U.S. Department of Transportation
Federal Highway Administration

Construction Part A

Participant Guide

Contents

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2. Introduction to Using the Participant Guide

The Participant Guide helps you get started with the process of setting up a new contract, progress tracking, and billing and payments, and quickly navigating through the various key processes of contract execution.

The options selected for use in this guide are for instructional purposes to showcase the entire lifecycle of a contract. Field selections, other than the ones used in this guide could

possibly lead to a varied contract workflow and may not be covered in this guide. For additional information on the application, refer to the User Guide/Masterworks Online Help available with the application.

Note: You may notice screenshots containing information added throughout the document, even in places where a new empty screen would typically be displayed. This practice eliminates the need for multiple images, allowing a single screenshot to convey the essential details required to proceed with the work effectively.

3. Construction Management

The **Contracts** module provides a comprehensive, flexible, full-featured, and intuitive system to manage contracts in a project. Its user-friendly features guide you through the complete contract process, from initial set up and analysis to implementing the contract, tracking progress, and estimating payments.

The highlights of the **Contracts** module are:

- Enables an authorized user to create contracts, assign contractors, and track work progress
- Provides an efficient approval process with instant notification of approvals
- Streamlines the management of changes in contract
- Electronic forms prevent redundancy and manual errors, and save time in updating field information
- Instant access and search based on a variety of parameters to monitor contracts
- A comprehensive reporting feature to create and publish reports for contracts
- Invitation-based accessibility to contract information

3.1. Accessing Contract Dashboards

Overview

Contract dashboards provide a quick view of contract information. You can access a contract only if you are invited to that contract. Based on the roles assigned to you, only selected information is displayed.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

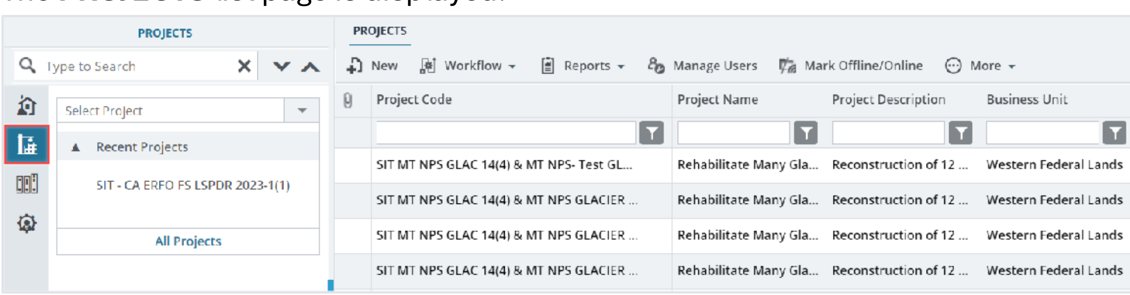


Figure 1:Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

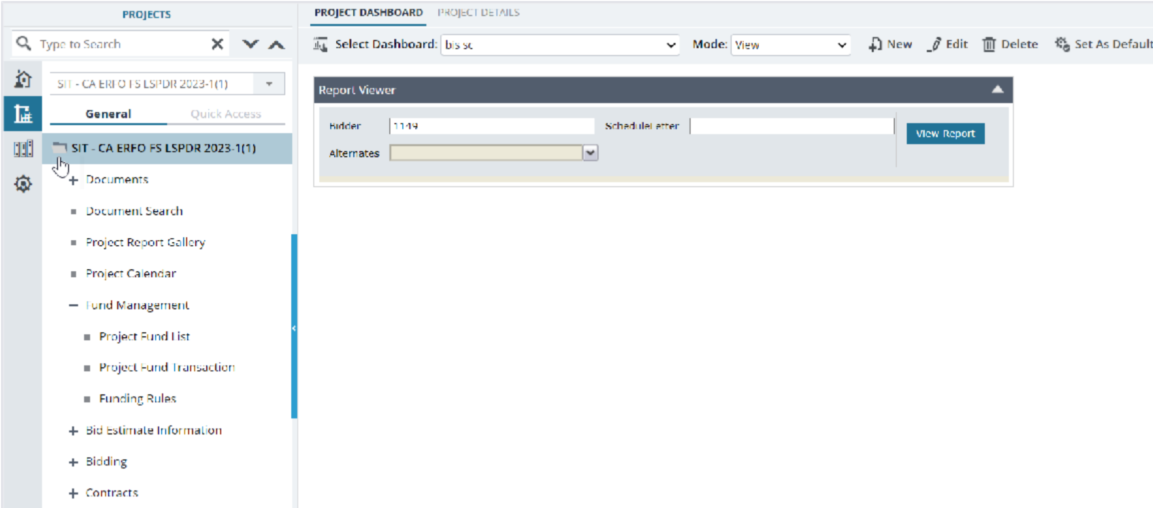


Figure 2: Expanding Projects Folder

3. Expand **Contracts**, click the contract.
   The **CONTRACT DASHBOARD** page is displayed.

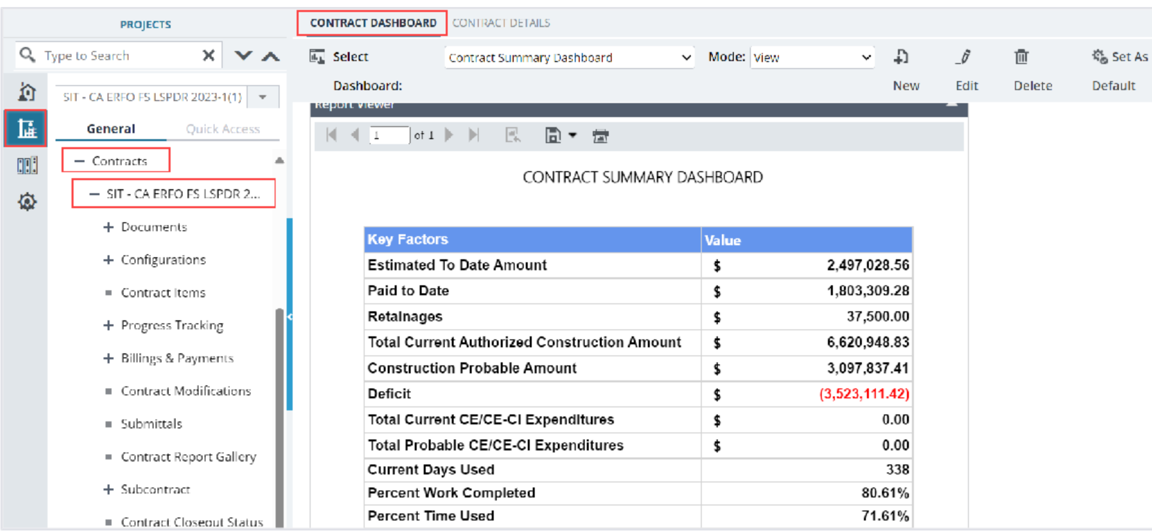
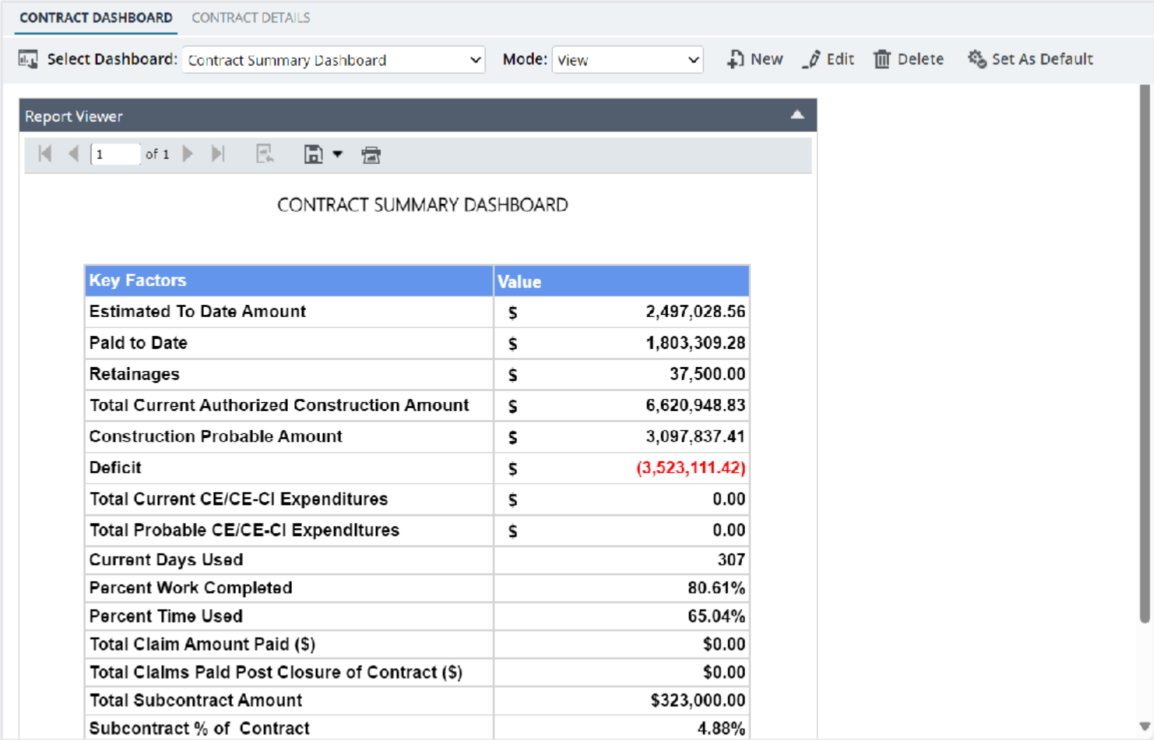


Figure 3: Contract Dashboard

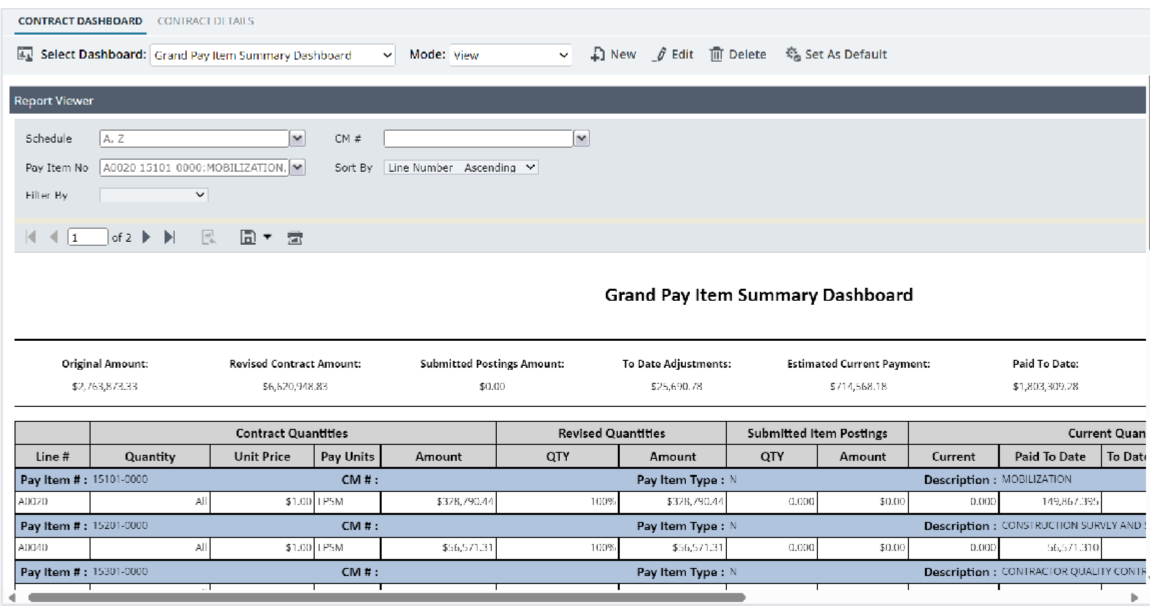
4. From the **Select Dashboard** drop-down list, select the appropriate dashboard to view.
   The following dashboards are available:

   - Contract Summary Dashboard
   - Grand Pay Item Summary



Key Factors	Value	
Estimated To Date Amount	$	2,497,028.56
Paid to Date	$	1,803,309.28
Retainages	$	37,500.00
Total Current Authorized Construction Amount	$	6,620,948.83
Construction Probable Amount	$	3,097,837.41
Deficit	$	(3,523,111.42)
Total Current CE/CE-CI Expenditures	$	0.00
Total Probable CE/CE-CI Expenditures	$	0.00
Current Days Used		307
Percent Work Completed		80.61%
Percent Time Used		65.04%
Total Claim Amount Paid ($)		$0.00
Total Claims Paid Post Closure of Contract ($)		$0.00
Total Subcontract Amount		$323,000.00
Subcontract % of Contract		4.88%

Figure 4: Contract Summary Dashboard



Original Amount:	Revised Contract Amount:	Submitted Postings Amount:	To Date Adjustments:	Estimated Current Payment:	Paid To Date:
$2,763,873.33	$6,620,948.83	$0.00	$25,690.78	$714,568.18	$1,803,309.28

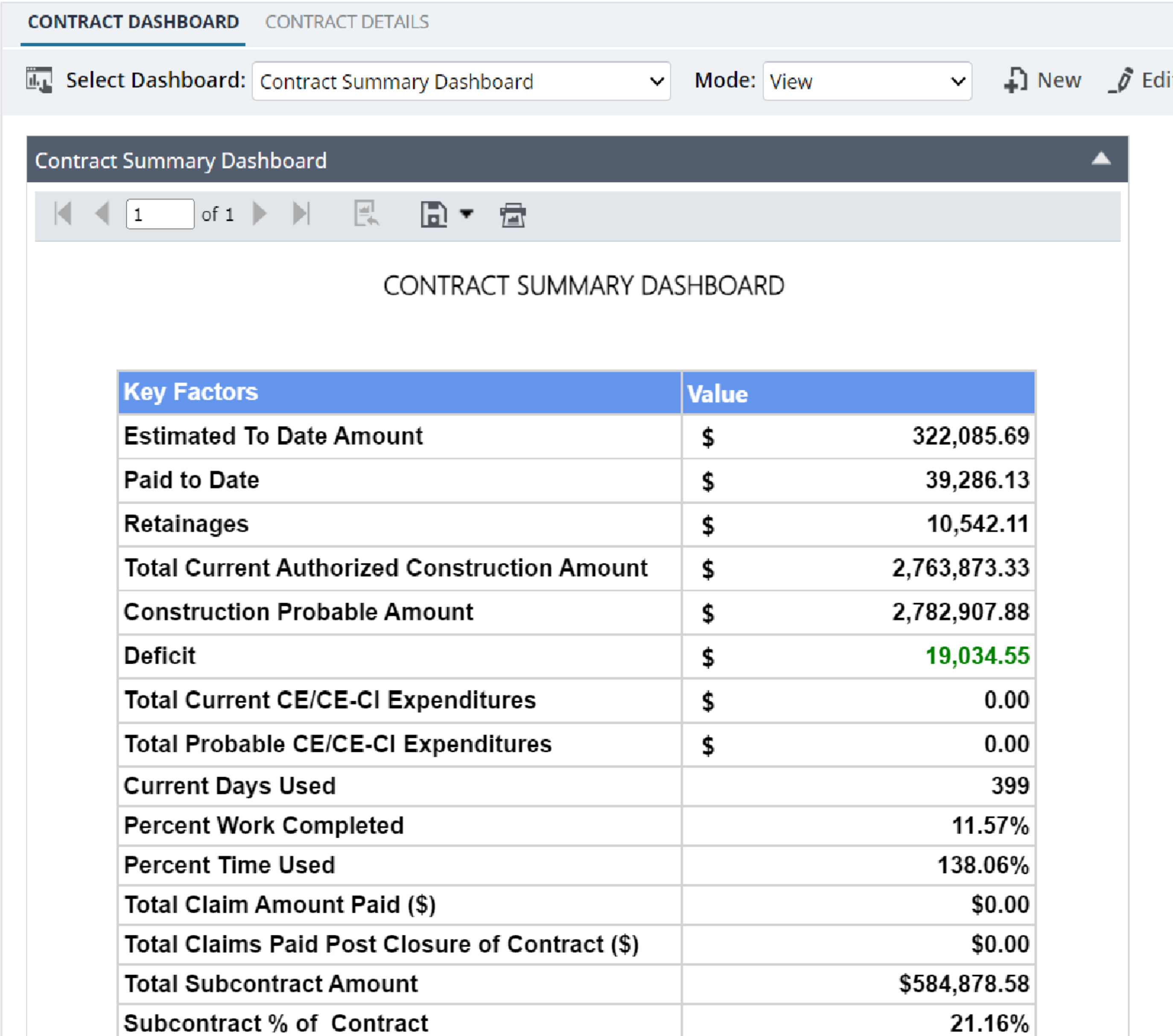
	Contract Quantities				Revised Quantities		Submitted Item Postings		Current Quan		
Line #	Quantity	Unit Price	Pay Units	Amount	QTY	Amount	QTY	Amount	Current	Paid To Date	To Date
Pay Item # : 15101-0000			CM # :			Pay Item Type : N			Description : MOBILIZATION		
A0020	All	$1.00	LPSM	$328,790.44	100%	$328,790.44	0.000	$0.00	0.000	149,867.395	
Pay Item # : 15201-0000			CM # :			Pay Item Type : N			Description : CONSTRUCTION SURVEY AND		
A0040	All	$1.00	LPSM	$56,571.31	100%	$56,571.31	0.000	$0.00	0.000	56,571.310	
Pay Item # : 15301-0000			CM # :			Pay Item Type : N			Description : CONTRACTOR QUALITY CONTR		

Figure 5: Grand Pay Item Summary Dashboard

3.1.1. Contract Dashboards

Contract Summary Dashboard

The **Contract Summary Dashboard** provides information on the estimated amount, paid amounts, retainage, expenditures, probable amounts, claim amounts, and so on.



Key Factors	Value	
Estimated To Date Amount	$	322,085.69
Paid to Date	$	39,286.13
Retainages	$	10,542.11
Total Current Authorized Construction Amount	$	2,763,873.33
Construction Probable Amount	$	2,782,907.88
Deficit	$	19,034.55
Total Current CE/CE-CI Expenditures	$	0.00
Total Probable CE/CE-CI Expenditures	$	0.00
Current Days Used		399
Percent Work Completed		11.57%
Percent Time Used		138.06%
Total Claim Amount Paid ($)		$0.00
Total Claims Paid Post Closure of Contract ($)		$0.00
Total Subcontract Amount		$584,878.58
Subcontract % of Contract		21.16%

Figure 6: Contract Summary Dashboard

The **Contract Summary Dashboard** displays the following information:

Field Name	Description
Estimated To Date Amount	Sum of all the item postings that are in the **Submitted** and **Approved** workflow status.
Paid to Date	Sum of Net to be Paid from all the approved pay estimates.
Retainages	Sum of Item Level Retainages + Adjustments with Type Retainage Value = A + B

Field Name	Description
	Where, A = Sum of all previously held retainages – (Release Previously held + Retainage this PE for each item). For each item the latest instance of it from the **Pay Estimates** must be considered. B = Sum of Previously Held Retainages + (Adjustment this PE – Release Previously held Retainage for all Adjustments of type = Retainage from the latest PE). **Note**: PE = Pay Estimate
Total Current Authorized Construction Amount	Sum of all Project Fund List, that is, the Authorized Amount for **CON** type fund sources.
Construction Probable Amount	Sum of Probable Amount for all the contract items + Adjustments from the latest Pay Estimate irrespective of its workflow status. **Note**: Only users with permission defined in the **Additional Permissions Setup** catalog of the library can view this field.
Deficit	It is calculated as: Construction Probable Amount – Total Current Authorized Construction Amount **Note**: If the deficit is negative, it is displayed and negative sign is not displayed.
Total Current CE/CE-CI Expenditures	Sum of Expended Amounts for fund type = CE + CI
Total Probable CE/CE-CI Expenditures	Sum of Probable Amounts for fund type = CE + CI **Note:** Only users with permission defined in the **Additional Permissions Setup** catalog of the library can view this field.
Current Days Used	It is calculated as: • If **Time Count Stopped Date** is available, then (Time Count Stopped Date – Start Date – Interim stoppage days + 1) • If **Time Count Stopped Date** is not available, then (Current Date – Start Date – Interim stoppage days + 1) **Note:** The contract's selected calendar is used for day calculation.
Percent Work Completed	It is calculated as: Estimated To Date Amount ÷ Construction Probable Amount (in %).

Field Name	Description
Percent Time Used	It is calculated as: • If **Time Count Stopped Date** is available, then (Time Count Stopped Date – Start Date – Interim stoppage days + 1) ÷ Revised Calendar Days (in %) **Note:** Revised Calendar Days = Original Calendar Days + Change in number of days • If **Time Count Stopped Date** is not available, then (Current Date – Start Date – Interim stoppage days + 1) ÷ Revised Calendar Days (in %) **Note:** The calendar selected for the contract is used for calculating the days. The same formula holds good for completion date contract.
Total Claim Amount Paid ($)	Sum of all Approved Claims paid, that is, Total Claims Paid ($) from the **Contract Details** page.
Total Claims Paid Post Closure of Contract ($)	Sum of all Claims approved post approval of Final Pay Estimate, that is, Total Claims paid post closure of Contract ($) from the **Contract Details** page.
Total Subcontract Amount	Sum of the Current Subcontract Amount ($) from the latest Approved versions from the **Request for Sublet Work** form.
Subcontract % of Contract	(Sum of Subcontract Amount from the latest approved version for all subcontractors ÷ Contract Amount from Contract Items) x 100

Grand Pay Item Summary Dashboard

The **Grand Pay Item Summary** dashboard provides information based on the Schedule, Pay Item No, and CM# selected.

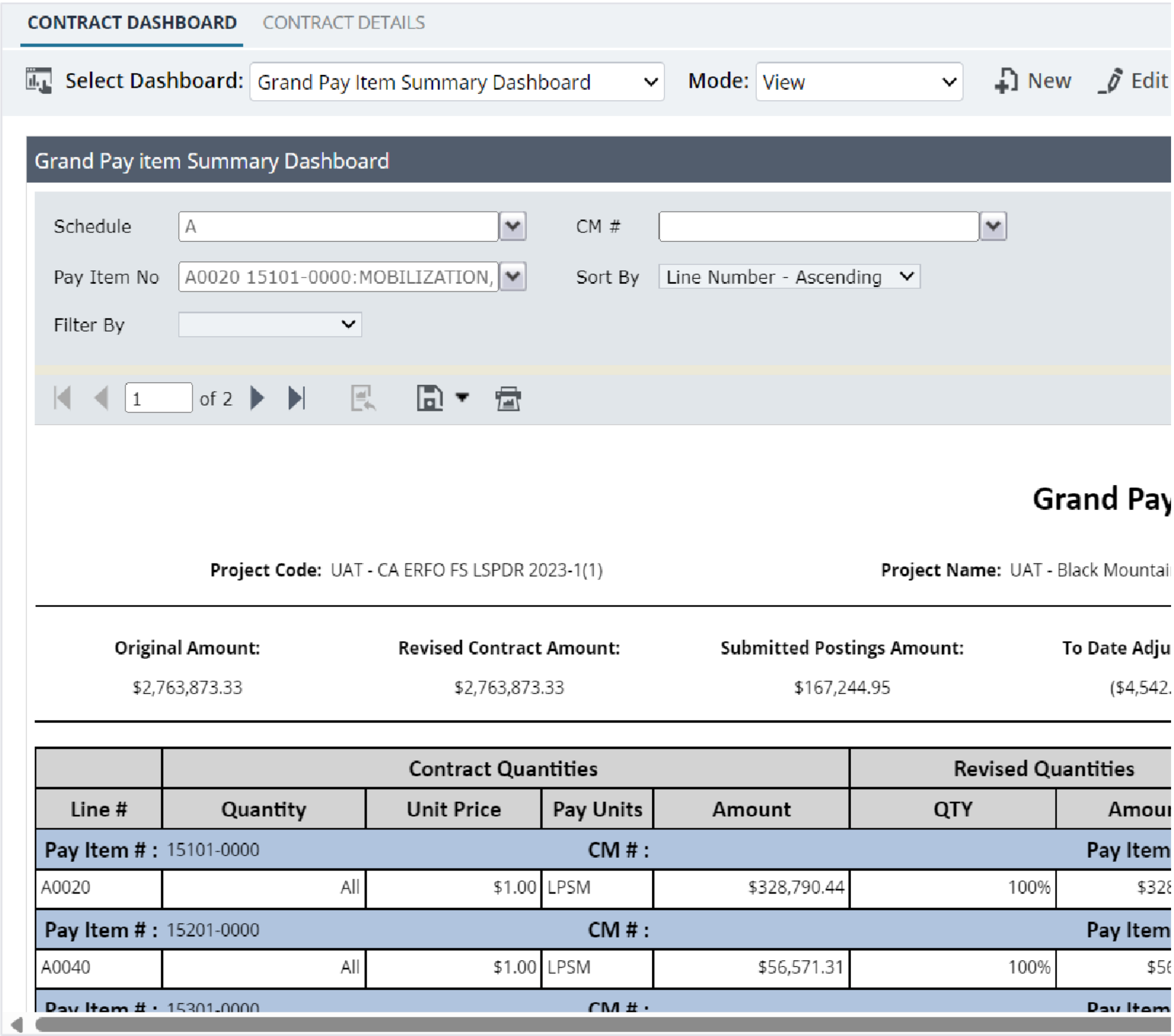


Figure 7: Grand Pay Item Summary Dashboard

By default, a dashboard is displayed. To view specific information, provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Schedule	From the drop-down list, select the appropriate option. Available options are all schedules from containers in the **Contract Items** page.

Field Name	Description
Pay Item No	From the drop-down list, select the appropriate option. Available options are pay items from the **Contract Items** page.
CM #	By default, all items irrespective of impact by any CM # is be displayed. Optionally, from the drop-down list, select the specific CM #. Only items impacted by the CM is displayed.

The following information is displayed:

Field Name	Description
Project Code	The code of the project.
Project Name	The name of the project.
Contract Number	The number of the contract.
State	The state of the project.
Original Amount	Original Approved Contract Value. It is calculated as: Sum of Original Qty x Unit Price for All Contract Items
Revised Contract Amount	Sum of Current Amount for all the Contract Items.
Submitted Postings Amount	Total amount of postings in the Submitted workflow status.
To Date Adjustments	Displays value based on the past and current Pay Estimates irrespective of their workflow status.
Estimated Current Payment	It is calculated as: To Date Progress - Paid To Date
Paid To Date	It is calculated as: Paid to date x Unit Price + Adjustments To Date for approved Pay Estimates only
To Date Progress	It is calculated as: Total amount of all approved item postings + Adjustments
Probable Amount	Sum of Probable Amounts from Contract Items. The probable amount includes adjustments as well. **Note:** Only users with permission defined in the Additional

Field Name	Description
	Permissions Setup catalog of the library can view and update this field.
Percent Work Completed	It is calculated as : To Date Progress ÷ Probable Amount x 100

The grid displays the following information:

Section	Field Name	Description
–	Pay Item #	The pay item number of the item.
–	CM #	The contract modification number of the item.
–	Pay Item Type	The pay item type of the item.
–	Description	The description of the item.
–	Line #	The line number of the item.
Contract Quantities	Quantity	Original Contract Quantity available at the time of locking the contract item. If the unit of the item is LPSM or CTSM, then the value is All.
Contract Quantities	Unit Price	The unit price of the item.
Contract Quantities	Pay Units	The unit of the item.
Contract Quantities	Amount	It is calculated as: Unit Price x Quantity
Revised Quantities	QTY	Original Contract Quantity + any approved contract modification for the respective item. If the unit of the item is LPSM or CTSM, then the value is 100%.
Revised Quantities	Amount	It is calculated as: Unit Price x Revised Quantities: QTY
Approved Item Posting	QTY	Sum of Approved Item Posting Quantities for the respective Pay Item.

Section	Field Name	Description
Approved Item Posting	Amount	It is calculated as: QTY x Unit Price from the approved item posting.
Current Quantities	Current	Sum of all the quantities for the item in all the pay estimates in **Approved** workflow status. This quantity is calculated as posted quantities that were included in pay estimates and is not inclusive of any item level hold/retainages i.e. Net Qty should be considered = (Posted Qty – Hold Qty This PE) + Previously Held Qty Release
Current Quantities	Paid To Date	Sum of all the quantities for the item in all the pay estimates in **Approved for Payment** or **Paid** workflow status. The paid quantity is calculated as posted quantities that were included in pay estimates and is not inclusive of any item level hold/retainages. i.e Net Qty should be considered = (Posted Qty – Hold Qty This PE) + Previously Held Qty Release
	To Date Progress	It is calculated as: Current To Be Paid + Previously Paid Qty
	Amount	Amount corresponding to the To Date Qty.
–	Comp %	It is calculated as: To Date Amount ÷ Probable Amount in $ in %
Probable Quantities	Probable QTY	The probable quantity of the item. **Note:** Only users with permission defined in the **Additional Permissions Setup** catalog of the library can view and update this field.
Probable Quantities	Probable Amount	Amount corresponding to the Probable Qty. **Note:** Only users with permission defined in the **Additional Permissions Setup** catalog of the library can view and update this field.
–	O/U %	It is calculated as: To Date Amount ÷ Probable Amount in $ in % **Note:** Only users with permission defined in the **Additional Permissions Setup** catalog of the library can view and update this field.

The adjustment grid displays the following information:

Field Name	Description
Adjustment Type	The appropriate information is retrieved from the latest pay estimate in any workflow status.
Description	The appropriate information is retrieved from the latest pay estimate in any workflow status.
Fund Rule	The appropriate information is retrieved from the latest pay estimate in any workflow status.
Adjustment Amount in $: Original	The initial adjustment amount when this adjustment was created. This information is retrieved from the latest pay estimate in any workflow status.
Adjustment Amount in $: Previous	The Previously Held Amount in $ from the latest pay estimate.
Adjustment Amount in $: Current	The Net Adjustment from the latest pay estimate.
Adjustment Amount in $: To Date	It is calculated as: Adjustment Amount in $: Previous + Adjustment Amount in $: Current
Probable Amount in $	The appropriate information is retrieved from the latest pay estimate in any workflow status. **Note:** Only users with permission defined in the Additional Permissions Setup catalog of the library can view and update this field.
O/U %	It is calculated as: To Date Amount ÷ Probable Amount in $ in %

3.2. Contract Setup

The **Contracts** module enables you to create a contract that includes setting up the contract attributes, establishing zero estimate, managing prime contractor and sub-contractors, tracking progress using contractor daily records, inspector daily records, and daily diaries, progress payments, contract modifications, sub-contracting, document management, submittals, and claims management. Additionally, Masterworks Mobile application enables you to track the daily progress and update item postings at the worksite.

To create a contract, you must provide all necessary contract-related information. Once it is created, you must import the awarded bid to work with the contract items. Additionally, you can add contract items manually only if the **Solicitation Procedure** in the published advertisement is defined as **Design-Build** or **Letter Contracts**.

You can access the contract only if you are invited to it. The modules or forms available to you in a contract are based on the roles assigned to you in the project and in the contract.

You can manage the following contract-related tasks in a project:

- Create Contracts
- Import awarded bid to contract
- Manage contract users
- Edit contract details
- Add prime contractor to contract
- Manage key contacts
- Add contract items

Contracts Permission Matrix

This section provides information on the roles and corresponding permissions for the respective forms.

Table 1: Table 1 – Contract Details

Role	Create	Edit	View	Audit Log
Administrator	Yes	Yes	Yes	Yes
Construction Component Lead	Yes	Yes	Yes	Yes
Construction Admin Staff	Yes	Yes	Yes	Yes
Construction Engineer	–	–	Yes	–
Highway Construction Manager/QA QC	–	–	Yes	–

Role	Create	Edit	View	Audit Log
Construction Contractor CDRs only	–	–	Yes	–
Construction Contractor Basic	–	–	Yes	–
Construction Contractor QC Manager	–	–	Yes	–
Construction Contractor Manager	–	–	Yes	–
Construction Operations Engineer	–	Yes	Yes	–
Inspector	–	–	Yes	–
Assistant Project Engineer	–	–	Yes	–
Project Engineer	–	Yes	Yes	–
Regional Engineer	–	–	Yes	–
Construction Inspection A&E Manager	–	–	Yes	–
Inspector A&E	–	–	Yes	–
Assistant Project Engineer A&E	–	–	Yes	–
Project Engineer A&E	–	–	Yes	–

Table 2: Table 2 – Contractors

Role	Edit	View	Audit Log
Administrator	Yes	Yes	Yes
Construction Component Lead	Yes	Yes	Yes

Role	Edit	View	Audit Log
Construction Admin Staff	Yes	Yes	Yes
Construction Engineer	–	Yes	–
Highway Construction Manager/QA QC	–	Yes	–
Construction Contractor CDRs only	–	Yes	–
Construction Contractor Basic	–	Yes	–
Construction Contractor QC Manager	–	Yes	–
Construction Contractor Manager	–	Yes	–
Construction Operations Engineer	–	Yes	–
Inspector	–	Yes	–
Assistant Project Engineer	–	Yes	–
Project Engineer	–	Yes	–
Regional Engineer	–	Yes	–
Construction Inspection A&E Manager	–	Yes	–
Inspector A&E	–	Yes	–
Assistant Project Engineer A&E	–	Yes	–
Project Engineer A&E	–	Yes	–

Table 3: Table 3 – Key Contacts

Role	Create	Edit	View	Delete	Audit Log
Administrator	Yes	Yes	Yes	Yes	Yes
Construction Component Lead	Yes	Yes	Yes	Yes	Yes
Construction Admin Staff	Yes	Yes	Yes	Yes	Yes
Construction Engineer	–	–	Yes	–	–
Highway Construction Manager/QA QC	–	–	Yes	–	–
Construction Contractor CDRs only	–	–	Yes	–	–
Construction Contractor Basic	–	–	Yes	–	–
Construction Contractor QC Manager	–	–	Yes	–	–
Construction Contractor Manager	–	–	Yes	–	–
Construction Operations Engineer	Yes	Yes	Yes	Yes	–
Inspector	–	–	Yes	–	–
Assistant Project Engineer	–	–	Yes	–	–

Role	Create	Edit	View	Delete	Audit Log
Project Engineer	Yes	Yes	Yes	Yes	–
Regional Engineer	Yes	Yes	Yes	Yes	–
Construction Inspection A&E Manager	–	–	Yes	–	–
Inspector A&E	–	–	Yes	–	–
Assistant Project Engineer A&E	–	–	Yes	–	–
Project Engineer A&E	Yes	Yes	Yes	Yes	–

3.2.1 Creating a Contract

Prerequisites

- A bid must be in the **Awarded** workflow status.
  The bidding process is handled via the Advertisement, Amendment, e-Bidding module, and Bid Opening and Review forms. The bid gets awarded in the Bid Opening and Review form. For more information, refer to **M05 Acquisitions and e-Bidding PG**.
- The role of the logged-in user must be one of the following:
  - Administrator
  - Construction Component Lead
  - Construction Admin Staff
    For more information on role-specific permissions, refer to Table 1- Contract Details Permission Matrix.

Overview

A project can have only one contract associated with it. You can create a contract only after a bid is awarded. After a contract is created, you cannot delete it.

You can enter contract details that include basic contract information, and attach contract-related images and files.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

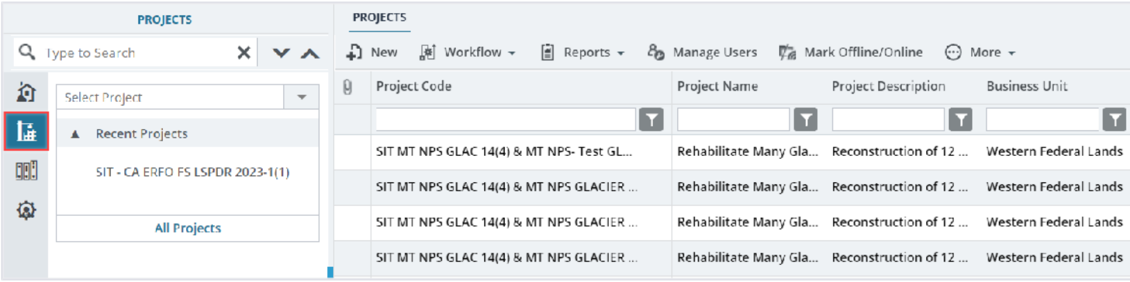


Figure 8:Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

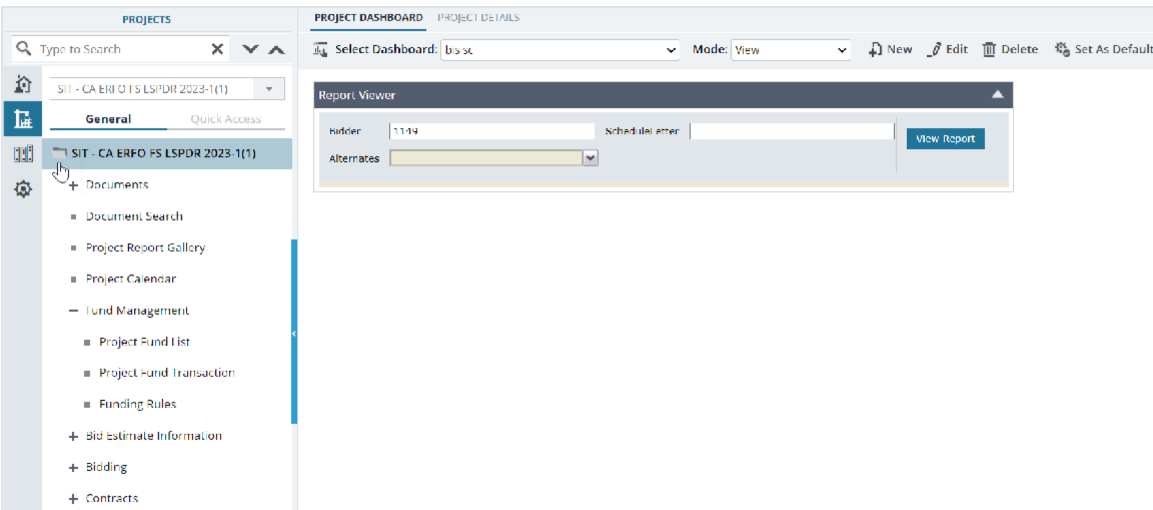


Figure 9: Expanding Projects Folder

3. In the navigation pane, click **Contracts**.
   The **CONTRACTS LIST** page is displayed.

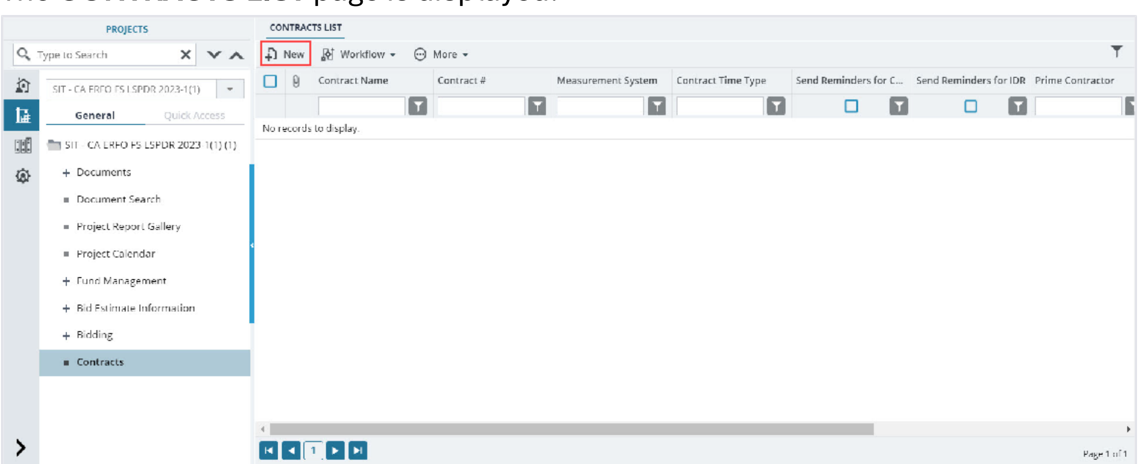


Figure 10: List Page of Contracts

4. Click **New**.

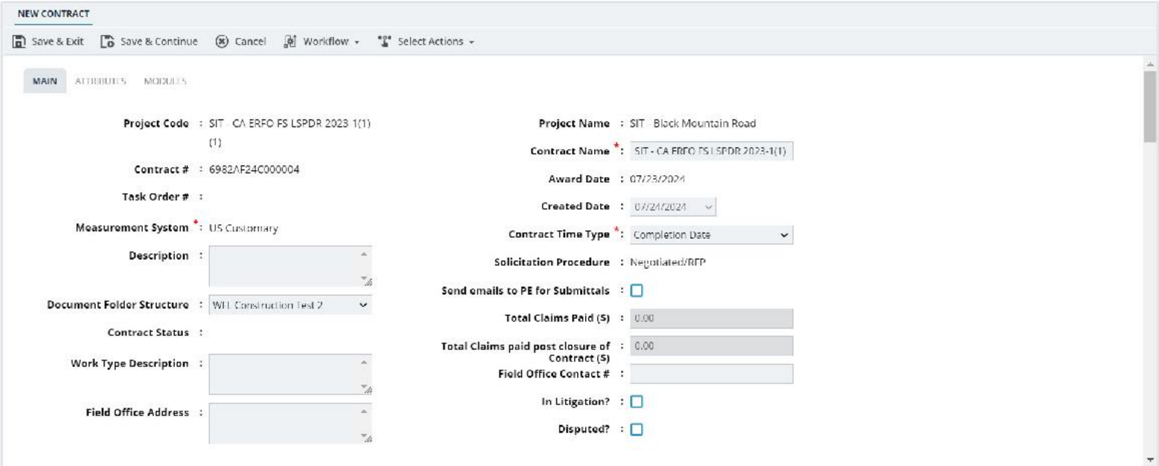


Figure 11: New Contract

The **NEW CONTRACT** page displays the following information:

Section	Field Name	Description
–	Project Code	The identification code of the project.
	Project Name	The name of the project.
	Contract #	Defined in the **Contract #** field of the awarded bid in the **Bid Opening and Review** form.
	Task Order #	Defined in the **Task Order #** field of the awarded bid in the **Bid Opening and Review** form.
	Measurement System	Defined in the **Measurement System** field of the project.
	Contract Status	Upon saving the record, the current workflow status of the contract. **Note:** The value is updated based on the workflow validation defined in the Section 3.2.7. Contract Workflow Status.
	Award Date	The value as defined in the **Award Date** field of the awarded bid in the **Bid Opening And Review** form.
-	Created Date	The current date at the time of creation of the contract.
	Solicitation Procedure	The value as defined in the **Solicitation Procedure** field in the published advertisement.
CONTRACT TIME	Original Calendar Days	The **Calendar Days** at the time of creating the

Section	Field Name	Description
		contract is displayed. Once a contract modification is created, this field value will not change.
	Original Completion Date	By default, it displays the **Current Completion Date**. In the **Contract Time Type** field, if **Calendar Days** is selected, then the **Original Completion Date** is calculated as Time Start Date + Original Calendar Days - 1 Once a contract modification is created, this field value will not change.
	Change in Number of Days	Initially, it shows no value. When contract modifications are created, it displays the sum of all **Change in Number of Days** as defined in the **Change in Calendar Days** or **Change** **in Working Days** field, as applicable.

5. In the **MAIN** tab, provide the appropriate information in the fields, as described in the following table:

Section	Field Name	Description
–	Description	Enter a brief description of the contract.
	Document Folder Structure	From the drop-down list, select the document folder structure for the contract. Based on the selected document folder structure, a set of folders and documents is created in the **Documents** folder of the contract.
	Work Type Description	Enter a description of the work type.
	Field Office Address	Enter the address of the field office.
	Send Reminders for CDR	Select the check box to ensure that reminder emails are sent to complete Contractor Daily Records (CDR).

Section	Field Name	Description
		Reminders are sent until the contract is moved to the **Completed** workflow status. **Note:** Upon selecting the check box, **the CDR Reminder Timeframe (hrs)** field is displayed with the default value. Alternatively, you can modify the value as necessary.
	Send Reminders for IDR	Select the check box to ensure that reminder emails are sent to complete Inspector Daily Records (IDR). Reminders are sent until the contract is moved to the **Completed** workflow status. **Note:** Upon selecting the check box, the **IDR Reminder Timeframe (hrs)** field is displayed with the default value. Alternatively, you can modify the value as necessary.
-	Contract Name	Enter a unique name for the contract.
	Contract Time Type	From the drop-down list, select the appropriate type. Available options are Calendar Days and Completion Date. The **Contract Time Type** must be selected to update the contract time.
	Send emails to PE for Submittals	Select the checkbox to ensure notification emails are sent to users assigned with the **Project Engineer** role for approving the submittals.
	Field Office Contact #	Enter the phone number of the field office.
	In Litigation	Select the check box to ensure that the contract is in litigation.
	Disputed	Select the check box to ensure that the contract is disputed.
Contract Time	Calendar	**Note**: The project calendar is displayed as a default value.

Section	Field Name	Description
		Optionally, from the drop-down list, remove the calendar for the contract. If the project calendar is selected, then the **Calendar Days** field changes **into Working Days** field. The **Working Days** fields displays the number of days calculated from the selected **Start Date** to the **Current Completion Date** of the contract. If no calendar is selected, then the **Calendar Days** field displays the number of days calculated from the selected **Start Date** to the **Current Completion Date** of the contract.
	Time Start Date	By default, the current date is displayed. Optionally, from the calendar drop-down list, select the date the contract begins. **Note: Time Start Date** cannot be later than **Current Completion Date**.
	Calendar Days	By default, it displays the number of days between the **Start Date** and the **Current Completion Date**. Based on the option selected in the **Contract Time Type** field, the value in the **Calendar Days** field is updated. • In the **Contract Time Type** field, if **Calendar Days** is selected, then the **Calendar Days** field transforms into an editable field and you can enter the number of days as necessary. Once the contract items are locked, you cannot edit the **Calendar Days** field. • In the **Contract Time Type** field, if **Completion Date** is selected, then the **Calendar Days** field displays the number of days based on the calendar selected in the **Calendar** field. If any calendar is selected, then the **Non-working Days** specified in the calendar are excluded from the calculation. If any calendar is not selected in the **Calendar** field, then the **Calendar Days** field displays the difference in days

Section	Field Name	Description
		between the **Start Date** and **Current Completion Date**. **Note:** If there are any approved contract modifications, the **Calendar Days** field displays the updated days including the change in days from the latest approved contract modification.
	Current Completion Date	By default, it is calculated as: Time Start Date + 5 years Based on the option selected in the **Contract Time Type** field, the value in the **Current Completion Date** field is updated. • In the **Contract Time Type** field, if Completion Date is selected, then the Current Completion Date field transforms into an editable field. From the **Current Completion Date** calendar drop- down list, select the appropriate date. Based on the selected date, the value in the Calendar Days field is updated. • Once the contract items are locked, you cannot edit the Current Completion Date field. • In the Contract Time Type field, if Calendar Days is selected, then the Current Completion Date field is calculated as Time Start Date + Working Days **Note:** If there are any approved contract modifications, the Current Completion Date field displays the updated date from the latest approved contract modification
	Time Count Stopped Date	From the drop-down list, select the time count stopped date. Optionally, to clear the time count stopped date, click **Reset**.
	Construction Started Date	From the calendar drop-down list, select the date the construction starts.
	Notice to Proceed Date	From the calendar drop-down list, select the date when the work can commence.

Section	Field Name	Description
		Note: The notice to proceed may be received even before the time start date. This can be used for reporting purposes.
	Estimated Completion Date	From the calendar drop-down list, select an estimated date for completion of the contract. This field is used when the user wants to set a targeted date irrespective of what the **Current Completion Date** is going to be. **Note:** Ensure this field is updated regularly for reporting purposes.
	Period of Performance From Date	From the calendar drop-down list, select the start date for the performance period post contract close-out.
	Period of Performance To Date	From the calendar drop-down list, select the end date for the performance period post contract close-out.
	Warranty Period (days)	Enter the number of days for which the warranty is provided.
	Actual % Work Completed	Enter the percentage of the actual work completed. This field is used when the user wants to enter the percentage of construction work completed. **Note:** Ensure this field is updated regularly for reporting purpose.

6. To update the stop time during the contract execution, in the **INTERIM TIME STOPPAGE** section, perform the following steps:

   Note: The information added in this section has no impact on the calculation of contract days. However, you can use it for reporting purposes.

1. Click **Add**.

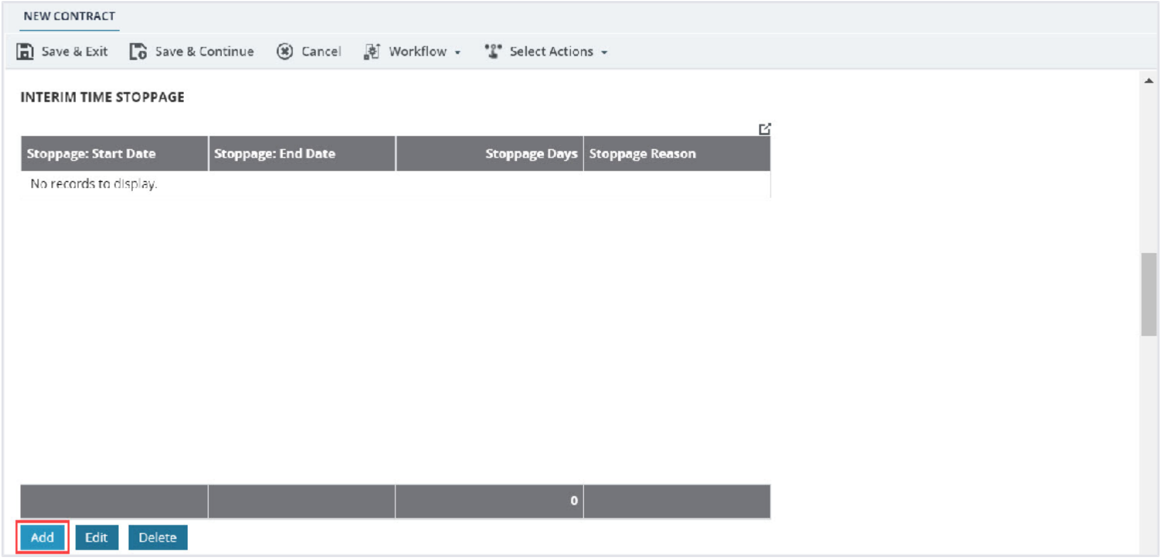


Figure 12: Interim Time Stoppage Section

The **New Interim Time Stoppage** dialog box is displayed.

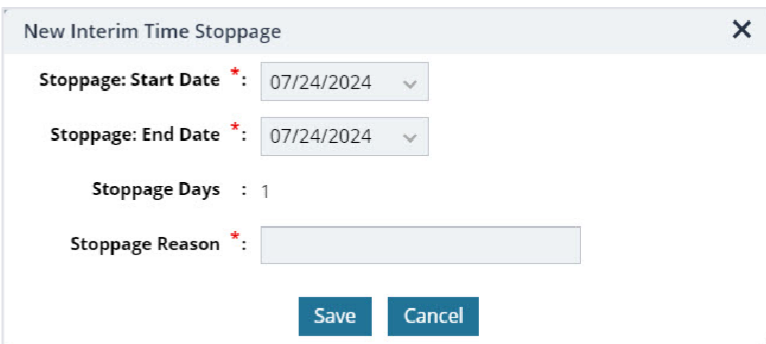


Figure 13: New Interim Time Stoppage Dialog Box

2. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Stoppage: Start Date	From the calendar drop-down list, select the start date for the stop time.
Stoppage: End Date	From the calendar drop-down list, select the end date for the stop time. **Note:** Upon selecting the details in the **Stoppage: Start Date** and **Stoppage: End Date** fields, the **Stoppage Days** field displays the total number of days for the stop time. This value is calculated based on the selected calendar and the stoppage start date and end date.
Stoppage Reason	Enter appropriate reason for the stop time.

3. Click **Save**.

4. Optionally, perform the following steps, as applicable:

    - To edit the stop time details, click the appropriate entry, click **Edit**, and then repeat steps **6b to 6c**, as applicable.
    - To delete any stop time details, click the appropriate entry, click **Delete**, and then click **OK**.

7. In the **SIGNIFICANT CONTRACT STATUS** field, enter appropriate information in the text area.

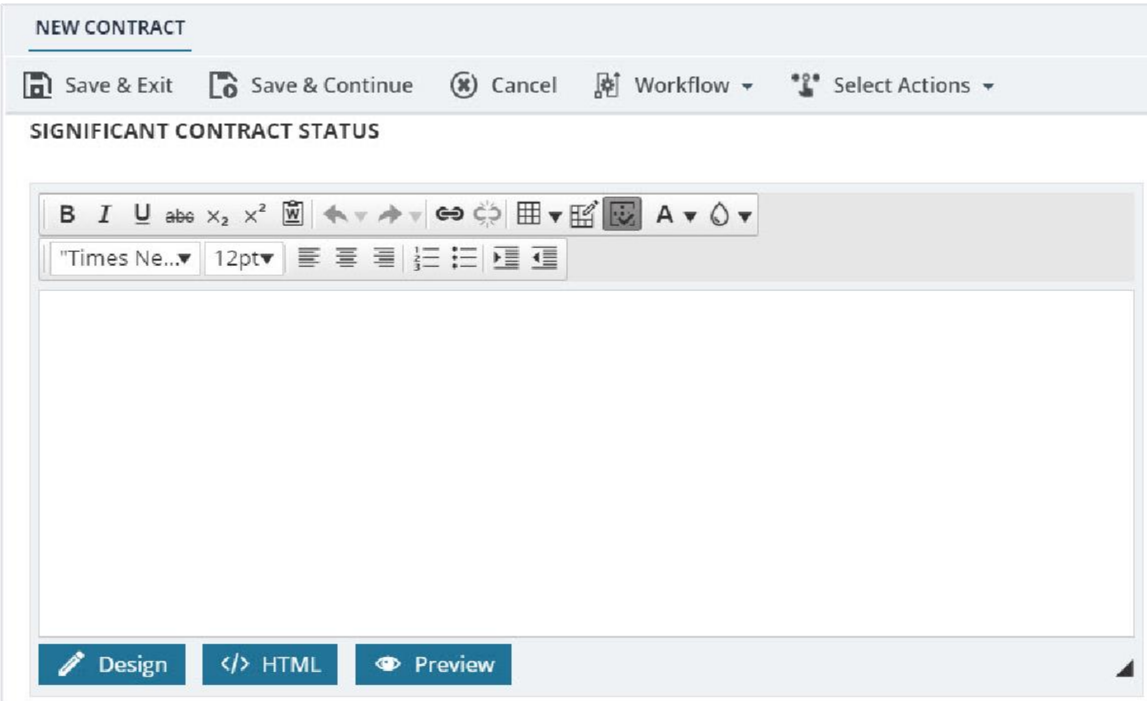


Figure 14: Significant Contract Status Section

Upon generating a report, this information is available as the Significant Contract Status. You can perform any of the following tasks to create and edit the information:

Note: By default, the Design mode is selected.

- Bold, italicize, underline, strike-through letters and words
- Use subscripts and superscripts
- Select the font and its size
- Select the font color and the background color for the content
- Insert and manage tables, and hyperlinks
- Use bullets and numbering
- Use clipboard operations to cut, copy, and paste the text
- Use indents and outdents
- To add HTML code, click **</> HTML**, and then enter the code.
- To preview the HTML entered typed, click **Preview**.

8. In the **DISPUTES & FOIA STATUS** field, enter appropriate information in the text area.

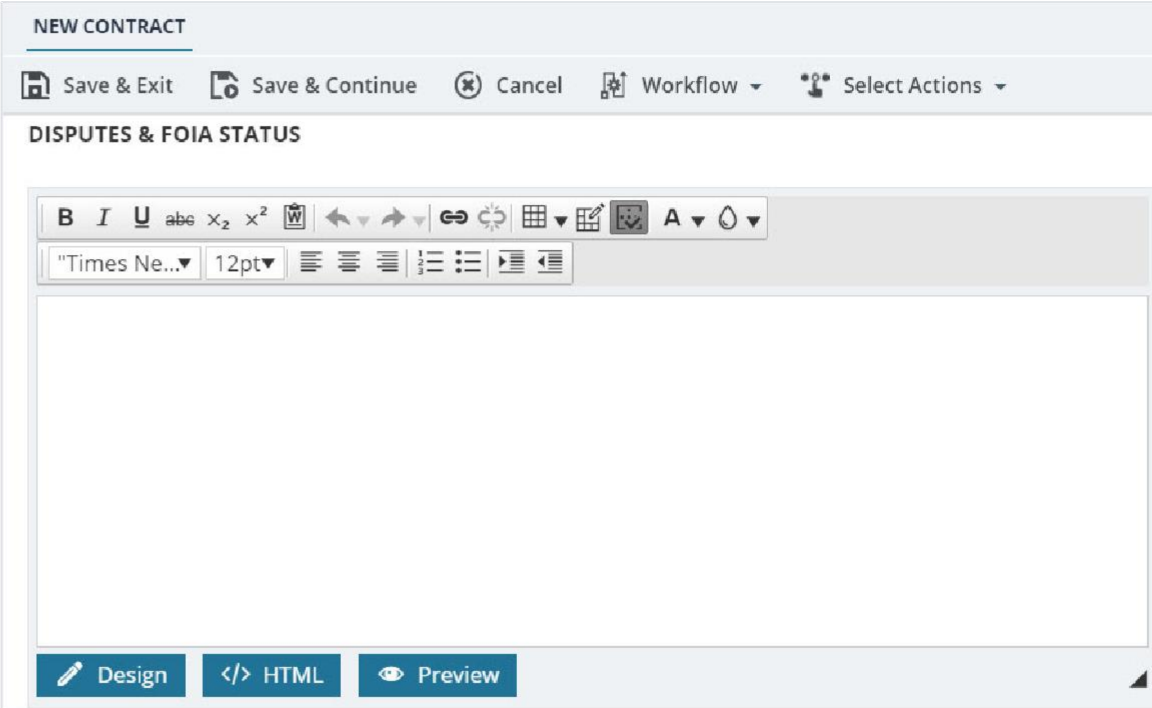


Figure 15: Disputes & FOIA Status Section

Upon generating a report, this information is available as Disputes and FOIA Status about the contract.

Note: By default, the Design mode is selected.

- Bold, italicize, underline, strike-through letters and words
- Use subscripts and superscripts
- Select the font and its size
- Select the font color and the background color for the content
- Insert and manage tables, and hyperlinks
- Use bullets and numbering
- Use clipboard operations to cut, copy, and paste the text
- Use indents and outdents
- To add HTML code, click **</> HTML**, and then enter the code.

9. In the **COE COMMENT** field, enter appropriate information in the text area.

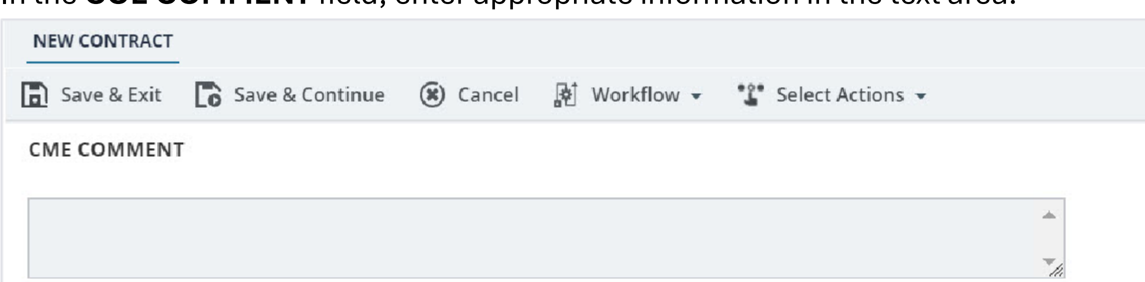


Figure 16: CME Comment Section

Upon generating a report, this information is available as Construction Operations Engineer (COE) comments about the contract.

10. In the **CME COMMENT** field, enter appropriate information in the text area.

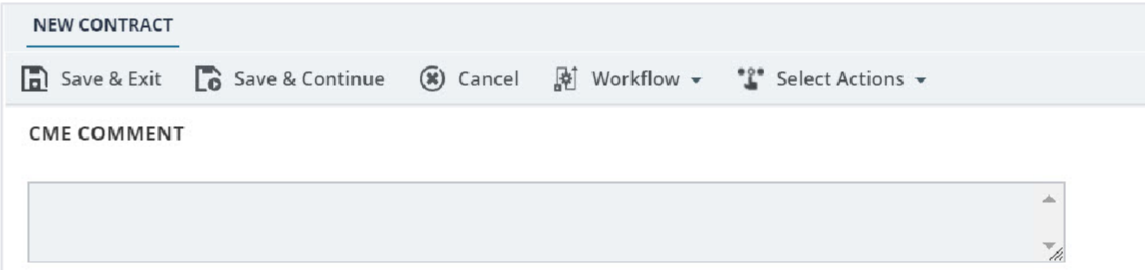


Figure 17: CME Comment Section

Upon generating a report, this information is available as CME Comments about the contract.

11. In the **CSTATUS COMMENT** field, enter appropriate information in the text area.

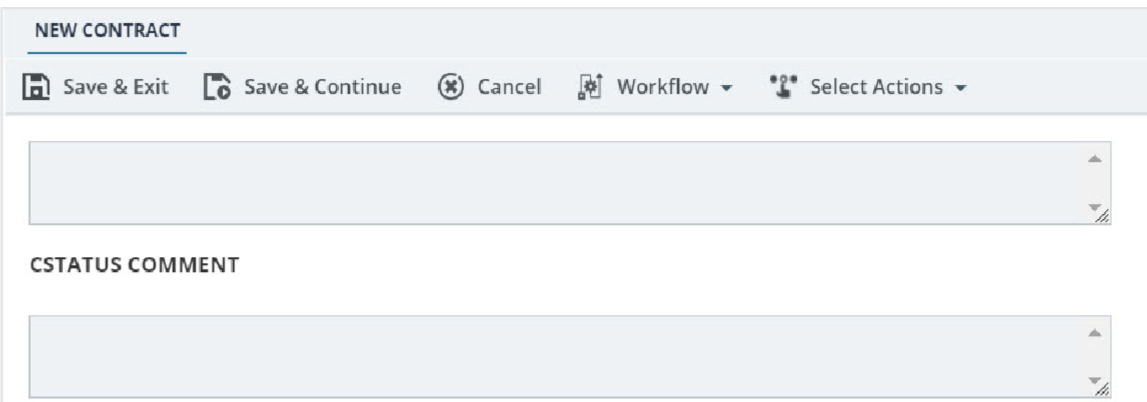


Figure 18: CSTATUS Comment Section

Upon generating a report, this information is available as Remarks in the Construction Status Report.

12. In the **NOTES** field, enter appropriate notes for the contract.

13. Optionally, in the **ATTACHMENTS** section, upload or link related files.
For information on attachments, refer to Section 4.1. Attachments.

14. Click **Save & Exit** to save the record and return to the list page. Optionally, click **Save & Continue** to save the record and continue on the same page. Click **Cancel** to discard the added information and exit the page.

Upon saving the record and once the contract reaches the claims process, the following information is displayed:

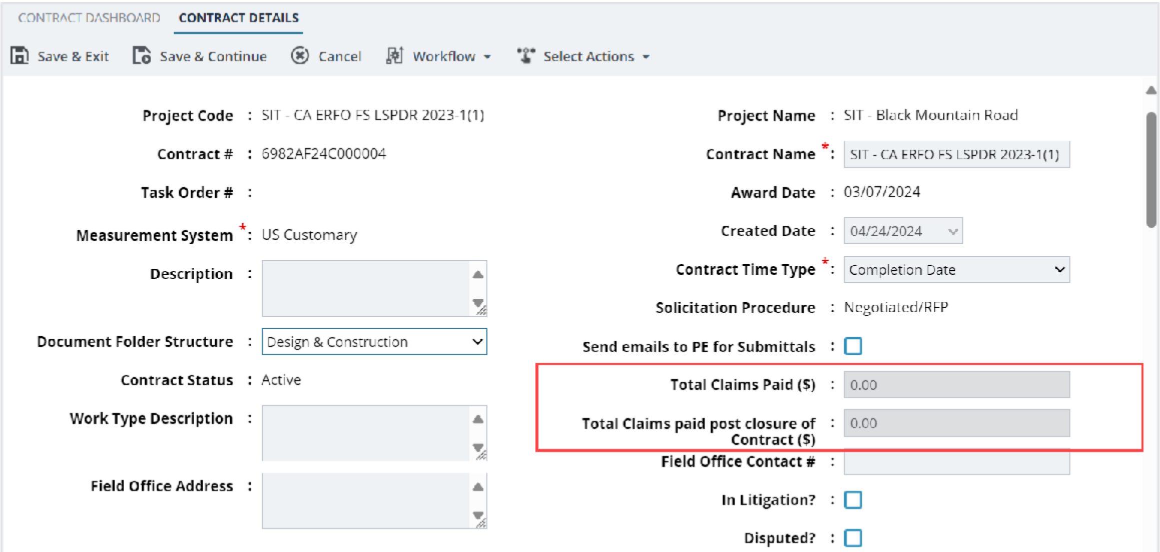


Figure 19: Claims Details in Contract Details Page

Field Name	Description
Total Claims Paid ($)	Sum of the **Claim Amount ($)** from the approved claims. If the **Claim Settlement Amount ($)** is available, then this amount is considered for the calculation. Otherwise, the Contracting Officer **Decision Amount ($)** is used for calculating **Total Claims Paid ($)**.
Total Claims paid post closure of Contract ($)	Post approval of the final pay estimate, it displays the sum of the **Claim Amount ($)** from the approved claims. If the **Claim Settlement Amount ($)** is available, then this amount is considered for the calculation. Otherwise, the **Contracting Officer Decision Amount ($)** is used for calculating **Total Claims Paid ($)**.

3.2.2 Importing Awarded Bid Details to the Contract

Prerequisites

The role of the logged-in user must be one of the following:

- Administrator
- Construction Component Lead
- Construction Admin Staff

  For more information on role-specific permissions, refer to [Table 1 – Contract Details Permission Matrix].

Overview

You can import the details of an awarded bid only after a contract is created. To enable the Import feature, you must edit the contract after creating it. The Import feature enables you to import the awarded bid items as contract items and the awarded bidder as prime contractor. However, you can change the prime contractor, if necessary. For more information on changing the prime contractor, refer to [Section 3.2.5.1. Changing a Prime Contractor](#).

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

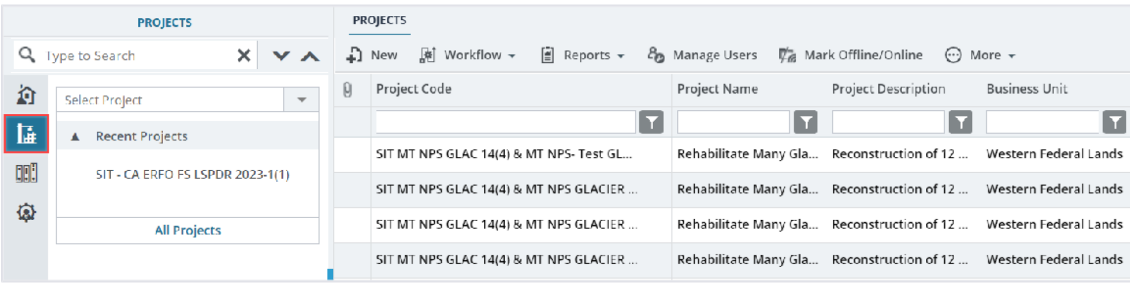


Figure 20:Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

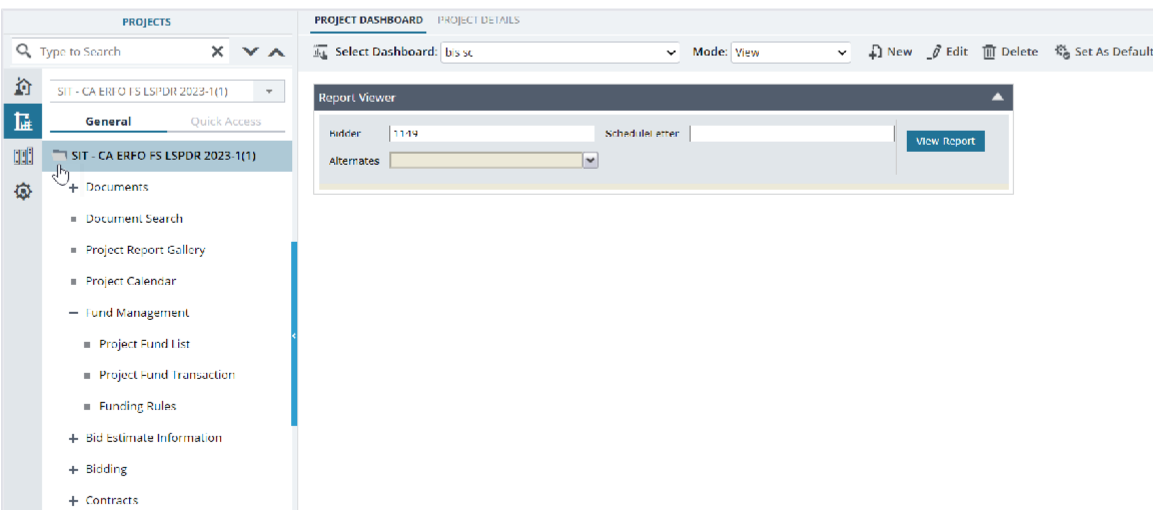


Figure 21: Expanding Projects Folder

3. In the navigation pane, click **Contracts**.
   The **CONTRACTS LIST** page is displayed.

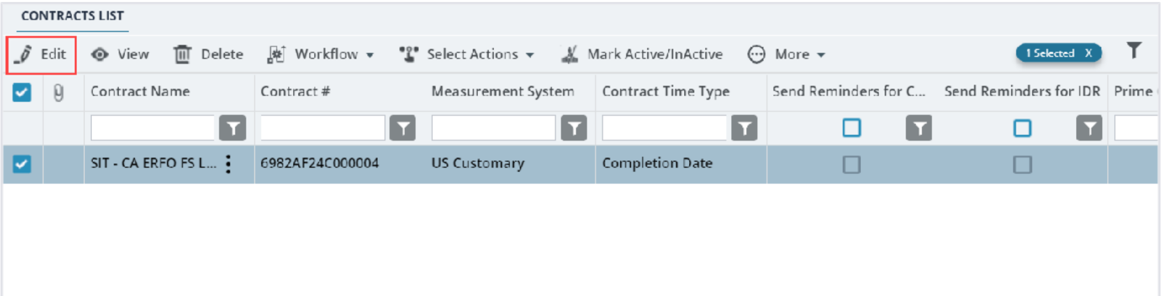


Figure 22: Contract Details Page – Import Option

4. In the list page, select the contract, and then click **Edit**.
   The **CONTRACT DETAILS** page is displayed.

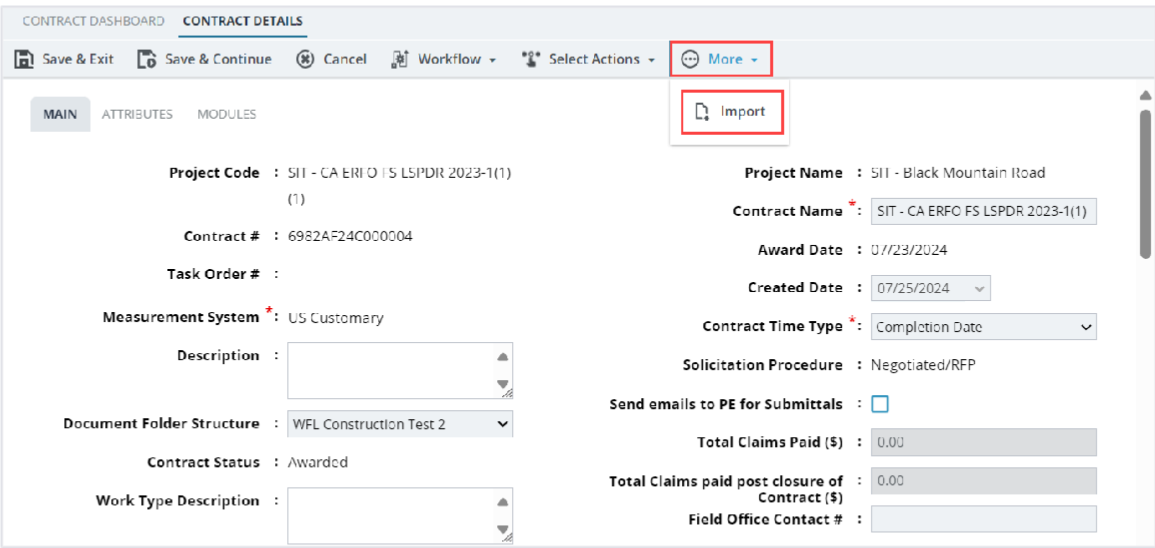


Figure 23: Contract Details Page – Import Option

5. Click **Import**.
   All the information of the awarded bid that comprises awarded items and awarded contractor is retrieved from the **Bid Opening And Review** form to the contract.

   Note: After performing this action, the Import feature is not available anymore.

   Upon importing the awarded bid, the following information is retrieved from the **Bid Opening And Review** form into the contract:

   - Awarded schedules and alternates
   - The unit price and quantities of LPSM and CTSM items are interchanged. For items having sub items, the quantity is displayed based on the value entered in the final engineer's e1stimate as a percentage breakdown. For example, Sub item quantity in contract items = Sub item quantity from final engineer's estimate x Unit Price from the awarded bid, and the unit price is updated as 1.

- Details of the awarded contractor as prime contractor.
  For information on the details received on importing awarded bid to the contracts module, refer to Section 3.3. Contract Items and Section 3.2.5. Managing Contractor Details.

3.2.3 Managing Contract Users

By inviting users to a contract, you can maintain confidentiality of the contract details and allow contract access only to authorized users

To invite a user to a contract, the user is first invited to the project and then to the contract of the project. The user creating the contract is automatically invited to the contract. Additionally, you can invite other users to the contract.

You can assign roles to a user in a contract based on the roles assigned to the user in the project. The roles assigned to a user in a contract are a subset of all the roles assigned to the user in the project, and the roles assigned to a user in a project are a subset of all the roles assigned to the user in the enterprise.

You can invite users to a contract in two ways:

- 3.2.3.1. Inviting users to contracts of a project
- 3.2.3.2. Inviting a user to contracts of multiple projects

Upon removing a user from the contract, the user cannot access the contract or perform any tasks in the contract. For more information on removing a user from a contract, refer to Section 3.2.3.3. Removing a User from the Contract.

3.2.3.1. Inviting Users to the Contract of a Project

Prerequisites

The user is invited to the project.
For more information on inviting users to a project, refer to the **Inviting Users to a Project** section in the **M02 Project Management PG**.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

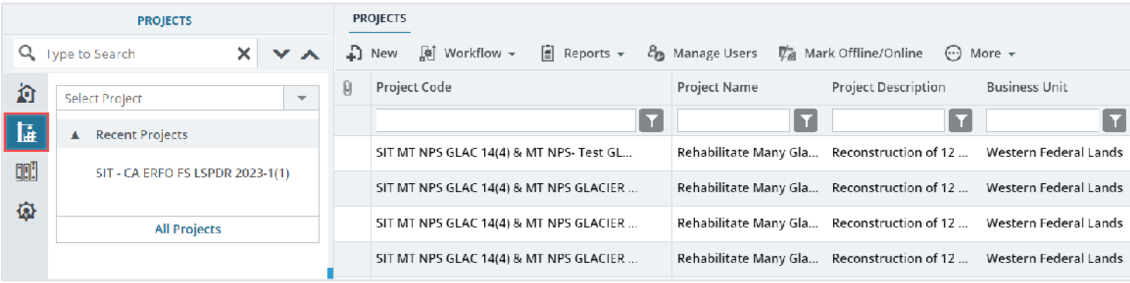


Figure 24: Navigation to Projects Module

2. In the list page, double-click the appropriate project.
   The **PROJECT DASHBOARD** is displayed.

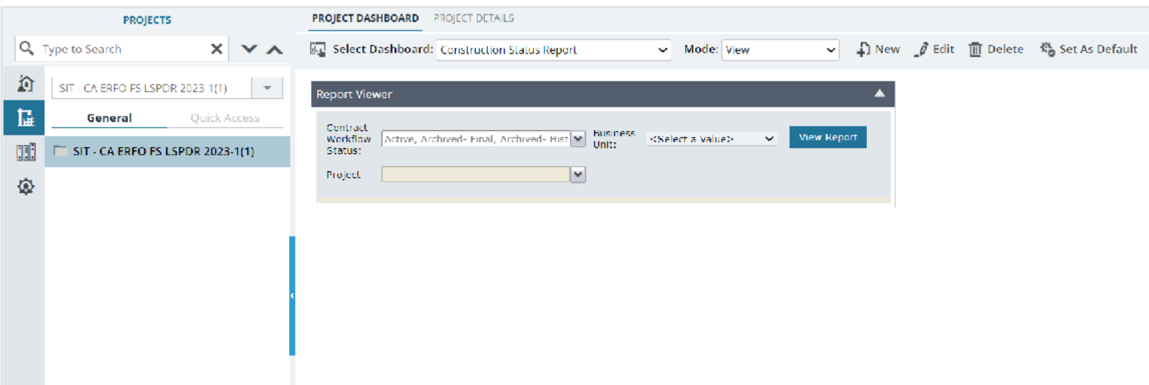


Figure 25: Project Dashboard

3. Click the **PROJECT DETAILS** tab.
4. Click **Manage Users**.
   Optionally, if Manage Users is not displayed in the tab then, click **More**, and click **Manage Users**.
   The **MANAGE USERS IN PROJECT** page is displayed.

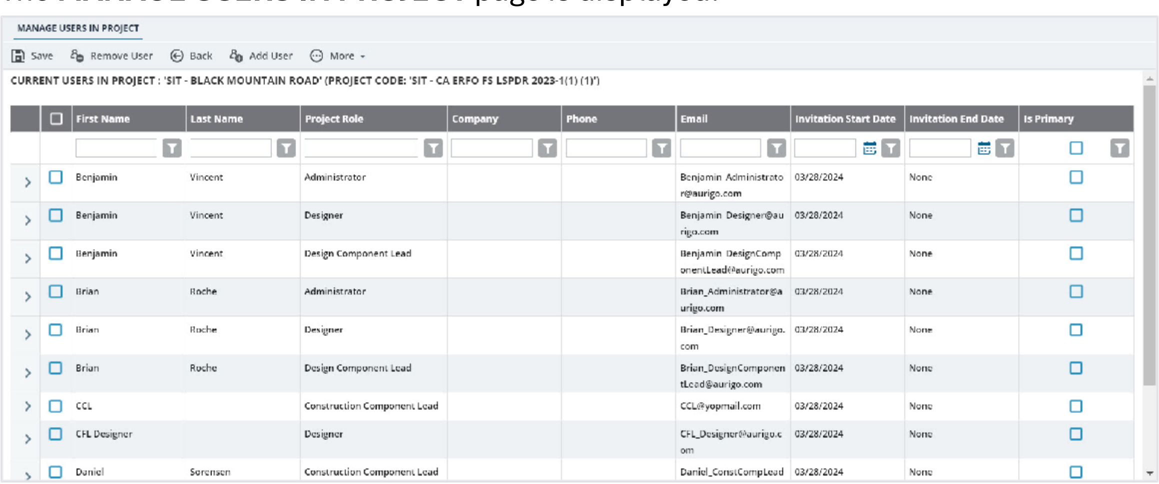


Figure 26: Manage Users in Project Page

5. In the **MANAGE USERS IN PROJECT** page, expand the appropriate user row in the project.

   The contract associated with the project is displayed.

   The following image displays the **MANAGE USERS IN PROJECT** page:

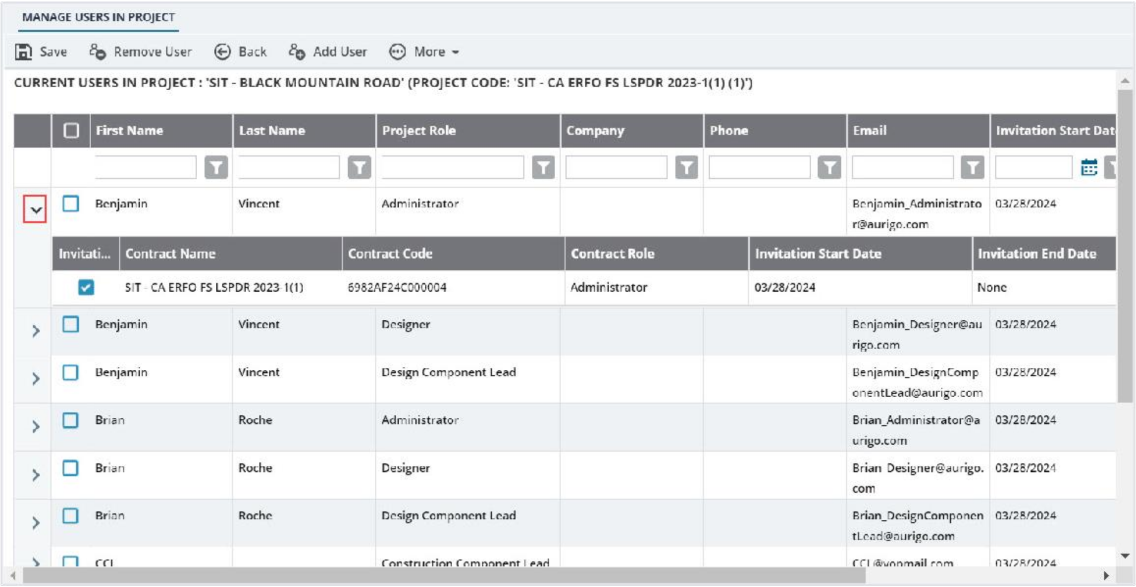


Figure 27: Manage Users in Project Page

6. In the **Invitation** column, select the check box adjacent to the contract name.

   The user is invited to the contract with all the roles the user has in the project.

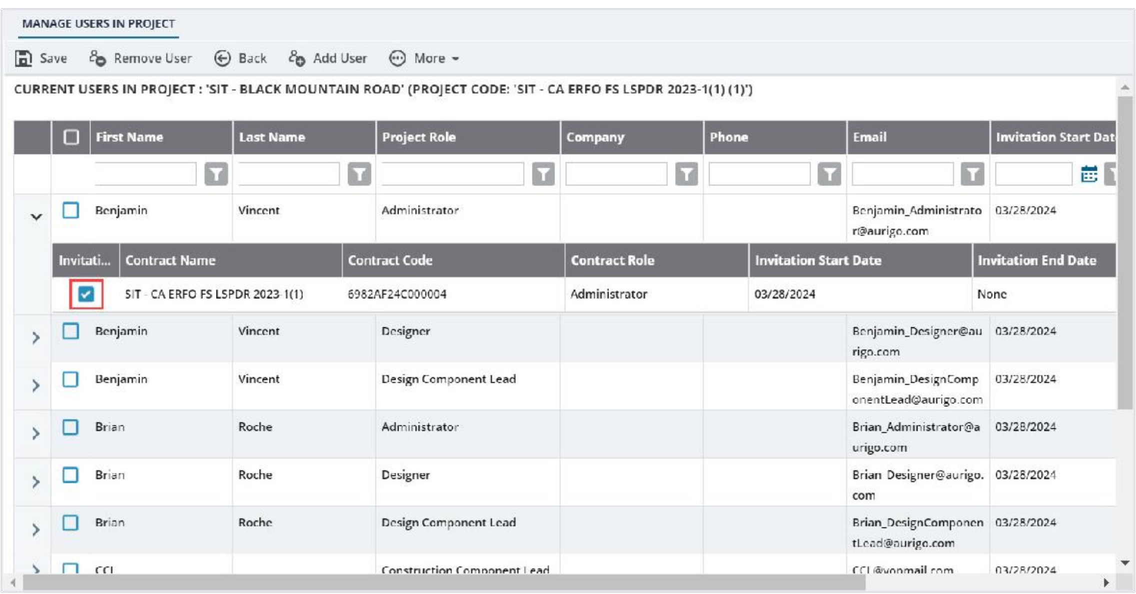


Figure 28 : Invitation Check Box

7. To define contract roles for the invited user, perform the following steps:
    a. Double-click the cell in the **Contract Role** column of the user.

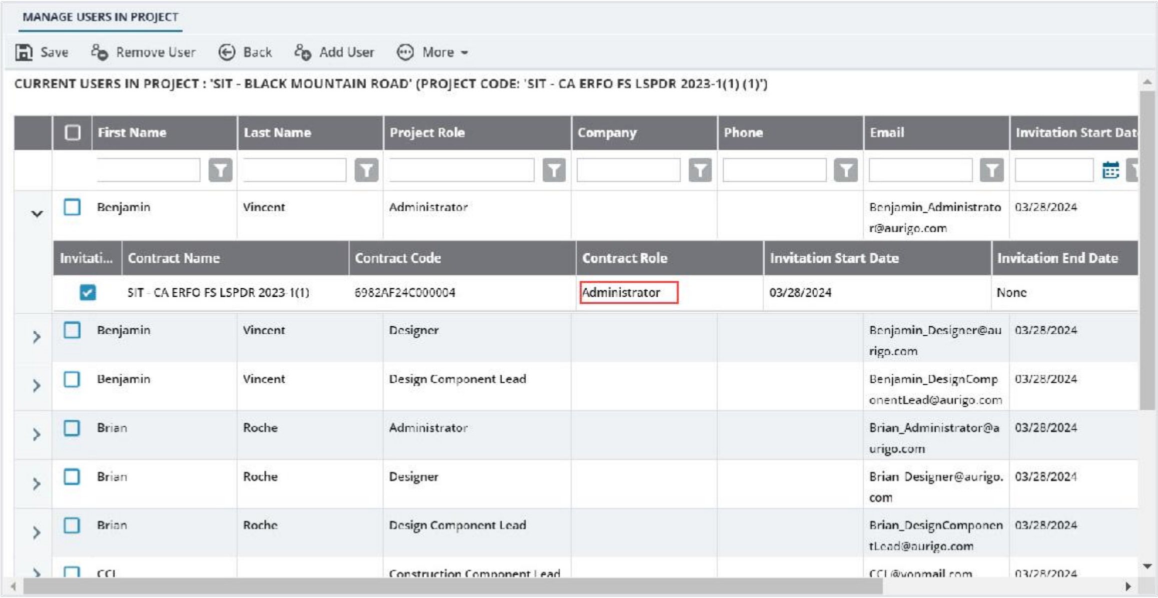


Figure 29: Contract Role Column

The list of roles assigned to the user at the project level is displayed.

For more information on security roles, refer to the **Security Roles** section in the **A02 Administrator Guide**.

    b. From the Contract Role drop-down list, select the roles that must be assigned to the user in the contract.

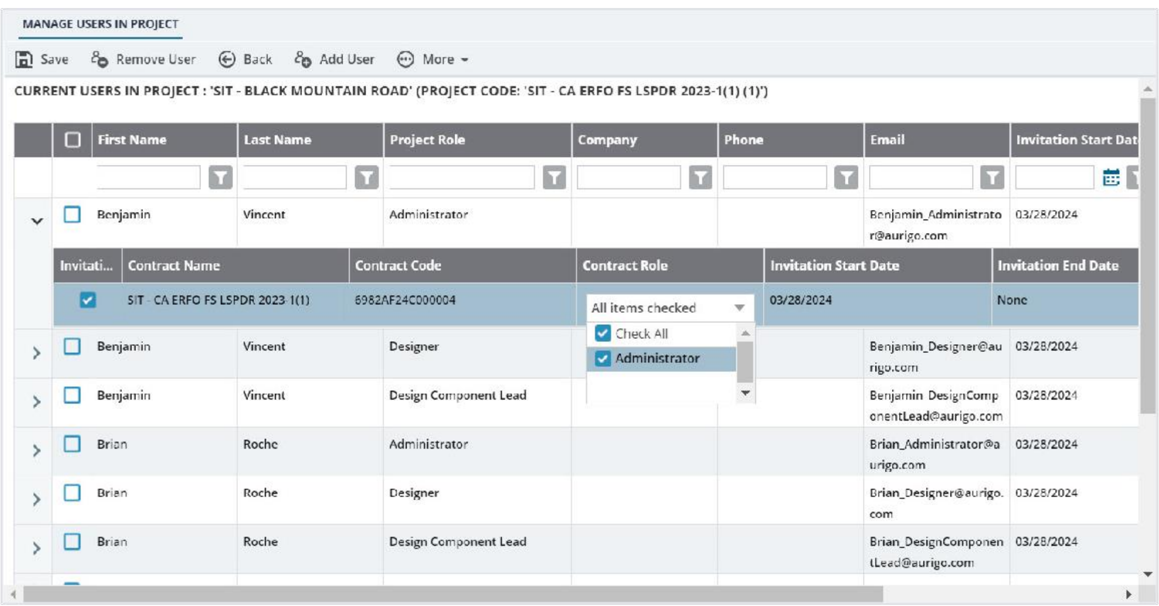


Figure 30: Drop-Down List of Contract Role

Available options are the roles that the user is assigned to in the project. The selected roles are also added for the user in the project.

8. To assign the invitation start date and end date to the invited users, perform the following steps:
    a. Double-click the cell in the **Invitation Start Date** column of the user.

Based on the **Invitation Start Date**, the user will be invited to the contract and will be able to edit contract details and perform workflow actions.

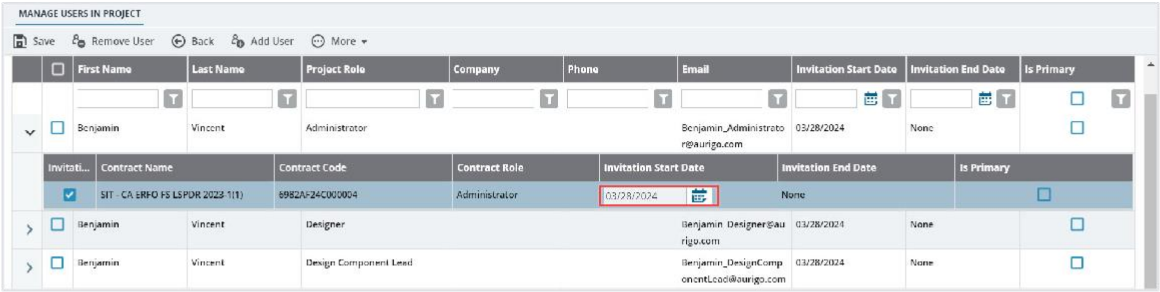


Figure 31: Invitation Start Date Column

The current date is selected as the **Invitation Start Date** by default.

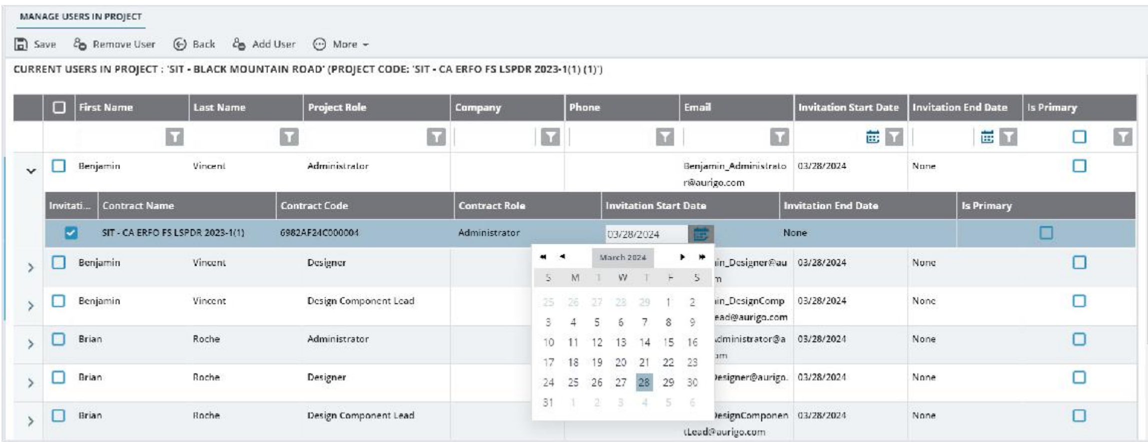


Figure 32: Invitation Start Date Column

b. Click to assign contract invitation start date to the user.

c. Double-click the cell in the **Invitation End Date** column of the user.

   Once the **Invitation End Date** crosses, the invited user will not be able to make changes to the contract.

   None is selected as the **Invitation End Date** by default.

d. Click to assign contract invitation end date to the user.

Note: If the **Is Primary** check box is checked, the invited user receives email and Inbox notifications on invitation start date, a week before invitation expiry date, and on the invitation end date after the invitation expiry date.

9. Optionally, clear the **Is Primary** check box to prevent the invited user from receiving task email notifications as defined in the associated workflow.

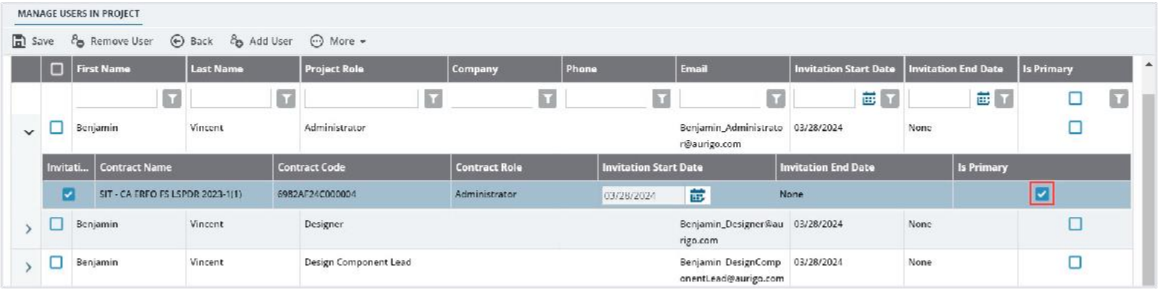


Figure 33: Is Primary Check Box

Alternatively, select the check box for the invited user to receive task email notifications as defined in the associated workflow.

10. Click **Save**.

3.2.3.2. Inviting a User to Contracts of Multiple Projects

Prerequisites

User is invited to the project.
For more information on inviting users to a project, refer to the **Inviting Users to a Project** section in the **M02 Project Management PG**.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

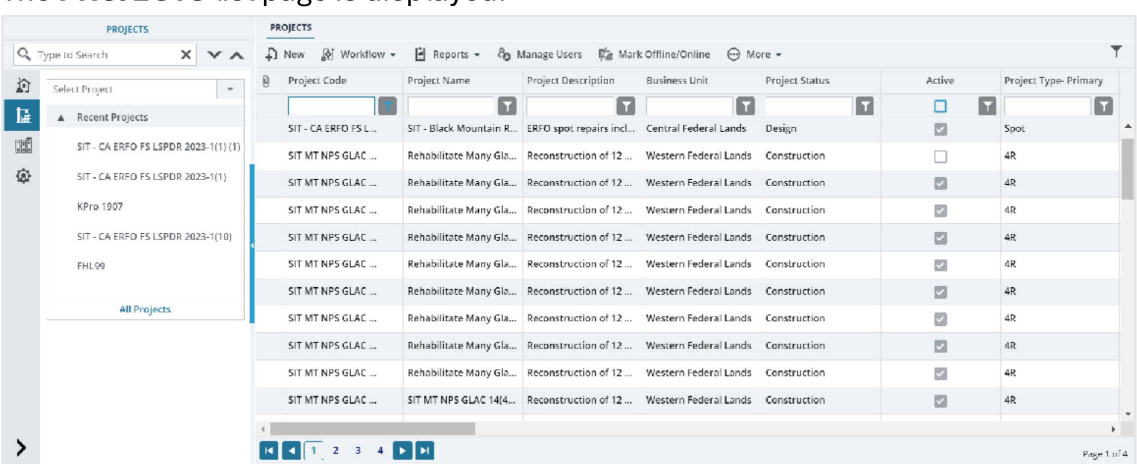


Figure 34: List Page of Projects

2. Click **Manage Users**.

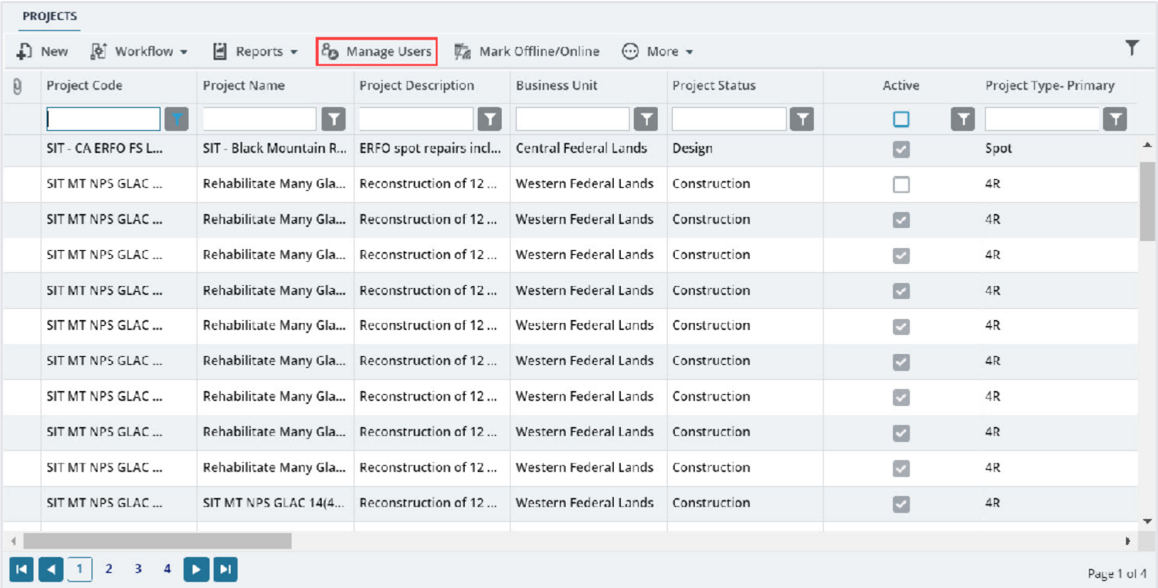


Figure 35: Manage Users

The **MANAGE USER MEMBERSHIP** page is displayed.

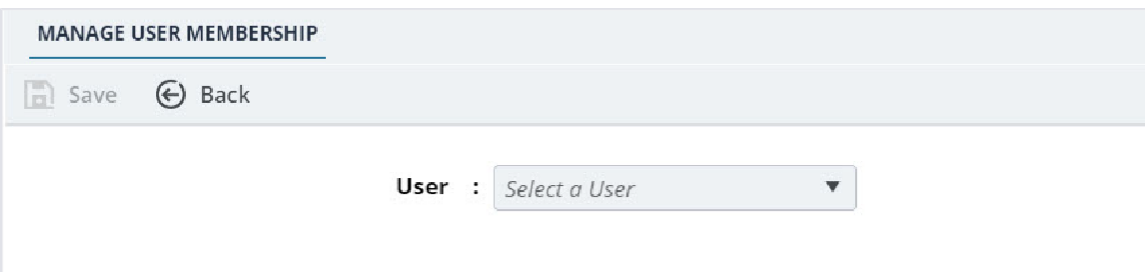


Figure 36: Manage User Membership Page

3. From the **User** drop-down list, select the appropriate user name. Available options are active user accounts defined at the enterprise level.
   For more information on user accounts, refer to the **User Accounts** section in the **A02 Administrator Guide**.

3.2.3.3. Removing a User from Contract

Prerequisites

User is invited to the project.
For more information on inviting users to a project, refer to the Inviting Users to a Project section in the **M02 Project Management PG**.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

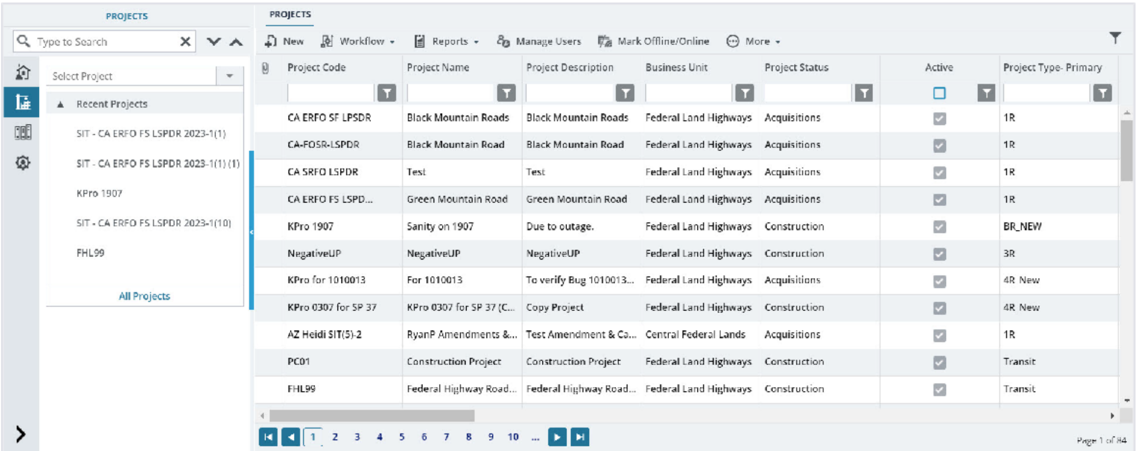


Figure 37: Projects

2. Click **Manage Users**.
   The **MANAGE USER MEMBERSHIP** page is displayed.

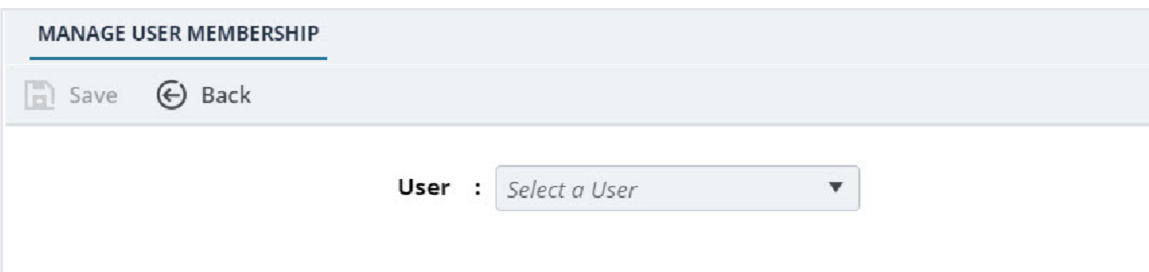


Figure 38: Manage User Membership Page

3. From the **User** drop-down list, select the appropriate user name.
   Available options are user accounts defined at the enterprise level.
   For more information on user accounts, refer to the **User Accounts** section in the **A02 Administrator Guide**.

4. In the **EXISTING PROJECTS** section, expand the appropriate project rows.
   The contract of the project is displayed.

The following image displays the **MANAGE USER MEMBERSHIP** page:

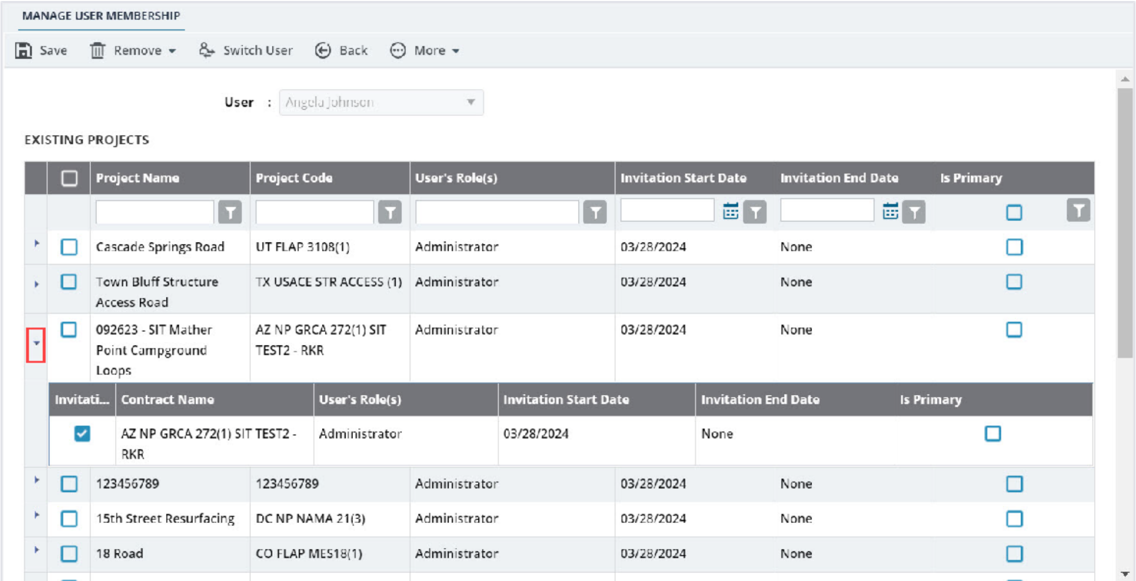


Figure 39: Manage User Membership

5. In the **Invitation** column of the contract, clear the check box.

   The user is removed from the contract.

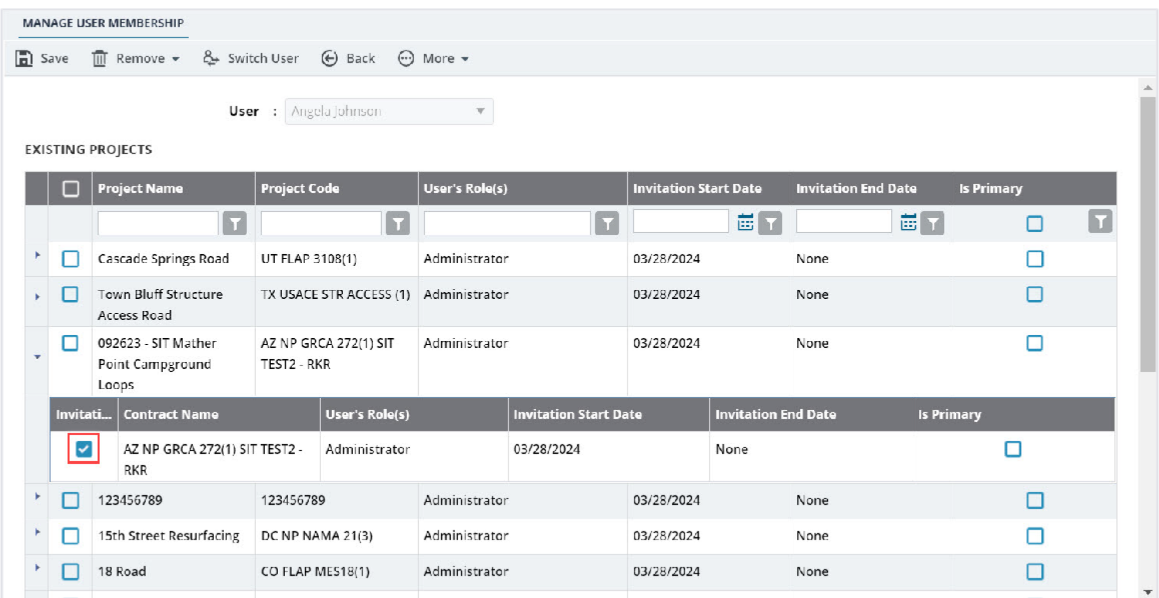


Figure 40: Invitation Check Box

6. Click **Save**.

3.2.4. Editing Contract Details

Prerequisites

- The contract is in the **Awarded** or **Active** workflow status.
- The role of the logged-in user must be one of the following:
    - Administrator
    - Construction Component Lead
    - Construction Admin Staff
    - Construction Operations Engineer
    - Project Engineer

    For more information on role-specific permissions, refer to Table 1 – Contract Details Permission Matrix.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

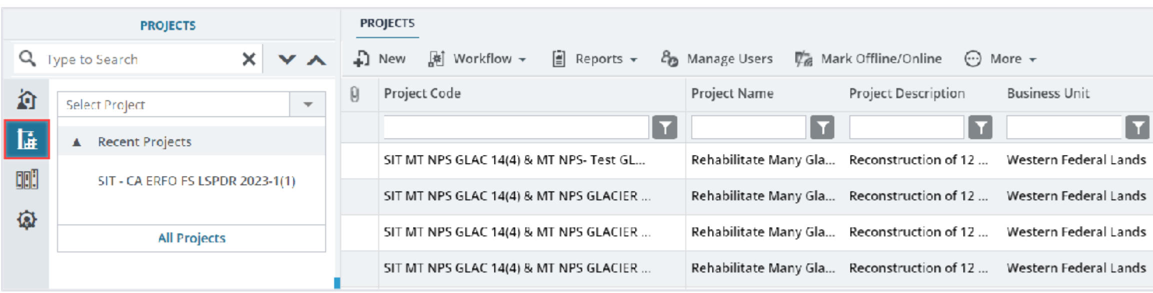


Figure 41: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

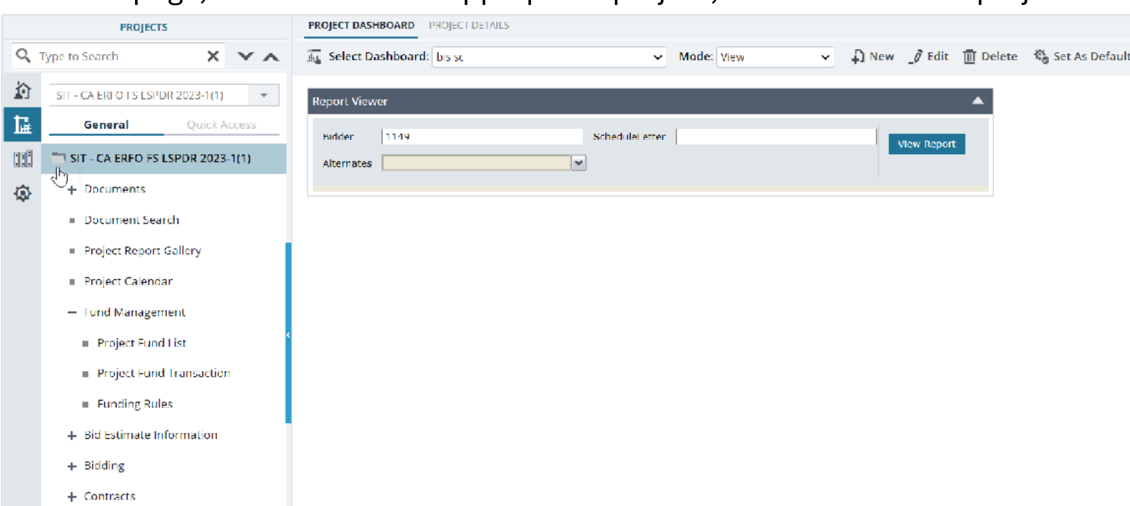


Figure 42: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

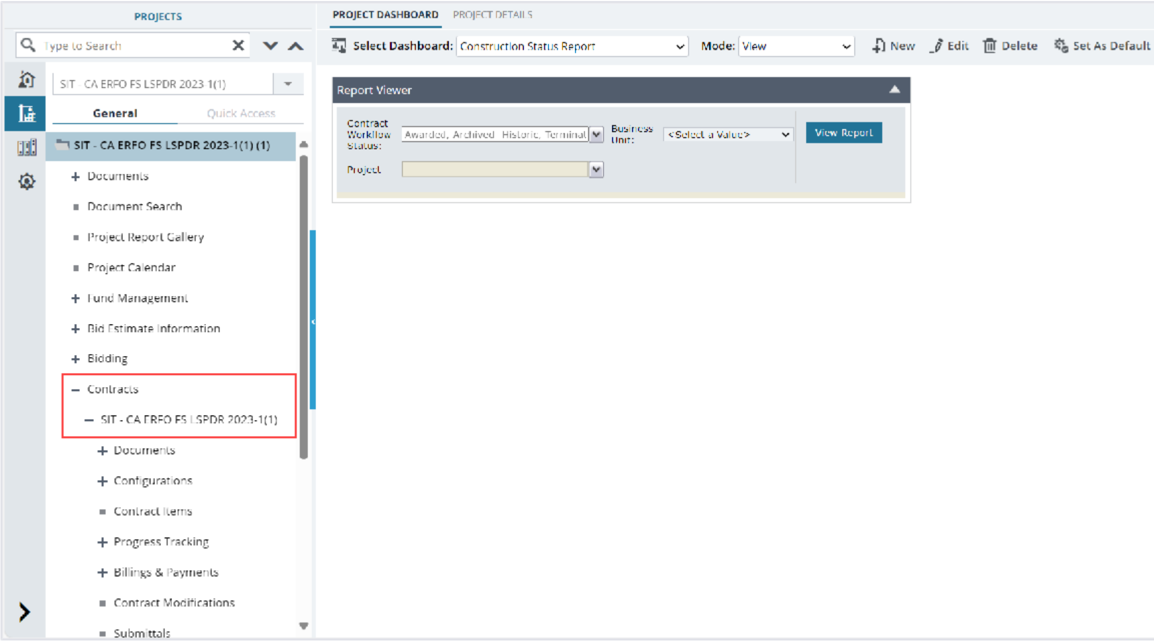


Figure 43: Navigation to Contracts

4. Click the **CONTRACT DETAILS** page, and then click **Edit**.

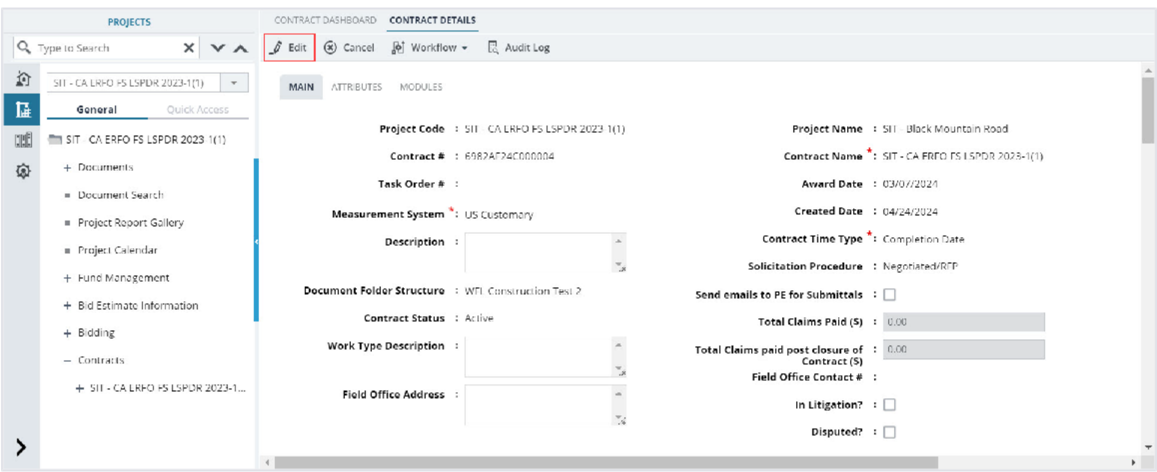


Figure 44: Contract Details

Note: You cannot edit a contract if it is moved to the **Completed** workflow status.

5. Make the necessary changes.
   For information on updating the appropriate information to the respective fields, refer to Section 3.2.1. Creating a Contract.
6. Click **Save & Exit** to save the record and return to the list page. Optionally, click **Save & Continue** to save the record and continue on the same page. Click **Cancel** to discard the added information and exit the page.

3.2.5. Managing Contractor Details

Based on the roles assigned to you, you can change the details of the prime contractor for a contract. The **Contractors** page displays the details of the prime contractor. All the information about the prime contractor is retrieved from the awarded bid in the **Bid Opening And Review** form.

If necessary, users assigned with the Construction Admin Staff and Construction Component Lead roles can change the prime contractor. For more information on changing a prime contractor, refer to Section 3.2.5.1. Changing a Prime Contractor.

3.2.5.1. Changing a Prime Contractor

Prerequisites

- The role of the logged-in user must be one of the following:
  - Administrator
  - Construction Component Lead
  - Construction Admin Staff
  - For more information on role-specific permissions, refer to Table 2 – Contractors Permission Matrix.
- Contractor details are available in the **Contractor Details** catalog of the library.
  For more information on contractors, refer to the **Contractor Details** section in the **A01 Library Management PG**.

Overview

You can change the prime contractor of a contract if the guarantor takes responsibility for the contract and the original contract is executed to completion. If the contract fails and a new contract is created, then the FHWA team creates a new project.

> **Note:**
>
> - You can change a prime contractor or contractor even after the contract items are locked.
> - If the Prime Contractor details are already entered and then the contract items are imported in the Contract Details page, then the Prime Contractor details are overridden.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

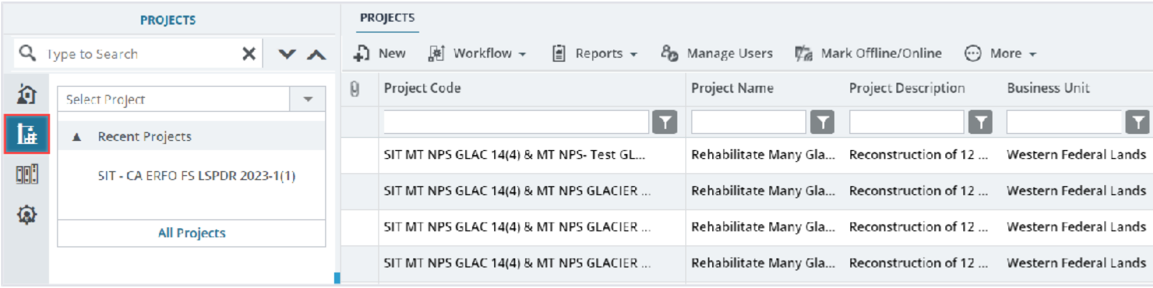


Figure 45: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

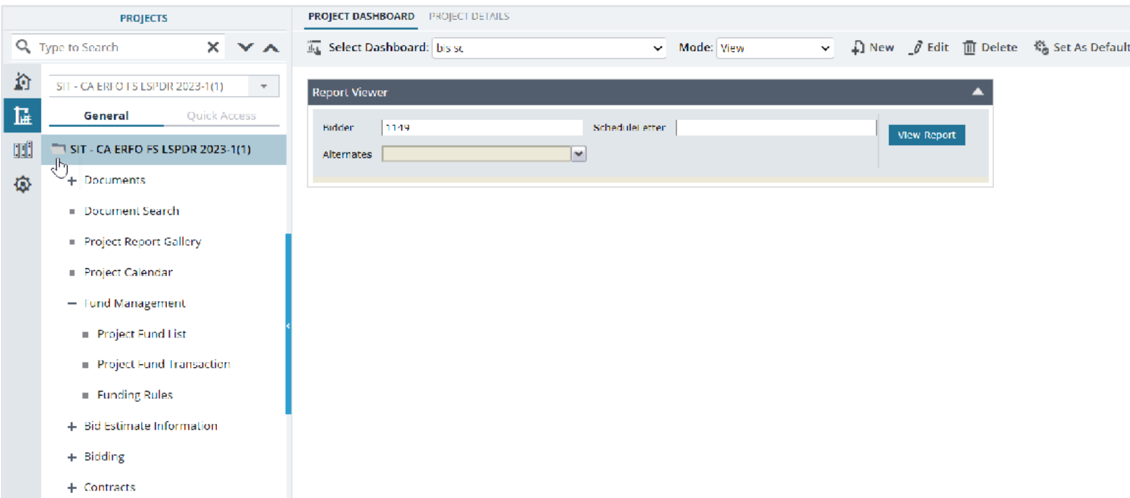


Figure 46: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

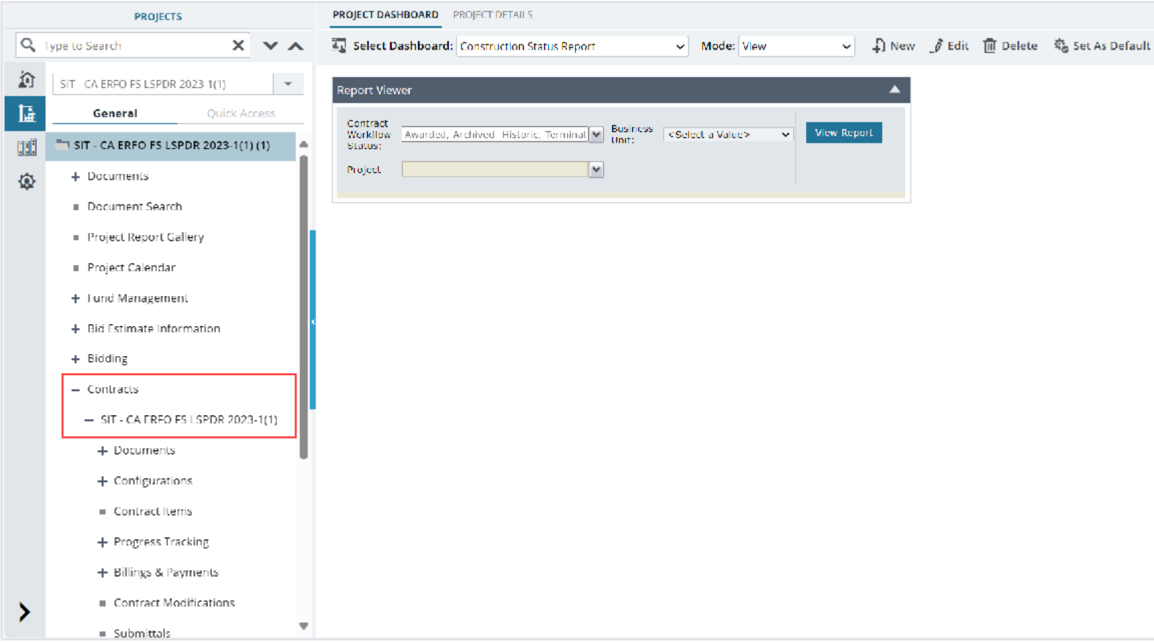


Figure 47: Navigation to Contracts

4. Expand Configurations, click **Contractors**.
   The **CONTRACTORS** page is displayed.

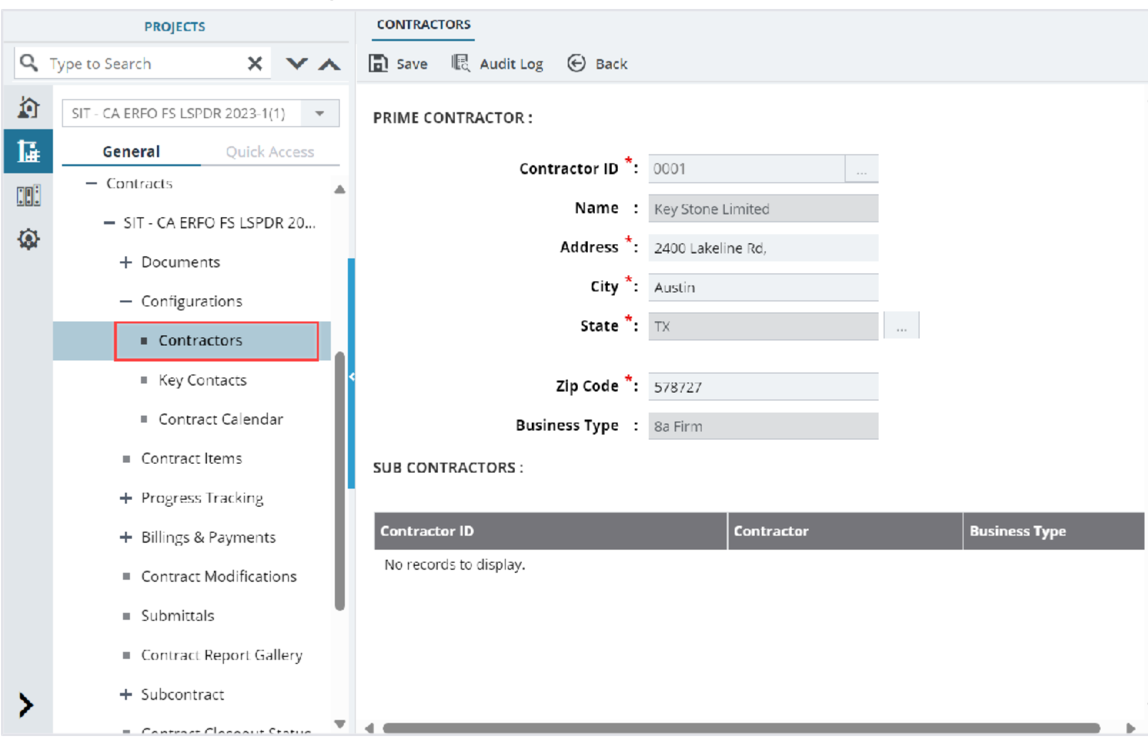
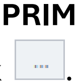


Figure 48: Contractors Page

5. To change the prime contractor, in the **PRIME CONTRACTOR** section, perform the following steps:
   a. In the **Contractor ID** field, click .

The **Add Prime Contractor** dialog box is displayed.

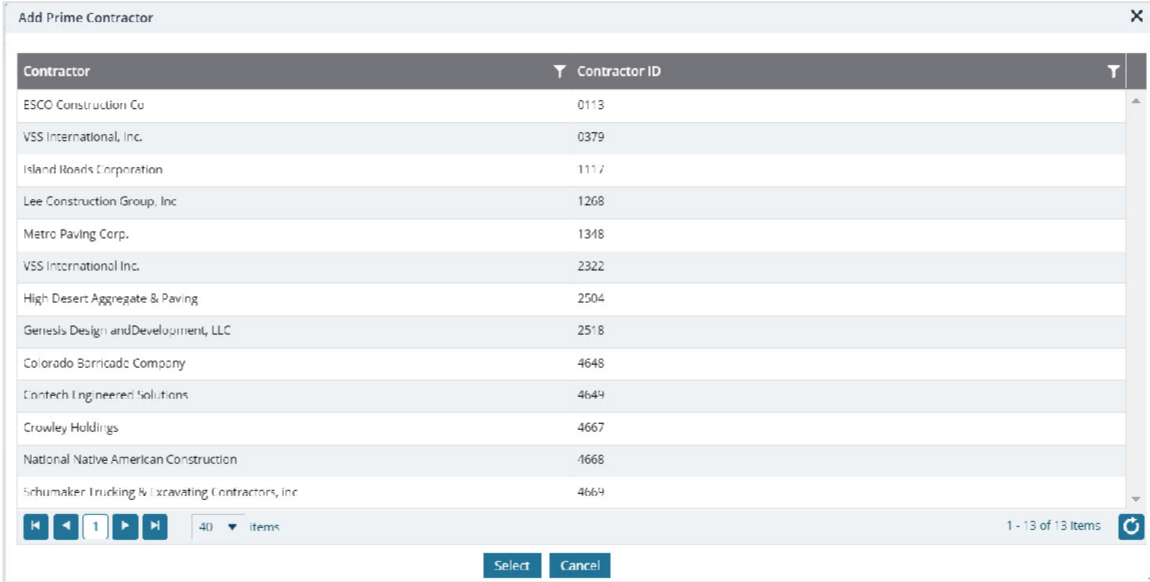


Figure 49: Add Prime Contractor Dialog Box

Available options are contractors defined in the **Contractor Details** catalog of the library. For more information on contractors, refer to the **Contractor Details** section in the **A01 Library Management PG**.

b. Click the appropriate contractor, and then click **Select**.
The details of the selected contractor is displayed in the **PRIME CONTRACTOR** section.

6. Click **Save**.
Once a **Request from Sublet Work** is approved, in the **SUB CONTRACTOR** section of the **CONTRACTORS** form; the following information is retrieved:

Field Name	Description
Contractor ID	The unique identifier of the sub contractor as defined in the **Contractor Details** catalog of the library. For more information on contractors, refer to the **Contractor Details** section in the **A01 Library Management PG**.
Contractor	The name of the sub contractor as defined in the **Contractor Details** catalog of the library. For more information on contractors, refer to the **Contractor Details** section in the **A01 Library Management PG**.
Business Type	The business type of the sub contractor as defined in the approved **Request for Sublet Work** record. For more information on Request For Sublet Work, refer to the **Request For Sublet Work** section in the **Construction Participant Guide – Part C**.

3.2.6. Managing Details of Key Contacts

Prerequisites

The role of the logged-in user must be one of the following:

- Administrator
- Construction Component Lead
- Construction Admin Staff
- Construction Operations Engineer
- Project Engineer
- Regional Engineer
- Project Engineer A&E

  For more information on role-specific permissions, refer to Table 3 – Key Contacts Permission Matrix.

Overview

The **KEY CONTACTS** form enables you to save the contact information of key participants in the contract, irrespective of whether they are Masterworks users.

You can add information for the key contacts as described in this section, or you can add information for the key contacts in bulk using the Excel template available in the **KEY CONTACTS** form. For information on adding key contact details in bulk, refer to Section 4.4.1 Uploading Form Details in Bulk.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

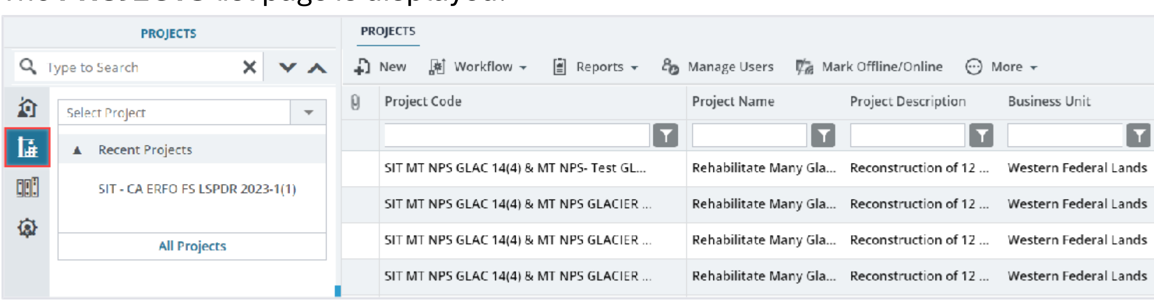


Figure 50: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

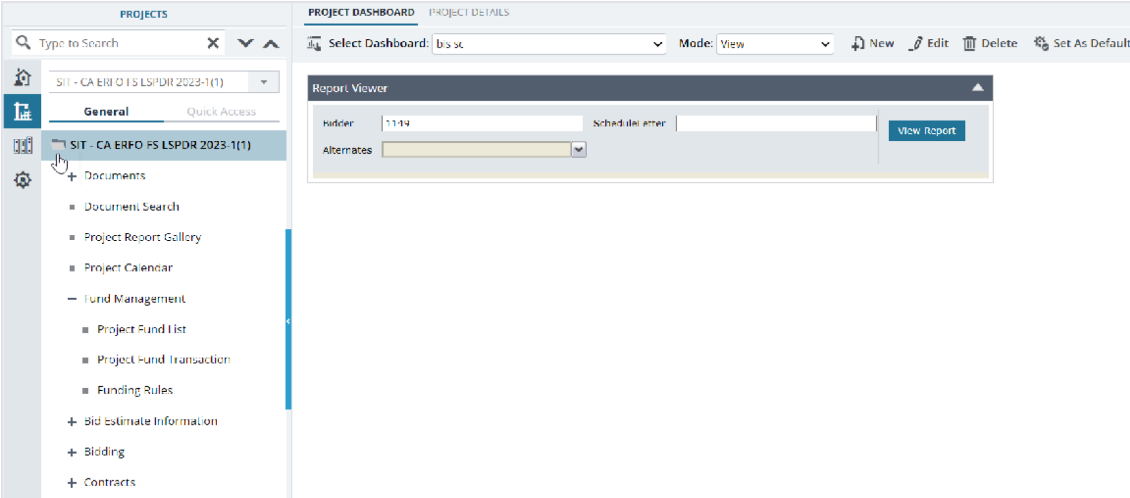


Figure 51: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

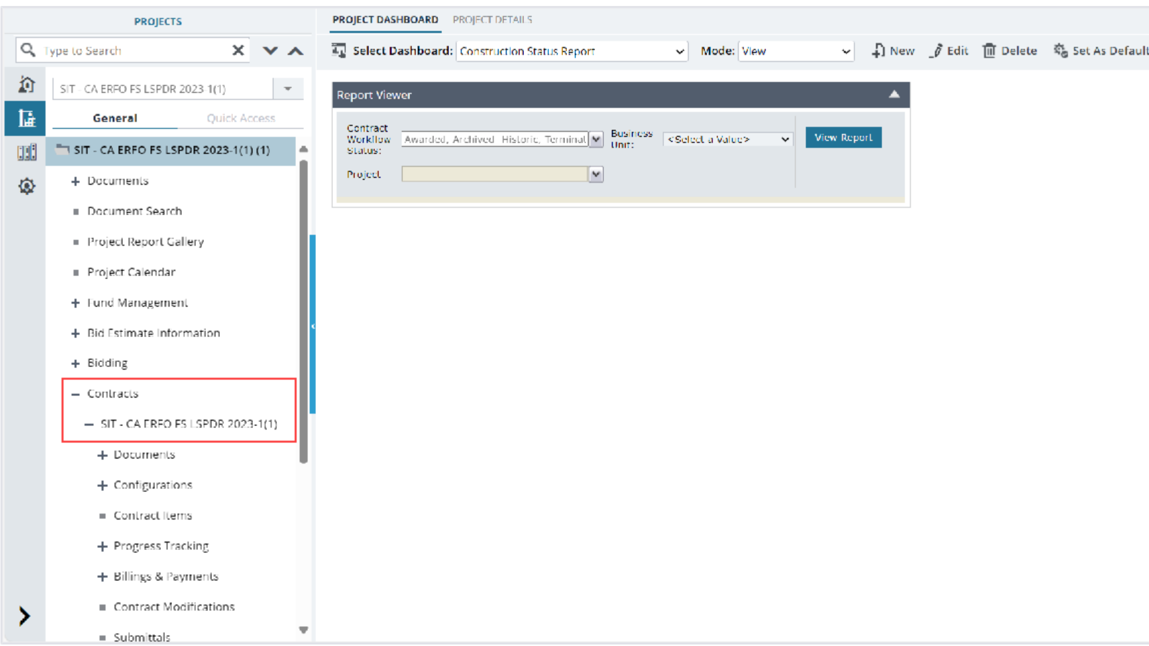


Figure 52: Navigation to Contracts

4. Expand **Configurations**, click **Key Contacts**.

   The **KEY CONTACTS** list page is displayed.

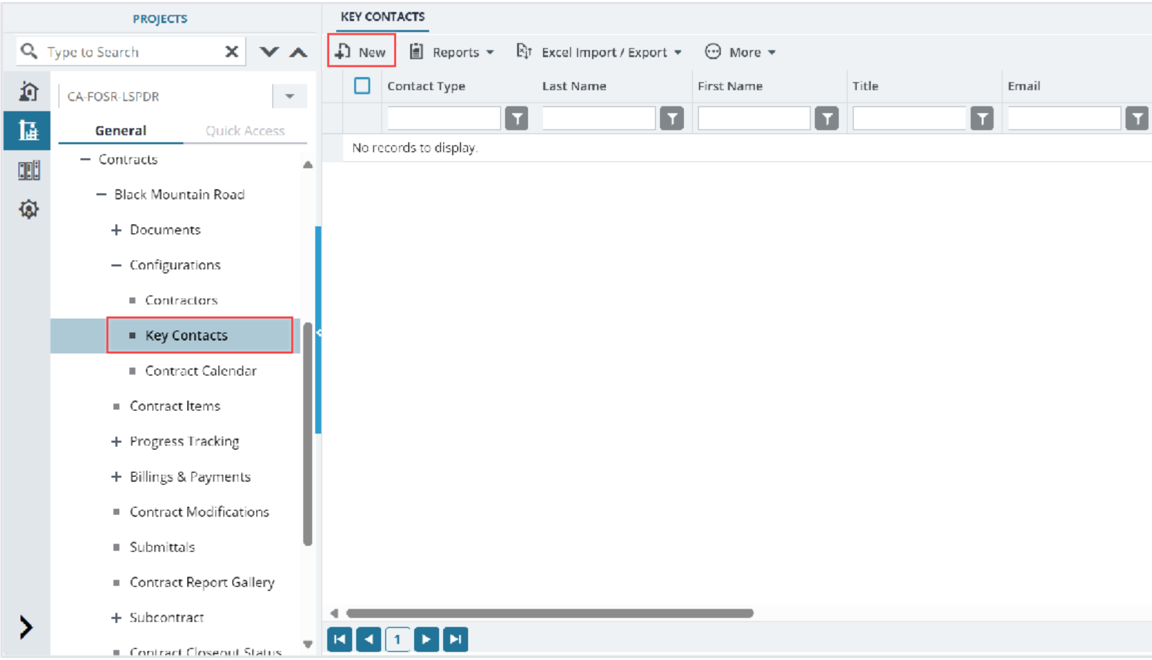


Figure 53: List Page of Key Contacts Form

5. Click **New**.

   The **KEY CONTACTS** page is displayed.

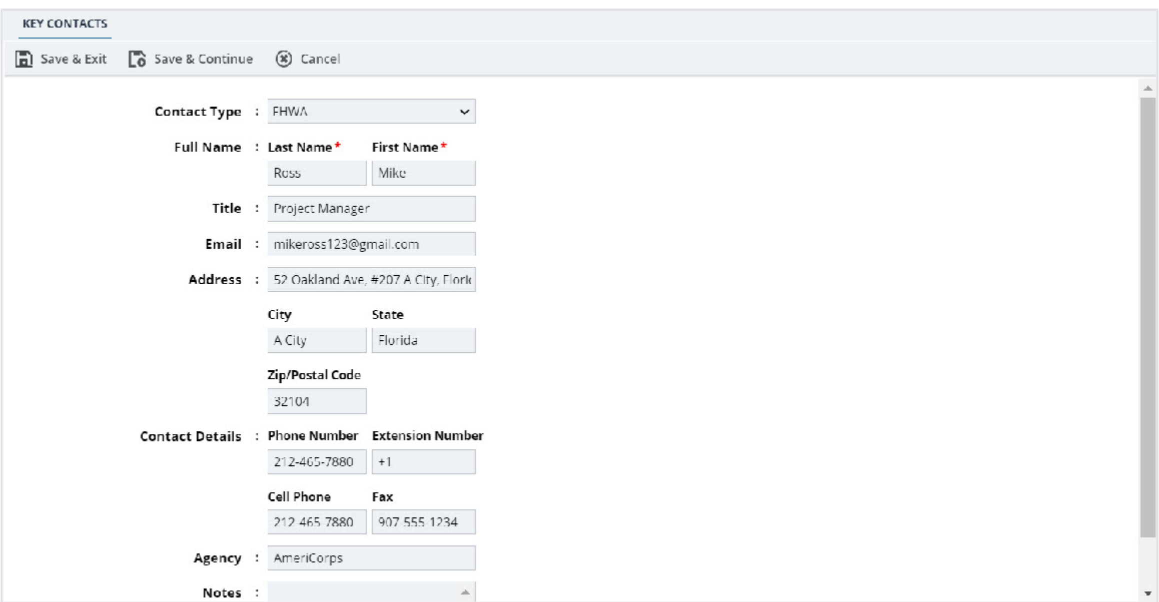


Figure 54: Key Contacts

6. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Contact Type	From the drop-down list, select the appropriate category for the key contact. Available options are Consultant, Contractor, FHWA, Other, etc.

Field Name	Description
	The drop-down list displays the contacts defined in the **Contact Type** catalog of the library.
Full Name	In the Last Name field, enter the last name of the contact person. In the First Name field, enter the first name of the contact person.
Title	Enter the title for the key contact.
Email	Enter the email address of the contact.
Address	Enter the address of the key contact.
City	Enter the name of the city where the key contact resides.
State	Enter the name of the state where the key contact resides.
Zip/Postal Code	Enter the zip code of the city in which the key contact resides.
Contact Details	a. In the **Phone Number** field, enter the phone number of the key contact. b. In the **Extension Number** field, enter the extension of the phone number of the key contact. c. In the **Cell Phone** field, enter the cell phone number of the key contact. d. In the **Fax Number** field, enter the fax number of the key contact.
Agency	Enter the agency name of the key contact.
Notes	Enter additional information for the key contact.

7. Click **Save & Exit** to save the record and return to the list page. Optionally, click **Save & Continue** to save the record and continue on the same page. Click **Cancel** to discard the added information and exit the page.

3.2.7. Contract Workflow Status

The following table provides the workflow status (current and subsequent status) of the **Contract** record.

For information on setting a workflow status to the next status, refer to Section 4.3. Workflow Status Transitions.

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
1	Awarded	• Administrator • Construction Admin Staff	Mark as Active	Active	–
2	Active		Mark as Complete	Completed	The contract is editable in this workflow status.

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
			Mark as On-hold	On-hold	–
			Mark as Canceled	Canceled	**Note:** This workflow action is not reversible.
			Terminate	Terminated	–
3	On-hold		Mark as Active	Active	–
4	Completed		Mark as Closed	Closed	To move the Contract to the **Closed** workflow status, ensure the following conditions are met: • Balance Change Modification is approved • Final Pay Estimate is paid • Contract Closeout form is updated .
			Mark as Active	Active	–
5	Closed		Mark as Archived	Archived-Historic	Once the contract is archived, you cannot make any changes to the contract.

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
			Mark as Active	Active	–
6	Archived-Historic		Final Archive	Archived-Final	Once the contract is archived, you cannot make any changes to the contract.

3.3 Contract Items

The **Contract Items** form provides intuitive features to define pay items, update pay item attributes, and display a summary of the status of the pay item. In the **CONTRACT DETAILS** page, upon performing the import action, all items from the awarded bid are imported to the **Contract Items** form.

The **Contract Items** form enables you to define the scope of work of the contract. You can add items to a contract to define the work for the contractor. While adding items, along with defining quantity, you can also define the probable quantity of the item.

To finalize the scope of a contract, you must lock the contract items. Locking the contract items is equivalent to finalizing the zero estimate. Once the contract items are locked, you cannot make any changes to the scope of the contract items (except changes to probable quantity). Any other scope changes to the contract items must be done via a contract modification.

In the published advertisement, if the **Solicitation Procedure** is defined as **Design-Build** or

Letter Contract, you can perform the following tasks:

- Add or edit items before the contract items are locked.
- Import contract items after the contract items are locked.
  For more information on importing contract items, refer to Section 3.3.2.3. Import Contract Items in Bulk.

Adding or modifying contract items is not allowed for other solicitation procedures.

Once the contract items are locked, you can modify the scope of the contract only through contract modification process.

For more information on making modifications to the contract, refer to the **Contract Modifications** section in the **Construction Participant Guide – Part C PG**.

You can perform the following tasks to manage contract items:

- 3.3.1. Edit containers
- 3.3.2. Add contract items
- 3.3.3. Edit details of contract items
- 3.3.4. Associate a Fund Rule
- 3.3.5. Lock contract items
- 3.3.6. Unlock contract items

Contract Items Permission Matrix

This section provides information on the roles and corresponding permissions for the Contract Items form.

Table 4: Table 4 – Contract Items

Role	Create	Edit	View	Lock Items	Delete	Audit Log
Administrator	Yes	Yes	Yes	Yes	Yes	Yes
Construction Component Lead	Yes	Yes	Yes	Yes	Yes	Yes
Construction Admin Staff	Yes	Yes	Yes	Yes	Yes	Yes
Construction Engineer	–	–	Yes	–	–	–
Highway Construction Manager/QA QC	–	–	Yes	–	–	–
Construction Contractor CDRs only	–	–	Yes	–	–	–
Construction Contractor Basic	–	–	Yes	–	–	–
Construction Contractor QC Manager	–	–	Yes	–	–	–
Construction Contractor Manager	–	–	Yes	–	–	–
Construction Operations Engineer	–	–	Yes	Yes	–	–
Inspector	–	–	Yes	–	–	–

Role	Create	Edit	View	Lock Items	Delete	Audit Log
Assistant Project Engineer	–	–	Yes	–	–	–
Project Engineer	–	–	Yes	Yes	–	–
Regional Engineer	–	–	Yes	Yes	–	–
Construction Inspection A&E Manager	–	–	Yes	–	–	–
Inspector A&E	–	–	Yes	–	–	–
Assistant Project Engineer A&E	–	–	Yes	–	–	–
Project Engineer A&E	–	–	Yes	Yes	–	–

3.3.1. Editing a Container

Prerequisites

The role of the logged-in user must be one of the following:

- Administrator
- Construction Component Lead
- Construction Admin Staff
  For more information on role-specific permissions, refer to Contract Items Permission Matrix.

Overview

The container details are retrieved from the awarded bid in the **Bid Opening And Review** form. You cannot create new containers or delete any existing ones. You can edit only specific fields in a container.

Note: You can edit a container even after the contract items are locked.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

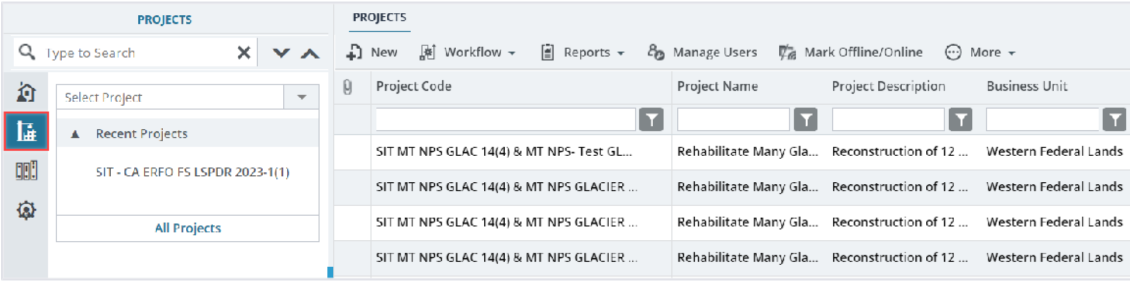


Figure 55: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

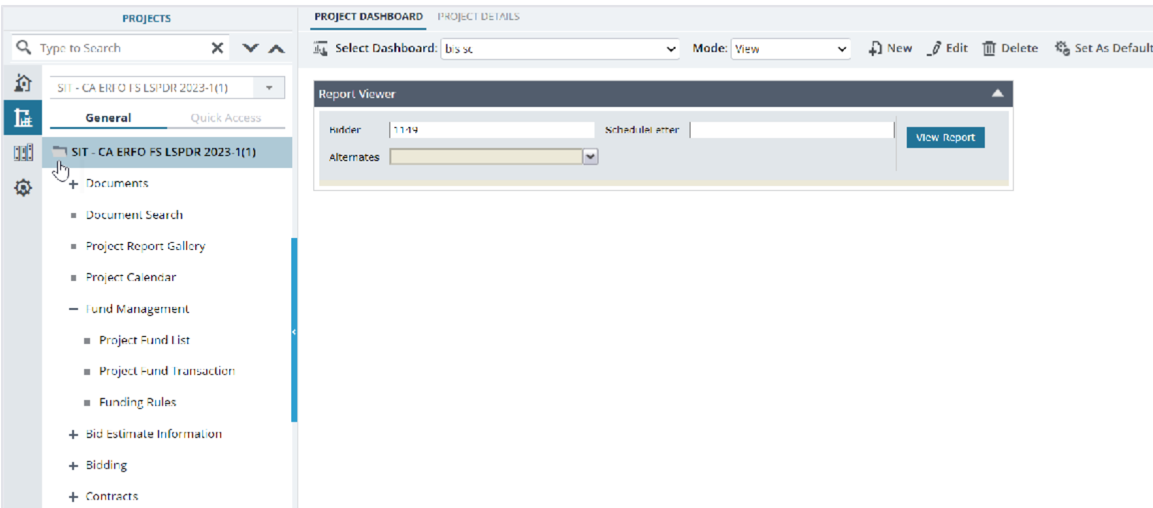


Figure 56: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then the contract.

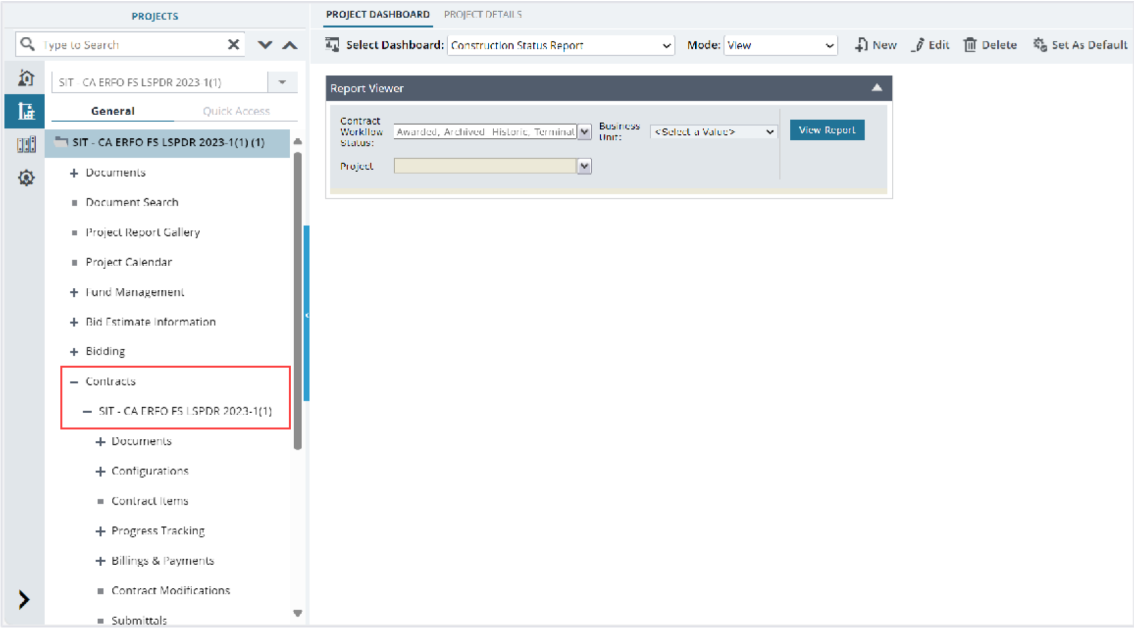


Figure 57: Navigation to Contracts

4. Click **Contract Items**.

   The **ITEM LIST** page is displayed.

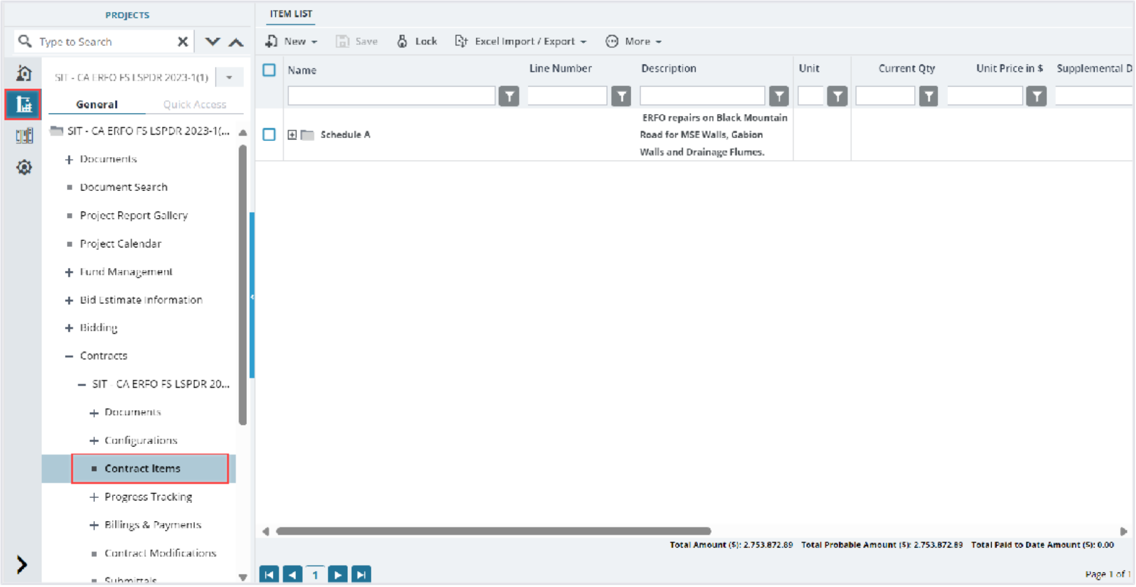


Figure 58: Item List Page

5. In the list page, select the appropriate container, and then click **Edit**.

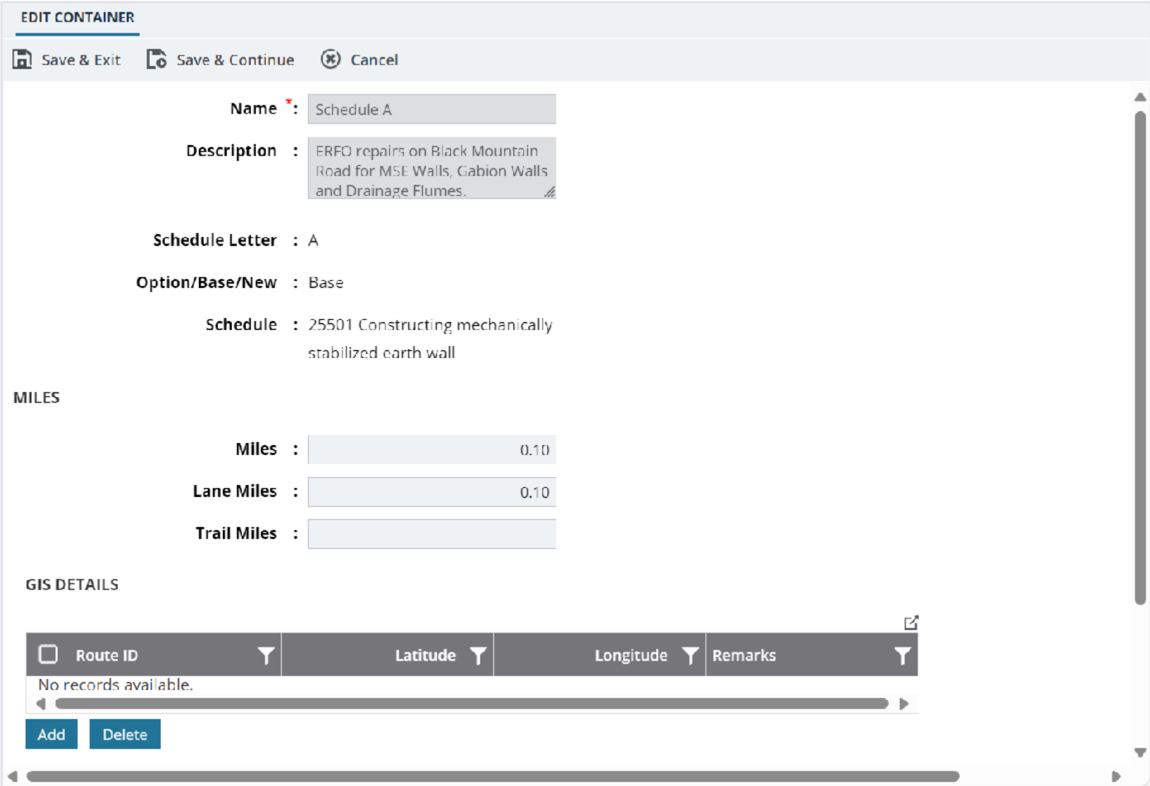


Figure 59: Edit Container Page

The **EDIT CONTAINER** page displays the following information:

Note: Most of the container details are retrieved from the final engineer's estimate. For more information on the engineer's estimate, refer to **M04 Design Estimate PG**.

Section Name	Column Name	Description
–	Name	The name of the container as defined in the final engineer's estimate.
	Description	The description of the container as defined in the final engineer's estimate.
	Schedule Letter	The schedule letter from the awarded bid in the **Bid Opening And Review** form.
	Option/Base/ New	The value of the schedule letter from the awarded bid in the **Bid Opening And Review** form.
	Schedule	The schedule construction type as defined in the final engineer's estimate.
MILES	Miles	The miles as defined in the final engineer's estimate. Optionally, you can enter a positive number with up to two decimal places.
	Lane Miles	The lane miles as defined in the final engineer's estimate.

Section Name	Column Name	Description
		Optionally, you can enter a positive number with up to two decimal places.
	Trail Miles	The trail miles as defined in the final engineer's estimate. Optionally, you can enter a positive number with up to two decimal places.
GIS DETAILS	Route ID	The identification code of the route as defined in the final engineer's estimate.
	Latitude	The latitude coordinate of the route as defined in the final engineer's estimate.
	Longitude	The longitude coordinate of the route as defined in the final engineer's estimate.
	Remarks	The additional comments for the route are defined in the final engineer's estimate.
BRIDGE DATA	Bridge Name	The name of the bridge is defined in the final engineer's estimate.
	Bridge Number	The identification code of the bridge as defined in the final engineer's estimate.
	Bridge Length	The length of the bridge as defined in the final engineer's estimate.
	Bridge Area	The area of the bridge as defined in the final engineer's estimate.
	Bridge Construction Type	The bridge construction type as defined in the final engineer's estimate.

6. Optionally, to manage the information in the **GIS DETAILS** section, perform the following steps:

    - To add a GIS detail, click **Add**, click the cells of the respective columns, and then add the appropriate information as described in the following table:

Column Name	Description
Route ID	Enter the identification code of the route.
Latitude	Enter the latitude coordinate of the route. **Note:** You must enter the value within the range of -90 to 90.
Longitude	Enter the longitude coordinate of the route. **Note:** You must enter the value within the range of -180 to 180
Remarks	Enter any additional comments for the route, if applicable.

- To edit a GIS detail, click the appropriate columns of the respective row and make the necessary changes.
- To delete a GIS detail, select the check box adjacent to the appropriate row, click **Delete**, and then click **OK**.

7. Optionally, to manage the information in the **BRIDGE DATA** section, perform the following steps:
    - To add bridge information, click **Add**, click the cells of the respective columns, and then add the appropriate information as described in the following table:

Column Name	Description
Bridge Name	Enter the name of the bridge.
Bridge Number	Enter the identification code of the bridge.
Bridge Length	Enter the length of the bridge.
Bridge Area	Enter the area of the bridge.
Bridge Construction Type	From the drop-down list, select the appropriate bridge construction type. Available options are active bridge construction types defined in the **Bridge Construction Type** catalog of the library.

    - To edit bridge information, click the appropriate columns of the respective row and make the necessary changes.
    - To delete bridge information, select the check box adjacent to the appropriate row, click **Delete**, and then click **OK**.

8. Click **Save & Exit** to save the record and return to the list page. Optionally, click **Save & Continue** to save the record and continue on the same page. Click **Cancel** to discard the added information and exit the page.

3.3.2. Adding Items to a Contract

Until the contract items are locked, you can manually add items to a contract.

Note: You can manually add items only if the **Solicitation Procedure** in the published advertisement is defined as **Design-Build** or **Letter Contract**.

You can add work items to a contract in the following ways:

- 3.3.2.1. Manually entering the appropriate information for standard items or non-standard items
- 3.3.2.2. Adding items from the predefined set of standard items from the Library
- 3.3.2.3. Add items in bulk using Excel Export/Import

3.3.2.1. Adding a Contract Item Manually

Prerequisites

- In the published advertisement, the **Solicitation Procedure** is defined as **Design-Build** or **Letter Contract**.
- Contract items are not locked.
- The role of the logged-in user must be one of the following:
    - Administrator
    - Construction Component Lead
    - Construction Admin Staff

    For more information on role-specific permissions, refer to Contract Items Permission Matrix.

Overview

In the **ITEM LIST** page, the **New** feature enables you to manually add contract items. You can manually add the details of a contract item or add a contract item available with predefined information from the **Standard Items Table** catalog of the library.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

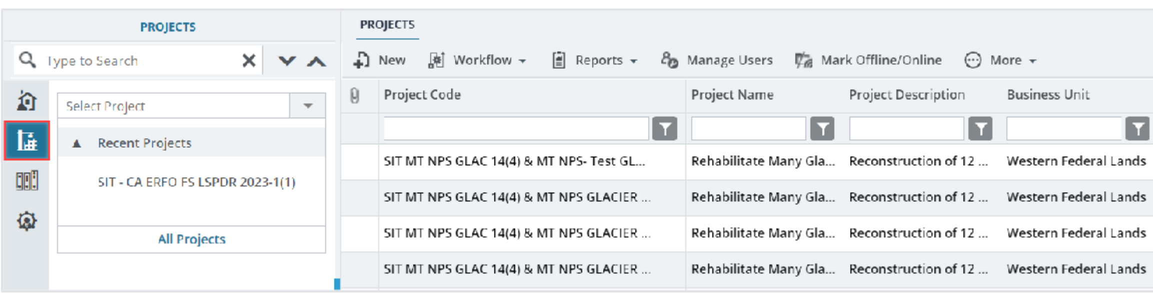


Figure 60: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

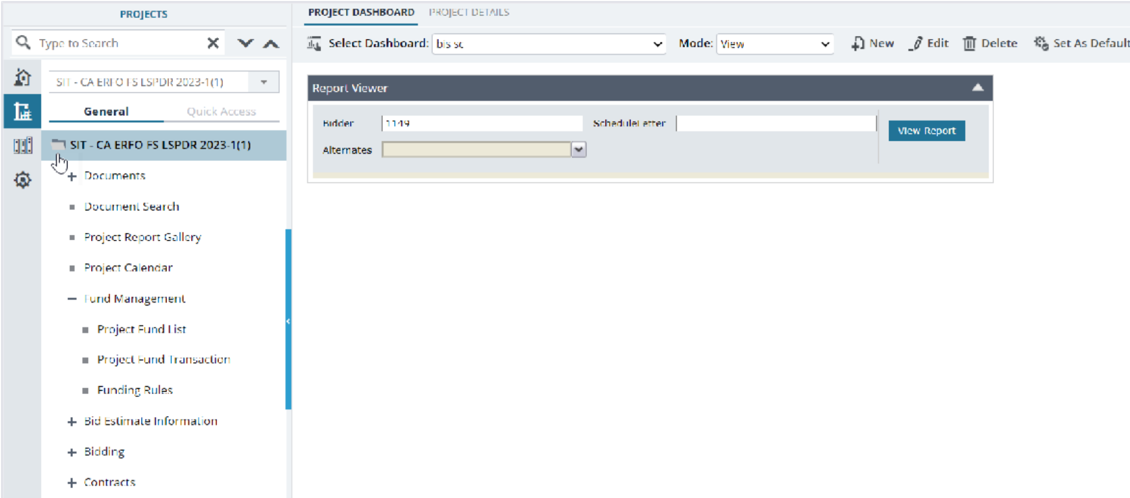


Figure 61: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

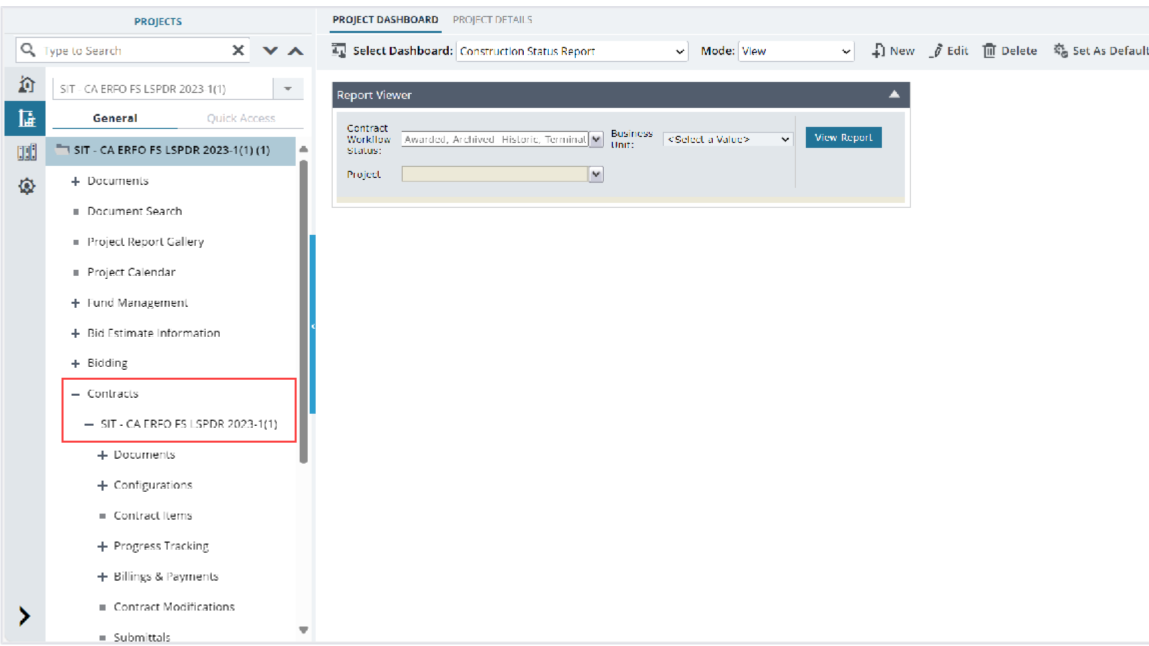


Figure 62: Navigation to Contracts

4. Click **Contract Items**.

The **ITEM LIST** page is displayed.

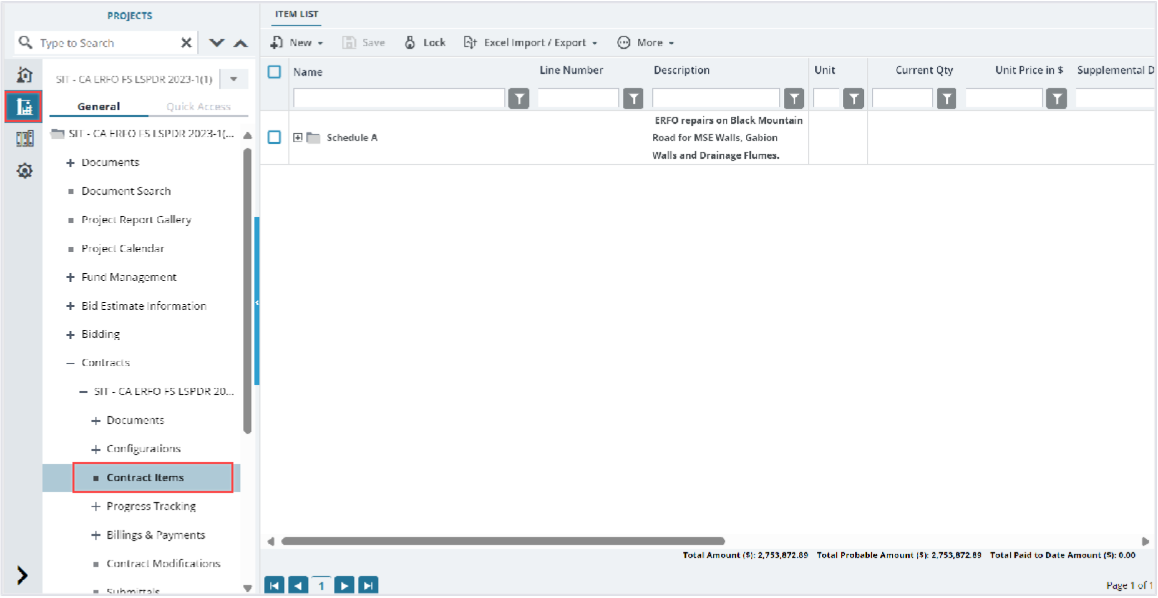


Figure 63: Item List Page

5. To add an item within a selected container, select the appropriate container, click **New**, and then click **New**.

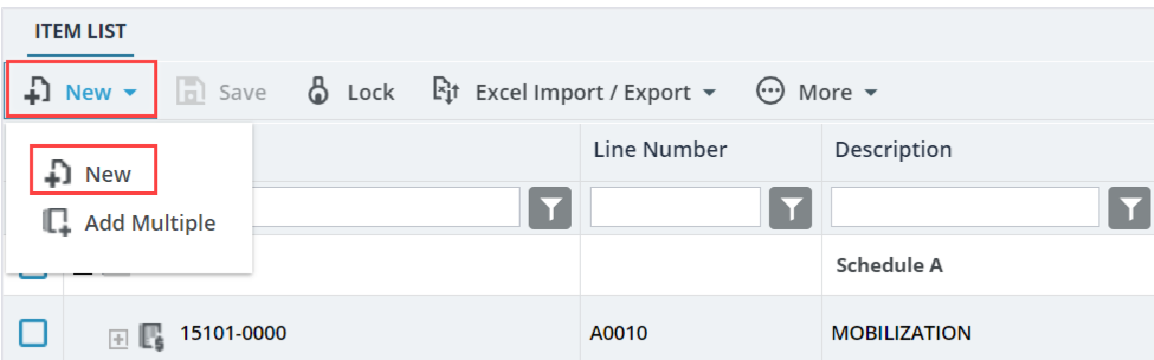


Figure 64: Adding New Item

The **NEW ITEM** page is displayed.

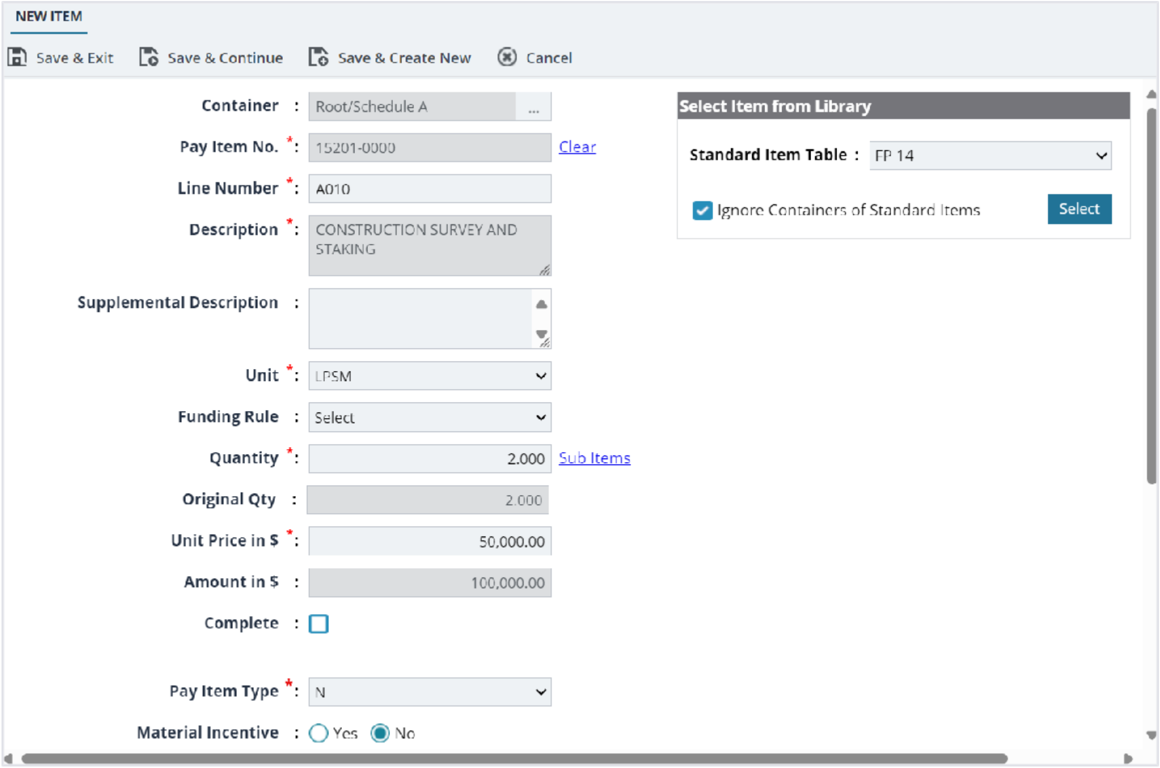


Figure 65: New Item Page

Note: By default, the **Material Incentive** field is selected as **No**. It is a non-editable field.

6. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Container	If you have selected a container, the name of the selected container is displayed. To select a different container to categorize the item, perform the following steps:

<table>
<tr><th>Field Name</th><th>Description</th></tr>
<tr><td></td><td>

a. Click .
The **SELECT CONTAINER** page is displayed.

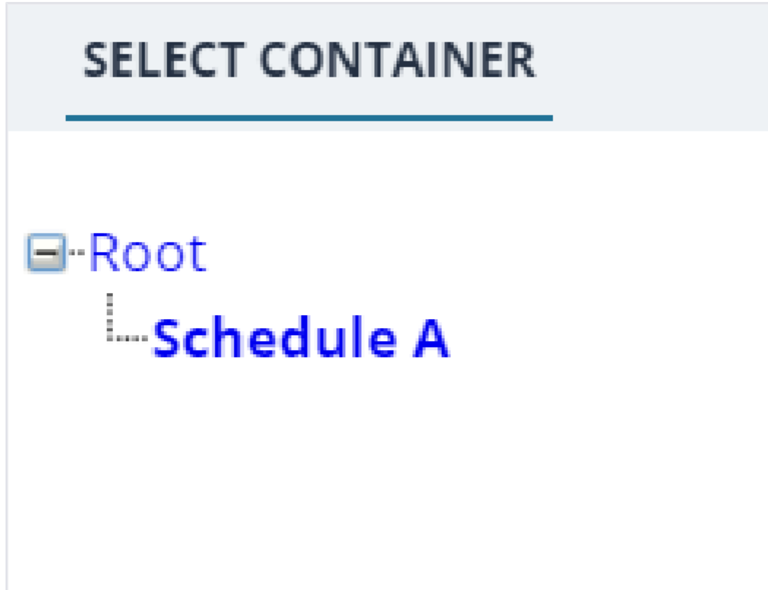


Figure 66: Select Container Page

b. Available options are containers defined in the final engineer's estimate.
c. Click the appropriate container.

</td></tr>
<tr><td>Pay Item No.</td><td>

Enter the item number.
Alternatively, to select an item from the library, perform the following steps:

a. In the **Select Item from Library** section, from the **Standard Item Table** drop-down list, select the standard table in which the item is defined.

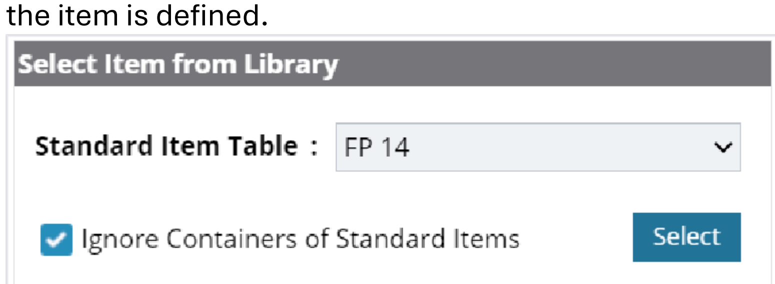


Figure 67: Select Item from Library Section

Available options are FP 03, FP 14, and FP 24.
The drop-down list displays the standard item tables defined in the **Standard Items Table** catalog of the library.
For information on **Standard Items Table**, refer to the **Standard Items Table** section in the **A01 Library Management PG**.

b. Click **Select** to select an item from the selected standard items table.

</td></tr>
</table>

Field Name	Description

The **Please select an item** dialog box is displayed.

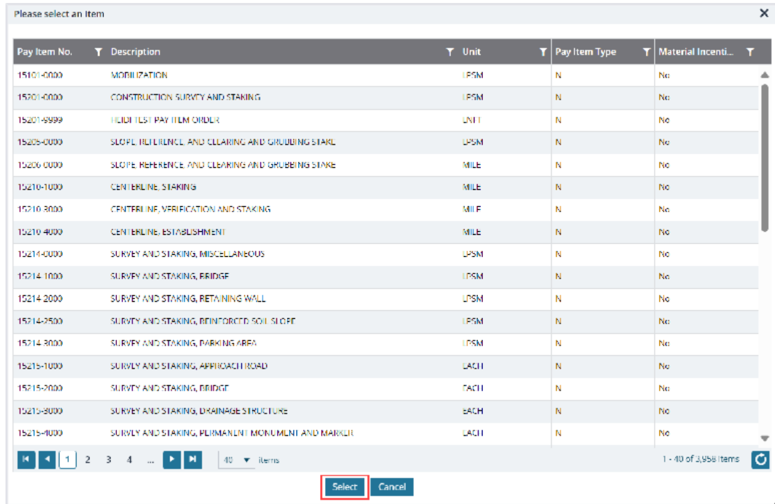


Figure 68: Please select an item dialog box

Items are displayed in the ascending order of the pay item number and based on the **Measurement System** defined in the project details page.

Available options are items defined in the selected standard items table that is defined in the **Standard Items Table** catalog of the library.
For information on Standard Items Table, refer to the **Standard Items Table** section in the **A01 Library Management PG**.

c. Click an item, and then click **Select**.
The **Pay Item No.**, **Description**, **Unit**, and **Unit Price in $** are displayed.
If an item added from library has the **Material Incentive** field selected as **Yes**, an item is automatically added with the following information:

Field Name	Description
Container Pay Item No.	The value as specified for the parent item.
Description	The same description as the parent item appended with (Quality).
Unit	The value as specified for the parent item.

<table>
<tr><th>Field Name</th><th>Description</th></tr>
<tr><td></td><td>
<table>
<tr><th>Field Name</th><th>Description</th></tr>
<tr><td>Funding Rule</td><td>If a default funding rule is assigned to the project, then the same funding rule is displayed.
Otherwise, the field is blank.</td></tr>
<tr><td>Quantity</td><td>If the Unit field is LPSM or CTSM, then 1 is displayed.
Otherwise, the field is blank. It is always LPSM for the Material Incentive.</td></tr>
<tr><td>Line Number</td><td>The fields are blank.</td></tr>
<tr><td>Supplemental Description</td><td>The fields are blank.</td></tr>
<tr><td>Unit Price in $</td><td>The fields are blank.</td></tr>
<tr><td>Complete</td><td>The fields are blank.</td></tr>
<tr><td>Probable Quantity</td><td>The fields are blank.</td></tr>
<tr><td>Notes</td><td>The fields are blank.</td></tr>
<tr><td>Pay Item Type</td><td>The pay item type is any one of these: N, NM, NR, NS, QM.</td></tr>
<tr><td>Material Incentive</td><td>It is selected as No.</td></tr>
</table>
To update the necessary fields for the item, refer to the appropriate rows in this table, as applicable.
</td></tr>
<tr><td>Line Number</td><td>Enter a unique alphanumeric number to add the item.</td></tr>
<tr><td>Description</td><td>Enter the description of the item.
Item description is displayed automatically if you have selected the item from the library.</td></tr>
<tr><td>Supplemental Description</td><td>Enter additional description specific to the item.</td></tr>
<tr><td>Unit</td><td>From the drop-down list, select the unit of measure for the item. Available options are LPSM, MILE, EACH, SQYD, etc.
The drop-down list displays the measurement units defined in the Measurement Systems catalog of the library.
For more information on measurement systems, refer to the Measurement Systems section in the A01 Library Management PG.
Item unit is displayed automatically if you have selected the item from the library.</td></tr>
<tr><td>Funding Rule</td><td>From the drop-down list, select the funding rule for the item. Available options are active and approved funding rules defined for the project.</td></tr>
</table>

Field Name	Description
	For more information on funding rules, refer to the **Funding Rules** section in the **M03 Fund Management PG**. For more information on associating a funding rule to an item from the Contract Items list page, refer to Section 3.3.4 Associating a Fund Rule to a Contract Item.
Quantity	Enter the appropriate quantity of the item. Additionally, you can add sub items to an item, and the quantity of the item is calculated as the sum of all the sub items added. **Note:** Prior to adding sub items, ensure the **Unit** and **Pay Item Type** fields are updated with necessary information. For information on sub items, refer to Section 3.3.2.4. Adding Sub Items. Upon entering the value in the **Quantity** field, the **Original Qty** field displays the same value as defined in the **Quantity** field until the contract items are locked. **Note:** After the contract items are locked, the value in the **Original Qty** field does not change.
Unit Price in $	Enter the cost per unit. Upon entering the values in the **Quantity** and **Unit Price in $** fields, the **Amount in $** field displays the total amount of the item. It is calculated as: Quantity x Unit Price in $.
Complete	Select the check box to mark the item as complete. **Note:** The items are automatically marked as complete upon approving the balance change modification. However, this field remains editable at this stage.
Pay Item Type	From the drop-down list, select the appropriate type for the item. Available options are N, NM, NR, NS, QM, etc. The drop-down list displays the active pay item types defined in the **Pay Item Type** catalog of the library. The item type is displayed automatically if you have selected the item from the library.
Notes	Enter any additional information relevant to the item.
Probable Qty	Enter the appropriate probable quantity for the item. Upon entering the values in the **Probable Qty** and **Unit Price in $** fields, the **Probable Amount** field displays the total amount of the item. It is calculated as: Probable Qty x Unit Price in $. **Note:** Probable quantity defines the estimated quantity for a contract item to keep a track on the suggested number of a contract item and its actual usage during the construction.

Field Name	Description
	Only users with permission defined in the Additional Permissions Setup catalog of the library can view and update this field. For more information on additional permissions, refer to the **Additional Permissions Setup** section in the **A01 Library Management PG**.

Note:

- The **Paid To Date Qty** field displays the item quantity that are part of the **Pay Estimates** in the **Approved for Payment** and **Paid** workflow status.
- At the bottom of **ITEM LIST** page, the following fields are displayed:
  - **Total Amount ($)**: Sum of all the Amount in $
  - **Total Probable Amount ($)**: Sum of all the Probable Amount in $
  - **Total Paid to Date Amount ($)**: Sum of all the Paid to Date Qty x Unit Price

7. Optionally, in the **ATTACHMENTS** section, upload or link related files. For information on attachments, refer to Section 4.1. Attachments.
8. To save the item, perform any of the following steps, as applicable:

- Click **Save & Exit** to return to the item list page.
- Click **Save & Continue** to save the item and continue on the same page.
- Click **Save & Create New** to save the current item and continue creating new items.

Click **Cancel** to discard the added information and exit the page.

3.3.2.2. Adding Multiple Contract Items

Prerequisites

- In the published advertisement, the **Solicitation Procedure** is defined as **Design-Build** or **Letter Contract**.
- Contract items are not locked.
- The role of the logged-in user must be one of the following:
  - Administrator
  - Construction Component Lead
  - Construction Admin Staff
  - For more information on role-specific permissions, refer to Contract Items Permission Matrix.

Overview

In the **ITEM LIST** page, the **Add Multiple** feature enables you to add items only from the library. You can add multiple contract items at once to save time and effort.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

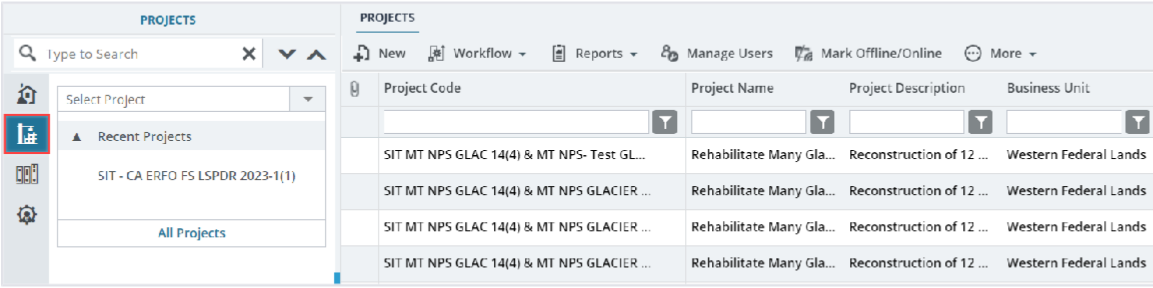


Figure 69: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

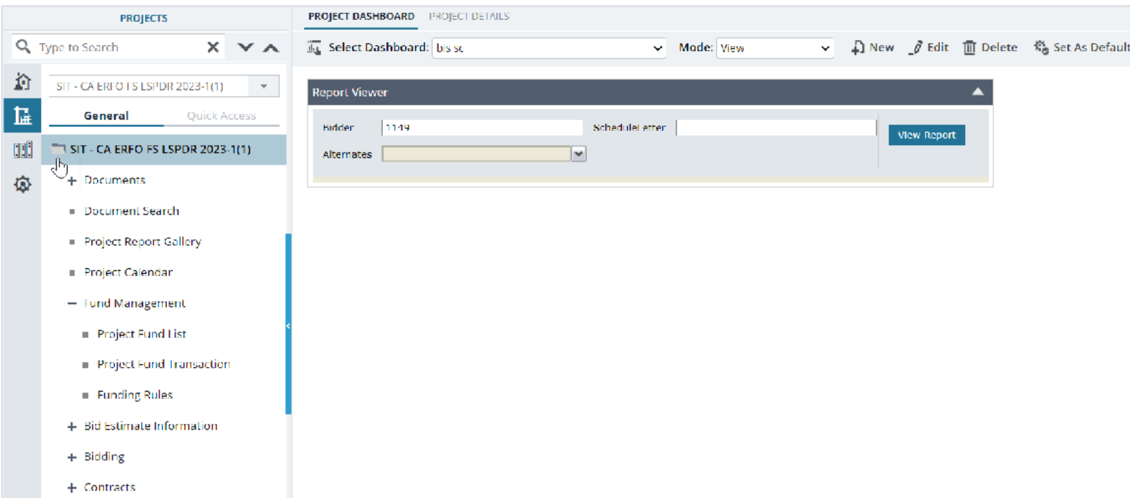


Figure 70: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

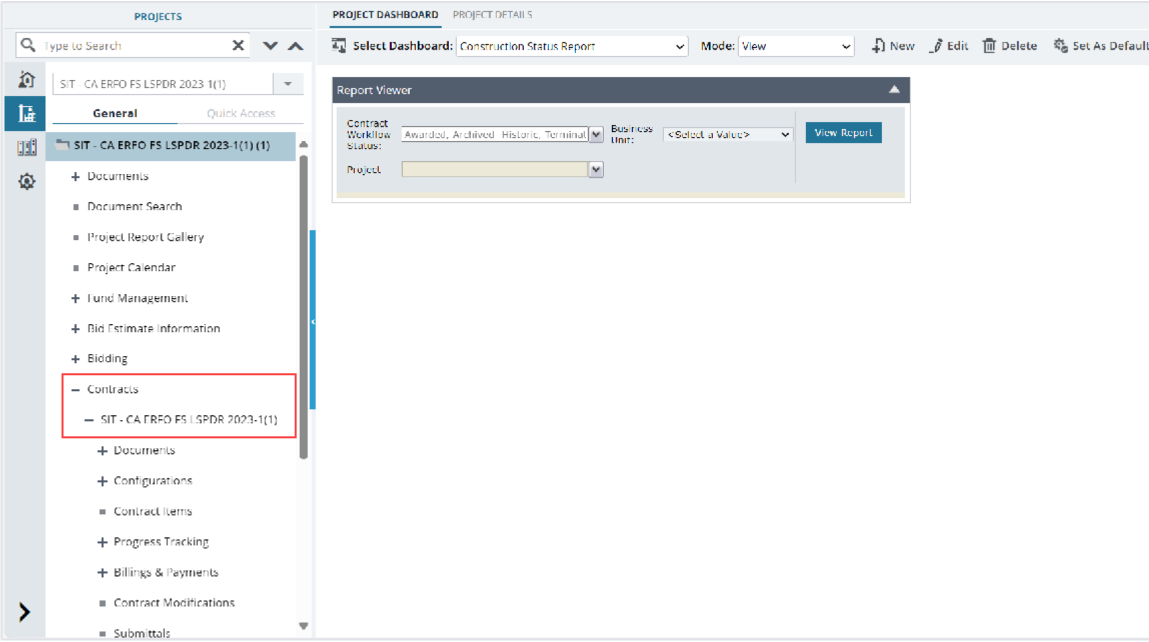


Figure 71: Navigation to Contracts

4. Click **Contract Items**.
   The **ITEM LIST** page is displayed.

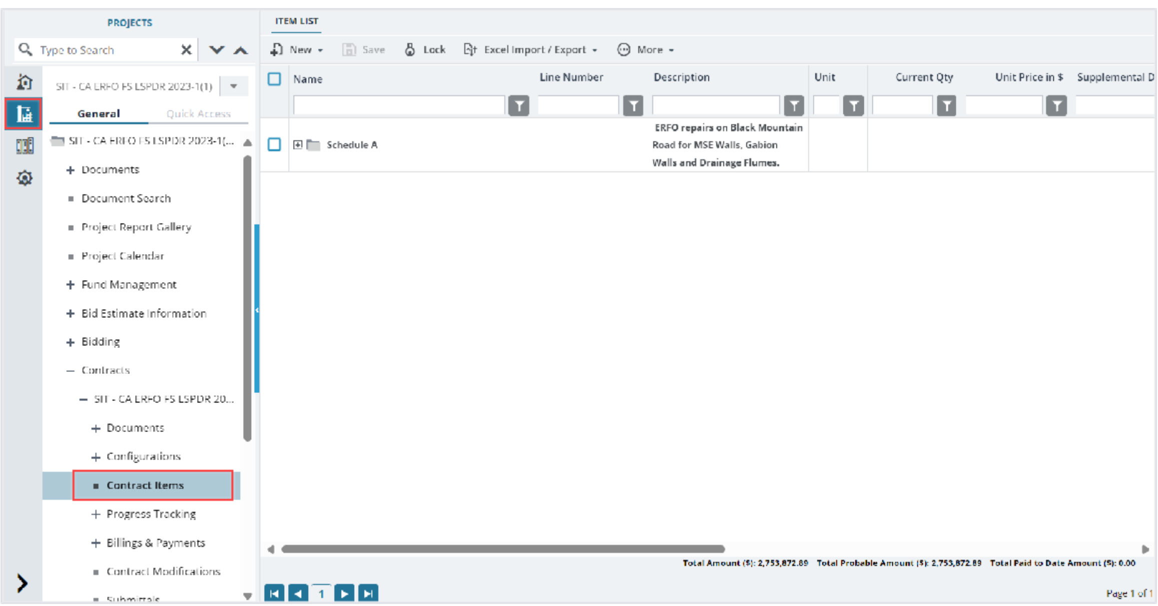


Figure 72: Item List Page

5. Select the appropriate container to add items.

6. Click **New**, and then click **Add Multiple**.

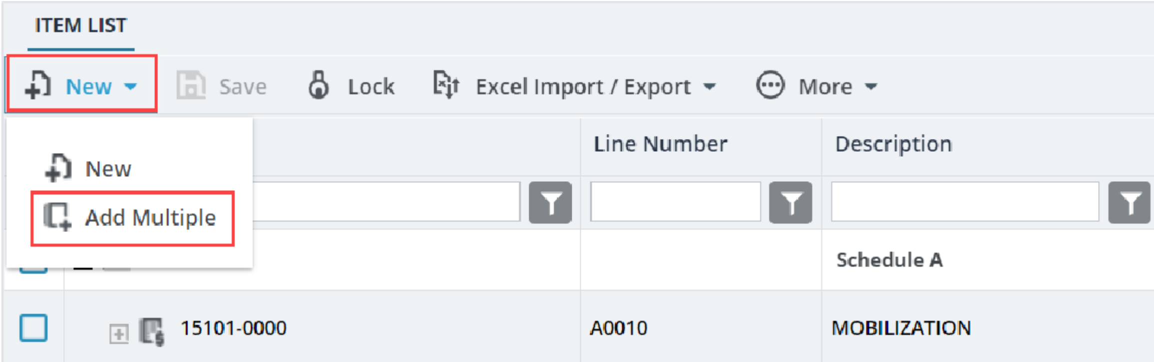


Figure 73: Add Multiple Option

The **ADD STANDARD ITEMS** page is displayed.

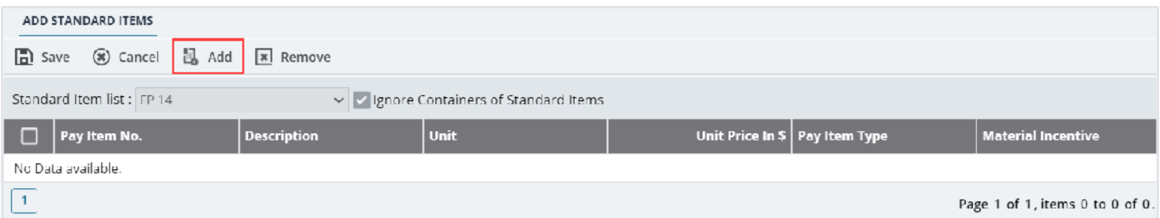
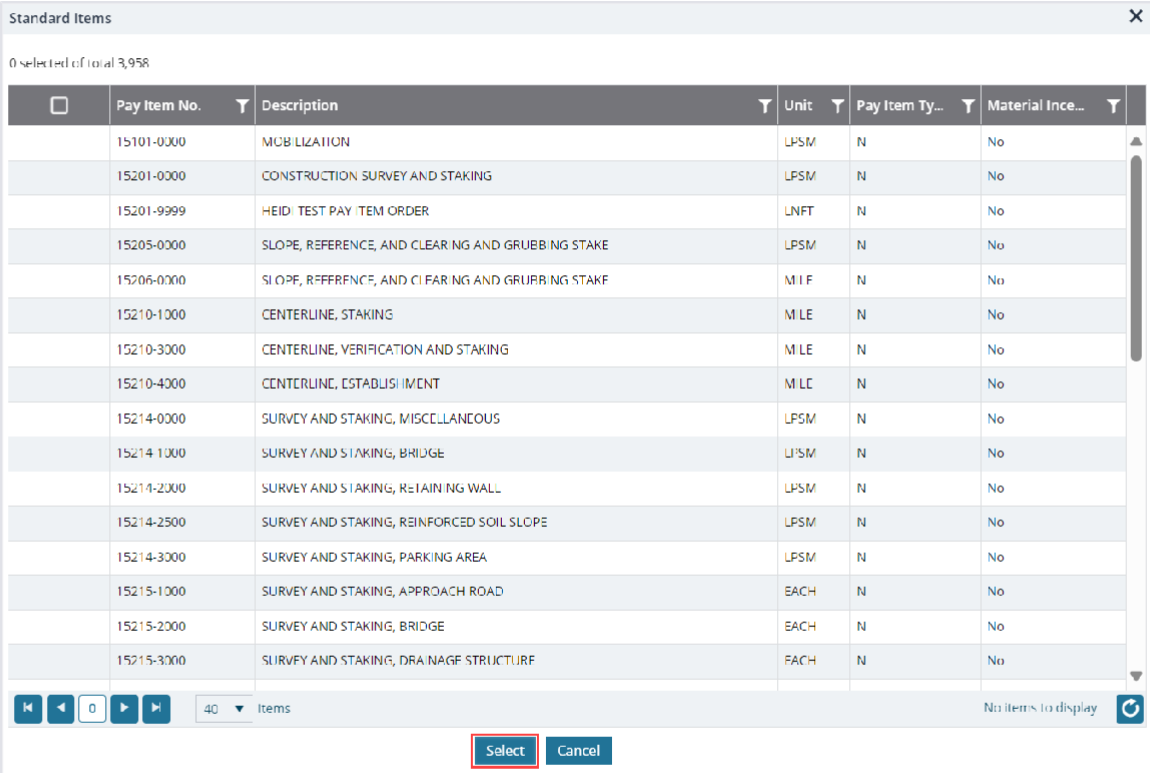


Figure 74: Add Standard Items Page

The following information is displayed:

Field Name	Description	Comments
Standard Item list	The standard items table selected for the project.	**Note:** You cannot edit these fields.
Ignore Containers of Standard Items	By default, the check box is selected to ensure containers of standard items are not added.	

7. Click **Add** to select an item from the standard items table selected for the project.
   The **Standard Items** dialog box is displayed.


Standard Items

0 selected of total 3,958

	Pay Item No.	Description	Unit	Pay Item Ty...	Material Ince...
	15101-0000	MOBILIZATION	LPSM	N	No
	15201-0000	CONSTRUCTION SURVEY AND STAKING	LPSM	N	No
	15201-9999	HEIDI TEST PAY ITEM ORDER	LNFT	N	No
	15205-0000	SLOPE, REFERENCE, AND CLEARING AND GRUBBING STAKE	LPSM	N	No
	15206-0000	SLOPE, REFERENCE, AND CLEARING AND GRUBBING STAKE	MILE	N	No
	15210-1000	CENTERLINE, STAKING	MILE	N	No
	15210-3000	CENTERLINE, VERIFICATION AND STAKING	MILE	N	No
	15210-4000	CENTERLINE, ESTABLISHMENT	MILE	N	No
	15214-0000	SURVEY AND STAKING, MISCELLANEOUS	LPSM	N	No
	15214-1000	SURVEY AND STAKING, BRIDGE	LPSM	N	No
	15214-2000	SURVEY AND STAKING, RETAINING WALL	LPSM	N	No
	15214-2500	SURVEY AND STAKING, REINFORCED SOIL SLOPE	LPSM	N	No
	15214-3000	SURVEY AND STAKING, PARKING AREA	LPSM	N	No
	15215-1000	SURVEY AND STAKING, APPROACH ROAD	EACH	N	No
	15215-2000	SURVEY AND STAKING, BRIDGE	EACH	N	No
	15215-3000	SURVEY AND STAKING, DRAINAGE STRUCTURE	EACH	N	No

0 40 Items No items to display

Select Cancel

Figure 75: Standard Items Dialog Box

8. Available options are items defined in the selected standard items table that is defined in the **Standard Items Table** catalog of the library.
   For more information on standard items, refer to the **Standard Items Table** section in the **A02 Library Management PG**.
9. Select the appropriate items, and then click **Select**.
10. Click **Save**.
    The **ITEM LIST** page is updated with the selected items.

Note:

- For the selected items, the values in the **Container**, **Pay Item No**, **Description**, **Unit**, **Pay Item Type**, and **Material Incentive** fields are retrieved from the **Standard Items Table** catalog of the library.
- To update item information, refer to Section 3.3.3. Editing Contract Item Details.

3.3.2.3. Import Contract Items in Bulk

Prerequisites

- In the published advertisement, the **Solicitation Procedure** is defined as **Design-Build** or **Letter Contract**.
- Contract items are not locked.
- The role of the logged-in user must be one of the following:
  - Administrator
  - Construction Component Lead
  - Construction Admin Staff
  - For more information on role-specific permissions, refer to Contract Items Permission Matrix.

Overview

The **Excel Import / Export** feature enables you to upload and update work item details to a contract in bulk.

The high-level process of uploading or updating details of work items in bulk is as follows:

1. Export the template workbook.
2. Add or update item information in the template workbook.
3. Import the updated workbook.

Note: You cannot delete records or upload attachments using an Excel workbook.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

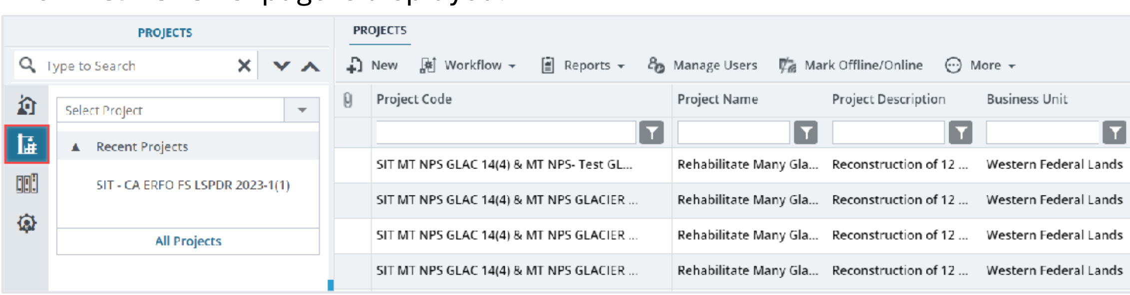


Figure 76: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

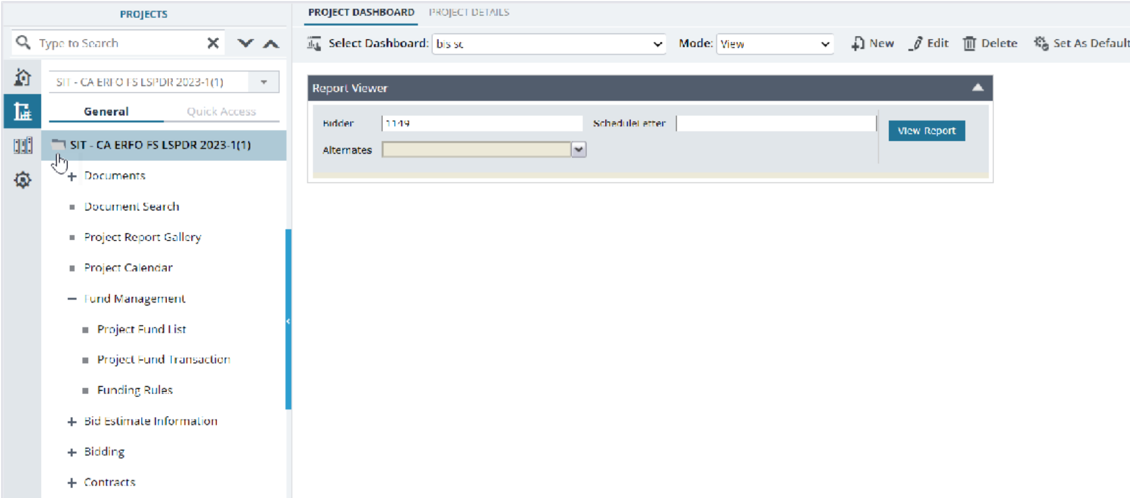


Figure 77: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

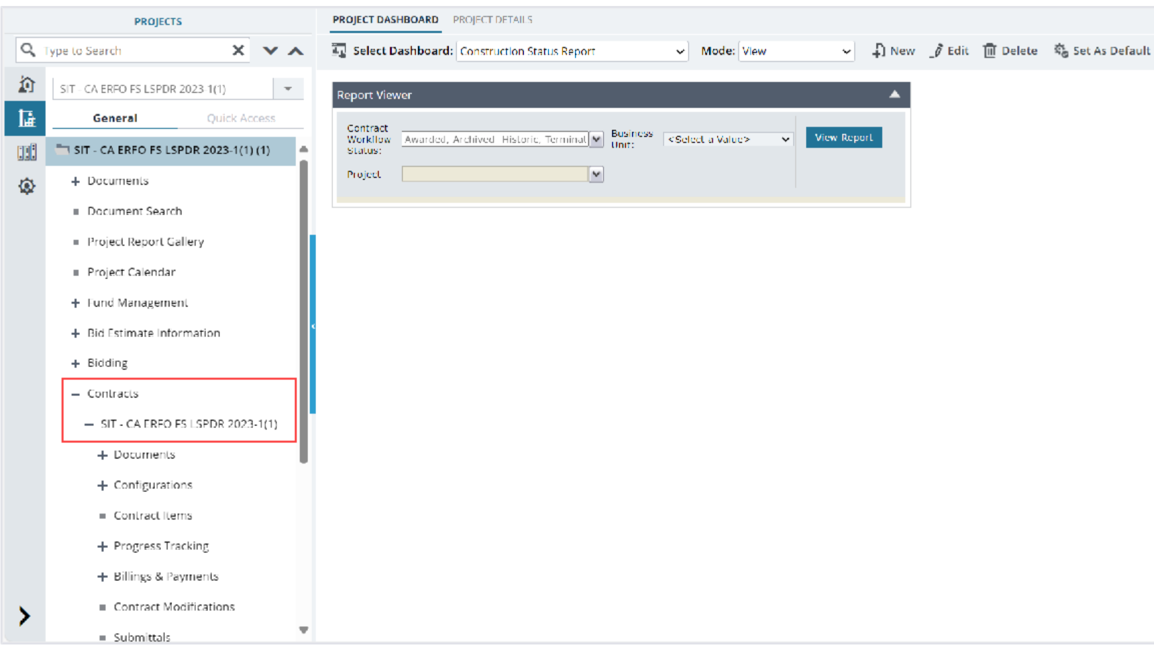


Figure 78: Navigation to Contracts

4. Click **Contract Items**.

The **ITEM LIST** page is displayed.

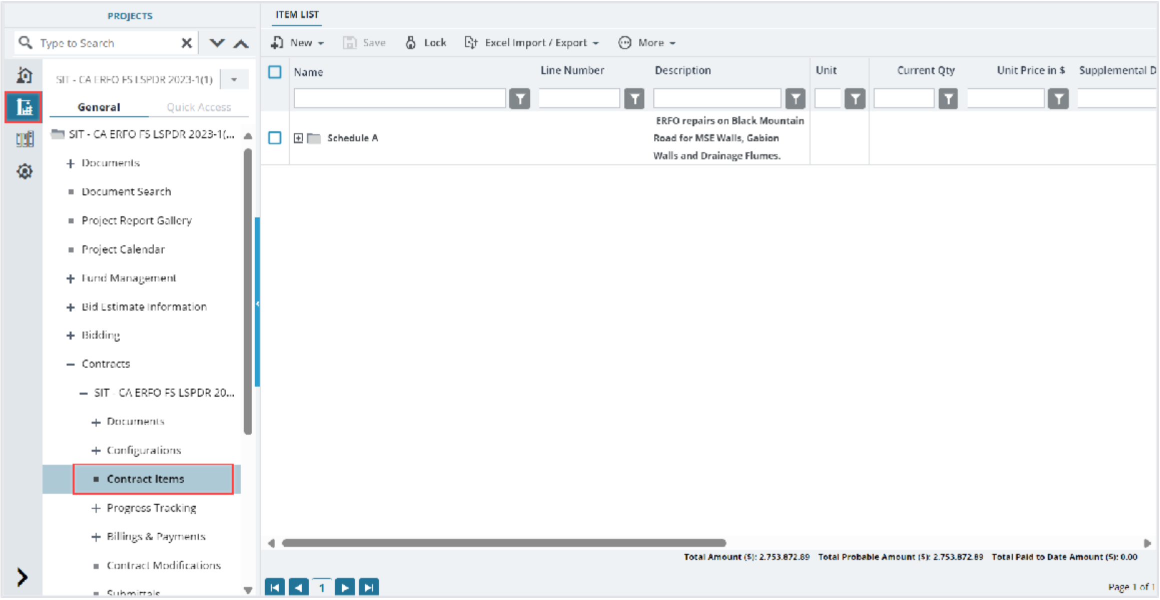


Figure 79: Item List Page

5. To export details of new items, in the toolbar, click **Excel Import / Export**, and then click **Excel Template** or **Excel Template With Data**.

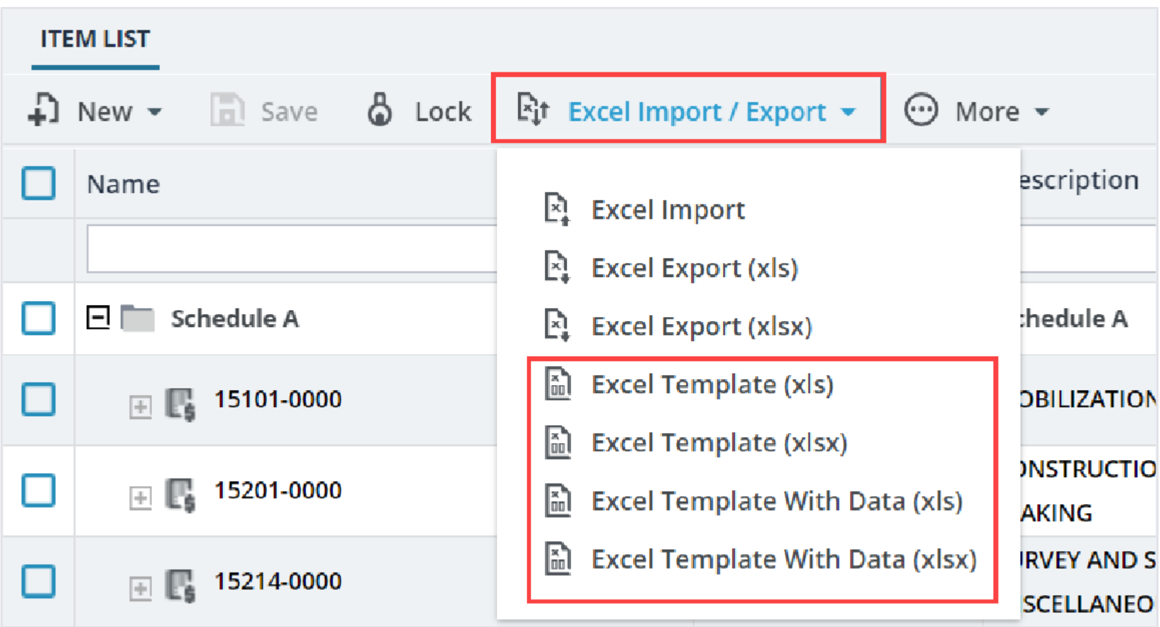


Figure 80: Excel Import / Export Option

The Excel workbook template is downloaded to the local hard drive.

Note: It is recommended to download the template with data. To download the template workbook with data, ensure a Contract Items record is created and the appropriate details are added.

6. Open the saved Excel workbook template.

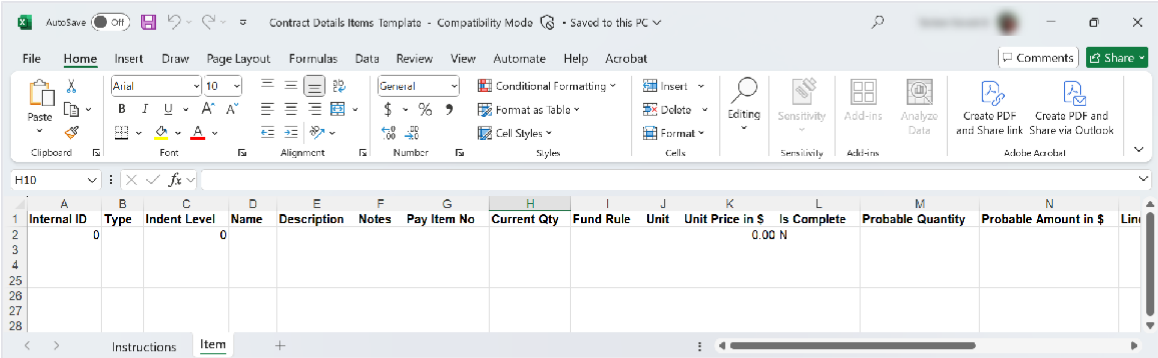


Figure 81: Excel Workbook

The template workbook contains the following sheets:

- Instructions sheet – This sheet provides instructions to enter details of the contract items.
- Item sheet – This sheet enables you to provide accurate information about the items in respective columns of this sheet.

7. In the Excel workbook, perform either of the following steps as applicable:
   - To upload new items, refer to Section 3.3.2.3.1. Upload New Items.
   - To update the existing **Contract Items** record, refer to Section 3.3.2.3.2. Update the existing items.
8. To import the template workbook with item details to the application, perform the following steps:
   a. In the **ITEM LIST** page, click **Excel Import / Export**, and then click **Excel Import**.

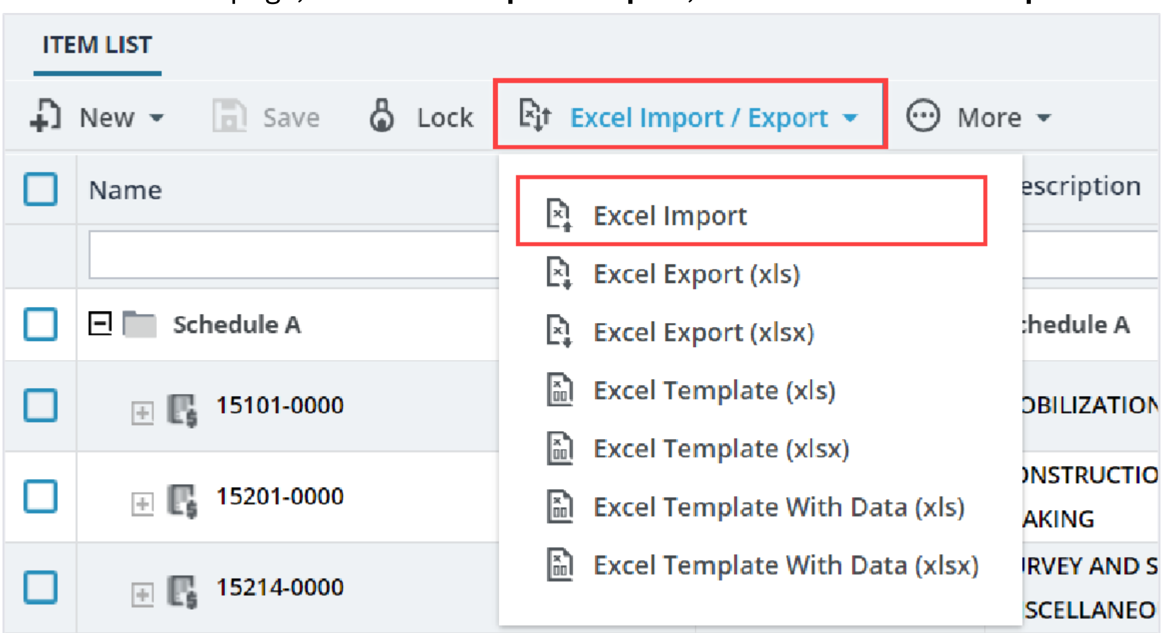


Figure 82: Excel Import

The **IMPORT DETAILS FROM EXCEL FILE** page is displayed.

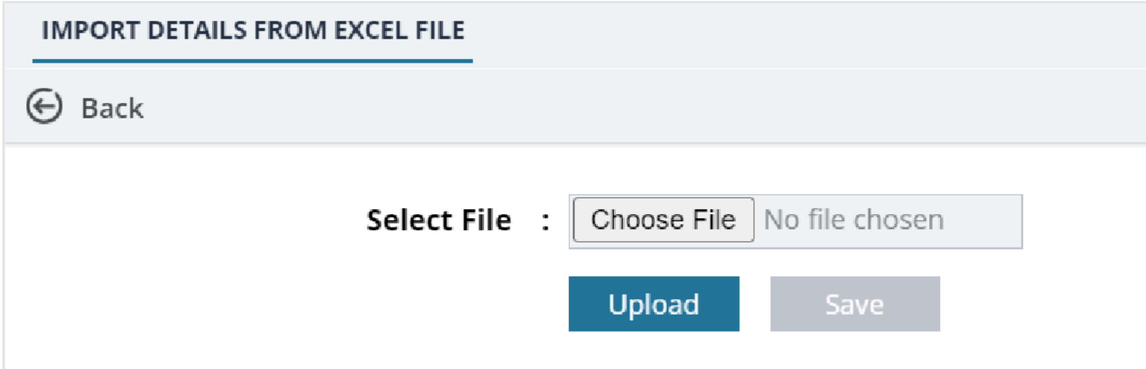


Figure 83: Import Details From Excel File Page

b. Click **Choose File** to select the workbook with updated details.
   The **Open** dialog box is displayed.

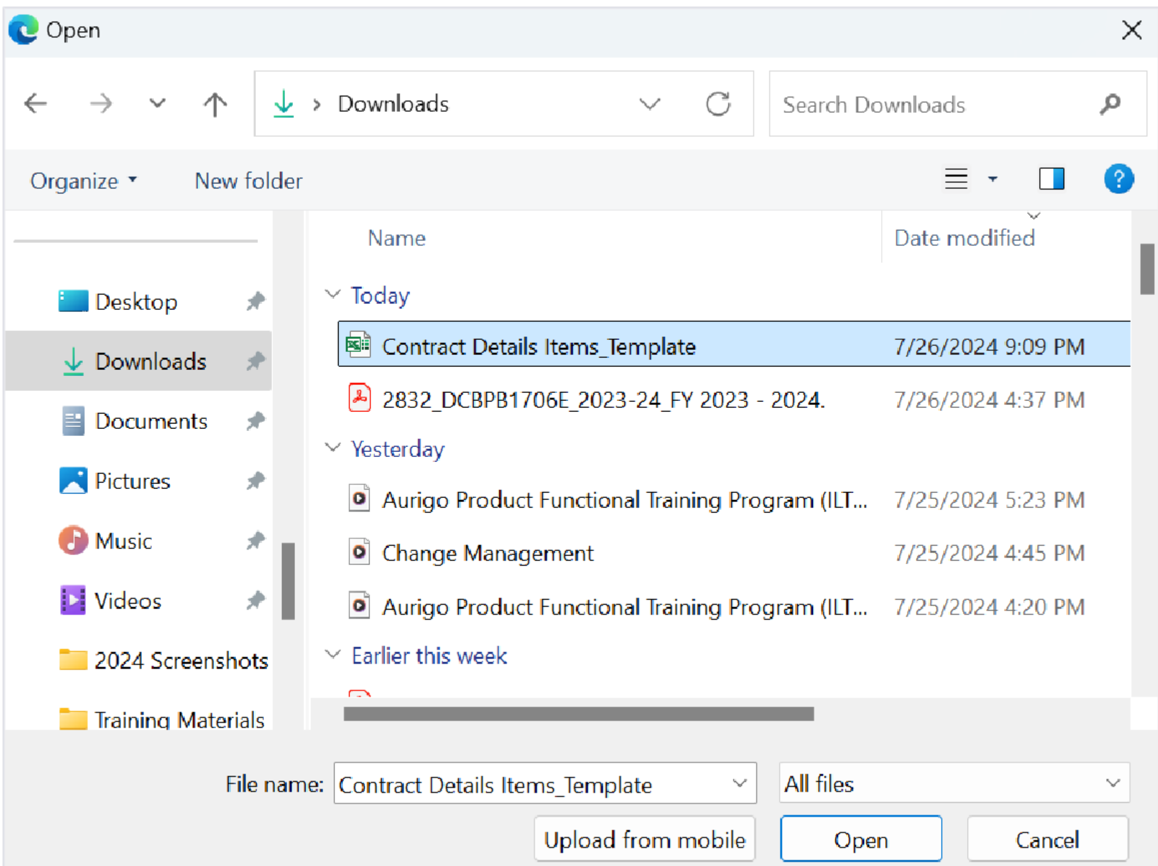


Figure 84: Open Dialog Box

c. Select the appropriate workbook, and then click **Open**.
d. Click **Upload** to import form information from the Excel workbook to the form. On successful import, the success message is displayed.

e. On encountering errors while importing an Excel workbook, perform the following steps:

i. In the toolbar, click **Error Log**.

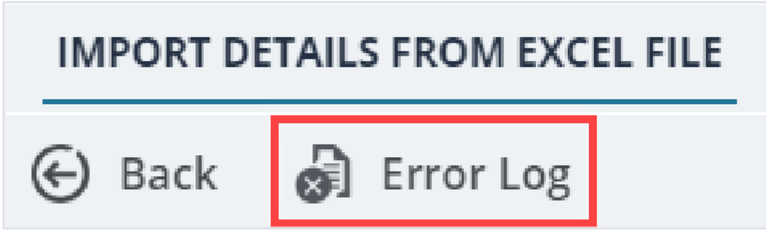


Figure 85: Error Log Option

The error log workbook is downloaded to your local storage.

ii. Open the workbook to view the errors in the various columns.
Error messages in the cells are highlighted in red. Tabs in the workbook are also highlighted to indicate the presence of errors.

iii. Open the Excel workbook with form information and modify form details.
Optionally, you can make relevant corrections in the error log workbook and upload it.

iv. Save and upload the Excel workbook to import the updated information.

f. Click **Save**.

g. Click **Back**.
The item details in the Excel workbook are uploaded to the ITEM LIST page.

3.3.2.3.1. Uploading Item Details in Bulk

Steps

a. Enter the appropriate details in the worksheet, as described in the following table:

Column	Description
Internal ID	To upload details of new items, do not enter any details in the Internal ID column. The Internal ID column displays the unique identification code for the corresponding record of the form and is used as a reference to update work item details.
Type	Enter the type of item being defined. • To create an item, enter **Item**. • To create a sub-item, enter **SubItem**.
Indent Level	Defines the line number of the parent container to group the current container or item into the parent container. Specify 0 for first level containers. For example, consider two containers, CONT1 and CONT2. To define CONT2 under CONT1, Indent Level for CONT1 must be set to 0 and Indent Level of CONT2 must be set to 1. Similarly for items, to define an item in CONT2, Indent Level of the item must be set to 2.

<table>
<tr><th>Column</th><th>Description</th></tr>
<tr><td></td><td>

The hierarchy of containers and items in containers must be defined sequentially in the Excel worksheet. For example, to define an item in a container CONT3 that is at indent level 0, the item must be defined with indent level 1 after the row with details of container CONT3.

Similarly, to define sub-items for an item that is at indent level 1, the sub-items for that item must be defined with indent level 2 after the row with the details of the item.

The following images illustrate three containers C1, C2, and C3. Container C3 is within C2. Items ITEM1 is in C1, ITEM2 is in C2, and ITEM3 is in C3.

Note the following factors:

- The indent levels defined in the Excel workbook
- The item ITEM1 is marked as a non-contract item, and therefore the **Amount in $** column for the item displays zero in the **ITEM LIST** page
- The item ITEM2 is marked as Complete, and therefore will not be available for inclusion into any pay estimates

The following image illustrates the items and containers defined in the Excel workbook:

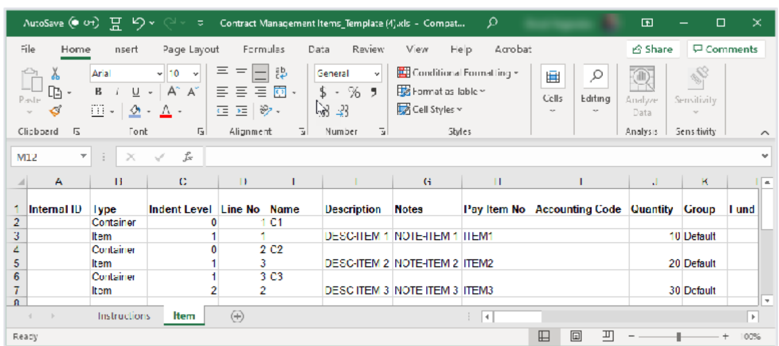
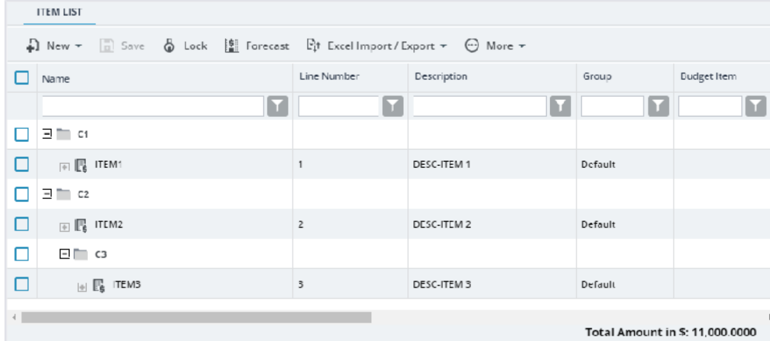


Figure 86: Items and Containers Illustrated in Excel Workbook

The following image illustrates the items and containers imported to the application using the Excel workbook containing information as illustrated in the previous image:

</td></tr>
</table>

Column	Description
	 *Figure 87: Items and Containers Import List* Mandatory field; information must be provided.
Name	Enter the name of the item or the sub-item.
Description	Enter the description of the item. • If **Type** is entered as **Item**, then in the **Item Description** column, enter a description for the item. • If **Type** is entered as **SubItem**, then in the **Item Description** column, enter a name for the sub-item.
Notes	Enter any additional information relevant to the item.
Pay Item No	If **Type** is entered as **Item**, then in the **Pay Item No** column, enter a unique name or identifier to identify the item. Mandatory field; information must be provided. **Note:** Prefix an apostrophe to the first **Pay Item No** in the sheet if the first 8 rows contain numeric values, followed by alphanumeric pay item numbers starting row 9. Microsoft Excel automatically converts a text- content column to a numeric-content column if the first 8 rows contain numeric values.
Current Qty	If **Type** is entered as **Item**, then in the **Quantity** column, enter the required quantity of the item. If **Type** is entered as **SubItem**, then in the **Quantity** column, enter the required quantity of the subitem. The quantity of the item is calculated as the sum of all its subitem quantities.
Fund Rule	If **Type** is entered as **Item**, enter the **Rule Name** of the funding rule from the list of approved fund rules to associate the item amount to the selected fund rule. For more information on funding rules, refer to the **Funding Rules** section in the **M03 Fund Management PG**. **Note:** You can change the fund rule of an item at any time until the contract items are locked. For more information on associating a funding rule with an item, refer to Section 3.3.4. Associating a Fund Rule with a Contract Item.

Column	Description
Unit	If **Type** is entered as **Item**, enter the unit of measure for the item. **Note:** Ensure the unit of measure used is defined in the measurement system selected for the project. A measurement system is selected for every project. For information on the measurement system selected for the project, refer to **Creating a Project** topic in the **M02 Project Management PG**. Mandatory field; information must be provided.
Unit Price in $	If **Type** is entered as **Item**, enter the cost per unit. Mandatory field; information must be provided.
Is Complete	**Note:** The items are automatically marked as complete upon approving the balance change modification. However, the field remains editable at this stage. You can enter **Y** if the items are complete, else enter **N**.
Probable Quantity	Enter the appropriate probable quantity for the item.
Probable Amount in $	Enter the appropriate probable amount of the item.
Line Number	Enter the line number of the item.
Supplemental Description	Enter additional description specific to the item.
CM #	Leave the field blank.
Original Quantity	
Amount in $	
Paid to date Qty	

3.3.2.3.2. Updating Item Details in Bulk

Steps

1. Update the appropriate details in the worksheet, as described in the following table:

   Note: Deleting an item from the Excel workbook does not delete the item in the standard items table.

Column	Description
Internal ID	Do not edit. Retain the value in this column.
Type	Enter the type of item being defined. • To create an item, enter **Item**. • To create a sub-item, enter **SubItem**.
Indent Level	Defines the line number of the parent container to group the current container or item into the parent container. Specify 0 for first level containers. For example, consider two containers, CONT1 and CONT2. To define CONT2 under CONT1, Indent Level for CONT1 must be set to 0 and

Column	Description

Indent Level of CONT2 must be set to 1. Similarly for items, to define an item in CONT2, Indent Level of the item must be set to 2.
The hierarchy of containers and items in containers must be defined sequentially in the Excel worksheet. For example, to define an item in a container CONT3 that is at indent level
0, the item must be defined with indent level 1 after the row with details of container CONT3.

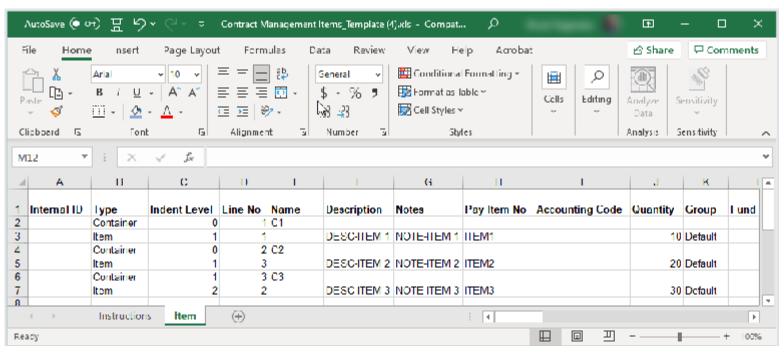
Similarly, to define sub-items for an item that is at indent level 1, the sub-items for that item must be defined with indent level 2 after the row with the details of the item.

The following images illustrate three containers C1, C2, and C3. Container C3 is within C2. Items ITEM1 is in C1, ITEM2 is in C2, and ITEM3 is in C3.

Note the following factors:

- The indent levels defined in the Excel workbook
- The item ITEM1 is marked as a non-contract item, and therefore the **Amount in $** column for the item displays zero in the **ITEM LIST** page
- The item ITEM2 is marked as Complete, and therefore will not be available for inclusion into any pay estimates

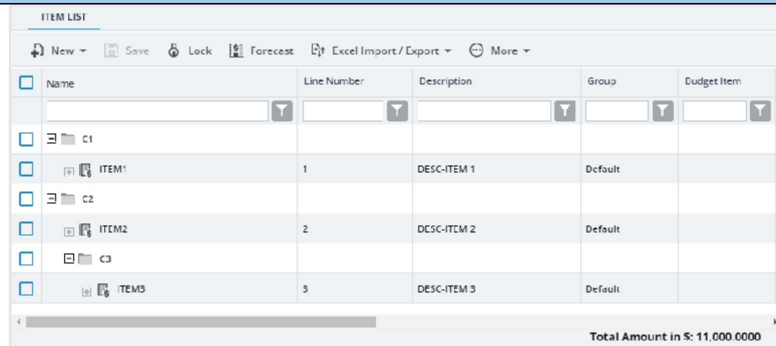
The following image illustrates the items and containers defined in the Excel workbook:



Internal ID	Type	Indent Level	Line No	Name	Description	Notes	Pay Item No	Accounting Code	Quantity	Group	Fund
	Container	0	1	C1							
	Item	1	1		DESC-ITEM 1	NOTE-ITEM 1	ITEM1		10	Default	
	Container	0	2	C2							
	Item	1	3		DESC-ITEM 2	NOTE-ITEM 2	ITEM2		20	Default	
	Container	1	3	C3							
	Item	2	2		DESC ITEM 3	NOTE ITEM 3	ITEM3		30	Default	

Figure 88: Items and Containers Illustrated in Excel Workbook

The following image illustrates the items and containers imported to the application using the Excel workbook containing information as illustrated in the previous image:

Column	Description
	 *Figure 89: Items and Containers Import List* Mandatory field; information must be provided.
Description	Enter the description of the item. • If **Type** is entered as **Item**, then in the **Item Description** column, enter a description for the item. • If **Type** is entered as **SubItem**, then in the **Item Description** column, enter a name for the sub-item.
Notes	Enter any additional information relevant to the item.
Pay Item No	If **Type** is entered as **Item**, then in the **Pay Item No** column, enter a unique name or identifier to identify the item. Mandatory field; information must be provided. **Note:** Prefix an apostrophe to the first **Pay Item No** in the sheet if the first 8 rows contain numeric values, followed by alphanumeric pay item numbers starting row 9. Microsoft Excel automatically converts a text- content column to a numeric-content column if the first 8 rows contain numeric values.
Quantity	If **Type** is **Item**, then in the **Quantity** column, update the required quantity of the item. If **Type** is **SubItem**, then in the **Quantity** column, update the required quantity of the subitem. The quantity of the item is calculated as the sum of all its subitem quantities.
Fund Rule	If **Type** is **Item**, update the **Rule Name** of the funding rule from the list of approved fund rules to associate the item amount to the selected fund rule. For more information on funding rules, refer to the **Funding Rules** section in the **M03 Fund Management PG**. **Note:** You can change the fund rule of an item at any time until the contract items are locked. For more information on associating a funding rule with an item, refer to Section 3.3.4. Associating a Fund Rule with a Contract Item.
Unit	If **Type** is **Item**, update the unit of measure for the item.

Column	Description
	Note: Ensure the unit of measure used is defined in the measurement system selected for the project. A measurement system is selected for every project. For information on the measurement system selected for the project, refer to **Creating a Project** topic in the **M02 Project Management PG**. Mandatory field; information must be provided.
Unit Price in $	If **Type** is **Item**, update the cost per unit. Mandatory field; information must be provided.
Is Complete	**Note:** The items are automatically marked as complete upon approving the balance change modification. However, the field remains editable at this stage. You can enter **Y** if the items are complete, else enter **N**.
Pay Item Type	If **Type** is **Item**, update the type of pay item. The entered value must match the pay item types defined in the **Pay Item Type** catalog of the library.
Probable Qty	Update the appropriate probable quantity for the item.
Probable Amount in $	Update the appropriate probable amount of the item.
Line Number	Update the line number of the item.
Supplemental Description	Update the additional description specific to the item.

3.3.2.4. Adding Sub Items

Overview

You can divide an item into sub items to distribute the amount from different fund sources.

If sub items are defined for an item, the quantity of the item is calculated as the sum of the quantities of the sub items.

Steps

1. Adjacent to the **Quantity** field, click **Sub Items**.

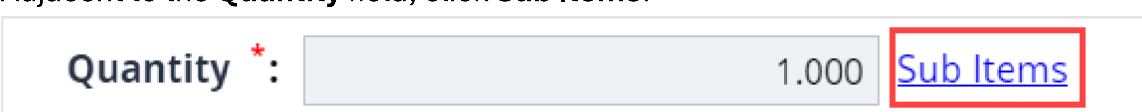


Figure 90: Sub Items

The **SUB ITEMS** page is displayed.

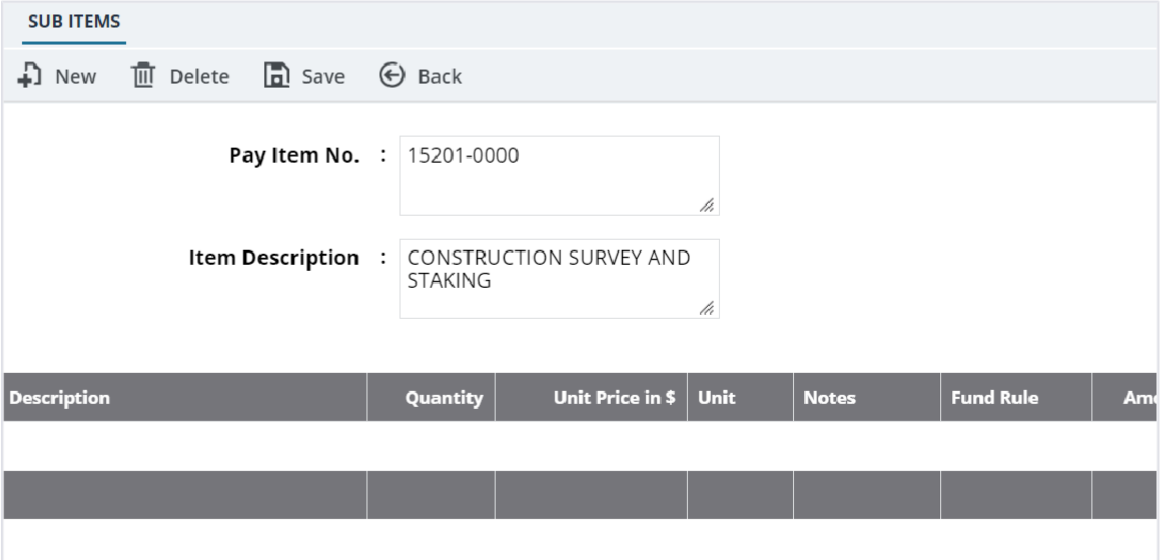


Figure 91: Sub Items Page

The **SUB ITEMS** page displays the following information:

Field Name	Description
Pay Item No	The pay item number of the item.
Item Description	The description of the item.

2. Click **New**.

A row is added to the table. The table displays the following information:

Field Name	Description
Unit Price in $	The unit price of the item.
Unit	The unit of measure selected for the item.
Funding Rule	The funding rule selected for the item. On saving the sub item, the Description of the item is updated based on the funding rule selected. **Note:** You can modify the value as necessary.

3. Provide the appropriate information in the columns, as described in the following table.

Field Name	Description
Quantity	Double-click and enter the quantity for the sub item.
Notes	Double-click and enter any notes for the sub item.
Funding Rule	Double-click and select the appropriate funding rule for the sub item. Options available are approved funding rules defined for the project. For more information on funding rules, refer to the **Funding Rules** section in the **M03 Fund Management PG**.
Probable Qty	Enter the probable quantity for the sub item. It defines the estimated quantity (or amount) that may be needed for the completion of the contract.

4. Click **Save**.
   Upon saving the sub item details, the **Amount in $** and **Probable Amount** columns display the amount of the sub item based on the **Quantity** and **Probable Qty** specified for the sub item and the **Unit Price in $** value specified for the item.
   On saving, the **Description** of the item is updated based on the Funding Rule associated with the item.
5. Optionally, to delete an item, perform the following steps:
   a. In the table, select the appropriate item.
   b. Click **Delete**, and then click **OK**.
6. Click **Back** to return to the item page.
   Note: Once sub items are added to an item, you can modify the quantity of the item by editing the quantities of the sub items only.

3.3.3. Editing Contract Item Details

A contract item may require modifications to alter the quantity, unit price, containers, and so on. You can edit contract item details in the following ways:

- 3.3.3.1. Inline Editing
- 3.3.3.2. Using the Edit option

3.3.3.1. Inline Editing

Prerequisites

The role of the logged-in user must be one of the following:

- Administrator
- Construction Component Lead
- Construction Admin Staff

For more information on role-specific permissions, refer to Contract Items Permission Matrix.

Overview

The **Inline Editing** feature enables you to modify and save item details by directly editing details in the **ITEM LIST** page. You can modify only **Probable Qty** field irrespective of locking of the contract items.

Note: This feature is not applicable for sub items.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

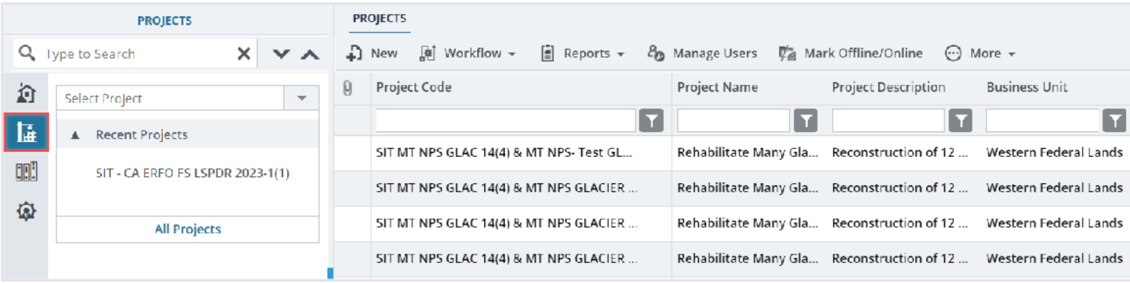


Figure 92: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

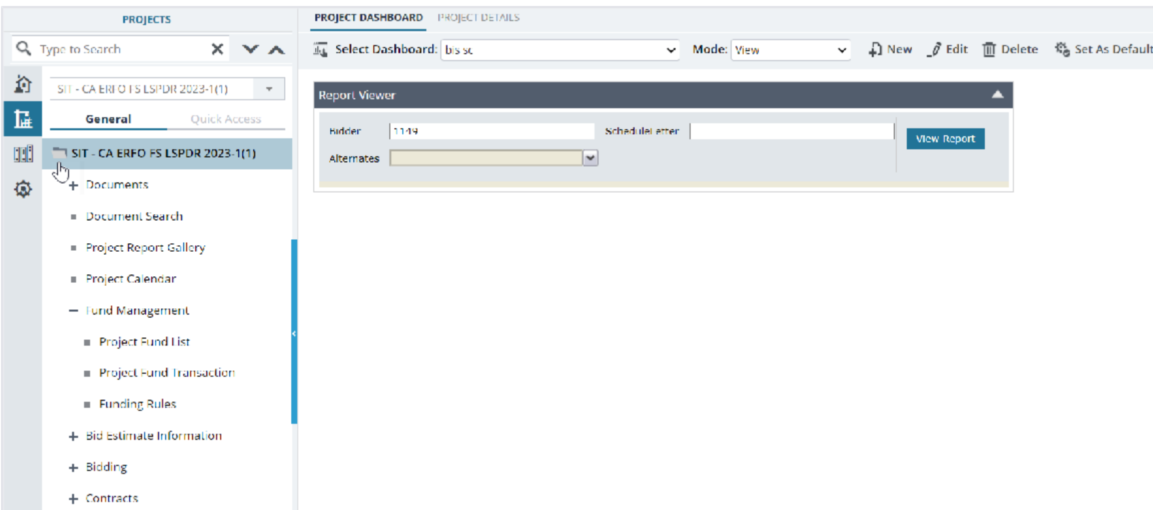


Figure 93: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

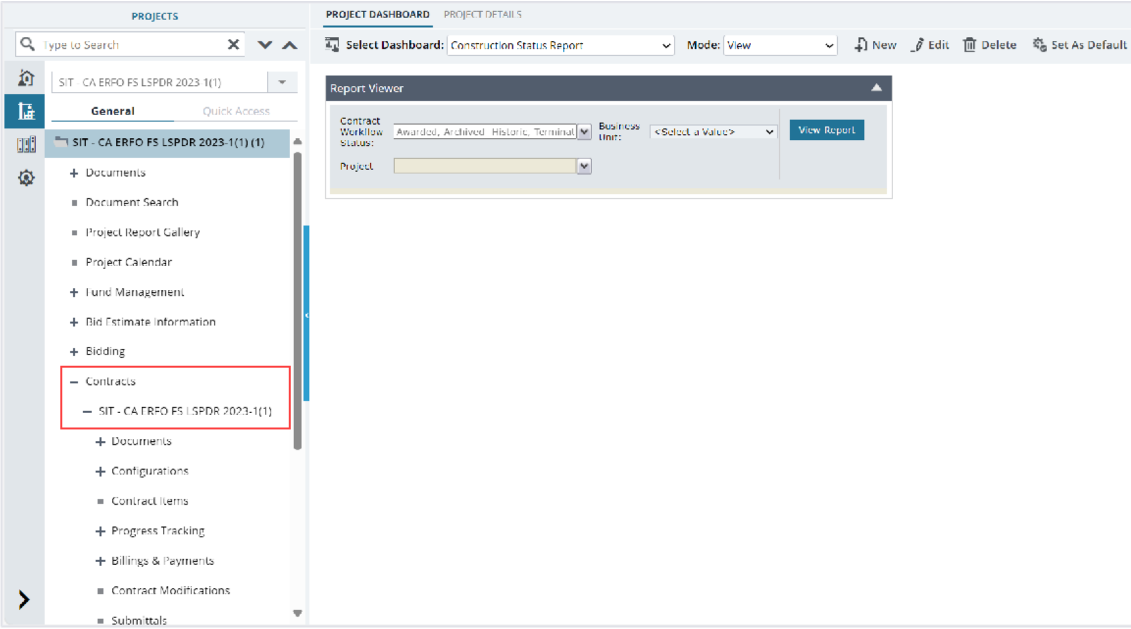


Figure 94: Navigation to Contracts

4. Click **Contract Items**.

   The **ITEM LIST** page is displayed.

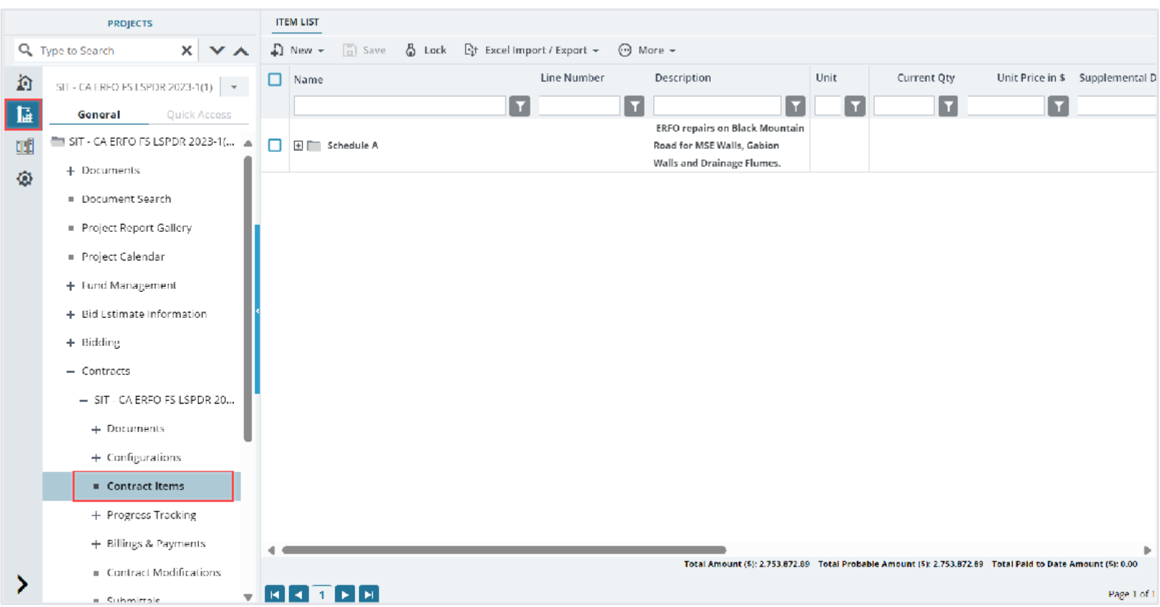


Figure 95: Item List Page

5. Right-click on a row, and click Expand All to expand all containers and view item details.

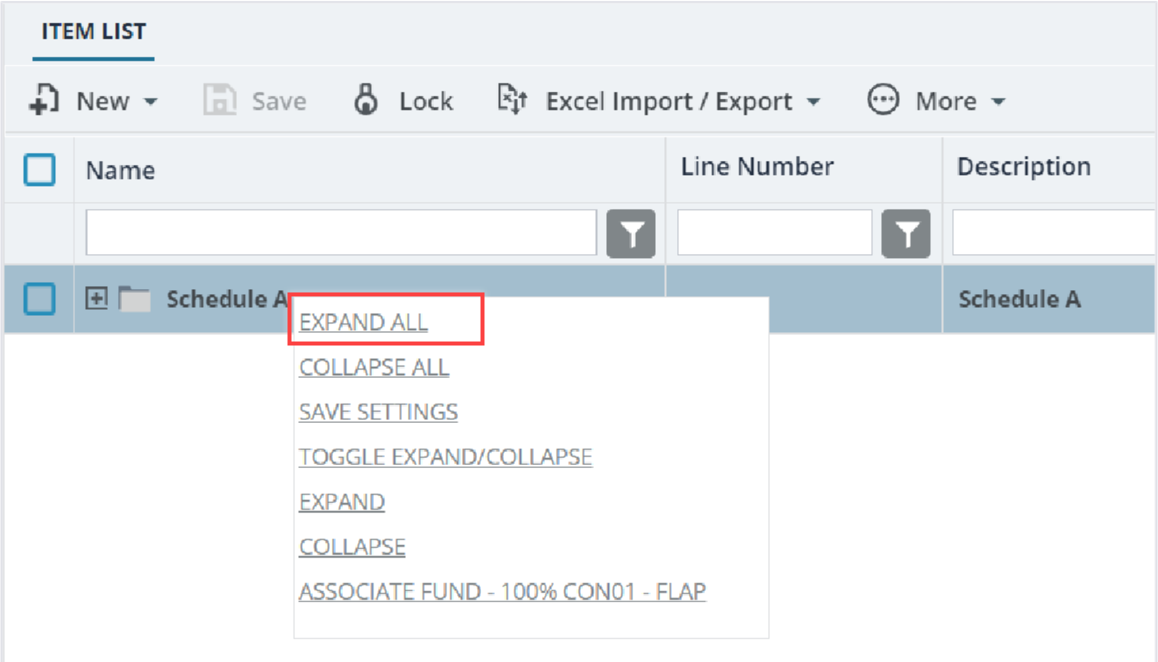


Figure 96: Expand All Option

6. Double-click the row of the item that you want to edit.
   The **Probable Qty** column of the selected row is highlighted.

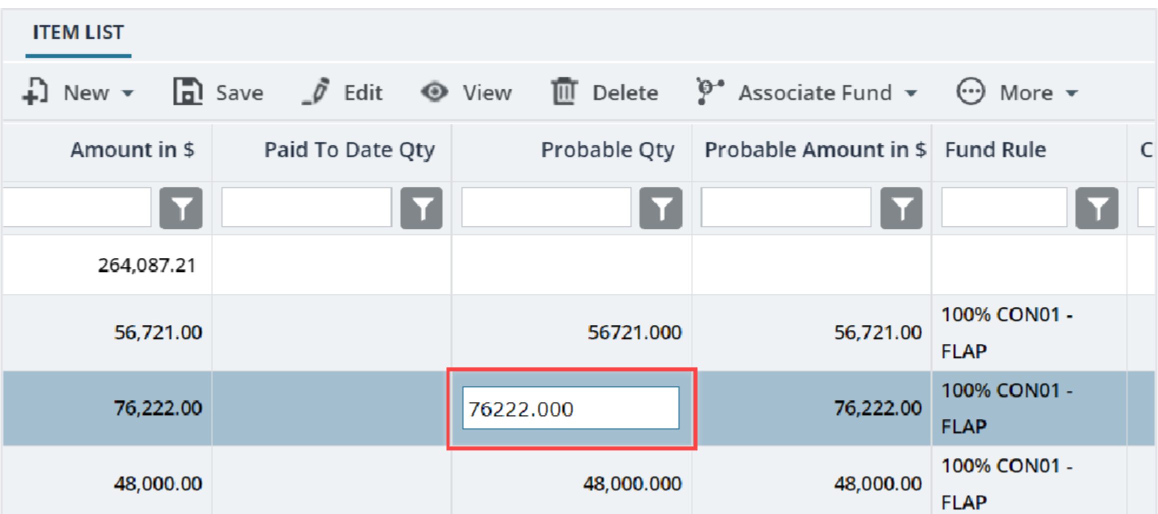


Figure 97: Probable Quantity – Edit

7. In the **Probable Qty** column of the selected item row, enter the appropriate quantity.
8. Click **Save**.

3.3.3.2. Using the Edit Option

Prerequisites

- Contract items are not locked.
- The role of the logged-in user must be one of the following:
  - Administrator
  - Construction Component Lead
  - Construction Admin Staff
  - For more information on role-specific permissions, refer to Contract Items Permission Matrix.

Overview

Based on the contract type and how the items are added to the contract, you can edit only specific fields in a contract item.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

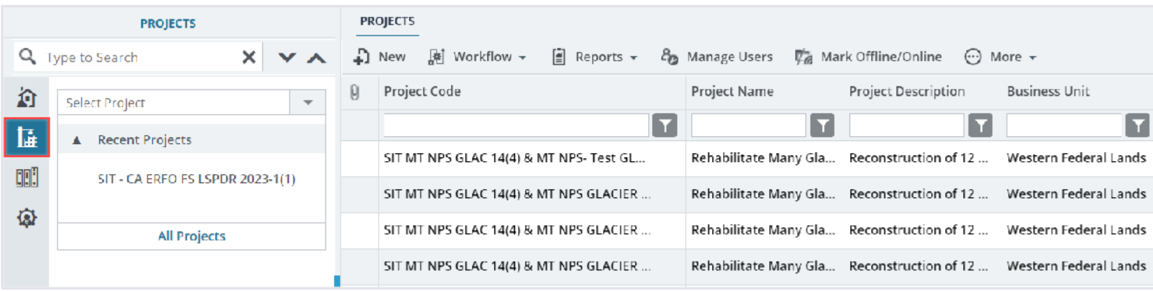


Figure 98: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

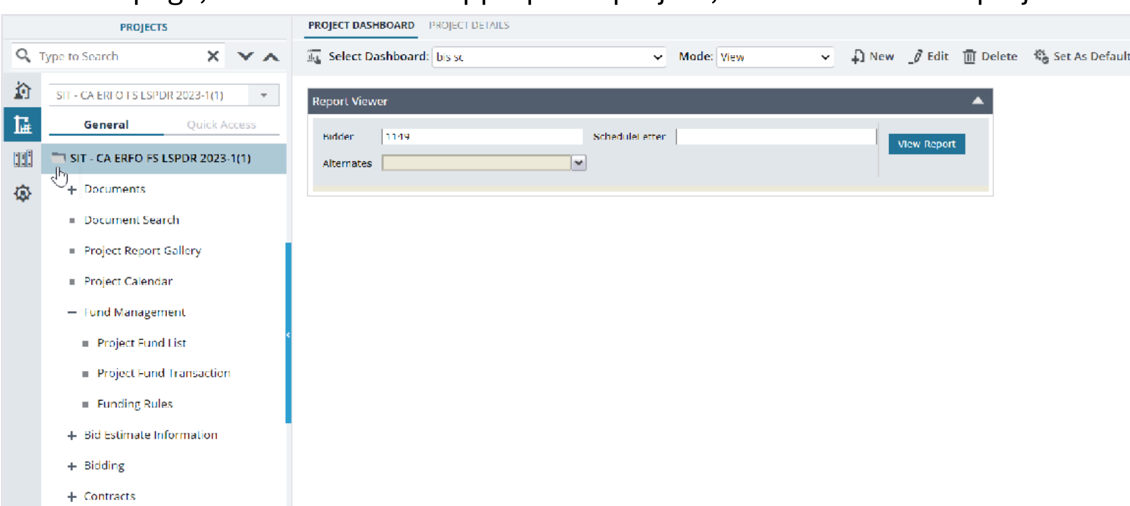


Figure 99: Expanding Projects Folder

3. In the navigation pane, expand the Contracts folder, and then expand the contract.

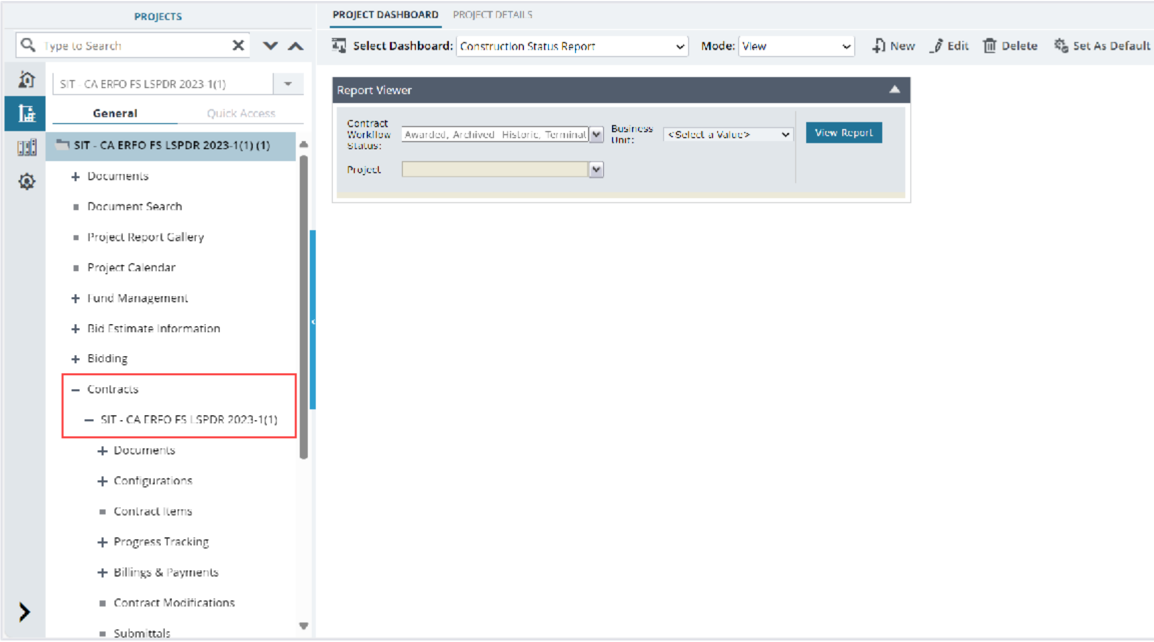


Figure 100: Navigation to Contracts

4. Click **Contract Items**.
   The **ITEM LIST** page is displayed.

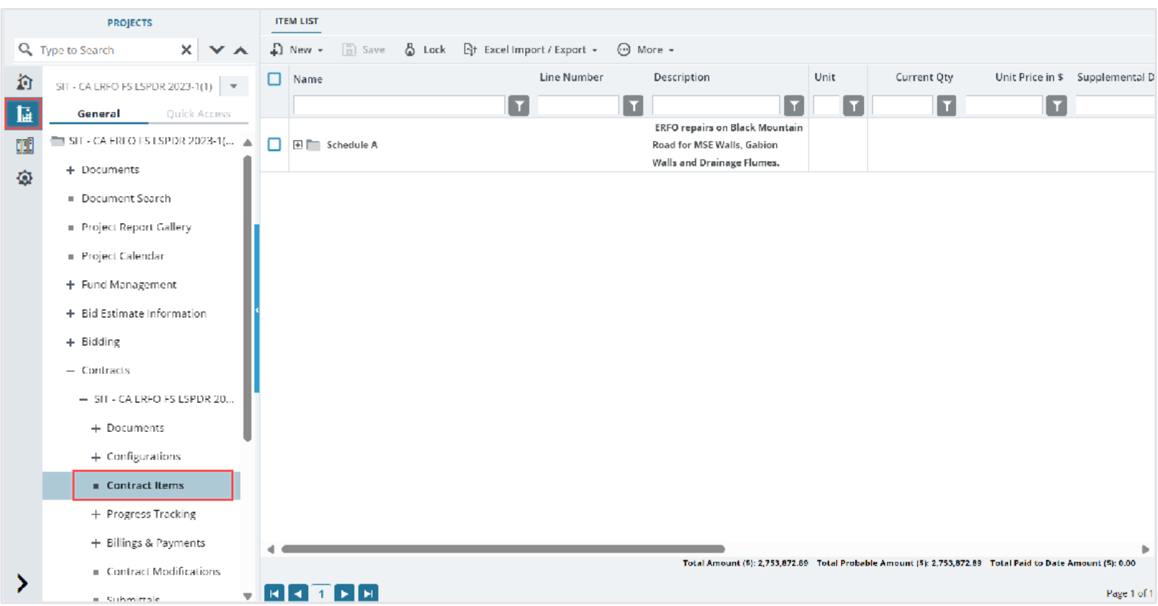


Figure 101: Item List Page

5. Right-click on a row and click Expand All to expand all containers and view item details.

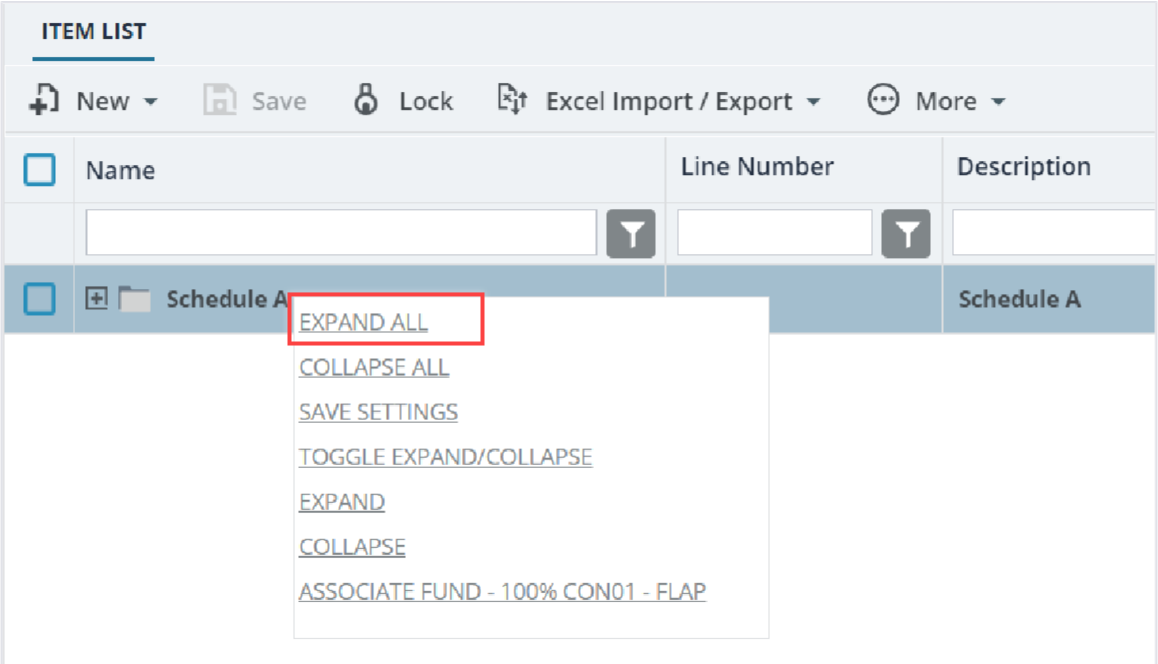


Figure 102: Expand All Option

6. Select the item that you want to edit, and click **Edit**.
   The **EDIT ITEM** page is displayed.

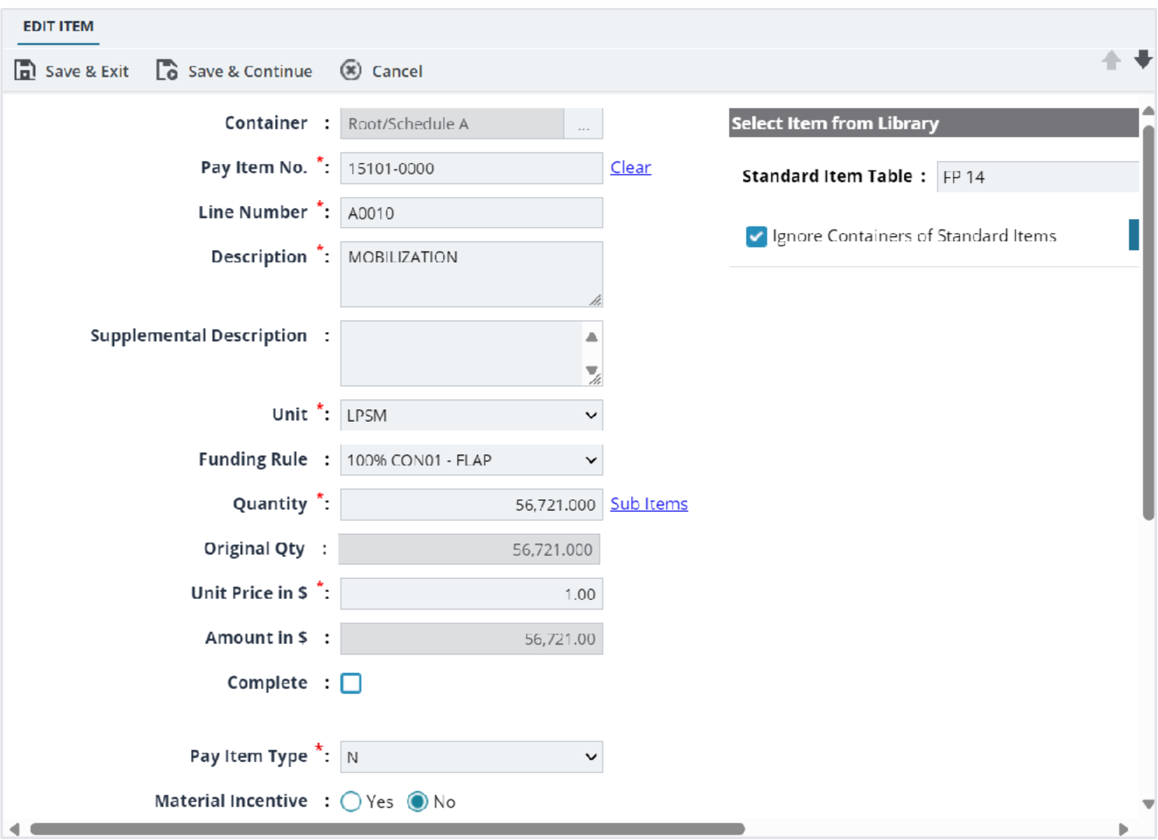


Figure 103: Edit Item Page

7. Enter or modify the appropriate information in the editable fields.
   For information on updating the fields, refer to Section 3.3.2.1. Adding a Contract Item Manually.
   Based on the contract type, you can modify the following fields:

Field Name	Contract Type	Comments
Pay Item No	D-B and Letter Contract	You can edit this field only if the item is added using the New option.
Line Number		
Description		
Supplemental Description	All Contracts	-
Unit	D-B and Letter Contract	You can edit this field only if the item is added using the New option.
Funding Rule	All Contracts	-
Quantity	D-B and Letter Contract	
Unit Price in $		
Pay Item Type	D-B and Letter Contract	You can edit this field only if the item is added using the New option.
Complete	All Contracts	-
Notes		
Probable Qty		

8. Click **Save & Exit** to save the record and return to the list page. Optionally, click **Save & Continue** to save the record and continue on the same page. Click **Cancel** to discard the added information and exit the page.

3.3.4. Associating a Fund Rule to a Contract Item

Overview

You can associate a fund rule with multiple contract items and sub items. This facilitates flexibility in applying and using different fund sources in accordance with changing business decisions. The latest associated fund rule is considered in pay estimates, purchase orders, and expenses to determine the consumption of the fund.

Ideally, fund rules are associated with contract items, including the sub items, before the contract items are locked. However, roles such as Administrator, Construction Component

Lead, and Construction Admin Staff can change the fund rule even after the contract items are locked.

Note: If the fund rule for a contract item or sub item is changed at any point in time, then the updated fund rule must be reflected in the **Pay Estimates** and **Contract Modifications** records containing that item. This is applicable for Pay Estimates and Contract Modifications in their **Draft** and **Submitted** workflow status.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

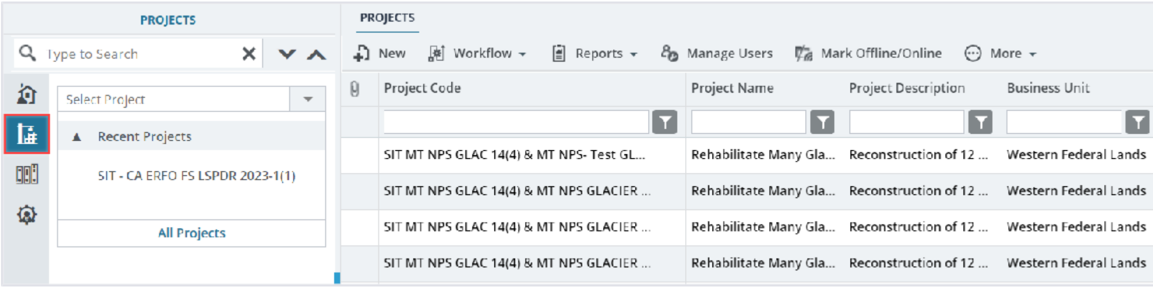


Figure 104: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

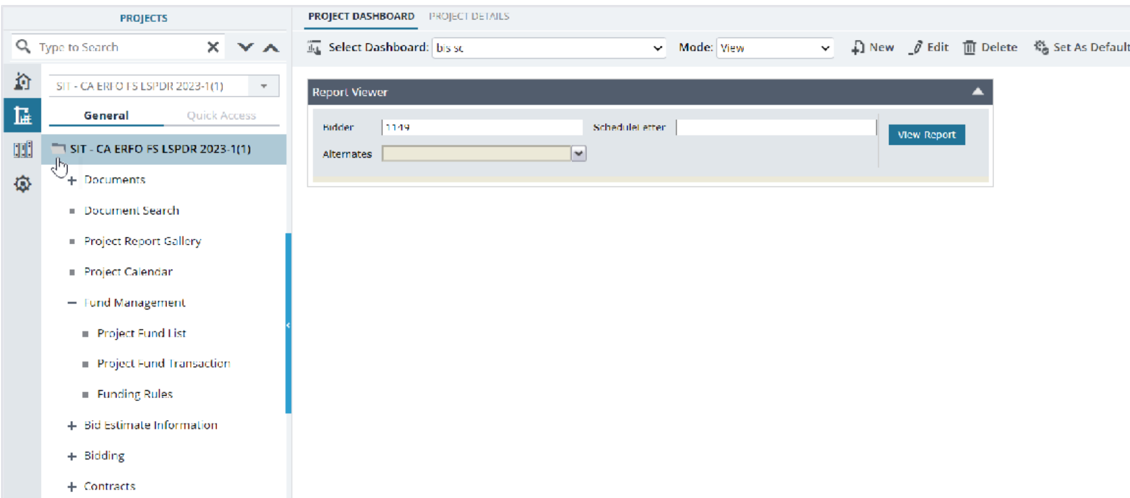


Figure 105: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

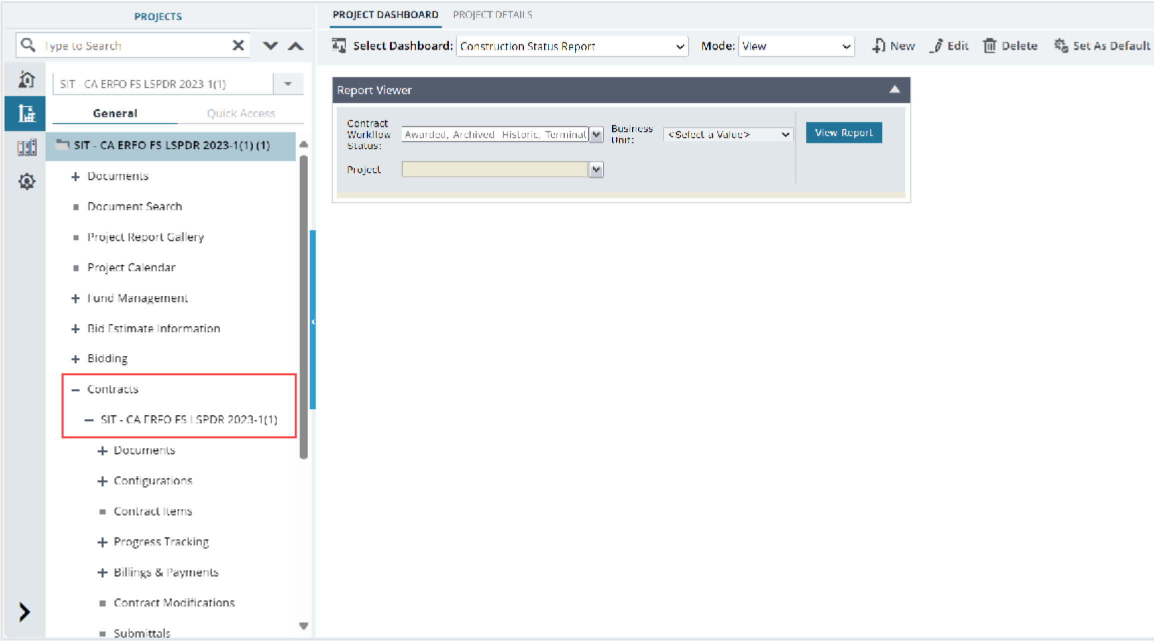


Figure 106: Navigation to Contracts

4. Click **Contract Items**.
   The **ITEM LIST** page is displayed.

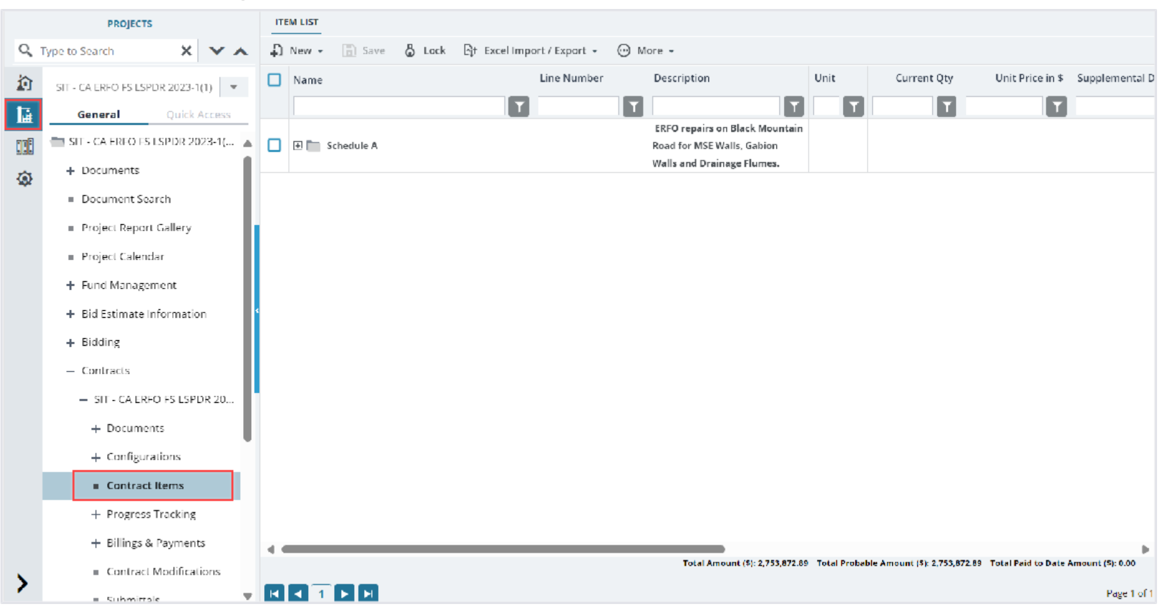


Figure 107: Item List Page

5. Select the appropriate items and sub items to associate with a fund rule.

6. Click **Associate Fund**, and then click the appropriate fund rule.

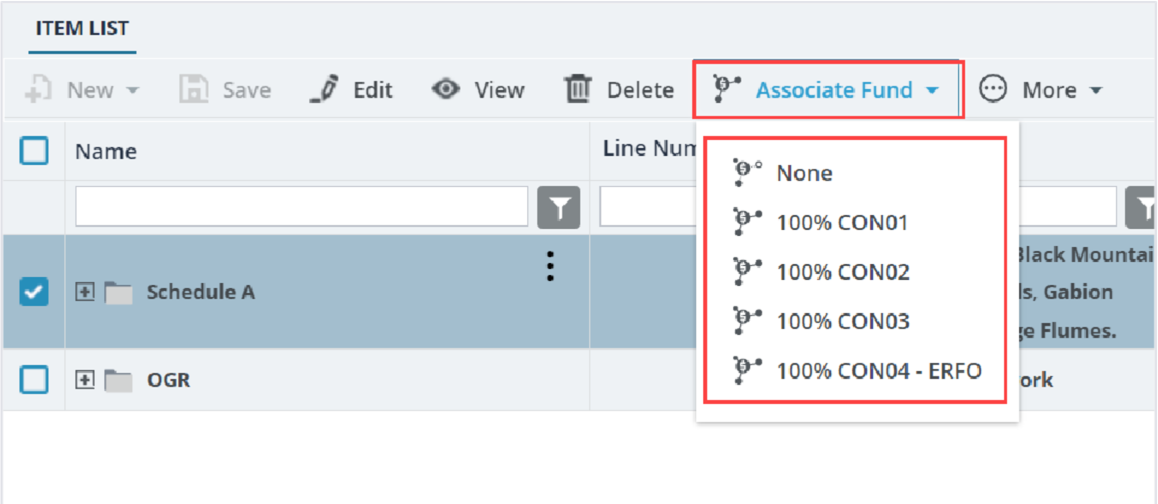


Figure 108: Associate Fund Rule

Alternatively, perform the following steps:

a. Click **Edit**.
   The **EDIT ITEM** page is displayed.
b. From the **Funding Rule** drop-down list, select the appropriate fund rule.
   Available options are active and approved funding rules that are defined for the project.
   For more information on funding rules, refer to the **Funding Rules** section in the **M03 Fund Management PG**.

7. Click **Save**.

3.3.5. Locking the Contract Item List

Prerequisites

- The role of the logged-in user must be any of the following:
  - Administrator
  - Construction Component Lead
  - Construction Admin Staff
  - Construction Operations Engineer
  - Project Engineer
  - Regional Engineer
  - Project Engineer A&E

  For more information on role-specific permissions, refer to [Contract Items Permission Matrix]
- The logged-in user must have the Lock permission to lock the contract items.
- The prime contractor for the contract is configured.

For more information on managing contractors, refer to Section 3.2.5. Managing Contractor Details.

- All items must have the quantity and unit price associated with them.

Overview

You can finalize the scope of a contract by locking the **ITEM LIST** of the contract. Locking the contract items is equivalent to finalizing the zero estimate. Once the contract items are locked, the **Lock** option is changed to **Unlock**.

Note: Once the contract items are locked, you cannot make any changes to the contract items except the probable quantity.
The changes to the probable quantity are reflected in the **Pay Estimates** and Contract Modifications records in the **Draft** and **Submitted** workflow status.

After the contract items are locked, if any Project Fund Transactions are created, those are approved through Contract Modifications.

You can unlock the contract items only if records are not created in the following forms:

- Contractor Daily Record
- Inspector Daily Record
- Daily Diary
- Submittals
- Contract Modifications
- Item Posting
  For more information on unlocking contract items, refer to Section 3.3.6. Unlocking the Contract Item List.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

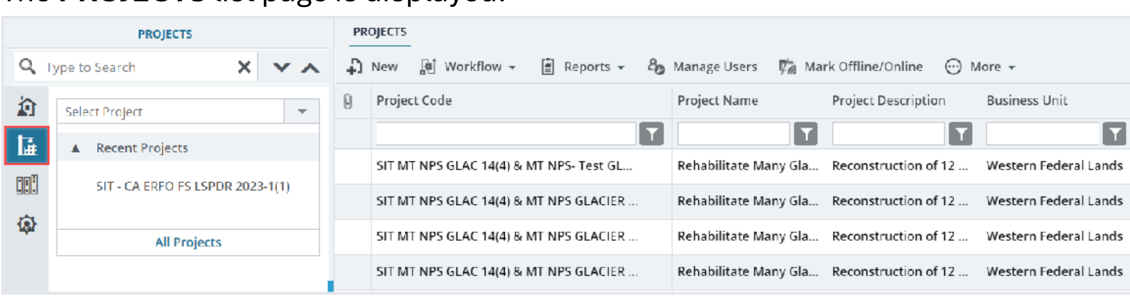


Figure 109: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

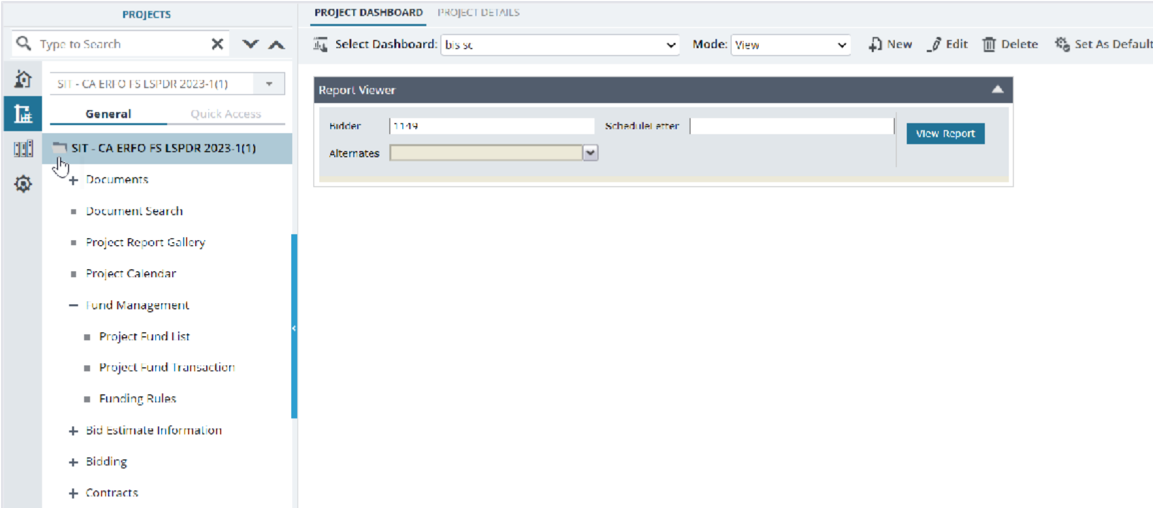


Figure 110: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

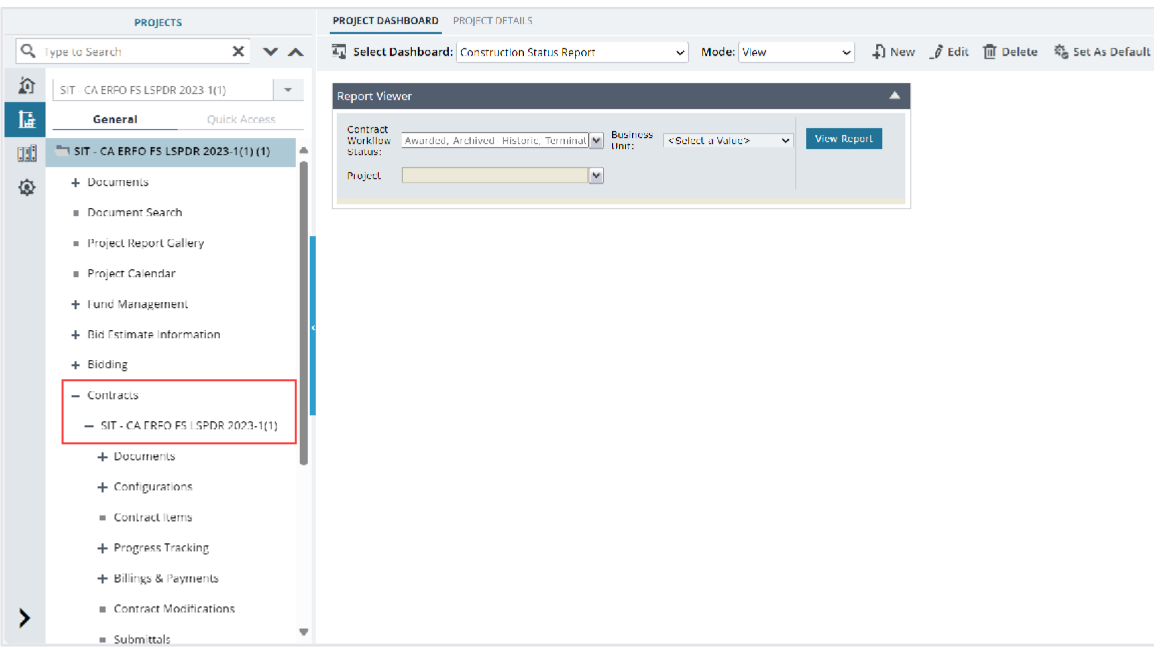


Figure 111: Navigation to Contracts

4. Click **Contract Items**.

   The **ITEM LIST** page is displayed.

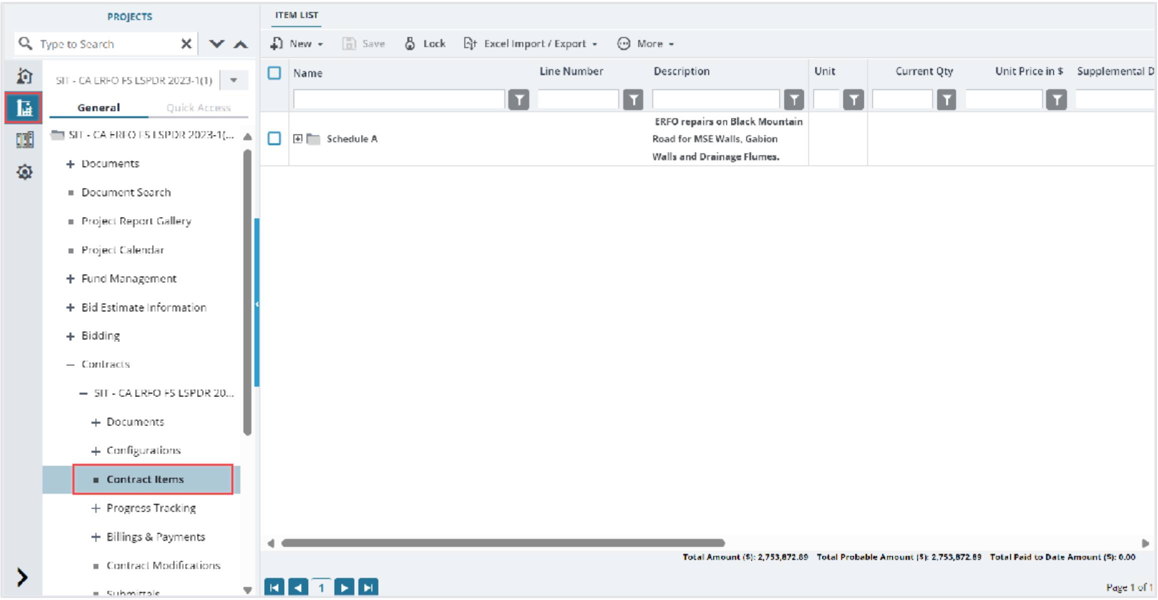


Figure 112: Item List Page

5. Click **Lock**.

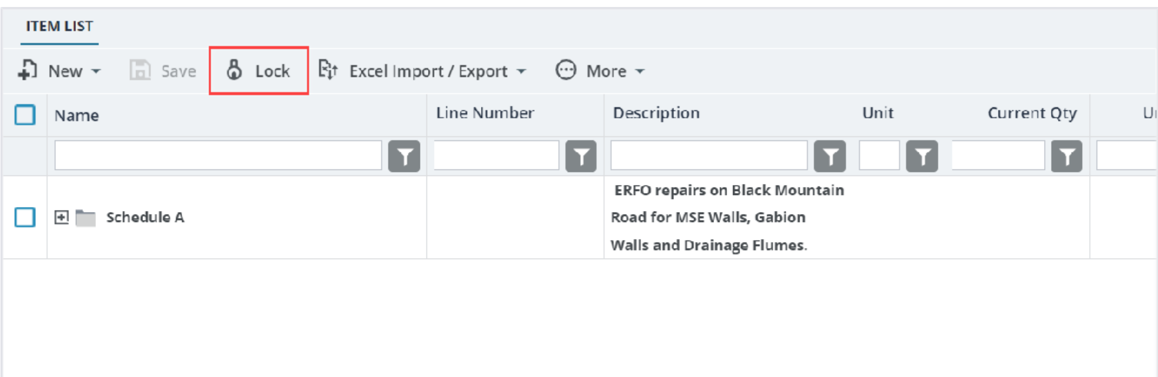


Figure 113: Lock Option

   The confirmation message is displayed.

6. Click **OK**.

   The contract items of the contract are locked.

3.3.6. Unlocking the Contract Item List

Prerequisites

- Contract items are locked.
- Records are not created in any of the following forms:
  - Contractor Daily Record
  - Inspector Daily Record

- Daily Diary
- Submittals
- Contract Modifications
- Item Posting
- Pay Estimates

Overview

You can unlock a locked contract item list to modify the details of contract items.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

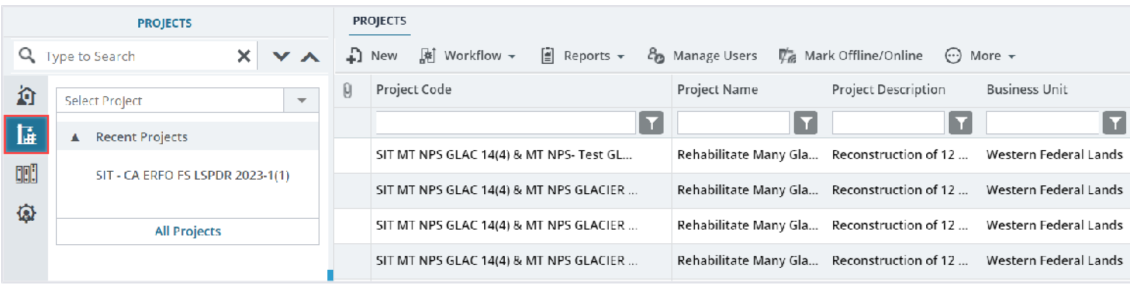


Figure 114: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

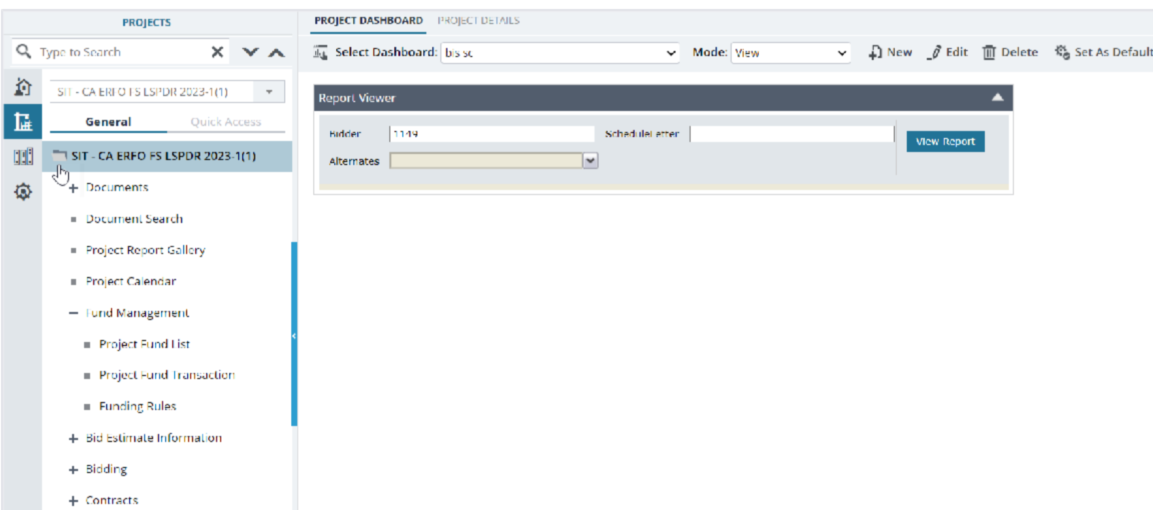


Figure 115: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

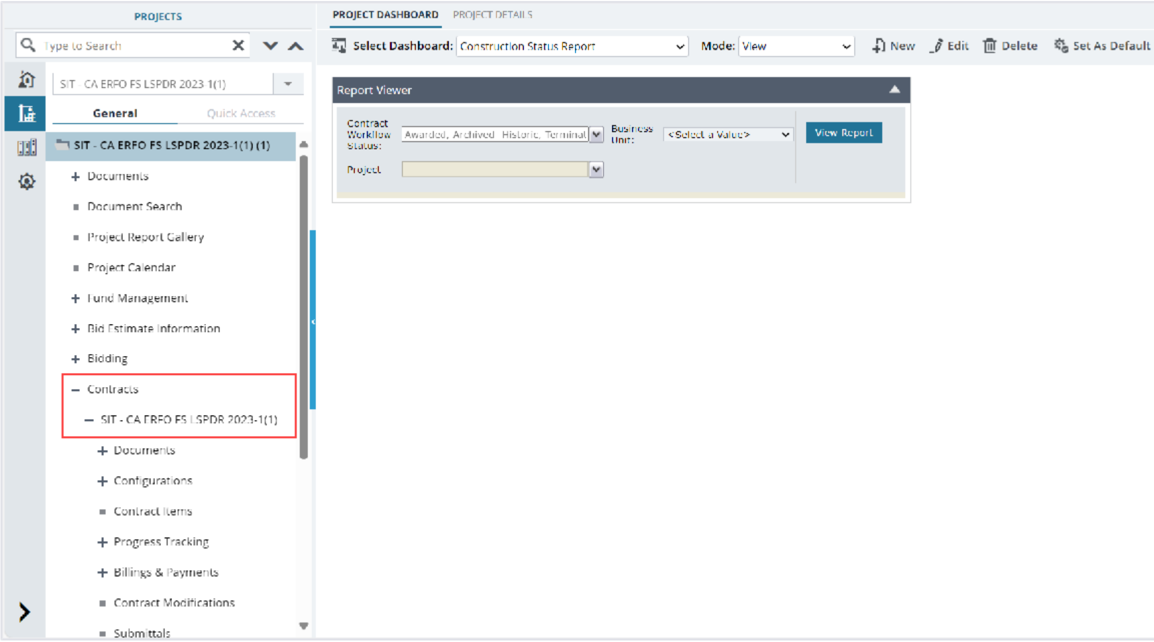


Figure 116: Navigation to Contracts

4. Click **Contract Items**.

   The **ITEM LIST** page is displayed

5. Click **Unlock**.

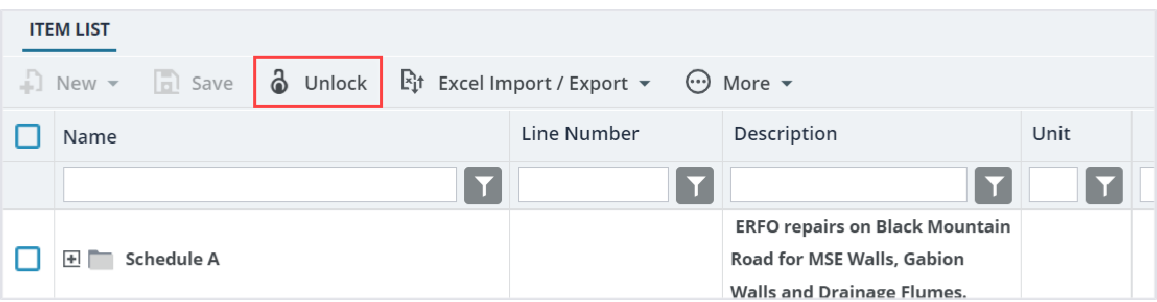


Figure 117: Unlock Option

   The confirmation message is displayed.

6. Click **OK**.

   The contract items of the contract are locked.

3.4. Billings and Payments

The Billings & Payments module enables you to record the item quantities posted, advances paid on materials and payments made for items that are partially completed or are completed in the contract. It also enables you to track important dates regarding payments and pay estimates.

You can perform the following tasks:

- 3.4.1. Manage items posted
- 3.4.2. Manage pay estimates
- 3.4.2.2. Track important dates related to the pay estimate

Billings and Payments Permission Matrix

This section provides information on the roles and corresponding permissions for the respective forms:

Table 5: Table 1 – Item Posting

Role	Create	Edit	View	Delete	Audit Log
Administrator	Yes	Yes	Yes	Yes	Yes
Construction Component Lead	Yes	Yes	Yes	–	Yes
Construction Admin Staff	Yes	Yes	Yes	–	Yes
Construction Engineer	–	–	Yes	–	–
Highway Construction Manager/QA QC	–	–	Yes	–	–
Construction Contractor Basic	Yes	Yes	Yes	–	–
Construction Contractor QC Manager	Yes	Yes	Yes	–	–
Construction Contractor Manager	Yes	Yes	Yes	–	–
Construction Operations Engineer	Yes	Yes	Yes	–	–
Inspector	Yes	Yes	Yes	–	–
Assistant Project Engineer	Yes	Yes	Yes	–	–

Role	Create	Edit	View	Delete	Audit Log
Project Engineer	Yes	Yes	Yes	–	–
Regional Engineer	Yes	Yes	Yes	–	–
Construction Inspection A&E Manager	–	–	Yes	–	–
Inspector A&E	Yes	Yes	Yes	–	–
Assistant Project Engineer A&E	Yes	Yes	Yes	–	–
Project Engineer A&E	Yes	Yes	Yes	–	–

Table 6: Table 2 – Pay Estimates

Role	Create	Edit	View	Delete	Audit Log
Administrator	Yes	Yes	Yes	Yes	Yes
Construction Component Lead	Yes	Yes	Yes	Yes	Yes
Construction Admin Staff	Yes	Yes	Yes	Yes	Yes
Construction Operations Engineer	Yes	Yes	Yes	Yes	–
Assistant Project Engineer	Yes	Yes	Yes	–	–
Project Engineer	Yes	Yes	Yes	Yes	–
Regional Engineer	Yes	Yes	Yes	Yes	–
Project Engineer A&E	Yes	Yes	–	–	–

Table 7: Table 3 – Pay Estimate Tracking

Role	Create	Edit	View	Delete	Audit Log
Administrator	Yes	Yes	Yes	Yes	Yes
Construction Component Lead	Yes	Yes	Yes	Yes	Yes

Role	Create	Edit	View	Delete	Audit Log
Construction Admin Staff	Yes	Yes	Yes	Yes	Yes
Construction Engineer	–	–	Yes	–	–
Highway Construction Manager/QAQC	–	–	Yes	–	–
Construction Contractor Basic	–	–	Yes	–	–
Construction Contractor QC Manager	–	–	Yes	–	–
Construction Contractor Manager	–	–	Yes	–	–
Construction Operations Engineer	Yes	Yes	Yes	Yes	–
Inspector	–	–	Yes	–	–
Assistant Project Engineer	Yes	Yes	Yes	–	–
Project Engineer	Yes	Yes	Yes	Yes	–
Regional Engineer	Yes	Yes	Yes	Yes	–
Construction Inspection A&E Manager	–	–	Yes	–	–
Inspector A&E	–	–	Yes	–	–
Assistant Project Engineer A&E	–	–	Yes	–	–
Project Engineer A&E	Yes	Yes	Yes	–	–

3.4.1. Item Posting

The Item Posting form is used to post contract items that are worked upon on a given day to track work progress and process payment.

You can create and approve the Item Posting record in two ways:

- Approved: This enables you to generate a pay estimate for the work completed.

- Approved for Info Only: This enables you to create an item posting for information only. These do not get added to the pay estimates.

You can post only one item or sub item in an Item Posting record.

While posting items, Masterworks allows you to post items greater than the remaining quantity of the contract items. The quantity overruns must eventually be addressed by a contract modification before the contract closeout.

You can perform the following tasks:

- 3.4.1.1. Create an item posting
- 3.4.1.2. Approve an item posting

3.4.1.1. Creating an Item Posting Record

Prerequisites

- Contract items are locked.
- The role of the logged-in user must be any of the following:
  - Administrator
  - Construction Component Lead
  - Construction Admin Staff
  - Construction Contractor Basic
  - Construction Contractor QC Manager
  - Construction Contractor Manager
  - Construction Operations Engineer
  - Inspector
  - Assistant Project Engineer
  - Project Engineer
  - Regional Engineer
  - Inspector A&E
  - Assistant Project Engineer A&E
  - Project Engineer A&E

    For more information on role-specific permissions, refer to Table 1 – Item Posting Permission Matrix.
- Final pay estimate is not generated.

Overview

The **Item Posting** form enables you to post the contract items used for the construction activities.

You can post only one item or sub item in an **Item Posting** record.

This form is configured for use in the mobile application. All the fields configured for the web application are available in the mobile application. Only the users who created the record can edit or delete it.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

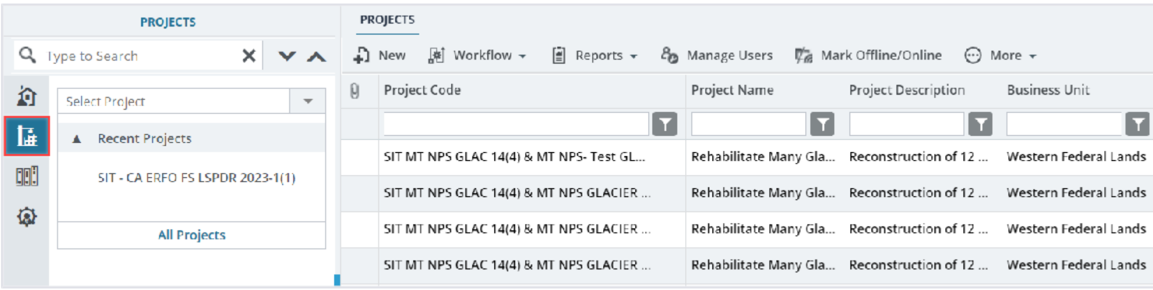


Figure 118: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

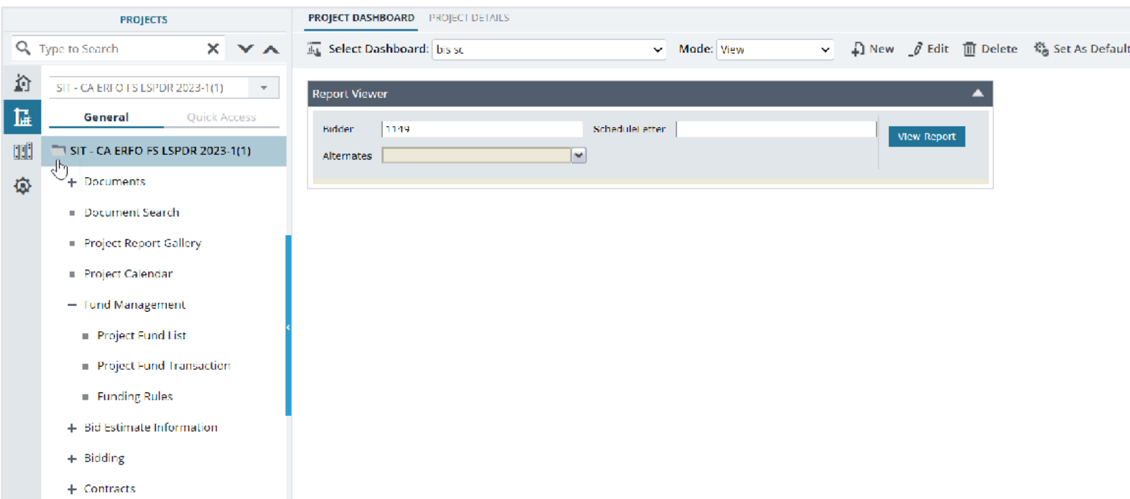


Figure 119: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

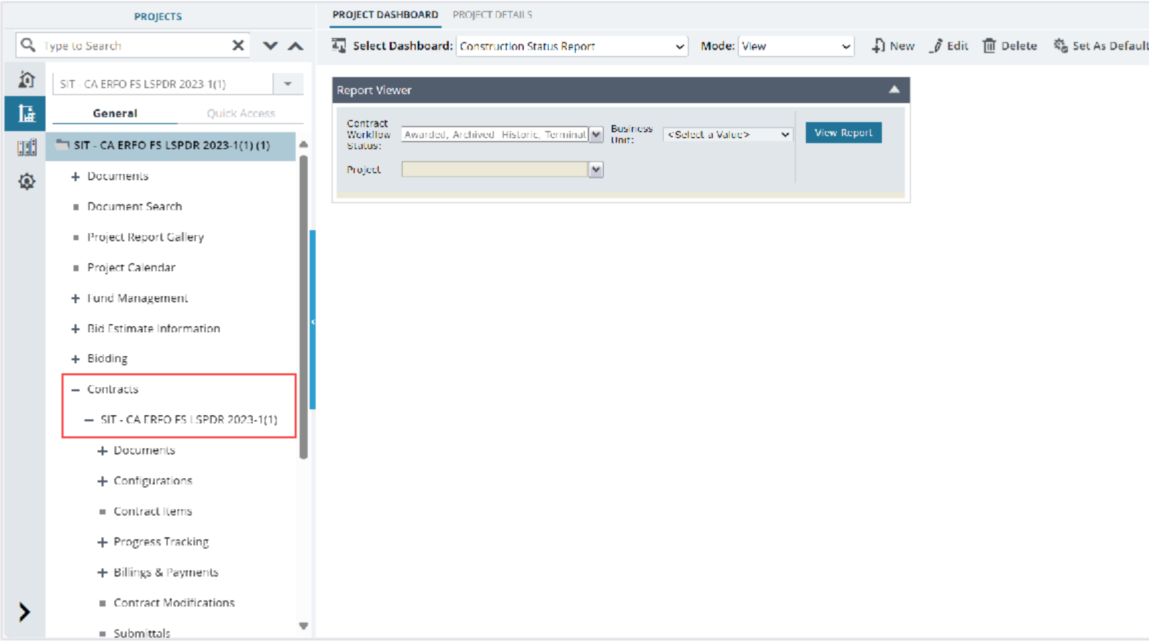


Figure 120: Navigation to Contracts

4. Expand the **Billings & Payments** folder, and then click **Item Posting**.
   The **ITEM POSTING** list page is displayed.

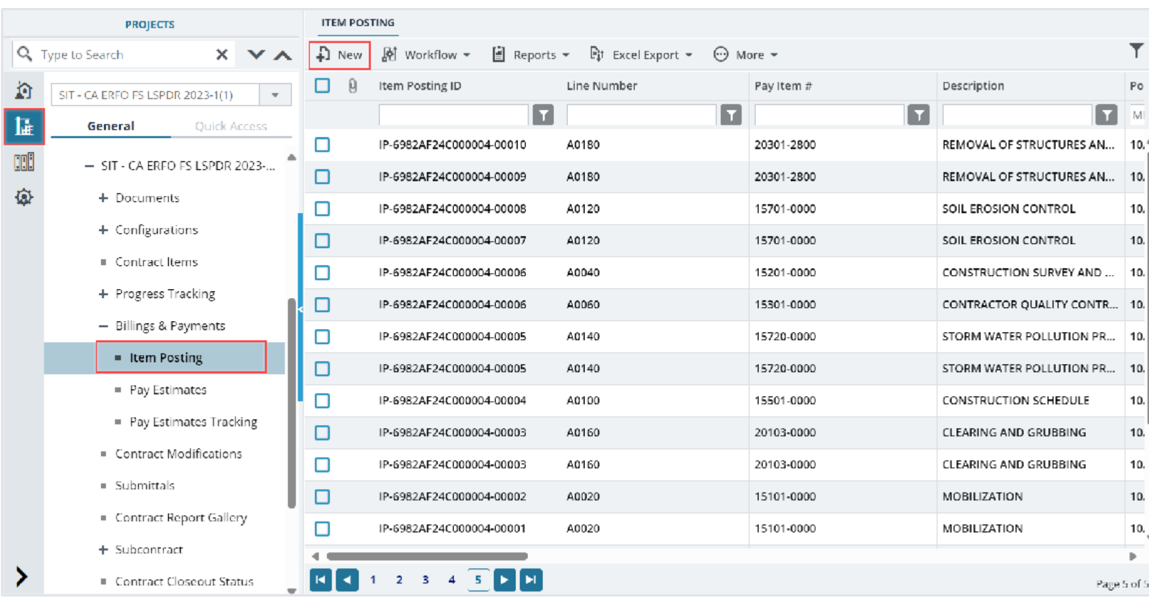


Figure 121: List Page of Item Posting Form

5. Click **New**.

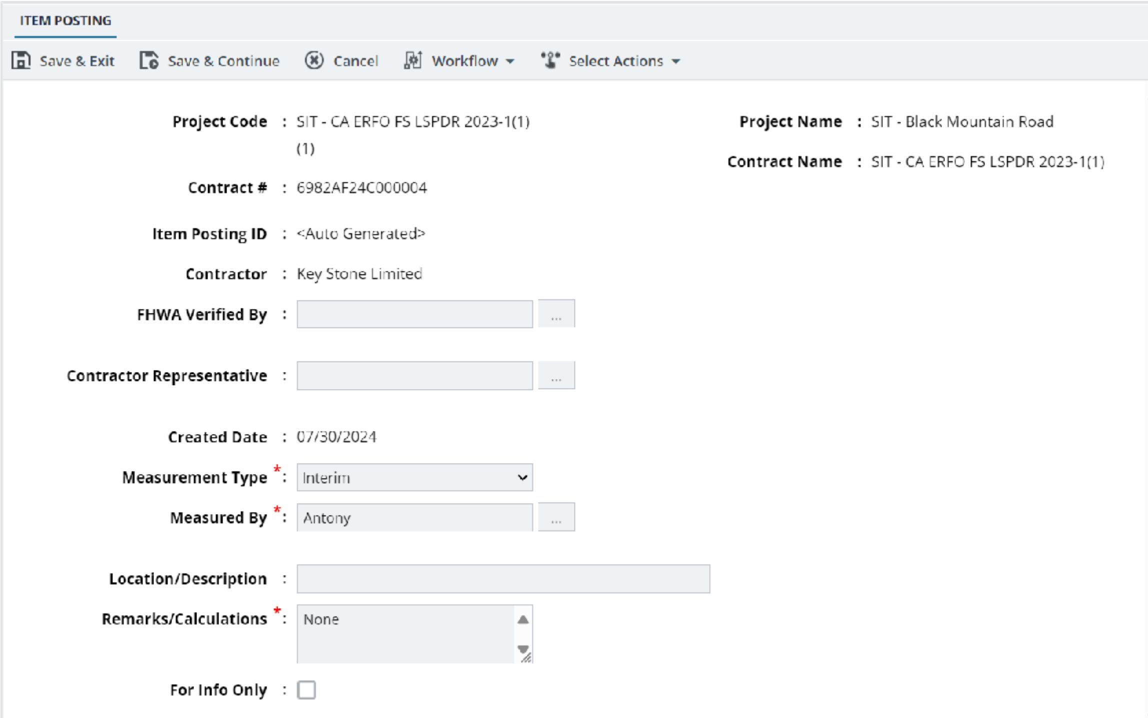


Figure 122: Item Posting Details Page

The **ITEM POSTING** page displays the following information:

Field Name	Description
Project Code	The project code as defined for the project.
Project Name	The name of the project.
Contract #	The value as displayed in the **Contract #** field of the **CONTRACT DETAILS** page.
Contract Name	The name of the contract.
Item Posting ID	On saving the record, a unique identification code for the item posting is automatically generated.
Contractor	The prime contractor associated with the contract.
Created Date	The current date is considered as the item posting creation date.
For Info Only	Once the record is moved to the **Approved for Info Only** workflow status, the system automatically selects the check box for this field.
Created By	The name of the logged-in user.

6. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
FHWA Verified By	To select the name of the FHWA official who has verified the item posting, perform the following steps: a. Click . The **FHWA Verified By** dialog box is displayed.

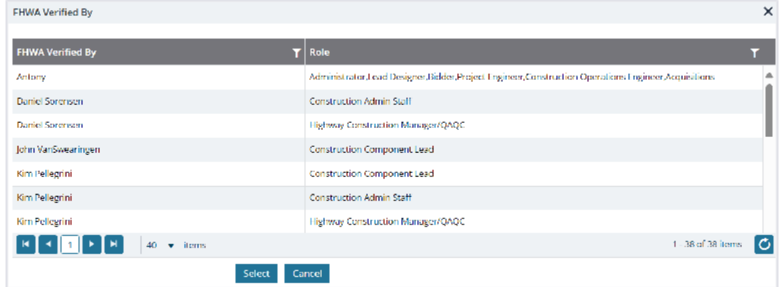
<table>
<tr><th>Field Name</th><th>Description</th></tr>
<tr><td></td><td>

Figure 123: FHWA Verified By Dialog Box

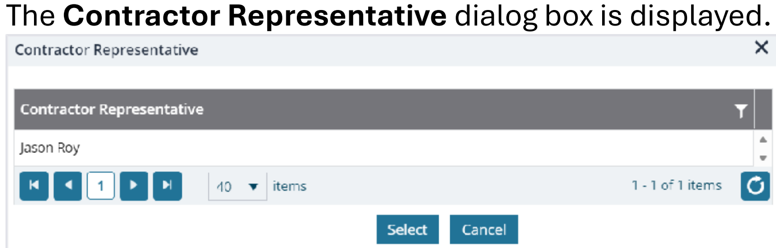
Available users are users invited to the contract with the appropriate role and permission set up in the Additional Permission Setup library catalog.
For more information on additional permissions, refer to the Additional Permissions Setup section in the A02 Library Management PG.
b. Click the appropriate name, and then click Select.
Optionally, you can enter the name of the user outside Masterworks.</td></tr>
<tr><td>Contractor Representative</td><td>To select the contractor representative, perform the following steps:
a. Click ... .
The Contractor Representative dialog box is displayed.


Figure 124: Contractor Representative Dialog Box

Available users are users invited to the contract with the appropriate role and permission set up in the Additional Permission Setup library catalog.
For more information on additional permissions, refer to the Additional Permissions Setup section in the A02 Library Management PG.

c. Click the appropriate name, and then click Select.
Optionally, you can enter the name of the user outside Masterworks.</td></tr>
<tr><td>Measurement Type</td><td>From the drop-down list, select the appropriate measurement type.
Available options are Interim and Final.</td></tr>
</table>

<table>
<tr><th>Field Name</th><th>Description</th></tr>
<tr><td></td><td>

Note: There is no impact to subsequent item postings if measurement type for the item posting is selected as Final. If an item is consumed completely, then you can add more item through a CM.

The drop-down list displays the types defined in the **Measurement Type** catalog of the library.

</td></tr>
<tr><td>Measured By</td><td>

To select the name of the person who measured the item posting quantities, perform the following steps:

a. Click .
The **Measured By** dialog box is displayed.

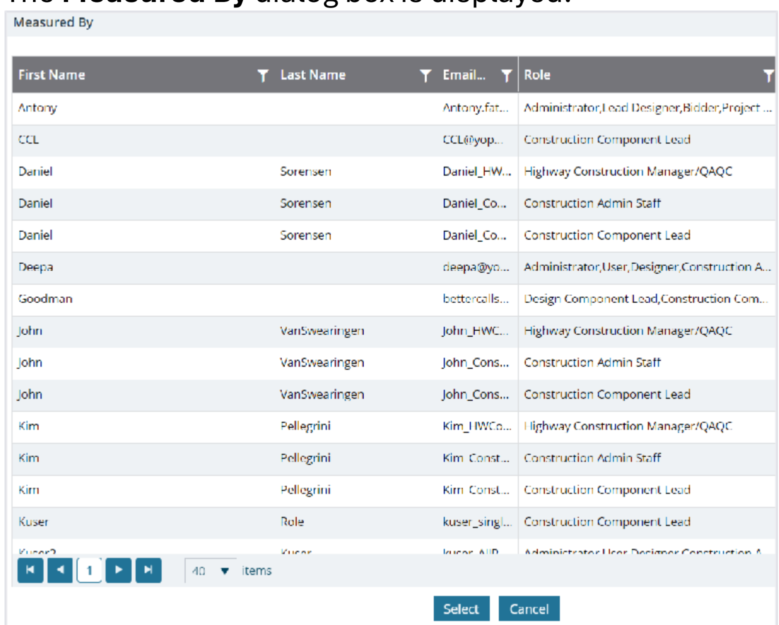


Figure 125: Measured By Dialog Box

Available users are users invited to the contract with the appropriate role and permission set up in the Additional **Permission Setup** library catalog.
For more information on additional permissions, refer to the **Additional Permissions Setup** section in the A02 **Library Management** PG.

b. Click the appropriate name, and then click **Select**.
Optionally, you can enter the name of the user outside Masterworks.

</td></tr>
<tr><td>Location/Description</td><td>Enter the location details of the worksite.</td></tr>
<tr><td>Remarks/Calculations</td><td>Enter any additional remarks relevant to the item posted.</td></tr>
</table>

7. To add items to post, perform either of the following steps:

- To add posted items from the previously created **Item Posting** record, if available, click **Add Last Items**.
  Note: Items that are marked as **Complete** are not available for posting.

- To add new items, in the **ITEMS POSTED** section, perform the following steps:
  a. Click **Add**.

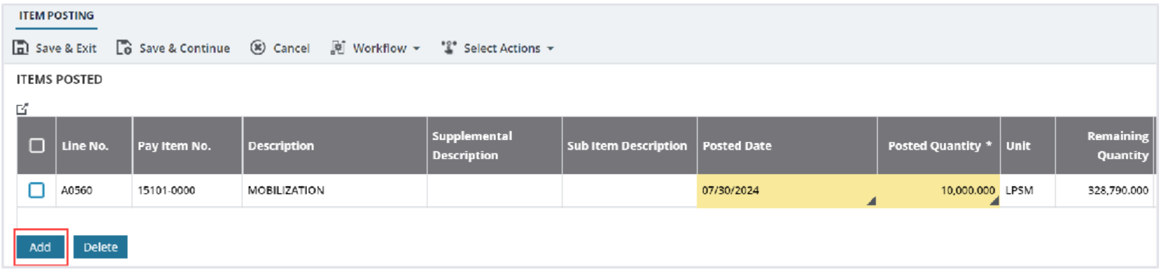


Figure 126: Items Posted Section

The **Please Select Item** dialog box is displayed.

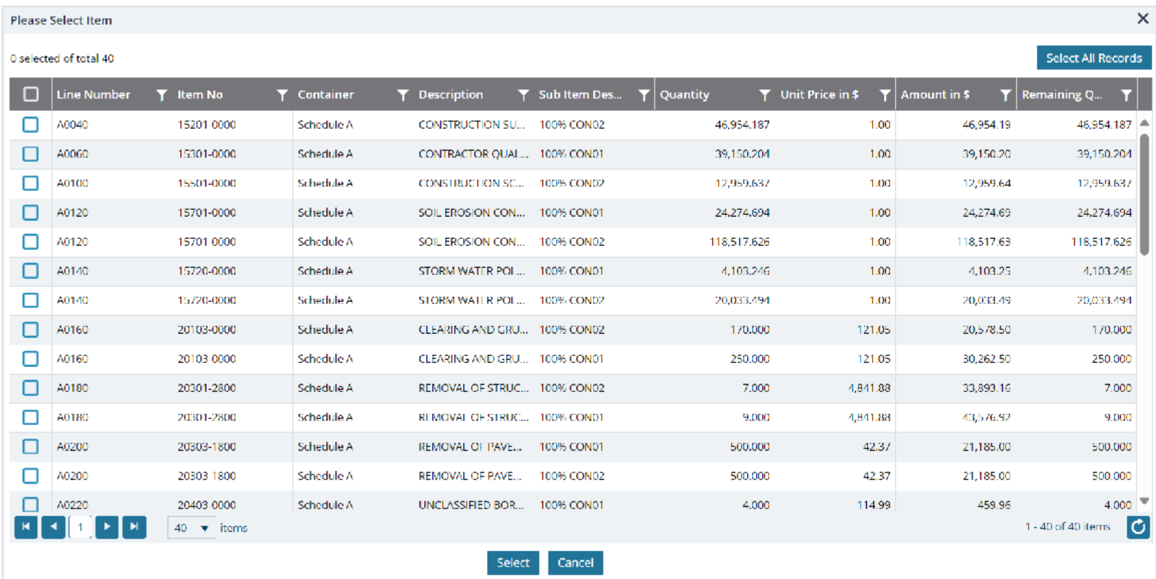


Figure 127: Please Select Item Dialog Box

Available options are the locked contract items in the contract.
Note: Items that are marked as Complete are not available for posting.

b. Click the appropriate items for posting, and then click **Select**.
Alternatively, to select all items from the list, click **Select All Records**, and in the confirmation dialog box, click **OK**.
The following information is displayed:

Field Name	Description
Line No.	The line number of the item from the **Contract Items** form.

Field Name	Description
Pay Item No.	The identification number of the item from the **Contract Items** form.
Description	The description of the item from the **Contract Items** form.
Sub Item Description	The description of the sub item from the **Contract Items** form.
Unit	The unit of the item from the **Contract Items** form.
Remaining Quantity	The remaining quantity of the selected item after calculating the sum of quantities of all approved item postings. Calculated as: Remaining Quantity = Revised Quantity - Sum of posted quantities of all approved item postings of the item
Unit Price in $	The unit price of the pay item from the **Contract Items** form.
Amount in $	Calculated as: Unit Price in $ x Revised Qty.
Posted Amount in $	The cost associated with the posted quantity. Calculated as: Unit Price in $ x Posted Qty
Revised Qty	The contract quantity including any changes.
Production Rate	Calculated as: Posted Quantity ÷ Total Production Days

c. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Posted Date	By default, the current date is displayed. To select the date on which items are posted, perform the following steps: i. Adjacent to the cell, click . ii. Select the appropriate date. Optionally, enter the date.
Posted Quantity	Enter the number of items posted on a given day. You can post quantity greater than the total quantity. **Note:** You can make a negative item posting to delete the specified item quantity from the posted quantity. To make a negative item posting, press the Minus Sign (-), and then enter the quantity to be decreased from the total posted quantity of the item.
Work Start Date	By default, the current date is displayed. To select the date on which the work started, perform the following steps: i. Adjacent to the cell, click . ii. Select the appropriate date. Optionally, enter the date.

Field Name	Description
Work End Date	By default, the current date is displayed. To select the date on which the work ended, perform the following steps: i. Adjacent to the cell, click . ii. Select the appropriate date. Optionally, enter the date.
Total Production Days	Enter the number of production days.

d. Optionally, to delete the posted item, perform the following steps:
   i. Select the check box adjacent to the appropriate posted item, and then click **Delete**.
      A confirmation message is displayed.
   ii. Click **OK**.
      The item is deleted from the section.

8. To add references of records of forms in the project, in the LINKED RECORDS section, perform the following steps:
   a. Click **Add**.
      The **SEARCH FORM** page is displayed.
   b. From the **Form** drop-down list, click and select the form you want to associate. Alternatively, type the name of the form, and then select the appropriate form. Available forms in the list are forms with the **IsSearchable** form attribute set to True. For additional information on form attributes, refer to **Form Builder in Administrator Guide**. All fields available in the selected form are displayed. To associate records, you can search for records in the selected form.
   c. In the form fields, enter the appropriate criteria to search.
   d. Optionally, expand the **Filter By Attachment** and **Filter By Workflow Status** sections, and enter additional criteria to search.
   e. In the toolbar, click **Search**.
      The information that matches the criteria is displayed in the **SEARCH RESULTS** section. Search results contain information of only projects to which you are invited.
   f. Optionally, to clear existing search results to search with new criteria, click **Reset**.
   g. In the **SEARCH RESULTS** section, select the appropriate records, and then click **Link**. The selected records are added to the **LINKED RECORDS** section.
      Note: To view the details of a linked record, in the **Description** column, click the appropriate record.

9. In the **REVIEW COMMENTS** box, enter any comments for the item posting.
10. Optionally, in the **ATTACHMENTS** section, upload or link related files. For information on attachments, refer to Section 4.1. Attachments.

11. Click **Save & Exit** to save the record and return to the list page. Optionally, click **Save & Continue** to save the record and continue on the same page. Click **Cancel** to discard the added information and exit the page.
    On saving the record, the record will be available in the **Draft** workflow status
    To perform the workflow actions, refer to Section 3.4.1.3. Item Posting Workflow Status.
    On approval of an item posting, the pay items of the item posting are utilized and are available for generating the pay estimate. If the item posting is created only for information, then the pay estimate is not generated for such item postings.

3.4.1.2. Approving an Item Posting

Prerequisites

Based on the workflow status of the record, the role of the logged-in user should be one of the following:

- Administrator
- Construction Component Lead
- Construction Admin Staff
- Construction Operations Engineer
- Construction Contractor Basic
- Construction Contractor QC Manager
- Construction Contractor Manager
- Regional Engineer
- Project Engineer
- Assistant Project Engineer
- Project Engineer A&E
- Assistant Project Engineer A&E
- Inspector
- Inspector A&E

Overview

This section explains the positive and forward workflow actions to reach the **Approved** workflow status. To move an **Item Posting** record through the defined workflow, perform the following steps:

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

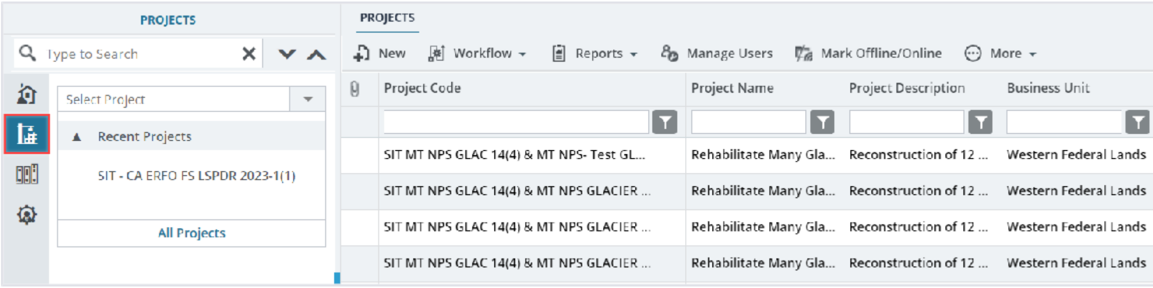


Figure 128: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

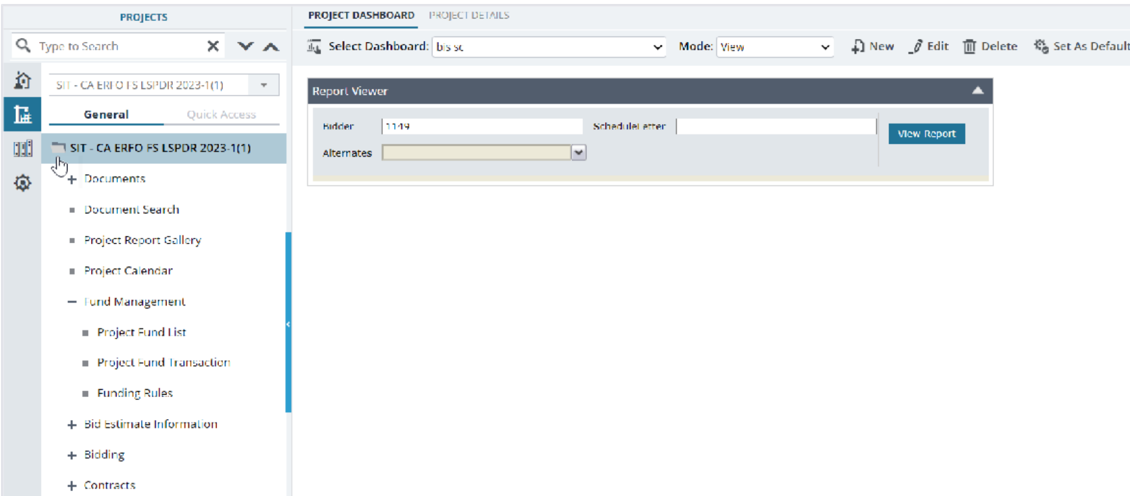


Figure 129: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

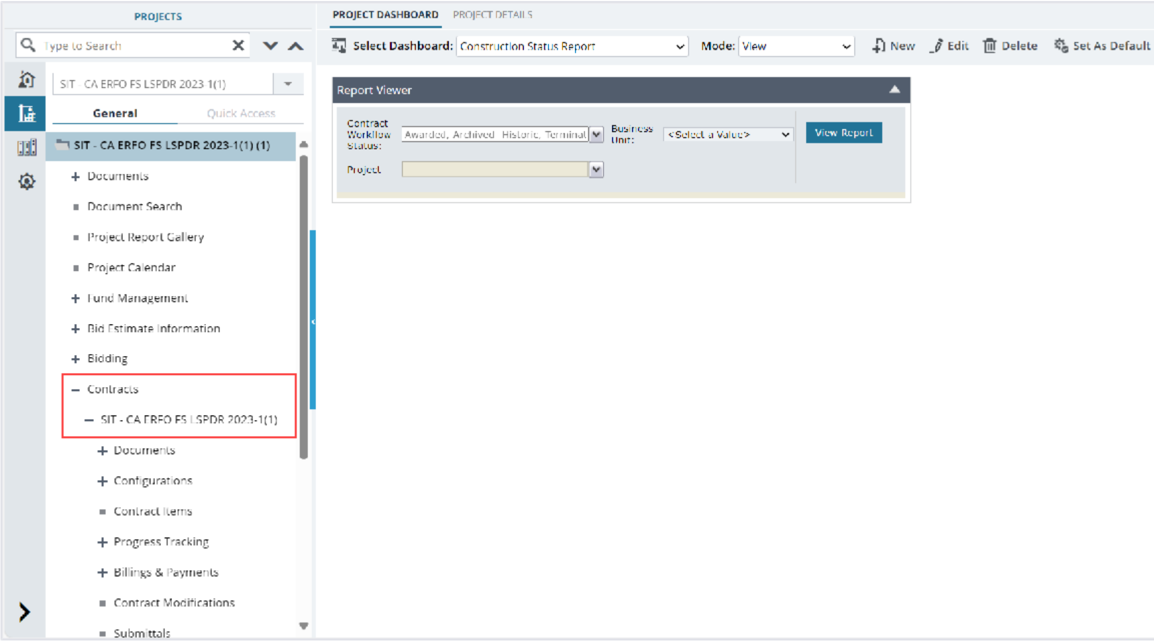
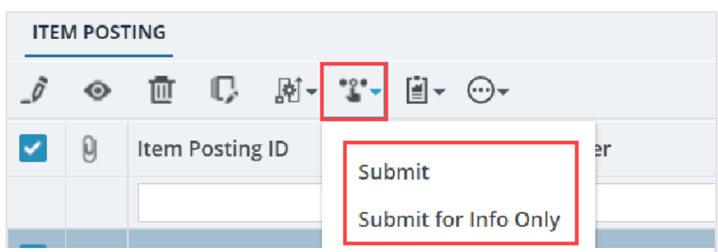
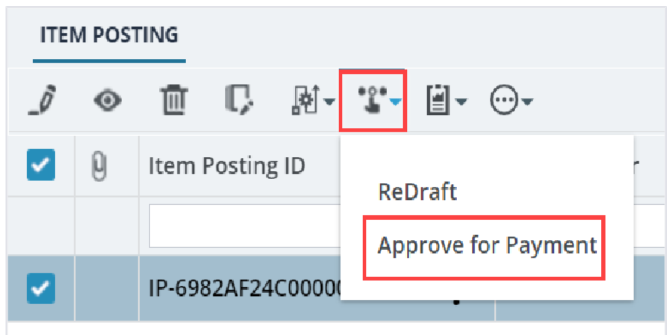
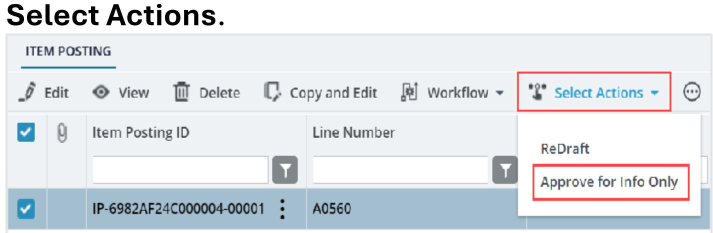


Figure 130: Navigation to Contracts

4. Expand the **Billings & Payments** folder, and then click **Item Posting**.
   The **ITEM POSTING** list page is displayed.
5. To approve the **Item Posting** record, perform the following steps:

Phase	Role	Workflow Steps
1	• Administrator • Construction Component Lead • Construction Admin Staff • Construction Operations Engineer • Construction Contractor Basic • Construction Contractor QC Manager • Construction Contractor Manager • Regional Engineer • Project Engineer	a. In the list page, select the appropriate record that is in the **Draft** workflow status, and then click **Select Actions**.  *Figure 131: Workflow Action – Submit or Submit for Info Only* *Figure 132: Submit Workflow Action* b. Click either **Submit** or **Submit for Info Only**, and in the Masterworks dialog box, click **OK**. Based on the workflow action, the workflow status of the record is set to either of the following: • If you select **Submit**, the workflow status of the record is set to **Submitted**.

Phase	Role	Workflow Steps
	• Assistant Project Engineer • Project Engineer A&E • Assistant Project Engineer A&E • Inspector • Inspector A&E	• If you select **Submit for Info Only**, the workflow status of the record is set to **Submitted for Info Only**. **Note:** The record is editable in both **Submitted** and **Submitted for Info Only** workflow status. If you are assigned with any of the roles mentioned in the **Roles** column, you can edit the **Item Posting** record, and even make changes to the **Items Posted** section.
2	• Administrator • Construction Component Lead • Construction Admin Staff • Construction Operations • Engineer • Regional Engineer • Project Engineer • Assistant Project Engineer • Project Engineer A&E • Assistant Project Engineer A&E	a. In the list page, select the appropriate record that is in the **Submitted** workflow status, and then click **Select Actions**.  *Figure 133: Workflow Action – Approve for Payment* b. Click **Approve for Payment**, and in the Masterworks dialog box, click **OK**. The workflow status of the record is set to **Approved**.
3	• Administrator • Construction Component Lead • Construction Admin Staff • Construction Operations Engineer • Regional Engineer • Project Engineer • Assistant Project Engineer • Project Engineer A&E	a. In the list page, select the appropriate record that is in the **Submitted for Info Only** workflow status, and then click **Select Actions**.  *Figure 134: Workflow Action – Approve for Info Only* b. Click **Approve for Info Only**, and in the Masterworks dialog box, click **OK**. The workflow status of the record is set to **Approved for Info Only**.

Phase	Role	Workflow Steps
	• Assistant Project Engineer A&E	

3.4.1.3. Item Postings Workflow Status

The following table provides the workflow actions and status (current and subsequent stage of the Item Posting record.

For information on setting a workflow status to the next status, refer to Section 4.3. Workflow Status Transitions.

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
1	Draft	• Administrator • Construction Component Lead • Construction Admin Staff • Construction Operations Engineer • Construction Contractor Basic • Construction Contractor QC Manager • Construction Contractor Manager • Regional Engineer • Project Engineer • Assistant Project Engineer • Project Engineer A&E • Assistant Project Engineer A&E	Submit	Submitted	After the record is moved to the Submitted workflow status, you cannot delete it. However, you can edit it.
			Submit for Info Only	Submitted for Info Only	Upon performing the **Submit for Info Only** workflow action, the system automatically selects For **Info Only** check box of the **Item Posting** record.

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
		• Inspector • Inspector A&E			
2	Submitted	• Administrator • Construction Component Lead • Construction Admin Staff • Construction Operations Engineer • Regional Engineer • Project Engineer • Assistant Project Engineer • Project Engineer A&E • Assistant Project Engineer A&E	Approve for Payment	Approved	-
			ReDraft	Draft	-
3	Submitted for Info Only	• Administrator • Construction Component Lead • Construction Admin Staff • Construction Operations Engineer • Regional Engineer • Project Engineer • Assistant Project Engineer • Project Engineer A&E	Approve for Info Only	Approved for Info Only	-
			ReDraft	Draft	-

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
		• Assistant Project Engineer A&E			
4	Approve	• Administrator • Construction Component Lead • Construction Admin Staff • Construction Operations Engineer • Regional Engineer • Project Engineer • Assistant Project Engineer • Project Engineer A&E • Assistant Project Engineer A&E	Undo Approve	Submitted	You can move the record to the **Submitted** workflow status only if the items are not part of any Pay Estimates. If the items are already part of **Pay Estimates**, ensure they are removed from the pay estimate to proceed with the workflow action. This is possible only if the Pay Estimate is in **Draft** workflow status.

3.4.1.4. Generating Item Posting Report

Based on the roles assigned to you, you can generate various item postings report that illustrate various information views. These reports enable various stakeholders to stay up-to- date on the status of the pay notes.

You can generate various payment reports from the Item posting list page.

Pay Note Report Permission Matrix

From the **ITEM POSTING** list page, the following roles can generate reports:

- Administrator
- Construction Component Lead
- Construction Admin Staff

- Construction Engineer
- Highway Construction Manager/QA QC
- Inspector
- Assistant Project Engineer
- Project Engineer
- Regional Engineer
- Construction Inspection A&E Manager
- Inspector A&E
- Assistant Project Engineer A&E
- Project Engineer A&E

3.4.1.4.1. Item Posting List Page Report

Overview

Based on the roles assigned to you, you can generate reports that illustrate various information views. For more information on report permissions, refer to Pay Note Report Permission Matrix.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

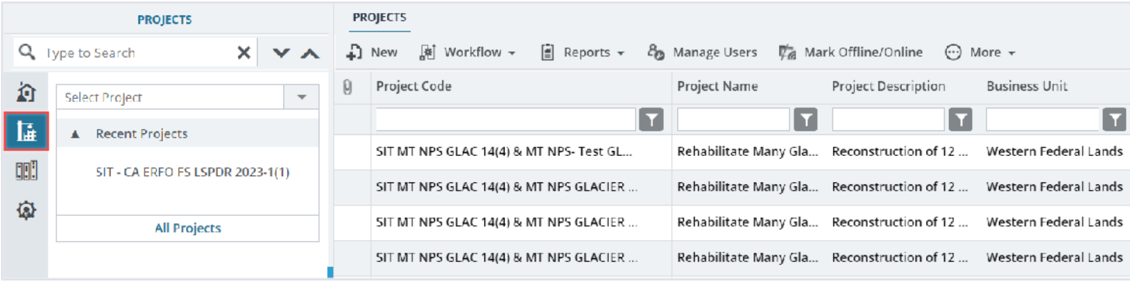


Figure 135: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

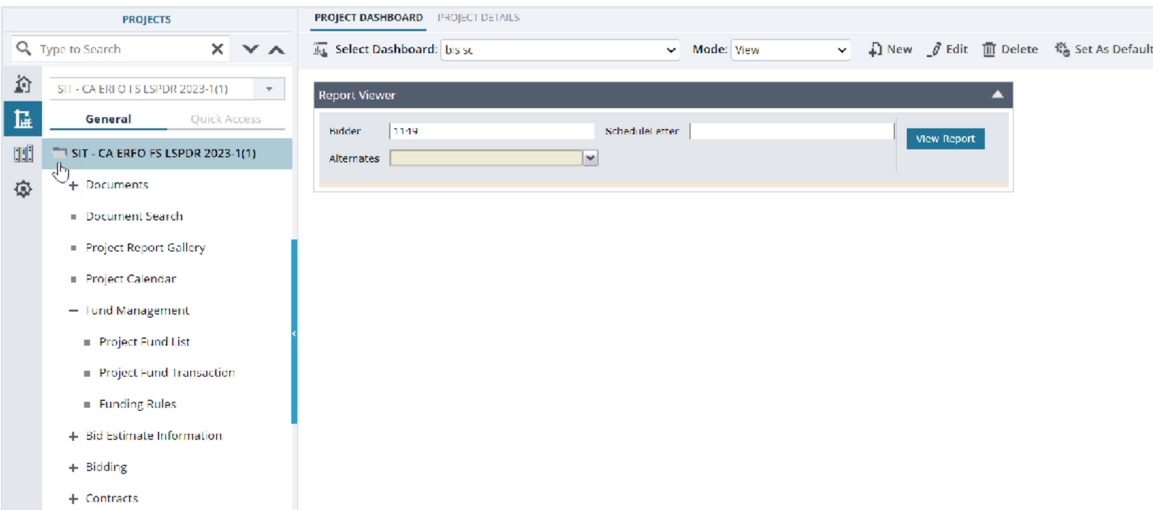


Figure 136: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

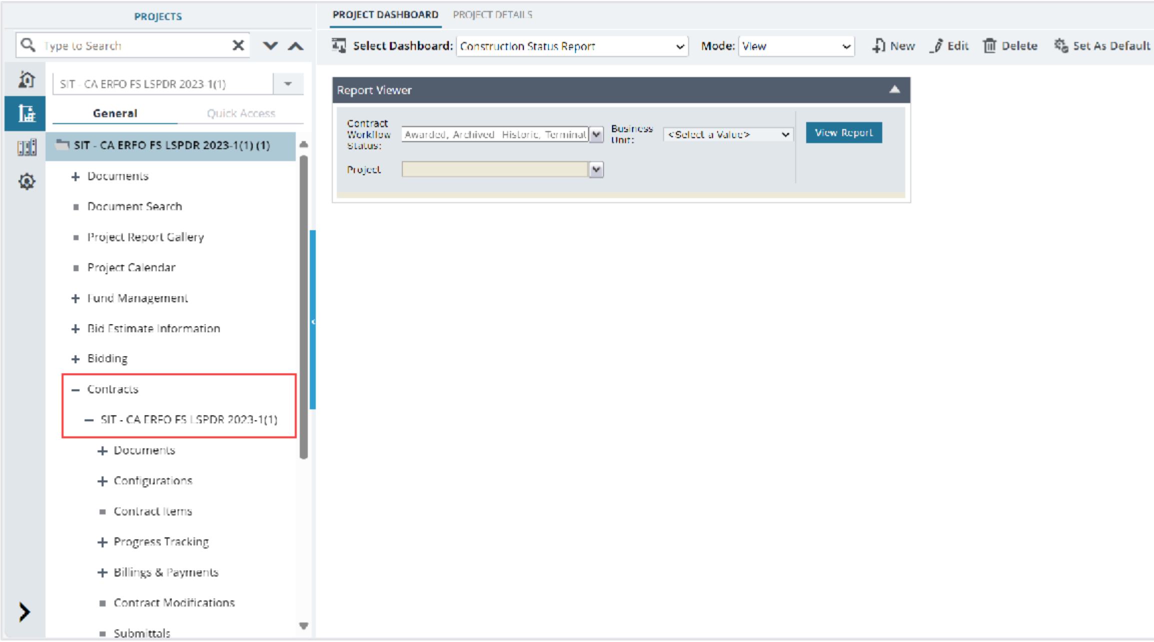


Figure 137: Navigation to Contracts

4. Expand the **Billings & Payments** folder, and then click **Item Posting**.
   The **ITEM POSTING** list page is displayed.

5. In the list page, click **Reports**, and then click **Pay Note Report**.

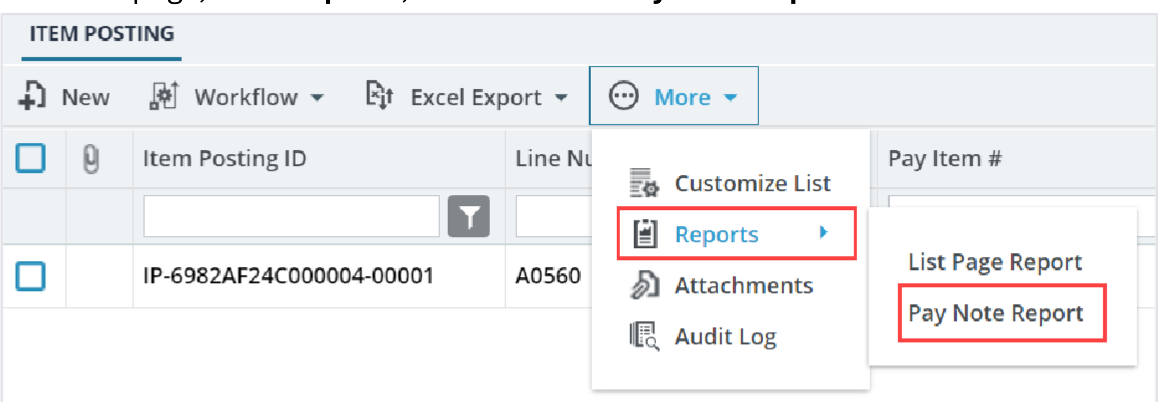


Figure 138: Reports Option

The report is generated and displayed.

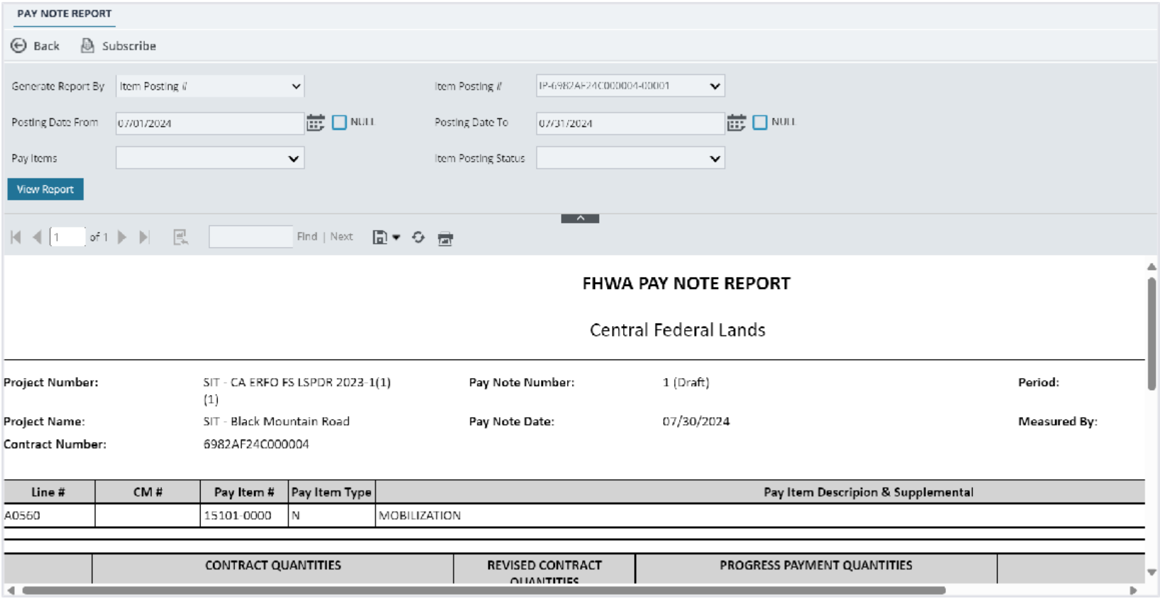


Figure 139: Pay Note Report

3.4.2. Pay Estimates

Pay estimates are estimations of payment to contractors for a pay period.

The **Pay Estimates (PE)** form enables you to consolidate item postings for a pay period and generate the required payment for a pay period. The following factors are taken into consideration in a progress estimate:

- The completed work items that have been posted and approved
- Deduction of payment based on certain retainage for specific items
- Any adjustments due to liquidated damages or addition of items, and so on
- Any advance payment or recovery of advance payment made to the contractor
- Retention of certain part of the payment
- Release of previously held retention, if any

You can generate pay estimates for partially or fully completed items that have been posted and approved.

The process of generating pay estimates starts with posting completed work items through the **Item Posting** form. Pay estimates are necessary to process payments that must be made to a contractor, after recovering contract advances and retainage. Masterworks automates the process of consolidating approved item postings for the contract.

The **Pay Estimates** form also provides a summary of fund requirements across various account codes and enables you to override the system-defined fund calculations. Based on the funding rules applied to the various items posted and adjustments, you can get a funding summary on the amount that is getting consumed from the respective fund source for the payment of the item. It also gives an estimate on how much amount must be withdrawn from the appropriate fund source for payment to the contractor.

Note: Only users with permission defined in the **Additional Permissions Setup** catalog of the library can view and update the **Probables**.

For more information on additional permissions, refer to the **Additional Permissions Setup** section in the **A01 Library Management PG**.

If the fund source does not have sufficient fund for payment of the material, then based on the account priority specified, the fund is consumed from the lower priority fund source.

You can perform the following tasks:

- 3.4.2.1. Generate pay estimate
- 3.4.2.2. Track important dates of a pay estimate
- 3.4.2.3. Set the pay estimate to paid

3.4.2.1. Generating a Pay Estimate

Prerequisites

- Contract items are locked.
- Approved fund sources must be available.
- You can generate only one pay estimate for a selected date range.
- The role of the logged-in user must be one of the following:
    - Administrator
    - Construction Component Lead
    - Construction Admin Staff
    - Construction Operations Engineer
    - Assistant Project Engineer
    - Project Engineer
    - Regional Engineer
    - Project Engineer A&E
- You must have the permission to update **PE Work Done: Probables** and **Pay Estimates Adjustment: Probables** fields.
  For more information on additional permissions, refer to the **Additional Permissions Setup** section in the **A01 Library Management** PG.
- If there are any prior pay estimates, then the records must be in the **Approved for Payment** or **Paid** workflow status. For more information on the pay estimate workflow, refer to Section 3.4.2.4. Pay Estimate Workflow Status.
- Final pay estimate should not be generated.

Overview

In the **Pay Estimates** form, you have the following options:

- **New Pay Estimate:** This is used to generate a pay estimate periodically to pay contractors for the work done.
- **New Final Pay Estimate:** This is used to generate final pay estimate after the balance change modification has been issued and the final voucher is ready to be processed.

A **Pay Estimate** is generated to estimate the pay for the work done. Work done is measured from approved item postings. It also enables you to manage retainage, make adjustments, and provide advance payments to the contractor throughout the contract lifecycle.

It also provides a summary of funding requirements across various account codes and enables you to override the system-defined funding calculations.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

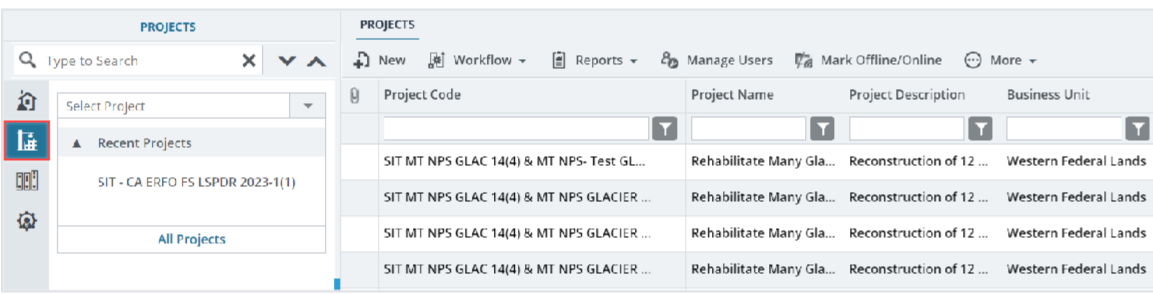


Figure 140: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

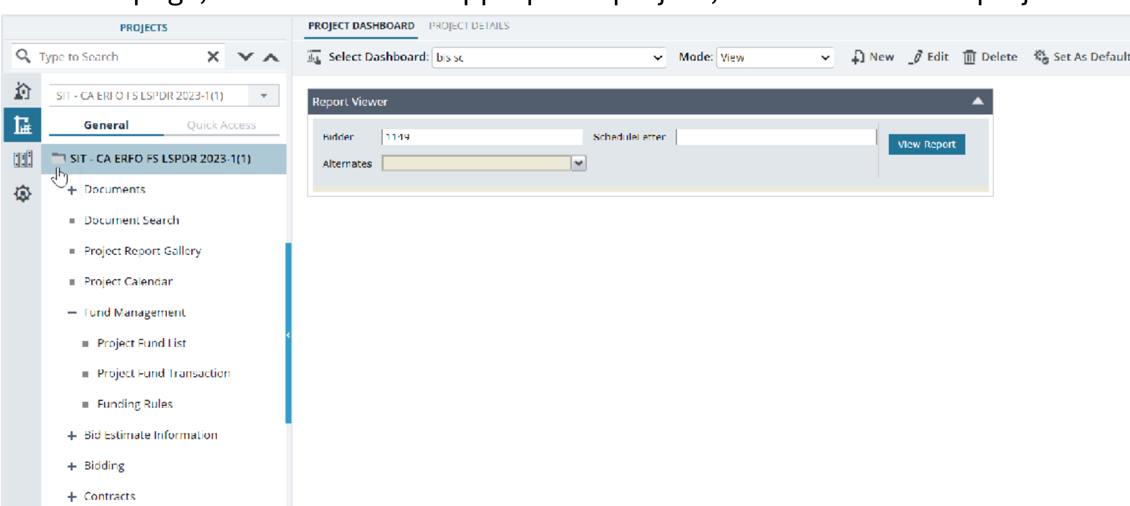


Figure 141: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

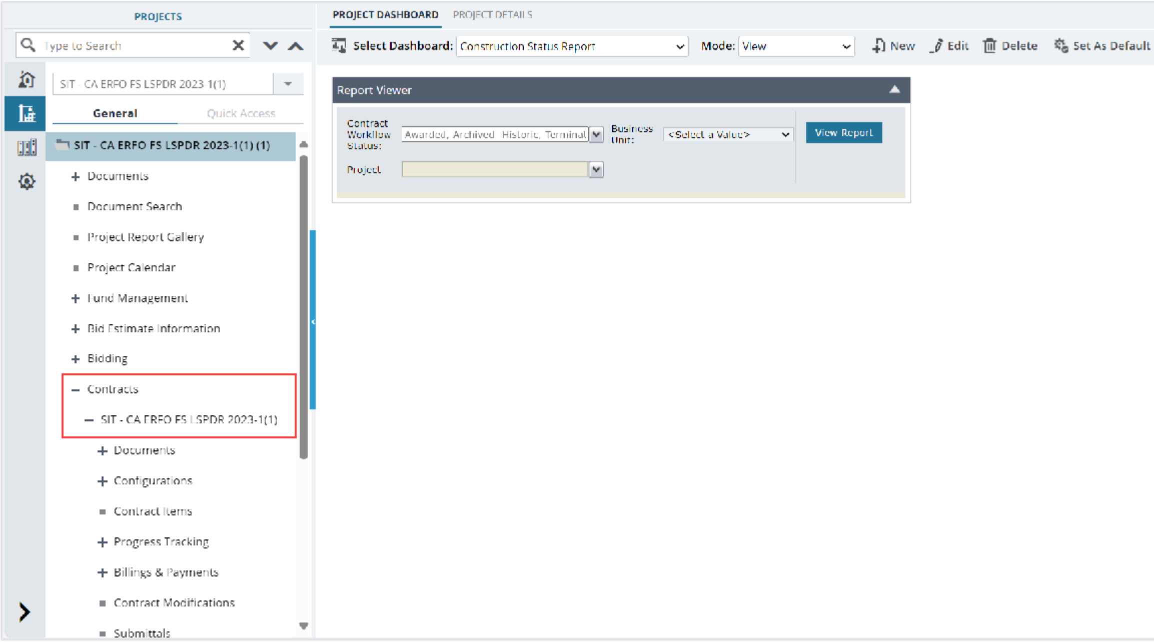


Figure 142: Navigation to Contracts

4. Expand the **Billings & Payments** folder, and then click Pay Estimates.
   The **PAY ESTIMATES LIST** page is displayed.

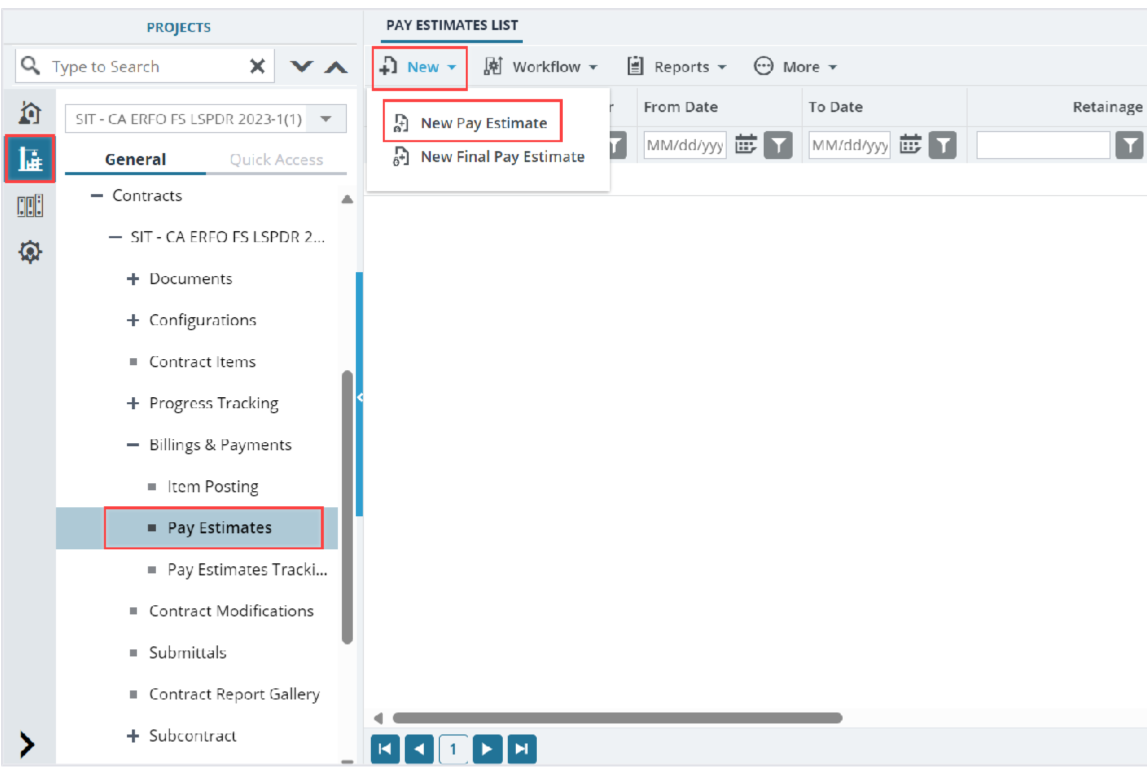


Figure 143: List Page of Pay Estimate Form

5. Click **New**, and then click **New Pay Estimate**.

The **NEW PAY ESTIMATE** page is displayed.

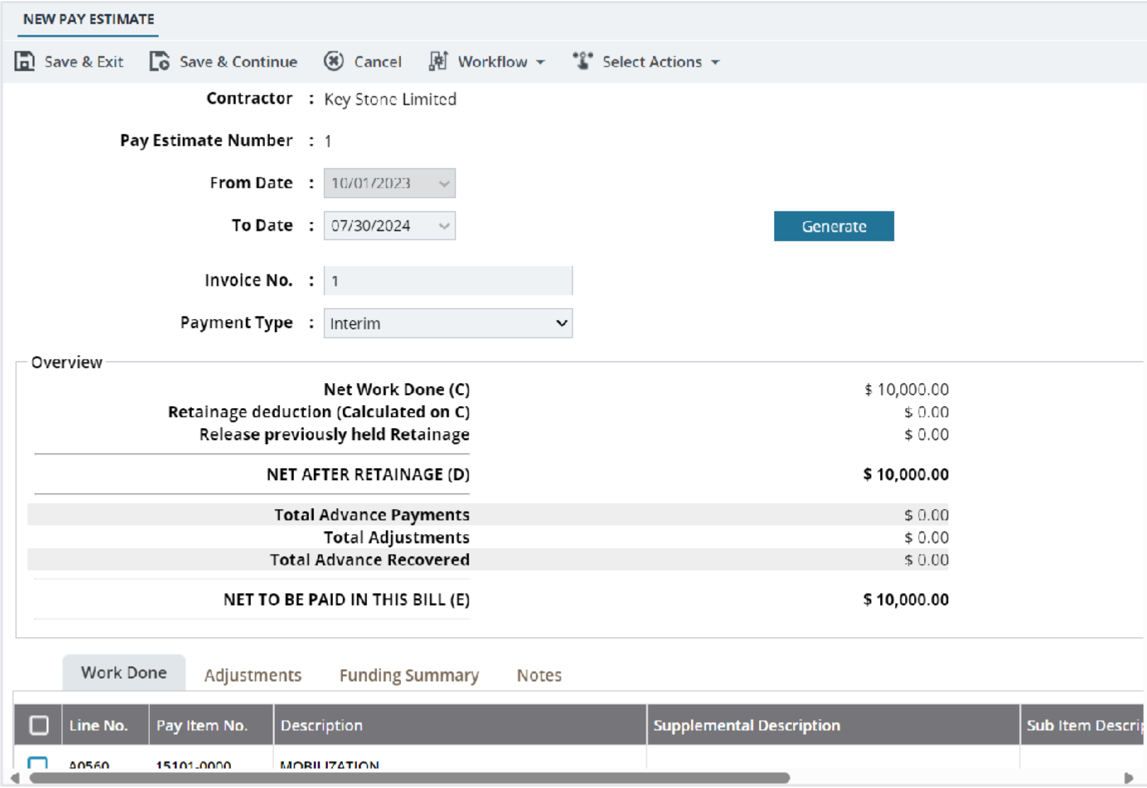


Figure 144: New Pay Estimate Details Page

The **NEW PAY ESTIMATE** displays the following information:

Field Name	Description
Contractor	The prime contractor for the contract.
Pay Estimate Number	The sequential order of the estimate generated.
From Date	For the first pay estimate, the time start date of the contract is displayed. For subsequent pay estimates, it is calculated as the **To Date** of the previous pay estimate plus one day. **Note:** You cannot select the **From Date** as you cannot have overlapping dates to generate pay estimates. It means, you can generate only one pay estimate for a selected time period.

6. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
To Date	From the drop-down list, select the date up to which the pay estimate must be generated.
Invoice No	Enter a unique invoice code for the pay estimate.
Payment Type	A default value is displayed.

Field Name	Description
	Optionally, from the drop-down list, select the appropriate payment type. Available options are Final, Initial, Interim, etc. The drop-down list displays the payment types defined in the **Payment Type** catalog of the library.

7. Click **Generate** to view the item postings that were approved in the selected period.
   The **Work Done** tab displays the list of all approved item postings that have not been included in any previous pay estimates and have **Posted Date** on or before the **To Date** of the pay estimate.

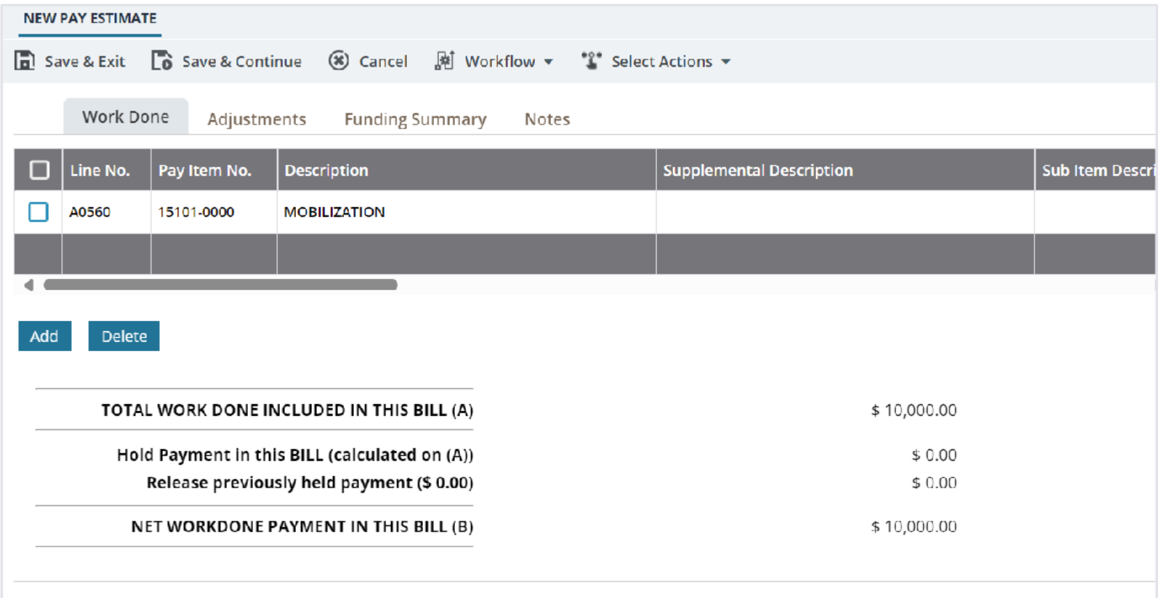


Figure 145: Work Done Tab

The **Work Done** tab displays the following information:

Field Name	Description
Line No.	The line number of the item from the **Contract Items** form.
Pay Item No.	The identification number of the item from the **Contract Items** form.
Description	The description of the item from the **Contract Items** form.
Supplemental Description	The supplemental description of the item from the **Contract Items** form.
Sub Item Description	The description of the sub item from the **Contract Items** form.
Posting Date	The date on which the item was posted.
Posted Qty	The quantity of items posted on a given day.
Rate in $	The unit price of the pay item from the **Contract Items** form.
Amount in $	It is calculated as: Posted Qty x Rate in $
Previously Held Qty	A value is displayed if there were any quantities retained in the previous pay estimate for the same approved item posting. **Note:** If the same item is posted in multiple item postings and are

Field Name	Description
	included in the pay estimate, then Masterworks displays those items as separate entries. Therefore, the previously held information is displayed for the first entry of that pay item. Otherwise, it can cause confusion as you might count the previously held quantities twice.
Net Qty	It is calculated as: (Posted Qty - Hold Qty this PE) + Previously Held Qty Release this PE
Net Amount	It is calculated as: Net Qty x Rate in $
Probable Amount	By default, it displays the probable amount for the item as defined in the **ITEM LIST** page of the **Contract Items** form. Additionally, if you modify the value in the **Probable Qty** field, the amount is updated accordingly. Calculated as: Probable Qty x Unit Price in $ **Note:** Only users with permission defined in the **Additional Permissions Setup** catalog of the library can view and update this field. For more information on additional permissions, refer to the **Additional Permissions Setup** section in the **A01 Library Management PG**.
O/U%	Calculated as: [(Probable Amount – Revised Amount) ÷ Revised Amount] x 100 **Note:** Only users with permission defined in the **Additional Permissions Setup** catalog of the library can view and update this field. For more information on additional permissions, refer to the **Additional Permissions Setup** section in the **A01 Library Management PG**.

a. To update the necessary information for the approved item postings, in the **Work Done** tab, provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Previously Held Qty Release this PE	To release the amount for the previously held quantity, enter the quantity to be released in this pay estimate. **Note:** You cannot release quantity greater than the previously held quantity.
Hold Qty this PE	To withhold part of the amount payable in this pay estimate, enter the quantity to be held. **Note:** You cannot hold quantity greater than the posted quantity.

Field Name	Description
	You can release the amount held in subsequent pay estimates.
Probable Qty	By default, it displays the probable quantity as defined in the **ITEM LIST** page of the **Contract Items** form. Optionally, enter the appropriate probable quantity. Once the **Pay Estimate** record is approved, the same quantity is updated in the **Contract Items** and **Contract Modifications** form. **Note:** Only users with permission defined in the **Additional Permissions Setup** catalog of the library can view and update this field. For more information on additional permissions, refer to the **Additional Permissions Setup** section in the **A01 Library Management PG**.
Remarks	Enter any notes for the pay item.

b. Optionally, perform any of the following, as applicable:

- To add approved item posting manually, perform the following steps:
  i. Click **Add**.
  The **Workdone List** dialog box is displayed.

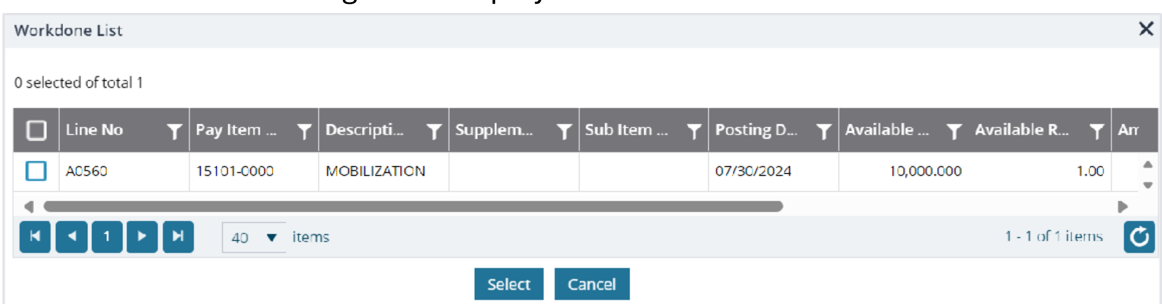


Figure 146: Workdone List Dialog Box

  ii. Click the appropriate item postings, and then click **Select**.
  iii. Make the necessary changes.
- To delete item postings which are not relevant to the pay estimate, perform the following steps:
  i. Select the appropriate item postings, and then click **Delete**.
  A confirmation message is displayed.
  ii. Click **OK**.

The **TOTAL WORK DONE INCLUDED IN THIS BILL (A)** displays the sum of all item postings that are displayed in the **Work Done** tab.

The **NET WORKDONE PAYMENT IN THIS BILL (B)** is calculated as the difference between the **TOTAL WORK DONE INCLUDED IN THIS BILL (A)** and **Hold Payment in this BILL (calculated on (A)) amount**, plus **Release previously held payment ($)**.

8. In the **Adjustments** tab you can make adjustments such as retain part of the payment, record the advance payments, and other necessary adjustments. It displays all the previously held adjustment entries, if applicable.

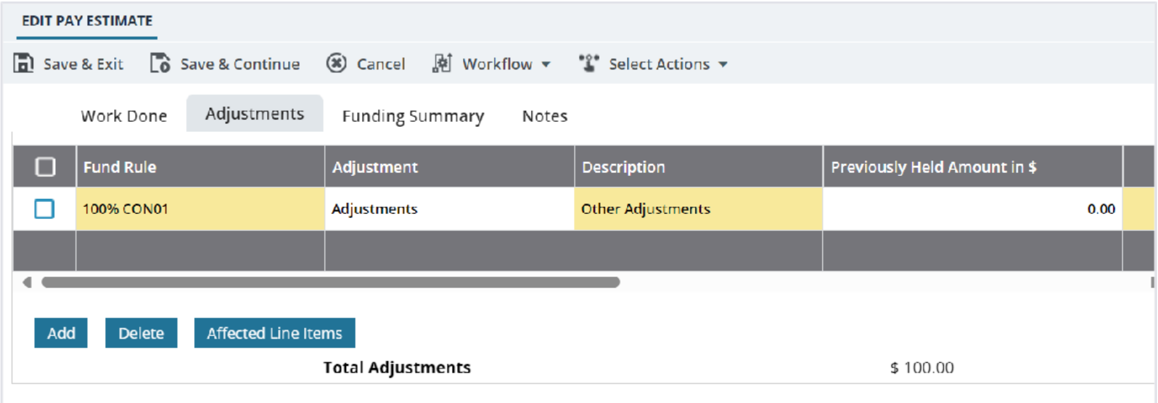


Figure 147: Adjustments Tab

To add adjustments, perform the following steps:

a. Click **Add**.

The **Adjustments List** dialog box is displayed.

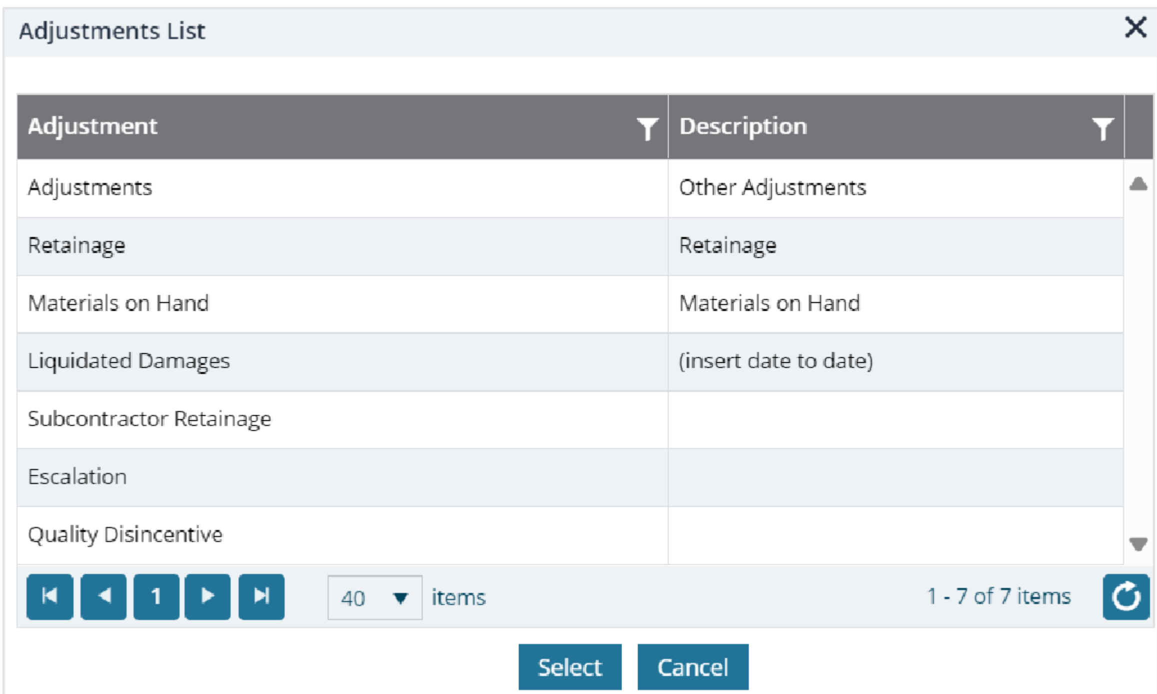


Figure 148: Adjustments List Dialog Box

Available options are adjustments defined in the **Adjustments** catalog of the library.

b. Click the appropriate option, and then click **Select**.

The adjustment is added to the section. The following information is displayed:

Column Name	Description
Adjustment	The adjustment as defined in the **Adjustments** catalog of the library.

Column Name	Description
Previously Held Amount in $	The amount previously retained for the adjustment.

c. Provide the appropriate information in the fields, as described in the following table:

Column Name	Description
Fund Rule	To associate a fund rule for the adjustment, select the appropriate fund rule from the drop-down list. Available options are active and approved fund rules defined in the **Funding Rules** form of the project. **Note:** The fund rule aids in calculating the funding summary.
Description	By default, the description for the adjustment as defined in the **Adjustments** catalog of the library is defined. Optionally, enter the description for the adjustment.
Adjustment this PE in $	Enter the amount for the adjustment. **Note:** • If you are adding a retainage, then you must prefix the value with a - sign. • If you are recovering the advance paid, then against the adjustment Materials on Hand you must prefix the value with a Minus (-) sign.
Probable Amount in $	Enter the appropriate probable amount for the adjustment. **Note:** Only users with permission defined in the **Additional Permissions Setup** catalog of the library can view and update this field. For more information on additional permissions, refer to the **Additional Permissions Setup** section in the **A01 Library Management PG**.
Invoice Number	**Note:** You can enter an invoice number only if the **Adjustment** is selected as **Materials on Hand**. For reference and tracking purpose, enter the number that is available in the invoice.
Affected Line Item	**Note:** • You can add the affected line item only if the Adjustment is selected as Materials on Hand. • The system prompts you to save the existing information before adding the affected line item.

Column Name	Description
	To add the item that is affected by the advance payment, perform the following steps: i. Select the appropriate adjustment, and then click **Affected Line Item**. The **AFFECTED LINE ITEMS** page is displayed. ii. From the **Affected Line Item** drop-down list, select the appropriate line items. Available options are locked contract items of the contract. iii. Click **Save & Exit**.

The **Total Adjustments** displays the sum of all adjustments, retainage, and advance payments.

d. Optionally, perform the following steps, as applicable:

- To edit adjustments, click the editable cells, and make the necessary changes.
- To delete adjustments, perform the following steps:

  Note: You cannot delete an adjustment that is carried forward from the previous pay estimate to the current pay estimate.

  i. Select the appropriate record, and then click **Delete**.
  A confirmation message is displayed.
  ii. Click **OK**.

9. The **Funding Summary** tab provides summary about the funding requirements. Based on the funding rule assigned to the item postings and adjustments, it displays the amount that is available in the fund source to enable funding of the work done and adjustments made. It also gives an estimate on how much amount must be withdrawn from the appropriate fund source.

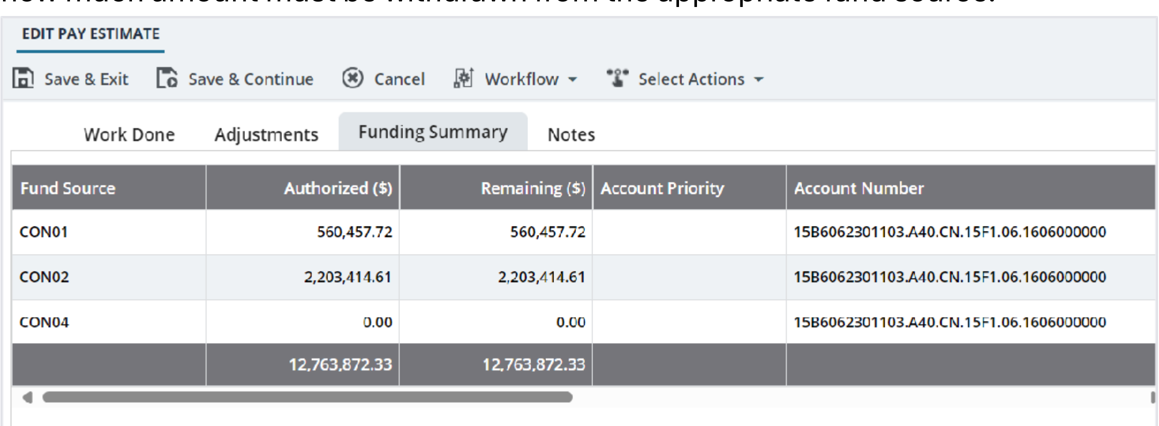


Figure 149: Funding Summary Tab

Note: If any updates are made to the Work Done or Adjustments tab, ensure to click **Save & Continue** to view the updated **Fund Summary** section.

In the **Funding Summary** tab, the following information is displayed:
Note:

- Suppose a new project fund source is created when the Pay Estimates record is in the Draft or Submitted workflow status, the new fund source is automatically displayed in the Funding Summary tab.
- If the fund rule associated with the contract items or sub items are changed, then the changes must be updated for that item in the **Pay Estimates** record. The changes are reflected only for Pay Estimates in **Draft** or **Submitted** workflow status.

Column Name	Description
Fund Source	**Note:** Only fund sources with CON type are displayed. The fund source is displayed based on the funding rule assigned to the contract item and adjustments.
Authorized ($)	The sum of all project fund transactions done for the respective fund source.
Remaining ($)	The remaining amount that is available in the respective fund source.
Account Priority	The account priority as defined for the respective fund source. **Note:** The system will automatically calculate the **Current Approved ($)** such that it will first use the remaining amount in the respective fund sources, and if additional funds are required, it will consume funds from lower priority funds set up in account priority. If the **Current Posted ($)** value is negative, the system holds that amount for payment at a later stage instead of adding funds to the fund source.
Account Number	The account number of the fund source.
Fund Description	The description of the fund source.
Current Posted ($)	It is calculated as: Amount to be paid for items posted (after reducing item level retainages) + Adjustments from the respective fund source without assigning any account priority.
Current Approved ($)	As per the defined account priority, the system re-calculates the amount for each fund. **Note:** If you make any changes in the other tabs, the value is updated to comply with the new funding requirements. The changes are displayed only after saving the pay estimate.

Column Name	Description
Remaining Amount after this PE	It is calculated as: Remaining Amount – Amount this PE

Provide the appropriate information in the fields, as described in the following table:

Note: You can edit these fields even after the record is moved to the Approved for Payment workflow status.

Column Name	Description
Amount this PE	By default, it displays current approved value. Optionally, you can enter the appropriate amount. The amount in PE cannot be greater than the remaining amount in the fund source. The total of Amount this PE must be equal to the NET TO BE PAID IN THIS BILL (E).
Notes	Enter any relevant notes for the funding summary.

Upon entering the necessary details in the **Work Done**, **Adjustments**, and **Funding Summary** tabs, in the **OVERVIEW** section, the following information is displayed:

Column Name	Description
Net Work Done (C)	Displays amount same as the **NET WORKDONE PAYMENT IN THIS BILL (B)**.
Retainage Deduction (Calculated on C)	Sum of all **Adjustment this PE in $** amounts for adjustment type as Retainage.
Release Previously held Retainage	Sum of **Previously held release this PE in $** amounts for adjustment type as Retainage.
NET AFTER RETAINAGE (D)	It is calculated as the difference between the sum of **Net Work Done (C) and Release Previously held Retainage,** and the **Retainage Deduction**.
Total Advance Payments	Sum of all positive values for **Net Adjustment this PE in $** amounts for adjustment type as Materials on Hand.
Total Adjustments	Sum of all adjustments in this pay estimate except Retainage and Materials on Hand.
Total Advance Recovered	Sum of all negative values for **Net Adjustment this PE in $** amounts for adjustment type as Materials on Hand.
NET TO BE PAID IN THIS BILL (E)	It is calculated as: NET AFTER RETAINAGE (D) + Total Advance Payments + Total Adjustments + Total Advance Recovered

10. Enter any additional information in the **Notes** tab, if required.
11. Optionally, in the **ATTACHMENTS** section, upload or link related files. For information on attachments, refer to Section 4.1. Attachments.

12. Click **Save & Exit** to save the record and return to the list page. Optionally, click **Save & Continue** to save the record and continue on the same page. Click **Cancel** to discard the added information and exit the page.

3.4.2.2. Tracking Important Dates of a Pay Estimate

Prerequisites

- A Pay Estimate record must be created.
- The role of the logged-in user must be one of the following:
    - Administrator
    - Construction Component Lead
    - Construction Admin Staff
    - Construction Operations Engineer
    - Assistant Project Engineer
    - Project Engineer
    - Regional Engineer
    - Project Engineer A&E

      For more information on role-specific permissions, refer to Pay Estimate Tracking Permission Matrix.

Overview

The **Pay Estimates Tracking** form enables you to record and track important dates related to payments. These dates help you generate payment-related reports.

Note: Approval of a Pay Estimate record marks the associated Pay Estimates Tracking record as locked, making the user unable to delete the Pay Estimates Tracking record.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

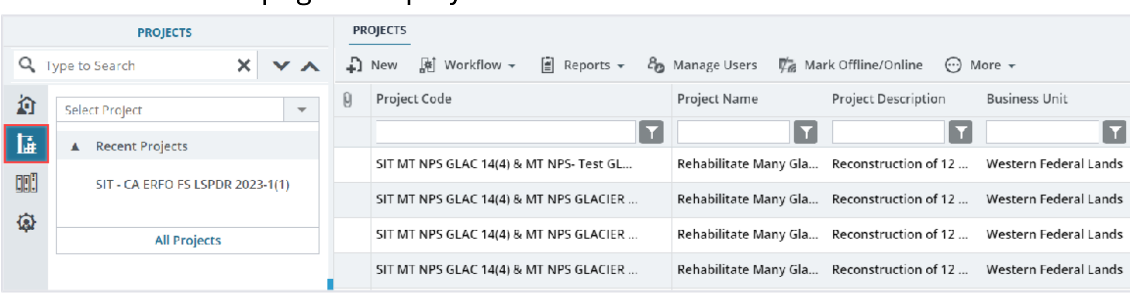


Figure 150: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

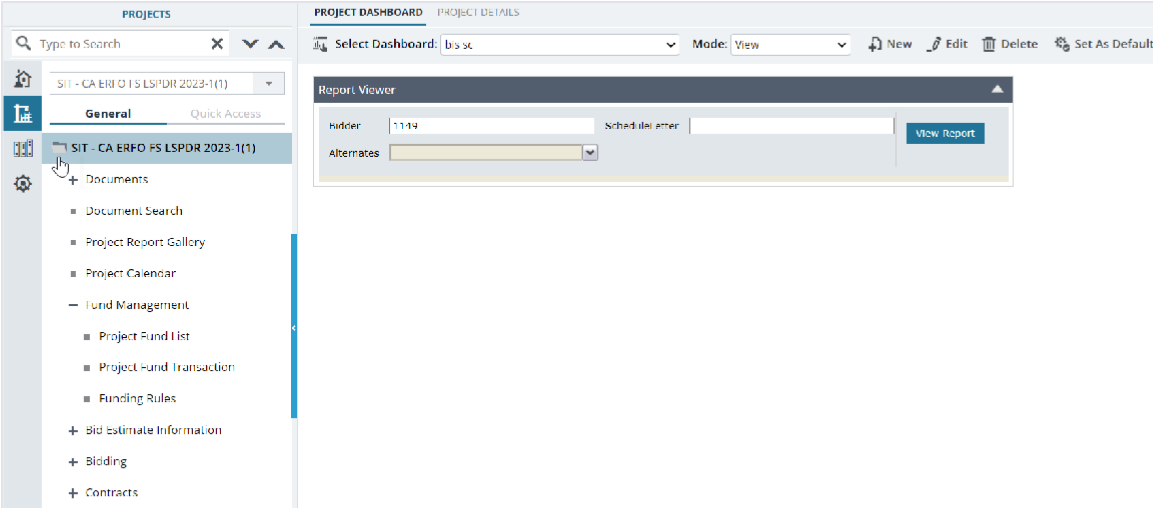


Figure 151: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

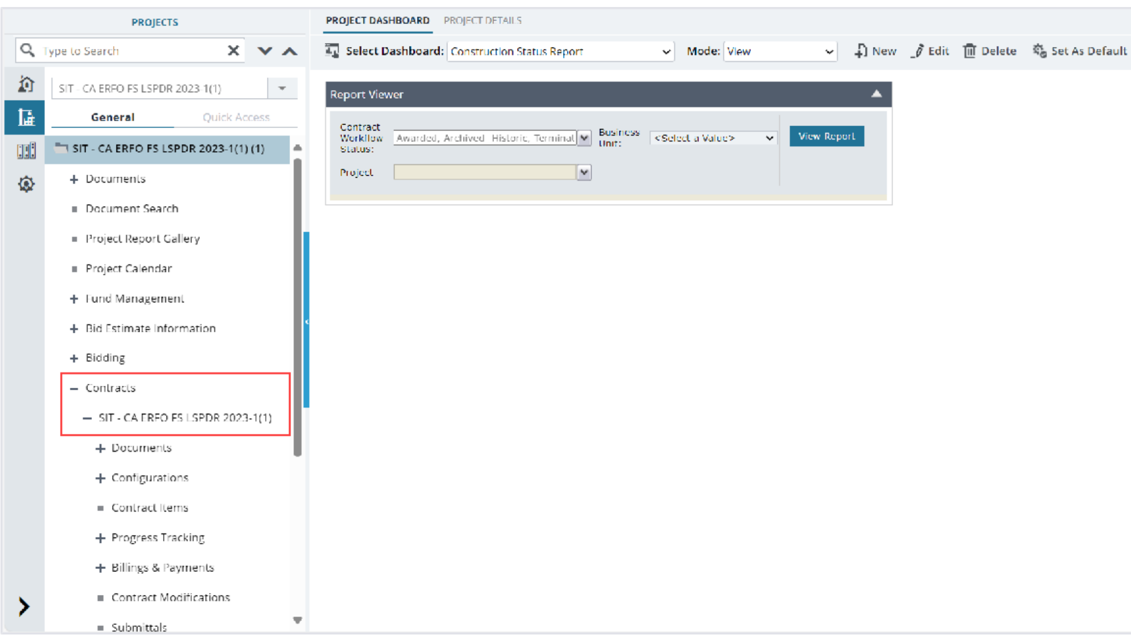


Figure 152: Navigation to Contracts

4. Expand the **Billings & Payments** folder, and then click **Pay Estimates**.
   The **PAY ESTIMATES LIST** page is displayed.

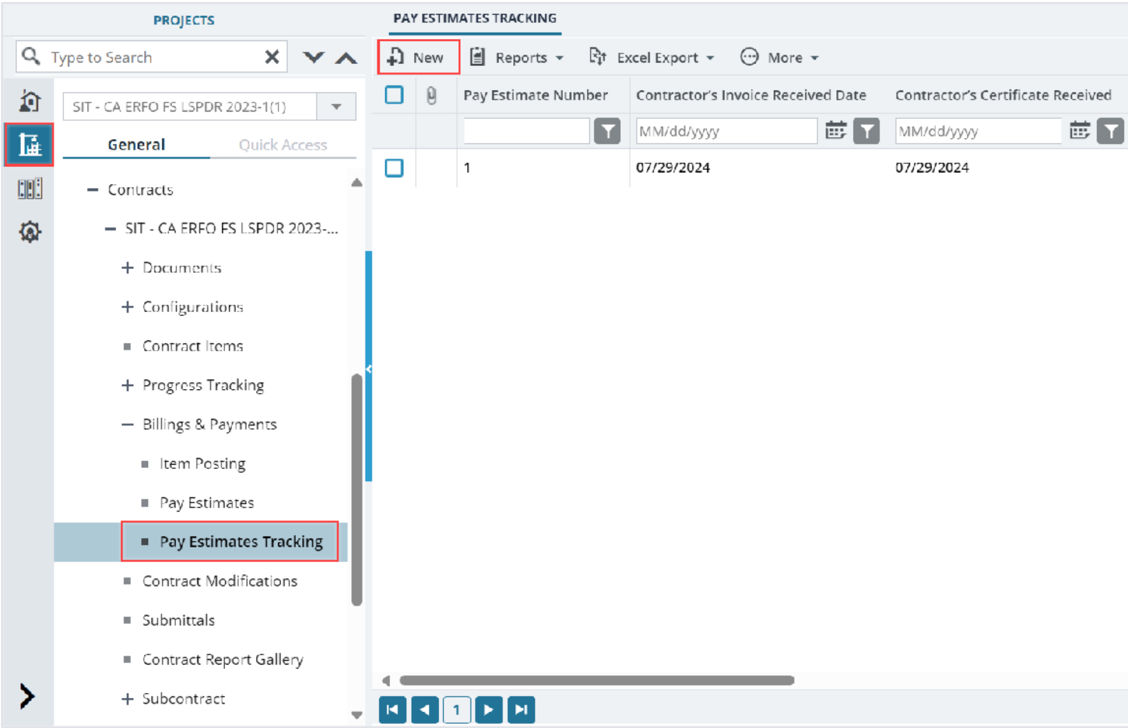


Figure 153: List Page of Pay Estimates Tracking Form

5. Click **New**.

   The **PAY ESTIMATES TRACKING** page is displayed.

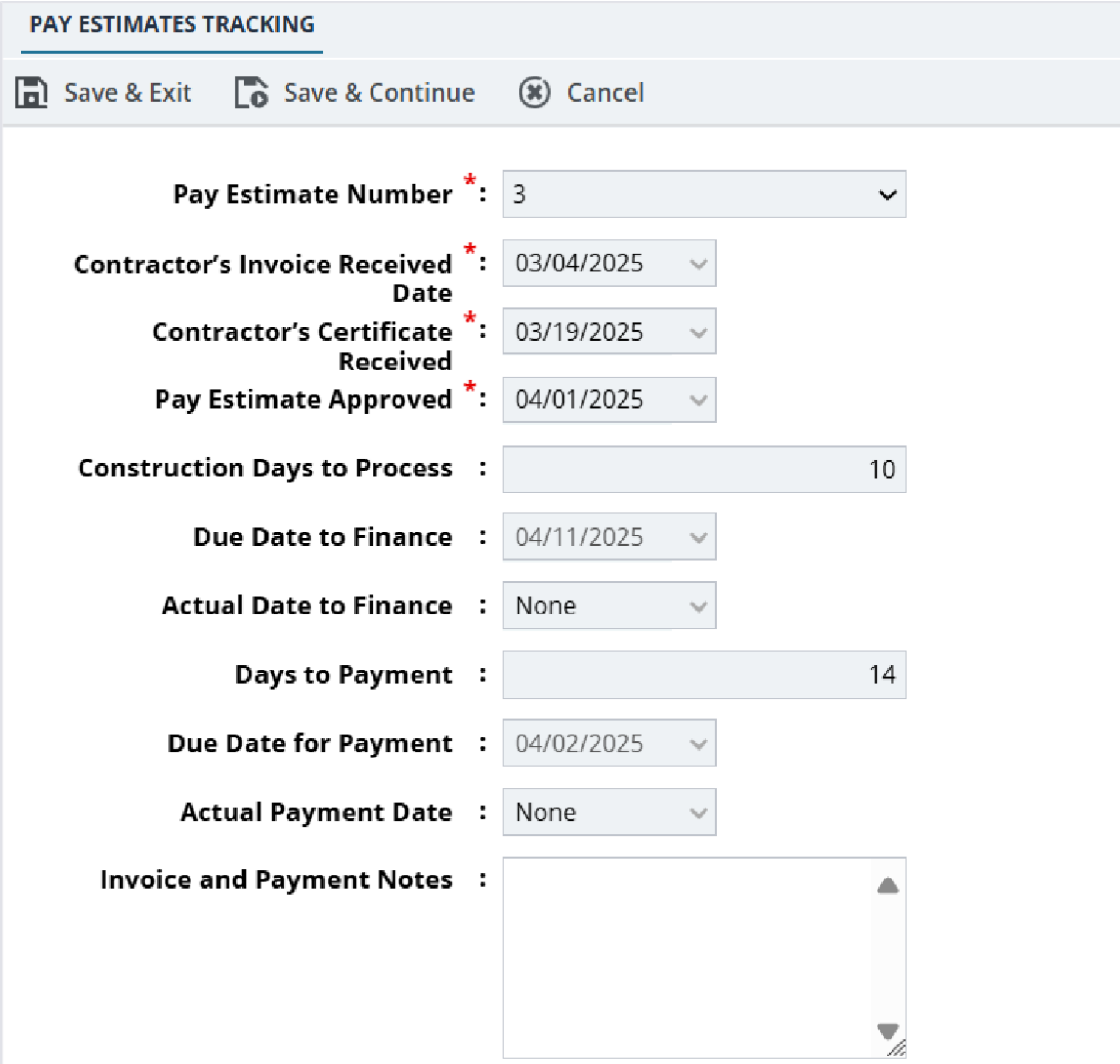


Figure 154: Pay Estimates Tracking Details Page

6. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Pay Estimate Number	By default, the most recent pay estimate is displayed. Optionally, select the appropriate pay estimate number. Available options are pay estimates for which a pay estimate tracking record has not been created already.
Contractor's Invoice Received Date	From the drop-down list, select the date on which the invoice was received from the contractor.
Contractor's Certificate Received	From the drop-down list, select the date on which the certificate was received from the contractor. Once the date is entered, the Due Date for **Payment** field is displayed.

Field Name	Description
	It is calculated as: Contractor's Certification Received Date + Days to Payment.
Pay Estimate Approved	From the drop down list, select the date on which the respective pay estimate record was approved.
Construction Days to Process	A default value is displayed. Optionally, enter the appropriate number of days required to process the payment estimate.
Due Date to Finance	From the drop-down list, select the date on which the pay estimate was due to be sent to finance.
Actual Date to Finance	From the drop-down list, select the date on which the pay estimate was actually sent to finance.
Days to Payment	By default, the number of days for which the pay estimate was generated is displayed. Optionally, enter the number of days.

7. Optionally, in the **ATTACHMENTS** section, upload or link related files. For information on attachments, refer to Section 4.1. Attachments.
8. Click **Save & Exit** to save the record and return to the list page. Optionally, click **Save & Continue** to save the record and continue on the same page. Click **Cancel** to discard the added information and exit the page.

3.4.2.3. Setting the Pay Estimate Record to Paid

Prerequisites

Based on the workflow status of the record, the role of the logged-in user should be any of the following:

- Administrator
- Construction Component Lead
- Construction Admin Staff
- Construction Operations Engineer
- Assistant Project Engineer
- Project Engineer
- Regional Engineer
- Project Engineer A&E

Overview

This section explains the positive and forward workflow actions to reach the **Paid** workflow status. To move a Pay Estimates record through the defined workflow, perform the following steps:

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

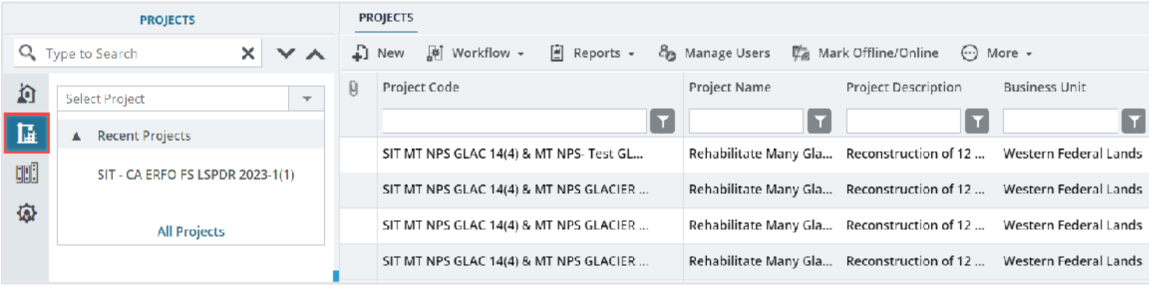


Figure 155: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

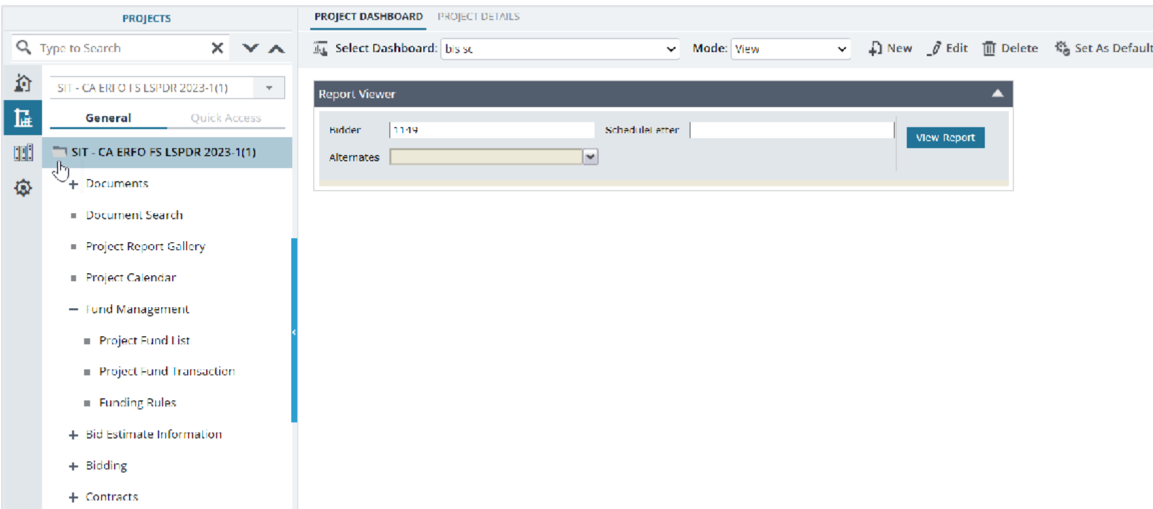


Figure 156: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

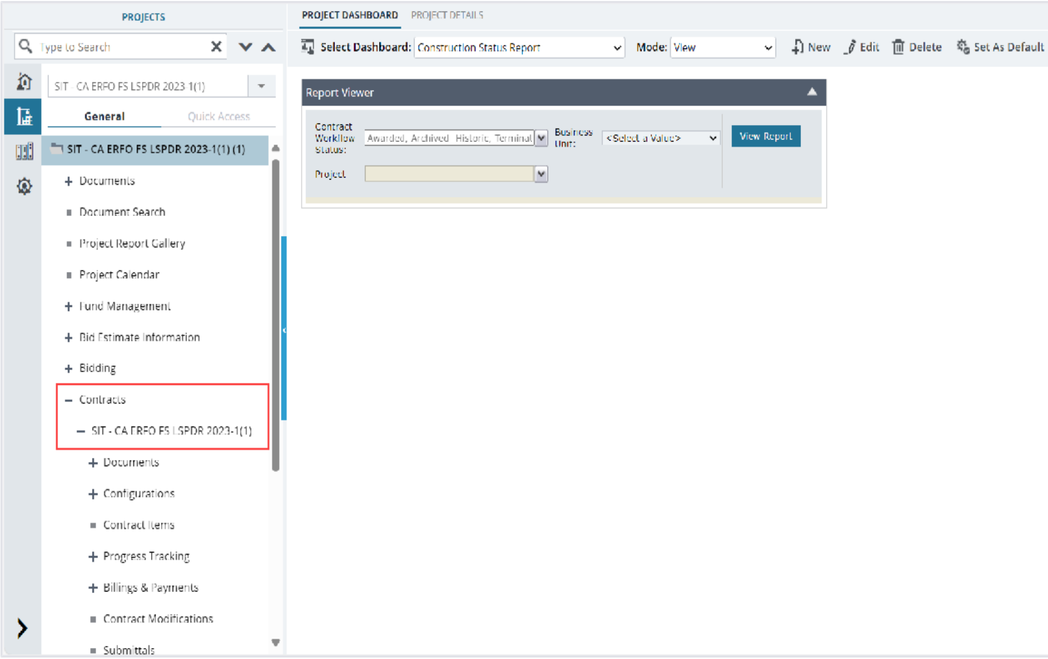
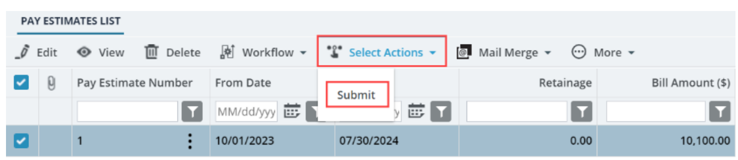
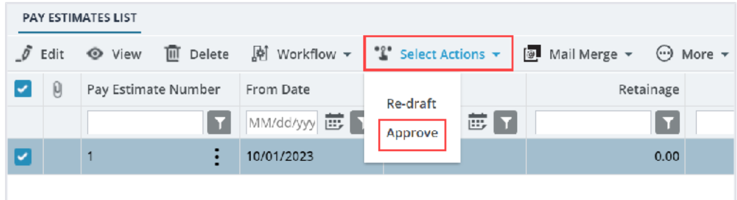
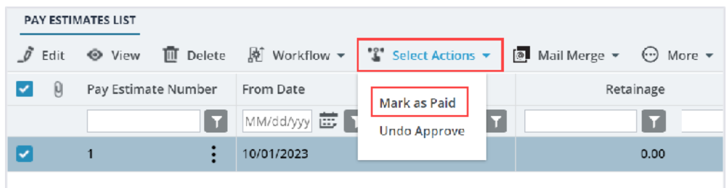


Figure 157: Navigation to Contracts

4. Expand the **Billings & Payments** folder, and then click **Pay Estimates**.
   The **PAY ESTIMATES LIST** page is displayed.
5. To approve the **Pay Estimates** record, perform the following steps:

Phase	Role	Workflow Steps
1	• Administrator • Construction Component Lead • Construction Admin Staff • Construction Operations Engineer • Assistant Project Engineer • Project Engineer • Regional Engineer • Project Engineer A&E	a. In the list page, select the appropriate record that is in the **Draft** workflow status, and then click **Select Actions**.  *Figure 158: Workflow - Submit* b. Click **Submit**, and in the **Masterworks** dialog box, click **OK**. The workflow status of the record is set to **Submitted**.

Phase	Role	Workflow Steps
2	• Administrator • Construction Component Lead • Construction Admin Staff	a. In the list page, select the appropriate record that is in the **Submitted** workflow status, and then click **Select Actions**.  *Figure 159: Workflow Action - Approve* b. Click **Approve**, and in the Masterworks dialog box, click **OK**. The workflow status of the record is set to **Approved for Payment**.
3	• Administrator • Construction Component Lead • Construction Admin Staff	a. In the list page, select the appropriate record that is in the **Approved for Payment** workflow status, and then click **Select Actions**.  *Figure 160: Workflow Action – Mark as Paid* b. Click **Mark as Paid**, and in the Masterworks dialog box, click **OK**. The workflow status of the record is set to **Paid**.

3.4.2.4. Pay Estimate Workflow Status

The following table provides the workflow status (current and subsequent stage) of the **Pay Estimates** record.

For information on setting a workflow status to the next status, refer to Section 4.3. Workflow Status Transitions.

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
1	Draft	• Administrator • Construction Component Lead • Construction Admin Staff	Submit	Submitted	After the record is moved to the **Submitted** workflow status, you cannot delete it. However, you can edit it.

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
		• Construction Operations Engineer • Assistant Project Engineer • Project Engineer • Regional Engineer • Project Engineer A&E			
2	Submitted	• Administrator • Construction Component Lead • Construction Admin Staff	Approve	Approve for Payment	**Note:** This workflow action can be performed only if a **Pay Estimates Tracking** record is created for the PE. To move the **Pay Estimates** record to the **Approved for Payment** workflow status, ensure the following conditions are met: • The **Amount this PE** must be equal to the **NET TO BE PAID IN THIS BILL (E).** • Remaining amount in the fund source must be greater than or equal to **Amount this PE**.

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
					Note: • The **Funding Summary** tab of the **Pay Estimates** record is editable in this workflow status. • Upon approval, the **Pay Estimates Tracking** record associated with the PE is considered as locked.
2	Submitted	• Administrator • Construction Component Lead • Construction Admin Staff	Re-Draft	Draft	-
3	Approved for Payment	• Administrator • Construction Component Lead • Construction Admin Staff	Mark as Paid	Paid	

			Undo Approve	Submitted	To move the **Pay Estimates** record to the Paid workflow status, ensure the following conditions are met:
					  • A **Pay Estimate Tracking** record for the corresponding must be created.
					  • The **Amount this PE** must be equal to the **NET TO BE**

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
					PAID IN THIS BILL (E). • Remaining amount in the fund source must be greater than or equal to **Amount this PE**. • If the previous **Pay Estimate** record is not set to **Paid**, then the current pay estimate cannot be set to **Paid**. **Note:** The **Pay Estimates Tracking** record for the corresponding PE cannot be deleted if the PE exists in **Approved for Payment** or **Paid** workflow status.

3.4.2.5. Generating Pay Estimate Reports

Overview

Based on the roles assigned to you, you can generate various pay estimates and payment progress reports that illustrate various information views. These reports enable various stakeholders to stay up-to-date on the status of payment progress.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

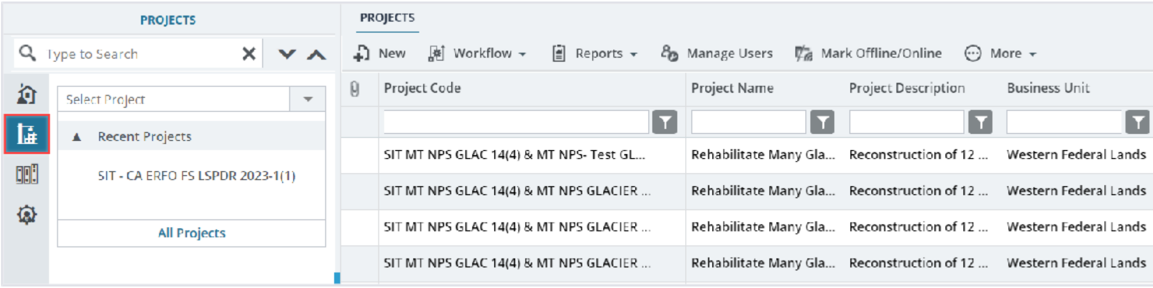


Figure 161: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

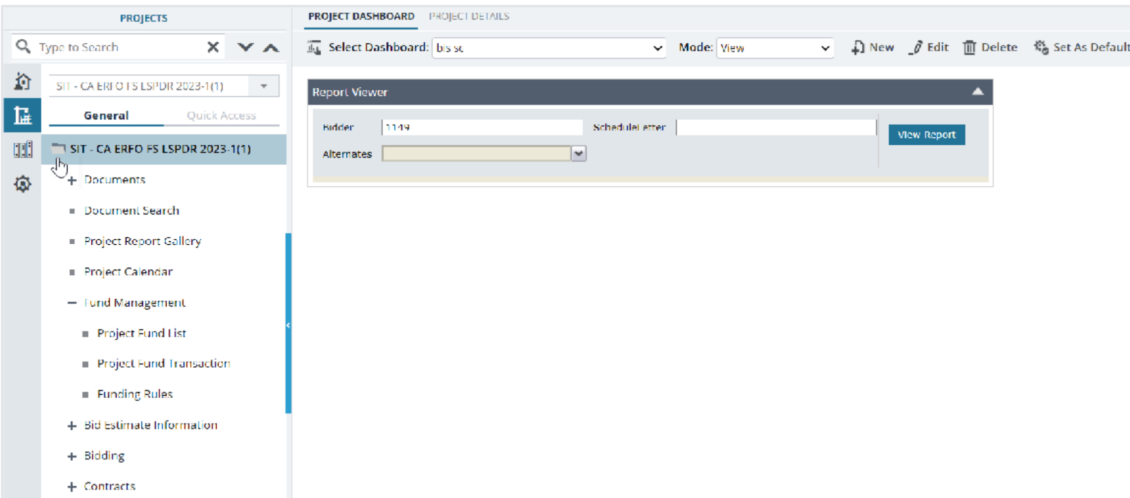


Figure 162: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

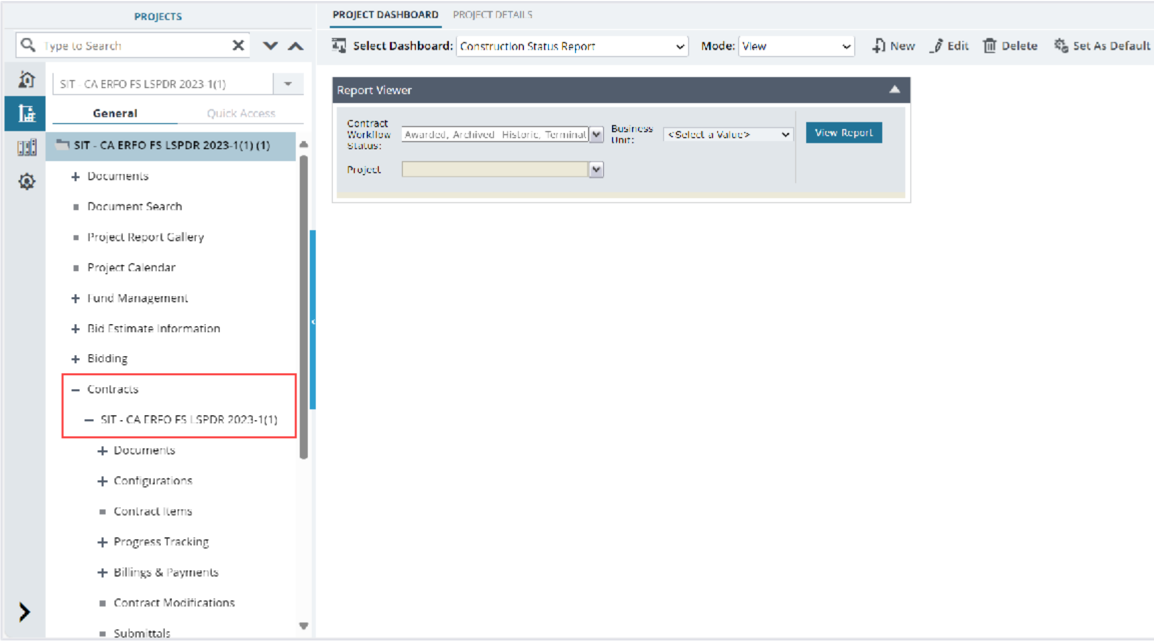


Figure 163: Navigation to Contracts

4. Expand the **Billings & Payments** folder, and then click **Pay Estimates**.
   The **PAY ESTIMATES LIST** page is displayed.
5. In the list page, click **Reports**, and then click the appropriate report.

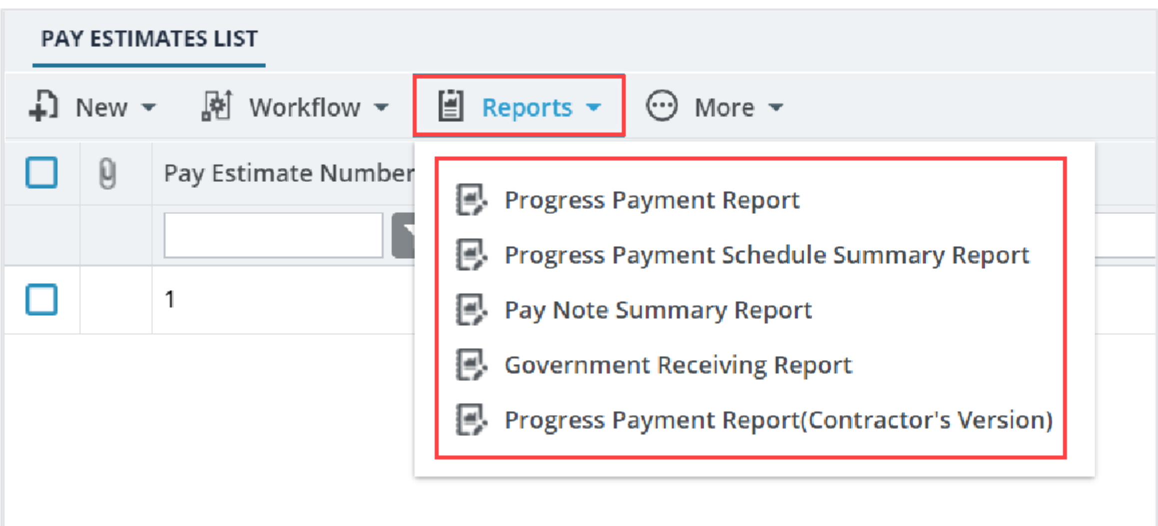


Figure 164: Pay Estimates Report

The report is generated and displayed.
You can generate the following reports:

- Progress Payment Report
- Progress Payment Schedule Summary Report
- Pay Note Summary Report
- Government Receiving Report

- Progress Payment Report(Contractor's Version)

3.5. Progress Tracking

The Progress Tracking module comprises forms that aid in recording and tracking the day-to- day activities at the worksite.

The **Progress Tracking** module consists of the following forms:

- 3.5.1. Labor/Equipment: It enables you to create a list of resources and equipment that can be associated across various daily reports of the contract.
- 3.5.2. Work Activity Template: It enables you to create templates with predefined information on contract items, equipment, and resources. This can later be associated with the CDR and IDR records.
- 3.5.3. Contractor Daily Record (CDR): It enables you to record and track the contractor daily records at the worksite.
- 3.5.4. Inspector Daily Record (IDR): It enables you to record and track the inspector daily records at the worksite.
- 3.5.5. Daily Diary: It enables you to record and track the daily summaries of the construction related activities in the project.

Progress Tracking Permission Matrix

This section provides information on the roles and corresponding permissions for the respective forms:

Table 8: Table 1- Contractor Daily Record

Role	Create	Edit	View	Delete	Audit Log
Administrator	Yes	Yes	Yes	Yes	Yes
Construction Component Lead	Yes	Yes	Yes	–	Yes
Construction Admin Staff	–	–	Yes	–	Yes
Construction Engineer	–	–	Yes	–	–
Highway Construction Manager/QA QC	–	–	Yes	–	–
Construction Contractor CDRs only	Yes	Yes	Yes	–	–
Construction Contractor Basic	Yes	Yes	Yes	–	–

Role	Create	Edit	View	Delete	Audit Log
Construction Contractor QC Manager	Yes	Yes	Yes	–	–
Construction Contractor Manager	Yes	Yes	Yes	–	–
Construction Operations Engineer	–	–	Yes	–	–
Inspector	–	–	Yes	–	–
Assistant Project Engineer	–	–	Yes	–	–
Project Engineer	–	–	Yes	–	–
Regional Engineer	–	–	Yes	–	–
Construction Inspection A&E Manager	–	–	Yes	–	–
Inspector A&E	–	–	Yes	–	–
Assistant Project Engineer A&E	–	–	Yes	–	–
Project Engineer A&E	–	–	Yes	–	–

Table 9: Table 2 – Inspector Daily Record

Role	Create	Edit	View	Delete	Audit Log
Administrator	Yes	Yes	Yes	Yes	Yes
Construction Component Lead	Yes	Yes	Yes	–	Yes
Construction Admin Staff	–	–	Yes	–	Yes
Construction Engineer	Yes	Yes	Yes	–	–
Highway Construction Manager/QA QC	–	–	Yes	–	–
Construction Operations Engineer	Yes	Yes	Yes	–	–

Role	Create	Edit	View	Delete	Audit Log
Inspector	Yes	Yes	Yes	–	–
Assistant Project Engineer	Yes	Yes	Yes	–	–
Project Engineer	Yes	Yes	Yes	–	–
Regional Engineer	Yes	Yes	Yes	–	–
Construction Inspection A&E Manager	–	–	Yes	–	–
Inspector A&E	Yes	Yes	Yes	–	–
Assistant Project Engineer AE	Yes	Yes	Yes	–	–
Project Engineer A&E	Yes	Yes	Yes	–	–

Table 10: Table 3 – Daily Diary

Role	Create	Edit	View	Delete	Audit Log	Comments
Administrator	Yes	Yes	Yes	Yes	Yes	–
Construction Component Lead	Yes	Yes	Yes	–	Yes	–
Construction Admin Staff	–	–	Yes	–	Yes	–
Construction Engineer	Yes	Yes	Yes	–	–	–
Highway Construction Manager/QA QC	Yes	Yes	Yes	–	–	–
Construction Operations Engineer	Yes	Yes	Yes	–	–	–
Inspector	Yes	Yes	Yes	–	–	–
Assistant Project Engineer	Yes	Yes	Yes	–	–	–
Project Engineer	Yes	Yes	Yes	–	–	If the record is created by the user assigned

Role	Create	Edit	View	Delete	Audit Log	Comments
						with the Project Engineer role, then only the Project Engineer can access the record.
Regional Engineer	Yes	Yes	Yes	–	–	–
Construction Inspection A&E Manager	–	–	Yes	–	–	–
Inspector A&E	Yes	Yes	Yes	–	–	–
Assistant Project Engineer A&E	Yes	Yes	Yes	–	–	–
Project Engineer A&E	Yes	Yes	Yes	–	–	If the record is created by Project Engineer A&E role, then only users assigned with Project Engineer A&E and Project Engineer roles can access the record.

Table 11: Table 4 – Work Activity Template

Role	Create	Edit	View	Delete	Audit Log
Administrator	Yes	Yes	Yes	Yes	Yes
Construction Component Lead	Yes	Yes	Yes	Yes	Yes

Role	Create	Edit	View	Delete	Audit Log
Construction Admin Staff	Yes	Yes	Yes	Yes	Yes
Construction Engineer	–	–	Yes	–	–
Highway Construction Manager/QA QC	_	–	Yes	–	–
Construction Contractor CDRs only	Yes	Yes	Yes	–	–
Construction Contractor Basic	Yes	Yes	Yes	–	–
Construction Contractor QC Manager	Yes	Yes	Yes	–	–
Construction Contractor Manager	Yes	Yes	Yes	–	–
Construction Operations Engineer	Yes	Yes	Yes	Yes	–
Inspector	Yes	Yes	Yes	–	–
Assistant Project Engineer	Yes	Yes	Yes	Yes	–
Project Engineer	Yes	Yes	Yes	Yes	–
Regional Engineer	Yes	Yes	Yes	Yes	–
Construction Inspection A&E Manager	–	–	Yes	–	–
Inspector A&E	Yes	Yes	Yes	–	–
Assistant Project Engineer A&E	Yes	Yes	Yes	Yes	–
Project Engineer A&E	Yes	Yes	Yes	Yes	–

Table 12: Table 5 – Labor/Equipment Template

Role	Create	Edit	View	Delete	Audit Log
Administrator	Yes	Yes	Yes	Yes	Yes

Role	Create	Edit	View	Delete	Audit Log
Construction Component Lead	Yes	Yes	Yes	Yes	Yes
Construction Admin Staff	Yes	Yes	Yes	Yes	Yes
Construction Engineer	–	–	Yes	–	–
Highway Construction Manager/QA QC	_	–	Yes	–	–
Construction Contractor CDRs only	Yes	Yes	Yes	–	–
Construction Contractor Basic	Yes	Yes	Yes	–	–
Construction Contractor QC Manager	Yes	Yes	Yes	–	–
Construction Contractor Manager	Yes	Yes	Yes	–	–
Construction Operations Engineer	Yes	Yes	Yes	Yes	–
Inspector	Yes	Yes	Yes	–	–
Assistant Project Engineer	Yes	Yes	Yes	Yes	–
Project Engineer	Yes	Yes	Yes	Yes	–
Regional Engineer	Yes	Yes	Yes	Yes	–
Construction Inspection A&E Manager	–	–	Yes	–	–
Inspector A&E	Yes	Yes	Yes	–	–
Assistant Project Engineer A&E	Yes	Yes	Yes	Yes	–
Project Engineer A&E	Yes	Yes	Yes	Yes	–

3.5.1. Recording Labors and Equipment

Prerequisites

The role of the logged-in user must be one of the following:

- Administrator
- Construction Component Lead
- Construction Admin Staff
- Construction Contractor CDRs only
- Construction Contractor Basic
- Construction Contractor QC Manager
- Construction Contractor Manager
- Construction Operations Engineer
- Inspector
- Assistant Project Engineer
- Project Engineer
- Regional Engineer
- Inspector A&E
- Assistant Project Engineer A&E
- Project Engineer A&E

For more information on role-specific permissions, refer to Table 5 – Labors/ Equipment Permission Matrix.

Overview

The **Labors/Equipment** catalog acts as a database that contains a list of resources and equipment that you can associate across various daily reports of the contract.

The Labors/Equipment form enables you to record the following information:

- Type of labor or equipment
- Hourly rate of the labor or equipment
- Move-in and move-out date of the labor or equipment
- The associated contractor or subcontractor

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

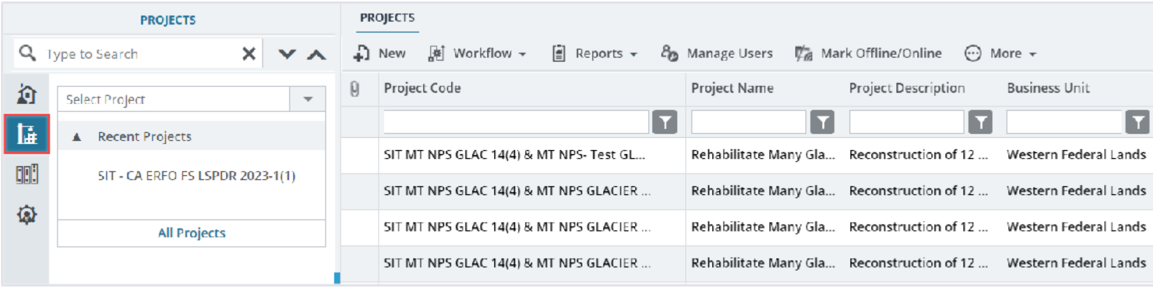


Figure 165: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

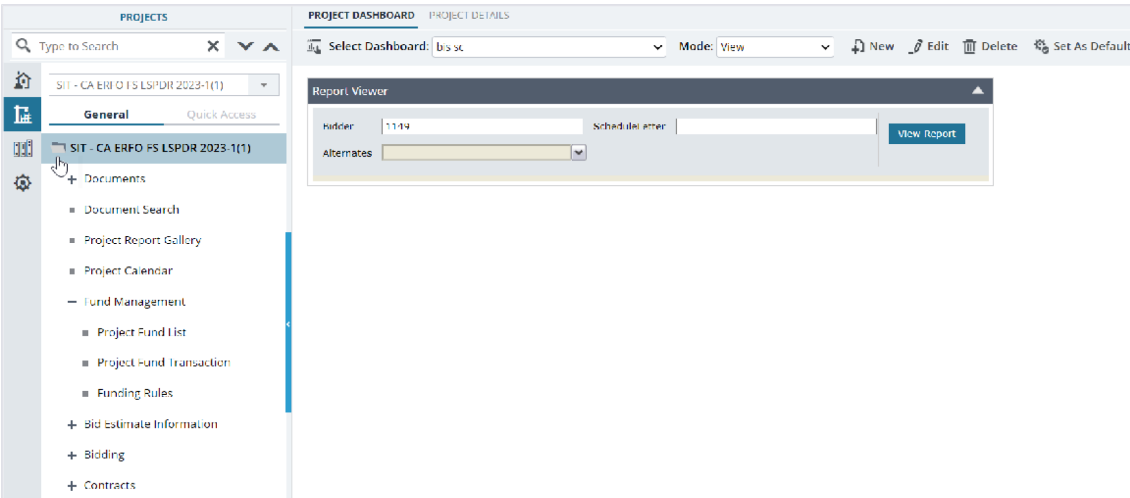


Figure 166: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

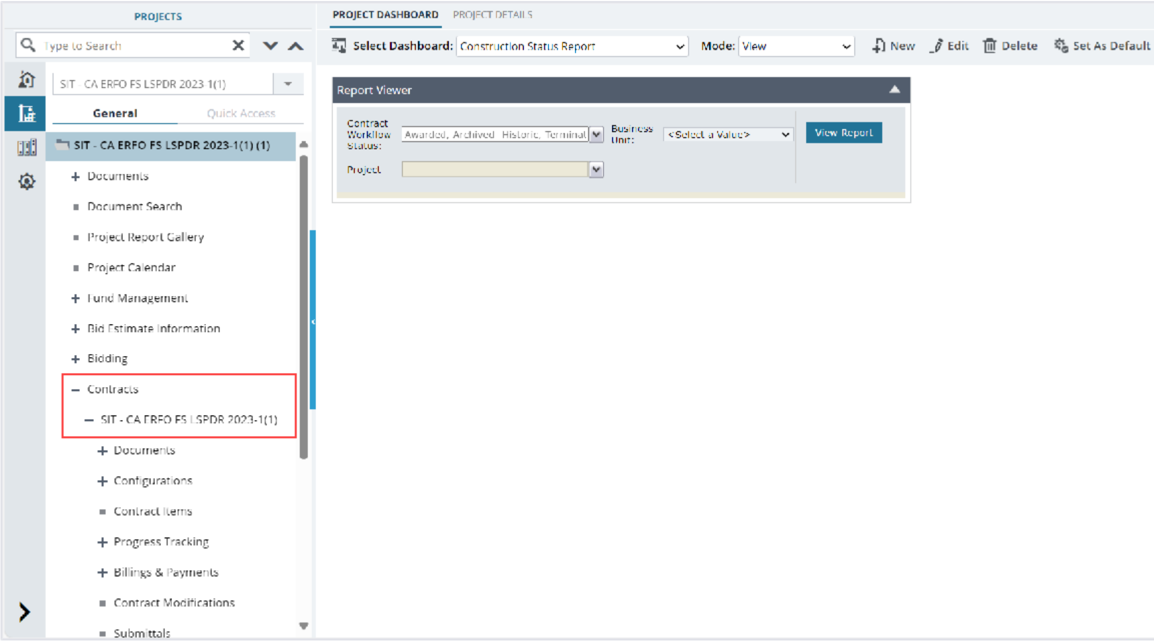


Figure 167: Navigation to Contracts

4. Expand the **Progress Tracking** folder, and then click **Labors/Equipment**.
   The **LABORS/EQUIPMENT** list page is displayed.

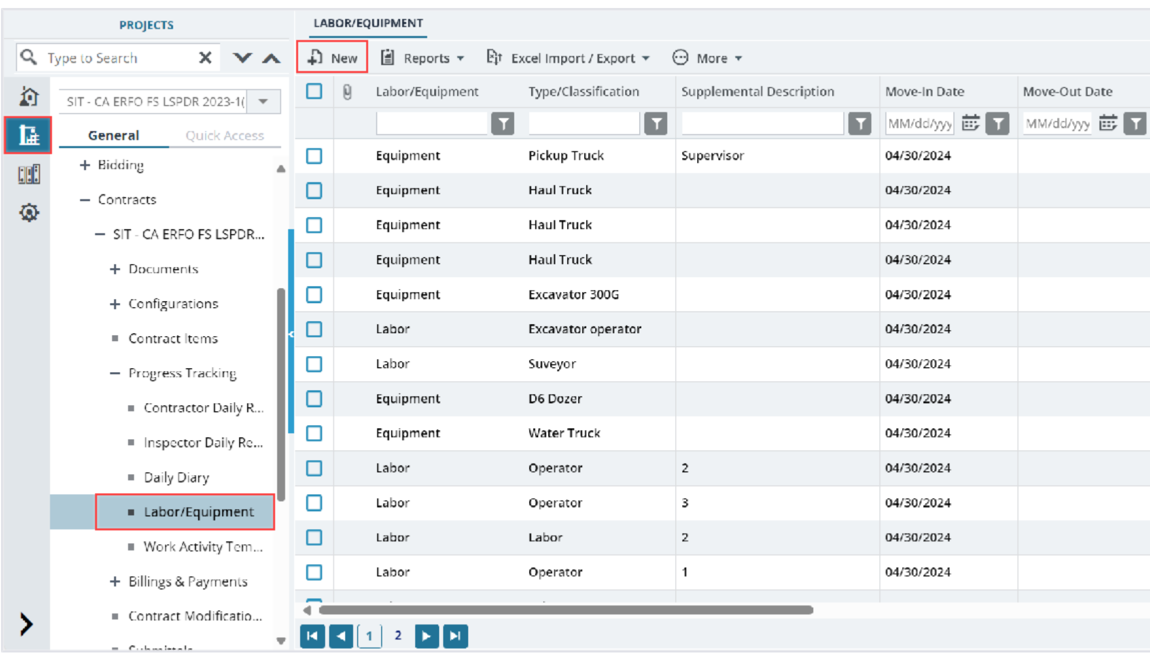


Figure 168: List Page of Labors/Equipment Form

5. Click **New**.

The **LABORS/EQUIPMENT** page is displayed.

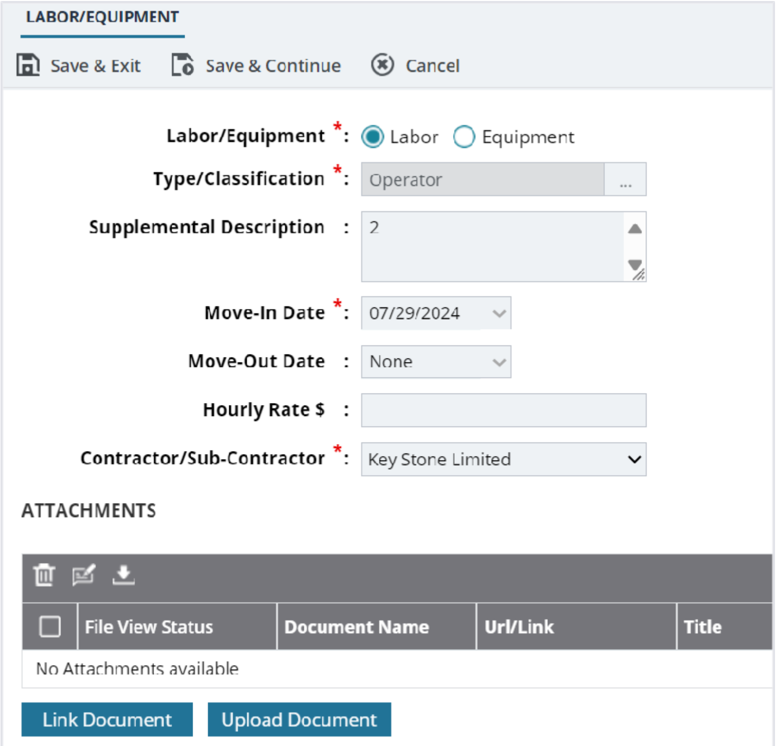
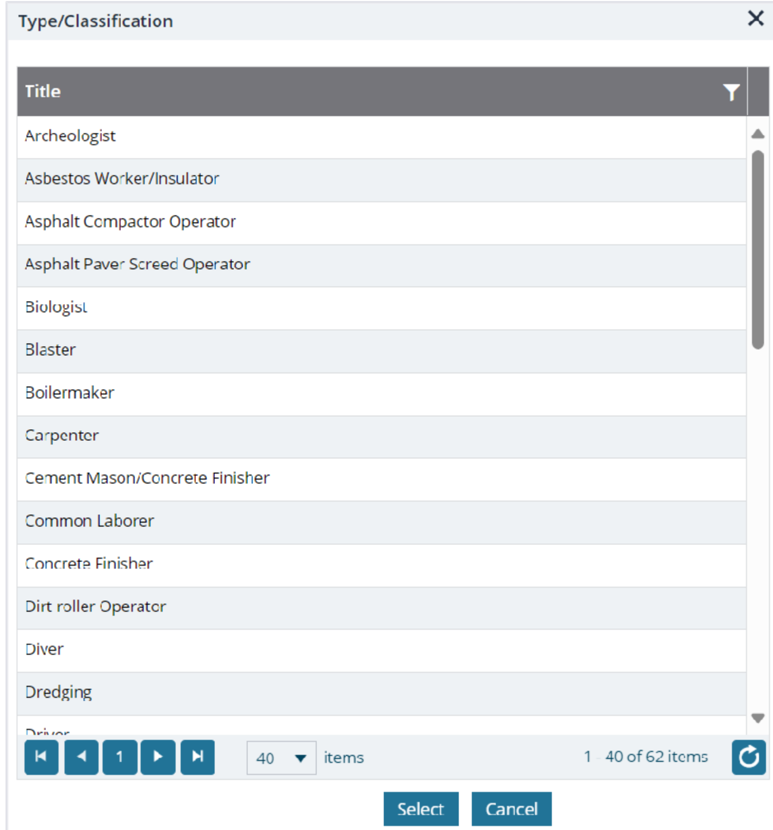


Figure 169: Labor/Equipment Page

6. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Labor/Equipment	Click the appropriate option as applicable: • Labor: To add details of the resource. • Equipment: To add details of the equipment.
Type/Classification	To add the type of labor or specify the classification of equipment, perform the following steps: 1. Click . The **Type/Classification** dialog box is displayed.

Field Name	Description
	 *Figure 170: Type/Classification Dialog Box* If Labor is selected in the **Labor/Equipment** field, then available options are resources defined in the **Resource Title** catalog of the library. If Equipment is selected in the **Labor/Equipment** field, then available options are equipment defined in the **Equipment** catalog of the library. 2. Click the appropriate option, and then click **Select**.
Supplemental Description	Enter additional description specific to the selected labor or equipment, as applicable.
Move-In Date	By default, the current date is displayed. Optionally, select the appropriate date from the drop-down list.
Move-Out Date	A default value is displayed. Optionally, select the appropriate date from the drop-down list.
Hourly Rate $	Enter the hourly rate of the labor or equipment. **Note**: Only approved rates must be added for the labor or equipment.

Field Name	Description
Contractor/Sub- Contractor	From the drop-down list, select the contractor or subcontractor with whom the labor or equipment is associated. For example, Key Stone Limited. Available options are prime contractor displayed in the **Contractors** form of the contract. It also displays the active subcontractors from the **Request for Sublet Work** form.

7. Optionally, in the **ATTACHMENTS** section, upload or link related files. For information on attachments, refer to Section 4.1. Attachments.
8. Click **Save & Exit** to save the record and return to the list page. Optionally, click **Save & Continue** to save the record and continue on the same page. Click **Cancel** to discard the added information and exit the page.

3.5.2. Creating a Work Activity Template

Prerequisites

- The role of the logged-in user must be one of the following:
    - Administrator
    - Construction Component Lead
    - Construction Admin Staff
    - Construction Contractor CDRs only
    - Construction Contractor Basic
    - Construction Contractor QC Manager
    - Construction Contractor Manager
    - Construction Operations Engineer
    - Inspector
    - Assistant Project Engineer
    - Project Engineer
    - Regional Engineer
    - Inspector A&E
    - Assistant Project Engineer A&E
    - Project Engineer A&E

      For more information on role-specific permissions, refer to Table 4 – Work Activity Template Permission Matrix.

Overview

The **Work Activity Template** enables you to create templates with predefined information on contract items, equipment and labor. This information can be reused across various daily reports.

On selecting a template during creation of daily reports, the information defined in the template are automatically added to the work activity section of the daily report

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

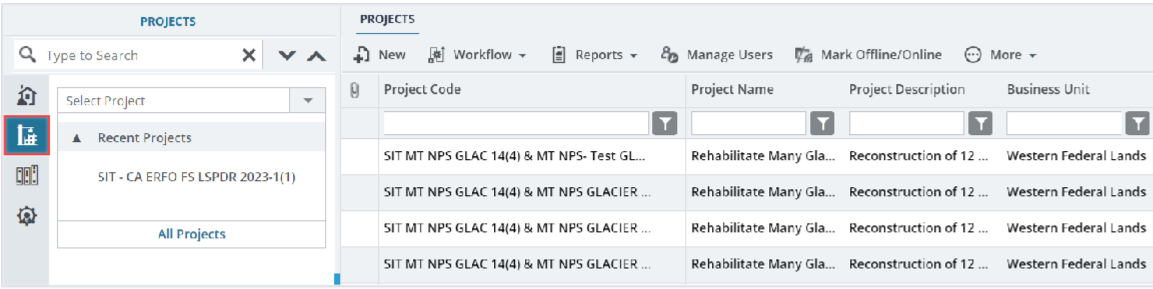


Figure 171: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

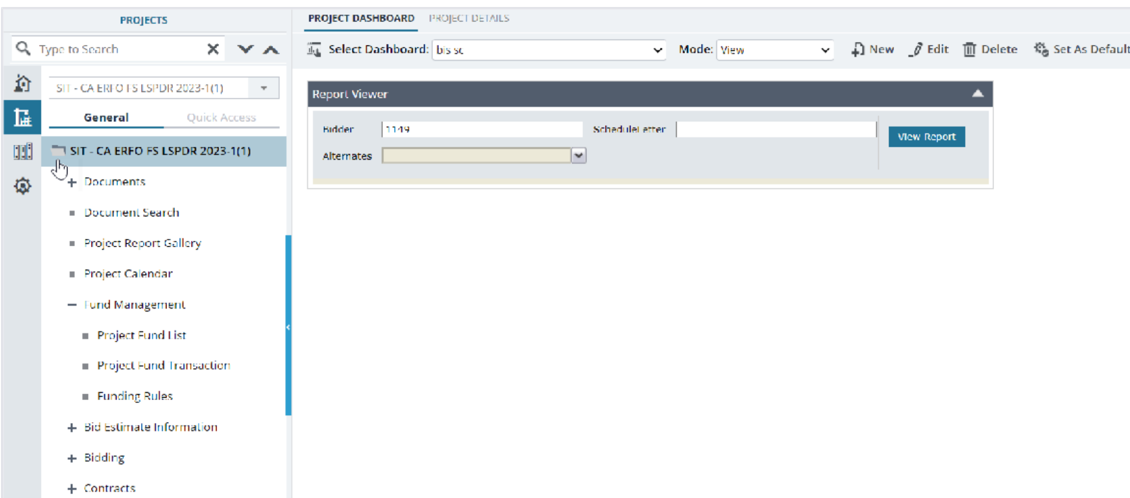


Figure 172: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

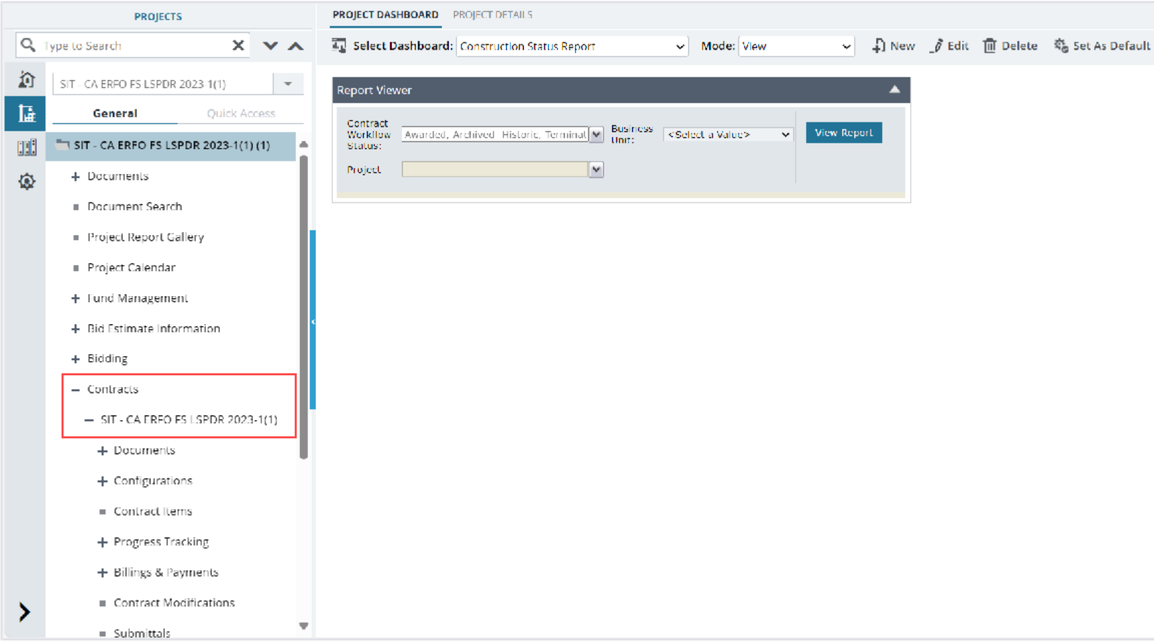


Figure 173: Navigation to Contracts

4. Expand the **Progress Tracking** folder, and then click **Work Activity Templates**. The **WORK ACTIVITY TEMPLATES** list page is displayed.

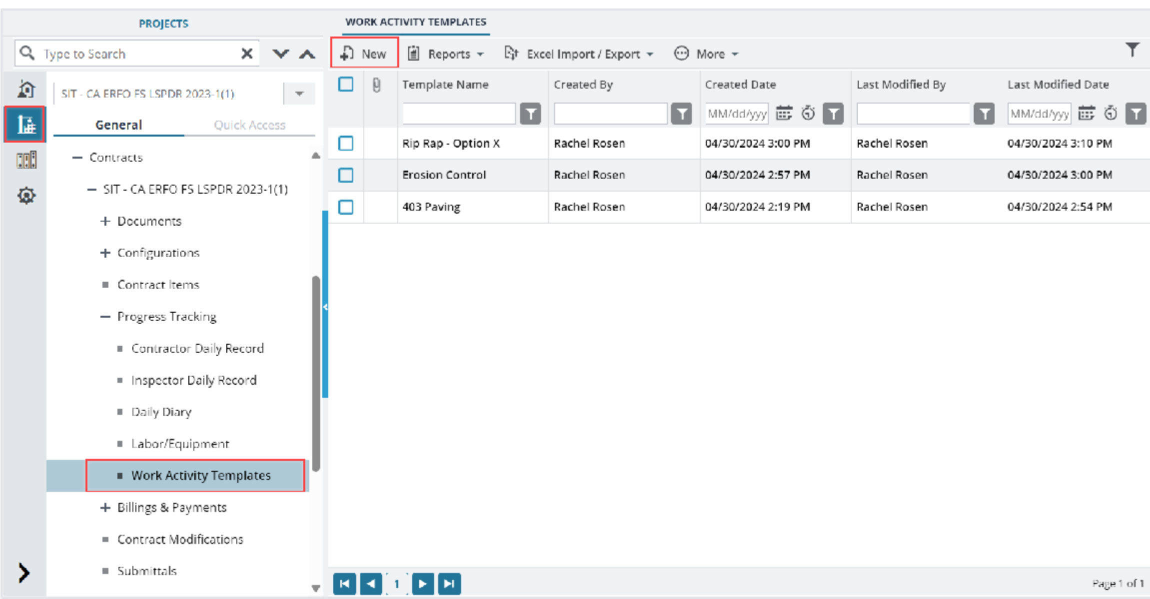


Figure 174: List Page of Work Activity Template Form

5. Click **New**.

The **WORK ACTIVITY TEMPLATES** page is displayed.

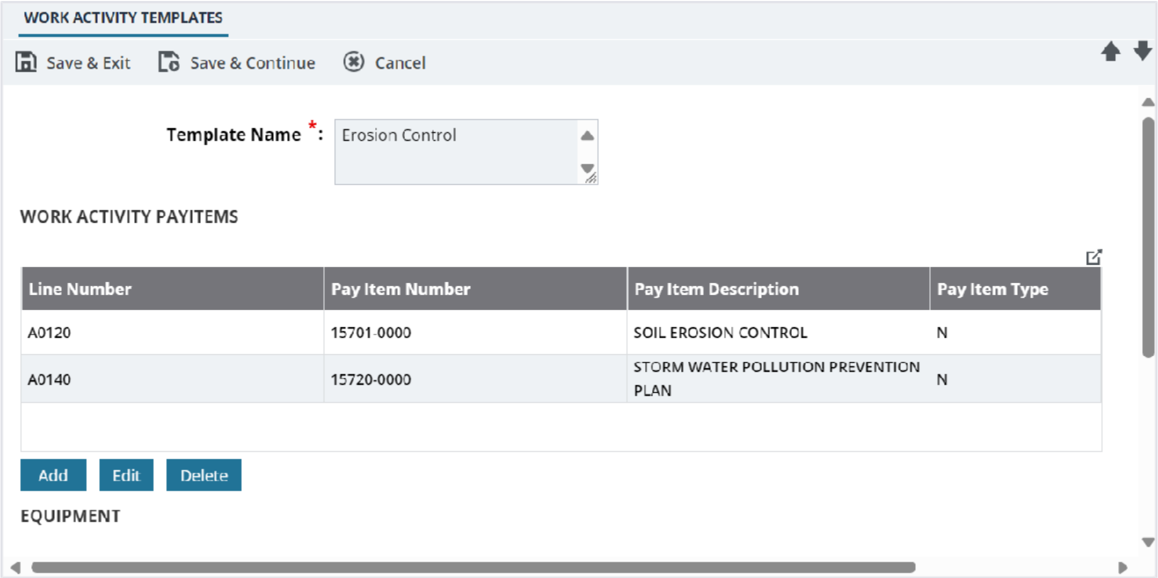


Figure 175: Work Activity Templates Page

6. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Description	Enter the description of the work activity template.
Location	Enter the appropriate location.

7. To add the approved contract items to the template, in the **WORK ACTIVITY PAYITEMS** section, perform the following steps:
   a. Click **Add**.

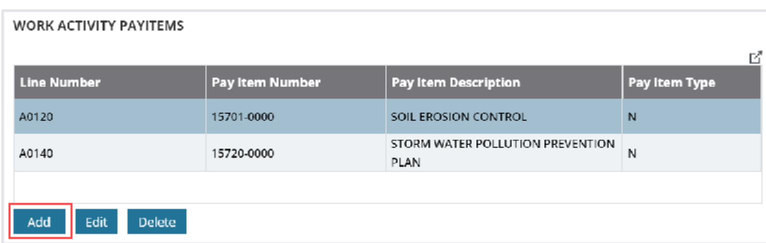


Figure 176: Work Activity Pay Items Section

The **Approved Contract Items** dialog box is displayed.

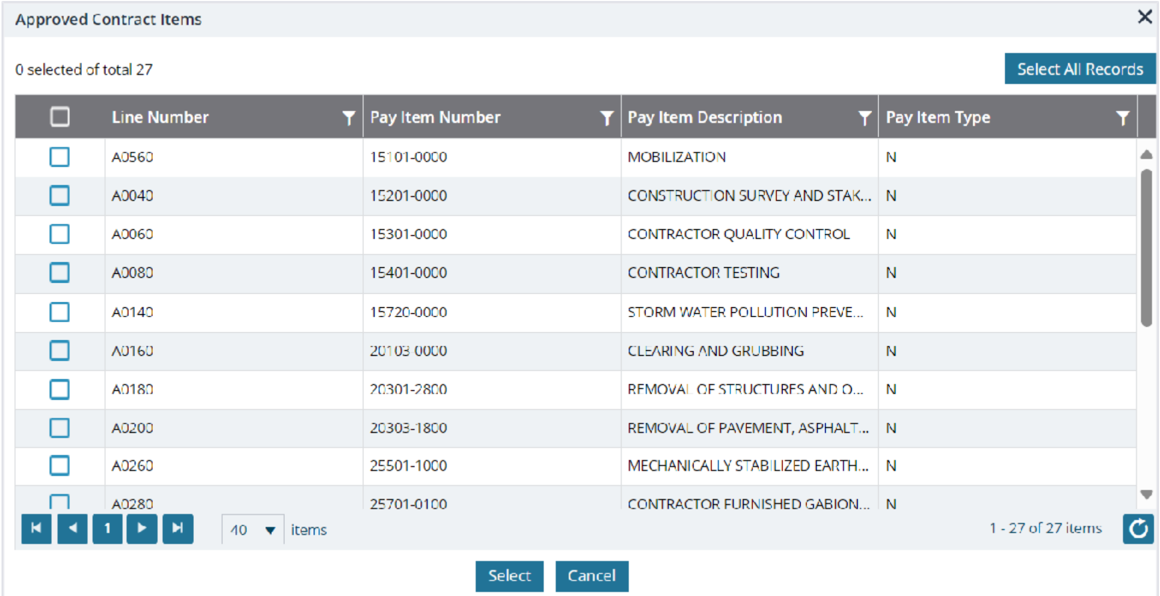


Figure 177: Approved Contract Items Dialog Box

Available options are the locked contract items in the contract.

b. Click the appropriate contract item, and then click Select.

   The contract item is added to the **WORK ACTIVITY PAYITEMS** section.

c. Optionally, perform the following steps, as applicable:

   - To edit the contract item details, perform the following steps:
     i. Select the appropriate record, and then click **Edit**.

        The **Edit WORK ACTIVITY PAYITEMS** dialog box is displayed.

     ii. Make the necessary changes.

     iii. Click **Save**.

   - To delete the contract item, perform the following steps:
     i. Select the appropriate record, and then click **Delete**.
        The confirmation message is displayed.

     ii. Click **OK**.

        The contract item is deleted from the section.

8. To add the equipment to the template, in the **EQUIPMENT** section, perform the following steps:

a. Click **Add**.

Figure 178: Equipment Section

The **New EQUIPMENT** dialog box is displayed.

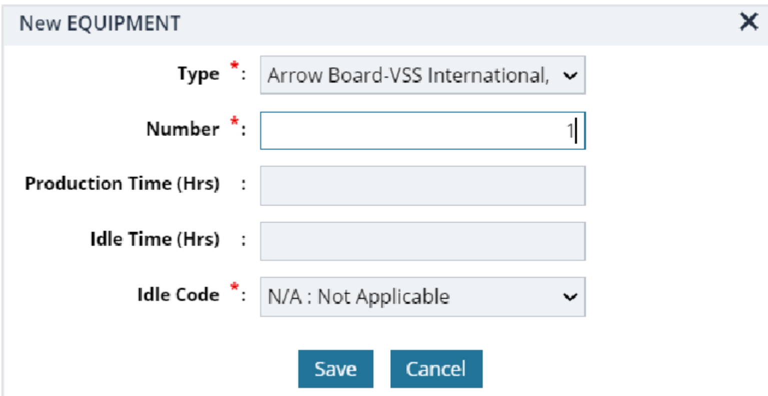


Figure 179: New Equipment Dialog Box

b. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Type	From the drop-down list, select the appropriate equipment. Available options are equipment defined in the Labor/ Equipment form of the contract. **Note:** In the drop-down, the equipment is hyphenated with the name of the Contractor or Subcontractor. For example, Haul Truck - Key Stone Limited.
Number	Enter the quantity of the equipment.
Production Time (Hrs)	Enter the production time in hours.
Idle Time (Hrs)	Enter the time in hours that the equipment was kept inactive.
Idle Code	Enter the code that defines the reason to keep the equipment inactive. Available options are S: Suspended, P: No Operator, W: No Work Available, etc. The drop-down list displays the active idle codes with appropriate description defined in the **Idle Codes** catalog of the library.

c. Click **Save**.

The equipment is added to the **EQUIPMENT** section.

- Optionally, perform the following steps, as applicable:
  i. To edit the equipment details, perform the following steps:
  ii. Select the appropriate record, and then click **Edit**.
  The **Edit EQUIPMENT** dialog box is displayed.
  iii. Make the necessary changes.
  iv. Click **Save**.
- To delete the equipment, perform the following steps:
  i. Select the appropriate record, and then click **Delete**.
  The confirmation message is displayed.
  ii. Click **OK**.
  The equipment is deleted from the section.

9. To add the labor to the template, in the **LABOR** section, perform the following steps:

a. Click **Add**.

Figure 180: Labor Section

The **New LABOR** dialog box is displayed.

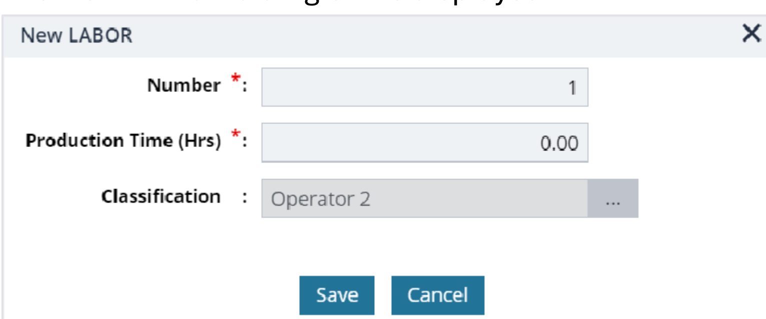
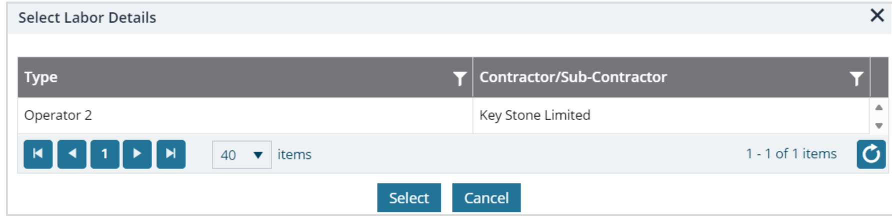


Figure 181: New Labor dialog box

b. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Classification	To select the labor, perform the following steps: a. Click .... The **Select Labor Details** dialog box is displayed.

Field Name	Description
	 *Figure 182: Select Labor Dialog Box* Available options are labors defined in the **Labor/ Equipment** form of the contract. ii. Click the appropriate labor, and click **Select**.
Number	Enter the number of labor.
Production Time (Hrs)	Enter the production time in hours.

c. Click Save.
   The labor is added to the **LABOR** section.
d. Optionally, perform the following steps, as applicable:
   - To edit the labor details, perform the following steps:
     i. Select the appropriate record, and then click **Edit**.
        The **Edit LABOR** dialog box is displayed.
     ii. Make the necessary changes.
     iii. Click **Save**.
   - To delete the labor, perform the following steps:
     i. Select the appropriate record, and then click **Delete**.
        The confirmation message is displayed.
     ii. Click **OK**.
     iii. The labor is deleted from the section.

10. Optionally, in the **ATTACHMENTS** section, upload or link related files. For information on attachments, refer to Section 4.1. Attachments.

11. Click **Save & Exit** to save the record and return to the list page. Optionally, click **Save & Continue** to save the record and continue on the same page. Click **Cancel** to discard the added information and exit the page.

3.5.3. Contractor Daily Record

The Contractor Daily Record (CDR) form enables you to record and track the daily reports at the worksite on a given day.

You can record the following worksite information:

- General information and weather conditions
- Contractor onsite time
- Critical onsite issues
- A written account of events occurred at the site
- Work activity, equipment, personnel, and materials used

After entering the contractor daily record, you can submit it to FHWA for approval.

If the record is not created within the timeline specified in the CDR Reminder Timeframe (hrs) field in the **CONTRACT DETAILS** page, then an email notification is sent to users assigned with the following roles:

- Construction Component Lead
- Contract Management
- Construction Contractor Manager
- Construction Contractor QC Manager
- Construction Contractor Lead
- Construction Contractor CDRs Only

Note: The CDR Reminder Timeframe (hrs) field is displayed only if the Send Reminders for CDR check box is selected in the **CONTRACT DETAILS** page.

You can perform the following tasks:

- 3.5.3.1. Create contractor daily record
- 3.5.3.3. Approve contractor daily record

3.5.3.1. Creating a Contractor Daily Record

Prerequisites

The role of the logged-in user must be one of the following:

- Administrator
- Construction Contractor CDRs only
- Construction Contractor Basic
- Construction Component Lead
- Construction Contractor QC Manager
- Construction Contractor Manager

  For more information on role-specific permissions, refer to Table 1 – Contractor Daily Record Permission Matrix.

Overview

The CDR form enables you to record and track the day-to-day activities at the worksite.

This form is configured for use in the mobile application. All the fields configured for the web application are available in the mobile application. Only the users who created the record can edit or delete it.

Steps

1. Click **Contract Items**.
   The **ITEM LIST** page is displayed.

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

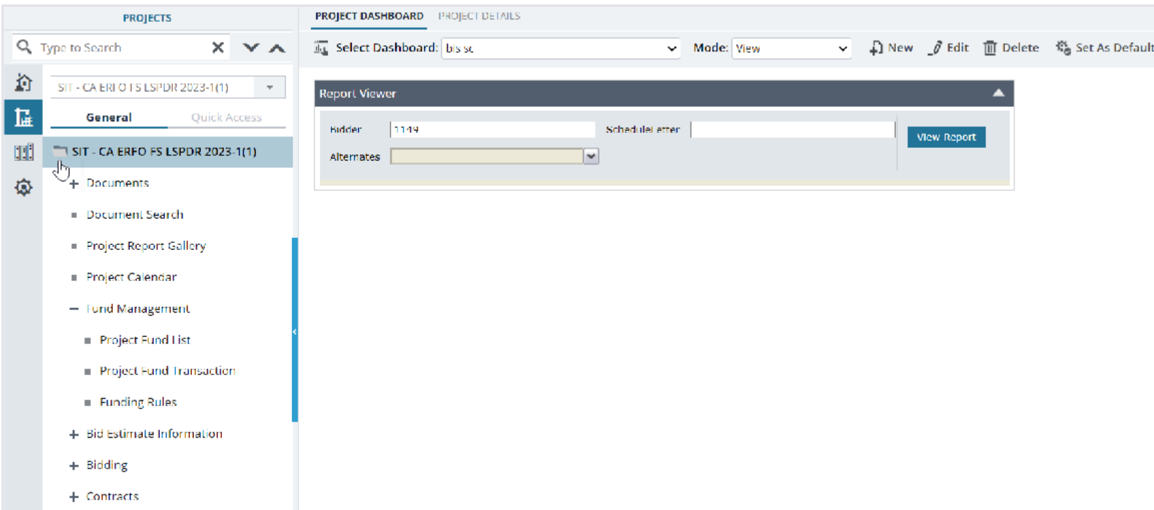


Figure 183: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

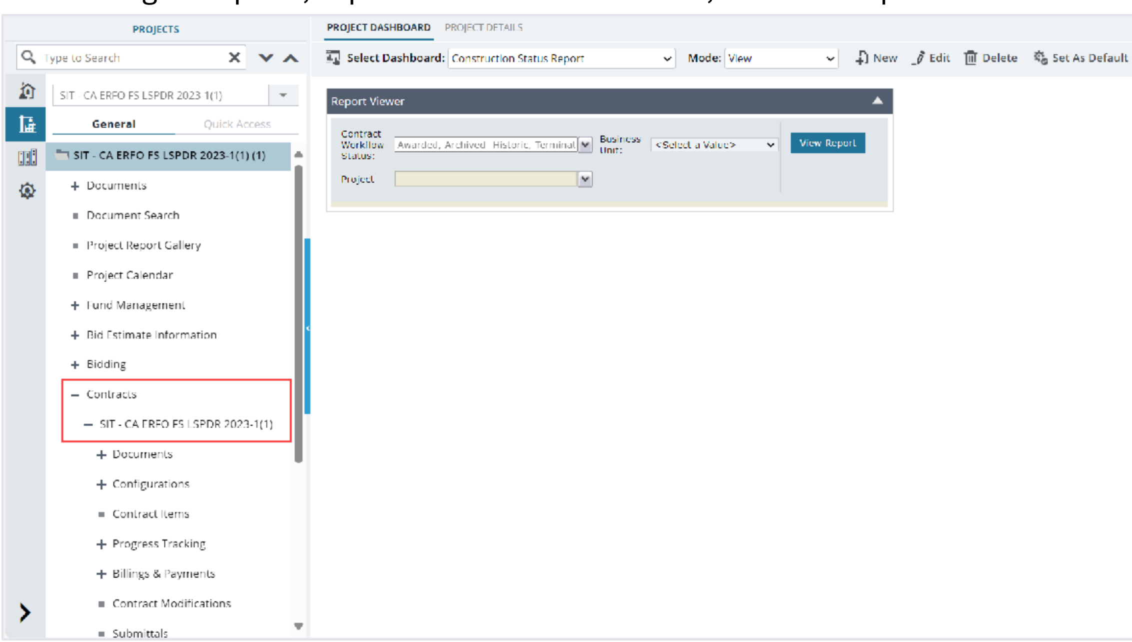


Figure 184: Navigation to Contracts

4. Expand the **Progress Tracking** folder, and then click **Contractor Daily Record**.
   The **CONTRACTOR DAILY RECORD** list page is displayed.

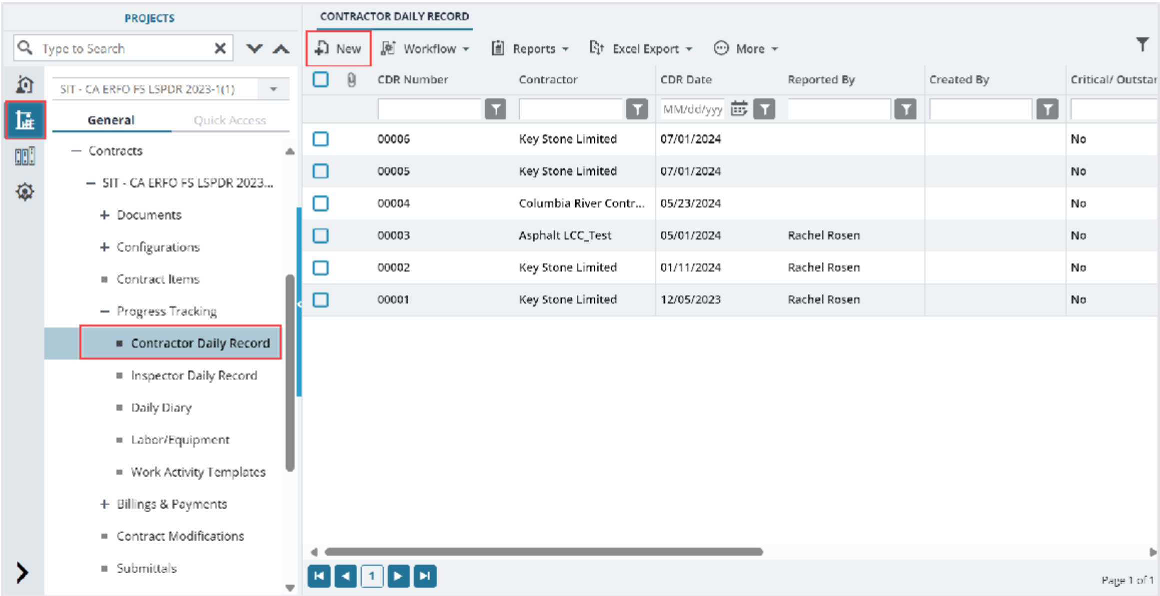


Figure 185: List Page of the Contractor Daily Record Form

5. Click **New**.

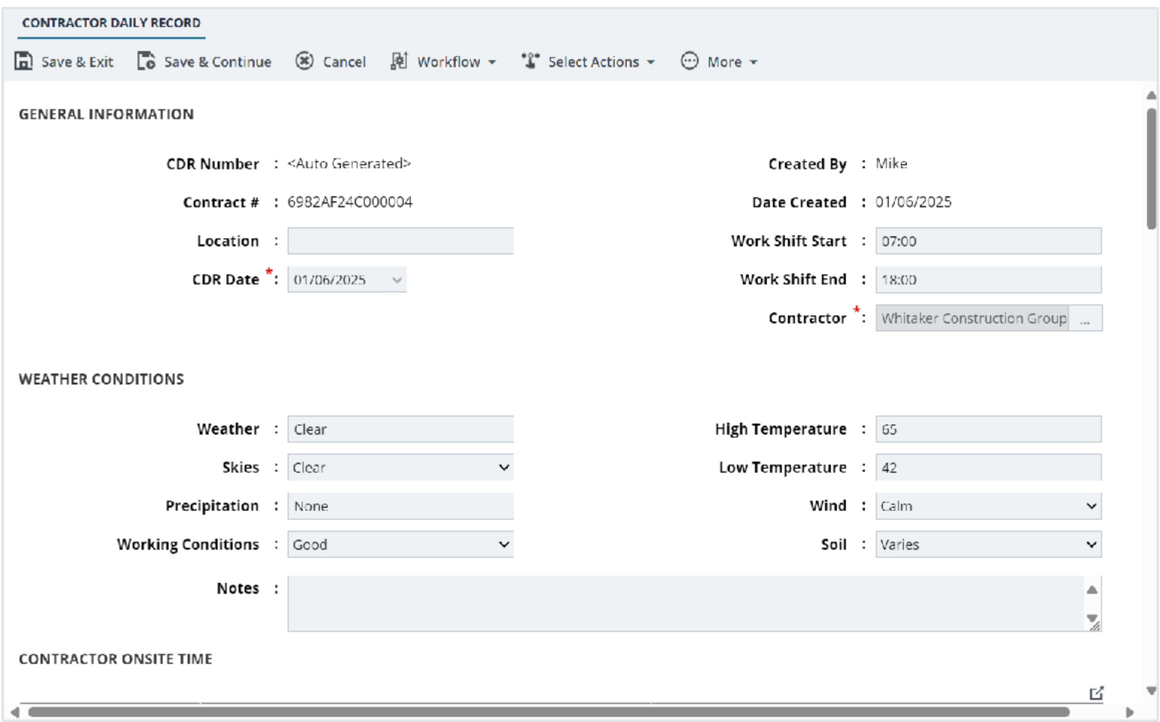


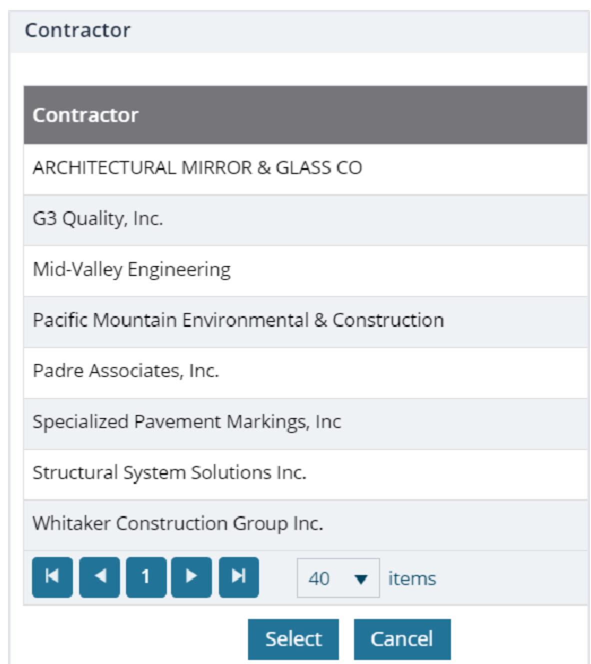
Figure 186: Contractor Daily Record Page

The **CONTRACTOR DAILY RECORD** page displays the following information:

Section Name	Field Name	Description
GENERAL INFORMATION	CDR Number	On saving the record, a unique identification code for the CDR is automatically generated.
	Created By	The name of the logged-in user.

Section Name	Field Name	Description
	Contract #	The value as displayed in the Contract # field of the **CONTRACT DETAILS** page.
	Date Created	The current date is displayed as the date of creation of the CDR record.
	Reported By	The name of the logged-in user.
	Date	The current date.

6. Provide the appropriate information in the fields, as described in the following table:

Section Name	Field Name	Description
GENERAL INFORMATION	Location	Enter the location of the worksite.
	Work Shift Start	Enter the appropriate start time of the work shift.
	CDR Date	By default, the current date is displayed. Optionally, from the drop-down list, select the date for which the daily report is being created.
	Work Shift End	Enter the appropriate end time of the work shift.
	Contractor	To select the contractor at the worksite, perform the following steps: a. Click . The **Contractor** dialog box is displayed.  *Figure 187: Contractor Dialog Box* Available options are active prime contractor and subcontractors displayed in the Contractors form of the contract.

Section Name	Field Name	Description
		b. Click the appropriate contractor, and then click **Select**. For example, **Key Stone Limited**.
WEATHER CONDITIONS	Weather	Enter the weather metrics as recorded at the worksite.
	Skies	From the drop-down list, select the appropriate option as recorded at the worksite. Available options are Clear, Cloudy, Haze, etc. The drop-down list displays the sky conditions defined in the **Skies** catalog of the library.
	Precipitation	Enter the precipitation metrics as recorded at the worksite.
	Working Conditions	From the drop-down list, select the appropriate option as recorded at the worksite. Available options are Good, Satisfactory, Unsatisfactory, etc. The drop-down list displays the working conditions defined in the **Work Condition** catalog of the library.
	High Temperature	Enter the highest temperature recorded at the worksite.
	Low Temperature	Enter the lowest temperature recorded at the worksite.
	Wind	From the drop-down list, select the appropriate option as recorded at the worksite. Available options are Breezy, Calm, Strong, etc. The drop-down list displays the wind conditions defined in the **Wind** catalog of the library.
	Soil	From the drop-down list, select the appropriate option as recorded at the worksite. Available options are Dry, Varies, Wet, etc. The drop-down list displays the soil conditions defined in the **Soil** catalog of the library.
	Notes	Enter any notes for the weather conditions at the worksite.

7. To record the contractor onsite time details, in the **CONTRACTOR ONSITE TIME** section, perform the following steps:

a. Click **Add**.

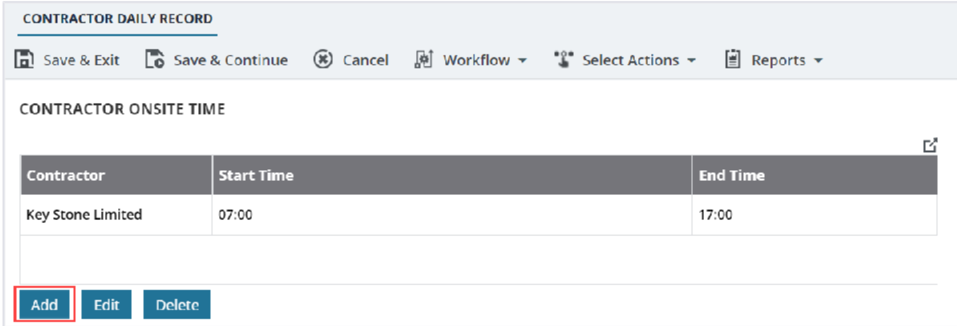


Figure 188: Contractor Onsite Time Section

The **New Contractor Onsite Time** dialog box is displayed.

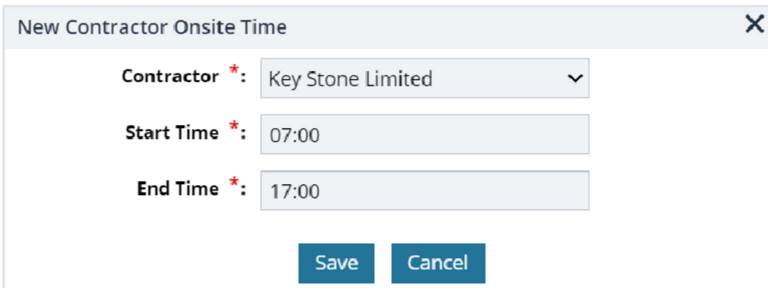


Figure 189: New Contractor Onsite Time

b. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Contractor	From the drop-down list, select a contractor. For example, Key Stone Limited. Available options are prime contractor and subcontractors displayed in the Contractors form of the contract.
Start Time	Enter the appropriate start time of the contractor at the worksite.
End Time	Enter the appropriate end time of the contractor at the worksite.

c. Click **Save**.

d. Optionally, perform the following steps, as applicable:

- To edit the onsite time, perform the following steps:
  i. Select the appropriate record, and then click **Edit**.
  ii. Make the necessary changes, and then click **Save**.
- To delete the onsite time entry, perform the following steps:
  i. Select the appropriate record, and then click **Delete**.
  A confirmation message is displayed.
  ii. Click **OK**.

8. To add the work activity details of the worksite, refer to Section 3.5.3.2. Defining Work Activities in CDR and IDR.
9. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Critical/ Outstanding Issue	Select the appropriate option. **Note:** Upon selecting **Yes**, the **If Yes, Description** field is displayed. In the **If Yes, Description** field, enter the appropriate description.
Unsafe Operations	Select the appropriate option. **Note:** Upon selecting **Yes**, the **If Yes, Description** field is displayed. In the **If Yes, Description** field, enter the appropriate description.
Traffic Control Problems	Select the appropriate option. **Note:** Upon selecting **Yes**, the **If Yes, Description** field is displayed. In the **If Yes, Description** field, enter the appropriate description.
Erosion Control Problems	Select the appropriate option. **Note:** Upon selecting **Yes**, the **If Yes, Description** field is displayed. In the **If Yes, Description** field, enter the appropriate description.
Accidents	Select the appropriate option. **Note:** Upon selecting **Yes**, the **If Yes, Description** field is displayed. In the **If Yes, Description** field, enter the appropriate description.
Deficiencies Found	Select the appropriate option.
Corrective Time Taken (Days)	**Note:** Upon selecting Yes in the Deficiencies Found field, this field is displayed. Enter the number of days required to accomplish the deficiencies found.

10. In the **DAILY NARRATIVE** section, enter a detailed account of events that occurred at the worksite.

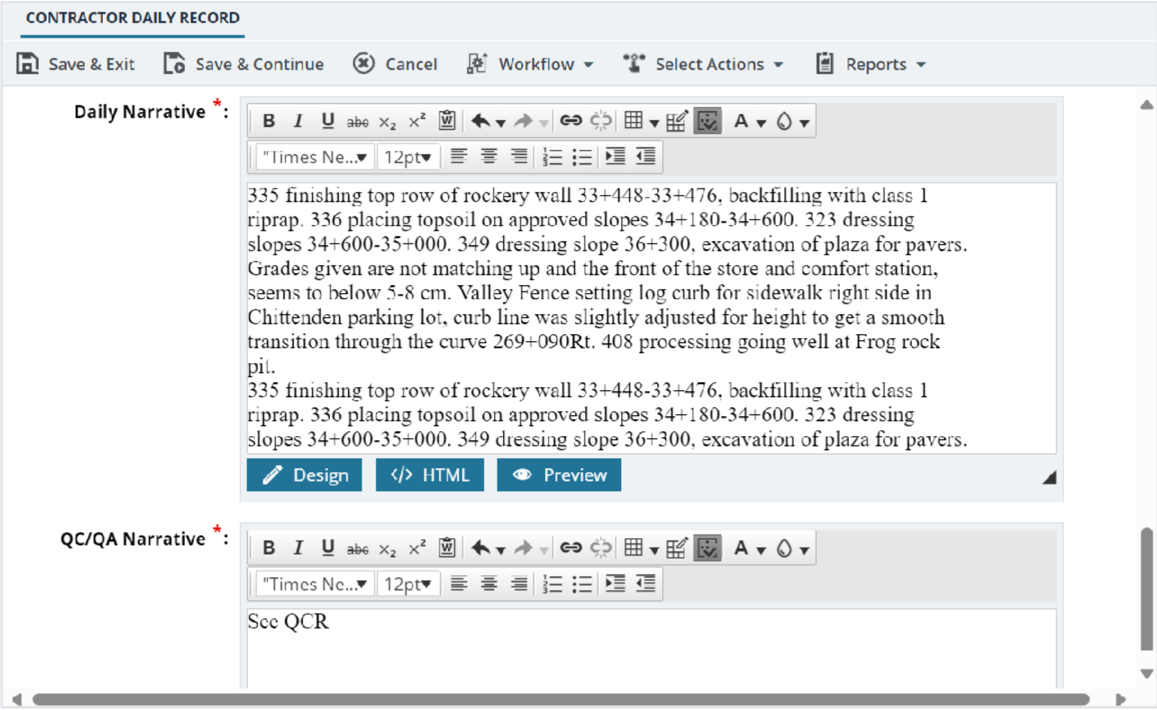


Figure 190: Daily Narrative Section

You can perform any of the following tasks to create and edit the daily narrative:

Note: By default, the Design mode is selected.

- Bold, italicize, underline, strike-through letters and words
- Use subscripts and superscripts
- Select the font and its size
- Select the font color and the background color for the content
- Insert and manage tables, and hyperlinks
- Use bullets and numbering
- Use clipboard operations to cut, copy, and paste the text
- Use indents and outdents
- To add HTML code, click </> HTML, and then enter the code.
- To preview the entered information, click Preview

11. In the **QC/QA NARRATIVE** section, enter a detailed account of events that occurred at the worksite according to the QC/QA.
    You can perform any of the following tasks to create and edit the narrative:

Note:

- For WFL projects, this section will be filled out by the Construction Contractor QC Manager role.
- By default, the Design mode is selected.

- Bold, italicize, underline, strike-through letters and words
- Use subscripts and superscripts
- Select the font and its size
- Select the font color and the background color for the content
- Insert and manage tables, and hyperlinks
- Use bullets and numbering
- Use clipboard operations to cut, copy, and paste the text
- Use indents and outdents
- To add HTML code, click </> HTML, and then enter the code.
- To preview the entered information, click Preview

12. Select the check box adjacent to the contractor self-declaration statement to ensure all the entered information is accurate.

Note: This check box must be selected to submit the CDR.

13. In the **COMMENTS** section, enter any additional notes or comments for the daily report.
14. To generate a report from the details page, perform the following:
    a. In the toolbar, click **Reports**.

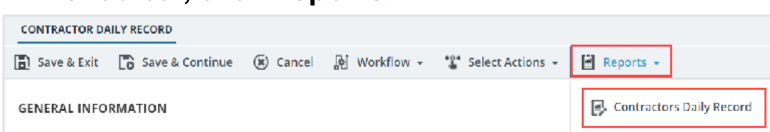


Figure 191: Contractors Daily Report

    b. Click **Contractors Daily Report**.
    The **CONTRACTORS DAILY REPORT** page is displayed in a new tab.
15. Optionally, in the **ATTACHMENTS** section, upload or link related files. For information on attachments, refer to Section 4.1. Attachments.
16. Click **Save & Exit** to save the record and return to the list page. Optionally, click **Save & Continue** to save the record and continue on the same page. Click **Cancel** to discard the added information and exit the page.

3.5.3.2. Defining Work Activities in CDR and IDR

Prerequisites

- CDR or IDR records are available, as applicable.
- The relevant records are in the Draft workflow status.
- Based on the work activity in CDR or IDR, the role of the logged-in user must be one of the
- following:
    - Administrator
    - Construction Contractor CDRs only
    - Construction Contractor Basic
    - Construction Engineer
    - Construction Operations Engineer
    - Inspector
    - Construction Component Lead
    - Construction Contractor QC Manager
    - Assistant Project Engineer
    - Project Engineer
    - Regional Engineer
    - Inspector A&E
    - Assistant Project Engineer A&E
    - Project Engineer A&E
    - Construction Contractor Manager

    For more information on role-specific permissions, refer to Table 1 – Contractor Daily Record Permission Matrix or Table 2 – Inspector Daily Record, as applicable.

Overview

You can enter the work activity details of the worksite in the **WORK ACTIVITIES** section of the CDR and IDR forms.

On clicking the hyperlink in the **New WORK ACTIVITIES** dialog box, you are navigated to CDR **NAVIGATION PAGE** or **IDR NAVIGATION PAGE** based on the form you are working on. In the respective page, you can record information about the contract items, equipment, and labor.

Steps

1. Open the CDR or IDR record, as applicable.
2. In the **WORK ACTIVITIES** section, click **Add**.

The **New WORK ACTIVITIES** dialog box is displayed.

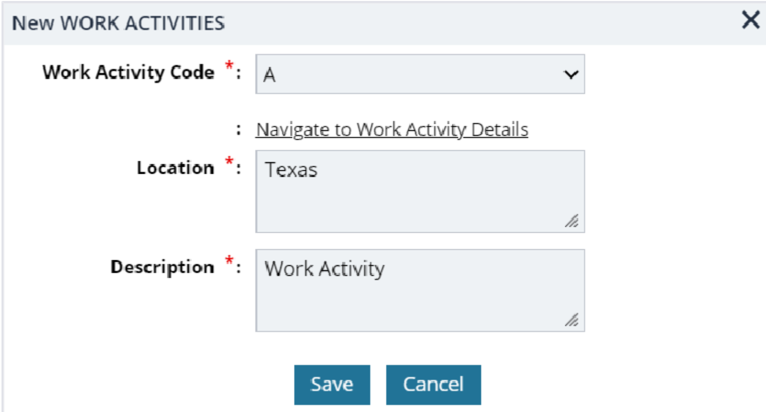


Figure 192: New Work Activities Dialog Box

3. From the **Work Activity Code** drop-down list, select the appropriate work code.

   Note: You cannot repeat the same **Work Activity Code**.

4. To add the activity details, perform the following steps, as applicable:

   - To add the activity details from the template, perform the following steps:

     a. In the **Work Activity** dialog box, click the **Navigate to Work Activity** details hyperlink.

        Based on the form you are working on, either **CDR NAVIGATION PAGE** or **IDR NAVIGATION PAGE** is displayed.

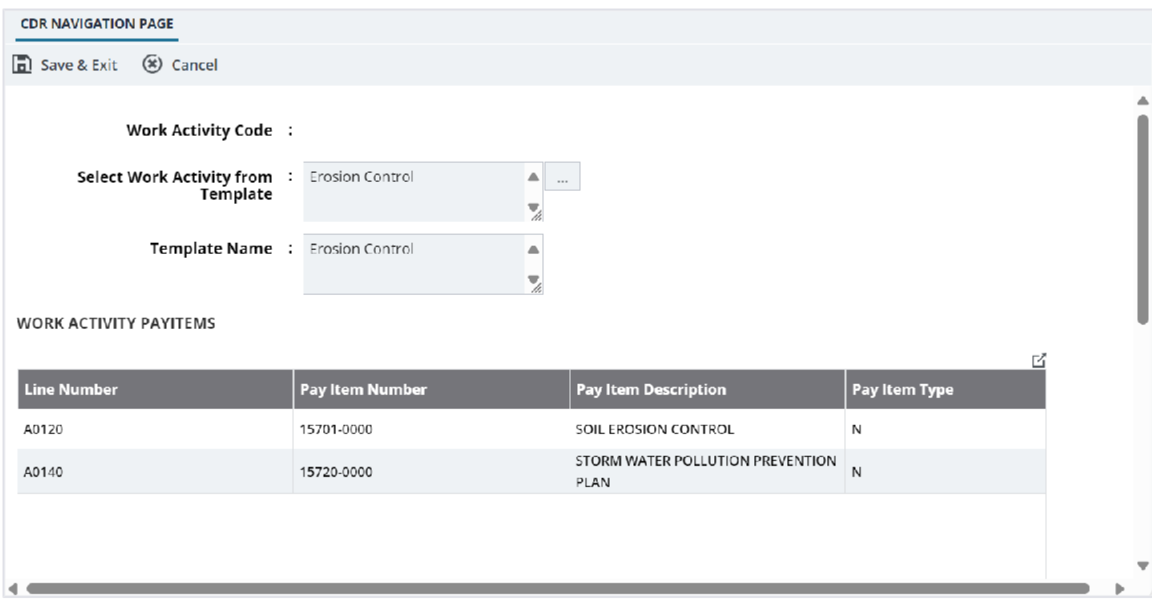


Figure 193: CDR Navigation Page

b. Adjacent to the **Select Work Activity** from Template field, click .
The **Select Work Activity Template** dialog box is displayed.

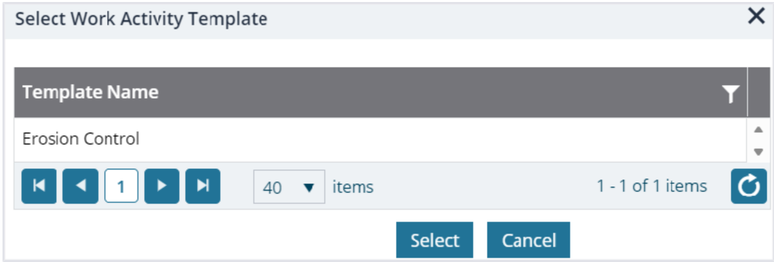


Figure 194: Select Work Activity Template Dialog Box

c. Select the appropriate template, and then click **Select**.
Available options are work activity templates defined in the **Work Activity Templates** form. For more information on work activity templates, refer to Section 3.5.2. Creating a Work Activity Template.
Upon selecting the template, information retrieved from the work activity template is displayed in the **Description**, **Location**, **WORK ACTIVITY PAYITEMS**, **EQUIPMENT**, and **LABOR** sections.

- To manually add the activity details, in the **Work Activity** dialog box, click the **Navigate to Work Activity** details hyperlink and perform the following steps:

a. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Description	Enter the description for the work activity
Location	Enter the location for the work activity.

b. To add the approved contract items to the template, in the **WORK ACTIVITY PAYITEMS** section, perform the following steps:

i. Click **Add**.

The **Approved Contract Items** dialog box is displayed.

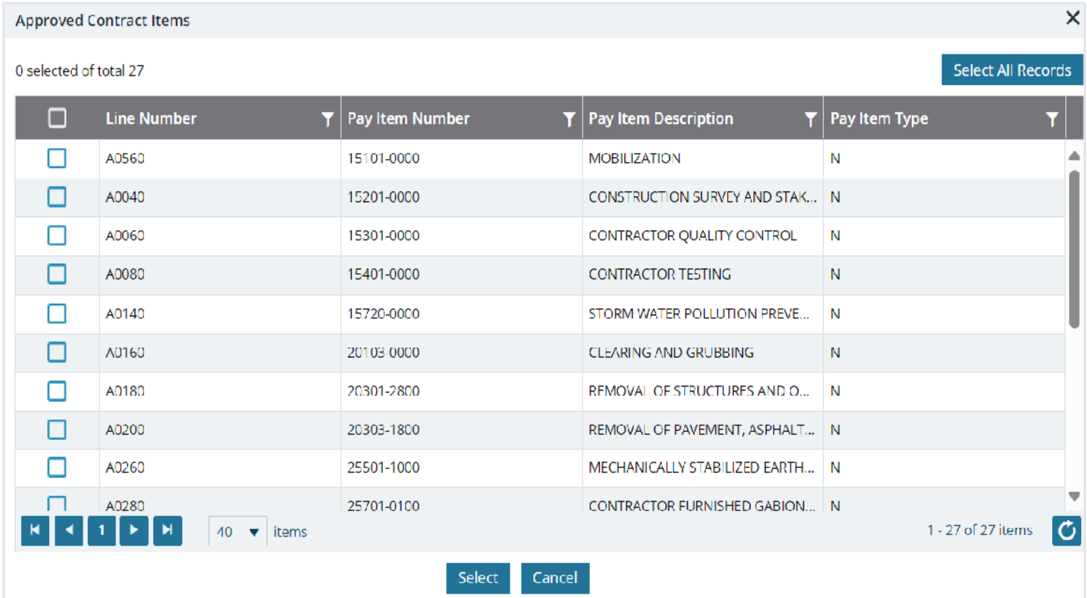


Figure 195: Approved Contract Items Dialog Box

ii. Select the appropriate contract item, and then click **Select**.

The contract item is added to the **WORK ACTIVITY PAYITEMS** section.

iii. Optionally, perform the following steps, as applicable:

- To edit the contract item details, perform the following steps:
    a) Select the appropriate record, and then click **Edit**.
    The **Edit WORK ACTIVITY PAYITEMS** dialog box is displayed.
    b) Make the necessary changes.
    c) Click **Save**.
- To delete the contract item, perform the following steps:
    a) Select the appropriate record, and then click **Delete**.
    The confirmation message is displayed.
    b) Click OK.
    The contract item is deleted from the section.

c. To add the equipment to the template, in the **EQUIPMENT** section, perform the following steps:

   i. Click **Add**.
   The **New EQUIPMENT** dialog box is displayed.

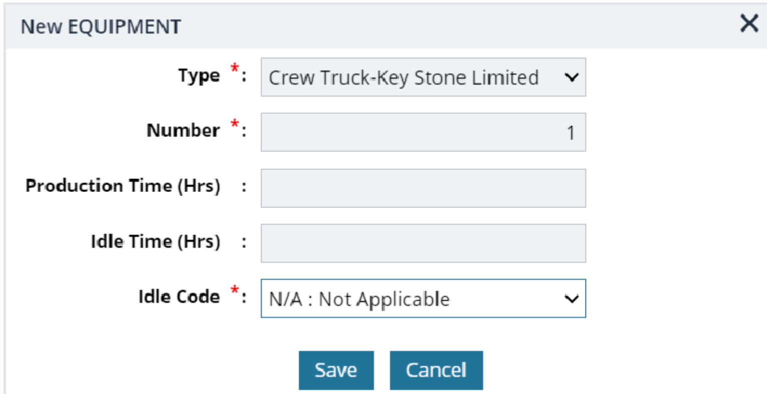


Figure 196: New Equipment Dialog Box

   ii. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Type	From the drop-down list, select the appropriate equipment. Available options are equipment defined in the **Labor/Equipment** form of the contract. **Note:** In the drop-down, the equipment is hyphenated with the name of the Contractor or Subcontractor. For example, Haul Truck - Key Stone Limited. For more information on Labor/Equipment form, refer to Section 3.5.1. Recording Labors and Equipment.
Number	Enter the quantity of the equipment.
Production Time (Hrs)	Enter the production time in hours.
Idle Time (Hrs)	Enter the number of hours the equipment was left idle.
Idle Code	Enter the code that defines the reason to keep the equipment idle. Available options are S: Suspended, P: No Operator, W: No Work Available, etc. The drop-down list displays the active codes with appropriate description defined in the **Idle Codes** catalog of the library.

iii. Click **Save**.

The equipment is added to the **EQUIPMENT** section.

iv. Optionally, perform the following steps, as applicable:

- To edit the equipment details, perform the following steps:
  a) Select the appropriate record, and then click Edit.
     The **Edit EQUIPMENT** dialog box is displayed.
  b) Make the necessary changes.
  c) Click **Save**.
- To delete the equipment, perform the following steps:
  a) Select the appropriate record, and then click Delete.
     The confirmation message is displayed.
  b) Click **OK**.
     The equipment is deleted from the section.

d. To add the labor to the template, in the **LABOR** section, perform the following steps:

i. Click **Add**.

The **New LABOR** dialog box is displayed.

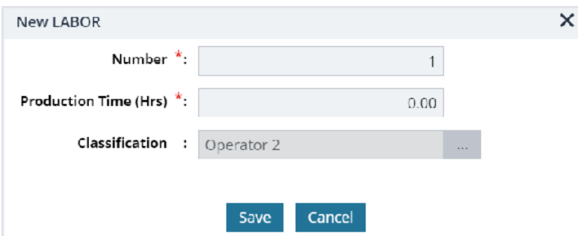
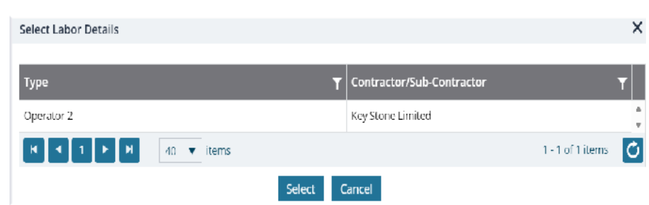


Figure 197: New Labor Dialog Box

ii. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Classification	To select the labor, perform the following steps: a) Click . The **Select Labor Details** dialog box is displayed.  *Figure 198: Select Labor Details Dialog Box*

Field Name	Description
	Available options are labors defined in the **Labor/Equipment** form of the contract. For more information on Labor/Equipment form, refer to Section 3.5.1. Recording Labors and Equipment. b) Select the appropriate labor, and click **Select**.
Number	Enter the number of laborers.
Production Time (Hrs)	Enter the production time in hours.

iii. Click **Save**.

The labor is added to the **LABOR** section.

iv. Optionally, perform the following steps, as applicable:

- To edit the labor details, perform the following steps:
  - a) Select the appropriate record, and then click **Edit**.

    The **Edit LABOR** dialog box is displayed.
  - b) Make the necessary changes.
  - c) Click **Save**.
- To delete the labor, perform the following steps:
  - a) Select the appropriate record, and then click **Delete**.

    The confirmation message is displayed.
  - b) Click **OK**.

    The labor is deleted from the section.

5. Optionally, perform the following steps, as applicable:

- To edit the work activity details, in the **WORK ACTIVITIES** section, perform the following steps:

a. Select the appropriate record, and then click **Edit**.

The **Edit WORK ACTIVITIES** dialog box is displayed.

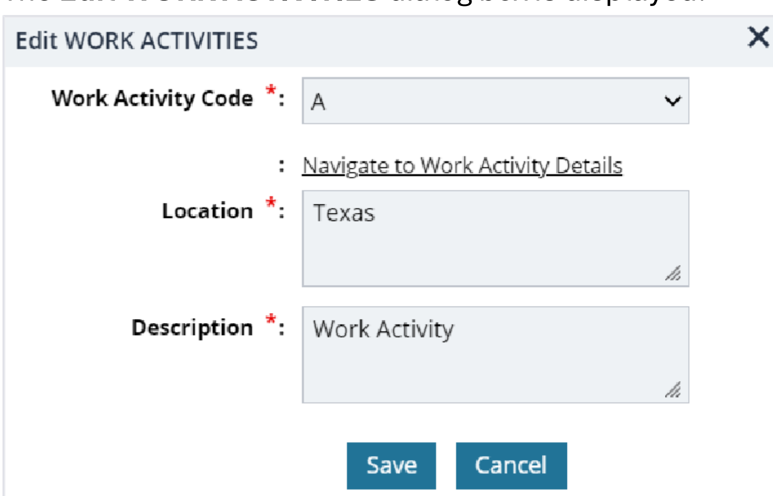


Figure 199: Edit Work Activities Dialog Box

   b. Make the necessary changes, and then click **Save**.
   c. Alternatively, click the **Navigate to Work Activity** Details hyperlink corresponding to the appropriate **Work Activity Code** from the **WORK ACTIVITIES** section, and make the necessary changes.
- To delete the work activity details, in the WORK ACTIVITIES section, perform the following steps:
   a. Select the appropriate record, and then click **Delete**.
      A confirmation message is displayed.
   b. Click **OK**.

6. Click **Save & Exit**.
   The **New WORK ACTIVITIES** dialog box is displayed.
7. Click **Save**.

3.5.3.3. Approving a Contractor Daily Record

Prerequisites

Based on the workflow status of the record, the role of the logged-in user should be one of the following:

- Administrator
- Construction Component Lead
- Construction Contractor Manager
- Construction Contractor QC Manager
- Construction Contractor Lead
- Construction Contractor CDRs Only
- Project Engineer
- Assistant Project Engineer
- Project Engineer A&E
- Assistant Project Engineer A&E

Overview

This section explains the positive and forward workflow actions to reach the **Approved** workflow status. To move a **Contract Daily** Record in a regular construction contract through the defined workflow, perform the following steps:

Steps

1. In the module menu, click **Projects**.
2. The **PROJECTS** list page is displayed.

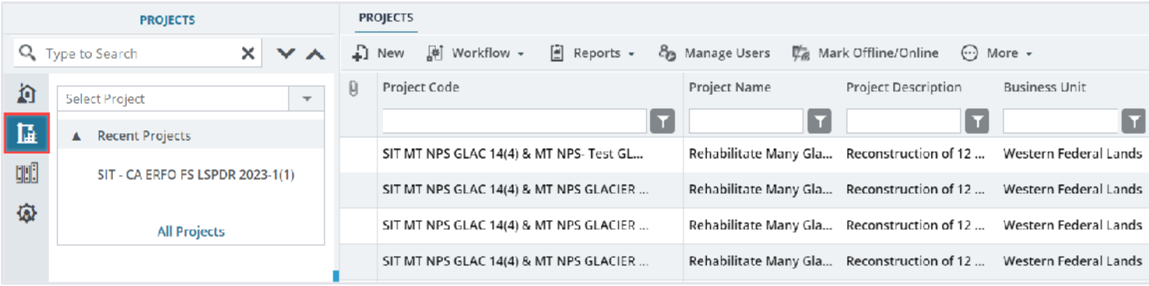


Figure 200: Navigation to Projects Module

3. In the list page, double-click the appropriate project, and then click the project folder to expand it.

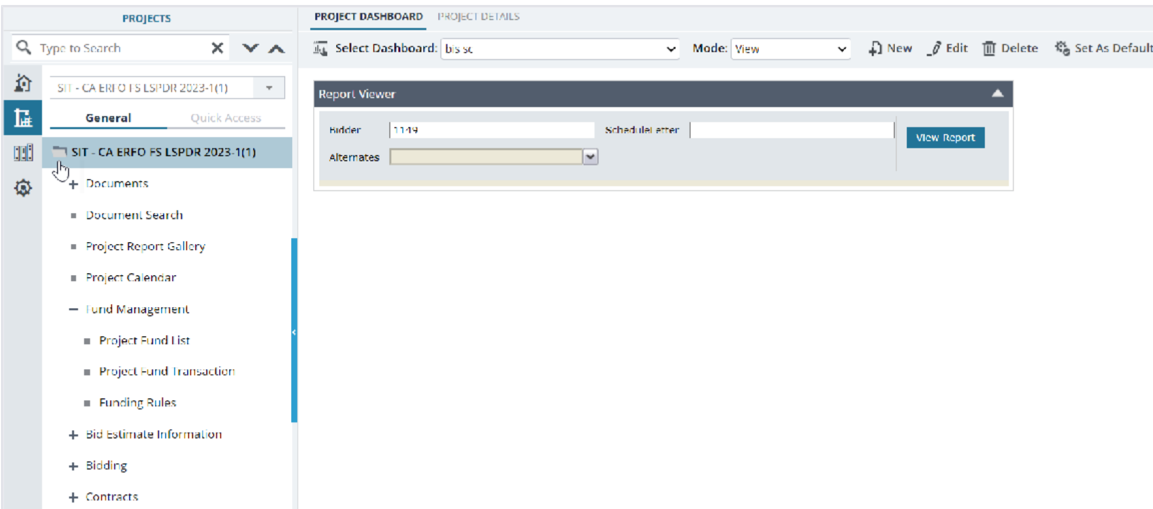


Figure 201: Expanding Projects Folder

4. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

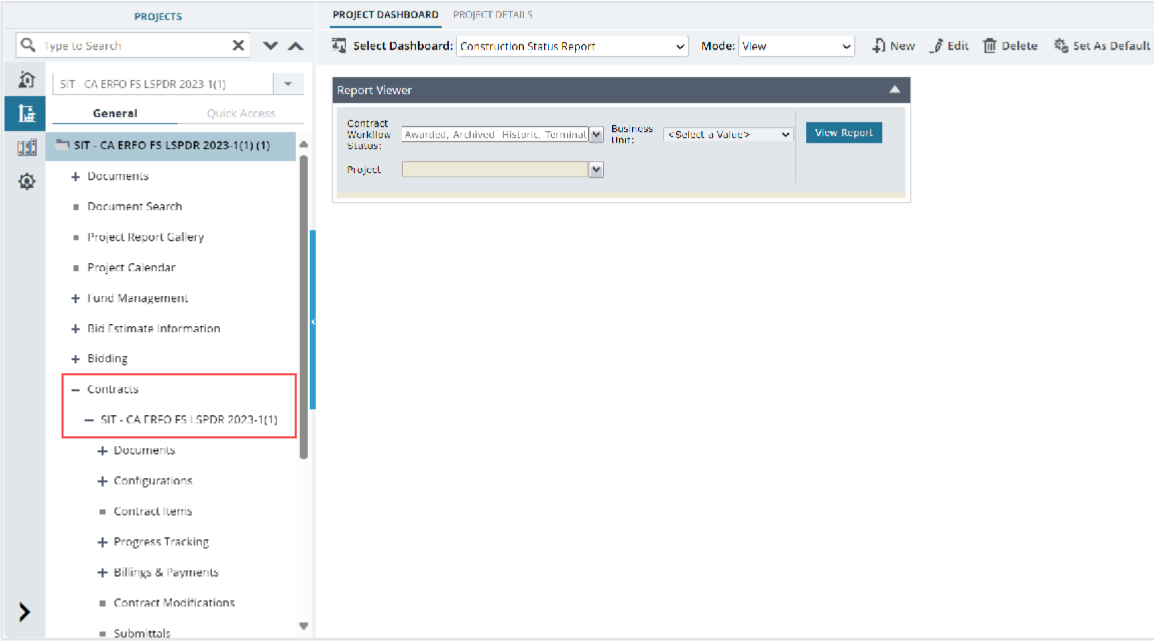
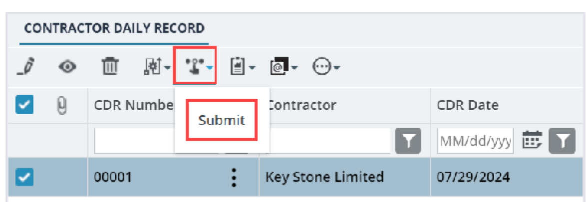
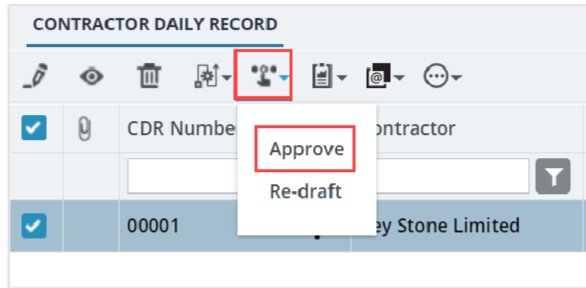


Figure 202: Navigation to Contracts

5. To approve the **Contractor Daily Record** record, perform the following steps:

Phase	Role	Workflow Steps
1	• Administrator • Construction Component Lead • Construction Contractor Manager • Construction Contractor QC Manager • Construction Contractor Lead • Construction Contractor CDRs Only	**Note:** To move the **Contractor Daily** Record to the **Pending Review** workflow status, ensure the contractor's declaration in the CDR record is selected. a. In the list page, select the appropriate record that is in the **Draft** workflow status, and then click **Select Actions**.  *Figure 203: Workflow Action – Submit* b. Click **Submit**, and in the Masterworks dialog box, click **OK**. The workflow status of the record is set to **Pending Review**.
2	• Administrator • Project Engineer • Assistant Project Engineer • Project Engineer A&E	a. In the list page, select the appropriate record that is in the **Pending Review** workflow status, and then click **Select Actions**.

	• Assistant Project Engineer A&E	 *Figure 204: Workflow Action – Approve* b. Click **Approve**, and in the Masterworks dialog box, click **OK**. The workflow status of the record is set to **Approved**.

3.5.3.4. Contractor Daily Record Workflow Status

Based on the **Solicitation Procedure** displayed in the **CONTRACT DETAILS** page, this section provides the workflow actions and status (current and subsequent status) of the **Contract Daily** Record.

For information on setting a workflow status to the next status, refer to Section 4.3. Workflow Status Transitions.

Table 13: Contract Daily Report Workflow Status – Regular Construction Contracts

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
1	Draft	• Administrator • Construction Component Lead • Construction Contractor Manager • Construction Contractor QC Manager • Construction Contractor Lead • Construction Contractor CDRs Only	Submit	Pending Review	**Note:** Ensure the selected contractor is active in the **Request for Sublet Work** form. • To move the Contractor Daily Record to the **Pending Review** workflow status, ensure the

					contractor declaration check box in the **Contractor Daily Record** is selected. • Once the record is moved to the **Pending Review** workflow status, you cannot delete it or edit any of its fields.
2	Pending Review	• Administrator • Project Engineer • Assistant Project Engineer • Project Engineer A&E • Assistant Project Engineer A&E	Approve	Approved	-
			Re-draft	draft	-

Table 14: Contract Daily Report Workflow Status – D-B and Letter Contracts

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
1	Draft	• Administrator • Construction Component Lead • Construction Contractor Manager	Submit for QC Review	Pending for QC Review	**Note:** Ensure the selected contractor is active in the **Request for Sublet Work** form.

		• Construction Contractor QC Manager • Construction Contractor Lead • Construction Contractor CDRs Only			• To move the Contractor Daily Record to the **Pending for QC Review** workflow status, ensure the contractor declaration check box in the **Contractor Daily Record** is selected. • Once the record is moved to the **Pending for QC Review** workflow status, you cannot delete it or edit any of its fields.
			Re-draft	Draft	-
2	Pending Review	• Administrator • Project Engineer • Assistant Project Engineer • Project Engineer A&E • Assistant Project Engineer A&E	Approve	Approved	-
			Re-draft	Draft	-

3.5.4. Inspector Daily Record

The **Inspector Daily Record (IDR)** form enables you to record and track the daily reports at the worksite on a given day.

You can record the following worksite information:

- General information and weather conditions
- Contractor's onsite time
- Critical onsite issues
- A written account of events occurred at the site
- Work activity, equipment, personnel, and materials used

After entering the inspector daily record, you can submit it to FHWA for approval.
If the record is not created within the timeline specified in the **IDR Reminder Timeframe (hrs)** field in the **CONTRACT DETAILS** page, then an email notification is sent to users assigned with the following roles:

- Lead Inspector
- Inspector
- Inspector A&E

Note: The **IDR Reminder Timeframe (hrs)** field is displayed only if the **Send Reminders for IDR** check box is selected in the **CONTRACT DETAILS** page.

You can perform the following tasks:

- 3.5.4.1. Create inspector daily record
- 3.5.4.2. Approve inspector daily record

3.5.4.1. Creating an Inspector Daily Record

Prerequisites

- The role of the logged-in user must be one of the following:
    - Administrator
    - Construction Component Lead
    - Construction Engineer
    - Construction Operations Engineer
    - Inspector
    - Assistant Project Engineer
    - Project Engineer
    - Regional Engineer
    - Inspector A&E
    - Assistant Project Engineer A&E

- ○ Project Engineer A&E

  For more information on role-specific permissions, refer to Table 2 – Inspector Daily Record Permission Matrix.

Overview

You can record and track the day to day activities at the worksite.

This form is configured for use in the mobile application. All the fields configured for the web application are available in the mobile application. Only the users who created the record can edit or delete it.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

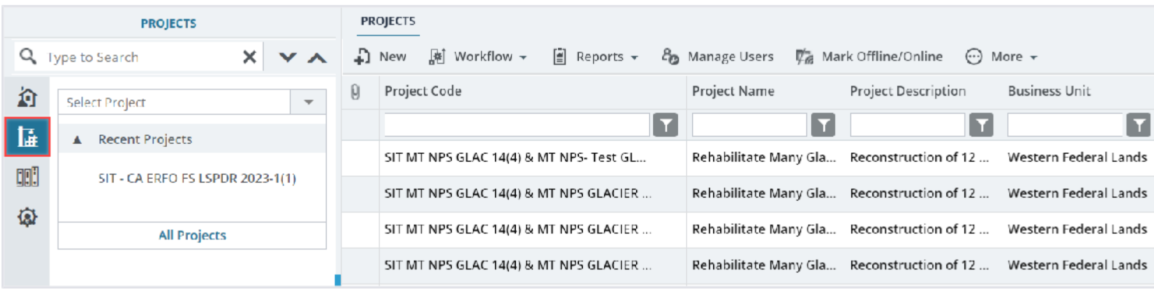


Figure 205: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

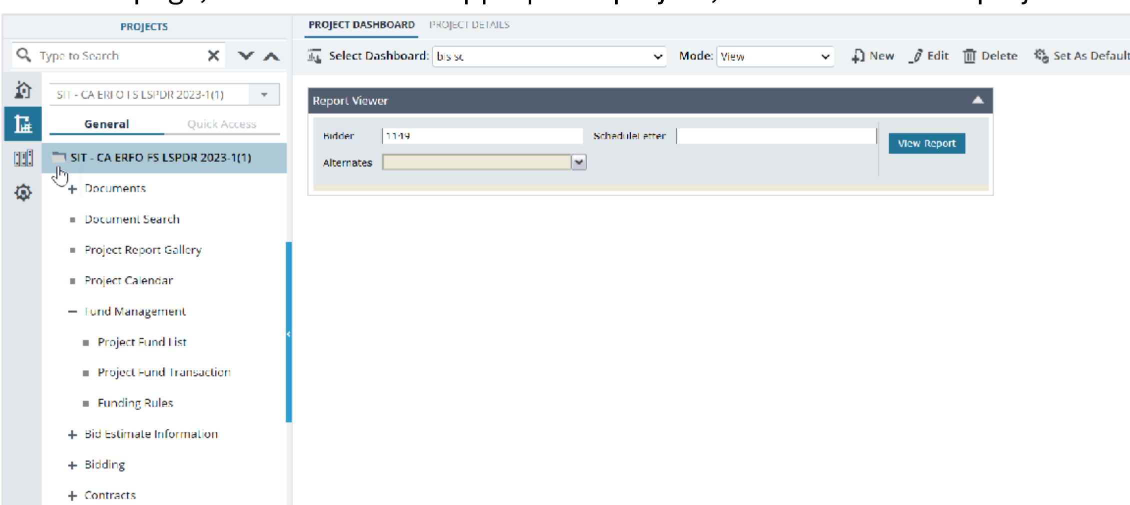


Figure 206: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

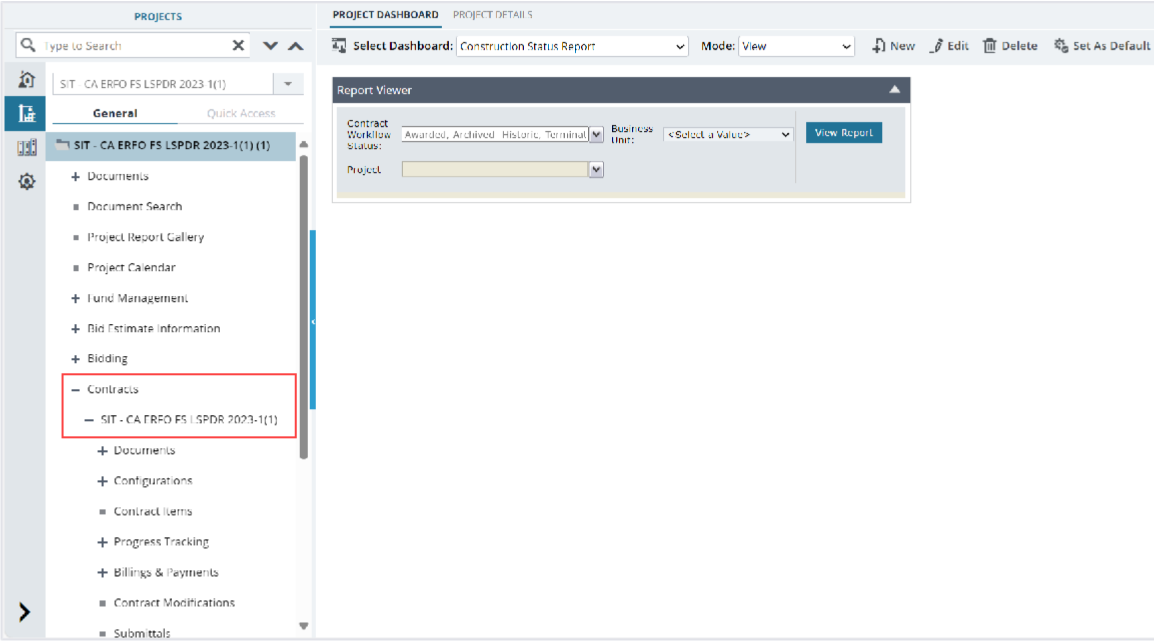


Figure 207: Navigation to Contracts

4. Expand the **Progress Tracking** folder, and then click **Inspector Daily** Record. The **INSPECTOR DAILY RECORD** list page is displayed.

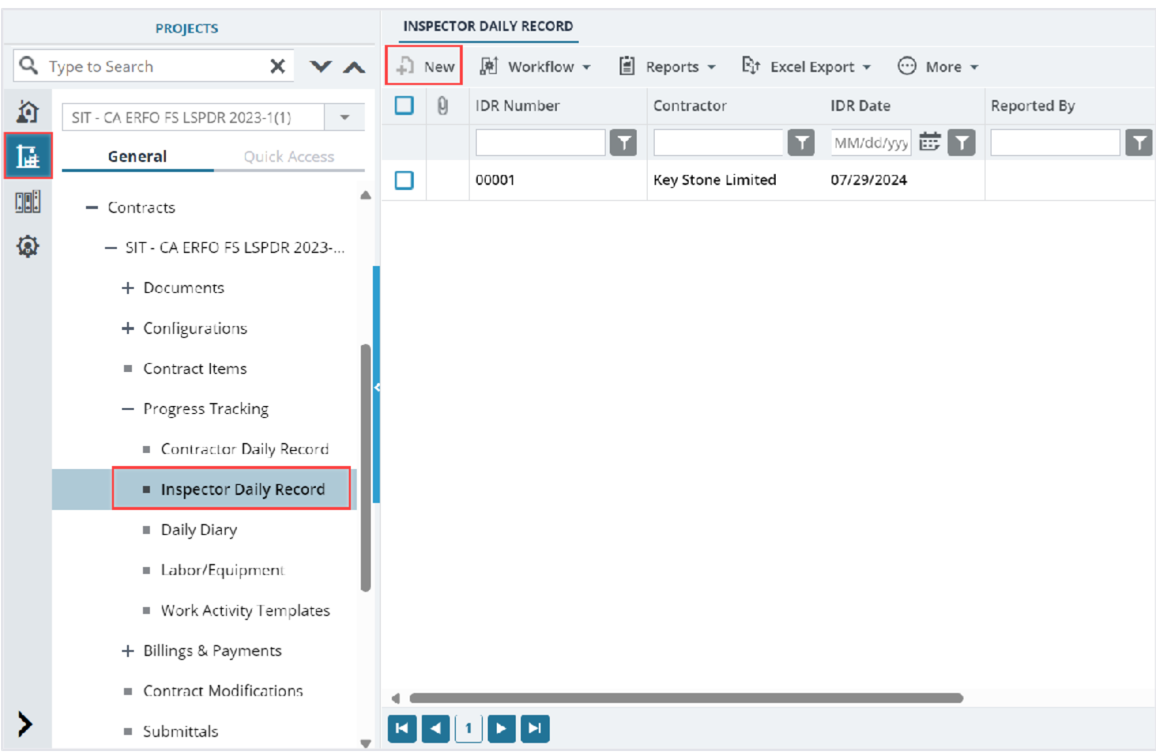


Figure 208: List Page of Inspector Daily Record

5. Click **New**.

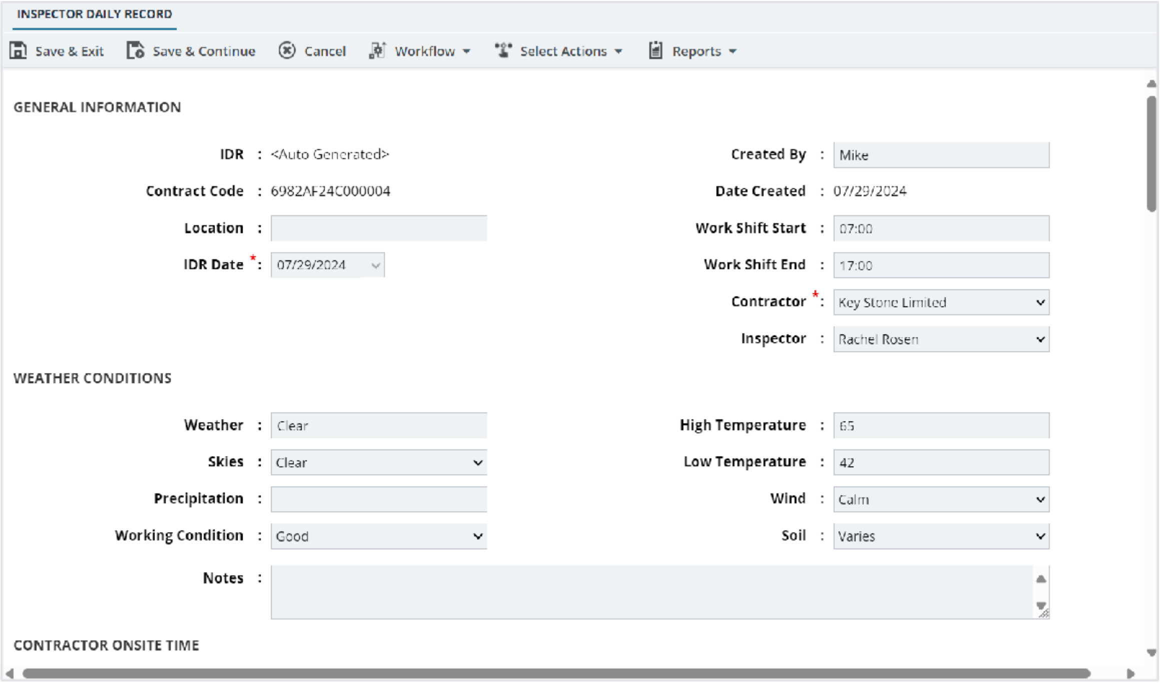


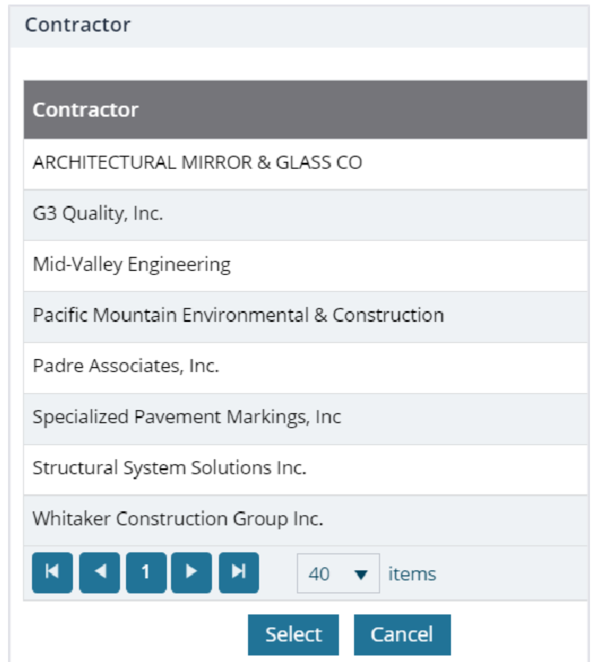
Figure 209: Inspector Daily Record Page

The **INSPECTOR DAILY RECORD** page displays the following information:

Section Name	Field Name	Description
GENERAL INFORMATION	IDR Number	On saving the record, a unique identification code for the IDR is automatically generated.
GENERAL INFORMATION	Contract #	The value as displayed in the **Contract #** field of the **CONTRACT DETAILS** page.
GENERAL INFORMATION	Date Created	The current date is considered as the daily report creation date.
COMMENTS	Reported By	The name of the logged-in user.
COMMENTS	Date	The current date.

6. Provide the appropriate information in the fields, as described in the following table:

Section Name	Field Name	Description
GENERAL INFORMATION	Created By	By default, the name of the logged-in user is displayed. Optionally, enter the appropriate name.
GENERAL INFORMATION	Work Shift Start	Enter the appropriate start time of the work shift.
GENERAL INFORMATION	Location	Enter the location of the worksite.
GENERAL INFORMATION	IDR Date	By default, the current date is displayed. Optionally, from the drop-down list, select the date for which the daily report is being created.

Section Name	Field Name	Description
GENERAL INFORMATION	Work Shift End	Enter the appropriate end time of the work shift.
GENERAL INFORMATION	Contractor	To select the contractor at the worksite, perform the following steps: b. Click . The **Contractor** dialog box is displayed.  *Figure 210: Contractor Dialog Box* Available options are active prime contractor and subcontractors displayed in the Contractors form of the contract. c. Click the appropriate contractor, and then click **Select**. For example, **Key Stone Limited**.
GENERAL INFORMATION	Inspector	From the drop-down list, select the name of the inspector. Available options are users invited to the contractor with the Inspector role.
WEATHER CONDITIONS	Weather	Enter the weather metrics as recorded at the worksite.
WEATHER CONDITIONS	Skies	From the drop-down list, select the appropriate option as recorded at the worksite. Available options are Clear, Cloudy, Haze, etc. The drop-down list displays the sky conditions defined in the **Skies** catalog of the library.
WEATHER CONDITIONS	Precipitation	Enter the precipitation metrics as recorded at the worksite.

Section Name	Field Name	Description
WEATHER CONDITIONS	Working Conditions	From the drop-down list, select the appropriate option as recorded at the worksite. Available options are Good, Satisfactory, Unsatisfactory, etc. The drop-down list displays the working conditions defined in the **Work Condition** catalog of the library.
WEATHER CONDITIONS	High Temperature	Enter the highest temperature recorded at the worksite.
WEATHER CONDITIONS	Low Temperature	Enter the lowest temperature recorded at the worksite.
WEATHER CONDITIONS	Wind	From the drop-down list, select the appropriate option as recorded at the worksite. Available options are Breezy, Calm, Strong, etc. The drop-down list displays the wind conditions defined in the **Wind** catalog of the library.
WEATHER CONDITIONS	Soil	From the drop-down list, select the appropriate option as recorded at the worksite. Available options are Dry, Varies, Wet, etc. The drop-down list displays the soil conditions defined in the **Soil** catalog of the library.
WEATHER CONDITIONS	Notes	Enter any notes for the weather conditions at the worksite.

7. To record the contractor onsite time details, in the **CONTRACTOR ONSITE TIME** section, perform the following steps:
    a. Click **Add**.

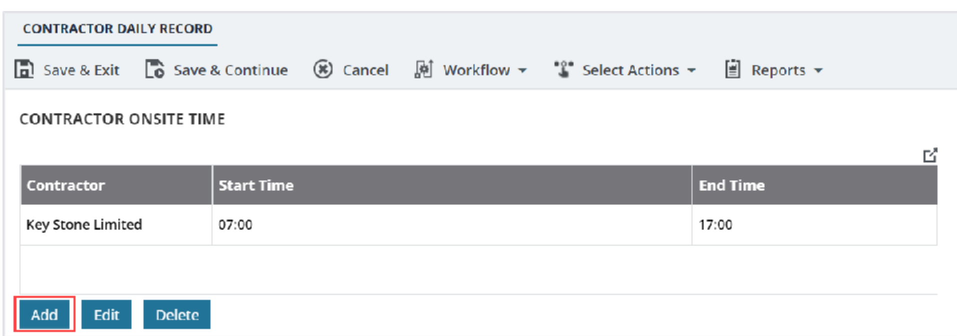


Figure 211: Contractor Onsite Time Section

The **New Contractor Onsite Time** dialog box is displayed.

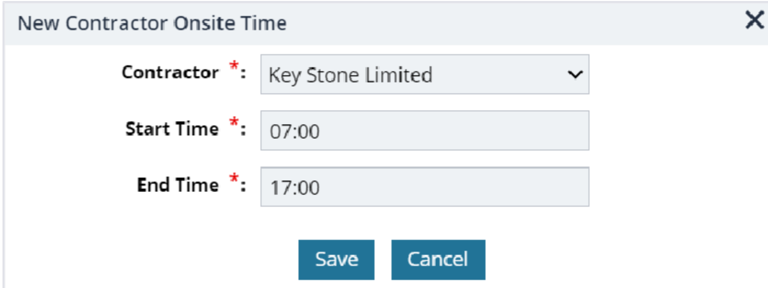


Figure 212: New Contractor Onsite Time

b. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Contractor	From the drop-down list, select a contractor. For example, Key Stone Limited. Available options are prime contractor and subcontractors displayed in the Contractors form of the contract.
Start Time	Enter the appropriate start time of the contractor at the worksite.
End Time	Enter the appropriate end time of the contractor at the worksite.

c. Click **Save**.

d. Optionally, perform the following steps, as applicable:

- To edit the onsite time, perform the following steps:
  iii. Select the appropriate record, and then click **Edit**.
  iv. Make the necessary changes, and then click **Save**.
- To delete the onsite time entry, perform the following steps:
  iii. Select the appropriate record, and then click **Delete**.
  A confirmation message is displayed.
  iv. Click **OK**.

8. To add the work activity details of the worksite, refer to Section 3.5.3.2. Defining Work Activities in CDR and IDR.
9. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Critical/ Outstanding Issue	Select the appropriate option. **Note:** Upon selecting **Yes**, the **If Yes, Description** field is displayed.

Field Name	Description
	In the **If Yes, Description** field, enter the appropriate description.
Unsafe Operations	Select the appropriate option. **Note:** Upon selecting **Yes**, the **If Yes, Description** field is displayed. In the **If Yes, Description** field, enter the appropriate description.
Traffic Control Problems	Select the appropriate option. **Note:** Upon selecting **Yes**, the **If Yes, Description** field is displayed. In the **If Yes, Description** field, enter the appropriate description.
Erosion Control Problems	Select the appropriate option. **Note:** Upon selecting **Yes**, the **If Yes, Description** field is displayed. In the **If Yes, Description** field, enter the appropriate description.
Accidents	Select the appropriate option. **Note:** Upon selecting **Yes**, the **If Yes, Description** field is displayed. In the **If Yes, Description** field, enter the appropriate description.
Deficiencies Found	Select the appropriate option.
Corrective Time Taken (Days)	**Note:** Upon selecting Yes in the Deficiencies Found field, this field is displayed. Enter the number of days required to accomplish the deficiencies found.

10. In the **QA NARRATIVE REPORT** section, enter a detailed account of events that occurred at the worksite according to the QA.

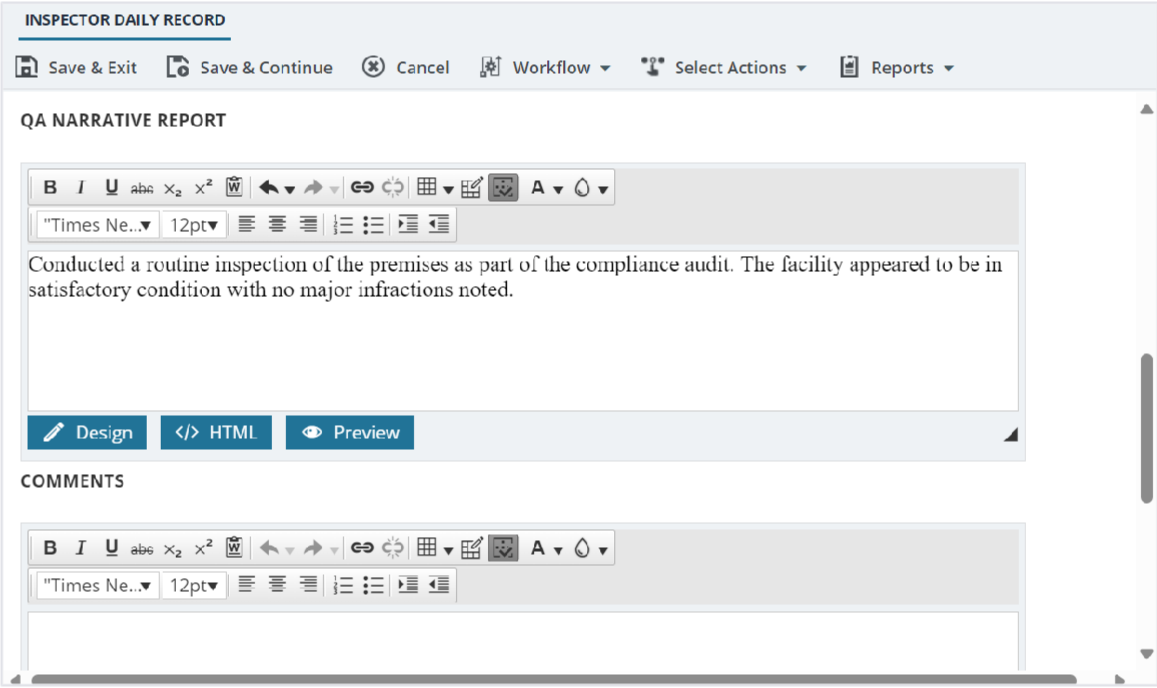


Figure 213: QA Narrative Report Section

You can perform any of the following tasks to create and edit the daily narrative:

Note: By default, the Design mode is selected.

- Bold, italicize, underline, strike-through letters and words
- Use subscripts and superscripts
- Select the font and its size
- Select the font color and the background color for the content
- Insert and manage tables, and hyperlinks
- Use bullets and numbering
- Use clipboard operations to cut, copy, and paste the text
- Use indents and outdents
- To add HTML code, click </> HTML, and then enter the code.
- To preview the entered information, click Preview

11. In the **COMMENTS** section, enter a detailed account of events that occurred at the worksite.
    You can perform any of the following tasks to enter comments:
    Note: By default, the Design mode is selected.

- Bold, italicize, underline, strike-through letters and words
- Use subscripts and superscripts
- Select the font and its size
- Select the font color and the background color for the content
- Insert and manage tables, and hyperlinks
- Use bullets and numbering
- Use clipboard operations to cut, copy, and paste the text
- Use indents and outdents
- To add HTML code, click </> HTML, and then enter the code.
- To preview the entered information, click Preview

12. To generate a report from the details page, perform the following:
    a. In the toolbar, click **Reports**.

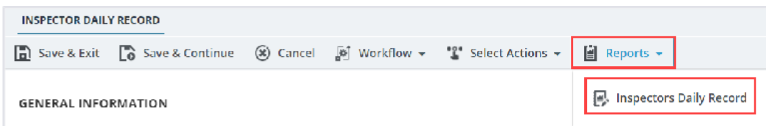


Figure 214: Inspectors Daily Report

    b. Click **Inspector Daily Report**.
    The **INSPECTORS DAILY REPORT** page is displayed in a new tab.
13. Optionally, in the **ATTACHMENTS** section, upload or link related files. For information on attachments, refer to Section 4.1. Attachments.
14. Click **Save & Exit** to save the record and return to the list page. Optionally, click **Save & Continue** to save the record and continue on the same page. Click **Cancel** to discard the added information and exit the page.

3.5.4.2. Approving an Inspector Daily Record

Prerequisites

Based on the workflow status of the record, the role of the logged-in user should be one of the following:

- Administrator
- Construction Component Lead
- Regional Engineer
- Project Engineer
- Assistant Project Engineer
- Project Engineer A&E
- Assistant Project Engineer A&E
- Lead Inspector
- Inspector
- Inspector A&E

- Construction Operations Engineer

Overview

This section explains the positive and forward workflow actions to reach the **Approved** workflow status. To move an **Inspector Daily** Record through the defined workflow, perform the following steps:

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

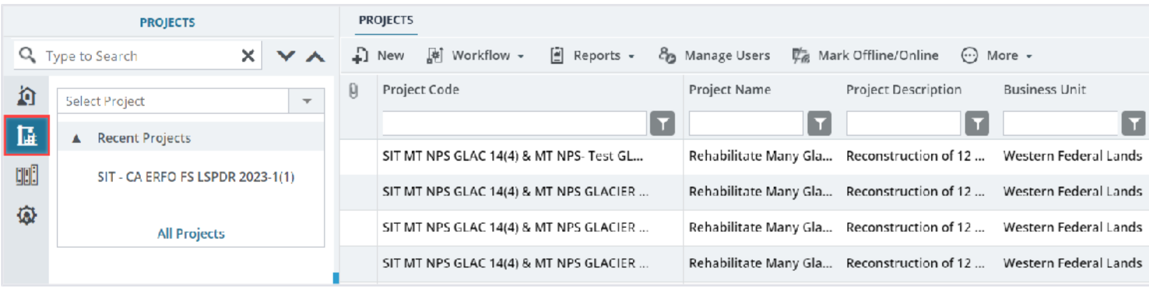


Figure 215: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

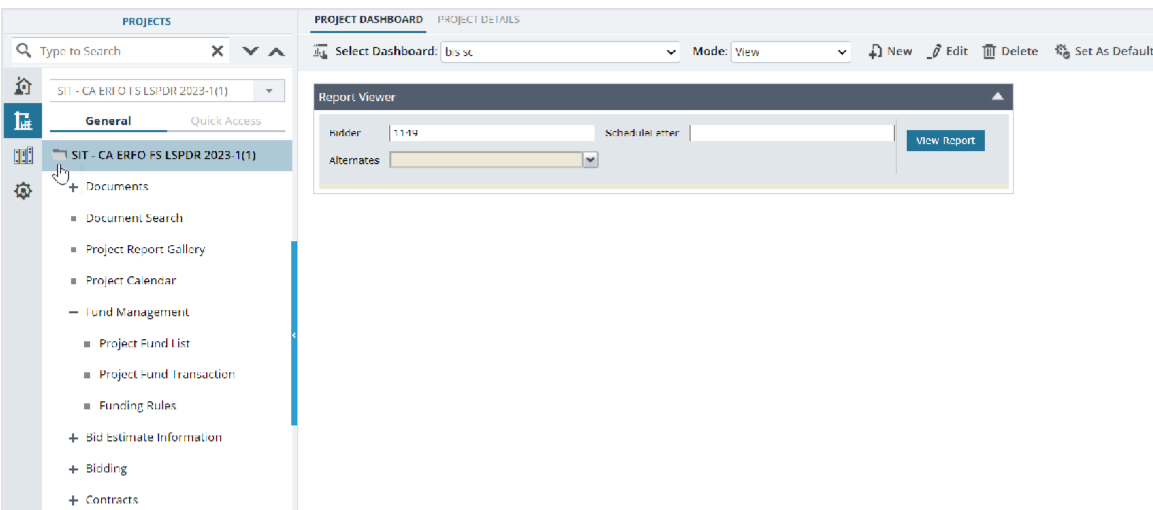


Figure 216: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

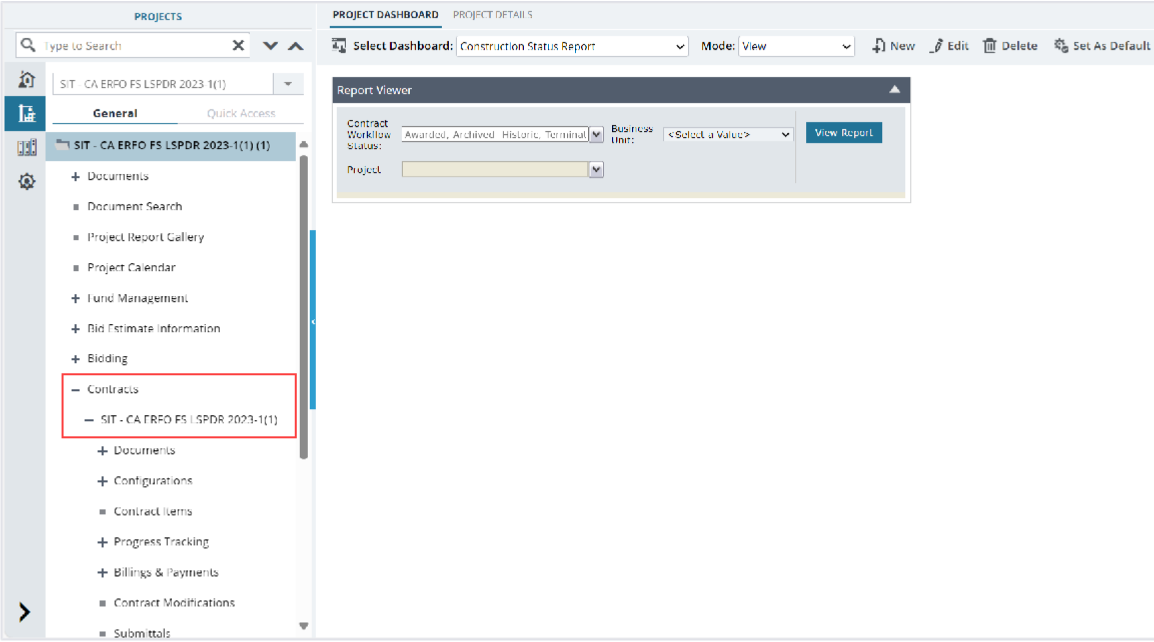
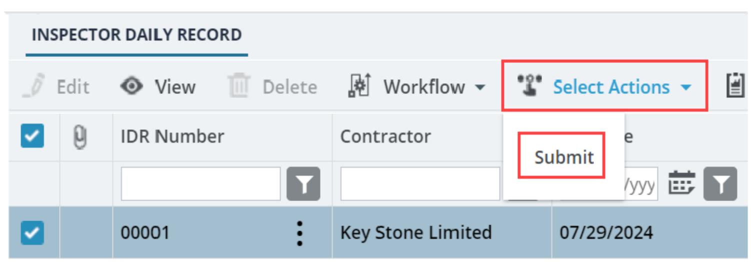


Figure 217: Navigation to Contracts

4. Expand the **Progress Tracking** folder, and then click **Inspector Daily Record**.
   The **INSPECTOR DAILY RECORD** list page is displayed.
5. To approve the **Inspector Daily Record**, perform the following steps:

Phase	Role	Workflow Steps
1	• Administrator • Construction Component Lead • Regional Engineer • Project Engineer • Assistant Project Engineer • Project Engineer A&E • Assistant Project Engineer A&E • Lead Inspector • Inspector • Inspector A&E	a. In the list page, select the appropriate record that is in the **Draft** workflow status, and then click **Select Actions**.  *Figure 218: Workflow Action – Submit* b. Click **Submit**, and in the Masterworks dialog box, click **OK**. Based on the role assigned to the user, the workflow status of the record is set to either of the following: • If the user is assigned with the Project Engineer role, the workflow status of the record is set to **Approved**. • If the user is assigned any other roles except the Project Engineerrole, the workflow status of the record is set to **Pending Review**.
2	• • Administrator	a. In the list page, select the appropriate record that is in the **Pending Review** workflow status, and then click **Select**

<table>
<tr>
<td></td>
<td>

- Construction Component Lead
- Regional Engineer
- Project Engineer
- Project Engineer A&E
- Construction Operations Engineer

</td>
<td>

Actions.

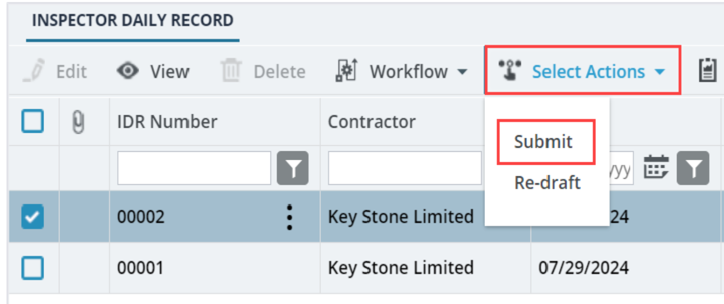


Figure 219: Workflow Action – Submit

b. Click **Submit**, and in the Masterworks dialog box, click **OK**. Based on the role assigned to the user, the workflow status of the record is set to either of the following:

- If the user is assigned with the Project Engineer A&E role, the workflow status of the record is set to **Pending FHWA Review**.
- If the user is assigned any other roles except the Project Engineer A&E role, the workflow status of the record is set to **Approved**.

</td>
</tr>
<tr>
<td>3</td>
<td>

- Administrator
- Project Engineer
- Construction Operations Engineer

</td>
<td>

a. In the list page, select the appropriate record that is in the **Pending FHWA Review** workflow status, and then click **Select Actions**.

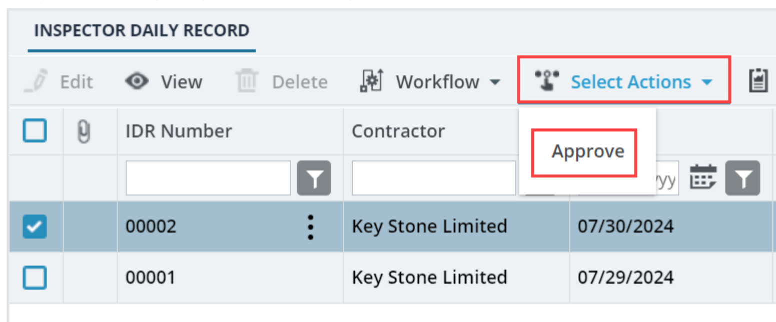


Figure 220: Workflow Action – Approve

b. Click **Approve**, and in the Masterworks dialog box, click **OK**. The workflow status of the record is set to **Approved**.

</td>
</tr>
</table>

3.5.4.3. Inspector Daily Record Workflow Status

The following table provides the workflow actions and status (current and subsequent status) of the Inspector Daily Record.

For information on setting a workflow status to the next status, refer to [Section 4.3. Workflow Status Transitions](#).

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
1	Draft	• Administrator • Construction Component Lead • Regional Engineer • Project Engineer • Assistant Project Engineer • Project Engineer A&E • Assistant Project Engineer A&E • Lead Inspector • Inspector • Inspector A&E	Submit	Pending Review	**Note:** Ensure the selected contractor is active in the **Request for Sublet Work** form. • If the user is assigned any other roles except the Project Engineer role, then the workflow status of the record is set to Pending Review. • Once the record is moved to the **Pending Review** workflow status, you cannot delete it or edit any of its fields.
1	Draft	• Administrator • Construction Component Lead • Regional Engineer	Submit	Approved	If the user is assigned with the Project Engineer role, then the workflow status of the record is set to **Approved**.

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
		• Project Engineer • Assistant Project Engineer • Project Engineer A&E • Assistant Project Engineer A&E • Lead Inspector • Inspector • Inspector A&E			
2	Pending Review	• Administrator • Construction Component Lead • Regional Engineer • Project Engineer • Project Engineer A&E • Construction Operations Engineer	Submit	Pending FHWA Review	• If the user is assigned with the Project Engineer A&E role, then the workflow status of the record is set to Pending FHWA. • Once the record is moved to the Pending FHWA Review workflow status, you cannot delete it or edit any of its fields.
2	Pending Review	• Administrator	Submit	Approved	If the user is assigned any

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
		• Construction Component Lead • Regional Engineer • Project Engineer • Project Engineer A&E • Construction Operations Engineer			other roles except the Project Engineer A&E role, then the workflow status of the record is set to **Approved**.
			Re-draft	Draft	-
3	Pending FHWA Review	• Administrator • Project Engineer • Construction Operations Engineer	Approve	Approved	-

3.5.5. Daily Diary

The Daily Diary enables you to record and track the daily summaries of the construction-related activities in the project.

You can record the following information:

- Weather conditions at the worksite
- Keywords pertaining to the daily summary
- A written account of the events that occurred at the worksite
- Detailed notes about specific categories
- The work hours of the project onsite staff

You can perform the following tasks:

- 3.5.5.1. Create daily diary
- 3.5.5.2. Approve daily diary record

3.5.5.1. Creating a Daily Diary Record

Prerequisites

The role of the logged-in user must be one of the following:

- Administrator
- Construction Component Lead
- Construction Engineer
- Highway Construction Manager/QAQC
- Construction Operations Engineer
- Inspector
- Assistant Project Engineer
- Project Engineer
- Regional Engineer
- Inspector A&E
- Assistant Project Engineer A&E
- Project Engineer A&E

  For more information on role-specific permissions, refer to Table 3 – Daily Diary Permission Matrix.

Overview

You can record and track the daily summaries of the construction activities.
This form is configured for use in the mobile application. All the fields configured for the web application are available in the mobile application. Only the users who created the record can edit or delete it. Additionally, only users assigned with the Project Engineer role can view the records created by other users.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

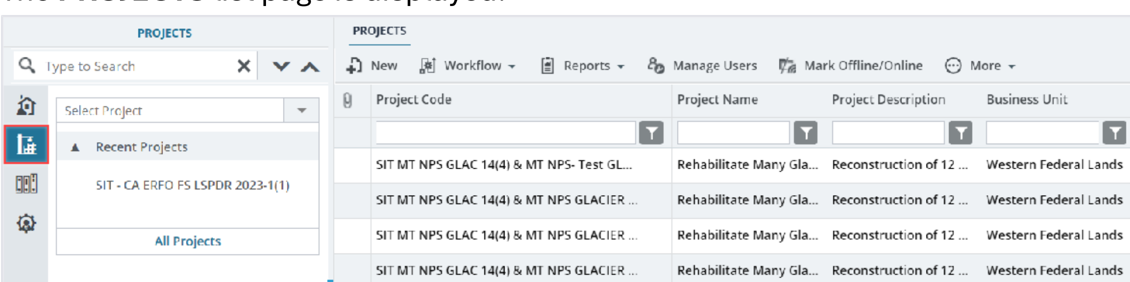


Figure 221: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

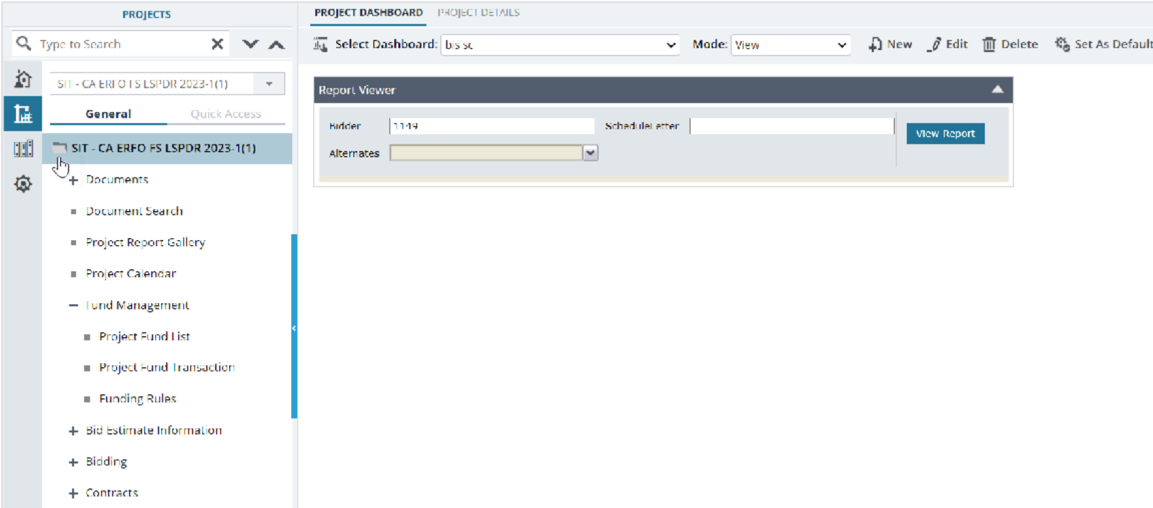


Figure 222: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

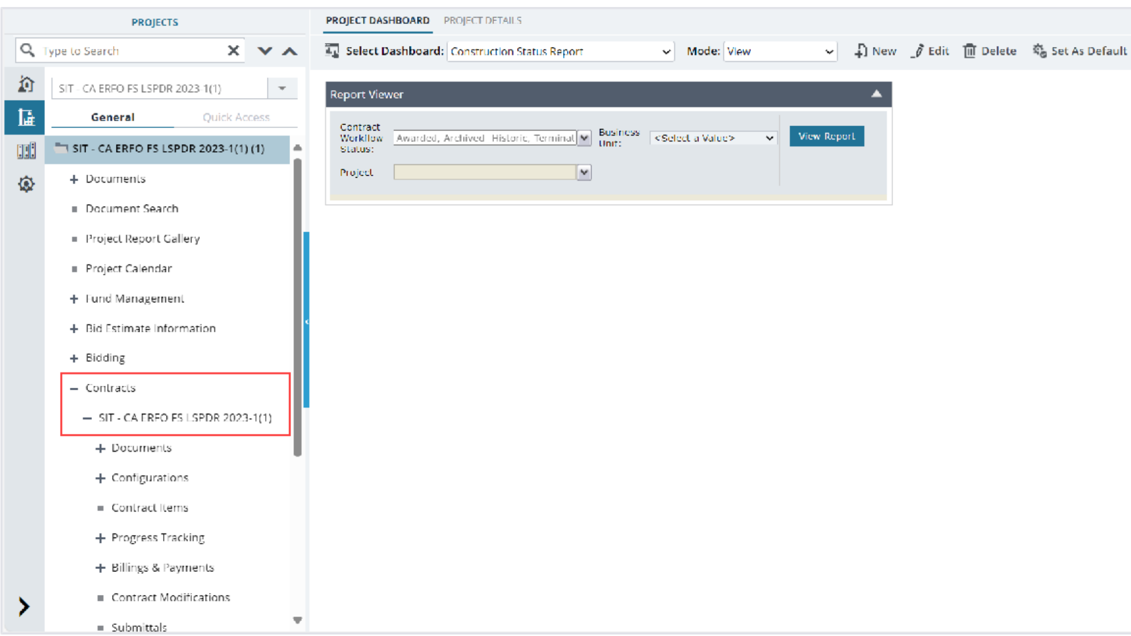


Figure 223: Navigation to Contracts

4. Expand the **Progress Tracking** folder, and then click **Daily Diary**.

The **DAILY DIARY** list page is displayed.

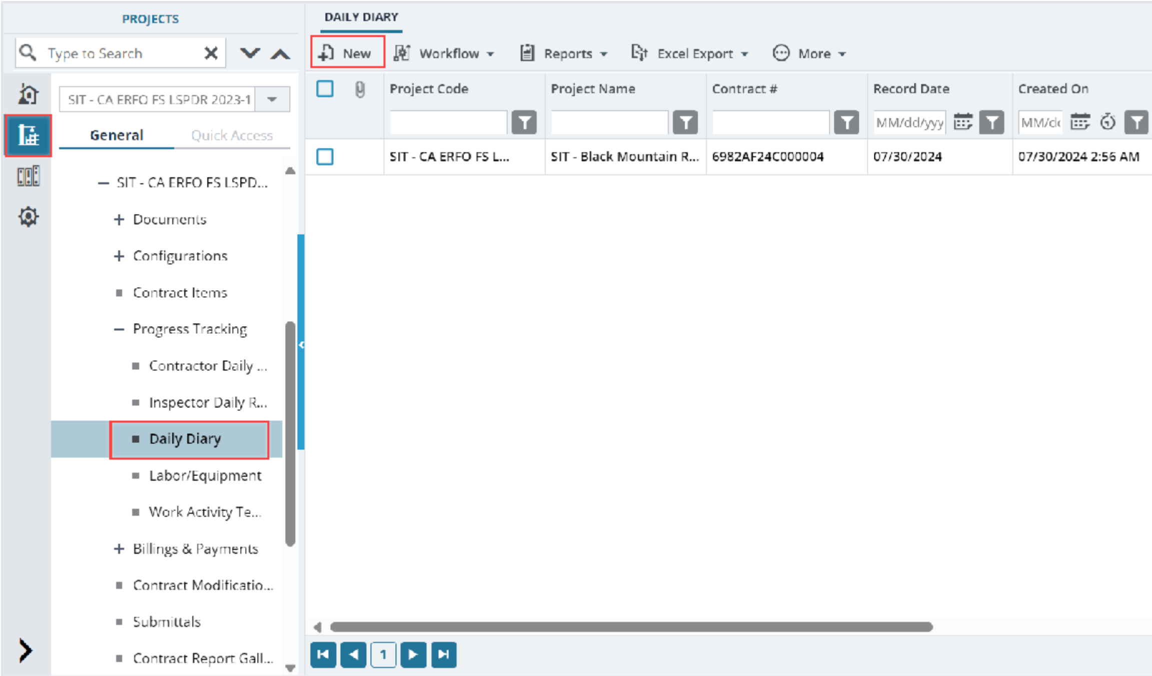


Figure 224: List Page of Daily Diary Form

5. Click **New**.

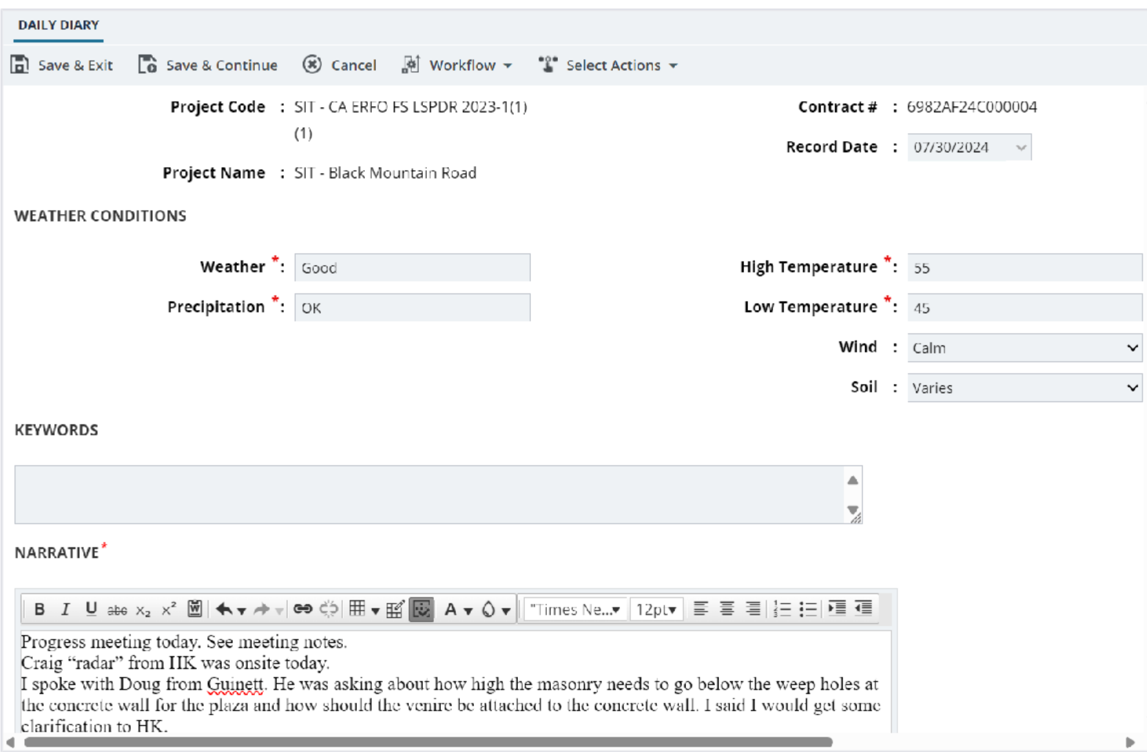


Figure 225: Daily Diary Page

The **DAILY DIARY** page displays the following information:

Field Name	Description
Project Code	The project code as defined for the project.

Field Name	Description
Field Name	Description
Project Name	The name of the project.
Contract #	The value as displayed in the **Contract #** field of the **CONTRACT DETAILS** page.
Prepared By	The name of the logged-in user.
Prepared On	The current date is considered as the daily report creation date.
Reviewed By	Once the record is approved, the name of the reviewer is displayed.
None	Once the record is approved, the date on which the record is reviewed is displayed.

6. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Weather	Enter the weather metrics as recorded at the worksite.
Precipitation	Enter the precipitation metrics as recorded at the worksite.
High Temperature	Enter the highest temperature recorded at the worksite.
Low Temperature	Enter the lowest temperature recorded at the worksite.
Wind	From the drop-down list, select the appropriate option as recorded at the worksite. Available options are Breezy, Calm, Strong, etc. The drop-down list displays the conditions defined in the **Wind** catalog of the library.
Soil	From the drop-down list, select the appropriate option as recorded at the worksite. Available options are Dry, Varies, Wet, etc. The drop-down list displays the soil conditions defined in the **Soil** catalog of the library.

7. In the **KEYWORDS** section, enter any keywords pertaining to the daily summary.
8. In the **NARRATIVE** section, enter a detailed account of events that occurred at the worksite.

   You can perform any of the following tasks to create and edit the daily narrative:

   Note: By default, the Design mode is selected.

   - Bold, italicize, underline, strike-through letters and words
   - Use subscripts and superscripts
   - Select the font and its size
   - Select the font color and the background color for the content
   - Insert and manage tables, and hyperlinks
   - Use bullets and numbering
   - Use clipboard operations to cut, copy, and paste the text
   - Use indents and outdents
   - To add HTML code, click </> HTML, and then enter the code.

- To preview the entered information, click Preview

9. To add notes specific to certain category, in the **SPECIFIC NOTES** section, perform the following steps:

    a. Click **Add**.

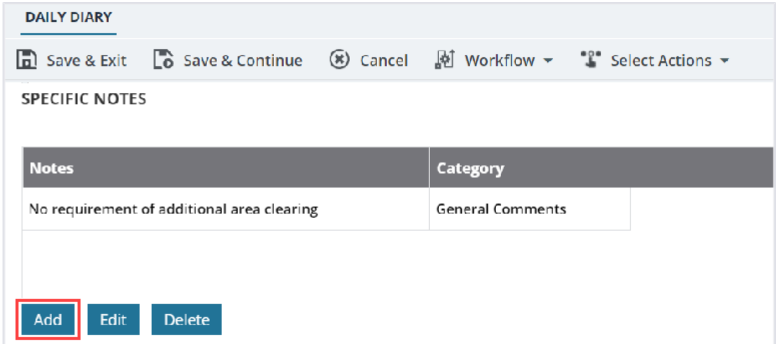


Figure 226: Specific Notes Section

The **New Specific Notes** dialog box is displayed.

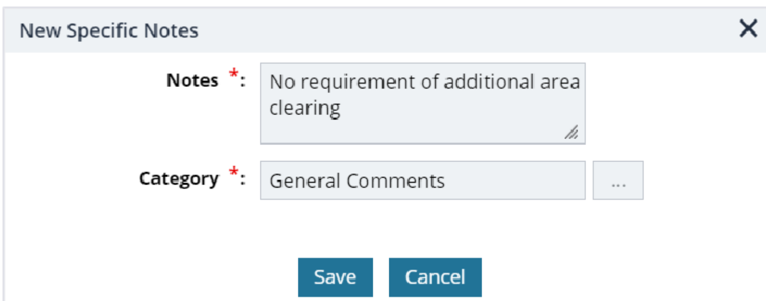


Figure 227:New Specific Notes Dialog Box

    b. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Category	To select a category, perform the following steps: i. Click ... .

<table>
<tr><th>Field Name</th><th>Description</th></tr>
<tr><td></td><td>
The Category Picker dialog box is displayed.

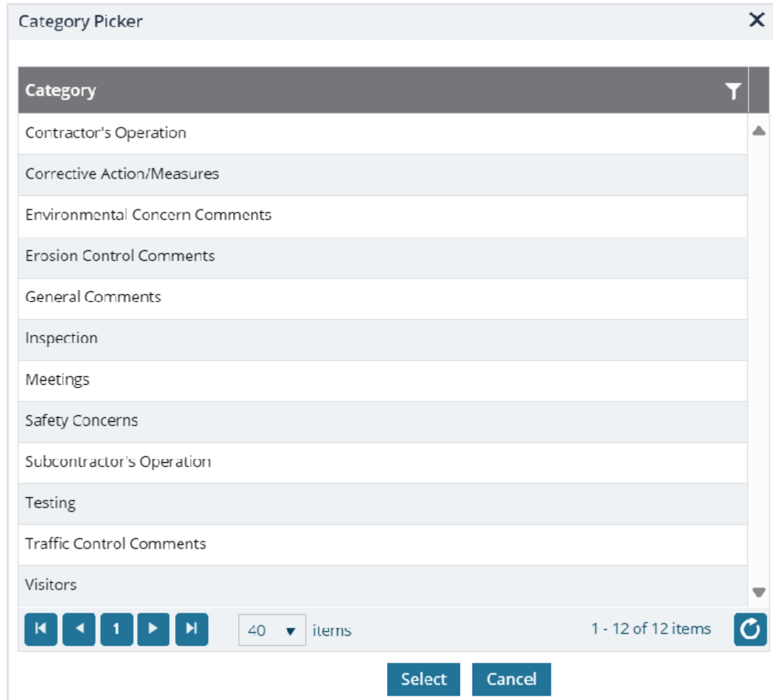


Figure 228: Category Picker Dialog Box

Available options are active categories defined in the **Daily Diary Categories** catalog of the library.

ii. Click the appropriate category, and then click **Select**. Optionally, if there are no categories recorded in the **Daily Diary Categories** catalog of the library, enter the name of the category.

Note: If the category is manually added, then the newly added category is updated in the **Category Picker** of other **Daily Diary** records of the project. However, it is not automatically updated in the **Daily Diary Categories** library catalog.
</td></tr>
<tr><td>Notes</td><td>Enter any specific notes for the category.</td></tr>
</table>

c. Click **Save**.

d. Optionally, perform the following steps, as applicable:

- To edit the notes, perform the following steps:
  i. Select the appropriate record, and then click **Edit**.
  ii. Make the necessary changes, and then click **Save**.
- To delete the notes, perform the following steps:

i. Select the appropriate record, and then click **Delete**.
   A confirmation message is displayed.
ii. Click **OK.**

10. To record the work hours of the project staff at the worksite, in the **PROJECT STAFF ONSITE TIME**, perform the following steps:
    a. Click **Add**.

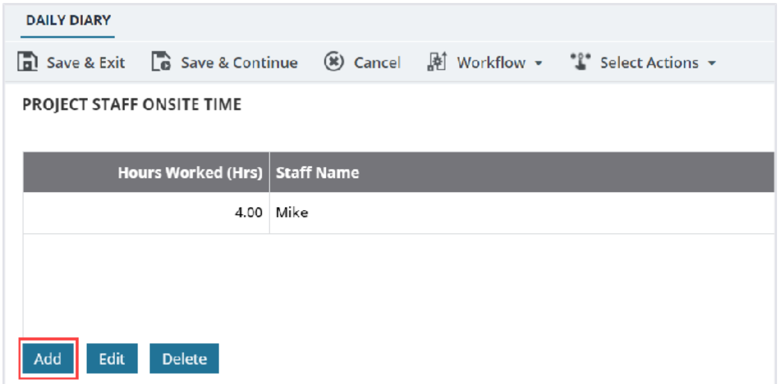


Figure 229: Project Staff Onsite Time Section

    b. The **New Project Staff Onsite Time** dialog box is displayed.

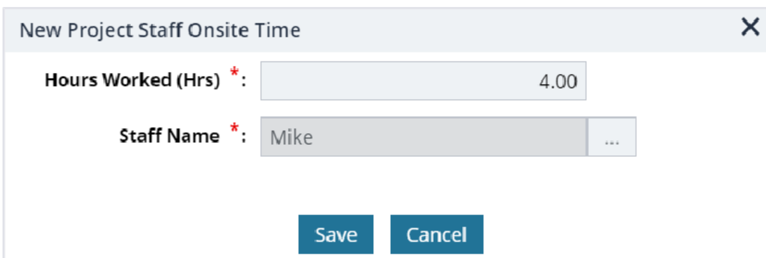
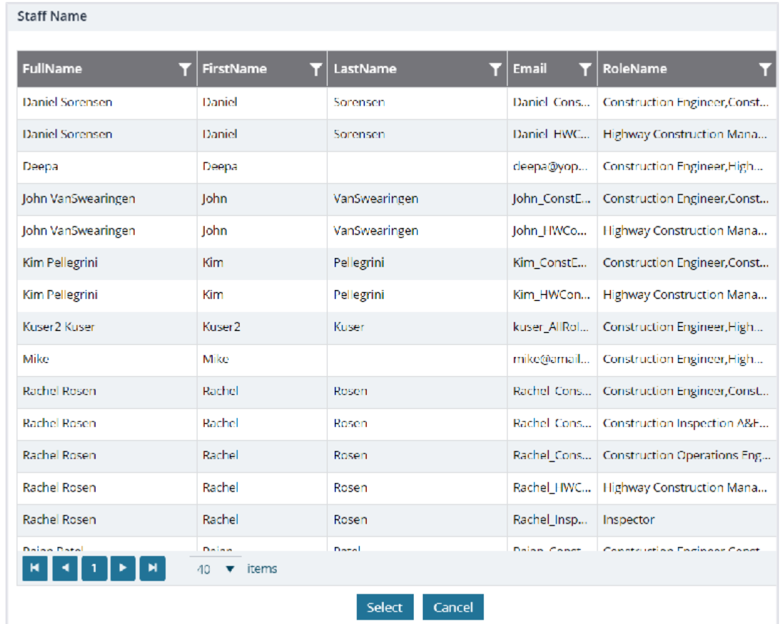


Figure 230: New Project Staff Onsite Time Dialog Box

    c. Provide the appropriate information in the fields, as described in the following table:

Field Name	Description
Hours Worked (Hrs)	By default, 0 is displayed. Enter the number of hours the staff worked onsite.
Staff Name	To select the Staff Name, perform the following steps: i. Click ... .

Field Name	Description
	The **Staff Name** dialog box is displayed.  *Figure 231: Staff Name Dialog Box* Available options are users with appropriate roles invited to the project and contract. **Note:** Only users with the following roles are available in the picker: • Construction Operations Engineer • Inspector • Assistant Project Engineer • Project Engineer • Regional Engineer • Construction Inspection A&E Manager • Inspector A&E • Assistant Project Engineer A&E • Project Engineer A&E • Construction Engineer • Highway Construction Manager/QAQC ii. Click the appropriate staff name, and then click **Select**.

d. Click **Save**.
e. Optionally, perform the following steps, as applicable:

- To edit the onsite time, perform the following steps:
  i. Select the appropriate record, and then click **Edit**.
  ii. Make the necessary changes, and then click **Save**.
- To delete the onsite time entry, perform the following steps:
  i. Select the appropriate record, and then click **Delete**.
     A confirmation message is displayed.
  ii. Click **OK.**

11. Optionally, in the **ATTACHMENTS** section, upload or link related files. For information on attachments, refer to Section 4.1. Attachments.

12. Click **Save & Exit** to save the record and return to the list page. Optionally, click **Save & Continue** to save the record and continue on the same page. Click **Cancel** to discard the added information and exit the page.

3.5.5.2. Approving a Daily Diary Record

Prerequisites

Based on the workflow status of the record, the role of the logged-in user should be one of the following:

- Administrator
- Construction Component Lead
- Regional Engineer
- Project Engineer
- Assistant Project Engineer
- Project Engineer A&E
- Assistant Project Engineer A&E
- Lead Inspector
- Inspector
- Inspector A&E

Overview

This section explains the positive and forward workflow actions to reach the **Approved** workflow status. To move a **Daily Diary** through the defined workflow, perform the following steps:

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

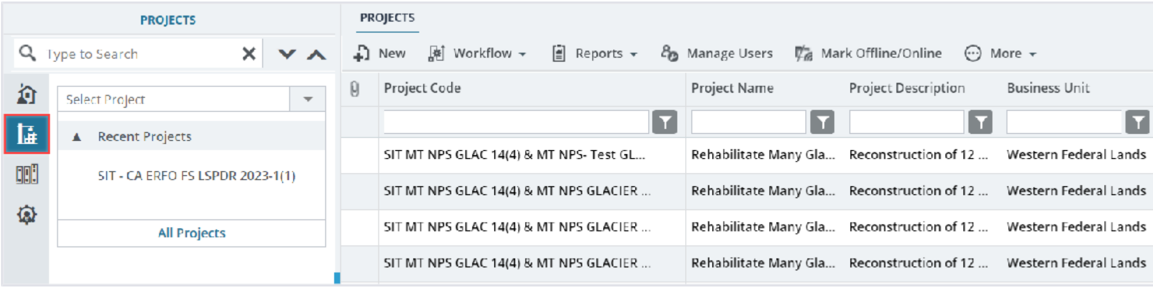


Figure 232: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

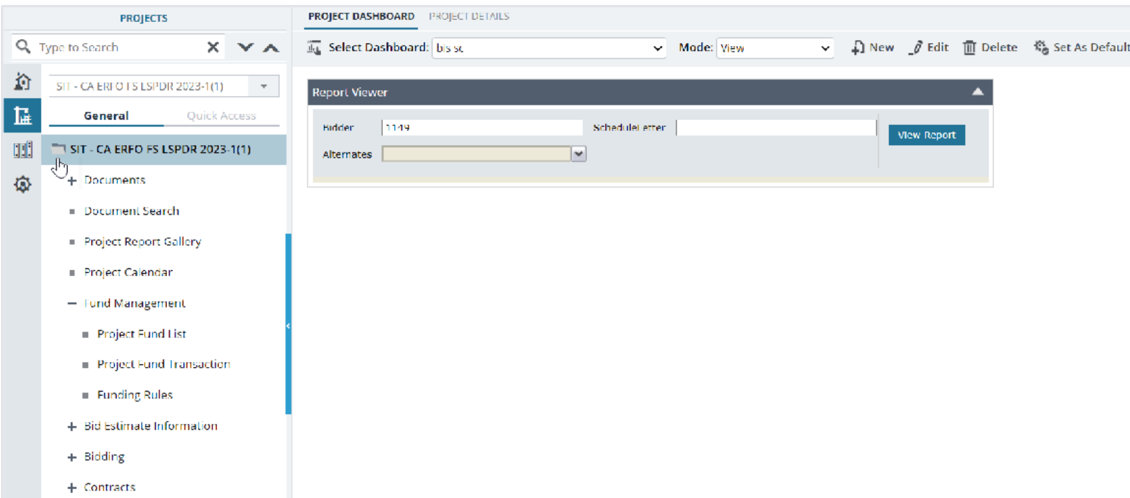


Figure 233: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

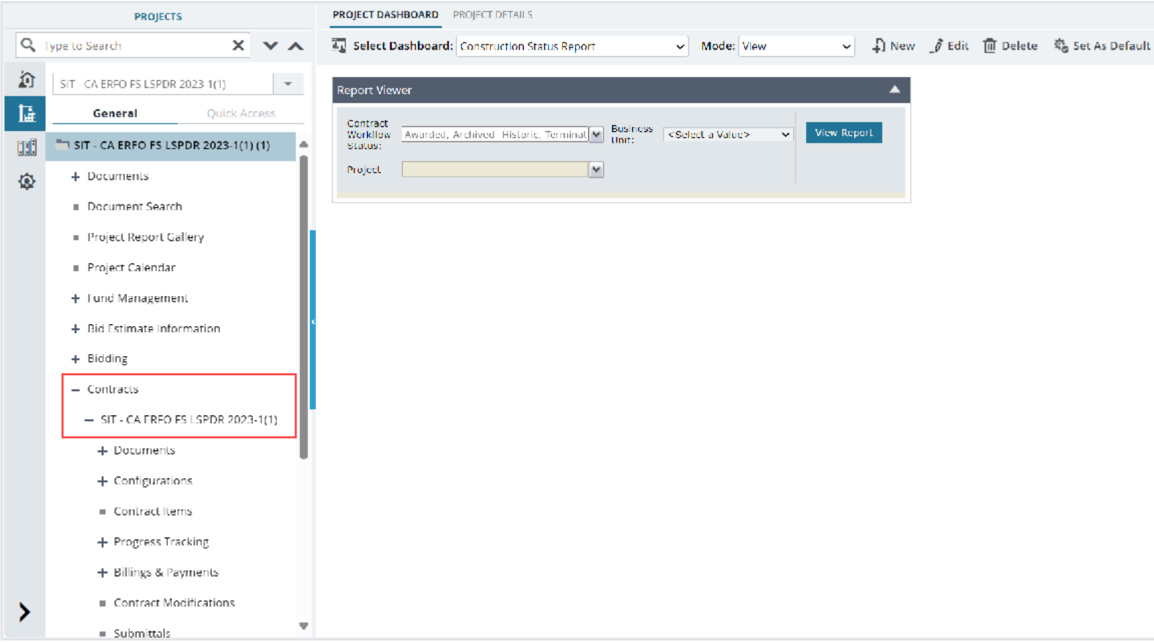
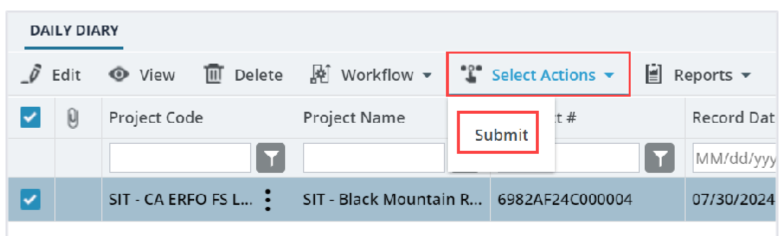


Figure 234: Navigation to Contracts

4. Expand the **Progress Tracking** folder, and then click **Daily Diary**.
   The **DAILY DIARY** list page is displayed.
5. To approve the **Daily Diary** record, perform the following steps:

Phase	Role	Workflow Steps
1	• Administrator • Construction Component Lead • Regional Engineer • Project Engineer • Assistant Project Engineer • Project Engineer A&E • Assistant Project Engineer A&E • Lead Inspector • Inspector • Inspector A&E	a. In the list page, select the appropriate record that is in the **Draft** workflow status, and then click **Select Actions**.  *Figure 235: Workflow Action – Submit* b. Click **Submit**, and in the Masterworks dialog box, click **OK**. Based on the role assigned to the user, the workflow status of the record is set to either of the following: • If the user is assigned with the Project Engineer role, the workflow status of the record is directly set to **Approved**. • If the user is assigned any other roles except the Project Engineer role, the workflow status of the record is set to **Pending for Review**.

<table>
<tr><td>2</td><td>

- Administrator
- Project Engineer

</td><td>

a. In the list page, select the appropriate record that is in the **Pending Review** workflow status, and then click **Select Actions**.

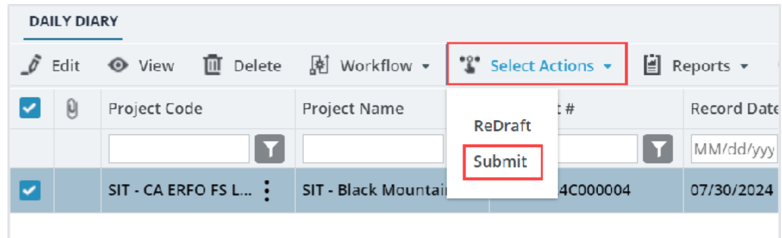


Figure 236: Workflow Action – Submit

b. Click **Approve**, and in the Masterworks dialog box, click **OK**. The workflow status of the record is set to **Approved**.

</td></tr>
</table>

3.5.5.3. Daily Diary Workflow Status

The following table provides the workflow actions and status (current and subsequent status) of the **Daily Diary** record.

For information on setting a workflow status to the next status, refer to Section 4.3. Workflow Status Transitions.

Phase	Current Workflow Status	Action Stakeholders	Action	Subsequent Workflow Status	Comments
1	Draft	• Administrator • Construction Component Lead • Regional Engineer • Project Engineer • Assistant Project Engineer • Project Engineer A&E • Assistant Project Engineer A&E	Submit	Pending for Review	• If the user is assigned any other roles except the Project Engineer role, then the workflow status of the record is set to Pending

		• Lead Inspector • Inspector • Inspector A&E			for Review. • Only the user that created the record can edit the record. • Once the record is moved to the **Pending for Review** workflow status, you cannot delete it or edit any of its fields.
				Approved	If the user is assigned with the Project Engineer role, then the workflow status of the record is set to **Approved**.
2	Pending for Review	• Administrator • Project Engineer	Submit	Approved	-
				Re-draft	-

3.5.6. Generating Progress Tracking Reports

Based on the roles assigned to you, you can generate various progress reports that illustrate various information views. These reports enable various stakeholders to stay up-to-date on the progress status of the contract.

You can generate various progress tracking reports from:

- 3.5.6.1. Contractor daily record list page
- 3.5.6.2. Inspector daily record list page
- 3.5.6.3. Daily diary list page

Progress Tracking Report Permission Matrix

From the **CONTRACT DAILY RECORD**, **INSPECTOR DAILY RECORD**, and **DAILY DIARY** list page, the following roles can generate reports:

- Administrator
- Construction Component Lead
- Construction Admin Staff
- Construction Engineer
- Highway Construction Manager/QA QC
- Construction Operations Manager
- Construction Contractor CDRs only
- Construction Contractor Basic
- Construction Contractor QC Manager
- Construction Contractor Manager
- Inspector
- Assistant Project Engineer
- Project Engineer
- Regional Engineer
- Construction Inspection A&E Manager
- Inspector A&E
- Assistant Project Engineer A&E
- Project Engineer A&E

3.5.6.1. Contractor Daily Record List Page Report

Overview

Based on the roles assigned to you, you can generate the contractor daily report that illustrate Various information views. For more information on roles, refer to Progress Tracking Permission Matrix.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

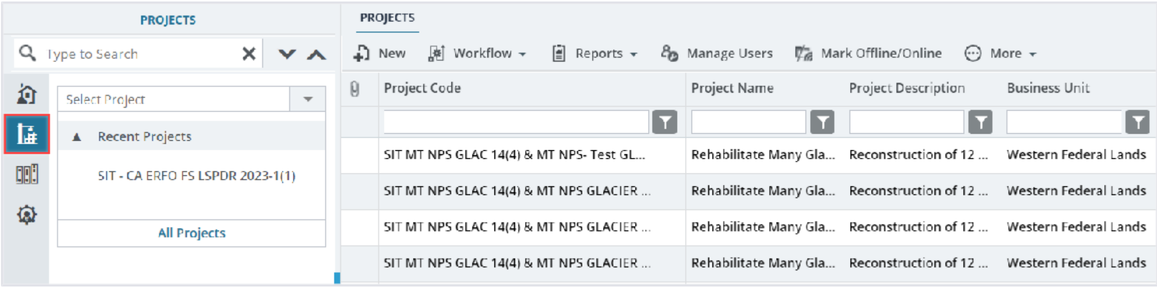


Figure 237: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

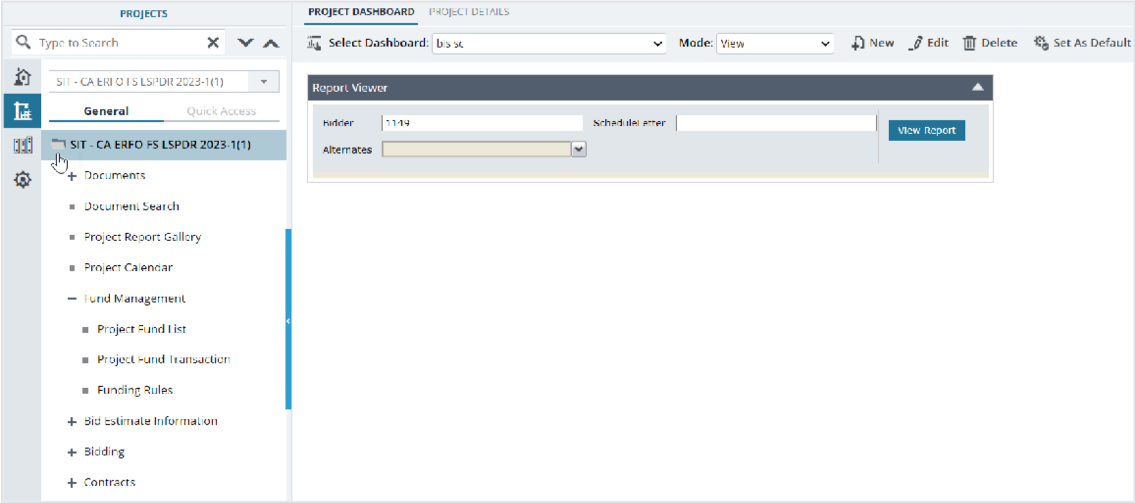


Figure 238: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

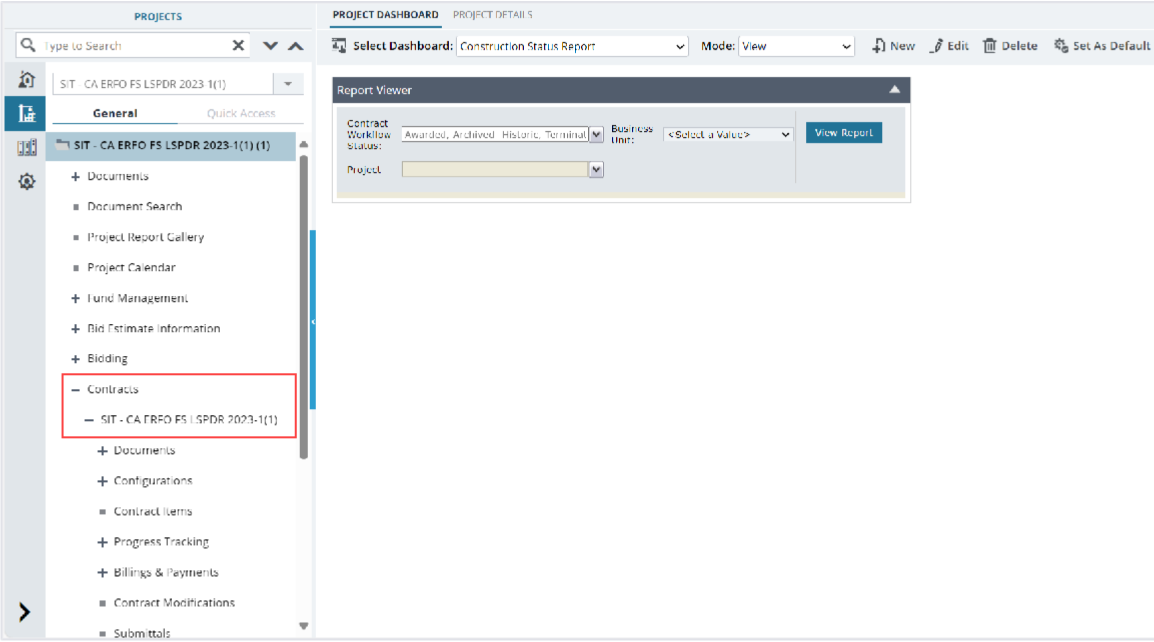


Figure 239: Navigation to Contracts

4. Expand the **Progress Tracking** folder, and then click **Contractor Daily** Record.
   The **CONTRACTOR DAILY RECORD** list page is displayed.

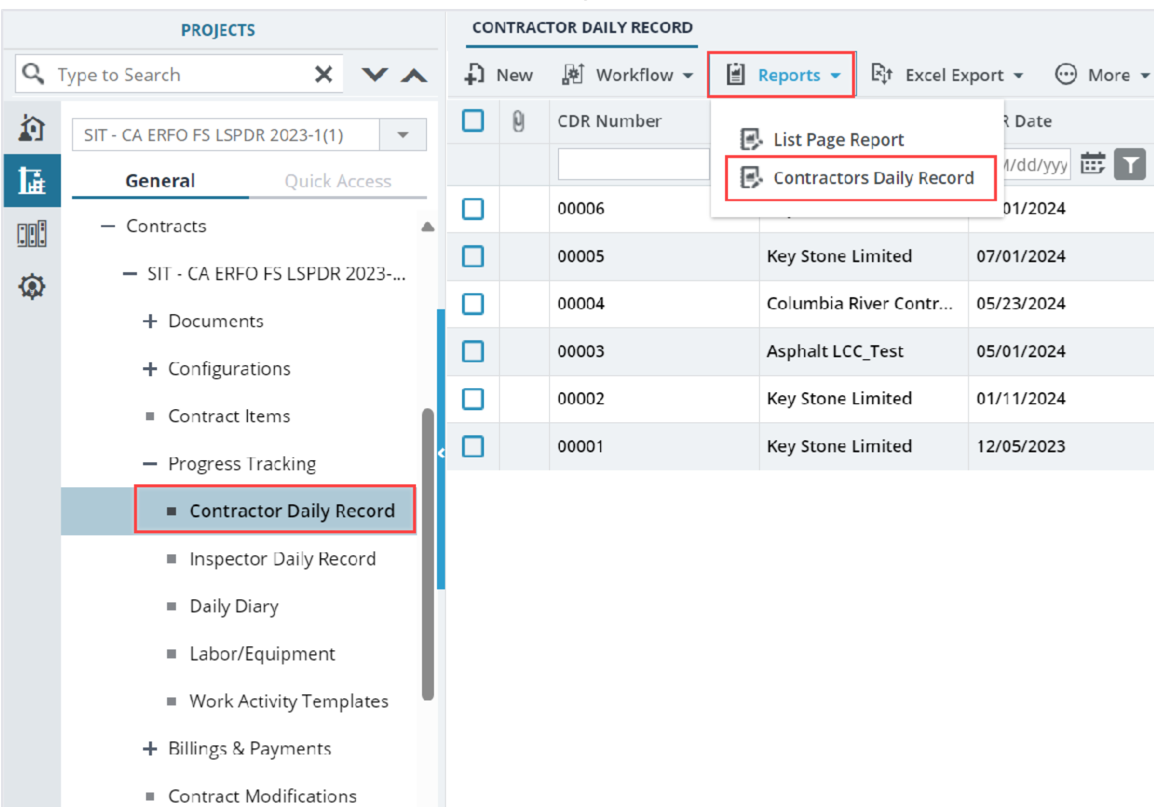


Figure 240: List Page of Contractor Daily Record

5. In the list page, click **Reports**, and then click **Contractors Daily Record**.
   Optionally, select the appropriate CDR record, click **Reports**, and then click **Contractors Daily Record**.

The report is generated and displayed.

For more information on the various report features available, refer to Section 4.2. Standard Report Functions.

3.5.6.2. Inspector Daily Record List Page Report

Overview

Based on the roles assigned to you, you can generate the inspector daily report that illustrate various information views.

Steps

1. In the module menu, click **Projects**.

   The **PROJECTS** list page is displayed.

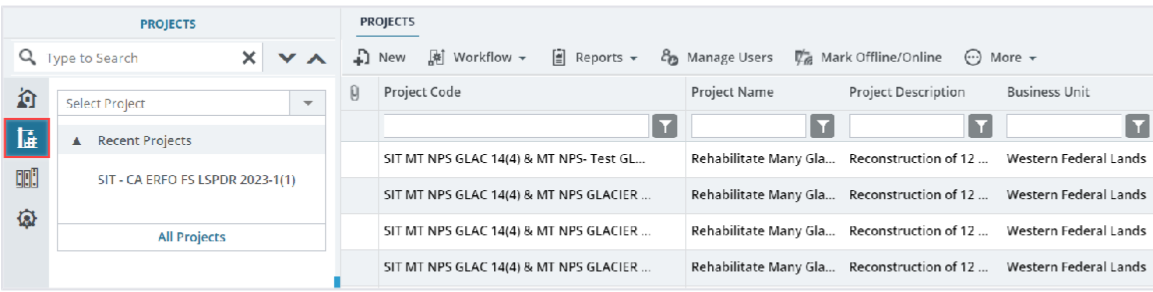


Figure 241: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

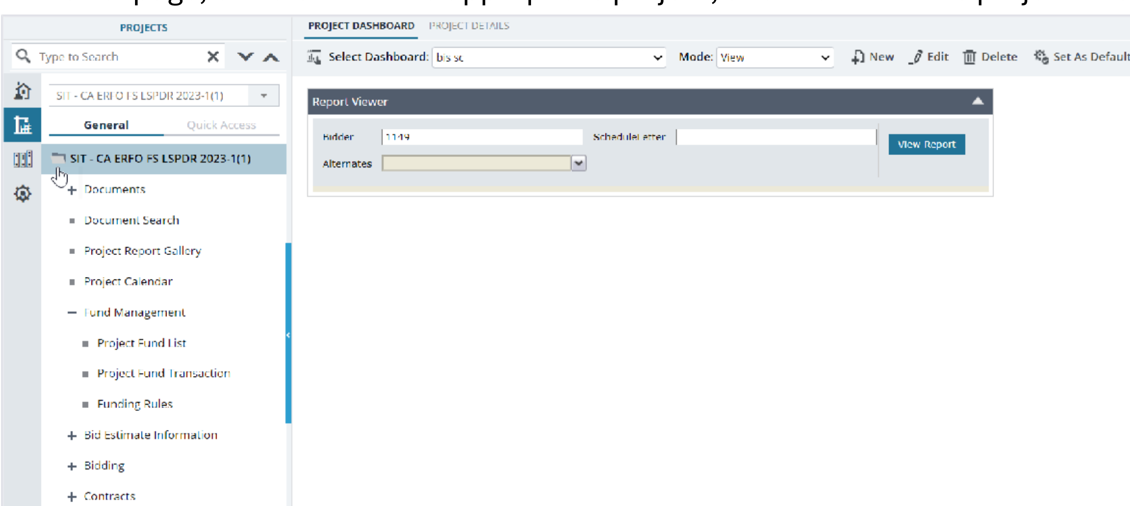


Figure 242: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

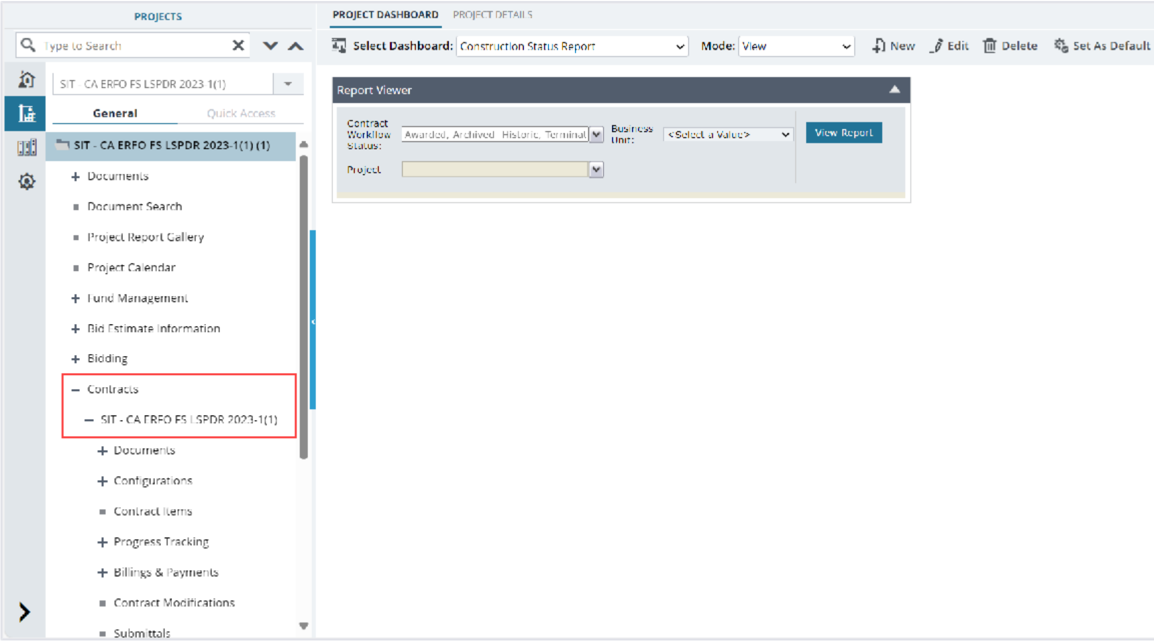


Figure 243: Navigation to Contracts

4. Expand the **Progress Tracking** folder, and then click **Inspector Daily** Record.
   The **INSPECTOR DAILY RECORD** list page is displayed.

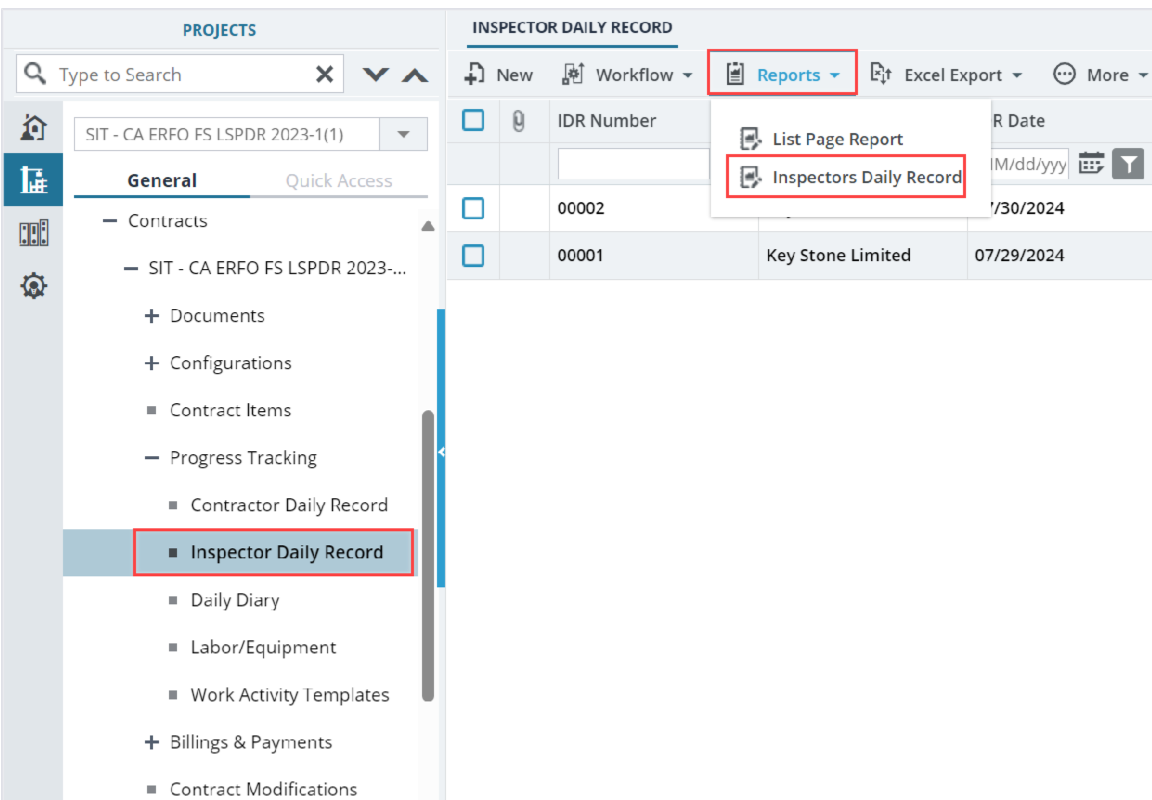


Figure 244: List Page of Inspector Daily Record

5. In the list page, click **Reports**, and then click **Inspectors Daily Record**.
   The report is generated and displayed.

For more information on the various report features available, refer to Section 4.2. Standard Report Functions.

3.5.6.3. Daily Diary List Page Report

Overview

Based on the roles assigned to you, you can generate the daily report that illustrate various information views. For more information on report permissions, refer to Progress Tracking Report Permission Matrix.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

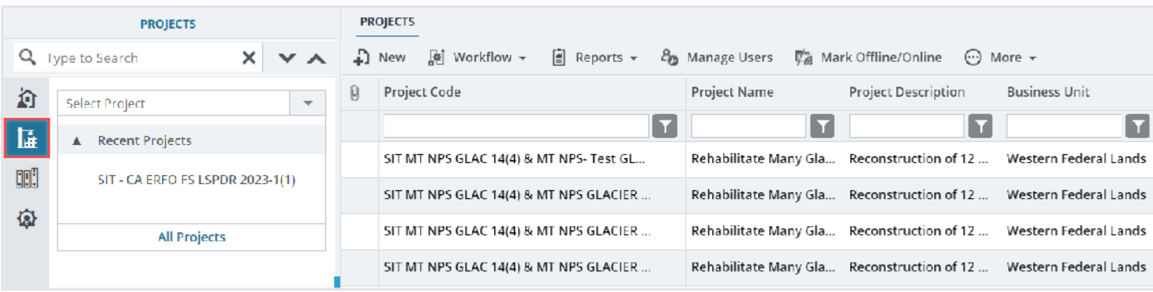


Figure 245: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

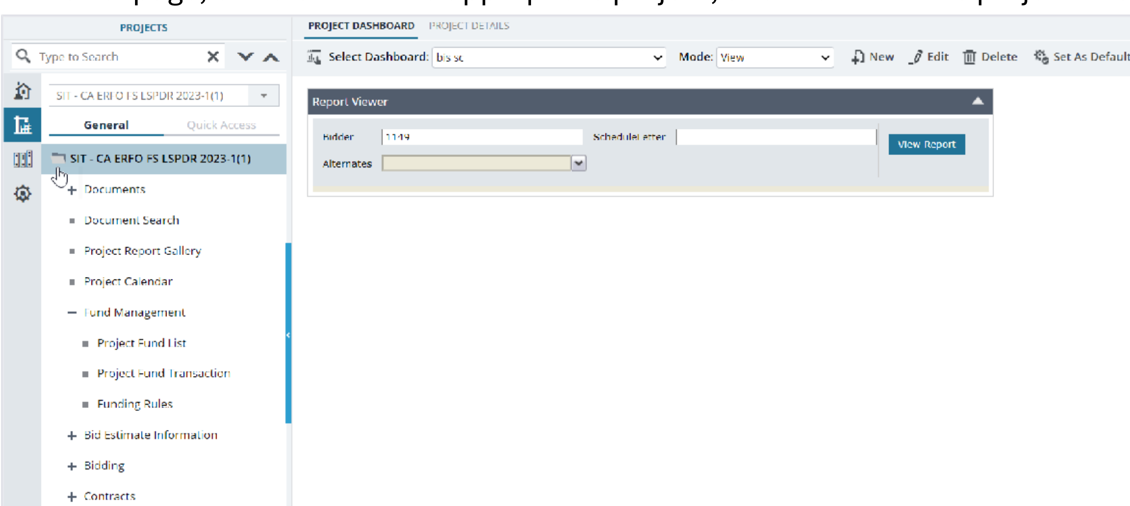


Figure 246: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

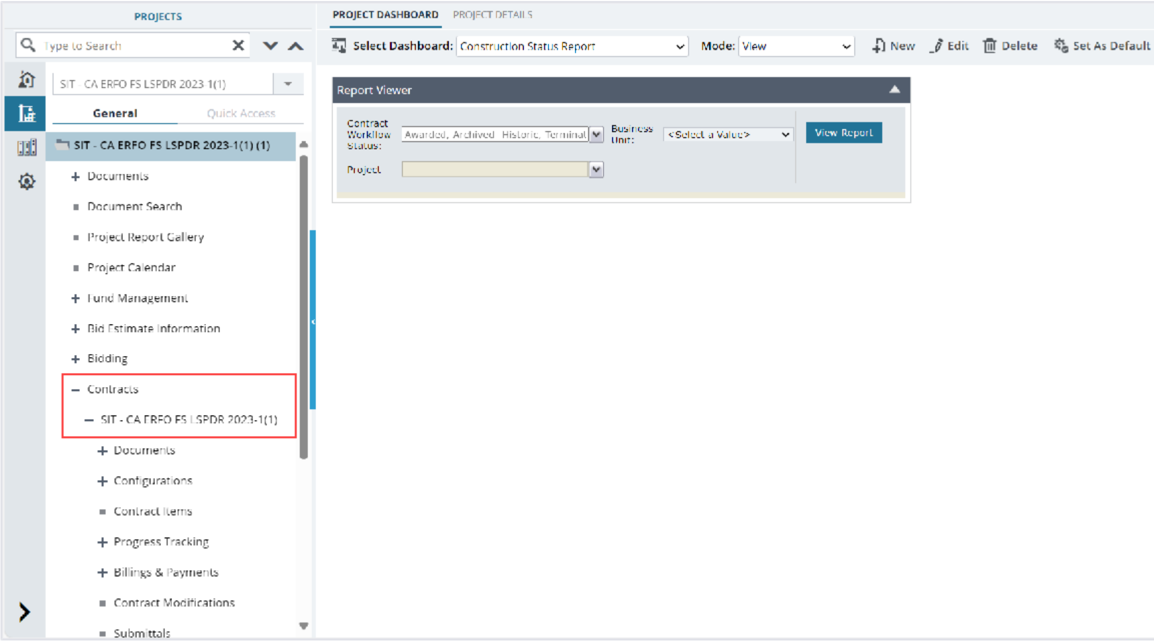


Figure 247: Navigation to Contracts

4. Expand the **Progress Tracking** folder, and then click **Daily Diary**.
   The **DAILY DIARY** list page is displayed.

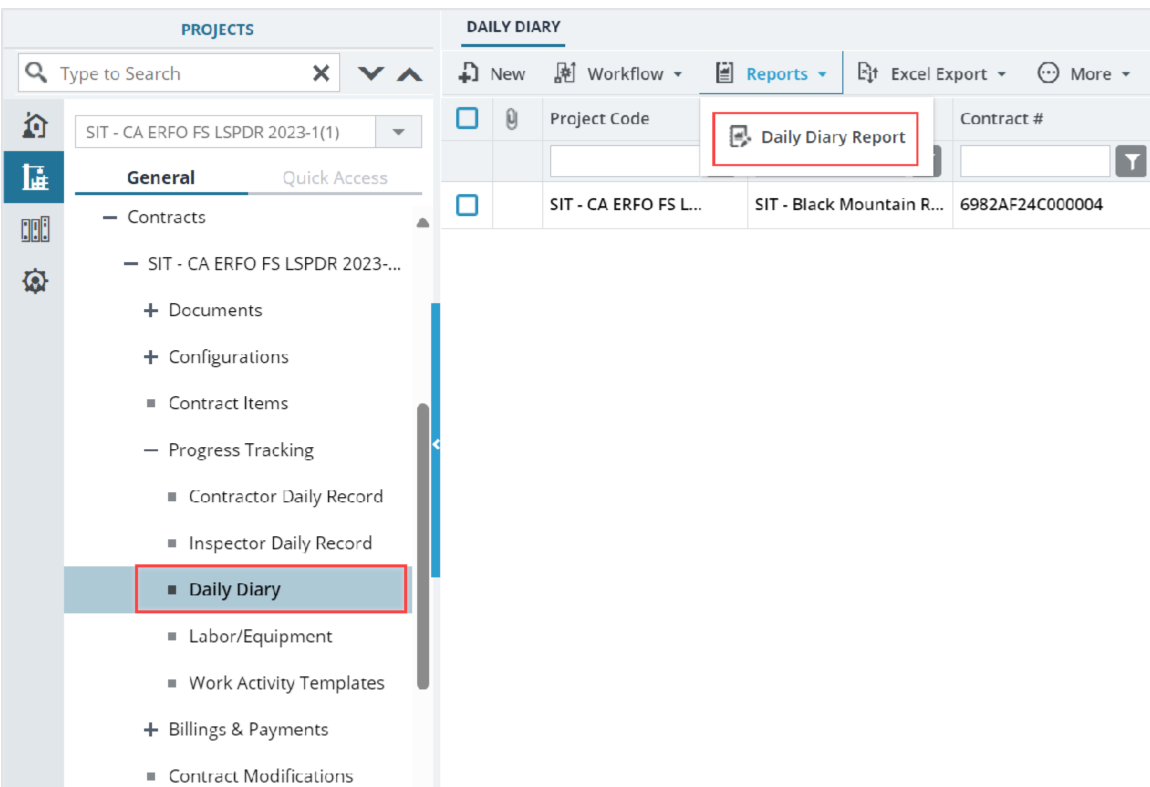


Figure 248: List Page of the Daily Diary Form

5. In the list page, click **Reports**, and then click **Daily Diary Report**.
   The report is generated and displayed.
   For more information on the various report features available, refer to Section 4.2. Standard Report Functions.

3.6. Generating Contract Reports

Based on the roles assigned to you, you can generate various contract reports that illustrate various types of information. These reports enable various contract stakeholders to stay up-todate on the contract status.

You can generate various contract reports from the **Contract Report Gallery**.

Contract Report Gallery Permission Matrix

From the **CONTRACT REPORT GALLERY** page, the following roles can generate the respective reports:

Role	Reports
• Administrator • Construction Component Lead • Construction Contractor Basic • Construction Admin Staff • Construction Engineer • Construction Contractor QC Manager • Construction Contractor Manager • Highway Construction Manager/QA QC • Inspector • Assistant Project Engineer • Project Engineer • Regional Engineer • Construction Inspection A&E Manager • Inspector A&E • Assistant Project Engineer A&E • Project Engineer A&E	• CM Affected Pay Items Report • Contract Modification Report • Contract Summary Report • Grand Pay Item Summary Report • Government Receiving Report • Pay Note Report • Pay Note Summary Report • Progress Payment Report • Progress Payment Schedule Summary Report • Contractors Daily Record • Daily Diary Report • Inspector Daily Report
• Construction Operations Engineer	• CM Affected Pay Item Report • Contract Modification Report • Government Receiving Report • Contractors Daily Record • Daily Diary Report • Inspector Daily Report • Progress Payment Schedule Summary Report

• Administrator • Construction Component Lead • Construction Admin Staff • Construction Contractor QC Manager • Construction Contractor Manager • Construction Operations Engineer • Assistant Project Engineer • Project Engineer • Regional Engineer • Project Engineer A&E	• Progress Payment Report (Contractor's Version)

3.6.1. Contract Report Gallery

Overview

Based on the roles assigned to you, you can generate various reports that illustrate contract information. For more information on report permissions, refer to Contract Report Gallery Permission Matrix.

Steps

1. In the module menu, click **Projects**.
   The **PROJECTS** list page is displayed.

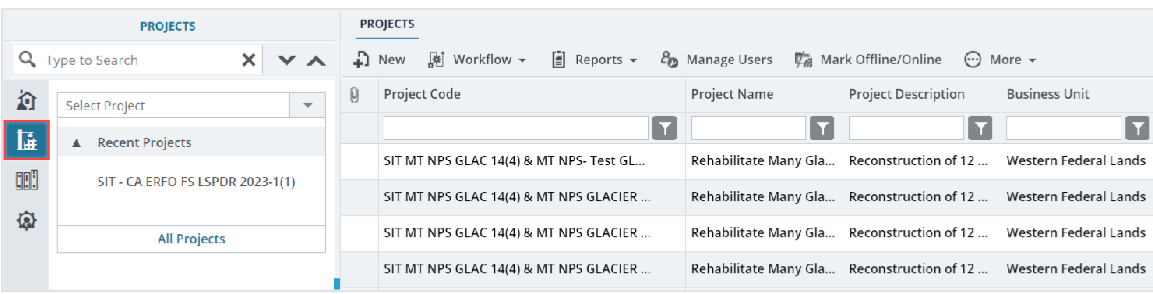


Figure 249: Navigation to Projects Module

2. In the list page, double-click the appropriate project, and then click the project folder to expand it.

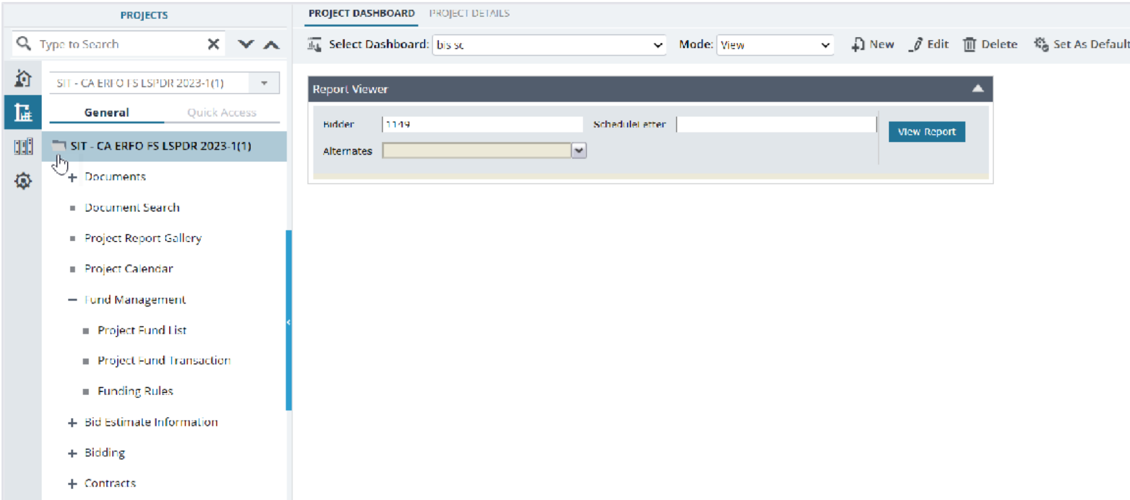


Figure 250: Expanding Projects Folder

3. In the navigation pane, expand the **Contracts** folder, and then expand the contract.

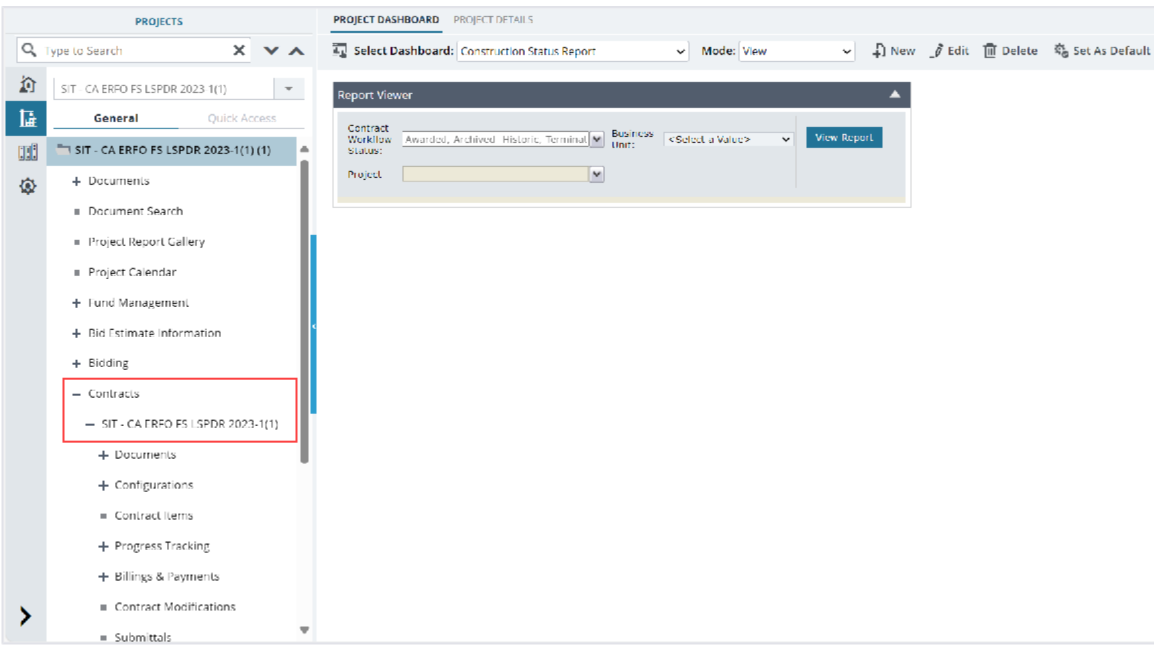


Figure 251: Navigation to Contracts

4. Click **Contract Report Gallery**.
   The **CONTRACT REPORT GALLERY** page is displayed.

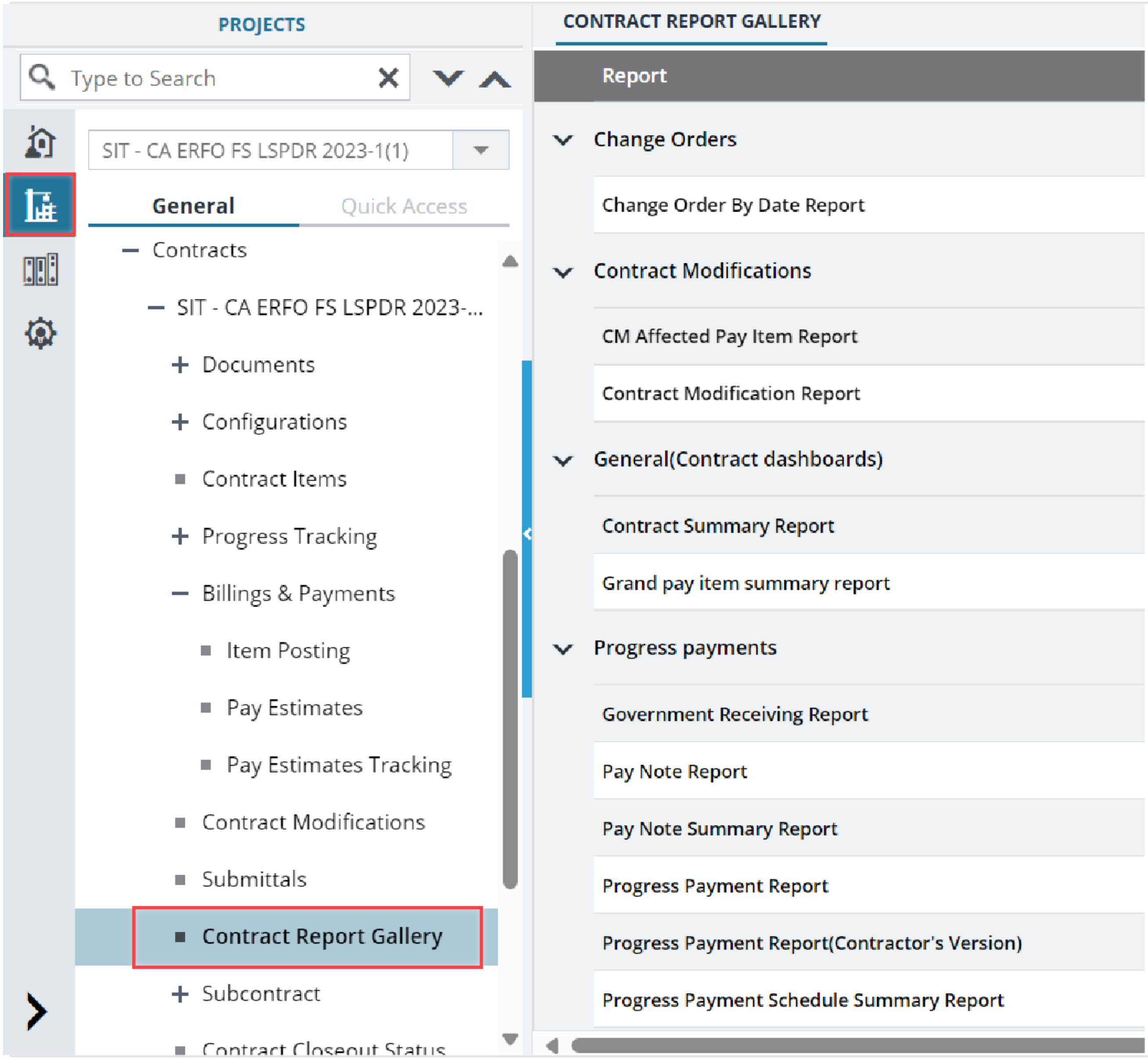


Figure 252: Contract Report Gallery

5. In the list page, double-click the appropriate report.
   The report is generated and displayed.
   You can generate the following reports:

   - CM Affected Pay Items Report
   - Contract Modification Report
   - Contract Summary Report
   - Grand Pay Item Summary Report
   - Government Receiving Report
   - Pay Note Report

- Pay Note Summary Report
- Progress Payment Report
- Progress Payment Schedule Summary Report
- Contractors Daily Record
- Daily Diary Report
- Inspector Daily Report
- Submittal Log

  For more information on the various report features available, refer to Section 4.2. Standard Report Functions.

4. Appendix

4.1 Attachments

You can upload or link files in the Documents folders to every record. You can also upload any number of attachments, regardless of size, to a record or while performing workflow actions for a record.

The following sections explain how to upload or link, access, and download attachments in a form or workflow:

- 4.1.1. Attaching a File to a Form
- 4.1.2. Attaching a File to a Workflow
- 4.1.3. Accessing and Downloading Attached Files
- 4.1.4. Deleting Attached Files

You can annotate and delete attachments

4.1.1 Attaching a File to a Form

You can upload files to a form and link a file in the Documents folders of a form.

Note: The **Upload** and **Link New Document** option is the most preferred and used method to link files to a form by the FLH team.

The **Project Fund List** form is used for illustration purposes.

Uploading Files to a Form

To upload files, perform the following steps in the **ATTACHMENTS** section:

1. Click **Upload Document**.

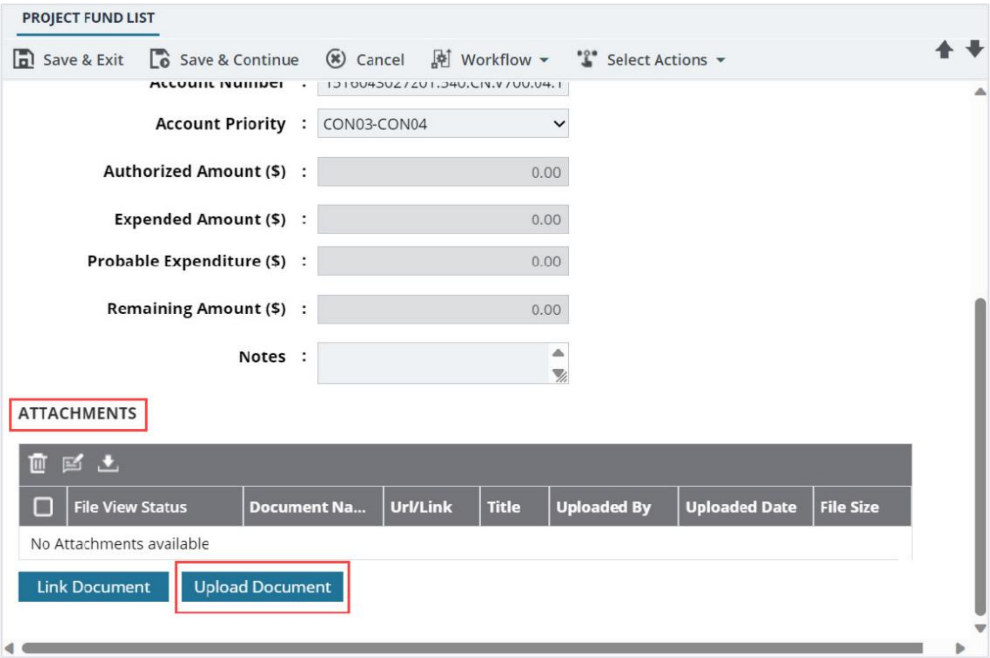


Figure 253: Using Upload Document Option

The **Open** dialog box is displayed.

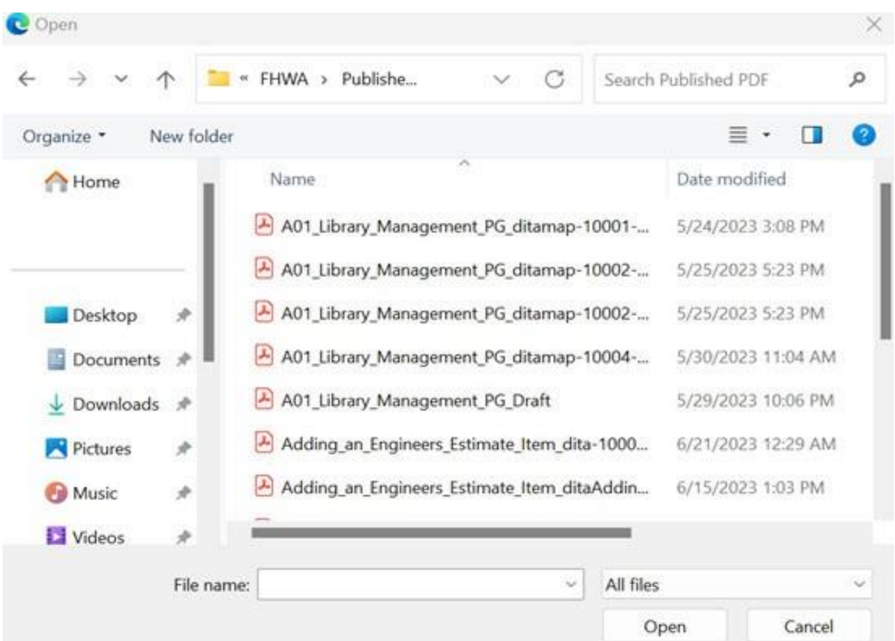


Figure 254: Open Dialog Box

2. To upload a single file, click the appropriate file.
   Optionally, to upload multiple files, press and hold **CTRL**, and then click the appropriate files.

3. Click **Open**.

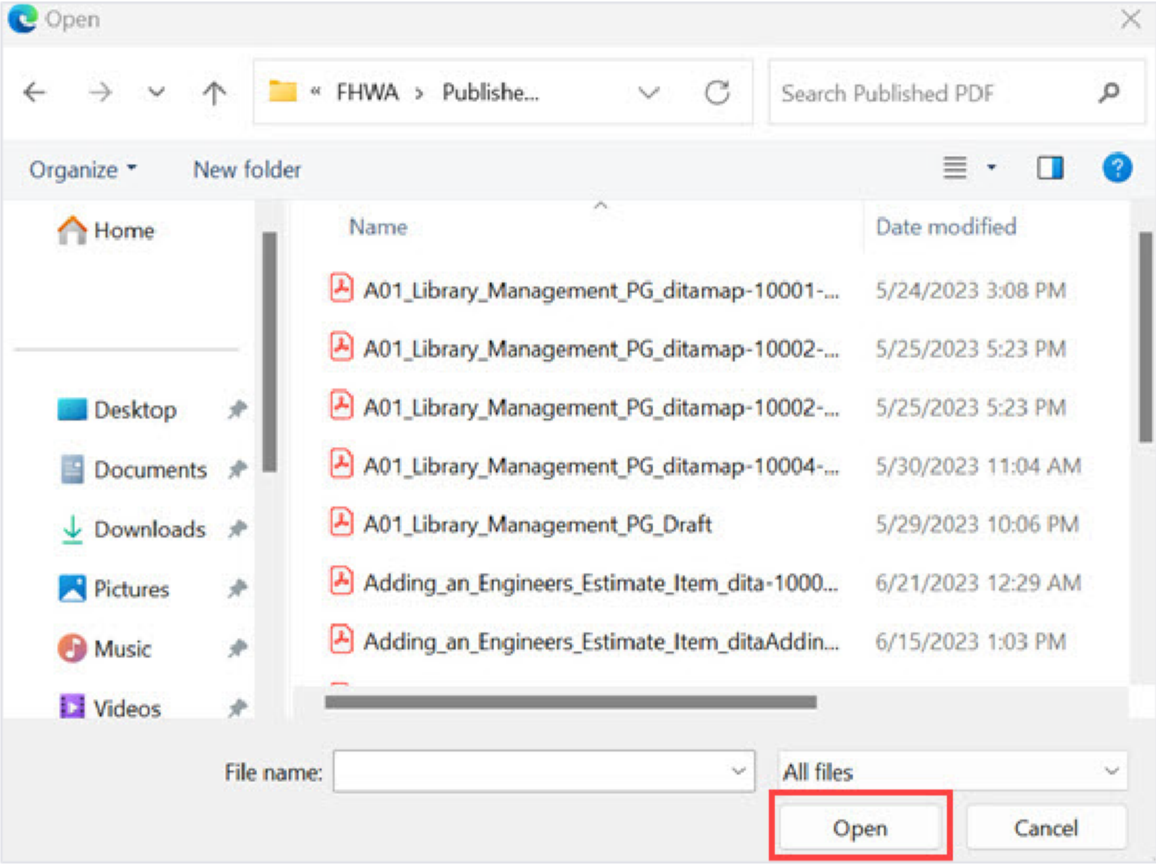


Figure 255: Open Option

The files are uploaded to the form and displayed in the **ATTACHMENTS** section.

4. The name of the file is updated in the **Title** column.

Optionally, in the **Title** column, enter the tiles for the files attached.

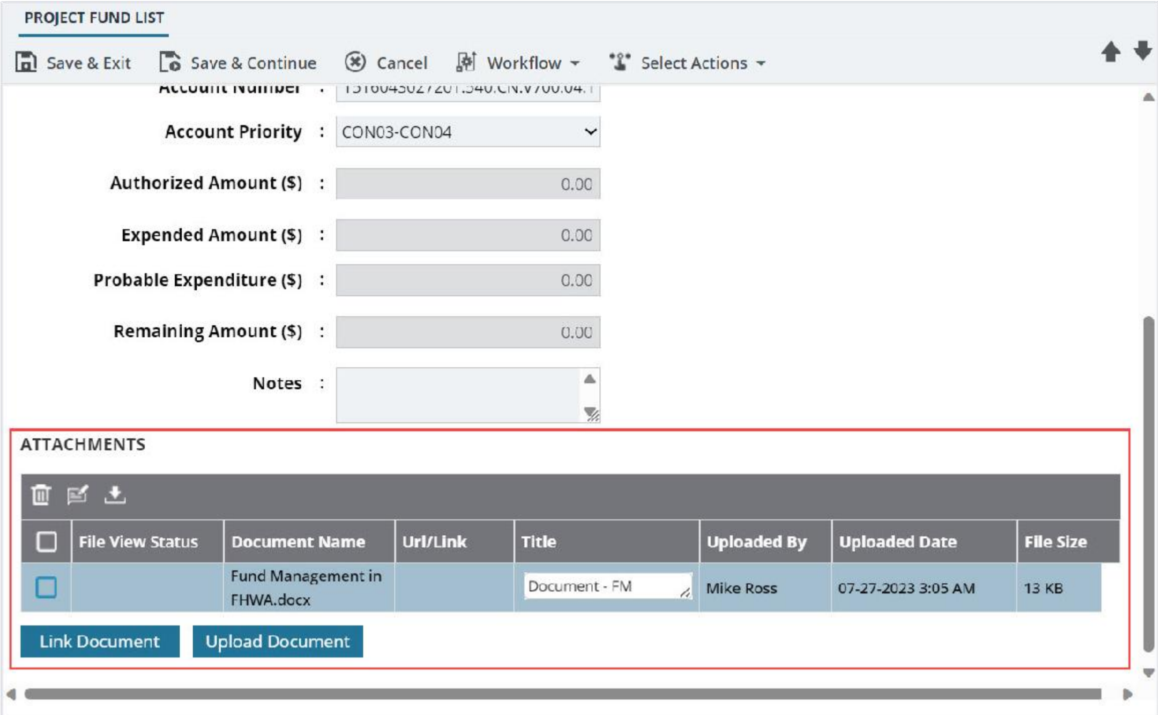


Figure 256: Uploaded File

Linking a File to a Form

You can link a file to a form using any of the following options:

- **Masterworks Document:** This option enables you to link files available in the document folders of a project or contract. The document folders are available based on the selected document folder structure in the **PROJECT DETAILS** page.
  Note: This option helps users avoid uploading the same files multiple times in a project.

- **Upload and Link New Document:** This option enables you to upload new files to the document folders of a project or contract and link them to the respective form. The document folders are available based on the selected document folder structure in the PROJECT DETAILS page.
  Note: This option helps users upload new files into the document folder structure from the respective form without navigating to the document folder.
  The Upload and Link New Document option is the most preferred and used method to link files to a form by the FLH team.

- **External Document:** This option enables you to link files from an external location.

Linking a File to a Form – Masterworks Document Option

To link a file available in the Documents folders, perform the following steps:

1. In the **ATTACHMENTS** section, click **Link Document**.

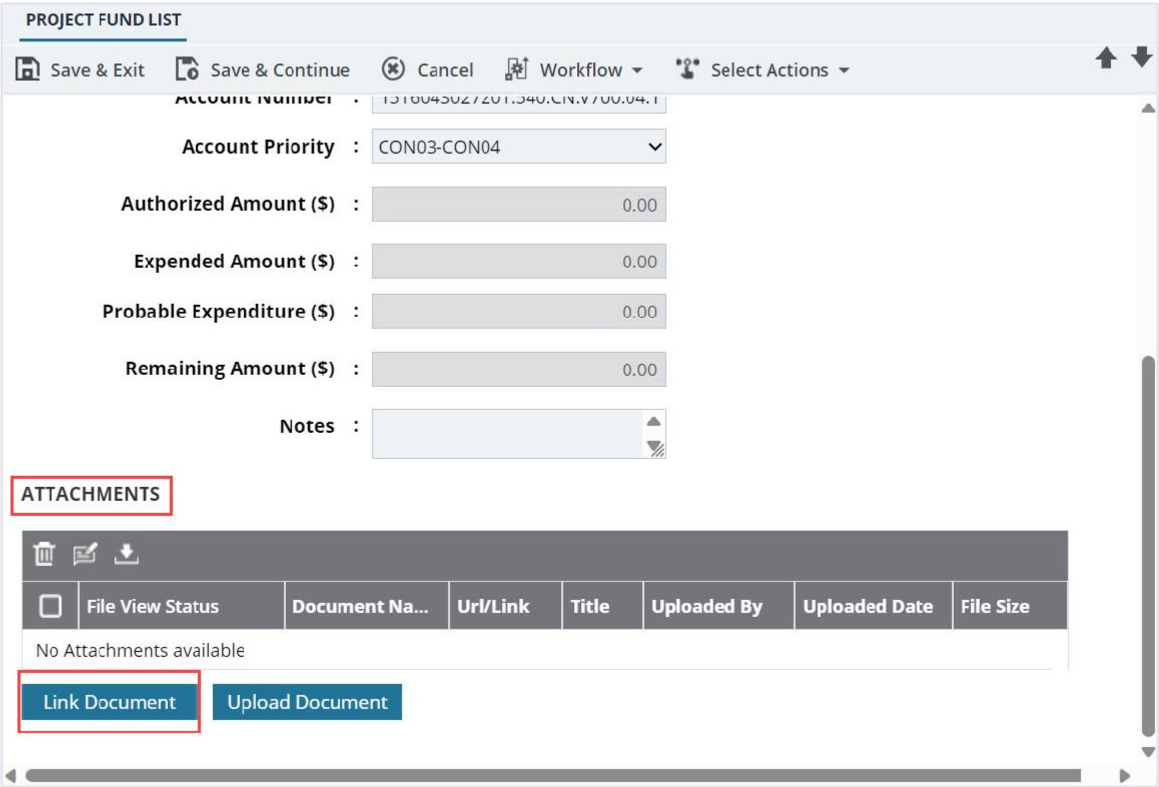


Figure 257: Using Link Document Option

The **Link Document** dialog box is displayed.

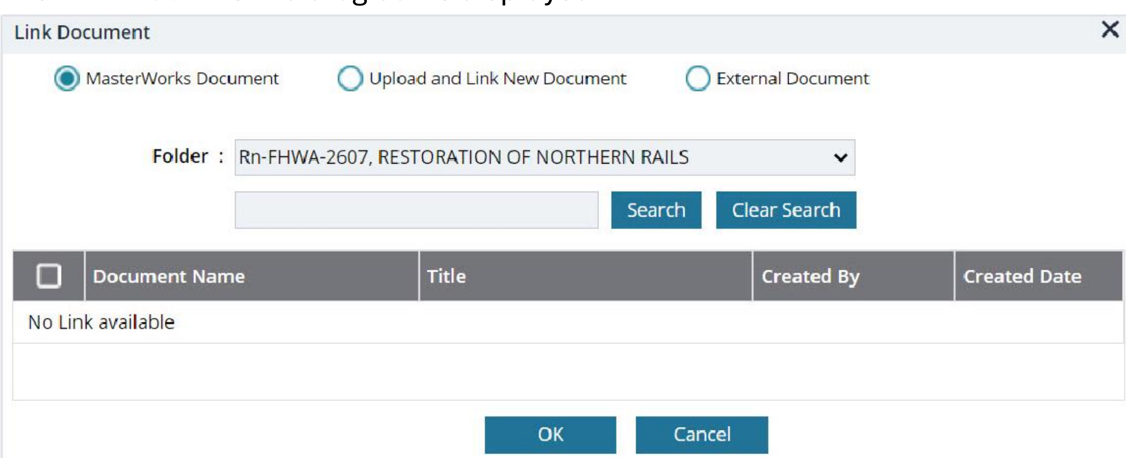


Figure 258: Link Document Dialog Box

2. Click **Masterworks Document**.

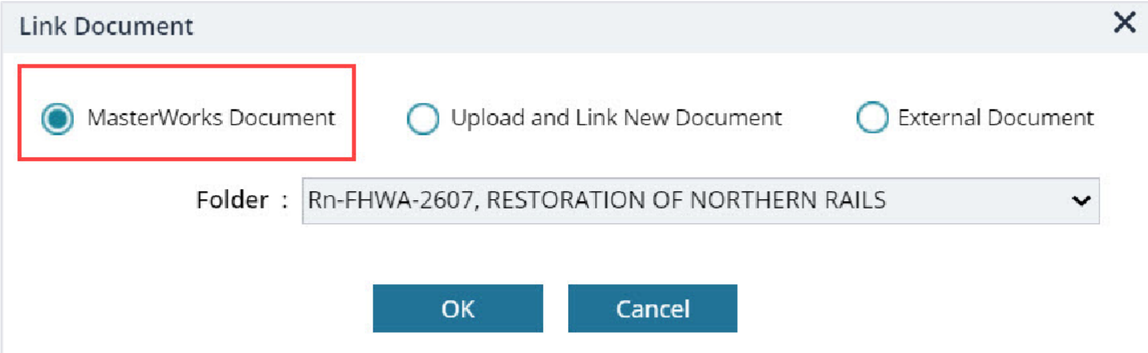


Figure 259: Using Masterworks Document Option

3. In the **Folder** drop-down list, select the appropriate document folder where the files exist. The list of files in that folder is displayed.

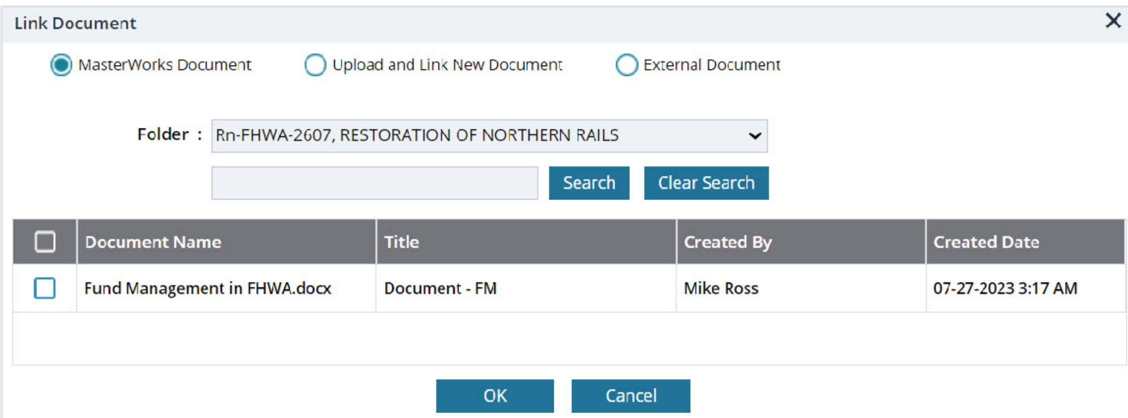


Figure 260: List of Documents

4. Perform any of the following steps, as applicable:

- From the list of files, select the appropriate files.
- To search for a file, in the box, enter any search criteria for the file, click **Search**, and then select the appropriate files.

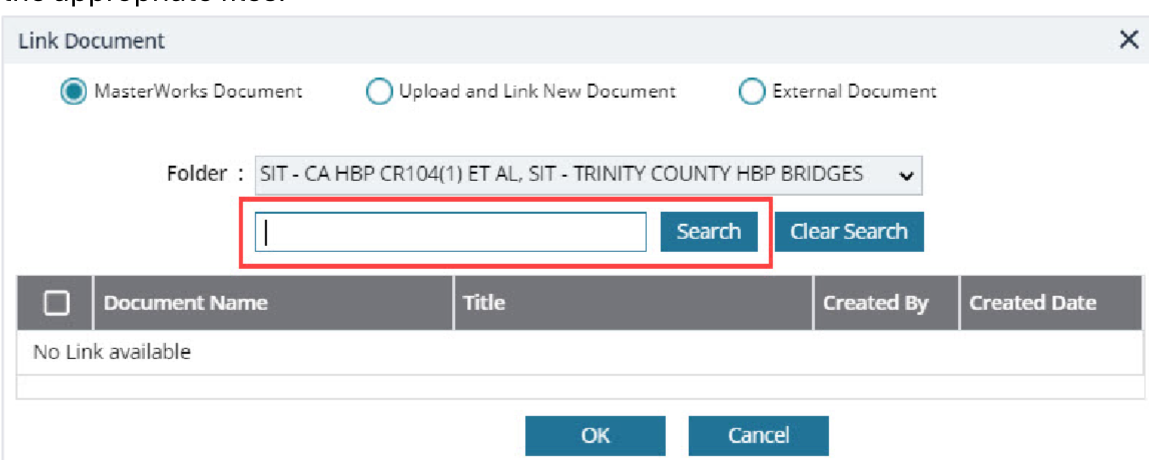


Figure 261: Using Search Option

You can specify search criteria such as the extension of the file type, the date or time the file was uploaded, the name or title of the file, or the username of the user who uploaded the file.

- Optionally, to view all the files in the selected folder, click **Clear Search**.

5. Click **OK**.
   The files are linked to the form and are displayed in the **ATTACHMENTS** section.

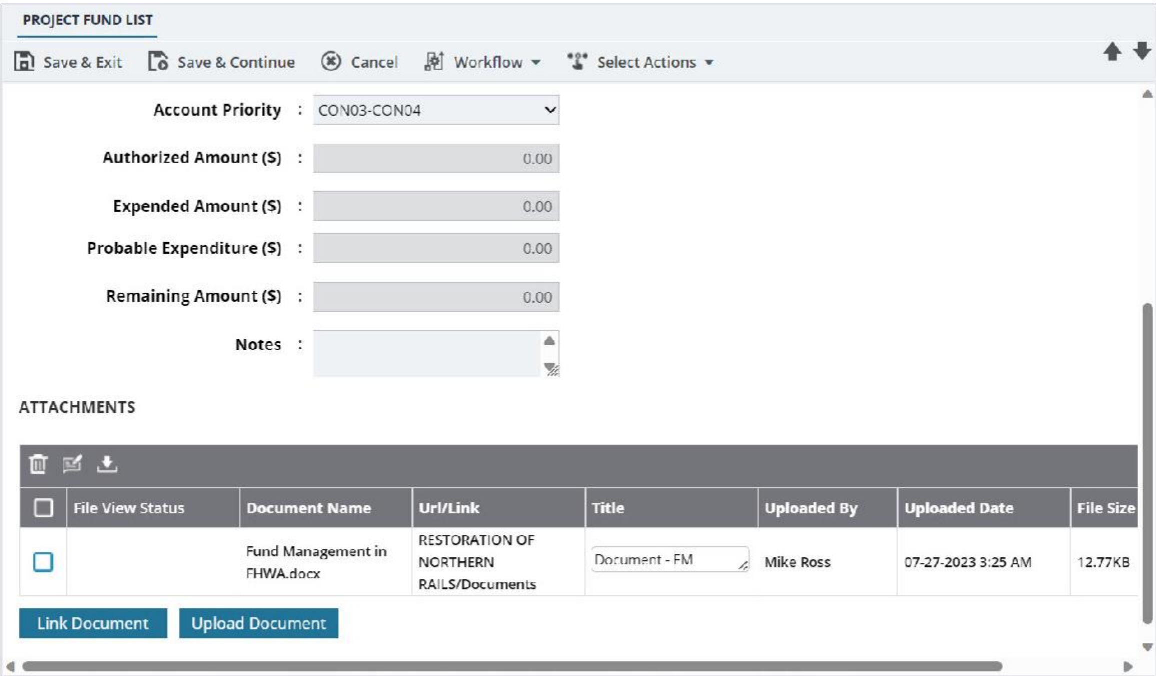


Figure 262: Linked Document

Note: The **Url/Link** column displays the path to the folder where the document is available. You can click the folder path to open the folder.

6. In the **Title** column, enter the titles for the linked files.

Linking a File to a Form – Upload and Link New Document Option

To upload a file to a folder in the Documents folder structure and link the file to the respective form, perform the following steps:

Note: The Upload and Link New Document option is the most preferred and used method to link files to a form by the FLH team.

1. In the **ATTACHMENTS** section, click **Link Document**.

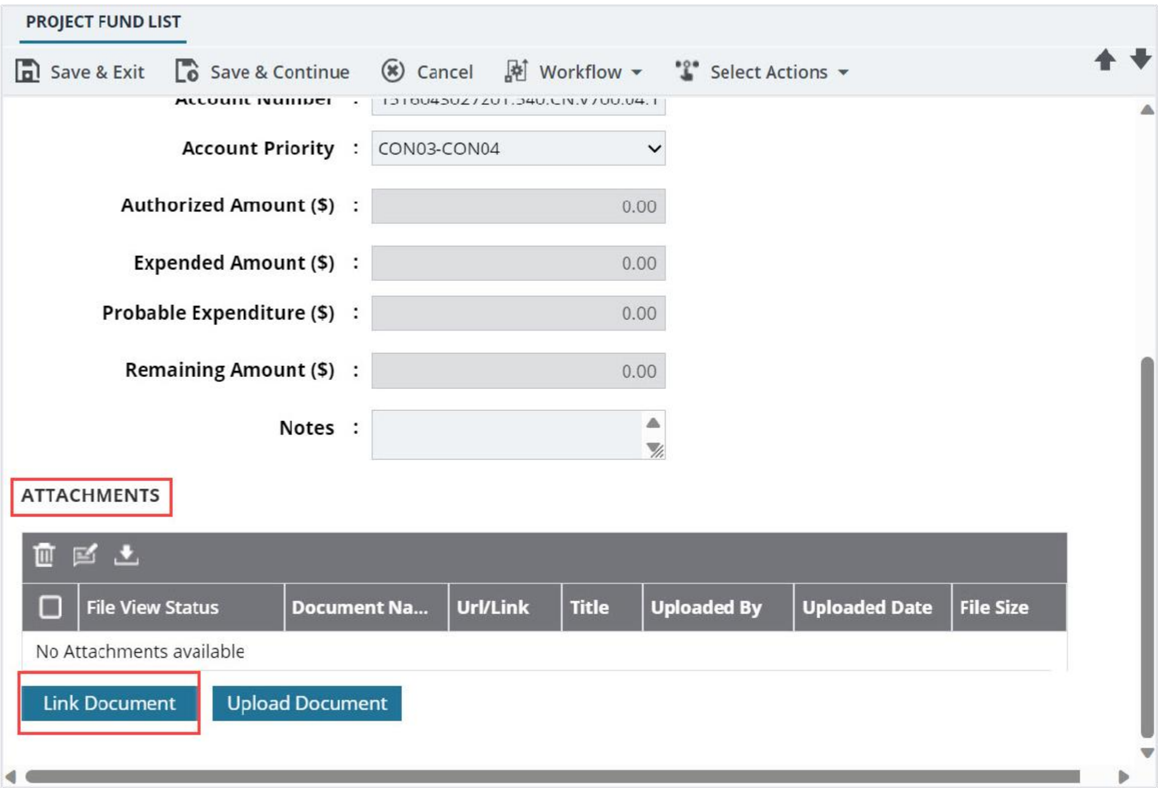


Figure 263: Using Link Document Option

The **Link Document** dialog box is displayed.

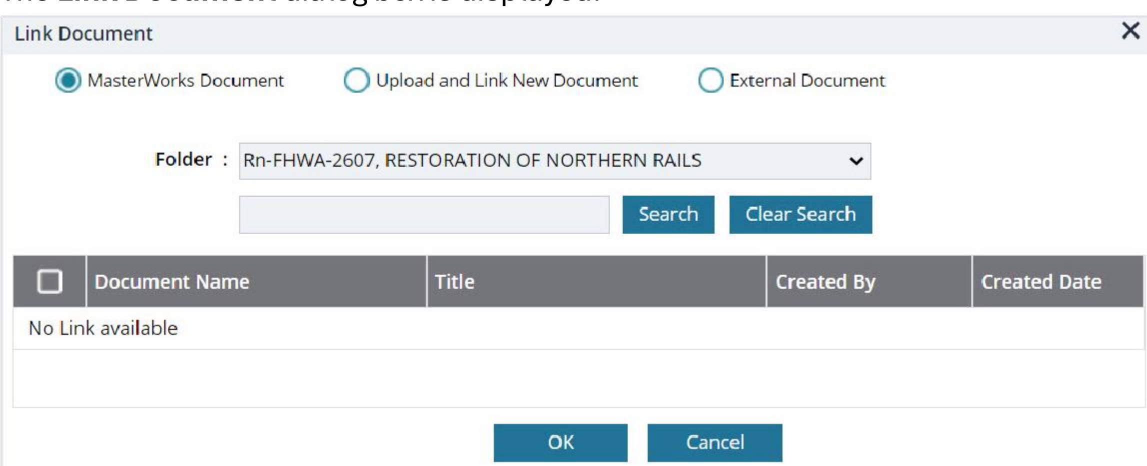


Figure 264: Link Document Dialog Box

2. Click **Upload and Link New Document**.

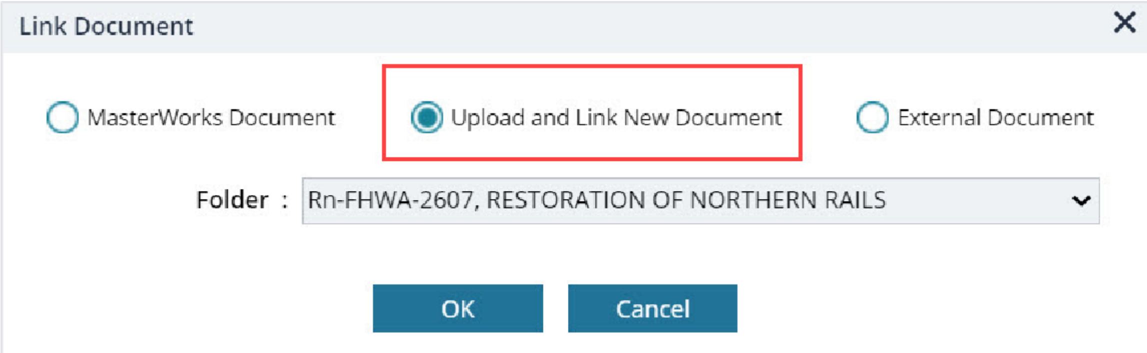


Figure 265: Using Upload and Link New Document Option

3. In the **Folder** drop-down list, select the appropriate folder to upload files.
4. Click **OK**.
   A confirmation dialog box is displayed.
5. Click **OK**.
   The **NEW DOCUMENT** page is displayed.

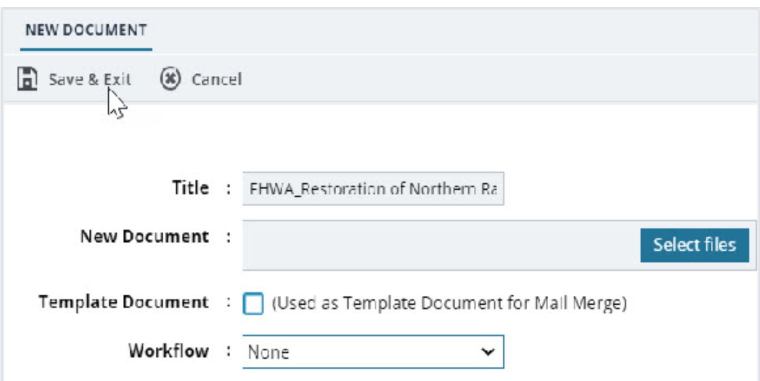


Figure 266: New Document Page

6. To upload files, in the **New Document** section, drag and drop the appropriate files.
   On uploading and saving the files, the files are uploaded to the selected folder in the Folder drop-down list and linked to the respective form.
7. In the **Title** column, enter the titles for the linked files.

Linking a File to a Form – External Document Option

To link a file to an external storage system, perform the following steps:

1. In the **ATTACHMENTS** section, click **Link Document**.

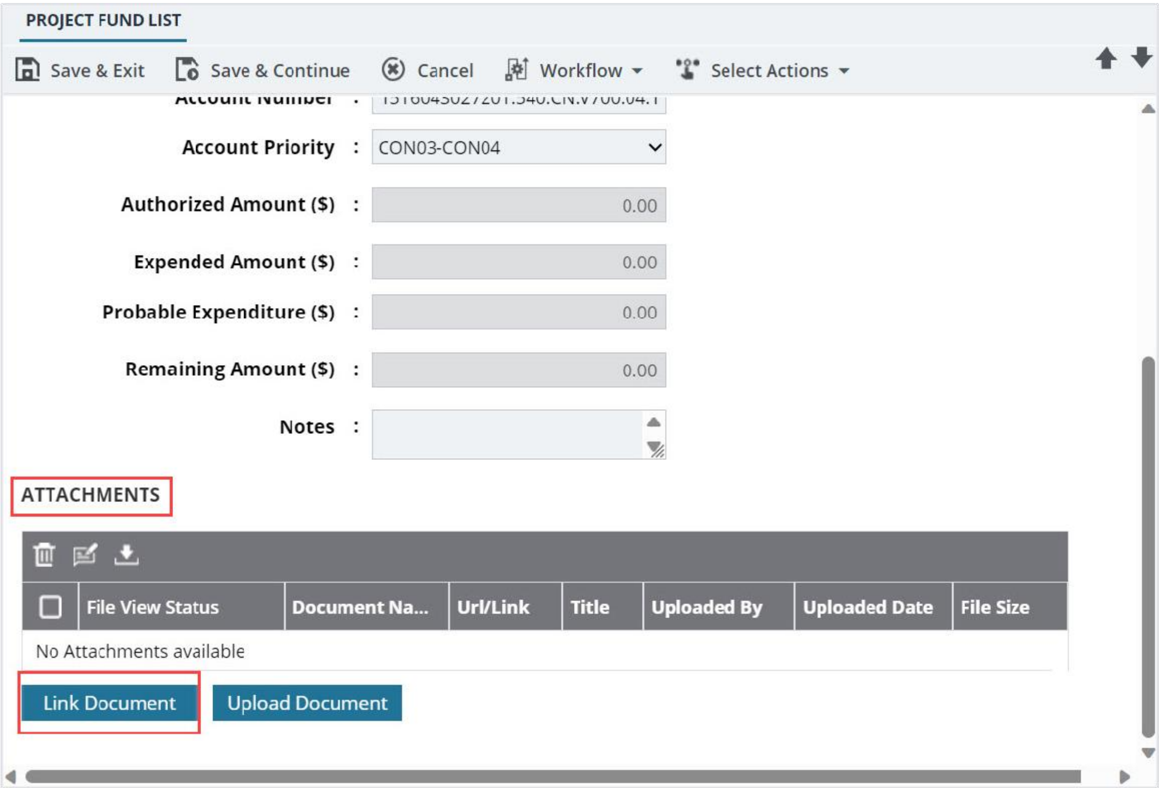


Figure 267: Using Link Document Option

2. Click **External Document**.

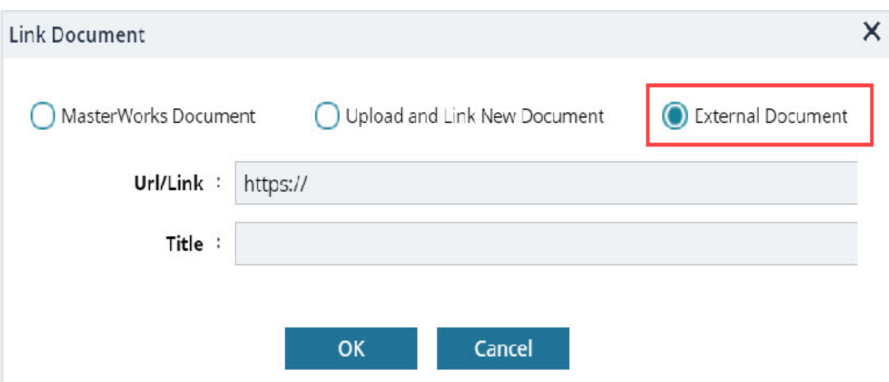


Figure 268: Using External Document Option

3. In the **URL/Link** box, enter the URL to the file in the external storage system.
4. In the **Title** box, enter the title for the linked file.
5. Click **OK**.

   The file is linked to the form and is displayed in the **ATTACHMENTS** section.

4.1.2. Attaching a File to a Workflow

Overview

You can upload files to the specific records of a form while performing a workflow action. The **Project Fund List** form is used for illustration purposes.

Steps

1. In the list page of a form, select the appropriate record.

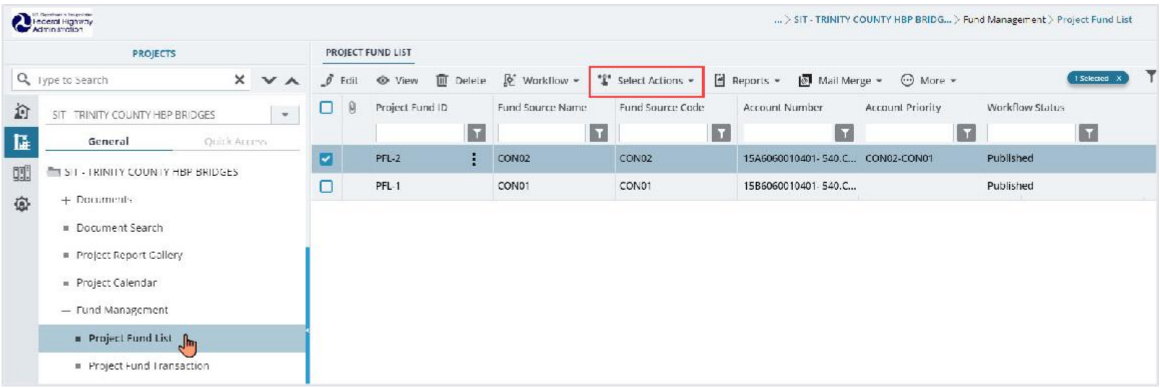


Figure 269: Using Select Actions Option

2. Click **Select Actions**  , and then click the appropriate workflow action. The **Masterworks** dialog box is displayed.

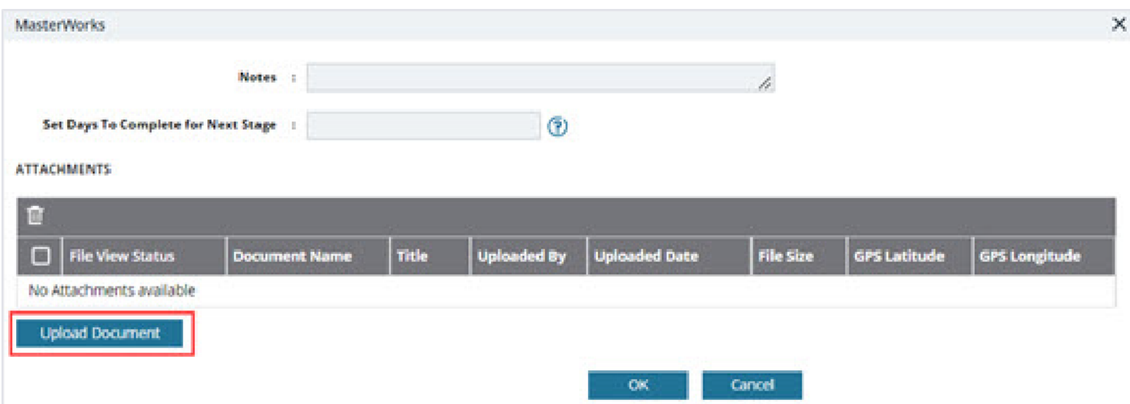


Figure 270: Masterworks Dialog Box

3. In the **ATTACHMENTS** section, click **Upload Document**.

   The **Open** dialog box is displayed.

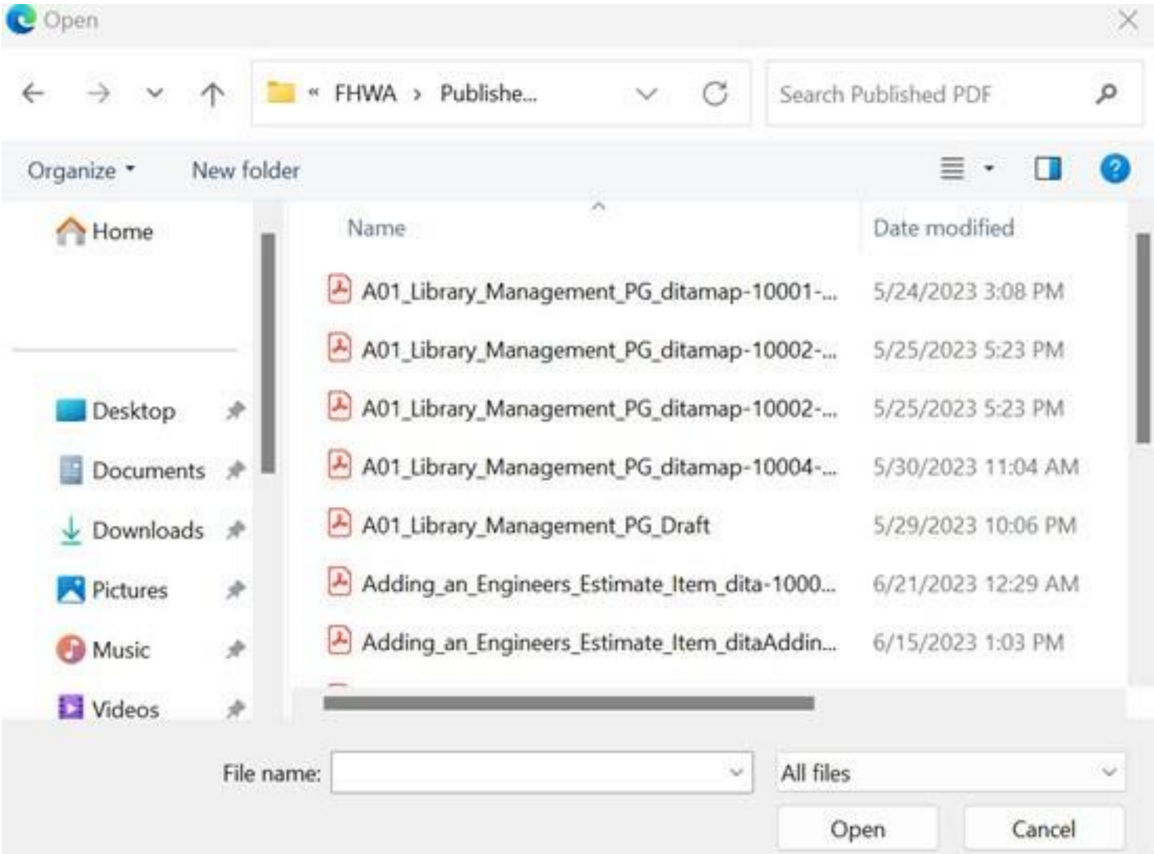


Figure 271: Open Dialog Box

4. To upload a single file, click the required file.

   Optionally, to upload multiple files, press and hold **CTRL**, and then click the required files.

5. Click **Open**.

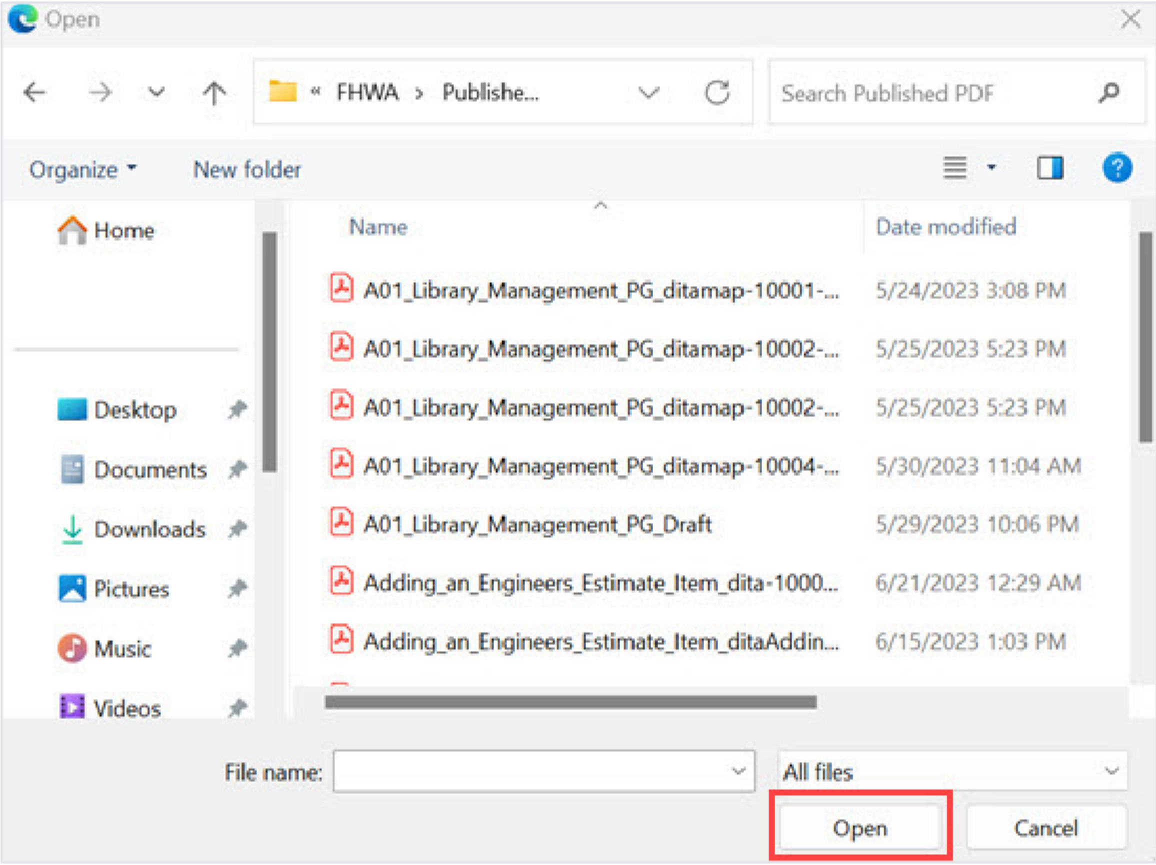


Figure 272: Using Open Option

The name of the file is automatically updated in the **Document Name** column.

6. Optionally, in the **Title** column, enter the title for the attached file.

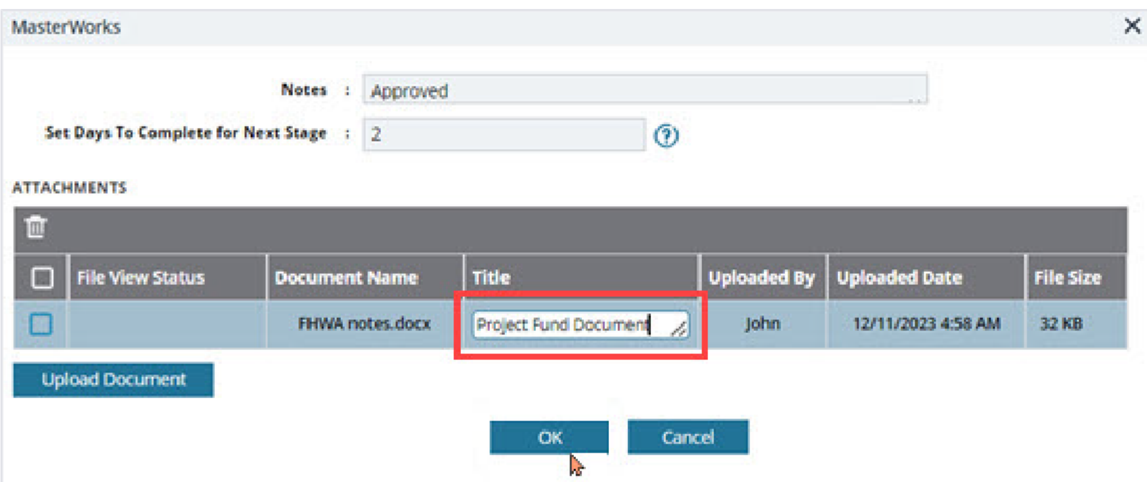


Figure 273: Updating Title for the Attached File

7. Click **OK**.
   You can access the attached file from the **Workflow Status and History** dialog box.
   For more information, refer to Section 4.2.2. Viewing the Workflow History

4.1.3. Accessing and Downloading Attached Files

You can access files that are attached to forms and workflows.
The **Project Fund List** form is used for illustration purposes.

- To access files attached to a form (from the list page):

1. In the navigation pane, click the required form.

   The form list page is displayed.

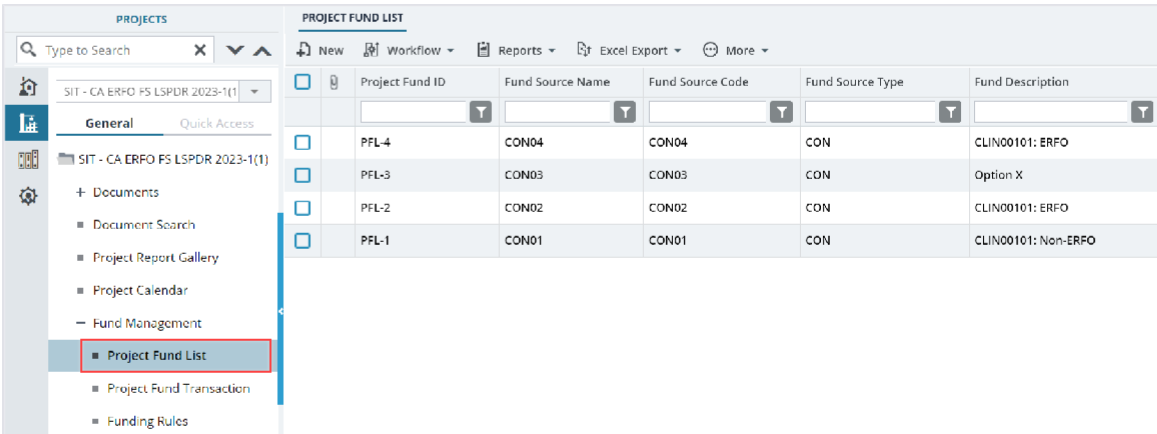


Figure 274: Project Fund List Page

2. Click **More**, and then click **Attachments**.

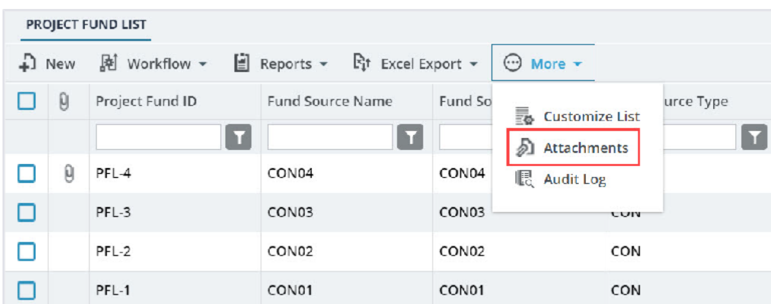


Figure 275: Using Attachments Option

The attachments of all the records are listed.

Figure 276: List of Attachments

Optionally, to view files attached to a record, select the appropriate record and then click **Attachments**.

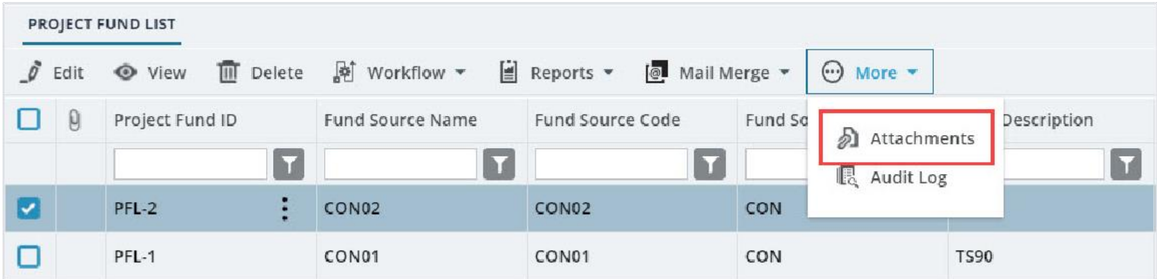


Figure 277: Viewing Files Attached to a Record

- To access and download files attached to a record (from the details page):

1. In the navigation pane, click the appropriate form.

The form list page is displayed.

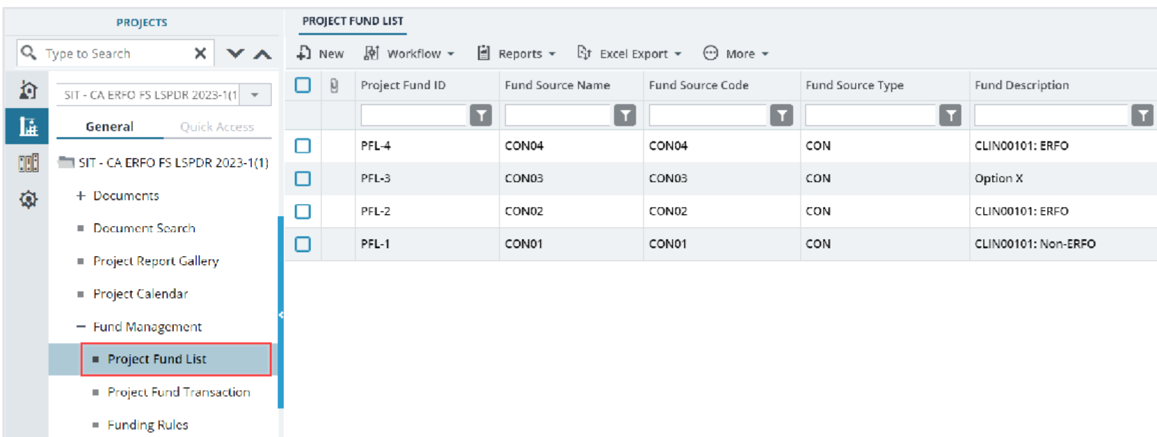


Figure 278: Project Fund List Page

2. In the list page, select the appropriate record, and then click **View**.

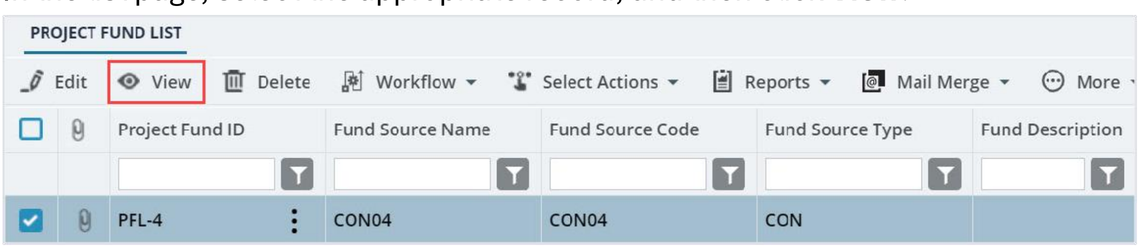


Figure 279: Using View Option

The form details page is displayed.

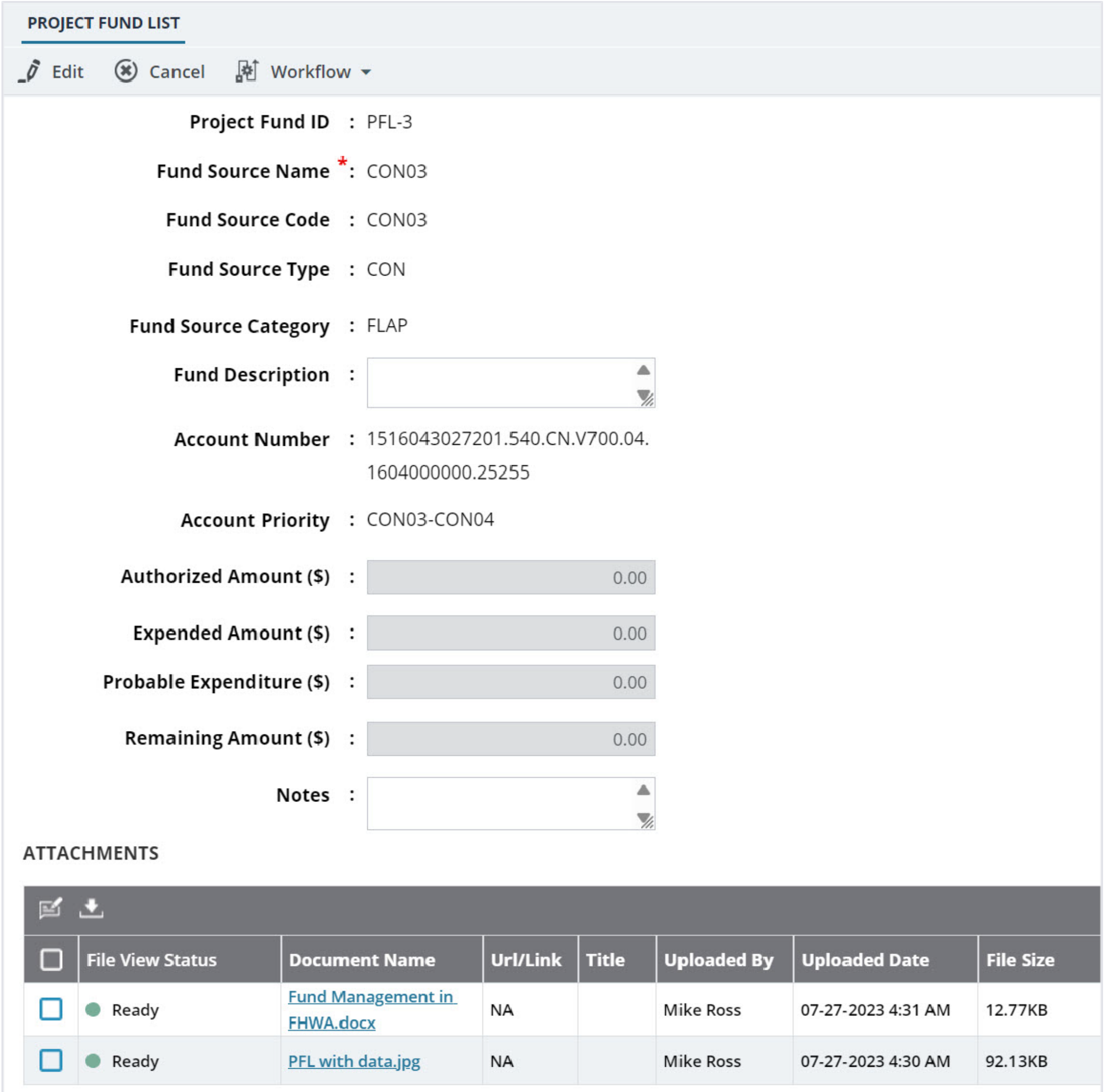


Figure 280: Project Fund List Page in View Mode

2. In the **ATTACHMENTS** section, select the appropriate files, and then click .

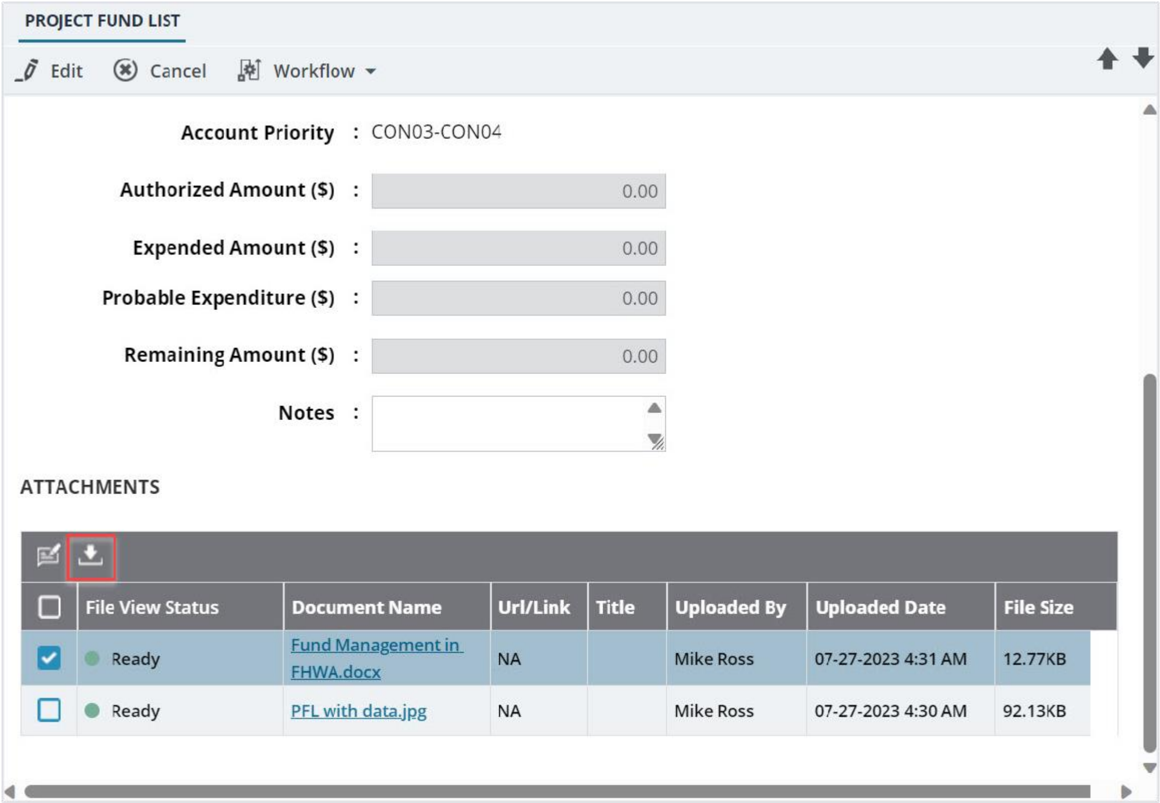


Figure 281: Using Download Option

- To access and download files attached to a workflow:

1. In the navigation pane, click the appropriate form.

   The form list page is displayed.

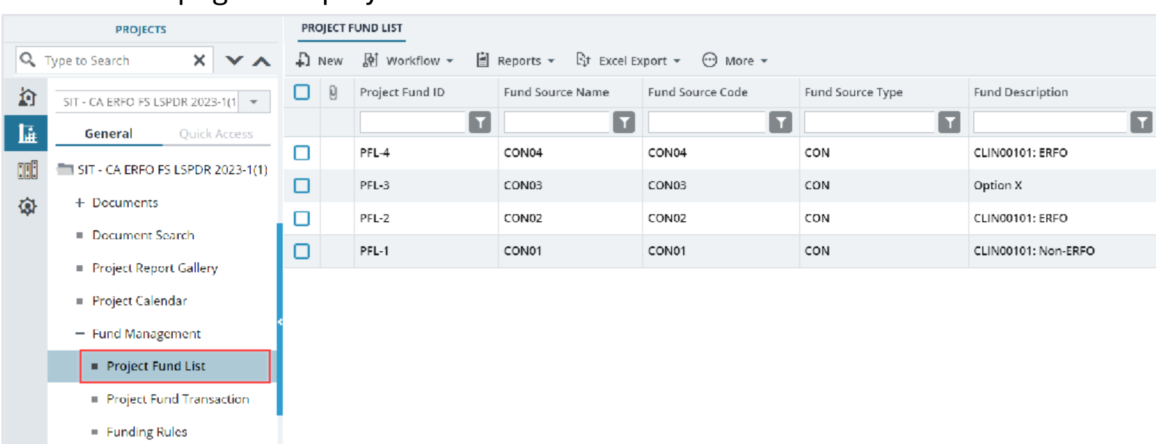


Figure 282: Project Fund List Page

2. In the list page, select the appropriate record.
   In the **WORKFLOW** group, click **History**.

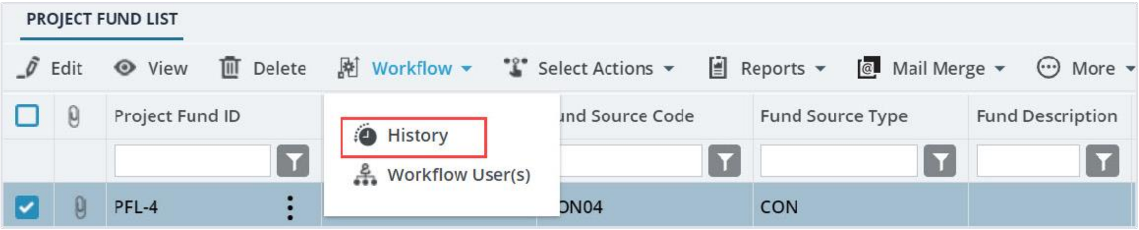


Figure 283: Using History Option

The **Workflow Status & History** dialog box is displayed.

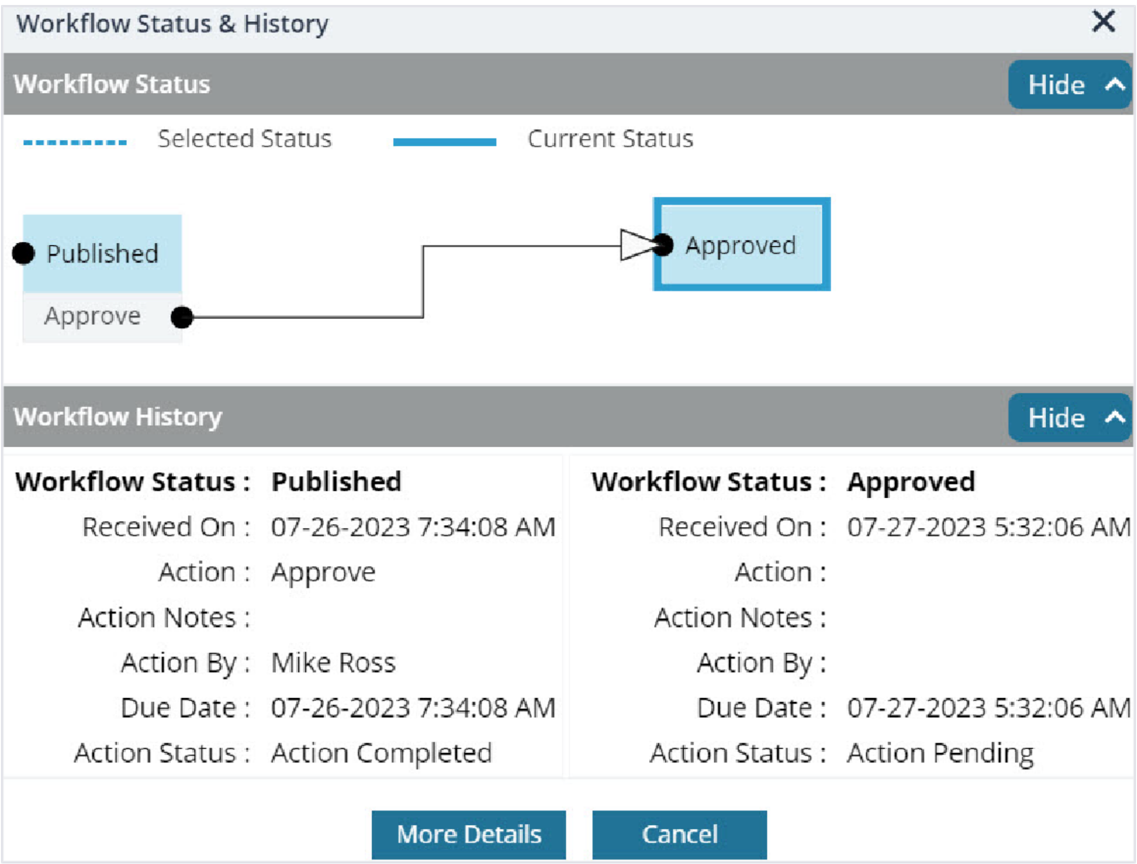


Figure 284: Workflow Status & History Dialog Box

3. To view all the attachments and complete workflow history, click **More Details**.

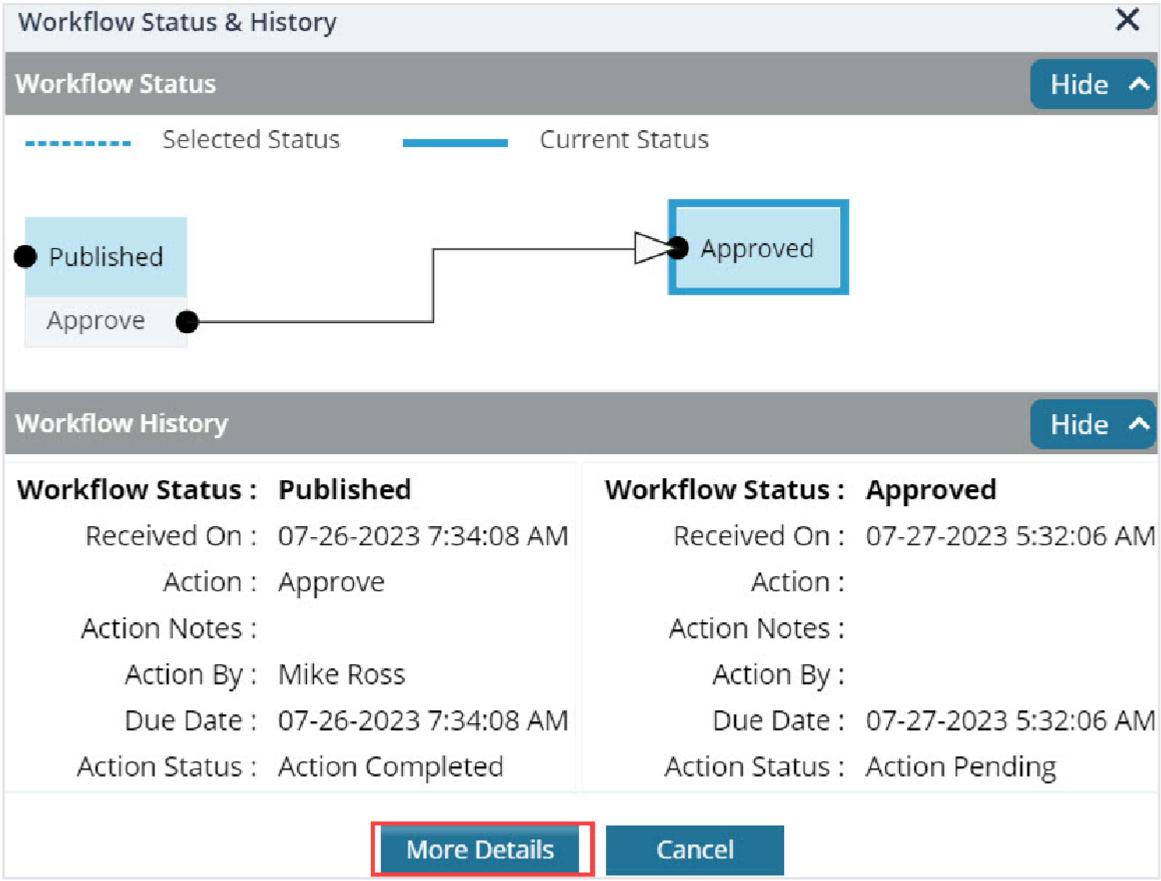


Figure 285: Using More Details Option

The **History** page is displayed.

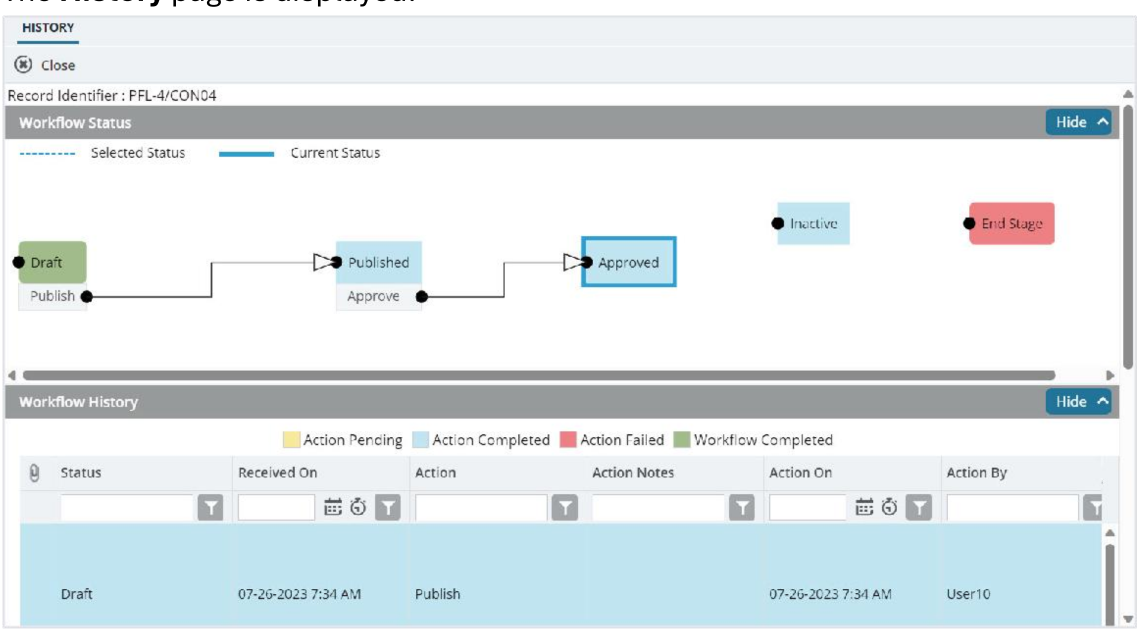


Figure 286: History Page

4. In the **ATTACHMENTS** section, select the appropriate documents, and then click .

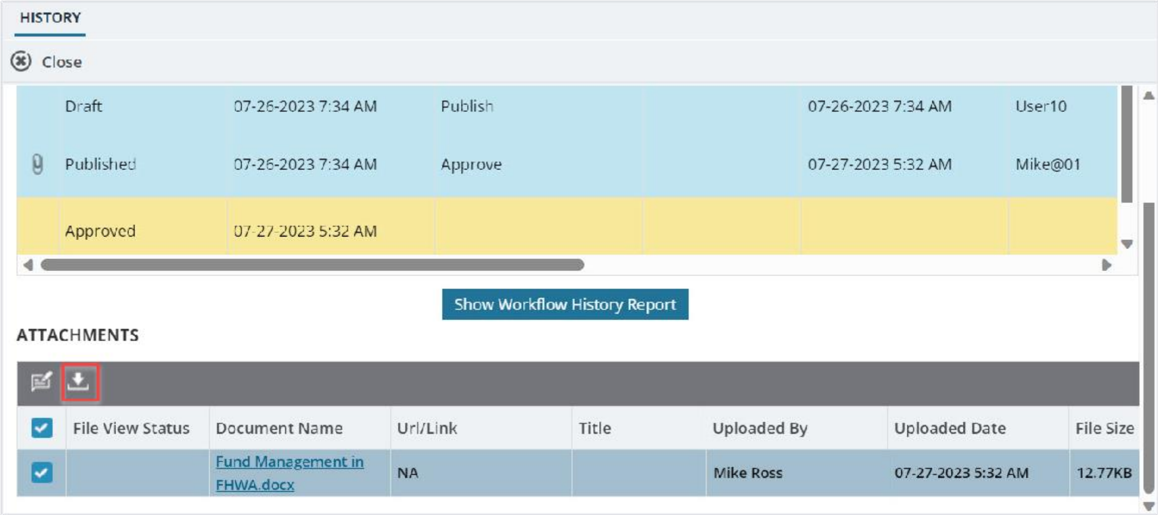


Figure 287: Using Download Option

4.1.4. Deleting Attached Files

Prerequisites

You can delete a file only if you have attached it.

Overview

You can delete files that are attached to forms. You cannot delete files that are attached while performing a workflow action.

The **Project Fund List** form is used for illustration purposes.

Steps

1. To access the appropriate file attached to a form to be deleted, perform the following steps:
   a. In the navigation pane, click the appropriate form.
   The form list page is displayed.

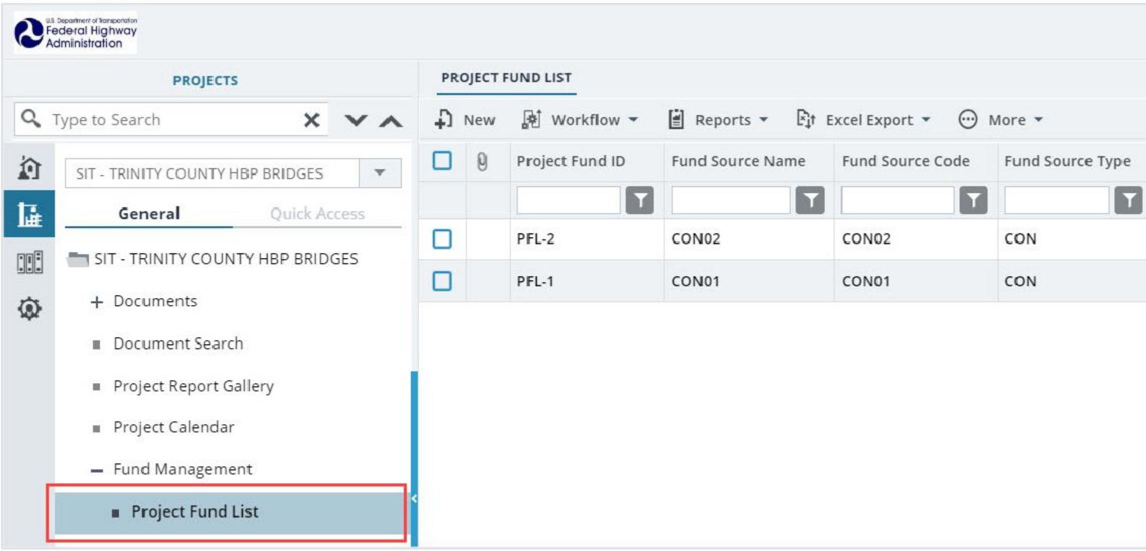


Figure 288: Project Fund List Page

   b. Click **More**, and then click **Attachments**.
   The attachments of all the records are listed.

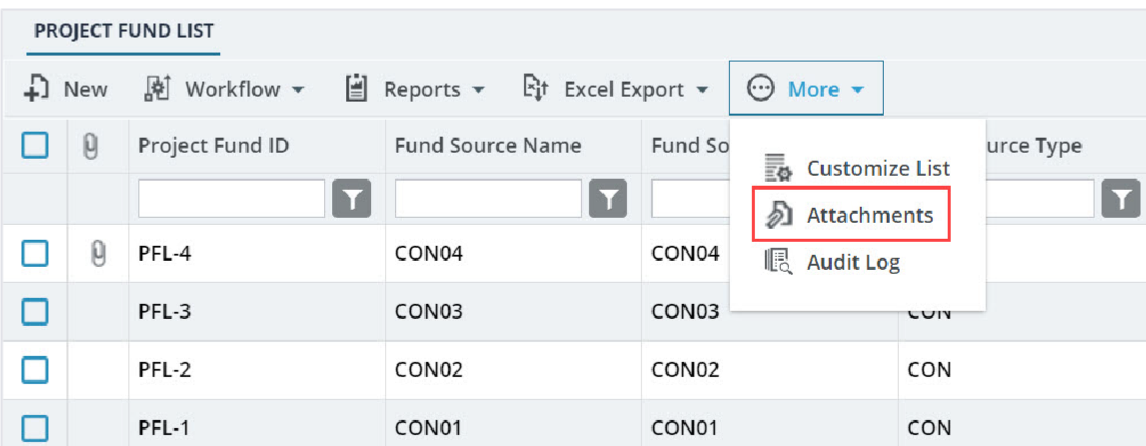


Figure 289: Using Attachments Option

   Various document management features are available for attachments.

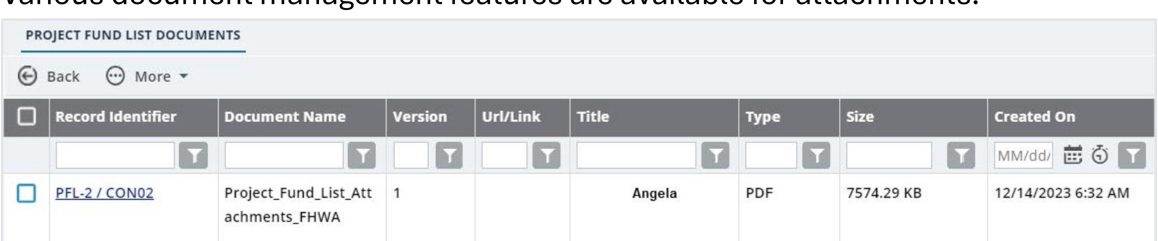


Figure 290: List of Attachments

2. To delete an attachment, select the appropriate file, and then click .

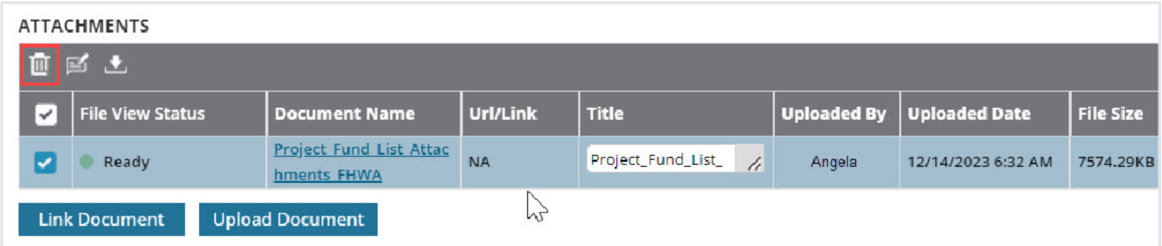


Figure 291: Using Delete Option

4.2. Standard Report Functions

Performing all report-related activities is similar in procedure throughout the application.

All tasks that you can perform are based on the roles assigned to you in a project and the permissions granted to the roles.

For information on roles, refer to **Security Roles** in the **A02 Administrator Guide**.

The standard report functions include the following:

- 4.2.1. Generating and Viewing Reports
    - 4.2.1.1. Generating a report
    - 4.2.1.2. Printing a report
    - 4.2.1.3. Saving a report in various formats
    - 4.2.1.4. Updating report to view the latest information
- 4.2.2. Subscribing to a report

4.2.1. Generating and Viewing Reports

You can generate reports for different information views for all the forms in the application. Masterworks enables you to use report filters to generate reports with specific information. You can perform the following report functions:

- 4.2.1.1. Generating a report
- 4.2.1.2. Printing a report
- 4.2.1.3. Saving a report in various formats
- 4.2.1.4. Updating report to view the latest information

4.2.1.1. Generating a Report

Overview

You can generate various reports that comprise information based on the roles assigned to you and the various projects to which you are invited.

For a few reports, you can use the filter criteria to provide information for the relevant fields and generate the reports.

The **Project Fund List** form is used for illustration purposes.

Steps

1. Perform any of the following steps, as applicable:

    - In the form list page, click Reports, and then click the appropriate report.

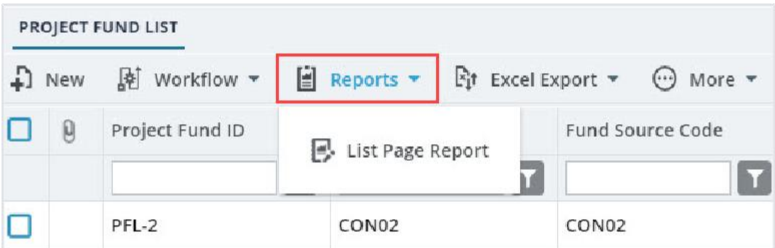


Figure 292: Using Reports Option

    - In the project navigation pane, click **Project Report Gallery**, and then double-click the appropriate report.

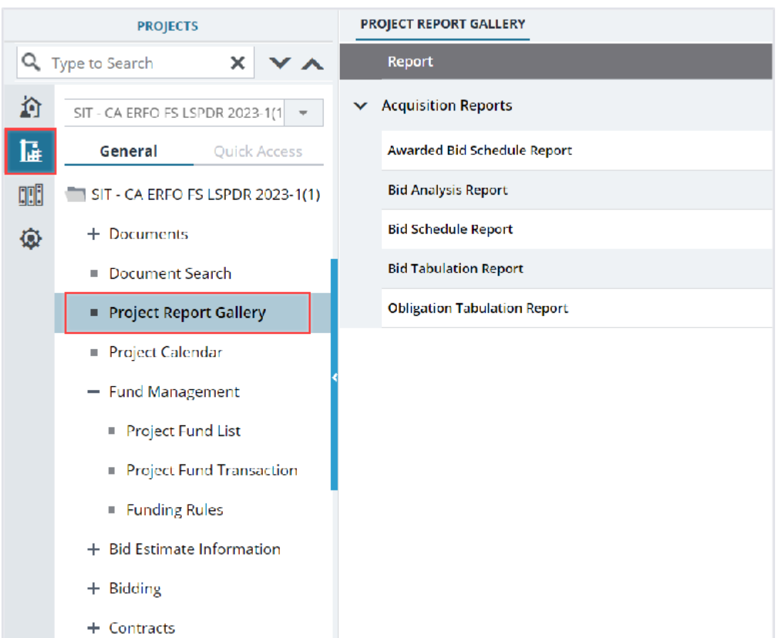


Figure 293: Project Report Gallery Navigation Page

- In the project navigation pane, expand the contract folder, click **Contract Report Gallery**, and then double-click the appropriate report.

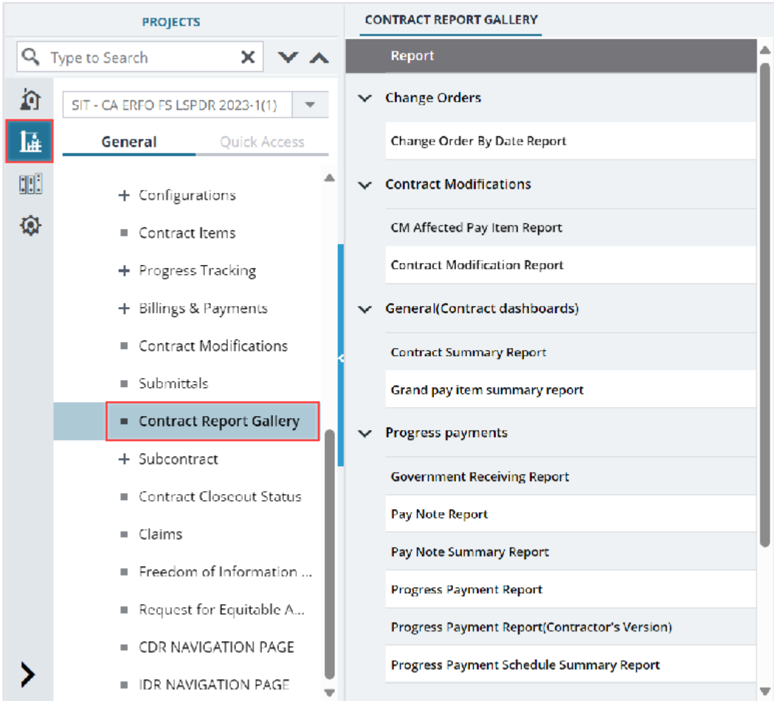
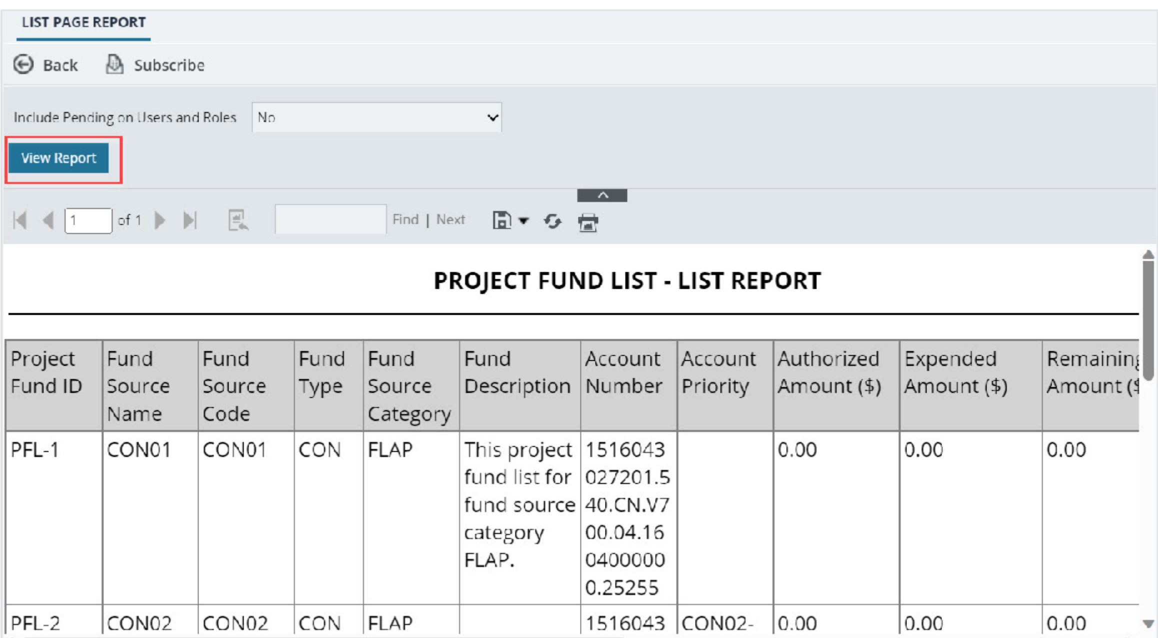


Figure 294: Contract Report Gallery Navigation Page

2. If filtering options are necessary, select the appropriate information in the relevant fields, and then click **View Report**.



Project Fund ID	Fund Source Name	Fund Source Code	Fund Type	Fund Source Category	Fund Description	Account Number	Account Priority	Authorized Amount ($)	Expended Amount ($)	Remaining Amount ($
PFL-1	CON01	CON01	CON	FLAP	This project fund list for fund source category FLAP.	1516043027201.540.CN.V700.04.1604000000.25255		0.00	0.00	0.00
PFL-2	CON02	CON02	CON	FLAP		1516043	CON02-	0.00	0.00	0.00

Figure 295: Using View Report Option

The report is generated and displayed.

4.2.1.2. Printing a Report

Steps

1. Generate the required report.
   For more information, refer to Section 4.2.1.1. Generating a Report
2. In the report toolbar, click **Print Report** .

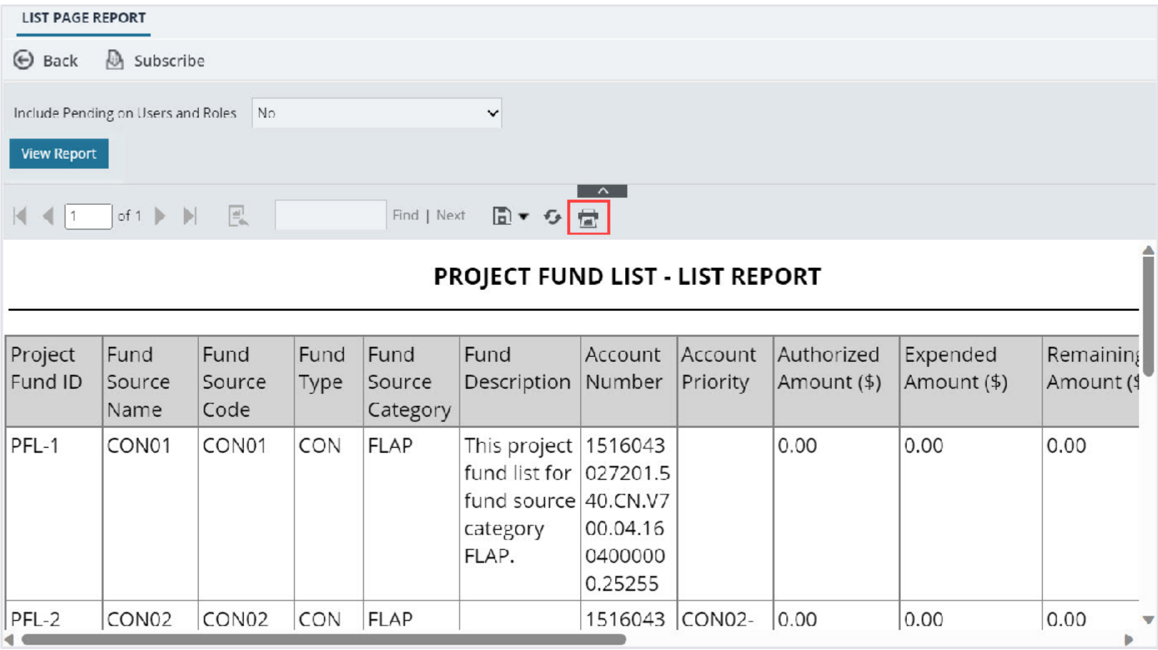


Figure 296: Using Print Report Option

4.2.1.3. Saving a Report

Steps

1. Generate the required report.
   For more information, refer to Section 4.2.1.1. Generating a Report
2. In the report toolbar, click **Export**, and then click the required option.

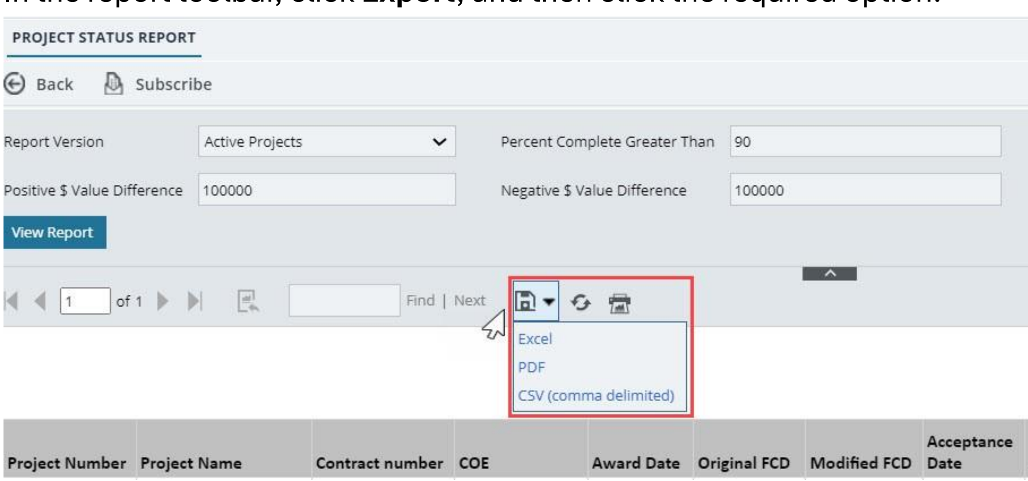


Figure 297: Exporting a Report

4.2.1.4. Viewing Latest Information in a Report

Steps

1. Generate the required report.
   For more information, refer to Section 4.2.1.1. Generating a Report
2. In the report toolbar, click **Refresh**

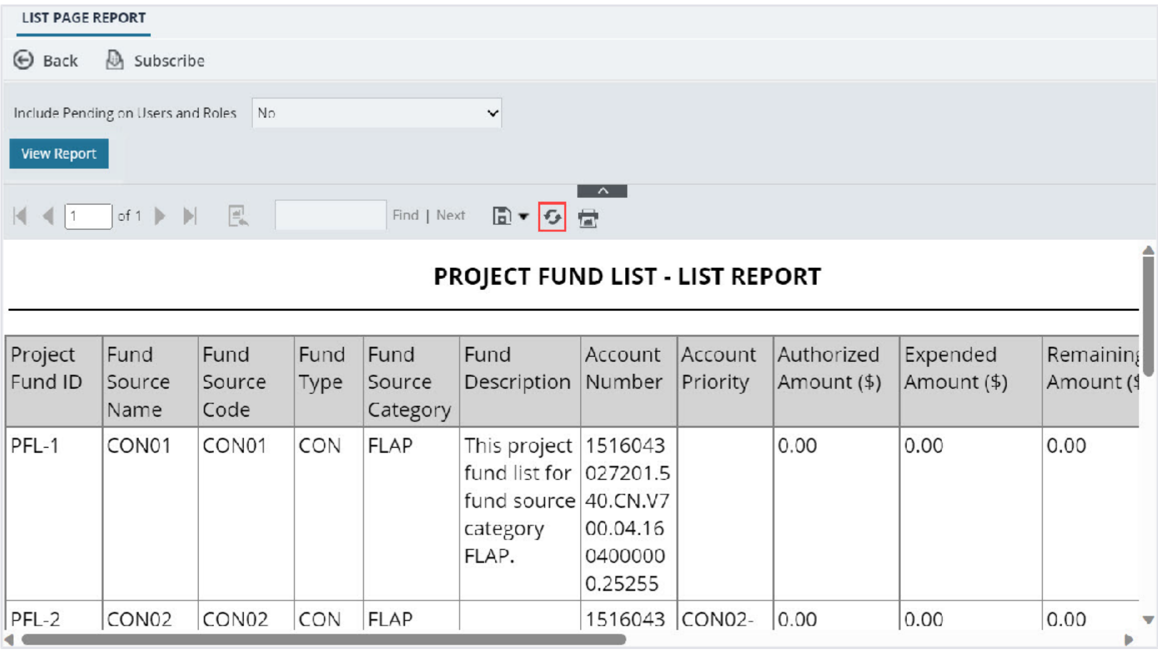


Figure 298: Using Refresh Option

4.2.2. Subscribing to Reports

Prerequisites

- You must have access to the report.
- The logged-in user is assigned with the permission to generate the report.

Overview

You can subscribe to reports, and subscribed reports are delivered to the specified email addresses or saved in the specified file location. You can configure subscriptions so that the reports are delivered periodically in the specified format.

Additionally, you can create multiple subscriptions for a single report with varied subscription options.

You can subscribe to a report using any of the following methods:

- Email: The report is delivered through email to the specified email addresses in the specified formats.
  Note: Only Masterworks registered email address is allowed to receive the subscribed reports.
- File Share: The reports are saved to the specified location in the specified formats
  Note: Users with the appropriate permission can subscribe themselves or others to a report. Only users with the **Administrator** role can remove or end an active subscription once it is created.

Steps

1. Open a report, and then click Subscribe .

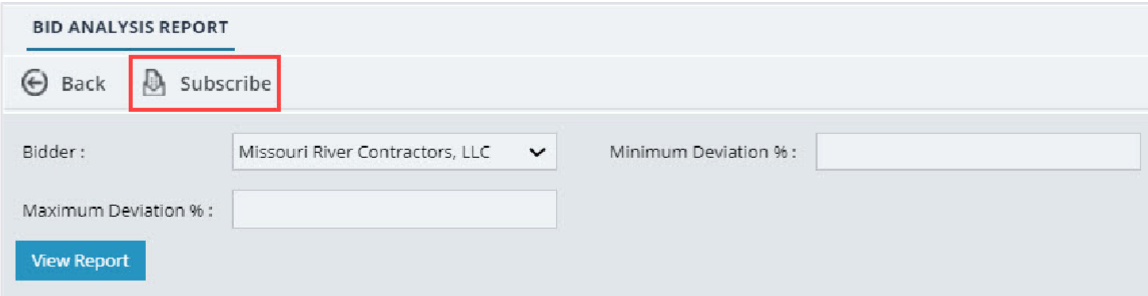


Figure 299: Subscribing a Report

The subscription dialog box is displayed.

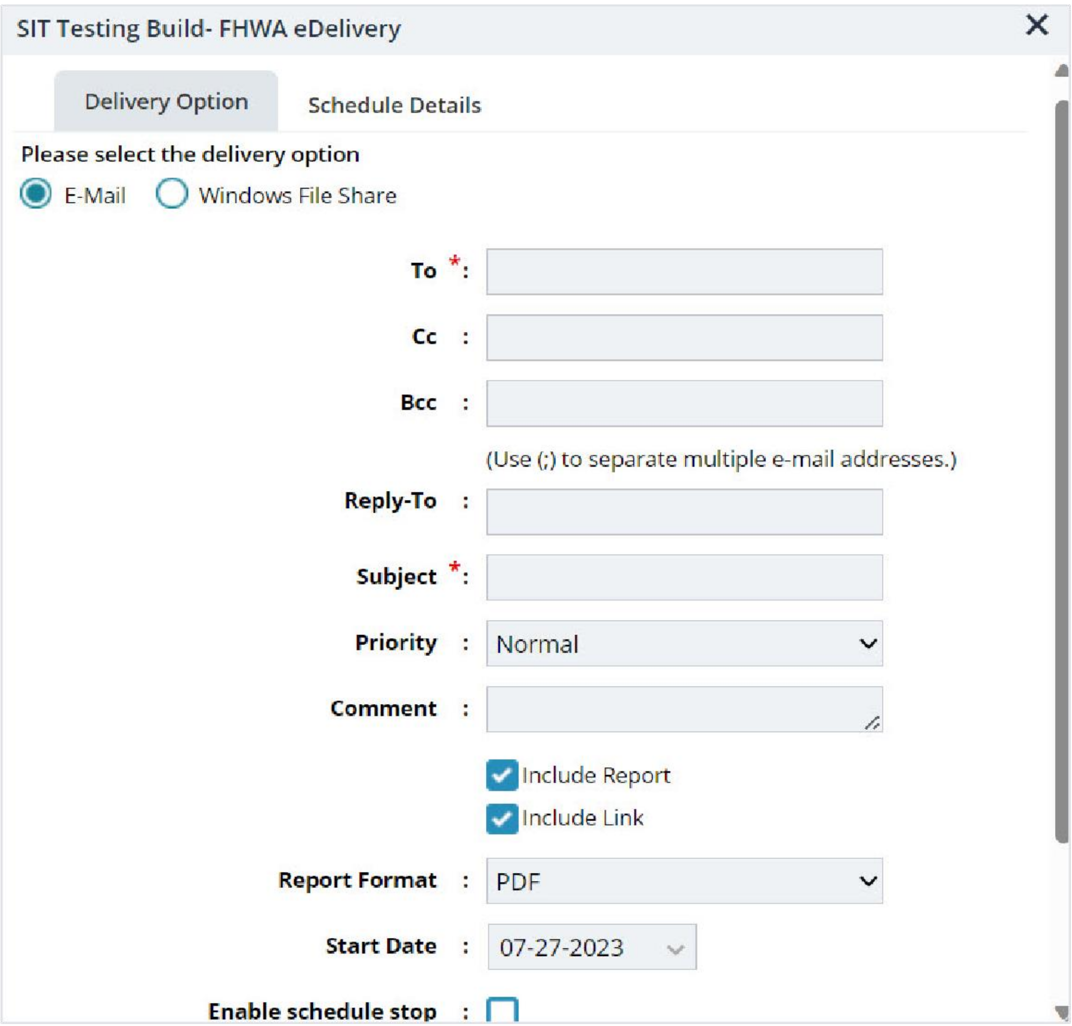


Figure 300: Subscription Dialog Box

Note: To subscribe to a report, you must fill the fields with red asterisks.

2. In the **Please select the delivery option** section, perform either of the following steps, as applicable:

    - Click **E-Mail** to receive the report through email.
    - Click **Windows File Share** to save the report to the specified location.

3. Based on the delivery option selected, perform the following steps:

E-Mail	Windows File Share
a. In the **To** box, enter the email addresses of the recipients of the report. b. In the **Reply-To** box, enter the email addresses of the recipients to whom the reply email must be delivered. c. In the **Subject** box, enter the name of the report or any other appropriate subject for the email. d. From the **Priority** drop-down list, select the priority of the email. If the selected priority is High, the email will be sent as a High Priority notification. e. In the **Comment** box, enter any comment for the email. Comments are included in the body of the email. f. Select the **Include Report** check box to deliver the report in the selected format as an email attachment. g. Select the **Include Link** check box to deliver the link to the report in the report delivery email. The recipient can view the report on the application only if the recipient has the required permissions on the report. h. From the **Report Format** drop- down list, select the format in which the report must be generated and delivered to the specified email addresses. i. From the **Start Date** list, click the date from when the report must be delivered. j. Select the **Stop this schedule on** check box, and then select the date until when the report must be delivered.	a. In the **File Name** box, enter the file name for the report. b. Select the **Add** a file extension when the file is created check box to save the report file name with the extension of the file format as required for the report. c. In the **Path** box, enter the path of the shared file location where the report must be saved. **Note**: To configure the shared file location in the application, you must provide the file path location to the **Administrator**. d. From the **Report Format** drop-down list, select the format in which the report must be generated and saved. e. In the **Credentials** used to access the file share section, enter the credentials to access the shared location and save the report. f. From the **Overwrite** options section, click any of the following options: • Overwrite an existing file with a newer version - When saving the report at the file location at the scheduled time, if a file with the same name exists, then the existing file is overwritten by the latest report. • Do not overwrite the file if a previous version exists - When saving the report at the file location at the scheduled time, if a file with the same name exists, then the report is not overwritten by the latest report, and the report is not saved at the file location. • Increment file names as newer versions are added - When saving the report at the file location at the

E-Mail	Windows File Share
	scheduled time, if a file with the same name exists, then the latest report is saved with the same name appended with a sequential number. g. From the **Start Date** list, click the date from when the report must be saved. h. Select the **Stop** this schedule on check box, and then select the date up to when the report must be saved at the file location.

4. To set the frequency of report delivery, click the Schedule Details tab.

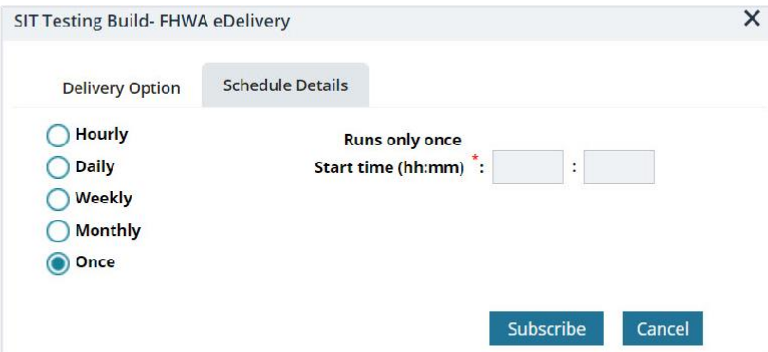


Figure 301: Schedule Details

5. From the delivery frequency options, click the appropriate option:

Option	Description	Steps
Hourly	The report is delivered every preset number of hours.	a. Click **Hourly** in the delivery options list. b. In the **Run the schedule every** section, enter the frequency of report delivery: i. In the **hours** and **minutes** boxes, enter the time period in hours and minutes the report must be periodically delivered. ii. In the **Start time (hh:mm)** box, enter the time (in 24-hour format) the report delivery must begin.
Daily	The report is delivered once on preset days, or periodically as defined.	a. Click **Daily** in the delivery options list. b. In the schedule definition section, enter the frequency of report delivery: • Click **Every Weekday** to get the report delivered on all weekdays, from Monday to Friday. • Click **Repeat after this number of days**, and then, then in the box, enter the number of days to get the report

Option	Description	Steps
		delivered periodically once every specified number of days. c. In the **Start time (hh:mm)** box, enter the time (in 24-hour format) the report must be delivered.
Weekly	The report is delivered every preset number of weeks on preset days of the week.	a. Click **Weekly** in the delivery options list. b. Click **Repeat** after this number of weeks, and then in the box, enter the number of weeks to get the report delivered periodically once every specified number of weeks. c. In the On day(s) section, select the days on which the report must be delivered. d. In the Start time (hh:mm) box, enter the time (in 24-hour format) the report must be delivered.
Monthly	The report is delivered monthly on preset days of a selected week.	a. Click **Monthly** in the delivery options list. b. Select the months when the report must be delivered. c. Click one of the following options to schedule the delivery of the report: • **On week of the month** i. From the list of weeks, select the week the report must be delivered. ii. In the **On day(s)** section, select the days the report must be delivered in the week previously selected. • **On Calendar day(s)** ○ In the box, enter the number of days of the month the report must be delivered, starting from the current day. For example, if the current day is the 12th of a month, and the calendar days set is 10, then the report is sent for 10 days from the 12th of every selected month. d. In the Start time (hh:mm) box, enter the time (in 24-hour format) by when the report must be delivered.
Once	The report is delivered once on the current day.	In the **Start time (hh:mm)** box, enter the time (in 24-hour format) by when the report must be delivered.

6. Click **Subscribe**.

   The report is delivered as scheduled.

Note: Only users with the **Administrator** role can unsubscribe to reports.

4.3. Workflow Status Transitions

A workflow automates a business process for stakeholders to evaluate a form, make decisions, and then take an appropriate action. Workflows comprise various status, and each status is transitioned to the next workflow status through actions taken by stakeholders of the current workflow status. Transitioning a workflow status to the subsequent workflow status is performed in the way of a workflow action.

The following topics describe the various workflow related tasks:

- 4.3.1. Performing Workflow Status Transitions
- 4.3.2. Viewing the Workflow History
- 4.3.3. Selecting Workflow Users
- 4.3.4. Associating a Workflow

4.3.1. Performing a Workflow Action

Prerequisites

- A workflow is associated with the record.
- You are an action stakeholder for a particular status in the workflow.
- You are invited to the project.
- You have editing permission for the form or document.
- A workflow action is pending for you.

Overview

When a workflow action is performed on a record, the record is moved from the current workflow status to the subsequent workflow status. A workflow status is transitioned to the subsequent workflow status based on the workflow action conditions defined.

Steps

1. Open a form list page or document list page.
   Note: You can view the workflow status of a record in the Workflow Status column of the list page.
2. Perform any of the following steps, as applicable:
   - Select the appropriate record.

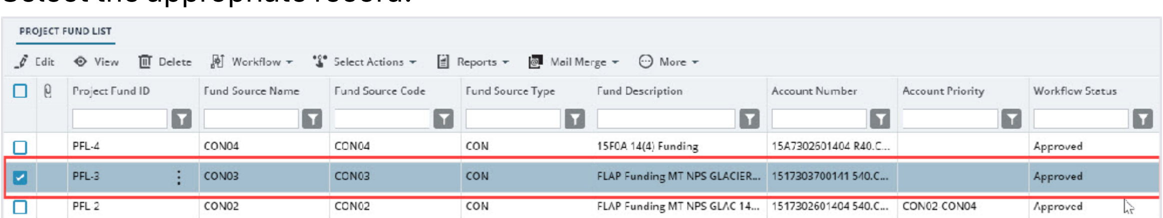


Figure 302: Selecting a Record

- Select multiple records that are in the same workflow status and have the same workflow associated with them.

Figure 303: Multiple Records with Same Status

- Select the appropriate record, and then click **Edit**.

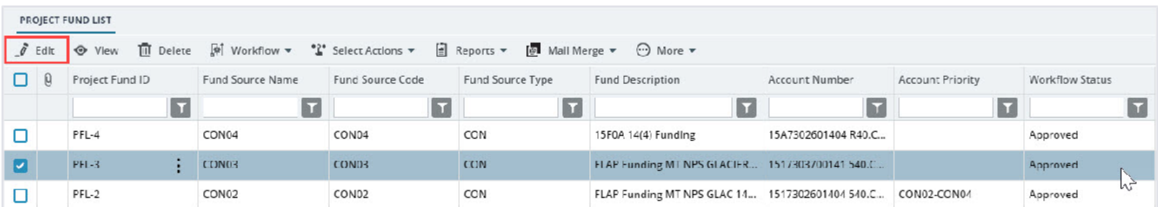
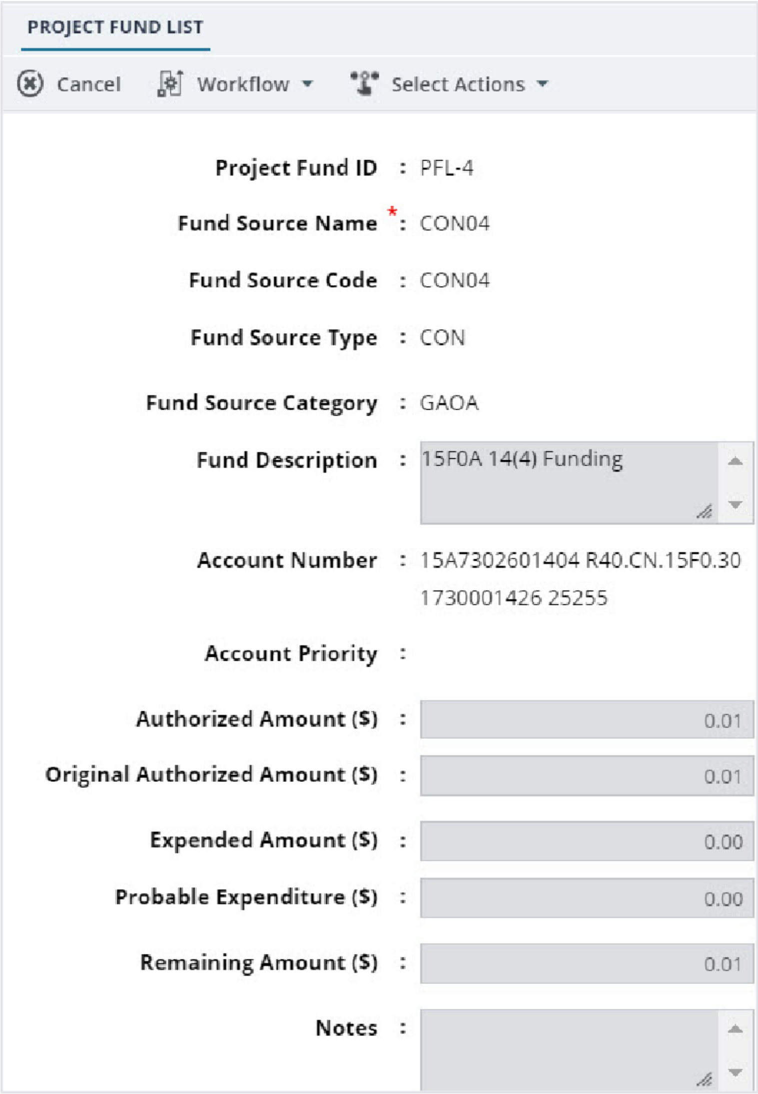


Figure 304: Editing a Record

The **Project Fund List** page is displayed.



3. Click **Select Actions**  , and then click the appropriate workflow action.

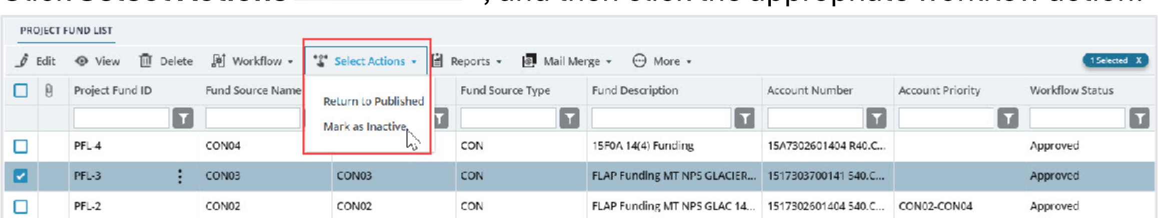


Figure 305: Using Select Actions Option – List Page

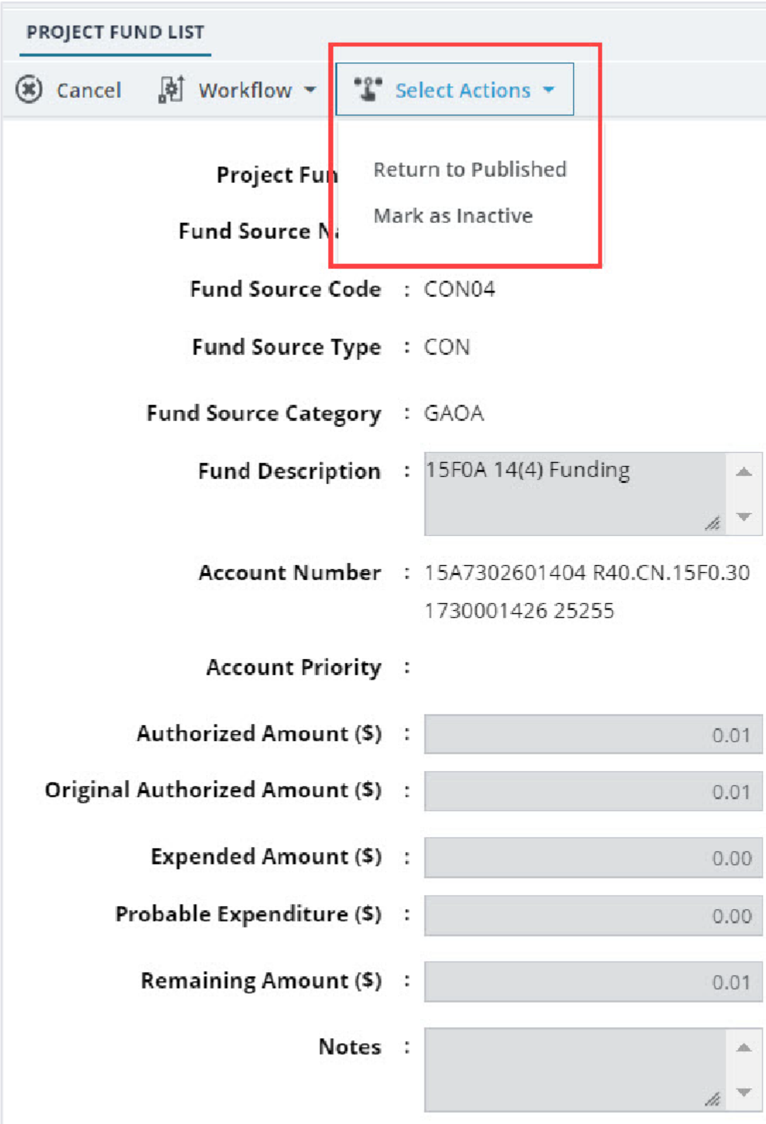


Figure 306: Using Select Actions Option – Details Page

Available actions are based on the definition of the associated workflow. The **Masterworks** dialog box is displayed.

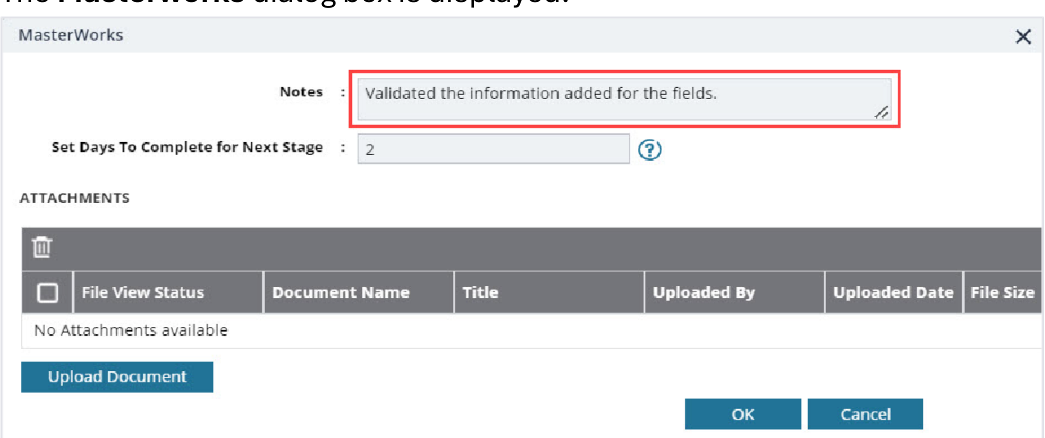


Figure 307: Masterworks Dialog Box

4. Optionally, in the **Notes** field, enter the notes for the workflow transition.

You can access these notes from the **Workflow History** dialog box.

5. In the **Set Days To Complete for Next Stage** field, enter the number of days by when the workflow action of the next workflow status must be completed.

Note:

- The number mentioned in this field determines the due date to complete the workflow action for the next workflow status.
- If the field is empty, the application applies the default number of days set for the respective workflow.
- If you want to override the default days set for the respective workflow, you need to enter the appropriate number in this field.

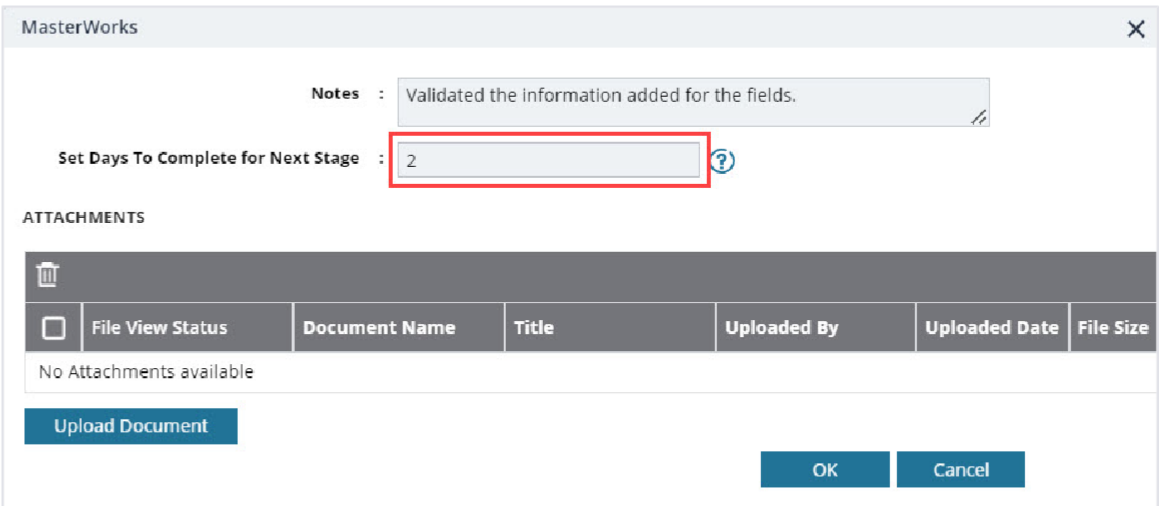


Figure 308: Set Days To Complete for Next Stage

6. Optionally, in the **ATTACHMENTS** section, you can upload or link related files.
   For information on attachments, refer to Section 4.1. Attachments.
   You can access these documents from the Workflow History dialog box. For more information, refer to Section 4.3.2. Viewing the Workflow History.
7. Click **OK**.

Note:

- You cannot revert certain workflow status to the previous workflow status.
- You cannot edit or select certain fields in a form based on the current workflow status of the record.

4.3.2. Viewing the Workflow History

Prerequisites

A workflow is associated with the record.

Overview

You can view the business process progression of a record in the workflow history of the record. The following details are available in the workflow history of every record:

- Action taken at every workflow status
- Date the workflow action was performed
- Notes entered when the workflow action was performed
- User name and user ID of the users who performed a workflow action
- Documents attached during workflow transitions

The **Project Fund List** form is used for illustration purposes.

Steps

1. In the list page of a form, select the appropriate record.

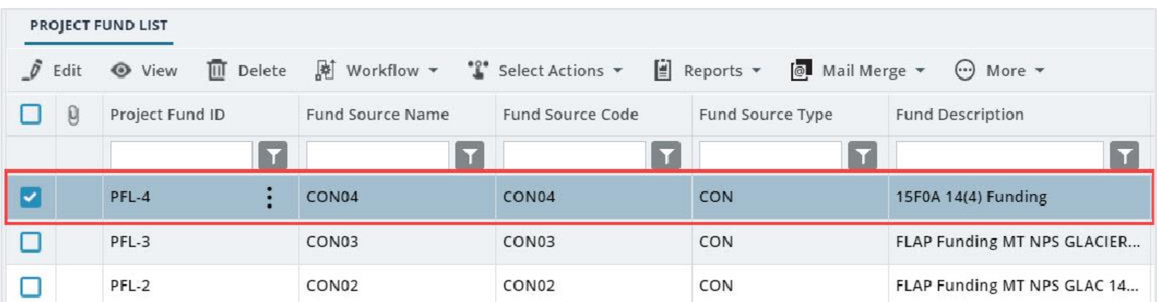


Figure 309: Selecting a Record

2. Click **Workflow**, and then click **History**.

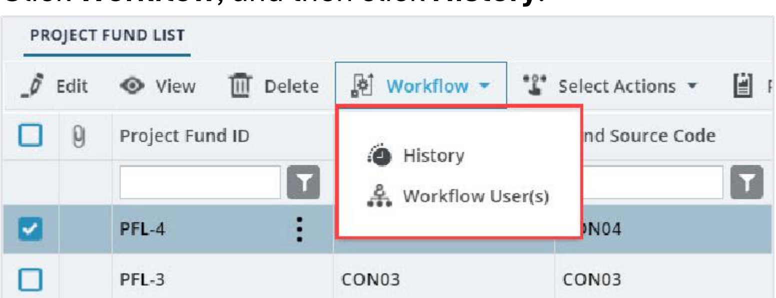


Figure 310: Using History Option

The **Workflow Status & History** dialog box is displayed.

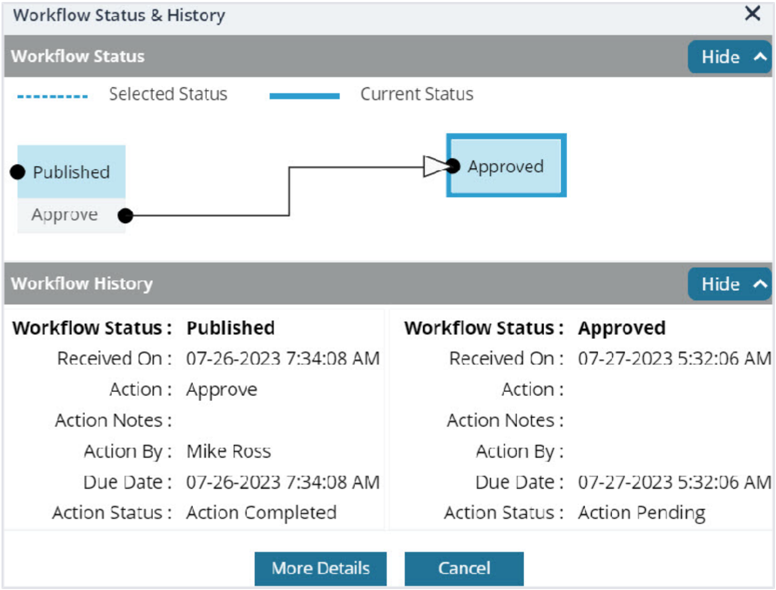


Figure 311: Workflow Status & History Dialog Box

The **Workflow Status** section displays the current and the previous workflow statuses.

The **Workflow History** section displays the details of the workflow statuses.

3. To view the complete workflow history, click **More Details**.

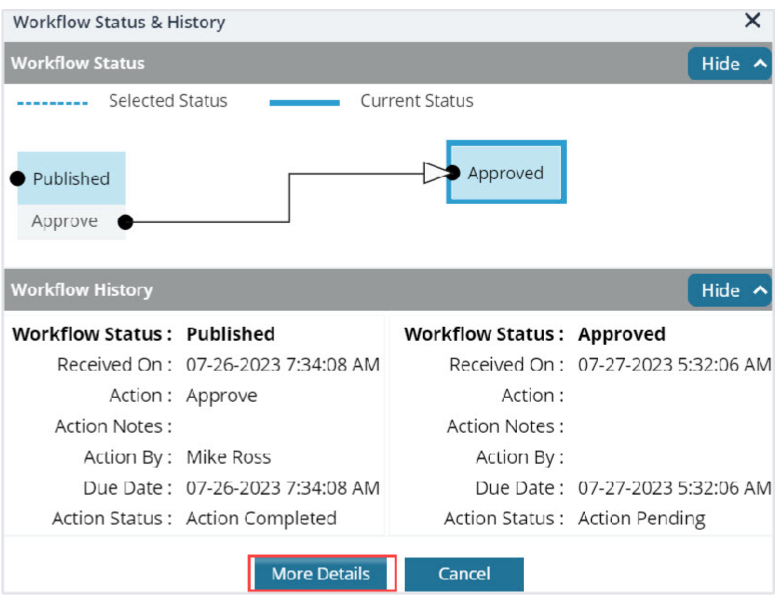


Figure 312: More Details option

The **History** page is displayed.

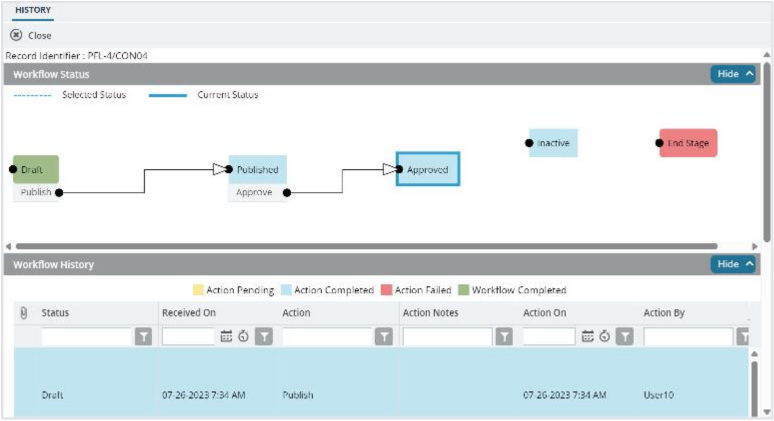


Figure 313: History Page

The **Workflow Status** section displays the progression of the workflow through the various statuses. The **Workflow History** section displays the details associated with each of the workflow statuses. The **ATTACHMENTS** section displays the list of documents attached when users performed workflow actions on the selected record.

4. To view details associated with any of these workflow statuses, click the appropriate workflow transition record in the **Workflow Status** section.

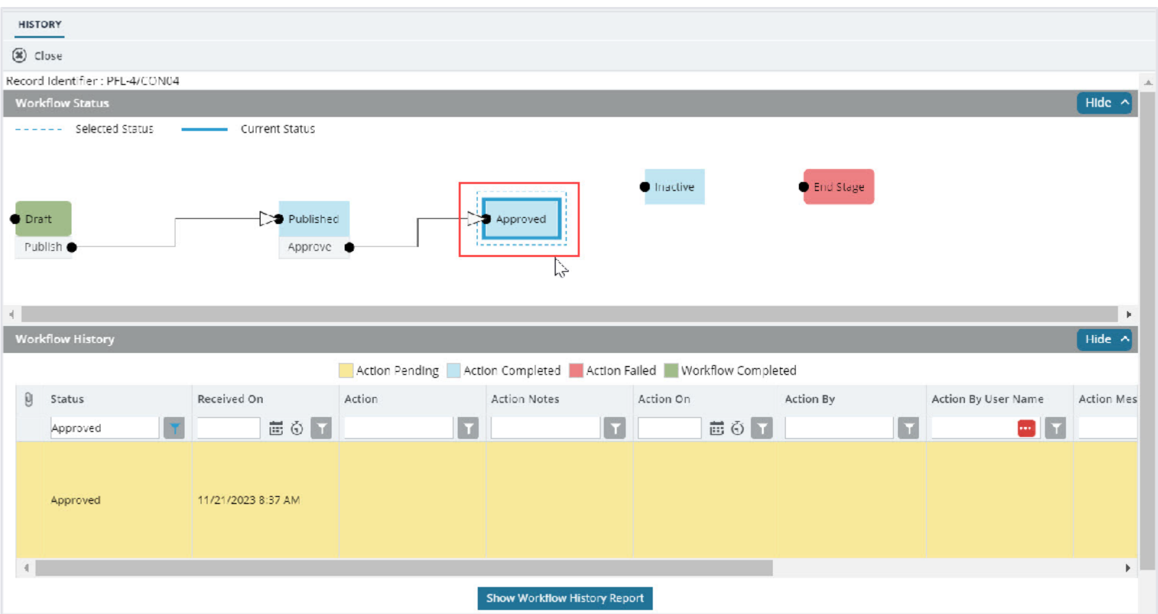


Figure 314: Workflow Status Section

The **Workflow History** section displays the details associated with the selected workflow statuses. The **ATTACHMENTS** section displays the files uploaded during the workflow transition of the selected workflow statuses.

5. To open an attachment, in the **ATTACHMENTS** section, in the **Document Name** column, click the required file name.

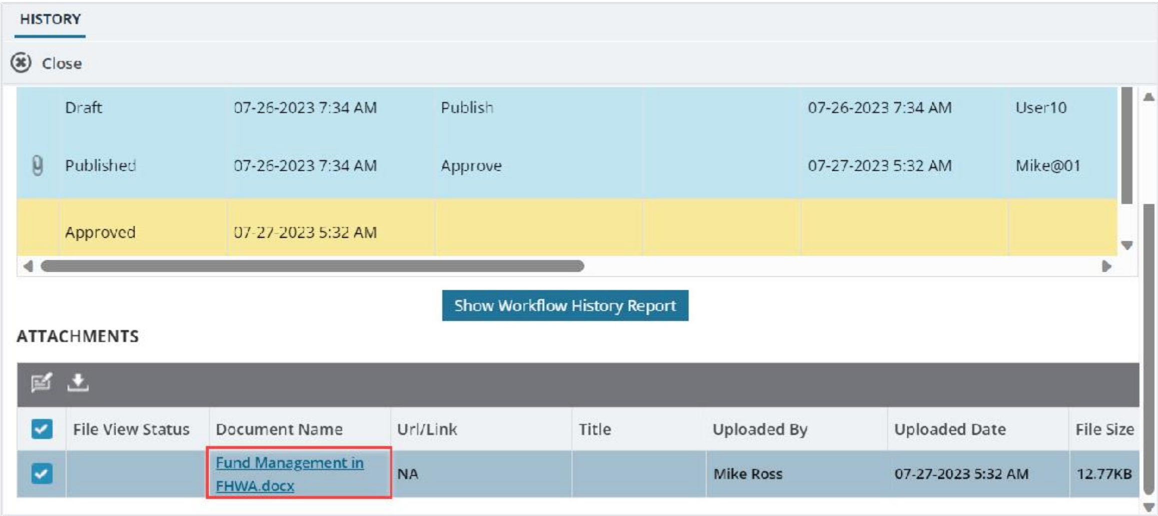


Figure 315: Clicking Document Name

The document is opened in the application viewer.

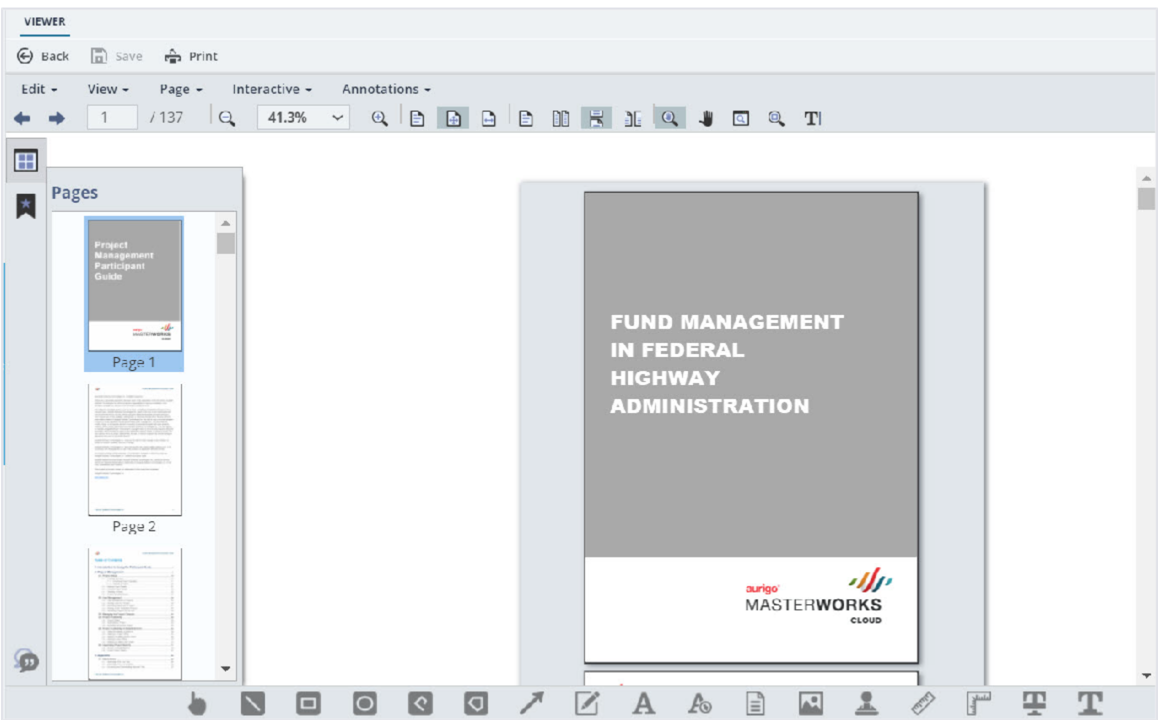


Figure 316: Viewing a Document in the Application Viewer

6. To view the workflow history as a report, click **Show Workflow History Report**.

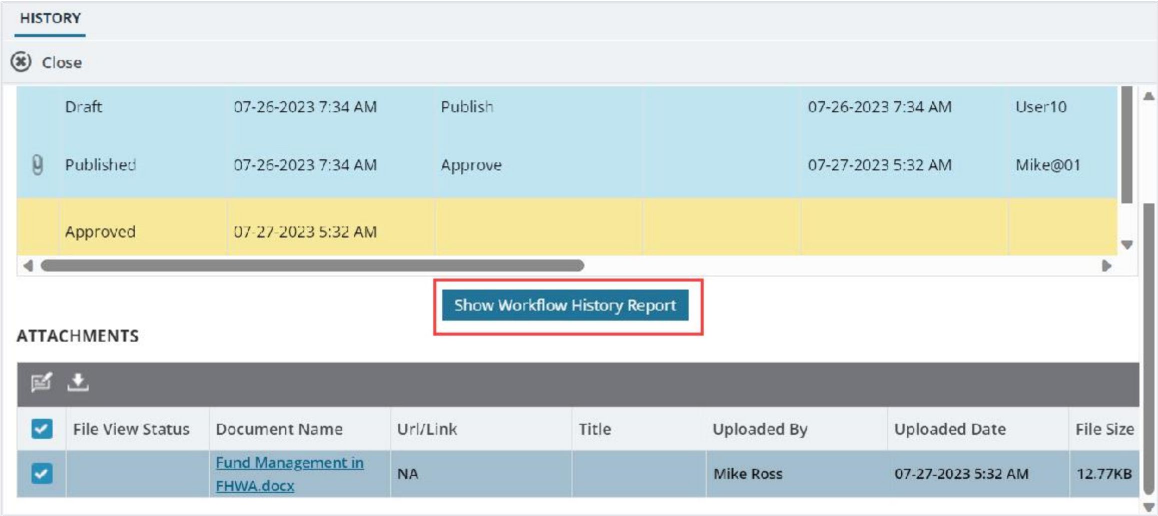
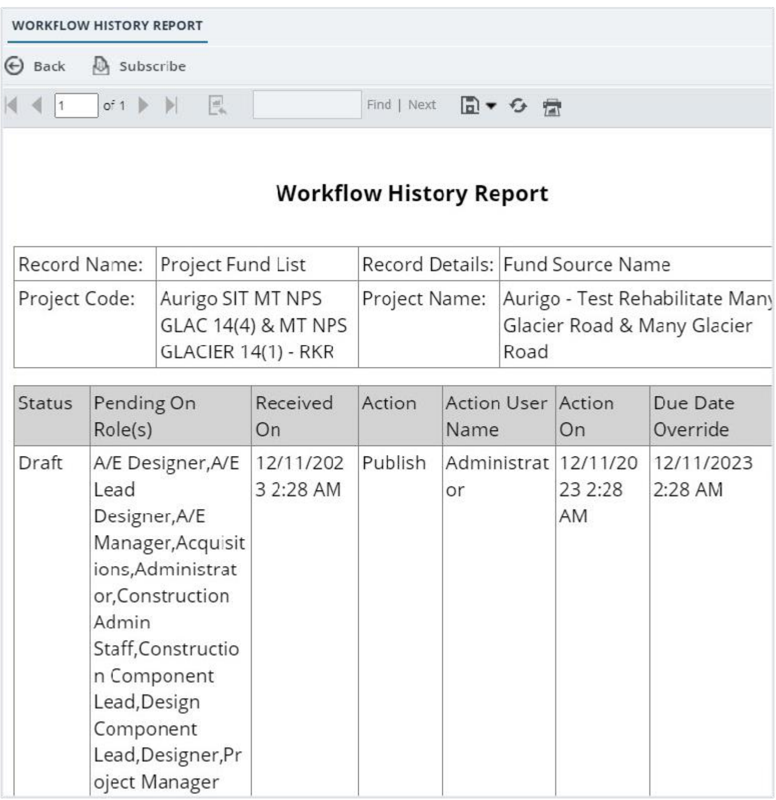


Figure 317: Using Show Workflow History Report Option

The **Workflow History Report** is displayed.



Workflow History Report

Record Name:	Project Fund List	Record Details:	Fund Source Name
Project Code:	Aurigo SIT MT NPS GLAC 14(4) & MT NPS GLACIER 14(1) - RKR	Project Name:	Aurigo - Test Rehabilitate Many Glacier Road & Many Glacier Road

Status	Pending On Role(s)	Received On	Action	Action User Name	Action On	Due Date Override
Draft	A/E Designer,A/E Lead Designer,A/E Manager,Acquisitions,Administrator,Construction Admin Staff,Construction Component Lead,Design Component Lead,Designer,Project Manager	12/11/2023 2:28 AM	Publish	Administrator	12/11/2023 2:28 AM	12/11/2023 2:28 AM

Figure 318: Workflow History Report Page

4.3.3. Selecting Workflow Users

Prerequisites

Workflows are published for the form.

Overview

At any workflow stage, you can select specific users to mandatorily take an action at the defined workflow stage. These selected users must perform an action at the defined workflow stage to move the workflow to the subsequent workflow stage. Only selected workflow users can perform the workflow action.

For document folders in the Document Management module, users selected at a folder level are applicable to all sub-folders and document records within them. Additionally, you can select users at a sub-folder level and at a document record level.

The **Project Fund List** form is used for illustration purposes.

Steps

1. To select users in the workflow of a module or document folder, perform the following steps:
    a. In the list page of a form or the list page of a document folder, click **Workflow**, and then click **Workflow User(s)**.

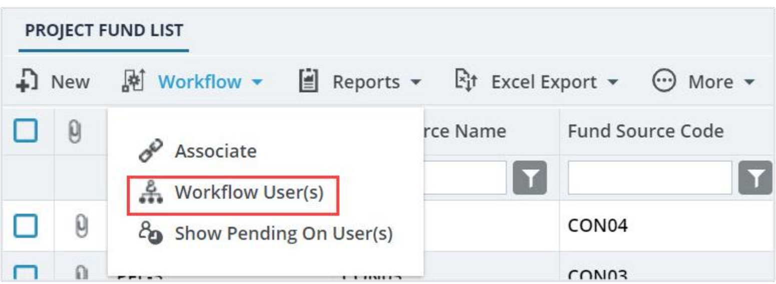


Figure 319: Using Workflow User(s) Option

    b. From the **Available Workflows** drop-down list, select a workflow.
    The published workflows associated with the form are displayed.

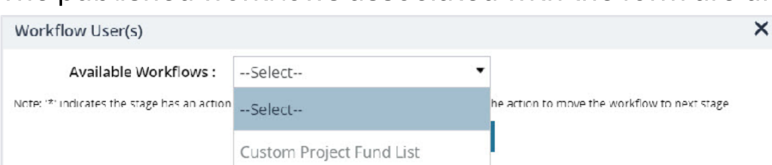


Figure 320: Published Workflows

The **Workflow User(s)** table is displayed.

The list of stakeholders for each stage and role is displayed.

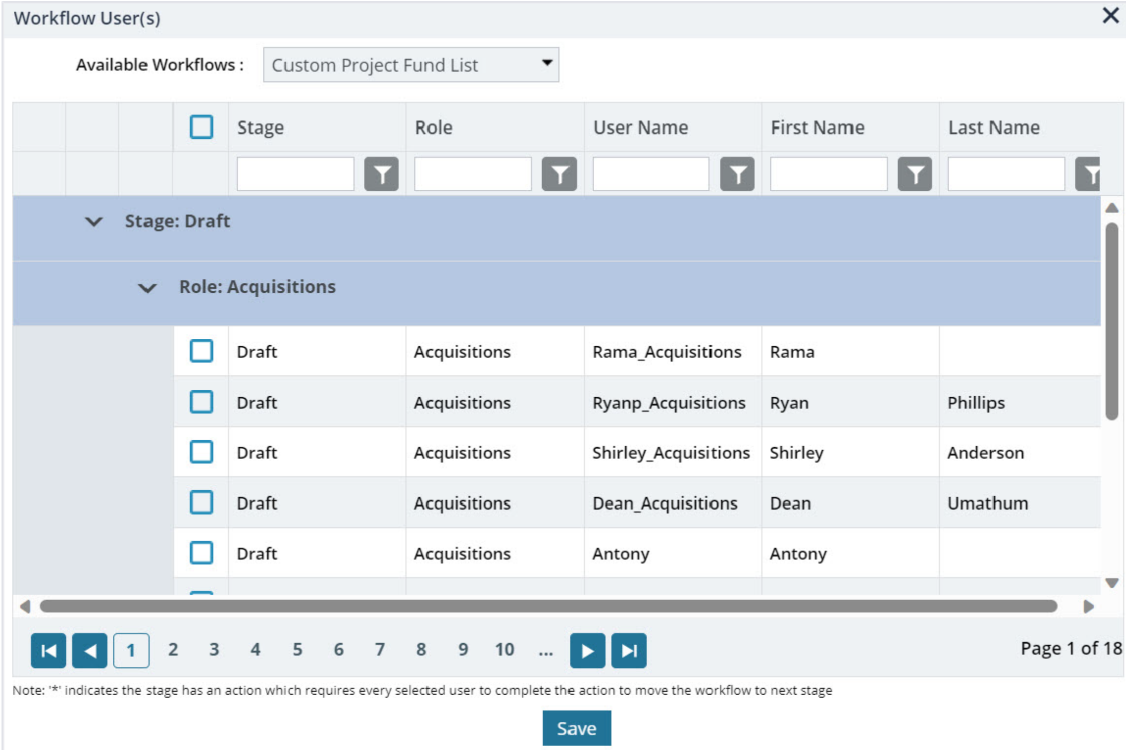


Figure 321: List of Stakeholders

2. Alternatively, to select users in a workflow for a record of a form or a document, perform the following steps:

   - Select a record, click **Workflow**, and then click **Workflow User(s)**.

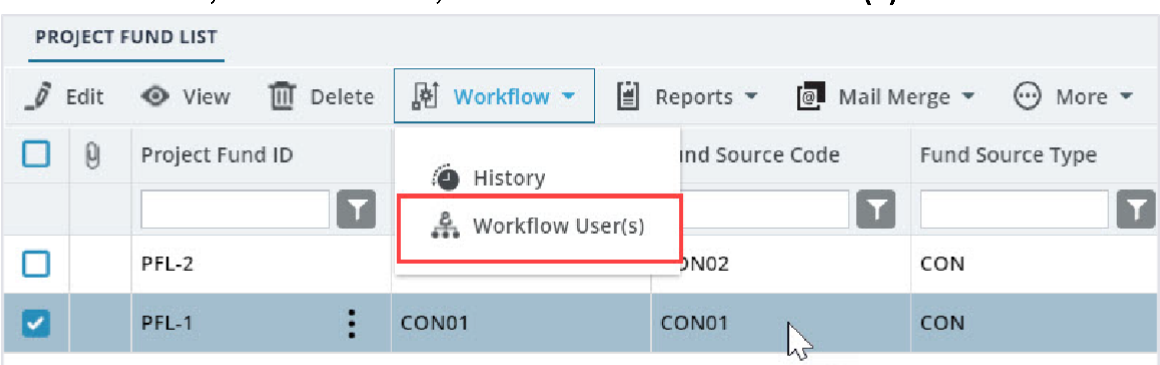


Figure 322: Using Workflow User(s) Option

The **WORKFLOW USER(S)** page with the associated workflow of the record is displayed.

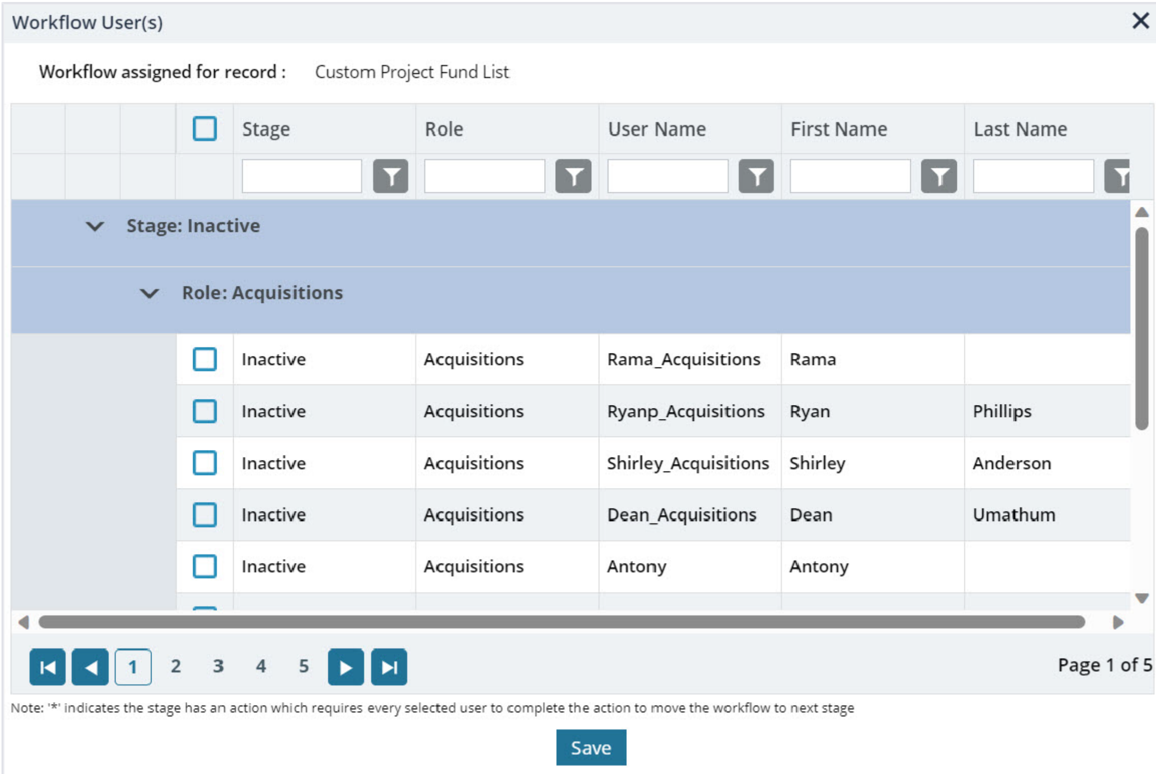


Figure 323: Workflow User(s) Page

Only workflow stages following the current workflow stage are displayed, and the list of stakeholders for each stage is displayed.

4.3.4. Associating a Workflow

Prerequisites

- Workflows are published for the form.
- The logged-in user is assigned Administrator role.

Overview

Once a workflow is published as the default workflow for a form, every record of the form that is created in every project is associated with its default workflow. You can change the default workflow of a form. The newly associated workflow is effective for this form only in this project. New records created for this form in this project are associated with the newly selected workflow.

The **Project Fund List** form is used for illustration purposes.

Steps

1. In the navigation pane, click a form to open.

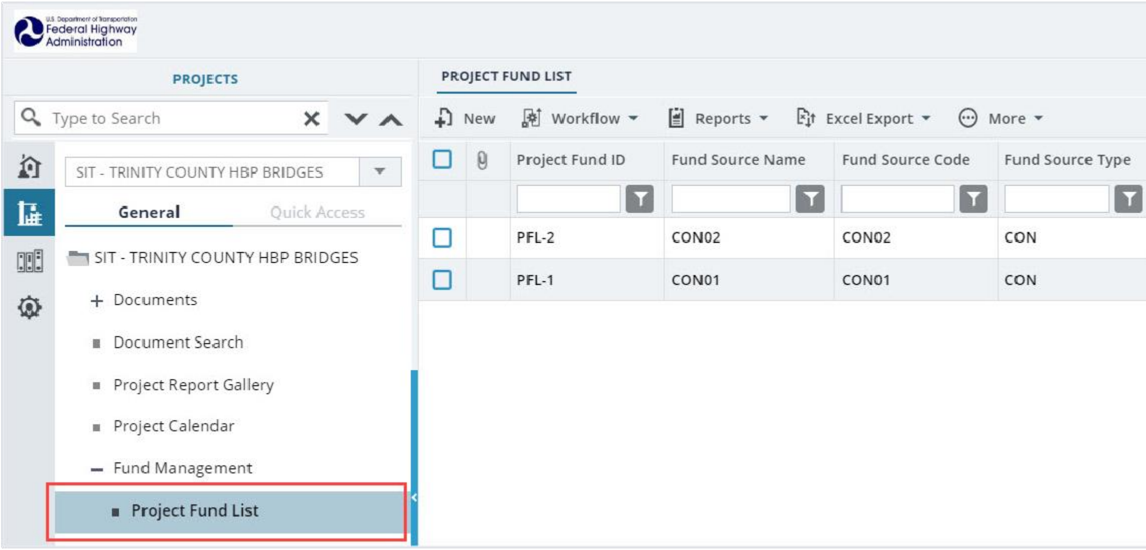


Figure 324: Selecting a Form

2. Click **Workflow**, and then click **Associate**.

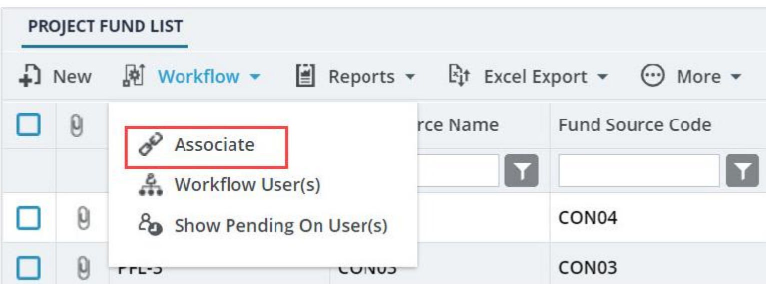


Figure 325: Using Associate Option

The **Workflow Association** dialog box is displayed.

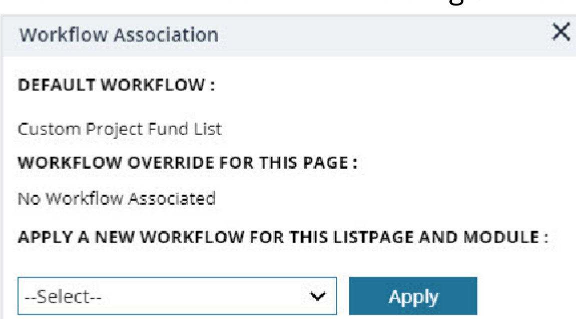


Figure 326: Workflow Association Dialog Box

The **DEFAULT WORKFLOW** section displays the workflow name of the form that is marked as default for the form in the application.

3. To associate a different workflow to the form in the project, from the **APPLY A NEW WORKFLOW FOR THIS LISTPAGE AND MODULE** drop-down box, select the workflow to associate with the form for the project.

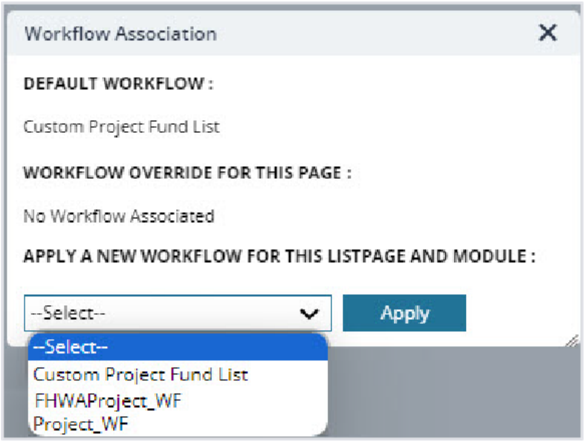


Figure 327: Using Applying a new Workflow for this List Page and Module Option

Available options are the published workflows for the respective form.

Upon selecting the workflow, the **WORKFLOW OVERRIDE FOR THIS PAGE** field displays the current workflow that is associated with the form for the project.

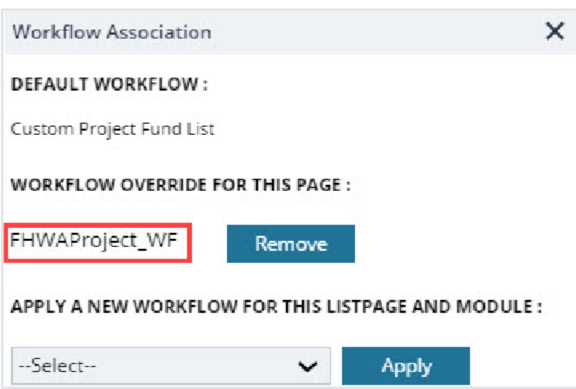


Figure 328: Updated Workflow Override for this Page Field

If no selection is done in the **APPLY A NEW WORKFLOW FOR THIS LISTPAGE AND MODULE** field, then the **WORKFLOW OVERRIDE FOR THIS PAGE** field displays **No Workflow Associated**.

4. Optionally, to reset the workflow of the form for the project to the default workflow as defined for the form in the application, click Remove adjacent to the **WORKFLOW OVERRIDE FOR THIS PAGE** field.

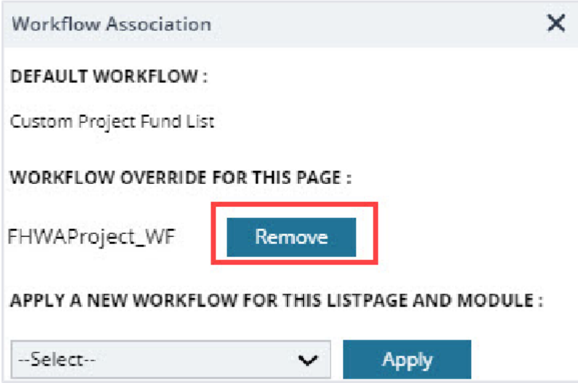


Figure 329: Resetting to Default Workflow

5. Click **Apply** to save the changes.
   The workflow properties are associated with the form.
   The selected workflow is associated with the newly created records of this form within the project.

4.4. Importing Form Details from an Excel Workbook

You can perform the following tasks using a Microsoft Excel workbook:

- 4.4.1. Create multiple records simultaneously.
  You can create multiple form records by importing form information from a Microsoft Excel workbook to the form.
- 4.4.2. Update details of multiple records simultaneously.
  You can update form information of multiple records simultaneously by importing form information from a Microsoft Excel workbook to the form.

The template to upload or update information of multiple records to a form is downloaded as a Microsoft Excel workbook from the list page of the form. The Excel template workbook is updated with the form information and is uploaded back to the form.

The **Instructions** tab in the Microsoft Excel workbook template provides information on updating the template for uploading multiple records.

Note: The following pointers enable you to upload or update form information correctly:

- For lists and selection options, ensure the correct spelling of the option as defined in the application is entered
- For Yes/No options, enter Yes or No in the relevant columns
- For updating form information, ensure the Internal ID refers correctly to the intended record
- You cannot delete records or upload attachments using an Excel workbook
- Calculated fields will not be available in the template

Validation rules for data entered in the template and the values entered in the form are the same.

4.4.1. Uploading Form Details in Bulk

Steps

1. In the navigation pane, click a form.
   The selected form list page is displayed.

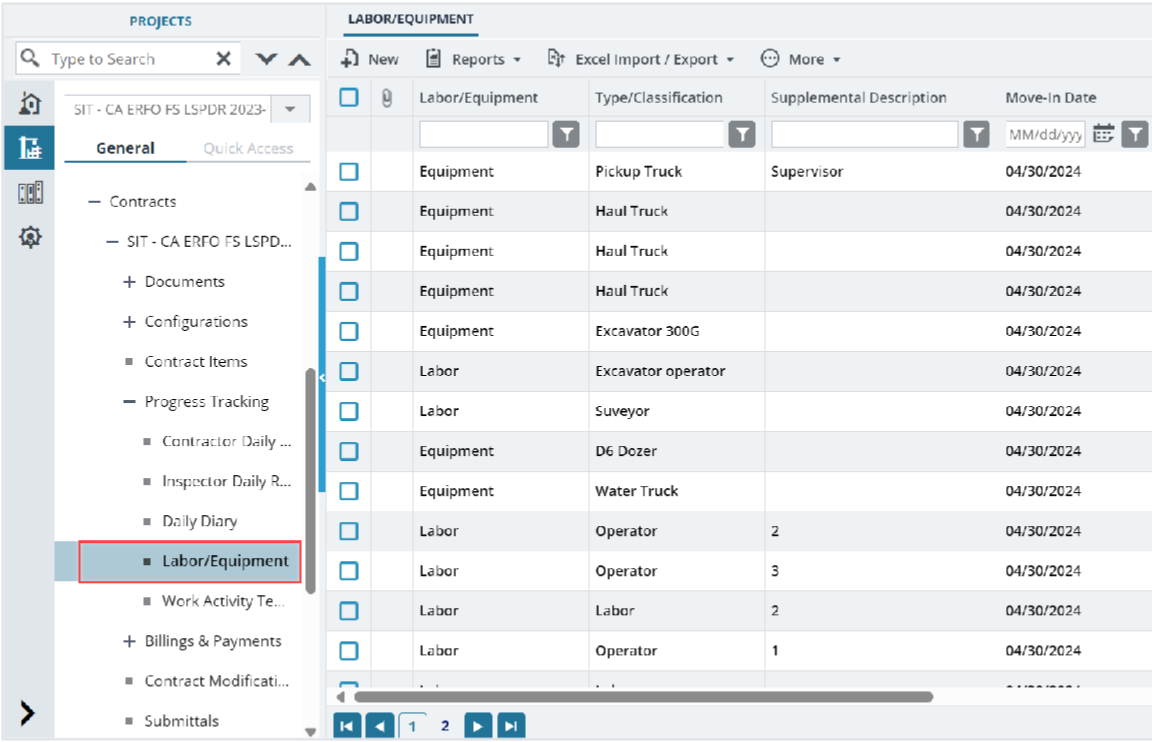


Figure 330: List Page

2. In the tool bar, click **Excel Import / Export**.

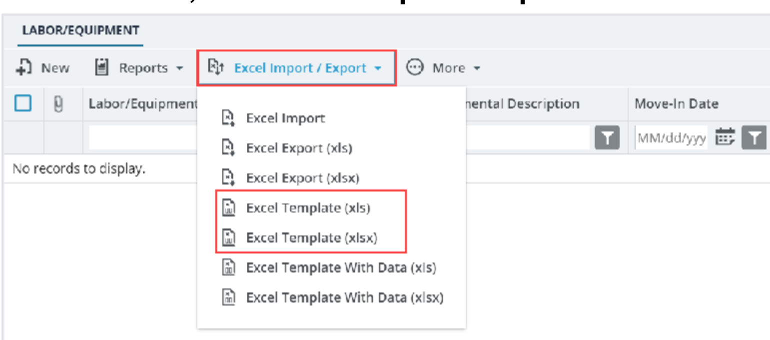


Figure 331: Excel Import / Export

3. To export the form template to an Excel workbook, click **Excel Template**.
   The Excel workbook template is downloaded to the local storage.
4. Open the saved Excel workbook template, enter form details in the various columns, and save the updated Excel workbook. For information on column details, refer to the corresponding topic on creation of the form.
   Note: The first column with the heading **Internal ID** must not be filled in.
5. In the list page, click **Excel Import / Export**, and then click **Excel Import**.

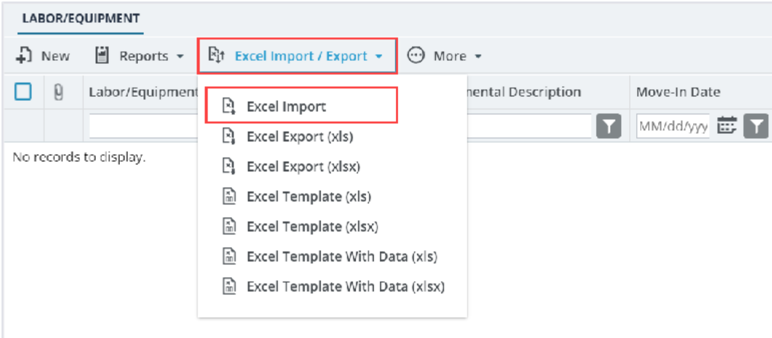


Figure 332: Excel Import

The **IMPORT DETAILS FROM EXCEL FILE** page is displayed.

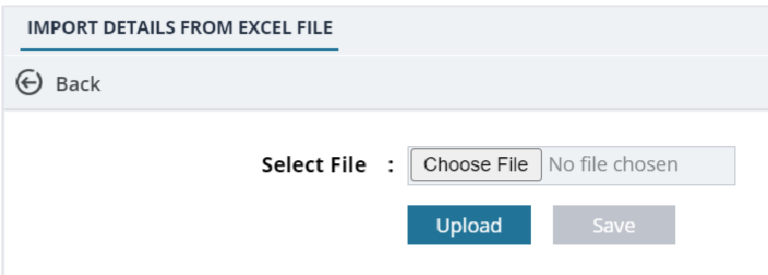


Figure 333: Import Details From Excel File

6. Click **Choose File** to select the workbook with updated form information. The **Choose File to Upload** dialog box is displayed.

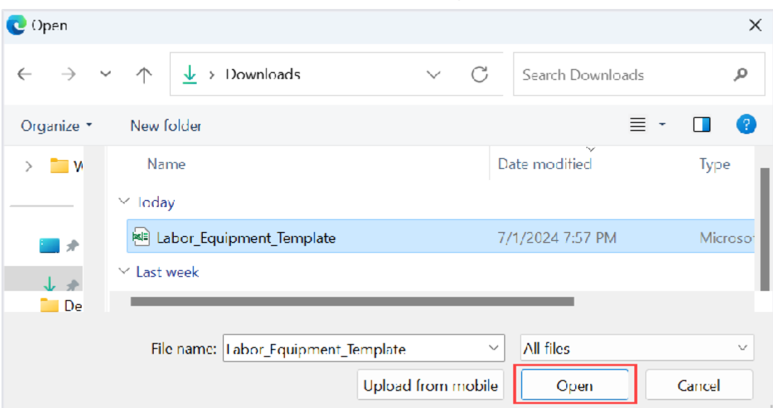


Figure 334: File to Upload

7. Select the required workbook, and then click **Open**.
8. Click **Upload** to import form information from the Excel workbook to the form.

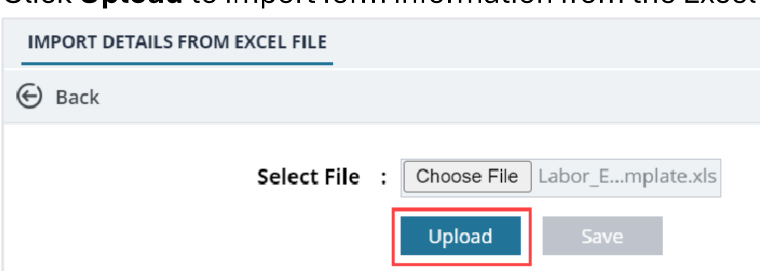


Figure 335: Upload the Excel

On successful import, the success message is displayed.

9. On encountering errors while importing an Excel workbook, perform the following steps:
    a. In the toolbar, click **Error Log**.

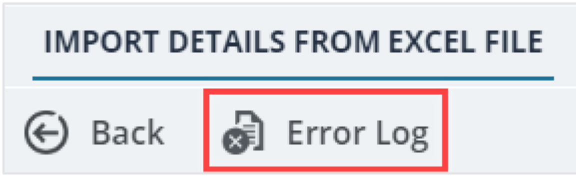
    

    Figure 336: Error Log Option

    The error log workbook is downloaded to your local storage.

    b. Open the workbook to view the errors in the various columns.
    Error messages in the cells are highlighted in red. Tabs in the workbook are also highlighted to indicate the presence of errors.
    c. Open the Excel workbook with form information and modify form details.
    Optionally, you can make relevant corrections in the error log workbook and upload it.
    d. Save and upload the Excel workbook to import the updated information.
10. Click **Save**.
    The items in the Excel workbook are uploaded to the list page.

4.4.2. Updating Form Details in Bulk

Steps

1. In the navigation pane, click a form.
   The selected form list page is displayed.

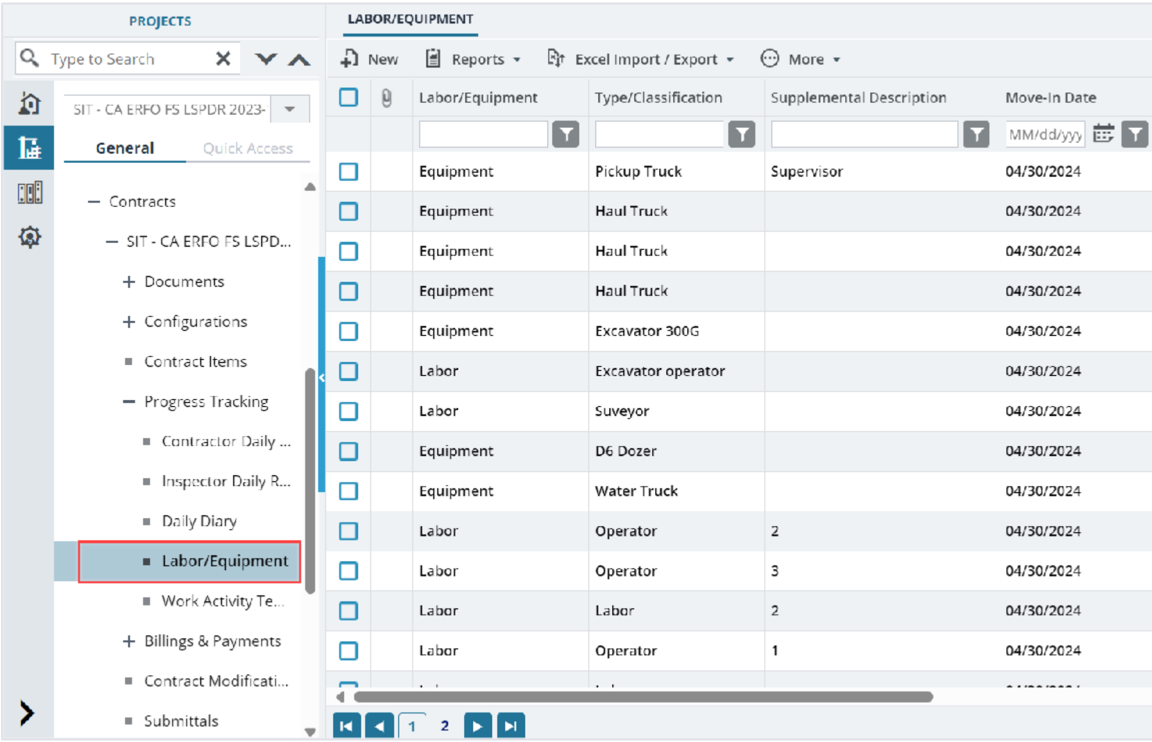


Figure 337: List Page

2. In the tool bar, click **Excel Import / Export**.

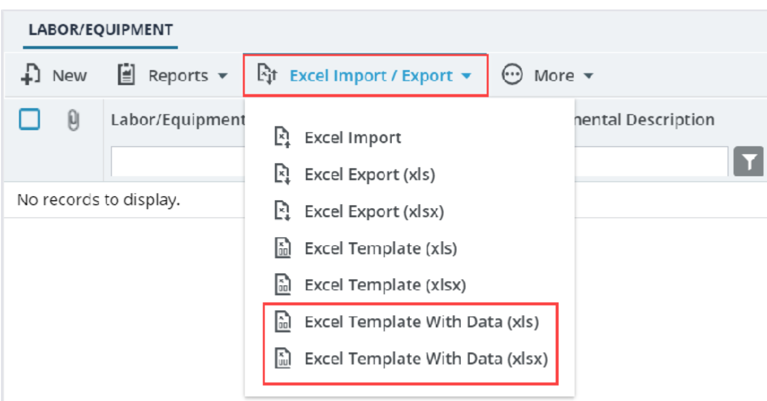


Figure 338: Excel Template With data

3. Click **Excel Template With Data (xls)** or **Excel Template With Data (xlsx)** to export the form details to an Excel workbook.
   The Excel workbook template is downloaded to the local storage.
4. To update existing information, perform the following steps:
   a. Open the saved Excel workbook.

The first column named **InternalID** displays the unique identification code for the corresponding record of the form.

b. Update form details in the various columns, and delete the records that need not be updated. For information on column details, refer the corresponding topic on creation of the form.

Note: Deleting a record from the Excel workbook does not delete the record in the form.

c. Save the updated Excel workbook.

Note: To create new form records, in the same Excel workbook, do not enter information in the **Internal ID** column, and enter all other required and mandatory columns.

5. In the list page, click **Excel Import / Export**, and then click **Excel Import**.

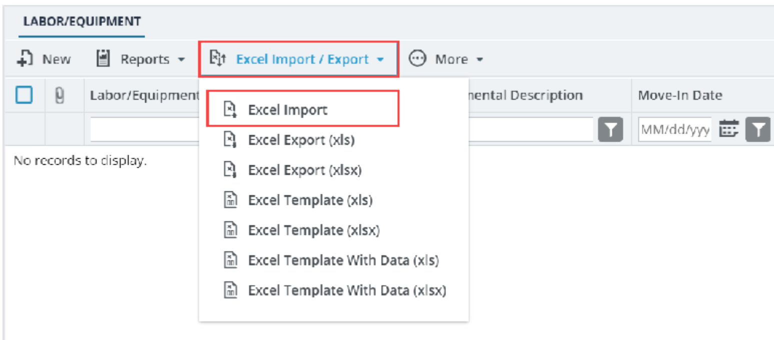


Figure 339: Excel Import

The **IMPORT DETAILS FROM EXCEL FILE** page is displayed.

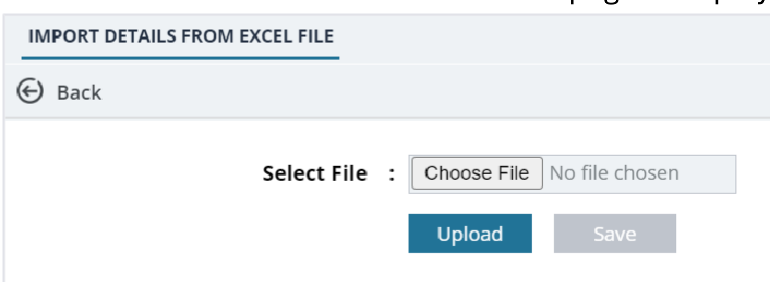


Figure 340: Import Details from Excel File

6. Click **Choose File** to select the workbook with updated form information.
   The **Choose File to Upload** dialog box is displayed.
7. Select the required workbook, and then click **Open**.
8. Click **Upload** to import form information from the Excel workbook to the form.
   On successful import, the success message is displayed.
9. On encountering errors while importing an Excel workbook, perform the following steps:
   a. In the toolbar, click **Error Log**.

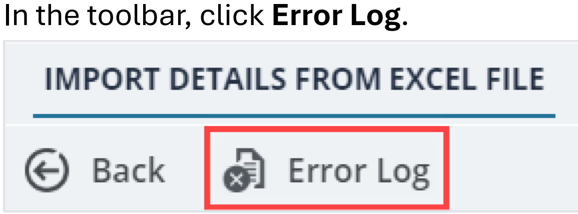


Figure 341: Error Log Option

The error log workbook is downloaded to your local storage.

b. Open the workbook to view the errors in the various columns.

   Error messages in the cells are highlighted in red. Tabs in the workbook are also highlighted to indicate the presence of errors.

c. Open the Excel workbook with form information and modify form details.
   Optionally, you can make relevant corrections in the error log workbook and upload it.
d. Save and upload the Excel workbook to import the updated information.

10. Click **Save**.

The items in the uploaded Excel workbook are uploaded to the list page.

3. Select the users for each stage to add to the workflow.

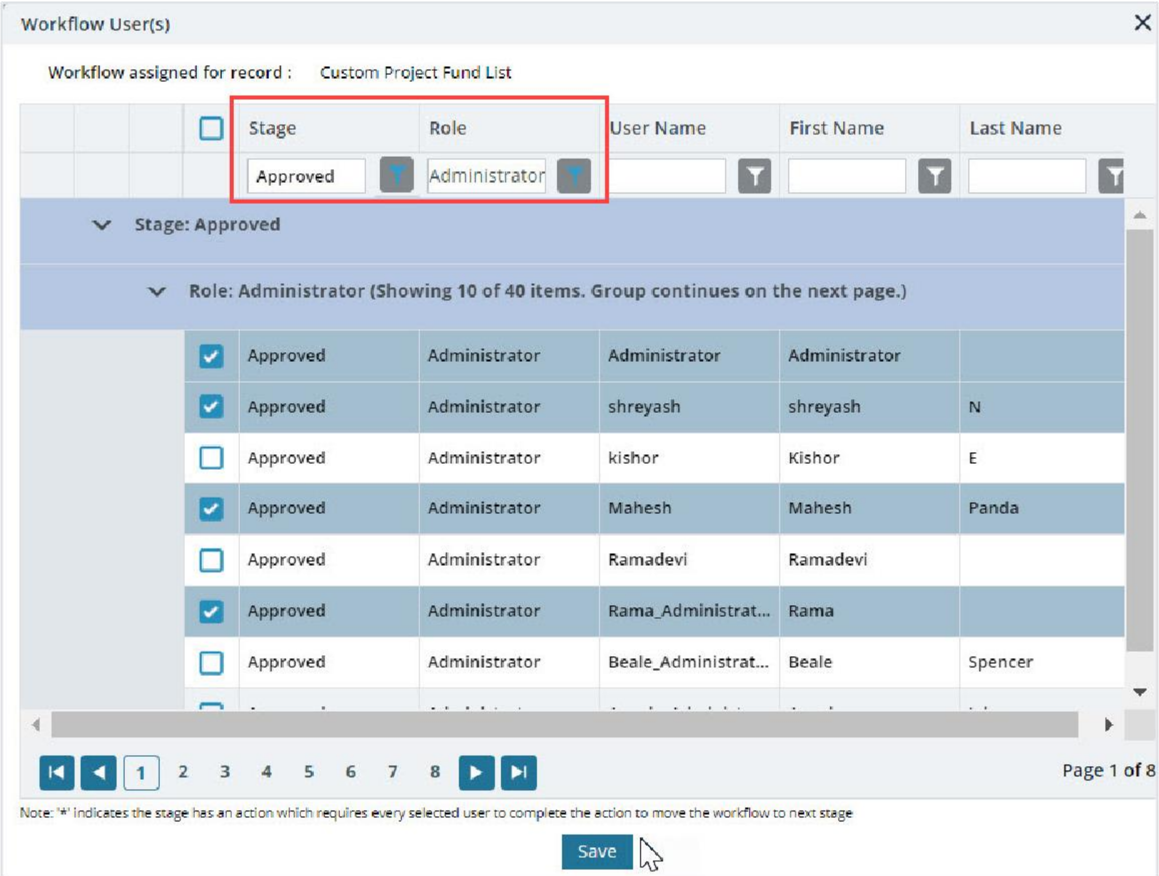


Figure 342: Using Filter Option

Optionally, you can filter the users using the following filters:

- Stage
- Role
- User Name
- First Name
- Last Name

4. Click **Save**.
   Based on the defined workflow, any or all selected users must perform the workflow action on the selected record.
   The **WORKFLOW HISTORY** page displays the workflow actions performed by all users across all stages of the workflow.