### ENGINEERING APPLICATION COMPLETENESS CHECKLIST

<table>
<thead>
<tr>
<th>Master File #:</th>
<th>Engineering File #:</th>
<th>Date Received:</th>
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<table>
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<tr>
<th>Project Title:</th>
<th>Parcel #:</th>
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<tbody>
<tr>
<td>Address:</td>
<td>Zip Code:</td>
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<tr>
<th>Applicant/Representative/Owner:</th>
<th>Phone #:</th>
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<tbody>
<tr>
<td>Address:</td>
<td>E-Mail:</td>
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The Community Planning and Development Department’s Engineering Section has received your application for the above-named project and has reviewed its content.

- Your application has been found **COMPLETE** and will be processed from this date: ________________ forward.
  - Expected completion date for plan review and comments will be: ________________
  - Comments: ________

- Your application has been found **INCOMPLETE** and will not be processed until indicated items are submitted or deficiencies corrected in plans or reports.

  - Approved Land Use Site Plan
  - Sewer Main Plan
  - Watermain Plan
  - Storm Sewer Facilities
  - Streetside Improvement Plan
  - Solid Waste
  - Street Lighting Plan
  - Clearing/Grading/Erosion Control Plan
  - Drainage Report (hydra & work map) [ 3 ]
  - Engineers Construction Cost Estimate
  - Reimbursement Contract (draft & map)
  - Stormwater Agreement
  - Draft Easements/Dedication
  - Draft Bills of Sale
  - Set of Plans [ 4 ]

Comments: ________

For exact items please refer to the attached Engineering Plan Checklist of Completeness.

Received by
3.000 GENERAL PUBLIC WORKS CONSIDERATIONS

3.040 Drafting Standards

A. All plans submitted either design approval or permanent record will be free of photographs, stick-ons, or shading. Hatching may be acceptable if the pattern is not excessively dense.

B. Design drawings will be submitted on clean, legible blue or black line format.

C. Record drawings will conform to the Plan Checklist and be submitted on static-free, 4-mil Mylar with permanent image and six sets of blue line copies. Sheet sizes will be 22-inch x 34-inch or 24-inch x 36-inch for engineering drawings and 18-inch x 24-inch for survey drawings. No sepia will be accepted.

D. Plans will be prepared with the understanding that each will be microfilmed. Minimum text height will be at least 0.08 times the scale factor (i.e., 1-inch – 20-foot scale; minimum text will be 20 (0.08) = 1.6 units). Minimum nominal text size will be 1/8-inch.

E. No engineering plans will be accepted with architect’s scale.

F. Street drawings will be either 1-inch – 5 feet, 1-inch = 10 feet, 1-inch = 20 feet, or 1-inch = 30 feet horizontal with vertical not to exceed 1-inch = 10 feet. Utility drawings may be accepted at 1-inch = 50 feet or 1-inch = 40 feet if they are legible and microfilmable.

G. Plans will show all existing and proposed monuments. All monumentation will be described using current City of Olympia coordinates. Centerline of roadways, easements (with type and dimensions), and other pertinent data will be referenced to existing monuments.

H. All existing features (pipes, curbs, power poles, etc.) are to be produced with a fine (0.5mm) pen or half tones. Proposed features will be distinguished by a larger or bolder line weight.

I. Different line types will be used to distinguish different features. For example, centerline and right-of-way will have different line types.
## PLAN CHECKLIST

### STANDARD ITEMS: WATER, SANITARY SEWER, STORM SEWER, STREET, LIGHTING, AND SIGNALS, RECORD DRAWINGS, ETC.

- Vicinity map (showing project location)
  - Legend (APWA Standard Symbols or approved alternatives).
  - North arrow with current City of Olympia meridian.
  - Scale bar.
  - Current City of Olympia datum – benchmark #, elevation (MSL), and location.
  - Title block.
  - Title: ________________________________
  - Date:
  - Design by:
  - Drawn by:
  - Checked by:
  - Signature Approval Block
  - Sheet number of total sheets (e.g., 2 of 5)
  - Revisions and revision dates.

- Engineer's/Land Surveyor's Stamp, signed and dated.
  - Plans submitted on 22” x 34”, 24” x 36” sheet size.
  - Detail sheet(s) describing applicable work.
  - “Call Before You Dig” note
  - General notes and construction notes
  - Sheet index
  - “Drain to Stream, Dump No Waste” note
  - Cover sheet (can include vicinity map, legend, general notes, construction details[s]).
  - Record drawings labeled (minimum text height ¼”).

### REQUIRED PLAN PORTION ITEMS

- Rights-of-way dimensions and rights-of-way lines labeled.
- Match lines with station and see page notation.
- Edge of pavement, width, and pavement type.
- Roadway and restoration sections (if applicable).
- Existing utilities (above and below ground).
- Adjacent property lines and addresses.
- Note when matching existing features and utilities.
- Easements – existing, proposed, type, and dimensioning (if applicable).
- Define survey baseline vs. construction baseline (if applicable).
- Street names with quadrant suffix.
- Profile grades (decimal FT/FT)
- Existing ground profile (on construction baseline for street or over utility installation when roadway section not included).
- Scale (horizontal and vertical).
- Vertical elevation increments 25’ stations on vertical curves and 50’ on all tangents.
SANITARY SEWER

Plan View: (for all projects, as applicable)
  - Station and offset shown at each proposed manhole.
    - Manholes numbered.
    - Manhole type designation.
    - Flow direction (with arrow on pipe).
    - Distance from water lines (if applicable).
    - Type of pipe.
    - Size of pipe.
    - Length of pipe from center of manhole to center of manhole.
    - Depth at property line.
    - Station for sewer laterals at property line.
    - On record drawings, laterals will be related to property corners measured along the right-of-way line.
    - Force main and appurtenances with station and offset
    - Invert elevations.

Profile View:
  - Station and offset shown at each manhole.
    - 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 from center of manhole to center of manhole (in L.F.)
    - Existing utility crossings.
    - Force main and appurtenances with station and offsets.

WATER

Plan View: (for all projects, as applicable)
  - Existing utility crossings.
    - Show fixtures with stations
    - Fire hydrants.
    - Blow-off (at dead end of line)
    - Vacuum and air release valves when required.
    - Tees, crosses, elbows, adapters, and valves; meter station and offset.
    - Size of pipe.
    - Type and brand of fixtures.
    - Length of water main in L.F. between fixtures.
    - Distance from sanitary or storm sewer (if applicable).
Profile View:
- Existing utility crossings.
  - Show fixtures with stations and elevation.
  - Show valves and stations and elevations.
  - Size and material of water main.
  - Length of water main in L.F.
  - Grades.

STORM SEWER

Plan View: (for all projects, as applicable)
- Station and offset at each manhole catch basin.
- Manholes/catch basins numbered.
- Manhole/catch basin type designation.
- Manholes/catch basin rim elevation.
- Flow direction (with arrow on pipe)
- Type of pipe
- Size of pipe
- Length of pipe
- Stormwater detention facility (pond dimensions with elevations)
- Stormwater treatment facility (dimensions with elevations)
- Control structure with orifice size and elevation.
- Emergency overflow location and elevation.
- Design high water elevation.

Profile View:
- Station and offset at each manhole catch basin.
  - Invert elevations on manholes/catch basins showing direction of flow.
  - Manhole/catch basin type designation.
  - Rim elevation.
  - Type of pipe.
  - Size of pipe.
  - Length of pipe (shown in L.F.) center structure to center structure.
  - Grades shown (decimal form FT/FT).
  - Existing utility crossings.
  - Stormwater detention facility.
  - Stormwater treatment facility.
  - Control structure.

STREET

Plan View: For residential plats. As required for all other projects.
- Identify property lines and addresses.
  - Spot elevations on curb returns (PC, PT, /2)
  - PI, PC, PT stationing of horizontal curves.
  - Curve information delta, radius, and length for all cures.
  - Horizontal angle points and curb return elevations.
Identify field design situations by notes.
- Match existing features noted by station with elevation.
- Typical roadway sections and pavement types.
- Pavement markings noted by station and offset.
- Sidewalks.
- Driveway entrances.
  - Station at center.
  - Width, type (AC, PCC) note applicable City standard plan.
- Curb access ramps pursuant to City standard plan.
- Intersection detail, if applicable.
- Existing transit stops and shelters.
- Street trees with stations.

Profile View: For residential plats. As required for all other projects.

- Vertical information PVC, PVI, PVT, AP.
- Show grades in decimal (FT/FT) for width (+ and -) and slope.
- Super elevated roadway segments.
- Detail (length of transition in, length of full super, length of transition out).
- Existing edge of pavement profile.*
- New and existing centerline profile.
- New gutter edge of pavement profile.*
- Pavement cross section, supported by pavement design.
  * Not required for new standard street section construction. Required for retrofit and variable gutter.

SOLID WASTE

- Identify dumpster site location on street and site plans.
- Show dumpster pad size.
- Compactors, as required.
- Show blind and concrete pad sizes with provisions for recycle collection.
- Show spot elevations at corners of concrete pad.
- Identify concrete pad cross slope (not steeper than 0.005 ft/ft).
- Easy entrance and exit for collection vehicle and crews, per chapter 8, EDDS.
- Minimum turning radius of 42 feet for turnaround and positioning for backing up.
- Minimum access width of 12 feet clear opening.
- Hard surface access entrance to container blind site with maximum slope of 0.03 ft/ft.

TRAFFIC SIGNALS

Signal Standard Detail Sheet:
- Refer to EDDS, Section 4F, for design details.
CLEARING / GRADING / EROSION CONTROL PLAN

- Show existing and proposed contours for residential plats, and/or adequate spot elevations for commercial retail, and industrial, where relatively flat site.
- Provide Minimum Floor Elevation (MFE) for each lot, typically 2% of the rise from gutter line to the house, plus one foot.
- Show all retaining walls with top and bottom of wall elevations, existing and proposed contours.
- Provide retaining wall designs or indicate when and by whom the design will be submitted prior to engineering permit issuance.
- Provide all necessary BMPs for erosion control.

ILLUMINATION

J-boxes

- Conduit runs
- Streetlight pole and number.
- Construction notes.
- Service panels/disconnect.
- One-line diagram for streetlight circuit(s).
- Scale (1" = 30’) and north arrow.
- Legend for streetlight equipment/notes.

Streetlight number – Table

- Circuit number.
- Luminaire type/watts/distribution.
- Mounting height.
- Mast arm length.
- Station and offset.
- Sheet number.
- Comments.

PRIVATE UTILITES

Plan:

Location and route of all facilities to be installed on existing utility poles.

Location, route, and configuration of all facilities to be located underground, including the line and grade proposed for the burial at all points along the route that are within the public ways.

Location of all existing underground utilities, conduits, ducts, pipes, mains, and installations that are within the public ways along the underground route proposed by the applicant.

The construction methods to be employed for protection of existing structures, fixtures, and facilities within or adjacent to the public ways.

The location, dimension, and type of all trees within or adjacent to the public ways along the route proposed by the applicant together with a landscape plan for protecting, trimming, removing, replacing, and restoring any trees or areas to be disturbed during construction.

The location of all survey monuments that may be disturbed or displaced by the proposed construction.

- All applicable requirements under the Street checklist for street restoration.

Profile:
Location, route, and configuration of all facilities to be located underground, including the line and grade proposed for the burial at all points along the route that are within the public ways.

Location of all existing underground utilities, conduits, ducts, pipes, mains, and installations that are within the public ways along the underground route proposed by the applicant.

☐ All applicable requirements under the Streets checklist for street restoration.