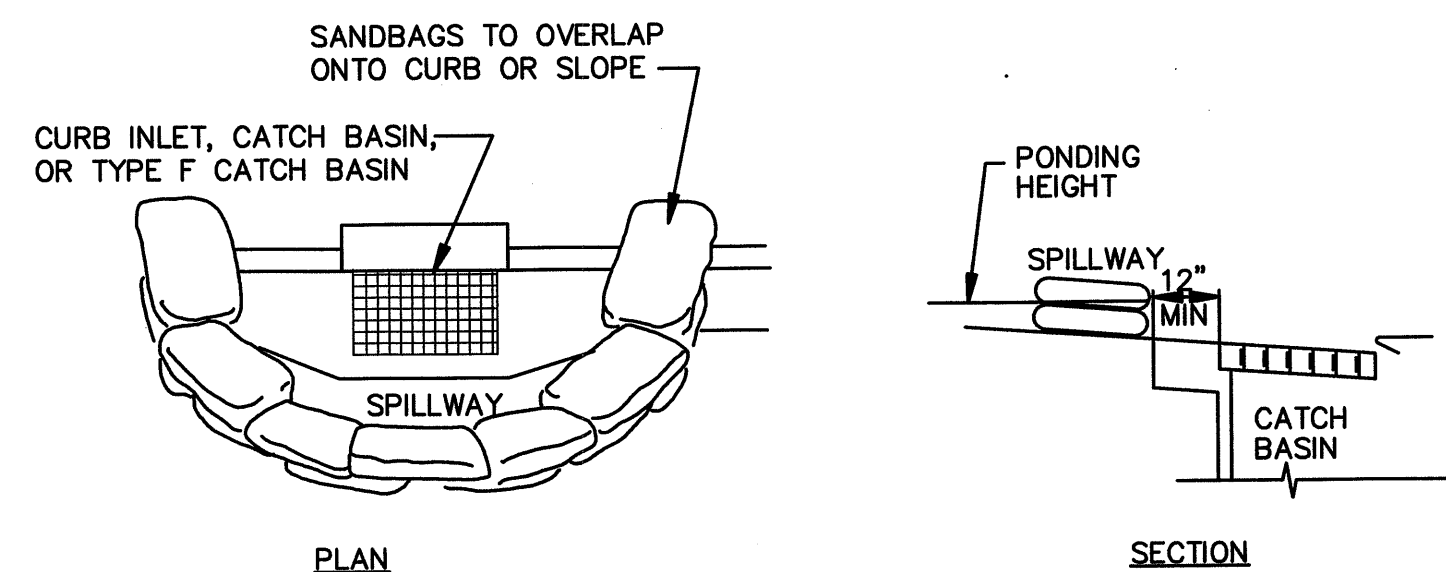
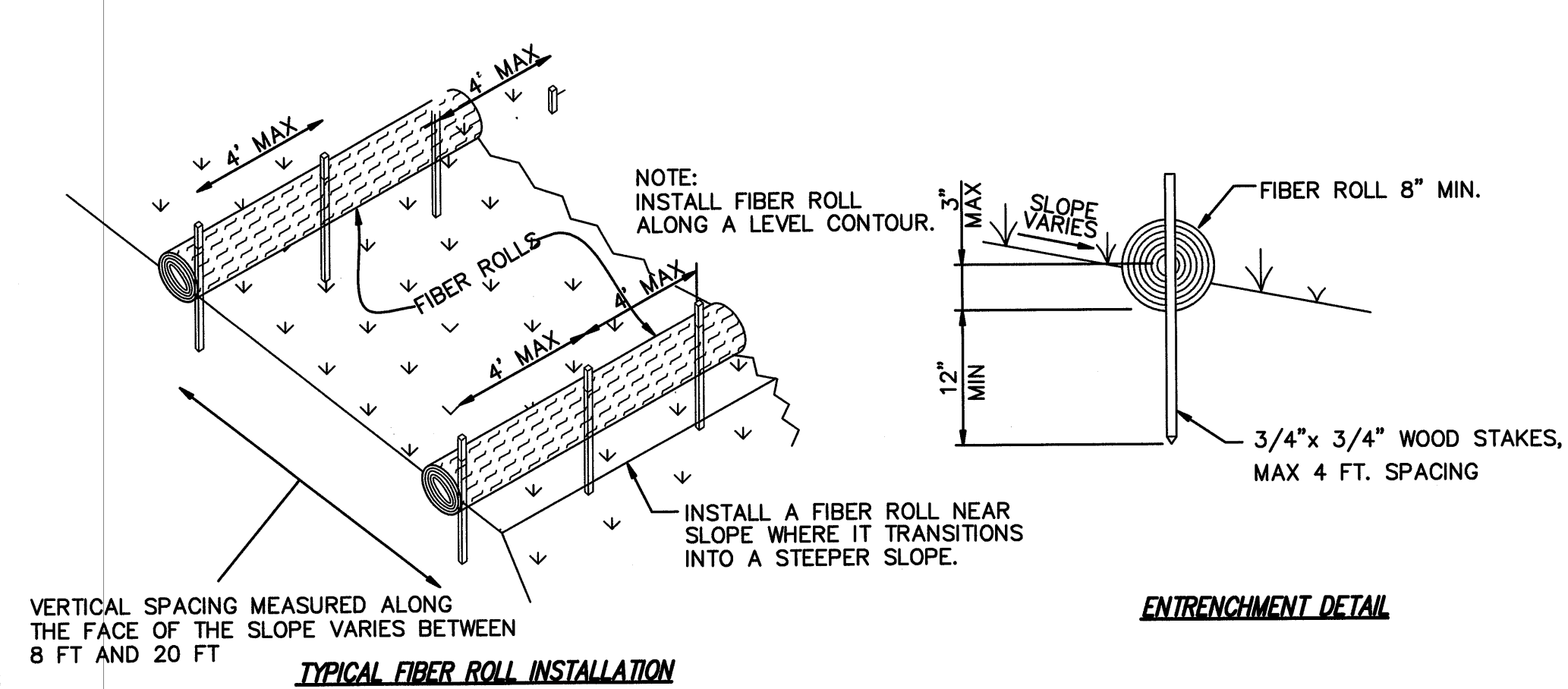


PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND PUBLIC TRAVELED WAY



**NOTES**

1. LEAVE A GAP OF ONE BAG IN THE MIDDLE OF THE TOP ROW OF BAGS TO SERVE AS THE SPILLWAY. SPILLWAY HEIGHT SHALL BE LOWER THAN CURB HEIGHT AND SUFFICIENT IN SIZE TO PASS FLOWS FROM SEVERE STORM EVENT
2. PLACE 2 LAYERS OF OVERLAPPING SANDBAGS AND PACK TIGHTLY TOGETHER TO MINIMIZE THE SPACE BETWEEN BAGS
3. INSPECT AND REPAIR FILTERS AFTER EACH STORM EVENT. REMOVE SEDIMENT WHEN ONE HALF OF THE FILTER DEPTH HAS BEEN FILLED
4. USE SILT BAG/SILT SOCK WHEN INLET IS ADJACENT TO PUBLIC TRAVELED WAY.



TYPICAL FIBER ROLL INSTALLATION

ENTRENCHMENT DETAIL

**A** STABILIZED CONSTRUCTION ENTRANCE

NO SCALE

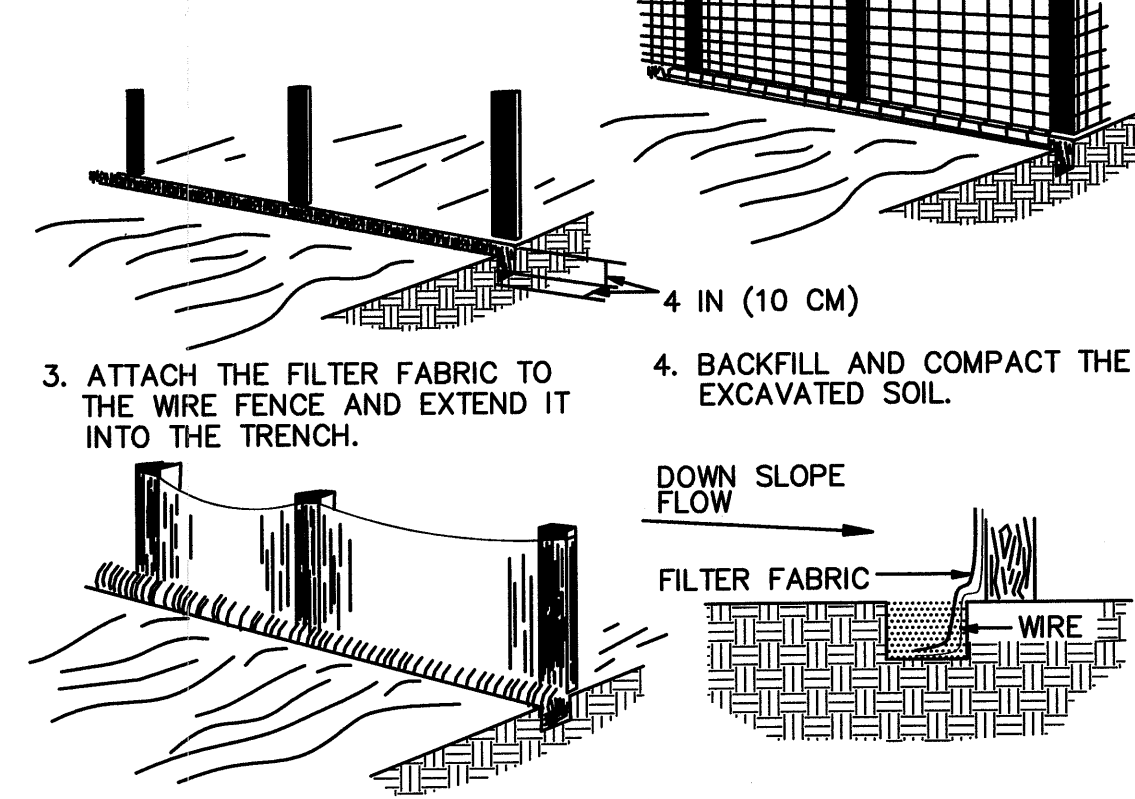
**B** GRAVEL BAG INLET PROTECTION

NO SCALE

**C** FIBER ROLL

NO SCALE

1. SET POSTS AND EXCAVATE A 4 BY 4 IN (10 BY 10 CM) TRENCH UPSLOPE FROM AND ALONG THE LINE OF POSTS.
2. STAPLE WIRE FENCING TO THE POSTS ON UPSLOPE SIDE.



**NOTES**

1. SILT FENCE TO BE LOCATED WITHIN 5 FEET OF TOP OR TOE OF SLOPE WHERE APPLICABLE.
2. SILT FENCE WILL TERMINATE 1 FOOT ON EITHER SIDE OF RIP RAP ENERGY DISSIPATORS.

**SILTATION AND SEDIMENT CONTROL MEASURES NOTES**

1. THE SEDIMENT BASINS SHALL BE PROVIDED AT THE LOWER END OF EVERY DRAINAGE AREA PRODUCING SEDIMENT RUNOFF. THE BASINS SHALL BE MAINTAINED AND CLEANED TO DESIGN CONTOURS AFTER EVERY RUNOFF PRODUCING STORM. THE BASINS SHOULD BE SEMI-PERMANENT STRUCTURES THAT WOULD REMAIN UNTIL SOIL STABILIZING VEGETATION HAS BECOME WELL ESTABLISHED ON ALL ERODIBLE SLOPES.
2. SEDIMENTATION BASINS MAY NOT BE REMOVED OR MADE INOPERATIVE WITHOUT PRIOR APPROVAL OF SDG&E REPRESENTATIVE.
3. UTILITY TRENCHES THAT ARE CUT THROUGH BASIN DIKES OR BASIN INLET DIKES SHALL BE PLUGGED WITH GRAVEL BAGS FROM TOP OF PIPE TO TOP OF DIKE.
4. ALL UTILITY TRENCHES SHALL BE BLOCKED AT THE PRESCRIBED INTERVALS WITH A DOUBLE ROW OF GRAVEL BAGS WITH A TOP ELEVATION THAT IS TWO GRAVEL BAGS BELOW THE GRADED SURFACE OF THE STREET. GRAVEL BAGS ARE TO BE PLACED WITH LAPPED COURSES. THE INTERVALS PRESCRIBED BETWEEN GRAVEL BAG BLOCKING SHALL DEPEND ON THE SLOPE OF THE GROUND SURFACE, BUT SHALL NOT EXCEED THE FOLLOWING:

| GRADE OF THE STREET | INTERVAL         |
|---------------------|------------------|
| LESS THAN 2%        | 200 FEET MAXIMUM |
| 2% TO 4%            | 100 FEET         |
| 4% TO 10%           | 50 FEET          |
| OVER 10%            | 25 FEET          |

5. AFTER UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDING SLIGHTLY TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA. CARE SHOULD BE EXERCISED TO PROVIDE FOR CROSS FLOW AT FREQUENT INTERVALS WHERE TRENCHES ARE NOT ON THE CENTERLINE OF A CROWNED STREET.
6. ALL BUILDING PADS SHOULD BE SLOPED TOWARDS THE DRIVEWAYS AND VELOCITY CHECK DAMS PROVIDED AT THE BASE OF ALL DRIVEWAYS DRAINING INTO THE STREET.
7. PROVIDE VELOCITY CHECK DAMS IN ALL UNPAVED GRADED CHANNELS AT THE INTERVALS INDICATED BELOW:

| GRADE OF CHANNEL | INTERVALS BETWEEN CHECK DAMS |
|------------------|------------------------------|
| LESS THAN 3%     | 100 FEET                     |
| 3% TO 6%         | 50 FEET                      |
| OVER 6%          | 25 FEET                      |

8. PROVIDE VELOCITY CHECK DAMS IN ALL PAVED STREET AREAS ACCORDING TO INTERVALS INDICATED BELOW. VELOCITY CHECK DAMS MAY BE CONSTRUCTED OF GRAVEL BAGS, TIMBER, OR OTHER EROSION RESISTANT MATERIALS APPROVED BY SDG&E REPRESENTATIVE, AND SHALL EXTEND COMPLETELY ACROSS THE STREET OR CHANNEL AT RIGHT ANGLES TO THE CENTERLINE. VELOCITY CHECK DAMS MAY ALSO SERVE AS SEDIMENT TRAPS.

| GRADE OF STREET | INTERVALS             | NO. OF BAGS HIGH |
|-----------------|-----------------------|------------------|
| LESS THAN 2%    | AS REQUIRED, 200' MAX | 1                |
| 2% TO 4%        | 100 FEET              | 1                |
| 4% TO 6%        | 50 FEET               | 1                |
| 6% TO 10%       | 50 FEET               | 2                |
| MORE THAN 10%   | 25 FEET               | 2                |

9. PROVIDE A GRAVEL BAG SILT BASIN OR TRAP BY EVERY STORM DRAIN INLET TO PREVENT SEDIMENT FROM ENTERING DRAIN SYSTEM.
10. GRAVEL BAGS AND FILL MATERIAL SHALL BE STOCKPILED AT INTERVALS, READY FOR USE WHEN REQUIRED.
11. 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.
12. PROVIDE ROCK RIP-RAP ON CURVES AND STEEP DROPS IN ALL EROSION PRONE DRAINAGE CHANNELS DOWNSTREAM FROM THE DEVELOPMENT. THIS PROTECTION WOULD REDUCE EROSION CAUSED BY THE INCREASED FLOWS THAT MAY BE ANTICIPATED FROM DENUDE SLOPES, OR FROM IMPERVIOUS SURFACES.
13. ANY PROPOSED ALTERNATE CONTROL MEASURES MUST BE APPROVED IN ADVANCE BY ALL RESPONSIBLE AGENCIES; IE, SDG&E REPRESENTATIVE, DEPARTMENT OF SANITATION AND FLOOD CONTROL, OFFICE OF ENVIRONMENTAL MANAGEMENT, ETC.

**EROSION CONTROL NOTES**

1. THE TOPS OF ALL SLOPES SHALL HAVE A DIKE OR TRENCH TO PREVENT WATER FROM FLOWING OVER THE CRESTS OF SLOPES.
2. CATCH BASINS, DESILTING BASINS, SAND BAGS, CHECK DAMS AND STORM DRAIN SYSTEMS SHALL BE INSTALLED TO THE SATISFACTION OF THE DIRECTOR OF DEVELOPMENT SERVICES. THESE FACILITIES SHALL BE CLEANED ON A REGULAR BASIS, KEPT FREE OF SOIL ACCUMULATION.
3. GRAVEL BAG CHECK DAMS SHALL BE PLACED IN UNPAVED AREAS WITH GRADIENTS IN EXCESS OF 2%, IN OTHER GRADED OR EXCAVATED AREAS AS REQUIRED BY THE DEPARTMENT OF DEVELOPMENT SERVICES, AND AT OR NEAR EVERY POINT WHERE CONCENTRATED FLOWS LEAVE THE DEVELOPMENT.
4. GRAVEL BAGS SHALL BE PLACED ON THE UPSTREAM SIDE OF ALL DRAINAGE INLETS TO MINIMIZE SILT BUILDUP IN THE INLETS AND PIPES.
5. THE CONTRACTOR SHALL IMMEDIATELY REPAIR ANY ERODED SLOPES.
6. ROADWAYS AND ENTRANCES TO AND FROM THE SITE SHALL BE SWEEPED ON A REGULAR BASIS TO KEEP THEM FREE OF SOIL ACCUMULATIONS.
7. CONTRACTOR SHALL HAVE WATER TRUCKS AND EQUIPMENT ON-SITE TO MINIMIZE AIRBORNE DUST CREATED FROM GRADING AND HAULING OPERATIONS OR EXCESSIVE WIND CONDITIONS. WATERING SHALL BE PERFORMED ON A CONTINUOUS BASIS ANY TIME THESE CONDITIONS ARE PRESENT, AND AT ALL OTHER TIMES AS DIRECTED BY SDG&E REPRESENTATIVE.
8. PRIOR TO THE COMMENCEMENT OF GRADING, THE OWNER SHALL PROVIDE THE CONTRACTOR WITH A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), WHICH PROVIDES RECOMMENDATIONS AND PROCEDURES TO FULFILL STORM WATER DISCHARGE REQUIREMENTS OF THE STATE WATER RESOURCES CONTROL BOARD (SWRCB), ORDER NO. 99-08-DWQ, NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES), GENERAL PERMIT NO. CAS000002, WASTE DISCHARGE REQUIREMENTS (WDRS) FOR DISCHARGE OF STORM WATER RUNOFF ASSOCIATED WITH CONSTRUCTION ACTIVITY.

**STORMWATER ADVISORY NOTES**

1. 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 (BEST MANAGEMENT PRACTICES) 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.
2. NO AREA BEING DISTURBED SHALL EXCEED 50 ACRES AT ANY GIVEN TIME WITHOUT DEMONSTRATING TO THE SDG&E REPRESENTATIVE'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.
3. THE CONTRACTOR IS OBLIGATED TO INSURE COMPLIANCE WITH ALL APPLICABLE STORMWATER REGULATIONS AT ALL TIMES. THE BMPs (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 BMPs IS THE PERMITTEE'S RESPONSIBILITY, AND FAILURE TO PROPERLY INSTALL OR MAINTAIN THE BMPs MAY RESULT IN ENFORCEMENT ACTION BY THE REGIONAL WATER QUALITY CONTROL BOARD. IF INSTALLED BMPs FAIL, THEY MUST BE REPAIRED OR REPLACED WITH AN ACCEPTABLE ALTERNATE WITHIN 24 HOURS, OR AS SOON AS SAFE TO DO SO.
4. A NOTICE OF INTENT (NOI) WILL BE FILED WITH THE STATE WATER RESOURCE CONTROL BOARD (SWRCB) AND A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) 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 WASTE DISCHARGE NUMBER ASSIGNED BY SWRCB FOR THE MASS GRADING OF THIS SITE IS [REDACTED]. THE PERMITTEE SHALL KEEP A COPY OF THE SWPPP ON SITE AND AVAILABLE FOR REVIEW BY SDG&E.

**EMERGENCY EROSION CONTROL MEASURE NOTES**

1. 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 SDG&E REPRESENTATIVE THAT WILL ALLOW WATER TO DRAIN FROM THE PAD WITHOUT CAUSING EROSION.
2. TOPS OF ALL SLOPES TO BE DIKED OR TRENCHED TO PREVENT WATER FROM FLOWING OVER THE CREST OF SLOPES.
3. MANUFACTURED SLOPES AND PADS SHALL BE ROUNDED VERTICALLY AND HORIZONTALLY AS APPROPRIATE TO BLEND WITH THE SURROUNDING TOPOGRAPHY.
4. 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 SDG&E REPRESENTATIVE. 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.
5. CATCH BASINS, DESILTING BASINS, AND STORM DRAINS SHALL BE INSTALLED TO THE SATISFACTION OF SDG&E REPRESENTATIVE.
6. GRAVEL BAG CHECK DAMS TO BE PLACED IN A MANNER APPROVED BY THE CITY ENGINEER IN UNPAVED STREETS WITH GRADIENTS IN EXCESS OF 2% AND ON OR IN OTHER GRADED OR EXCAVATED AREAS AS REQUIRED BY SDG&E REPRESENTATIVE.
7. THE CONTRACTOR TO MAINTAIN THE PLANTING AND EROSION CONTROL MEASURES DESCRIBED ABOVE UNTIL RELIEVED OF SAME BY THE SDG&E REPRESENTATIVE. THE DEVELOPER TO REMOVE ALL SOIL INTERCEPTED BY THE SANDBAGS, CATCH BASINS, AND DESILTING BASINS, AND KEEP FACILITIES CLEAN AND FREE OF SILT AND SAND AS DIRECTED BY THE SDG&E REPRESENTATIVE. THE DEVELOPER SHALL REPAIR ANY ERODED SLOPES AS DIRECTED BY SDG&E REPRESENTATIVE.

**EROSION CONTROL NOTES:**

1. THESE EROSION CONTROL PLANS SHOW PROJECT IMPROVEMENTS FOR ILLUSTRATION ONLY. SEE PROJECT IMPROVEMENT PLANS FOR IMPROVEMENT DETAILS.
2. ALL HYDROSEED AND BONDED FIBER MATRIX MIXES TO BE APPROVED BY PROJECT LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

**STANDARD SPECIFICATIONS**

1. STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (2000 EDITION)
2. CALIFORNIA DEPARTMENT OF TRANSPORTATION "MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE WORK ZONES," (1990 EDITION).
3. STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS (JULY 1992).

**STANDARD DRAWINGS**

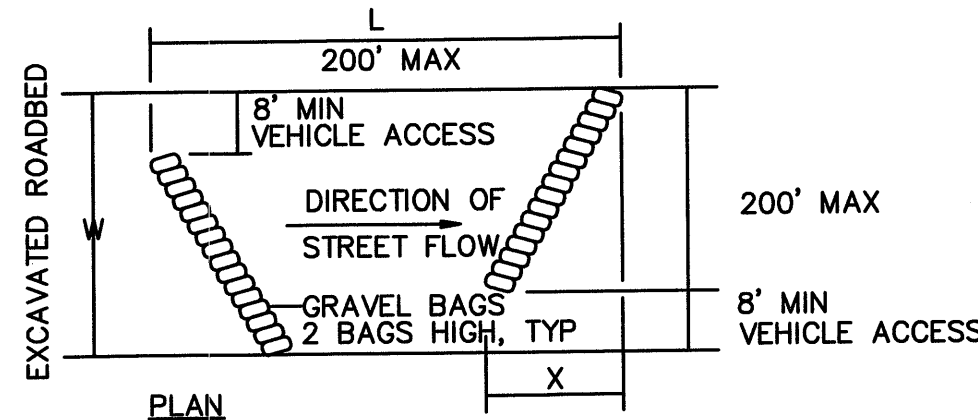
1. SAN DIEGO GAS AND ELECTRIC WATER QUALITY CONSTRUCTION BEST MANAGEMENT PRACTICES MANUAL (DECEMBER 2002 EDITION).
2. CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA) STORMWATER BEST MANAGEMENT PRACTICES HANDBOOK.

**D** SILT FENCE

NO SCALE

**NOTES**

1. GRAVEL BAGS ARE ENCOURAGED OVER THE USE OF SANDBAGS AND MAY BE REQUIRED IN AREAS WHICH ARE PARTICULARLY SENSITIVE TO SEDIMENT DEPOSITION
2. REQUIREMENTS FOR AND SPACING OF VELOCITY REDUCERS FOR STREETS WITH GRADES OF LESS THAN 4% SHALL BE AS SHOWN ON THE EROSION CONTROL PLAN



| "W" | "X" | SLOPE     | "L"      |
|-----|-----|-----------|----------|
| 20' | 30' | < 4%      | 100' MAX |
|     | 5'  | 4% TO 10% | 50' MAX  |
|     |     | > 10%     | 25' MAX  |

**NOLTE**  
BEYOND ENGINEERING

**E** SANDBAG VELOCITY REDUCER

NO SCALE

REVISIONS

| NO. | WORK DONE | DATE: | BY: | APP'D: | NO. | WORK DONE | DATE: | BY: | APP'D: | NO. | WORK DONE | DATE: | BY: | APP'D: | NO. | WORK DONE | DATE: | BY: | APP'D: | NO. |  |
|-----|-----------|-------|-----|--------|-----|-----------|-------|-----|--------|-----|-----------|-------|-----|--------|-----|-----------|-------|-----|--------|-----|--|
|     |           |       |     |        |     |           |       |     |        |     |           |       |     |        |     |           |       |     |        |     |  |

SAN DIEGO GAS & ELECTRIC COMPANY  
SAN DIEGO, CALIFORNIA

SUNCREST SUBSTATION ACCESS ROAD  
EROSION CONTROL DETAILS & NOTES

|                  |                 |                |       |        |
|------------------|-----------------|----------------|-------|--------|
| DRAWN BY: DHT    | DATE: 3/24/10   | SCALE: 1"=20'  | W.G.: | REV: 0 |
| CHECKED BY: PJC  | DATE: --        |                |       |        |
| APPROVED BY: CR  | DATE: --        | SHEET 41 OF 55 |       |        |
| CAD NO.: IPPV141 | PLOT SCALE: 1=1 |                |       |        |



SCR-C-241