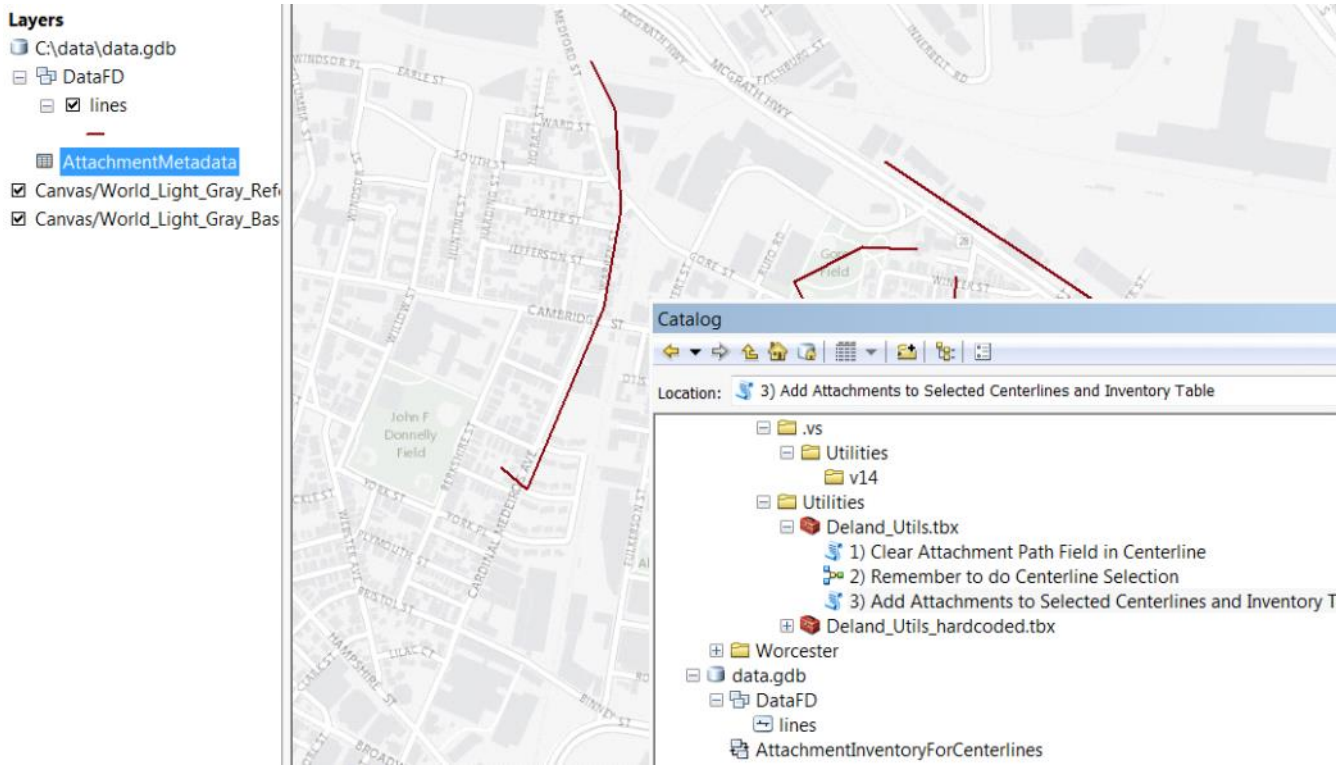
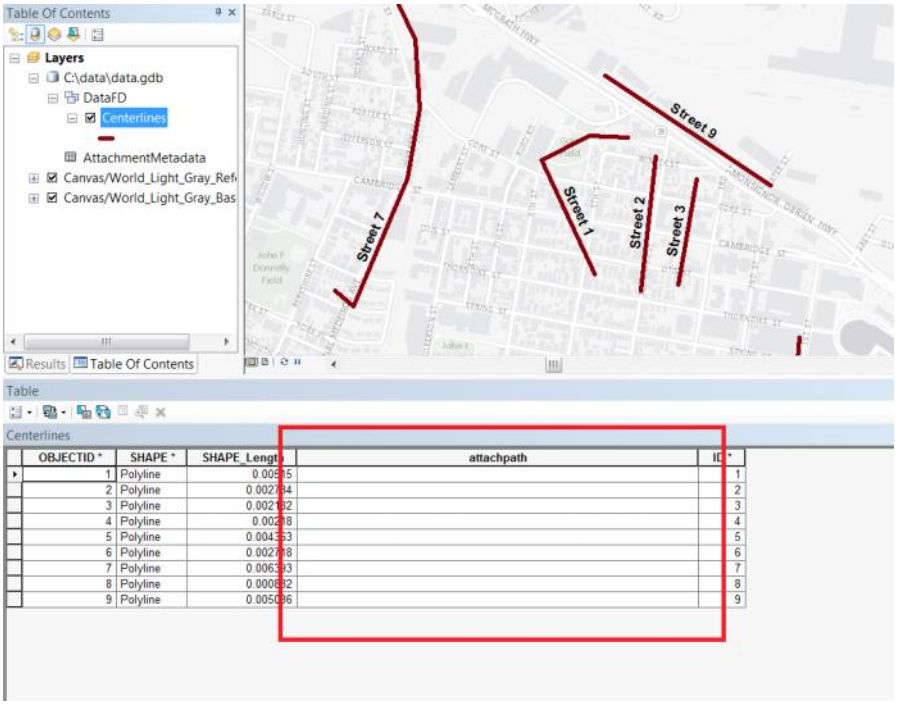
Deland Utilities Beta 1

Friday, August 21, 2015 2:09 PM

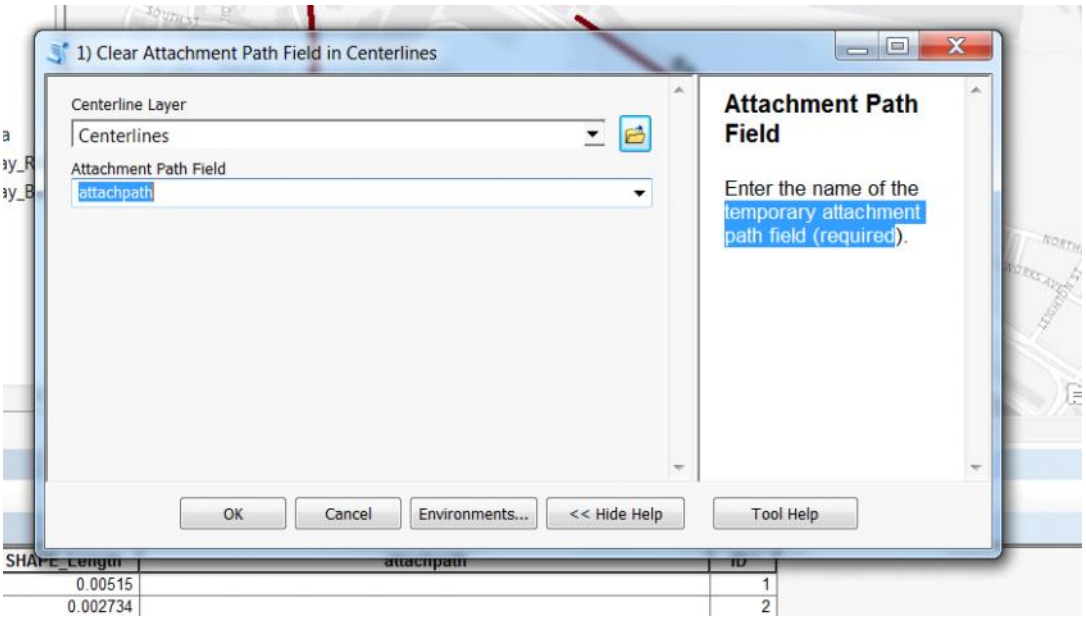
Deland_Utils.tbx ArcGIS Toolbox



We are going to take advantage of the Add Attachments Geoprocessing tool as we can make it read a single table for the path to attachments to be added to all features. It will ignore features with blank attributes. Therefore if we populate that attribute for selected features only, we can add an attachment to multiple features at once.

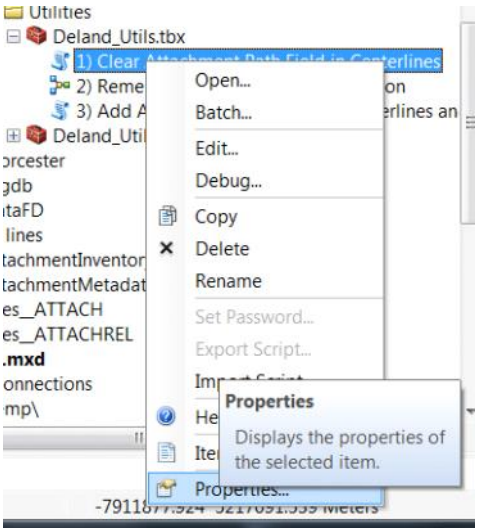


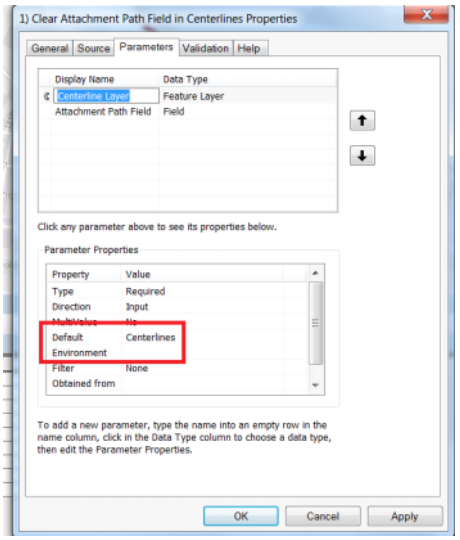
Step 1.
Run the Clear Attachment Path Field in Centerlines



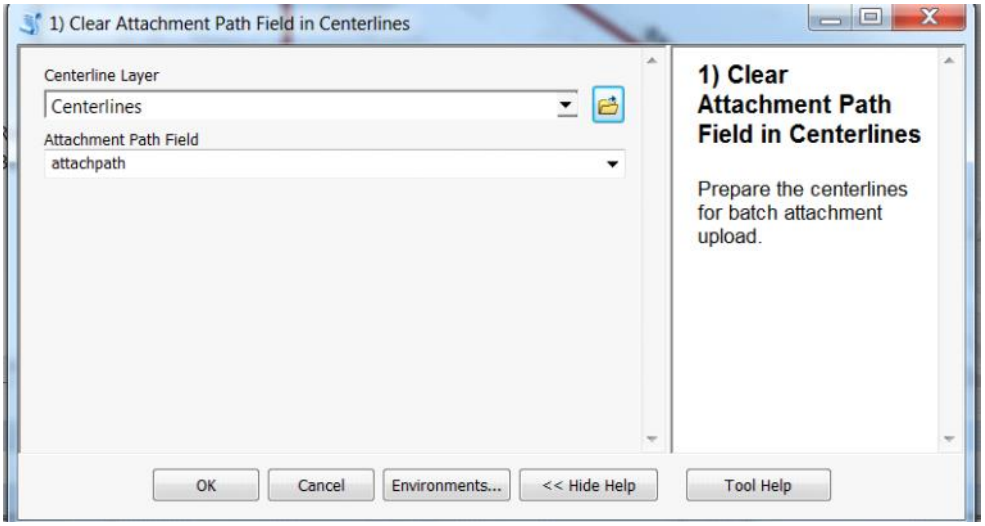
Since this will not likely change during the project we can definitely hard code this so as to elimnate the requirement to fill it out each time. ***Note****: you can also run it from the Geoprocessing Results window to use the same parameters for the tool each time.*

An easy way to do this is to edit the GP tool and put in default values for this per project schema:





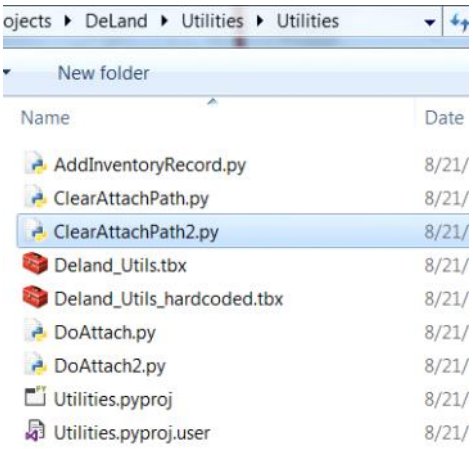
Run the tool.



The attachpath field should be blank for all features.

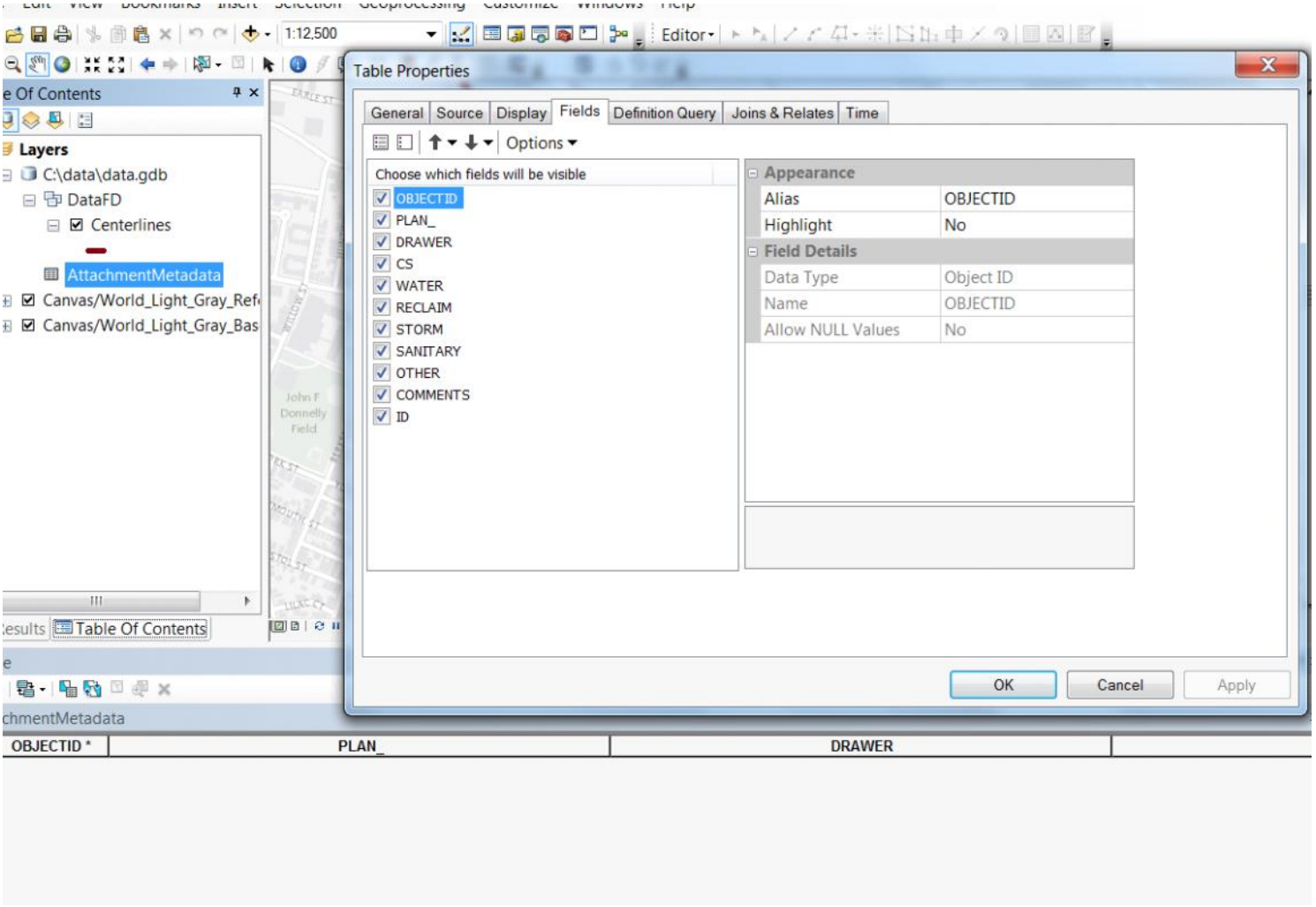
h	attachpath	ID
515		
734		
182		
218		
363		
718		
393		
332		
036		

The script that was just run is called ClearAttachPath2.py




```
layer_name = 'lines'
attachpathfield='attachpath'
myworkspace=None

mxd = arcpy.mapping.MapDocument("CURRENT")
df = arcpy.mapping.ListDataFrames(mxd)[0]

layer_name = arcpy.GetParameterAsText(0)
arcpy.AddMessage("Centerline layer: " + layer_name)

attachpathfield=arcpy.GetParameterAsText(1)
arcpy.AddMessage("Attachment Path: " + attachpathfield)

for lyr in arcpy.mapping.ListLayers(mxd, "", df):
    if lyr.name == layer_name:
        myworkspace=lyr.workspacePath

#clear selection
arcpy.SelectLayerByAttribute_management(layer_name, 'CLEAR_SELECTION', '#')

#clear attachpath
with arcpy.da.Editor(myworkspace) as edit:
    arcpy.CalculateField_management(
        layer_name, attachpathfield, '""', 'PYTHON')
```

The Centerline layer has a relationship to a standalone table storing information about each attachment.



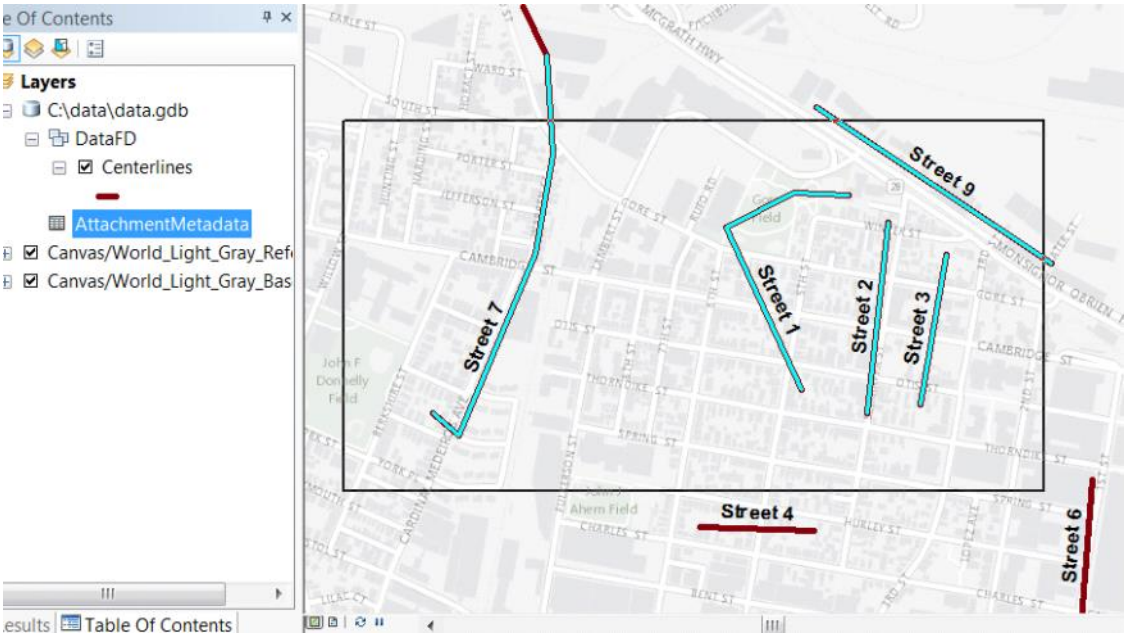
So rather than do this individually for each attachment and for each feature we can collect that information once and use a little python script to loop through the selected features and update each one programmatically.

From DoAttach2.py

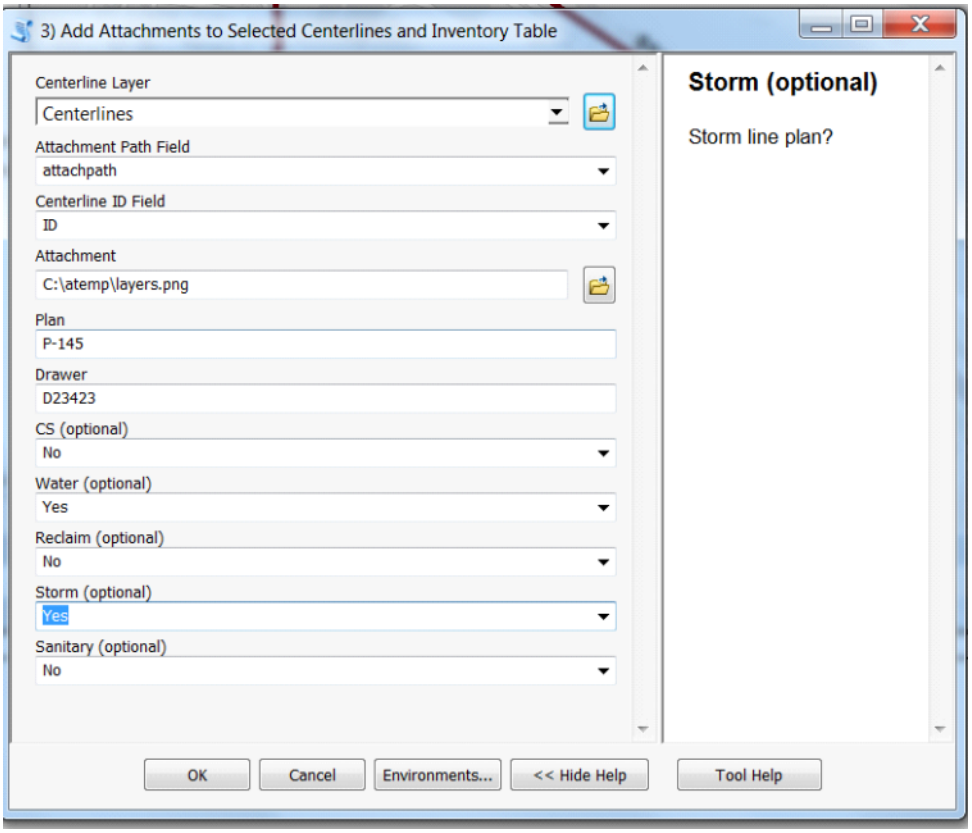
```
#run add attachments
arcpy.AddAttachments_management(layer_name, 'OBJECTID', layer_name, 'OBJECTID', attachpathfield, '#')

# Create insert cursor for inventory table
#
attachmentmetadata_rows = arcpy.InsertCursor(attachmetadatatable_name)
count=0
try:

    with arcpy.da.SearchCursor(layer_name , (layer_idfield,)) as selectedstreetcursor:
        for row in selectedstreetcursor:

            attachmentmedata_record = attachmentmetadata_rows.newRow()
            attachmentmedata_record.ID = row[0]
            attachmentmedata_record.PLAN_ = plan
            attachmentmedata_record.DRAWER = drawer
            attachmentmedata_record.CS = cs
            attachmentmedata_record.WATER = water
            attachmentmedata_record.RECLAIM = reclaim
            attachmentmedata_record.STORM = storm
            attachmentmedata_record.SANITARY = sanitary


            attachmentmetadata_rows.insertRow(attachmentmedata_record)
            count=count+1

except arcpy.ExecuteError:
    print "error"
    print(arcpy.GetMessages(2))


print "Added " + str(count) + " new records to " + attachmetadatatable_name + "..."
```

We can call this script from the tool "3) Add Attachments to Selected Centerlines and Inventory Table".

Don't forget to select the target features in the map using the standard ArcGIS tools.

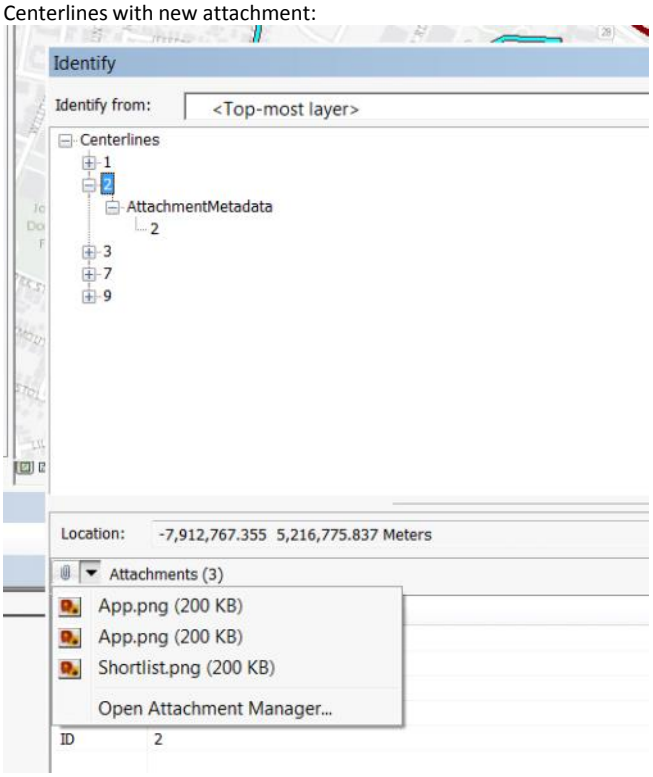


The tool will present a dialog to collect the relevant information including the file to attach and then run AddAttachments using the values in the attachpath field for each row and then iterate through the selected centerlines, adding a table in the related "inventory scan" metadata table for each entry.

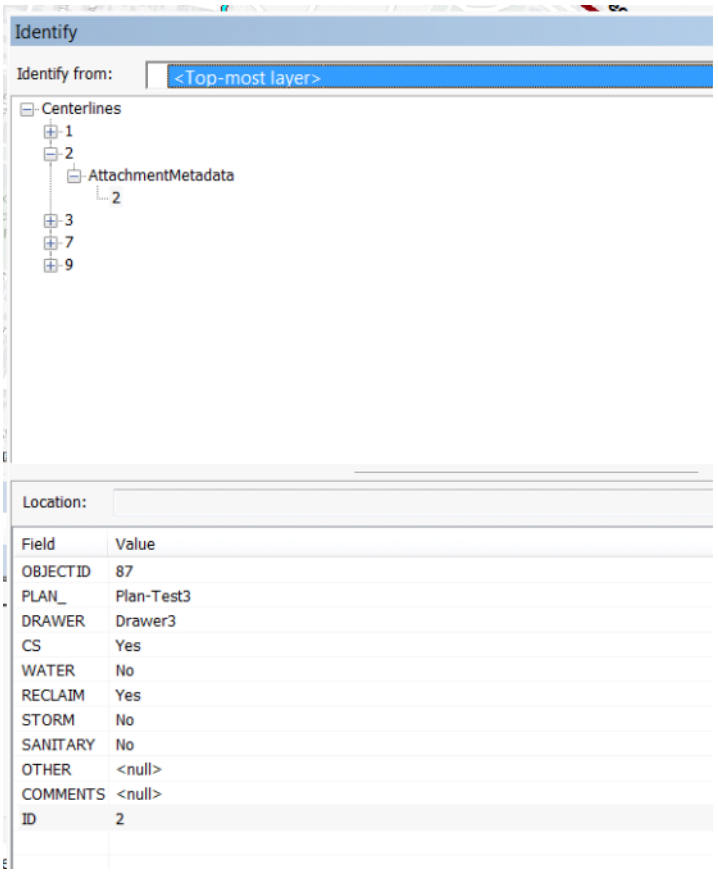


The results:

Centerlines with new attachment:



Related record with plan information:


Identify
Identify from:
<Top-most layer>
Centerlines
1
2
AttachmentMetadata
2
3
7
9
Location:
Field
Value
OBJECTID
87
PLAN_
Plan-Test3
DRAWER
Drawer3
CS
Yes
WATER
No
RECLAIM
Yes
STORM
No
SANITARY
No
OTHER
<null>
COMMENTS
<null>
ID
2