

### Step 3: Obtaining Station Numbers and Coordinates from CADD

Greg Dreaper

This process requires AutoCAD, Microsoft Excel, and ArcGIS. The Mobile District has developed LSP routines in AutoCAD to extract the station number, layer name, and xy coordinates. This Attached is an Excel spreadsheet developed a clean text file to import into ArcGIS.

Before getting start, open Windows Explorer and make sure that there is a TEMP file on the C drive. If not, to create a new folder

1. Open Windows Explorer
2. Click the C drive or folder in which you want to create a new folder.
3. On the FILE menu, point to NEW, and then click FOLDER.
4. Type a name for the new folder, and then press ENTER.

1. Open AutoCAD, and open the cleaned Master Channel file.

(Note: The Points to ASCII LSP will generate a text file base on the active layer in the CADD file. Since all the station labels are going to be on the unique two-channel code layer for each channel with in the Master drawing, the Point to ASCII LSP can be run on each two-character layer to extract the station labels for each channel.)

2. From the Layer drop down menu, make the first, 2-channel code layer



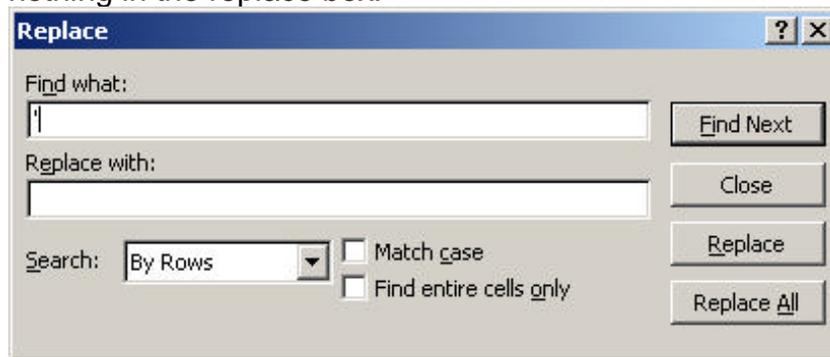
3. Hit the Points to ASCII button, . Then check the C:\temp folder to make sure that a text file with that two-character name has been added to the temp folder.
4. Complete this process for each individual channel layer. And then close AutoCAD.

### Importing the Channel Station Information into Microsoft EXCEL

An EXCEL file is provided with these instructions. The file contains three spreadsheets, Raw Data, Channel Data, and Export to Arcview. The most important of these sheets is the Channel data spreadsheet. This sheet

contains formulas that allow for the cleaning of the channel text file exported from AutoCAD.

1. Open Excel, and open the Channel\_Data\_Template. Click on the RAW DATA TAB on the bottom of the page.
2. Click the file OPEN button, . From the Open Dialog box under the FILE OF TYPE menu, select ALL. Browse to the Channel text files that were exported from AUTACAD, and Open the FIRST File.
3. From the Text Import Wizard, select DELIMITED and click NEXT. Check COMMA and click FINISH.
4. From the Edit menu, choose WINDOW, select ARRANGE. From the Arrange dialog box, select TILE and click OK.
5. If the Station numbers import with a single tick mark beside them (located in column C), they need to be deleted. From the main menu, Select REPLACE, From the Find What box type the single tick mark, and type nothing in the replace box.



Then click

REPLACE ALL.

\*The Goal is to migrate all of the information from the text file to the Channel Data template's, RAW DATA spreadsheet. There should be four columns of data; Easting Northing, Station Numbers, and the Two-Character Channel Code

6. In the text file, pick the first cell (A1), and then press CTRL+SHIFT+END. This should highlight tall of the information in the file. From the MAIN menu, click EDIT and select COPY.
  - \* If more than 1 channel data set is to be copied/paste, scroll to the bottom of the previous copied data set and paste the second one directly underneath it.
7. In the RAW DATA spreadsheet, Click on the First empty cell, then from the MAIN menu, click EDIT and select PASTE. Finally, CLOSE the text file.
8. Repeat steps, 2 – 7, importing all of the channel text files into the RAW DATA table.
9. From the Raw Table, Holding the left mouse button down, drag the mouse from the top of the first two columns to the bottom, selecting all of them. From the MAIN menu, click EDIT and select COPY.
10. Selecting the Channel Data spreadsheet, select the first cell under the Column EASTING. From the MAIN menu, click EDIT and select PASTE.

11. From the Raw Table, Holding the left mouse button down, drag the mouse from the top of the third column to the bottom, selecting all of it. From the MAIN menu, click EDIT and select COPY
12. Selecting the Channel Data spreadsheet, select the first cell under the Column RAW STATIONING. From the MAIN menu, click EDIT and select PASTE.
13. From the Raw Table, Holding the left mouse button down, drag the mouse from the top of the Fourth column to the bottom, selecting all of it. From the MAIN menu, click EDIT and select COPY
14. Selecting the Channel Data spreadsheet, select the first cell under the Column CHANNEL\_CO. From the MAIN menu, click EDIT and select PASTE.
15. Highlight the row of cells from G2 through M2. Hold the mouse over the bottom right corner of the last highlighted cell until the mouse becomes a black crosshair. Hold the left button of the mouse down and drag to the end of all of the highlighted columns.
16. From the Channel Data spreadsheet, holding the left mouse button down, drag the mouse from the top of the PASTE VALUE column to the bottom, selecting all of it. From the MAIN menu, click EDIT and select COPY
17. Select the first cell under the Column STATIONING. From the MAIN menu, click EDIT and select PASTE SPECIAL. From the Paste Special dialog box, select VALUE and hit OK.
18. Holding the left mouse button down, drag the mouse from the top of the columns A, B, C, and D to the bottom, selecting all of them. From the MAIN menu, click EDIT and select COPY.
19. At the bottom of Excel, Select the tab "Export to ArcView." Click the A2 cell and From the Main Menu select EDIT PASTE.
20. Under the DEPTH column, type in "0" for depth. Highlight the cell, move the mouse over the bottom right-hand side of the cell, until crosshair appears. Once the crosshair appears, hold the left mouse button down and drag down to the last value in the spreadsheet. This will copy 0 to all the cells in the depth column.
21. From the Main Menu, Select FILE and click SAVE AS. Save the file out as a comma delimited text file. (\*.CSV).  
\* Save the file in the temp folder on your C drive.
22. Open Window Explorer, navigate to the saved csv file, highlight the file, pres F2 on the keyboard, and rename the file to a \*.txt extension.
23. Open ArcGIS (ArcMap), Click the add theme button , navigate to the text file and click OK.
24. From the Main menu, click View and select DATA FRAME PROPERTIES. Select the Coordinate System tab, under the Select Coordinate System box; select the coordinate system of the point data and click OK.
25. Right click on the table, and select DISPLAY XY DATA. In the Display XY Data dialog box, under the X Field, select EASTING and under the Y Field, select NORHTING. Click OK.

26. Right click on the Events theme built by step 24, and highlight Data, and select EXPORT DATA.
27. Under the Export Data Dialog box, in the Export box select ALL FEATURES, select AUSE THE SAME COODINATE SYSTEM AS DATA FRAME, and specify a location. Name the file "Master Channel Points." Click OK.