



COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS
LAND DEVELOPMENT DIVISION
SUBDIVISION PLAN CHECKING SECTION - DRAINAGE AND GRADING UNIT
STORMWATER POLLUTION (EROSION CONTROL) PLAN CORRECTION SHEET

Form fields for SITE ADDRESS, TRACT/PM NO., DISTRICT NO., GRADING PLAN CHK.#, DESIGN ENGINEER/APPLICANT, TELEPHONE NO., OWNER, TELEPHONE NO., CHECKER, ENTRY DATE, STORM SEASON.

The submitted Stormwater Pollution Plans have been reviewed for conformity to the Building Codes. Make the corrections as shown on the returned set of plans and as noted below:

REQUIRED SUBMITTALS

- 1. Resubmit correction sheet and check prints, and four (4) revised sets plans for further consideration.
2. After the plans are approved, submit two (2) sets of the approved plans to the District Office where the grading permit was issued.
3. A supplemental plan check fee of \$\_\_\_\_\_ will be required for Stormwater Pollution Plan review.

GENERAL COMMENTS

- 1. All sheets and calculations must be "wet" signed and stamped by a Registered Civil Engineer.
2. Add the Stormwater Pollution (Erosion Control) Notes, see attached.
3. Add to plans all applicable Erosion Control Details, and specify standard Best Management Practices (BMPs), see attached. Please note that these details are only examples of typical erosion control devices and should not be considered standard details. These details do not apply to every situation. You may have to modify these details to fit your site needs or design different details.
4. If erosion control plans have been approved for previous storm season, provide copy of previously approved plan with submittal.
5. Erosion control devices and BMPs are required to prevent debris flow onto adjacent properties, adjacent roadways, and into natural drainage courses.
6. Indicate on the plans, all drainage devices, including Private Drains (PDs), culverts, lot drains, paved streets, drainage devices, drainage swales, terrace drains, down drains, catch basins, etc., that will be in operation on November 1. In addition, note if the irrigation system is operable and the planting is established on that date.
7. Outline the drainage area and graded area, and submit calculations on or attached to the plans to demonstrate that the design of the proposed erosion control devices will meet or exceed County Standards. Use 50 cu. yd./acre debris accumulation parameter unless a lower rate is approved based upon recommendations of the Soils Engineer. Runoff flow must be based on the hydrology study.
8. Provide cross-section on the plans and detailed calculations demonstrating that the catchment area will have sufficient debris storage capacity.

**GENERAL COMMENTS (cont.)**

- 9. Provide an orifice and pipe size for clear water discharge through the top of the dam and into the standpipe system and calculations demonstrating that both will pass peak flows based on a design 25 year storm. This includes the number and size of perforations in the standpipe and its minimum height, and the pipe size and slope passing flows through the dam.
- 10. Provide for a weir to handle flows over the top of the dam and calculations demonstrating that the weir will handle 1.5 times the peak flow based on a design 50 year storm.
- 11. Show in detail the check dam. A) If the capacity is less than 1,600 cy. ds., Detail 3 attached may be used. B) If the capacity is greater, use Detail 5 attached.
- 12. Desilting facilities will be required if any of the devices noted an Item 6 above are not operable by this date.
- 13. Erosion debris from cut and fill slopes that do not have established planting located at the site perimeter adjacent to off-site developed property must be controlled by the use of silt fence, sandbag slough walls, plastic sheeting, or by a combination of all three.
- 14. Desilting basins or excavated pits are required at all street outlets from the graded site, or as indicated on the plans.

**SPECIFIC COMMENTS**

- 1. At the downhill side of intersecting streets and at the locations indicated on the returned plans, check dams should be provided in accordance with Item 11 above.
- 2. Grate-type yard catch basins must be encircled with sandbags having one (1) layer for each foot of width of catch basin.
- 3. Catch basins by curbs must have the manhole cover removed, a stand-pipe fitted into the manhole opening and sandbags sealing the catch basin opening. The entire catch basin must be encircled by one (1) row of sandbags, two (2) layers high, above parkway surface. Provide Detail 2 on plans.
- 4. On unpaved streets, check dams should be provided in accordance with Detail 4. The following minimum spacing should be used, unless calculations are submitted to justify increased spacing:

| <u>SLOPE</u>     | <u>CHECK DAM INTERVAL</u> |
|------------------|---------------------------|
| Less than 5%     | 100 feet on center        |
| 5% to 10%        | 50 feet on center         |
| Greater than 10% | 25 feet on center         |

- 5. Outline the drainage area and graded area tributary to each desilting basin for conditions as of November 1, on each stage thereafter. Indicate the acres for each of these tributary areas. Use 50 cu. yd./acre for the required basin volume unless a lower rate is approved based upon recommendations of the Soils Engineer. Refer to the approved hydrology study for the appropriate peak flow from a design 50 year storm which is multiplied by 1.5 to determine the spillway design flow. Submit calculations for the spillway width (W).
- 6. All desilting facilities constructed with a pipe which outlets directly into a storm drain must be designed to prevent entry of debris into the system. Pipes at grade on the upstream side of the facility will not be allowed.
- 7. Pumps capable of draining desilting basins within 24 hours shall be provided where installation of gravity drain pipes is impractical.
- 8. Provide a dike to direct flow to desilting basins or pits. Dike must be lined with concrete, sandbags, or other nonerodible materials.
- 9. See additional comments marked in red on returned plans.



**LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS**  
**STORMWATER POLLUTION (EROSION CONTROL) PLAN NOTES**

Please fill in name and number

1. In case of emergency, call \_\_\_\_\_ (Responsible Person) \_\_\_\_\_ at \_\_\_\_\_ (24 hour telephone) \_\_\_\_\_.
2. A stand-by crew for emergency work shall be available at all times during the rainy season (NOV 1 to APR 15). Necessary materials shall be available on-site and stockpiled at convenient locations to facilitate rapid construction of emergency devices when rain is imminent.
3. Erosion control devices shown on this plan may be removed when approved by the Grading Inspector if the grading operation has progressed to the point where they are no longer required.
4. Graded areas adjacent to fill slopes located at the site perimeter must drain away from the top of slope at the conclusion of each working day.
5. All silt and debris shall be removed from all devices within 24 hours after each rainstorm and be disposed of properly.
6. A guard shall be posted on the site whenever the depth of water in any device exceeds two feet. The device shall be drained or pumped dry within 24 hours after each rainstorm.
7. Except as otherwise approved by the Grading Inspector, all removable protective devices shown shall be in place at the end of each working day or on weekends when the 5-day rain probability forecast exceeds 40 percent.
8. All loose soils and debris which may create a potential hazard to off-site property shall be removed from the site as directed by the Grading Inspector.
9. The placement of additional devices to reduce erosion damage within the site is left to the discretion of the Field Engineer.
10. Desilting basins may not be removed or made inoperable between November 1 and April 15 of the following year, without the approval of the Grading Inspector.
11. Erosion control devices are to be modified as needed as the project progresses and plans of these changes must be submitted for approval as required.
12. Add the following notes (or similar) to the plans to define the current state of construction.
  - a. Storm drains and catch basins are (not) constructed.
  - b. Streets are (not) paved, except as noted on the erosion control plans.
  - c. Drainage devices are (not) constructed, except as noted on plans.
13. Stormwater pollution control requirements must be integrated into the erosion control plans per Title 62, Section 7010 of the County Code for any construction between October 1 and April 15.

The following notes and BMPs as outlined in, but not limited to, the Best Management Practice Handbook, California Stormwater Quality Task Force, Sacramento, California 1993, or the latest revised edition, may apply during the construction of this project (additional measures may be required if deemed appropriate by County inspectors):

**ATTACHMENT A NOTES**

- a. Eroded sediments and other pollutants must be retained on-site and may not be transported from the site via sheetflow, swales, area drains, natural drainage courses or wind.
- b. Stockpiles of earth and other construction related materials must be protected from being transported from the site by the forces of wind or water.

**ATTACHMENT A NOTES (cont.)**

- c. Fuels, oils, solvents, and other toxic materials must be stored in accordance with their listing and are not to contaminate the soils and surface waters. All approved storage containers are to be protected from the weather. Spills must be cleaned up immediately and disposed of in a proper manner. Spills may not be washed into the drainage system.
- d. Excess or waste concrete may not be washed into the public way or any other drainage system. Provisions shall be made to retain concrete wastes on-site until they can be disposed of as solid waste.
- e. Trash and construction related solid wastes must be deposited into a covered receptacle to prevent contamination of rainwater and dispersal by wind.
- f. Sediments and other materials may not be tracked from the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the public way. Accidental depositions must be swept up immediately and may not be washed down by rain or other means.
- g. Any slopes with disturbed soils or denuded of vegetation must be stabilized so as to inhibit erosion by wind and water.

**ATTACHMENT B - BMPs**

CA001 - DEWATERING OPERATIONS  
CA002 - PAVING OPERATIONS  
CA003 - STRUCTURE CONSTRUCTION AND PAINTING  
CA010 - MATERIAL DELIVERY AND STORAGE  
CA011 - MATERIAL USE  
CA012 - SPILL PREVENTION AND CONTROL  
CA020 - SOLID WASTE MANAGEMENT  
CA021 - HAZARDOUS WASTE MANAGEMENT  
CA022 - CONTAMINATED SOIL MANAGEMENT  
CA023 - CONCRETE WASTE MANAGEMENT  
CA030 - VEHICLE AND EQUIPMENT CLEANING  
CA031 - VEHICLE AND EQUIPMENT FUELING  
CA032 - VEHICLE AND EQUIPMENT MAINTENANCE  
CA040 - EMPLOYEE/SUBCONTRACTOR TRAINING  
ESC01 - SCHEDULING  
ESC02 - PRESERVATION OF EXISTING VEGETATION  
ESC10 - SEEDING AND PLANTING  
ESC11 - MULCHING  
ESC20 - GEOTEXTILES AND MATS  
ESC21 - DUST CONTROLS  
ESC22 - TEMPORARY STREAM CROSSING  
ESC23 - CONSTRUCTION ROAD STABILIZATION  
ESC24 - STABILIZED CONSTRUCTION ENTRANCE  
ESC30 - EARTH DIKE  
ESC31 - TEMPORARY DRAINS AND SWALES  
ESC32 - SLOPE DRAIN  
ESC40 - OUTLET PROTECTION  
ESC41 - CHECK DAMS  
ESC42 - SLOPE ROUGHENING/TERRACING  
ESC50 - SILT FENCE  
ESC51 - STRAW BALE BARRIERS  
ESC52 - SAND BAG BARRIER  
ESC53 - BRUSH OR ROCK FILTER  
ESC54 - STORM DRAIN INLET PROTECTION  
ESC55 - SEDIMENT TRAP  
ESC56 - SEDIMENT BASIN

ATTACHMENT C

STATEMENT OF UNDERSTANDING

As the \_\_\_\_\_, of the project, I have reviewed the Best Management Practices Handbooks, California Storm Water Quality Task Force, Sacramento, California, and have proposed the implementation of the Best Management Practices (BMPs) applicable, to effectively minimize the negative impacts of this project's construction activities on the surrounding water quality. The selected BMPs will be installed, monitored and maintained to ensure their effectiveness. The BMPs that I have not chosen for implementation are redundant or deemed not applicable to the proposed construction activities. If at any time, site conditions and/or the County official warrant reevaluation and revisions of the chosen BMPs, the appropriate changes will be made without unnecessary delay. I am aware that failure to properly implement and maintain, while under construction, the BMPs necessary to prevent the discharge of pollutants from this project could result in significant penalties and/or delays.

\_\_\_\_\_  
Signature

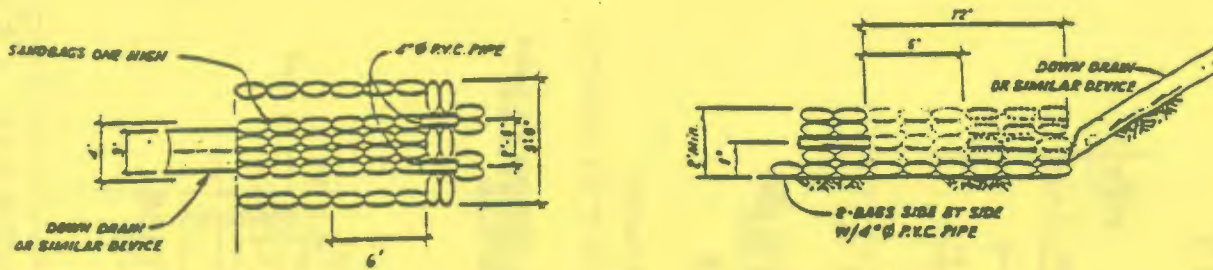
\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Date

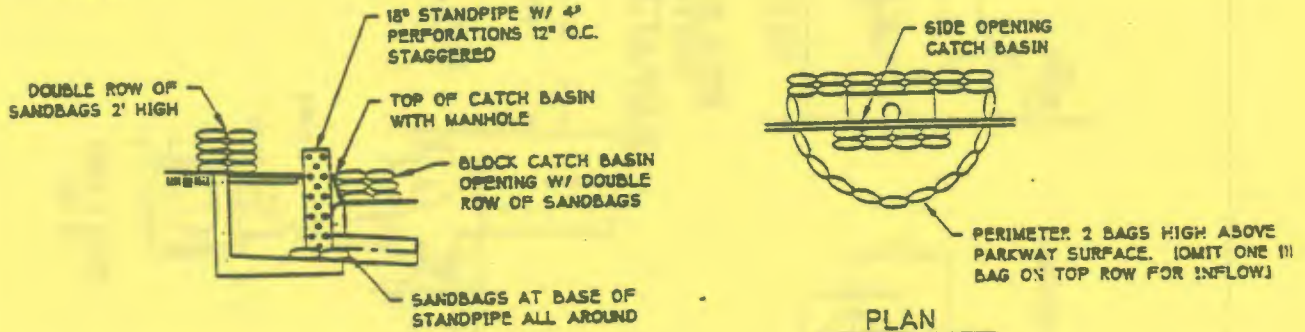
Project Description: \_\_\_\_\_  
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Project Address: \_\_\_\_\_  
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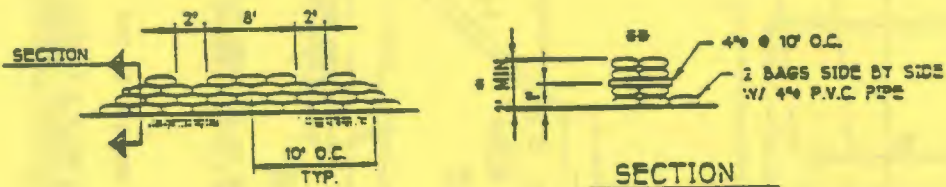
EROSION CONTROL DEVICES DETAILS



① DOWNDRAIN DEBRIS BASIN  
N.T.S.



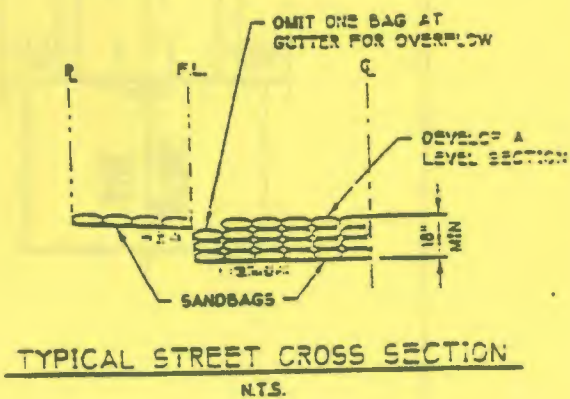
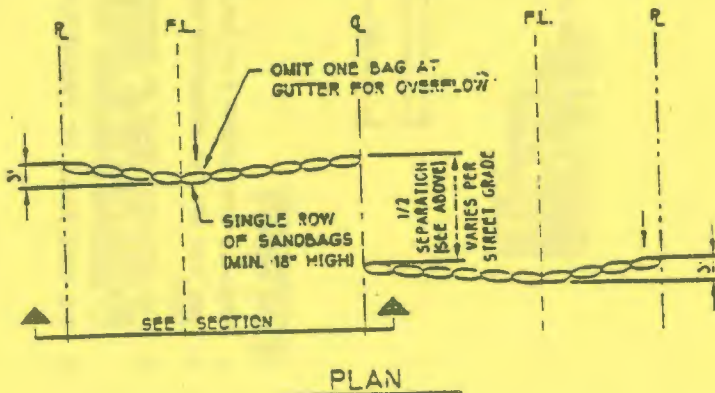
② CATCH BASIN W/ STANDPIPE  
N.T.S.



- \* HEIGHT OF CHECK DAM SHOULD NOT EXCEED 3 FEET.
- \*\* PROVIDE AN EXTRA ROW OF SANDBAGS FOR EVERY ROW OF SANDBAGS 3 SANDBAGS HIGH.

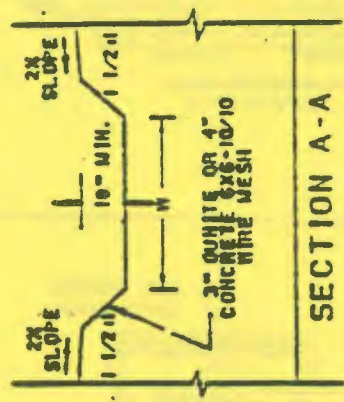
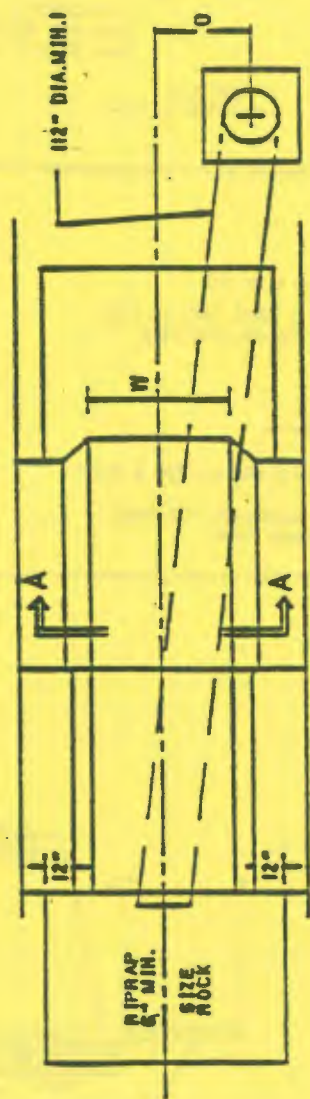
③ CHECK DAM  
N.T.S.

| CHECK ROW DAMS |            |
|----------------|------------|
| STREET GRADE   | SEPARATION |
| < 5X           | 100' O.C.  |
| 5X - 10X       | 50' O.C.   |
| > 10X          | 25' O.C.   |



④ CHECK DAMS W/ "V" ALIGNMENT  
TO BE USED ON UNPAVED STREETS

DESIGN FOR  
1.5 MAX. Q



SECTION A-A

CONCRETE OR CONCRETE AT THE  
OVERFLOW IS TO EXTEND DOWN  
EACH FACE OF THE DIKE.



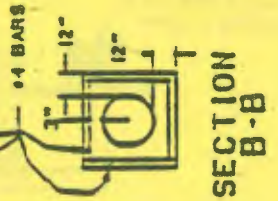
DISCHARGE TO PAVED  
STREET, STORM DRAIN OR  
APPROVED DRAINAGE  
COURSE IN PAVED  
OR SAND BAGGED  
CHANNEL.

FOUND PIPE IN  
COMPETENT MATERIAL

COMPACTON REPORTS ARE TO BE SUBMITTED  
ON EACH DIKE PRIOR TO FINAL APPROVAL.

DESICLING BASIN  
DESIGN CRITERIA

1. INDICATE DIMENSIONS FOR D.H.W AND O ON THE PLANS.
2. THE TOP OF THE STANDPIPE MUST BE SET AT THE ELEVATION OF THE TOP OF THE DIKE.
3. THE SPILL WAY MUST BE CONSTRUCTED WITH CONCRETE OR QUIKITE WHEN R EXCEEDS 3" OR WHEN THE STORAGE VOLUME EXCEEDS 1 ACRE FOOT (500 CUBIC YARDS). SAND BAGGED SPILL WAYS MAY BE ALLOWED FOR LESSER DEPTHS AND STORAGE VOLUMES DEPENDING ON EXISTING DOWNSTREAM DEVELOPMENT.
4. THE DIKE SHALL BE COMPACTED TO 95% COMPACTION.



SECTION B-B

SECTION C-C

NOTE: PROPERLY ANCHORED GUY WIRES  
MAY BE SUBSTITUTED FOR THE  
ANCHOR BLOCK.

DEPARTMENT OF COUNTY ENGINEER-COUNTY OF LOS ANGELES  
BUILDING AND SAFETY DIVISION  
MINIMUM DESIGNING BASIN STANDARD

COUNTY ENGINEER  
STANDARD

DETAIL 5

DATE SEPT. 12, 1984  
REVISED TO