Design Documentation,

Chapter 300 Approval, and Process Review

# 300.02 WSDOT Project Delivery

## 300.02(1) Project Delivery Method

The project delivery method pertains to WSDOT projects and may vary depending on project type and cost. Preservation projects with an overall project cost of $10 million and over, and all other projects with an overall project cost of $2 million and over, are required to go through the Project Delivery Method Selection process. The overall project cost is the total of the Preliminary Engineering, Right of Way, and Construction costs. Project Delivery Method Selection, described below, applies only to WSDOT projects and is not meant to be applied to local agency or developer projects that occur within WSDOT’s jurisdiction. This includes any project that WSDOT is asked to design and/or construct on behalf of the funding entity.

WSDOT primarily uses two delivery methods: Design-bid-build (DBB) and design-build (DB). DBB is considered the traditional project delivery method where a project office puts together a complete set of plans, specifications, and estimate (PS&E), that is advertised for contractors to bid on. The project is constructed by a contractor in accordance with the PS&E and WSDOT provides construction oversight. For DB projects, the WSDOT develops a request for proposal (RFP) that includes a basic configuration for the project and a Conceptual Design Approval. The RFP is advertised and a contractor is selected. The contractor is responsible for the design, project construction, and final Design Documentation Package.

Design-build’s typical application is for improvement projects in the mobility, economic initiatives, or environmental subprograms where there are opportunities for innovation, greater efficiencies, or significant savings in project delivery time.

For all projects, the delivery method is determined using WSDOT [Project Delivery Method Selection Guidance](http://www.wsdot.wa.gov/Projects/delivery/designbuild/PDMSG.htm) (PDMSG) with the following exceptions:

* Projects under $2 million are programmatically exempt from PDMSG, do not require a Project Delivery Method Selection Checklist, and will be DBB.
* Preservation Paving projects under $10 million are programmatically exempt from PDMSG, do not require a Project Delivery Method Selection Checklist, and will be DBB.

## 300.02(2) Environmental Requirements

WSDOT uses the Environmental Review Summary (ERS) portion of the Project Summary to scope environmental impacts associated with the proposed project and document the anticipated environmental class of action (Environmental Impact Statement/Environmental Assessment/Categorical Exclusion). Projects that have only state funds must have State Environmental Policy Act (SEPA) documentation. Upon receipt of the ERS approval for projects requiring an Environmental Accessment or Environmental Impact Statement under NEPA, the region proceeds with environmental documentation, including public involvement, appropriate for the magnitude and type of the project.

The environmental approval levels are shown in Exhibit 300-3. Refer to your Region Environmental Office and Chapter 225 for more information.

# 300.03 Design Documentation

## 300.03(2) Design Decisions

### 300.03(2)(a) Design Analysis

A Design Analysis is a process and tool used to document important design decisions, summarizing information needed for an approving authority to understand and support the decision. The approving authority is shown in Exhibit 300-2 or 300-5.

A Design Analysis is required where a dimension chosen for a design element that will be changed by the project is outside the range of values provided for that element in the Design Manual. A Design Analysis is also required where the need for one is specifically referenced in the Design Manual.

A region approved Design Analysis is required if a dimension or design element meets current [AASHTO guidance adopted by FHWA](https://www.fhwa.dot.gov/programadmin/standards.cfm), but is outside the corresponding Design Manual criteria. Email a PDF copy of all region approved Design Analyses to the ASDE supporting your region.

A Design Analysis may be classified as a federal action and require FHWA involvement as discussed in 300.05(3).

In the case of a shoulder width reduction at an existing bridge pier, bridge abutment, sign structure, or luminaire base in a run of median barrier, the Design Parameter Sheet may be used instead of a Design Analysis to document the dimensioning decision for the shoulder at that location.

On National Highway System (NHS) routes, a Design Analysis involving one of the controlling criteria (see 300.05(3)) is a federal action. Projects involving a federal action in any phase of the project require additional documentation, such as NEPA, Section 4(f) of the USDOT Act, ESA, etc., for which a programmatic agreement may or may not be provided. Contact region Environmental staff for more information.

A template is available for the development of the Design Analysis document here:  [www.wsdot.wa.gov/design/support.htm](http://www.wsdot.wa.gov/design/support.htm).

# 300.04 Project Approvals

## 300.04(2) Design-Build Projects

For design-build (DB) projects, WSDOT provides a preliminary design referred to as the conceptual design and the design-builder becomes the engineer of record responsible for completing the final design. For this reason, WSDOT obtains Conceptual Design Approval (CDA) for DB projects and the engineer applies a PE stamp without signature per WAC 196-23-020(2). See the [WSDOT Design-Build Manual](https://www.wsdot.wa.gov/publications/manuals/m3126) for additional information regarding the level of completeness required for the conceptual design and development of the request for proposal (RFP).

Once a contract is executed, the design-builder is responsible for maintaining and completing all design documentation, including the PDA, DDP supporting documents, and Project File. Refer to the design-build DDP checklist for design documents necessary for CDA, PDA, and DDP supporting documents.

Conceptual Design Approval is entered into the DDP and remains valid for three years or as approved by the ASDE. An extension to the CDA must be filed in the DDP. Once the RFP is issued, the version of the Design Manual is locked throughout the duration of the contract.

# 300.06 Changes to Approved Documents

There are four ways to revise an already approved design document. The document can be supplemented if the original document is to remain entirely intact and new information is added. The document can be amended if changes are small and easy to understand. The document can be superseded (totally replaced) if the changes are large. The person revising the document must work with the approving authorities to determine which of the three approaches will be taken. These three options apply to all design documents requiring approval signatures.

## 300.06(1) Errata

Errata are corrections to errors in the original document (e.g. misspelled word or mistyped numbers). The intent and conclusion of the original document is unchanged. The highest Region and HQ approval authority must agree that the clerical errors do not change the intent of the originals. Errata are listed on a separate document by page and line reference and included in the DDP or PF in the same section as the original document. Errata are not circulated for approval signatures.

## 300.06(1) Supplement

Supplements provide new or additional information while leaving the original document intact. These are noted as supplements on the title page and an introductory paragraph/section is included in the supplement that clearly indicates the parent document and why it is being supplemented. The supplement is filed in the DDP or PF in the same section as the original document. Supplements are circulated for approval similar to the original document.

## 300.06(2) Amend

Amended documents are where an original is modified beyond the level of an errata. For amendments, the original document is modified by marking up the original document. An amendment should be limited to a section or specific pages of the original document. If the amendment is large and covers a significant amount of the document, consider superseding the original (see below). The amendment must include a cover document that explains the reasons for the modifications and how they impact the conclusion of the original document. Amendments must have a signature page and obtain approvals according to Exhibit 300-2 thru 4. Amendments are a separate document from the original and the original and the amendment are filed in the DDP or PF in the same section.

## 300.06(2) Supersede

Superseded documents replace the original document in its entirety. A watermark is applied to the original document indicating that it has been superseded. Treat the superseding document as a completely new document. The superseding document must have a section stating what document it supersedes, clearly indicating the title and approval date of the original document. Superseding documents must have a signature page and obtain approvals according to Exhibit 300-2 thru 4. Both the superseded and superseding documents are retained in the DDP or PF in the same section.

Exhibit 300-2 Approval Authorities

|  |  |  |  |
| --- | --- | --- | --- |
| **Project Type** | **Basis of Design(BOD)Approval** | **Design Analysis Approval**[1] | **Design Approval and Project Development Approval** |
| Project of Division Interest (PoDI) | [2] | [2] | [2] |
| **Interstate** |
| Improvement Projects [3] | HQ Design | FHWA[4]HQ Design | FHWA[5]HQ Design |
| Preservation Projects | HQ Design | FHWA[4]HQ Design | Region |
| **National Highway System (NHS)** |
| Projects on all limited access highways, or on managed access highways outside of incorporated cities and towns | Region ‡ | HQ Design | Region |
| Projects on managed access highways within incorporated cities and towns Inside curb or EPS [6]Outside curb or EPS | Region ‡City/Town | HQ DesignHQ LP | RegionCity/Town |
| **Non-National Highway System (Non-NHS)** |
| Improvement projects on all limited access highways, or on managed access highways outside of incorporated cities and towns  | Region ‡ | HQ Design | Region |
| Improvement projects on managed access highways within incorporated cities and towns [7]Inside curb or EPS [6]Outside curb or EPS | Region ‡City/Town | HQ DesignHQ LP | RegionCity/Town |
| Preservation projects on limited access highway, or on managed access highways outside of incorporated cities and towns, or within unincorporated cities and towns [8] | Region | Region | Region |
| Preservation projects on managed access highways within incorporated cities and towns [8]Inside curb or EPS [6]Outside curb or EPS | RegionCity/Town | RegionHQ LP | RegionCity/Town |

‡ HQ concurrence required

FHWA = Federal Highway Administration

HQ = WSDOT Headquarters

HQ LP = WSDOT Headquarters Local Programs Office

EPS = Edge of paved shoulder where curbs do not exist

NHS = National Highway System

 [www.wsdot.wa.gov/mapsdata/travel/hpms/NHSRoutes.htm](http://www.wsdot.wa.gov/mapsdata/travel/hpms/NHSRoutes.htm)

**For table notes, see the following page.**

Exhibit 300-2 Approval Authorities (continued)

**Notes:**

[1] See 300.03(2)(a)

[2] Projects of Division Interest (PoDI) must receive FHWA approvals per the PoDI Agreement regardless of funding source or project type.

[3] For projects types needing FHWA approval, see 300.05(2).

[4] See 300.05(3) for FHWA involvement with Design Analysis.

[5] FHWA will provide Design Approval prior to NEPA Approval, but will not provide Project Development Approval until NEPA is complete.

[6] Includes raised medians (see Chapter 1600).

[7] Refer to [RCW 47.24.020](http://apps.leg.wa.gov/rcw/default.aspx?cite=47.24.020) for more specific information about jurisdiction and responsibilities that can affect approvals.

[8] For Bridge Replacement projects in the Preservation program, follow the approval level specified for Improvement projects.

Exhibit 300-3 Approvals

|  |  |
| --- | --- |
| **Item** | **Approval Authority** |
| **Region** | **HQ** | **FHWA** |
| **Program Management** |
| Project Profile  |  | X [10] |  |
| Work Order Authorization |  | X | X [1] |
| **Public Hearings** |
| Corridor Hearing Summary |  | X [2] |  |
| Design Hearing Summary |  | X [3] | X [8] |
| Limited Access Hearing  |  | X [4] |  |
| **Access Control** |
| Limited Access Break: Interstate |   | [7] | X |
| Limited Access Break: non-Interstate |   | X |   |
| **Environmental Document** |
| Environmental Review Summary | X |   |   |
| NEPA – Environmental Impact Statement (EIS) |   | [7] | X |
| NEPA – Categorical Exclusion (CE) | X |   |   |
| NEPA – Environmental Assessment (EA) |   | [7] | X |
| SEPA – Categorical Exemption (CE)  | X |   |   |
| SEPA – Environmental Checklist & Determination of Non-Significance (DNS) | X |   |   |
| SEPA – Environmental Impact Statement (EIS) |   | X |   |
| **Design** |
| Access Revision Report |  | [7] | X |
| Basis of Design (BOD) | [9] | [9] | [9] |
| Design Analysis | [9] | [9] | [9] |
| Design Approval | [9] | [9] | [9] |
| Experimental Features  |   | X | X |
| Geotechnical Report |   | X [12] |   |
| Grading Plans | X |   |   |
| Hydraulic Report  | X [15] | [15] |   |
| Irrigation Plans | X [16] |  | X [17] |
| Materials Source Report |   | X [12] |   |
| Maximum Extent Feasible | X | X[19] |   |
| Monumentation Map | X |   |   |
| Pavement Determination Report |   | X [12] |   |
|  |  |  |   |
| Proprietary Items | X |  |  |
| Project Development Approval | [9] | [9] | [9] |
| Public Art Plan – Interstate | X [16] | X [17][21] | X |
| Public Art Plan – Non-Interstate | X [16] | X [17][21] |   |

**Table continued on the following page, which also contains the notes.**

Exhibit 300-3 Approvals (continued)

|  |  |
| --- | --- |
| **Item** | **Approval Authority** |
| **Region** | **HQ** | **FHWA** |
| **Design (Continued)** |
| Roadside Restoration and Wetland Mitigation Planting Plans | X [16] | X [17] |   |
| Resource Conservation Areas | X [16] | X [17] | X |
| Rest Area Plans |   | X |   |
| Resurfacing Report |   | X [12] |   |
| Right of Way Plans | [11] | X |   |
| Tied Bids | X [14] |   |   |
| **PS&E Process Approvals** |
| DBE/Training Goals |  | X [22] |  |
| Contract Time-Related Liquidated Damages |  | X [5] |  |
| Incentive Provisions |  | X [5] |  |
| Interim liquidated damages |  | X [6] |  |
| Lump Sum Traffic Control | X |  |  |
| Mandatory Material Sources and/or Waste Sites | X |  |  |
| Nonstandard Bid Item Use |  | X [5] |  |
| Railroad Agreements |  | X [24] |  |
| Right Of Way Certification | X | X [23] |  |
| Special Provisions |  | X [5] |  |
| State Force Work | X [22] |  |  |
| State-Furnished Materials | X [22] |  |  |
| Ultimate Reclamation Plan Approval Through DNR | X |  |  |
| Work Performed for Public or Private Entities | X [22] |  |  |
| **Structures** |
| Bridge Design Plans (Bridge Layout) | X | X |   |
| Preliminary Bridge Plans for Unusual/Complex Bridges on the Interstate |   | [7] | X |
| Structures Requiring Type Size and Location |   | X |   |

**Table continued on the following page, which also contains the notes.**

|  |
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| **Traffic** |
| Continuous Illumination – Mainline | X [20]  | X [18] |   |
| Crash Analysis Report | X [20] | X |   |
| High Mast Illumination |   | X [18] |   |
| Illumination Plans | X [20] |   |   |
| Intelligent Transportation System (ITS) Plans | X [20] |   |   |
| Interchange Plan for Approval | X |  |  |
| Intersection Control Evaluation | X [20] | X [18] |   |
| Intersection or Channelization Plans  | X |   |   |
| ITS Systems Engineering Analysis Worksheet  | X [20] |   |   |
| Preliminary Signalization Plans |   | X [6][18] |   |
| Safety Analysis | X |  |  |
| Signal Permits | X [13] |   |   |
| Signalization Plans | X [20] |   |   |
| Traffic Analysis | X |  |  |
| Tunnel Illumination |   | X [18] |   |
| Work Zone Transportation Management Plan/Traffic Control Plan | X [20] |   |   |
| ***Notes:*** [1] Federal-aid projects [2] Assistant Secretary Regions and Mega Programs[3] State Design Engineer[4] Right of Way Plans Manager[5] HQ Construction[6] Transportation Data, GIS & Modeling Office[7] Final review & concurrence required at HQ prior to submittal to approving authority.[8] On Interstate projects, the State Design Engineer submits the approved design hearing summary to the FHWA for federal approval.[9] See Exhibit 300-2[10] HQ Capital Program Development and Management (CPDM)[11] Certified by a professional licensee |  [12] HQ Materials Lab[13] Regional Administrator[14] Per [23 CFR 635.111](http://www.ecfr.gov/cgi-bin/text-idx?SID=2ccdfc61eb71e012b4d8d78323a3e622&mc=true&node=pt23.1.635&rgn=div5)[15] See the [*Hydraulics Manual*](https://www.wsdot.wa.gov/Publications/Manuals/M23-03.htm) for approvals levels.[16] Applies to regions with a Landscape Architect.[17] Applies to regions without a Landscape Architect.[18] State Traffic Engineer[19] ASDE and OEO Deputy Director[20] Region Traffic Engineer[21] ASDE and Bridge and Structures Office[22] See Plans Preparation Manual[23] HQ Real Estate Services[24] See Agreements Manual |

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 Glossary

# Acronyms

|  |  |
| --- | --- |
| SIMMS | Signal Maintenance Management System |
| SOV | Single-occupant vehicle |
| SRA | Safety rest area |
| SPUI | Single Point Urban Interchange |
| STIP | Statewide Transportation Improvement Program |
| STP | Surface Transportation Program |
| TDM | Transportation demand management |
| TIA | Traffic Impact Analysis |
| TIP | Transportation Improvement Program |
| TMA | Transportation Management Area |
| TMP | Transportation management plan |
| TTC | Temporary Traffic Control |
| TO | Transportation Operations |
| TSMO | Transportation Systems Management and Operations |
| TWLTL | Two-way left-turn lane |
| SWZS | Smart Work Zone System |
| UPO | [Central Puget Sound] Urban Planning Office |
| USC | United States Code |
| VE | Value engineering |
| VECP | Value Engineering Change Proposal |
| VIC | Visitor Information Center |
| VPH | Vehicles per hour |
| WAC | Washington Administrative Code |
| WIM | Weigh in motion |
| WSDOT | Washington State Department of Transportation |
| WSPMS | Washington State Pavement Management System |
| WTP | Washington Transportation Plan |

# Glossary of Terms

***A***

**Active Transportation and Demand Management (ATDM)** - An application of Transportation Systems Management and Operations (TSMO) to actively manage the transportation system through real-time strategies and predictive analyses (e.g. On-Demand Transit, Dynamic Lane Use Control, and Dynamic Way-Finding).

***alternative(s)***Possible solutions to accomplish a defined purpose and need. These include local and state transportation system mode and design options, locations, and Transportation Systems Management and Operations (TSMO)-type improvements such as ramp metering, mass transit, and high-occupancy vehicle (HOV) facilities.

**amend/amended/amendment**  To make changes to an original document. Used to correct part of a document while leaving the remainder of the document intact.

***B***

**bridge fence**    Fencing used to reduce the likelihood of an object being dropped or thrown from a bridge.

***D***

***Design Approval (DA)*** Documented approval of the design at this early milestone locks in Design Manual policy for three years. Design approval becomes part of the Design Documentation Package (see [Chapter 300.](http://www.wsdot.wa.gov/publications/manuals/fulltext/M22-01/300.pdf))

***E***

***errata*** Alist of errors and their correctionsfor an original document that are on the scale of clerical errors (e.g. misspelled word or mistyped numbers).

***S***

***Smart Work Zone System (SWZS)*** A site-specific configuration of temporary traffic control technology deployed within a roadway work zone to increase safety for roadway users and workers by providing "real-time" information on work zone traffic conditions and delays. SWZS configurations may include, but are not limited to, any combination of the following: Queue Warning System, Dynamic Late Merge or Zipper Merge, Travel Time System, and/or Trucks Entering System.

**supersede**   A document that replaced the original completed document in its entirety.

**supplement**  To add content to a document while leaving the original intact. Used to add additional information to a document.

***T***

**Transportation demand management (TDM)** The process of using transportation options, motivation, and infrastructure to enhance access to and use of transportation network capacity.

**Transportation Systems Management and Operations (TSMO)** - TSMO is applying cost-effective solutions that are multimodal, cross jurisdictional, and applicable across the transportation system. TSMO strategies are flexible solutions that can be applied as standalone solutions, combined with other solutions, and/or mitigation for performance tradeoffs prior to future expansion. See <https://tsmowa.org/> for more information.