

Washington County Road Engineering Plan Submittal/Review Checklist

Washington County Land Use Case File Number:

Parcel(s):

Developer/Owner Name(s):

Developer/Owner E-mail(s):

The following elements should be included in plans submitted for review. Please complete the columns under the area noted "Applicant to complete this section"; prior to plan submittal. Completing these checklist items will not guarantee plan review approval.

Submitting Engineer will verify each item, sign and seal at the end of the checklist. By signing this form you certify that the submittal includes all elements. **Any plan set found to be incomplete will not be reviewed until a complete set is submitted.**

All submittals must include the following Preliminary Completeness Verification Items.

| Preliminary Completeness Verification |
|--|
| Completed Washington County Road Engineering Plan Submittal/Review Checklist; upload in "Documents" folder |
| 22"x34" drawings, such that reductions to 11"x17" are clearly legible and scalable with PE stamp & signature on all sheets; upload in "Drawings" folder |
| Plan sheet verification; verify proper sheet numbering and sheet sections, as listed in the Sheet Index, are included in plan set |
| Drainage calculations; upload in "Documents" folder |
| Structural calculations; upload in "Documents" folder |
| Sight Distance with plan, profile and photo exhibits; upload in "Documents" folder |
| Geotechnical report with laboratory data, calculations and boring logs; upload in "Documents" folder |
| Proposed Design Exceptions ; upload in "Documents" folder |
| County and/or City Notice of Decision; include a response on how each condition related to public improvements was addressed ; upload in "Documents" folder |
| Pavement design report with testing logs, laboratory data and calculations; upload in "Documents" folder |
| Erosion Control Plans submitted to Clean Water Services, upload in "For Reference" folder |
| Engineer's estimate of public improvements; upload in "Documents" folder |

| Applicant to complete this section | Plan Sheets Will Include the Following Notes and Information |
|------------------------------------|---|
| Sheet # or N/A | |
| | Note: Mill & Fill: After 'T' cut patch backs, mill 2" depth and machine lay hot mix with the associated road work. Final determination of Mill & Fill area is at the discretion of the county inspector. |
| | Paving geotextile may be required by inspection staff on the bottom of the final lift at any joints between the existing pavement and new pavement sections. The paving geotextile should consist of Propex Petomat 4598 or Petrotac 4591 or an approved equivalent. The manufacturer recommends that the pavement geotextile overlap the new and existing pavement sections by three inches on each side of the joint, as long as the joint is less than 1/8" wide. Paving geotextile should also be placed over any cracks that are observed in the existing pavement after milling and before placement of the new overlay. Follow manufacturer's recommendations for joints/cracks wider than 1/8". |
| | ¹ Title block including: the name of the project, engineering firm, the owner, County casefile number, sheet title |
| | Revision block |
| | Signed professional engineers stamp |
| | North arrow |
| | ² A bar scale shall be provided on all plan view sheets |
| | ³ All text and notations clear and legible |

¹Placed on the lower right-hand corner of the sheet, across the bottom edge of the sheet or across the right-hand edge of the sheet.

²The scale shall be 1"=2', 4', 5', or 10' vertically and 1"=10', 20', 40', 50' or 100' horizontally for all drawings except structural drawings.

³Letter size shall not be smaller than 0.10 of an inch high.

**Road Design and Construction Standards (Ordinance 738)*

| Applicant to complete this section | Title Sheet Includes |
|---|--|
| Sheet # or N/A | |
| | Project name |
| | Address/taxlot/ ¼ section township and range |
| | Vicinity map |
| | Sheet index |
| | Legend |
| | Engineering firm name/address/phone number/email |
| | Developer/owners name/address/phone number/email |
| | Washington County benchmark datum |
| | Monument note: "ATTENTION: Oregon Law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through 952-001-0090. You may obtain copies of the rules by calling the center. (Note: The telephone number for the Oregon Utility Notification Center is 503-232-1987)." |
| | ORS 92.044 note: "This design complies with ORS 92.044 (7) in that no utility infrastructure is designed to be within one (1) foot of a survey monument location shown on a subdivision or a partition plat. No design exceptions or final field location changes shall be permitted if that change would cause any utility infrastructure to be placed within the prohibited area." |
| | Locate note (Call 811 before you dig) |
| | |
| Applicant to complete this section | Site Plan Includes |
| Sheet # or N/A | |
| | Proposed lot and tract layout per plat |
| | Existing and proposed public rights-of-way, property lines, lot numbers and private streets |
| | All existing and proposed easements |
| | Proposed public street improvements |
| | Proposed sanitary, storm, and water facilities |
| | Delineated boundaries of all natural and water quality sensitive features |
| | On or within 100-ft of site, show all sensitive areas as defined in CWS standards Chapter 3, Table 3.1 |
| | Show all proposed retaining walls and pedestrian/bike paths |
| | Show all proposed fences and monuments in public ROW or easements |
| | Existing and proposed topo, proposed curbs, buildings, sidewalk, ramps, driveway approaches, etc. |

| Applicant to complete this section | Existing Conditions Site Plan Includes |
|---|--|
| Sheet # or N/A | |
| | Existing topo/contours |
| | Existing curbs |
| | Existing sidewalk locations |
| | Existing ramp locations |
| | Driveways, mailboxes, trees |
| | Road crown |
| | Locations and size of existing utilities, manholes, underground and overhead |
| | Location and description of existing survey monuments |
| | Adjacent property contours to show existing topo |
| | Adjacent structures |

| Applicant to complete this section | Proposed Street and Utility Plans Include |
|---|--|
| Sheet # or N/A | |
| | Plan view over profile view with matching stationing |
| | Location and size of proposed storm and sanitary sewer facilities |
| | Storm sewer and street designs may be combined on the same sheet |
| | Water and sanitary sewer design should be combined on the same sheet |
| | Pedestrian/bike paths shall be shown in plan and profile |
| | Retaining walls shall be shown with elevations at base and top of wall |
| | Lot numbers |
| | Stationing on mainline |
| | Lateral length and slope |
| | Invert elevation at main and end of lateral |
| | Lateral pipe type and size |
| | Label each street classification and/or label private street |

| | |
|---|---|
| Applicant to complete this section | Grading Plans Include |
| Sheet # or N/A | |
| | Existing and proposed contours |
| | Adjacent property contours and structures |
| | Typical sections with cut/fill |
| | Compaction notes |
| | Drainage plan |

| | |
|---|--|
| Applicant to complete this section | Curb Returns and Ramp Details Include |
| Sheet # or N/A | |
| | Stationing of proposed curb |
| | Curb return data table |
| | Top of curb elevations at ¼ delta points and at radius returns |
| | Radius return profile |

| | |
|---|--|
| Applicant to complete this section | Signing, Striping, and Street Trees Plan Includes |
| Sheet # or N/A | |
| | Existing and proposed signing and striping with street trees shadows |
| | Signing and striping details |
| | Street tree locations, sizes, and species |
| | Show street light pole locations on the signing/striping plan |

| | |
|---|---|
| Applicant to complete this section | Signal Plan Includes |
| Sheet # or N/A | |
| | Signal design |
| | Interconnect plan and communications |
| | Detection plan, including loop or video |
| | Equipment table |
| | Approved details |

| | |
|---|---|
| Applicant to complete this section | Street/Roadway Plan View(s) Include |
| Sheet # or N/A | |
| | Labeled ROW, curb, property, easement, and tract lines |
| | Widths of ROW and streets |
| | Road design speed(s) |
| | Alignment references, from ROW, curb, and centerline |
| | Legal centerline with city or county stationing |
| | Typical street cross sections by station and pavement structural section w/compaction requirements and wet weather structural section |
| | T-cut notes (see page 2, note 1) and ½ street grind and inlay with pavement design recommendations – 200' either direction of utility cut |
| | Lot numbers |
| | Existing and proposed sidewalks, ramps, driveways, and mailboxes |
| | Road crown lines in transition sections |
| | Location and size of proposed drainage facilities |
| | Location and description of existing survey monuments |
| | References to appropriate details, including detail number and sheet number |
| | Match lines with sheet number and stationing reference |
| | Horizontal curve data |
| | Road cross slope transitions and/or super elevation diagrams |
| Applicant to complete this section | Street/Roadway Profile View(s) Include |
| Sheet # or N/A | |
| | All featured and non-featured utilities shown to scale and in bold and half-tone respectively |
| | For all featured utilities: length, size, slope, material, ASTM specification, backfill, and bedding specification |
| | Relevant invert and surface elevations |
| | Existing and finish ground profiles |
| | Type and size of all crossings (to scale) |
| | The top of curb for all cul-de-sacs, eyebrows and intersection curb returns |

| Applicant to complete this section | Lighting Plan Should Include |
|------------------------------------|---|
| Sheet # or N/A | |
| | Poles identified and numbered including existing adjacent poles and fixtures |
| | Photometric summary table with average light level and uniformity targets |
| | Pole and design values and luminaire schedule |
| | <p>General street lighting notes and SDL clause (if applicable). S.D.L. Street Lighting Agreement Clause: <i>Washington County requires that a S.D.L. or a L.I.D. be established to pay for power and maintenance of street lighting on local and neighborhood route classified roads. Washington County will not pay for power or maintenance for roadway lighting other than arterial and collector classified roads.</i></p> <p>North Bethany Subarea S.D.L. Street Lighting Agreement Clause: <i>Washington County requires that street lights within the North Bethany Subarea be added to the existing North Bethany S.D.L. Assessment Area to pay for power and maintenance.</i></p> |
| | Power source |
| | Approved PGE street lighting equipment list |
| | Tax lot numbers or lot numbers as appropriate |
| | Illumination details, see Road Design and Construction Standards, Chapter 3, Section 350. |
| | Label private roads as "PRIVATE" and public roads as "PUBLIC" |

| Applicant to complete this section | Engineer's Estimate of Public Improvements Should Include |
|------------------------------------|--|
| Sheet # or N/A | |
| | All work performed subject to the Public Facility Permit |
| | Utilize recognized unit costs from Oregon DOT weighted average items and prices and/or RSMMeans construction cost data *Note your reference source for pricing |
| | Roadway, storm-water, and utilities broken out by section |
| | Break out pricing estimates for all work by applicable jurisdiction (e.g. City, County, State, Clean Water Services) |
| | Quantity takeoff of items (similar to ODOT's bid item list) |
| | Unit prices; Mobilization, erosion control, temporary protection and direction of traffic |

If any elements are not included, explain why. Attach additional pages if necessary.

AFFIDAVIT OF CONFORMANCE TO ENGINEERING PLAN SUBMITTAL/REVIEW CHECKLIST

I hereby notify Washington County that the submitted proposed construction plans and estimate for Engineering Plan Review are in conformance with Appendix E of the current *Washington County Road Design and Construction Standards*. **Any required elements missing from the attached plans and estimate will delay plan review until a complete plan and estimate is submitted.** The plans are identical to the submittal to other agencies and /or jurisdictions (such as Clean Water Services, City of Hillsboro, etc.).

Signature

Printed Name

Date

