

## Reporting Survey Point Code Information

This example will demonstrate how to display point code information (offset, elevation, coordinates etc.) from surveyed cross sections.

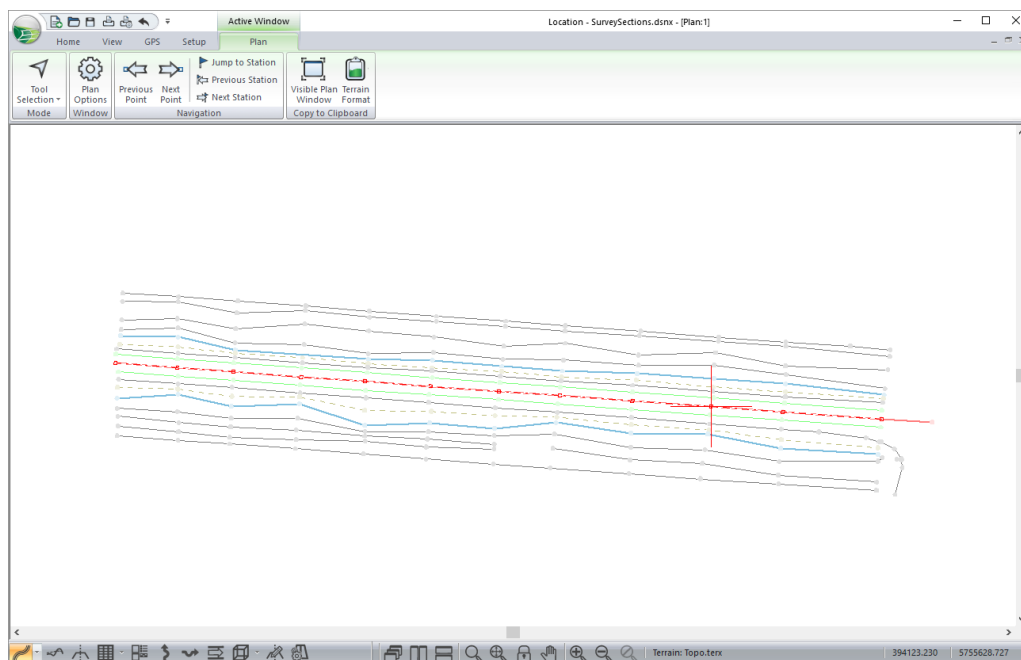


*Figure 1: Cross Section Point Codes*

Prior to starting this example, a TIN surface which includes the surveyed points should be created. Each of the feature lines created from the survey should be named appropriately. A new Location design should be created using the TIN surface and the centerline feature as the initial alignment.

## Creating Reference Features

1. Open the Location module and choose menu *File / Open, SurveySections.dsnx*.



*Figure 2: Survey Sections Location Design.*

2. Choose menu Setup | Location Setup. Choose the *Alignment* tab and click on *Features* button to activate the *Reference Features* dialog (as shown below).
3. Click on *RF 1* and check “Use as reference feature”. In the Feature group box, click on the *Browse* button and select “RRELN-11”. Press OK.

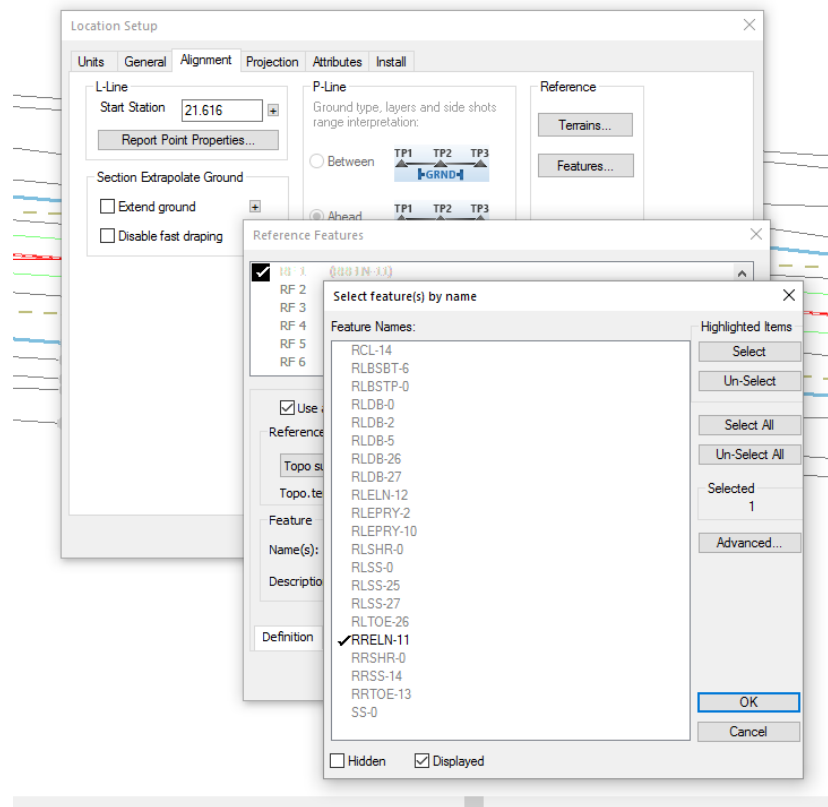


Figure 3: Creating a Reference Feature

4. Click on *RF 2* and check “Use as reference feature”. In the Feature group box click on the *Browse* button and select “RRSHR-0”. Press OK.
5. Repeat step 4 and add reference feature for “RRTOE-13”. When complete press OK twice to remain to the main screen.

## Setting Up the Cross Section Template

The next step is to assign a *XSEC – Cross Section Points* template to create template point codes for reporting.

6. From the *Home* tab choose *Templates*. Click on + button beside *XSEC – Cross Section Points* template. Click on the *Point codes on surface (beta) – right* component. Click on *Properties*

Template Component Properties

Class: SLPS Description: Point codes on surface (beta).

☒ Stock Component ☐ Process Up ☒ Show advanced parameters

Places one or more point codes on a surface (beta).

Item	Default	Override	Uni
NPointCodes	3.0		
OffsetX1	1.0		m.
OffsetX2	2.0		m.
OffsetX3	3.0		m.
OffsetX4	4.0		m.

Value: 3.0

Number of point codes (must be between 1 and 12)

Defaults Overrides

User created or modified Oct 12, 2017

Advanced... Connection... OK Cancel

Figure 4: Template Component Properties

NOTE: The Point Codes on Surface Component is available in the standard E-library (Version 8 or higher). It creates template point codes (PC1, PC2, PC3...) on a surface corresponding to fixed offsets or reference features.

7. Set the component properties as follows:

*NPointCodes* = 3

*OffsetX1* = Reference Feature 1 (RRELN)

*OffsetX2* = Reference Feature 2 (RRSHR)

*OffsetX3* = Reference Feature 3 (RRTOE)

8. Press OK to return to the main screen. Click on the  to view the sections.

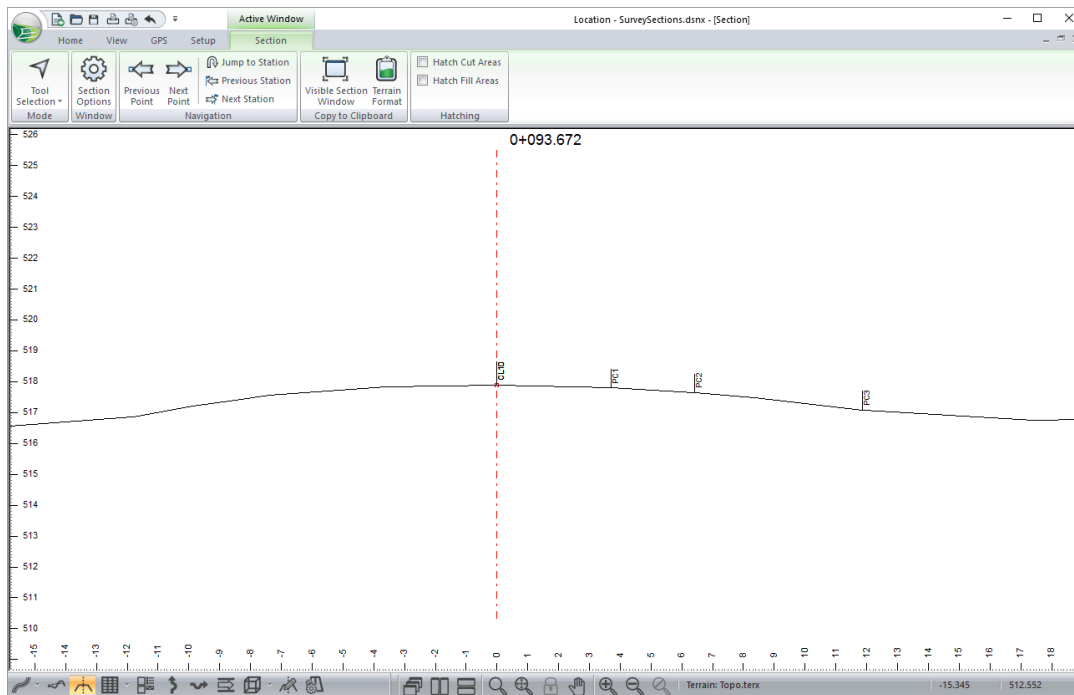



Figure 6: Section View Showing Point Codes.

## Creating A Point Code Report

9. Click on the Data Window icon  at the bottom of the screen to activate a Data Window.
10. Right click in the Data window and choose *Data Option*. Click on *Columns* to activate the *Data Window Fields* dialog.

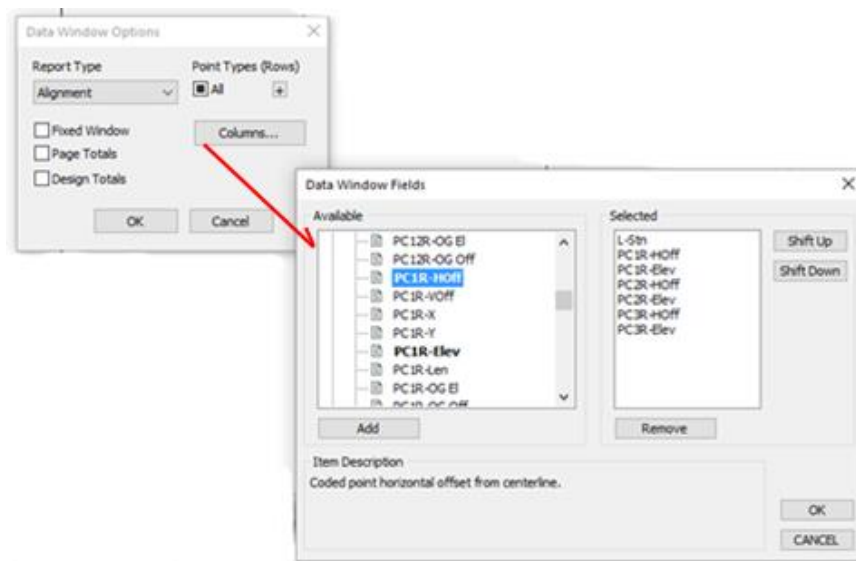


Figure 7: Data Window Fields Dialog

11. Add fields L-Stn from the L-line folder. In the Template Codes folder add PC1R-Hoff, PC1R-Elev, PC2R-Hoff, PC2R-Elev, PC3R-Hoff, and PC3R-Elev.

NOTE: PC1R-Hoff corresponds to the horizontal offset for point code PC1. PC2R-Elev corresponds to the elevation for point code PC1

12. Press OK and the Data Window report should appear as shown below.

L-Stn	PC1R-Hoff (N/A)	PC1R-Elev (N/A)	PC2R-Hoff (N/A)	PC2R-Elev (N/A)	PC3R-Hoff (N/A)	PC3R-Elev (N/A)
0+021.616	3.603	517.647	6.901	517.454	10.244	516.927
0+063.223	3.597	517.758	6.317	517.596	11.812	516.943
0+093.672	3.698	517.798	6.417	517.648	11.851	517.083
0+126.949	3.612	517.953	6.538	517.786	11.582	517.047
0+157.682	3.656	518.034	6.224	517.873	10.442	517.307
0+183.482	3.624	518.010	6.387	517.871	10.579	517.376
0+212.344	3.683	517.984	6.512	517.822	10.917	517.265
0+240.157	3.643	517.981	5.852	517.852	9.313	517.338
0+267.145	3.753	517.964	5.997	517.829	9.355	517.277
0+295.792	3.690	517.903	6.024	517.769	9.172	517.207
0+319.506	3.642	517.897	6.026	517.805	12.698	516.694
0+345.647	3.709	517.834	2.000	517.869	3.000	517.848

Figure 8: Offset and Elevation Report

13. File / Close. Do not save changes.