Modeling with ASCII Text Survey Data Borrow Pit Modeling & Volumes II

Unlike the first borrow pit example (page 198), this second example makes use of a starting survey that documents the pit's original topography and a final survey that documents the pit's ending topography, which should result in a more accurate measure of the pit volume (but the data files in this example have some issues that must be resolved before we can quantify the pit's net borrow volume)...

Look in: Day 2 G 🕸 🖻 🖽 -The pit area is offsite and not included in a Date modified Name Type Size corresponding AGTEK job file, so we'll start from * 🖉 Edit 🐀 Entry 🔤 Profile 🚯 H import Bestates_RTK_topo_. 8/10/2018 9:53 PM Microsoft Excel C... 19 KB Ouick access Surface Design Laver LEV W XSEC.csv 9/3/2018 11:20 AM Microsoft Excel C... 41 KB scratch and directly Open the starting survey text file 이 않 문 승 Π. Gradework Layer F... Gradework Layer F... Microsoft Excel C... pineogtopo.agt 10/1/2017 9:59 PM 3 KB 1 10/8/2019 9:37 AM 8/31/2018 2:45 PM 22 KB 24 KB in AGTEK. Desktop pitfinal-1.cs 8/29/2018 4:36 PM Microsoft Excel C.. 24 KB DitfinalCD.cs 8/28/2018 4:19 PM Microsoft Excel C., 24 KB 8/28/2018 3:04 PM 8/28/2018 3:43 PM Text Document 24 KB 24 KB pitfinalSCD.tx Step 1: (a) Select File > Open from AGTEK's menu; , pitfinalSD.txt Text Document (b) in the Open dialog, change Files of type to NEZ pitfinalTD.txt 8/28/2018 4:07 PM Text Document 24 KB 8/31/2018 2:43 PM Microsoft Excel C 22 KB This PC pitoriginal.cs Text Files, select file (pitoriginal.csv in this > exercise—see Appendix C) then click Open; (c) Open Network Point Order NEZ Text Files (".agt; ".csv; ".txt New Files of type: [AGTEK 4D] in the Point Order dialog, select the Help North, East option then click OK. North, East C East, North This file displays a formatting error message (see OK Cancel discussion on pages 195-196). Let's click OK to AGTEK Gradework close the error dialog and use Windows Notepad to see if we can identify the formatting issue (while File "C:\AGTEK\Data\Day 2\pitoriginal.csv" is not in a readable Ξ. we're at it, we'll also check the second survey file for file format this example for any formatting issues).

Step 2: Use *Windows File Explorer* to locate the *pitoriginal.csv* file in the *Day* 2 training folder then **Right** click the file and select **Open with > Notepad**. Also locate the *pitfinal.csv* file then **Right** click it and select **Open with > Notepad**. The two survey files should now be displayed in separate *Notepad* windows (see below).

The error message in Step 1 is caused by the *P,Y,X,Z, L* header record in the starting survey file (the *PNT,NORTH, EAST,ELEV,LBL* header record in the final survey file will cause the same error when that file is imported in AGTEK)—the headers are useful because they confirm that the *left-to-right* field sequence for the survey point records are compatible in both files (per page 195) but we must remove the headers from these files before they can be imported by AGTEK. The *0,0,0,0,FILE* record in the starting survey file is not a survey point record but it won't cause an error (it can be deleted in *Notepad* or in AGTEK). The last thing to note with these files is that they don't share the same horizontal and vertical reference values (compare the records labeled *CP1* in both files)—we'll adjust for this issue with some later steps.

Step 3: In each *Notepad* window, drag select the header record, press **Delete** *twice* (the second deletion removes the resulting empty record) then select **File > Save As** from *Notepad's* menu to save these changes (let's append *EDIT* to the save as names for resulting *pitoriginalEDIT.csv* and *pitfinalEDIT.csv* edited files—see *Notepad Save As Tip* at top of next page). Both *Notepad* windows can be closed after completing and saving the edits in this step.

Starting Survey File (pitoriginal.csv):

📕 pitoriginal.csv - Notepad 🛛 🗆	×
File Edit Format View Help	
P,Y,X,Z,L	^
0,0,0,0,FILE	
1,5000.000,5000.000,1000.000,CP1	
2,5003.330,5519.546,1007.823,CP2	
100,4534.526,5042.829,1017.219,GS	
101,4534.560,5047.829,1017.191,GS	
102,4534.595,5052.829,1017.162,GS	
103,4534.630,5057.828,1017.134,GS	
104,4534.665,5062.828,1017.106,GS	
105,4534.699,5067.828,1017.077,GS	~

Final Survey File (pitfinal.csv):

📗 pitfinal.csv - Notepad 🛛 — 🛛	×
File Edit Format View Help	
PNT,NORTH,EAST,ELEV,LBL	^
100,1000.000,1000.000,100.000,CP1	
101,1003.313,1519.572,107.849,CP2	
102,946.268,1060.285,100.773,TOP	
103,941.269,1060.193,100.851,TOP	
104,936.271,1060.100,100.928,TOP	
105,931.272,1060.008,101.005,TOP	
106,926.274,1059.916,101.082,TOP	
107,921.275,1059.824,101.159,TOP	
108,916.277,1059.731,101.236,TOP	~

OK

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