

**GRADING PLAN CERTIFICATION:**

I, CERTIFY THAT THE GRADING AS SHOWN ON THIS MINOR GRADING PLAN SATISFIES THE REQUIREMENTS OF THE COUNTY OF SAN DIEGO GRADING ORDINANCE.

BY: \_\_\_\_\_ DATE: \_\_\_\_\_

RCE NO.: \_\_\_\_\_ EXPIRES \_\_\_\_\_

THE COUNTY IS NOT RESPONSIBLE FOR THE DESIGN IN ANYWAY.

BY: \_\_\_\_\_ DATE: \_\_\_\_\_

FOR: MARK WARDLAW, DIRECTOR, DEPARTMENT OF PLANNING & DEVELOPMENT SERVICES

COUNTY APPROVED CHANGES		
DESCRIPTION:	APPROVED BY:	DATE:

PRIVATE CONTRACT		
SHEET X	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	XX SHEETS
MINOR GRADING PLAN FOR:		
XXXXXXX XXXXX SINGLE FAMILY RESIDENCE		
CALIFORNIA COORDINATE INDEX _____		
APPROVED FOR RMIN ABID: COUNTY ENGINEER	ENGINEER OF WORK	
SEE CERTIFICATION	R.C.E.	
GRADING PERMIT NO: PDS20XX-LDGRMN-2XXXX		

**EROSION CONTROL NOTES**

- ALL BUILDING PADS TO BE DIKED AND THE DIKES MAINTAINED TO PREVENT WATER FROM FLOWING FROM THE PAD UNTIL THE STREETS AND DRIVEWAYS ARE PAVED AND WATER CAN FLOW FROM THE PADS WITHOUT CAUSING EROSION, OR CONSTRUCT DRAINAGE FACILITIES TO THE SATISFACTION OF THE COUNTY DEPARTMENT OF PUBLIC WORKS THAT WILL ALLOW WATER TO DRAIN FROM THE PAD WITHOUT CAUSING EROSION.
- TOPS OF ALL SLOPES TO BE DIKED OR TRENCHED TO PREVENT WATER FROM FLOWING OVER THE CREST OF SLOPES.
- MANUFACTURED SLOPES AND PADS SHALL BE ROUNDED VERTICALLY AND HORIZONTALLY AS APPROPRIATE TO BLEND WITH THE SURROUNDING TOPOGRAPHY.
- AS SOON AS CUTS OR EMBANKMENTS ARE COMPLETED, BUT NOT LATER THAN OCTOBER 1, ALL CUT AND FILL SLOPES SHALL BE STABILIZED WITH A HYDROMULCH MIXTURE OR AN EQUAL TREATMENT APPROVED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS BETWEEN OCTOBER 1 AND APRIL 15. APPROVED SLOPE PROTECTION MEASURES SHALL PROCEED IMMEDIATELY BEHIND THE EXPOSURE OF CUT SLOPES AND/OR THE CREATION OF EMBANKMENT SLOPES.
- CATCH BASINS, DESILTING BASINS AND STORM DRAIN SYSTEMS SHALL BE INSTALLED TO THE SATISFACTION OF THE COUNTY DEPARTMENT OF PUBLIC WORKS.
- SAND BAG CHECK DAMS TO BE PLACED IN A MANNER APPROVED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS IN UNPAVED STREETS WITH GRADIENTS IN EXCESS OF 2% AND ON OR IN OTHER GRADED OR EXCAVATED AREAS AS REQUIRED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS.
- THE DEVELOPER TO MAINTAIN THE PLANTING AND EROSION CONTROL MEASURES DESCRIBED ABOVE UNTIL RELIEVED OF THE SAME BY THE COUNTY DEPARTMENT OF PUBLIC WORKS. THE DEVELOPER TO REMOVE ALL SOIL INTERCEPTED BY THE SAND BAGS, CATCH BASINS AND DESILTING BASINS AND KEEP THESE FACILITIES CLEAN AND FREE OF SILT AND SAND AS DIRECTED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS. THE DEVELOPER SHALL REPAIR ANY ERODED SLOPES AS DIRECTED BY THE COUNTY DEPARTMENT OF PUBLIC WORKS.

**BMP LEGEND**

PDS 659	BROW DITCH	⇒⇒⇒
PDS 659	BERM	→ B →
DIRECTION OF LOT DRAINAGE ⇒⇒⇒		
<b>MATERIALS &amp; WASTE MANAGEMENT CONTROL BMPs</b>		
WM-1	MATERIAL DELIVERY & STORAGE	
WM-4	SPILL PREVENTION AND CONTROL	
WM-8	CONCRETE WASTE MANAGEMENT	
WM-5	SOLID WASTE MANAGEMENT	
WM-9	SANITARY WASTE MANAGEMENT	
WM-6	HAZARDOUS WASTE MANAGEMENT	
<b>TEMPORARY RUNOFF CONTROL BMPs</b>		
SS-2	PRESERVATION OF EXISTING VEGETATION	~PEV~PEV~
SS-3	BONDED OR STABILIZED FIBER MATRIX (WINTER)	~M~M~
SS-4	HYDROSEEDING (SUMMER)	~TSP~TSP~
SS-6 / SS-8	STRAW OR WOOD MULCH	~S/W~S/W~
SS-7	PHYSICAL STABILIZATION (WINTER)	~EBM~EBM~
SS-10	ENERGY DISSIPATOR	
SC-1	SILT FENCE	—■—■—
SC-2	SEDIMENT / DESILTING BASIN	
SC-5	FIBER ROLLS	—FR—FR—
SC-6 / SC-8	GRAVEL OR SAND BAGS	○○○○
SC-7	STREET SWEEPING AND VACUUMING	
SC-10	STORM DRAIN INLET PROTECTION	
NS-2	DEWATERING FILTRATION	—DW—DW—
TC-1	STABILIZED CONSTRUCTION ENTRANCE	▨▨▨
TC-2	CONSTRUCTION ROAD STABILIZATION	▨▨▨
TC-3	ENTRANCE / EXIT TIRE WASH	▨▨▨
<b>PERMANENT BMPs</b>		
SD-10	PROTECTION OF CHANNEL BANKS / MANUFACTURED SLOPES AND FLAT PAD AREA COVERAGE	
SD-12	IMPLEMENTATION OF EFFICIENT IRRIGATION SYSTEMS	
SD-13	STORM DRAIN STENCILING AND POSTING OF SIGNAGE	
SD-32	PROPER DESIGN OF TRASH STORAGE AREAS	
SD-34	PROPER DESIGN OF OUTDOOR MATERIAL STORAGE AREAS	
EC-10	OUTLET PROTECTION	
TC-10	UNDERGROUND INFILTRATION TRENCH	

<b>LOW IMPACT DEVELOPMENT BMPs</b>	
LID 2.2.1	CONSERVATION OF NATURAL DRAINAGES, WELL DRAINED SOILS AND SIGNIFICANT VEGETATION
LID 2.2.2	MINIMIZE DISTURBANCES TO NATURAL DRAINAGES
LID 2.2.3	MINIMIZE AND DISCONNECT IMPERVIOUS SURFACES
LID 2.2.4	MINIMIZE SOIL COMPACTION
LID 2.2.5	DRAIN RUNOFF FROM IMPERVIOUS SURFACES TO PERVIOUS AREAS
LID 3.1	HYDROLOGIC DESIGN
LID 3.2	PERMEABLE PAVEMENT DESIGN
LID 3.3	ROAD DESIGN FOR DEVELOPMENTS
LID 3.4	PARKING LOT DESIGN FOR COMMERCIAL PROJECTS
LID 3.5	DRIVEWAY, SIDEWALK, AND BIKE PATH DESIGN
LID 3.6	BUILDING DESIGN
LID 3.7	LANDSCAPING DESIGN

**PLANTING & IRRIGATION NOTES**

- ALL PERMANENT AND TEMPORARY EROSION CONTROL PLANTING AND IRRIGATION SHALL BE INSTALLED AND MAINTAINED AS REQUIRED BY THE COUNTY OF SAN DIEGO LANDSCAPE STANDARDS:
- A. HYDROSEEDING SHALL BE APPLIED TO:
- ALL SLOPES THAT ARE GRADED 6:1 (HORIZONTAL TO VERTICAL) OR STEEPER WHEN THEY ARE:
    - THREE FEET OR MORE IN HEIGHT AND ADJACENT TO A PUBLIC WALL OR STREET;
    - ALL SLOPES 4 FEET OR MORE IN HEIGHT.
  - AREAS GRADED FLATTER THAN 6:1 WHEN ANY OF THE FOLLOWING CONDITIONS EXIST:
    - NOT SCHEDULED FOR IMPROVEMENTS (CONSTRUCTION OR GENERAL LANDSCAPING) WITHIN 30 DAYS OF ROUGH GRADING.
- B. HYDROSEEDING AREAS SHALL BE IRRIGATED IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
- ALL SLOPES THAT ARE GRADED 6:1 OR STEEPER AND THAT ARE:
    - THREE TO EIGHT FEET IN HEIGHT SHALL BE IRRIGATED BY HAND WATERING FROM QUICK COUPLERS/HOSE BIBS OR A CONVENTIONAL SYSTEM OF LOW PRECIPITATION SPRINKLER HEADS PROVIDING 100% COVERAGE.
    - GREATER THAN 8 FEET IN HEIGHT SHALL BE WATERED BY A CONVENTIONAL SYSTEM OF LOW PRECIPITATION SPRINKLER HEADS PROVIDING 100% COVERAGE.
  - AREAS SLOPED LESS THAN 6:1 SHALL BE IRRIGATED AS APPROVED BY THE COUNTY ENGINEER, PRIOR TO HYDROSEEDING. THE DEVELOPER SHALL SUBMIT A PROPOSED SCHEME TO PROVIDE IRRIGATION TO THE COUNTY ENGINEER. THE PROPOSAL SHALL BE SPECIFIC REGARDING THE NUMBERS AND COSTS OF THE ELEMENTS OF THE PROPOSED SYSTEM.
  - IRRIGATION SHALL MAINTAIN THE MOISTURE LEVEL OF THE SOIL AT THE OPTIMUM LEVEL FOR THE GROWTH OF THE HYDROSEEDED GROWTH.
  - SLOPE HYDROSEEDING MIX SHALL CONSIST OF ALL OF THE FOLLOWING: (TEMPORARY PAD HYDROSEEDING MIX PER SHEET 14.)
    - SEED MIX SHALL CONSIST OF NO LESS THAN:
      - 20 LBS. PER ACRE OF ROSE CLOVER
      - 20 LBS. PER ACRE OF ZORRO FESCUE
      - 3 LBS. PER ACRE OF ESCHSCHOLZIA CALIFORNICA
      - 4 LBS. PER ACRE OF ACHILLEA MILLEFOLIA
      - 3 LBS. PER ACRE OF ALYSSUM (CARPET OF SNOW)
      - ½ LB. PER ACRE OF DIMORPHOLECA
    - ITEMS c, d, e AND f OF THIS SUBSECTION MAY BE OMITTED ON EITHER A PUBLIC STREET OR RESIDENTIAL STRUCTURES.
    - ITEM a OF THIS SUBSECTION MUST BE INOCULATED WITH A NITROGEN FIXING BACTERIA AND APPLIED DRY EITHER BY DRILLING OR BROADCASTING BEFORE HYDROSEEDING.
    - ALL SEED MATERIALS SHALL BE TRANSPORTED TO THE JOBSITE IN UNOPENED CONTAINERS WITH THE CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE CERTIFICATION TAG ATTACHED TO, OR PRINTED ON SAID CONTAINERS.
    - NON-PHYTO-TOXIC WETTING AGENTS MAY BE ADDED TO THE HYDROSEED SLURRY AT THE DISCRETION OF THE CONTRACTOR.
  - TYPE 1 MULCH APPLIED AT THE RATE OF NO LESS THAN 2000 LBS. PER ACRE. TYPE 6 MULCH (STRAW) MAY BE SUBSTITUTED, ALL OR PART, FOR HYDRAULICALLY APPLIED FIBER MATERIAL. WHEN STRAW IS USED IT MUST BE ANCHORED TO THE SLOPE BY MECHANICALLY PUNCHING NO LESS THAN 50% OF THE STRAW INTO THE SOIL.
  - FERTILIZER CONSISTING OF AMMONIUM PHOSPHATE, SULFATE, 16-20-0, WITH 15% SULPHUR APPLIED AT THE RATE OF 500 LBS. PER ACRE.
- D. AREAS TO BE HYDROSEEDED SHALL BE PREPARED PRIOR TO HYDROSEEDING BY:
- ROUGHENING THE SURFACE TO BE PLANTED BY ANY OR A COMBINATION OF:
    - TRACK WALKING SLOPES STEEPER THAN 6:1
    - HARROWING AREAS 6:1 OR FLATTER THAT ARE SUFFICIENTLY FRIABLE.
    - RIPPING AREAS THAT WILL NOT BREAK UP USING ITEMS a OR b ABOVE.
  - CONDITIONING THE SOILS SO THAT IT IS SUITABLE FOR PLANTING BY:
    - ADJUSTING THE SURFACE SOIL MOISTURE TO PROVIDE A DAMP BUT NOT SATURATED SEED BED.
    - THE ADDITION OF SOIL AMENDMENTS, PH ADJUSTMENT, LEACHING OR COVERING SALINE SOILS TO PROVIDED VIABLE CONDITIONS FOR GROWTH.

**HYDROSEED NOTES:**

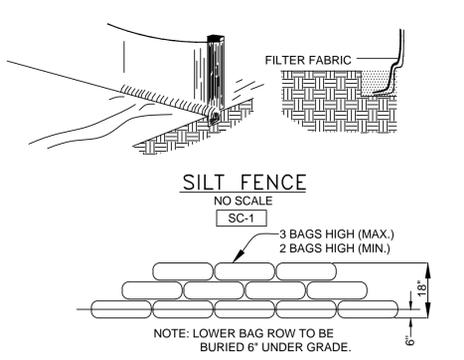
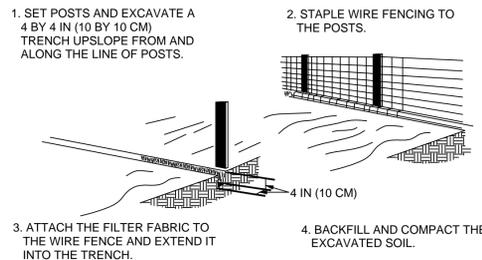
- PRIOR TO THE ACCEPTANCE OF THE HYDROSEEDED AREAS BY THE COUNTY RESIDENT ENGINEER, A CERTIFICATION REPORT MUST BE SUBMITTED BY A REGISTERED LANDSCAPE ARCHITECT, STATING THAT THE HYDROSEEDING WAS DONE ACCORDING TO THE PROJECT SPECIFICATIONS AND THAT THE GROWTH IS ADEQUATELY ESTABLISHED TO PREVENT EROSION.
- IT IS THE INTENT THAT THE HYDROSEED MIX BE APPLIED NO SOONER THAN JUST BEFORE THE FIRST RAIN IN OCTOBER AND NO LATER THAN JUST AFTER THE SECOND RAIN AFTER THE FIRST RAIN IN OCTOBER.
- ALL DISTURBED SLOPES TO BE HYDROSEEDED UNLESS OTHERWISE NOTED.



**STORMWATER MANAGEMENT NOTES**

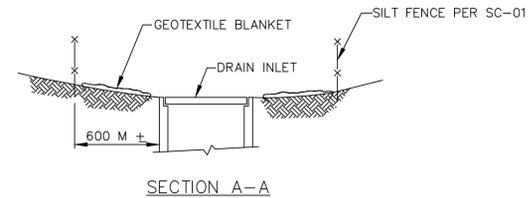
- DURING THE RAINY SEASON THE AMOUNT OF EXPOSED SOIL ALLOWED AT ONE TIME SHALL NOT EXCEED THAT WHICH CAN BE ADEQUATELY PROTECTED BY THE PROPERTY OWNER IN THE EVENT OF A RAINSTORM. 125% OF ALL SUPPLIES NEEDED FOR BMP MEASURES SHALL BE RETAINED ON THE JOB SITE IN A MANNER THAT ALLOWS FULL DEPLOYMENT AND COMPLETE INSTALLATION IN 48 HOURS OR LESS OF A FORECAST RAIN.
- 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 15 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.
- THE PROPERTY OWNER IS OBLIGATED TO INSURE COMPLIANCE WITH ALL APPLICABLE STORMWATER REGULATIONS AT ALL TIMES. THE BMP'S (BEST MANAGEMENT PRACTICES) THAT HAVE BEEN INCORPORATED INTO THIS PLAN SHALL BE IMPLEMENTED AND MAINTAINED TO EFFECTIVELY PREVENT THE POTENTIALLY NEGATIVE IMPACTS OF THIS PROJECT'S CONSTRUCTION ACTIVITIES ON STORMWATER QUALITY. THE MAINTENANCE OF THE BMP'S IS THE PERMITTEE'S RESPONSIBILITY, AND FAILURE TO PROPERLY INSTALL OR MAINTAIN THE BMP'S MAY RESULT IN ENFORCEMENT ACTION BY THE COUNTY OF SAN DIEGO OR OTHERS. IF INSTALLED BMP'S FAIL, THEY MUST BE REPAIRED OR REPLACED WITH AN ACCEPTABLE ALTERNATE WITHIN 24 HOURS, OR AS SOON AS SAFE TO DO SO.
- ON PROJECTS OF GREATER THAN 1 ACRE ADD THE FOLLOWING NOTE: A NOTICE OF INTENT (NOI) HAS BEEN, OR WILL BE FILED WITH THE STATE WATER RESOURCES CONTROL BOARD (SWRCB) AND THAT A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN OR WILL BE PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF CALIFORNIA GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY (PERMIT NO. CAS000002) FOR ALL OPERATIONS ASSOCIATED WITH THESE PLANS. THE NOI NUMBER ASSIGNED BY SWRCB FOR THIS PROJECT IS [WDID#] [ALTERNATIVE: NOT YET ASSIGNED, BUT WILL BE PROVIDED BEFORE A PERMIT IS ISSUED], THE PERMITTEE SHALL KEEP A COPY OF THE SWPPP ON SITE AND AVAILABLE FOR REVIEW BY COUNTY.

**TYPICAL BMP DETAILS**

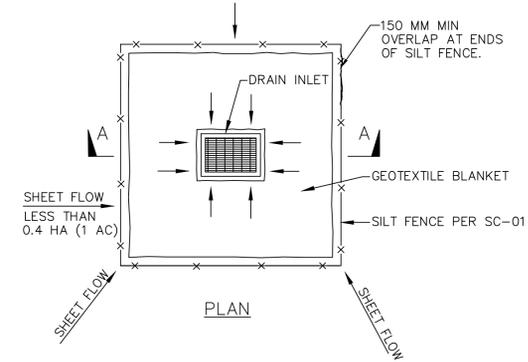


**GRAVEL BAG CHECK DAM**

NO SCALE  
SC-6



SECTION A-A



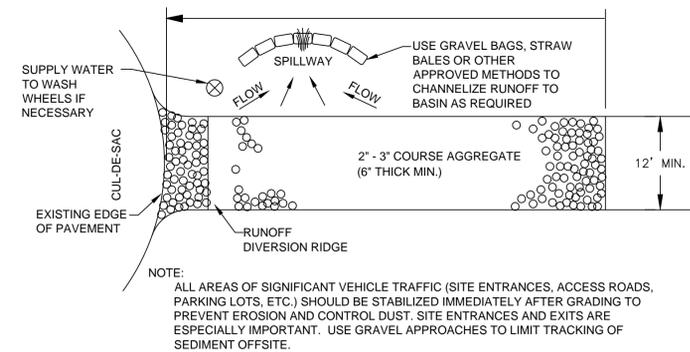
PLAN

**NOTES:**

- FOR USE IN AREAS WHERE GRADING HAS BEEN COMPLETED AND FINAL SOIL STABILIZATION AND SEEDING ARE PENDING.
- NOT APPLICABLE IN PAVED AREAS.
- NOT APPLICABLE WITH CONCENTRATED FLOWS.

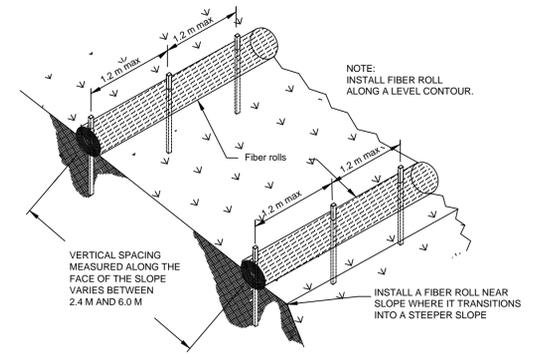
**DRAIN INLET PROTECTION TYPE 1**

NO SCALE  
SC-10



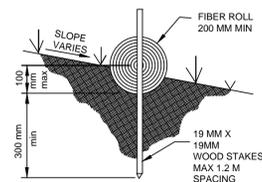
**STABILIZED CONSTRUCTION ENTRANCE**

NO SCALE  
TC-1



**TYPICAL FIBER ROLL INSTALLATION**

NO SCALE  
SC-5



**ENTRENCHMENT DETAIL**

NO SCALE  
SC-5

**NOTE:**

VEGETATION STABILIZATION (PLANTING OR HYDROSEEDING) MAY BE INSTALLED BETWEEN MAY 1ST AND AUGUST 15TH. SLOPE IRRIGATION MUST BE IN PLACE AND TO BE OPERABLE FOR SLOPES >3'. VEGETATION MUST BE WATERED AND ESTABLISHED PRIOR TO OCTOBER 1ST. THE OWNER SHALL SUPPLEMENT VEGETATION WITH BARK OR MULCH BY OCTOBER 1ST IF VEGETATION ESTABLISHMENT DOES NOT OCCUR BY THAT DATE. 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 VEGETATION COVERAGE OF 70% OF THE NATURAL VEGETATIVE COVERAGE OR MORE ON ALL DISTURBED AREAS.

ALL SLOPES OVER THREE FEET MUST HAVE ESTABLISHED VEGETATIVE COVER PRIOR TO FINAL PERMIT APPROVAL

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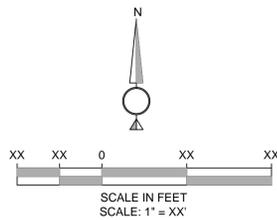
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FOR: MARK WARDLAW, DIRECTOR, DEPARTMENT OF PLANNING & DEVELOPMENT SERVICES

COUNTY APPROVED CHANGES		
DESCRIPTION:	APPROVED BY:	DATE:

PRIVATE CONTRACT		
SHEET X	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	XX SHEETS
EROSION CONTROL AND CONSTRUCTION BMP STANDARD NOTES AND DETAILS FOR: XXXXXXX XXXXX SINGLE FAMILY RESIDENCE		
CALIFORNIA COORDINATE INDEX _____		
APPROVED FOR RAIN ABID: COUNTY ENGINEER	ENGINEER OF WORK	R.C.E.
SEE CERTIFICATION	GRADING PERMIT NO: PDS20XX-LDGRMN-2XXXX	



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DESCRIPTION:	APPROVED BY:	DATE:

PRIVATE CONTRACT		
SHEET X	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	XX SHEETS
EROSION CONTROL AND CONSTRUCTION BMP PLAN FOR: XXXXXXX XXXXX SINGLE FAMILY RESIDENCE		
CALIFORNIA COORDINATE INDEX _____		
APPROVED FOR RAINN ABID: COUNTY ENGINEER	ENGINEER OF WORK R.C.E.	
SEE CERTIFICATION	GRADING PERMIT NO: PDS20XX-LDGRMN-2XXXX	