



# Web-based AASHTOWare Project<sup>TM</sup> Interaction Guide

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## AASHTOWare Project Estimator<sup>TM</sup> 2.12a AASHTOWare Project Preconstruction<sup>TM</sup> (web Trns•port<sup>TM</sup> 2.00 and Later Releases)

*June 2013*

*Last Updated  
June 2013*

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# 1. Introduction

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The AASHTOWare Project Estimator™ software helps agencies estimate the cost of a construction project using cost-based, bid-based, quote-based, and ad hoc estimation methods. The software automates estimation data gathering and, in doing so, relieves the tedium of the estimation process while providing consistent and flexible methods for the estimation. AASHTOWare Project Estimator software interacts with the web-based AASHTOWare Project™ (formerly known as web Trns•port™) application, which is used by highway agencies to prepare estimates and proposals before bid lettings.

This guide documents the interfaces between the AASHTOWare Project Estimator software and the AASHTOWare Project Preconstruction application. It is intended as a supplement to the documentation for those products and assumes that you already have a working knowledge of AASHTOWare Project Estimator software and the AASHTOWare Project Preconstruction application.

- 📖 **Note:** For more information on AASHTOWare Project Estimator software basics and estimation techniques, such as starting the software or logging on, please see the *Estimator User's Guide*.

Specific file transfer procedures are not covered in the guide. For help with file transfer software, please see your agency's network specialist. Support for your file transfer is not provided through Info Tech, Inc.

Where applicable, this guide distinguishes between web-based AASHTOWare Project versions: one Interfacing with AASHTOWare Project Preconstruction section describes these procedures for web Trns•port 2.00 software, and one section describes these procedures for version 2.01 and later.

## 1.1 Overview

Sharing information between the AASHTOWare Project Estimator software and the AASHTOWare Project Preconstruction application helps you create estimates and update

project data and prices for projects and proposals much more quickly than working in either application alone. The following chapters contain instructions for importing and exporting information from within the AASHTOWare Project Estimator software as well as from within the AASHTOWare Project Preconstruction application.

AASHTOWare Project Preconstruction Projects consist of items used in construction. These items typically fall into different project categories for funding purposes, for segregating types of work items, or for segregating work phases. In order to create a AASHTOWare Project Preconstruction-compatible project in the AASHTOWare Project Estimator software, all items and associated cost bases must be AASHTOWare Project-compatible.

Once the estimate has been created in the AASHTOWare Project Estimator software, it must be delivered to the AASHTOWare Project Preconstruction application to be included in a project or proposal, and eventually a bid letting. Three steps are required to successfully complete the estimate:

1. Export the AASHTOWare Project Estimator file as an XML file.
2. Store the AASHTOWare Project Estimator XML file in a location accessible by the AASHTOWare Project Preconstruction application.
3. Import the AASHTOWare Project Estimator XML file into the AASHTOWare Project Preconstruction application.

Each of these steps is described in detail in the following chapters.



## 2. Importing and Exporting in the AASHTOWare Project Estimator Software

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The AASHTOWare Project Estimator software stores estimates in separate data files. You can use the AASHTOWare Project Estimator software's import and export capabilities to export data into other applications or import information created in external programs into the AASHTOWare Project Estimator software. See the *Estimator System Manager's Guide* for more details.

When importing, the software looks at the information being imported to determine if it is a catalog or estimate and places it accordingly.

The AASHTOWare Project Estimator software's data security measures are enforced when you import catalogs, and the software will import catalog data only for users that have permission to edit a catalog. You can export any catalog or estimate that you can open.

### 2.1 Exporting Information to the AASHTOWare Project Preconstruction Application

The export command is content sensitive in the AASHTOWare Project Estimator software. That is, the data you want to export must be currently active (displayed). For example, if you want to export an estimate, you must have the estimate open.

Follow these steps to export an estimate:

1. Ensure that the estimate is active.
2. Select **Export** from the **File** menu.

The software displays the dialog box shown in Figure 2-1.



Figure 2-1. Export Project Dialog Box

3. Click SAVE.

Upon successfully exporting the estimate, you are ready to transfer the project into the AASHTOWare Project Preconstruction application. The software used to transfer the data to the AASHTOWare Project Preconstruction system is supported by your computer staff. Info Tech assumes that software and resources are available to you for transferring your project to the AASHTOWare Project Preconstruction system.

## 2.2 Importing Information From the AASHTOWare Project Preconstruction Application

You can import AASHTOWare Project Preconstruction project or proposal information into the AASHTOWare Project Estimator software. Select **Import** from the **File** menu and choose the project or proposal from the Import window. Click **OPEN**.



Figure 2-2. Import Projects and Proposals From the AASHTOWare Project Preconstruction Application

You can treat these imported projects and proposals like a normal estimate, but you must use the Save As option when saving them for the first time.

## 2.3 Importing Checked-out Project or Proposals From the AASHTOWare Project Preconstruction Application

You can import AASHTOWare Project Preconstruction projects or proposals that have been checked-out for pricing or repricing into the AASHTOWare Project Estimator software. Once the file has been checked-out of web-based AASHTOWare Project, select **Import** from the **File** menu in the AASHTOWare Project Estimator software and choose the project or proposal from the Import window (See Figure 2-2). Click **OPEN**.

The AASHTOWare Project Preconstruction projects or proposals that have been checked-out will import into the AASHTOWare Project Estimator software and will only allow the unit price of the items to be edited. Items can not be added nor deleted on checked-out projects or proposals. After pricing has been completed, export the estimate as detailed in Section 2.1.



### **3. Importing and Exporting in the AASHTOWare Project Preconstruction Application (version Trns•port Preconstruction 2.00)**

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You can perform a number of types of imports and exports in the Trns•port Preconstruction system:

- You can import information to create a new Trns•port Preconstruction project from an AASHTOWare Project Estimator estimate.
- You can update project data already in the Trns•port Preconstruction application with data from the AASHTOWare Project Estimator software.
- You can import new pricing information for Trns•port Preconstruction projects and proposals from the AASHTOWare Project Estimator software. The Trns•port Preconstruction application will only accept estimate information that already exists in the Trns•port Preconstruction system and has been checked-out. Pricing data is the only kind of information that can be imported from the AASHTOWare Project Estimator software for checked-out project or proposals.
- You can export a Trns•port Preconstruction project or proposal to the AASHTOWare Project Estimator software to be used as the foundation for a new AASHTOWare Project Estimator estimate.

The Trns•port Preconstruction system uses an information “check-in/check-out” process to protect the integrity of project and proposal information as it is passed to and from the AASHTOWare Project Estimator software. During the period that estimate information is checked-out, the entire project or proposal is locked and cannot be changed in the Trns•port Preconstruction application. When a project or proposal has been checked out from the Trns•port Preconstruction system, pricing information is the only information that may be changed.

## 3.1 Contingency Percent vs. Engineering and Construction Percent

The Estimator Contingency Percent field is derived by adding a percentage to the total of the items in the estimate.

The Trns•port Preconstruction "Engineering and Construction Percent" (E&C) is an industry standard percentage added by some agencies to the cost of the work items on a project to account for the agency's cost of doing business and initiating the project.

The Estimator Contingency Percent field does not affect the Trns•port Preconstruction E&C Percent field. Also, the Trns•port Preconstruction E&C Percent field does not affect the Estimator Contingency Percent field.

The AASHTOWare Project Estimator software uses contingency to make up for risk or unknown factors not taken into account that might affect the estimate. As you approach a final estimate, the contingency should drop to as close to zero as possible. The Trns•port Preconstruction contingencies are used to obtain funding based on fixed percents of the cost of the work. Even if you use the Estimator contingency field for this other purpose, you need to re-enter it in the Trns•port Preconstruction application once the project is imported into the Trns•port Preconstruction application.

Because the Trns•port Preconstruction application does not use contingencies in the same way as the AASHTOWare Project Estimator software, the estimate in the AASHTOWare Project Estimator software may be higher than the same one imported into the Trns•port Preconstruction application when a non-zero contingency percentage is used.

## 3.2 Importing Project Data From the AASHTOWare Project Estimator Software

This section contains information about how to import an estimate from the AASHTOWare Project Estimator software to be used as the foundation for a new Trns•port Preconstruction project.

Follow these steps to import an estimate:

1. Export the AASHTOWare Project Estimator file as an XML file (See Section 2.1).
2. Store the AASHTOWare Project Estimator XML file in a location accessible by the Trns•port Preconstruction system.
3. In the Trns•port Preconstruction application, open the **Project List** and click on the IMPORT ESTIMATOR XML button as shown in Figure 3-1.

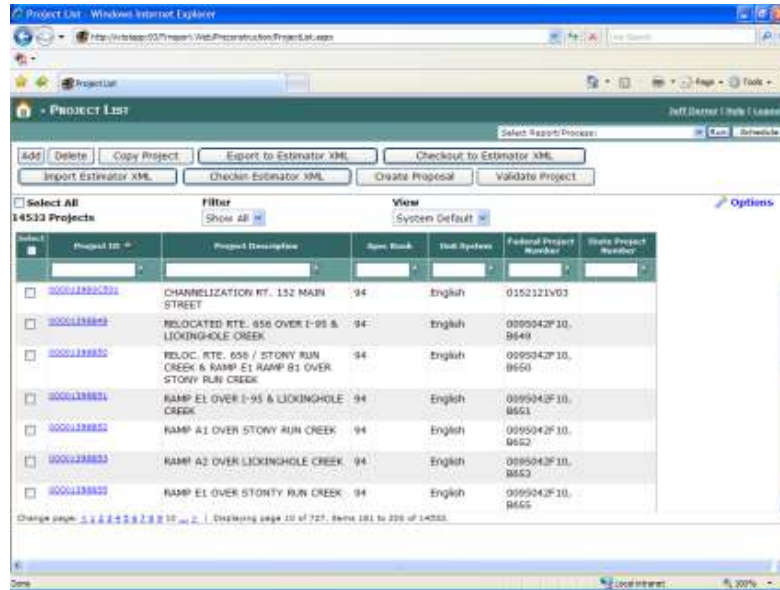


Figure 3-1. Project List Window

4. In the Import Estimator XML window shown in Figure 3-2, click the BROWSE... button and navigate to the location of the AASHTOWare Project Estimator XML file stored in Step 2.

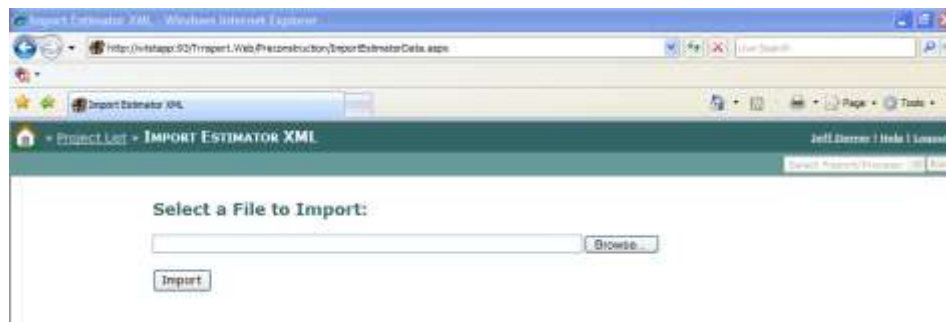


Figure 3-2. Import Estimator XML File Window

5. Once the file has been identified, click the IMPORT button (Figure 3-2).
6. A confirmation window will open concerning adding the project. If this is the project desired for the import, click the OK button; otherwise, click the CANCEL button (Figure 3-3).

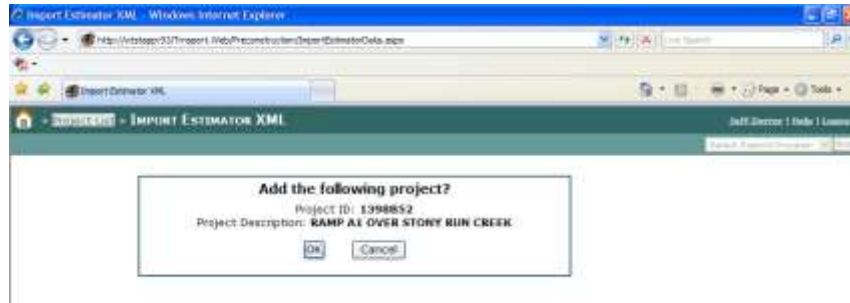


Figure 3-3. Import Estimator XML Confirmation Window

If the imported project data did not already exist in the Trns•port Preconstruction application, the Import Estimator XML window will close and the Project List will open. If the project is already in the Trns•port Preconstruction application, the Import Estimator XML window will display the dialog box as shown in Figure 3-4.

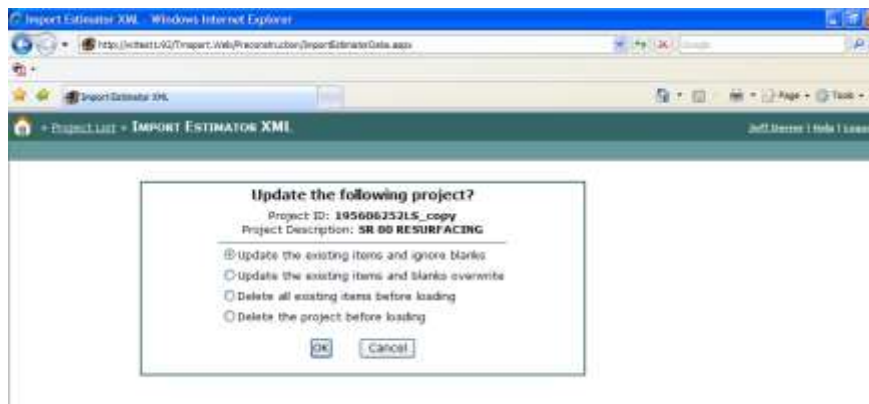


Figure 3-4. Import Estimator XML Window

By default, fields that contain blank values in the project you are importing are ignored and do not overwrite information that already exists in the project. If you want existing data to be replaced by blank values in the imported project, click the option button labeled **Update the existing items and blanks overwrite**.

If you want the Trns•port Preconstruction application to delete all existing items in the project before it imports the new project file, click the option button labeled **Delete all existing items before loading**.

If you want web Trns•port to delete the entire project record before it imports the new project file, click the option button labeled **Delete the project before loading**.



### 3.3 Importing Project Prices From the AASHTOWare Project Estimator Software

Follow these steps to import pricing information from the AASHTOWare Project Estimator software to update a Trns•port Preconstruction project:

1. Export the AASHTOWare Project Estimator file as an XML file (See Section 2.1).
2. Store the AASHTOWare Project Estimator XML file in a location accessible by the Trns•port Preconstruction application.
3. In the Trns•port Preconstruction application, open the **Project List** and click on the CHECKIN ESTIMATOR XML button as shown in Figure 3-5.

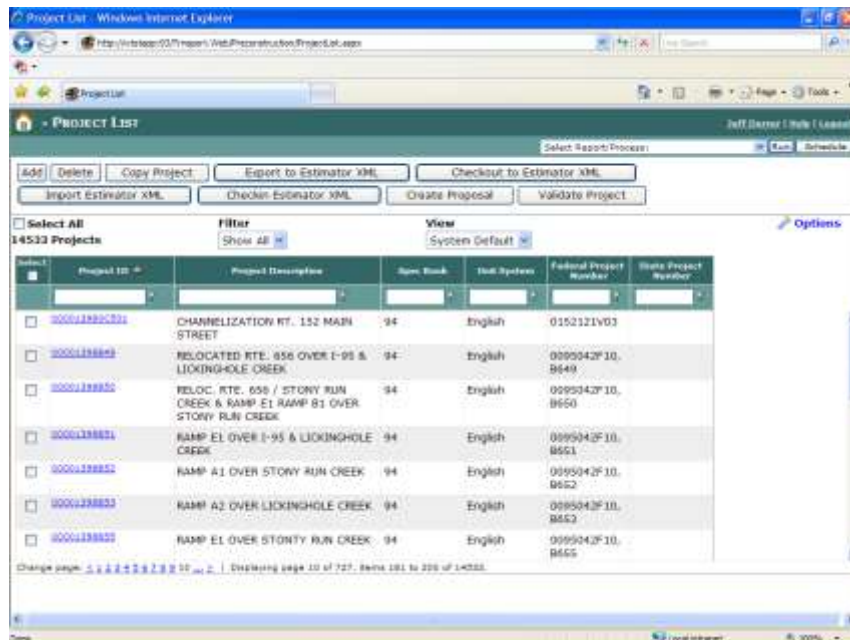


Figure 3-5. Project List Window

4. In the Checkin Estimator XML window shown in Figure 3-6, click the BROWSE... button and navigate to the location of the AASHTOWare Project Estimator XML file stored in Step 2.





Figure 3-8. Proposal List Window

4. In the Checkin Estimator XML window shown in Figure 3-9, click the BROWSE... button and navigate to the location of the AASHTOWare Project Estimator XML file stored in Step 2.

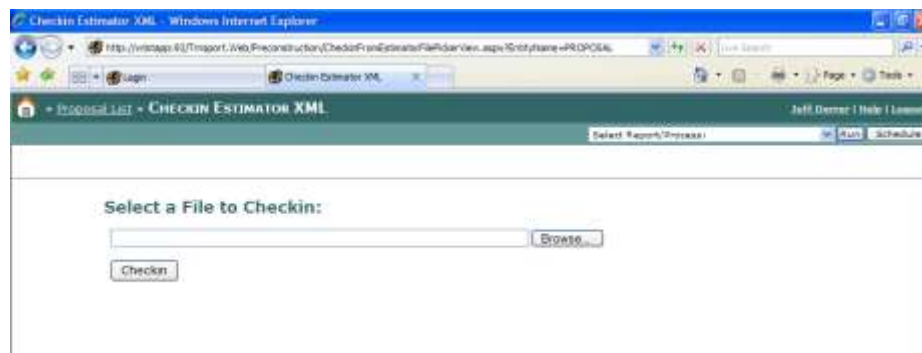


Figure 3-9. Checkin Estimator Window

5. Once the file has been identified, click the CHECKIN button (See Figure 3-2).
6. A confirmation window will open concerning checking-in the proposal. If this is the proposal desired for the checkin, click the OK button; otherwise, click the CANCEL button (See Figure 3-10).

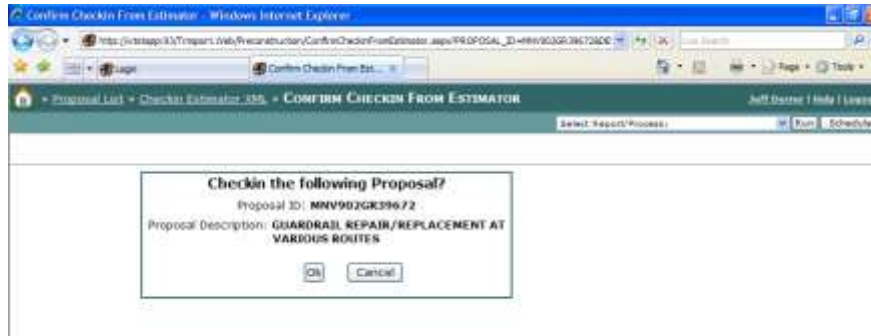


Figure 3-10. Confirm Proposal Checkin From Estimator Window

## 3.5 Exporting a Project to the AASHTOWare Project Estimator Software

You can export a Trns•port Preconstruction project to the AASHTOWare Project Estimator software to use as the foundation for a new AASHTOWare Project Estimator estimate.

Once the job is imported into the AASHTOWare Project Estimator software, you need to set the Estimator catalog.

### 3.5.1 Exporting a Trns•port Preconstruction Project to the AASHTOWare Project Estimator Software

Follow these steps to export a project to the AASHTOWare Project Estimator software:

1. In the Trns•port Preconstruction application, select the project from the **Project List** as shown in Figure 3-18.
2. Click on the EXPORT TO ESTIMATOR XML button as shown in Figure 3-18.

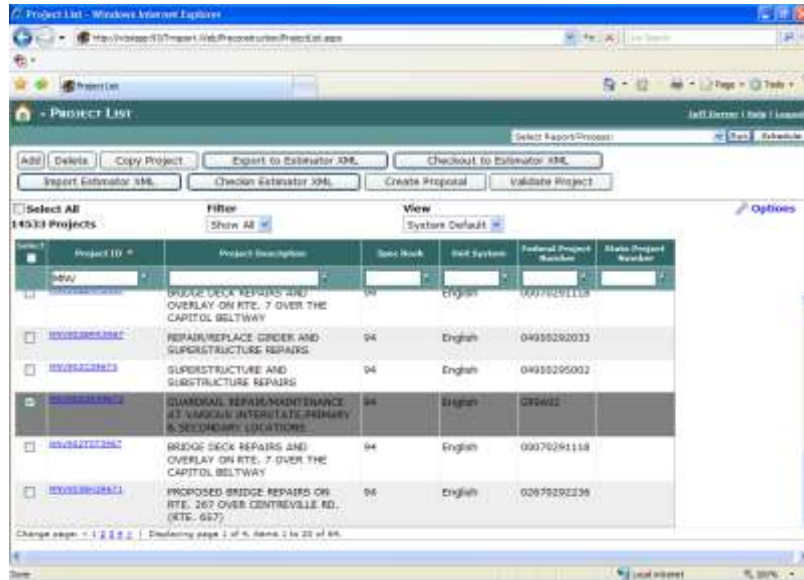


Figure 3-11. Project List Window With Selected Project

3. Click on the SAVE button as shown in Figure 3-12.

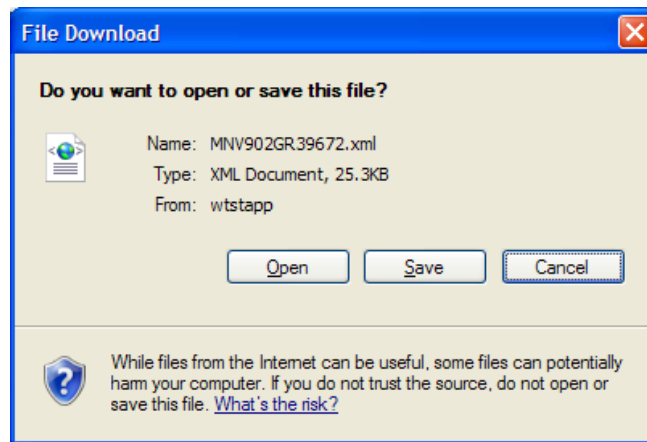


Figure 3-12. File Download Window

4. Navigate to a location accessible to the AASHTOWare Project Estimator software and store the XML file by clicking the SAVE button in the Save As window as shown in Figure 3-13.

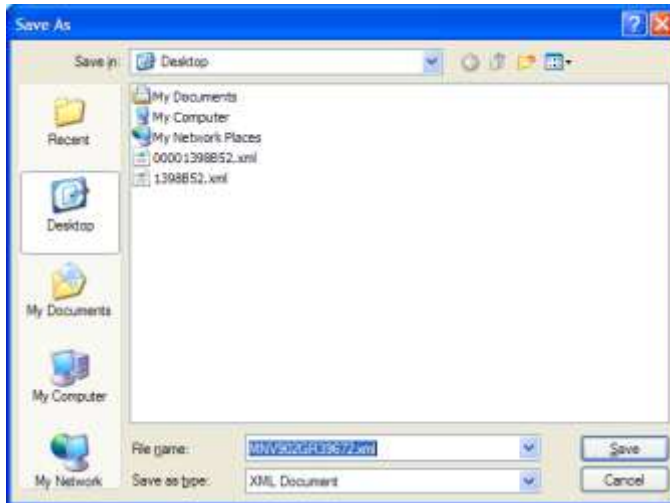


Figure 3-13. Save As Window

5. Click the CLOSE button on the Download Complete window as shown in Figure 3-14.

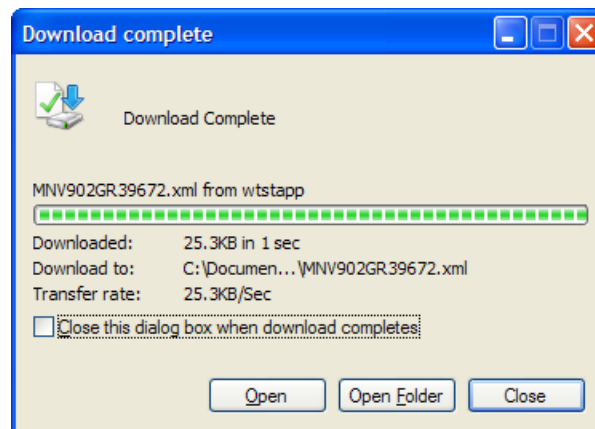


Figure 3-14. Download Complete Window

6. In the AASHTOWare Project Estimator software, select **Import** from the **File** menu as shown in Figure 3-15.

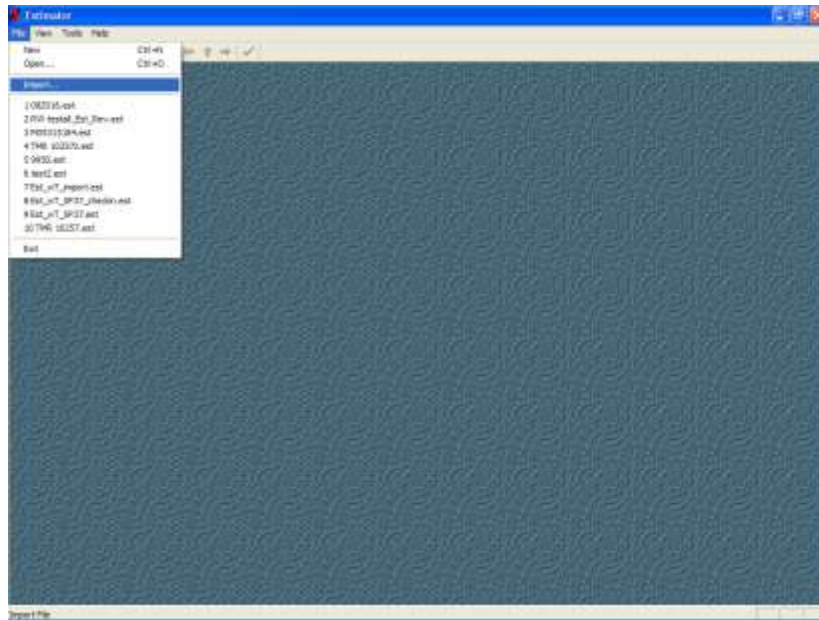


Figure 3-15. Estimator Window

7. On the Import window, highlight the file and click the OPEN button as shown in Figure 3-16.



Figure 3-16. Import Window

8. The AASHTOWare Project Estimator software opens the estimate as shown in Figure 3-17.

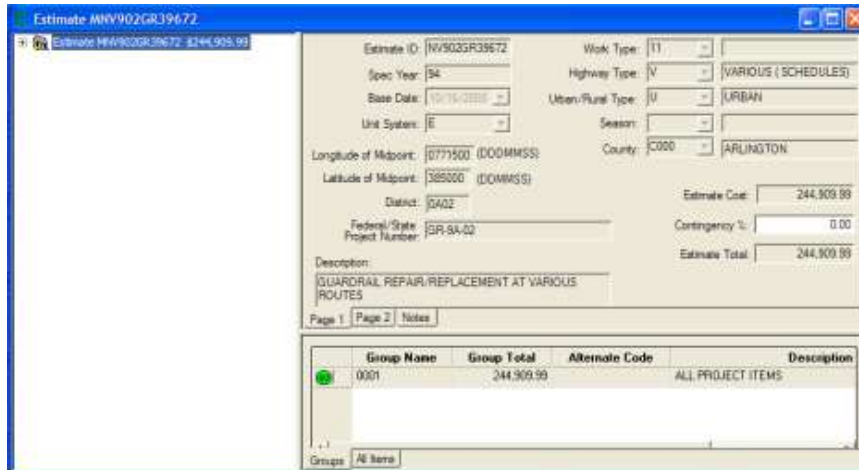


Figure 3-17. Estimate Window

### 3.5.2 Setting the Estimate Catalog

Once the project is imported into the AASHTOWare Project Estimator software, you must set the estimate catalog.

1. Open the estimate (See Figure 3-17).
2. Select **Estimate Options** from the **File** menu.
3. Use the down arrow next to the Catalog field to select the desired catalog.
4. When you are finished, click OK.

You can treat the imported job like a normal estimate, but you must use the Save As option when saving it the first time.

## 3.6 Checking-Out Projects to the AASHTOWare Project Estimator Software

When you export project information from the Trns•port Preconstruction system to the AASHTOWare Project Estimator software to update pricing in an estimate, the Trns•port Preconstruction application considers the project checked-out and will not allow changes to be made to the project until you check it back in. Also, you will only be allowed to change the Contingency % field and item prices.

Once the job is imported into the AASHTOWare Project Estimator software, you need to set the Estimator catalog.



### 3.6.1 Checking-out a Trns•port Preconstruction Project to the AASHTOWare Project Estimator Software

Follow these steps to export a project to the AASHTOWare Project Estimator software:

1. In the Trns•port Preconstruction application, select the project from the **Project List** as shown in Figure 3-18.
2. Click on the CHECKOUT TO ESTIMATOR XML button as shown in Figure 3-18.

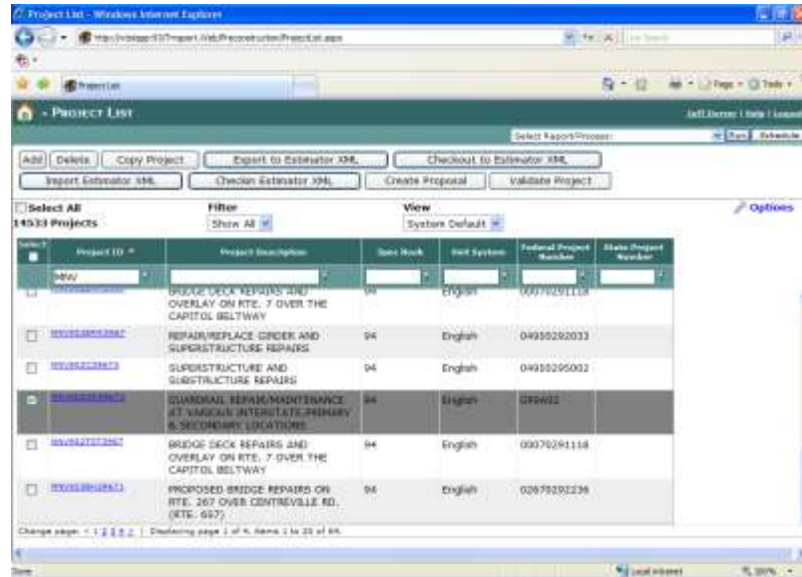


Figure 3-18. Project List Window With Selected Project

3. Click on the SAVE button as shown in Figure 3-19.

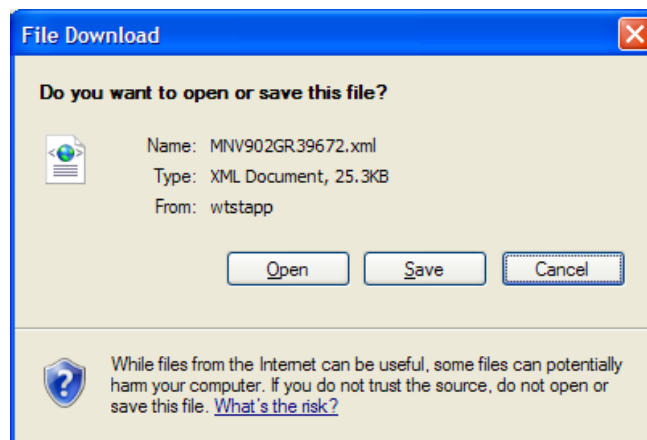


Figure 3-19. File Download Window

4. Navigate to a location accessible to the AASHTOWare Project Estimator software and store the XML file by clicking the SAVE button on the Save As window as shown in Figure 3-20.



Figure 3-20. Save As Window

5. Click the CLOSE button on the Download Complete window as shown in Figure 3-21.

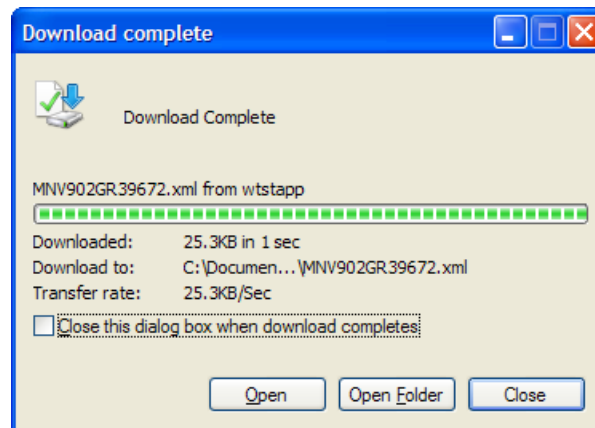


Figure 3-21. Download Complete Window

6. In the AASHTOWare Project Estimator software, select **Import** from the **File** menu as shown in Figure 3-22.

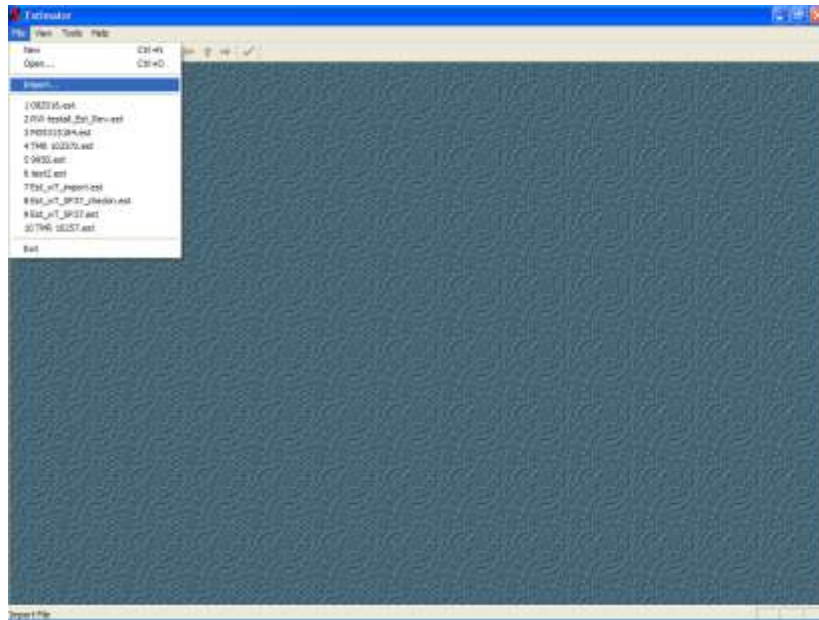


Figure 3-22. Estimator Window

7. On the Import window, highlight the file and click the OPEN button as shown in Figure 3-23.



Figure 3-23. Import Window

8. The AASHTOWare Project Estimator software opens the estimate as shown in Figure 3-24.

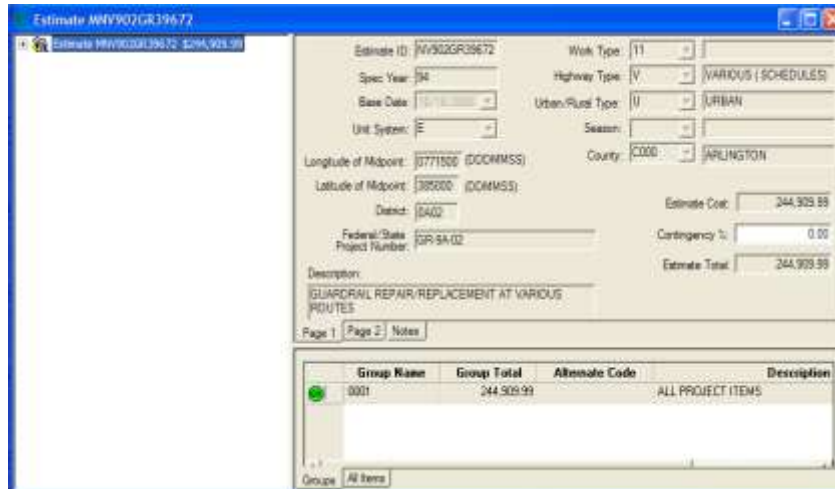


Figure 3-24. Imported Estimate Window

### 3.6.2 Setting the Estimate Catalog

Once the project is imported into the AASHTOWare Project Estimator software, you must set the estimate catalog.

1. Open the estimate if it has been closed (See Figure 3-24).
2. Select **Estimate Options** from the **File** menu.
3. Use the down arrow next to the Catalog field to select the desired catalog.
4. When you are finished, click OK.

You can treat the imported job like a normal estimate, but you must use the Save As option when saving it the first time. Only item unit prices can be edited on checked-out projects from the Trns•port Preconstruction application. Additionally items can not be added nor removed for checked-out projects.

## 3.7 Exporting a Proposal to the AASHTOWare Project Estimator Software

You can export a Trns•port Preconstruction proposal to the AASHTOWare Project Estimator software to use as the foundation for a new AASHTOWare Project Estimator estimate.

Once the job is imported into the AASHTOWare Project Estimator software, you need to set the Estimator catalog.

### 3.7.1 Exporting a Trns•port Preconstruction Proposal to the AASHTOWare Project Estimator Software

Follow these steps to export a proposal to the AASHTOWare Project Estimator software:

1. In the Trns•port Preconstruction application select the proposal from the **Proposal List** as shown in Figure 3-25.
2. Click on the EXPORT TO ESTIMATOR XML button as shown in Figure 3-25.

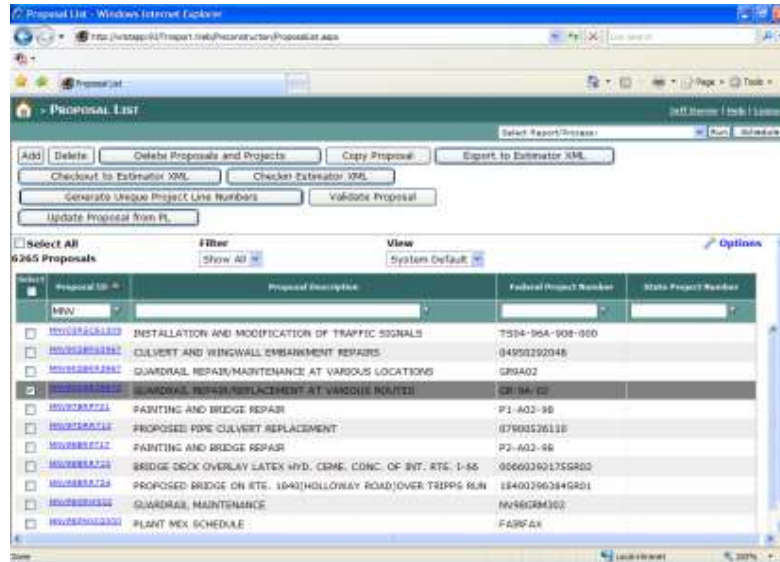


Figure 3-25. Proposal List Window With Selected Proposal

3. Click on the SAVE button as shown in Figure 3-26.

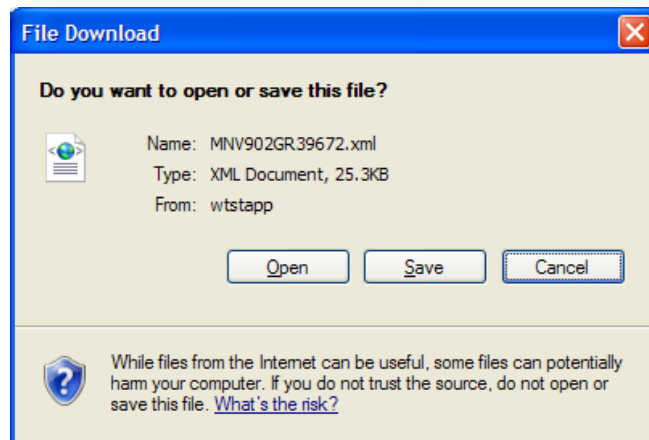


Figure 3-26. File Download Window

4. Navigate to a location accessible to the AASHTOWare Project Estimator software and store the XML file by clicking the SAVE button on the Save As window as shown in Figure 3-27.

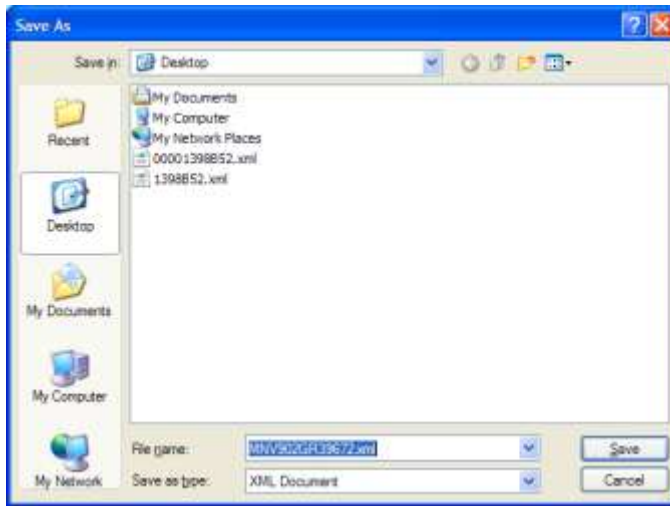


Figure 3-27. Save As Window

5. Click the CLOSE button on the Download Complete window as shown in Figure 3-28.

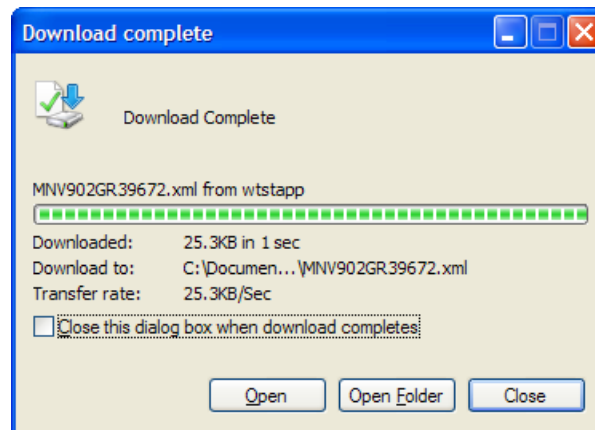


Figure 3-28. Download Complete Window

6. In the AASHTOWare Project Estimator software, select **Import** from the **File** menu as shown in Figure 3-29.

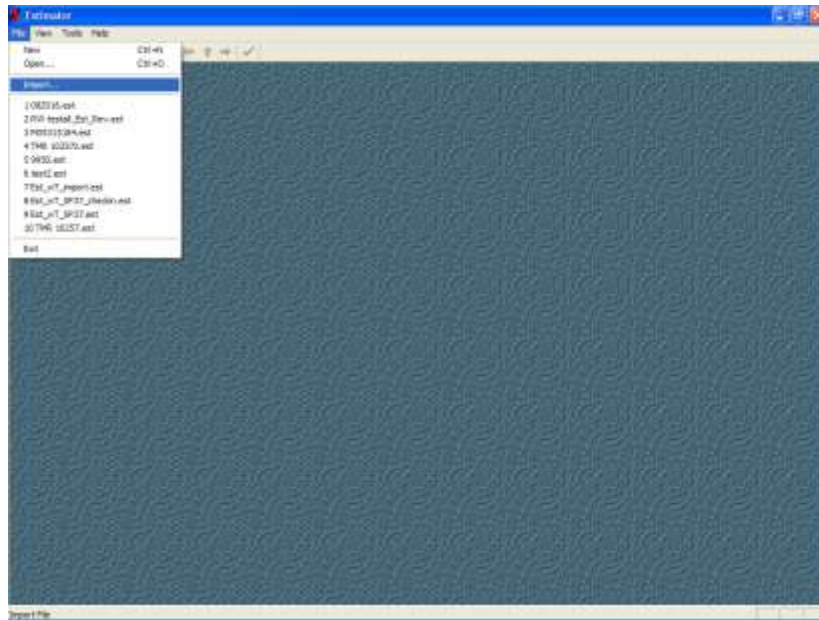


Figure 3-29. Estimator Window

7. On the Import window, highlight the file and click the OPEN button as shown in Figure 3-30.



Figure 3-30. Import Window

8. The AASHTOWare Project Estimator software opens the estimate as shown in Figure 3-31.

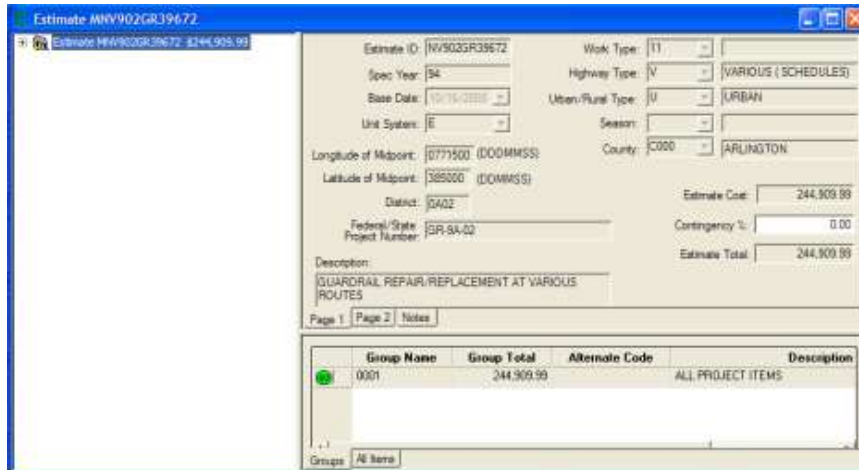


Figure 3-31. Estimate Window With Imported Proposal

### 3.7.2 Setting the Estimate Catalog

Once the proposal is imported into the AASHTOWare Project Estimator software, you must set the estimate catalog.

1. Open the estimate if it has been closed (See Figure 3-31).
2. Select **Estimate Options** from the **File** menu.
3. Use the down arrow next to the Catalog field to select the desired catalog.
4. When you are finished, click OK.

You can treat the imported job like a normal estimate, but you must use the Save As option when saving it the first time.

## 3.8 Checking-Out Proposals to the AASHTOWare Project Estimator Software

When you export proposal information from the Trns•port Preconstruction application to the AASHTOWare Project Estimator software to update pricing in an estimate, the Trns•port Preconstruction system considers the proposal checked out and will not allow changes to be made to the proposal until you check it back in. Also, you will only be allowed to change the Contingency % field and item prices.

Once the job is imported into the AASHTOWare Project Estimator software, you need to set the Estimator catalog.



### 3.8.1 Checking-out a Trns•port Preconstruction Proposal to the AASHTOWare Project Estimator Software

Follow these steps to export a proposal to the AASHTOWare Project Estimator software:

1. In the Trns•port Preconstruction application select the proposal from the **Proposal List** as shown in Figure 3-31.
2. Click on the CHECKOUT TO ESTIMATOR XML button as shown in Figure 3-32.

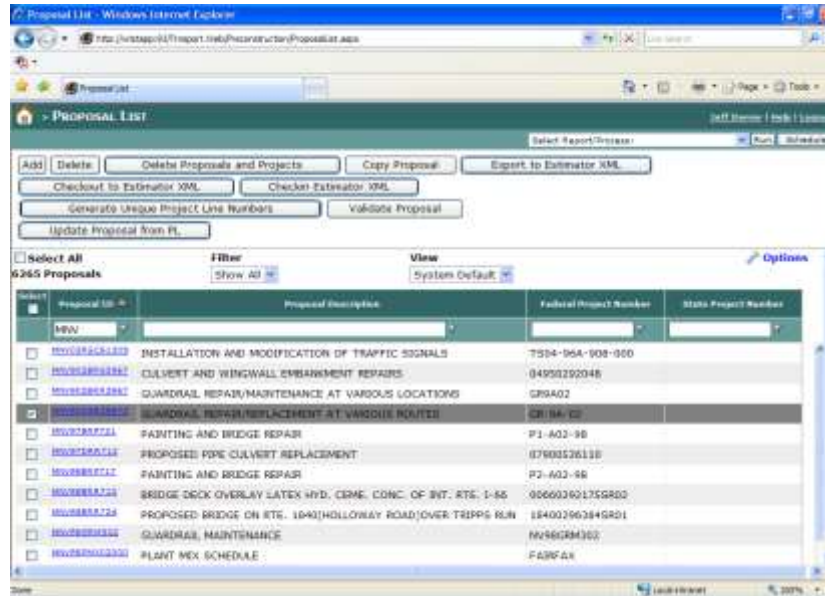


Figure 3-32. Proposal List Window

3. Click on the SAVE button as shown in Figure 3-33.

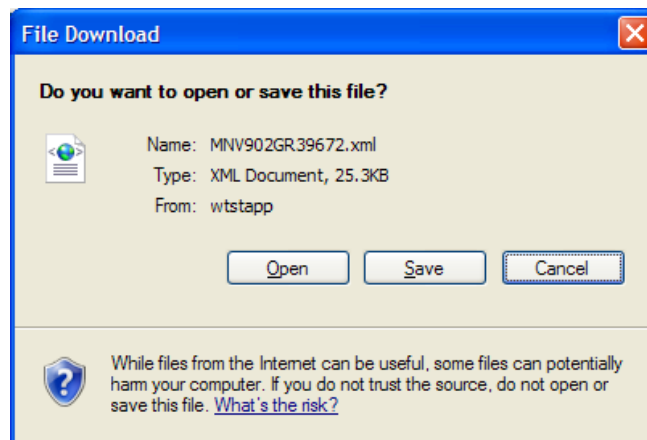


Figure 3-33. File Download Window

4. Navigate to a location accessible to the AASHTOWare Project Estimator software and store the XML file by clicking the SAVE button on the Save As window as shown in Figure 3-34.

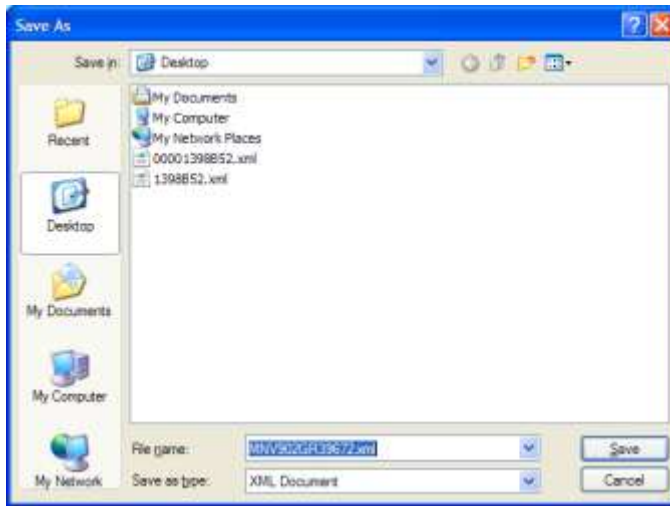


Figure 3-34. Save As Window

5. Click the CLOSE button on the Download Complete window as shown in Figure 3-35.

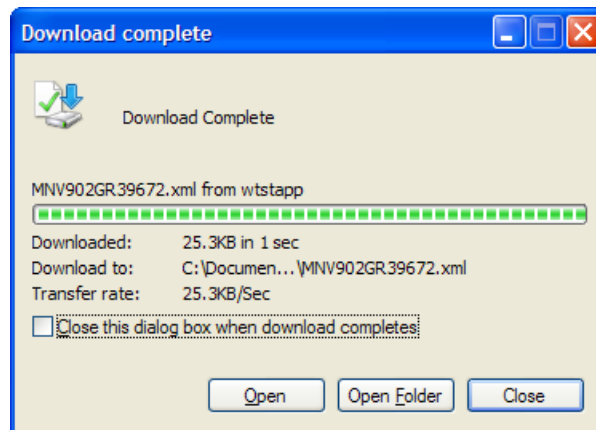


Figure 3-35. Download Complete Window

6. In the AASHTOWare Project Estimator software, select **Import** from the **File** menu as shown in Figure 3-36.

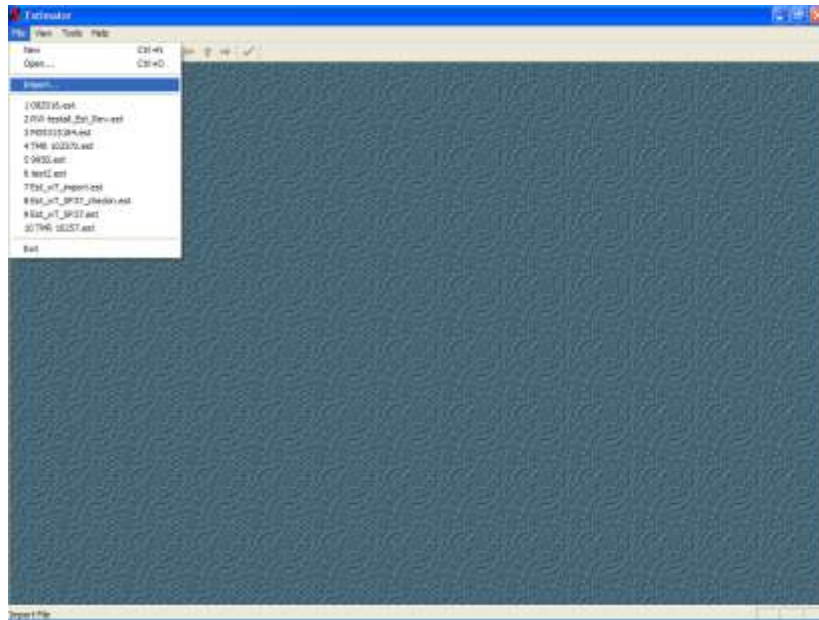


Figure 3-36. Estimator Window

7. On the Import window, highlight the file and click the OPEN button as shown in Figure 3-37.



Figure 3-37. Import Window

8. The AASHTOWare Project Estimator software opens the estimate as shown in Figure 3-38.

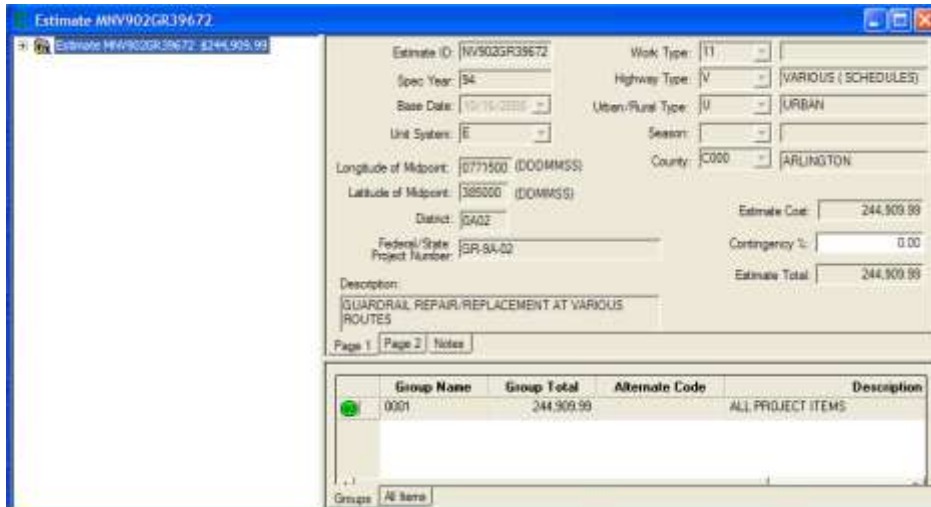


Figure 3-38. Estimate Window With Check-Out Proposal

### 3.8.2 Setting the Estimate Catalog

Once the proposal is imported into the AASHTOWare Project Estimator software, you must set the estimate catalog.

1. Open the estimate if it has been closed (See Figure 3-38).
2. Select **Estimate Options** from the **File** menu.
3. Use the down arrow next to the Catalog field to select the desired catalog.
4. When you are finished, click OK.

You can treat the imported job like a normal estimate, but you must use the Save As option when saving it the first time. Only item unit prices can be edited on checked-out proposals from the Trns•port Preconstruction application. Additionally items cannot be added nor removed for checked-out projects.

## 3.9 Exporting Code Tables to the AASHTOWare Project Estimator Software

You can export code table information from the Trns•port Preconstruction application to the AASHTOWare Project Estimator software. Follow these steps to export code tables to the AASHTOWare Project Estimator software:

1. Select **Export Reference Data** from the **Select Report/Process** pulldown menu and click the RUN button as shown in Figure 3-39.



- An Export to SAPW, CAS, and CES window will open as shown in Figure 3-41.

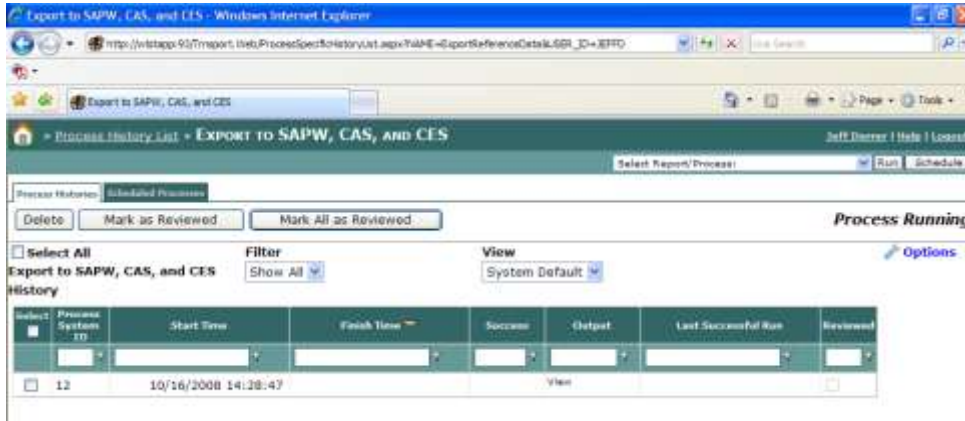


Figure 3-41. Export to SAPW, CAS, and CES Window

- When the process is finished, a time will be listed in the Finish Time column as shown in Figure 3-42 (you might have to refresh your screen to see this listed). If you double-click on View link in the Output column, a Process History File List window will open as shown in Figure 3-43.

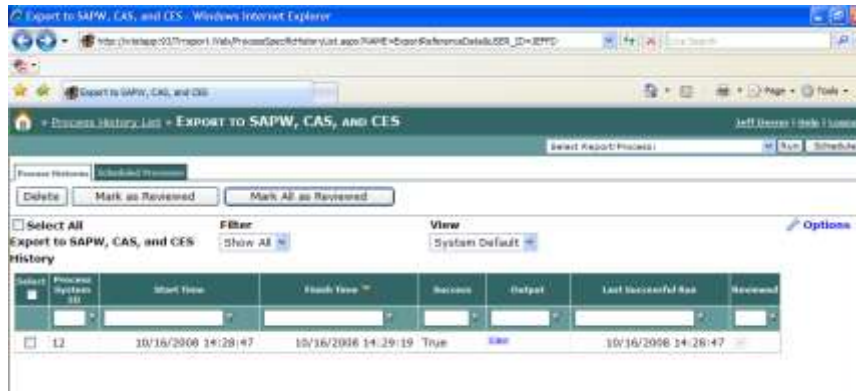
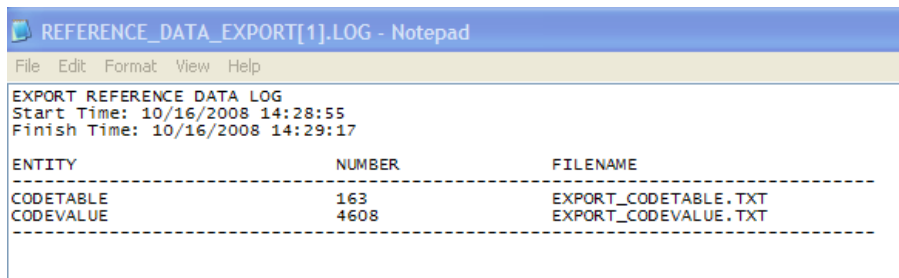


Figure 3-42. Export to SAPW, CAS, and CES Window



Figure 3-43. Process History File List Window


5. Double-click on the REFERENCE\_DATA\_EXPORT.LOG link to open a list similar to that shown in Figure 3-44.



```
REFERENCE_DATA_EXPORT[1].LOG - Notepad
File Edit Format View Help
EXPORT REFERENCE DATA LOG
Start Time: 10/16/2008 14:28:55
Finish Time: 10/16/2008 14:29:17
-----
ENTITY                NUMBER                FILENAME
-----
CODETABLE              163                  EXPORT_CODETABLE.TXT
CODEVALUE              4608                 EXPORT_CODEVALUE.TXT
-----
```

Figure 3-44. Export Reference Data Log

6. The file EXPORT\_CODEVALUE.TXT contains the code values for the AASHTOWare Project Estimator software. Trns•port Preconstruction writes this file to a location specified by the Agency Options. Contact your agency's Trns•port Preconstruction System Administrator for the location of this file.

 **Note:** For information on loading code values into an Estimator catalog, see Chapter 5 of the *Estimator System Manager's Guide*.





## 4. Importing and Exporting in AASHTOWare Project Preconstruction (version Trns•port Preconstruction 2.01 and later)

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You can perform a number of types of imports and exports in the AASHTOWare Project Preconstruction system:

- You can import information to create a new AASHTOWare Project Preconstruction project from a AASHTOWare Project Estimator estimate.
- You can update project data already in the AASHTOWare Project Preconstruction application with data from the AASHTOWare Project Estimator software.
- You can import new pricing information for AASHTOWare Project Preconstruction projects and proposals from the AASHTOWare Project Estimator software. The AASHTOWare Project Preconstruction application will only accept estimate information that already exists in the AASHTOWare Project Preconstruction system and has been checked-out. Pricing data is the only kind of information that can be imported from the AASHTOWare Project Estimator software for checked-out project or proposals.
- You can export an AASHTOWare Project Preconstruction project or proposal to the AASHTOWare Project Estimator software to be used as the foundation for a new AASHTOWare Project Estimator estimate.

The AASHTOWare Project Preconstruction system uses an information “check-in/check-out” process to protect the integrity of project and proposal information as it is passed to and from the AASHTOWare Project Estimator software. During the period that estimate information is checked-out, the entire project or proposal is locked and cannot be changed in the AASHTOWare Project Preconstruction application. When a project or proposal has been checked out from the AASHTOWare Project Preconstruction system, pricing information is the only information that may be changed.

## 4.1 Contingency Percent vs. Engineering and Construction Percent

The Estimator Contingency Percent field is derived by adding a percentage to the total of the items in the estimate.

The AASHTOWare Project Preconstruction "Engineering and Construction Percent" (E&C) is an industry standard percentage added by some agencies to the cost of the work items on a project to account for the agency's cost of doing business and initiating the project.

The Estimator Contingency Percent field does not affect the AASHTOWare Project Preconstruction E&C Percent field. Also, the AASHTOWare Project Preconstruction E&C Percent field does not affect the Estimator Contingency Percent field.

The AASHTOWare Project Estimator software uses contingency to make up for risk or unknown factors not taken into account that might affect the estimate. As you approach a final estimate, the contingency should drop to as close to zero as possible. The AASHTOWare Project Preconstruction contingencies are used to obtain funding based on fixed percents of the cost of the work. Even if you use the Estimator contingency field for this other purpose, you need to re-enter it in the AASHTOWare Project Preconstruction application once the project is imported into the AASHTOWare Project Preconstruction application.

Because the AASHTOWare Project Preconstruction application does not use contingencies in the same way as the AASHTOWare Project Estimator software, the estimate in the AASHTOWare Project Estimator software may be higher than the same one imported into the AASHTOWare Project Preconstruction application when a non-zero contingency percentage is used.

## 4.2 Exporting a Project to the AASHTOWare Project Estimator Software

You can export an AASHTOWare Project Preconstruction project to the AASHTOWare Project Estimator software to use as the foundation for a new AASHTOWare Project Estimator estimate.

Once the job is imported into the AASHTOWare Project Estimator software, you need to set the Estimator catalog.

There are several different methods to export a AASHTOWare Project Preconstruction project to the AASHTOWare Project Estimator. The options are from the Global Options Actions Menu, the Project component action menu and the project row action menu. For this document, we are using the Global Options Actions menu selection.

## 4.2.1 Exporting an AASHTOWare Project Preconstruction Project to the AASHTOWare Project Estimator Software

Follow these steps to export a project to the AASHTOWare Project Estimator software:

1. In the AASHTOWare Project Preconstruction application, open up the Global Options Action menu.
2. Click on the Execute Process.
3. Select EXPORT PROJECT TO ESTIMATOR row as shown in Figure 4-1.



Figure 4-1. Execute Process window

4. Search for the project that you intend to export. (See Figure 4-2)

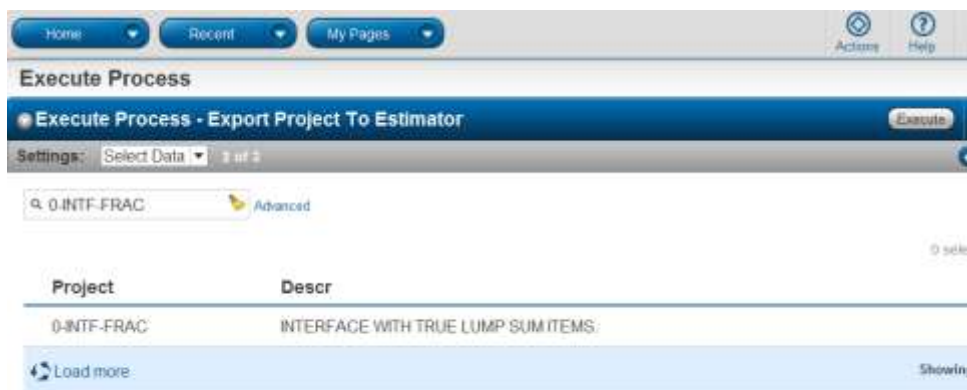


Figure 4-2. Select Data window

5. Select the project by highlighting the row and then clicking on the Execute button. (See Figure 4-3)



Figure 4-3. Select Data page

6. Click the SAVE button on the File Download window as shown in Figure 4-4.

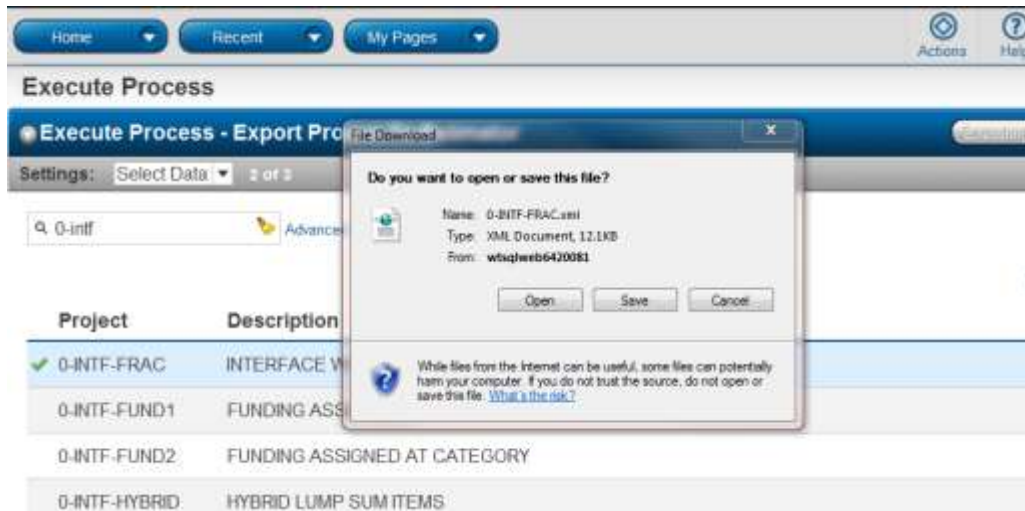


Figure 4-4. File Download window

7. Save the file to an accessible directory.
8. In the AASHTOWare Project Estimator software, select **Import** from the **File** menu as shown in Figure 4-5.

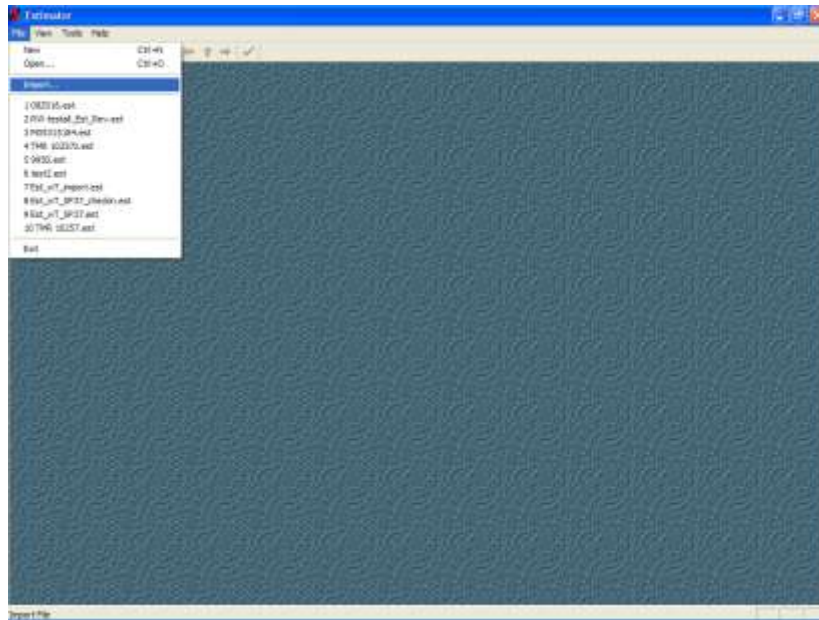


Figure 4-5. Estimator Window

9. On the Import window, highlight the file and click the OPEN button as shown in Figure 4-6.



Figure 4-6. Import Window

10. The AASHTOWare Project Estimator software opens the estimate as shown in Figure 4-7.



Figure 4-7. Estimate Window

### 4.3 Importing Project Data From the AASHTOWare Project Estimator Software

This section contains information about how to import an estimate from the AASHTOWare Project Estimator software to be used as the foundation for a new AASHTOWare Project Preconstruction project. There are several different methods to import an estimator file into web-based AASHTOWare Project. The options are from the Global Options Actions Menu, the Project component action menu and the project row action menu. For this document we are using the Global Options Actions menu selection.

Follow these steps to import an estimate:

1. Export the AASHTOWare Project Estimator file as an XML file (See Section 2.1).
2. Store the AASHTOWare Project Estimator XML file in a location accessible by the AASHTOWare Project Preconstruction system.
3. In the AASHTOWare Project Preconstruction application, open the Global Options Actions Menu. Select Import File. (See Figure 4-8)



Figure 4-8. Global Options Action menu

4. In the Import window shown in Figure 4-9, click the SELECT FILE button and navigate to the location of the AASHTOWare Project Estimator XML file stored in Step 2.



Figure 4-9. Import Window

5. Once the file has been identified, click on the file and then click the IMPORT button in web-based AASHTOWare Project. (Figure 4-10)

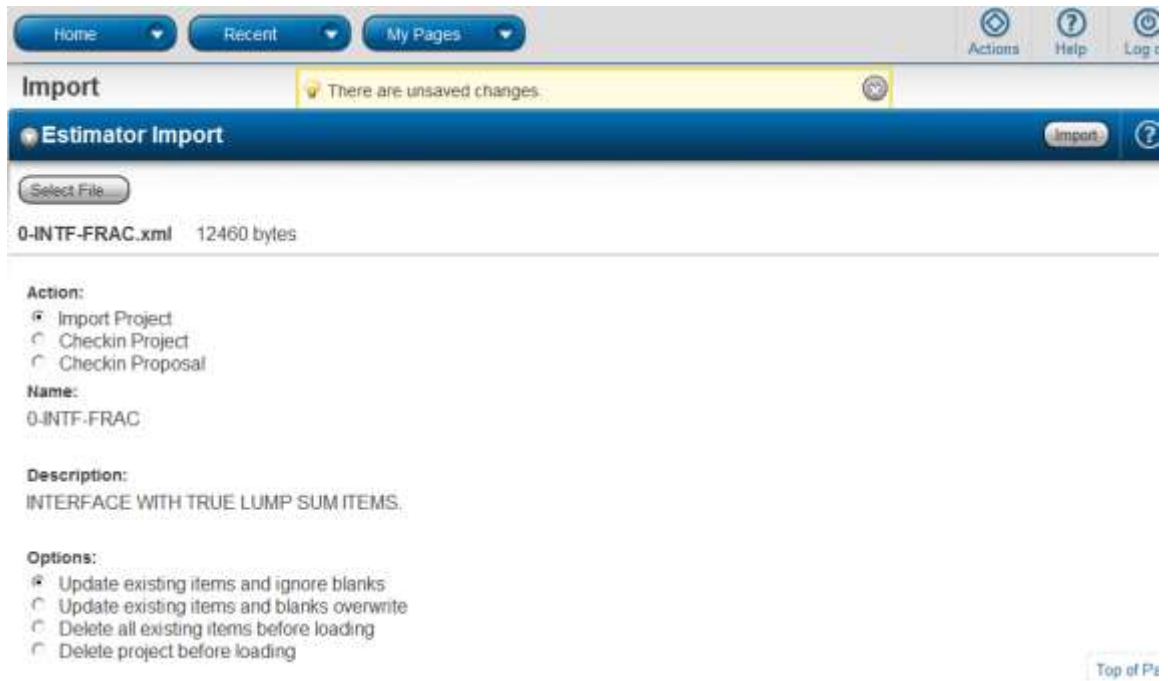


Figure 4-10. Estimator Import window

6. An Import succeeded message box opens after the process completes as well as a View project hyperlink. Clicking the View Project hyperlink will navigate directly to the project summary page. (Figure4-11).



Figure 4-11. Import Estimator XML Confirmation Window

By default, fields that contain blank values in the project you are importing are ignored and do not overwrite information that already exists in the project. If you want existing data to be replaced by blank values in the imported project, click the option button labeled **Update the existing items and blanks overwrite** as shown in Figure 4-10.



If you want the AASHTOWare Project Preconstruction application to delete all existing items in the project before it imports the new project file, click the option button labeled **Delete all existing items before loading**.

If you want web-based AASHTOWare Project to delete the entire project record before it imports the new project file, click the option button labeled **Delete the project before loading**.

## 4.4 Checking-Out Projects to the AASHTOWare Project Estimator Software

When you checkout a project from the AASHTOWare Project Preconstruction system to the AASHTOWare Project Estimator software to update pricing in an estimate, the AASHTOWare Project Preconstruction application considers the project checked-out and will not allow changes to be made to the project until you check it back in. Also, you will be allowed only to change the Contingency % field and item prices.

Once the job is imported into the AASHTOWare Project Estimator software, you need to set the Estimator catalog.

### 4.4.1 Checking-out an AASHTOWare Project Preconstruction Project to the AASHTOWare Project Estimator Software

Follow these steps to check-out a project to the AASHTOWare Project Estimator software:

1. In the AASHTOWare Project Preconstruction application, click on the Global Options Action menu and click Execute process. (See Figure 4-12)

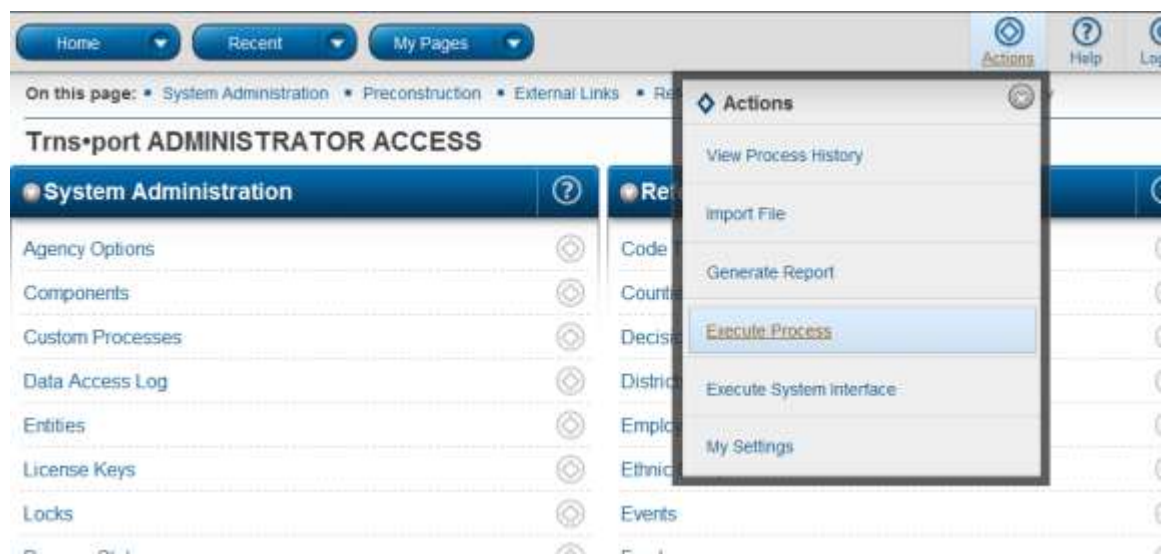


Figure 4-12. Global Options Actions Menu

2. Select the CHECKOUT PROJECT TO ESTIMATOR row as shown in Figure 4-13.

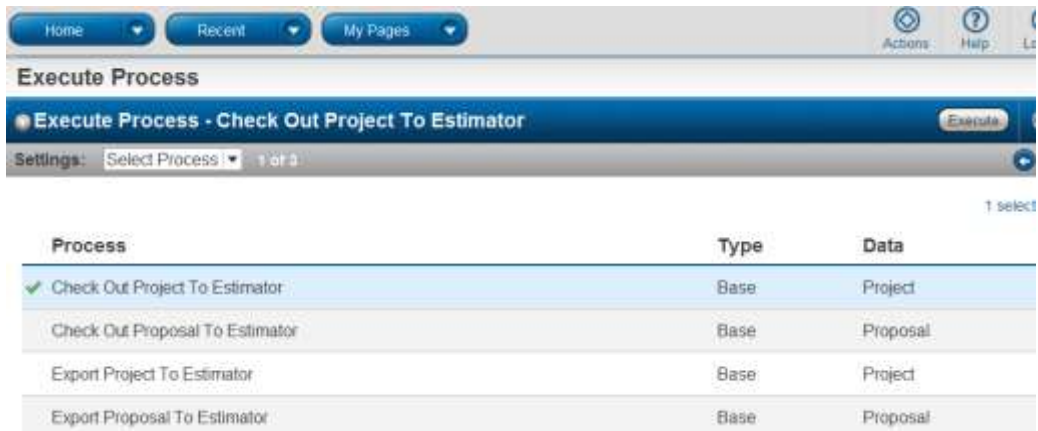


Figure 4-13. Execute Process Select Process Window

3. Select the project to be checked out as shown in Figure 4-14 and click the EXECUTE button.

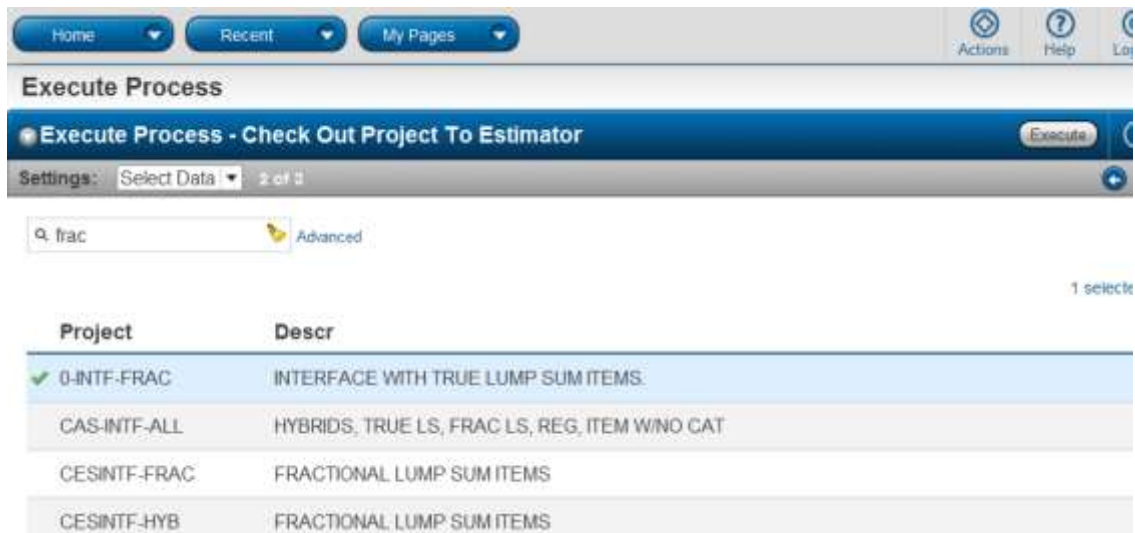


Figure 4-14. Select Data window

4. Click SAVE from the File Download window as seen in Figure 4-15. Save the file to an accessible directory.

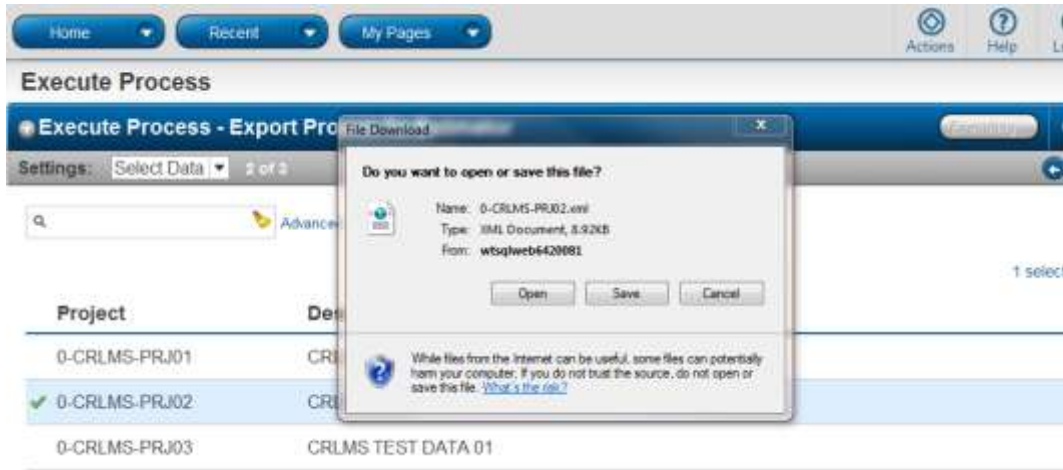


Figure 4-15. File Download Window

5. In the AASHTOWare Project Estimator software, select **Import** from the **File** menu as shown in Figure 4-16.

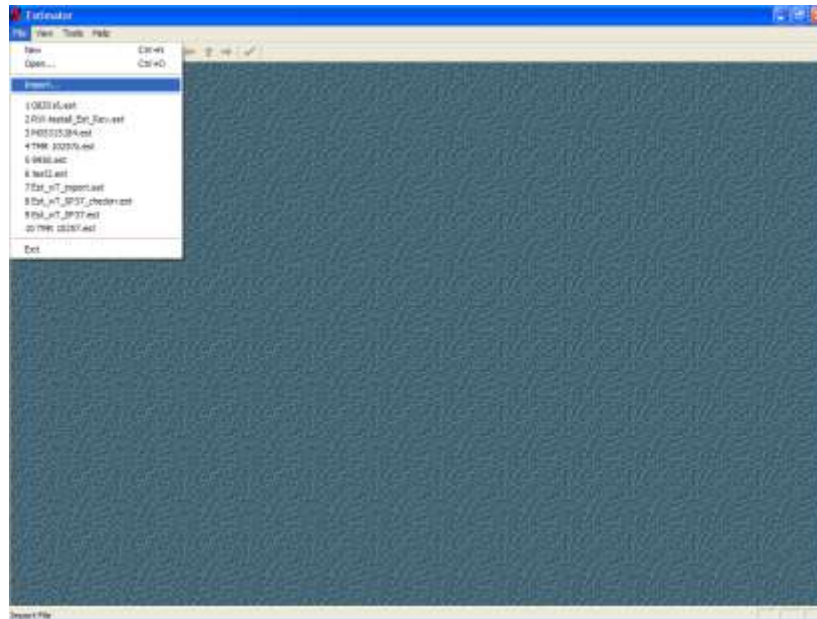


Figure 4-16. Estimator Window

6. On the Import window, highlight the file and click the OPEN button as shown in Figure 4-17.



Figure 4-17. Import Window

7. The AASHTOWare Project Estimator software opens the estimate as shown in Figure 4-18.

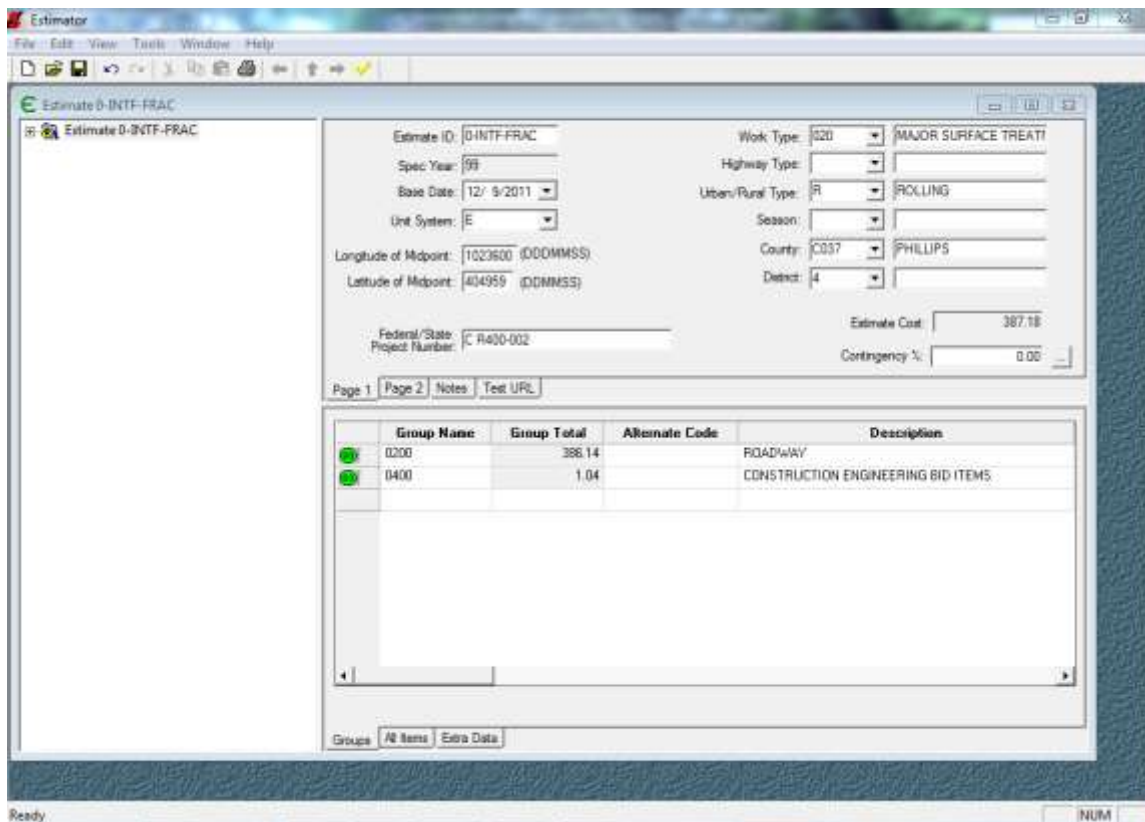


Figure 4-18. Imported Estimate Window

## 4.5 Checkin Project Prices From the AASHTOWare Project Estimator Software

Follow these steps to checkin pricing information from the AASHTOWare Project Estimator software to update an AASHTOWare Project Preconstruction project:

1. From the Project Component Action button select the Check-In task as seen in Figure 4-19.

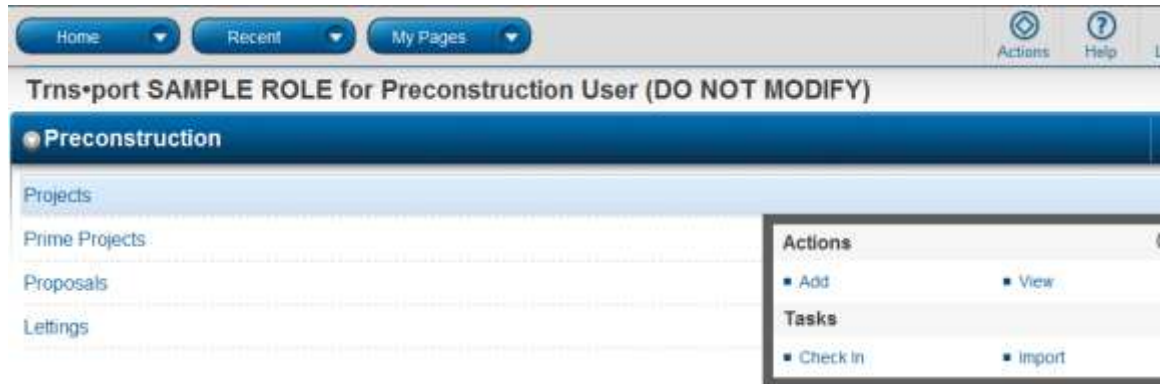


Figure 4-19. Project Component Action Menu

2. From the Import Page Click the Select File button as shown in Figure 4-20.



Figure 4-20. Import window

3. Select a checked out File such as the file that was checked out in section 4.4.1 Checking-out an AASHTOWare Project Preconstruction Project to the AASHTOWare Project Estimator Software. The web-based AASHTOWare Project software will recognize the file is from a checked out project and will automatically select the Checkin Project radio button. (See Figure 4-21)

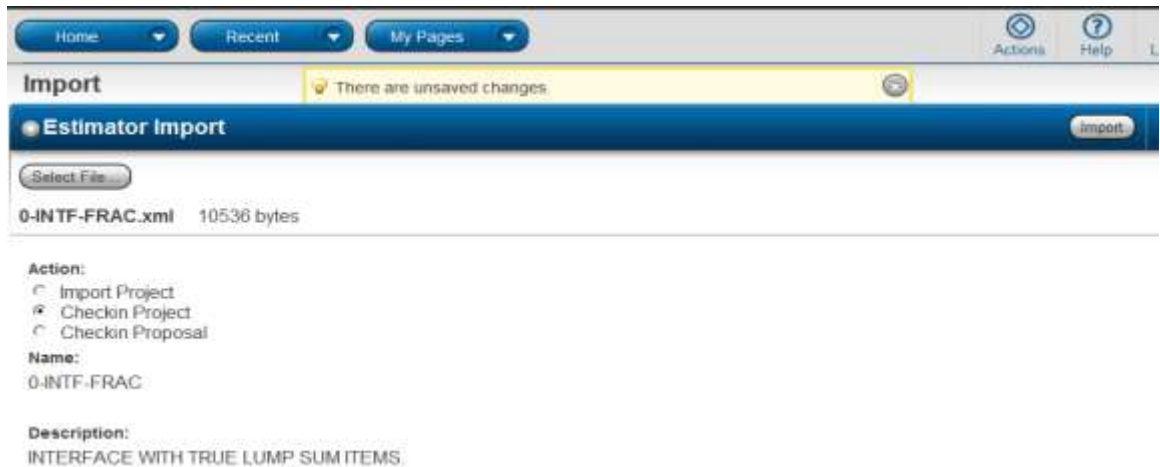


Figure 4-21. Estimator Import Page

4. Click the Import button. A Project check in succeeded message box will appear and a View Project link. (See Figure 4-22)



Figure 4-22. Confirm Project Checkin Window

## 4.6 Exporting a Proposal to the AASHTOWare Project Estimator Software

You can export an AASHTOWare Project Preconstruction proposal to the AASHTOWare Project Estimator software to use as the foundation for a new AASHTOWare Project Estimator estimate.

Once the job is imported into the AASHTOWare Project Estimator software, you need to set the Estimator catalog.

## 4.6.1 Exporting an AASHTOWare Project Preconstruction Proposal to the AASHTOWare Project Estimator Software

Follow these steps to export a proposal to the AASHTOWare Project Estimator software:

1. From the Global Options Actions Menu Select Execute Process. (See Figure 4-23)

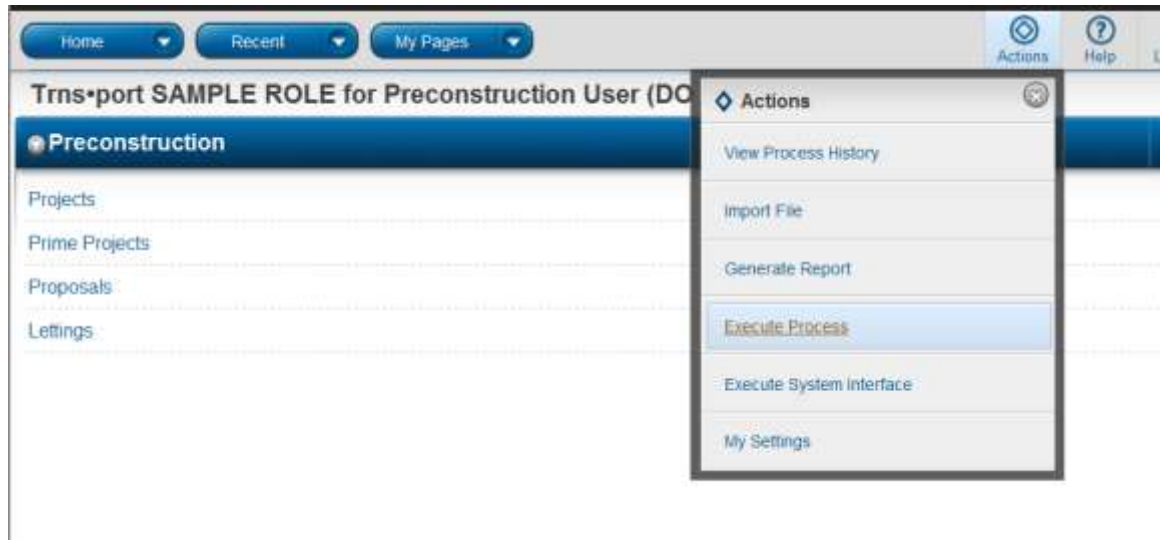


Figure 4-23. Global Options Action Menu

2. Select the Export Proposal to Estimator row as shown in Figure 4-24.

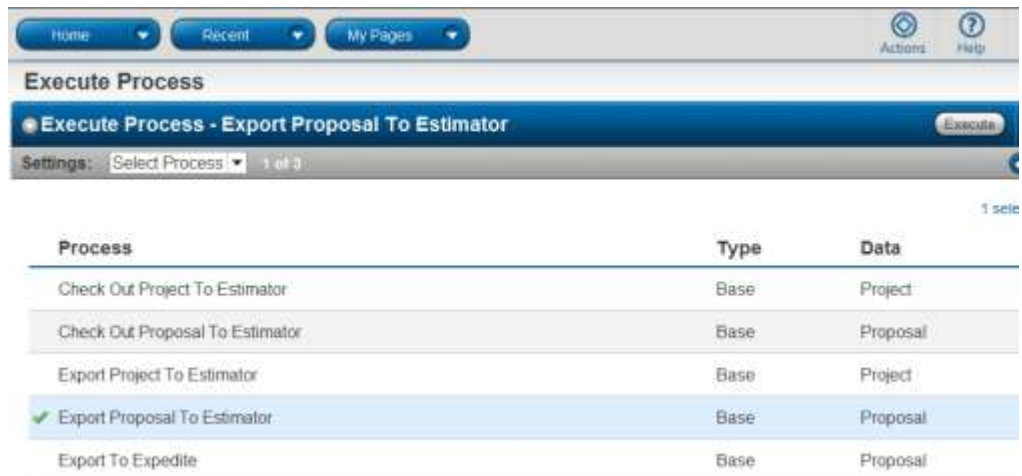


Figure 4-24. Select Process Window

3. Select your data through the search, highlight the row and then click on the

EXECUTE button. (See Figure 4-25)

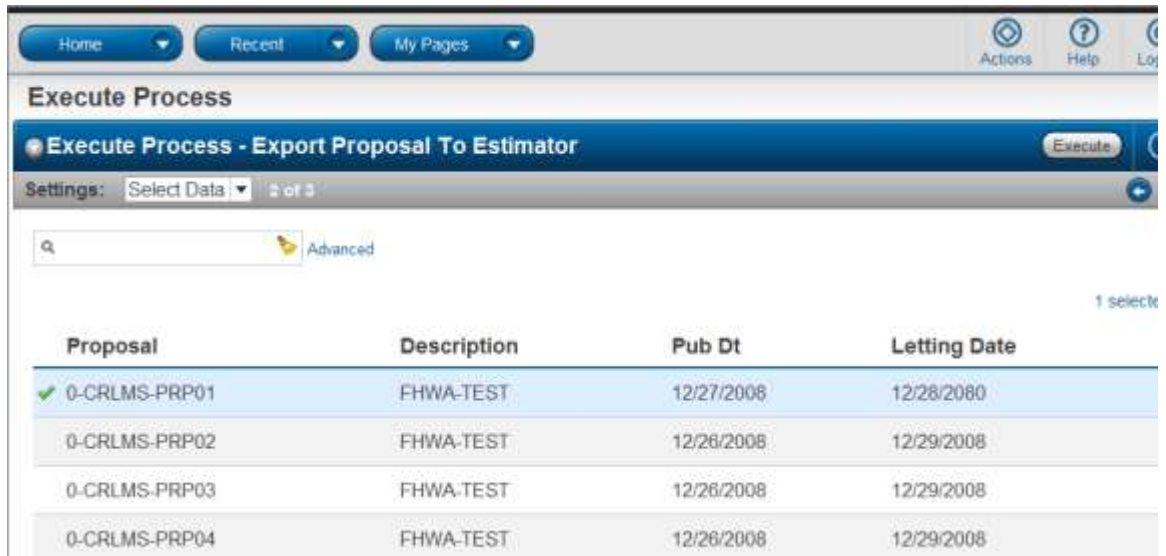


Figure 4-25. Execute Process Select Data window

4. Click on the SAVE button and save the file to an accessible directory. (See Figure 4-26)

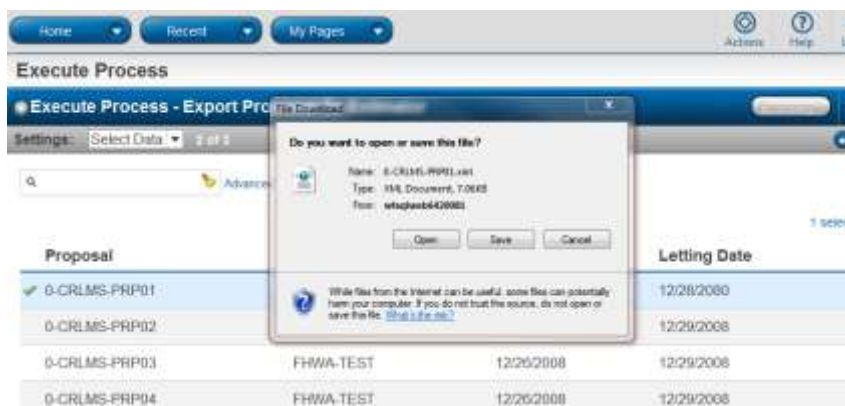


Figure 4-26. File Download Window

In the AASHTOWare Project Estimator software, select **Import** from the **File** menu as shown in Figure 4-27.



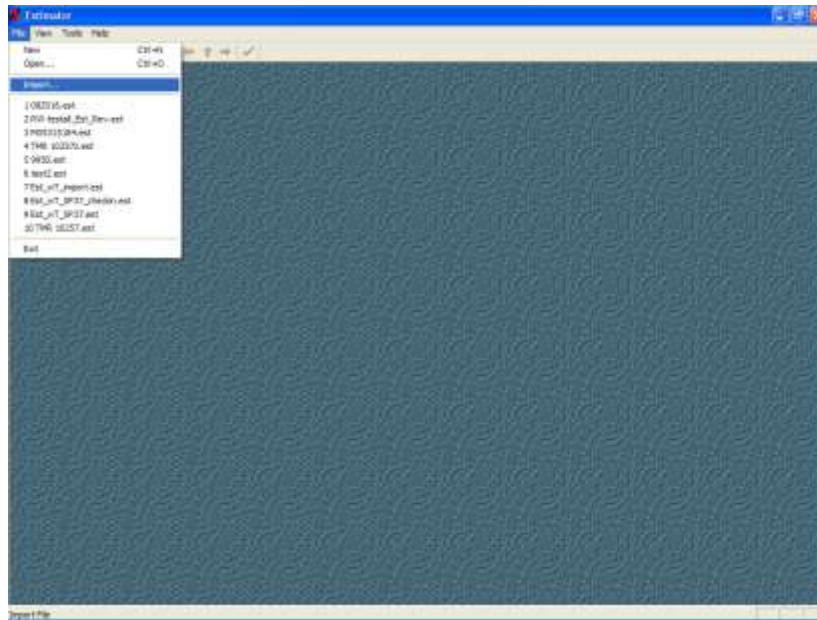


Figure 4-27. Estimator Window

5. On the Import window, highlight the file and click the OPEN button as shown in Figure 4-28.



Figure 4-28. Import Window

6. The AASHTOWare Project Estimator software opens the estimate as shown in Figure 4-29.

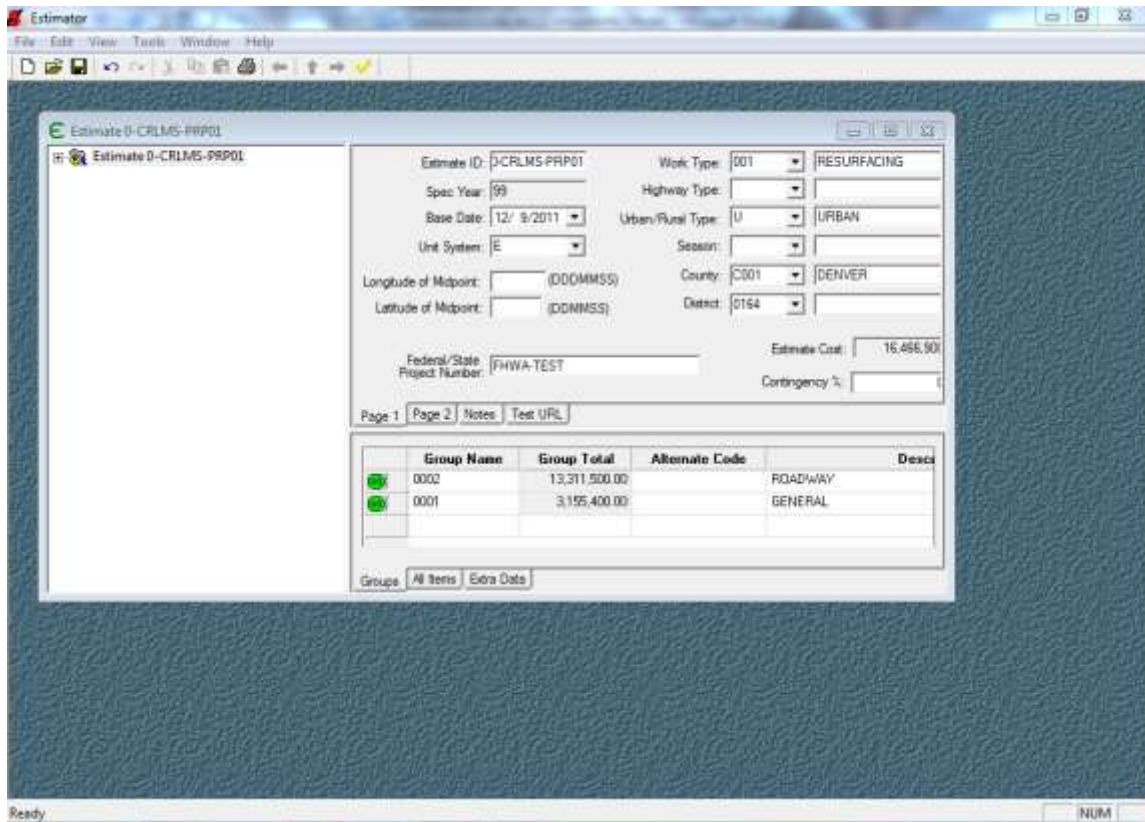


Figure 4-29. Estimate Window With Imported Proposal

#### 4.6.2 Setting the Estimate Catalog

Once the proposal is imported into the AASHTOWare Project Estimator software, you must set the estimate catalog.

1. Open the estimate if it has been closed (See Figure 3-31).
2. Select **Estimate Options** from the **File** menu.
3. Use the down arrow next to the Catalog field to select the desired catalog.
4. When you are finished, click OK.

You can treat the imported job like a normal estimate, but you must use the Save As option when saving it the first time.

## 4.7 Checking-Out Proposals to the AASHTOWare Project Estimator Software

When you checkout a proposal from the AASHTOWare Project Preconstruction application to the AASHTOWare Project Estimator software to update pricing in an estimate, the AASHTOWare Project Preconstruction system considers the proposal checked out and will not allow changes to be made to the proposal until you check it back in. Also, you will only be allowed to change the Contingency % field and item prices.

Once the job is imported into the AASHTOWare Project Estimator software, you need to set the Estimator catalog.

### 4.7.1 Checking-out an AASHTOWare Project Preconstruction Proposal to the AASHTOWare Project Estimator Software

Follow these steps to check-out a proposal to the AASHTOWare Project Estimator software:

1. In the AASHTOWare Project Preconstruction application open the Global Options Action menu and select Execute Process. (See Figure 4-30)



Figure 4-30. Global Options Actions Menu

2. Click on the CHECKOUT PROPOSAL TO ESTIMATOR ROW as shown in figure 4-31.

**Execute Process**

Execute Process - Check Out Proposal To Estimator Execute

Settings: Select Process 1 of 3

Process	Type	Data
Check Out Project To Estimator	Base	Project
✓ Check Out Proposal To Estimator	Base	Proposal
Export Project To Estimator	Base	Project
Export Proposal To Estimator	Base	Proposal
Export To Expedite	Base	Proposal

Figure 4-31. Proposal List Window

- From the Select Data window search for the proposal to be checked out and click the Execute button as seen in Figure 4-32.

Execute Process | Tmsi-port

Home Recent My Pages Actions Help Log

**Execute Process**

Execute Process - Check Out Proposal To Estimator Execute

Settings: Select Data 1 of 3

Search:  Advanced

Proposal	Description	Pub Dt	Letting Date
✓ 0-CRLMS-PRP01	FHWA-TEST	12/27/2008	12/28/2080
0-CRLMS-PRP02	FHWA-TEST	12/26/2008	12/29/2008
0-CRLMS-PRP03	FHWA-TEST	12/26/2008	12/29/2008
0-CRLMS-PRP04	FHWA-TEST	12/26/2008	12/29/2008

Figure 4-32. Execute Process Select Data window

- Click SAVE in the File Download window and save the file in an accessible directory. (See Figure 4-33)

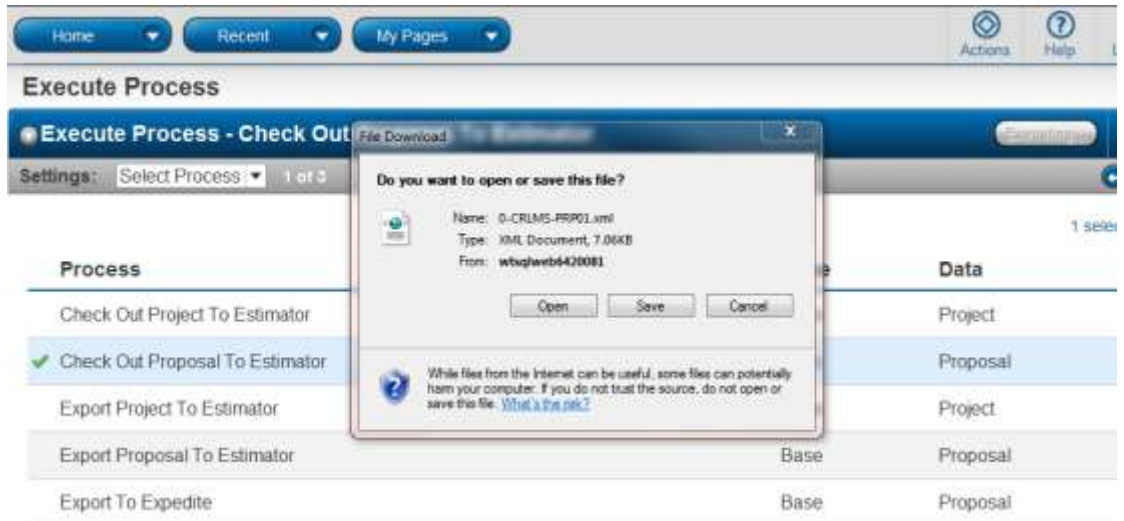


Figure 4-33. File Download window

5. In the AASHTOWare Project Estimator software, select **Import** from the **File** menu as shown in Figure 4-34.

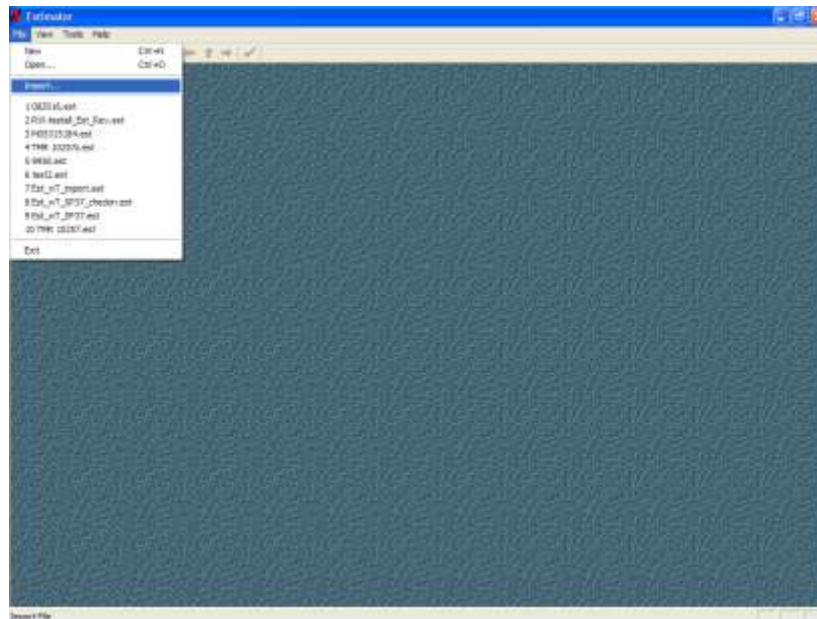


Figure 4-34. Estimator Window

6. On the Import window, highlight the file and click the OPEN button as shown in Figure 4-35.

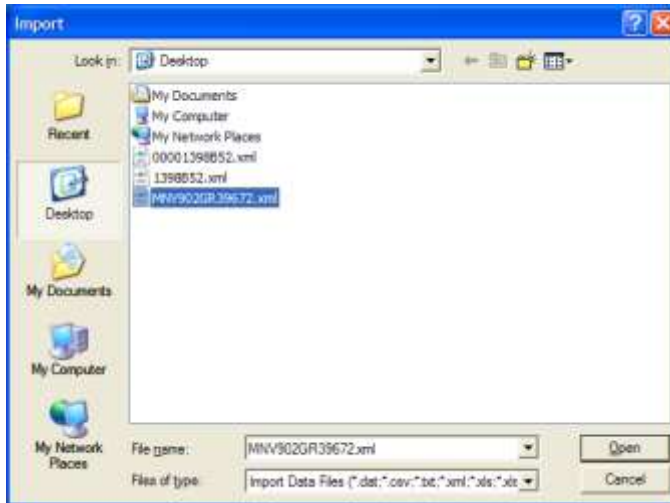


Figure 4-35. Import Window

7. The AASHTOWare Project Estimator software opens the estimate as shown in Figure 4-36.

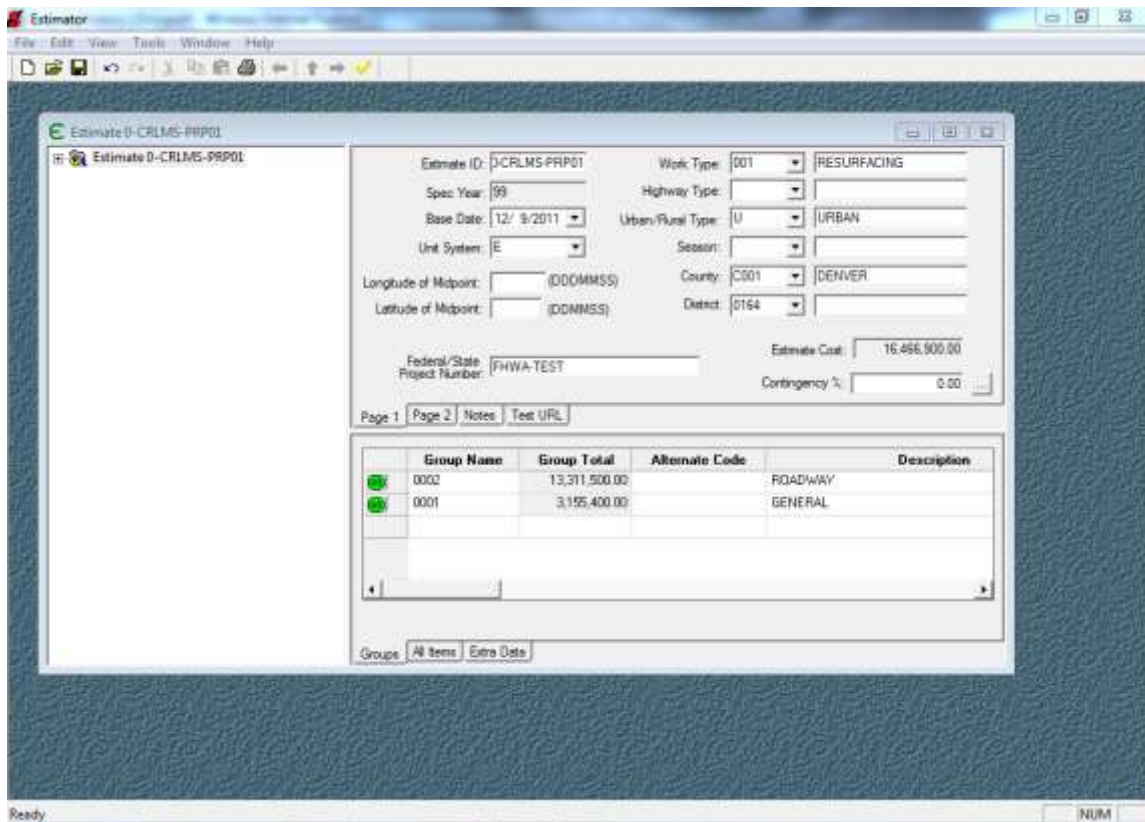


Figure 4-36. Estimate Window with Checked-Out Proposal

## 4.7.2 Setting the Estimate Catalog

Once the proposal is imported into the AASHTOWare Project Estimator software, you must set the estimate catalog.

1. Open the estimate if it has been closed (See Figure 3-37).
2. Select **Estimate Options** from the **File** menu.
3. Use the down arrow next to the Catalog field to select the desired catalog.
4. When you are finished, click OK.

You can treat the imported job like a normal estimate, but you must use the Save As option when saving it the first time. Only item unit prices can be edited on checked-out proposals from the AASHTOWare Project Preconstruction application. Additionally items cannot be added nor removed for checked-out proposals.

## 4.8 Exporting Code Tables and Reference data to the AASHTOWare Project Estimator Software

You can export code table and reference data information from the AASHTOWare Project Preconstruction application to the AASHTOWare Project Estimator software. The Export Reference Data process will be used to export code tables to Estimator. Follow these steps to export these tables to the AASHTOWare Project Estimator software:

1. From the Global Options Menu Click Execute System Interface. Select Export Reference Data as seen in Figure 4-37.

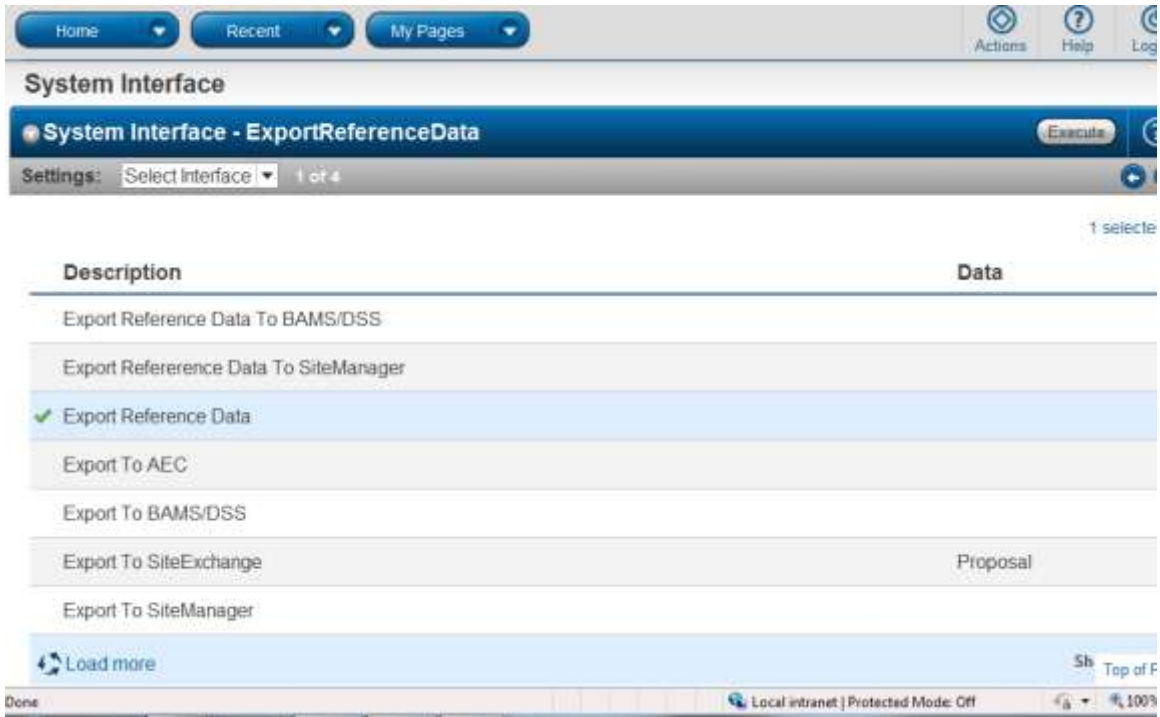


Figure 4-37. System Interface window

2. Click the right arrow until you reach Set Parameters, page 3 of 4. Ensure that Ref Code Tables is checked as seen in Figure 4-38.

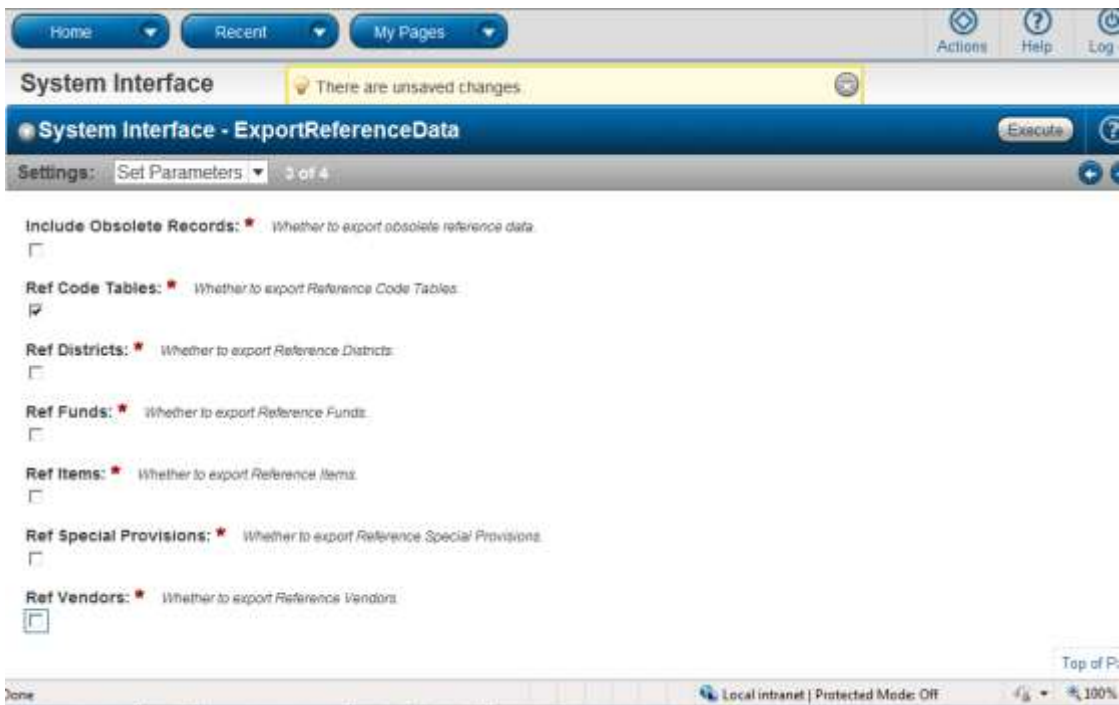


Figure 4-38. Set Parameters for ExportReferenceData window



3. Click the Execute button. The process will run and a message box will appear as seen below in Figure 4-39 that shows the System Interface Started

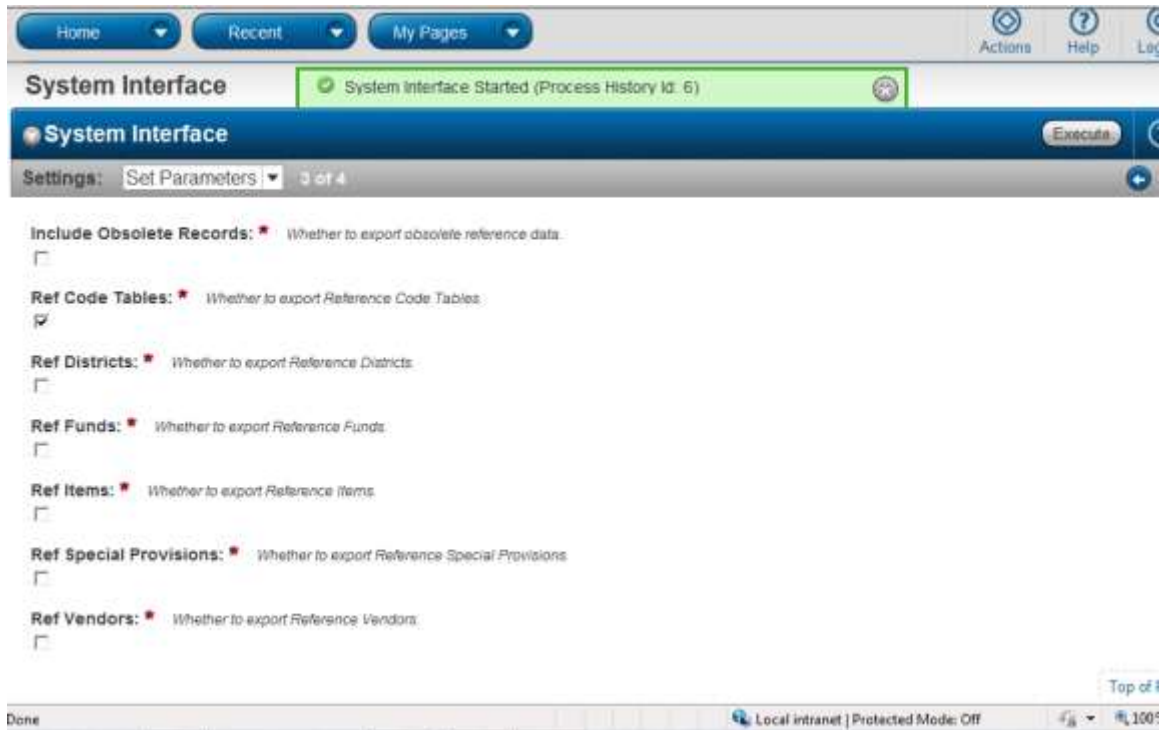


Figure 4-39. System Interface Process Started Message box

4. The Reference data file contains the values for the AASHTOWare Project Estimator software. AASHTOWare Project Preconstruction writes this file to a location specified by the Agency Options. Contact your agency's AASHTOWare Project Preconstruction System Administrator for the location of this file.
- 📄 **Note:** For information on loading code values into an Estimator catalog, see Chapter 5 of the *Estimator System Manager's Guide*.



## 5. Interface Information

---

This chapter contains AASHTOWare Project Estimator and AASHTOWare Project Preconstruction interface information for importing and exporting projects, project prices, proposals, and proposal prices and for checking out projects and proposals.

### 5.1 Importing Proposal or Project Data From the AASHTOWare Project Estimator Software

You can import new proposal or project information from the AASHTOWare Project Estimator software into the AASHTOWare Project Preconstruction application. You can also update proposals or projects data already in the AASHTOWare Project Preconstruction application with data from the AASHTOWare Project Estimator software.

#### 5.1.1 Sample Import File From the AASHTOWare Project Estimator Software

```
<?xml version="1.0" encoding="UTF-8" ?>
- <Estimate>
  <EstimateId>MNV902GR39672</EstimateId>
  <Description>GUARDRAIL REPAIR/MAINTENANCE AT VARIOUS INTERSTATE, PRIMARY & SECONDARY
    LOCATIONS</Description>
  <Estimator />
  <PreparationDate />
  <LettingDate>2008/10/17</LettingDate>
  <EstimateType />
  <EstimateTypeDescription />
  <WorkType />
  <WorkTypeDescription />
  <HighwayType>V</HighwayType>
  <HighwayTypeDescription>VARIOUS ( SCHEDULES)</HighwayTypeDescription>
  <UrbanRuralType>U</UrbanRuralType>
  <UrbanRuralTypeDescription>URBAN</UrbanRuralTypeDescription>
  <County>C000</County>
  <CountyDescription>ARLINGTON</CountyDescription>
  <Season />
  <SeasonDescription />
  <DistrictNumber>0A02</DistrictNumber>
  <Longitude>0771500</Longitude>
```

```

<Latitude>385000</Latitude>
<FederalStateProjectNumber>GR9A02</FederalStateProjectNumber>
<CheckedBy />
<DateChecked />
<ApprovedBy />
<DateApproved />
<UnitSystem>E</UnitSystem>
<Catalog />
<SpecYear>94</SpecYear>
<PriceRoundingLevel>5</PriceRoundingLevel>
<QuantityRoundingLevel>2</QuantityRoundingLevel>
<ExtensionRoundingLevel>2</ExtensionRoundingLevel>
<PercentageRoundingLevel>2</PercentageRoundingLevel>
<TransportFlag>Y</TransportFlag>
<TransportPriceBasesFlag>N</TransportPriceBasesFlag>
<EditPricesOnlyFlag>Y</EditPricesOnlyFlag>
<Comment />
<EstimatedCostUnfinished />
<EstimatedCost> nnnnnn.nn</EstimatedCost> (cost removed and replaced with n's)
<ContingencyPercent>0.00</ContingencyPercent>
<EstimatedTotalUnfinished />
<EstimatedTotal> nnnnnn.nn</EstimatedTotal> (cost removed and replaced with n's)
<EstimateMarketAreaMapSet />
- <EstimateGroup>
  <GroupNumber>0001</GroupNumber>
  <Description>REGULAR BID ITEMS</Description>
  <AlternateCode />
  <Comment />
  <UsedInTotal>Y</UsedInTotal>
  <GroupTotalUnfinished />
  <GroupTotal>nnnnnn.nn</GroupTotal> (cost removed and replaced with n's)
- <EstimateItem>
  <LineNumber>0005</LineNumber>
  <ItemCode>13320</ItemCode>
  <Description>GUARDRAIL GR-2</Description>
  <SupplementalDescription />
  <RequireSupplementalDescriptionFlag>N</RequireSupplementalDescriptionFlag>
  <Comment>REGRESSION FROM GBBP</Comment>
  <Units>LF</Units>
  <AlternateCode />
  <IsAdHocPrice>N</IsAdHocPrice>
  <Quantity>1500.00</Quantity>
  <UnitPriceUnfinished />
  <UnitPrice>11.03120</UnitPrice>
  <UsedInTotal>Y</UsedInTotal>
  <ExtendedAmountUnfinished />
  <ExtendedAmount>16546.80</ExtendedAmount>
- <EstimateItemReferencePrice>
  <EstimateItemReferencePriceId />
  <EstimateItemReferencePriceName>13320</EstimateItemReferencePriceName>
  <EstimateItemReferencePriceDescription />
  <EstimateItemReferencePriceUnitPrice>11.03120</EstimateItemReferencePriceUnitPrice>
  <EstimateItemReferencePricePercentFlag>N</EstimateItemReferencePricePercentFlag>
  <EstimateItemReferencePricePercent>0.00</EstimateItemReferencePricePercent>
  <ActiveFlag>Y</ActiveFlag>
  <AbsoluteActiveFlag>Y</AbsoluteActiveFlag>
  <Comment />
  </EstimateItemReferencePrice>
</EstimateItem>
</EstimateGroup>
</Estimate>

```

## 5.2 Importing Project Prices From the AASHTOWare Project Estimator Software

You can import pricing information from the AASHTOWare Project Estimator software to update a AASHTOWare Project Preconstruction project.

### 5.2.1 Sample Import File From the AASHTOWare Project Estimator Software

```
<?xml version="1.0" encoding="UTF-8" ?>
- <Estimate>
  <EstimateId>MNV902GR39672</EstimateId>
  <Description>GUARDRAIL REPAIR/MAINTENANCE AT VARIOUS INTERSTATE, PRIMARY & SECONDARY
    LOCATIONS</Description>
  <Estimator />
  <PreparationDate />
  <LettingDate>2008/10/17</LettingDate>
  <EstimateType />
  <EstimateTypeDescription />
  <WorkType />
  <WorkTypeDescription />
  <HighwayType>V</HighwayType>
  <HighwayTypeDescription>VARIOUS ( SCHEDULES)</HighwayTypeDescription>
  <UrbanRuralType>U</UrbanRuralType>
  <UrbanRuralTypeDescription>URBAN</UrbanRuralTypeDescription>
  <County>C000</County>
  <CountyDescription>ARLINGTON</CountyDescription>
  <Season />
  <SeasonDescription />
  <DistrictNumber>0A02</DistrictNumber>
  <Longitude>0771500</Longitude>
  <Latitude>385000</Latitude>
  <GPS_Longitude>71.4739</GPS_Longitude>
  <GPS_Latitude>42.7458</GPS_Latitude>
  <FederalStateProjectNumber>GR9A02</FederalStateProjectNumber>
  <CheckedBy />
  <DateChecked />
  <ApprovedBy />
  <DateApproved />
  <UnitSystem>E</UnitSystem>
  <Catalog />
  <SpecYear>94</SpecYear>
  <PriceRoundingLevel>5</PriceRoundingLevel>
  <QuantityRoundingLevel>2</QuantityRoundingLevel>
  <ExtensionRoundingLevel>2</ExtensionRoundingLevel>
  <PercentageRoundingLevel>2</PercentageRoundingLevel>
  <TransportFlag>Y</TransportFlag>
  <TransportPriceBasesFlag>N</TransportPriceBasesFlag>
  <EditPricesOnlyFlag>Y</EditPricesOnlyFlag>
  <Comment />
  <EstimatedCostUnfinished />
  <EstimatedCost> nnnnnn.nn</EstimatedCost> (cost removed and replaced with n's)
  <ContingencyPercent>0.00</ContingencyPercent>
  <EstimatedTotalUnfinished />
  <EstimatedTotal> nnnnnn.nn</EstimatedTotal> (cost removed and replaced with n's)
  <EstimateMarketAreaMapSet />
- <EstimateGroup>
  <GroupNumber>0001</GroupNumber>
  <Description>REGULAR BID ITEMS</Description>
  <AlternateCode />
  <Comment />
  <UsedInTotal>Y</UsedInTotal>
  <GroupTotalUnfinished />
  <GroupTotal> nnnnnn.nn</GroupTotal> (cost removed and replaced with n's)
- <EstimateItem>
  <LineNumber>0005</LineNumber>
```

```

<ItemCode>13320</ItemCode>
<Description>GUARDRAIL GR-2</Description>
<SupplementalDescription />
<RequireSupplementalDescriptionFlag>N</RequireSupplementalDescriptionFlag>
<Comment>REGRESSION FROM GBBP</Comment>
<Units>LF</Units>
<AlternateCode />
<IsAdHocPrice>N</IsAdHocPrice>
<IsFixedPrice>Y</IsFixedPrice>
<Quantity>1500.00</Quantity>
<UnitPriceUnfinished />
<UnitPrice>11.03120</UnitPrice>
<UsedInTotal>Y</UsedInTotal>
<ExtendedAmountUnfinished />
<ExtendedAmount>16546.80</ExtendedAmount>
- <EstimateItemReferencePrice>
  <EstimateItemReferencePriceId />
  <EstimateItemReferencePriceName>13320</EstimateItemReferencePriceName>
  <EstimateItemReferencePriceDescription />
  <EstimateItemReferencePriceUnitPrice>11.03120</EstimateItemReferencePriceUnitPrice>
  <EstimateItemReferencePricePercentFlag>N</EstimateItemReferencePricePercentFlag>
  <EstimateItemReferencePricePercent>0.00</EstimateItemReferencePricePercent>
  <ActiveFlag>Y</ActiveFlag>
  <AbsoluteActiveFlag>Y</AbsoluteActiveFlag>
  <Comment />
  </EstimateItemReferencePrice>
</EstimateItem>
</EstimateGroup>
</Estimate>

```

## 5.3 Importing Proposal Prices From The AASHTOWare Project Estimator Software

You can import pricing information from the AASHTOWare Project Estimator software to update an AASHTOWare Project Preconstruction proposal.

### 5.3.1 Sample Import File From the AASHTOWare Project Estimator Software

The XML file format is the same as importing project prices from the AASHTOWare Project Estimator software (See Section 5.2.1).

## 5.4 Exporting Projects to the AASHTOWare Project Estimator Software

You can export a copy of an AASHTOWare Project Preconstruction project to the AASHTOWare Project Estimator software to be used as the foundation for a new AASHTOWare Project Estimator estimate.

### 5.4.1 Sample Export File From the AASHTOWare Project Preconstruction Application

```
<?xml version="1.0" encoding="utf-8" ?>
```

```

- <Estimate xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:noNamespaceSchemaLocation="Estimate.xsd">
  <EstimateId>MNV902GR39672</EstimateId>
  <Description>GUARDRAIL REPAIR/MAINTENANCE AT VARIOUS INTERSTATE,PRIMARY & SECONDARY
    LOCATIONS</Description>
  <UnitSystem>E</UnitSystem>
  <SpecYear>94</SpecYear>
  <County>C000</County>
  <CountyDescription>ARLINGTON</CountyDescription>
  <DistrictNumber>0A02</DistrictNumber>
  <Latitude>385000</Latitude>
  <Longitude>0771500</Longitude>
  <HighwayType>V</HighwayType>
  <HighwayTypeDescription>VARIOUS ( SCHEDULES)</HighwayTypeDescription>
  <UrbanRuralType>U</UrbanRuralType>
  <UrbanRuralTypeDescription>URBAN</UrbanRuralTypeDescription>
  <WorkType />
  <WorkTypeDescription />
  <FederalStateProjectNumber>GR9A02</FederalStateProjectNumber>
  <EditPricesOnlyFlag>N</EditPricesOnlyFlag>
  <JobNumber />
  <LaneMile />
  <BeginTermini>029</BeginTermini>
  <EndTermini>NFO</EndTermini>
  <JobLength />
  <JobPavementWidth />
  <JobPavementDepth />
  <JobType>MS</JobType>
  <CePct>0.00</CePct>
  <DateCreated>2002/07/16</DateCreated>
  <LastUpdate>2008/10/16</LastUpdate>
  <Estimator />
  <JobCode1 />
  <JobCode2 />
  <JobDate1 />
  <JobDate2 />
  <JobDate3 />
  <JobDate4 />
  <JobDate5 />
  <JobFlag1 />
  <JobFlag2 />
  <JobFlag3 />
  <JobFlag4 />
  <JobFlag5 />
  <JobNumber1 />
  <JobNumber2 />
  <JobNumber3 />
  <JobString1 />
  <JobString2 />
  <JobString3 />
  <JobString4 />
  <JobString5 />
  <ProjectGrade />
  <PricedBy />
  <PricedDate />
- <EstimateGroup>
  <GroupNumber>0001</GroupNumber>
  <Description>REGULAR BID ITEMS</Description>
  <JobCatCode1 />
  <JobCatCode2 />
  <JobCatCode3 />
  <JobCatCode4 />
  <JobCatFlag1 />
  <JobCatFlag2 />
  <JobCatFlag3 />
  <JobCatFlag4 />
  <JobCatFlag5 />
  <JobCatNum1>0</JobCatNum1>
  <JobCatNum2>0</JobCatNum2>
  <JobCatString1 />
  <JobCatString2 />
  <JobCatString3 />

```

```

    <JobCatString4 />
    <JobCatString5 />
    <JobCatString6 />
    <CategoryWorkClass>191</CategoryWorkClass>
    <FederalWorkClass>K000</FederalWorkClass>
    <SuppWorkClass>SAFT</SuppWorkClass>
  - <EstimateItem>
    <LineNumber>0005</LineNumber>
    <ItemCode>13320</ItemCode>
    <Description>GUARDRAIL GR-2</Description>
    <RequireSupplementalDescriptionFlag>N</RequireSupplementalDescriptionFlag>
    <Units>LF</Units>
    <Comment>REGRESSION FROM GBBP</Comment>
    <AlternateCode />
    <IsAdHocPrice>N</IsAdHocPrice>
    <Quantity>1500.000</Quantity>
    <UnitPrice>11.03120</UnitPrice>
    <FixedPrice>N</FixedPrice>
    <StateFurnishedMaterial>N</StateFurnishedMaterial>
    <JobItemExtendedAmt>16546.80</JobItemExtendedAmt>
    <JobItemCode1 />
  - <EstimateItemReferencePrice>
    <EstimateItemReferencePriceName>13320</EstimateItemReferencePriceName>
    <EstimateItemReferencePriceUnitPrice>11.03120</EstimateItemReferencePriceUnitPrice>
  </EstimateItemReferencePrice>
</EstimateItem>
- <EstimateFund>
  <JobFundCode>S100</JobFundCode>
  <JobFundDescription>100% STATE</JobFundDescription>
  <JobFundPriority>1</JobFundPriority>
  <JobFundFedFlag>N</JobFundFedFlag>
  <JobFundPct>100.0000</JobFundPct>
  <JobFundLimit />
  <JobFundGroup>STATE</JobFundGroup>
  <JobFundFacsCode />
</EstimateFund>
</EstimateGroup>
</Estimate>

```

## 5.5 Checking Out a Project to the AASHTOWare Project Estimator Software

You can export project information from the AASHTOWare Project Preconstruction application to the AASHTOWare Project Estimator software to update pricing in an estimate. This process assigns the project to “checked-out” status and will not allow changes to be made to the project in the AASHTOWare Project Preconstruction application until you check it back in.

### 5.5.1 Sample Export File From the AASHTOWare Project Preconstruction Application

```

<?xml version="1.0" encoding="utf-8" ?>
<Estimate xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:noNamespaceSchemaLocation="Estimate.xsd">
  <EstimateId>MN902GR39672</EstimateId>
  <Description>GUARDRAIL REPAIR/MAINTENANCE AT VARIOUS INTERSTATE, PRIMARY & SECONDARY
    LOCATIONS</Description>
  <UnitSystem>E</UnitSystem>
  <SpecYear>94</SpecYear>
  <County>C000</County>
  <CountyDescription>ARLINGTON</CountyDescription>

```



```

<DistrictNumber>0A02</DistrictNumber>
<Latitude>385000</Latitude>
<Longitude>0771500</Longitude>
<HighwayType>V</HighwayType>
<HighwayTypeDescription>VARIOUS ( SCHEDULES)</HighwayTypeDescription>
<UrbanRuralType>U</UrbanRuralType>
<UrbanRuralTypeDescription>URBAN</UrbanRuralTypeDescription>
<WorkType />
<WorkTypeDescription />
<FederalStateProjectNumber>GR9A02</FederalStateProjectNumber>
<EditPricesOnlyFlag>Y</EditPricesOnlyFlag>
<JobNumber />
<LaneMile />
<BeginTermini>029</BeginTermini>
<EndTermini>NFO</EndTermini>
<JobLength />
<JobPavementWidth />
<JobPavementDepth />
<JobType>MS</JobType>
<CePct>0.00</CePct>
<DateCreated>2002/07/16</DateCreated>
<LastUpdate>2008/10/16</LastUpdate>
<Estimator />
<JobCode1 />
<JobCode2 />
<JobDate1 />
<JobDate2 />
<JobDate3 />
<JobDate4 />
<JobDate5 />
<JobFlag1 />
<JobFlag2 />
<JobFlag3 />
<JobFlag4 />
<JobFlag5 />
<JobNumber1 />
<JobNumber2 />
<JobNumber3 />
<JobString1 />
<JobString2 />
<JobString3 />
<JobString4 />
<JobString5 />
<ProjectGrade />
<PricedBy />
<PricedDate />
- <EstimateGroup>
<GroupNumber>0001</GroupNumber>
<Description>REGULAR BID ITEMS</Description>
<JobCatCode1 />
<JobCatCode2 />
<JobCatCode3 />
<JobCatCode4 />
<JobCatFlag1 />
<JobCatFlag2 />
<JobCatFlag3 />
<JobCatFlag4 />
<JobCatFlag5 />
<JobCatNum1>0</JobCatNum1>
<JobCatNum2>0</JobCatNum2>
<JobCatString1 />
<JobCatString2 />
<JobCatString3 />
<JobCatString4 />
<JobCatString5 />
<JobCatString6 />
<CategoryWorkClass>191</CategoryWorkClass>
<FederalWorkClass>K000</FederalWorkClass>
<SuppWorkClass>SAFT</SuppWorkClass>
- <EstimateItem>
<LineNumber>0005</LineNumber>
<ItemCode>13320</ItemCode>

```

```

<Description>GUARDRAIL GR-2</Description>
<RequireSupplementalDescriptionFlag>N</RequireSupplementalDescriptionFlag>
<Units>LF</Units>
<Comment>REGRESSION FROM GBBP</Comment>
<AlternateCode />
<IsAdHocPrice>N</IsAdHocPrice>
<Quantity>1500.000</Quantity>
<UnitPrice>11.03120</UnitPrice>
<FixedPrice>N</FixedPrice>
<StateFurnishedMaterial>N</StateFurnishedMaterial>
<JobItemExtendedAmt>16546.80</JobItemExtendedAmt>
<JobItemCode1 />
- <EstimateItemReferencePrice>
  <EstimateItemReferencePriceName>13320</EstimateItemReferencePriceName>
  <EstimateItemReferencePriceUnitPrice>11.03120</EstimateItemReferencePriceUnitPrice>
  </EstimateItemReferencePrice>
</EstimateItem>
- <EstimateFund>
  <JobFundCode>S100</JobFundCode>
  <JobFundDescription>100% STATE</JobFundDescription>
  <JobFundPriority>1</JobFundPriority>
  <JobFundFedFlag>N</JobFundFedFlag>
  <JobFundPct>100.0000</JobFundPct>
  <JobFundLimit />
  <JobFundGroup>STATE</JobFundGroup>
  <JobFundFacsCode />
  </EstimateFund>
</EstimateGroup>
</Estimate>

```

## 5.6 Exporting a Proposal to the AASHTOWare Project Estimator Software

You can export a copy of a AASHTOWare Project Preconstruction proposal to the AASHTOWare Project Estimator software to be used as the foundation for a new AASHTOWare Project Estimator estimate.

### 5.6.1 Sample Export File From the AASHTOWare Project Preconstruction Application

```

<?xml version="1.0" encoding="utf-8" ?>
- <Estimate xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:noNamespaceSchemaLocation="Estimate.xsd">
  <EstimateId>MNV902GR39672</EstimateId>
  <Description>GUARDRAIL REPAIR/REPLACEMENT AT VARIOUS ROUTES</Description>
  <UnitSystem>E</UnitSystem>
  <SpecYear>94</SpecYear>
  <County>C000</County>
  <CountyDescription>ARLINGTON</CountyDescription>
  <DistrictNumber>0A02</DistrictNumber>
  <Latitude>385000</Latitude>
  <Longitude>0771500</Longitude>
  <HighwayType>V</HighwayType>
  <HighwayTypeDescription>VARIOUS ( SCHEDULES)</HighwayTypeDescription>
  <UrbanRuralType>U</UrbanRuralType>
  <UrbanRuralTypeDescription>URBAN</UrbanRuralTypeDescription>
  <WorkType>11</WorkType>
  <WorkTypeDescription />
  <FederalStateProjectNumber>GR-9A-02</FederalStateProjectNumber>
  <EditPricesOnlyFlag>N</EditPricesOnlyFlag>
  <BeginTermini>029</BeginTermini>
  <EndTermini>NFO</EndTermini>
  <JobLength />

```

```

<JobPavementWidth />
<JobPavementDepth />
<JobType>MS</JobType>
<DateCreated>2008/10/01</DateCreated>
<LastUpdate>2008/10/16</LastUpdate>
<Estimator />
<JobCode1 />
<JobCode2 />
<JobCode3 />
<JobDate1 />
<JobDate2 />
<JobDate3 />
<JobDate4 />
<JobDate5 />
<JobFlag1 />
<JobFlag2 />
<JobFlag3 />
<JobFlag4 />
<JobFlag5 />
<JobNumber1>0</JobNumber1>
<JobNumber2>0</JobNumber2>
<JobNumber3>0</JobNumber3>
<JobQty1 />
<JobQty2 />
<JobString1>X20</JobString1>
<JobString2 />
<JobString3 />
<JobString4 />
<JobString5 />
<JobLongString1>NONE</JobLongString1>
- <EstimateGroup>
  <GroupNumber>0001</GroupNumber>
  <Description>ALL PROJECT ITEMS</Description>
- <EstimateItem>
  <LineNumber>0005</LineNumber>
  <ItemCode>13320</ItemCode>
  <Description>GUARDRAIL GR-2</Description>
  <RequireSupplementalDescriptionFlag>N</RequireSupplementalDescriptionFlag>
  <Units>LF</Units>
  <Comment>REGRESSION FROM GBBP</Comment>
  <AlternateCode />
  <IsAdHocPrice>N</IsAdHocPrice>
  <Quantity>1500.000</Quantity>
  <UnitPrice>11.03120</UnitPrice>
  <JobItemExtendedAmt>16546.80</JobItemExtendedAmt>
- <EstimateItemReferencePrice>
  <EstimateItemReferencePriceName>13320</EstimateItemReferencePriceName>
  <EstimateItemReferencePriceUnitPrice>11.03120</EstimateItemReferencePriceUnitPrice>
  </EstimateItemReferencePrice>
  </EstimateItem>
</EstimateGroup>
</Estimate>

```

## 5.7 Checking Out a Proposal to the AASHTOWare Project Estimator Software

You can export proposal information from the AASHTOWare Project Preconstruction application to the AASHTOWare Project Estimator software to update pricing in an estimate. This process assigns the proposal to “checked-out” status and will not allow changes to be made to the proposal or its associated projects until you check it back in.

## 5.7.1 Sample Export File From the AASHTOWare Project Preconstruction Application

```
<?xml version="1.0" encoding="utf-8" ?>
- <Estimate xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:noNamespaceSchemaLocation="Estimate.xsd">
  <EstimateId>MNV902GR39672</EstimateId>
  <Description>GUARDRAIL REPAIR/REPLACEMENT AT VARIOUS ROUTES</Description>
  <UnitSystem>E</UnitSystem>
  <SpecYear>94</SpecYear>
  <County>C000</County>
  <CountyDescription>ARLINGTON</CountyDescription>
  <DistrictNumber>0A02</DistrictNumber>
  <Latitude>385000</Latitude>
  <Longitude>0771500</Longitude>
  <HighwayType>V</HighwayType>
  <HighwayTypeDescription>VARIOUS ( SCHEDULES)</HighwayTypeDescription>
  <UrbanRuralType>U</UrbanRuralType>
  <UrbanRuralTypeDescription>URBAN</UrbanRuralTypeDescription>
  <WorkType>11</WorkType>
  <WorkTypeDescription />
  <FederalStateProjectNumber>GR-9A-02</FederalStateProjectNumber>
  <EditPricesOnlyFlag>Y</EditPricesOnlyFlag>
  <BeginTermini>029</BeginTermini>
  <EndTermini>NFO</EndTermini>
  <JobLength />
  <JobPavementWidth />
  <JobPavementDepth />
  <JobType>MS</JobType>
  <DateCreated>2008/10/01</DateCreated>
  <LastUpdate>2008/10/17</LastUpdate>
  <Estimator />
  <JobCode1 />
  <JobCode2 />
  <JobCode3 />
  <JobDate1 />
  <JobDate2 />
  <JobDate3 />
  <JobDate4 />
  <JobDate5 />
  <JobFlag1 />
  <JobFlag2 />
  <JobFlag3 />
  <JobFlag4 />
  <JobFlag5 />
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  <JobNumber2>0</JobNumber2>
  <JobNumber3>0</JobNumber3>
  <JobQty1 />
  <JobQty2 />
  <JobString1>X20</JobString1>
  <JobString2 />
  <JobString3 />
  <JobString4 />
  <JobString5 />
  <JobLongString1>NONE</JobLongString1>
- <EstimateGroup>
  <GroupNumber>0001</GroupNumber>
  <Description>ALL PROJECT ITEMS</Description>
- <EstimateItem>
  <LineNumber>0005</LineNumber>
  <ItemCode>13320</ItemCode>
  <Description>GUARDRAIL GR-2</Description>
  <RequireSupplementalDescriptionFlag>N</RequireSupplementalDescriptionFlag>
  <Units>LF</Units>
  <Comment>REGRESSION FROM GBBP</Comment>
  <AlternateCode />
  <IsAdHocPrice>N</IsAdHocPrice>
  <Quantity>1500.000</Quantity>
  <UnitPrice>11.03120</UnitPrice>
```

```


    <JobItemExtendedAmt>16546.80</JobItemExtendedAmt>
  - <EstimateItemReferencePrice>
    <EstimateItemReferencePriceName>13320</EstimateItemReferencePriceName>
    <EstimateItemReferencePriceUnitPrice>11.03120</EstimateItemReferencePriceUnitPrice>
    </EstimateItemReferencePrice>
  </EstimateItem>
</EstimateGroup>
</Estimate>

```

## 5.8 Reference Data

You can export reference data information from the AASHTOWare Project Preconstruction application to the AASHTOWare Project Estimator software to update an Estimator catalog. Code tables are exported in a fixed-field format. The format of this file is one row per code table entry and has the form:

Columns 1-8	Columns 9-16	Columns 17+
Code Table Name	Name	Code Value

 **Note:** Only the first 40 characters of the Code Value will import into the AASHTOWare Project Estimator software.

### 5.8.1 Sample Export File From the AASHTOWare Project Preconstruction Application

```

HWYTYPE 03      ASPHALT
UNITS   MILE    MILE
COUNTY 49      FRANKLIN
PWRKTYP ASPH    ASPHALT
URBRUR  U       URBAN
SEASON  SPRI    SPRING

```

In the actual export file from the AASHTOWare Project Preconstruction application you will get code table reference data that the AASHTOWare Project Estimator software ignores and does not use.

