AUTODESK UNIVERSITY

Subway Railway: Tunneling and Underground Stations with AEC Collection - CES500155

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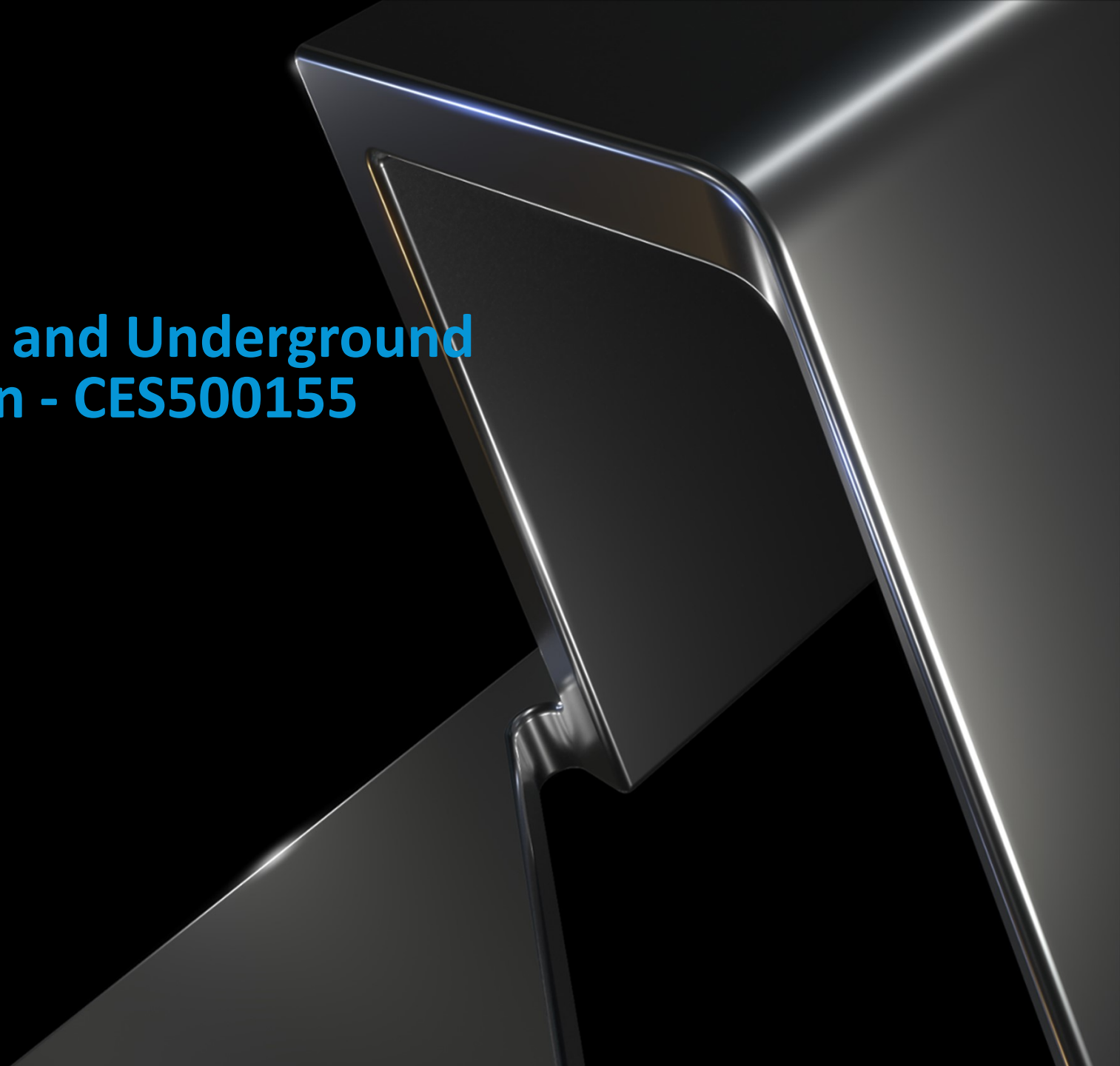

WE WILL COVER:

- CUSTOM SUBASSEMBLIES WITH SUBASSEMBLY COMPOSER
- CUSTOM FAMILIES IN REVIT
- DYNAMO SCRIPTS IN CIVIL 3D AND REVIT FOR COORDINATION
- HOW 3D MODELS ARE SYNCHRONIZED BETWEEN CIVIL 3D AND REVIT

LET’S TAKE A LOOK AT THE EXAMPLE MODEL:

Civil 3D stock and custom Subassemblies

- STOCK SUBASSEMBLIES HAVE SUFFICIENT DETAIL AND FLEXIBILITY
- THEY WILL NEED SOME FINE TUNNING TO FIT IN YOUR PROJECTS
- THEY WILL NOT HAVE **ALL** PROPERTIES FOR EVERY DESIGN CASE

- ENTER THE AUTODESK SUBASSEMBLY COMPOSER:

Custom families in Revit for design coordination

- USING GENERIC ADAPTIVE FAMILIES
- BASED ON ADAPTIVE COMPONENTS, POINTS AND SWEPT PROFILES

AND REFERENCE GEOMETRY

- THE SHAPE AND SIZE WILL ADAPT TO “HOST” ELEMENTS IN REVIT
- WE ARE LOOKING FOR CONTROLLED AUTOMATION WITH UPDATING REVIT MODEL WHEN CIVIL DESIGN COMPONENTS CHANGE

- LET’S EXPLORE THE TECHNOLOGY AT THE CONCEPTUAL LEVEL:

Dynamo scripting in AutoCAD Civil 3D and Revit to coordinate track design with an underground station model

- ALIGNMENT GEOMETRY IN CIVIL 3D AS A HOST OBJECT IN REVIT
- COLLECT ALIGNMENT GEOMETRY WITH DYNAMO IN CIVIL 3D
- USE IT TO CREATE THE HOST ELEMENT WITH DYNAMO IN REVIT
- WHEN ALIGNMENT DESIGN CHANGE OCCURS, UPDATE THE HOST OBJECT
- THE DEPENDANT ELEMENTS IN REVIT WILL UPDATE WITH THE HOST

THANK YOU!