

Civil Engineering Plans Standards and Requirements

Planning & Community Development
17500 Midvale Ave N
Shoreline, WA 98133
206-801-2500
pcd@shorelinewa.gov



Civil engineering plans are maps, cross sections, and other supporting documents showing proposed changes to your property related to site engineering, such as grading, drainage, access, utilities, and work within the public-right-of-way. Civil engineering plans submitted as a part of your permit application package should meet the standards contained in this document. Your plans should stand alone – staff should be able to understand the changes proposed to your site without you being there to explain them.

Standards

Unless otherwise noted, all site plans and drawing must be drawn and plotted to a standard engineering or architectural scale (e.g. 1" = 20', 1/4" = 1', etc.). The sheet size, scale, north arrow and scale bar must be noted on the document. Information about the author must be noted. Plans labeled "not for construction" or "draft" will not be accepted.

Drawings must be clear and information must be legible. The minimum font size is 10 pt. Pencil drawings and scanned photos are not acceptable drawings. The City cannot accept .zip files.

Content

This handout outlines minimum plan sheet requirements for civil engineering review. Additional information may be required on each plan sheet to provide a comprehensive depiction of the proposed improvements. Note: plans for elements within the public right-of-way should be separate from the plans for on-site elements.

For small projects, the civil engineering plans and the site plan may be the same document (you may need to upload two copies of the same item). These projects are typically small home additions such as decks, patios, and additions less than 2,000 square feet that do not change drainage patterns or utility service on-site.

General

- Property (site) address and project name, if applicable.
- Name, address, and phone number of the person who prepared the drawing.
- Professional Engineering (PE) Stamp from the appropriate discipline.
- Legend showing all hatches, symbols and linetypes used.
- List of abbreviations used.
- All applicable standard plan notes.
- North arrow and graphic scale.
- Dimensions of all property lines.
- Easements which are on or adjacent to the property, including utility, drainage, access, open space and slope. Include the King County recording number for existing easements.
- Rights-of-way, including alleys, centerlines, and street names.
- Reference datum and control points.

Site Plan

- Building setbacks from front, side, and rear property lines.
- Structures within 15' of property lines on adjacent lots.
- Driveways, private roads, alleys, walkways, and parking on-site, if applicable. Spot elevations and slope arrows should also be provided.

- Existing and proposed buildings, including identification/use, projections, roof overhangs, footing drains, covered breezeways, carports, and other accessory buildings. Include any buildings or site features to be demolished.
- Existing and proposed rockeries, retaining walls, fences, sheds and any other structures on-site.
- Patios, decks, and all other hardscape surfaces.
- All applicable standard details.

Grading

- Clearing limits and trees to be removed/retained.
- Any critical areas and required buffers.
- Existing contours drawn and labeled at 2' intervals on site and 5' contours extending 20' from property lines and on slopes over 15%.
- Proposed contours drawn and labeled at 2' intervals, shown in a darker linetype than existing contours.
- At least two cross-sections, one in each direction, showing existing and proposed contours, horizontal and vertical scales, past excavation, filled or cleared areas (indicate depth of cut/fill).
- Quantity of excavation and fill (in cubic yards).
- Quantity and type of fill material to be imported to the site.
- Quantity of surplus or unsuitable excavation materials to be exported from the site.
- Proposed disposal site for demolition debris and/or excavated material with anticipated haul routes.

Erosion Control

- Anticipated work areas, clearing limits, tree protection and stockpile areas.
- Proposed locations, standard details and notes for all Best Management Practices (BMPs) identified in the Stormwater Pollution Prevention Plan and/or permanent erosion and sediment control methods. These facilities must be designed in accordance with the most current version of the Department of Ecology Stormwater Management Manual for Western Washington.

Drainage and Paving

- Please review the City's [Surface Water Drainage Requirements](#) [handout](#).
- Existing and proposed flow paths of stormwater through the site and in the right-of-way.
- Plan and profile views of existing and proposed drainage system and associated paving. The plans should indicate type, locations, slope, elevations, and dimensions of all drainage features.
- Details of all structures and drainage facilities including catch basins, flow control devices, water quality, infiltration facilities, etc.
- Surface water distribution point and hydrological features.
- Well, steep slope, stream, wetland, and septic system drain fields, if applicable.

Utilities

- Locations of all existing and proposed utilities from the point of connection to the site including water, sewer, gas, power and telecommunications. Include associated appurtenances within 150' of the property, where applicable. Utility features include, but are not limited to, fire hydrants, power poles, overhead power lines and water meters.
- Details and dimensions for all trenches. Indicate the number, type and location of each conduit or pipe.
- Profiles of the existing and proposed sewer system and storm drainage system.
- Approval of proposed utility location(s) from utility provider(s) will be required. Approved plans or email correspondence from utility provider(s) indicating approval must be provided for review.

Right-of-Way Plan

- Profile(s) and specific cross section(s) of the street, showing all dimensions and proposed improvements from centerline to the property line above and below grade.
- Survey extent within the right-of-way should cover the full roadway. If the improvements occur within 250' of a signalized intersection, the survey must extend up to the intersection and include traffic signal loops.

- Locations and dimensions of existing and proposed access points and access drives on adjacent properties and streets.
- Roadside features including, but not limited to, street signage, edge of pavement, pavement width, ditches, sidewalk, mailboxes, landscaping, benches, bus stops, trees, curb, gutter, traffic signal loops and other roadside features.
- All applicable standard details.
- Location of existing and proposed street trees. Identify trees proposed to be removed.
- Species of tree(s) selected from the Approved Street Tree List in Appendix G of the EDM.
- Show crane swing path over right-of-way, if applicable.