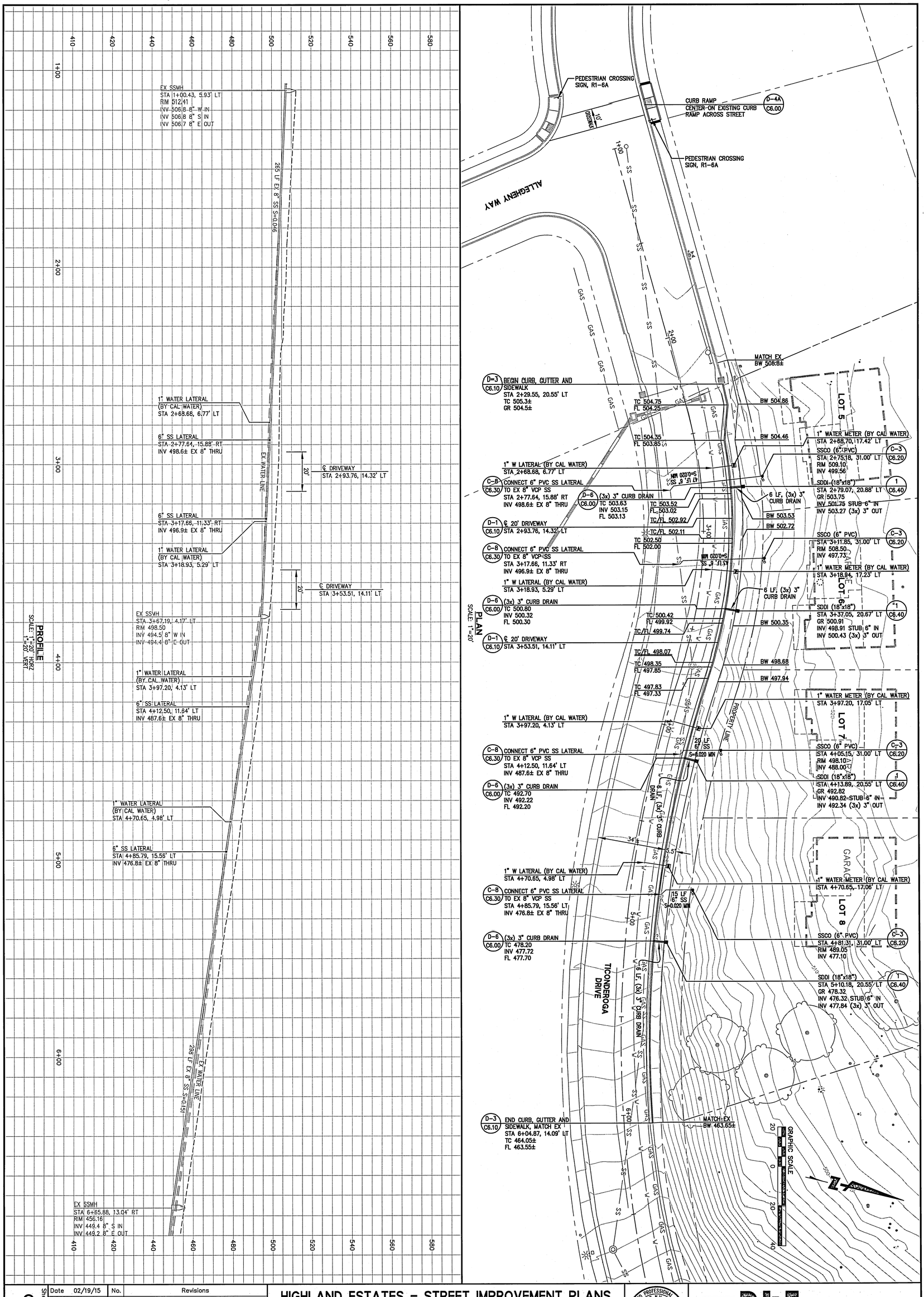

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	Approved RH		
	Job No 950168-20		

HIGHLAND ESTATES - STREET IMPROVEMENT PLANS
TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY
PLAN & PROFILE - TICONDEROGA DRIVE

CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER RICHARD W. HAYES No. C043971 CIVIL STATE OF CALIFORNIA

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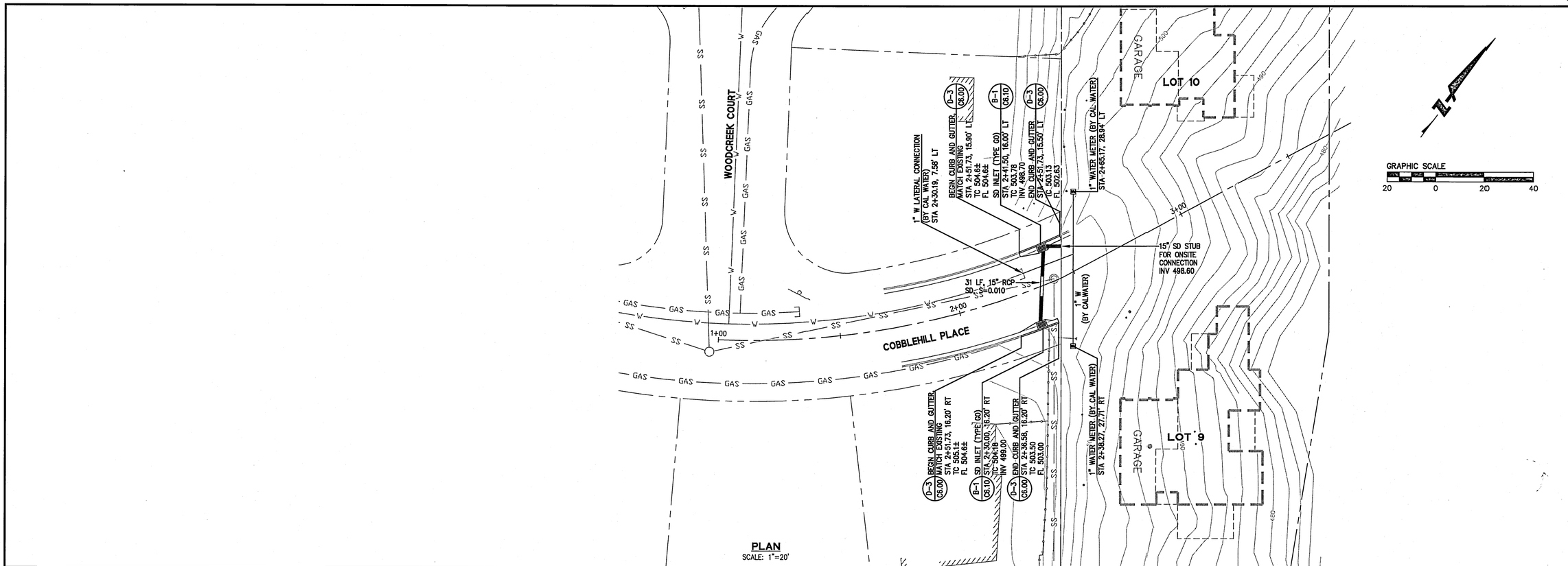

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TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY
PLAN & PROFILE - COBBLEHILL PLACE

CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

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PLAN
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PROFILE
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1"=20' VERT

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HIGHLAND ESTATES – STREET IMPROVEMENT PLANS
TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY
PLAN & PROFILE – COWPENS WAY

CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

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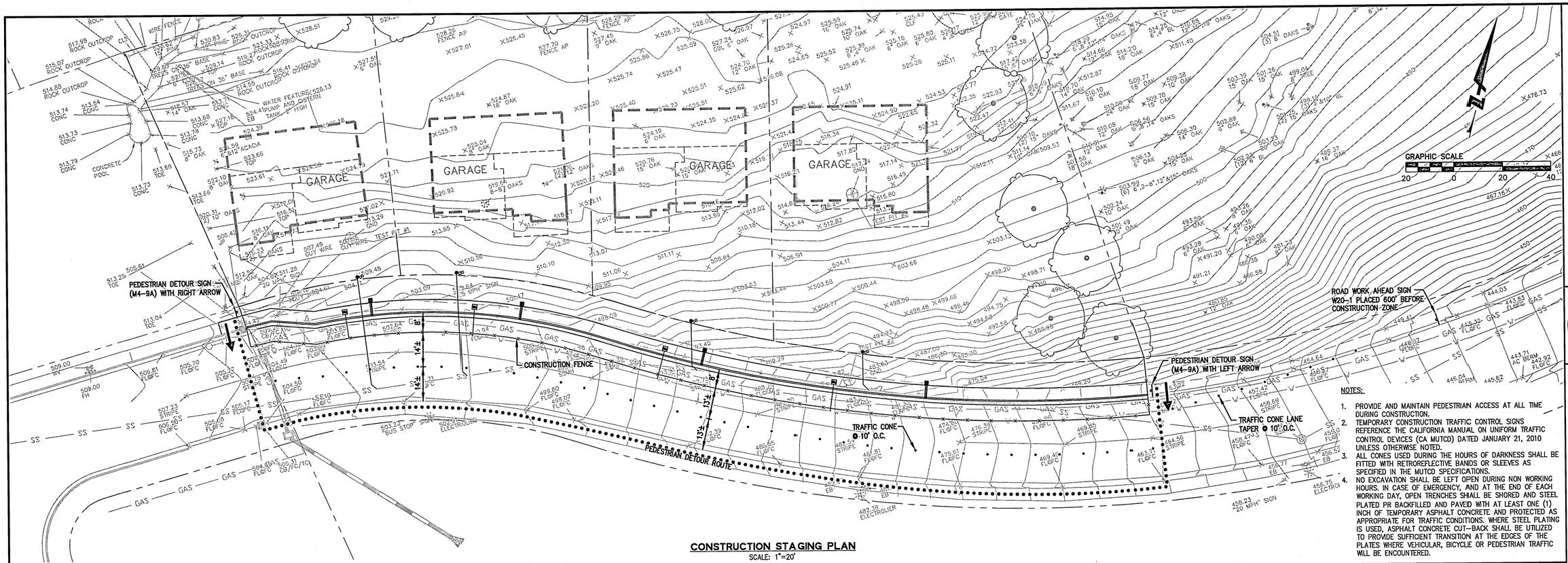
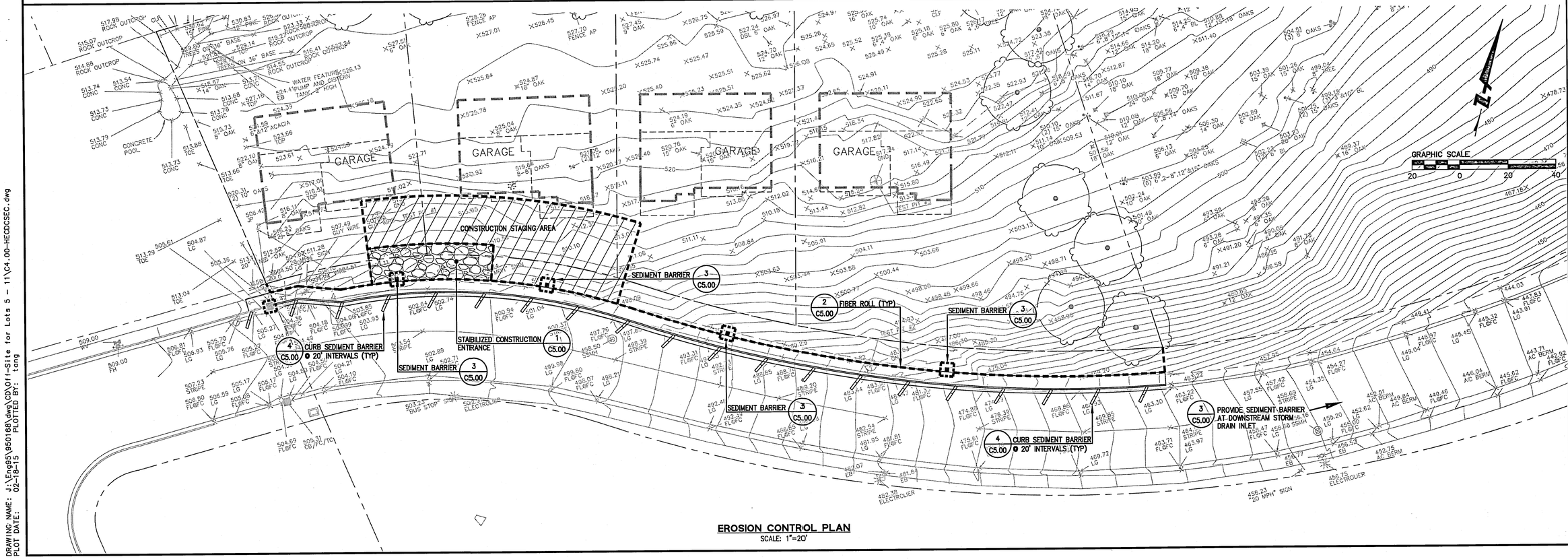


CONSTRUCTION STAGING PLAN

SCALE: 1"=20'

NOTES:

1. PROVIDE AND MAINTAIN PEDESTRIAN ACCESS AT ALL TIME DURING CONSTRUCTION.
2. TEMPORARY CONSTRUCTION TRAFFIC CONTROL SIGNS REFERENCE THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) DATED JANUARY 21, 2010 UNLESS OTHERWISE NOTED.
3. ALL CONES USED DURING THE HOURS OF DARKNESS SHALL BE FITTED WITH RETROREFLECTIVE BANDS OR SLEEVES AS SPECIFIED IN THE MUTCD SPECIFICATIONS.
4. NO EXCAVATION SHALL BE LEFT OPEN DURING NON WORKING HOURS. IN CASE OF EMERGENCY, AND AT THE END OF EACH WORKING DAY, OPEN TRENCHES SHALL BE SHORED AND STEEL PLATED PR BACKFILLED AND PAVED WITH AT LEAST ONE (1) INCH OF TEMPORARY ASPHALT CONCRETE AND PROTECTED AS APPROPRIATE FOR TRAFFIC CONDITIONS. WHERE STEEL PLATING IS USED, ASPHALT CONCRETE CUT–BACK SHALL BE UTILIZED TO PROVIDE SUFFICIENT TRANSITION AT THE EDGES OF THE PLATES WHERE VEHICULAR, BICYCLE OR PEDESTRIAN TRAFFIC WILL BE ENCOUNTERED.



EROSION CONTROL PLAN

SCALE: 1"=20'

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HIGHLAND ESTATES – STREET IMPROVEMENT PLANS
TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY
CONSTRUCTION STAGING & EROSION CONTROL PLANS

CITY OF SAN MATEO — SAN MATEO COUNTY — CALIFORNIA

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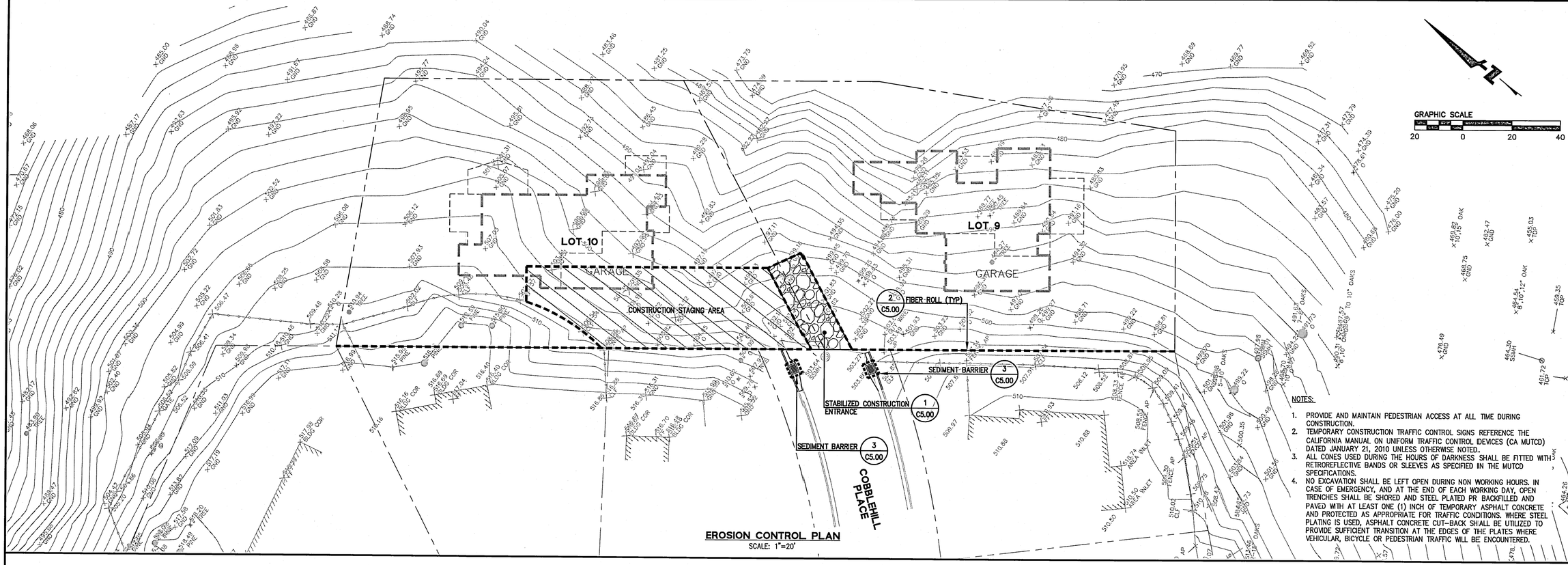
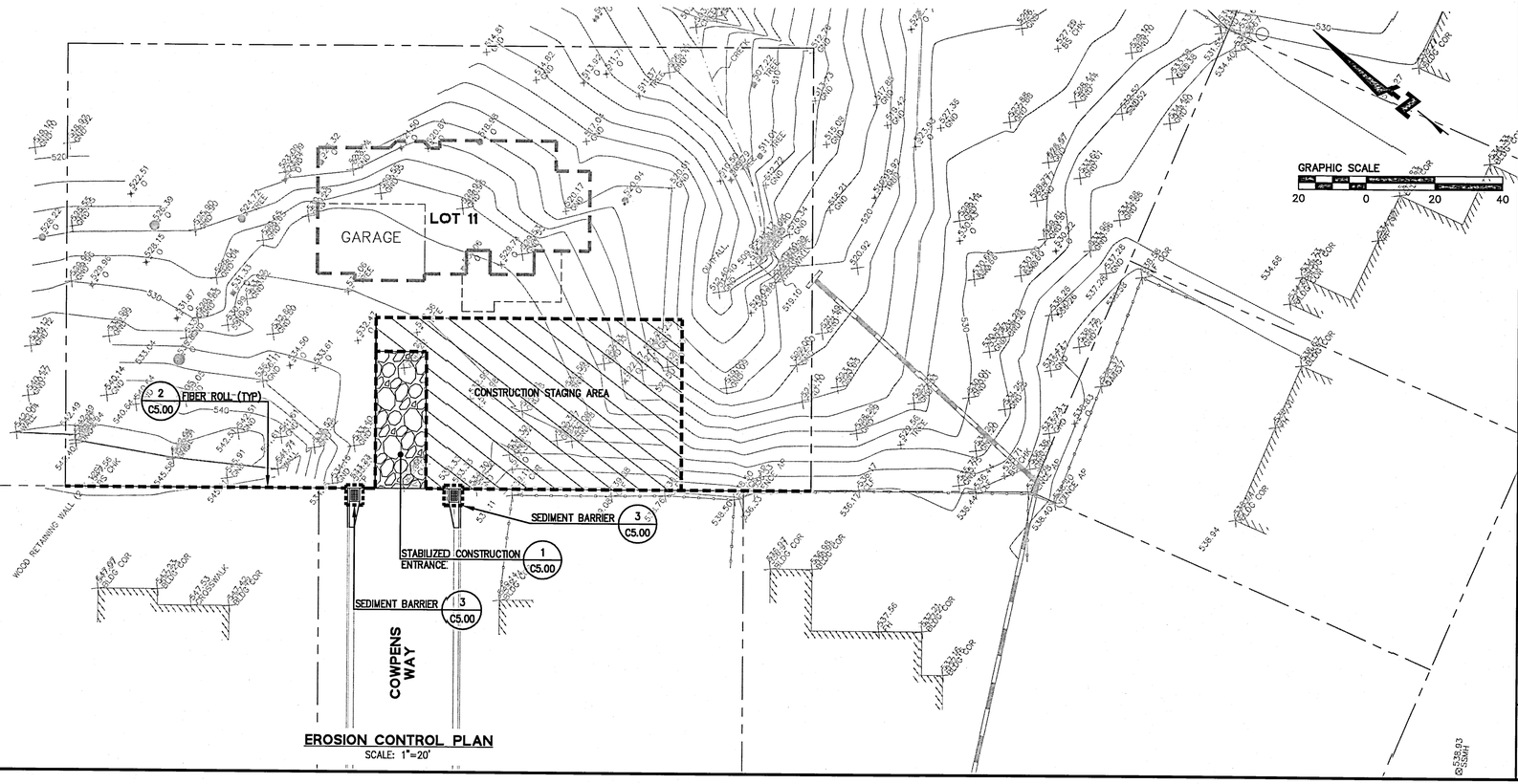


EROSION CONTROL PLAN
SCALE: 1"=20'

NOTES:

1. PROVIDE AND MAINTAIN PEDESTRIAN ACCESS AT ALL TIME DURING CONSTRUCTION.
2. TEMPORARY CONSTRUCTION TRAFFIC CONTROL SIGNS REFERENCE THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) DATED JANUARY 21, 2010 UNLESS OTHERWISE NOTED.
3. ALL CONES USED DURING THE HOURS OF DARKNESS SHALL BE FITTED WITH RETROREFLECTIVE BANDS OR SLEEVES AS SPECIFIED IN THE MUTCD SPECIFICATIONS.
4. NO EXCAVATION SHALL BE LEFT OPEN DURING NON WORKING HOURS. IN CASE OF EMERGENCY, AND AT THE END OF EACH WORKING DAY, OPEN TRENCHES SHALL BE SHORED AND STEEL PLATED PR BACKFILLED AND PAVED WITH AT LEAST ONE (1) INCH OF TEMPORARY ASPHALT CONCRETE AND PROTECTED AS APPROPRIATE FOR TRAFFIC CONDITIONS. WHERE STEEL PLATING IS USED, ASPHALT CONCRETE CUT-BACK SHALL BE UTILIZED TO PROVIDE SUFFICIENT TRANSITION AT THE EDGES OF THE PLATES WHERE VEHICULAR, BICYCLE OR PEDESTRIAN TRAFFIC WILL BE ENCOUNTERED.



EROSION CONTROL PLAN
SCALE: 1"=20'

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HIGHLAND ESTATES – STREET IMPROVEMENT PLANS
TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY
EROSION CONTROL PLANS
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

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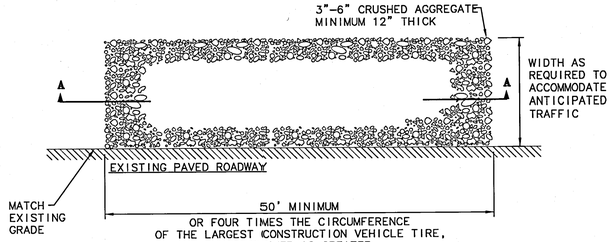
EROSION CONTROL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
2. ALTHOUGH SPECIFIC LOCATIONS FOR SEDIMENT CONTROL FACILITIES ARE SHOWN ON THESE PLANS, IT IS INTENDED THIS EROSION CONTROL PLAN BE MODIFIED WHEN NECESSARY TO MEET FIELD CONDITIONS. BASIN AND TRAP SIZES AND ELEVATIONS MAY BE ADJUSTED AS LONG AS THE MINIMUM AREAS AND DEPTHS FOR SEDIMENT SETTLING AND STORAGE ARE NOT REDUCED.
3. THE INTENT OF THESE PLANS IS TO PROVIDE THE INITIAL CONCEPT FOR INTERIM EROSION CONTROL. THE CONTRACTOR SHALL UPDATE THE PLANS TO REFLECT CHANGING SITE CONDITIONS. PLAN UPDATES SHALL BE BASED UPON GENERAL SURVEY DATA. EROSION CONTROL EFFECTIVENESS SHALL ALSO BE MONITORED AND THE PLANS UPGRADED AS REQUIRED TO PREVENT SIGNIFICANT QUANTITIES OF SEDIMENT FROM ENTERING THE DOWNSTREAM DRAINAGE SYSTEM.
4. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. IN GENERAL, THE CONTRACTOR IS RESPONSIBLE FOR KEEPING THE STORM RUN OFF FROM LEAVING THE SITE. FIBER ROLLS, SAND BAGS, AND SILT FENCES SHALL BE USED BY THE CONTRACTOR ON AN AS NEEDED BASIS TO INHIBIT SILT FROM LEAVING THE SITE AND ENTERING THE STORM DRAIN SYSTEM. ALL EXISTING, TEMPORARY, OR PERMANENT CATCH BASINS SHALL USE ONE OF THE SEDIMENT BARRIERS SHOWN.
5. THE CONTRACTOR WILL BE LIABLE FOR ANY AND ALL DAMAGES TO PUBLIC AND/OR PRIVATE OWNED AND MAINTAINED ROAD CAUSED BY THE CONTRACTOR'S GRADING ACTIVITIES, AND WILL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAUL ROUTE. ADJACENT PUBLIC ROADS SHALL BE CLEANED AT THE END OF EACH WORKING DAY.
6. BEST MANAGEMENT PRACTICES SHALL BE OPERABLE YEAR AROUND.
7. DURING THE RAINY SEASON, ALL PAVED AREAS ARE TO BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE IS TO BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.
8. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED DAILY DURING THE RAINY SEASON. ALL SLOPES SHALL BE REPAIRED AS SOON AS POSSIBLE WHEN DAMAGED.
9. THE FIRST PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY. THE REMAINDER OF CONSTRUCTION EQUIPMENT (70 PERCENT), WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL BE REQUIRED TO USE EMULSIFIED FUELS.
10. THE SECOND PHASE OF CONSTRUCTION SHALL REQUIRE 30 PERCENT OF CONSTRUCTION EQUIPMENT TO MEET TIER 2 EPA CERTIFICATION STANDARDS FOR CLEAN TECHNOLOGY AND 50 PERCENT TO MEET TIER 1 EPA CERTIFICATION STANDARDS. THE REMAINING 20 PERCENT OF CONSTRUCTION EQUIPMENT, WHICH WOULD CONSIST OF OLDER TECHNOLOGIES, SHALL USE EMULSIFIED FUELS.
11. FOR ALL LARGER VEHICLES, INCLUDING CEMENT MIXERS OR OTHER DEVICES THAT MUST BE DELIVERED BY LARGE TRUCKS, VEHICLES SHALL BE EQUIPPED WITH CARB LEVEL THREE VERIFIED CONTROL DEVICES.
12. WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
13. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
14. PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY NON-TOXIC SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
15. SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS, AND STAGING AREAS AT THE CONSTRUCTION SITES.
16. SWEEP PUBLIC STREETS ADJACENT TO CONSTRUCTION SITES DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO THE STREETS.
17. HYDROSEED OR APPLY NON-TOXIC SOIL STABILIZERS TO INACTIVE CONSTRUCTION AREAS (PREVIOUSLY GRADED AREAS INACTIVE FOR TEN DAYS OR MORE).
18. TEMPORARY AND PERMANENT SLOPES GREATER THAN 3 FEET SHALL BE SEEDED UNLESS ALTERNATIVE MEASURES ARE USED.
19. SEED MIX FOR REVEGETATION AND HYDROSEEDING:
    NORTHERN CALIFORNIA COVER MIX BY ACBRIGHT OR EQUAL

    30% BLUE WILDRYE
    30% MEADOW BARLEY
    20% ZORRO FESCUE
    10% PURPLE NEEDLE GRASS
    10% CALIFORNIA NATIVE WILDFLOWERS

    APPLY AT 40 POUNDS PER ACRE MINIMUM
20. ENCLOSE, COVER, WATER TWICE DAILY, OR APPLY NON-TOXIC SOIL BINDERS TO EXPOSED STOCKPILES (DIRT, SAND, ETC.). LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
21. DISPOSAL AREAS FOR SEDIMENT TO BE DETERMINED IN FIELD. WHEN MATERIAL IS STOCKPILED, IT SHALL BE SURROUNDED BY A SILT FENCE/FIBER ROLLS.
22. LIMIT TRAFFIC SPEEDS ON UNPAVED ROADS TO 15 MILES PER HOUR.
23. INSTALL SANDBAGS OR OTHER EROSION CONTROL MEASURES TO PREVENT SILT RUNOFF TO PUBLIC ROADWAYS.
24. REPLANT VEGETATION IN DISTURBED AREAS AS SOON AS POSSIBLE.
25. INSTALL WHEEL WASHERS FOR ALL EXITING TRUCKS OR WASH OFF THE TIRES OR TRACKS OF ALL TRUCKS AND EQUIPMENT LEAVING THE CONSTRUCTION SITE.
26. INSTALL WIND BREAKS AT THE WINDWARD SIDES OF THE CONSTRUCTION AREAS.
27. SUSPEND EXCAVATION AND GRADING ACTIVITIES WHEN WIND (AS INSTANTANEOUS GUSTS) EXCEEDS 25 MILES PER HOUR.
28. NO GRADING SHALL BE ALLOWED DURING THE WINTER SEASON (OCTOBER 15 TO APRIL 15) TO AVOID POTENTIAL SOIL EROSION UNLESS APPROVED, IN WRITING, BY THE COMMUNITY DEVELOPMENT DIRECTOR. THE PROPERTY OWNERS SHALL SUBMIT A LETTER TO THE CURRENT PLANNING SECTION, AT LEAST TWO WEEKS PRIOR TO COMMENCEMENT OF GRADING, STATING THE DATE WHEN GRADING WILL BEGIN.
29. STABILIZE ALL DENUDED AREAS AND MAINTAIN EROSION CONTROL MEASURES CONTINUOUSLY BETWEEN OCTOBER 15 AND APRIL 15. STABILIZING SHALL INCLUDE BOTH PROACTIVE MEASURES, SUCH AS THE PLACEMENT OF STRAW BALES OR COIR NETTING, AND PASSIVE MEASURES, SUCH AS MINIMIZING VEGETATION REMOVAL AND REVEGETATING DISTURBED AREAS WITH VEGETATION THAT IS COMPATIBLE WITH THE SURROUNDING ENVIRONMENT.
30. STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.
31. CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING PAVEMENT CUTTING WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICALS, WASH WATER OR SEDIMENTS, AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATERCOURSES.
32. USE SEDIMENT CONTROLS OR FILTRATION TO REMOVE SEDIMENT WHEN DEWATERING SITE AND OBTAINING ALL NECESSARY PERMITS.
33. AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON-SITE, EXCEPT IN A DESIGNATED AREA WHERE WASH WATER IS CONTAINED AND TREATED.
34. DELINEATE WITH FIELD MARKERS CLEARING LIMITS, SETBACKS, AND DRAINAGE COURSES.
35. PROTECT ADJACENT PROPERTIES AND UNDISTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE BUFFER STRIPS, SEDIMENT BARRIERS OR FILTERS, DIKES, MULCHING, OR OTHER MEASURES AS APPROPRIATE.
36. PERFORM CLEARING AND EARTH-MOVING ACTIVITIES ONLY DURING DRY WEATHER.
37. LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF.
38. LIMIT CONSTRUCTION ACCESS ROUTES AND STABILIZE DESIGNATED ACCESS POINTS.
39. ALL GRADED SURFACES AND MATERIALS, WHETHER FILLED, EXCAVATED, TRANSPORTED OR STOCKPILED, SHALL BE WETTED, PROTECTED OR CONTAINED IN SUCH A MANNER AS TO PREVENT ANY SIGNIFICANT NUISANCE FROM DUST, OR SPILLAGE UPON ADJOINING WATER BODY, PROPERTY, OR STREETS. EQUIPMENT AND MATERIALS ON THE SITE SHALL BE USED IN SUCH A MANNER AS TO AVOID EXCESSIVE DUST. A DUST CONTROL PLAN MAY BE REQUIRED AT ANYTIME DURING THE COURSE OF THE PROJECT.
40. A DUST PALLIATIVE SHALL BE APPLIED TO THE SITE WHEN REQUIRED BY THE COUNTY. THE TYPE AND RATE OF APPLICATION SHALL BE RECOMMENDED BY THE SOILS ENGINEER AND APPROVED BY THE DEPARTMENT OF PUBLIC WORKS, THE PLANNING AND BUILDING DEPARTMENT'S GEOTECHNICAL SECTION, AND THE REGIONAL WATER QUALITY CONTROL BOARD.
41. IF NO WORK HAS PROGRESSED FOR A PERIOD OF 6-WEEKS, FINAL DRAINAGE AND EROSION CONTROL IMPROVEMENTS SHALL BE INSTALLED IN ACCORDANCE WITH AN APPROVED WINTERIZATION PLAN.
42. PADS SHALL BE GRADED TO MINIMIZE STANDING WATER. SPECIFIC LOCATIONS REQUIRING SUPPLEMENTAL GRADING TO ACHIEVE ACCEPTABLE DRAINAGE SHALL BE DETERMINED BY THE CONSTRUCTION MANAGER. ALL SPOILS AND SOIL STOCKPILES REMAINING ON SITE SHALL BE ENCIRCLED BY SILT FENCES/FIBER ROLLS.
43. STUBBED OUT ENDS OF PARTIALLY COMPLETED SUBDRAINS SHALL BE WRAPPED WITH AN APPROVED FABRIC TO PREVENT SOIL AND DEBRIS FROM ENTERING THE PIPE.
44. HAUL ROADS ARE CURRENTLY NOT SHOWN ON THE PLANS. EROSION CONTROL MEASURES SHALL BE TAKEN TO MINIMIZE EROSION RELATED TO HAUL ROADS.
45. GRADING SCHEDULE SHALL BE SUBMITTED FOR APPROVAL TO SAN MATEO COUNTY PUBLIC WORKS BY AUGUST 15.
46. THE NAME, ADDRESS,AND 24 HOUR TELEPHONE NUMBER OF THE PERSON RESPONSIBLE FOR IMPLEMENTATION OF EROSION AND SEDIMENTATION CONTROL PLAN SHALL BE PROVIDED TO THE CITY.
47. SHOULD IT APPEAR THAT THE EROSION CONTROL PLAN, OR ANY OTHER MATTER THERETO, IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT THE BKF PROJECT ENGINEER AT (650) 482-6300 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.

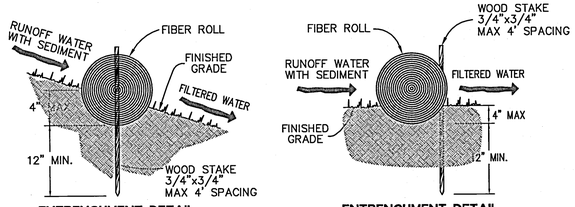
ALL EROSION CONTROL MEASURES SHALL BE IN PLACE BY OCTOBER 15 AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.



NOTES:

1. ALL CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USE TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS SHALL BE REMOVED IMMEDIATELY.
2. WHEELS SHALL BE CLEAN PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAYS. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF INLET PROTECTION (E.G. SAND BAGS OR OTHER APPROVED METHODS).
3. THE MATERIAL FOR CONSTRUCTION OF THE PAD SHALL BE 3" TO 6" STONE.
4. THE THICKNESS OF THE PAD SHALL NOT BE LESS THAN 12".
5. THE WIDTH OF THE PAD SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
6. THE LENGTH OF THE PAD SHALL NOT BE LESS THAN 50'.

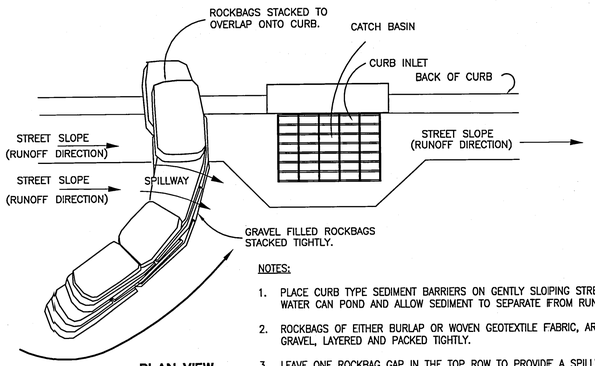
1 — STABILIZED CONSTRUCTION ENTRANCE
NTS



NOTES:

1. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" TO 4" DEEP, DUG ON CONTOUR.
2. ADJACENT ROLLS SHALL TIGHTLY ABUT.
3. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.

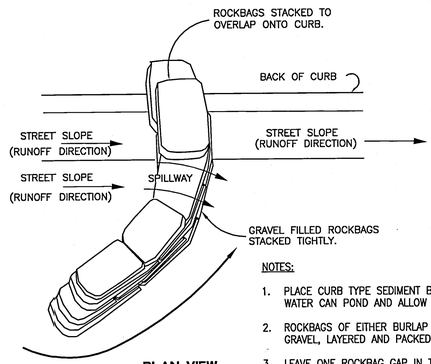
2 — FIBER ROLL
NTS



NOTES:

1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREETS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. ROCKBAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC, ARE FILLED WITH GRAVEL, LAYERED AND PACKED TIGHTLY.
3. LEAVE ONE ROCKBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY OVERFLOW. TOP OF SPILLWAY SHALL BE LOWER THAN TOP OF CURB.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

3 — CURB AND GUTTER ROCKBAG SEDIMENT BARRIER ON SLOPE
(TIME FRAME: BETWEEN FINAL PAVING OPERATIONS AND PROJECT COMPLETION)
NTS



NOTES:

1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREETS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
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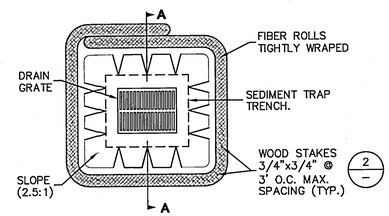
3. LEAVE ONE ROCKBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY OVERFLOW. TOP OF SPILLWAY SHALL BE LOWER THAN TOP OF CURB.
4. INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT, SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

4 — CURB SEDIMENT BARRIER
(TIME FRAME: BETWEEN PROJECT COMMENCEMENT AND PROJECT COMPLETION)
NTS



NOTES:

1. PLACE FIBER ROLLS AROUND THE INLET CONSISTENT WITH BASIN SEDIMENT BARRIER DETAIL ON THIS SHEET. (FIBER ROLLS ARE TUBES MADE FROM STRAW BOUND W/ PLASTIC NETTING. THEY ARE APPROX. 8" DIA. AND 20 – 30 FT. LONG.)
2. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE FIBER ROLL IN A TRENCH, 3" – 4" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND FIBER ROLL.
3. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BY-PASSING THE INLET. EXCAVATION OF A BASIN ADJACENT TO THE DROP INLET OR A TEMPORARY DIKE ON THE DOWNSLOPE OF THE STRUCTURE MAY BE NECESSARY.

5 — DROP INLET FIBER ROLLS SEDIMENT BARRIER
(TIME FRAME: AREA DRAINS – BETWEEN AREA DRAIN INSTALLATION AND PROJECT COMPLETION
CURB INLETS – BETWEEN CURB INLET INSTALLATION AND FINAL PAVING OPERATIONS)
NTS

BKF ENGINEERS
255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE: (650) 482-6300
FAX: (650) 482-6399
ENGINEERS / SURVEYORS / PLANNERS

REGISTERED PROFESSIONAL ENGINEER — ROBERT A. GALGA — No. 044371 — STATE OF CALIFORNIA — CIVIL

HIGHLAND ESTATES – STREET IMPROVEMENT PLANS
TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY
EROSION CONTROL DETAILS AND NOTES

CITY OF SAN MATEO — SAN MATEO COUNTY — CALIFORNIA

Revisions	No.

Date	02/19/15
Scale	AS SHOWN
Design	JT
Drawn	AG
Approved	RH
Job No	950168-20

Sheet Number:
C5.00
OF

DRAWING NAME: J:\Eng95\950168\dwg\CD\Off-Site for Lots 5 – 11\C5.00-HECDEC.dwg
PLOT DATE: 02-18-15 PLOTTED BY: tang

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DRAWN BY: D.P.
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APPROVED BY: N.R.C.

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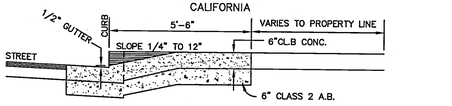
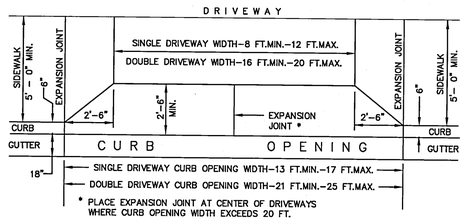


SECTION



PLAN



ELEVATION

NOTE:
WHERE POSSIBLE, 22 FT. DISTANCES OR MULTIPLES OF 22 FT. DISTANCES SHOULD BE OBTAINED BETWEEN CURB OPENINGS. CONSTRUCT MONOLITHIC CURB, GUTTER, DRIVEWAY AND APRON. WHERE DRIVEWAYS OF SEPARATE RESIDENTIAL DWELLINGS ARE CONSTRUCTED ADJACENT TO ONE ANOTHER, DOUBLE THE DIMENSIONS SHOWN ABOVE. USE NO. 4 REINFORCING BAR DOWELS AS SHOWN ON STANDARD CURB, GUTTER AND SIDEWALK DETAIL.

STANDARD STRUCTURES
DRIVEWAY WIDTHS AND CURB OPENINGS FOR SINGLE FAMILY RESIDENTIAL DWELLINGS

D-1

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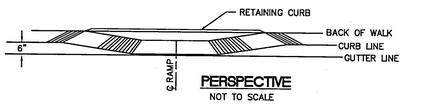
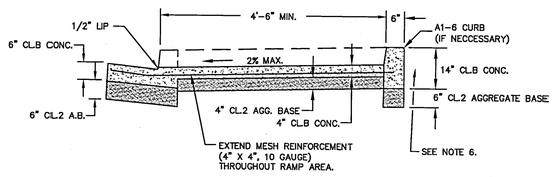
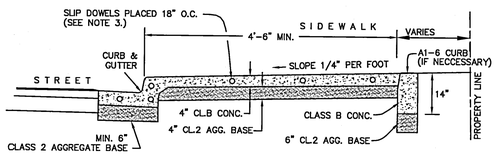


PERSPECTIVE

NOT TO SCALE



SECTION C-C



SECTION D-D

SIDEWALK ACCESS RAMP FOR SIDEWALKS LESS THAN 6' WIDE

NO SCALE

(SHEET 2 OF 3)

D-4B

SAN MATEO COUNTY DEPARTMENT
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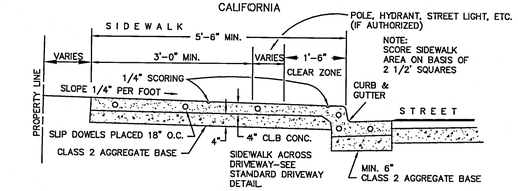
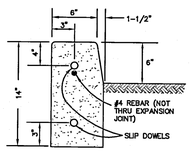
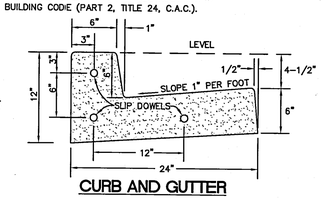


TYPICAL SECTION
URBAN CURB, GUTTER AND SIDEWALK

NOTE: OBSTRUCTIONS SUCH AS POLES, HYDRANTS, STREET SIGNS, UTILITY BOXES, STREET LIGHTS, ETC. SHALL BE LOCATED BEHIND THE SIDEWALK, UNLESS OTHERWISE SPECIFICALLY AUTHORIZED BY THE DIRECTOR OF PUBLIC WORKS. A CLEAR ZONE ALONG THE CURB AND SIDEWALK 18 INCHES IN WIDTH (MEASURED FROM THE FACE OF THE CURB) SHALL BE KEPT CLEAR AND OPEN FROM ALL OBSTRUCTIONS. IN ADDITION, AN AREA 3 FEET IN WIDTH ALONG THE SIDEWALK, EXCLUSIVE OF THE CURB WIDTH, SHALL BE KEPT CLEAR AND OPEN FROM ALL OBSTRUCTIONS IN COMPLIANCE WITH THE STATE BUILDING CODE (PART 2, TITLE 24, C.A.C.).



A1-6 CURB



CURB AND GUTTER

TYPICAL SECTIONS

NOTES:

1. ALL CONCRETE TO BE CLASS B CONCRETE..
2. MINIMUM SIDEWALK THICKNESS = 4 INCHES PCC.
3. PLACE 1/2" DIAMETER X 18" LONG DOWELS AT EXPANSION JOINTS AS SHOWN.
4. PLACE 1/2" THICK EXPANSION JOINTS FULL WIDTH 20' ON CENTER.
5. CONSTRUCT MONOLITHIC CURB, GUTTER AND SIDEWALK UNLESS OTHERWISE SPECIFICALLY AUTHORIZED BY THE DIRECTOR OF PUBLIC WORKS.
6. SUB-BASE MATERIALS WITHIN 30" OF SUBGRADE SHALL BE COMPACTED TO 95%.

D-3

SAN MATEO COUNTY DEPARTMENT
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DRAWN BY: D.P.
CHECK BY: J.A.L.
APPROVED BY: N.R.C.

SCALE: NONE
DATE: 7/97
REVISED:

GENERAL NOTES

1. CURB RAMPS THAT HAVE A RAMP SLOPE FLATTER THAN 6.67% SHALL HAVE A DETECTABLE WARNING SURFACE THAT EXTENDS THE FULL WIDTH OF THE RAMP AND 24" MINIMUM LENGTH. DETECTABLE WARNING SURFACES, AT THE OPTION OF THE CONTRACTOR, SHALL BE CONSTRUCTED BY CAST-IN-PLACE OR STAMPED METHOD, OR CONSIST OF A PREFABRICATED SURFACE. THE PRE-FABRICATED SURFACE SHALL REQUIRE APPROVAL BY THE ENGINEER.
2. TRANSITIONS FROM RAMPS TO WALKS SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. THE BOTTOM OF THE RAMP SHALL HAVE A 1/2" LIP AT 45°.
3. INSTALL SLIP DOWELS 18" O.C. AT EXPANSION JOINTS.
4. MINIMUM WIDTH OF RAMP, NOT INCLUDING RETAINING CURB, SHALL BE 4 FEET.
5. THE SURFACE OF RAMP SHALL HAVE A TRANSVERSE BROOMED SURFACE TEXTURE ROUGHER THAN THE SURROUNDING SIDEWALK EXCEPT WHEN LOCATED IN CENTER OF CURB RETURN.
6. BACKFILL MATERIAL TO BE PLACED FLUSH WITH TOP OF CURB.
7. CONSTRUCT MONOLITHIC CURB, GUTTER, AND SIDEWALK.
8. SUB-BASE MATERIAL WITHIN 2.5' OF SUBGRADE SHALL BE COMPACTED TO 95%.
9. RECONSTRUCT SIDEWALK TO NEAREST SCORE LINE AND INSTALL EXPANSION JOINT.
10. UTILITY PULL BOXES, MANHOLES, VAULTS AND ALL OTHER UTILITY FACILITIES WITHIN THE BOUNDARIES OF THE CURB RAMP WILL BE RELOCATED BY OTHERS PRIOR TO, OR IN CONJUNCTION WITH, CURB RAMP CONSTRUCTION

SIDEWALK ACCESS RAMP FOR SIDEWALKS LESS THAN 6' WIDE

NO SCALE

(SHEET 3 OF 3)

D-4C

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CALIFORNIA

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APPROVED BY: N.R.C.

SCALE: NONE
DATE: 7/95
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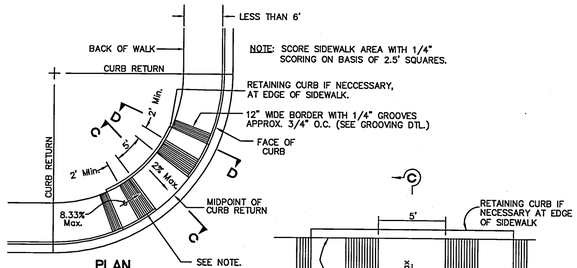
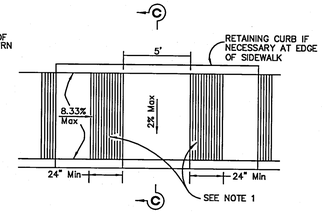
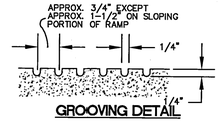


PLAN

ACCESS RAMP ON CURB RETURN



ACCESS RAMP ON TANGENT
USE WHEN SIDEWALK IS LESS THAN 8' WIDE



GROOVING DETAIL



LIP DETAIL
SEE NOTE 2.

SIDEWALK ACCESS RAMP FOR SIDEWALKS LESS THAN 6' WIDE

NO SCALE

(SHEET 1 OF 3)

D-4A

SAN MATEO COUNTY DEPARTMENT
OF
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CALIFORNIA

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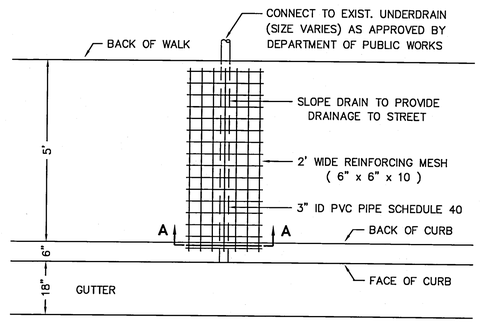
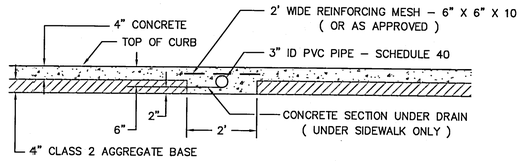


PLAN



SECTION A-A

DRAINAGE UNDER SIDEWALK

D-6

BKF ENGINEERS
255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE: (650) 482-6300
FAX: (650) 482-6399
ENGINEERS / SURVEYORS / PLANNERS

REGISTERED PROFESSIONAL ENGINEER NORMAN R. HAGA No. 043971 CIVIL STATE OF CALIFORNIA

HIGHLAND ESTATES - STREET IMPROVEMENT PLANS
TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY
CONSTRUCTION DETAILS

CITY OF SAN MATEO — SAN MATEO COUNTY — CALIFORNIA

Revisions	No.

Date	02/19/15
Scale	AS SHOWN
Design	JT
Drawn	AG
Approved	RH
Job No	950168-20

Sheet Number:
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OF

DRAWING NAME: J:\Eng95\950168\dwg\CD\01-Site for Lots 5 - 11\C6.00-HECDDT.dwg
PLOT DATE: 02-18-15
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REDWOOD CITY
CALIFORNIA

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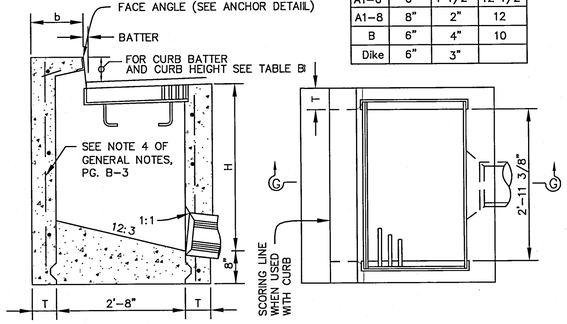
TABLE B

Curb Type	Normal Curb Height	Curb Batter	b
A1–6	6"	1 1/2"	12 1/2"
A1–8	8"	2"	12
B	6"	4"	10
Dike	6"	3"	



SECTION G–G PLAN

INLET TYPE GO

CATCH BASIN QUANTITY TABLE

	H=3'–0" TO 8'–0" (T=6")		H=8'–1" TO 20'–0" (T=8")	
	'H=3'–0"	ADDITIONAL P.C.C. PER FT. (C.Y.)	H=8'–1"	ADDITIONAL P.C.C. PER FT. (C.Y.)
GO	1.24	0.245	3.39	0.346

TABLE BASED ON 8" FLOOR SLAB, NO DEDUCTION FOR PIPE OPENINGS, AND CURB TYPE GIVING HIGHEST QUANTITY OF CONCRETE. NO DEDUCTIONS OR ADJUSTMENTS ARE TO BE MADE TO THESE QUANTITIES BECAUSE OF PIPE OPENINGS, DIFFERENT FLOOR ALTERNATIVES OR DIFFERENT CURB TYPE.

B–1

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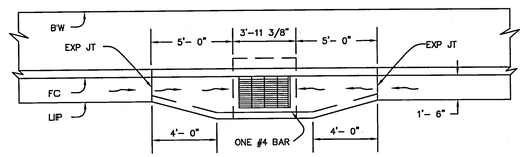
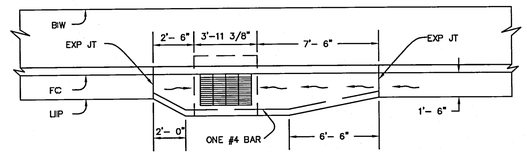


TYPE GO INLET ON SAG



TYPE GO INLET ON GRADE

QUANTITY OF PCC FOR APRONS (CUBIC YARDS)		
INLET	ON GRADE	IN SAG
GO	0.3843	0.3880

APRON DETAILS

NO SCALE

B–1A

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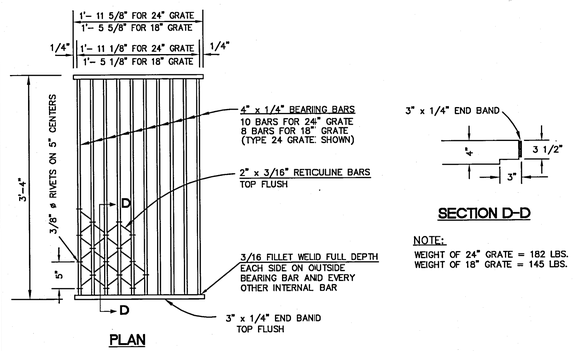

PLAN

SECTION D–D

NOTE:
WEIGHT OF 24" GRATE = 182 LBS.
WEIGHT OF 18" GRATE = 145 LBS.

TYPE 24–10S GRATE

WELDED STEEL (RETICULINE TYPE)

INLET TYPE	GRATE TYPE	NO. GRATES	WEIGHT LBS.
GO,GOL	24–10S	1	229

NOTE:
ALL STEEL TO BE HOT DIP GALVANIZED AFTER ALL WELDING IS COMPLETE.

B–4

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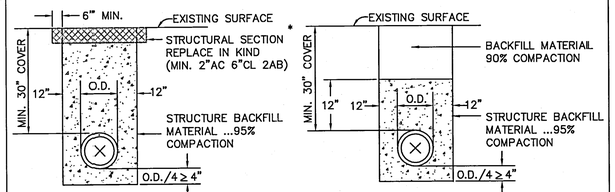
O.D.= OUTSIDE DIAMETER



TYPE A (IN ROADWAY) TYPE B (OUTSIDE ROADWAY)

THERE SHALL BE A MINIMUM OF TWO AND ONE–HALF FEET (30 INCHES) OF COVER OVER ALL PIPES AND CONDUITS UNLESS OTHERWISE DIRECTED BY COUNTY ROAD INSPECTOR.

STRUCTURE BACKFILL MATERIAL...MATERIAL WITH SAND EQUIVALENT NOT LESS THAN 20 AND SIEVE GRADATION BY WEIGHT AS FOLLOWS:

SIEVE SIZE	% PASSING SIEVES
3"	100
NO.4	35–100
NO.30	20–100

BACKFILL MATERIAL...MATERIAL FROM EXCAVATION, FREE FROM STONES OR LUMPS EXCEEDING 3 INCHES IN GREATEST DIMENSION, VEGETABLE MATTER, OR OTHER UNSATISFACTORY MATERIAL.

*IN AREAS OF CEMENT TREATED BASES, THE REPLACEMENT MATERIAL SHALL CONSIST OF A MINIMUM OF 3" OF ASPHALT CONCRETE (TYPE B) OVER A MINIMUM OF 8" OF PORTLAND CEMENT CONCRETE (CLASS B).

FOR TRENCH BACKFILL REQUIREMENTS FOR SANITARY SEWER PIPE, SEE STANDARD DRAWINGS C6 AND C7.

STANDARD TRENCH BACKFILL AND BEDDING DETAIL STORM DRAIN PIPES

B–15

BKF ENGINEERS
255 SHORELINE DRIVE, SUITE 200
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ENGINEERS | SURVEYORS | PLANNERS

REGISTERED PROFESSIONAL ENGINEER RUSSELL A. MEGA No. 043871 CIVIL STATE OF CALIFORNIA

HIGHLAND ESTATES – STREET IMPROVEMENT PLANS
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CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

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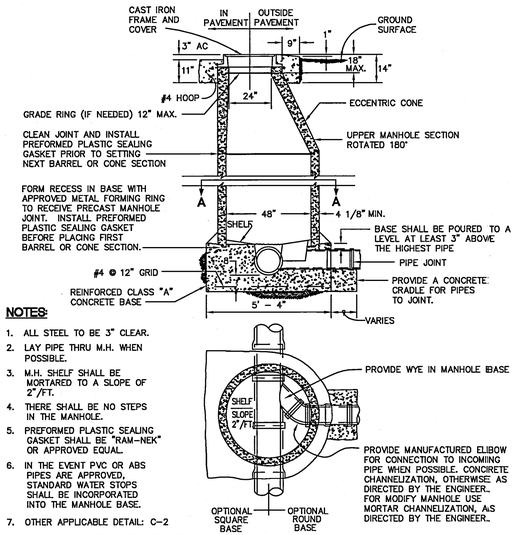

SECTION A-A

NOTES:

1. ALL STEEL TO BE 3" CLEAR.
2. LAY PIPE THRU M.H. WHEN POSSIBLE.
3. M.H. SHELF SHALL BE MORTARED TO A SLOPE OF 2"/FT.
4. THERE SHALL BE NO STEPS IN THE MANHOLE.
5. PREFORMED PLASTIC SEALING GASKET SHALL BE "RAM-NEK" OR APPROVED EQUAL.
6. IN THE EVENT PVC OR ABS PIPES ARE APPROVED, STANDARD WATER STOPS SHALL BE INCORPORATED INTO THE MANHOLE BASE.
7. OTHER APPLICABLE DETAIL: C-2
8. MANHOLE THROAT LOCATION TO BE OPPOSITE THE LARGEST SHELF AREA OR AS DIRECTED BY THE ENGINEER

SANITARY SEWER MANHOLE DETAIL

C-1

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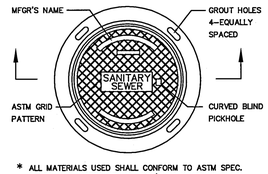
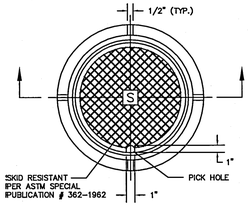
GENERAL NOTE:

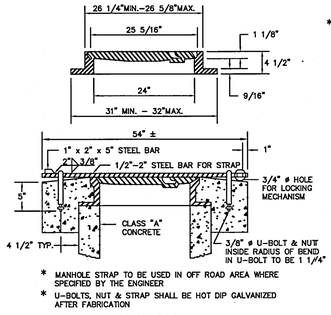
FRAME AND COVER SHALL MEET OR EXCEED THE REQUIREMENTS OF AASHTO H-20 LOADING.



* ALL MATERIALS USED SHALL CONFORM TO ASTM SPEC. A-159-70T-G3000 OR U.S. GOVT SPEC. QQ1-653



* ALL MATERIALS USED SHALL CONFORM TO ASTM SPEC. A-159-64T-G3000 OR U.S. GOVT SPEC. QQ1-653



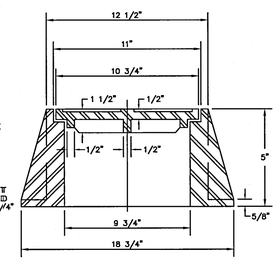
* MANHOLE STRAP TO BE USED IN OFF ROAD AREA WHERE SPECIFIED BY THE ENGINEER

* U-BOLTS, NUT & STRAP SHALL BE HOT DIP GALVANIZED AFTER FABRICATION

SECTION

SANITARY SEWER MANHOLE COVER, FRAME AND STRAP DETAIL

C-2



SECTION

SANITARY SEWER FLUSHING INLET COVER

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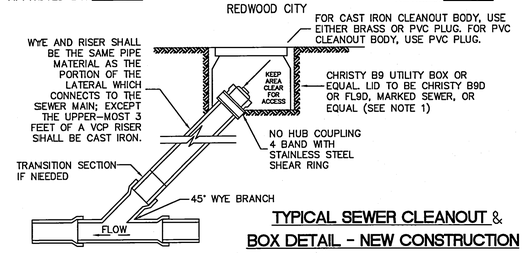
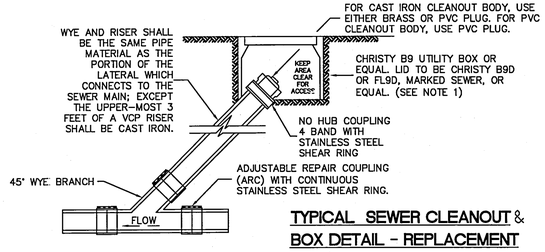


TYPICAL SEWER CLEANOUT & BOX DETAIL - NEW CONSTRUCTION



TYPICAL SEWER CLEANOUT & BOX DETAIL - REPLACEMENT

NOTES:

1. WHEN BOX IS SUBJECT TO TRAFFIC LOADING, PROVIDE CAST IRON LID.
2. BOX TO BE PLACED SUCH THAT CLEANOUT CAP CAN BE EASILY REMOVED, SEE ILLUSTRATION.
3. PROPERTY OWNER IS RESPONSIBLE FOR MAINTAINING LATERAL FROM THE PROPERTY STRUCTURE TO DISTRICT MAIN. DISTRICT PROVIDES COURTESY SERVICE FROM DISTRICT STANDARD PROPERTY LINE CLEANOUT TO THE MAIN.
4. SDR-26 WYE, RISER, CLEANOUT BODY AND CAP CAN BE USED ONLY WHEN LATERAL FROM PROPERTY LINE TIO MAIN LINE IS REPLACED WITH SDR-26.
5. WHEN ENTIRE LATERAL IS REPLACED, LATERAL FROM PROPERTY LINE CLEANOUT TO MAIN LINE SHALL HAVE A 14-1-UF GUAGE MINIMUM SINGLE CONDUCTOR TRACER WIRE TAPED TO THE ENTIRE LENGTH OF THE PIPE.

CONSTRUCTION OF A STANDARD CLEANOUT REQUIRES MULTIPLE INSPECTIONS BY DISTRICT PERSONEL:
1. FIRST INSPECTION -- TO INSPECT WYE AND RISER, WYE AND RISER MUST BE EXPOSED.
2. SECOND INSPECTION -- TO INSPECT PLACEMENT OF BOX, LID AND LOCATION OF CLEANOUT WITHIN BOX .

C-3

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REDWOOD CITY CALIFORNIA

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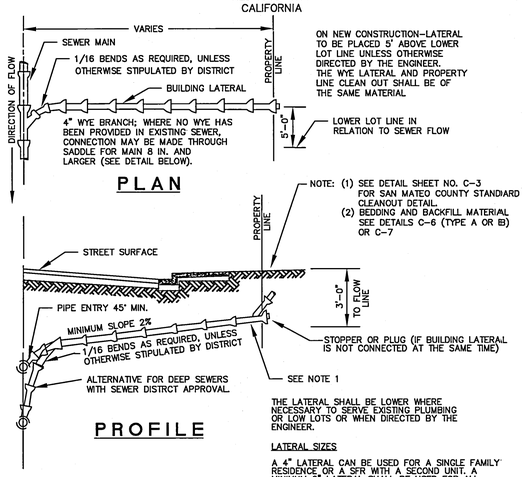

PLAN

PROFILE

THE LATERAL SHALL BE LOWER WHERE NECESSARY TO SERVE EXISTING PLUMBING OR LOW LOTS OR WHEN DIRECTED BY THE ENGINEER.

LATERAL SIZES

A 4" LATERAL CAN BE USED FOR A SINGLE FAMILY RESIDENCE OR A SFR WITH A SECOND UNIT. A MINIMUM 6" LATERAL SHALL BE USED FOR ALL OTHER DEVELOPMENTS.

METHOD OF ATTACHING LATERAL TO EXISTING SEWER WHERE NO WYE HAS BEEN PROVIDED



1. EXISTING MAIN ≤ 8": FOR MEANS BY WHICH CONNECTION IS TO BE MADE TO MAIN LINE SEE DETAIL C-6.
2. EXISTING MAIN 10"-18": CONNECTION BY MEANS OF AN APPROVED SADDLE "TEIE"
3. EXISTING MAIN >18": CONNECTION SHALL BE AT A MANHOLE UNLESS OTHERWISE APPROVED BY THE SEWER DISTRICT.

SEWER LATERAL DETAIL

C-5

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REDWOOD CITY CALIFORNIA

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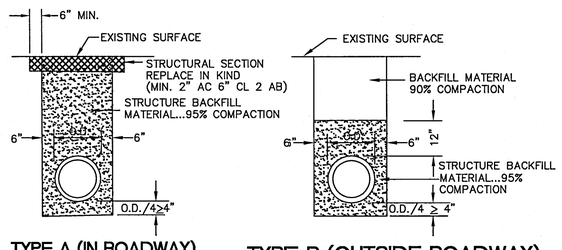

TYPE A (IN ROADWAY) TYPE B (OUTSIDE ROADWAY)

1. STRUCTURE BACKFILL MATERIAL....MATERIAL WITH SAND EQUIVALENT NOT LESS THAN 20 AND SIEVE GRADATION BY WEIGHT AS FOLLOWS:

SIEVE SIZE	% PASSING SIEVE
3"	100
No. 4	35-100
No. 30	20-100

2. BACKFILL MATERIAL.... MATERIAL FROM EXCAVATION, FREE FROM STONES OR LUMPS EXCEEDING 3 INCHES GREATEST DIMENSION, ORGANIC MATTER, OR OTHER UNSATISFACTORY MATERIAL

STANDARD TRENCH BACKFILL AND BEDDING DETAIL FOR VITRIFIED CLAY AND DUCTILE IRON SEWER PIPE

C-6

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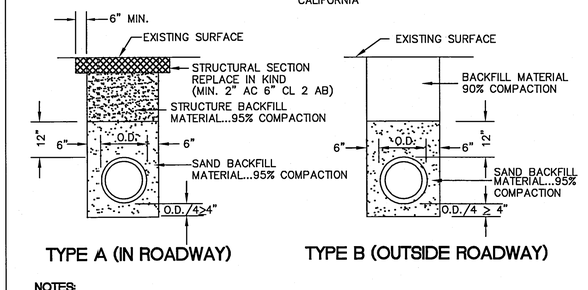

TYPE A (IN ROADWAY) TYPE B (OUTSIDE ROADWAY)

NOTES:

1. SAND.... MATERIAL FREE FROM ORGANIC MATTER AND CLAY WITH A SIEVE GRADATION BY WEIGHT AS FOLLOWS:

SIEVE SIZE	% PASSING SIEVE
No. 4	100
No. 200	0-5

2. STRUCTURE BACKFILL MATERIAL.... MATERIAL WITH SAND EQUIVALENT NOT LESS THAN 20 AND SIEVE GRADATION BY WEIGHT AS FOLLOWS:

SIEVE SIZE	% PASSING SIEVE
3"	100
No. 4	35-100
No. 30	20-100

3. BACKFILL MATERIAL.... MATERIAL FROM EXCAVATION, FREE FROM STONES OR LUMPS EXCEEDING 3 INCHES GREATEST DIMENSION, ORGANIC MATTER, OR OTHER UNSATISFACTORY MATERIAL.

STANDARD TRENCH BACKFILL AND BEDDING DETAIL FOR PVC SEWER PIPE

C-7

BKF ENGINEERS
255 SHORELINE DRIVE, SUITE 200
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PHONE: (650) 482-6300
FAX: (650) 482-6399
Engineers | Surveyors | Planners

REGISTERED PROFESSIONAL ENGINEER — RUSSELL H. TOA — No. 034371 — CIVIL — STATE OF CALIFORNIA

HIGHLAND ESTATES - STREET IMPROVEMENT PLANS
TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY
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CITY OF SAN MATEO — SAN MATEO COUNTY — CALIFORNIA

No.	Revisions

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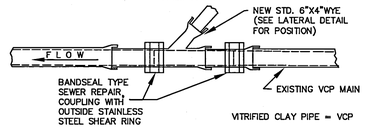
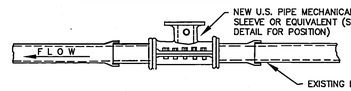


NOTE: (1) THE NEWLY INSTALLED WYE SHALL BE OF THE SAME MATERIAL AS THE EXISTING MAIN.

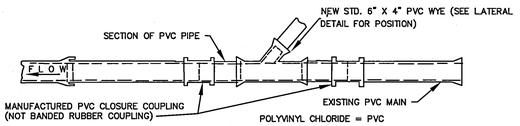
PLAN
VITRIFIED CLAY



NOTES: HORIZONTAL PIPE ENTRY ANGLE WILL BE 90°, INSTEAD OF 45°
(SEE LATERAL DETAIL, PLAN VIEW)

VERTICAL PIPE ENTRY ANGLE SHALL BE 45° MINIMUM (SEE LATERAL DETAIL PROFILE VIEW)

PLAN
DUCTILE IRON PIPE



NOTE: ALL PVC, PIPE AND FITTINGS SHALL BE SDR 35 35 AND SHALL HAVE RUBBER GASKETED JOINTS. SOLVENT WELDED JOINTS SHALL NOT BE ALLOWED.

PLAN
POLYVINYL CHLORIDE PIPE

LATERAL CONNECTION INSTALLATION DETAIL ON EXISTING PIPE

NOTE: LATERAL CONNECTION INSTALLATION ON NEWLY INSTALLED PIPE WILL BE AS DIRECTED BY THE DEPARTMENT OF PUBLIC WORKS.

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OF
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REDWOOD CITY

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DATE: 6/95
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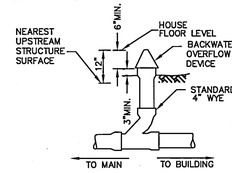
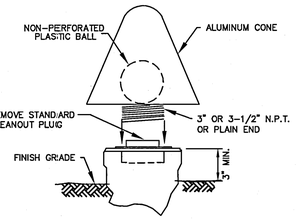
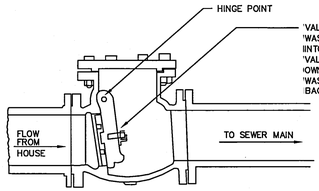




OVERFLOW DEVICE

NOTE: LOCATION OF DEVICE TO APPROVAL OF DISTRICT AND BUILDING DEPARTMENT PRIOR TO INSTALLATION



NOTE: LOCATION OF DEVICE TO APPROVAL OF DISTRICT AND BUILDING DEPARTMENT PRIOR TO INSTALLATION

BACKFLOW DEVICE

OVERFLOW AND BACKFLOW DEVICE DETAIL

SAN MATEO COUNTY DEPARTMENT
OF
PUBLIC WORKS
REDWOOD CITY

DRAWN BY: M.L.
CHECK BY: R.O.
APPROVED BY: N.R.C.

SCALE: NONE
DATE: 8/06
REVISED:

SAN MATEO COUNTY SEWER AND SANITATION DISTRICTS
STANDARD SPECIFICATIONS
GENERAL NOTES

1. ALL REFERENCES TO "DISTRICT" IN THESE GENERAL NOTES SHALL MEAN THE APPROPRIATE COUNTY SEWER OR SANITATION DISTRICT.

2. THE APPROVAL OF THESE PLANS BY THE DISTRICT SHALL BE INTERPRETED TO MEAN THAT THE SANITARY SEWER DESIGN SHOWN ON THESE PLANS MEETS THE DISTRICT'S STANDARDS. THE DISTRICT'S APPROVAL IN NO WAY GUARANTEES ANY OTHER ASPECT OF THIS PLAN OR ITS ACCURACY RELATIVE TO ACTUAL FIELD CONDITIONS.

3. THE CONTRACTOR SHALL CONTACT THE DISTRICT AT 363-4765 OR 363-4100 TWO (2) WOKING DAYS IN ADVANCE OF BEGINNING ANY SANITARY SEWER WORK. THE CONTRACTOR SHALL THEREAFTER KEEP THE INSPECTOR FOR THE DISTRICT INFORMED OF HIS SCHEDULE FOR SANITARY SEWER WORK.

4. ALL SANITARY SEWER WORK CONSTRUCTED WITHOUT INSPECTION BY THE DISTRICT SHALL BE REMOVED AND RECONSTRUCTED WITH INSPECTION.

5. THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT FORTY-EIGHT (48) HOURS IN ADVANCE OF BEGINNING ANY WORK.

6. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES BEFORE BEGINNING ANY EXCAVATING.

7. THE CONTRACTOR SHALL OBTAIN ANY AND ALL PERMITS REQUIRED BY THE COUNTY OR CITY BEFORE BEGINNING ANY SANITARY SEWER WORK.

8. UPON THE COMPLETION OF CONSTRUCTION A COMPLETE SET OF REPRODUCIBLE "AS-CONSTRUCTED" PLANS SHALL BE PROVIDED TO THE DISTRICT.

9. SANITARY SEWER SERVICE SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL USE WHATEVER MEANS ARE NECESSARY (E.G. PUMPS, ETC.) TO MAINTAIN THIS SERVICE DURING CONSTRUCTION.

10. PRIOR TO COMMENCING ANY SANITARY SEWER WORK IN OFF-SITE EASEMENTS THE CONTRACTOR SHALL PROVIDE THE DISTRICT WITH ADEQUATE EVIDENCE THAT ALL AFFECTED PROPERTY OWNERS (AND TENANTS WHERE APPLICABLE) WERE NOTIFIED WELL IN ADVANCE OF THE DATE WORK IN THESE EASEMENTS WAS TO BEGIN AND THAT THEY HAVE UPDATED THAT NOTICE IN A TIMELY MANNER WHEN THOSE DATES HAVE CHANGED.

SAN MATEO COUNTY DEPARTMENT
OF
PUBLIC WORKS
REDWOOD CITY
CALIFORNIA

DRAWN BY: N.M.A.
CHECK BY: R.O.
APPROVED BY: N.R.C.

SCALE: NONE
DATE: 6/95
REVISED: 7/97

SAN MATEO COUNTY SEWER AND SANITATION DISTRICTS
STANDARD SPECIFICATIONS
PIPE AND FITTINGS

POLYVINYL CHLORIDE PIPE (PVC)

1. ALL PIPE AND FITTINGS SHALL CONFORM TO ASTM SPECIFICATIONS D3034, SDR 35.

2. ALL JOINTS SHALL BE A BELL AND SPIGOT ASSEMBLY WITH ELASTOMERIC SEALING GASKETS. SEALING GASKETS SHALL MEET THE REQUIREMENTS OF ASTM SPECIFICATION D1869. SOLVENT CEMENT JOINTS ARE NOT PERMITTED.

3. ALL PIPE ENTERING OR LEAVING A CONCRETE STRUCTURE SHALL HAVE A RUBBER WATERSTOP GASKET ATTACHED TO IT. THE WATERSTOP GASKET SHALL CONFORM TO THE PIPE MANUFACTURER'S SPECIFICATIONS. THE WATERSTOP GASKET SHALL BE SEATED FIRMLY AROUND THE PIPE EXTERIOR AND BE CAST INTO THE CONCRETE STRUCTURE.

4. ALL PIPE JOINTS SHALL BE MADE USING MANUFACTURED PVC COUPLINGS. BAND TYPE COMPRESSION COUPLINGS ARE NOT PERMITTED.

DUCTILE IRON PIPE (DIP)

1. ALL PIPE SHALL BE THICKNESS CLASS 50 (FOUR INCH PIPE SHALL BE THICKNESS CLASS 51) IN ACCORDANCE WITH ANSI SPECIFICATIONS A21.51. FITTINGS SHALL BE IN ACCORDANCE WITH ANSI SPECIFICATION A21.10.

2. JOINTS SHALL BE PUSH-ON TYPE OR MECHANICAL JOINT TYPE IN ACCORDANCE WITH ANSII SPECIFICATION A21.11. RUBBER GASKETS FOR PUSH-ON JOINTS SHALL BE IN ACCORDANCE WITH ANSI SPECIFICATIONS HEREIN.

3. PIPE AND FITTINGS SHALL HAVE A BITUMINOUS COATING OUTSIDE IN ACCORDANCE WITH ASTM SPECIFICATION A746-86, UNLESS OTHERWISE SPECIFIED HEREIN.

4. PIPE AND FITTINGS SHALL HAVE A 1/16" (ONE-SIXTEENTH INCH) CEMENT-MORTAR LINING WITH AN ASPHALTIC SEAL COAT.

VITRIFIED CLAY PIPE (VCP)

1. PIPE AND FITTINGS SHALL BE EXTRA STRENGTH, UNGLAZED, BELL AND SPIGOT, CONFORMING TO THE LATEST REVISION OF ASTM SPECIFICATION C700.

2. JOINTS SHALL BE A BELL AND SPIGOT ASSEMBLY WITH FACTORY INSTALLED FLEXIBLE COMPRESSSION TYPE GASKETS MADE OF PLASTICIZED POLYVINYL OR POLYURETHANE CONFORMING TO THE LATEST REVISION OF ASTM SPECIFICATIONS C425. BAND TYPE COUPLINGS ARE NOT ALLOW.

SAN MATEO COUNTY DEPARTMENT
OF
PUBLIC WORKS
REDWOOD CITY
CALIFORNIA

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SCALE: NONE
DATE: 6/95
REVISED: 7/97

SAN MATEO COUNTY SEWER AND SANITATION DISTRICTS
STANDARD SPECIFICATIONS
TESTING REQUIREMENTS

1. ALL REFERENCES TO "DISTRICT" IN THESE TESTING REQUIREMENTS SHALL MEAN THE APPROPRIATE COUNTY SEWER OR SANITATION DISTRICT.

2. ALL REQUIRED CLEANING AND TESTING OF SANITARY SEWER MAINS AND LATERALS SHALL BE PERFORMED IN THE PRESENCE OF A REPRESENTATIVE OF THE DISTRICT.

3. ALL SANITARY SEWER MAINS BEING CONSTRUCTED SHALL BE CLEANED BY MEANS OF A HIGH SPEED JET RODDER PRIOR TO TESTING. VCP AND DIP SHALL BE TESTED FOR OBSTRUCTION BY BALL ROLLING.

4. ALL SANITARY SEWER MAINS BEING CONSTRUCTED SHALL PASS A LOW PRESSURE AIR TEST. EACH SECTION OF MAIN SHALL BE TESTED BETWEEN SUCCESSIVE MANHOLES. THE LOW PRESSURE AIR TEST SHALL BE CONDUCTED IN THE FOLLOWING MANNER.

   A COMPRESSED AIR SUPPLY SHALL BE ATTACHED TO AN AIR FITTING ON THE MAIN AND THE AIR PRESSURE WITHIN THE LINE INCREASED TO FOUR (4) POUNDS PER SQUARE INCH. (PSI). AFTER THE AIR SUPPLY IS SECURELY TURNED OFF OR DISCONNECTED, THERE SHALL BE A TWO (2) MINUTE WAITING PERIOD BEFORE THE ACTUAL TEST PERIOD BEGINS TO ALLOW STABILIZATION OF AIR WITHIN THE MAIN.

   IN NO CASE SHALL THE AIR PRESSURE WITHIN THE LINE BE LESS THAN 3.5 PSI AT THE BEGINNING OF THE TEST PERIOD. REFER TO THE CHART WHICH FOLLOWS FOR THE LENGTH OF THE TEST PERIOD. THE MINIMUM LENGTH OF TEST IS TWO (2) MINUTES). THE ALLOWABLE AIR PRESSURE LOSS DURING THE TEST PERIOD SHALL BE 1.0 PSI. A WRITTEN RECORD OF THE TEST SHALL BE SUBMITTED TO THE DISTRICT BY THE CONTRACTOR.

NOMINAL PIPE SIZE (inches)	LENGTH OF LINE (feet)	LENGTH OF TEST (minutes)
4	ALL	2
6	0 – 300	2
6	300 – 370	2 1/2
6	370 AND GREATER	3
8	0 – 170	2
8	170 – 210	2 1/2
8	210 – 250	3
8	250 – 290	3 1/2
8	290 AND GREATER	3 3/4
10	0 – 110	2
10	110 – 165	3
10	165 – 215	4
10	215 AND GREATER	4 3/4

SAN MATEO COUNTY DEPARTMENT
OF
PUBLIC WORKS
REDWOOD CITY
CALIFORNIA

DRAWN BY: N.M.A.
CHECK BY: R.O.
APPROVED BY: N.R.C.

SCALE: NONE
DATE: 6/95
REVISED: 7/97

5. A TELEVISION INSPECTION SHALL BE MADE OF ALL SANITARY SEWER MAINS BEING CONSTRUCTED. IMMEDIATELY PRIOR TO TELEVISING THE SEWER, AN AMOUNT OF WATER ACCEPTABLE TO THE DISTRICT'S REPRESENTATIVE SHALL BE INTRODUCED INTO THE SEWER MAIN BEING INSPECTED.

   A VIDEO TAPE IN VHS FORMAT AT SP, OR EQUIVALENT, SPEED SHALL BE MADE OF THE INSPECTION AND DELIVERED ALONG WITH A TYPED LOG OF THE INSPECTION TO THE DISTRICT (SAN MATEO COUNTY DEPARTMENT OF PUBLIC WORKS) FOR REVIEW AND ACCEPTANCE.

   SUBMITTED VIDEO TAPES SHALL INCLUDE A CONTINUOUS ON-SCREEN DISPLAY WHICH CONTAINS, AS A MINIMUM, THE DATE OF THE FILMING, IDENTIFICATION OF THE LINE AND SEGMENT (REACH) OF THE LINE BEING VIEWED, AND A READOUT, IN FEET, SHOWING THE DISTAINCE TO THE ENTRY POINT.

   IF, IN THE OPINION OF THE DISTRICT, THE SUBMITTED VIDEO TAPES ARE OF POOR QUALITY, THE DISTRICT MAY REJECT THE VIDEO TAPES AND REQUIRE THE VIDEO INSPECTION TO BE REPEATED AND NEW VIDEO TAPES SUBMITTED TO THE DISTRICT FOR REVIEW AND ACCEPTANCE. ALL VIDEO TAPES SHALL BECOME THE PROPERTY OF THE DISTRICT.

6. DEFLECTION TESTING OF POLYVINYL CHLORIDE (PVC) SEWER MAINS SHALL BE PERFORMED AFTER THE PLACEMENT OF ALL TRENCH BACKFILL. PIPE DEFLECTION SHALL BE TESTED BY PULLING BY HAND A GO/NO-GO MANDREL THROUGH THE INSTALLED SECTIONS OF SEWER MAIN.

   THE MANDREL USED SHALL HAVE A MINIMUM LENGTH EQUAL TO ITS DIAMETER. THE MANDREL SHALL BE CONSTRUCTED WITH A MINIMUM OF NINE (9) RIBS FABRICATED PARALLEL TO ITS LONGITUDINAL AXIS. BOTH THE DESIGN OF THE MANDREL AND THE FABRICATED MANDREL ITSELF SHALL BE INSPECTED AND APPROVED BY THE DISTRICT WELL IN ADVANCE OF THE DEFLECTION TEST.

   THE MANDREL DIAMETER SHALL BE 95% OF THE PIPE'S AVERAGE INSIDE DIAMETER AS DEFINED BY ASTM SPECIFICATION D3034, AND AS DETAILED IN THE FOLLOWING TABLE:

NOMINAL PIPE SIZE (inches)	AVERAGE INSIDE DIAMETER (inches)	MINIMUM MANDREL DIAMETER (inches)
6	5.893	5.598
8	7.891	7.497
10	9.864	9.371

NOTE: AVERAGE INSIDE DIAMETER = AVERAGE OUTSIDE DIAMETER – 2(1.06)T; WHERE T = MINIMUM WALL THICKNESS AS DEFINED BY ASTM SPECIFICATION D3034.

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REDWOOD CITY, CA 94065
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FAX: (650) 482-6399
ENGINEERS / SURVEYORS / PLANNERS

REGISTERED PROFESSIONAL ENGINEER
ROLAND N.V. NAGA
No. C043971
CIVIL
STATE OF CALIFORNIA

HIGHLAND ESTATES - STREET IMPROVEMENT PLANS
TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY
CONSTRUCTION DETAILS

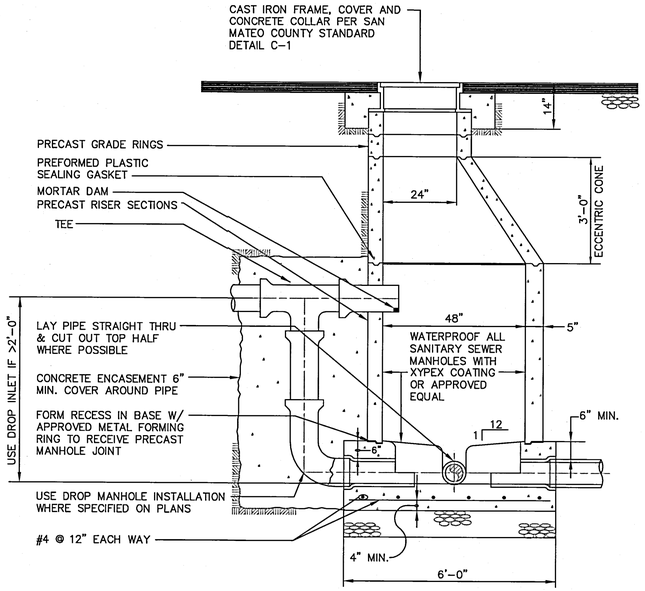
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

No.	Revisions

Date 02/19/15
Scale AS SHOWN
Design JT
Drawn AG
Approved RH
Job No 950168-20

Sheet Number:
C6.30
OF

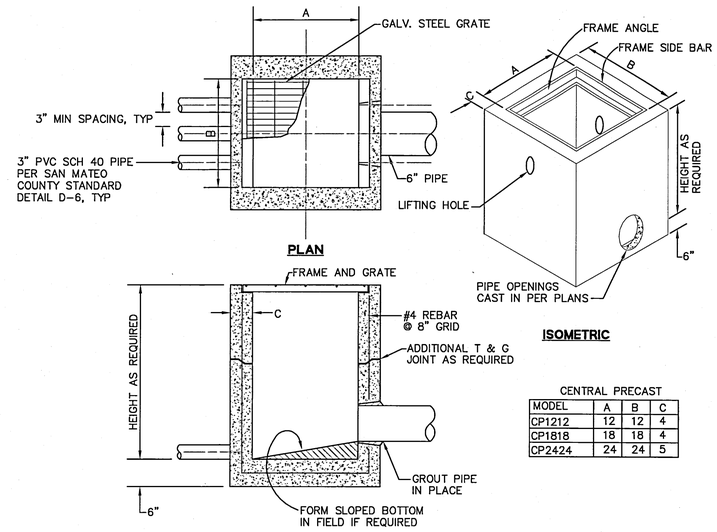
DRAWING NAME: J:\Eng95\950168\dwg\CD\Off-Site for Lots 5 - 11\C6.30-HECDDT.dwg
PLOT DATE: 02-18-15 PLOTTED BY: tong



4 — SANITARY SEWER DROP MANHOLE
NTS

NOTES:

1. BASE AND COLLAR SHALL BE CLASS B (5 SACK) CONCRETE PLACED AGAINST UNDISTURBED EARTH OR APPROVED BACKFILL MATERIAL COMPACTED TO 95% RELATIVE DENSITY.
2. PRECAST BARREL AND CONE SECTIONS SHALL CONFORM TO ASTM C-473 SPECIFICATIONS.
3. MANHOLE FRAME SHALL MATCH GRADE AFTER PAVING TO WITHIN 0.10 FT.
4. MORTAR JOINTS SHALL USE A MIX OF 2 PARTS SAND TO 1 PART CEMENT.
5. FOR SANITARY SEWER MANHOLES, BAND AND MORTAR ALL JOINTS PRIOR TO WATERPROOFING. FOR STORM DRAIN MANHOLES, BAND AND MORTAR OR RAM-NECK ALL JOINTS.
6. WATERPROOFING SHALL BE DONE ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
7. IF THE RISER FROM THE DROP MANHOLE IS FURTHER THAN THE 12" EDGE OF THE MANHOLE CONCRETE COLLAR, A SEPARATE CONCRETE COLLAR SHALL BE INSTALLED FOR THE G-5 BOX.



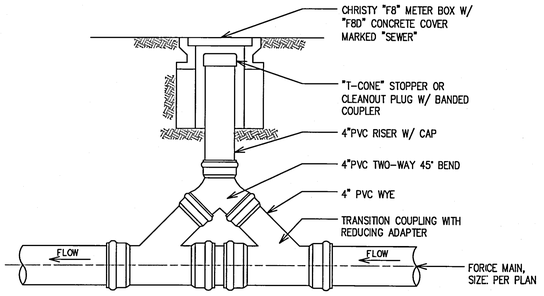
CENTRAL PRECAST

MODEL	A	B	C
CP1212	12	12	4
CP1818	18	18	4
CP2424	24	24	5

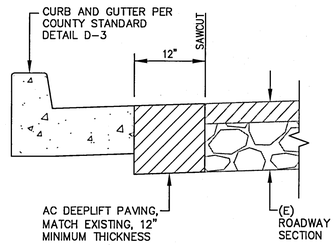
NOTES:

1. DROP INLETS SHALL BE CENTRAL PRECAST OR APPROVED EQUAL.
2. AN ENGINEERED PRECAST DROP INLET UNIT CAN BE USED AS AN ALTERNATE.
3. SEE PLAN FOR DROP INLET SIZE AND LOCATION.

1 — DROP INLET DETAIL
NTS



2 — SANITARY SEWER FORCE MAIN CLEANOUT DETAIL
NTS



3 — SAWCUT AND AC DEEPLIFT DETAIL
NTS

255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE: (650) 482-6300
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ENGINEERS / SURVEYORS / PLANNERS

REGISTERED PROFESSIONAL ENGINEER ROBERT H. HAGA No. 043071 CIVIL STATE OF CALIFORNIA

HIGHLAND ESTATES - STREET IMPROVEMENT PLANS
TICONDEROGA DRIVE, COBBLEHILL PLACE & COWPENS WAY
CONSTRUCTION DETAILS

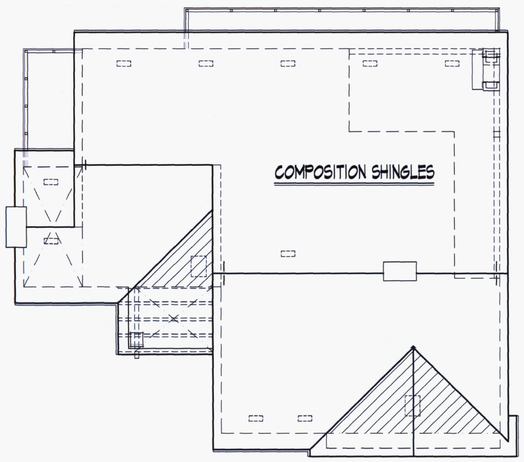
CITY OF SAN MATEO — SAN MATEO COUNTY — CALIFORNIA

Revisions	No.

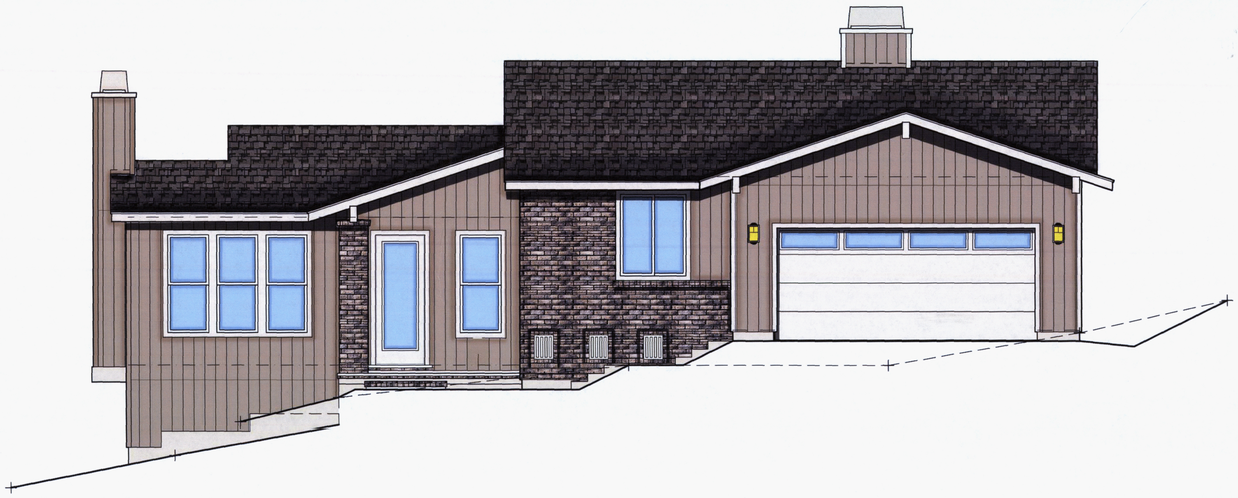
Date	02/19/15
Scale	AS SHOWN
Design	JT
Drawn	AG
Approved	RH
Job No	950168-20

Sheet Number:
C6.40
OF

DRAWING NAME: J:\Eng95\950168\dwg\CD\Off-Site for Lots 5 - 11\C6.40-HECDDT.dwg
PLOT DATE: 02-18-15 PLOTTED BY: tang



ROOF PLAN



FRONT ELEVATION



LEFT SIDE ELEVATION

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Architecture • Planning

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SAN CARLOS, CALIFORNIA 94070
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LOT No. 1

EXTERIOR ELEVATIONS & ROOF PLAN

REVISIONS

LICENSED ARCHITECT
MARK R. GROSS
C-24313
Rev. 9-30-13
STATE OF CALIFORNIA

ALL DIMENSIONS & CONDITIONS ARE TO BE VERIFIED BY CONTRACTOR BEFORE START OF CONSTRUCTION.

DESIGNED BY
-
DRAWN BY
R.L.S
CHECKED BY
-
JOB NO.
4106
DATE
JULY 08, 2013
SHEET NO.
1-6

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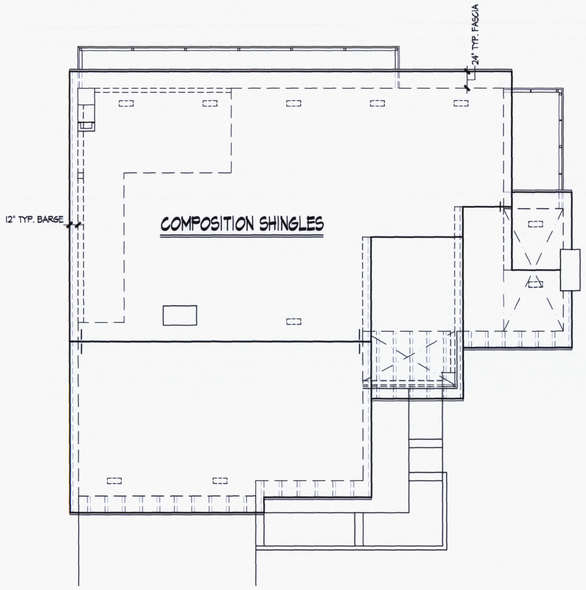
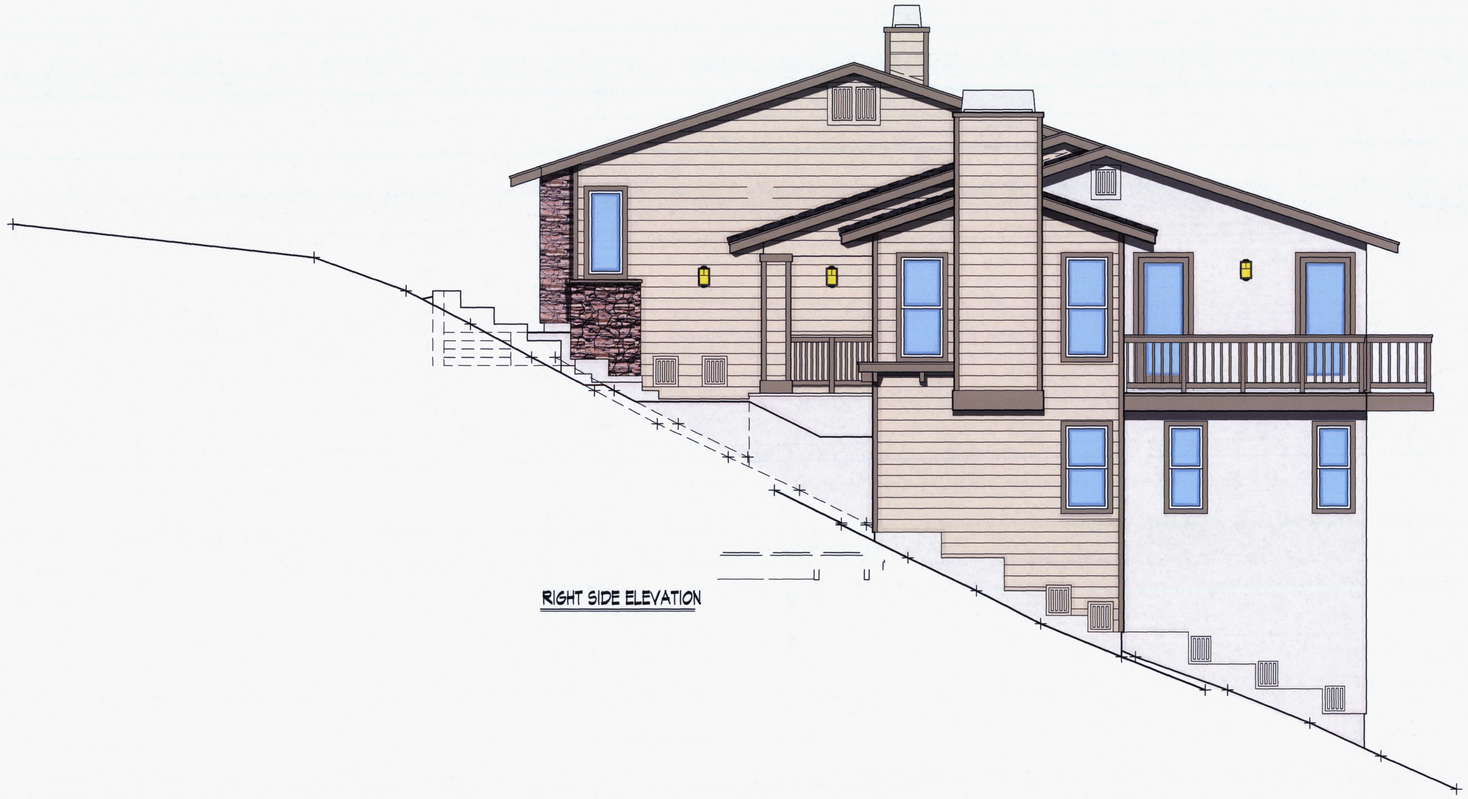


ROOF PLAN



FRONT ELEVATION



RIGHT SIDE ELEVATION

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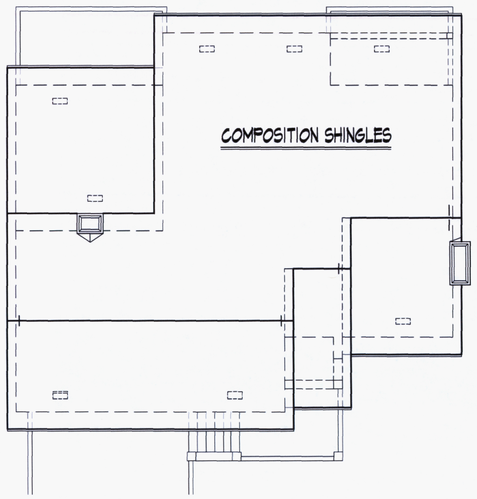
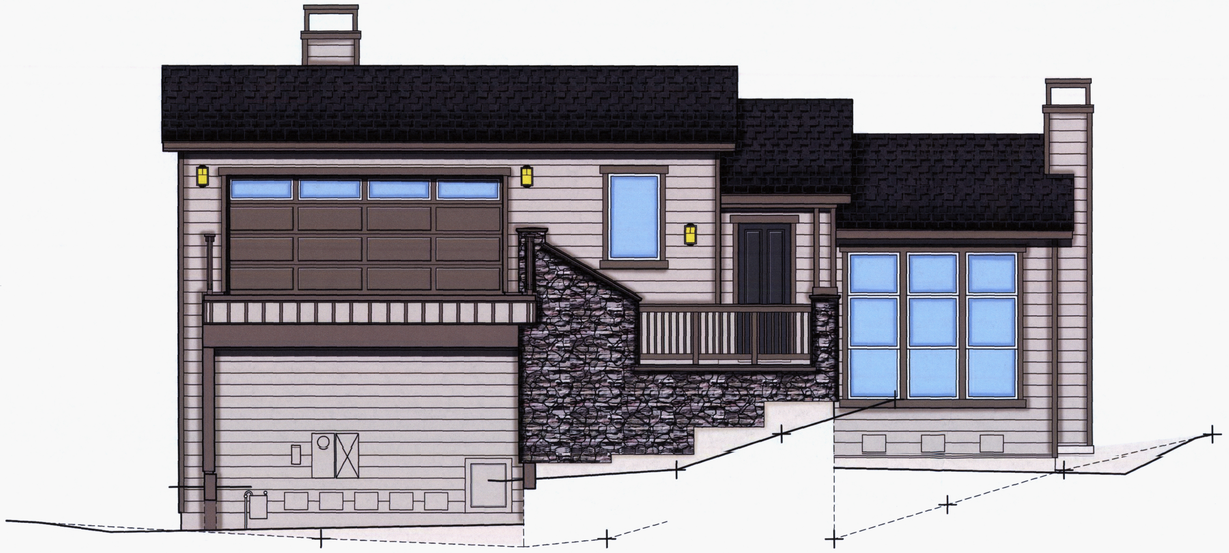


ROOF PLAN



FRONT ELEVATION



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C-24313
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STATE OF CALIFORNIA

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4106
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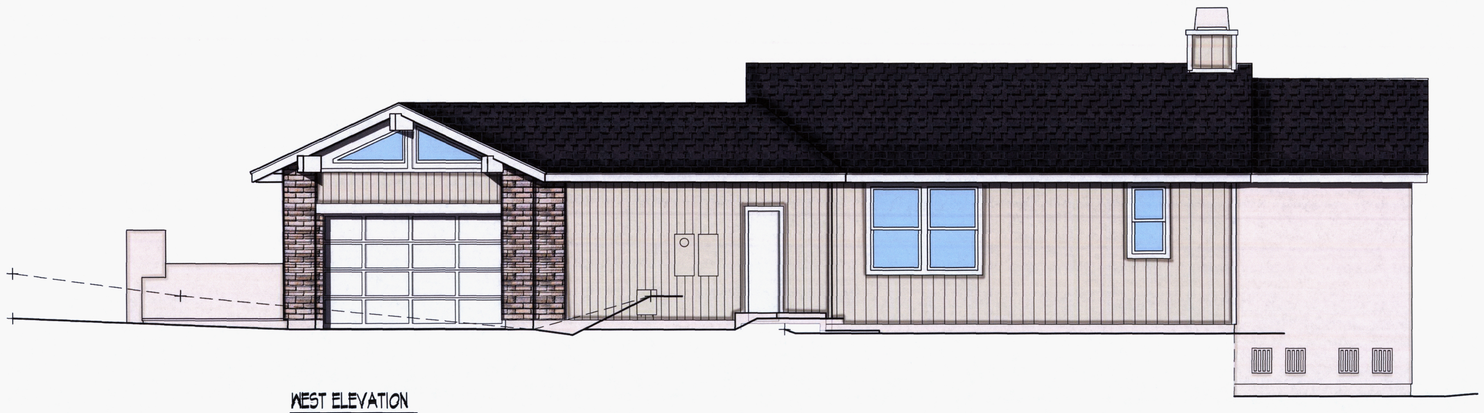

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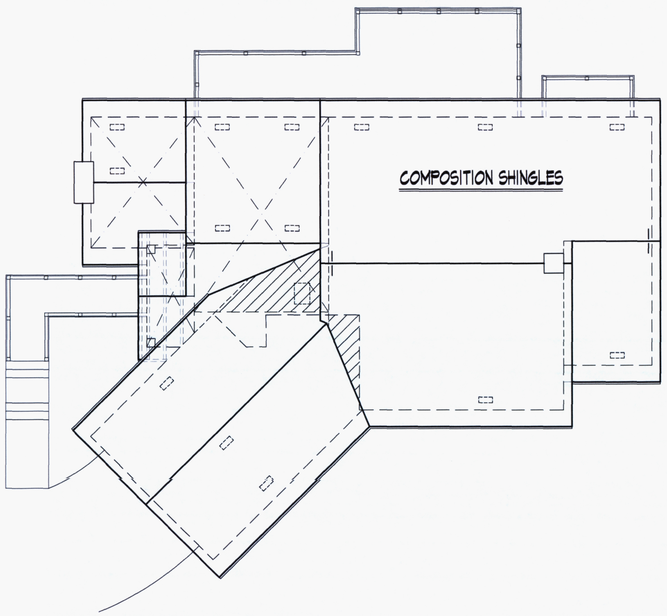

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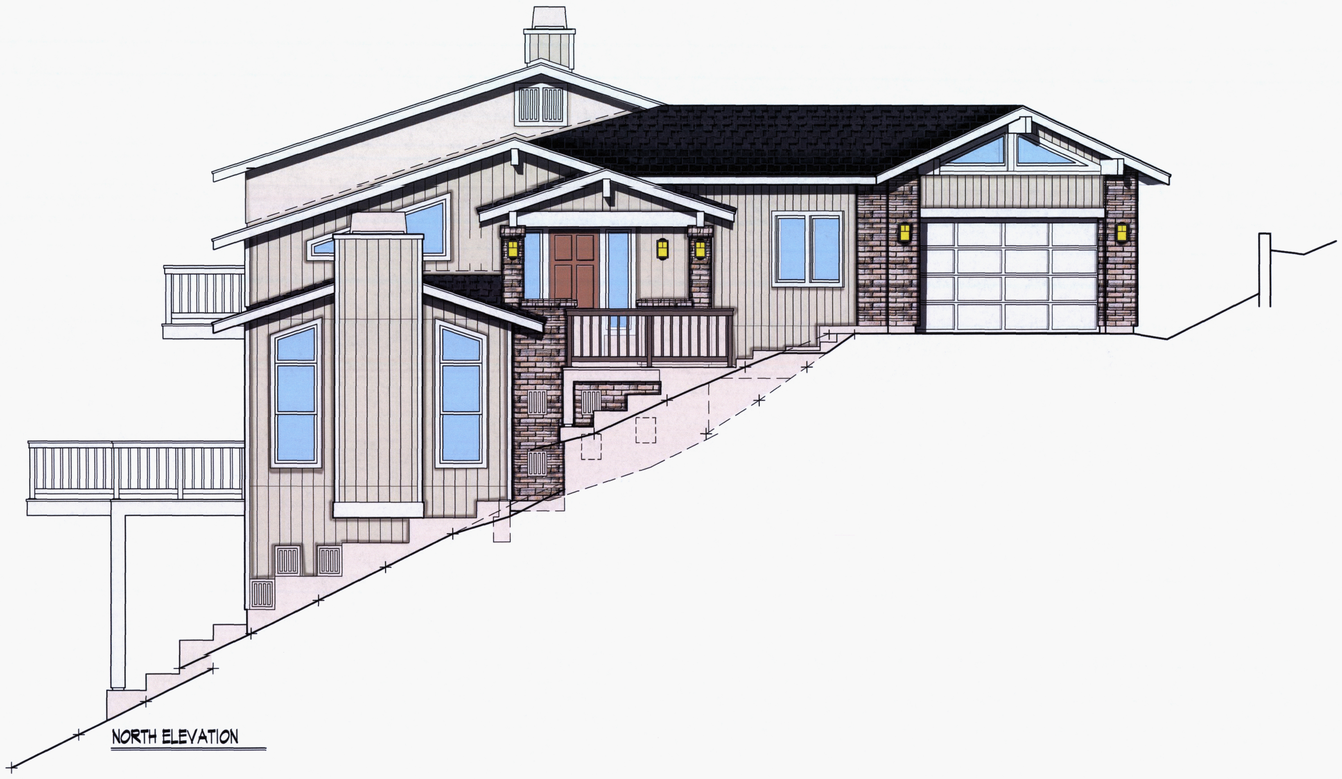

NORTH ELEVATION

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LOT No. 4

EXTERIOR ELEVATIONS

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LICENSED ARCHITECT
MARK H. GROSS
C-24313
Rev. 9-30-13
STATE OF CALIFORNIA

ALL DIMENSIONS & CONDITIONS ARE TO BE VERIFIED BY CONTRACTOR BEFORE START OF CONSTRUCTION.

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DRAWN BY
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CHECKED BY
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JOB NO.
4106
DATE
JULY 08, 2013
SHEET NO.

4-7

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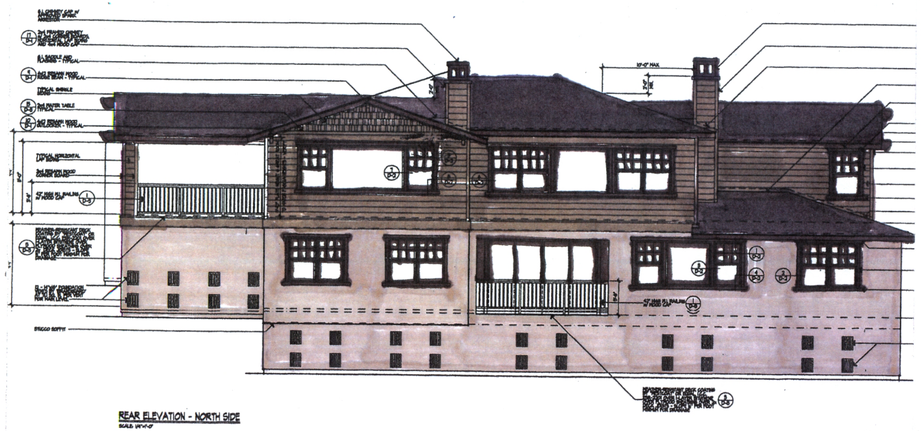
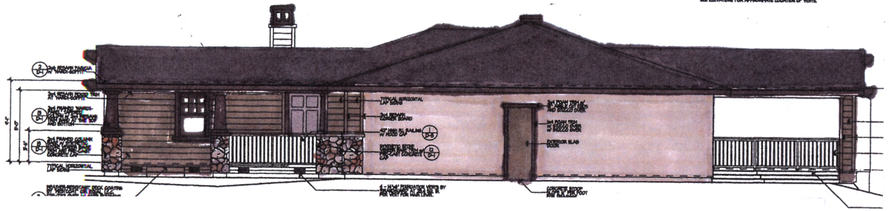
Highlands Estates

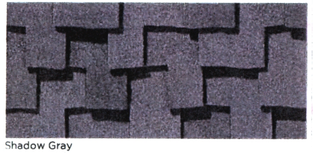
Lot - 9



REAR ELEVATION - NORTH SIDE

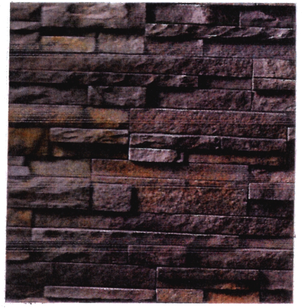


Note: All colors shown in this color rendering are not exact color matches to the actual color. However, they are close representations.

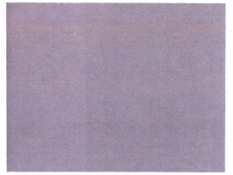


Shadow Gray

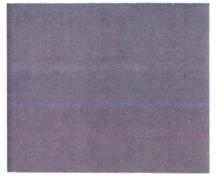
Roof: Certainteed Presidential-Shadow Grey



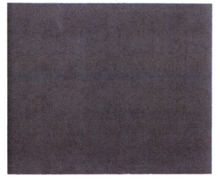
Stone: Boral Pro Fit Alpine Ledgestone-Umber Creek



Stucco: Benjamin Moore-Ashley Gray #HC-87

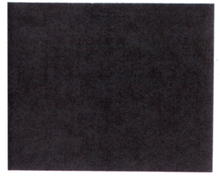


Horizontal Siding: Benjamin Moore-Revolutionary Storm #CW-155

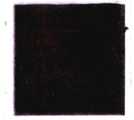


Entry Door: Benjamin Moore-Northwood Brown #1000

Shingle Siding/Garage Door: Benjamin Moore-Northwood Brown #1000



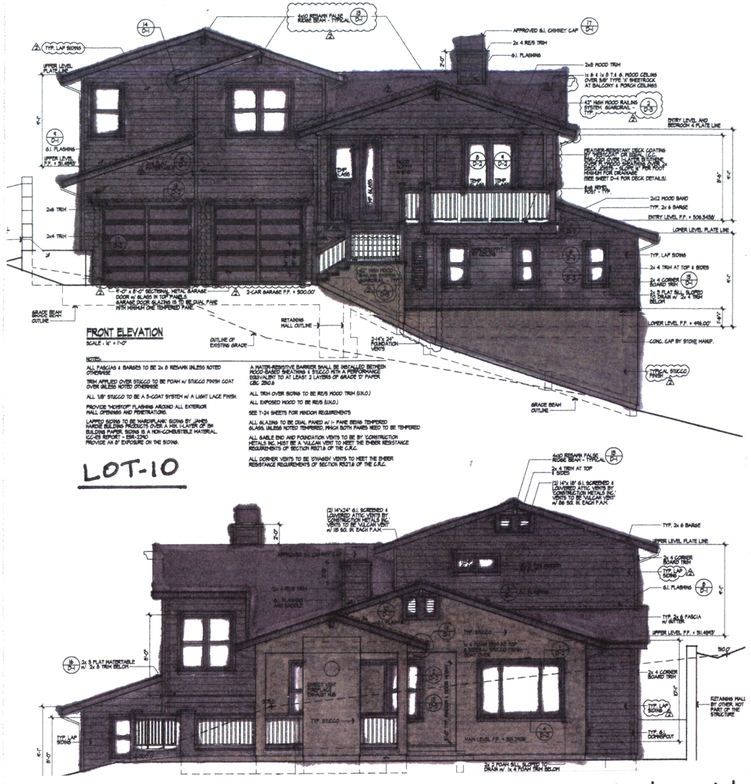
Fascia/Eaves/Trim/Post/Railing: Benjamin Moore-Midsummer night #2134-20



Windows: Milguard Vinyl-Espresso

Highlands Estates

Lot - 10



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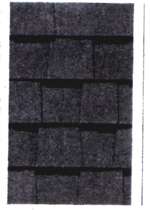
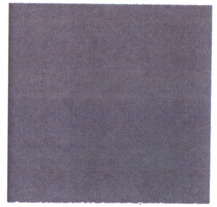
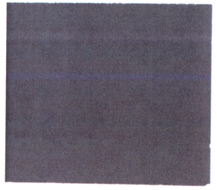


Max Def Black Walnut
(Available in StreakFighter™ only)

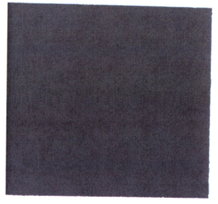
Roof: Certainteed Landmark TL-Max def Black Walnut



Stucco: Benjamin Moore-Gargoyle #1546



Horizontal Siding/Hardi-Panel: Benjamin Moore-Deep Creek #1477



Entry Door: Benjamin Moore-Iron Mountain #2134-30

Metal Railing: Benjamin Moore-Iron Mountain #2134-30

Fascia/Eaves/Trim/Garage: Benjamin Moore-Iron Mountain #2134-30

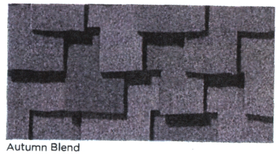


Windows: Milguard Vinyl-Bronze

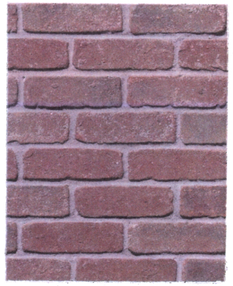
Highlands Estates

Lot - 11

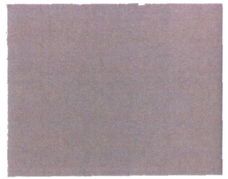



Autumn Blend

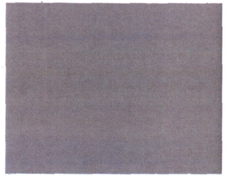
Roof: Certainteed Presidential-Autumn Blend



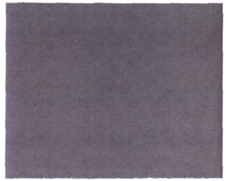
Brick: Mc Near Sandmold Series-Tunbridge



Stucco: Benjamin Moore-Alexandria Beige #HC-77



Horizontal Siding/Hardi-Panel: Benjamin Moore-Kingsport Grey #HC-86



Fascia/Eaves/Trim/Garage: Benjamin Moore-Woodcliff Lake #980

Entry Door/Shutters: Benjamin Moore-Woodcliff Lake #980



Metal Railing: Benjamin Moore-Bronzetone #60



Windows: Milguard Vinyl-Tweed

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