



**SITE DEVELOPMENT**

**NOTE:** excavation of fill in excess of 500 cu. Yds. requires SEPA

Engineering Cost Estimate for Site Work (attach worksheet) \$ \_\_\_\_\_

Number of CY to be excavated: \_\_\_\_\_ Number of CY to be filled: \_\_\_\_\_

Will fill be brought on site: \_\_\_\_\_ Where does imported fill originate from: \_\_\_\_\_

Does fill contain any potentially hazardous materials: \_\_\_\_\_

Will excavated materials be taken off site: \_\_\_\_\_

Where will materials be deposited: \_\_\_\_\_

Briefly describe existing terrain, vegetation, and improvements on subject site: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Has a soils report been completed on the subject site: \_\_\_\_\_

Are any of the following features located on the site or within 200 feet of the site:

Stream          Lake          Wetland          Slope >15%          Soft compressible soils

Is any part of the proposed land surface modification within the above: \_\_\_\_\_

Is the project site located within an identified 100 year flood plain: \_\_\_\_\_

Will the proposed land surface modification change the points where stormwater or ground water enters or exits the site:          Yes          No

Will the proposed land surface modification change the quality , quantity, or velocity of stormwater or groundwater:          Yes          No

Will any trees be removed as part of this action: \_\_\_\_\_ Number of trees removed: \_\_\_\_\_

Percent of significant trees on site: \_\_\_\_\_

Is a DNR permit required: \_\_\_\_\_ (attach copy if yes)

**General Plan Criteria**

1. Plan sheets, detail sheets and profile sheets or combined plan, profile and detail sheets shall be on 24"x36" sheets. Originals shall be reproducible mylar or equivalent. One copy of plans in electronic format shall also be submitted. Contact the Public Works Department for AutoCAD version.
2. The layout of all pages shall be consistent (i.e., the north arrow always points the same direction).
3. Drafting details shall generally conform to APWA Standard Symbols; with lettering size (before reduction) no smaller than 1/8". Existing features shall be shown with dashed lines, and/or are half-toned (screened), in order to clearly distinguish existing features from proposed improvements.
4. Each sheet of the plan set shall be stamped, signed and dated by a professional civil engineer licensed in the State of Washington. At least one sheet showing all boundary survey information must be provided that has been stamped by the professional land surveyor licensed in the State of Washington.

5. A title block shall be provided on each plan sheet. The title block shall list, at a minimum, the development title, the name, address, and phone number of the firm or individual preparing the plan, a revision block, page numbering, and sheet title (i.e., road and drainage, grading, erosion/sedimentation control).
6. Location and label for each section or other details shall be provided.
7. Native Growth Protection Easements shall be designated.
8. Wetlands shall be labeled with the number from the wetland inventory, or shall be labeled "un-inventoried" if not listed on the wetland inventory.
9. All match lines with matched sheet number shall be provided.
10. All division or phase lines and the proposed limits of construction under the permit application shall be indicated.
11. The *General Construction Notes* for streets and utilities that apply to the plan shall be provided on the plans.
12. Provide City approval blocks on all sheets of drawing
13. Legal Description on plans
14. Notify Dial-A-Dig: 1-800-424-5555 to be on plans
15. Show oversize quarry temporary construction entrance
16. Include "Keep Streets Clean" notice on plans (see attachment).
17. Three (3) copies of any covenants, conditions (CC&Rs) and restrictions
18. Vicinity map on plans
19. Current Zoning on plans
20. *General Notes* which include specific reference to MUTCD.
21. Table of Contents on first sheet (if there are more than 3 pages, you may use a separate sheet).
22. Total impervious surface area on plans

**Site Plan and Roadway Elements**

1. Property lines, lot numbers, right-of-way lines, and widths for proposed road and intersection roads shall be provided.
2. All existing and proposed roadway features such as centerline, edge of pavement and shoulder, ditch lines, curbs and/or sidewalks shall be provided. In addition, points of access to abutting properties and roadway continuations shall be shown. Show street names and numbers.
3. Existing and proposed topography contours shall be shown at 2-foot intervals (5-foot intervals for slopes greater than 15 percent, 10-foot intervals for slopes greater than 40 percent). Contours may be extrapolated from USGS mapping, aerial photos or other topography map resources. However, contours shall be field verified for roadway and stream centerlines, flood plains, drainage tracts easements and conveyance systems. Contours shall extend 50 feet beyond property lines to resolve questions of setback, cut and fill slopes, drainage swales, ditches, and access or drainage to adjacent property.

4. The location of all existing utilities and proposed utilities (except those designed by the utility and not currently available) shall be shown to the extent that these will be affected by the proposed project. All existing utility poles shall be clearly identified.
5. All roads and adjoining subdivisions shall be identified.
6. Right-of-way for all proposed roadways shall be shown with sufficient dimensioning to clearly show exact locations on all sections of existing/proposed dedicated public roadway.
7. For subdivision projects, drawing scales shall be generally 1"=50', however, 1"=100' shall be optional for development of lots one acre or larger. For commercial or multi-family projects, scales shall be generally 1"=20' however, 1"=40' and 1"=50' are acceptable. Details for clarification, including those for intersections and existing driveways, should be shown on a larger scale.
8. Show the location, identification and dimensions of all buildings, parking areas, property lines, streets, alleys and easements.
9. Verify condition of all public right-of-way and the rights to use them as proposed.
10. Show locations of structures on abutting properties within 25 feet of the proposed project site.
11. Provide section details of all retaining walls and rockeries including sections through critical portions of the rockeries or retaining walls. Walls over 4 feet in height must be engineered and stamped by a Registered Professional Engineer.
12. Show all existing and proposed buildings with projections and overhangs.
13. Traffic control plan (per MUTCD).

#### **Temporary Erosion Control and Sediment Control Plan (TESC) & Drainage**

1. Use the same Engineering Plan information as the base for the TESC plan. A smaller scale may be used to provide better comprehension and understanding.
2. Show all limits of clearing for flagging in the field.
3. Provide perimeter control of runoff on all necessary property boundaries.
4. Locate the construction entrance and detail. Specify length, width, thickness and rock size of the entrance.
5. Identify drainage features such as streams, wetlands, roads, bogs, depressions, springs, seeps, swales, ditches, existing pipes and seasonal water locations.
6. Specify the construction sequence
7. Identify all utility corridor locations other than roadways, associated clearing limits and erosion/sedimentation control measures for all on-site and off-site utility construction.
8. Provide TESC plan notes.
9. Provide all details necessary to clearly illustrate the intent of the erosion/sedimentation control design. Calculations are enclosed for pond/trap sizing.
10. Delineate drainage divides before and after proposed construction, indicating with arrow the flow direction to structural control measures. Use a bold dashed line showing developed condition.

11. Show all drainage pipes, ditches or cut-off trenches associated with erosion\sedimentation control.
12. Provide all temporary pipe inverts or minimum slopes and cover.
13. Show grades, dimensions, location, and direction of flow in all ditches and swales.
14. Provide details of bypassing off-site runoff around clearing limits\disturbed areas and sediment pond trap.
15. Indicate locations and outlets of any possible de-watering systems.
16. Designate location for grass-lines swales, interceptor trenches or ditches.
17. Provide all pertinent information from soils report or other special reports relating to erosion/sedimentation control.
18. Specify areas to receive special treatment such as jute netting, rock lining, and sod.
19. Specify soil cover practices and locations to be used for all disturbed soil areas.
20. Show the locations of all sediment traps/ponds, if required, and all associated pipes and structures.
21. Dimension pond berm widths and all inside and outside pond slopes (silt ponds).
22. Indicate the trap/pond storage required and the depth, length and width dimensions.
23. Provide typical section views throughout pond and outlet structure. Calculations for required detention are enclosed.
24. Provide typical details of gravel cone and standpipe, and/or other filtering devices.
25. Detail stabilization techniques for outlet/inlet.
26. Detail control/restrictor device location and detail.
27. Specify mulch and/or recommended cover of berms and slopes.
28. Provide rock specifications and detail for rock check dam, if used.
29. Specify spacing for rock check dams as required for actuarial slopes on-site.
30. Provide front and side sections of typical rock check dams.
31. Show the location and relative sizes of other natural features such as rock outcropping, existing vegetation and trees 12" in diameter and greater and any deciduous trees 8" in diameter that could be disturbed by the project improvements and construction activities (within tree canopy), noting species.
32. Complete Technical Information Report (TIR), per the DOE Stormwater Manual.
33. Provide information on the plans regarding proposed impervious area per lot (if platting) or overall proposed impervious area for other site development.

### **Utilities**

1. Sanitary sewer (plan view): Station shown at each manhole; manholes numbered; manhole type designation; flow direction with arrow on pipe; depth at property line and distance from downhill manhole for side sewer; distance from water lines.
2. Sanitary sewer (profile view): manholes numbered; invert elevation showing direction (in and out); rim elevation; grades shown (decimal form FT./FT.); type of pipe; size of pipe; length of pipe (in L.F.); existing utilities shown.

3. Water (plan view): system map (1"=20') showing existing and proposed with line size, valves and hydrants; existing utility conflicts; fixtures (need horizontal and vertical control); fire hydrants (flange elevation 2" above finished grade; blow off (at end of line); vacuum and air release valves when required; tees, crosses, elbows, adapters and valves need coupling type and meter locations; Fire Department connection (storz); thrust blocking required at all fittings including in-line valves; distance from sewer.
4. Water (profile view): existing utility crossings; show fixtures; show valves and couplers; size of water main; length of water main in L.F.; grades (engineered design grade to F.L.).
5. Storm Sewer (erosion control plan report): Section 1 - construction sequence and procedure; Section 2 - trapping sediment; Section 3 - permanent erosion control and site restoration; Section 4 - geotechnical analysis and report; Section 5 - inspection sequence.
6. Storm Sewer (illustrations and specifications): vicinity map; project boundaries; sub-basin boundaries; off-site area tributary to project; contours; major drainage features; flow path.
7. Storm Sewer (site map): existing topography at least 50 feet beyond site boundaries; finished grades; existing structures within 100 feet of project boundary; utilities; easements (existing and proposed); environmentally sensitive areas; 100 year flood plain boundary; existing and proposed wells within 1,200 feet of proposed retention facility; existing and proposed fuel tanks; existing and proposed on-site sanitary systems within 100 feet of detention/retention facilities; proposed structures including roads and parking surfaces; lot dimensions and areas; proposed drainage facilities and sufficient cross-sections and details to build.
8. Storm Sewer (plan view-conveyance system): station and number at each manhole/catch basin; manhole/catch basin type and size; manhole/catch basin rim elevation; flow direction with arrow on pipe/channel; type and size of pipe; length of pipe in lineal feet.
9. Storm Sewer (profile view-conveyance system): station and number at each manhole/catch basin; rim elevation; invert in and out; length of pipe in lineal feet; grades (FT./FT.); design velocity.
10. Storm Sewer (work map): unit areas including off-site contributing areas; percentage impervious; average slope; estimated ultimate infiltration rate; conveyance date, identifier (for reference to model output), slope, inverts; overland flow paths and distances; soil types; spot water surface elevations, discharges and velocities for the design event.
11. Storm Sewer (erosion control drawing): soil types; locations of soil pits and infiltration tests; construction entrance detail; silt fences and traps; mulching and vegetation plan; clearing and grubbing limits; existing and finished grade; details and locations of all BMPs recommended; location and details of temporary sediment ponds.
12. Storm Sewer (maintenance report): required type and frequency of long-term maintenance; identification of responsible maintenance organization; frequency of sediment removal; cleaning of catch basins; vegetation control; annual cost estimate of maintenance.
13. Storm Sewer: construction inspection report.
14. Illumination and Signals (lighting): station and offset to fixtures; pole type-including manufacturer and model number; mounting height, arm length, anchor bolt size and pattern; power source wire size, type, conduit, line loss calculations; luminaire type, lamp wattage; location of service disconnects (5% maximum voltage drop from source to farthest luminaire); J-box location.
15. Illumination and Signals (signals - follow WSDOT specs unless otherwise required by the City): station and offset to signal base, cabinets, ped, lead, loops, etc.; wiring schedule, signal heads

and mounting assembly; detection loops; opticom; control cabinet, size and layout; power source; conduit; wire size and type; J box schedule; pedestrian signal type with push button; controller type, configuration and wiring schematic.

### **Landscape Plans**

1. Landscape plans for sites over  $\frac{1}{2}$  acre shall be prepared by a landscape architect.
2. Significant Tree Retention Plan per SMC 17.145.040
3. Plans shall be drawn to scale and include dimensions and distances.
4. Delineate existing and proposed parking spaces and/or other vehicular use areas.
5. Designate by name and location all plant material to be installed or preserved in accordance with these or any other applicable standards.
6. Identify and describe all other landscape material and elements proposed to be used.
7. Show all landscape features, including areas of vegetation to be preserved in relationship to all existing or proposed building and/or any other improvements to the site.
8. Include a tabular summary clearly indicating the relevant statistical information necessary for the planning director to determine compliance with the provisions of these standards. This information shall include gross acreage, square footage of vegetation, preservation areas, the number of trees to be planted or preserved, square footage of paved areas, and such other information as the planning director may require.
9. Include irrigation plans, including location and coverage of sprinkler heads, if an irrigation system is proposed.

### **Parking Plans**

1. Plans shall be drawn to scale and include dimensions and distances
2. The plan shall accurately depict the required number, dimensions, and location of parking spaces, other spaces in excess of the requirements, access isles, driveways, vehicle turn-around and/or backup areas, areas designated for trash collection, off-street loading areas (if required), the distance of the parking area to the structure or uses it is intended to serve, pedestrian walkways, required landscaping, and the relationship of the parking lot to the street system into which the vehicles will discharge.