SEEQUENT

OpenGround

Tutorial TSF3

How to Create a Master Template

Last updated: March 2025

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2. Introduction

This guide has been developed to assist users in producing a basic master template. It will demonstrate the basics of creating the template and using the functions of the Template Studio application.

A master template is a template type that is designed in Template Studio that will take the basics of a standard template but offer the opportunity to incorporate some more advanced functionality such as re-using strip templates and hiding and showing strips based on hide and show conditions.

This will be done in the format of a tutorial, which can be followed along with producing a replica output while introducing core concepts and ideas.

This guide can be followed from the beginning to create a finialised output or can be used to jump to a specific section along with the accompanying files that have been provided as a ‘jumping in’ point.

Users are expected to have a basic understanding of how OpenGround is set up and how configurations function within the scope of configuration packs. In this tutorial, users are also expected to have a basic knowledge of how a template is setup, it is recommended to follow through ‘Tutorial TSF1 – How to Create a Borehole Log’ if this is not the case.

Note that this guide has been created with the US market in mind, hence the dimensions and outputs being suited to a US output. Due to this, the US configuration pack has been used.

However, this guide can be applied by users across the world as needed.

3. Accompanying Files

Note that the following downloads are also available to help users compare the output at the end of each section, or to allow users to skip to the section that they wish to work through.

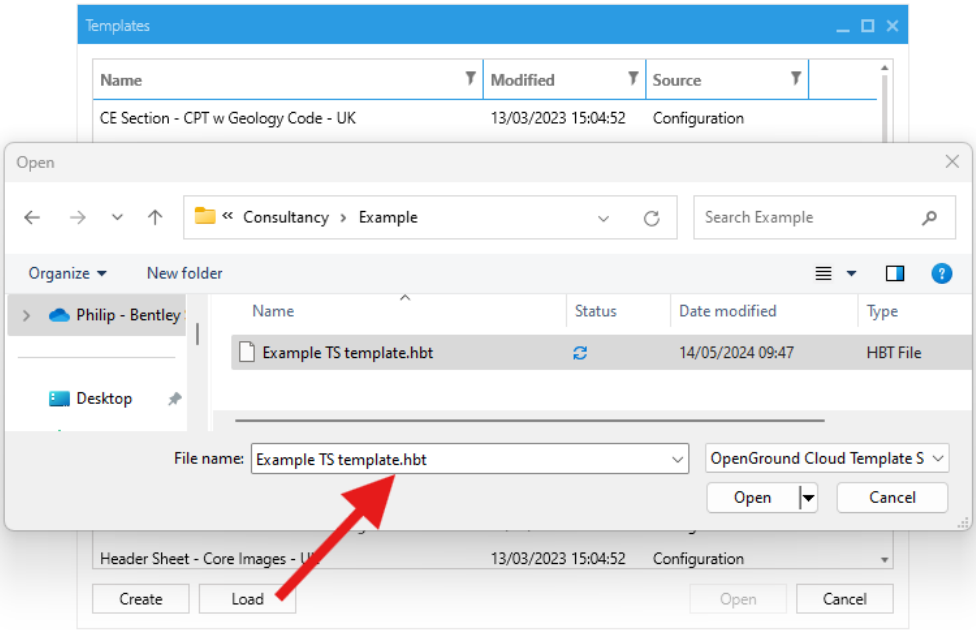
The example project used has the Project ID of SEQ-BEN-000 and can be found here;

1. SEQ-BEN-000.zip

The templates that can be used along with this guide can be found here;

2. Tutorial 3 - Template after Header and Footer Completion.hbt
3. Tutorial 3 - After Strip Set Column Set.hbt
4. Tutorial 3 - Blow Counts and Nvalue Strip.hbt
5. Tutorial 3 - Graphic Log - Legend Code.hbt
6. Tutorial 3 - Layer Bottom Depth Strip.hbt
7. Tutorial 3 - Material Description Strip.hbt
8. Tutorial 3 - Remarks Strip.hbt
9. Tutorial 3 - Sample Type and Number Strip.hbt
10. Tutorial 3 - Scale Strip.hbt
11. Tutorial 3 - Final Output.hbc

Templates can be saved as an external file to allow them to be distributed. To load such a template file (.hbt) click the Load button and browse to the file:



Note that you will need to save the template manually to store it on the system.

4. Setting up a Master Template

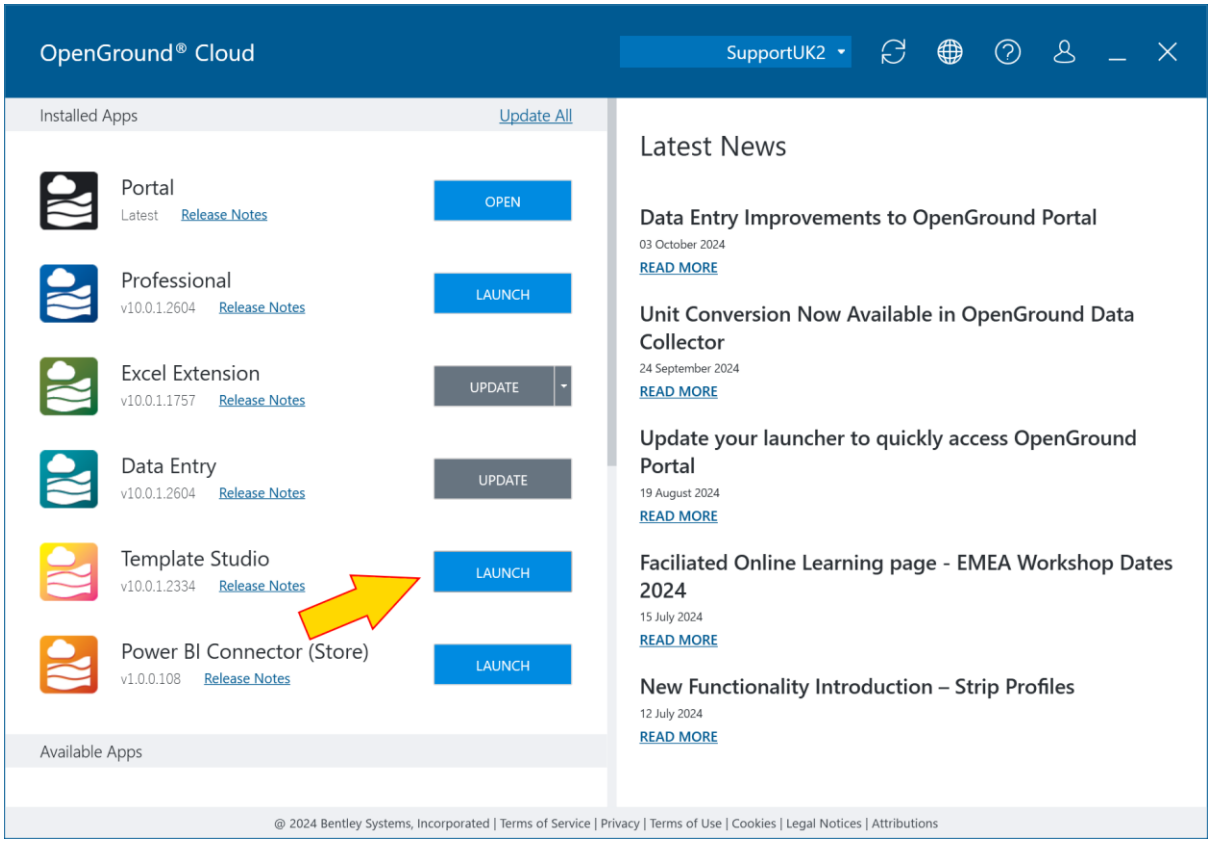
At the end of this tutorial, a user should be able to take a borehole log template, convert it into a master template and then start introducing strips in to the depth area, with settings set up to hide strips that have no data.

Please note that the SEQ-BEN-000 example project is used in this tutorial. Please see this guide on how to setup this project if following along and not using other data.

This tutorial is also based as a follow on to the TSF1 – How To Create a Borehole Log tutorial. If the user has a basic understanding of Template Studio then this can be skipped and this tutorial started at the stepping on point file.

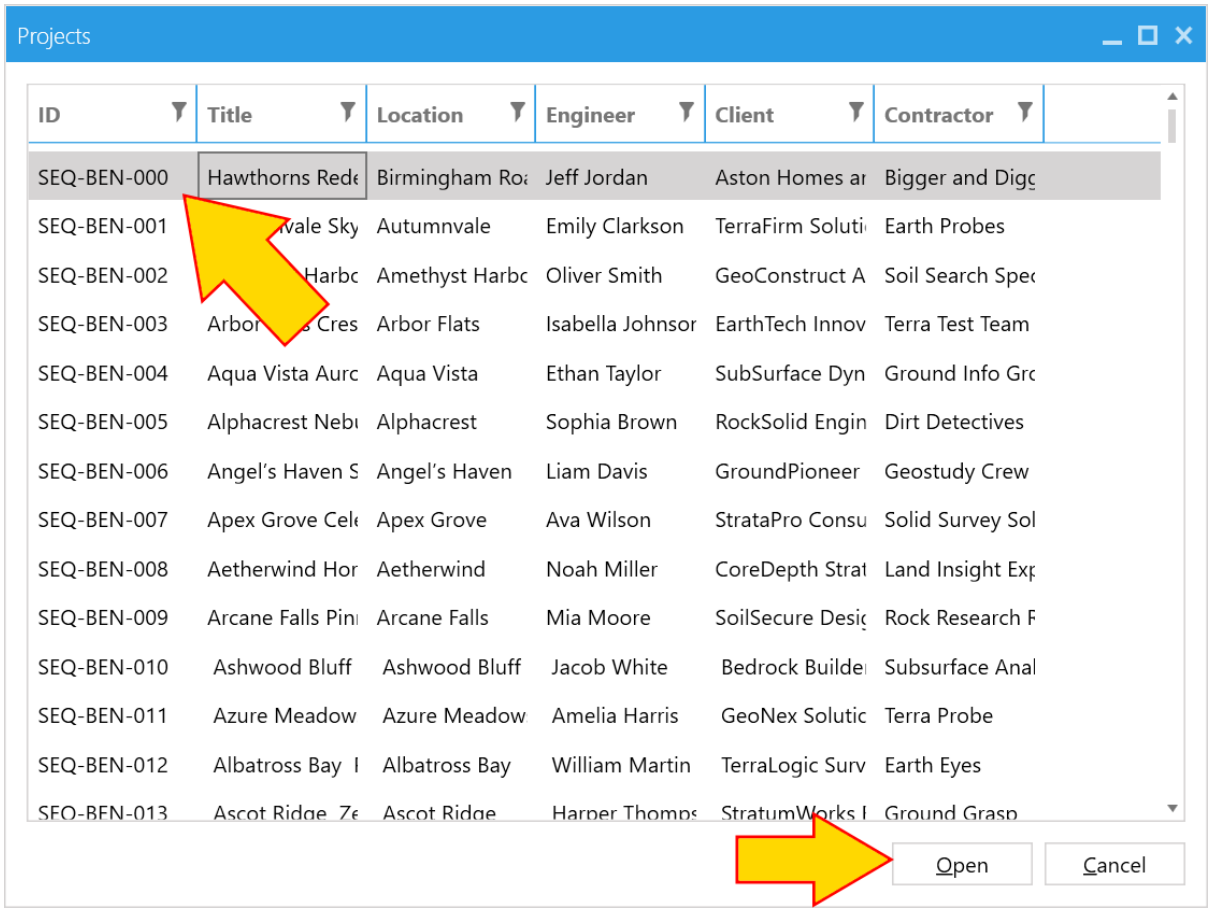
3.1 Starting Template Studio

Template Studio is launched from the OpenGround Launcher. Assuming that no updates are available for the application, press the Launch button next to the Template Studio application to launch the software.



3.2 Selecting a Project

Template Studio works on the basis that a user will be creating a template with the use of project data, therefore it allows for a project to be selected once it has been launched. Any data that is then previewed within Template Studio will use the live project data to give a preview that is indicative of what the finished template would look like. To select the relevant project, simply find the project in the list, select it by clicking on it, then double click on it or click the Open button to advance to the next window.

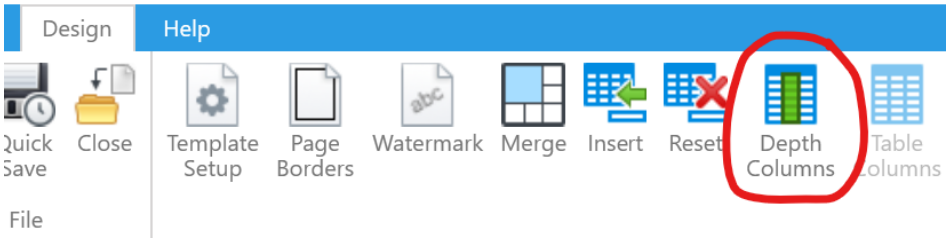


3.3 Loading the Template and Setting up for a Master Template

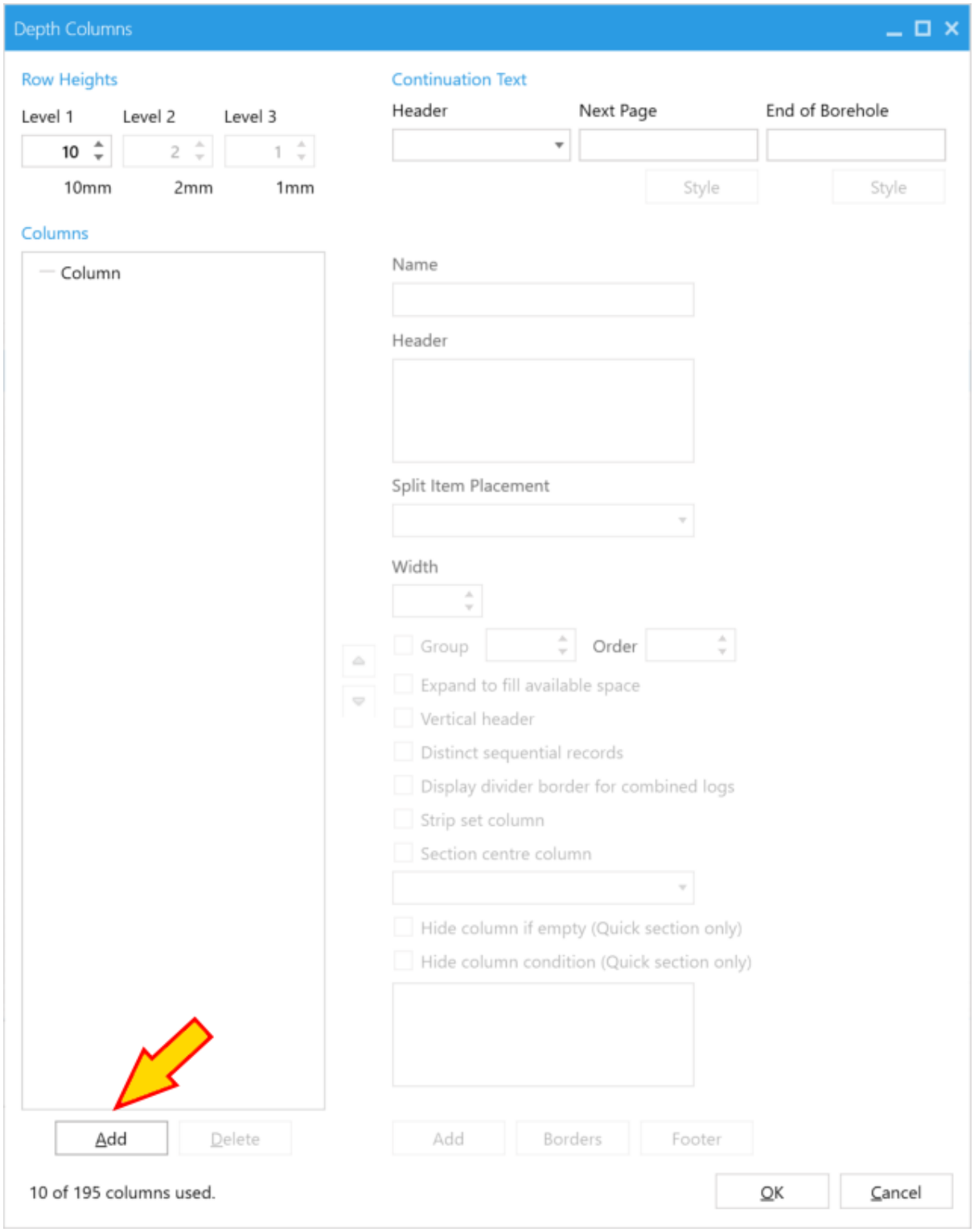
Note that this is the point that the example file 'Tutorial 3 – Template after Header and Footer Completion.hbt' will be used as the starting point (this file was created based on the steps in the TSF1 – How to Create a Borehole Log tutorial).

When converting a borehole log to a master template. The only difference is that the depth columns that are used will be replaced with a single strip set column instead.

It is possible to combine normal columns with a Strip Set column (although there can only ever be one Strip Set column), however, for the purposes of this tutorial, the normal columns will be replaced with strips in the Strip Set instead.



Select the Depth Columns button to show the Depth Columns window. Press the Add button once to add one column to the template.



Select the first column in the list, the settings in the right hand side of the window will then become active. This column will become the Strip Set column that will contain all of the strips.

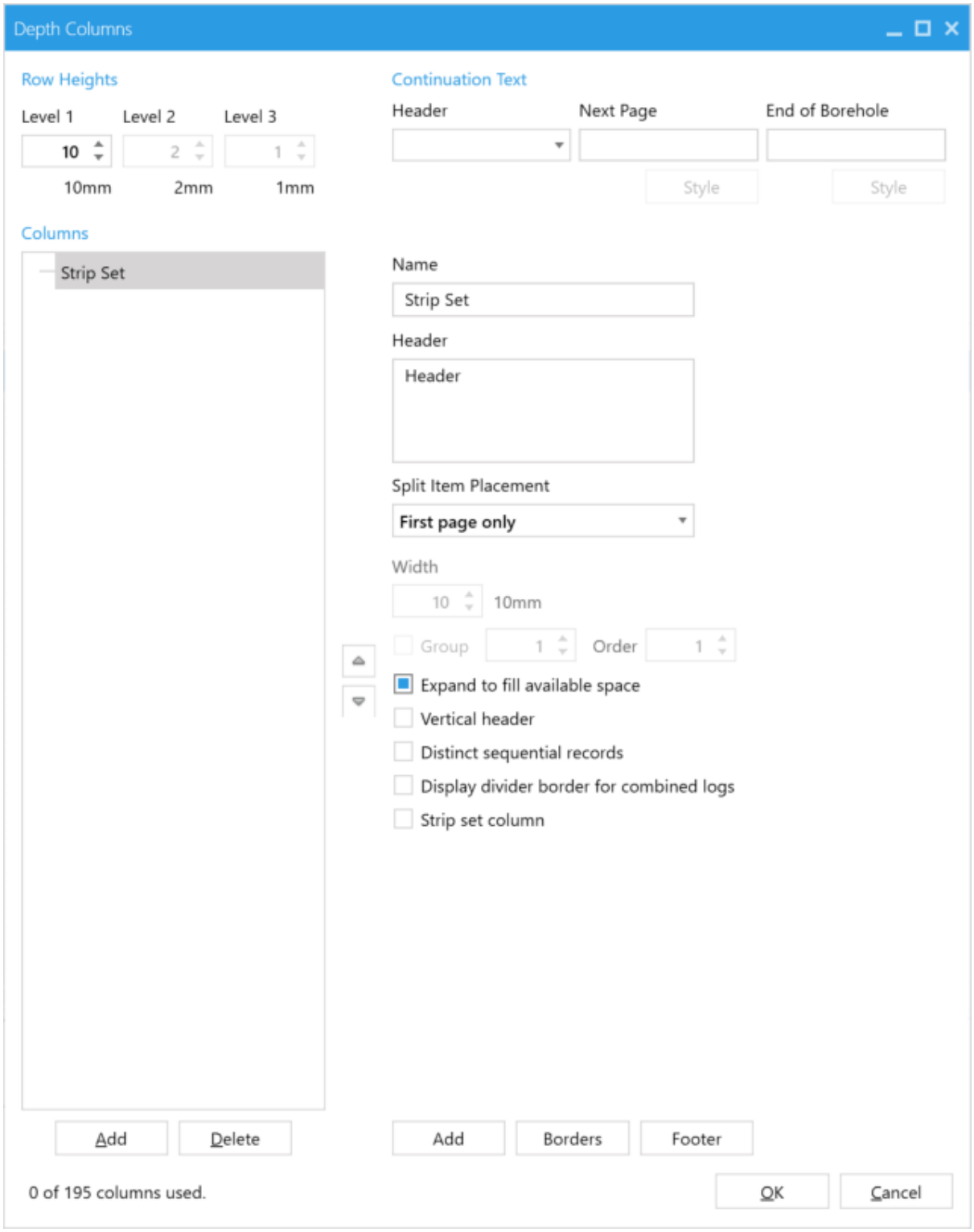
Change the name to be Strip Set.

The name of the column does not effect anything with how the template functions and is solely presented to help a user differentiate between the different columns on their log.

Change the Header to be Strip Set.

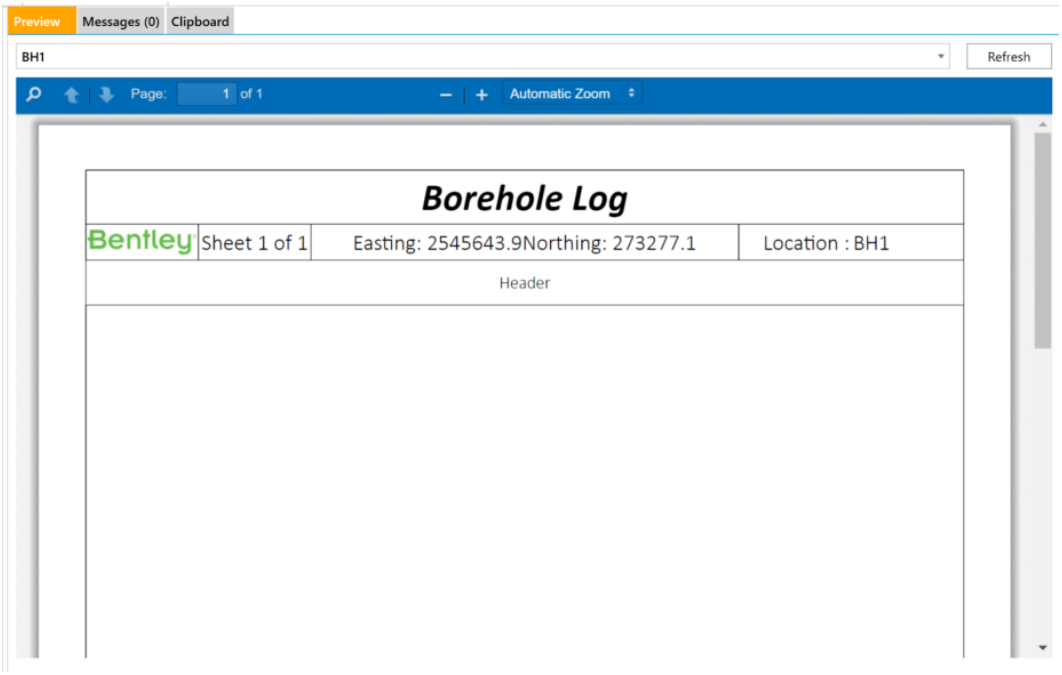
This header name will not appear anywhere or be used at all, but it is best practice to name columns to help differentiate them in future if needed.

Select the option for ‘Expand to fill available space’ which will automatically set the width to be that of the remaining space in the template (don’t worry if this doesn’t update straight away, the settings will be saved in the template).



Select OK to save the changes and the middle part of the template should update to show the changes made.

Preview the template to see how this currently looks.



The template preview will appear with a header and a footer area but with no data shown in the middle ‘depth related area’ of the template. This area will be defined in the following sections of this guide.

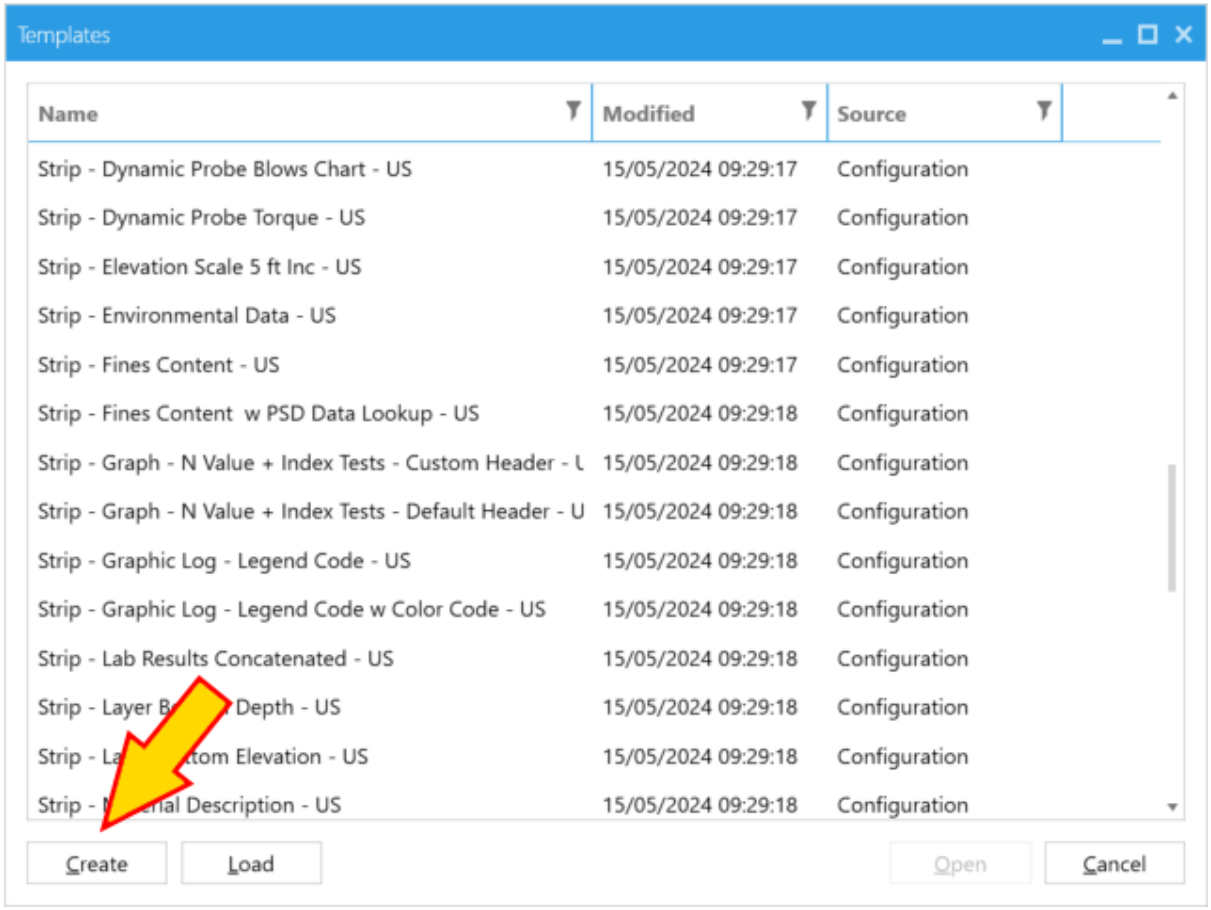
Save the template into the Project, or the Configuration Pack. Once this has been done, the Strip Sets button will become available in the ribbon. At this stage, there are no strips to add to the Strip Set so these will be created next.

3.4 Creating a Strip for a Master Template

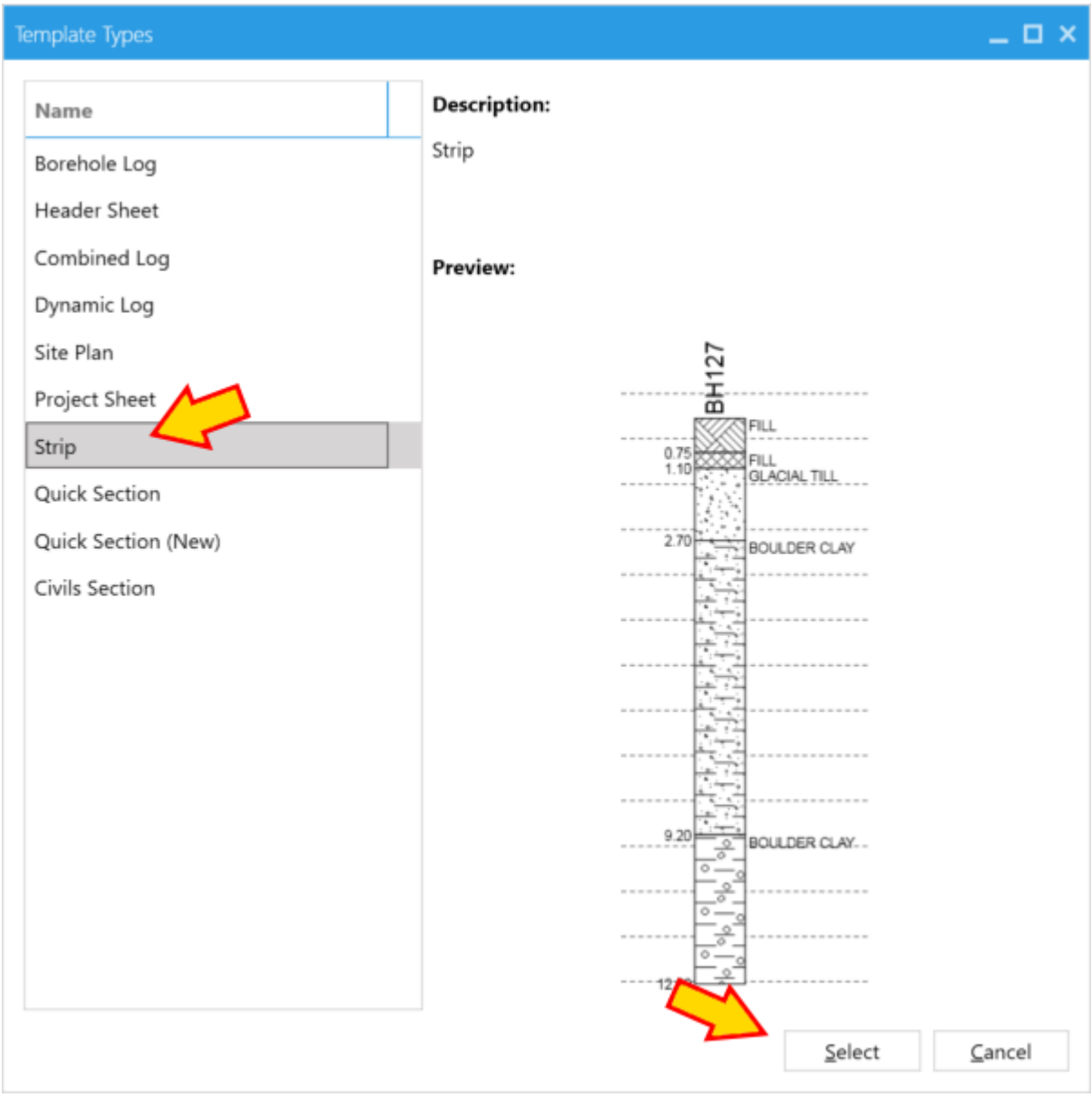
The next stage in setting up a Master Template is to create the first strip that will be used in the template. These will then be applied into a Strip Set which will contain the strips and the settings used to bind them together.

When creating a Master Template, it maybe better to think of designing all of the strips first, then applying them to the Master Template in one go. This tutorial will guide through creating a strip and adjusting the Strip Set in the Master Template when new items are available.

Return to the Templates window in Template Studio, then select the option for Create.

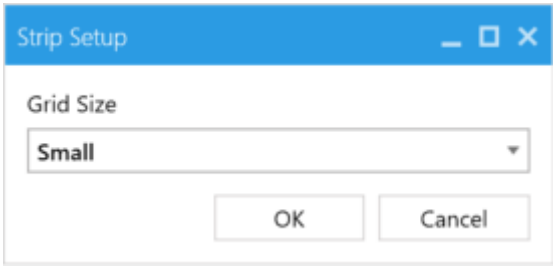


Select the option for Strip and then Select Select.

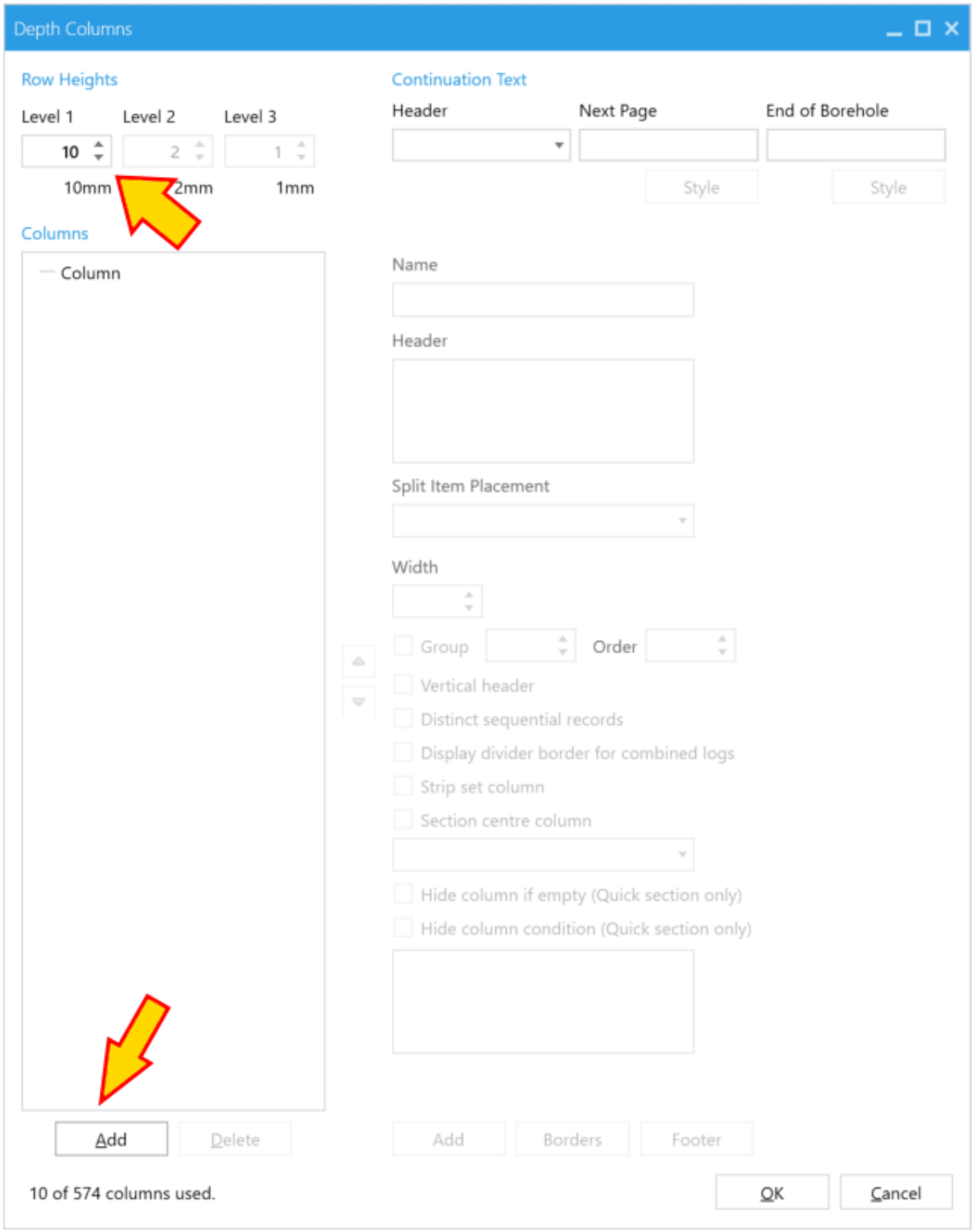


Select the Small grid size and Select OK.

It is recommended to select the same grid size as the Master Template that you are designing the strip for use with. This is however not essential.



The Depth Columns dialogue will then appear, which functions the same as it would in a standard borehole log.Select the Add button to add a new column to the depth area, then change the Row height for Level 1 to be 10mm



Select the column in the list, the settings in the right hand side of the window will then become active. This column will become the scale bar column.

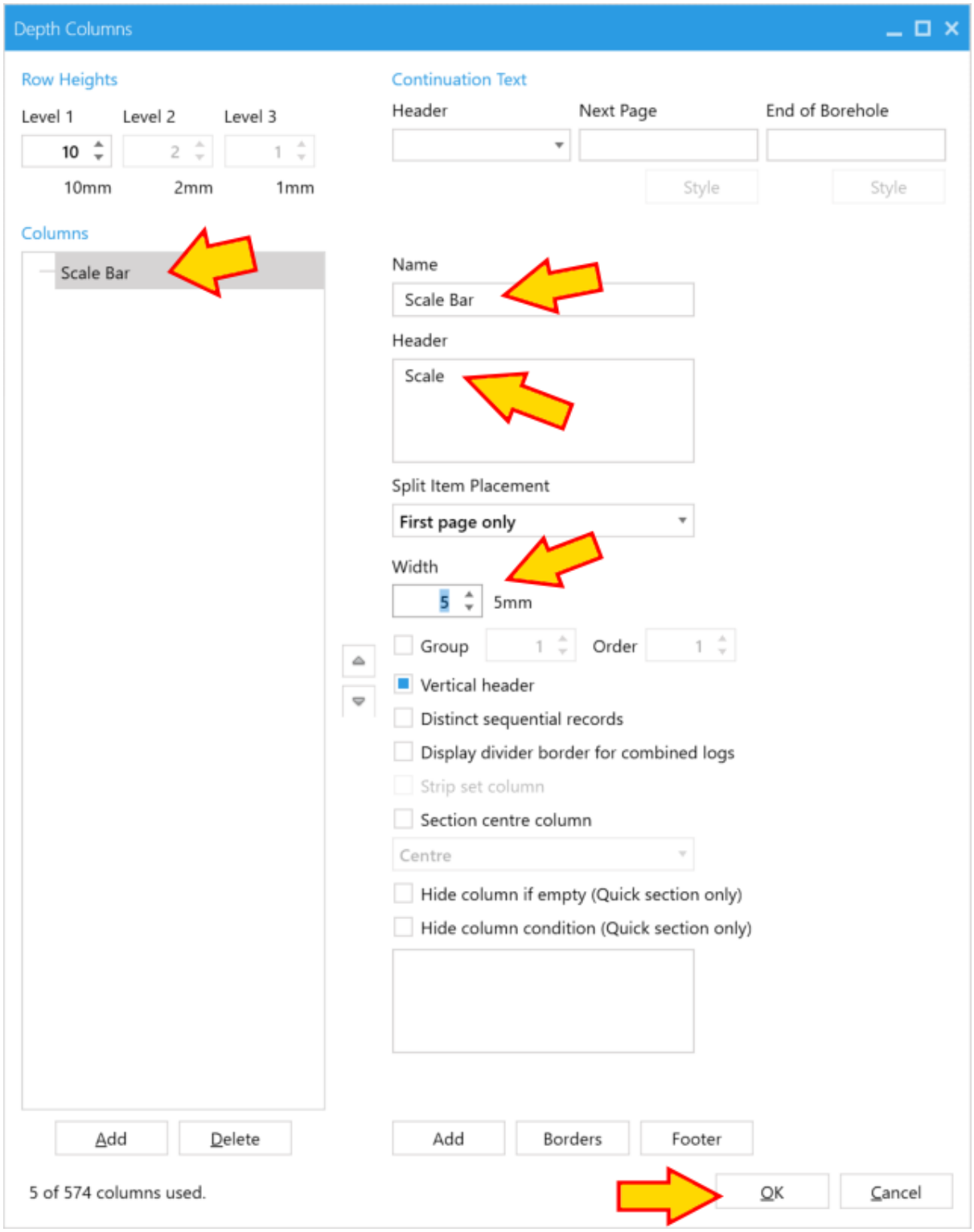
Change the name to be Scale Bar.

The name of the column does not effect anything with how the template functions and is solely presented to help a user differentiate between the different columns on their log.

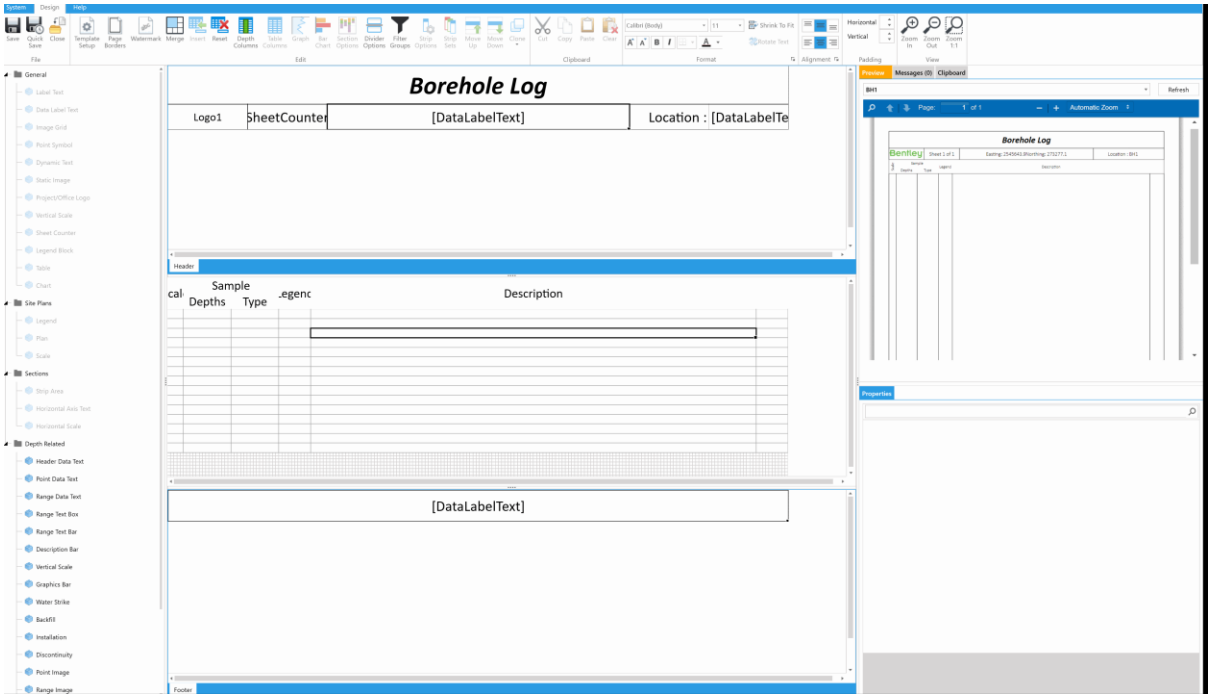
Change the Header to be Scale.

This is the header that will appear in the Depth Header part of the column.

Change the width to be 5mm and check the option for Vertical Header. This will make the column thinner and make the text appear sideways in the Depth Header. Then click on the OK button to close the dialogue.



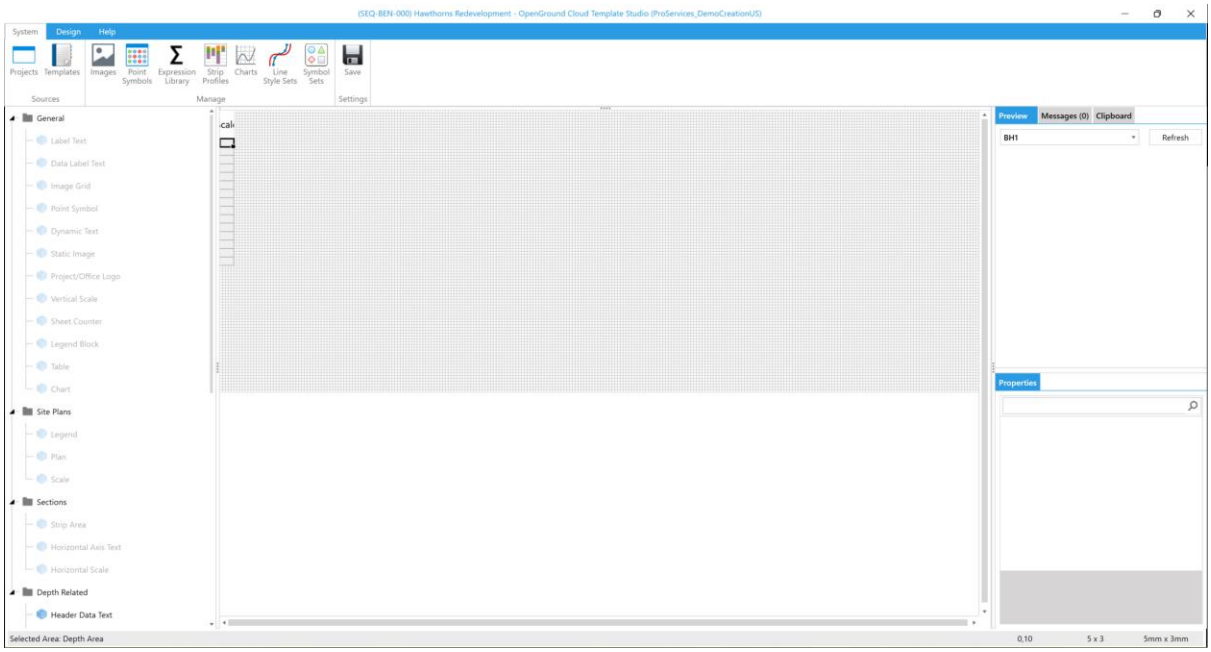
Select the scale column header which is the first header column, then set the font size to be size 14.



Next, select the borders button on the ribbon and then select more borders, then select inside and outline borders and click OK.

Then select the Vertical Alignment option and change the value to be 0.0.

Click on the top empty cell in the depth area under the Scale header, then double click on the Vertical Scale Bar library item to insert this. This will update the workspace to show an item has been inserted and the Properties window will update with further settings.

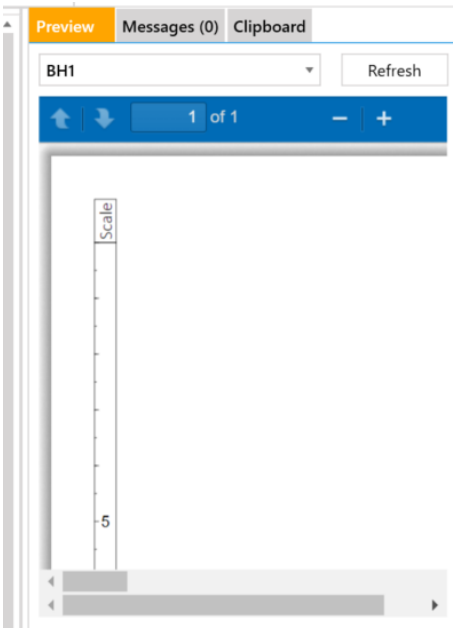


The Vertical Scale Bar works slightly differently to most other library items in that the ability to control the font used and the font size is controlled in the properties dialogue instead.

Set the Font to be Calibri and the Font Size to be 12 and change the following properties (settings not changed aren't listed);

- Decimal Places – 0
- Increment – 5
- Long Marker Length – 1
- Middle Marker Length - 0.5
- Short Marker Length – 0
- Scale Alignment – Left
- Number Alignment – Centre
- ShowLastNumber – True

After setting these settings, preview the template. This will show a preview of just the single column.



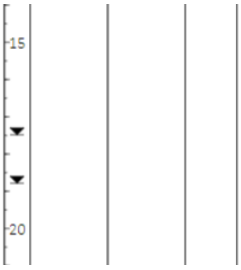
It is possible to add more than one item in a depth column. In this case, a water strike will be plotted in the scale column.

Select the next empty cell in the scale column, which should be the 2nd row down, then double click on the Point Symbol Library Item. The workspace should update to show a point symbol item in the relevant space and new options appear in the Properties window.

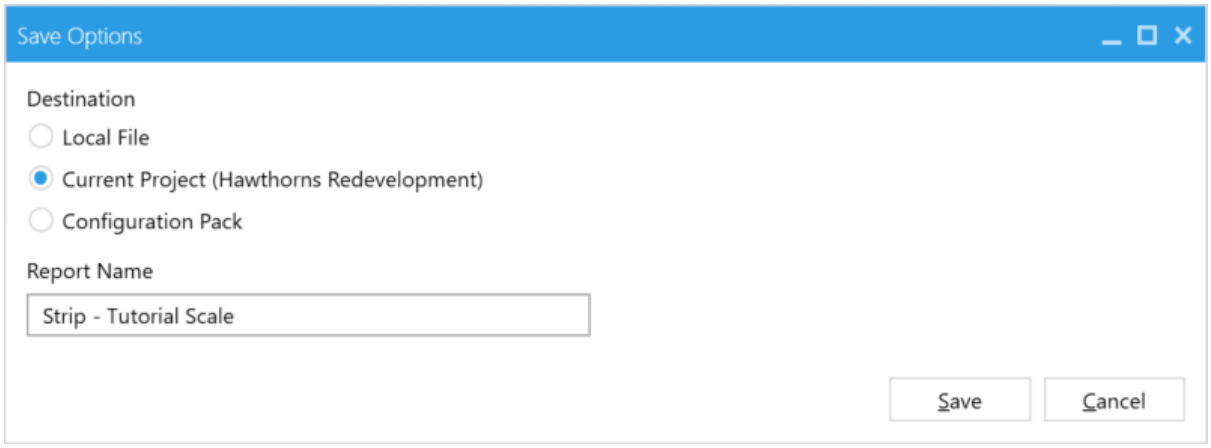
Change the following properties (settings not changed aren't listed);

- Group – Water Levels and Boring Drilling Progress By Time
- Depth – Depth water value
- Symbol – Water Strike Filled
- Scale X – 50
- Scale Y – 50

After setting these settings, preview the log template.



Save the template into either the configuration pack or the project to make it then be available when being used inside of a strip set.



Following this, close the template to return to the Templates window.

The finalised version of this output is available as Tutorial 3 - Scale Strip.hbt

3.5 Creating a Strip Set and adding a Strip

The next step in creating the master template is to add a Strip Set and add the Strip that was just created to it. This will then be used in the following steps of this tutorial.

Open the Master Template that was previously saved into the project or configuration pack.

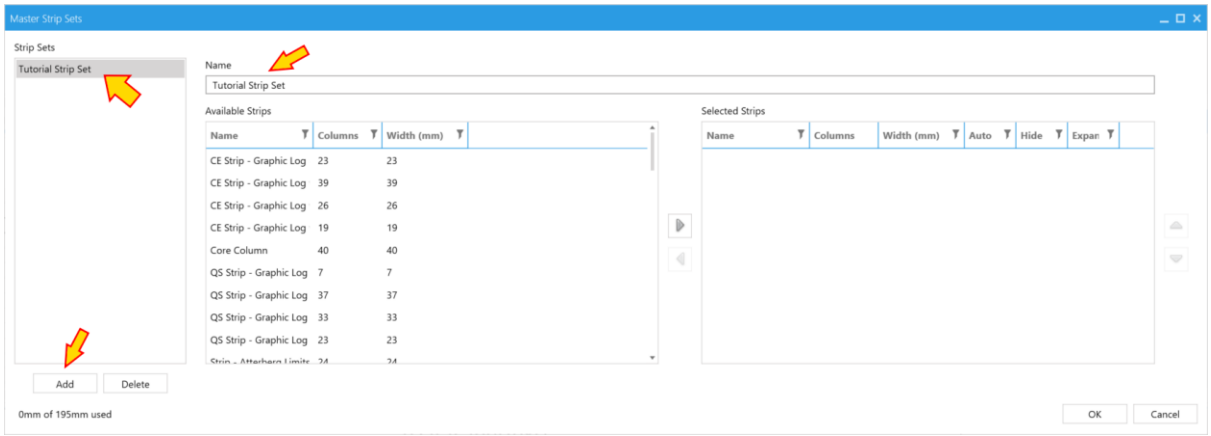
This template is available as Tutorial 3 - After Strip Set Column Set.hbt if the template from the previous step is not available.

Select the Strip Sets button from the ribbon.

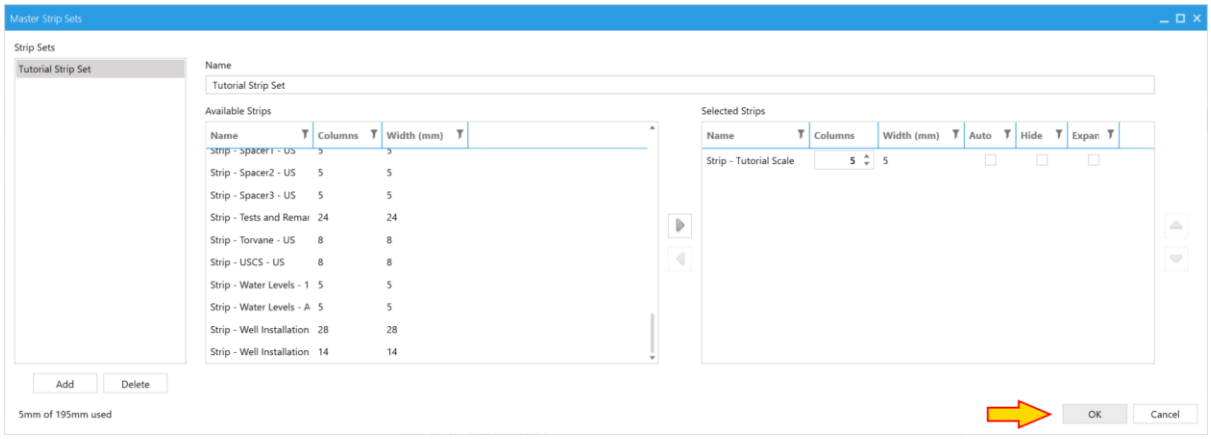
If the Strip Sets button is not available in the ribbon, then the template may have 'lost' this setting. Open the Depth Columns dialogue and reselect the 'Strip set column' then save. The Strip Sets button should then become available.

This can happen as no strip set was created in the previous steps of this tutorial and once a strip set has been added, this will be prevented from happening again.

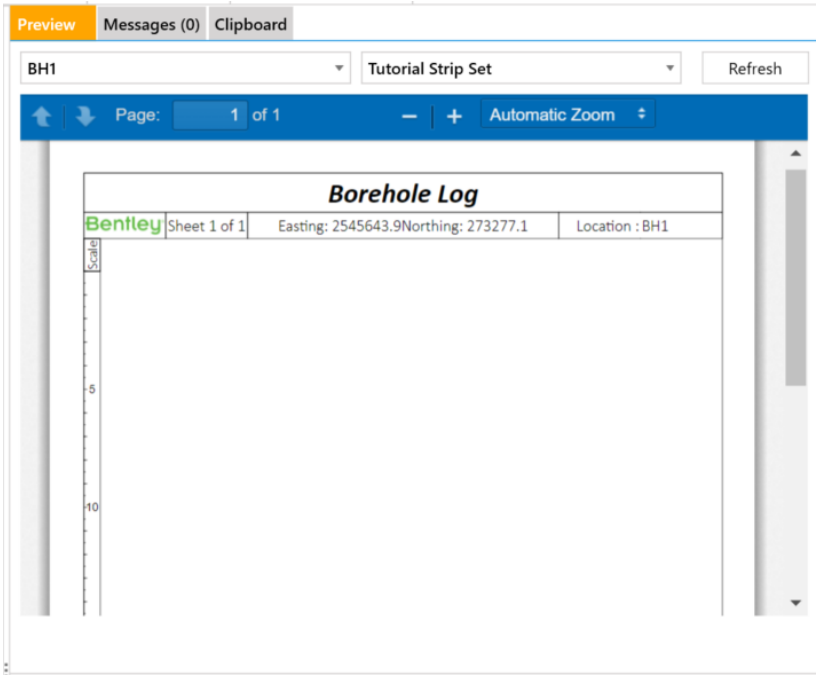
Select the Add button in the Master Strip Sets dialogue, then select the newly created Strip Set and change the name to a more convenient name. In this case, 'Tutorial Strip Set' will be used as the name.



Following this, search the list under Available Strips to find the template created in the previous step, then double click on this to change it so that it appears under Selected Strips. Select OK to save the template, confirming any changes.



Refresh the template preview and the template should now have 1 column in showing how the strip and strip set are now being applied.



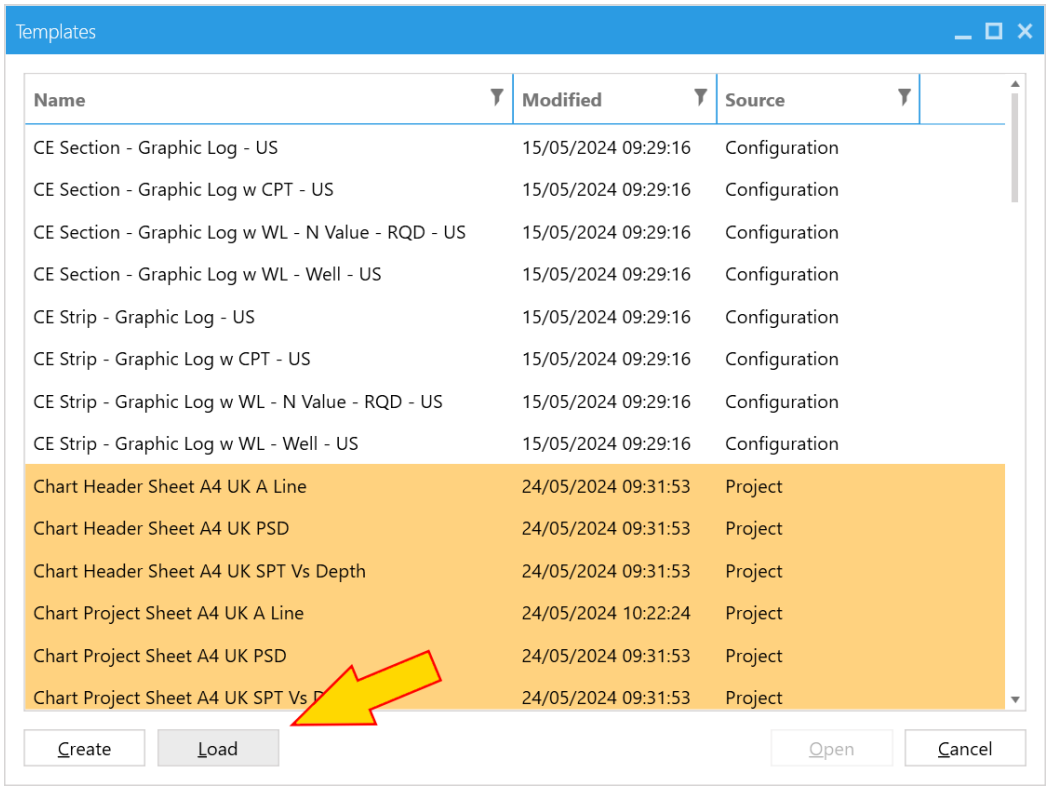
Following this, close the template (Save again), then return to the Templates window.

From this stage on, there will not be a saved output of the Master Template made available as a HBT file. This is because a HBT file does not contain the Strip Set properties. The rest of the strips in this tutorial will be made available as HBT files and the final combined output will be made available as a Professional HBC component that contains everything at the end of the tutorial.

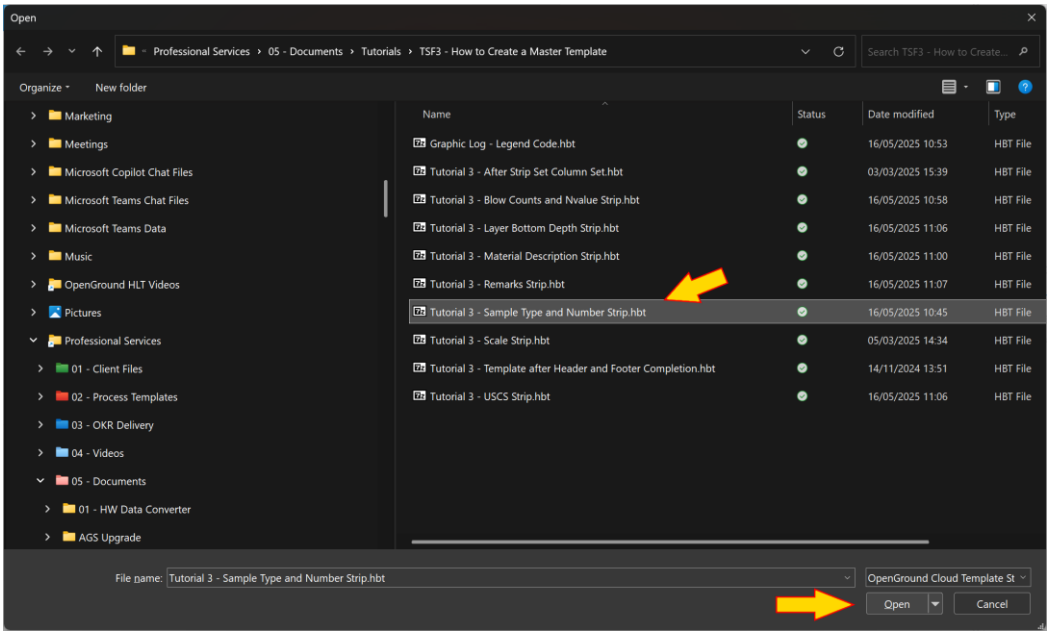
3.6 Saving an Externally provided Strip Template

One of the main advantages of using a Master Template is that it is possible to use pre-created strips and place them inside the template. It is also possible to use a strip in more than one template at a time, allowing for a large reduction in creating copies of the same outputs. In this stage of the tutorial, pre-made strips will be saved into the configuration pack for use with the Master Template.

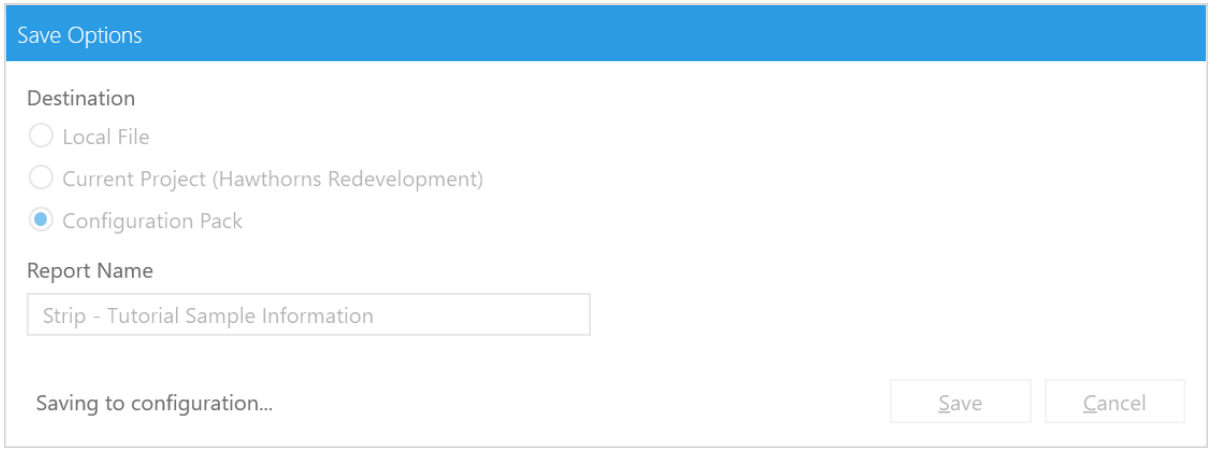
Return to the Templates window and then press the Load button.



Select the ‘Tutorial 3 – Same Type and Number Strip.hbt’ file included in the included files and select Open.



The strip will then open in Template Studio. As this strip template has already been setup and no further changes will be needed, simply select the Save button and Save the template as ‘Strip – Tutorial Sample Information’.



Following this, close the template (Save again), then return to the Templates window.

Repeat the above process for the following strips that are included in the included files;

File Name	Template Studio Name
Tutorial 3 – Blow Counts and Nvalue Strip	Strip – Tutorial SPT
Tutorial 3 - Layer Bottom Depth Strip	Strip – Tutorial Geology Base
Tutorial 3 - Material Description Strip	Strip – Tutorial Geology Description
Tutorial 3 - Remarks Strip	Strip – Tutorial Remarks
Tutorial 3 - USCS Strip	Strip – Tutorial USCS

Tutorial 3 - Graphic Log - Legend Code	Strip – Tutorial Legend Code

Once all of the above templates have been saved into the configuration pack, return to the Templates window.

3.7 Placing Multiple Strips into a Master Template and Handling Sizes

Now that all of the strips are in place, they can now be placed onto the Master Template. These strips can also be reused in other templates.

Open the Master Template that was previously saved into the project or configuration pack.

This template is available as Tutorial 3 - After Strip Set Column Set.hbt if the template from the previous step is not available.

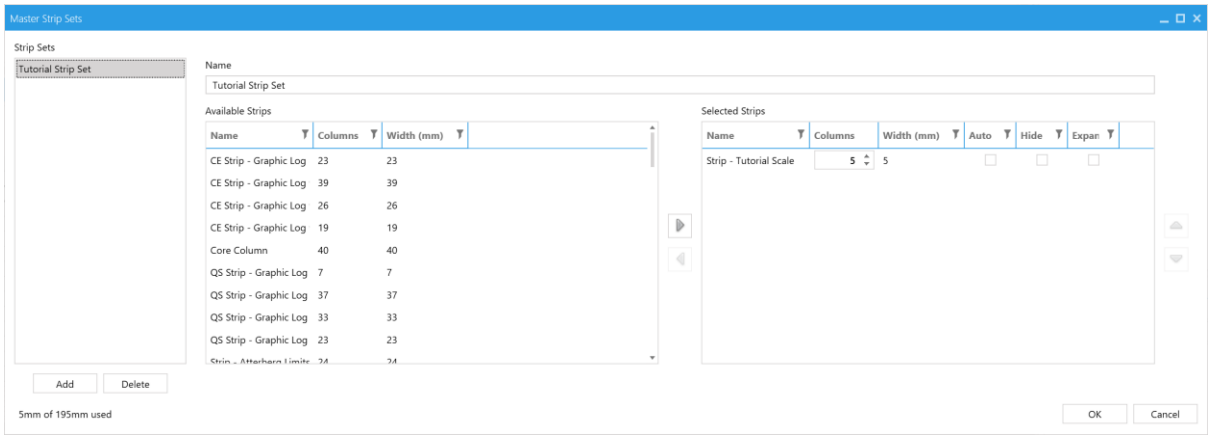
Select the Strip Sets button from the ribbon.

If the Strip Sets button is not available in the ribbon, then the template may have 'lost' this setting. Open the Depth Columns dialogue and reselect the 'Strip set column' then save. The Strip Sets button should then become available.

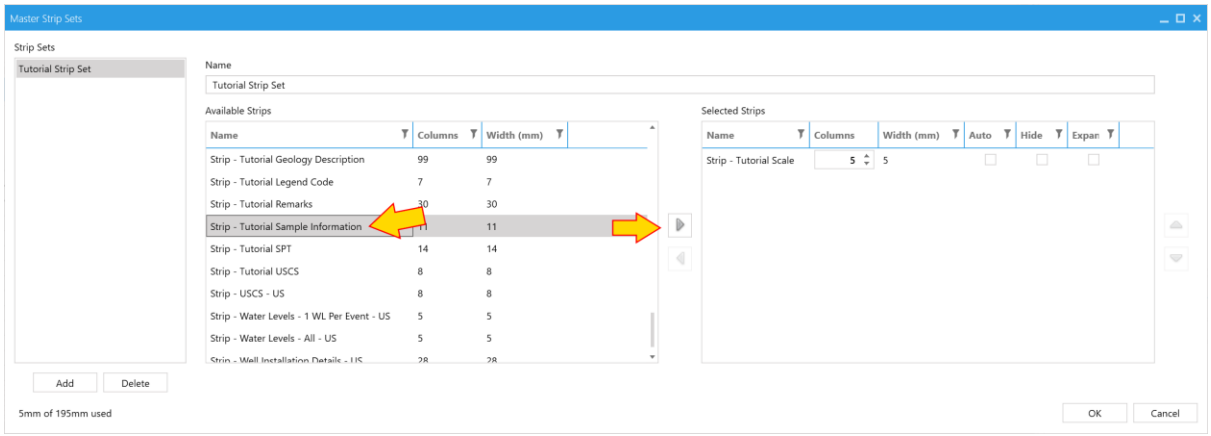
This can happen as no strip set was created in the previous steps of this tutorial and once a strip set has been added, this will be prevented from happening again.

Select the Tutorial Strip Set created before.

If the Strip Set isn't present, then a copy of the template was opened that was not saved with a Strip Set. Select the Add button in the Master Strip Sets dialogue, then select the newly created Strip Set and change the name to a more convenient name. In this case, 'Tutorial Strip Set' will be used as the name.



Select the 'Strip – Tutorial Sample Information' strip and then press the right arrow to add it to the strip set.

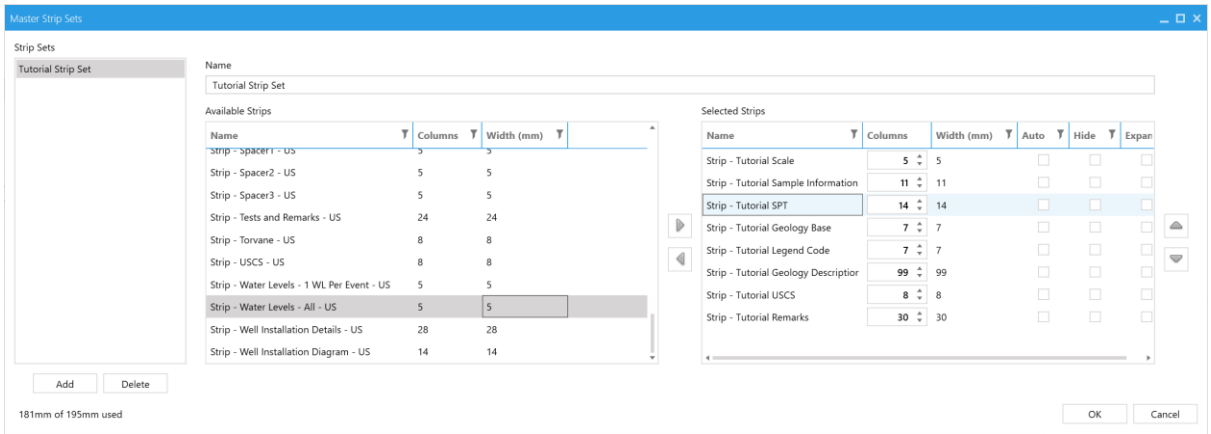


Repeat the above for the following strips, in the following order;

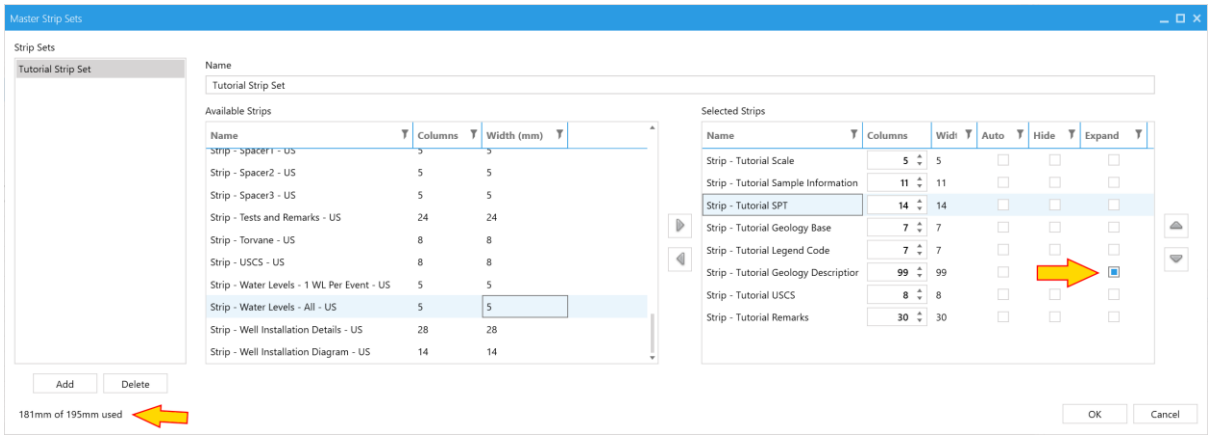
1. Strip – Tutorial SPT
2. Strip – Tutorial Geology Base
3. Strip – Tutorial Legend Code
4. Strip – Tutorial Geology Description
5. Strip – Tutorial USCS
6. Strip – Tutorial Remarks

If the strips are placed in the wrong order, it is possible to select the required strip and then use the up and down arrows on the far right of the window to move the currently selected strip up or down the order.

The outcome of this should lead to the window looking like the following;



Note that the value in the far bottom left of the window states that only 181mm of the 195mm has been used. This will mean that when the template is previewed, there would be a 14mm gap on the right hand side of the template. To rectify this, select the Expand option next to the 'Strip – Tutorial Geology Description' strip.

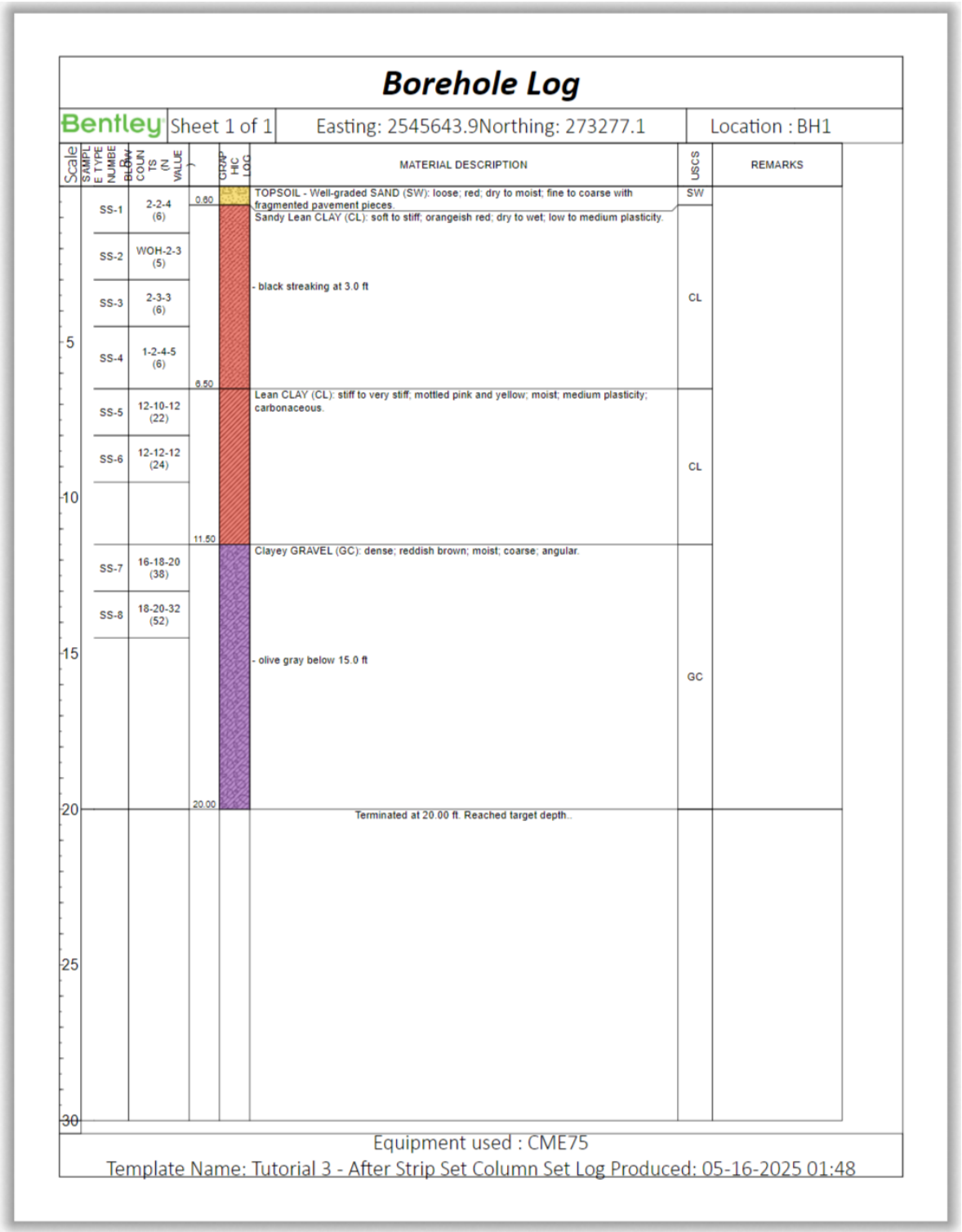


Although this will not update the value on the bottom left, the selected strip will automatically expand horizontally to fill out any empty space on a preview.

The Expand and Hide options are used in conjunction with Hide Options in Strip templates to automatically hide strip templates, and expand another strip template to fill the available space when a strip is hidden. This is not covered in this guide.

Save the template.

Preview the template to show the resulting strips on the Master Template.



Note that some of the template headers may not fit correctly in the space made available for this template. This has been done to show that although strips can be used in multiple templates, they will not always show correctly. The best way to resolve this would be to go into the strip templates and change the header information, either to use Shrink to Fit, or use a smaller font etc.

5. Final Template Output

Note that this is the point that the example file 'Tutorial 3 - Final Output.hbc' has been created. If comparing the final output with an output produced by a user, use this file.