

That CAD Girl

jennifer dibona

website: www.thatcadgirl.com

email: thatcadgirl@aol.com

phone: (919) 417-8351

fax: (919) 573-0351

Roadway Design Sequence

1. Build an accurate Existing Ground surface
2. Set horizontal and vertical scales and current text style
3. Define and station horizontal alignment - Use layer prefix
4. Extract existing ground profile
 - a. Set layer prefix
 - b. Set current alignment
 - c. Set current surface
 - d. Sample existing ground
 - e. Draw profile in drawing
5. Create a proposed profile
 - a. Set current alignment
 - b. Set current layer
 - c. Layout proposed vertical profile
 - d. Define to project database
 - e. Edit proposed vertical profile with vertical alignment editor
 - f. Import to drawing
 - g. Find intersection elevations on proposed vertical profile
6. Extract existing ground cross sections
 - a. Set current alignment
 - b. Set current surface
 - c. Sample existing ground
 - i. Swath Width - As wide as possible
 - ii. Along Tangents - 20.0'
 - iii. Along Curves - 5.0'
 - iv. Additional Sample Control: select PCs/PTs, Alignment start, Alignment end, Save Sample List, Add specific stations
 - v. Specific Stations: 0.1' inside each start and end of alignment, intersection of centerline alignments, hi/low points on proposed profile, intersection and cul-de-sac critical points, median critical points, template transition points
 - d. View/Edit cross sections
 - e. Import cross sections into drawing
7. Create proposed roadway template
 - a. Settings
 - b. Draw Template
 - c. Define Template
 - d. Edit Template - to add Top Surface, Point Codes and Transition Regions
8. Apply roadway template to cross sections and import cross section data to drawing
 - a. Edit design control
 - b. View/Edit cross sections
 - c. Import 3d Grid
9. Create surface from cross section data
 - a. To get dirt quantities: Cross Sections> 3D Grid> Datum Surface
 - b. To create finished ground contours: Cross Sections> 3D Grid> Top Surface