**Overview:** Use the NRCS Points to Profile tool to create a profile and profile view from surveyed points without the need to create a surface. The Points to Profile tool creates an alignment and a profile between selected points. The created profile is static. The user can create a profile view for displaying the profile.

**Software:** AutoCAD Civil 3D 2016, Civil 3D Workspace, NRCS C3D 2016 template

**Notation:**

<table>
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<th>Button to Press</th>
<th>Displayed Text</th>
<th>Icon</th>
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**Prerequisite**

Follow the instructions for *Importing Survey Coordinate Point Files.*

[If you want to prevent a surface from being created, checkmark Add Points to Point Group and select the EX – Not For Surface point group when importing points.]

**Create Alignment and Profile**

1. Click NRCS... NRCS C3D... Points to Profile
2. Leave Unchecked Create 3D Polyline only
3. Click Select Multiple Points
4. Click the Pick button.
5. Select points in CAD. Press Enter when done with the CAD selection.
6. Input an Alignment name. E.g {Pipeline Main 1}
7. Input the Alignment layer as {1.C3D.Alin.Pipeline}
8. Input the Start Station value for beginning the alignment stationing E.g. {1000}
9. Checkmark Create Profile
10. Click Create. Click OK

Note: Editing the alignment vertices will NOT update the profile.

**Create Profile Views**

1) Decide on the horizontal scale that you want for the Profile Views and set the drawing annotation Scale.
   Based on the horizontal scale, here is the reach length that fits into a viewport. 700’ (1”=50’), 1400’ (1”=100’), 2800’ (1”=200’)
2) Click Home... Profile & Section Views... Create Multiple Profile Views...
   (or use Create Profile View if you need only one profile view.)
3) Set Select alignment correctly E.g. (Pipeline Main 1)
4) Set the Profile View style to the Horizontal/Vertical scaling desired. E.g. (A50Hx5V)
   Click Next
5) Select Automatic and input the length of each view. E.g (700) for a 1”=50’ scale.
6) Click Next
7) Select Automatic. Click Next
8) Set the Style column to (Original Ground).
9) **Set the Labels** column for the planned waterway to *Finished*. This places elevations every 100’ and grades on each segment along the profile.

10) Click **Create Profile Views**

11) **Click** a location in the drawing for the profiles to appear.

12) To edit the Profile labels click a label and click **Labels… Modify… Edit Label Group**. **Increments** can be changed for the **Major Stations**. **Weeding** can be changed for the **Lines – Grade (%)**. Click **Ok**.

13) Individual profile labels can be removed by using **Ctrl+Click** to select one profile label in the Profile Grid view. Then press **Delete**.

Create a named view in order to find the Profile View easily later

14) **Zoom** to a full view of the profile view that you just created.

15) **Click** the View Controls… **View Manager… New**

16) **Input** a View Name. E.g {**Pipeline Main 1- Profile**}

17) On the **View Properties** tab **Uncheck** mark **Save layer snapshot with view**.

18) **Click** **Ok**.

Refer to the document **Profiles & Sections** for labeling and modifying profile views. Refer to the document **Profiles Creation & Editing** for creating planned profiles.