Create HEC RAS Data in ORD

OpenRoads Modeling Workflow

1. Use element templates located under Hydraulics>Plans>FEMA>HEC RAS to draft your cross sections, the centerline of the stream, the overbanks and the top of banks. Any lines can be used, but these were created for your ease of use.



2. Once the cross sections, the center line of the stream, the overbanks and the top of banks have been created, go to Terrain Tab>Analysis>Hydraulic>Create HecRas Data



- 3. Follow the prompts at your cursor (they also appear in the bottom left-hand corner of the screen) to select your cross sections.
- 4. Next you will select the Terrain model. If you have the contours turned on, you can just select a contour.
- 5. Next you are required to locate the Reference line. Typically this will be the centerline of the stream.
- 6. Now locate the line that you drew for the Left Over Bank...or Left Bank Over.
- 7. Now select the line that represents the Left Top of Bank.
- 8. This will be followed by the Right Top of Bank and then the Right Over Bank (Right Bank Over)
- 9. If you are working in Projectwise, you will be asked you want "No Wizard" or "Advanced Wizard". Not sure what happened to the Wizard.
- 10. Select "No Wizard". Pick your name and leave it as a Geo file.
- 11. Check the file in the program ask you to.
- 12. The file should be located in the file that your DGN file is located.
- 13. Export the file to your C: or S: drive and open HecRas
- 14. Open the Geometric tab in HEC Ras.
- 15. File>Import Geometry Data>GIS Format.

✓ Geometric Data		
File	EditOptionsViewTablesNew Geometry DataOpen Geometry DataSave Geometry DataSave Geometry Data AsRename Geometry TitleDelete Geometry DataCopy to ClipboardPrint	Tools GIS Tools Help rea SA/2D Area 2D Area BreakLines Mann n Begions OF 12.99
Stora Are: 2DFI. Are: SA/2DI Control Control	Import Geometry Data > Exit Geometry Data Editor	GIS Format USACE Survey Data Format HEC-RAS Format HEC-2 Format UNET Geometry Format HEC Stream Alignment Mike 11 Cross Sections CSV (Comma Seperated Value) Format GML Format

- a. 16. You know what to do from here.
- 17. Note: Hec-Ras is only reading the start/end point on the stream centerline (tried ORD 10.12 into Hec-Ras 5.0.5)