

CITY OF WENATCHEE

P.O. BOX 519 ● WENATCHEE, WASHINGTON 98807-0519 ● (509) 888-3202

DEPARTMENT OF PUBLIC WORKS PRE-APPROVED PLANS POLICY

Policy G-6: ENGINEERING PLAN REQUIREMENTS

All subdivision, multi-family, commercial, and single-family residential projects, as directed by Public Works, which submit for grading or building permit must include engineering drawings which have been stamped, signed and dated by a professional engineer licensed in the State of Washington. The plans must also include all of the applicable requirements outlined below:

GENERAL PLAN FORMAT: Provided N/A

- 1. Plan sheets and profile sheets or combined plan and profile sheets, specifications and detail sheets shall be on sheet size 22" x 34" or 11" x 17".
- 2. The detail sheet(s) shall include all standard details which are applicable to the project plus any details which are unique to the project. The detail sheet(s) shall provide sufficient information to construct complex elements of the project. Details may be provided on the plan and profile sheets if space allows. Optionally, WSDOT Standard Plans and City of Wenatchee Standard Details may be assembled in an 11" x 17" project specific packet with cover page identifying the project.
- 3. Each submittal shall contain a project information/cover sheet with the following information:
 - Title: Project name and City of Wenatchee Community Development or Public Works Permit Number (as applicable).
 - Table of contents (if more than three pages).
 - Vicinity map with outline of project location.
 - Legal description and site address.
 - Name and phone number of utility field contacts and One-Call number,
 - o 1-800-424-5555.
 - Name and phone number of surveyor.
 - Name and phone number of owner/agent.
 - Name and phone number of applicant.
 - Name and phone number of engineering firm preparing plans (company logos acceptable)

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- City of Wenatchee's pre-construction notification requirements.
- City of Wenatchee Public Works inspection request line phone number, 509-888-3263.
- 4. 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, date, page (of pages) numbering, permit number, City approval box, and sheet title (e.g. Road and Drainage, Grading, Erosion/Sedimentation Control, Sewer, Water).
- 5. All plan sheets must have a NORTH arrow and must indicate the drawing scale bar. Acceptable plan scales are 1"=10' and 1"=20". For profiles, the vertical scale shall be 1"=5'.
- 6. All plans shall use these Datum and shall indicate the temporary or permanent benchmark used in the survey:
 - Vertical Datum: NAVD 1988 vertical US Foot,
 - Horizontal Datum: Washington State Plane North NAD 83 (2011)
- 7. Wetlands and critical areas shall be indicated on the plans as required by the department of Community Development
- 8. Existing features shall be shown with dashed lines, and/or half-toned (screened), in order to clearly distinguish existing features from proposed improvements.
- 9. Plan sheets shall indicate all property lines, right-of-way (RW) lines and easements.
- 10. Existing and proposed contours must be shown on all plan views. Contours shall be shown at 2-foot intervals (5-foot intervals for slopes > 15%; 10-foot intervals for slopes > 40%). Contours shall be field verified for roadway and stream centerlines, floodplains and for 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.
- 11. All existing utilities, structures, pavement, etc. to be removed shall be clearly labeled as "Existing to be removed".

WATER SYSTEM IMPROVEMENTS

Provided N/A

- Show all existing and proposed water system features including, but not limited to:
 - a. Water mains.
 - b. Water valves.
 - c. Water meters.

- d. Fire hydrants.
- e. Blow-offs.
- f. Air and vacuum release valve assemblies.
- g. Pressure reducing valves.
- h. Fire sprinkler lines
- i. Double check-valves and vaults
- j. Fire Department Connections (FDC).
- k. Thrust blocking.
- 2. Indicate all easements required for water main extensions.
- 3. Length, size and pipe type shall be shown for all main extensions, Fire sprinkler services and domestic services.
- 4. Show the water system and the sanitary sewer system on the same plan view for verification of minimum separation requirements.
- 5. Provide detailed info for all proposed utility crossings:
 - a. Double check-valves and vaults
 - b. Fire Department Connections (FDC).
 - c. Thrust blocking.
- 6. Indicate all easements required for water main extensions.
- 7. Length, size and pipe type shall be shown for all main extensions, Fire sprinkler services and domestic services.
- 8. Show the water system and the sanitary sewer system on the same plan view for verification of minimum separation requirements.
- 9. Provide detailed info for all proposed utility crossings

SANITARY SEWER SYSTEM IMPROVEMENTS

Provided N/A

- Show all existing and proposed sanitary sewer system features including, but not limited to:
 - a. Sewer mains (gravity and force mains).
 - b. Side sewers (laterals).
 - c. Manholes.
 - d. Clean outs.
 - e. Backflow preventers.
 - f. Existing septic tanks and drain fields.
 - g. Pump stations

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- 2. Indicate all easements required for sanitary sewer main extensions and laterals.
- 3. Show the sanitary sewer system and the water system on the same plan view for verification of minimum separation requirements.
- 4. Slope, length, size and pipe material shall be indicated for all mains and laterals.
- 5. Each manhole shall be uniquely numbered and shall be stationed off of the right-of-way centerline. Provide information itemized by rim; incoming pipe(s) with invert elevation, with pipe size (in inches) and direction of flow (N, NE, NW, S, SE, SW, E, W... etc.); and itemized by outlet pipe(s) invert elevation with pipe size (in inches) and direction of flow. When connections to manholes are other than 90, 180, or 270 degrees from outlet, identify angle relative to outlet.
- 6. Indicate invert elevations for all sewer laterals stubbed to the property line and the centerline stationing for each lateral.
- 7. Provide a profile of all sewer main extensions. Clearly indicate the vertical and horizontal scale and also show the profile on the same sheet with, and aligned underneath, the plan view.
- 8. The profile must show the location of all existing and proposed gas, electrical, water and storm drain crossings.

STORM DRAIN SYSTEM IMPROVEMENTS

Provided N/A

- Show all existing and proposed storm drain system features including, but not limited to:
 - a. Storm drain mains.
 - b. Catch basins.
 - c. Curb inlets.
 - d. Yard drains.
 - e. Detention or Retention systems.
 - f. Biofiltration swales.
 - g. Storm drainage laterals or stub-outs for lots.
 - h. Culverts.
 - i. Streams.
 - Ditches.
 - k. Headwalls.
 - I. Trench drains.

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- m. Infiltration pits, trenches, or galleries.
- n. French drains.
- o. Oil control facilities.
- p. Water quality basic treatment facilities.
- q. Pretreatment facilities.
- 2. Slope, length, size and pipe material shall be indicated for all storm drain mains and stub-outs.
- 3. All catch basins shall be uniquely numbered and shall be clearly labeled with the type of CB (e.g. Type I, Type IL, Type II), include type of frame and type of grate or frame and cover specific to each catch basin.
- 4. Indicate all grate, lid and invert elevations along with direction of flow and pipe size for all drainage structures in plan or profile view. Also, indicate the invert elevation of all lot drainage stubs at the property line.
- 5. Provide a profile of all storm drainage systems and all RW storm drainage. Clearly indicate the vertical and horizontal scale.
- 6. Indicate all easements required for storm drain main extensions, swales, storm drain detention or retention facilities and other drainage features.
- 7. Indicate the centerline stationing for all catch basins, curb inlets and storm drain laterals.

ROADWAY IMPROVEMENTS

Provided N/A

- 1. Show all existing and proposed roadway improvements including, but not limited to:
 - a. Pavement.
 - b. Concrete curb & gutter.
 - c. Thickened asphalt edges.
 - d. Edge of pavement.
 - e. Sidewalk (incl. safety railings, when applicable).
 - f. Planter strips.
 - g. Street trees.
 - h. Utility structures (e.g. manhole lids, catch basins, electrical boxes, power poles)
 - i. Handicap ramps.
 - j. Street lights and service control.
 - k. Barricades.

ROADWAY IMPROVEMENTS (continued)

Provided N/A

- I. Signage and pavement markings.
- m. Driveways.
- n. Rockery walls or other segmental walls or structural walls
- o. Mailboxes.
- p. Monuments.
- 2. Show all right-of-way lines, centerlines and roadway widths for all RW's.
- 3. Clearly differentiate between areas of existing pavement, areas of new pavement and areas to be overlaid. Also indicate location of all saw cut lines.
- 4. Provide a profile of all new roadways or extensions of existing roadways. Indicate all vertical curve data, roadway slopes, centerline stationing and existing ground profiles.
- 5. Clearly label all profiles with respective street names and plan sheet reference numbers if drawn on separate sheets.
- 6. Indicate all easements and/or RW dedications required.

DRY UTILITY IMPROVEMENTS

Provided N/A

- 1. Show all existing and proposed dry utility improvements including, but not limited to:
 - a. Power
 - b. Communication (phone & cable)
 - c. Fiberoptic
- 2. Provide a cross section of all RW's indicating utilities within.

CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

Provided N/A

The SWPPP contains two parts; the stormwater site plan or the Erosion and Sediment Control (ESC) Plan (required for all projects) and the Stormwater Pollution Prevention and Spill Plan (SWPPP). Both plans include drawings and reports. Details regarding the full Construction Stormwater General Permit can be found at the Department of Ecology. Listed below are minimum items to include in plan drawings.

- 1. Provide details for all Erosion and Sediment Control (ESC) and Best Management Practices (BMPs) used on site.
- 2. Include ESC Plan Notes.
- 3. Indicate clearing limits.
- 4. Specify the type and location of temporary cover measures.
- 5. Specify the type and location of permanent cover measures (this can be shown in the landscaping plan, if prepared).
- 6. Specify the location and type of perimeter protection.
- 7. Indicate the location for tree protection fencing.
- 8. Specify the location of the construction entrance(s); include length, width, thickness, rock size, etc.
- Specify the locations of all sediment ponds and traps, provide all
 dimensions, and provide typical section views through pond and outlet
 structures. Provide typical details of the control structure and dewatering
 mechanism.
- 10. Indicate catch basins that are to be protected, and indicate type of protection to be used.
- 11. Locate all pipes, ditches, dikes, and swales that will be used to convey stormwater. Show grades, dimensions, location and direction of flow. Show all temporary pipe inverts.
- 12. Indicate locations and outlets of any possible dewatering systems. Indicate locations of outlet protection.
- 13. Indicate the location of any level spreaders.
- 14. Provide location and specifications for the interception of runoff from disturbed areas and the conveyance of the runoff to a non-erosive discharge point.
- 15. Provide locations of all check dams.
- 16. Indicate drainage sub-basins before and after proposed construction, indicating flow direction to structural control measures with arrows. Use a bold dashed line showing developed condition.
- 17. Show all cut and fill slopes, indicating top/bottom of slope catch lines.
- 18. Indicate hazard areas (and applicable buffers) that are on or adjacent to the project site such as flood, erosion, landslide, and steep slope hazard areas.
- 19. Indicate drainage features and critical areas (and applicable buffers) that are on or adjacent to the project site such as streams, lakes, wetlands, roads, bogs, depressions, springs, seeps, swales, ditches, existing pipe, and seasonal water locations.