CAD: An Introduction to ArcGIS for AutoCAD

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GIS INSPIRING WHAT'S NEXT

ArcGIS for AutoCAD: What It Is

The Basics

The AutoCAD Interface into the ArcGIS System

- Runs inside of AutoCAD

Free download from Esri

- http://www.esri.com/software/arcgis/arcgis-for-autocad

Supports AutoCAD 2015-2019

- 64-bit
- The *AutoCAD* in Map3D and Civil3D

GIS and CAD

Interoperability

Working with ArcGIS for AutoCAD

- Designed with the CAD User in Mind
- User Interface Elements to make it easy
  - Ribbons
  - GIS Contents Pane
  - Table Viewer
- Command Line
  - Old School CAD
- Customize using LSP

  …Bonus Tools

ArcGIS for AutoCAD

What is it used for?

- Access free Esri-Curated Maps Maps, maps and more maps
- Edit Geodatabases Through Feature Services
  - Add, Extract, Blocks, Labels
- Use AutoCAD to Create ArcGIS Data (MSC)
  - Export to CAD
  - CAD in ArcGIS Desktop

Maps, Maps… and More Maps

Karen Hodge

Maps, Maps, Maps

#1 Reason to Download ArcGIS for AutoCAD?

Free Maps

Why do we need maps in AutoCAD?

Geographic Context

Location, Location, Location

Demo: Map Services

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Free Maps

Maps provide context for design

Maps ensure locational awareness in design

Find maps from:

- **Esri curated content**

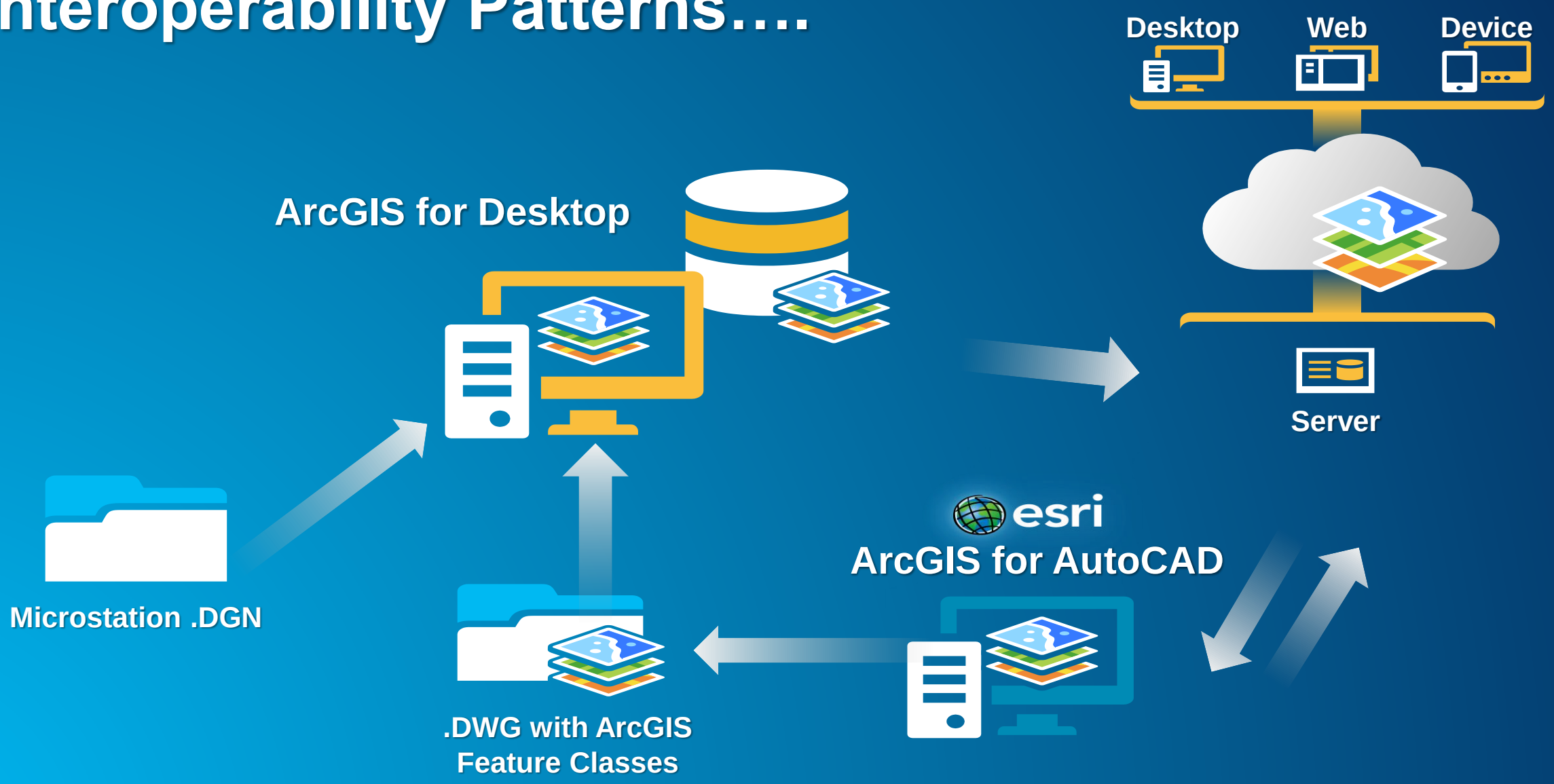
Esri services on ArcGIS Online

Connections to organizational servers

CAD as Feature Service Editor

Don Kuehne

Interoperability Patterns….



CityParcels.mxd - ArcMap

File Edit View Bookmarks Insert Selection Geoprocessing Customize Windows Help

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Editor

Table Of Contents

Layers

Encumbrances

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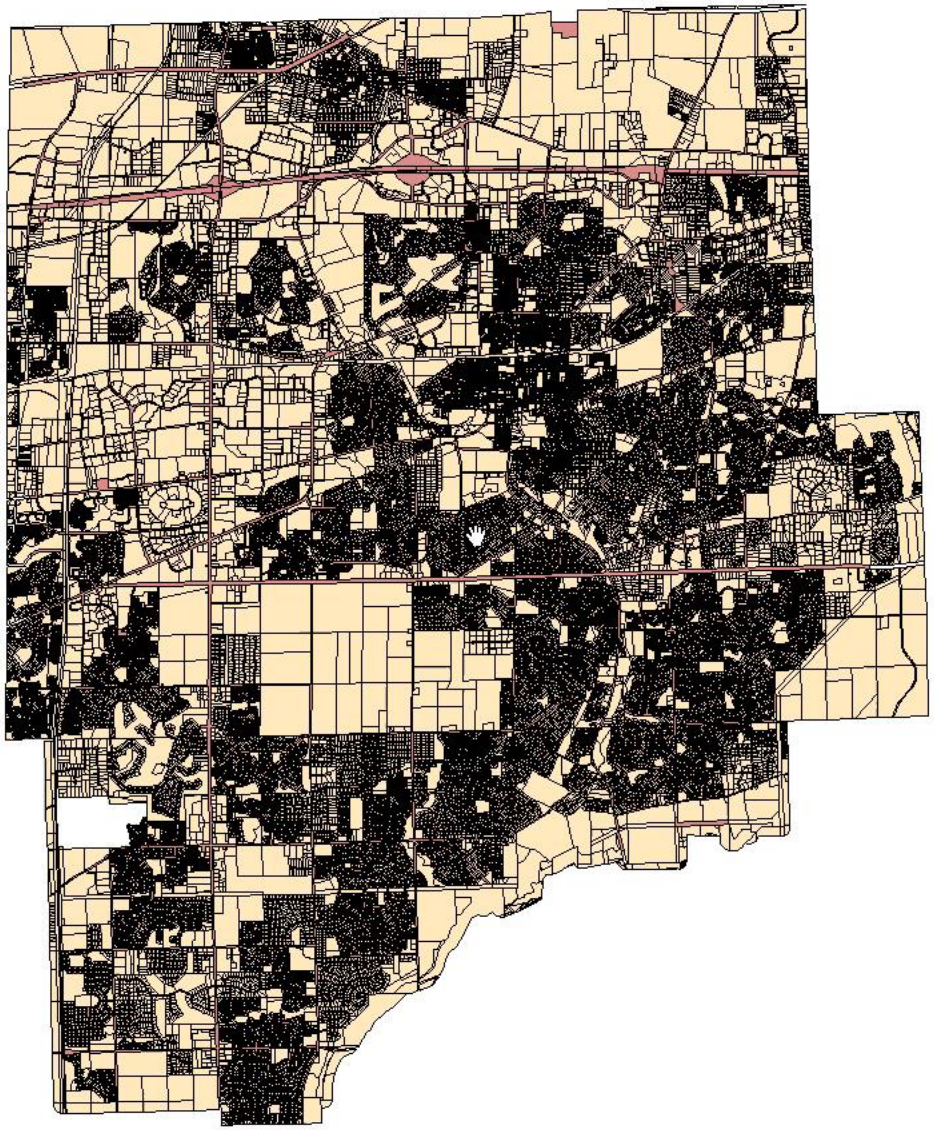

Search

Local Search

ALL Maps Data Tools Images

Any Extent

Catalog

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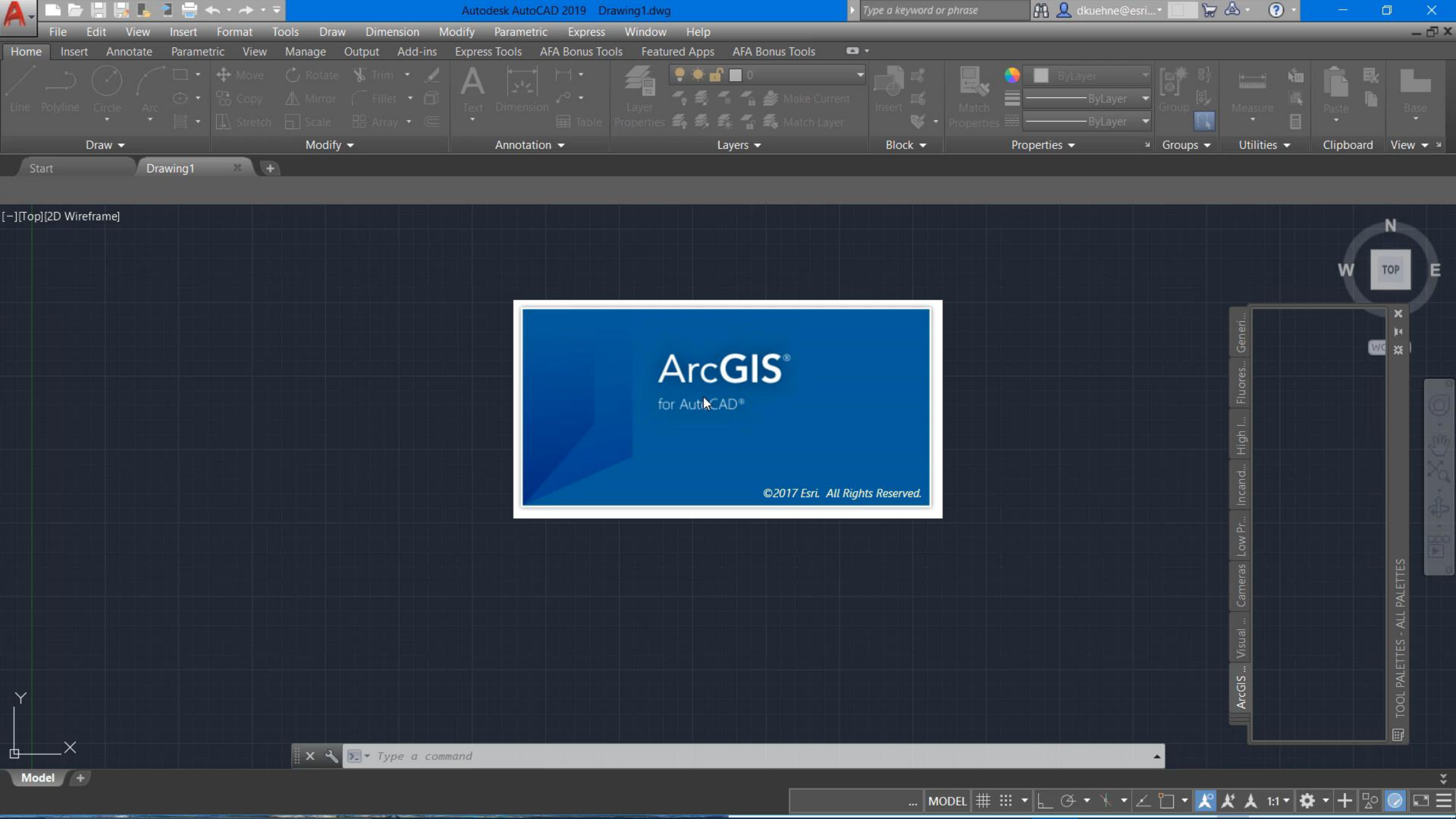
Demo: *Extracting* Feature Services

Don Kuehne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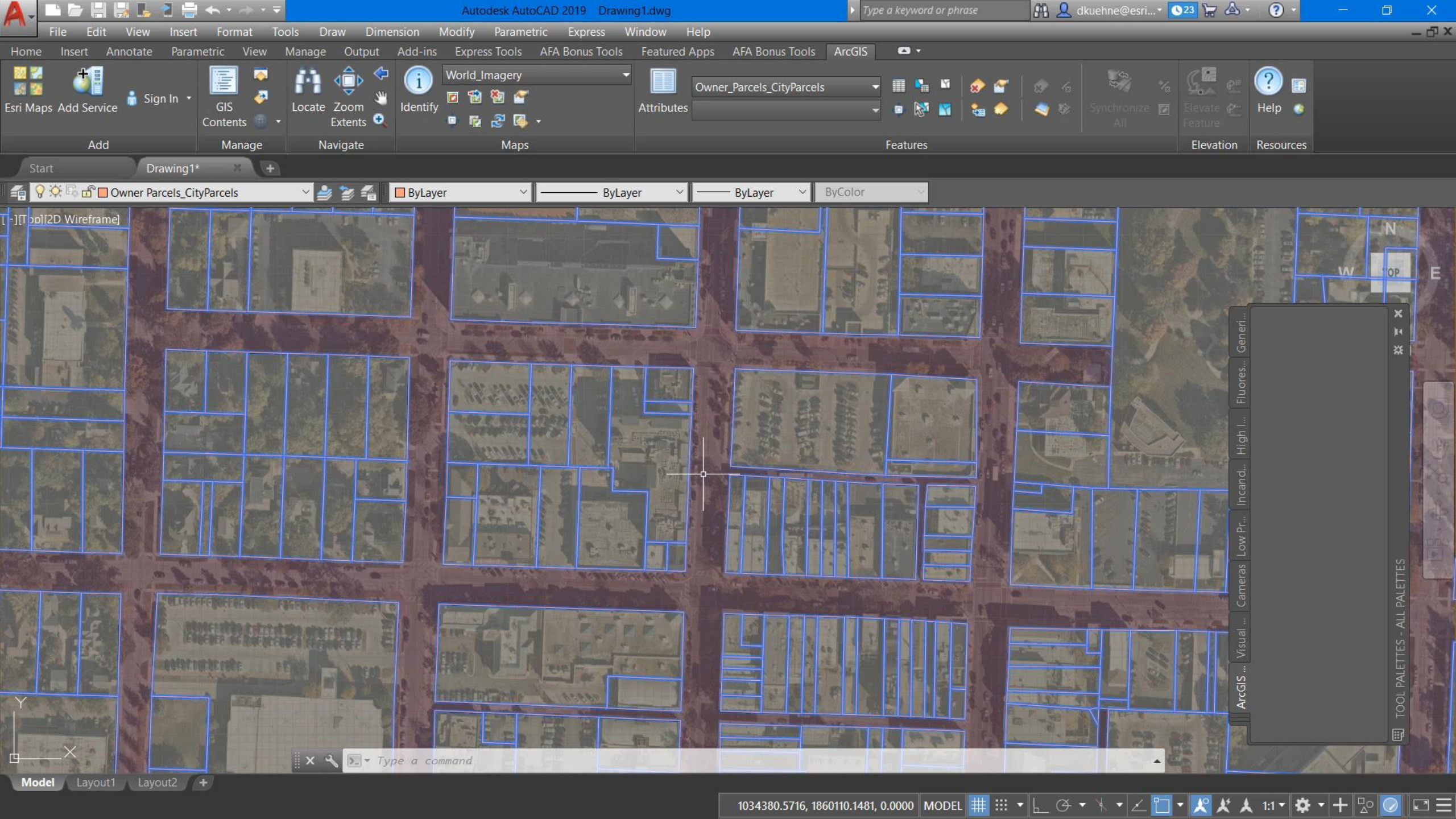
Demo: *Editing* Feature Services

Don Kuehne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Zoom Extents
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World_Imagery
Maps
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Demo: Blocks and Linked Text

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Autodesk AutoCAD 2019 Drawing2.dwg

File Edit View Insert Format Tools Draw Dimension Modify Parametric Express Window Help

Home Insert Annotate Parametric View Manage Output Add-ins Express Tools AFA Bonus Tools Featured Apps AFA Bonus Tools ArcGIS

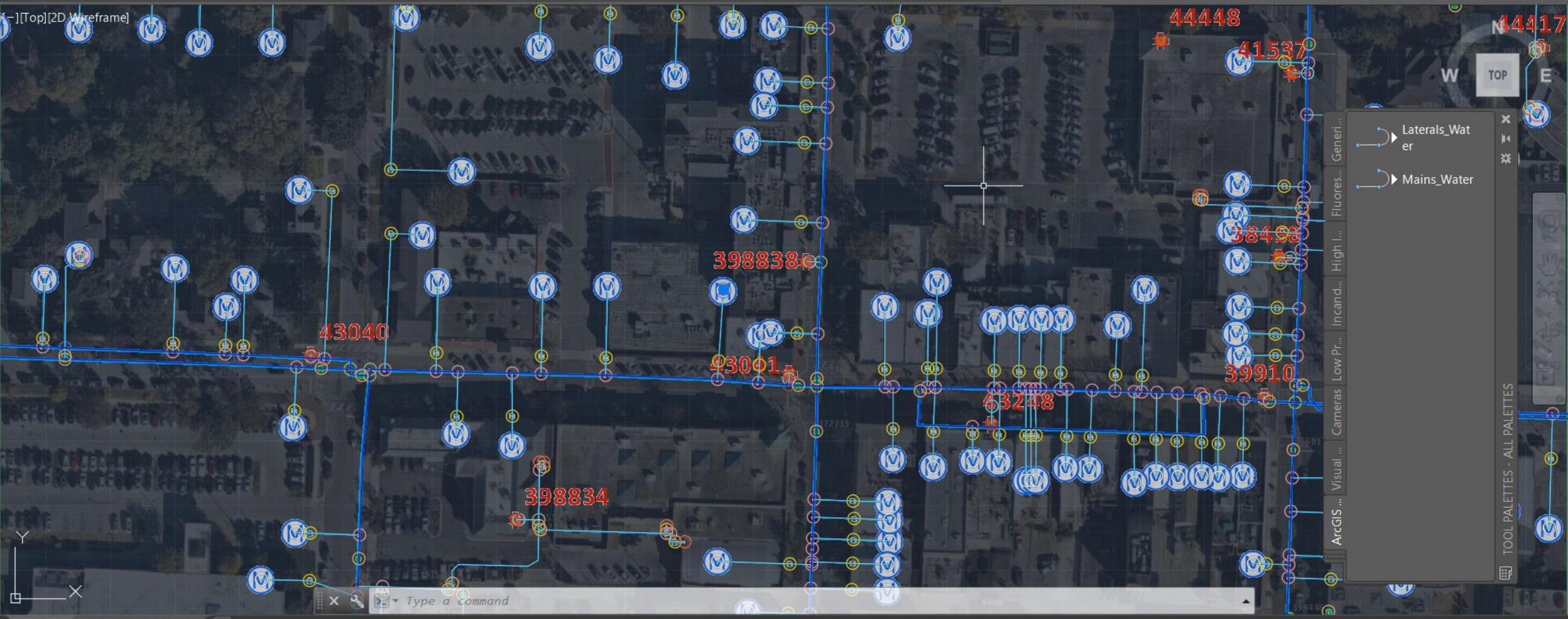
Esri Maps | Add Service | Sign In | GIS Contents | Locate | Zoom Extents | Identify | Water | Attributes | Control_Valves_Water | All Types | Synchronize All | Elevate Feature | Help

Add | Manage | Navigate | Maps | Features | Elevation | Resources

Start | Demo* | Drawing2*

ESRI_Meters_Water | ByLayer | ByLayer | ByLayer | ByColor

[-][Top][2D Wireframe]



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Model | Layout1 | Layout2

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Demo: Templates, Long Transaction

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Autodesk AutoCAD 2019

File Window Help

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Esri Maps Add Service Sign In | GIS Contents | Locate Zoom Extents | Identify World_Street_Map | Attributes Laterals_Water | Synchronize All | Elevate Feature | Help

Add | Manage | Navigate | Maps | Features | Elevation | Resources

Start

Get Started

Start Drawing

Templates

Open Files...

Open a Sheet Set...

Get More Templates Online

Explore Sample Drawings...

Recent Documents

WaterEditingTemplate

AlmostTemplate

THIS WEEK

Notifications

Have You Tried (June 2018): Using the features of the Online Help system.

Explore Help Features

Connect

Welcome Don!

(dkuehne@esri.com)

Send Feedback

Help us improve our products

Send Feedback

LEARN

GIS CONTENTS

Type a command

LEARN CREATE

Creating ArcGIS Data in AutoCAD

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Smarter CAD Drawings

Better way to Organize CAD Drawings:

Location

Organization

Properties

Mapping Specification for CAD key to:

Feature Services

Feature Classes

Demo: Creating Feature Classes

Karen Hodge

Smarter CAD Drawings

Smarter CAD Drawings using:

- Adding Feature Services
- Extracting from Feature Services
- Export to CAD
- Defining your own

Smarter Way to Work using Templates

- Layering Standards
- Block Libraries
- Coordinate Systems
- Schemas
- Maps/Services

Helpful Links

Additional Content and Information

ArcGIS for AutoCAD 370 (Search for ArcGIS for AutoCAD DOWNLOAD)

Bonus Tools

- ArcGIS.com (Search for “Bonus Tools”)

YouTube (Search for “GISCADChannel”)

- Feature Classes
- Attribution
- Export to CAD to create matching schemas

GISCADInteroperability Blog (Search for GISCADInteroperability)

- CAD editors updating GIS enterprise data (or not)

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esri

THE SCIENCE OF WHERE