

## Design Memorandum

TO: All Design Section Staff  
FROM: Bijan Khaleghi  
DATE: November 4, 2014  
SUBJECT: Archiving Design and Check Calculations, Design Files, and S&E Files

This design memorandum defines WSDOT policy for archiving design and check calculations, design files, and S&E files. Archiving of Contract Plans and as-built plans will be addressed in a subsequent policy memorandum.

These archiving requirements apply to all consultant designs and Design-Build projects. The archiving requirement needs to be stated in the RFP for Design-Build projects.

The Bridge Design office is instituting a new Archiving process for these important documents. The new policy requires archiving design calculations, design files, and S&E files for all structures and attachments that are incorporated in the contract including bridges, special design walls, overhead sign structures, luminaries, expansion joint and bearing replacements, rail retrofit, seismic retrofits and bridge rehabilitation projects.

Archiving of design calculations of unscheduled works related to the bridge contract is required. Archiving of unscheduled works requested by maintenance is not required.

All design calculations are required to be organized and bound. The coversheet of design calculations are required to be stamped and signed. Design check calculations are also required to be organized, bound and archived, but the coversheet of design check calculations need not be stamped and signed. An example of the coversheet is shown below.

Section 1.3.8 is revised as follows:

**A. Upon award of the project:**

1. The designer and checker will place a job file cover label on the bound design and check calculations folder (see figure 1-3-8.1).
2. The unit supervisor or bridge project manager shall turn in the bound project design calculations and check calculations to the Archive Engineer.
3. The S&E Engineer is required to give the Bridge Archive Engineer the signed plan sheets, job file, and S&E file. Archive Engineer will review and select portions of design files that need to be archived. The signed and stamped special provisions in the S&E files will be archived.

Files will be placed in a temporary storage space marked as "Design Unit Document Temporary Storage". These cabinets will be locked, and only the Bridge Archive Engineer, the Scheduling Engineer, and the Office Administrator will have keys to them. The Design Files, S&E Files, and Design Calculations are organized by the contract number.

A Bridge and Structures staff member may access the Design Files, S&E Files, or Design Calculations by requesting the files from the Bridge Archive Engineer or the Scheduling Engineer, who will check out the files and note the date and person's name. If a person other than a Bridge and Structures Office staff member requests these documents, the approval of the Bridge Design Engineer or Bridge Management Engineer will be required for release of the documents.

**B. Upon the physical Contract Completion:**

The designer will update the bound calculation file with any contract plan changes that have occurred during construction.

**C. Nine months after physical completion of the contract:**

The Bridge Archive Engineer will place all reports, signed and stamped special provisions, and bound design and check calculations in an archiving box and send the documents to the Office of Secretary of State for archive storage, except as otherwise approved by the Bridge Design Engineer.

The Bridge Archive Engineer will maintain a record of the documents location and archive status.

**Background:**

Calculations, job files, and S&E files are stored by the Archive Engineer are stored in temporary storage until 9 months after physical completion of the construction project. After construction, they are sent to archives.

If you have any questions regarding this issue, please contact Scott Sargent at 705-7753 [SargenW@wsdot.wa.gov](mailto:SargenW@wsdot.wa.gov), David Lemcke at 705-7211 [LemckeD@wsdot.wa.gov](mailto:LemckeD@wsdot.wa.gov) or Bijan Khaleghi at 705-7181 [Bijan.Khaleghi@wsdot.wa.gov](mailto:Bijan.Khaleghi@wsdot.wa.gov).

cc: Mark Gaines, Bridge Construction – 47354  
Craig Boone, Bridge and Structures – 47340

I-5  
M STREET TO PORTLAND AVENUE - HOV  
XL3497G

Design Calculations

Structure Type Bridge Substructure

Structure Name I-5 Over I-705 and Tacoma Rail

Structure Number 5/445E County Pierce

State Route I-5 Contract Number 8607

Structure Designed By Jedediah Bingle PE, SE

Structure Checked By Anthony Mizumori PE, SE

Description of Calculations The calculations included herein are prepared to support the details provided in the plan set that meet the design criteria set forth by the policy determined by the WSDOT Bridge and Structures Office as defined in the WSDOT Bridge Design Manual. These calculations are provided to support portion of the plan set for the shafts, columns and crossbeams of Piers 2, 3, 4 and 5 for the referenced structure.

Design Calculations Prepared By



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Supervisor Bijan Khaleghi PE, SE



**Washington State  
Department of Transportation**