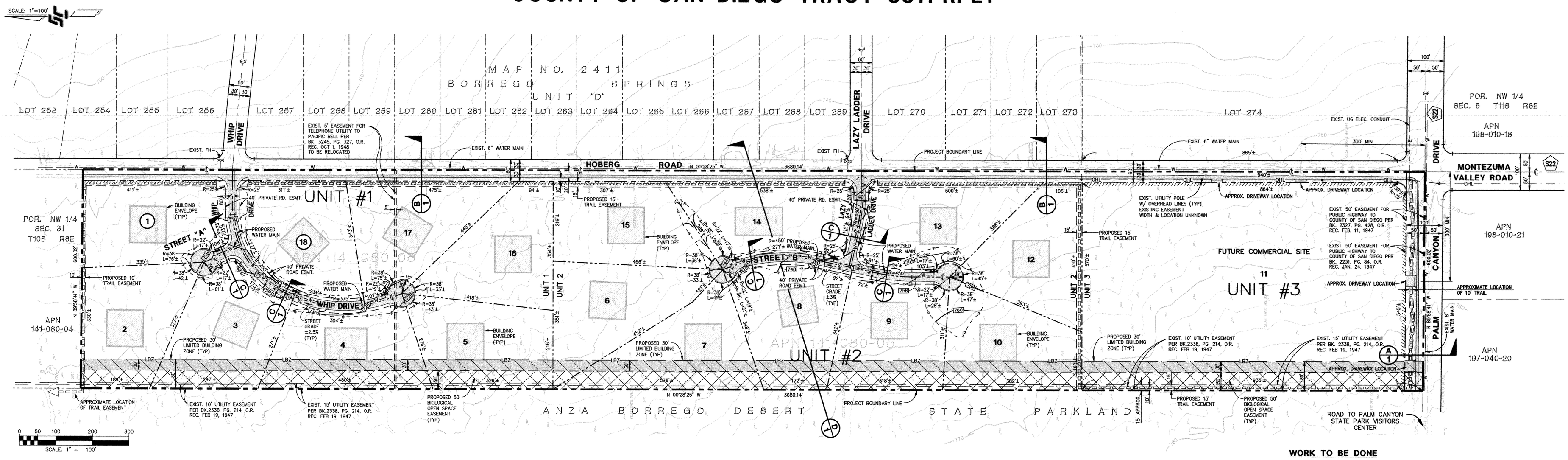
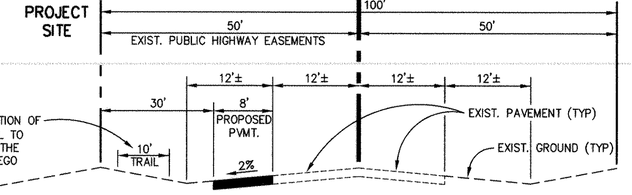
PRELIMINARY GRADING PLAN
COUNTY OF SAN DIEGO TRACT 5511-RPL1

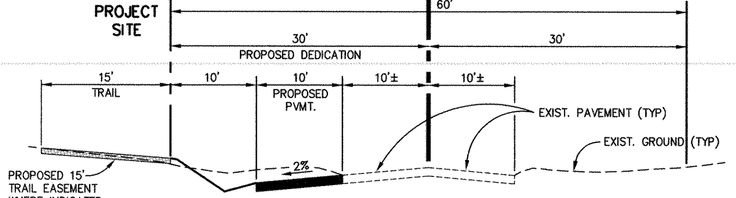




TYPICAL SECTION (PUBLIC) PALM CANYON DRIVE

A/1

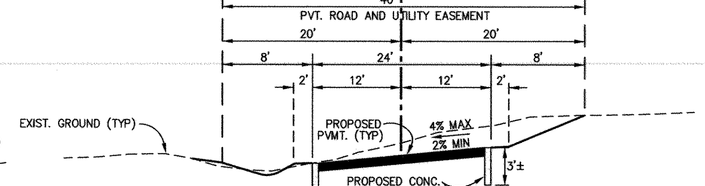
NO SCALE



TYPICAL SECTION (PUBLIC) HOBERG ROAD

B/1

NO SCALE



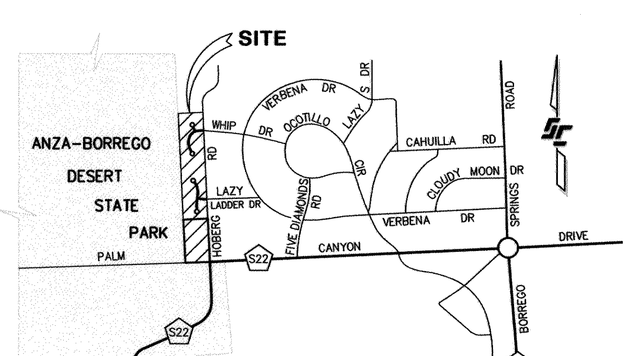
TYPICAL SECTION (PRIVATE) WHIP DRIVE, STREET "A", "B", LAZY LADDER DRIVE

C/1

NO SCALE

NOTE

PAD GRADING IS NOT PROPOSED WITH THIS DEVELOPMENT, SEE SECTION D/1 BELOW. GRADING IS PROPOSED WITHIN THE PRIVATE STREET ONLY.



VICINITY MAP

NO SCALE

WORK TO BE DONE

THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS AND THE CURRENT SPECIFICATIONS AND STANDARD DRAWINGS OF THE COUNTY OF SAN DIEGO.

STANDARD SPECIFICATIONS:

1. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION "GREEN BOOK" (2006 EDITION), INCLUDING THE REGIONAL AND COUNTY OF SAN DIEGO SUPPLEMENT AMENDMENT.
2. SAN DIEGO COUNTY GRADING ORDINANCE.
3. CALIFORNIA DEPARTMENT OF TRANSPORTATION, " MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE WORK ZONES," (1996 EDITION).
4. STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS (JULY 2002).

STANDARD DRAWINGS:

1. THE CURRENT SAN DIEGO AREA REGIONAL STANDARD DRAWINGS.
2. STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD PLAN (JULY 2004).
3. THE CURRENT WATER AGENCIES'S STANDARD DRAWINGS.

LEGEND

DESCRIPTION	SYMBOL
PROPOSED LOT NUMBER	1 THRU 18
SUBDIVISION BOUNDARY	
PROPOSED LOT LINE	
PROPOSED RIGHT-OF-WAY	
EXISTING RIGHT-OF-WAY	
PROPOSED EASEMENT LINE	
PROPOSED ACCESS RIGHTS RELINQUISHED	
EXISTING EASEMENT LINE	
EXISTING CONTOUR	630
PROPOSED CONTOUR	630
PROPOSED APPROX. 100'X100' BUILDING ENVELOPE LOCATION	
RUNOFF FLOW DIRECTION	
PROPOSED PAVEMENT	
PROPOSED TRAIL EASEMENT	
PROPOSED BIOLOGICAL OPEN SPACE	
PROPOSED LIMITED BUILDING ZONE	
PROPOSED WATER MAIN	W
PROPOSED FIRE HYDRANT	
EXISTING WATER MAIN	W
EXISTING FIRE HYDRANT	
EXISTING OVERHEAD UTILITIES W/ UTILITY POLE	OHL PP

GENERAL NOTES (PRELIMINARY GRADING)

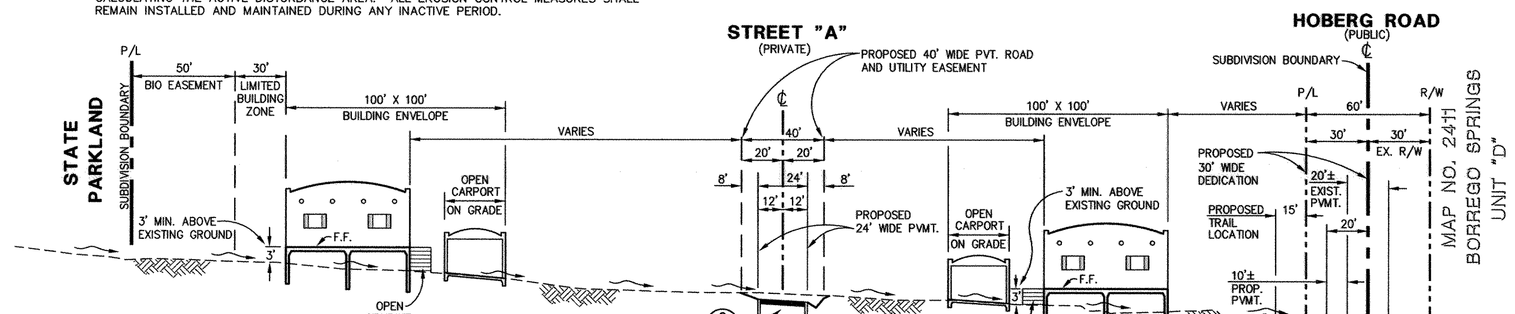
1. THIS PLAN IS PROVIDED TO ALLOW FOR FULL AND ADEQUATE DISCRETIONARY REVIEW OF A PROPOSED DEVELOPMENT PROJECT. THE PROPERTY OWNER ACKNOWLEDGES THAT ACCEPTANCE OR APPROVAL OF THIS PLAN DOES NOT CONSTITUTE AN APPROVAL TO PERFORM ANY GRADING SHOWN HEREON, AND AGREES TO OBTAIN VALID GRADING PERMISSION/PERMITS BEFORE COMMENCING SUCH ACTIVITY.
2. THIS "PRELIMINARY GRADING PLAN" DOES NOT CONSTITUTE A CONSTRUCTION DOCUMENT. A FINAL GRADING PLAN, PREPARED (TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS) IN ACCORDANCE WITH COUNTY GRADING ORDIANCE SHALL BE SUBMITTED TO THE DEPARTMENT OF PUBLIC WORKS. APPROVAL OF THE FINAL GRADING PLAN SHALL BE REQUIRED AND GRADING PERMIT ISSUED PRIOR TO ANY WORK IN THE FIELD.
3. A CONSTRUCTION, EXCAVATION OR ENCROACHMENT PERMIT FROM THE DIRECTOR OF PUBLIC WORKS WILL BE REQUIRED FOR ANY WORK IN THE COUNTY RIGHT-OF-WAY.
4. ALL SLOPES OVER 3 FEET IN HEIGHT SHALL BE PLANTED IN ACCORDANCE WITH SAN DIEGO COUNTY SPECIFICATIONS.
5. A SOILS REPORT SHALL BE REQUIRED PRIOR TO THE ISSUANCE OF A GRADING AND/OR BUILDING PERMIT.
6. APPROVAL OF THESE PLANS BY THE DIRECTOR OF PUBLIC WORKS DOES NOT AUTHORIZE ANY WORK OR GRADING TO BE PERFORMED UNTIL THE PROPERTY OWNER'S PERMISSION HAS BEEN OBTAINED AND A VALID GRADING PERMIT HAS BEEN ISSUED.
7. THE DIRECTOR OF PUBLIC WORKS APPROVAL OF THESE PLANS DOES NOT CONSTITUTE COUNTY BUILDING OFFICIAL APPROVAL OF ANY FOUNDATIONS FOR STRUCTURES TO BE PLACED ON THE AREA COVERED BY THESE PLANS. NO WAIVER OF THE GRADING ORDINANCE REQUIREMENTS CONCERNING MINIMUM COVER OVER EXPANSIVE SOILS IS MADE OR IMPLIED (SECTIONS 87.403 & 87.410). ANY SUCH WAIVER MUST BE OBTAINED FROM THE DIRECTOR OF DPLU.
8. ALL SLOPES SHALL BE ROUNDED INTO EXISTING TERRAIN TO PRODUCE A CONTOURED TRANSITION FROM CUT OR FILL FACES TO NATURAL GROUND AND ABUTTING CUT OR FILL SURFACES.
9. NOTWITHSTANDING THE MINIMUM STANDARDS SET FORTH IN THE GRADING ORDINANCE AND NOTWITHSTANDING THE APPROVAL OF THESE PREELIMINARY GRADING PLANS, THE PERMITTEE IS RESPONSIBLE FOR THE PREVENTION OF DAMAGE TO THE ADJACENT PROPERTY. NO PERSON SHALL EXCAVATE ON LAND SO CLOSE TO THE PROPERTY LINE AS TO ENDANGER ANY ADJOINING PUBLIC STREET, SIDEWALK, ALLEY, FUNCTION OF ANY SEWAGE DISPOSAL SYSTEM, OR ANY OTHER PUBLIC OR PRIVATE PROPERTY, WITHOUT SUPPORTING AND PROTECTING SUCH PROPERTY FROM SETTLING, CRACKING, EROSION, SILTING, SCOUR OR OTHER DAMAGE WHICH MIGHT RESULT FROM THE GRADING DESCRIBED ON THIS PLAN. THE COUNTY WILL HOLD THE PERMITTEE RESPONSIBLE FOR CORRECTION OF NON-DEDICATED IMPROVEMENTS WHICH DAMAGE ADJACENT PROPERTY.
10. ALL GRADING DETAILS WILL BE IN ACCORDANCE WITH SAN DIEGO COUNTY STANDARD DRAWINGS DS-8, DS-10, DS-11, D-75 UNLESS SHOWN OTHERWISE ON THESE PLANS.
11. SLOPE RATIOS: DEVIATING FROM THESE RATIOS WILL REQUIRE
    CUT – 2:1 APPROVAL OF THE DIRECTOR OF PUBLIC WORKS AFTER
    FILL – 2:1 REVIEW OF A REPORT FROM A SOILS ENGINEER.
12. EARTHWORK QUANTITIES:
    CUT: 5,500 C.Y.
    FILL: 1,200 C.Y.
    EXPORT: 4,300 C.Y.
    A SEPARATE PERMIT MUST BE OBTAINED FOR WASTE OR IMPORT AREA.
    GRADING QUANTITIES ARE APPROXIMATE AND ARE PROVIDED HEREON FOR PERMIT PURPOSES ONLY. QUANTITIES ARE BASED ON THE DIFFERENCE BETWEEN THE EXISTING SURFACES AND PROPOSED PAD/SUBGRADE SURFACES *. VARIATIONS DUE TO LOSS FROM CLEARING AND GRUBBING, STRIPPING, SHRINKAGE, SWELL, UNSUITABLE MATERIAL & REMEDIAL GRADING ARE NOT CONSIDERED NOR FACTORED INTO THESE QUANTITIES. CONTRACTOR SHALL VERIFY QUANTITIES WITH THEIR OWN VOLUME CALCULATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THEIR OWN INDEPENDENT QUANTITY AND MATERIAL TAKE OFFS AND CONSTRUCT THE DESIGN INDICATED ON THESE DRAWINGS, PROJECT TO BE BID BASED ON CONTRACTOR'S OWN ESTIMATES.
13. SPECIAL CONDITION: IF ANY ARCHAEOLOGICAL RESOURCES ARE DISCOVERED ON THE SITE OF THIS GRADING DURING GRADING OPERATIONS, SUCH OPERATIONS WILL CEASE IMMEDIATELY, AND THE PERMITTEE WILL NOTIFY THE DIRECTOR OF PUBLIC WORKS OF THE DISCOVERY. GRADING OPERATIONS WILL NOT RECOMMENCE UNTIL THE PERMITTEE HAS RECEIVED WRITTEN AUTHORITY FROM THE DIRECTOR OF PUBLIC WORKS TO DO SO.

EROSION AND SEDIMENT CONTROL MEASURES NOTES:

1. ALL UTILITY TRENCHES SHALL BE BLOCKED AT THE PRESCRIBED INTERVALS WITH A DOUBLE ROW OF GRAVEL BAGS WITH A TOP ELEVATION. TWO GRAVEL BAGS BELOW THE GRADED SURFACE OF THE STREET. GRAVEL BAGS ARE TO BE PLACED WITH LAPPED COURSES.
2. AFTER UTILITY TRENCHES ARE BACK FILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDED SLIGHT TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA. CARE SHOULD BE EXERCISED T PROVIDE FOR CROSS FLOW AT FREQUENT INTER INTERVALS WHERE TRENCHES ARE NOT ON THE CENTERLINE OF A CROWNED STREET.
3. ALL BUILDING PADS SHOULD BE SLOPED TOWARDS THE DRIVEWAYS AND VELOCITY CHECK DAMS PROVIDED AT THE END OF THE DRIVEWAY APRON OF ALL DRIVEWAYS DRAINING INTO THE STREET.
4. PROVIDE VELOCITY CHECK DAMS IN ALL UNPAVED GRADED CHANNELS.
5. PROVIDE VELOCITY CHECK DAMS IN ALL STREET AREAS. VELOCITY CHECK DAMS MAY BE CONSTRUCTED OF GRAVEL BAGS, TIMBER, OR OTHER EROSION RESISTANT MATERIAL APPROVED BY THE COUNTY ENGINEER, AND SHALL EXTEND COMPLETELY ACROSS THE STREET OR CHANNEL AT RIGHT ANGLES TO THE CENTERLINE. VELOCITY CHECK DAMS MAY ALSO SERVE AS SEDIMENT TRAPS.
6. GRAVEL BAGS AND FILL MATERIAL SHALL BE STOCKPILED AT INTERVALS, READY FOR USE WHEN REQUIRED.
7. ALL EROSION CONTROL DEVICES WITHIN THE DEVELOPMENT SHOULD BE MAINTAINED DURING AND AFTER EVERY RUNOFF PRODUCING STORM. IF POSSIBLE, MAINTENANCE CREWS WOULD BE REQUIRED TO HAVE ACCESS TO ALL AREAS.
8. ANY PROPOSED ALTERNATE CONTROL MEASURES MUST BE APPROVED IN ADVANCE BY ALL RESPONSIBLE AGENCIES; I.E., COUNTY ENGINEER, DEPARTMENT OF SANITATION AND FLOOD CONTROL, OFFICE OF ENVIRONMENTAL MANAGEMENT, ETC.
9. PHYSICAL STABLIZATION THROUGH USE OF GEOTEXTILES, MATS, FIBER ROLLS (SS-7 OR ESC20), BONDED FIBER MATRIX OR OTHER MATERIAL APPROVED BY THE COUNTY FOR STABILIZING SLOPES, OR NOTE 15.
10. VEGETATION STABILIZING USING HYDROSEED (SS-4 OR ESC10) OR ACCEPTABLE LANDSCAPING MAY BE USED ONLY MAY 1 TO AUGUST 15. VEGETATION PROPOSED TO STABILIZE SLOPES MUST BE INSTALLED BY AUGUST 15, WATERED AND ESTABLISHED PRIOR TO OCTOBER 1. THE PROPERTY OWNER OR AUTHORIZED AGENT SHALL SHOW ON THE PLAN A CONTINGENCY PHYSICAL BMP TO BE INSTALLED BY OCTOBER 1 IF HYDROSEED ESTABLISHMENT DOES NOT OCCUR BY THAT DATE. IF LANDSCAPING IS PROPOSED, EROSION CONTROL MEASURES MUST ALSO BE USED WHILE LANDSCAPING IS BEING ESTABLISHED. ESTABLISHED VEGETATION SHALL HAVE A SUBSURFACE MAT OF INTERTWINED MATURE ROOTS WITH A UNIFORM VEGETATIVE COVERAGE OF 70 PERCENT OF THE NATURAL VEGETATIVE COVERAGE OR MORE ON ALL DISTURBED AREAS.
11. ALL MANUFACTURED SLOPES AND CLEARED SLOPES OF 3 TO 1 (HORIZONTAL TO VERTICAL) AND STEEPER ARE TO BE PROTECTED WITH A BMP APPROVED BY THE COUNTY OF SAN DIEGO, AS DESCRIBED IN NUMBER 14 ABOVE. CLEARED SLOPES FLATTER THAN 3 TO 1 MUST STILL BE PROTECTED FROM EROSION USING EITHER AN APPROVED BMP OR BY USING HYDROMULCH WITH A GUAR BINDER. FLAT AREAS OF LESS THAN 5% (LIKE BUILDING PADS, PARKING AREAS, LEACH FIELDS) SHALL HAVE 100% PROTECTION USING GEOTEXTILES, MATS (SS-7 OR ESC20), OR OTHER MATERIAL APPROVED BY THE COUNTY FOR STABILIZING SLOPES, OR USING TRACKING AND SOIL STABILIZERS/BINDERS (SS-5), TEMPORARY SEEDING (SS-4), MULCH/WOOD CHIPS (SS-3, SS-6, SS-8), OR JUTE MATTING (SS-7). THE COUNTY MAY REDUCE THIS REQUIREMENT FOR FLAT AREAS AND THE BELOW REQUIREMENT, PROVIDED FULL SEDIMENT CONTROL IS PROVIDED THROUGH CONSTRUCTED AND MAINTAINED DESILTATION BASINS (SC-2) AT ALL PROJECT DISCHARGE POINTS.
12. AREAS OF GRADED PADS THAT HAVE ACTIVE STRUCTURE CONSTRUCTION UNDERWAY MAY BE PROTECTED BY ROLLED PLASTIC AS PART OF A WEATHER-TRIGGERED ACTION PLAN UNTIL THE STRUCTURE'S ROOF HAS BEEN COMPLETED. THE REMAINDER OF THE PAD AREA MUST CONTINUE TO BE PROTECTED USING EROSION CONTROL MEASURES IDENTIFIED ABOVE.
13. UNPAVED ROADS ARE EXEMPT FROM THE 100% PROTECTION REQUIREMENTS BUT SHALL HAVE APPROPRIATE BMP'S INSTALLED SUCH AS GRAVEL BAG CHEVRONS.

ADVISORY NOTE ON STORMWATER OBLIGATIONS:

1. THE ACTIVITIES SHOWN ON THE PLANS ARE SUBJECT TO ENFORCEMENT UNDER PERMITS FROM THE SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD AND MUST ALSO COMPLY WITH THE REQUIREMENTS OF THE SAN DIEGO COUNTY MUNICIPAL STORM WATER PERMIT. THIS INCLUDES REQUIREMENTS FOR MATERIALS AND WASTES CONTROL, EROSION CONTROL, AND SEDIMENT CONTROL ON PROJECT CONSTRUCTION SITES. THE PERMITTEES OF OPERATIONS SHOWN ON THESE PLANS ARE OBLIGATED TO INSURE COMPLIANCE WITH ALL APPLICABLE STORM WATER REQUIRMENTS AT ALL TIMES. THE PERMITTEE SHALL ALSO KEEP A COPY OF THE SWPPP (STORM WATER POLLUTION PREVENTION PLAN) ON SITE AND AVAILABLE FOR REVIEW BY COUNTY.
2. DURING THE RAINY SEASON THE AMOUNT OF EXPOSED SOIL ALLOWED AT ONE TIME SHALL NOT EXCEED THAT WHICH CAN BE ADEQUATELY PROTECTED BY THE PROPERTY OWNER OR AUTHORIZED AGENT IN THE EVENT OF A RAINSTORM. 125% OF ALL SUPPLIES NEEDED FOR BMP MEASURES SHALL BE RETAINED ON THE JOB SITE IN A MANNER THAT ALLOWS FULL DEPLOYMENT AND COMPLETE INSTALLATION IN 48 HOURS OR LESS OF A FORECAST RAIN.
3. NO AREA BEING DISTURBED SHALL EXCEED 50 ACRES AT ANY GIVEN TIME WITHOUT DEMONSTRATING TO THE SAN DIEGO COUNTY DPW DIRECTOR'S SATISFACTION THAT ADEQUATE EROSION AND SEDIMENT CONTROL CAN BE MAINTAINED. ANY DISTURBED AREA THAT IS NOT ACTIVELY GRADED FOR 10 DAYS MUST BE FULLY PROTECTED FROM EROSION. UNTIL ADEQUATE LONG-TERM PROTECTIONS ARE INSTALLED, THE DISTURBED AREA SHALL BE INCLUDED WHEN CALCULATING THE ACTIVE DISTURBANCE AREA. ALL EROSION CONTROL MEASURES SHALL REMAIN INSTALLED AND MAINTAINED DURING ANY INACTIVE PERIOD.



TYPICAL SECTION

D/1

NO SCALE

STEVENS·CRESTO ENGINEERING, INC.
CIVIL ENGINEERS · LAND PLANNERS · SURVEYORS
9665 CHESAPEAKE DRIVE
SUITE 320
SAN DIEGO, CA 92123-1352
PHONE: 858.694.5660
FAX: 858.694.5661
www.scengr.com

REVISIONS
1
2
3

OWNER/SUBDIVIDER

KRS DEVELOPMENT DBPP
ATTN: KENT SMITH
8 KIOPA'A STREET, SUITE 201
PUKALANI, HI 96768
TEL: (808) 572-3011
FAX: (808) 572-8378

ENGINEER OF WORK

STEVENS CRESTO ENGINEERING, INC.
9665 CHESAPEAKE DRIVE, SUITE 320
SAN DIEGO, CA 92123-1352
PHONE: (858) 694-5660
FAX: (858) 694-5661

MARK E. STEVENS R.C.E. 35502 — 6/5/08 DATE

REGISTERED PROFESSIONAL ENGINEER MARK E. STEVENS No. 35502 Exp. 9-30-09 CIVIL STATE OF CALIFORNIA

LEGAL DESCRIPTION

THE SOUTHERLY 3,680 FEET OF THAT PORTION OF SECTION 31, TOWNSHIP 10 SOUTH, RANGE 6 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO THE UNITED STATES GOVERNMENT SURVEY APPROVED MAY 14, 1885, LYING WESTERLY OF A LINE WHICH IS PARALLEL WITH THE 600 FEET DISTANT AT RIGHT ANGLES EASTERLY FROM THE WESTERLY LINE OF SAID SECTION.

BENCH MARK (BASIS OF HORIZONTAL AND VERTICAL CONTROL)

2" STD. BRASS PLUG (CALTRANS) MARKED "SDPR 12 1995" AT NE CORNER OF PALM CANYON DR. AND HOLBERG RD. ELEV. 765.884 DATUM: NAVD 88, NGS

ASSESSOR PARCEL NUMBER
141-080-05

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