Municipal NPDES Permit
Development Construction and Planning Requirements

Introduction

- Training Purpose
  - Educate Impacted City Personnel On Development Construction and Planning Requirements of the Municipal NPDES Permit (especially the differences)
    - Public Works
    - Planning
    - Building & Safety
    - Code Enforcement (if they do inspections)

Introduction

- Training Expectation
  - Know the difference between development planning project requirements and development construction project requirements
    - Confusion between the two in terms of requirements and BMPs
  - Encourage cooperation between planning and engineering
    - Confusion has led to who is responsible for what

Background

- Why Is It Important to Comply?
  - Local, State and Federal Requirements
    - Required by City's Runoff Control Ordinance
    - NPDES Permits in California Are Authorized Under the Porter-Cologne Act (Water Code)
    - NPDES Permit Are Also Authorized Under the Federal Clean Water Act
  - Improves Water Quality (good for environment)
    - Reduces Pollutant Discharges to MS4 (municipal storm drain system)
    - Prohibits Illicit Discharges (discharges not entirely composed of storm water and are not exempted).

Background

- What If Your City Does Not Comply?
  - Bad Stuff Will Happen to It
    - Fines Can Be As High As $10,000 or more per day
    - Automatic $1,000 fine for non-compliance
    - Exposure to Third Party Litigation
    - Bad Publicity for Your City (and City Council)

Background

- What Is An Municipal NPDES Permit?
  - National Pollutant Discharge Elimination System
    - Allows municipalities to discharge storm water and certain categories of non-storm water to the MS4
    - In exchange, conditions must be met:
      - Municipalities must implement 6 programs (Illicit Connection/Discharge Elimination, Public Education, Industrial/Commercial Inspection, Public Agency, and Development Planning & Construction) to reduce pollutants to the MS4
      - Municipalities must prohibit illicit discharges (any discharge that is not entirely composed of storm water and is not exempted under the Los Angeles MS4 Permit)

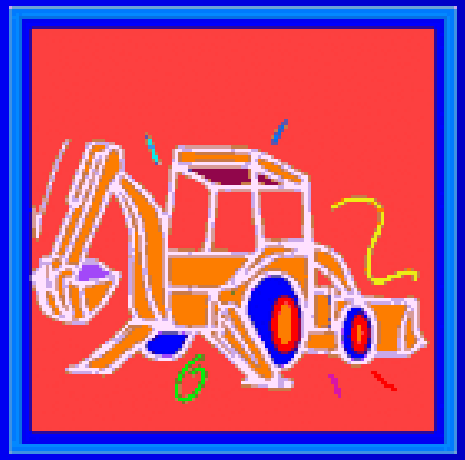
Background

- What Is A Pollutant?
  - Basically, everything that isn't storm water
    - Sediment or any material containing chemicals whole or diluted (e.g., concrete wash-out, paint, asphaltic material, and trash)
- What the MS4?
  - Stands for municipal separate storm sewer system (aka: storm drain system)
    - Includes streets, gutters, alleys, culverts, catch basins, storm drains, or any conveyance that transports runoff to a receiving water

Background

- What Is A Receiving Water?
  - Any navigable water body
    - Lake, stream, creek, river (including flood control channels) and oceans

Development Construction Program Requirements



Development Construction

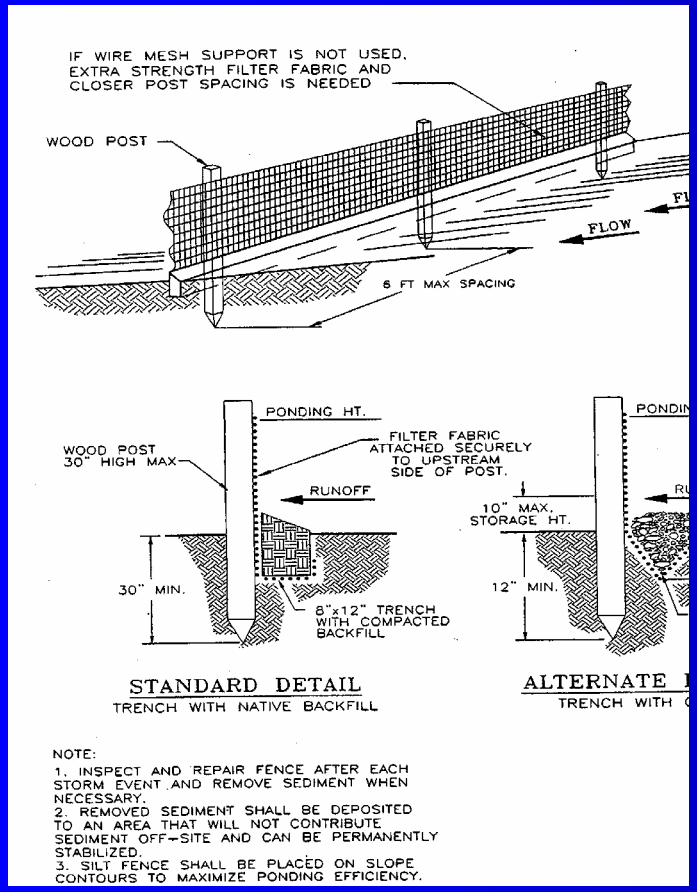
- Construction Projects Less Than 1 Acre
  - Requires City to assign minimum BMPs as conditions for grading permit issuance (project-by project basis)
    - Silt fences or sand bags (almost always)
    - Stabilized Construction Entrance (if a lot of traffic)
    - Trash receptacles (almost always)
    - Proper storage of materials containing pollutants
    - Erosion controls on slopes
    - Controls to prevent illicit discharges (e.g., concrete wash-out)

Development Construction

- Silt Fencing
  - Should be placed perpendicular to flow
  - Bottom of the fence should be anchored down to halt runoff entrained with sediment (if there is an opportunity for it to enter the MS4)
  - Many silt fences are installed improperly
    - Gaps between the bottom of the plastic bottom and the ground, allowing flow entrained with sediment to spill into MS4

Development Construction

Silt Fencing

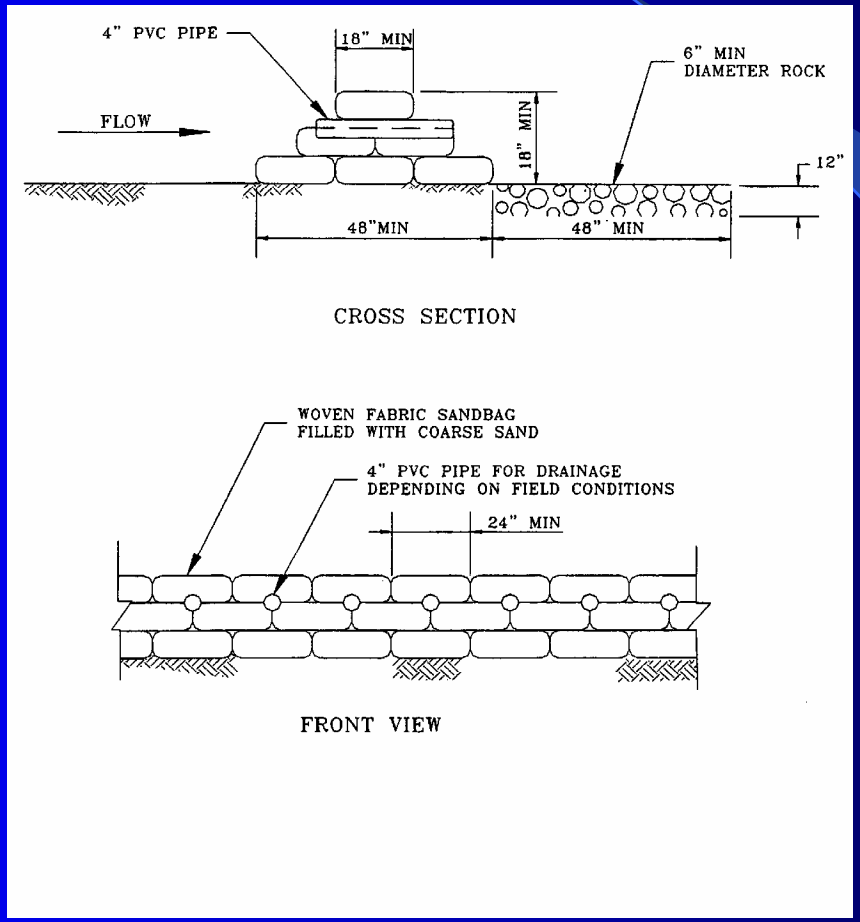


Development Construction

- Sand Bags
  - Should be placed perpendicular to flow
  - At least 2 rows (a third can be installed if necessary)
  - Should be maintained periodically (especially after a storm)
    - Plastic bags rupture easily
    - Construction activities and rains can disrupt sand bagging

Development Construction

Sand Bagging



Development Construction

- Catch Basin Inlet Protection
  - Could be used to prevent entry of sediment to the MS4 as a secondary sediment control (to silt fencing/sand bagging)
  - Various types (check dams/sand bags, viscuine or geo-textile fabric anchored down with sand bags)
  - Check dams/catch basins are better during the wet season but are more costly/labor intensive
  - Viscuine/geotextile fabric over the catch inlets should be used only during the dry season because of flooding issues

Development Construction

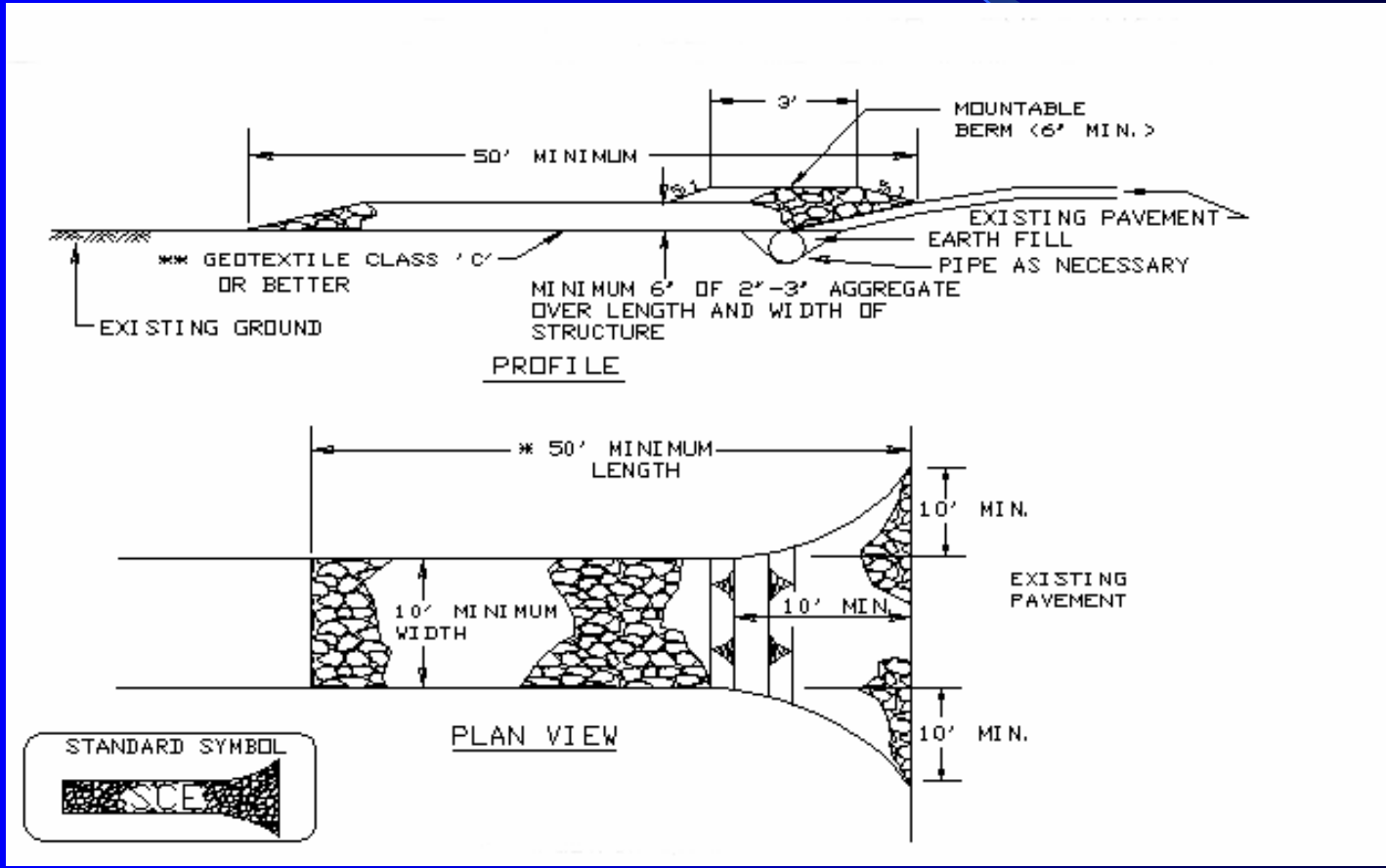
Catch Basin Inlet Protection

Development Construction

- Stabilized Construction Entrance
  - Should be installed if lots of in-and-out heavy vehicle traffic is expected
  - Various configurations (e.g., steel grates, ¾ angular rock over a geotextile)
  - Should be maintained periodically (daily traffic can disrupt some types of stabilized construction entrances)

Development Construction

Stabilized Construction Entrance

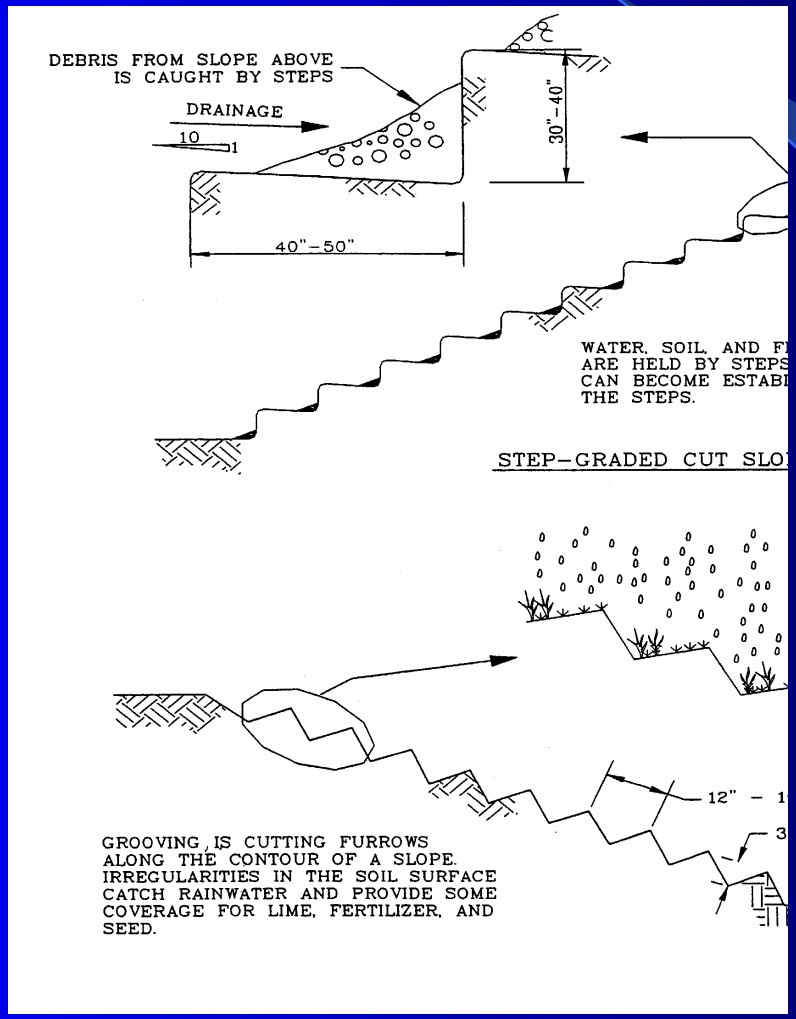


Development Construction

- Slope Stabilization (erosion control)
  - Terracing
  - Vegetation
  - Netting

Development Construction

Slope Stabilization



Development Construction

- BMP Resources
  - California Storm Water Quality Association (CASCA) Storm Water Best Management Practice Handbook - Construction
  - Los Angeles County Model Programs, Development Construction
  - City of Los Angeles and County of Los Angeles Storm Water Web Sites

Development Construction

- Construction Projects Less Than 1 Acre
  - Inspection Requirements
    - Permit does not specify any
      - But for projects that are between .5 acre and less than 1 acre, cities should inspect at least once during the wet season and once during the dry season)
      - Inspection visits should be documented and violations should be noted (use your own or a model)

Development Construction

- Construction Projects More Than 1 Acre
  - City Requires GCASWP As A Condition for Grading Permit Issuance, or
  - L-SWPPP (a local storm water pollution prevention plan)

Development Construction

- GCASWP
  - General Construction Activity Storm Water Permit
  - An NPDES permit Issued by the State Water Resources Control Board
  - Conditions
    - Requires a Fee ($750.00)
    - Submittal of a Notice of Intent to apply for a GCASWP (NOI)
    - Preparation of a Storm Water Pollution Prevention Plan (SWPPP)

Development Construction

- GCASWP - continued
  - Cities required to
    - Verify GCASWP application (WDID number or copy of an NOI)
    - Should not issue grading permits until either of these is provided
    - No ground should be broken until the WDID has been presented and a SWPPP is made available to the City for inspection
    - Inspect at least once during the wet season
    - Report serious violations to the regional board

Development Construction

- Local SWPPP
  - Alternative to GCASWP
    - Requires only a SWPPP that is essentially equivalent to a SWPPP required for GCASWP compliance
    - Downside: City is responsible for ensuring conformance instead of the regional board
    - County of Los Angeles prefers this option (contract cities as well)
    - Cities can pursue this option at any time and for any 1 acre-plus project

Development Construction

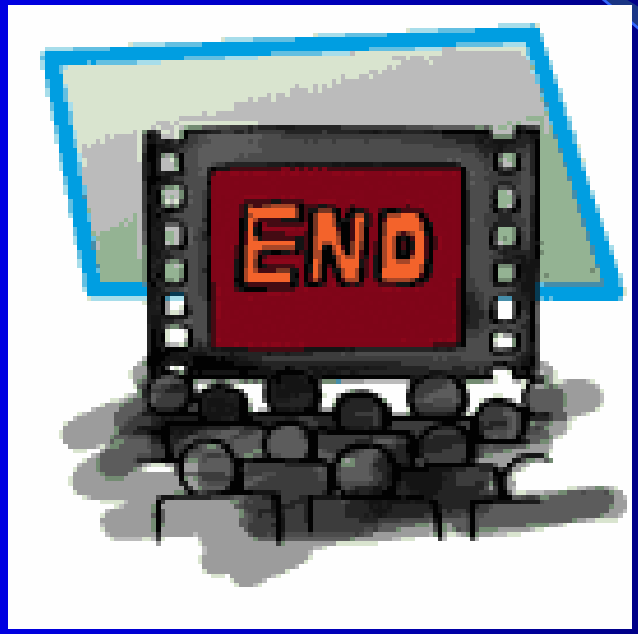
- Local SWPPP - continued
  - Architect/Engineer Certification Requirements
    - *As the architect/engineer of record, I have selected appropriate BMPs to effectively minimize the negative impacts of this project's construction activities on storm water quality. The project owner and contractor are aware that the selected BMPs must be installed, monitored, and maintained to ensure their effectiveness. The BMPs not selected for implementation are redundant or deemed not applicable to the proposed construction activity."*

Development Construction

- Local SWPPP - continued
  - Land Owner/Agent Certification
    - *I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that submitting false and/or inaccurate information, failing to update the Local SWPPP to reflect current conditions, or failing to properly and/or adequately implement the Local SWPPP may result in revocation of grading and/or other permits or other sanctions provided by law."*

Development Construction

- Documentation
  - Keep good records!
    - Need them in the event of an audit
    - Need them to complete annual reports due in September (annual report year coincident with fiscal year)
  - May use existing media or model forms
  - Track grading permits and development construction projects that were conditioned on them using GIS or other data base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