

CIVIL PS&E REVIEW CHECKLIST

Project Title: _____ Project Number: _____
 Submittal: _____

Legend:
 Acceptable
 Not Acceptable
 Not Applicable

Plans – General

30% 60% 90% Final

- First sheet of plan set includes signature box for TE Director
- Each sheet title block includes correct PSE project number and Federal Aid number if applicable
- Each sheet title block includes correct project name
- Each sheet title block includes correct drawing number (i.e. G01.01)
- Each sheet title block includes correct Designed By, Drafted By and Checked By initials and dates
- Each sheet title block includes appropriate engineer’s seal
- Each sheet showing plan view includes north arrow and is shown with correct orientation
- Each sheet showing plan/elevation/details includes scale bar and is correct
- Each sheet showing horizontal and vertical control includes appropriate datum reference
- Order of precedence of Plans is logical and consistent with WSF CADD standards (G, C, A, S, M, E)
- All indexed Plan sheets are included and sheet names/numbers are consistent with the Plans
- SOQ sheet is included with appropriate Groups assigned (*vital at Final*)
- All Legend symbols and Abbreviations correspond with those shown in the Plans
- All General Notes correspond with the work of the Plans
- Plans conform to the presentation requirements of the WSF CADD standards
- Line weights are used properly to represent the work
- Scale is used properly to represent the work
- Check ADA Status Spreadsheet to verify any pertinent updates [G:\Admin\DESIGN\ADA\ADA Project Status 07-09]
- All Details and Sections are correct for sheet reference numbers, limits, aspect, and orientation
- _____
- _____
- _____
- _____
- _____

Plans – General (G) Series Sheets

30% 60% 90% Final **Project Location and Vicinity Map Sheet**

- Project location is accurately located
- Project location Latitude and Longitude has been verified by CAD Manager (Lat & Long required on Fed Aid projects)

30% 60% 90% Final **Index Sheets (Not sealed by TE)**

- Sheet order of precedence matches plan sequence
- Volume references are correct
- Each plan sheet is included, and sheet number, drawing number and title are consistent with the Plans

30% 60% 90% Final **Sundry Site Plan (Not sealed by TE)**

- Sundry plan is the most current available

30% 60% 90% Final **Summary of Quantities (Not sealed by TE)**
 All items are included, and quantities and units are consistent with estimate (*vital at Final*)

All appropriate groups are assigned (*vital at Final*)

Control Section and Tax Schedule for each group are correct (*vital at Final*)

30% 60% 90% Final **Other**

Plans – Civil (C) Series Sheets

30% 60% 90% Final **Legend, Abbreviations & General Notes**

All symbols within the Plans are included and defined

All abbreviations within the Plans are included and defined

General notes are appropriate and applicable to work of the Plans

30% 60% 90% Final **Existing Conditions**

Upland topography is shown with appropriate line weight and accurate

Bathymetry and elevations are shown with appropriate line weight and accurate

Boring locations are shown, identified and accurate in their location

R/W, DNR Lease, easements, and other property lines are shown and consistent with the Sundry Site Plan

All existing features and elements are clearly identified

Horizontal and vertical control is established

Horizontal and vertical datum is identified and includes epoch date

Survey monument identification is correct as compared to WSDOT Survey Monument Database (typically use ID#)

Survey monument coordinates are in English units and in the Washington State Plane coordinate system

Survey monument elevations are in English units and in the referenced vertical datum (typically MLLW)

30% 60% 90% Final **Existing Utilities**

Upland topography is consistent with Existing Conditions sheets

Bathymetry and elevations are consistent with Existing Conditions sheets

Underground utilities are shown using appropriate symbols, line types and scales, and are complete

Overhead utilities are shown using appropriate symbols, line types and scales, and are complete

R/W, DNR Lease, easements, and other property lines are shown and consistent with Existing Conditions sheets

All applicable site and utility features and elements are clearly identified

30% 60% 90% Final **Construction Phasing**

Existing conditions shown are consistent with Existing Conditions sheets

Bathymetry and elevations are consistent with Existing Conditions sheets

Entire project scope is included and phased

Phased work identified includes a sequenced phase note callout

Phasing Notes are include for all callouts

R/W, DNR Lease, easements, and other property lines are shown and consistent with Existing Conditions sheets

All applicable features and elements are clearly identified

Existing utilities shown only as applicable

- | 30% | 60% | 90% | Final | |
|-----------------------------|--------------------------|--------------------------|-------------------------------------|--|
| Construction Staging | | | | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Upland topography is consistent with Existing Conditions sheets |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Bathymetry and elevations are consistent with Existing Conditions sheets |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | R/W, DNR Lease, easements, and other property lines are shown and consistent with Existing Conditions sheets |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | All applicable existing features and elements are clearly identified |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Upland and in-water staging areas clearly identified including hatching, and dimensioned to local control |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | All access points are clearly identified |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | All restrictions are identified in the Notes |
| Demolition Plans | | | | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Upland topography is consistent with Existing Conditions sheets |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Bathymetry and elevations are consistent with Existing Conditions sheets |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | R/W, DNR Lease, easements, and other property lines are shown and consistent with Existing Conditions sheets |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Existing utilities consistent with Existing Utilities sheets |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | All applicable existing features and elements are clearly identified |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | All demolition work of project is identified and appropriately referenced to discipline plan sheets (i.e. see Civil, Structural, Mechanical, or Electrical sheets) |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Demolition call-outs accurately describe the nature and limits of the work |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | All salvage and relocation items are clearly identified |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | All utility demolition is identified by cross-hatch |
| Site Layout | | | | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Upland topography is consistent with Existing Conditions sheets |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Upland topography is consistent with new contours shown |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Bathymetry and elevations are consistent with Existing Conditions sheets |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | R/W, DNR Lease, easements, and other property lines are shown and consistent with Existing Conditions sheets |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Existing utilities consistent with Existing Utilities sheets |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | All applicable features and elements are clearly identified |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Surveying information and applicable datum are shown |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Vertical datum includes epic date (typically MLLW) |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Work points are identified |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Work point coordinates are in English units and in the Washington State Plane coordinate system |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Work point elevations are in English units and in the referenced vertical datum (typically MLLW) |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | All new work of project is identified and appropriately referenced to discipline plan sheets (i.e. see Civil, Structural, Mechanical, or Electrical sheets) |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | All new work of project is coordinated between discipline plan sheets (i.e. see Civil, Structural, Mechanical, or Electrical sheets) |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | All new work is clearly delineated from existing conditions |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Only new work is shown – i.e. All existing work replaced by new work is removed from plan sheets |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | New work call-outs accurately describe the nature and limits of the work |

- 30% 60% 90% Final **Civil Site Work**
- Upland topography is consistent with Existing Conditions sheets
 - Bathymetry and elevations are consistent with Existing Conditions sheets
 - R/W, DNR Lease, easements, and other property lines are shown and consistent with Existing Conditions sheets
 - Existing utilities consistent with Existing Utilities sheets
 - All applicable features and elements are clearly identified
 - All civil work of project is identified
 - All new work is shown and clearly delineated from existing conditions
 - Only new work is shown – i.e. All existing work replaced by new work is removed from plan sheets
 - Civil work call-outs accurately describe the nature and limits of the work and are consistent with Site Layout

- 30% 60% 90% Final **Civil Plans & Details**
- Upland topography is consistent with Existing Conditions sheets
 - Bathymetry and elevations are consistent with Existing Conditions sheets
 - R/W, DNR Lease, easements, and other property lines are shown and consistent with Existing Conditions sheets
 - Existing utilities consistent with Existing Utilities sheets
 - All applicable features and elements are clearly identified
 - Civil work clearly identified and dimensioned in appropriate units/coordinates
 - Reference dimensions are indicated as appropriate
 - New utilities are shown and complete
 - Pavement removal limits are clearly shown and dimensioned
 - Grading limits are clearly shown and dimensioned
 - Trenching and cut and fill limits are shown
 - HMA limits are clearly shown and dimensioned
 - Slopes for drainage are shown and clear
 - Pavement sections are shown and detailed
 - Utility elevations are consistent between plans and profiles
 - Drainage structure grate and invert elevations are shown and in the referenced vertical datum
 - Signing and striping is shown and complete
 - ADA parking and access are shown and have been coordinated with Architecture

- 30% 60% 90% Final **Other**
- _____
 - _____
 - _____


Plans – Biddability/Constructability

30% 60% 90% Final

- Contractor staging is shown and adequate, and coordinated with Operations and the specifications
- Phasing plans are shown and cover all work, and coordinated with Operations and the specifications
- Traffic control is shown and complete, and coordinated with Operations
- Plans are consistent between all disciplines
- Plans are clear in representing/delineating the work
- SOQ items are consistent with Payment sections of the specifications in title and unit of measure (*vital at Final*)
- Identify any Value Engineering Opportunities
- _____
- _____
- _____
- _____
- _____

Specifications

30% 60% 90% Final

- All work of the Plans is addressed by a specification
- All applicable, current Amendments to the Standard Specifications are included
- All applicable WSDOT General Special Provisions are included
- All applicable WSF Special Provisions are included
- Contract Working Days is consistent with the engineer’s construction schedule
- All indexed specifications are included and titles are consistent
- All specifications contain Description, Materials, Construction Requirements, Measurement, and Payment sections
- Description sections clearly and accurately define the scope of work
- Payment sections are consistent with the SOQ items in title and unit of measure (*vital at Final*)
- All lump sum items contain approximate quantities for bidding or are biddable from the contract documents
- All force account items are defined 
- All sole source/proprietary items have been approved by WSF or ASDE as appropriate, and documentation is in the project files
- Soil boring logs are included in the Appendices
- Environmental and Jurisdictional permits are included in the Appendices
- Hazardous Materials reports are included in the Appendices
- Federal Aid Special Training Provisions have been addressed
- _____
- _____
- _____
- _____
- _____

Estimate

30% 60% 90% Final

- All work of the Plans and specifications is included in the estimate
- All unit prices have been reviewed and verified by Project Controls
- All lump sum items have backup estimates
- All force account items have justification
- All contingencies have been validated
- Mobilization is included
- All EBase items are consistent with the SOQ items and Payment sections of the specifications (*vital at Final*)
- All EBase quantities & unit prices match the estimate
- The EBase contingencies match the estimate
- _____
- _____
- _____
- _____
- _____

CIVIL CONSTRUCTABILITY REVIEW CHECKLIST

Project Title: _____ **Project Number:** _____
Submittal: _____

Legend:
<input checked="" type="checkbox"/> Acceptable
<input checked="" type="checkbox"/> Not Acceptable
<input checked="" type="checkbox"/> Not Applicable

Plans – Constructability

60% 90%

- Entire project scope is shown
- Upland topography shown is accurate
- Existing conditions shown are accurate
- Existing utilities shown are accurate
- Verify connection points of all utilities
- Verify all utility systems are shown are complete
- Horizontal and vertical control shown is accurate and accessible
- Contractor staging shown is adequate and accessible
- Verify work areas defined are adequate
- Verify work areas defined are accessible and free of horizontal and vertical site constraints
- Verify work areas defined are free of dangerous conditions
- All site features have been accounted for in demolition
- All salvage items have been included
- Phasing and schedule of work does not interfere with other disciplines
- _____
- _____
- _____
- _____

Specifications – Constructability

60% 90%

- All work of the Plans is included in the specifications
- All demolition work shown on the Plans matches the scope defined in the specifications
- All necessary survey work is included and accessible
- All salvage items have been included
- All permits are included in the Appendices
- _____
- _____
- _____
- _____

Estimate – Constructability

60% 90%

- All work of the Plans and specifications is included in the estimate
- _____
- _____
- _____
- _____

CIVIL CHECK CHECKLIST

Project Title: _____ **Project Number:** _____
Submittal: _____

Legend:

- Acceptable
- Not Acceptable
- Not Applicable

Plans - General

- Title block includes PSE project number
- Title block includes Designed By, Drafted By and Checked By initials and dates
- All line types and symbols are included on the Legend
- All abbreviations are included on the Abbreviations list
- General Notes are consistent with work shown
- General Notes include language requiring Contractor to verify existing underground utility locations prior to excavation
- All Plan sheet names/numbers are consistent with the Civil plan sheet index
- SOQ sheet includes all civil bid items
-

Plans – Engineering

- All civil work is indicated on the Site Plan
- Demolition work is clearly shown
- All civil work is consistent with Environmental provisions
- Reference dimensions are indicated
- Upland topography is shown and accurate to existing conditions
- Bathymetry and elevations are shown and accurate
- Surveying information is shown and accurate to existing conditions
- Horizontal and vertical control is established, accurate and complete
- Boring locations are shown and accurate
- R/W, DNR Lease, easements, and other property lines are shown and accurate
- Grading limits are clearly shown and field measureable to established control
- Excavation and backfill limits are shown
- Pavement sections are shown and appropriate for the location
- Geotechnical recommendations have been incorporated
- Paving limits are shown and field measureable to established control
- Existing utilities are clearly shown and accurate to existing conditions and records
- New utilities are clearly shown and identified, and conflicts have been resolved
- Slopes for drainage are adequate and all areas drain to a collection point
- Drainage structures are located to established control
- Utility profile elevations are consistent with plan elevations
- Roadway, holding lane and parking improvements are shown and located to established control
- Curb, gutter, sidewalks and ramps are correctly located and identified to established control
- Signing and striping is identified and located to established control
- All references to Standard Plans are current and correct
- ADA requirements are identified and consistent with code
-
- Storm Drain System
- Check water quality design and details
- Check that all materials used are appropriate for the application
- Check that pervious surface drainage is adequate and connected to storm system
- Check curb and gutter drain locations
- Crosscheck contours and grate spot elevations for proper drainage slopes
- Check number and locations of storm inlets

- Check size and slope of storm drains
- Crosscheck plan and profile horizontal dimensions and compare to established control
- Check storm drain invert elevations against contours (no exposed or shallow piping)
- Check drain grate and manhole rim elevations against topography
- Check that structure drain systems are connected to storm system
- Check storm drainage details
- Check cathodic protection system and details
-
- Sanitary Sewer System
- Review adequacy of sewage system capacity
- Check lift station design and details.
- Check that point(s) of connection to existing system is shown
- Check flow velocity
- Check that mains provide gravity flow from laterals
- Check adequate separation from water lines
- Check inverts of mains and laterals for adequate drops
- Check adequate dimensions for manhole locations
- Check cleanout locations
- Check details
- Check that all materials used are appropriate for the application
- Check cathodic protection system and details
-

Plans – Biddability/Constructability

- Civil work areas are adequate for type(s) of work to be performed
- Civil work areas are accessible and free of horizontal and vertical site constraints
- Civil work areas are free of dangerous conditions
- Check if shoring is required for excavation
- Check if dewatering is required for excavation
-
-

Specifications

- All civil work is included in the specifications
- Check for shoring and dewatering specification language
- Check that all civil quantities are obtainable from the Plans
- All civil special provisions contain Description, Materials, Construction Requirements, Measurement, and Payment sections
- Civil special provision description sections clearly and accurately define the scope of work
- Check that the term “shall” is used for all Contractor responsibilities
- Check that the term “will” is used for all State responsibilities
- Check that all items requiring submittal are identified
- Check that all testing requirements are identified
- Payment sections are consistent with the SOQ items in title and unit of measure
- All lump sum items contain approximate quantities for bidding
- All force account items are defined
- Appropriate environmental provisions and BMPs are included in special provisions
- Appropriate hazardous materials procedures are included in the special provisions
- Check that all references to Standard Specifications, Special Provisions, Standard Plans, and other standards and codes are current and correct
- Special Provisions contain applicable Regional Special Provisions for WSF projects
- Special Provisions contain applicable WSDOT General Special Provisions

Estimate

- All civil work is included in the estimate
- All unit prices are for in-place work, and *do not* include contingency or mobilization
- All lump sum prices are for in-place work, and *do not* include contingency or mobilization
- All force account items are identified
-

Construction Schedule

- All civil work is included in the schedule
- Civil work activities occur in the appropriate order
- Civil work activities are assigned an appropriate duration
- Civil work activities are assigned appropriate logic based on project scope/phasing
-