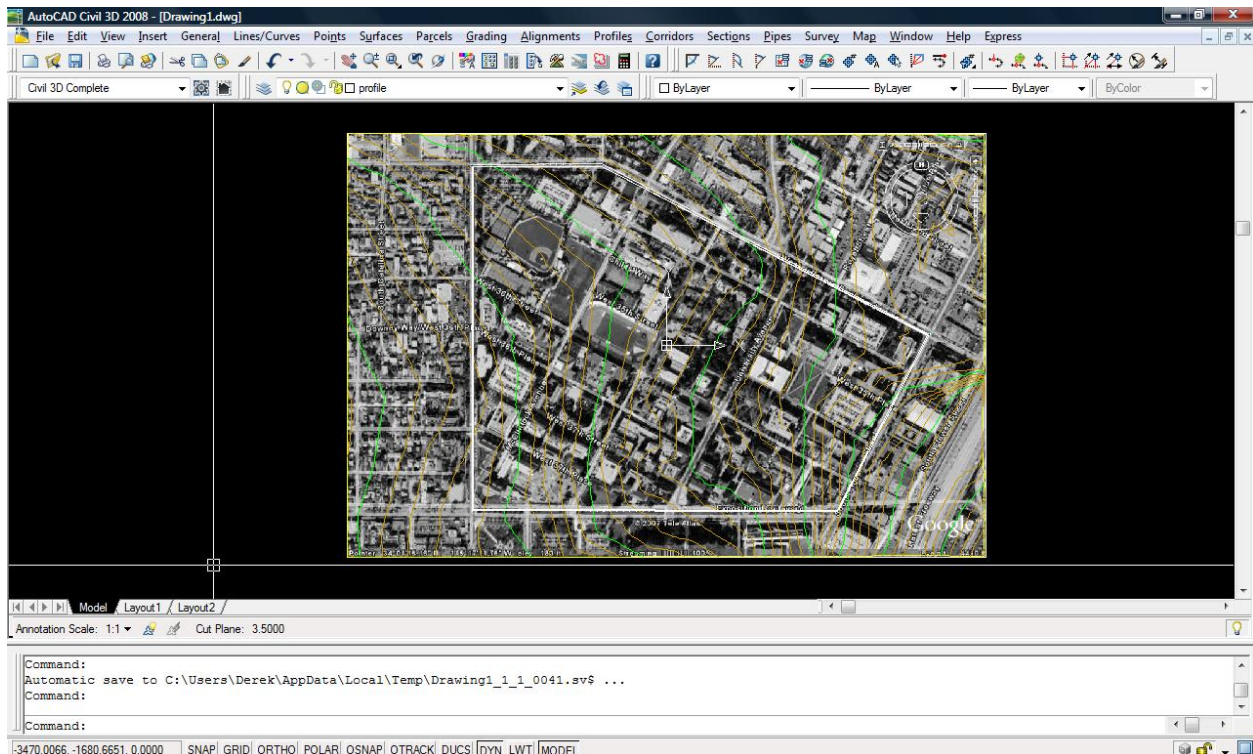


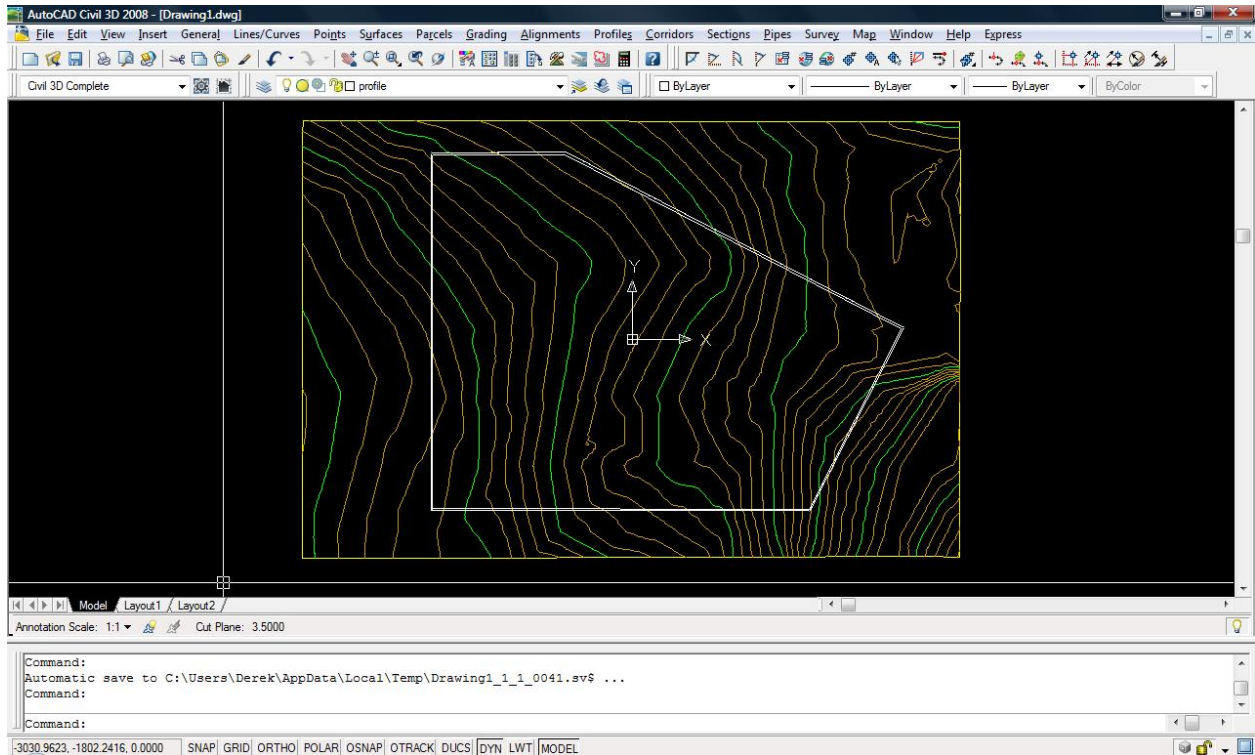
# CIVIL 3D PROJECT

## USC Campus

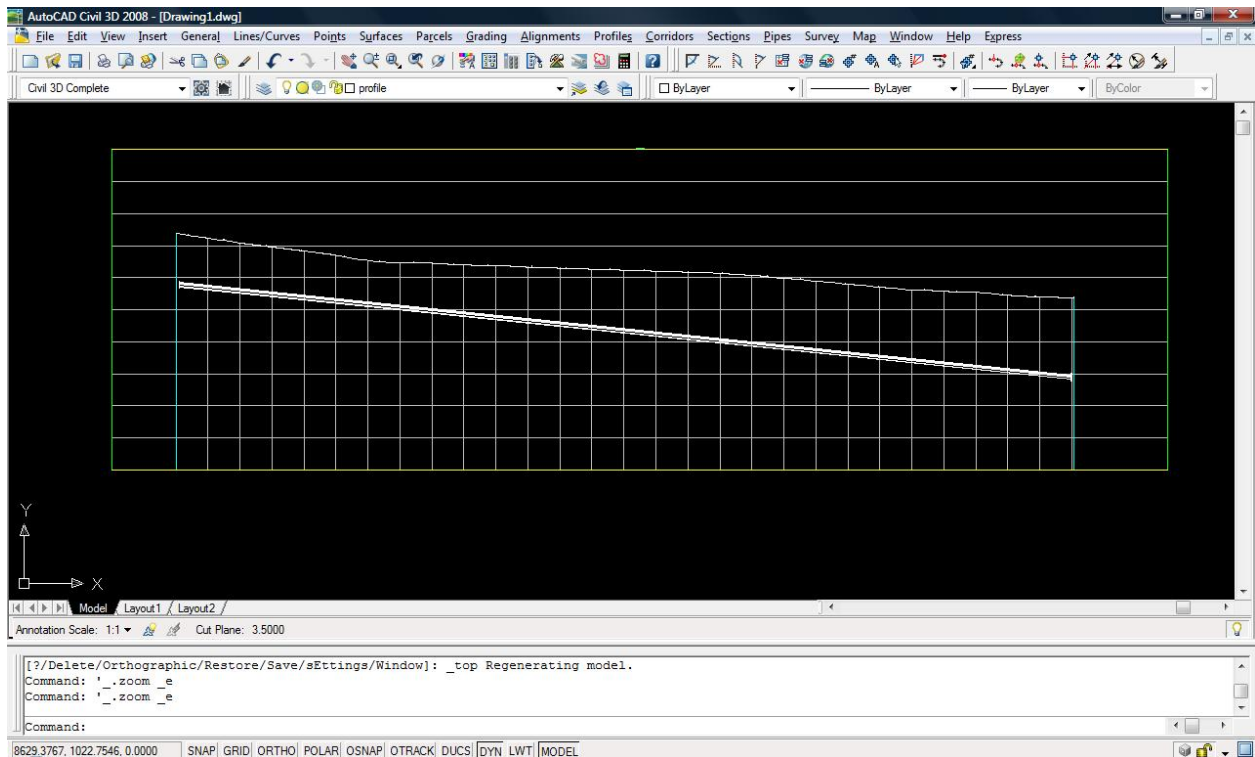
My Civil 3D Project is one that incorporates many functions of Autodesk's civil engineering design software. During periods of intense rainfall, the USC campus and adjacent streets are plagued by bad drainage. To mitigate ponding situations, I've created a series of new drain pipe networks along the existing Exposition, Figueroa, Jefferson, and Vermont streets. The following screenshots detail the procedure.



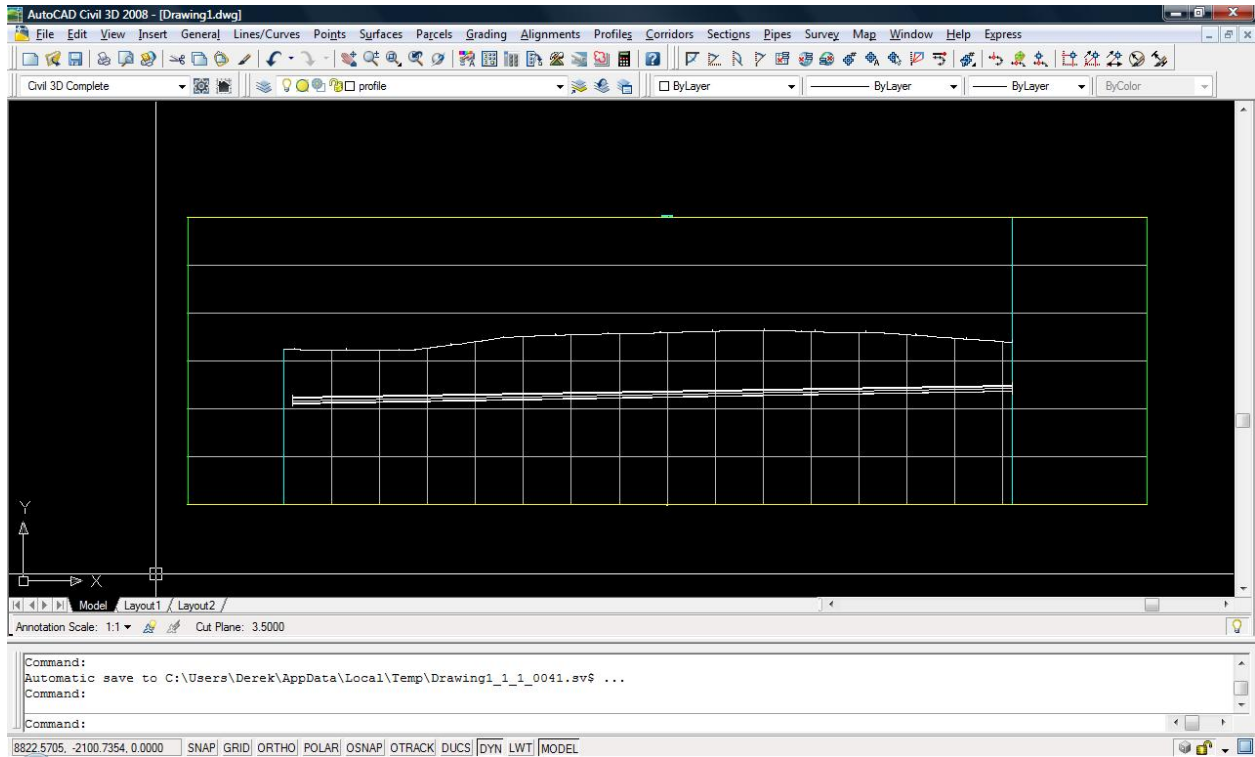
Terrain data is imported into Autodesk AutoCAD Civil 3D 2008 from Google Earth. Simply opening the Google Earth application and zooming into the area of interest allows USGS elevation data and an aerial snapshot to be captured by Civil 3D.



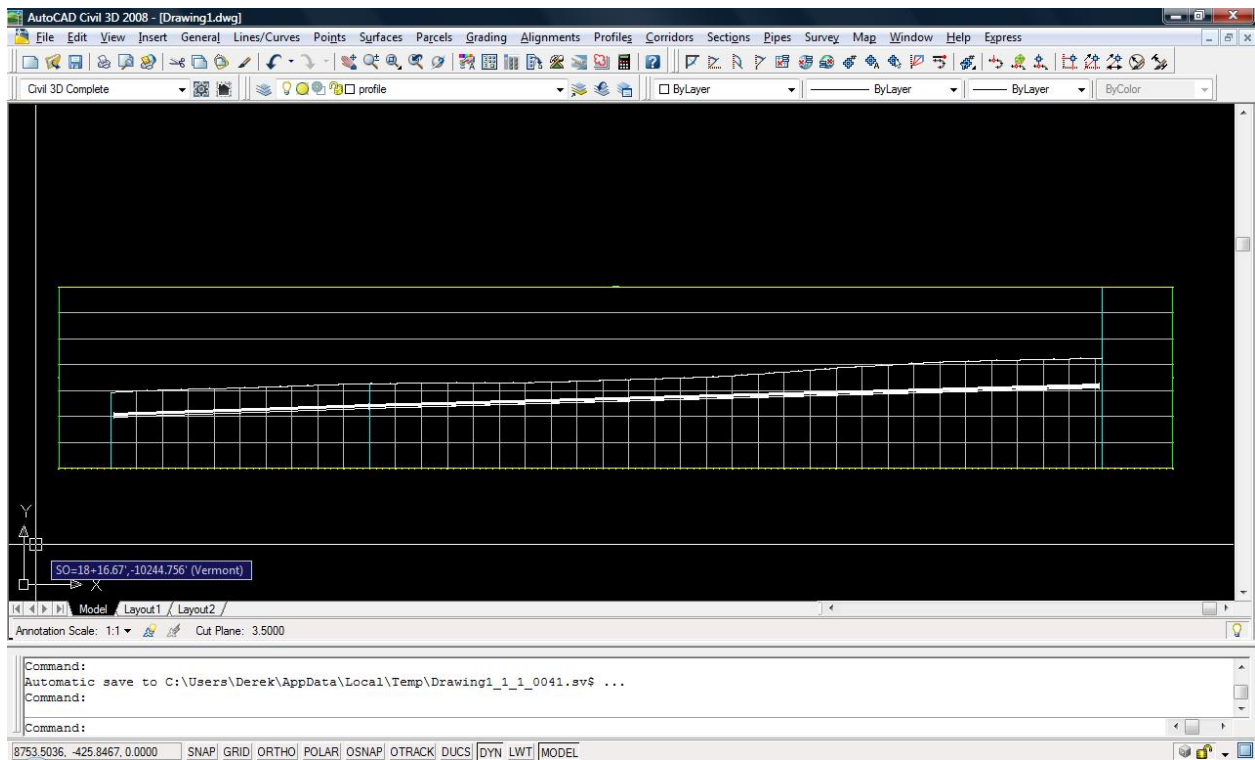
Using a style editor built into Civil 3D 2008, contour lines corresponding to the imported terrain data are generated. With the aid of the aerial photo, alignments/corridors are easily created by tracing.



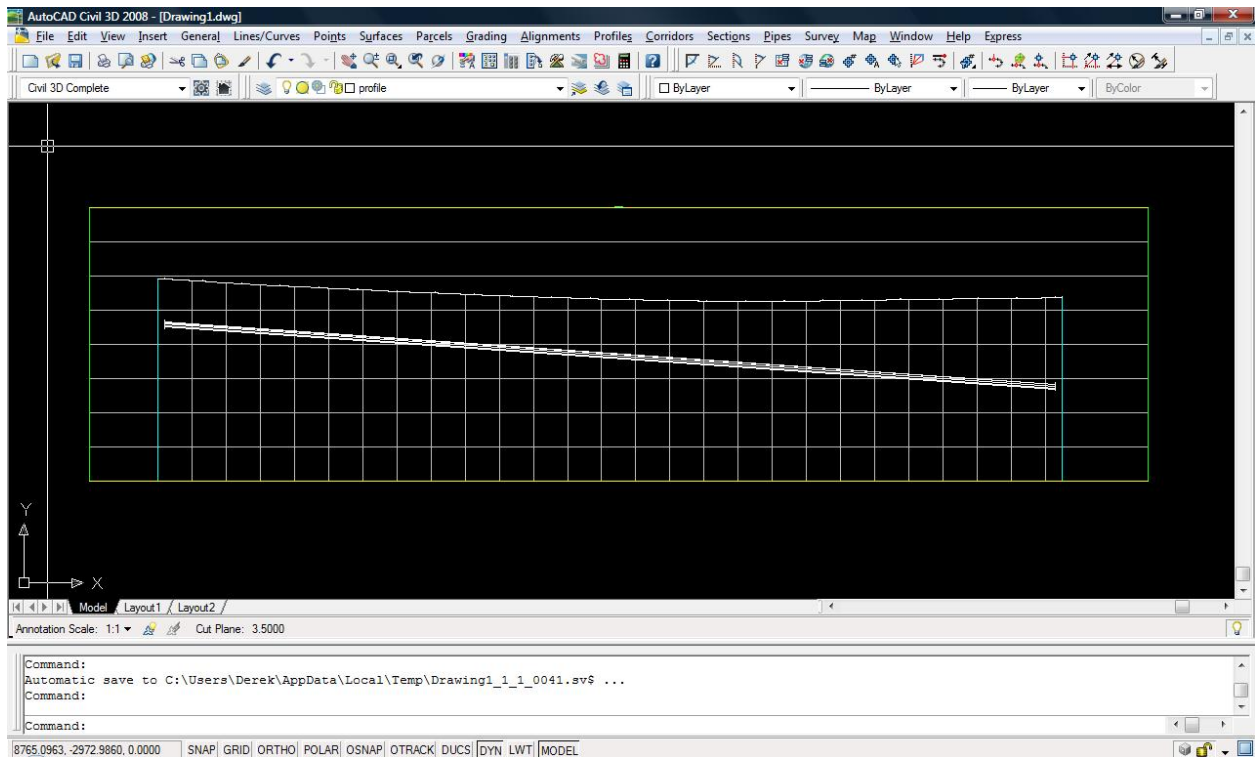
A profile view of Exposition Blvd. with new subterranean drainage pipe.



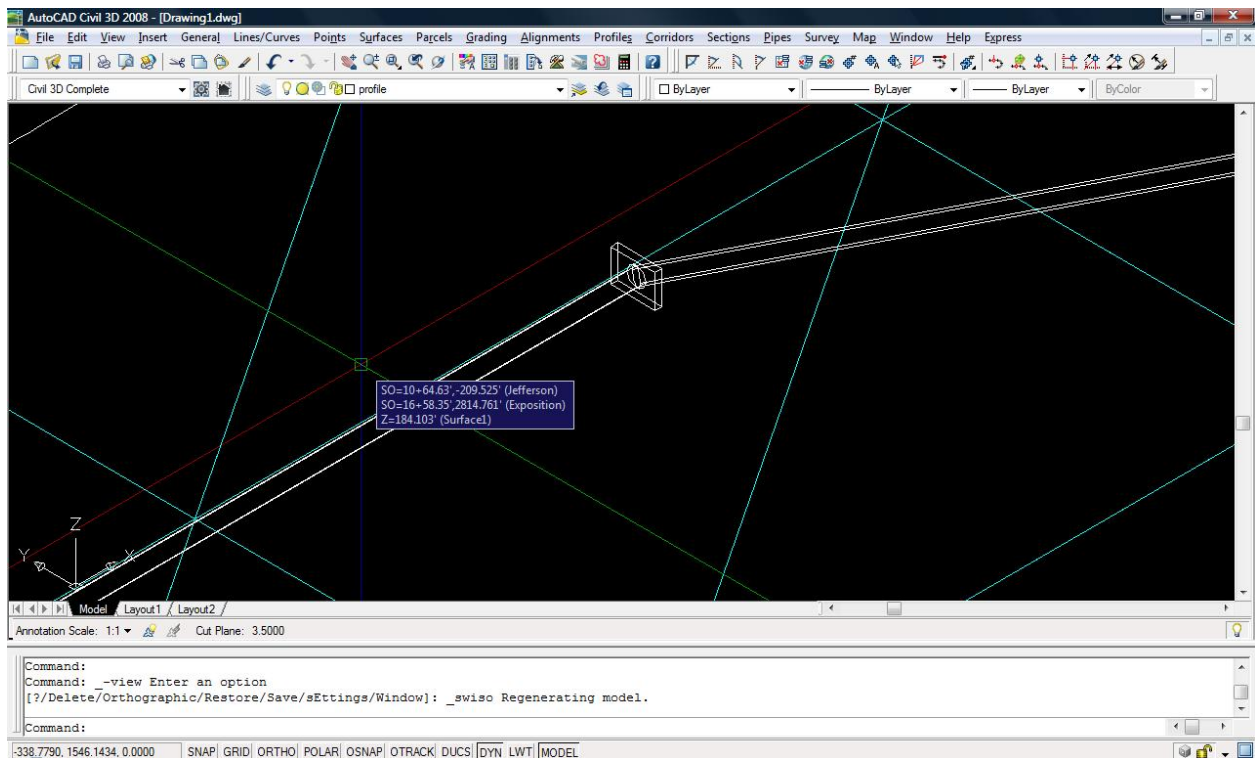
A profile view of Figueroa St. with new subterranean drainage pipe.



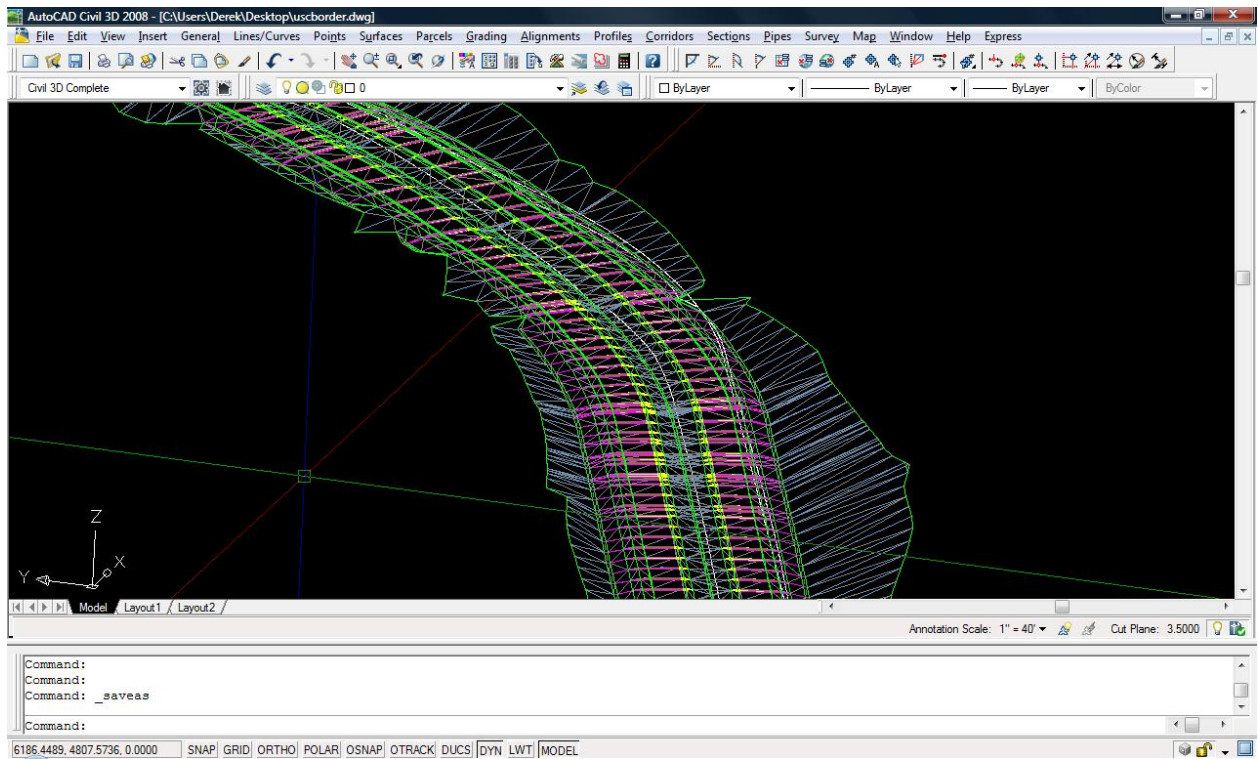
A profile view of Jefferson Blvd. with new subterranean drainage pipe. Note that the ground slopes from East to West, dictating flow in a westerly direction.



A profile view of Vermont Ave. with new subterranean drainage pipe.



Due to the bend in Jefferson Blvd. at the Orchard Ave. intersection, a concrete box structure is needed to stabilize the pipe along the joint.



A three dimensional view of the Jefferson Blvd. bend at the Orchard Ave. intersection. Civil 3D corridor settings were utilized to create the double lane roadway separated by gravel median.