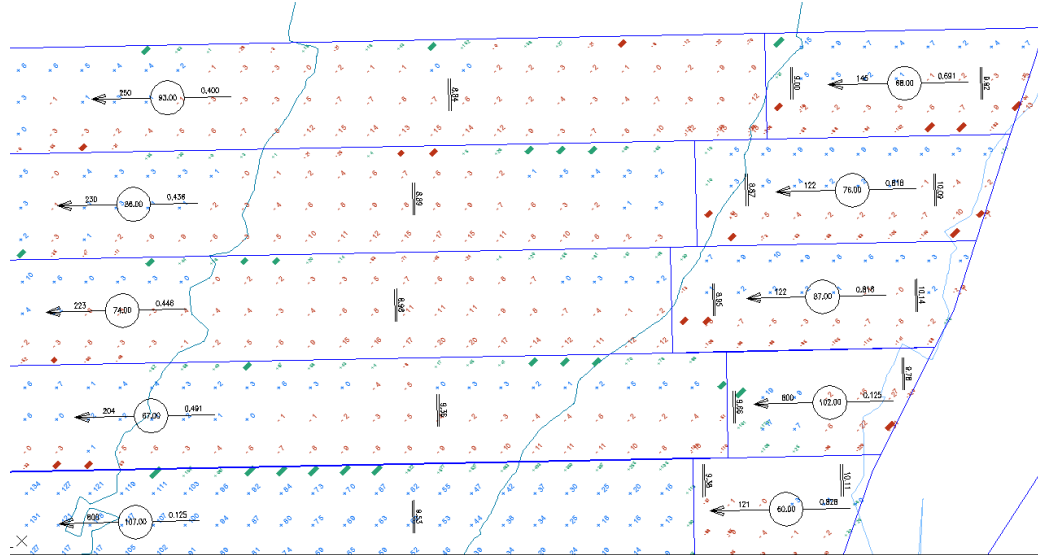


## Site Leveller 2012 - Settings & Styles

Site Leveller can be fully customised so that the outputs created by the software meet specific drafting standards. This document outlines the styles, blocks, and settings used by Site Leveller, so that users can create their own custom templates.



## AutoCAD Civil3D Template Setup

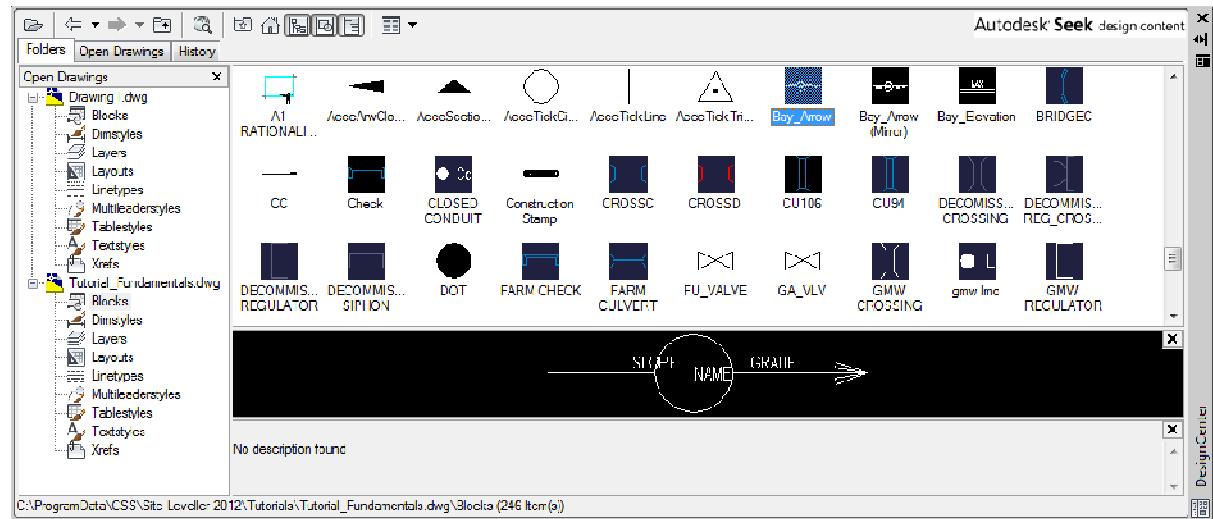
For Site Leveller objects such as Bay Arrows and Max/Min Labels, it is important that AutoCAD Blocks for these objects exist in the drawing. If a style or block does not exist in the drawing, Site Leveller will not create the object. Below is a table of components within Site Leveller that utilise styles or blocks within a drawing.

### Site Leveller Objects

Bay Arrows (Block)	As part of the Site Leveller Template, two blocks for the Bay Arrows exist. One is named <b>Bay_Arrow</b> and one <b>Bay_Arrow (mirror)</b> . Two blocks exist because the software can be setup to ensure that the bay arrows are rotated to be plan readable.
Max/Min Labels (Block)	As part of the Site Leveller Template, a block named <b>Bay_Elevation</b> exists. A second block can be used to ensure that these labels are also plan readable.
Tables (AutoCAD Table Style)	Site Leveller will use an AutoCAD Table Style to style the tables outputted. As part of the Site

	<p>Leveller template, a table style named <b>Site Leveller - Table</b> exists.</p>
Labels (AutoCAD Text Style)	<p>When setting up labels to be outputted by Site Leveller, AutoCAD Text Styles can be used to style the text. By default, Site Leveller text styles use the <b>Standard</b> text style.</p> <p><i><b>Note:</b> Do not use Annotative text styles. The software is unable to create text that is annotative.</i></p>

**AutoCAD Design Center** is a useful tool for moving blocks/styles from one drawing to another. Hold **CTRL-2** to open Design Center. If you are creating your own template, it is recommended you use Design Center to copy the required blocks/styles from the Site Leveller Drawing Template into your new template.



# Civil3D Objects

Civil3D Surface Styles used by Site Leveller are controlled in the Civil3D Outputs tab of Site Leveller Settings.

Surface Styles

Design Surface:

No Display

Volume Comp. Surface:

Levels Shaded

Final Surface:

No Display

On creation of Bays, Site Leveller will create a Civil3D Surface. The **Design Surface** style set is the Civil3D Surface Style that is applied to this surface.

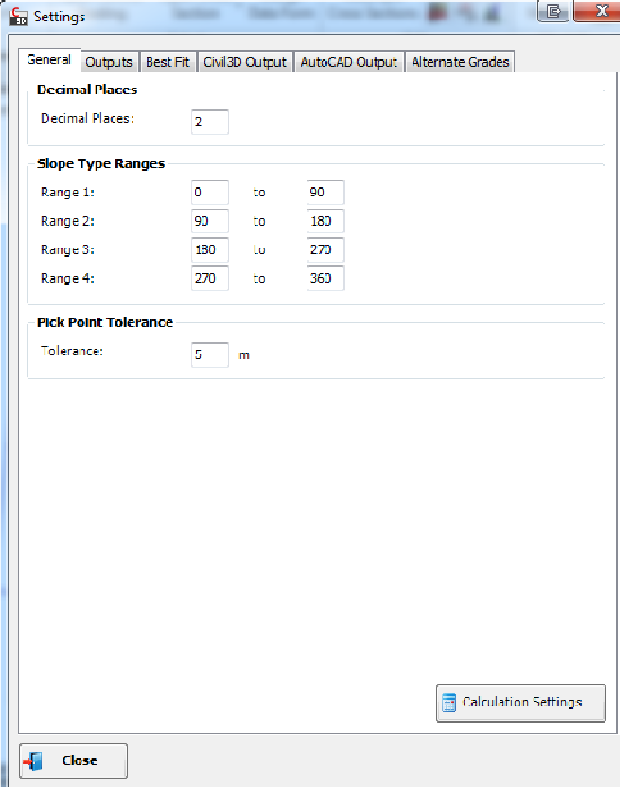
If the user specifies to create a Volume Comparison Surface, then the **Volume Comp. Surface** style set is the Civil3D Style applied to this surface on creation. A Civil3D Surface Style with the *Elevation*

Component turned ON should be used, so that areas outside the cut/fill triggers can be shaded. As part of the Site Leveller template, the *Levels Shaded* Surface Style is the default.

Users have the ability to create final surfaces, which are surfaces that combine multiple Bays. The **Final Surface** style set here will be the Civil3D Style applied to this type of surface on creation.

## Site Leveller Settings

### General Tab



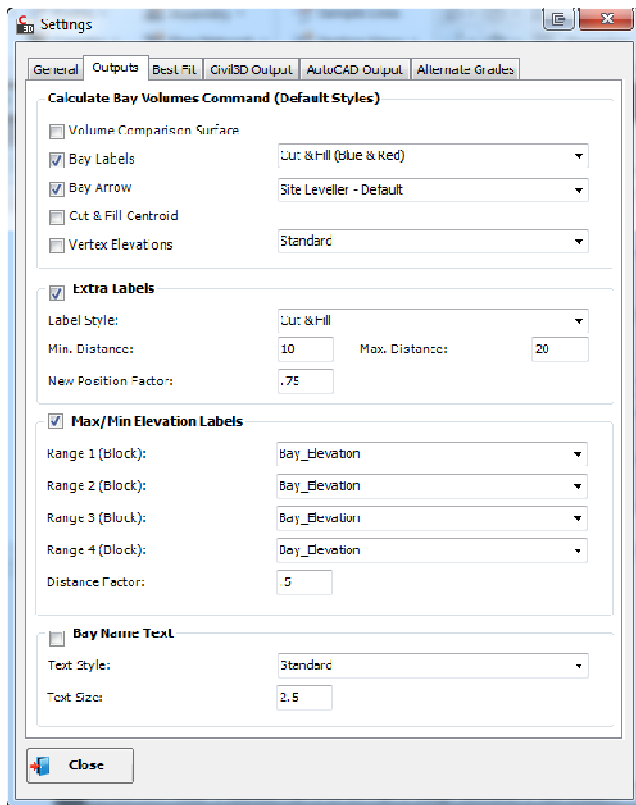
The screenshot shows the 'Settings' dialog box with the 'General' tab selected. The 'Decimal Places' field is set to 2. The 'Slope Type Ranges' section contains four rows: Range 1 (0 to 90), Range 2 (90 to 180), Range 3 (180 to 270), and Range 4 (270 to 360). The 'Pick Point Tolerance' field is set to 5 m. A 'Calculation Settings' button is located at the bottom right of the dialog box.

Range	Start	End
Range 1:	0	90
Range 2:	90	180
Range 3:	180	270
Range 4:	270	360

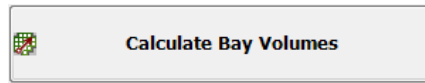
\* **Decimal Places** : Decimal places for values displayed by Site Leveller (not including final labelling) are set by this field.

\* **Slope Type Ranges**: This area allows the user to define slope ranges based on the bearing applied to a Bay. This allows the user to then assign a block to certain slope ranges to ensure plan readability. If an object is inserted at a bearing that falls into one of these ranges, then a specific block for that slope range will be used. Bay Arrows and Max/Min Labels use Slope Ranges to ensure plan readability.

## Outputs Tab

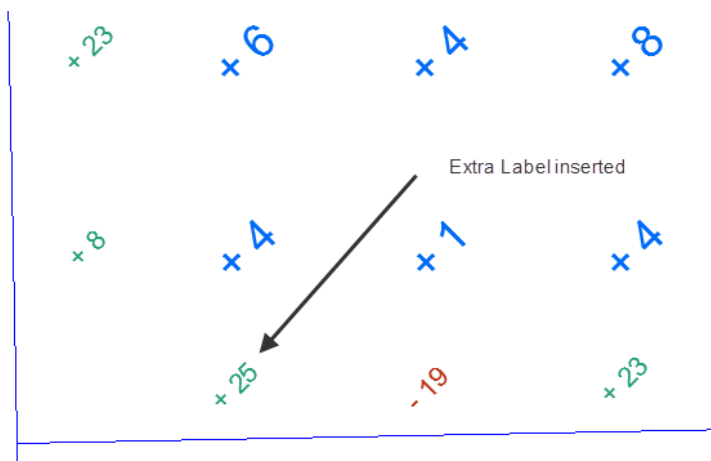


### \* Calculate Bay Volumes (Default Styles):



When the user runs the **Calculate Bay Volumes** command in the Create/Edit Bay Form, the user has the ability to select what objects are updated.

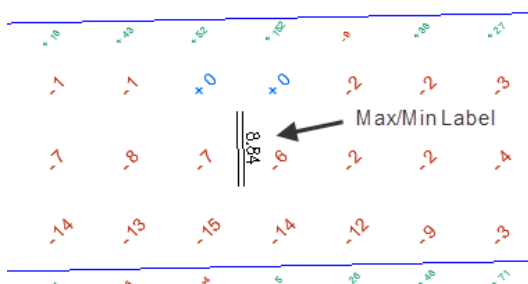
The styles that are assigned for Bay Arrows and Bay Labels are the default styles that are assigned to Bays when running the Parcel to Bay command.



**\* Extra Labels:** After inserting labels on to a Bay, the software will check the distance to the boundary of the Bay for each label inserted. If the distance to the boundary is within a specified length range (between the minimum and maximum distance specified), then the software will insert another label. The position of the new label is based on the New Position Factor. This is a

value between 0 - 1 - if the user specifies .5, then the label will be inserted halfway between the point and the boundary edge.

### \* Max/Min Elevation Labels



If the Max/Min Elevation Labels option is turned ON, the software will apply one elevation at the top section (maximum height) of the Bay and one elevation at the bottom section (minimum elevation) of the Bay. The style of these labels are

controlled using AutoCAD Blocks that contain an attribute. The software will insert the elevation value into the first attribute found.

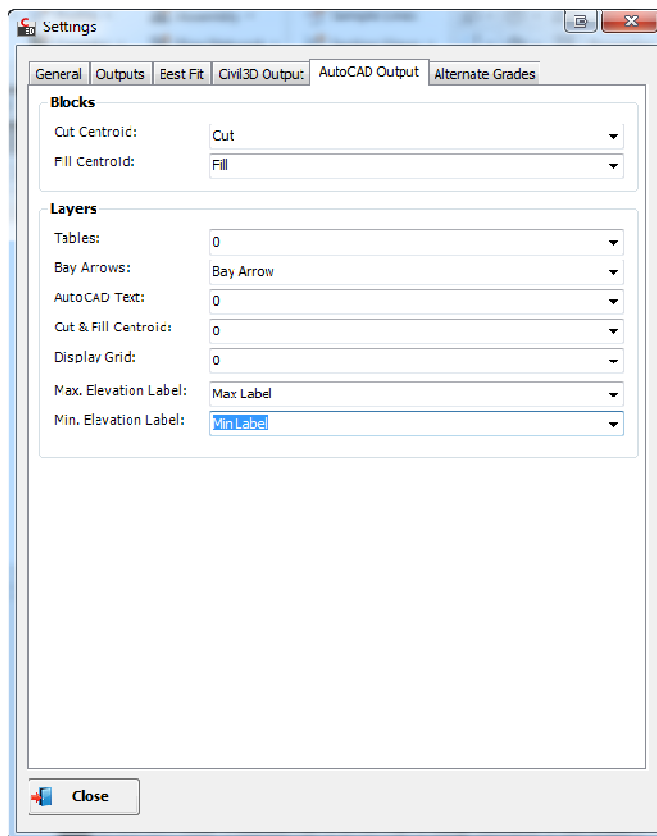
The position of these labels is based on the distance from the centre of the bay to the boundary. If the distance factor is set to .5, then the label will be placed at half the distance to the boundary.

These labels can also be setup to be plan readable. Based on the Slope Ranges that have been setup by the user, a specific block can be inserted to cater for the display of the labels at certain bearings.

#### \* Bay Name Text

If this option is selected, the software will place the name of the Bay at the centroid. The user has the ability to set the AutoCAD Text Style used and also the text height. This text won't be rotated to match the bearing applied on the Bay.

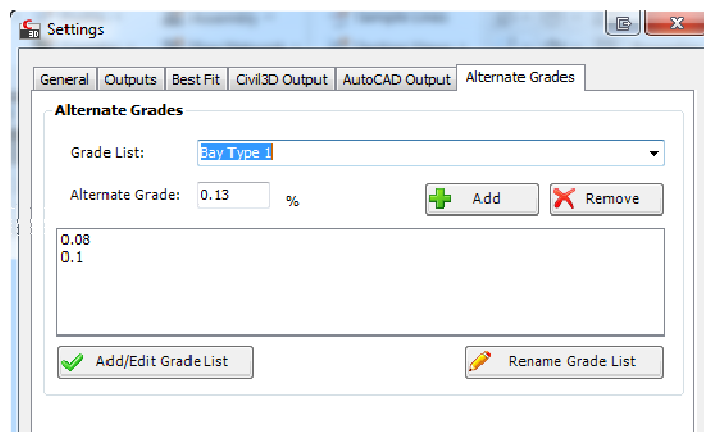
### AutoCAD Output Tab



In this tab, the user can specify an AutoCAD Layer that objects created by Site Leveller are placed in.

If the user has selected the option to show the cut/fill centroid on a Bay, then AutoCAD Blocks will be inserted onto the Bay at the cut/fill centroid locations.

## Alternate Grades Tab



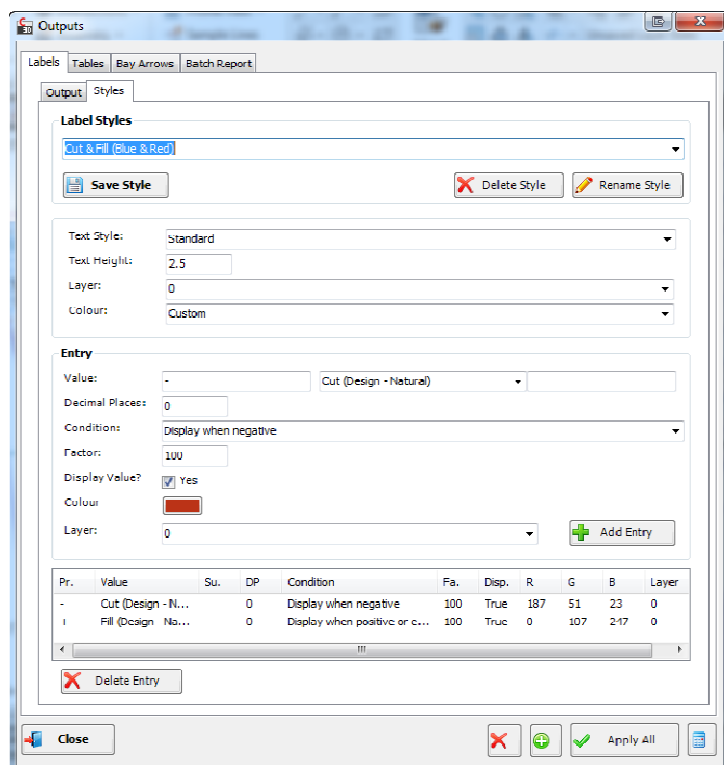
Alternate Grade Lists are setup to be used for when running a Batch Report. The Batch Report allows users to calculate multiple Bays at different grades. This data is displayed in a spreadsheet, which allows the user to analyse scenarios and apply selected results to the Bays

Alternate Grade Lists save the user inputting grades before running the

Batch Report. The user may choose to setup different grade lists based on the type of farm being designed.

## Site Leveller Styles

### Label Styles



Labels created by Site Leveller using the Label Output command are styled using Site Leveller Label Styles. Users have the ability to customise their own styles, choose which Bay values are inserted onto the Label, and select under what conditions the labels are inserted.

**\* Text Style:** This is the AutoCAD Text Style that all text components will be placed on.

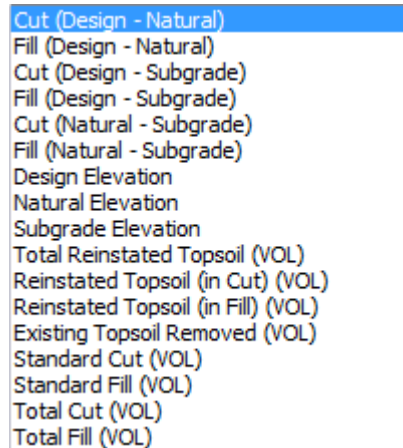
**\* Text Height:** This is the text height that all text components will be sized to.

**\*Layer / Colour:** If the user specifies

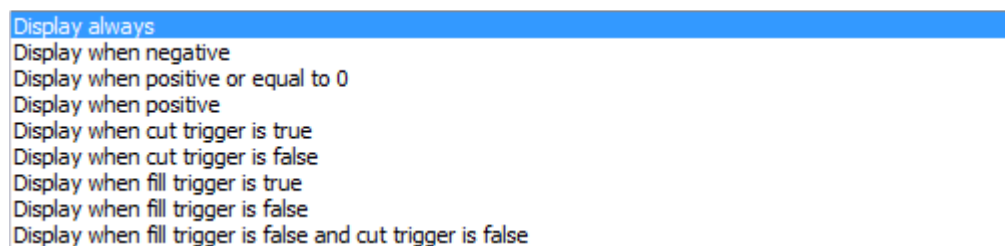
By Layer in the Colour option, then the text will use the colour assigned to the AutoCAD Layer selected.

Site Leveller Label Styles are created by adding text components to the label. Each text component is inserted when a certain condition is met. For example, a text component showing the cut value will be shown if the *Cut (Design - Natural)* property is negative (*Display when negative*).

Below is a list of all the Bay values that can be added to a Site Leveller Label...



There are conditions which determine whether or not the value selected above will be shown on the label. Conditions that the user can select are as follows...



The user has the ability to format the value. Below is a list of the options the user has for formatting a label component...

- \* **Decimal Places:** This is the number of decimal places the value will be formatted to.
- \* **Factor:** This is a multiplication factor on the value. Users can use the factor display a value in millimetres, hectares, etc.
- \* **Display Value:** If this option is ticked off, the value will not be shown on the label. Only the suffix and prefix values will be displayed. This option can be used if the user wants to only display a symbol, rather than the full value.
- \* **Colour:** This is the colour of the text component added.
- \* **Layer:** This is the AutoCAD Layer that the text component will be placed on.

## Table Styles

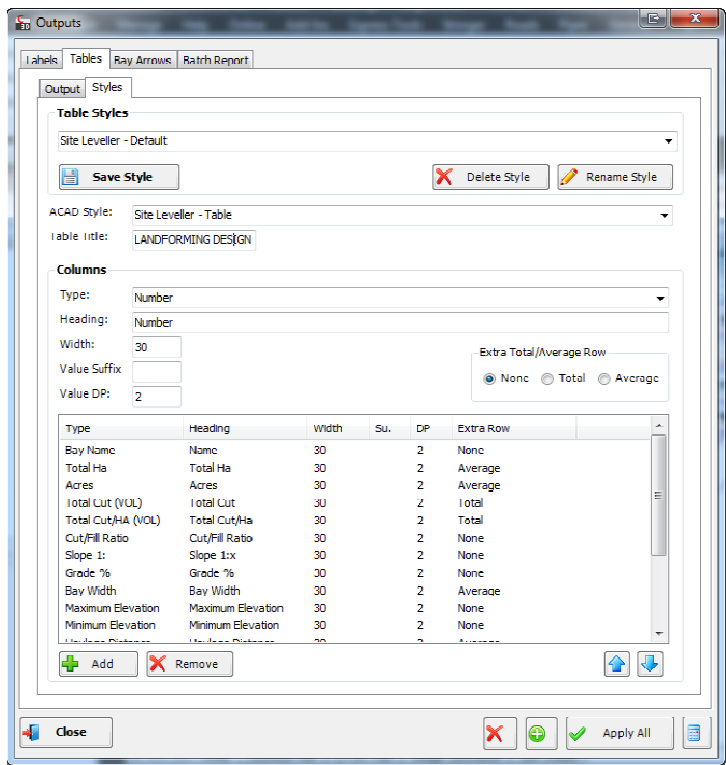


Table styles are used to control the display of data when outputting a Site Leveller table.

Users have the ability to control what data is displayed in the table by selecting the Site Leveller values displayed in each column. Each value can be formatted and a final row can be included on the table to display a total or average value for a specified column.

**\* ACAD Style:** AutoCAD Table Styles are used to control the display of the table. Properties such as font, colours, and borders are all controlled in the AutoCAD Table Style.

**\*Table Title:** This is the title of the table, which will be displayed in the first row of the table.

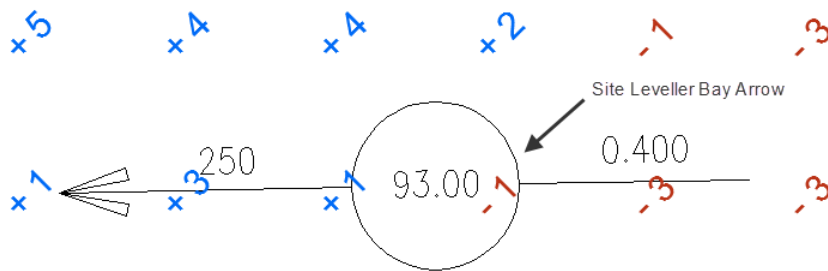
When creating a table style, the user adds columns to the table and selects a Site Leveller value to be displayed. The user can then specify a heading for the column along with the width of the column. Each value displayed can also include a suffix.

Below is a list of the Site Leveller values that can be added to the column...

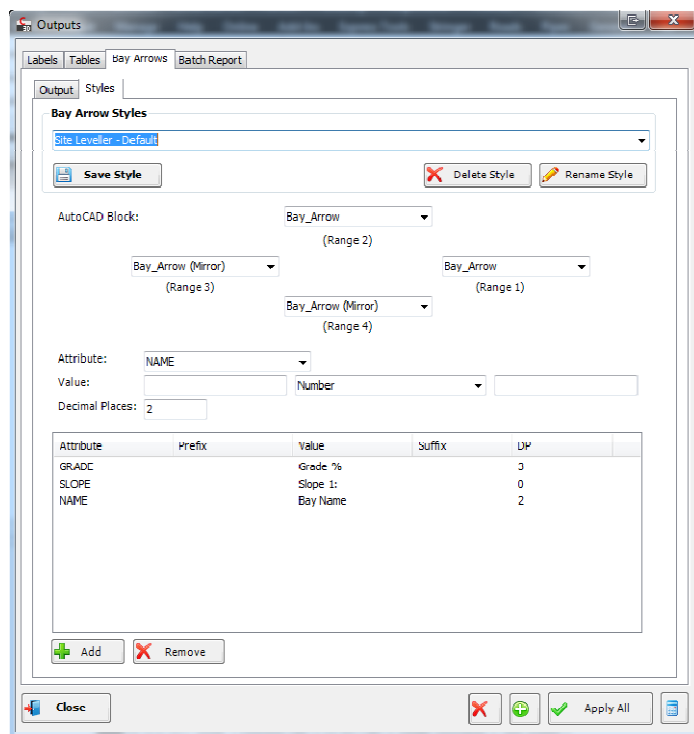




## Bay Arrow Styles



Bay arrows are displayed on the bay to show the direction and grade of the bay. In Site Leveller, bay

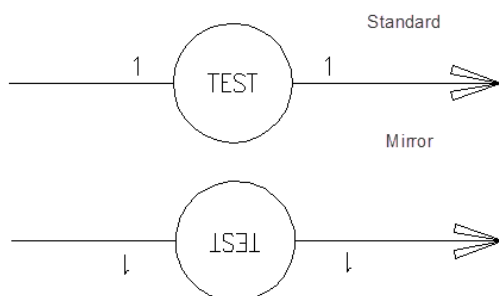


arrows are displayed using AutoCAD Blocks . These AutoCAD Blocks are setup with attributes and Site Leveller will use these attributes to display Bay information.

When creating a bay arrow, the first step is to create an AutoCAD Block containing attributes. To add a text attribute, run the command **ATTDEF** from the Command line.

Bay Arrows can be setup to be plan readable. Slope ranges can be setup by the user, which involves specifying an AutoCAD Block for each slope range. A slope range is determined by the bearing applied on the bay. As part of the default Site Leveller Bay Arrow

Style, two AutoCAD Blocks are used to ensure plan readability.



\* **Attribute/Value:** The attribute list contains a list of all available attributes in the AutoCAD Block. For each attribute the user selects a Site Leveller value, which will be displayed in the attribute. The value can be formatted to include a prefix or suffix and the number of decimal places can also be specified.