2013 PLS-CADD Advanced Training and User Group

Leg & Guy Extension XML

by
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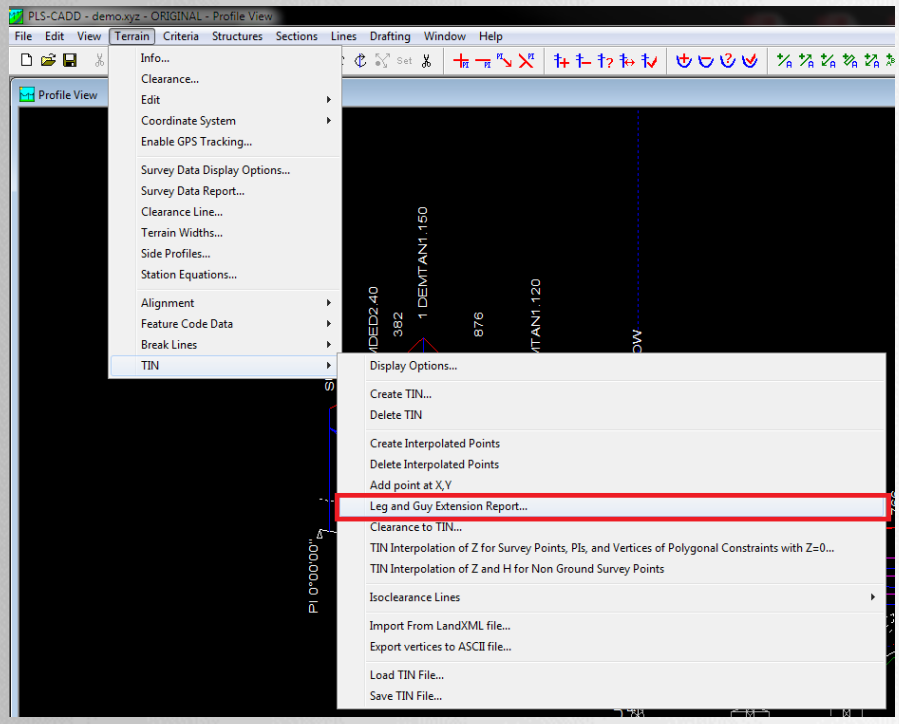
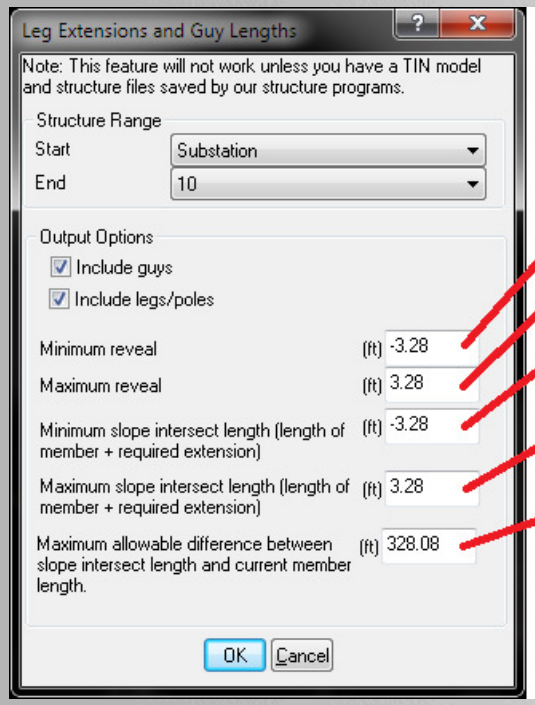
Leg & Guy Extension Report

- Gives information about structure's joints & additional distances required to intersect TIN surface



Report Options



Locations with less reveal than this marked NG and colored red

Locations with more reveal than this marked NG and colored red

Locations requiring a leg or member size shorter than this marked NG and colored red

Locations requiring a leg or member size longer than this marked NG and colored red

Locations requiring a change in leg or member size greater than this marked NG and colored red

Information in Report

- Important information like member xyz coordinates and length required to intersect TIN surface allow calculations using XML to automate determination of appropriate body/leg tower extensions or pole height/embedments to fit TIN surface.

Leg and Guy Extension Report

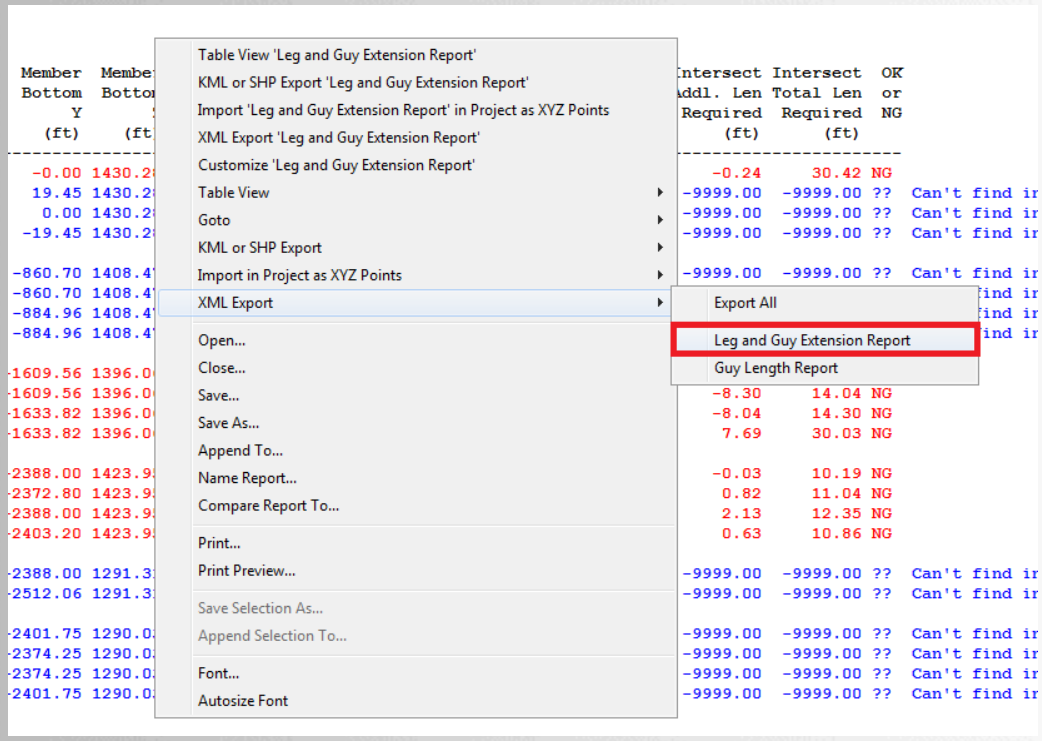
In the report below the program has identified structure members that are connected to fixed joints.
The program has projected the X and Y coordinates of these joints onto the TIN model to determine the ground elevation below these joints.
The program has also calculated the point of intersection of a line passing through these structure members and the TIN model.
Values of -9999 indicate there is no valid TIN model at the specified point.

Warning: The results below are based on the coordinates of fixed joints in the structure model.
These results may need to be adjusted if the structures were modeled with a fixity point other than ground.

Structure Number	Member Label or Type	From Joint	To Joint	Member Length (ft)	Member Top Z (ft)	Member Bottom X (ft)	Member Bottom Y (ft)	Member Bottom Z (ft)	TIN Z at Member Bot. XY (ft)	Reveal at Member Bot. XY (ft)	Slope Intersect X (ft)	Slope Intersect Y (ft)	Slope Intersect Z (ft)	Intersect Addl. Len Required (ft)	Intersect Total Len Required (ft)	OK or NG	
3	66P	100S	120S	30.668	1460.28	2447.60	-0.00	1430.28	1430.52	-0.24	2447.66	-0.00	1430.52	-0.24	30.42	NG	
	66X	100X	120X	30.668	1460.28	2467.05	19.45	1430.28	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	??	Can't find
	66XY	100XY	120XY	30.668	1460.28	2486.50	0.00	1430.28	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	??	Can't find
	66Y	100Y	120Y	30.668	1460.28	2467.05	-19.45	1430.28	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	??	Can't find
4	70P	100S	120S	22.342	1430.47	2454.93	-860.70	1408.47	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	??	Can't find
	70X	100X	120X	22.342	1430.47	2479.18	-860.70	1408.47	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	??	Can't find
	70XY	100XY	120XY	22.342	1430.47	2479.18	-884.96	1408.47	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	??	Can't find
	70Y	100Y	120Y	22.342	1430.47	2454.93	-884.96	1408.47	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	??	Can't find
5	70P	100S	120S	22.342	1418.06	2454.93	-1609.56	1396.06	1390.47	5.59	2454.19	-1608.82	1390.14	6.01	28.36	NG	
	70X	100X	120X	22.342	1418.06	2479.18	-1609.56	1396.06	1405.00	-8.94	2478.16	-1610.59	1404.24	-8.30	14.04	NG	
	70XY	100XY	120XY	22.342	1418.06	2479.18	-1633.82	1396.06	1404.68	-8.62	2478.19	-1632.83	1403.98	-8.04	14.30	NG	
	70Y	100Y	120Y	22.342	1418.06	2454.93	-1633.82	1396.06	1389.03	7.03	2453.98	-1634.76	1388.49	7.69	30.03	NG	
6	66XY	100XY	120XY	10.223	1433.95	2451.86	-2388.00	1423.95	1423.98	-0.03	2451.86	-2388.00	1423.98	-0.03	10.19	NG	
	66Y	100Y	120Y	10.223	1433.95	2467.06	-2372.80	1423.95	1423.15	0.79	2467.06	-2372.62	1423.15	0.82	11.04	NG	
	66P	100S	120S	10.223	1433.95	2482.26	-2388.00	1423.95	1421.93	2.02	2482.71	-2388.00	1421.87	2.13	12.35	NG	
	66X	100X	120X	10.223	1433.95	2467.06	-2403.20	1423.95	1423.34	0.61	2467.06	-2403.34	1423.33	0.63	10.86	NG	
9	P	P:t	P:g	131.916	1423.22	5639.76	-2388.00	1291.31	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	??	Can't find
	g1	MR:C	$Gnd1	152.919	1399.44	5639.76	-2512.06	1291.31	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	??	Can't find
10	66P	100S	120S	21.978	1311.52	6709.15	-2401.75	1290.03	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	??	Can't find
	66X	100X	120X	21.978	1311.52	6709.15	-2374.25	1290.03	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	??	Can't find
	66XY	100XY	120XY	21.978	1311.52	6736.65	-2374.25	1290.03	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	??	Can't find
	66Y	100Y	120Y	21.978	1311.52	6736.65	-2401.75	1290.03	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	-9999.00	??	Can't find

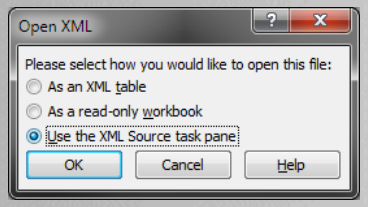
Export to XML

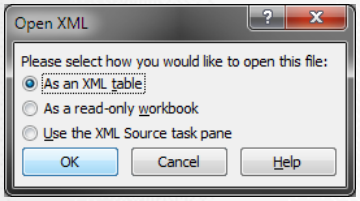
- Right clicking inside the report allows the export of XML.
- Almost all reports in PLS software support XML export.

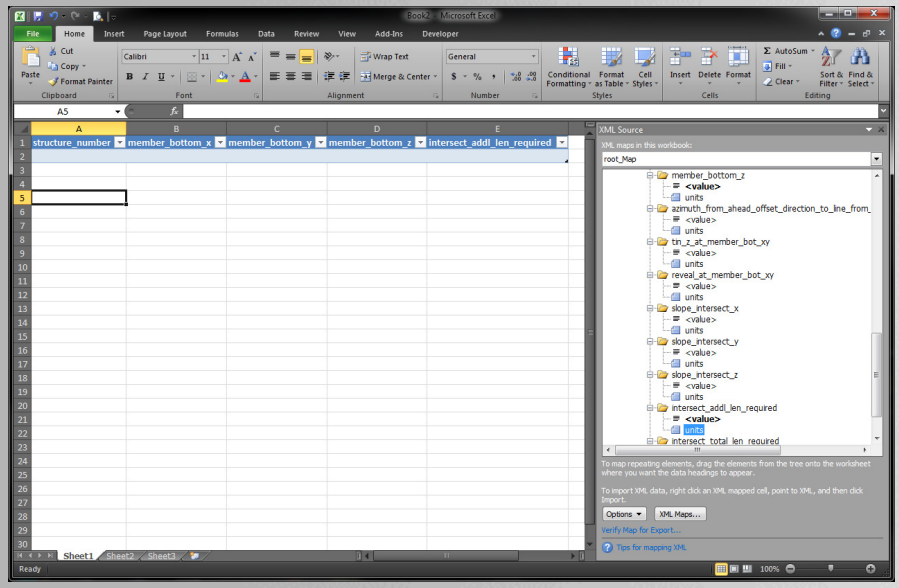


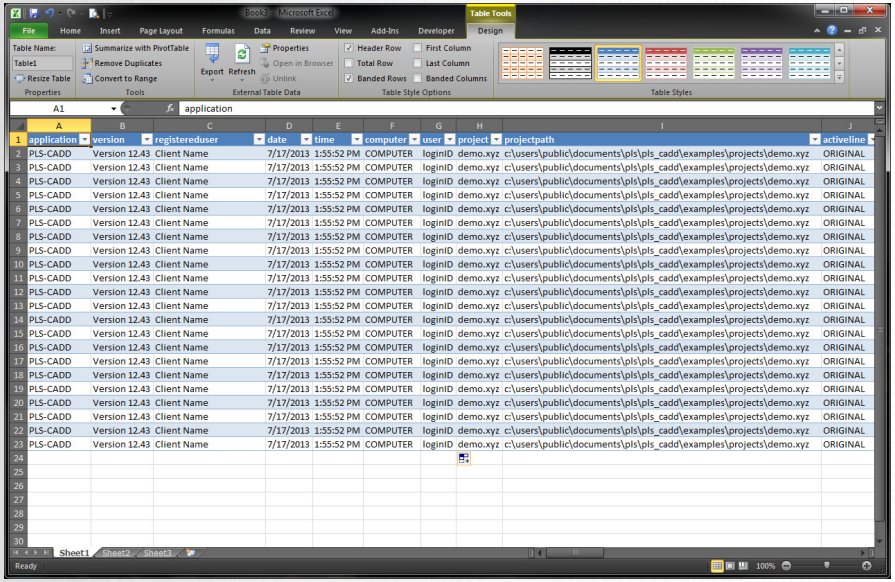
XML into MS Excel Options

- Source Task Pane (drag/drop only items you want and refresh data to pull in)
- Table (all available data in XML dumped into table)



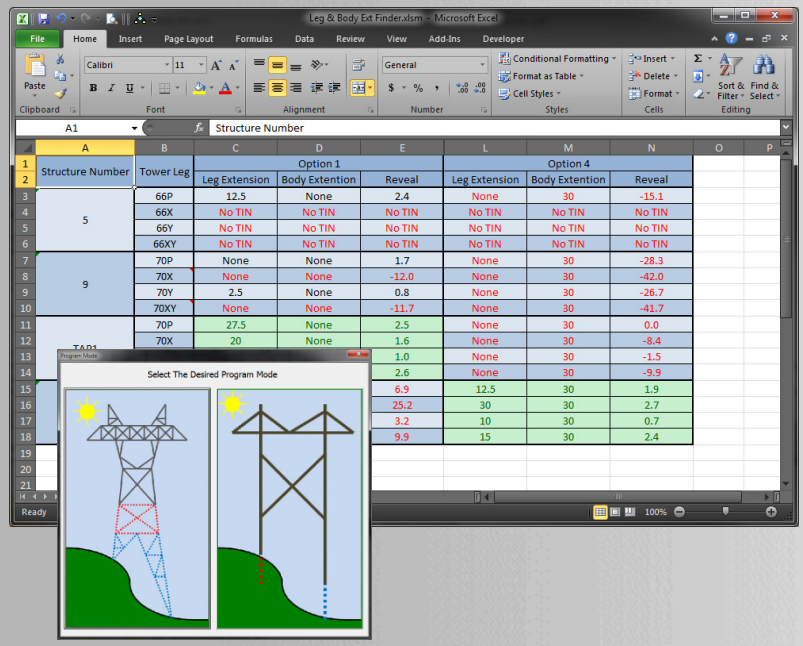


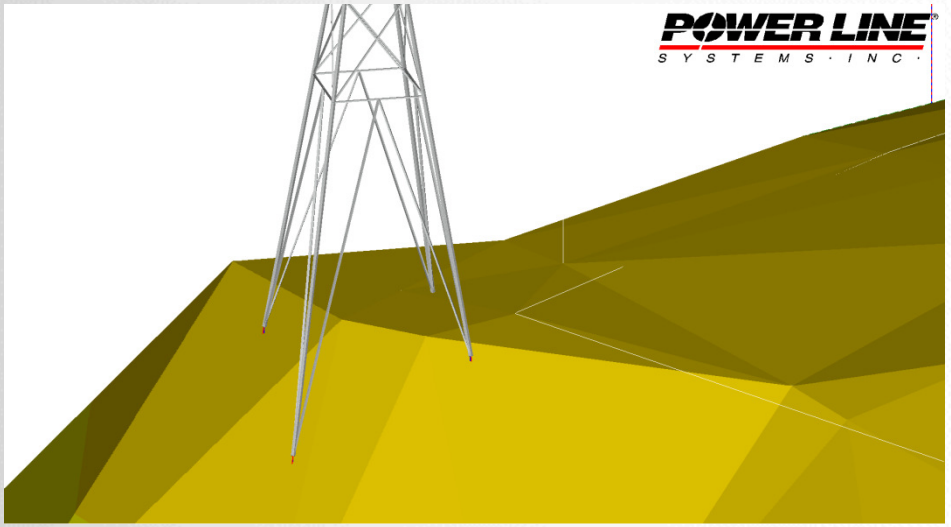




Macros and VBA to Automate

- Simple macros or more advanced VBA routines can be implemented to automate calculations and quickly perform tasks like finding leg/body extensions or pole heights/embedments to fit TIN surface





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