A Practical Guide to GIS in AutoCAD Civil 3D
Part 1 (Repeat)

Rick Ellis
President, CADapult Software Solutions
rick@cadapult-software.com  @theRickEllis

Join the conversation #AU2017
Who am I...

- Rick Ellis
- Portland, Oregon
- Originally a CAD Manager and Civil Designer
- I’ve been teaching AutoCAD, Civil 3D, and AutoCAD Map since mid-90’s
- Consultant
- Author
- 12th year teaching at AU
- Member of the Autodesk University Advisory Council
Lab Assistants

- R.K. McSwain
  - CAD Manager and creator of CAD Panacea

- Sam Lucido
  - Civil Designer and CAD Services Manager, Haley and Aldrich

- Todd Rogers
  - Customer Success Manager, Autodesk Certified Instructor at Graitec USA
Who are you?
Class Surveys

- Your class feedback is critical.
- Use the AU mobile app or fill out a class survey online.
- Give feedback after each session.
- AU speakers will get feedback in real-time.
- Your feedback results in better classes and a better AU experience.
This class is based on selections from this book.

I’ll give away a copy at the end of the class.

www.cadapult-software.com/books
Course Agenda

- Introduction to GIS in Civil 3D
- Importing GIS Data from other Formats as AutoCAD Objects
- Label Objects with Annotation Templates
- Importing GIS Data as Civil 3D Objects
- Connecting to GIS Data
What About Questions???

- Lab Assistants are here to help you
- Short time for questions at the end of each topic
- After the session
- Via email
- Office Hours
  - Wednesday 5:30 – 6:30 in Lido 3103
Introduction to GIS in Civil 3D

- It’s really 3 programs in 1
  - So what data can I create and who can use it?
Using GIS Data from other Formats

- Three ways you can bring GIS data into Civil 3D:
  - Importing GIS Data as AutoCAD Objects
  - Importing GIS Data as Civil 3D Objects
  - Connecting to GIS Data

- Important to understand how GIS data is structured
  - Feature Classes
Importing GIS Data as AutoCAD Objects

AutoCAD Civil 3D can import the following types:

- Autodesk SDF
- ESRI ArcInfo Coverage
- ESRI ArcInfo Export (E00)
- ESRI Shape file
- GML
- MapInfo MIF/MID
- MapInfo TAB
- Intergraph/MicroStation Design (dgn)
- OS (GB) MasterMap (GML 2)
- Spatial Data Transfer Standard (SDTS)
- Vector Product Format Coverage (VPF)
Exercise
Several types of data can be used to drive an Annotation Template. These include:

- Object Data
- Linked data sources
- Object properties
Importing GIS Data as Civil 3D Objects

There are two types of Civil 3D objects that can be created directly from GIS data.

- Surfaces
- Pipe Networks
Exercise
Connecting to GIS Data

- Direct Connection
- Not an Import
- Creates Map Features not AutoCAD Objects
- Stylized in the Display Manager
Exercise
Other useful GIS tools in Civil 3D

- Drawing Cleanup tools
  - Automate the process of cleaning many common geometry errors
- Thematic Mapping
- Dynamic North Arrows, Scale Bars and Legends
- Map Books
This class is based on selections from this book.

We have only scratched the surface of this topic.

Get your copy at:

www.cadapult-software.com/books
Still have Questions???

- Via email
  - rick@cadapult-software.com
- Office Hours
  - Wednesday 5:30 – 6:30 in Lido 3103
Thank you for your time and attention!

Don’t forget to fill out the class survey!

Rick Ellis
rick@cadapult-software.com