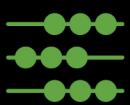


profitable | productive | professional

# Benchmark Apps - Parametric Models



**benchmark**  
estimating software



# Benchmark Apps – Parametric Models

## User Manual

**This manual is designed to assist users in the day-to-day use  
of the Parametric Models feature with Benchmark  
Estimating Software.**

Version 7.85, April 2022

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# Benchmark Apps - Parametric Models

## Overview

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Benchmark apps, built using Microsoft Power Apps, offer an intuitive, cloud-hosted solution for Parametric Models. Estimators can input details about the works to be undertaken in a sophisticated interface to produce the list of quantities. The pricing i.e., Bill of Quantity (BQ or BOQ) is then created back in Benchmark. Estimators can also view a summarised or full version of the BQ in the app.

# Prerequisites

To use the Parametric Models feature in Benchmark, you must have:

- Access to Microsoft Power Apps in your organisation.
- Permission to use the Parametric Models app in Power Apps.
- PowerApps URL configured in Administration > Integration Settings > PowerApps.  
Contact your system administrator for more information.
- **Parametric Models Library** role-based or individual access. An administrator can provide the relevant level of this access to the estimator from the [Estimator Library](#) or [Role Based Access](#) windows.

Access	Role Based Access
Disallow change to Project status after Wo	No
Custom Export Library	Read, Edit, Add, Delete
Run Inactive Routines in a Project	No
Reports/Exports	View
Allow editing in Project Mark-up Calculato	Yes
Workflow	Read, Edit, Add, Delete
Mark-Up/On-Cost/TEF Calculation Library	Read, Edit, Add, Delete
Do not allow Project Client to be edited	No
Mark-Up/On-Cost/TEF Percentage Settings	Read, Edit, Add, Delete
Display Workbank on My Benchmark	Yes
Parametric Models Library	Read, Edit, Add, Delete

# Accessing Parametric Models

---

You can access the Parametric Models app from the LoadSpring Homepage.

1. Go to the LoadSpring homepage.
  2. From My Applications section, select Benchmark Apps - Parametric Models.
- The app opens in your web browser.

# Navigating the App

There are several model types available and in development for this feature. In this document, we will look at some of the implemented model types, such as Indirect Works and Regional Investment Programme (RIP).



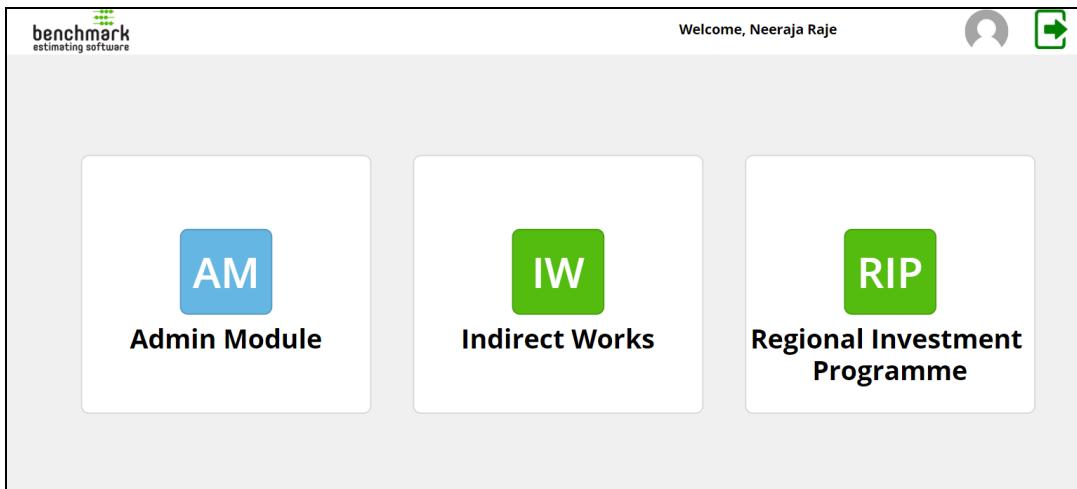
The Indirect Works model is also called the Preliminary model or Prelims model.

## Landing Page

The app landing page allows you to select a model type to view the saved, submitted and archived model instances or create a new one.



Only users with an Administrator role for this application in Power Apps will have access to the Admin Module.



# Summary Page

The screenshot shows the Summary Page of the benchmark estimating software. At the top, there is a navigation bar with the benchmark logo, a search icon, a user profile icon, and a 'Logout' button. Below the navigation bar is a toolbar with buttons for 'Saved', 'Submitted', and 'Archived' (highlighted with a red box), a search icon, a 'Create New Model Instance' button, and a 'Logout' button. The main content area is a table listing model instances. Each row in the table has a red circle with a number from 1 to 9 pointing to specific elements: 1 points to the user profile; 2 points to the 'Saved' button; 3 points to the search icon; 4 points to the 'Create New Model Instance' button; 5 points to the first row of the table; 6 points to the 'View' button in the first row; 7 points to the 'Archive' icon in the first row; 8 points to the 'Logout' button; 9 points to the home icon in the top right corner of the table header.

Model Instance	Estimate	Date Created	Status	Scheme Name	Project Manager	Created By	Action
New Preliminaries Model v1.7		31/01/2022	Saved			Shailendra Mishra	<a href="#">View</a>
New Preliminaries Model SAG	PowerApps New	14/12/2021	Saved	Bypass	1dassa	Sagar Chavan	<a href="#">View</a> <a href="#">Archive</a>
HW Repairs_Updated	Golden Quadrilateral	10/12/2021	Saved	Bypass	Joe	Neeraja Raje	<a href="#">View</a> <a href="#">Archive</a>
New Preliminaries Model v1.5_V	Project V	10/12/2021	Saved	Widening	Joe	Vinodh KP	<a href="#">View</a>
New Preliminaries Model v1.4	Golden Quadrilateral	08/12/2021	Saved			Neeraja Raje	<a href="#">View</a> <a href="#">Archive</a>
New Preliminaries Model v1.3	Modified title	08/12/2021	Saved			Neeraja Raje	<a href="#">View</a> <a href="#">Archive</a>
New Preliminaries Model v1.2	Load sections from library	08/12/2021	Saved			Neeraja Raje	<a href="#">View</a> <a href="#">Archive</a>
New Preliminaries Model v1.1	Golden Quadrilateral	07/12/2021	Saved	CSB		Neeraja Raje	<a href="#">View</a> <a href="#">Archive</a>
New Preliminaries Model v1.0	Highway Upgrade	02/12/2021	Saved	Junction Improvement	PM	Shailendra Mishra	<a href="#">View</a>

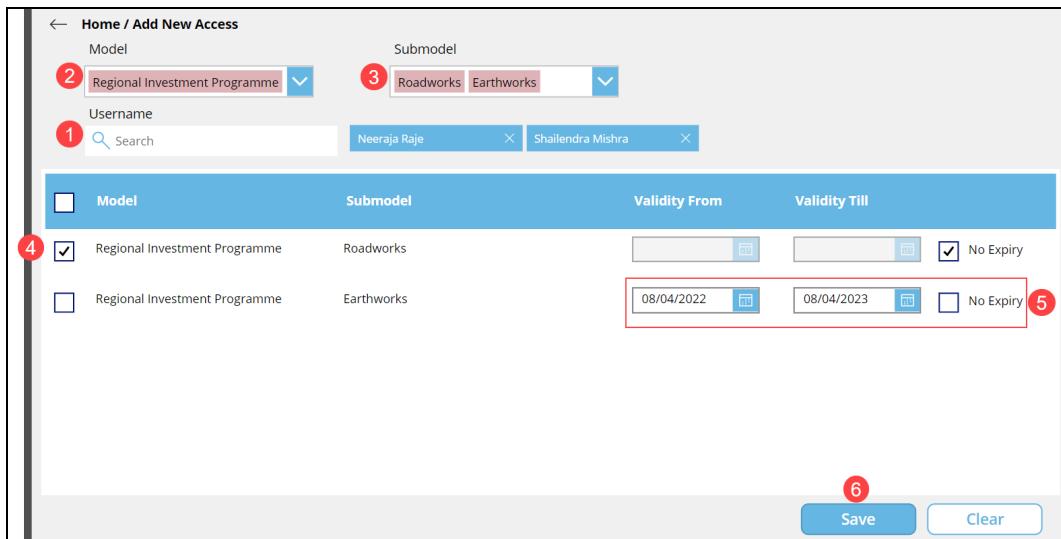
- 1 - Displays the name of the logged in user.
- 2 - Use this toggle to view the list of Saved, Submitted or Archived model instances.
- 3 - Search for model instances.
- 4 - Create new model instances.
- 5 - Displays key information for each of the model instances:
  - Model Name
  - Estimate Name
  - Date the instance was created
  - Status of the model instance – *Saved, Submitted or Archived*
  - Scheme Name
  - Name of the Project Manager
  - Name of the user who created the model instance
- 6 - View all the details for the selected model instance.
- 7 - Archive the model instance.
- 8 - Log out of the application.
- 9 - Go back to the Home (previous) screen.

# Managing User Access

Administrators must grant users access to the relevant model types and sub models. This access can be granted for a set duration, if required.

## Setting Up New Access

1. [Open](#) the Parametric Models app.
2. Select Admin Module.
3. Select the New Access + button.

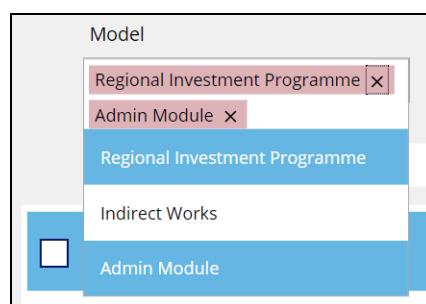


The screenshot shows the 'Home / Add New Access' screen. At the top, there are dropdown menus for 'Model' (set to 'Regional Investment Programme') and 'Submodel' (set to 'Roadworks, Earthworks'). Below these are two search input fields: 'Username' containing 'Neeraja Raje' and 'Shailendra Mishra', and 'Model' containing 'Regional Investment Programme'. The main table lists access configurations:

Model	Submodel	Validity From	Validity Till	Expiry
<input checked="" type="checkbox"/> Regional Investment Programme	Roadworks	<input type="text"/> 08/04/2023	<input type="text"/> 08/04/2023	<input checked="" type="checkbox"/> No Expiry
<input type="checkbox"/> Regional Investment Programme	Earthworks	<input type="text"/> 08/04/2022	<input type="text"/> 08/04/2023	<input type="checkbox"/> No Expiry

At the bottom right are 'Save' and 'Clear' buttons.

4. From the *Username* ① dropdown, search and select the relevant user(s).  
To remove a selected user, select x in their username tab.
5. From the *Model* ② dropdown, select all the model types you want this user to be able to access.  
For example, *Regional Investment Programme*.  
To remove a selected model type, select x.



6. From the *Submodel* ③ dropdown, select all the sub models that you want this user to be able to access.

For example, if you select the model type *Regional Investment Programme*, then *Roadworks, Earthworks, Drainage, Carriageway, Signs & Lighting* will be the sub models available for selection.

To remove a selected sub model, select x.

7. All the selected models / sub models will be added to the grid, with a default validity of one year.
8. Select the relevant row (model / sub model) **4**  
Alternatively, use the checkbox in the header to select all the rows.
9. To modify the default access duration, use the *Validity From* and *Validity To* calendar tools or check *No Expiry* **5**
10. Select Save **6**

# Modifying User Access

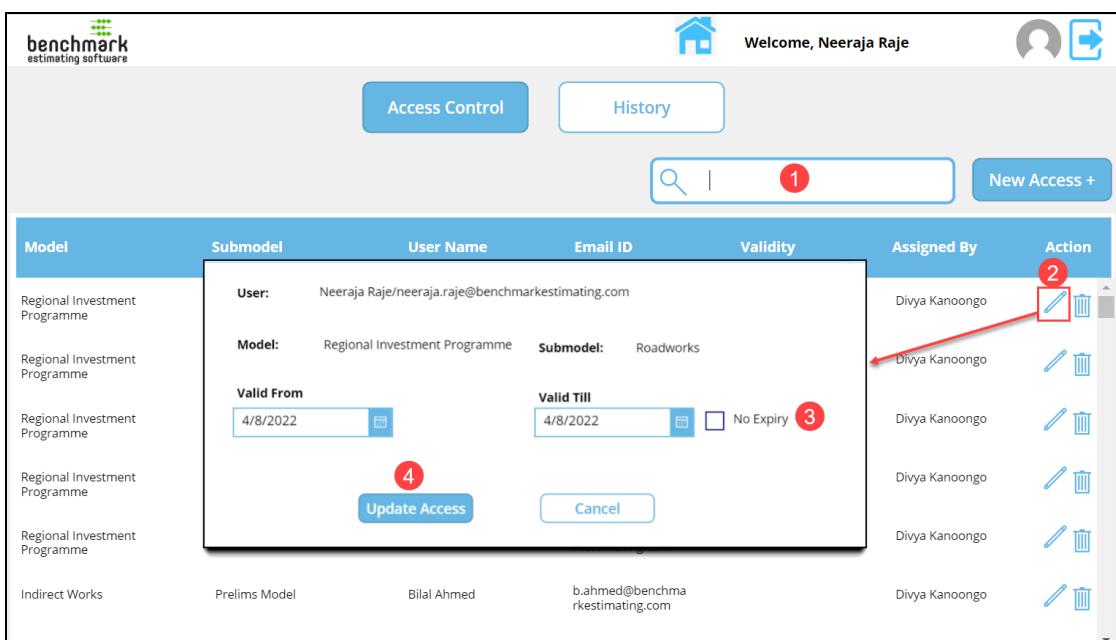
The Access Control tab lists all the users and their access within the application. Administrators can modify the duration for which users can access the assigned models/sub models.

1. In the Access Control tab, search **1** the relevant user.

You can also search by:

- Model
- Sub model
- Email
- User who assigned the access

2. Select the Edit **2** icon.
3. In the pop-up screen, modify the validity of the user's access to this model/sub model or select **No Expiry** **3**
4. Select Update Access **4**



The screenshot shows the Access Control tab in the benchmark estimating software. A user row for 'Neeraja Raje' is selected. A modal dialog is open, allowing modification of access details. The dialog contains fields for User Name (Neeraja Raje/neeraja.raje@benchmarkestimating.com), Model (Regional Investment Programme), Submodel (Roadworks), Valid From (4/8/2022), and Valid Till (4/8/2022). A checkbox for 'No Expiry' is checked. At the bottom of the dialog are 'Update Access' (button 4) and 'Cancel' buttons. To the right of the dialog, a list of assigned users by 'Divya Kanoongo' is shown, each with edit (pencil) and delete (trash) icons. The 'Assigned By' column shows 'Divya Kanoongo' repeated five times. The main table below the dialog lists other users and their access details.

Model	Submodel	User Name	Email ID	Validity	Assigned By	Action
Regional Investment Programme		Neeraja Raje/neeraja.raje@benchmarkestimating.com			Divya Kanoongo	
Regional Investment Programme					Divya Kanoongo	
Regional Investment Programme					Divya Kanoongo	
Regional Investment Programme					Divya Kanoongo	
Regional Investment Programme					Divya Kanoongo	
Indirect Works	Prelims Model	Bilal Ahmed	b.ahmed@benchma rkestimating.com		Divya Kanoongo	

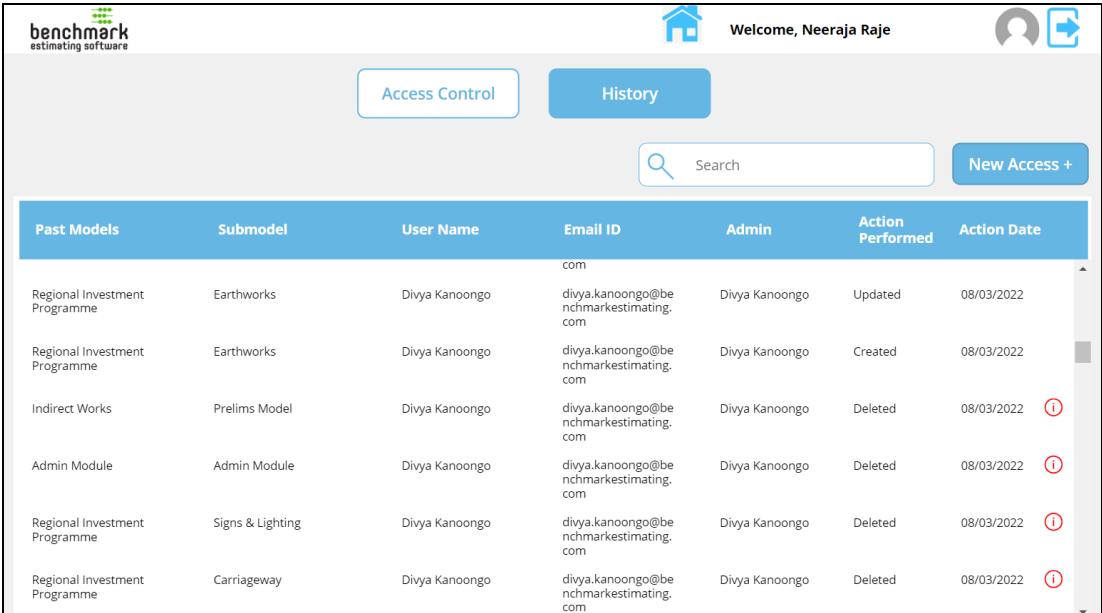
# Deleting User Access

Administrators can revoke a user's access to the assigned models / sub models.

1. In the Access Control tab, search the relevant user.
2. Select the Delete icon  for the model / sub model you no longer want this user to access.  
The following confirmation prompt displays:  
"Are you sure you want to delete <Model Type – Sub Model Name> model access for <Username>?"
3. Enter comments in the text area within the prompt, if required.
4. Select Yes.

# Viewing Access History

The History tab of the Admin Module shows all the access created, updated and deleted by Administrators.



Past Models	Submodel	User Name	Email ID	Admin	Action Performed	Action Date
Regional Investment Programme	Earthworks	Divya Kanoongo	divya.kanoongo@benchmarkestimating.com	Divya Kanoongo	Updated	08/03/2022
Regional Investment Programme	Earthworks	Divya Kanoongo	divya.kanoongo@benchmarkestimating.com	Divya Kanoongo	Created	08/03/2022
Indirect Works	Prelims Model	Divya Kanoongo	divya.kanoongo@benchmarkestimating.com	Divya Kanoongo	Deleted	08/03/2022 
Admin Module	Admin Module	Divya Kanoongo	divya.kanoongo@benchmarkestimating.com	Divya Kanoongo	Deleted	08/03/2022 
Regional Investment Programme	Signs & Lighting	Divya Kanoongo	divya.kanoongo@benchmarkestimating.com	Divya Kanoongo	Deleted	08/03/2022 
Regional Investment Programme	Carriageway	Divya Kanoongo	divya.kanoongo@benchmarkestimating.com	Divya Kanoongo	Deleted	08/03/2022 



An information icon  displays if a comment was added when deleting an access. Select the icon to view the comment.

# Input Mapping

## Indirect Works

Forms in the app user interface map to their corresponding Parametric Model worksheets (MP Model v51.5).

## Primary Input

New Preliminaries Model v1.0  
Last Modified Date : 06/12/2021 Last Modified By : Vinodh KP

Primary Input	TTM Input	Scaffold Input	Temp Retaining Input	Report	Comments
1. Time-Duration 2. Labour & Site 3. Direct Works Price	4. Staff 5. Road Length 6. Security Gates	7. Vehicles 8. Haul Roads 9. Plant Platforms	10. Offices 11. Power 12. Temporary Traffic Management	13. Temporary Retaining Structures 14. Construction Hoarding 15. Statutory Services Apparatus Protection	16. Surface Water Management 17. Environment 18. Archaeology
Estimate Name *	Highway Upgrade	Section Name *	Excavation		
Estimate Completion Date	02/12/2021				
TIME/DURATION					
LABOUR & SITE					
DIRECT WORKS PRICE					

**Next**

INDIRECT PRICE CALCULATOR / NEW PRELIMS MODEL  
For use on schemes over £10,000,000

highways england

PROJECT / ESTIMATE TYPE	ESTIMATED COMPLETION DATE
Select Scheme Definition from the Dropdown List	Smart Motorway
INP STAGES X AND Y DURATIONS	WEEKS MONTHS YEARS
Occupied Construction Duration Stage X	118
Adjusted Construction Duration	118
Default Defects Period	52
Adjusted Defects Period	52
Default Aftercare Period	280
Adjusted Aftercare Period	280
Default Site Working Hours	45
<b>primary inputs</b> summary	
detailed summary full box see change report project management calls project management bcp client requirement bcp client	

## TTM Input

New Preliminaries Model v1.0  
Last Modified Date : 06/12/2021 Last Modified By : Vinodh KP

Primary Input	TTM Input	Scaffold Input	Temp Retaining Input	Report	Comments
1. Project Information	2. Traffic Safety and Management	3. Installation of Temporary Traffic Management Arrangements	4. Maintenance of Temporary Traffic Management Arrangements	5. Taking Measures for or Construction, Maintenance, Removal of ControlTraffic Arrangements	6. Recovery Vehicles
7. Temporary Closed Circuit/CCTV System for the Monitoring of Traffic	8. Temporary Automatic Speed Camera System for the Enforcement of Mandated Speed Limits at Roadworks				
Project Information					
Project Type	Junction Improvement	Road Type	Permanent Speed Limit		
Primary Road-Length of the Works (km)	0	Road Type	Permanent Speed Limit		
Secondary Road-Length of the Works (km)	0	Road Type	Permanent Speed Limit		
Number of Junctions (no)					
Traffic Safety and Management Reality Check					

**Back** **Next**

TEMPORARY TRAFFIC MANAGEMENT INPUT SHEET

Project Information	Traffic Safety and Management	Number of vehicles per week = total days per week Load factor = number of vehicles per day Note: 1 day = 24 hours
Project Type Primary Road - Length of the works (km) Secondary Road - Length of the works (km) Number of Junctions	Project Duration Traffic Safety and Management Reality Check Import projects Number of days per week Adjusted allowance Dedicated TSOCL Number of days per week Default allowance Number of days per week Number of vehicles per week	Road type Permanent speed limit Traffic Safety and Management Number of vehicles per week Adjusted allowance Number of days per week Default allowance Number of days per week Number of vehicles per week
<b>ttm input</b> <b>ttm summary</b>		

## Scaffold Input

New Preliminaries Model v1.0  
Last Modified Date : 06/12/2021 Last Modified By : Vinodh KP

Primary Input	TTM Input	Scaffold Input	Temp Retaining Input	Report	Comments	
1. Overbridge Abutments	2. Underbridge Abutments	3. Wing Walls	4. Pile-Cap And Foundation Access	5 Wall Scaffolding & Cantilever Pier Scaffolding	6. Loading Bay Addition & Suspended Loft Scaffolding (Birmingham Box)	7. Cost Engine Self Price Section
OVERBRIDGE ABUTMENTS						
Number of Scaffolds of this Size	Scaffolding Number of Faces Front and Rear	Scaffold Length in Metres	Scaffold width in Boards	Scaffold Height in Metres	Number of Staircases	Scaffold Hire Period in weeks
1. Access Scaffold to an Overbridge Abutment carrying 4 lanes x 2 carriageways plus hardstrips and verg						
Adjusted Allowance	2	39	5	7	2	26
2. Access Scaffold to an Overbridge Abutment carrying 3 lanes x 2 carriageways plus hardstrips and verg						
Adjusted Allowance	2	32	5	7	1	26
3. Access Scaffold to an Overbridge Abutment carrying 2 lanes x 2 carriageways plus hardstrips and verg						
Adjusted Allowance	2	22	3	7	1	26

**Back** **Next**

SCAFFOLDING INPUT

Overbridge Abutments	Underbridge Abutments	Number of faces front and rear	Scaffold length in metres	Staircase height in metres	Scaffold hire period in weeks	Number of vehicles per week	Total Price	Max
1. Access Scaffold to an Overbridge Abutment carrying 4 lanes x 2 carriageways plus hardstrips and verg	5. Access Scaffold to an Underbridge Abutment carrying 4 lanes x 2 carriageways plus hardstrips and verg	2	39	5	7	2	£ 20,000.00	£ 41,454.00
2. Access Scaffold to an Overbridge Abutment carrying 3 lanes x 2 carriageways plus hardstrips and verg	6. Access Scaffold to an Underbridge Abutment carrying 3 lanes x 2 carriageways plus hardstrips and verg	2	32	3	7	1	£ 20,400.00	£ 32,496.00
3. Access Scaffold to an Overbridge Abutment carrying 2 lanes x 2 carriageways plus hardstrips and verg	7. Access Scaffold to an Underbridge Abutment carrying 2 lanes x 2 carriageways plus hardstrips and verg	2	22	3	7	1	£ 20,875.00	£ 33,199.20
4. Access Scaffold to an Overbridge Abutment carrying 1 lane x 2 carriageways plus hardstrips and verg	8. Access Scaffold to an Underbridge Abutment carrying 1 lane x 2 carriageways plus hardstrips and verg	0	2	2	7	1	£ 20,875.00	£ 36,179.60

**scaffold input** **priced page** **data sheet** **pricing summary** **dropdowns** **input power** **grid calculator 1** **generator calculator 1** **water & sewage** **business ...**

## Temp Retaining Input

New Preliminaries Model v1.0  
Last Modified Date : 06/12/2021 Last Modified By : Vinodh KP

Primary Input   TTM Input   Scaffold Input   **Temp Retaining Input**   Report   Comments

**Sheet Piled Wall**

Select from here

**Retaining Wall Constructed in:** Select from here Sheet Piles Working in Cantilever

Number of Walls	Retained Height	Length of Wall	Calculated Pile length	Ground Conditions	Pre-auger	Buy Back / Removal Percentage
Adjusted Allowance	3	100	8	Unknown	50%	50%

Select from here

**Back**   **Next**

**Retaining Solutions Input**

**Sheet Piled Wall**

Select from here

Retaining Wall Constructed in: Select from here Sheet Piles Working in Cantilever

Length of Wall	Calculated Pile length	Ground Conditions	Pre-auger	Buy Back / Removal Percentage
Default Allowance	100	6	unknown	50%
Adjusted Allowance	200	6	unknown	50%
Adopted Allowance	100	8	unknown	50%
Default Allowance	100	8	unknown	50%
Adjusted Allowance	300	8	unknown	50%
Adopted Allowance	100	9	unknown	50%
Default Allowance	100	9	unknown	50%
Adjusted Allowance	100	10	unknown	50%
Adopted Allowance	100	10	unknown	50%

Select from here

**temp retaining inputs** | scaffold input | priced page | data sheet | piling summary | dropdowns | input power | grid calculator 1 | generator calculator 1 | watt ...

# Regional Investment Programme (RIP)

## Roadworks

Forms in the app user interface map to their corresponding Parametric Model worksheets (DWCM – Roadworks General – BW - v1.3).

## Options Parameters

New Roadworks Model

Options Parameters   Detailed Parameters   Series Parameters   Full BQ   Comments

**Site Information**

Existing Network   Length (Kms)   Standard   Elevated Sections (Kms)   Grade Separated Interchanges (No)   At Grade Junctions (No)   Side Roads (No)

Rural:	Primary	Secondary			
Urban:	Primary	Secondary			

**Back**   **Next**

**Scheme Credentials**

Scheme name   Project Manager   Cost Manager   PDF Stage of Scheme Estimate Reference   Date of Estimate   Scheme Type   Site Information

Existing Network	Length (Kms)	Standard	Elevated Sections (Kms)	Grade Separated Interchanges (No)	At Grade Junctions (No)	Side Roads (No)
Rural:	Primary	Secondary				
Urban:	Primary	Secondary				

**Geography**

Length (Kms)   Standard   Elevated Sections (Kms)   Grade Separated Interchanges (No)   At Grade Junctions (No)   Side Roads (No)

**RURAL**   **URBAN**

**Scheme Requirements**

New principal route: Version Control   Grand Summary   Options Parameters   Detailed Parameters   Series Parameters   Cost Plan   BQ ...

## Detailed Parameters

New Roadworks Model

Options Parameters   **Detailed Parameters**   Series Parameters   Full BQ   Comments

**Existing Infrastructure**

Existing roads to be abandoned/upgraded   RURAL   URBAN   TOTAL

Donut	no			0
Dumbell	no			0
Half Dumbell	no			0
Diamond	no			0

Grade Separated Interchanges:

Existing roads to be abandoned/upgraded	RURAL	URBAN	TOTAL
Donut	no		0
Dumbell	no		0
Half Dumbell	no		0
Diamond	no		0

**Back**   **Next**

**EXISTING INFRASTRUCTURE:**

Existing roads to be abandoned/upgraded: Grade Separated Interchanges: Donut, Dumbell, Half Dumbell, Diamond, T-Junction, Roundabout, Crossroads, Single, Dual, Off-line Tracks, De-trunking

	RURAL	URBAN	TOTAL
Donut	no	no	0
Dumbell	no	no	0
Half Dumbell	no	no	0
Diamond	no	no	0
T-Junction	no	no	0
Roundabout	no	no	0
Crossroads	no	no	0
Single	kms	kms	0
Dual	kms	kms	0

**PRINCIPAL ROUTES**

Proposed Cross Connection: Link 1, Link 2, Link 3, Link 4, Link 5, Link 6, Link 7, Link 8, Link 9, Link 10

Existing Section	Start Chainage	End Chainage	Length (m)	Alignment	New road Type	Hardscape(s)/Shoulder (per carriage way)	C/Res width	Verge width (per carriage way)
Link 1	0	0	0					
Link 2	0	0	0					
Link 3	0	0	0					
Link 4	0	0	0					
Link 5	0	0	0					
Link 6	0	0	0					
Link 7	0	0	0					
Link 8	0	0	0					
Link 9	0	0	0					
Link 10	0	0	0					

**Version Control** | **Grand Summary** | Options Parameters | **Detailed Parameters** | Series Parameters | Cost Plan | BQ ...

## Series Parameters

New Roadworks Model

Options Parameters		Detailed Parameters		Series Parameters		Full BQ		Comments	
1 Proportion of heavily wooded areas requiring clearance. 2 Take down existing traffic signs and markings. 3 Take up existing kerbs and channels. 4 Take up existing lighting columns and signs. 5 Take down existing traffic signs and markings. 6 Take up existing kerbs and channels. 7 Take down existing traffic signs and markings. 8 Fencing (as specified and shown on the drawings). 9 Post and rail boundary fencing (excluding Environmental Barriers). 10 Environmental Barriers (excluding ECOLOGY PLANNING). 11 Environmental Barriers (excluding ECOLOGY PLANNING). 12 Additional habitat creation. 13 Temporary habitat creation. 14 Temporary habitat creation.									
<b>Proportion of heavily wooded areas requiring clearance</b>									
Principal route	Link 1	Link 2	Link 3	Link 4	Link 5	Link 6	Link 7	Link 8	Link 9
Location									
Start Chainage									
End Chainage									
Extent of heavily wooded areas	<input checked="" type="checkbox"/>								

Back Next

SITE CLEARANCE:								
Proportion of heavily wooded areas requiring clearance								
Principal route	Link 1	Link 2	Link 3	Link 4	Link 5	Link 6	Link 7	Link 8
Location	0	0	0	0	0	0	0	0
Start Change	0	0	0	0	0	0	0	0
End Change	0	0	0	0	0	0	0	0
Interchanges	0	0	0	0	0	0	0	0
Name	0	0	0	0	0	0	0	0
Mainline Change	0	0	0	0	0	0	0	0
Side Roads	0	0	0	0	0	0	0	0
The Change	0	0	0	0	0	0	0	0
End Change	0	0	0	0	0	0	0	0
Extented/heavily wooded areas	0	0	0	0	0	0	0	0
Side Roads (cont'd)	0	0	0	0	0	0	0	0
Start Change	0	0	0	0	0	0	0	0
End Change	0	0	0	0	0	0	0	0
Extent of wooded areas	0	0	0	0	0	0	0	0

Take down existing fences. Version Control Grand Summary Options Parameters Series Parameters Cost Plan BQ ...

## Earthworks

Forms in the app user interface map to their corresponding Parametric Model worksheets (DWCM – BW – Earthworks - v1.2).

## Options Parameters

Earthworks Model

Options Parameters		Detailed Parameters		EWKS Parameters		Full BQ		Comments	
1 Scheme Credentials 2 Site Information 3 Scheme Requirement 4 Earthworks									
<b>Site Information</b>									
Existing Network	Length (Kms)	Standard	Elevated Sections (kms)	Grade Separated Interchanges (No)	At Grade Junctions (No)	Side Roads (No)			
Rural:									
Secondary:									
Urban:									
Primary:									
Secondary:									

Back Next

Scheme Credentials									
Scheme name									
Project Manager									
Cost Engineer									
PCF Stage of Scheme									
Delivery Reference									
Date of Commence									
Scheme Type									
Site Information									
Existing Network	Length (kms)	Standard	Elevated Sections (kms)	Grade Separated Interchanges (No)	At Grade Junctions (No)	Side Roads (No)			
Rural:									
Urban:									
Primary									
Secondary									
Geography									
Terrain									
Ground conditions (stability)									
Premier/ancient land use									
Scheme Requirements									
New principal route:	Sheet 1	Subcontract Library	Options Parameters	Length (kms)	No. of Links	Standard			

... Subcontract Library Options Parameters EWKS Parameters Summary Earthworks Schedule Detailed Parameters

## Detailed Parameters

New Earthworks Model

Options Parameters		Detailed Parameters		EWKS Parameters		Full BQ		Comments	
1 Existing Infrastructure 2 Principal Routes 3 Grade Separated Interchanges 4 At Grade Junction 5 Side Roads 6 Off-line Tracks 7 Off-line Roads 8 Proposed Landscaping Bunds									
<b>Existing Infrastructure</b>									
Existing roads to be abandoned/upgraded	RURAL	URBAN	TOTAL						
Grade Separated Interchanges:									
Donut	no			0					
Dumbell	no			0					
Half Dumbell	no			0					
Diamond	no			0					

Back Next

EXISTING INFRASTRUCTURE:									
Existing roads to be abandoned/upgraded	Grade separated interchanges:	RURAL	URBAN	TOTAL					
Donut	no			0					
Dumbell	no			0					
Half Dumbell	no			0					
Diamond	no			0					
Roundabout	no			0					
Crossroads				0					
Intersection				0					
Single				0					
Dual				0					
Off-line Tracks				0					
On-line tracking				0					

... Subcontract Library Options Parameters EWKS Parameters Summary Earthworks Schedule Detailed Parameters

## EWKS Parameters

New Earthworks Model

Options Parameters		Detailed Parameters		EWKS Parameters		Full BQ		Comments	
1 Topsoil Strip 2 Excavation of unacceptable materials 3 Excavation of hard material 4 Balancing Ponds 5 Starter layer 6 Removal of existing drains									
<b>Topsoil Strip</b>									
Principal Route	Link1	Link2	Link3	Link4					
Location									
Start Chainage									
End Chainage									
Predominant Land Use	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					
Average Depth of Topsoil Strip (mm)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					

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BULK EARTHWORKS:								
Topsoil Strip								
Principal route	Link 1	Link 2	Link 3	Link 4	Link 5	Link 6	Link 7	Link 8
Location	0	0	0	0	0	0	0	0
Start Change	0	0	0	0	0	0	0	0
End Change	0	0	0	0	0	0	0	0
Predominant land use								
Average depth of topsoil strip (mm)								
Interchanges:								
Grade Separate Interchanges								
Name	0	0	0	0	0	0	0	0
Mainline Change	0	0	0	0	0	0	0	0
Predominant land use								
Average depth of topsoil strip (mm)								
Side Roads:								
Start Change	0	0	0	0	0	0	0	0
End Change	0	0	0	0	0	0	0	0
Predominant land use								
Average depth of topsoil strip (mm)								
Side Roads (cont'd)	0	0	0	0	0	0	0	0
Start Change	0	0	0	0	0	0	0	0
End Change	0	0	0	0	0	0	0	0
Predominant land use								
Average depth of topsoil strip (mm)								

... Subcontract Library Options Parameters EWKS Parameters Summary Earthworks Schedule Detailed Parameters

## **Drainage**

Forms in the app user interface map to their corresponding Parametric Model worksheets (DWCM – RIP Drainage - v1.2).

## Options Parameters

New Drainage Model

**Save As Draft**

**Options Parameters**   **Detailed Parameters**   **Specifics Parameters**   **Full BQ**   **Comments**

1.Scheme Credentials   2.Site Information   3.Scheme Requirement

### Site Information

Existing Network	Length (Kms)	Standard	Elevated Sections (kms)	Grade Separated Interchanges (No)	At Grade Junctions (No)	Side Roads (No)
Rural:	Primary	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Secondary	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Urban:	Primary	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Secondary	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Back**   **Next**

<b>Scheme Credentials</b>							
Scheme name							
Project Manager							
Cost Advisor							
PCI Stage of Scheme							
Estimate Reference							
Date Entered							
Date Last Updated							
<b>Scheme Type</b>							
<b>Site Information</b>							
Existing Network		Length (kms)	Standard	Elevated Sections (kms)	Grade Separated Interchanges (No.)	At Grade Junctions (No.)	Side Roads (No.)
Rural:	Primary						
	Secondary						
Urban:	Primary						
	Secondary						
<b>Geography</b>							
Terrain		RURAL			URBAN		
Ground conditions (stability)		Primary	Secondary		Primary	Secondary	
<b>Scheme Requirements</b>							
New principal route:							
Rural - Bypass sections							
Widened sections (A)							
Widened sections (B)							
Urban - By-pass sections							
Length (kms)	No. of Links		Standard				
Subcontract Library	Option Parameters	Detailed Parameters		Specifics	Historic Key Items	Tables	Drainage Factors

## Detailed Parameters

New Drainage Model

Options Parameters	Detailed Parameters	Specifics Parameters	Full BQ	Comments			
<input checked="" type="radio"/> 1 Existing Infrastructure	<input type="radio"/> 2 Principal Routes	<input type="radio"/> 3 Grade Separated Interchanges	<input type="radio"/> 4 At Grade Junction	<input type="radio"/> 5 Side Roads	<input type="radio"/> 6 Side Road Junctions	<input type="radio"/> 7 Offline Tracks	<input type="radio"/> 8 Proposed Landscaping Bunds
<b>Existing Infrastructure</b>							
Existing roads to be abandoned/upgraded		RURAL	URBAN	TOTAL			
Grade Separated Interchanges:	Donut	no	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	Dumbbell	no	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	Half Dumbbell	no	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	Diamond	no	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	

## Specifics Parameters

New Drainage Model

Options Parameters	Detailed Parameters	Specifics Parameters	Full BQ	Comments																																															
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>																																															
1. Proposed Highway Geometry	2. Grade Separated Interchanges	3. At Grade Junctions	4. Side Roads																																																
<h3>Proposed Highway Geometry</h3> <table border="1"> <thead> <tr> <th rowspan="2">Principal Route</th> <th colspan="5">Drainage Method Allocation</th> </tr> <tr> <th>New Road Type</th> <th>Length(m)</th> <th>Kerb &amp; Gully</th> <th>Filter Drain</th> <th>Combined Drainage</th> <th>Channel</th> </tr> </thead> <tbody> <tr> <td>Link1</td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Link2</td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Link3</td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Link4</td> <td></td> <td>0</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Link5</td> <td></td> <td>n</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					Principal Route	Drainage Method Allocation					New Road Type	Length(m)	Kerb & Gully	Filter Drain	Combined Drainage	Channel	Link1		0					Link2		0					Link3		0					Link4		0					Link5		n				
Principal Route	Drainage Method Allocation																																																		
	New Road Type	Length(m)	Kerb & Gully	Filter Drain	Combined Drainage	Channel																																													
Link1		0																																																	
Link2		0																																																	
Link3		0																																																	
Link4		0																																																	
Link5		n																																																	

PROPOSED HIGHWAY GEOMETRY:		Drainage Method Allocation				
Principal route		New Road Type	Length (m)	Kerb & Gully	Filter Drain	Combined Drainage
1	Link 1		0	0		
	Link 2		0	0		
	Link 3		0	0		
	Link 4		0	0		
	Link 5		0	0		
	Link 6		0	0		
	Link 7		0	0		
	Link 8		0	0		
	Link 9		0	0		
	Link 10		0	0		
<b>INTERCHANGES</b>						
(or 5+ Separated Interchanges)		Combined Drainage				
1	(Expand to 5+ parameters)	New Road Type	Length (m)	Kerb & Gully	Filter Drain	Channel
	Interchanges:		0	0		
	Diverge A		0	0		
	Merge A		0	0		
	Diverge B		0	0		
Merge B			0	0		
Merge C			0	0		
Merge D			0	0		
Merge E			0	0		
Merge F			0	0		
Merge G			0	0		
Merge H			0	0		
Merge I			0	0		
Merge J			0	0		
Merge K			0	0		
Merge L			0	0		
Merge M			0	0		
Merge N			0	0		
Merge O			0	0		
Merge P			0	0		
Merge Q			0	0		
Merge R			0	0		
Merge S			0	0		
Merge T			0	0		
Merge U			0	0		
Merge V			0	0		
Merge W			0	0		
Merge X			0	0		
Merge Y			0	0		
Merge Z			0	0		
Merge AA			0	0		
Merge BB			0	0		
Merge CC			0	0		
Merge DD			0	0		
Merge EE			0	0		
Merge FF			0	0		
Merge GG			0	0		
Merge HH			0	0		
Merge II			0	0		
Merge JJ			0	0		
Merge KK			0	0		
Merge LL			0	0		
Merge MM			0	0		
Merge NN			0	0		
Merge OO			0	0		
Merge PP			0	0		
Merge QQ			0	0		
Merge RR			0	0		
Merge SS			0	0		
Merge TT			0	0		
Merge UU			0	0		
Merge VV			0	0		
Merge WW			0	0		
Merge XX			0	0		
Merge YY			0	0		
Merge ZZ			0	0		
Merge AAA			0	0		
Merge BBB			0	0		
Merge CCC			0	0		
Merge DDD			0	0		
Merge EEE			0	0		
Merge FFF			0	0		
Merge GGG			0	0		
Merge HHH			0	0		
Merge III			0	0		
Merge JJJ			0	0		
Merge KKK			0	0		
Merge LLL			0	0		
Merge MMM			0	0		
Merge NNN			0	0		
Merge OOO			0	0		
Merge PPP			0	0		
Merge QQQ			0	0		
Merge RRR			0	0		
Merge SSS			0	0		
Merge TTT			0	0		
Merge UUU			0	0		
Merge VVV			0	0		
Merge WWW			0	0		
Merge XXX			0	0		
Merge YYY			0	0		
Merge ZZZ			0	0		
Merge AAAA			0	0		
Merge BBBB			0	0		
Merge CCCC			0	0		
Merge DDDD			0	0		
Merge EEEE			0	0		
Merge FFFF			0	0		
Merge GGGG			0	0		
Merge HHHH			0	0		
Merge IIII			0	0		
Merge JJJJ			0	0		
Merge KKKK			0	0		
Merge LLLL			0	0		
Merge MLLL			0	0		
Merge NLLL			0	0		
Merge OLLL			0	0		
Merge PLLL			0	0		
Merge QLLL			0	0		
Merge RLLL			0	0		
Merge SLLL			0	0		
Merge TLLL			0	0		
Merge ULLL			0	0		
Merge VLLL			0	0		
Merge WWWW			0	0		
Merge XXXX			0	0		
Merge YYYY			0	0		
Merge ZZZZ			0	0		
Merge AAAAA			0	0		
Merge BBBBB			0	0		
Merge CCCCC			0	0		
Merge DDDDD			0	0		
Merge EEEEE			0	0		
Merge FFFFF			0	0		
Merge GGGGG			0	0		
Merge HHHHH			0	0		
Merge IIIII			0	0		
Merge JJJJJ			0	0		
Merge KKKKK			0	0		
Merge LLLLL			0	0		
Merge MLLLL			0	0		
Merge NLLLL			0	0		
Merge OLLLL			0	0		
Merge PLLLL			0	0		
Merge QLLLL			0	0		
Merge RLLLL			0	0		
Merge SLLLL			0	0		
Merge TLLLL			0	0		
Merge ULLLL			0	0		
Merge VLLLL			0	0		
Merge WWWWW			0	0		
Merge XXXXX			0	0		
Merge YYYYY			0	0		
Merge ZZZZZ			0	0		
Merge AAAAAA			0	0		
Merge BBBBBB			0	0		
Merge CCCCCC			0	0		
Merge DDDDDD			0	0		
Merge EEEEEE			0	0		
Merge FFFFFF			0	0		
Merge GGGGGG			0	0		
Merge HHHHHH			0	0		
Merge IIIIII			0	0		
Merge JJJJJJ			0	0		
Merge KKKKKK			0	0		
Merge LLLLLL			0	0		
Merge MLLLLL			0	0		
Merge NLLLLL			0	0		
Merge OLLLLL			0	0		
Merge PLLLLL			0	0		
Merge QLLLLL			0	0		
Merge RLLLLL			0	0		
Merge SLLLLL			0	0		
Merge TLLLLL			0	0		
Merge ULLLLL			0	0		
Merge VLLLLL			0	0		
Merge WWWWWW			0	0		
Merge XXXXXX			0	0		
Merge YYYYYY			0	0		
Merge ZZZZZZ			0	0		
Merge AAAAAA			0	0		
Merge BBBBBB			0	0		
Merge CCCCCC			0	0		
Merge DDDDDD			0	0		
Merge EEEEEE			0	0		
Merge FFFFFF			0	0		
Merge GGGGGG			0	0		
Merge HHHHHH			0	0		
Merge IIIIII			0	0		
Merge JJJJJJ			0	0		
Merge KKKKKK			0	0		
Merge LLLLLL			0	0		
Merge MLLLLL			0	0		
Merge NLLLLL			0	0		
Merge OLLLLL			0	0		
Merge PLLLLL			0	0		
Merge QLLLLL			0	0		
Merge RLLLLL			0	0		
Merge SLLLLL			0	0		
Merge TLLLLL			0	0		
Merge ULLLLL			0	0		
Merge VLLLLL			0	0		
Merge WWWWWW			0	0		
Merge XXXXXX			0	0		
Merge YYYYYY			0	0		
Merge ZZZZZZ			0	0		
Merge AAAAAA			0	0		
Merge BBBBBB			0	0		
Merge CCCCCC			0	0		
Merge DDDDDD			0	0		
Merge EEEEEE			0	0		
Merge FFFFFF			0	0		
Merge GGGGGG			0	0		
Merge HHHHHH			0	0		
Merge IIIIII			0	0		
Merge JJJJJJ			0	0		
Merge KKKKKK			0	0		
Merge LLLLLL			0	0		
Merge MLLLLL			0	0		
Merge NLLLLL			0	0		
Merge OLLLLL			0	0		
Merge PLLLLL			0	0		
Merge QLLLLL			0	0		
Merge RLLLLL			0	0		
Merge SLLLLL			0	0		
Merge TLLLLL			0	0		
Merge ULLLLL			0	0		
Merge VLLLLL			0	0		
Merge WWWWWW			0	0		
Merge XXXXXX</td						

# Carriageway

Forms in the app user interface map to their corresponding Parametric Model worksheets (DWCM – Carriageway – BW - v1.2).

## Options Parameters

New Carriageway Model

- Options Parameters
- Detailed Parameters
- Pavement Parameters
- Full BQ
- Comments

Save As Draft

1 Scheme Credentials 2 Site Information 3 Scheme Requirement 4 Road Restraints 5 Pavements 6 Kerb/Footway/Paved Areas

**Site Information**

Existing Network	Length (Kms)	Standard	Elevated Sections (kms)	Grade Separated Interchanges (No)	At Grade Junctions (No)	Side Roads (No)
Rural:	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Secondary	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Urban:	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Secondary	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

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**Scheme Credentials**

Project Name:   
 Project Manager:   
 Cost Engineer:   
 PCT Stage of Scheme:   
 Estimate Reference:   
 Date of Estimate:   
 Scheme Type:

**Site Information**

Existing Network	Length (kms)	Standard	Elevated Sections (kms)	Grade Separated Interchanges (No)	At Grade Junctions (No)	Side Roads (No)
Rural:	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Urban:	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Secondary	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Geography**

Terrain	Ground conditions (stability)	PREDOMINANT LAND USE
<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/> RURAL <input type="checkbox"/> URBAN
<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/> PRIMARY <input type="checkbox"/> SECONDARY

**Scheme Requirements**

New principal route:

RURAL	URBAN
<input type="text"/> Bypass sections <input type="text"/> Widened sections (A) <input type="text"/> Widened sections (B)	<input type="text"/> Bypass sections <input type="text"/> Widened sections (A) <input type="text"/> Widened sections (B)
<input type="text"/> Length (kms)	<input type="text"/> No. of Links
<input type="text"/> Standard	<input type="text"/>

... Other Cost Library | Subcontract Library | Options Parameters | Detailed Parameters | Pavement Parameters | Historic Key Items | Tables | Historic Data |

## Detailed Parameters

New Carriageway Model

- Options Parameters
- Detailed Parameters
- Pavement Parameters
- Full BQ
- Comments

1 Existing Infrastructure 2 Principal Routes 3 Grade Separated Interchanges 4 At Grade Junction 5 Side Roads 6 Side Road Junctions 7 Off-Line Tracks 8 Proposed Landscaping Bunds

**Existing Infrastructure**

Existing roads to be abandoned/upgraded	RURAL	URBAN	TOTAL
Donut	<input type="text"/>	<input type="text"/>	<input type="text"/>
Dumbell	<input type="text"/>	<input type="text"/>	<input type="text"/>
Half Dumbell	<input type="text"/>	<input type="text"/>	<input type="text"/>
Diamond	<input type="text"/>	<input type="text"/>	<input type="text"/>

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**EXISTING INFRASTRUCTURE**

Existing roads to be abandoned/upgraded	RURAL	URBAN	TOTAL
Grade separated interchanges:	<input type="text"/>	<input type="text"/>	<input type="text"/>
Donut	<input type="text"/>	<input type="text"/>	<input type="text"/>
Dumbell	<input type="text"/>	<input type="text"/>	<input type="text"/>
Half Dumbell	<input type="text"/>	<input type="text"/>	<input type="text"/>
Diamond	<input type="text"/>	<input type="text"/>	<input type="text"/>

**PRINCIPAL ROUTES**

Proposed Cross-section	Existing Section	Start Change	End Change	Length (m)	Alignment	New Road Type	Hard shoulder(s)/shoulder (per carriageway)	Cycles width	Verge width (per carriageway)
Link 1	<input type="text"/>	<input type="text"/>	<input type="text"/>						
Link 2	<input type="text"/>	<input type="text"/>	<input type="text"/>						
Link 3	<input type="text"/>	<input type="text"/>	<input type="text"/>						
Link 4	<input type="text"/>	<input type="text"/>	<input type="text"/>						
Link 5	<input type="text"/>	<input type="text"/>	<input type="text"/>						
Link 6	<input type="text"/>	<input type="text"/>	<input type="text"/>						
Link 7	<input type="text"/>	<input type="text"/>	<input type="text"/>						
Link 8	<input type="text"/>	<input type="text"/>	<input type="text"/>						
Link 9	<input type="text"/>	<input type="text"/>	<input type="text"/>						
Link 10	<input type="text"/>	<input type="text"/>	<input type="text"/>						

Length In Cut/In Embankment At grade On embankment

Options Parameters Detailed Parameters Pavement Parameters Historic Key Items Tables Calc Table Data Import Historic metrics ...

## Pavement Parameters

New Carriageway Model

- Options Parameters
- Detailed Parameters
- Pavement Parameters
- Full BQ
- Comments

1 Principal Routes 2 Grade Separated Interchanges 3 At Grade Junction 4 Sideroads

**Principal Routes**

Proposed Cross-section	Existing Section	Start Change	End Change	Length (m)	New Road Type	Kerb	Channel	Combined Drain	Paved Area
Link1	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Link2	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Link3	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

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**PRINCIPAL ROUTES**

Proposed Cross-section	Existing Section	Start Change	End Change	Length (m)	New Road Type	Kerb	Earth length	Channel	Combined	Edging	Edging length	Combined
Link 1	<input type="text"/>											
Link 2	<input type="text"/>											
Link 3	<input type="text"/>											
Link 4	<input type="text"/>											
Link 5	<input type="text"/>											
Link 6	<input type="text"/>											
Link 7	<input type="text"/>											
Link 8	<input type="text"/>											
Link 9	<input type="text"/>											
Link 10	<input type="text"/>											

LINKS Length In Cut/In Embankment At grade On embankment

Options Parameters Detailed Parameters Pavement Parameters Historic Key Items Tables Calc Table Data Import Historic metrics ...

## Signs & Lighting

Forms in the app user interface map to their corresponding Parametric Model worksheets (DWCM – RIP Signs Lighting - v1.2).

## Options Parameters

Signs & Lighting Model

- Options Parameters
- Detailed Parameters
- Signs Parameters
- Road Marking Parameters
- Full BQ
- Comments

1 Scheme Credentials 2 Site Information 3 Scheme Requirement 4 Signs 5 Roadmarkings

**Site Information**

Existing Network	Length (Kms)	Standard	Elevated Sections (kms)	Grade Separated Interchanges (No)	At Grade Junctions (No)	Side Roads (No)
Rural:	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Secondary	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Urban:	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Secondary	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

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**Scheme Credentials**

Project Name:   
 Project Manager:   
 Cost Engineer:   
 PCT Stage of Scheme:   
 Estimate Reference:   
 Date of Estimate:   
 Scheme Type:

**Site Information**

Existing Network	Length (Kms)	Standard	Elevated Sections (kms)	Grade Separated Interchanges (No)	At Grade Junctions (No)	Side Roads (No)
Rural:	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Urban:	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Secondary	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**Geography**

Terrain	Ground conditions (stability)	PREDOMINANT LAND USE
<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/> RURAL <input type="checkbox"/> URBAN
<input type="text"/>	<input type="text"/>	<input checked="" type="checkbox"/> PRIMARY <input type="checkbox"/> SECONDARY

**Scheme Requirements**

New principal route:

RURAL	URBAN
<input type="text"/> Bypass sections <input type="text"/> Widened sections (A) <input type="text"/> Widened sections (B)	<input type="text"/> Bypass sections <input type="text"/> Widened sections (A) <input type="text"/> Widened sections (B)
<input type="text"/> Length (kms)	<input type="text"/> No. of Links
<input type="text"/> Standard	<input type="text"/>

... Subcontract Library | Option Parameters | Detailed Parameters | Sign Parameters | Road Marking Parameters | Historic Key Items | Tables | Historic Data |

## Detailed Parameters

New Signs & Lighting Model

- [Options Parameters](#)
- [Detailed Parameters](#)
- [Signs Parameters](#)
- [Road Marking Parameters](#)
- [Full BQ](#)
- [Comments](#)

Existing Infrastructure

Existing roads to be abandoned/upgraded			RURAL	URBAN	TOTAL
Grade Separated Interchanges:	Donut	no			0
	Dumbell	no			0
	Half Dumbell	no			0
	Diamond	no			0

Back Next

EXISTING INFRASTRUCTURE

Existing roads to be abandoned/upgraded		RURAL			URBAN			TOTAL		
Grade separated interchanges:	Donut	no			no			no		
At grade junctions:	Donut	no			no			no		
	Dumbell	no			no			no		
	Half Dumbell	no			no			no		
	Diamond	no			no			no		
Side roads (crossings)	T junction	single	kms					U		
Off-line tracks	Double		kms					L		
De-tracking			kms					O		

PRINCIPAL ROUTES

Proposed Cross-section		Existing Section	Start Chainage	End Chainage	Length (m)	Alignment	New Road Type	Hard shoulder (per carriageway)	C/Res width	Verge width (per carriageway)
Link 1		0	0	0						
Link 2		0	0	0						
Link 3		0	0	0						
Link 4		0	0	0						
Link 5		0	0	0						
Link 6		0	0	0						
Link 7		0	0	0						
Link 8		0	0	0						
Link 9		0	0	0						
Link 10		0	0	0						

Total length In cutting At grade On embankment

Option Parameters Detailed Parameters Sign Parameters Road Marking Parameters Historic Key Items Historic Data Tables Calc Table Historic me ...

## SigNS Parameters

New Signs & Lighting Model

- [Options Parameters](#)
- [Detailed Parameters](#)
- [Signs Parameters](#)
- [Road Marking Parameters](#)
- [Full BQ](#)
- [Comments](#)

Principal Routes

Proposed Cross-section		Existing Section	Start Chainage	End Chainage	Length (m)	New Road Type	Unit ne 1m2	Unit 1-5m2	Unit Over 10m2
Link 1			0		✓ Unknown	✓ Unknown	✓ Unknown	✓ Unknown	✓ Unknown
Link 2			0		✓ Unknown	✓ Unknown	✓ Unknown	✓ Unknown	✓ Unknown
Link 3			0		✓ Unknown	✓ Unknown	✓ Unknown	✓ Unknown	✓ Unknown
Link 4			0		✓ Unknown	✓ Unknown	✓ Unknown	✓ Unknown	✓ Unknown
Link 5			0		✓ Unknown	✓ Unknown	✓ Unknown	✓ Unknown	✓ Unknown

Back Next

PRINCIPAL ROUTES

Proposed Cross-section		Existing Section	Start Chainage	End Chainage	Length (m)	New Road Type	Unit ne 1m2	Unit 1-5m2
Link 1		0	0	0		0	6	3
Link 2		0	0	0		0	1	Unknown
Link 3		0	0	0		0	Unknown	Unknown
Link 4		0	0	0		0	Unknown	Unknown
Link 5		0	0	0		0	Unknown	Unknown
Link 6		0	0	0		0	Unknown	Unknown
Link 7		0	0	0		0	Unknown	Unknown
Link 8		0	0	0		0	Unknown	Unknown
Link 9		0	0	0		0	Unknown	Unknown
Link 10		0	0	0		0	Unknown	Unknown

INTERCHANGES

Grade Separated Interchanges		Ref/Name	Chainage	Section	Type
1	[Expand to enter parameters]	E 1200 001	0	0	E 1200 002
2	Interchange:	Required?	Road Type	Length	Unit ne 1m2
3	Diverge A	0	0	0	Unit 1-5m2
4	Merge A	0	0	0	Unknown
5	Diverge B	0	0	0	Unknown
6	Merge B	0	0	0	Unknown
7	Links:	0	0	0	Unknown

Option Parameters Detailed Parameters Sign Parameters Road Marking Parameters Historic Key Items Historic Data Tables Calc Table Historic me ...

## Road Marking Parameters

New Signs & Lighting Model

- [Options Parameters](#)
- [Detailed Parameters](#)
- [Signs Parameters](#)
- [Road Marking Parameters](#)
- [Full BQ](#)
- [Comments](#)

Principal Routes

Proposed Cross-section		Existing Section	Start Chainage	End Chainage	Length (m)	New Road Type
Link1			0		✓ Unknown	✓ Unknown
Link2			0		✓ Unknown	✓ Unknown
Link3			0		✓ Unknown	✓ Unknown

Back Next

PRINCIPAL ROUTES

Proposed Cross-section		Existing Section	Start Chainage	End Chainage	Length (m)	New Road Type
Link 1		0	0	0		Unknown
Link 2		0	0	0		Unknown
Link 3		0	0	0		Unknown
Link 4		0	0	0		Unknown
Link 5		0	0	0		Unknown
Link 6		0	0	0		Unknown
Link 7		0	0	0		Unknown
Link 8		0	0	0		Unknown
Link 9		0	0	0		Unknown
Link 10		0	0	0		Unknown

INTERCHANGES

Grade Separated Interchanges		Ref/Name	Chainage	Section	Type
1	[Expand to enter parameters]	E 1200 877	0	0	E 1200 878
2	Interchange:	Required?	Road type	Length	Type
3	Diverge A	0	0	0	Intermittent thermoplastic
4	Merge A	0	0	0	Applied solid glass beads
5	Diverge B	0	0	0	Intermittent thermoplastic
6	Merge B	0	0	0	Applied solid glass beads
7	Links:	0	0	0	Intermittent thermoplastic

Sliproads: Diverge A Merge A Diverge B Merge D Unit Links

Option Parameters Detailed Parameters Sign Parameters Road Marking Parameters Historic Key Items Historic Data Tables Calc Table Historic me ...

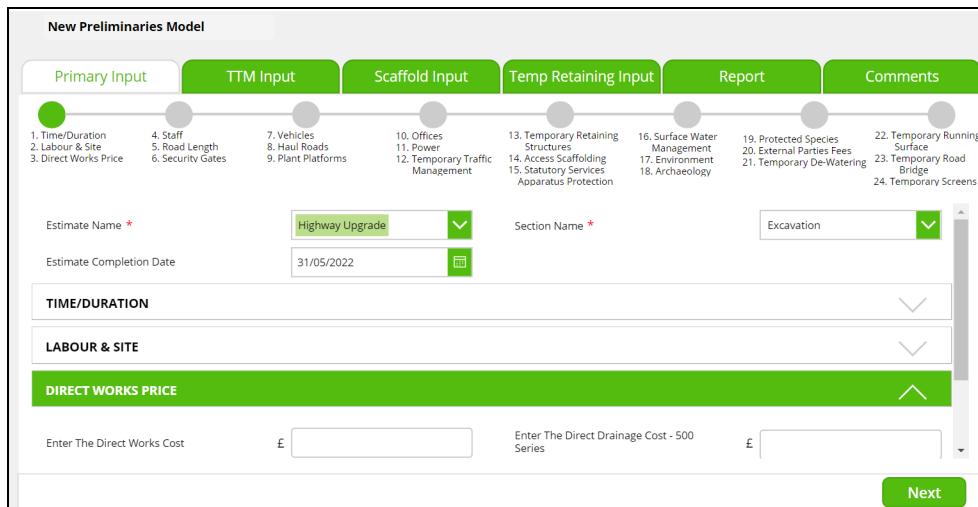
# Creating New Model Instances

## Indirect Works

1. [Open](#) the Parametric Models app.
2. Select Indirect Works.
3. Select Create New Model Instance.
4. In the Primary Input tab, select the *Estimate Name* and *Section Name*.

These are mandatory fields.

If you have accessed the app from a Project Section, these fields will automatically populate the Project *Title* and Section *Description*, respectively from Benchmark.



5. Use the up and down arrows on the accordions to expand or collapse panels in the screen.




6. Enter / select details for all the relevant fields in each of the panels in the screen.

7. Select **Next** to continue proceeding to the next screens.

When you proceed from the first screen, you will be prompted to enter the model instance name.

8. Enter the name and select Continue.

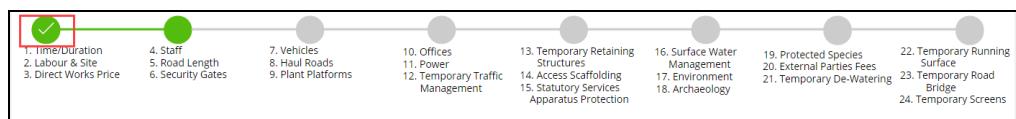


If required, you can edit this name in any of the screens using the Edit icon.

Then, Save the new name.

The screenshot shows the software's main menu bar with tabs: Primary Input, TTM Input, Scaffold Input, Temp Retaining Input, Report, and Comments. Below the menu is a horizontal progress line consisting of 16 numbered circles. The first circle (1. Project Information) has a green checkmark inside, indicating completion. The other 15 circles are grey, indicating they are pending completion. To the right of the progress line, there is descriptive text for each item, such as '1. Project Information' through '8. Temporary Automatic Speed Camera System for the Enforcement of Mandatory Speed Limits at Roadworks'.

Each completed screen is denoted by a tick within a green circle in the progress line. Active screens are denoted by a green circle. Screens pending completion are denoted by grey circles.



9. Enter / select details for all the relevant fields in each of the panels in the TTM Input tab.

The screenshot shows the 'TTM Input' tab selected. Below the progress line, there is a 'Project Information' panel with the following fields:  
Project Type: Junction Improvement  
Primary Road-Length of the Works (km): 0  
Secondary Road-Length of the Works (km): 0  
Number of Junctions (no): [empty input field]  
At the bottom of the panel are 'Back' and 'Next' buttons.

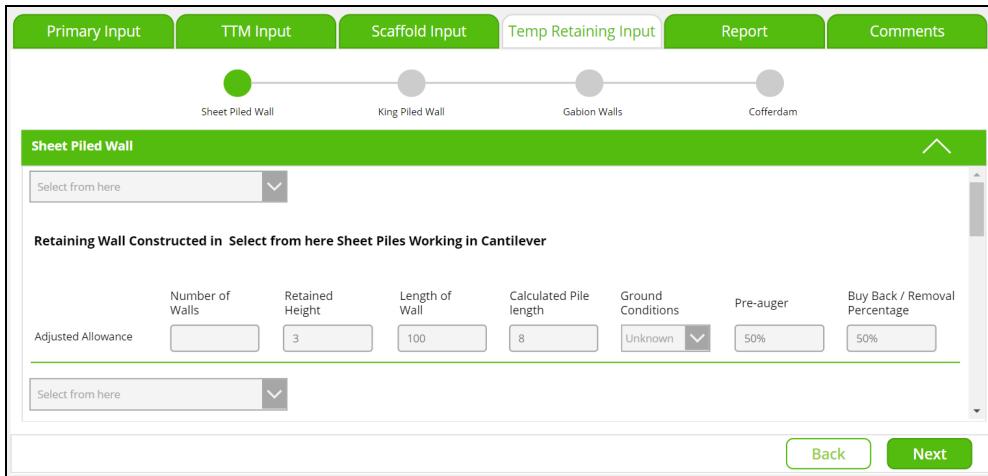
10. Select Next to continue proceeding to the next screens.

You can select Back to return to the previous screen and make changes.

11. Enter / select details for all the relevant fields in each of the panels in the Scaffold Input tab.

The screenshot shows the 'Scaffold Input' tab selected. Below the progress line, there is an 'OVERBRIDGE ABUTMENTS' panel with the following fields:  
Number of Scaffolds of this Size  
Scaffolding Number of Faces Front and Rear  
Scaffold Length in Metres  
Scaffold width in Boards  
Scaffold Height in Metres  
Number of Staircases  
Scaffold Hire Period in weeks  
There are three sections for different overbridge abutments, each with these fields.  
At the bottom of the panel are 'Back' and 'Next' buttons.

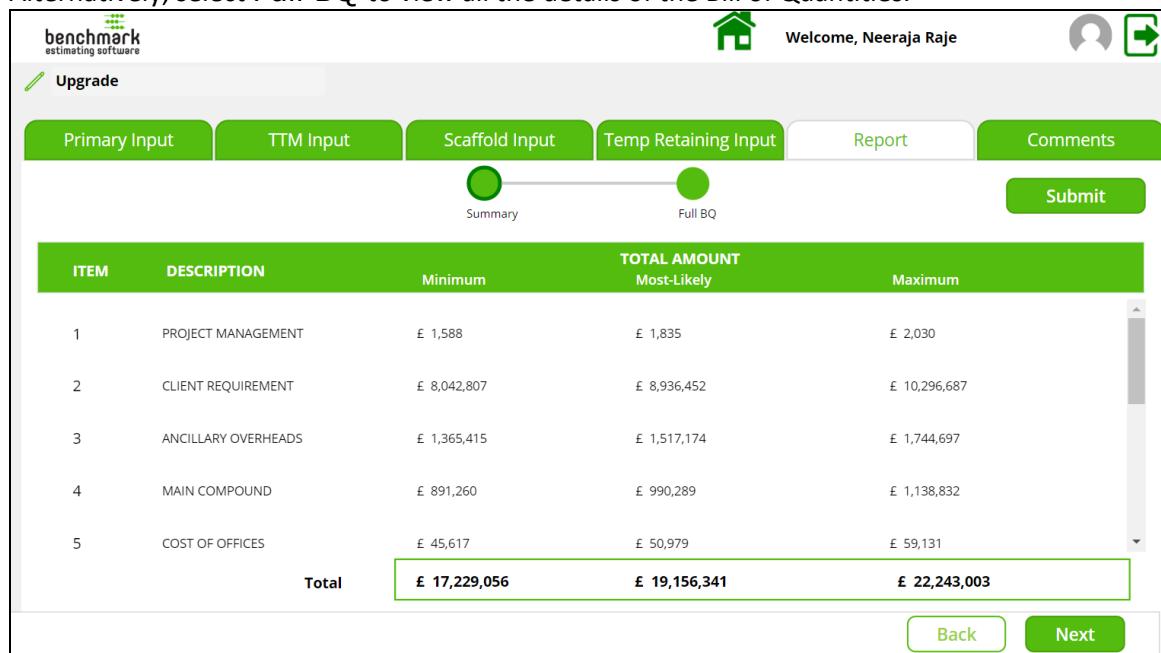
12. Select **Next** to continue proceeding to the next screens.
13. Enter / select details for all the relevant fields in each of the panels in the Temp Retaining Input tab.



Number of Walls	Retained Height	Length of Wall	Calculated Pile length	Ground Conditions	Pre-auger	Buy Back / Removal Percentage
Adjusted Allowance	3	100	8	Unknown	50%	50%

14. Select **Next** to continue proceeding to the next screens.
15. In the **Report** screen, review the summary of the BQ.

Alternatively, select **Full BQ** to view all the details of the Bill of Quantities.



ITEM	DESCRIPTION	Minimum	TOTAL AMOUNT Most-Likely	Maximum
1	PROJECT MANAGEMENT	£ 1,588	£ 1,835	£ 2,030
2	CLIENT REQUIREMENT	£ 8,042,807	£ 8,936,452	£ 10,296,687
3	ANCILLARY OVERHEADS	£ 1,365,415	£ 1,517,174	£ 1,744,697
4	MAIN COMPOUND	£ 891,260	£ 990,289	£ 1,138,832
5	COST OF OFFICES	£ 45,617	£ 50,979	£ 59,131
<b>Total</b>		<b>£ 17,229,056</b>	<b>£ 19,156,341</b>	<b>£ 22,243,003</b>

16. Select **Submit**.

The BQ will be created in Benchmark.

## Viewing the BQ

When you submit a model instance from the Parametric Models app:

- A BQ is created back in Benchmark.
- BQ line items are created as part of a section or composite item.
- BQ line items with quantity and units are created as normal items.
- BQ line items without quantity and units are created as text items.
- BQ line items with 0 quantity are not created.

To view the BQ created in Benchmark:

1. Open the Project for which you created the BQ.
2. Select the relevant Section.

All the BQ line items are created as Project Items.

The screenshot shows the 'Project Items' screen in Benchmark. On the left, there is a tree view of project sections, with 'Excavation' expanded and several items under it. In the center, a form is displayed for creating a new item. The 'Item' tab is selected, showing fields for Code (left blank), Description (set to 'Staff Daily Travel'), Quantity (0.54), Unit (Days), Activity (Rate Only), Start Date (31/12/2023), and Text. Below the main form, a 'Summary' section shows the project and section details. At the bottom, a table lists the newly created items with their descriptions, quantities, units, rates, and costs.

Line	Code	WBS	Description	Quantity	Unit	Rate	Cost	Sub Rate
1			Staff Daily Travel	0.54	Days	£0.00	£0.00	£0.00
2			Door Access, including swipe cards	2.00	Days	£0.00	£0.00	£0.00
3			Gate Access	5.00	units	£0.00	£0.00	£0.00
4			Manager	4,528.30	hours	£0.00	£0.00	£0.00
5			CCTV Watchers Days	5,434.00	hours	£0.00	£0.00	£0.00
6			CCTV Watchers Nights	5,434.00	hours	£0.00	£0.00	£0.00
7			Staff Weekly Travel	0.49	Weeks	£0.00	£0.00	£0.00

You can also view these items in the app using the **Full BQ** option in the Report tab:



All the Items from the legacy Excel files will be displayed here. Only the non-zero quantity Items will be created in Benchmark.

The screenshot shows the 'Report' tab with the 'Full BQ' option selected. The interface includes tabs for Primary Input, TTM Input, Scaffold Input, Temp Retaining Input, Report (which is active), and Comments. Below these tabs is a summary section with 'Summary' and 'Full BQ' buttons. The main area displays a table of BQ items with columns for Description, Quantity, and Unit. The table includes rows for Travel, Subsistence, and Regular Subsistence items.

DESCRIPTION	QUANTITY	UNIT
PROJECT MANAGEMENT BQ TRAVEL	.54	Days
PROJECT MANAGEMENT BQ Staff Daily Travel	.54	Days
PROJECT MANAGEMENT BQ Staff Weekly Travel	.49	Weeks
PROJECT MANAGEMENT BQ SUBSISTENCE		
PROJECT MANAGEMENT BQ Regular Subsistence	.38	Weeks

# Regional Investment Programme (RIP)

The RIP model includes the following sub models:

- Roadworks
- Earthworks
- Drainage
- Carriageway
- Signs & Lighting



This topic describes the process of creating a Roadworks submodel instance in the application to generate a Bill of Quantities (BQ). You can create other submodel instances following a similar process.

1. [Open](#) the Parametric Models app.
2. Select Regional Investment Programme.
3. Select Roadworks.
4. Select Create New Model Instance.
5. In the Options Parameters tab, select the *Estimate Name* and *Section Name*.

These are mandatory fields.

If you have accessed the app from a Project Section, these fields will automatically populate the *Project Title* and *Section Description*, respectively from Benchmark.



The Scheme Credentials panel will populate details for the Scheme that this Estimate (Project) is associated with in Benchmark.

6. Use the up and down arrows on the accordions to expand or collapse panels in the screen.

Site Information																			
<input checked="" type="checkbox"/>																			
																			
Site Information																			
Existing Network	Length (Kms)	Standard	Elevated Sections (kms)	Grade Separated Interchanges (No)	At Grade Junctions (No)	Side Roads (No)													
Rural:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Primary</td> <td style="width: 10%; text-align: center;">10</td> <td style="width: 10%; text-align: center;">S2 (rural)</td> <td style="width: 10%; text-align: center;">▼</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%; text-align: center;">2</td> </tr> <tr> <td>Secondary</td> <td style="text-align: center;">10</td> <td style="text-align: center;">S2 (rural)</td> <td style="text-align: center;">▼</td> <td style=""></td> <td style=""></td> <td style="text-align: center;">2</td> </tr> </table>	Primary	10	S2 (rural)	▼			2	Secondary	10	S2 (rural)	▼			2				
Primary	10	S2 (rural)	▼			2													
Secondary	10	S2 (rural)	▼			2													

7. Select **Next** to continue proceeding to the next screens.

When you proceed from the first screen, you will be prompted to enter the model instance name.

8. Enter the name and select Continue.



If required, you can edit this name in any of the screens using the Edit icon.

Then, Save the new name.

The screenshot shows a horizontal progress bar with seven steps. Step 1, 'Scheme Credentials', is completed (green circle with checkmark) and has a red circle around its edit icon. Steps 2 through 7 are in progress (grey circles). A 'Save As Draft' button is located in the top right corner.

Each completed screen is denoted by a tick within a green circle in the progress line. Active screens are denoted by a green circle. Screens pending completion are denoted by grey circles.



9. Enter / select details for all the relevant fields in each of the panels in the Detailed Parameters screen.

The screenshot shows the 'Existing Infrastructure' panel. It displays a table for 'Grade Separated Interchanges' with three columns: RURAL, URBAN, and TOTAL. The table includes data for four interchange types: Donut, Dumbbell, Half Dumbbell, and Diamond. Buttons for 'Back' and 'Next' are located at the bottom right.

Grade Separated Interchanges:	Existing roads to be abandoned/upgraded			
	RURAL	URBAN	TOTAL	
Donut	no	2	1	3
Dumbbell	no	2	1	3
Half Dumbbell	no			0
Diamond	no			0

10. Select **Next** to continue proceeding to the next screens.  
You can select **Back** to return to the previous screen and make changes.
11. Enter / select details for all the relevant fields in each of the panels in the Series Parameters tab.

Pipelines

Save As Draft

Options Parameters	Detailed Parameters	Series Parameters	Full BQ	Comments
1. Proportion of heavily wooded areas requiring clearance	3. Take down existing safety barriers	5. Take up existing lighting columns	7. Take down existing technology	9. Post and rail boundary fencing
2. Take down existing fences	4. Take up existing kerbs and channels	6. Take down existing traffic signs	8. Temporary Fencing (as specified and shown on the drawings)	10. Other fencing (excluding Environmental Barriers)
				11. Environmental Barriers & ECOLOGY Planting
				13. Additional habitat creation
				14. Temporary Reptile Fencing

**Proportion of heavily wooded areas requiring clearance**

**Take down existing fences**

Assumptions: All widening in RURAL locations require fences to be taken down on BOTH sides of existing highway boundary.

ADJUST for retained fencing associated with:

Areas of assumed take down both sides of road:	Proportion to be retained	Areas of assumed no fences taken down:	Proportion to be removed
Parallel widening	10%	Symmetric widening with no land take (rural)	20%
Assymmetric widening	10%	Urban sections	25%
Symmetric widening with land take	5%	Detrunked sections	5%

Back Next

12. Select **Next** to continue proceeding to the next screens.
13. In the **Full BQ** tab, review all the details of the Bill of Quantities (BQ).

benchmark estimating software

Welcome, Neeraja Raje

Pipelines

Options Parameters	Detailed Parameters	Series Parameters	Full BQ	Comments
Submit				
Sr No	Description	Unit	Qty	
1	General site clearance	ha	65.28	
2	General site clearance - wooded areas	ha	6.95	
3	General site clearance - removal of hedges	m	0.57	
4	Demolition of buildings	no	0	
5	Demolition of bridges	no	0	
6	Demolition of retaining walls	no	0	

14. Select **Submit**.  
The following confirmation prompt displays:  
“No changes to the model are permissible once you submit the item list to Benchmark. Please press **Confirm** to continue.”
15. Select **Confirm**.

## Viewing the BQ

To view the BQ created in Benchmark:

1. Open the Project for which you created the BQ.
2. Select the relevant Section.

All the BQ line items are created as Project Items.

The screenshot shows the 'Project Items' screen in Benchmark. On the left, there's a tree view under 'Overhead Section' with 'Pipeline Section' selected. The main area displays a single item: 'General site clearance' with a quantity of 65.28 ha. Below this is a 'Summary' section showing project details like '£0.00' for the project and 'Section One, Pipeline Section'. At the bottom is a detailed table of line items, each with a description, quantity, unit, and rate. The table includes rows for vegetation clearance, subsoil treatment, final preparation, cultivation, take-up of trees, shrubs, hedge plants, translocation, landscaping, installation of tunnels and underpasses, and various types of fencing and gates.

Line Code	WBS	Description	Quantity	Unit	Rate
1		General site clearance	65.28	ha	£0.00
2		Vegetation clearance to surfaces sloping at 10° or less to the horizontal	147,576.00	m <sup>2</sup>	£0.00
3		Subsoil treatment to surfaces sloping at 10° or less to the horizontal	123,600.00	m <sup>2</sup>	£0.00
4		Final Preparation of soils to surfaces sloping at 10° or less to the horizontal	553,826.00	m <sup>2</sup>	£0.00
5		Final Cultivation to surfaces sloping at 10° or less to the horizontal	544,583.00	m <sup>2</sup>	£0.00
6		Take up or down and remove to tip off Site fences	17,118.00	m	£0.00
7		Grass seeding by conventional sowing to surfaces sloping at 10° or less to the horizontal	212,465.00	m <sup>2</sup>	£0.00

You can also view these items in the app using the **Full BQ** tab:



All the Items from the legacy Excel files will be displayed here. Only the non-zero quantity Items will be created in Benchmark.

The screenshot shows the 'Pipelines' tab in the Benchmark app. At the top, there are tabs for 'Options Parameters', 'Detailed Parameters', 'Series Parameters', 'Full BQ' (which is highlighted in green), and 'Comments'. Below this is a table with columns for 'Sr No', 'Description', 'Unit', and 'Qty'. The table contains six rows of data, each representing a different type of site clearance or removal task.

Sr No	Description	Unit	Qty
1	General site clearance	ha	65.28
2	General site clearance - wooded areas	ha	6.95
3	General site clearance - removal of hedges	m	0.57
4	Demolition of buildings	no	0
5	Demolition of bridges	no	0
6	Demolition of retaining walls	no	0



# Searching Model Instances

You can search the model instances by the following search criteria:

- Model name
- Estimate name
- Creation date
- Scheme name
- Project manager
- User who created the model instance

In the example below, we will search the model instances by Estimate name:

1. [Open](#) the Parametric Models app.
2. Select the relevant model type.  
For example, **Indirect Works**.
3. In the Search bar, enter the search term.  
For example, Highway.
4. This displays the list of model instances containing the search term.

The screenshot shows the Benchmark estimating software interface. At the top, there is a navigation bar with a house icon, a user profile icon, and the text "Welcome, Neeraja Raje". Below the navigation bar, there are three buttons: "Saved" (highlighted in green), "Submitted", and "Archived". To the right of these buttons is a search bar containing the text "highway" with a magnifying glass icon. Next to the search bar is a green button labeled "Create New Model Instance". Below the search bar, there is a table with the following columns: Model Instance, Estimate, Date Created, Status, Scheme Name, Project Manager, Created By, and Action. The table contains one row of data: "New Preliminaries Model v1.0" (Estimate: Highway Upgrade, Date Created: 02/12/2021, Status: Saved, Scheme Name: Junction Improvement, Project Manager: PM, Created By: Shailendra Mishra, Action: View). The "View" link in the Action column is highlighted with a red box.

Clear the search term to view the unfiltered list of model instances again.

# Saving Model Instances

When working on a model instance, you can choose to save the details and submit it later.

- Select **Save As Draft** to save the entered details.



The screenshot shows the 'New Preliminaries Model v1.4' interface. At the top right, there are buttons for 'Save AS Draft' (highlighted with a red box), 'Copy', and 'Modify'. Below these are tabs for 'Primary Input', 'TTM Input', 'Scaffold Input', 'Temp Retaining Input', 'Report', and 'Comments'. A horizontal timeline at the bottom lists 24 numbered items from 'Time/Duration' to 'Temporary Screens'. The 'Staff' section is expanded, showing 'SUPPLIER STAFF PCF STAGE 6 & 7' with fields for 'Adjusted Supplier Staff Percentage (if known)' (Default Value is 20%) and 'Is The Supplier Providing Permanent Work Design?' (YES selected). The 'DISCIPLINE APORTIONMENT' table shows 'NON OVERHEAD DIRECTORS' at 4% and 'PROJECT MANAGEMENT' at 32%. At the bottom are 'Back' and 'Next' buttons.

- These drafts display with a status of **Saved** in the list of model instances.
- Select **View** to open the draft.
- Select **Modify** to continue working on the model instance.



## Modifying Model Instances

You can view but not modify the model instances created by other users.



## Errors

A red circle denotes errors in the section. Go to the relevant section and rectify the error.

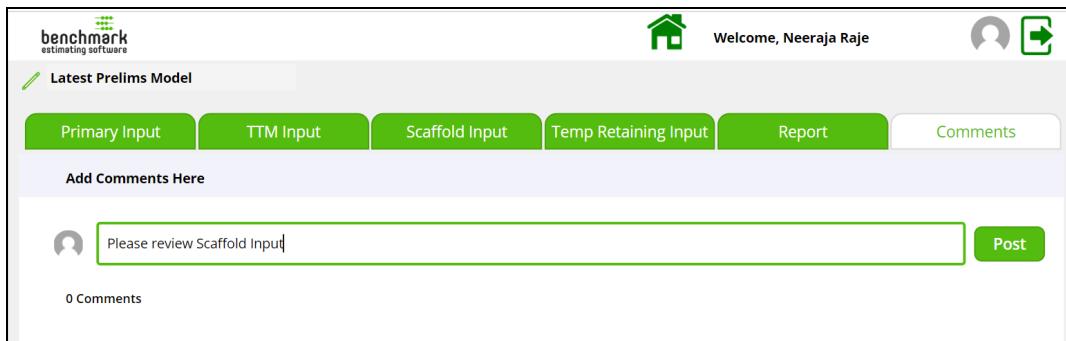


# Adding Comments

You can add comments to a model instance, when creating it or editing a saved draft. You can also add comments for the model instances created by other users.

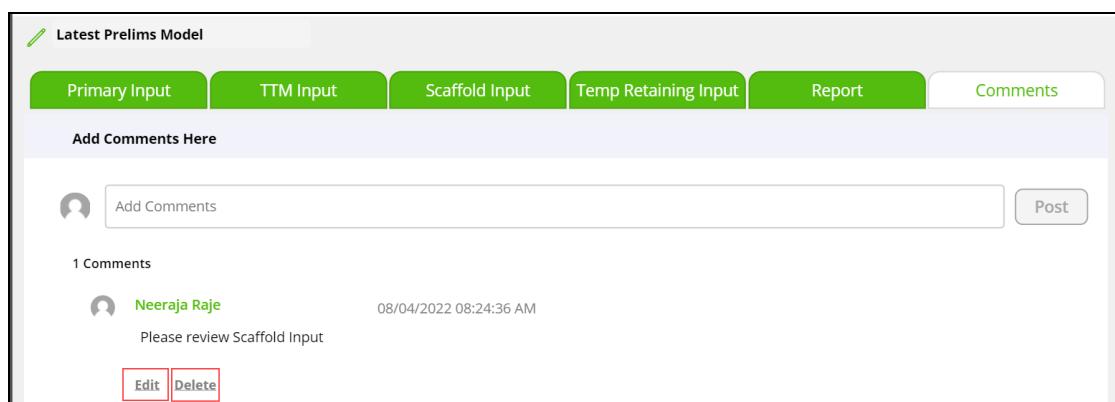
To add comments:

1. Select the Comment tab for the relevant model instance.



The screenshot shows the 'Comments' tab selected in the top navigation bar of a software interface. Below the tabs, there is a text input field containing the comment 'Please review Scaffold Input'. To the right of the input field is a green 'Post' button. At the bottom left, it says '0 Comments'.

2. Enter the comment and select Post.
3. Once posted, the comment will be listed in the tab.
4. Select:
  - a. Edit to modify and save your comment.
  - b. Delete to delete your comment.



The screenshot shows the same interface after the comment has been posted. The comment 'Please review Scaffold Input' by 'Neeraja Raje' is now listed under '1 Comments'. The timestamp '08/04/2022 08:24:36 AM' is shown next to the comment. Below the comment are two buttons: 'Edit' and 'Delete'.

# Archiving Model Instances

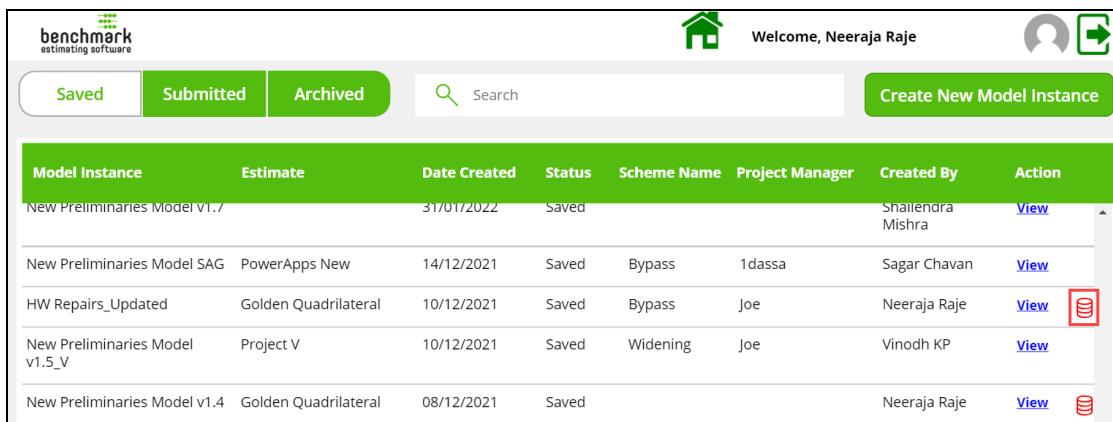
If you no longer need a model instance, you can archive it. This can be particularly useful when you need to manage a large list of model instances in the application.

You can only archive your saved model instances. You cannot archive:

- Your submitted model instances.
- The model instances created by other users.

To archive:

1. Go to the Saved tab.
2. Select the Archive Model icon for the relevant model instance.



Model Instance	Estimate	Date Created	Status	Scheme Name	Project Manager	Created By	Action
New Preliminaries Model v1.7		31/01/2022	Saved			Shailendra Mishra	<a href="#">View</a>
New Preliminaries Model SAG	PowerApps New	14/12/2021	Saved	Bypass	1dassa	Sagar Chavan	<a href="#">View</a>
HW Repairs_Updated	Golden Quadrilateral	10/12/2021	Saved	Bypass	Joe	Neeraja Raje	<a href="#">View</a> 
New Preliminaries Model v1.5_V	Project V	10/12/2021	Saved	Widening	Joe	Vinodh KP	<a href="#">View</a> 
New Preliminaries Model v1.4	Golden Quadrilateral	08/12/2021	Saved			Neeraja Raje	<a href="#">View</a> 

The following confirmation prompt displays:

“Are you sure you want to archive <model instance name>?”

3. Add a comment within the text area in the prompt, if required.
4. Select Yes.

The model instance will be removed from the Saved tab, and added to the Archived tab.

You can view or [copy](#) these archived model instances, but not submit them.

# Copying Model Instances

This functionality facilitates:

- Easy reuse of the same model instance between different estimates.
- Creation of multiple versions of the same model instance within the same estimate. Each version may be different from the other. Users can then compare these versions and submit the relevant model instance.



You can only submit one version per model instance. The others can be archived.

To copy a model instance:

1. From the list of saved/submitted/archived model instances, select View to open the model instance you want to copy.
2. Select Copy.

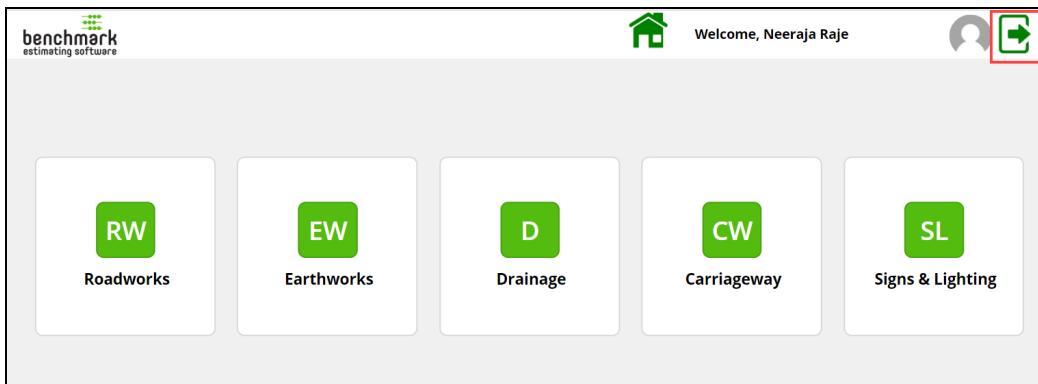
The screenshot shows the 'HW Repairs\_Updated' model instance details. At the top right are 'Copy' (highlighted with a red box) and 'Modify' buttons. Below them is a grid of 24 numbered items, each with a green circular checkbox. Items 1, 4, 7, 10, 13, 16, 19, 22, and 24 have their checkboxes checked. The grid is organized into four columns: Primary Input (1-3), TTM Input (4-6), Scaffold Input (7-9), and Temp Retaining Input (10-12). To the right of the grid are 'Report' and 'Comments' buttons. Below the grid are fields for 'Estimate Name \*' (Golden Quadrilateral), 'Section Name \*' (Repairs), and 'Estimate Completion Date' (10/12/2021). At the bottom are three expandable sections: 'TIME/DURATION', 'LABOUR & SITE', and 'DIRECT WORKS PRICE'.

3. This creates a copy of the selected model instance.
4. Select the new Estimate Name and Section Name.
5. Enter/select details for the new model instance using standard functionality.

# Logging Out

To log out of this application:

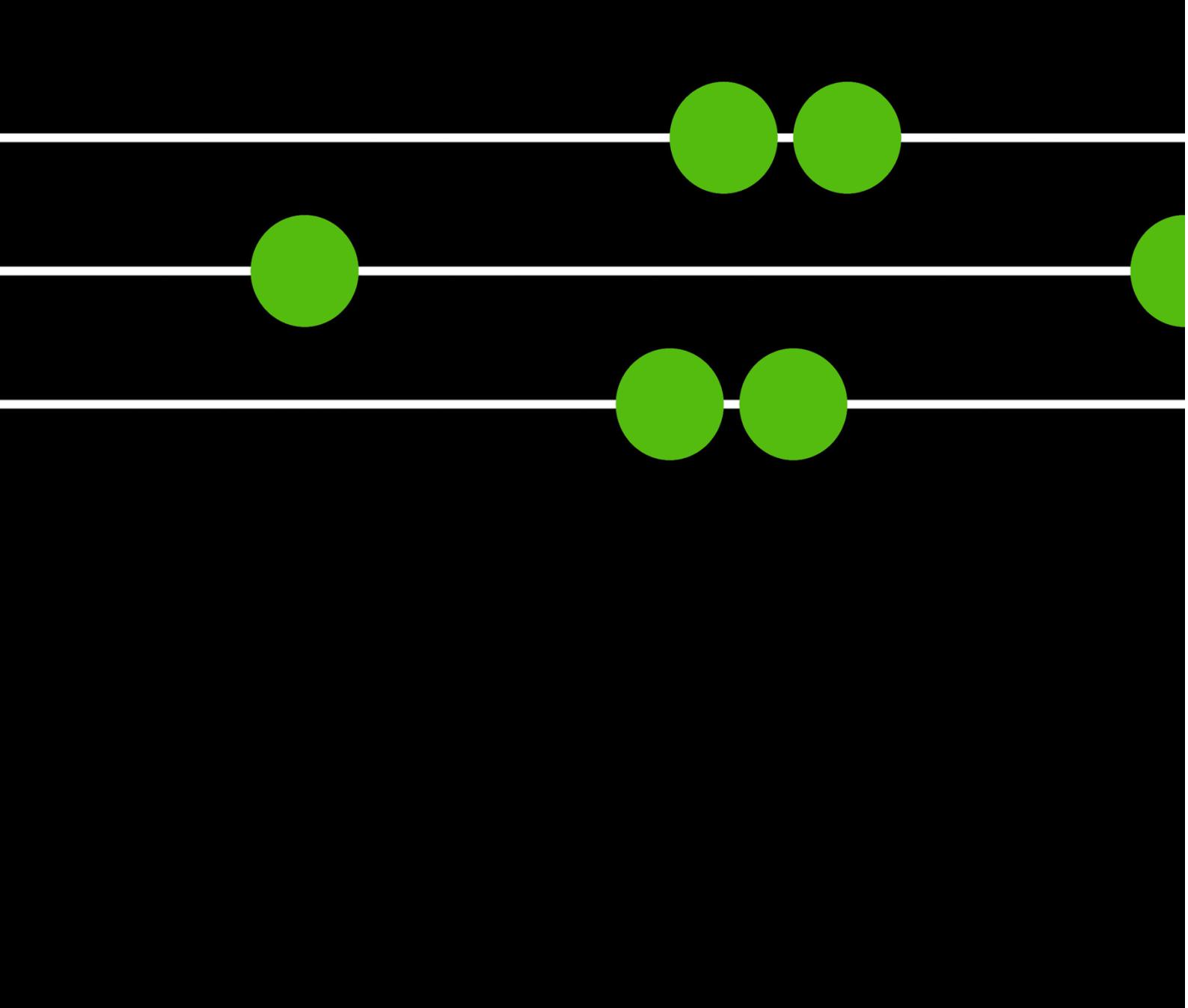
1. From any page within the application, select the Logout icon.



The following confirmation prompt displays:

“Are you sure you want to Logout?”

2. Select Yes.



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