

Proposed Checklist



CITY OF REDMOND **CLEARING, GRADING AND STORMWATER MANAGEMENT** **PLAN REVIEW CHECKLIST**

Project Name: _____ Submittal Dates: _____ Review Dates/Initials: _____

Tax Parcel / Plat # / CIP #: _____ / _____ / _____

Engineer: _____ / _____

Contact: _____ / _____

Phone: _____ / _____

Review Notes: I = Incomplete / Incorrect / Must be Addressed
 C = Complete/Correct
 N = Non-Applicable
 [] = Reference
 __/__/__ = 1st/2nd/3rd Review

REDMOND MUNICIPAL CODE

Plans shall conform to Redmond Municipal Code Chapter 15.24, and the Stormwater Technical Notebook. The general headings listed below must be addressed.

- ___/___/___ Erosion and Sediment Control
- ___/___/___ Conveyance Facilities
- ___/___/___ Water Quality Control
- ___/___/___ Onsite Stormwater Management
- ___/___/___ Water Quantity Control
- ___/___/___ Stabilization of Disturbed Areas
- ___/___/___ Protection of Adjacent Properties
- ___/___/___ Adequate Maintenance Provisions
- ___/___/___ Identification of Critical Areas and Associated Buffers
- ___/___/___ Identification of Easements
- ___/___/___ Accurate Description of Work Area
- ___/___/___ Control of Pollutants other than Sediment on Construction Sites
- ___/___/___ Source Control of Pollution
- ___/___/___ Controlling Off-Site Erosion
- ___/___/___ Other BMPs
- ___/___/___ Separate Public and Private Drainage
- ___/___/___ Limited Topographic Change
- ___/___/___ Tree Preservation Plan
- ___/___/___ Downstream Analysis

OTHER PERMITS / SPECIAL TOPICS

- Projects disturbing 1 acre or more obtain NPDES Construction Stormwater General Permit from Washington State Department of Ecology.
- Projects seeking fee-in-lieu have submitted a proposal and obtained a letter of approval from Natural Resources.

DRAINAGE REPORT REQUIREMENTS

- Project Description [brief narrative description of the project activity and site]
- Existing Site Information
 - Detailed Topographic Map of site, including
 - North Arrow
 - Scale (larger engineering scale may be used as appropriate)
 - Title Block
 - Property Lines
 - Existing contours
 - Area (square feet or acres)
 - Structures
 - Roads
 - Wells and Wellhead Protection Zone (1, 2, 3, 4)
 - Septic Tanks
 - Other underground facilities and utilities
 - Perennial streams and other permanent watercourses
 - Wetlands and buffers
 - Easements
 - Test pit sites
 - Describe any wetlands on site
 - Describe any threatened or endangered species habitats or related concerns
 - Identify any existing TMDL Implementation Plan, Watershed Management Plan, or Wellhead Protection requirements that affects the project or site and how it does so.
 - Larger scale drawing showing all basins that cause runoff to flow to or across site
 - Larger scale drawing showing the downstream/down gradient drainage to the point of discharge to the receiving water body

DRAINAGE REPORT REQUIREMENTS (continued)

- Soils information – include geotechnical report
- Site Layout Narrative and Map
 - Provide a narrative and map that describes the preliminary development layout designed to minimize hydrology impacts. Based upon the analysis of existing site conditions, locate the buildings, roads, parking lots, and landscaping features for the proposed development. Consider the following points when laying out the site:
 - Fit development to the terrain to minimize land disturbance; Confine construction activities to the least area necessary, and away from critical areas;
 - Preserve areas with natural vegetation (especially forested areas) as much as possible;
 - On sites with a mix of soil types, locate impervious areas over less permeable soil (e.g., till), and try to restrict development over more porous soils (e.g., outwash);
 - Cluster buildings together;
 - Minimize impervious areas; and
 - Maintain and utilize the natural drainage patterns.

The development layout designed here will be used for determining threshold discharge areas, for calculating whether size thresholds under Minimum Requirements #6, #7, and #8 are exceeded (see Chapter 2), and for the drawings and maps required for the Stormwater Drainage Report.

Downstream Analysis (Qualitative and Quantitative, as applicable)

Redmond requires an offsite analysis, unless waived by the Stormwater Engineer for projects that add 5,000 square feet or more of new impervious surface, or that convert $\frac{3}{4}$ acres of pervious surfaces to lawn or landscaped areas, or convert 2.5 acres of forested area to pasture.

Mapping

Calculations

Assumptions

For more information, see Section 2.6.2 of Volume I of the 2005 Ecology Manual.

DRAINAGE REPORT REQUIREMENTS (continued)

 / / Permanent Stormwater Facilities

 / / *Highlighted* and annotate copy of flow charts used to determine applicable Minimum Requirements

 / / *Describe how each minimum requirement is being met.*

 / / *Source Control BMPs selected and documented (not applicable for single family residential).* Provide list of source controls selected.

Refer to Volume IV. If the project involves construction of areas or facilities to conduct any of the activities described in Section 2.2 of Volume IV, the “applicable” structural source control BMPs described in that section must be constructed as part of the project. In addition, if the specific business enterprise that will occupy the site is known, the “applicable” operational source control BMPs must also be described.

The project may have additional source control responsibilities as a result of areas specific pollution control plans established by Redmond Watershed Management Plan, when adopted.

 / / *Determine Threshold Discharge Areas for applicable minimum requirements for treatment, flow control, and wetland protection.* Take into account on-site stormwater management (minimum requirement 5) when determining applicable minimum requirements. Include in submittal the 4 step process described in Volume I, section 4.2, Step III of the 2005 Ecology Manual.

 / / *Identify Flow Control BMPs and facilities.* Document the 2 step process identified in Volume I, section 4.2, step IV, of the 2005 Ecology Manual. Flow control standard modifications specific to Redmond may be found in Section 2.5.7 of the Stormwater Technical Notebook.

 / / *Select Treatment Facilities.* Document the 6 step process identified in section 2.9.1.4 of the Stormwater Technical Notebook, which adds local requirements to Volume I, section 4.2, step V, of the 2005 Ecology Manual.

 / / Map showing developed site stormwater facilities layout

 / / Locations and sizes of on-site management, treatment, and detention BMPs and facilities

 / / Locations and sizes of conveyance systems

 / / Calculations for sizing of facilities

 / / Area Draining to SWM System, Bypass and Compensation Areas

DRAINAGE REPORT REQUIREMENTS (continued)

- / / Offsite Areas Draining on Site - generally do not need to be controlled but, must be safely conveyed
- / / Detention Volume Computation - show volume required and volume provided - stage/storage curve must match proposed facility
- / / Output from WWHM (or equivalent model)
 - / / Report
 - / / Additional data not provided in report (for example, screen print of flow control facility sizing or an excel file containing stage/area/volume/ discharge/infiltration data for pond)
 - / / Digital copy of WWHM input
- / / Infiltration Sizing
 - / / Soil Permeability Tests or Gradation per DOE - two (2) tests minimum or one (1) for every 5000 s.f. of infiltration system bottom area. Test must end up being not more than 20' from the final location of the infiltration system. Note on plans - to be verified by field observation.
 - / / Soil Test - must be taken at the proposed bottom of infiltration system.
 - / / Excavation or Boring - is required in the trench area to a minimum depth of 4' below the proposed bottom of the trench. Infiltration not feasible if evidence of ground water or bedrock/hard pan.
 - / / Maximum Drainage Area
 - / / Down Spout Infiltration Systems - 5000 s.f.
 - / / Infiltration Basin - 50 acres
 - / / Infiltration Trench - 15 acres
- / / Conveyance Calculations
 - / / Storm Drain Computations - rational method may be used for pipe sizing. Include: "C" factor determination, time of concentration determination and flow calculations
 - / / Storm Drainage Table (include: inlet number, drainage area, rational method "C" factor and t_c ,)
 - / / Hydraulic Grade Line Computations – hgl for 10 year must be 12-inches below overflow condition (allowances may be made near detention system or large bodies of water surcharge). 25 year = 6 inches below. 50 year = no overtopping.
 - / / Downstream Analysis - provide storm drain computations and hydraulic grade line computations for existing storm drainage systems which are being revised by changes to the drainage area or system expansion.
 - / / Safe 100-Year Flow Conveyance - the 100-year storm flow shall not impact any buildings (this is beyond traditional conveyance system).

DRAINAGE REPORT REQUIREMENTS (continued)

___/___/___ Information presented in the calculations is consistent with plan.

___/___/___ Construction Stormwater Pollution Prevention Plan (SWPPP) [12 elements]

DRAWING FORMAT AND CONTENT

___/___/___ Construction Drawing Size - 22" x 34"

___/___/___ Drawing Content - shall contain all information necessary to review the design and to construct the improvements.

___/___/___ Title Block/Drawing Title

___/___/___ Issue or Revision Date

___/___/___ Section, Township, and Range

___/___/___ Project Name & Phase

___/___/___ Tax Parcel/Plat Number

___/___/___ Legal Description

___/___/___ Engineer Information - name, address, phone and contact

___/___/___ Owner Information - name, address, phone and contact

___/___/___ Vicinity Map - showing the general location of the project

___/___/___ City Approval Block – (Private projects: must be on every sheet at lower right hand corner, Public projects: City Engineer signs cover sheet.)

___/___/___ Horizontal Scale - 1"=20'

___/___/___ Vertical Scale - 1"=5'

___/___/___ Vertical Datum - minimum of two (2) C.O.R. datum must be shown

___/___/___ Horizontal Datum - minimum of two (2) C.O.R. datum and NAD 83-91 coordinates on two (2) minimum points at exterior lot/boundary corners must be shown

___/___/___ North Arrow & Scale Bar - shown in the upper left hand corner of the drawings

___/___/___ Drawing Layout - shall be laid out to afford the maximum understanding possible

___/___/___ Profiles of Storm Drainage Systems - required for public drainage systems and may be required for private systems where conflicts with other utilities are possible

___/___/___ Profile Information - include existing and proposed grade, all utility crossings and crossings clearances, pipe slope, pipe size, pipe length, pipe material, manhole depths, inverts, etc.

___/___/___ Plan View Information - shall indicate and identify all existing and proposed features, utilities, street improvements and paving, and other features that will affect the design and construction of the site grading and the drainage system.

___/___/___ Engineer Stamp and Signed and Dated Consistently with Issued or Revised Date - drawings shall be stamped before submittal and review by the City.

___/___/___ Legend - identify line types and symbols used

___/___/___ Property Data - shall include property lines with bearings and distances, right-of-way lines, parcel numbers, lot numbers, plat names, and street names.

DRAWING FORMAT AND CONTENT (continued)

- / / Phased Project Drawings - depict all construction necessary to complete the phase (each phase shall be independently approved).
- / / Standard Notes found in Appendix of the Stormwater Notebook
- / / Identify source and dates of survey information used in design.

SITE PLAN (All Proposed Information must be Distinguishable from Existing Information)

- / / Property Lines - including bearings and distances
- / / Right of Way - including bearings and distances
- / / Lot Numbers
- / / Site Area - shown in s.f. and acres
- / / Streets - edge of pavement or curb and sidewalk, centerline, and name shown
- / / Contours - (dashed lines for existing and solid lines for proposed) 1' or 2' interval (slopes 40% or greater may be shown with 5 foot contours)
- / / Onsite Features - easements, buffers, +40% slopes, etc.
- / / Offsite Information - all features within offsite areas that drain onsite, and all information within 20' of all property lines
- / / Utilities (water, sewer, telephone, cable television, gas, power, etc.)
- / / All Utilities Easements Shown with Dimensions Labeled
- / / Setbacks
 - / / Building
 - / / Steep Slope (in accordance with geotechnical recommendations)
 - / / Other _____
- / / Parcel Information – Area (s.f.), existing, new, and proposed impervious area, and water quality and quantity design storms

CLEARING AND GRADING

- / / Fully Identify Work - clearing and grading limits shown, with stockpile/staging areas and sequence of construction
- / / Disturbed Area - in acres must be shown on the clearing and grading plans
- / / Limits of Clearing - fenced with 42" orange safety fence or approved filter fence
- / / Trees to Remain - shall be shown with the dripline designated (must have protective fencing at five feet (5') beyond the dripline if adjacent to cleared areas) - no grading or filling permitted within the dripline. Show pertinent information within 50' of clearing.
- / / Buffers of Critical Areas
- / / Steep Slope Setback
- / / Grades - show existing and proposed contours

CLEARING AND GRADING (continued)

- /___/___ Cut/Fill - shall not exceed 8'
- /___/___ Stabilization of Disturbed Areas
- /___/___ Stockpile location and ground slopes
- /___/___ Estimate of Earthwork Quantities

TEMPORARY EROSION AND SEDIMENTATION CONTROL

- /___/___ Timing and Stabilization of Sediment Trapping Measures
- /___/___ Silt Fence [COR Std 502] (no straw bale permitted - must use silt fence)
- /___/___ Construction Entrance [COR Std 503]
- /___/___ Clean Water Diversion - areas onsite and offsite that are not disturbed must be diverted away from disturbed areas.
- /___/___ Dewatering Construction Sites – show sediment traps
- /___/___ Stabilization of Temporary Conveyance Channels and Outlets – no erosion for 10-year/24-hour storm
- /___/___ Storm Drain Inlet Protection – inlet protection must be provided for all storm drain inlets within the construction vicinity
- /___/___ Temporary Swales and/or Trenches - show shape, dimensions, spot elevations every 50', drainage area, channel stabilization treatment type and computations of flow and velocity (cannot exceed 4 fps without rip-rap lining) [COR Std 504].
- /___/___ Check Dams - show detail, dimensions and quantity of rock protection. No straw bales allowed.
- /___/___ Temporary Culverts - show drainage area, 1' minimum cover, type of pipe, length and diameter, and slope.
- /___/___ Temporary Sediment Pond(s) - show size, bottom elevation, top elevation, cleanout elevation, outlet protection, drainage area, volume required, volume provided, cross-section through the dam, profile through the pond, spillway and consistent with calculations. Not allowed near future infiltration sites.
- /___/___ Rip-rap Outlet Protection - show size of stone, quantity and stabilization fabric under stone [COR Std 620].
- /___/___ Maximum open trench length = 300'
- /___/___ TESC performance bond posted (Rough Grade Permit only)
- /___/___ Construction Access Routes
- /___/___ Note concerning Removal of Temporary BMPs upon completion of project
- /___/___ Preservation of Natural Drainage Systems
- /___/___ Sequence of Construction - describe how construction will proceed in order to limit erosion, include phasing if appropriate.
- /___/___ Remove all TESC measures following final site stabilization.

STORMWATER PLAN

- / / Minimum Pipe Size - 12” minimum for public storm drain systems and 6” minimum for private systems.
- / / Pipe Data - pipe size, length, slope, and material labeled
- / / Horizontal Clearance - 5’ from all other utilities and structures, and 8’ from trees (street trees may be 3’ minimum with root barrier).
- / / Vertical Clearance - 1’ from other utilities - 18” for sewer with storm above sewer
- / / Design Slope - 0.25% minimum and 20% maximum
- / / Rockeries/Retaining Walls - shall not cross or be near storm drain pipes. Exceptions shall only be approved where no alternatives exist. Any crossing of a wall shall be perpendicular to the wall and special construction techniques including steel casings may be required. No rockeries allowed over roof or footing drains
- / / Structure Data - structure number, structure type and/or size, type of cover, rim elevation, and all pipe inverts labeled
- / / Structure Spacing – 300’ typical, varies by size of pipe.
- / / Easements – shown with dimensions labeled - 20’ minimum width - no obstructions allowed in easements
- / / Drains Behind Sidewalk - required in all cut situations and at the base of slopes
- / / Cleanouts Spacing - to be at bends, end of lines and at 100’ o.c. (required in all cut situations and at the base of slopes)
- / / Cleanouts Specifications - shall be specified with Carson boxes or equal with ungasketed caps in soft area and traffic bearing in paved areas [COR Std 621].
- / / Footing/Foundation Drains - including pipe size, material, and cleanouts shall be connected to the storm drain system (shown as stubbed to lots only for plats).
- / / Roof Drains - including pipe size, material, and cleanouts shall be connected to the stormdrain system (shown as stubbed to lots only for plats) 6” minimum. Maximum of three roof drain stubs are allowed to be connected per collection pipe.
- / / Footing/Foundation Drains and Roof Drains - shall be connected at a structure only (private onsite structure or at the street).
- / / 3’ Paved Area - around roof drain cleanout or catch basin Type 1A required
- / / Outfall Protection - sized for 10-year storm (unless otherwise specified by Development Services Division); provide: type, size dimensions and quantity of stone. Stone must be laid on approved filter fabric. Maximum allowable discharge velocity to rock outlet is 10 fps without special design [COR Std 620].
- / / In control structures, hoods for risers over 15” in diameter shall have an annular space equal to the riser pipe flow area. / /

STORMWATER PROFILES (Required for Public System)

- ___/___/___ Profile - pipes and structures
- ___/___/___ Other Utilities - labeled and designate size and type
- ___/___/___ Profile grades - show and label existing and proposed grades
- ___/___/___ Pipe Cover - 18" minimum
- ___/___/___ Pipe Profile Information - show invert and top of pipe, pipe size, pipe material, and design slope.
- ___/___/___ Drop structures only allowed per approval of Stormwater Engineer
- ___/___/___ Grates: through-curb inlets at sag curves, possible bypass points and every third inlet; Vaned Grates for public system and private, unless otherwise specified by the Stormwater Engineer.
- ___/___/___ Lids: solid round lids for all travel lanes (existing rectangular grates being retrofitted with solid lids in traffic lanes can be retrofitted with round lids). – Solid rectangular lids may be used in non-traffic lanes or landscaped areas where inlets are not required.
- ___/___/___ Utility Crossings - all crossings must be shown, label utility type, line size, invert of utility and storm lines and clearance between pipes (1' minimum vertical clearance and 30 degrees minimum crossing angle).
- ___/___/___ Structure Profile Information - label type of structure, structure number, size, and pipe inverts
- ___/___/___ Berm Section - in accordance with geotechnical recommendation for open ponds
- ___/___/___ Public Storm Structure – with 4' or greater from the top to the invert must be Type II catch basin - 5' for private structure - see Standard detail 608
- ___/___/___ Type III catch basin required for structures with bottoms between 12' and 25'. See Standard Detail 615.

STORMWATER QUALITY TREATMENT AND FLOW CONTROL FACILITIES

Wetpond / Detention Pond

- ___/___/___ Setbacks - 10' minimum away from structure and ROW, and 50' minimum away from steep slope (15% or greater)
- ___/___/___ Length/Width Ratio - minimum of 3.0 (preferred)
- ___/___/___ Interior Slope - maximum of 3H:1V. A 2:1 slope below water surface OK where no geotechnical liner is used and pool depth is under 4'.
- ___/___/___ Pond fencing is required where walls or slopes steeper than 3:1 are designed.
- ___/___/___ Permanent Pool - minimum of 6-month/24-hour basin runoff volume.
- ___/___/___ Live Storage - maximum of 50-year/24-hour release.
- ___/___/___ Berm Embankment - maximum of 6' high (preferred)
- ___/___/___ Toe of Embankment - minimum of 55' from ROW.
- ___/___/___ Pond permanent pool depth under 8'
- ___/___/___ Multi-Celled - minimum of 2 cell (preferred)
- ___/___/___ Emergency Overflow - for open pond, shall be completely separated from pond outlet.
- ___/___/___ 5' wide safety bench set at or 1' below the permanent water surface elevation around perimeter of pond. Plant bench with wetland planting.

STORMWATER QUALITY TREATMENT AND FLOW CONTROL FACILITIES (continued)

- Trees must be setback from the 50-year storm stage. Maintenance access to the pond must be unhindered by trees.
- Natural shape preferred
- Maintenance access - a Vactor truck shall be able to access the control structure, a backhoe shall be able to access the pond bank.
- Inflow pipes to the pond discharge at or above the control elevation. (Stormwater Engineer may approve submerged inflow).
- Ponds lined or over impermeable soil in WPZ 1, 2, 3

Underground Detention

- Controlling Orifice Computation - plans and computation must match
- Control Structure - designed and detailed (plan view and cross section required) shall conform to COR Std 610 or equivalent.
- Profile of Detention Pipe or Vault
- Structural Details and Vault Calculations (separate building division review and permit required)
- Inverts - show for all pipes entering and leaving control structure or vault
- Vent - minimum 2" diameter for pipe detention systems, 12" diameter for vaults
- Maintenance Vehicle Access - required to both ends of detention pipes and two (2) accesses to vaults (one near control structure)
- Maintenance access road provided with drivable surface to control structure
- Maximum Distance between Detention System Access Points - 100' and ladder access must be provided at all ends.
- Easement - 5' minimum around all public detention systems (20' min. width)
- Minimum 10-foot setback from structures, property lines, and right-of-way, or minimum distance to allow construction of a 1:1 slope to the bottom of the facility, whichever is greater.
- Fire Hydrant - within 100 feet of detention pipe systems 4' in diameter or larger, and for all vault systems over 1000 cubic feet of total volume may be required.
- Tank Note- "Detention tanks may be air tested before final acceptance".

Infiltration

- Wellhead Protection Zone noted and accommodated.
- If UIC is part of design, then UIC is registered with Ecology.
- Soil Permeability Tests or Gradation per DOE - two (2) tests minimum or one (1) for every 5000 s.f. of infiltration system bottom area. Test must end up being not more than 20' from the final location of the infiltration system. Note on plans - to be verified by field observation.
- Soil Test - must be taken at the proposed bottom of infiltration system.
- Excavation or Boring - is required in the trench area to a minimum depth of 4' below the proposed bottom of the trench. Infiltration not feasible if evidence of ground water or bedrock/hard pan.

STORMWATER QUALITY TREATMENT AND FLOW CONTROL FACILITIES (continued)

- / / Infiltration Bed - all infiltration system should be a minimum of 5' above the seasonal high water mark, bedrock, hardpan and impermeable layer. May be reduced to 3' with mounding analysis.
- / / Setbacks
 - / / Minimum 200' from drinking water wells and springs, septic tanks and drain fields
 - / / Minimum 20' down slope and 100' up slope of building foundations
 - / / Minimum 10' from NGPE and property line
- / / Down Spout Infiltration System - shall be designed with overall project for typical lot with individual homes.
- / / Maximum Drainage Area
 - / / Down Spout Infiltration Systems - 5000 s.f.
 - / / Infiltration Basin - 50 acres
 - / / Infiltration Trench - 15 acres
- / / Infiltration System Location - may not be located in an area previously used as a sediment trap.
- / / Inflow to an Infiltration System - must first pass through a pre-settling BMP or a biofilter. Disturbed areas shall not drain to the infiltration system.
- / / Add the following note to the plan: "The contractor shall construct infiltration systems only after the entire area draining to it has been stabilized".
- / / Filter fabric is required on all sides, top and bottom of infiltration trenches.
- / / Maximum Trench Length - 100'
- / / Observation Well - one is required per trench
- / / Provisions for the 100-year overflow path required.
- / / Maximum Ponding - in an open infiltration basins is 3' for the maximum storm entering the basin (not to exceed the 100 year - this includes headwater to pass storm flow out any overflow) 1' of freeboard is required to the top of the structure.
- / / Basins Side Slopes - shall not exceed 3:1
- / / Infiltration Basin Berm - must use impervious material for berm and the berm must be 2' wide at the top for each foot in height as measured from the ponding area bottom.

Biofiltration

- / / Required Length - 200' minimum (may be reduced to 150' for redevelopment projects only).
- / / High flow bypass required unless otherwise designated.
- / / Maximum Velocity - 1 fps for the design storm. 3 fps for stability
- / / Swale Slope - For slope greater than 2.5%, check dams must be provided.
- / / Swale bottom width - Maximum 8 feet
- / / Setbacks - no buildings or trees within 8' of the normal high water.

STORMWATER QUALITY TREATMENT AND FLOW CONTROL FACILITIES (continued)

- / / Maintenance Access – A backhoe must be able to access at least one side of each biofiltration swale.
- / / Easement - public systems shall be in tracts, or easements, unless approved during site review.
- / / Cross Section - show dimensions, design flow depth and 1’ minimum freeboard
- / / Vegetation Specifications - shall provide for water tolerant plants and shall address shading of vegetation. Biofilter planting shall be shown on the civil drawings and subject to approval from the Construction Division.
- / / Swales/Trenches - including, grading, slope, spot elevations (a minimum of every 50’ and at both ends), bottom width, side slopes, and lining.
- / / Biofiltration swales lined or over impermeable soil in WPZ 1,2,3
- / / Setback from biofiltration swale top of bank to property line shall be a minimum of 5’.

LOW IMPACT DEVELOPMENT SITE ASSESSMENT

- / / Survey
- / / Soils report
- / / Land cover assessment
- / / Streams, wetlands, buffers
- / / Flood hazard areas
- / / Drainage Report
- / / Compost Amended Soil or Protection of Undisturbed soils
- / / LID BMPs to be used _____
- / / Credits used in modeling _____

OPERATIONS AND MAINTENANCE

- / / O&M Manual per Section 2.5.9 of the Technical Notebook
- / / Provisions for long term maintenance noted on plat
- / / Concrete inlets or channelized catch basins may be installed only where downstream catch basins are available to collect sediment. They should be used where sump maintenance would be difficult.
- / / Maintenance access to all catch basins and drainage structures has been provided. Extreme cases may be waived by the Stormwater Engineer.
- / / Roof drain stubs should cross sidewalk at close to a 90 degree angle.
- / / A maximum of three (3) single family houses may share a common roof drain stub.

ADDITIONAL COMMENTS

1. _____
2. _____
- _____
- _____
- _____
- _____