Topic **##**: How to Import Field Data Using a CSV File in ORD

About this Write Up

We will be outlining a few workflows to aid in importing different file formats of survey data into ORD. Multiple file types can be imported. This workflow is going to concentrate on the CSV file format, which has been a Bentley file format for many years. KYTC requires this file as one of our deliverables when a survey is completed.

ORD Version

This workflow is intended for OpenRoads Designer version 10.08.00.88 (2020 R2). The directions outlined below may respond differently in other versions of the Program.

Contact Information

This workflow was produced by John Sudduth. Please send all questions, errors or overall complaints to <u>KYTCCaddSupport@ky.gov</u> or call 502-564-3280.

Getting Started

Once you are in the ORD software, be sure you are in the "Survey Workflow" as seen in the pull down menu in the upper left corner. The first thing we will need to do is to create a new field book file. There are two ways to import field data into ORD from a CSV file; we will cover both methods.

It is of critical importance that you create a new DGN file from the KYTC_ORD_3D.dgn seed file before you import your Field Book. This seed file is located in the ORD workspace folders on your local install.

The field book will contain all the point and line data from the imported CSV file. For this example, we will call the new Field Book: US25. First thing to do is click on the Field Book Tab. Next, click on the "New Field Book" icon, shown below.



Key "US25" into the prompt below and then hit Enter. The blue text will appear as well; you can click the left button on the mouse, and the box will go away. You will now have a field book called US25.





Step 1: Click on the Text Wizard folder as shown above. You will notice that this folder is part of the IMPORT Group of commands.

Step 2: Pick the US25 field book and a screen will appear for you to pick the file you want to import. Click on the pull down arrow to set the files of type to All Files (*.*).

~	US_25.csv	2/6/2019 9:51 AM	Microsoft Excel C	95)	КВ	
File nam	ne: US_25.csv			v	All Files (*.*)	

You will notice that sometimes a CSV file will look like an Excel spreadsheet, but as long as the extension of the file is CSV, it is a valid file for importing.

You will want to make sure your Record Format is set to Uniform, the Data Type to Delimited and your Start Row to 1. Then hit Next.

Text Import Wizard	e Save As Open Text	- 0	×
Projections Record Format Uniform	Data Type Delimited	- Start Row 1	
101,3879938.271,521803 102,3880170.144,521819 103,3880375.466,521829 104,3881515.092,521803 105,3881273.839,521813 1000,3880145.453,52181 1001,3879934.72,52180 1002,3879935.095,52180 1002,3879932.325,52180	0.563,027.197,CP101,, 0.241,031.600,CP102,, 8.261,033.807,CP103,, 3.373,029.490,CP104,, 0.367,828.334,CP105,, 89.310,029.654,WM,, 0.366,821.607,T0H ST,, 67.200,824.242,BKK ST, 72.271,823.241,F ST BO	S ST,4 BOARD	Î
1004,3879960.815,52180 1005,3879962.098,52180 1005,3879962.476,52180 1007,3879993.962,52180 1008,3879993.962,52180 1008,3879990.709,52181 1009,3880002.122,52181	86.32,822.908,F BOS,, 82.615,823.814,TOH TF, 80.041,824.239,BRK,, 94.431,823.942,BRK,, 01.165,823.013,F BOS,, 06.02,823.026,F BOS,, 9.944.823.338.MDF		v

Make sure you set your Delimiters to Comma. Then select Next.



Set your columns to Point Name, Northing, Easting, Elevation, Code, and Note. Select Save As.

Point Name	Northing	Easting	Elevation	Code	Note		^
101	3879938.271	5218030.563	827.197	CP101			
102	3880170.164	5218190.241	831.686	CP102			
103	3880375.466	5218298.261	833.807	CP103		1	
104	3881515.092	5218083.373	829.498	CP104		1	
105	3881273.839	5218130.367	828.334	CP105			
1000	3880145.453	5218189.318	829.654	WM			
1001	3879934.72	5218070.366	823.607	TOH ST			
1002	3879935.095	5218067.208	824.242	BRK ST			
1003	3879932.325	5218072.271	823.241	F ST BOS ST	4 BOARD PLANK		
1004	3879960.815	5218086.32	822.908	F BOS			
1005	3879962.098	5218082.815	823.814	TOH TP			
1006	3879964.476	5218080.041	824.239	BRK			
1007	3879993.982	5218094.491	823.942	BRK		12	
1008	3879990.709	5218101.165	823.013	F BOS			
1009	3880002.122	5218106.02	823.026	F BOS			
1010	3879999.72	5218098.394	823.338	BRK		3	
1011	3880005	5218098.633	823.433	BRK			
1012	3880007.936	5218101.493	823.452	BRK			~

Once you have saved the TIW file where you want it, select Finish.

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Point Name	Northing	Easting	Elevation	Code	Note		
101	3879938.271	5218030.563	827.197	CP101			
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1008	3879990.709	5218101.165	823.013	F BOS			
1009	3880002.122	5218106.02	823.026	F BOS			
1010	3879999.72	5218098.394	823.338	BRK			
1011	3880005	5218098.633	823.433	BRK			
1012	3880007.936	5218101.493	823.452	BRK			

***NOTE: KYTC has a TIW file that is delivered with our standards. You can find this here:

↑ 📜	> This PC > OSDisk (C:) > KYTC_ORD_Standards > Organization-Civil > KYTC_Standards_OC > Survey									
5	* ^	Name	Date modified	Туре	Size					
36		I Data Collector Codes ORD.xls	9/26/2019 11:26 A	Microsoft Excel 97	59 KB					
49		🖺 ORD_KYTC IN COLOR 2019 ORD.fxl	8/14/2019 2:32 PM	Feature Definition	93 KB					
		Survey.tiw	8/14/2019 2:32 PM	TIW File	1 KB					
hote										

Fit your view, and you will notice that the survey data now appears on the screen inside ORD.



You will notice that there are no point numbers or other data in the drawing. Let us look at how to show them.

One way to do this is go to the Analyze Tab as shown and the click some of the items that are highlighted to get the data you want displayed. After clicking on the different decorations, you can now see the associated information that comes with each point collected in the field. You can also see the different line styles created by the survey data as well.



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Keep in mind that a CSV file is just one way to bring in survey data.

Here is a list of Import formats that ORD can read:

InRoads FWD File (*.fwd) Land XML File (*.xml) Leica Digital Levels File (*.gsi;*.lev) Leica MDF File (*.mdf) Neutral File (*.xnf) TIW Comma delimited PtNumNEZCode File (*.txt;*.cor) TIW Comma delimited PtNumNEZCodeCode File (*.txt;*.cor) TIW Comma delimited PtNumXYZCode File (*.txt;*.cor) TIW Space delimited PtNumNEZCode File (*.txt;*.cor) TIW Space delimited PtNumXYZCode File (*.txt;*.cor) TIW Space or Comma delimited XYZ File (*.txt;*.cor) TIW Topcon FC4 File (*.fc4) Topcon MaXML File (*.mxl) Trimble DC SDR File (*.dc;*.sdr) Trimble Link Engine File (*.job) Tripod Data Systems TDS File (*.rw5;*.raw)

You can bring multiple survey files into ORD and they can be different file formats as well. For example, we could bring in a CSV file and a FWD file at the same time. Just be sure that they are all on the same coordinate system.