EFT-TDT - Errors and Remedies

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Need help troubleshooting or want someone to review your design? Right click on the Customer's folder to Export and email the project.



1. Contouring Problem



Remedies:

1. Instead of drawing the entire breakline in at once try drawing in 5 segments at a time.

2. Design tab

a) Earthwork volume calculation failed.



Remedy: The user forgot to apply curves to the alignment.

b) Structure extends beyond defined alignment

Design Status

Structure extends beyond defined alignment (-1.000 < 0.000). Please edit profile end-points, or extend the alignment as needed.

Remedy: Increase/decrease the Station value in bottom table in this tab.

c) Cross section is invalid, some of bank top is below ground

Design Status

At start station, WSCB 1 cross section is invalid: Some of bank top is below ground Cannot design terrace end shape.

At start station, WSCB 1 cross section is invalid: Some of bank top is below ground Cannot design terrace end shape.

Remedies:

- 1. Shallow the cut for the 0+00 (start station) until the berm top is at or slightly above ground. If the user looks at the cross section for the start station they can get a feel for how much to shallow the cut.
- 2. Increase berm height at start station in channel table. Again the user can look at the cross section for an idea of how much to increase the berm height at that station.
- 3. Uncheck Grade Channel/Bank at Start and/or End (on Template tab)
- d) Cross-sections intersect

Design Status

Cross-sections intersect in stations from 98.3 to 100.0

Alignment may loop back on itself within structure width,

or may have deflection angles too sharp for the structure width.

Consider increasing radius of Alignment curvature, or other

alignment edits, or decreasing structure width. Terrace earth-work volume calc failed: Datapoints does not define a surfa

Remedies:

- 1.Accept edits in the Terrace Design then open the problem Alignment. Click the Apply Curves button then Accept Edits, OR
- 2. There may be excessive cut in the terrace design, the terrace cross section may have a straight line from the top of the berm to beyond the surface model. Either make the cuts shallower or if the problem is in a short reach (e.g. 1+00 to 2+00), raise the "Height" (berm height) in Channel table in the Profile or Design tabs.
- 3. You may have double-clicked, but made an extra "tail" on the end of your intended alignment. Remove the extra segment or redraw the alignment.

e) Compact Border Extraction Failed

🍰 Com	pute Storage Error 🛛 💌
8	Compact border extraction failed. The Terrace may have dual fill zones, due to a double-dip in the channel profile. If so, define two terrace designs, each with limited extent along alignment. Or, there may be a depression in the ground, near the Terrace alignment. In this case, try different flood elevations to merge the fill zone, or edit the Terrace alignment to merge the depression with the channel storage.
	See Help for further information.
~	

Remedy: Raise or lower the water level in Design tab (Water Elevation field) then click Compute Storage but not "Design Terrace" button.

f) Reach R-1 is not stable, Velocity _._ exceeds limit _._ ft/sec



Remedy:

- 1. Check the Flow Velocity column in the Channel table on the Design tab to be sure you actually have a velocity problem. If not proceed.
- 2. Adjust channel grade in table under Channel in the Design tab, or
- 3. Check Erodibility in the Soil tab
- g) Design Terrace failed testing water Z elev. and cannot provide an automated solution.



Remedy:

The user will have to type in waterline elevations manually and then click the "Compute Storage" button after each guess. After the "Compute Storage" button has been clicked the user will have to check to make sure the computed storage (ac-in) is equal or greater than the required storage value. If it's not then continue with this process. Once the user has a computed storage greater than or equal to the required storage click "Accept Edits". Do <u>not</u> click the "Design Terrace" button otherwise the user will receive the same error message.

h) Points have undefined Z



Remedy:

- 1. Remove block, redesign and if necessary, re-add block(s)
- 2. Add a boundary point to extend surface model
- i) Data Points not tinned, cannot compute border.

Remedy: Most likely your terrace design is too close to the border of your survey information.

- 1. Make sure your inlet has been created on the **Profile** tab. (Set Outlet Location)
- 2. If the border cannot be changed (PL issues etc) then make your cuts shallower. This will shorten the template distances for the channel catch lines as well as the cut slope lines.
- 3. If the border can be extended and your county has LiDAR or the user is confident they know what the ground does past the surveyed area, the user can digitize points based on the LiDAR and survey data to extend the border so that the terrace template can be extended.

- 4. If the border can be extended but there are important land features near that area (buildings, PL, etc) then these points should be surveyed in the field for verification.
- j) Slope limit exceeded



Remedy: The slope (back-slope in this example) is too steep for the specified width and slope limits you selected in the Template tab.

1. Enter steeper allowable slope limits

🏭 Edit Default Cros	s-Section Template	2			×
Bottom Width (ft)	12.00	Front Height (ft)	0.20	Top Width (ft)	3.00
Cut Slope		Front Slope		Back Slope	
Mode	RATIO_BAS 👻	Mode	WIDTH_BA 👻	Mode	WIDTH_BA 👻
Value (ft/ft)	16.0	Value (feet)	30.0	Value (feet)	30.0
Limit (feet)	100.0	Limit (ft/ft)	8.0	Limit (ft/ft)	8.0

2. Ignore the warning and complete the Design Terrace step, which if it lowers your top elevation, could bring the slopes back within your limits.

3. UGO Designs

a) Untested values in the Status Column when you Simulate the UGO Design

Line E						Desi	Design Network		avity Flow	Set All Gravity	
							Ed	lit Pipeline	Set Pre	essure Flow	Set All Pressure
e Details											_
PipeLine	Name	Actual Q	Capacity	Velocity	Length	Grade	Pressur	Diameter	Material	Status	
Line E	P-1	0.00	N/A	N/A	126.7	8.59%	No	4.0	CORR	(b) Unteste	d
Line E	P-2	0.00	N/A	N/A	152.0	7.16%	No	4.0	CORR	d Unteste	d
Line E	P-3	0.00	0.56	0.23	100.9	11.34%	No	4.0	CORR	V INO PTOD	nem
Line E	P-4	0.00	0.38	0.15	63.7	5.18%	No	4.0	CORR	V No Prot	lem
		_				_			_		

Total Flow Q for this pipeline: 0.00 cfs

Remedy: Delete all grade breaks in UGO Line, Simulate UGO Line, Re-insert Grade Breaks, and then re-simulate.

b) Profile of UGO Design shows riser components and waterlines below ground and way above terrace berms.



Remedy: The user named all the riser components the same name so the last riser designed set the water elevation and orifice elevations for all the other riser components as well.

- 1. Edit each riser component and rename each according to UGO line and Terrace number (i.e. UGOA Terrace #1 the ID should be **A1**).
- 2. Reset all Water Sources (closest water source should be defaulted to the top of the list)
- 3. Re-Design Orifices.

4. Print Reports

a. Nothing to Report Error Message



Remedy:

- One of the terrace benchmark descriptions have an apostrophe in the phrase (i.e. 100') find these apostrophes and replace with the abbreviation ft or feet then "Accept Edits" and then reports should print.
- 2. If the value in the **Offset from Alignment** box is not 0 or 5 then this error will occur. Change offset value.
- Report (cross section and checkout sheets) won't print Remedy:

Delete the problem terrace and redesign. Finding the problem terrace is trial and error. Try printing them individually to figure out which terrace is the problem. If the construction checkout sheet is the only one not printing go to the Template Tab and make sure the Offset from Alignment, toward the top of the screen, is populated. If it is, change this to 0.0. Most cases the user thought this offset blank referred to the riser offset from the alignment. If this is the case this offset value is set in the Drain column of the Profile or Design Tab.

c. Map (Sheet Data, New Map Sheet) is made on two pages, not one. The title block is created on the second page.



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O NRCS	Plan View Kathleen Uhimeyer UGO Terrace System T62N R6W Sec5	Date Date Drawn SAE	File Name Fild 7 Tract 10476.xml Deswing Name Kathlene Uhimeye 01/13/2015
			sheet of

Remedies:

1. Limit the Drawing Name entry to no more than 15 characters (spaces included).

2. Enter "Plan View" for both the Drawing Name and the Sheet Title.

🎄 New Map Sheet	
Please provide rec	uired Map Sheet parameters below:
Drawing Name	Farmer Longname
Sheet Title	Plan View
Sheet Size	A -
Sheet Layout	Landscape 🔻
Print Scale, ft/in	200
Optional Symb	ols
North Arrow	🖉 Scale Bar 📄 Legend Key
	OK Cancel

d. Print Report window doesn't appear after clicking open

Remedies:

- 1. Export Preferences
- 2. Exit EFT
- 3. Rename the My EFT Files\.eft\workspace folder to a different name
- 4. Run EFT. Users should get a window as if it is the first time EFT has been run.
- 5. Go to Preferences and apply MN State configuration
- 6. Restart EFT
- 7. Import saved Preferences

5. EFT main page

a) Overview tab is missing (or was accidentally closed)

ANRCS Engineering Field Tools								
File Edit U	Jtilit	ies	Help					
🎄 Overview	x		EFT Map					
▼ EFT Customers								
D								

Remedies:

- 1. Close and reopen EFT. In most cased, it will return.
- 2. If it does not return, from NRCS EFT Support: delete the contents of the EFT folder in LocalAppData on your C drive. The easiest way to access this location is to launch Filer Explorer, enter %LOCALAPPDATA%\EFT into the top address bar. Remove the .eft folder there and restart EFT.