



Utility Conformance Report

Command Description

The Utility Conformance Report command is for reporting as-built strings against a surface and displaying grades, cover, and location. This command is ideal for reporting underground conduits and subsoils. Options for summary display and an option to visualize output in plan-view prior to creating report.

The screenshot shows the 'Utility Conformance Report' dialog box with the following sections and controls:

- Report** (selected), Details, Formatting, Visualization
- As-Built**
 - Line: [Empty text box] [Red square icon]
 - Surveyed line location: [Pipe Invert]
 - Points: Selected: 0 [Options]
 - Surveyed point location: [Pit Top]
- Design**
 - Mode: [Surface]
 - [Empty dropdown]
 - Measure perpendicular
 - Design offset: [0.000]
- Control**
 - [Empty text box] [Green square icon]
 - Restrict chainage
 - Start chainage: [Empty text box]
 - End chainage: [Empty text box]
- Tolerances**
 - Minimum cover: [0.600]
 - Maximum cover: [1.200]
 - Minimum grade: [0.50]
 - Maximum grade: [5.00]
- Reporting intervals**
 - Report at As-Built nodes
 - Report at regular Control interval
 - Control interval: [5.000]
- Display options**
 - Combine points and lines
 - Include As-Built grades
- Buttons: Create Report, Visualize, Close



At the top of the command pane there is the ability to **load** and **save** a tolerance setting file. Once you have populated the command with the appropriate tolerances and setting for a report you can save it in a file that can be reloaded in the future.

Report tab

As-Built Line	Select an as-built line string to use in the report (<i>optional</i>). Option to change the selection highlight colour. (<i>Highlight does not work on pipe strings</i>)
Line vertical offset	If a <i>line string</i> has been chosen - Specify a vertical adjustment to apply to the as-built line string. This is useful if you have located the invert but want to report to the top of pipe.
Surveyed line location	If a <i>line string</i> has been chosen – Enter a name into the text box relating to the surveyed location being reported, eg. <i>Top of Pipe</i>
Pipe Level	If a <i>Pipe string</i> has been chosen – Select the justification required for reporting.
As-Built Points	Select as-built points to use in the report (<i>optional</i>). These can be reported the same as the line or can be displayed separately for things like “Top of Pits”
Surveyed point location	Text box relating to the surveyed location of the points being reported, eg. <i>Top of Pit</i>
Design Mode	Choose the Mode to use - Surface or Strings to conform the as-built against.
Surface	Choose a surface from the list.
Strings	This will create a surface projected between the left and right strings. Control - Select a line to use to calculate perpendicular to, between the left and right string. Left – Select the left string to use for levels Right – Select the right string to use for levels
Measure perpendicular	Check if you want the points to be tested perpendicular to the Design.
Design offset	Enter the level distance from the design. This is vertical or perpendicular depending on the previous setting.
Control	Select the control alignment to which you want to report chainage, offset and direction. Option to change the selection highlight colour. (<i>Must have</i>)
Restrict chainage <i>Start station</i> <i>End station</i>	Check if you want chainages to be restricted between the Start chainage and End chainage you specify.
Tolerances <i>Minimum Cover</i> <i>Maximum Cover</i> <i>Minimum Grade</i> <i>Maximum Grade</i>	Enter the minimum and maximum tolerance values to use to report the as-built against the surface and itself.
Report As-Built nodes	Check if you want to report only the nodes on the as-built line string. Note: <i>You must have one of these reporting interval options selected if using an as-built line. If neither “interval” is selected it will only report the points.</i>
Report at regular Control interval	Check if you want to report at regular intervals you specify in Control interval along the as-built line string rather than or as well as at nodes.
Combine Points and lines	Check this if you want to include the points selected with the as-built line into the same vertical summary and report against the cover tolerances. If no Reporting Intervals are selected above, then use this to report points only. If unchecked points and lines are reported separately.
Include As-built Grades	Check this if you want to display as-built grades in the report.



Details tab

Title	Enter a title for the report (for example, the project name).
Custom image file	Select a “png” or “bmp” image file to be added to the top right corner of the report. E.g., company Logo or project image. This only appears if you have a Title filled out.
Description	Enter a description for the report.
Reference number	Enter a survey job reference number.
Author	Enter the name of the report’s author.
Custom Header	Enter a user defined heading
Custom Text	Enter a user defined text to go beside the Custom header
Pipe/Conduit diameter	Enter a value for the utility size to display in the report

Formatting tab

Colors	Choose the colours to be used in the Excel Report. <i>Out of tolerance</i> <i>Missing data</i> <i>Summary background</i> <i>Title background</i> Reset to Defaults
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Visualization tab

Create visualization layers	Check if you want conformance information to be displayed on layers in TBC.
Layer prefix	Enter a prefix to add to layer names.
Text Height	Select the height of the text to be displayed on screen.
Text Style	Select the text style for the text displayed on screen.
Gap	This is the distance in metres that the insertion point of the text will be right of the node it is created for.
Clear visualization layers	Check if you want the layers to be cleared before adding new data.
Include data prefix	Check if you want to include the “Data” type as a prefix to the text on screen.
Data	Check the boxes for the data you need to see on screen. Lines: Cover – level difference from Line to surface As-built Grade – grades between reported points Survey level – As-built survey level of the position on line Points: Easting – Easting of point Northing – Northing of point Cover – level difference from point to surface As-Built grade – grades between reported points only when no line grades are reported Survey level – As-built survey level of the point