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CHATHAM COUNTY REGIONAL STORMWATER STUDIES

Dundee Canal

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Dewberry

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List of Abbreviations

Abbreviation	Meaning
AHPS	NWS Advanced Hydrologic Prediction Service
AG	Augusta Road
AORC	Analysis of Record for Calibration
BFE	Base Flood Elevation
CC	Concrete (pipe material)
CMP	Corrugated Metal Pipe
CP	Coastline Port Services
CRS	Community Rating System
DA	Davis Avenue
DEM	Digital Elevation Model
EPA	Environmental Protection Agency
ESRI	Environmental Systems Research Institute
GA	Georgia
GC	Garden City
GDOT	Georgia Department of Transportation
GIS	Geographical Information System
HDPE	High-Density Polyethylene (pipe material)
LA	Lynah Avenue
LFP	Longest flowpath
LiDAR	Light Detection and Ranging
LOS	Level of service
MSE	Midwest and Southeast
NFIP	National Flood Insurance Program
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
NWS	National Weather Service
OCS	Outlet Control Structure
O&M	Operations and maintenance
PCSWMM	Personal Computer Storm Water Management Model
PT	Priscilla Thomas
PVC	Polyvinyl chloride (pipe material)
RCP	Reinforced concrete pipe
SAGIS	Savannah Area Geographic Information System
S&O Canal	Savannah Ogeechee Canal
SCS	Soil Conservation Service
SO	S&O Canal
SP	Sharon Park Neighborhood
SSURGO	Soil Survey Geographic Database
SWI	Stormwater Inventory
UH	Unit Hydrograph
USDA	United Stated Department of Agriculture
USGS	United States Geological Survey
WLS	Water level sensor
WSE	Water surface elevation
WV	Woodville Neighborhood

1. Executive Summary

The purpose of this study was to develop a stormwater model for the Dundee Canal basin to assess existing conditions, identify areas of concern, develop a recommended plan of action for improvements, and provide an interactive and living stormwater model for Chatham County and other stakeholders capable of being modified in the future as new developments are proposed. All hydrologic and hydraulic modeling for this project was modeled utilizing the PCSWMM program which runs the SWMM5 engine based hydrodynamic rainfall-runoff simulation using dynamic wave hydraulic model formulations on a GIS platform. In total, the model area included 3,330 acres draining to the Dundee Canal basin and is composed of the following elements.

Table 1 – Summary of Dundee Canal PCSWMM model elements.

MODEL ELEMENT	COUNT	LINEAR FEET
Closed Conduits	347	38,000
Open Channel Conduits	648	153,000
Storm Structure Junctions	169	N/A
Open Channel Junctions	188	N/A
Storage Nodes	2	N/A
Subcatchments	362	N/A

Prior to model development, Dewberry coordinated with Chatham County and other stakeholders, including Garden City and the City of Savannah, to collect and assess all available data and information to gain base knowledge of the existing drainage system. Areas were then identified where additional survey and/or site visit investigations were needed to complete model development, and Dewberry's subconsultant, M.E. SACK Engineering (M.E. Sack), collected data for 237 drainage conduits within the Dundee Canal.

The data and information gathered was compiled into a stormwater GIS database and used to develop a hydraulic model of the existing stormwater system. The database includes all identifiable parts of the Dundee Canal stormwater system draining 20 acres or more, which encompasses portions of the historic Savannah Ogeechee (S&O) Canal and Heidt Canal (Figure 1). The existing conditions model was calibrated to Water Level Sensor (WLS) data collected by Chatham County using rainfall inputs derived from the NOAA Analysis of Record for Calibration (AORC) for two storm events occurring on May 10th, 2025, and June 15th, 2025.

The existing conditions model was used to conduct a Level of Service (LOS) analysis, identify structural flooding, and provide data to help Chatham County and other stakeholders better understand flood risk and plan for future developments. Existing conditions data provided with this report include the following:

- LOS tables for all modeled conduits (Appendix A)
- Existing Conditions Floodplain Maps (Appendix D)
- Stormwater System GIS database (Included separately as SystemsAnalysis.gdb)
- GIS data for existing conditions Water Surface Elevations (WSE) and Base Flood Elevations (BFEs) (Included separately as ExistingConditionsData.gdb)

Nine areas of concern were identified during model creation, and in those areas, fifteen proposed stormwater system improvement project concepts were developed based on analysis of flooding in the Dundee Canal basin as evident in the existing conditions model results. Model scenarios were developed for each of the fifteen proposed improvement options, and proposed improvement option results were compared to the existing conditions results to quantify the benefits of each proposed option. A criteria matrix was developed to score the proposed improvement options, which included categories for stormwater, cost, constructability, and community. The highest scoring options were combined into one model scenario for the recommended stormwater improvement consensus plan.

2. Introduction

2.1 Project Purpose and Description

Chatham County is taking action to provide stormwater models for major drainage basins throughout the County. The Dundee Canal basin, which spans multiple jurisdictions including unincorporated areas of Chatham County, the City of Savannah, and Garden City, GA, is one basin of interest. The Dundee Canal basin is approximately 3,330 acres consisting of primarily developed areas and drains to the Savannah River. Several historic canals connect to the Dundee Canal, including the Heidt and Savannah Ogeechee (S&O) Canals. The locations of the Dundee Canal basin, historic canals, and Dundee Canal are shown in Figure 1.

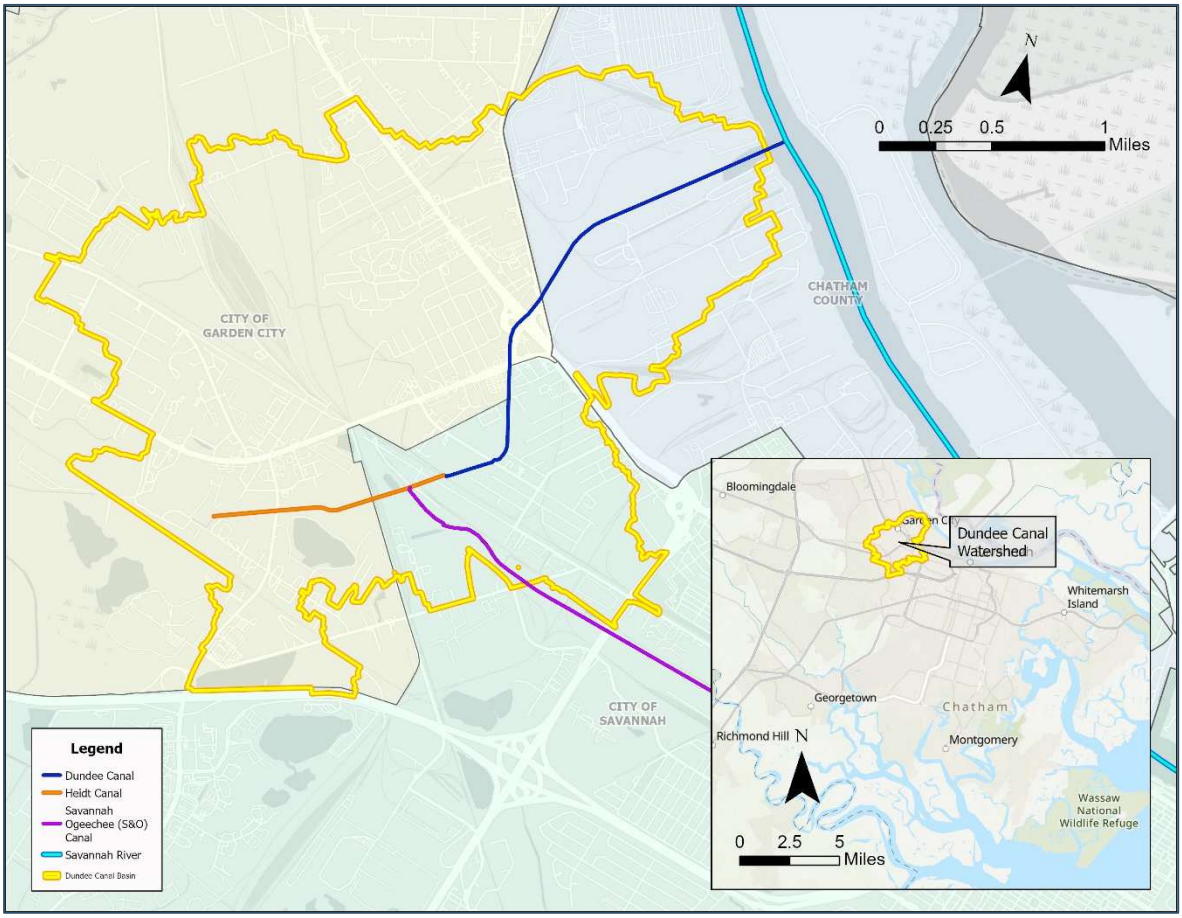


Figure 1: Dundee Canal Location Map

This study investigates and assesses the existing conditions of the Dundee Canal basin stormwater system, draining a minimum of 20 acres, in order to identify areas of concern. As a result of the existing conditions investigation, several proposed improvement projects were assessed and ranked based on impacts to stormwater, cost, constructability, and community. Additionally, Dewberry will provide an interactive stormwater model and an updated stormwater system GIS database for Chatham County and other stakeholders capable of being modified in the future as new developments are proposed.

All hydrologic and hydraulic analysis for this project was completed utilizing the PCSWMM program which runs the SWMM5 engine based hydrodynamic rainfall-runoff simulation using dynamic wave hydraulic model formulations on a GIS platform. This method allows for time varying rainfall to be routed through the system, accounting for timing of the hydrographs, storage, backwater, and losses in the system. Unsteady flow analysis via the PCSWMM program provides a highly accurate representation of stormwater management during a storm event. While 2D portions of the model were used to establish flow patterns and calibrate the model, the final model provided to Chatham County is a 1D model which allows for the most efficient model run times.

3. Model Data

3.1 Assessment of Available Information

Dewberry coordinated with Chatham County and other stakeholders to assess all available information and collect base knowledge of the existing drainage system as a first step toward model development. This information was compiled and used to determine data gaps and identify additional information needed for model development.

3.1.1 Topographic Data

Light Detection and Ranging (LiDAR) Data collected from 2018 - 2019 (2-ft resolution) was obtained from USGS for the Dundee Canal basin. Figure 2 shows the LiDAR data Digital Elevation Model (DEM) symbolized with a color map and 5-ft contours.

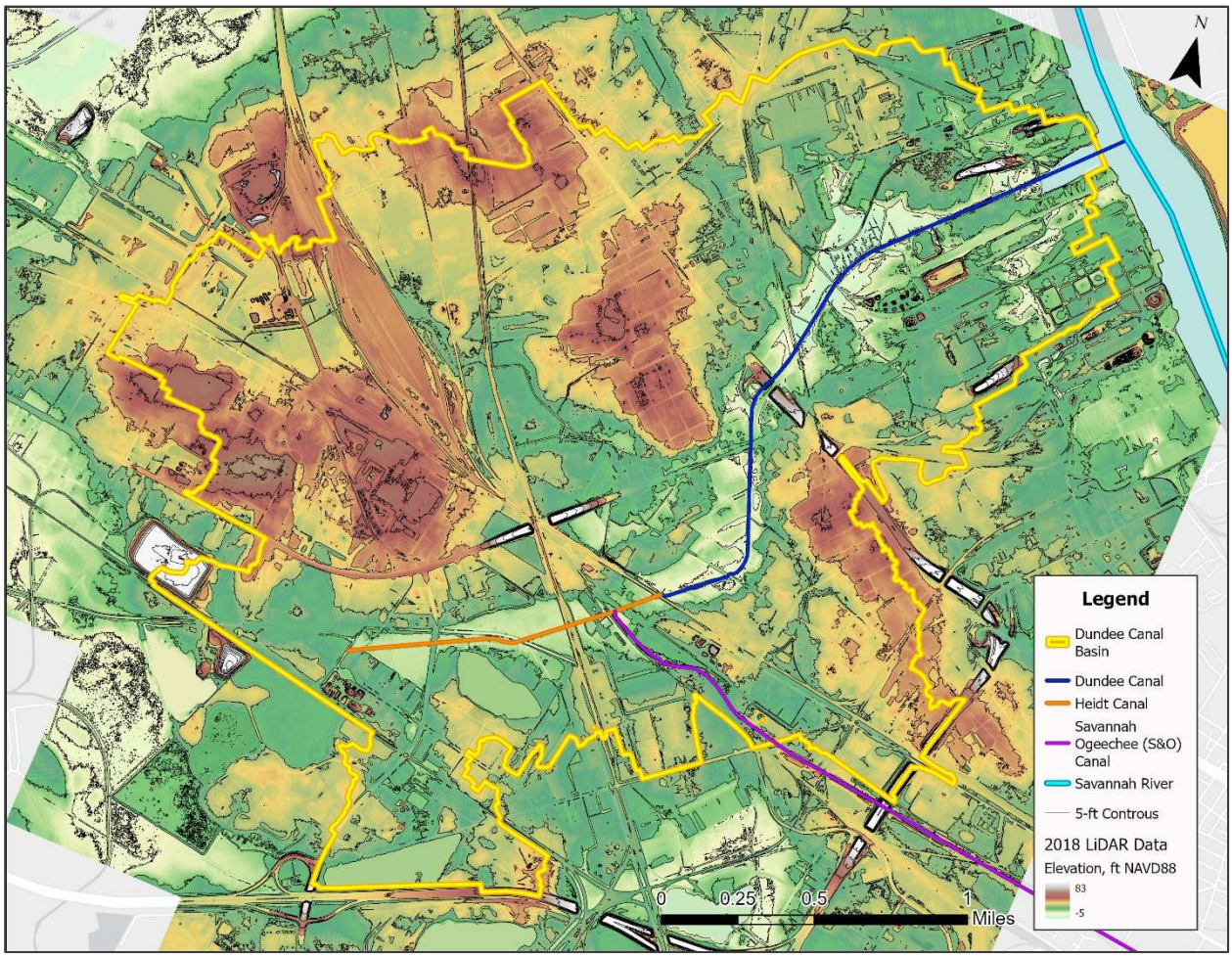


Figure 2: 2018 - 2019, 2-ft Resolution LiDAR Data Obtained from USGS

3.1.2 Stormwater Inventory Data

Garden City, the City of Savannah, and Chatham County provided Dewberry with stormwater inventory (SWI) data for channels, pipes, inlets, and structures. These data were brought into GIS in conjunction with topographic data to identify stormwater assets which drain 20 or more acres within the Dundee Canal basin.

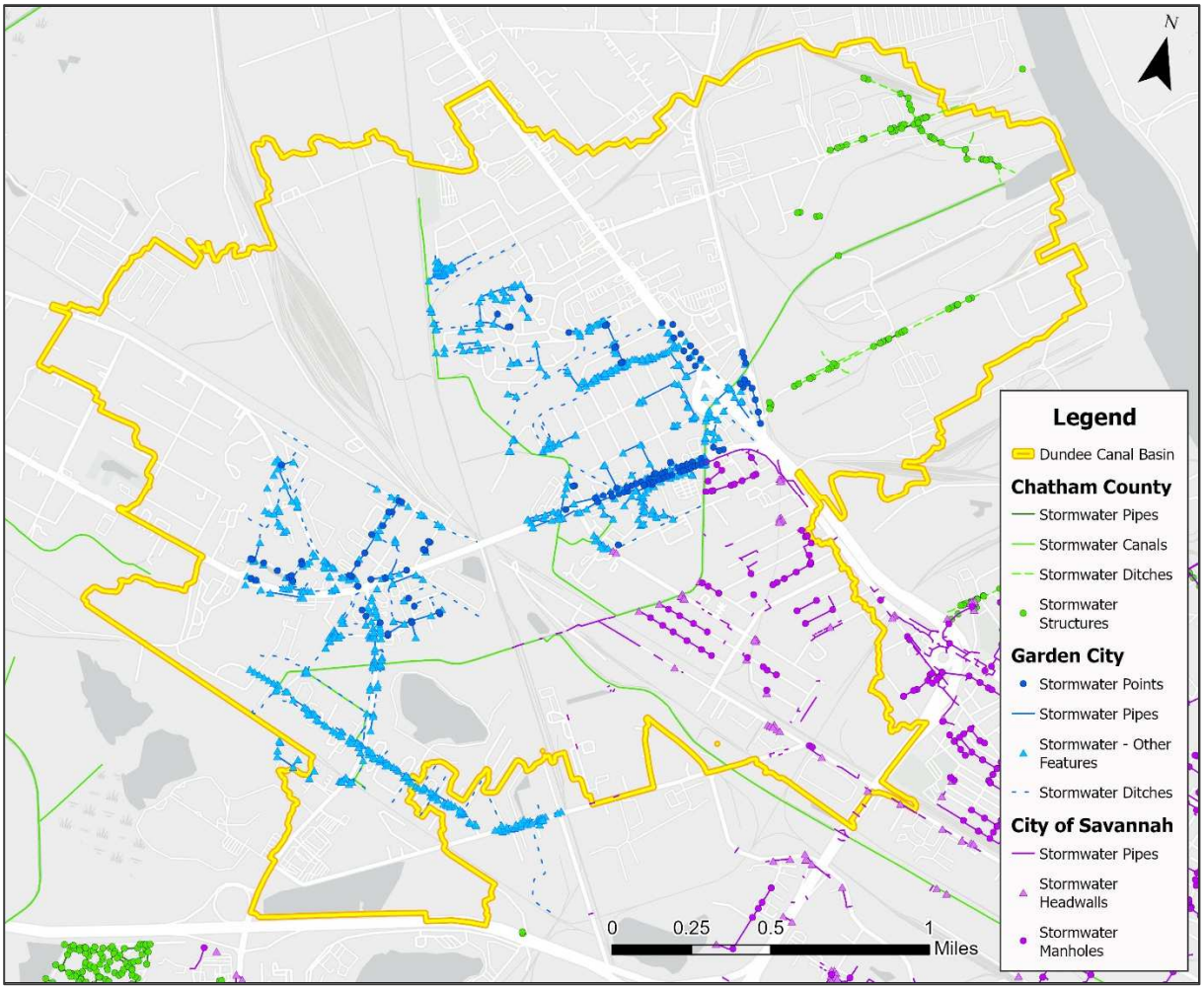


Figure 3: Stormwater Inventory Data received from Chatham County, Garden City, and the City of Savannah

3.1.3 GIS Data

GIS data were obtained from various sources to support model development and results analysis. The GIS data sources used in development of this model include:

- ESRI basemap data including aerial imagery, road names, and parking lot locations
- Improved high-resolution aerial imagery shared by Chatham County via NearMap
- TIGER roads line features obtained from the U.S. Census Bureau
- SSURGO Soils data obtained from the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS)
- National Hydrography Dataset (NHD) obtained from U.S. Geological Survey (USGS)
- Building footprints from Savannah Area Geographic Information System (SAGIS)
- Parcel information from SAGIS
- Impervious dataset (not including building footprints) generated by Dewberry.

3.1.4 Plans

Chatham County provided plans for major drainage systems in the Dundee Canal basin. The plans obtained from Chatham County include:

- 1977 plans for the Augusta Road (I-516), US HWY 80, and SR25 (Main St.) interchange.
- 1975 design plans for the Lynes Parkway Extension, showing the SR25 (Main St.) bridge over Dundee Canal.
- 2010 Bridge Exhibit of Brampton Road, showing two railroad bridges over Dundee Canal

downstream of Main Street, and the Main Street bridge over Dundee Canal.
- 2007 Mainline Traffic plans for US HWY 80 showing stormwater assets from Fourth Street running Northeast to Dundee Canal, and a triple box culvert under US HWY 80 at Dundee Canal.
- 2006 CAD drawings and plots for the Tide gate at Dundee Canal near the confluence with the Savannah River.
- 1982 Sewer plans showing the box culvert under Alfred Street at Dundee Canal.
- Map exhibit showing historical canal locations in the project area.
- 2025 Groves K-12 School as-built plans

Dewberry coordinated with the City of Savannah, who provided map exhibits showing culvert upgrades along the Savannah Ogeechee Canal near the intersection of Old Louisville Road and Telfair Road.

Finally, Dewberry also obtained plan data from the GDOT GeoPI website, including plans for the Brampton Road bridge connector, and HWY 80 & Augusta Road drainage system.

Plan data from each of these sources is provided in Appendix E – Plan Data. Note that elevations shown in older plans referencing the NGVD 29 datum were converted to the NAVD 88 datum.

3.2 Data Collection

3.2.1 Survey

Using the stormwater assets identified with the available stormwater inventory data, plan information, and other GIS data, areas for survey data collection were identified to collect pipe invert, pipe material, pipe size, inlet rim elevation, and inlet type for stormwater assets draining 20 acres or more. Survey data was needed for existing infrastructure that included pipe size, material, and invert elevations, as well as for new infrastructure not included in any previous inventories that was identified during the model setup process. The survey team collected data for 237 stormwater conduits and 359 stormwater inlets/headwalls (Figure 4). Photographs and field sketches were also collected to help confirm connectivity of the stormwater system.

3.2.2 Site Visits

Dewberry incorporated the available and collected data (Sections 3.1.1, 3.1.2, 3.1.3, and 3.2.1) into a preliminary existing conditions PCSWMM model and identified areas where additional site investigation was needed to confirm connectivity or collect additional information. Data collected during site visits includes measure downs of pipe inverts, photographs, and field sketches of system connectivity (Figure 4). Notable data collected during site visits used to confirm connectivity of the stormwater system include drainage plans for Chatham City apartments, pipe invert measure-downs along minus Avenue, and confirmation of a culvert near Kelly Hill road on Heidt Canal draining out of the Dundee Canal basin. Site visit data was incorporated into the preliminary PCSWMM model to inform the existing conditions analysis.

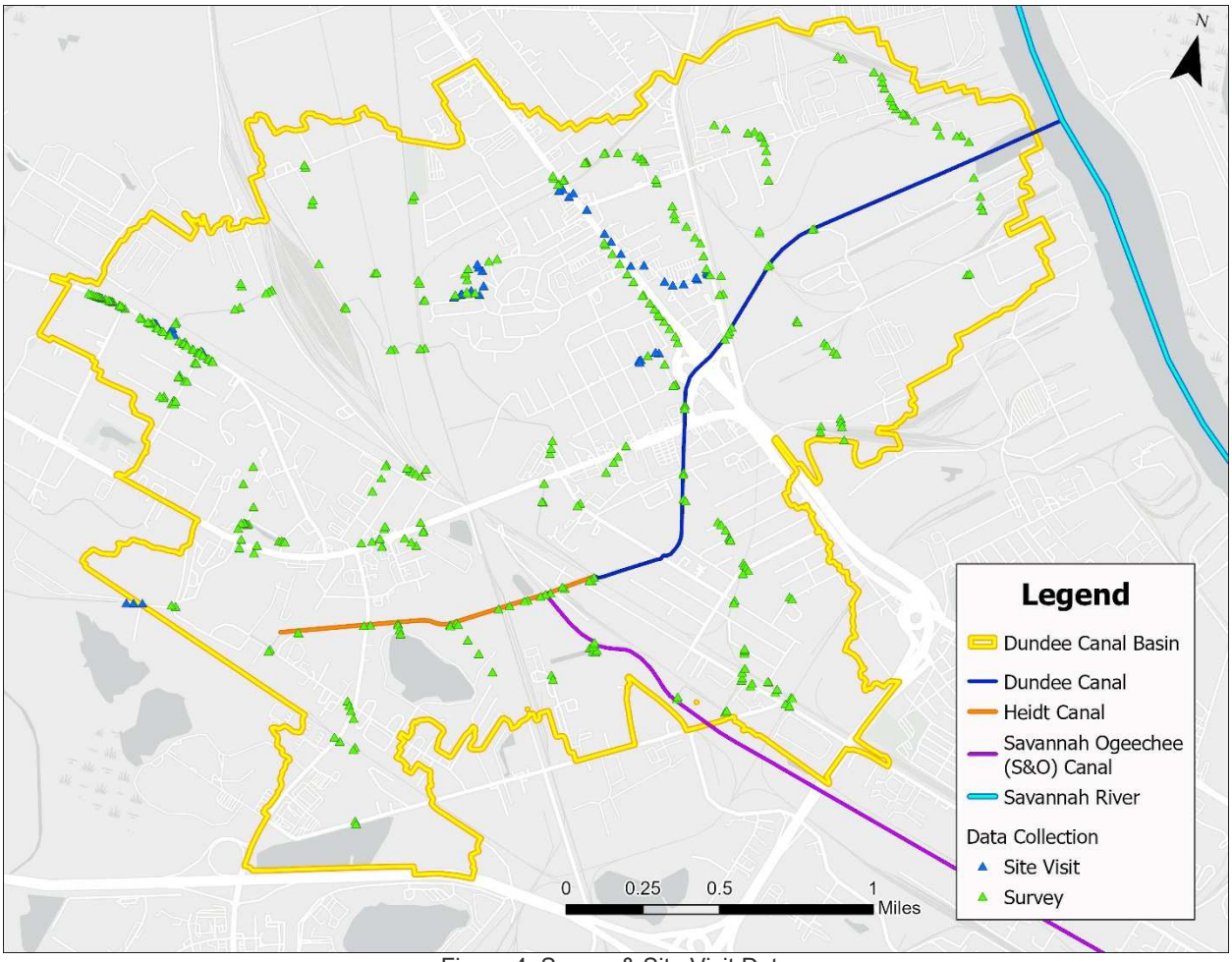


Figure 4: Survey & Site Visit Data

4. Existing Conditions Model Development

Dewberry has developed an existing conditions model for the Dundee Canal watershed that includes all stormwater assets draining a minimum of 20 acres. This model is based on existing landuse conditions and will the basis for identifying areas of concern which will drive the development of the solution models.

All hydrologic and hydraulic analysis for this project was completed utilizing the PCSWMM program which runs the SWMM5 engine based hydrodynamic rainfall-runoff simulation using dynamic wave hydraulic model formulations on a GIS platform. This method allows for time varying rainfall to be routed through the system, accounting for timing of the hydrographs, storage, backwater, and losses in the system. Unsteady flow analysis via the PCSWMM program provides a highly accurate representation of stormwater management during a storm event. While 2D portions of the model were used to establish flow patterns and calibrate the model, the final model provided to Chatham County is a 1D model which allows for the most efficient model run times. The following sections detail the hydrologic and hydraulic model setup used for this study.

4.1 Hydrology

4.1.1 Rainfall Input

Precipitation frequency data were obtained from NOAA Atlas 14 for the 2-, 5-, 10-, 25-, 50-, and 100-year, 24-hour design storm frequencies. Given the variability of rainfall near the coast, rainfall depths for the Dundee Canal watershed were collected at the SR25/Main St. Bridge over Dundee Canal, which his near the centroid of the watershed. Rain gages were developed in PCSWMM using the Design Storm Creator for the MSE Type 5 rainfall distribution (Table 22 and Figure 5).

Table 2: 24-hour MSE5 Design Storms - Cumulative Rainfall Depth

DESIGN STORM	CUMULATIVE RAINFALL DEPTH,
2-year	4.40
5-year	5.57
10-year	6.64
25-year	8.28
50-year	9.65
100-year	11.1

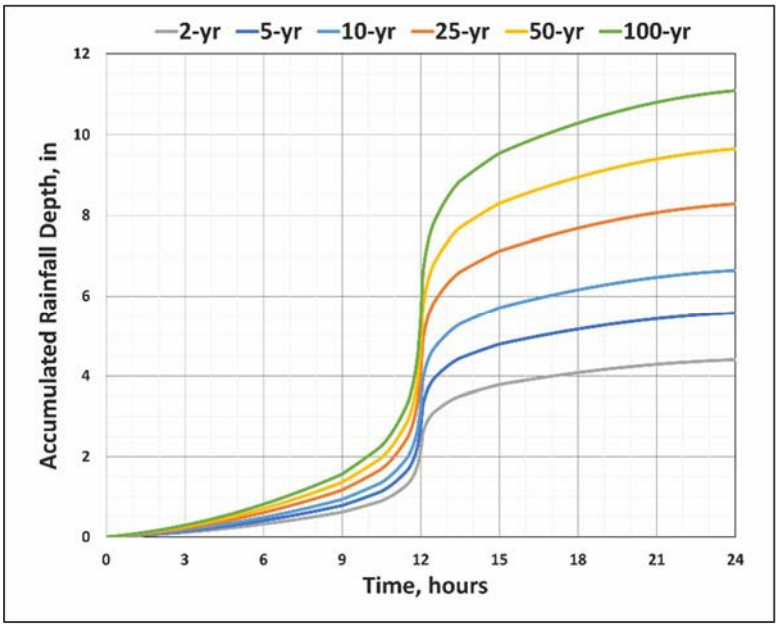


Figure 5: 24-hour Design Storms - Cumulative Rainfall Depth

4.1.2 Subcatchment Delineation

Subcatchments were delineated for every water-accepting model node using automated GIS processes and were manually adjusted as needed to better align with roadway crowns, ditch lines, and property boundaries. Subcatchments were delineated based on stormwater inventory data, GIS imagery, terrain data, plan data, survey data, and site visit observations, and were adjusted as needed to ensure accurate drainage area. Longest flowpaths (LFPs) were then digitized in GIS for each subbasin. An overview of the model subbasins is shown in Figure 6.

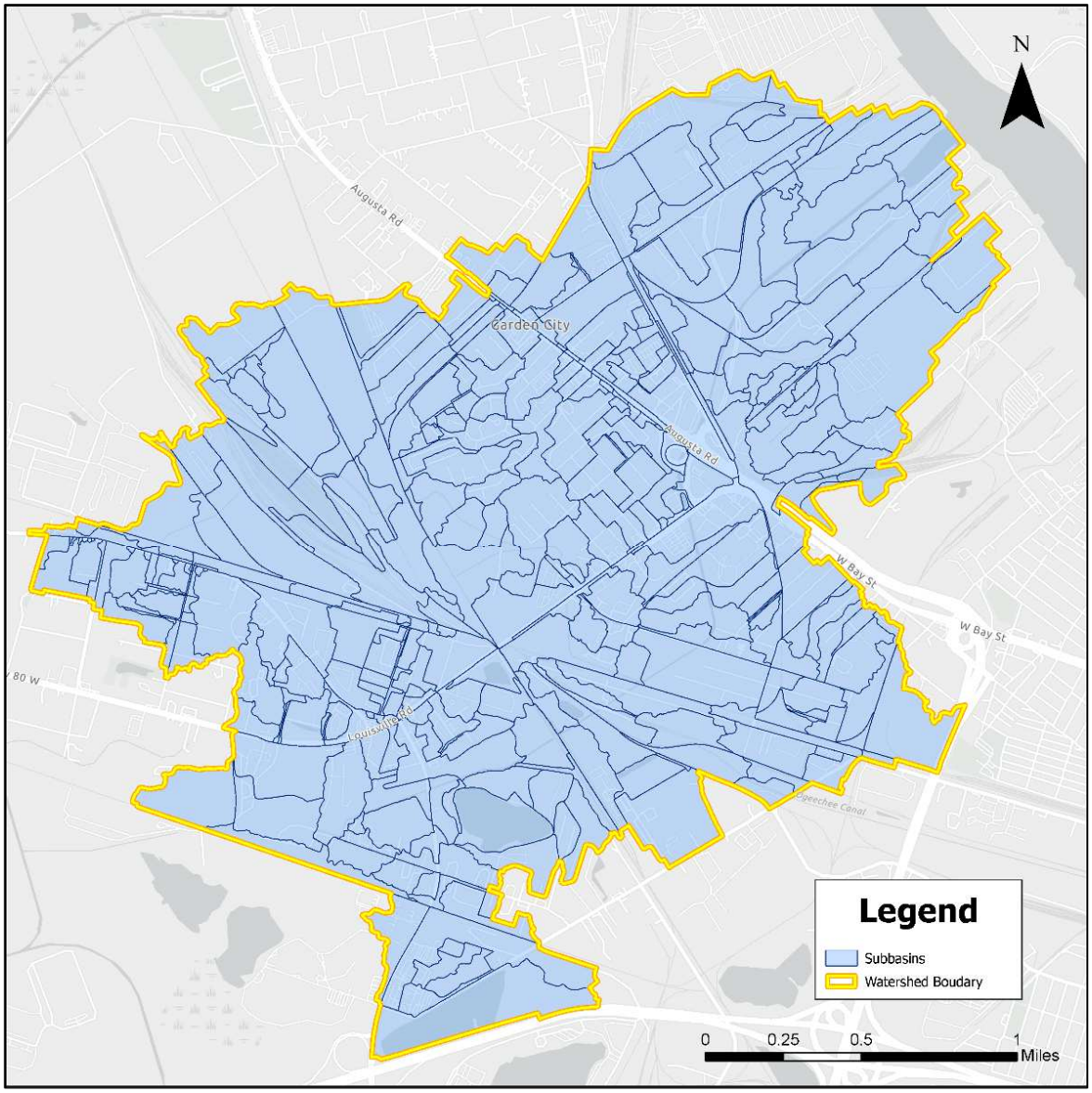


Figure 6: Model Subbasins (Subbasins shapefile included separately in ExistingConditionsData.gdb)

4.1.3 Runoff Hydrograph Derivation

Available GIS data were reviewed and incorporated into a seamless landuse layer in GIS (Figure 7). Impervious areas were identified using building footprint and road centerline data and were supplemented with data extracted from ESRI basemap layers to add parking lots. Building footprints were buffered by 5 feet to account for the additional impervious area of small sidewalks & driveways that were not captured in the available data. Vegetated areas were identified by reviewing GIS imagery from ESRI and Google satellite imagery. Areas of dense tree cover or vegetation were manually traced in GIS and incorporated into the landuse layer. Wetland areas from the NHD were also reviewed against GIS imagery and split into 'woody wetlands' and 'wetlands' based on the presence and density of tree cover within the wetland area. The refinement of the landuse to identify 'wetlands' versus 'wood wetlands' was a result of the model calibration and will be discussed further in Section 5 - Model Calibration. Open water areas were identified using aerial imagery and NHD waterbody polygons.

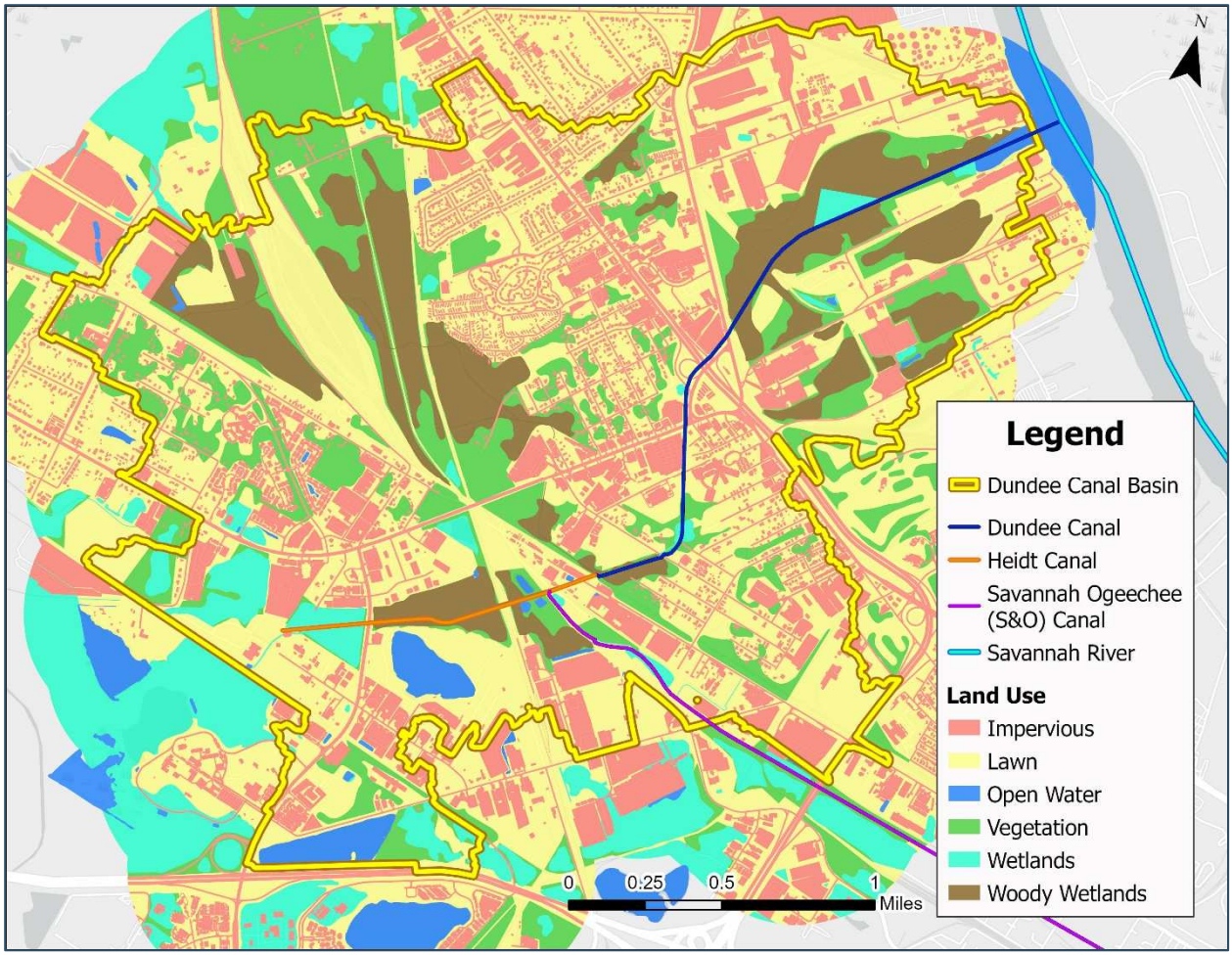


Figure 7: Land Use Data

The landuse data were intersected with soils data from the USGS SSURGO database, and distance-weighted curve numbers were calculated for each sub basin (Table 3). Areas with combined soil groups (i.e., A/D, B/D, C/D) were assumed hydrologic soils group (HSG) type D.

Table 3: Existing Conditions Curve Numbers

LANDUSE	HYDROLOGIC SOIL GROUP						
	A	B	C	D	A/D	B/D	C/D
Wetlands	80	80	80	80	80	80	80
Woody Wetlands	30	60	73	79	79	79	79
Lawn	39	61	74	80	80	80	80
Impervious	98	98	98	98	98	98	98
Vegetation	25	55	70	77	77	77	77
Open Water	98	98	98	98	98	98	98

Slope and flow length were calculated in GIS for each subbasin using the LFP layer, and the SCS method was used to calculate the time of concentration for each subbasin in PCSWMM. For any basins with a time of concentration less than 5 minutes, a minimum time of concentration of 5 minutes was manually assigned. The SCS dimensionless Unit Hydrograph (UH) method with a standard peak rate factor of 483.4 was used to develop runoff hydrographs for each subbasin given the design storm rainfall input, curve number infiltration parameters, and time of concentration. The standard peak rate factor was

selected for Dundee Canal provided the basin is mostly developed and significantly modified from the original hydrology.

Additionally, calibration results aligned well with the standard peak rate factor and further supported its use. Both the standard (483.4) peak rate factor and lower (323) peak rate factors were tested during model development, and negligible differences in maximum WSE were observed for all higher frequency (2-, 5-, 10-, and 25-year) design storms. Comparatively significant differences in Maximum WSE were observed for lower frequency (50- and 100-year) design storms (approximately 0.05 to 0.1 feet on average and 0.5 feet at most). The largest differences were observed at roadway inlet nodes. Given the basin is mostly developed areas and calibration results were aligned well, the slightly more conservative standard peak rate factor of 483.4 was maintained.

It should be noted that runoff hydrographs were not attenuated to account for stormwater Best Management Practices (BMPs). Storage and attenuation were accounted for as needed to accurately model the scoped portion of the stormwater system. Additionally, few BMPs are designed for the 100-yr event and would therefore have limited attenuation during major events. This is discussed further in Section 4.2.4.

4.2 Hydraulics

4.2.1 Inlets & Conduits

Invert elevation, rim elevation, material, conduit shape, conduit size, inlet type, and inlet shape (obtained from SWIs, plan data, and additional survey efforts) were attributed to spatial data in GIS and imported to PCSWMM. Pipes were attributed with Manning's n roughness coefficients and entrance/exit loss coefficients (Table 4 to Table 7), and culvert codes were attributed based on Appendix A of the EPA SWMM Manual.

Table 4: Pipe Manning's n Roughness Coefficients

PIPE MATERIAL	ABBREVIATION	MANNING'S N ROUGHNESS COEFFICIENT
Reinforced Concrete / Plain Concrete Pipe	RCP / CC	0.013
Reinforced Concrete Box	RCB	0.013
Corrugated Metal Pipe	CMP	0.024
Plastic / HDPE	HDPE / PVC	0.015
Unknown*	UNK	0.02

**Unknown pipes were not included in SWIs and were deemed inaccessible during field efforts to access the pipe.*

Table 5: Pipe Exit Loss Coefficients

ANGLE (DEG)	EXIT LOSS COEFFICIENT
0	0.25
15	0.35
20	0.41
30	0.53
40	0.63
50	0.72
60	0.8
70	0.86
80	0.91
90	0.95

Table 6: Culvert Entrance Loss Coefficients

PIPE MATERIAL	PIPE SHAPE	INLET TYPE OR SHAPE	ENTRY LOSS COEFFICIENT	CULVERT CODE
CMP	Arch / Ellipse	Catch basin/Drop Inlet/MH	0.35	
		Headwall (All Types)	0.50	45
		Projecting End	0.90	47
	Circular	Catch basin/Drop Inlet/MH	0.35	
		Headwall (All Types)	0.50	4
		Projecting End	0.90	6
CC/RCP/RCB	Arch / Ellipse	Catch basin/Drop Inlet/MH	0.35	
		Headwall (All Types)	0.50	30
		Projecting End	0.50	32
	Circular	Catch basin/Drop Inlet/MH	0.35	
		Headwall (All Types)	0.50	1
		Projecting End	0.50	3
	Box	Catch basin/Drop Inlet/MH	0.35	
		Projecting End/Straight Headwall	0.50	10
		Winged Headwall	0.50	9
HDPE/PVC	Arch	Catch basin/Drop Inlet/MH	0.35	
		Headwall (All Types)	0.50	30
		Projecting End	0.90	47
	Circular	Catch basin/Drop Inlet/MH	0.35	
		Headwall (All Types)	0.50	1
		Projecting End	0.90	6

Table 7: Culvert Exit Loss Coefficients

CONDITION	EXIT LOSS COEFFICIENT
Constructed Channel Transect (Yards, Roadside, etc.)	0.5
Natural Channel Transect (Floodplains, large storage areas, etc.)	0.9 – 1.0

4.2.2 1D Channelized and Overland Flow

Channel and overland flow transect data were extracted from the DEM using tools available in PCSWMM, and as needed, transects were manually adjusted based on survey, plan, and SWI data. Transects were extended to contain the 100-year floodplain to ensure flow could pass uninhibited throughout the model.

Channel bathymetry was incorporated in open water areas where the terrain data did not appear to capture the channel geometry accurately. Bathymetry was primarily incorporated along the lower reaches of Dundee Canal from Alfred Street to the outfall at the Savannah River where cross section information form survey and plan data were available to determine typical channel dimensions and transect inverts. Channel invert elevations were interpolated in between known elevations along the lower reaches of Dundee Canal to improve calibration results, which is further discussed in Section 5.2 – Calibration Adjustments.

Additionally, many of the culvert inverts collected by survey or obtained from plan data were at a lower elevation compared to the terrain data. This indicated that the many culverts were partially or fully buried,

which is confirmed in many locations by survey photographs and site visit observations. However, transect invert elevations were lowered at these locations to better represent a fully functioning stormwater system, improve model stability, and reduce volume accounting errors. Channel invert elevations were not interpolated between these locations. Channel invert elevations were not adjusted at roadway crossings where culverts are naturally embedded because of regional conditions, as this was not considered a maintenance issue.

Initial Manning's n values of 0.05 and 0.1 were applied to channels and overbanks, respectively. Overtopping transects were assigned Manning's n values for sheet flow based on review of aerial imagery. A sheet flow roughness value of 0.02 was used for roadway or paved sections, and values ranging from 0.04 to 0.08 were assigned for vegetated areas.

In areas where 1D overland flow was uncontained and/or was difficult to discern the direction of flow, 2D mesh areas were developed to better understand flow patterns and ensure 1D overland flow direction was accurate to real-world flood events. However, all 2D mesh areas were ultimately converted back to 1D areas as Dewberry determined the final 1D results were well aligned with the 2D model results, and the 1D model provided significantly improved model run times over the 2D model.

4.2.3 Bridge Modeling Approach

Custom conduits were used to model bridge openings, and 1D overtopping non-conduits were used to model overtopping flow. The custom conduit geometry is defined by a shape curve, which in turn is defined by Depth/Full Depth and Width/Full Depth of the bridge opening. The shape curves for each bridge were developed with available data form plans provided by Chatham County or data collected during survey. As an example, the modeling approach for the SR25 bridge over Dundee Canal is discussed in this section. All other bridges were modeled with the same approach.

Figure 8 shows the bridge data for the SR25 bridge over Dundee Canal obtained from the plans 'Bridge Exhibit of Brampton Road'. The high and low coordinates of the bridge were scaled from the plan and are shown in Figure 9.

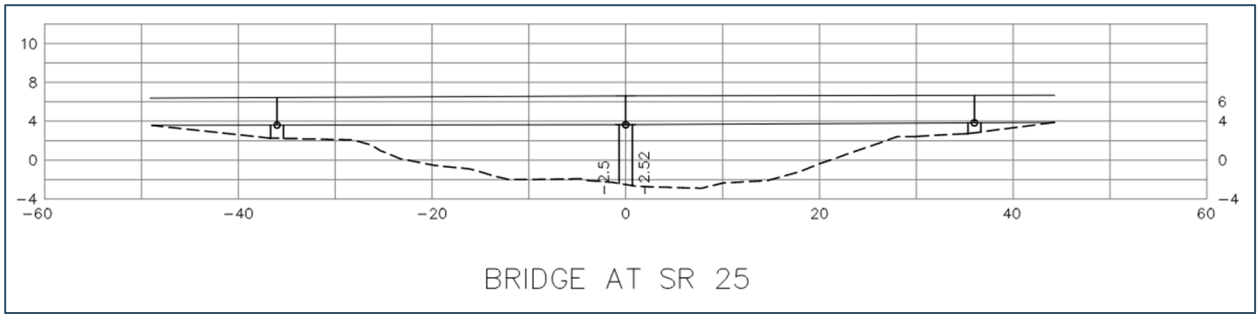


Figure 8: Plan Data for SR25 Bridge over Dundee Canal

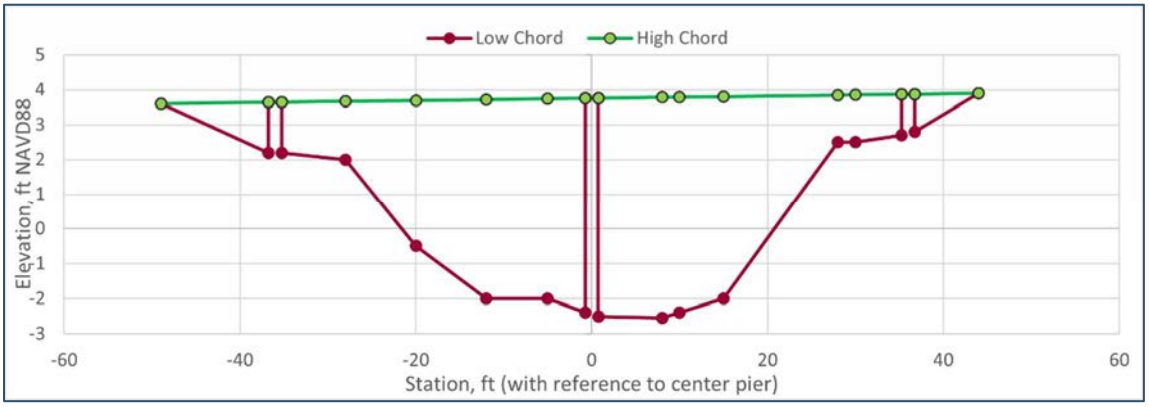


Figure 9: High & Low Coordinates of SR25 Bridge over Dundee Canal

As shown in Figure 9, there are 4 separate openings for the SR25 bridge separated by 3 piers. The width of each opening was summed for a series of sample elevations, and Width/Full Depth was calculated based on the total width of the 4 openings at each elevation. Elevation is converted to Depth/ Full Depth for the shape curve, and the bridge opening invert is defined for the bridge conduit as the lowest low coordinate. Figure 10 shows how the shape curve was developed, and Figure 11 shows the same shape curve as it appears in PCSWMM.

Elevation	Depth	Width	Depth/ Max (Full) Depth	Width/ Max (Full) Depth
-2.52	0	5	0.000	0.812
-2	0.52	17.5	0.084	2.841
-1	1.52	30	0.247	4.870
0	2.52	42.5	0.409	6.899
1	3.52	50	0.571	8.117
2	4.52	57.5	0.734	9.334
3	5.52	80	0.896	12.987
3.64	6.16	92.5	1.000	15.016

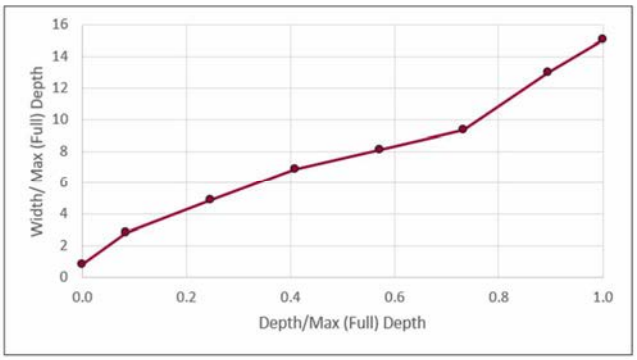


Figure 10: Custom Conduit Shape Curve for SR25 Bridge over Dundee Canal

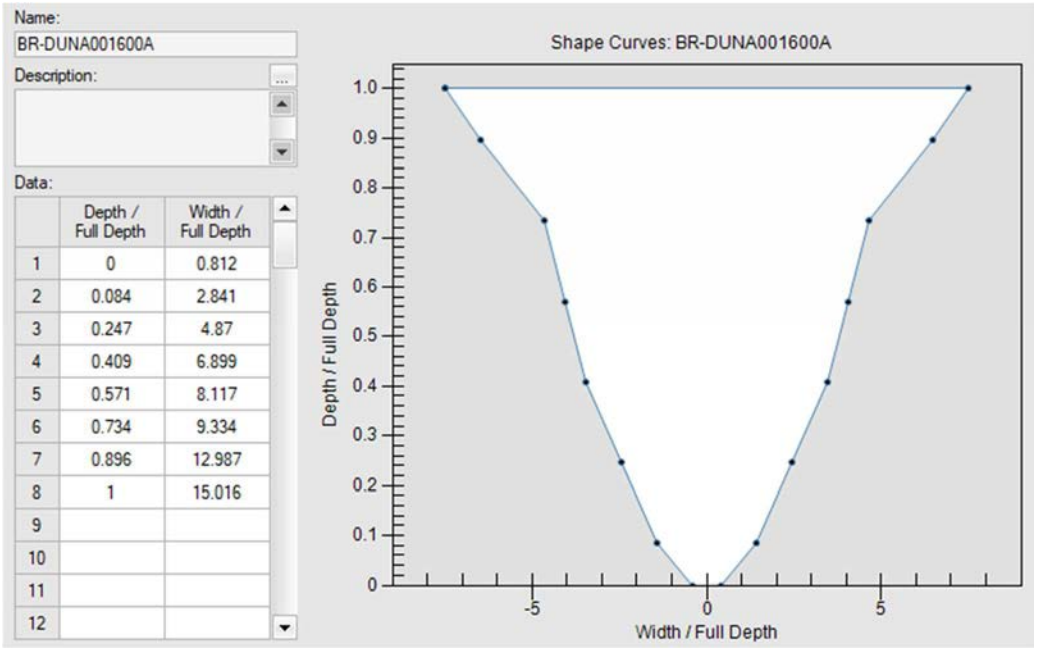


Figure 11: Example of a Shape Curve in PCSWMM

This modeling approach was used for the following bridges:

- Market Street Bridge over Dundee Canal
- SR 25 (Main St.) Bridge over Dundee Canal
- Railroad Bridge over Dundee Canal (Immediately downstream of the SR25 bridge)
- Railroad Bridge over Dundee Canal (Approximately 1350 ft downstream of the SR25 bridge)

Note that the custom conduit in PCSWMM shows only one opening. The width/full depth calculated in the shape curve accounts for the opening area blocked by the piers, as calculations were based on the 4 separate openings and combined into one shape curve. Model results with a bridge modeling approach using one conduit & shape curve for the combined opening area were found to produce nearly identical results compared to an approach with multiple conduits & shape curves for each opening. Therefore, bridges were modeled with a single custom conduit & shape curve to provide a more intuitive setup for future use of the model. It should be noted that the bridge at SR25 (Main St.) is also the location of one of

the calibration water level sensors, and Section 5 - Model Calibration reviews that the custom conduit geometry produced strong agreement between the recorded and modeled results.

4.2.4 Storage Areas

Model storage nodes, 1D non-conduits, or basic model junctions with increased ponded area are all leveraged to provide storage volume in the model depending on the application. Storage nodes, 1D non-conduits, or junctions were selected based on the level of detail needed to accurately represent storage volume.

Storage nodes were used where Outlet Control Structures (OCS) were present at stormwater ponds and required more detailed representation of outflow through the OCS. With this approach, the storage nodes were attributed with stage-area curves in PCSWMM based on the available topographic or plan data, and those storage nodes were connected to outflow pipes with orifice and/or weir links to accurately represent how water fills the pond and is released through the OCS. Configuration of the weir and orifice links are based on survey or plan data.

Many ponds in the Dundee Canal basin do not have true OCSs, and stormwater flows exit the pond through elevated pipe culverts and do not pass through an OCS structure. In these locations, 1D non-conduits were used to account for the pond storage and were routed directly to the outflow pipe. This technique simplifies the model setup by eliminating the need to include a storage node but still captures the storage provided via the transect derived from the DEM. This approach works well for routing flows through ponds with simple geometries.

1D non-conduits were also used to account for channel or floodplain storage immediately upstream of conduits at or below the 20-acre drainage limit to improve model stability and calibration results. Figure 12 shows an example of a 1D non-conduit used to account for channel storage upstream of a culvert at the 20-acre drainage area limit under Listner Ave.

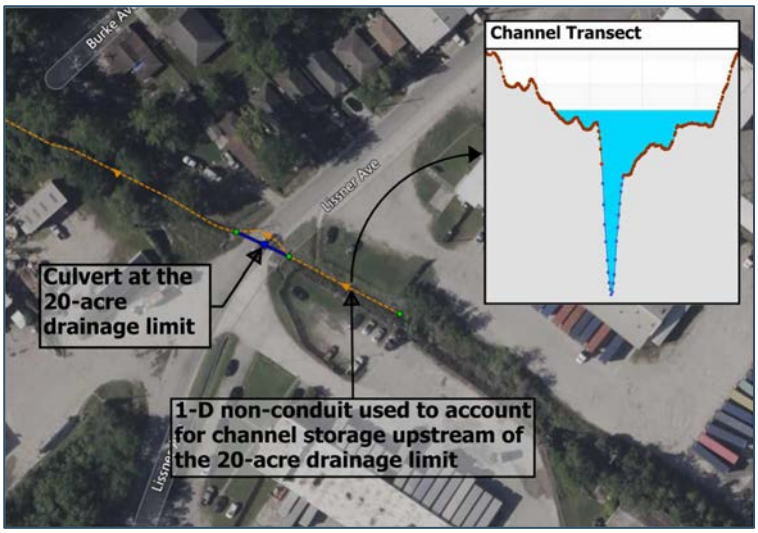


Figure 12: 1D non-conduit used to account for storage upstream of the 20-acre drainage limit

Finally, Dewberry would adjust the ponded area associated with model nodes to improve model stability. The ponded area defines the available storage above the rim elevation of the model junction and prevents flow from escaping the model which would result in elevated routing errors above 1%. A base value of 50 square feet was used for all junctions, and for nodes that significantly exceeded their hydraulic grade line (HGL) ponded area was then adjusted based on the actual, measured ponded area shown in the DEM.

4.2.5 1-D Overtopping Sections

1-D non-conduit overtopping sections were provided for all pipe systems, bridges, and culverts where necessary to convey flows overtopping roadways/embankments or conveyed by curb and gutter systems.

Overtopping transects were obtained from the terrain data and supplemented with survey or plan data where needed. Typical curb sections were used for curb & gutter systems. Conduit IDs include the prefix "OT-" for all overtopping non-conduits. Junction rim elevations represent the overtopping elevation of the applicable roadway, bridge deck, embankment, or curb & gutter system. Vertical offsets were applied to the 1-D non-conduit overtopping sections based on these rim elevations, such that overtopping flows are only conveyed if the defined overtopping elevation is exceeded. Manning's roughness coefficients were applied uniformly to the overtopping sections based on land cover observed in aerial imagery, and range from 0.02 for paved areas to 0.08 for heavily vegetated areas. Configuration of these 1-D non-conduit overtopping sections were also informed by 2D mesh areas developed to better understand flow patterns and ensure 1D overtopping flows were accurate to real-world flood events.

4.2.6 System Performance

All stormwater assets were modeled as fully functioning in the existing conditions model, however survey photographs, site visit observations, and the available SWI data indicate that many stormwater assets are not fully functioning due to sediment build up or deterioration. Therefore, existing conditions model results may not capture the true extent of flooding caused by operation and maintenance (O&M) issues. Modeling the existing system as fully functioning produces an accurate representation of flooding issues caused by insufficient capacity of the existing stormwater infrastructure independent of maintenance issues, which provides a consistent basis for assessment of stormwater system LOS and potential system improvements. Further, modeling the system as fully functional aligned well with calibration results reviewed in Section 5 - Model Calibration.

5. Model Calibration

5.1 Calibration Data

5.1.1 Water Level Sensors

Chatham County installed Water Level Sensors (WLS) in two locations in the Dundee Canal basin on May 5th, 2025. The WLS were installed at SR25 (Main St.) and Alfred Street. The location of each WLS is shown in Figure 13.

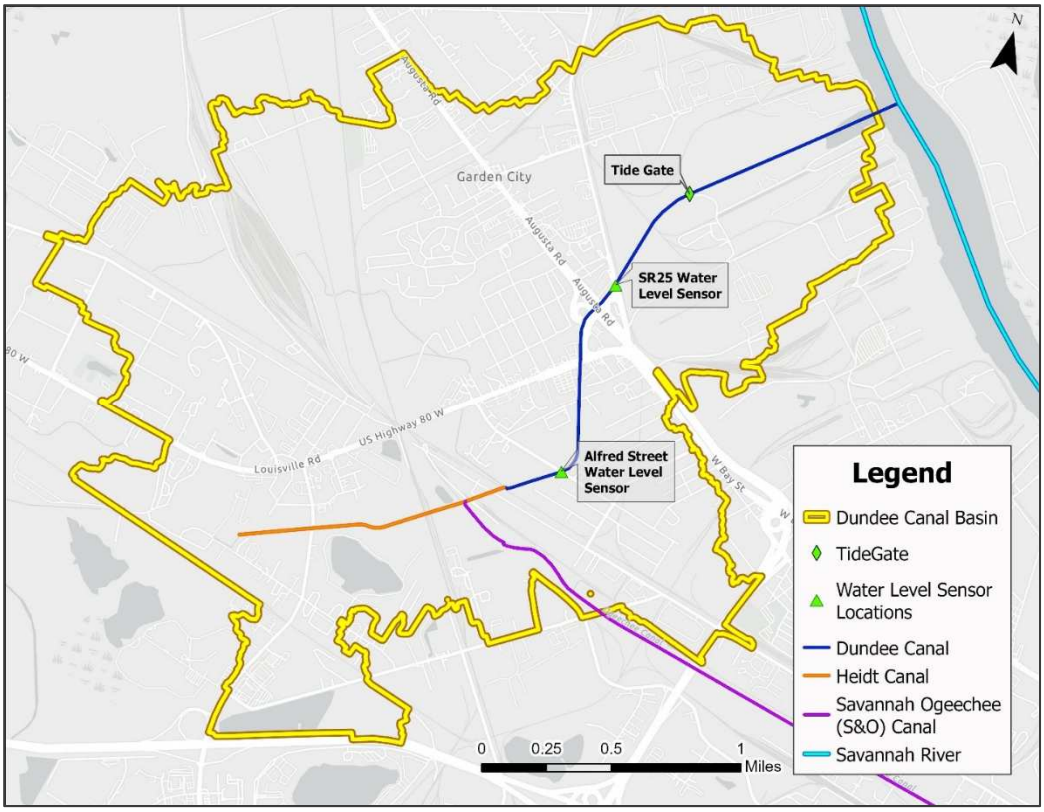


Figure 13: Water Level Sensor Locations

The WLS data consists of pressure readings in 5-minute intervals, which were used to calculate water elevation in ft NAVD88. Data from May 5th, 2025 to August 16th, 2025 were received and reviewed against survey photos and elevations of the SR25 bridge and Alfred Street culvert to ensure accuracy. The WLS data is shown in Section 5.1.3, Figure 15.

5.1.2 Tidal Data

The boundary condition for the Dundee Canal at the outfall to the Savannah River was obtained from USGS gage 021989715, Savannah River at Garden City (Figure 14). The water elevation at the gage is primarily influenced by tidal patterns.

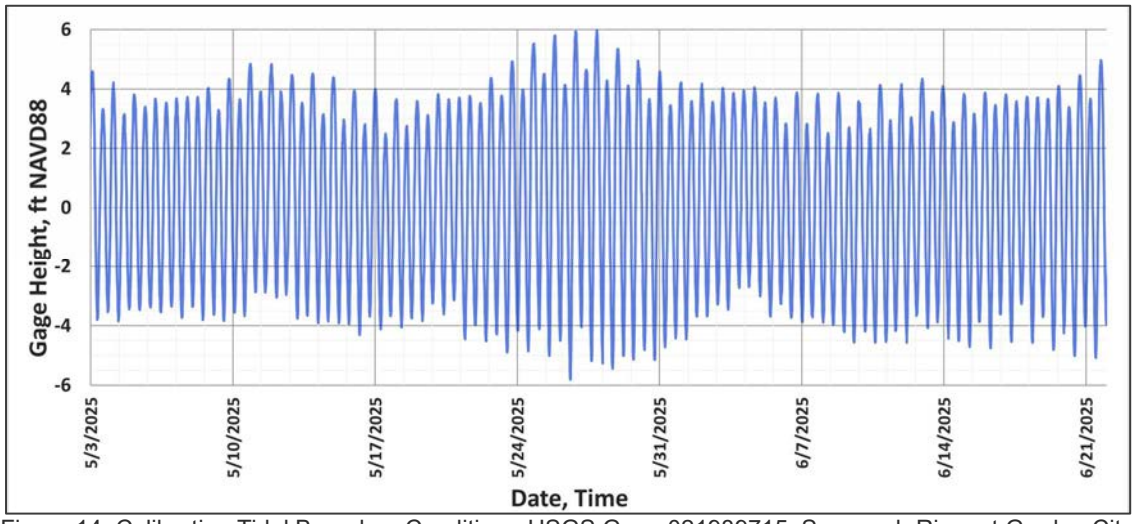


Figure 14: Calibration Tidal Boundary Condition - USGS Gage 021989715, Savannah River at Garden City

5.1.3 Calibration Events & Rainfall Input

Storm events occurring on May 10th and June 14th of 2025 were selected for calibration events. May 10th was both the most intense storm that occurred during the monitoring period and elicited the highest WSE response at both the Main St. and Alfred Street WLS locations. The May 10th event totaled 4.3 inches of rainfall over the peak 48 hour time period at the SR25 WLS location. The June 14th rainfall event was chosen as a secondary calibration event based on several factors, including a more sustained WSE response and higher total rainfall volume compared to other prospective storm events. The June 14th event totaled 1.8 inches of rainfall over the peak 48 hour time period at the SR25 WLS location. Figure 15 shows the WLS data for both the Alfred Street and Main St. Locations compared to the NOAA AORC data at the Main St. WLS location.

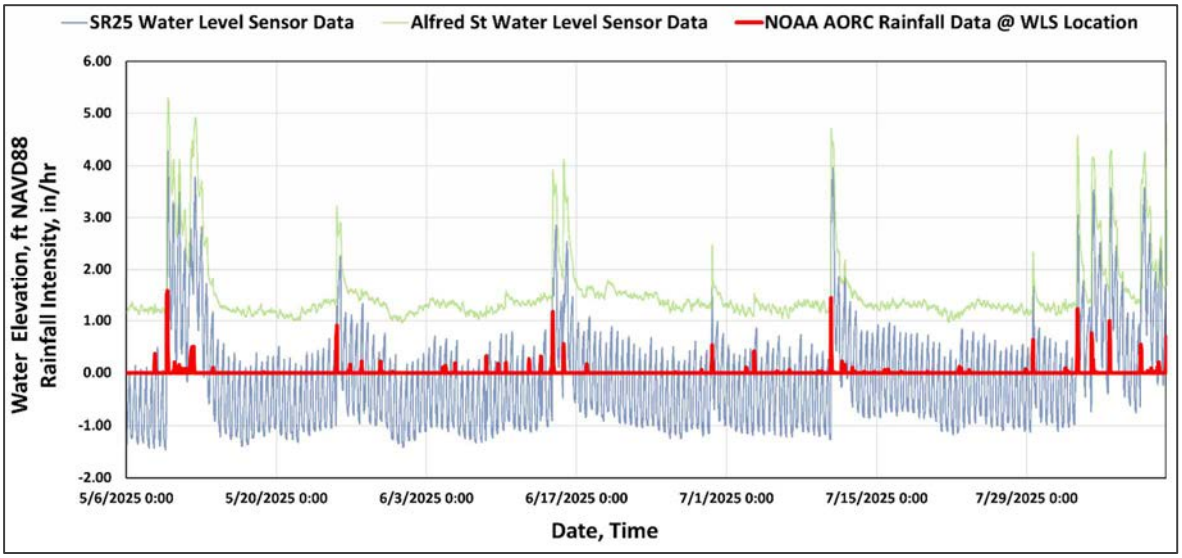


Figure 15: Comparison of NOAA AORC Rainfall Data & WLS Data at SR25 Location

Spatially variable hourly rainfall data from NOAA's Analysis of Record for Calibration (AORC) dataset was obtained from May 2025 to August 2025 for model calibration. The NOAA AORC is a gridded record of near-surface weather conditions that covers the continental United States and hydrologically contributing areas. The precipitation data obtained has a spatial resolution of 800 meters, a temporal resolution of 1 hour, and represents hourly accumulated precipitation. The rainfall data was reviewed against rain gage and WLS information provided by Chatham County, and the National Weather Service Advanced Hydrologic Prediction Service (AHPS).

Hourly rainfall was prepared for the subcatchments using the NOAA AORC data. Rainfall for each hourly timestep was weighted based on the area of each of the 800-meter AORC cells contained within each subcatchment. Cumulative rainfall depths for the peak 48-hour storm duration of the two calibration events (May 10th and June 14th) for the subcatchments are shown on the maps in Figure 16 and Figure 17. Spatial variation in the rainfall data was observed for both selected calibration events. Different zones in the Dundee Canal basin were identified where similar rainfall conditions occurred based on the AORC data.

Rainfall input for the two calibration scenarios (May 10th and June 14th, 2025) was assigned to final model subcatchments based on the AORC data at a location representative of average rainfall conditions in each zone. Model sensitivity analysis indicated that more detailed rainfall zones do not significantly alter results at the WLS locations.

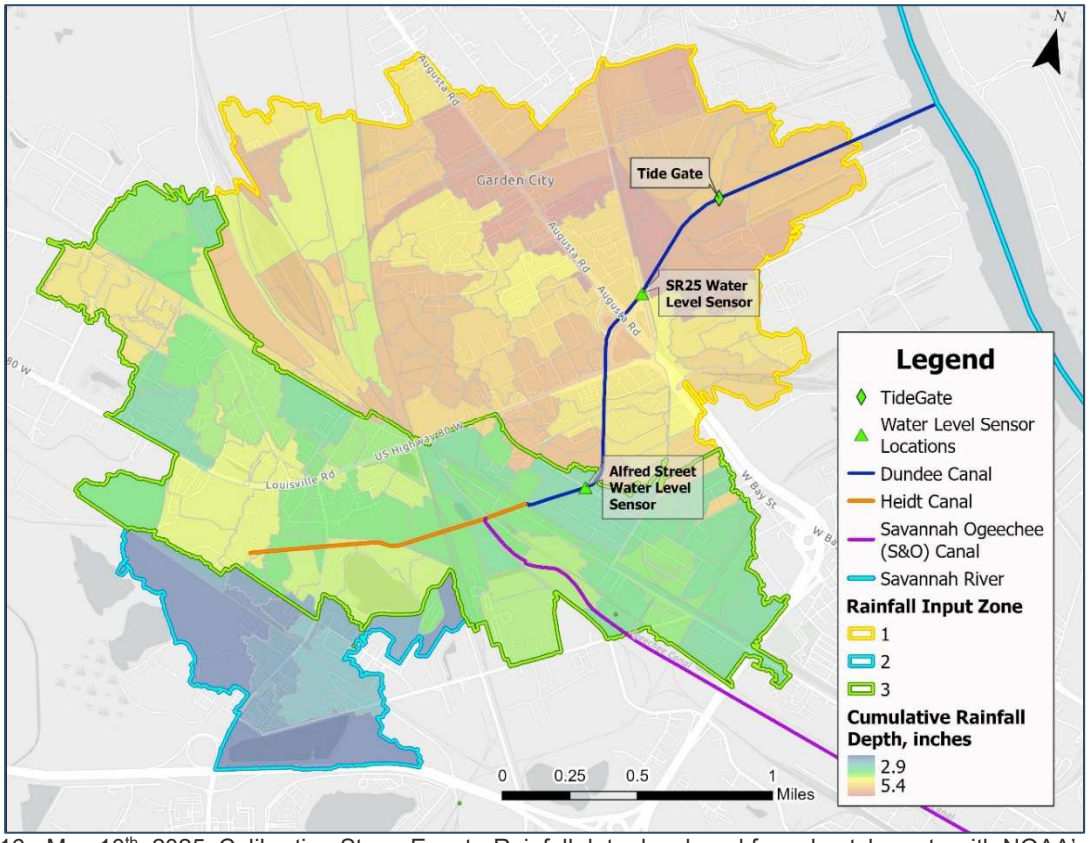


Figure 16 - May 10th, 2025, Calibration Storm Event - Rainfall data developed for subcatchments with NOAA's AORC

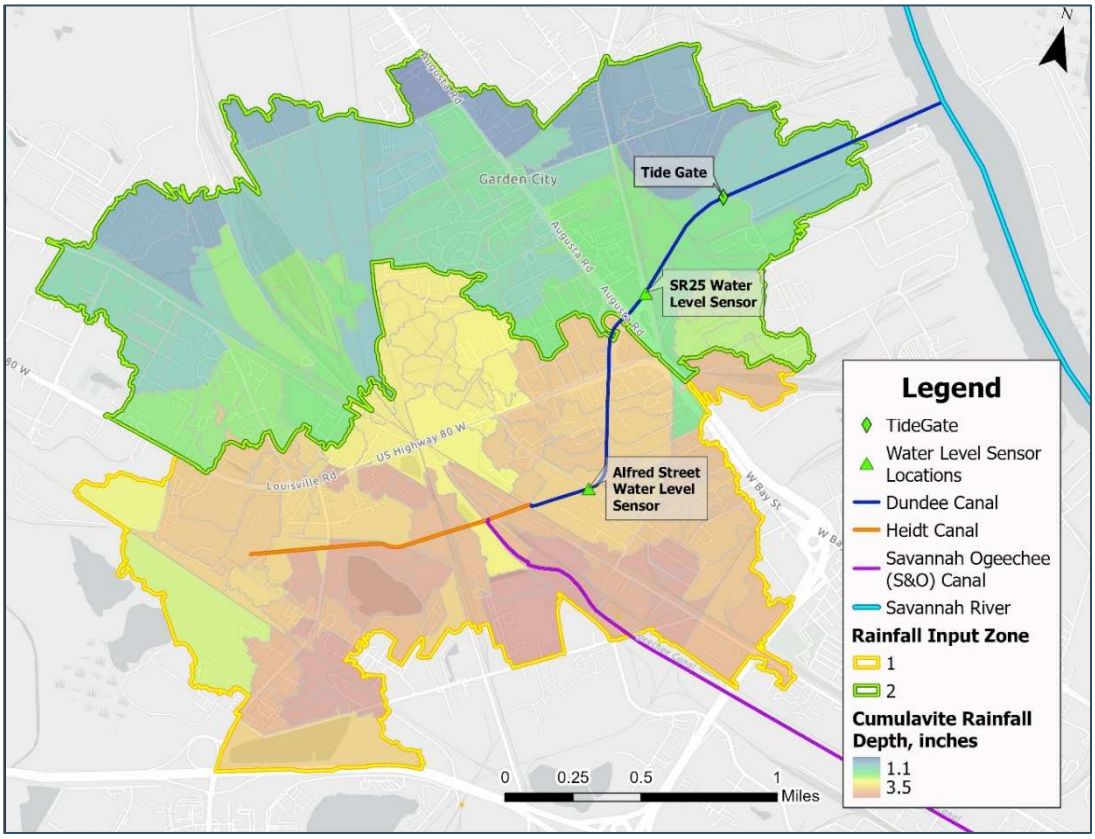


Figure 17: June 14th, 2025, Calibration Storm Event - Rainfall data developed for subcatchments with NOAA's AORC

Three different rainfall inputs were used for the May 10th calibration scenario for each of the zones shown in Figure 16. Zone 1 rainfall input was derived from the AORC data at the SR25 location, Zone 2 was derived from the AORC data at the centroid of the rainfall zone, and Zone 3 was derived from the AORC data at the Alfred Street location (Figure 18).

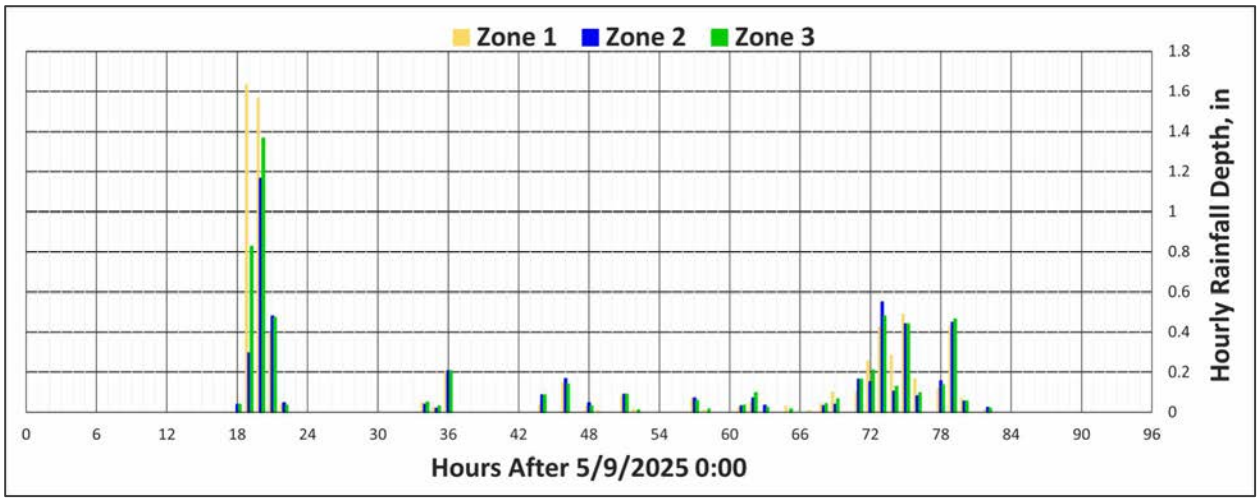


Figure 18: May 10th Calibration Strom Event Rainfall Input

Two different rainfall inputs were used for the June 14th calibration scenario for each of the zones shown in Figure 16. Zone 1 rainfall input was derived from the AORC data at the Alfred St. location and Zone 2 was derived from the AORC data at the SR25 location (Figure 18).

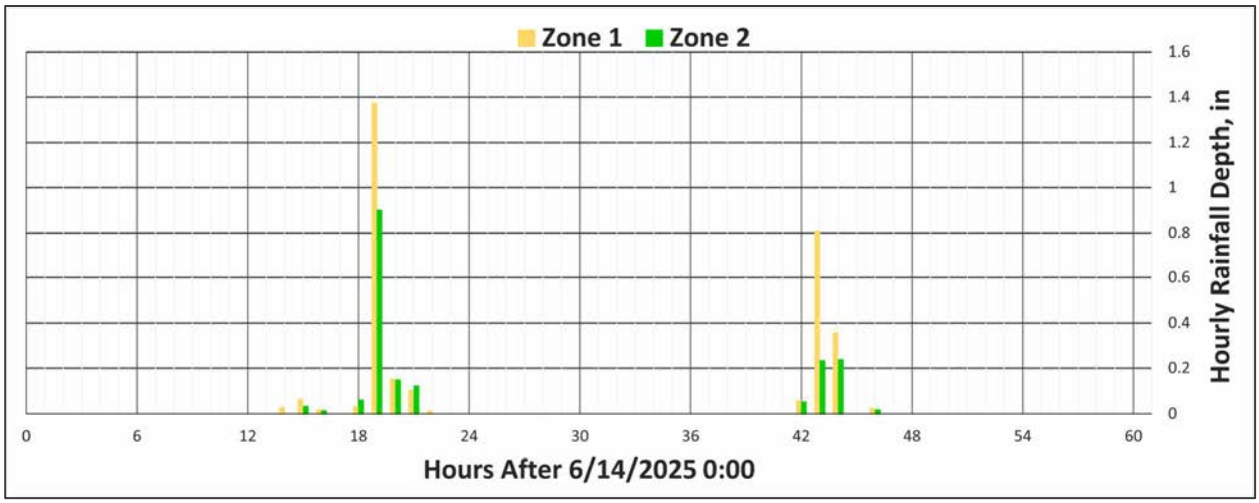


Figure 19: June 14th Calibration Storm Event Rainfall Input

5.2 Calibration Adjustments

Calibration adjustments were made based on the May 10th calibration event. After these adjustments, the June 14th calibration event was tested to verify model calibration was sufficient.

5.2.1 Baseflows

The first step to calibrate the model was to match model results to the tide signal observed in the WLS data. The SR25 WLS data shows a significant tide signal, which is approximately 1/3 to 1/4 of the amplitude of the tide observed in the USGS gage data used for the boundary condition of Dundee Canal at the outfall to the Savannah River. The effect of the Dundee Canal Tide Gate upstream of the confluence with the Savannah River can be observed in the SR25 WLS data. The tide gate operates passively based on the hydraulic head differential between upstream and downstream. During rising tide, the tide gate closes as the water elevation on the downstream side of the tide gate rises above the water

elevation on the upstream side. During falling tide, the tide gate opens as the water elevation on the downstream side of the tide gate falls below the water elevation on the upstream side. Figure 20 shows the USGS gage boundary condition compared to the WLS data during a dry period (without any rainfall) from May 15th, 2025, to May 23rd, 2025. The opening and closing of the tide gate can be inferred at the sharp inflections in the SR25 WLS data, where water elevation at the WLS is equal to the water elevation at the USGS gage tidal boundary condition.

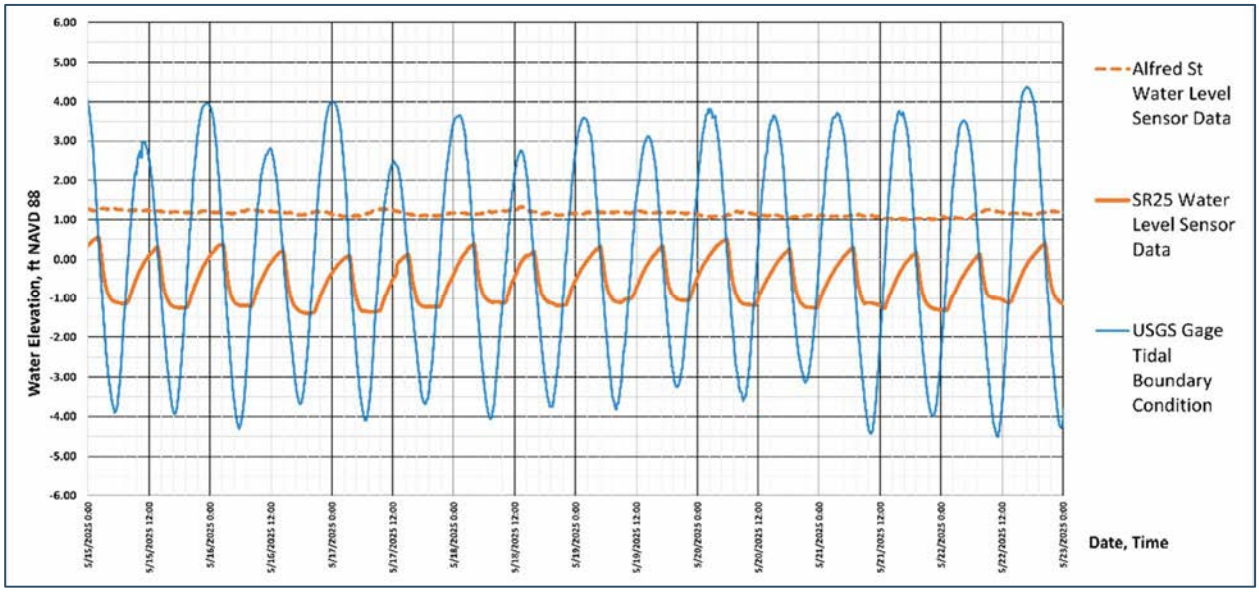


Figure 20: Tidal Influence at Alfred St. & SR25 WLS Locations

The Alfred Street WLS is not as significantly influenced by the tide or the operation of the tide gate during dry periods and shows water levels sustained high enough to indicate baseflow is present. The Alfred St. WLS is upstream of the SR25 WLS, which indicates baseflows are present since a higher upstream water level could not be sustained as observed in the WLS data without some source of flow. Additionally, flows were observed in the piped portion of Heidt Canal flowing under Louisville Road eastward to Dundee Canal during survey.

To calibrate the model to the tide signal observed at the SR25 WLS and the sustained water level at the Alfred St. WLS, the tide gate was set up in the model to operate passively based on hydraulic head differential. This was done by simply preventing backflow (flow from the Savannah River into the Dundee basin) through the model conduit for the tide gate. Baseflows were then applied at selected locations along the Dundee Canal and major tributaries, then slowly increased until the tide signal was matched at the SR25 WLS location, and the sustained water level was matched at the Alfred Street location. Baseflows were applied proportionally to drainage areas. Channel invert elevations along the Dundee Canal from the Outfall to the Savannah River to the Alfred St. WLS were also adjusted based on survey or plan data of culvert or channel inverts to account for bathymetric data. Figure 21 shows the locations of both WLS, the tide gate, and selected locations where baseflows were applied in the model to match the tide signal.

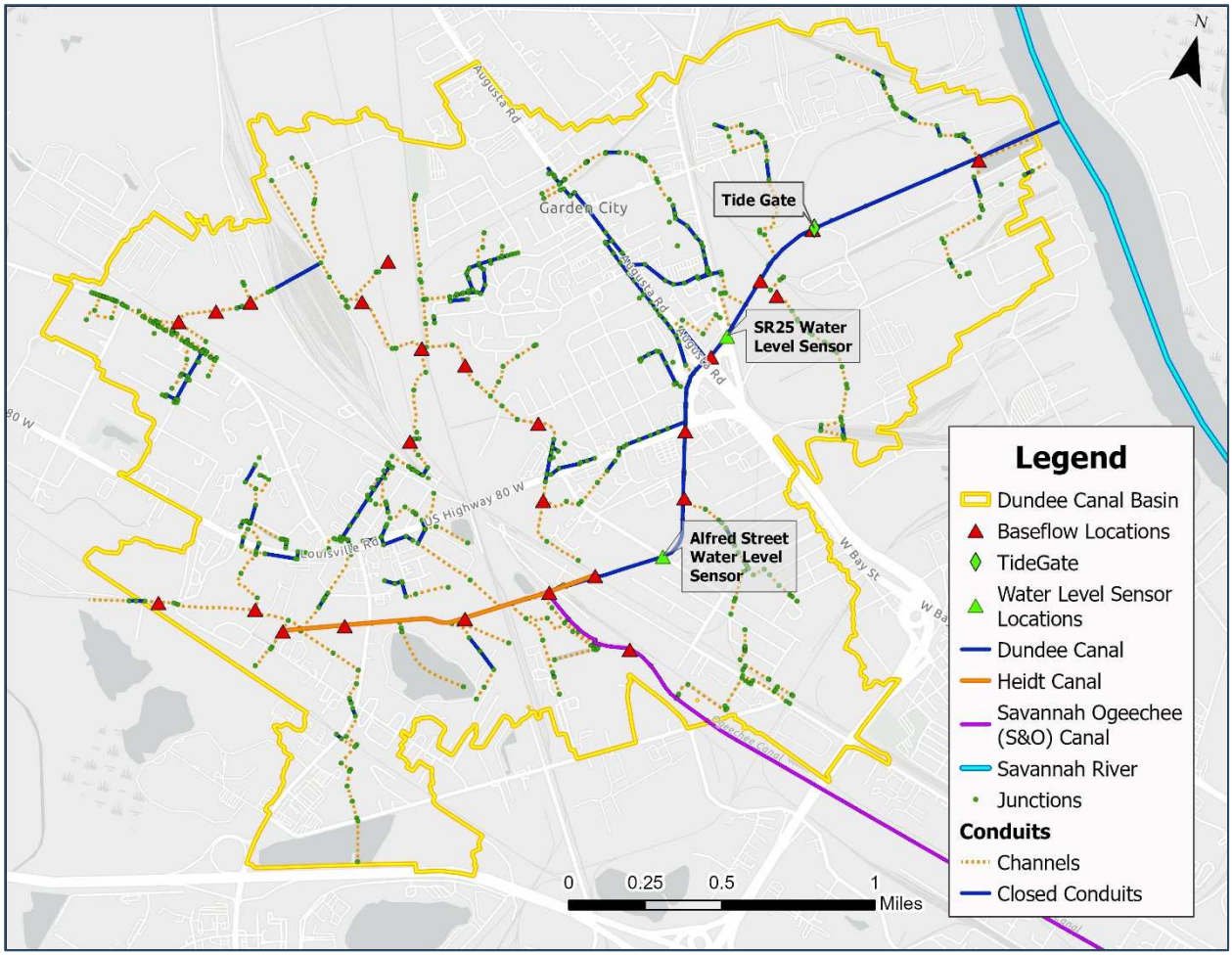


Figure 21: Calibration Baseflow Locations

The best results were achieved by allowing the model to run for approximately three days until model results at the WLS locations stabilized and matched the tide signal. Figure 22 shows results from a model run starting on May 5th, 2025 with no rainfall and baseflows applied at the locations shown in Figure 21. As shown in the Figure 22, model water elevation at the SR25 WLS location slowly rises over the course of three days until the tide signal is matched.

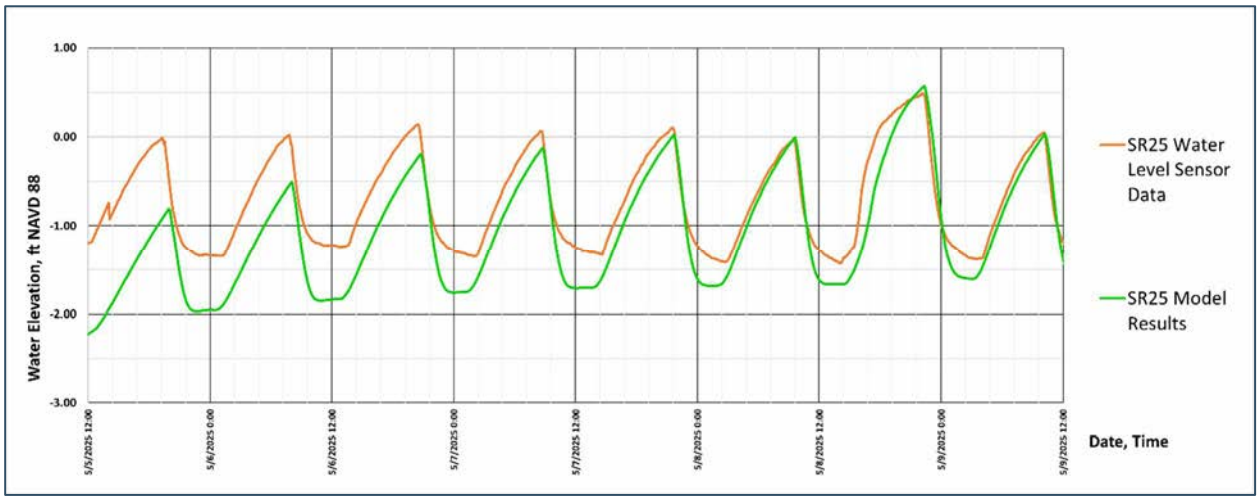


Figure 22: Tide Signal Calibration - SR25 WLS Location

5.2.2 Sensitivity Analysis

Variation of several parameters including channel and overbank Manning's n values along the Dundee Canal, culvert entrance and exit losses, and channel bathymetry incorporation were tested to determine the sensitivity of model results to any adjustments. Variation in channel Manning's n had the most significant effect on calibration results, while variation in overbank Manning's n and entrance/exit losses having a negligible effect when parameters are varied within normal ranges (Figure 23 and Figure 24).

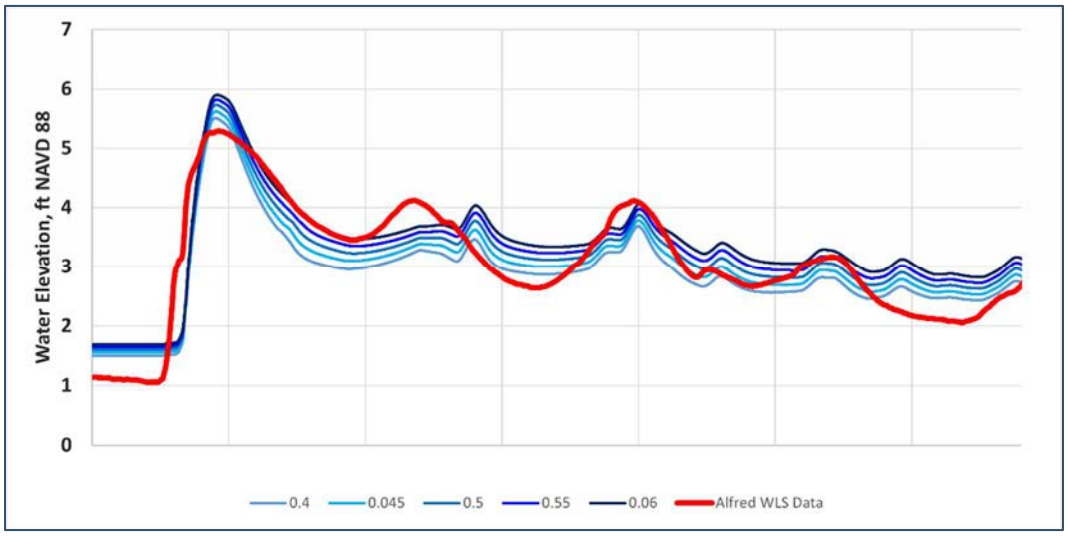


Figure 23: Channel Manning's n sensitivity analysis example – May 10th Calibration Event - Alfred St. WLS

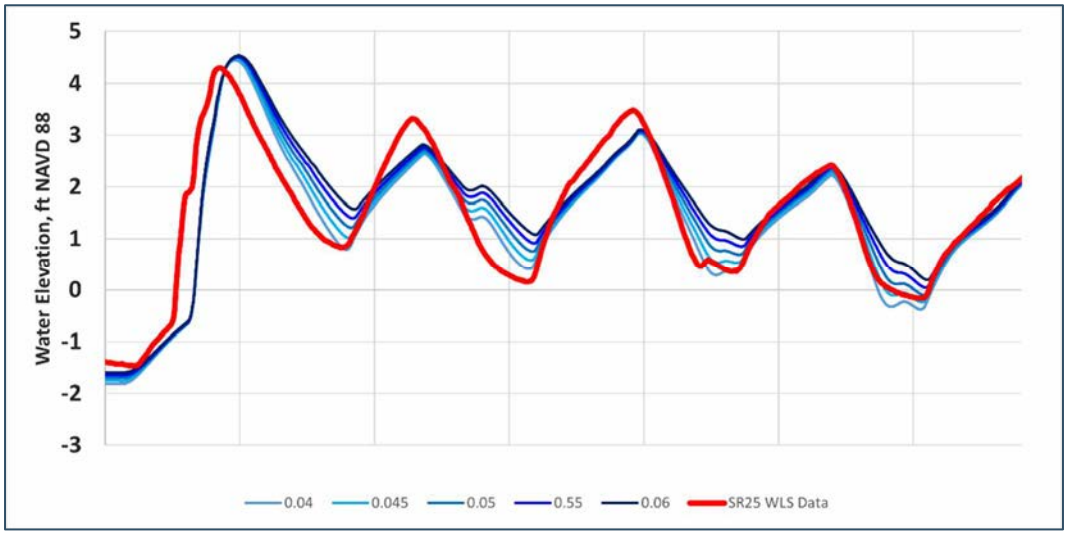


Figure 24: Channel Manning's n sensitivity analysis example – May 10th Calibration Event -SR25 WLS

Based on the model sensitivity analysis, the originally assigned channel and overbank Manning's n values of 0.05 and 0.1, respectively, were maintained in the model, as those values produced the lowest average error during the first 48 hours of the two calibration events.

Model sensitivity analysis also indicated that adjusting channel elevations along the Dundee Canal based on survey and plan data, such that channel invert elevations are interpolated to form a consistent slope between known channel invert elevations, produced a more pronounced tide signal at the SR25 WLS location that better aligned with the WSE data.

Additionally, reduced pipe flow area based on sediment depth and debris blockages either observed during site visits or indicated in the SWI data were tested and did not significantly affect calibration results, as the WLS locations are primarily influenced by the tide, tide gate, and flows form the major canals (Dundee, Heidt, and S & O). Sediment tends to mobilize during significant storm events due to increased velocity resulting from reduced flow area, and much of the sediment is deposited during the receding flood. The final calibration simulations did not include any reduced pipe diameter based on sediment depth.

5.2.3 Landuse Adjustments

The land use data developed for the Dundee Canal basin (discussed in section 4.1.3) was adjusted to improve model calibration by separating the wetland areas into two categories: wetlands' and 'woody wetlands.' Although the Dundee Canal basin is relatively urbanized, curve numbers calculated with the initial land cover & soils data were higher than expected. Further, calibration results showed higher WSE responses compared to the WLS data at both monitoring locations. To address this issue, GIS imagery of wetland areas indicated in the NHD were reviewed, and areas with dense vegetation or tree cover were designated as 'woody wetlands' and assigned a lower curve number. This change lowered WSE responses at both WLS locations and significantly improved calibration results.

5.2.4 Storage Adjustments

Model calibration runs were initially completed with 2D mesh areas included, as discussed in section 4.2.2. After converting the model to a fully 1D setup to improve model run times, calibration results indicated faster WSE responses at both WSL locations compared to previous runs with 2D mesh areas. This indicated that the additional storage accounted for in the 2D mesh areas was not being fully captured by the 1D channel transects. To address this issue, channel transects were added above the 20-acre drainage limit to add back storage previously accounted for with 2D mesh areas. This change improved the timing of WSE responses at both WLS locations and resulted in results similar to 2D model runs.

5.2.5 Historic Canal & Outfall Adjustments

An outfall was placed draining out of the project area to the west (shown in Figure 25) based on site visit observations of new construction in the area. Additionally, discussions with the City of Savannah confirmed that the S & O canal is not connected under Telfair Road and the model outfall was removed to prevent flow exiting the model to the east. Both adjustments significantly improved calibration results. Early calibration testing and sensitivity analysis without these adjustments proved difficult, as WSE response and peak WSE timing did not align well with WLS data. Calibration results were further improved by incorporating bathymetry into the channel transects connecting the upstream end of Heidt Canal to the added Western outfall. This change allowed for flow exiting the shaded blue area north of US HWY 80 shown in Figure 25 to flow in either direction (out of the Dundee Canal basin or towards Dundee Canal) and ultimately resulted in more flow existing the Dundee Canal Basin to the West. This change primarily improved calibration of WSE response at the Alfred Street WLS location.

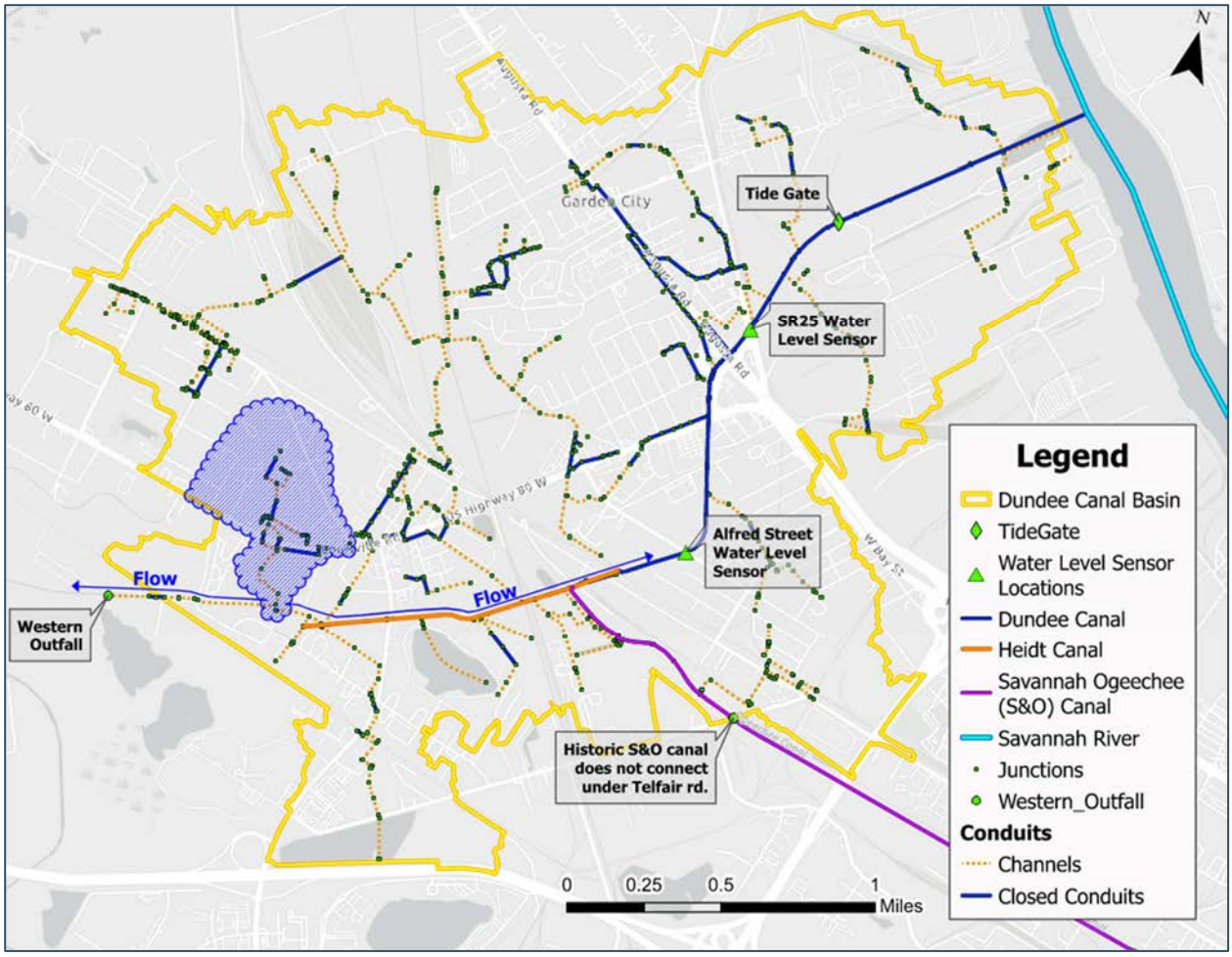


Figure 25: Addition of Western Outfall & Historic Canal Adjustments for Calibration

5.3 Calibration Results

Figure 26 to Figure 29 show model results compared to the WLS data for the two selected calibration storm events on May 10th and June 15th of 2025. Model results are shown in green, WLS data is shown in orange, and rainfall input at the SR25 WLS location is shown blue.

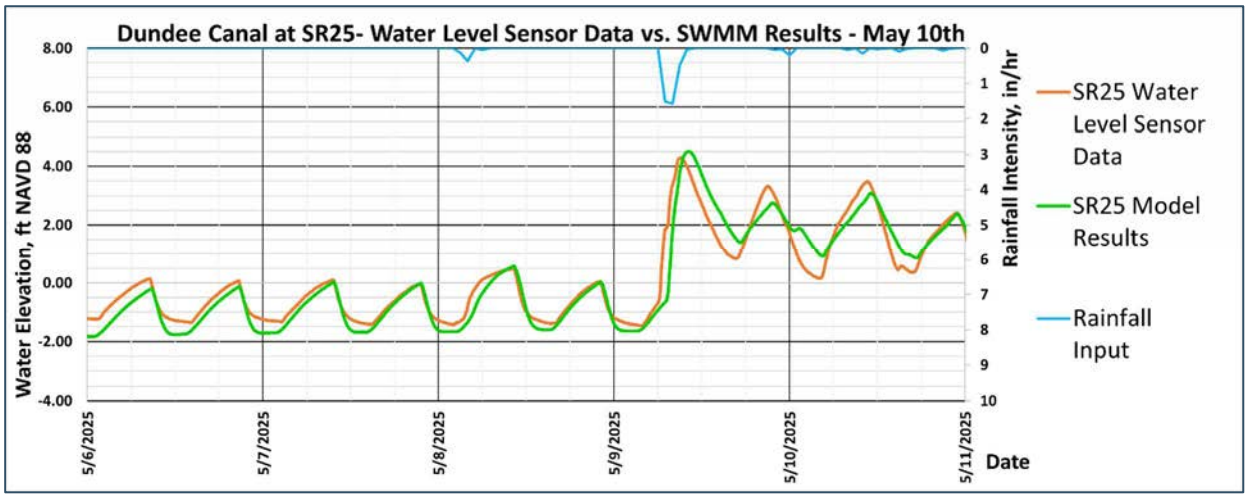


Figure 26: May 10th, 2025 Calibration Results - SR25 WLS

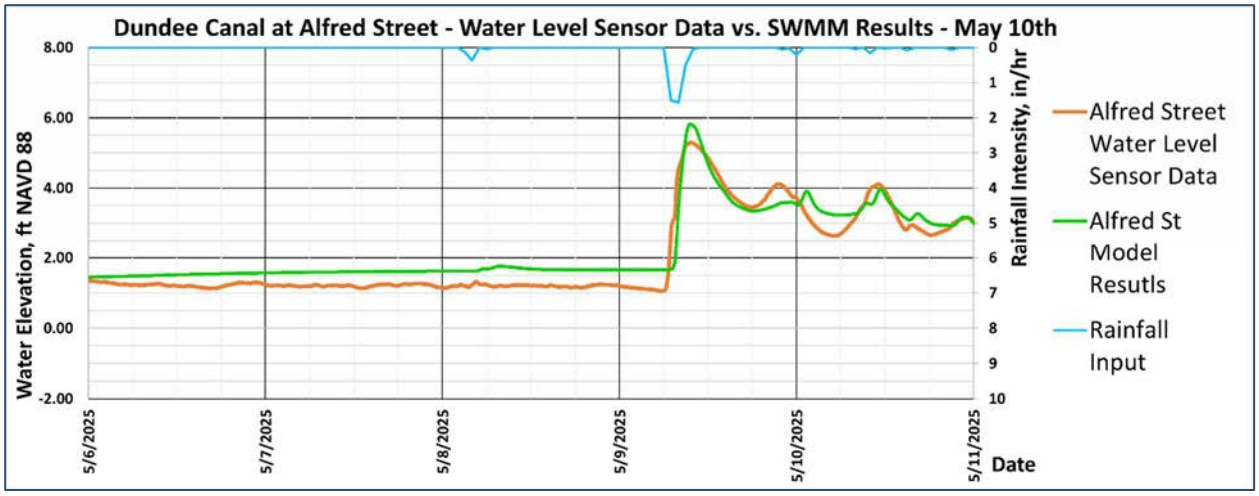


Figure 27: May 10th Calibration Results - Alfred St. WLS

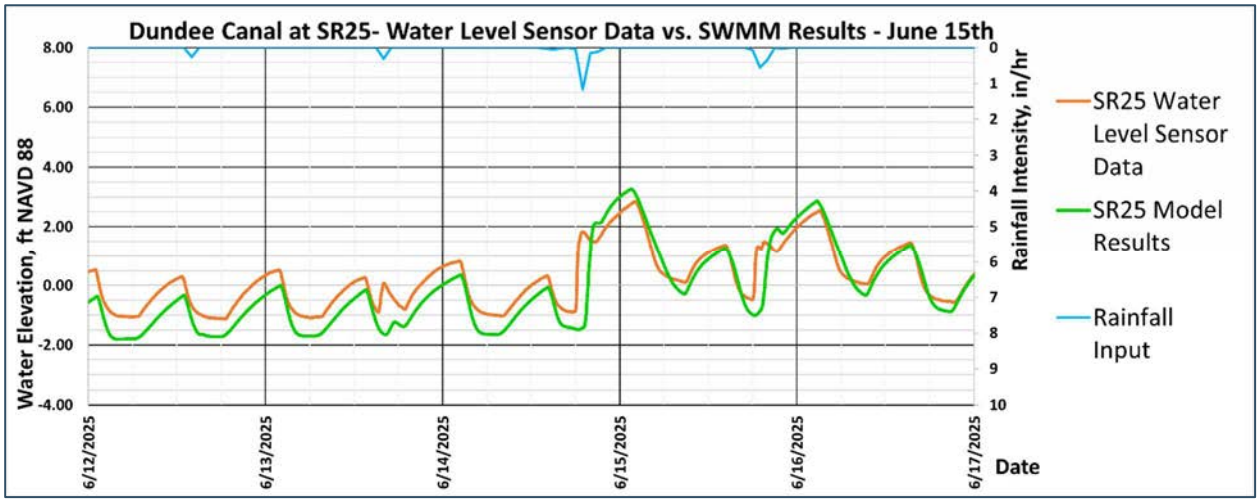


Figure 28: June 15th Calibration Results - SR25 WLS

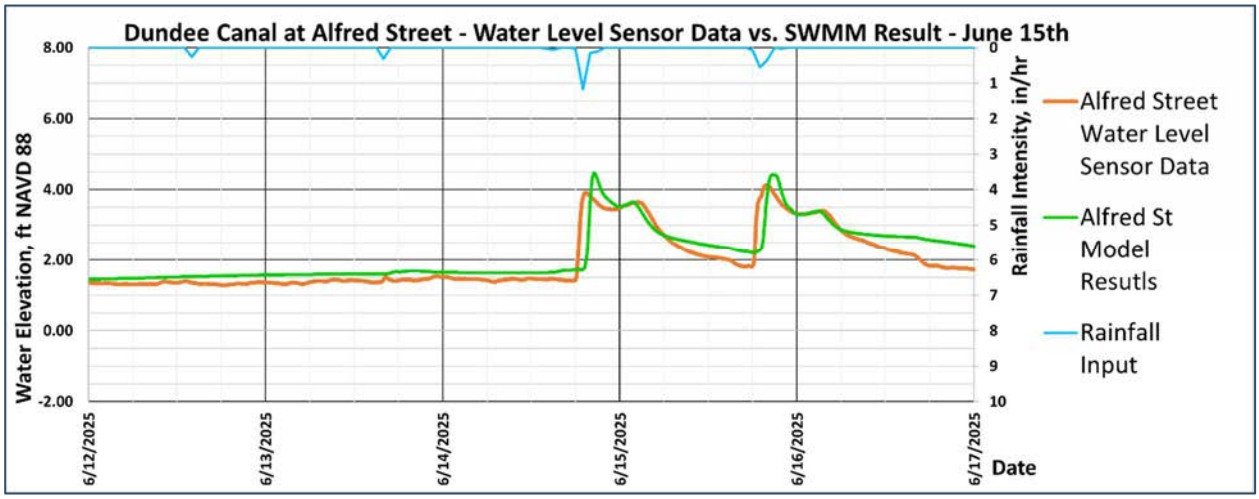


Figure 29: June 15th Calibration Results - Alfred St. WLS

6. Existing Conditions Assessment

6.1 Level of Service Analysis

The baseline model simulations were analyzed to determine the LOS of every conduit (pipe or culvert) in the Dundee Canal stormwater system draining 20 acres or more. Model water elevation was compared to the overtopping elevations at the upstream node of each conduit, and LOS for each pipe was assigned based on the lowest frequency design storm that does not overtop the pipe or culvert. For example, a culvert that is overtopped starting in the 50-year design storm would have a 25-year LOS. Chatham County desires that pipe systems and culverts meet a minimum 50-year LOS. The City of Savannah requires that culverts and pipe systems with drainage areas greater than 10 acres meet a minimum 25-year LOS, and for culverts, Savannah prefers to achieve a 100-year LOS, where feasible. Figure 30 summarizes the results of the existing LOS analysis.

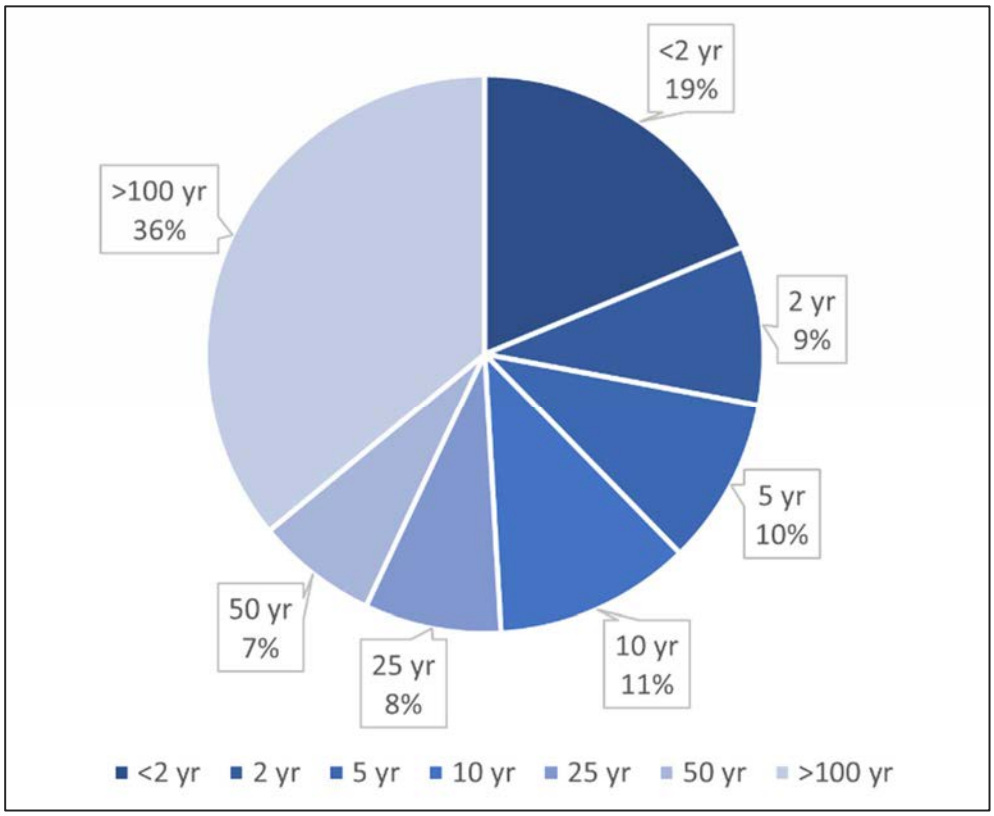


Figure 30: Dundee Canal Basin Existing Pipe LOS

Of all conduits identified in this study draining 20 acres or more, 57% have less than a 50-year LOS, and 38% have less than a 10-year LOS. LOS for each pipe is included in the Conduit data tables in Appendix A – Level of Service Tables. Pipe LOS was also attributed to all applicable conduits in the stormwater system GIS database. Figure 31 shows LOS for each conduit considered in the LOS analysis.

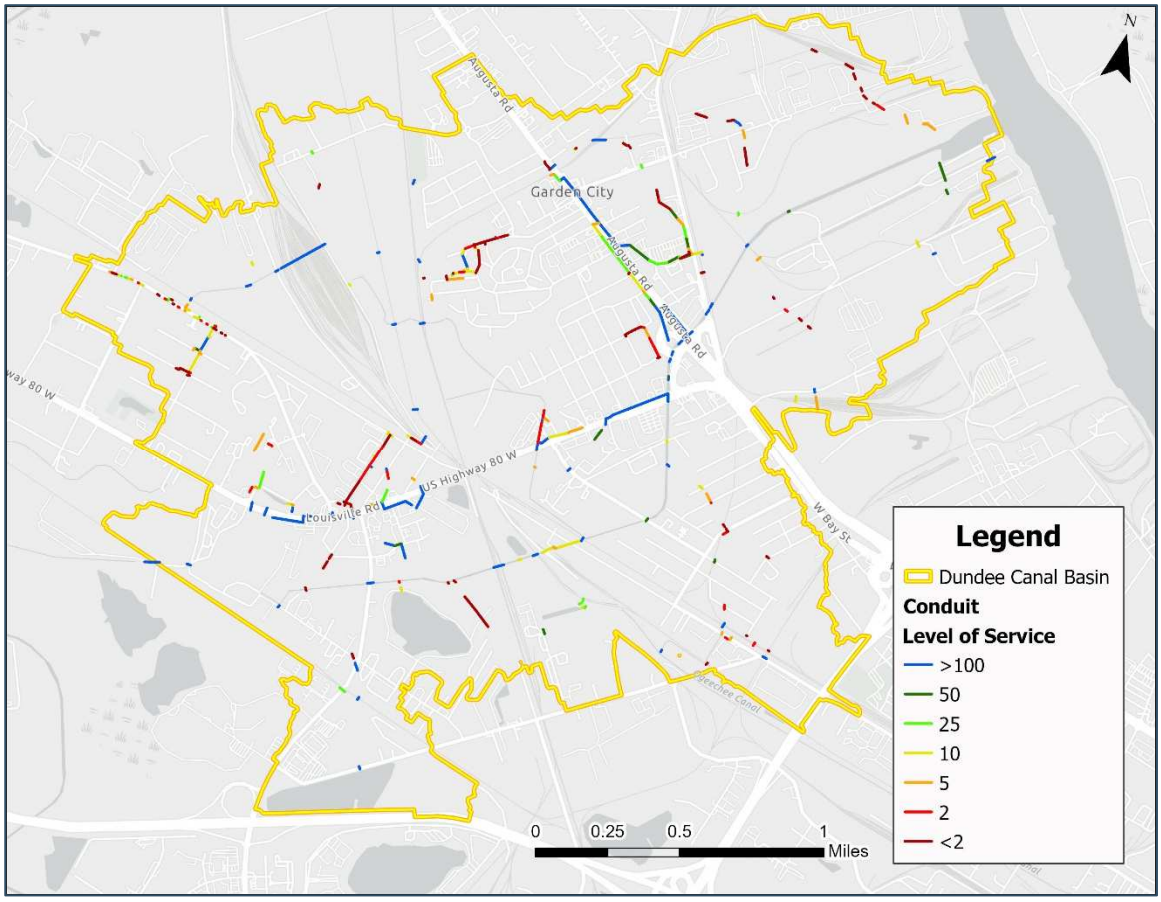


Figure 31: Pipe LOS map overview

6.2 Maintenance Needs

Survey and site visit observations as well as SWI data indicate many pipes require maintenance to clear debris or sediment build up. Several pipes were observed during site visits partially or completely blocked by debris (Figure 32).



Figure 32: Site visit photos of blocked pipes – Foundation Drive (Left) & Augusta Rd. near Chatham Villa Dr. (Right)

Many blocked or partially buried pipes were also observed during survey efforts (Figure 33).



Figure 33: Survey photos of blocked pipes

The Chatham County and Garden City SWI databases both include information on debris or sediment build up. The Garden City SWI indicates there are 34 pipes within the Dundee Canal basin which exhibit some degree of sediment build up, and the Chatham County SWI indicated there are 13 pipes that exhibit either sediment or debris build up (Figure 34).

Sediment or debris build up information gathered form survey, site visit, or SWI data was attributed to each pipe in the stormwater system GIS database, and this information is included for each pipe in Appendix A – Level of Service Tables. LOS determined for each of these pipes in Appendix A assumes the pipe is fully functioning, without any debris or sediment blockage.

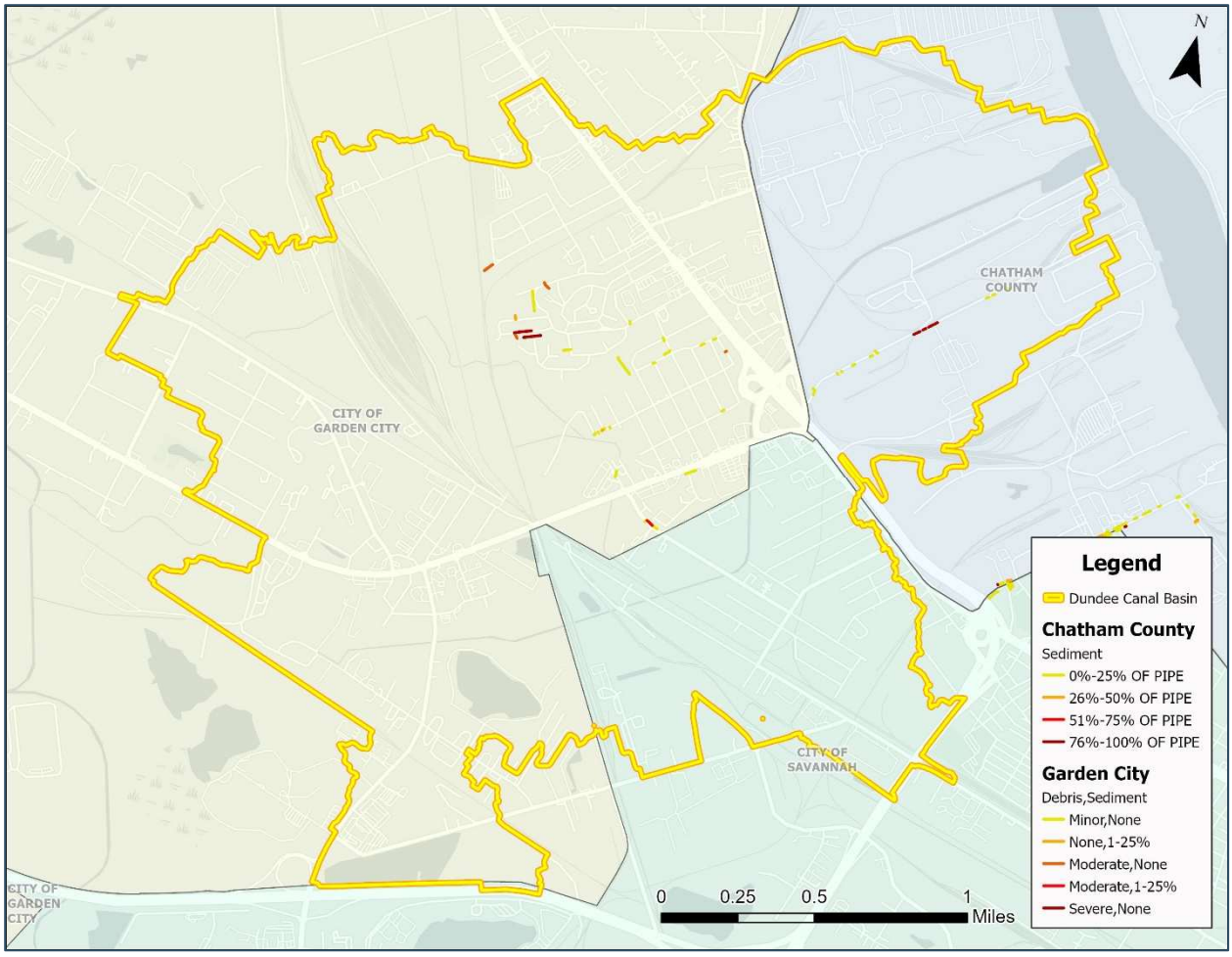


Figure 34: Sediment and debris build up indicated by SWI data

6.3 Existing Flooding Analysis

To analyze existing flooding conditions, Water Surface Elevation (WSE) data were generated for the 2-, 5-, 10-, 25-, 50-, and 100-year design storms by assigning each subcatchment a WSE equal to the maximum hydraulic grade line (HGL) of the outlet node. Floodplains were delineated based on this WSE data for each design storm and are shown in Appendix E – Existing Conditions Maps.

Flooding analysis focused on the 10- and 100-year design storms. These events were chosen to simplify analysis of existing flooded structures and roadways. Analysis of structures flooded in the 10-year design storm provides information useful for determining structural damage and roadway replacement cost over the life of a 30-year mortgage, and analysis of the 100-year design storm provides information about structural and roadway flooding in the regulatory floodplain.

WSE data were compared to available parcel and building footprint data to identify areas of flooding concern by comparing estimated first floor elevations, determined by taking the average terrain value from within each building footprint, and WSE data generated for each design storm. Based on this analysis, 311 structures were identified that flood in the 10-yr design storm and 629 structures were identified that flood in the 100-year design storm. Figure 35 shows building footprints that flood in the 10- and 100-year design storms within the Dundee Canal watershed. Table 8 shows the number of flooded structures categorized by flooded depth range.

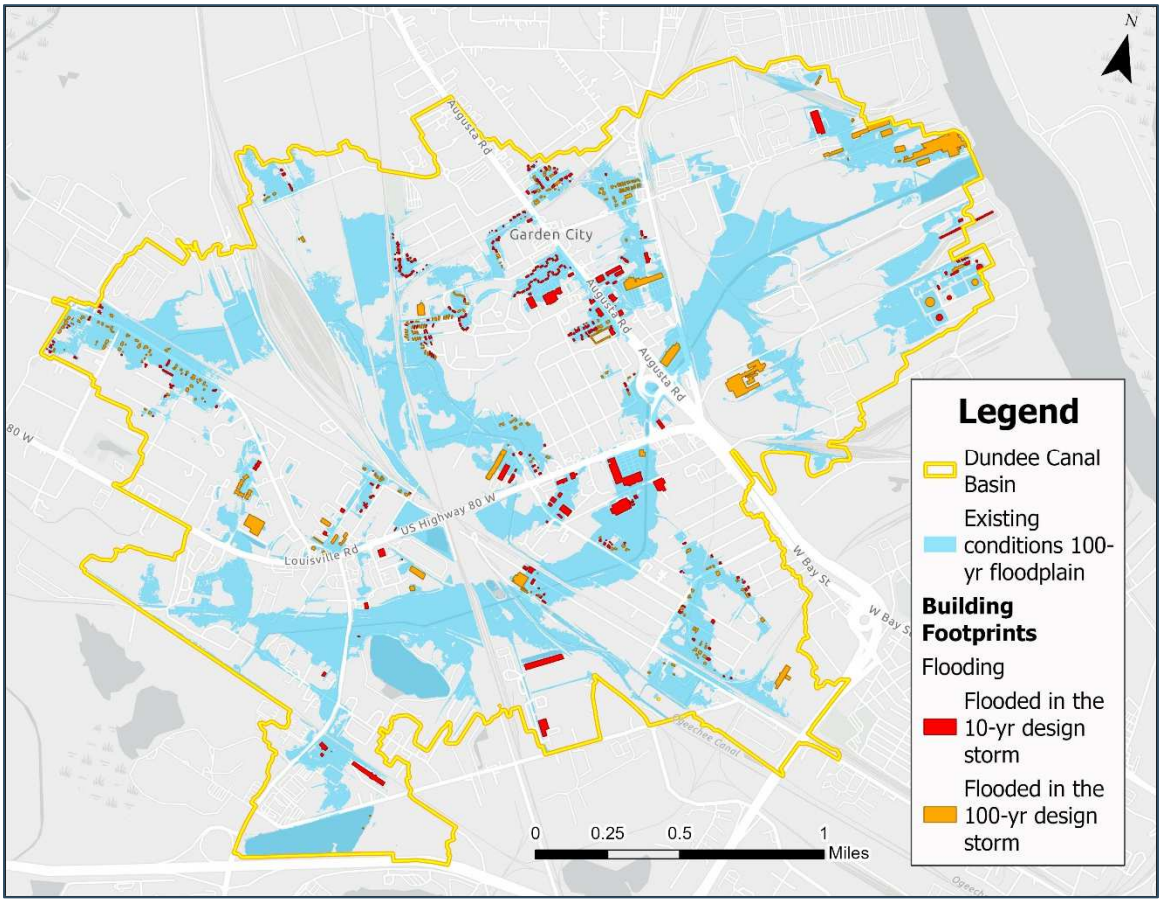


Figure 35: Structural flooding overview

Table 8: Number of flooded structures by flooded depth range

Flooded Depth Range	10-year, 24-hour Design Storm	100-year, 24-hour Design Storm
< 1 ft	235	355
1-2 ft	69	195
2-3 ft	7	71
< 3 ft	0	8
Total	**311**	**629**

Physical depth-damage functions are provided by the U.S. Army Corps of Engineers (USACE) in their report *North Atlantic Coast Comprehensive Study: Resilient Adaptation to Increasing Risk*. These depth-damage functions are categorized by structure type and estimate damage as a percentage of total structure value based on the depth of water relative to ground elevation. To estimate depth-damage functions applicable to the Dundee Canal watershed, Tables 2, 3, 5A, 5B, 6A, and 6B were taken from the USACE report and averages for Residential and Commercial depth-damage functions were estimated. shows the depth-damage functions taken from the USACE report, and the average functions used for this analysis. The USACE depth-damage functions include damage estimates for negative depths relative to ground level for structures with basements, however only positive depths relative to ground level were considered in this analysis since no data was available to determine which structures have basements.

Table 9: Structural depth-damage functions provided by USACE

	Prototype description	Structural Inundation Damage as % of Structure Value for Each inundation depth - Most Likely						
		0.5 ft	1 ft	2 ft	3 ft	5 ft	7 ft	10 ft
2	Commercial - Engineered	18%	35%	39%	43%	47%	70%	75%
3	Commercial - Non/Pre-Engineered	15%	30%	42%	64%	71%	80%	87%
Commercial Average:		**17%**	**33%**	**41%**	**54%**	**59%**	**75%**	**81%**
5A	Single Story Residence, No Basement	10%	18%	28%	33%	42%	55%	65%
5B	Two Story Residence, No Basement	10%	15%	20%	25%	30%	50%	60%
6A	Single Story Residence, With Basement	30%	30%	35%	40%	70%	90%	95%
6B	Two-Story Residence, With Basement	20%	25%	30%	35%	50%	60%	70%
Residential Average:		**18%**	**22%**	**28%**	**33%**	**48%**	**64%**	**73%**

Available parcel and building footprint data were leveraged to analyze theoretical structural damage based on the existing conditions WSE data and average depth-damage functions for the 10-year and 100-year design storms. Based on the available data and an average of the damage-depth functions developed by USACE, the theoretical Structural damage resulting from the 100- and 10-year design storms are 4.9% and 2.1%, respectively, of the building values accounted for in the parcel and building footprint data within the Dundee Canal watershed.

Structure value data were available in the parcel data and were used to calculate approximate savings for potential stormwater system improvements by comparing existing structural damage values with structural damage values calculated for proposed improvement scenarios. These savings were used to assess each proposed improvement option and are noted on the project sheets in section 7.2 where applicable.

6.4 Problem Area Identification

Dewberry leveraged the results of the LOS Analysis and Existing Flooding Analysis to identify and group problem areas. In each location, numerous pipes do not meet the desired LOS and structure as well as roadway flooding is problematic and creates a hazard. These problem areas assisted in identifying target areas for proposed improvements, and proposed improvement projects were grouped into the 9 different areas of concern shown in Figure 36.

- Augusta Road (AG)
- Coastline Port Services (CP)
- Davis Avenue (DA)
- Lynah Avenue (LA)
- Garden City (GC)
- Priscilla Thomas (PT)
- S&O Canal (SO)
- Sharon Park Neighborhood (SP)
- Woodville Neighborhood (WV)

Problem areas tended to be grouped based on the source of the flooding and named based on the neighborhood or structure/roadway impacted. Oftentimes, a majority of the flooding could be attributed to a single undersized culvert or drainageway that could be upsized to alleviate substantial flooding.

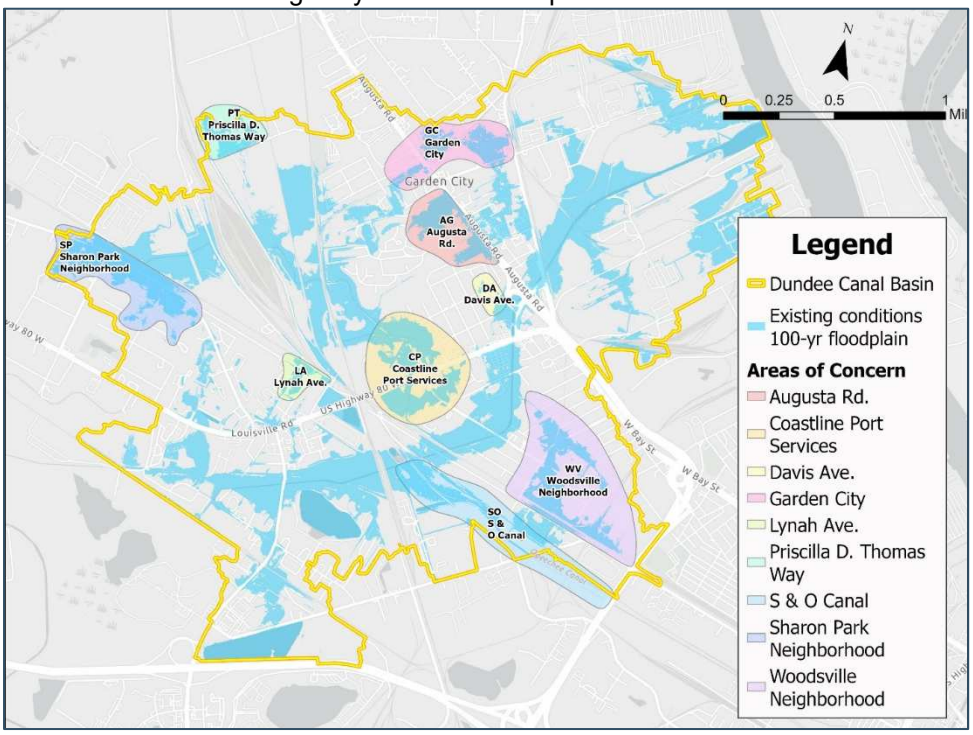


Figure 36: Areas of Concern Map

These areas of concern were selected with the goal of isolating areas where stormwater improvements have the most potential to alleviate structural and roadway flooding. It should be noted that extensive model testing indicated that most primary conveyance improvements along the Dundee and Heidt Canals had limited impacts on structural and roadway flooding, as WSE in these areas are primarily controlled by tide levels, or the existing stormwater infrastructure is already sufficient. While some areas of concern include primary conveyance improvements, the selected areas of concern tend to focus on other areas where stormwater improvements scored higher based on the criteria defined in the following section.

7. Improvement Plan

Fifteen proposed improvements were developed based on the problem areas identified during the existing conditions assessment in the Dundee Canal basin. Several problem areas only have a single proposed solution, and these tend to be more simplistic solutions involving pipe upgrades with no or very limited negative downstream impacts. Therefore, these solutions do not require a balancing of upstream and downstream benefits. Problem areas with multiple solutions tend to generate some negative downstream impacts, and therefore, solutions may require additional measures of offsets to mitigate negative downstream impacts. The following sections review the ranking criteria for each proposed solution as well as the proposed solutions, including a project description, maintenance considerations, ranking, advantages, limitations, and planning-level cost estimate. Finally, the recommended solution for each problem area has been combined into a Preferred Consensus Plan. A recommended implementation timeline along with identification of potential funding sources has also been included for the Preferred Consensus Plan.

7.1 Solution Ranking

Model scenarios for each of the proposed improvement options were created, and each option was given a score of 1 to 100 based on analysis of proposed results compared to existing conditions results. Several factors were considered to score and rank the improvement options. These criteria are separated into 4 categories:

- Stormwater
  Scoring for the stormwater category was based on several factors including how many structures are removed from the 10-year and 100-year floodplains, LOS improvements, roadway flood mitigation, and negative downstream impacts.
- Cost
  The cost category is based on planning-level cost estimates which consider total estimated project cost (including potential land acquisition and design services), maintenance burden, savings through improved LOS, and grant funding opportunities. It is assumed the most likely projects to receive grant funding will meet FEMA 404 Hazard Mitigation Assistance (HMA) grant requirements or will provide water quality benefits which could potentially qualify for a 319(h) grant. Total estimated project cost was calculated based on concept level bid pricing, and savings through improved LOS were estimated based on the structural depth-damage functions described in Section 6.3 and estimated roadway replacement costs. Estimated savings are based on the 10-year design storm and consider savings over a 30-year period. Itemized cost estimates for each improvement option are provided in Appendix E.
- Constructability
  Constructability was scored based on permitting concerns, required property purchase, utility impacts, and coordination with outside entities. Improvement options involving work under a roadway were assumed to impact multiple utilities. Coordination with outside entities considers the type and number of different entities or municipalities with which coordination would be required to complete the project.
- Community
  Community benefit scores are based on aesthetic benefit, community benefit, and construction impact to the community. Aesthetic benefit scores were scored based on a qualitative assessment of the aesthetic value provided to the community by each option, where unsightly improvement options score lower and aesthetically pleasing options score higher. Community benefits were scored based on benefits provided to the community by each improvement option, such as removing homes from the regulatory floodplain or providing community green space.

Table 11 shows the full ranking criteria used to score the improvement options. Table 10 shows the improvement options ranked from highest score to lowest score, and Table 12 shows improvement option scoring for each individual category and ranking criteria.

Table 10: Improvement Option Rank & Overall Scores

RANK	IMPROVEMENT OPTION	ACRONYM	OVERALL SCORE
1	Priscilla D. Thomas Way Pipe Upgrade	PT1	84
2	Sharon Park Pipe Upgrade	SP1	79
3	Brampton Rd. Culvert Upgrade + Railroad Pipe Removal	GC1	69
4	Woodville Railroad Culvert Upgrade	WV2	67
5	Lynah Ave. Pipe Upgrades + Heidt Ave. Culvert + Opt. LA1	LA2	64
9	Woodville Pipe Upgrades along Unnamed Canal	WV1	63
7	Woodville Pipe Upgrades + Railroad Culvert Upgrade	WV3	63
8	Sharon Park Pipe Upgrade + Storage Areas	SP2	60
9	Lynah Ave. Railroad Culvert Upgrade + Channel Excavation	LA1	60
10	Davis Avenue Diversion	DA1	54
11	August Rd. Pipe Upgrades	AG1	51
12	Coastline Port Services Diversion + Daylight + Pipe Upgrades	CP3	44
13	Coastline Port Services Diversion	CP1	43
14	Connect the S&O Canal to Drain East	SO1	39
15	Coastline Port Services Diversion + Daylight	CP2	30

Table 11: Proposed improvement options ranking matrix

CATEGORY	RANKING CRITERIA	SCORE		
		0	1	2
Stormwater	LOS improvements	No Improvement/ <50-yr	Meets 50-yr	Meets 100-yr
	Less Frequent Structural Flood Mitigation (100-YR Event)	No structures removed from floodplain	1-5 Structures removed from floodplain	5 + Structures removed from floodplain
	More Frequent Structural Flood Mitigation (10-YR Event)	No structures removed from floodplain	1-5 Structures removed from floodplain	5 + Structures removed from floodplain
	Roadway flood mitigation	No improvement to flooding along roadway	Roadway removed from the 25-year floodplain	Roadway removed from the 50-yr floodplain
	Negative downstream impacts (100-yr event)	Structures, roadways, or commercial properties added to the floodplain	Floodplain water surface elevations increase downstream, but no structures, roadways, or commercial properties added to the floodplain	No negative downstream impacts
Cost	Total Cost	$2M+	$500K - $2M	< $500K
	Maintenance burden	High	Medium	Low
	Savings through improved system level of service based on the 10-year design storm	None	$1 to $500K	> $500K
	Grant funding opportunities	No	Yes, limited	Yes, strong candidate
Constructability	Permitting Concerns	Multiple	Single	Local Only/None
	Property Purchase	Multiple	Single	None
	Water/ Sewer Utility impacts	Multiple	Single	None
	Coordination with outside entities	Railroad and/or multiple entities	Private, GDOT, or other municipalities	None
Community	Aesthetic benefit	Negative	Neutral	Positive
	Community benefit	Negative	Neutral	Positive
	Community construction impact	High	Moderate	None

Table 12: Improvement Option Scores

CATEGORY	RANKING CRITERIA	WV1	WV2	WV3	SO1	DA1	PT1	CP1	CP2	CP3	SP1	SP2	LA1	LA2	AG1	GC1
Stormwater	Level Of Service (LOS) improvements	2	1	2	0	0	2	0	1	1	2	2	2	1	0	2
	Less Frequent Structural Flood Mitigation (100-YR Event)	2	1	2	0	0	2	1	1	2	2	2	0	2	2	2
	More Frequent Structural Flood Mitigation (10-YR Event)	2	2	2	1	1	1	0	0	2	1	2	1	2	0	1
	Roadway flood mitigation	2	0	2	0	0	2	0	0	0	1	2	1	1	1	2
	Negative downstream impacts (100-yr event)	1	1	1	1	2	1	1	0	0	1	2	2	2	1	0
Category Score:		**90**	**50**	**90**	**20**	**30**	**80**	**20**	**20**	**50**	**70**	**100**	**60**	**80**	**40**	**70**
Cost	Total Cost	0	2	0	1	2	2	2	0	0	2	0	1	1	0	1
	Maintenance burden	2	2	2	2	2	2	0	1	1	2	1	1	1	1	2
	Savings through improved system LOS	2	1	2	0	2	1	0	0	1	1	1	1	2	2	1
	Grant funding opportunities	2	1	2	0	0	2	2	1	2	2	1	1	2	2	1
Category Score:		**75**	**75**	**75**	**38**	**75**	**88**	**50**	**25**	**50**	**88**	**38**	**50**	**75**	**63**	**63**
Constructability	Permitting Concerns	1	2	1	0	2	2	0	0	0	2	1	1	1	1	2
	Property Purchase	2	2	2	2	2	2	1	1	1	2	0	2	2	2	2
	Water/ Sewer Utility impacts	0	2	0	1	0	2	2	0	0	2	2	2	1	0	2
	Coordination with outside entities	0	0	0	1	1	2	1	1	1	0	0	0	0	1	0
Category Score:		**38**	**75**	**38**	**50**	**63**	**100**	**50**	**25**	**25**	**75**	**38**	**63**	**50**	**50**	**75**
Community	Aesthetic benefit	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Community benefit	2	1	2	1	1	2	1	1	2	2	2	1	2	2	2
	Community construction impact	0	2	0	1	1	1	1	1	0	2	1	2	0	0	1
Category Score:		**50**	**67**	**50**	**50**	**50**	**67**	**50**	**50**	**50**	**83**	**67**	**67**	**50**	**50**	**67**
OVERALL SCORE:		**63**	**67**	**63**	**39**	**54**	**84**	**43**	**30**	**44**	**79**	**60**	**60**	**64**	**51**	**69**

7.2 Proposed Improvement Options

The following project sheets present the fifteen proposed improvement options developed to address the problem areas identified during the existing conditions assessment in the Dundee Canal basin. Each project sheet provides the following information:

- Project Name and Acronym
- Planning-Level Cost Estimate
- Maintenance Burden
- Option Ranking Performance (overall and by category)
- Option Description (including map exhibit)
- Option Advantages and Limitations

Several problem areas only have a single proposed solution, and these tend to be more simplistic solutions involving pipe upgrades with no or very limited negative downstream impacts. Therefore, these solutions do not require a balancing of upstream and downstream benefits. Problem areas with multiple solutions tend to generate some negative downstream impacts, and therefore, solutions may require additional measures of offsets to mitigate negative downstream impacts. Further, the fifteen options presented in this report are not exhaustive of all proposed options developed. However, other proposed options have been abandoned due to substantial negative downstream impacts, significant cost impacts and/or poor ranking performance. While the proposed option SO1 – Connect the S&O Canal to Drain East, performs poorly from a ranking standpoint, it helps to reduce water surface elevations along the Dundee Canal in a critical area that may enable other, higher-ranking options to be completed even though they cause increases in water surface elevation along the Dundee Canal.

It should be noted that the project sheets assess each proposed option on an individual basis, and unless explicitly stated in the project description, the interaction of results from other proposed options is not considered. Should multiple proposed options be implemented, the model should be updated to reflect the desired options to ensure there are no unintended negative consequences from implementation of a selection of options.

AG1 Augusta Rd. Pipe Upgrades

Total Cost: $2,300,000
Maintenance Level: Medium

Option Performance: 51/100

Cost: 63/100

Stormwater: 40/100

Constructibility: 50/100

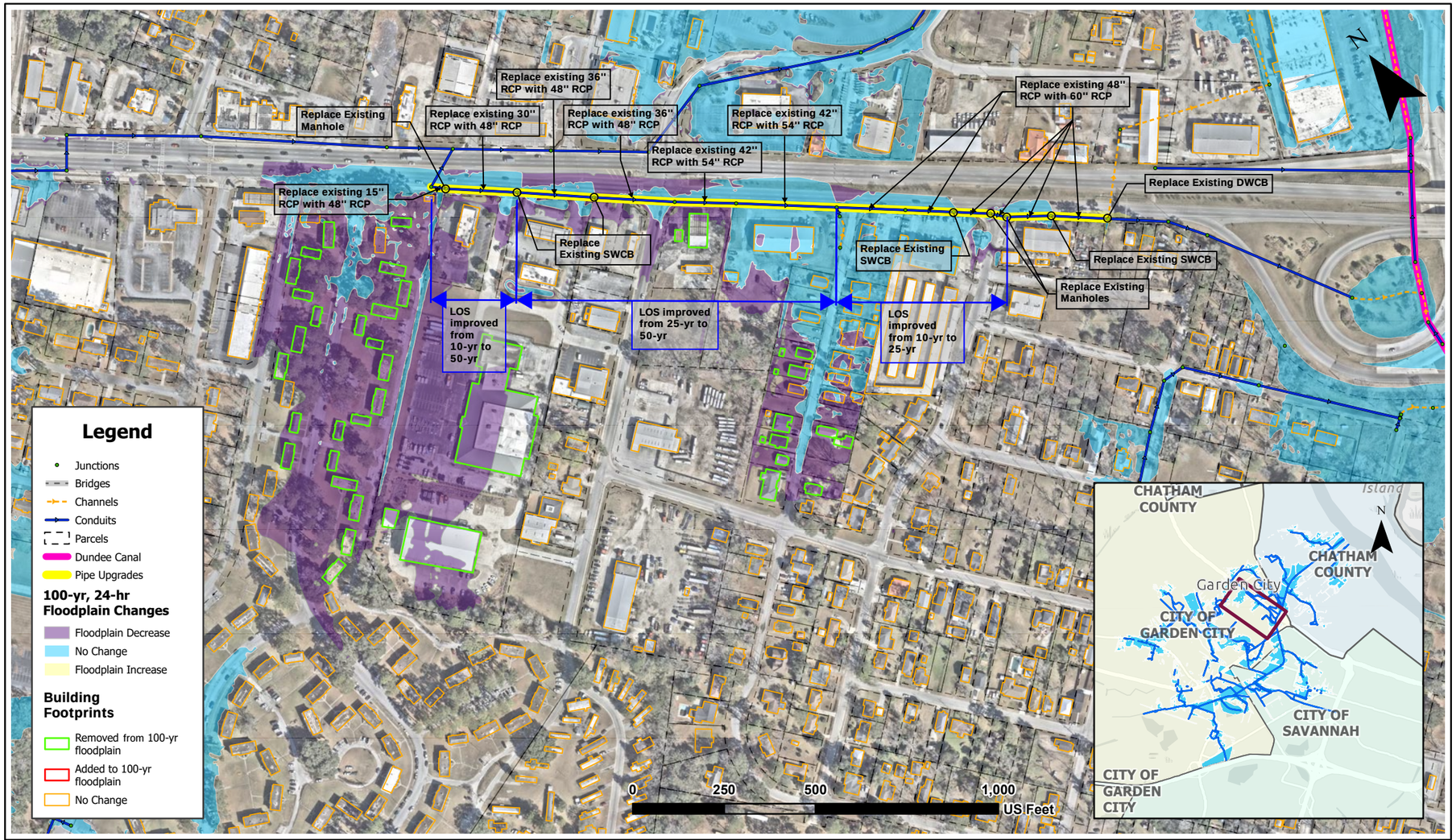
Community: 50/100

Option AG1 consists of upgrading the Existing GDOT RCP pipe system along Augusta Rd. Pipe upgrades include replacing 40 LF of 15" RCP with 48" RCP, replacing 195 LF of 30" RCP with 48" RCP, replacing 215 LF of 36" RCP with 48" RCP, replacing 445 LF of 42" RCP with 54" RCP, and replacing 910 LF or 48" RCP with 60" RCP. Structures which connect to existing pipes that are not being upgraded are recommended to remain, and replacement of 4 (four) single-wing catch basins, 3 (three) storm manholes, and 1 (one) double-wing catch basin are required where upgrades are proposed. This option substantially reduces 100-yr flood elevations in the Chatham City Apartments complex upstream of the pipe upgrades, removes several homes from the 100-yr floodplain along Leon Village Dr., improves level of service, and reduces roadway flooding along Augusta Rd.

Based on reduced flood elevations and roadway inundation for the 10-year storm event, projected savings equal approximately $6,000,000 over a 30-year time frame. These savings are projected based on structural damage functions provided by USACE and estimated roadway replacement costs.

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Option Advantages:

- Removes 24 apartment buildings from the 100-year floodplain
- Removes 4 commercial structures from the 100-year floodplain
- Removes 9 homes from the 100-year floodplain
- Level of Service improved from a minimum of 10-year to a minimum of 25-year
- A 50-year Level of Service is achieved from Chatham City Srv Rd. to Leon Village Dr.
- Flooding on Augusta Rd. is eliminated for the 25-year storm
- No downstream structures are added to the 10-year or 100-year floodplains

Option Limitations:

- Coordination with GDOT is required to complete the project
- Significant community construction impact

CP1 Coastline Port Services Diversion

Total Cost: $400,000

Maintenance Level: High

Option Performance: 43/100

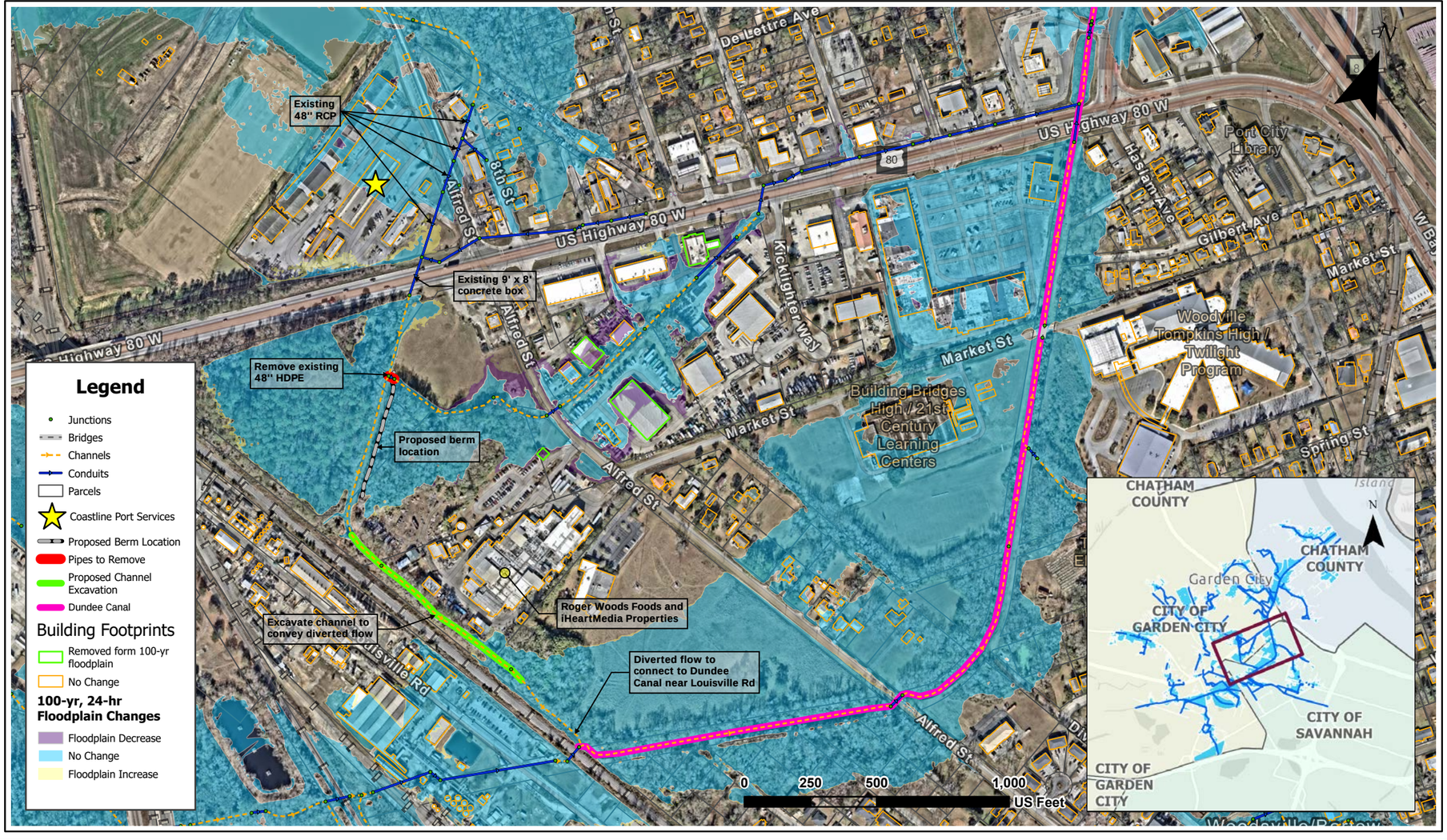
Cost: 50/100

Stormwater: 20/100

Constructibility: 50/100

Community: 50/100

Option CP1 involves excavating a ditch along the southwestern side of the Roger Wood Foods and iHeartMedia properties. The proposed ditch would be 1,300 LF and would have a bottom width of 5' with side slopes of 3:1 and a depth of 3'. This ditch will directly connect flows exiting the pipe system from the Coastline Port Services (CPS) to the Dundee Canal. Currently, flow exiting the CPS pipe system flows to the east through a 48" HDPE before passing under Alfred Street. Water then flows between multiple commercial buildings before entering a pipe system along US Highway 80 before discharging into the Dundee Canal downstream of US Highway 80. To further improve the effectiveness of option CP1, this option also proposes to remove the existing 48" HDPE and create a 3.5' high berm (10' elevation NAVD88) along the eastern side of the ditch. The proposed berm is overtopped starting in the 50-year storm event. Therefore, it would need to be designed to withstand overflow events. However, it still provides significant benefit to commercial properties along US Highway 80 in the 100-year flood event.



Option Advantages:

- Removes 3 commercial structures from the 100-year floodplain
- Reduces impacts to commercial parking lots between Market St. and US Highway 80
- Minimal construction impact to the community

Option Limitations:

- Increases downstream 100-year flood elevations along Dundee Canal by 0.15 feet.
- Increases 100-year flood elevations in the south side of the Coastline Port Services parking lot by 0.3 feet
- Requires work on private property
- This project may need to be completed in conjunction with a CLOMR/LOMR or another project, such as SO1 to help offset downstream rises in water surface elevations.

CHATHAM COUNTY GEORGIA 1777

Dewberry

CP2 Coastline Port Services Channel Cap + Daylight

Total Cost: $2,050,000
Maintenance Level: Medium

Option Performance: 30/100

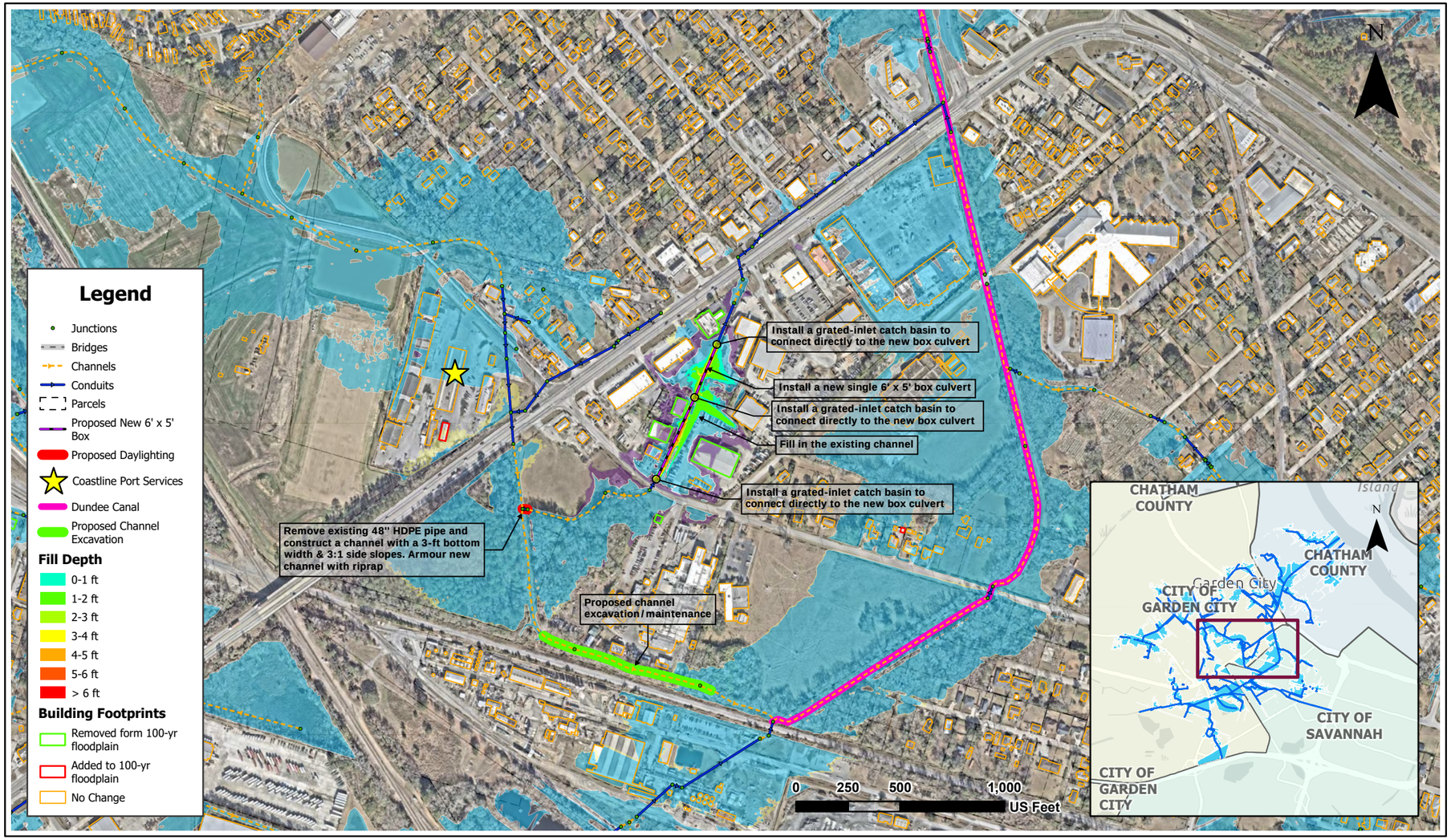
Cost: 25/100

Stormwater: 20/100

Constructibility: 25/100

Community: 50/100

Option CP2 consists of capping the channel between Market St. and US Highway 80 and installing a single 6' x 5' box culvert. Removal of an and existing 48" HDPE pipe and construction of a channel in its place is also recommended to reduce impacts to the Coastline Port Services property. Capping the channel between Market St. and US Highway 80 involves installing a single 6' x 5' box culvert, filling the existing channel to an elevation of approximately 8.5', and installing 3 grated inlet catch basins to drain directly into the new culvert. The new channel to be constructed in place of the existing HDPE box culvert would have a 3' bottom width and 3:1 side slopes, and would require armoring with rip-rap due to high velocities during less frequent storm events. Excavation of a ditch along the southwestern side of the Roger Wood Foods and iHeartMedia properties, as is proposed in Option CP1, is also recommended for Option CP2 to further reduce flood elevations in the Coastline Port Services property during less frequent storm events.



Option Advantages:

- Removes 4 commercial structures from the 100-year floodplain
- 100-year flood elevation increases along Dundee Canal are negligible (<0.05')

Option Limitations:

- Coordination with GDOT is required to complete the project
- Adds one structure in the Coastline Port Services property to the 100-yr floodplain.

CHATHAM COUNTY GEORGIA 1777

Dewberry

CP3 Coastline Port Services Channel Cap + Daylight + Pipe Upgrades

Total Cost: $4,200,000
Maintenance Level: Medium

Option Performance: 44/100

Cost: 50/100

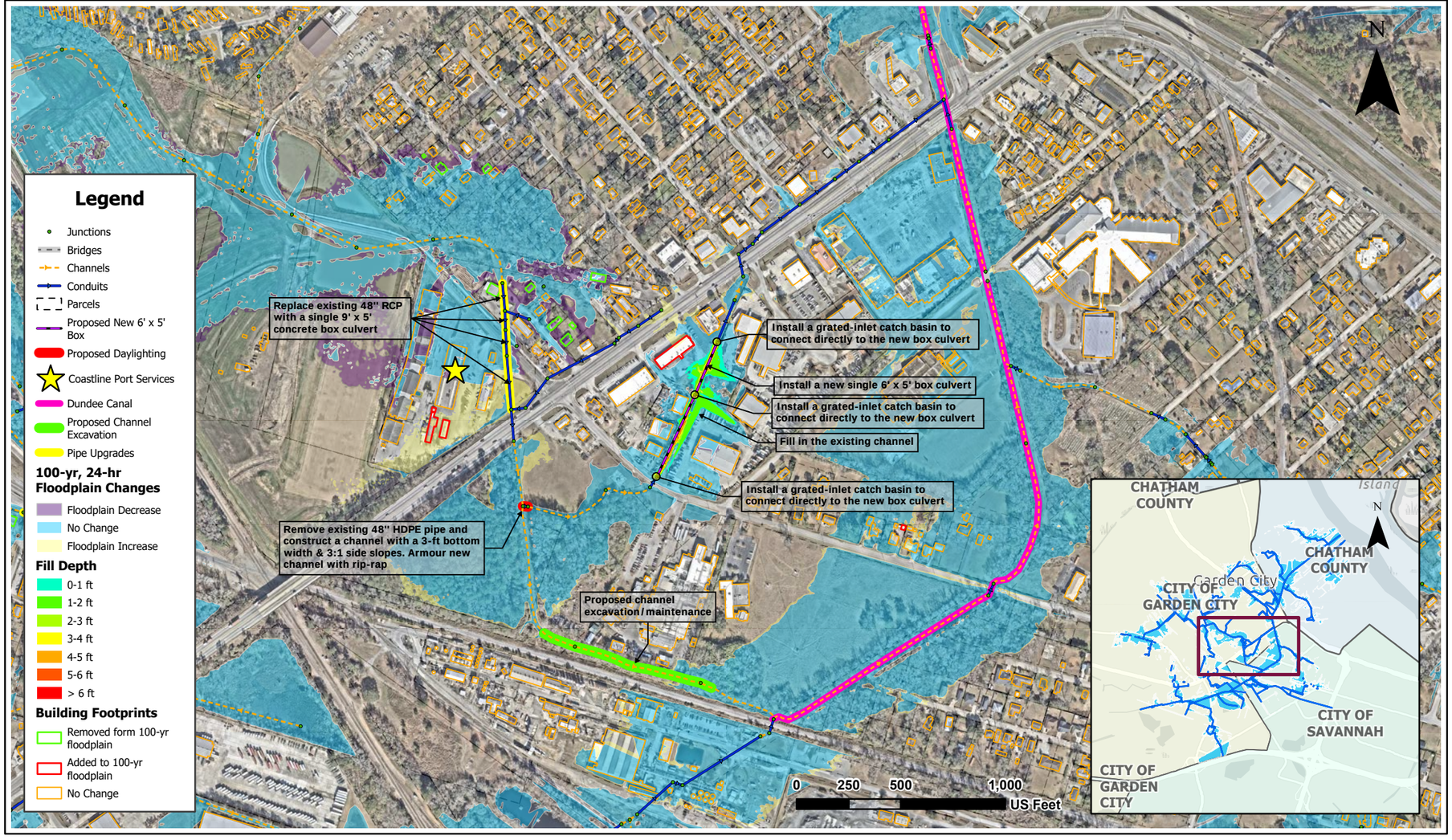
Stormwater: 50/100

Constructibility: 25/100

Community: 50/100

Option CP3 builds upon Option CP2 and calls for replacing 610 LF of existing 48" RCP east of the Coastline Port Services (CPS) from 8th Street to US Highway 80 with a single 9'x5' concrete box culvert. Aspects of options CP1 and CP2 are combined to reduce flood elevation increases in the Coastline Port Services parking lot and along the Dundee Canal resulting from the new 9' x 5' box culvert. The excavation of the proposed 1,300 LF ditch is recommended as in Option CP1. Aspects of Option CP2 recommended for option CP3 include capping the channel between Market St. and US Highway 80 and installing a single 6' x 5' box culvert, removal of an and Existing 48" HDPE pipe, and constructing a channel in place of the existing 48" HDPE.

Based on reduced flood elevations for the 10-year storm event, projected net savings equal approximately $315,000 over a 30-year time frame. These savings are projected based on structural damage functions provided by USACE.



Option Advantages:

- Removes 7 homes from the 100-year floodplain
- Removes 10 homes from the 10-year floodplain

Option Limitations:

- Adds 3 commercial structures to the 100-year Floodplain
- 100-year flood elevation along Dundee Canal increased by 0.15 feet
- This project may need to be completed in conjunction with a CLOMR/LOMR or another project, such as SO1 to help offset downstream rises in water surface elevations.
- Requires work on private property

CHATHAM COUNTY

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DA1 Davis Avenue Diversion

Total Cost: $400,000
Maintenance Level: Low

Option Performance: 54/100

Cost: 75/100

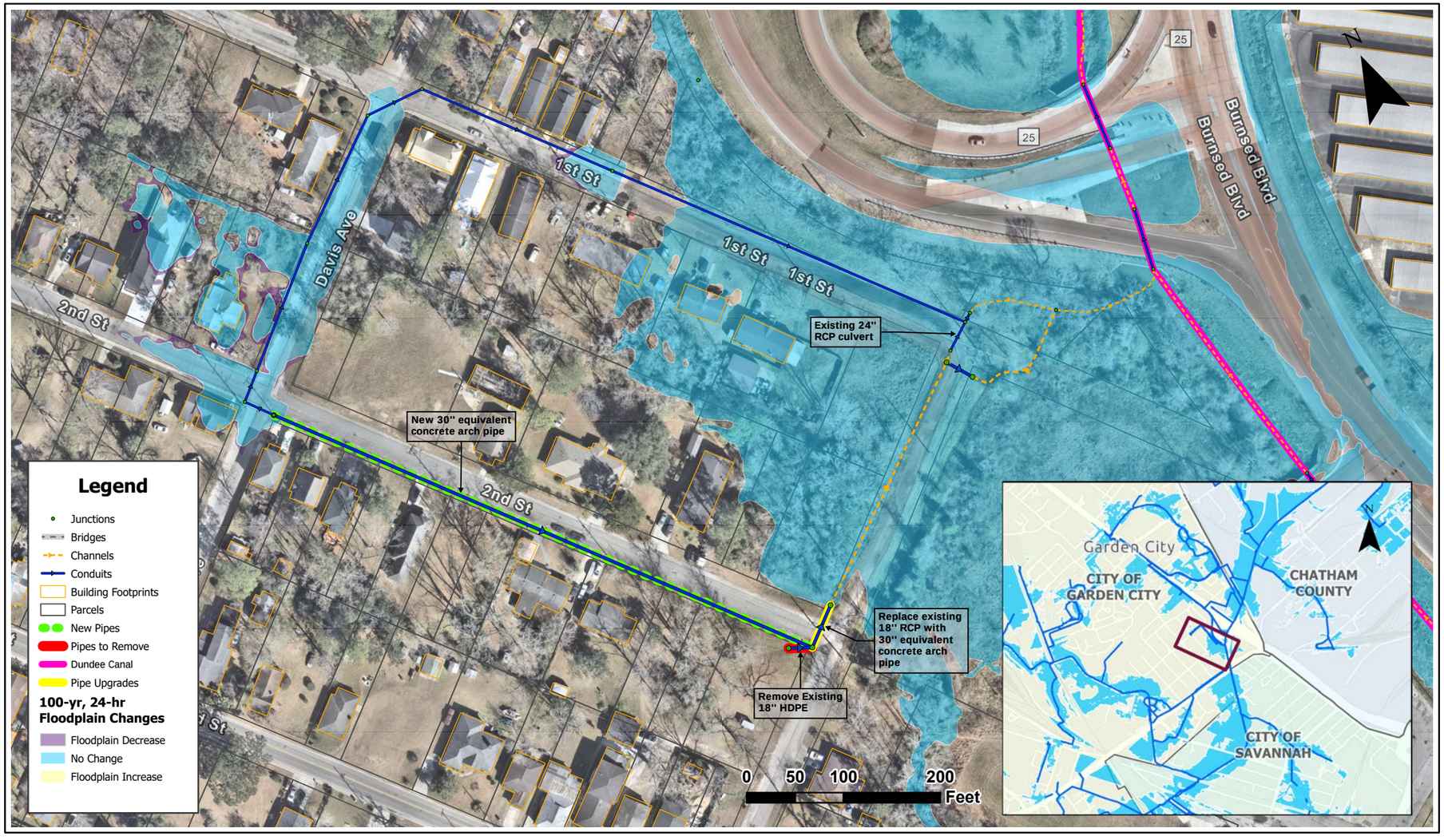
Stormwater: 30/100

Constructibility: 63/100

Community: 50/100

Option DA1 Consists of installing a new 30" equivalent concrete arch pipe along 2nd Street to divert flow from the existing pipe system along Davis Avenue and 1st Street. Concrete Arch pipe was selected due to the limited ground cover and shallow existing structure to which the new pipe will connect. The new pipe is proposed to outlet to an existing ditch and connect to Dundee Canal via the existing 24" RCP culvert under 1st Street. This option provides limited benefit for less frequent storm events due to tailwater conditions form the proximity of Dundee Canal, but alleviates roadway and structural flooding for more frequent storm events.

Based on reduced flood elevations and roadway inundation for the 10-year storm event, projected savings equal approximately $665,000 over a 30-year time frame. These savings are projected based on structural damage functions provided by USACE and estimated roadway replacement costs.



Option Advantages:

- Removes 1 structure from the 10-year floodplain
- LOS improved from 2-year to 10-year for all pipes along Davis Avenue and 1st Street
- Eliminates roadway flooding on Davis Avenue up to the 10-year storm event
- No negative downstream impacts
- Work will primarily be within the public right-of-way

Option Limitations:

- Limited benefits for less frequent storms (50- and 100-year)
- Would temporarily impact driveway access to homes on 2nd Street during construction

CHATHAM COUNTY GEORGIA

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GC1 Brampton Rd. Culvert Upgrade + Railroad Pipe Removal

Total Cost: $850,000

Maintenance Level: Low

Option Performance: 69/100

Cost: 63/100

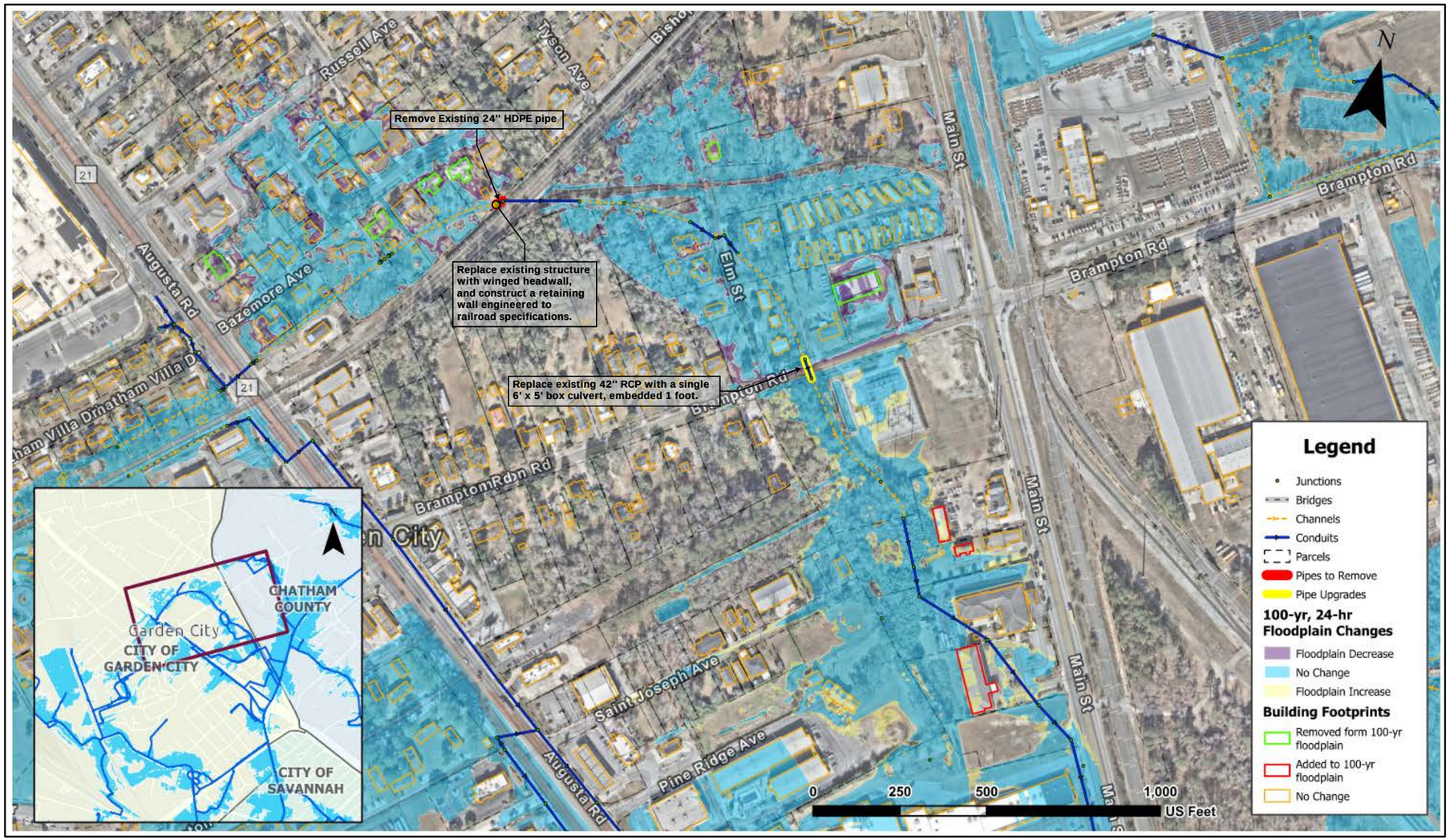
Stormwater: 70/100

Constructibility: 75/100

Community: 67/100

Option GC1 consists of replacing the existing 42'' RCP culvert under Brampton Road with a single 6' x 5' box culvert, embedded 1-ft per regional conditions, and removing the existing 24'' HDPE pipe that connects to an existing 30'' HDPE pipe passing under the railroad near the intersection of Tyson Ave. and Bishop Ave. Removal of the existing 24'' HDPE pipe requires construction of a retaining wall parallel to the railroad tracks engineered to railroad specifications. The retaining wall would be located approximately 14 feet from the centerline of the railroad tracks, and will require temporary shoring with interlocking steel sheet piles to complete construction.

Based on reduced flood elevations for the 10-year storm event, projected net savings equal approximately $150,000 over a 30-year time frame. These savings are projected based on structural damage functions provided by USACE.



Option Advantages:

- Removes 2 commercial structures from the 100-year floodplain
- Removes 3 homes from the 100-year floodplain
- Removes 3 homes from the 10-year floodplain
- Brampton Rd. culvert Level of Service improved from 25-year to 50-year
- 100-yr flood elevation reduced by an average of 0.3 feet upstream of Brampton Rd.
- 100-yr flood elevation reduced by approximately 1 foot for the homes along Bays Ave.

Option Limitations:

- Coordination with railroad is required to complete the project
- Adds 3 downstream commercial structures to the 100-year floodplain
- Downstream 100-yr flood elevation increased by up to 0.3 feet

CHATHAM COUNTY

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LA1 Lynah Ave. RR Culvert Upgrade + Channel Excavation

Total Cost: $700,000
Maintenance Level: Medium

Option Performance: 60/100

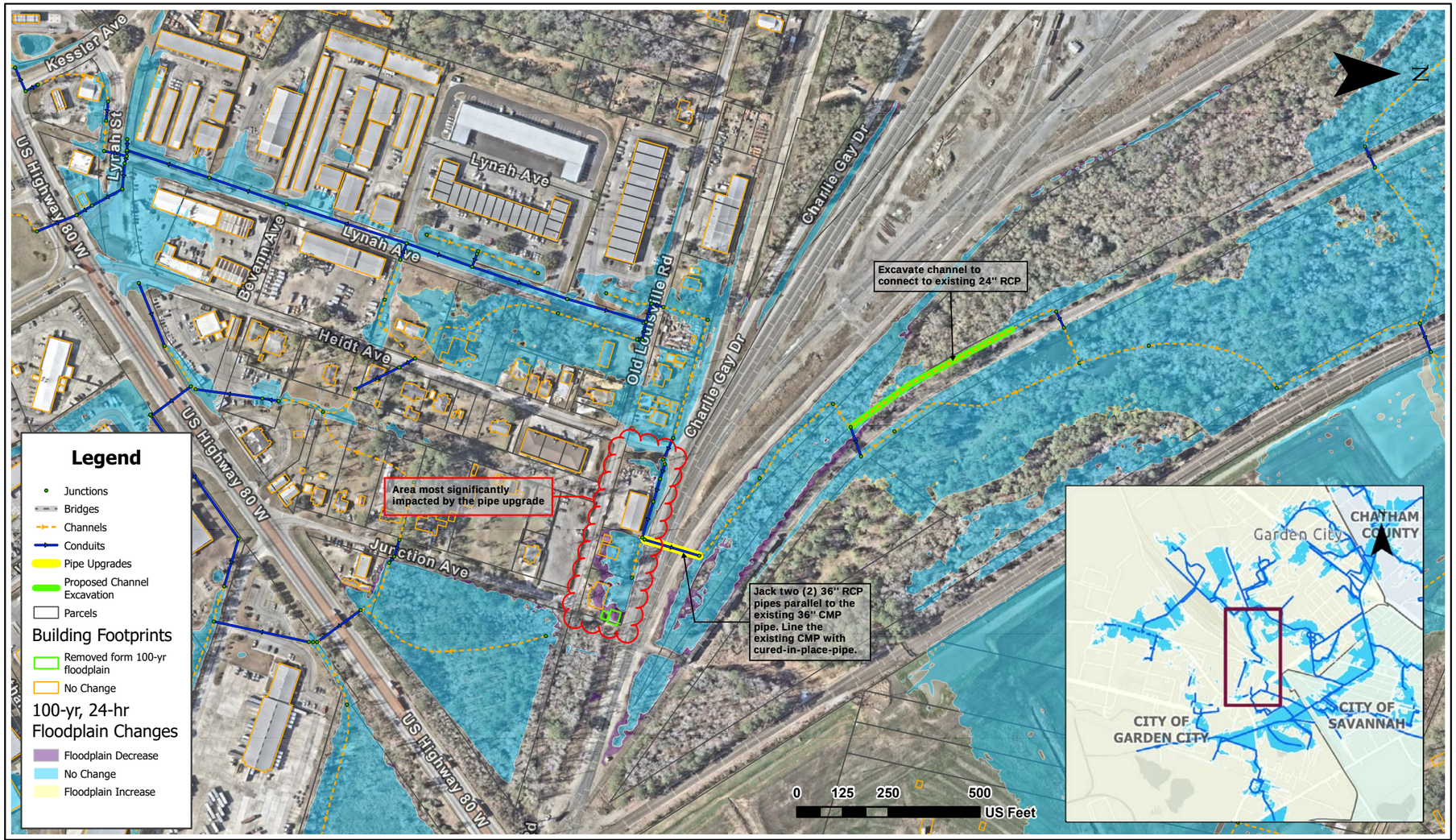
Cost: 50/100

Stormwater: 60/100

Constructibility: 63/100

Community: 67/100

Option LA1 involves jacking two (2) 36" RCP pipes parallel to the existing one (1) 36" CMP pipe crossing under the railroad approximately 300 feet Northeast of the intersection of Heidt Ave. and Old Louisville Rd. Additionally, channel excavation is proposed to hydraulically connect the existing 24" HDPE to another existing 24" RCP under the railroad to provide additional flow capacity and reduce the tailwater downstream of the proposed pipe upgrades. It is also recommended to line the existing 36" CMP with cured-in-place-pipe. The additional capacity provided by connecting to this pipe with the proposed channel excavation is needed for the two additional RCP pipes proposed to be jacked under the railroad to provide any benefit. Jacking parallel pipes is considered to minimize impacts to the operation of the railroad track. The primary benefit for Option LA1 is decreases in flood elevations for more frequent (2- to 25-year) storm events in the area immediately upstream of the proposed pipe upgrades.



Option Advantages:

- Removes 3 commercial structures from the 10-year floodplain
- No negative downstream impacts
- Reduces the 100-yr flood elevation by 0.5 feet, and the 2-yr to 50-yr flood elevation by 1.5 feet in the area shown on the map

Option Limitations:

- Coordination with railroad is required to complete the project

CHATHAM COUNTY

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LA2 Lynah Ave. Pipe Upgrades & Heidt Ave. Culvert + Option LA1

Total Cost: $1,600,000
Maintenance Level: Medium

Option Performance: 64/100

Cost: 75/100

Stormwater: 80/100

Constructibility: 50/100

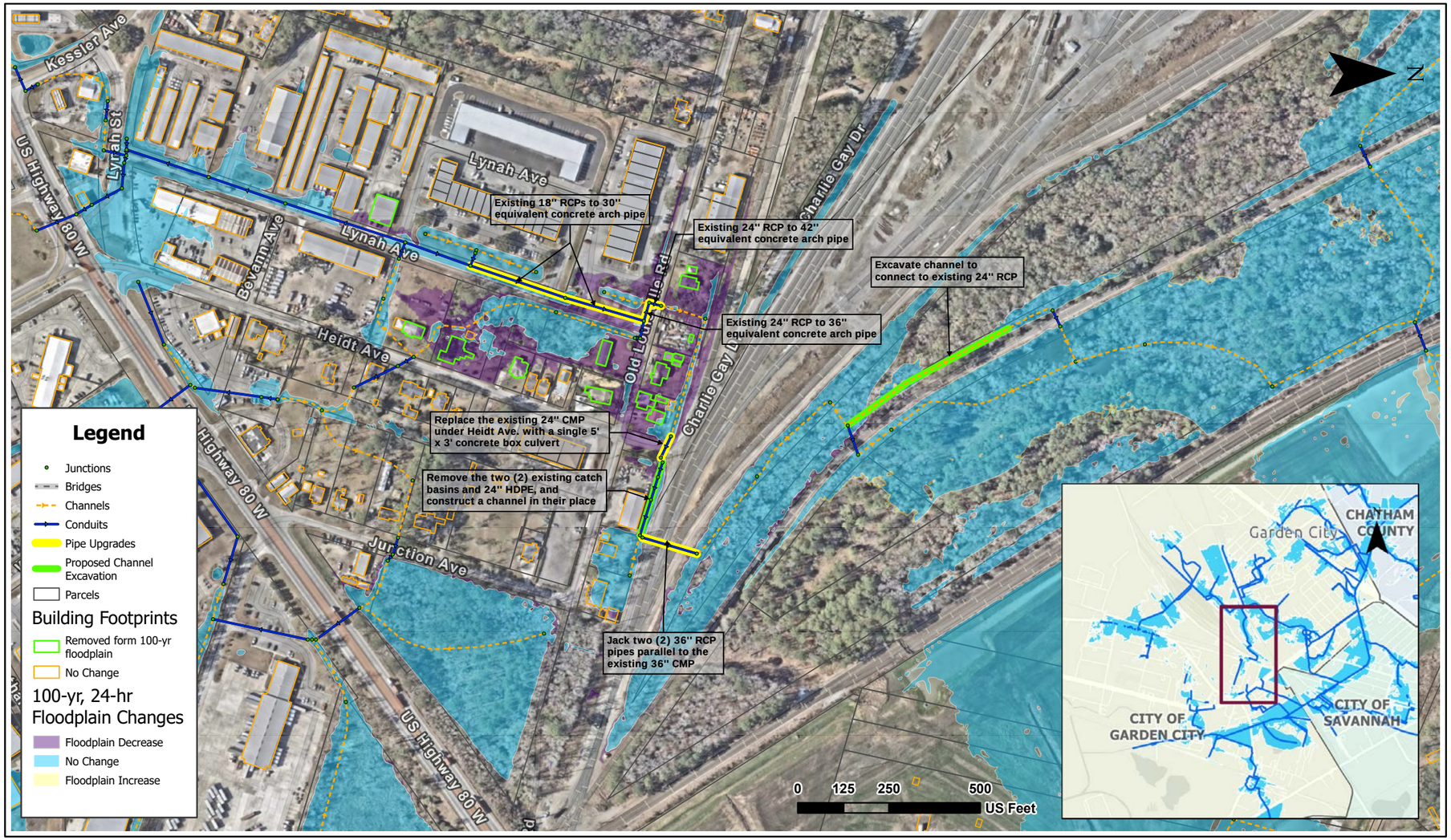
Community: 50/100

Option LA2 builds upon option LA1 (described below), adding replacement of the existing 24" CMP pipe under Heidt Ave. with a single 5' x 3' concrete box culvert, daylighting of the 24" HDPE pipe system along Charlie Gay Dr., and pipe upgrades along Lynah Avenue to further reduce flood elevations along Lynah Avenue. Daylighting of the Charlie Gay Dr. pipe system also involves removal of two (2) catch basins. The channel constructed in place of the HDPE pipes should have a bottom elevation equal to that of the existing HDPE pipe inverts. Pipe upgrades along Lynah Avenue consist of replacing the existing 18" to 24" RCP pipes with 30" to 42" equivalent concrete arch pipe. Concrete arch pipe is considered due to limited ground cover and shallow existing structures. Option LA2 provides less benefit to the homes at 3702, 3704, and 3720 Old Louisville Rd. immediately upstream of the railroad pipe crossing than Option LA1, but significantly reduces flood elevations near the intersection of Old Louisville Rd. and along Lynah Avenue.
Option LA1: Jack two (2) 36" RCP pipes parallel to the existing one (1) 36" CMP pipe crossing under the railroad approximately 300 feet Northeast of the intersection of Heidt Ave. and Old Louisville Rd. Additionally, channel excavation is proposed to connect to an existing 24" RCP pipe downstream of the proposed pipe upgrades.

Based on reduced flood elevations for the 10-year storm event, projected savings equal approximately $300,000 over a 30-year time frame. These savings are projected based on structural damage functions provided by USACE.

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Option Advantages:

- Removes 8 commercial structures from the 100-year floodplain
- Removes 8 commercial structures from the 10-year floodplain
- No negative downstream impact

Option Limitations:

- Coordination with railroad is required to complete the project

PT1 Priscilla D. Thomas Way Pipe Upgrade

Total Cost: $375,000
Maintenance Level: Low

Option Performance: 84/100

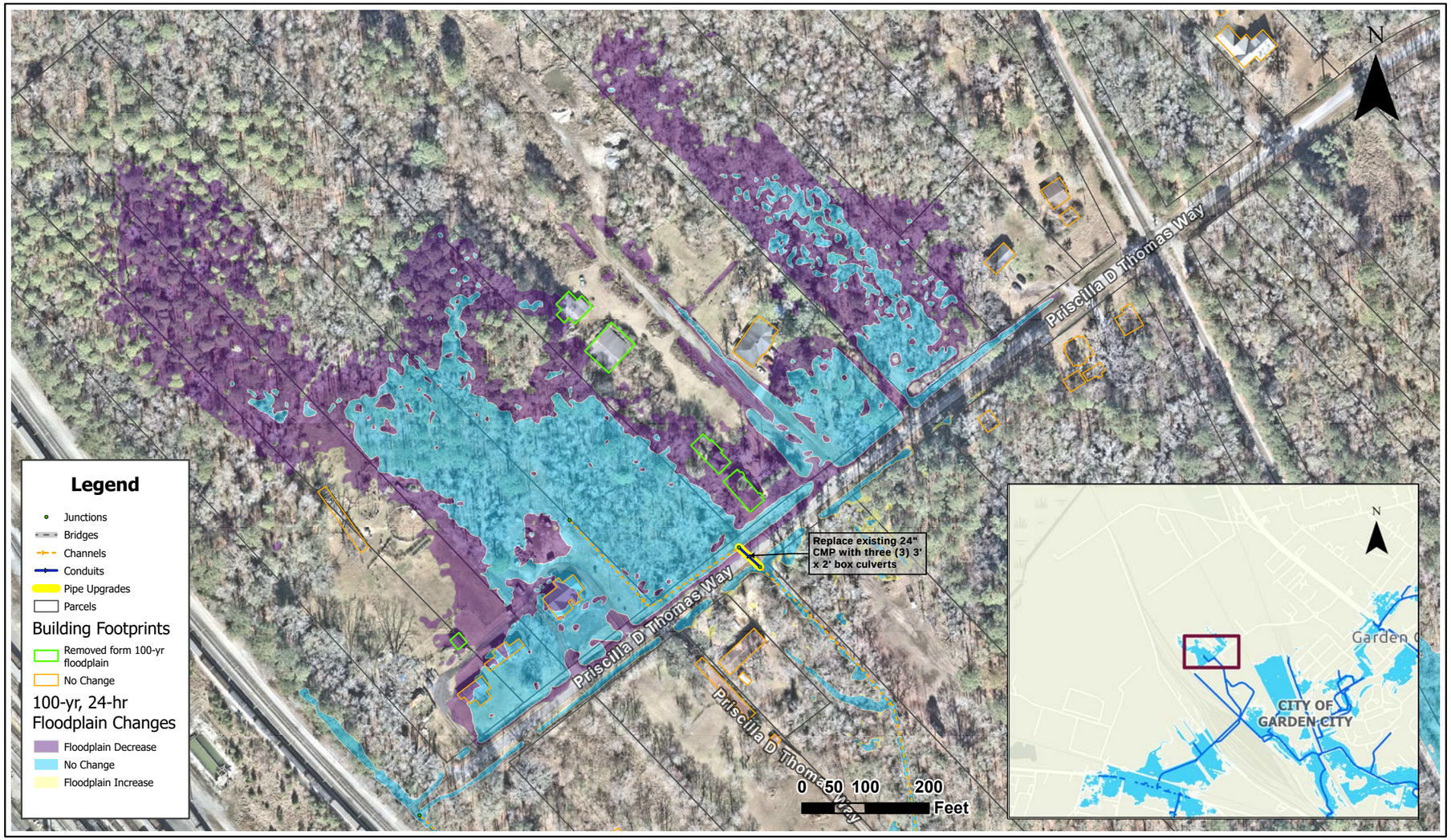
Cost: 88/100

Stormwater: 80/100

Constructibility: 100/100

Community: 67/100

The culvert running under Priscilla D. Thomas Way currently has a 25-yr level of service (LOS), which is lower than the county desired LOS of the 50-yr storm. Additionally, flows back up on the North side of Priscilla D Thomas Way, causing multiple homes to be inundated during the 100-yr storm event. It is recommended that the one (1) existing 24" CMP pipe be replaced with a triple 3' x 2' box culvert. The goal of Option PT1 is to reduce inundation on the north side of Priscilla D. Thomas Way via increased conveyance under the road, while limiting increases in the floodplain downstream.



Option Advantages:

- 5 structures removed from the 100-year floodplain
- Improved culvert LOS from 25-year to 100-year
- Homes are currently flooded by the 10-year storm event. With the proposed pipe upgrade homes do not flood until the 50-year storm event
- Minimal increase to downstream 100-year flood elevations
- Work will primarily be within the public right-of-way

Option Limitations:

- Expanded culvert size would impact a power pole and require relocation to be coordinated with power company

CHATHAM COUNTY GEORGIA 1777

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SO1 Connect the S&O Canal to Drain East

Total Cost: $1,200,000
Maintenance Level: Low

Option Performance: 39/100

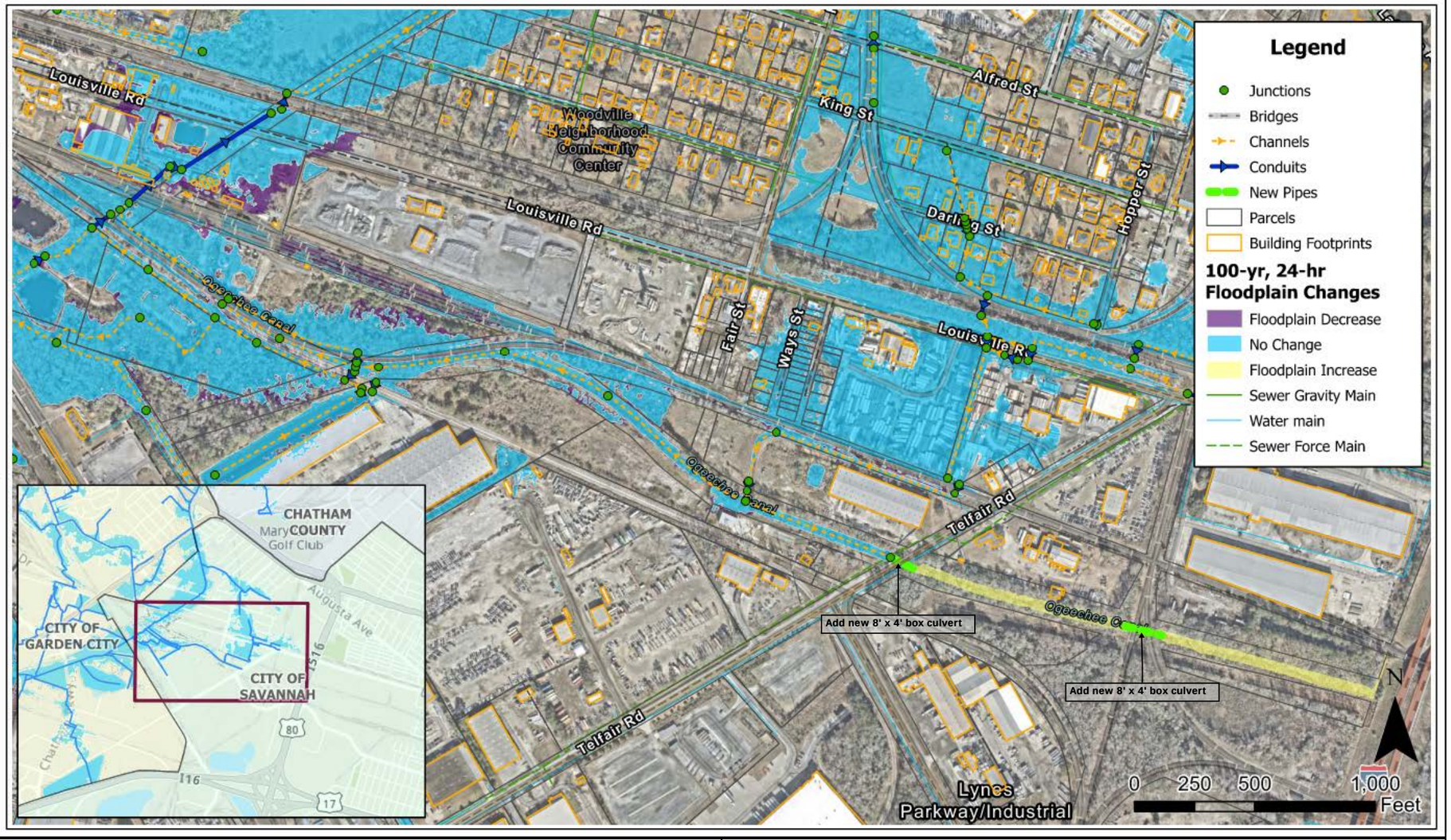
Cost: 38/100

Stormwater: 20/100

Constructibility: 50/100

Community: 50/100

Per the City of Savannah, the S&O Canal used to drain to the west and the east. However, the eastern drainage path was removed at some point in the past, and it has been confirmed by multiple surveys that no pipes exist under Telfair Road nor the railroad crossing directly east of Telfair Road. In order to reduce water surface elevations along the S&O and Dundee canals, Option SO1 recommends reconnecting the S&O Canal to its eastern drainage path by installing a single 8'x4' box culvert under Telfair Road and another single 8'x4' box culvert under the railroad crossing east of Telfair Road. The culverts will need to be embedded 20% to meet the regional conditions for the Savannah USACE District. Therefore, the active conveyance area of each culvert will be 8'x3.2'. Flow will pass under Interstate 516 via an existing 48" RCP before continuing via a ditch to the east, exiting the Dundee Canal drainage area.



Option Advantages:

- Lowers the entirety of the S&O Canal by an average of 0.59', with a maximum decrease of 0.74'
- Maximum WSE decrease along the Dundee Canal between the railroad south of Louisville Rd. and HWY 80 of 0.78', with an average decrease of 0.24'
- No negative impacts or floodplain increases within the Dundee watershed, but impacts to the east beyond the watershed boundary will need to be assessed with a model extension

Option Limitations:

- Increases flow in the S&O Canal to the east outside of the Dundee watershed. Prior to implementation, impacts would need to be assessed downstream
- Coordination with Railroad is required to complete the project

CHATHAM COUNTY GEORGIA 1777

Dewberry

SP1 Sharon Park Pipe Upgrade

Total Cost: $200,000
Maintenance Level: Low

Option Performance: 79/100

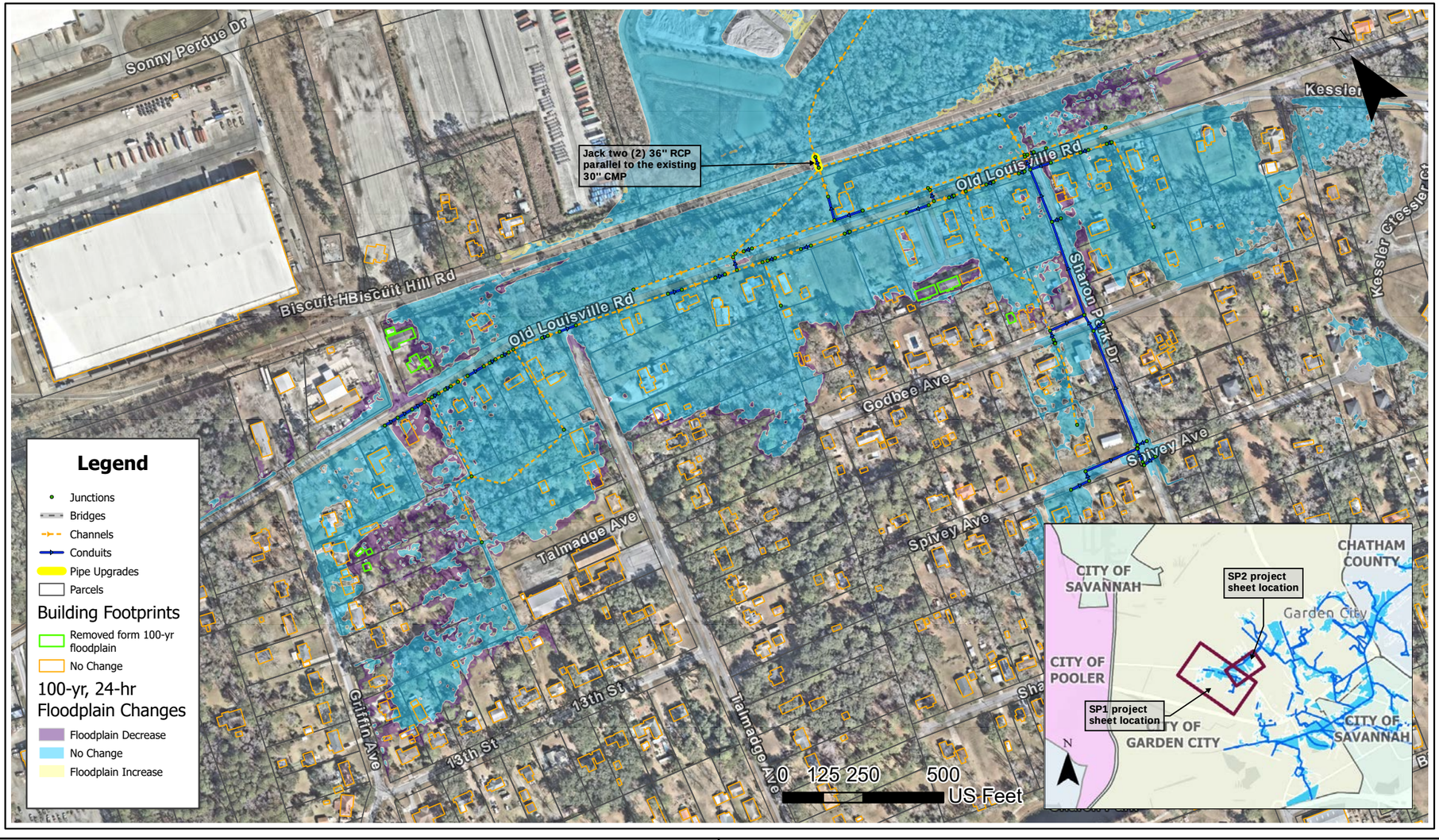
Cost: 88/100

Stormwater: 70/100

Constructibility: 75/100

Community: 83/100

The Sharon Park residential neighborhood experiences significant flooding during less frequent storm events, such as the 100-year regulatory flood. To help with flooding remediation, Option SP1 proposes jacking two (2) 36" RCP pipes in parallel to the one (1) existing 30" CMP pipe under the Norfolk Southern Railroad. It is also recommended the existing CMP is lined with cured-in-place-pipe. For this option, rather than trenching to construct the new culverts under the railroad, jacking is considered based on Norfolk Southern technical specifications, which allow for jacking concrete pipes under the railroad. While the 100-yr floodplain shows little change with the proposed pipe upgrade, there are more significant improvements for more frequent storm events.



Option Advantages:

- Reduces 100-yr flood elevation in the Sharon Park neighborhood by approximately 0.5 feet.
- Removes 5 homes from the 100-year floodplain, and several smaller structures such as sheds or car ports.
- Improved LOS for upstream pipes along Sharon Park Dr., Spivey Ave., and Old Louisville Rd.

Option Limitations:

- Limited benefits for low frequency storms (50- and 100-year) due to downstream flood elevations
- Coordination with the railroad is required to complete the project

CHATHAM COUNTY GEORGIA

Dewberry

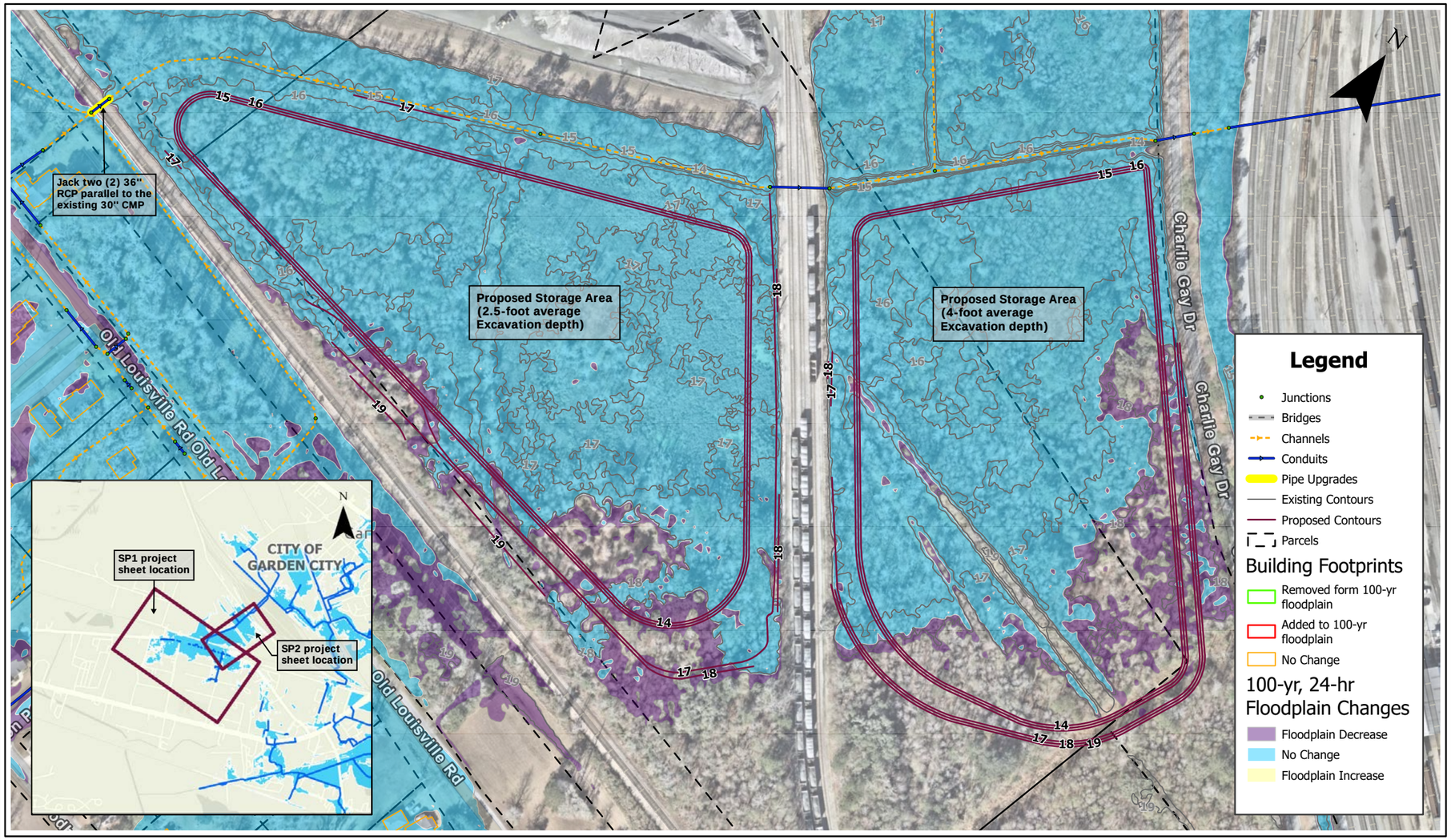
SP2 Sharon Park Pipe Upgrade + Storage Areas

Total Cost: $3,650,000
Maintenance Level: Medium

Option Performance: 60/100

- **Cost: 38/100**
- **Stormwater: 100/100**
- **Constructibility: 38/100**
- **Community: 67/100**

The Sharon Park residential neighborhood experiences significant flooding during less frequent storm events, such as the 100-year regulatory flood. Option SP2 builds upon Option SP1. Option SP1 proposes jacking two (2) 36" RCP pipes in parallel to the one (1) existing 30" CMP pipe under the Norfolk Southern Railroad. In addition to the pipe upgrades, Option SP2 proposes adding two storage areas downstream of the pipe upgrades, one storage area with approximately 2.5 foot average excavation depth, and the second storage area with approximately 4-foot average excavation depth. The addition of storage reduces the water surface elevation of the tailwater conditions of the pipes under the Norfolk Southern Railroad, which allows for increased benefits in flood reduction in the Sharon Park neighborhood.



Option Advantages:

- Reduces 100-yr flood elevation in the Sharon Park neighborhood by approximately 1 foot.
- Removes 5 homes from the 100-year floodplain, and several smaller structures such as sheds or car ports.
- Improved LOS for upstream pipes along Sharon Park Dr., Spivey Ave., and Old Louisville Rd.
- Significant reduction in flooding for higher frequency storm events (1- to 25-year storms), with 11 structures removed form the 10-year floodplain

Option Limitations:

- Coordination with the railroad is required to complete the project
- Would potentially require maintenance agreement or acquisition of Norfolk Southern RR property

CHATHAM COUNTY GEORGIA 1777

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WV1 Woodville Pipe Upgrades along Unnamed Canal

Total Cost: $4,950,000

Maintenance Level: Low

Option Performance: 63/100

Cost: 75/100

Stormwater: 90/100

Constructibility: 38/100

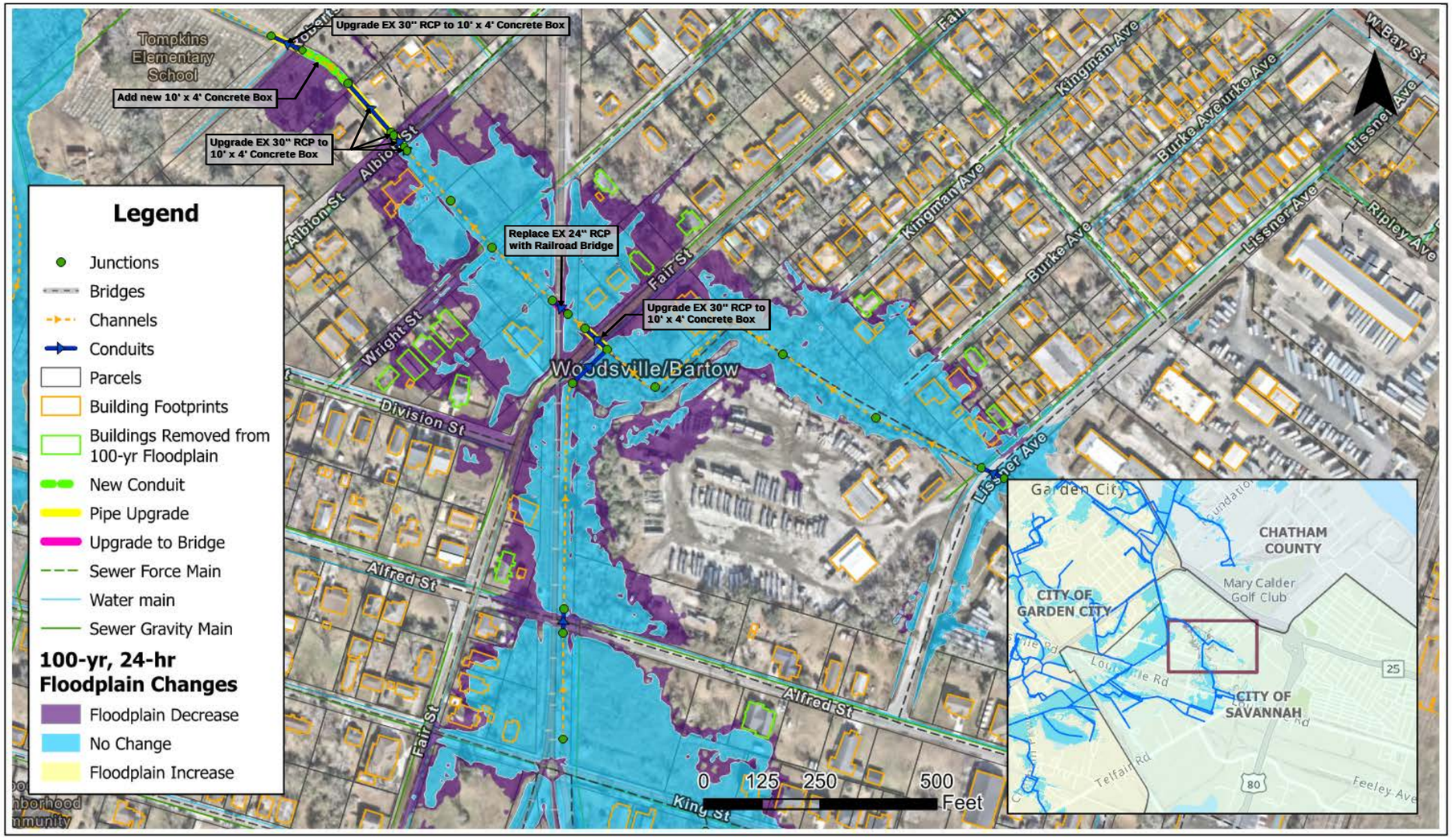
Community: 50/100

The unnamed canal that runs through Woodville passes under several streets, a railroad, and through Woodville Cemetery. In order to reduce flooding in the Woodville neighborhood and remove roads from the floodplain, it is recommended that four (4) existing 30" RCPs and one (1) existing 24" RCP are upgraded to 10' x 4' box culverts. Additionally, WV1 calls for piping the ditch through the Woodville Cemetry to the east of Roberts Street by extending the 10' x 4' box culvert. The ditch to the west of Roberts Street will still need to be stabilized to address ongoing erosion. Finally, WV1 specifies replacing the one (1) 24" RCP under the railroad with a bridge structure to maximize flow area where there is minimal hydraulic clearance.

Based on reduced flood elevations and roadway inundation for the 10-year storm event, projected savings equal approximately $465,000 over a 30-year time frame. These savings are projected based on structural damage functions provided by USACE and estimated roadway replacement costs.

CHATHAM COUNTY GEORGIA

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Option Advantages:

- Eliminates flooding in Woodville Cemetery
- Increases LOS from <2-year to 50-year for Fair Street, increases LOS from 5-year to 25-year for Albion Street, and increases LOS from <2-year to 100-year for the railroad crossing
- Removes 13 structures form the 100-year floodplain
- Addresses erosion of the canal within the cemetery east of Roberts Street

Option Limitations:

- Coordination with the railroad is required to complete the project
- Will require road closures at culvert crossing upgrades at Fair Street and Albion Street
- Requires work on private property
- Maximum WSE increase along Dundee Canal between the railroad south of Louisville Rd and HWY 80 of 0.24', with an average rise of 0.14'. No new homes are added to the 100-year floodplain as a result of downstream WSE increases.
  - This project will need to be completed in conjunction with a CLOMR/LOMR or another project, such as SO1 which can offset the WSE increases along Dundee Canal.

WV2 Woodville Railroad Culvert Upgrade

Total Cost: $475,000

Maintenance Level: Low

Option Performance: 67/100

Cost: 75/100

Stormwater: 50/100

Constructibility: 75/100

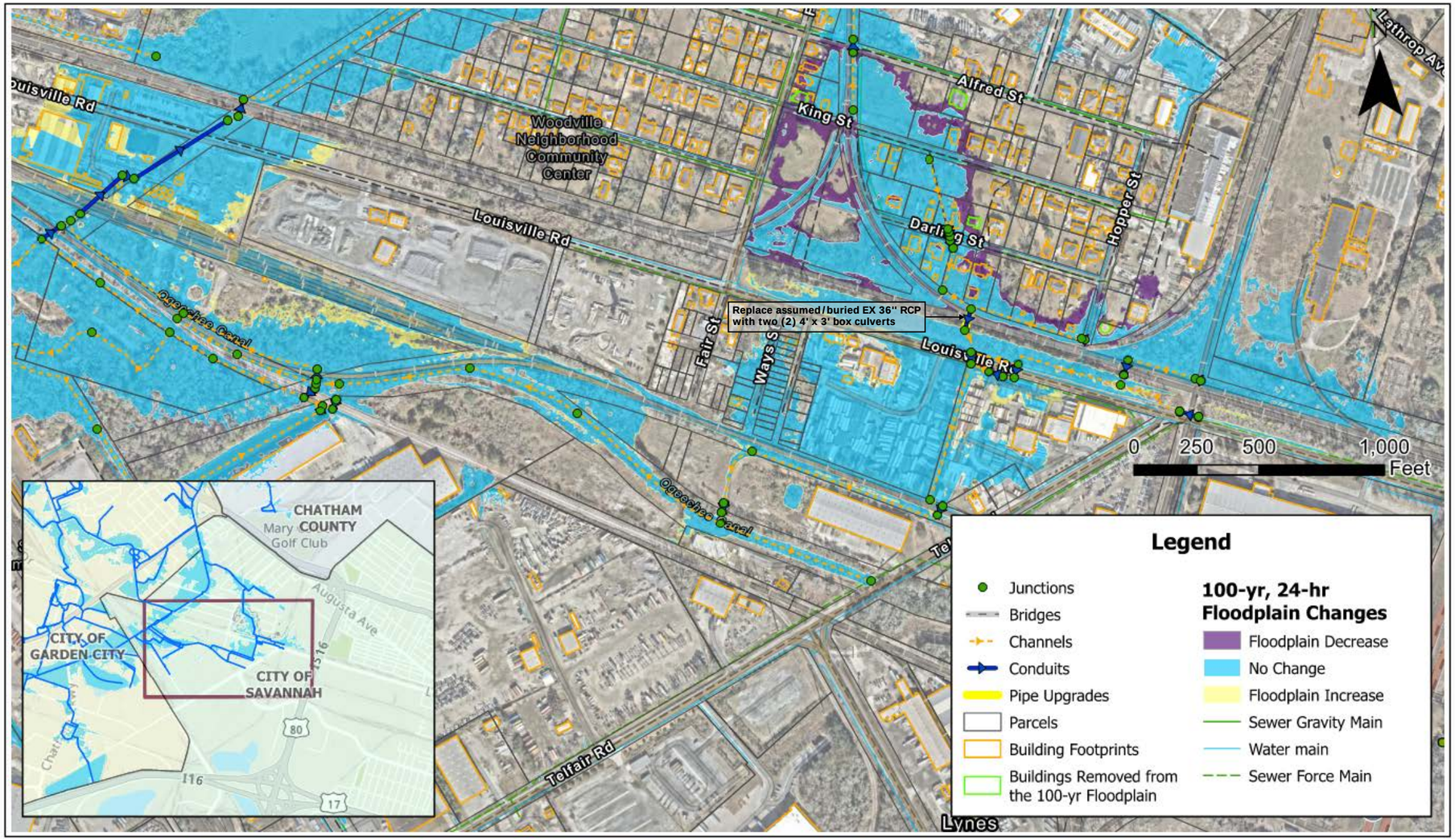
Community: 67/100

The existing culvert that runs under a Norfolk Southern railroad along the southern side of the Woodville neighborhood is currently undersized and buried. In order to reduce water surface elevations in the Woodville neighborhood, Option WV2 recommends replacing the existing pipe under the railroad (assumed to be a 36"CMP) with a double 4'x3' box culvert. This box culvert size matches the double 4'x3' box culvert that the City of Savannah has recently installed directly south under Louisville Road and significantly reduces the flow restriction leaving the Woodville neighborhood. Further, this option improves flooding in the unnamed canal further to the north in the Woodville neighborhood that discharges into the Dundee Canal because it minimizes flow swapping between drainage areas over King Street which the modeling shows to occur in large storm events.

Based on reduced flood elevations for the 10-year storm event, projected savings equal approximately $340,000 over a 30-year time frame. These savings are projected based on structural damage functions provided by USACE.

CHATHAM COUNTY

Dewberry



Option Advantages:

- Removes 3 structures from the 100-year floodplain

Option Limitations:

- Coordination with the railroad is required to complete the project
- Maximum WSE increase along Dundee Canal between the railroad south of Louisville Rd and HWY 80 of 0.67', with an average rise of 0.24'
  - This project will need to be completed in conjunction with a CLOMR/LOMR or another project, such as SO1 which can offset the WSE increases along Dundee Canal.

WV3 Woodville Pipe Upgrades & Railroad Culvert Upgrade

Total Cost: $5,650,000

Maintenance Level: Low

Option Performance: 63/100

Cost: 75/100

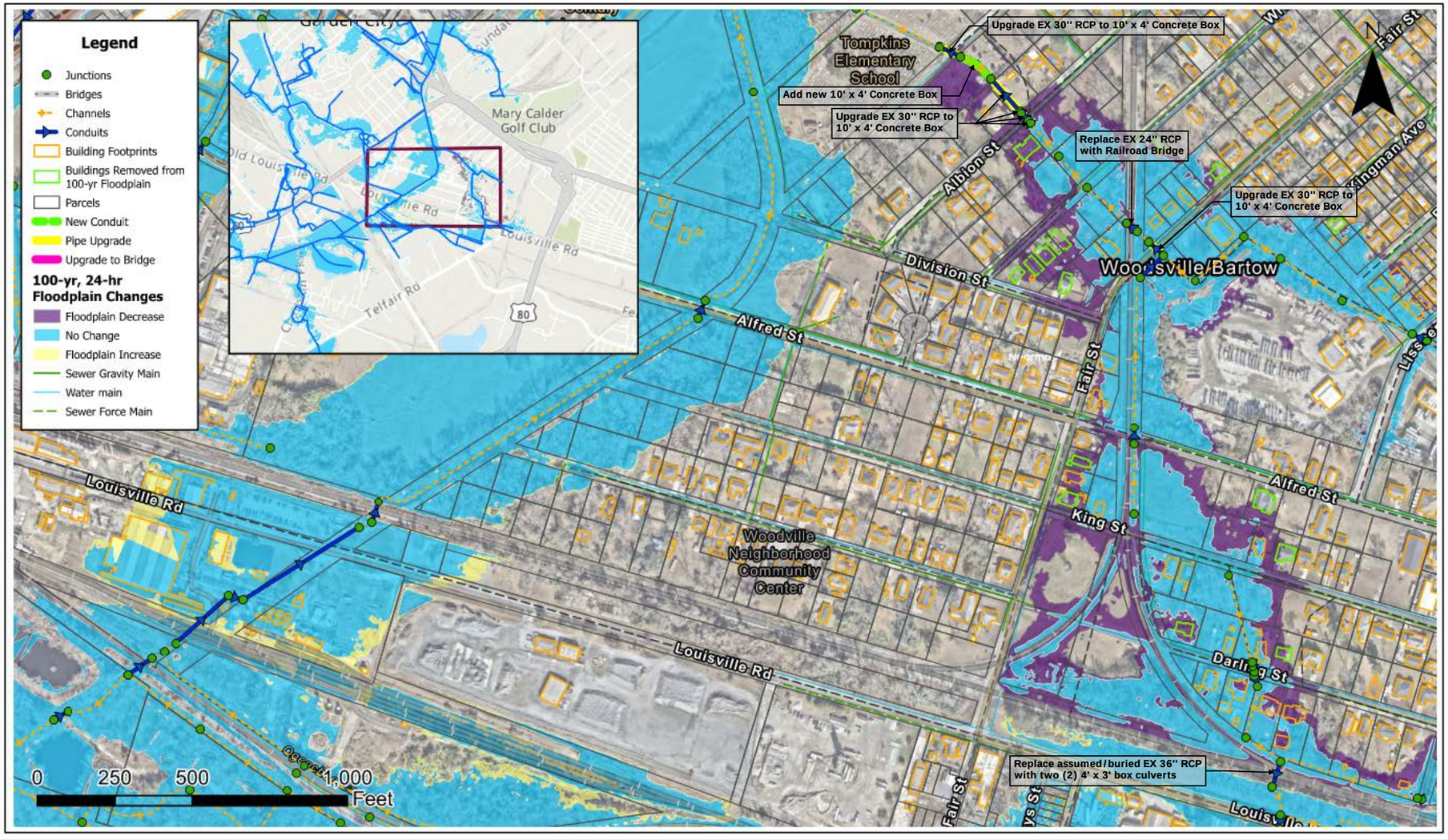
Stormwater: 90/100

Constructibility: 38/100

Community: 50/100

Option WV3 combines the proposed upgrades resented in Options WV1 and WV2 into a single scenario. Option WV1 proposes upgrading the culverts under Fair Street, Albion Street, and Roberts Street to 10'x4' box culverts, converting the open channel in the cemetery southeast of Roberts street to a closed system, and upgrading the 24" RCP under the railroad to a low bridge structure. Option WV2 proposes upgrading the culvert under the railroad on the southern side of the Woodville neighborhood to double 4'x3' box culverts. In conjunction, these options provide significant flood reductions to the neighborhood in all events, and the upgrades significantly limit flow swapping between drainage areas over King Street which the modeling shows to occur in large storm events.

Based on reduced flood elevations and roadway inundation for the 10-year storm event, projected savings equal approximately $580,000 over a 30-year time frame. These savings are projected based on structural damage functions provided by USACE and estimated roadway replacement costs.



Option Advantages:

- Eliminates flooding in Woodville Cemetery
- Increases LOS from <2-year to 10-year for Fair Street, increases LOS from 5-year to 50-year for Albion Street, and increases LOS from <2-year to 25-year for the railroad crossing
- Removes 15 structures form the 100-year floodplain
- Addresses erosion of the canal within the cemetery east of Roberts Street

Option Limitations:

- Coordination with the railroad is required to complete the project
- Will require road closures at culvert crossing upgrades at Fair Street and Albion Street
- Requires work on private property
- Maximum WSE increase along Dundee Canal between the railroad south of Louisville Rd and HWY 80 of 0.24', with an average rise of 0.14' No new homes are added to the 100-year floodplain as a result of downstream WSE increases.
  - This project will need to be completed in conjunction with a CLOMR/LOMR or another project, such as SO1 which can offset the WSE increases along Dundee Canal.

CHATHAM COUNTY GEORGIA 1777

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7.3 Preferred Consensus Plan

A preferred consensus plan model scenario was developed by combining the highest scoring improvement option in each problem area. Three proposed options were included that were not the highest ranking. Those options are listed below along with their rational for inclusion:

- Option CP2 was included in lieu of option CP3 to reduce flood elevation increases along Dundee Canal.
- Option WV3 was included in lieu of WV2 due to significant combined benefits of implementing both WV1 and WV2 options.
- SO1 was included to offset rises along Dundee Canal caused by some of the other options.

The purpose of this model scenario is to analyze floodplain mapping and LOS results to determine flooding conditions when improvement options are combined, verify there are no or limited negative downstream effects, and provide a recommended set of stormwater improvement options that have been verified to work together. The improvement options included in the preferred consensus plan include:

- Option AG1 – Augusta Rd. Pipe Upgrades
- Option CP2 – Coastline Port Services Diversion + Channel Cap + Daylighting
- Option DA1 – Davis Avenue Diversion
- Option GC1 – Brampton Rd. Culvert Upgrade + Railroad Pipe Removal
- Option LA2 – Lynah Ave. RR Culvert Upgrades & Heidt Ave. Culvert + Option LA1
- Option PT1 – Priscilla Thomas Way Pipe Upgrades
- Option SO1 – Connect the S&O Canal to Drain East
- Option SP1 – Sharon Park Pipe Upgrade
- Option WV3 – Woodville Pipe Upgrades & Railroad Culvert Upgrade

In the preferred consensus plan scenario, a total of 38 pipes or culverts not meeting the desired 50-year LOS with existing conditions were improved to 50-year or higher (or were eliminated). Figure 37 shows the count of pipes in each LOS category with Existing Conditions compared to the preferred consensus plan scenario.

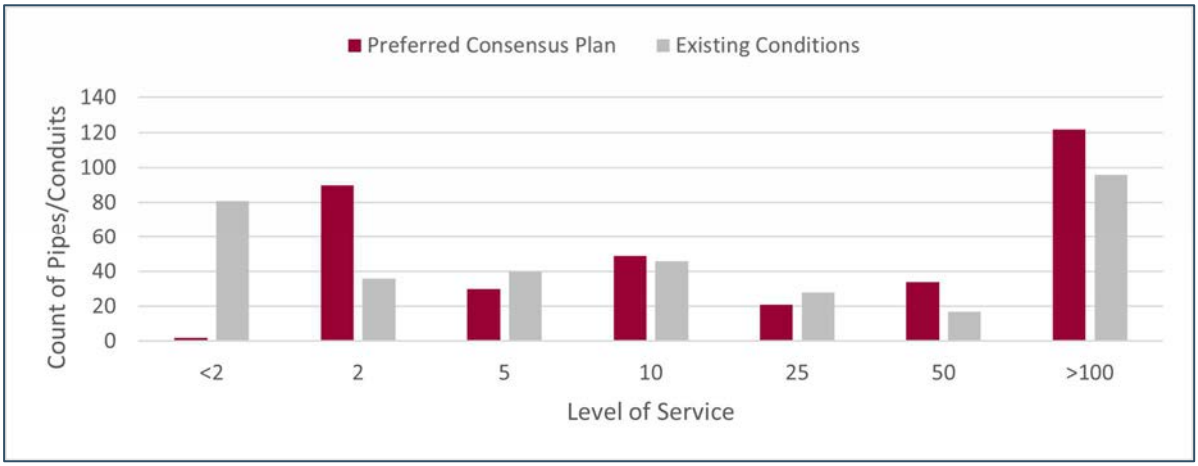


Figure 37: Preferred Consensus Plan LOS Comparison

Floodplain mapping was developed and analyzed for the Preferred Consensus plan scenario to ensure that the combined improvement options do not lead to excessive downstream floodplain increases. In the preferred consensus plan, the 100-year flood elevation increases along Dundee canal by a maximum of approximately 0.2 feet, and 0.1 feet on average. Increases in the 100-year flood elevation are also present in the Norfolk Southern Railroad property to the North of the Sharon Park neighborhood (0.2 feet on average), and downstream of the Brampton Road culvert upgrade proposed in Option GC1 (0.2 feet on average). However, these negative impacts are very limited, and no new structures are added to the floodplain in the preferred consensus plan.

Benefits of the preferred consensus plan include reductions in the 100-year flood elevation for each problem area. Figure 38 shows the 100-year, 24-hour floodplain changes in the preferred consensus plan scenario. Significant reductions can be seen in the Garden City and Augusta Road areas.

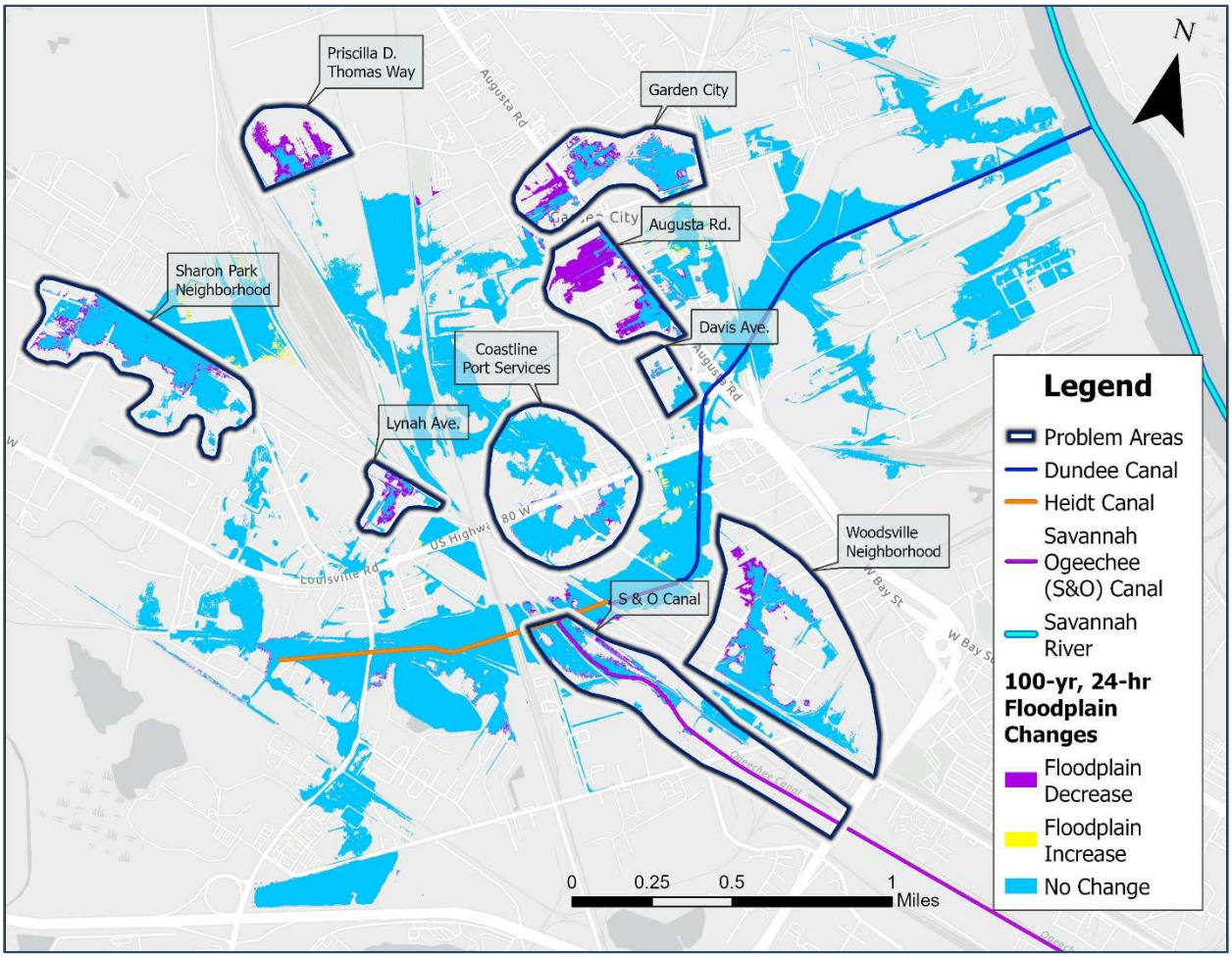


Figure 38: Preferred Consensus Plan 100-Year Floodplain Changes

Table 13: Preferred Consensus Plan - Total Cost

IMPROVEMENT OPTION	COST
AG1	$2,300,000
CP2	$2,050,000
DA1	$400,000
GC1	$850,000
LA2	$1,600,000
PT1	$375,000
SO1	$1,200,000
SP1	$200,000
WV3	$5,650,000
Total	**$14,625,000**

7.4 Timeline

The schedule presented below provides a potential implementation timeline for the preferred consensus plan. It should be noted that most of the projects do not fall within Chatham County's jurisdiction and would require action from the City of Garden City, the City of Savannah, or GDOT to implement. Table 14 provides the list of the preferred consensus plan options and their associated jurisdiction. The total cost burden for each jurisdiction along with the annual capital improvement plan (CIP) budget is shown in Table 15. Any options shared between jurisdictions has been split evenly. It should be noted that project inflation costs have not been included in the concept costs and will need to be factored into cost estimates as timelines are established.

Table 14: List of Preferred Consensus Plan options and their associated jurisdiction.

PREFERRED CONSENSUS PLAN OPTION	ACRONYM	JURISDICTION
Priscilla D. Thomas Way Pipe Upgrade	PT1	Garden City
Sharon Park Pipe Upgrade	SP1	Garden City
Brampton Rd. Culvert Upgrade + Railroad Pipe Removal	GC1	Garden City
Lynah Ave. Pipe Upgrades + Heidt Ave. Culvert + Opt. LA1	LA2	Garden City
Woodville Pipe Upgrades + Railroad Culvert Upgrade	WV3	Savannah
Davis Avenue Diversion	DA1	Garden City
August Rd. Pipe Upgrades	AG1	GDOT
Connect the S&O Canal to Drain East	SO1	Savannah
Coastline Port Services Diversion + Daylight	CP2	Garden City & Chatham County

Table 15: List of jurisdictions and the total preferred consensus plan cost burden along with annual CIP budget (if provided).

JURISDICTION	PREFERRED CONSENSUS PLAN COST	ANNUAL CIP BUDGET
Chatham County	$1,025,000.00	No dedicated fund
Garden City	$4,450,000.00	$150,000 (FY26)
Savannah	$6,850,000.00	$1,400,000 (FY26)
GDOT	$2,300,000.00	N/A

It should be noted that all preferred consensus plan costs significantly exceed each jurisdiction's annual CIP budget. Therefore, any implementation timeline will need to allow time for the pursuit of grant funding to support project implementation. As feasible, smaller projects could be implemented as grant funding is secured. However, any timeline will require flexibility and will need to be modified as more critical needs arise. Therefore, the timeline presented in Table 16 is a starting point and a recommended order for project implementation. However, it will need to be modified as funding sources can be identified.

Table 16: Potential implementation timeline for the Preferred Consensus Option.

JURISDICTION	FISCAL YEAR									
	'27	'28	'29	'30	'31	'32	'33	'34	'35	'36
Chatham										CP2
Garden City	SP1		PT1		DA1		GC1		LA2	CP2
Savannah		SO1			Wv3	Wv3				
GDOT					AG1					

7.5 Funding Sources

As noted in the previous section, the preferred consensus plan costs significantly exceed each jurisdiction's annual CIP budget. Therefore, successful implementation of the preferred consensus plan will require leveraging multiple local, state, and federal grant opportunities for the sharing of project funding through partnerships in watershed management and technical and financial assistance through grants and loans.

Partnerships are most likely on a local level. One of the most obvious partnerships to address the flooding in Dundee Canal is among the impacted jurisdictions including Garden City, Savannah, and Chatham County as flooding in one portion of the watershed can often have compounding impacts both upstream and downstream of the impacted area. Additionally, there could be options to partner with local commercial property owners. There are several proposed options that could significantly reduce flooding impacts on commercial property that may be partially or fully supported by private partnerships.

From a state funding level, there are a multitude of funding options with various requirements and eligibility. Based on a review of available funding sources, the most promising options for the preferred consensus plan have been compiled in Table 17.

Table 17: Summary of technical and financial assistance provided by the federal government for which projects in the preferred consensus plan could apply.

NAME	AGENCY	ELIGIBLE PARTIES	PROGRAM OVERVIEW	TECHNICAL ASSISTANCE	MATCH AMOUNT	% OF APPLICANTS FUNDED	TYPICAL LOWEST AMOUNT AWARDED	TYPICAL HIGHEST AMOUNT AWARDED	MEDIAN AMOUNT AWARDED
Hazard Mitigation Grant Program	FEMA	States, U.S. Territories, Federally-recognized tribes, local governments	Climate Resilient Mitigation Activities are eligible under the Hazard Mitigation Assistance programs to support communities in reducing the risks associated with climate change. These activities are: Aquifer Storage and Recovery, Floodplain and Stream Restoration, Flood Diversion and Storage, and Green Infrastructure Methods. These activities can mitigate any natural hazard; however, the activities are focused on mitigating the impacts of flood and drought conditions.	No	25% (cash or in-kind resources)	N/A	$2,130	$36.3 million	$605,094
Clean Water State Revolving Fund (CWSRF)	EPA	Public, private, or nonprofit entity	The EPA's Clean Water State Revolving Fund (CWSRF) program provides a permanent source of low-cost financing for a wide range of water quality infrastructure projects. These projects include municipal wastewater treatment and collection, nonpoint source pollution controls, decentralized wastewater treatment systems, green infrastructure, water efficiency, and estuary management. Funds to capitalize the program are provided annually through federal grants and state matching funds (equal to 20 percent of federal grants). Monies are loaned to assistance recipients at below-market rates. In addition, states also have the ability to customize loan terms to benefit small and disadvantaged communities. Loan repayments are recycled back into the programs to fund additional projects. Since its inception, the CWSRF has provided over $111.2 billion in assistance to eligible borrowers, including communities of all sizes, farmers, small businesses, and nonprofit organizations.	No	Loan	N/A	No statutory limit	No statutory limit	N/A

NAME	AGENCY	ELIGIBLE PARTIES	PROGRAM OVERVIEW	TECHNICAL ASSISTANCE	MATCH AMOUNT	% OF APPLICANTS FUNDED	TYPICAL LOWEST AMOUNT AWARDED	TYPICAL HIGHEST AMOUNT AWARDED	MEDIAN AMOUNT AWARDED
Nonpoint Source Implementation Grants (319 Program)	EPA	States, territories, and tribes	The EPA provides formula grants to implement nonpoint source programs and projects in accordance with section 319 of the Clean Water Act (CWA). Nonpoint source pollution projects can be used for a wide range of activities including agriculture, forestry, construction, and urban challenges. When set as priorities within a state's nonpoint source management program, projects may also be used to protect source water areas and high quality waters. Examples of previously funded projects include installation of best management practices (BMPs) for animal waste; design and implementation of BMP systems for stream, lake, and estuary watersheds; and basin-wide landowner education programs. Most states provide opportunities for 3rd parties to apply for funds under a state request for proposal.	Yes	40% non-Federal	Variable	$422,000	$8.4 million	$2.8 million
Corps Water Infrastructure Financing Program (CWIFP)	USACE		The Corps Water Infrastructure Financing Program (CWIFP) is a credit assistance program providing direct loans to non-Federal entities for dam safety and levee projects. The program enables critical local infrastructure investments to improve public safety across the nation. Projects are fully implemented at the local level, with local control and ownership. CWIFP provides significant financial savings to local taxpayers while leveraging minimal federal investment and risk.	No	20% - 51% & Loan	N/A	N/A	$20 Million	N/A

7.6 CRS Credit Opportunities

The National Flood Insurance Program (NIFP) Community Rating System (CRS) awards flood insurance premium discounts to communities based on CRS credit points granted for flood protection activities undertaken by the community. There are 19 categories of activities that fall under four series:

- 300 Series - Public Information
- 400 Series - Mapping & Regulations
- 500 Series - Flood Damage Reduction
- 600 Series - Flood Preparedness

This study provides information that can be used to pursue several opportunities for communities to gain CRS credits in the floodplain mapping, flood damage reduction, and flood preparedness series of activities.

7.6.1 400 Series Opportunities

Existing conditions model results could be used to pursue CRS credits for Floodplain Mapping (Activity 410), Open Space Preservation (Activity 420), and Stormwater Management (Activity 450) in the Mapping & Regulations series. Model results can be leveraged to adopt new flood elevations in areas that have not been previously studied for Activity 410. Currently open parcels that are shown as inundated in the existing conditions model results could be regulated to prevent development for Activity 420. Finally, to maximize credit for activity 450, Chatham County could take the following actions:

- Regulate ALL development for stormwater management. Current regulation requires stormwater management for one (1) acre or greater per the Georgia Stormwater Management Manual.
- Increase the design storm to the 100-year event. Chatham County is currently credited for 10-year event.
- Develop a full Watershed Management Plan (WMP).
- Regulate erosion and soil loss from any disturbed land greater than 1,000 square feet. Chatham County is currently credited for one (1) acre or greater.

It should be noted that one of the prerequisites for a CRS Class 4 (see Section 211.c) is that the community receive credit for managing the impacts of a 100-year storm with the BFE as the tailwater condition, where applicable.

7.6.2 500 Series Opportunities

Existing conditions model results could be used to quickly identify potential repetitive loss properties and earn CRS credits under Activity 520 – Acquisition and Relocation. Additionally, the model could assist with a new analysis of repetitive loss area analysis (RLAA) within the Dundee Canal basin to earn CRS credits under activity 510 – Floodplain Management Planning.

7.6.3 600 Series Opportunities

Finally, the existing conditions model could be used to run simulations of forecasted storm events to earn CRS credits under activity 610 – Flood Warning and Response.

8. Appendices

8.1 Appendix A - Survey

Survey Point ID	X	Y	Elevation	Description
100	965196.2100	762989.0000	19.500	BASE.NAIL.RTK
101	965181.7478	762944.6872	20.885	PKNS
102	965445.2522	762833.0923	22.941	PKNF.DT
103	964564.1921	762560.7634	19.323	PKNF
104	964403.6845	762124.6752	23.752	RW.MON
105	964432.5822	762141.1998	21.875	PKNF.CL2RD
106	965698.3655	766772.1751	18.808	PKNF
200	968703.6637	757984.9209	9.802	BASE.NAIL.RTK
201	968760.0906	757994.6413	10.247	PKNS
202	968182.1412	760653.6247	22.559	RW.MON.LEAN
203	965334.6340	758723.7388	15.007	RBF.PC
300	974513.5512	761798.5410	15.299	BASE.NAIL.RTK
301	974547.5813	761772.7681	16.098	PKNF
302	975891.1937	759804.0267	15.771	RBF
400	971187.4006	766119.2514	21.002	BASE.NAIL.RTK
401	971173.8781	766120.6433	20.401	PKNS
402	971797.3978	765984.7049	15.447	PKNF
500	970900.4042	762974.4026	11.605	BASE.NAIL.RTK
501	970915.8755	763103.0486	12.566	PKNF
502	972422.3910	764429.5916	9.952	PKNF.CL2RD
1000	962538.7300	763575.2599	15.443	HDPE15"IE
1001	962538.7926	763575.1273	16.750	HDPE15"
1002	962585.6348	763571.2861	17.770	GI
1003	962637.6874	763567.1182	17.903	GI
1004	962681.8197	763563.9550	16.622	HDPE15"
1005	962681.9569	763564.0361	15.392	HDPE15"IE
1006	962710.1016	763563.2992	17.140	RCP18"
1007	962710.0390	763563.3716	15.405	RCP18"IE
1008	962733.8094	763560.9587	17.029	RCP18"
1009	962733.9782	763561.0279	15.319	RCP18"IE
1010	962757.4199	763559.3960	15.407	RCP18"IE
1011	962757.5095	763559.3531	17.121	RCP18"
1012	962777.4895	763556.9795	16.986	RCP18"
1013	962777.6518	763556.9105	15.314	RCP18"IE
1014	962837.5895	763555.9221	15.164	RCP18"IE
1015	962837.5003	763556.1696	16.782	RCP18"
1016	962837.6403	763561.0368	18.526	RCP18"DIRECTION
1017	962839.3402	763553.8032	16.852	RCP18"
1018	962839.1317	763553.8327	15.110	RCP18"IE
1019	962898.3178	763549.3981	16.797	RCP18"
1020	962898.4480	763549.5543	15.061	RCP18"IE
1021	962918.9507	763547.7883	17.460	RCP24"
1022	962918.7997	763547.7590	15.116	RCP24"IE
1023	962940.1863	763546.3715	14.990	RCP24"IE
1024	962939.9623	763546.1978	17.294	RCP24"
1025	962962.5155	763544.0276	17.361	RCP24"
1026	962962.3671	763544.0921	15.104	RCP24"IE
1027	962985.9514	763540.9559	16.899	RCP24"
1028	962986.2258	763541.0037	14.641	RCP24"IE
1029	963097.0999	763516.5876	14.284	RCP18"IE
1030	963097.3304	763516.4880	15.992	RCP18"

Survey Point ID	X	Y	Elevation	Description
1031	963114.9027	763511.6436	15.924	RCP18"
1032	963115.1778	763511.7169	14.157	RCP18"IE
1033	963175.9516	763495.4128	18.411	STMH
1034	963152.9405	763502.3778	15.781	RCP18"
1035	963152.8208	763502.4315	14.112	RCP18"IE
1036	963201.4230	763488.3092	15.743	RCP18"
1037	963201.6836	763488.2576	14.054	RCP18"IE
1038	963501.5746	763401.1926	13.841	HDPE24"IE
1039	963501.6703	763401.0898	15.836	HDPE24"
1040	963539.9784	763390.7718	13.637	RCP24"IE
1041	963540.0224	763390.8342	15.806	RCP24"
1042	963649.1550	763359.3123	13.508	RCP24"IE
1043	963649.2775	763359.1949	15.928	RCP24"
1044	963672.9714	763352.0389	13.498	RCP24"IE
1045	963673.0538	763351.9127	15.613	RCP24"
1046	963721.2363	763384.1163	16.787	CL10"CONC
1047	963726.4702	763383.2088	13.303	RCP30"IE
1048	963726.5880	763383.1389	15.617	RCP30"
1049	963731.7961	763381.8065	13.211	RCP30"IE
1050	963731.9399	763381.7403	15.498	RCP30"
1051	963736.2107	763380.0064	16.750	CL10"CONC
1052	963724.1177	763342.0110	17.068	CL10"CONC
1053	963709.2118	763346.2936	17.079	CL10"CONC
1054	963713.7575	763344.3606	13.497	RCP30"IE
1055	963713.5759	763344.4993	16.222	RCP30"
1056	963718.9576	763342.9474	16.148	RCP30"
1057	963718.9070	763342.8641	13.405	RCP30"IE
1058	963810.9311	763312.1152	13.603	RCP18"IE
1059	963810.9980	763312.0221	15.249	RCP18"
1060	963834.5757	763305.2708	15.450	RCP18"
1061	963834.6791	763305.1490	13.749	RCP18"IE
1062	963916.6500	763282.1582	15.606	RCP18"
1063	963916.5428	763282.2655	14.037	RCP18"IE
1064	963913.4034	763278.8950	16.356	RCP18"
1065	963913.4076	763279.0791	14.660	RCP18"IE
1066	963918.4793	763261.3745	14.414	RCP18"IE
1067	963918.4272	763261.5311	15.961	RCP18"
1068	963948.5807	763272.7904	15.981	RCP18"
1069	963948.6606	763272.8687	14.276	RCP18"IE
1070	964056.0707	763242.2846	16.302	RCP18"
1071	964055.8317	763242.3478	14.590	RCP18"IE
1072	964071.7924	763237.8446	16.008	RCP18"
1073	964071.7788	763237.7249	14.607	RCP18"IE
1074	964251.1655	763185.4674	14.066	HDPE18"IE
1075	964251.3508	763185.4903	15.512	HDPE18"
1076	964321.3098	763165.2589	14.097	RCP18"IE
1077	964321.2716	763165.3970	15.792	RCP18"
1078	964341.9291	763166.8619	17.598	RCP36"
1079	964341.9104	763166.6970	14.329	RCP36"IE
1080	964348.0115	763166.1872	18.649	CL10"CONC
1081	964336.4421	763169.4702	18.657	CL10"CONC

Survey Point ID	X	Y	Elevation	Description
1082	964345.8091	763202.7163	17.905	CL10"CONC
1083	964356.8457	763199.6714	17.907	CL10"CONC
1084	964351.7641	763201.5572	16.997	RCP36"
1085	964351.6984	763201.5801	14.051	RCP36"IE
1086	964387.1884	763148.7911	15.873	RCP18"
1087	964387.1127	763148.8384	14.216	RCP18"IE
1088	964402.7574	763144.1061	14.409	RCP18"IE
1089	964402.6234	763144.1528	16.113	RCP18"
1090	964505.3160	763114.9530	16.600	RCP18"
1091	964505.0803	763114.9887	14.884	RCP18"IE
1092	964527.9243	763108.6359	16.782	RCP18"
1093	964528.0948	763108.5726	14.958	RCP18"IE
1094	964608.0335	763084.9905	15.389	RCP18"IE
1095	964608.1524	763084.8365	16.951	RCP18"
1096	964625.8670	763079.8178	17.012	RCP18"
1097	964626.0216	763079.8490	15.404	RCP18"IE
1098	964643.6808	763073.3025	18.300	STMH
1099	964709.2274	763055.8248	17.086	RCP18"
1100	964709.1623	763055.8256	15.447	RCP18"IE
1101	964653.6319	763117.1118	12.397	RCP48"IE
1102	964653.0938	763116.6830	16.519	RCP48"FES
1103	964803.1660	763028.5663	17.500	RCP18"
1104	964803.0381	763028.5888	15.930	RCP18"IE
1105	964827.6183	763021.0448	15.846	RCP18"IE
1106	964827.6060	763021.2711	17.449	RCP18"
1107	964885.3876	763003.6348	18.185	RCP18"
1108	964885.2925	763003.6693	16.635	RCP18"IE
1109	964900.9860	762999.0018	16.854	RCP18"IE
1110	964900.8245	762999.0857	18.531	RCP18"
1111	964406.5876	762628.1978	19.116	CB
1112	964399.1125	762599.0630	19.142	CB
1113	964396.9635	762585.8044	16.796	RCP18"IE
1114	964396.9657	762585.9590	18.520	RCP18"FES
1115	964517.8017	762549.5752	19.597	CB
1116	964558.3624	762555.3451	19.498	CB
1117	964176.0772	762184.1899	20.454	RCP18"FES
1118	964175.9972	762184.2961	18.674	RCP18"IE
1119	964236.9155	762174.1794	21.010	CB
1120	964246.1338	762205.5512	21.184	CB
1121	964408.1407	762127.8205	21.538	CB
1122	964450.3049	762118.5203	21.652	CB
1123	964456.5303	762173.3416	21.377	CB
1124	964425.9822	762179.6539	21.323	CB
1125	964418.7432	762170.8357	21.921	STMH
1126	964406.7470	762116.0652	22.079	STMH
1127	964606.0826	762902.5334	17.648	CB
1128	964599.0060	762903.9610	18.054	STMH
1129	964635.1645	762895.4633	18.050	CB
1130	964107.2972	763457.4260	12.342	METAL30"IE
1131	964107.5198	763457.4390	15.012	METAL30"
1132	964111.3150	763452.4361	15.117	CL12"CONC

Survey Point ID	X	Y	Elevation	Description
1133	964109.8560	763456.8483	17.019	CL12"CONC
1134	964111.4796	763457.0665	17.779	CL12"CONC
1135	964103.8525	763459.0236	17.750	CL12"CONC
1136	964105.0866	763458.0605	17.091	CL12"CONC
1137	964101.7032	763455.1513	15.228	CL12"CONC
1138	964110.4813	763484.4171	17.981	CL12"CONC
1139	964118.4612	763482.1582	18.038	CL12"CONC
1140	964116.8514	763483.0912	17.320	CL10"CONC
1141	964118.2427	763488.0156	15.675	CL10"CONC
1142	964113.9422	763489.3027	15.482	CL10"CONC
1143	964112.4905	763484.4338	17.320	CL10"CONC
1144	964114.6635	763483.7542	11.998	METAL30"IE
1145	964114.7975	763483.9029	14.560	METAL30"
1146	965014.4956	764412.5043	18.269	OCS
1147	965010.8826	764417.5383	18.403	OCS
1148	965015.9455	764421.1764	18.201	OCS
1149	965013.4778	764419.4959	13.704	4"CONC.OPENING.IE
1150	965013.3896	764419.4644	14.427	4"CONC.OPENING
1151	965044.6265	764374.8782	13.476	30"RCP.IE
1152	965044.5760	764375.1905	16.107	30"RCP
1153	965016.9168	764414.1534	16.046	30"RCP
1154	965112.0949	764013.3998	13.470	1'CLCONC.WING
1155	965106.5502	764010.6060	15.663	1'CLCONC.WING
1156	965106.0979	764010.0144	16.284	1'CLCONC.HEADWALL
1157	965102.6671	764015.1540	16.404	1'CLCONC.HEADWALL
1158	965103.3109	764015.2801	15.779	1'CLCONC.WING
1159	965108.0516	764019.2942	13.597	1'CLCONC.WING
1160	965109.1918	764016.0143	11.900	FES.IE 1'SEDI
1161	965032.6016	763964.9967	12.299	FES.IE 1'SEDI
1162	965033.7500	763961.6096	13.866	1'CLCONC.WING
1163	965038.7566	763965.7344	16.307	1'CLCONC.WING
1164	965039.5243	763965.9141	17.039	1'CLCONC.HEADWALL
1165	965035.9981	763970.9936	16.914	1'CLCONC.HEADWALL
1166	965035.6984	763970.5030	16.254	1'CLCONC.WING
1167	965029.7380	763967.5062	13.814	1'CLCONC.WING
1168	965479.6640	764365.1920	15.488	CMP42"
1169	965479.6297	764364.9364	12.024	CMP42"IE
1170	965471.2846	764351.6464	12.640	RCP40"IE
1171	965474.5585	764336.0798	17.649	RCP40"
1172	965474.4446	764335.6191	13.503	RCP40"IE
1173	965471.4633	764351.0848	16.701	RCP40"
1174	965522.2069	764408.2198	15.484	CMP42"
1175	965522.4361	764408.2511	11.836	CMP42"IE
1176	965560.5320	764446.2341	11.718	CMP42"IE
1177	965560.8802	764446.4065	15.376	CMP42"
1178	966711.9036	764606.4475	17.143	CMP18"
1179	967543.8076	763737.6243	18.610	CMP18"
1180	968694.0515	762306.1712	17.110	CMP18"
1181	968694.1056	762306.2664	15.646	CMP18"IE
1182	968297.8915	763160.0483	13.347	RCP24"
1183	968298.0434	763160.1739	10.872	RCP24"IE

Survey Point ID	X	Y	Elevation	Description
1184	968254.3517	763139.3207	14.418	RCP24"
1185	968254.3899	763139.0399	11.920	RCP24"IE
1186	968671.0367	762069.7089	14.448	HDPE24"IE
1187	968671.5719	762069.5361	16.479	HDPE24"
1188	968658.0854	762065.1082	16.513	CMP24"
1189	968658.2528	762065.1543	14.424	CMP24"IE
1190	968599.6000	762093.3343	14.088	CMP24"IE
1191	968712.6465	762058.8718	16.890	GI
1192	968775.1354	762042.5000	16.987	GI
1193	968871.2085	762008.0425	16.125	HDPE24"
1194	968871.9062	762007.8432	14.069	HDPE24"IE
1195	968877.1890	762015.4966	16.462	RCP36"
1196	968877.0129	762014.9659	13.122	RCP36"IE
1197	968233.1712	762033.5101	20.911	CB
1198	968232.4238	762031.6170	19.907	CL42"FLUME
1199	968231.3752	762023.6720	19.804	CL42"FLUME
1200	968241.3261	762067.5357	17.761	HDPE24"
1201	968241.3329	762067.9347	15.759	HDPE24"IE
1202	968921.1808	762163.9765	14.047	CMP36"
1203	968921.0754	762164.1136	11.047	CMP36"IE
1204	968434.9538	762564.2033	13.350	CMP18"
1205	966998.2661	764337.0531	16.702	CMP18"
1206	966876.0670	764471.5496	12.800	CMP24"
1207	966845.7908	764491.1957	12.774	CMP24"
1208	966157.0814	765135.0063	16.955	CMP18"
1209	966227.9847	765090.9371	13.755	CMP42"
1210	966427.1216	764880.7765	16.947	CMP18"
1211	965850.1068	766045.8477	15.168	RCP18"
1212	965850.1141	766045.6648	13.550	RCP18"IE
1213	965846.8322	766118.2847	13.891	RCP18"IE
1214	965846.8071	766118.1689	15.839	RCP18"
1215	965580.7059	766633.1371	14.751	RCP24"IE
1216	965580.5623	766633.3287	17.009	RCP24"FES
1217	965547.6576	766663.8960	17.595	RCP24"FES
1218	965547.4729	766664.0599	15.210	RCP24"IE
1219	965656.2226	766756.1550	18.020	RCP18"FES
1220	965656.1382	766755.9701	16.109	RCP18"IE
1221	965660.6750	766759.5937	17.808	STMH
1222	965650.9655	766773.8603	17.685	RCP15"
1223	965650.8660	766774.0285	16.086	RCP15"IE
1224	965702.2910	766792.3628	18.118	STMH
1225	965706.7830	766795.5494	17.560	RCP18"FES
1226	965707.0362	766795.7024	15.598	RCP18"IE
1227	965690.5737	766805.5586	15.293	RCP15"IE
1228	965690.7513	766805.3565	16.656	RCP15"
1229	968364.2172	764162.3132	10.670	RCP48"
1230	968364.5892	764162.4774	6.557	RCP48"IE
1231	967860.7555	764009.4747	11.967	RCP36"
1232	967861.2349	764009.6171	8.587	RCP36"IE
1233	967854.6784	764018.0082	11.398	RCP36"
1234	967855.0347	764018.2990	8.041	RCP36"

Survey Point ID	X	Y	Elevation	Description
1235	967802.1339	763989.0785	10.210	RCP36"
1236	967802.2315	763988.9149	6.210	RCP48"IE
1237	967803.6021	763982.6124	10.826	RCP48"IE
1238	967803.5652	763982.6047	6.830	RCP48"IE
1239	967229.6921	765199.0187	17.123	RCP36"
1240	967229.7951	765199.0285	14.045	RCP36"IE
1241	967193.8141	765181.4240	16.930	RCP36"
1242	967193.8139	765181.4399	13.912	RCP36"IE
1243	967988.9416	765213.5170	13.452	RCP48"
1244	967988.9703	765213.5546	9.450	RCP48"IE
1245	967992.1380	765221.3039	13.580	RCP48"
1246	967992.2065	765221.2984	9.580	RCP48"IE
1247	967953.4601	765261.8126	13.582	RCP48"
1248	967953.4367	765261.8186	9.588	RCP48"IE
1249	967949.6690	765254.8172	14.546	RCP48"
1250	967949.6765	765254.7917	10.040	RCP48"IE
1251	966905.5583	760304.0583	16.697	RCP18"FES
1252	966905.7494	760304.0632	14.851	RCP18"IE
1253	966879.7996	760306.6846	18.102	CB
1254	966840.4942	760310.4280	18.200	CB
1255	966798.6035	760298.5492	15.557	RCP24"FES
1256	966798.6681	760298.4803	13.351	RCP24"IE
1257	966849.5496	760370.4856	18.352	CB
1258	966075.3572	760352.5707	17.801	DWCB
1259	966086.1858	760394.4866	17.825	SWCB
1260	966183.1400	760439.5693	16.596	CB
1261	966153.0771	760446.4087	16.646	CB
1262	966068.5712	760324.3183	13.669	18"RCP.FES
1263	966068.5812	760324.0723	11.744	18"RCP.FES.IE
1264	966092.0530	760424.5144	11.596	RCP18"IE
1265	966091.8995	760424.3318	13.254	RCP18"FES
1266	966137.3650	760442.0242	10.881	RCP36"IE
1267	966137.3273	760442.0012	14.282	RCP36"FES
1268	966197.9171	760427.8535	13.476	RCP36"
1269	966198.2156	760427.5006	10.050	RCP36"IE
1270	966224.6361	760446.5440	15.759	CL.HEADWALL
1271	966219.1384	760447.5655	15.964	CL.HEADWALL
1272	966221.8405	760446.2854	10.819	RCP48"IE
1273	966221.9859	760446.7282	14.820	RCP48"
1274	966223.7632	760752.8335	16.496	CL.HEADWALL
1275	966229.3112	760753.9405	16.549	CL.HEADWALL
1276	966226.4571	760753.9990	11.758	RCP48"IE
1277	966226.4891	760753.9990	15.737	RCP48"
1278	965953.7036	761090.8426	18.281	CMP36"
1279	965953.5929	761090.7367	15.290	CMP36"IE
1280	965777.9664	761492.5886	21.268	STMH
1281	965859.3206	761472.6555	17.085	RCP24"IE
1282	965858.7897	761472.7862	19.283	RCP24"FES
1283	965952.6487	761095.4949	18.484	LINE
1284	966037.4723	761435.1008	18.911	HDPE36"
1285	966037.5660	761435.4106	15.858	HDPE36"IE

Survey Point ID	X	Y	Elevation	Description
1286	966026.5915	761614.7026	17.881	RCP12"
1287	966025.1038	761615.0062	16.689	RCP12"IE
1288	966094.1279	761682.1235	20.651	STMH
1289	966103.4239	761679.7564	16.659	RCP12"IE
1290	966103.2750	761679.7404	17.869	RCP12"FES
1291	966453.7801	760117.3959	13.088	RCP24"FES
1292	966453.7737	760117.6506	10.899	RCP24"IE
1293	966440.9550	759991.6704	12.280	RCP24"
1294	966441.0256	759991.7124	10.080	RCP24"IE
1295	965016.8758	764414.2391	13.550	RCP30"IE
1296	966157.1532	765135.0864	15.450	CMP18"IE
1297	966227.9949	765091.0162	10.250	CMP42"IE
1298	966427.1897	764880.8309	15.450	CMP18"IE
1299	966711.9049	764606.5173	15.640	CMP18"IE
1300	966845.8552	764491.2983	10.770	CMP24"IE
1301	966876.1436	764471.7050	10.800	CMP24"IE
1302	966998.3515	764337.1351	15.200	CMP18"IE
1303	967543.9311	763737.6688	17.110	CMP18"IE
1304	968435.0576	762564.2872	11.840	CMP18"IE
1305	968599.2678	762093.3237	16.090	CMP24"
2000	967117.5110	758425.1053	6.734	CMP18"IE
2001	967812.9686	760601.6334	21.068	SWCB
2002	967834.0502	760597.3692	20.275	STMH
2003	967784.6932	760600.8997	19.583	RCP18"FES
2004	967784.5013	760600.8386	17.647	RCP18"IE
2005	967815.5419	760538.1067	17.368	RCP18"IE
2006	967815.7799	760538.5949	19.040	RCP18"
2007	967920.3455	760586.7951	20.163	CBGI
2008	968035.0049	760354.8378	18.147	RCP24"FES
2009	968034.9219	760354.4020	15.858	RCP24"IE
2010	968176.2274	760632.9136	21.133	DWCB
2012	968347.7808	760703.2885	18.106	RCP15"
2013	968348.0050	760703.6156	16.605	RCP15"IE
2014	968387.3473	760725.7260	19.113	RCP18"
2015	968387.2430	760725.7778	17.330	RCP18"IE FULL SEDI
2016	968472.9934	760785.7978	16.190	RCP24"IE FULL SEDI
2017	968473.2428	760785.9245	18.054	RCP24" FULL SEDI
2018	968540.8664	760665.2038	17.044	STMH
2019	968537.4188	760662.6876	16.633	RCP24"FES
2020	968537.1550	760662.6570	14.399	RCP24"IE
2021	968461.7681	760773.0138	17.919	RCP24"FES
2022	968461.4206	760772.9984	15.595	RCP24"IE
2023	968603.7418	760851.2641	21.599	HBGI
2024	968707.3877	760929.8152	21.987	SWCB
2025	968498.5553	761015.1072	17.968	RCP18"FES
2026	968498.5785	761015.2386	16.191	RCP18"IE
2027	968491.7438	760970.5560	18.646	CB.GI
2028	968874.3968	760905.4184	19.481	STMH
2029	969004.2556	760866.5573	15.690	RCP30"FES
2030	969004.6990	760866.3784	12.857	RCP30"IE
2031	969156.8353	761120.2093	13.296	HW.CENT.6'W

Survey Point ID	X	Y	Elevation	Description
2032	969156.8353	761120.2093	8.350	CULV.IE
2033	969156.6037	761097.3682	14.102	CMP52"
2034	969157.0577	761097.8291	9.417	CMP52"IE
2035	969069.8024	761239.4803	13.608	HW.CENT.6'W
2036	969069.8349	761239.4537	8.451	CULV.IE
2037	965292.3851	758771.9641	9.267	CL12"CONC.HW
2038	965301.1007	758763.9780	14.031	CL12"CONC.HW
2039	965301.5862	758763.4524	14.070	CL12"CONC.HW
2040	965300.8931	758751.7050	14.105	CL12"CONC.HW
2041	965294.0224	758746.3599	10.803	CL12"CONC.HW
2042	965300.4772	758756.9833	7.147	CULV10'X5'IE
2044	965382.9957	758739.6281	9.170	CLCONC.HW
2045	965373.9756	758748.4748	14.052	CLCONC.HW
2046	965374.5750	758760.1206	14.066	CLCONC1'.HW
2047	965382.8082	758766.2395	10.183	CLCONC1'.HW
2048	965375.0175	758754.1344	7.180	CULV10'X5'IE
2049	967135.0232	758460.4762	8.105	CMP18"
2050	967135.5423	758461.1992	6.642	CMP18"IE
2051	967117.7899	758425.9249	8.267	CMP18"
2052	966736.5176	757963.0417	12.181	NO PIPES WITNESSED
2053	967525.6803	758863.3124	4.101	RCP42"IE
2054	967526.2299	758863.3409	7.954	RCP42"
2055	967549.0250	758854.9924	7.951	RCP42"
2056	967549.5250	758854.8564	4.104	RCP42"IE
2057	967519.5848	758858.5394	6.704	RCP24"
2058	967519.8984	758858.7746	4.591	RCP24"IE
2059	967516.0386	758851.9838	8.934	DIRECTION
2060	968576.3756	759258.3471	6.428	CLCONC.HW
2061	968585.3104	759267.1928	9.598	CLCONC.HW0.8'W
2062	968586.1782	759266.3506	10.415	CLCONC.HW1.35'W
2063	968584.6538	759277.9658	10.486	CLCONC.HW1.35'W
2064	968583.7378	759277.9803	9.686	CLCONC.HW0.8'W
2065	968579.3368	759282.7384	6.584	CLCONC.HW0.8'W
2066	968587.4585	759274.4599	3.370	CULV10'X4.3'IE
2067	968701.9867	759323.1397	6.821	CL.CONC0.8'W
2068	968693.0405	759316.9580	9.613	CL.CONC0.8'W
2069	968692.1974	759317.4175	10.445	CL.CONC1.35'W
2070	968693.8604	759306.2643	10.460	CL.CONC1.35'W
2071	968694.7313	759306.4259	9.545	CL.CONC0.8'W
2072	968697.9380	759303.5480	7.880	CL.CONC0.8'W
2073	968693.5496	759311.7520	4.040	CONC10'X4.2IE
2074	969155.1074	759437.6688	6.071	RCP15"
2075	969155.2181	759437.2220	4.714	RCP15"IE
2076	969144.3632	759458.8706	6.261	RCP15"
2077	969144.1797	759459.0695	4.706	RCP15"IE
2078	969199.2781	759361.2389	9.831	RCP18"
2079	969199.1489	759361.4101	8.135	RCP18"IE
2080	969232.4679	759297.0006	10.120	RCP18"
2081	969232.6069	759296.5312	8.061	RCP18"IE
2082	970013.9442	759671.6098	4.300	RCP15"IE
2083	970014.0529	759671.4966	5.754	RCP15"

Survey Point ID	X	Y	Elevation	Description
2084	970028.1339	759655.0460	4.547	RCP15"IE
2085	970027.9849	759655.1857	6.001	RCP15"
2086	970125.9733	759707.9968	7.050	HDPE24"
2087	970126.0598	759707.8012	5.047	HDPE24"IE
2088	970110.3697	759729.1463	7.007	HDPE24"
2089	970109.7646	759730.1316	5.006	HDPE24"
2090	970377.4781	759498.8599	8.379	RCP36"FES
2091	970377.4054	759498.9359	4.878	RCP36"IE
2092	970620.6195	759321.1821	9.681	CB.GI
2093	970932.1670	759076.8173	10.138	RCP36"
2094	970932.4644	759076.8659	6.537	RCP36"IE
2095	968651.5472	757953.5450	8.049	RCP24"
2096	968651.3245	757953.7987	5.811	RCP24"IE
2097	968701.4766	757870.9009	8.641	RCP30"
2098	968701.7455	757870.6540	5.822	RCP30"IE
2099	968741.6676	757822.2403	8.183	CL.CONC0.8'W
2100	968748.9479	757809.4886	11.165	CL.CONC0.8'W
2101	968749.9043	757810.1376	12.132	CL.CONC1.35'W
2102	968748.2308	757796.6995	12.022	CL.CONC1.35'W
2103	968747.6679	757798.2633	11.103	CL.CONC0.8'W
2104	968741.7214	757794.7449	8.265	CL.CONC0.8'W
2105	968748.4968	757803.8000	12.052	BOX.CULV10'W
2106	968748.1765	757803.4093	5.800	BOX.CULV10'W.IE
2107	968828.4459	757686.4122	11.896	BOX.CULV10'W
2108	968828.9581	757686.1427	5.803	BOX.CULV10'W.IE
2109	968827.4408	757680.6511	11.888	CL12"CONC.HW
2110	968828.9312	757692.9464	11.865	CL12"CONC.HW
2111	968962.5659	757170.6832	9.233	RCP36"FES
2112	968962.5321	757170.5008	5.707	RCP36"IE
2113	968981.0092	757218.7264	9.080	RCP36"FES
2114	968981.0810	757219.1096	5.556	RCP36"IE
2115	969338.6100	755951.5977	10.123	RCP24"
2116	969338.8765	755951.2616	8.078	RCP24"IE
2119	969309.6252	755980.1329	11.372	NO PIPE FOUND
3000	971920.9291	759291.6043	9.694	RCP48"FES
3001	971920.8769	759291.8416	5.525	RCP48"IE
3002	971967.2398	759221.2145	10.127	RCP48"FES
3003	971967.0657	759220.9900	5.668	RCP48"IE
3004	972504.8982	759861.6748	12.063	OCS
3005	972503.7167	759859.1161	8.780	OCS24"IE
3006	972510.8623	759876.4629	11.101	RCP24"FES
3007	972510.9148	759876.6007	8.752	RCP24"IE
3008	972550.9678	759866.0628	10.199	RCP18"
3009	972550.8613	759865.7800	8.579	RCP18"IE
3010	972566.9050	759903.2863	10.663	RCP18"
3011	972567.2676	759903.9770	8.681	RCP18"IE
3012	972490.2549	760023.7270	4.247	RCP36"IE
3013	972490.3431	760023.4037	7.564	RCP36"
3014	972488.2009	759983.4327	7.455	RCP36"
3015	972488.1580	759983.2140	4.149	RCP36"IE
3016	972480.0906	759946.8539	9.091	RCP42"

Survey Point ID	X	Y	Elevation	Description
3017	972480.3622	759946.9121	5.545	RCP42"IE
3018	972436.6834	759910.8120	9.976	RCP42"
3019	972436.4888	759910.6184	5.875	RCP42"IE
3020	973839.5966	759319.6515	13.602	NO PIPES FOUND FILLED?
3021	973970.2125	759472.6166	6.372	RCP36"IE
3022	973970.0560	759472.8768	9.169	RCP36"
3023	973936.0325	759498.3189	5.820	RCP36"IE
3024	974116.5665	759490.0959	9.856	RCP24"
3025	974116.5463	759490.4806	7.689	RCP24"IE
3026	974108.1710	759452.2234	9.748	RCP24"
3027	974108.1365	759451.9848	7.612	RCP24"IE
3028	974716.0455	759177.3434	10.593	NO PIPES WITNESSED
3029	974805.9737	759143.7322	10.262	NO PIPES WITNESSED
3030	974970.4025	759442.3275	9.260	RCP36"
3031	974970.1837	759441.6882	6.024	RCP36"IE
3032	974990.0741	759478.1908	9.568	RCP24"
3033	974990.2494	759478.6993	6.328	RCP36"IE
3034	975694.0175	758885.3264	9.509	NO PIPES WITNESSED.LOW POINT
3035	975746.7187	758871.8096	8.516	PIPE? NOT VISABLE
3036	975812.1577	758847.5111	14.372	NO PIPE WITNESSED.TRAIN DEBRIS
3037	975015.6820	760571.9821	13.270	DWCB
3038	975021.7217	760538.7691	13.317	DWCB
3039	975031.3130	760507.9781	9.882	RCP24"IE
3040	975028.6780	760507.6546	13.731	CL10 "CONC.HW
3041	975034.0025	760509.4663	13.718	CL10"CONC.HW
3042	975019.4173	760553.8722	13.463	SSMH.STMH
3043	975012.8350	760584.3709	12.168	RCP15"FES
3044	975012.7347	760584.4375	10.631	RCP15"IE
3045	975586.8911	760137.0165	13.255	HDPE18"
3046	975586.6389	760137.1233	11.759	HDPE18"IE
3047	975753.1543	760354.9439	15.505	GI2'
3048	975702.7831	760195.6359	17.263	CB
3049	975702.4614	760193.7683	12.710	HDPE18"IE
3050	976024.0159	759979.1699	15.318	PIPE BURIED FLOODED
3051	976000.8719	759987.9186	14.186	PIPE BURIED LOW FLOW
3052	975276.0307	759992.3674	9.810	RCP36"
3053	975275.8669	759992.1646	6.810	RCP36"IE
3054	975291.7894	760041.4249	10.587	RCP36"
3055	975291.6478	760041.7141	7.340	RCP36"IE
3056	974069.9177	762539.5252	6.235	RCP30"IE
3057	974069.6692	762539.6637	9.072	RCP30"
3058	974009.8289	762567.9389	8.435	RCP30"
3059	974009.3131	762568.1176	5.350	RCP30"IE
3060	974014.9795	762565.2874	12.950	GI
3061	974264.3907	762361.5442	14.734	STMH
3062	974269.2925	762356.2900	14.723	CB
3063	974291.8841	762330.4225	14.440	CB
3064	974297.9138	762323.1741	10.116	RCP30"
3065	974298.0727	762322.9896	7.216	RCP30"IE
3066	974170.9162	762467.1019	9.376	RCP30"
3067	974170.8951	762467.1144	6.484	RCP30"IE

Survey Point ID	X	Y	Elevation	Description
3068	974610.0898	762001.6006	8.892	RCP24"IE
3069	974610.3091	762001.3440	10.997	RCP24"
3070	974643.0388	761973.0818	10.932	RCP24"
3071	974643.2456	761973.0222	8.707	RCP24"IE
3072	974678.8453	761940.5285	9.351	RCP24"IE
3073	974679.0029	761940.4232	11.520	RCP24"
3074	974723.6152	761900.3296	8.815	HDPE30"IE
3075	974723.4790	761900.7379	11.258	HDPE30"
3076	974725.0605	761893.5984	9.846	RCP15"IE
3077	974724.8694	761893.5579	11.289	RCP15"
3078	974653.3910	761824.7142	11.396	RCP15"
3079	974653.4098	761824.5569	9.946	RCP15"IE
3080	974633.5863	761295.0751	11.136	RCP18"IE
3081	974634.3044	761341.7048	11.491	HDPE10"IE
3082	974634.2801	761341.2459	12.428	HDPE10"
3083	975578.7499	761622.1333	13.012	RCP24"IE
3084	975578.2374	761619.6494	13.052	RCP24"IE
3085	975578.1136	761619.6924	15.328	RCP24"
3086	975578.7308	761622.2045	15.277	RCP24"
3087	975529.4078	761641.8040	14.953	RCP24"
3088	975530.0387	761644.6278	15.218	RCP24"
3089	975530.0181	761645.0445	13.007	RCP24"IE
3090	975529.2339	761641.8599	12.907	RCP24"IE
3091	973333.0902	762794.9337	4.132	RCP42"
3092	973332.9374	762794.8932	0.583	RCP42"IE
3093	973371.0888	762779.5758	4.590	RCP42"
3094	973371.3882	762779.2369	0.765	RCP42"IE
3095	973181.5915	763216.2063	8.632	CONC.BRIDGE
3096	973181.4658	763216.5608	9.690	0.5'CONC.CURB.FACETOP
3097	973228.3706	763254.5322	9.482	0.5'CONC.CURB.FACETOP
3098	973228.4956	763254.3715	8.303	CONC.BRIDGE
3099	973243.5752	763235.7584	8.298	CONC.BRIDGE
3100	973243.7507	763235.6059	9.436	0.5'CONC.CURB.TOPFACE
3101	973196.5246	763197.3491	9.785	0.5'CONC.CURB.TOPFACE
3102	973196.4103	763197.5502	8.647	CONC.BRIDGE
3103	973235.9916	763244.9661	8.414	CL.BRIDGE
3104	973188.9185	763206.8075	8.691	CL.BRIDGE
3105	973197.8441	763197.7073	7.409	BRIDGE.BOT
3106	973181.7799	763217.5063	7.377	BRIDGE.BOT
3107	973227.0402	763254.1666	7.076	BRIDGE.BOT
3108	973243.2242	763234.4136	7.106	BRIDGE.BOT
3109	973198.2881	763197.5850	5.857	TOP.SLOPE
3110	973193.9205	763228.0975	4.979	TOP.SLOPE
3111	973226.3101	763254.0030	5.305	TOP.SLOPE
3112	973232.7997	763225.5361	5.367	TOP.SLOPE
3113	973210.4086	763205.6956	1.004	TOE.SLOPE
3114	973204.2858	763237.3903	0.883	TOE.SLOPE
3115	973219.0124	763248.9884	2.030	TOE.SLOPE
3116	973222.6416	763215.8036	0.967	TOE.SLOPE
3117	972007.8216	763105.7512	5.020	RCP60"
3118	972007.9590	763105.9225	-0.197	RCP60"IE

Survey Point ID	X	Y	Elevation	Description
3119	971929.3938	762918.0268	6.701	RCP60"
3120	971929.4518	762917.6141	1.255	RCP60"IE
3121	972040.0121	763232.4520	7.148	CL6"CONC.HW
3122	972047.1258	763234.7554	7.202	CL6"CONC.HW
3123	972043.4396	763233.1755	6.002	RCP72"
3124	972043.7555	763232.6109	-0.345	RCP72"IE
3125	971994.5933	763358.6140	7.379	GI3'
3126	971957.7698	763279.3162	10.579	DWCB
3127	972139.9951	763435.2128	9.778	STMH
3128	972746.7286	763877.9789	10.996	STMH
3129	971631.3977	762266.9892	7.566	CL10"CONC.HW
3130	971639.7079	762261.5912	7.366	CL10"CONC.HW
3131	971636.0979	762264.7306	1.053	IE.CULV6'WX5'H
3132	971607.7934	762211.0933	7.630	CL10"CONC.HW
3133	971592.3653	762221.2044	7.837	CL10"CONC.HW
3134	971602.9576	762213.3128	1.153	IE.CULV6'WX5'H
3135	971017.2507	762120.3025	7.561	HDPE48"
3136	971017.6201	762120.2605	3.254	HDPE48"IE
3137	970995.7531	762122.2337	7.396	HDPE48"
3138	970995.5277	762122.4726	3.452	HDPE48"IE
3139	970955.5930	762437.1678	11.385	CL.CONC.HW
3140	970950.5246	762433.3300	1.006	CULV.IE9'WX8'H
3141	970945.7483	762430.4448	11.525	CL.CONC.HW
3500	971850.4270	760812.7230	9.951	46"DIA.GI
3501	971870.1410	760828.4600	9.878	46"DIA.GI
3502	971956.3650	760887.9650	9.818	46"DIA.GI
3503	972028.8090	760878.6660	7.855	CB.GI FULL WATER
3504	972051.4920	760869.6430	8.029	CB.GI FULL WATER
3505	971757.1470	760783.8800	9.358	CB.GI 7.3'X7.3'
3506	971763.4030	760781.8530	10.039	CB.GI 7.3'X7.3'
3507	971758.9680	760791.0150	9.216	CB.GI 7.3'X7.3'
3508	971710.0530	760804.7540	9.365	CB.GI 7.0'X7.0'
3509	971716.5590	760802.5210	9.407	CB.GI 7.0'X7.0'
3510	971714.3280	760795.9300	9.250	CB.GI 7.0'X7.0'
3511	971707.8300	760798.2080	9.332	CB.GI 7.0'X7.0'
3512	971664.4490	760817.1350	8.656	CB.GI
3513	972132.2650	761020.1840	5.671	RMP48"
3514	972132.2470	761020.2150	1.730	RMP48"IE
3515	972174.8860	761035.1510	6.041	RMP48"
3516	970919.9320	760249.7940	5.824	RCP48"
3517	970749.8240	760151.1880	7.155	RCP48"
3518	971152.2400	760400.4350	9.041	RCP60"
3519	971152.1780	760400.2190	3.937	RCP60"IE
3520	971187.6740	760421.6630	9.120	RCP60"
3521	971187.7190	760421.6260	4.327	RCP60"IE
3522	971394.5240	760547.3470	5.036	RCP48"
3523	971465.0200	760596.4540	4.858	RCP48"
3524	971545.0480	760647.0370	5.317	RCP48"
3525	972195.6020	761102.2820	7.605	RCP48"
3526	975938.4690	759855.0880	13.841	RCP36"
3527	975938.4000	759855.4330	11.044	RCP36"IE

Survey Point ID	X	Y	Elevation	Description
3528	976012.2840	759833.8330	14.391	RCP30"
3529	976012.6270	759833.9310	11.544	RCP30"IE
3530	975113.6730	760086.1280	12.531	NO PIPE WITNESSED
3531	975083.5230	760201.3080	15.349	DAMAGED/BURIED PIPE N/A
3532	975547.1280	760146.4260	13.402	DAMAGED/BURIED PIPE N/A
3533	975560.2030	760142.8990	12.932	RCP18"
3534	975560.3220	760142.8250	11.192	RCP18"IE
3535	975715.8940	760001.6050	12.244	RCP24"
3536	975715.6940	760001.3610	10.294	RCP24"IE
3537	975732.9640	760060.5540	12.851	RCP24"
3538	971809.7880	760838.0170	9.893	46"DIA.GI
4500	974438.5899	766254.7462	4.273	PIPE.RCP30"
4501	974439.4518	766254.0361	1.449	PIPE.RCP30".IE
4502	974415.6272	766276.6250	4.136	PIPE.RCP30"
4505	973326.1320	765610.1250	5.904	TOP.SLOPE
4506	973317.2530	765628.1260	1.045	BOT.SLOPE
4507	973306.0080	765649.4160	3.711	PIER.SUPP.TOP
4508	973354.4810	765711.3450	6.539	CONC.BRIDGE
4509	973319.9800	765775.3280	6.208	CONC.BRIDGE
4510	973319.3910	765782.8750	7.087	TOP.SLOPE
4511	973327.8800	765764.0670	0.970	BOT.SLOP
4512	973359.4880	765709.4640	7.335	TOP.SLOPE
4513	973348.5310	765727.7800	0.602	BOT.SLOPE
4514	973363.4270	765796.7240	1.039	BOT.SLOPE
4515	973373.7290	765772.4720	7.075	TOP.SLOPE
4516	973372.8200	765781.0230	7.688	RR.BRIDGE.STEEL
4517	973384.7080	765789.2430	7.822	RR.BRIDGE.WOOD
4519	973387.5980	765791.0740	3.894	TOP SLOPE
4520	973373.6140	765814.2620	1.510	BOT.SLOPE
4521	973376.8410	765807.1410	4.421	PIER.SUPP.STEELCL.TOP
4522	973365.3120	765828.2220	4.395	PIER.SUPP.STEELCL.TOP
4523	973353.8270	765849.2940	4.423	PIER.SUPP.STEELCL.TOP
4524	973343.4660	765883.5230	4.659	TOP.SLOPE
4525	973354.5820	765873.5320	1.579	BOT.SLOPE
4526	973329.8230	765860.0270	7.761	BRIDGE.STEEL
4527	973325.9730	765856.7310	3.734	TOP.SLOPE
4528	973338.6640	765841.6610	1.266	BOT.SLOPE
4529	973343.0250	765865.7020	7.854	RR.BRIDGE.WOOD
4530	973071.4240	766380.3570	4.250	CONC.HWCL10"
4531	973067.3090	766387.8030	4.206	CONC.HWCL10"
4532	973069.9230	766384.5330	-0.738	STEEL42"IE
4533	973029.1880	766362.1850	-0.338	STEEL42"IE
4534	973397.7100	767601.4210	1.301	RCP36"
4535	973397.4490	767602.0430	-1.936	RCP36"IE
4536	973409.1230	767558.9110	1.056	RCP36"
4537	973409.0930	767558.1550	-2.277	RCP36"IE
4538	973688.7890	767095.0740	7.560	RR.BRIDGE.STEEL
4539	973741.3170	767061.0940	7.376	RR.BRIDGE.STEEL
4540	973732.1990	767048.4190	7.309	RR.BRIDGE.WOOD
4541	973681.0470	767081.7480	7.409	RR.BRIDGE.WOOD
4542	973594.1150	767051.7770	8.245	RR.BRIDGE.UNDERCONS

Survey Point ID	X	Y	Elevation	Description
4543	973627.3670	767103.5400	7.970	RR.BRIDGE.UNDERCONS
4544	973770.4970	767011.4340	7.875	RR.BRIDGE.UNDERCONS
4545	973736.9380	766959.3560	7.913	RR.BRIDGE.UNDERCONS
4546	974721.7470	766097.5560	8.917	NO.PIPE.WITNESSED.
4547	974415.3047	766276.8015	1.458	PIPE.RCP30".IE
4548	974971.6727	766020.5293	6.050	HEADWALL.CL.10"
4549	974978.5589	766027.7063	5.838	HEADWALL.CL.10"
4550	974974.5254	766024.3266	5.428	PIPE.RCP24"
4551	974974.2344	766024.3234	3.146	PIPE.RCP24".IE
4552	975030.8975	765992.0597	5.884	PIPE.RCP24"
4553	975030.9936	765991.9673	3.622	PIPE.RCP24".IE
4554	975172.4603	765933.6080	6.726	HEADWALL.CL.10"
4555	975168.0767	765926.0946	6.486	HEADWALL.CL.10"
4556	975169.8438	765930.4690	3.959	PIPE.RCP24".IE
4557	975170.0787	765930.1486	5.955	PIPE.RCP24"
4558	975226.5241	765897.9940	3.909	PIPE.RCP24".IE
4559	975226.5186	765898.0040	5.981	PIPE.RCP24"
4560	975581.4008	764844.3543	12.674	PIPE.RCP36"
4561	975581.2138	764844.7512	9.493	PIPE.RCP36".IE
4562	975604.7010	764792.8027	13.049	PIPE.RCP36"
4563	975605.1175	764792.2135	9.503	PIPE.RCP36".IE
4564	975642.2808	764716.5764	10.969	PIPE.RCP30".IE
4565	975642.5085	764716.0229	13.950	PIPE.RCP30"
4566	975735.4337	764505.4506	14.782	PIPE.RCP30"
4567	975735.9160	764504.8755	12.379	PIPE.RCP30".IE
4568	975293.8747	764628.2437	13.159	PIPE.RCP18"
4569	975293.5676	764628.9385	11.460	PIPE.RCP18".IE
4570	975308.8394	764536.7636	12.673	PIPE.RCP18".IE
4571	975308.8032	764537.2815	14.478	PIPE.RCP18"
4572	975303.0095	764533.1773	14.618	PIPE.RCP18"
4573	975303.4802	764533.6665	13.004	PIPE.RCP18".IE
4574	975261.9907	764494.5091	14.788	PIPE.RCP18"
4575	975262.1407	764494.2144	13.136	PIPE.RCP18".IE
4576	972177.9705	769152.5511	11.823	PIPE.RCP24"FES
4577	972177.5364	769152.2822	9.924	PIPE.RCP24"FES.IE
4578	972202.0887	769167.2767	13.236	STRUCTURE.GI.NA
4579	972386.4978	769137.0256	9.819	PIPE.RCP24"FES
4580	972387.0880	769137.4429	7.890	PIPE.RCP24"FES.IE
4581	972358.5851	769124.4873	11.625	STRUCTURE.GI
4582	972331.7724	769164.5490	11.939	STRUCTURE.GI
4583	972772.2464	769169.3650	3.480	PIPE.RCP36".FES.IE
4584	972982.5699	769185.5248	10.883	STMH
4585	972879.0944	769220.0374	11.252	STMH
4586	973024.2895	769156.9072	1.904	PIPE.RCP36".IE
4587	973023.7449	769157.2291	5.059	PIPE.RCP36"
4588	973089.8321	769080.1205	3.331	PIPE.RCP36"
4589	973089.6336	769080.2286	-0.199	PIPE.RCP36".IE
4590	973157.6538	768954.4423	4.226	PIPE.RCP36".FES
4591	973157.7476	768954.2969	0.770	PIPE.RCP36".IE
4592	973204.4861	768776.1040	3.777	PIPE.RCP36"
4593	973204.2192	768776.6805	0.325	PIPE.RCP36".IE

Survey Point ID	X	Y	Elevation	Description
4594	973328.0953	768479.4347	3.506	PIPE.RCP36"
4595	973328.1767	768479.1484	0.038	PIPE.RCP36".FES.IE
4596	974307.2348	767841.6627	8.510	CONC.DAM
4597	974304.0747	767839.2717	8.684	CONC.DAM
4598	974272.6591	767879.6155	8.682	CONC.DAM
4599	974275.6757	767882.0027	8.758	CONC.DAM
4600	974282.4145	767874.9017	5.257	WATER.LEVEL.9/11/2025
4601	974296.7681	767845.2884	0.239	WATER.LEVEL.9/11/2025
4602	974294.9547	767851.9712	8.749	CHANNEL.WIDTH
4603	974282.6608	767867.6658	8.757	CHANNEL.WIDTH
4604	973324.8310	765617.9380	7.110	CONC.BRIDGE
4605	973290.6150	765681.2210	6.788	CONC.BRIDGE
4606	973290.6260	765681.2760	6.855	CONC.BRIDGE
4607	973284.8070	765685.6050	6.121	TOP.SLOPE
4608	973297.0390	765664.9730	0.775	BOT.SLOPE
4609	973326.1320	765610.1250	5.904	TOP.SLOPE
4610	971947.0156	767413.5279	11.410	STMH
4611	971906.1390	767491.6604	12.009	STRUCTURE.GI.DAMAGED
4612	971842.6929	767618.7301	8.445	PIPE.48"RCP
4613	971842.6291	767619.2626	3.940	PIPE.48"RCP.IE
4614	972166.7853	767345.5651	12.970	STMH
4615	972356.9331	767199.7413	10.618	STMH
4616	972477.2478	767126.8254	11.579	STMH
4617	972584.0794	766933.3043	11.153	STMH
4618	972685.0553	766729.5235	9.232	STMH
4619	972772.7211	766646.2556	9.172	STMH
4620	972906.3613	766570.4535	3.048	PIPE.42"RCP.IE
4621	972905.8904	766570.2235	6.614	PIPE.42"RCP
4622	972970.8028	766436.8110	7.478	STRUCTURE.HEADWALL.CL6"
4623	972967.7392	766442.8067	7.421	STRUCTURE.HEADWALL.CL6"
4624	972962.8165	766685.5858	3.509	STRUCTURE.HEADWALL.CL6"
4625	972957.1598	766683.0539	3.506	STRUCTURE.HEADWALL.CL6"
4626	972960.1322	766683.8516	-2.695	PIPE.RCP60"IE
5000	970892.3715	763189.5571	6.748	RCP48"
5001	970892.3504	763190.1212	2.401	RCP48"IE
5002	970897.5574	763194.3613	6.808	RCP48"
5003	970897.5274	763194.3813	2.448	RCP48"IE
5004	970906.8844	763055.6459	12.951	STMH
5005	970909.8340	762967.3932	9.700	GI
5006	967504.8859	766648.7844	18.583	OCS
5007	967509.7673	766648.2121	18.629	OCS
5008	967509.1810	766643.3503	18.623	OCS
5009	967504.2832	766643.9047	18.580	OCS
5010	967507.2634	766648.5038	14.689	6"OCSIE
5011	967506.8119	766643.2625	17.813	RCP36"
5012	967506.7987	766643.2383	14.858	RCP36"IE
5013	967498.6462	766569.4811	17.863	RCP36"FES
5014	967498.8020	766569.2778	14.350	RCP36"IE
5015	968131.1095	764950.3487	10.956	HDPE24"
5016	968130.8654	764950.0197	8.953	HDPE24"IE
5017	968148.4835	764958.7435	11.001	HDPE24"

Survey Point ID	X	Y	Elevation	Description
5018	968148.4758	764958.6969	9.008	HDPE24"IE
5019	968813.9249	765275.6532	17.826	STMH
5020	968632.6368	765182.2716	15.458	OCS.GI
5021	968635.3781	765179.3007	15.456	OCS.GI
5022	968632.4066	765176.6212	15.537	OCS.GI
5023	968629.7188	765179.5266	15.566	OCS.GI
5024	968634.0595	765177.6840	14.552	RCP24"
5025	968633.5576	765178.4268	12.348	RCP24"IE
5026	968642.5547	765170.8057	15.097	STMH
5027	968765.9611	765260.7249	12.882	RCP24"IE
5028	968766.1433	765260.7695	14.776	RCP24"FES
5029	968824.7295	765258.0221	14.835	GI
5030	968952.8162	765301.5510	16.103	STMH
5031	969065.9337	765842.1025	16.285	GI
5032	969041.0759	765883.1060	16.123	GI
5033	969171.1754	765962.1456	16.922	STMH
5034	969222.4014	765993.5131	16.304	GI
5035	969214.0488	766017.3417	17.320	OCS
5036	969308.2313	766046.4960	17.280	STMH
5037	969366.8564	766082.9557	16.240	GI
5038	969421.0463	766114.0957	15.759	RCP18"
5039	969421.1648	766114.1560	14.056	RCP18"IE
5040	968877.5936	765324.0751	16.745	STMH
5041	968862.0332	765331.4967	16.753	GI
5042	968364.2799	764162.2354	10.665	RCP48"
5043	968364.4154	764162.3227	6.546	RCP48"IE
5044	968286.7310	764131.9646	11.750	RCP48"
5045	968286.7645	764131.9840	7.350	RCP48"IE
5046	972919.3879	764280.7769	7.421	CL.CONC.1'HW
5047	972935.5657	764311.9036	7.437	CL.CONC.1'HW
5048	972935.1792	764312.6938	8.317	CL.CONC.16"HW
5049	972964.7219	764321.4294	8.346	CL.CONC.16"HW
5050	972964.9058	764320.5490	7.518	CL.CONC.12"HW
5051	972979.5463	764311.1015	7.539	CL.CONC.12"HW
5052	972948.6765	764316.4002	-2.324	IE
5053	972890.2726	764394.0908	7.527	CL.CONC.12"HW
5054	972919.7431	764375.8900	7.636	CL.CONC.12"HW
5055	972920.0905	764375.0869	8.492	CL.CONC.16"HW
5056	972949.7538	764383.7848	8.546	CL.CONC.16"HW
5057	972949.8409	764384.7359	7.642	CL.CONC.12"HW
5058	972959.1969	764400.2055	7.562	CL.CONC.12"HW
5059	972928.8166	764377.6678	-2.308	IE
5060	972938.8239	764364.1249	8.018	GI
5061	972655.9824	764649.1863	4.170	RCP24"
5062	972655.7292	764649.0636	1.928	RCP24"IE
5063	972680.5864	764671.6760	4.780	STMH
5064	972691.5299	764674.4653	3.187	CL.CONC.12"HW
5065	972683.1883	764682.7470	3.060	CL.CONC.12"HW
5066	972664.3840	764616.6848	2.591	HDPE15"
5067	972664.8223	764616.1163	1.342	HDPE15"IE
5068	972647.5326	764639.7212	2.785	HDPE15"

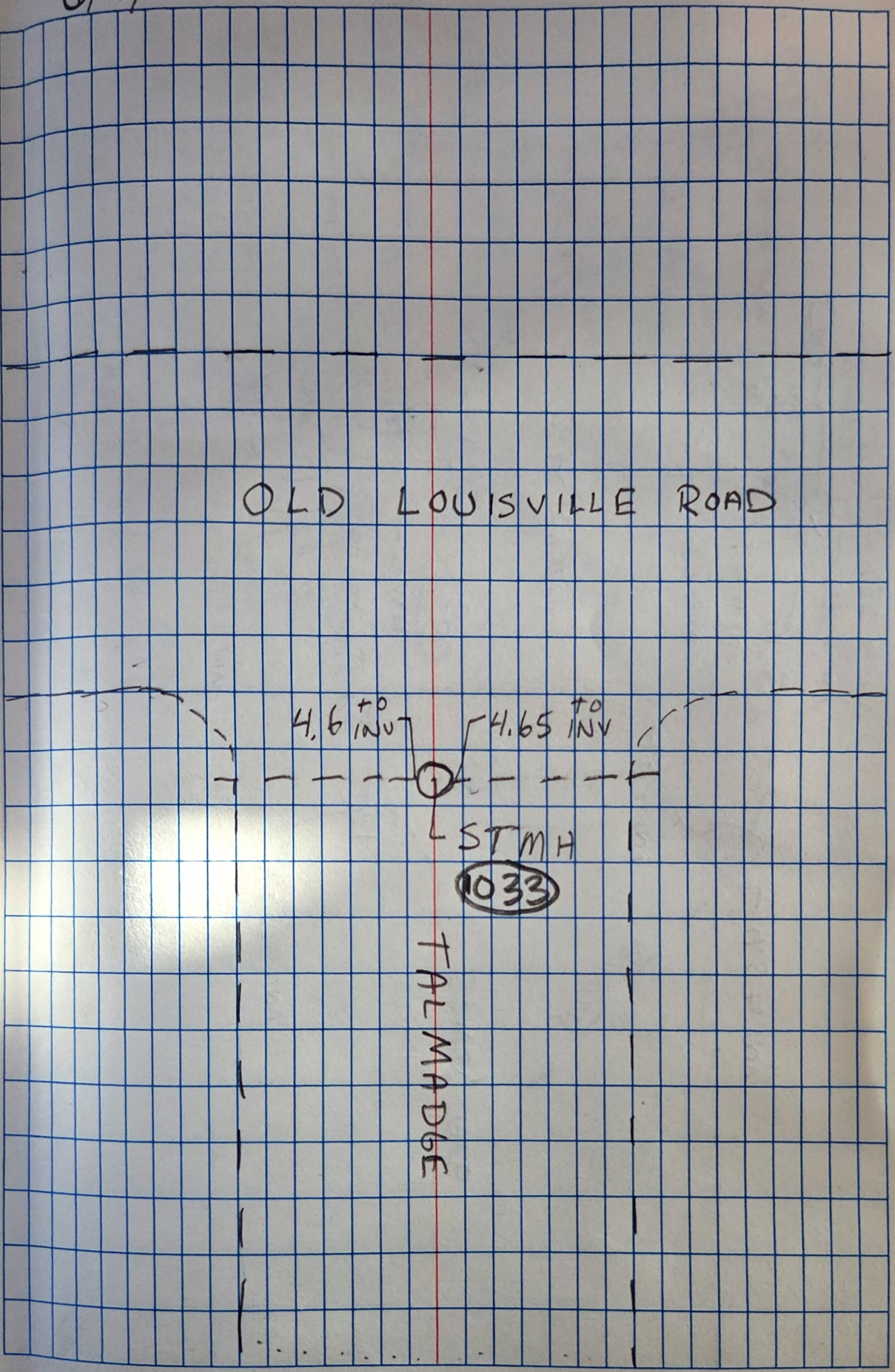
Survey Point ID	X	Y	Elevation	Description
5069	972647.1307	764640.1654	1.489	HDPE15"IE
5070	972418.1030	764963.8643	8.632	GI
5071	972397.2757	764431.1546	9.405	GI
5072	972374.3953	764441.1409	10.025	HDPE18"
5073	972374.2209	764441.1943	8.473	HDPE18"IE
5074	972432.1844	764462.7592	6.917	RCP18"
5075	972432.3279	764462.9838	5.194	RCP18"IE
5076	972100.6864	765030.1672	13.499	STMH
5077	971483.2448	767944.2221	9.731	RCP42"
5078	971483.5890	767943.9621	5.981	RCP42"IE
5079	971451.5022	767985.2575	10.202	RCP42"
5080	971451.2323	767985.5006	6.310	RCP42"IE
5081	971132.4111	768272.6385	12.953	STMH.CB
5082	971109.4580	768258.3219	12.949	STMH.CB
5083	971182.9350	768234.7133	6.696	RCP42"IE
5084	971182.4675	768234.8315	10.903	RCP42"FES
5085	971029.1415	768286.0612	12.101	RCP42"FES
5086	971029.0770	768286.3331	8.297	RCP42"IE
5087	970490.8916	768204.3181	17.571	STMH.CB
5088	970475.6785	768190.1934	13.104	HDPE24"
5089	970475.4193	768189.7981	10.841	HDPE24"IE
5090	970704.8827	768261.6703	12.472	HDPE30"
5091	970705.3988	768261.5461	9.596	HDPE30"IE
5092	970221.4038	767975.7454	11.677	RCP30"IE
5093	970221.1974	767975.2587	14.279	RCP30"
5094	970213.5087	767964.9816	11.421	RCP30"IE
5095	970213.5037	767964.9687	13.979	RCP30"
5096	970204.1224	767953.8590	13.854	RCP24"
5097	970204.5170	767954.0874	11.298	RCP24"IE
5098	970194.6804	767940.7273	14.285	RCP24"
5099	970194.1734	767940.2057	11.928	RCP24"IE
5100	969913.5344	767562.0188	18.491	STMH.SWCB
5101	969924.2130	767576.8298	15.481	RCP30"
5102	969924.8575	767577.6453	12.658	RCP30"IE.FES
5103	969859.2452	767481.1219	18.655	STMH
5104	969747.0987	767553.9520	17.491	GI
5105	969724.5937	767589.9547	18.336	STMH.CBSW
5106	969848.4335	767466.1319	16.274	RCP30"FES
5107	969848.2432	767465.9116	13.440	RCP30"IE
5108	969598.3060	767679.4089	18.029	STMH.CB
5109	969477.6551	767766.6469	18.097	STMH.DWCB
5110	969481.9378	767774.1297	17.627	STMH.FULL.CONC
5111	969363.4236	767855.4002	17.954	STMH.DWCB
5112	969370.3036	767863.9005	17.561	STMH.SMHCVR
5113	969448.9667	767802.7390	17.629	STMH.SMHCVR
5114	969320.2301	767903.8074	17.490	STMH
5115	969211.0648	767988.9945	18.333	STMH.SW
5116	969068.4850	768097.4489	18.777	STMH.SW
5117	968891.8506	768239.8780	18.453	STMH
5118	968868.3434	768252.6871	18.289	STMH
5119	968861.9591	768243.8820	17.951	GI

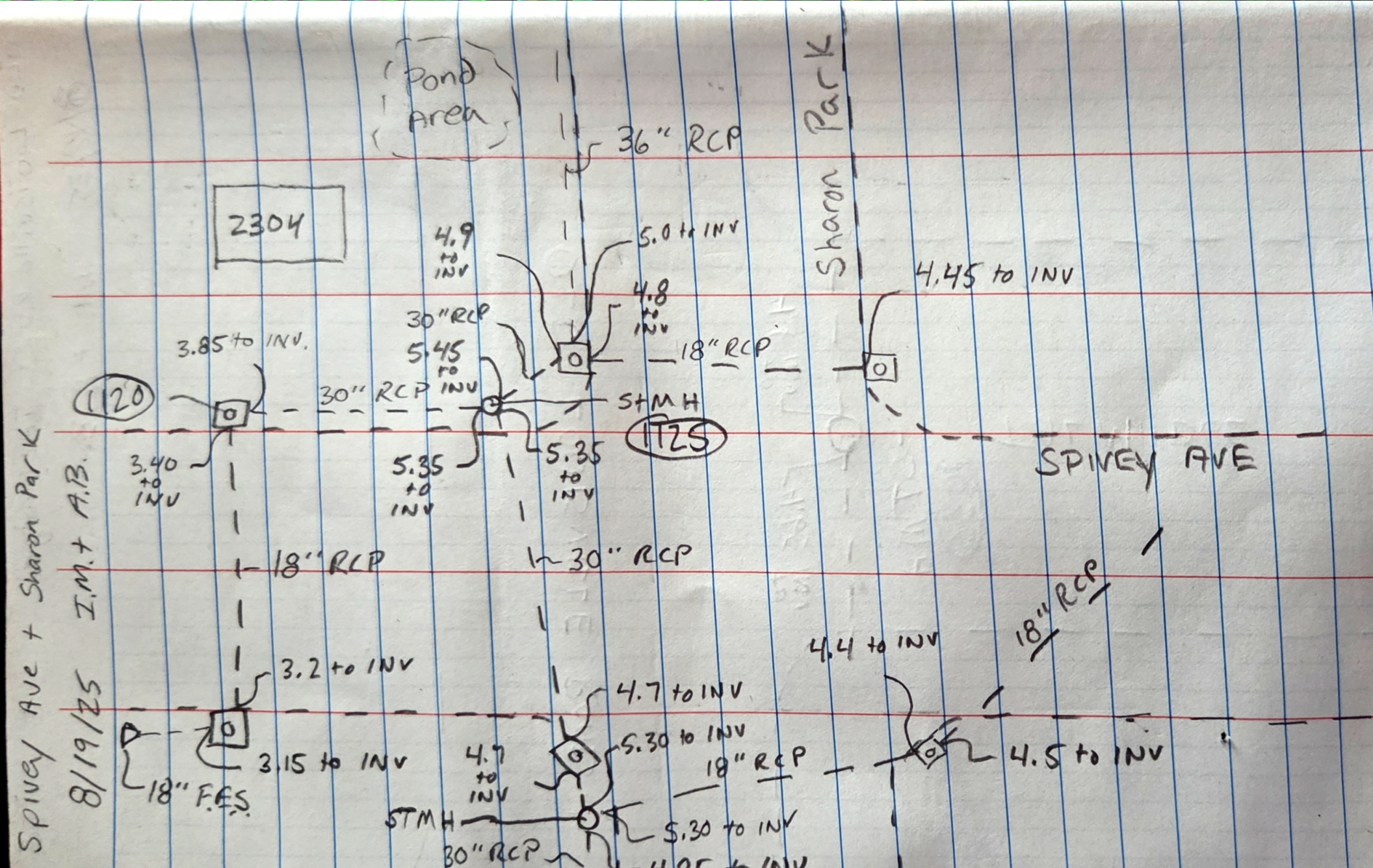
Survey Point ID	X	Y	Elevation	Description
5120	968785.3861	768302.6278	18.024	GI
5121	968744.8990	768338.1122	18.668	STMH.DWCB
5122	968721.1981	768368.7416	18.524	STMH
5123	970875.6697	766707.4850	20.201	STMH.SW
5124	970904.8937	766681.2281	20.313	STMH
5125	971058.6350	766560.0154	19.923	STMH.SWCB
5126	971223.6452	766429.2235	19.504	STMH.SWCB
5127	971363.6655	766283.8318	18.703	STMH.DWCB
5128	971396.2278	766291.9878	18.597	STMH
5129	971531.5003	766191.8727	18.051	STMH.SWCB
5130	971522.7786	766184.2567	15.865	18"RCP
5131	971750.8506	766025.4669	16.552	STMH.SWCB
5132	971743.9619	766000.1946	13.016	GI.CB.FLUME
5133	971901.0768	765910.6708	15.604	STMH
5134	971893.9394	765904.0617	13.951	GI
5135	972006.1379	765831.1108	14.971	STMH.SWCB
5136	972085.7282	765770.2106	13.776	STMH
5137	972116.0680	765738.1725	13.747	STMH
5138	972218.7586	765669.5508	13.454	STMH.SWCB
5139	972340.9139	765574.1570	13.007	STMH.DWCB
5140	972472.0906	765473.5211	14.681	STMH.SWCB
5141	972537.0806	765383.6994	13.302	STMH
5142	971330.9076	766317.7448	18.730	STMH.DWCB
10000	760007.5521	966169.7969	16.371	HW
10001	760007.7886	966176.8199	16.341	HW
10002	760007.0018	966173.1173	9.893	RCP60"IE
10003	759984.7298	966130.5632	14.001	RCP24"FES
10004	759984.5883	966130.6494	11.549	RCP24"IE
10005	760003.4005	966047.2239	17.308	RCP24"FES
10006	760003.3584	966046.9949	14.783	RCP24"IE
10007	760157.1870	966162.5588	17.182	HW
10008	760157.4117	966169.7308	17.148	HW
10009	760157.9771	966166.4726	10.700	RCP60"IE
10010	761543.2725	968133.0491	22.504	STMH.SWCB
10011	761556.8768	968096.4355	23.249	OCS
10012	761809.4867	968223.8131	21.274	STMH.SWCB
10013	762019.0730	968284.4698	17.517	18"RCP.IE
10014	762018.0667	968283.1612	17.809	18"RCP.IE
10015	762018.4733	968282.5143	17.393	24"RCP.IE
10016	762018.0651	968282.2653	20.869	STMH.SWCB.DAMAGED
10017	762607.1169	968644.7923	9.668	24"RCP.IE
10018	762593.3945	968596.9212	18.284	APPROX.PIPE.LOCAL
10019	765784.8610	968866.4241	12.676	24"RCP.IE
10020	765776.5037	968871.3645	15.438	GI
10021	765738.5679	968900.6608	16.125	GI
10022	765701.8456	968971.8475	15.380	GI
10023	765591.9021	968706.2361	15.749	GI
10024	765670.3097	968730.3584	15.703	GI
10025	765563.6386	968699.7613	18.235	STMH
10026	765484.1400	968760.2230	18.239	GI
10027	760010.7825	975188.9008	8.276	30"RCP.IE

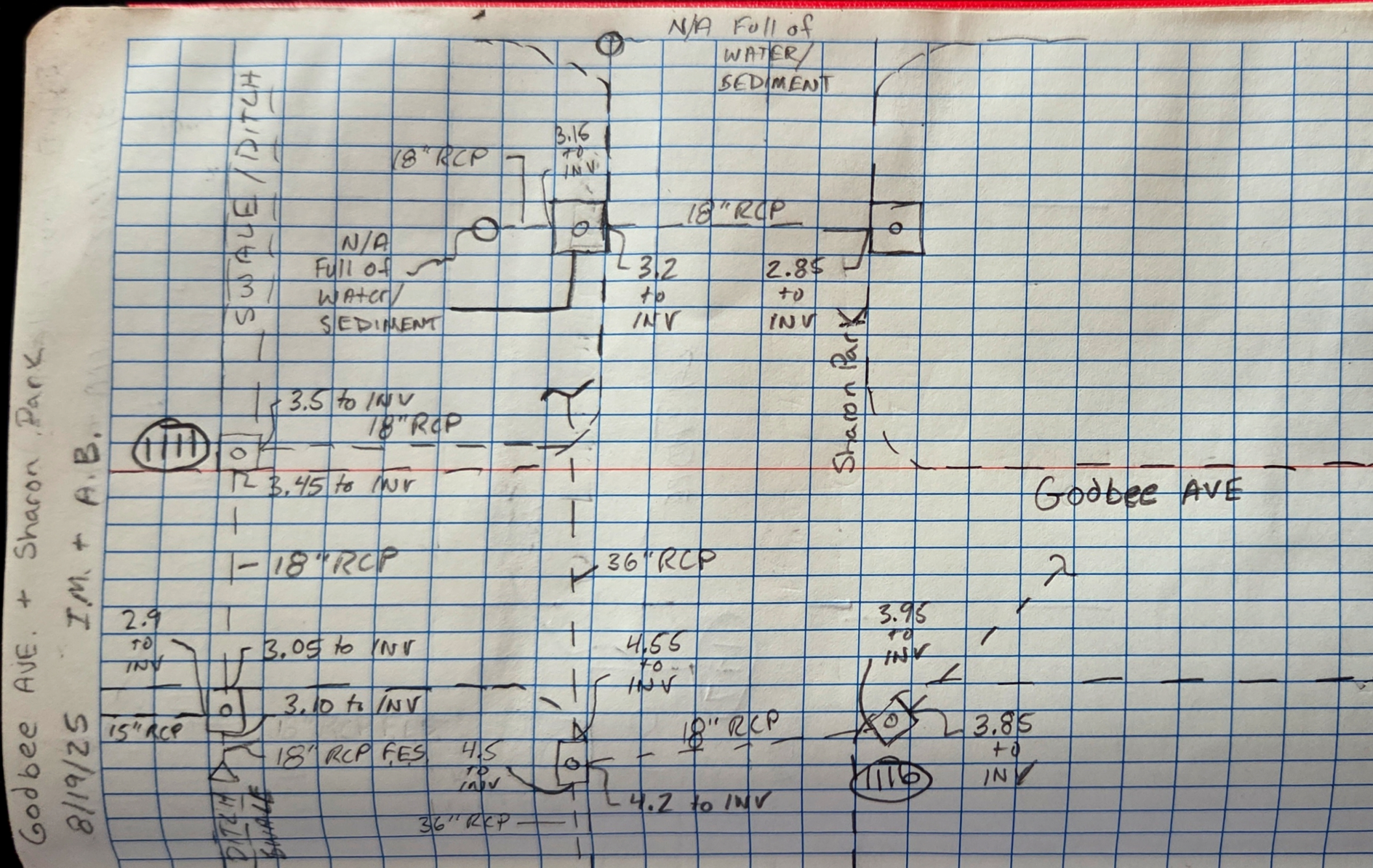
Survey Point ID	X	Y	Elevation	Description
10028	759997.2768	975228.2927	8.417	30"RCP.IE
10029	760039.5625	975110.3782	11.216	CONC.HW
10030	760045.3816	975107.3552	12.997	CONC.HW.1'W
10031	760045.4897	975107.4840	14.529	CONC.HW.1.4'W
10032	760048.1881	975097.4503	14.377	CONC.HW.1.4'W
10033	760043.8527	975092.5535	10.918	CONC.HW.1'W
10034	760047.0829	975099.9544	8.933	4HX3W.CHANNEL.IE
10035	760045.8098	975104.7603	8.916	4HX3W.CHANNEL.IE
10036	760090.5678	975107.7634	8.918	4HX3W.CHANNEL.IE
10037	760091.7241	975102.8092	8.979	4HX3W.CHANNEL.IE
10038	760097.4240	975097.6893	10.960	CONC.HW
10039	760091.9028	975100.6931	13.168	CONC.HW
10040	760091.8003	975100.3918	14.452	CONC.HW
10041	760089.7340	975110.4007	14.597	CONC.HW
10042	760088.5896	975110.2553	14.530	CONC.HW
10043	760089.8720	975110.5618	13.122	CONC.HW
10044	760093.9665	975116.0949	11.130	CONC.HW
10045	770608.4912	974780.7971	4.615	30"RCP.IE
10046	770525.5083	974838.1303	3.944	30"RCP.IE
10047	770385.8397	974980.1969	2.369	24"RCP.IE
10048	770349.6151	975006.1084	1.951	24"RCP.IE
10049	770266.7881	975066.4448	1.729	36"RCP.IE
10050	770229.0762	975116.4700	1.987	36"RCP.IE
10051	770182.9810	975263.7157	1.730	30"RCP.IE
10052	770173.6142	975296.6847	0.947	30"RCP.IE
10053	770162.5042	975336.0082	0.137	30"RCP.IE
10054	770124.5850	975468.3213	-0.294	30"RCP.IE
10055	769996.4875	975967.7806	-2.749	36"RCP.IE
10056	770118.9358	975883.7887	-1.237	36"RCP.IE
10057	770050.9176	976256.6091	-2.855	48"CMP.IE
10058	770010.1881	976461.5714	-4.144	48"CMP.IE
10059	770075.2861	976327.5894	0.586	36"CMP.IE
10060	770836.9668	973931.5850	7.218	30"RCP.IE
10061	770825.1563	974012.5721	7.490	30"RCP.IE
10062	770737.2559	974599.6258	6.107	36"RCP.IE
10063	770700.6933	974739.3340	5.049	36"RCP.IE
10064	767804.5394	977047.8738	7.250	3X9 BOX.CULV.IE
10065	767823.4869	977068.4091	7.680	3X9 BOX.CULV.IE
10066	769437.5364	976723.3598	-2.187	36"METAL
10067	769152.4342	976914.8535	1.270	36"RCP.IE
10068	768989.6421	976966.7189	0.823	42"RCP.IE
10069	768994.6130	976973.1374	0.414	42"RCP.IE
10070	768927.4868	977014.3010	0.741	42"RCP.IE
10071	768932.3713	977020.3503	0.937	42"RCP.IE

OLD Louisville RD. + TALMadge

8/18/25 I.M. + A.B.

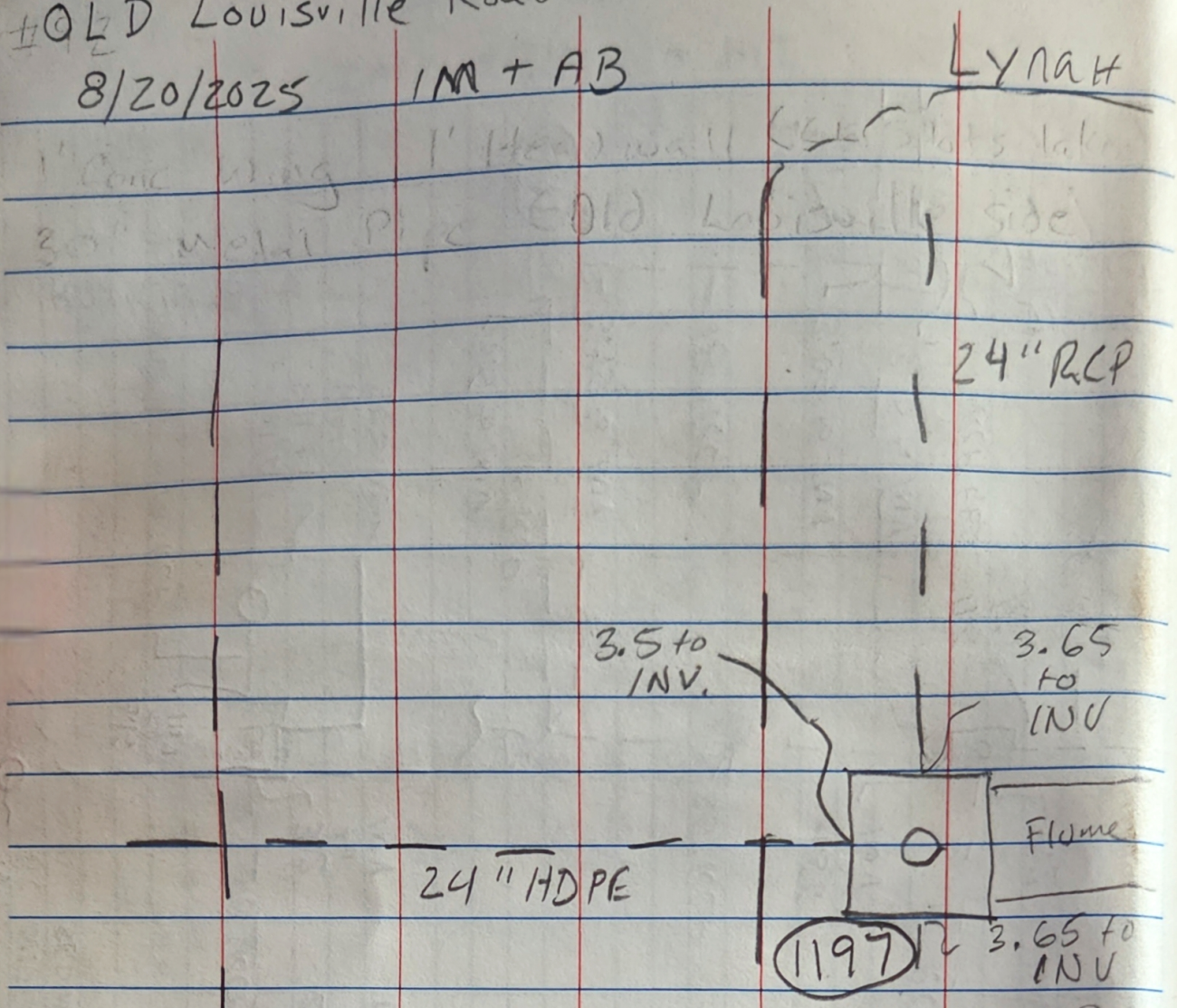



Spivey Ave + Sharon Park
8/19/25 I.M.+ A.B.
Pond Area
2304
36" RCP
4.9 to INV
5.0 to INV
4.8 to INV
30" RCP
5.45 to INV
18" RCP
Sharon Park
4.45 to INV
3.85 to INV.
120
30" RCP
STMH
1125
3.40 to INV
5.35 to INV
5.35 to INV
SPIVEY AVE
18" RCP
30" RCP
4.4 to INV
18" RCP
3.2 to INV
4.7 to INV
5.30 to INV
3.15 to INV
4.7 to INV
18" RCP
4.5 to INV
18" F.E.S.
STMH
5.30 to INV
30" RCP


Godbee AVE. + Sharon Park
8/19/25 I.M. + A.B.
N/A Full of WATER/ SEDIMENT
3.16 to INV
18" RCP
18" RCP
N/A Full of Water/ SEDIMENT
3.2 to INV
2.85 to INV
Sharon Park
SWALE / DITCH
3.5 to INV
18" RCP
3.45 to INV
Godbee AVE
18" RCP
36" RCP
2.9 to INV
3.05 to INV
4.55 to INV
3.95 to INV
3.10 to INV
15" RCP
18" RCP FES
18" RCP
4.5 to INV
3.85 to INV
4.2 to INV
36" RCP
DITCH / SWALE

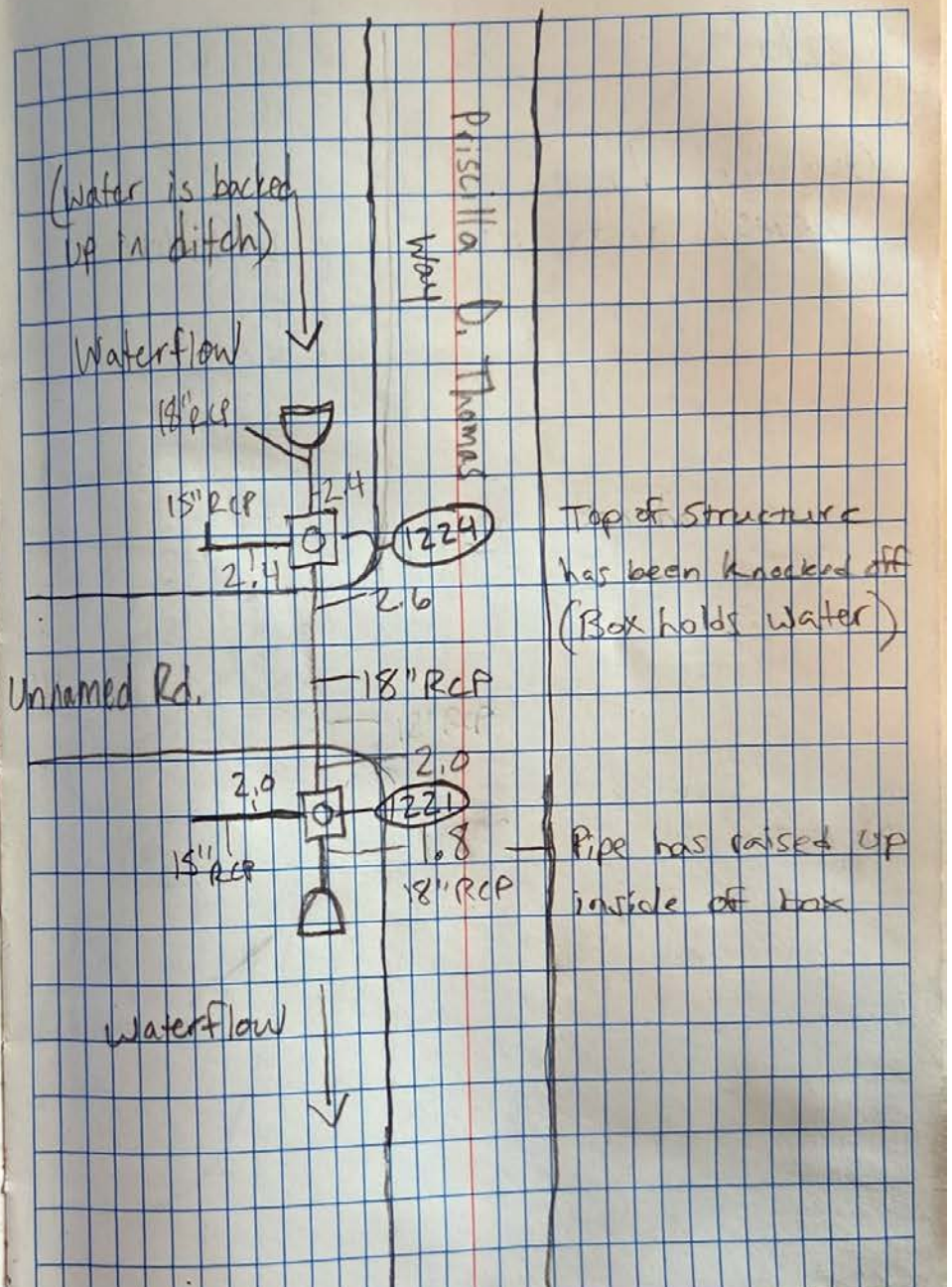
OLD Louisville Road

8/20/2025 IM + AB



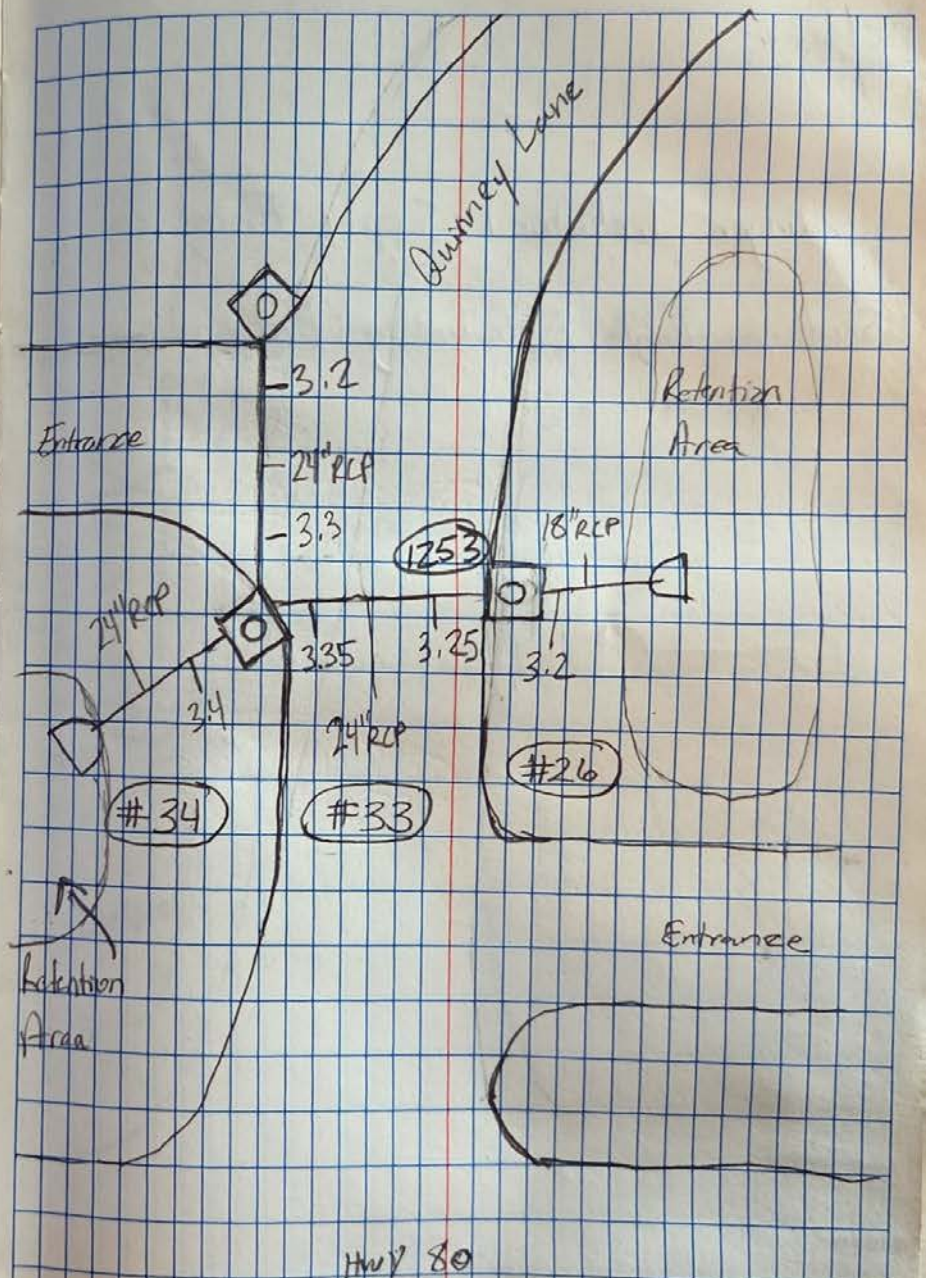
8/21/25

Priscilla D. Thomas Way
Investigation Area



8/22/25

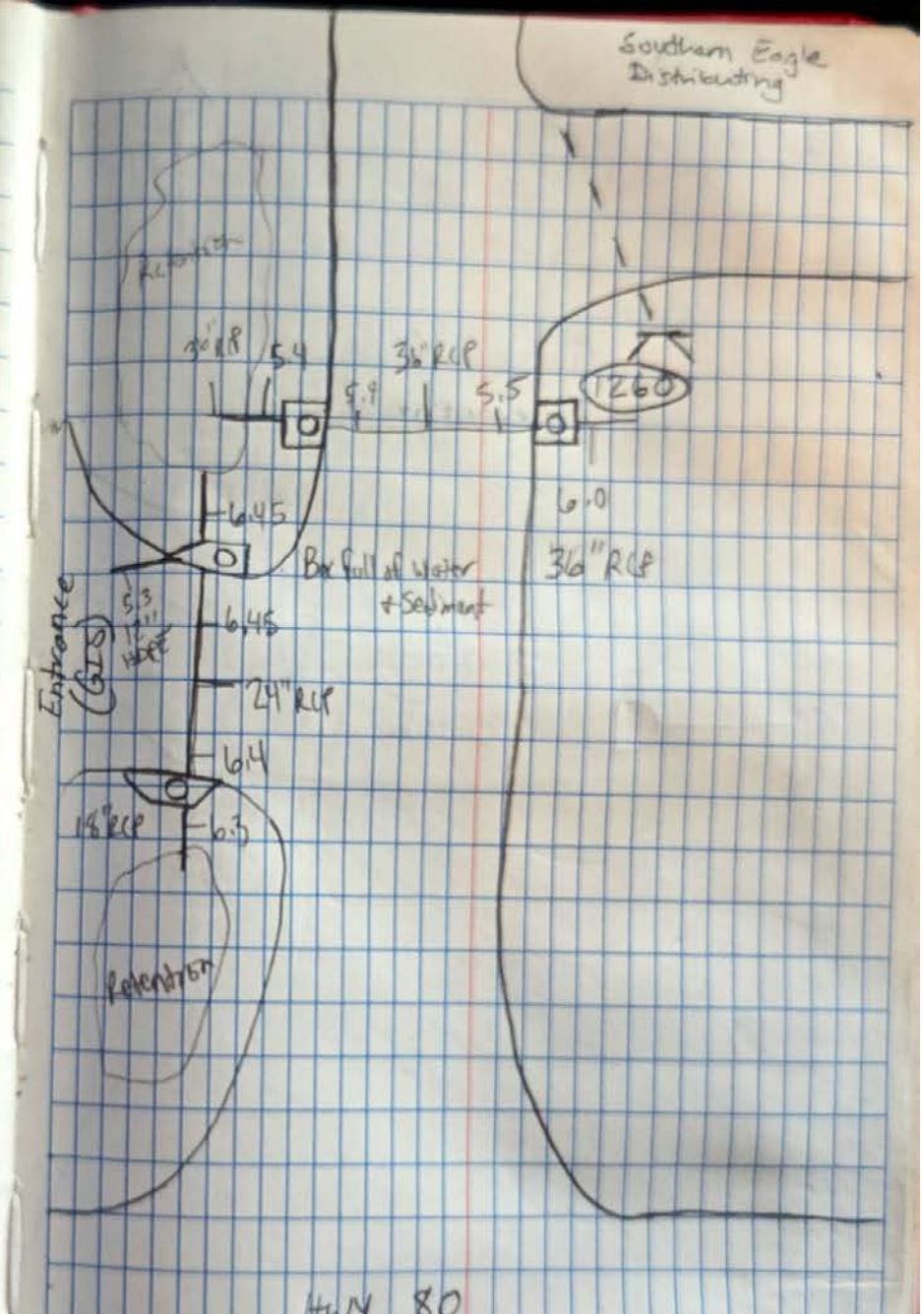
Quinney Lane



8/22/25

Grainger Industrial Supply Entrance

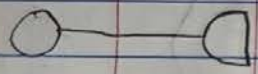
Southern Eagle Distributing Entrance



8/25/25

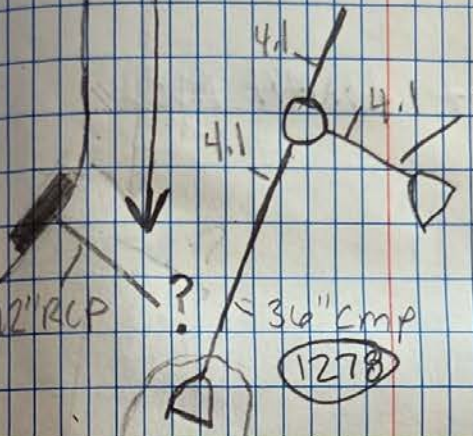
N

Garden City Elementary



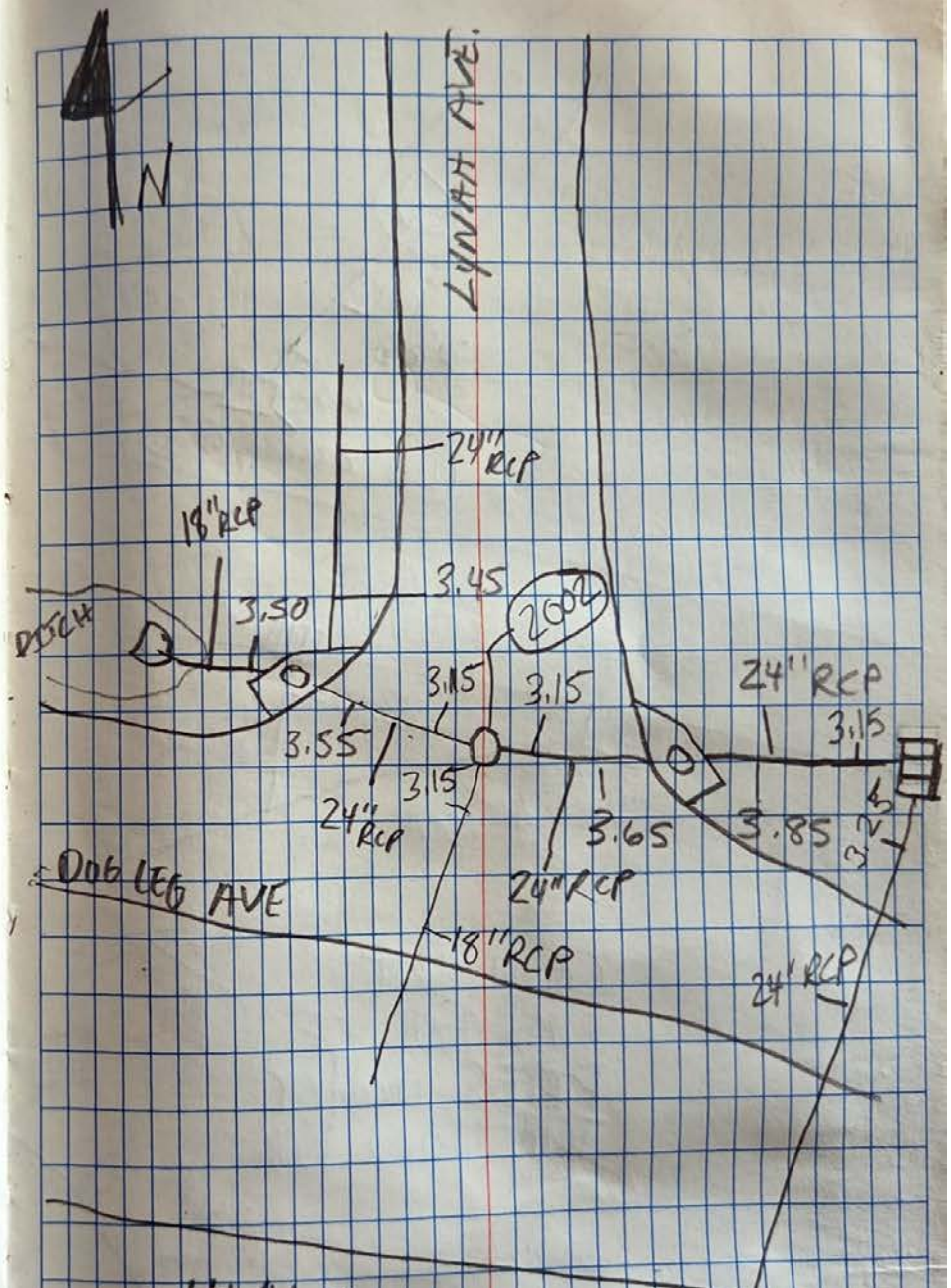
Ditch

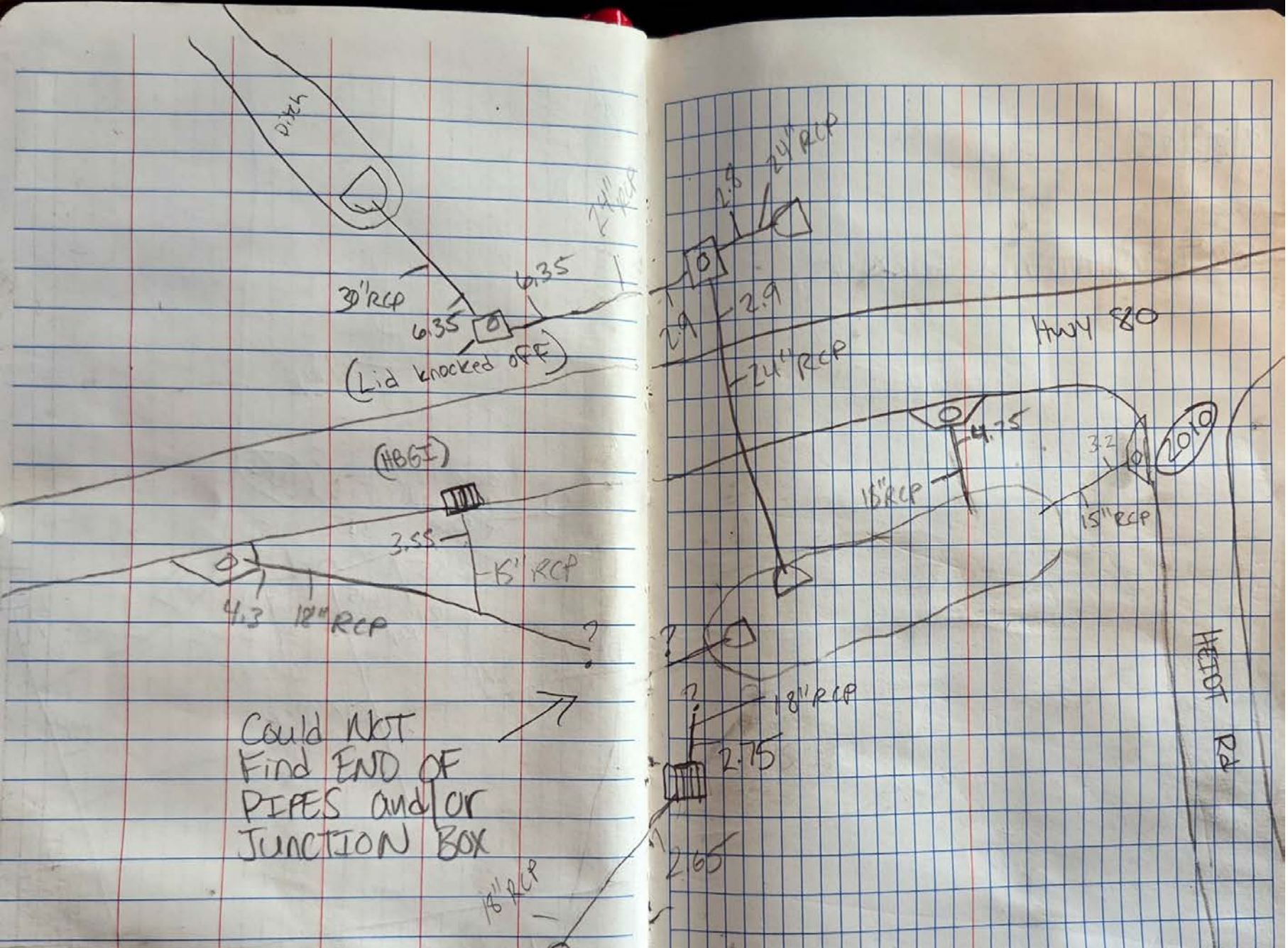
Ditch at headwall full of water and trash. Could not find out pipe from headwall. Appears to intersect main pipe underground.



8/25/25

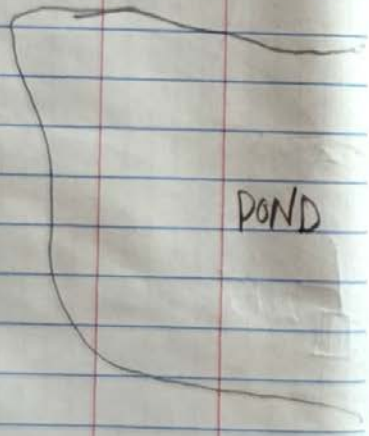
Dog Leg AVE. + LYNAH AVE.

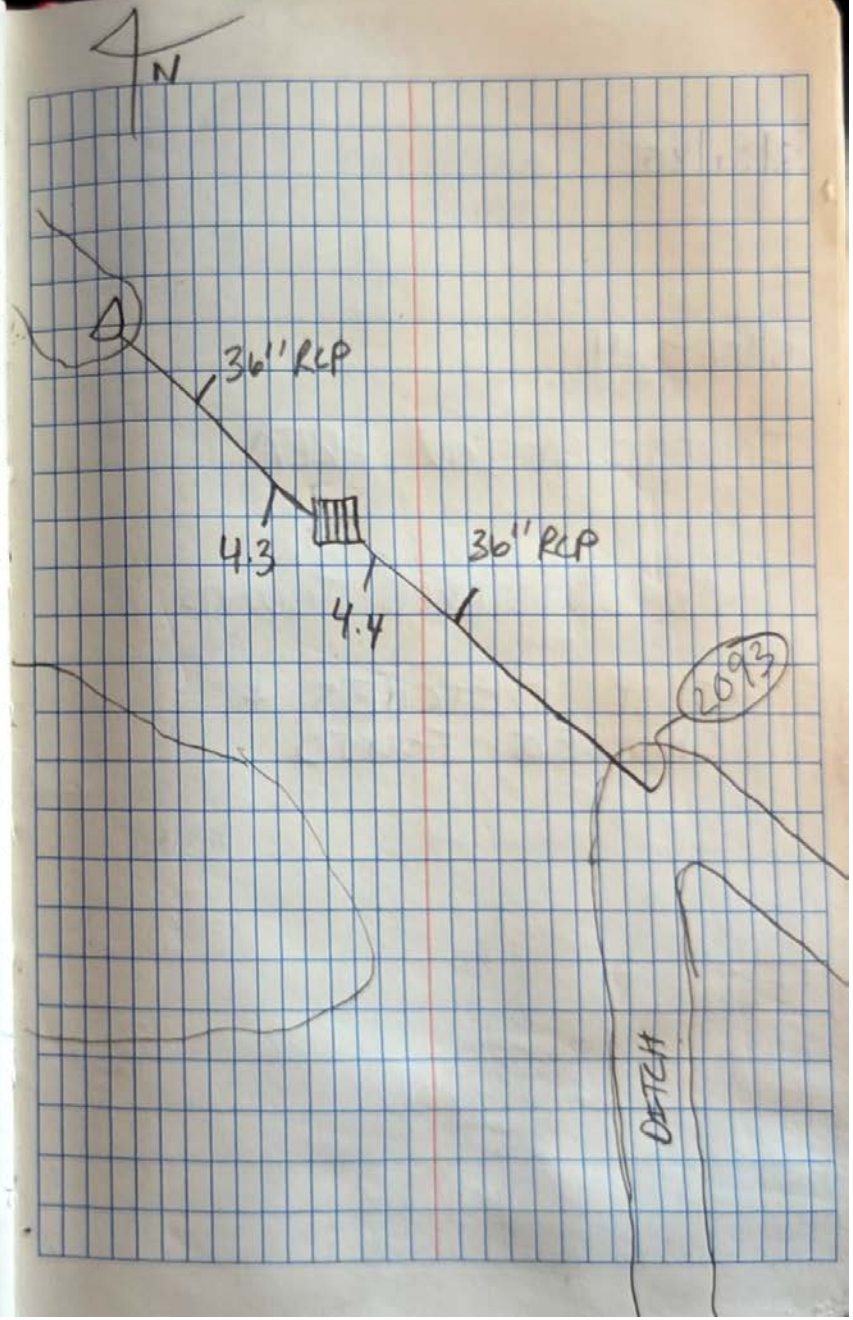



Ditch
30" RCP
6.35
6.35
(Lid knocked off)
(HBGF)
3.55
15" RCP
4.3
12" RCP
Could NOT Find END OF PIPES and/or JUNCTION BOX
18" RCP
2.5
24" RCP
2.9
2.9
24" RCP
Hwy 80
4.75
15" RCP
3.2
20'0
15" RCP
18" RCP
2.75
2.65
HEIDT Rd

8/26/25

307 CHATHAM PARKWAY





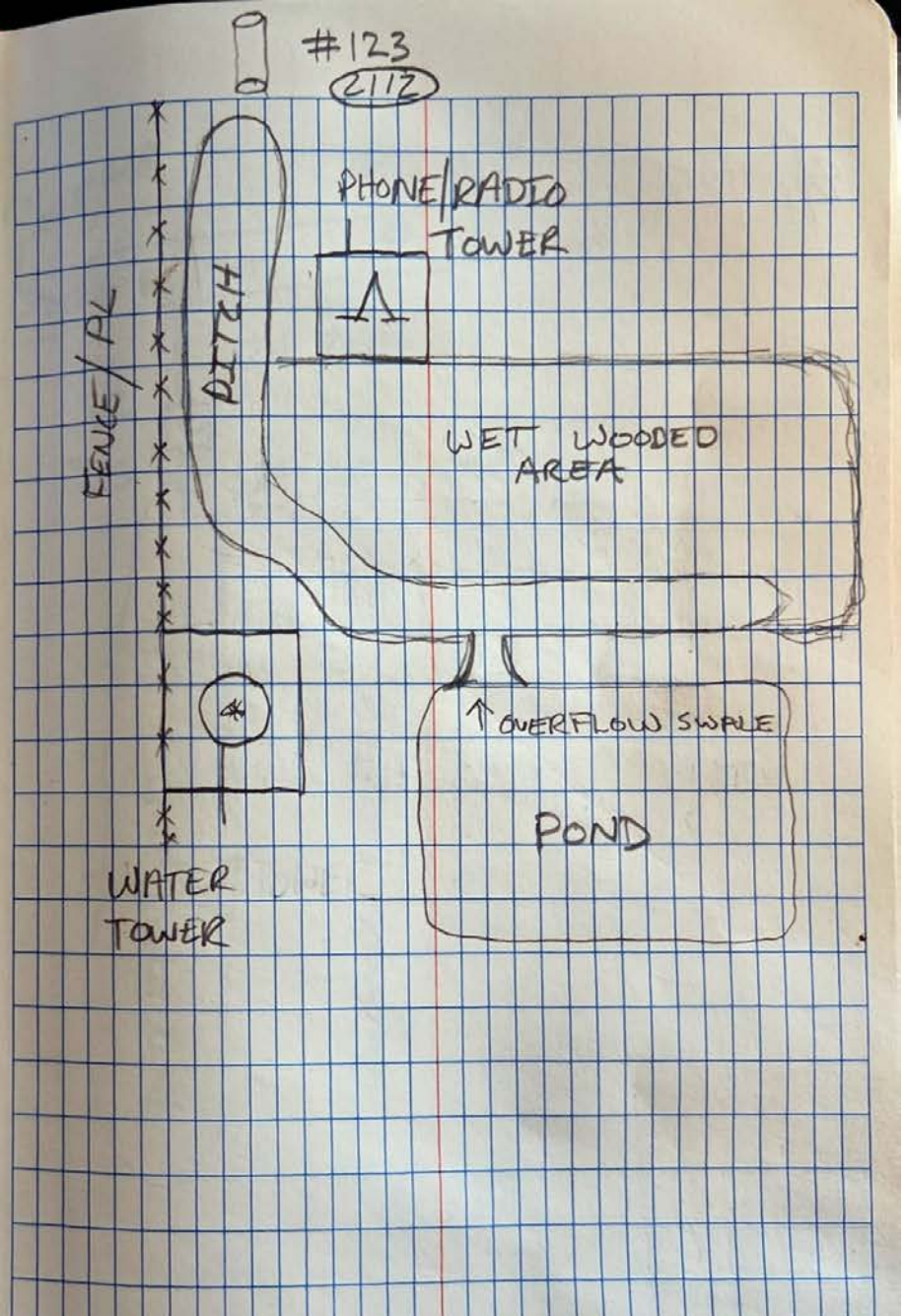
8/27/25

SHEET 14

INVESTIGATION AREA

- NO STRUCTURES FOUND

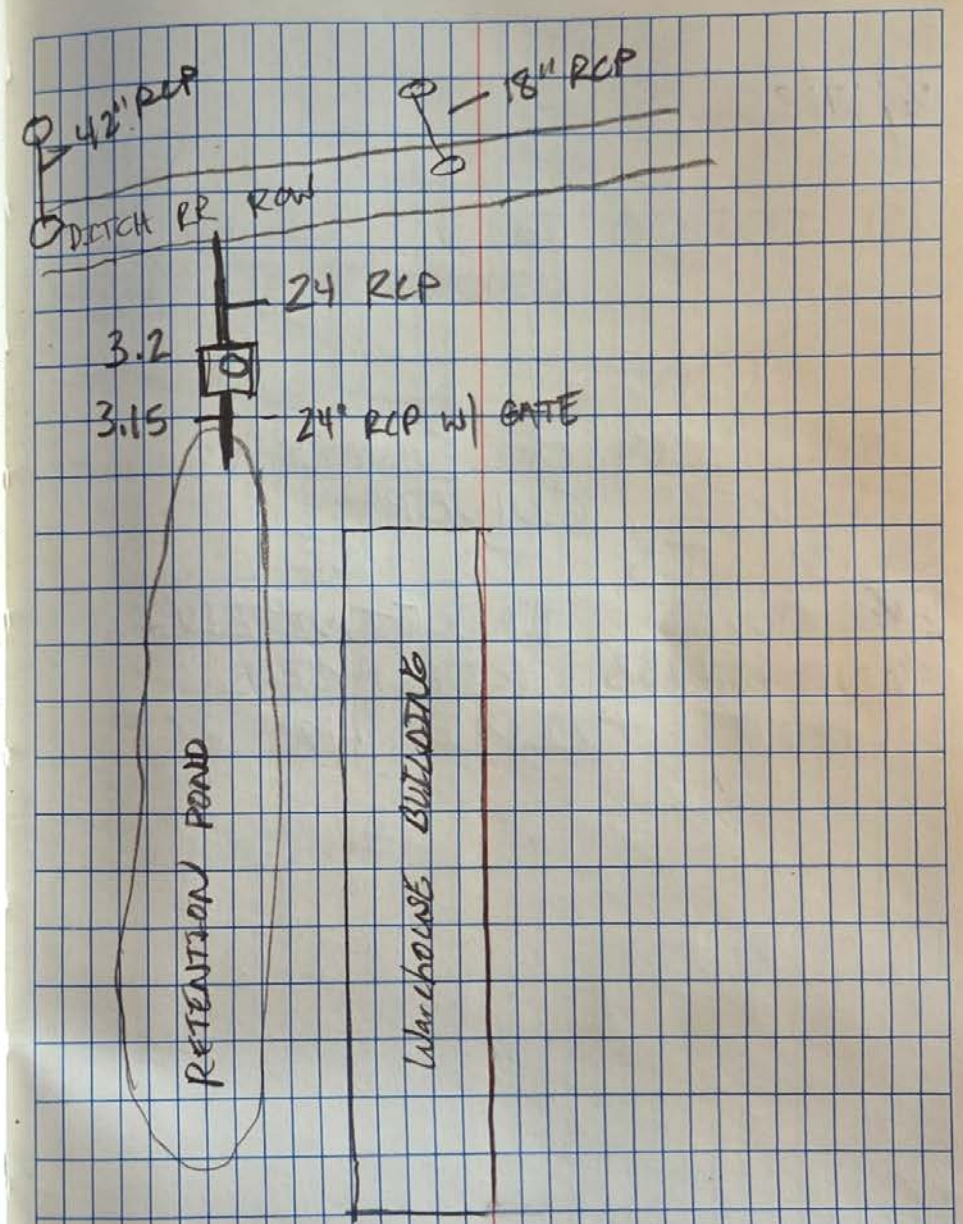
- JUST DITCHES & CHANNELS FOUND



8/27/25

3.15

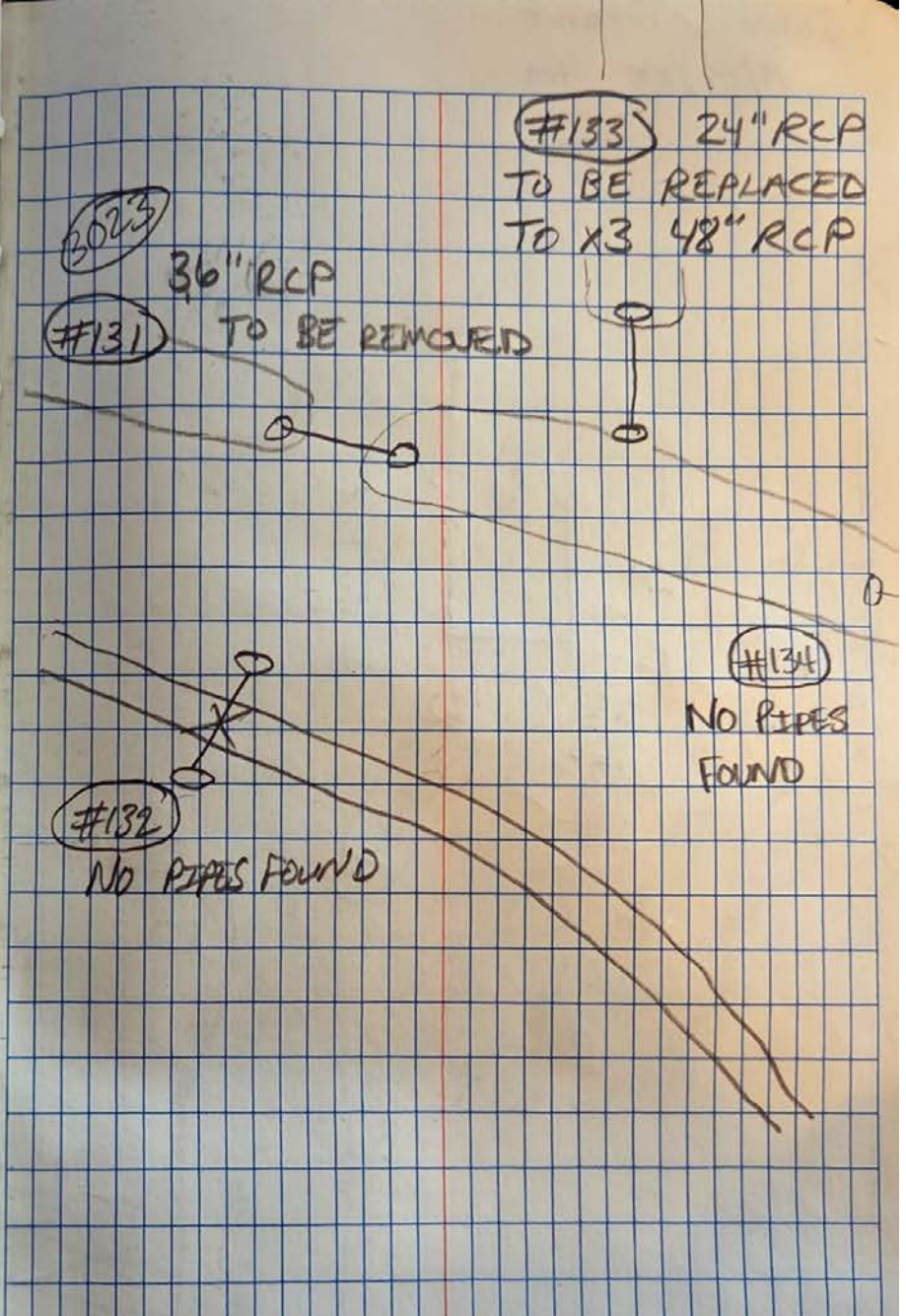
3.2


42" RCP
18" RCP
DITCH RR ROW
24 RCP
3.2
3.15
24" RCP W/ GATE
RETENTION POND
WAREHOUSE BUILDING

8/27/25

151 TELFAIR Rd

PER CITY OF SAVANNAH WORKERS, CULVERT #131 IS TO BE REMOVED INDEFINITELY AND #133 REPLACED WITH TRIPLE 48" RCP

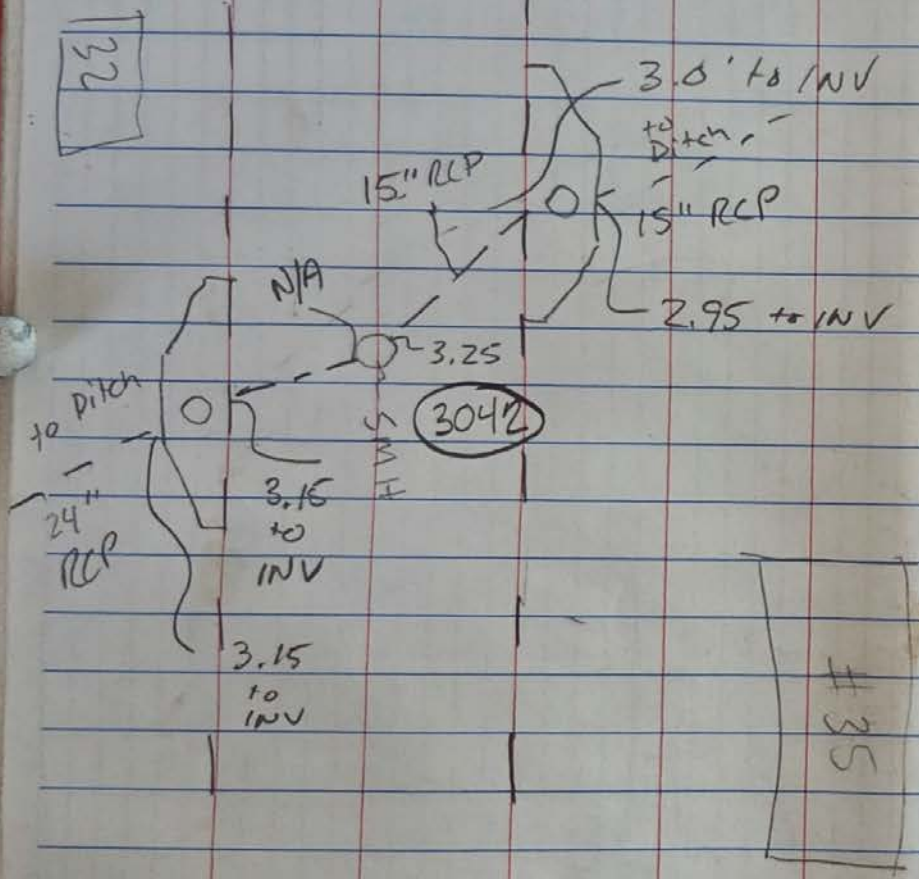


Solenis Plant

8/29/25 IM

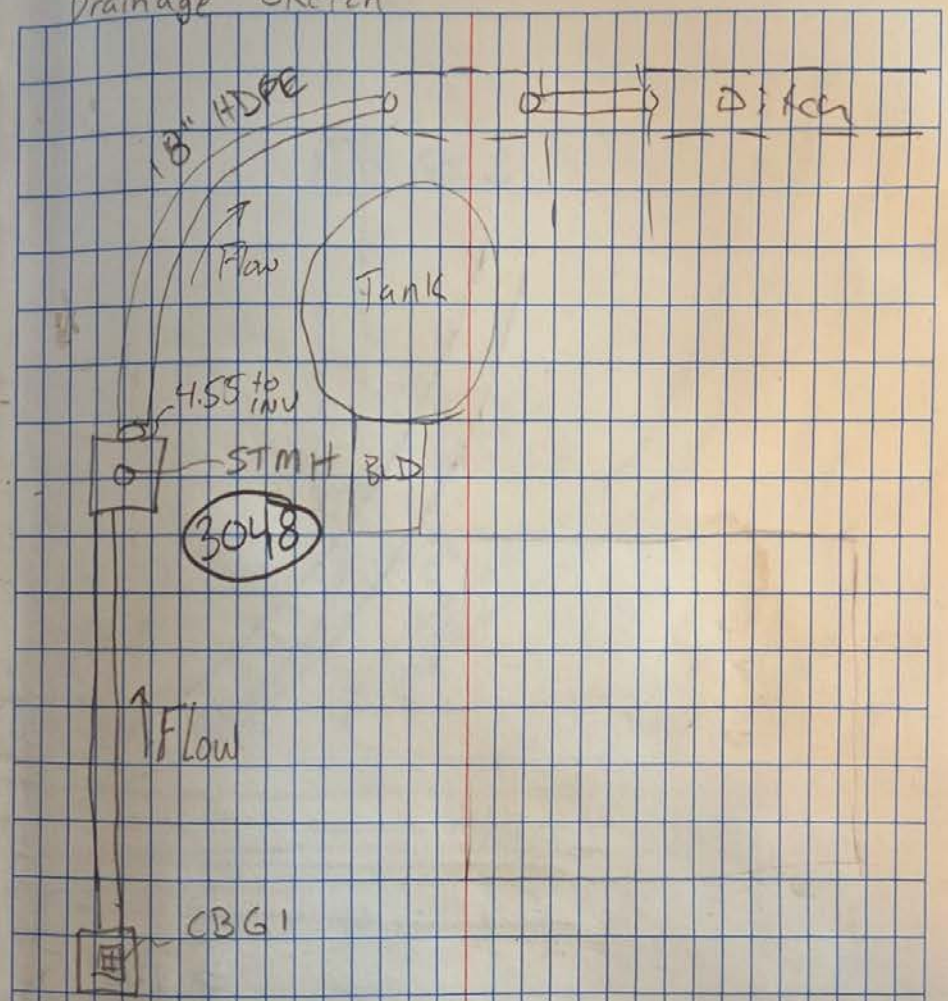
Darling St. (#32335)

Drainage Sketch

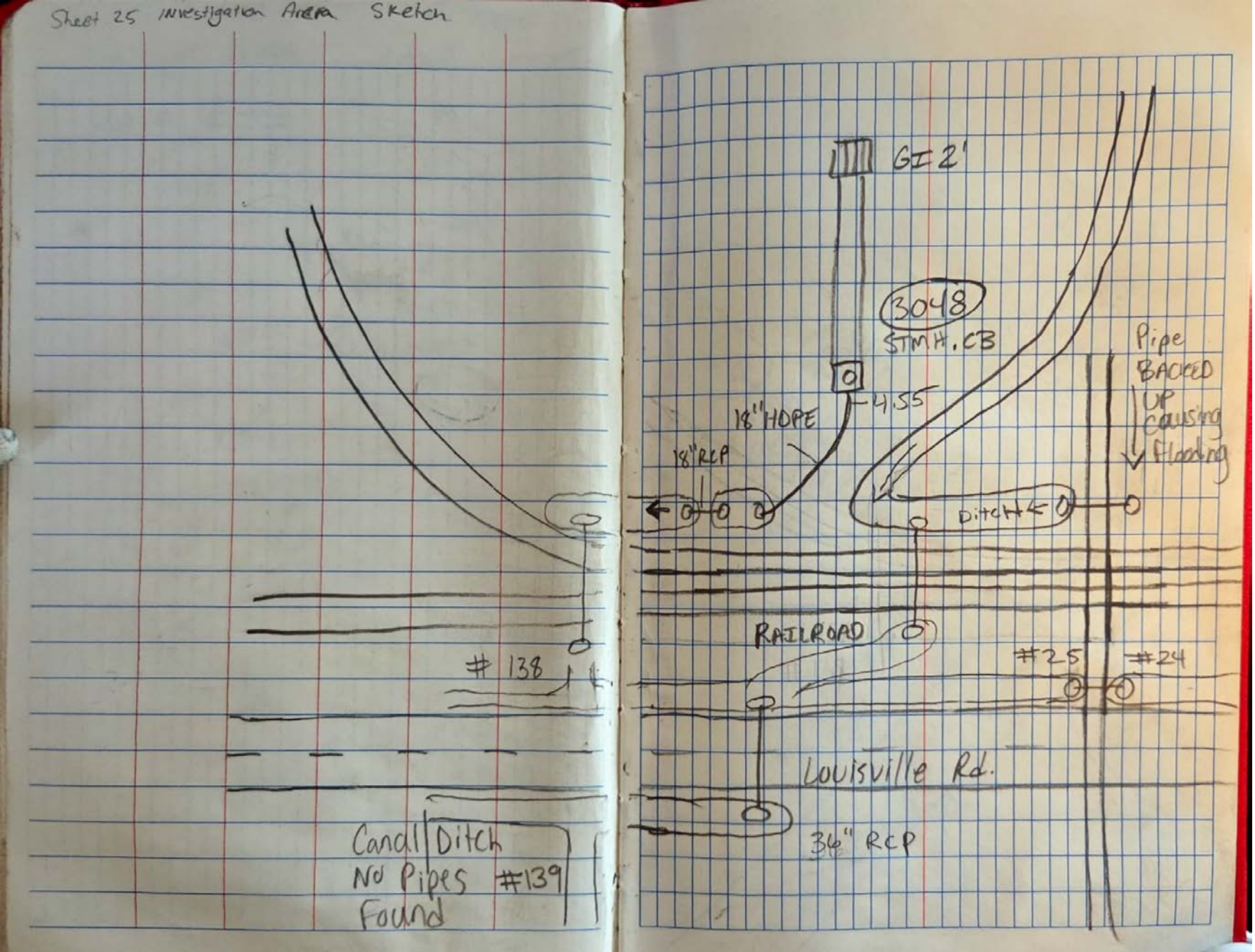


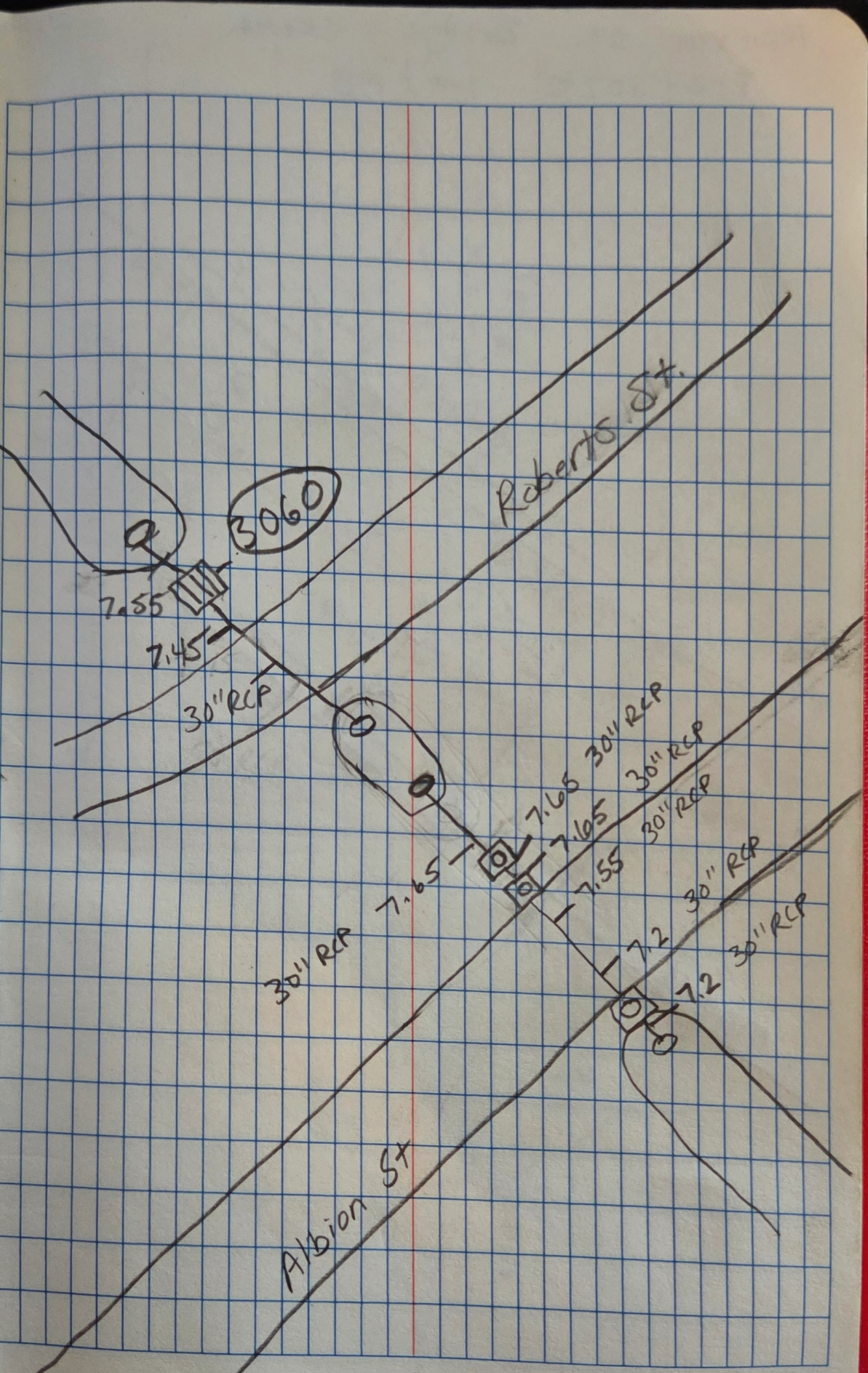
145 Hopper St.

Drainage Sketch

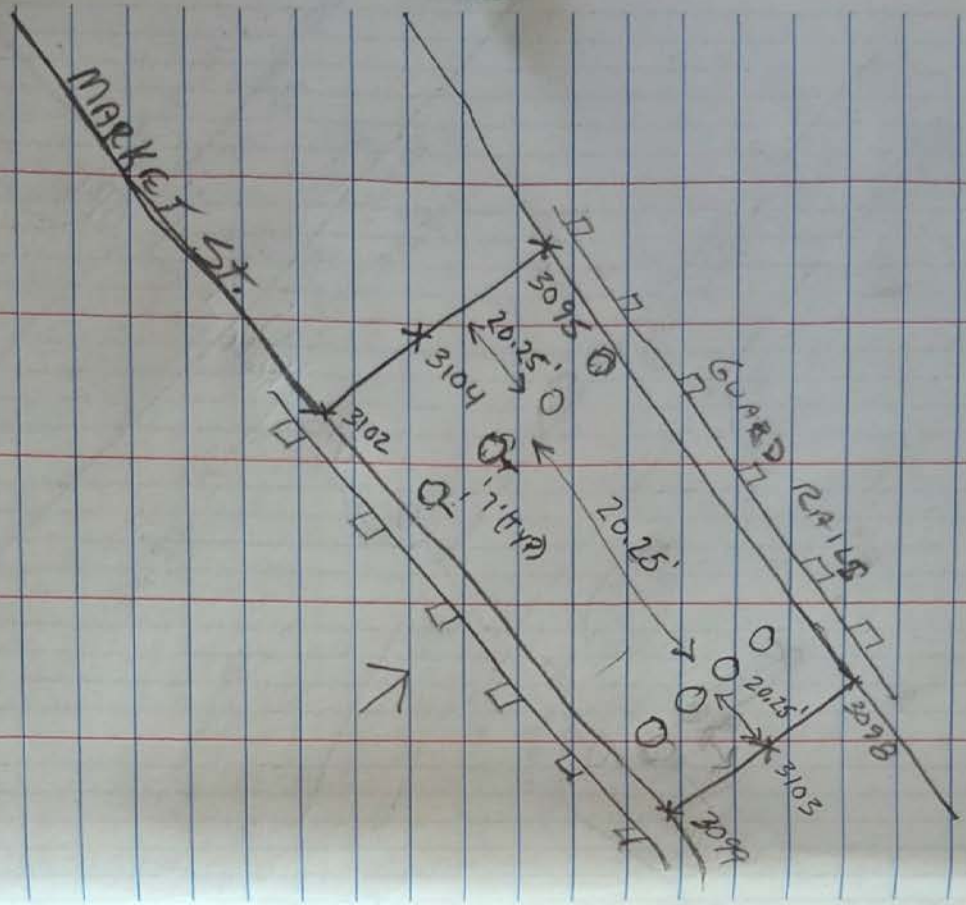


Sheet 25 Investigation Area Sketch

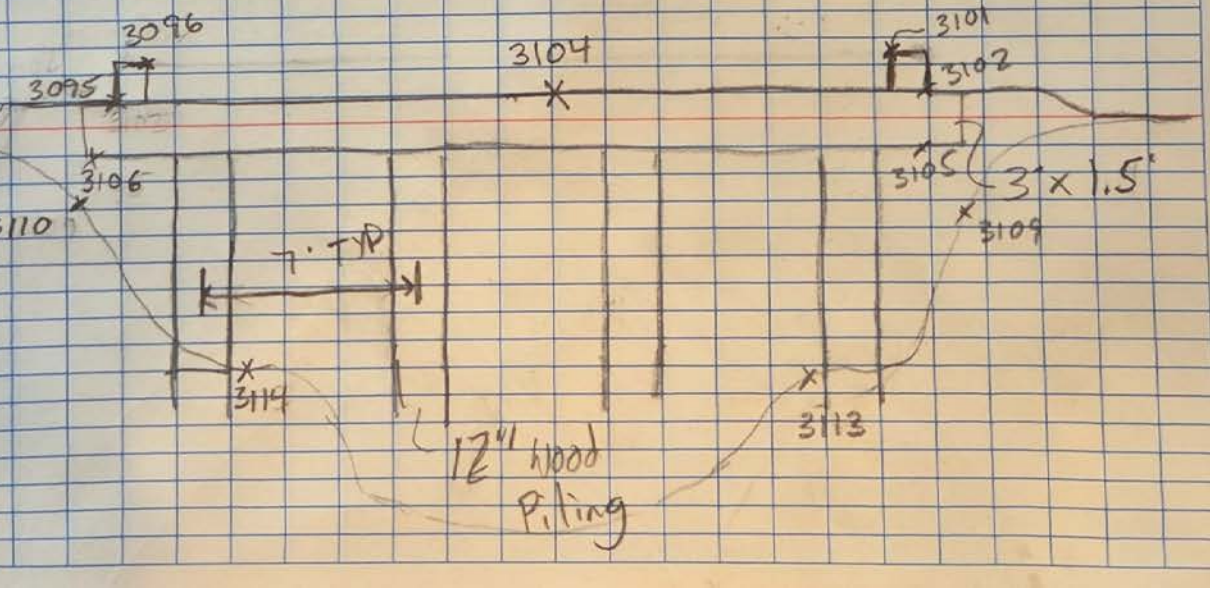



Roberts St.
3060
7.55
7.45
30" RCP
7.65
30" RCP
7.65
30" RCP
7.55
30" RCP
7.65
30" RCP
7.2
30" RCP
7.2
30" RCP
Albion St

Market St. Bridge Sketch
7-2-2025 J.M./AB.

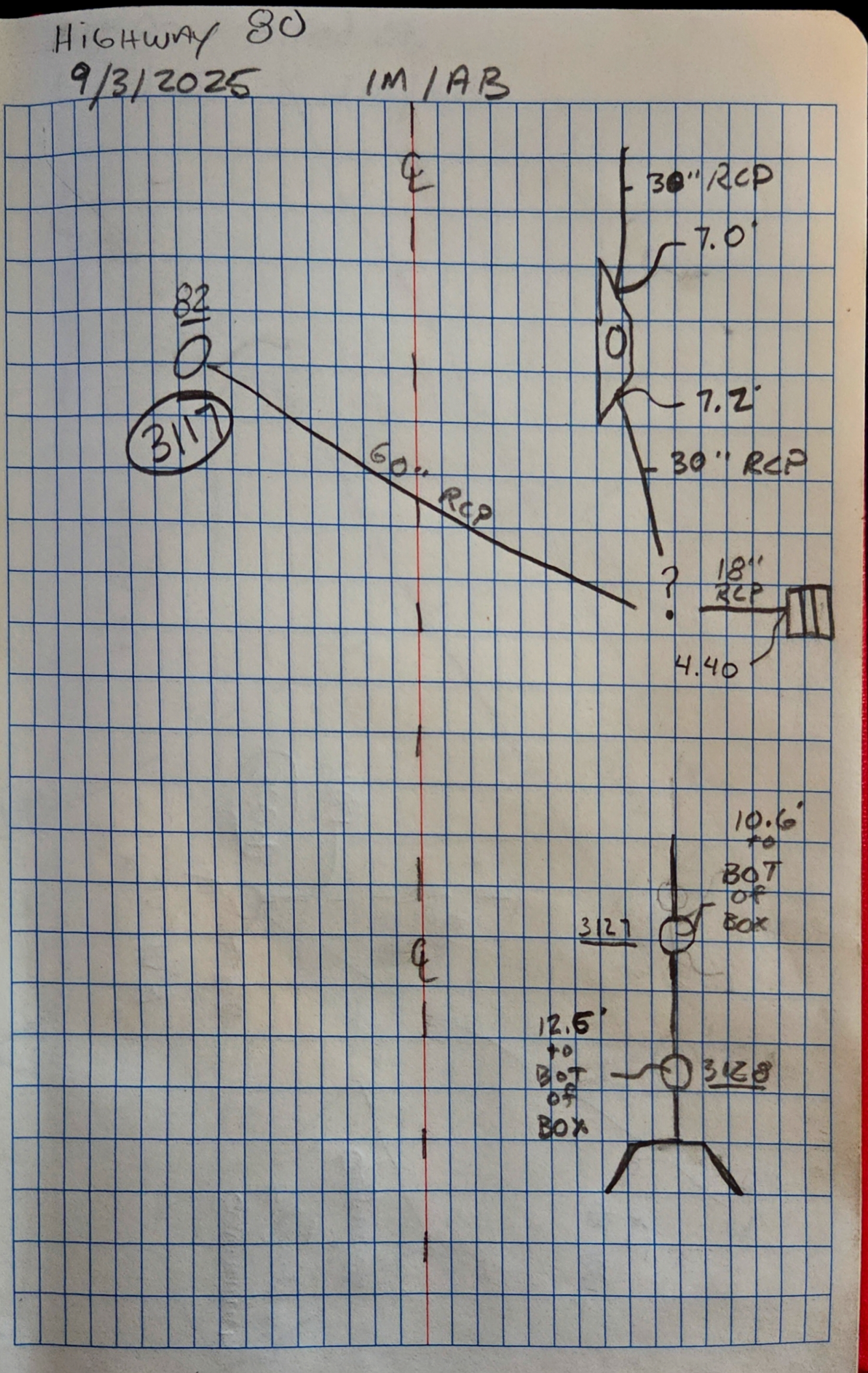


CL Rd BRIDGE VIEW

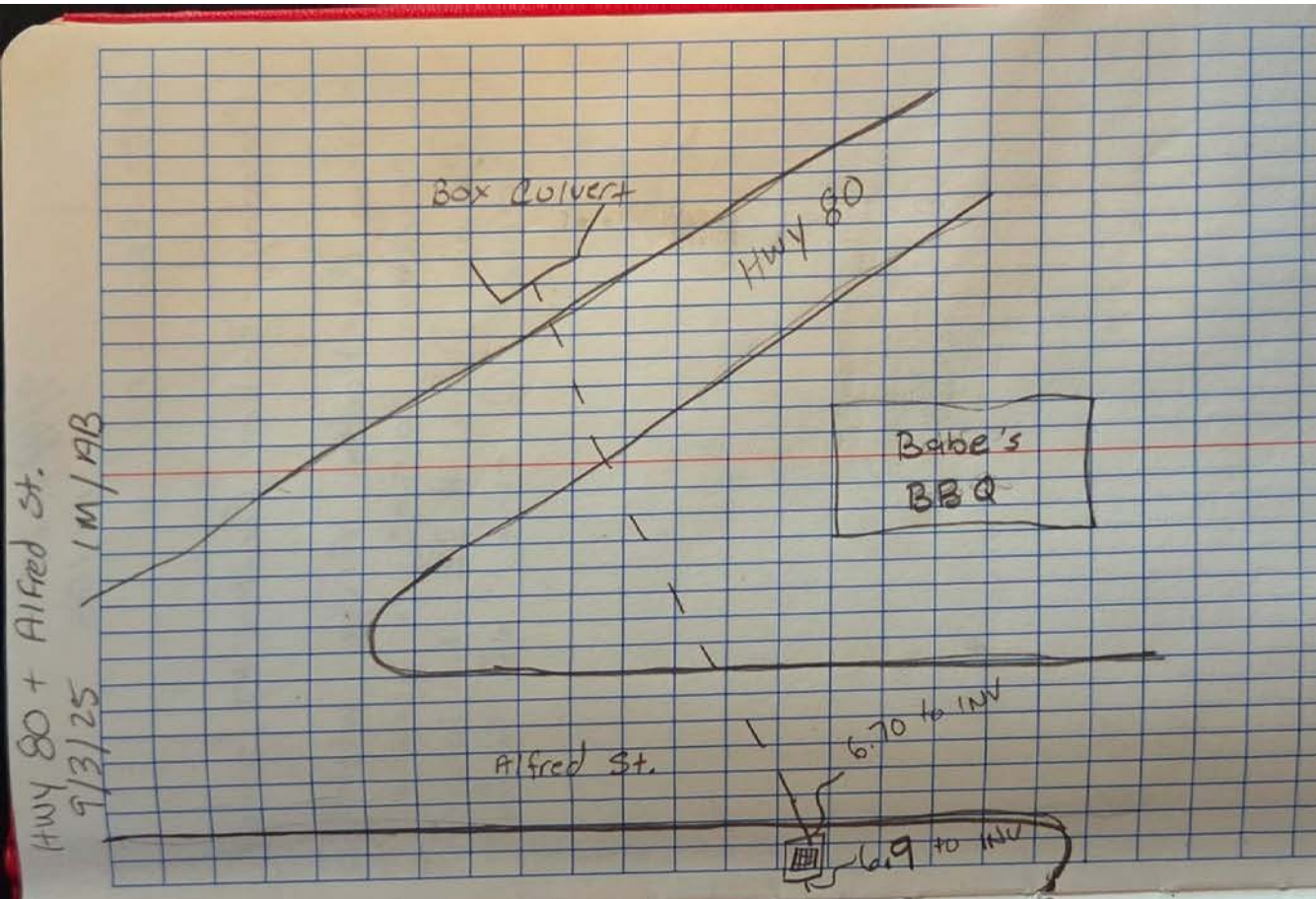


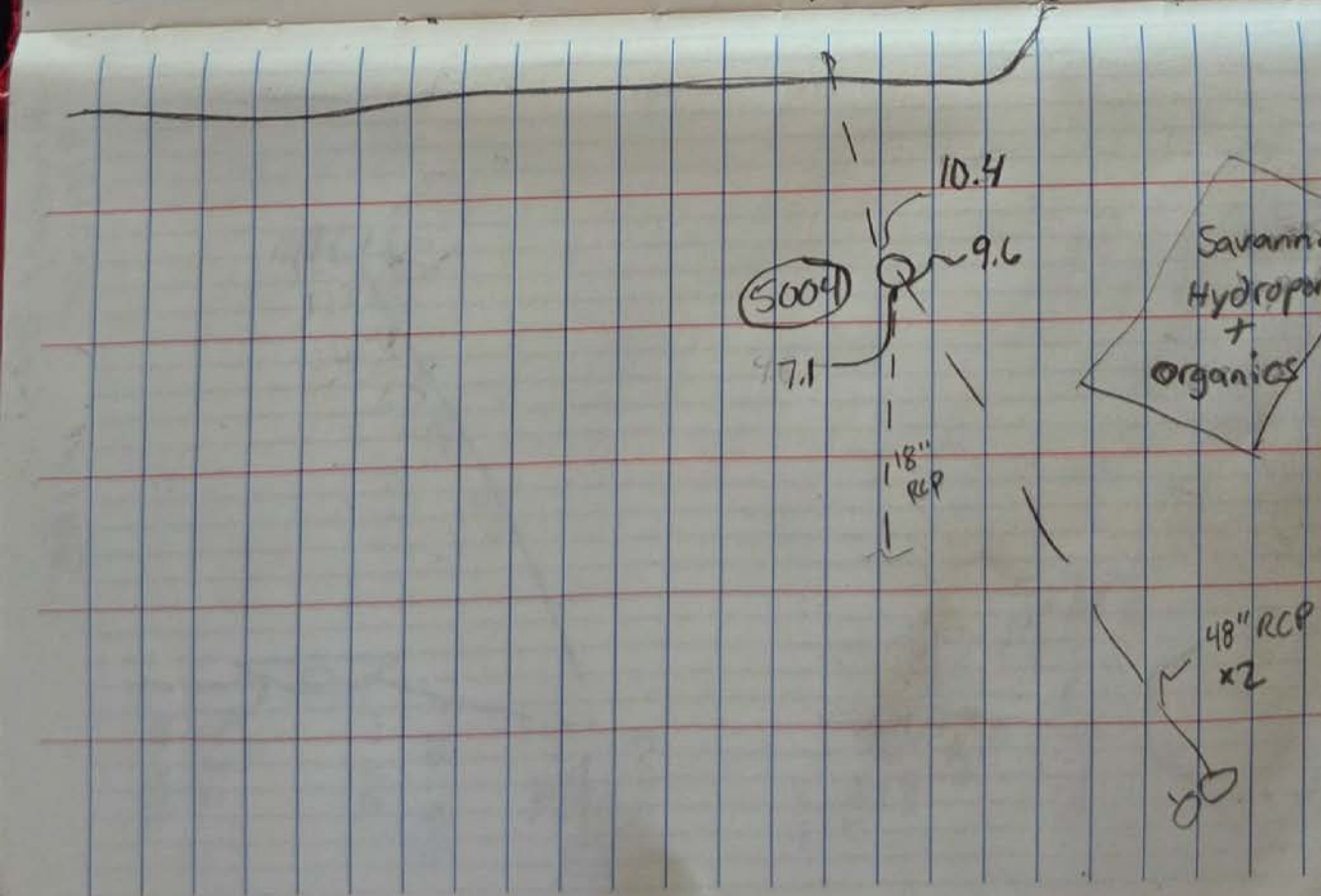
HIGHWAY 80

9/3/2025 IM/AB



Hwy 80 + Alfred St.
9/3/25
IM/AB





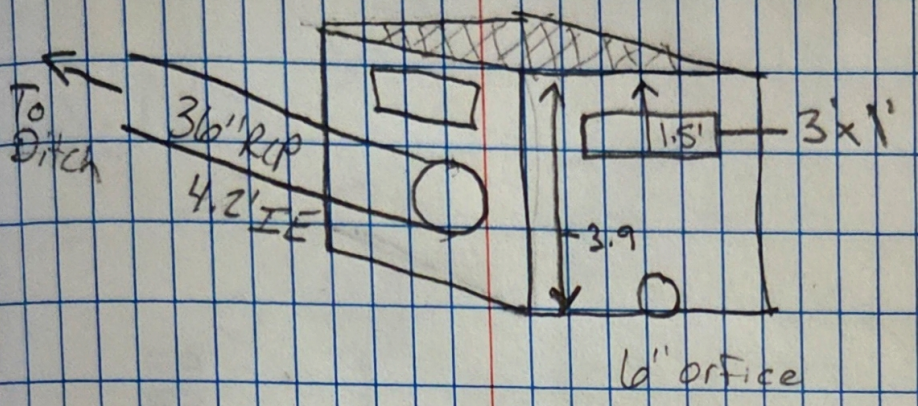
9/4/2025
IM/AB

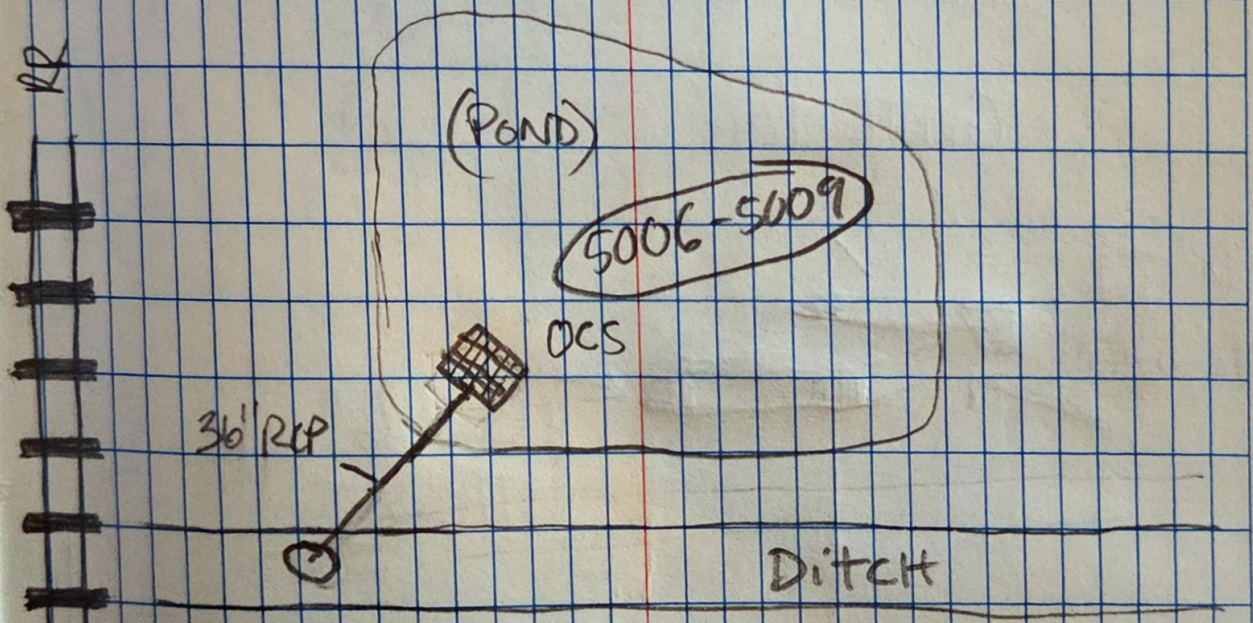
#32 - Sheet 19

Company - Baker Constructors (sitework)

New Construction Area with Detention Baisins IN Area of Canal Path. # 32 NO longer present @ time of survey

OCS #99 9/4/2025 IM AB

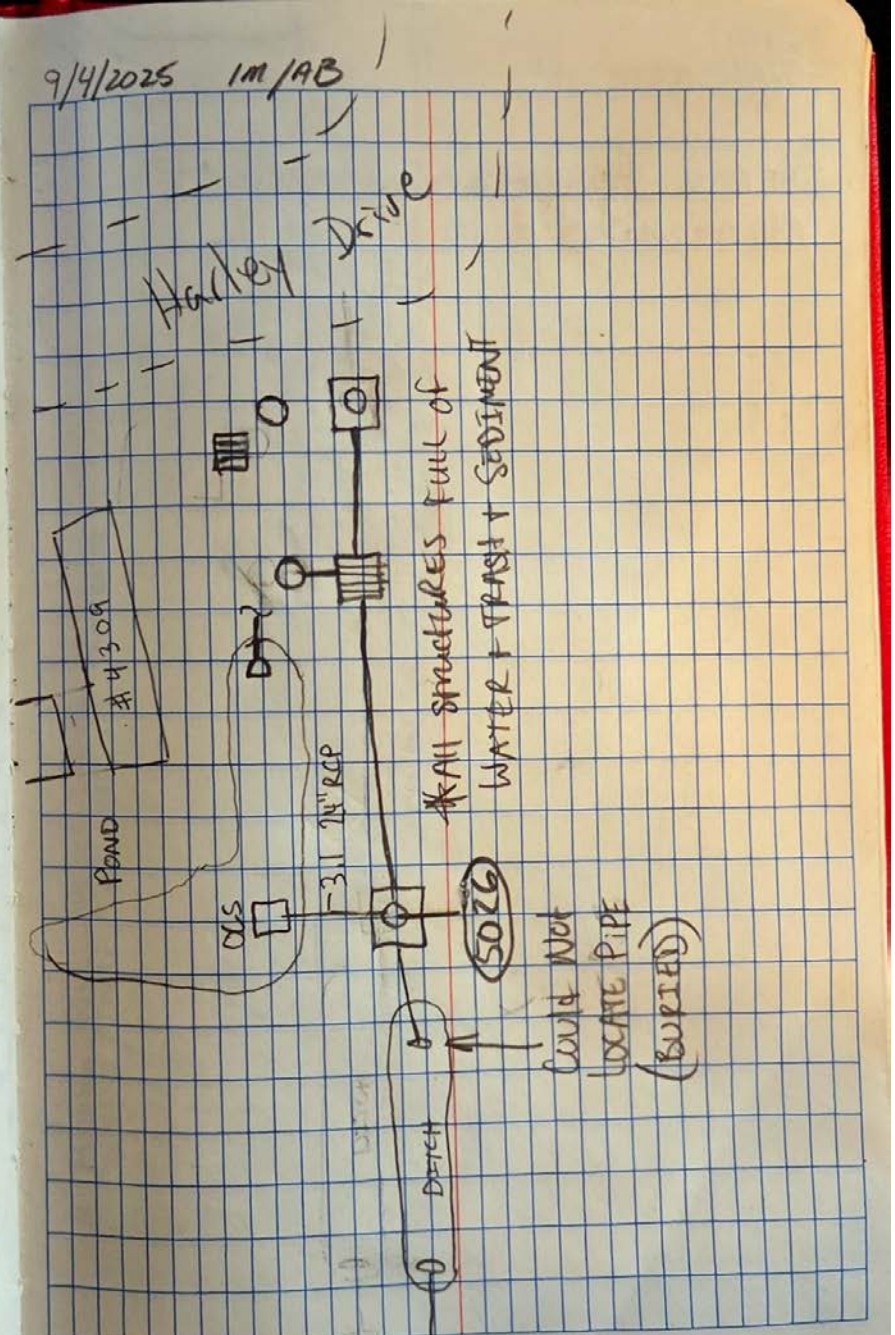




SHEET 8 INVESTIGATION AREA



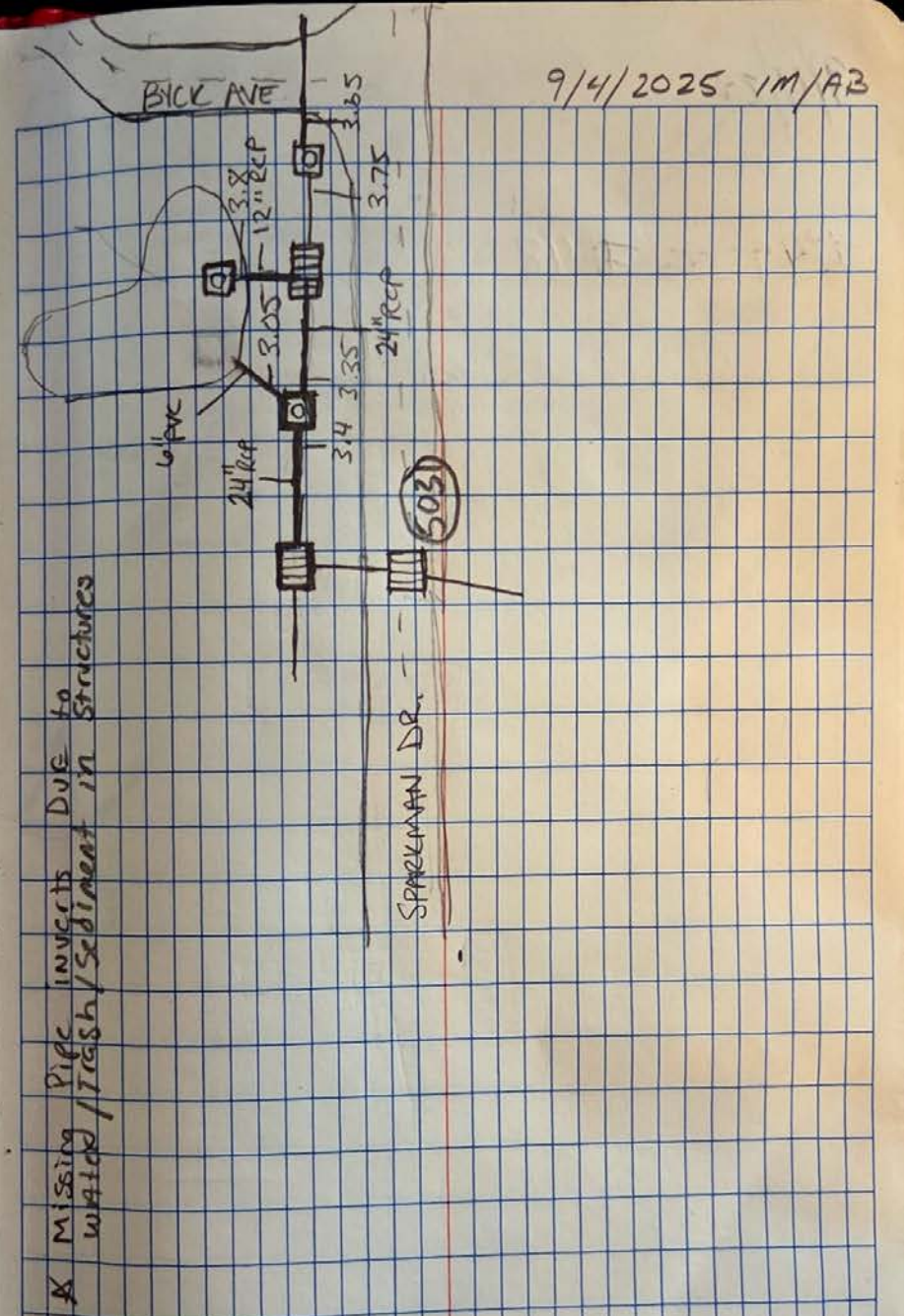
9/4/2025 IM/AB



9/4/25

SHEET 8 INVESTIGATION AREA
CONTINUED

9/4/2025 IM/AB

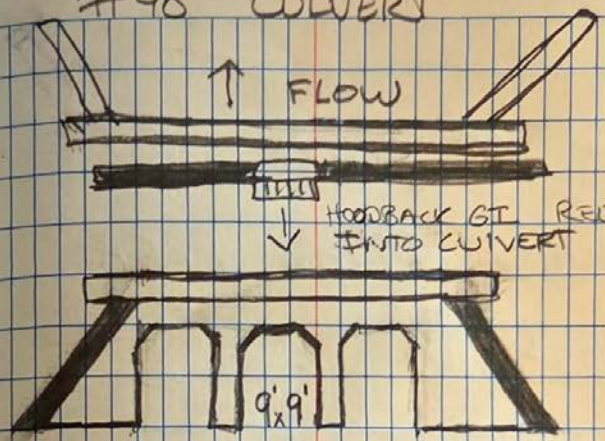


Missing Pipe Invert Due to water/Trash/Sediment in Structures

9/4/25

#49 & #48

#48 CULVERT



$052

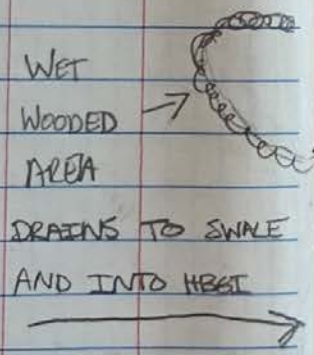
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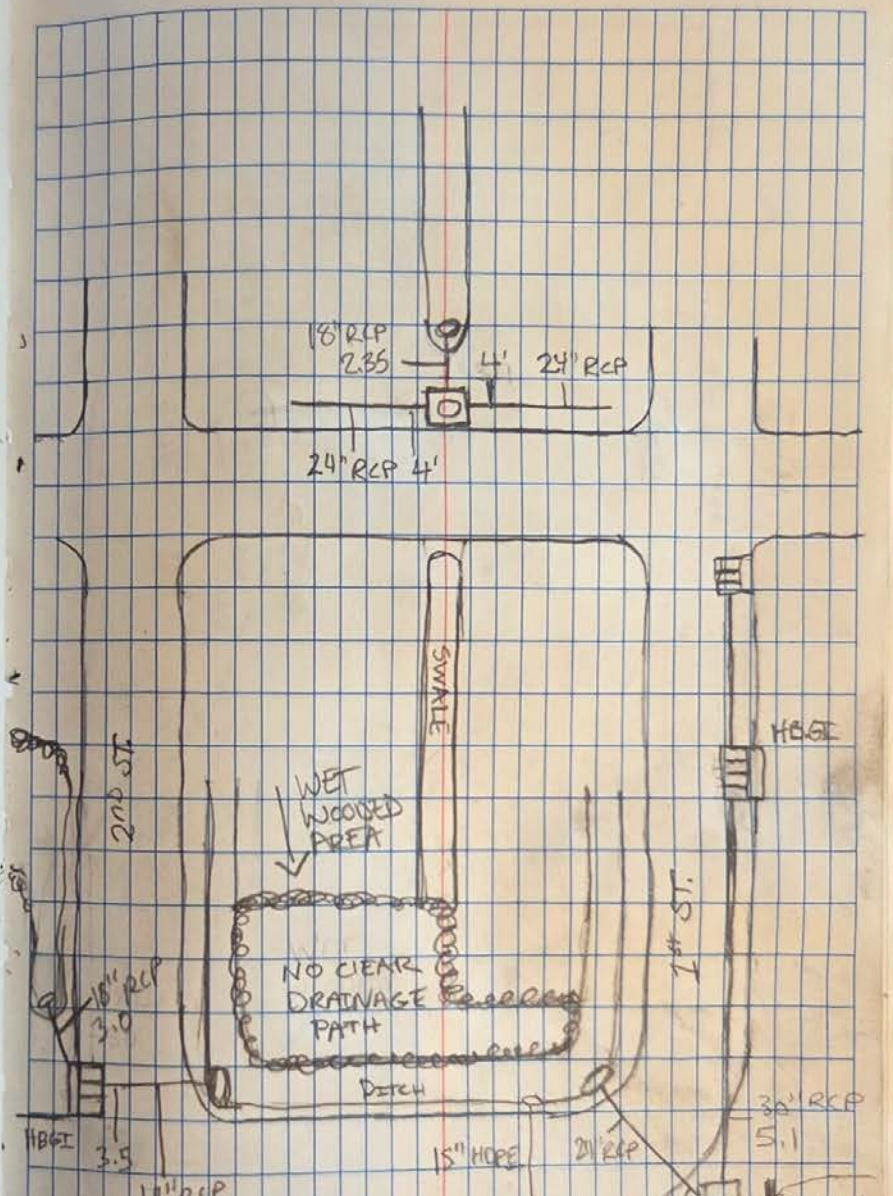
9/4/25

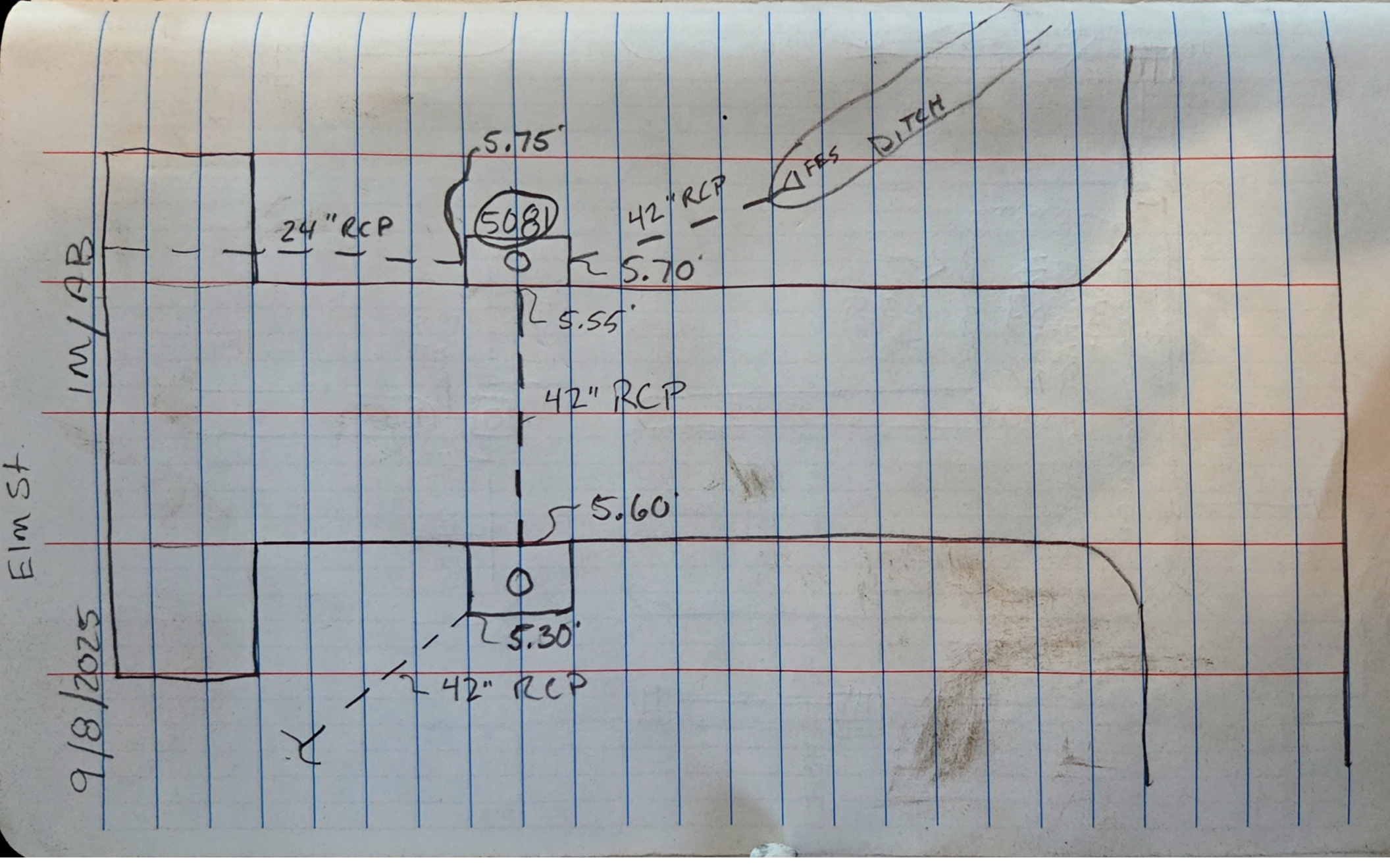
1st + 2nd Street

INVESTIGATION AREA

Sheet 18



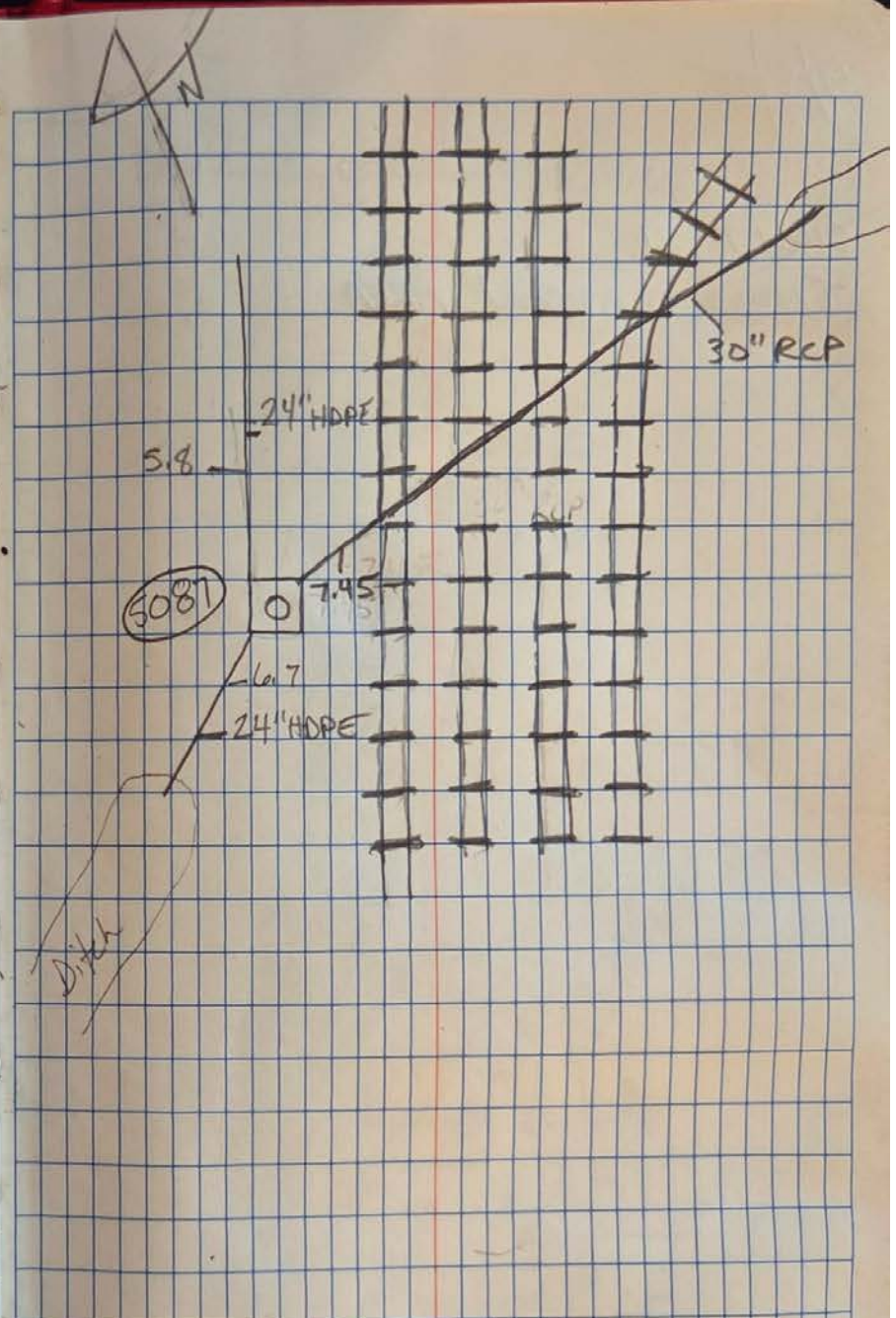



5.75'
5081
24" RCP
42" RCP
5.70'
5.55'
42" RCP
5.60'
5.30'
42" RCP
IN/AB
FES DITCH
Elm St.
9/8/2025

9/8/25

SHEET 7

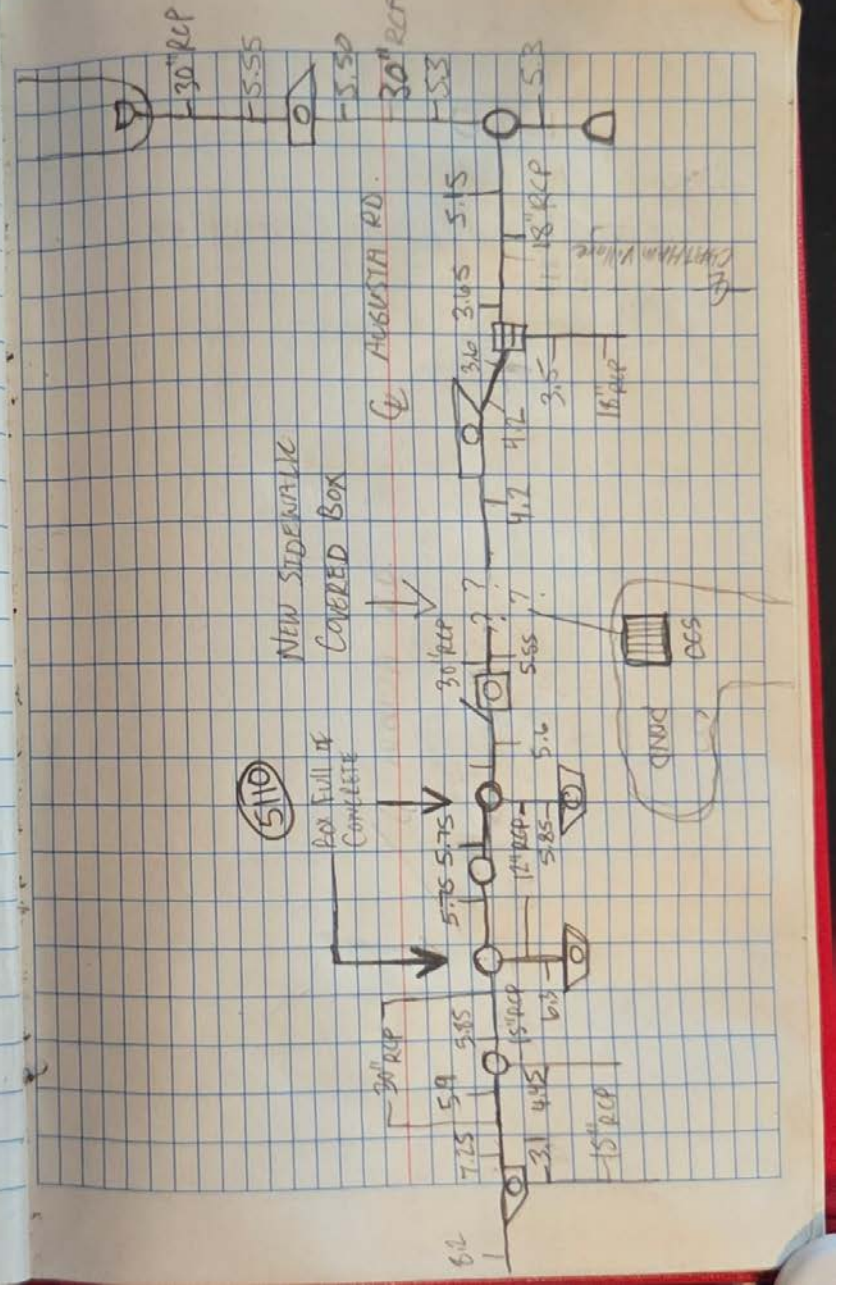
#80 + #81



9/8/25

SHEET 7

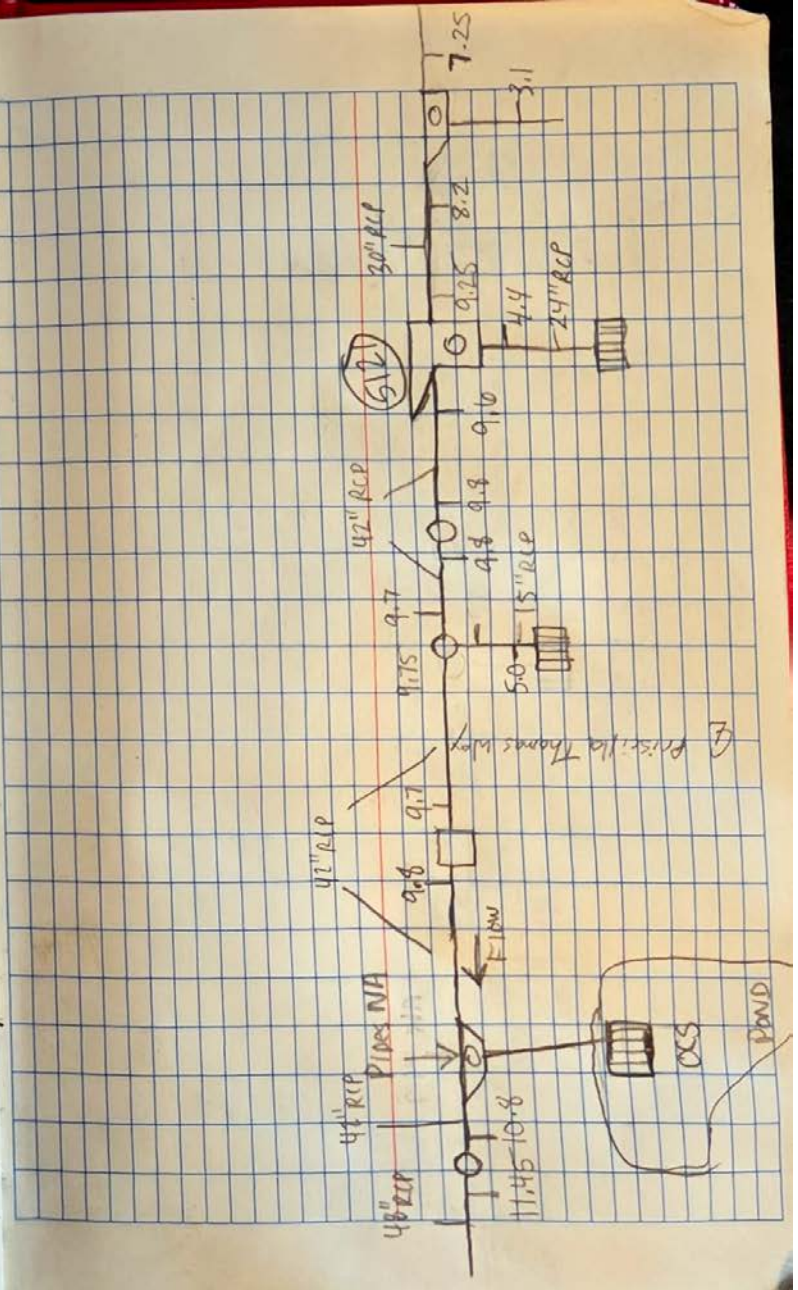
INVESTIGATION AREA



9/8/25

SHEET 7

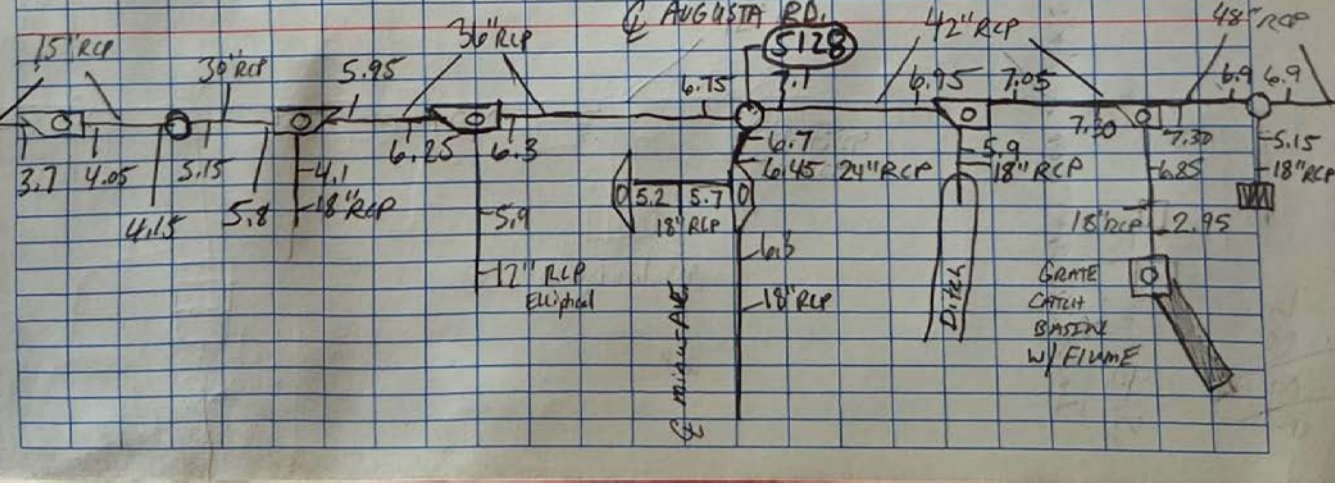
INVESTIGATION AREA CONTINUED



9/8/25

SHEET 17

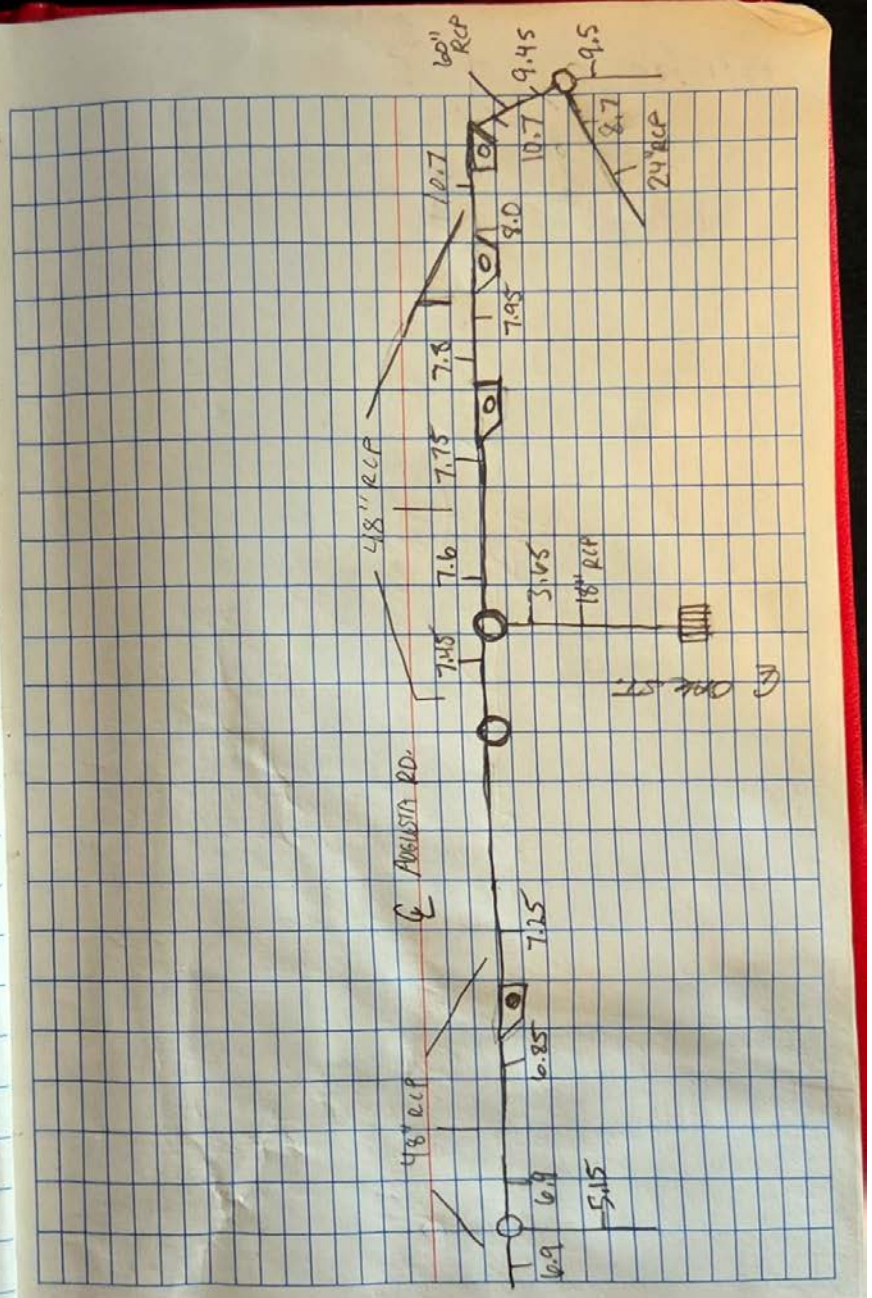
INVESTIGATION AREA



9/8/25

SHEET 17

INVESTIGATION AREA CONTINUED



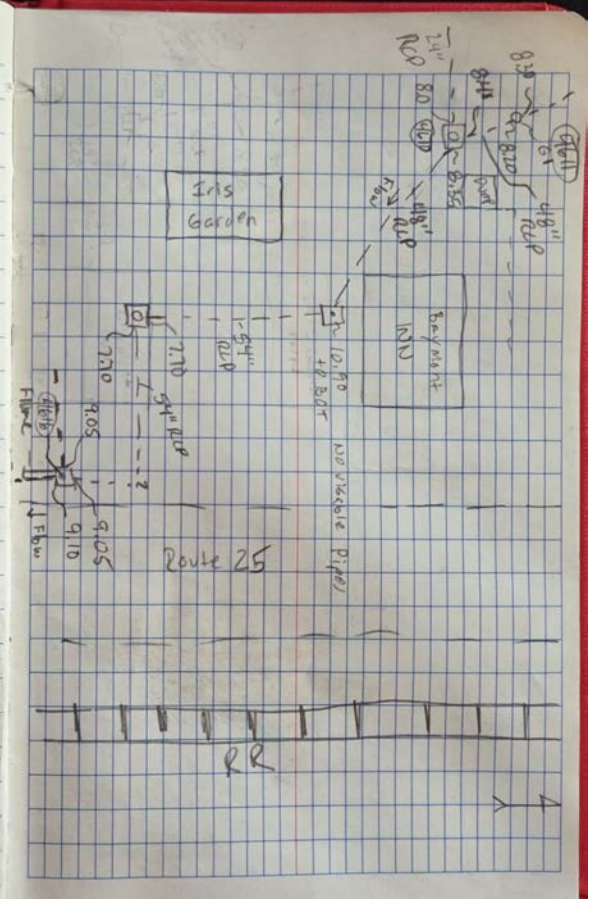
9/11/25

Sheet 15

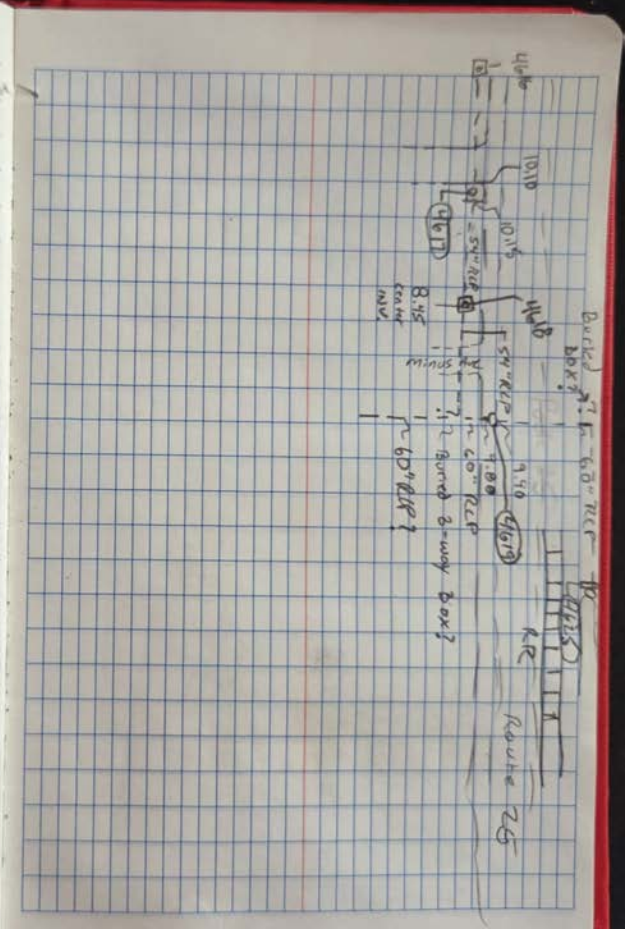
9/15/2025

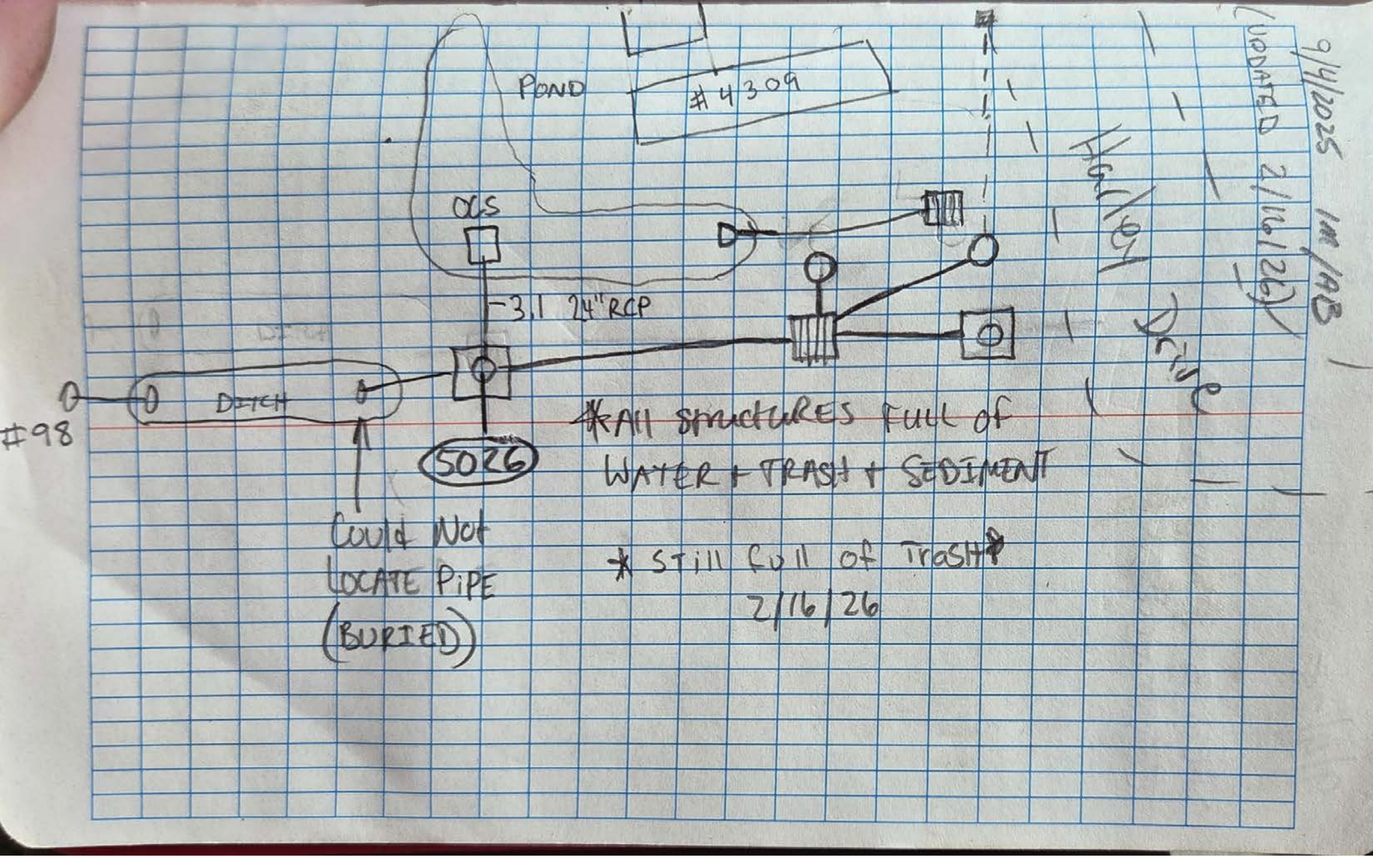
Sheet 16 + 17

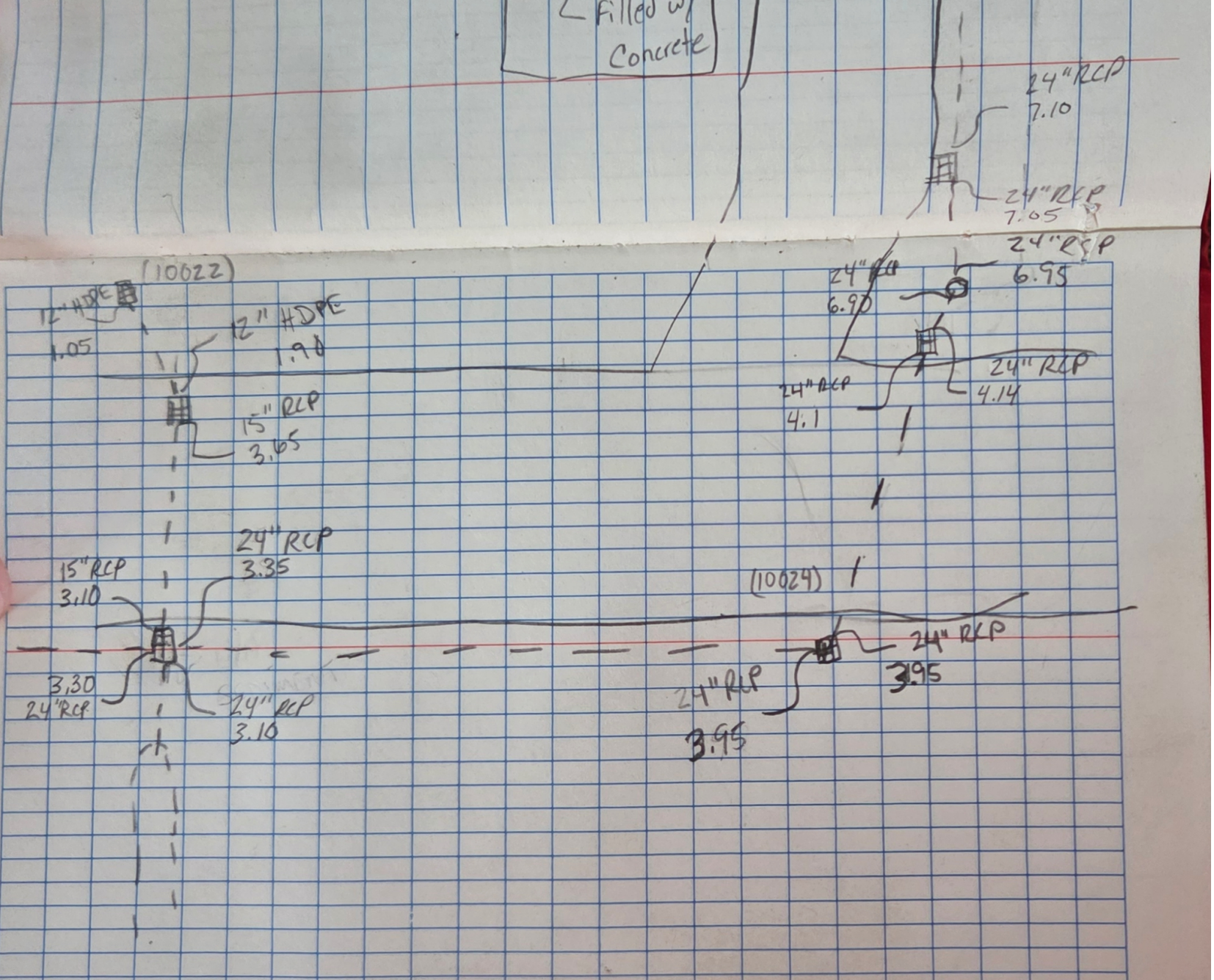
Investigation Area

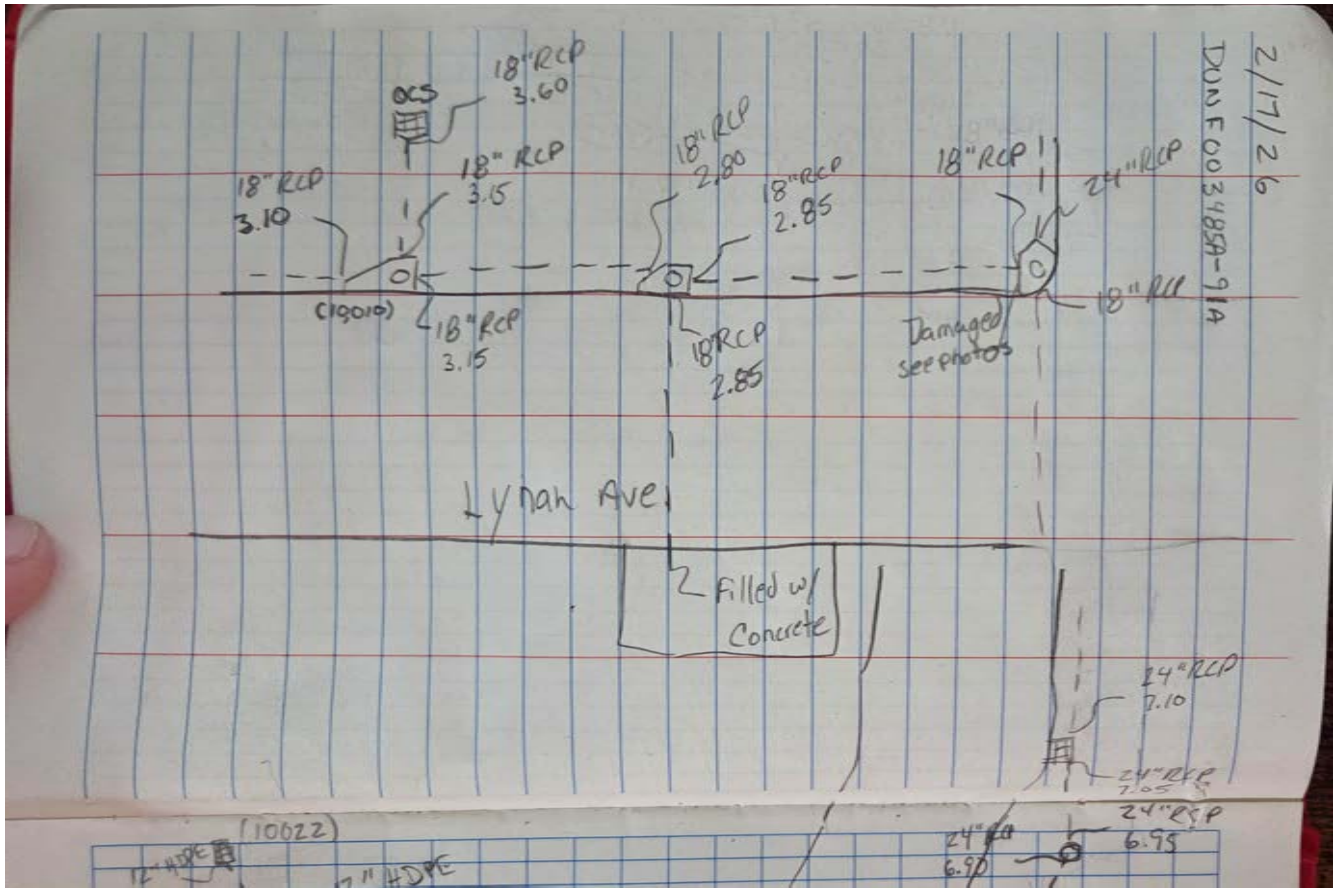


Sheet 16+17 Continued




POND
#4309
OCS
-3.1 24" RCP
DITCH
#98
5026
Could Not
LOCATE PIPE
(BURIED)
*All structures full of
WATER + TRASH + SEDIMENT
* Still Full of Trash*
2/16/26
9/4/2025 1M/1AB
(UPDATED 2/16/26)


Filled w/ Concrete
24" RCP
7.10
24" RCP
7.05
(10022)
12" HDPE
1.05
12" HDPE
1.90
15" RCP
3.65
24" RCP
6.90
24" RCP
6.95
24" RCP
4.1
24" RCP
4.14
15" RCP
3.10
24" RCP
3.35
(10024)
3.30
24" RCP
24" RCP
3.10
24" RCP
3.95
24" RCP
3.95


2/17/26
DUMF00348SA-91A
18" RCP
3.60
OCS
18" RCP
3.15
18" RCP
3.10
18" RCP
2.80
18" RCP
2.85
18" RCP
24" RCP
18" RCP
(10010)
18" RCP
3.15
18" RCP
2.85
Damaged
see photos
Lyman Ave
Filled w/
Concrete
24" RCP
7.10
24" RCP
7.05
24" RCP
6.95
24" RCP
6.90
(10022)
12" HDPE
12" HDPE

8.2 Appendix B – Level of Service Tables

Conduit Name	US Invert Elevation (ft NAVD88)	DS Invert Elevation (ft NAVD88)	US Inlet Type	DS Inlet Type	Length	Manning's N	Entrance Loss Coefficient	Exit Loss Coefficient	Conduit Shape	Rise	Span	Number of Barrels	Culvert Code	Slope (%)	Material	US Data Source	DS Data Source	Ownership	Political Area	Level of Service	US Sediment Depth	DS Sediment Depth	SWI Facility ID
BR-DUNA001000A	-3.8	-3.8	N/A	N/A	47.7	0.035	0.5	0.5	BRIDGE	8.9	0	1		N/A	N/A	SURVEY	SURVEY	Assumed RR	Chatham County	>100			
BR-DUNA001450A	-2.8	-2.8	N/A	N/A	81.8	0.035	0.5	0.5	BRIDGE	7.35	0	1		N/A	N/A	SURVEY	SURVEY	Assumed RR	Chatham County	>100			
BR-DUNA001600A	-2.52	-2.52	N/A	N/A	101.3	0.035	0.5	0.5	BRIDGE	10	0	1		N/A	N/A	SURVEY	SURVEY	UNK	Garden City	>100			
BR-DUNA002650A	-0.918	-0.92	N/A	N/A	46.8	0.035	0.5	0.5	BRIDGE	7.88	0	1		N/A	N/A	SURVEY	SURVEY	UNK	Savannah	10			
DUNA001725A	-0.692	-0.827	JB	HW	91.7	0.013	0.35	0.5	RECTANGULAR	8	10	3		0.15%	CC	CHATHAM_PLANS	CHATHAM_PLANS	State	Garden City	>100			291
DUNA001726A	8	3.25	JB	JB	699.7	0.013	0.35	0.95	CIRCULAR	3	0	1		0.68%	RCP	CHATHAM_PLANS	CHATHAM_PLANS	State	Garden City	>100			239
DUNA001750A	-0.47	-0.692	HW	JB	247.9	0.013	0.5	0.25	RECTANGULAR	8	10	3		0.09%	CC	CHATHAM_PLANS	CHATHAM_PLANS	State	Garden City	>100			239
DUNA001810A	3.8	3.3	JB	HW	431.5	0.013	0.35	0.5	CIRCULAR	5	0	1		0.12%	RCP	SURVEY	CHATHAM_PLANS	State	Garden City	>100			
DUNA001815A	3.98	3.8	CB	JB	112.8	0.013	0.35	0.25	CIRCULAR	5	0	1		0.16%	RCP	SURVEY	SURVEY	State	Garden City	>100			43
DUNA001820A	5.01	3.98	CB	CB	165.0	0.013	0.35	0.41	CIRCULAR	4	0	1		0.62%	RCP	SURVEY	SURVEY	State	Garden City	>100			
DUNA001830A	5.65	5.06	CB	CB	156.3	0.013	0.35	0.25	CIRCULAR	4	0	1		0.38%	RCP	SURVEY	SURVEY	State	Garden City	50			
DUNA001840A	6.14	5.65	JB	CB	122.4	0.013	0.35	0.25	CIRCULAR	4	0	1		0.40%	RCP	SURVEY	SURVEY	State	Garden City	25	0% - 25%		
DUNA001845A	6.33	6.19	JB	JB	44.6	0.013	0.35	0.25	CIRCULAR	4	0	1		0.31%	RCP	SURVEY	SURVEY	State	Garden City	5		0% - 25%	
DUNA001900A	-1.314	-1.341	HW	HW	71.3	0.013	0.5	0.5	RECTANGULAR	8	10	3		0.04%	CC	CHATHAM_PLANS	CHATHAM_PLANS	State	Garden City	>100			293
DUNA002000A	-1.255	-1.209	HW	HW	64.8	0.013	0.5	0.5	RECTANGULAR	8	10	3		-0.07%	CC	CHATHAM_PLANS	CHATHAM_PLANS	State	Garden City	>100			294
DUNA002015A	1.48	1.2	JB	HW	10.7	0.013	0.35	1	CIRCULAR	2.5	0	1		2.61%	RCP	SURVEY	SURVEY	Garden City	Garden City	<2		0% - 25%	56
DUNA002020A	1.928	1.48	HW	JB	33.3	0.013	0.9	0.25	CIRCULAR	2	0	1		1.35%	RCP	SURVEY	SURVEY	Garden City	Garden City	<2	51% - 75%		56
DUNA002030A	1.93	1.48	CB	JB	396.5	0.013	0.35	0.95	CIRCULAR	2.5	0	1		0.11%	RCP	SURVEY	SURVEY	Garden City	Garden City	2			56
DUNA002035A	3.398	1.93	CB	CB	214.1	0.013	0.35	0.25	CIRCULAR	2.5	0	1		0.69%	RCP	SITE_VISIT	SURVEY	Garden City	Garden City	5	0% - 25%		96
DUNA002040A	4.2	3.398	CB	CB	62.5	0.013	0.35	0.68	CIRCULAR	2.5	0	1		1.28%	RCP	SITE_VISIT	SITE_VISIT	Garden City	Garden City	2	0% - 25%	0% - 25%	96
DUNA002045A	9.92	4.2	JB	CB	146.1	0.013	0.35	0.68	CIRCULAR	2	0	1		3.92%	RCP	SURVEY	SITE_VISIT	Garden City	Garden City	<2		0% - 25%	95
DUNA002050A	11.74	9.92	CB	JB	141.8	0.013	0.35	0.25	CIRCULAR	2	0	1		1.28%	RCP	SITE_VISIT	SURVEY	Garden City	Garden City	<2			95
DUNA002055A	11.944	11.74	CB	CB	34.2	0.013	0.35	0.25	CIRCULAR	2	0	1		0.60%	RCP	SITE_VISIT	SITE_VISIT	Garden City	Garden City	<2			95
DUNA002060A	12.242	11.944	CB	CB	32.8	0.013	0.35	0.95	CIRCULAR	1.5	0	1		0.91%	RCP	SITE_VISIT	SITE_VISIT	Garden City	Garden City	<2			95
DUNA002200A	-2.31	-2.308	CB	HW	15.0	0.013	0.35	0.5	RECTANGULAR	9	9	3		-0.01%	CC	SURVEY	SURVEY	State	Garden City	50	0% - 25%	0% - 25%	299
DUNA002300A	-2.324	-2.31	HW	CB	48.7	0.013	0.5	0.25	RECTANGULAR	9	9	3		-0.03%	CC	SURVEY	SURVEY	State	Garden City	>100	0% - 25%	0% - 25%	298
DUNA002500A	-0.95	-1.12	HW	HW	145.9	0.013	0.35	0.5	RECTANGULAR	7	10	3		0.12%	CC	CHATHAM_PLANS	CHATHAM_PLANS	State	Garden City	>100		0% - 25%	300
DUNA003000A	1.87	1.745	HW	HW	61.3	0.013	0.5	0.5	RECTANGULAR	6	6	2		0.20%	CC	CHATHAM_PLANS	CHATHAM_PLANS	Savannah	Savannah	50			6006
DUNA003150A	3.73	3.61	HW	HW	70.0	0.013	0.5	0.5	CIRCULAR	4	0	1	3	0.17%	RCP	SURVEY	SURVEY	Savannah	Savannah	>100			21175
DUNA003300A	2.158	1.73	CB	HW	441.0	0.024	0.35	0.5	CIRCULAR	4	0	1		0.10%	RMP	SURVEY	SURVEY	Savannah	Savannah	10			20731
DUNA003400A	2.565	2.358	CB	CB	48.6	0.013	0.35	0.5	CIRCULAR	4	0	1		0.43%	RCP	SURVEY	SURVEY	Savannah	Savannah	5			20731
DUNA003500A	3.504	2.565	HW	CB	229.9	0.013	0.5	0.25	CIRCULAR	4	0	1		0.41%	RCP	SURVEY	SURVEY	Savannah	Savannah	10			22333
DUNA003600A	3.522	3.26	HW	HW	93.7	0.013	0.5	0.5	CIRCULAR	4	0	1	3	0.28%	RCP	SURVEY	SURVEY	Savannah	Savannah	>100			19437
DUNA003800A	3.937	4.327	HW	HW	54.2	0.013	0.5	0.5	CIRCULAR	5	0	1	3	-0.72%	RCP	SURVEY	SURVEY	UNK	Savannah	10			21174
DUNA003920A	5.668	5.525	HW	HW	84.5	0.013	0.5	0.5	CIRCULAR	4	0	1	3	0.17%	RCP	SURVEY	SURVEY	UNK	Savannah	50			20735
DUNA004000A	5.3	5.824	HW	HW	195.6	0.013	0.5	0.5	CIRCULAR	4	0	1	3	-0.27%	RCP	SURVEY	SURVEY	Assumed RR	Savannah	>100			21173
DUNA004110A	4.547	4.3	HW	HW	22.1	0.013	0.5	0.5	CIRCULAR	1.25	0	1	3	1.12%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUNA004120A	5.6	4.878	CB	HW	301.0	0.013	0.35	0.5	CIRCULAR	3	0	1		0.24%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUNA004125A	6.537	5.6	HW	CB	396.1	0.013	0.5	0.25	CIRCULAR	3	0	1		0.24%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUNA004151A	5.047	5.007	HW	HW	42.3	0.015	0.5	0.9	CIRCULAR	2	0	1	10	0.10%	HDPE	SURVEY	SURVEY	UNK	Garden City	<2			
DUNA004205A	4.714	4.706	HW	HW	25.1	0.013	0.5	0.5	CIRCULAR	1.25	0	1	3	0.03%	RCP	SURVEY	SURVEY	UNK	Garden City	2			
DUNA004220A	8.061	7.983	HW	HW	72.6	0.013	0.5	0.5	CIRCULAR	1.5	0	1	3	0.11%	RCP	SURVEY	SURVEY	UNK	Garden City	10			
DUNA004400A	3.37	4.04	HW	HW	113.2	0.013	0.5	0.5	RECTANGULAR	5	8	1	1	-0.59%	CC	SURVEY	SURVEY	Garden City	Garden City	>100	0% - 25%	26% - 50%	158
DUNA004600A	5.794	5.706	HW	HW	14.6	0.02	0.5	1	CIRCULAR	2.5	0	1	1	0.60%	CMP	GC_SWI	GC_SWI	Private - Non Residential	Garden City	<2	0% - 25%	0% - 25%	387
DUNA004800A	6.734	6.642	HW	HW	40.7	0.024	0.5	0.9	CIRCULAR	1.5	0	1	6	0.23%	CMP	SURVEY	SURVEY	Private - Non Residential	Garden City	>100	0% - 25%	0% - 25%	361
DUNB000100A	-0.34	-0.514	HW	HW	43.3	0.013	0.5	0.5	CIRCULAR	3	0	1	3	0.40%	RCP	SURVEY	SURVEY	UNK	Chatham County	25			
DUNB000300A	1.738	2.154	HW	HW	320.8	0.013	0.5	0.5	CIRCULAR	3	0	1	3	-0.13%	RCP	SURVEY	SURVEY	UNK	Chatham County	<2			
DUNB000450A	3.577	0.77	HW	HW	142.8	0.013	0.5	0.5	CIRCULAR	3	0	1		1.97%	RCP	SURVEY	SURVEY	UNK	Chatham County	5			
DUNB000510A	4.979	4.693	JB	HW	47.6	0.013	0.35	0.5	CIRCULAR	3	0	1		0.60%	RCP	SURVEY	SURVEY	UNK	Chatham County	>100			
DUNB000520A	5.43	4.979	JB	JB	113.3	0.013	0.35	0.35	CIRCULAR	3	0	1		0.40%	RCP	SURVEY	SURVEY	UNK	Chatham County	>100			

Conduit Name	US Invert Elevation (ft NAVD88)	DS Invert Elevation (ft NAVD88)	US Inlet Type	DS Inlet Type	Length	Manning's N	Entrance Loss Coefficient	Exit Loss Coefficient	Conduit Shape	Rise	Span	Number of Barrels	Culvert Code	Slope (%)	Material	US Data Source	DS Data Source	Ownership	Political Area	Level of Service	US Sediment Depth	DS Sediment Depth	SWI Facility ID
DUNB000600A	5.896	5.43	HW	JB	116.5	0.013	0.5	0.63	CIRCULAR	3	0	1		0.40%	RCP	SURVEY	SURVEY	UNK	Chatham County	<2			
DUNB000900A	9.92	8.728	HW	HW	209.4	0.013	0.9	0.5	CIRCULAR	2	0	1		0.57%	RCP	SURVEY	SURVEY	UNK	Chatham County	<2			
DUNC000003A	2.209	0.145	HW	HW	79.8	0.02	0.9	0.5	CIRCULAR	3	0	1		2.59%	UNK	ASSUMED	ASSUMED	UNK	Chatham County	5			
DUNC000100A	1.449	1.458	HW	HW	32.7	0.013	0.5	0.5	CIRCULAR	2.5	0	1	3	-0.03%	RCP	SURVEY	SURVEY	Assumed Chatham	Chatham County	<2			
DUNC000300A	3.066	2.5	HW	HW	60.2	0.02	0.9	0.5	CIRCULAR	2.5	0	1		0.94%	UNK	ASSUMED	ASSUMED	Assumed Chatham	Chatham County	2	0%-25%	0%-25%	371
DUNC000450A	3.622	3.146	HW	HW	64.7	0.013	0.9	0.5	CIRCULAR	2	0	1		0.74%	RCP	SURVEY	SURVEY	Assumed Chatham	Chatham County	<2			
DUNC000600A	5.464	4.492	HW	HW	63.8	0.013	0.5	0.5	CIRCULAR	2	0	1	3	1.52%	RCP	SURVEY	SURVEY	Assumed Chatham	Chatham County	<2			
DUNC000900A	10.107	10.18	HW	HW	62.7	0.013	0.5	0.5	CIRCULAR	3	0	1	3	-0.12%	RCP	SURVEY	SURVEY	Assumed RR	Chatham County	>100			
DUNC001100A	13.305	12.852	HW	HW	97.3	0.013	0.5	0.5	CIRCULAR	1.5	0	1	3	0.47%	RCP	SURVEY	SURVEY	Assumed RR	Chatham County	10			
DUNC001300A	12.379	10.769	HW	HW	230.9	0.02	0.9	0.5	CIRCULAR	2.5	0	1		0.70%	UNK	SURVEY	SURVEY	Assumed RR	Chatham County	5			
DUND000010A	-2.55	-2.695	JB	HW	51.2	0.013	0.35	0.5	CIRCULAR	5	0	1		0.28%	RCP	ASSUMED	SURVEY	Assumed State	Chatham County	>100			
DUND000100B	-0.339	-0.738	HW	HW	59.6	0.013	0.35	0.5	CIRCULAR	4	0	1		0.67%	CC	SURVEY	SURVEY	UNK	Chatham County	<2			
DUND000110A	3.01	2.07	JB	JB	232.3	0.013	0.35	0.47	CIRCULAR	4	0	1		0.41%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUND000115A	3.709	3.01	CB	JB	87.1	0.013	0.35	0.63	CIRCULAR	4	0	1		0.80%	RCP	SURVEY	SURVEY	UNK	Garden City	2			
DUND000120A	2.07	2.91	JB	JB	238.6	0.013	0.35	0.25	CIRCULAR	4.5	0	1		-0.35%	RCP	SURVEY	SURVEY	UNK	Garden City	50			
DUND000130A	2.91	2.479	JB	JB	138.5	0.013	0.35	0.41	CIRCULAR	4.5	0	1		0.31%	RCP	SURVEY	SURVEY	UNK	Garden City	5			
DUND000140A	2.479	1.003	JB	JB	222.8	0.013	0.35	0.25	CIRCULAR	4.5	0	1		0.66%	RCP	SURVEY	SURVEY	UNK	Garden City	25			
DUND000150A	1.003	0.782	JB	JB	224.3	0.013	0.35	0.35	CIRCULAR	4.5	0	1		0.10%	RCP	SURVEY	SURVEY	UNK	Garden City	50			
DUND000160A	0.782	-0.35	JB	JB	124.7	0.02	0.35	0.91	CIRCULAR	4.5	0	1		0.91%	UNK	SURVEY	SURVEY	UNK	Garden City	5			
DUND000165A	-0.35	-0.8	JB	JB	182.4	0.013	0.35	0.95	CIRCULAR	5	0	1		0.25%	RCP	SURVEY	ASSUMED	Assumed State	Garden City	10			
DUND000200	3.94	3.709	HW	CB	141.5	0.013	0.9	0.25	CIRCULAR	4	0	1		0.16%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUND000400A	6.31	5.98	HW	HW	60.2	0.013	0.9	1	CIRCULAR	3.5	0	1		0.55%	RCP	SURVEY	SURVEY	UNK	Garden City	25			
DUND000540A	7.17	6.696	CB	HW	62.8	0.013	0.35	0.5	CIRCULAR	3.5	0	1		0.76%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUND000550B	7.5	7.17	CB	CB	27.0	0.013	0.35	0.86	CIRCULAR	3.5	0	1		1.22%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUND000600A	8.297	7.5	HW	CB	84.5	0.015	0.9	0.72	CIRCULAR	3.5	0	1		0.94%	HDPE	SURVEY	SURVEY	UNK	Garden City	<2			
DUND000800A	10.73	9.596	CB	HW	221.6	0.015	0.35	0.5	CIRCULAR	2.5	0	1		0.51%	HDPE	SURVEY	SURVEY	Assumed RR	Garden City	>100			
DUND000900A	10.841	10.73	HW	CB	21.0	0.013	0.35	0.5	CIRCULAR	2	0	1		0.53%	RCP	SURVEY	SURVEY	Assumed RR	Garden City	>100			
DUND000920A	11.479	11.677	HW	HW	13.1	0.013	0.5	0.5	CIRCULAR	2.5	0	1	3	-1.51%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUND000940A	11.928	11.28	HW	HW	16.3	0.013	0.35	0.5	CIRCULAR	2	0	1		3.98%	RCP	SURVEY	SURVEY	UNK	Garden City	10			
DUND001001A	12.771	12.685	CB	HW	19.6	0.013	0.35	1	CIRCULAR	2.5	0	1		0.44%	RCP	SURVEY	SURVEY	Assumed State	Garden City	>100			
DUND001002A	13.355	12.771	JB	CB	97.4	0.013	0.35	0.25	CIRCULAR	2.5	0	1		0.60%	RCP	SURVEY	SURVEY	Assumed State	Garden City	>100			
DUND001010A	13.44	13.355	HW	JB	18.5	0.013	0.9	0.25	CIRCULAR	2.5	0	1		0.46%	RCP	SURVEY	SURVEY	Assumed State	Garden City	>100			
DUND001020A	13.84	13.44	CB	JB	134.0	0.013	0.35	0.95	CIRCULAR	1.5	0	1		0.30%	RCP	SURVEY	SURVEY	Assumed State	Garden City	<2			
DUND001100A	14.136	13.84	CB	CB	42.1	0.013	0.35	0.47	CIRCULAR	1.5	0	1		0.70%	RCP	SURVEY	SURVEY	Assumed State	Garden City	<2			
DUND001110A	13	14.136	JB	CB	61.2	0.013	0.35	0.53	CIRCULAR	2.5	0	1		-1.86%	RCP	CHATHAM_PLANS	CHATHAM_PLANS	Private	Garden City	>100			
DUND001110B	13	12.43	JB	CB	94.9	0.013	0.35	0.25	CIRCULAR	2.5	0	1		0.60%	RCP	CHATHAM_PLANS	CHATHAM_PLANS	Private	Garden City	>100			
DUND001115A	13.25	13	OCS	CB	46.5	0.013	0.35	0.86	CIRCULAR	2	0	1		0.54%	RCP	CHATHAM_PLANS	CHATHAM_PLANS	Private	Garden City	>100			
DUND002000A	0.043	-0.35	CB	JB	229.8	0.013	0.35	0.25	CIRCULAR	5	0	1		0.17%	RCP	SITE_VISIT	SURVEY	UNK	Garden City	50			
DUND002010A	5.15	5.043	CB	CB	199.4	0.013	0.35	0.95	CIRCULAR	2	0	1		0.05%	RCP	SITE_VISIT	SITE_VISIT	UNK	Garden City	<2			
DUND002020A	5.2	5.15	CB	CB	38.3	0.013	0.35	0.95	CIRCULAR	2	0	1		0.13%	RCP	SITE_VISIT	SITE_VISIT	UNK	Garden City	<2			
DUND002100A	1.118	0.043	CB	CB	41.4	0.013	0.35	0.95	CIRCULAR	5	0	1		2.60%	RCP	SITE_VISIT	SITE_VISIT	UNK	Garden City	25			
DUND002200A	2.424	1.118	CB	CB	247.1	0.013	0.35	0.95	CIRCULAR	5	0	1		0.53%	RCP	SITE_VISIT	SITE_VISIT	UNK	Garden City	50			
DUND002300A	3.337	2.424	CB	CB	187.0	0.013	0.35	0.47	CIRCULAR	5	0	1		0.49%	RCP	SITE_VISIT	SITE_VISIT	UNK	Garden City	25			
DUND002400A	3.73	3.337	CB	CB	155.5	0.013	0.35	0.47	CIRCULAR	5	0	1		0.25%	RCP	SITE_VISIT	SITE_VISIT	UNK	Garden City	25			
DUND002500A	5.03	3.73	CB	CB	450.9	0.013	0.35	0.41	CIRCULAR	5	0	1		0.29%	RCP	SITE_VISIT	SITE_VISIT	UNK	Garden City	50			

Conduit Name	US Invert Elevation (ft NAVD88)	DS Invert Elevation (ft NAVD88)	US Inlet Type	DS Inlet Type	Length	Manning's N	Entrance Loss Coefficient	Exit Loss Coefficient	Conduit Shape	Rise	Span	Number of Barrels	Culvert Code	Slope (%)	Material	US Data Source	DS Data Source	Ownership	Political Area	Level of Service	US Sediment Depth	DS Sediment Depth	SWI Facility ID
DUND002600A	5.93	5.03	CB	CB	228.3	0.013	0.35	0.53	CIRCULAR	5	0	1		0.39%	RCP	SITE_VISIT	SITE_VISIT	UNK	Garden City	>100			
DUND002700A	7.153	5.93	CB	CB	267.6	0.013	0.35	0.63	CIRCULAR	5	0	1		0.46%	RCP	SITE_VISIT	SITE_VISIT	Assumed State	Garden City	>100			
DUND002800A	7.4	7.153	CB	CB	268.3	0.013	0.35	0.25	CIRCULAR	5	0	1		0.09%	RCP	SITE_VISIT	SITE_VISIT	Assumed State	Garden City	>100			
DUND002900A	7.78	7.4	CB	CB	180.6	0.013	0.35	0.25	CIRCULAR	5	0	1		0.21%	RCP	SITE_VISIT	SITE_VISIT	Assumed State	Garden City	>100			
DUND003000A	8.563	7.78	CB	CB	509.0	0.013	0.35	0.25	CIRCULAR	4.5	0	1		0.15%	RCP	SITE_VISIT	SITE_VISIT	Assumed State	Garden City	>100			
DUND003100A	9	8.563	CB	CB	367.5	0.013	0.35	0.25	CIRCULAR	4.5	0	1		0.12%	RCP	SITE_VISIT	SITE_VISIT	Assumed State	Garden City	>100			
DUND003200B	9.15	9	CB	CB	97.3	0.013	0.35	0.95	CIRCULAR	4.5	0	1		0.15%	RCP	SITE_VISIT	SITE_VISIT	Assumed State	Garden City	>100			
DUND003300A	9.44	9.2	CB	CB	165.4	0.013	0.35	0.95	CIRCULAR	4	0	1		0.15%	RCP	SITE_VISIT	SITE_VISIT	Assumed State	Garden City	25			
DUND003400A	10.5	9.94	HW	CB	66.9	0.013	0.9	0.86	CIRCULAR	3	0	1		0.84%	RCP	SITE_VISIT	SITE_VISIT	Assumed State	Garden City	5			
DUNE000000A	1.392	0.58	HW	HW	49.8	0.013	0.5	0.5	CIRCULAR	3.5	0	1	3	1.63%	RCP	SURVEY	SURVEY	Savannah	Savannah	>100			3181
DUNE000200A	6.235	5.35	HW	HW	73.9	0.013	0.5	0.5	CIRCULAR	2.5	0	1	3	1.20%	RCP	SURVEY	SURVEY	Savannah	Savannah	10			3316
DUNE000300A	6.9	6.484	JB	HW	141.0	0.013	0.35	0.5	CIRCULAR	2.5	0	1		0.30%	RCP	SURVEY	SURVEY	Savannah	Savannah	5			2496
DUNE000400A	6.95	6.9	JB	JB	7.2	0.013	0.35	0.25	CIRCULAR	2.5	0	1		0.70%	RCP	SURVEY	SURVEY	Savannah	Savannah	5			4802
DUNE000500A	7.15	6.95	CB	JB	34.3	0.013	0.35	0.25	CIRCULAR	2.5	0	1		0.58%	RCP	SURVEY	SURVEY	Savannah	Savannah	5			4803
DUNE000550A	7.216	7.15	HW	CB	9.7	0.013	0.5	0.25	CIRCULAR	2.5	0	1		0.68%	RCP	SURVEY	SURVEY	Savannah	Savannah	2			7842
DUNE000800A	8.707	8.892	HW	HW	43.5	0.013	0.5	0.5	CIRCULAR	2	0	1	3	-0.43%	RCP	SURVEY	SURVEY	Savannah	Savannah	<2			3179
DUNE000900A	8.815	8.753	HW	HW	65.4	0.013	0.5	0.5	CIRCULAR	2	0	1	3	0.10%	RCP	SURVEY	SURVEY	Savannah	Savannah	<2			3176
DUNE000910A	9.946	8.815	HW	HW	104.1	0.013	0.5	0.5	CIRCULAR	2.5	0	1	3	1.09%	RCP	SURVEY	SURVEY	Savannah	Savannah	2			3177
DUNE000930A	11.136	11.491	HW	HW	51.5	0.013	0.5	0.5	CIRCULAR	0.833	0	1	3	-0.69%	RCP	SURVEY	SURVEY	Savannah	Savannah	50			3912
DUNE000950A	13.012	13.007	HW	HW	53.9	0.013	0.9	0.5	CIRCULAR	2	0	1		0.01%	CC	SURVEY	SURVEY	Savannah	Savannah	<2			4666
DUNF000020A	11.244	9.857	HW	PE	146.6	0.013	0.9	0.5	CIRCULAR	1.5	0	1	3	0.95%	RCP	GC_SWI	GC_SWI	Garden City	Garden City	<2	0% - 25%	0% - 25%	157
DUNF000040A	12.181	11.833	HW	PE	92.2	0.013	0.9	0.5	CIRCULAR	1.5	0	1	3	0.38%	RCP	GC_SWI	GC_SWI	Garden City	Garden City	<2	0% - 25%	0% - 25%	186
DUNF000060A	19.65	19.35	OCS	CB	37.5	0.013	0	0	CIRCULAR	1.5	0	1		0.80%	RCP	SURVEY	SURVEY	UNK	Garden City	10	0% - 25%		125
DUNF000100A	-1.54	-2.03	JB	HW	326.6	0.013	0.9	0.5	RECTANGULAR	9	6.5	1		0.15%	CC	CHATHAM_PLANS	CHATHAM_PLANS	State	Garden City	>100	0% - 25%	0% - 25%	304
DUNF000200A	-1.25	-1.54	JB	JB	176.6	0.013	0.35	0.25	RECTANGULAR	9	6.5	1		0.16%	CC	CHATHAM_PLANS	CHATHAM_PLANS	State	Garden City	>100	0% - 25%	0% - 25%	303
DUNF000300A	-1.32	-1.25	JB	JB	142.9	0.013	0.35	0.25	RECTANGULAR	9	6.5	1		-0.05%	CC	CHATHAM_PLANS	CHATHAM_PLANS	State	Garden City	>100	0% - 25%	0% - 25%	308
DUNF000400A	-1.33	-1.32	JB	JB	207.9	0.013	0.35	0.25	RECTANGULAR	9	6.5	1		-0.01%	CC	CHATHAM_PLANS	CHATHAM_PLANS	State	Garden City	>100	0% - 25%	0% - 25%	320
DUNF000500A	-0.8	-1.33	JB	JB	225.0	0.013	0.35	0.25	RECTANGULAR	9	6.5	1		0.24%	CC	SURVEY	CHATHAM_PLANS	State	Garden City	>100	0% - 25%	0% - 25%	13
DUNF000600A	-0.652	-0.8	CB	JB	70.7	0.013	0.35	0.35	RECTANGULAR	9	6.5	1		0.21%	CC	CHATHAM_PLANS	SURVEY	State	Garden City	>100		0% - 25%	327
DUNF000700A	-0.509	-0.652	CB	CB	84.7	0.013	0.35	0.35	RECTANGULAR	9	6.5	1		0.17%	RCP	CHATHAM_PLANS	CHATHAM_PLANS	State	Garden City	>100			325
DUNF001400A	-0.345	-0.509	HW	CB	108.7	0.013	0.9	0.8	CIRCULAR	6	0	1		0.15%	RCP	SURVEY	CHATHAM_PLANS	State	Garden City	>100			324
DUNF001500A	1.255	1.947	HW	HW	216.1	0.013	0.35	0.5	CIRCULAR	5	0	1		-0.32%	RCP	SURVEY	SURVEY	Private - Non Residential	Garden City	50	0% - 25%	26% - 50%	463
DUNF001850A	7.72	6.33	CB	JB	100.5	0.013	0.35	0.25	CIRCULAR	4	0	1		1.38%	RCP	SURVEY	SURVEY	State	Garden City	10			
DUNF001860A	8.7	7.72	JB	CB	132.0	0.013	0.35	0.25	CIRCULAR	4	0	1		0.74%	RCP	SURVEY	SURVEY	State	Garden City	10	0% - 25%		
DUNF001865A	9.25	8.7	CB	JB	188.3	0.013	0.35	0.25	CIRCULAR	4	0	1		0.29%	RCP	SURVEY	SURVEY	State	Garden City	10		0% - 25%	
DUNF001866A	11.51	11.45	FL	CB	25.9	0.013	0.5	0.95	CIRCULAR	1.5	0	1		0.23%	RCP	SURVEY	SURVEY	State	Garden City	<2	0% - 25%		
DUNF001870A	11	9.25	CB	CB	275.1	0.013	0.35	0.25	CIRCULAR	3.5	0	1		0.64%	RCP	SURVEY	SURVEY	State	Garden City	25			
DUNF001880A	11.5	11.05	JB	CB	168.2	0.013	0.35	0.25	CIRCULAR	3.5	0	1		0.27%	RCP	SURVEY	SURVEY	Assumed State	Garden City	25			
DUNF001900A	1.153	1.053	HW	HW	61.2	0.013	0.5	0.5	RECTANGULAR	5	6	3	1	0.16%	CC	SURVEY	SURVEY	Garden City	Garden City	>100		26% - 50%	203
DUNF001910A	13.2	11.85	CB	JB	220.5	0.013	0.35	0.25	CIRCULAR	3	0	1		0.61%	RCP	SURVEY	SURVEY	Assumed State	Garden City	25			
DUNF001910B	14.02	13.2	CB	CB	211.1	0.013	0.35	0.25	CIRCULAR	3	0	1		0.39%	RCP	SURVEY	SURVEY	Assumed State	Garden City	25			
DUNF001920A	15.31	13.97	JB	CB	195.0	0.013	0.35	0.25	CIRCULAR	2.5	0	1		0.69%	RCP	SURVEY	SURVEY	Assumed State	Garden City	10			
DUNF001930A	15.16	14	JB	CB	40.5	0.013	0.35	0.95	CIRCULAR	1.25	0	1		2.87%	RCP	SURVEY	SURVEY	Assumed State	Garden City	10			

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DUNF001931A	14	13.7	CB	CB	119.4	0.013	0.35	0.95	CIRCULAR	2	0	1		0.25%	RCP	SURVEY	SITE_VISIT	Assumed State	Garden City	5			
DUNF002200A	3.452	3.254	HW	HW	24.3	0.015	0.5	0.5	CIRCULAR	4	0	1	3	0.81%	HDPE	SURVEY	SURVEY	UNK	Garden City	5			
DUNF002310A	1.2	1.006	CB	HW	151.3	0.013	0.35	0.5	RECTANGULAR	8	9	1		0.13%	CC	GC_SWI	SURVEY	Private - Non Residential	Garden City	>100		0% - 25%	412
DUNF002311A	5.35	5.2	CB	CB	68.9	0.013	0.35	0.95	CIRCULAR	2	0	1		0.22%	RCP	GC_SWI	GC_SWI	State	Garden City	>100			435
DUNF002312A	5.72	5.35	CB	CB	176.6	0.013	0.35	0.8	CIRCULAR	1.5	0	1		0.21%	RCP	GC_SWI	GC_SWI	State	Garden City	>100	0% - 25%		435
DUNF002313A	6.5	5.72	CB	CB	361.8	0.013	0.35	0.47	CIRCULAR	1.5	0	1		0.22%	RCP	GC_SWI	GC_SWI	State	Garden City	10		0% - 25%	435
DUNF002314A	6.55	6.5	CB	CB	34.6	0.013	0.35	0.47	CIRCULAR	1.5	0	1		0.14%	RCP	GC_SWI	GC_SWI	State	Garden City	5	0% - 25%		431
DUNF002315A	6.75	6.55	CB	CB	108.9	0.013	0.35	0.41	CIRCULAR	1.5	0	1		0.18%	RCP	GC_SWI	GC_SWI	State	Garden City	5		0% - 25%	430
DUNF002316A	6.9	6.75	CB	CB	134.4	0.013	0.35	0.25	CIRCULAR	1.5	0	1		0.11%	RCP	GC_SWI	GC_SWI	State	Garden City	5			429
DUNF002400A	1.8	1.2	CB	CB	258.8	0.013	0.35	0.25	CIRCULAR	4	0	1		0.23%	RCP	GC_SWI	GC_SWI	Private - Non Residential	Garden City	2	0% - 25%		195
DUNF002500A	2	1.8	CB	CB	124.3	0.013	0.35	0.25	CIRCULAR	4	0	1		0.16%	RCP	SURVEY	GC_SWI	Garden City	Garden City	2	0% - 25%	0% - 25%	195
DUNF002600A	2.2	2	JB	CB	91.4	0.013	0.35	0.25	CIRCULAR	4	0	1		0.22%	RCP	SURVEY	SURVEY	Private - Non Residential	Garden City	>100	0% - 25%	0% - 25%	424
DUNF002601A	4.95	4.7	CB	JB	123.2	0.013	0.35	0.95	CIRCULAR	1.5	0	1		0.20%	RCP	GC_SWI	SURVEY	Private - Non Residential	Garden City	5		0% - 25%	197
DUNF002700A	2.401	2.2	HW	JB	133.6	0.015	0.35	0.25	CIRCULAR	4	0	1		0.15%	HDPE	SURVEY	SURVEY	Private - Non Residential	Garden City	2	0% - 25%	0% - 25%	425
DUNF003307A	11.253	8.6	CB	HW	97.5	0.02	0.5	1	CIRCULAR	1.5	0	1		2.72%	UNK	GC_SWI	GC_SWI	Garden City	Garden City	5	0% - 25%		32
DUNF003315A	9.008	8.953	HW	HW	19.6	0.013	0.35	1	CIRCULAR	2	0	1		0.28%	RCP	SURVEY	SURVEY	Garden City	Garden City	<2	0% - 25%	0% - 25%	47
DUNF003317A	9	8.922	CB	HW	72.1	0.013	0.35	1	CIRCULAR	1.5	0	1		0.11%	RCP	GC_SWI	GC_SWI	Garden City	Garden City	<2	0% - 25%		49
DUNF003318A	9.5	9	CB	CB	298.4	0.013	0.35	0.95	CIRCULAR	1.5	0	1		0.17%	RCP	GC_SWI	GC_SWI	Garden City	Garden City	5	0% - 25%	0% - 25%	49
DUNF003321A	8.9	8.9	JB	HW	39.2	0.02	0.35	1	CIRCULAR	3.5	0	1		0.00%	UNK	SURVEY	SITE_VISIT	Private - Non Residential	Garden City	25			
DUNF003322A	8.834	8.864	CB	JB	93.2	0.013	0.35	0.35	CIRCULAR	3.5	0	1		-0.03%	RCP	SURVEY	CHATHAM_PLANS	Private - Non Residential	Garden City	2	0% - 25%		50
DUNF003323A	9.602	9.334	JB	CB	135.2	0.013	0.35	0.25	CIRCULAR	2	0	1		0.20%	RCP	SURVEY	SURVEY	Garden City	Garden City	10		0% - 25%	53
DUNF003324A	10.1	9.602	JB	JB	82.2	0.013	0.35	0.35	CIRCULAR	1	0	1		0.61%	RCP	SITE_VISIT	SURVEY	Garden City	Garden City	10	0% - 25%		53
DUNF003325A	12.465	10.1	CB	JB	169.0	0.015	0.35	0.95	CIRCULAR	1	0	1		1.40%	HDPE	SITE_VISIT	SITE_VISIT	Garden City	Garden City	<2		0% - 25%	53
DUNF003327A	14	12.465	CB	CB	261.5	0.013	0.35	0.53	CIRCULAR	0.667	0	1		0.59%	RCP	SITE_VISIT	SITE_VISIT	Private - Non Residential	Garden City	<2	0% - 25%		208
DUNF003328A	14.225	14	CB	CB	82.3	0.015	0.35	0.63	CIRCULAR	1	0	1		0.27%	HDPE	SITE_VISIT	SITE_VISIT	Garden City	Garden City	10	0% - 25%	0% - 25%	218
DUNF003329A	12.09	11.75	JB	YI	175.5	0.02	0.35	0.47	CIRCULAR	2	0	1		0.19%	UNK	GC_SWI	GC_SWI	Garden City	Garden City	2	51% - 75%	0% - 25%	217
DUNF003329B	12.24	12.475	JB	CB	45.3	0.013	0.35	0.47	CIRCULAR	2	0	1		-0.52%	RCP	GC_SWI	SITE_VISIT	Garden City	Garden City	2	51% - 75%	0% - 25%	218
DUNF003330A	12.67	12.09	HW	JB	15.7	0.013	0.9	0.35	CIRCULAR	2	0	1		3.70%	RCP	SITE_VISIT	GC_SWI	Garden City	Garden City	>100	26% - 50%	51% - 75%	215
DUNF003331A	12.5	12.09	CB	JB	202.0	0.02	0.35	0.25	CIRCULAR	2	0	1		0.20%	UNK	SURVEY	GC_SWI	Garden City	Garden City	<2	0% - 25%	51% - 75%	36
DUNF003332A	12.75	12.5	JB	CB	150.9	0.013	0.35	0.25	CIRCULAR	2	0	1		0.17%	RCP	SURVEY	SURVEY	Garden City	Garden City	<2	0% - 25%	0% - 25%	214
DUNF003340A	9.588	9.45	HW	HW	56.1	0.013	0.9	1	CIRCULAR	4	0	2		0.25%	RCP	SURVEY	SURVEY	Garden City	Garden City	>100		26% - 50%	45
DUNF003350A	14.85	15.213	OCS	HW	74.0	0.013	0.35	0.5	CIRCULAR	3	0	1		-0.49%	RCP	SURVEY	SURVEY	UNK	Garden City	>100			
DUNF003400A	6.75	6.55	HW	HW	83.3	0.02	0.9	1	CIRCULAR	4	0	1		0.24%	UNK	SURVEY	SURVEY	Assumed RR	Garden City	>100			
DUNF003420A	9.9	9.668	HW	HW	85.2	0.015	0.5	0.9	CIRCULAR	2	0	1	10	0.27%	HDPE	ASSUMED	ASSUMED	UNK	Garden City	>100			
DUNF003432A	13.122	11.047	HW	HW	155.4	0.024	0.5	0.9	CIRCULAR	3	0	1	6	1.34%	CMP	SURVEY	SURVEY	Assumed RR	Garden City	>100			
DUNF003440A	14.212	14.3	HW	HW	65.0	0.013	0.5	0.5	CIRCULAR	2	0	1		-0.14%	HDPE	SURVEY	SURVEY	UNK	Garden City	10			
DUNF003441A	14.45	14.373	HW	CB	42.3	0.013	0.35	0.25	CIRCULAR	2	0	1		0.18%	HDPE	SURVEY	SURVEY	UNK	Garden City	<2			
DUNF003442A	14.373	14.256	CB	CB	64.9	0.013	0.35	0.25	CIRCULAR	2	0	1		0.18%	HDPE	SURVEY	SURVEY	UNK	Garden City	<2			
DUNF003443A	14.256	14.07	CB	HW	102.3	0.013	0.35	0.5	CIRCULAR	2	0	1		0.18%	HDPE	SURVEY	SURVEY	UNK	Garden City	2			
DUNF003475A	16	15.758	YI	HW	33.8	0.013	0.35	1	CIRCULAR	2	0	1		0.72%	RCP	SURVEY	SURVEY	Garden City	Garden City	10	0% - 25%	0% - 25%	132
DUNF003485A	17.39	16	CB	YI	52.2	0.02	0.35	0.9	CIRCULAR	2	0	1		2.66%	UNK	GC_SWI	SURVEY	Garden City	Garden City	25		0% - 25%	131
DUNF003486A	17.75	17.51	CB	CB	48.7	0.013	0.35	0.25	CIRCULAR	1.5	0	1		0.49%	RCP	SURVEY	SURVEY	Garden City	Garden City	10			128
DUNF003487A	18.25	17.75	HW	CB	14.7	0.013	0.9	0.91	CIRCULAR	1.5	0	1		3.40%	RCP	SURVEY	SURVEY	Garden City	Garden City	10	0% - 25%		129
DUNF003490A	18.42	17.79	CB	CB	224.7	0.02	0.35	0.9	CIRCULAR	1.5	0	1		0.28%	UNK	GC_SWI	GC_SWI	Garden City	Garden City	<2			127
DUNF003491A	19.35	18.47	CB	CB	274.3	0.013	0.35	0.25	CIRCULAR	1.5	0	1		0.32%	RCP	SURVEY	SURVEY	Garden City	Garden City	2			125
DUNF003492A	19.7	19.4	JB	CB	189.8	0.013	0.35	0.25	CIRCULAR	1.5	0	1		0.16%	RCP	GC_SWI	GC_SWI	Garden City	Garden City	2	0% - 25%		126

Conduit Name	US Invert Elevation (ft NAVD88)	DS Invert Elevation (ft NAVD88)	US Inlet Type	DS Inlet Type	Length	Manning's N	Entrance Loss Coefficient	Exit Loss Coefficient	Conduit Shape	Rise	Span	Number of Barrels	Culvert Code	Slope (%)	Material	US Data Source	DS Data Source	Ownership	Political Area	Level of Service	US Sediment Depth	DS Sediment Depth	SWI Facility ID
DUNF003493A	19.7	18.75	CB	JB	345.7	0.02	0.35	0.25	CIRCULAR	1.5	0	1		0.28%	RCP	GC_SWI	SURVEY	Garden City	Garden City	2	0% - 25%		120
DUNF003494A	18.75	18.15	CB	CB	222.4	0.013	0.35	0.25	CIRCULAR	1.5	0	1		0.27%	RCP	GC_SWI	GC_SWI	UNK	Garden City	<2			121
DUNF003495A	18.15	17.52	CB	CB	236.9	0.013	0.35	0.25	CIRCULAR	1.5	0	1		0.27%	RCP	GC_SWI	GC_SWI	UNK	Garden City	<2			122
DUNF003496A	17.65	17.52	HW	CB	30.3	0.013	0.9	0.95	CIRCULAR	1.5	0	1		0.43%	RCP	SURVEY	SURVEY	Garden City	Garden City	<2	0% - 25%		117
DUNF003497A	17.52	17.12	CB	JB	16.2	0.013	0.35	0.25	CIRCULAR	2	0	1		2.47%	RCP	SURVEY	SURVEY	Garden City	Garden City	<2		0% - 25%	113
DUNF003498A	17.12	17.05	JB	CB	20.5	0.013	0.35	0.35	CIRCULAR	2	0	1		0.34%	RCP	SURVEY	SURVEY	Garden City	Garden City	<2	0% - 25%		116
DUNF003499A	19.04	17.12	HW	JB	63.6	0.013	0.9	0.95	CIRCULAR	1.5	0	1		3.02%	RCP	SURVEY	SURVEY	Garden City	Garden City	<2	0% - 25%	0% - 25%	113
DUNF003501A	17.05	17.01	CB	CB	70.1	0.013	0.35	0.8	CIRCULAR	2	0	1		0.06%	RCP	SURVEY	SURVEY	Garden City	Garden City	2		0% - 25%	115
DUNF003502A	16.91	16.52	CB	CB	94.2	0.013	0.35	0.25	CIRCULAR	2	0	1		0.41%	RCP	SURVEY	GC_SWI	Garden City	Garden City	<2	0% - 25%		114
DUNF003503A	16.52	16.32	CB	CB	49.6	0.013	0.35	0.25	CIRCULAR	2	0	1		0.40%	UNK	GC_SWI	GC_SWI	Garden City	Garden City	<2			114
DUNF003503B	16.32	15.85	CB	HW	117.3	0.013	0	0.5	CIRCULAR	2	0	1		0.40%	RCP	GC_SWI	SURVEY	Assumed GDOT	Garden City	>100			
DUNF003520A	19.334	18.767	HW	PE	52.8	0.013	0.9	0.5	CIRCULAR	1	0	1	3	1.07%	RCP	GC_SWI	GC_SWI	Garden City	Garden City	<2	0% - 25%		263
DUNF003530A	18.5	18.2	HW	CB	38.3	0.013	0.9	0.95	CIRCULAR	1	0	1		0.78%	RCP	GC_SWI	GC_SWI	Garden City	Garden City	>100	26% - 50%	0% - 25%	105
DUNF003540A	18.2	17.938	CB	HW	71.0	0.013	0.35	0.5	CIRCULAR	1	0	1		0.37%	RCP	GC_SWI	GC_SWI	Garden City	Garden City	>100	0% - 25%	0% - 25%	106
DUNF003600A	6.83	6.8	HW	HW	63.6	0.013	0.5	0.5	CIRCULAR	3	0	2	3	0.05%	RCP	SURVEY	SURVEY	Assumed RR	Garden City	>100			
DUNF003702A	12.348	12	OCS	JB	10.6	0.013	0.35	0.91	CIRCULAR	2	0	1		3.30%	RCP	SURVEY	SURVEY	Private - Non Residential	Garden City	<2			
DUNF003720A	14.045	13.912	HW	HW	40.1	0.013	0.5	0.5	CIRCULAR	3	0	1	3	0.33%	RCP	SURVEY	SURVEY	Assumed RR	Garden City	>100			
DUNF003740A	13.891	13.55	HW	HW	72.6	0.013	0.5	0.5	CIRCULAR	1.5	0	1	3	0.47%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUNF003760A	15.21	14.751	HW	HW	45.1	0.024	0.5	0.9	CIRCULAR	2	0	1	6	1.02%	CMP	SURVEY	SURVEY	UNK	Garden City	25			
DUNF003820A	10.8	10.77	HW	HW	35.6	0.024	0.5	0.9	CIRCULAR	2	0	1	6	0.08%	CMP	SURVEY	SURVEY	Assumed RR	Garden City	10			
DUNF003900A	11.718	10.25	HW	HW	926.8	0.024	0.5	0.9	CIRCULAR	3.5	0	1	6	0.16%	CMP	SURVEY	SURVEY	Assumed RR	Garden City	>100			
DUNF004000A	12.024	11.836	HW	HW	60.7	0.013	0.35	0.5	CIRCULAR	3.5	0	1		0.31%	RCP	SURVEY	SURVEY	Assumed RR	Garden City	>100			
DUNF004001A	8.872	8.9	JB	JB	88.5	0.013	0.35	0.47	CIRCULAR	3.5	0	1		-0.03%	RCP	CHATHAM_PLANS	SURVEY	Private - Non Residential	Garden City	10			
DUNF004002A	8.864	8.872	JB	JB	25.7	0.013	0.35	0.35	CIRCULAR	3.5	0	1		-0.03%	RCP	CHATHAM_PLANS	CHATHAM_PLANS	Private - Non Residential	Garden City	10			
DUNF004120A	13.704	13.476	OCS	HW	56.6	0.013	0.35	1	CIRCULAR	2.5	0	1		0.40%	RCP	SURVEY	SURVEY	Assumed RR	Garden City	10			
DUNF004300A	12.299	11.9	HW	HW	92.0	0.024	0.35	0.5	CIRCULAR	3.5	0	1		0.43%	METAL	SURVEY	SURVEY	Assumed RR	Garden City	>100			
DUNF004500A	12.342	12	HW	HW	35.2	0.024	0.5	0.9	CIRCULAR	2.5	0	1	6	0.97%	CMP	SURVEY	SURVEY	Assumed RR	Garden City	>100			
DUNF004552A	12.5	12.4	HW	HW	21.0	0.013	0.5	0.5	CIRCULAR	1.5	0	1	3	0.48%	RCP	SITE_VISIT	SITE_VISIT	UNK	Garden City	2			
DUNF004620A	13.693	13.676	HW	HW	27.4	0.024	0.5	0.9	CIRCULAR	3	0	1	6	0.06%	CMP	SITE_VISIT	SITE_VISIT	UNK	Garden City	<2			
DUNF004630B	13.857	13.5	HW	HW	76.2	0.024	0.5	0.9	CIRCULAR	1	0	2	6	0.47%	CMP	SITE_VISIT	SITE_VISIT	UNK	Garden City	5			
DUNF004640A	13.913	13.857	HW	HW	93.0	0.013	0.35	0.5	CIRCULAR	2	0	1		0.06%	RCP	SITE_VISIT	SITE_VISIT	UNK	Garden City	10			
DUNF004700A	13.45	13.25	HW	HW	41.9	0.013	0.5	0.5	CIRCULAR	2.5	0	2	1	0.48%	RCP	SURVEY	SURVEY	UNK	Garden City	25			
DUNF004850A	13.749	13.603	HW	HW	24.5	0.013	0.5	0.5	CIRCULAR	1.5	0	1	3	0.60%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUNF004900A	14.276	14.037	HW	HW	33.3	0.013	0.5	0.5	CIRCULAR	1.5	0	1	3	0.72%	RCP	SURVEY	SURVEY	UNK	Garden City	2			
DUNF004960A	14.606	14.59	HW	HW	16.6	0.013	0.5	0.5	CIRCULAR	1.5	0	1	3	0.10%	RCP	SURVEY	SURVEY	UNK	Garden City	5			
DUNF005100A	14.097	14.066	HW	HW	72.8	0.02	0.35	0.5	CIRCULAR	1.5	0	1		0.04%	UNK	SURVEY	SURVEY	UNK	Garden City	10			
DUNF005110A	15.616	14.95	CB	JB	117.3	0.02	0.35	0.95	CIRCULAR	1.5	0	1		0.57%	UNK	SURVEY	ASSUMED	UNK	Garden City	50			
DUNF005111A	14.95	14.45	JB	CB	307.4	0.02	0.35	0.25	CIRCULAR	3	0	1		0.16%	UNK	ASSUMED	SURVEY	UNK	Garden City	>100			
DUNF005112A	15.05	14.95	CB	JB	57.3	0.013	0.35	0.25	CIRCULAR	3	0	1		0.17%	RCP	SURVEY	ASSUMED	UNK	Garden City	5			
DUNF005113A	15.55	15.05	CB	CB	41.2	0.013	0.35	0.95	CIRCULAR	1.5	0	1		1.21%	RCP	SURVEY	SURVEY	UNK	Garden City	5			
DUNF005115A	16.042	16.092	CB	CB	30.1	0.013	0.35	0.95	CIRCULAR	1.5	0	1		-0.17%	RCP	SURVEY	SURVEY	UNK	Garden City	5			
DUNF005120A	16.796	16.042	HW	CB	12.6	0.013	0.35	0.25	CIRCULAR	1.5	0	1		6.01%	RCP	SURVEY	SURVEY	UNK	Garden City	5			
DUNF005127A	16.323	15.05	CB	CB	381.1	0.013	0.35	0.35	CIRCULAR	3	0	1		0.33%	RCP	SURVEY	SURVEY	UNK	Garden City	10			
DUNF005128A	16.47	16.423	JB	CB	11.9	0.013	0.35	0.5	CIRCULAR	2.5	0	1		0.40%	RCP	SURVEY	SURVEY	UNK	Garden City	>100			
DUNF005129A	17.33	16.57	CB	JB	175.8	0.013	0.35	0.86	CIRCULAR	2.5	0	1		0.43%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUNF005130A	17.81	17.78	CB	CB	31.6	0.013	0.35	0.95	CIRCULAR	1.5	0	1		0.10%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUNF005140A	18.674	17.86	HW	CB	63.3	0.013	0.35	0.95	CIRCULAR	1.5	0	1		1.29%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUNF005155A	14.33	14.05	HW	HW	36.7	0.013	0.5	0.5	CIRCULAR	3	0	1	3	0.76%	RCP	SURVEY	SURVEY	UNK	Garden City	25			
DUNF005160A	14.409	14.216	HW	HW	16.3	0.013	0.5	0.5	CIRCULAR	1.5	0	1	3	1.18%	RCP	SURVEY	SURVEY	UNK	Garden City	2			

Conduit Name	US Invert Elevation (ft NAVD88)	DS Invert Elevation (ft NAVD88)	US Inlet Type	DS Inlet Type	Length	Manning's N	Entrance Loss Coefficient	Exit Loss Coefficient	Conduit Shape	Rise	Span	Number of Barrels	Culvert Code	Slope (%)	Material	US Data Source	DS Data Source	Ownership	Political Area	Level of Service	US Sediment Depth	DS Sediment Depth	SWI Facility ID
DUNF005300A	14.958	14.884	HW	HW	23.7	0.013	0.5	0.5	CIRCULAR	1.5	0	1	3	0.31%	RCP	SURVEY	SURVEY	UNK	Garden City	2			
DUNF005360A	15.404	15.388	HW	HW	18.7	0.013	0.35	0.5	CIRCULAR	1.5	0	1		0.09%	RCP	SURVEY	SURVEY	UNK	Garden City	25			
DUNF005361A	14.45	13.65	CB	JB	176.4	0.013	0.35	0.25	CIRCULAR	3	0	1		0.45%	RCP	SURVEY	SURVEY	UNK	Garden City	10			
DUNF005362A	15.2	14.45	CB	CB	30.1	0.013	0.35	0.95	CIRCULAR	1.5	0	1		2.49%	RCP	SURVEY	SURVEY	UNK	Garden City	10			
DUNF005365A	13.65	12.397	JB	HW	43.4	0.013	0.35	0.5	CIRCULAR	4	0	1		2.89%	RCP	SURVEY	SURVEY	UNK	Garden City	10			
DUNF005400A	15.447	13.65	HW	JB	67.6	0.013	0.35	0.95	CIRCULAR	1.5	0	1		2.66%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUNF005500A	15.846	15.93	HW	HW	25.7	0.013	0.5	0.5	CIRCULAR	1.5	0	1	3	-0.33%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUNF005600A	16.854	16.634	HW	HW	16.4	0.013	0.5	0.5	CIRCULAR	1.5	0	1	3	1.34%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUNF006010A	13.841	13.637	HW	HW	45.1	0.013	0.5	0.5	CIRCULAR	2	0	1	3	0.45%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUNF006030A	14.112	14.054	HW	HW	54.7	0.013	0.5	0.5	CIRCULAR	1.5	0	1	3	0.11%	RCP	SURVEY	SURVEY	UNK	Garden City	10			
DUNF006060A	13.508	13.498	HW	HW	31.7	0.013	0.5	0.5	CIRCULAR	2	0	1	3	0.03%	RCP	SURVEY	SURVEY	UNK	Garden City	2			
DUNF006070A	14.284	14.157	HW	HW	18.6	0.013	0.5	0.5	CIRCULAR	1.5	0	1	3	0.68%	RCP	SURVEY	SURVEY	UNK	Garden City	2			
DUNF006090A	15.104	14.64	HW	HW	23.8	0.013	0.5	0.5	CIRCULAR	2	0	1	3	1.95%	RCP	SURVEY	SURVEY	UNK	Garden City	5			
DUNF006110A	15.116	14.99	HW	HW	21.6	0.013	0.5	0.5	CIRCULAR	2	0	1	3	0.58%	RCP	SURVEY	SURVEY	UNK	Garden City	10			
DUNF006130A	15.164	15.06	HW	HW	59.0	0.013	0.5	0.5	CIRCULAR	1.5	0	1	3	0.18%	RCP	SURVEY	SURVEY	UNK	Garden City	25			
DUNF006150A	15.407	15.314	HW	HW	20.5	0.013	0.5	0.5	CIRCULAR	1.5	0	1	3	0.45%	RCP	SURVEY	SURVEY	UNK	Garden City	25			
DUNF006170A	15.405	15.319	HW	HW	23.6	0.013	0.35	0.5	CIRCULAR	1.5	0	1		0.36%	HDPE	SURVEY	SURVEY	UNK	Garden City	10			
DUNF006190A	15.42	15.392	CB	HW	44.3	0.013	0.35	0.5	CIRCULAR	1.25	0	1		0.06%	HDPE	SURVEY	SURVEY	UNK	Garden City	<2			
DUNF006200A	15.435	15.42	CB	CB	52.0	0.013	0.35	0.25	CIRCULAR	1.25	0	1		0.03%	HDPE	SURVEY	SURVEY	UNK	Garden City	<2			
DUNF006210A	15.443	15.435	HW	CB	47.1	0.013	0.35	0.25	CIRCULAR	1.25	0	1		0.02%	HDPE	SURVEY	SURVEY	UNK	Garden City	5			
DUNF007010A	9	8.834	JB	CB	32.3	0.013	0.35	0.95	CIRCULAR	3.5	0	1		0.51%	RCP	SURVEY	SURVEY	Private - Non Residential	Garden City	25		0% - 25%	50
DUNF007015A	9.297	9	JB	JB	77.6	0.02	0.35	0.95	CIRCULAR	2	0	1		0.38%	UNK	CHATHAM_PLANS	SURVEY	Private - Non Residential	Garden City	10			51
DUNF007016A	11.14	9.297	YI	JB	196.6	0.02	0	0.95	CIRCULAR	2	0	1		0.94%	UNK	GC_SWI	CHATHAM_PLANS	Private - Non Residential	Garden City	>100			51
DUNF007017A	11.29	11.14	YI	JB	100.2	0.02	0	0	CIRCULAR	2	0	1		0.15%	UNK	GC_SWI	CHATHAM_PLANS	Private - Non Residential	Garden City	>100			51
DUNF007020A	11.65	11.29	YI	JB	29.3	0.02	0.35	0	CIRCULAR	2	0	1		1.23%	UNK	GC_SWI	CHATHAM_PLANS	Private - Non Residential	Garden City	10	0% - 25%		51
DUNF007030A	11.75	11.65	YI	YI	81.8	0.02	0.35	0.53	CIRCULAR	2	0	1		0.12%	UNK	GC_SWI	GC_SWI	Garden City	Garden City	10	0% - 25%	0% - 25%	217
DUNF008001A	13	12.5	CB	CB	50.8	0.02	0.35	0.95	CIRCULAR	1	0	1		0.98%	UNK	GC_SWI	GC_SWI	UNK	Garden City	<2	0% - 25%	0% - 25%	37
DUNF008002A	12.9	12.75	CB	JB	62.2	0.013	0.35	0.25	CIRCULAR	2	0	1		0.24%	RCP	SURVEY	SURVEY	Assumed Garden City	Garden City	<2	0% - 25%	0% - 25%	214
DUNF008003A	13.52	12.9	OCS	CB	25.6	0.02	0.35	0.95	CIRCULAR	1	0	1		2.43%	UNK	SURVEY	SURVEY	Assumed Private	Garden City	>100	0% - 25%	0% - 25%	
DUNF008004A	13.6	12.9	JB	CB	99.9	0.013	0.35	0.25	CIRCULAR	2	0	1		0.70%	RCP	SURVEY	SURVEY	Assumed Garden City	Garden City	2	0% - 25%	0% - 25%	213
DUNF008005A	13.75	13.6	CB	JB	70.1	0.013	0.35	0.25	CIRCULAR	2	0	1		0.21%	RCP	SURVEY	SURVEY	Assumed Garden City	Garden City	<2		0% - 25%	213
DUNF008006A	14.06	13.75	HW	CB	62.9	0.013	0.5	0.25	CIRCULAR	1.5	0	1		0.49%	RCP	SURVEY	SURVEY	Assumed Garden City	Garden City	<2			
DUNF009000A	16.64	16.57	CB	JB	43.9	0.013	0.35	0.35	CIRCULAR	2.5	0	1		0.16%	RCP	SURVEY	SURVEY	UNK	Garden City	10			
DUNF009005A	16.78	16.64	JB	CB	11.6	0.013	0.35	0.25	CIRCULAR	2.5	0	1		1.21%	RCP	SURVEY	SURVEY	UNK	Garden City	50			
DUNF009010A	17.25	16.78	CB	JB	43.8	0.013	0.35	0.95	CIRCULAR	1.5	0	1		1.07%	RCP	SURVEY	SURVEY	UNK	Garden City	<2			
DUNF009020A	16.927	16.323	CB	CB	31.2	0.013	0.35	0.95	CIRCULAR	1.5	0	1		1.94%	RCP	SURVEY	SURVEY	UNK	Garden City	2			
DUNG000020A	8.78	8.752	OCS	HW	19.2	0.013	0.35	0.5	CIRCULAR	2	0	1		0.15%	RCP	SURVEY	SURVEY	UNK	Savannah	10			20736
DUNG000040A	8.681	8.578	HW	HW	42.1	0.013	0.5	0.5	CIRCULAR	1.5	0	1	3	0.25%	RCP	SURVEY	SURVEY	UNK	Savannah	25			6388
DUNG000050A	5.545	5.875	HW	HW	56.0	0.013	0.5	0.5	CIRCULAR	3.5	0	1	3	-0.59%	RCP	SURVEY	SURVEY	UNK	Savannah	25			20737
DUNG000100A	4.149	4.247	HW	HW	40.2	0.013	0.5	0.5	CIRCULAR	3	0	1	3	-0.24%	RCP	SURVEY	SURVEY	UNK	Savannah	25			
DUNG000400A	7.689	7.612	HW	HW	39.2	0.013	0.5	0.5	CIRCULAR	4	0	3	3	0.20%	RCP	SURVEY	SURVEY	UNK	Savannah	>100			
DUNG000550A	6.328	6.024	HW	HW	42.1	0.013	0.35	0.5	CIRCULAR	3	0	1		0.72%	UNK	SURVEY	SURVEY	UNK	Savannah	<2			
DUNG000620A	8.98	8.92	HW	HW	44.4	0.013	0.5	0.5	RECTANGULAR	3	4	2	9	0.14%	CC	SURVEY	SURVEY	UNK	Garden City	5			
DUNG000720A	7	6.95	HW	HW	57.9	0.013	0.5	0.5	CIRCULAR	3	0	1	3	0.09%	RCP	SAVANNAH_SWI	SAVANNAH_SWI	Savannah	Savannah	2			
DUNG000805B	7.34	6.81	HW	HW	54.3	0.013	0.5	0.5	CIRCULAR	3	0	1	3	0.98%	RCP	SURVEY	SURVEY	Savannah	Savannah	5			21172

Conduit Name	US Invert Elevation (ft NAVD88)	DS Invert Elevation (ft NAVD88)	US Inlet Type	DS Inlet Type	Length	Manning's N	Entrance Loss Coefficient	Exit Loss Coefficient	Conduit Shape	Rise	Span	Number of Barrels	Culvert Code	Slope (%)	Material	US Data Source	DS Data Source	Ownership	Political Area	Level of Service	US Sediment Depth	DS Sediment Depth	SWI Facility ID
DUNG000809A	12.374	10.294	HW	HW	61.7	0.013	0.5	0.5	CIRCULAR	2	0	1	3	3.38%	RCP	SURVEY	SURVEY	Savannah	Savannah	2			
DUNG000820A	15.318	14.186	HW	HW	24.7	0.013	0.35	0.5	CIRCULAR	2	0	1		4.58%	RCP	SURVEY	SURVEY	Savannah	Savannah	<2			
DUNG000840A	11.544	11.044	HW	HW	77.6	0.013	0.35	0.5	CIRCULAR	2.5	0	1		0.64%	RCP	SURVEY	SURVEY	Savannah	Savannah	>100			26006
DUNG001000A	9.5	9.3	HW	HW	86.3	0.02	0.35	0.5	CIRCULAR	3	0	1		0.23%	UNK	SURVEY	SURVEY	Savannah	Savannah	>100			
DUNG001010A	11.192	10.943	CB	JB	13.7	0.013	0.35	0.5	CIRCULAR	1.5	0	1		1.82%	RCP	SURVEY	SURVEY	Savannah	Savannah	<2			3816
DUNG001300A	10	9.882	HW	CB	33.2	0.013	0.35	0.5	CIRCULAR	2	0	1		0.36%	RCP	SURVEY	SURVEY	Savannah	Savannah	2			5351
DUNG001400A	10.2	10	JB	CB	15.3	0.013	0.35	0.25	ELLIPSE	1.167	1.917	1		1.31%	RCP	SURVEY	SURVEY	Savannah	Savannah	2			3358
DUNG001500A	10.43	10.2	HW	JB	17.4	0.013	0.35	0.25	ELLIPSE	1.167	1.917	1		1.32%	RCP	SURVEY	SURVEY	Savannah	Savannah	2			3359
DUNG001600B	10.63	10.43	HW	DW	13.8	0.024	0.5	0.25	ELLIPSE	1.167	1.917	1		1.45%	CMP	SURVEY	SURVEY	Savannah	Savannah	2			5756
DUNH000001A	9.417	11.239	JB	JB	265.9	0.013	0.9	0.9	CIRCULAR	4.5	0	1		-0.69%	RCP	SURVEY	SURVEY	UNK	Garden City	>100			
DUNH000025A	13.1	12.857	CB	HW	136.0	0.013	0.35	0.5	CIRCULAR	2.5	0	1		0.18%	RCP	SURVEY	SURVEY	Garden City	Garden City	>100	76% - 100%	0% - 25%	178
DUNH000030A	14.35	13.1	JB	CB	410.9	0.013	0.35	0.63	CIRCULAR	2	0	1		0.30%	RCP	SURVEY	SURVEY	Garden City	Garden City	>100	0% - 25%	76% - 100%	171
DUNH000043A	8.85	8.376	CB	HW	243.3	0.013	0.35	1	CIRCULAR	3.5	0	1		0.20%	RCP	GC_SWI	GC_SWI	Garden City	Garden City	>100		26% - 50%	165
DUNH000044A	8.915	8.85	CB	CB	32.0	0.013	0.35	0.95	CIRCULAR	3.5	0	1		0.20%	RCP	GC_SWI	GC_SWI	Garden City	Garden City	>100			169
DUNH000045A	10.55	10.315	JB	CB	122.2	0.013	0.35	0.95	CIRCULAR	2	0	1		0.19%	RCP	GC_SWI	GC_SWI	Garden City	Garden City	50	0% - 25%		170
DUNH000047A	10.9	10.55	YI	JB	188.5	0.013	0.35	0.6	CIRCULAR	2	0	1		0.19%	RCP	GC_SWI	GC_SWI	Garden City	Garden City	>100	0% - 25%	0% - 25%	170
DUNH000050A	14.399	14.35	HW	JB	5.0	0.013	0.35	0.25	CIRCULAR	2	0	1		0.98%	RCP	SURVEY	SURVEY	Garden City	Garden City	>100	0% - 25%	0% - 25%	171
DUNH000100A	8.451	8.35	HW	HW	147.8	0.013	0.5	0.5	RECTANGULAR	6	6	1	3	0.07%	RCP	SURVEY	SURVEY	Assumed State	Garden City	>100			
DUNH000120A	14	13.649	CB	UNK	21.9	0.013	0.35	0.9	CIRCULAR	1.5	0	1		1.61%	RCP	GC_SWI	GC_SWI	Garden City	Garden City	10			137
DUNH000130A	15.521	14	UNK	CB	48.0	0.013	0.9	0.47	CIRCULAR	1.5	0	1		3.17%	RCP	GC_SWI	GC_SWI	Garden City	Garden City	5			137
DUNH000350A	16.19	16.19	HW	HW	184.1	0.013	0.35	0.5	CIRCULAR	2	0	1	3	0.00%	RCP	SURVEY	SURVEY	State	Garden City	25		51% - 75%	270
DUNH000400A	16.191	16.19	HW	HW	45.1	0.013	0.35	0.5	CIRCULAR	1.5	0	1		0.00%	RCP	SURVEY	SURVEY	Private - Non Residential	Garden City	25			270
DUNH000411A	20.49	19.7	HW	JB	47.9	0.013	0.9	0.95	CIRCULAR	1.25	0	1		1.65%	HDPE	GC_SWI	GC_SWI	UNK	Garden City	>100	26% - 50%	0% - 25%	126
DUNH000412A	19.63	19.51	HW	HW	50.1	0.013	0.9	0.25	CIRCULAR	1.5	0	1		0.24%	RCP	GC_SWI	GC_SWI	UNK	Garden City	>100	76% - 100%	51% - 75%	119
DUNH000413A	19.51	18.44	HW	HW	134.1	0.013	0.35	0.5	CIRCULAR	1.5	0	1		0.80%	RCP	GC_SWI	GC_SWI	UNK	Garden City	2	51% - 75%		118
DUNH000500A	15.595	14.35	CB	JB	135.1	0.013	0.9	0.9	CIRCULAR	2	0	1		0.92%	RCP	SURVEY	SURVEY	State	Garden City	>100	0% - 25%	0% - 25%	171
DUNH000700A	16.514	16.604	HW	HW	185.8	0.013	0.35	0.5	CIRCULAR	1.25	0	1		-0.05%	RCP	SURVEY	SURVEY	State	Garden City	5		76% - 100%	269
DUNI000000A	4.104	4.101	HW	HW	21.9	0.013	0.35	0.5	CIRCULAR	3.5	0	1		0.01%	RCP	SURVEY	SURVEY	Private - Non Residential	Garden City	<2	0% - 25%	0% - 25%	388
DUNI000200A	5.822	5.81	HW	HW	87.7	0.013	0.5	0.5	CIRCULAR	2	0	2	3	0.01%	RCP	SURVEY	SURVEY	Garden City	Garden City	<2	0% - 25%	0% - 25%	24
DUNI000400A	5.803	5.8	HW	HW	141.8	0.013	0.5	0.5	CIRCULAR	5	0	1	1	0.00%	CC	SURVEY	SURVEY	Garden City	Garden City	>100	0% - 25%	0% - 25%	28
DUNI000600A	5.707	5.556	HW	HW	51.7	0.013	0.35	0.5	CIRCULAR	3	0	1		0.29%	RCP	SURVEY	SURVEY	Assumed RR	Garden City	>100			
DUNI000620A	9.4	8.03	HW	HW	120.7	0.013	0.5	0.5	CIRCULAR	3	0	1		1.14%	RCP	SURVEY	SURVEY	Garden City	Garden City	25	0% - 25%	26% - 50%	145
DUNI001000A	8.078	8	HW	HW	53.4	0.013	0.35	0.5	CIRCULAR	2	0	1		0.15%	CC	SURVEY	SURVEY	Unk	Garden City	>100			
DUNJ000012B	7.18	7.147	HW	HW	74.6	0.013	0.5	1	RECTANGULAR	5	10	1		0.04%	RCP	SURVEY	SURVEY	Assumed Private	Garden City	>100			
DUNJ000018A	16.1	14.136	HW	HW	533.7	0.013	0.5	1	CIRCULAR	3	0	1		0.37%	RCP	GC_SWI	GC_SWI	State	Garden City	>100		0% - 25%	348
DUNJ000021A	16.46	16.2	HW	HW	122.3	0.013	0.9	1	CIRCULAR	1.5	0	2		0.21%	RCP	GC_SWI	GC_SWI	State	Garden City	>100	0% - 25%	76% - 100%	258
DUNJ000060A	17.885	17.624	HW	PE	73.5	0.013	0.9	0.5	CIRCULAR	2	0	1	3	0.36%	RCP	GC_SWI	GC_SWI	Private	Garden City	>100		0% - 25%	257
DUNJ000101A	10.899	10.08	HW	HW	139.1	0.013	0.9	1	CIRCULAR	2	0	1		0.59%	RCP	SURVEY	SURVEY	Assumed State	Garden City	>100		76% - 100%	
DUNJ000120A	10.7	10.7	HW	HW	151.4	0.013	0.5	1	CIRCULAR	5	0	1		0.00%	RCP	SURVEY	SURVEY	State	Garden City	>100	0% - 25%	0% - 25%	
DUNJ000210A	13.86	13.351	HW	HW	44.9	0.013	0.35	1	CIRCULAR	2	0	1		1.13%	RCP	SURVEY	SURVEY	Garden City	Garden City	10		0% - 25%	109
DUNJ000211B	10.3	10.05	HW	HW	18.8	0.013	0.35	1	CIRCULAR	3	0	1		1.33%	RCP	SURVEY	SURVEY	Private - Non Residential	Garden City	10		0% - 25%	
DUNJ000212A	10.6	10.55	HW	HW	31.5	0.013	0.35	0.5	CIRCULAR	3	0	1		0.16%	RCP	SURVEY	SURVEY	Private - Non Residential	Garden City	5			
DUNJ000213A	10.881	10.6	HW	HW	15.9	0.013	0.35	0.5	CIRCULAR	3	0	1		1.77%	RCP	SURVEY	SURVEY	Private - Non Residential	Garden City	5	0% - 25%		
DUNJ000215A	11.744	11.6	HW	HW	104.0	0.013	0.35	0.5	CIRCULAR	1.5	0	1		0.14%	RCP	SURVEY	SURVEY	Private - Non Residential	Garden City	2			
DUNJ000220A	13.859	13.86	HW	HW	39.2	0.013	0.35	0.5	CIRCULAR	1.5	0	1		0.00%	RCP	SURVEY	SURVEY	Garden City	Garden City	10			107
DUNJ000230A	16.345	13.869	HW	HW	26.1	0.013	0.35	0.5	CIRCULAR	1.5	0	1		9.51%	RCP	SURVEY	SURVEY	Garden City	Garden City	5	0% - 25%		107

Conduit Name	US Invert Elevation (ft NAVD88)	DS Invert Elevation (ft NAVD88)	US Inlet Type	DS Inlet Type	Length	Manning's N	Entrance Loss Coefficient	Exit Loss Coefficient	Conduit Shape	Rise	Span	Number of Barrels	Culvert Code	Slope (%)	Material	US Data Source	DS Data Source	Ownership	Political Area	Level of Service	US Sediment Depth	DS Sediment Depth	SWI Facility ID
DUNJ000250A	16.5	16.4	HW	HW	88.4	0.013	0.9	0.5	CIRCULAR	2	0	1	3	0.11%	RCP	GC_SWI	GC_SWI	Garden City	Garden City	>100	0% - 25%	0% - 25%	224
DUNJ000300A	11.758	10.819	HW	HW	306.8	0.013	0.35	1	CIRCULAR	4	0	1		0.31%	HDPE	SURVEY	SURVEY	Private - Non Residential	Garden City	25	0% - 25%	0% - 25%	351
DUNJ000410A	15.858	15.29	HW	HW	355.2	0.013	0.35	0.5	CIRCULAR	3	0	1		0.16%	RCP	SURVEY	SURVEY	Assumed Private	Garden City	5			
DUNJ000425A	15.5	15.25	CB	HW	82.1	0.024	0.35	0.9	CIRCULAR	1.5	0	1		0.31%	CMP	GC_SWI	GC_SWI	Garden City	Garden City	2	0% - 25%	0% - 25%	404
DUNJ009000A	7.147	6.6	HW	YI	153.1	0.013	0.5	0.25	CIRCULAR	3.5	0	2		0.36%	RCP	SITE_VISIT	SITE_VISIT	Assumed Private	Garden City	>100			
DUNJ009100A	6.6	6.5	YI	HW	123.9	0.013	0.35	1	CIRCULAR	3.5	0	2		0.08%	RCP	SITE_VISIT	SITE_VISIT	Assumed Private	Garden City	>100			
DUNK001100A	1.27	1.413	HW	HW	343.4	0.024	0.35	1	CIRCULAR	3	0	1		-0.04%	UNK	ASSUMED	ASSUMED	Assumed Chatham	Chatham County	50			
DUNK001110A	1.792	1.335	HW	HW	155.2	0.02	0.5	0.5	CIRCULAR	4	0	1		0.30%	UNK	ASSUMED	ASSUMED	Assumed Chatham	Chatham County	>100			
DUNK001300A	0.835	0.605	HW	HW	78.4	0.013	0.5	1	CIRCULAR	3.5	0	2	1	0.29%	RCP	SURVEY	SURVEY	Assumed Chatham	Chatham County	50			
DUNK001500A	3.205	3.261	HW	HW	116.5	0.02	0.5	1	CIRCULAR	4	0	1		-0.05%	UNK	ASSUMED	ASSUMED	Assumed Chatham	Chatham County	10			
DUNK001700A	7.68	7.25	HW	HW	50.1	0.013	0.5	1	RECTANGULAR	3	9	1		0.86%	UNK	ASSUMED	ASSUMED	Assumed Chatham	Chatham County	>100			
DUNL001100A	-3.25	-4.14	JB	N/A	172.1	0.024	0.35	0.5	CIRCULAR	3	0	1		0.52%	UNK	SURVEY	SURVEY	Assumed Chatham	Chatham County	5			40637
DUNL001150A	0.59	0.5	HW	JB	8.6	0.024	0.5	0.95	CIRCULAR	3	0	1		1.05%	CMP	SURVEY	SURVEY	UNK	Garden City	5			40637
DUNL001200A	-2.86	-3.25	HW	JB	71.3	0.024	0.9	0.63	CIRCULAR	4	0	1		0.55%	UNK	SURVEY	SURVEY	Assumed Chatham	Chatham County	5			40637
DUNL001400A	-1.24	-2.75	HW	HW	164.2	0.013	0.9	1	CIRCULAR	3	0	1	3	0.92%	RCP	SURVEY	SURVEY	Assumed Chatham	Chatham County	5			40636
DUNL001600A	0.137	-0.29	HW	HW	160.7	0.013	0.5	1	CIRCULAR	2.5	0	1	3	0.27%	RCP	SURVEY	SURVEY	Chatham County	Chatham County	2			40635
DUNL001800A	1.73	0.95	HW	HW	37.3	0.013	0.5	1	CIRCULAR	2.5	0	1	1	2.09%	RCP	SURVEY	SURVEY	Assuemd Chatham	Chatham County	<2			40634
DUNL002000A	1.73	1.99	HW	HW	79.4	0.013	0.5	1	CIRCULAR	3	0	1	1	-0.33%	RCP	SURVEY	SURVEY	Assumed Chatham	Chatham County	<2			40639
DUNL002200A	2.37	1.95	HW	HW	60.9	0.013	0.9	1	CIRCULAR	2	0	1	3	0.69%	RCP	SURVEY	SURVEY	Private	Chatham County	<2	0%-25%		40651
DUNL002400A	4.61	3.94	HW	HW	108.3	0.013	0.9	1	CIRCULAR	2.5	0	1	3	0.62%	RCP	SURVEY	SURVEY	Private	Chatham County	<2	0%-25%	0%-25%	40650
DUNL002600A	6.11	5.05	HW	HW	158.1	0.013	0.35	0.9	CIRCULAR	3	0	1	3	0.67%	RCP	SURVEY	SURVEY	Private	Chatham County	<2	0%-25%		40653
DUNL002700A	7.22	7.49	HW	HW	97.0	0.013	0.9	1	CIRCULAR	2.5	0	1	3	-0.28%	RCP	CHATHAM_SWI	CHATHAM_SWI	Private	Chatham County	<2			40652
TG-DUNA000400A	-3.232	-3.232	TG	TG	29.5	0.013	0.9	1	RECTANGULAR	10	15.5	1		0.00%	CC	SURVEY	SURVEY	UNK	Chatham County	50			

8.3 Appendix C – Junction Data

Name	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft²)	Existing Conditions Initial Depth	Calibration Initial Depth, ft	Calibration Baseflow (cfs)	Material	Inlet Type	Inlet Shape	> 20 ac Drainage Area (Y/N)	Data Source	Sediment Depth (% pipe diameter)	SWI Facility ID	Junction Max HGL					
															2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
DUNA000001	-4.83	10	14.83	50	8.942	4.83	3.77	IRR	IRR	IRR	YES	IRR			4.11	4.12	4.12	4.12	4.18	4.18
DUNA000005	-4.825	10	14.825	50	8.937	4.825	0	IRR	IRR	IRR	YES	IRR			4.23	4.29	4.34	4.42	4.5	4.62
DUNA000100	-4.81	12	16.81	50	8.922	4.81	0	IRR	IRR	IRR	YES	IRR			4.53	4.7	4.86	5.09	5.31	5.62
DUNA000200	-4.8	6.555	11.355	50	8.912	4.8	0	IRR	IRR	IRR	YES	IRR			4.62	4.81	4.98	5.24	5.47	5.79
DUNA000300	-4.54	6.768	11.308	50	8.652	4.54	0	IRR	TIDE GATE	IRR	YES	SURVEY		19753	4.62	4.82	5	5.25	5.48	5.81
DUNA000400	-4.54	6.845	11.385	50	8.652	4.54	0.6	IRR	TIDE GATE	IRR	YES	SURVEY			5.12	5.5	5.84	6.32	6.66	7.03
DUNA000500	-4.4	6.815	11.215	50	8.512	4.4	0	IRR	IRR	IRR	YES	IRR			5.13	5.51	5.84	6.32	6.67	7.04
DUNA000800	-3.91	7.206	11.116	50	8.022	3.91	0	IRR	IRR	IRR	YES	IRR			5.14	5.53	5.86	6.34	6.69	7.06
DUNA000900	-3.8	7.376	11.176	50	7.912	3.8	0	IRR	BRIDGE	IRR	YES	SURVEY			5.15	5.53	5.87	6.35	6.69	7.06
DUNA001000	-3.8	7.309	11.109	50	7.912	3.8	0	IRR	BRIDGE	IRR	YES	SURVEY			5.19	5.6	5.95	6.46	6.84	7.23
DUNA001200	-3.6	7.509	11.109	50	7.712	3.6	0.93	IRR	IRR	IRR	YES	IRR			5.19	5.6	5.95	6.47	6.85	7.23
DUNA001300	-3.2	8.162	11.362	50	7.312	3.2	0	IRR	IRR	IRR	YES	IRR			5.21	5.62	5.98	6.49	6.87	7.26
DUNA001400	-2.8	7.7	10.5	50	6.912	2.8	0	IRR	BRIDGE	IRR	YES	SURVEY			5.25	5.66	6.02	6.53	6.91	7.3
DUNA001450	-2.8	7.7	10.5	50	6.912	2.8	0	IRR	BRIDGE	IRR	YES	SURVEY			5.27	5.68	6.05	6.58	6.97	7.36
DUNA001500	-2.52	9.001	11.521	50	6.632	2.52	0	IRR	BRIDGE	IRR	YES	SURVEY			5.27	5.69	6.05	6.59	6.98	7.37
DUNA001600	-2.52	10.058	12.578	50	6.632	2.52	0	IRR	BRIDGE	IRR	YES	SURVEY			5.28	5.7	6.07	6.6	6.99	7.38
DUNA001601	3.889	9.856	5.967	50	0.223	0	0	IRR	IRR	IRR	YES	IRR			5.28	5.7	6.07	6.6	6.99	7.38
DUNA001602	7.76	9.568	1.808	50	0	0	0	IRR	IRR	IRR	YES	IRR			7.86	8.11	8.17	9.57	9.57	9.7
DUNA001700	-0.827	9.173	10	50	4.939	0.827	0.52	CC	HW	WG	YES	CHATHAM PLANS			5.39	5.81	6.18	6.73	7.13	7.53
DUNA001701	3.58	4.242	0.662	50	0.532	0	0	IRR	IRR	IRR	YES	IRR			5.28	5.7	6.07	6.6	6.99	7.38
DUNA001702	5.851	15.851	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			5.85	5.85	6.07	6.6	6.99	7.38
DUNA001703	11.116	16.116	5	50	0	0	0	IRR	IRR	IRR	YES	IRR			11.12	11.12	11.12	11.12	11.12	11.12
DUNA001725	-0.692	9.61	10.302	50	4.804	0.692	0	CC	JB	RO	YES	CHATHAM PLANS			5.43	5.86	6.23	6.79	7.22	7.64
DUNA001726	8	13.325	5.325	50	0	0	0	RCP	JB	RO	YES	CHATHAM PLANS		421	8.88	9	9.1	9.25	9.36	9.48
DUNA001750	-0.47	10.327	10.797	50	4.582	0.47	0	CC	HW	WG	YES	CHATHAM PLANS			5.48	5.91	6.3	6.87	7.32	7.76
DUNA001800	-1.137	8.863	10	50	5.249	1.137	0	IRR	IRR	IRR	YES	IRR			5.52	5.96	6.34	6.92	7.37	7.8
DUNA001850	-1.341	8.659	10	50	5.453	1.341	0	CC	HW	WG	YES	CHATHAM PLANS			5.53	5.98	6.36	6.93	7.38	7.81
DUNA001900	-1.314	8.686	10	50	5.426	1.314	0	CC	HW	ST	YES	CHATHAM PLANS			5.57	6.02	6.41	7	7.46	7.9
DUNA001950	-1.209	8.791	10	50	5.321	1.209	0	CC	HW	ST	YES	CHATHAM PLANS			5.58	6.03	6.41	7.01	7.47	7.91
DUNA002000	-1.255	8.745	10	50	5.367	1.255	0	CC	HW	WG	YES	CHATHAM PLANS			5.61	6.07	6.46	7.08	7.55	8
DUNA002009	0.928	8.5	7.572	50	3.184	0	0	IRR	IRR	IRR	YES	IRR			5.61	6.07	6.46	7.08	7.55	8
DUNA002010	1.2	4.125	2.925	50	2.912	0	0	RCP	HW	ST	YES	SURVEY	0% - 25%	2400	5.61	6.07	6.46	7.08	7.55	8
DUNA002011	5.037	13.406	8.369	50	0	0	0	IRR	IRR	IRR	YES	IRR			5.61	6.07	6.46	7.08	7.55	8
DUNA002015	1.48	4.78	3.3	50	2.632	0	0	RCP	JB	RO	YES	SURVEY		2399	5.61	6.07	6.46	7.08	7.55	8
DUNA002020	1.928	4.125	2.197	50	2.184	0	0	RCP	HW	FE	YES	SURVEY	51% - 75%	2397	5.61	6.07	6.46	7.08	7.55	8
DUNA002030	1.93	8.63	6.7	50	2.182	0	0	RCP	CB	GI	YES	SURVEY			8.45	9.34	9.72	10.04	10.19	10.32
DUNA002035	3.398	12.898	9.5	50	0.714	0	0	RCP	CB	CM	YES	SITE_VISIT	0% - 25%	2392	10.02	12.4	13.13	13.27	13.35	13.42
DUNA002040	4.2	13	8.8	50	0	0	0	RCP	CB	CM	YES	SITE_VISIT	0% - 25%	2393	11	13.38	13.55	13.66	13.72	13.79
DUNA002045	9.92	13.5	3.58	50	0	0	0	RCP	JB	RO	YES	SURVEY			13.82	14.08	14.17	14.27	14.35	14.42
DUNA002050	11.74	14.64	2.9	50	0	0	0	RCP	CB	CM	YES	SITE_VISIT			14.95	15.04	15.09	15.17	15.22	15.27
DUNA002055	11.944	14.844	2.9	50	0	0	0	RCP	CB	CM	YES	SITE_VISIT			15.16	15.22	15.28	15.35	15.4	15.45
DUNA002060	12.242	14.842	2.6	50	0	0	0	RCP	CB	CM	YES	SITE_VISIT			15.05	15.08	15.12	15.18	15.23	15.27
DUNA002100	-2.308	8.492	10.8	50	6.42	2.308	0	CC	HW	ST	YES	SURVEY	0% - 25%	3047	5.66	6.12	6.51	7.13	7.59	8.03
DUNA002200	-2.31	8.01	10.32	50	6.422	2.31	0	CC	CB	GI	YES	SURVEY	0% - 25%	3046	5.68	6.15	6.54	7.17	7.64	8.09
DUNA002300	-2.324	8.492	10.816	50	6.436	2.324	0	CC	HW	ST	YES	SURVEY	0% - 25%	3043	5.7	6.17	6.57	7.21	7.68	8.14
DUNA002400	-2.03	9.011	11.041	50	6.142	2.03	0	CC	HW	ST	YES	CHATHAM PLANS	0% - 25%	3044	5.79	6.26	6.65	7.29	7.75	8.2
DUNA002500	-0.95	10.214	11.164	50	5.062	0.95	0.29	CC	HW	ST	YES	CHATHAM PLANS			5.8	6.28	6.67	7.33	7.8	8.26
DUNA002600	-0.92	8.41	9.33	50	5.032	0.92	0	IRR	BRIDGE	IRR	YES	SURVEY			5.92	6.4	6.78	7.43	7.89	8.33
DUNA002650	-0.918	7.05	7.968	50	5.03	0.918	0	IRR	BRIDGE	IRR	YES	SURVEY			5.96	6.44	6.83	7.48	7.91	8.34
DUNA002700	-0.9	10.614	11.514	50	5.012	0.9	0.04	RCP	HW	PE	YES	SURVEY			6.08	6.55	6.93	7.56	7.97	8.39
DUNA002800	-0.65	7.583	8.233	50	4.762	0.65	0	IRR	IRR	IRR	YES	IRR			6.11	6.57	6.95	7.57	7.99	8.41
DUNA002900	0.31	8.5	8.19	50	3.802	0	0	IRR	BRIDGE	IRR	YES	CHATHAM PLANS		HDW-87	6.18	6.66	7.02	7.62	8.03	8.45
DUNA003000	1.87	8.5	6.63	50	2.242	0	0	IRR	BRIDGE	IRR	YES	CHATHAM PLANS			6.24	6.73	7.11	7.71	8.14	8.59
DUNA003100	3.61	17.546	13.936	50	0.502	0	0.03	RCP	HW	PE	YES	SURVEY			6.56	7	7.33	7.83	8.23	8.66

Name	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft²)	Existing Conditions Initial Depth	Calibration Initial Depth, ft	Calibration Baseflow (cfs)	Material	Inlet Type	Inlet Shape	> 20 ac Drainage Area (Y/N)	Data Source	Sediment Depth (% pipe diameter)	SWI Facility ID	Junction Max HGL					
															2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
DUNA003110	5.585	14	8.415	50	0	0	0	IRR	IRR	IRR	YES	IRR			7.66	7.84	8.06	8.31	8.7	9.17
DUNA003120	4.3	13	8.7	50	0	0	0	IRR	IRR	IRR	YES	IRR			7.78	8.01	8.29	8.6	9.18	9.98
DUNA003150	1.73	17.546	15.816	50	2.382	0	0	RMP	HW	PE	YES	SURVEY			7.01	7.48	7.85	8.5	9.2	10.43
DUNA003200	1.73	18	16.27	50	2.382	0	0	RMP	HW	PE	YES	SURVEY			7.02	7.48	7.85	8.5	9.2	10.43
DUNA003300	2.158	9.358	7.2	50	1.954	0	0	RMP	CB	GI	YES	SURVEY			8.27	8.89	9.35	9.64	9.73	10.43
DUNA003400	2.565	9.365	6.8	50	1.547	0	0	RCP	CB	GI	YES	SURVEY			8.46	9.11	9.57	9.85	9.91	10.43
DUNA003500	3.49	10.477	6.987	50	0.622	0	0	RCP	HW	PE	YES	SURVEY			8.78	9.47	9.97	10.5	10.75	10.9
DUNA003525	3.4	11.5	8.1	50	0.712	0	0.48	IRR	IRR	IRR	YES	IRR			8.78	9.47	9.97	10.5	10.75	10.9
DUNA003550	3.26	11.5	8.24	50	0.852	0	0	RCP	HW	PE	YES	SURVEY			8.78	9.47	9.97	10.5	10.75	10.9
DUNA003600	3.487	11.5	8.013	50	0.625	0	0	RCP	HW	PE	YES	SURVEY			8.84	9.5	9.99	10.56	10.9	11.25
DUNA003700	4.327	10.039	5.712	50	0	0	0	RCP	HW	PE	YES	SURVEY			8.84	9.5	9.99	10.56	10.9	11.25
DUNA003800	3.937	10.039	6.102	50	0.175	0	0	RCP	HW	PE	YES	SURVEY			8.79	9.43	9.95	10.55	10.9	11.25
DUNA003900	3.55	12.1	8.55	50	0.562	0	0	IRR	IRR	IRR	YES	IRR			8.79	9.43	9.95	10.55	10.9	11.25
DUNA003905	5.746	12.3	6.554	50	0	0	0	IRR	IRR	IRR	YES	IRR			8.79	9.43	9.96	10.55	10.9	11.25
DUNA003906	6.543	13.5	6.957	50	0	0	0	IRR	IRR	IRR	YES	IRR			9.14	9.55	9.96	10.55	10.9	11.25
DUNA003907	7.773	8.925	1.152	50	0	0	0	IRR	IRR	IRR	YES	IRR			8.77	9.46	9.96	10.56	10.9	11.25
DUNA003910	5.525	17.994	12.469	50	0	0	0	RCP	HW	PE	YES	SURVEY			9.61	10.02	10.37	10.81	11.11	11.43
DUNA003920	5.668	13.5	7.832	50	0	0	0	RCP	HW	PE	YES	SURVEY			9.97	10.65	11.31	12.37	13.27	13.91
DUNA003921	9.707	13.5	3.793	50	0	0	0	IRR	IRR	IRR	YES	IRR			9.97	10.65	11.31	12.37	13.27	13.91
DUNA003950	3.5	19.5	16	50	0.612	0	0	RCP	HW	PE	YES	SURVEY			8.79	9.43	9.95	10.55	10.9	11.25
DUNA004000	5.3	19.5	14.2	50	0	0	0	RCP	HW	PE	YES	SURVEY			8.63	9.18	9.72	10.43	10.9	11.29
DUNA004100	4.3	8	3.7	50	0	0	0	RCP	HW	PE	YES	SURVEY			8.63	9.18	9.72	10.43	10.9	11.29
DUNA004110	4.547	8	3.453	50	0	0	0	RCP	HW	PE	YES	SURVEY			8.63	9.18	9.72	10.43	10.9	11.29
DUNA004115	4.878	13.5	8.622	50	0	0	0	RCP	HW	PE	YES	SURVEY			8.63	9.18	9.72	10.43	10.9	11.29
DUNA004120	5.6	9.681	4.081	50	0	0	0	RCP	CB	GI	YES	SURVEY			9.83	10.19	10.31	10.43	10.9	11.29
DUNA004125	6.537	10	3.463	50	0	0	0	RCP	HW	PE	YES	SURVEY			10.43	10.67	10.76	10.87	10.95	11.29
DUNA004126	8.342	18.342	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			10.44	10.69	10.8	10.92	11.02	11.29
DUNA004130	8.936	18.936	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			10.69	11.02	11.2	11.42	11.57	11.72
DUNA004140	5.106	13.04	7.934	50	0	0	2.36	IRR	IRR	IRR	YES	IRR			8.63	9.18	9.72	10.43	10.9	11.29
DUNA004150	5.007	8.62	3.613	50	0	0	0	HDPE	HW	PE	YES	SURVEY			8.63	9.18	9.72	10.43	10.9	11.29
DUNA004151	5.047	8.62	3.573	50	0	0	0	HDPE	HW	PE	YES	SURVEY			8.63	9.18	9.72	10.43	10.9	11.29
DUNA004152	6.04	14.5	8.46	50	0	0	0	IRR	IRR	IRR	YES	IRR			8.63	9.18	9.72	10.43	10.9	11.29
DUNA004200	4.706	8.518	3.812	50	0	0	0	RCP	HW	PE	YES	SURVEY			8.63	9.18	9.72	10.43	10.9	11.29
DUNA004205	4.714	8.518	3.804	50	0	0	0	RCP	HW	PE	YES	SURVEY			8.5	9.18	9.72	10.43	10.9	11.29
DUNA004210	5.483	10.34	4.857	50	0	0	0	RCP	HW	PE	YES	SURVEY			8.5	9.18	9.72	10.43	10.9	11.29
DUNA004220	8.061	10.34	2.279	50	0	0	0	RCP	HW	PE	YES	SURVEY			8.5	9.18	9.72	10.43	10.9	11.29
DUNA004221	8.066	12.5	4.434	50	0	0	0	IRR	IRR	IRR	YES	IRR			8.5	9.19	9.72	10.43	10.9	11.29
DUNA004300	4.04	11.6	7.56	50	0.072	0	0	CC	HW	WG	YES	SURVEY	26% - 50%	3463	8.63	9.19	9.72	10.43	10.9	11.29
DUNA004400	3.37	11.64	8.27	50	0.742	0	0	CC	HW	WG	YES	SURVEY	0% - 25%	3520	8.63	9.19	9.72	10.43	10.9	11.29
DUNA004450	4.1	8.224	4.124	50	0.012	0	1.75	IRR	IRR	IRR	YES	IRR			8.63	9.19	9.72	10.43	10.9	11.29
DUNA004475	5.479	9.062	3.583	50	0	0	0	IRR	IRR	IRR	YES	IRR			8.64	9.19	9.72	10.43	10.9	11.29
DUNA004500	5.706	9.2	3.494	50	0	0	0	UNK	HW	PE	YES	ASSUMED	0% - 25%	3499	8.66	9.19	9.72	10.43	10.9	11.29
DUNA004600	5.794	9.2	3.406	50	0	0	0	UNK	HW	PE	YES	ASSUMED	0% - 25%	3498	9.28	9.49	9.72	10.43	10.9	11.29
DUNA004610	6.939	16.939	10	50	0	0	0.47	IRR	IRR	IRR	YES	IRR			9.37	9.72	9.95	10.43	10.9	11.29
DUNA004700	6.642	17.808	11.166	50	0	0	0	CMP	HW	PE	YES	SURVEY	0% - 25%	4089	9.41	9.78	10.01	10.43	10.9	11.29
DUNA004800	6.734	17.593	10.859	50	0	0	0	CMP	HW	PE	YES	SURVEY	0% - 25%	4088	9.67	9.78	10.01	10.43	10.9	11.29
DUNA004850	8.954	18.954	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			9.84	9.98	10.08	10.43	10.9	11.29
DUNB000000	-0.514	7.75	8.264	50	4.626	0.514	0	RCP	HW	PE	YES	SURVEY			5.14	5.53	5.86	6.34	6.69	7.06
DUNB000005	-0.92	9.08	10	50	5.032	0.92	0	IRR	IRR	IRR	YES	IRR			5.14	5.53	5.86	6.34	6.69	7.06
DUNB000100	-0.34	7.75	8.09	50	4.452	0.34	0	RCP	HW	PE	YES	SURVEY			5.65	6.2	6.68	7.39	7.9	8.1
DUNB000200	2.154	4.738	2.584	50	1.958	0	0	RCP	HW	PE	YES	SURVEY			5.65	6.2	6.68	7.39	7.9	8.1
DUNB000300	1.738	4.738	3	50	2.374	0	0	RCP	HW	PE	YES	SURVEY			5.72	6.2	6.68	7.39	7.9	8.1
DUNB000320	0.77	9.962	9.192	20000	3.342	0	0	RCP	HW	FE	YES	SURVEY			5.72	6.2	6.68	7.39	7.9	8.1
DUNB000450	3.577	9.962	6.385	50	0.535	0	0	RCP	HW	PE	YES	SURVEY			8.49	9.55	10.14	10.32	10.39	10.44

Name	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft²)	Existing Conditions Initial Depth	Calibration Initial Depth, ft	Calibration Baseflow (cfs)	Material	Inlet Type	Inlet Shape	> 20 ac Drainage Area (Y/N)	Data Source	Sediment Depth (% pipe diameter)	SWI Facility ID	Junction Max HGL					
															2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
DUNB000451	9.64	16.507	6.867	50	0	0	0	IRR	IRR	IRR	YES	IRR			9.64	9.64	10.14	10.33	10.4	10.5
DUNB000452	10	17.978	7.978	50	0	0	0	IRR	IRR	IRR	YES	IRR			10	10	10.14	10.34	10.42	10.51
DUNB000500	4.693	9.557	4.864	50	0	0	0	RCP	HW	PE	YES	SURVEY			8.5	9.56	10.14	10.33	10.4	10.45
DUNB000510	4.979	10.88	5.901	50	0	0	0	RCP	JB	RO	YES	SURVEY			8.93	9.75	10.22	10.45	10.54	10.57
DUNB000520	5.43	11.25	5.82	50	0	0	0	RCP	JB	RO	YES	SURVEY			9.48	10.01	10.35	10.59	10.67	10.72
DUNB000600	5.896	9.557	3.661	50	0	0	0	RCP	HW	FE	YES	SURVEY			10.22	10.42	10.57	10.73	10.82	10.92
DUNB000700	6	15.295	9.295	50	0	0	0	IRR	IRR	IRR	YES	IRR			10.28	10.51	10.69	10.88	11.01	11.14
DUNB000800	8.728	13.155	4.427	50	0	0	0	RCP	HW	FE	YES	SURVEY			10.33	10.58	10.75	10.96	11.09	11.22
DUNB000900	9.92	13.155	3.235	50	0	0	0	RCP	HW	FE	YES	SURVEY			13.62	13.72	13.79	13.88	13.96	14.03
DUNC000000	1.458	5.12	3.662	50	2.654	0	0	RCP	HW	PE	YES	SURVEY			5.21	5.64	5.99	6.49	6.87	7.25
DUNC000001	-0.46	9.54	10	50	4.572	0.46	0	IRR	IRR	IRR	YES	IRR			5.19	5.6	5.95	6.47	6.85	7.23
DUNC000002	0.145	6.5	6.355	50	3.967	0	0	UNK	HW	ST	YES	ASSUMED			5.19	5.6	5.95	6.47	6.85	7.23
DUNC000003	2.209	6.5	4.291	50	1.903	0	0	UNK	HW	PE	YES	ASSUMED			5.44	6.11	6.75	6.93	7	7.24
DUNC000005	0.383	10.383	10	50	3.729	0	0.57	IRR	IRR	IRR	YES	IRR			5.2	5.6	5.96	6.47	6.85	7.23
DUNC000010	1.403	11.712	10.309	50	2.709	0	0	IRR	IRR	IRR	YES	IRR			5.2	5.61	5.96	6.47	6.85	7.24
DUNC000100	1.449	5.12	3.671	50	2.663	0	0	RCP	HW	PE	YES	SURVEY			5.57	5.88	6.09	6.5	6.88	7.25
DUNC000200	2.5	8.8	6.3	50	1.612	0	0	UNK	HW	PE	YES	ASSUMED	0%-25%	6070	5.59	5.94	6.19	6.52	6.89	7.26
DUNC000300	3.066	8.8	5.734	50	1.046	0	0	UNK	HW	PE	YES	ASSUMED	0%-25%	417	7.77	9.02	9.1	9.16	9.2	9.23
DUNC000400	3.146	10.945	7.799	50	0.966	0	0	RCP	HW	ST	YES	SURVEY			7.77	9.03	9.11	9.2	9.25	9.3
DUNC000450	3.622	10.945	7.323	50	0.49	0	0	RCP	HW	PE	YES	SURVEY			11.07	11.24	11.3	11.35	11.38	11.4
DUNC000500	4.492	10.5	6.008	50	0	0	0	RCP	HW	ST	YES	SURVEY			11.07	11.25	11.31	11.36	11.39	11.43
DUNC000600	5.464	10.5	5.036	50	0	0	0	RCP	HW	PE	YES	SURVEY			11.07	11.25	11.31	11.36	11.4	11.43
DUNC000601	7.565	17.565	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			11.07	11.28	11.37	11.47	11.55	11.63
DUNC000700	8.011	18.011	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			11.24	11.53	11.73	11.94	12.09	12.22
DUNC000701	9.49	19.49	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			11.4	11.75	11.94	12.12	12.24	12.35
DUNC000800	10.18	16.52	6.34	50	0	0	0	RCP	HW	PE	YES	SURVEY			12.66	13.1	13.29	13.45	13.58	13.73
DUNC000900	10.107	16.52	6.413	50	0	0	0	RCP	HW	PE	YES	SURVEY			12.93	13.62	13.95	14.27	14.64	15.1
DUNC000910	10.769	13.269	2.5	50	0	0	0	RCP	HW	PE	YES	SURVEY			12.94	13.63	13.96	14.28	14.65	15.11
DUNC001000	12.852	16.4	3.548	50	0	0	0	RCP	HW	PE	YES	SURVEY			13.53	13.66	13.97	14.29	14.66	15.13
DUNC001100	13.305	16.4	3.095	50	0	0	0	RCP	HW	PE	YES	SURVEY			15.02	15.6	15.87	16.42	16.58	16.62
DUNC001200	15.146	25.146	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			15.57	15.64	15.88	16.42	16.63	16.77
DUNC001300	9.673	16.148	6.475	50	0	0	0	RCP	HW	PE	YES	SURVEY			14.02	15.46	16.27	16.42	16.63	16.77
DUND000000	-1.215	8.785	10	50	5.327	1.215	0	IRR	IRR	IRR	YES	IRR			5.22	5.62	5.98	6.49	6.87	7.26
DUND000010	-2.55	10.34	12.89	50	6.662	2.55	0	UNK	JB	BD	YES	ASSUMED			5.84	6.32	6.75	7.29	10.34	8.32
DUND000020	-2.695	10.2	12.895	50	6.807	2.695	0	RCP	HW	ST	YES	SURVEY			5.22	5.63	5.98	6.49	6.87	7.26
DUND000050	-0.738	10.24	10.978	50	4.85	0.738	0	STEEL	HW	ST	YES	SURVEY			5.22	5.62	5.98	6.49	6.87	7.26
DUND000100	-0.339	3.439	3.778	50	4.451	0.339	0	STEEL	HW	PE	YES	SURVEY			5.25	5.67	6.04	6.57	6.96	7.35
DUND000101	5.68	11.8	6.12	10000	0	0	0	IRR	IRR	IRR	YES	IRR			10.75	12.11	12.27	12.56	13.07	13.57
DUND000110	3.01	11.41	8.4	50	1.102	0	0	RCP	JB	RO	YES	SURVEY			11.5	12.12	12.32	12.56	13.07	13.57
DUND000115	3.709	12.009	8.3	50	0.403	0	0	RCP	CB	GI	YES	SURVEY			11.96	12.4	12.53	12.67	13.08	13.57
DUND000120	2.07	12.97	10.9	50	2.042	0	0	RCP	JB	RO	YES	SURVEY			10.45	11.08	11.4	11.72	12.24	12.98
DUND000130	2.91	10.61	7.7	50	1.202	0	0	RCP	JB	RO	YES	SURVEY			9.91	10.56	10.94	11.33	11.81	12.68
DUND000140	2.479	11.58	9.101	50	1.633	0	0	RCP	JB	RO	YES	SURVEY			9.45	10.11	10.53	10.97	11.45	12.66
DUND000141	6.779	12.05	5.271	9000	0	0	0	IRR	IRR	IRR	YES	IRR			8.27	8.92	10.74	12.56	13.07	13.57
DUND000150	1.003	11.15	10.147	50	3.109	0	0	RCP	JB	RO	YES	SURVEY			8.93	9.62	10.1	10.6	11.16	12.02
DUND000160	0.782	9.23	8.448	50	3.33	0	0	UNK	JB	RO	YES	SURVEY			8.31	9.01	9.49	10.02	10.42	11.31
DUND000165	-0.35	9.17	9.52	50	4.462	0.35	0	RCP	JB	RO	YES	SURVEY			7.58	8.36	8.9	9.47	9.91	10.51
DUND000167	11.28	11.78	0.5	50	0	0	0	IRR	IRR	IRR	YES	IRR			11.28	11.28	11.28	11.54	12.39	13.55
DUND000200	3.94	11.781	7.841	50	0.172	0	0	RCP	HW	PE	YES	SURVEY			12.43	12.72	12.84	12.97	13.13	13.58
DUND000250	5.797	12.808	7.011	50	0	0	0	IRR	IRR	IRR	YES	IRR			12.43	12.72	12.84	12.97	13.13	13.58
DUND000300	5.98	14.3	8.32	50	0	0	0	RCP	HW	PE	YES	SURVEY			12.46	12.74	12.87	13	13.18	13.61
DUND000400	6.31	14.3	7.99	50	0	0	0	RCP	HW	PE	YES	SURVEY			13.15	13.63	13.89	14.22	14.44	14.52
DUND000500	6.696	12.95	6.254	50	0	0	0	RCP	HW	PE	YES	SURVEY			13.17	13.64	13.89	14.23	14.45	14.53
DUND000540	7.17	12.95	5.78	50	0	0	0	RCP	CB	DW	YES	SURVEY			13.2	13.64	13.89	14.23	14.45	14.53

Name	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft²)	Existing Conditions Initial Depth	Calibration Initial Depth, ft	Calibration Baseflow (cfs)	Material	Inlet Type	Inlet Shape	> 20 ac Drainage Area (Y/N)	Data Source	Sediment Depth (% pipe diameter)	SWI Facility ID	Junction Max HGL					
															2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
DUND000550	7.5	12.949	5.449	50	0	0	0	RCP	CB	DW	YES	SURVEY			13.26	13.64	13.89	14.23	14.45	14.53
DUND000600	8.297	13.3	5.003	50	0	0	0	RCP	HW	FE	YES	SURVEY			13.46	13.66	13.89	14.23	14.45	14.53
DUND000650	9.607	17.5	7.893	50	0	0	0	IRR	IRR	IRR	YES	IRR			13.47	13.67	13.9	14.23	14.45	14.53
DUND000700	9.596	17.57	7.974	50	0	0	0	HDPE	HW	PE	YES	SURVEY			13.48	13.68	13.9	14.23	14.45	14.53
DUND000800	10.73	17.57	6.84	50	0	0	0	HDPE	CB	UNK	YES	SURVEY			14.12	14.44	14.73	15.07	15.34	15.52
DUND000900	10.841	21.825	10.984	50	0	0	0	HDPE	HW	PE	YES	SURVEY			14.62	15.03	15.31	15.72	16.03	16.31
DUND000910	11.677	15	3.323	50	0	0	0	RCP	HW	PE	YES	SURVEY			14.62	15.03	15.31	15.72	16.03	16.31
DUND000920	11.479	15	3.521	50	0	0	0	RCP	HW	PE	YES	SURVEY			14.63	15.04	15.32	15.72	16.03	16.31
DUND000930	11.28	15.8	4.52	50	0	0	0	RCP	HW	PE	YES	SURVEY			14.63	15.04	15.32	15.72	16.03	16.31
DUND000940	11.928	15.8	3.872	50	0	0	0	RCP	HW	PE	YES	SURVEY			14.65	15.04	15.32	15.72	16.03	16.31
DUND001000	12.685	24.84	12.155	50	0	0	0	RCP	HW	FE	YES	SURVEY			14.67	15.05	15.32	15.72	16.03	16.31
DUND001001	12.771	18.491	5.72	50	0	0	0	RCP	CB	RW	YES	SURVEY			14.69	15.05	15.32	15.75	16.16	16.51
DUND001002	13.355	18.655	5.3	50	0	0	0	RCP	JB	RO	YES	SURVEY			14.71	15.06	15.32	15.93	16.49	16.99
DUND001010	13.44	20	6.56	50	0	0	0	RCP	HW	PE	YES	SURVEY			14.74	15.1	15.37	16.06	16.77	17.46
DUND001011	15.229	17.5	2.271	50	0	0	0	IRR	IRR	IRR	YES	IRR			15.76	15.81	15.85	16.14	16.78	17.47
DUND001020	13.84	17.491	3.651	50	0	0	0	RCP	CB	GI	YES	SURVEY			14.84	15.18	15.51	16.05	16.6	17.11
DUND001100	14.136	18.336	4.2	50	0	0	0	RCP	CB	RW	YES	SURVEY			14.73	15.07	15.33	15.6	15.79	15.95
DUND001110	13	18.21	5.21	50	0	0	0	RCP	CB	GI	NO	CHATHAM PLANS			14.69	15.04	15.29	15.52	15.66	15.78
DUND001115	13.25	18.1	4.85	50	0	0	0	RCP	IRR	IRR	YES	CHATHAM PLANS			15.71	16.6	17.21	17.39	17.4	17.42
DUND002000	0.043	11.343	11.3	50	4.069	0	0	RCP	CB	RW	YES	SITE_VISIT			7.97	8.94	9.59	10.47	11.05	11.68
DUND002010	5.15	7.975	2.825	50	0	0	0	RCP	CB	DW	YES	SITE_VISIT			8.27	9.01	9.49	10.02	10.42	11.31
DUND002020	5.2	8.08	2.88	50	0	0	0	RCP	CB	DW	YES	SITE_VISIT			8.31	9.01	9.49	10.02	10.42	11.31
DUND002100	1.118	11.718	10.6	50	2.994	0	0	RCP	CB	LW	YES	SITE_VISIT			8.29	9.47	10.3	11.55	12.2	12.95
DUND002200	2.424	13.924	11.5	50	1.688	0	0	RCP	CB	LW	YES	SITE_VISIT			8.73	10.19	11.25	12.72	13.61	14.36
DUND002300	3.337	14.337	11	50	0.775	0	0	RCP	CB	LW	YES	SITE_VISIT			9.03	10.69	11.89	13.53	14.56	15.31
DUND002400	3.73	15.23	11.5	50	0.382	0	0	RCP	CB	LW	YES	SITE_VISIT			9.29	11.12	12.44	14.18	15.3	16.01
DUND002500	5.03	16.333	11.303	50	0	0	0	RCP	CB	RW	YES	SITE_VISIT			9.67	11.78	13.27	15.12	16.26	16.91
DUND002600	5.93	18.73	12.8	50	0	0	0	RCP	CB	LW	YES	SITE_VISIT			9.96	12.21	13.81	15.7	16.77	17.42
DUND002700	7.153	19.953	12.8	50	0	0	0	RCP	CB	LW	YES	SITE_VISIT			10.37	12.66	14.37	16.28	17.21	17.84
DUND002800	7.4	20.203	12.803	50	0	0	0	RCP	CB	LW	YES	SITE_VISIT			10.78	13.02	14.82	16.73	17.56	18.16
DUND002900	7.78	20.484	12.704	50	0	0	0	RCP	CB	LW	YES	SITE_VISIT			10.91	13.12	14.95	16.87	17.65	18.24
DUND003000	8.563	20.263	11.7	50	0	0	0	RCP	CB	CM	YES	SITE_VISIT			11.31	13.46	15.39	17.33	17.95	18.5
DUND003100	9	19.19	10.19	50	0	0	0	RCP	CB	RW	YES	SITE_VISIT			11.64	13.68	15.66	17.58	18.07	18.59
DUND003200	9.15	18.753	9.603	50	0	0	0	RCP	CB	LW	YES	SITE_VISIT			11.9	13.84	15.86	17.75	18.13	18.63
DUND003300	9.44	17.836	8.396	50	0	0	0	RCP	CB	LW	YES	SITE_VISIT			11.99	13.92	15.96	17.76	18.08	18.53
DUND003400	10.5	15.8	5.3	50	0	0	0	RCP	HW	PE	YES	SITE_VISIT			12.33	14.2	16.34	17.8	17.9	17.97
DUND003401	15.16	17.5	2.34	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.23	16.39	16.52	17.81	17.87	17.9
DUNE000000	1.392	10.614	9.222	50	2.72	0	0	RCP	HW	PE	YES	SURVEY			6.08	6.55	6.93	7.56	7.97	8.39
DUNE000050	4.708	14.708	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			6.4	6.66	7.04	7.84	8.43	8.93
DUNE000100	5.35	13.724	8.374	50	0	0	0	RCP	HW	PE	YES	SURVEY			8.24	8.4	8.5	9.96	10.85	11.42
DUNE000200	6.235	13.724	7.489	50	0	0	0	RCP	HW	PE	YES	SURVEY			10.02	10.72	11.23	14.13	14.26	14.35
DUNE000250	6.484	14.734	8.25	50	0	0	0	RCP	HW	PE	YES	SURVEY			10.54	11.04	11.44	14.25	14.49	14.71
DUNE000300	6.9	14.734	7.834	50	0	0	0	RCP	JB	RO	YES	SURVEY		STMH-51	11.95	12.46	15.16	15.34	15.5	15.62
DUNE000400	6.95	14.723	7.773	50	0	0	0	RCP	JB	RO	YES	SURVEY		STMH-51	12.46	13.08	15.45	15.68	15.81	15.91
DUNE000500	7.15	14.44	7.29	50	0	0	0	RCP	CB	DW	YES	SURVEY			13.16	13.91	15.31	15.69	15.83	15.93
DUNE000550	7.216	14.27	7.054	50	0	0	0	RCP	HW	PE	YES	SURVEY			13.8	14.67	15.38	15.7	15.84	15.94
DUNE000600	8.1	19.15	11.05	50	0	0	0	IRR	IRR	IRR	YES	IRR			13.81	14.67	15.38	15.71	15.87	15.98
DUNE000650	8.6	19.155	10.555	50	0	0	0	IRR	IRR	IRR	YES	IRR			13.82	14.67	15.38	15.72	15.88	16
DUNE000700	8.892	16.06	7.168	50	0	0	0	RCP	HW	PE	YES	SURVEY			13.83	14.68	15.38	15.73	15.89	16.02
DUNE000800	8.707	16.06	7.353	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.12	16.45	16.6	16.76	16.86	16.94
DUNE000850	8.753	15.735	6.982	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.12	16.45	16.6	16.76	16.86	16.95
DUNE000900	8.815	15.735	6.92	50	0	0	0	HDPE	HW	PE	YES	SURVEY			16.13	16.45	16.6	16.77	16.86	16.95
DUNE000905	9.521	20.297	10.776	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.14	16.47	16.63	16.81	16.93	17.03
DUNE000909	10.856	21.161	10.305	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.17	16.53	16.73	16.97	17.14	17.29

Name	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft²)	Existing Conditions Initial Depth	Calibration Initial Depth, ft	Calibration Baseflow (cfs)	Material	Inlet Type	Inlet Shape	> 20 ac Drainage Area (Y/N)	Data Source	Sediment Depth (% pipe diameter)	SWI Facility ID	Junction Max HGL					
															2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
DUNE000910	9.946	15.59	5.644	50	0	0	0	RCP	HW	PE	YES	SURVEY			15.45	15.81	15.92	15.99	16.03	16.07
DUNE000920	11.491	19	7.509	50	0	0	0	HDPE	HW	PE	YES	SURVEY			15.45	15.81	15.92	15.99	16.02	16.06
DUNE000925	11.723	21.723	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.18	16.54	16.75	17	17.18	17.34
DUNE000930	11.136	15.5	4.364	50	0	0	0	RCP	HW	PE	YES	SURVEY		HDW-821	13.82	14.05	14.32	14.9	15.38	15.85
DUNE000931	12.16	17	4.84	50	0	0	0	IRR	IRR	IRR	YES	IRR			13.82	14.04	14.31	14.9	15.37	15.85
DUNE000935	12.418	22.418	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.21	16.59	16.82	17.09	17.27	17.44
DUNE000940	13.007	17.51	4.503	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.24	16.63	16.87	17.16	17.36	17.53
DUNE000950	13.012	17.51	4.498	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.69	17.74	17.78	17.82	17.84	17.87
DUNE000975	14.657	19.8	5.143	50	0	0	0	IRR	IRR	IRR	YES	IRR			17.71	17.77	17.81	17.87	17.91	17.96
DUNF000010	9.857	13.15	3.293	50	0	0	0	RCP	HW	PE	YES	GC_SWI	0% - 25%	3500	11.62	11.75	11.84	11.97	12.07	12.17
DUNF000020	11.244	13.15	1.906	50	0	0	0	RCP	HW	FES	YES	GC_SWI	0% - 25%	3501	13.85	13.92	13.97	14.04	14.09	14.14
DUNF000030	11.833	13.69	1.857	50	0	0	0	RCP	HW	FES	YES	GC_SWI	0% - 25%	3503	13.92	14	14.05	14.12	14.18	14.23
DUNF000040	12.181	13.69	1.509	50	0	0	0	RCP	HW	FES	YES	GC_SWI	0% - 25%	3504	14.04	14.06	14.08	14.14	14.19	14.24
DUNF000050	15.85	23	7.15	50	0	0	0	IRR	IRR	IRR	YES	IRR			17.3	17.33	17.35	17.37	17.38	17.39
DUNF000060	19.65	23.25	3.6	50	0	0	0	RCP	OCS	OCS	YES	SURVEY	0% - 25%	1621	22.78	23.17	23.25	23.35	23.55	23.76
DUNF000065	19.03	22.9	3.87	50	0	0	0	CC	OCS	OCS	YES	SURVEY	0% - 25%	1621	22.79	23.04	23.12	23.35	23.55	23.76
DUNF000066	18.89	22.9	4.01	50	0	0	0	IRR	IRR	IRR	YES	IRR			22.79	23.04	23.12	23.35	23.55	23.76
DUNF000067	18.89	22.9	4.01	50	0	0	0	IRR	IRR	IRR	YES	IRR			22.79	23.04	23.12	23.35	23.55	23.76
DUNF000100	-1.54	11	12.54	50	5.652	1.54	0	CC	JB	RO	YES	CHATHAM PLANS	0% - 25%	3060	5.85	6.34	6.73	7.4	7.86	8.3
DUNF000200	-1.25	9.53	10.78	50	5.362	1.25	0	CC	JB	RO	YES	CHATHAM PLANS	0% - 25%	3064	5.89	6.39	6.77	7.45	7.91	8.35
DUNF000300	-1.32	9.48	10.8	50	5.432	1.32	0	CC	JB	RO	YES	CHATHAM PLANS	0% - 25%	3067	5.92	6.43	6.81	7.49	7.96	8.4
DUNF000400	-1.33	9.42	10.75	50	5.442	1.33	0	CC	JB	RO	YES	CHATHAM PLANS	0% - 25%	3072	5.95	6.47	6.86	7.54	8.01	8.45
DUNF000500	-0.8	9.77	10.57	50	4.912	0.8	0	CC	JB	RO	YES	SURVEY	0% - 25%	3075	5.99	6.51	6.9	7.59	8.05	8.49
DUNF000600	-0.652	9.997	10.649	50	4.764	0.652	0	CC	CB	LW	YES	CHATHAM PLANS		3078	6.02	6.54	6.94	7.63	8.09	8.52
DUNF000700	-0.509	10.215	10.724	50	4.621	0.509	0	CC	CB	LW	YES	CHATHAM PLANS		3079	6.05	6.58	6.98	7.67	8.13	8.56
DUNF001400	-0.345	10.23	10.575	50	4.457	0.345	0	RCP	HW	ST	YES	SURVEY			6.18	6.76	7.2	7.96	8.41	9.14
DUNF001410	1.947	9.26	7.313	50	2.165	0	0	RCP	HW	PE	YES	SURVEY	26% - 50%	3145	6.2	6.77	7.21	7.97	8.41	9.15
DUNF001500	1.255	9.26	8.005	50	2.857	0	0	RCP	HW	PE	YES	SURVEY	0% - 25%	3144	6.42	7.08	7.62	8.47	9.06	9.89
DUNF001600	3.297	11.15	7.853	50	0.815	0	0	IRR	IRR	IRR	YES	IRR			6.6	7.2	7.7	8.51	9.09	9.91
DUNF001800	1.053	10.253	9.2	50	3.059	0	0	CC	HW	ST	YES	SURVEY	26% - 50%	3208	6.67	7.24	7.73	8.53	9.11	9.92
DUNF001805	3.3	13.819	10.519	50	0.812	0	0	RCP	HW	WG	YES	CHATHAM PLANS			5.52	5.96	6.34	6.92	7.37	7.8
DUNF001810	3.8	13.3	9.5	50	0.312	0	0	RCP	JB	RO	YES	SURVEY			6.59	7.14	7.47	8.08	8.63	9.17
DUNF001815	3.98	14.68	10.7	50	0.132	0	0	RCP	CB	LW	YES	SURVEY		501	7.03	7.54	7.89	8.55	9.2	9.82
DUNF001820	5.01	13.01	8	50	0	0	0	RCP	CB	DW	YES	SURVEY		500	7.92	8.63	9.19	10.3	11.43	12.3
DUNF001830	5.65	13.45	7.8	50	0	0	0	RCP	CB	RW	YES	SURVEY		606	8.64	9.45	10.26	11.8	13.34	13.98
DUNF001840	6.14	13.74	7.6	50	0	0	0	RCP	JB	RO	YES	SURVEY	0% - 25%	499	9.2	10.13	13.77	13.12	14.37	15.05
DUNF001845	6.33	13.78	7.45	50	0	0	0	RCP	JB	RO	YES	SURVEY			9.5	10.51	13.81	13.94	15.05	15.76
DUNF001850	7.72	14.97	7.25	50	0	0	0	RCP	CB	RW	YES	SURVEY		494	10.06	11.04	12.14	15.07	15.95	16.7
DUNF001860	8.7	15.6	6.9	50	0	0	0	RCP	JB	RO	YES	SURVEY	0% - 25%	490	10.96	11.74	12.82	15.99	17	17.88
DUNF001865	9.25	16.55	7.3	50	0	0	0	RCP	CB	RW	YES	SURVEY		488	11.77	12.69	13.62	17.1	18.3	19.32
DUNF001866	11.51	15.3	3.79	50	0	0	0	RCP	FL	RT	YES	SURVEY	0% - 25%	489	16.82	16.9	17	17.43	18.3	19.32
DUNF001867	15.14	17.6	2.46	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.93	17.05	17.15	17.55	18.32	19.33
DUNF001870	11	18.05	7.05	50	0	0	0	RCP	CB	RW	YES	SURVEY			12.9	13.49	14.84	17.66	18.71	19.74
DUNF001880	11.5	18.6	7.1	50	0	0	0	RCP	JB	RO	YES	SURVEY			13.48	14.02	15.32	18.04	19.03	20
DUNF001900	1.153	10.253	9.1	50	2.959	0	0	CC	HW	ST	YES	SURVEY			6.67	7.25	7.74	8.55	9.14	9.96
DUNF001910	13.2	19.5	6.3	50	0	0	0	RCP	CB	RW	YES	SURVEY			14.45	14.79	15.75	18.91	19.91	20.54
DUNF001920	13.97	19.92	5.95	50	0	0	0	RCP	CB	RW	YES	SURVEY			15.04	15.26	15.91	19.6	20.52	21.11
DUNF001930	15.16	20.31	5.15	50	0	0	0	RCP	JB	RO	YES	SURVEY			16.19	16.39	16.68	20.69	21.31	22.16
DUNF001931	14	20.2	6.2	50	0	0	0	RCP	CB	RW	YES	SURVEY			17.74	19.41	20.6	21.2	21.99	23.16
DUNF002000	3.732	12.3	8.568	50	0.38	0	0	IRR	IRR	IRR	YES	IRR			6.71	7.27	7.76	8.55	9.15	9.96
DUNF002100	3.254	8.1	4.846	50	0.858	0	0	HDPE	HW	PE	YES	SURVEY			7.29	7.48	7.85	8.58	9.18	9.98
DUNF002200	3.452	8.1	4.648	50	0.66	0	0.72	HDPE	HW	PE	YES	SURVEY			7.79	8.01	8.29	8.6	9.18	9.98
DUNF002300	1.006	13.1	12.094	50	3.106	0	0	CC	HW	ST	YES	SURVEY	0% - 25%	3132	7.8	8.02	8.3	8.6	9.19	9.99
DUNF002310	1.2	15.1	13.9	50	2.912	0	0	RCP	CB	GI	YES	GC_SWI			7.82	8.04	8.32	8.63	9.26	10.11

Name	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft²)	Existing Conditions Initial Depth	Calibration Initial Depth, ft	Calibration Baseflow (cfs)	Material	Inlet Type	Inlet Shape	> 20 ac Drainage Area (Y/N)	Data Source	Sediment Depth (% pipe diameter)	SWI Facility ID	Junction Max HGL					
															2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
DUNF002311	5.35	15.112	9.762	50	0	0	0	RCP	CB	LW	NO	GC_SWI		3093	7.82	8.05	8.37	8.77	9.43	10.25
DUNF002312	5.72	13.165	7.445	50	0	0	0	RCP	CB	RW	NO	GC_SWI	0% - 25%	3092	7.82	8.22	9.44	10.01	10.54	11.11
DUNF002313	6.5	11.6	5.1	50	0	0	0	RCP	CB	LW	NO	GC_SWI		3091	7.82	8.53	11.25	12.13	12.41	12.61
DUNF002314	6.55	11.03	4.48	50	0	0	0	RCP	CB	LW	NO	GC_SWI	0% - 25%	3090	7.82	8.59	11.75	12.15	12.43	12.63
DUNF002315	6.75	10.95	4.2	50	0	0	0	RCP	CB	LW	NO	GC_SWI		3086	7.82	8.59	11.7	12.06	12.31	12.49
DUNF002316	6.9	10.36	3.46	50	0	0	0	RCP	CB	LW	NO	GC_SWI		3089	7.82	8.59	11.65	11.96	12.17	12.32
DUNF002317	11.15	11.65	0.5	50	0	0	0	IRR	IRR	IRR	YES	IRR			11.15	11.15	11.18	11.75	12.43	12.63
DUNF002400	1.8	8.912	7.112	4000	2.312	0	0	RCP	CB	GI	YES	GC_SWI	0% - 25%	3108	8.8	9.22	9.51	10.65	11.52	11.73
DUNF002500	2	9.7	7.7	4000	2.112	0	0	RCP	CB	GI	YES	SURVEY	0% - 25%	3100	9.42	9.99	10.33	10.72	11.52	11.73
DUNF002600	2.2	12.951	10.751	50	1.912	0	0	RCP	JB	RO	YES	SURVEY	0% - 25%	3101	9.96	10.66	11.05	11.44	11.98	12.18
DUNF002601	4.95	11.705	6.755	20000	0	0	0	RCP	CB	DW	NO	GC_SWI		3104	9.96	10.86	11.76	12.15	12.43	12.63
DUNF002602	10	11.216	1.216	5000	0	0	0	IRR	IRR	IRR	YES	IRR			10	11.47	11.76	12.15	12.43	12.63
DUNF002700	2.401	11.019	8.618	50	1.711	0	0	RCP	HW	PE	YES	SURVEY	0% - 25%	3102	10.72	11.52	11.9	12.29	12.53	12.74
DUNF002800	4.511	14.511	10	50	0	0	0.08	IRR	IRR	IRR	YES	IRR			10.72	11.52	11.9	12.3	12.53	12.74
DUNF002900	4.554	14.554	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			10.74	11.53	11.91	12.3	12.54	12.75
DUNF003000	5.063	15.063	10	50	0	0	0	IRR	IRR	IRR	YES	IRR		2355	10.76	11.53	11.91	12.3	12.54	12.76
DUNF003200	6.442	16.442	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			10.82	11.57	11.95	12.33	12.58	12.82
DUNF003201	9.275	18.382	9.107	50	0	0	0	IRR	IRR	IRR	YES	IRR			11.1	11.57	11.95	12.33	12.58	12.82
DUNF003202	9.735	20.334	10.599	50	0	0	0	IRR	IRR	IRR	YES	IRR			12.28	12.61	12.87	13.22	13.48	13.73
DUNF003203	12.735	22.434	9.699	50	0	0	0	IRR	IRR	IRR	YES	IRR			14.36	14.62	14.83	15.11	15.31	15.51
DUNF003210	5.923	15.923	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			10.91	11.63	11.99	12.37	12.63	12.89
DUNF003220	6.316	16.844	10.528	50	0	0	0.05	IRR	IRR	IRR	YES	IRR			11.03	11.69	12.04	12.41	12.67	12.95
DUNF003221	6.4	16.837	10.437	50	0	0	0	IRR	IRR	IRR	YES	IRR			11.14	11.73	12.07	12.42	12.69	12.97
DUNF003225	14.774	24.74	9.966	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.5	16.76	16.96	17.22	17.4	17.57
DUNF003230	15.039	25.039	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.63	16.9	17.09	17.36	17.54	17.71
DUNF003300	6.55	16.82	10.27	50	0	0	0	RCP	HW	PE	YES	SURVEY			11.31	11.86	12.2	12.55	12.92	13.3
DUNF003305	8.509	14	5.491	50	0	0	0	IRR	IRR	IRR	YES	IRR			11.31	11.86	12.2	12.55	12.93	13.3
DUNF003306	8.6	14	5.4	50	0	0	0	RCP	HW	PE	YES	GC_SWI			11.31	11.86	12.2	12.55	12.93	13.3
DUNF003307	11.253	13.3	2.047	50	0	0	0	RCP	CB	GI	YES	GC_SWI	0% - 25%	3581	12.94	13.3	13.44	13.61	13.69	13.74
DUNF003310	9.865	19.865	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			12.87	13.16	13.49	13.85	14.05	14.26
DUNF003311	8.953	15	6.047	50	0	0	0	HDPE	HW	PE	YES	SURVEY	0% - 25%	3584	12.87	13.16	13.49	13.85	14.05	14.26
DUNF003315	9.008	13.6	4.592	50	0	0	0	HDPE	HW	PE	YES	SURVEY	0% - 25%	3585	13.67	13.87	13.93	14.03	14.08	14.26
DUNF003316	8.922	14.161	5.239	50	0	0	0	RCP	HW	PE	YES	GC_SWI			13.69	13.91	13.99	14.11	14.18	14.28
DUNF003317	9	12.24	3.24	50	0	0	0	RCP	CB	GI	NO	GC_SWI	0% - 25%	3589	13.04	13.3	13.44	13.64	13.75	13.84
DUNF003318	9.5	13.95	4.45	50	0	0	0	RCP	CB	GI	NO	GC_SWI	0% - 25%	3590	13.05	13.3	14.01	14.47	14.65	14.81
DUNF003320	8.9	14.75	5.85	50	0	0	0	UNK	HW	PE	YES	SITE_VISIT			13.71	13.95	14.03	14.15	14.23	14.31
DUNF003321	8.9	15.097	6.197	50	0	0	0	UNK	JB	RO	YES	SURVEY			13.94	14.71	14.55	14.87	15.16	15.5
DUNF003322	8.834	14.835	6.001	50	0	0	0	RCP	CB	GI	YES	SURVEY	0% - 25%	3591	14.4	15.09	15.5	16.22	16.98	17.89
DUNF003323	9.602	16.102	6.5	50	0	0	0	RCP	JB	RO	YES	SURVEY			14.41	15.12	15.52	16.21	16.97	17.87
DUNF003324	10.1	15.5	5.4	50	0	0	0	RCP	JB	RO	YES	SITE_VISIT	0% - 25%	3534	14.57	15.15	15.48	16.04	16.69	17.41
DUNF003325	12.465	14.265	1.8	17500	0	0	0	HDPE	CB	RT	YES	SITE_VISIT		3570	15.04	15.53	16.07	16.27	16.36	16.42
DUNF003327	14	15.408	1.408	6000	0	0	0	HDPE	CB	GI	YES	SITE_VISIT	0% - 25%	3538	15.94	16.24	16.34	16.42	16.46	16.49
DUNF003328	12.475	16.125	3.65	50	0	0	0	HDPE	CB	GI	YES	SITE_VISIT	0% - 25%	3537	15.44	15.8	16.01	16.26	16.42	16.58
DUNF003329	12.09	15.44	3.35	50	0	0	0	RCP	JB	BD	YES	GC_SWI	51% - 75%	3539	15.44	15.79	16.01	16.26	16.43	16.59
DUNF003330	12.67	17.08	4.41	50	0	0	0	RCP	HW	PE	YES	SITE_VISIT	26% - 50%	3540	15.45	15.8	16.03	16.31	16.48	16.66
DUNF003331	12.5	16.12	3.62	3000	0	0	0	UNK	CB	GI	YES	SURVEY	0% - 25%	3541	17	17.24	17.3	17.33	17.35	17.36
DUNF003332	12.75	16.607	3.857	50	0	0	0	RCP	JB	RO	YES	SURVEY	0% - 25%	3546	17.01	17.25	17.32	17.37	17.39	17.42
DUNF003335	9.45	20.303	10.853	50	0	0	0	RCP	HW	PE	YES	SURVEY	26% - 50%	3588	13.29	13.69	14.06	14.51	14.77	14.99
DUNF003340	9.588	20.832	11.244	50	0	0	0	RCP	HW	PE	YES	SURVEY		0	13.45	14.01	14.6	15.46	16.11	16.75
DUNF003341	11.18	21.18	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			14.03	14.57	15.09	15.84	16.4	16.96
DUNF003342	13.362	23.362	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			15.74	16.16	16.49	16.95	17.37	17.78
DUNF003345	15.213	22	6.787	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.54	16.87	17.1	17.37	17.63	17.96
DUNF003350	14.7	20	5.3	50	0	0	0	RCP	OCS	OCS	YES	SURVEY			16.63	17.03	17.33	17.76	18.13	18.68
DUNF003400	6.75	18.73	11.98	50	0	0	0.17	RCP	HW	PE	YES	SURVEY			12.15	12.98	13.56	14.18	14.6	14.97

Name	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft²)	Existing Conditions Initial Depth	Calibration Initial Depth, ft	Calibration Baseflow (cfs)	Material	Inlet Type	Inlet Shape	> 20 ac Drainage Area (Y/N)	Data Source	Sediment Depth (% pipe diameter)	SWI Facility ID	Junction Max HGL					
															2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
DUNF003403	9.44	19.283	9.843	50	0	0	0	IRR	IRR	IRR	YES	IRR			12.15	12.98	13.56	14.18	14.6	14.97
DUNF003406	10.87	19.882	9.012	50	0	0	0	IRR	IRR	IRR	YES	IRR			12.15	12.98	13.56	14.18	14.6	14.97
DUNF003409	11.17	18.2	7.03	50	0	0	0	IRR	IRR	IRR	YES	IRR			12.18	12.98	13.56	14.18	14.6	14.97
DUNF003410	9.668	18.8	9.132	50	0	0	0	UNK	HW	PE	YES	ASSUMED			12.23	12.99	13.56	14.18	14.6	14.97
DUNF003420	9.9	18.8	8.9	50	0	0	0	UNK	HW	PE	YES	ASSUMED			15.61	16.69	17.58	18.04	18.21	18.33
DUNF003421	11.4	22.793	11.393	50	0	0	0.23	IRR	IRR	IRR	YES	IRR			15.61	16.69	17.58	18.04	18.21	18.33
DUNF003425	11.65	22.427	10.777	50	0	0	0	IRR	IRR	IRR	YES	IRR			15.61	16.69	17.58	18.04	18.21	18.33
DUNF003431	11.047	20.3	9.253	50	0	0	0	CMP	HW	PE	YES	SURVEY			15.62	16.7	17.58	18.04	18.21	18.33
DUNF003432	13.12	20.3	7.18	50	0	0	0	HDPE	HW	PE	YES	SURVEY			15.82	17.05	18	18.26	18.33	18.39
DUNF003433	14.938	17.95	3.012	50	0	0	0	IRR	IRR	IRR	YES	IRR			15.82	17.05	18	18.26	18.33	18.38
DUNF003440	14.3	16.3	2	50	0	0	0	CMP	HW	PE	YES	SURVEY			17.44	17.92	18.18	18.46	18.75	18.9
DUNF003441	14.45	17.35	2.9	50	0	0	0	HDPE	HW	PE	YES	SURVEY			17.44	17.92	18.18	18.45	18.75	18.9
DUNF003442	14.373	16.89	2.517	50	0	0	0	HDPE	CB	GI	YES	SURVEY			17	17.76	18.12	18.4	18.64	18.78
DUNF003443	14.256	16.99	2.734	50	0	0	0	HDPE	CB	GI	YES	SURVEY			16.45	17.52	18.06	18.34	18.51	18.63
DUNF003445	14.07	16.98	2.91	50	0	0	0	HDPE	HW	PE	YES	SURVEY			15.82	17.05	18	18.26	18.33	18.39
DUNF003450	14.088	20	5.912	50	0	0	0	CMP	HW	PE	YES	SURVEY			18.16	18.86	19.38	20.14	20.25	20.29
DUNF003460	15	25.25	10.25	50	0	0	0	IRR	IRR	IRR	YES	IRR			18.24	18.88	19.4	20.14	20.27	20.31
DUNF003470	15.758	27.74	11.982	50	0	0	0	HDPE	HW	PE	YES	SURVEY	0% - 25%	1625	18.27	18.9	19.41	20.15	20.28	20.33
DUNF003475	16	20.57	4.57	50	0	0	0	RCP	YI	RD	YES	SURVEY	0% - 25%	1624	18.58	19.26	19.86	20.78	20.88	20.91
DUNF003481	18.432	22	3.568	50	0	0	0	IRR	IRR	IRR	YES	IRR			18.84	19.26	19.86	20.78	20.88	20.91
DUNF003485	17.39	20.87	3.48	50	0	0	0	RCP	CB	LW	YES	GC_SWI		1626	18.78	19.33	19.94	20.81	20.95	20.98
DUNF003486	17.75	20.069	2.319	50	0	0	0	RCP	CB	RW	NO	SURVEY		1627	18.78	19.3	19.82	20.52	20.78	21.06
DUNF003487	18.25	20	1.75	50	0	0	0	RCP	HW	PE	NO	SURVEY	0% - 25%	1628	18.81	19.3	19.77	20.43	20.66	20.93
DUNF003488	17.95	21.5	3.55	50	0	0	0	IRR	IRR	IRR	YES	IRR			18.81	19.3	19.77	20.43	20.66	20.93
DUNF003490	18.42	21.27	2.85	11600	0	0	0	RCP	CB	LW	YES	SURVEY		1623	21.21	21.79	22.04	22.24	22.38	22.5
DUNF003491	19.35	22.5	3.15	50	0	0	0	RCP	CB	LW	YES	SURVEY		1622	22.27	22.93	23.12	23.35	23.55	23.76
DUNF003492	19.7	22.698	2.998	50	0	0	0	UNK	JB	RO	YES	GC_SWI	0% - 25%	1635	22.25	22.73	22.83	22.9	22.95	22.98
DUNF003493	18.75	22.48	3.73	11300	0	0	0	UNK	CB	RW	NO	GC_SWI		1620	22.55	22.78	22.94	23.14	23.34	23.6
DUNF003494	18.15	21.5	3.35	50	0	0	0	RCP	CB	RW	NO	GC_SWI		1618	22.45	22.63	22.74	22.87	23.08	23.36
DUNF003495	17.52	21.07	3.55	50	0	0	0	RCP	CB	RW	NO	GC_SWI		1604	21.26	21.32	21.48	21.72	21.84	21.93
DUNF003496	17.65	21.15	3.5	50	0	0	0	RCP	HW	PE	NO	GC_SWI	0% - 25%	1605	21.58	21.64	21.7	21.82	21.92	21.99
DUNF003497	17.12	20.27	3.15	50	0	0	0	RCP	JB	RO	NO	GC_SWI	0% - 25%	1609	21.04	21.29	21.47	21.7	21.82	21.91
DUNF003498	17.05	21.07	4.02	50	0	0	0	RCP	CB	RW	NO	GC_SWI		1603	20.9	21.29	21.48	21.71	21.84	21.93
DUNF003499	19.04	20.8	1.76	50	0	0	0	RCP	HW	PE	NO	GC_SWI	0% - 25%	1608	20.89	20.97	21.01	21.04	21.06	21.08
DUNF003500	6.8	19.59	12.79	50	0	0	0	RCP	HW	PE	YES	SURVEY			12.49	13.18	13.68	14.25	14.63	14.99
DUNF003501	16.91	20.16	3.25	50	0	0	0	RCP	CB	YI	NO	GC_SWI	0% - 25%	1602	20.88	21.28	21.48	21.71	21.83	21.92
DUNF003502	16.52	20.194	3.674	50	0	0	0	UNK	CB	GI	NO	AERIALS		1601	20.87	21.28	21.47	21.71	21.83	21.92
DUNF003503	16.32	21	4.68	50	0	0	0	RCP	CB	DW	NO	AERIALS		3217	19.75	20.04	20.18	20.36	20.46	20.55
DUNF003510	18.767	20.53	1.763	50	0	0	0	RCP	HW	PE	NO	GC_SWI			20.89	20.96	21	21.03	21.05	21.08
DUNF003520	19.334	20.53	1.196	50	0	0	0	RCP	HW	PE	NO	GC_SWI	0% - 25%	1606	20.77	20.8	20.81	20.84	20.85	20.87
DUNF003530	18.5	20.34	1.84	50	0	0	0	RCP	HW	PE	NO	GC_SWI	26% - 50%	1839	19.22	19.48	19.66	19.94	20.12	20.3
DUNF003540	18.2	19.807	1.607	3500	0	0	0	RCP	CB	DW	NO	GC_SWI	0% - 25%	1838	18.94	19.13	19.23	19.42	19.59	19.77
DUNF003550	17.938	19.807	1.869	50	0	0	0	RCP	HW	PE	NO	GC_SWI	0% - 25%	1837	18.69	18.79	18.96	19.2	19.41	19.63
DUNF003600	6.83	19.59	12.76	50	0	0	0	RCP	HW	PE	YES	SURVEY			12.71	13.44	13.95	14.58	15.03	15.47
DUNF003700	10.06	20.06	10	50	0	0	0.21	IRR	IRR	IRR	YES	IRR			12.8	13.47	13.96	14.58	15.03	15.47
DUNF003702	12.348	12.348	0	10000	0	0	0	CC	OCS	OCS	YES	SURVEY			13.94	14.38	14.55	14.87	15.17	15.5
DUNF003705	10.5	20	9.5	50	0	0	0	IRR	IRR	IRR	YES	IRR			13.12	13.62	14.05	14.62	15.05	15.48
DUNF003710	13.912	19.65	5.738	50	0	0	0	RCP	HW	PE	YES	SURVEY			14.51	14.57	14.62	14.68	15.03	15.47
DUNF003720	14.045	19.65	5.605	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.43	16.9	17.31	17.95	18.51	19.15
DUNF003721	15.609	19.25	3.641	50	0	0	0.24	IRR	IRR	IRR	YES	IRR			16.43	16.9	17.31	17.95	18.51	19.15
DUNF003730	13.55	25.486	11.936	50	0	0	0	RCP	HW	PE	YES	SURVEY			15.73	15.9	16.02	15.99	15.92	15.88
DUNF003740	13.891	16.53	2.639	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.55	16.67	16.72	16.75	16.78	16.87
DUNF003750	14.751	25.638	10.887	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.61	16.73	16.79	16.85	16.92	17.18
DUNF003760	15.21	18.44	3.23	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.15	17.52	17.84	18.26	18.56	18.67

Name	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft²)	Existing Conditions Initial Depth	Calibration Initial Depth, ft	Calibration Baseflow (cfs)	Material	Inlet Type	Inlet Shape	> 20 ac Drainage Area (Y/N)	Data Source	Sediment Depth (% pipe diameter)	SWI Facility ID	Junction Max HGL					
															2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
DUNF003761	16	20.6	4.6	50	0	0	0	IRR	IRR	IRR	YES	IRR			17.15	17.52	17.84	18.26	18.56	18.67
DUNF003800	10.6	21.542	10.942	50	0	0	0	IRR	IRR	IRR	YES	IRR			13.14	13.63	14.05	14.62	15.05	15.48
DUNF003801	10.7	22.292	11.592	50	0	0	0	IRR	IRR	IRR	YES	IRR			13.25	13.66	14.06	14.62	15.06	15.48
DUNF003802	10.25	23.406	13.156	50	0	0	0	CMP	HW	PE	YES	SURVEY			13.3	13.68	14.06	14.63	15.06	15.48
DUNF003803	13.937	23.937	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			14.99	15.2	15.36	15.57	15.73	15.87
DUNF003805	15.651	25.651	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.49	16.65	16.77	16.94	17.06	17.16
DUNF003810	10.77	12.77	2	50	0	0	0	CMP	HW	PE	YES	SURVEY			13.12	13.62	14.05	14.62	15.05	15.48
DUNF003820	10.8	15.445	4.645	50	0	0	0	CMP	HW	PE	YES	SURVEY			13.12	13.62	14.22	15.58	15.9	16.12
DUNF003900	11.718	21.5	9.782	50	0	0	0	CMP	HW	PE	YES	SURVEY			15.93	16.33	16.74	17.28	17.69	18.1
DUNF003950	11.836	20.22	8.384	50	0	0	0	CMP	HW	PE	YES	SURVEY			15.93	16.33	16.74	17.28	17.69	18.1
DUNF004000	12.024	20.22	8.196	50	0	0	0	CMP	HW	PE	YES	SURVEY			16.08	16.48	16.88	17.42	17.83	18.23
DUNF004001	8.872	15.208	6.336	50	0	0	0	RCP	JB	RO	YES	CHATHAM PLANS			14.12	14.79	14.99	15.42	15.91	16.48
DUNF004002	8.864	15.24	6.376	50	0	0	0	RCP	JB	RO	YES	CHATHAM PLANS			14.24	14.91	15.24	15.78	16.39	17.13
DUNF004100	12.7	20	7.3	50	0	0	0.54	IRR	IRR	IRR	YES	IRR			16.09	16.48	16.88	17.42	17.83	18.23
DUNF004110	13.476	24.043	10.567	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.09	16.48	16.88	17.42	17.83	18.23
DUNF004120	13.704	17.97	4.266	24500	0	0	0	RCP	OCS	OCS	YES	SURVEY			16.09	16.7	17.47	18.19	18.28	18.34
DUNF004200	11.9	22	10.1	50	0	0	0	METAL	HW	WG	YES	SURVEY			16.09	16.48	16.88	17.42	17.83	18.23
DUNF004300	12.299	22	9.701	50	0	0	0	METAL	HW	WG	YES	SURVEY			16.29	16.7	17.09	17.63	18.04	18.43
DUNF004350	12.15	22.194	10.044	50	0	0	0.01	IRR	IRR	IRR	YES	IRR			16.29	16.7	17.09	17.63	18.04	18.43
DUNF004400	12	20.218	8.218	50	0	0	1.33	METAL	HW	ST	YES	SURVEY			16.3	16.71	17.09	17.63	18.04	18.43
DUNF004500	12.342	20.218	7.876	50	0	0	0	METAL	HW	PE	YES	SURVEY			16.92	17.39	17.78	18.32	18.75	19.14
DUNF004505	13.5	15.5	2	50	0	0	0	CMP	HW	PE	YES	SITE_VISIT			16.92	17.39	17.78	18.32	18.75	19.14
DUNF004540	12.5	25.6	13.1	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.94	17.41	17.79	18.33	18.75	19.14
DUNF004541	12.35	19	6.65	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.95	17.41	17.83	18.35	18.75	19.14
DUNF004550	12.397	18.3	5.903	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.95	17.42	17.86	18.35	18.75	19.14
DUNF004551	12.4	18.75	6.35	50	0	0	0	RCP	HW	PE	YES	SITE_VISIT			16.95	17.41	17.83	18.36	18.75	19.14
DUNF004552	12.5	18.75	6.25	50	0	0	0	RCP	HW	PE	YES	SITE_VISIT			16.95	18.9	19.07	19.15	19.19	19.24
DUNF004553	15	18.792	3.792	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.95	18.91	19.11	19.21	19.28	19.36
DUNF004554	17.1	18.95	1.85	50	0	0	0	IRR	IRR	IRR	YES	IRR			17.1	18.91	19.11	19.21	19.28	19.36
DUNF004590	13.6	17.5	3.9	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.92	17.39	17.78	18.32	18.75	19.14
DUNF004600	13.25	18.45	5.2	50	0	0	0	RCP	HW	ST	YES	SURVEY			16.92	17.39	17.78	18.32	18.75	19.14
DUNF004601	14.95	18.6	3.65	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.92	17.39	17.78	18.6	18.75	19.14
DUNF004610	13.676	16.35	2.674	50	0	0	0	RCP	HW	PE	YES	SITE_VISIT			16.92	17.39	17.78	18.32	18.75	19.14
DUNF004620	13.693	16.35	2.657	50	0	0	0	RCP	HW	PE	YES	SITE_VISIT			16.92	17.39	17.78	18.32	18.75	19.14
DUNF004630	13.857	18	4.143	50	0	0	0	CMP	HW	PE	YES	SITE_VISIT			16.92	17.39	18.03	18.32	18.75	19.14
DUNF004640	13.913	18	4.087	50	0	0	0	RCP	HW	PE	YES	SITE_VISIT			16.95	17.41	17.83	18.35	18.75	19.14
DUNF004649	13.282	18.404	5.122	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.95	17.41	17.83	18.35	18.75	19.14
DUNF004650	14.05	18.5	4.45	50	0	0	0	RCP	HW	ST	YES	SURVEY			16.95	17.41	17.83	18.37	18.75	19.14
DUNF004700	13.45	18.45	5	50	0	0	0	RCP	HW	ST	YES	SURVEY			16.93	17.41	17.8	18.33	18.75	19.14
DUNF004705	13.577	17.159	3.582	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.93	17.41	17.8	18.33	18.75	19.14
DUNF004706	15.86	17.8	1.94	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.93	17.41	17.8	18.34	18.75	19.14
DUNF004800	13.603	16.9	3.297	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.93	17.41	17.8	18.33	18.75	19.14
DUNF004850	13.749	16.9	3.151	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.94	17.41	17.8	18.33	18.75	19.14
DUNF004860	14.037	17.4	3.363	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.94	17.41	17.8	18.33	18.75	19.14
DUNF004900	14.276	17.4	3.124	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.94	17.41	17.8	18.33	18.75	19.14
DUNF004950	14.59	17.45	2.86	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.94	17.41	17.8	18.33	18.75	19.14
DUNF004960	14.606	17.45	2.844	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.94	17.41	17.8	18.33	18.75	19.14
DUNF005000	14.066	18.1	4.034	50	0	0	0	HDPE	HW	PE	YES	SURVEY			16.94	17.41	17.8	18.33	18.75	19.14
DUNF005100	14.097	18.1	4.003	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.95	17.41	17.86	18.35	18.75	19.14
DUNF005110	15.616	19.116	3.5	50	0	0	0	UNK	CB	DW	YES	SURVEY			17.36	17.7	17.92	18.36	18.75	19.14
DUNF005111	14.95	20.065	5.115	50	0	0	0	UNK	JB	BD	YES	ASSUMED			18.5	18.99	19.31	19.63	19.75	19.94
DUNF005112	15.05	19.6	4.55	50	0	0	0	RCP	CB	LW	YES	SURVEY			18.91	19.43	19.77	20.02	20.13	20.29
DUNF005113	15.55	19.5	3.95	50	0	0	0	RCP	CB	LW	YES	SURVEY			18.92	19.44	19.8	20.02	20.13	20.29
DUNF005115	16.042	19.142	3.1	50	0	0	0	RCP	CB	DW	YES	SURVEY			18.3	18.86	19.58	19.72	19.82	19.91

Name	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft²)	Existing Conditions Initial Depth	Calibration Initial Depth, ft	Calibration Baseflow (cfs)	Material	Inlet Type	Inlet Shape	> 20 ac Drainage Area (Y/N)	Data Source	Sediment Depth (% pipe diameter)	SWI Facility ID	Junction Max HGL					
															2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
DUNF005120	16.796	19.4	2.604	50	0	0	0	RCP	HW	PE	YES	SURVEY			18.63	19.4	19.67	19.79	19.87	19.95
DUNF005127	16.323	21.323	5	50	0	0	0	RCP	CB	RT	YES	SURVEY			20.23	20.83	21.21	21.53	21.76	21.88
DUNF005128	16.47	21.921	5.451	50	0	0	0	RCP	JB	RO	YES	SURVEY			20.82	21.21	21.43	21.59	21.79	21.9
DUNF005129	17.33	21.184	3.854	50	0	0	0	RCP	CB	RT	YES	SURVEY			21.3	21.38	21.44	21.5	21.54	21.57
DUNF005130	17.81	21.01	3.2	50	0	0	0	RCP	CB	RT	YES	SURVEY			21.47	21.51	21.54	21.58	21.6	21.63
DUNF005140	18.674	21	2.326	50	0	0	0	RCP	HW	PE	YES	SURVEY			21.55	21.61	21.66	21.73	21.77	21.82
DUNF005150	14.216	17.6	3.384	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.95	17.43	17.87	18.35	18.75	19.14
DUNF005155	14.132	18.5	4.368	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.95	17.41	17.86	18.35	18.75	19.14
DUNF005160	14.409	17.6	3.191	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.23	17.69	17.89	18.35	18.75	19.14
DUNF005200	14.6	17.57	2.97	50	0	0	0	IRR	IRR	IRR	YES	IRR			17.24	17.69	17.9	18.35	18.75	19.14
DUNF005201	16.892	19.5	2.608	50	0	0	0	IRR	IRR	IRR	YES	IRR			17.29	17.69	17.9	18.35	18.75	19.14
DUNF005250	14.884	17.6	2.716	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.24	17.69	17.9	18.35	18.75	19.14
DUNF005300	14.958	17.6	2.642	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.24	17.69	17.9	18.35	18.75	19.14
DUNF005350	15.388	18.4	3.012	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.24	17.69	17.9	18.35	18.75	19.14
DUNF005360	15.404	18.4	2.996	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.24	17.69	17.9	18.35	18.75	19.14
DUNF005361	14.45	18.05	3.6	50	0	0	0	RCP	CB	RT	YES	SURVEY			17.09	17.49	17.92	18.52	18.81	19.41
DUNF005362	15.2	18.05	2.85	50	0	0	0	RCP	CB	RT	YES	SURVEY			17.1	17.5	17.92	18.54	18.81	19.41
DUNF005365	13.65	18.3	4.65	50	0	0	0	RCP	JB	RO	YES	SURVEY			16.96	17.45	17.87	18.38	18.75	19.14
DUNF005400	15.447	18.84	3.393	50	0	0	0	RCP	HW	PE	YES	SURVEY			18.92	19.07	19.13	19.24	19.3	19.37
DUNF005450	15.93	19	3.07	50	0	0	0	RCP	HW	PE	YES	SURVEY			18.97	19.23	19.35	19.5	19.63	19.78
DUNF005500	15.846	19	3.154	50	0	0	0	RCP	HW	PE	YES	SURVEY			19.22	19.39	19.47	19.64	19.8	19.99
DUNF005550	16.634	19.3	2.666	50	0	0	0	RCP	HW	PE	YES	SURVEY			19.28	19.61	19.75	20.01	20.27	20.56
DUNF005600	16.854	19.3	2.446	50	0	0	0	RCP	HW	PE	YES	SURVEY			19.54	19.72	19.94	20.3	20.64	21
DUNF005601	18.4	21.5	3.1	50	0	0	0	IRR	IRR	IRR	YES	IRR			19.54	19.73	19.94	20.3	20.64	21.01
DUNF006000	13.637	16.3	2.663	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.94	17.41	17.8	18.33	18.75	19.14
DUNF006010	13.841	16.3	2.459	50	0	0	0	HDPE	HW	PE	YES	SURVEY			16.94	17.41	17.8	18.34	18.75	19.14
DUNF006020	14.054	18.411	4.357	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.94	17.41	17.8	18.34	18.75	19.14
DUNF006030	14.112	18.411	4.299	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.21	17.66	18.1	18.48	18.77	19.16
DUNF006040	14.64	18.075	3.435	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.39	17.82	18.11	18.48	18.77	19.16
DUNF006050	13.498	17.2	3.702	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.93	17.41	17.8	18.33	18.75	19.14
DUNF006060	13.508	17.2	3.692	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.93	17.41	17.8	18.33	18.75	19.14
DUNF006070	14.284	17.8	3.516	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.39	17.82	18.11	18.48	18.77	19.16
DUNF006071	14.586	18.2	3.614	50	0	0	0	IRR	IRR	IRR	YES	IRR			17.39	17.82	18.11	18.48	18.77	19.16
DUNF006072	16.8	19.5	2.7	50	0	0	0	IRR	IRR	IRR	YES	IRR			17.47	17.82	18.11	18.48	18.77	19.16
DUNF006080	14.157	18.2	4.043	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.21	17.66	18.1	18.48	18.77	19.16
DUNF006090	15.104	18.075	2.971	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.43	17.83	18.11	18.48	18.77	19.16
DUNF006100	14.99	18.125	3.135	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.43	17.83	18.11	18.48	18.77	19.16
DUNF006110	15.116	18.125	3.009	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.46	17.84	18.11	18.48	18.77	19.16
DUNF006120	15.06	18.5	3.44	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.47	17.84	18.11	18.48	18.77	19.16
DUNF006130	15.164	18.5	3.336	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.68	17.92	18.11	18.48	18.77	19.16
DUNF006135	15.251	18.5	3.249	50	0	0	0	IRR	IRR	IRR	YES	IRR			17.69	17.92	18.11	18.48	18.77	19.16
DUNF006140	15.314	18.5	3.186	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.69	17.93	18.11	18.48	18.77	19.16
DUNF006150	15.407	18.5	3.093	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.85	18.04	18.16	18.48	18.77	19.16
DUNF006160	15.319	18.4	3.081	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.85	18.04	18.16	18.48	18.77	19.16
DUNF006170	15.405	18.4	2.995	50	0	0	0	RCP	HW	PE	YES	SURVEY			18.07	18.19	18.27	18.48	18.77	19.16
DUNF006171	15.399	18.4	3.001	50	0	0	0	IRR	IRR	IRR	YES	IRR			18.07	18.19	18.27	18.48	18.77	19.16
DUNF006172	16.16	20.1	3.94	50	0	0	0	IRR	IRR	IRR	YES	IRR			18.14	18.29	18.4	18.52	18.77	19.16
DUNF006173	15.73	17.79	2.06	50	0	0	0	IRR	IRR	IRR	YES	IRR			18.08	18.19	18.27	18.48	18.77	19.16
DUNF006180	15.392	19.2	3.808	50	0	0	0	HDPE	HW	PE	YES	SURVEY			18.07	18.19	18.27	18.48	18.77	19.16
DUNF006190	15.42	17.903	2.483	50	0	0	0	HDPE	CB	GI	YES	SURVEY			18.08	18.19	18.27	18.48	18.77	19.16
DUNF006200	15.435	17.77	2.335	50	0	0	0	HDPE	CB	GI	YES	SURVEY			18.09	18.19	18.27	18.48	18.77	19.16
DUNF006210	15.443	19.2	3.757	8000	0	0	0	HDPE	HW	PE	YES	SURVEY			18.65	19.19	19.27	19.3	19.31	19.33
DUNF007000	19.364	23	3.636	50	0	0	0	IRR	IRR	IRR	YES	IRR			19.76	20.15	20.43	20.73	20.88	21
DUNF007010	9	16.273	7.273	50	0	0	0	RCP	JB	RO	YES	SURVEY			14.4	15.12	15.52	16.22	16.97	17.88

Name	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft²)	Existing Conditions Initial Depth	Calibration Initial Depth, ft	Calibration Baseflow (cfs)	Material	Inlet Type	Inlet Shape	> 20 ac Drainage Area (Y/N)	Data Source	Sediment Depth (% pipe diameter)	SWI Facility ID	Junction Max HGL					
															2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
DUNF007015	9.297	16.122	6.825	50	0	0	0	RCP	JB	RO	YES	CHATHAM PLANS			14.51	15.17	15.54	16.2	16.91	17.75
DUNF007016	11.14	18.24	7.1	50	0	0	0	IRR	IRR	IRR	YES	IRR			14.72	15.26	15.59	16.19	16.79	17.51
DUNF007017	11.29	18.24	6.95	50	0	0	0	IRR	IRR	IRR	YES	IRR			14.83	15.3	15.61	16.16	16.71	17.35
DUNF007020	11.65	15.75	4.1	50	0	0	0	UNK	YI	GI	YES	GC_SWI	0% - 25%	3535	14.87	15.34	15.6	16.11	16.62	17.18
DUNF007030	11.75	15.7	3.95	50	0	0	0	UNK	YI	GI	YES	GC_SWI	0% - 25%	3536	14.97	15.32	15.56	16.05	16.47	16.9
DUNF008001	13	16.285	3.285	9500	0	0	0	UNK	CB	GI	NO	GC_SWI	0% - 25%	3542	16.74	16.81	16.9	17.02	17.07	17.11
DUNF008002	12.9	16.304	3.404	2000	0	0	0	RCP	CB	GI	NO	GC_SWI	0% - 25%	3547	17.02	17.26	17.33	17.39	17.42	17.45
DUNF008003	13.52	17.32	3.8	27500	0	0	0	UNK	OCS	OCS	NO	GC_SWI	0% - 25%	3548	16.3	16.35	16.38	16.43	16.48	16.66
DUNF008004	13.6	17.28	3.68	50	0	0	0	RCP	JB	RO	NO	GC_SWI	0% - 25%	3549	17.26	17.39	17.55	17.84	18.09	18.36
DUNF008005	13.75	16.24	2.49	7500	0	0	0	RCP	CB	GI	NO	GC_SWI			17.27	17.36	17.43	17.53	17.6	17.65
DUNF008006	14.06	16.88	2.82	7500	0	0	0	RCP	HW	PE	NO	SURVEY			17.28	17.37	17.44	17.54	17.6	17.66
DUNF008007	14.74	17.5	2.76	50	0	0	0	IRR	IRR	IRR	NO	IRR			17.31	17.4	17.48	17.59	17.66	17.72
DUNF008008	14.2	16.305	2.105	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.3	16.35	16.38	16.42	16.48	16.66
DUNF008009	16.5	18	1.5	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.5	16.5	16.5	16.5	16.5	16.5
DUNF008010	14.597	17.602	3.005	50	0	0	0	IRR	IRR	IRR	YES	IRR			15.45	15.8	16.03	16.31	16.48	16.66
DUNF008011	16.5	18	1.5	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.5	16.5	16.5	16.5	16.5	16.66
DUNF009000	16.64	21.71	5.07	50	0	0	0	RCP	CB	RT	YES	SURVEY			20.98	21.38	21.61	21.82	22.04	22.1
DUNF009005	16.78	22.08	5.3	50	0	0	0	RCP	JB	RO	YES	SURVEY			21.02	21.43	21.66	21.83	22.05	22.1
DUNF009010	17.25	21.65	4.4	50	0	0	0	RCP	CB	RT	YES	SURVEY			21.96	22.05	22.1	22.14	22.17	22.19
DUNF009020	16.927	21.377	4.45	50	0	0	0	RCP	CB	RT	YES	SURVEY			20.41	21.57	21.67	21.75	21.84	21.92
DUNG000000	5.875	17.983	12.108	50	0	0	0	RCP	HW	PE	YES	SURVEY			8.97	9.57	10.02	10.57	10.91	11.25
DUNG000001	6.181	11.5	5.319	50	0	0	0	IRR	IRR	IRR	YES	IRR			8.85	9.5	9.99	10.56	10.9	11.25
DUNG000005	6.48	8.5	2.02	50	0	0	0	IRR	IRR	IRR	YES	IRR			8.87	9.51	9.99	10.56	10.9	11.25
DUNG000010	8.752	19.809	11.057	50	0	0	0	RCP	HW	PE	YES	SURVEY			9.5	9.6	10.03	10.58	10.91	11.25
DUNG000015	6.337	12.5	6.163	50	0	0	0	IRR	IRR	IRR	YES	IRR			8.91	9.52	10	10.56	10.9	11.25
DUNG000020	8.78	10.85	2.07	50	0	0	0	RCP	OCS	OCS	YES	SURVEY			10.34	10.6	10.84	11.12	11.26	11.35
DUNG000021	9.37	10.85	1.48	50	0	0	0	IRR	IRR	IRR	YES	IRR			10.36	10.61	10.84	11.13	11.27	11.37
DUNG000030	8.578	13.5	4.922	50	0	0	0	RCP	HW	PE	YES	SURVEY			9.5	9.62	10.05	10.58	10.91	11.25
DUNG000040	8.681	11.51	2.829	50	0	0	0	RCP	HW	PE	YES	SURVEY			9.47	10.13	10.63	11.23	11.59	11.65
DUNG000050	5.545	11.51	5.965	50	0	0	0	RCP	HW	PE	YES	SURVEY			9.41	10.09	10.61	11.21	11.57	11.64
DUNG000060	4.75	11.51	6.76	50	0	0	0	IRR	IRR	IRR	YES	IRR			9.41	10.09	10.61	11.21	11.57	11.64
DUNG000070	8.798	11.6	2.802	50	0	0	0	IRR	IRR	IRR	YES	IRR			9.41	10.09	10.61	11.21	11.57	11.64
DUNG000080	10.694	11.6	0.906	50	0	0	0	IRR	IRR	IRR	YES	IRR			10.69	10.69	10.69	11.21	11.57	11.64
DUNG000099	6.796	11.088	4.292	50	0	0	0	IRR	IRR	IRR	YES	IRR			8.82	9.53	10.03	10.56	10.84	11.11
DUNG000100	4.149	11.51	7.361	50	0	0	0	RCP	HW	PE	YES	SURVEY			9.41	10.09	10.61	11.21	11.57	11.64
DUNG000110	4.247	11.51	7.263	50	0	0	0	RCP	HW	PE	YES	SURVEY			9.3	9.81	10.2	10.65	10.93	11.29
DUNG000115	5	11.51	6.51	50	0	0	0	IRR	IRR	IRR	YES	IRR			9.47	10.13	10.63	11.23	11.59	11.65
DUNG000120	5.35	11.73	6.38	50	0	0	1.49	IRR	IRR	IRR	YES	IRR			9.92	10.38	10.79	11.32	11.66	11.75
DUNG000130	5.55	14.952	9.402	50	0	0	0	IRR	IRR	IRR	YES	IRR			9.95	10.42	10.82	11.34	11.68	11.77
DUNG000305	6.331	17.911	11.58	50	0	0	0	IRR	IRR	IRR	YES	IRR			10.1	10.56	10.94	11.43	11.75	11.86
DUNG000310	7.612	14.25	6.638	50	0	0	0	RCP	HW	PE	YES	SURVEY			10.13	10.58	10.96	11.44	11.76	11.87
DUNG000400	7.689	14.25	6.561	50	0	0	0	RCP	HW	PE	YES	SURVEY			10.23	10.7	11.08	11.56	11.9	12.05
DUNG000410	8.567	11.55	2.983	50	0	0	0	IRR	IRR	IRR	YES	IRR			10.71	11.12	11.4	11.78	12.08	12.24
DUNG000500	6.024	12.204	6.18	50	0	0	0	RCP	HW	PE	YES	SURVEY			11.02	11.33	11.56	11.87	12.13	12.28
DUNG000550	6.328	12.204	5.876	8000	0	0	0	RCP	HW	PE	YES	SURVEY			12.24	12.52	12.6	12.67	12.72	12.76
DUNG000600	6.5	12.204	5.704	50	0	0	0	IRR	IRR	IRR	YES	IRR			12.26	12.54	12.61	12.68	12.73	12.76
DUNG000610	8.92	12.96	4.04	50	0	0	0	CC	HW	WG	YES	SURVEY			12.4	12.69	12.8	12.89	12.96	13.02
DUNG000620	8.98	12.96	3.98	50	0	0	0	CC	HW	WG	YES	SURVEY			12.46	12.82	12.97	13.09	13.16	13.21
DUNG000710	6.95	12.64	5.69	50	0	0	0	UNK	HW	PE	YES	SAVANNAH_SWI		HDW-957	12.4	12.7	12.81	12.9	12.96	13.03
DUNG000720	7	12.64	5.64	50	0	0	0	UNK	HW	PE	YES	SAVANNAH_SWI		HDW-958	12.45	12.77	12.87	12.96	13.01	13.06
DUNG000730	6.81	12.96	6.15	50	0	0	0	RCP	HW	PE	YES	SURVEY		HDW-960	12.45	12.77	12.88	12.96	13.01	13.06
DUNG000805	7.34	12.96	5.62	50	0	0	0	RCP	HW	PE	YES	SURVEY		HDW-959	12.5	12.86	13	13.11	13.17	13.23
DUNG000806	10.3	16.742	6.442	50	0	0	0	IRR	IRR	IRR	YES	IRR			12.53	12.88	13.01	13.13	13.19	13.24
DUNG000808	10.294	17.11	6.816	50	0	0	0	RCP	HW	PE	YES	SURVEY			12.58	12.91	13.04	13.14	13.2	13.26

Name	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft²)	Existing Conditions Initial Depth	Calibration Initial Depth, ft	Calibration Baseflow (cfs)	Material	Inlet Type	Inlet Shape	> 20 ac Drainage Area (Y/N)	Data Source	Sediment Depth (% pipe diameter)	SWI Facility ID	Junction Max HGL					
															2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
DUNG000809	11.707	17.11	5.403	50	0	0	0	RCP	HW	PE	YES	SURVEY			15.96	17.13	17.21	17.28	17.33	17.51
DUNG000810	14.186	17.1	2.914	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.24	17.16	17.25	17.35	17.43	17.61
DUNG000820	14.177	17	2.823	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.19	17.28	17.33	17.4	17.46	17.62
DUNG000830	11.044	16.703	5.659	50	0	0	0	RCP	HW	PE	YES	SURVEY			12.53	12.88	13.01	13.13	13.19	13.24
DUNG000840	11.544	16.703	5.159	50	0	0	0	RCP	HW	PE	YES	SURVEY			12.53	12.88	13.01	13.13	13.19	13.25
DUNG000900	9.3	17.11	7.81	50	0	0	0	UNK	HW	PE	YES	SURVEY			12.47	12.82	12.98	13.1	13.16	13.21
DUNG001000	9.5	17.11	7.61	50	0	0	0	UNK	HW	PE	YES	SURVEY			12.84	13.6	14.23	14.89	15.37	15.85
DUNG001010	11.192	12.78	1.588	50	0	0	0	RCP	CB	DW	YES	SURVEY			13.29	13.64	14.24	14.89	15.37	15.85
DUNG001020	10.78	12.78	2	50	0	0	0	RCP	JB	RO	YES	SURVEY			12.92	13.63	14.24	14.89	15.37	15.85
DUNG001100	9.75	17.209	7.459	50	0	0	0	IRR	IRR	IRR	YES	IRR			12.85	13.6	14.24	14.89	15.37	15.85
DUNG001200	9.882	20.741	10.859	50	0	0	0	RCP	HW	FE	YES	SURVEY			12.85	13.6	14.25	14.9	15.37	15.85
DUNG001300	10	13.317	3.317	50	0	0	0	RCP	CB	DW	YES	SURVEY			12.9	13.79	14.26	14.9	15.37	15.85
DUNG001400	10.2	13.463	3.263	50	0	0	0	RCP	JB	RO	YES	SURVEY		STMH-892	13.01	13.8	14.26	14.9	15.37	15.85
DUNG001500	10.43	13.27	2.84	50	0	0	0	RCP	CB	DW	YES	SURVEY			13.13	13.8	14.26	14.9	15.37	15.85
DUNG001600	10.63	13.36	2.73	50	0	0	0	RCP	HW	FE	YES	SURVEY			13.36	13.8	14.26	14.9	15.37	15.85
DUNG001601	11.88	13.47	1.59	50	0	0	0	IRR	IRR	IRR	YES	IRR			13.36	13.81	14.26	14.9	15.37	15.85
DUNG002000	6.27	15	8.73	50	0	0	0	UNK	HW	PE	NO	ASSUMED			10.1	10.56	10.94	11.43	11.75	11.86
DUNH000000	8.35	28	19.65	50	0	0	0	RCP	HW	PE	YES	SURVEY			12.85	13.54	13.97	14.38	14.88	15.4
DUNH000001	9.417	17.4	7.983	50	0	0	0	CMP	JB	RO	YES	SURVEY			12.85	13.54	13.97	14.38	14.88	15.4
DUNH000002	13.823	17.4	3.577	50	0	0	0	IRR	IRR	IRR	YES	IRR			13.82	13.82	13.94	14.38	14.88	15.4
DUNH000003	8.864	17.4	8.536	50	0	0	0	IRR	IRR	IRR	YES	IRR			12.85	13.54	13.97	14.38	14.88	15.4
DUNH000005	13.6	17.4	3.8	50	0	0	0	IRR	IRR	IRR	YES	IRR			13.6	13.6	13.97	14.38	14.88	15.4
DUNH000010	11.239	17.4	6.161	50	0	0	0	RCP	JB	RO	YES	SURVEY			12.84	13.49	13.89	14.27	14.6	14.92
DUNH000020	12.857	22.408	9.551	50	0	0	0	RCP	HW	FE	YES	SURVEY	0% - 25%	3127	13.67	13.7	13.89	14.28	14.6	14.92
DUNH000025	13.1	19.48	6.38	50	0	0	0	RCP	CB	GI	YES	SURVEY	76% - 100%	3126	14.45	14.51	14.54	14.69	14.86	15.06
DUNH000030	14.35	17.044	2.694	50	0	0	0	RCP	JB	RO	YES	SURVEY	0% - 25%	3111	15.97	16.09	16.17	16.27	16.33	16.39
DUNH000040	8.493	18.493	10	50	0	0	0	IRR	IRR	IRR	YES	IRR			9.31	9.42	9.72	10.43	10.9	11.29
DUNH000041	8.632	9	0.368	50	0	0	0	IRR	IRR	IRR	YES	IRR			9.97	10.12	10.22	10.43	10.9	11.29
DUNH000042	8.376	11.876	3.5	50	0	0	0	RCP	HW	FE	YES	GC_SWI	26% - 50%	3118	10.1	10.3	10.44	10.6	10.9	11.29
DUNH000043	8.85	13.491	4.641	50	0	0	0	RCP	CB	DW	NO	GC_SWI		3117	10.85	11.21	11.48	11.83	12.13	12.48
DUNH000044	8.915	13.455	4.54	50	0	0	0	RCP	CB	DW	NO	GC_SWI		3116	11.17	11.58	11.9	12.33	12.73	13.25
DUNH000045	10.55	14.772	4.222	50	0	0	0	RCP	JB	RO	YES	GC_SWI	0% - 25%	3125	11.98	12.22	12.44	12.82	13.24	14.79
DUNH000047	10.9	14.8	3.9	50	0	0	0	RCP	YI	GI	NO	GC_SWI	0% - 25%	0	12.44	12.73	13.08	13.66	14.21	14.78
DUNH000048	8.436	8.973	0.537	50	0	0	0	IRR	IRR	IRR	YES	IRR			10.08	10.27	10.41	10.56	10.9	11.29
DUNH000050	14.399	16.399	2	50	0	0	0	RCP	HW	FE	YES	SURVEY	0% - 25%	3111	15.96	16.06	16.13	16.21	16.27	16.32
DUNH000100	8.451	28	19.549	50	0	0	0	RCP	HW	PE	YES	SURVEY			12.85	13.54	13.97	14.39	14.9	15.44
DUNH000110	13.649	14.3	0.651	50	0	0	0	UNK	UNK	UNK	NO	GC_SWI			13.88	14.02	14.1	14.39	14.9	15.44
DUNH000120	14	15.772	1.772	50	0	0	0	UNK	CB	RT	NO	GC_SWI		1588	14.43	14.89	15.24	15.93	15.97	16.01
DUNH000130	15.521	16.35	0.829	50	0	0	0	UNK	UNK	UNK	NO	AERIALS			15.81	16.13	16.37	16.67	16.8	16.94
DUNH000140	15.25	16.35	1.1	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.65	16.82	16.91	17.09	17.22	17.34
DUNH000200	13.7	20	6.3	50	0	0	0	IRR	IRR	IRR	YES	IRR			13.7	13.7	13.98	14.39	14.9	15.44
DUNH000350	16.19	18.646	2.456	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.56	17.88	18.13	18.62	18.85	18.98
DUNH000400	16.191	18.5	2.309	50	0	0	0	RCP	HW	PE	YES	SURVEY			17.57	17.9	18.16	18.38	18.52	18.78
DUNH000410	17.9	21	3.1	50	0	0	0	IRR	IRR	IRR	YES	IRR			18.24	18.29	18.32	18.37	18.4	18.44
DUNH000411	20.49	22.65	2.16	50	0	0	0	HDPE	HW	FES	NO	GC_SWI	26% - 50%	1634	21.77	21.88	22.01	22.16	22.27	22.38
DUNH000412	19.63	20.9	1.27	50	0	0	0	RCP	HW	PE	NO	GC_SWI	76% - 100%	1598	20.41	20.59	20.66	20.75	20.81	20.92
DUNH000413	19.51	20.18	0.67	50	0	0	0	RCP	HW	PE	NO	GC_SWI	51% - 75%	1599	20.1	20.22	20.26	20.29	20.31	20.34
DUNH000414	18.44	20.18	1.74	50	0	0	0	IRR	IRR	IRR	YES	IRR			19.09	19.18	19.2	19.21	19.24	19.29
DUNH000415	20.82	22.6	1.78	50	0	0	0	IRR	IRR	IRR	YES	IRR			21.61	21.63	21.66	21.7	21.72	21.75
DUNH000500	15.595	22.2	6.605	50	0	0	0	RCP	CB	DW	YES	SURVEY	0% - 25%	1614	17.33	17.73	18.08	18.7	19.5	19.85
DUNH000550	16.19	18.19	2	50	0	0	0	RCP	HW	PE	YES	SURVEY	51% - 75%	1615	17.33	17.74	18.08	18.7	19.5	19.85
DUNH000600	16.604	21.133	4.529	50	0	0	0	RCP	HW	PE	YES	SURVEY	76% - 100%	1611	17.33	17.74	18.08	18.72	19.51	19.86
DUNH000700	16.514	21.1	4.586	9000	0	0	0	RCP	HW	PE	YES	SURVEY		1610	17.68	18.39	21.4	21.64	21.73	21.79
DUNI000000	4.104	8.224	4.12	50	0.008	0	0	RCP	HW	PE	YES	SURVEY	0% - 25%	3497	8.67	9.19	9.72	10.43	10.9	11.29

Name	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft²)	Existing Conditions Initial Depth	Calibration Initial Depth, ft	Calibration Baseflow (cfs)	Material	Inlet Type	Inlet Shape	> 20 ac Drainage Area (Y/N)	Data Source	Sediment Depth (% pipe diameter)	SWI Facility ID	Junction Max HGL					
															2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
DUNI000020	5.55	8.224	2.674	50	0	0	0	IRR	IRR	IRR	YES	IRR			8.67	9.19	9.72	10.43	10.9	11.29
DUNI000030	4.101	8.224	4.123	50	0.011	0	0	RCP	HW	PE	YES	SURVEY	0% - 25%	3496	8.66	9.19	9.72	10.43	10.9	11.29
DUNI000040	7.175	17.175	10	50	0	0	0	IRR	IRR	IRR	YES	IRR		4122	8.68	9.2	9.72	10.43	10.9	11.29
DUNI000050	6.56	17.083	10.523	50	0	0	0	IRR	IRR	IRR	YES	IRR			9.53	9.97	10.2	10.48	10.9	11.29
DUNI000100	5.81	9.98	4.17	50	0	0	0	RCP	HW	PE	YES	SURVEY	0% - 25%	4073	9.8	10.29	10.54	10.85	11.07	11.29
DUNI000200	5.822	9.98	4.158	50	0	0	0	RCP	HW	PE	YES	SURVEY	0% - 25%	4086	10.11	10.33	10.55	10.86	11.07	11.29
DUNI000300	5.8	12.24	6.44	50	0	0	0	CC	HW	PE	YES	SURVEY	0% - 25%	4087	10.11	10.33	10.55	10.86	11.08	11.29
DUNI000400	5.803	12.24	6.437	50	0	0	0	CC	HW	ST	YES	SURVEY	0% - 25%	2091	10.13	10.36	10.6	10.94	11.18	11.39
DUNI000450	5.67	17.172	11.502	50	0	0	0	IRR	IRR	IRR	YES	IRR			10.13	10.37	10.61	10.94	11.18	11.4
DUNI000500	5.556	17.395	11.839	50	0	0	0	RCP	HW	FES	YES	SURVEY			10.13	10.37	10.61	10.94	11.19	11.4
DUNI000600	5.707	17.152	11.445	50	0	0	0	RCP	HW	FES	YES	SURVEY			10.11	10.27	10.52	10.92	11.27	11.64
DUNI000610	8.03	12.375	4.345	50	0	0	0	RCP	HW	PE	YES	SURVEY	26% - 50%	3451	10.12	10.29	10.52	10.92	11.27	11.64
DUNI000620	9.4	12.375	2.975	50	0	0	0	RCP	HW	FE	YES	SURVEY	0% - 25%	4113	10.9	11.27	11.58	12.06	12.4	12.51
DUNI000700	8.18	16.25	8.07	50	0	0	0	IRR	IRR	IRR	YES	IRR			9.8	10.21	10.52	10.92	11.27	11.64
DUNI000710	9.616	16.25	6.634	50	0	0	0	IRR	IRR	IRR	YES	IRR			10.11	10.27	10.41	10.71	10.98	11.29
DUNI000800	9.54	16.25	6.71	50	0	0	0	IRR	IRR	IRR	YES	IRR			10.13	10.29	10.43	10.67	10.89	11.2
DUNI000810	9.524	16.25	6.726	50	0	0	0	IRR	IRR	IRR	YES	IRR			10.13	10.29	10.43	10.67	10.89	11.2
DUNI000820	9.605	16.25	6.645	50	0	0	0	IRR	IRR	IRR	YES	IRR			10.08	10.23	10.42	10.67	10.88	11.19
DUNI000900	8	11.47	3.47	50	0	0	0	CC	HW	PE	YES	SURVEY			9.99	10.22	10.42	10.67	10.87	11.19
DUNI001000	8.078	11.47	3.392	50	0	0	0	RCP	HW	PE	YES	SURVEY			8.74	8.96	9.19	9.61	10.1	10.59
DUNI001001	8.25	10.078	1.828	50	0	0	0	IRR	IRR	IRR	YES	IRR			8.74	8.96	9.19	9.61	10.1	10.59
DUNJ000000	8.18	11	2.82	50	0	0	0.56	IRR	IRR	IRR	YES	IRR			10.96	11.45	11.67	11.9	11.99	12.14
DUNJ000001	9.12	12.359	3.239	50	0	0	0	IRR	IRR	IRR	YES	IRR			9.29	9.72	10.45	11.28	11.76	11.98
DUNJ000010	8.5	14.5	6	50	0	0	0	IRR	IRR	IRR	YES	IRR			11.68	11.56	11.75	11.97	12.08	12.22
DUNJ000011	7.18	12.18	5	50	0	0	0	CC	HW	WG	YES	SURVEY			10.84	11.37	11.62	11.86	11.96	12.11
DUNJ000012	7.147	12.147	5	50	0	0	0	CC	HW	WG	YES	SURVEY			10.65	11.2	11.46	11.73	11.86	12.02
DUNJ000015	9.27	12.5	3.23	50	0	0	0	IRR	IRR	IRR	YES	IRR			11.72	11.66	11.82	12.04	12.15	12.28
DUNJ000016	9.95	15.5	5.55	50	0	0	0	IRR	IRR	IRR	YES	IRR			11.75	11.73	11.87	12.08	12.19	12.32
DUNJ000017	14.136	17.136	3	50	0	0	0	RCP	HW	FE	YES	GC_SWI	0% - 25%	3434	14.96	15.02	15.08	15.11	15.12	15.15
DUNJ000018	16.1	18.59	2.49	50	0	0	0	RCP	HW	FE	YES	GC_SWI			17.33	17.46	17.59	17.65	17.69	17.74
DUNJ000019	16.2	18.59	2.39	50	0	0	0	RCP	HW	FE	YES	GC_SWI	76% - 100%	3436	17.35	17.48	17.6	17.66	17.7	17.75
DUNJ000020	6.891	11.5	4.609	50	0	0	0	IRR	IRR	IRR	YES	IRR			9.29	9.5	9.72	10.43	10.9	11.29
DUNJ000021	16.46	23.4	6.94	50	0	0	0	RCP	HW	FE	YES	GC_SWI	0% - 25%	1834	18.1	18.47	18.9	19.17	19.39	19.62
DUNJ000050	17.624	20.16	2.536	50	0	0	0	RCP	HW	PE	NO	GC_SWI	0% - 25%	1835	18.1	18.47	18.9	19.17	19.39	19.62
DUNJ000060	17.885	20.16	2.275	50	0	0	0	RCP	HW	PE	NO	GC_SWI			18.42	18.53	18.92	19.19	19.4	19.63
DUNJ000100	10.08	21.676	11.596	50	0	0	0	RCP	HW	FE	YES	SURVEY	76% - 100%	3435	11.75	11.74	11.87	12.08	12.19	12.33
DUNJ000101	10.8	21.57	10.77	50	0	0	0	RCP	HW	PE	YES	SURVEY			13.76	14.22	14.58	15.11	15.5	16.14
DUNJ000110	10.7	21.57	10.87	50	0	0	0	RCP	HW	WG	YES	SURVEY	0% - 25%	4929	11.9	12	12.1	12.29	12.41	12.53
DUNJ000120	10.7	21.57	10.87	50	0	0	0	RCP	HW	WG	YES	SURVEY	0% - 25%	3235	13.78	14.22	14.57	15.09	15.48	16.13
DUNJ000130	10.75	17.796	7.046	50	0	0	0	IRR	IRR	IRR	YES	IRR			13.8	14.23	14.59	15.11	15.5	16.14
DUNJ000150	10	15	5	50	0	0	0	IRR	IRR	IRR	YES	IRR			13.8	14.24	14.6	15.11	15.5	16.14
DUNJ000203	13.351	18.2	4.849	50	0	0	0	RCP	HW	FE	YES	SURVEY	0% - 25%	1830	13.8	14.24	14.6	15.11	15.5	16.14
DUNJ000205	10.8	17.5	6.7	50	0	0	0	RCP	HW	ST	YES	SURVEY	0% - 25%	3223	13.8	14.24	14.6	15.14	15.51	16.18
DUNJ000207	10.05	16.6	6.55	50	0	0	0	RCP	HW	FE	YES	SURVEY	0% - 25%	3222	13.8	14.24	14.6	15.11	15.5	16.15
DUNJ000210	13.86	18.2	4.34	50	0	0	0	RCP	HW	PE	YES	SURVEY		1831	15.83	16.15	16.46	18.33	18.4	18.47
DUNJ000211	10.3	16.596	6.296	50	0	0	0	RCP	HW	PE	YES	SURVEY		3221	14.18	14.96	15.7	16.84	16.99	17.1
DUNJ000212	10.6	16.646	6.046	50	0	0	0	RCP	HW	PE	YES	SURVEY		3224	14.5	15.55	16.65	17.21	17.3	17.35
DUNJ000213	10.88	16.65	5.77	50	0	0	0	RCP	HW	FE	YES	SURVEY	0% - 25%	3225	14.78	16.09	16.98	17.23	17.31	17.37
DUNJ000214	11.6	17.81	6.21	50	0	0	0	RCP	HW	PE	YES	SURVEY			14.78	16.09	16.98	17.23	17.32	17.37
DUNJ000215	11.744	17.81	6.066	50	0	0	0	RCP	HW	FE	YES	SURVEY			16.76	18.01	18.07	18.13	18.16	18.19
DUNJ000220	13.859	18.102	4.243	50	0	0	0	RCP	HW	PE	YES	SURVEY			16.92	17.37	17.95	18.44	18.48	18.53
DUNJ000230	16.345	18.65	2.305	19000	0	0	0	RCP	HW	PE	YES	SURVEY	0% - 25%	1824	17.79	18.39	18.8	18.88	18.92	18.95
DUNJ000240	16.4	19.7	3.3	50	0	0	0	RCP	HW	PE	NO	GC_SWI	0% - 25%	1825	17.79	18.39	18.8	18.88	18.92	18.95
DUNJ000250	16.5	19.7	3.2	50	0	0	0	RCP	HW	FES	NO	GC_SWI	0% - 25%	1826	17.8	18.44	18.89	19.16	19.38	19.61

Name	Invert Elev. (ft)	Rim Elev. (ft)	Depth (ft)	Ponded Area (ft²)	Existing Conditions Initial Depth	Calibration Initial Depth, ft	Calibration Baseflow (cfs)	Material	Inlet Type	Inlet Shape	> 20 ac Drainage Area (Y/N)	Data Source	Sediment Depth (% pipe diameter)	SWI Facility ID	Junction Max HGL					
															2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
DUNJ000300	11.75	17.5	5.75	50	0	0	0	RCP	HW	ST	YES	SURVEY	0% - 25%	3240	14.73	15.27	15.86	16.92	17.61	17.96
DUNJ000350	14.58	24.6	10.02	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.25	16.37	16.44	16.93	17.62	17.98
DUNJ000355	15.15	17.672	2.522	50	0	0	0	IRR	IRR	IRR	YES	IRR			16.65	16.85	17	17.2	17.64	18
DUNJ000400	15.29	19.5	4.21	50	0	0	0	CMP	HW	PE	YES	SURVEY			17.13	17.23	17.27	17.37	17.77	18.07
DUNJ000410	15.858	19.5	3.642	50	0	0	0	HDPE	HW	PE	YES	SURVEY			18.91	19.42	19.65	19.92	20.17	20.41
DUNJ000420	17.748	18.75	1.002	50	0	0	0	IRR	IRR	IRR	YES	IRR			19.14	19.48	19.7	19.95	20.19	20.43
DUNJ000425	15.5	17.62	2.12	25000	0	0	0	CMP	CB	GI	NO	GC_SWI	0% - 25%	4334	16.91	18.23	19.37	19.63	19.76	19.85
DUNJ000430	15.25	17.62	2.37	50	0	0	0	CMP	HW	PE	NO	GC_SWI	0% - 25%	4335	16.65	16.85	17	17.2	17.64	18
DUNJ008000	7.147	18	10.853	50	0	0	0.19	IRR	IRR	IRR	YES	IRR			10.56	11.14	11.41	11.69	11.84	12
DUNJ009000	7.147	13.76	6.613	50	0	0	0	RCP	HW	ST	YES	SITE_VISIT			10.47	11.08	11.35	11.64	11.79	11.95
DUNJ009100	6.6	11.1	4.5	50	0	0	0	RCP	YI	RD	YES	SITE_VISIT			9.78	10.18	10.36	10.56	10.66	10.77
DUNJ009200	6.5	13.76	7.26	50	0	0	0	RCP	HW	ST	YES	SITE_VISIT			7.72	7.8	7.83	7.86	7.88	7.9
DUNK001000	-2.187	10	12.187	50	6.299	2.187	0	UNK	HW	PE	YES	ASSUMED			4.11	4.12	4.12	4.12	4.3	4.25
DUNK001005	3.2	7.8	4.6	50	0.912	0	0	IRR	IRR	IRR	YES	IRR			5.45	5.8	6.16	7.08	7.68	7.98
DUNK001100	1.27	7.8	6.53	50	2.842	0	0	UNK	HW	PE	YES	ASSUMED			5.59	5.99	6.39	7.18	7.74	8.08
DUNK001110	1.792	7.8	6.008	50	2.32	0	0	UNK	HW	PE	YES	ASSUMED			4.67	5.07	5.61	6.85	7.55	7.78
DUNK001120	1.335	15	13.665	50	2.777	0	0	UNK	HW	PE	YES	ASSUMED			4.14	4.18	4.23	4.32	4.38	4.63
DUNK001200	0.605	7.107	6.502	50	3.507	0	0	UNK	HW	PE	YES	ASSUMED			5.59	5.99	6.4	7.18	7.75	8.08
DUNK001300	0.835	7.86	7.025	50	3.277	0	0	UNK	HW	PE	YES	ASSUMED			5.86	6.45	6.84	7.27	7.76	8.1
DUNK001310	2.3	11	8.7	50	1.812	0	0	IRR	IRR	IRR	YES	IRR			5.87	6.45	6.84	7.27	7.76	8.1
DUNK001320	2.55	11	8.45	50	1.562	0	0	IRR	IRR	IRR	YES	IRR			5.9	6.48	6.88	7.31	7.79	8.14
DUNK001330	2.705	10.184	7.479	50	1.407	0	0	IRR	IRR	IRR	YES	IRR			5.95	6.5	6.89	7.32	7.8	8.15
DUNK001400	3.261	7.261	4	50	0.851	0	0	UNK	HW	PE	YES	ASSUMED			5.95	6.5	6.89	7.32	7.8	8.15
DUNK001500	3.205	9.832	6.627	50	0.907	0	0	UNK	HW	PE	YES	ASSUMED			7.39	8.62	9.71	10.43	10.57	10.66
DUNK001550	3.7	9.9	6.2	50	0.412	0	0	IRR	IRR	IRR	YES	IRR			7.39	8.62	9.71	10.43	10.57	10.66
DUNK001600	7.25	8.1	0.85	50	0	0	0	UNK	HW	PE	YES	ASSUMED			7.76	8.62	9.71	10.43	10.57	10.66
DUNK001700	7.68	11.733	4.053	50	0	0	0	UNK	HW	PE	YES	ASSUMED			8.61	8.88	9.72	10.46	10.65	10.92
DUNL001000	-4.14	9.9	14.04	50	8.252	4.14	0	UNK	TIDE_GATE	IRR	YES	SURVEY		19715	4.12	4.12	4.12	4.13	4.45	4.45
DUNL001100	-3.25	9.45	12.7	50	7.362	3.25	0	UNK	JB	BD	YES	SURVEY		3084	6.59	7.24	9.49	9.72	9.81	9.9
DUNL001150	0.59	9.45	8.86	50	3.522	0	0	CMP	HW	ST	YES	SURVEY		3084	6.6	7.26	9.63	9.86	10.39	10.39
DUNL001160	4.4	10.8	6.4	50	0	0	0	IRR	IRR	IRR	YES	IRR			6.6	7.26	9.63	9.86	10.39	10.39
DUNL001200	-2.86	9.45	12.31	50	6.972	2.86	0	UNK	HW	PE	YES	SURVEY			6.94	7.66	9.97	10.23	10.33	10.44
DUNL001300	-2.75	5.15	7.9	50	6.862	2.75	0	UNK	HW	PE	YES	SURVEY			6.94	7.66	9.97	10.23	10.33	10.44
DUNL001400	-1.24	9.6	10.84	50	5.352	1.24	0	UNK	HW	PE	YES	SURVEY		18249	8.2	9.17	10.13	10.31	10.39	10.5
DUNL001500	-0.29	6.419	6.709	50	4.402	0.29	0	UNK	HW	PE	YES	SURVEY			8.2	9.17	10.13	10.31	10.4	10.51
DUNL001600	0.137	10.06	9.923	50	3.975	0	0	UNK	HW	PE	YES	SURVEY		5937	9.76	10.37	10.52	10.6	10.64	10.68
DUNL001700	0.95	10.06	9.11	50	3.162	0	0	UNK	HW	WG	YES	SURVEY		3081	9.76	10.37	10.52	10.6	10.64	10.68
DUNL001800	1.73	9.4	7.67	50	2.382	0	0	UNK	HW	WG	YES	SURVEY		3080	9.77	10.37	10.52	10.6	10.64	10.69
DUNL001900	1.99	9.4	7.41	50	2.122	0	0	UNK	HW	WG	YES	SURVEY			9.78	10.37	10.53	10.62	10.67	10.73
DUNL002000	1.73	8.7	6.97	50	2.382	0	0	UNK	HW	WG	YES	SURVEY		3085	9.78	10.37	10.53	10.62	10.68	10.73
DUNL002100	1.95	8.7	6.75	50	2.162	0	0	UNK	HW	PE	YES	SURVEY			9.78	10.38	10.53	10.63	10.68	10.74
DUNL002200	2.37	8.314	5.944	50	1.742	0	0	UNK	HW	PE	YES	SURVEY	0% - 25%	18244	9.78	10.38	10.53	10.63	10.68	10.74
DUNL002300	3.94	9.25	5.31	50	0.172	0	0	UNK	HW	PE	YES	SURVEY	0% - 25%	12314	9.78	10.38	10.53	10.63	10.69	10.75
DUNL002400	4.61	9.25	4.64	50	0	0	0	UNK	HW	PE	YES	SURVEY	0% - 25%	12315	9.81	10.38	10.54	10.64	10.7	10.76
DUNL002500	5.05	10.3	5.25	50	0	0	0	UNK	HW	PE	YES	SURVEY			9.81	10.38	10.54	10.64	10.7	10.76
DUNL002600	6.11	10.3	4.19	50	0	0	0	UNK	HW	PE	YES	SURVEY	0% - 25%	18247	10.42	10.69	10.79	10.87	10.92	10.95
DUNL002700	7.22	11.65	4.43	50	0	0	0	RCP	HW	PE	YES	SURVEY			12.05	12.14	12.19	12.24	12.27	12.3
DUNL002800	7.49	12.56	5.07	50	0	0	0	RCP	HW	PE	YES	SURVEY			10.47	10.76	10.91	11.06	11.15	11.24

8.4 Appendix D – Subcatchment Data

Name	Outlet	Area (ac)	Flow Length (ft)	Slope (%)	Time of Concentration (min)	SCS Curve Number	Peak Rate Factor
SUB-DUNC000400	DUNC000400	2.78	684	1.20	21.8	79.4	Standard (483.4)
SUB-DUNC000200	DUNC000200	2.71	908	0.76	31.8	82.0	Standard (483.4)
SUB-DUNC000300	DUNC000300	8.00	1511	0.69	39.7	88.5	Standard (483.4)
SUB-DUNA001600	DUNA001600	28.28	2020	0.76	43.7	90.7	Standard (483.4)
SUB-DUNB000100	DUNB000100	28.80	1575	1.10	41.3	81.7	Standard (483.4)
SUB-DUNB000700	DUNB000700	26.64	2507	0.46	74.7	87.8	Standard (483.4)
SUB-DUNC000500	DUNC000500	3.15	585	1.25	15.7	85.1	Standard (483.4)
SUB-DUNC000601	DUNC000601	12.10	957	1.29	26.4	80.7	Standard (483.4)
SUB-DUNC000700	DUNC000700	12.76	1219	0.57	43.2	83.9	Standard (483.4)
SUB-DUNC001200	DUNC001200	1.57	542	0.43	29.6	80.0	Standard (483.4)
SUB-DUND000600	DUND000600	13.18	1380	0.60	50.9	81.3	Standard (483.4)
SUB-DUNF003220	DUNF003220	14.16	928	0.95	30.3	80.5	Standard (483.4)
SUB-DUNF004200	DUNF004200	41.17	3417	0.33	152.1	79.2	Standard (483.4)
SUB-DUNF004120	DUNF004120	12.48	1308	0.78	40.4	83.1	Standard (483.4)
SUB-DUNF004400	DUNF004400	26.29	2415	0.35	109.9	79.8	Standard (483.4)
SUB-DUNF004540	DUNF004540	7.83	1779	0.54	66.1	81.3	Standard (483.4)
SUB-DUNF004601	DUNF004601	5.70	1891	0.28	87.1	84.5	Standard (483.4)
SUB-DUNF006172	DUNF006172	11.13	1429	0.41	65.8	80.3	Standard (483.4)
SUB-DUNF005113	DUNF005113	0.87	344	1.66	9.2	84.0	Standard (483.4)
SUB-DUNF005129	DUNF005129	2.33	1000	0.82	34.6	80.4	Standard (483.4)
SUB-DUNF002700	DUNF002700	11.31	756	1.89	17.7	81.3	Standard (483.4)
SUB-DUNA000200	DUNA000200	20.67	2343	0.84	70.0	79.4	Standard (483.4)
SUB-DUNA000800	DUNA000800	11.63	1731	0.70	61.2	78.9	Standard (483.4)
SUB-DUND000200	DUND000200	19.97	1604	1.03	44.2	81.1	Standard (483.4)
SUB-DUNA001800	DUNA001800	2.47	439	5.30	6.1	84.6	Standard (483.4)
SUB-DUNA001900	DUNA001900	2.54	769	3.34	12.0	84.9	Standard (483.4)
SUB-DUNA002055	DUNA002055	15.55	1308	0.75	37.7	85.7	Standard (483.4)
SUB-DUNA002100	DUNA002100	9.50	1324	1.55	25.4	86.8	Standard (483.4)
SUB-DUNA002600	DUNA002600	11.19	1449	1.06	33.2	86.7	Standard (483.4)
SUB-DUNA002650	DUNA002650	24.90	1412	1.68	25.3	87.2	Standard (483.4)
SUB-DUNF001410	DUNF001410	5.73	768	1.75	12.1	92.8	Standard (483.4)
SUB-DUNF001931	DUNF001931	17.06	1363	0.37	47.8	89.7	Standard (483.4)
SUB-DUNF002000	DUNF002000	7.69	722	2.23	15.1	82.6	Standard (483.4)
SUB-DUNF002310	DUNF002310	25.70	1661	0.64	52.6	83.9	Standard (483.4)
SUB-DUNF003305	DUNF003305	18.57	2482	0.68	66.8	85.4	Standard (483.4)
SUB-DUNF003355	P-DUNF003355	17.74	1495	0.25	61.4	90.3	Standard (483.4)
SUB-DUNF003721	DUNF003721	50.78	2744	0.44	111.0	79.1	Standard (483.4)
SUB-DUNF003730	DUNF003730	6.98	857	0.37	49.3	78.0	Standard (483.4)
SUB-DUNF004700	DUNF004700	9.08	1076	1.25	29.8	80.4	Standard (483.4)
SUB-DUNF005200	DUNF005200	3.71	606	1.52	16.5	81.5	Standard (483.4)
SUB-DUNF005362	DUNF005362	0.97	659	0.59	23.8	86.7	Standard (483.4)
SUB-DUNF005601	DUNF005601	29.02	1700	0.65	56.3	82.1	Standard (483.4)
SUB-DUNA002800	DUNA002800	18.38	1576	1.11	42.6	80.5	Standard (483.4)

Name	Outlet	Area (ac)	Flow Length (ft)	Slope (%)	Time of Concentration (min)	SCS Curve Number	Peak Rate Factor
SUB-DUNA003000	DUNA003000	42.98	2528	0.63	78.8	81.9	Standard (483.4)
SUB-DUNA003100	DUNA003100	6.83	905	1.44	24.1	80.4	Standard (483.4)
SUB-DUNA003200	DUNA003200	20.67	1979	0.83	47.0	87.3	Standard (483.4)
SUB-DUNA003500	DUNA003500	9.26	1446	0.88	46.3	79.5	Standard (483.4)
SUB-DUNA003600	DUNA003600	19.66	1479	0.91	45.4	80.1	Standard (483.4)
SUB-DUNA003905	DUNA003905	17.65	2463	0.47	80.3	85.1	Standard (483.4)
SUB-DUNA003800	DUNA003800	6.82	1418	1.05	42.0	79.3	Standard (483.4)
SUB-DUNA004300	DUNA004300	8.09	1518	0.88	47.4	79.9	Standard (483.4)
SUB-DUNH000040	DUNH000040	9.38	831	1.09	25.5	80.9	Standard (483.4)
SUB-DUNA004221	DUNA004221	29.66	1766	0.32	52.7	93.7	Standard (483.4)
SUB-DUNA004500	DUNA004500	1.43	416	2.00	10.3	82.6	Standard (483.4)
SUB-DUNE000000	DUNE000000	10.06	1410	1.73	30.0	81.9	Standard (483.4)
SUB-DUNE000600	DUNE000600	2.98	563	1.63	14.9	81.7	Standard (483.4)
SUB-DUNE000650	DUNE000650	6.67	869	0.90	28.2	81.8	Standard (483.4)
SUB-DUNE000940	DUNE000940	4.26	854	0.82	22.0	89.7	Standard (483.4)
SUB-DUNE000910	DUNE000910	6.68	1039	0.65	34.2	85.1	Standard (483.4)
SUB-DUNA004700	DUNA004700	3.96	1126	0.52	42.6	84.1	Standard (483.4)
SUB-DUNJ000120	DUNJ000120	12.64	1214	0.99	27.9	88.5	Standard (483.4)
SUB-DUNJ000214	DUNJ000214	16.78	1913	0.51	63.2	85.2	Standard (483.4)
SUB-DUNI000100	DUNI000100	14.57	1593	0.78	34.8	91.3	Standard (483.4)
SUB-DUNI000500	DUNI000500	13.09	1625	0.60	38.9	92.0	Standard (483.4)
SUB-DUNI001001	DUNI001001	60.71	2250	0.93	49.3	87.2	Standard (483.4)
SUB-DUNI000900	DUNI000900	7.16	1415	0.45	42.3	90.8	Standard (483.4)
SUB-DUNI000810	DUNI000810	7.76	857	0.90	28.8	80.9	Standard (483.4)
SUB-DUNF003409	DUNF003409	2.47	837	0.78	33.8	77.4	Standard (483.4)
SUB-DUNF003421	DUNF003421	31.54	3332	0.27	157.4	80.3	Standard (483.4)
SUB-DUNF003433	DUNF003433	1.03	239	1.85	6.4	84.6	Standard (483.4)
SUB-DUNF003460	DUNF003460	6.33	2110	0.35	119.1	73.4	Standard (483.4)
SUB-DUNH000100	DUNH000100	17.46	1123	0.76	37.5	82.0	Standard (483.4)
SUB-DUNG000110	DUNG000110	16.01	1988	0.39	66.1	88.5	Standard (483.4)
SUB-DUNA003920	DUNA003920	39.51	2427	0.35	81.0	88.5	Standard (483.4)
SUB-DUNG000305	DUNG000305	7.07	769	1.05	21.7	84.4	Standard (483.4)
SUB-DUNG000600	DUNG000600	18.55	1704	0.48	58.0	85.9	Standard (483.4)
SUB-DUNG000620	DUNG000620	10.51	1745	0.43	76.4	79.8	Standard (483.4)
SUB-DUNH000500	DUNH000500	2.42	345	1.73	6.7	91.8	Standard (483.4)
SUB-DUNF003230	DUNF003230	14.77	1879	0.55	60.0	85.0	Standard (483.4)
SUB-DUNB000900	DUNB000900	24.80	1778	0.34	63.4	89.0	Standard (483.4)
SUB-DUNB000500	DUNB000500	11.07	1146	1.30	25.0	86.5	Standard (483.4)
SUB-DUND000900	DUND000900	17.58	1784	0.37	66.5	86.8	Standard (483.4)
SUB-DUNA001000	DUNA001000	17.03	1775	1.09	49.9	78.8	Standard (483.4)
SUB-DUNC000100	DUNC000100	4.81	644	1.21	21.1	78.7	Standard (483.4)
SUB-DUNF003341	DUNF003341	15.67	2281	0.47	71.9	86.6	Standard (483.4)
SUB-DUNC000900	DUNC000900	6.34	933	0.83	31.9	81.0	Standard (483.4)

Name	Outlet	Area (ac)	Flow Length (ft)	Slope (%)	Time of Concentration (min)	SCS Curve Number	Peak Rate Factor
SUB-DUNC001000	DUNC001000	1.32	457	1.15	14.8	82.2	Standard (483.4)
SUB-DUNC001100	DUNC001100	5.89	1173	0.71	46.7	77.1	Standard (483.4)
SUB-DUNF004900	DUNF004900	1.58	520	1.98	13.2	80.3	Standard (483.4)
SUB-DUNF004960	DUNF004960	2.46	569	1.82	11.2	88.5	Standard (483.4)
SUB-DUNF005400	DUNF005400	0.38	233	0.93	8.2	86.6	Standard (483.4)
SUB-DUNF005500	DUNF005500	0.08	61	3.10	5.0	85.9	Standard (483.4)
SUB-DUNF003470	DUNF003470	3.31	1175	0.78	35.5	84.2	Standard (483.4)
SUB-DUNE000925	DUNE000925	8.91	1307	1.02	31.0	86.8	Standard (483.4)
SUB-DUNJ000400	DUNJ000400	1.10	481	0.67	17.2	86.9	Standard (483.4)
SUB-DUNA004800	DUNA004800	8.69	1433	0.56	53.6	81.7	Standard (483.4)
SUB-DUNI000200	DUNI000200	7.32	1175	0.75	36.7	83.9	Standard (483.4)
SUB-DUNA000100	DUNA000100	38.71	2289	0.55	82.6	80.1	Standard (483.4)
SUB-DUNF003760	DUNF003760	24.87	1312	0.33	72.6	78.4	Standard (483.4)
SUB-DUND000000	DUND000000	7.00	1407	1.33	38.3	78.2	Standard (483.4)
SUB-DUNA001300	DUNA001300	7.92	916	1.83	22.6	79.0	Standard (483.4)
SUB-DUNC000000	DUNC000000	2.63	591	1.52	18.3	77.5	Standard (483.4)
SUB-DUNC000800	DUNC000800	8.20	1482	0.57	58.7	79.5	Standard (483.4)
SUB-DUNF003225	DUNF003225	5.49	1528	0.80	38.2	87.9	Standard (483.4)
SUB-DUNE000250	DUNE000250	5.15	793	2.15	16.8	82.2	Standard (483.4)
SUB-DUNE000975	DUNE000975	18.05	1172	0.56	33.1	90.5	Standard (483.4)
SUB-DUNH000000	DUNH000000	9.12	1121	0.27	66.1	80.5	Standard (483.4)
SUB-DUNC001300	DUNC001300	11.39	875	0.52	42.9	77.3	Standard (483.4)
SUB-DUND000400	DUND000400	21.42	1628	0.59	53.0	84.4	Standard (483.4)
SUB-DUNC000600	DUNC000600	19.83	1633	0.45	49.2	90.1	Standard (483.4)
SUB-DUNC000701	DUNC000701	4.74	495	1.35	16.5	78.2	Standard (483.4)
SUB-DUND000110	DUND000110	15.54	1345	0.90	35.0	85.8	Standard (483.4)
SUB-DUNB000800	DUNB000800	4.70	712	1.50	12.5	92.4	Standard (483.4)
SUB-DUNE000935	DUNE000935	8.07	810	0.87	22.7	87.0	Standard (483.4)
SUB-DUNE000900	DUNE000900	5.97	1605	0.88	43.2	84.1	Standard (483.4)
SUB-DUNE000500	DUNE000500	0.42	449	2.09	7.8	91.0	Standard (483.4)
SUB-DUNE000400	DUNE000400	0.43	479	2.19	7.8	91.7	Standard (483.4)
SUB-DUNG001500	DUNG001500	1.40	476	1.45	12.7	84.2	Standard (483.4)
SUB-DUNG001100	DUNG001100	6.50	1096	0.66	42.9	79.4	Standard (483.4)
SUB-DUNG001300	DUNG001300	0.62	353	1.70	8.2	87.3	Standard (483.4)
SUB-DUNG001010	DUNG001010	15.80	2756	0.40	88.5	87.1	Standard (483.4)
SUB-DUNG000809	DUNG000809	2.06	946	0.64	41.0	77.6	Standard (483.4)
SUB-DUNG000820	DUNG000820	38.39	2694	0.36	107.1	82.8	Standard (483.4)
SUB-DUNG000400	DUNG000400	5.17	1101	0.61	40.4	82.7	Standard (483.4)
SUB-DUNG000115	DUNG000115	14.01	1899	0.42	82.0	80.0	Standard (483.4)
SUB-DUNF003400	DUNF003400	31.56	2024	0.49	83.3	78.7	Standard (483.4)
SUB-DUNJ008000	DUNJ008000	30.08	1939	1.76	40.9	79.8	Standard (483.4)
SUB-DUNF003210	DUNF003210	11.39	745	1.77	19.4	79.1	Standard (483.4)
SUB-DUNF003310	DUNF003310	7.90	2192	0.43	92.7	79.3	Standard (483.4)

Name	Outlet	Area (ac)	Flow Length (ft)	Slope (%)	Time of Concentration (min)	SCS Curve Number	Peak Rate Factor
SUB-DUNF003202	DUNF003202	6.86	968	1.06	24.8	85.7	Standard (483.4)
SUB-DUNF003340	DUNF003340	7.92	2009	0.46	75.5	82.7	Standard (483.4)
SUB-DUNF006020	DUNF006020	6.12	1459	0.78	44.2	83.1	Standard (483.4)
SUB-DUNF003450	DUNF003450	1.38	426	1.19	11.7	86.8	Standard (483.4)
SUB-DUNF003425	DUNF003425	5.16	1071	0.75	39.6	79.3	Standard (483.4)
SUB-DUNF003801	DUNF003801	12.29	1785	0.60	65.7	79.9	Standard (483.4)
SUB-DUNF003700	DUNF003700	6.26	1220	0.48	55.7	78.9	Standard (483.4)
SUB-DUND003401	DUND003401	9.47	1619	0.64	48.0	85.8	Standard (483.4)
SUB-DUNF003342	DUNF003342	14.97	1984	0.38	68.7	87.7	Standard (483.4)
SUB-DUNF005110	DUNF005110	0.64	553	1.20	15.0	85.6	Standard (483.4)
SUB-DUNF009010	DUNF009010	7.41	1150	0.85	35.4	82.7	Standard (483.4)
SUB-DUNA004000	DUNA004000	15.80	891	1.54	24.1	79.1	Standard (483.4)
SUB-DUNH000050	DUNH000050	2.39	419	1.95	9.0	86.9	Standard (483.4)
SUB-DUNI000300	DUNI000300	3.28	469	1.91	10.9	84.2	Standard (483.4)
SUB-DUNI000800	DUNI000800	2.06	353	0.34	21.1	83.7	Standard (483.4)
SUB-DUNJ000220	DUNJ000220	0.26	277	0.49	10.8	91.5	Standard (483.4)
SUB-DUNJ000300	DUNJ000300	1.33	445	1.34	13.1	83.0	Standard (483.4)
SUB-DUNC000003	DUNC000003	23.10	2366	0.37	103.1	80.3	Standard (483.4)
SUB-DUNA000400	DUNA000400	27.22	2591	0.57	93.6	78.9	Standard (483.4)
SUB-DUNA001500	DUNA001500	4.11	1038	1.43	20.9	87.9	Standard (483.4)
SUB-DUNA001400	DUNA001400	26.81	3057	0.89	66.3	86.5	Standard (483.4)
SUB-DUNA002200	DUNA002200	2.94	582	0.52	14.7	96.5	Standard (483.4)
SUB-DUNF000400	DUNF000400	9.46	1090	1.43	23.1	86.2	Standard (483.4)
SUB-DUNA002700	DUNA002700	7.17	1165	1.43	26.8	83.4	Standard (483.4)
SUB-DUNA004130	DUNA004130	16.22	2073	0.46	66.6	87.0	Standard (483.4)
SUB-DUNF002200	DUNF002200	23.85	1420	0.68	50.8	80.2	Standard (483.4)
SUB-DUNF002600	DUNF002600	1.47	407	0.69	13.6	89.0	Standard (483.4)
SUB-DUNF002400	DUNF002400	3.69	535	0.47	14.7	96.4	Standard (483.4)
SUB-DUNF003200	DUNF003200	6.32	842	1.69	21.7	79.4	Standard (483.4)
SUB-DUNF003300	DUNF003300	1.36	393	2.75	9.3	79.1	Standard (483.4)
SUB-DUNF003500	DUNF003500	5.62	1352	0.88	45.0	78.7	Standard (483.4)
SUB-DUNF003750	DUNF003750	3.11	709	0.98	22.8	82.1	Standard (483.4)
SUB-DUNF004300	DUNF004300	14.19	1975	0.48	81.7	78.9	Standard (483.4)
SUB-DUNJ000000	DUNJ000000	25.81	2381	0.61	74.1	83.0	Standard (483.4)
SUB-DUNI000040	DUNI000040	4.30	539	0.44	24.0	86.0	Standard (483.4)
SUB-DUNA002020	DUNA002020	10.26	956	2.07	18.3	84.7	Standard (483.4)
SUB-DUNA002000	DUNA002000	6.32	1056	1.10	29.0	82.8	Standard (483.4)
SUB-DUNC000005	DUNC000005	15.90	1901	0.67	64.8	80.1	Standard (483.4)
SUB-DUNA001200	DUNA001200	4.47	853	1.17	26.6	79.0	Standard (483.4)
SUB-DUNH000010	DUNH000010	8.73	642	0.91	18.0	87.6	Standard (483.4)
SUB-DUNF002900	DUNF002900	31.66	2539	0.57	91.7	78.9	Standard (483.4)
SUB-DUNF005300	DUNF005300	0.37	188	0.68	9.2	82.9	Standard (483.4)
SUB-DUNF003442	DUNF003442	0.73	195	1.84	6.0	82.1	Standard (483.4)

Name	Outlet	Area (ac)	Flow Length (ft)	Slope (%)	Time of Concentration (min)	SCS Curve Number	Peak Rate Factor
SUB-DUNA004152	DUNA004152	6.79	2346	0.62	80.5	79.8	Standard (483.4)
SUB-DUNF006030	DUNF006030	2.13	1064	0.94	23.8	90.4	Standard (483.4)
SUB-DUNF006210	DUNF006210	3.48	884	0.32	44.2	84.2	Standard (483.4)
SUB-DUNF003805	DUNF003805	2.23	616	0.82	24.1	79.6	Standard (483.4)
SUB-DUNF003800	DUNF003800	12.58	1790	0.55	68.6	79.9	Standard (483.4)
SUB-DUNF003900	DUNF003900	28.21	1586	0.46	65.6	81.0	Standard (483.4)
SUB-DUNG001000	DUNG001000	5.14	1023	1.02	29.1	83.0	Standard (483.4)
SUB-DUNA004120	DUNA004120	10.19	1142	0.68	42.9	79.9	Standard (483.4)
SUB-DUNA004125	DUNA004125	13.29	1365	0.29	68.1	83.1	Standard (483.4)
SUB-DUNA004126	DUNA004126	6.70	1035	0.73	38.1	80.0	Standard (483.4)
SUB-DUNF005127	DUNF005127	0.13	133	0.44	6.4	90.9	Standard (483.4)
SUB-DUNF009000	DUNF009000	2.75	841	0.61	30.9	84.2	Standard (483.4)
SUB-DUNF009020	DUNF009020	0.90	285	0.80	12.6	81.0	Standard (483.4)
SUB-DUNF005130	DUNF005130	0.73	820	0.81	23.4	87.5	Standard (483.4)
SUB-DUNF005115	DUNF005115	1.15	673	1.34	16.4	86.0	Standard (483.4)
SUB-DUNF005112	DUNF005112	0.17	247	0.89	7.7	90.0	Standard (483.4)
SUB-DUNF005361	DUNF005361	0.32	496	0.46	18.9	89.7	Standard (483.4)
SUB-DUNF004500	DUNF004500	6.03	1500	0.39	67.9	81.2	Standard (483.4)
SUB-DUNF003345	DUNF003345	4.67	1409	0.48	57.8	81.3	Standard (483.4)
SUB-DUNF000100	DUNF000100	0.82	283	0.32	14.0	90.6	Standard (483.4)
SUB-DUNF000300	DUNF000300	3.73	804	1.70	17.0	85.6	Standard (483.4)
SUB-DUNF000700	DUNF000700	11.87	1661	0.89	40.6	86.4	Standard (483.4)
SUB-DUND001020	DUND001020	3.33	1013	0.27	47.6	87.6	Standard (483.4)
SUB-DUND003200	DUND003200	7.78	1074	0.30	37.6	93.2	Standard (483.4)
SUB-DUND003100	DUND003100	1.57	431	0.45	15.6	92.0	Standard (483.4)
SUB-DUNF001830	DUNF001830	0.80	223	1.22	5.0	95.6	Standard (483.4)
SUB-DUNF001820	DUNF001820	1.06	246	1.19	7.0	88.8	Standard (483.4)
SUB-DUNF001850	DUNF001850	0.41	339	0.63	8.3	97.2	Standard (483.4)
SUB-DUNF001865	DUNF001865	0.52	259	0.63	7.7	94.7	Standard (483.4)
SUB-DUNF001870	DUNF001870	3.06	550	1.21	13.8	87.7	Standard (483.4)
SUB-DUNF001880	DUNF001880	3.10	615	0.70	14.4	95.0	Standard (483.4)
SUB-DUNF001910	DUNF001910	2.63	483	0.86	12.7	91.3	Standard (483.4)
SUB-DUNF001920	DUNF001920	1.30	333	1.31	7.0	93.2	Standard (483.4)
SUB-DUNA004610	DUNA004610	24.08	1300	1.13	27.1	88.9	Standard (483.4)
SUB-DUNF005360	DUNF005360	0.09	95	1.09	5.0	84.3	Standard (483.4)
SUB-DUNF005140	DUNF005140	9.36	563	1.02	19.6	80.4	Standard (483.4)
SUB-DUNF005120	DUNF005120	6.00	882	1.13	26.3	80.8	Standard (483.4)
SUB-DUNF004552	DUNF004552	0.40	382	0.69	14.6	85.8	Standard (483.4)
SUB-DUNF004640	DUNF004640	0.57	510	0.45	23.8	84.7	Standard (483.4)
SUB-DUNF004620	DUNF004620	0.60	297	0.69	13.3	82.6	Standard (483.4)
SUB-DUND000150	DUND000150	2.68	1264	0.50	40.9	88.3	Standard (483.4)
SUB-DUND002100	DUND002100	4.69	498	0.45	15.2	95.0	Standard (483.4)
SUB-DUND002000	DUND002000	4.51	686	1.51	17.5	82.7	Standard (483.4)

Name	Outlet	Area (ac)	Flow Length (ft)	Slope (%)	Time of Concentration (min)	SCS Curve Number	Peak Rate Factor
SUB-DUND002200	DUND002200	0.20	184	0.37	10.9	86.4	Standard (483.4)
SUB-DUND000141	DUND000141	2.46	412	1.45	10.3	86.8	Standard (483.4)
SUB-DUND002500	DUND002500	2.59	372	0.23	19.4	91.9	Standard (483.4)
SUB-DUND002400	DUND002400	2.97	446	0.38	19.9	88.9	Standard (483.4)
SUB-DUND002300	DUND002300	3.40	340	0.83	7.8	95.9	Standard (483.4)
SUB-DUND002600	DUND002600	2.83	517	0.64	14.4	93.1	Standard (483.4)
SUB-DUND002700	DUND002700	0.42	295	0.47	11.5	91.5	Standard (483.4)
SUB-DUND002800	DUND002800	0.23	206	0.48	8.4	92.0	Standard (483.4)
SUB-DUND003000	DUND003000	2.12	634	0.20	29.3	93.9	Standard (483.4)
SUB-DUND001011	DUND001011	4.00	1091	0.37	49.9	83.7	Standard (483.4)
SUB-DUNF003325	DUNF003325	3.03	327	0.70	12.4	86.8	Standard (483.4)
SUB-DUNF003322	DUNF003322	10.33	1125	0.84	29.5	87.5	Standard (483.4)
SUB-DUNA002050	DUNA002050	0.32	540	0.45	18.8	91.9	Standard (483.4)
SUB-DUNA002045	DUNA002045	1.72	529	0.65	21.7	82.6	Standard (483.4)
SUB-DUNA002009	DUNA002009	11.24	2270	0.83	56.3	85.3	Standard (483.4)
SUB-DUNA002030	DUNA002030	0.26	227	1.84	5.0	92.9	Standard (483.4)
SUB-DUNF002800	DUNF002800	32.05	1762	1.04	46.7	81.5	Standard (483.4)
SUB-DUNL001400	DUNL001400	27.13	1529	1.10	39.6	82.3	Standard (483.4)
SUB-DUNB000300	DUNB000300	32.90	1896	0.77	39.2	91.9	Standard (483.4)
SUB-DUNA002500	DUNA002500	28.07	2662	0.95	48.5	90.8	Standard (483.4)
SUB-DUNF001900	DUNF001900	5.52	767	1.57	13.5	91.5	Standard (483.4)
SUB-DUNF005100	DUNF005100	0.12	97	3.08	5.0	87.8	Standard (483.4)
SUB-DUNG000021	DUNG000021	10.90	1114	0.68	23.0	95.4	Standard (483.4)
SUB-DUNA003400	DUNA003400	8.41	1634	0.61	50.8	85.2	Standard (483.4)
SUB-DUNG001601	DUNG001601	10.17	1421	0.66	45.7	83.9	Standard (483.4)
SUB-DUNF002300	DUNF002300	5.58	1305	3.47	16.3	87.6	Standard (483.4)
SUB-DUNI000820	DUNI000820	7.72	885	1.11	30.0	76.9	Standard (483.4)
SUB-DUNJ000010	DUNJ000010	32.42	1996	0.55	65.2	84.0	Standard (483.4)
SUB-DUNA000005	DUNA000005	34.17	2185	0.79	68.0	79.4	Standard (483.4)
SUB-DUNA002900	DUNA002900	10.50	1366	1.26	30.1	85.6	Standard (483.4)
SUB-DUNA004110	DUNA004110	10.91	972	0.52	46.0	77.8	Standard (483.4)
SUB-DUND001002	DUND001002	0.19	107	0.50	5.0	91.5	Standard (483.4)
SUB-DUND000160	DUND000160	0.75	177	1.67	6.2	80.0	Standard (483.4)
SUB-DUNF001867	DUNF001867	22.82	2290	0.55	66.0	86.8	Standard (483.4)
SUB-DUND000550	DUND000550	4.55	1400	0.68	41.4	85.8	Standard (483.4)
SUB-DUND000540	DUND000540	0.42	422	0.58	16.9	86.2	Standard (483.4)
SUB-DUNF006090	DUNF006090	0.06	50	2.94	5.0	83.1	Standard (483.4)
SUB-DUNF006150	DUNF006150	0.13	116	1.80	5.0	79.3	Standard (483.4)
SUB-DUNF006200	DUNF006200	0.12	86	0.85	5.0	88.1	Standard (483.4)
SUB-DUNF006190	DUNF006190	0.18	152	0.73	6.9	85.4	Standard (483.4)
SUB-DUNF006060	DUNF006060	0.23	144	2.36	5.0	86.3	Standard (483.4)
SUB-DUNF004850	DUNF004850	0.34	178	1.38	6.1	83.2	Standard (483.4)
SUB-DUNJ000212	DUNJ000212	0.51	375	1.71	7.3	91.7	Standard (483.4)

Name	Outlet	Area (ac)	Flow Length (ft)	Slope (%)	Time of Concentration (min)	SCS Curve Number	Peak Rate Factor
SUB-DUND000130	DUND000130	1.90	332	1.22	10.0	85.2	Standard (483.4)
SUB-DUNF003315	DUNF003315	2.00	616	1.09	17.9	84.3	Standard (483.4)
SUB-DUNF003307	DUNF003307	6.02	1541	0.83	35.3	89.5	Standard (483.4)
SUB-DUND000940	DUND000940	5.07	777	0.46	31.6	85.8	Standard (483.4)
SUB-DUNF001860	DUNF001860	1.06	196	0.99	5.0	96.6	Standard (483.4)
SUB-DUNF003820	DUNF003820	7.54	954	0.51	43.4	79.5	Standard (483.4)
SUB-DUNJ000215	DUNJ000215	7.32	1259	0.77	35.8	85.9	Standard (483.4)
SUB-DUNJ000211	DUNJ000211	0.45	363	1.68	7.2	91.4	Standard (483.4)
SUB-DUNJ000210	DUNJ000210	0.55	286	0.52	12.7	87.3	Standard (483.4)
SUB-DUNJ000230	DUNJ000230	4.86	760	0.87	18.4	91.0	Standard (483.4)
SUB-DUNJ000021	DUNJ000021	7.15	1564	0.53	45.1	89.3	Standard (483.4)
SUB-DUNG000030	DUNG000030	0.60	603	0.67	24.7	81.5	Standard (483.4)
SUB-DUNE000931	DUNE000931	5.76	835	0.41	38.8	83.2	Standard (483.4)
SUB-DUNG000720	DUNG000720	1.65	458	1.31	7.9	96.0	Standard (483.4)
SUB-DUNA004210	DUNA004210	2.73	1028	1.06	32.1	79.5	Standard (483.4)
SUB-DUNF002500	DUNF002500	1.29	439	0.57	13.8	92.4	Standard (483.4)
SUB-DUNF000500	DUNF000500	0.38	211	0.22	11.5	93.9	Standard (483.4)
SUB-DUNA002400	DUNA002400	0.54	255	1.98	7.3	81.1	Standard (483.4)
SUB-DUNF000200	DUNF000200	0.52	161	0.97	5.0	92.8	Standard (483.4)
SUB-DUND001001	DUND001001	0.61	196	0.31	10.4	91.1	Standard (483.4)
SUB-DUND000100	DUND000100	3.97	2176	0.73	61.4	83.8	Standard (483.4)
SUB-DUNF003490	DUNF003490	0.27	280	0.76	9.2	90.2	Standard (483.4)
SUB-DUNA001726	DUNA001726	3.98	1233	0.49	30.2	95.0	Standard (483.4)
SUB-DUNA002040	DUNA002040	0.48	301	0.78	11.4	85.7	Standard (483.4)
SUB-DUNF001840	DUNF001840	1.88	395	0.88	8.2	96.7	Standard (483.4)
SUB-DUNA002060	DUNA002060	0.20	256	1.76	5.5	90.5	Standard (483.4)
SUB-DUNF001815	DUNF001815	0.16	157	2.51	5.0	97.2	Standard (483.4)
SUB-DUNF003327	DUNF003327	0.45	125	1.19	5.0	85.3	Standard (483.4)
SUB-DUNF003328	DUNF003328	0.37	166	0.30	6.7	97.5	Standard (483.4)
SUB-DUNF003331	DUNF003331	0.18	181	0.62	8.7	85.2	Standard (483.4)
SUB-DUNF003330	DUNF003330	10.61	902	0.31	55.1	78.4	Standard (483.4)
SUB-DUNI000400	DUNI000400	6.51	1393	0.77	38.5	86.2	Standard (483.4)
SUB-DUNL002700	DUNL002700	42.53	3184	0.26	117.5	88.4	Standard (483.4)
SUB-DUNL002400	DUNL002400	12.99	1127	0.63	39.1	83.6	Standard (483.4)
SUB-DUNL002200	DUNL002200	22.25	2004	0.60	55.5	87.4	Standard (483.4)
SUB-DUNL002100	DUNL002100	5.27	1128	0.92	31.8	84.1	Standard (483.4)
SUB-DUNL001800	DUNL001800	3.53	566	1.03	16.0	86.5	Standard (483.4)
SUB-DUNL001600	DUNL001600	5.65	1004	0.79	30.2	85.3	Standard (483.4)
SUB-DUNL001160	DUNL001160	9.61	746	0.53	26.9	87.5	Standard (483.4)
SUB-DUNK001700	DUNK001700	27.92	1722	0.49	61.7	84.0	Standard (483.4)
SUB-DUNK001330	DUNK001330	20.51	2318	0.53	79.7	82.3	Standard (483.4)
SUB-DUNK001100	DUNK001100	10.07	1021	0.75	32.6	84.1	Standard (483.4)
SUB-DUNK001550	DUNK001550	74.67	3569	0.31	142.4	83.3	Standard (483.4)

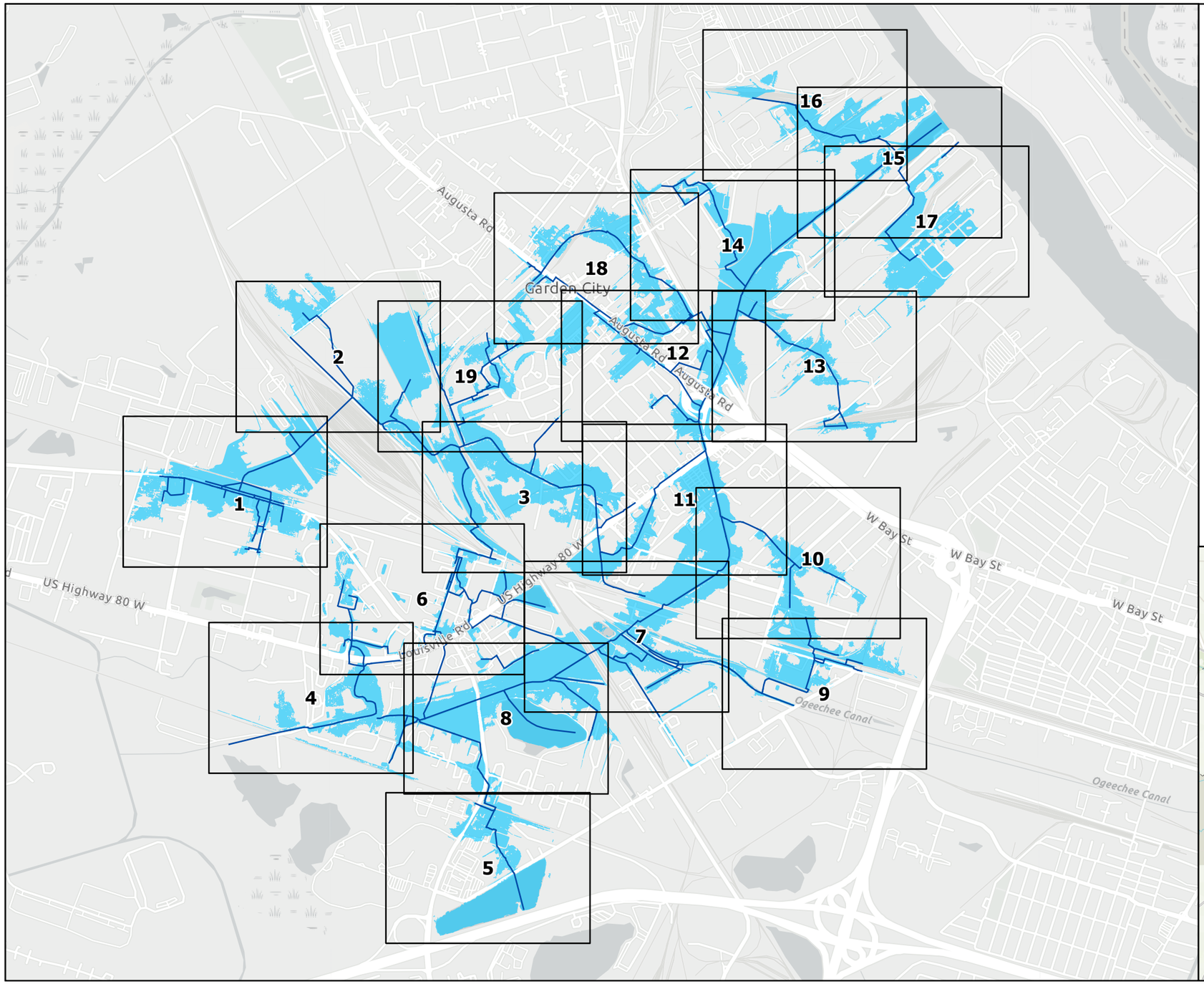
Name	Outlet	Area (ac)	Flow Length (ft)	Slope (%)	Time of Concentration (min)	SCS Curve Number	Peak Rate Factor
SUB-DUNK001310	DUNK001310	11.98	1013	0.86	31.9	82.5	Standard (483.4)
SUB-DUNA000001	DUNA000001	20.59	552	1.29	12.3	89.9	Standard (483.4)
SUB-DUNL002600	DUNL002600	5.34	951	1.00	30.6	80.0	Standard (483.4)
SUB-DUNJ000420	DUNJ000420	32.78	1756	0.40	68.3	84.4	Standard (483.4)
SUB-DUNA004850	DUNA004850	17.08	2223	0.24	118.0	81.1	Standard (483.4)
SUB-DUNG000840	DUNG000840	1.92	526	0.16	44.7	82.0	Standard (483.4)
SUB-DUNG000550	DUNG000550	8.74	1225	0.66	32.2	90.1	Standard (483.4)
SUB-DUNI000020	DUNI000020	16.54	1159	0.68	41.7	81.2	Standard (483.4)
SUB-DUNF003740	DUNF003740	3.97	594	0.98	21.9	78.8	Standard (483.4)
SUB-DUNF003600	DUNF003600	13.27	1126	0.37	58.5	79.5	Standard (483.4)
SUB-DUNF003802	DUNF003802	37.25	2367	0.39	107.5	78.1	Standard (483.4)
SUB-DUNE000800	DUNE000800	21.36	1821	0.76	48.8	85.6	Standard (483.4)
SUB-DUNF008004	DUNF008004	4.75	801	1.00	21.2	86.7	Standard (483.4)
SUB-DUNF008007	DUNF008007	9.61	1055	0.67	32.4	86.6	Standard (483.4)
SUB-DUNF008008	DUNF008008	3.17	661	0.49	32.6	80.0	Standard (483.4)
SUB-DUNF008002	DUNF008002	0.14	166	0.60	8.2	85.4	Standard (483.4)
SUB-DUNI000600	DUNI000600	43.29	3153	0.39	116.3	82.9	Standard (483.4)
SUB-DUNI000620	DUNI000620	16.53	1755	0.44	64.0	84.8	Standard (483.4)
SUB-DUNA004140	DUNA004140	26.91	2745	0.69	75.4	84.0	Standard (483.4)
SUB-DUNH000047	DUNH000047	3.78	411	1.14	11.9	86.1	Standard (483.4)
SUB-DUNH000044	DUNH000044	7.52	860	0.53	33.0	85.0	Standard (483.4)
SUB-DUNH000043	DUNH000043	0.40	261	0.64	11.4	85.3	Standard (483.4)
SUB-DUNH000041	DUNH000041	8.23	808	0.66	29.6	83.4	Standard (483.4)
SUB-DUNF008001	DUNF008001	2.79	534	0.39	23.4	88.0	Standard (483.4)
SUB-DUNJ000425	DUNJ000425	1.69	305	0.59	9.8	93.0	Standard (483.4)
SUB-DUNJ000355	DUNJ000355	10.29	1059	0.56	34.4	87.6	Standard (483.4)
SUB-DUNH000350	DUNH000350	1.21	234	1.40	6.3	88.2	Standard (483.4)
SUB-DUNH000410	DUNH000410	5.90	750	0.46	28.6	87.7	Standard (483.4)
SUB-DUNF003485	DUNF003485	0.21	194	0.46	8.9	89.8	Standard (483.4)
SUB-DUNF003488	DUNF003488	3.70	666	0.46	31.7	82.0	Standard (483.4)
SUB-DUNF003486	DUNF003486	0.17	500	0.43	13.4	97.9	Standard (483.4)
SUB-DUNH000700	DUNH000700	0.53	178	1.93	5.0	92.2	Standard (483.4)
SUB-DUNF003503	DUNF003503	0.64	186	1.82	5.0	91.5	Standard (483.4)
SUB-DUNF003502	DUNF003502	0.38	125	1.16	5.0	92.9	Standard (483.4)
SUB-DUNF003501	DUNF003501	2.20	509	0.55	13.1	96.3	Standard (483.4)
SUB-DUNF003520	DUNF003520	0.29	124	2.76	5.0	88.5	Standard (483.4)
SUB-DUNF003499	DUNF003499	0.46	145	2.38	5.0	83.8	Standard (483.4)
SUB-DUNF003498	DUNF003498	0.99	643	0.45	19.7	93.8	Standard (483.4)
SUB-DUNF003494	DUNF003494	1.75	530	1.05	14.7	87.0	Standard (483.4)
SUB-DUNF003496	DUNF003496	10.10	1220	0.51	41.5	86.8	Standard (483.4)
SUB-DUNF003495	DUNF003495	0.87	418	0.76	10.9	93.4	Standard (483.4)
SUB-DUNH000411	DUNH000411	0.71	237	0.36	11.3	91.1	Standard (483.4)
SUB-DUNF006120	DUNF006120	0.10	68	3.00	5.0	80.7	Standard (483.4)

Name	Outlet	Area (ac)	Flow Length (ft)	Slope (%)	Time of Concentration (min)	SCS Curve Number	Peak Rate Factor
SUB-DUNF006135	DUNF006135	0.14	85	2.96	5.0	80.7	Standard (483.4)
SUB-DUNF006072	DUNF006072	7.04	882	0.92	27.0	83.2	Standard (483.4)
SUB-DUNF003492	DUNF003492	0.15	204	0.55	5.8	97.6	Standard (483.4)
SUB-DUNF003491	DUNF003491	0.15	176	0.48	7.8	90.8	Standard (483.4)
SUB-DUNF003475	DUNF003475	14.97	1593	0.56	110.1	58.8	Standard (483.4)
SUB-DUNF003481	DUNF003481	1.97	589	0.93	15.6	89.3	Standard (483.4)
SUB-DUNF000065	DUNF000065	6.64	670	1.06	15.6	90.1	Standard (483.4)
SUB-DUNF003493	DUNF003493	2.46	548	0.56	13.4	96.8	Standard (483.4)
SUB-DUNF007017	DUNF007017	0.60	235	0.89	8.1	87.7	Standard (483.4)
SUB-DUNF007016	DUNF007016	0.08	55	0.54	5.0	83.0	Standard (483.4)
SUB-DUNF004002	DUNF004002	1.82	324	1.76	9.6	80.5	Standard (483.4)
SUB-DUNF000040	DUNF000040	4.23	793	0.56	28.4	86.5	Standard (483.4)
SUB-DUNA004450	DUNA004450	10.18	1063	0.77	35.1	82.4	Standard (483.4)
SUB-DUNF000020	DUNF000020	6.72	930	0.72	30.2	84.8	Standard (483.4)
SUB-DUNF001600	DUNF001600	13.91	1267	1.09	23.7	92.0	Standard (483.4)
SUB-DUNF003803	DUNF003803	11.33	1112	0.34	58.3	80.7	Standard (483.4)
SUB-DUND001100	DUND001100	0.18	120	0.03	24.4	90.6	Standard (483.4)
SUB-DUND001120	DUND001120	9.65	1250	0.40	43.5	89.7	Standard (483.4)

8.5 Appendix E – Existing Conditions Maps

Dundee Canal
Existing Conditions Maps

Maps Series Index

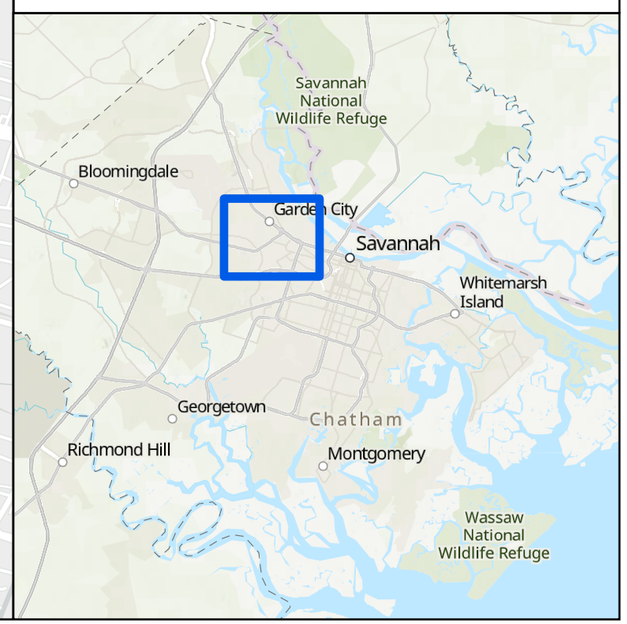


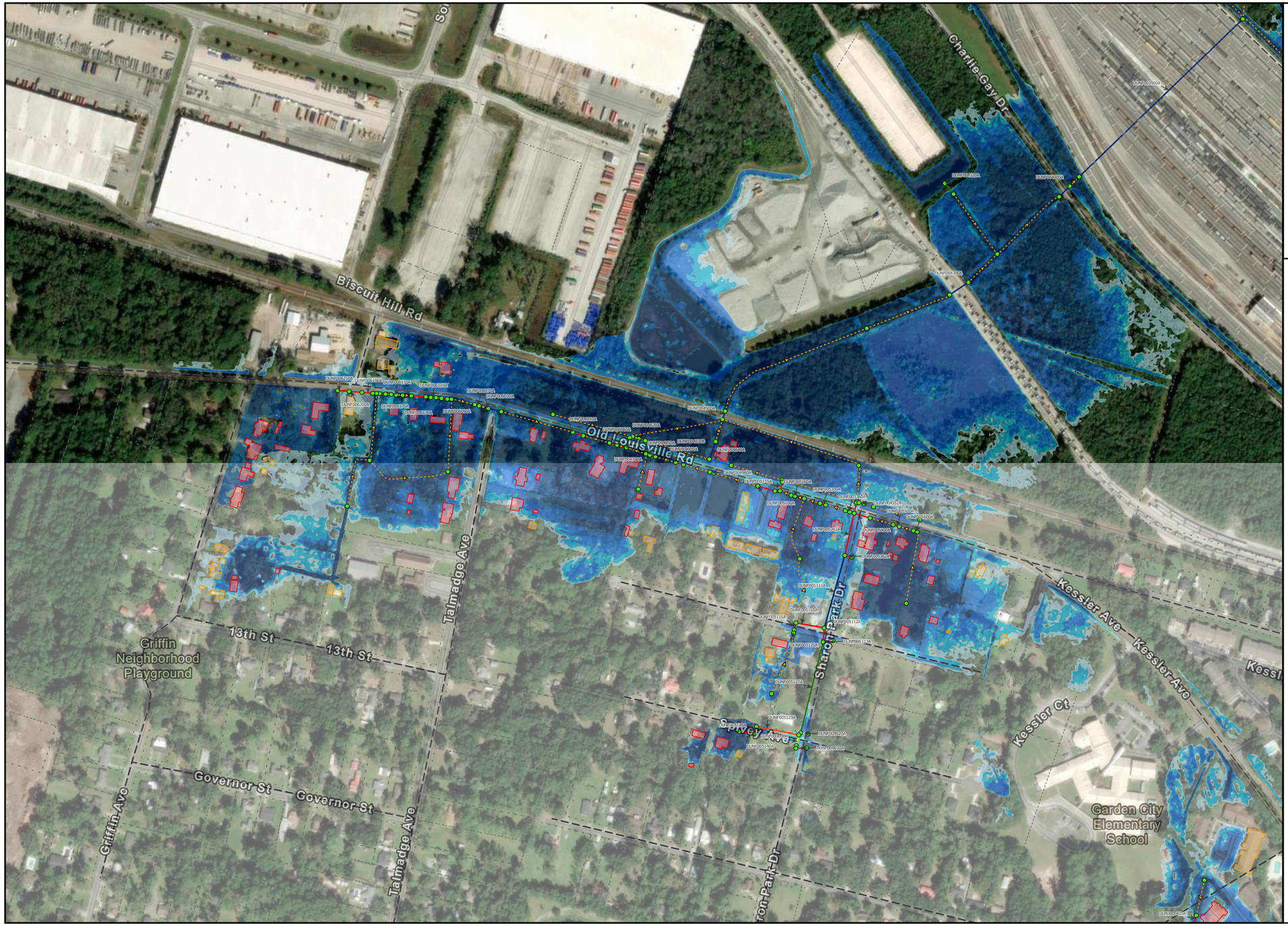
N

0 0.25 0.5 1 Miles

Legend

- Map Series Page Number
- Existing Conditions 100-yr Floodplain
- Model Conduits





Pg. 1

N

0 125 250 500
Feet

Legend

Junctions

- Model Node
- Outfalls

Conduits

Level of Service

- <2
- 2
- 5
- 10
- 25
- 50
- 100

Roads

Road Type (MTFCC)

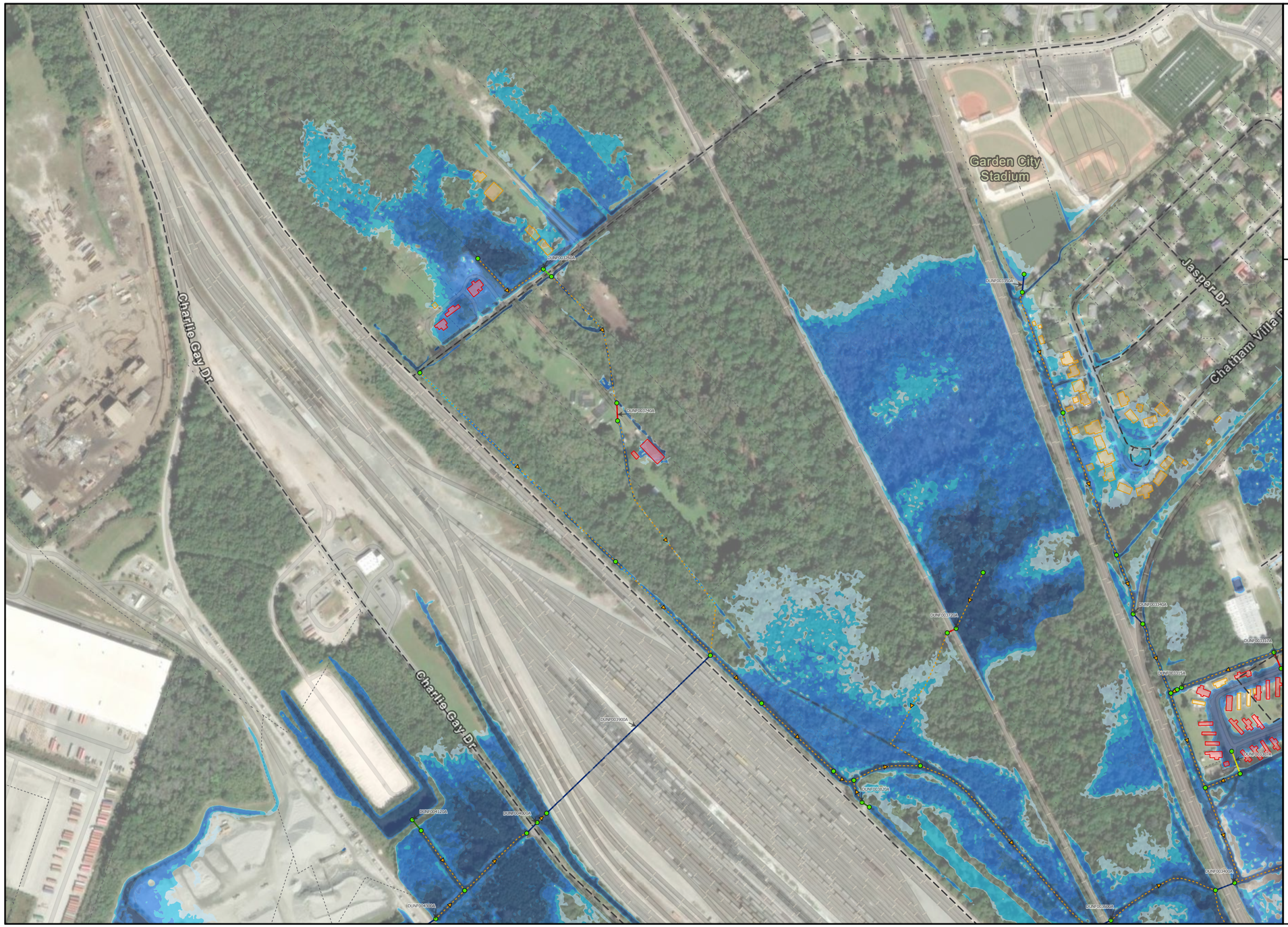
- Primary Road (S1100)
- Secondary Road (S1200)
- Local Neighborhood Road, City Street, or Rural Road (S1400)
- Ramp (S1630)

Floodplains

- 100-yr
- 50-yr
- 25-yr
- 10-yr
- 5-yr
- 2-yr

Building Footprints

- Flooded in the 100-yr Design Storm
- Flooded in the 10-yr Design Storm
- Parcels



Pg. 2

N

0 125 250 500
Feet

Legend

Junctions

- Model Node
- Outfalls

Conduits

Level of Service

- <2
- 2
- 5
- 10
- 25
- 50
- 100

Roads

Road Type (MTFCC)

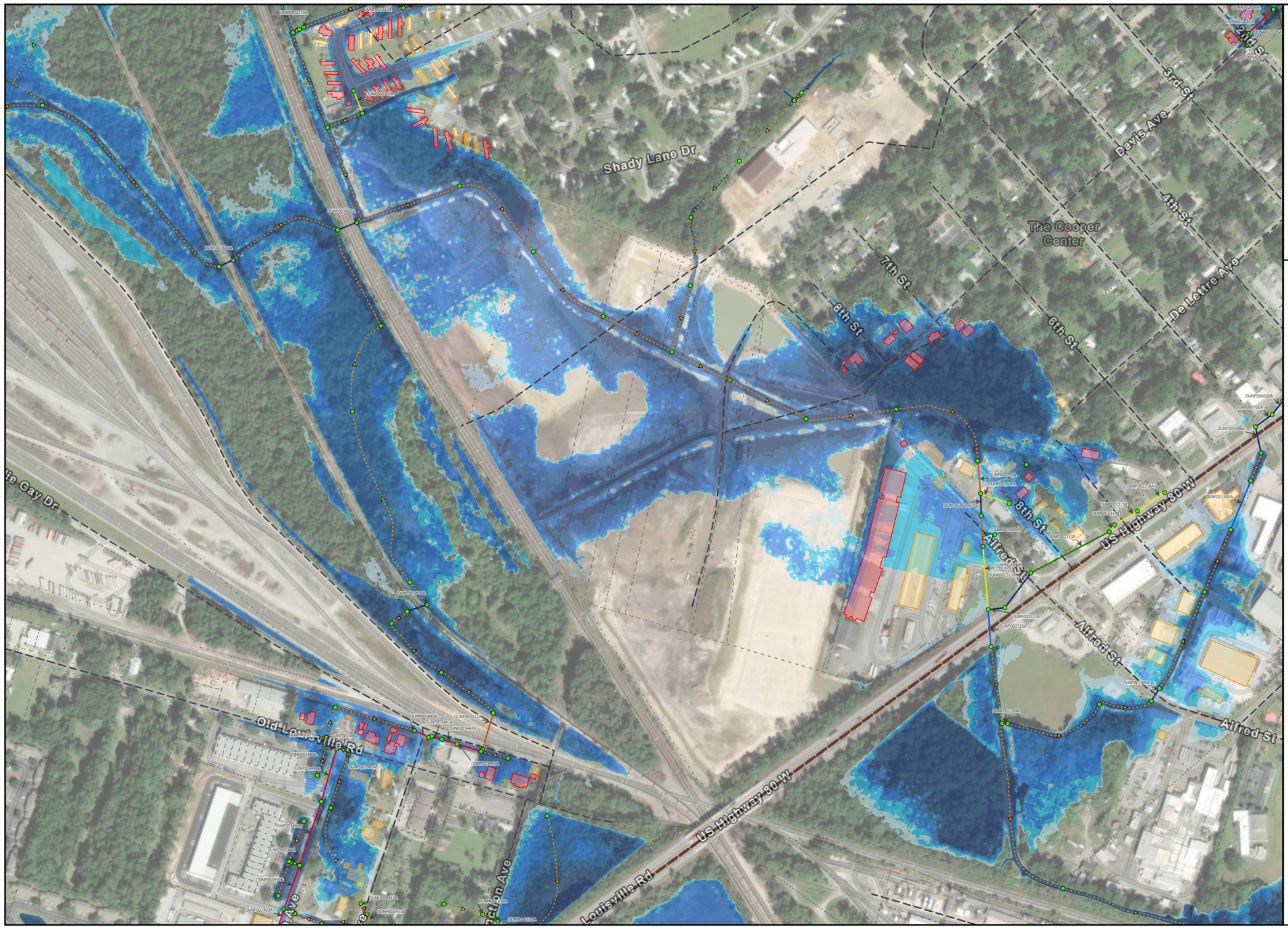
- Primary Road (S1100)
- Secondary Road (S1200)
- Local Neighborhood Road, City Street, or Rural Road (S1400)
- Ramp (S1630)

Floodplains

- 100-yr
- 50-yr
- 25-yr
- 10-yr
- 5-yr
- 2-yr

Building Footprints

- Flooded in the 100-yr Design Storm
- Flooded in the 10-yr Design Storm
- Parcels



N

0 125 250 500
Feet

Legend

Junctions
- Model Node
- Outfalls

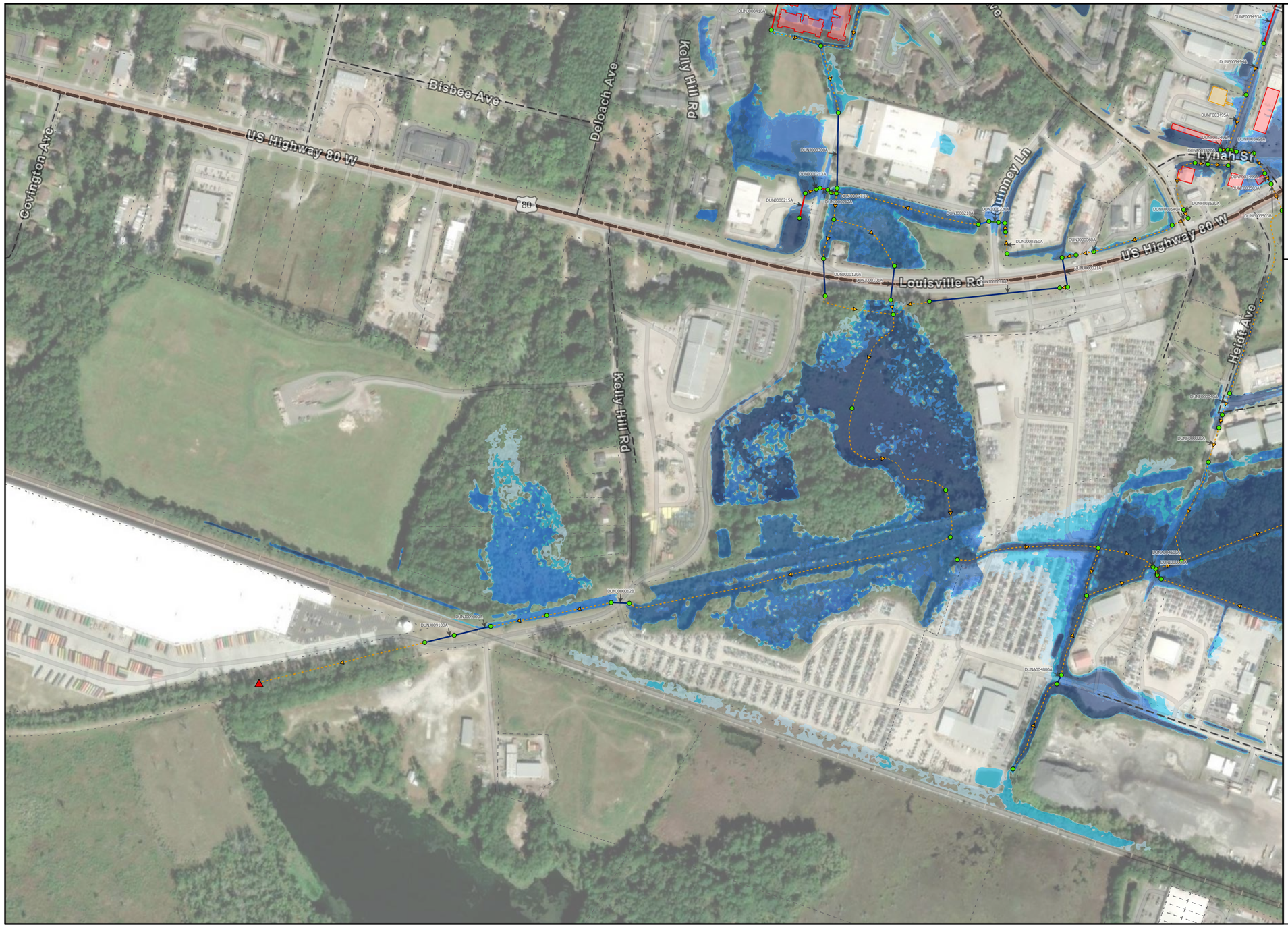
Conduits
Level of Service
- <2
- 2
- 5
- 10
- 25
- 50
- 100

Roads
Road Type (MTFCC)
- Primary Road (S1100)
- Secondary Road (S1200)
- Local Neighborhood Road, City Street, or Rural Road (S1400)
- Ramp (S1630)

Floodplains
- 100-yr
- 50-yr
- 25-yr
- 10-yr
- 5-yr
- 2-yr

Building Footprints
- Flooded in the 100-yr Design Storm
- Flooded in the 10-yr Design Storm
- Parcels

Pg. 4



N

0 125 250 500 Feet

Legend

Junctions

- Model Node
- Outfalls

Conduits

Level of Service

- <2
- 2
- 5
- 10
- 25
- 50
- 100

Roads

Road Type (MTFCC)

- Primary Road (S1100)
- Secondary Road (S1200)
- Local Neighborhood Road, City Street, or Rural Road (S1400)
- Ramp (S1630)

Floodplains

- 100-yr
- 50-yr
- 25-yr
- 10-yr
- 5-yr
- 2-yr

Building Footprints

- Flooded in the 100-yr Design Storm
- Flooded in the 10-yr Design Storm
- Parcels

Pg. 5



N

0 125 250 500
Feet

Legend

Junctions

- Model Node
- Outfalls

Conduits

Level of Service

- <2
- 2
- 5
- 10
- 25
- 50
- 100

Roads

Road Type (MTFCC)

- Primary Road (S1100)
- Secondary Road (S1200)
- Local Neighborhood Road, City Street, or Rural Road (S1400)
- Ramp (S1630)

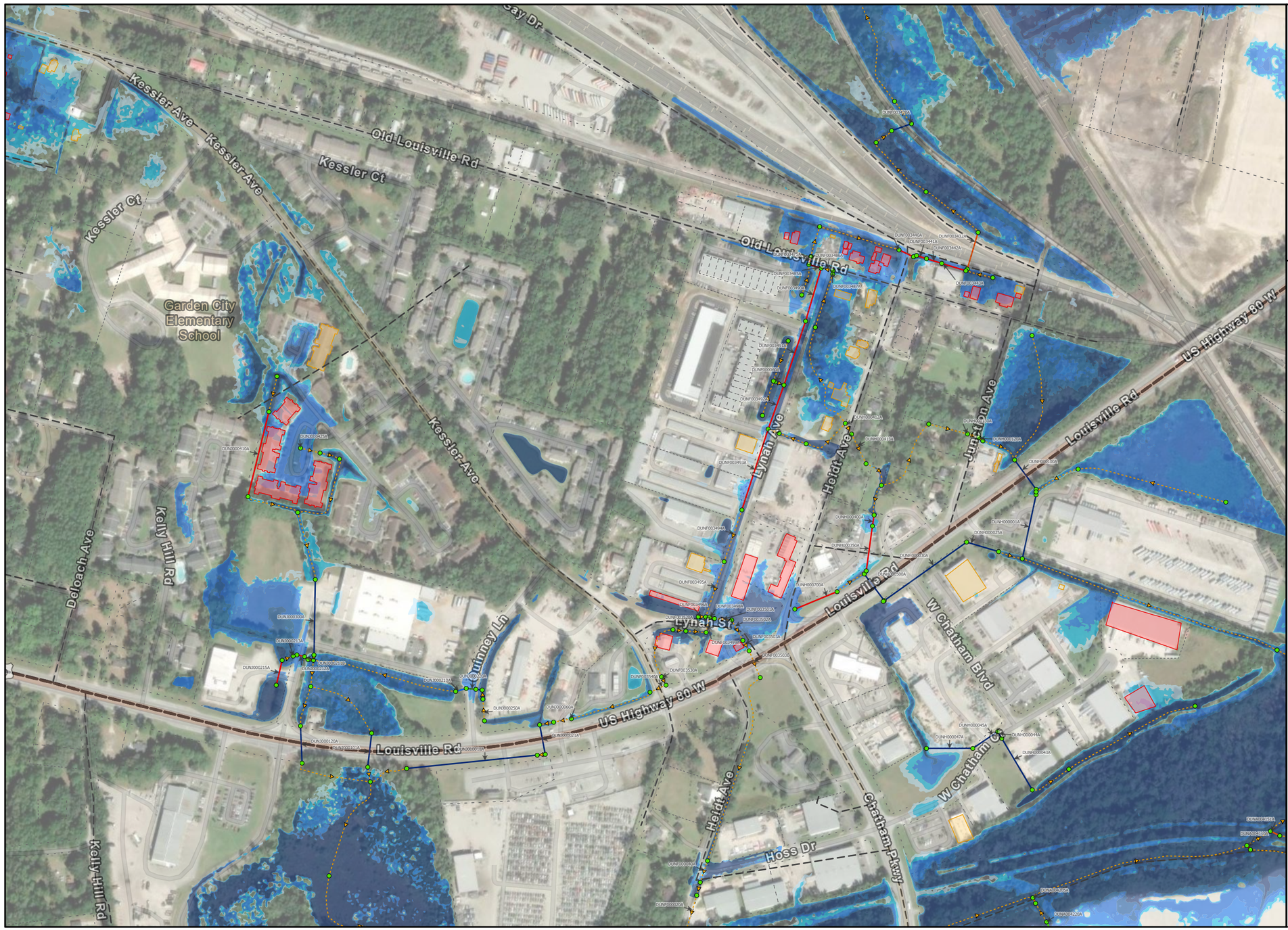
Floodplains

- 100-yr
- 50-yr
- 25-yr
- 10-yr
- 5-yr
- 2-yr

Building Footprints

- Flooded in the 100-yr Design Storm
- Flooded in the 10-yr Design Storm
- Parcels

Pg. 6



N

0 125 250 500 Feet

Legend

Junctions

- Model Node
- Outfalls

Conduits

Level of Service

- <2
- 2
- 5
- 10
- 25
- 50
- 100

Roads

Road Type (MTFCC)

- Primary Road (S1100)
- Secondary Road (S1200)
- Local Neighborhood Road, City Street, or Rural Road (S1400)
- Ramp (S1630)

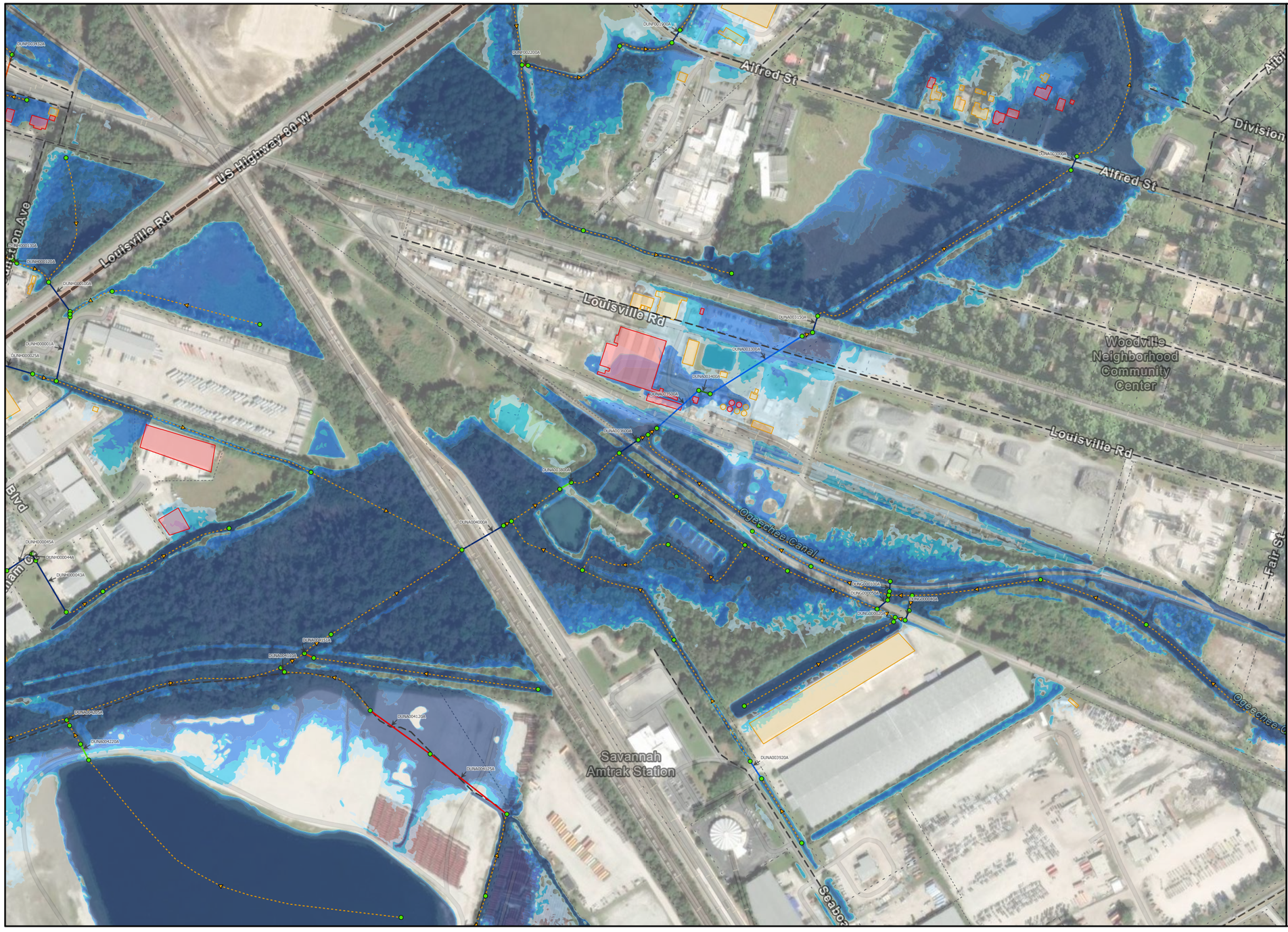
Floodplains

- 100-yr
- 50-yr
- 25-yr
- 10-yr
- 5-yr
- 2-yr

Building Footprints

- Flooded in the 100-yr Design Storm
- Flooded in the 10-yr Design Storm
- Parcels

Pg. 7



N

0 125 250 500
Feet

Legend

Junctions
- Model Node
- Outfalls

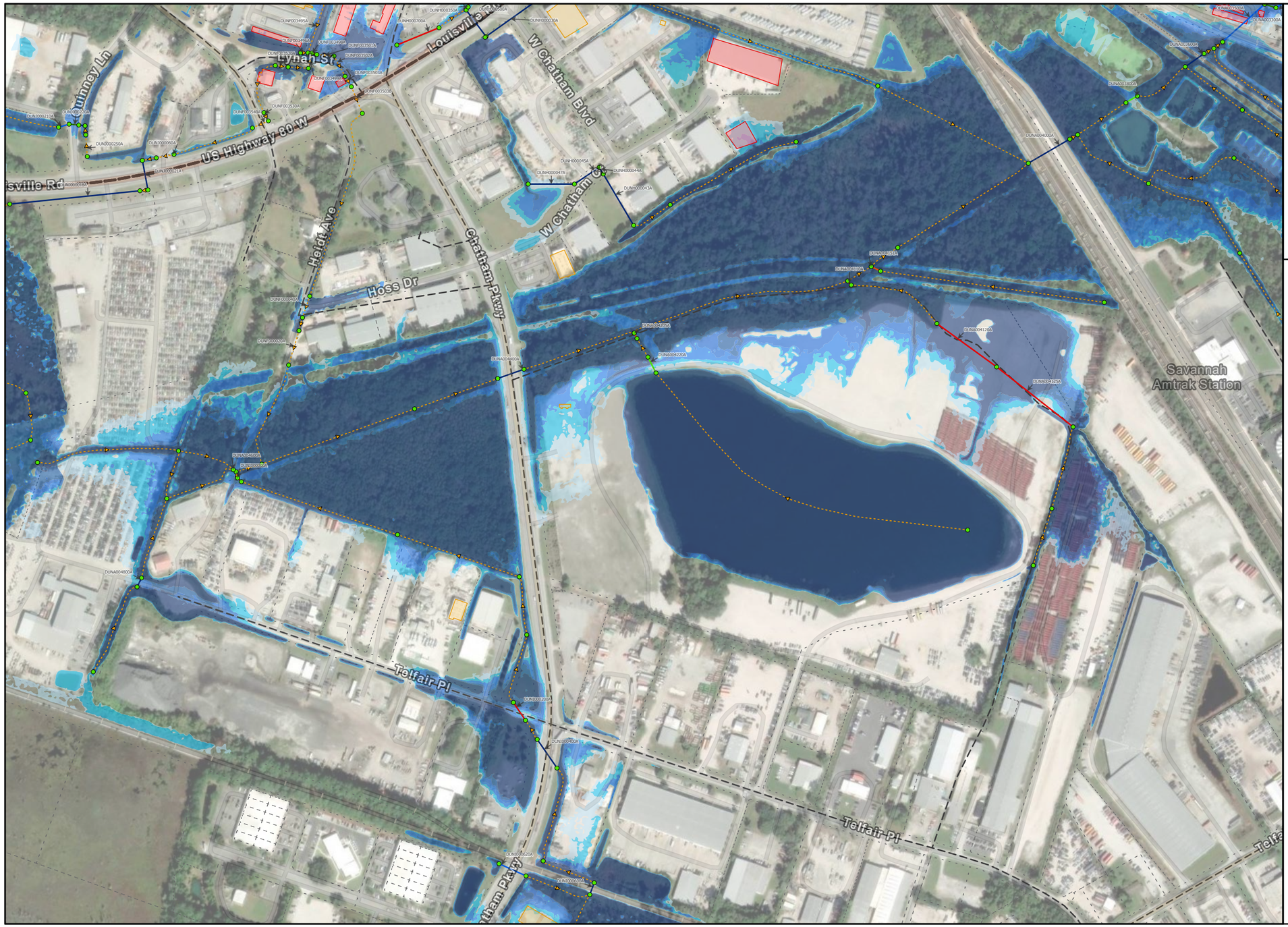
Conduits
Level of Service
- <2
- 2
- 5
- 10
- 25
- 50
- 100

Roads
Road Type (MTFCC)
- Primary Road (S1100)
- Secondary Road (S1200)
- Local Neighborhood Road, City Street, or Rural Road (S1400)
- Ramp (S1630)

Floodplains
- 100-yr
- 50-yr
- 25-yr
- 10-yr
- 5-yr
- 2-yr

Building Footprints
- Flooded in the 100-yr Design Storm
- Flooded in the 10-yr Design Storm
- Parcels

Pg. 8



N

0 125 250 500
Feet

Legend

Junctions
- Model Node
- Outfalls

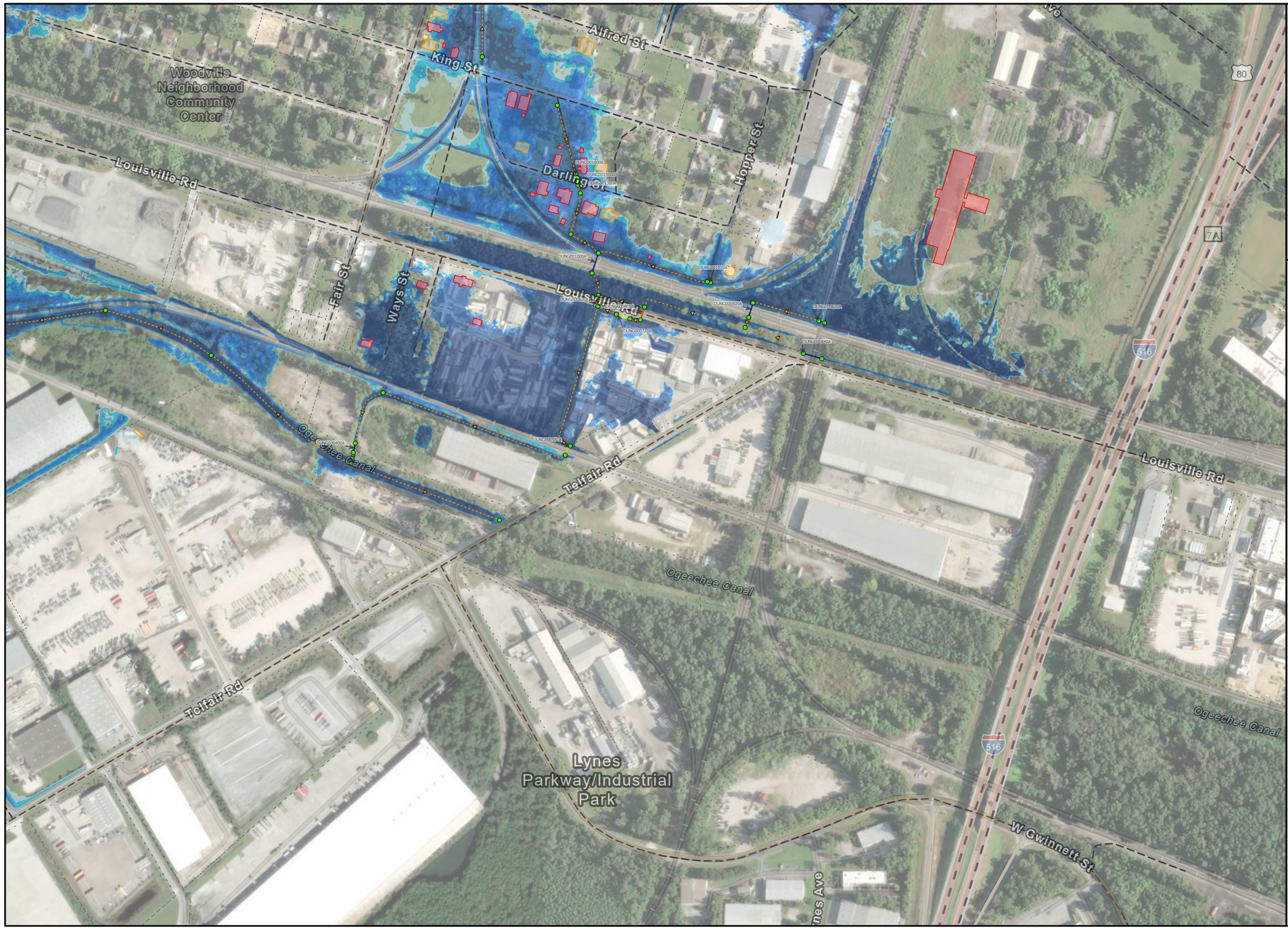
Conduits
Level of Service
- <2
- 2
- 5
- 10
- 25
- 50
- 100

Roads
Road Type (MTFCC)
- Primary Road (S1100)
- Secondary Road (S1200)
- Local Neighborhood Road, City Street, or Rural Road (S1400)
- Ramp (S1630)

Floodplains
- 100-yr
- 50-yr
- 25-yr
- 10-yr
- 5-yr
- 2-yr

Building Footprints
- Flooded in the 100-yr Design Storm
- Flooded in the 10-yr Design Storm
- Parcels

Pg. 9



N

0 125 250 500 Feet

Legend

Junctions

- Model Node
- Outfalls

Conduits

Level of Service

- <2
- 2
- 5
- 10
- 25
- 50
- 100

Roads

Road Type (MTFCC)

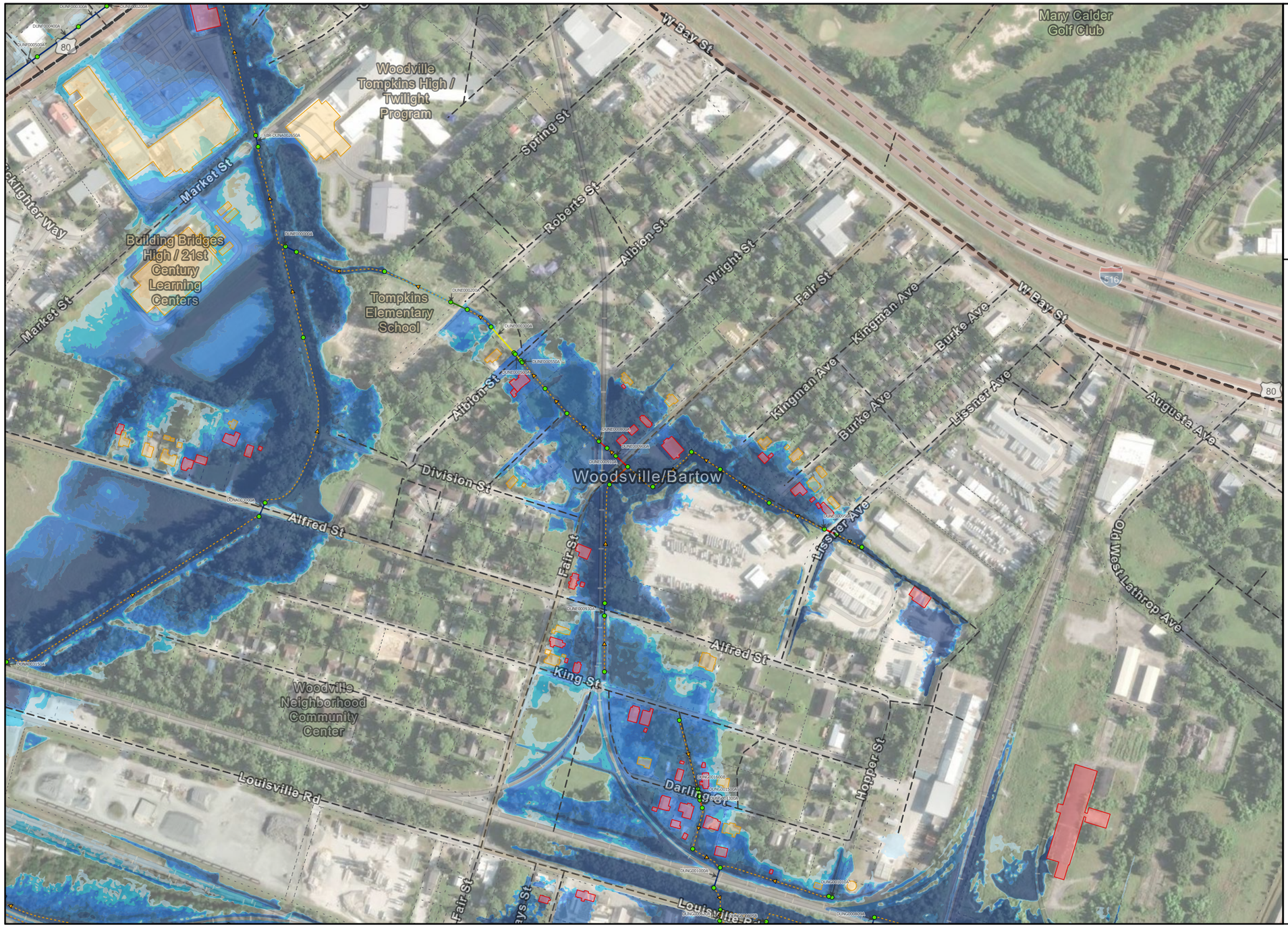
- Primary Road (S1100)
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- Local Neighborhood Road, City Street, or Rural Road (S1400)
- Ramp (S1630)

Floodplains

- 100-yr
- 50-yr
- 25-yr
- 10-yr
- 5-yr
- 2-yr

Building Footprints

- Flooded in the 100-yr Design Storm
- Flooded in the 10-yr Design Storm
- Parcels



N

0 125 250 500 Feet

Legend

Junctions

- Model Node
- Outfalls

Conduits

Level of Service

- <2
- 2
- 5
- 10
- 25
- 50
- 100

Roads

Road Type (MTFCC)

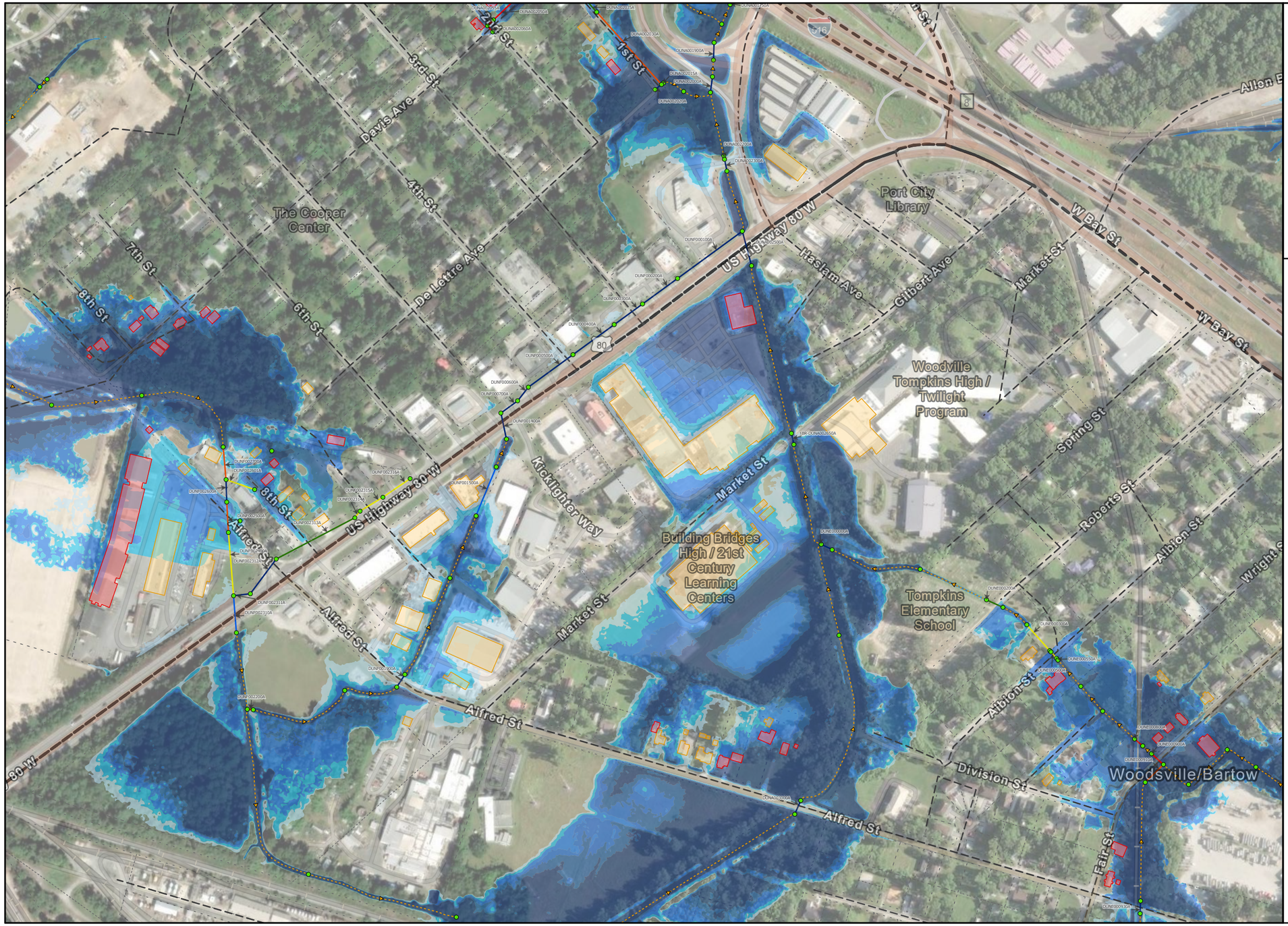
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Floodplains

- 100-yr
- 50-yr
- 25-yr
- 10-yr
- 5-yr
- 2-yr

Building Footprints

- Flooded in the 100-yr Design Storm
- Flooded in the 10-yr Design Storm
- Parcels



N

0 125 250 500
Feet

Legend

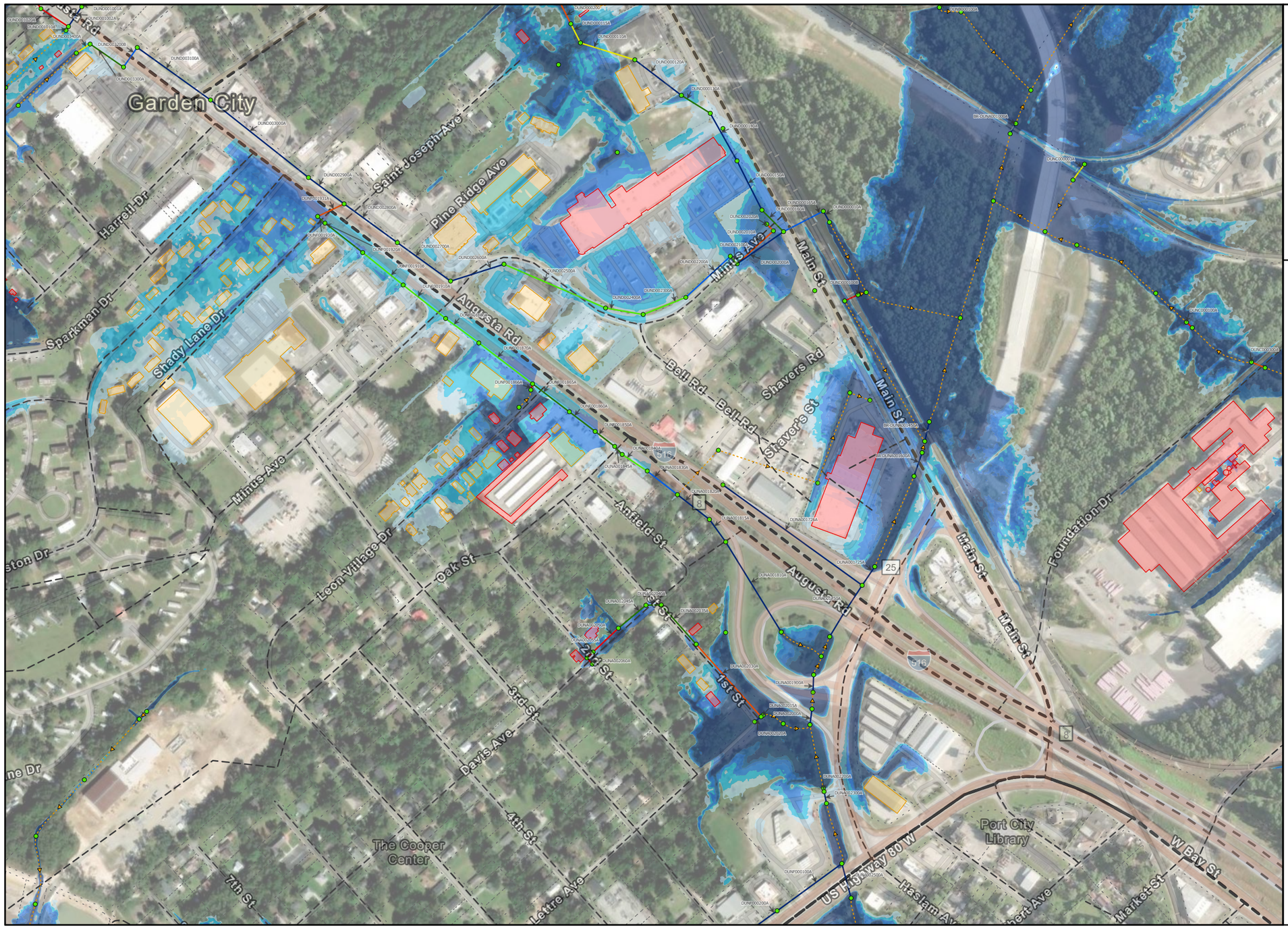
Junctions
- Model Node
- Outfalls

Conduits
Level of Service
- <2
- 2
- 5
- 10
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- 50
- 100

Roads
Road Type (MTFCC)
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Floodplains
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- 10-yr
- 5-yr
- 2-yr

Building Footprints
- Flooded in the 100-yr Design Storm
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Legend

Junctions

- Model Node
- Outfalls

Conduits

Level of Service

- <2
- 2
- 5
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Roads

Road Type (MTFCC)

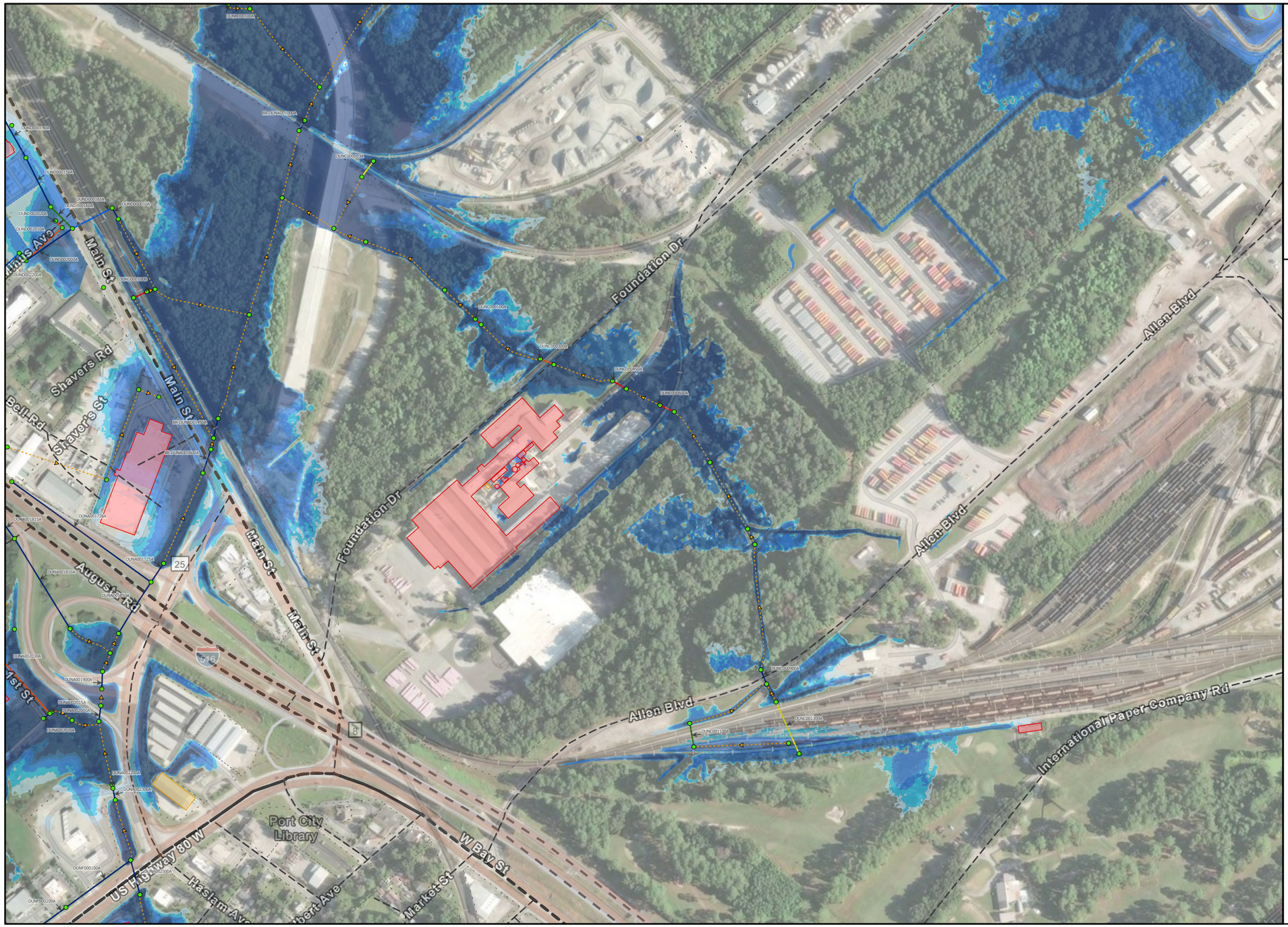
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- Flooded in the 10-yr Design Storm
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N

0 125 250 500 Feet

Legend

Junctions

- Model Node
- Outfalls

Conduits

Level of Service

- <2
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- 100

Roads

Road Type (MTFCC)

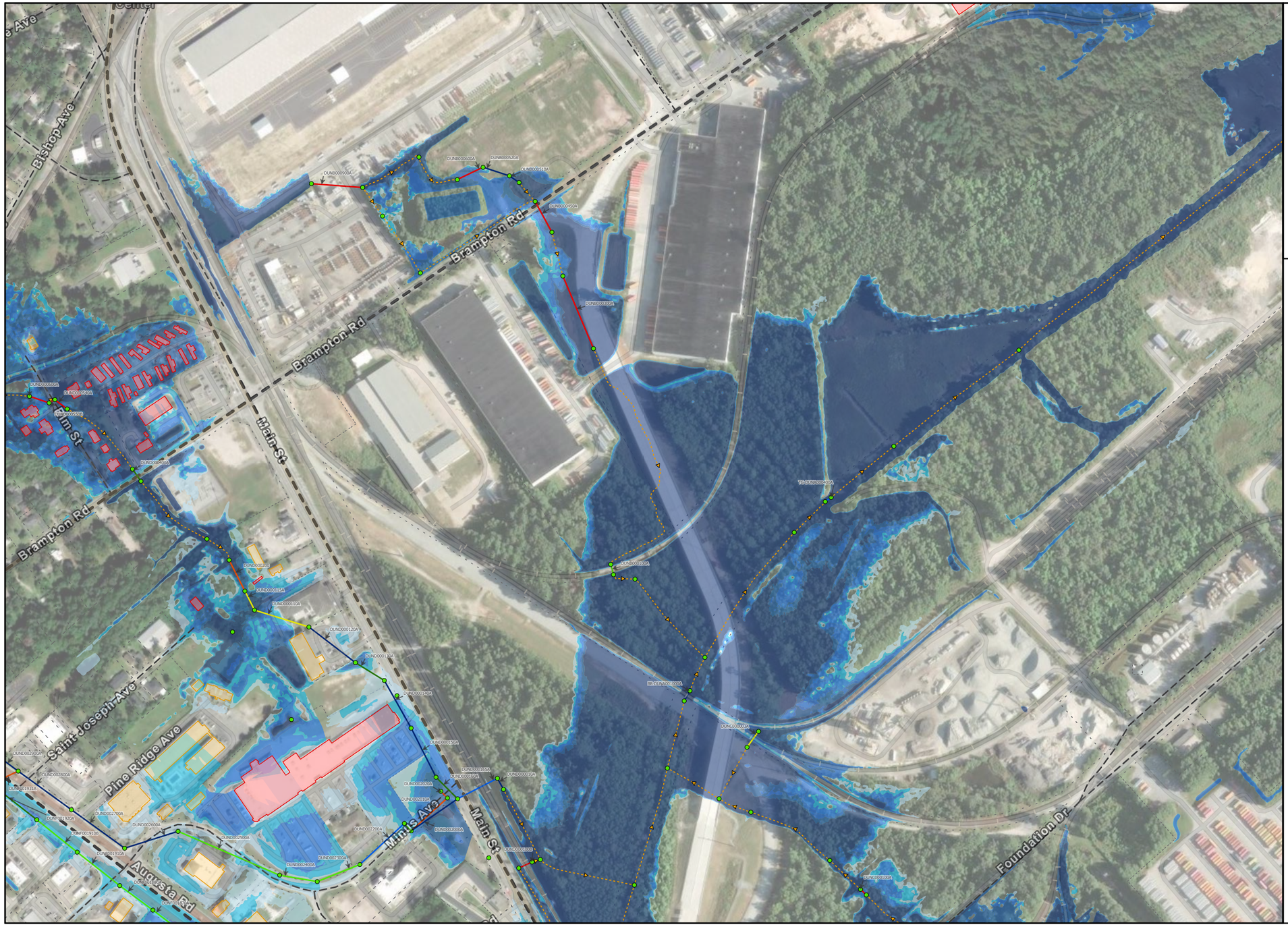
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- Parcels



N

0 125 250 500
Feet

Legend

Junctions

- Model Node
- Outfalls

Conduits

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- 2
- 5
- 10
- 25
- 50
- 100

Roads

Road Type (MTFCC)

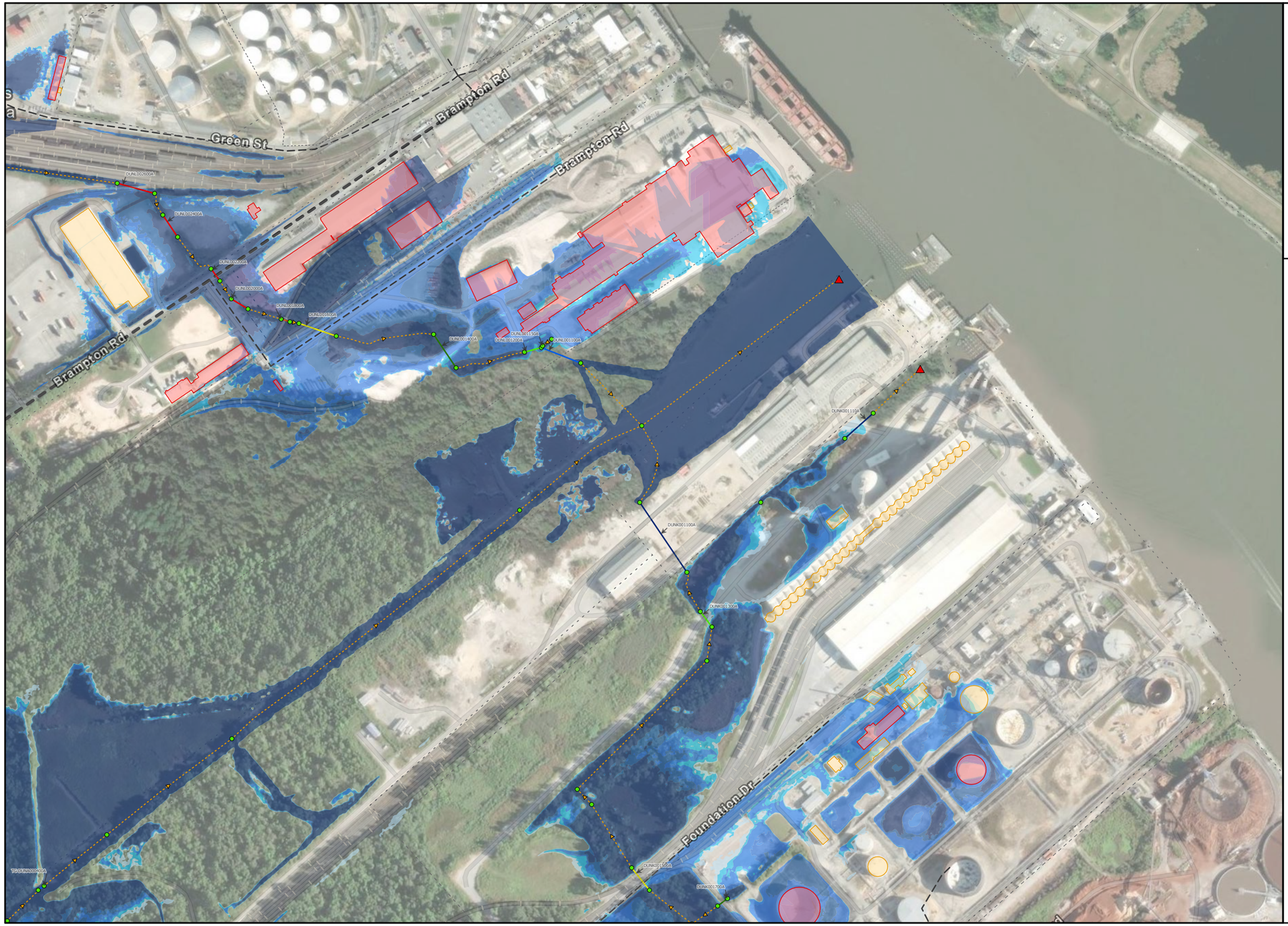
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- Local Neighborhood Road, City Street, or Rural Road (S1400)
- Ramp (S1630)

Floodplains

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N

0 125 250 500
Feet

Legend

Junctions

- Model Node
- Outfalls

Conduits

Level of Service

- <2
- 2
- 5
- 10
- 25
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- 100

Roads

Road Type (MTFCC)

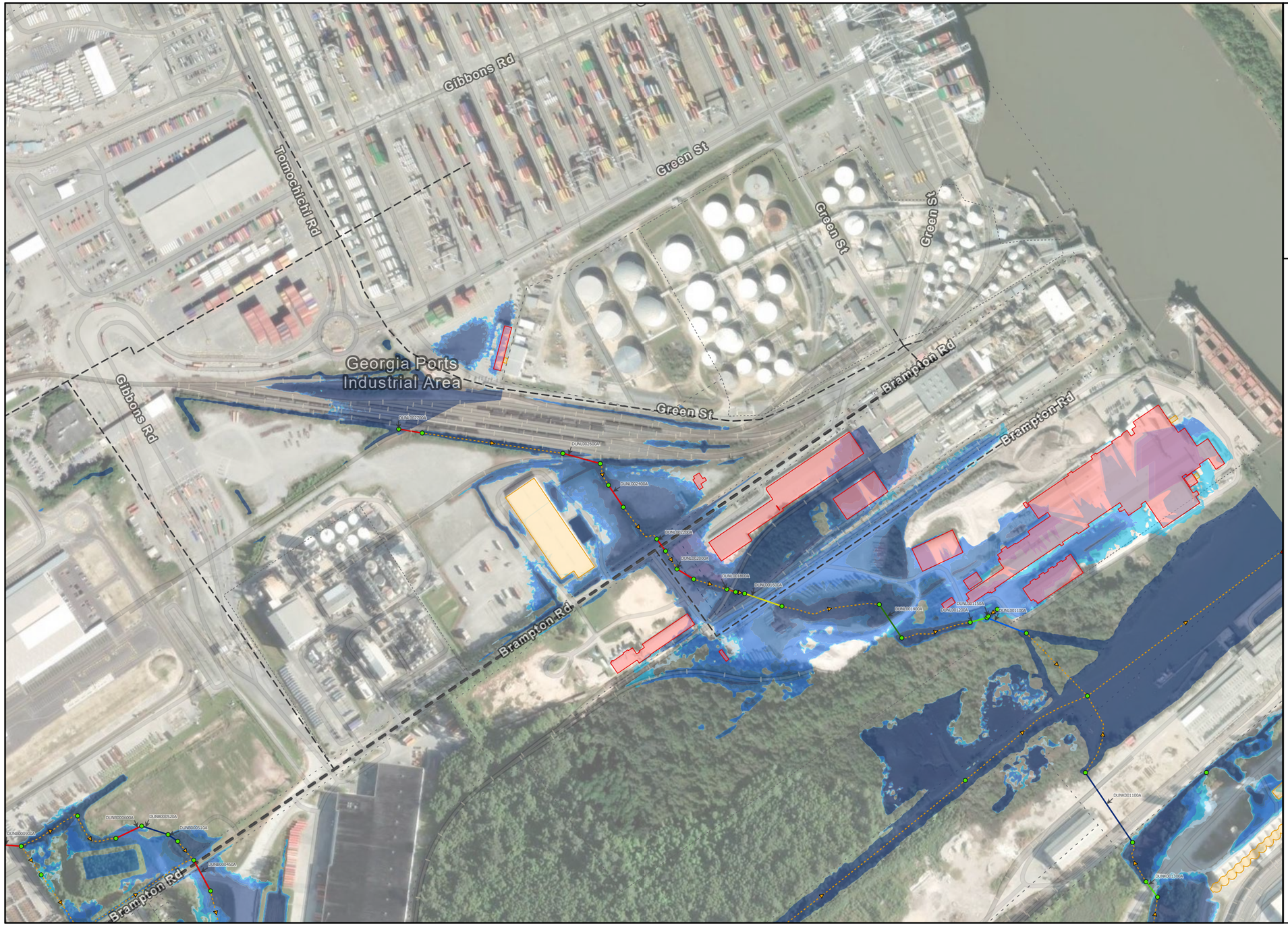
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- 2-yr

Building Footprints

- Flooded in the 100-yr Design Storm
- Flooded in the 10-yr Design Storm
- Parcels



N

0 125 250 500 Feet

Legend

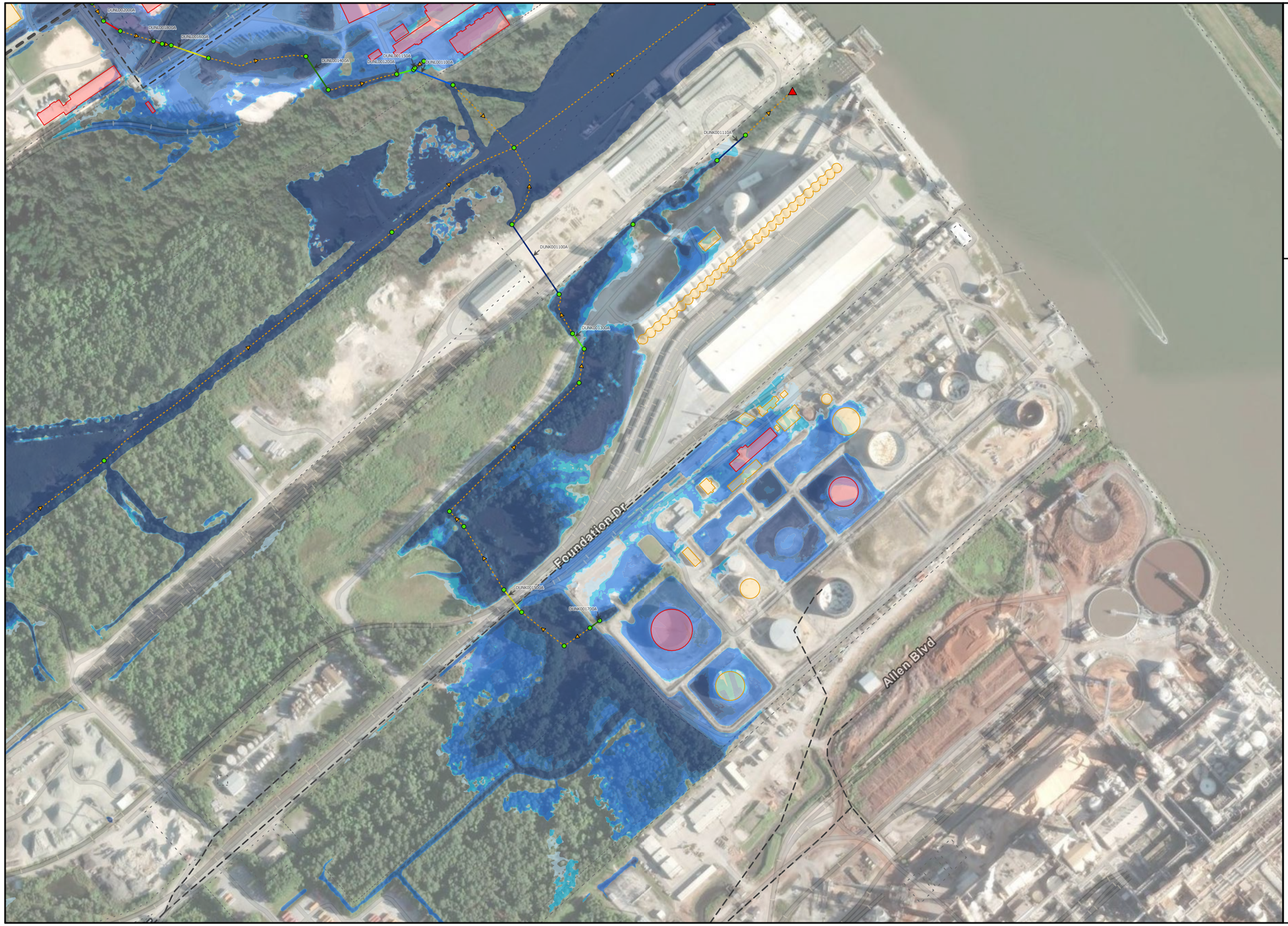
Junctions
- Model Node
- Outfalls

Conduits
Level of Service
- <2
- 2
- 5
- 10
- 25
- 50
- 100

Roads
Road Type (MTFCC)
- Primary Road (S1100)
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Floodplains
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Building Footprints
- Flooded in the 100-yr Design Storm
- Flooded in the 10-yr Design Storm
- Parcels



N

0 125 250 500
Feet

Legend

Junctions

- Model Node
- Outfalls

Conduits

Level of Service

- <2
- 2
- 5
- 10
- 25
- 50
- 100

Roads

Road Type (MTFCC)

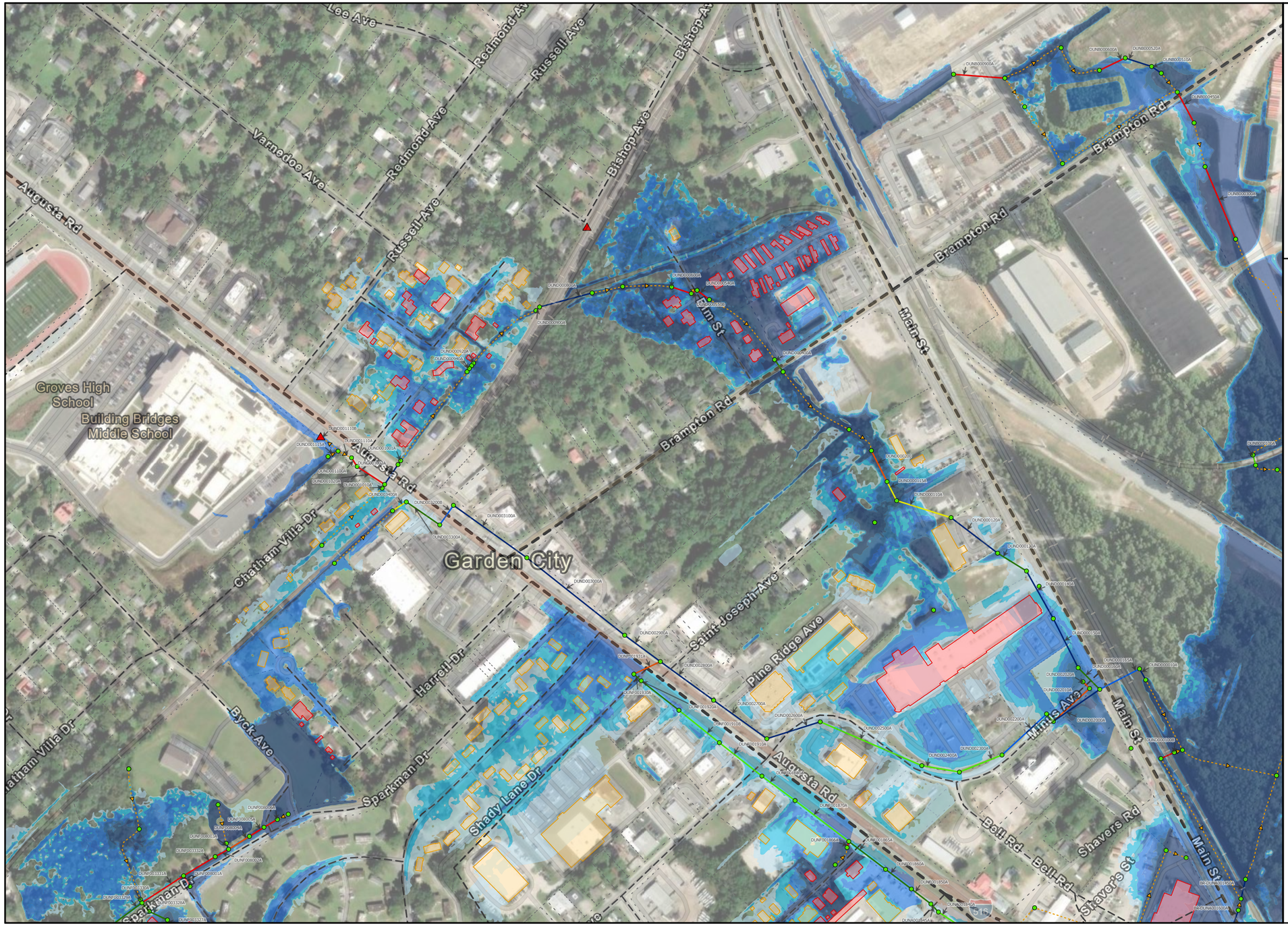
- Primary Road (S1100)
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- Local Neighborhood Road, City Street, or Rural Road (S1400)
- Ramp (S1630)

Floodplains

- 100-yr
- 50-yr
- 25-yr
- 10-yr
- 5-yr
- 2-yr

Building Footprints

- Flooded in the 100-yr Design Storm
- Flooded in the 10-yr Design Storm
- Parcels



N

0 125 250 500 Feet

Legend

Junctions

- Model Node
- Outfalls

Conduits

Level of Service

- <2
- 2
- 5
- 10
- 25
- 50
- 100

Roads

Road Type (MTFCC)

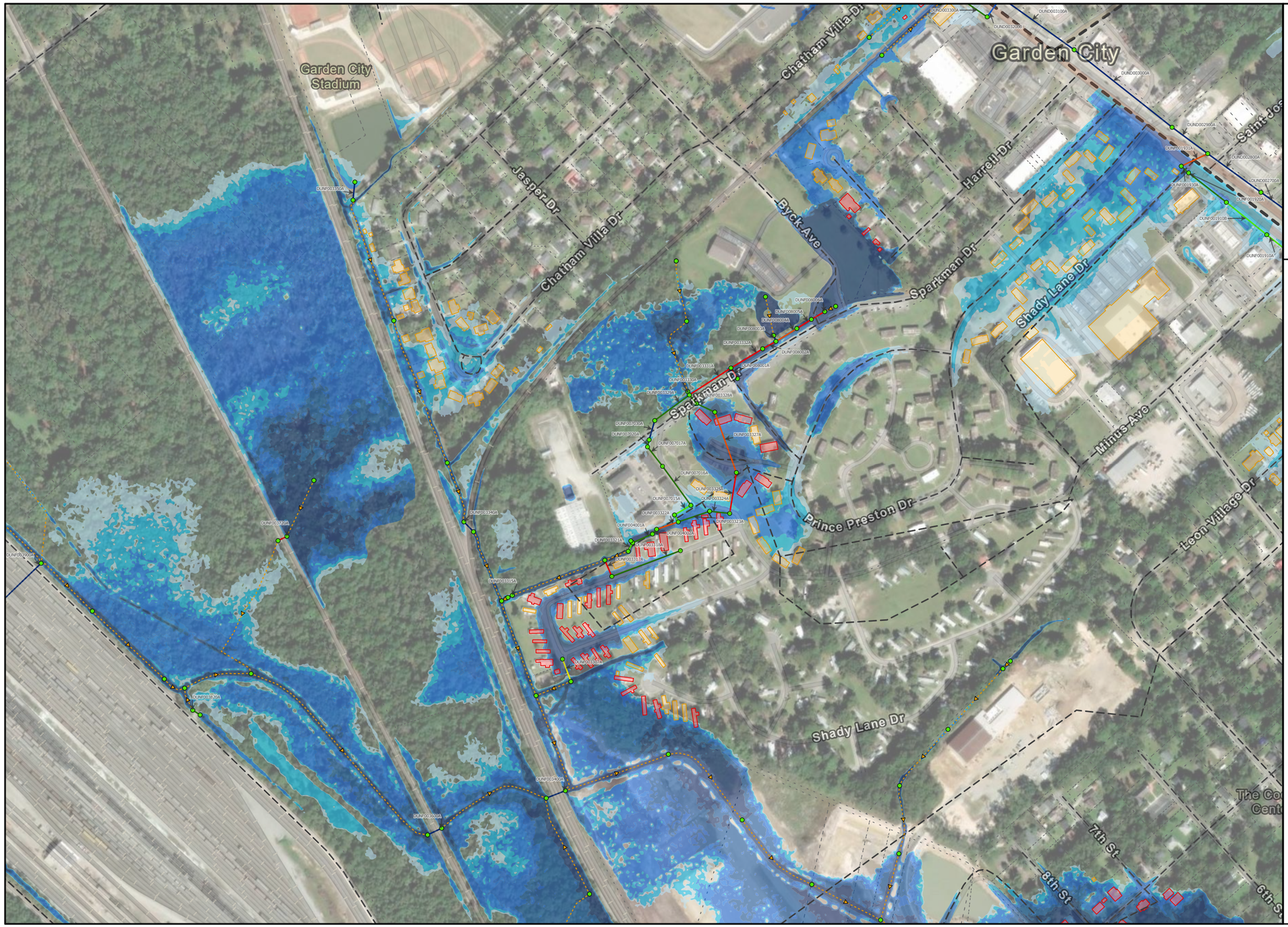
- Primary Road (S1100)
- Secondary Road (S1200)
- Local Neighborhood Road, City Street, or Rural Road (S1400)
- Ramp (S1630)

Floodplains

- 100-yr
- 50-yr
- 25-yr
- 10-yr
- 5-yr
- 2-yr

Building Footprints

- Flooded in the 100-yr Design Storm
- Flooded in the 10-yr Design Storm
- Parcels



N

0 125 250 500
Feet

Legend

Junctions
- Model Node
- Outfalls

Conduits
Level of Service
- <2
- 2
- 5
- 10
- 25
- 50
- 100

Roads
Road Type (MTFCC)
- Primary Road (S1100)
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Floodplains
- 100-yr
- 50-yr
- 25-yr
- 10-yr
- 5-yr
- 2-yr

Building Footprints
- Flooded in the 100-yr Design Storm
- Flooded in the 10-yr Design Storm
- Parcels

8.6 Appendix F – Concept Cost Estimates

Cost Estimate - Option AG1

ITEM #	DESCRIPTION	APPROX. QTY.		UNIT PRICE	TOTAL PRICE
EXPLORATION AND REMOVAL ITEMS					
1	Remove existing pipe, all types and sizes	2020	lf	$5.00	$10,100.00
CLEARING AND EARTHWORK					
Tree Removal Including Stump					
2	Greater than 24"	3	ea	$1,000.00	$3,000.00
Additional Excavation Costs					
3	Haul off site	42	load	$350.00	$14,700.00
Silt Fence, Complete					
4	Type C	8225	lf	$4.50	$37,012.50
STABILIZATION ITEMS					
Curb and Gutter					
5	6" x 24" x 12" high back	1800	lf	$40.00	$72,000.00
6	Sodding complete	1715	sy	$15.00	$25,725.00
Reinforced Concrete Pipe - Any Configuration					
7	48" diameter (detail 1)	670	lf	$275.00	$184,250.00
8	54" diameter (detail 1)	450	lf	$340.00	$153,000.00
9	60" diameter (detail 1)	910	lf	$377.00	$343,070.00
Corrugated Plastic Tubing					
10	Complete precast catch basin, group 1 (GDOT 1033 / 1034)	35	vf	$700.00	$24,710.00
11	Complete precast manhole, type 2 (GDOT 1011A)	20	vf	$750.00	$15,150.00
12	Tie into existing structures	10	ea	$500.00	$5,000.00
TRAFFIC CONTROL					
13	Traffic control major - total per project	1	ea	$25,000.00	$25,000.00
14	Traffic control minor – total per project	6	ea	$5,000.00	$30,000.00
ROADWAY RESTORATION					
Street Cut					
15	Full pavement and base course replacement	3710	sy	$115.00	$426,650.00
Driveway Restoration					
16	6" concrete	2390	sy	$89.50	$213,905.00
Materials					
17	Contingency costs, additional work (labor & materials) cost plus percentage			25%	$395,818.13
DESIGN SERVICES (15% OF PROJECT COST)				**$296,863.59**	
TOTAL				**$2,275,954.22**	

Cost Estimate - Option CP1

ITEM #	DESCRIPTION	APPROX. QTY.		UNIT PRICE	TOTAL PRICE
EXPLORATION AND REMOVAL ITEMS					
1	Remove existing pipe, all types and sizes	25	lf	$5.00	$125.00
2	Debris removal	10	load	$250.00	$2,500.00
CLEARING AND EARTHWORK					
Tree Removal Including Stump					
3	6" to less than 12"	10	ea	$900.00	$9,000.00
4	12" – 24"	10	ea	$900.00	$9,000.00
5	Greater than 24"	10	ea	$1,000.00	$10,000.00
Excavation					
6	Channel excavation	1200	cy	$45.00	$54,000.00
7	Borrow excavation	640	cy	$30.00	$19,200.00
8	Shoulder building/other soil to remain onsite	1800	cy	$15.00	$27,000.00
9	Haul off site	20	load	$350.00	$7,000.00
Silt Fence, Complete					
10	Type C	4000	lf	$4.50	$18,000.00
STABILIZATION ITEMS					
11	Stone rip rap type III, complete in place	900	ton	$65.00	$58,500.00
SITE RESTORATION AND LANDSCAPING ITEMS					
Curb and Gutter					
12	Permanent seeding complete	1000	sy	$2.50	$2,500.00
Materials					
13	Contingency costs, additional work (labor & materials) cost plus percentage			25%	$54,206.25
DESIGN SERVICES (15% OF PROJECT COST)				**$40,654.69**	
LAND ACQUISITION				**$82,278.02**	
TOTAL				**$393,963.96**	

Cost Estimate - Option CP2

ITEM #	DESCRIPTION	APPROX. QTY.		UNIT PRICE	TOTAL PRICE
EXPLORATION AND REMOVAL ITEMS					
1	Removal of existing drainage structures	1	ea	$500.00	$500.00
2	Remove existing pipe, all types and sizes	50	lf	$5.00	$250.00
3	Debris removal	20	load	$250.00	$5,000.00
CLEARING AND EARTHWORK					
Tree Removal Including Stump					
4	6" to less than 12"	35	ea	$900.00	$31,500.00
5	12" – 24"	10	ea	$900.00	$9,000.00
6	Greater than 24"	10	ea	$1,000.00	$10,000.00
Additional Excavation Cost					
7	Channel excavation	1275	cy	$45.00	$57,375.00
8	Borrow excavation	1415	cy	$30.00	$42,450.00
9	Shoulder building/other soil to remain onsite	1095	cy	$15.00	$16,425.00
10	Haul off site	107	load	$350.00	$37,450.00
Silt Fence, Complete					
11	Type C	6660	lf	$4.50	$29,970.00
STABILIZATION ITEMS					
12	Stone rip rap type III, complete in place	132	ton	$65.00	$8,580.00
SITE RESTORATION AND LANDSCAPING ITEMS					
Curb and Gutter					
13	Sodding complete	4550	sy	$15.00	$68,250.00
STREAM BYPASS PUMPING (NOT INCIDENTAL TO OTHER BID ITEMS)					
Stream Bypass Pumping (Not Incidental to Other Bid Items)					
14	6" pump	425	hr	$75.00	$31,875.00
DRAINAGE STRUCTURES					
Pre-Cast Reinforced Concrete Box Culvert					
15	6' x 5'	985	lf	$975.00	$960,375.00
Corrugated Plastic Tubing					
16	Replacement top for 1033/1034, complete	3	ea	$2,000.00	$6,000.00
17	Tie into existing structures	2	ea	$500.00	$1,000.00
Materials					
18	Contingency costs, additional work (labor & materials) cost plus percentage			25%	$329,000.00
DESIGN SERVICES (15% OF PROJECT COST)				**$246,750.00**	
LAND ACQUISITION				**$166,743.62**	
TOTAL				**$2,058,493.62**	

Cost Estimate - Option CP3

ITEM #	DESCRIPTION	APPROX. QTY.		UNIT PRICE	TOTAL PRICE
EXPLORATION AND REMOVAL ITEMS					
1	Removal of existing drainage structures	5	ea	$500.00	$2,500.00
2	Remove existing pipe, all types and sizes	660	lf	$5.00	$3,300.00
3	Debris removal	21	load	$250.00	$5,250.00
CLEARING AND EARTHWORK					
Tree Removal Including Stump					
4	6" to less than 12"	40	ea	$900.00	$36,000.00
5	12" – 24"	15	ea	$900.00	$13,500.00
6	Greater than 24"	10	ea	$1,000.00	$10,000.00
7	Tree stump removal	0	ea	$100.00	$0.00
8	Fence removal, storage, and resetting	0	lf	$40.00	$0.00
9	Fence removal and replacement (wood - all types), complete	0	lf	$40.00	$0.00
10	Fence removal and replacement (chain link - all types), complete	0	lf	$65.00	$0.00
11	Temporary fencing	0	lf	$25.00	$0.00
12	Orange barrier fence (not used as safety fence)	0	lf	$1.50	$0.00
Pipe/Box Culvert Installation - Additional Excavation Cost Where Depth to Top of Pipe>10'					
13	Depth to top of box culvert 10' – 15'	225	lf	$50.00	$11,250.00
14	Channel excavation	1275	cy	$45.00	$57,375.00
15	Borrow excavation	1415	cy	$30.00	$42,450.00
16	Shoulder building/other soil to remain onsite	1095	cy	$15.00	$16,425.00
17	Haul off to non GCDWR site	267	load	$350.00	$93,450.00
Silt Fence, Complete					
18	Type C	8010	lf	$4.50	$36,045.00
STABILIZATION ITEMS					
19	Stone rip rap type III, complete in place	132	ton	$65.00	$8,580.00
SITE RESTORATION AND LANDSCAPING ITEMS					
Curb and Gutter					
20	6" x 24" x 12" high back	350	lf	$40.00	$14,000.00
21	Sodding complete	5950	sy	$15.00	$89,250.00
STREAM BYPASS PUMPING (NOT INCIDENTAL TO OTHER BID ITEMS)					
Stream Bypass Pumping (Not Incidental to Other Bid Items)					
22	6" pump	925	hr	$75.00	$69,375.00
DRAINAGE STRUCTURES					
Pre-Cast Reinforced Concrete Box Culvert					
23	6' x 5'	985	lf	$975.00	$960,375.00
24	9' x 5'	610	lf	$1,700.00	$1,037,000.00
Corrugated Plastic Tubing					
25	Complete precast catch basin, group 1 (GDOT 1033 / 1034)	30	vf	$700.00	$21,000.00
26	Replacement top for 1033/1034, complete	3	ea	$2,000.00	$6,000.00
ROADWAY RESTORATION					
Street Cut					
27	Full pavement and base course replacement	1700	sy	$115.00	$195,500.00
Driveway Restoration					
28	6" concrete	75	sy	$89.50	$6,712.50
Materials					
29	Contingency costs, additional work (labor & materials) cost plus percentage			25%	$694,359.38
DESIGN SERVICES (15% OF PROJECT COST)				**$520,769.53**	
LAND ACQUISITION				**$221,724.61**	
TOTAL				**$4,214,291.01**	

Cost Estimate - Option DA1

ITEM #	DESCRIPTION	APPROX. QTY.		UNIT PRICE	TOTAL PRICE
GENERAL ITEMS					
1	Removal of existing drainage structures	1	ea	$500.00	$500.00
2	Remove existing pipe, all types and sizes	75	lf	$5.00	$375.00
3	Debris removal	2	load	$250.00	$500.00
CLEARING AND EARTHWORK					
Tree Removal Including Stump					
4	12" – 24"	1	ea	$900.00	$900.00
5	Fence removal and replacement (wood - all types), complete	100	lf	$40.00	$4,000.00
6	Fence removal and replacement (chain link - all types), complete	100	lf	$65.00	$6,500.00
Additional Excavation Cost					
7	Haul off site	40	load	$350.00	$14,000.00
Silt Fence, Complete					
8	Type C	2700	lf	$4.50	$12,150.00
STABILIZATION ITEMS					
9	Plastic filter fabric installed	10	sy	$5.00	$50.00
SITE RESTORATION AND LANDSCAPING ITEMS					
Curb and Gutter					
10	6" x 24" x 12" high back	600	lf	$40.00	$24,000.00
11	Sodding complete	550	sy	$15.00	$8,250.00
REPLACEMENT PIPE					
Reinforced Concrete Arch Pipe					
12	22.5" x 36.5" (eq 30")	650	lf	$185.00	$120,250.00
DRAINAGE STRUCTURES					
Corrugated Plastic Tubing					
13	Complete precast catch basin, group 1 (GDOT 1033 / 1034)	3	vf	$700.00	$2,100.00
14	Replacement top for 1033/1034, complete	1	ea	$2,000.00	$2,000.00
15	Tie into existing structures	1	ea	$500.00	$500.00
Precast Concrete Pipe Headwell					
16	For pipe size 30"	1	ea	$1,540.00	$1,540.00
TRAFFIC CONTROL					
17	Traffic control minor – total per project	1	ea	$5,000.00	$5,000.00
ROADWAY RESTORATION					
Street Cut					
18	Full pavement and base course replacement	350	sy	$115.00	$40,250.00
Driveway Restoration					
19	6" concrete	370	sy	$89.50	$33,115.00
Materials					
20	Contingency costs, additional work (labor & materials) cost plus percentage			25%	$68,995.00
DESIGN SERVICES (15% OF PROJECT COST)				**$51,746.25**	
TOTAL				**$396,721.25**	

Cost Estimate - Option GC1

ITEM #	DESCRIPTION	APPROX. QTY.		UNIT PRICE	TOTAL PRICE
GENERAL ITEMS					
1	RR flagging & Permitting	42	day	$1300.00	$54,600.00
2	Relocate Power Pole	1	Ea	$35000.00	$35,000.00
EXPLORATION AND REMOVAL ITEMS					
3	Removal of existing drainage structures	1	ea	$500.00	$500.00
4	Remove existing pipe, all types and sizes	85	lf	$5.00	$425.00
5	Debris removal	1	load	$250.00	$250.00
CLEARING AND EARTHWORK					
Tree Removal Including Stump					
6	6" to less than 12"	3	ea	$900.00	$2,700.00
7	12" – 24"	5	ea	$900.00	$4,500.00
8	Greater than 24"	5	ea	$1000.00	$5,000.00
9	Fence removal, storage, and resetting	100	lf	$40.00	$4,000.00
Additional Excavation Cost					
10	Channel excavation	115	cy	$45.00	$5,175.00
11	Haul off to non GCDWR site	25	load	$350.00	$8,750.00
12	Classified stone (#57, #5, #4, crusher run, gab, etc.)	420	ton	$57.50	$24,150.00
Silt Fence, Complete					
13	Type C	500	lf	$4.50	$2,250.00
STABILIZATION ITEMS					
14	Stone rip rap type I, complete in place	18	ton	$60.00	$1,080.00
SITE RESTORATION AND LANDSCAPING ITEMS					
Curb and Gutter					
15	Permanent seeding complete	75	sy	$2.50	$187.50
16	Sodding complete	33	sy	$15.00	$495.00
STREAM BYPASS PUMPING (NOT INCIDENTAL TO OTHER BID ITEMS)					
Stream Bypass Pumping (Not Incidental to Other Bid Items)					
17	6" pump	300	hr	$75.00	$22,500.00
DRAINAGE STRUCTURES					
Pre-Cast Reinforced Concrete Box Culvert					
18	6' x 5'	61	lf	$975.00	$59,475.00
Corrugated Plastic Tubing					
19	Precast concrete box culvert headwall-parapet	10	lf	$50.00	$500.00
20	Precast concrete box culvert headwall-wingwall	12	cy	$2000.00	$24,000.00
21	Precast concrete box culvert headwall- aprons and baffles	15	cy	$2000.00	$30,000.00
22	Concrete retaining wall GDOT 4949D	30	cy	$4000.00	$120,000.00
23	RR Temporary Shoring with Sheet Piles	50	lf	$3000.00	$150,000.00
TRAFFIC CONTROL					
24	Traffic control major - total per project	1	ea	$25,000.00	$25,000.00
ROADWAY RESTORATION					
Street Cut					
25	Full pavement and base course replacement	120	sy	$115.00	$13,800.00
Driveway Restoration					
26	6" concrete	22	sy	$89.50	$1,969.00
Materials					
27	Contingency costs, additional work (labor & materials) cost plus percentage			25%	$149,076.63
DESIGN SERVICES (15% OF PROJECT COST)				**$111,807.47**	
LAND ACQUISITION				**$1,955.58**	
TOTAL				**$859,146.17**	

Cost Estimate - Option LA1

ITEM #	DESCRIPTION	APPROX. QTY.		UNIT PRICE	TOTAL PRICE
GENERAL ITEMS					
1	RR flagging & permitting	56	day	$1300.00	$72,800.00
EXPLORATION AND REMOVAL ITEMS					
2	Debris removal	2	load	$250.00	$500.00
CLEARING AND EARTHWORK					
Tree Removal Including Stump					
3	6" to less than 12"	8	ea	$900.00	$7,200.00
4	12" – 24"	8	ea	$900.00	$7,200.00
5	Greater than 24"	8	ea	$1,000.00	$8,000.00
Additional Excavation Cost					
6	Channel excavation	120	cy	$45.00	$5,400.00
7	Haul off to non GCDWR site	10	load	$350.00	$3,500.00
Curb and Gutter					
8	Permanent seeding complete	100	sy	$2.50	$250.00
9	Temporary seeding complete	100	sy	$5.00	$500.00
STREAM BYPASS PUMPING (NOT INCIDENTAL TO OTHER BID ITEMS)					
Stream Bypass Pumping (Not Incidental to Other Bid Items)					
10	6" pump	100	hr	$75.00	$7,500.00
RCP Jack & Bore					
11	36"	310	lf	$1200.00	$372,000.00
Materials					
12	Contingency costs, additional work (labor & materials) cost plus percentage			25%	$121,212.50
DESIGN SERVICES (15% OF PROJECT COST)				**$90,909.38**	
LAND ACQUISITION				**$1,027.89**	
TOTAL				**$697,999.77**	

Cost Estimate - Option LA2

ITEM #	DESCRIPTION	APPROX. QTY.		UNIT PRICE	TOTAL PRICE
GENERAL ITEMS					
1	RR flagging	84	day	$1300.00	$109,200.00
EXPLORATION AND REMOVAL ITEMS					
2	Remove existing pipe, all types and sizes	930	lf	$5.00	$4,650.00
3	Debris removal	4	load	$250.00	$1,000.00
Pipe/Box Culvert Installation - Additional Excavation Cost Where Depth to Top of Pipe>10'					
4	Channel excavation	583	cy	$45.00	$26,235.00
5	Haul off to non GCDWR site	60	load	$350.00	$21,000.00
Silt Fence, Complete					
6	Type C	1200	lf	$4.50	$5,400.00
STABILIZATION ITEMS					
7	Plastic filter fabric installed	150	sy	$5.00	$750.00
8	Stone rip rap type III, complete in place	90	ton	$65.00	$5,850.00
SITE RESTORATION AND LANDSCAPING ITEMS					
Curb and Gutter					
9	6" x 24" x 12" high back	760	lf	$40.00	$30,400.00
10	Permanent seeding complete	200	sy	$2.50	$500.00
11	Temporary seeding complete	100	sy	$5.00	$500.00
12	Sodding complete	650	sy	$15.00	$9,750.00
STREAM BYPASS PUMPING (NOT INCIDENTAL TO OTHER BID ITEMS)					
Stream Bypass Pumping (Not Incidental to Other Bid Items)					
13	6" pump	180	hr	$75.00	$13,500.00
RCP Jack & Bore					
14	36"	310	lf	$1200.00	$372,000.00
Reinforced Concrete Arch Pipe					
15	22.5" x 36.5" (eq 30") (detail 1)	500	lf	$185.00	$92,500.00
16	26.5" x 43.5" (eq 36") (detail 1)	36	lf	$228.00	$8,208.00
17	31.5" x 51.5" (eq 42") (detail 1)	34	lf	$300.00	$10,200.00
DRAINAGE STRUCTURES					
Pre-Cast Reinforced Concrete Box Culvert					
18	6' x 3'	150	lf	$875.00	$131,250.00
Corrugated Plastic Tubing					
19	Complete precast manhole, type 2 (GDOT 1011A)	5	vf	$750.00	$3,375.00
20	Complete precast drop inlet, Group 2 (GDOT 1019A, GDOT 9031S, GC P&D	1	vf	$1,050.00	$1,050.00
21	Tie into existing structures	2	ea	$500.00	$1,000.00
22	Precast concrete box culvert headwall-parapet	32	lf	$50.00	$1,600.00
23	Precast concrete box culvert headwall-wingwall	24	cy	$2000.00	$48,000.00
24	Precast concrete box culvert headwall- aprons and baffles	16	cy	$2000.00	$32,000.00
TRAFFIC CONTROL					
25	Traffic control minor – total per project	2	ea	$5,000.00	$10,000.00
ROADWAY RESTORATION					
Street Cut					
26	Full pavement and base course replacement	1251	sy	$115.00	$143,865.00
Materials					
27	Contingency costs, additional work (labor & materials) cost plus percentage			25%	$276,770.75
DESIGN SERVICES (15% OF PROJECT COST)				**$207,578.06**	
LAND ACQUISITION				**$13,723.50**	
TOTAL				**$1,605,155.32**	

Cost Estimate - Option PT1

ITEM #	DESCRIPTION	APPROX. QTY.		UNIT PRICE	TOTAL PRICE
EXPLORATION AND REMOVAL ITEMS					
1	Remove existing pipe, all types and sizes	50	lf	$5.00	$250.00
2	Relocate Power Pole	1	Ea	$35000.00	$35,000.00
3	Debris removal	2	load	$250.00	$500.00
Additional Excavation Cost					
4	Haul off site	6	load	$350.00	$1,944.44
Silt Fence, Complete					
5	Type C	350	lf	$4.50	$1,575.00
STABILIZATION ITEMS					
6	Plastic filter fabric installed	70	sy	$5.00	$350.00
7	Stone rip rap type III, complete in place	90	ton	$65.00	$5,850.00
SITE RESTORATION AND LANDSCAPING ITEMS					
Curb and Gutter					
8	Permanent seeding complete	400	sy	$2.50	$1,000.00
9	Temporary seeding complete	400	sy	$5.00	$2,000.00
STREAM BYPASS PUMPING (NOT INCIDENTAL TO OTHER BID ITEMS)					
Stream Bypass Pumping (Not Incidental to Other Bid Items)					
10	6" pump	80	hr	$75.00	$6,000.00
DRAINAGE STRUCTURES					
Pre-Cast Reinforced Concrete Box Culvert (Detail 1 Per Attachment E)					
11	6' x 3'	150	lf	$875.00	$131,250.00
Corrugated Plastic Tubing					
12	Precast concrete box culvert headwall-parapet	16	lf	$50.00	$800.00
13	Precast concrete box culvert headwall-wingwall	12	cy	$2000.00	$24,000.00
14	Precast concrete box culvert headwall- aprons and baffles	8	cy	$2000.00	$16,000.00
15	Ditches - paved		sy	$50.00	$0.00
TRAFFIC CONTROL					
16	Traffic control major - total per project	1	ea	$25,000.00	$25,000.00
ROADWAY RESTORATION					
Street Cut					
17	Detail 'A'		sy	$65.00	$0.00
18	Detail 'B'		sy	$50.00	$0.00
19	Full pavement and base course replacement	100	sy	$115.00	$11,500.00
Materials					
20	Contingency costs, additional work (labor & materials) cost plus percentage			25%	$65,754.86
DESIGN SERVICES (15% OF PROJECT COST)				**$49,316.15**	
TOTAL				**$378,090.45**	

Cost Estimate - Option SO1

ITEM #	DESCRIPTION	APPROX. QTY.		UNIT PRICE	TOTAL PRICE
GENERAL ITEMS					
1	Railroad Coordination	90	ea	$1300.00	$117,000.00
CLEARING AND EARTHWORK					
Tree Removal Including Stump					
2	6" to less than 12"	7	ea	$900.00	$6,300.00
3	12" – 24"	3	ea	$900.00	$2,700.00
4	Greater than 24"	3	ea	$1,000.00	$3,000.00
Additional Excavation Cost					
5	Borrow excavation	3451	cy	$30.00	$103,518.90
6	Haul off to non GCDWR site	49	load	$350.00	$17,150.00
Silt Fence, Complete					
7	Type C	1479	lf	$4.50	$6,655.43
STABILIZATION ITEMS					
8	Plastic filter fabric installed	30	sy	$5.00	$148.15
9	Stone rip rap type I, complete in place	60	ton	$60.00	$3,600.00
SITE RESTORATION AND LANDSCAPING ITEMS					
Curb and Gutter					
10	6" x 24" x 12" high back	132	lf	$40.00	$5,280.00
11	Permanent seeding complete	3578	sy	$2.50	$8,945.08
12	Temporary seeding complete	4321	sy	$5.00	$21,604.24
STREAM BYPASS PUMPING (NOT INCIDENTAL TO OTHER BID ITEMS)					
Stream Bypass Pumping (Not Incidental to Other Bid Items)					
13	6" pump	400	hr	$75.00	$30,000.00
DRAINAGE STRUCTURES					
Pre-Cast Reinforced Concrete Box Culvert					
14	8' x 4'	260	lf	$1,300.00	$337,669.80
Corrugated Plastic Tubing					
15	Precast concrete box culvert headwall-parapet	42	lf	$50.00	$2,100.00
16	Precast concrete box culvert headwall-wingwall	37	cy	$2500.00	$92,000.00
17	Precast concrete box culvert headwall- aprons and baffles	9	cy	$2500.00	$21,350.00
TRAFFIC CONTROL					
18	Traffic control major - total per project	1	ea	$25,000.00	$25,000.00
ROADWAY RESTORATION					
Street Cut					
19	Full pavement and base course replacement	302	sy	$115.00	$34,725.53
Materials					
20	Contingency costs, additional work (labor & materials) cost plus percentage			25%	$209,686.78
DESIGN SERVICES (15% OF PROJECT COST)					**$157,265.09**
LAND ACQUISITION					**$8,015.58**
TOTAL					**$1,213,714.58**

Cost Estimate - Option SP1

ITEM #	DESCRIPTION	APPROX. QTY.		UNIT PRICE	TOTAL PRICE
GENERAL ITEMS					
1	Railroad Flagging	28	day	$1300.00	$36,400.00
EXPLORATION AND REMOVAL ITEMS					
2	Debris removal	2	load	$250.00	$500.00
Curb and Gutter					
3	Permanent seeding complete	100	sy	$2.50	$250.00
4	Temporary seeding complete	100	sy	$5.00	$500.00
STREAM BYPASS PUMPING (NOT INCIDENTAL TO OTHER BID ITEMS)					
Stream Bypass Pumping (Not Incidental to Other Bid Items)					
5	6" pump	125	hr	$75.00	$9,375.00
RCP Jack & Bore					
6	36"	80	lf	$1200.00	$96,000.00
Materials					
7	Contingency costs, additional work (labor & materials) cost plus percentage			25%	$36,442.36
DESIGN SERVICES (15% OF PROJECT COST)				**$27,331.77**	
LAND ACQUISITION				**$856.25**	
TOTAL				**$210,399.83**	

Cost Estimate - Option SP2

ITEM #	DESCRIPTION	APPROX. QTY.		UNIT PRICE	TOTAL PRICE
GENERAL ITEMS					
1	Railroad Flagging	70	day	$1300.00	$91,000.00
EXPLORATION AND REMOVAL ITEMS					
2	Debris removal	27	load	$250.00	$6,750.00
CLEARING AND EARTHWORK					
Tree Removal Including Stump					
3	Clearing and Grubbing	23	ac	$7500.00	$172,500.00
Excavation					
4	Haul off site	6518	load	$350.00	$2,281,144.44
Silt Fence, Complete					
5	Type C	4850	lf	$4.50	$21,825.00
STABILIZATION ITEMS					
6	Plastic filter fabric installed	70	sy	$5.00	$350.00
SITE RESTORATION AND LANDSCAPING ITEMS					
Curb and Gutter					
7	Permanent seeding complete	100100	sy	$2.50	$250,250.00
8	Temporary seeding complete	100	sy	$5.00	$500.00
STREAM BYPASS PUMPING (NOT INCIDENTAL TO OTHER BID ITEMS)					
Stream Bypass Pumping (Not Incidental to Other Bid Items)					
9	6" pump	125	hr	$75.00	$9,375.00
RCP Jack & Bore					
10	36"	80	lf	$1200.00	$96,000.00
Materials					
11	Contingency costs, additional work (labor & materials) cost plus percentage			25%	$732,423.61
DESIGN SERVICES (15% OF PROJECT COST)				**$549,317.71**	
LAND ACQUISITION				**$105,695.20**	
TOTAL				**$3,662,118.06**	

Cost Estimate - Option WV1

ITEM #	DESCRIPTION	APPROX. QTY.		UNIT PRICE	TOTAL PRICE
GENERAL ITEMS					
1	RR Coordination	1	ea	$125000.00	$125,000.00
EXPLORATION AND REMOVAL ITEMS					
2	Removal of existing drainage structures	11	ea	$500.00	$5,500.00
3	Remove existing pipe, all types and sizes	376	lf	$5.00	$1,880.00
4	Debris removal	6	load	$250.00	$1,500.00
CLEARING AND EARTHWORK					
Tree Removal Including Stump					
5	6" to less than 12"	6	ea	$900.00	$5,400.00
6	12" – 24"	2	ea	$900.00	$1,800.00
Pipe/Box Culvert Installation - Additional Excavation Cost Where Depth to Top of Pipe>10'					
7	Borrow excavation	5077	cy	$30.00	$152,295.64
8	Haul off to non GCDWR site	82.00	load	$350.00	$28,700.00
Silt Fence, Complete					
9	Type C	3441	lf	$4.50	$15,484.12
STABILIZATION ITEMS					
10	Plastic filter fabric installed	127	sy	$5.00	$636.89
11	Stone rip rap type I, complete in place	86	ton	$60.00	$5,158.80
Curb and Gutter					
12	6" x 24" x 12" high back	324	lf	$40.00	$12,960.00
13	Temporary seeding complete	7252	sy	$5.00	$36,257.59
14	Sodding complete	6629	sy	$15.00	$99,435.45
STREAM BYPASS PUMPING (NOT INCIDENTAL TO OTHER BID ITEMS)					
Stream Bypass Pumping (Not Incidental to Other Bid Items)					
15	6" pump	200	hr	$75.00	$15,000.00
DRAINAGE STRUCTURES					
Pre-Cast Reinforced Concrete Box Culvert					
16	10' x 4'	332	lf	$2,000.00	$663,052.00
Corrugated Plastic Tubing					
17	Complete precast catch basin, group 1 (GDOT 1033 / 1034)	15	vf	$700.00	$10,430.00
18	Complete precast manhole, type 2 (GDOT 1011A)	39	vf	$750.00	$29,550.00
19	Precast concrete box culvert headwall-parapet	51	lf	$50.00	$2,566.67
20	Precast concrete box culvert headwall-wingwall	37	cy	$2500.00	$92,000.00
21	Precast concrete box culvert headwall- aprons and baffles	9	cy	$2500.00	$23,600.00
TRAFFIC CONTROL					
22	Traffic control major - total per project	1	ea	$25,000.00	$25,000.00
ROADWAY RESTORATION					
Street Cut					
23	Full pavement and base course replacement	622	sy	$115.00	$71,586.08
Railroad Bridge					
24	Railroad Bridge	1	ea	$2000000.00	$2,000,000.00
Materials					
25	Contingency costs, additional work (labor & materials) cost plus percentage			25%	$856,198.31
DESIGN SERVICES (15% OF PROJECT COST)				**$642,148.73**	
LAND ACQUISITION				**$5,408.44**	
TOTAL				**$4,928,548.71**	

Cost Estimate - Option WV2

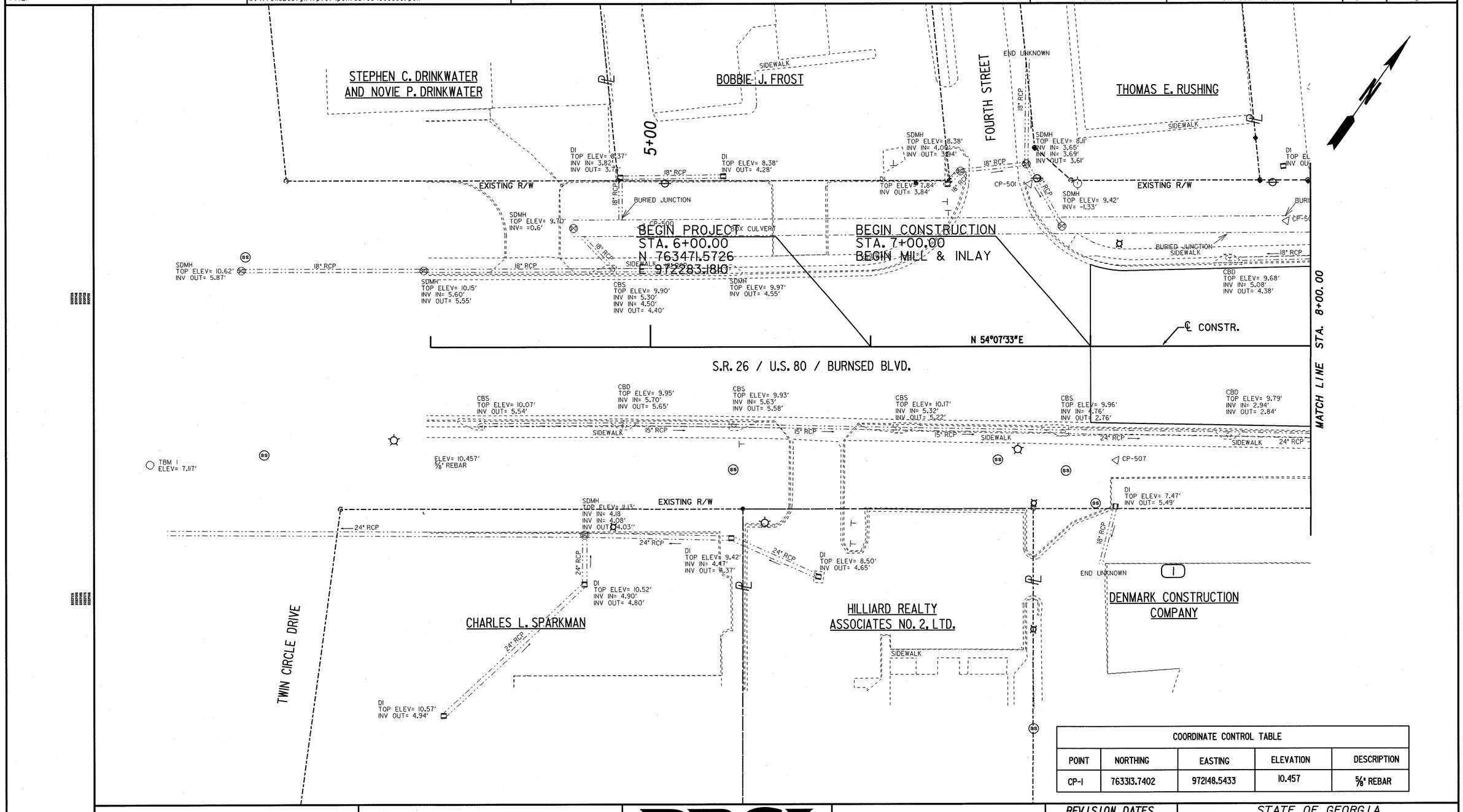
ITEM #	DESCRIPTION	APPROX. QTY.		UNIT PRICE	TOTAL PRICE
GENERAL ITEMS					
1	RR Coordination	1	ea	$80000.00	$80,000.00
EXPLORATION AND REMOVAL ITEMS					
2	Removal of existing drainage structures	2	ea	$500.00	$1,000.00
3	Remove existing pipe, all types and sizes	87	lf	$5.00	$435.00
4	Debris removal	2	load	$250.00	$500.00
CLEARING AND EARTHWORK					
Tree Removal Including Stump					
5	6" to less than 12"	5	ea	$900.00	$4,500.00
6	12" – 24"	3	ea	$900.00	$2,700.00
Pipe/Box Culvert Installation - Additional Excavation Cost Where Depth to Top of Pipe>10'					
7	Borrow excavation	599	cy	$30.00	$17,981.30
8	Haul off to non GCDWR site	12	load	$350.00	$4,200.00
Silt Fence, Complete					
9	Type C	446	lf	$4.50	$2,008.16
STABILIZATION ITEMS					
10	Plastic filter fabric installed	46	sy	$5.00	$230.00
11	Stone rip rap type I, complete in place	31	ton	$60.00	$1,863.00
SITE RESTORATION AND LANDSCAPING ITEMS					
12	Permanent seeding complete	1277	sy	$2.50	$3,193.09
13	Temporary seeding complete	1541	sy	$5.00	$7,705.11
DRAINAGE STRUCTURES					
Pre-Cast Reinforced Concrete Box Culvert					
14	6' x 3'	173	lf	$875.00	$150,955.00
Corrugated Plastic Tubing					
15	Precast concrete box culvert headwall-parapet	22	lf	$50.00	$1,083.33
16	Precast concrete box culvert headwall-wingwall	18	cy	$2500.00	$46,000.00
17	Precast concrete box culvert headwall- aprons and baffles	3	cy	$2500.00	$7,075.00
Materials					
18	Contingency costs, additional work (labor & materials) cost plus percentage			25%	$82,857.25
DESIGN SERVICES (15% OF PROJECT COST)				**$62,142.94**	
LAND ACQUISITION				**$886.05**	
TOTAL				**$477,315.23**	

Cost Estimate - Option WV3

ITEM #	DESCRIPTION	APPROX. QTY.		UNIT PRICE	TOTAL PRICE
GENERAL ITEMS					
1	Railroad Coordination	1	ea	$200000.00	$200,000.00
EXPLORATION AND REMOVAL ITEMS					
2	Removal of existing drainage structures	13	ea	$500.00	$6,500.00
3	Remove existing pipe, all types and sizes	463	lf	$5.00	$2,315.00
4	Debris removal	8	load	$250.00	$2,000.00
CLEARING AND EARTHWORK					
Tree Removal Including Stump					
5	6" to less than 12"	11	ea	$900.00	$9,900.00
6	12" – 24"	5	ea	$900.00	$4,500.00
Additional Excavation Cost					
7	Borrow excavation	5676	cy	$30.00	$170,276.94
8	Haul off to non GCDWR site	94	load	$350.00	$32,900.00
Silt Fence, Complete					
9	Type C	3887	lf	$4.50	$17,492.28
STABILIZATION ITEMS					
10	Plastic filter fabric installed	173	sy	$5.00	$866.89
11	Stone rip rap type I, complete in place	117	ton	$60.00	$7,021.80
SITE RESTORATION AND LANDSCAPING ITEMS					
Curb and Gutter					
12	6" x 24" x 12" high back	324	lf	$40.00	$12,960.00
13	Permanent seeding complete	1277	sy	$2.50	$3,193.09
14	Temporary seeding complete	8793	sy	$5.00	$43,962.70
15	Sodding complete	6629	sy	$15.00	$99,435.45
STREAM BYPASS PUMPING (NOT INCIDENTAL TO OTHER BID ITEMS)					
Stream Bypass Pumping (Not Incidental to Other Bid Items)					
16	6" pump	200	hr	$75.00	$15,000.00
DRAINAGE STRUCTURES					
Pre-Cast Reinforced Concrete Box Culvert					
17	6' x 3'	173	lf	$875.00	$150,955.00
18	10' x 4'	332	lf	$2,000.00	$663,052.00
Corrugated Plastic Tubing					
19	Complete precast catch basin, group 1 (GDOT 1033 / 1034)	15	vf	$700.00	$10,430.00
20	Complete precast manhole, type 2 (GDOT 1011A)	39	vf	$750.00	$29,550.00
21	Precast concrete box culvert headwall-parapet	73	lf	$50.00	$3,650.00
22	Precast concrete box culvert headwall-wingwall	55	cy	$2500.00	$138,000.00
23	Precast concrete box culvert headwall- aprons and baffles	12	cy	$2500.00	$30,675.00
TRAFFIC CONTROL					
24	Traffic control major - total per project	1	ea	$5,000.00	$5,000.00
ROADWAY RESTORATION					
Street Cut					
25	Full pavement and base course replacement	622	sy	$115.00	$71,586.08
Railroad Bridge					
26	Railroad Bridge	1	ea	$2200000.00	$2,200,000.00
Materials					
27	Contingency costs, additional work (labor & materials) cost plus percentage			25%	$982,805.56
DESIGN SERVICES (15% OF PROJECT COST)				**$737,104.17**	
LAND ACQUISITION				**$6,294.48**	
TOTAL				**$5,657,426.44**	

8.7 Appendix G – Plan Data

Thursday, January 18, 2007 3:59:30 PM 14427	w:\TransDesign\Iplot\colortables\Oce600.tbl w:\TransDesign\Iplot\pentables\Oce600.pen	h:\GDOT\Safety Projects\001894\dgn\001894CP01.dgn	COUNTY CHATHAM	PROJECT NUMBER STP-0001-00(894)	SHEET NO. 15	TOTAL SHEETS 66



COORDINATE CONTROL TABLE				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP-1	763313.7402	972148.5433	10.457	5/8" REBAR

PROPERTY LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS BLA
END LIMIT OF ACCESS ELA
EXIST. LIMIT OF ACCESS
EXIST. R/W AND LIMIT OF ACCESS
EXISTING R/W LINE

PBS&J

SCALE IN FEET
0 20 40 80

REVISION DATES

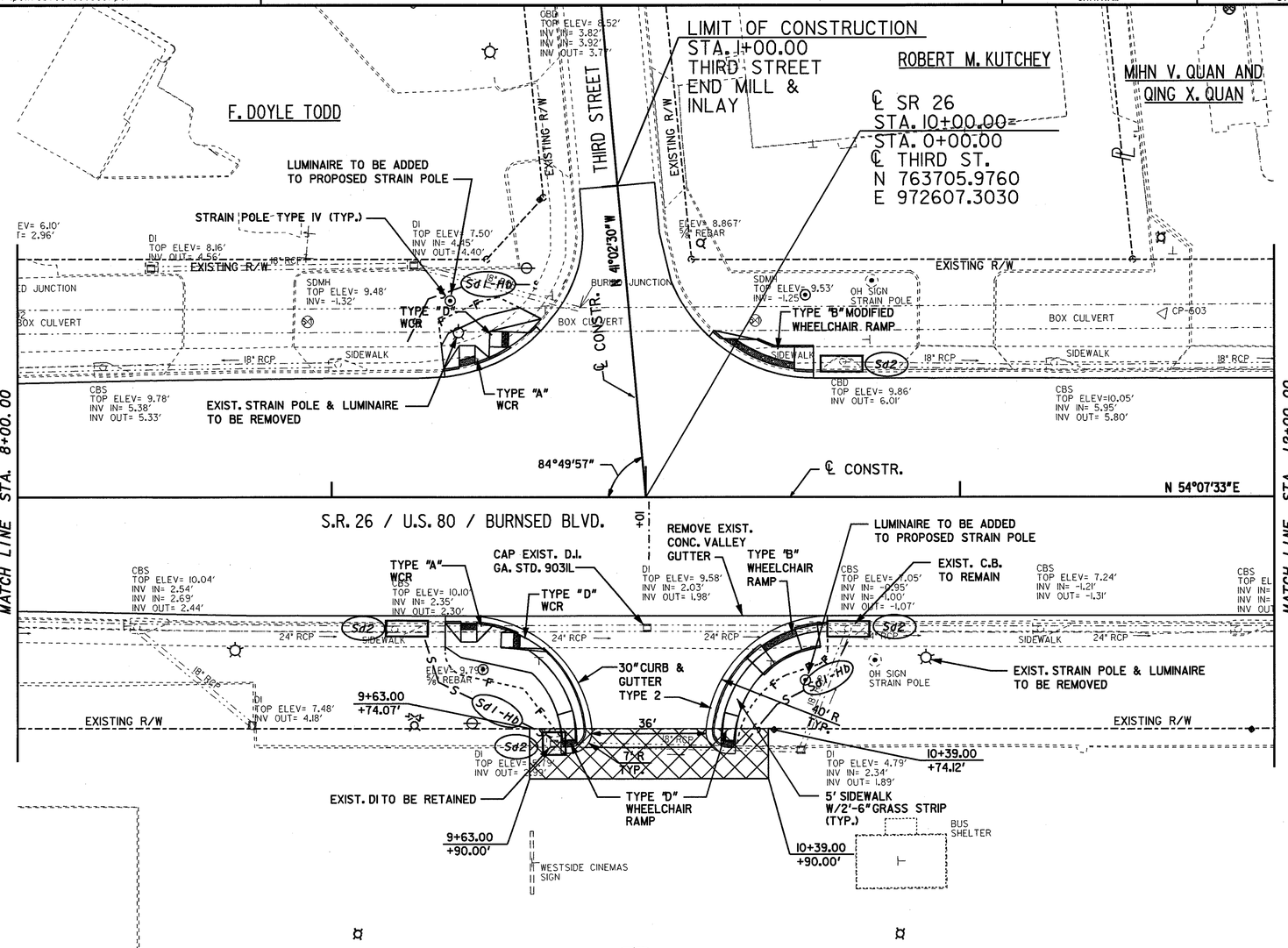
STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: TRAFFIC SAFETY AND DESIGN

MAINLINE PLAN
SR 26 @ THIRD STREET

DRAWING No. 13-01

GPLM

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14427			CHATHAM	STP-0001-00(894)	16	66



COORDINATE CONTROL TABLE				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP-2	763634.4193	972594.2749	9.797	⅝" REBAR
CP-4	763784.0120	972561.0960	8.867	⅝" REBAR
CP-5	763981.1370	972390.5680	14.097	⅝" REBAR

PROPERTY LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS BLA
END LIMIT OF ACCESS ELA
EXIST. LIMIT OF ACCESS
EXIST. R/W AND LIMIT OF ACCESS
EXISTING R/W LINE

PBS&J

SCALE IN FEET
0 20 40 80

REVISION DATES		

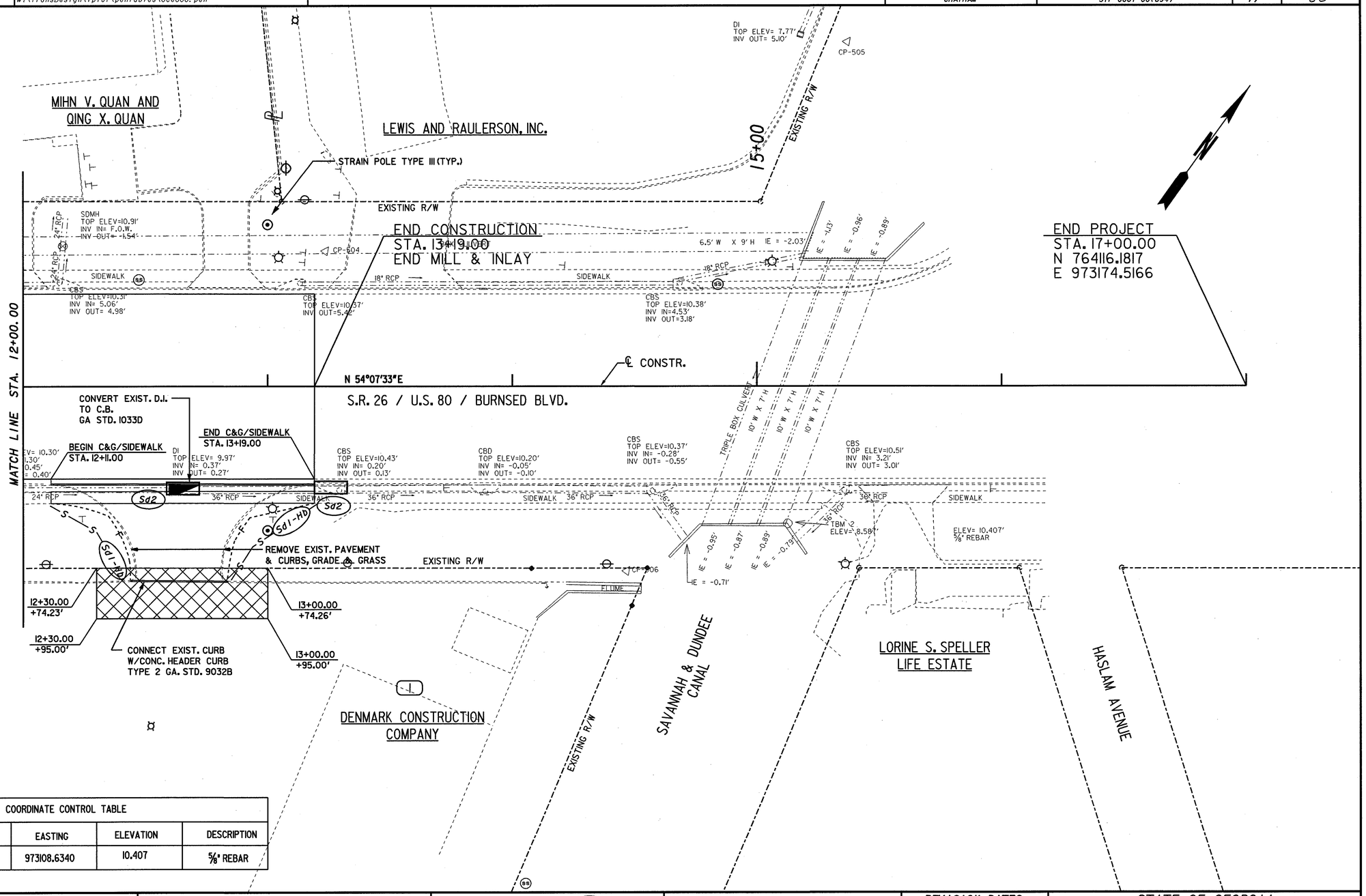
STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: TRAFFIC SAFETY AND DESIGN

MAINLINE PLAN
SR 26 @ THIRD STREET

DRAWING No. 13-02

GPLN

Thursday, January 18, 2007 3:59:52 PM	w:\TransDesign\lplot\colortables\Oce600.tbl	h:\GDOT\Safety Projects\001894\dgn\001894CP03.dgn	COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
14427	w:\TransDesign\lplot\pentables\Oce600.pen		CHATHAM	STP-0001-00(894)	17	66



COORDINATE CONTROL TABLE				
POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP-3	764005.0030	973108.6340	10.407	5/8" REBAR

PROPERTY LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTRUCTION & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS BLA
END LIMIT OF ACCESS ELA
EXIST. LIMIT OF ACCESS
EXIST. R/W AND LIMIT OF ACCESS
EXISTING R/W LINE

PBS&J

SCALE IN FEET
0 20 40 80

REVISION DATES		

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: TRAFFIC SAFETY AND DESIGN

MAINLINE PLAN
SR 26 @ THIRD STREET

DRAWING No. 13-03

GPLN

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA	STP-0001-00(894)	18	66

REVISION	DATES

TBM 1
STA. 2+72, 53.25' RT.
CHISLED X ON EAST
END OF 12" CONCRETE
HEADWALL
ELEV. 7.12

TBM 2
STA. 15+13, 56.23' RT.
CHISLED SQUARE ON
EAST END OF 18"
CONCRETE HEADWALL
ELEV. 8.59

BEGIN PROJECT
STA. 7+00.00

END PROJECT
STA. 13+19.00

+0.08% (AVE. GRADE)

EXISTING GRADE

S.R. 26
PROFILE

100 90 80 70 60 50 40 30 20 10 0 -10 -20 -30 -40 -50 -60 -70 -80

4+00 5+00 6+00 7+00 8+00 9+00 10+00 11+00 12+00 13+00 14+00 15+00 16+00

10.45 10.34 10.28 10.27 10.29 10.31 10.29 10.22 10.27 10.32 10.41 10.51 10.40 10.36 10.41 10.49 10.60 10.77 10.82 10.82 10.75 10.74 10.93 11.04

◇◇◇JAN◇◇◇◇◇ H◇◇GDOT◇SAFETY PROJECTS◇◇◇◇◇◇◇◇◇◇◇DGN◇◇◇◇◇◇◇◇◇◇PRO◇◇◇DGN

PBS&J

SCALE
1"=50' HORIZONTAL
1"=10' VERTICAL

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE OF TRAFFIC SAFETY & DESIGN

MAINLINE PROFILE

DRAWING No.
15–01

CHATHAM COUNTY, GEORGIA

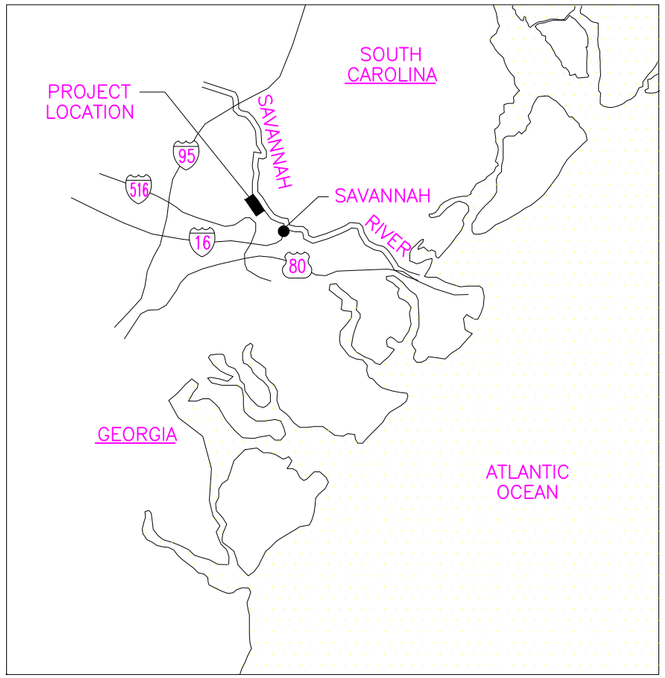
DUNDEE CANAL DRAINAGE IMPROVEMENTS & TIDEGATE UPGRADE

QBS-05-6-4

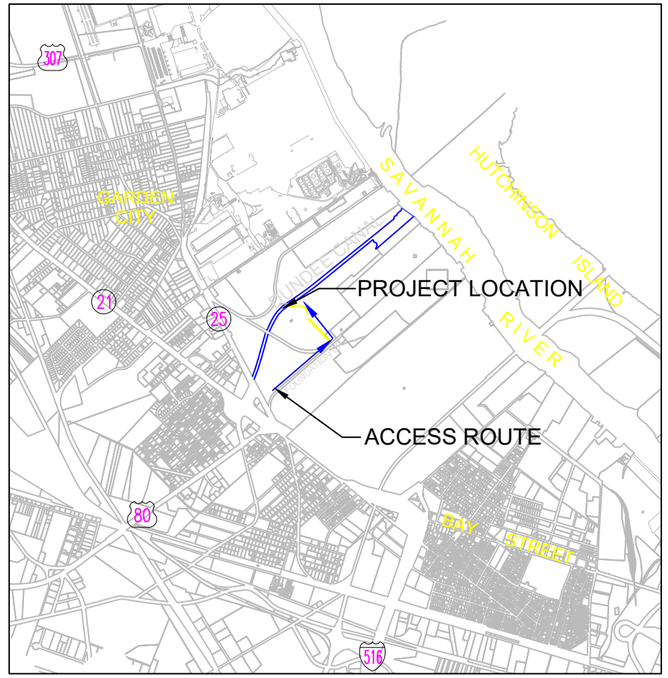
DRAWING INDEX

SHEET NO.	DRAWING NO.	SHEET TITLE
1	X1	COVER SHEET
2	X2	GENERAL NOTES & ABBREVIATIONS
3	X3	SOIL BORINGS LOGS
4	X4	SOUTH ACCESS PLAN & DETAILS
5	EC1	EROSION & SEDIMENT CONTROL PLANS GENERAL NOTES & DETAILS
6	EC2	PHASE 1–CLEARING & GRUBBING SITE PLAN
7	EC3	PHASE 2–GRADING & CONSTRUCTION SITE PLAN
8	EC4	PHASE 3–FINAL PHASE SITE PLAN
9	S1	EXISTING SITE PLAN & DEMOLITION PLAN
10	S2	DEMOLITION DETAILS
11	S3	NEW SITE PLAN
12	S4	CROSS SECTIONS
13	S5	TIDEGATE PLAN & ELEVATION
14	S6	TIDEGATE DETAILS
15	S7	SHEET PILE PLAN, SHEET 1 OF 2
16	S8	SHEET PILE PLAN, SHEET 2 OF 2
17	S9	BULKHEAD SECTION & DETAILS
17A	S9A	SOIL ANCHOR & BULKHEAD SECTION 1
18	S10	CONCRETE SHEET PILE DETAILS SHEET 1 OF 3
19	S11	CONCRETE SHEET PILE DETAILS SHEET 2 OF 3
20	S12	CONCRETE SHEET PILE DETAILS SHEET 3 OF 3
21	S13	MISCELLANEOUS DETAILS SHEET 1 OF 3
21A	S13A	MISCELLANEOUS DETAILS SHEET 2 OF 3 1
22	S14	MISCELLANEOUS DETAILS SHEET 3 OF 3

OCTOBER 2007



VICINITY MAP
NOT TO SCALE



LOCATION MAP
NOT TO SCALE

RECORD DRAWINGS

REVISION	DESCRIPTION	BY	DATE
2	RECORD DRAWINGS	JET	9/11/09
1	AMENDMENT NO.2	JPB	5/05/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

COVER SHEET

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

DR	CISCO	CHK	THOMAS
DSGN	CISCO	SUPVSD BY	J. E. THOMAS
JOB NO.	5701	TITLE	PM

GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

DATE OCTOBER 2007

SHEET 1 OF 22

X1

GENERAL NOTES:

1. NOTES BELOW ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES.
2. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THESE PLANS AND OF THE SPECIFICATIONS.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE STARTING WORK. NOTIFY CHATHAM COUNTY OF DISCREPANCIES.
4. ALL FEDERAL, STATE AND LOCAL SAFETY REGULATIONS ARE TO BE STRICTLY FOLLOWED: METHODS OF CONSTRUCTION AND ERECTION OF STRUCTURAL MATERIAL IS THE CONTRACTORS RESPONSIBILITY.
5. THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE FEDERAL, STATE, AND LOCAL ENVIRONMENTAL PROTECTION STANDARDS, LAWS AND REGULATIONS.
6. CHATHAM COUNTY WILL OBTAIN ALL REQUIRED ENVIRONMENTAL PERMITS AND PROVIDE COPIES TO CONTRACTOR, CONTRACTOR SHALL REVIEW AND ABIDE BY ALL PERMIT CONDITIONS AND REQUIREMENTS.
7. DISPOSAL OF MATERIALS IS THE RESPONSIBILITY OF THE CONTRACTOR. ALL DEBRIS SHALL BE DISPOSED OF OFF CHATHAM COUNTY PROPERTY IN A PERMITTED LANDFILL.
8. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE COUNTY ENGINEER.
9. THE CONTRACTOR SHALL PLACE CONSTRUCTION DEBRIS CONTROL DEVICES, BOOMS, TARPAULINS, FLOATS, STAGING, AND OTHER DEVICES AS NECESSARY AS TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING THE WATER, AND AIR BORNE MATERIALS FROM LEAVING THE IMMEDIATE VICINITY OF THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN-UP OF ANY MATERIALS DEPOSITED OUTSIDE THE WORK AREA. CONTRACTOR SHALL PROVIDE APPROPRIATE EROSION CONTROL MEASURES TO ALL DISTURBED AREAS IN ACCORDANCE WITH GEORGIA EROSION CONTROL LAWS AND REGULATIONS AND SHEETS EC1 TO EC4.
10. LOCATION OF INDICATED UTILITIES IS APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING, AT THEIR EXPENSE, ANY EXISTING UTILITIES DAMAGED DURING CONSTRUCTION.
11. THE FOLLOWING DATA IS PROVIDED CONCERNING TIDAL INFORMATION:

MHHW	= +4.06
MHW	= +3.76
NAVD (1988)	= 0.00
MLW	= -4.38
MLLW	= -4.58

ALL ELEVATIONS SHOWN ON DRAWINGS ARE BASED ON NAVD1988 (NORTH AMERICAN VERTICAL DATUM 1988). THE CONTRACTOR SHALL VERIFY THE ELEVATION OF THE BENCHMARKS SHOWN ON SHEET S1 PRIOR TO COMMENCING WORK. HORIZONTAL COORDINATES ARE IN U.S. SURVEY FEET REFERRED TO THE GEORGIA STATE GRID (EAST ZONE 1001) BASED ON NAD83(93).

12. FOR SOIL BORING LOGS, SEE SHEET X3.
13. STAGING AREA IS LOCATED APPROXIMATELY 800' SOUTHEAST OF PROJECT SITE, AS SHOWN ON SHEET X4.
14. ALL MATERIAL PROVIDED FOR THIS PROJECT SHALL BE NEW UNLESS OTHERWISE NOTED.
15. REMOVE ALL DOWNED TREES, ALL VEGETATION, ALL STANDING TREES & ALL DEBRIS LOCATED WITHIN THE LIMITS OF CONSTRUCTION PER THE SPECIFICATION. IT IS RECOMMENDED FOR CONTRACTOR TO CONDUCT A SITE VISIT PRIOR TO BIDDING TO DETERMINE EXTENT OF CLEARING AND GRUBBING ALONG THE BANK.
16. ASSUME ALL CONCRETE DEBRIS ENCOUNTERED DURING PROJECT IS REINFORCED.
17. THE TOPOGRAPHIC SURVEY WAS PERFORMED BY WARD EDWARDS, INC. IN AUGUST 2005 & MARCH 2006.
18. CONTRACTOR SHALL PROVIDE A COMPLETE AS-BUILT SURVEY FOR THE COUNTY AFTER COMPLETING CONSTRUCTION. SURVEY SHALL BE PERFORMED PER THE SPECIFICATIONS AND SEALED BY A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF GEORGIA.
19. FOR EXISTING SITE AND DEMOLITION PLAN, SEE SHEET S1.
20. FOR NEW SITE PLAN, SEE SHEET S3.
21. ACCESS TO THE SITE SHALL BE FROM THE SOUTH SIDE AS SHOWN ON THE DRAWINGS. THE CONTRACTOR WILL NEED TO PROVIDE A TEMPORARY BRIDGE TO FACILITATE EQUIPMENT ACCESS TO THE NORTH SIDE, IF REQUIRED.
22. CONTRACTOR SHALL CALL THE STATEWIDE "CALL BEFORE YOU DIG" NUMBER IN ACCORDANCE WITH THE GEORGIA UTILITY FACILITY PROTECTION ACT IN ADVANCE OF BEGINNING CONTRUCTION ACTIVITIES AND AS THEREAFTER REQUIRED IN ORDER TO REMAIN IN COMPLIANCE WITH THE ACT.

Underground Service Alert
Call: TOLL FREE
1-800
282-7411
TWO WORKING DAYS BEFORE YOU DIG

DESIGN CRITERIA

1. GRAVITY LOADS
   A. UNIFORMLY DISTRIBUTED LIVE LOAD . . . 250 PSF BEHIND TOP OF EMBANKMENT
   B. CONCENTRATED LOAD AASHTO HS20 TRUCK

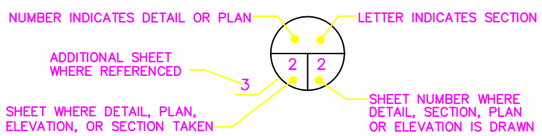
PRESTRESSED CONCRETE SHEETPILES

1. CONCRETE SHEET PILES SHALL BE DRIVEN TO THE MINIMUM TIP ELEVATION INDICATED.
2. CONCRETE:
   A. fc'=4000 PSI @ TRANSFER
      fc'=6000 PSI @ 28 DAYS & TIME OF DRIVING PILE
3. REINFORCING:
   A. PRESTRESSING STEEL SHALL CONFORM TO ASTM A416 GRADE 270
   B. MILD STEEL DOWELS - ASTM A 615.
4. FINAL STRESS IN PRESTRESSING STEEL
   AFTER ALL LOSSES = 154 KSI
   ESTIMATED LOSSES = 35 KSI
5. PILE SECTION & LOCATIONS ARE SHOWN ON PLANS
6. IN CUTTING OFF CONCRETE SHEETPILES, AN ABRASIVE SAW SHALL BE USED TO SCORE THE CONCRETE AT THE CUT OFF ELEVATION TO THE APPROXIMATE DEPTH OF REINFORCING STEEL.
7. CONTRACTOR MAY AT HIS OPTION CAST CORRUGATED METAL TUBE IN THE TOP OF THE SHEET FOR EACH DOWEL. METAL TUBE SHALL BE GALVANIZED, HAVE A MIN. THICKNESS OF 0.023 INCH AND SHALL HAVE AN INTERNAL DIMENSION AS SHOWN. CAP TUBE TO PREVENT INFILTRATION OF CONCRETE DURING PLACING. CLEAN HOLE OF DUST, WATER, AND/OR OIL BEFORE INSTALLING DOWEL. INSURE THAT THERE IS NO POLISHED SURFACE INSIDE OF HOLE, OR CORE DRILL PILE FOR DOWELS AS SHOWN. IN EITHER OPTION DOWEL TO BE EPOXY GROUTED IN FIELD AFTER DRIVING SHEETPILE.
8. SPUDDING OR JETTING OF THE SHEET PILES WILL NOT BE PERMITTED.
8. CONCRETE SHEET PILES SHALL HAVE A MINIMUM ALLOWABLE BENDING MOMENT CAPACITY OF 28 KIP-FEET PER FOOT.

STRUCTURAL AND MISCELLANEOUS STEEL

1. ALL STEEL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
2. ALL WELDING SHALL CONFORM TO AWS D 1.1.
3. MATERIAL SHALL CONFORM TO THE FOLLOWING, UON:
   A. PLATES . . . . . .ASTM A572, GRADE 50 GALV
   B. HSS. . . . . .ASTM A500, GRADE B
   C. PIPE . . . . . .ASTM A53, GRADE B
   D. WT. . . . . .ASTM A992, GRADE 50
   E. TIDE GATE SHAFT. . . . . .ASTM A588, GRADE 46
4. FIELD TREAT DAMAGED GALVANIZED FINISH, PER ASTM A780, IN ADDITION, ALL EXPOSED THREADED SURFACES SHALL BE PAINTED WITH TWO COATS OF HIGH ZINC DUST OXIDE PAINT AFTER INSTALLATION OF THE NUT.

PLAN, ELEVATION, SECTION AND DETAIL SYMBOL



CONCRETE, GROUT AND REINFORCING STEEL:

1. ALL CONCRETE WORK SHALL BE PERFORMED IN ACCORDANCE WITH ACI 301, UNLESS OTHERWISE NOTED.
2. ALL CAST-IN-PLACE CONCRETE SHALL BE NORMAL WEIGHT CONCRETE (145 PCF).
3. ALL DETAILING, FABRICATION, AND ERECTION OF REINFORCING STEEL SHALL CONFORM TO THE ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, ACI 315 AND ACI 301.
4. MATERIALS SHALL CONFORM TO THE FOLLOWING, UNLESS OTHERWISE NOTED:
   A. CAST-IN-PLACE CONCRETE . . . . . 5000 PSI @ 28 DAYS
   B. REINFORCING STEEL FOR CIP CONCRETE . . . . . ASTM A615, GRADE 60
5. MINIMUM CONCRETE COVER FOR REINFORCEMENT, 3" UON.
6. GROUT FOR INJECTION GROUTING BETWEEN SHEET PILES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI.

ABBREVIATIONS

AASHTO = AMERICAN ASSOCIATION STATE HIGHWAY TRANSPORTATION OFFICIALS
ACI = AMERICAN CONCRETE INSTITUTE
AISC = AMERICAN INSTITUTE OF STEEL CONSTRUCTION
APPROX = APPROXIMATE
ASTM = AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS = AMERICAN WELDING SOCIETY
BLDG = BUILDING
BM = BENCH MARK
BOTT = BOTTOM
C.J. = CONSTRUCTION JOINT
CF = CUBIC FEET
CI = CAST IRON
CIP = CAST-IN-PLACE
CLR = CLEAR
CONC = CONCRETE
CONST = CONSTRUCTION
CONT = CONTINUOUS
CSP = CONCRETE SHEET PILE
CY = CUBIC YARDS
DET = DETAIL
DIA = DIAMETER
DISCONT = DISCONTINUOUS
E = EAST, ELECTRICAL
EA = EACH
EL = ELEVATION
EQ = EQUAL
ETC = ET CETERA
EW = EACH WAY
EXIST = EXISTING
EXP = EXPANSION
FT = FEET
GALV = GALVANIZED
GR = GRADE
GRD = GROUND
H = HIGH
HA = HAND AUGER
HORIZ = HORIZONTAL
HSS = HOLLOW STEEL SECTION
ID = INSIDE DIAMETER
IN = INCHES
INFO = INFORMATION
JT = JOINT
K = THOUSANDS OR KIP
KIP = ONE THOUSAND POUNDS
KSI = KIPS PER SQUARE INCH
L = ANGLE OR LENGTH
LB. = POUND
LF = LINEAR FEET
LG = LONG
LT = LEFT
MAX = MAXIMUM
MHW = MEAN HIGH WATER
MHHW = MEAN HIGHER HIGH WATER
MIN = MINIMUM
MISC = MISCELLANEOUS
MLW = MEAN LOW WATER
MLLW = MEAN LOWER LOW WATER
N = NORTH
NAVD = NORTH AMERICAN VERTICAL DATUM
NTS = NOT TO SCALE
NO. = NUMBER
O.C. = ON CENTER
OD = OUTSIDE DIAMETER
OUTBD = OUTBOARD
P/C = PRECAST
PCF = POUNDS PER CUBIC FOOT
PERP = PERPENDICULAR
P/S = PRESTRESSED
PSI = POUND PER SQUARE INCH
PSF = POUNDS PER SQUARE FOOT
PVC = POLYVINYL CHLORIDE
R = RADIUS
RBS = REBAR SET
R/C = REINFORCED CONCRETE
REQ'D = REQUIRED
ROW = RIGHT-OF-WAY
RT = RIGHT
S = SOUTH
SCH = SCHEDULE
SD = STORM DRAIN
SF = SQUARE FOOT
SHT = SHEET
SPA = SPACES
SPT = STANDARD PENETRATION TEST
SQ = SQUARE
SS = STAINLESS STEEL
STA = STATION
STD = STANDARD
T = TON
TBM = TEMPORARY BENCH MARK
TEMP = TEMPORARY
TOC = TOP OF CONCRETE
TYP = TYPICAL
UON = UNLESS OTHERWISE NOTED
VERT = VERTICAL
W = WEST OR WIDTH
W/ = WITH
WWF = WELDED WIRE FABRIC
" = SECONDS OR INCH
' = MINUTES OR FEET
* = ASTERISK
~ = APPROXIMATELY
□ = SQUARE
= NUMBER OR POUNDS
& = AND
@ = AT
℄ = CENTERLINE
P = PLATE
℄ = DIAMETER
° = DEGREES

LEGEND

10	CONTOUR
	NEW HANDRAIL OR FENCE
X	EXISTING FENCE
	PROPERTY LINE

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

GENERAL NOTES & ABBREVIATIONS

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

DSGN	CISCO	PM	THOMAS
DR	CISCO	CHKD BY	J. E. THOMAS
JOB NO.	5701	TITLE	PM

GEORGIA REGISTERED No. 028043 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

DATE OCTOBER 2007

SHEET 2 OF 22

X2

RECORD DRAWINGS

PROJECT: **Dundee Canal Savannah, GA SAV2-05-036**

LOG OF BORING NO. SPT1

DATE:	7/28/2005	LOGGED BY:	JF
DRILLING METHOD:	Mud Rotary	HAMMER TYPE:	Safety
DRILLING RIG:	CME-45	DRILLER:	WPC
WATER LEVEL @ TOB:	10	WATER LEVEL @ 24 hrs:	NA

NOTES:
Soil classified in accordance with ASTM 2488. The SPT blow counts have not been adjusted for hammer or overburden pressure.

DEPTH (feet)	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION MSL (feet)	SAMPLE NO/TYPE	STANDARD PENETRATION TEST DATA (blows/foot) 0 10 20 30 60 80	N VALUE
		SILTY SAND (SM) loose, brown, silty sand, with trace of gravel		SS1		8
5		**SANDY CLAY (CLS)** stiff, brown, black, blue, sandy clay		SS2		15
		firm, greenish, sandy clay		SS3		8
10		**PEAT (PT)** very soft, black peat		SS4		2
		SANDY CLAY (CLS)				
15		firm, greenish, sandy clay		SS5		7
		CLAYEY SAND (SC)				
20		loose, brown, yellow, clayey sand		SS6		5
25		very loose, brown, greenish, clayey sand		SS7		4
		END OF BORING				

PROJECT: **Dundee Canal Savannah, GA SAV2-05-036**

LOG OF BORING NO. SPT2

DATE:	7/28/2005	LOGGED BY:	JF
DRILLING METHOD:	Mud Rotary	HAMMER TYPE:	Safety
DRILLING RIG:	CME-45	DRILLER:	WPC
WATER LEVEL @ TOB:	9.2	WATER LEVEL @ 24 hrs:	NA

NOTES:
Soil classified in accordance with ASTM 2488. The SPT blow counts have not been adjusted for hammer or overburden pressure.

DEPTH (feet)	GRAPHIC LOG	MATERIAL DESCRIPTION	ELEVATION MSL (feet)	SAMPLE NO/TYPE	STANDARD PENETRATION TEST DATA (blows/foot) 0 10 20 30 60 80	N VALUE
		SANDY CLAY (CLS) firm, brown, sandy clay		SS1		6
5		very stiff, brown, greenish, sandy clay		SS2		16
		soft, brown, greenish, sandy clay		SS3		4
10		**PEAT (PT)** soft, black peat, mixed with wood		SS4		4
		CLAYEY SAND (SC)				
15		loose, greenish, clayey sand		SS5		7
		loose, brown, greenish, clayey sand		SS6		9
20						
25		loose, brown, greenish, clayey sand		SS7		7
		END OF BORING				

HA 1		
Depth Below Grade (ft)	**Material Description**	**USCS Classifications**
0.0-0.17	topsoil (oranic soil)	OL/OH
0.17-3.0	brown, clayey sand	SC
3.0-5.0	brown, orange, clayey sand	SC
5.0-10.0	white, brown, silty clay with sand	CL/CH
6	**Ground Water Depth**	

HA 2		
Depth Below Grade (ft)	**Material Description**	**USCS Classifications**
0.0-0.17	topsoil (organic soil)	OL/OH
0.17-1.0	red, clayey sand	SC
1.0-4.0	black, brown, clayey sand, with trace of gravel	SC
4.0-8.0	brown, orange, silty sand	SM
8.0-10.0	gray, silty clay, with trace of sand	CL/CH
8	**Ground Water Depth**	

HA#B 3		
Depth Below Grade (ft)	**Material Description**	**USCS Classifications**
0.0-1.0	topsoil (fine sand)	
1.0-2.0	grey, brown, silty sand	SM
2.0-3.0	brown, grey, clayey sand	SC
3.0-4.0	soft, grey, brown, sandy clay	CL/CH
4.0-6.0	greenish, grey clay	CL/CH
6.0-7.0	dark clay	CL/CH
7.0-9.5	soft, dark clay	CL/CH
9.5-10.0	soft, greenish, grey, sandy clay	CL/CH
10.0-10.5	soft, greenish, sandy clay	CL/CH
10.5-11.0	firm, grey clay	CL/CH
9.5	**Ground Water Depth**	

HA#B 4		
Depth Below Grade (ft)	**Material Description**	**USCS Classifications**
0.0-1.0	topsoil (silty fine sand)	
1.0-4.0	mottled, grey, brown, sandy clay	CL/CH
4.0-5.0	dark, grey sandy clay	CL/CH
5.0-7.0	soft grey sandy clay	CL/CH
7.0-10.0	soft grey sandy clay	CL/CH
7	**Ground Water Depth**	

GENERAL NOTES:

1. SOIL BORINGS PERFORMED BY WPC, INC. OF SAVANNAH, GEORGIA. BORING AND HAND AUGER LOCATIONS ARE SHOWN ON SHT S1. A COPY OF THE GEOTECHNICAL REPORT IS AVAILABLE IN THE SPECIFICATIONS.
2. SOIL BORINGS PROVIDED FOR CONTRACTORS INFORMATION ONLY.
3. SOIL BORING REPRESENTS SUBSURFACE INFORMATION ONLY AT THE LOCATION OF THE BORING AND IS NOT INTENDED TO BE CONSIDERED TYPICAL BEYOND THE LIMITS OF THE BORING. THE CONTRACTOR SHOULD ANTICIPATE VARIABILITY IN THE SUBSURFACE CONDITIONS AND ALLOW FOR VARIATION IN THE PREPARATION OF HIS BID. ADDITIONAL BORINGS MAY BE PERFORMED AT THE CONTRACTORS COST.

1 RECORD DRAWINGS JET 9/11/09
REVISION DESCRIPTION BY DATE

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

SOIL BORING LOGS

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

DSGN CISCO DR CISCO CHK THOMAS
CHECKED BY J. E. THOMAS TITLE PM
JOB NO. 5701

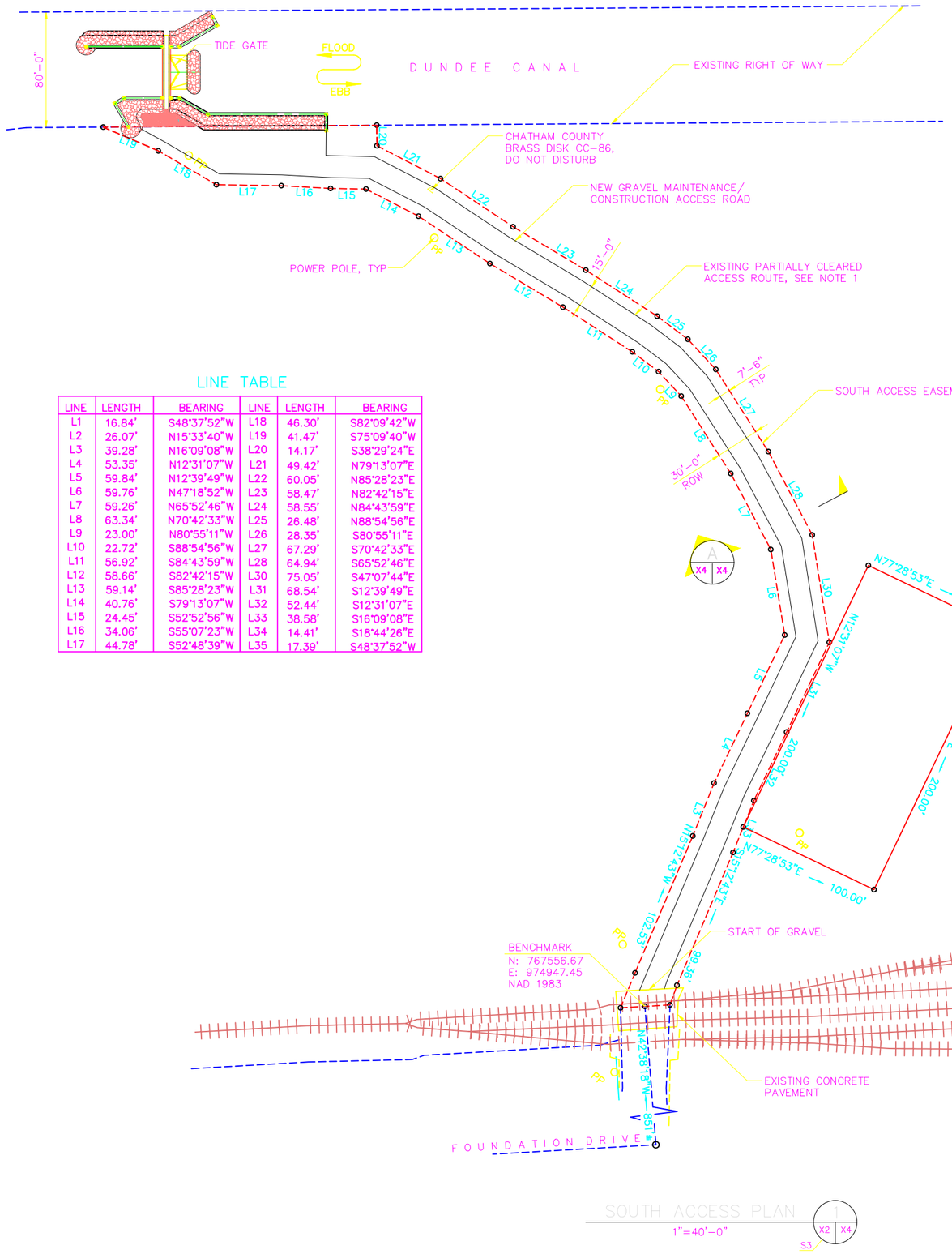
GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

DATE OCTOBER 2007

SHEET 3 OF 22

X3

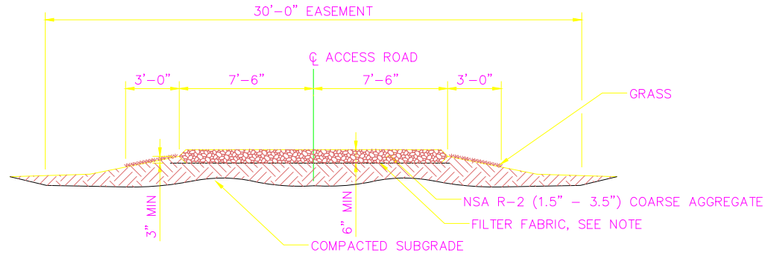
RECORD DRAWINGS



LINE TABLE

LINE	LENGTH	BEARING	LINE	LENGTH	BEARING
L1	16.84'	S48°37'52"W	L18	46.30'	S82°09'42"W
L2	26.07'	N15°33'40"W	L19	41.47'	S75°09'40"W
L3	39.28'	N16°09'08"W	L20	14.17'	S38°29'24"E
L4	53.35'	N12°31'07"W	L21	49.42'	N79°13'07"E
L5	59.84'	N12°39'49"W	L22	60.05'	N85°28'23"E
L6	59.76'	N47°18'52"W	L23	58.47'	N82°42'15"E
L7	59.26'	N65°52'46"W	L24	58.55'	N84°43'59"E
L8	63.34'	N70°42'33"W	L25	26.48'	N88°54'56"E
L9	23.00'	N80°55'11"W	L26	28.35'	S80°55'11"E
L10	22.72'	S88°54'56"W	L27	67.29'	S70°42'33"E
L11	56.92'	S84°43'59"W	L28	64.94'	S65°52'46"E
L12	58.66'	S82°42'15"W	L30	75.05'	S47°07'44"E
L13	59.14'	S85°28'23"W	L31	68.54'	S12°39'49"E
L14	40.76'	S79°13'07"W	L32	52.44'	S12°31'07"E
L15	24.45'	S52°52'56"W	L33	38.58'	S16°09'08"E
L16	34.06'	S55°07'23"W	L34	14.41'	S18°44'26"E
L17	44.78'	S52°48'39"W	L35	17.39'	S48°37'52"W

SOUTH ACCESS PLAN 1
1"=40'-0"
X2 X4
S3



NOTE: FILTER FABRIC SHALL EXTEND 6 INCHES BEYOND GRAVEL BOTH SIDES.

SECTION A
1/4" = 1'-0"
X4 X4

NOTES:

1. CONTRACTOR SHALL REMOVE ALL VEGETATION WITHIN NEW ACCESS ROAD.
2. ALL TOPSOIL WITHIN ACCESS ROAD SHALL BE STRIPPED AND STOCKPILED.

40' 0' 40' 80'
SCALE: 1"=40'

4'-0" 0'-0" 4'-0" 8'-0"
SCALE: 1/4"=1'-0"

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

SOUTH ACCESS PLAN & DEATILS

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

DSN	GRANEY	JOB NO.	5701
DR	CISCO	SUBMITTED BY	J. E. THOMAS
CHK	THOMAS	TITLE	PM

GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

DATE OCTOBER 2007

SHEET 4 OF 22

X4

RECORD DRAWINGS

NARRATIVE DESCRIPTION & EROSION & SEDIMENT CONTROL NOTES:

1. GENERAL

   A. FOR VICINITY MAP SEE SHEET EC-1

   B. TOTAL SITE AREA = 1.5 ACRES
   TOTAL DISTURBED AREA = 1.1 ACRES

   C. THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND DISTURBING ACTIVITIES.

   D. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

   E. ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.

2. BUFFER VARIANCE:

   A. THE GEORGIA DNR WILL BE ISSUING A STREAM BUFFER VARIANCE FOR THISPROJECT. THE MAJORITY OF THE CONSTRUCTION WORK WILL OCCUR WITHIN THE STREAM BUFFER.

3. DESCRIPTION;

   A. THE EXISTING DUNDEE CANAL TIDE GATE IS LOCATED APPROXIMATELY 1/2-MILE EAST OF WHERE DUNDEE CANAL AND STATE ROUTE 25 INTERSECT NEAR GARDEN CITY, GEORGIA. THE CANAL PROVIDES STORMWATER DRAINAGE AND FLOOD PROTECTION FOR A 5.5 SQUARE MILE AREA. THE PURPOSE OF THE PROJECT IS TO REPAIR THE CURRENT TIDE GATE STRUCTURE AND TO STABILIZE THE CANAL BANKS IMMEDIATELY ADJACENT TO THE EXISTING TIDE GATE TO AVOID FUTURE EROSION AND POTENTIAL FAILURE OF THE STRUCTURE. THE CONCRETE BULKHEAD USED TO STABILIZED THE EMBANKMENTS WILL ENCROACH INTO STATE WATERS DUE TO THE NATURE OF THE PROJECT. TURBIDITY CURTAINS WILL BE INSTALLED WITHIN THE DUNDEE CANAL, DOWNSTREAM OF THE PROJECT SITE. THE TURBIDITY CURTAIN WILL REMAIN IN PLACE THROUGHOUT THE LENGTH OF THE PROJECT. SILT FENCE WILL ALSO BE PLACED IN STRATEGIC LOCATIONS ALONG THE BANKS AND STATE BUFFER (WHERE APPLICABLE) TO LIMIT THE AMOUNT OF SILT RUNOFF INTO THE ADJACENT STATE WATERS. ALL REQUIRED ENVIRONMENTAL PERMITTING APPLICATIONS ARE ONGOING FOR THIS PROJECT.

4. ZONING:

   A. HEAVY INDUSTRIAL (INCLUDING SURROUNDING AREAS)

5. STATE WATERS;

   A. STATE WATERS ARE LOCATED WITHIN 200 FEET OF THE PROJECT SITE.

6. TIDAL INFORMATION;

MHHW	=	+4.06
MHW	=	+3.76
NAVD (1988)	=	0.00
MLW	=	-4.38
MLLW	=	-4.58

ALL ELEVATIONS SHOWN ON DRAWINGS ARE BASED ON NAVD1988 (NORTH AMERICAN VERTICAL DATUM 1988). HORIZONTAL COORDINATES ARE IN U.S. SURVEY FEET REFERRED TO THE GEORGIA STATE GRID (EAST ZONE 1001) BASED ON NAD83(93).

7. SEDIMENT STORAGE CALCULATIONS;

DUE TO THE LIMITED LAND AREA AND ABSENCE OF DRAINAGE INLETS, IT IS NOT FEASIBLE TO USE THE COMMISSION'S RECOGNIZED ACCEPTABLE STORAGE STRUCTURES SUCH AS "EXCAVATED SD2 - INLET SEDIMENT TRAP" OR "SD3 - TEMPORARY SEDIMENT BASIN." THE CURRENT PROPOSED BMP'S WILL BE SUFFICIENT TO CONTROL SEDIMENT.

A. DRAINAGE AREA = 1.1 ACRES
B. REQUIRED SEDIMENT STORAGE = 67 CY/AC * 1.1 ACRES = 73.7 CY
C. ASSUME 1'-3" HIGH SEDIMENT STORAGE PER LINEAR FOOT OF SILT FENCE
D. ASSUME 2:1 SLOPE OF SIDES
E. DETERMINE LENGTH OF SILT FENCE
   Lmin = REQUIRED SEDIMENT STORAGE/STORAGE AREA PER FOOT
   Lmin = 73.7 CY/ 1.25 SF = 1592 LINEAR FEET
F. PROVIDED LENGTH OF SILT FENCE = 1980 LINEAR FEET

8. VEGETATION:

   A. THE SITE VEGETATION CURRENTLY CONSISTS OF TALL GRASS, BRUSH WITH SPARSE TREE COVERAGE IN AREAS TO BE CLEARED AND MEDIUM TO DENSE TREE COVERAGE IN AREAS TO BE LEFT UNDISTURBED. TOP SOIL WILL BE SALVAGED, STOCKPILED AND SPREAD ON AREAS TO BE VEGETATED. TREES OUTSIDE OF THE CLEARING LINE WILL BE PROTECTED FROM DAMAGE BY APPROPRIATE MARKINGS. (SEE SHEETS EC-3, EC-4 & EC-5 FOR CLEARING INFORMATION AND VEGETATIVE PLAN.)

9. STANDARDS AND SPECIFICATIONS;

   A. ALL EROSION AND SEDIMENT CONTROL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE PUBLICATION TITLED, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA."

10. CONTACT INFORMATION:

   A. DEVELOPER/OWNER
   CHATHAM COUNTY ENGINEERING DEPT.
   124 BULL STREET, SUITE 430
   SAVANNAH, GA 31401
   (912) 652-7807

   24 HOUR CONTACT
   MOFFATT & NICHOL
   MR. PATRICK GRANEY, PE
   2 EAST BRYAN STREET, SUITE 501
   SAVANNAH, GA 31401
   (912) 231-0044

   AS THE PLAN DESIGNER, I CERTIFY THAT I HAVE VISITED THIS SITE PRIOR TO DESIGNING THE EROSION AND SEDIMENT CONTROL PLAN.

PATRICK GRANEY, P.E.
GSWCC CERTIFICATION NO. 0000013972

Ds1 TEMPORARY MULCH STABILIZATION

1. MULCH CAN BE USED AS A SINGULAR EROSION CONTROL DEVICE FOR UP TO SIX MONTHS, BUT IT SHALL BE APPLIED AT THE APPROPRIATE DEPTH, DEPENDING ON THE MATERIAL USED, ANCHORED, AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE.

   A. SITE PREPARATION:
   GRADE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH.
   INSTALL NEEDED EROSION CONTROL MEASURES.
   LOOSEN COMPACT SOIL TO A MINIMUM DEPTH OF 3 INCHES.

   B. MULCHING MATERIALS:
   DRY STRAW OR HAY: SHALL BE APPLIED AT A DEPTH OF 2 TO 4 INCHES PROVIDING COMPLETE SOIL COVERAGE.
   WOOD WASTE: SHALL BE APPLIED AT A DEPTH OF 2 TO 3 INCHES. ORGANIC MATERIAL FROM THE CLEARING STAGE OF DEVELOPMENT SHOULD REMAIN ON SITE, BE CHIPPED, AND APPLIED AS MULCH.

Ds3 PERMANENT VEGETATION

1. PERMANENT VEGETATION SHALL BE ESTABLISHED ON ALL PERMANENTLY EXPOSED DISTURBED AREAS (I.E. SHOULDERS OF ACCESS ROAD AND TOP OF SHORELINE PROTECTION) IMMEDIATELY FOLLOWING CONSTRUCTION.

   A. PREPARATION FOR SEEDING:
   GRADE AREA AS NECESSARY TO HYDROSEED.

   B. PLANTING:
   PLANT GRASS BY HYDRAULIC SEEDING: MIX SEED, FERTILIZER, AND WOOD CELLULOSE OR WOOD PULP FIBER MULCH WITH WATER AND APPLY IN A SLURRY UNIFORMLY OVER THE AREA TO BE TREATED. APPLY WITHIN ONE HOUR AFTER THE MIXTURE IS MADE.

   C. FERTILIZER & LIME:
   MIX FERTILIZER WITH SEED PRIOR TO APPLICATION. FINELY GROUND LIMESTONE SHALL BE MIXED WITH WATER AND APPLIED IMMEDIATELY AFTER MULCHING IS COMPLETED OR IN COMBINATION WITH THE TOP DRESSING.

   AFTER GRASS IS ESTABLISHED:
   FIRST YEAR - 1500 LBS PER ACRE OF 6-12-12
   SECOND YEAR - 1000 LBS PER ACRE OF 6-12-12
   MAINTENANCE - 400 LBS PER ACRE 10-10-10
   REFER TO TABLE 6-5.1 IN THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA," 2000 FOR APPLICATION TIMES.

   D. MULCH:
   WOOD CELLULOSE MULCH OR WOOD PULP FIBER SHALL BE USED WITH HYDRAULIC SEEDING. IT SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE. DRY STRAW OR DRY HAY SHALL BE APPLIED AT THE RATE OF 2.5 TONS PER ACRE AFTER HYDROSEEDING. MULCH SHALL BE EVENLY SPREAD WITH 75% SOIL COVER.

   E. ANCHORING MULCH:
   HAY AND STRAW MULCH SHALL BE PRESSED INTO THE SOIL IMMEDIATELY AFTER THE MULCH IS SPREAD.

   F. IRRIGATION:
   WATER IMMEDIATELY AFTER ANCHORING MULCH. APPLY AT A RATE THAT WILL NOT CAUSE RUNOFF.

   G. SEED MIXTURES:
   COMMON BERMUDA (HULLED SEED) - 10 LBS. PURE LIVE SEED PER ACRE (MARCH 1 TO AUGUST 1)
   COMMON BERMUDA (UNHULLED SEED) - 10 LBS. PURE LIVE SEED PER ACRE (OCTOBER 1 TO FEB 1)
   RYE (COMPANION GRASS) - 28 LBS. PURE LIVE SEED PER ACRE (SEPTEMBER 1 TO MARCH 1)

DISTURBED AREA STABILIZATION NTS — SEE 2 EC2|EC2 — EC4 & EC5

PROPOSED CONSTRUCTION ACTIVIES SCHEDULE

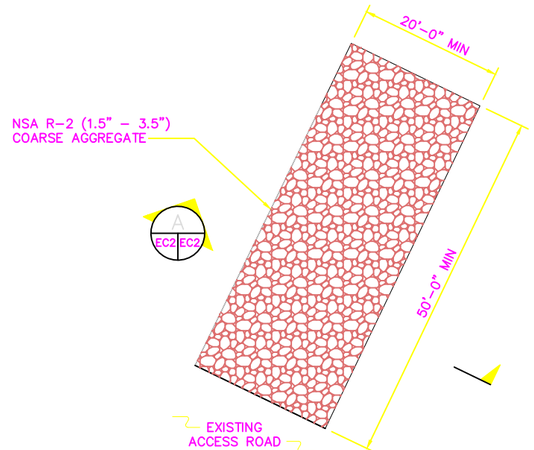
ACTIVITY	JAN 07	FEB 07	MAR 07	APR 07	MAY 07	JUN 07
CONSTRUCTION EXIT *						
SILT FENCE *						
CLEARING & GRUBBING						
MULCHING *						
TURBIDITY CURTAIN *						
CONCRETE BULKHEAD						
REPLACE MITER GATES						
GRADING						
RIPRAP EROSION CONTROL						
MAINTENANCE ROAD						
PERMANENT SEEDING						

* ALL BMP'S SHALL BE MAINTAINED THROUGHOUT THE ENTIRETY OF THE PROJECT

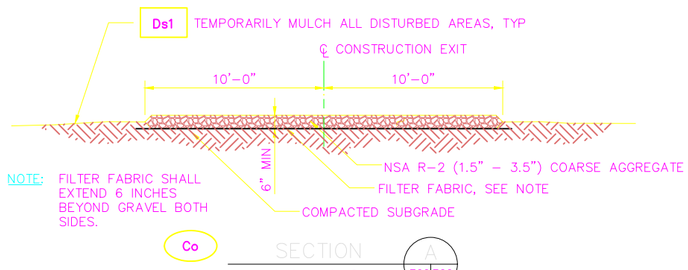
LEGEND

- Sd1-C — TYPE C SILT FENCE ——X—— SEE 2 EC2|EC3
- Co — CONSTRUCTION EXIT SEE 1 EC2|EC2
- Ds1 — TEMPORARY MULCH STABILIZATION, SEE 2 EC2|EC2
- Ds3 — PERMANENT VEGETATION, SEE 2 EC2|EC2

NUMBER INDICATES DETAIL OR PLAN
SHEET WHERE DETAIL, PLAN, SECTION, OR ELEVATION TAKEN
ADDITIONAL SHEET WHERE REFERENCED
LETTER INDICATES SECTION OR ELEVATION
SHEET NUMBER WHERE DETAIL, PLAN, SECTION, OR ELEVATION IS DRAWN

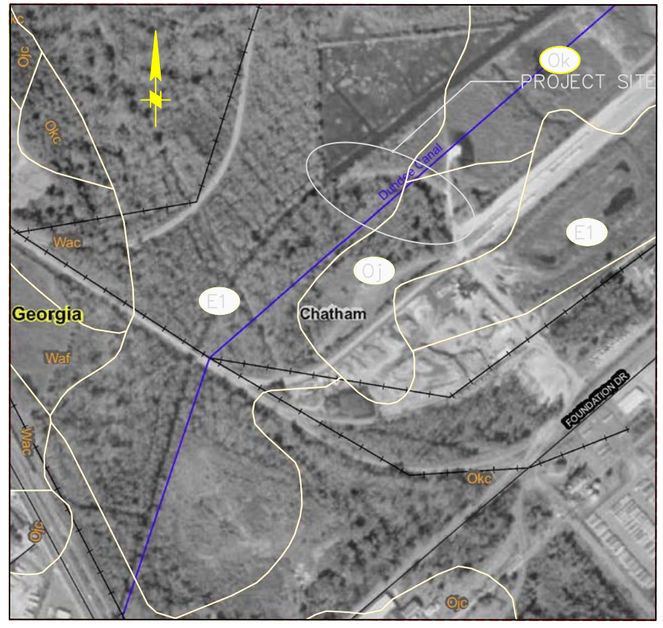


Co CONSTRUCTION EXIT 1 EC3|EC2
1"=10'-0"



NOTE: FILTER FABRIC SHALL EXTEND 6 INCHES BEYOND GRAVEL BOTH SIDES.

Co SECTION A EC2|EC2
1/4" = 1'-0"



SOIL PROPERTIES:

A. PROJECT SITE CONTAINS THE FOLLOWING SOIL SERIES BASED ON THE USDA-NRCS NATIONAL COOPERATIVE SOIL SURVEY:

E1 - ELLABELLE LOAMY SAND
Ok - OGEECHEE LOAMY FINE SAND
Oj - OCILLA COMPLEX

B. SEE SOILS MAP FOR LOCATIONS

SOILS MAP
NOT TO SCALE

4'0" 0'-0" 4'0" 8'0"
SCALE: 1/4"=1'-0"

RECORD DRAWINGS

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

GENERAL NOTES & DETAILS

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

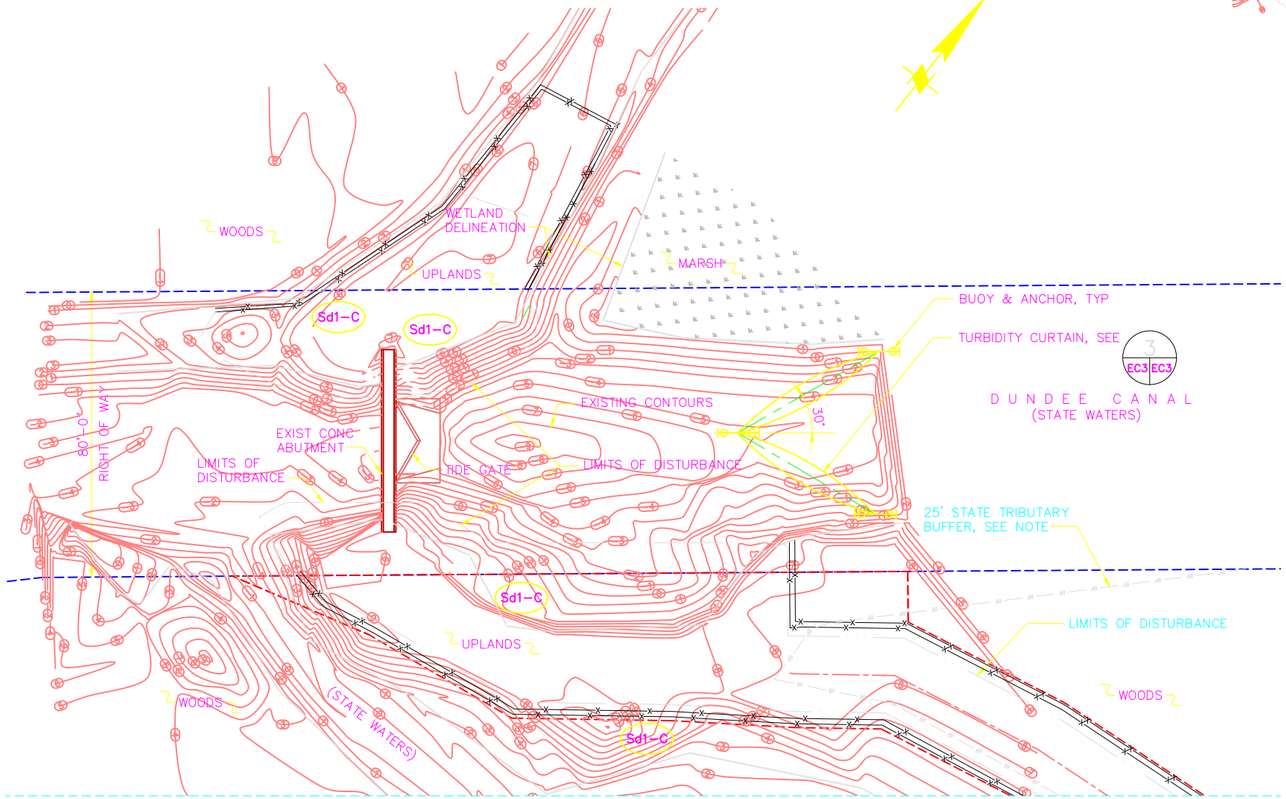
DSGN	GRANEY
DR	CISCO
CHK	THOMAS
SUPVSD BY	J. E. THOMAS
TITLE	PM
JOB NO.	5701

GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

DATE OCTOBER 2007

SHEET 5 OF 22

EC1



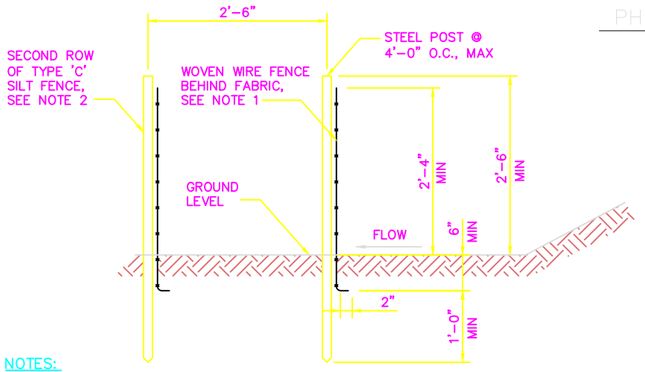
MATCHLINE A–A

AREA 'A'
1"=20'-0"

NOTE:

DUE TO LIMITED UPLAND AREA AROUND THE CANAL, THE MAJORITY OF THE CONSTRUCTION WILL OCCUR WITH IN THE 25 FOOT STATE TRIBUTARY BUFFER. DNR WILL BE ISSUING A STREAM BUFFER VARIANCE.

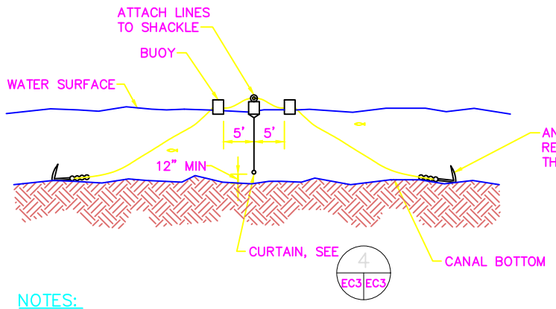
PHASE 1 – CLEARING & GRUBBING SITE PLAN 1 EC2 EC3



NOTES:

1. SECURE WIRE FABRIC TO POSTS.
2. INSTALL AT ALL STREAM BUFFER LOCATIONS AND WHERE INDICATED ON THE DRAWINGS.

Sd1-C DETAIL 2 EC2 EC3
1"=1'-0"

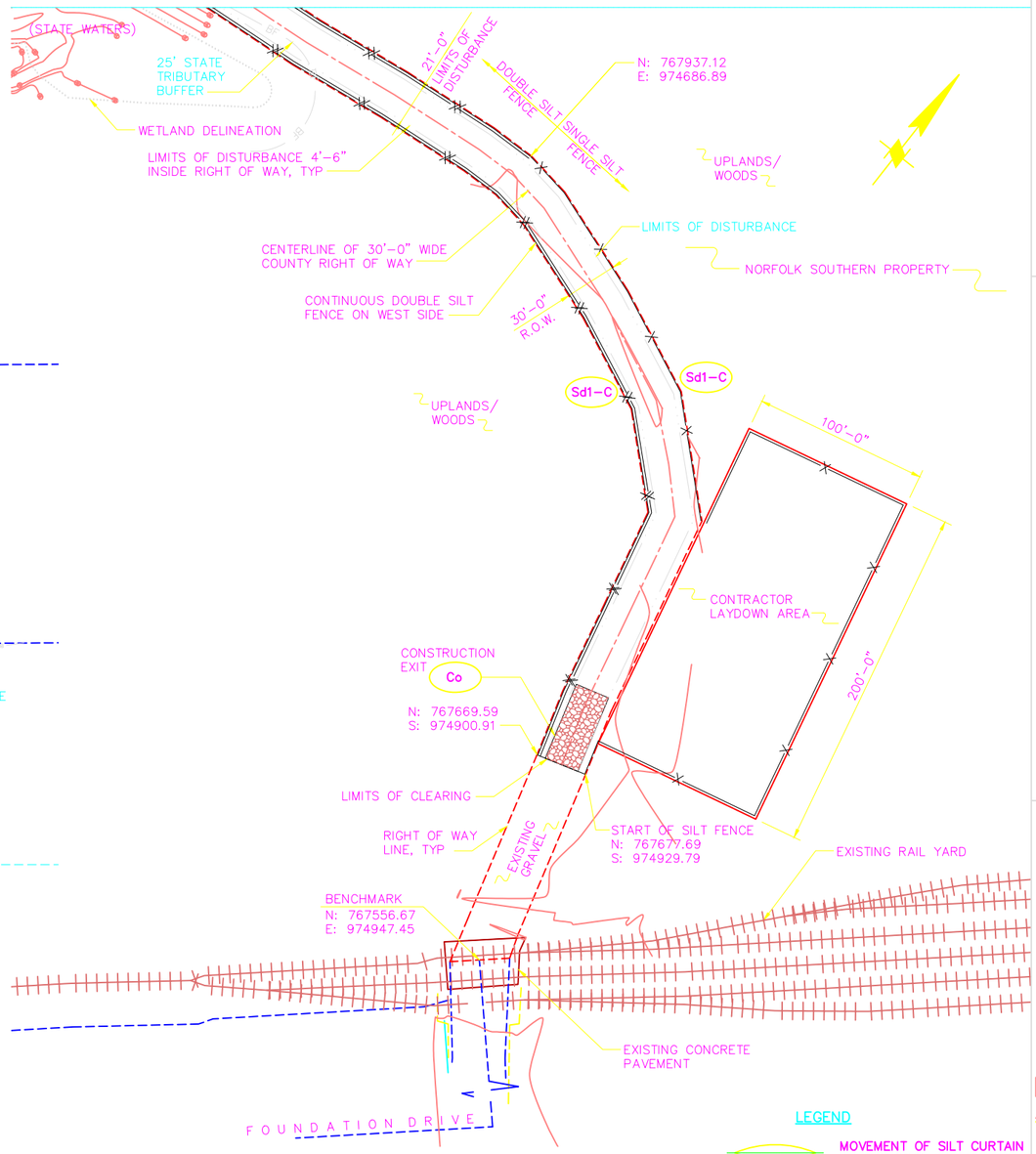


NOTES:

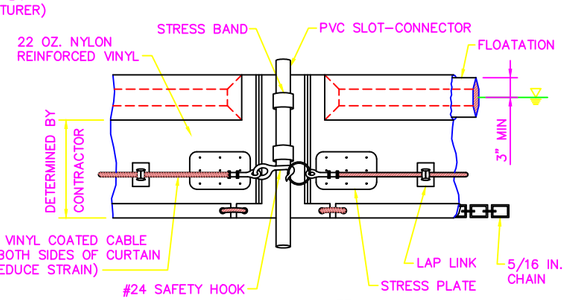
1. ANCHORING WITH BUOYS, AS SHOWN, REMOVES ALL VERTICAL FORCES FROM THE CURTAIN. HENCE, THE CURTAIN WILL NOT SINK FROM WIND OR CURRENT LOADS. FINAL CONFIGURATION AND DETAILS AS RECOMMENDED BY MANUFACTURER.
2. FIGURE IS FOR REFERENCE ONLY. TURBIDITY CURTAIN SHALL BE SUBMITTED TO CHATHAM COUNTY FOR APPROVAL.

TURBIDITY CURTAIN 3
NTS
EC4 EC3 EC3

MATCHLINE A–A



AREA 'B'
1"=40'-0"



DETAIL 4 EC3 EC3
NTS

LEGEND

- MOVEMENT OF SILT CURTAIN DUE TO WIND OR CURRENT
- LIMITS OF DISTURBANCE
- RIGHT OF WAY
- WETLAND DELINEATION
- STATE TRIBUTARY BUFFER
- Sd1-C
- 8 EXISTING CONTOURS

1"=0" 0"=0" 1"=0" 2"=0"
SCALE: 1"=1'-0"
20' 0' 20' 40'
SCALE: 1"=20'
40' 0' 40' 80'
SCALE: 1"=40'

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

PHASE 1–CLEARING & GRUBBING
SITE PLAN

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

DSGN	DR	CHKD	QA
GRANEY	CISCO	J. E. THOMAS	THOMAS

JOB NO. 5701
TITLE PM

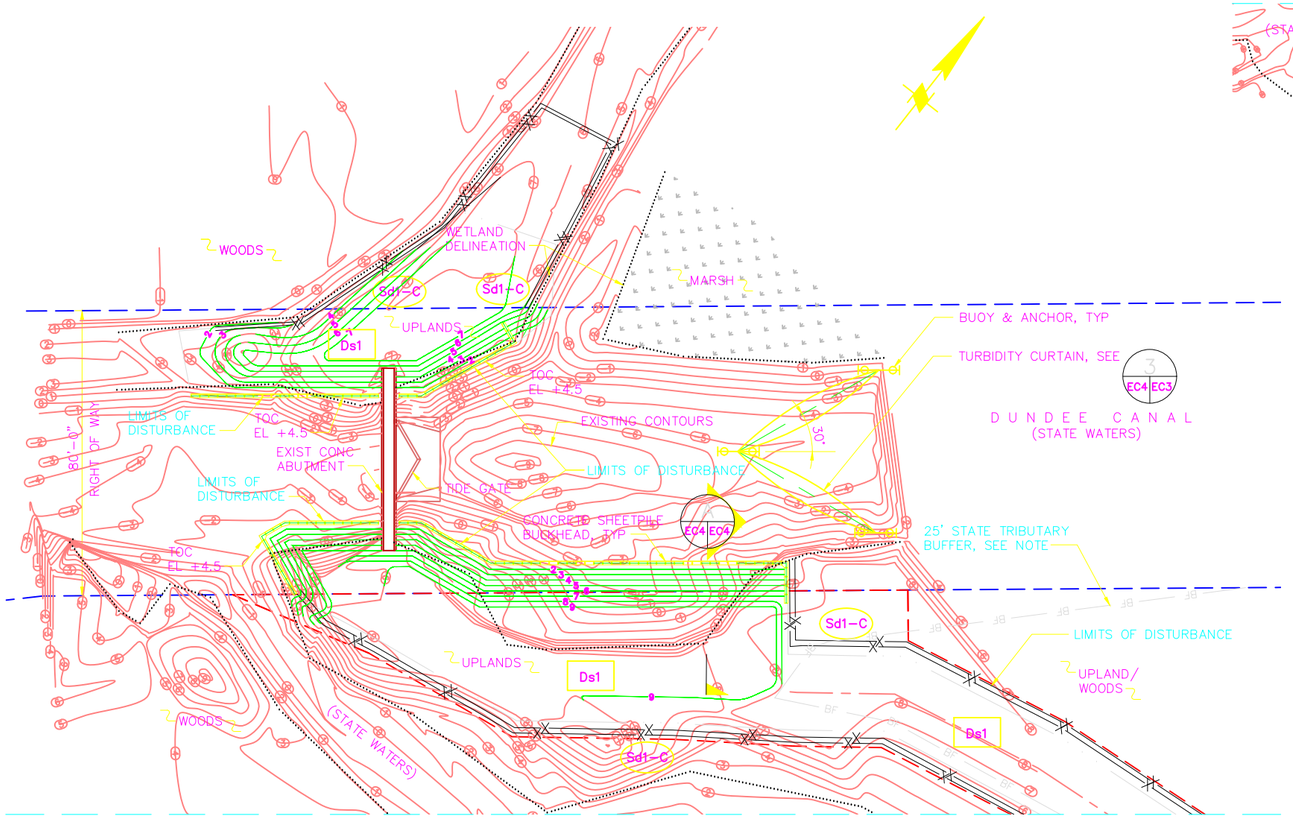
GEORGIA REGISTERED No. 028043 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

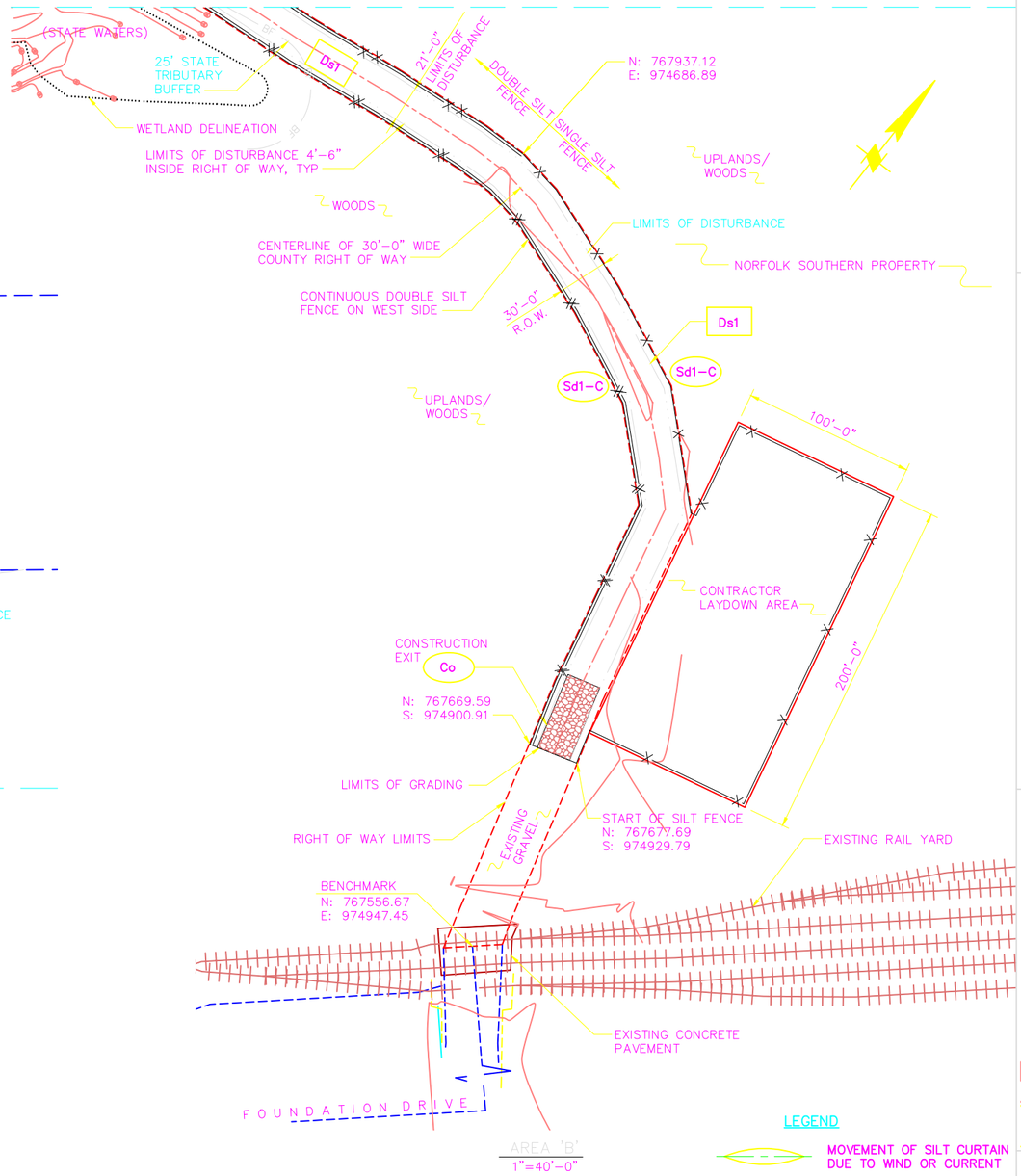
DATE OCTOBER 2007

SHEET 6 OF 22

EC2

RECORD DRAWINGS



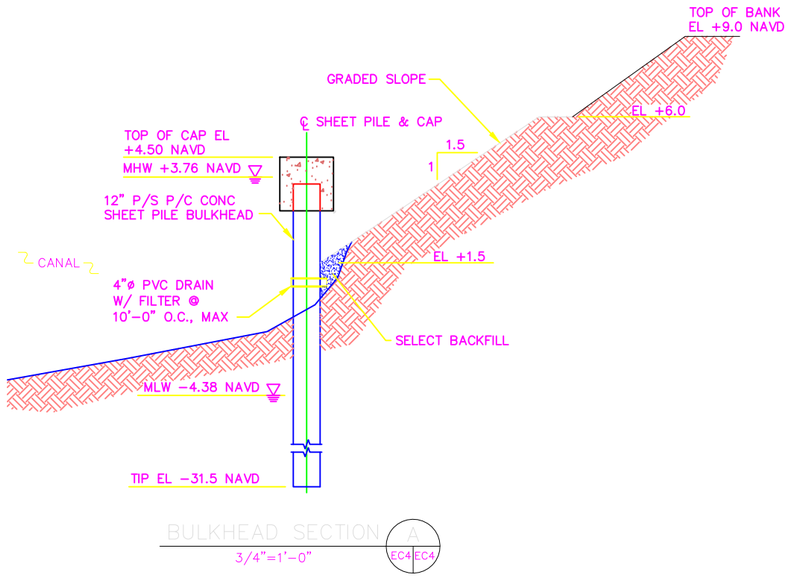


AREA 'A'
1"=20'-0"

NOTE:

DUE TO LIMITED UPLAND AREA AROUND THE CANAL, THE MAJORITY OF THE CONSTRUCTION WILL OCCUR WITH IN THE 25 FOOT STATE TRIBUTARY BUFFER. DNR WILL BE ISSUING A STREAM BUFFER VARIANCE.

PHASE 2 - GRADING & CONSTRUCTION SITE PLAN 1 EC2 EC4



BULKHEAD SECTION A
3/4"=1'-0"
EC4 EC4

NOTES:

1. FOR TEMPORARY MULCH STABILIZATION SEE Ds1 — 2 EC4 EC2
2. ONCE THE CONCRETE SHEET PILE BULKHEAD IS IN PLACE, ANY EROSION OR RUNOFF ADJACENT TO THE TIDEGATE WILL BE CONTAINED BEHIND THE BULKHEAD.

LEGEND

- MOVEMENT OF SILT CURTAIN DUE TO WIND OR CURRENT
- LIMITS OF DISTURBANCE
- RIGHT OF WAY
- WETLAND DELINEATION
- BF — STATE TRIBUTARY BUFFER
- Sd1-C
- 8 — EXISTING CONTOURS
- 9 — PROPOSED CONTOURS

2'-0" 0'-0" 1'-0" 2'-0"
SCALE: 3/4"=1'-0"

40' 0' 40' 80'
SCALE: 1"=40'

20' 0' 20' 40'
SCALE: 1"=20'

RECORD DRAWINGS

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

PHASE 2-GRADING & CONSTRUCTION SITE PLAN

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

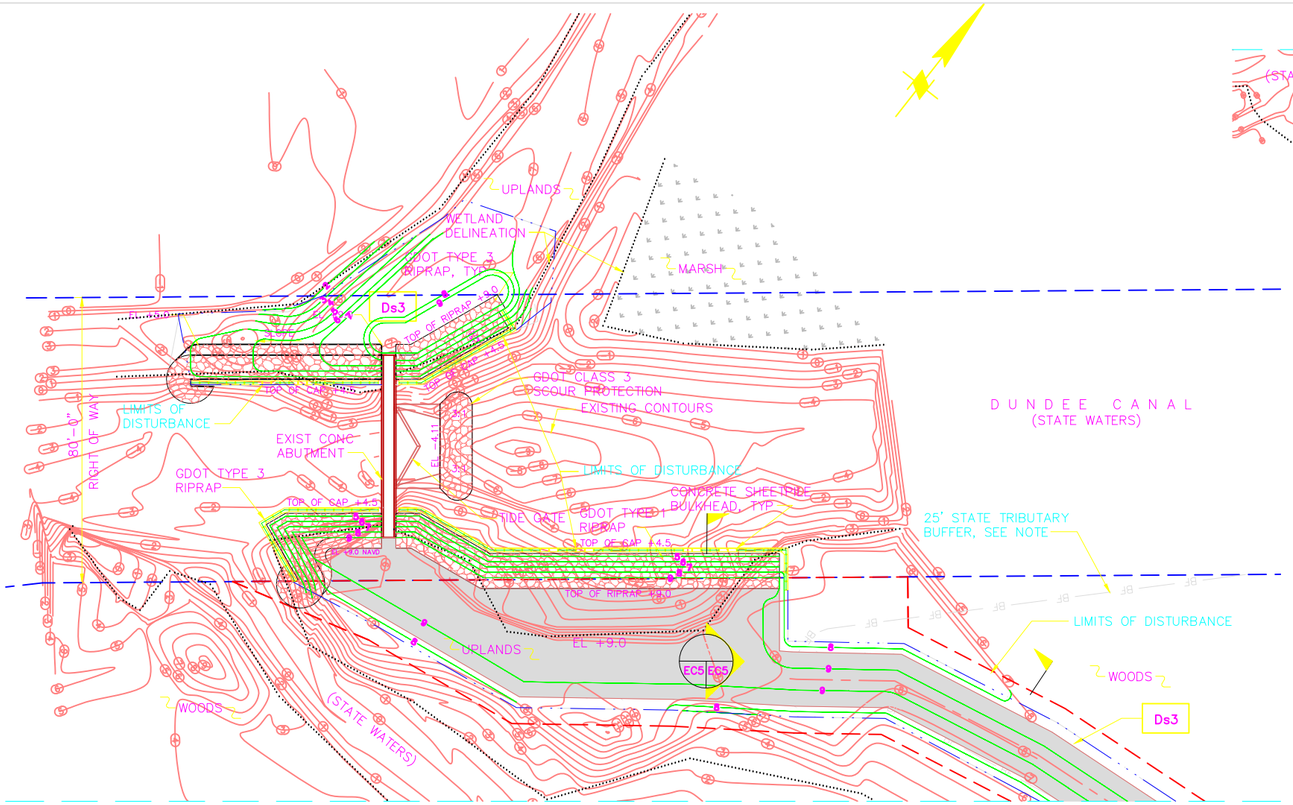
DSGN	DR	CK
GRANEY	CISCO	THOMAS
JOB NO. 5701	SUBMITTED BY J. E. THOMAS	TITLE PM

GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

DATE OCTOBER 2007

SHEET 7 OF 22

EC3



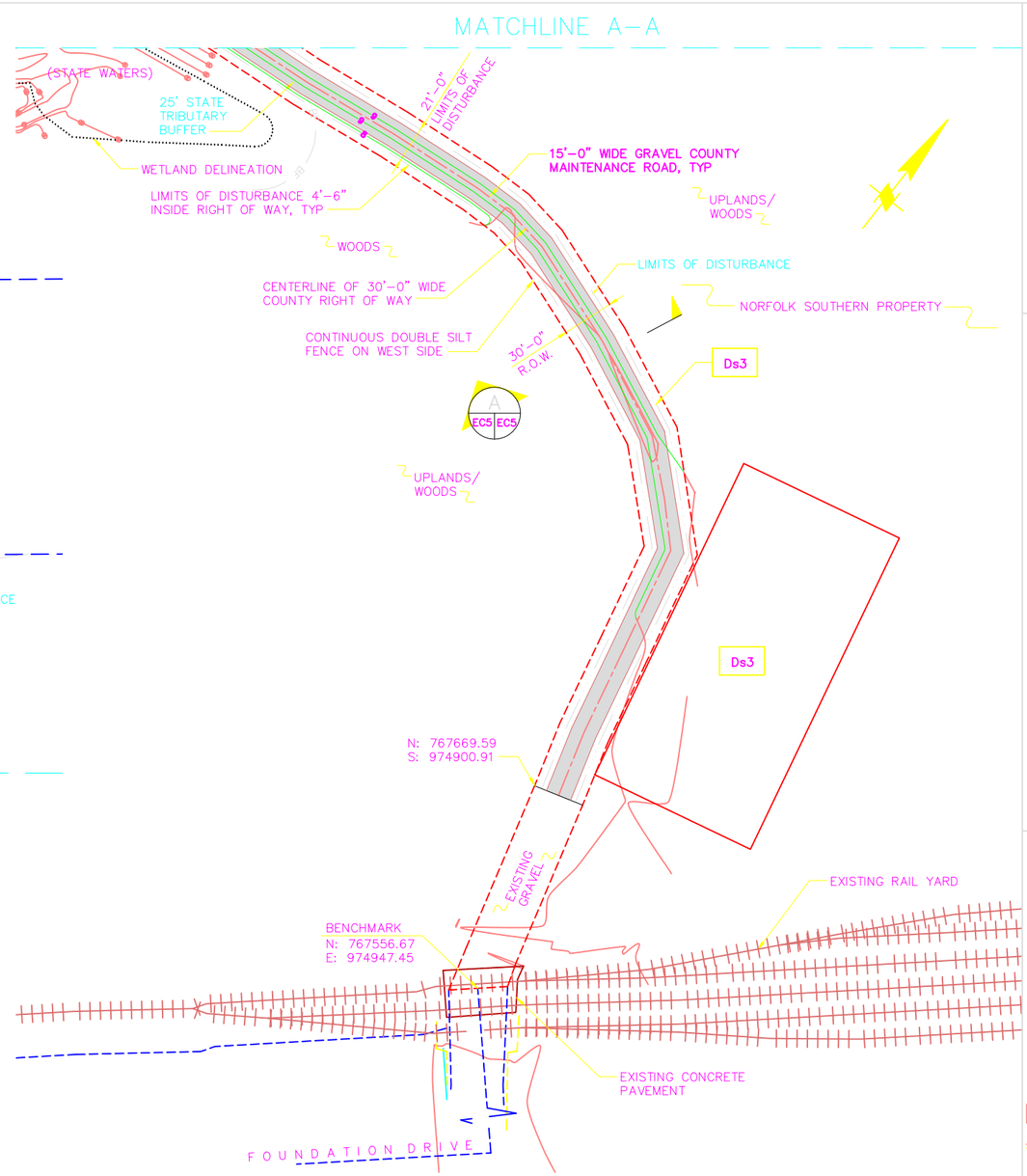
MATCHLINE A–A

NOTE:

DUE TO LIMITED UPLAND AREA AROUND THE CANAL, THE MAJORITY OF THE CONSTRUCTION WILL OCCUR WITH IN THE 25 FOOT STATE TRIBUTARY BUFFER. DNR WILL BE ISSUING A STREAM BUFFER VARIANCE.

AREA 'A'
1"=20'-0"

PHASE 3 – FINAL PHASE SITE PLAN 1
EC2 EC5



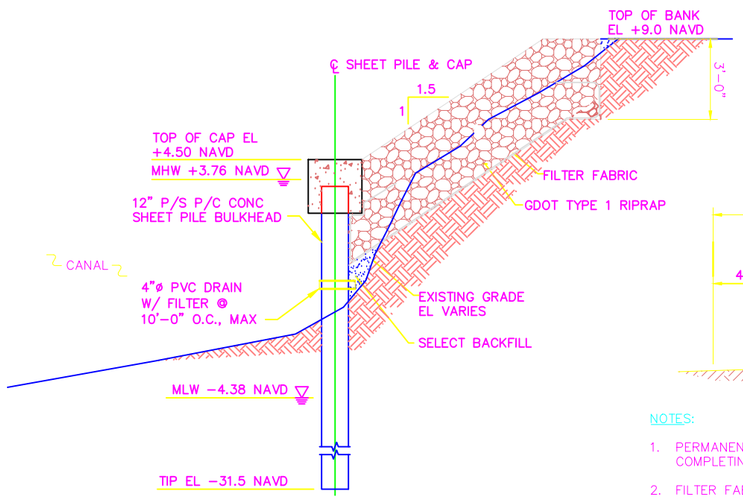
AREA 'B'
1"=40'-0"

NOTES:

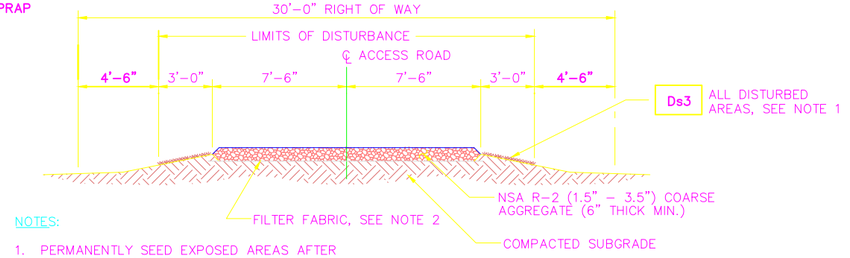
1. FOR PERMANENT SEEDING STABILIZATION SEE Ds3
   EC5 EC2

LEGEND

- LIMITS OF DISTURBANCE
- RIGHT OF WAY
- WETLAND DELINEATION
- BF — STATE TRIBUTARY BUFFER
- MAINTENANCE ACCESS ROAD
- 8 — EXISTING CONTOURS
- 8 — PROPOSED CONTOURS



BULKHEAD SECTION B
3/8"=1'-0"
EC5 EC5



NOTES:

1. PERMANENTLY SEED EXPOSED AREAS AFTER COMPLETING MAINTENANCE ROAD.
2. FILTER FABRIC SHALL EXTEND 6 INCHES BEYOND GRAVEL BOTH SIDES.

SECTION A
1/4" = 1'-0"
EC5 EC5

20' 0' 20' 40'
SCALE: 1"=20'

4'-0" 0'-0" 4'-0" 8'-0"
SCALE: 1/4"=1'-0"

40' 0' 40' 80'
SCALE: 1"=40'

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

PHASE 3–FINAL PHASE
SITE PLAN

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

DSGN	GRANEY	JOB NO.	5701
DR	CISCO	DESIGNED BY	J. E. THOMAS
CHK	THOMAS	TITLE	PM

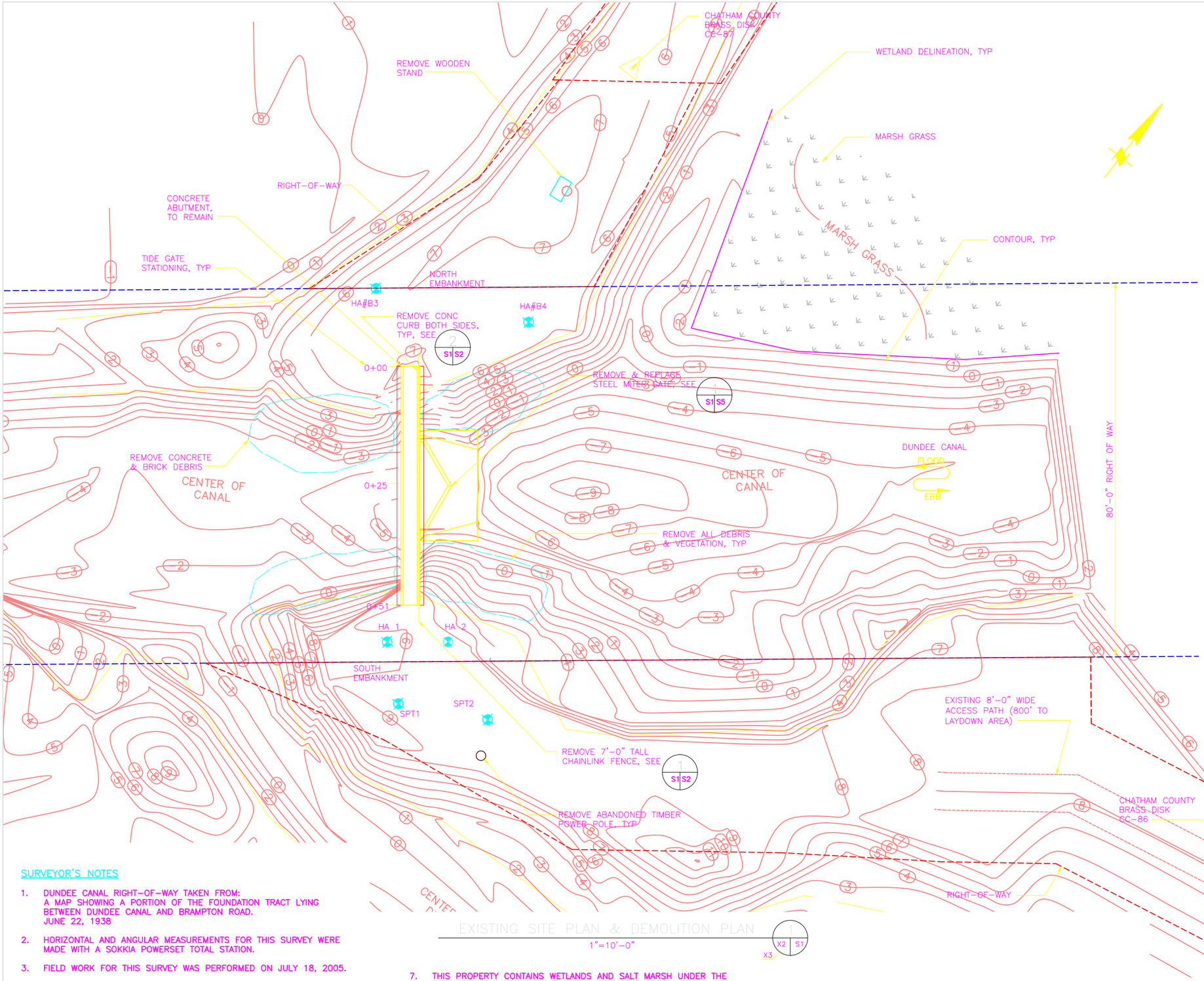
GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

DATE OCTOBER 2007

SHEET 8 OF 22

EC4

RECORD DRAWINGS



EXISTING SITE PLAN & DEMOLITION PLAN
1"=10'-0"

HORIZONTAL AND VERTICAL CONTROL TABLE FOR CHATHAM COUNTY MONUMENTS AND AZIMUTH MARKERS SET

PROJECT DETAILS:
COORDINATE SYSTEM: US STATE PLANE 1983
ZONE: GEORGIA EAST 1001
VERTICAL DATUM: NAVD 1988

DISK CC-86		
N:767909.33	E:974483.97	ELEV: 8.11'
RBS #8 (AZIMUTH MARKER)		
N:767888.01	E:974403.23	ELEV: 8.49'
DISK CC-87		
N:767959.36	E:974272.44	ELEV: 6.64'
RBS #9 (AZIMUTH MARKER)		
N:767825.99	E:974315.79	ELEV: 8.86'
RBS #10 (AZIMUTH MARKER)		
N:767892.99	E:974263.90	ELEV: 6.78'

SURVEYOR'S NOTES

1. DUNDEE CANAL RIGHT-OF-WAY TAKEN FROM: A MAP SHOWING A PORTION OF THE FOUNDATION TRACT LYING BETWEEN DUNDEE CANAL AND BRAMPTON ROAD. JUNE 22, 1938
2. HORIZONTAL AND ANGULAR MEASUREMENTS FOR THIS SURVEY WERE MADE WITH A SOKKIA POWERSET TOTAL STATION.
3. FIELD WORK FOR THIS SURVEY WAS PERFORMED ON JULY 18, 2005.
4. THE BASIS FOR COORDINATES AND BEARINGS ON THIS SURVEY ARE BASED ON NAD 1983, GEORGIA EAST ZONE 1001. VERTICAL DATUM IS BASED ON NAVD 88.
5. ALL MONUMENTS SET IN CONCRETE AND POLYVINYL CHLORIDE PIPE. ALL REBARS SET AS AZIMUTH MARKERS ARE 1/2" DIAMETER WITH CAPS.
6. WETLAND LIMITS DELINEATED BY ENVIRONMENTAL SERVICES, INC., JULY, 2005.
7. THIS PROPERTY CONTAINS WETLANDS AND SALT MARSH UNDER THE JURISDICTION OF THE U.S. ARMY CORPS OF ENGINEERS AND THE GEORGIA DEPARTMENT OF NATURAL RESOURCES. DISTURBANCE TO THESE WETLAND AREAS WITHOUT PROPER AUTHORIZATION MAY RESULT IN PENALTY BY LAW.
8. THIS PROPERTY LIES WITHIN A 100 YEAR FLOOD PLAIN ZONE AE (ELEV. 12) PER FIRM PANEL NUMBER 130030 0040 C, REVISION DATE: MAY 19, 1987.
9. GDOT DISKS (GEORGIA DEPARTMENT OF TRANSPORTATION) USED AS HORIZONTAL CONTROL ONLY.

LEGEND

- = BORING OR HAND AUGER HOLE
- SPT1 HA1 = BORING OR HAND AUGER HOLE DESIGNATION
- PP ABND = POWER POLE ABANDONED
- (-5-) = CONTOUR ELEVATION
- = WETLAND LINE
- = CHATHAM COUNTY CONTROL MONUMENT SET

10' 0' 10' 20'
SCALE: 1"=10'

RECORD DRAWINGS

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

EXISTING SITE PLAN & DEMOLITION PLAN

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

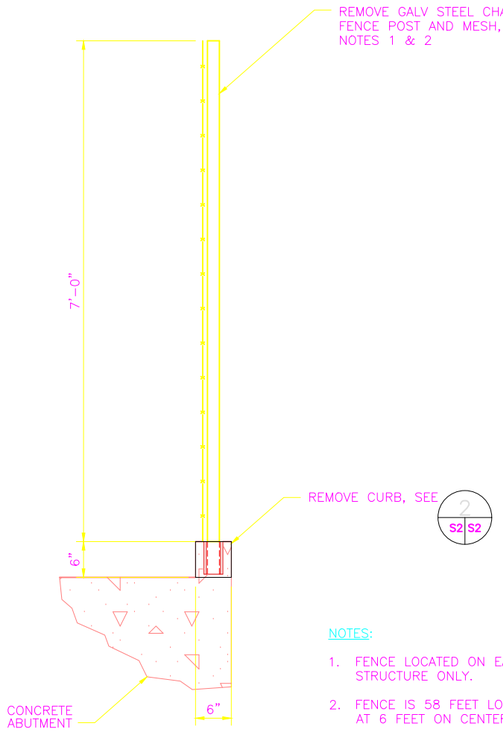
DSN	GRANEY	CHK	THOMAS
DR	CARLON	TITLE	PM
JOB NO.	5701	SUBMITTED BY	J. E. THOMAS

GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

DATE OCTOBER 2007

SHEET 9 OF 22

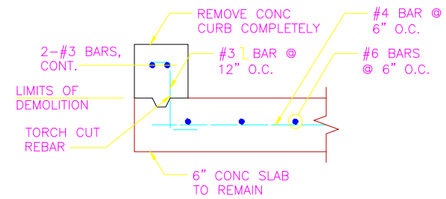
S1



NOTES:

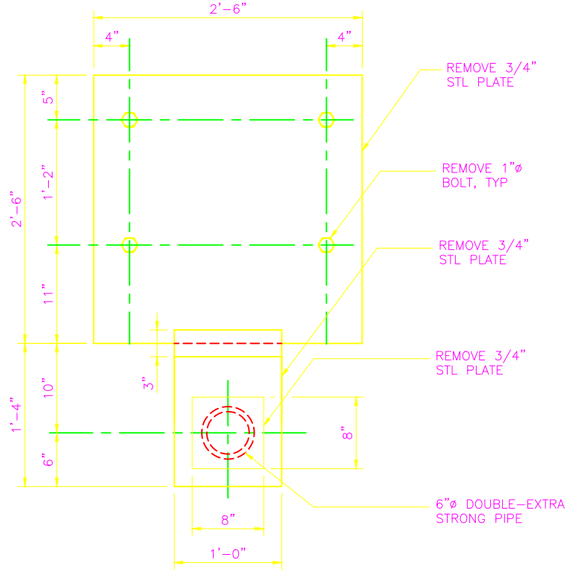
1. FENCE LOCATED ON EAST SIDE OF TIDEGATE STRUCTURE ONLY.
2. FENCE IS 58 FEET LONG WITH POSTS SPACED AT 6 FEET ON CENTER.

FENCE DEMOLITION 1
1" = 1'-0"
S1 S2



NOTE: UPSTREAM SIDE SHOWN. DOWNSTREAM SIDE OPPOSITE HAND.

CURB DEMOLITION 2
1 1/2" = 1'-0"
S1 S2
S2



TIDE GATE HINGE PLATE DEMOLITION 3
1 1/2" = 1'-0"
S5 S2

1'-0" 0'-0" 1'-0" 2'-0"
SCALE: 1"=1'-0"

1'-0" 0'-0" 6" 1'-0"
SCALE: 1 1/2"=1'-0"

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

DEMOLITION DETAILS

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

DSGN	GRANEY	JOB NO.	5701
DR	CARLON	DRAWING NO.	J. E. THOMAS
CHK	THOMAS	TITLE	PM

GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

DATE OCTOBER 2007

SHEET 10 OF 22

S2

RECORD DRAWINGS

TIDE GATE STATIONING, TYP
NORTH END TRANSITION, SEE 1 S3 S14
CONCRETE ABUTMENT
BENCHMARK #2 "X" SCRIBED IN CONC HEADWALL ELEV = 4.47 NAVD88 N 767877.581 E 974282.923 GA STATE PLAN EAST ZONE
RIGHT-OF-WAY
CHATHAM COUNTY BRASS DISK CC-87
BENCHMARK #1 "X" SCRIBED IN CONC HEADWALL ELEV = 4.45 NAVD88 N 767870.865 E 974274.578 GA STATE PLAN EAST ZONE
GDOT TYPE 3 RIP RAP
2'-0" WIDE CONC CAP, TYP
WETLAND DELINEATION, TYP
MARSH GRASS
MARSH GRASS
GDOT TYPE 3 RIP RAP
WP#10
WP#9
℄ NEW P/S P/C CSP WALL, TYP
FOR SHEET PILE PLAN, SEE 1 S3 S8
WP#8
WP#1
WP#4
WP#7
STEEL MITER GATE TO BE REMOVED & REPLACED IN KIND, SEE 1 S3 S5
FOR SHEET PILE PLAN, SEE 1 S3 S4
WEST SIDE STATIONING
1 S3 S7
80'-0" EXISTING RIGHT OF WAY
CENTER OF CANAL
GDOT TYPE 1 RIP RAP
℄ TIDE GATE
CENTER OF CANAL
FINAL GRADE, TYP
EAST SIDE STATIONING
FLOOD
EBB
DUNDEE CANAL
EMBANKMENT STATIONING, TYP
FOR SHEET PILE PLAN, SEE 1 S3 S7
NEW HANDRAIL BOTH SIDES, TYP
GDOT TYPE 3 RIP RAP
WP#4
WP#5
WP#11
WP#12
WP#13
WP#6
WP#3
GDOT TYPE 1 RIP RAP
FOR SHEET PILE PLAN, SEE 1 S3 S8
WP#14
WP#15
SOUTH END TRANSITION, SEE 2 S3 S14
MANATEE INFORMATIONAL DISPLAY SIGN. SEE NOTE 2.
27'-0"
MAINTENANCE/CONSTRUCTION ACCESS ROAD, SEE SHEET X4
RIGHT-OF-WAY
20'-0"

NEW SITE PLAN 1 S3
1" = 10'-0"

NOTES:
1. FOR NEW CONCRETE CURB, SEE 3 S3 S14
2. CONTRACTOR SHALL INSTALL SIGN IN ACCORDANCE WITH SPECIAL PROVISIONS. SEE SPECIFICATIONS.

10' 0' 10' 20'
SCALE: 1"=10'

RECORD DRAWINGS

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

NEW SITE PLAN

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

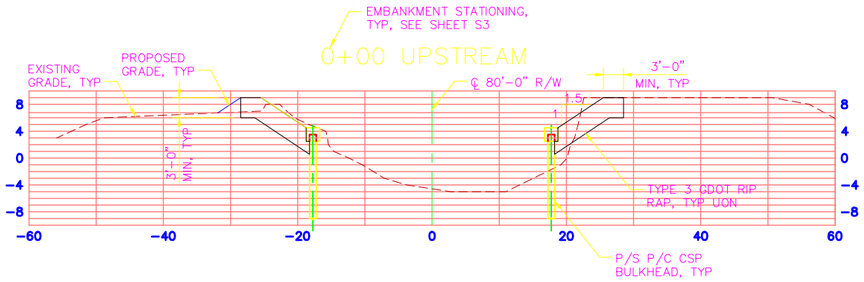
DSGN	CISCO	DRN	THOMAS
CHK	CISCO	SUBMITTED BY:	J. E. THOMAS
JOB NO.	5701	TITLE:	PM

GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

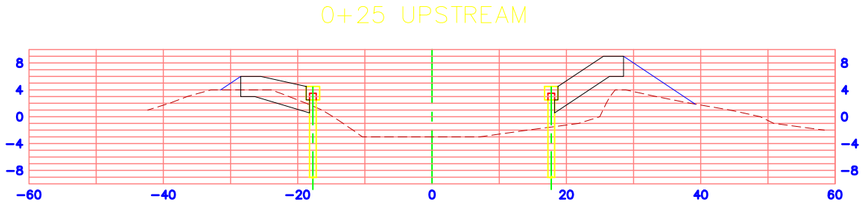
DATE OCTOBER 2007

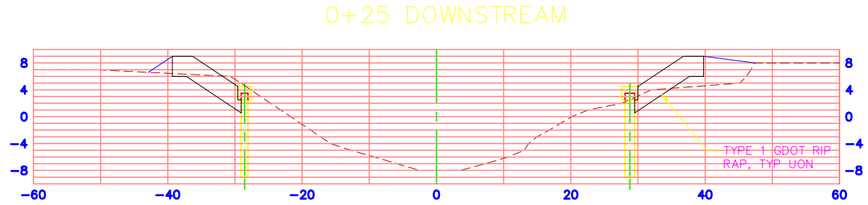
SHEET 11 OF 22

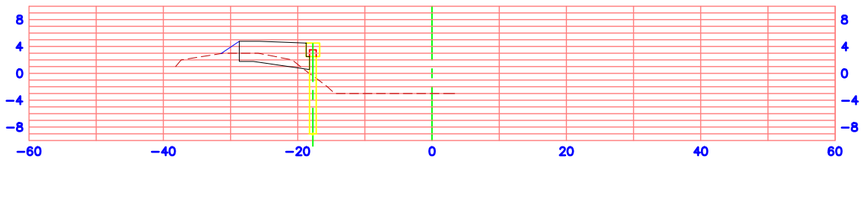
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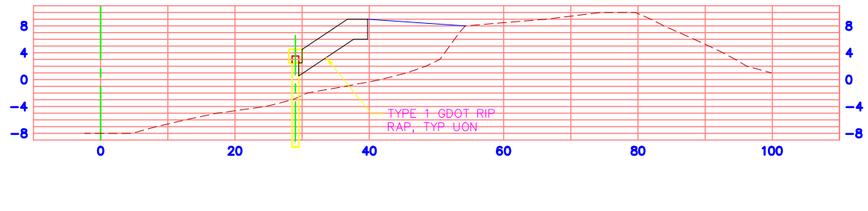


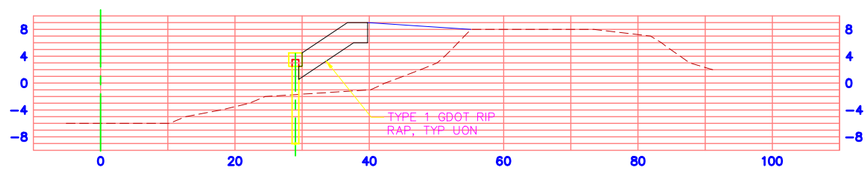


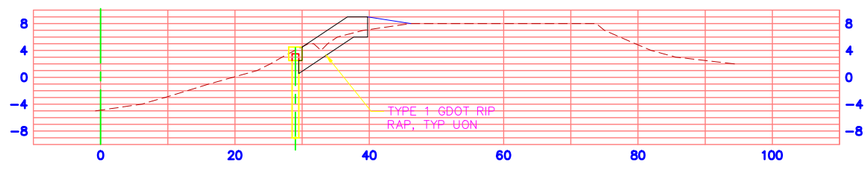


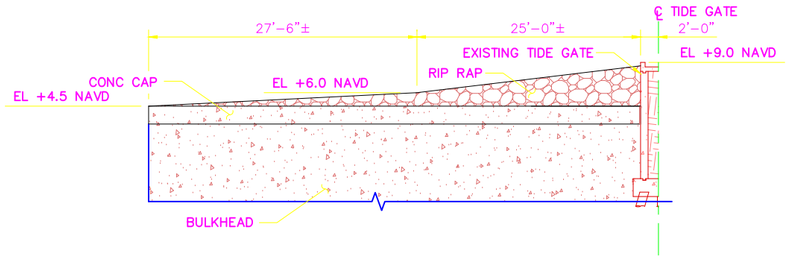












NOTE: ALL RIP RAP GDOT TYPE 3, UON.

10' 0' 10' 20'
SCALE: 1"=10'

RECORD DRAWINGS

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

CROSS SECTIONS

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

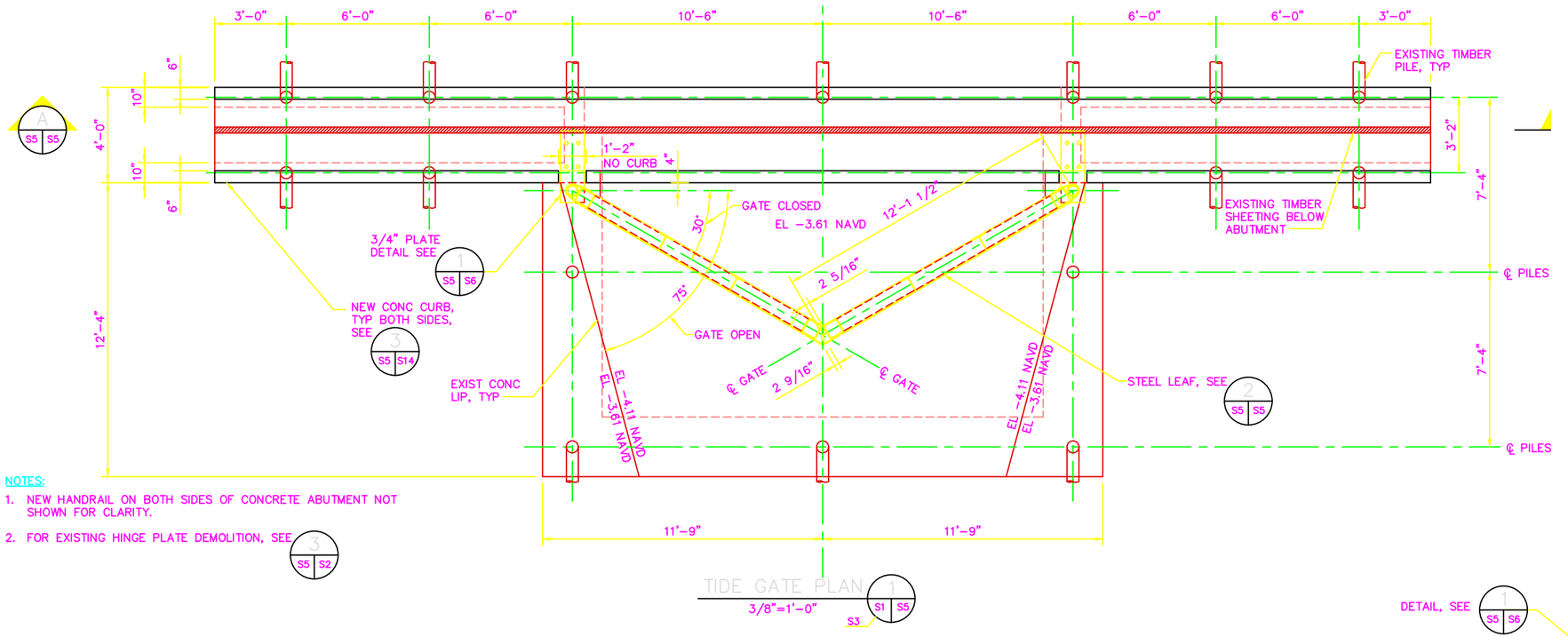
DSGN	CISCO	CHK	THOMAS
DR	CISCO	SUPVSD BY	J. E. THOMAS
JOB NO.	5701	TITLE	PM

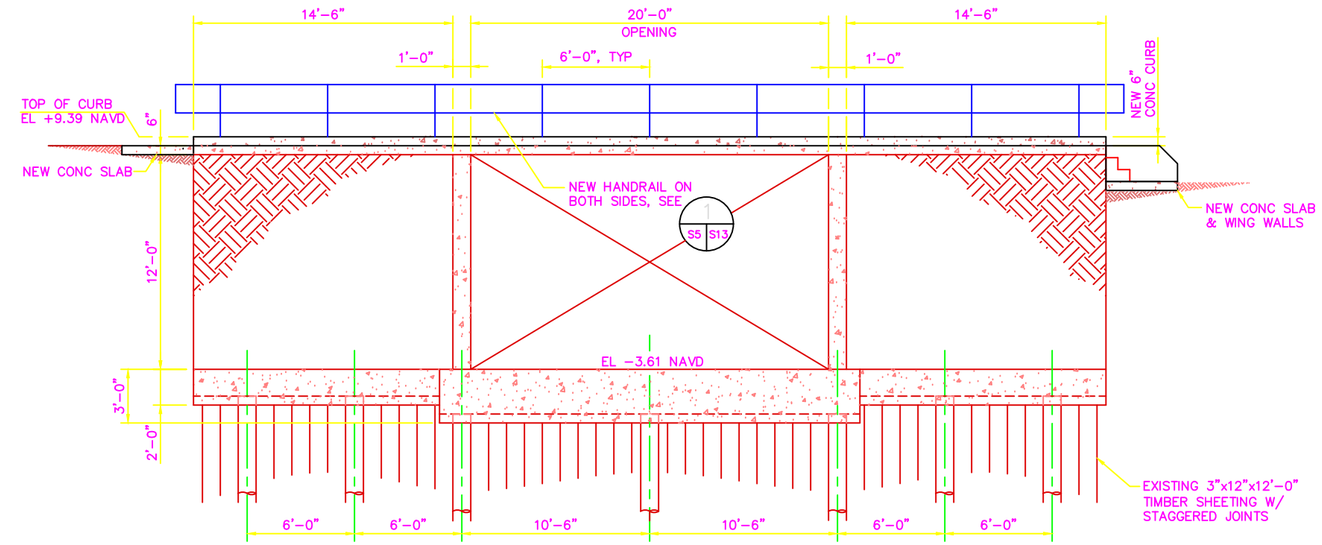
GEORGIA
REGISTERED
No. 028943
PROFESSIONAL
ENGINEER
JONATHAN E. THOMAS

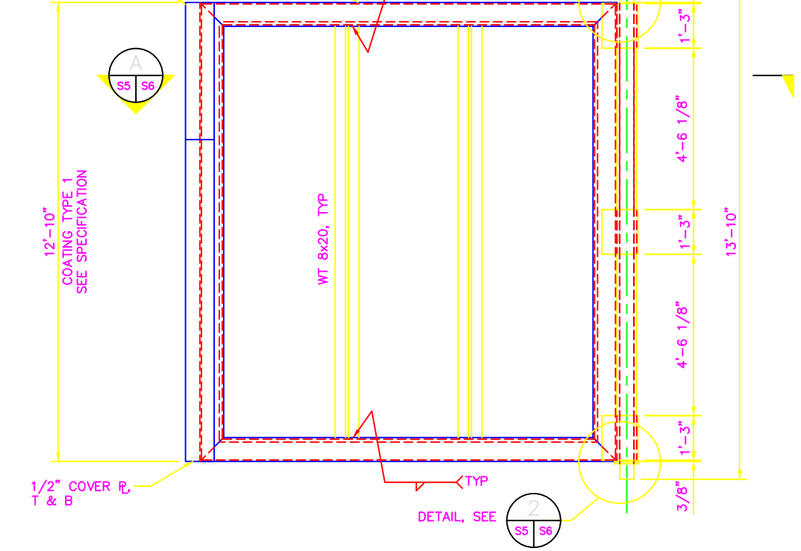
DATE OCTOBER 2007

SHEET 12 OF 22

S4







4'-0" 0'-0" 2'-0" 4'-0"
SCALE: 3/8"=1'-0"

4'-0" 0'-0" 4'-0" 8'-0"
SCALE: 1/4"=1'-0"

2'-0" 0'-0" 2'-0" 4'-0"
SCALE: 1/2"=1'-0"

SECTION A S5 S5
1/4"=1'-0"

STEEL LEAF DETAIL 2 S5 S5
1/2"=1'-0"

MITER GATE NOTES:

1. ALL STRUCTURAL WELDING SHALL CONFORM TO AWS D1.1.
2. FABRICATOR SHALL PROVIDE ALL WELDING PROCEDURES FOR APPROVAL.
3. DETAILED SHOP DRAWINGS SHALL BE PROVIDED BY FABRICATOR FOR DETAILS NOT SHOWN IN THESE PLANS, TO INCLUDE ALL WELDING.
4. ALL WELDS SHALL BE SUBJECT TO 100% VISUAL AND MAGNETIC PARTICLE INSPECTION.

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

TIDEGATE PLAN & ELEVATION

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

DSN	GRANEY	JOB NO.	5701
DR	CISCO	SUBMITTED BY	J. E. THOMAS
CHK	THOMAS	TITLE	PM

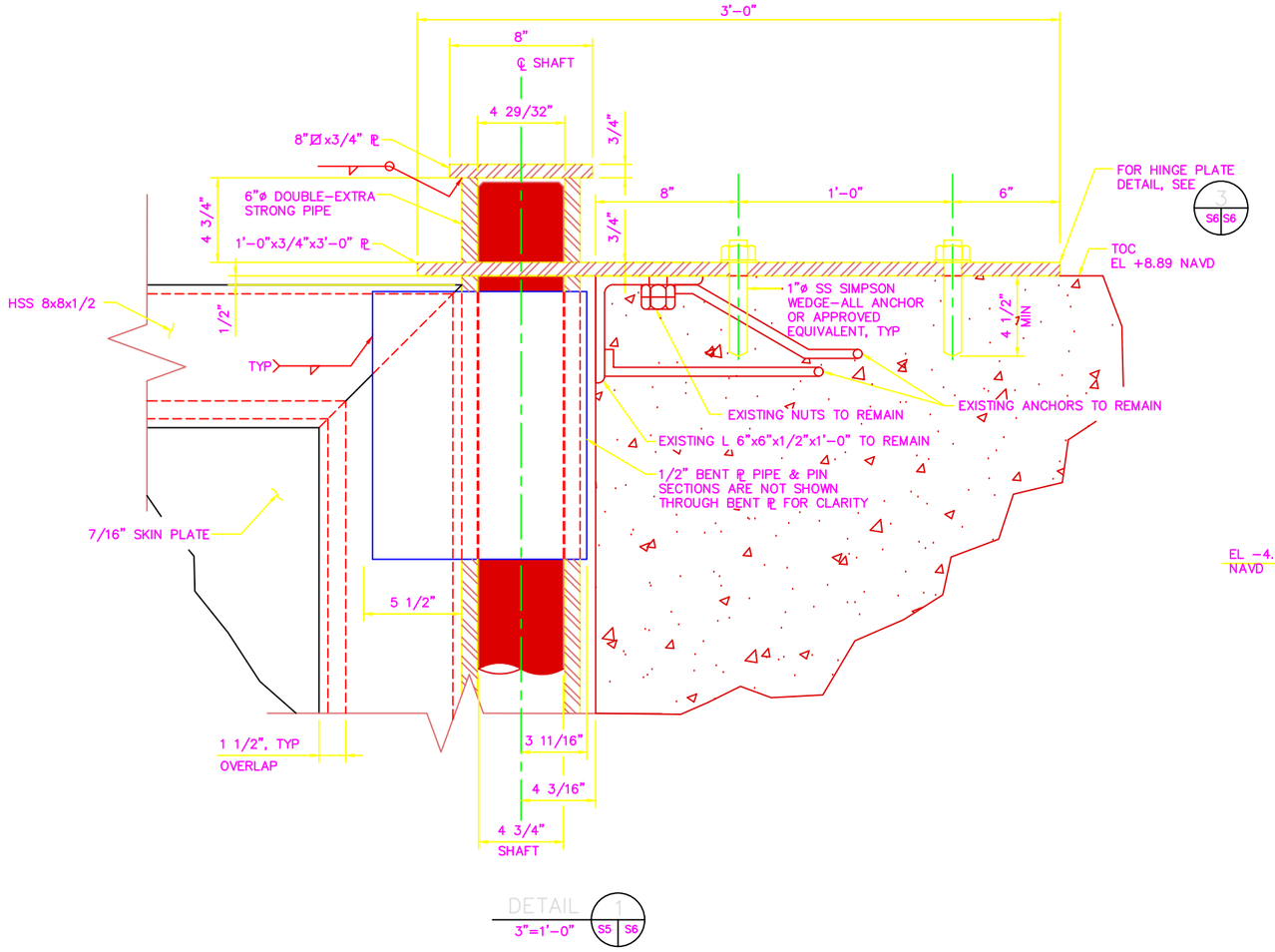
GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

DATE OCTOBER 2007

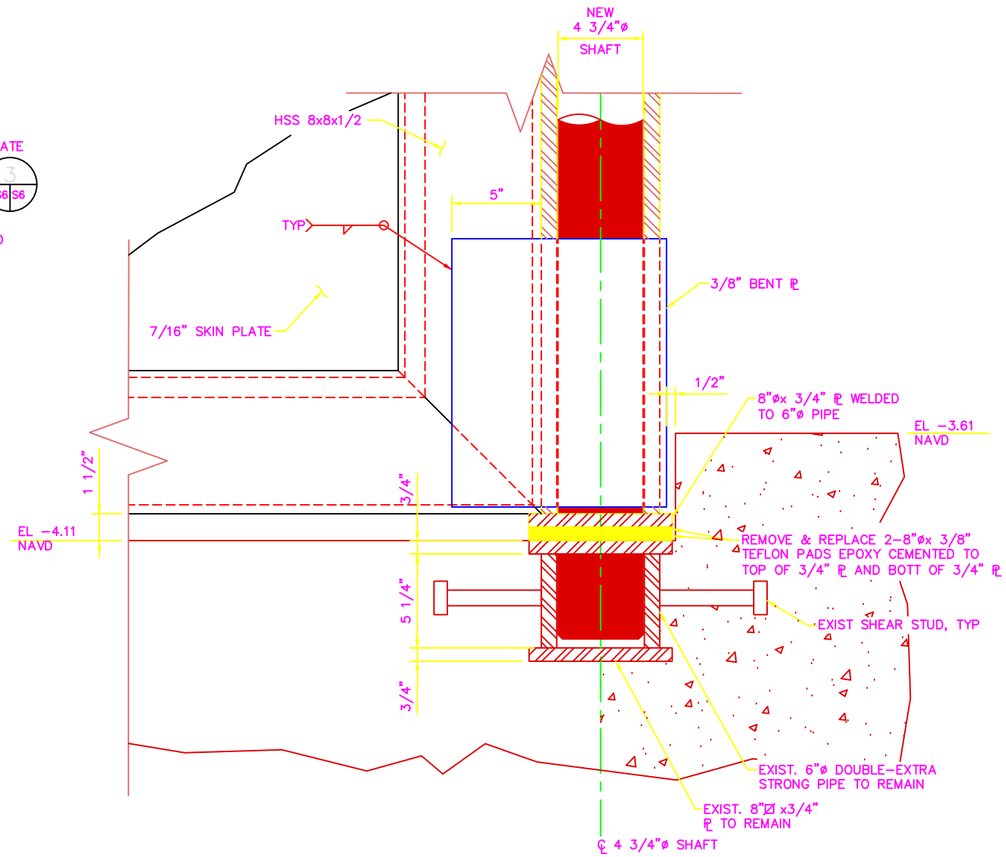
SHEET 13 OF 22

S5

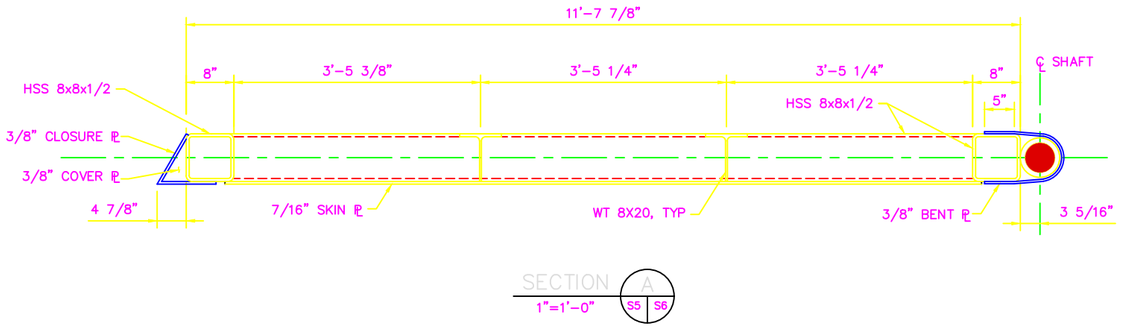
RECORD DRAWINGS



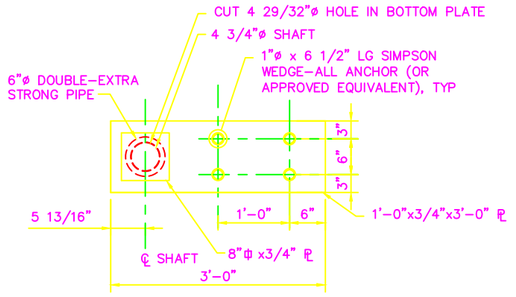
DETAIL 1
3"=1'-0" S5 S6



DETAIL 2
3"=1'-0" S5 S6



SECTION A
1"=1'-0" S5 S6



DETAIL 3
1"=1'-0" S6 S6

1'-0" 0'-0" 1'-0" 2'-0"
SCALE: 1"=1'-0"

6" 0'-0" 3" 6"
SCALE: 3"=1'-0"

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

TIDEGATE DETAILS

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

DSGN	DR	CHK
CARLON	CISCO	THOMAS
JOB NO. 5701	SIGNED BY J. E. THOMAS	TITLE PM

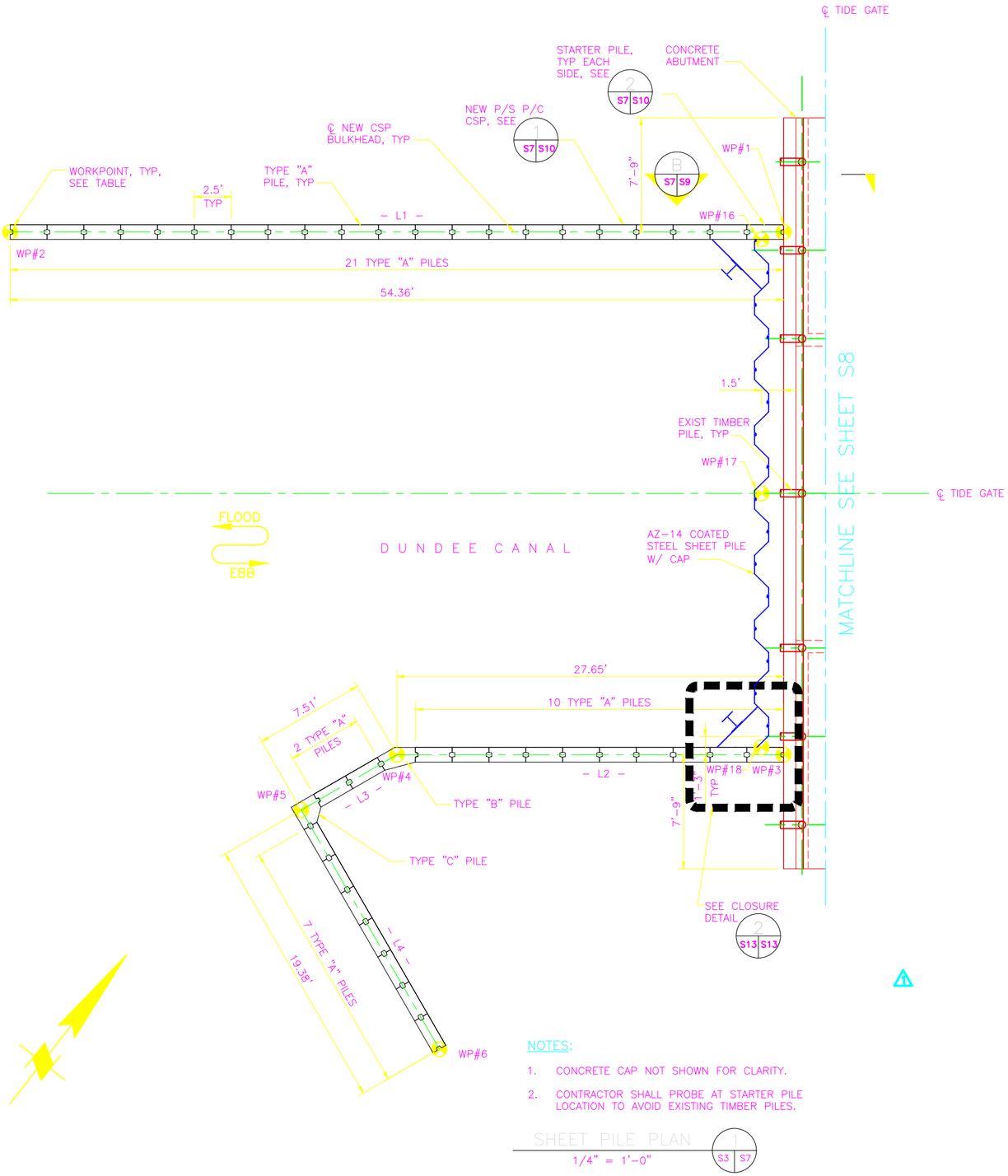
GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

DATE OCTOBER 2007

SHEET 14 OF 22

S6

RECORD DRAWINGS



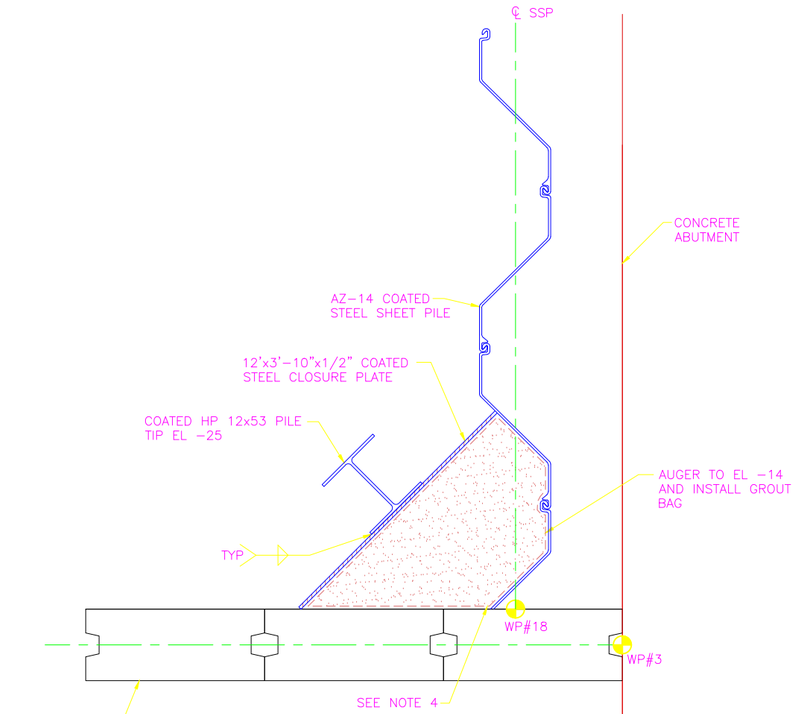
WORKPOINT LOCATION		
DESIGNATION	NORTHING	EASTING
WP#1	767872.35	974276.99
WP#2	767839.96	974235.67
WP#3	767844.42	974298.89
WP#4	767828.23	974278.23
WP#5	767821.27	974275.43
WP#6	767814.27	974292.82
WP#16	767871.03	974276.11
WP#17	767857.46	974286.76
WP#18	767843.88	974297.39

LINE TABLE		
DESIGNATION	LENGTH	BEARING
L1	52'–6"	S51°54'29.0"W
L2	26'–3"	S51°54'29.0"W
L3	7'–6"	S21°54'29.0"W
L4	18'–9"	S68°05'31.0"E

NOTES:

1. CONCRETE CAP NOT SHOWN FOR CLARITY.
2. CONTRACTOR SHALL PROBE AT STARTER PILE LOCATION TO AVOID EXISTING TIMBER PILES.

SHEET PILE PLAN — 1/4" = 1'–0" (1 / S3 | S7)



NOTES:

1. CONTRACTOR TO VERIFY AND SUBMIT CLOSURE DETAIL FOR APPROVAL.
2. CLOSURE DETAIL TYPICAL FOR BOTH SIDES OF STEEL SHEET PILE WALL.
3. CLOSURE PLATE ON NORTH SIDE OF CANAL IS 12'x4'–9"x1/2".
4. CONTRACTOR TO CUT PILE SECTION WIDTH TO MATCH CONCRETE SHEET PILE.
5. CONTRACTOR TO UTILIZE 16MIL DRY THICKNESS COAL TAR EPOXY FOR COATING STEEL SURFACES; SUBMIT PRODUCT DATA FOR APPROVAL.

CLOSURE DETAIL — 1" = 1'–0" (2 / S13 | S13)

4'–0" 0'–0" 4'–0" 8'–0" SCALE: 1/4"=1'–0"

1'–0" 0'–0" 1'–0" 2'–0" SCALE: 1"=1'–0"

RECORD DRAWINGS

REVISION	DESCRIPTION	BY	DATE
2	RECORD DRAWINGS	JET	9/11/09
1	AMENDMENT NO. 1	JPB	1/27/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05–6–4

SHEET PILE PLAN
SHEET 1 OF 2

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912–231–0044

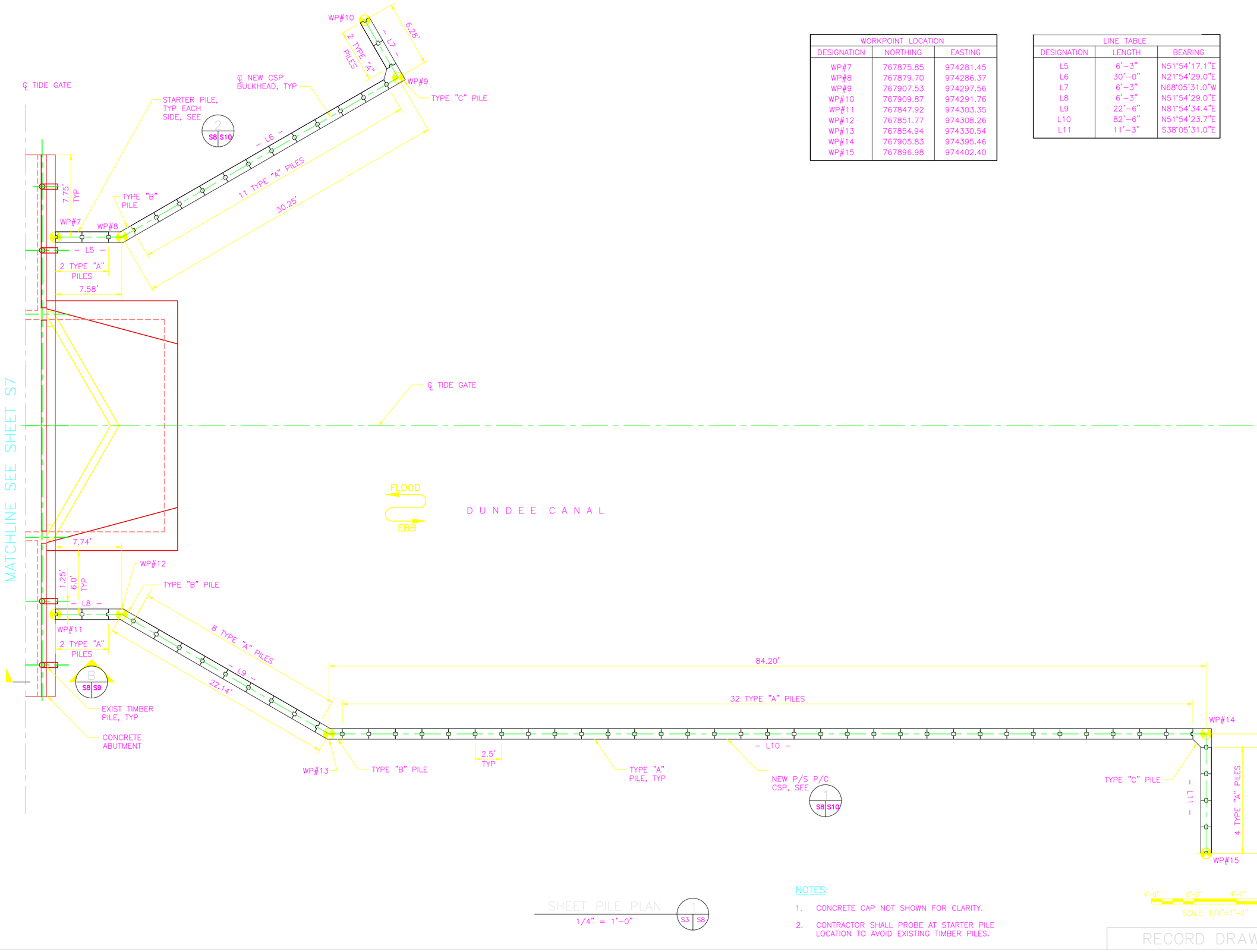
DSGN CISCO | DR CISCO | CHK THOMAS | TITLE PM
JOB NO. 5701 | SUBMITTED BY J. E. THOMAS

GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

DATE OCTOBER 2007

SHEET 15 OF 22

S7



WORKPOINT LOCATION		
DESIGNATION	NORTHING	EASTING
WP#7	767875.85	974281.45
WP#8	767879.70	974286.37
WP#9	767907.53	974297.56
WP#10	767909.87	974291.76
WP#11	767847.92	974303.35
WP#12	767851.77	974308.26
WP#13	767854.94	974330.54
WP#14	767905.83	974395.46
WP#15	767896.98	974402.40

LINE TABLE		
DESIGNATION	LENGTH	BEARING
L5	6'–3"	N51°54'17.1"E
L6	30'–0"	N21°54'29.0"E
L7	6'–3"	N68°05'31.0"W
L8	6'–3"	N51°54'29.0"E
L9	22'–6"	N81°54'34.4"E
L10	82'–6"	N51°54'23.7"E
L11	11'–3"	S38°05'31.0"E

SHEET PILE PLAN
1/4" = 1'-0"
1
S3 S8

NOTES:

1. CONCRETE CAP NOT SHOWN FOR CLARITY.
2. CONTRACTOR SHALL PROBE AT STARTER PILE LOCATION TO AVOID EXISTING TIMBER PILES.

4'-0" 0'-0" 4'-0" 8'-0"
SCALE: 1/4"=1'-0"

RECORD DRAWINGS

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

SHEET PILE PLAN
SHEET 2 OF 2

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

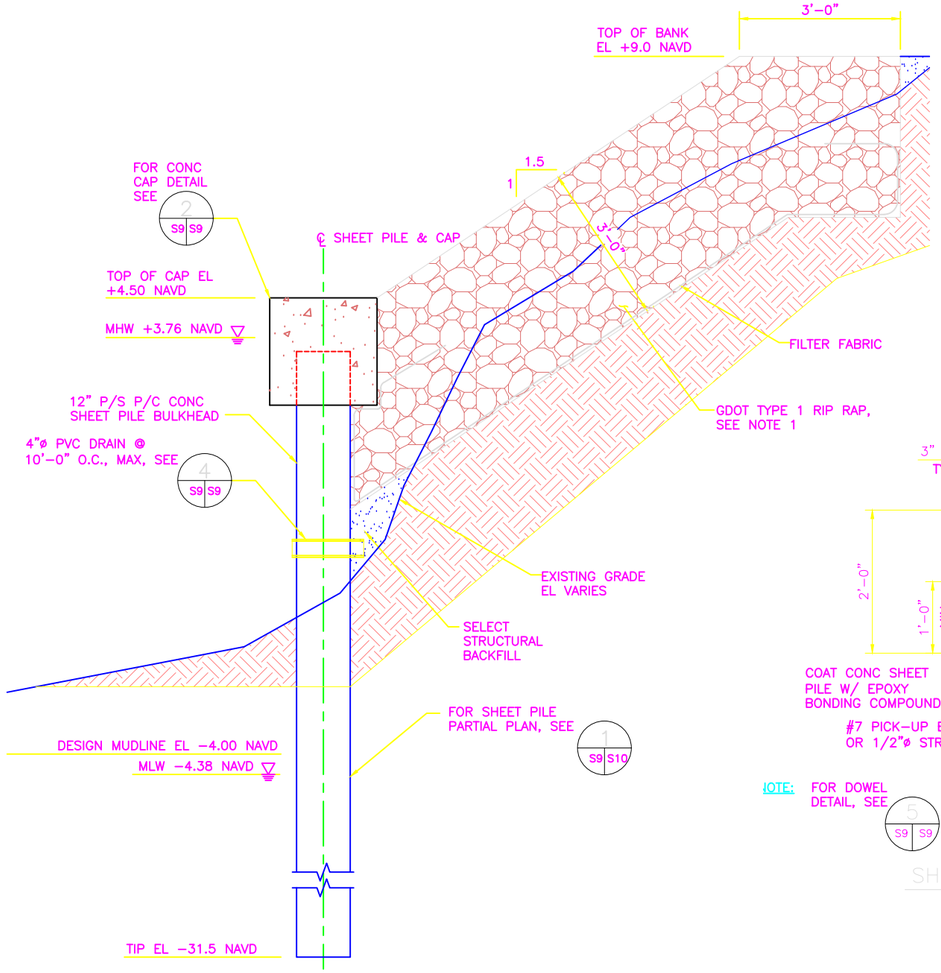
DSGN	CISCO	CHK	THOMAS
DR	CISCO	SUPVSD BY	J. E. THOMAS
JOB NO.	5701	TITLE	PM

GEORGIA
REGISTERED
No. 028943
PROFESSIONAL
ENGINEER
JONATHAN E. THOMAS

DATE OCTOBER 2007

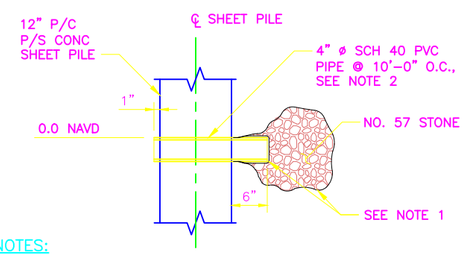
SHEET 16 OF 22

S8



NOTE: SOUTHEAST SIDE SHOWN. GDOT TYPE 3 RIP RAP ON OTHER BULKHEAD SECTIONS.

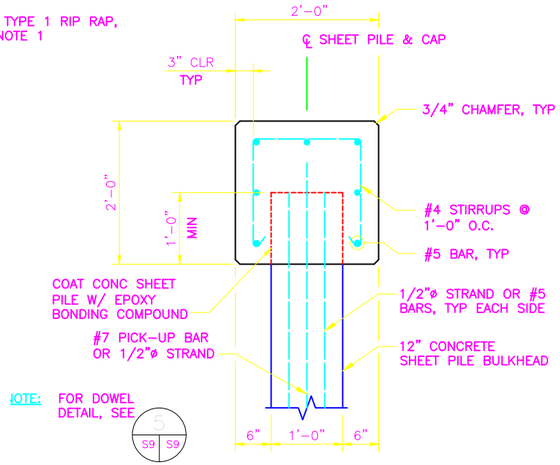
TYPICAL SECTION A
3/4"=1'-0"
S3 S9



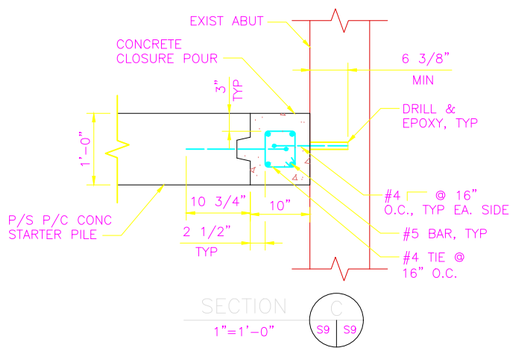
NOTES:

1. SECURELY TIE 1 CUBIC FOOT OF NO. 57 STONE IN BAG OF POROUS FABRIC. ENSURE POSITIVE CLOSURE AROUND PIPE TO PREVENT MATERIAL FROM MIGRATING OUT OF PIPE.
2. CENTER DRAIN @ ℄ OF SHEET PILE. DISPLACE P/S STRAND AS REQUIRED TO INSTALL DRAIN.

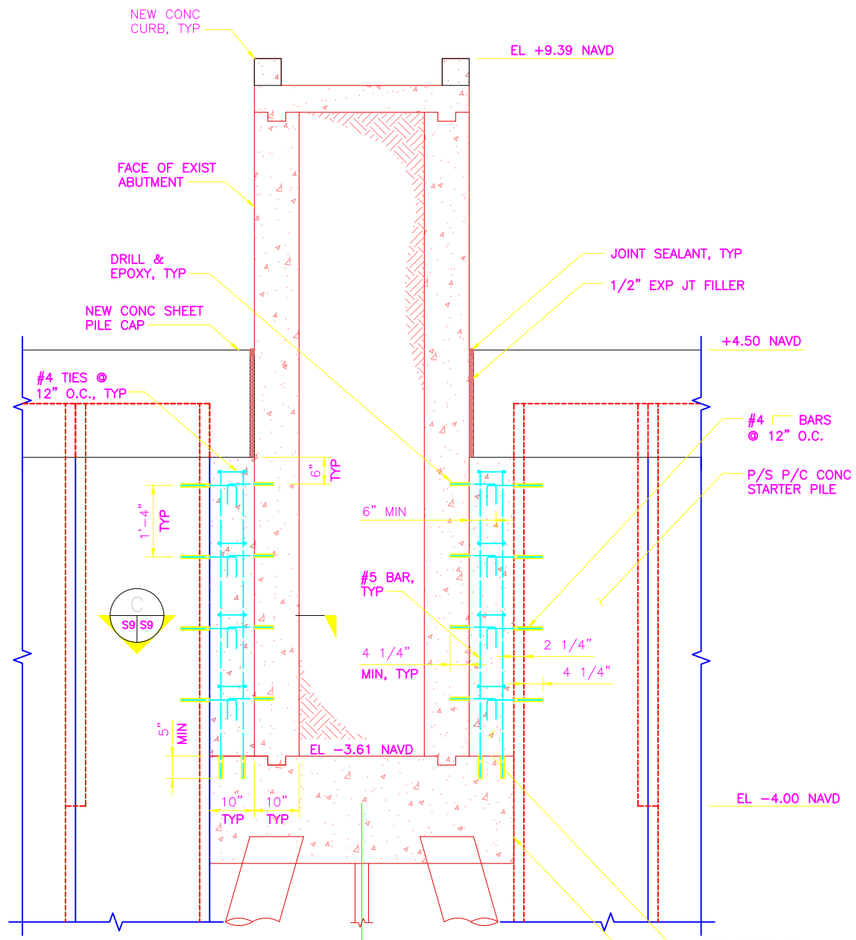
WEAPHOLE DETAIL 4
1"=1'-0"
S9 S9



SHEET PILE CAP DETAIL 2
1"=1'-0"
S9 S9

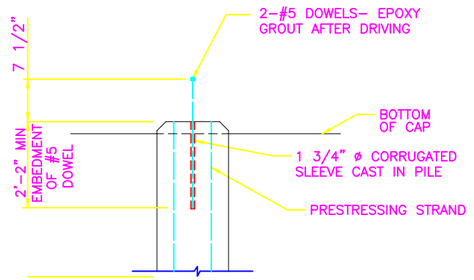


SECTION C
1"=1'-0"
S9 S9

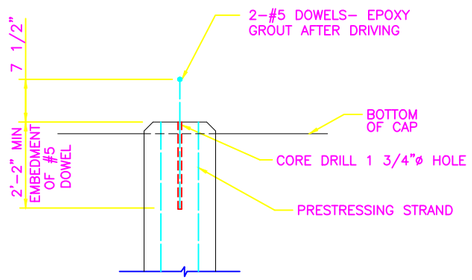


NOTE: CONTRACTOR SHALL FORM AND PROVIDE CLOSURE POUR.

SECTION B
3/4"=1'-0"
S7 S9
S8



OPTION 1
NTS



OPTION 2
NTS

DOWELS 5
NTS
S9 S9

1'-0" 0'-0" 1'-0" 2'-0"
SCALE: 1"=1'-0"

2'-0" 0'-0" 1'-0" 2'-0"
SCALE: 3/4"=1'-0"

RECORD DRAWINGS

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

BULKHEAD SECTION & DETAILS

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

DSGN	THOMAS
DR	CISCO
CHK	PM
SUPERVISED BY	J. E. THOMAS
SCALE	CISCO
JOB NO.	5701

GEORGIA
REGISTERED
No. 028943
PROFESSIONAL
ENGINEER
JONATHAN E. THOMAS

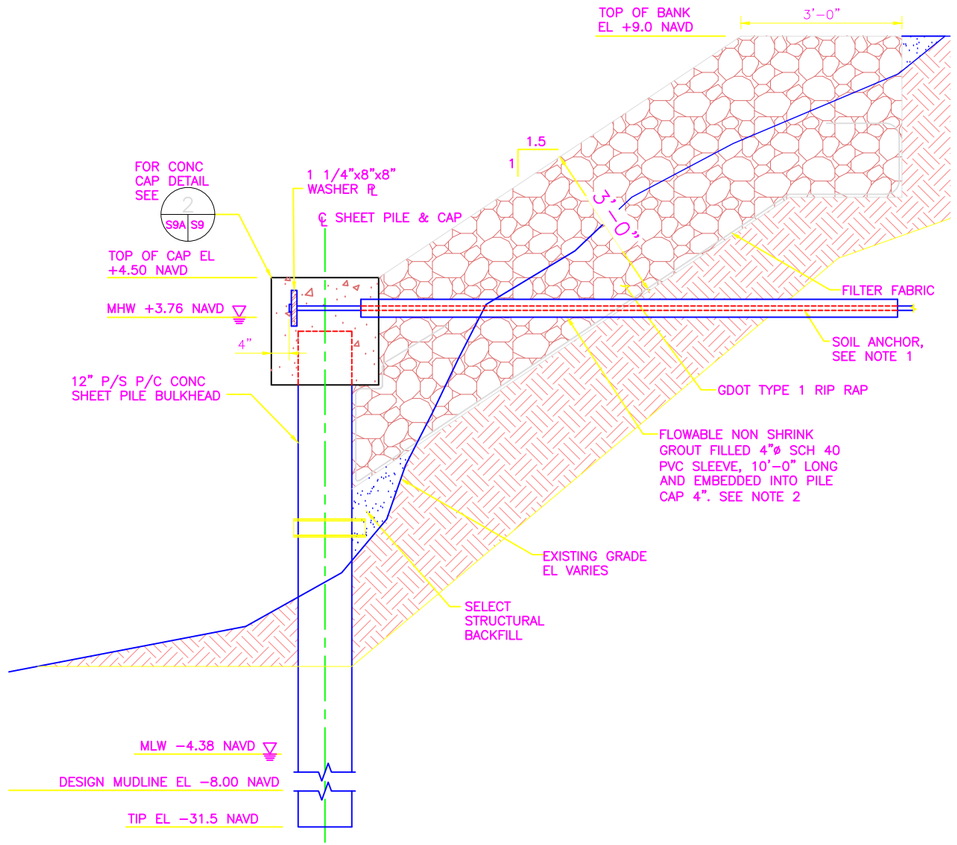
DATE OCTOBER 2007

SHEET 17 OF 22

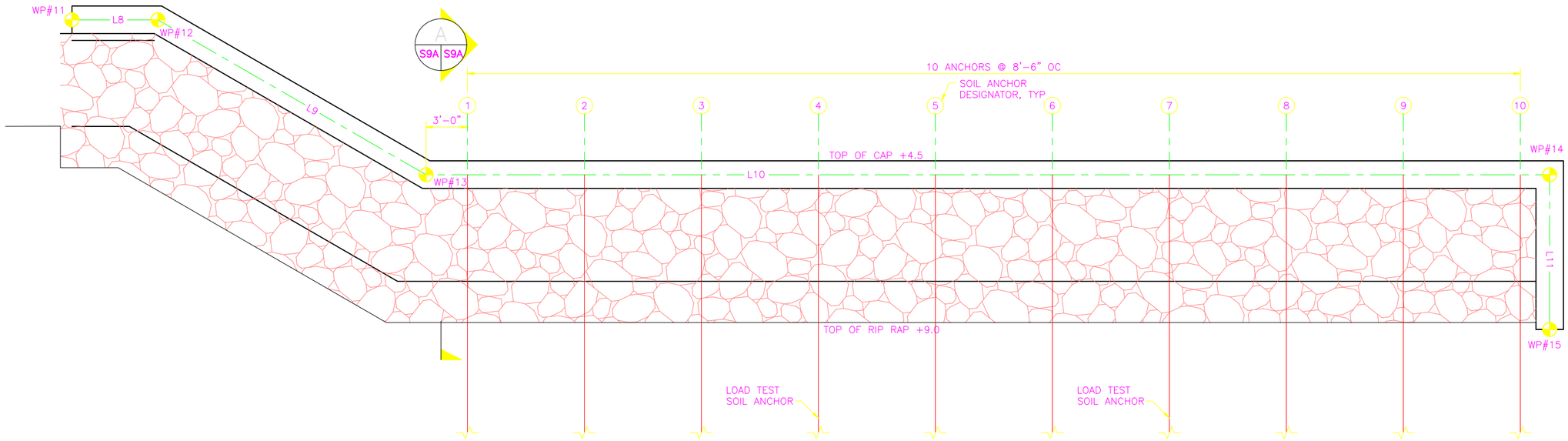
S9

NOTES:

1. THE REQUIRED HORIZONTAL DESIGN LOAD FOR THE SOIL ANCHORS IS 25 KIPS. THE CONTRACTOR'S GEOTECHNICAL ENGINEER SHALL BE RESPONSIBLE FOR THE STRUCTURAL AND GEOTECHNICAL DESIGN OF THE SOIL ANCHORS. LOAD TEST TWO SOIL ANCHORS NOTED FOR LOAD TESTING ON THE SOIL ANCHOR PLAN. LOAD TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH THE SOIL ANCHOR MANUFACTURER'S RECOMMENDATIONS. DO NOT APPLY LOAD TESTING FORCES TO THE CONCRETE SHEET PILES. THE CONTRACTOR'S GEOTECHNICAL ENGINEER SHALL SUBMIT A SEALED CERTIFICATION LETTER THAT THE SOIL ANCHORS WERE INSTALLED AND LOAD TESTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND ARE CAPABLE OF SUPPORTING THE DESIGN LOAD.
2. GROUT SHALL BE SIKAGROUT 212 BY SIKA, FIVE STAR SPECIAL GROUT 400 BY FIVE STAR PRODUCTS OR CRYSTEX BY L&M CONSTRUCTION CHEMICALS, INC.



BULKHEAD SECTION BETWEEN WP13 & 14 — A — S9A S9A
3/4"=1'-0"



SOIL ANCHOR PLAN — 1 — S9A S9A
1/4"=1'-0"

4'-0" 0'-0" 4'-0" 8'-0"
SCALE: 1/4"=1'-0"

2'-0" 0'-0" 1'-0" 2'-0"
SCALE: 3/4"=1'-0"

RECORD DRAWINGS

REVISION	DESCRIPTION	BY	DATE
1	AMENDMENT NO. 1	JPB	1/30/09
2	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

SOIL ANCHOR PLAN &
BULKHEAD SECTION

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

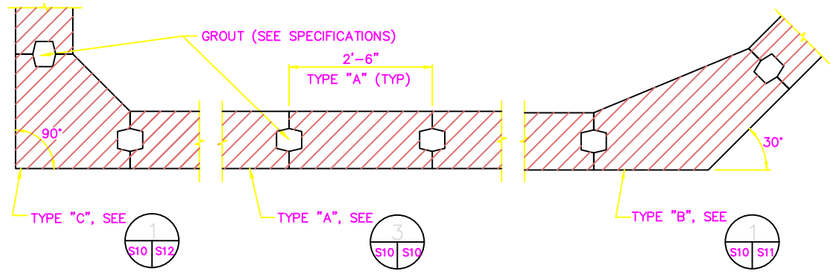
DSGN R. PURVIS | DRAWN BY C. SCOTT | CHKD BY J. E. THOMAS | QA THOMAS | TITLE PM | JOB NO. 5701

GEORGIA
REGISTERED
No. 028943
PROFESSIONAL
ENGINEER
JONATHAN E. THOMAS

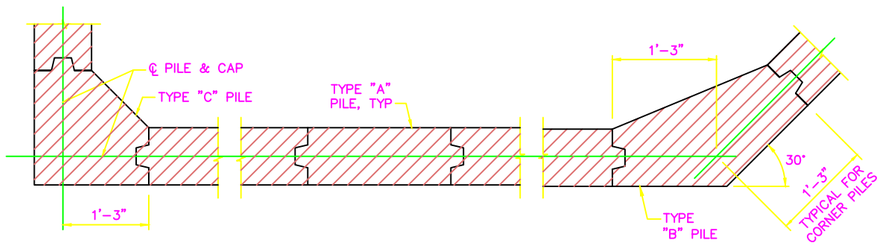
DATE OCTOBER 2007

SHEET 17A OF 22

S9A

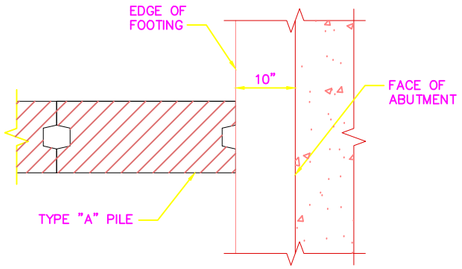


ABOVE ELEVATION −4.0 NAVD

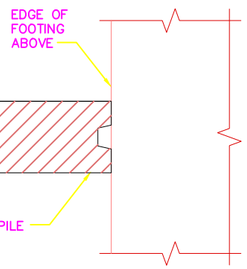


BELOW ELEVATION −4.0 NAVD

SHEET PILE PARTIAL PLAN 1
NTS
S7 S10
S8,S9

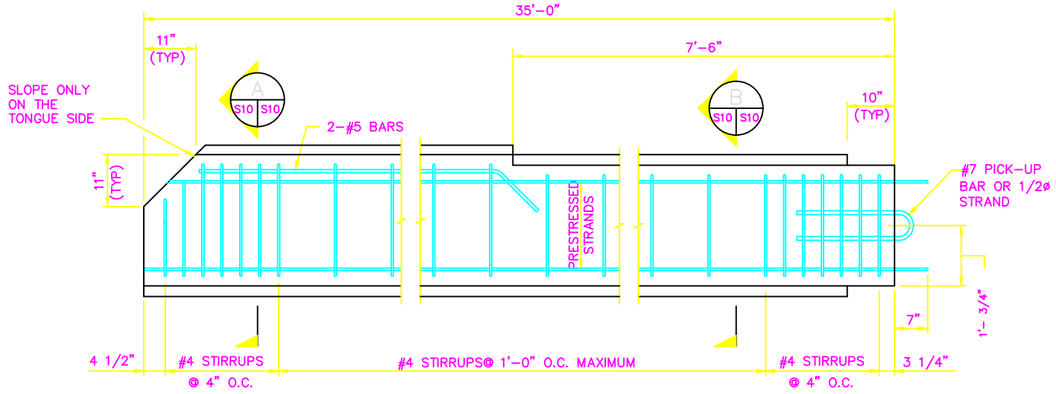


ABOVE ELEVATION −4.0 NAVD

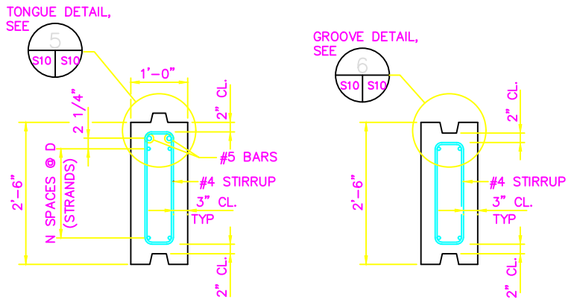


BELOW ELEVATION −4.0 NAVD

STARTER PILE DETAIL 2
SCALE: 1"=1'-0"
S7 S10
S8

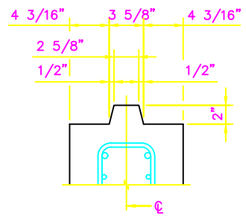


TYPE "A" PILE DETAIL (101 REQD) 3
NTS
S10 S10

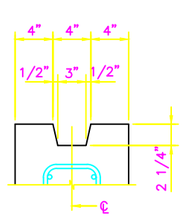


SECTION A 5
NTS
S10 S10

SECTION B 6
NTS
S10 S10



DETAIL 5
NTS
S10 S10



DETAIL 6
NTS
S10 S10

STRAND DIA. (IN)	MAXIMUM L	N	D (IN)	TOTAL # OF STRANDS	SECTION MODULUS (IN^3)	* STRESS (PSI)
0.5	35'-0"	7	2-7/8	16	720	1100

* UNIT PRESTRESS AFTER LOSSES.

NOTES:

1. INTERMEDIATE PRESTRESS STRANDS NOT SHOWN IN ELEVATIONS AND SECTIONS.
2. AT THE CONTRACTOR'S OPTION #4 STIRRUPS MAY BE FABRICATED AS A TWO PIECE BAR AND SHALL BE SHOWN ON SHOP DRAWINGS.
3. IF TONGUE MUST BE ON THE OPPOSITE SIDE FROM THAT SHOWN ALL DIMENSIONS WILL BE THE SAME BUT OPPOSITE HAND.
4. FOR PILE STORAGE & TRANSPORTATION SUPPORT DETAIL, SEE 2 S10 S12

1'-0" 0'-0" 1'-0" 2'-0"
SCALE: 1"=1'-0"

RECORD DRAWINGS

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

CONCRETE SHEET PILE DETAILS
SHEET 1 OF 3

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

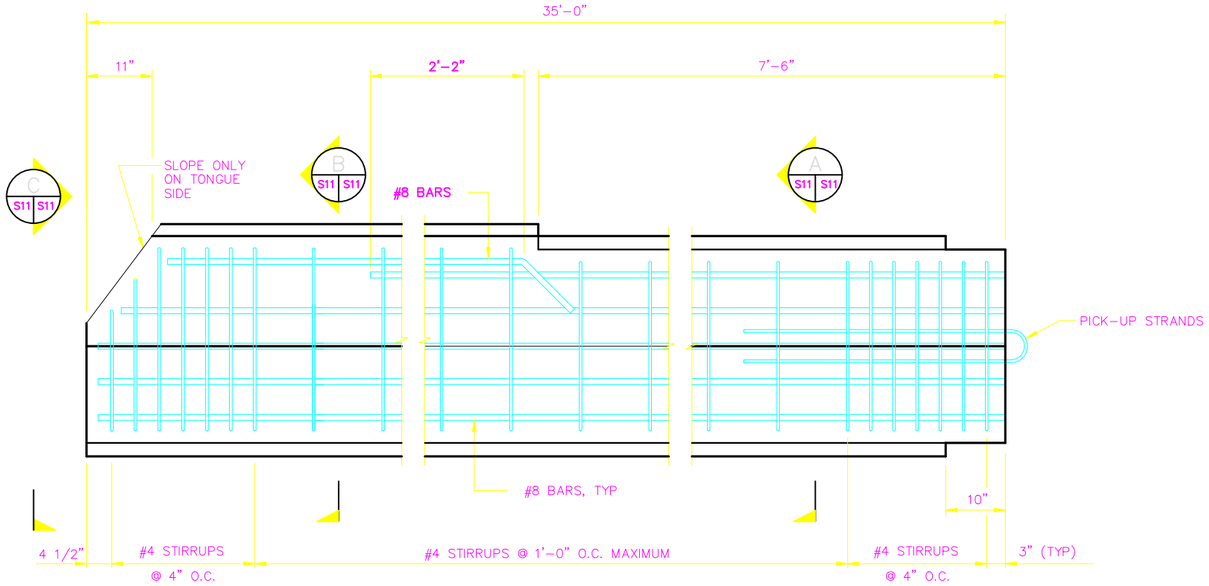
DSGN	CISCO	DRN	THOMAS
JOB NO.	5701	SUBMITTED BY	J. E. THOMAS
CHK	CISCO	TITLE	PM

GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

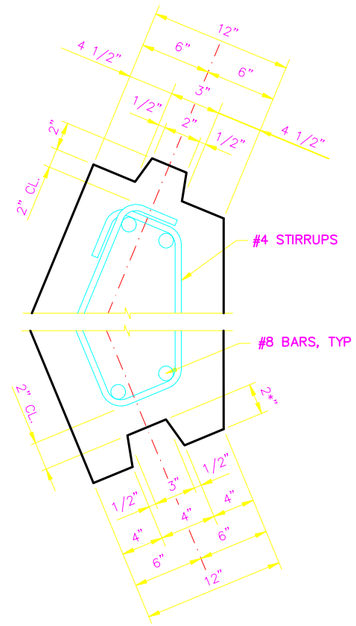
DATE OCTOBER 2007

SHEET 18 OF 22

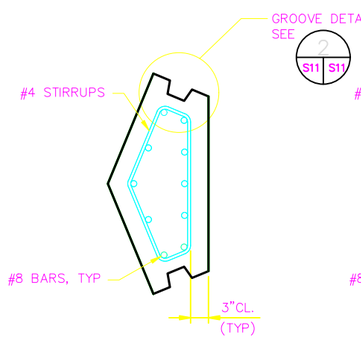
S10



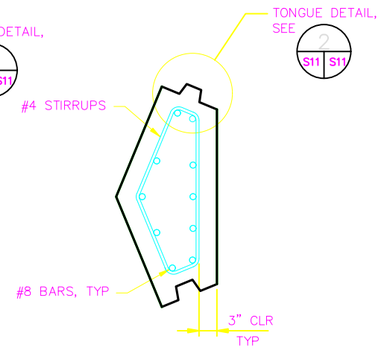
TYPE "B" SHEET PILE DETAIL (4 REQD) 1
NTS S10 S11



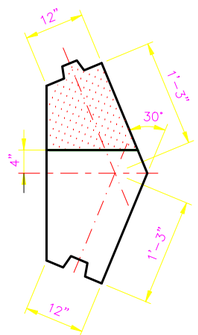
TONGUE AND GROOVE DETAIL 2
NTS S11 S11



SECTION A
NTS S11 S11



SECTION B
NTS S11 S11



SECTION C
NTS S11 S11

NOTES:

1. AT THE CONTRACTOR'S OPTION #4 STIRRUPS MAY BE FABRICATED AS A TWO PIECE BAR AND SHALL BE SHOWN ON SHOP DRAWINGS.
2. IF TONGUE MUST BE ON THE OPPOSITE SIDE FROM THAT SHOWN ALL DIMENSIONS WILL BE THE SAME BUT OPPOSITE HAND.
3. FOR PILE STORAGE & TRANSPORTATION SUPPORT DETAIL, SEE 2 S11 S12

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

CONCRETE SHEET PILE DETAILS
SHEET 2 OF 3

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

DSGN	CISCO	DR	CISCO	CHK	THOMAS
JOB NO.	5701	SUBMITTED BY	J. E. THOMAS	TITLE	PM

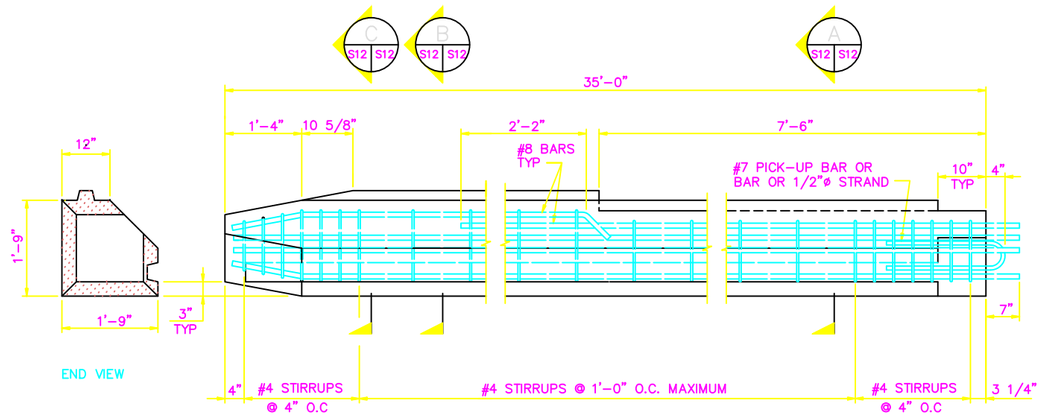
GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

DATE OCTOBER 2007

SHEET 19 OF 22

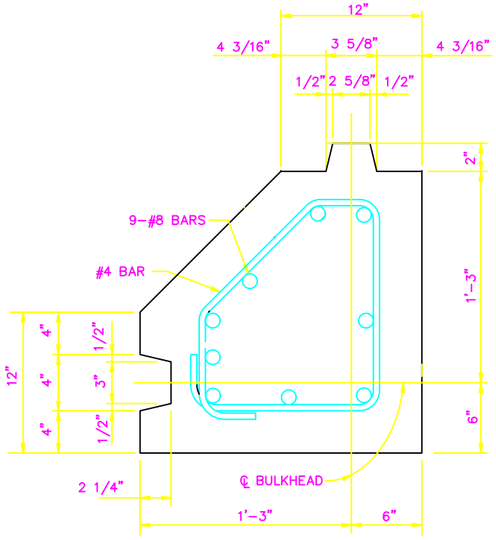
S11

RECORD DRAWINGS



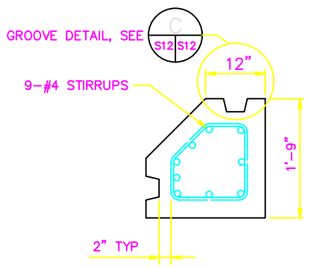
TYPE "C" SHEET PILE DETAIL (3 REQD) 1 S10 S12

NTS



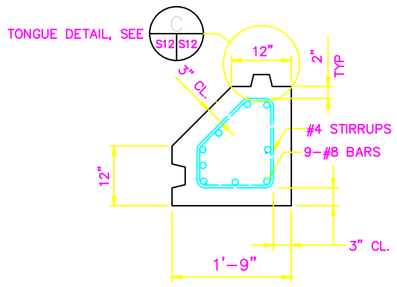
SECTION C S12 S12

NTS



SECTION A S12 S12

NTS

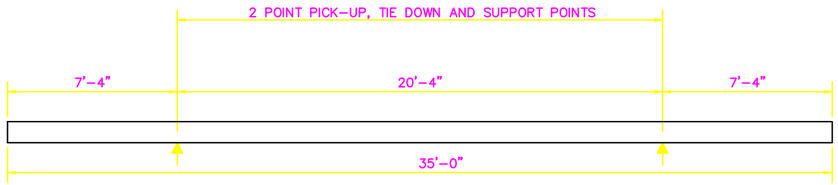


SECTION B S12 S12

NTS

NOTES:

1. IF TONGUE MUST BE ON THE OPPOSITE SIDE FROM THAT SHOWN ALL DIMENSIONS WILL BE THE SAME BUT OPPOSITE HAND.
2. FOR PILE STORAGE & TRANSPORTATION SUPPORT DETAIL, SEE 2 S12 S12



PILE STORAGE AND TRANSPORTATION SUPPORT DETAILS 2 S10 S12

NTS

S11,S12

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

CONCRETE SHEET PILE DETAILS
SHEET 3 OF 3

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

DSGN	CISCO	PM	THOMAS
DR	CISCO	CHKD BY	J. E. THOMAS
JOB NO.	5701		

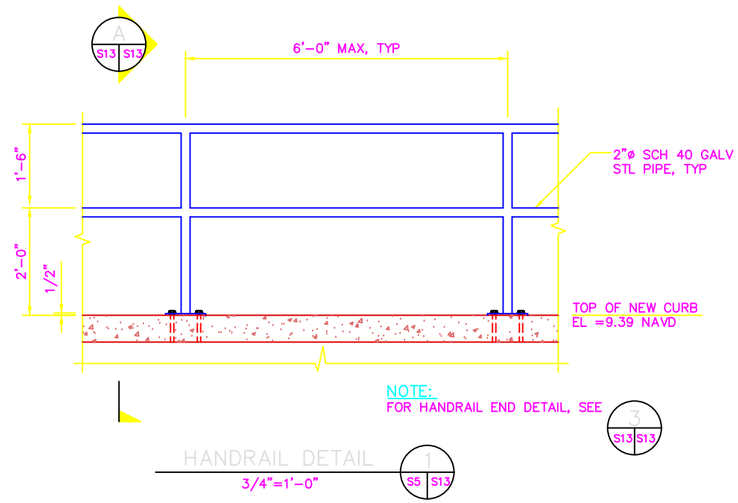
GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

DATE OCTOBER 2007

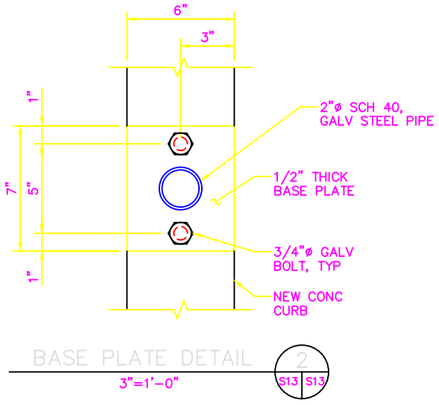
SHEET 20 OF 22

S12

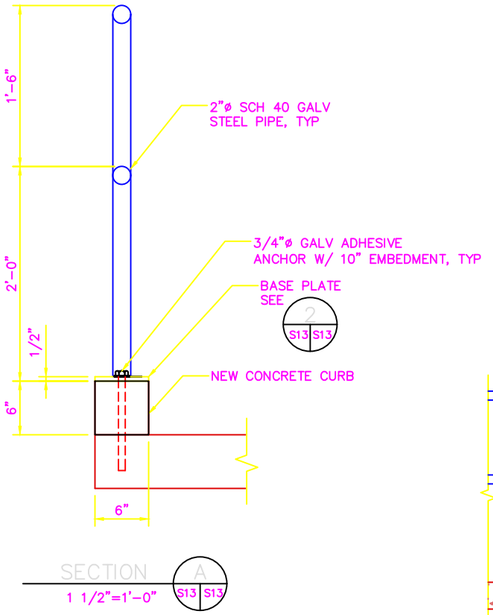
RECORD DRAWINGS



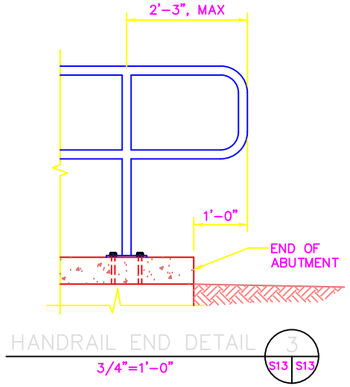
HANDRAIL DETAIL 1
3/4"=1'-0"
S5 S13



BASE PLATE DETAIL 2
3"=1'-0"
S13 S13



SECTION A
1 1/2"=1'-0"
S13 S13



HANDRAIL END DETAIL 3
3/4"=1'-0"
S13 S13

NOTES:

1. STEEL MITER GATE NOT SHOWN FOR CLARITY.
2. CONTRACTOR TO BURN HOLE IN STEEL SHEET PILE FOR REINFORCEMENT AS NEEDED.
3. CONTRACTOR TO USE CONCRETE ANTI-WASHOUT ADMIXTURE FOR INSTALLATION OF PILE CAP; SUBMIT PRODUCT DATA FOR APPROVAL; ANTI-WASHOUT ADMIXTURE SHALL BE ADDED TO PREVENT GREATER THAN 5% LOSS OF MASS.
4. CONTRACTOR TO USE ANCHORING EPOXY TYPE SIKADUR INJECTION GEL, FIVE STAR HP ANCHOR GEL OR EQUAL FOR #6 BAR EMBED INTO EXISTING CONCRETE.

RIP RAP SECTION B
1/2"=1'-0"
S3 S13
S13A

2'-0" 0'-0" 1'-0" 2'-0"
SCALE: 3/4"=1'-0"

1'-0" 0'-0" 6" 1'-0"
SCALE: 1 1/2"=1'-0"

6" 0'-0" 3" 6"
SCALE: 3"=1'-0"

2'-0" 0'-0" 2'-0" 4'-0"
SCALE: 1/2"=1'-0"

REVISION	DESCRIPTION	BY	DATE
3	RECORD DRAWINGS	JET	9/11/09
2	AMENDMENT NO. 2	JPB	5/05/09
1	AMENDMENT NO. 1	JPB	1/27/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

MISCELLANEOUS DETAILS
SHEET 1 OF 3

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

DSN	CISCO	CHK	THOMAS
DR	CISCO	SUBMITTED BY	J. E. THOMAS
JOB NO.	5701	TITLE	PM

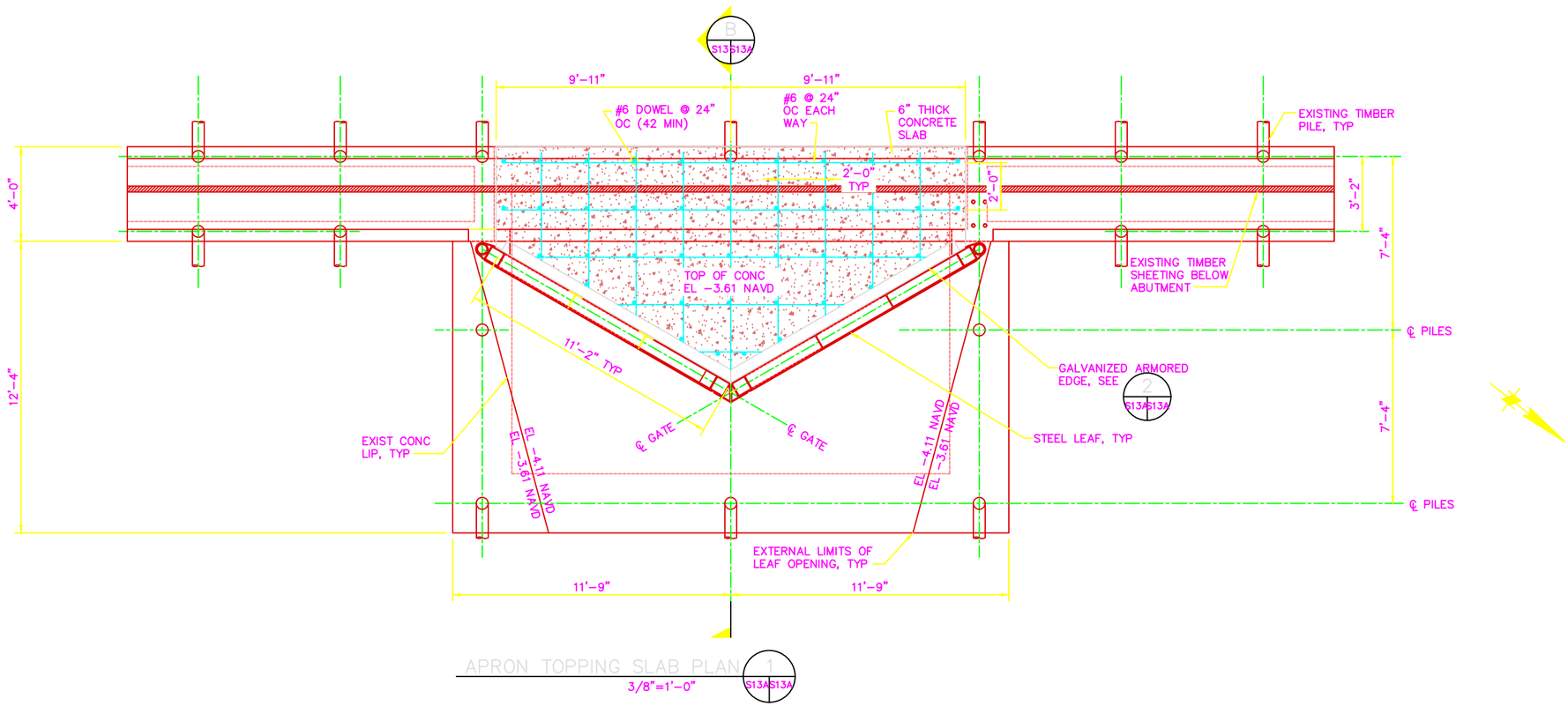
GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

DATE OCTOBER 2007

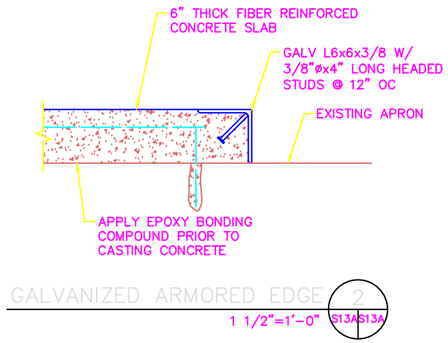
SHEET 21 OF 22

S13

RECORD DRAWINGS



APRON TOPPING SLAB PLAN 1
3/8"=1'-0" S13A S13A



GALVANIZED ARMORED EDGE 2
1 1/2"=1'-0" S13A S13A

4'-0" 0'-0" 2'-0" 4'-0"
SCALE: 3/8"=1'-0"

1'-0" 0'-0" 6" 1'-0"
SCALE: 1 1/2"=1'-0"

RECORD DRAWINGS

REVISION	DESCRIPTION	BY	DATE
2	RECORD DRAWINGS	JET	9/11/09
1	AMENDMENT NO. 2	JPB	5/05/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

MISCELLANEOUS DETAILS
SHEET 2 OF 3

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

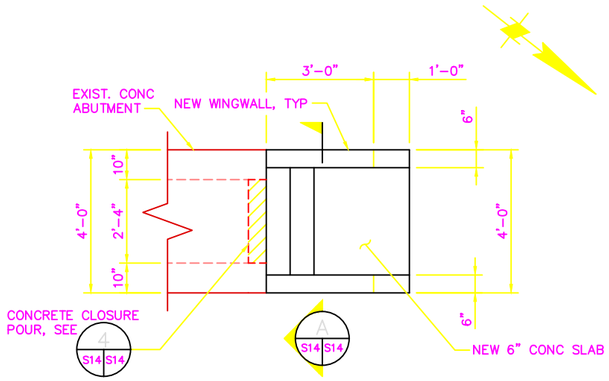
DSN	BALL	JOB NO.	5701
DR	SCOTT	SUBMITTED BY	J. E. THOMAS
CHK	THOMAS	TITLE	PM

GEORGIA
REGISTERED
No. 028943
PROFESSIONAL
ENGINEER
JONATHAN E. THOMAS

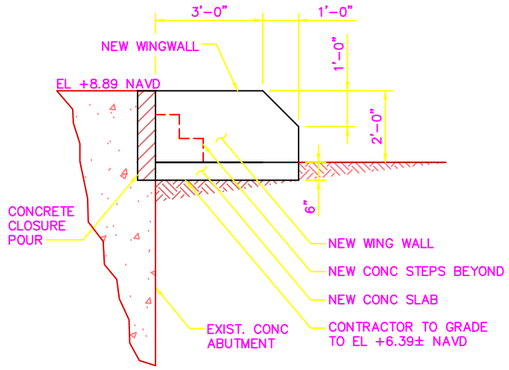
DATE OCTOBER 2007

SHEET 21A OF 22

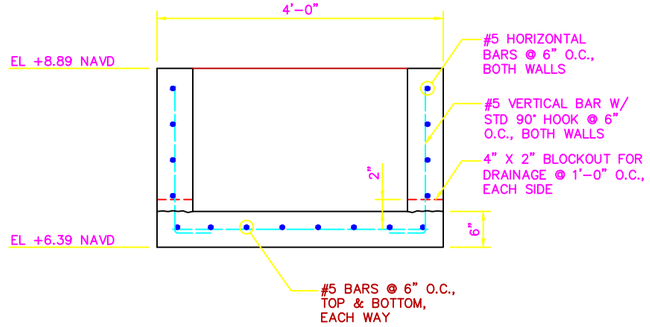
S13A



PLAN

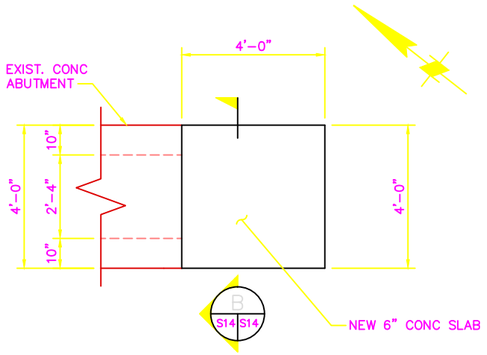


ELEVATION

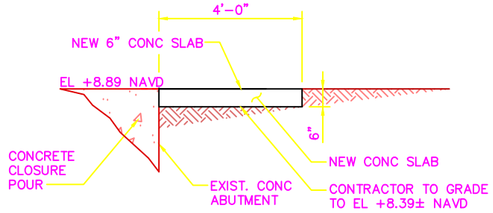


SECTION A
1"=1'-0"
S14 S14

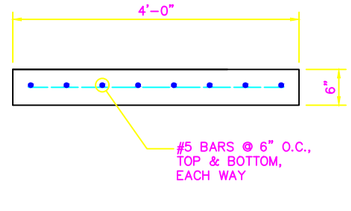
NORTH END TRANSITION 1
1/2"=1'-0"
S3 S14



PLAN

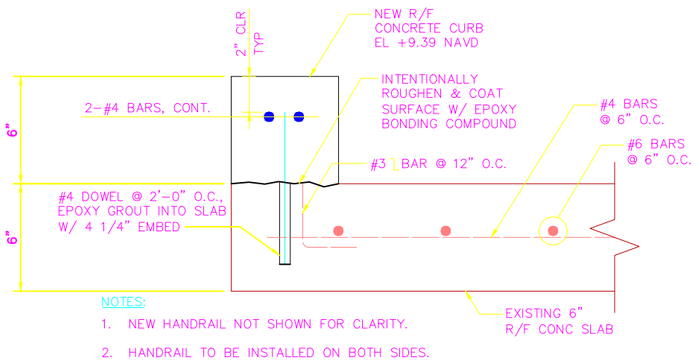


ELEVATION



SECTION B
1"=1'-0"
S14 S14

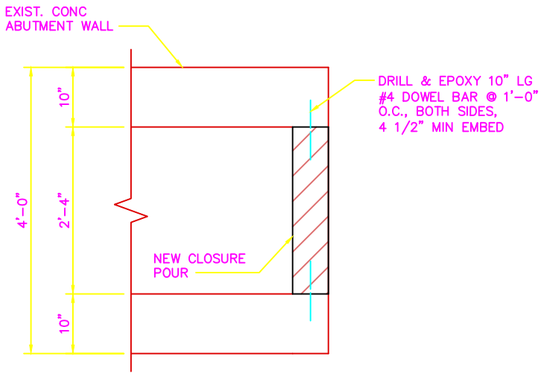
SOUTH END TRANSITION 2
1/2"=1'-0"
S3 S14



NOTES:

1. NEW HANDRAIL NOT SHOWN FOR CLARITY.
2. HANDRAIL TO BE INSTALLED ON BOTH SIDES.

CURB DETAIL 3
3"=1'-0"
S3 S14
S5



CLOSURE POUR 4
1"=1'-0"
S14 S14

2'-0" 0'-0" 2'-0" 4'-0"
SCALE: 1/2"=1'-0"

1'-0" 0'-0" 1'-0" 2'-0"
SCALE: 1"=1'-0"

6" 0'-0" 3" 6"
SCALE: 3"=1'-0"

RECORD DRAWINGS

REVISION	DESCRIPTION	BY	DATE
1	RECORD DRAWINGS	JET	9/11/09

CHATHAM COUNTY, GEORGIA
DUNDEE CANAL DRAINAGE
IMPROVEMENTS & TIDEGATE UPGRADE
QBS 05-6-4

MISCELLANEOUS DETAILS
SHEET 3 OF 3

MOFFATT & NICHOL
2 EAST BRYAN STREET, SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

DSGN	CISCO	DR	CISCO	JOB NO.	5701
SUBMITTED BY:	J. E. THOMAS	CHK	THOMAS	TITLE	PM

GEORGIA REGISTERED No. 028943 PROFESSIONAL ENGINEER JONATHAN E. THOMAS

DATE OCTOBER 2007

SHEET 22 OF 22

S14

DRAWING INDEX

COVER SHEET
SOUTH FIELDS OVERVIEW
SOUTH FIELDS SEWER
SOUTH FIELDS STORM
SOUTH FIELDS WATER
NORTH FIELD OVERVIEW
NORTH FIELD SEWER
NORTH FIELD STORM
NORTH FIELD WATER

FINAL AS-BUILT

FOR

GROVE HIGH SCHOOL MUTI-FAMILY

GARDEN CITY, GEORGIA



LOCATION IN GEORGIA

N.T.S.



LOCATION MAP

N.T.S.

GEORGIA REGISTERED No.LS003308 LAND SURVEYOR ADAM H. EVANS

G.A. RLS 3308 — 01/26/26 DATE

ALL INFORMATION HAS BEEN FIELD VERIFIED. WITH THE EXCEPTION OF NOTE "A"

NOTE: A
THE LOCATION OF UNDERGROUND UTILITIES AS SHOWN ARE BASED ON VISIBLE EVIDENCE AND DRAWINGS PROVIDED TO THE SURVEYOR. LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON, AND ADDITIONAL BURIED UTILITIES MAY EXIST. CONTACT THE APPROPRIATE UTILITY COMPANIES FOR INFORMATION REGARDING BURIED UTILITIES.

NOTE: B
THIS SURVEY WAS DONE WITHOUT A TITLE SEARCH AND IS BASED ON REFERENCED INFORMATION. THERE MAY EXIST OTHER DOCUMENTS OF RECORD WHICH COULD AFFECT THIS PROPERTY

NOTE: C
WETLANDS, JURISDICTIONAL WATERS OR OTHER CONDITIONS WHICH MAY BE REGULATED BY FEDERAL OR STATE OR LOCAL AGENCIES WERE NOT INVESTIGATION DURING THIS SURVEY. RIPARIAN BUFFER AND OTHER RESTRICTIONS ON DEVELOPMENT MAY BE REQUIRED

NOTE: D
EXCEPT AS SPECIFICALLY STATED OR SHOWN, THIS SURVEY DOES NOT REPORT ANY OF THE FOLLOWING: EASEMENTS, OTHER THAN THOSE VISIBLE DURING FIELD EXAMINATION, BUILDING SETBACKS, RESTRICTIVE COVENANTS, ZONING OR LAND USE REGULATIONS AND ANY FACTS WHICH A TITLE SEARCH MAY DISCLOSE.

ENGINEER

MOFFATT & NICHOL
2 E BRYAN STREET SUITE 501
SAVANNAH, GEORGIA 31401
912-231-0044

OWNER

SAVANNAH-CHATHAM COUNTY
PUBLIC SCHOOL SYSTEM
SAVANNAH, GEORGIA 31401
912-231-0044

CADD FILE: S:\SURVEYING\LARRY\2023 DRAWINGS\JW OLIVER CONSTRUCTION\GROVE\Grove Asbuilt.dwg

GROVES ATHLETIC
FIELD & FIELD HOUSE
GARDEN CITY, GEORGIA

STATEWIDE LAND SURVEYORS LLC.
521 ETHEL STREET DOUGLAS, GA 31533 (912) 384-7723
WWW.STATEWIDELS.COM EMAIL: in6@statewidels.com

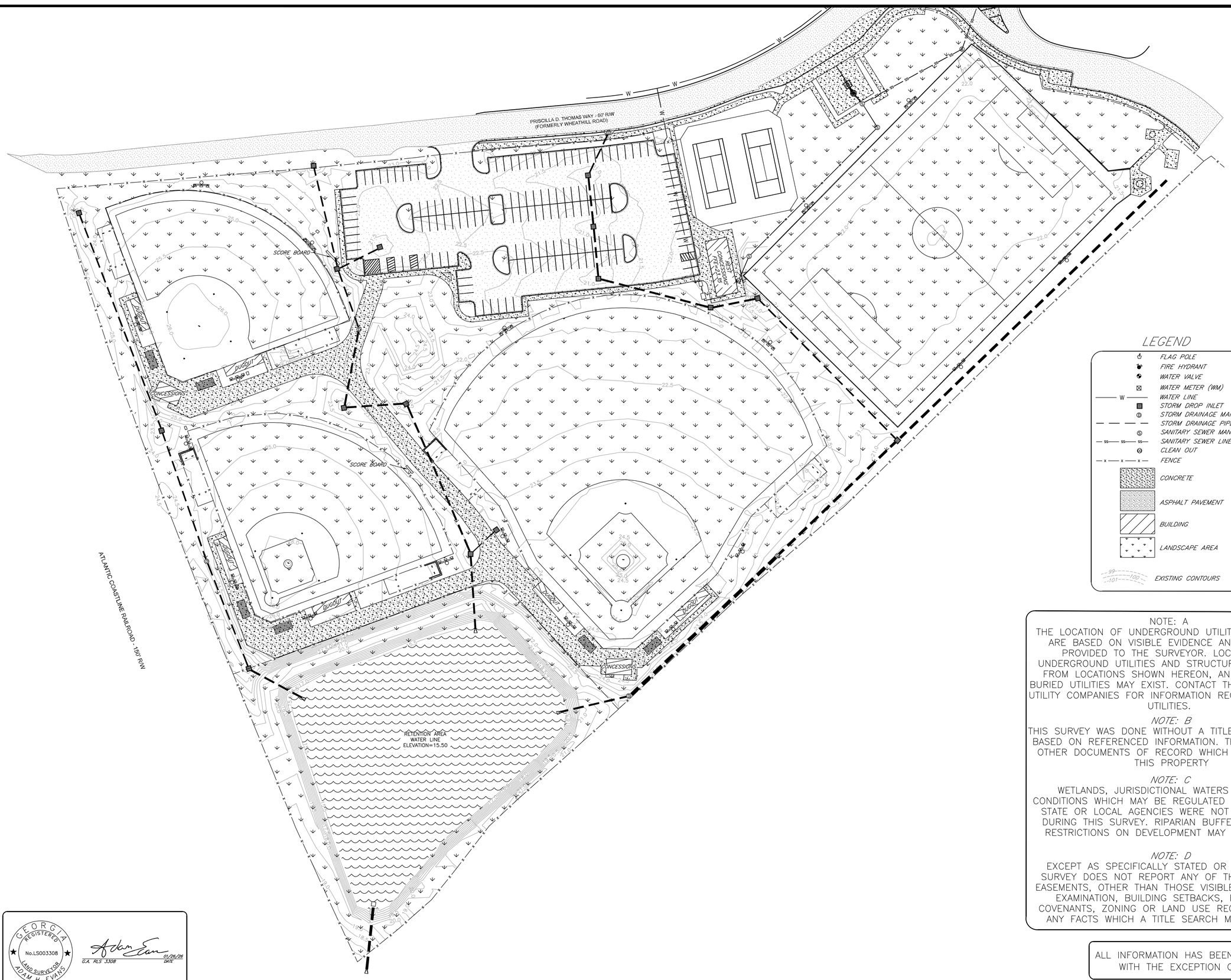
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COVER

FINAL FIELD SURVEY DATE:

09/24/25



1" = 50' SCALE 50 0 50 100 FEET

LEGEND

- FLAG POLE
- FIRE HYDRANT
- WATER VALVE
- WATER METER (WM)
- W — WATER LINE
- STORM DROP INLET
- STORM DRAINAGE MANHOLE
- STORM DRAINAGE PIPE
- SANITARY SEWER MANHOLE
- SS — SS — SS — SANITARY SEWER LINE
- CLEAN OUT
- x — x — x — FENCE
- CONCRETE
- ASPHALT PAVEMENT
- BUILDING
- LANDSCAPE AREA
- 99 / 101 — 100 — EXISTING CONTOURS

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GEORGIA REGISTERED No.LS003308 LAND SURVEYOR ADAM H. EVANS

G.A. RLS 3308 — 01/26/26 DATE

GROVES ATHLETIC FIELD & FIELD HOUSE GARDEN CITY, GEORGIA

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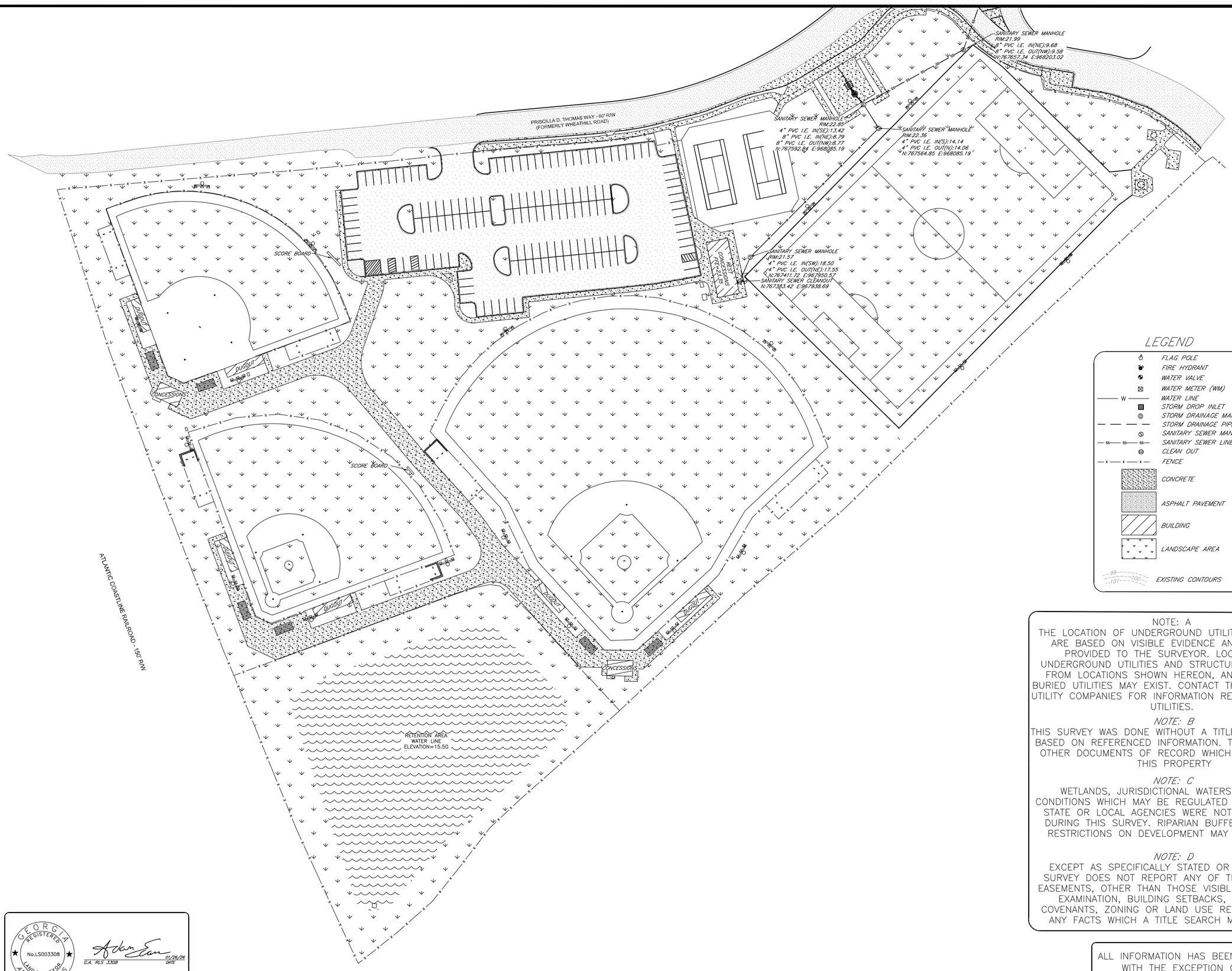
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OVERVIEW

FINAL FIELD SURVEY DATE:

09/24/25

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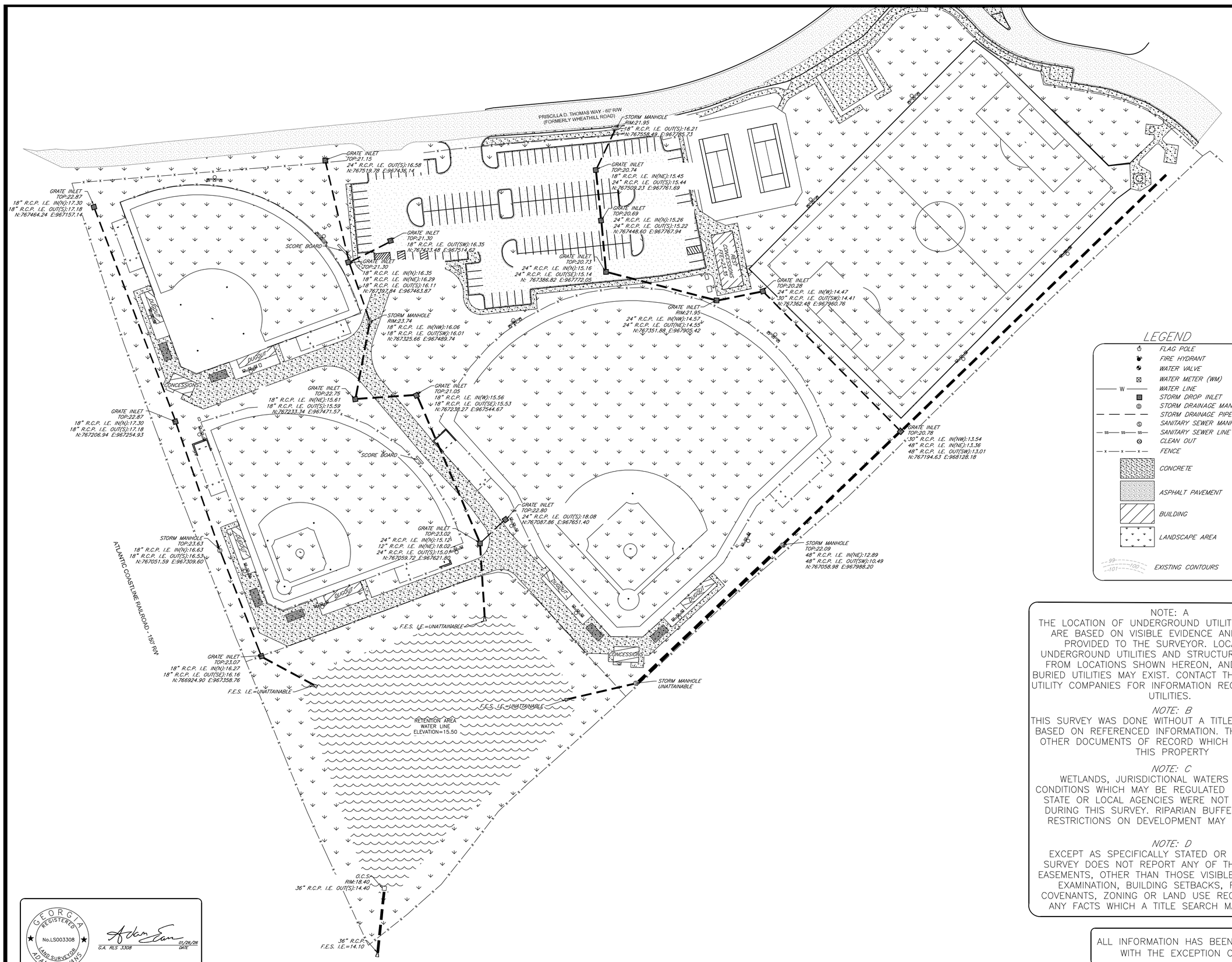
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Adam Evans 01/26/26
G.A. RLS 3308 DATE

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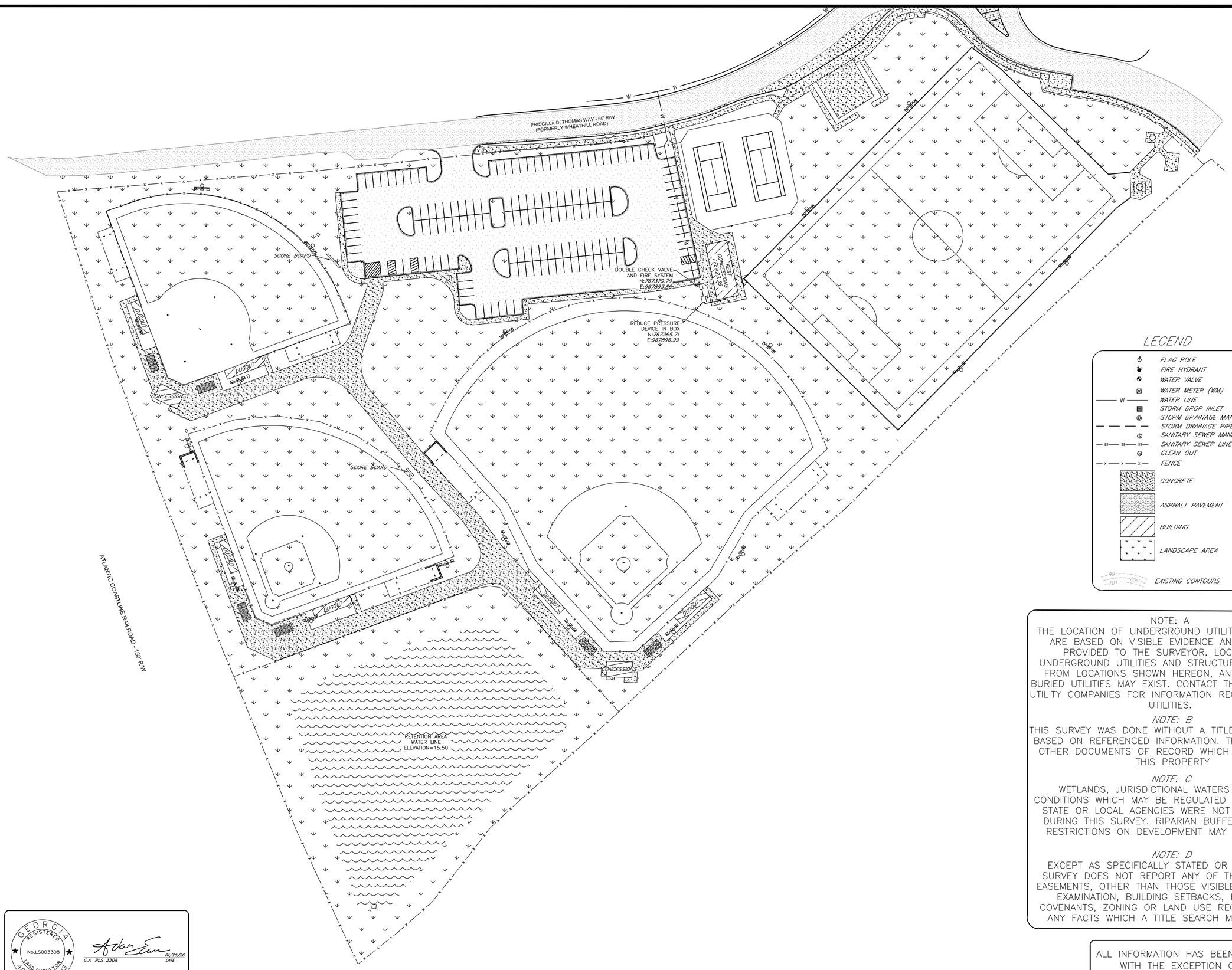
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STORM

FINAL FIELD SURVEY DATE:

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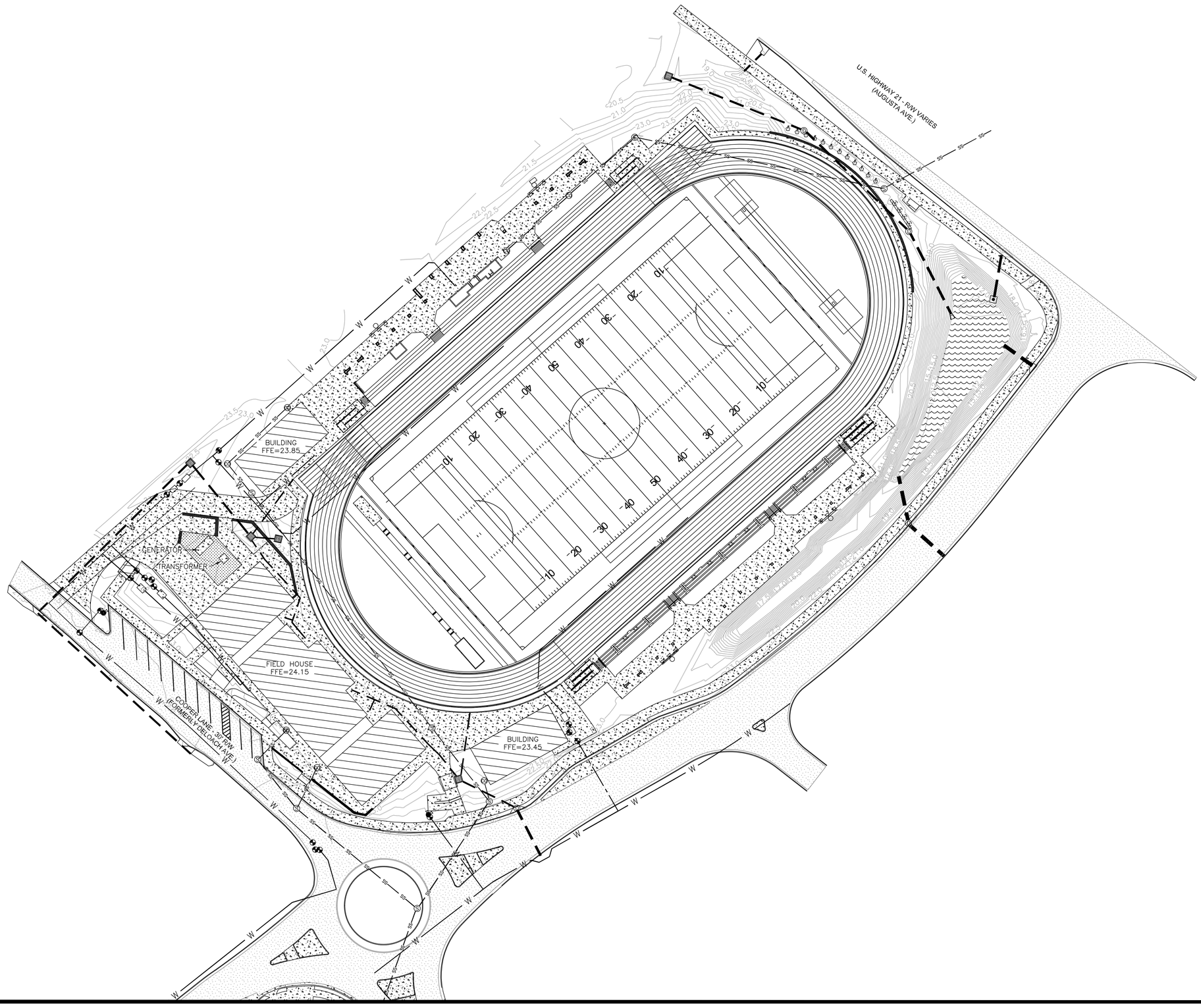
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PAGE NUMBER 5 OF 9

WATER

FINAL FIELD SURVEY DATE:

09/24/25



1" = 40' SCALE

40 0 40 80 FEET

GEORGIA REGISTERED No.LS003308 LAND SURVEYOR ADAM H. EVANS

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G.A. RLS 3308

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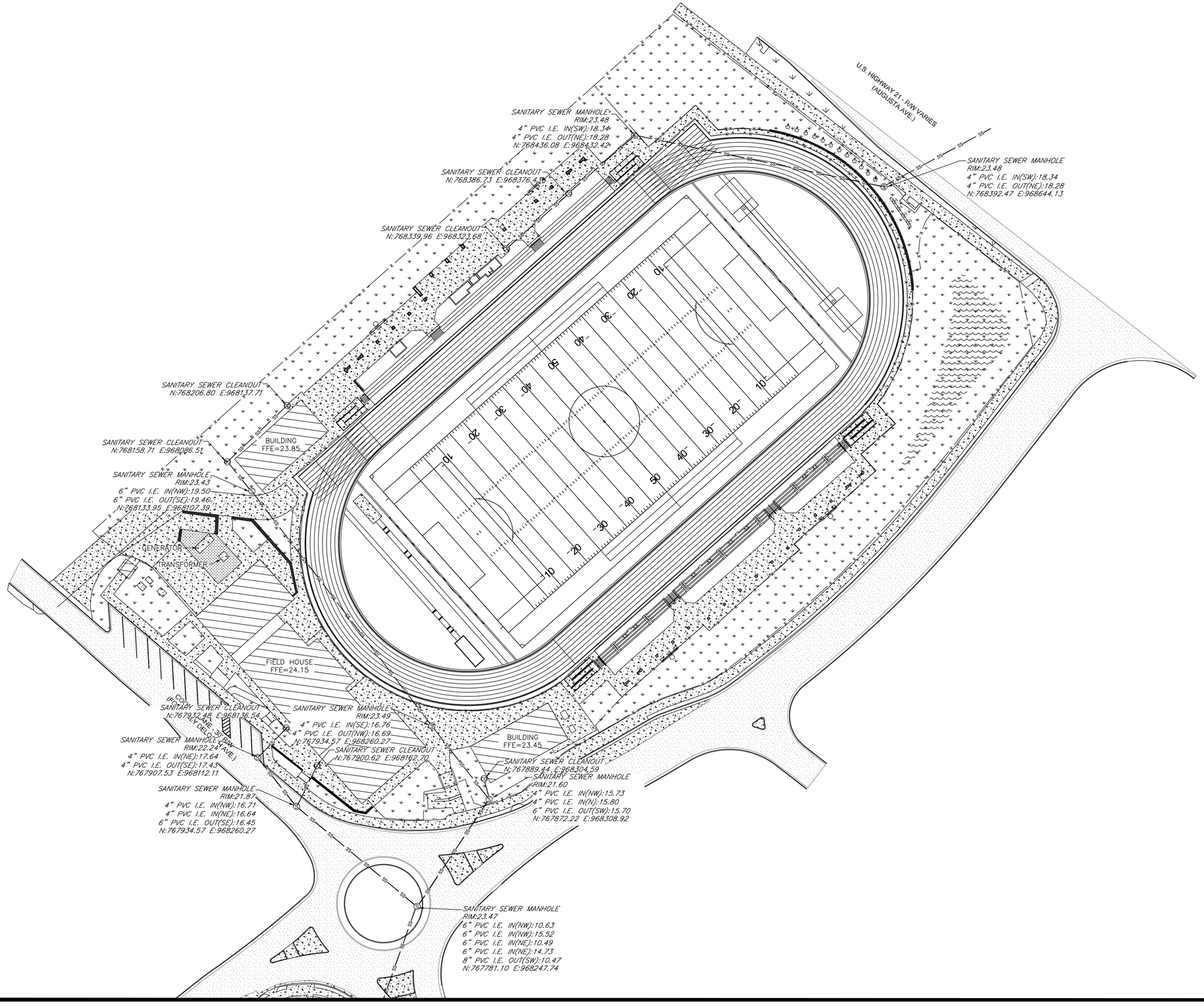
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OVERVIEW

FINAL FIELD SURVEY DATE:

09/24/25



1" = 40' SCALE 40 0 40 80 FEET

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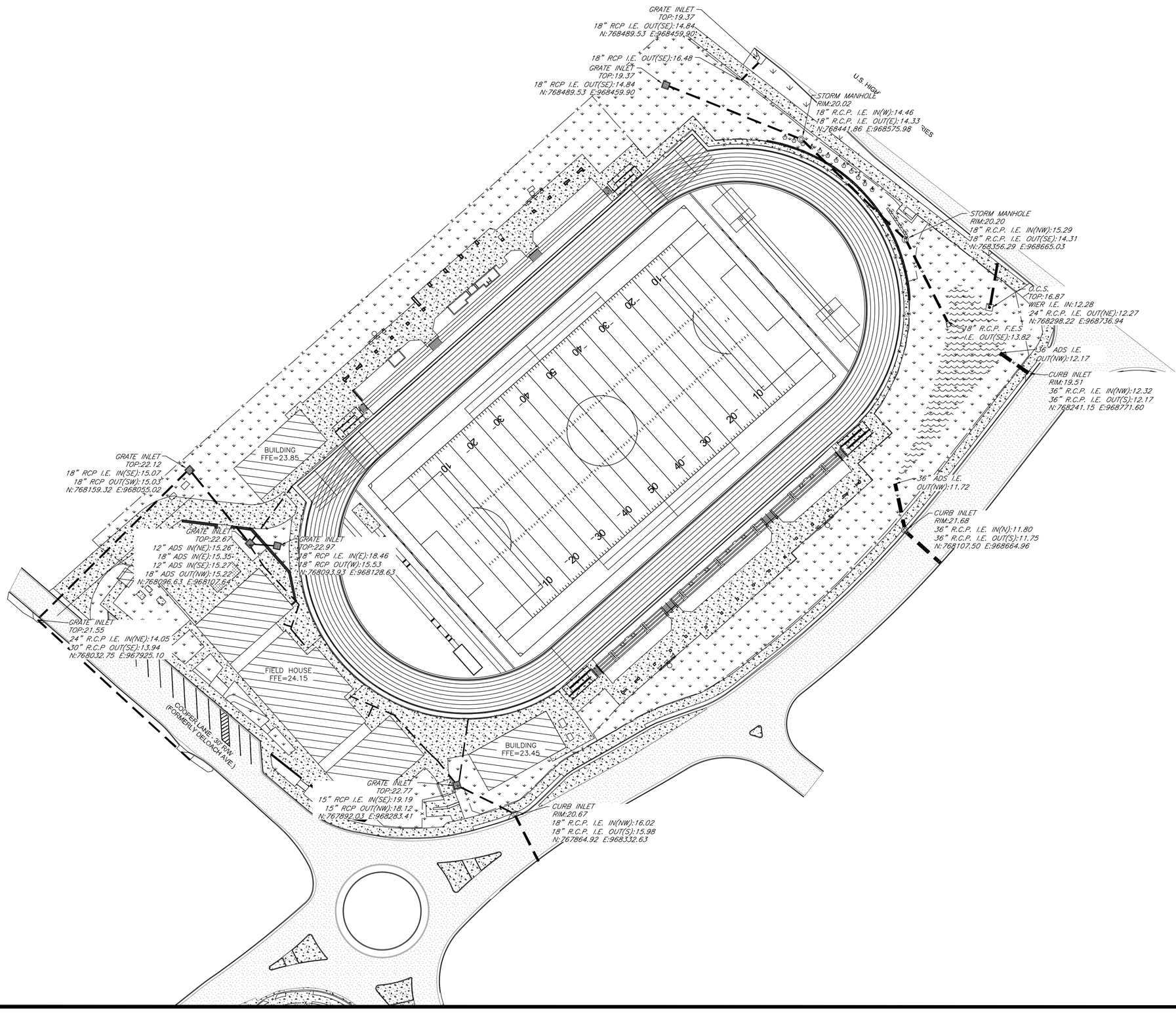
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SEWER

FINAL FIELD SURVEY DATE:
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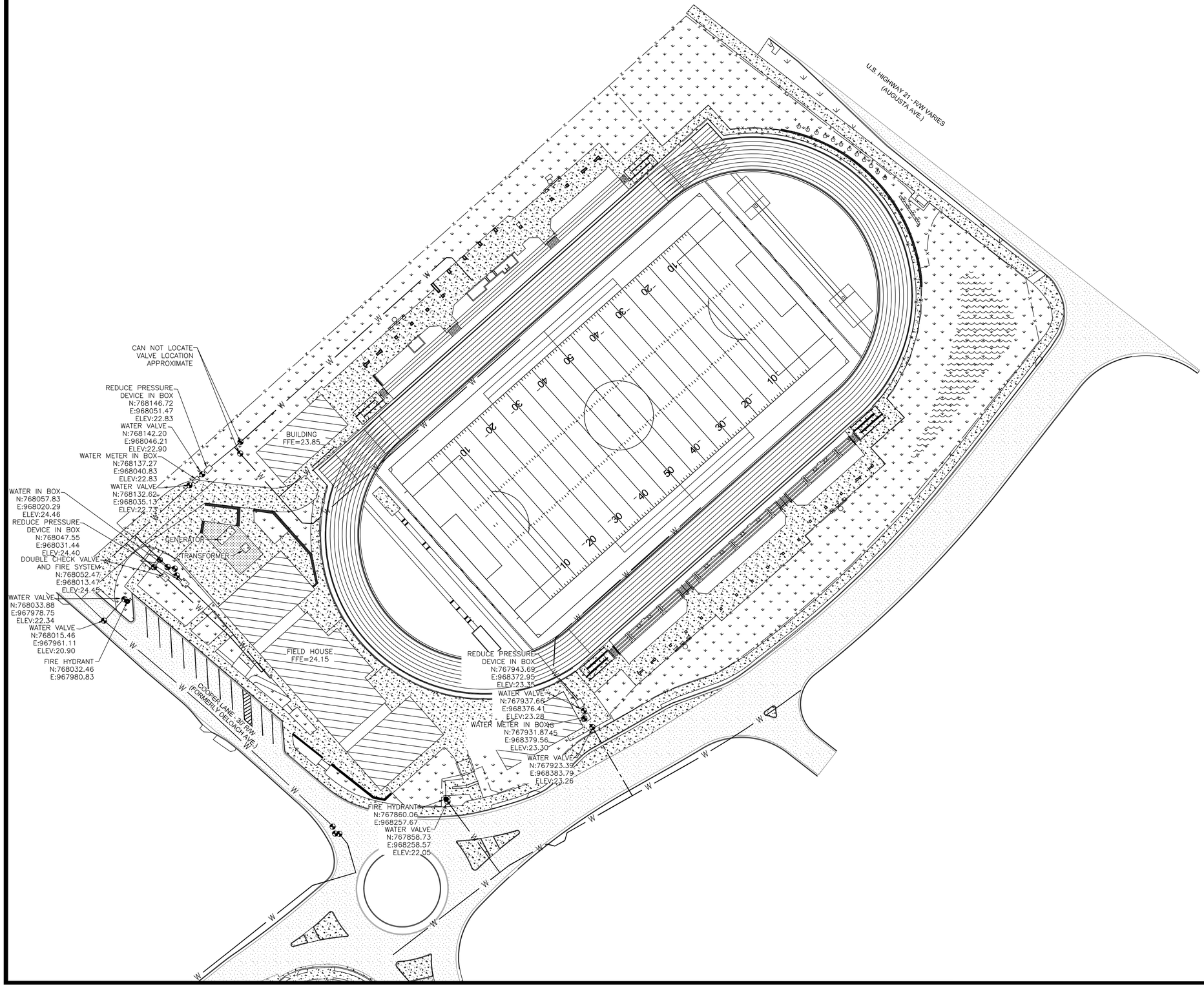
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PAGE NUMBER 8 OF 9

STORM

FINAL FIELD SURVEY DATE:

09/24/25



1" = 40'
40 0 40 80
SCALE FEET

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WATER

FINAL FIELD SURVEY DATE:
09/24/25

NEW K-12 MULTI-SCHOOL

100 PRISCILLA D. THOMAS WAY
GARDEN CITY, GEORGIA



PREPARED FOR:

SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

208 BULL STREET
SAVANNAH, GEORGIA 31401
(912) 231-0044

M&N JOB# 10797

RECORD DRAWINGS

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Moffatt & Nichol
DATE: 02/21/2024

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email: PGraham@chacompanies.com

SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM
SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

PROJECT CONSULTANTS:
LANDSCAPE ARCHITECT:
CLH DESIGN, P.A.

CIVIL ENGINEERS:
MOFFATT & NICHOL
CHA CONSULTING, INC.

STRUCTURAL ENGINEER:
THARPE ENGINEERING GROUP, LLC

MECHANICAL & PLUMBING:
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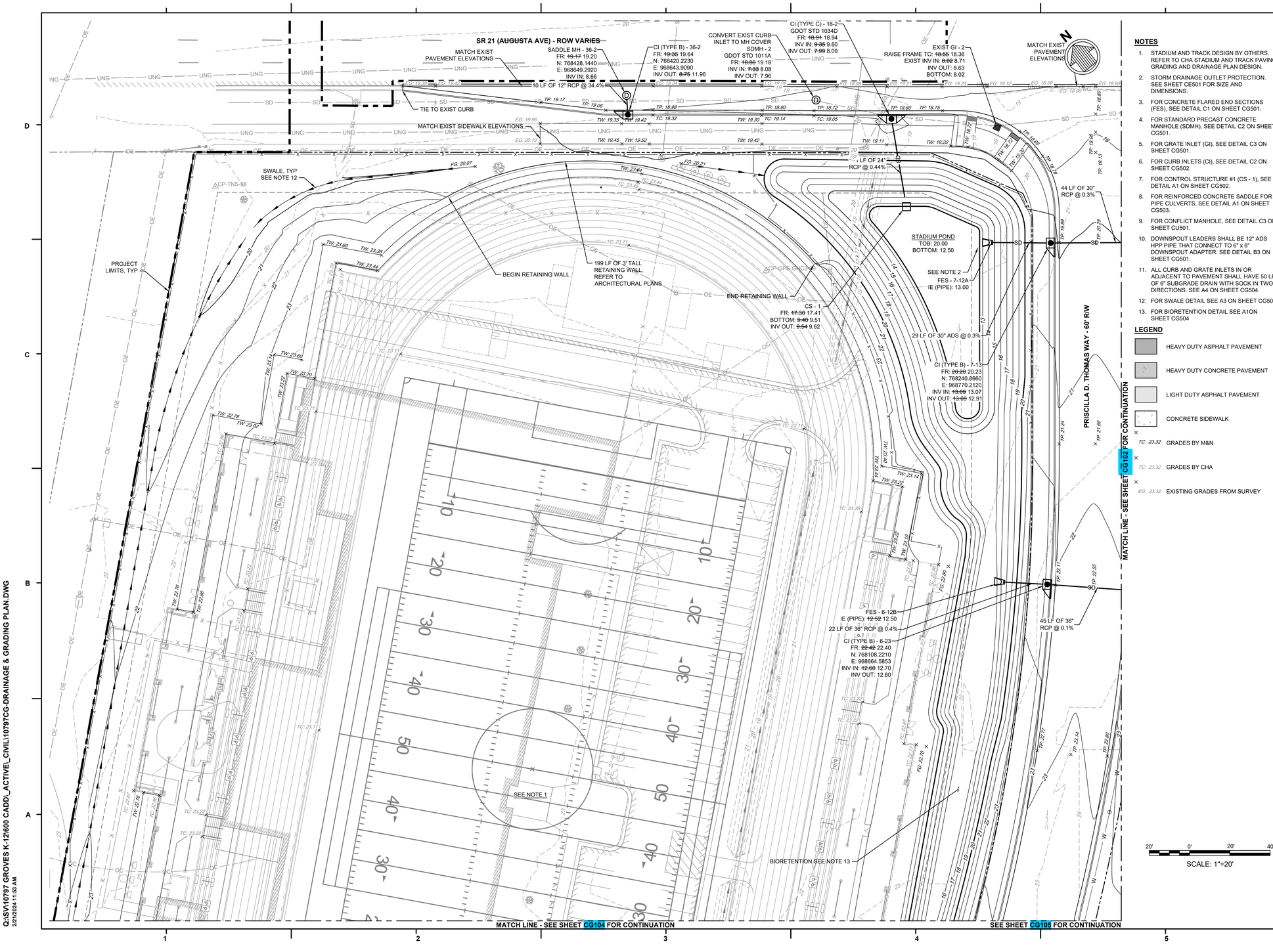
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NOTES

1. STADIUM AND TRACK DESIGN BY OTHERS. REFER TO CHA STADIUM AND TRACK PAVING, GRADING AND DRAINAGE PLAN DESIGN.
2. STORM DRAINAGE OUTLET PROTECTION. SEE SHEET CE501 FOR SIZE AND DIMENSIONS.
3. FOR CONCRETE FLARED END SECTIONS (FES), SEE DETAIL C1 ON SHEET CG501.
4. FOR STANDARD PRECAST CONCRETE MANHOLE (SDMH), SEE DETAIL C2 ON SHEET CG501.
5. FOR GRATE INLET (GI), SEE DETAIL C3 ON SHEET CG501.
6. FOR CURB INLETS (CI), SEE DETAIL C2 ON SHEET CG502.
7. FOR CONTROL STRUCTURE #1 (CS - 1), SEE DETAIL A1 ON SHEET CG502.
8. FOR REINFORCED CONCRETE SADDLE FOR PIPE CULVERTS, SEE DETAIL A1 ON SHEET CG503.
9. FOR CONFLICT MANHOLE, SEE DETAIL C3 ON SHEET CU501.
10. DOWNSPOUT LEADERS SHALL BE 12" ADS HPP PIPE THAT CONNECT TO 6" x 6" DOWNSPOUT ADAPTER. SEE DETAIL B3 ON SHEET CG501.
11. ALL CURB AND GRATE INLETS IN OR ADJACENT TO PAVEMENT SHALL HAVE 50 LF OF 6" SUBGRADE DRAIN WITH SOCK IN TWO DIRECTIONS. SEE A4 ON SHEET CG504.
12. FOR SWALE DETAIL SEE A3 ON SHEET CG501
13. FOR BIORETENTION DETAIL SEE A1ON SHEET CG504

LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- CONCRETE SIDEWALK
- *TC: 23.32* GRADES BY M&N
- *TC: 23.32* GRADES BY CHA
- *EG: 23.32* EXISTING GRADES FROM SURVEY

SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

PROJECT CONSULTANTS:
LANDSCAPE ARCHITECT: CLH DESIGN, P.A.
CIVIL ENGINEERS: MOFFATT & NICHOL; CHA CONSULTING, INC.
STRUCTURAL ENGINEER: THARPE ENGINEERING GROUP, LLC
MECHANICAL & PLUMBING: DULOHERY, WEEKS & GAGLIANO, INC.

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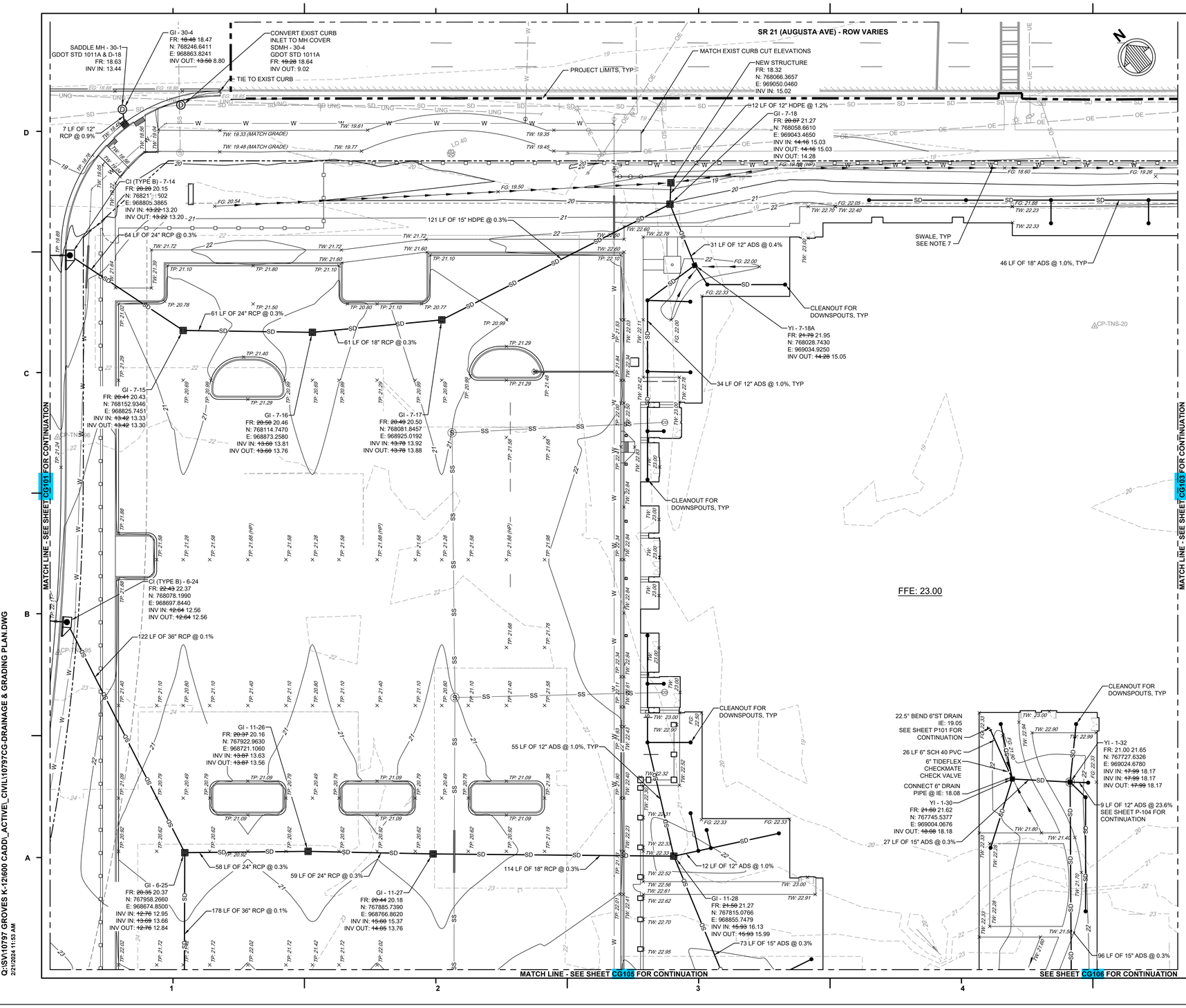
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DRAINAGE & GRADING PLAN

CG101

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NOTES

1. FOR GRATE INLET (GI), SEE DETAIL C3 ON SHEET CG501.
2. FOR YARD INLETS (YI), SEE DETAIL A4 ON SHEET CG501.
3. FOR CURB INLETS (CI), SEE DETAIL C2 ON SHEET CG502.
4. FOR ROOF DRAINAGE CONNECTION, SEE DETAIL A4 ON SHEET CG503.
5. DOWNSPOUT LEADERS SHALL BE 12" ADS HPP PIPE THAT CONNECT TO 6" x 6" DOWNSPOUT ADAPTER. SEE DETAIL B3 ON SHEET CG501.
6. ALL CURB AND GRATE INLETS IN OR ADJACENT TO PAVEMENT SHALL HAVE 50 LF OF 6' SUBGRADE DRAIN WITH SOCK IN TWO DIRECTIONS.
7. FOR SWALE DETAIL SEE A3 ON SHEET CG501

LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- CONCRETE SIDEWALK
- TC: 23.32 GRADES BY M&N
- EG: 23.32 EXSITING GRADES FROM SURVEY

YARD INLET NUMBER	SIZE OF TOP	LOCKING LID
YI - 18A	12" TOP	YES
YI - 30	15" TOP	YES
YI - 32	15" TOP	YES

No.	Description	Date
17	ENTRANCE GRADES	05/24/2023

20' 0' 20' 40'

SCALE: 1"=20'

SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

PROJECT CONSULTANTS:
LANDSCAPE ARCHITECT:
CLH DESIGN, P.A.

CIVIL ENGINEERS:
MOFFATT & NICHOL
CHA CONSULTING, INC.

STRUCTURAL ENGINEER:
THARPE ENGINEERING GROUP, LLC

MECHANICAL & PLUMBING:
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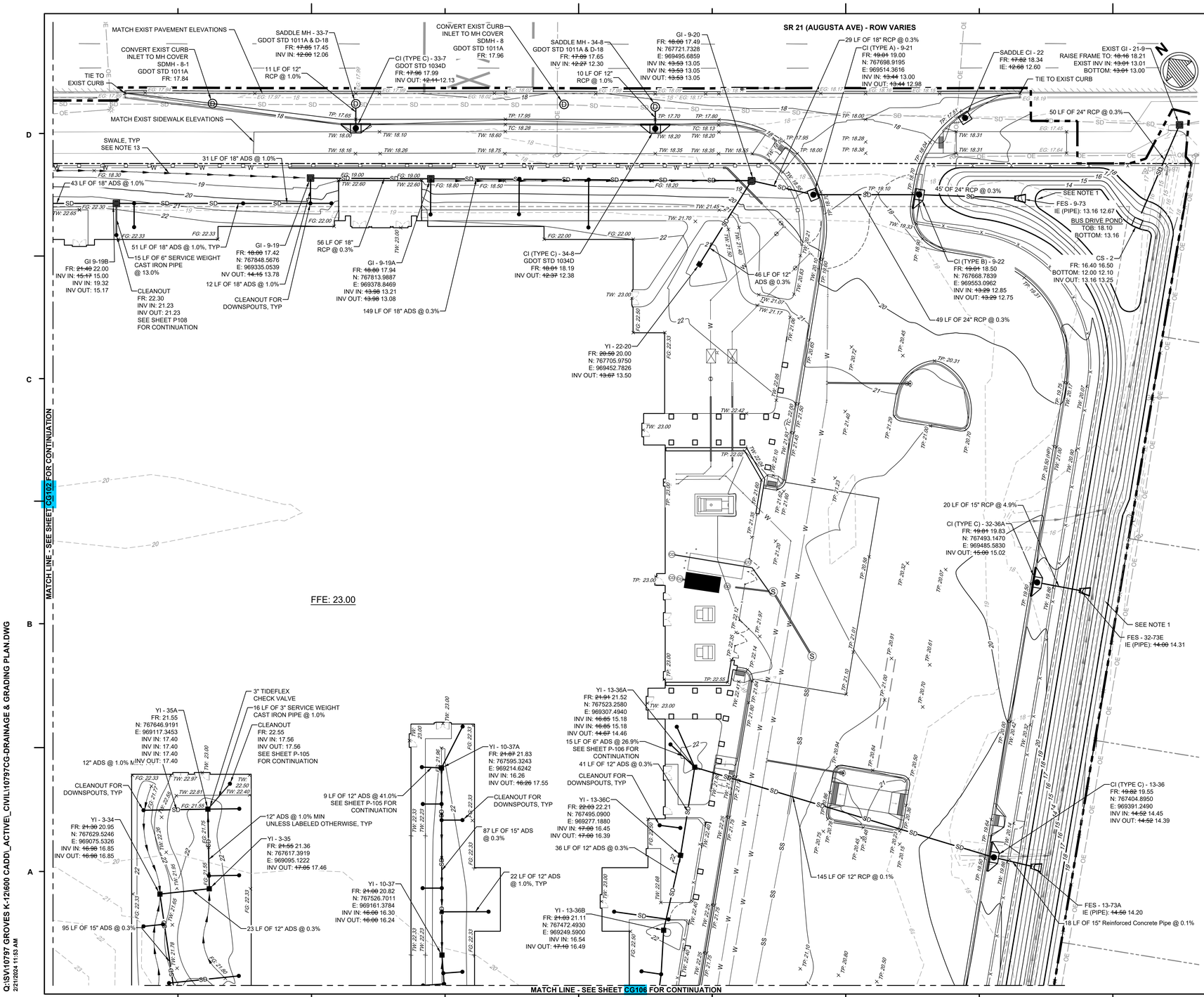
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DRAINAGE & GRADING PLAN

CG102

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NOTES

1. STORM DRAINAGE OUTLET PROTECTION. SEE SHEET CE501 FOR SIZE AND DIMENSIONS.
2. FOR CONCRETE FLARED END SECTIONS (FES), SEE DETAIL C1 ON SHEET CG501.
3. FOR STANDARD PRECAST CONCRETE MANHOLE (SDMH), SEE DETAIL C2 ON SHEET CG501.
4. FOR GRATE INLET (GI), SEE DETAIL C3 ON SHEET CG501.
5. FOR YARD INLETS (YI), SEE DETAIL A4 ON SHEET CG501.
6. FOR CURB INLETS (CI), SEE DETAIL C2 ON SHEET CG502.
7. FOR CONTROL STRUCTURE #2 (CS - 2), SEE DETAIL A2 ON SHEET CG502.
8. FOR REINFORCED CONCRETE SADDLE FOR PIPE CULVERTS, SEE DETAIL A1 ON SHEET CG503.
9. FOR ROOF DRAINAGE CONNECTION, SEE DETAIL A4 ON SHEET CG503.
10. DOWNSPOUT LEADERS SHALL BE 12" ADS HPP PIPE THAT CONNECT TO 6" x 6" DOWNSPOUT ADAPTER. SEE DETAIL B3 ON SHEET CG501.
11. ALL CURB AND GRATE INLETS IN OR ADJACENT TO PAVEMENT SHALL HAVE 50 LF OF 6" SUBGRADE DRAIN WITH SOCK IN TWO DIRECTIONS. SEE A4 ON SHEET CG504.
12. FOR SWALE DETAIL SEE A3 ON SHEET CG501

LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- CONCRETE SIDEWALK
- TC: 23.32 GRADES BY M&N
- EG: 23.32 EXISTING GRADES FROM SURVEY

YARD INLET NUMBER	SIZE OF TOP	LOCKING LID
YI - 20	12" TOP	YES
YI - 34	12" TOP	YES
YI - 35	12" TOP	YES
YI - 36A	12" TOP	YES
YI - 36B	12" TOP	YES
YI - 37	15" TOP	YES
YI - 37A	15" TOP	YES

No.	Description	Date
15	ASI-11	1/17/23
16	RFI 588 & 589	03/30/23

SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

PROJECT CONSULTANTS:
LANDSCAPE ARCHITECT: CLH DESIGN, P.A.
CIVIL ENGINEERS: MOFFATT & NICHOL; CHA CONSULTING, INC.
STRUCTURAL ENGINEER: THARPE ENGINEERING GROUP, LLC
MECHANICAL & PLUMBING: DULOHERY, WEEKS & GAGLIANO, INC.

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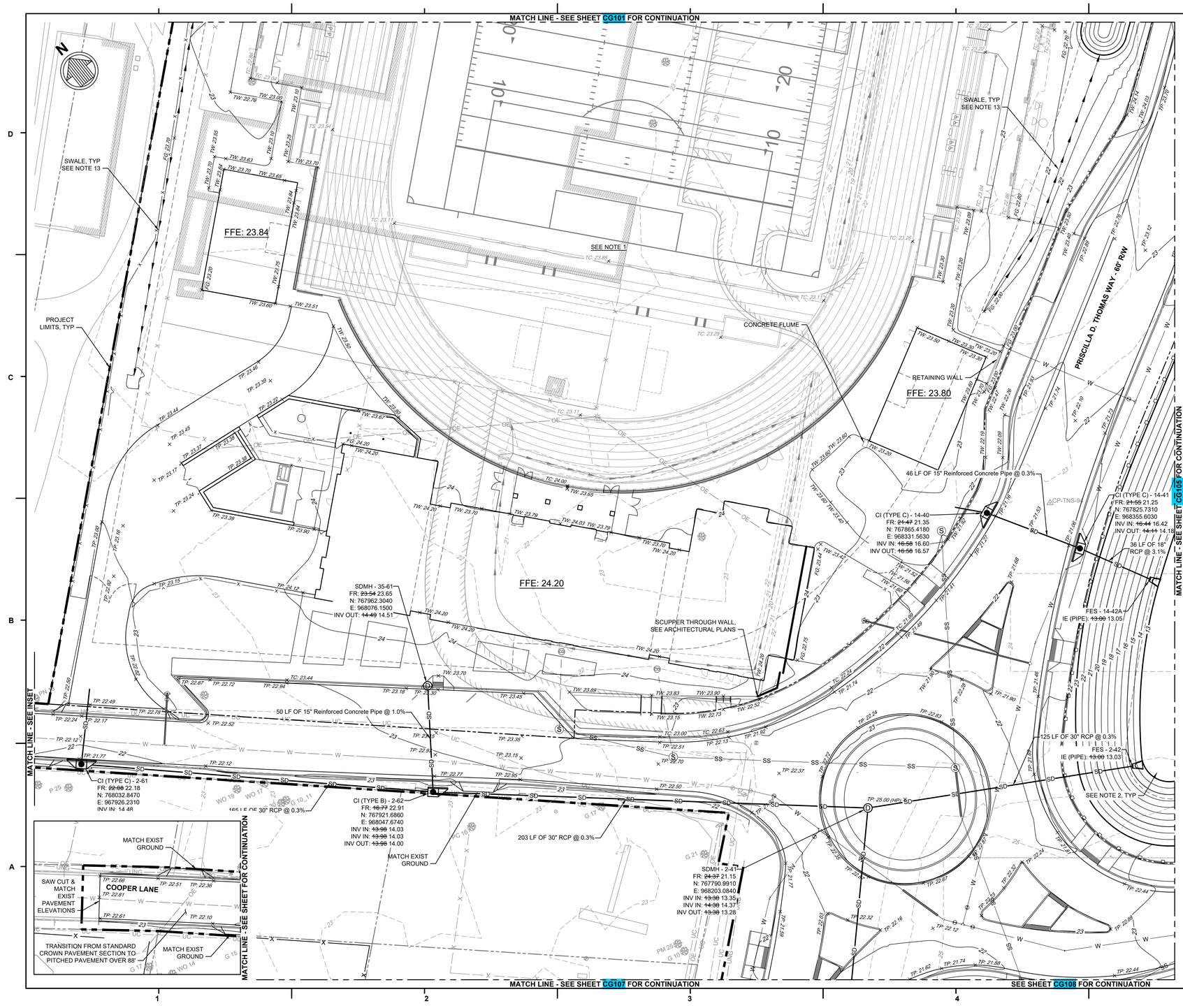
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DRAINAGE & GRADING PLAN

CG103

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NOTES

1. STADIUM AND TRACK DESIGN BY OTHERS. REFER TO CHA STADIUM AND TRACK PAVING, GRADING AND DRAINAGE PLAN DESIGN.
2. STORM DRAINAGE OUTLET PROTECTION. SEE SHEET CE501 FOR SIZE AND DIMENSIONS.
3. FOR CONCRETE FLARED END SECTIONS (FES), SEE DETAIL C1 ON SHEET CG501.
4. FOR STANDARD PRECAST CONCRETE MANHOLE (SDMH), SEE DETAIL C2 ON SHEET CG501.
5. FOR GRATE INLET (GI), SEE DETAIL C3 ON SHEET CG501.
6. FOR YARD INLETS (YI), SEE DETAIL A4 ON SHEET CG501.
7. FOR CURB INLETS (CI), SEE DETAIL C2 ON SHEET CG502.
8. FOR ROOF DRAINAGE CONNECTION, SEE DETAIL A4 ON SHEET CG503.
9. FOR TRENCH DRAIN, SEE DETAIL A3 ON SHEET CG504.
10. FOR CONFLICT MANHOLE, SEE DETAIL C3 ON SHEET CU501.
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12. ALL CURB AND GRATE INLETS IN OR ADJACENT TO PAVEMENT SHALL HAVE 50 LF OF 6" SUBGRADE DRAIN WITH SOCK IN TWO DIRECTIONS. SEE A4 ON SHEET CG504
13. FOR SWALE DETAIL SEE A3 ON SHEET CG501

LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- CONCRETE SIDEWALK
- TC: 23.32 GRADES BY M&N
- TC: 23.32 GRADES BY CHA

YARD INLET NUMBER	SIZE OF TOP	LOCKING LID
YI - 12	12" TOP	YES
YI - 12A	12" TOP	YES
YI - 39	12" TOP	YES
YI - 39A	12" TOP	YES
YI - 39B	12" TOP	YES
YI - 39C	15" TOP	YES
YI - 39D	12" TOP	YES

20' 0' 20' 40'

SCALE: 1"=20'

SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL
625-0518

PROJECT CONSULTANTS:
LANDSCAPE ARCHITECT:
CLH DESIGN, P.A.

CIVIL ENGINEERS:
MOFFATT & NICHOL
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STRUCTURAL ENGINEER:
THARPE ENGINEERING GROUP, LLC

MECHANICAL & PLUMBING:
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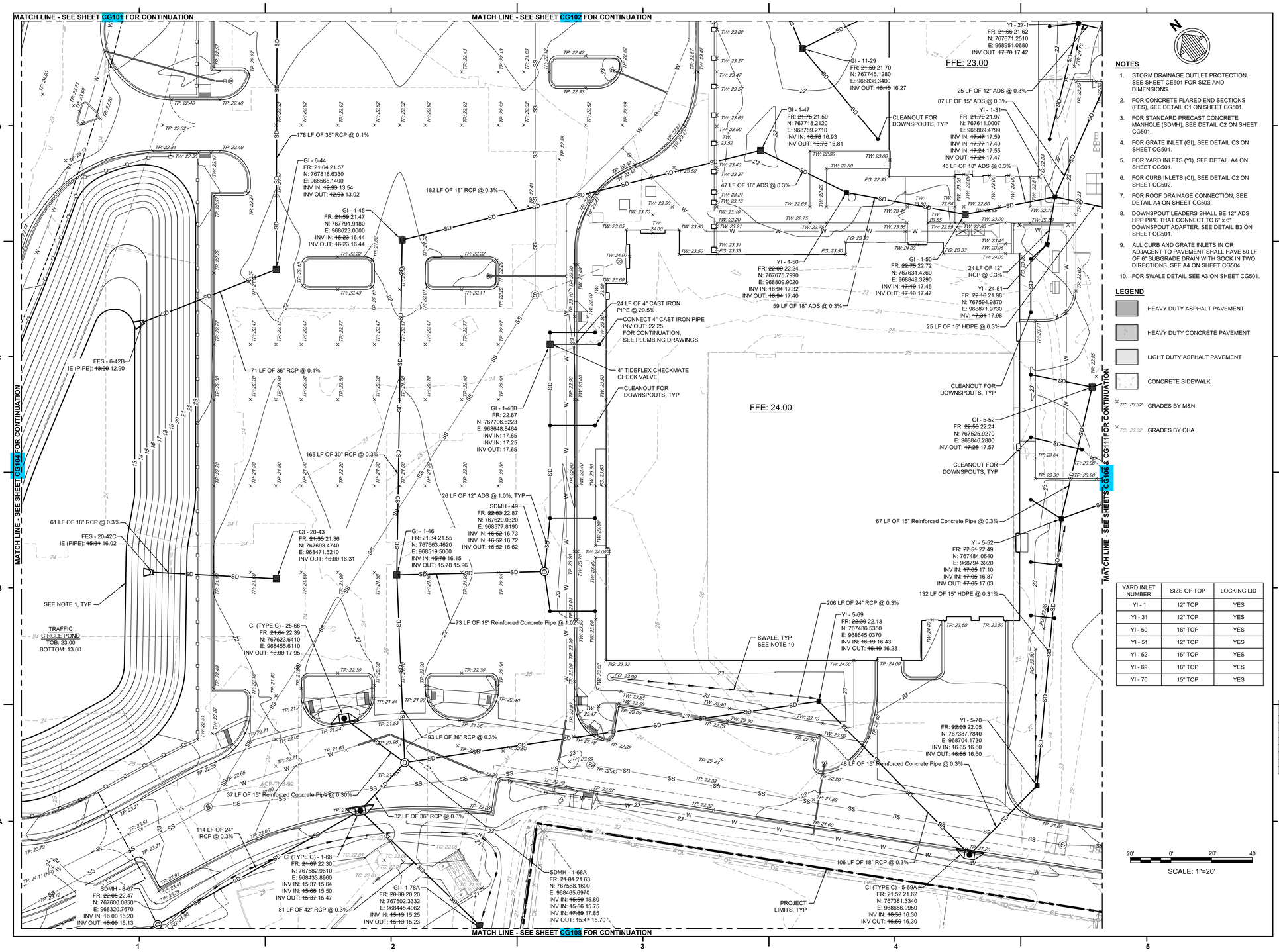
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DRAINAGE & GRADING PLAN

CG104

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NOTES

1. STORM DRAINAGE OUTLET PROTECTION. SEE SHEET CE501 FOR SIZE AND DIMENSIONS.
2. FOR CONCRETE FLARED END SECTIONS (FES), SEE DETAIL C1 ON SHEET CG501.
3. FOR STANDARD PRECAST CONCRETE MANHOLE (SDMH), SEE DETAIL C2 ON SHEET CG501.
4. FOR GRATE INLET (GI), SEE DETAIL C3 ON SHEET CG501.
5. FOR YARD INLETS (YI), SEE DETAIL A4 ON SHEET CG501.
6. FOR CURB INLETS (CI), SEE DETAIL C2 ON SHEET CG502.
7. FOR ROOF DRAINAGE CONNECTION, SEE DETAIL A4 ON SHEET CG503.
8. DOWNSPOUT LEADERS SHALL BE 12" ADS HPP PIPE THAT CONNECT TO 6" x 6" DOWNSPOUT ADAPTER. SEE DETAIL B3 ON SHEET CG501.
9. ALL CURB AND GRATE INLETS IN OR ADJACENT TO PAVEMENT SHALL HAVE 50 LF OF 6" SUBGRADE DRAIN WITH SOCK IN TWO DIRECTIONS. SEE A4 ON SHEET CG504.
10. FOR SWALE DETAIL SEE A3 ON SHEET CG501.

LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- CONCRETE SIDEWALK
- TC: 23.32 GRADES BY M&N
- TC: 23.32 GRADES BY CHA

YARD INLET NUMBER	SIZE OF TOP	LOCKING LID
YI - 1	12" TOP	YES
YI - 31	12" TOP	YES
YI - 50	18" TOP	YES
YI - 51	12" TOP	YES
YI - 52	15" TOP	YES
YI - 69	18" TOP	YES
YI - 70	15" TOP	YES

SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

PROJECT CONSULTANTS:
LANDSCAPE ARCHITECT: CLH DESIGN, P.A.
CIVIL ENGINEERS: MOFFATT & NICHOL; CHA CONSULTING, INC.
STRUCTURAL ENGINEER: THARPE ENGINEERING GROUP, LLC
MECHANICAL & PLUMBING: DULOHERY, WEEKS & GAGLIANO, INC.

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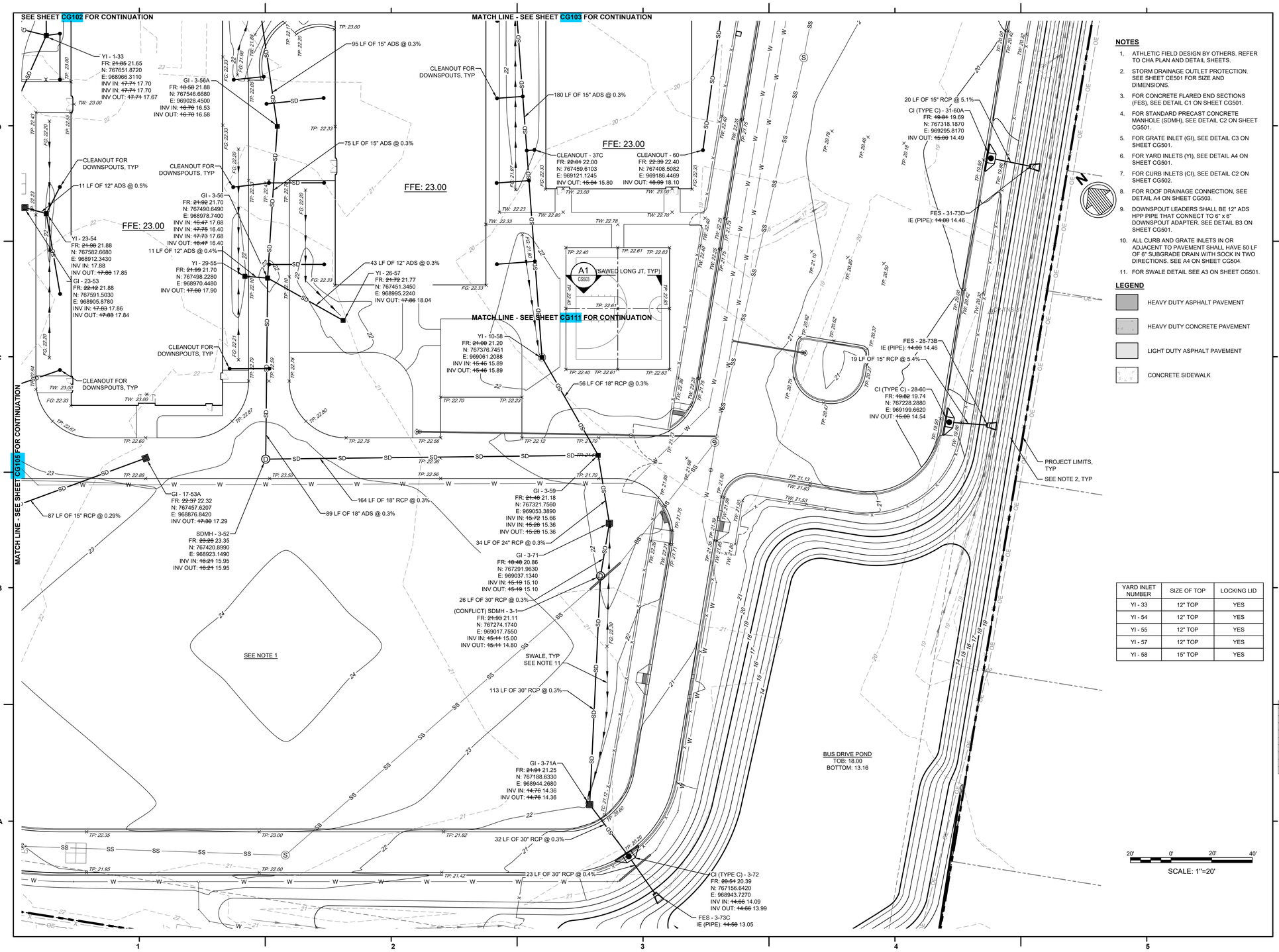
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DRAINAGE & GRADING PLAN

CG105

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YARD INLET NUMBER	SIZE OF TOP	LOCKING LID
YI - 33	12" TOP	YES
YI - 54	12" TOP	YES
YI - 55	12" TOP	YES
YI - 57	12" TOP	YES
YI - 58	15" TOP	YES

NOTES

1. ATHLETIC FIELD DESIGN BY OTHERS. REFER TO CHA PLAN AND DETAIL SHEETS.
2. STORM DRAINAGE OUTLET PROTECTION. SEE SHEET CE501 FOR SIZE AND DIMENSIONS.
3. FOR CONCRETE FLARED END SECTIONS (FES), SEE DETAIL C1 ON SHEET CG501.
4. FOR STANDARD PRECAST CONCRETE MANHOLE (SDMH), SEE DETAIL C2 ON SHEET CG501.
5. FOR GRATE INLET (GI), SEE DETAIL C3 ON SHEET CG501.
6. FOR YARD INLETS (YI), SEE DETAIL A4 ON SHEET CG501.
7. FOR CURB INLETS (CI), SEE DETAIL C2 ON SHEET CG502.
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11. FOR SWALE DETAIL SEE A3 ON SHEET CG501.

LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- CONCRETE SIDEWALK

SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

PROJECT CONSULTANTS:
LANDSCAPE ARCHITECT: CLH DESIGN, P.A.
CIVIL ENGINEERS: MOFFATT & NICHOL; CHA CONSULTING, INC.
STRUCTURAL ENGINEER: THARPE ENGINEERING GROUP, LLC
MECHANICAL & PLUMBING: DULOHERY, WEEKS & GAGLIANO, INC.

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DRAINAGE & GRADING PLAN

CG106

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MATCH LINE - SEE SHEET CG104 FOR CONTINUATION

MATCH LINE - SEE SHEET CG108 FOR CONTINUATION

MATCH LINE - SEE SHEET CG109 FOR CONTINUATION

MATCH LINE - SEE SHEET CG110 FOR CONTINUATION

CI (TYPE C) - 15-63
FR: ~~22.20~~ 21.65
N: 767751.7720
E: 968103.4540
INV OUT: ~~16.86~~ 16.84

MATCH EXIST PAVEMENT ELEVATIONS

49 LF OF 15" RCP @ 0.3%

115 LF OF 15" RCP @ 0.3%

CI (TYPE C) - 15-64
FR: ~~21.74~~ 21.58
N: 767707.1690
E: 968123.9350
INV IN: ~~16.71~~ 16.70
INV OUT: ~~14.74~~ 14.69

SWALE, TYP
SEE NOTE 9

SEE NOTE 10

PROJECT LIMITS, TYP

GI - 8-77
FR: ~~22.12~~ 22.03
N: 767530.6580
E: 968060.7770
INV OUT: ~~16.94~~ 17.14

CI (TYPE C) - 4-79
FR: ~~21.89~~ 21.74
N: 767557.9820
E: 967788.6860
INV IN: ~~14.81~~ 14.90
INV OUT: ~~14.81~~ 14.88

38 LF OF 18" RCP @ 0.5%

CI - (TYPE C) 4-65
FR: ~~22.69~~ 21.75
N: 767595.5280
E: 967783.3910
INV OUT: ~~15.00~~ 15.07

SEE NOTE 1

34 LF OF 18" RCP @ 0.5%

MAINTENANCE DRIVE, WIDTH VARIES

FES - 4-80
IE (PIPE): ~~14.63~~ 14.70

PRISCILLA D. THOMAS WAY - 60' R/W

TIE TO EXIST CURB

SEE NOTE 2

SOCCER FIELD POND
TOB: 20.50
TOW: 16.20
BOTTOM: 6.00

20' 0' 20' 40'
SCALE: 1"=20'

NOTES

1. ATHLETIC FIELD DESIGN BY OTHERS. REFER TO CHA PLAN AND DETAIL SHEETS.
2. STORM DRAINAGE OUTLET PROTECTION. SEE SHEET CE501 FOR SIZE AND DIMENSIONS.
3. FOR CONCRETE FLARED END SECTIONS (FES), SEE DETAIL C1 ON SHEET CG501.
4. FOR GRATE INLET (GI), SEE DETAIL C3 ON SHEET CG501.
5. FOR YARD INLETS (YI), SEE DETAIL A4 ON SHEET CG501.
6. FOR CURB INLETS (CI), SEE DETAIL C2 ON SHEET CG502.
7. DOWNSPOUT LEADERS SHALL BE 12" ADS HPP PIPE THAT CONNECT TO 6" x 6" DOWNSPOUT ADAPTER. SEE DETAIL B3 ON SHEET CG501.
8. ALL CURB AND GRATE INLETS IN OR ADJACENT TO PAVEMENT SHALL HAVE 50 LF OF 6" SUBGRADE DRAIN WITH SOCK IN TWO DIRECTIONS SEE A4 ON SHEET CG504.
9. FOR SWALE DETAIL SEE A3 ON SHEET CG501.
10. FOR PUMP STATION GRADING SEE SHEET CU401

LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- CONCRETE SIDEWALK

SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL
625-0518

PROJECT CONSULTANTS:
LANDSCAPE ARCHITECT:
CLH DESIGN, P.A.

CIVIL ENGINEERS:
MOFFATT & NICHOL
CHA CONSULTING, INC.

STRUCTURAL ENGINEER:
THARPE ENGINEERING GROUP, LLC

MECHANICAL & PLUMBING:
DULOHERY, WEEKS & GAGLIANO, INC.

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DRAINAGE & GRADING PLAN

CG107

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SEE SHEET CG104 FOR CONTINUATION

MATCH LINE - SEE SHEET CG105 FOR CONTINUATION

MATCH LINE - SEE SHEET CG107 FOR CONTINUATION

MATCH LINE - SEE SHEET CG110 FOR CONTINUATION

SWALE, TYP
SEE NOTE 6

152 LF OF 24" RCP @ 0.3%

GI - 8-74
FR: ~~20.82~~ 21.62
N: 767636.7460
E: 968172.8380
INV IN: ~~16.46~~ 16.19
INV OUT: ~~16.46~~ 16.17

SWALE, TYP
SEE NOTE 6

154 LF OF 18" RCP @ 0.3%

SEE NOTE 1

CP-TNS-90

237 LF OF 42" RCP @ 0.3%

EXIST SWALE, TYP

SDMH - 1-78
FR: ~~22.56~~ 22.57
N: 767340.9980
E: 968271.5450
INV IN: ~~14.42~~ 14.55
INV OUT: ~~14.42~~ 14.53

SWALE OVER PROPOSED STORM PIPE, TYP

206 LF OF 42" RCP @ 0.3%

CP-MNWS-89

MAINTENANCE DRIVE, WIDTH VARIES

GI - 1-84
FR: ~~21.94~~ 21.38
N: 767194.5490
E: 968127.1670
INV IN: ~~13.90~~ 14.15
INV OUT: ~~13.90~~ 13.98
68 LF OF 48" RCP @ 0.8%

4.0%

4.0%

NOTES

1. ATHLETIC FIELD DESIGN BY OTHERS. REFER TO CHA PLAN AND DETAIL SHEETS.
2. FOR STANDARD PRECAST CONCRETE MANHOLE (SDMH), SEE DETAIL C2 ON SHEET CG501.
3. FOR GRATE INLET (GI), SEE DETAIL C3 ON SHEET CG501.
4. DOWNSPOUT LEADERS SHALL BE 12" ADS HPP PIPE THAT CONNECT TO 6" x 6" DOWNSPOUT ADAPTER. SEE DETAIL B3 ON SHEET CG501.
5. ALL CURB AND GRATE INLETS IN OR ADJACENT TO PAVEMENT SHALL HAVE 50 LF OF 6" SUBGRADE DRAIN WITH SOCK IN TWO DIRECTIONS. SEE A4 ON SHEET CG504.
6. FOR SWALE DETAIL SEE A3 ON SHEET CG501.

LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- CONCRETE SIDEWALK
- TC: 23.32 GRADES BY M&N
- TC: 23.32 GRADES BY CHA

20' 0' 20' 40'

SCALE: 1"=20'

SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL
625-0518

PROJECT CONSULTANTS:
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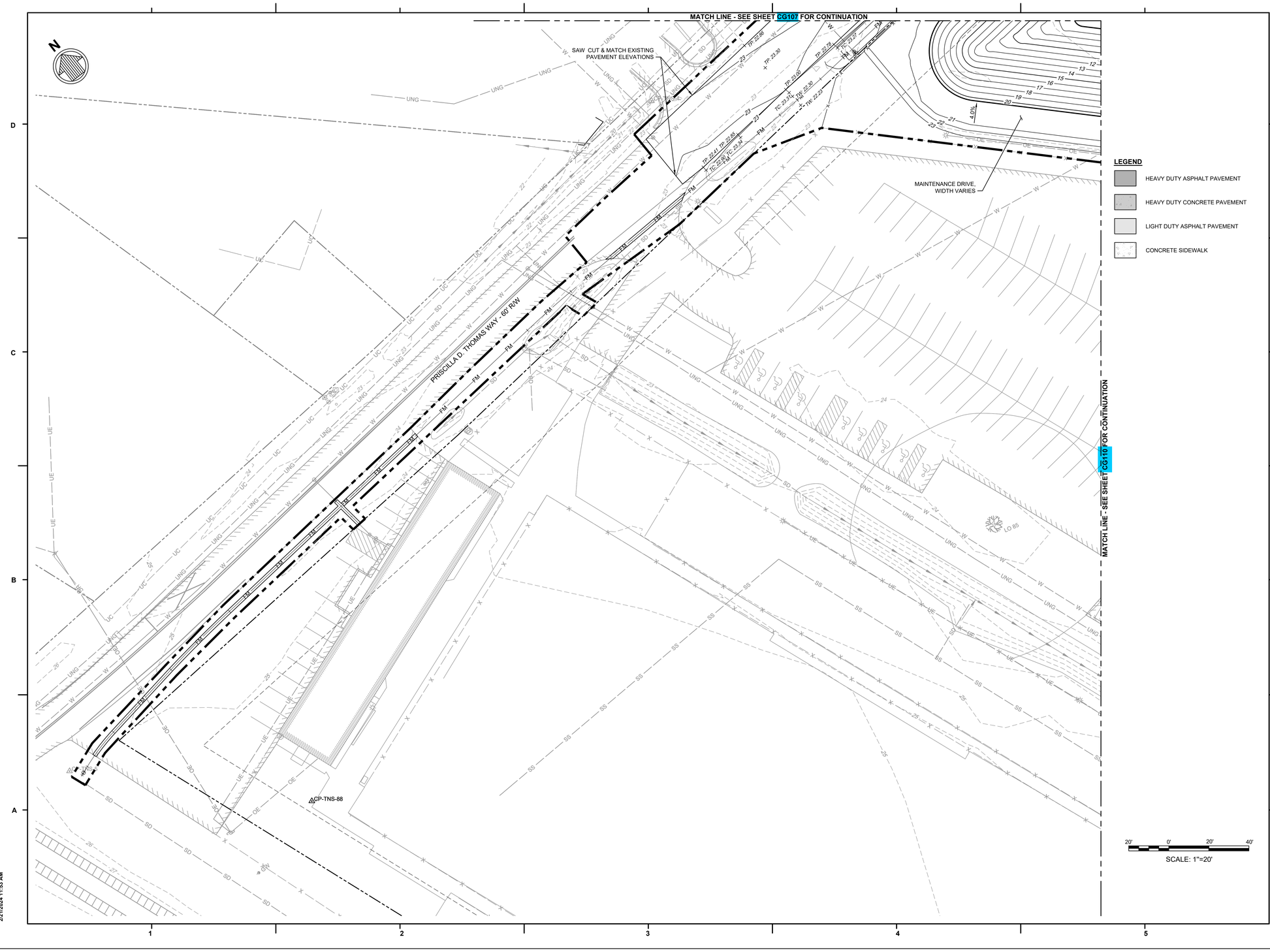
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DRAINAGE & GRADING PLAN

CG108

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SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

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DRAINAGE & GRADING PLAN

CG109

RECORD SET

MATCH LINE - SEE SHEET CG107 FOR CONTINUATION

MATCH LINE - SEE SHEET CG105 FOR CONTINUATION

MATCH LINE - SEE SHEET CG109 FOR CONTINUATION

SOCCER FIELD POND
TOB: 20.50
TOW: 16.20
BOTTOM: 6.00

FES - POND
IE (PIPE): ~~13.22~~ 13.44

MAINTENANCE DRIVE, WIDTH VARIES

CS - 3
FR: ~~18.59~~ 18.45
N: 767173.4211
E: 968021.4309
INV OUT: ~~16.20~~ 16.02

OVERFLOW WEIR FOR SOCCER FIELD POND ELEVATION: 20.0

(2) 61 LF OF 18" RCP @ 0.0%

6' X 4' PRECAST DRAINAGE STRUCTURE - 16-96A
FR: ~~23.12~~ 23.10
N: 767118.0510
E: 968046.0430
INV IN: ~~16.20~~ 16.41
INV OUT: ~~16.20~~ 16.03

98 LF OF 36" RCP @ 0.0%

MH - 16-96A.1
FR: ~~22.56~~ 22.50
N: 767049.1449
E: 967976.3663
INV IN: ~~16.20~~ 16.03
INV OUT: ~~16.20~~ 16.03

40 LF OF 36" RCP @ 0.0%

PROJECT LIMITS, TYP

FES - 16-96A
IE (PIPE): 16.20 16.00

SEE NOTE 1

CP-MNWS-1261

REMOVE AND REPLACE 280 LF OF EXISTING FENCE

MATCH LINE - SEE INSET FOR CONTINUATION

MATCH LINE - SEE SHEET FOR CONTINUATION

B5 / CG110

EXISTING FENCE TO BE REMOVED AND REUSED

PROPERTY LINE

MATCH EXISTING, TYP

BOTTOM OF V-DITCH, ELEVATION VARIES, SEE PLAN VIEW

B5 / CG110 DITCH CROSS SECTION
SCALE: 1" = 5'

NOTES

1. STORM DRAINAGE OUTLET PROTECTION. SEE SHEET CE501 FOR SIZE AND DIMENSIONS.
2. FOR CONCRETE FLARED END SECTIONS (FES), SEE DETAIL C1 ON SHEET CG501.
3. FOR STANDARD PRECAST CONCRETE MANHOLE (SDMH), SEE DETAIL C2 ON SHEET CG501.
4. FOR GRATE INLET (GI), SEE DETAIL C3 ON SHEET CG501.
5. FOR CONTROL STRUCTURE #3 (CS - 16-1), SEE DETAIL A3 ON SHEET CG502.
6. DOWNSPOUT LEADERS SHALL BE 12" ADS HPP PIPE THAT CONNECT TO 6" x 6" DOWNSPOUT ADAPTER. SEE DETAIL B3 ON SHEET CG501.

LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- CONCRETE SIDEWALK

5' 0' 5' 10'
SCALE: 1"=5'

20' 0' 20' 40'
SCALE: 1"=20'

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SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

PROJECT CONSULTANTS:
LANDSCAPE ARCHITECT:
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STRUCTURAL ENGINEER:
THARPE ENGINEERING GROUP, LLC

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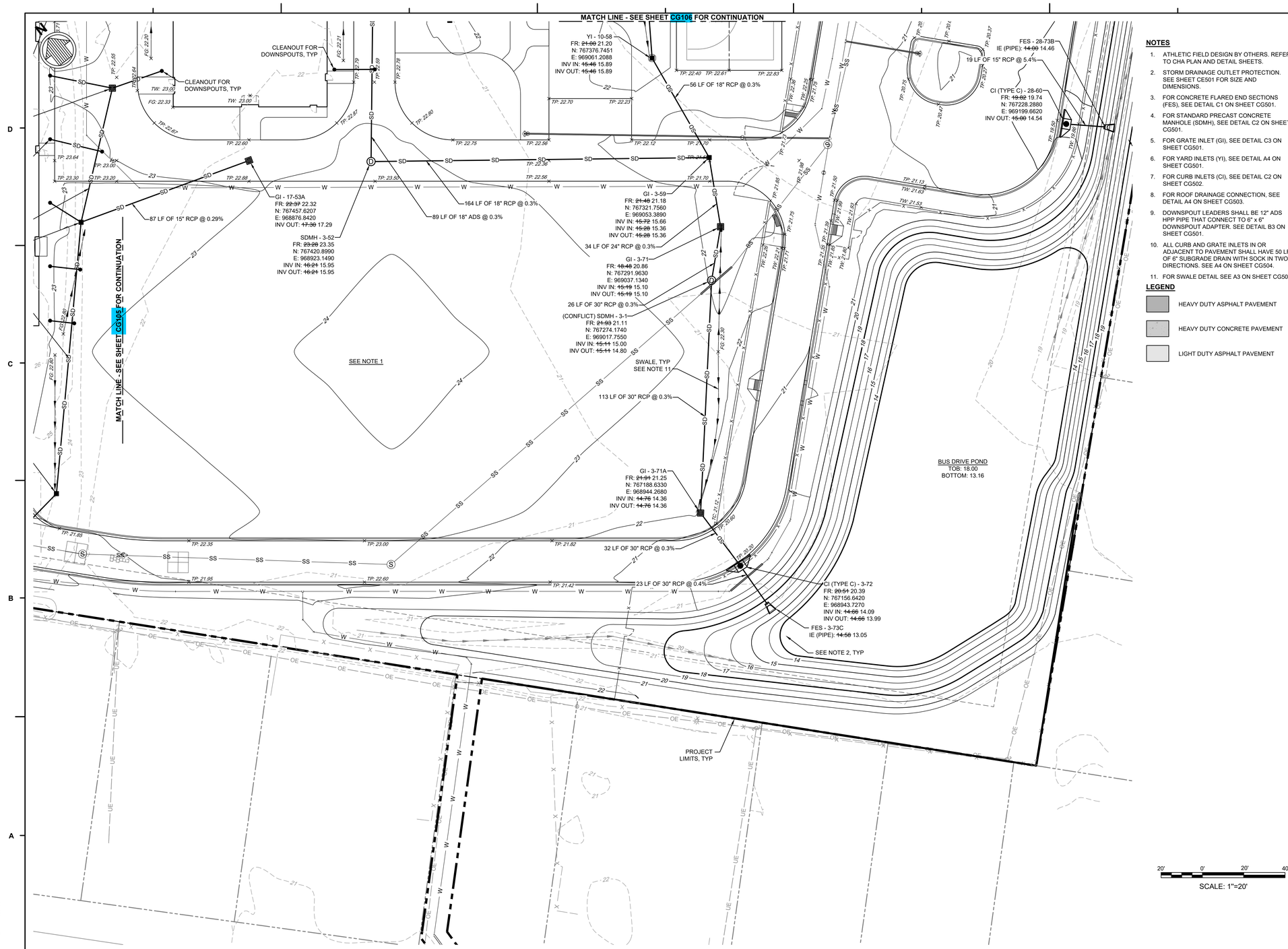
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DRAINAGE & GRADING PLAN

CG110

RECORD SET



NOTES

1. ATHLETIC FIELD DESIGN BY OTHERS. REFER TO CHA PLAN AND DETAIL SHEETS.
2. STORM DRAINAGE OUTLET PROTECTION. SEE SHEET CE501 FOR SIZE AND DIMENSIONS.
3. FOR CONCRETE FLARED END SECTIONS (FES), SEE DETAIL C1 ON SHEET CG501.
4. FOR STANDARD PRECAST CONCRETE MANHOLE (SDMH), SEE DETAIL C2 ON SHEET CG501.
5. FOR GRATE INLET (GI), SEE DETAIL C3 ON SHEET CG501.
6. FOR YARD INLETS (YI), SEE DETAIL A4 ON SHEET CG501.
7. FOR CURB INLETS (CI), SEE DETAIL C2 ON SHEET CG502.
8. FOR ROOF DRAINAGE CONNECTION, SEE DETAIL A4 ON SHEET CG503.
9. DOWNSPOUT LEADERS SHALL BE 12" ADS HPP PIPE THAT CONNECT TO 6" x 6" DOWNSPOUT ADAPTER. SEE DETAIL B3 ON SHEET CG501.
10. ALL CURB AND GRATE INLETS IN OR ADJACENT TO PAVEMENT SHALL HAVE 50 LF OF 6" SUBGRADE DRAIN WITH SOCK IN TWO DIRECTIONS. SEE A4 ON SHEET CG504.
11. FOR SWALE DETAIL SEE A3 ON SHEET CG501.

LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT

SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

PROJECT CONSULTANTS:
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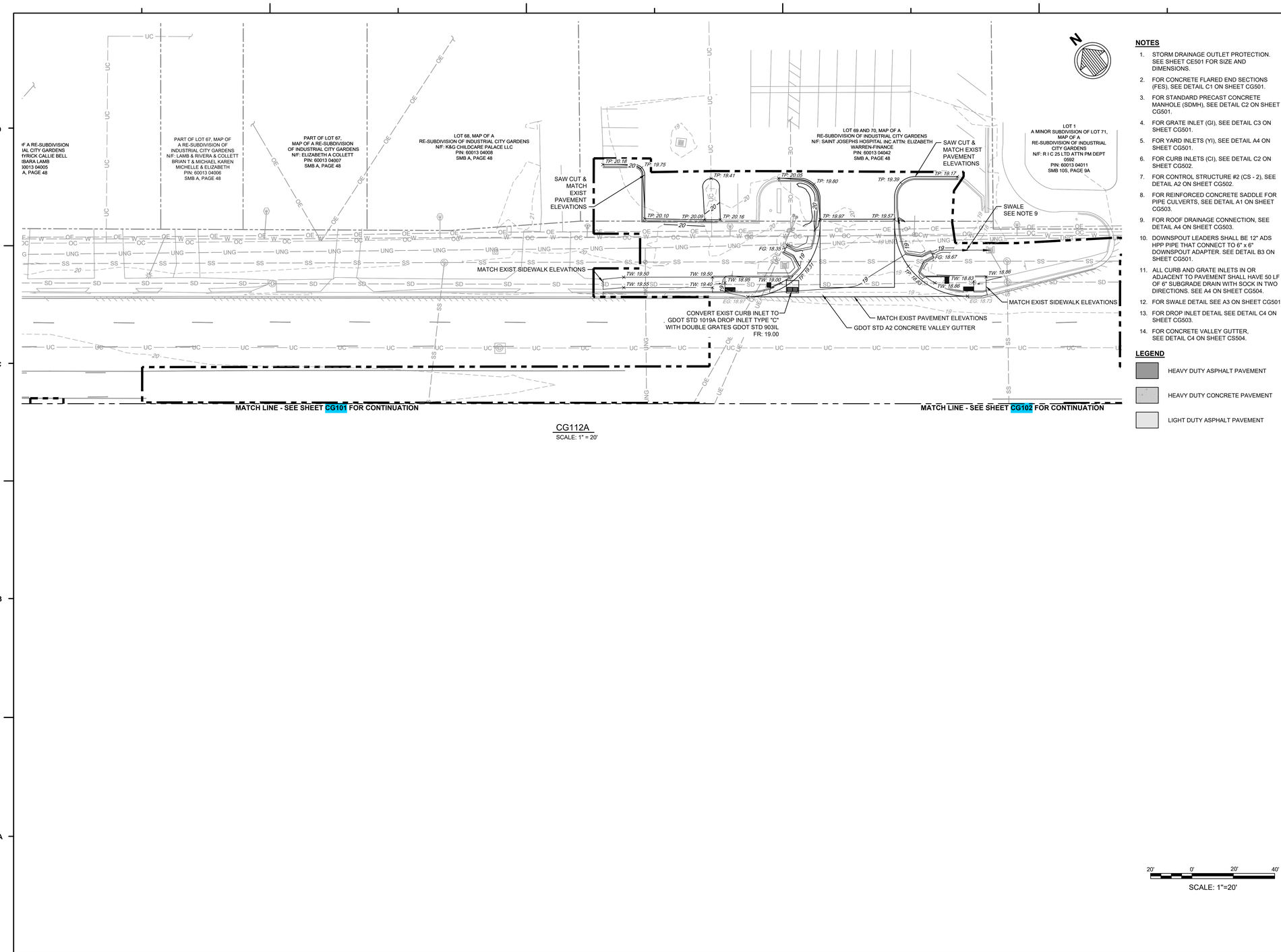
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DRAINAGE & GRADING PLAN

CG111

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CG112A
SCALE: 1" = 20'

SCALE: 1"=20'

NOTES

1. STORM DRAINAGE OUTLET PROTECTION. SEE SHEET CE501 FOR SIZE AND DIMENSIONS.
2. FOR CONCRETE FLARED END SECTIONS (FES), SEE DETAIL C1 ON SHEET CG501.
3. FOR STANDARD PRECAST CONCRETE MANHOLE (SDMH), SEE DETAIL C2 ON SHEET CG501.
4. FOR GRATE INLET (GI), SEE DETAIL C3 ON SHEET CG501.
5. FOR YARD INLETS (YI), SEE DETAIL A4 ON SHEET CG501.
6. FOR CURB INLETS (CI), SEE DETAIL C2 ON SHEET CG502.
7. FOR CONTROL STRUCTURE #2 (CS - 2), SEE DETAIL A2 ON SHEET CG502.
8. FOR REINFORCED CONCRETE SADDLE FOR PIPE CULVERTS, SEE DETAIL A1 ON SHEET CG503.
9. FOR ROOF DRAINAGE CONNECTION, SEE DETAIL A4 ON SHEET CG503.
10. DOWNSPOUT LEADERS SHALL BE 12" ADS HPP PIPE THAT CONNECT TO 6" x 6" DOWNSPOUT ADAPTER. SEE DETAIL B3 ON SHEET CG501.
11. ALL CURB AND GRATE INLETS IN OR ADJACENT TO PAVEMENT SHALL HAVE 50 LF OF 6" SUBGRADE DRAIN WITH SOCK IN TWO DIRECTIONS. SEE A4 ON SHEET CG504.
12. FOR SWALE DETAIL SEE A3 ON SHEET CG501.
13. FOR DROP INLET DETAIL SEE DETAIL C4 ON SHEET CG503.
14. FOR CONCRETE VALLEY GUTTER, SEE DETAIL C4 ON SHEET CG504.

LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT

SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

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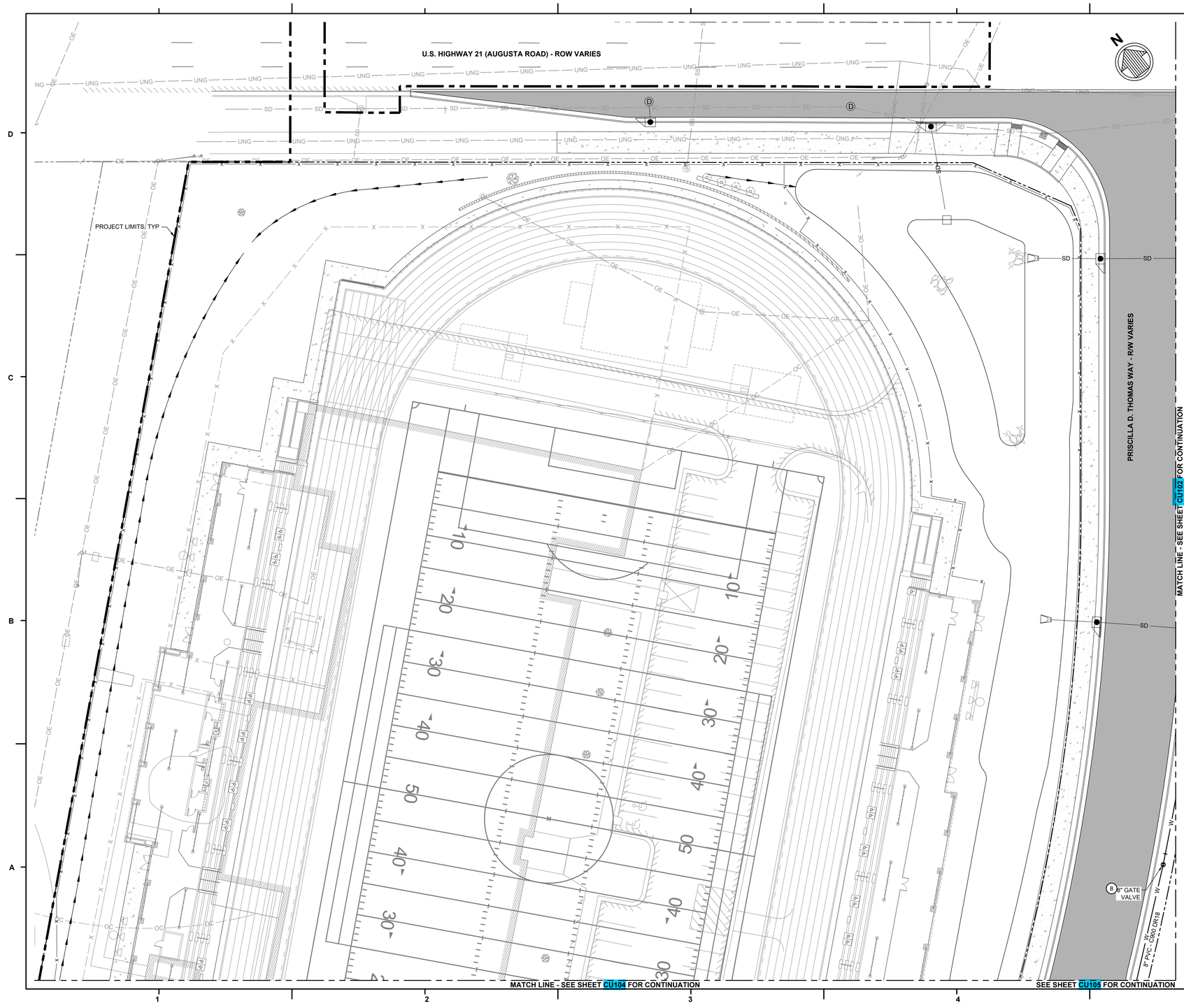
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DRAINAGE & GRADING PLAN

CG112

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NOTES

1. CONTRACTOR SHALL REFER TO THE M.E.P. PLANS FOR THE EXACT LOCATION OF BUILDING UTILITY CONNECTIONS.
2. FOR PIPE BEDDING REQUIREMENTS SEE DETAIL C1, SHEET CU502
3. FOR JOINT RESTRAINTS SEE SHEET CU504
4. FOR MINIMUM WATER & SEWER PIPE SEPARATION REQUIREMENTS SEE DETAIL C5, SHEET CU505.
5. FOR SANITARY SEWER GENERAL NOTES SEE DETAIL C2, SHEET CU502.
6. FOR DOMESTIC WATER GENERAL NOTES SEE DETAIL C3, SHEET CU505.
7. FOR ALL DOMESTIC WATER FITTINGS, VALVES & OTHER ACCESSORIES GENERAL NOTES SEE C3, SHEET CU505.
8. ALL PROPOSED DOMESTIC & FIRE PROTECTION LINES SHALL BE EQUIPPED WITH BACKFLOW PREVENTION DEVICE.
9. AN ACCEPTED WATER SUPPLY FOR FIRE PROTECTION SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ARRIVES ON SITE.
10. ALL PVC GRAVITY SEWER SHALL BE ASTM 2241, SDR-26, GREEN IN COLOR.
11. ALL WATER MAINS SHALL BE AWWA C-900, DR-18 PRESSURE CLASS 235 PVC.
12. ALL WATER LATERALS SHALL BE POLYETHYLENE PE3408 SDR-9 CONFORMING TO ALL REQUIREMENTS OF AWWA C-901 & ASTM D-2737 LATEST REVISIONS.
13. ALL WATER MAIN THRUST RESTRAINT SHALL BE HANDLED BY USE OF JOINT RESTRAINT/MECHANICAL JOINTS EQUIVALENT TO EBAA IRON MEGA LUG OR PUSH-ON JOINT TYPE RESTRAINED JOINTS EQUAL TO "LOK-RING", "TR FLEX", OR "SUPER LOCK".
14. ALL VALVES 4" OR LARGER WILL BE IN MANHOLES.
15. ALL FITTINGS 2" OR LARGER SHALL BE DUCTILE IRON RESTRAINED JOINTS.
16. CONTRACTOR SHALL ACQUIRE UTILITY ROW ENCROACHMENT FOR WORK IN U.S. HWY 21.

KEY NOTES

1. STANDARD PRECAST CONCRETE MANHOLE, SEE DETAIL C1 SHEET CU501
2. SADDLE MANHOLE, SEE DETAIL C2 SHEET CU501
3. CONFLICT MANHOLE, SEE DETAIL C3 SHEET CU501
4. STANDARD DROP MANHOLE CONNECTION, SEE DETAIL A3 SHEET CU501
5. GRAVITY GREASE INTERCEPTOR, SEE DETAIL C3 SHEET CU502
6. STEEL CASING INSTALLATION SEE DETAIL A1 SHEET CU501
7. SANITARY SEWER CLEANOUT, SEE DETAIL A5 SHEET CU502
8. VALVE MANHOLE FOR 4"-8" GATE VALVE, SEE DETAIL A3 SHEET CU503
9. VALVE MANHOLE FOR 4"-8" TAPPING SLEEVE AND VALVE, SEE DETAIL A4 SHEET CU503
10. TYPICAL TAPPING SLEEVE AND TAPPING VALVE SEE DETAIL A2 SHEET CU503
11. 2" WATER VALVE AND VALVE BOX, SEE DETAIL C1 SHEET CU503
12. WATER METER INSTALLATION 3" AND LARGER, SEE DETAIL C2 SHEET CU503
13. DOUBLE CHECK VALVE ASSEMBLY (FOR 3" AND LARGER) DOMESTIC SYSTEMS, SEE DETAIL C5 SHEET CU503
14. FIRE HYDRANT, SEE DETAIL A5 SHEET CU504
15. FIRE SERVICE SYSTEM FOR BUILDINGS, SEE DETAIL C3 SHEET CU503
16. PAVEMENT PATCHING, SEE C4 SHEET CS503
17. 2" TAPPING SADDLE, SEE A3 SHEET CU505
18. RAIN HARVESTING SYSTEM, SEE DETAILS A4 & B1 SHEET CU505
19. CONTRACTOR SHALL COORDINATE WITH SCCPSS PRIOR TO COMMENCING WORK ON THE DEEP WELL IRRIGATION SYSTEM AND PRIOR TO COMMENCING WORK ON THE WATER HARVESTING SYSTEM.

20' 0' 20' 40'

SCALE: 1"=20'

SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL
625-0518

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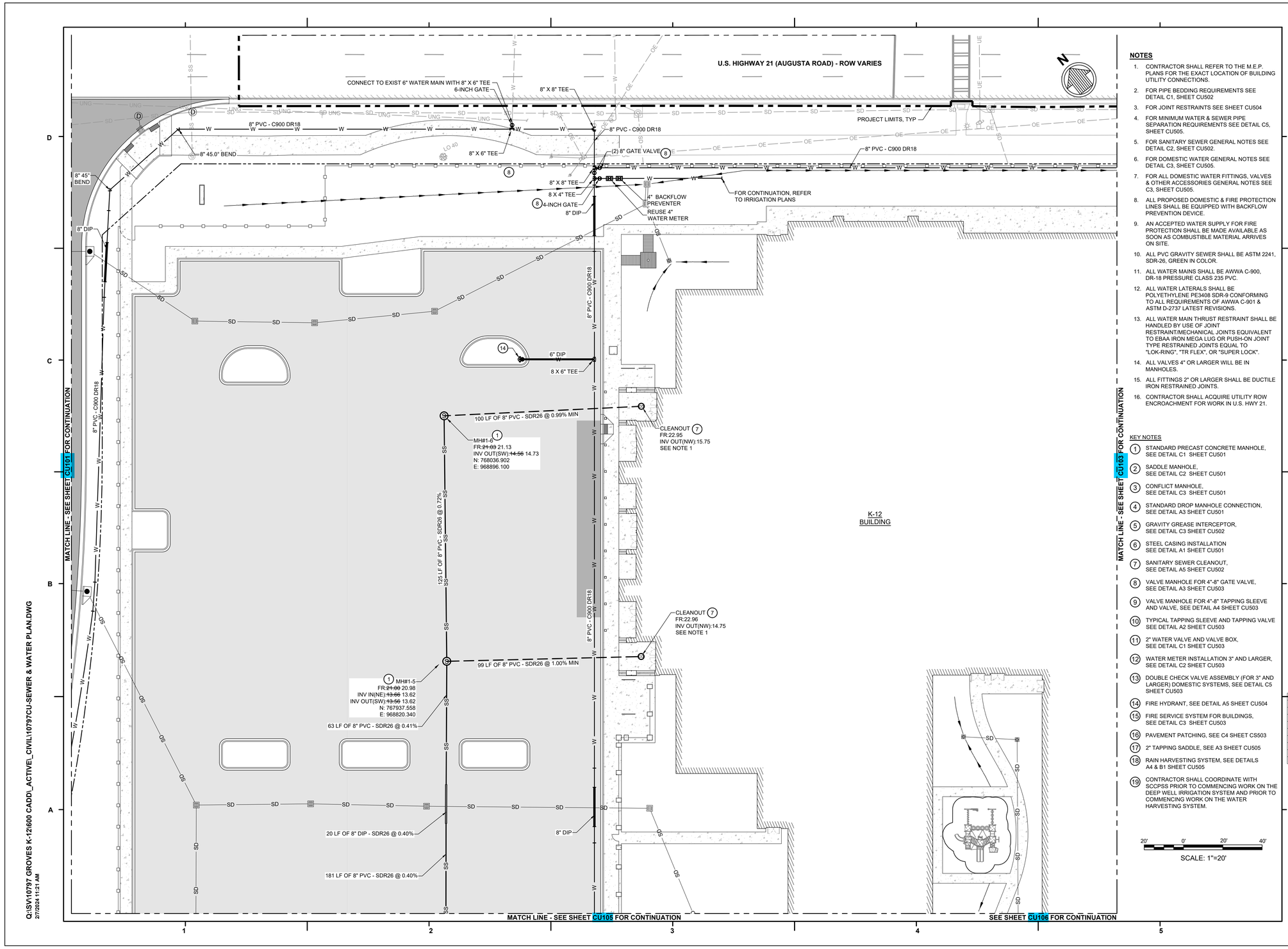
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UTILITY PLAN

CU101

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NOTES

1. CONTRACTOR SHALL REFER TO THE M.E.P. PLANS FOR THE EXACT LOCATION OF BUILDING UTILITY CONNECTIONS.
2. FOR PIPE BEDDING REQUIREMENTS SEE DETAIL C1, SHEET CU502
3. FOR JOINT RESTRAINTS SEE SHEET CU504
4. FOR MINIMUM WATER & SEWER PIPE SEPARATION REQUIREMENTS SEE DETAIL C5, SHEET CU505.
5. FOR SANITARY SEWER GENERAL NOTES SEE DETAIL C2, SHEET CU502.
6. FOR DOMESTIC WATER GENERAL NOTES SEE DETAIL C3, SHEET CU505.
7. FOR ALL DOMESTIC WATER FITTINGS, VALVES & OTHER ACCESSORIES GENERAL NOTES SEE C3, SHEET CU505.
8. ALL PROPOSED DOMESTIC & FIRE PROTECTION LINES SHALL BE EQUIPPED WITH BACKFLOW PREVENTION DEVICE.
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KEY NOTES

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SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

PROJECT CONSULTANTS:
LANDSCAPE ARCHITECT:
CLH DESIGN, P.A.
CIVIL ENGINEERS:
MOFFATT & NICHOL
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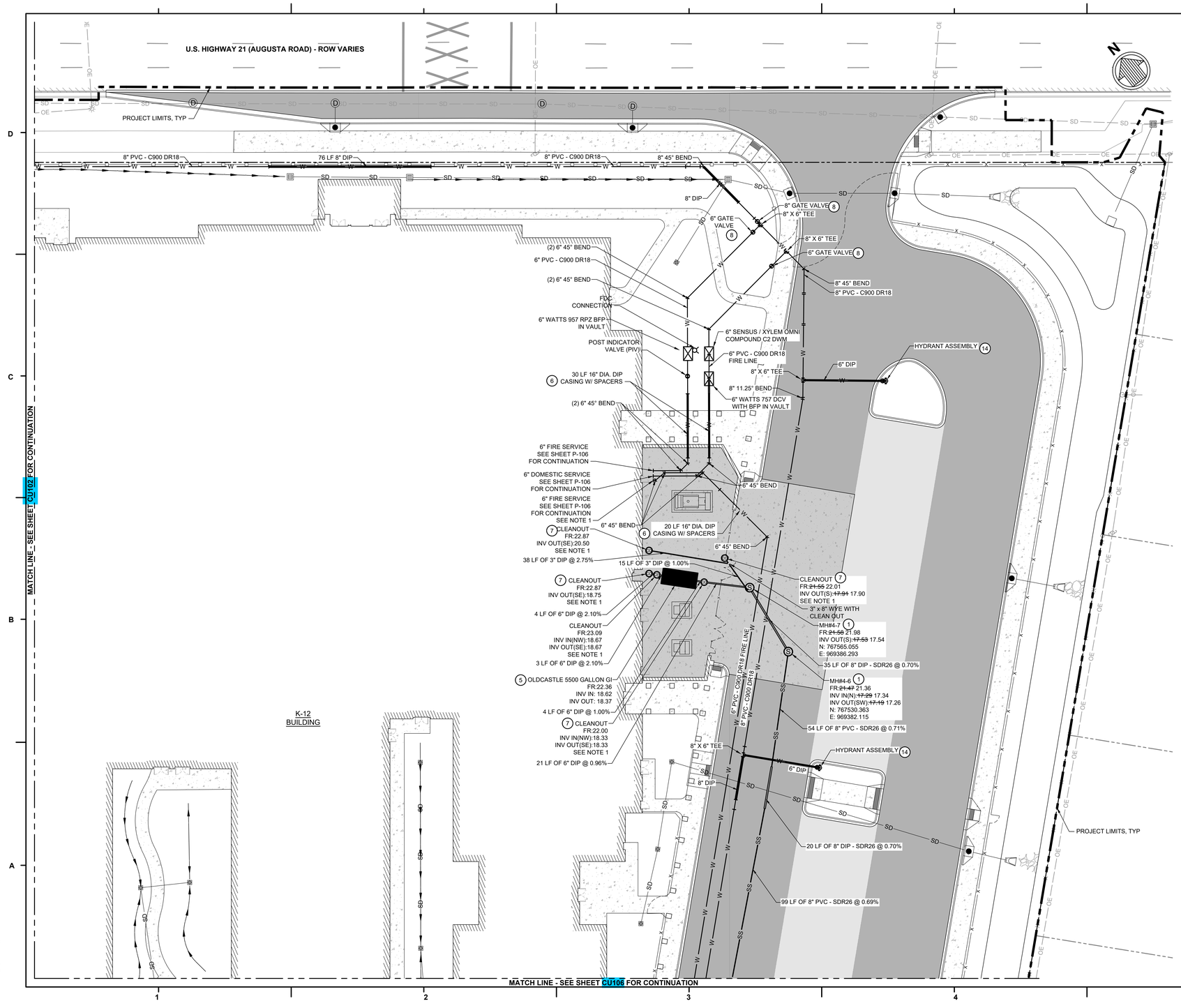
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UTILITY PLAN

CU102

RECORD SET

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SCALE: 1"=20'

SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

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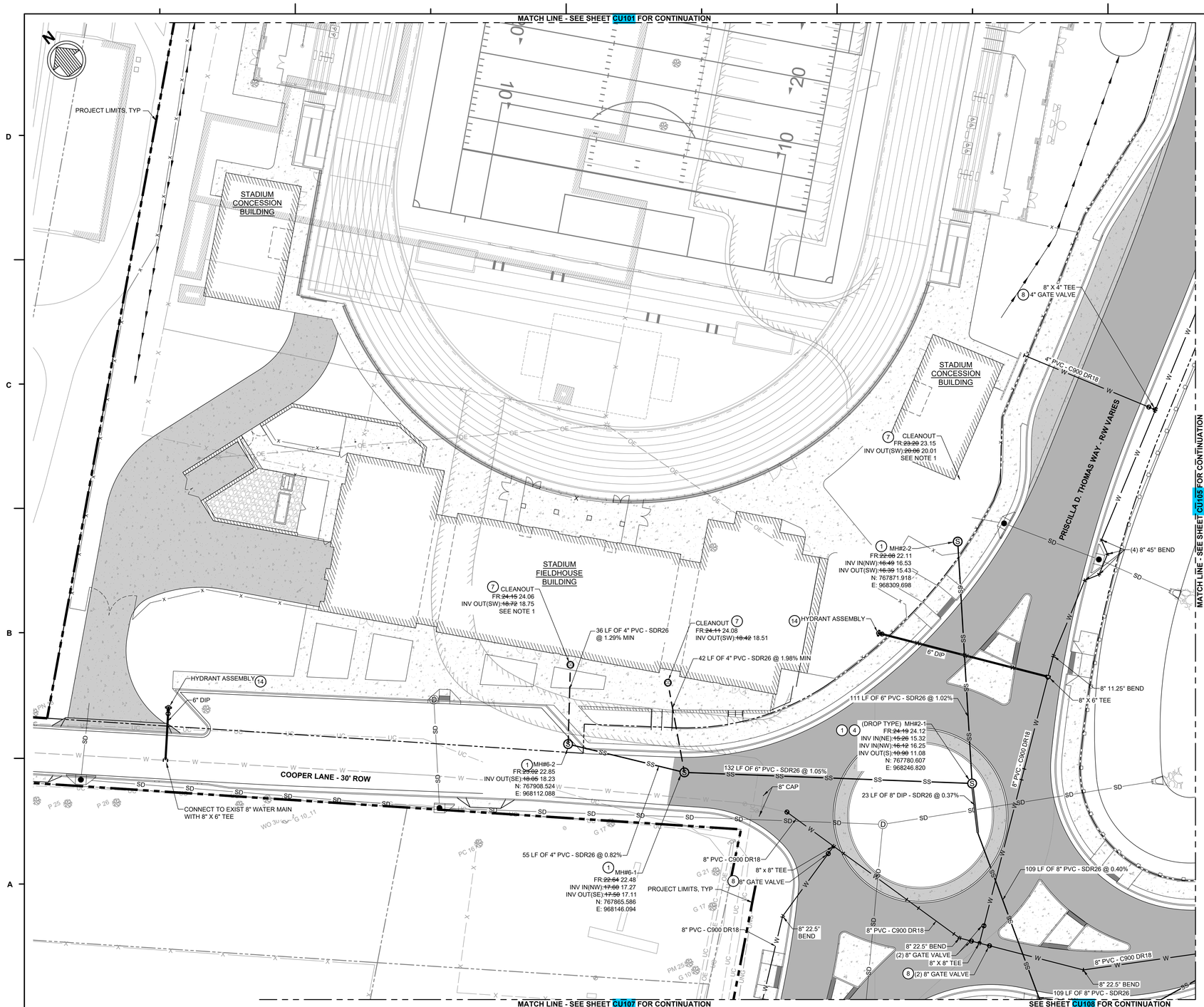
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UTILITY PLAN

CU103

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SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

PROJECT CONSULTANTS:
LANDSCAPE ARCHITECT:
CLH DESIGN, P.A.

CIVIL ENGINEERS:
MOFFATT & NICHOL
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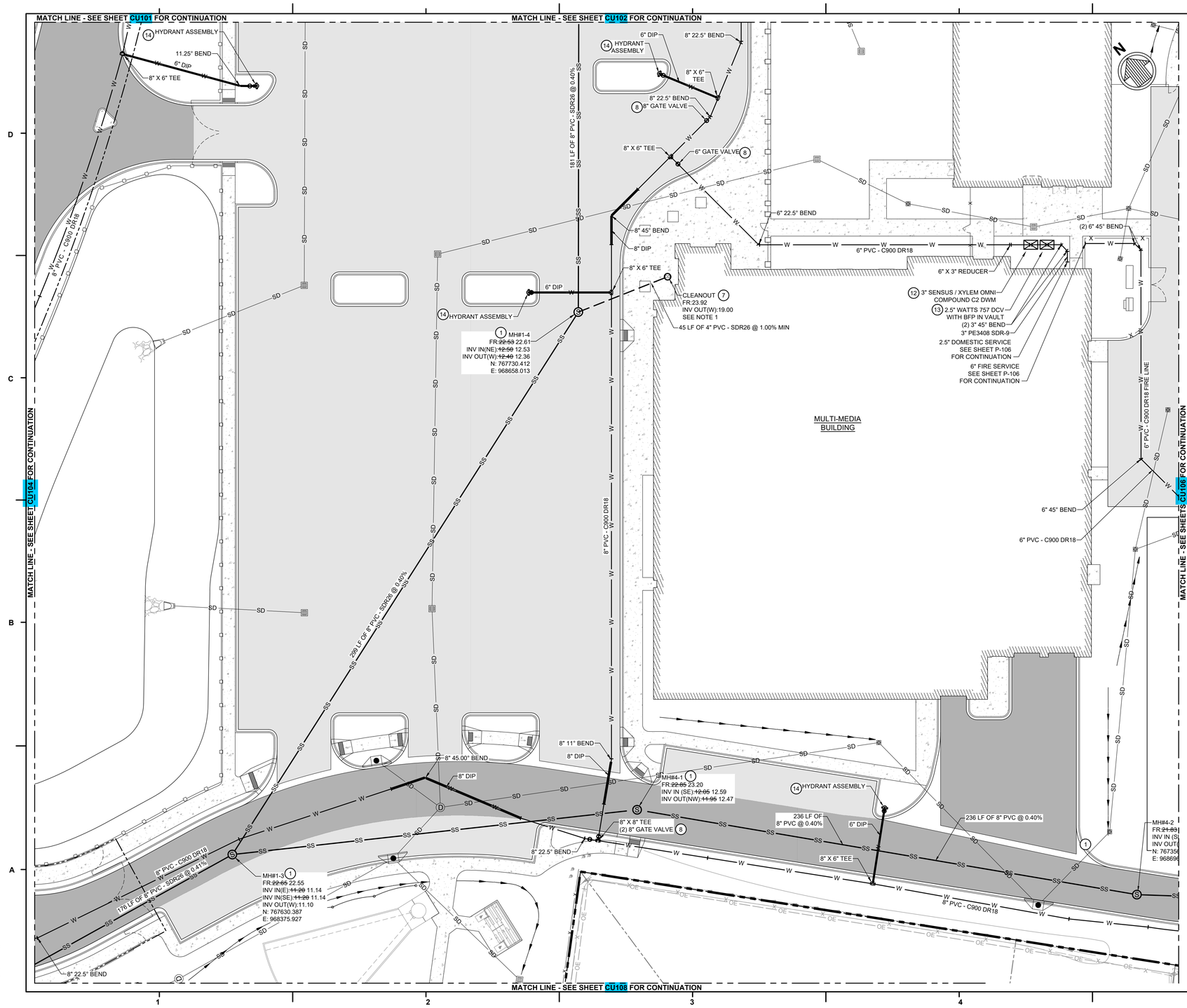
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UTILITY PLAN

CU104

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SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL
625-0518

PROJECT CONSULTANTS:
LANDSCAPE ARCHITECT:
CLH DESIGN, P.A.

CIVIL ENGINEERS:
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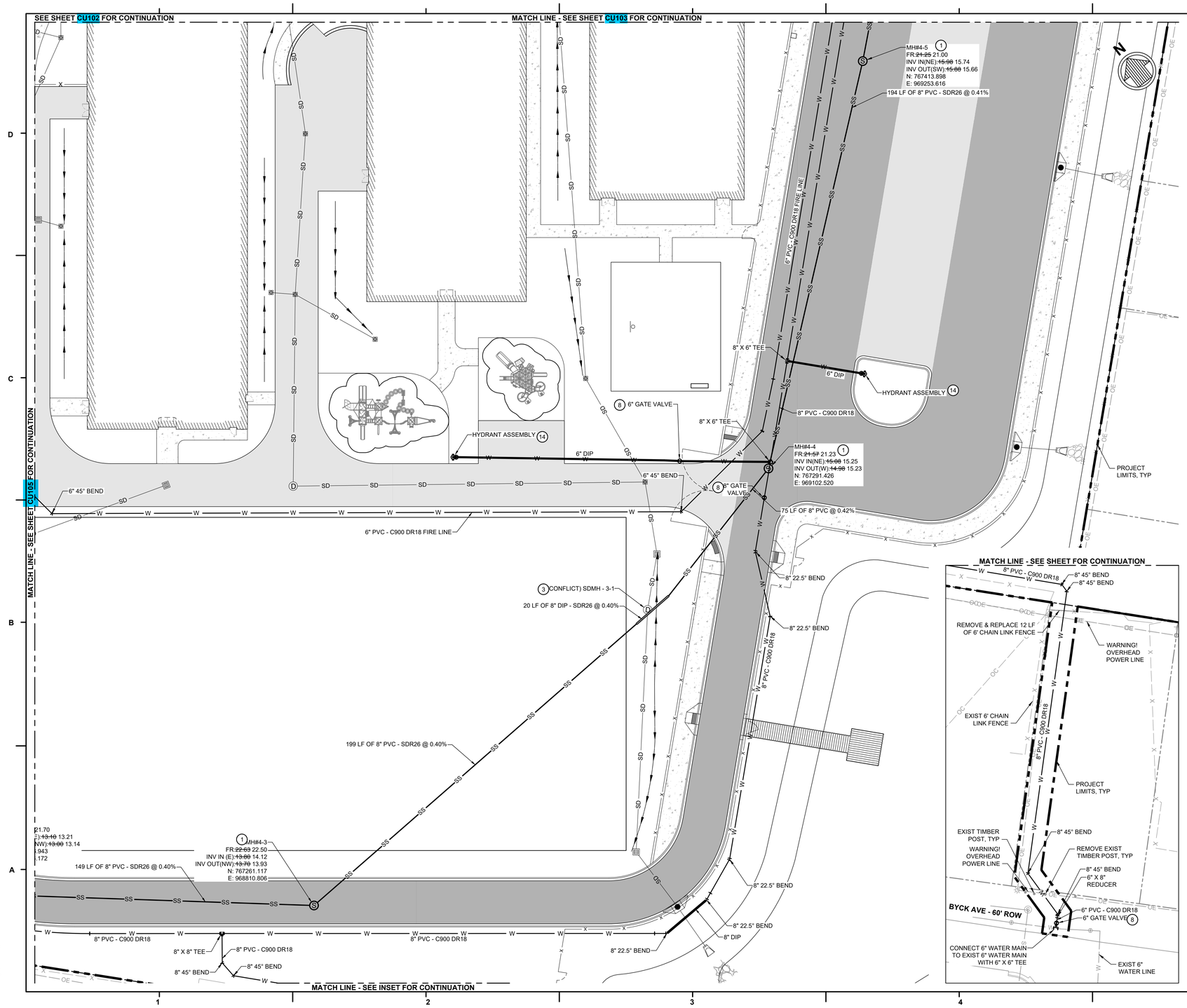
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UTILITY PLAN

CU105

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SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL
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UTILITY PLAN

CU106

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3. FOR JOINT RESTRAINTS SEE SHEET CU504
4. FOR MINIMUM WATER & SEWER PIPE SEPARATION REQUIREMENTS SEE DETAIL C5, SHEET CU505.
5. FOR SANITARY SEWER GENERAL NOTES SEE DETAIL C2, SHEET CU502.
6. FOR DOMESTIC WATER GENERAL NOTES SEE DETAIL C3, SHEET CU505.
7. FOR ALL DOMESTIC WATER FITTINGS, VALVES & OTHER ACCESSORIES GENERAL NOTES SEE C3, SHEET CU505.
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9. AN ACCEPTED WATER SUPPLY FOR FIRE PROTECTION SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ARRIVES ON SITE.
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KEY NOTES

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SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL
625-0518

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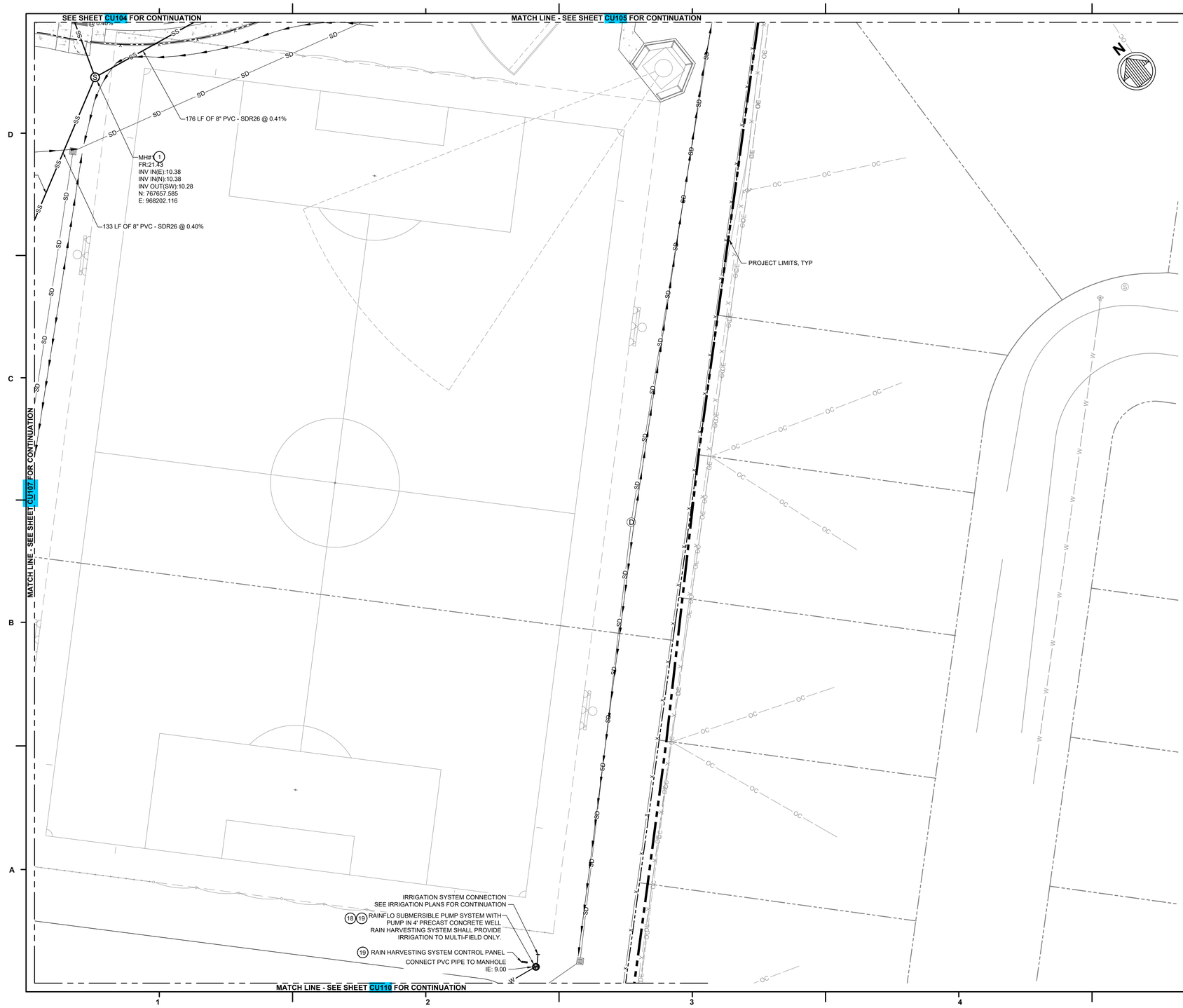
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UTILITY PLAN

CU107

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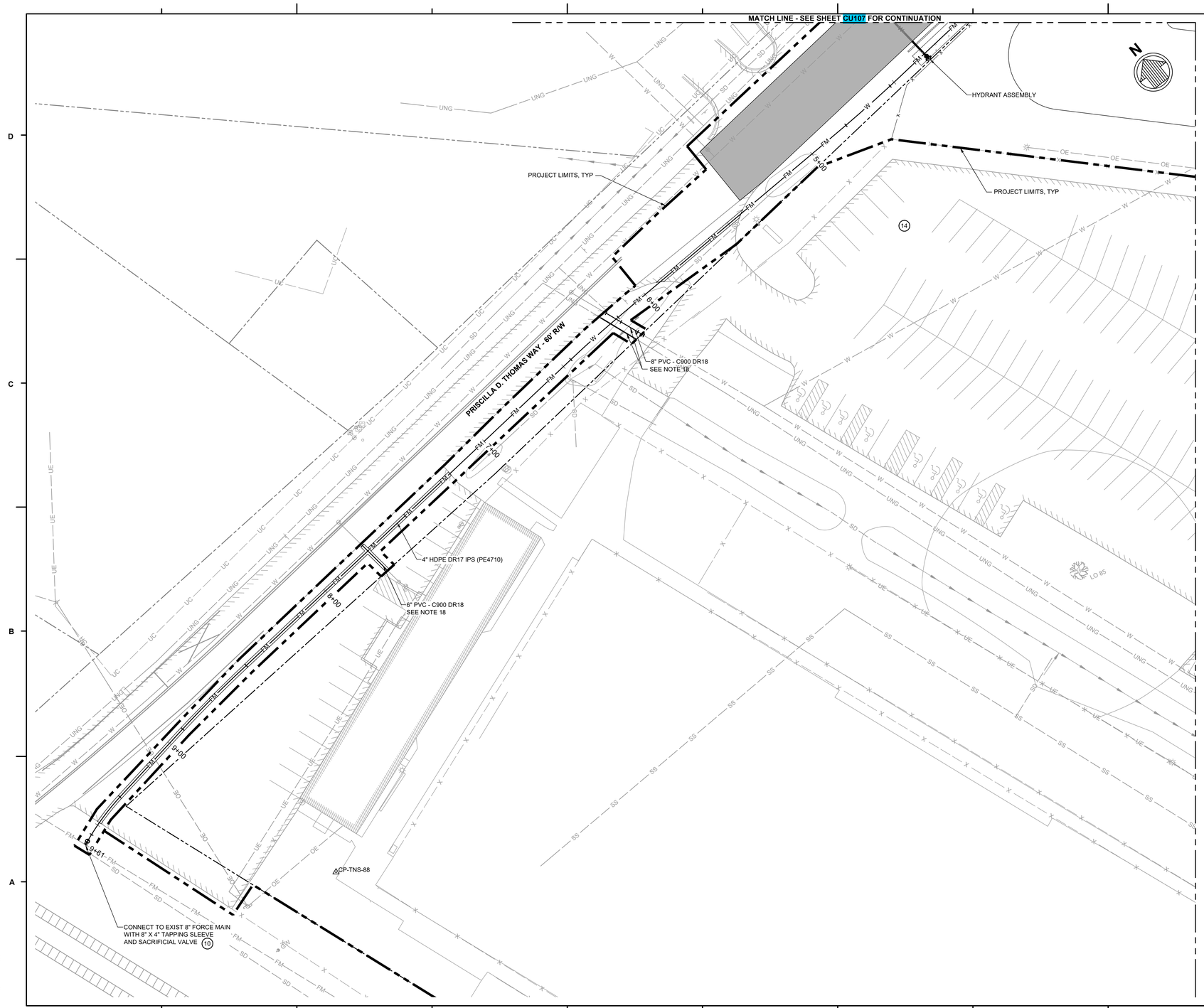
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UTILITY PLAN

CU108

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18. REROUTE EXISTING UTITLITY UNDER PROPOSED FORCE MAIN.

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SCCPSS

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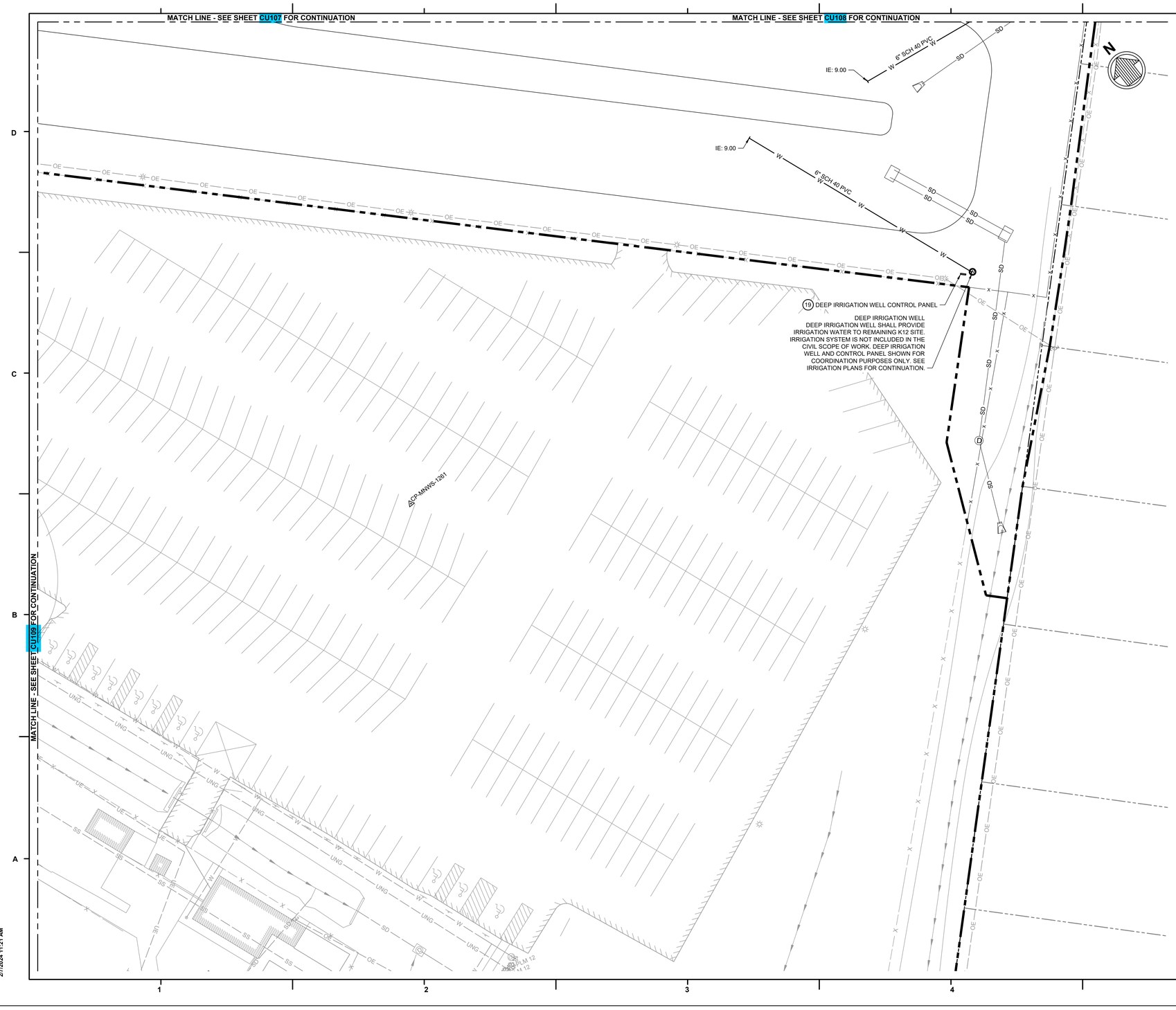
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UTILITY PLAN

CU109

RECORD SET



NOTES

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SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

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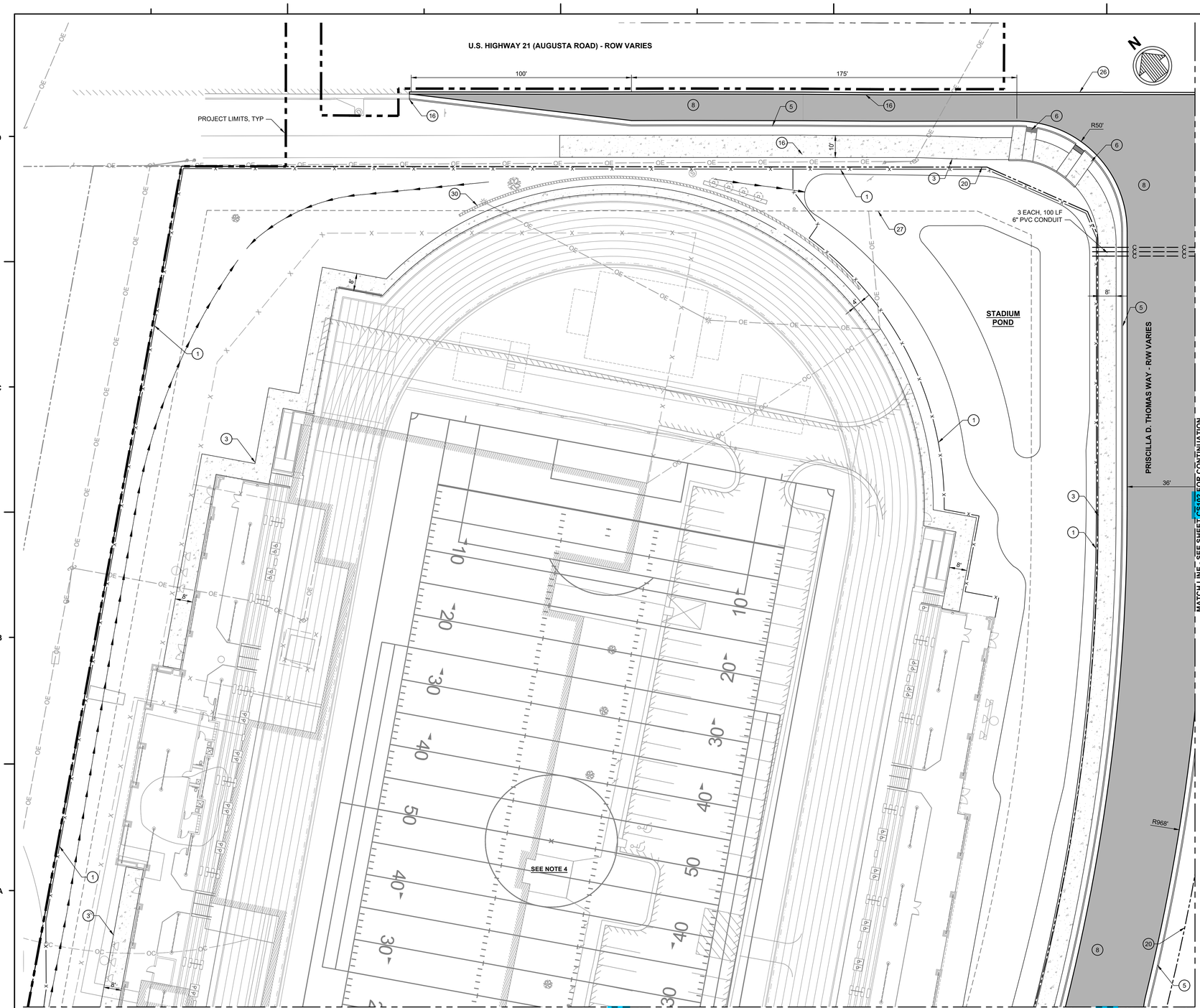
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UTILITY PLAN

CU110

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NOTES

1. ALL PAVEMENT DIMENSIONS TO EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
2. CONTRACTOR TO VERIFY BUILDING FOOTPRINT EXIT PORCHES, TRUCK DOCKS, PLAYGROUNDS, ATHLETIC FIELDS & STRUCTURES WITH ARCHITECTURAL PLAN.
3. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING.
4. STADIUM, TRACK & FIELD DESIGN BY OTHERS. REFER TO CHA STADIUM, TRACK & FIELD SITE PLAN DESIGN.

LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- CONCRETE SIDEWALK

KEY NOTE

1. 6' CHAIN LINK FENCE, SEE DETAIL C4 SHEET CS502
2. DECORATIVE FENCE, SEE ARCHITECTURAL SITE PLAN
3. SIDEWALK, SEE DETAIL C1 SHEET CS502
4. 18" CURB & GUTTER, SEE DETAIL A2 SHEET CS501
5. 30" CURB & GUTTER, SEE DETAIL C1 SHEET CS501
6. CURB CUT RAMP, SEE DETAIL A1 SHEET CS502
7. LIGHT DUTY ASPHALT PAVEMENT SEE DETAIL C5 SHEET CS501
8. HEAVY DUTY ASPHALT PAVEMENT SEE DETAIL D5 SHEET CS501
9. HEAVY DUTY CONCRETE PAVEMENT SEE DETAIL B5 SHEET CS501
10. WHEEL STOP SEE DETAIL B2 SHEET CS501
11. CONCRETE VALLEY GUTTER SEE DETAIL A3 SHEET CS501
12. CONCRETE FLUME SEE DETAIL A1 SHEET CS501
13. SWING GATE, CHAIN LINK/DECORATIVE, SEE ARCHITECTURAL SITE PLAN
14. DOUBLE SWING GATE WITH KNOX PADLOCK SEE DETAIL D4 SHEET CS502
15. TRANSITION FROM 18" CURB & GUTTER TO 30" CURB & GUTTER
16. MATCH EXIST CURB / PAVEMENT / SIDEWALK
17. CANOPY COLUMN FOUNDATION SEE ARCHITECTURAL PLANS FOR DETAILS
18. SCREEN WALL SEE ARCHITECTURAL PLANS FOR DETAILS
19. FLAGPOLE SEE ARCHITECTURAL PLANS FOR DETAILS
20. RELOCATED RIGHT OF WAY
21. DRIVEWAY WITH TAPERED ENTRANCES SEE DETAIL C3 SHEET CS501
22. ROUNDABOUT SEE DETAIL A3 SHEET CS502
23. SPLITTER ISLAND SEE C1 SHEET CS503
24. BUS STOP BAY
25. FEATHERING OF CURB, SEE DETAIL B4 SHEET CS501
26. 1' PAVEMENT MILLING FOR REINFORCING FABRIC STRIP INSTALLATION, SEE DETAIL A4 SHEET CS503
27. BUILDING SETBACK PER GOVERNING AUTHORITY CODE.
28. GENERATOR PAD
29. TRANSFORMER PAD
30. RETAINING WALL WITH HANDRAIL, SEE ARCHITECTURAL SITE PLAN
31. GDOT STD 9032B, TYPE 2 CONCRETE HEADER CURB, SEE DETAIL C1 SHEET CS501
32. DUMPSTER LOCATION
33. BOLLARD SEE DETAIL A5 SHEET CS501
34. ORNAMENTAL DOUBLE SWING GATE, SEE ARCHITECTURAL SITE PLAN

PARKING SUMMARY

EMPLOYEE PARKING (150 EMPLOYEES @ 1 PER 2 EMPLOYEES)	75
PARKING PASSES	100
TOTAL SPACES REQUIRED	175
STANDARD SPACES PROVIDED	507
ADA SPACES PROVIDED	17
TOTAL SPACES PROVIDED	524

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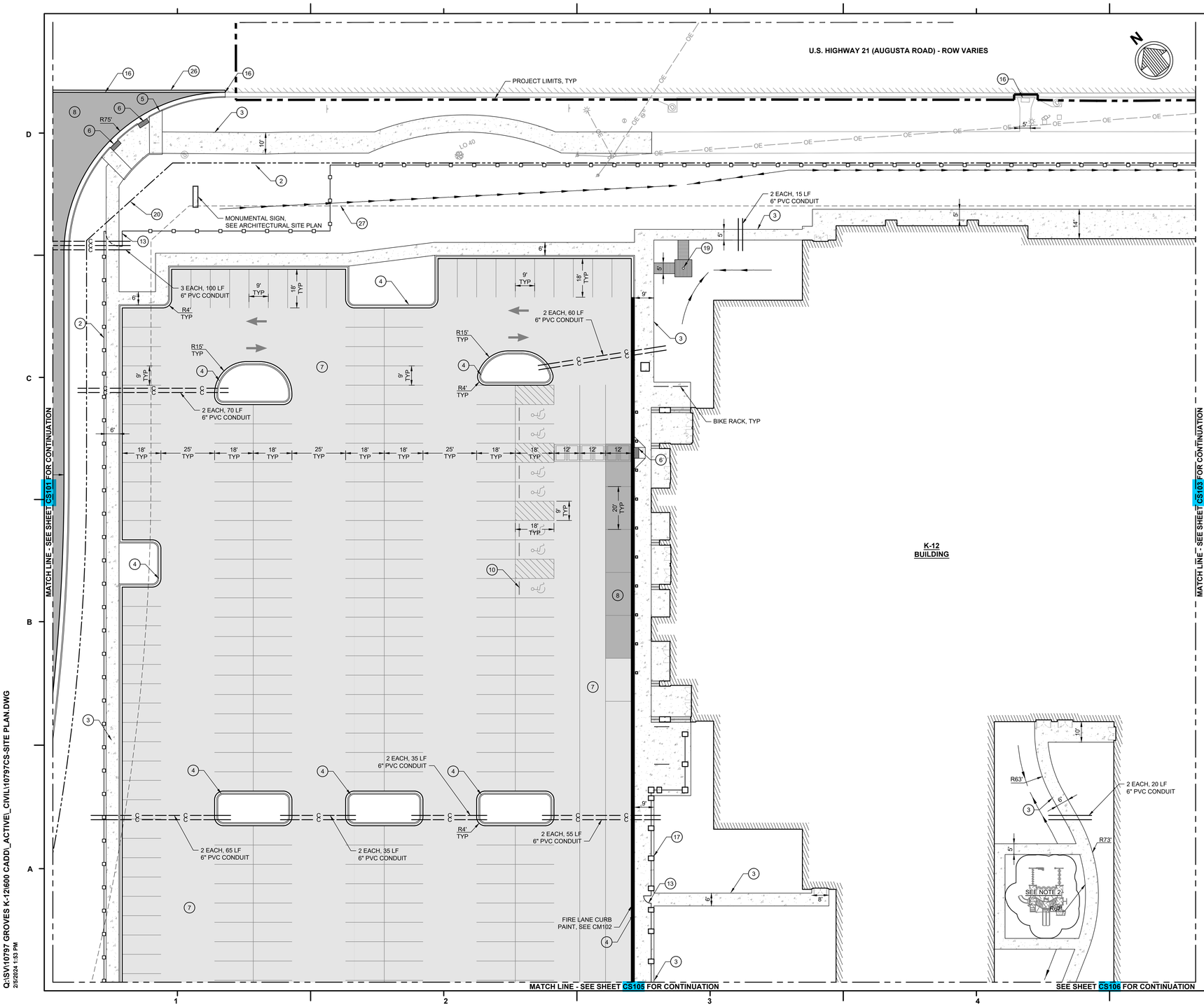
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DATE: 06/22/2020
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SITE PLAN

CS101

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NOTES

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3. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING.
4. STADIUM, TRACK & FIELD DESIGN BY OTHERS. REFER TO CHA STADIUM, TRACK & FIELD SITE PLAN DESIGN.

LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- CONCRETE SIDEWALK

KEY NOTE

1. 6' CHAIN LINK FENCE, SEE DETAIL C4 SHEET CS502
2. DECORATIVE FENCE, SEE ARCHITECTURAL SITE PLAN
3. SIDEWALK, SEE DETAIL C1 SHEET CS502
4. 18" CURB & GUTTER, SEE DETAIL A2 SHEET CS501
5. 30" CURB & GUTTER, SEE DETAIL C1 SHEET CS501
6. CURB CUT RAMP, SEE DETAIL A1 SHEET CS502
7. LIGHT DUTY ASPHALT PAVEMENT SEE DETAIL C5 SHEET CS501
8. HEAVY DUTY ASPHALT PAVEMENT SEE DETAIL D5 SHEET CS501
9. HEAVY DUTY CONCRETE PAVEMENT SEE DETAIL B5 SHEET CS501
10. WHEEL STOP SEE DETAIL B2 SHEET CS501
11. CONCRETE VALLEY GUTTER SEE DETAIL A3 SHEET CS501
12. CONCRETE FLUME SEE DETAIL A1 SHEET CS501
13. SWING GATE, CHAIN LINK/DECORATIVE, SEE ARCHITECTURAL SITE PLAN
14. DOUBLE SWING GATE WITH KNOX PADLOCK SEE DETAIL D4 SHEET CS502
15. TRANSITION FROM 18" CURB & GUTTER TO 30" CURB & GUTTER
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18. SCREEN WALL SEE ARCHITECTURAL PLANS FOR DETAILS
19. FLAGPOLE SEE ARCHITECTURAL PLANS FOR DETAILS
20. RELOCATED RIGHT OF WAY
21. DRIVEWAY WITH TAPERED ENTRANCES SEE DETAIL C3 SHEET CS501
22. ROUNDABOUT SEE DETAIL A3 SHEET CS502
23. SPLITTER ISLAND SEE C1 SHEET CS503
24. BUS STOP BAY
25. FEATHERING OF CURB, SEE DETAIL B4 SHEET CS501
26. 1' PAVEMENT MILLING FOR REINFORCING FABRIC STRIP INSTALLATION, SEE DETAIL A4 SHEET CS503
27. BUILDING SETBACK PER GOVERNING AUTHORITY CODE.
28. GENERATOR PAD
29. TRANSFORMER PAD
30. RETAINING WALL WITH HANDRAIL, SEE ARCHITECTURAL SITE PLAN
31. GDOT STD 9032B, TYPE 2 CONCRETE HEADER CURB, SEE DETAIL C1 SHEET CS501
32. DUMPSTER LOCATION
33. BOLLARD SEE DETAIL A5 SHEET CS501
34. ORNAMENTAL DOUBLE SWING GATE, SEE ARCHITECTURAL SITE PLAN

PARKING SUMMARY

EMPLOYEE PARKING (150 EMPLOYEES @ 1 PER 2 EMPLOYEES)	75
PARKING PASSES	100
TOTAL SPACES REQUIRED	175
STANDARD SPACES PROVIDED	507
ADA SPACES PROVIDED	17
TOTAL SPACES PROVIDED	524

20' 0' 20' 40'

SCALE: 1"=20'

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SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

PROJECT CONSULTANTS:
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CLH DESIGN, P.A.

CIVIL ENGINEERS:
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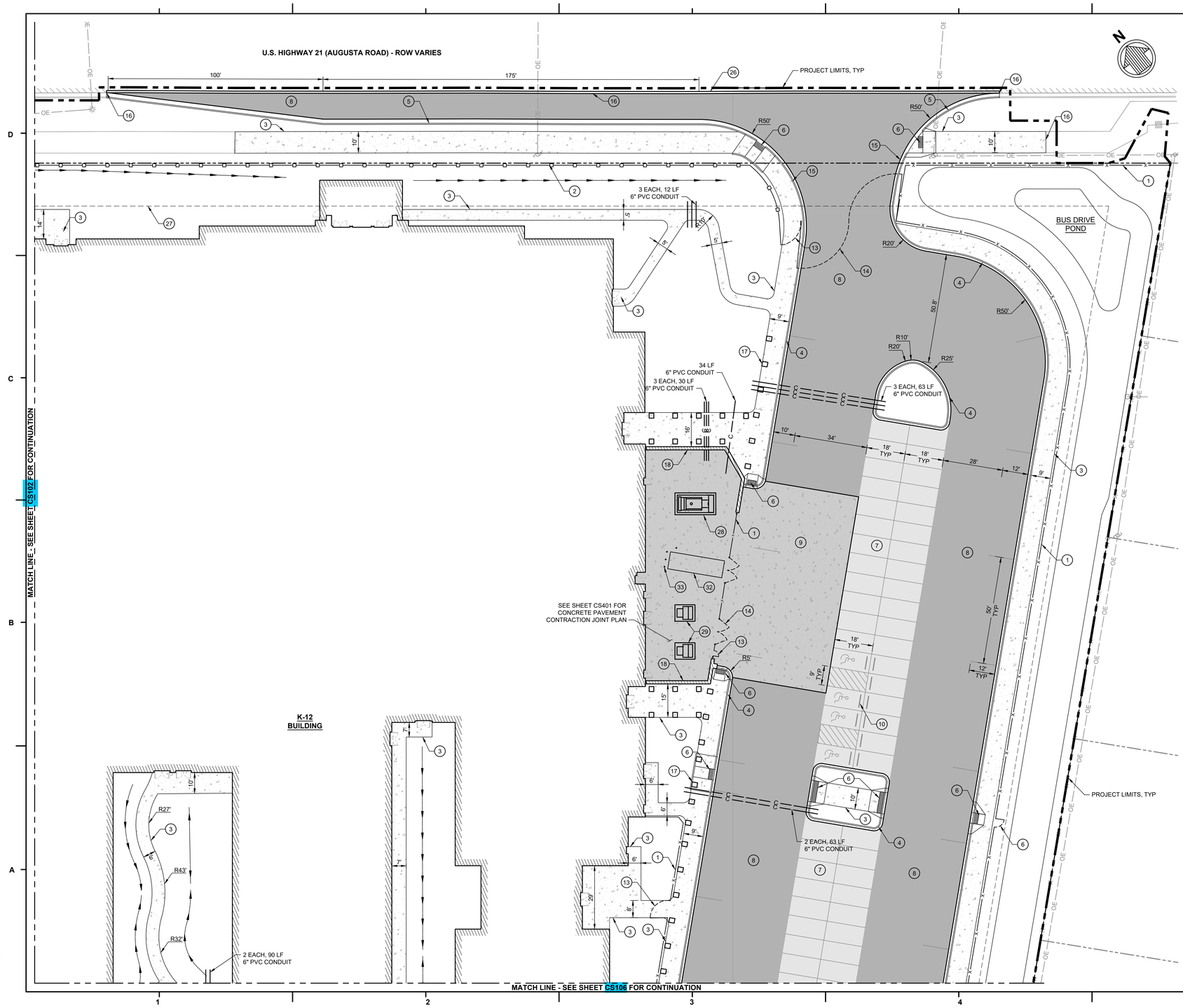
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SITE PLAN

CS102

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LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
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KEY NOTE

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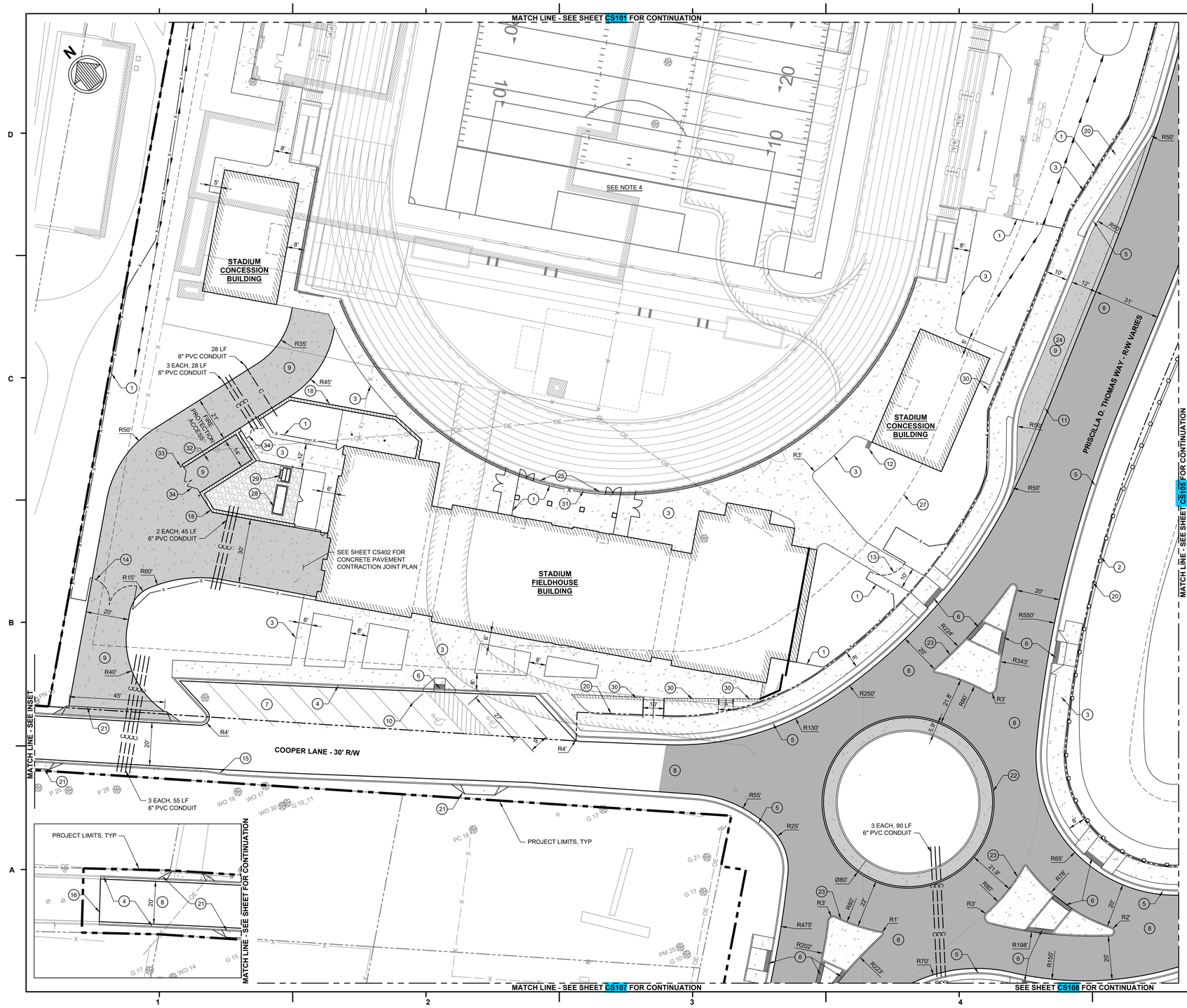
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SITE PLAN

CS103

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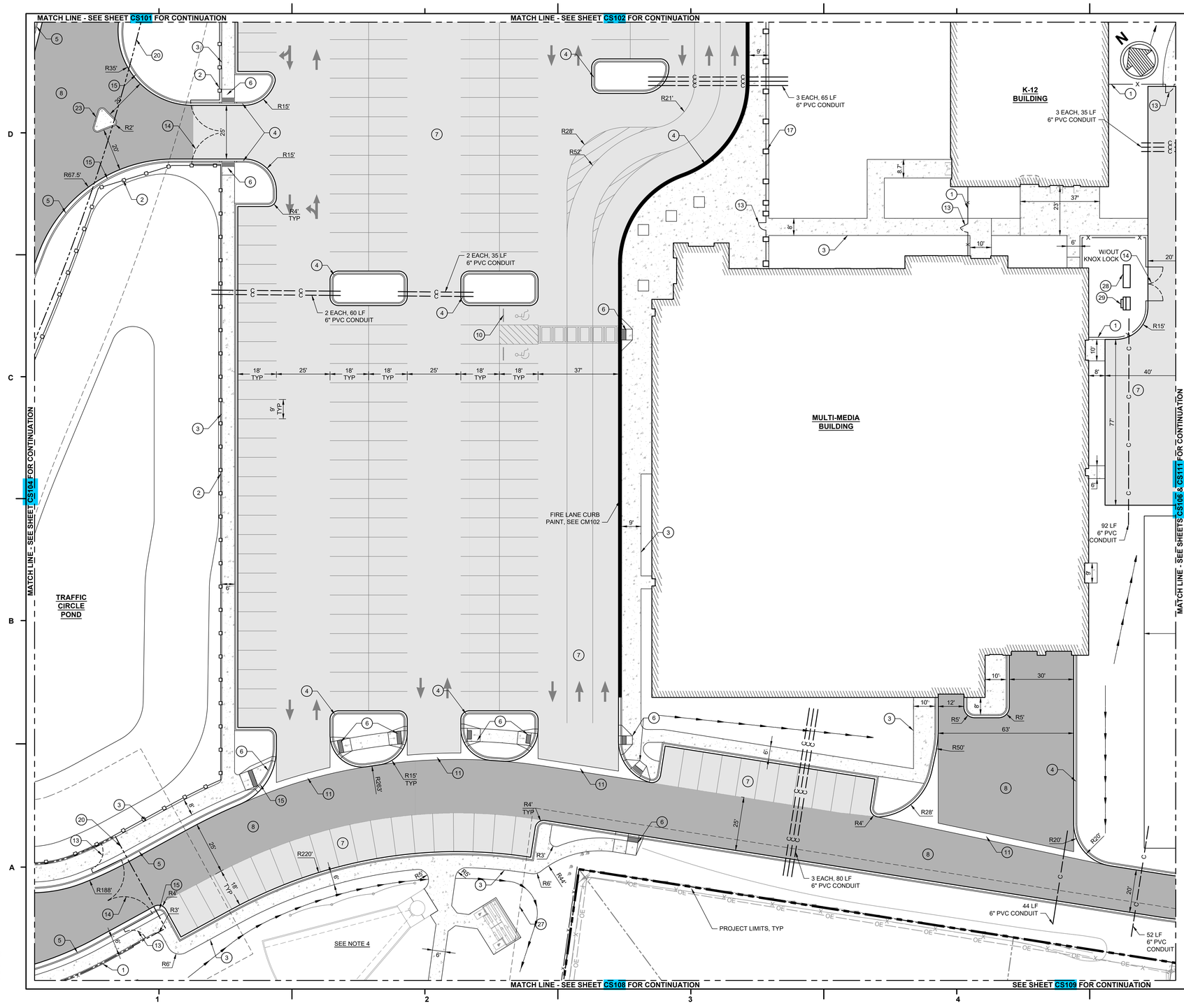
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SITE PLAN

CS104

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LEGEND

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KEY NOTE

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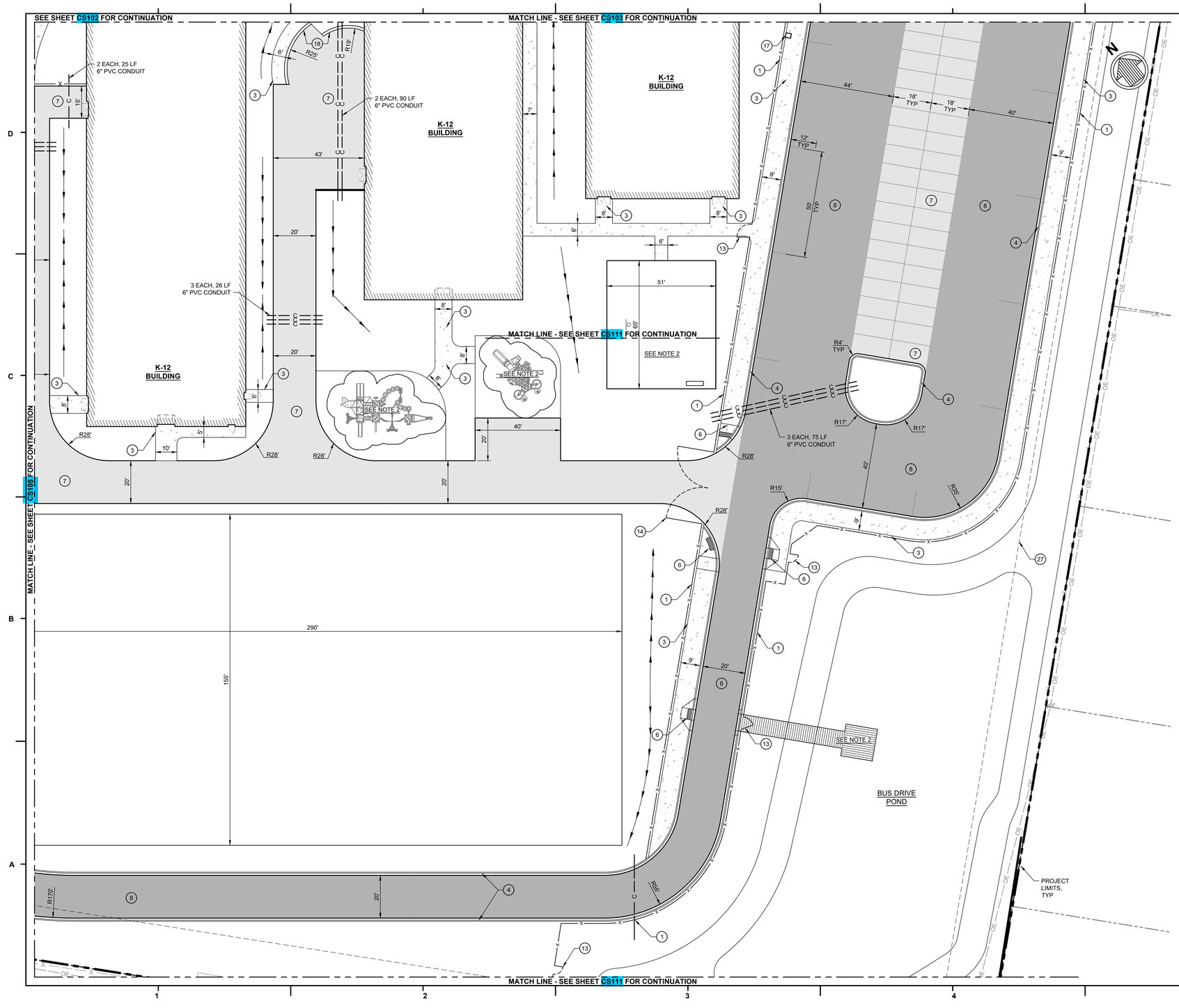
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SITE PLAN

CS105

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SITE PLAN

CS106

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NOTES

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2. CONTRACTOR TO VERIFY BUILDING FOOTPRINT EXIT PORCHES, TRUCK DOCKS, PLAYGROUNDS, ATHLETIC FIELDS & STRUCTURES WITH ARCHITECTURAL PLAN.
3. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING.
4. STADIUM, TRACK & FIELD DESIGN BY OTHERS. REFER TO CHA STADIUM, TRACK & FIELD SITE PLAN DESIGN.

LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- CONCRETE SIDEWALK

KEY NOTE

1. 6' CHAIN LINK FENCE, SEE DETAIL C4 SHEET CS502
2. DECORATIVE FENCE, SEE ARCHITECTURAL SITE PLAN
3. SIDEWALK, SEE DETAIL C1 SHEET CS502
4. 18" CURB & GUTTER, SEE DETAIL A2 SHEET CS501
5. 30" CURB & GUTTER, SEE DETAIL C1 SHEET CS501
6. CURB CUT RAMP, SEE DETAIL A1 SHEET CS502
7. LIGHT DUTY ASPHALT PAVEMENT SEE DETAIL C5 SHEET CS501
8. HEAVY DUTY ASPHALT PAVEMENT SEE DETAIL D5 SHEET CS501
9. HEAVY DUTY CONCRETE PAVEMENT SEE DETAIL B5 SHEET CS501
10. WHEEL STOP SEE DETAIL B2 SHEET CS501
11. CONCRETE VALLEY GUTTER SEE DETAIL A3 SHEET CS501
12. CONCRETE FLUME SEE DETAIL A1 SHEET CS501
13. SWING GATE, CHAIN LINK/DECORATIVE, SEE ARCHITECTURAL SITE PLAN
14. DOUBLE SWING GATE WITH KNOX PADLOCK SEE DETAIL D4 SHEET CS502
15. TRANSITION FROM 18" CURB & GUTTER TO 30" CURB & GUTTER
16. MATCH EXIST CURB / PAVEMENT / SIDEWALK
17. CANOPY COLUMN FOUNDATION SEE ARCHITECTURAL PLANS FOR DETAILS
18. SCREEN WALL SEE ARCHITECTURAL PLANS FOR DETAILS
19. FLAGPOLE SEE ARCHITECTURAL PLANS FOR DETAILS
20. RELOCATED RIGHT OF WAY
21. DRIVEWAY WITH TAPERED ENTRANCES SEE DETAIL C3 SHEET CS501
22. ROUNDABOUT SEE DETAIL A3 SHEET CS502
23. SPLITTER ISLAND SEE C1 SHEET CS503
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26. 1' PAVEMENT MILLING FOR REINFORCING FABRIC STRIP INSTALLATION, SEE DETAIL A4 SHEET CS503
27. BUILDING SETBACK PER GOVERNING AUTHORITY CODE.
28. GENERATOR PAD
29. TRANSFORMER PAD
30. RETAINING WALL WITH HANDRAIL, SEE ARCHITECTURAL SITE PLAN
31. GDOT STD 9032B, TYPE 2 CONCRETE HEADER CURB, SEE DETAIL C1 SHEET CS501
32. DUMPSTER LOCATION
33. BOLLARD SEE DETAIL A5 SHEET CS501
34. ORNAMENTAL DOUBLE SWING GATE, SEE ARCHITECTURAL SITE PLAN

PARKING SUMMARY

EMPLOYEE PARKING (150 EMPLOYEES @ 1 PER 2 EMPLOYEES)	75
PARKING PASSES	100
TOTAL SPACES REQUIRED	175
STANDARD SPACES PROVIDED	507
ADA SPACES PROVIDED	17
TOTAL SPACES PROVIDED	524

20' 0' 20' 40'

SCALE: 1"=20'

SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

PROJECT CONSULTANTS:
LANDSCAPE ARCHITECT:
CLH DESIGN, P.A.

CIVIL ENGINEERS:
MOFFATT & NICHOL
CHA CONSULTING, INC.

STRUCTURAL ENGINEER:
THARPE ENGINEERING GROUP, LLC

MECHANICAL & PLUMBING:
DULOHERY, WEEKS & GAGLIANO, INC.

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PROJECT: 5201-192070
DATE: 06/22/2020
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SITE PLAN

CS107

RECORD SET



NOTES

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LEGEND

- HEAVY DUTY ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
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KEY NOTE

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SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

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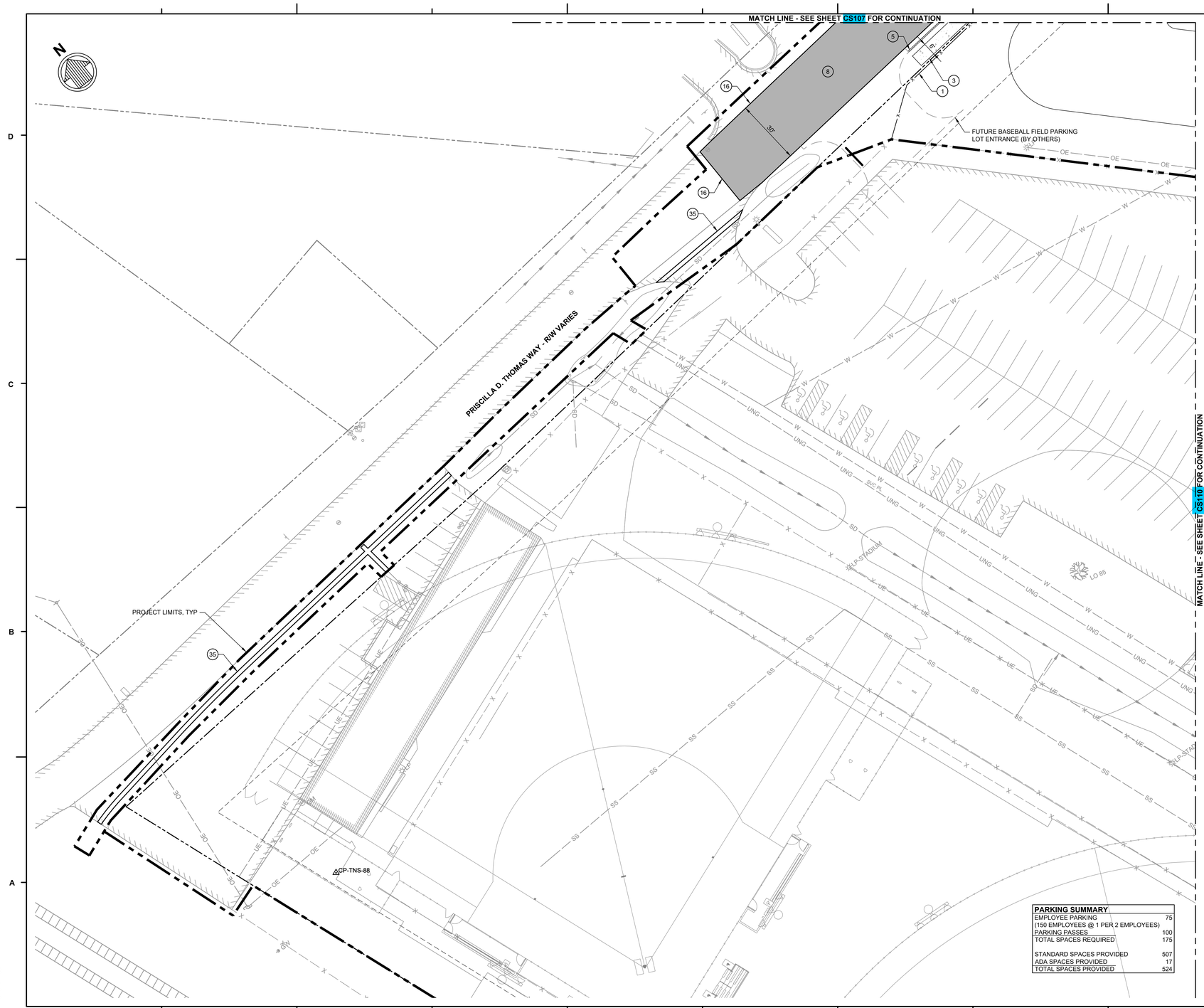
PROJECT: 5201-192070
DATE: 06/22/2020
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SITE PLAN

CS108

RECORD SET

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LEGEND

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- HEAVY DUTY CONCRETE PAVEMENT
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SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

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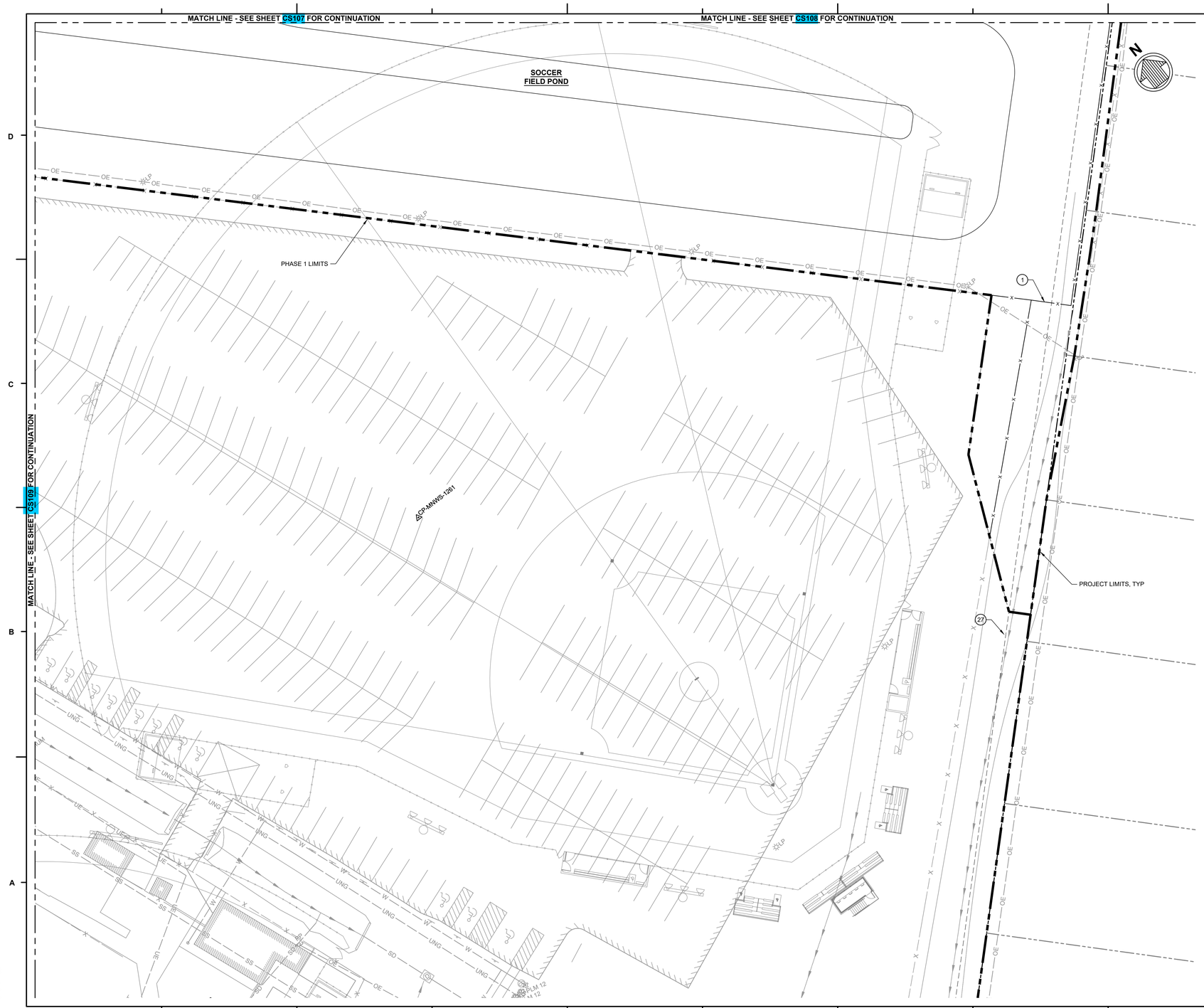
PROJECT: 5201-192070
DATE: 06/22/2020
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SITE PLAN

CS109

RECORD SET

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NOTES

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LEGEND

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- HEAVY DUTY CONCRETE PAVEMENT
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KEY NOTE

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SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

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CLH DESIGN, P.A.

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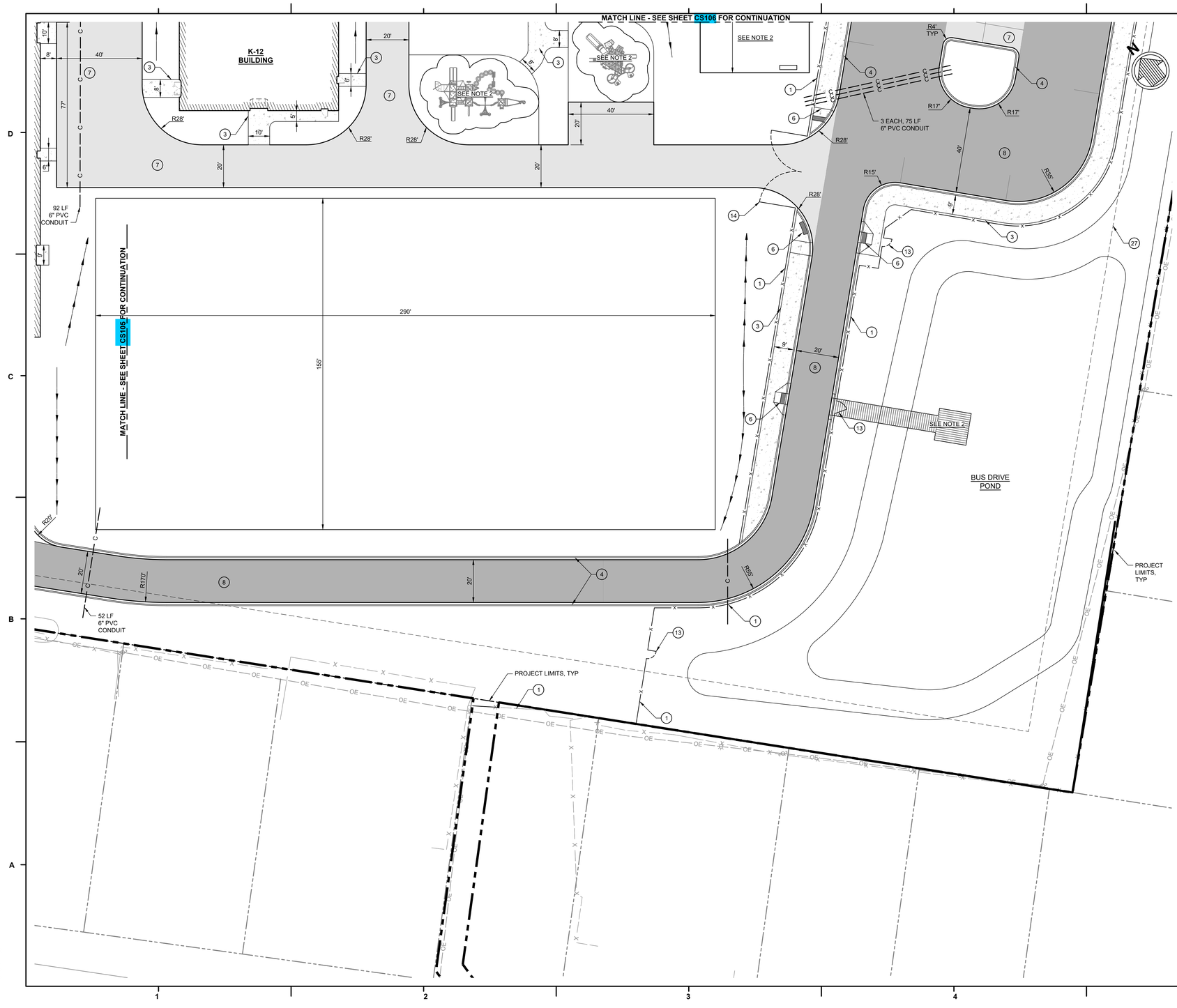
PROJECT: 5201-192070
DATE: 06/22/2020
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SITE PLAN

CS110

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NOTES

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LEGEND

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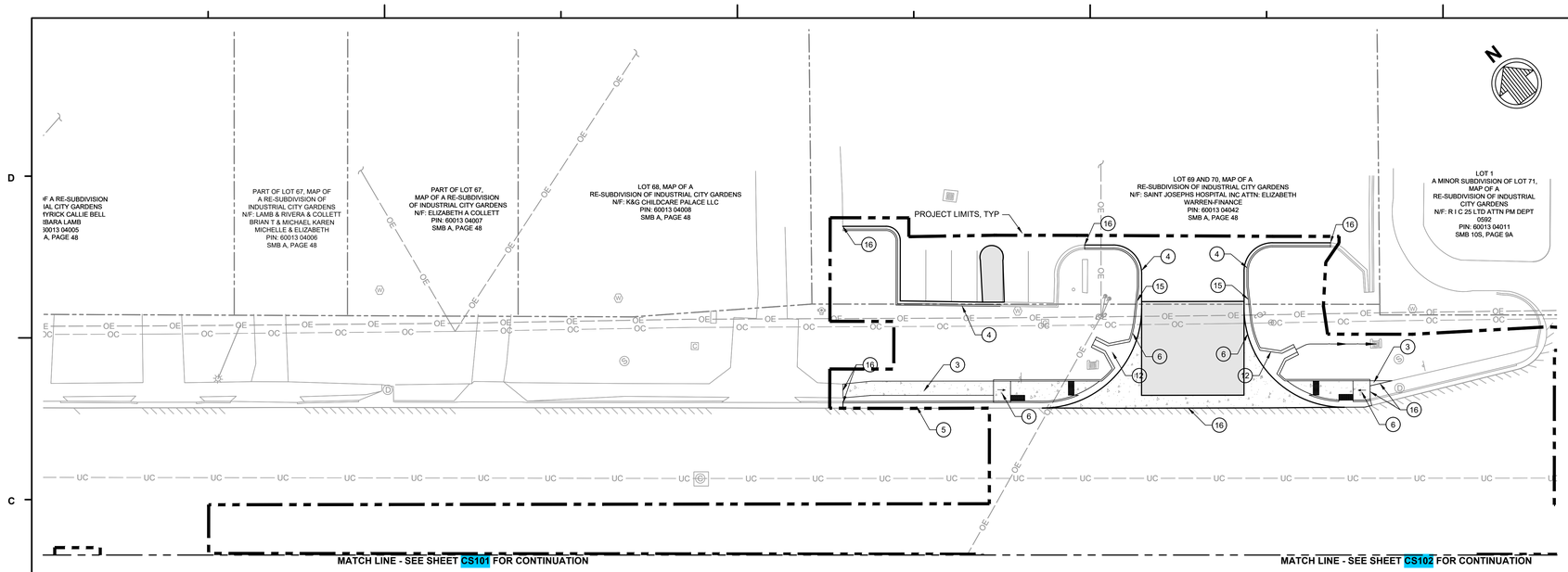
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SITE PLAN

CS111

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CS112A
SCALE: 1" = 20'

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- HEAVY DUTY CONCRETE PAVEMENT
- LIGHT DUTY ASPHALT PAVEMENT
- CONCRETE SIDEWALK

KEY NOTE

1. 6' CHAIN LINK FENCE, SEE DETAIL C4 SHEET CS502
2. DECORATIVE FENCE, SEE ARCHITECTURAL SITE PLAN
3. SIDEWALK, SEE DETAIL C1 SHEET CS502
4. 18" CURB & GUTTER, SEE DETAIL A2 SHEET CS501
5. 30" CURB & GUTTER, SEE DETAIL C1 SHEET CS501
6. CURB CUT RAMP, SEE DETAIL A1 SHEET CS502
7. LIGHT DUTY ASPHALT PAVEMENT SEE DETAIL C5 SHEET CS501
8. HEAVY DUTY ASPHALT PAVEMENT SEE DETAIL D5 SHEET CS501
9. HEAVY DUTY CONCRETE PAVEMENT SEE DETAIL B5 SHEET CS501
10. WHEEL STOP SEE DETAIL B2 SHEET CS501
11. CONCRETE VALLEY GUTTER SEE DETAIL A3 SHEET CS501
12. CONCRETE FLUME SEE DETAIL A1 SHEET CS501
13. SWING GATE, CHAIN LINK/DECORATIVE, SEE ARCHITECTURAL SITE PLAN
14. DOUBLE SWING GATE WITH KNOX PADLOCK SEE DETAIL D4 SHEET CS502
15. TRANSITION FROM 18" CURB & GUTTER TO 30" CURB & GUTTER
16. MATCH EXIST CURB / PAVEMENT / SIDEWALK
17. CANOPY COLUMN FOUNDATION SEE ARCHITECTURAL PLANS FOR DETAILS
18. SCREEN WALL SEE ARCHITECTURAL PLANS FOR DETAILS
19. FLAGPOLE SEE ARCHITECTURAL PLANS FOR DETAILS
20. RELOCATED RIGHT OF WAY
21. DRIVEWAY WITH TAPERED ENTRANCES SEE DETAIL C3 SHEET CS501
22. ROUNDABOUT SEE DETAIL A3 SHEET CS502
23. SPLITTER ISLAND SEE C1 SHEET CS503
24. BUS STOP BAY
25. FEATHERING OF CURB, SEE DETAIL B4 SHEET CS501
26. 1' PAVEMENT MILLING FOR REINFORCING FABRIC STRIP INSTALLATION, SEE DETAIL A4 SHEET CS503
27. BUILDING SETBACK PER GOVERNING AUTHORITY CODE.
28. GENERATOR PAD
29. TRANSFORMER PAD
30. RETAINING WALL WITH HANDRAIL, SEE ARCHITECTURAL SITE PLAN
31. GDOT STD 9032B, TYPE 2 CONCRETE HEADER CURB, SEE DETAIL C1 SHEET CS501
32. DUMPSTER LOCATION
33. BOLLARD SEE DETAIL A5 SHEET CS501
34. ORNAMENTAL DOUBLE SWING GATE, SEE ARCHITECTURAL SITE PLAN

PARKING SUMMARY	
EMPLOYEE PARKING (150 EMPLOYEES @ 1 PER 2 EMPLOYEES)	75
PARKING PASSES	100
TOTAL SPACES REQUIRED	175
STANDARD SPACES PROVIDED	507
ADA SPACES PROVIDED	17
TOTAL SPACES PROVIDED	524

20' 0' 20' 40'

SCALE: 1"=20'

SAVANNAH-CHATHAM COUNTY PUBLIC SCHOOL SYSTEM

SCCPSS

NEW K-12 MULTI-SCHOOL 625-0518

PROJECT CONSULTANTS:
LANDSCAPE ARCHITECT: CLH DESIGN, P.A.
CIVIL ENGINEERS: MOFFATT & NICHOL; CHA CONSULTING, INC.
STRUCTURAL ENGINEER: THARPE ENGINEERING GROUP, LLC
MECHANICAL & PLUMBING: DULOHERY, WEEKS & GAGLIANO, INC.

LS3P

321 WEST CONGRESS STREET SUITE 301
SAVANNAH, GEORGIA 31401
TEL. 912.695.2111 FAX 912.298.0206
WWW.LS3P.COM

moffatt & nichol
2 EAST BRYAN ST., STE 501
SAVANNAH, GA 31401
912-231-0044

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REVISIONS:

No.	Description	Date
0	ISSUE FOR RECORD	02/09/2024

PROJECT: 5201-192070
DATE: 06/22/20
DRAWN BY: CMS
CHECKED BY: CRZ

SITE PLAN

CS112

RECORD SET

Q:\SV\10797 GROVES K-12\600 CADD_ACTIVE_CIVIL\10797CS-SITE PLAN.DWG
2/6/2024 1:53 PM

CHATHAM CO.

Note: This sheet is included for reference only.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	GA.	EF-443-3(17) cr. 2	1977	15	

REV. 10-1-75

P.T. STA. 231+61.196 SURVEY ℄

P.O.T. STA. 236+91.384 SURVEY ℄

CONNECTOR RD. - DUNDEE CANAL - SR 25 CONN. NO. 3

JUNK YARD

AUTO REPAIR

PERRY L. & JANET W. ARGROVES

CAR WASH (NOT IN USE)

AUTO PARTS STORE

PAUL FRED & MARGARET D. WOODS

ELSIE HARRISON ESTATE

DAVIS ALLEY

GEORGE HERBERT JR. & WIFE

ANTHURLEEN HORNE

LESTER RIVERS

OAK STREET

ASPH. PARKING BOWLING ALLEY

ESTATE OF WILLIE BOWENS A/K/A WILLIE GREEN

HERBERT MACK A/K/A JOSEPH MACK & AHAB MACK

CHRISTOPHER HENRY

RELIABLE TRANSFER CO.

BRICK BLDG. TRAFFIC CIRCLE SHOPPING CENTER

BRICK WESTSIDE RENTAL

AMERICAN SERVICE

RAMP "A"

RAMP "B"

RAMP "C"

RAMP "D"

DIRT RAMP

GRADE PLOT

GUY POLE

FRAME RES.

METAL GARAGE

METAL SERVICE STATION

CONCRETE BLK. RES.

BRICK RES.

SLAB

ASPH. PAVEMENT

DIRT DR.

EDGE ASPHALT PAVING

EXIST. CULVERT 1ST BARREL FL = 0.43 2ND BARREL FL = 0.45 3RD BARREL FL = 0.47

EXIST. CULVERT 1ST BARREL FL = 0.00 2ND BARREL FL = 0.02 3RD BARREL FL = 0.04

EXIST. CULVERT 1ST BARREL FL = 0.00 2ND BARREL FL = 0.02

EXIST. CULVERT 1ST BARREL FL = 0.00 2ND BARREL FL = 0.02 3RD BARREL FL = 0.04

EXIST. CULVERT 1ST BARREL FL = 0.00 2ND BARREL FL = 0.02

CHATHAM CO

FED. ROAD DIV NO.	STATE	FED. AID PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
4	GA.	IR-261-2(13) Cr 2	1977	13	

REV. 10-1-79

NOTE: THIS SHEET IS INCLUDED FOR REFERENCE ONLY.

NOTE:
INSTALLATION OF WATER & SANITARY SEWER LINES OUTSIDE OF THE R/W OR EASEMENT AREAS SHOWN ON PLANS IS TO BE INSTALLED BY OTHERS.

GRADING & DRAINAGE

SCALE: 1" = 50'

PEF-041-2(15)
CHATHAM Co.

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	GA.	PEF-041-2(15)&2	77	25	

NOTE: THIS SHEET INCLUDED FOR REFERENCE ONLY.

DEZZIE SHAVERS

GOLDBERG ENTERPRISES, INC

SOUTHLAND OIL CO

NOTE: SEE SHEET 12-08A FOR DETAILS OF FRONTAGE RD. "A" & "B"

DUNLOPE CANAL

BRIDGE NO. 4

INJECTOR RD.

SHOPPING CENTER (BRICK)

RITZ CLUB FR BLDG

RSPH PAVEMENT

REQ'D. 10' UTILITY EASEMENT

REQ'D. SLOPE EASEMENT

CHATHAM TERMINAL COMPANY

EXISTING R.R. R/W

CANAL

MATCH LINE - STA 24+00 U.S. 17
(SEE SHEET 12-03 U.S. 17)

UTILITY OWNERS
SOUTHERN BELL TEL. & TEL. CO.
SAVANNAH ELECTRIC & POWER CO.
CABLEVISION OF SAVANNAH
CHATHAM TERMINAL COMPANY
CENTRAL OF GEORGIA RAILROAD
SEABOARD COAST LINE RAILROAD

SCALE

P.E. F-041-2(17) CHATHAM CO.

REGION No.	STATE	FEDERAL AID PROJECT No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
4	GA.	F.F.-041-2(17)ct.1	1975	1	334

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

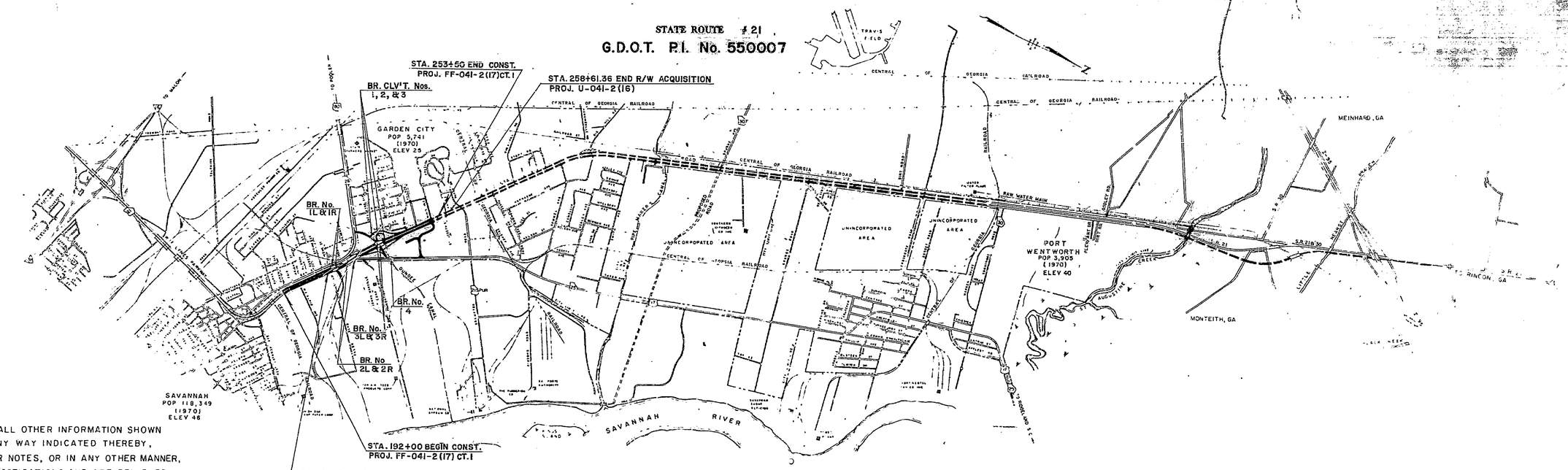
PLAN AND PROFILE OF PROPOSED
LYNES PARKWAY EXTENSION
WEST LATHROP TO MINUS AVENUE
CHATHAM COUNTY

FEDERAL AID PROJECT

FF-041-2(17) CT. 1

STATE ROUTE # 21

G.D.O.T. P.I. No. 550007



CONVENTIONAL SIGNS

- STATE OR COUNTY LINE
- CITY LIMIT LINE
- PROPERTY LINE
- SURVEY OR BASE LINE
- RIGHT OF WAY LINE
  - EXISTING
  - REQUIRED
  - LIMIT OF ACCESS
  - R/W & LIMIT OF ACCESS
  - R/W MARKERS
- FENCE
- RAILROADS
- POWER LINE
- TELEPHONE LINE
- POWER POLES
- TELEPHONE OR TELEGRAPH POLES

THE DATA, TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS, OR IN ANY WAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE DEPARTMENT OF TRANSPORTATION IN ANY WAY. THE ATTENTION OF THE BIDDER IS SPECIFICALLY DIRECTED TO SECTIONS 102.04, 102.05 AND 104.03 OF THE STANDARD SPECIFICATIONS OF THE DEPARTMENT OF TRANSPORTATION FOR THE CONSTRUCTION OF ROADS AND BRIDGES, DATED APRIL 20, 1972 WHICH WILL BE A PART OF THIS CONTRACT.

FF-041-2(17) CT.1 CONST.
U-FF-041-2(16) R/W & U-041-2(16) R/W
F-041-2(15) P.E.

0 1000 2000 4000
SCALE IN FEET

NOTE ALL WORK TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE DEPARTMENT OF TRANSPORTATION, STATE OF GEORGIA, DATED APRIL 20, 1972

APPROVED BY FEDERAL HIGHWAY ADMINISTRATION SEPT. 22, 1972 AND REVISIONS SUBMITTED FOR PROJECT.

FF-041-2(17) CT.1

TRAFFIC DATA 1993	
AVERAGE DAILY TRAFFIC, A.D.T.	31 882
A.M. PEAK	3437
P.M. PEAK	3437
24 HOUR % TRUCKS (15% A.D.T.	
PEAK HOUR % TRUCKS (5%)	

SPEED DESIGN DATA	
MAINLINE SPEED DESIGN	50 M.P.H.
LOOP SPEED DESIGN	25 M.P.H.
RAMP SPEED DESIGN	30 M.P.H.

LENGTH OF PROJECT	FF-041-2(17) CONTRACT I MILES	FF-041-2(17) CONTRACT II MILES
NET LENGTH OF ROADWAY	1.009	0.150
NET LENGTH OF BRIDGES	0.006	
NET LENGTH OF PROJECT	1.015	
NET LENGTH OF EXCEPTIONS	0.150	
GROSS LENGTH OF PROJECT	1.165	

PLAN REVISION DATE
6-10-75 6-24-75
6-11-75 6-27-75
6-16-75
6-18-75
6-19-75
6-23-75
6-24-75
6-27-75
7-01-75
7-10-75
9-11-75
12-03-75
12-22-75
1-23-76

PLANS COMPLETED: JUNE 6, 1975

SUBMITTED FOR APPROVAL

MAY 28, 1975 (DATE) — Kenny Starks — STATE HIGHWAY URBAN DESIGN ENGINEER

APPROVED

MAY 28, 1975 (DATE) — J. D. Moreland — STATE HIGHWAY ENGINEER OF GEORGIA

1-01

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	GA.	FF-041-2(17)CT	75	3|0	

BRIDGE CONSISTS OF

2 -36'-0" CONCRETE TEE BEAM SPANS ---------- SPECIAL DESIGN
2 - PRESTRESSED CONCRETE PILE (14" SQ.) END BENTS ---------- SPECIAL DESIGN
1 - PRESTRESSED CONCRETE PILE (16" SQ.) INTERMEDIATE BENT ---------- SPECIAL DESIGN
END POST AND END POST GUARDRAIL ATTACHMENT DETAIL ---------- GA. STD. NO.3053(2-1-75)
L=6'-9"; W=1'-2½", H=3'-6" SIDEWALK SIDE, 4'-0" OTHER SIDE.
14" AND 16" SQ. PRESTRESSED CONCRETE PILES ---------- GA. STD. NO.3215(12-18-74)
ALUMINUM HANDRAILING ---------- GA. STD. NO.3632(11-1-74)
BAR BENDING DETAILS ---------- GA. STD. NO.3901
TEMPORARY BEAM TYPE GUARDRAIL ---------- GA. STD. NO.4010(5-10-74)
TEMPORARY GUARDRAIL POST ---------- GA. STD. NO.4011(7-22-74)
TYPICAL FILL DETAIL AT END OF BRIDGE ---------- GA. STD. NO.9037(9-1-70)

GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD DATED 1972.

WAITING PERIOD - NO WORK SHALL BE STARTED UNTIL THE COMPLETED END FILLS FOR EACH PHASE HAS BEEN IN PLACE FOR AN ESTIMATED PERIOD OF 4 MONTHS.

END BENT EXCAVATION - EXCAVATION FOR END BENT NOS. 1 AND 3 SHALL BE INCLUDED IN OVERALL BID SUBMITTED.

⚠2 CONTRACTOR SHALL FURNISH, INSTALL, AND REMOVE TEMPORARY SHORING, TEMPORARY GUARDRAIL WITH POSTS, AND TEMPORARY TRAFFIC BARRIER. COST OF PROVIDING SAME SHALL BE PAID FOR IN THE OVERALL BID SUBMITTED. AFTER REMOVAL, ALL OF THESE MATERIALS WILL REMAIN THE PROPERTY OF THE CONTRACTOR.

CHAMFER - ALL EXPOSED EDGES SHALL BE CHAMFERED ¾ INCH UNLESS OTHERWISE NOTED.

REINFORCEMENT - ALL REINFORCEMENT SHALL BE PLACED AND TIED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. WELDING OF REINFORCEMENT WILL NOT BE PERMITTED.

⚠1 TEST PILES - DRIVE TEST PILES AS FOLLOWS:
ONE 16" SQ. × 35 FT. AT BENT 2 (PHASE I) AND
ONE 14" SQ. x 35 FT. AT BENT 1 (PHASE I).

DRIVING DATA PILES - ONE REQUIRED AT EACH OF BENTS 1 AND 3.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

SUMMARY OF QUANTITIES

300	CU YD UNCLASS EXCAV., INCL. HAUL
LUMP	SUPERSTR CONC (CL A) - BR NO 4
87	CU YD CL A CONC
9,229	LB BAR REINF STEEL
LUMP	SUPERSTR REINF STEEL - BR NO 4
128	LIN FT ALUM HANDRAIL, STD 3632
⚠1 550	LIN FT PILING, PSC, 14 IN SQ
210	LIN FT PILING, PSC, 16 IN SQ
1	EACH TEST PILE, PSC, 16 IN SQ
1	EACH LOAD TEST, PSC, 14 IN SQ (IF REQD)
1	EACH LOAD TEST, PSC, 16 IN SQ (IF REQD)
LUMP	REM OF EXIST BR - STA 25 + 84±
660	SQ YD STN PLAIN RIP RAP
660	SQ YD PLASTIC FILTER FABRIC
⚠1 1	EACH TEST PILE, PSC, 14 IN SQ

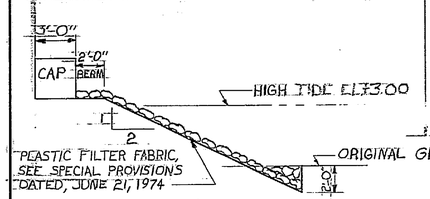
DESIGN DATA

SPECIFICATIONS - A.A.S.H.O., 1973, INT. 1974
TYPICAL HS20-44 LOADING - IMPACT ALLOWED
FUTURE PAVING ALLOWANCE = 15 LBS. PER SQ. FT.

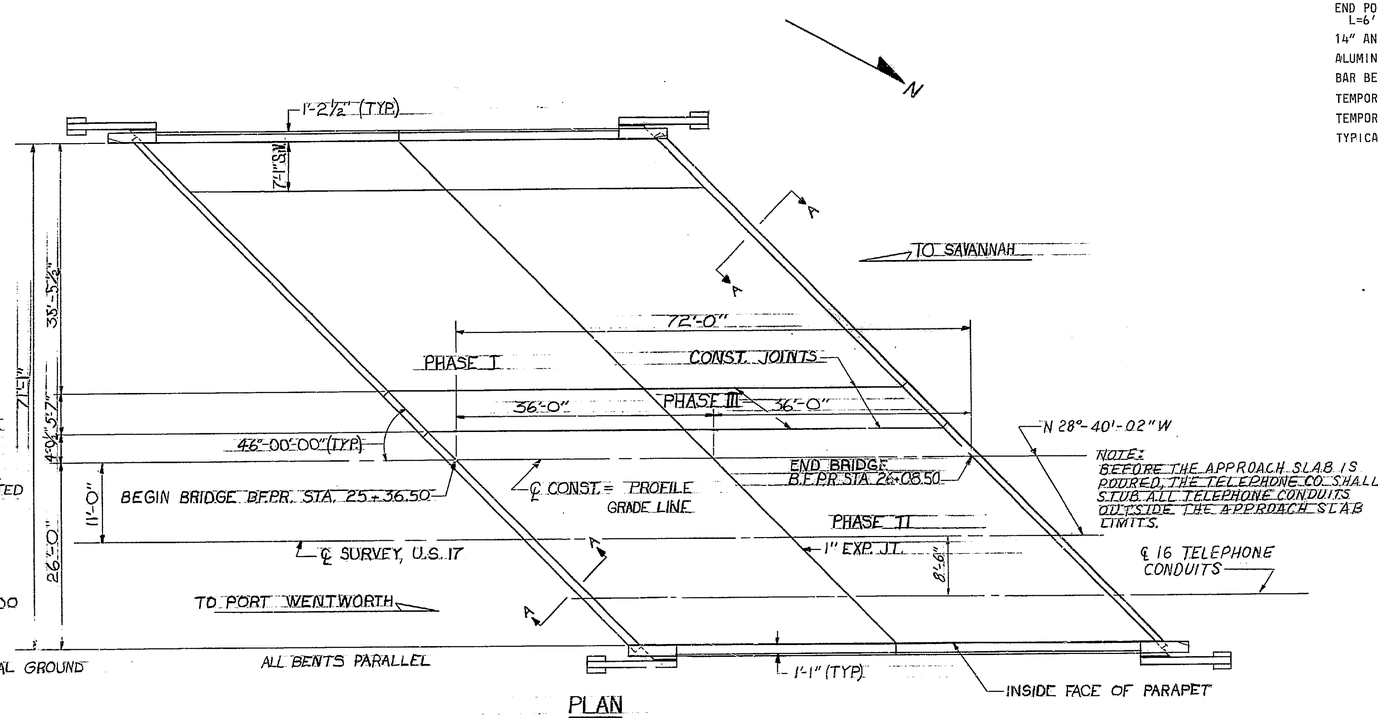
P.V.T. STA. 20+00
EL. 10.61
-0.3853%

GRADE DATA-U.S. 17, R.L.C.

RIP RAP SHALL EXTEND FROM 2' BELOW ORIGINAL GROUND UP TO AND ACROSS BERM. EXTEND RIP RAP 20' BEYOND END OF WING WALLS AND SHALL BE PLACED FROM 2' BELOW ORIGINAL GROUND TO SHOULDER ELEV. OR AS DIRECTED BY ENGINEER.

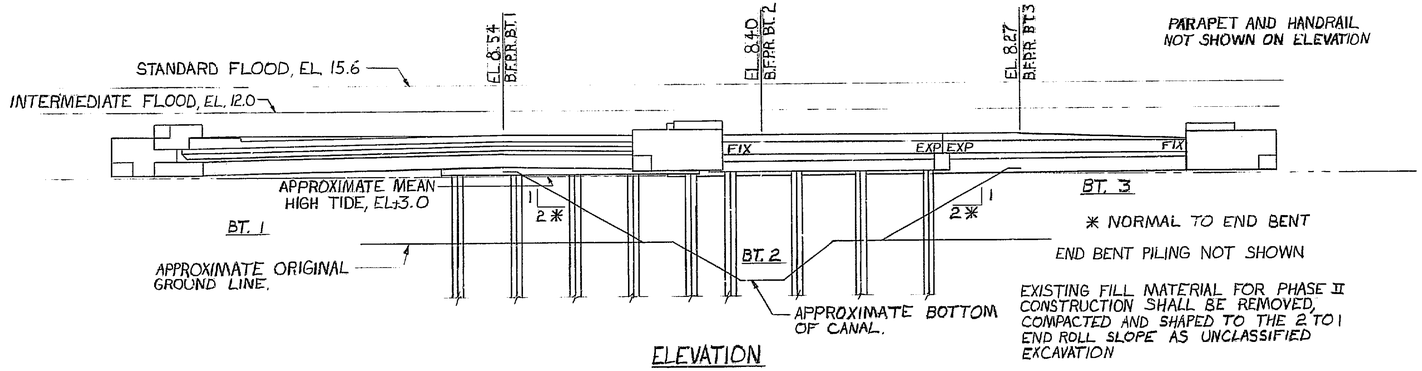


SECTION A-A



NOTE: BEFORE THE APPROACH SLAB IS POURED, THE TELEPHONE CO. SHALL STUB ALL TELEPHONE CONDUITS OUTSIDE THE APPROACH SLAB LIMITS.

PLAN



ELEVATION

UTILITIES

16 TELEPHONE CONDUITS -- SOUTHERN BELL TELEPHONE AND TELEGRAPH COMPANY

DRAINAGE DATA

TIDAL STREAM

NOTE: THE CONTRACTOR SHALL USE EVERY PRECAUTION NECESSARY TO PREVENT DAMAGE TO ADJACENT PROPERTY AND UNDERGROUND STRUCTURES DURING PILE DRIVING OPERATIONS.

BRIDGE NO. 4

GEORGIA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION - BRIDGE DESIGN

PLAN AND ELEVATION
U.S. 17 OVER DUNDEE CANAL
CHATHAM CO. FF 041-2(17)CT. 1
NO SCALE NOVEMBER, 1974

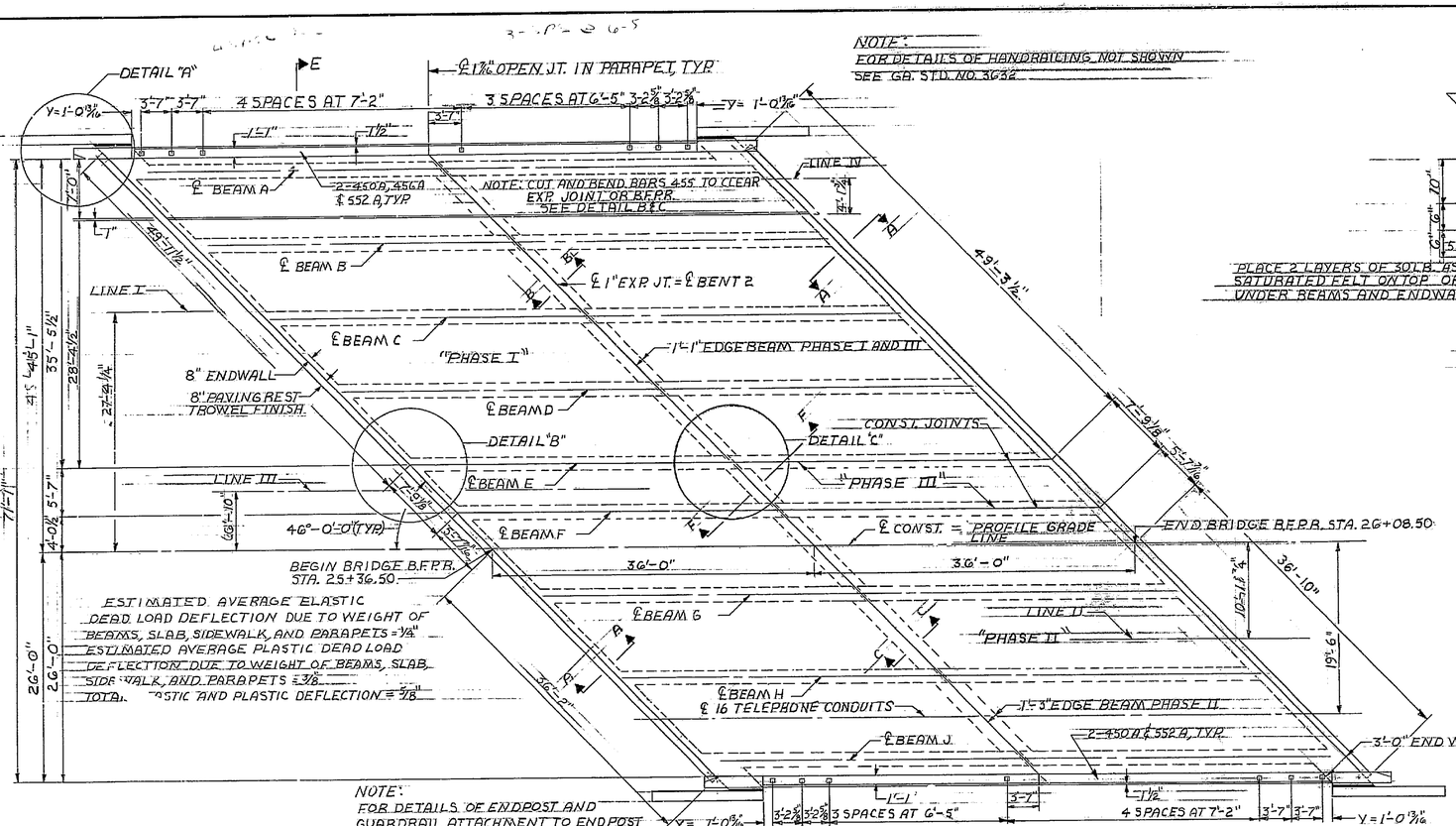
BY	DATE	REVISIONS
S.S.W.	6-20-75	ADDED TEST PILE-BENT 1
PAC	7-9-75	MODIFIED GENERAL NOTES

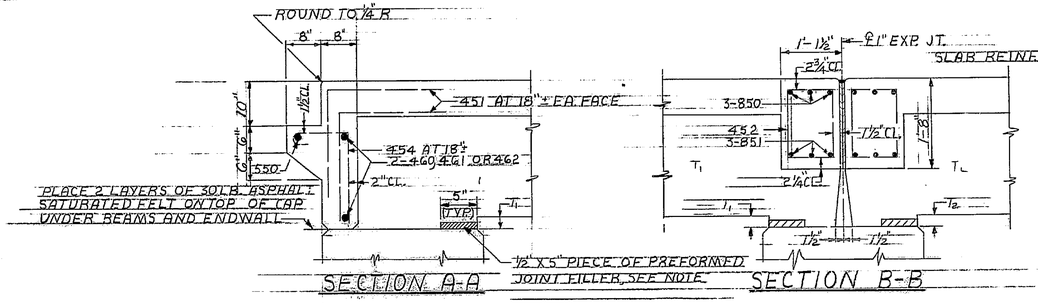
BRIDGE SHEET 1 OF 14

DESIGNED JET | TRACED | REVIEWED LKP
DRAWN RWF | CHECKED JET | APPROVED

20-08

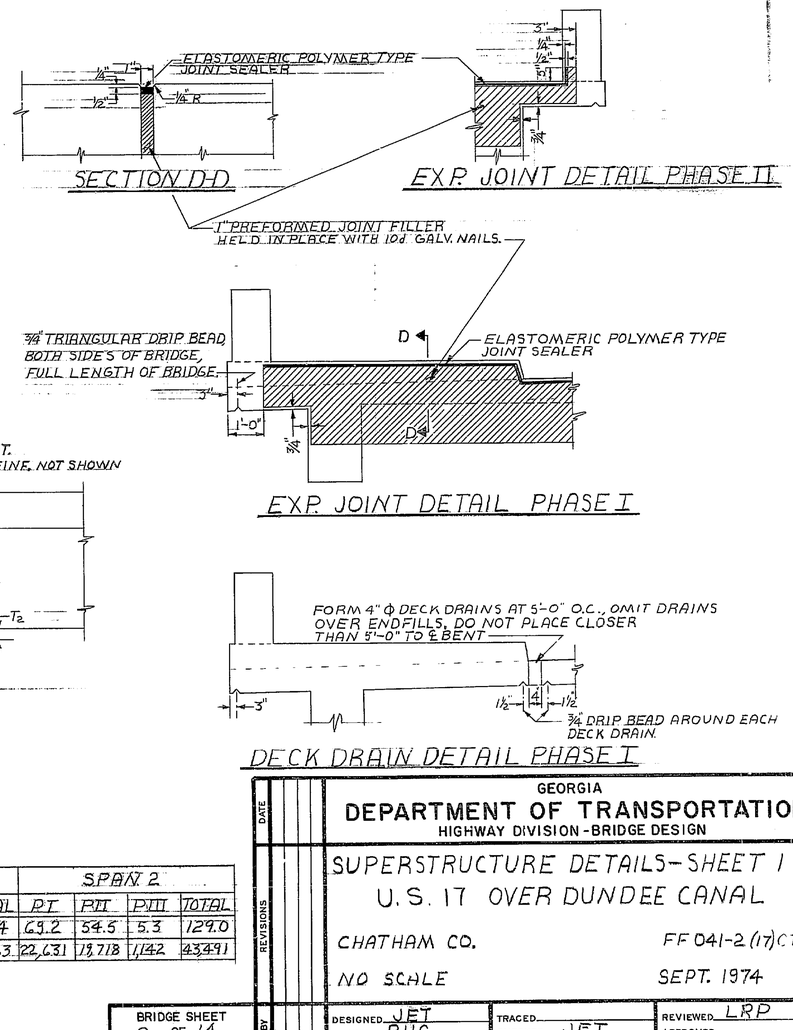
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	GA.	FF-041-2(17) CT.1	75	3(1.	

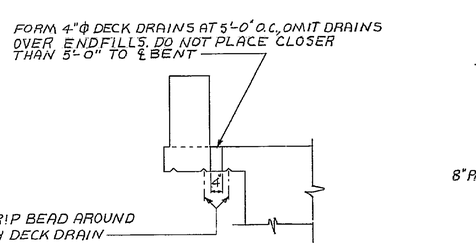


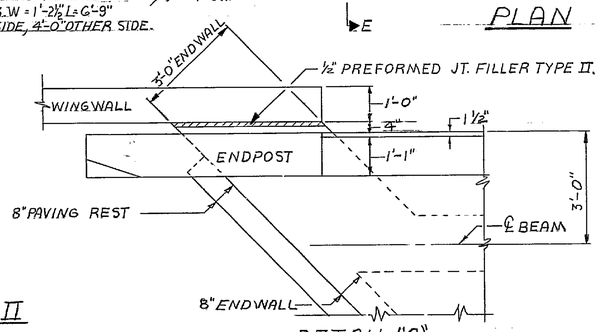


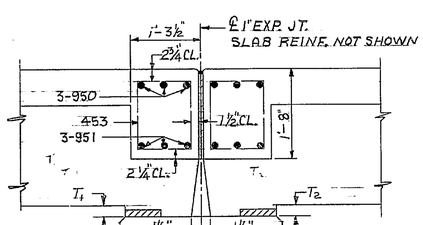
FIXED ENDS – PLACE UNDER BEAMS 2 LAYERS OF 30 LB. ASPHALT SATURATED FELT WITH HOLES FOR BARS 1005.

EXPANSION ENDS – PLACE UNDER BEAMS 2, ⅛" THICK PIECES OF COMPRESSED ASBESTOS SHEETS AS FURNISHED BY JOHNS-MANVILLE (STYLE NO. 60), RAYBESTOS-MANHATTAN (RM 663), SOUTHEASTERN PRODUCTS SALES (SEPCO #200) OR EQUAL. PLACE SURFACES WITH PARTING AGENT TOGETHER.



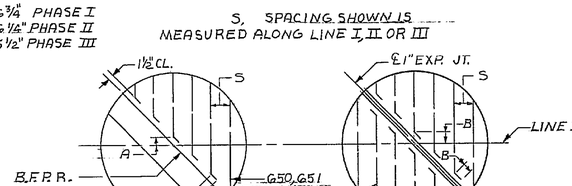


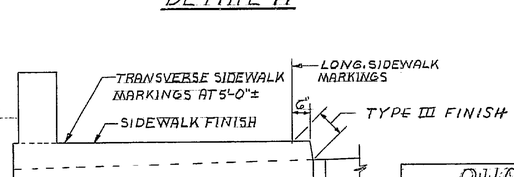




S = 6¾" PHASE I
6½" PHASE II
5½" PHASE III

S, SPACING SHOWN IS MEASURED ALONG LINE I, II OR III





QUANTITIES	SPAN 1				SPAN 2			
ITEM / PHASE	P.I	P.II	P.III	TOTAL	P.I	P.II	P.III	TOTAL
CU. YDS. CLASS "A" CONCRETE	69.6	54.5	5.3	129.4	69.2	54.5	5.3	129.0
LBS. BAR REINF. STEEL	22,654	19,667	1,142	43463	22,631	19,718	1,142	43491

GEORGIA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION - BRIDGE DESIGN

SUPERSTRUCTURE DETAILS – SHEET 1
U.S. 17 OVER DUNDEE CANAL

CHATHAM CO. FF 041-2 (17) CT.1

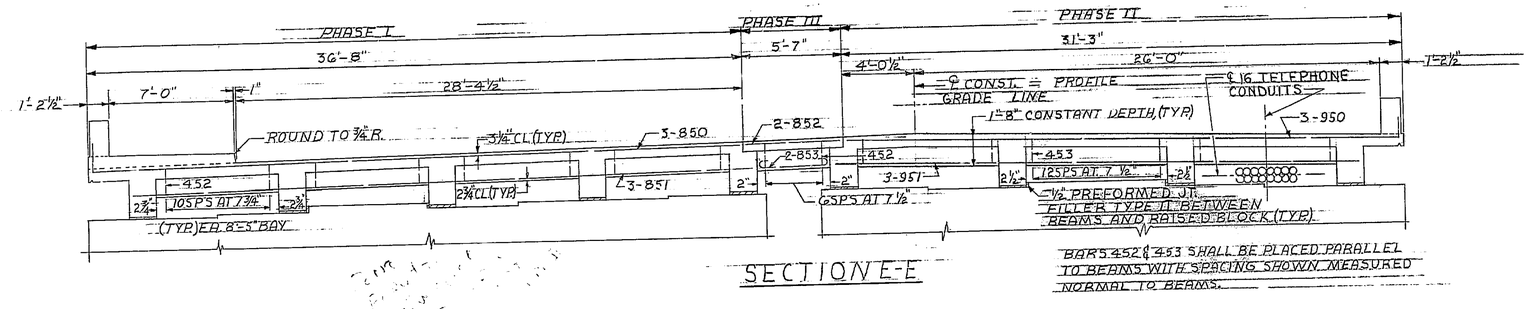
NO SCALE SEPT. 1974

BRIDGE SHEET 2 OF 14

DESIGNED JET | TRACED | REVIEWED LRP
DRAWN R.H.C | CHECKED JET | APPROVED

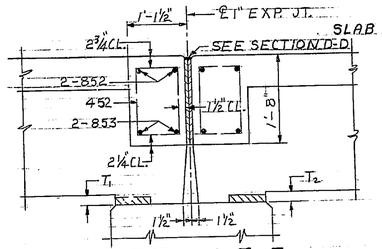
20-69

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	GA.	FF-041-2(17)CT1	75	3/12	

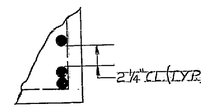


SECTION E-E

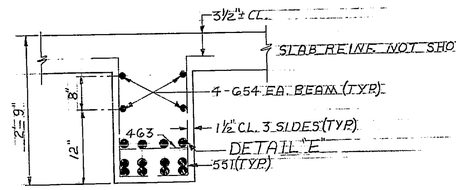
BARS 452 & 453 SHALL BE PLACED PARALLEL TO BEAMS WITH SPACING SHOWN MEASURED NORMAL TO BEAMS.



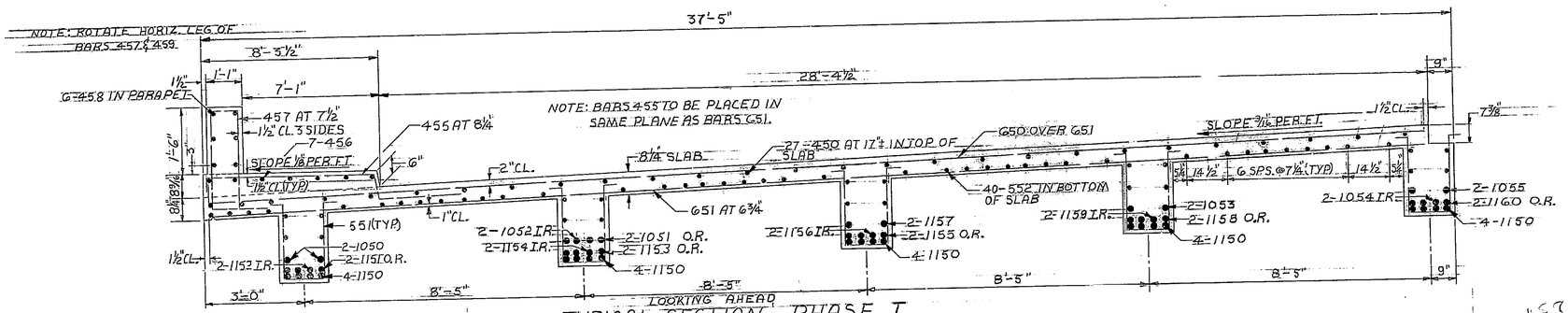
SECTION F-F



DETAIL "E"

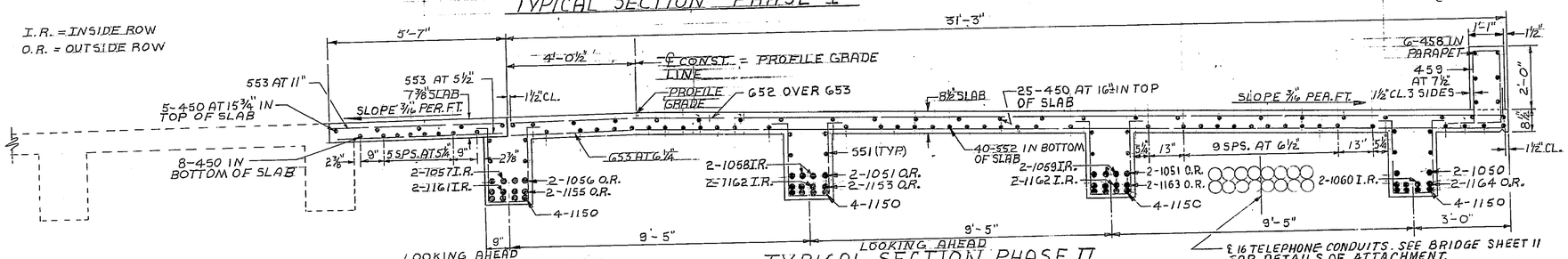


SECTION OF STEM



TYPICAL SECTION PHASE I

I.R. = INSIDE ROW
O.R. = OUTSIDE ROW

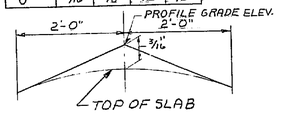


PORTION OF PHASE I TYPICAL SECTION PHASE III

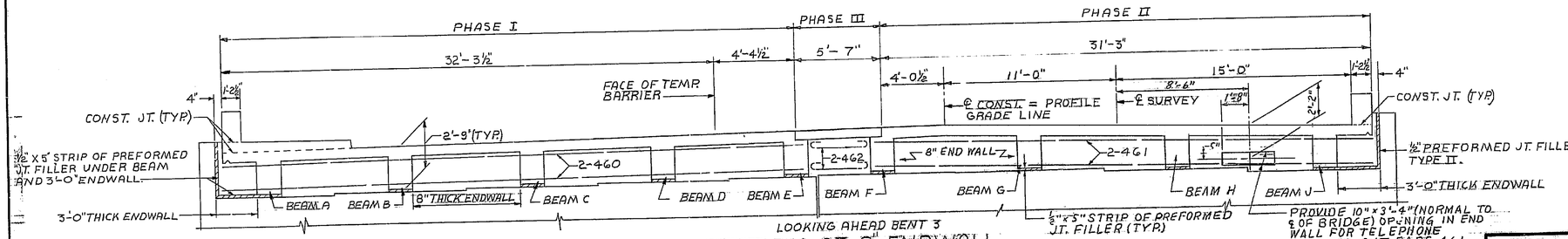
TYPICAL SECTION PHASE II

℄ 16 TELEPHONE CONDUITS. SEE BRIDGE SHEET 11 FOR DETAILS OF ATTACHMENT.

DIMENSIONS T1 & T2 (INCHES)				
BT.	1	2		3
BM.	T1	T1	T2	T1
A	½"	⅝"	½"	½"
B	½"	⅝"	½"	9/16"
C	9/16"	⅝"	½"	9/16"
D	9/16"	11/16"	½"	9/16"
E	9/16"	11/16	½"	9/16"
F	½"	⅝"	½"	½"
G	9/16"	11/16"	9/16"	9/16"
H	½"	⅝"	½"	9/16"
J	9/16"	⅝"	½"	½"



CROWN DETAIL



SECTION AT 8" ENDWALL

GEORGIA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION - BRIDGE DESIGN

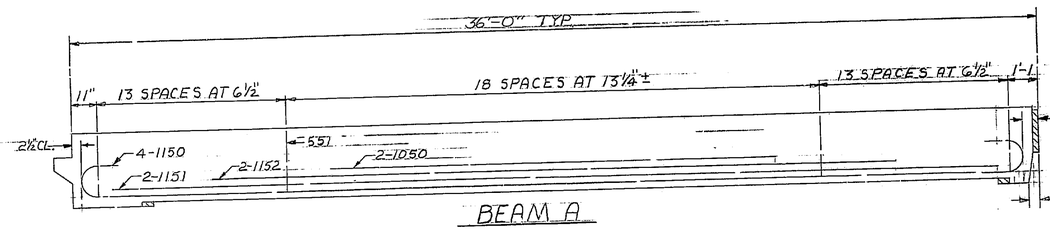
SUPERSTRUCTURE DETAILS-SHEET 2
U.S. 17 OVER DUNDEE CANAL
CHATHAM CO. FF 041-2(17)CT1
NO SCALE OCT. 1974

DESIGNED JET | TRACED | REVIEWED LRP
DRAWN RHC | CHECKED JET | APPROVED

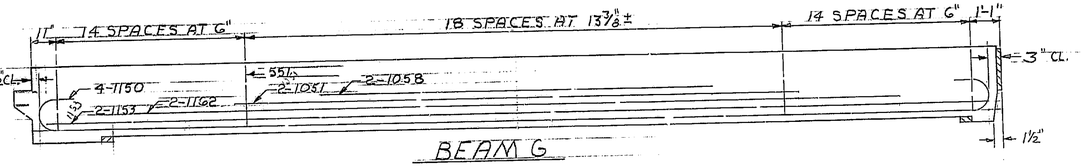
BRIDGE SHEET 3 OF 14

20-10

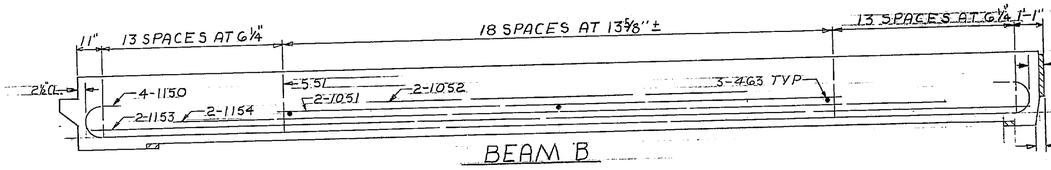
FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	GA.	FF-041-2 (17) CT. 1	75	3/13	



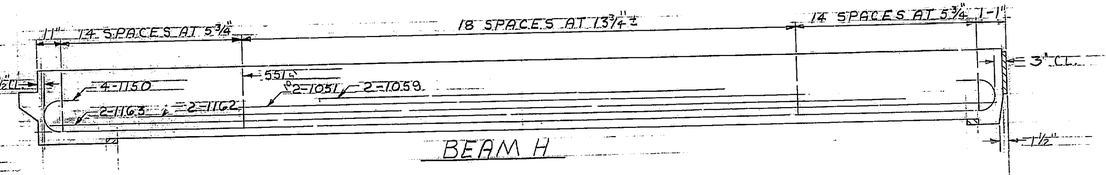
BEAM A



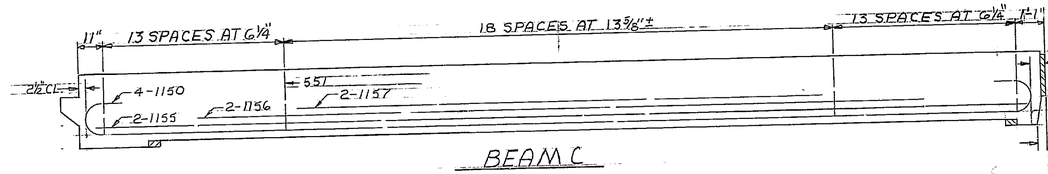
BEAM G



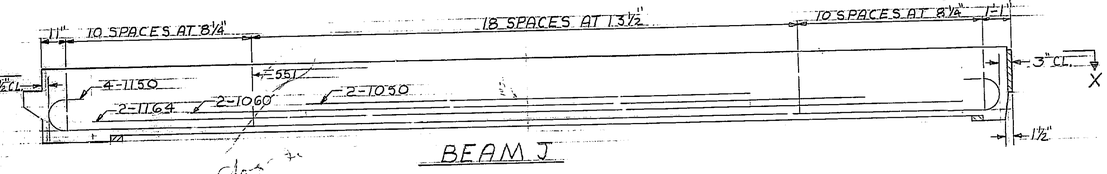
BEAM B



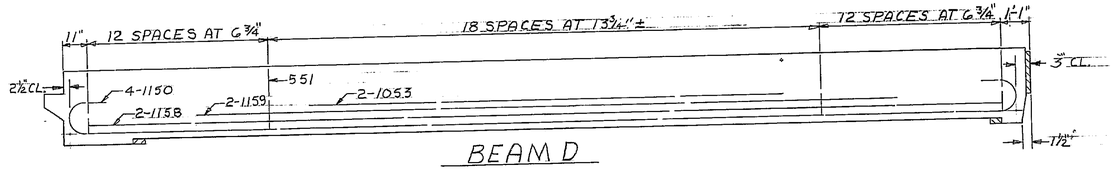
BEAM H



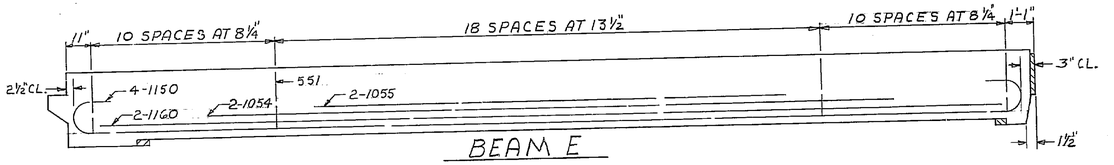
BEAM C



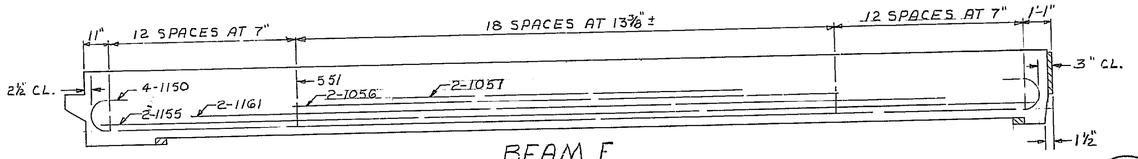
BEAM J



BEAM D

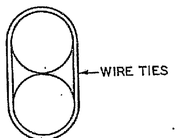


BEAM E



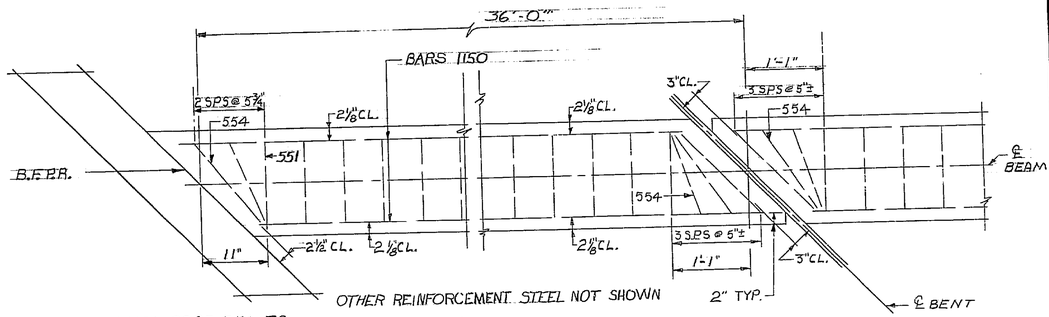
BEAM F

NOTE: PLACE ALL MAIN REINFORCEMENT STEEL SYMMETRICAL ABOUT ℄ SPAN.



BUNDLING DETAIL

NOTE: BARS TO BE BUNDLED SHALL BE BUNDLED VERTICALLY.



OTHER REINFORCEMENT STEEL NOT SHOWN

NOTE: SPECIAL BARS 554 TO BE CUT AND PLACED IN FIELD, AS NECESSARY.

SECTION X-X TYP.

GEORGIA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION - BRIDGE DESIGN

BEAM DETAILS

U.S. 17 OVER DUNDEE CANAL

CHATHAM CO. FF 041-2 (17) CT. 1

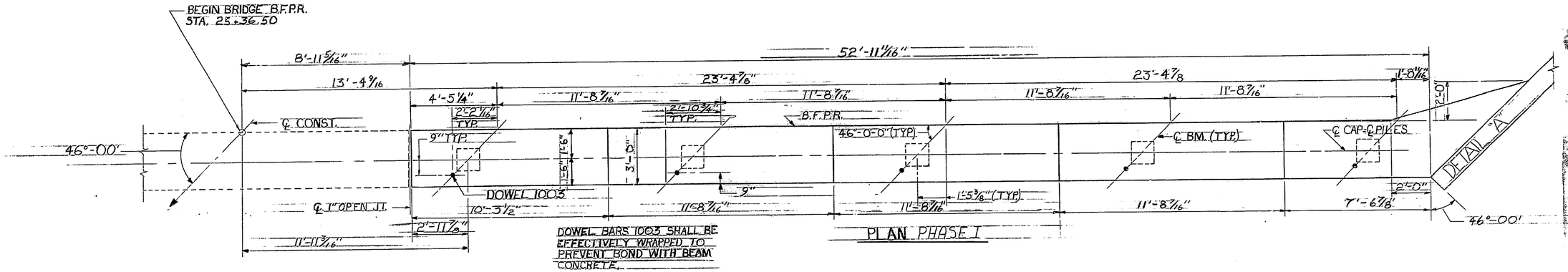
NO SCALE OCT. 1974

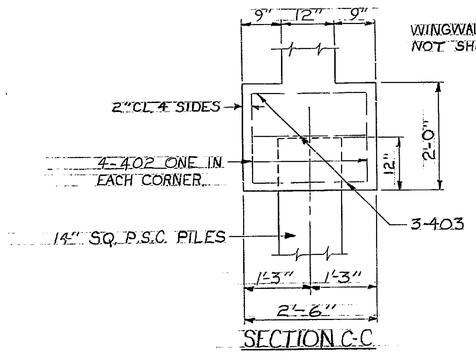
BRIDGE SHEET	DESIGNED	TRACED	REVIEWED
4 OF 14	JET		LRP
	DRAWN RHC	CHECKED JET	APPROVED

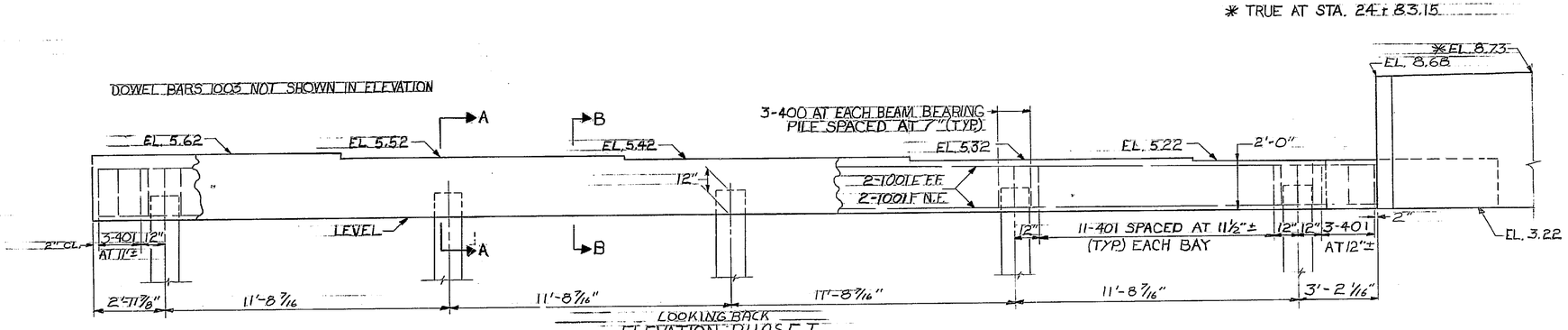
DATE | REVISIONS | BY

20-11

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	GA.	FF-041-2 (17) Ct. 1	75	3/14	

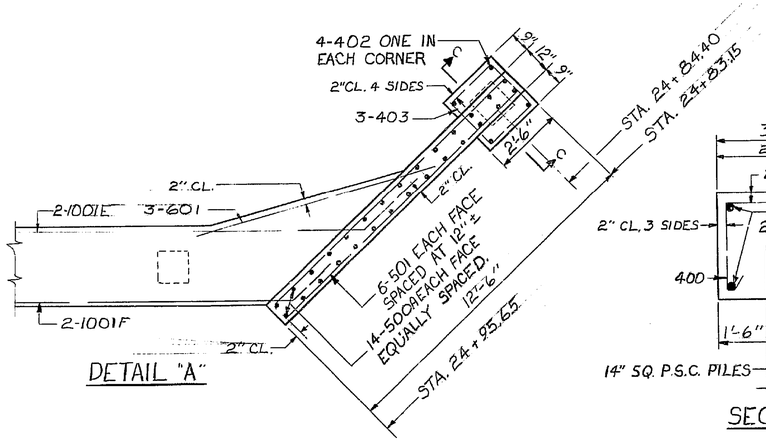


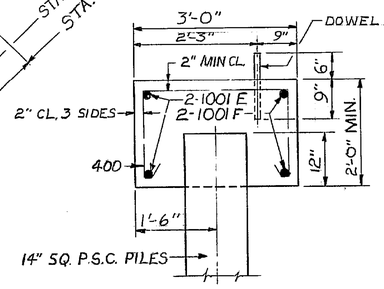


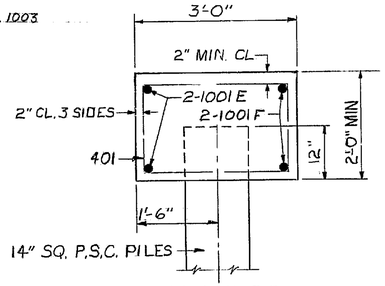


* TRUE AT STA. 24+83.15

QUANTITIES	
CU. YDS. CLASS "A" CONCRETE	16.20
LBS. BAR REINF. STEEL	1,781







BETWEEN BEAM BEARING AREA'S SLOPE TOP OF CAP ¼" X 3'-0" TO DRAIN TOWARDS BERM.

PLAN DRIVING OBJECTIVE

DRIVE ALL PILES TO A DRIVING RESISTANCE OF 46 TONS AFTER A MINIMUM PILE TIP ELEVATION OF (-)15 IS OBTAINED.

GEORGIA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION - BRIDGE DESIGN

DATE | REVISIONS | BY

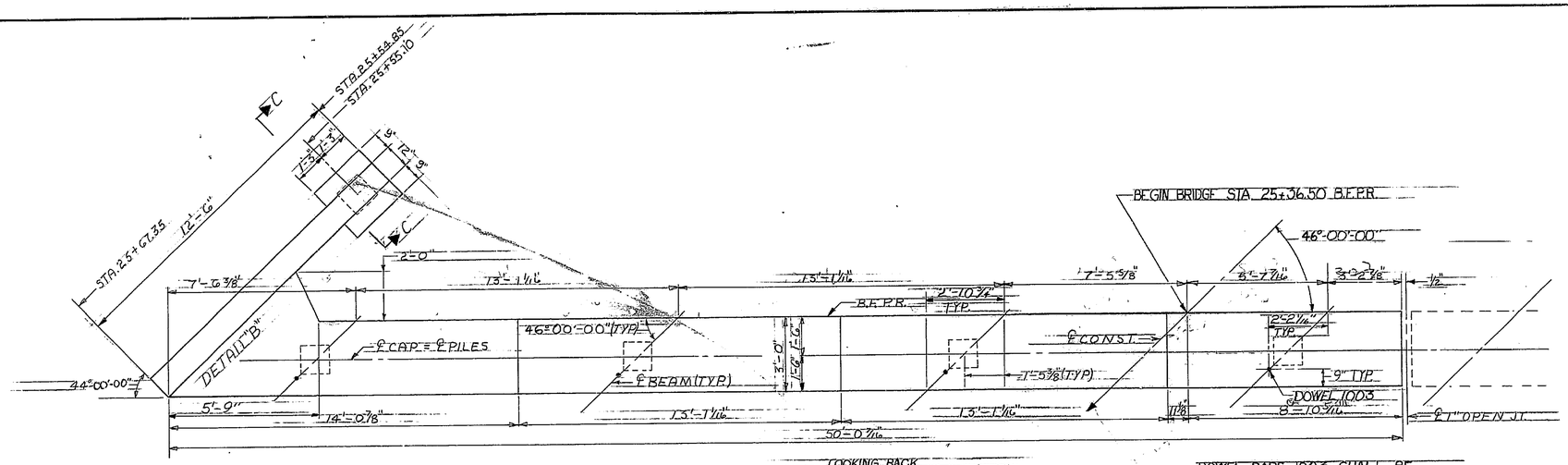
BENT 1 PHASE I
U.S. 17 OVER DUNDEE CANAL
CHATHAM CO. FF 041-2(17) CT. 1
NO SCALE NOVEMBER 1974

BRIDGE SHEET 5 OF 14

DESIGNED JET | TRACED | REVIEWED LRP
DRAWN RWF | CHECKED JET | APPROVED

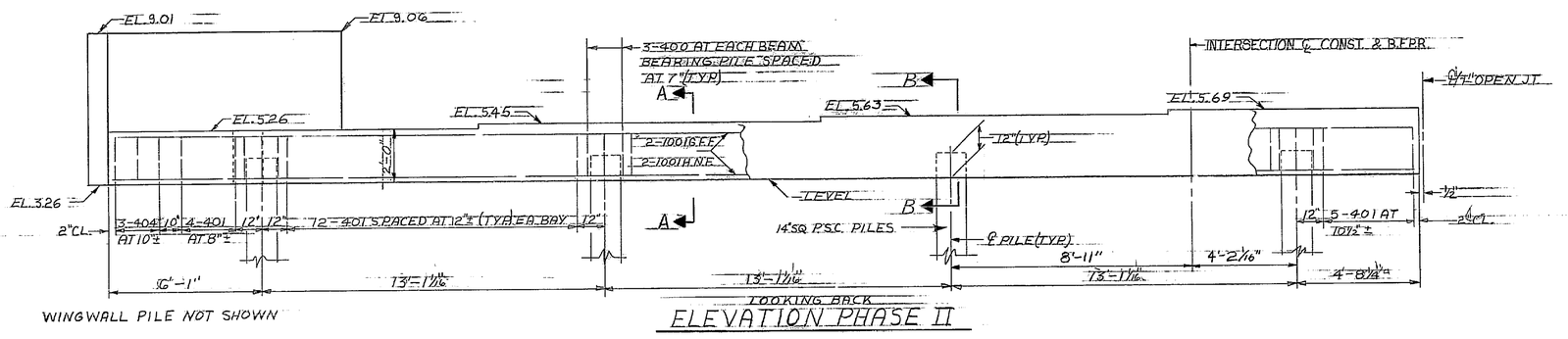
20-12

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	GA.	FF-041-2(17)CT.1	75	3/5	

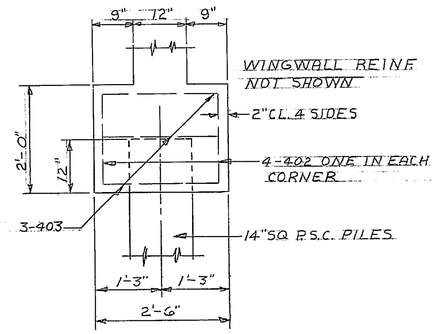


PLAN PHASE II

DOWEL BARS 1003 SHALL BE EFFECTIVELY WRAPPED TO PREVENT BOND WITH BEAM CONCRETE.



ELEVATION PHASE II



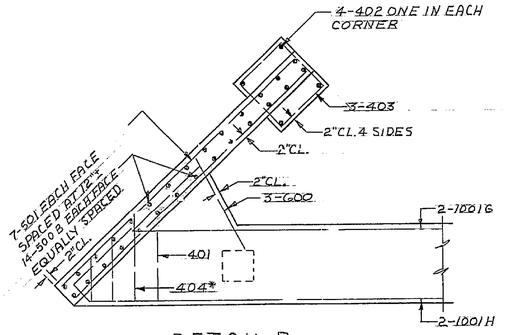
SECTION CC

PLAN DRIVING OBJECTIVE

DRIVE ALL PILES TO A DRIVING RESISTANCE OF 46 TONS AFTER A MIN. PILE TIP ELEV. OF (-)15 IS OBTAINED.

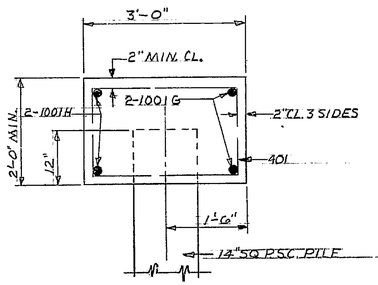
QUANTITIES	
CU. YDS. CLASS A CONCRETE	14.99
LBS. BAR REINF. STEEL	1,645

BETWEEN BEAM BEARING AREA'S SLOPE TOP OF CAP ¼" X 3'-0" TO DRAIN TOWARDS BERM.

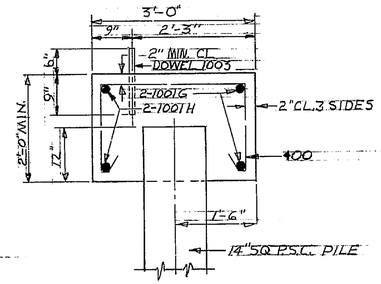


DETAIL B

*NOTE: SPECIAL BARS 404 TO BE CUT IN FIELD AS NECESSARY TO CLEAR WINGWALL REINFORCEMENT.



SECTION A-A



SECTION B-B

GEORGIA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION - BRIDGE DESIGN

DATE | REVISIONS | BY

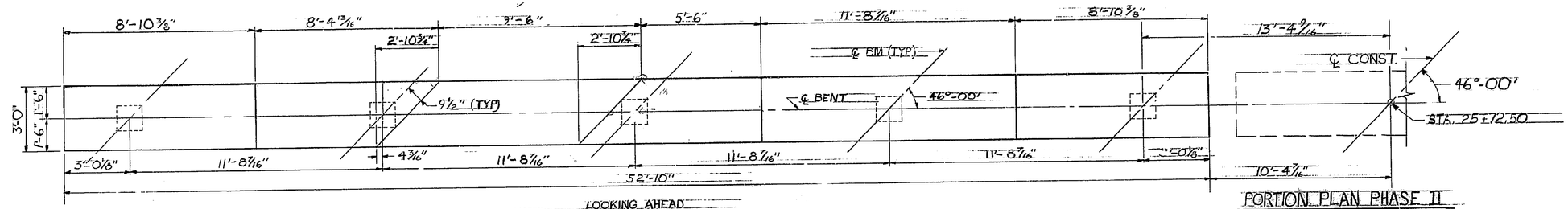
BENT 1 PHASE II
U.S. 17 OVER DUNDEE CANAL
CHATHAM CO. FF 041-2(17) CT.1
NO SCALE NOV. 1974

BRIDGE SHEET 6 OF 14

DESIGNED JET | TRACED | REVIEWED LRP
DRAWN RHC | CHECKED JET | APPROVED

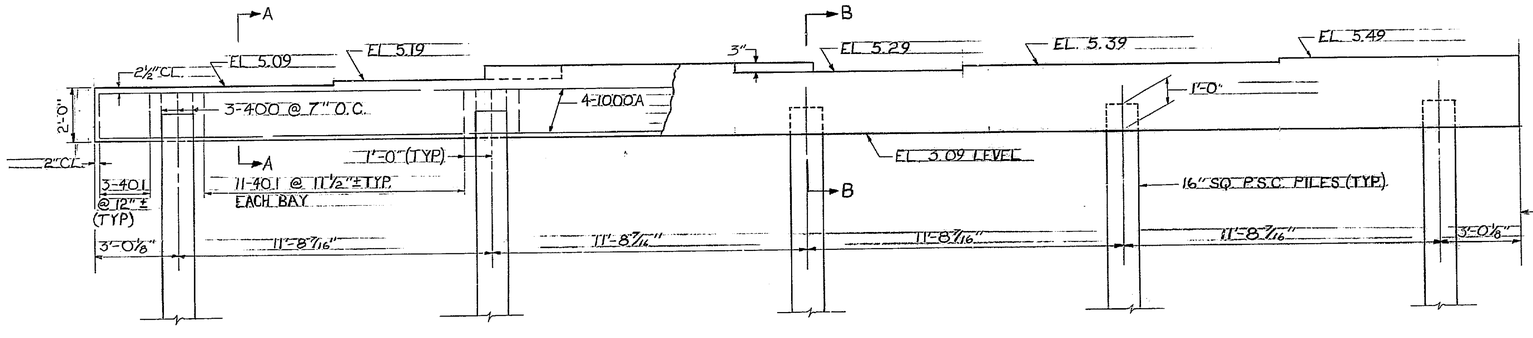
20-13

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	GA.	FF-041-2(17)CT.	75	316	

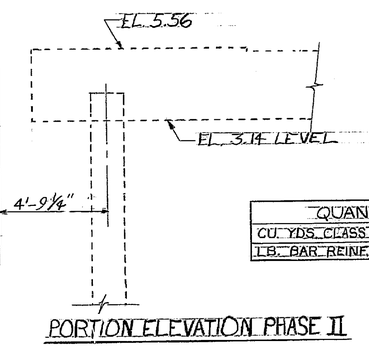


LOOKING AHEAD
PLAN PHASE I

PORTION PLAN PHASE II



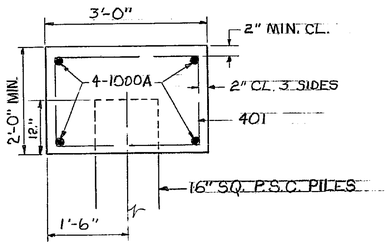
LOOKING AHEAD
ELEVATION PHASE I



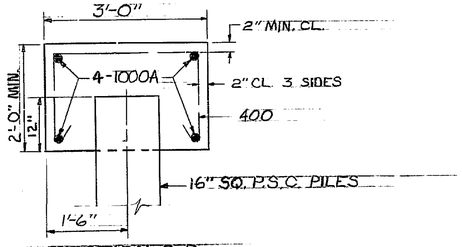
PORTION ELEVATION PHASE II

QUANTITIES	
CU. YDS. CLASS "A" CONCRETE	12.90
LB. BAR REINF. STEEL	1286

PLAN DRIVING OBJECTIVE
DRIVE ALL PILES TO A DRIVING RESISTANCE OF 66 TONS AFTER OBTAINING A MIN. PILE TIP ELEV. OF (-)15



SECTION A-A



SECTION B-B

GEORGIA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION - BRIDGE DESIGN

BENT 2 DETAILS PHASE I
U.S. 17 OVER DUNDEE CANAL
CHATHAM COUNTY FF 041-2(17)CT.1
NO SCALE NOVEMBER 1974

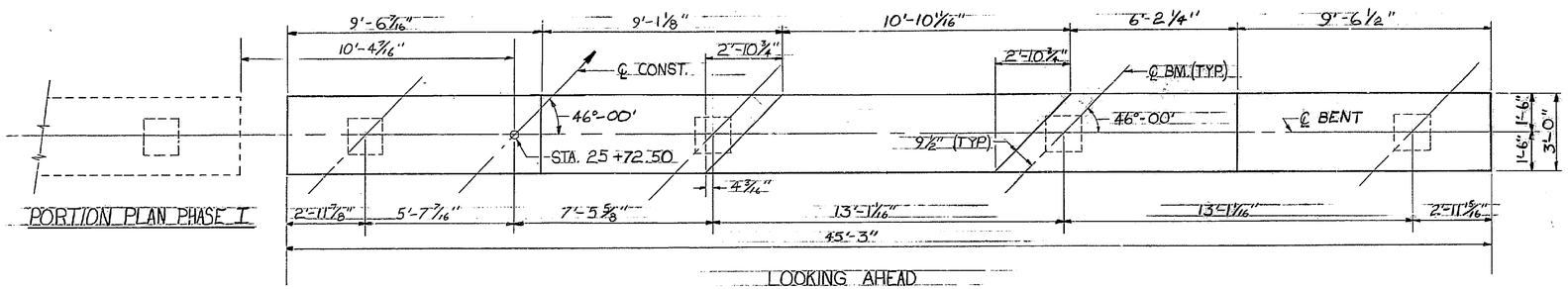
DATE | REVISIONS | BY

BRIDGE SHEET 7 OF 14

DESIGNED JET | TRACED | REVIEWED LRP
DRAWN RWF | CHECKED JET | APPROVED

20-14

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	GA.	FF-041-2(17)CT.1	75	3/7	

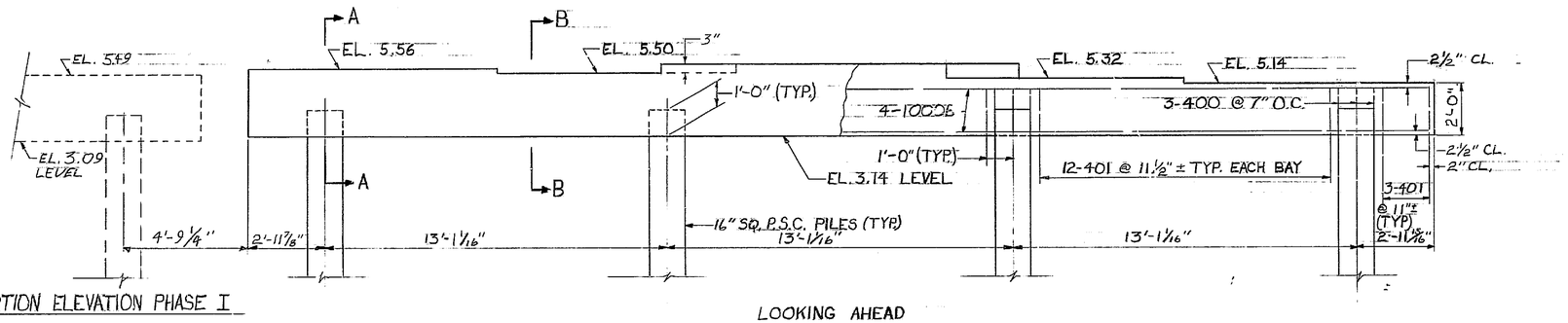


PORTION PLAN PHASE I

LOOKING AHEAD

PLAN PHASE II

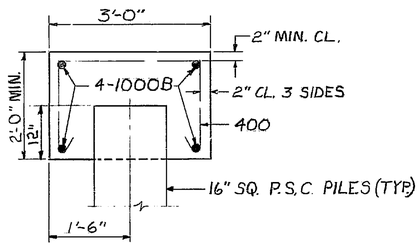
QUANTITIES	
CU. YDS. CLASS "A" CONCRETE	11.43
LB. BAR REINF. STEEL	1,091



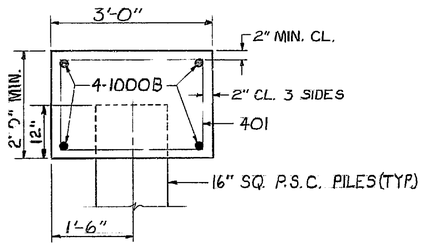
PORTION ELEVATION PHASE I

LOOKING AHEAD

ELEVATION PHASE II



SECTION A-A



SECTION B-B

PLAN DRIVING OBJECTIVE

DRIVE ALL PILES TO A DRIVING RESISTANCE OF 66 TONS AFTER OBTAINING A MINIMUM PILE TIP ELEVATION OF (-) 15.

GEORGIA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION - BRIDGE DESIGN

BENT 2 DETAILS PHASE II
U.S. 17 OVER DUNDEE CANAL
CHATHAM COUNTY FF 041-2(17)CT.1
NO SCALE NOVEMBER 1974

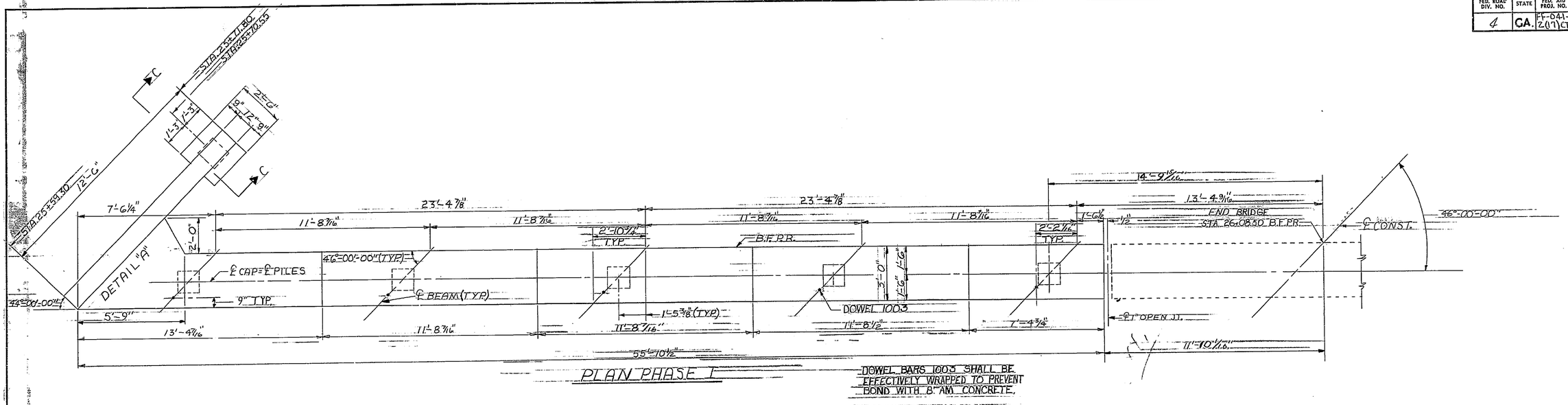
DATE | REVISIONS | BY

BRIDGE SHEET 8 OF 14

DESIGNED JET | TRACED | REVIEWED LRP
DRAWN RWF | CHECKED JET | APPROVED

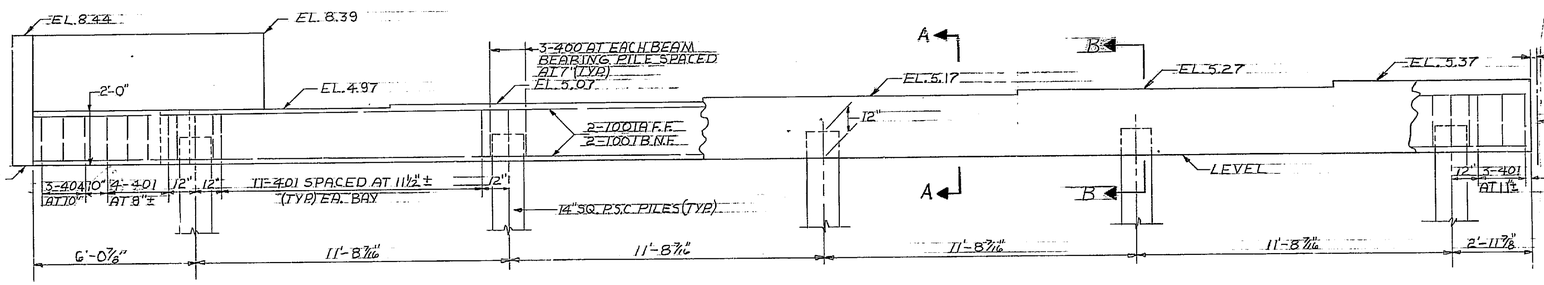
20-15

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	GA.	FF-041-2(17)CT	75	3/14	



PLAN PHASE I

DOWEL BARS 1003 SHALL BE EFFECTIVELY WRAPPED TO PREVENT BOND WITH B.F. AM. CONCRETE.



WINGWALL PILE NOT SHOWN

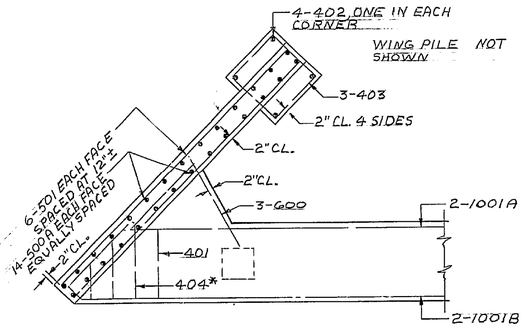
LOOKING AHEAD

ELEVATION PHASE I

PLAN DRIVING OBJECTIVE

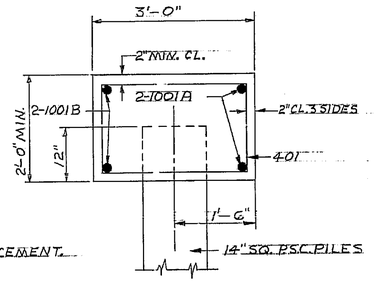
DRIVE ALL PILES TO A DRIVING RESISTANCE OF 46 TONS AFTER A MIN. PILE TIP ELEV. OF (-)15' IS OBTAINED.

QUANTITIES	
CU. YDS. CLASS A CONCRETE	15.92
LBS. BAR REINF. STEEL	1,769

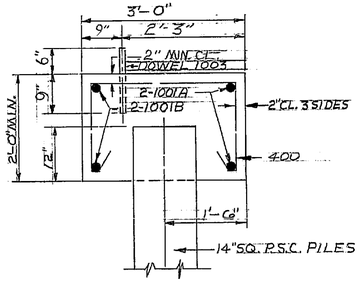


DETAIL "A"

*NOTE: SPECIAL BARS 404 TO BE CUT IN FIELD AS NECESSARY TO CLEAR WINGWALL REINFORCEMENT.

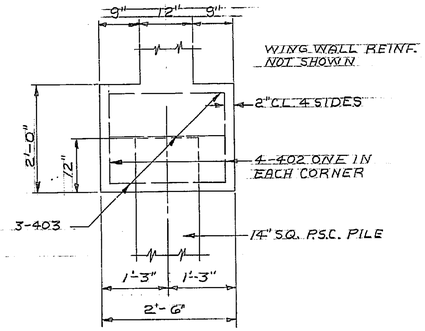


SECTION A-A



SECTION B-B

BETWEEN BEAM BEARING AREA'S SLOPE TOP OF CAP ¼" X 3'-0" TO DRAIN TOWARD BERM.



SECTION C-C

GEORGIA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION - BRIDGE DESIGN

BENT 3 PHASE I
U. S. 17 OVER DUNDEE CANAL
CHATHAM CO. FF 041-2(17)CT
NO SCALE NOVEMBER 1974

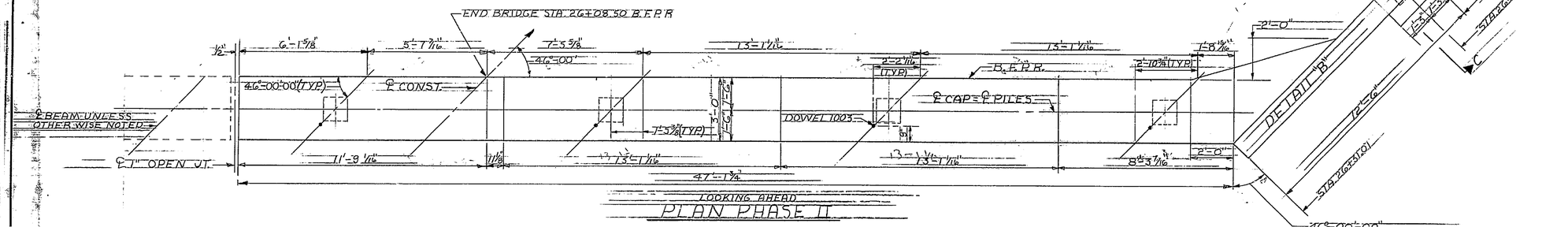
DESIGNED JET DRAWN RHC TRACED CHECKED JET REVIEWED LRP APPROVED

DATE BY REVISIONS

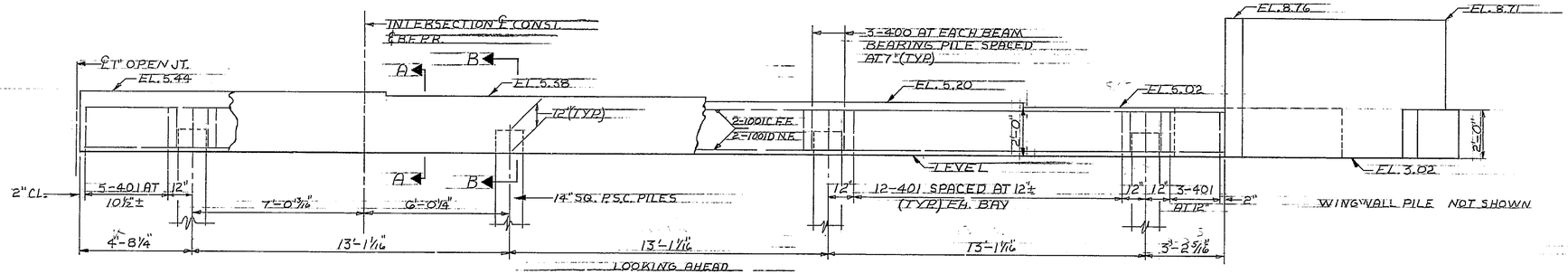
BRIDGE SHEET 9 OF 14

20-16

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	GA.	FF-041-2(17)CT.1	75	519	



PLAN PHASE II

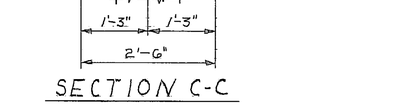


ELEVATION PHASE II

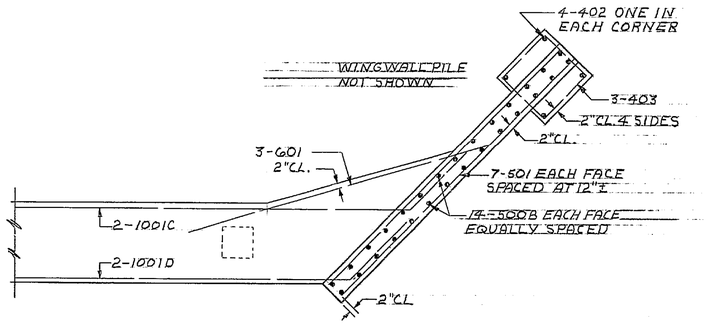
PLAN DRIVING OBJECTIVE

DRIVE ALL PILES TO A DRIVING RESISTANCE OF 46 TONS AFTER A MIN. PILE TIP ELEV. OF (-)15 IS OBTAINED.

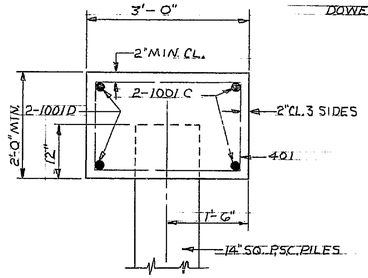
QUANTITIES	
CU. YDS. CLASS "A" CONCRETE	15.21
LBS. BAR REINF. STEEL	1,657



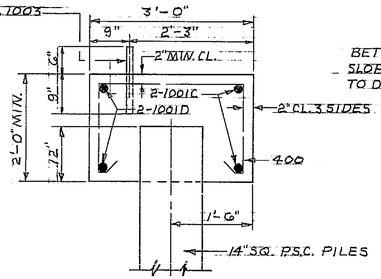
SECTION C-C



DETAIL "B"



SECTION A-A



SECTION B-B

BETWEEN BEAM BEARING AREA'S SLOPE TOP OF CAP ¼" X 3'-0" TO DRAIN TOWARD BERM.

GEORGIA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION - BRIDGE DESIGN

BENT 3 PHASE II
U.S. 17 OVER DUNDEE CANAL
CHATHAM CO. FF 041-2(17)CT.1
NO SCALE NOVEMBER 1974

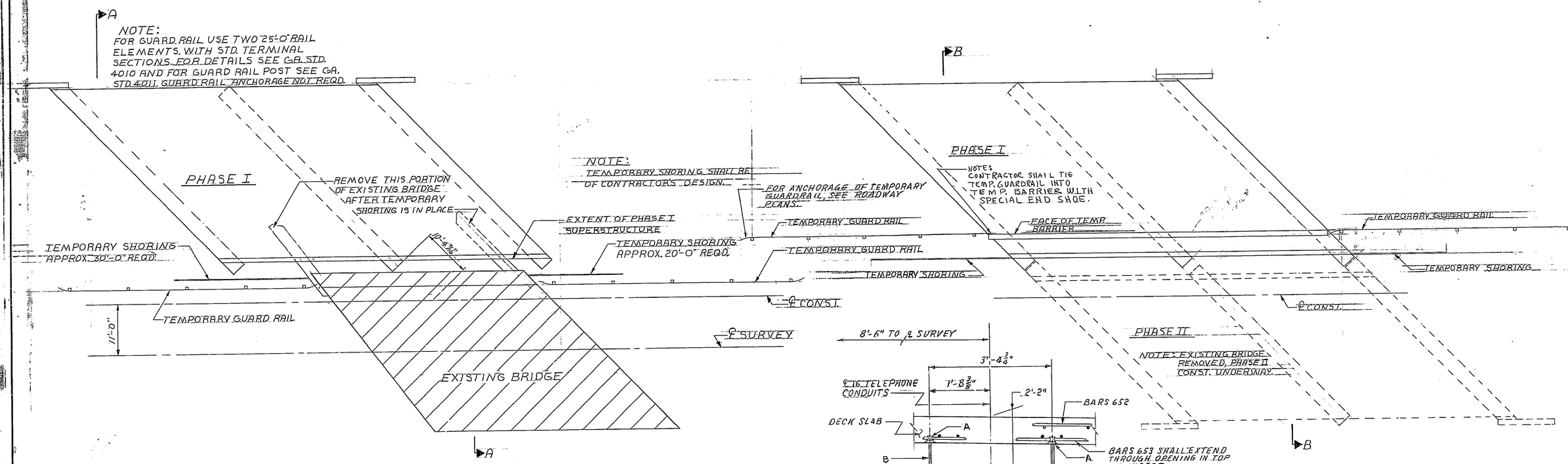
DATE | REVISIONS | BY

BRIDGE SHEET 10 OF 14

DESIGNED JET | TRACED | REVIEWED LRP
DRAWN RHC | CHECKED JET | APPROVED

20-17

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	GA.	FF-041-2(17)CT.1	75	320	



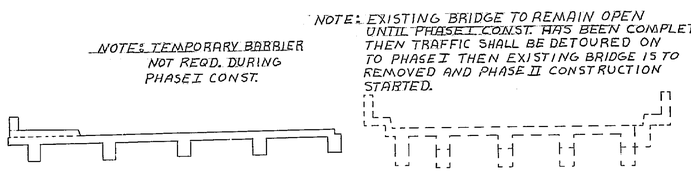
16 CONDUIT

A INSERT, GRINNELL CB UNIVERSAL CONCRETE (FIG. 282) OR EQUIVALENT.
B BOLT, GALVANIZED CORROSIVE RESISTANT MACHINE ¾" Φ.
C ANGLE IRON.
D TRANSITE CONDUITS, 3½" I.D. 5" O.D. AT COUPLING.
E NUTS AND LOCK WASHERS, ¾" GALV.

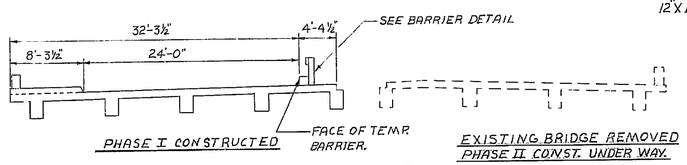
NOTES:
INSERTS TO BE ATTACHED TO WOOD FORMS BEFORE POURING CONCRETE SLAB. PLACE HANGER ATTACHMENTS AT INTERVALS OF 5 TO 7 FEET. CONTRACTOR SHALL SET INSERTS AND FORM OPENING IN END WALLS. CAULK ALL VOIDS AROUND CONDUITS AT OPENINGS IN END WALLS.

INSERTS SHALL BE FURNISHED BY SOUTHERN BELL TEL. & TEL. CO. BOLTS, ANGLES, NUTS, WASHERS AND WOOD PLANKS, ETC., SHALL BE FURNISHED AND SET BY SOUTHERN BELL. CAULKING SHALL ALSO BE ACCOMPLISHED BY THE UTILITY. SEE STD. SPECS. (1972) SECTION 107.21E.

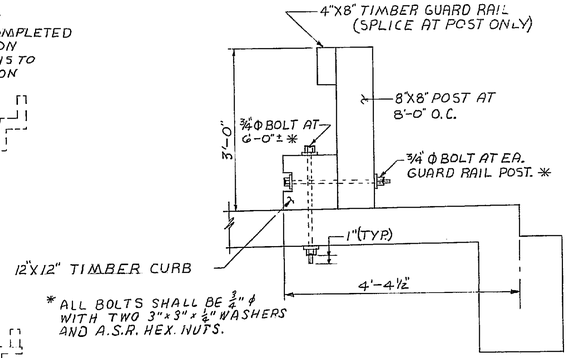
DETAILS OF HANGERS FOR TELEPHONE CONDUITS



LOOKING AHEAD
SECTION A-A



LOOKING AHEAD
SECTION B-B



TEMPORARY BARRIER DETAIL

GEORGIA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION - BRIDGE DESIGN

PHASE CONSTRUCTION DETAIL
U.S. 17 OVER DUNDEE CANAL
CHATHAM CO. FF 041-2(17)CT.1
NO SCALE DECEMBER 1974

DATE | REVISIONS | BY

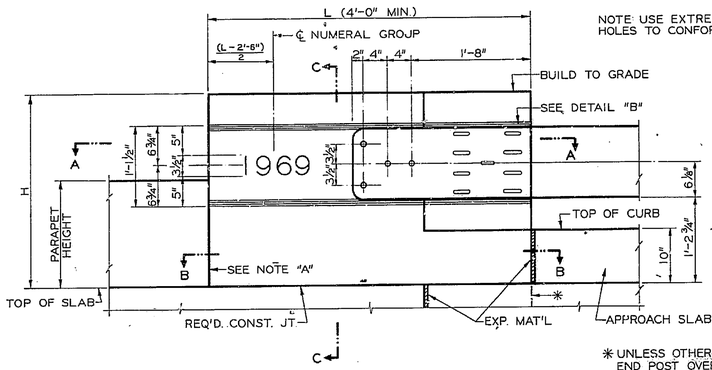
BRIDGE SHEET 11 OF 14

DESIGNED JET | TRACED | REVIEWED L.R.P.
DRAWN R.H.C. | CHECKED J.E.T. | APPROVED

20-18

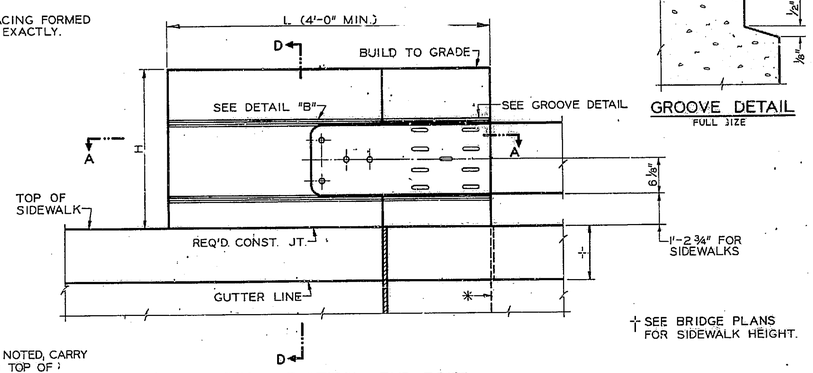
FED ROAD DIV NO	STATE	FED AID PROJ NO	STATE AID PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
4	GA	FF-041-2(17)LT		75	324	

NOTE: PLACE YEAR BRIDGE IS BUILT ON EACH RIGHT-HAND END POST AS SEEN BY APPROACHING TRAFFIC. FORM NUMERALS WITH APPROVED METAL DIES. NUMERAL GROUP, ETC., TO BE ON GRADE.



FRONT ELEVATION - END POST
PARAPET BARRIER
SCALE: 1" = 1'-0"

NOTE: USE EXTREME CARE IN PLACING FORMED HOLES TO CONFORM TO PATTERN EXACTLY.

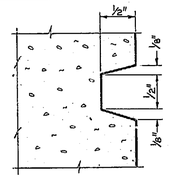


FRONT ELEVATION - END POST
SIDEWALK
NO SCALE

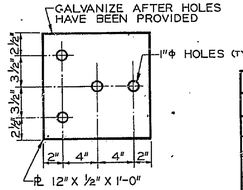
† SEE BRIDGE PLANS FOR SIDEWALK HEIGHT.

* UNLESS OTHERWISE SHOWN OR NOTED, CARRY END POST OVERHANG DOWN TO TOP OF PAVING REST ELEVATION.

NOTE "A": CONST. JT. WITH DOUBLE CHAMFER V-GROOVE, ½".

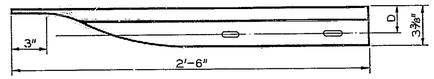


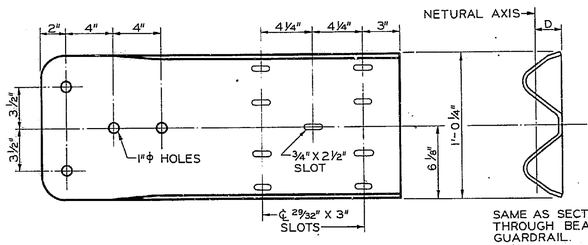
GROOVE DETAIL
FULL SIZE



DETAIL "A"
SCALE: 1½" = 1'-0"

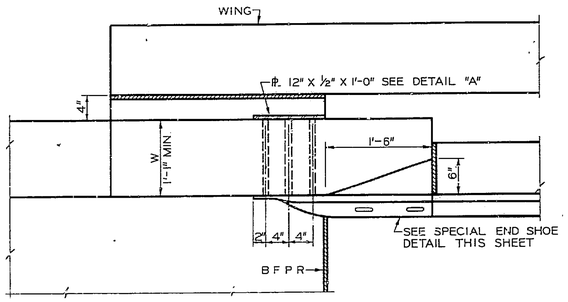
MATERIALS	
ITEM	SPECIFICATIONS
GUARDRAIL	A.A.S.H.O. SPECIFICATIONS M 180 - 65
½" PLATE	A.S.T.M. DESIGNATION A-36
NUTS & BOLTS	A.S.T.M. DESIGNATION A-307
WASHERS	MEDIUM STEEL
GALVANIZING	A.S.T.M. A-153



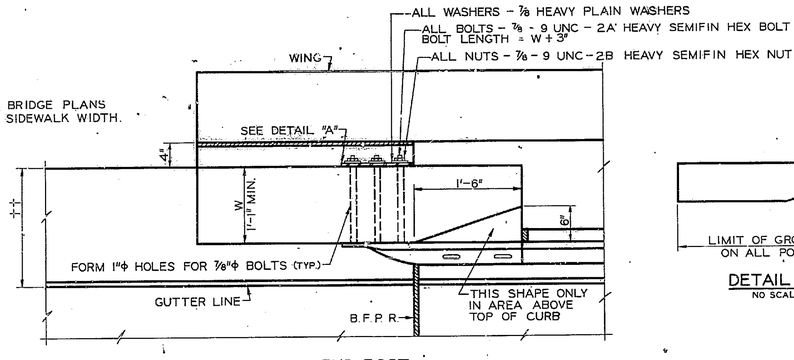


SAME AS SECTION THROUGH BEAM GUARDRAIL.

DETAIL
SPECIAL END SHOE



PLAN - END POST
PARAPET BARRIER
SCALE: 1" = 1'-0"



PLAN - END POST
SIDEWALK
SCALE: 1" = 1'-0"

DETAIL "B"
NO SCALE

GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD.

LOCATION - ALL END POSTS UNLESS NOTED ON BRIDGE PLANS

CHAMFER - CHAMFER ALL EXPOSED EDGES ½".

GALVANIZING - ALL METAL PARTS SHALL BE GALVANIZED AFTER FABRICATION.

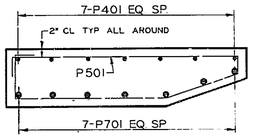
PAYMENT FOR MISCELLANEOUS HARDWARE - COST OF ½" PLATE AND MISCELLANEOUS HARDWARE SHALL BE INCLUDED IN THE PRICES BID FOR CONTRACT ITEMS.

PAYMENT FOR END POST - IF END POST IS A PORTION OF THE SUBSTRUCTURE, CONCRETE AND REINFORCEMENT ARE COMPUTED AND INCLUDED IN THE END BENT QUANTITIES.
IF END POST IS A PORTION OF THE SUPERSTRUCTURE, CONCRETE AND REINFORCEMENT ARE COMPUTED AND INCLUDED IN THE END SPAN QUANTITIES.

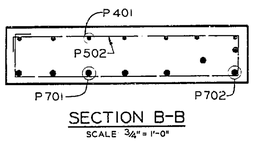
RESPONSIBILITY - WHEN THE BRIDGE CONTRACT IS SEPARATE FROM THE CONTRACT CONTAINING THE APPROACHING GUARDRAIL, THE BRIDGE CONTRACTOR SHALL ONLY BE RESPONSIBLE FOR THE CONSTRUCTION OF THE END POSTS AND FORMING OF THE 1"ϕ BOLT HOLES. THE CONTRACT CONTAINING THE APPROACHING GUARDRAIL SHALL BE RESPONSIBLE FOR FURNISHING AND INSTALLING THE SPECIAL END SHOE, PLATE, NUTS, WASHERS, AND BOLTS.

DIMENSIONS - FOR DIMENSIONS "L", "H", AND "W" AND OTHER DIMENSIONS, SEE BRIDGE PLANS

END POST - END POST TO BE CONSTRUCTED AFTER HANDRAIL IS IN PLACE

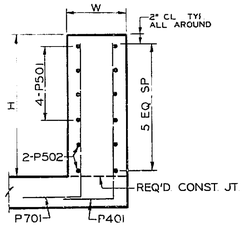


SECTION A-A
SCALE ¾" = 1'-0"

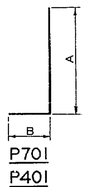


SECTION B-B
SCALE ¾" = 1'-0"

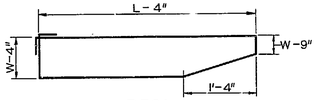
NOTE: IF END POST IS ON SUBSTRUCTURE, SEE BPIDGE PLANS FOR BARS THAT DOWEL FROM BELOW.



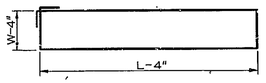
SECTION C-C
SCALE: ¾" = 1'-0"



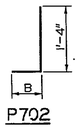
P701
P401



P501



P502



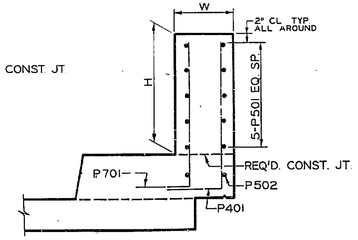
P702

NO. OF BARS REQUIRED		
MARK	PARAPET	SIDEWALK
P401	7	7
P501	4	5
P502	2	1
P701	7	7
P702	1	1

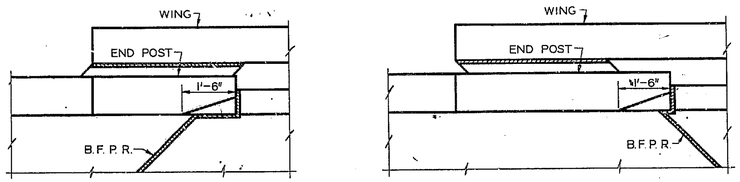
FOR SIMPLE END SPANS B = 1'-0", A = H - 4" + SLAB DEPTH FOR PARAPETS / WALK DEPTH FOR SIDEWALKS

FOR EXPANSION ENDS AT CONTINUOUS UNITS A = H - 2", B = 0".

NOTE ROTATE P701, P702, & P401 AS NECESSARY TO MAINTAIN 2" MIN. CL IN CONCRETE



SECTION D-D
SCALE: ¾" = 1'-0"



TYPICAL SKEWED END DETAIL
NO SCALE

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
END POST AND END POST
GUARDRAIL ATTACHMENT DETAIL

SCALE: AS SHOWN — NOVEMBER 1974

DESIGNED H.W.C.
DRAWN N.B.
TRACED B.J.W.
CHECKED P.V.L.

SUBMITTED R. L. Clapman Jr. BRIDGE ENGINEER
APPROVED Thomas D. Moulton STATE HIGHWAY ENGINEER

NUMBER 3053

20-22

LOT NO. 29 | LOT NO. 26 | LOT NO. 25 | LOT NO. 24

ALFRED STREET

1+72 | 1+58 | 1+05 | 0+00

WATER METER | IRON PIPE | DRIVE | 18" R.C.P. | STEEL GUARD RAIL | CANAL | SIGN | 6" OAK | TWIN 4" MAPLE | 10" OAK | 4" MAPLE | 24" MAGNOLIA | 8" OAK | 8" GUM | 8" OAK | TWIN 8" GUM | 16" GUM | 10" GUM | MAIL BOX

40 L.F. 8" C.I. PIPE @ 0.83%

316 L.F. 8" PIPE @ 0.33%

8"-WATER-LINE

301 L.F. 8" PIPE @ 0.28%

12.14 ft

12.06 ft

24' ASPHALT PAVEMENT

ABANDONED 2" WATER LINE

2" VALVES IN MANHOLES

2" VALVE IN BOX

SEE SHEET 3 — MATCH LINE

SEE SHEET 6 — MATCH LINE THIS SHEET

SAN. M.H. #8B
TOP EL. 9.27
I.E. 3.85

DOUBLE 5'x6' BOX CULVERT

DUNDEE

T.B.M. NO. 2
RR. SPIKE IN P.P.
ELEV. 10.55

SAN. M.H. #7 (DROP TYPE)
TOP EL. 11.43
I.E. 2.68
I.E. (E) 6.01 (DROP)
I.E. (S) 3.99

LOT NO. 55 | LOT NO. 57 | LOT NO. 58 | LOT NO. 59 | LOT NO. 60

SAN. M.H. #8A
TOP EL. 9.52
I.E. 3.52

22 20 18 16 14 12 10 8 6 4 2 0

SAN. M.H. #8B
TOP EL. 9.27
I.E. 3.85

SAN. M.H. #8A
TOP EL. 9.52
I.E. 3.52

SAN. M.H. #7 (DROP TYPE)
TOP EL. 11.43
I.E. 2.68
I.E. (E) 6.01 (DROP)
I.E. (S) 3.99

EXISTING BOX CULVERTS

EXISTING GRADE

316 L.F. 8" PIPE @ 0.33%

40 L.F. 8" C.I. PIPE @ 0.83%

301 L.F. 8" PIPE @ 0.28%

1.75 ft

LOT NO. 23 | LOT NO. 22 | LOT NO. 21 | LOT NO. 20 | LOT NO. 19

HOUSE NO. 116 | HOUSE NO. 112 | HOUSE NO. 110 | HOUSE NO. 108 MILLER

ALFRED STREET

2+49 | 1+78 | 0+00

12" CHINA BERRY | 16" OAK | 12" CHINA BERRY | 24" SWEETGUM | MAIL BOXES | TWIN 6" CRAPE MYRTLE | WATER METER | DRIVE | FIRE HYDRANT | MAG SPIKE | TRAFFIC SIGN

305 L.F. 8" PIPE @ 0.68%

8" WATER LINE

4" Ø SAN. HOUSE SERVICE CONNECTION (TYPICAL)

2" WATER LINE

285 L.F. 8" PIPE @ 0.50%

11.98 ft

24' ASPHALT PAVEMENT

ABANDONED 2" WATER LINE

MATCH LINE SEE SHEET 4 — MATCH LINE

T.B.M. NO. 3
RR. SPIKE IN P.P.
ELEV. 17.68

SAN. M.H. #13
TOP EL. 15.66
I.E. 8.08

SAN. M.H. #14
TOP EL. 16.42
I.E. 9.50

LOT NO. 61 | LOT NO. 62 | LOT NO. 63 | LOT NO. 64 | LOT NO. 65

HOUSE NO. 145 | HOUSE NO. 129 | HOUSE NO. 125 | HOUSE NO. 121 | HOUSE NO. 113

22 20 18 16 14 12 10 8 6 4 2 0

SAN. M.H. #13
TOP EL. 15.66
I.E. 8.08

SAN. M.H. #14
TOP EL. 16.42
I.E. 9.50

EXISTING GRADE

305 L.F. 8" PIPE @ 0.68%

285 L.F. 8" PIPE @ 0.50%

AS BUILT AUGUST 1982

NO	DATE	REVISION	BY

SHEET TITLE: ALFRED STREET

PROJECT: WOODVILLE AREA SANITARY SEWER EXTENSION SAVANNAH, GEORGIA

SAUSSY ENGINEERING, INC.
P.O. Box 9584 124 W. Bay St.
SAVANNAH, GA. 31412
(912) 232-5103

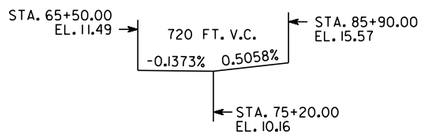
PROJECT NO. 8125
SCALE 1" = 20'
DATE JULY, 1981
DRAWN BY F.J.
CHECKED BY W.H.S.
DRAWING NO. 4

4 OF 18 SHTS

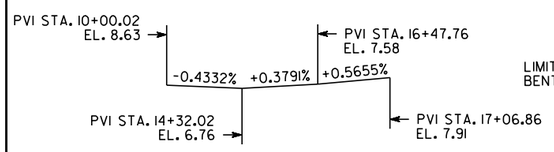
KK 91

GDOT | P.I. NO. 0006328

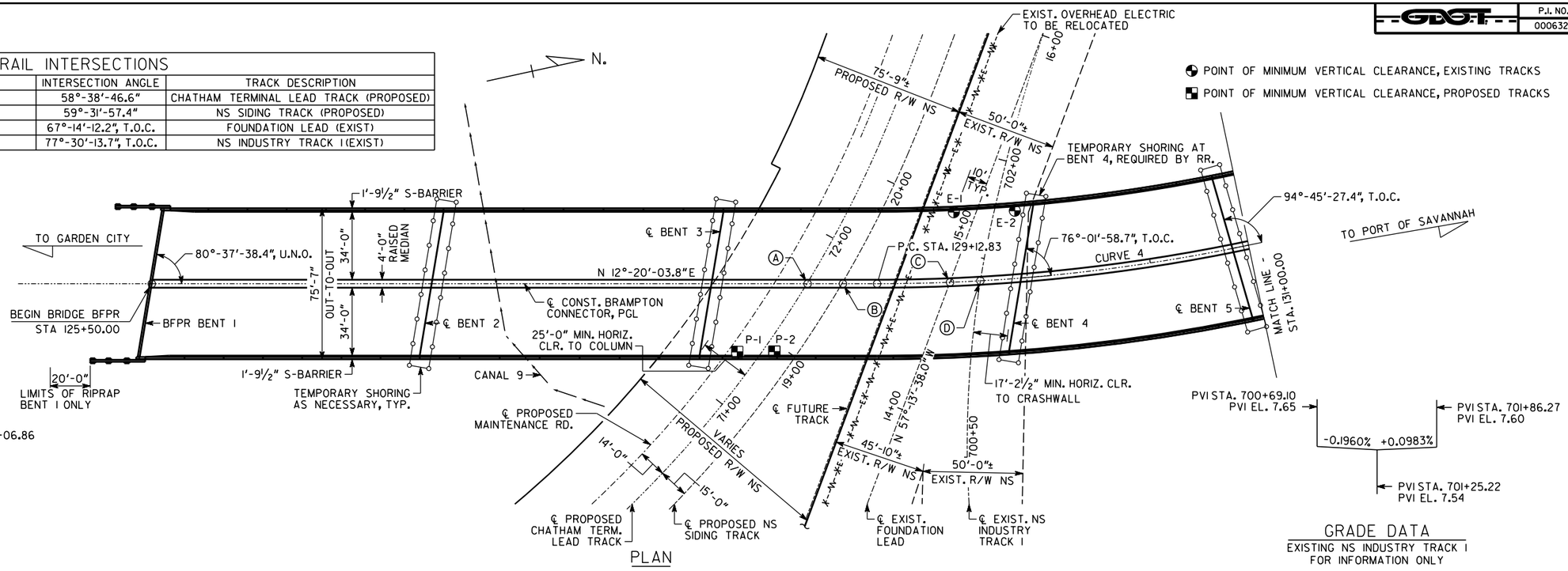
TABLE OF RAIL INTERSECTIONS				
INTERSECTION	BRAMPTON STA.	RAIL STA.	INTERSECTION ANGLE	TRACK DESCRIPTION
A	128+77.71	71+73.74	58°-38'-46.6"	CHATHAM TERMINAL LEAD TRACK (PROPOSED)
B	128+95.21	19+43.48	59°-31'-57.4"	NS SIDING TRACK (PROPOSED)
C	129+49.13	14+67.90	67°-14'-12.2", T.O.C.	FOUNDATION LEAD (EXIST)
D	129+64.52	701+38.64	77°-30'-13.7", T.O.C.	NS INDUSTRY TRACK 1 (EXIST)



VERTICAL CURVE DATA
PROPOSED CHATHAM TERMINAL TRACK

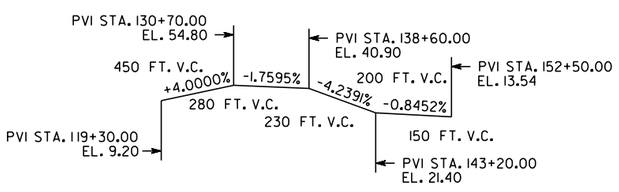


GRADE DATA
EXISTING FOUNDATION LEAD
FOR INFORMATION ONLY

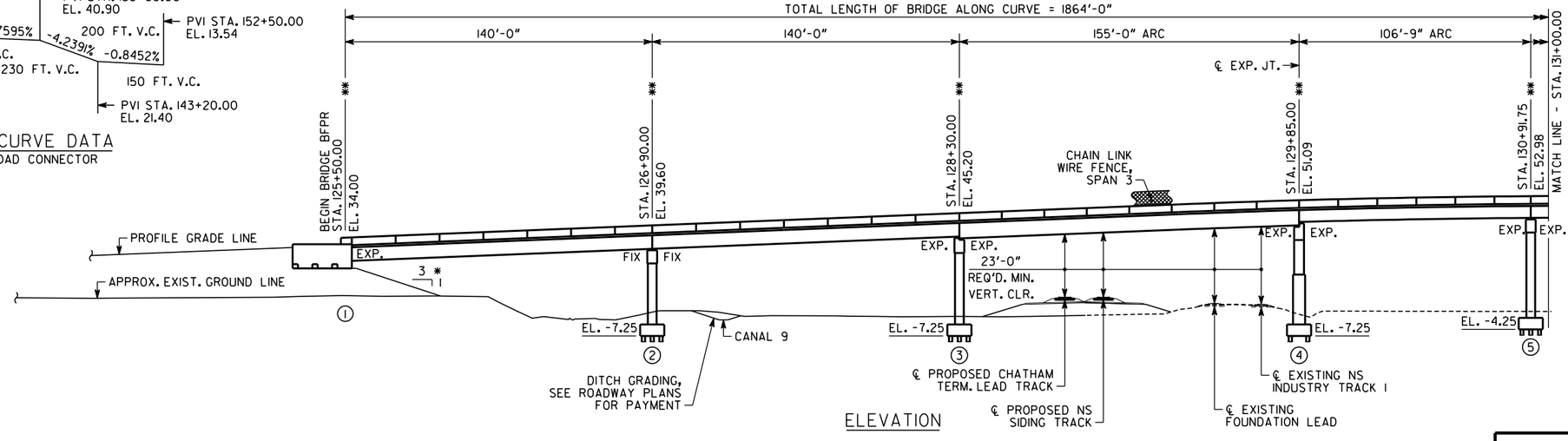


PLAN

GRADE DATA
EXISTING NS INDUSTRY TRACK 1
FOR INFORMATION ONLY



VERTICAL CURVE DATA
BRAMPTON ROAD CONNECTOR



ELEVATION

P.I. STA. = 132+05.76
Δ = 36°-03'-28.2" (LT)
D = 06°-21'-58.3"
T = 292.93 FT.
L = 566.40 FT.
R = 900 FT.
S.E. = 3.12%

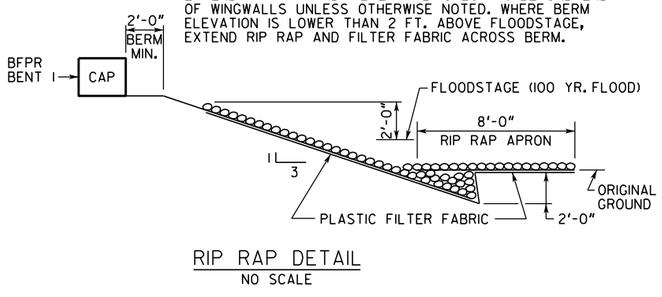
HORIZONTAL CURVE DATA
BRAMPTON CONNECTOR, CURVE 4

RAIL VERTICAL CLEARANCES	
CLEARANCE POINT	PROPOSED CLEARANCE
P-1	27'-1"
P-2	28'-1"
(**) E-1	33'-6"
(**) E-2	33'-11"

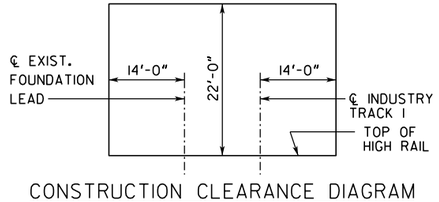
(**) TOP OF EXISTING RAIL ELEVATIONS SHALL BE CHECKED AND MIN. VERTICAL CLEARANCE VERIFIED BEFORE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF NS ENGINEER PUBLIC IMPROVEMENTS.

PROJECT P.I. NO. 0006328

BRIDGE NO. 1



RIP RAP DETAIL
NO SCALE



CONSTRUCTION CLEARANCE DIAGRAM
NO SCALE

NOTES

1. END BENT PILES NOT SHOWN.
2. BENTS 2 THROUGH 4 ARE PARALLEL TO BENT 1.
3. FENCE REQUIRED IN SPANS 3 AND 11 ONLY.

T.O.C. DENOTES ANGLES MEASURED TO THE TANGENT OF CURVE AT INTERSECTION OF ℄ CONST. AND ℄ BENT.

ARC DENOTED LENGTH ALONG CURVE

*END ROLL SLOPE NORMAL TO END BENT.

**STATIONS AND ELEVATIONS ARE ALONG PROFILE GRADE LINE AT THE INTERSECTION OF PROFILE GRADE LINE AND BFPR OR ℄ BENTS.

1 INCH WHEN PRINTED FULL SIZE

GEORGIA REGISTERED No. 29371 PROFESSIONAL ENGINEER R. Scott Caples SCOTT CAPLES
3/22/21

DRAWING NO. 35-0001
BRIDGE SHEET 1 OF 89

BY	REVISIONS	DATE
M&N	REV. PLANS & QUANTITIES	05-14-21
M&N	REATTACHED SEAL	06-11-21

moffatt & nichol
MOFFATT & NICHOL, INC.
1201 PEACHTREE STREET, NE
SUITE 1106
ATLANTA, GA 30361
404-205-8530

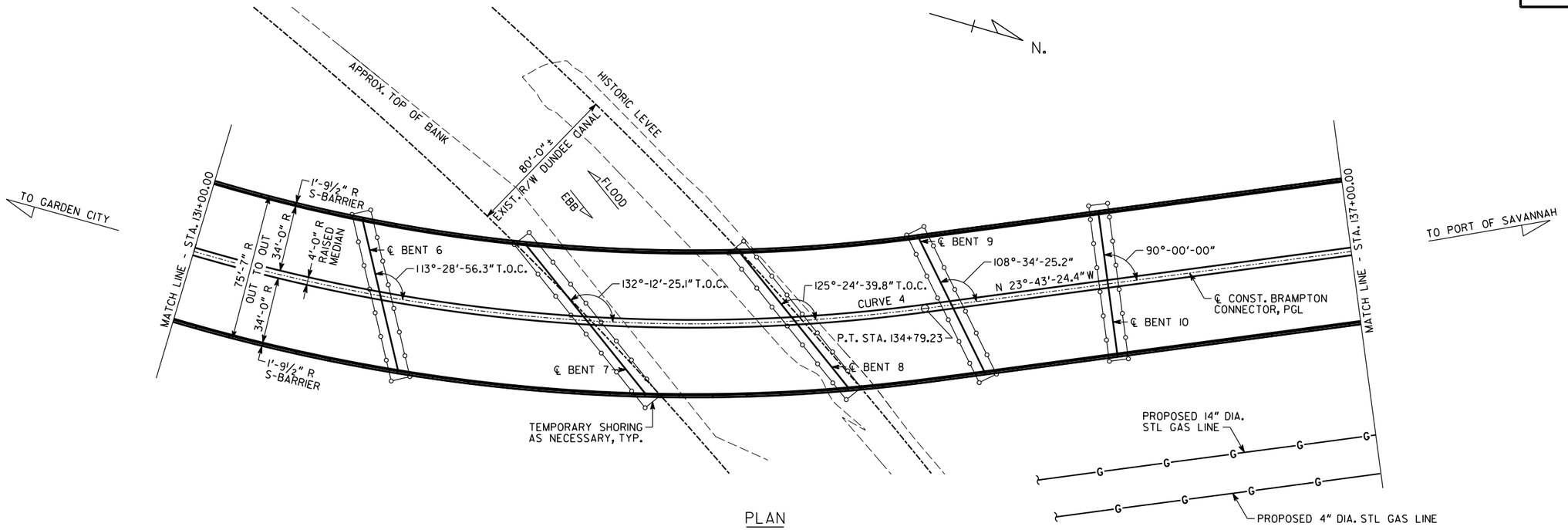
GEORGIA
DEPARTMENT OF TRANSPORTATION
ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES

PLAN AND ELEVATION BRAMPTON ROAD CONNECTOR OVER NS RAILWAY AND DUNDEE CANAL

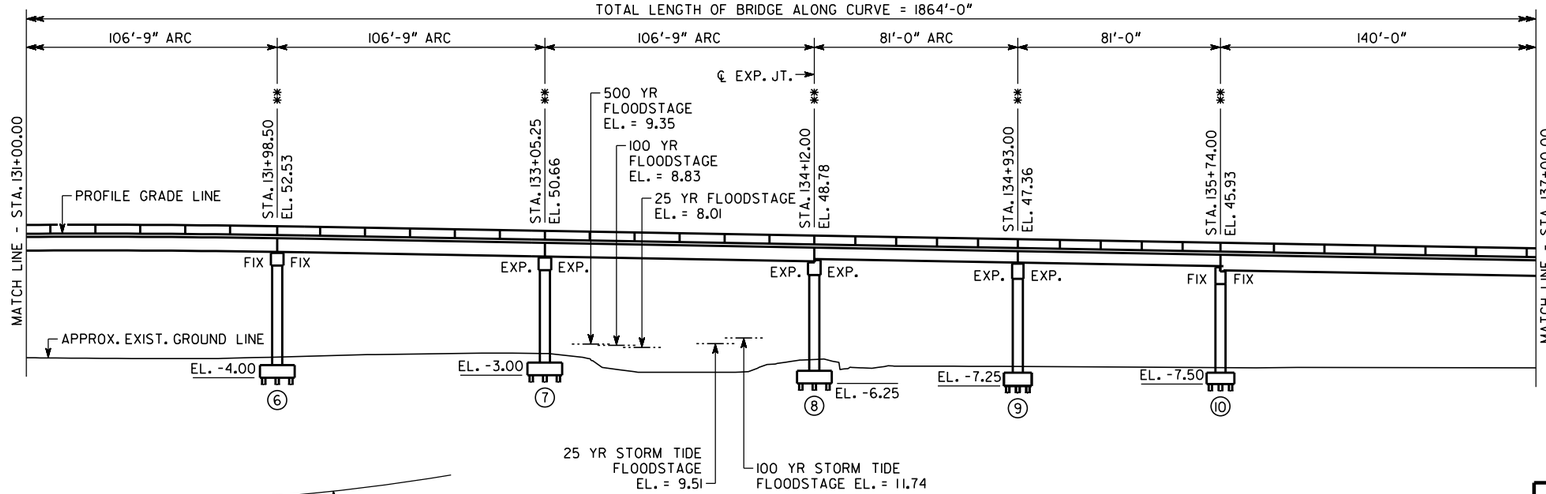
CHATHAM COUNTY 0006328

SCALE: 1" = 30'-0" (UNLESS OTHERWISE NOTED) MARCH 2021

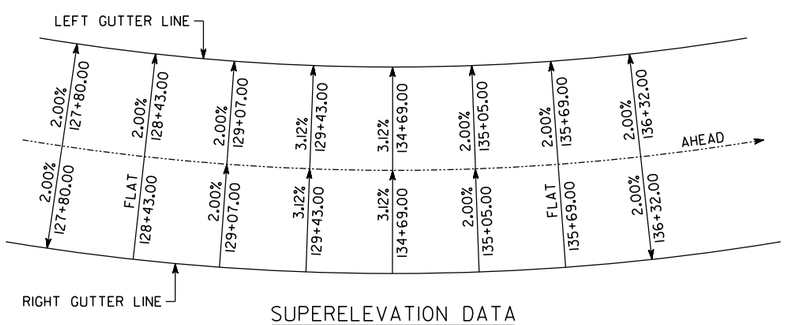
DESIGNED	MMK/EMT	CHECKED	RSC	REVIEWED	DLC/SKG
DRAWN	MMK/EMT	DESIGN GROUP	JBK	APPROVED	DPD



PLAN



ELEVATION



SUPERELEVATION DATA
NO SCALE

LEGEND

T.O.C. DENOTES ANGLES MEASURED TO TANGENT OF CURVE AT ℄ BENT

R - RADIAL DIMENSION

ARC - ARC DIMENSION

NOTES

1. BENTS 7 AND 8 ARE PARALLEL.

** STATIONS AND ELEVATIONS ARE ALONG PROFILE GRADE LINE AT THE INTERSECTION OF PROFILE GRADE LINE AND ℄ BENTS.

1 INCH WHEN PRINTED FULL SIZE

DRAWING NO. 35-0002

BRIDGE SHEET 2 OF 89

BRIDGE NO. 1

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MOFFATT & NICHOL, INC.
1201 PEACHTREE STREET, NE
SUITE 1106
ATLANTA, GA 30361
404-205-8530

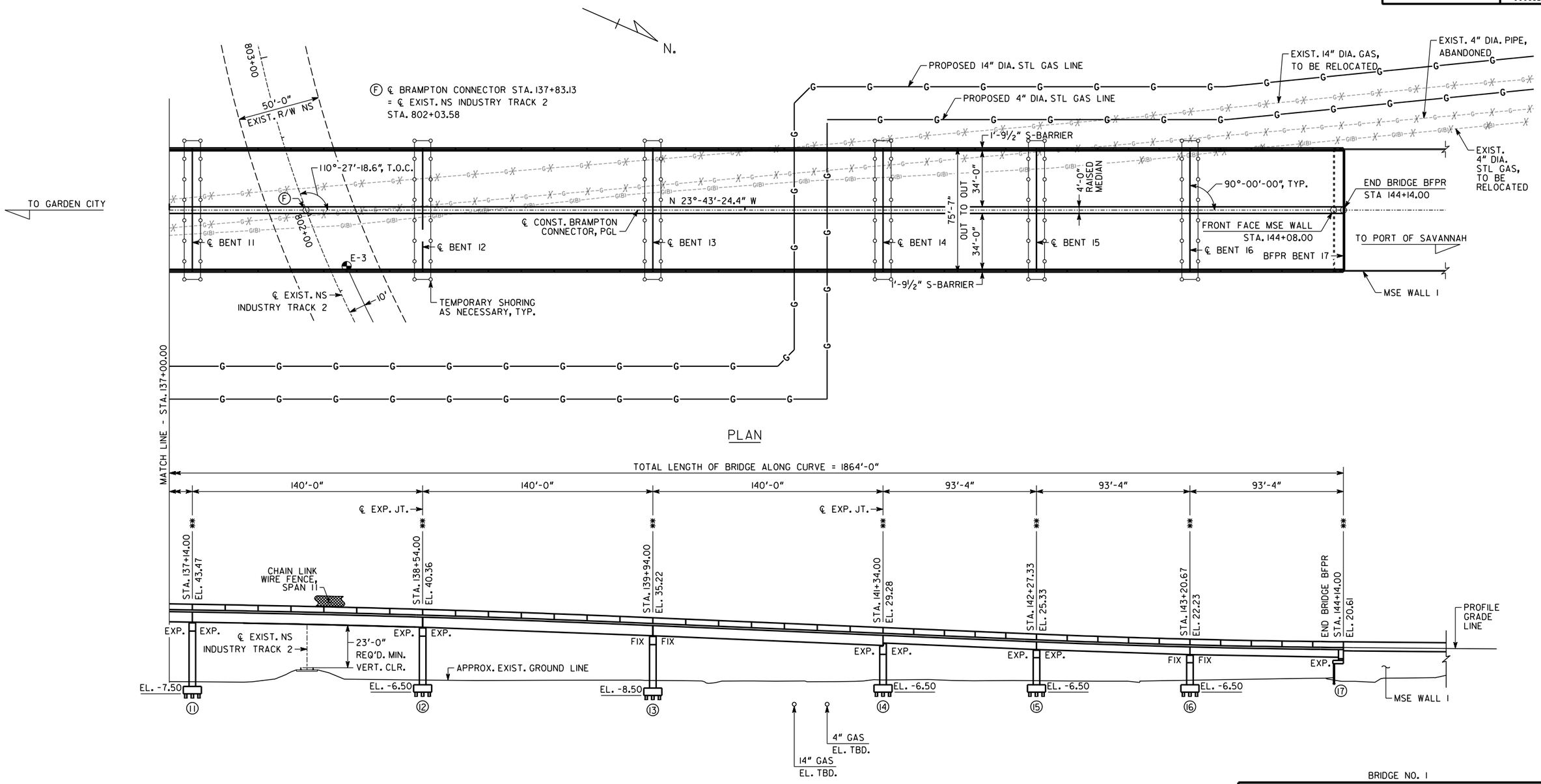
GEORGIA
DEPARTMENT OF TRANSPORTATION
ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES

PLAN AND ELEVATION
BRAMPTON ROAD CONNECTOR OVER
NS RAILWAY AND DUNDEE CANAL
CHATHAM COUNTY 0006328

SCALE: 1" = 30'-0" (UNLESS OTHERWISE NOTED) MARCH 2021

BY	REVISIONS	DATE
M&N	REV. PLANS & QUANTITIES	05-14-21
M&N	REVISED BENT 7 FOOTING	06-11-21

DESIGNED MMK/EMT | CHECKED RSC | REVIEWED DLC/SKG
DRAWN MMK/EMT | DESIGN GROUP JBK | APPROVED DPD



PLAN

ELEVATION

PVI STA. 801+54.53
EL. 8.80
PVI STA. 802+54.35
EL. 9.11
+0.1692%
+0.4455%
PVI STA. 802+01.65
EL. 8.88

GRADE DATA
EXISTING NS INDUSTRY TRACK 2
FOR INFORMATION ONLY

Ⓕ POINT OF MINIMUM VERTICAL CLEARANCE FOR EXISTING RAIL

RAIL VERTICAL CLEARANCES	
CLEARANCE POINT	PROPOSED CLEARANCE
(**) E-3	25'-0"

(**) TOP OF EXISTING RAIL ELEVATIONS SHALL BE CHECKED AND MIN. VERTICAL CLEARANCE VERIFIED BEFORE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF NS ENGINEER PUBLIC IMPROVEMENTS.

NOTES

1. BENTS 10 THROUGH 17 ARE PARALLEL.
2. T.O.C. DENOTES ANGLE MEASURED TO THE TANGENT OF CURVE AT INTERSECTION OF ℄ CONST. AND ℄ EXIST. NS TRACK.

** STATIONS AND ELEVATIONS ARE ALONG PROFILE GRADE LINE AT THE INTERSECTION OF PROFILE GRADE LINE AND BFPR OR ℄ BENTS.

1 INCH WHEN PRINTED FULL SIZE

BRIDGE NO. 1

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GEORGIA
DEPARTMENT OF TRANSPORTATION
ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES

PLAN AND ELEVATION
BRAMPTON ROAD CONNECTOR OVER
NS RAILWAY AND DUNDEE CANAL
CHATHAM COUNTY 0006328

SCALE: 1" = 30'-0" (UNLESS OTHERWISE NOTED) MARCH 2021

BY	REVISIONS	DATE
M&N	REV. PLANS & QUANTITIES	05-14-21

DRAWING NO. 35-0003
BRIDGE SHEET 3 OF 89

DESIGNED MMK/EMT	CHECKED RSC	REVIEWED DLC/SKG
DRAWN MMK/EMT	DESIGN GROUP JBK	APPROVED DPD

BRIDGE CONSISTS OF

2 - 81'-0" BULB TEE, 54 IN, PSC BEAM SPANS ---------- SPECIAL DESIGN

3 - 93'-4" BULB TEE, 56 IN, PSC BEAM SPANS ---------- SPECIAL DESIGN

4 - 106'-9" BULB TEE, 65 IN, PSC BEAM SPANS ---------- SPECIAL DESIGN

6 - 140'-0" BULB TEE, 74 IN, PSC BEAM SPANS ---------- SPECIAL DESIGN

1 - 155'-0" FLORIDA I-BEAM, 84 IN, PSC BEAM SPAN ---------- SPECIAL DESIGN

2 - PSC PILE END BENTS ---------- SPECIAL DESIGN

15 - CONCRETE INTERMEDIATE BENTS ---------- SPECIAL DESIGN

2 - END POST AND GUARDRAIL ATTACHMENT DETAIL ---------- GA. STD. 3054 (9-30-02)
(L = 4'-3"; W = 1'-1"; H = 3'-6")
(L = 4'-6"; W = 1'-1"; H = 3'-6")

SQUARE PRESTRESSED CONCRETE PILES ---------- GA. STD. 3215 (2-22-84)

BAR BENDING DETAILS ---------- GA. STD. 3901 (8-69)

CHAIN LINK WIRE FENCE ---------- GA. STD. 9031N (8-13-85)

TYPICAL FILL DETAIL AT END OF BRIDGE ---------- GA. STD. 9037 (9-99)

DRAINAGE DATA

DRAINAGE AREA ---------- 4.5 SQ MILES

CANAL FLOODS

FLOOD FREQUENCY	TOTAL DISCHARGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
25 YEAR	1,420 CFS	0.68 FPS	2,096 SQ FT	0.25 FT
100 YEAR	1,690 CFS	0.73 FPS	2,308 SQ FT	0.58 FT
500 YEAR	1,970 CFS	0.81 FPS	2,434 SQ FT	0.98 FT

STORMTIDE FLOODS

FLOOD FREQUENCY	TOTAL DISCHARGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
25 YEAR	1,464 CFS	0.72 FPS	2,011 SQ FT	N/A
100 YEAR	2,367 CFS	0.50 FPS	4,702 SQ FT	N/A

TRAFFIC DATA

TRAFFIC ---------- ADT = 14,975 (2024)
ADT = 18,950 (2044)

DESIGN SPEED ---------- 35 MPH

TRUCKS ---------- 44.0%

UTILITIES

NO UTILITIES ON BRIDGE

GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2021 EDITION, AS MODIFIED BY CONTRACT DOCUMENTS.

REINFORCING STEEL - PLACE AND TIE ALL REINFORCING STEEL IN ACCORDANCE WITH THE GEORGIA DOT SPECIFICATIONS. DO NOT WELD REINFORCING STEEL. MAINTAIN 2 INCH MINIMUM CLEARANCE ON ALL REINFORCEMENT IN THE SUPERSTRUCTURE UNLESS OTHERWISE NOTED.

CHAMFER - CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" UNLESS OTHERWISE NOTED.

RAILROAD SIDE DITCHES - PRIOR TO THE BEGINNING OF CONSTRUCTION, CLEAN THE RAILROAD SIDE DITCHES IN THE CONSTRUCTION AREA IN SUCH A MANNER AS TO PROVIDE POSITIVE DRAINAGE. MAINTAIN THE RAILROAD SIDE DITCHES FREE OF SILT AND DEBRIS UNTIL FINAL ACCEPTANCE. SEE ROADWAY PLANS FOR EROSION CONTROL AND PAYMENT.

PROTECTIVE PLATFORMS - PROVIDE PROTECTIVE PLATFORMS AT THIS SITE, SEE SECTION 510 OF THE GEORGIA DOT SPECIFICATIONS. MAINTAIN A MINIMUM VERTICAL CLEARANCE OF 23'-0" ABOVE RAILROAD.

TEMPORARY SHORING - INCLUDE THE COST OF TEMPORARY SHORING AS NECESSARY FOR BRIDGE CONSTRUCTION IN THE OVERALL BID SUBMITTED.

WAITING PERIOD - NONE REQUIRED.

FOUNDATION BACKFILL MATERIAL - PLACE 1'-0" OF TYPE II FOUNDATION BACKFILL MATERIAL UNDER EACH FOOTING AT BENTS 2 THROUGH 16. THE QUANTITY IS BASED ON THE PLAN FOOTING DIMENSIONS PLUS 2'-0". USE OF THIS MATERIAL MAY BE ELIMINATED BY THE ENGINEER IF THE FOOTING AREA IS DRY.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

DRIVING RESISTANCE - DETERMINE DRIVING RESISTANCE FOR PILES USING DYNAMIC PILE TESTING IN ACCORDANCE WITH SUB-SECTION 520.3.05.D.2 OF THE GEORGIA DOT SPECIFICATIONS. DYNAMIC PILE TESTING SHALL BE REQUIRED FOR EACH TEST PILE.

DYNAMIC PILE TESTING - PERFORM PILE TESTING USING THE PILE DRIVING ANALYZER (PDA) IN ACCORDANCE WITH SPECIAL PROVISION SECTION 523. NOTIFY THE GEOTECHNICAL BUREAU OF THE GEORGIA DOT OFFICE OF MATERIALS AND TESTING AT 404-608-4720 TWO WEEKS PRIOR TO DRIVING PILES.

PILE LOAD TEST - PERFORM A STATIC LOAD TEST FOR ONE PILE AT EACH OF BENT 1 LEFT AND BENT 11 RIGHT USING THE STANDARD LOADING PROCEDURE IN ASTM D 1143, SECTION 8.1.2 PROCEDURE: QUICK TEST. USE A MAXIMUM APPLIED LOAD OF 820 KIPS FOR BENT 1 LEFT AND 636 KIPS FOR BENT 11 RIGHT. THE PILE IS UNSATISFACTORY IF THE PERMANENT SETTLEMENT EXCEEDS 1/4 INCH. INCLUDE COST IN PRICE BID FOR "LOAD TEST, PSC, 18 IN SQ" AND "LOAD TEST, PSC, 16 IN SQ".

WAVE EQUATION - PERFORM WAVE EQUATION ANALYSIS (WEAP) IN ACCORDANCE WITH SUB-SECTION 520.3.05.D.2 OF THE GEORGIA DOT SPECIFICATION. PROVIDE RESULTS OF THE WEAP TO THE GEOTECHNICAL BUREAU OF THE GEORGIA DOT OFFICE OF MATERIALS AND TESTING FOR REVIEW AND APPROVAL TWO WEEKS PRIOR TO DRIVING PILES.

PILE DRIVING - SHOULD PILES FAIL TO OBTAIN DRIVING RESISTANCE AFTER ACHIEVING THE PILE TIP ELEVATIONS SHOWN, ALLOW PILES TO FREEZE A MINIMUM OF 24 HOURS AND RESTRIKE WITH A WARM HAMMER.

BENT NUMBER	PILE TIP ELEVATION
1	-38.00
2	-43.00
3	-57.00
4	-57.00
5	-43.00
6	-43.00
7	-43.00
8	-45.00
9	-45.00
10	-45.00
11	-45.00
12	-45.00
13	-45.00
14	-39.00
15	-41.00
16	-38.00
17	-40.00

GENERAL NOTES (CONTINUED)

TEST PILES - DRIVE TEST PILES AT THE FOLLOWING LOCATIONS:

ONE 18 IN SQ PSC X 70 FT AT BENT 1 RIGHT
TWO 18 IN SQ PSC X 58 FT AT BENT 3 LEFT AND RIGHT
TWO 18 IN SQ PSC X 58 FT AT BENT 4 LEFT AND RIGHT
TWO 16 IN SQ PSC X 47 FT AT BENT 5 LEFT AND RIGHT
TWO 16 IN SQ PSC X 47 FT AT BENT 6 LEFT AND RIGHT
TWO 16 IN SQ PSC X 48 FT AT BENT 7 LEFT AND RIGHT
TWO 16 IN SQ PSC X 47 FT AT BENT 8 LEFT AND RIGHT
TWO 16 IN SQ PSC X 46 FT AT BENT 9 LEFT AND RIGHT
TWO 16 IN SQ PSC X 46 FT AT BENT 10 LEFT AND RIGHT
ONE 16 IN SQ PSC X 46 FT AT BENT 11 LEFT
TWO 16 IN SQ PSC X 47 FT AT BENT 12 LEFT AND RIGHT
ONE 16 IN SQ PSC X 41 FT AT BENT 14 RIGHT
ONE 16 IN SQ PSC X 60 FT AT BENT 17 LEFT

HIGH PERFORMANCE CONCRETE (HPC) - PRESTRESSED CONCRETE PILES FOR THIS BRIDGE UTILIZE HIGH PERFORMANCE CONCRETE. SPECIAL REQUIREMENTS ARE REQUIRED AS DETAILED IN SPECIAL PROVISIONS SECTIONS 500 AND 865. HPC PSC PILES WILL BE PAID FOR AS "PILING, PSC".

SMOOTH DOWEL BARS - PLACE SMOOTH DOWEL BARS IN FORMED 3" DIAMETER X 12" DEEP HOLES AND GROUT IN PLACE SIMILAR TO ANCHOR BOLTS, SEE SUB-SECTION 501.3.05.B.3 OF THE GEORGIA DOT SPECIFICATIONS. STIRRUPS MAY BE SHIFTED SLIGHTLY TO CLEAR FORMED HOLES.

FILL SETTLEMENT - PROTECT PILES DRIVEN AT BENT 17 FROM NEGATIVE SKIN FRICTION WHEN USED IN CONJUNCTION WITH MECHANICALLY STABILIZED EARTH WALLS, SEE SECTION 551 OF THE GEORGIA DOT SPECIFICATIONS. DRIVE PILES AT END BENTS BEFORE WALL LEVELING PADS ARE CONSTRUCTED.

ABUTMENT SOIL REINFORCING DEVICE INSERTS - INCLUDE THE COST OF FURNISHING AND INSTALLING INSERTS FOR SOIL REINFORCING DEVICES AT BENT 17 IN THE OVERALL BID SUBMITTED.

STEEL DIAPHRAGMS - SUBSTITUTION FOR STEEL DIAPHRAGMS IS NOT ALLOWED FOR THIS BRIDGE.

STANDARD PLAN MODIFICATION - MODIFY THE APPROACH SLAB STANDARD TO INCREASE THE 3/4" EXPANSION JOINT SHOWN BETWEEN THE APPROACH SLAB AND THE BACK FACE PAVING REST AND END POST TO 1" AT END BENTS 1 AND 17. KEEP THE EXPANSION JOINT AT END BENT 1 CONTINUOUS AROUND END POST. INCLUDE COST OF JOINT IN APPROACH SLAB PAYMENT. SEE ROADWAY PLANS FOR APPROACH SLAB PAYMENT.

GROOVED CONCRETE - GROOVE THE ENTIRE LENGTH OF THE BRIDGE TRANSVERSELY AS PER SUB-SECTION 500.3.05.T.9.C OF THE GEORGIA DOT SPECIFICATIONS. DO NOT GROOVE UNDER RAISED MEDIAN.

CHAIN LINK FENCE - CHAIN LINK FENCE SHALL BE PAID FOR AS "LF CH LK FENCE, ZC COAT, 6 FT, 9 GA."

SUPERSTRUCTURE CONCRETE - IN SPANS 5 THRU 8 ONLY, PLACE SUPERSTRUCTURE CONCRETE WITH SHRINKAGE REDUCING ADMIXTURE AS LISTED ON GDOT QPL 14 AND IN ACCORDANCE WITH ASTM C 494 TYPE S STANDARDS. INCLUDE COSTS ASSOCIATED WITH UTILIZING ADMIXTURE IN THE BID PRICE FOR "SUPERSTR CONCRETE, CL D".

1 INCH WHEN PRINTED FULL SIZE

BRIDGE NO. 1

moffatt & nichol
MOFFATT & NICHOL, INC.
1201 PEACHTREE STREET, NE
SUITE 1106
ATLANTA, GA 30361
404-205-8530

GEORGIA
DEPARTMENT OF TRANSPORTATION
ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES

GENERAL NOTES
BRAMPTON ROAD CONNECTOR OVER
NS RAILWAY AND DUNDEE CANAL
CHATHAM COUNTY 0006328

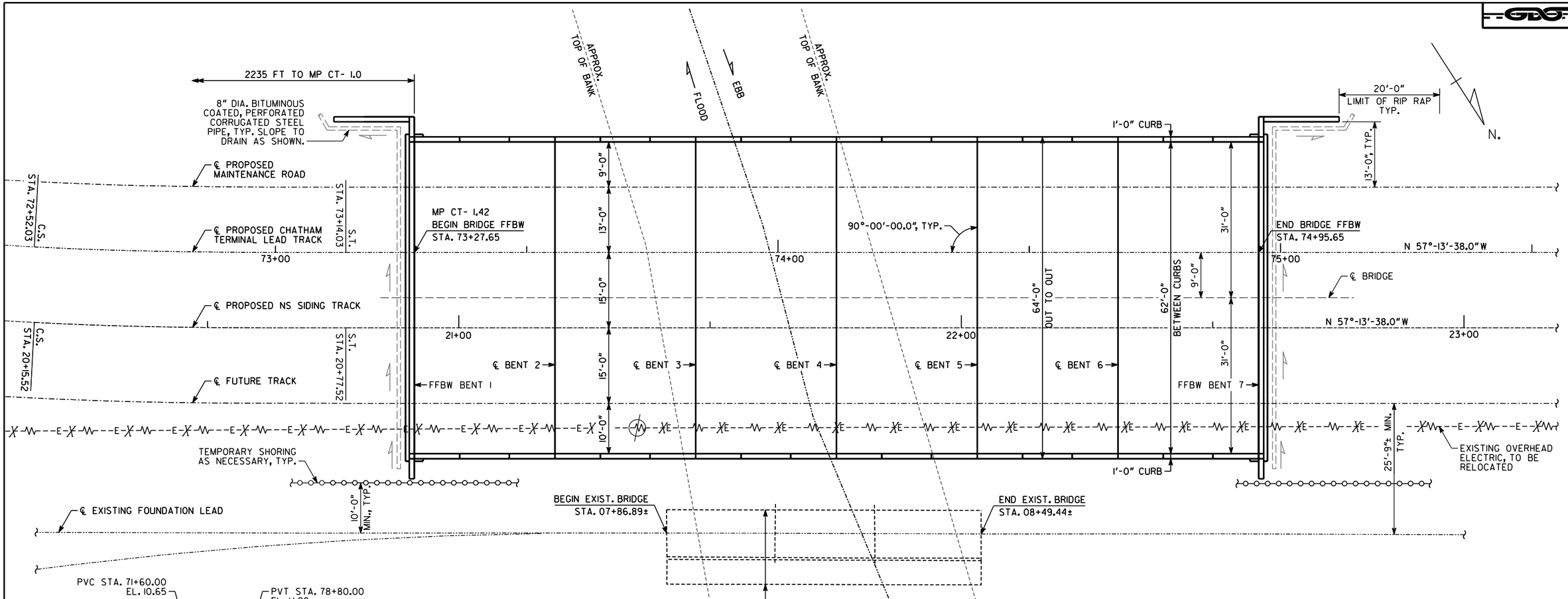
NO SCALE MARCH 2021

DESIGNED MMK/EMT CHECKED RSC REVIEWED DLC/SKG
DRAWN MMK DESIGN GROUP JBK APPROVED DPD

DRAWING NO. 35-0004
BRIDGE SHEET 4 OF 89

BY	REVISIONS	DATE
M&N	REV. PLANS & QUANTITIES	05-14-21

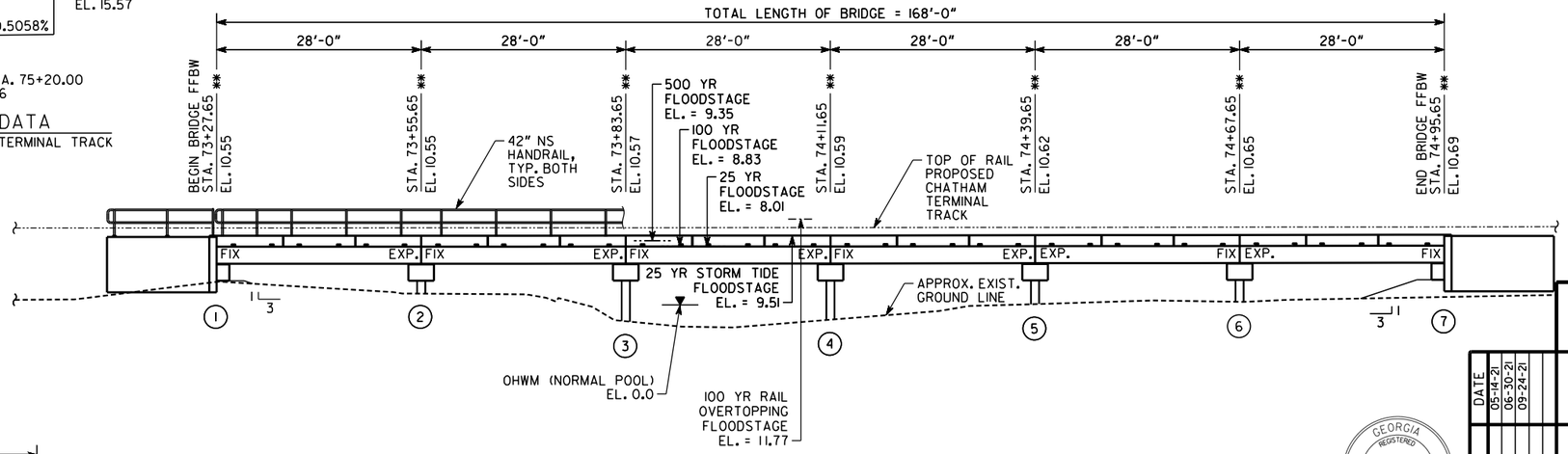
GDOT	P.I. NO. 0006328



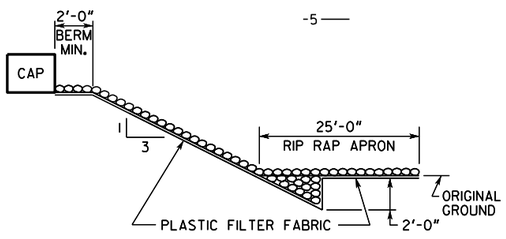
PLAN



VERTICAL CURVE DATA
TOP OF RAIL PROPOSED CHATHAM TERMINAL TRACK



ELEVATION



RIP RAP DETAIL

PLACE RIP RAP AND FILTER FABRIC FROM 2 FT. BELOW ORIGINAL GROUND AND EXTEND ACROSS BERM. EXTEND RIP RAP AND FILTER FABRIC 20 FT. BEYOND END OF WINGWALLS UNLESS OTHERWISE NOTED.

NOTES

1. END BENT PILES NOT SHOWN.
2. ALL BENTS ARE PARALLEL.
3. FFBW = FRONT FACE OF BACKWALL.

** STATIONS AND ELEVATIONS ARE ALONG TOP OF RAIL OF PROPOSED CHATHAM TERMINAL TRACK AT INTERSECTION WITH ℄ BENTS OR FFBW.

PROJECT P.I. NO. 0006328

BRIDGE NO. 2

moffatt & nichol
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ATLANTA, GA 30361
404-205-8530

GEORGIA
DEPARTMENT OF TRANSPORTATION
ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES

GEORGIA REGISTERED No. 29371 PROFESSIONAL ENGINEER R. Scott Caples SCOTT CAPLES
3/24/21

REVISIONS	BY	DATE
UPDATED PLANS	M&N	05-14-21
UPDATED ELEV. VIEW	M&N	06-30-21
UPDATED PLANS	M&N	09-24-21

PLAN AND ELEVATION NORFOLK SOUTHERN RAILWAY OVER DUNDEE CANAL

CHATHAM COUNTY 0006328

SCALE: 1" = 10'-0" (UNLESS OTHERWISE NOTED) MARCH 2021

DRAWING NO. 35-0090

BRIDGE SHEET 1 OF 16

DESIGNED EMT	CHECKED RSC	REVIEWED DLC/SKG
DRAWN EMT	DESIGN GROUP JBK	APPROVED DPD

1 INCH WHEN PRINTED FULL SIZE

P.I. NO. 0006328

BRIDGE CONSISTS OF

6 - 28'-0" PSC, 28IN, BOX BEAM SPANS ---------- NS STD. DWG. NS09-28-28 (MOD.)

2 - STEEL H PILE END BENTS ---------- NS STD. DWG. NS-B1-09 (MOD.)
NS STD. DWG. NS-2BW28DT-09 (MOD.)

5 - STEEL H PILE INTERMEDIATE BENTS ---------- NS STD. DWG. NS-B2-09 (MOD.)

NORFOLK SOUTHERN BOX GIRDER NOTES AND DETAILS --- NS STD. DWG. NS-BOX-09 (MOD.)

NS CONCRETE BALLAST DECK BEARING PAD DETAILS ---------- NS STD. DWG. BPD-09

NORFOLK SOUTHERN 42" HANDRAIL ---------- NS TYP. DWG. 13 (MOD.)

NORFOLK SOUTHERN WATERPROOFING DETAILS ---------- NS TYP. DWG. 18 (MOD.)

24" TYPE I RIP RAP

DRAINAGE DATA

DRAINAGE AREA ---------- 4.5 SQ MILES

CANAL FLOODS

FLOOD FREQUENCY	TOTAL DISCHARGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
25 YEAR	1,420 CFS	3.62 FPS	392 SQ FT	0.25 FT
100 YEAR	1,690 CFS	4.31 FPS	392 SQ FT	0.58 FT
500 YEAR	1,970 CFS	5.03 FPS	392 SQ FT	0.98 FT

STORMTIDE FLOODS

FLOOD FREQUENCY	TOTAL DISCHARGE	MEAN VELOCITY	AREA OF OPENING UNDER FLOODSTAGE	BACKWATER
25 YEAR	1,460 CFS	3.96 FPS	369 SQ FT	N/A
100 YEAR	2,363 CFS	6.03 FPS	392 SQ FT	N/A

UTILITIES

4" DIA. SIGNAL CONDUIT ---------- NORFOLK SOUTHERN

DESIGN DATA

SPECIFICATIONS ---------- AREMA MANUAL, 2020

LIVE LOAD ---------- COOPER E80 W/DIESEL IMPACT

CONCRETE:

PSC BOX BEAMS ---------- MIN. f'_{ci} = 5,400 PSI
MIN. f'_c = 7,400 PSI

SUBSTRUCTURE (PRECAST) - NS STD SPECIFICATION -------- MIN. f'_c = 5,000 PSI

BALLAST CURB - NS STD SPECIFICATION ---------- MIN. f'_c = 5,000 PSI

REINFORCEMENT STEEL: ---------- GRADE 60, f_y = 60,000 PSI

STEEL H-PILES: ---------- GRADE 36, f_y = 36,000 PSI

PRETENSIONING STRANDS (BOX BEAMS): ---------- f'_s = 270,000 PSI

TIE RODS (GALV. PER ASTM A123/A153) ---------- ASTM A722, MIN. f_y = 120,000 PSI

GENERAL NOTES

SPECIFICATIONS - ALL WORK NOT COVERED BY THE NORFOLK SOUTHERN PUBLIC PROJECTS MANUAL AND THE NORFOLK SOUTHERN STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION, OR AREMA SPECIFICATIONS, SHALL BE COVERED BY THE GEORGIA STANDARD SPECIFICATIONS, 2021 EDITION, AS MODIFIED BY CONTRACT DOCUMENTS. THE MORE STRINGENT OF THE SPECIFICATIONS SHALL GOVERN IF THERE IS A CONFLICT.

REINFORCING STEEL - PLACE AND TIE ALL REINFORCING STEEL IN ACCORDANCE WITH CH. 8 OF THE AREMA SPECIFICATIONS. DO NOT WELD REINFORCING STEEL. MAINTAIN 2 1/2" MINIMUM CLEARANCE OF ALL REINFORCEMENT UNLESS OTHERWISE NOTED.

CHAMFER - CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" UNLESS OTHERWISE NOTED.

TEMPORARY SHORING - TEMPORARY SHORING AS NECESSARY FOR CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH THE NORFOLK SOUTHERN SPECIAL PROVISION FOR PROTECTION OF RAILWAY INTERESTS.

WAITING PERIOD - NONE REQUIRED.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

DRIVING RESISTANCE - DETERMINE DRIVING RESISTANCE FOR PILES USING DYNAMIC PILE TESTING IN ACCORDANCE WITH SPECIAL PROVISION 520. DYNAMIC PILE TESTING SHALL BE REQUIRED AT BENTS 1, 3, 5, AND 7 LT AND BENTS 2, 4, AND 6 RT.

DYNAMIC PILE TESTING - PERFORM PILE TESTING USING THE PILE DRIVING ANALYZER (PDA) IN ACCORDANCE WITH SPECIAL PROVISION SECTION 523. NOTIFY THE GEOTECHNICAL BUREAU OF THE GEORGIA DOT OFFICE OF MATERIALS AND TESTING AT 404-608-4720 TWO WEEKS PRIOR TO DRIVING PILES.

WAVE EQUATION - PERFORM WAVE EQUATION ANALYSIS (WEAP) IN ACCORDANCE WITH SPECIAL PROVISION 520. PROVIDE RESULTS OF THE WEAP TO THE GEOTECHNICAL BUREAU OF THE GEORGIA DOT OFFICE OF MATERIALS AND TESTING FOR REVIEW AND APPROVAL TWO WEEKS PRIOR TO DRIVING PILES.

PILE DRIVING - SHOULD PILES FAIL TO OBTAIN DRIVING RESISTANCE AFTER ACHIEVING THE PILE TIP ELEVATIONS SHOWN, ALLOW PILES TO FREEZE A MINIMUM OF 48 HOURS AND RESTRIKE WITH A WARM HAMMER.

BENT NUMBER	PILE TIP ELEVATION
1 THRU 7	-83

SPECIAL PROTECTIVE COATING - CLEAN AND PAINT INTERMEDIATE BENT PILES WITH A BITUMINOUS EPOXY PROTECTIVE COATING IN ACCORDANCE WITH CH. 8 OF THE AREMA SPECIFICATIONS. THE COATING SHALL BE A TWO-COMPONENT, SPECIFICALLY FORMULATED COAL-TAR EPOXY SUCH AS TYPE I, CLASS 2, MIL-P-23236 OR U.S. CORPS OF ENGINEERS SPECIFICATION C-200 OR APPROVED EQUAL. COST OF COATING IS INCIDENTAL TO PRICE BID FOR ITEM 520-1179.

WELDING - ALL FIELD WELDING SHALL BE COMPLETED USING SHIELDED METAL ARC WELDING (SMAW) OR FLUX-CORED ARC WELDING (FCAW) PROCESSES AND SHOULD CONFORM TO AWS D1.5 AND AREMA CHAPTER 15.

INCIDENTAL ITEMS - INCLUDE THE COST INCIDENTAL TO THE WORK THAT IS NOT SPECIFICALLY COVERED BY THE GEORGIA STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS IN THE OVERALL BID SUBMITTED. THIS INCLUDES THE COST OF JOINT FILLERS AND OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK.

NORFOLK SOUTHERN RIGHT-OF-WAY - ALL WORK ON, OVER, UNDER, OR ADJACENT TO NORFOLK SOUTHERN RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE NORFOLK SOUTHERN "SPECIAL PROVISIONS FOR THE PROTECTION OF RAILWAY INTERESTS."

PSC CAPS - PRECAST CONCRETE BENT CAPS, INCLUDING PRECAST BACKWALLS AND WINGWALLS, AS DETAILED IN THE PLANS ARE MODIFIED FROM THE NS STD. DWGS. LISTED. COST FOR THE CAPS AS DETAILED, COMPLETE IN PLACE, IS INCLUDED IN THE PRICE BID FOR EACH "PSC CAPS, INTERMEDIATE BENTS", "PSC CAPS, END BENTS", "PSC CAPS, BACKWALLS", AND "PSC CAPS, WINGWALLS."

AS-BUILT DRAWINGS - PROVIDE NORFOLK SOUTHERN WITH AS-BUILT DRAWINGS SHOWING THE ACTUAL CLEARANCES AS CONSTRUCTED. IN ADDITION, ALL AS-BUILT FOUNDATION DATA SHALL BE PROVIDED INCLUDING DEPTH, SIZE, AND LOCATION OF ALL FOUNDATION COMPONENTS.

GENERAL NOTES (CONTINUED)

WATERPROOFING - APPLY A BUTYL RUBBER WATERPROOFING MEMBRANE AND ASPHALT PANEL PROTECTION SYSTEM (OR APPROVED EQUAL) BETWEEN BALLAST AND TOP SURFACE OF BOX BEAMS. BUILD UP THE WATERPROOFING SYSTEM TO PROVIDE A 1% CROSS SLOPE TO THE CURB DRAINS ALONG EACH SIDE OF THE BRIDGE. ALL MATERIALS AND INSTALLATION SHALL COMPLY WITH AREMA CHAPTER 8, PART 29 AND THE CURRENT NORFOLK SOUTHERN STANDARD SPECIFICATIONS FOR MEMBRANE WATERPROOFING.

DAMPPROOFING - ALL CONCRETE SURFACES THAT WILL BE IN CONTACT WITH BACKFILL OR EMBANKMENT SHALL BE DAMPPROOFED WITH ASPHALT PRIMER AND ASPHALT IN ACCORDANCE WITH AREMA CHAPTER 8, PART 29 AND NORFOLK SOUTHERN STANDARD SPECIFICATIONS.

CONCRETE BALLAST CURB - CONCRETE FOR BALLAST CURB, AS DETAILED ON THE PLANS, ON BRIDGE SHALL MEET NORFOLK SOUTHERN SPECIFICATIONS FOR CAST-IN-PLACE CONCRETE, AND SHALL BE INCLUDED FOR PAYMENT WITH "PSC BEAMS, SPCL DESIGN, BR NO-2."

STRUCTURAL STEEL - ALL MISCELLANEOUS STEEL REQUIRED FOR CONSTRUCTION (WT MEMBERS, COVER PLATES, ETC.) SHALL BE IN ACCORDANCE WITH THE NORFOLK SOUTHERN STANDARD SPECIFICATIONS FOR STRUCTURAL STEEL.

GROUT - GROUT FOR THE TIE-ROD DUCTS AND BEARING DOWEL ANCHORAGE SHALL MEET REQUIREMENTS OF AREMA CHAPTER 8, PART 17, AND THE NORFOLK SOUTHERN STANDARD SPECIFICATIONS.

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
211-0300	50	CY	BRIDGE EXCAVATION, STREAM CROSSING
501-3000	75000	LB	STR STEEL, BR NO - 2
507-0010	4	EA	PSC CAPS, END BENTS
507-0010	10	EA	PSC CAPS, INTERMEDIATE BENTS
507-0010	4	EA	PSC CAPS, BACKWALLS
507-0010	2	EA	PSC CAPS, WINGWALLS
507-9240	2016	LF	PSC BEAMS, SPCL DESIGN, BR NO - 2
516-0001	363	LF	ALUM HANDRAIL, SPCL DESIGN
520-1151	2470	LF	PILING IN PLACE, STEEL H, HP 14 X 89
520-1179	5300	LF	PILING IN PLACE, STEEL H, HP 14 X 117
520-4151	1	EA	LOAD TEST, STEEL H, HP 14 X 89 (IF REQD)
520-4179	1	EA	LOAD TEST, STEEL H, HP 14 X 117 (IF REQD)
522-1000	LUMP	LS	SHORING
523-1100	7	EA	DYNAMIC PILE TEST
530-0105	1195	SY	WATERPROOFING
531-1000	117	SY	DAMPPROOFING
603-2024	774	SY	STN DUMPED RIP RAP, TP 1, 24 IN
603-7000	774	SY	PLASTIC FILTER FABRIC

BRIDGE NO. 2

moffatt & nichol
MOFFATT & NICHOL, INC.
1201 PEACHTREE STREET, NE
SUITE 1106
ATLANTA, GA 30361
404-205-8530

GEORGIA
DEPARTMENT OF TRANSPORTATION
ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES

GENERAL NOTES
NORFOLK SOUTHERN RAILWAY
OVER DUNDEE CANAL
CHATHAM COUNTY 0006328

NO SCALE MARCH 2021

BY	REVISIONS	DATE
M&N	UPDATED PLANS	05-14-21
M&N	UPDATED NOTES & QUANT.	06-11-21
M&N	UPDATED NOTES & QUANT.	06-30-21
M&N	UPDATED PLANS	09-24-21

DESIGNED EMT | CHECKED RSC | REVIEWED DLC/SKG
DRAWN EMT | DESIGN GROUP JBK | APPROVED DPD

DRAWING NO. 35-0091
BRIDGE SHEET 2 OF 16

1 INCH WHEN PRINTED FULL SIZE

3/20/2021 9:23:01 AM
USER:fattar

GPLOT-V8
SCREEN_21.tbl

Q:\SV\5531-02\600 CADD_Active\DGN\0006328_21-0001.dgn

GDOT Georgia Department of Transportation

P.I. No. 0006328

LIMIT OF CONSTRUCTION
RAMP A2
STA. 354+00.71

LIMIT OF CONSTRUCTION
RAMP B
STA. 403+00.00

LIMIT OF CONSTRUCTION
RAMP A1
STA. 304+86.00

I-516/SR 21

TRIPLE 10'x 8' BOX CULVERT

RAMP B

RAMP C

LIMIT OF CONSTRUCTION
RAMP C
STA. 451+35.00

LIMIT OF CONSTRUCTION
SR 25/MAIN ST
STA. 220+00.00

OUTFALL S DUNDEE CANAL

RAMP A1

RAMP A2

OUTFALL Z

100+00

110+00

120+00

M4

L1

ESA

B1

A1

M5

D3

D4

D10

D9

D8

D7

C4

US 80/SR 26/SR 25

SR 25/MAIN ST

OUTFALL T

OUTFALL V

OUTFALL W

END BRIDGE 2
STA. 74+95.65

MATCH LINE STA 135+00.00

DRAWING No. 21-0002

BEGIN PROJECT CSSTP-0006-00(328)
BURNSED BLVD/SR 26 SPUR
STA. 99+00.00
N 764132.4439
E 973106.8155

Z2

BURNSED BLVD/SR 26 SPUR

A4

D1

C1

D6

E6

E4

E3

E2

K3

K1

F3

E10

U2

E4

A1

D2

E8

E9

RAMP D

X2

T1

W2

ESA

ESA

BEGIN BRIDGE 1
STA. 125+50.00

SR 26 SPUR/BRAMPTON RD CONN

V2

LIMIT OF CONSTRUCTION
RAMP D
STA. 473+95.00

PROPOSED DETENTION POND

CTL TRACK RR1

SIDING TRACK RR2

LIMIT OF CONSTRUCTION
MAIN ST
STA. 201+40.00

TOTAL PROJECT DISTURBED AREA = 46.37 AC

TOTAL PROJECT AREA = 59.32 AC

moffatt & nichol

SCALE IN FEET
0 200 400 800

REVISION DATES

DRAINAGE AREA MAP

BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		21-0001
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



moffatt & nichol

SCALE IN FEET
0 200 400 800

REVISION DATES

DRAINAGE AREA MAP

BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		21-0002
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

DRAINAGE AREA DESIGNATION	STATION	OFFSET	STRUCTURE TYPE	DESCRIPTION	SKEW ANGLE	DRAINAGE AREA (AC)	DISTURBED AREA (AC)	RUNOFF COEFFICIENT PRE	RUNOFF COEFFICIENT POST	PRE Q(10) (CFS)	PRE Q(25) (CFS)	PRE Q(50) (CFS)	PRE Q(100) (CFS)	POST Q(25) (CFS)	POST Q(50) (CFS)	POST Q(100) (CFS)	PRE V(10) (FPS)	PRE V(50) (FPS)	PRE V(100) (FPS)	POST V(50) (FPS)	POST V(100) (FPS)	PRE HW(50) (FT)	PRE HW(100) (FT)	POST HW(50) (FT)	POST HW(100) (FT)	RECEIVING WATERS
PIPE S (OUTFALL S)	115+50	CROSS PIPE	2-18" RCP	UNDER ROADWAY	68°	20.22	20.20	N/A	0.30	36.78	46.81	56.46	64.42	46.81	56.46	64.42	N/A	N/A	N/A	7.22	7.96	N/A	N/A	5.39	6.24	Dundee Canal
PIPE T (OUTFALL T)	119+46	CROSS PIPE	18" RCP	UNDER ROADWAY	84°	0.74	0.50	N/A	0.31	1.67	N/A	N/A	N/A	2.12	2.56	2.92	N/A	N/A	N/A	6.51	6.74	N/A	N/A	8.51	8.59	Dundee Canal
PIPE V (OUTFALL V)	68+00	CROSS PIPE	36" RCP	UNDER RAILROAD	62°	16.87	8.71	N/A	0.20	25.40	N/A	N/A	N/A	32.35	39.03	44.50	N/A	N/A	N/A	6.31	6.61	N/A	N/A	2.52	2.73	Dundee Canal
PIPE W (OUTFALL W)	70+80	CROSS PIPE	30" RCP	UNDER RAILROAD	66°	3.62	0.60	N/A	0.20	5.30	N/A	N/A	N/A	6.75	8.14	9.28	N/A	N/A	N/A	7.91	8.16	N/A	N/A	2.86	2.98	Dundee Canal
PIPE X	54+66	CROSS PIPE	24" RCP	UNDER RAILROAD	83°	6.40	N/A	N/A	0.31	12.00	N/A	N/A	N/A	15.27	18.42	21.02	N/A	N/A	N/A	7.08	7.62	N/A	N/A	8.40	8.80	Dundee Canal
PIPE Z (OUTFALL Z)	102+75	CROSS PIPE	36" RCP	EXTENDING EXIST. PIPE	89°	3.19	0.60	N/A	0.62	14.58	16.47	19.86	22.65	18.57	22.40	25.54	N/A	N/A	N/A	3.22	3.34	N/A	N/A	8.03	8.50	Dundee Canal
PIPE AA	514+77	CROSS PIPE	36" RCP	UNDER RAILROAD	62°	12.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	61.78	74.50	85.02	N/A	N/A	N/A	4.59	4.76	N/A	N/A	7.97	9.32	Dundee Canal
PIPE BB	515+72	CROSS PIPE	24" RCP	UNDER RAILROAD	86°	1.56	N/A	N/A	0.62	14.58	16.47	19.86	22.65	8.03	9.69	11.05	N/A	N/A	N/A	11.14	11.55	N/A	N/A	6.89	7.04	Dundee Canal
PIPE CC	512+75	CROSS PIPE	18" RCP	UNDER ROADWAY	57°	1.02	N/A	N/A	0.32	48.53	N/A	N/A	N/A	4.81	5.80	6.62	N/A	N/A	N/A	4.56	4.77	N/A	N/A	9.43	9.57	Dundee Canal
A1	351+10.91	63.6' LT	DROP INLET 1019	DRAINAGE SYSTEM A	N/A	0.24	0.10	N/A	0.35	0.85	N/A	N/A	N/A	1.08	1.32	1.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
A4	105+15.08	58.1' RT	DROP INLET 1019	DRAINAGE SYSTEM A	89°	4.78	0.50	N/A	0.63	18.09	23.02	27.76	31.68	23.02	27.76	31.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
B1	351+63.39	35.9' LT	DROP INLET 1019	DRAINAGE SYSTEM B	N/A	0.12	0.08	0.72	0.68	0.82	N/A	N/A	N/A	1.04	1.26	1.44	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
C1	477+94.19	74.6' LT	F.E.S.	DRAINAGE SYSTEM C	N/A	1.55	0.50	N/A	0.59	6.76	8.61	10.39	11.85	8.61	10.39	11.85	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
C3	110+54.31	59.8' LT	DROP INLET 1019	DRAINAGE SYSTEM C	N/A	0.05	N/A	0.63	0.95	0.48	0.55	0.61	0.67	0.55	0.61	0.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
D3	112+73.02	63.8' RT	C.B. 1033D	DRAINAGE SYSTEM D	N/A	0.64	N/A	N/A	0.88	5.63	5.62	6.25	6.83	7.05	7.84	8.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
D4	112+97.87	64.6' RT	DROP INLET 1019	DRAINAGE SYSTEM D	83°	0.12	N/A	N/A	0.84	1.01	N/A	N/A	N/A	1.29	1.47	1.61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
D5	113+12.93	72.9' RT	DROP INLET 1019	DRAINAGE SYSTEM D	N/A	0.25	N/A	N/A	0.92	2.31	3.10	3.55	3.88	2.76	3.06	3.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
D6	211+04.19	60.1' LT	DROP INLET 1019	DRAINAGE SYSTEM D	N/A	0.11	N/A	1.03	0.89	0.98	N/A	N/A	N/A	1.21	1.35	1.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
D9	113+80.22	54.2' LT	DROP INLET 1019	DRAINAGE SYSTEM D	N/A	0.10	N/A	N/A	0.95	0.95	N/A	N/A	N/A	1.10	1.23	1.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
D8	113+96.67	66.0' LT	DROP INLET 1019	DRAINAGE SYSTEM D	N/A	0.06	N/A	0.84	0.95	0.57	N/A	N/A	N/A	0.66	0.74	0.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
D7	114+11.38	81.5' LT	DROP INLET 1019	DRAINAGE SYSTEM D	N/A	0.03	N/A	N/A	0.95	0.29	N/A	N/A	N/A	0.33	0.37	0.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
D12	479+29.34	26.8' RT	F.E.S.	DRAINAGE SYSTEM D	N/A	2.53	0.55	N/A	0.43	6.52	9.65	11.64	13.28	8.30	10.02	11.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
E1	204+45.08	29.8' LT	EXIST. CATCH BASIN	DRAINAGE SYSTEM E	N/A	0.80	N/A	N/A	0.93	5.49	6.47	7.15	7.83	6.47	7.15	7.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
E2	206+40.58	28.5' LT	C.B. 1033D	DRAINAGE SYSTEM E	N/A	0.23	N/A	N/A	0.89	2.06	2.20	2.45	2.68	2.53	2.82	3.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
E3	208+20.17	31.8' LT	C.B. 1033D	DRAINAGE SYSTEM E	N/A	0.16	N/A	0.41	0.91	1.46	1.65	1.84	2.01	1.76	1.96	2.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
E4	209+43.00	36.6' LT	C.B. 1033D	DRAINAGE SYSTEM E	N/A	0.12	N/A	0.93	0.90	1.08	N/A	N/A	N/A	1.32	1.47	1.61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
E5	210+52.16	37.4' LT	C.B. 1033D	DRAINAGE SYSTEM E	90°	0.13	N/A	0.98	0.90	1.17	1.43	1.59	1.74	1.43	1.59	1.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
E6	206+42.00	28.3' RT	C.B. 1033D	DRAINAGE SYSTEM E	90°	0.07	N/A	0.95	0.67	0.47	N/A	N/A	N/A	0.60	0.73	0.83	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
E7	208+50.36	28.3' RT	C.B. 1033D	DRAINAGE SYSTEM E	N/A	0.21	0.21	N/A	0.73	1.54	2.19	2.66	3.03	1.97	2.38	2.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
E8	210+52.31	28.4' RT	C.B. 1033D	DRAINAGE SYSTEM E	N/A	0.17	N/A	0.90	0.80	1.36	1.69	1.96	2.14	1.73	2.08	2.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
E9	211+23.85	27.8' RT	C.B. 1033D	DRAINAGE SYSTEM E	N/A	0.06	N/A	N/A	0.73	0.44	0.87	1.05	1.20	0.56	0.68	0.78	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
E10	213+88.93	28.5' RT	EXIST. CATCH BASIN	DRAINAGE SYSTEM E	N/A	0.07	N/A	0.64	0.86	0.60	0.92	1.11	1.27	0.77	0.86	0.94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
E11	205+94.23	31.7' RT	DROP INLET 1019	DRAINAGE SYSTEM E	N/A	0.19	N/A	0.83	0.88	1.68	N/A	N/A	N/A	2.09	2.33	2.55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
F1	114+51.17	68.5' RT	DROP INLET 1019	DRAINAGE SYSTEM F	N/A	0.04	N/A	0.49	0.95	0.38	N/A	N/A	N/A	0.44	0.49	0.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
F2	114+68.91	57.2' RT	DROP INLET 1019	DRAINAGE SYSTEM F	N/A	0.02	N/A	0.65	0.63	0.13	N/A	N/A	N/A	0.16	0.19	0.22	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
F3	114+92.93	47.9' RT	DROP INLET 1019	DRAINAGE SYSTEM F	N/A	0.05	N/A	N/A	0.82	0.41	N/A	N/A	N/A	0.52	0.61	0.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
G1	144+27.82	34.5' LT	DROP INLET 1019	DRAINAGE SYSTEM G	N/A	0.17	N/A	N/A	0.95	1.62	N/A	N/A	N/A	1.87	2.08	2.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
G2	144+28.09	34.5' RT	DROP INLET 1019	DRAINAGE SYSTEM G	N/A	0.17	N/A	N/A	0.95	1.62	N/A	N/A	N/A	1.87	2.08	2.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
G3	146+76.88	34.3' RT	C.B. 1033D	DRAINAGE SYSTEM G	89°	0.10	N/A	N/A	0.95	0.95	N/A	N/A	N/A	1.10	1.23	1.34	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
G5 (OUTFALL G)	146+71.73	63.6' RT	F.E.S.	DRAINAGE SYSTEM G	N/A	25.69	7.50	N/A	0.46	71.37	N/A	N/A	N/A	90.84	109.55	125.01	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
G6	144+92.00	35.00' LT	DROP INLET 1019	DRAINAGE SYSTEM G	90°	0.07	N/A	N/A	0.95	0.67	N/A	N/A	N/A	0.77	0.86	0.94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
G7	144+92.00	35.00' RT	DROP INLET 1019	DRAINAGE SYSTEM G	N/A	0.07	N/A	N/A	0.95	0.67	N/A	N/A	N/A	0.77	0.86	0.94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
J1	158+88.31	26.7' RT	C.B. 1033D	DRAINAGE SYSTEM J	N/A	0.11	N/A	N/A	0.83	0.92	N/A	N/A	N/A	1.17	1.35	1.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
J2	155+78.16	31.0' RT	C.B. 1033D	DRAINAGE SYSTEM J	18°	0.29	N/A	N/A	0.86	2.50	N/A	N/A	N/A	3.18	3.55	3.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
J3	159+80.11	38.9' RT	F.E.S.	DRAINAGE SYSTEM J	N/A	0.34	N/A	N/A	0.57	1.93	N/A	N/A	N/A	2.46	2.99	3.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
J5	159+47.89	13.1' LT	DROP INLET 1019	DRAINAGE SYSTEM J	N/A	0.06	N/A	N/A	0.95	0.57	N/A	N/A	N/A	0.66	0.74	0.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
J6	159+09.94	30.0' LT	DROP INLET 1019	DRAINAGE SYSTEM J	N/A	0.08	N/A	N/A	0.38	0.31	0.39	0.47	0.54	0.39	0.47	0.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
J7	158+27.96	31.0' LT	DROP INLET 1019	DRAINAGE SYSTEM J	N/A	0.03	N/A	N/A	0.95	0.29	N/A	N/A	N/A	0.33	0.37	0.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
J8	157+88.99	31.7' LT	DROP INLET 1019	DRAINAGE SYSTEM J	N/A	0.02	N/A	N/A	0.95	0.19	N/A	N/A	N/A	0.22	0.25	0.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
J9	157+19.83	40.3' LT	DROP INLET 1019	DRAINAGE SYSTEM J	N/A	0.10	N/A	0.38	0.43	0.43	0.59	0.71	0.81	0.55	0.67	0.76	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
J10	157+08.66	31.1' LT	DROP INLET 1019	DRAINAGE SYSTEM J	N/A	0.01	N/A	N/A	0.95	0.10	N/A	N/A	N/A	0.11	0.12	0.13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
J11	155+95.58	36.8' LT	DROP INLET 1019	DRAINAGE SYSTEM J	77°	0.29	N/A	N/A	0.57	1.65	2.11	2.55	2.91	2.11	2.55	2.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
K1	213+17.93	43.7' RT	DROP INLET 1019	DRAINAGE SYSTEM K	N/A	0.02	N/A	0.42	0.95	0.19	N/A	N/A	N/A	0.22	0.25	0.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
K2	115+15.60	58.7' LT	DROP INLET 1019	DRAINAGE SYSTEM K	N/A	0.02	N/A	N/A	0.95	0.19	N/A	N/A	N/A	0.22	0.25	0.27	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
L1	451+12.01	21.0' RT	DROP INLET 1019	DRAINAGE SYSTEM L	N/A	0.06	0.06	0.57	0.95	0.57	N/A	N/A	N/A	0.66	0.74	0.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
L2	451+14.61	39.9' RT	MANHOLE (FLOW FROM EXIST 15")	DRAINAGE SYSTEM L	N/A	0.01	0.05	N/A	0.30	0.03	0.04	0.05	0.05	0.04	0.05	0.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
M1	402+98.31	18.9' LT	DROP INLET 1019	DRAINAGE SYSTEM M	N/A	0.51	0.51	N/A	0.55	2.83	N/A	N/A	N/A	3.61	4.38	4.99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
M2	401+73.24	12.9' LT	DROP INLET 1019	DRAINAGE SYSTEM M	N/A	0.20	0.04	N/A	0.63	1.25	N/A	N/A	N/A	1.60	1.94	2.20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
N1	148+56.26	34.3' RT	C.B. 1033D	DRAINAGE SYSTEM N	N/A	0.35	N/A	0.30	0.78	2.74	N/A	N/A	N/A	3.50	4.24	4.69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
N2	148+87.26	34.3' RT	C.B. 1034D	DRAINAGE SYSTEM N	89°	0.12	N/A	N/A	1.06	1.27	N/A	N/A	N/A	1.32	1.47	1.61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
N3	149+18.56	34.4' RT	C.B. 1033D	DRAINAGE SYSTEM N	N/A	0.20	N/A	N/A	1.18	2.36	N/A	N/A	N/A	2.20	2.45	2.68	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
N4	150+47.09	34.3' RT	C.B. 1033D	DRAINAGE SYSTEM N	N/A	0.37	N/A	N/A	0.93	3.45	N/A	N/A	N/A	4.08	4.53	4.96	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
N5	151+97.02	34.3' RT	C.B. 1033D	DRAINAGE SYSTEM N	N/A	0.38	N/A	N/A	0.81	3.09	N/A	N/A	N/A	3.94	4.66	5.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
N6	153+98.78	34.3' RT	C.B. 1033D	DRAINAGE SYSTEM N	N/A	0.32	N/A	N/A	0.83	2.65	N/A	N/A	N/A	3.38	3.92	4.29	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
Q1	652+67.53	22.5' LT	EXISTING DROP INLET	DRAINAGE SYSTEM Q	N/A	0.77	N/A	N/A	0.59	3.32	4.23	5.10	5.82	4.23	5.10	5.82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
Q2	652+07.93	25.6' LT	DROP INLET 1019	DRAINAGE SYSTEM Q	N/A	0.04	N/A	N/A	0.95	0.38	0.44	0.49	0.54	0.44	0.49	0.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
R1	145+07.24	60.2' RT	DROP INLET 1019	DRAINAGE SYSTEM R	N/A	0.18	N/A	N/A	0.95	1.71	N/A	N/A	N/A	1.98	2.21	2.41	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal
R3 (OUTFALL R)	144+58.24	72.5' RT	EXIST. DETENTION POND OUTLET	DRAINAGE SYSTEM R	N/A	13.88	5.66	0.59	0.48	39.96	31.04	37.43	41.40	50.86	61.34	69.99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Dundee Canal

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REVISION DATES

DRAINAGE AREA MAP
BRAMPTON ROAD CONNECTOR

CHECKED: DATE:
BACKCHECKED: DATE:
CORRECTED: DATE:
VERIFIED: DATE:

DRAWING No. 21-0003

CREATE OPENING IN WALL OF BOX CULVERT. MAX OPENING 2" GREATER THAN OD OF PIPE.

GROUT PIPE INTO OPENING

A1
30" PIPE CONNECTION TO CULVERT
INV.= -0.20
CONNECT TO PROPOSED TRIPLE BOX CULVERT 10' X 8'

PIPE CONNECTION TO BOX CULVERT
N.T.S.

A1
BOX CULVERT
GDOT STD 2405
RAMP A2
STA 351+17.19
INV = -0.20

A2
GDOT STD 9031S
RAMP A2
STA 350+80.55
43.20' LT
TOP ELEV.= 6.61
INV. ELEV.=0.82 (IN)(P57)
INV. ELEV.=0.82 (OUT)(P58)
H = 6.29'

A3
GDOT STD 1011A
RAMP A2
STA 350+64.28
24.08' LT
TOP ELEV.= 9.89
INV. ELEV.= 1.03 (IN)(P12)
INV. ELEV.=1.03 (OUT)(P57)
H=5.36'

℄ BRAMPTON RD CONN
STA 105+ 4.17

A4
GDOT CONST. DETAIL D-5
BRAMPTON RD CONN
STA 105+15.08
58.10' RT
INV. ELEV. = 1.90

PROPOSED GROUND
EXISTING GROUND

35.0' @ 2.97%
30" STORM DRAIN
H = 1' - 10'

21.0' @ 1.02%
30" STORM DRAIN
H = 1' - 10'

LINE "A"

(EXIST. PIPE)
105.0' @ 0.77%
30" STORM DRAIN
H = 1' - 10'

8.8' @ 0.77%
30" STORM DRAIN
H = 1' - 10'

PROPOSED GROUND
EXISTING GROUND

C1
GDOT STD 1120
BRAMPTON ROAD CONN
STA 110+01.59
53.28' RT
INV ELEV.=3.84

C2

10.8' @ 15.94%
18" STORM DRAIN
H = 1' - 10'

LINE "C"

CREATE OPENING IN WALL OF BOX CULVERT. MAX OPENING 2" GREATER THAN OD OF PIPE.

GROUT PIPE INTO OPENING

B1
18" PIPE CONNECTION TO CULVERT
INV.= -0.49
CONNECT TO PROPOSED TRIPLE BOX CULVERT 10' X 8'

PIPE CONNECTION TO BOX CULVERT
N.T.S.

B2
GDOT STD 9031S
RAMP A2
STA 351+63.39
35.94' LT
TOP ELEV.=2.87
INV. ELEV.=-2.30 (OUT)(P56)
H=5.67'

B1
BOX CULVERT
GDOT STD 2405
RAMP A2
STA. 351+49.88
INV. ELEV. = -2.49

EXISTING GROUND

14.7' @ 1.34%
18" STORM DRAIN
H = 1' - 10'

LINE "B"

C2
GDOT STD 1011A
BRAMPTON ROAD CONN
STA. 110+08.86
51.69' RT
TOP ELEV.=6.30
INV. ELEV.=3.00(P19)
INV. ELEV.=1.70(P46)
H=5.31'

℄ BRAMPTON RD CONN
STA 110+30.55

PROPOSED GROUND

116.9' @ 1.37%
18" STORM DRAIN
H = 1' - 10'

LINE "C"

C3
GDOT STD 1019A (TP. D)
BRAMPTON ROAD CONN
STA. 110+54.31
59.75' LT
TOP ELEV.=8.73
INV. ELEV.=0.10 (IN)(P19)
INV. ELEV.=0.10 (OUT)(P71)
H=9.12'

C4
BOX CULVERT
GDOT STD 2405
BRAMPTON ROAD CONN
STA. 110+58.36
INV. ELEV. = -0.20

EXISTING GROUND

10.9' @ 2.74%
18" STORM DRAIN
(CONNECT TO CULVERT) H = 1' - 10'

CREATE OPENING IN WALL OF BOX CULVERT. MAX OPENING 2" GREATER THAN OD OF PIPE.

GROUT PIPE INTO OPENING

C4
18" PIPE CONNECTION TO CULVERT
INV.= -0.20
CONNECT TO PROPOSED TRIPLE BOX CULVERT 10' X 8'

PIPE CONNECTION TO BOX CULVERT
N.T.S.

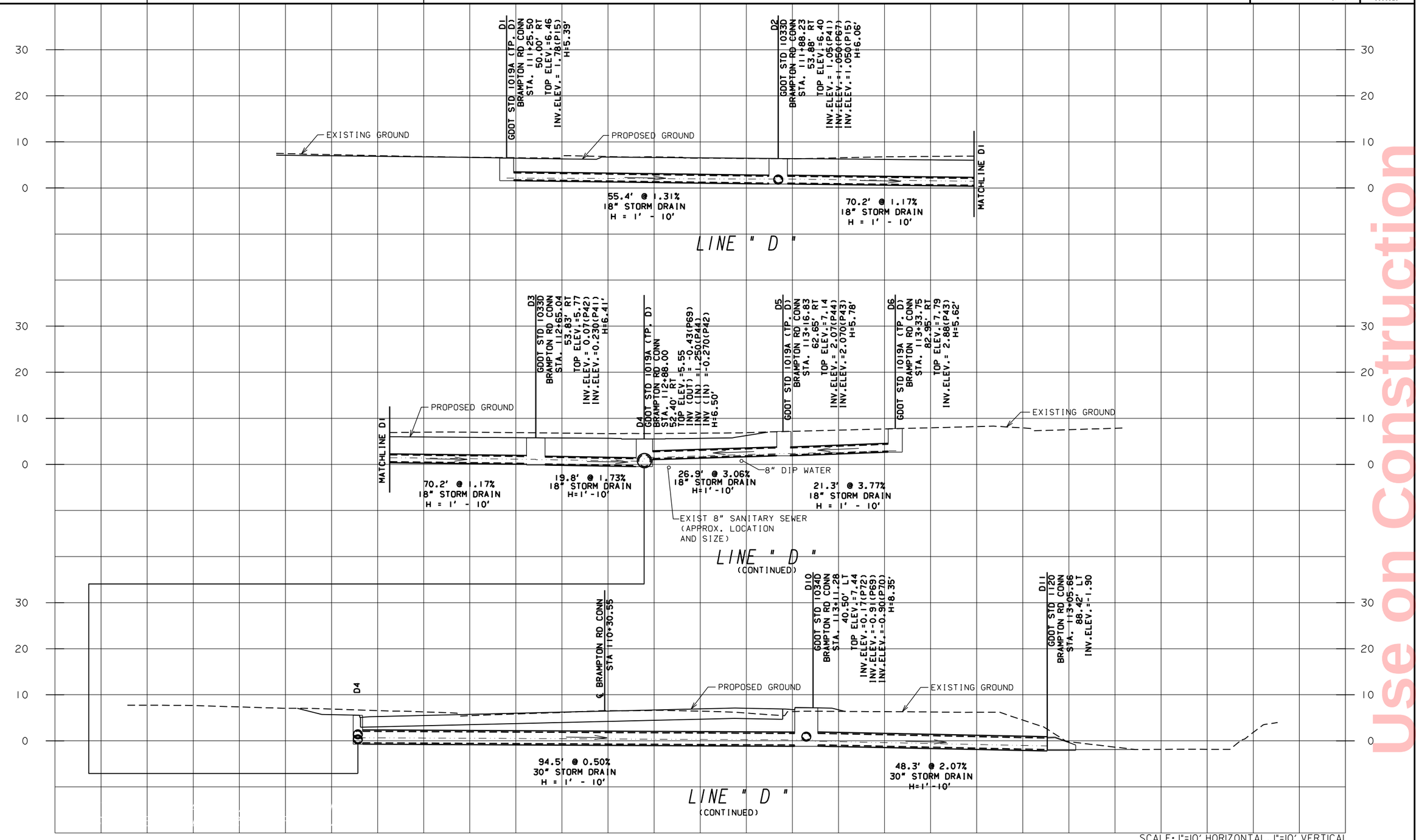
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REVISION DATES

DRAINAGE PROFILES
BRAMPTON ROAD CONNECTOR
SYSTEM A & B & C

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		22-0001
CORRECTED:		DATE:		
VERIFIED:		DATE:		



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

Use on Construction

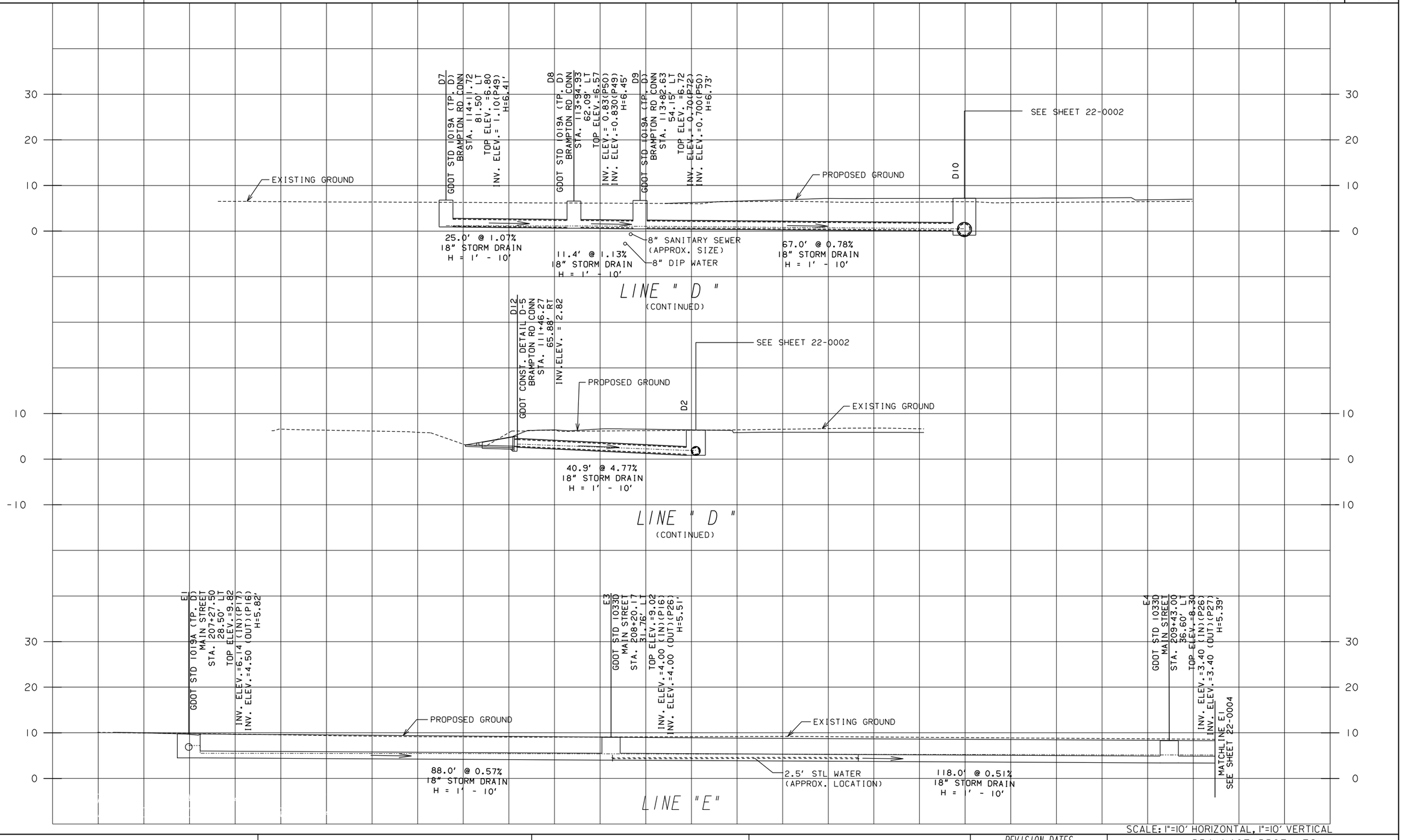
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REVISION DATES
01-16-23

DRAINAGE PROFILES

BRAMPTON ROAD CONNECTOR
SYSTEM D

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		22-0002
CORRECTED:		DATE:		
VERIFIED:		DATE:		



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

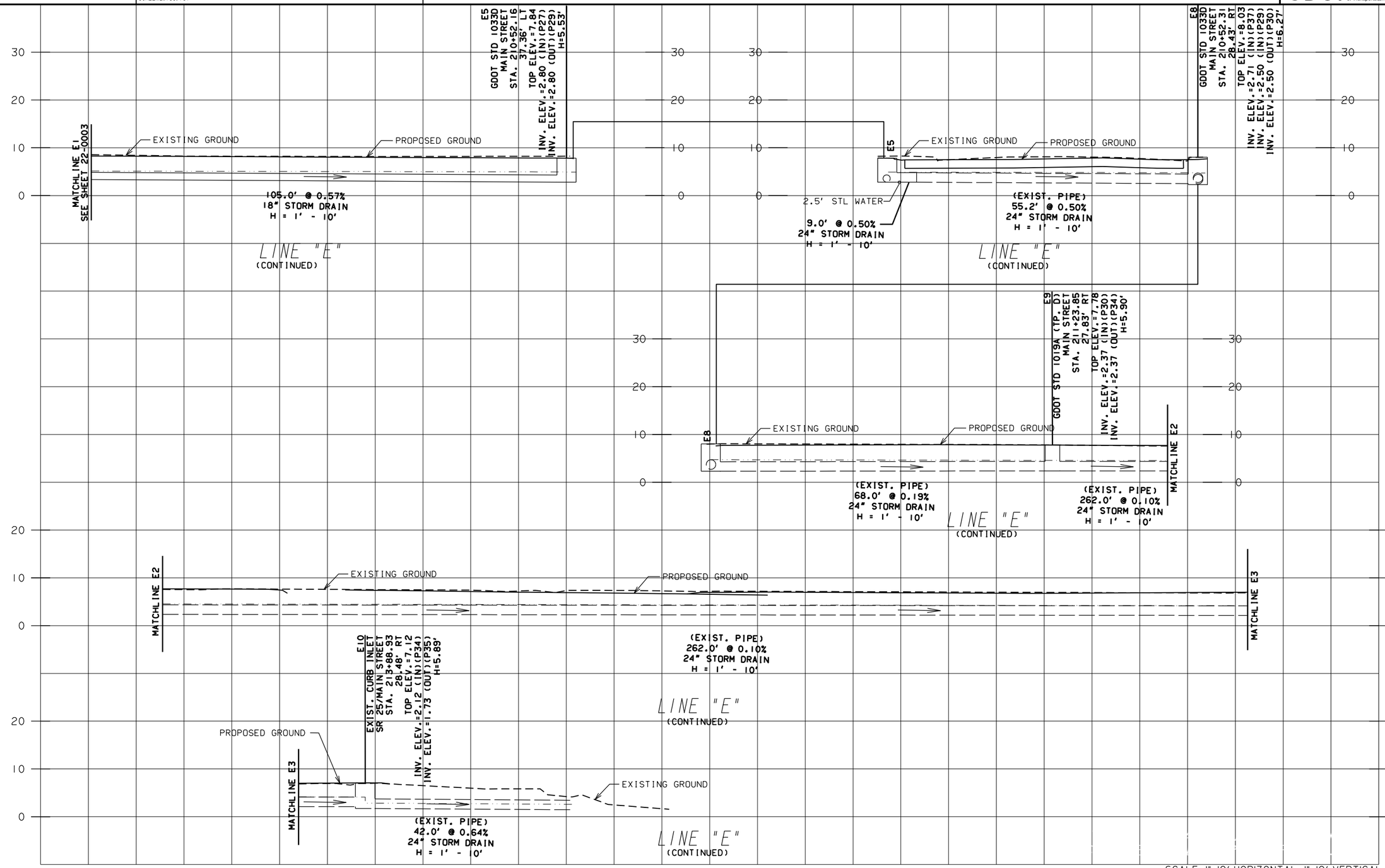
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REVISION DATES

DRAINAGE PROFILES

BRAMPTON ROAD CONNECTOR
SYSTEM D & E

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	22-0003
CORRECTED:		DATE:	
VERIFIED:		DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

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REVISION DATES

DRAINAGE PROFILES

BRAMPTON ROAD CONNECTOR

SYSTEM E

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		22-0004
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

3/20/2021 9:08:27 AM
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GDOT Georgia Department of Transportation

P.I. No. 0006328

F1
GDOT STD 1019A (TP. D)
BRAMPTON RD CONN
STA. 114+51.17
68.46' RT
TOP ELEV.=6.90
INV. ELEV.=3.45 (OUT)(P23)
H=3.95'

F2
GDOT STD 1019A (TP. D)
BRAMPTON RD CONN
STA. 114+68.91
57.23' RT
TOP ELEV.=7.80
INV. ELEV.=3.35 (IN)(P32)
INV. ELEV.=3.35 (IN)(P23)
INV. ELEV.=3.35 (OUT)(P33)
H=4.95'

F3
GDOT STD 1019A (TP. D)
BRAMPTON RD CONN
STA. 114+92.93
47.87' RT
TOP ELEV.=8.00
INV. ELEV.=3.50 (OUT)(P32)
H=5.00'

PROPOSED GROUND
EXISTING GROUND

18.0' @ 0.56%
18" STORM DRAIN
H = 1' - 10'

23.0' @ 0.66%
18" STORM DRAIN
H = 1' - 10'

LINE "F"

F4
GDOT STD 1120
BRAMPTON RD CONN
STA. 114+79.89
74.92' RT
INV.ELEV=3.24

PROPOSED GROUND
F2
EXISTING GROUND

15.0' @ 0.71%
18" STORM DRAIN
H = 1' - 10'

LINE "F"
(CONTINUED)

G1
GDOT CONST. DETAIL D-36
BRAMPTON RD CONN
STA. 144+46.38
33.75' LT
TOP ELEV.=19.66
INV.ELEV.= 15.50(P81)
H=4.87'

G8
GDOT CONST. DETAIL D-36
BRAMPTON RD CONN
STA. 144+72.20
34.01' LT
TOP ELEV.=19.43
INV.ELEV.=14.50(P80)
INV.ELEV.=15.000(P81)
H=5.64'

G6
GDOT CONST. DETAIL D-36
BRAMPTON RD CONN
STA. 145+07.05
34.42' LT
TOP ELEV.=19.42
INV.ELEV.= 13.50(P7)
INV.ELEV.=14.000(P80)
H=6.63'

PROPOSED GROUND
12" PVC PIPE FROM BRDIGE DECK DRAIN
INV. ELEV.= 16.24
EXISTING GROUND

21.8' @ 2.29%
18" STORM DRAIN
H = 1' - 10'

30.9' @ 1.62%
18" STORM DRAIN
H = 1' - 10'

109.6' @ 1.41%
18" STORM DRAIN
H=1' -10'

MATCHLINE G1

LINE "G"

G12
GDOT CONST. DETAIL D-36
BRAMPTON RD CONN
STA. 146+20.00
35.75' LT
TOP =19.45
INV (OUT) = 11.95(P86)
INV (IN) =11.95(P7)
H=8.21'

G11
GDOT CONST. DETAIL D-36
BRAMPTON RD CONN
STA. 146+53.00
35.75' LT
TOP =18.46
INV (OUT) = 10.89(P9)
INV (IN) =11.500(P86)
H=9.28'

G4
GDOT STD 1011A
BRAMPTON RD CONN
STA. 146+76.38
48.23' LT
TOP ELEV.=17.65
INV.ELEV.=8.33(P22)
INV.ELEV.=10.50(P9)
INV.ELEV.=2.50(P24)
INV.ELEV.=0.21(P20)
INV.ELEV.=0.21(P21)
H=17.94'

MATCHLINE G1
PROPOSED GROUND
EXISTING GROUND

109.6' @ 1.41%
18" STORM DRAIN
H=1' -10'

29.7' @ 1.51%
18" STORM DRAIN
H=1' -10'

23.1' @ 1.71%
18" STORM DRAIN
H=1' -10'

LINE "G"
(CONTINUED)

SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

LINE " "

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REVISION DATES

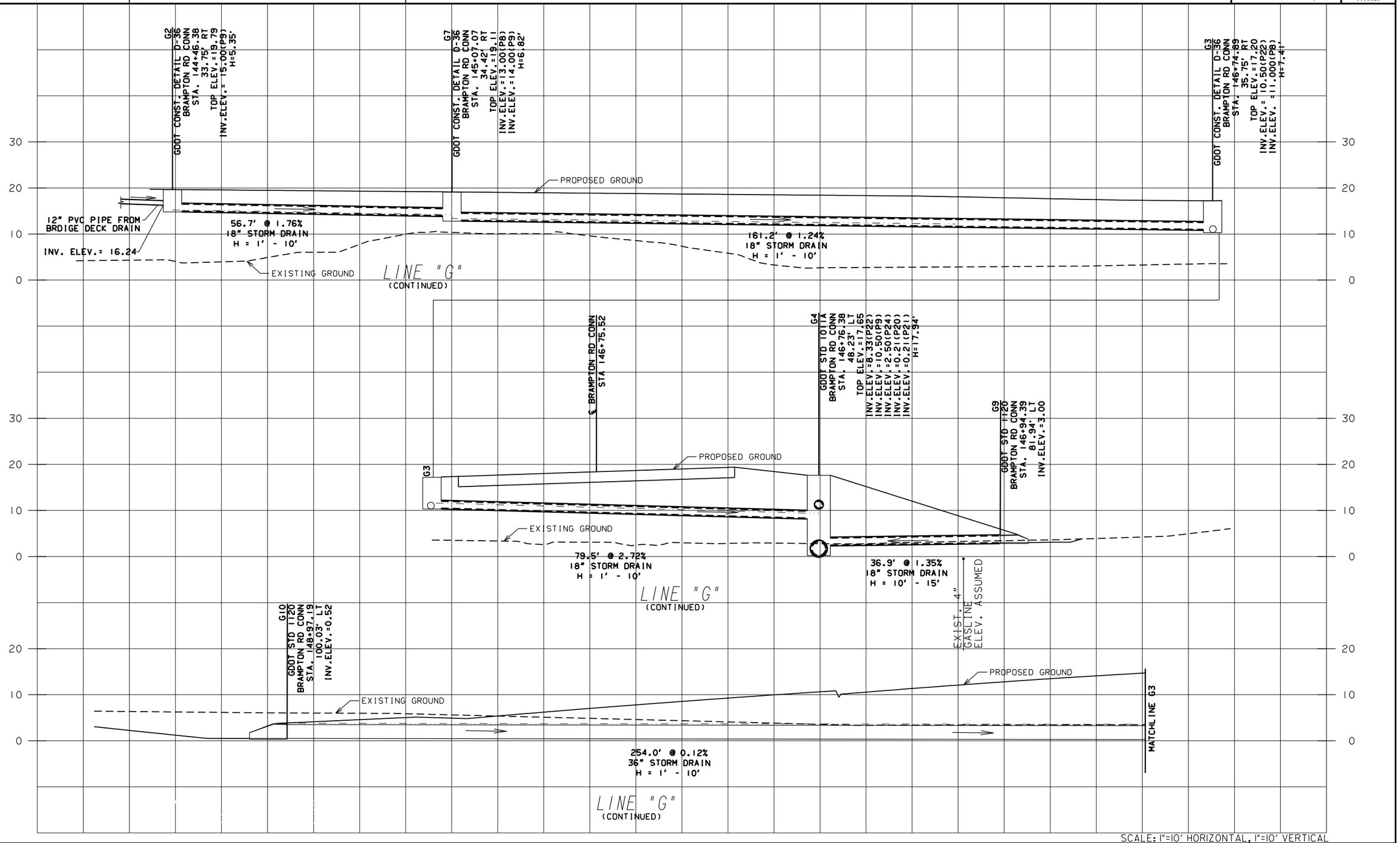
DRAINAGE PROFILES

BRAMPTON ROAD CONNECTOR

SYSTEM F & G

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		22-0005
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

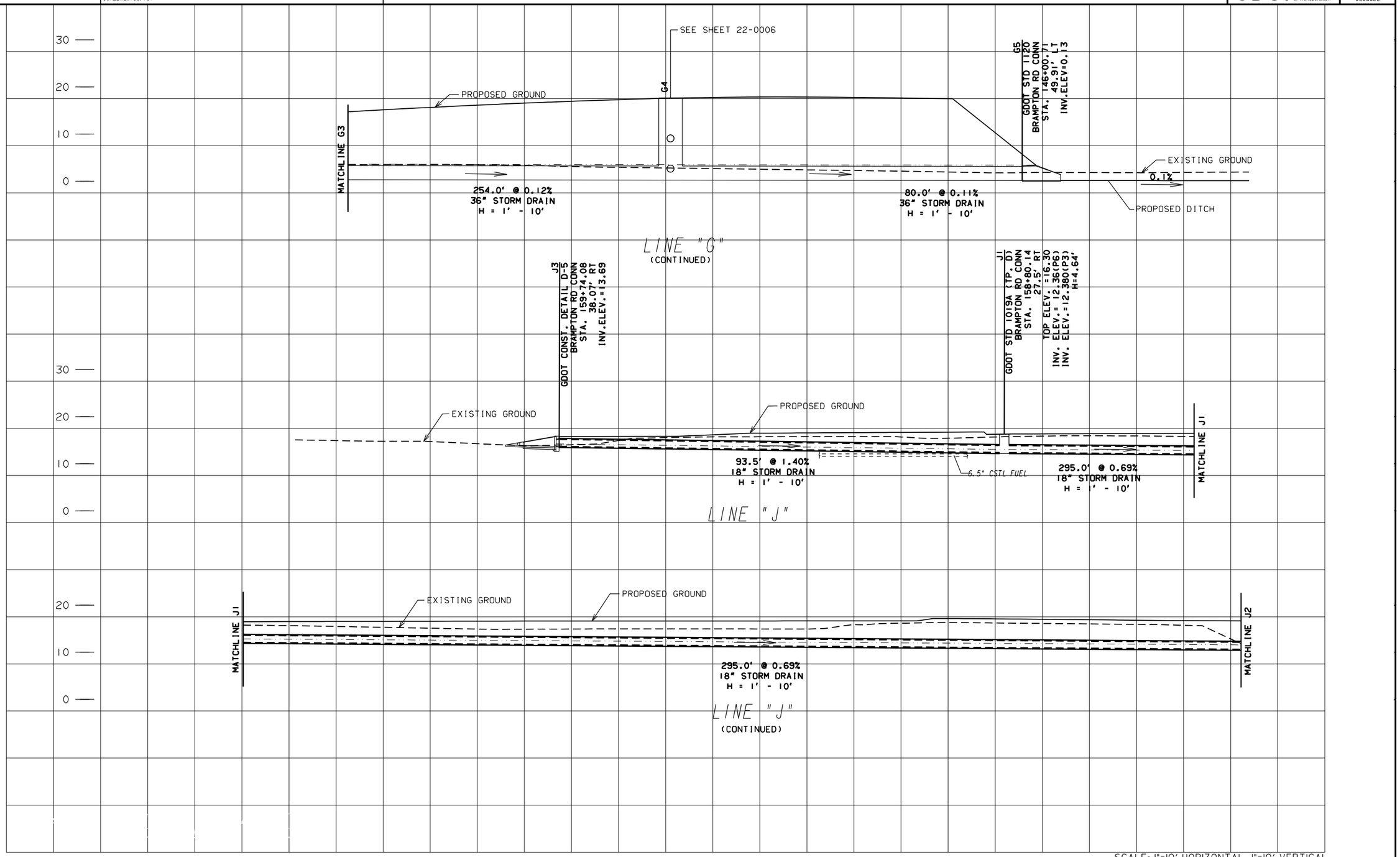
REVISION DATES

DRAINAGE PROFILES

BRAMPTON ROAD CONNECTOR

SYSTEM G

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	22-0006
CORRECTED:		DATE:	
VERIFIED:		DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

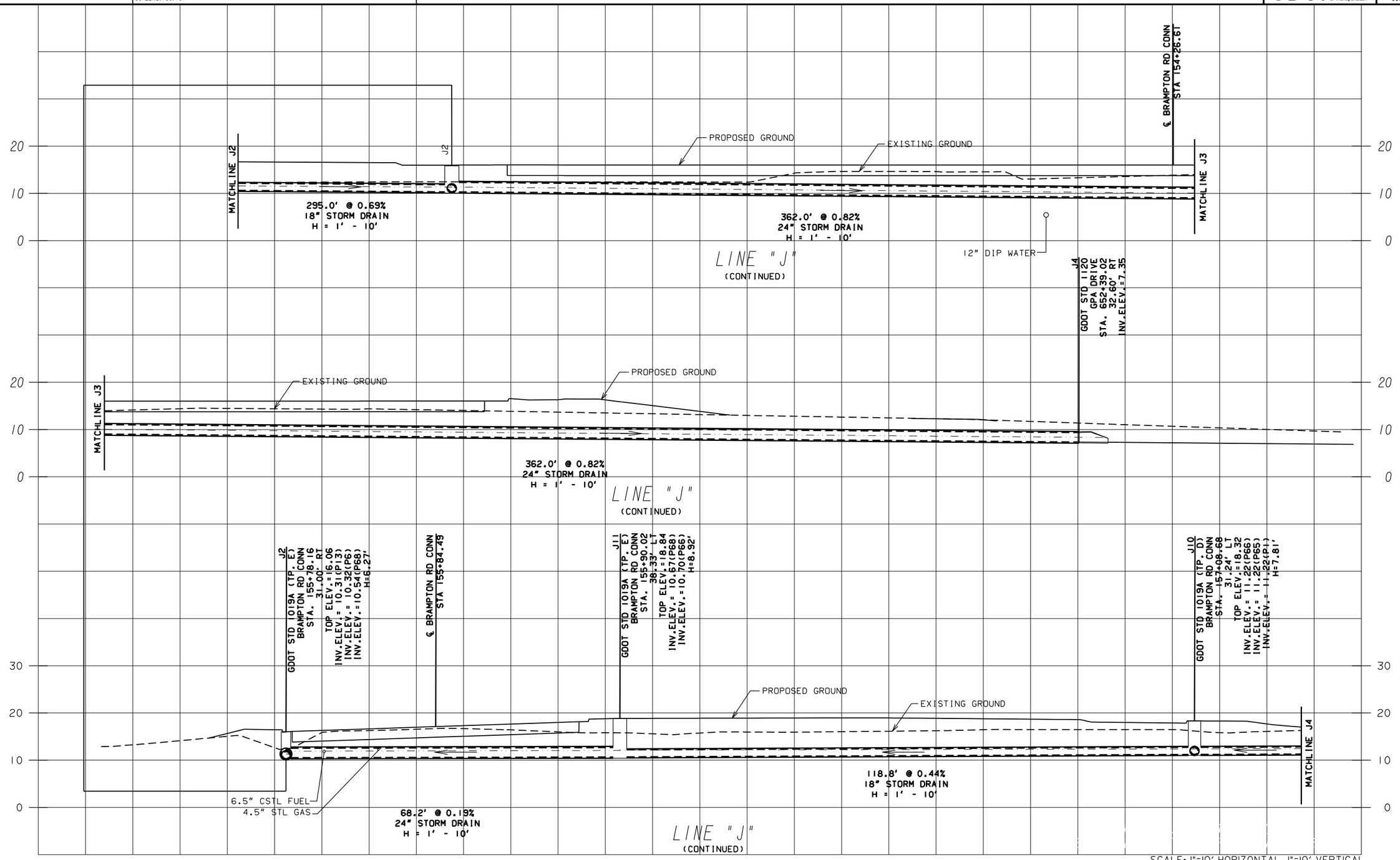
REVISION DATES

DRAINAGE PROFILES

BRAMPTON ROAD CONNECTOR

SYSTEM G & J

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		22-0007
CORRECTED:		DATE:		
VERIFIED:		DATE:		



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

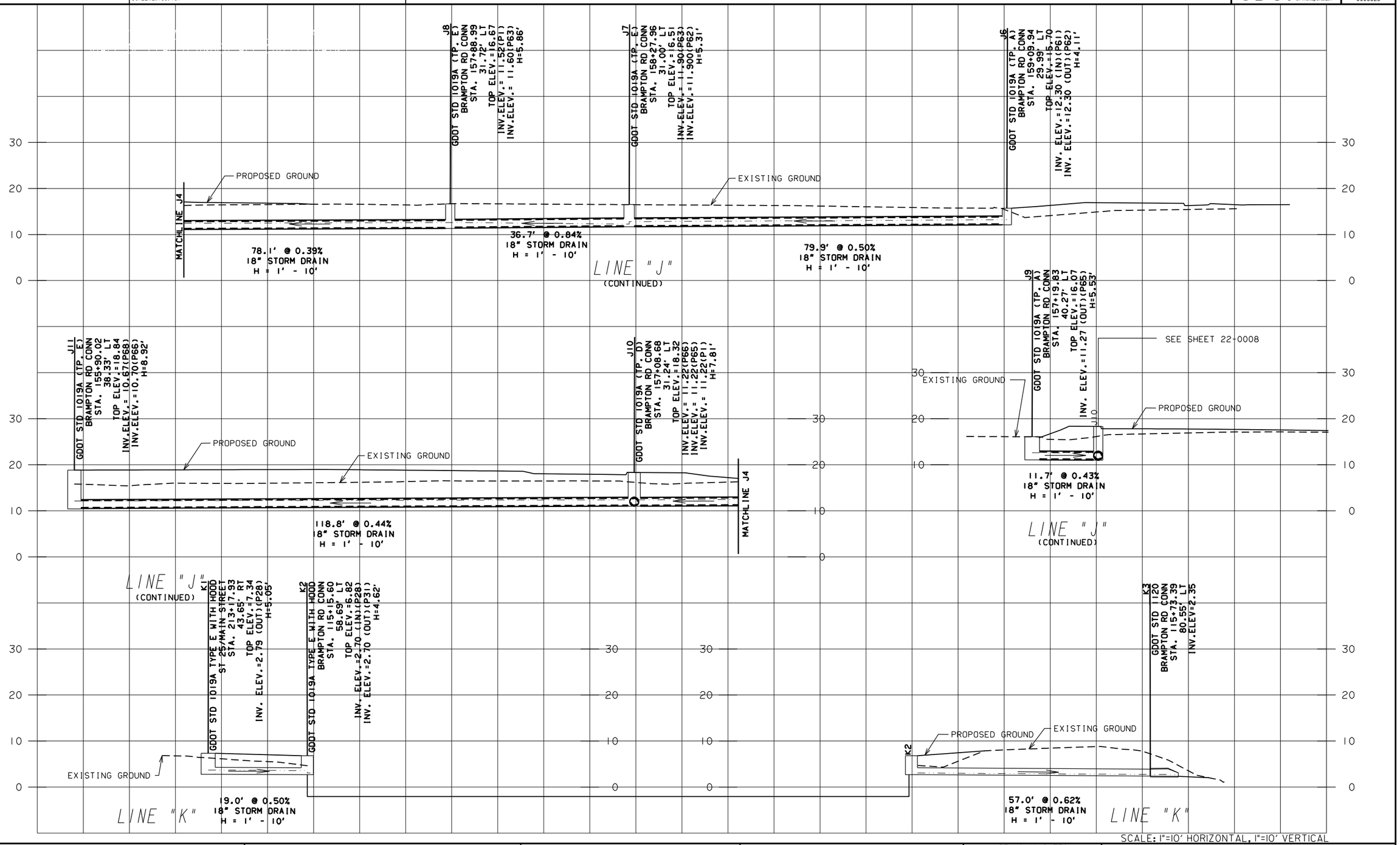
DRAINAGE PROFILES

BRAMPTON ROAD CONNECTOR

SYSTEM J

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	22-0008
CORRECTED:		DATE:	
VERIFIED:		DATE:	

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

DRAINAGE PROFILES

BRAMPTON ROAD CONNECTOR

SYSTEM J & K

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		22-0009
CORRECTED:		DATE:		
VERIFIED:		DATE:		

DATE$$$ TIME$$$
$USER$

$PRFB$
$$PENTABLE$$

DGN

GDOT Georgia Department of Transportation

P. I. No. 0006328

L4
GDOT STD 9031S
RAMP C
STA. 451+06.92
13.31' LT
TOP ELEV.=7.86
INV. ELEV.= 3.49(P45)
H=5.08'

L1
GDOT STD 1019A(TP. 1D)
RAMP C
STA. 451+06.25
21.19' RT
TOP ELEV.=8.57
INV.ELEV.= 3.23(P4)
INV.ELEV.=3.230(P45)
H=6.05'

L2
GDOT STD 1011A
RAMP C
STA. 451+14.44
39.77' RT
TOP ELEV.=6.75
INV.ELEV.=0.54(P41)
INV.ELEV.=0.10(P10)
INV.ELEV.=-0.46(P5)
H=7.92'

L3
WINGED CULVERT
GDOT STD 2405
RAMP C
STA. 451+08.61
51.61' RT
INV.ELEV.= -1.44

EXISTING GROUND
PROPOSED GROUND

32.2' @ 0.79%
18" STORM DRAIN
H = 1' - 10'

16.8' @ 16.06%
18" STORM DRAIN
H = 1' - 10'

10.9' @ 7.41%
18" STORM DRAIN
H = 1' - 10'

LINE "L"

CREATE OPENING IN WALL OF BOX CULVERT. MAX OPENING 2" GREATER THAN OD OF PIPE.

GROUT PIPE INTO OPENING

L3
18" PIPE CONNECTION TO CULVERT
INV.= -1.44
CONNECT TO PROPOSED WINGWALL OF TRIPLE BOX CULVERT 10' X 8'

PIPE CONNECTION TO BOX CULVERT
N.T.S.

EXIST GRATE INLET
RAMP C
STA. 451+39.45
30.97' RT
TOP ELEV.=7.59
INV. ELEV.= 0.60

L2
PROPOSED GROUND
FROM L1

24.0' @ 2.09%
15" STORM DRAIN
(EXIST. PIPE)

EXISTING GROUND

LINE "L"
(CONTINUED)

M4
GDOT STD 1120
RAMP B
STA. 403+03.44
20.58' LT
INV.ELEV=7.98

M1
GDOT STD D-33
RAMP B
STA. 402+62.57
30.60' LT
TOP ELEV.=9.36
INV. ELEV.=5.15 (IN)(P52)
INV. ELEV.=5.15 (OUT)(P54)
H=4.70'

M2
GDOT STD D-33
RAMP B
STA. 402+20.01
23.35' LT
TOP ELEV.=8.67
INV. ELEV.=3.42 (IN)(P54)
INV. ELEV.=3.42 (OUT)(P60)
H=5.75'

M3
GDOT STD D-33
RAMP B
STA. 401+72.5
20.38' LT
TOP ELEV.=9.10
INV. ELEV.=2.85 (IN)(P60)
INV. ELEV.=2.80 (OUT)(P61)
H=6.80'

M5
BOX CULVERT
GDOT STD 2405
RAMP B
STA 401+54.44
INV = 1.88

PROPOSED GROUND

51.0' @ 6.31%
18" STORM DRAIN
H = 1' - 10'

45.0' @ 3.81%
18" STORM DRAIN
H = 1' - 10'

48.0' @ 1.19%
18" STORM DRAIN
H = 1' - 10'

17.0' @ 5.44%
18" STORM DRAIN
H = 1' - 10'

EXISTING GROUND

LINE "M"

N10
GDOT STD 1120
BRAMPTON RD CONN
STA. 150+86.19
46.25' RT
INV. ELEV.=4.61

N11
GDOT STD 1011A
BRAMPTON RD CONN
STA. 151+03.58
46.65' RT
TOP ELEV.=12.59
INV. ELEV.=4.47(P2)
INV. ELEV.=4.12(P53)
H=9.18'

CREATE OPENING IN WALL OF BOX CULVERT. MAX OPENING 2" GREATER THAN OD OF PIPE.

GROUT PIPE INTO OPENING

M5
18" PIPE CONNECTION TO CULVERT
INV.= 1.88
CONNECT TO PROPOSED TRIPLE BOX CULVERT 10' X 8'

PIPE CONNECTION TO BOX CULVERT
N.T.S.

SEE SHEET 22-0011

N11 N2
PROPOSED GROUND

6.9' @ 1.73%
18" STORM DRAIN
H = 1' - 10'

EXISTING GROUND

EXISTING GROUND
PROPOSED GROUND

14.1' @ 1.00%
18" STORM DRAIN
H = 1' - 10'

LINE "N"

LINE "N"

SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

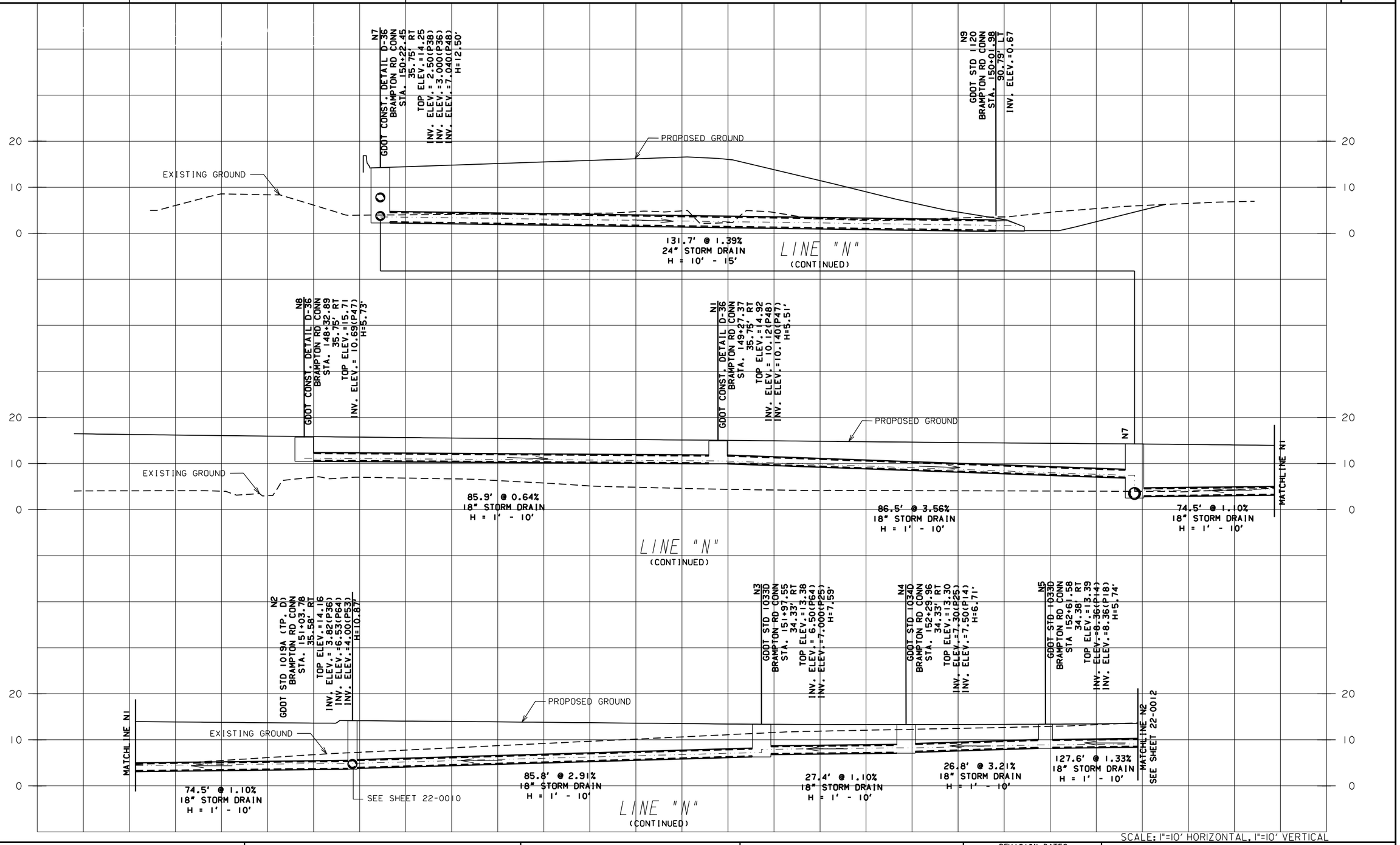
moffatt & nichol

REVISION DATES

DRAINAGE PROFILES
BRAMPTON ROAD CONNECTOR
SYSTEM L & M & N

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		22-0010
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

REVISION DATES

moffatt & nichol

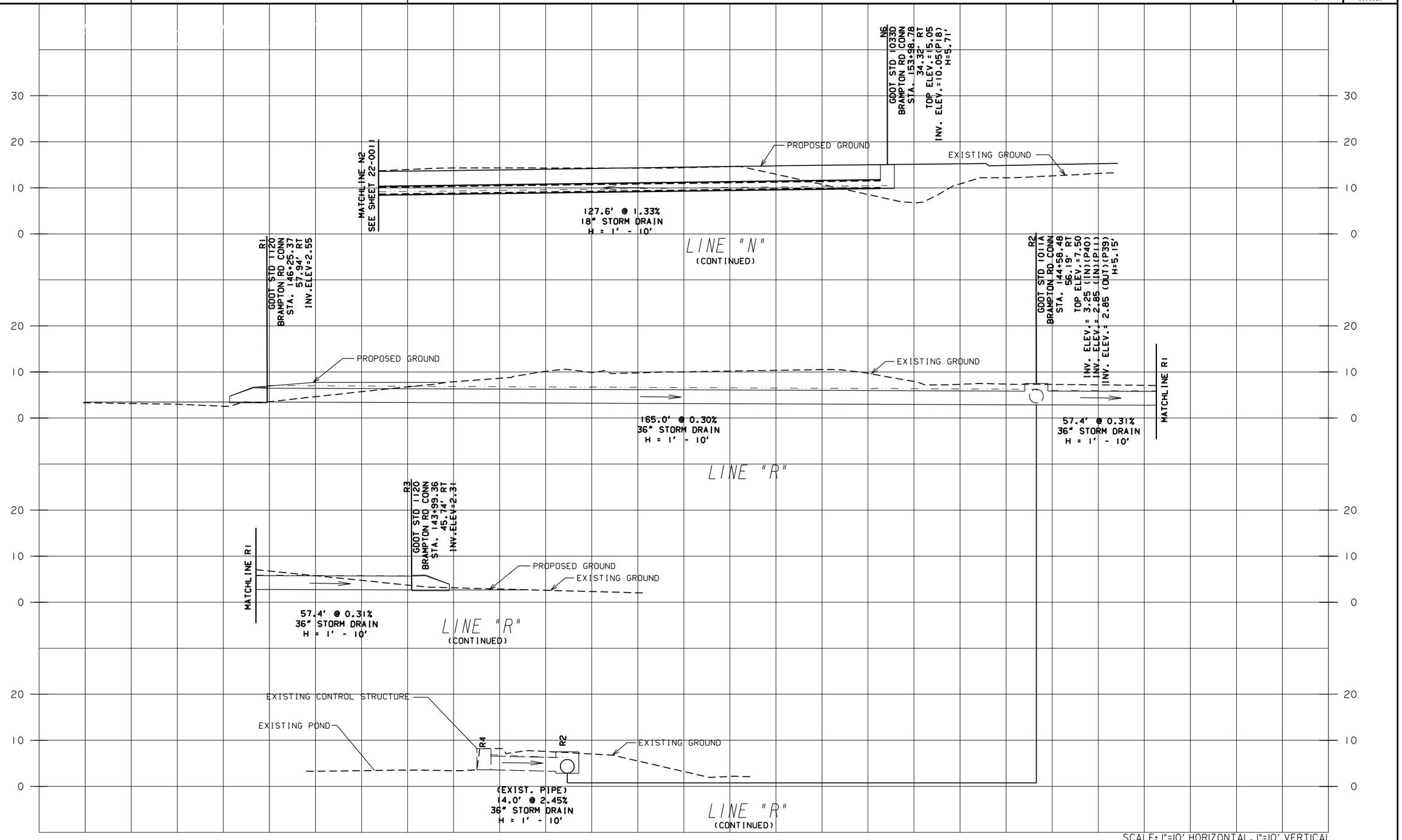
DRAINAGE PROFILES

BRAMPTON ROAD CONNECTOR

SYSTEM N

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	22-0011
CORRECTED:		DATE:	
VERIFIED:		DATE:	

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

DRAINAGE PROFILES

BRAMPTON ROAD CONNECTOR

SYSTEM N & R

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		22-0012
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

MATCH LINE STA. 122+00
DRAWING No. 13-0006

DRAWING No. 13-0006

DRAWING No. 13-0006

REQ'D R/W

REQ'D R/W

DRAWING No. 24-0021

MATCH LINE STA. 60+00

MATCH LINE STA. 65+00

DRAWING No. 24-0023

3
N/F
SOUTHERN REGION
INDUSTRIAL REALTY INC.

PROPOSED ℄
CTL TRACK RR1

60+00 80+00 00+19 90+00 02+62 00+01 03+63 00+11 64+00 12+00

CURVE 15

CURVE 17

CURVE 18

DE13046

DE13020
DE13021

DE13047

PROPOSED ℄
SIDING TRACK RR2

PS STA 60+40.57 (RR1)
STA 7+81.79 (RR2)
ELEV = 12.75
NO. 10 RH TURNOUT, HAND THROWN
BEGIN SIDING TRACK RR2

WETLAND 6

ESA

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

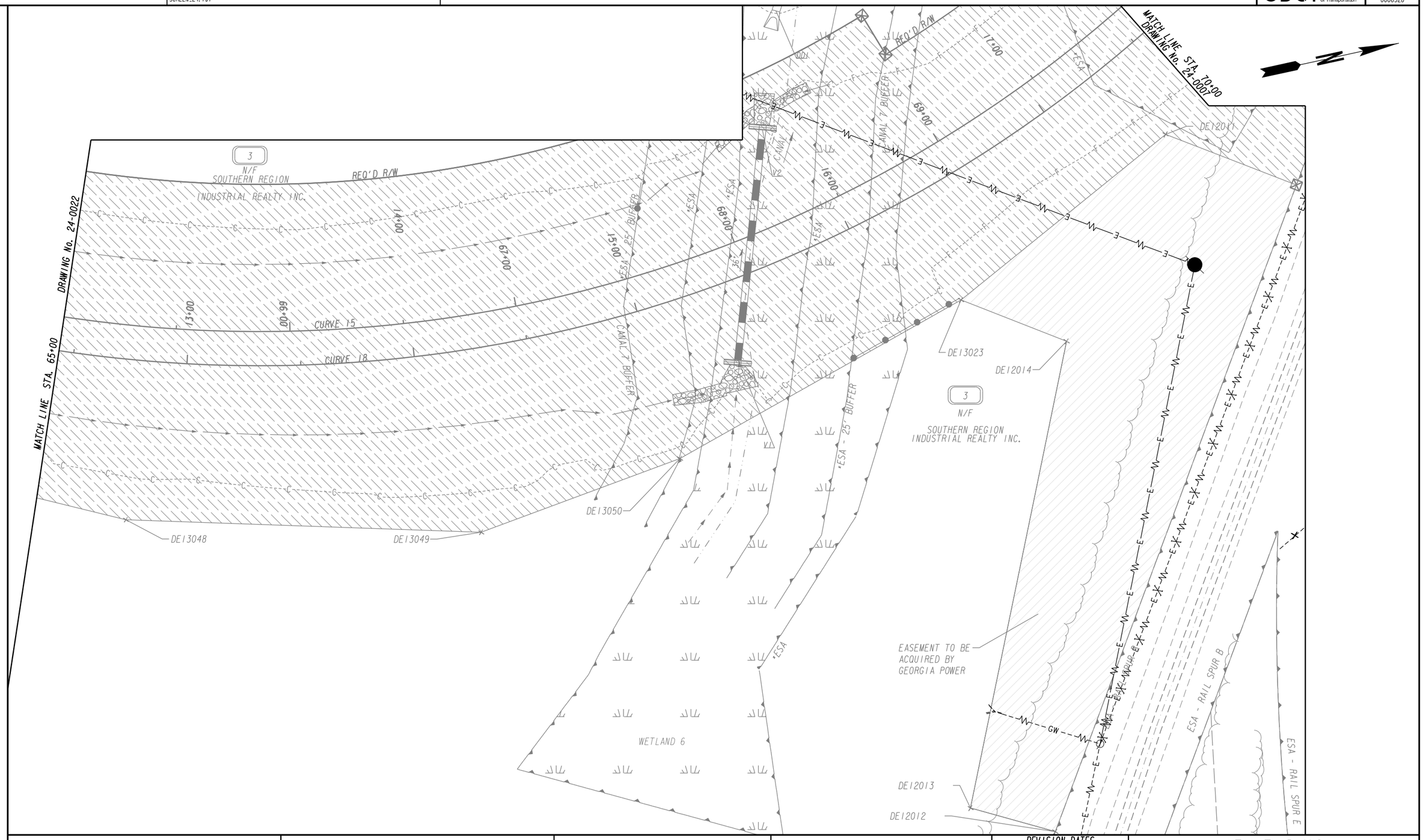
UTILITY PLANS

BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 24-0022

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE	BEGIN LIMIT OF ACCESS.....BLA
REQUIRED R/W LINE	END LIMIT OF ACCESS.....ELA
CONSTRUCTION LIMITS	LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	REQ'D R/W & LIMIT OF ACCESS
EASEMENT FOR CONSTR OF SLOPES	ORANGE BARRIER FENCE
EASEMENT FOR CONSTR OF DRIVES	ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

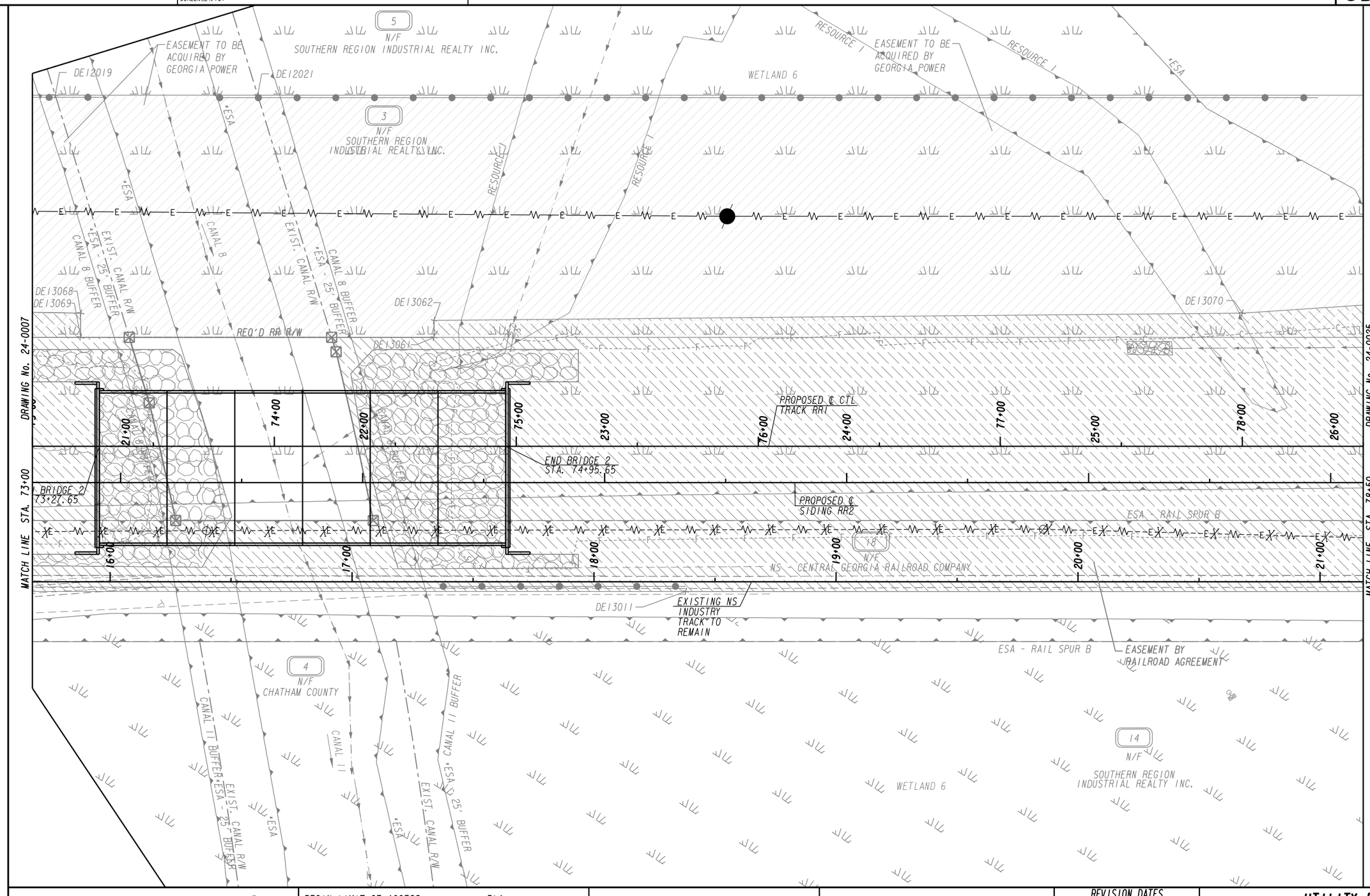
SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 24-0023



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

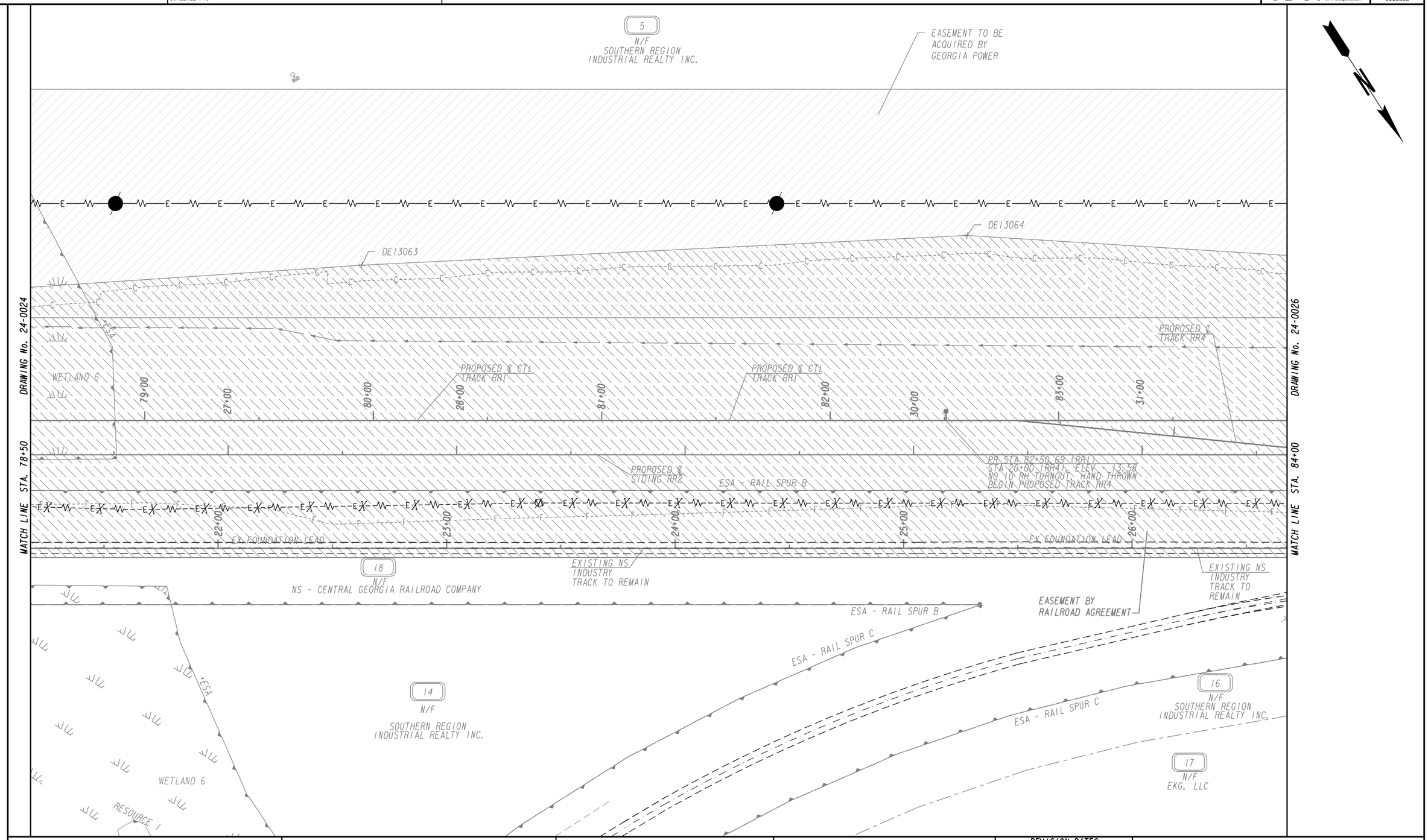
SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-0024
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

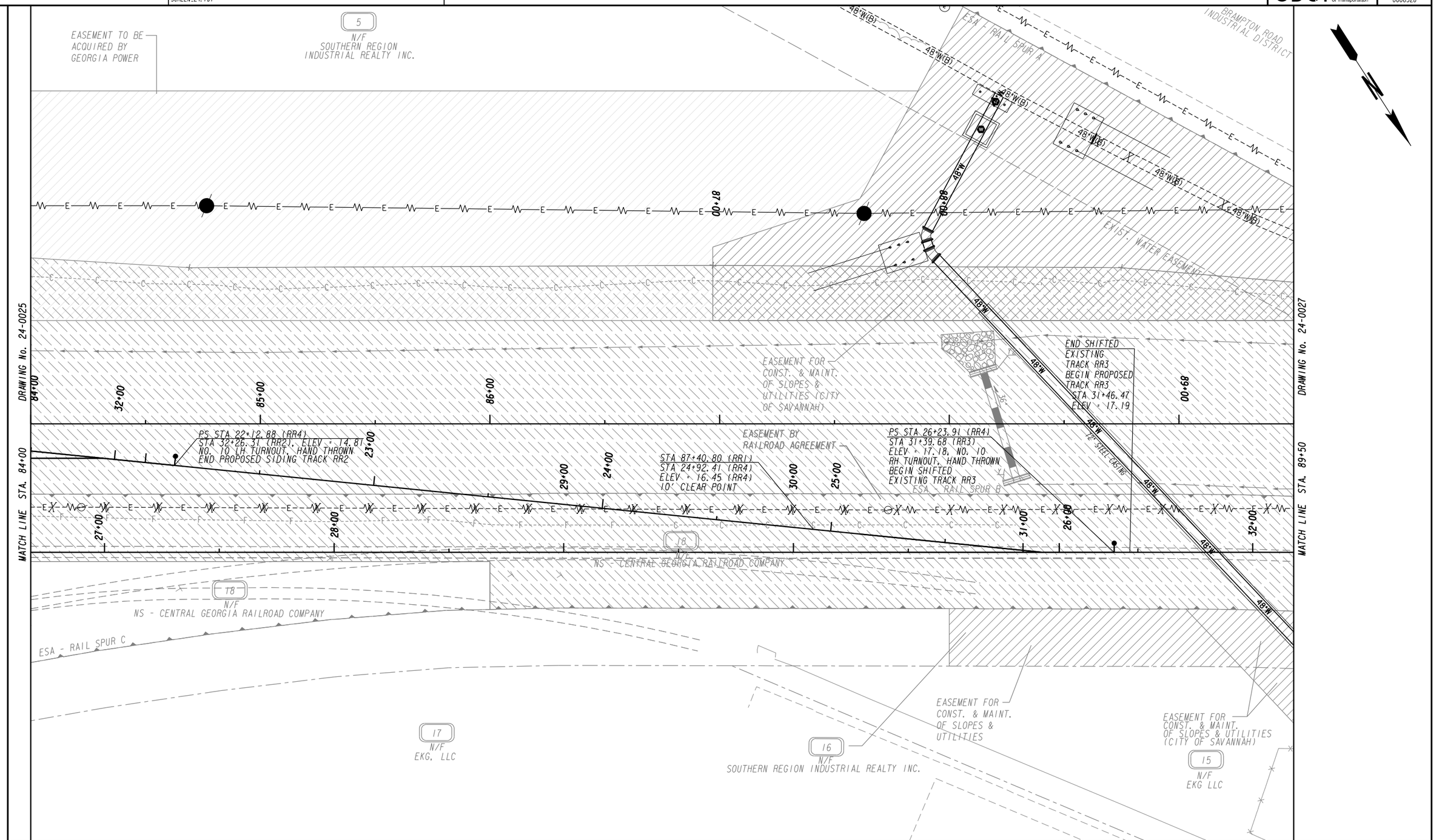
SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-0025
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

UTILITY PLANS

BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	24-0026
CORRECTED:		DATE:	
VERIFIED:		DATE:	

10/23/2015 GPLN

EXIST. R/W

5 N/F SOUTHERN REGION INDUSTRIAL REALTY INC.

2 N/F CHATHAM TERMINAL COMPANY

EASEMENT TO BE ACQUIRED BY GEORGIA POWER

ESA - RAIL SPUR A

239+00

240+00

241+00

N/F GEORGIA POWER COMPANY

MATCH LINE STA. 242+00 DRAWING No. 24-0028

G(B) G(B)

BRAMPTON ROAD INDUSTRIAL DISTRICT

EXIST. R/W

EASEMENT BY RAILROAD AGREEMENT

48"W(B)

MATCH LINE STA. 89+50 DRAWING No. 24-0026

90+00

91+00

92+00

93+00

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (CITY OF SAVANNAH)

EXIST. WATER EASEMENT

CURVE 16

35+00

ESA - RAIL SPUR A

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (CITY OF SAVANNAH)

34+00

36+00

ESA - RAIL SPUR B

EASEMENT BY RAILROAD AGREEMENT

33+00

CURVE 19

MATCH LINE STA. 242+00 DRAWING No. 24-0028

18 N/F NS - CENTRAL GEORGIA RAILROAD COMPANY

ESA - RAIL SPUR B

16 N/F SOUTHERN REGION INDUSTRIAL REALTY INC.

EXISTING FENCE

15 N/F EKG, LLC

6' CHAIN-LINK

48"W

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (CITY OF SAVANNAH)

DO NOT DISTURB

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (CITY OF SAVANNAH)

16 N/F SOUTHERN REGION INDUSTRIAL REALTY INC.

MATCH LINE STA. 94+00 DRAWING No. 24-0028

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

UTILITY PLANS

BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		24-0027
VERIFIED:		DATE:		

10/23/2015 GPLN

TH20
48" DIP WATER
Ground Elev: 18.79'
Utility Depth: 7.49'

TH21
6.5" CSTL FUEL
Ground Elev: 18.56'
Utility Depth: 4.41'

TH23
48" DIP WATER
Ground Elev: 17.51'
Utility Depth: 6.20'

TH24
UNK SIZE DIP WATER
Ground Elev: 17.10'
Utility Depth: 6.80'

TH25
6.5" CSTL FUEL
Ground Elev: 14.65'
Utility Depth: 3.36'

TH26
6.5" CSTL UNK
Ground Elev: 14.58'
Utility Depth: 2.95'

END CURB & GUTTER TP 2
STA 800+82.51 24.00' RT

PLACE:
(1) 24'x36'x36" HANDHOLE
(1) 5/8" X 8' GROUND ROD
LEAVE 150' SLACK LOOP

DIRECTIONAL BORE:
(2) 1.25" HDPE SDR11
(1) 144-CT ARMORED FIBER
(1) 12 GAUGE THHN TRACER WIRE
MINIMUM DEPTH = 42"

16
N/F
SOUTHERN REGION
INDUSTRIAL REALTY INC.

POSIBLE CASING FOR PVC WATER LINE

EXISTING STRAIN POLE

END CURB & GUTTER TP 2
STA 242+58.21 38.00' LT

N 56°08'28.9" E CONST ℄ BRAMPTON ROAD

EXIST. R/W

MATCH LINE STA. 242+00 DRAWING No. 24-0027

MATCH LINE STA. 42+00 DRAWING No. 24-0027

801+00

244+00

243+00

245+00

246+00

N/F
SUNTRUST BANK

EXISTING STRAIN POLE

SIGN

2"STL

℄ SR 25/MAIN ST
STA. 801+83.25 BRAMPTON ROAD

LIMIT OF R/W ACQUISITION
SR 25
244+34.49

N28°49'26.4"W

PC 242+56.03

CURVE 25

CONST ℄ SR 25/MAIN ST

N 25°43'27.4" W

PI 246+75.92

97+00

EXISTING STRAIN POLE

ESA - RAIL SPUR A

BRAMPTON ROAD INDUSTRIAL DISTRICT

DE13000

EASEMENT BY RAILROAD AGREEMENT

EXISTING STRAIN POLE

PT 245+76.85

LIMIT OF CONSTRUCTION
SR 25/MAIN STREET
STA 246+31.00

2
N/F
CHATHAM TERMINAL COMPANY

95+00

96+00

6" STL PIPE
34" OF COVER TYP.

37+00

39+00

CURVE 19

END PROPOSED
TRACK RR3
BEGIN SHIFTED
TRACK RR3
STA 37+72.95
ELEV = 18.46

DE13015

18
N/F
NS - CENTRAL GEORGIA RAILROAD COMPANY

502+00

UPSIZE 40-5 POLE TO
55-3 FT FOR CLEARANCE
OVER DRIVE

50P-266

EXISTING FENCE

EXIST. WATER EASEMENT

ESA - RAIL SPUR B

DE13012

DE13007

20" STEEL CASING

6' CHAIN-LINK

DE13001

ARV

48"W(B)

MATCH LINE DRAWING No. 24-0029

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	24-0028
CORRECTED:		DATE:	
VERIFIED:		DATE:	

10/23/2015 GPLN

MATCH LINE DRAWING No. 24-0027

MATCH LINE DRAWING No. 24-0028

48"W 48"W 48"W 48"W 48"W

6' CHAIN-LINK

GATE

REQ'D R/W

EDGE OF CUL-DE-SAC

R 15.00'
503+01.94
66.44' RT

45'/3
T-1005167
25-2
25-3
37.5-T

PROPOSED SVC DROP TO PROPOSED GA PWR POLE ON S SIDE OF CUL-DE-SAC

15
N/F
EKG LLC

MAINTAIN ACCESS DURING CONSTRUCTION

6' CHAIN-LINK

R 15.00'
503+65.94
50.24' RT

R 80.43'
504+38.65
97.90' RT

EASEMENT FOR
CONST. & MAINT.
OF SLOPES AND UTILITIES
(CITY OF SAVANNAH)

16
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.

17
N/F
EKG, LLC

IRR. PIVOT PT.

REQ'D R/W

EXIST. 20' WATER EASMT

EXIST. R/W

BRAMPTON ROAD INDUSTRIAL DISTRICT

LIMIT OF CONSTRUCTION
BRAMPTON ROAD
STA 505+07.00

50'/3

TH18

TH19

6.5" CSTL

2.5"STL

25P-24G, 1IP-22G IN 4" CONDUIT

EDGE OF CUL-DE-SAC
BRAMPTON ROAD
N55°46'27.1"E

OBLITERATE EXISTING PAVEMENT
GRADE TO DRAIN & GRASS

EXIST. WATER EASEMENT

503+00 ATT 45-5 POLE TO UPSIZE TO 55-3 FT FOR CLEARANCE OVER DRIVE
ATT TRANSFER SVC

9
N/F
GEORGIA PORTS AUTHORITY

3-SVR WIRES

55'/3

REPLACE 3 AERIAL SERVICE WIRES 4.00'
503+47.22
53.95' LT

78

504+00

DIRECTIONAL BORE:
(2) 1.25" HDPE SDR11
(1) 144-CT ARMORED FIBER
(1) 12 GAUGE THHN TRACER WIRE
MINIMUM DEPTH = 42"

EXIST. AERIAL 48FOC & 400PR-24G TO REMAIN

EXIST. 15' UTILITY EASMT

505+00

COMCAST BURIED FIBER CABLE

TH18
12" DIP WATER
Ground Elev: 17.23'
Utility Depth: 3.30'

TH19
6.5" CSTL FUEL
Ground Elev: 18.16'
Utility Depth: 3.92'

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
06-30-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-0029
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

DIRECTIONAL BORE:
(2) 1.25" HDPE SDR11
(1) 144-CT ARMORED FIBER
(1) 12 GAUGE THHN TRACER WIRE
MINIMUM DEPTH = 42"

9 N/F GEORGIA PORTS AUTHORITY

PROPOSED:
140' X 4" STEEL GAS MAIN
WT: 0.156/GRADE: X-52
NOP: 150 PSIG

PROPOSED:
4" GAS VALVE

LIMIT OF CONSTRUCTION
BEGIN WIDENING & OVERLAY
BRAMPTON ROAD
STA 511+00.00

24 CT FIBER, 0.875 / 0.625
AERIEL COAX TRUNK/FEEDER
CABLE ON NEW 1/4 INCH
STRAND TO BE INSTALLED ON
NEW OVERHEAD GPC POLES.

4" STEEL GAS MAIN
40 PSIG NOP
GRADE B/.156 WALL

60' SS
CONCRETE

511+00 512+00 513+00 514+00 515+00

EXIST. R/W

NBSW E

EXIST. AERIAL 48FOC & 400PR-24G TO REMAIN

2.5" STL

EXISTING 36" RCP TO REMAIN

POST (TYP.)

EXIST. PIPE TO REMAIN

BEGIN 2-FOOT PAVED SHOULDER STA 513+88.5 LT

NBSW G

NBSW E

EXIST. R/W

EXIST. AERIAL 48FOC & 400PR-24G TO REMAIN

"10"" OAK" TREE "6"" OAK" TREE "4"" OAK" TREE "8"" OAK" TREE

TH13
6.5" CSTL FUEL
Ground Elev: 8.16'
Utility Depth: 2.56'

TH14
12" DIP WATER
Ground Elev: 9.56'
Utility Depth: 3.45'

TH15
4.5" STL GAS
Ground Elev: 10.83'
Utility Depth: 3.64'

TH28
4.5" STL GAS
Ground Elev: 7.53'
Utility Depth: 3.64'

EXIST BURIED
25PR-22G IN
4" CONDUIT
TO REMAIN

CONST ℄ /BRAMPTON ROAD

GPC/45'

NBSW F

6.5" CSTL

BRAMPTON ROAD INDUSTRIAL DISTRICT

12" DIP

3-795AAC+4/0ACSRN

EXIST. R/W

60' SS
CONCRETE

EXIST. 20' WATER EASMT

"14"" PALM TREE" TREE

"10"" PALM TREE" TREE

"6"" CREPE MYRTLE" TREE

55'/3

13 N/F ATLANTA GAS LIGHT CO

CUT & CAP
TIE-INTO 4" STEEL GAS MAIN
WT: UNK/GRADE: UNK
NOP 150 PSIG
INSTALL TEST STATION

GPC/45'
T*1005189

N/F SOUTHERN NATURAL PIPELINE

"2""MAPLE" TREE

TIE-INTO 4" STEEL GAS MAIN
WT: UNK/GRADE: UNK
NOP 150 PSIG
INSTALL TEST STATION

EXISTING FENCE

GRATE INLET
TOP 11.20
I.E. (E) 6.20

CURVE 12

EXISTING FENCE

EXIST. 20' WATER EASMT

W4" STEEL GAS MAIN
150 PSIG NOP
55'/3GRADE/WALL UNKNOWN

55'/3
TW1 VWC11
600 PROG

*ESA - 25' BUFFER *ESA

CANAL 12 BUFFER

24" STEEL CASING

EXIST. GAS EASEMENT

REQ'D R/W

8 N/F MCDONALD VENTURES XXI LLC

WETLAND 10
AA2

STA 514+78.04 BRAMPTON RD
STA 650+00.00 GPA DRIVE

GPA DRIVE

N55°32'13.0"E

4"STL

3-795AAC+4/0ACSRN

EXIST. R/W

*ESA - 25' BUFFER *ESA

CANAL 12 BUFFER

MATCH LINE STA. 515+50

DRAWING No. 24-0011

MATCH LINE STA. 652+00

DRAWING No. 24-0012

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
06-02-21
06-30-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-0030
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

MATCH LINE
DRAWING No. 24-0008

ESA - RAIL SPUR E
ESA - RAIL SPUR D
ESA - RAIL SPUR D
ESA

EXIST. GAS EASEMENT
EXIST. GAS EASEMENT

4" STEEL GAS MAIN
150 PSIG MOP
GRADE/WALL UNKNOWN

SNG GAS MAIN
TO BE RELOCATED
BY OTHERS

EASEMENT FOR
CONST. & MAINT.
OF SLOPES &
UTILITIES (SOUTHERN
NATURAL GAS)
EASEMENT 2

EXISTING
4" GAS VALVE

4.00
12" CMP
NE 326

WETLAND 6
EASEMENT FOR
CONST. & MAINT.
OF SLOPES &
UTILITIES (SOUTHERN
NATURAL GAS)
EASEMENT 1

PROPOSED AGL
2120' X 4" STEEL GAS MAIN
WT: 0.188/GRADE: X-52
MOP: 150 PSIG

6
N/F
SOUTHERN REGION
INDUSTRIAL REALTY INC.

EXISTING
4" STEEL GAS MAIN
WT: 0.156/GRADE :X42
MOP: 150 PSIG
CP RECTIFIER

CUT & CAP
TIE INTO 4" STEEL GAS MAIN
WT: UNK/GRADE: UNK
MOP 150 PSIG
INSTALL TEST STATION

EASEMENT FOR
CONST. & MAINT.
OF SLOPES &
UTILITIES (SOUTHERN
NATURAL GAS)
EASEMENT 3

4" STEEL GAS MAIN
150 PSIG MOP
GRADE X52/. 156 WALL

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

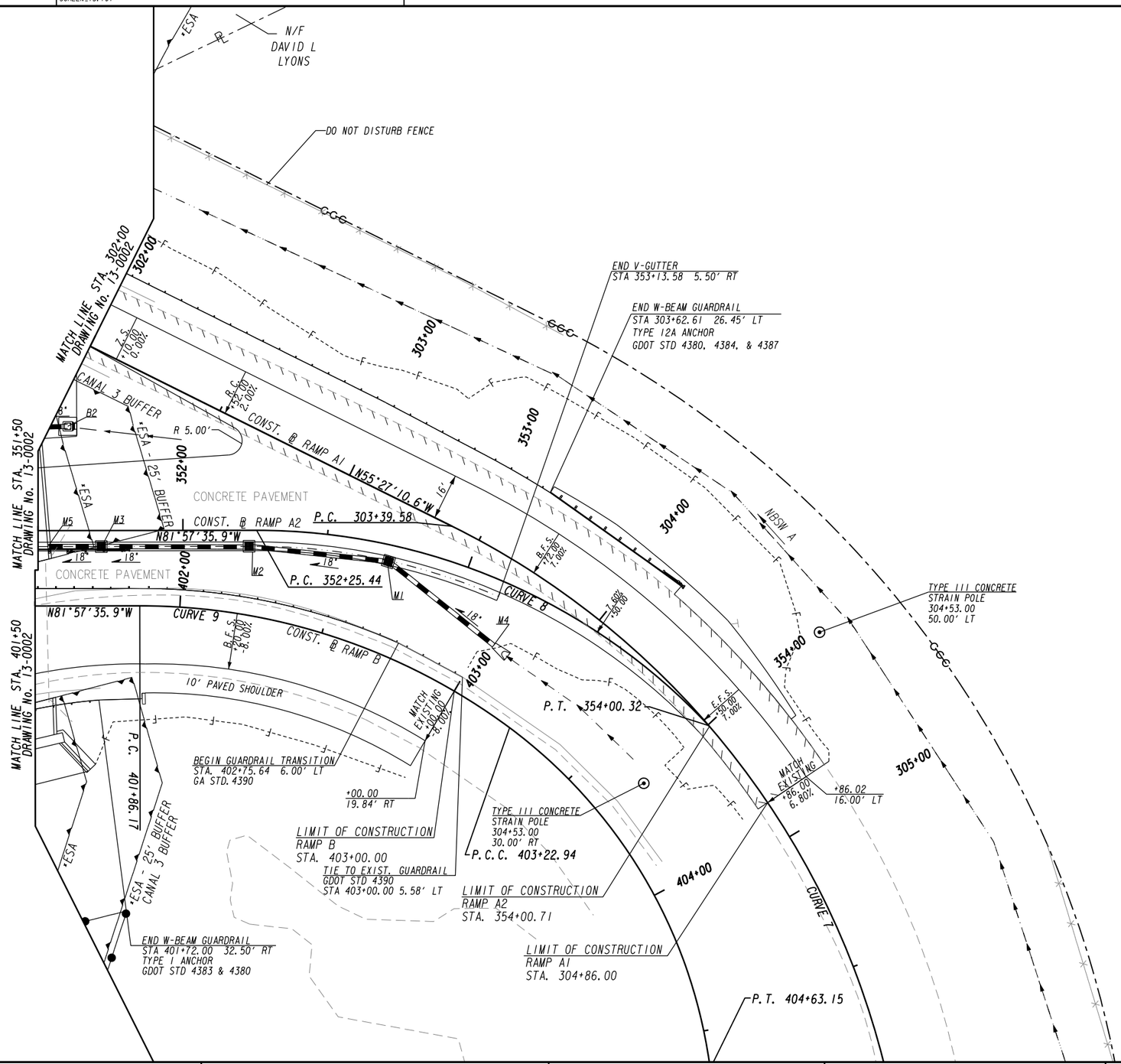
REVISION DATES
05-12-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 24-0031

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

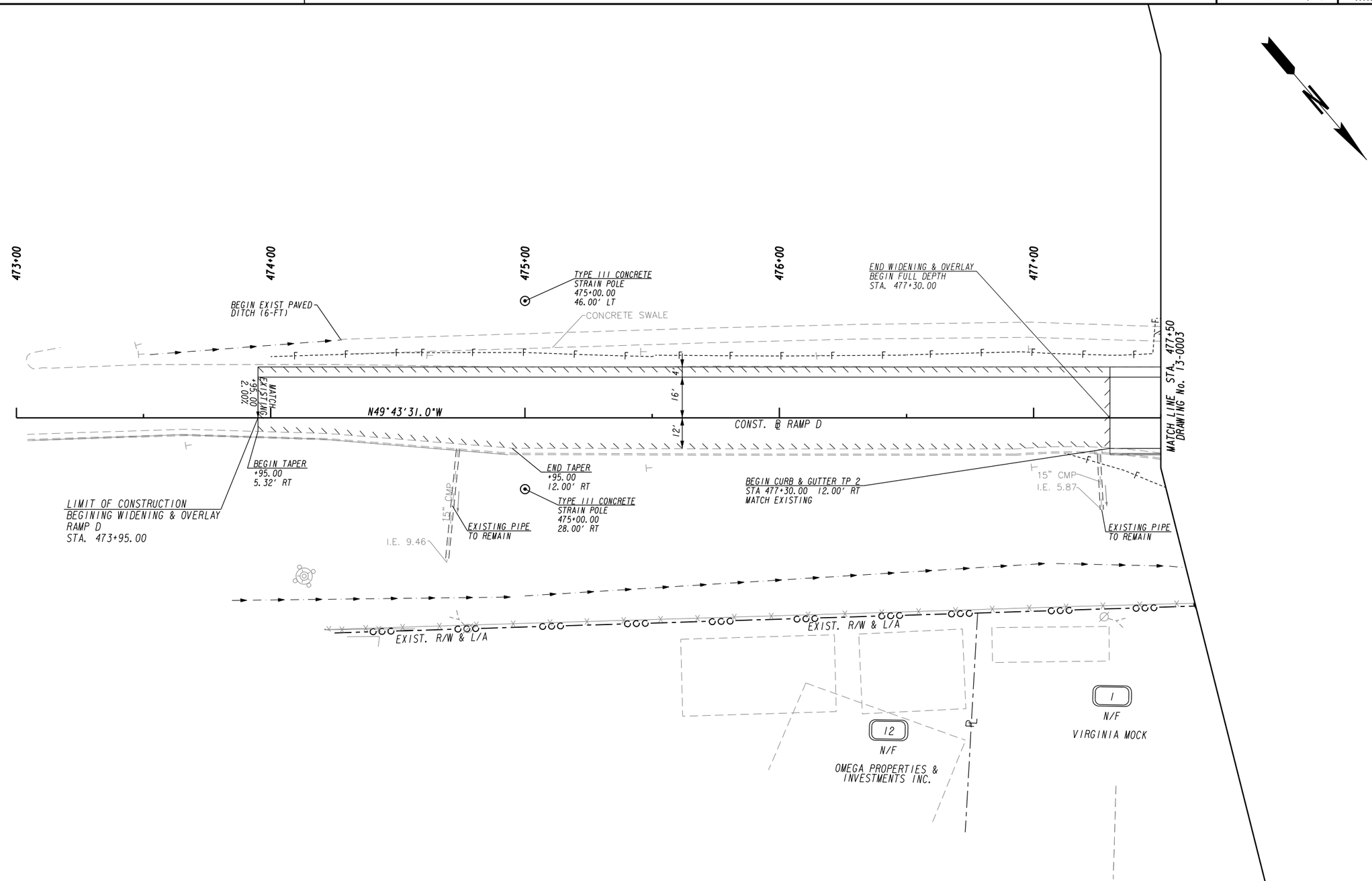
REVISION DATES

CONSTRUCTION PLAN

BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0015
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

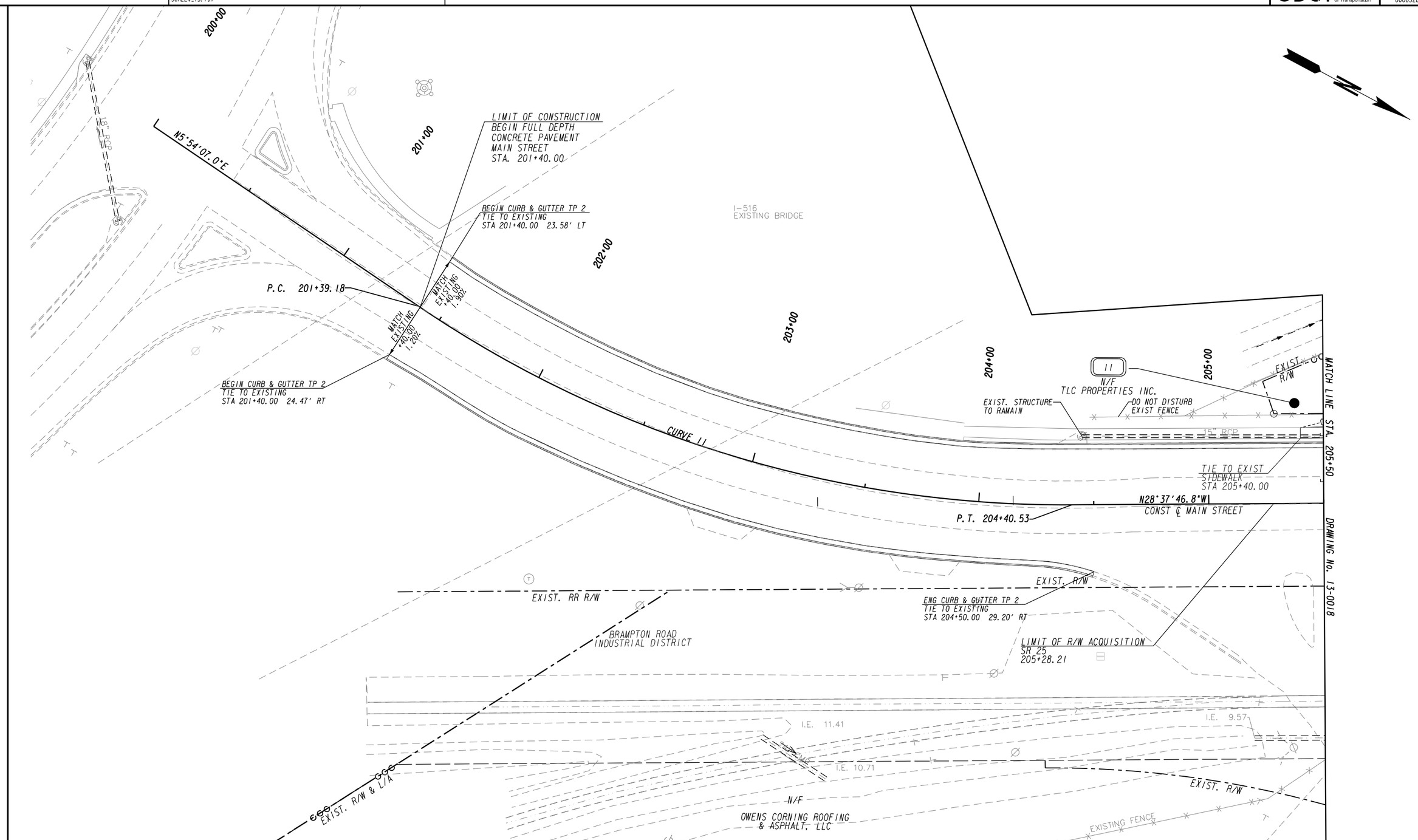
SCALE IN FEET
0 20 40 80

REVISION DATES

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0016
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

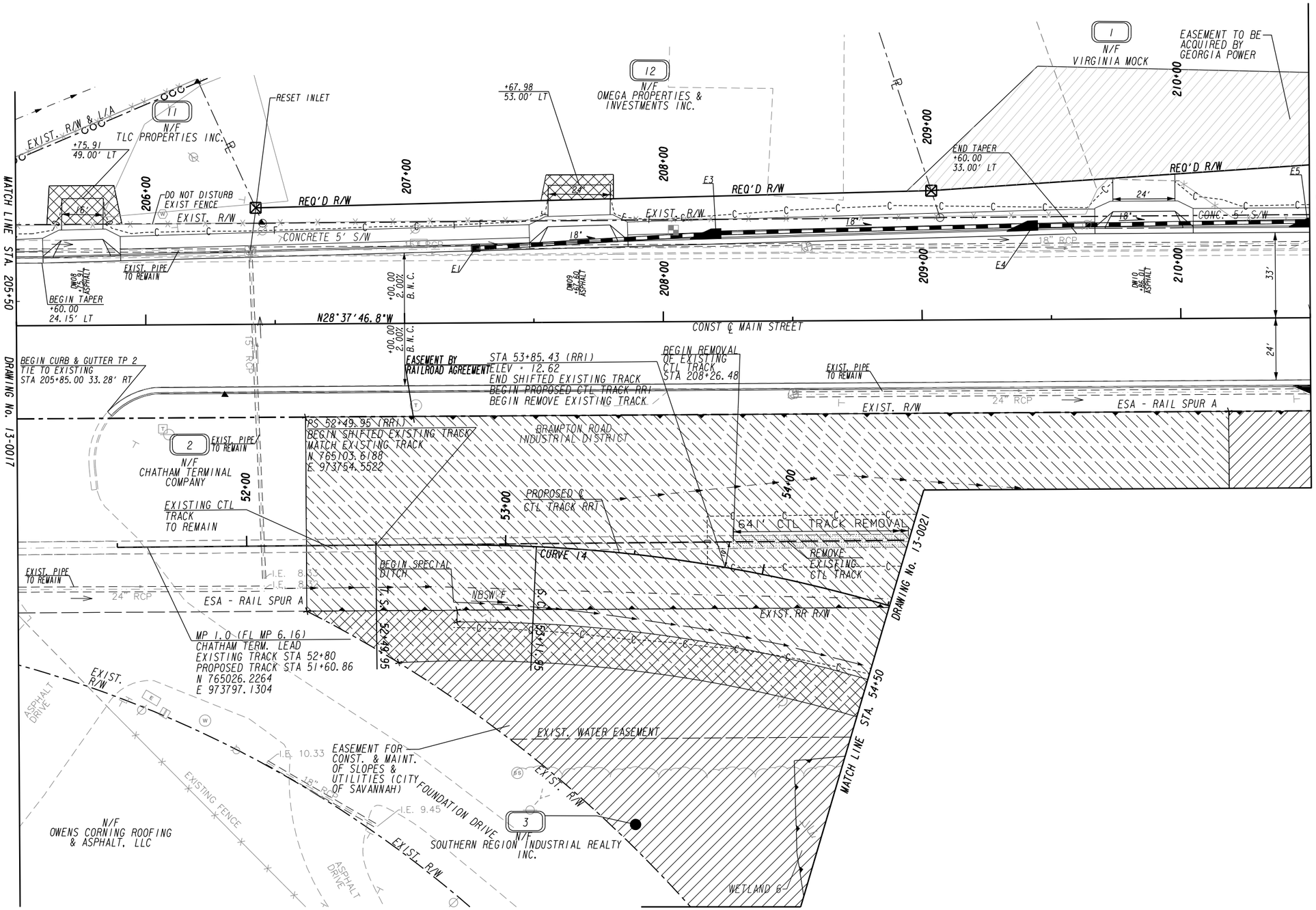
REVISION DATES

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 13-0017

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21
06-30-21
01-16-23

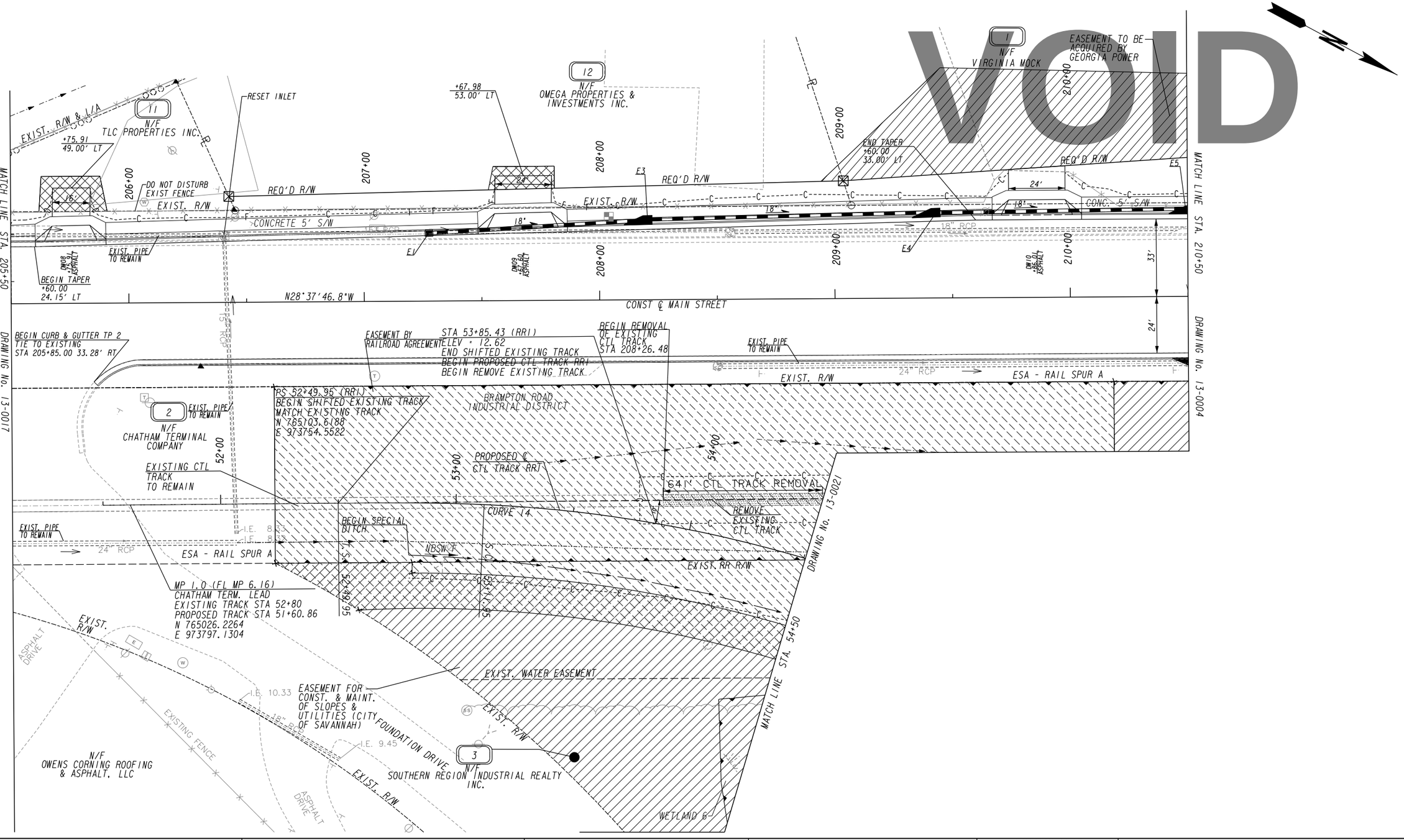
CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	13-0018
VERIFIED:		DATE:	

10/23/2015 GPLN

Not to be Used on Construction

VOID



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21
06-30-21

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0018
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

EXIST. GA POWER EASEMENT
EASEMENT TO BE ACQUIRED BY GEORGIA POWER
*ESA - 25' BUFFER
EXIST. R/W & LTA
*ESA
CANAL 5 BUFFER *ESA
CANAL 5
BEGIN APPROACH SLAB
END EXIST. BRIDGE
STA 214+61.01
+46.42
36.00' LT
BEGIN MILL & INLAY
STA. 214+80.92
END EXISTING
APPROACH SLAB
STA. 214+80.92
CONC. WALK
EXISTING FENCE
N/F
TRAFFIC CIRCLE SHOPPING CENTER
N/F
GARDEN CITY
EXIST. 20' UTILITY EASMT
BEGIN TAPER
+24.33
36.00' LT
NBSW D
N/F
MORTON & BAXTOR
KAREN & BETTY
EXIST. R/W
EXISTING FENCE
214+00
215+00
216+00
217+00
218+00
219+00
15" RCP
15" RCP
30" RCP
12" RCP
EXISTING 24" RCP TO REMAIN
EXISTING 24" RCP TO REMAIN
EXISTING 30" RCP TO REMAIN
36'
24"
24" RCP
N28°37'46.8"W
CONST ℄ SR 25/MAIN STREET
BEGIN EXISTING RR BRIDGE
STA 214+67.40
85.39' RT
REMOVE EXISTING RR BRIDGE
RESTORE CANAL TO ORIGINAL CONDITION
END EXISTING RR BRIDGE
STA 215+54.52
85.45' RT
END REMOVAL OF EXISTING CTL TRACK
STA 215+94.52
EXISTING 15" RCP TO REMAIN
+03.92
24.00' RT
EXIST. R/W
ESA - RAIL SPUR A
15" RCP
15" RCP
EXIST. R/W
EXIST. PIPE TO REMAIN
BRAMPTON ROAD
NBSW C INDUSTRIAL DISTRICT
2
N/F
CHATHAM TERMINAL COMPANY
REMOVE EXISTING CTL TRACK
EASEMENT BY RAILROAD AGREEMENT
40' CTL TRACK REMOVAL
INSTALL EARTHMOUND
EXIST. RR R/W
NBSW B
ESA - RAIL SPUR A
EXISTING CTL TRACK TO REMAIN
EXIST. RR R/W
CANAL 5 BUFFER *ESA
*ESA
CANAL 5
*ESA
*ESA - 25' BUFFER
EXIST. CANAL R/W
EXIST. CANAL R/W
EXIST. WATER EASEMENT
WETLAND 6
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.
MATCH LINE STA. 214+00 DRAWING No. 13-0004
MATCH LINE STA. 219+50 DRAWING No. 13-0020

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0019
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

N/F
MORTON & BAXTOR
KAREN & BETTY

N/F
SHAVERS & BAXTER
DEZZIE JR & BETTY

N/F
LL, LLC

N/F
SOMMERS BROTHERS
PARTNERSHIP

N/F
SOMMERS BROTHERS
PARTNERSHIP

220+00 221+00 222+00 223+00 224+00

MATCH LINE STA. 219+50

DRAWING No. 13-0019

END TAPER
+00.00
38.80' LT

LIMIT OF CONSTRUCTION
END MILL & INLAY
SR 25/MAIN STREET
STA 220+00.00

36'

MATCH EXISTING
+00.00
1.60'

CONST. ℄ SR 25/MAIN STREET

N28°37'46.8"W

24'

MATCH EXISTING
+00.00
2.80'

EXIST. PIPE
TO REMAIN

ESA - RAIL SPUR A

BRAMPTON ROAD
INDUSTRIAL DISTRICT

NBSW C

+00.00
24.00' RT

24" RCP

EXISTING CTL
TRACK
TO REMAIN

I.E. -0.61

EXIST. RR R/W

EXIST. RR R/W

ESA - RAIL SPUR A

N/F
SOUTHERN REGION
INDUSTRIAL REALTY
INC.

EXIST. WATER EASEMENT

WETLAND 6

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0020
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

MATCH LINE STA. 210+50 DRAWING No. 13-0004
MATCH LINE STA. 210+50 DRAWING No. 13-0018
MATCH LINE DRAWING No. 13-0004
MATCH LINE STA. 118+00 DRAWING No. 13-0005
MATCH LINE STA. 118+00 DRAWING No. 13-0004
MATCH LINE STA. 60+00 DRAWING No. 13-0022
MATCH LINE STA. 54+50 DRAWING No. 13-0018
EXIST. WATER EASEMENT
REQ'D R/W
EXIST. R/W
3 N/F SOUTHERN REGION INDUSTRIAL REALTY INC.
2 N/F CHATHAM TERMINAL COMPANY
PROPOSED ℄ CTL TRACK RR1
ESA
RAIL SPUR A EXIST. RR R/W
NBSW B
CTL TRACK REMOVAL
RIP RAP TP. 3, 18"
REMOVE EXISTING CTL TRACK
EASEMENT BY RAILROAD AGREEMENT
CURVE 14
END SPECIAL DITCH
EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (CITY OF SAVANNAH)
WETLAND 6
C.S. 57+90.04
S.T. 58+52.04
51+00
55+00
56+00
58+00
59+00
60+00

TH29
48" DIP WATER
Ground Elev: 7.26'
Utility Depth: 4.03'

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		13-0021
VERIFIED:		DATE:		

10/23/2015 GPLN

MATCH LINE STA. 122+00 DRAWING No. 13-0006

DRAWING No. 13-0006

DRAWING No. 13-0005

REQ'D R/W

REQ'D R/W

DRAWING No. 13-0021

MATCH LINE STA. 60+00

MATCH LINE STA. 65+00

DRAWING No. 13-0023

BEGIN SPECIAL DITCH

POB 7+81.79

60+00

8+00

61+00

9+00

62+00

ITSA

P.C. 9+24.04

C3
N/F
SOUTHERN REGION
INDUSTRIAL REALTY INC.

10+00

P.T. 10+00.90

PROPOSED ℄
CTL TRACK RR1

63+00

11+00

64+00

SIDE SLOPES
4:1 MAX

SIDE SLOPE 4:1 MAX
(EL. 9 TO EL. 12)

T.S. 64+27.02

PERMANENT POOL
ELEV. 9.0

S.C. 64+88.02

12+00

CURVE 15

CURVE 17

CURVE 18

18"

T.S. 11+68.94

S.C. 12+50.94

BEGIN SPECIAL DITCH

P.I. 8+13.04

P.I. 9+62.50

PS STA 60+40.57 (RR1)
STA 7+81.79 (RR2)
ELEV = 12.75
NO. 10 RH TURNOUT, HAND THROWN
BEGIN SIDING TRACK RR2

PROPOSED ℄
SIDING TRACK RR2

WETLAND 6

ESA

3
N/F
SOUTHERN REGION
INDUSTRIAL REALTY INC.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

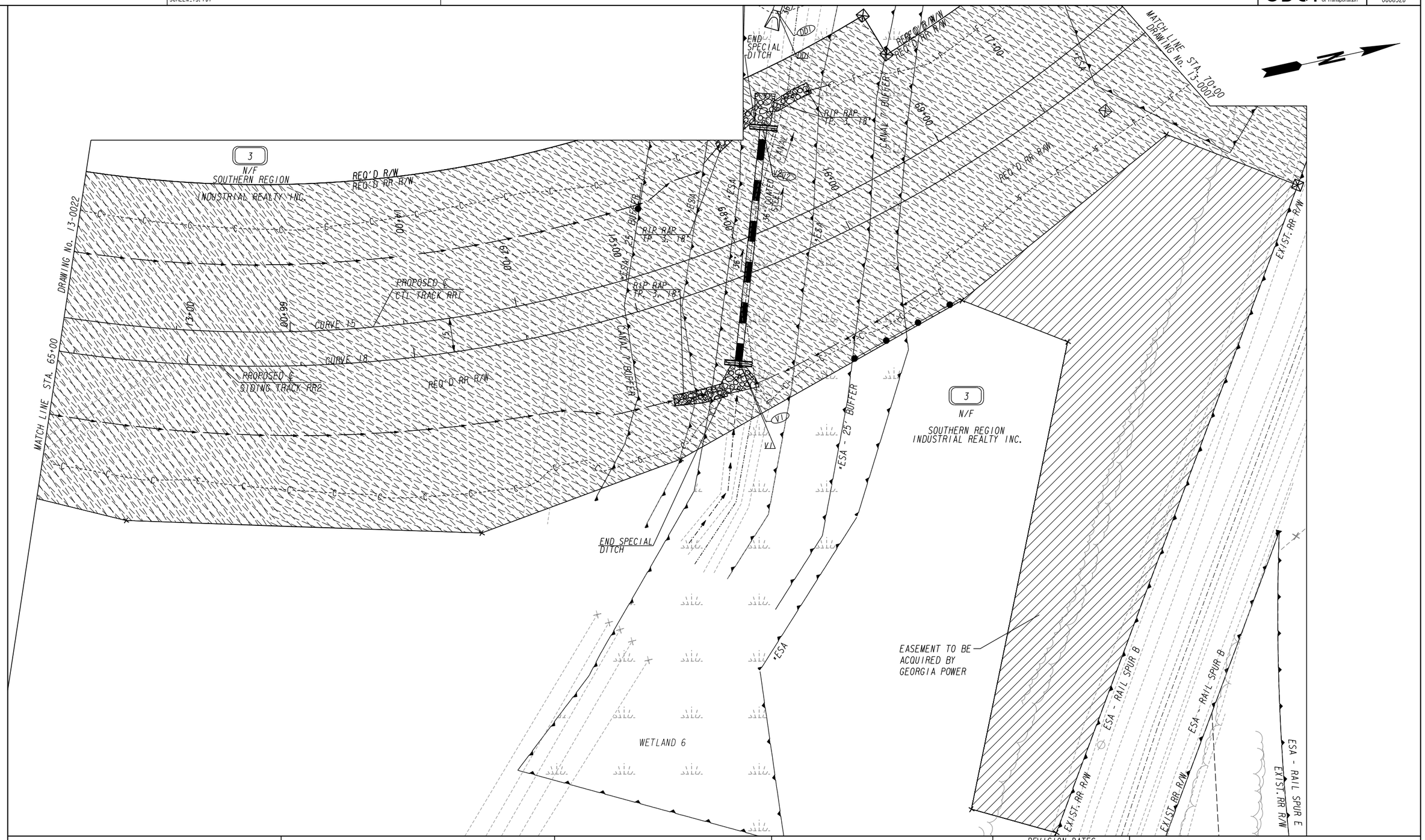
REVISION DATES
05-12-21

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED: DATE:
BACKCHECKED: DATE:
CORRECTED: DATE:
VERIFIED: DATE:

DRAWING No. 13-0022

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0023
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

5
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.

EASEMENT TO BE ACQUIRED BY GEORGIA POWER

WETLAND 6

RESOURCE 1

EASEMENT TO BE ACQUIRED BY GEORGIA POWER

*ESA

3
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.

*ESA

EXIST. CANAL R/W
*ESA - 25' BUFFER
CANAL 8 BUFFER

CANAL 8

EXIST. CANAL R/W
*ESA - 25' BUFFER
CANAL 8 BUFFER

REQ'D RR R/W

RIP RAP TP. 1, 24"

BEGIN SPECIAL DITCH

RIP RAP TP. 1, 24"

CANAL 8 BUFFER

EXIST. RR R/W

BRIDGE 2
73+27.65

END BRIDGE 2
STA. 74+95.65

PROPOSED ℄ CTL TRACK RR1

PROPOSED ℄ SIDING RR2

18
N/F
NS - CENTRAL GEORGIA RAILROAD COMPANY

EXISTING NS INDUSTRY TRACK TO REMAIN

BEGIN SPECIAL DITCH

RIP RAP TP. 3, 18"

ESA - RAIL SPUR B

EXIST. RR R/W

EASEMENT BY RAILROAD AGREEMENT

4
N/F
CHATHAM COUNTY

CANAL 11 BUFFER
EXIST. CANAL R/W
*ESA - 25' BUFFER

CANAL 11

*ESA

CANAL 11 BUFFER
EXIST. CANAL R/W
*ESA - 25' BUFFER

14
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.

WETLAND 6

DRAWING No. 13-0007
MATCH LINE STA. 73+00
DRAWING No. 13-0025
MATCH LINE STA. 78+50

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	13-0024
VERIFIED:		DATE:	

10/23/2015 GPLN

5
N/F
SOUTHERN REGION
INDUSTRIAL REALTY INC.

EASEMENT TO BE ACQUIRED BY GEORGIA POWER

MATCH LINE STA. 78+50 DRAWING No. 13-0024

ESA

WETLAND 6

19+00 27+00 80+00 POB 17+49.31

PROPOSED ℄ CTL TRACK RR1

28+00 81+00 82+00 30+00

PROPOSED ℄ TRACK RR4

P.I. 20+51.25 83+00 31+00

15.0'

41' MIN.

P.I. 17+49.31

PROPOSED ℄ SIDING RR2

ESA - RAIL SPUR B

PR STA 82+58.69 (RR1)
STA 28+00 (RR4), ELEV. = 13.58
NO. 10 RH TURNOUT, HAND THROWN
BEGIN PROPOSED TRACK RR4

EXIST. RR R/W

22+00 23+00 24+00 25+00 26+00

EX. FOUNDATION LEAD

MATCH LINE STA. 84+00 DRAWING No. 13-0026

18
N/F
NS - CENTRAL GEORGIA RAILROAD COMPANY

EXISTING NS INDUSTRY TRACK TO REMAIN

EASEMENT BY RAILROAD AGREEMENT

EXIST. RR R/W

ESA - RAIL SPUR B

ESA - RAIL SPUR C

14
N/F
SOUTHERN REGION
INDUSTRIAL REALTY INC.

16
N/F
SOUTHERN REGION
INDUSTRIAL REALTY INC.

17
N/F
EKG, LLC

WETLAND 6

RESOURCE 1

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 13-0025

10/23/2015 GPLN

EASEMENT TO BE ACQUIRED BY GEORGIA POWER

5
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.

CONCRETE SLAB FOR COS WATERLINE RELOCATION

ESA - RAIL SPUR A

BRAMPTON ROAD INDUSTRIAL DISTRICT

EXIST. RR R/W

EXIST. WATER EASEMENT

87+00

80+08

DRAWING No. 13-0025

MATCH LINE STA. 84+00

84+00

32+00

85+00

86+00

PROPOSED ℄ CTL TRACK RR1

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (CITY OF SAVANNAH)

RIP RAP TP. 3.18

12

36"

END SHIFTED EXISTING TRACK RR3 BEGIN PROPOSED TRACK RR3 STA 31+46.47 ELEV = 17.19

00+68

DRAWING No. 13-0027

MATCH LINE STA. 89+50

PS STA 32+12.88 (RR4)
STA 32+26.37 (RR2) ELEV = 14.87
NO. 10 LH TURNOUT, HAND THROWN
END PROPOSED SIDING TRACK RR2

23+00

PROPOSED ℄ TRACK RR4

EASEMENT BY RAILROAD AGREEMENT

PS STA 26+23.91 (RR4)
STA 31+39.68 (RR3)
ELEV = 17.18, NO. 10 RH TURNOUT, HAND THROWN
BEGIN SHIFTED EXISTING TRACK RR3

Y

ESA - RAIL SPUR B
BEGIN SPECIAL DITCH

29+00

24+00

STA 87+40.80 (RR1)
STA 24+92.41 (RR4)
ELEV = 16.45 (RR4)

EXIST. RR R/W TO CLEAR POINT

30+00

25+00

31+00

26+00

32+00

EXIST. RR R/W

27+00

28+00

18
N/F
NS - CENTRAL GEORGIA RAILROAD COMPANY

10'

18
N/F
NS - CENTRAL GEORGIA RAILROAD COMPANY

ESA - RAIL SPUR C

EXIST. RR R/W

EXIST. RR R/W

℄

℄

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES

P.I. 25+92.66

P.I. 26+23.91

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (CITY OF SAVANNAH)

17
N/F
EKG, LLC

16
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.

15
N/F
EKG LLC

PROPERTY AND EXISTING R/W LINE ------℄------
REQUIRED R/W LINE ————————
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		13-0026
VERIFIED:		DATE:		

10/23/2015 GPLN

EXIST. R/W

5
N/F
SOUTHERN REGION
INDUSTRIAL REALTY INC.

2
N/F
CHATHAM TERMINAL COMPANY

EASEMENT TO BE
ACQUIRED BY
GEORGIA POWER

ESA - RAIL SPUR A
EXIST RR R/W

MATCH LINE STA. 89+50
DRAWING No. 13-0026

90+00

EASEMENT FOR
CONST. & MAINT.
OF SLOPES & UTILITIES
(CITY OF SAVANNAH)

EXIST. WATER EASEMENT

EASEMENT FOR
CONST. & MAINT.
OF SLOPES &
UTILITIES
(CITY OF
SAVANNAH)

T.S. 89+99.88

ESA - RAIL
SPUR B

33+00

18
N/F
NS - CENTRAL GEORGIA RAILROAD COMPANY

T.S. 32+66.54

EXIST. RR R/W

16
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.

15
N/F
EKG, LLC

239+00

CONST ℄ SR 25/MAIN STREET

ESA - RAIL SPUR A

+17.00
36.00' LT

MATCH
EXISTING
+17.00

CONCRETE PAVEMENT

240+00

+17.00
28.00' LT

MATCH
EXISTING
+17.00

LIMIT OF CONSTRUCTION
BEGIN MILL & INLAY
SR 25/MAIN STREET
STA. 240+17.00

241+00

N/F
GEORGIA POWER COMPANY

MATCH LINE STA. 242+00
DRAWING No. 13-0028

CONCRETE PAVEMENT

N28°49'26.4"W

EASEMENT BY
RAILROAD AGREEMENT

EXIST. R/W

CONCRETE PAVEMENT

DISMANTLE EXISTING
TURNOUT, RECONSTRUCT
THROUGH MOVEMENT

BRAMPTON ROAD
INDUSTRIAL DISTRICT

END SPECIAL
DITCH

STA 90+91.41 (RR1)
STA 33+53.43 (RR3)
ELEV. = 18.10 (RR3)
10' CLEAR POINT

92+00

STA 92+73.77 (RR1)
ELEV. = 17.35
10' CLEAR POINT

93+00

CURVE 16
SHIFTED ℄ CTL
TRACK RR3

S.C. 33+30.53

S.C. 190+16.88

28'

34+00

EXIST. RR R/W

ESA - RAIL
SPUR A

T.S. 93+09.41

35+00

D = 5.98441°

ESA - RAIL SPUR B

EASEMENT BY
RAILROAD AGREEMENT

CURVE 19

END SPECIAL
DITCH

36+00

STA 91+99.52 (RR1)
STA 34+52.00 (RR3)
ELEV. = 18.35 (RR3)
10' CLEAR POINT

DRAWING No. 13-0028

ESA - RAIL SPUR B

EXIST. RR R/W

MATCH LINE STA. 94+00

EASEMENT FOR
CONST. & MAINT.
OF SLOPES & UTILITIES

EASEMENT FOR
CONST. & MAINT.
OF SLOPES & UTILITIES
(CITY OF SAVANNAH)

FUEL TANK

FUEL TANK

DO NOT DISTURB

EASEMENT FOR
CONST. & MAINT.
OF SLOPES & UTILITIES
(CITY OF SAVANNAH)

16
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.

FUEL TANK

FUEL TANK

FUEL TANK

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		13-0027
VERIFIED:		DATE:		

10/23/2015 GPLN

END CURB & GUTTER TP 2
STA 800+82.51 24.00' RT

MATCH LINE STA. 800+50
DRAWING No. 13-0032

N 56°08'28.9" E CONST ℄ BRAMPTON ROAD

+82.74
19.80' LT

R 55.00'
242+58.18
93.00' LT

16
N/F
SOUTHERN REGION
INDUSTRIAL REALTY INC.

EXISTING
STRAIN POLE

END CURB & GUTTER TP 2
STA 242+58.21 38.00' LT

243+00

EXIST. R/W

PROPOSED ADA RAMP

R 60.00'
244+14.76
99.86' LT

801+00

244+00

EXISTING
STRAIN POLE

N/F
SUNTRUST BANK

PROPOSED
ADA RAMP

EXIST. R/W

245+00

+24.39
43.28' LT

246+00

END TAPER
246+31.00
20.00' LT

EXIST. R/W

MATCH LINE STA. 242+00
DRAWING No. 13-0027

CONCRETE PAVEMENT

STA. 243+45.98 SR 25/MAIN ST=
STA. 801+83.25 BRAMPTON ROAD

LIMIT OF R/W ACQUISITION
SR 25
244+34.49

CONCRETE PAVEMENT

PI 246+79.92

BEGIN BARRICADE
STA 243+27.59, 27.59 RT
SEE GA STD 9039

N28°49'26.4"W

CURVE 25

CONST ℄ SR 25/MAIN ST

N 25°43'27.4" W

PC 242+56.03

END BARRICADE
STA 243+82.84, 74.81 RT
SEE GA STD 9039

EXISTING
STRAIN POLE

ESA - RAIL SPUR A

97+00

EXIST. R/W

EXIST. R/W

BRAMPTON ROAD
INDUSTRIAL DISTRICT

BEGIN TAPER
244+60.81
32.40' RT

EASEMENT BY
RAILROAD AGREEMENT

PT 245+76.185

END TAPER
246+31.00
13.00' RT

LIMIT OF CONSTRUCTION
SR 25/MAIN STREET
STA 246+31.00

BRAMPTON RD
EXISTING TRACK STA 98+01
CROSSING 734 163M
FL MP 5.45

95+00

EXISTING
CTL TRACK

EXISTING
STRAIN POLE

96+00

2
N/F
CHATHAM TERMINAL COMPANY

PS EXISTING CTL
TRACK STA 90+75
1,485FT SOUTH OF
CHATHAM TERMINAL
LEAD MP 2
VAL MAP VS-1,
SHEET 2

EXISTING TRACK STA 29+00.74
CROSSING 734 163M
FL MP 5.340
N 768342.1790
E 972023.8060

DISMANTLE
EXISTING
TURNOUT
& REMOVE
TRACK

STA 37+77.32
END SHIFTED TRACK RR3
MATCH EXISTING NS
FOUNDATION LEAD TRACK

EASEMENT FOR
CONST. & MAINT.
OF SLOPES &
UTILITIES (C)TY
OF SAVANNAH

37+00

39+00

96+36.56

P.C.

EXIST. RR R/W

MATCH LINE STA. 94+00 DRAWING No. 13-0027

CURVE 19

P.I. 94+62.35

37+48.64

END PROPOSED
TRACK RR3
BEGIN SHIFTED
TRACK RR3
STA 37+72.95
ELEV = 18.46

18
N/F
NS - CENTRAL GEORGIA RAILROAD COMPANY

502+00

P.C.S. 36+86.64

P.I. 94+19.90

ESA - RAIL SPUR B

EXISTING CTL TRACK
TO REMAIN

OBLITERATE EXISTING PAVEMENT AND
BASE. GRADE TO DRAIN AND GRASS.

EXIST. RR R/W

EXIST. WATER EASEMENT

N55°46'27.4"E

END BARRICADE
STA 502+33.56, 12.60 LT
SEE GA STD 9039

BEGIN BARRICADE
STA 502+31.02, 13.57 RT
SEE GA STD 9039

BEGIN PROPOSED FENCE
STA. 502+16.00
30.00' RT

MATCH LINE STA. 502+50 DRAWING No. 13-0029

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0028
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

MATCH LINE DRAWING No. 13-0027

MATCH LINE STA. 502+50.00 DRAWING No. 13-0028

PROPOSED FENCE
+48.00
30.00' RT

OBLITERATE EXISTING PAVEMENT
GRADE TO DRAIN & GRASS

EXIST. WATER EASEMENT

R 15.00'
502+94.80
65.11' LT

+90.95
31.69' LT

503+00

9
N/F
GEORGIA PORTS AUTHORITY

+9.38
31.82' LT

R 15.00'
503+47.22
53.95' LT

24'

DWLS 1.5" ASPHALT

EDGE OF CUL-DE-SAC

R 52.00'
503+10.59
0.00

EXIST. R/W

+68.40
108.38' RT

R 15.00'
503+01.94
66.44' RT

END PROPOSED FENCE
STA. 503+62.00
99.31' RT

GRAVEL DRIVE

GATE

CONCRETE

15
N/F
EKG LLC

MAINTAIN ACCESS DURING CONSTRUCTION

R 15.00'
503+65.94
50.24' RT

+92.40
108.34' RT

R 80.43'
504+38.65
97.90' RT

504+00

REQ'D R/W

EXIST. 20' WATER EASMT

CONST. & BRAMPTON ROAD
N55°46'27.1"E

EDGE OF CUL-DE-SAC

EXIST. 15' UTILITY EASMT

505+00

EXIST. R/W

BRAMPTON ROAD INDUSTRIAL DISTRICT

E.N.C. +00.00 -2.00%
E.N.C. +00.00 -2.00%
+07.00 -2.30%
+07.00 -2.80%
MATCH EXISTING

EASEMENT FOR
CONST. & MAINT.
OF SLOPES AND UTILITIES
(CITY OF SAVANNAH)

16
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.

17
N/F
EKG, LLC

+07.00
11.92' RT

+07.00
12.95' LT

CONCAST BURIED FIBER CABLE

LIMIT OF CONSTRUCTION
BRAMPTON ROAD
STA 505+07.00

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
06-30-21

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 13-0029

9
N/F
GEORGIA PORTS AUTHORITY

LIMIT OF CONSTRUCTION
BEGIN WIDENING & OVERLAY
BRAMPTON ROAD
STA 511+00.00

511+00 512+00 PC 512+58.10 513+00 514+00 651+00 PT 651+29.76

+00.00 -12.00
+00.00 12.00
BRAMPTON ROAD INDUSTRIAL DISTRICT

RIP RAP TP. 3, 18"
CC2
R 35.00' 513+07.33 46.85' LT
+48.77 48.50' LT
EXISTING 36" RCP TO REMAIN
R 50.00' 514+01.22 62.00' LT
R 75.00' 514+19.73 87.00' LT
EXIST. PIPE TO REMAIN
BEGIN 2-FOOT PAVED SHOULDER STA 513+88.5 LT
END CONCRETE PAVEMENT BEGIN FULL-DEPTH ASPHALT STA. 650+14.02
LOCATION CD #IRON REBAR FOUND
END FULL DEPTH BEGIN MILL & INLAY STA. 651+50.00
EXIST. PIPE TO REMAIN

NBSW E
NBSW F
NBSW G
AA1
HEADWALL
CANAL 12 BUFFER
GPA DRIVE
N55°32'13.0"E
CONST ℄ /BRAMPTON ROAD
CURVE 12
CURVE 13
650+00
515+00
90°00'00"
PC 650+00.11
MATCH BRAMPTON ROAD
MATCH LINE STA. 652+00
DRAWING No. 13-0012
MATCH LINE STA. 515+50
DRAWING No. 13-0011

IE 1.74
IE 3.42
IE 3.84
IE 1.58
IE 6.15
IE 5.5
IE 4.52
IE 4.67
IE 1.48
IE 9.02
IE 8.28
IE 8.09
IE 8.01

36" RCP
24" RCP
15" RCP
18" RCP

ASPHALT PARKING
CONCRETE PARKING

*ESA - 25' BUFFER *ESA
*ESA - 25' BUFFER
*ESA CANAL 12
CANAL 12 BUFFER
WETLAND 10 AA2

R 25.00' 512+52.89 37.00' RT
+80.17 39.22
+95.74 38.08
DO NOT DISTURB FENCE
R 20.31' 513+17.47 32.31' RT
BEGIN EXIST FENCE REMOVAL STA. 513+16.00
REMOVE EXISTING FENCE
R 50.00' 651+15.71 61.60' RT

13
N/F
ATLANTA GAS LIGHT CO
N/F
SOUTHERN NATURAL PIPELINE
EXISTING FENCE
8
N/F
MCDONALD VENTURES XXI LLC
REQ'D R/W
EXIST. GAS EASEMENT

EXIST. 20' WATER EASMT
I.E. 5.91
I.E. F.E.S. 5.63

STA 514+78.04 BRAMPTON RD
STA 650+00.00 GPA DRIVE
END SPECIAL DITCH
RIP RAP TP. 3, 18"
R/W MARKER INSTALLED BY HAND

END WIDENING AND OVERLAY
BEGIN FULL-DEPTH CONCRETE PAVEMENT
STA. 514+00.00

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

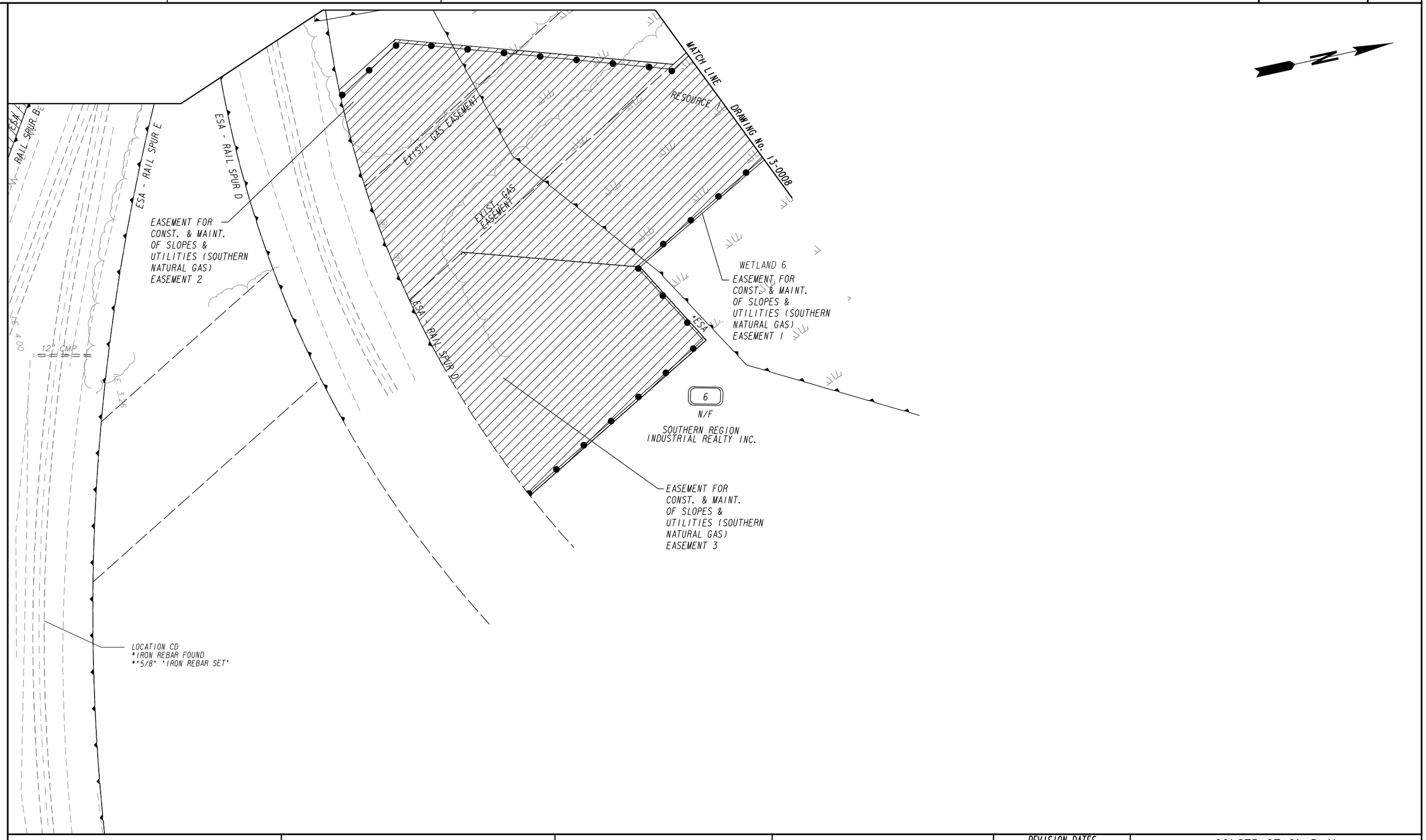
SCALE IN FEET
0 20 40 80

REVISION DATES

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0030
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

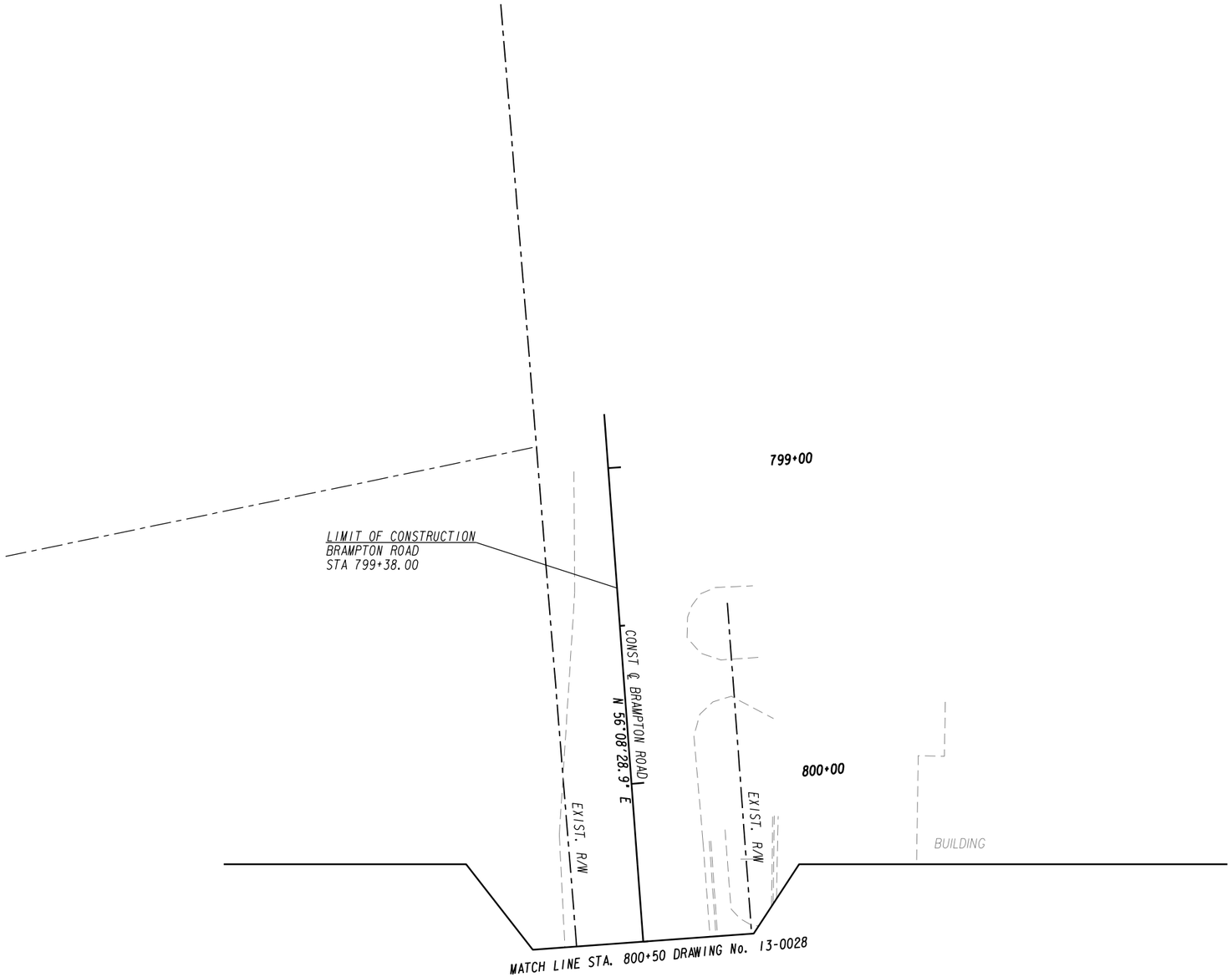
SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	13-0031
VERIFIED:		DATE:	

10/23/2015 GPLN



NOTE: THIS SHEET IS PROVIDED ONLY FOR STRIPING PURPOSES

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 13-0032

10/23/2015 GPLN

UTILITY LINECODES

	EXISTING	TO BE REMOVED	PROPOSED	TYPE OF UTILITY
OVERHEAD	E	E	E	ELECTRIC
	E-T	E-T	E-T	ELECTRIC/TELECOMMUNICATIONS
	E-TV	E-TV	E-TV	ELECTRIC/CABLE TV
	E-TC	E-TC	E-TC	ELECTRIC/TRAFFIC CONTROL
	E-T-TV	E-T-TV	E-T-TV	ELECTRIC/TELECOMMUNICATIONS/CABLE TV
	E-T-TV-TC	E-T-TV-TC	E-T-TV-TC	ELECTRIC/TELECOMMUNICATIONS/CABLE TV/TRAFFIC CONTROL
	E-TV-TC	E-TV-TC	E-TV-TC	ELECTRIC/CABLE TV/TRAFFIC CONTROL
	E-T-TC	E-T-TC	E-T-TC	ELECTRIC/TELECOMMUNICATIONS/TRAFFIC CONTROL
	GW	GW	GW	GUY WIRE
	T	T	T	TELECOMMUNICATIONS
	T-TC	T-TC	T-TC	TELECOMMUNICATIONS/TRAFFIC CONTROL
	T-TV-TC	T-TV-TC	T-TV-TC	TELECOMMUNICATIONS/CABLE TV/TRAFFIC CONTROL
	T-TV	T-TV	T-TV	TELECOMUNICATIONS/CABLE TV
	TV	TV	TV	CABLE TV
	TV-TC	TV-TC	TV-TC	CABLE TV/TRAFFIC CONTROL
	TC	TC	TC	TRAFFIC CONTROL
UNDERGROUND	E	E	E	ELECTRIC (QL-D)
	E(C)	E(C)		ELECTRIC (QL-C)
	E(B)	E(B)		ELECTRIC (QL-B)
	T	T	T	TELECOMMUNICATIONS (QL-D)
	T(C)	T(C)		TELECOMMUNICATIONS (QL-C)
	T(B)	T(B)		TELECOMMUNICATIONS (QL-B)
	TV	TV	TV	CABLE TV (QL-D)
	TV(C)	TV(C)		CABLE TV (QL-C)
	TV(B)	TV(B)		CABLE TV (QL-B)
	W	W	W	WATER (QL-D)
	W(C)	W(C)		WATER (QL-C)
	W(B)	W(B)		WATER (QL-B)
	**W	**W	**W	WATER FOR LABELED PIPE SIZES (QL-D)
	**W(C)	**W(C)		WATER FOR LABELED PIPE SIZES (QL-C)
	**W(B)	**W(B)		WATER FOR LABELED PIPE SIZES (QL-B)
	NW	NW	NW	NON-POTABLE WATER (QL-D)
	NW(C)	NW(C)		NON-POTABLE WATER (QL-C)
	NW(B)	NW(B)		NON-POTABLE WATER (QL-B)
	**NW	**NW	**NW	NON-POTABLE WATER FOR LABELED PIPE SIZES (QL-D)
	**NW(C)	**NW(C)		NON-POTABLE WATER FOR LABELED PIPE SIZES (QL-C)
	**NW(B)	**NW(B)		NON-POTABLE WATER FOR LABELED PIPE SIZES (QL-B)
	STM	STM	STM	STEAM (QL-D)
	STM(C)	STM(C)		STEAM (QL-C)
	STM(B)	STM(B)		STEAM (QL-B)
	**STM	**STM	**STM	STEAM FOR LABELED PIPE SIZES (QL-D)
	**STM(C)	**STM(C)		STEAM FOR LABELED PIPE SIZES (QL-C)
	**STM(B)	**STM(B)		STEAM FOR LABELED PIPE SIZES (QL-B)
	SS	SS	SS	SANITARY SEWER WITH FLOW DIRECTION (QL-D)
	SS(C)	SS(C)		SANITARY SEWER WITH FLOW DIRECTION (QL-C)
	SS(B)	SS(B)		SANITARY SEWER WITH FLOW DIRECTION (QL-B)
	Σ**SS	Σ**SS	Σ**SS	SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (QL-D)
	Σ**SS(C)	Σ**SS(C)		SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (QL-C)
	Σ**SS(B)	Σ**SS(B)		SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (QL-B)
	SFM	SFM	SFM	SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (QL-D)
	SFM(C)	SFM(C)		SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (QL-C)
	SFM(B)	SFM(B)		SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (QL-B)
	G	G	G	GAS (QL-D)
	G(C)	G(C)		GAS (QL-C)
	G(B)	G(B)		GAS (QL-B)
	**G	**G	**G	GAS FOR LABELED PIPE SIZES (QL-D)
	**G(C)	**G(C)		GAS FOR LABELED PIPE SIZES (QL-C)
	**G(B)	**G(B)		GAS FOR LABELED PIPE SIZES (QL-B)
	P	P	P	PETROLEUM (QL-D)
	P(C)	P(C)		PETROLEUM (QL-C)
	P(B)	P(B)		PETROLEUM (QL-B)
	**P	**P	**P	PETROLEUM FOR LABELED PIPE SIZES (QL-D)
	**P(C)	**P(C)		PETROLEUM FOR LABELED PIPE SIZES (QL-C)
	**P(B)	**P(B)		PETROLEUM FOR LABELED PIPE SIZES (QL-B)
	TC	FOR PROPOSED/TEMPORARY TRAFFIC CONTROL INFORMATION REFER TO TRAFFIC SIGNAL PLANS		TRAFFIC CONTROL (QL-D)
	TC(C)			TRAFFIC CONTROL (QL-C)
	TC(B)			TRAFFIC CONTROL (QL-B)
	UNK(B)	UNK(B)		UNKNOWN UTILITY FOUND IN SUE INVESTIGATION (QL-B)

UTILITY SYMBOLS

EXISTING	PROPOSED	TEMPORARY	
			UTILITY POLE/GUY POLE
			LIGHT POLE
			GUY ANCHOR
M	M	M	MARKER
X	X	X	SPLICE BOX
			CABINET
			VENT
E	E	E	ELECTRIC MANHOLE
H	H	H	HAND HOLE
E	E	E	TRANSFORMER
E	E	E	ELECTRIC METER
E	E	E	ELECTRIC BOX
			TRANSMISSION TOWER
T	T	T	TELECOMMUNICATIONS MANHOLE
T	T	T	TELECOMMUNICATIONS PEDESTAL
SLC	SLC	SLC	SUBCRIBER LOOP CARRIER (aka "SLICK")
			PHONE BOOTH
			CABLE TV PEDESTAL
TV	TV	TV	CABLE TV MANHOLE
W	W	W	WATER VALVE
W	W	W	WATER METER
W	W	W	WATER MANHOLE
			FIRE HYDRANT ASSEMBLY (INCLUDES ASSOCIATED VALVE)
BFP	BFP	BFP	BACKFLOW PREVENTER
PIV	PIV	PIV	PRESSURE INDICATOR VALVE
ARV	ARV	ARV	AIR RELEASE VALVE
W	W	W	WELL
W	W	W	WATER VAULT
W	W	W	WATER VALVE MARKER
			STAND PIPE

EXISTING	PROPOSED	TEMPORARY	
			CLEANOUT
SS	SS	SS	SANITARY SEWER MANHOLE
ARV	ARV	ARV	AIR RELEASE VALVE
GT	GT	GT	GREASE TRAP
S	S	S	SANITARY SEWER FORCE MAIN VALVE
G	G	G	GAS VALVE
G	G	G	GAS METER
G	G	G	GAS MANHOLE
GPR	GPR	GPR	GAS PRESSURE REGULATOR
G	G	G	GAS VAULT
GTS	GTS	GTS	GAS TEST STATION
P	P	P	PETROLEUM VALVE
TC	FOR PROPOSED/TEMPORARY TRAFFIC CONTROL INFORMATION REFER TO TRAFFIC SIGNAL PLANS		TRAFFIC CONTROL MANHOLE/ ELECTRIC COMMUNICATIONS BOX
			TRAFFIC CONTROL PEDESTRIAN SIGNAL/BUTTON POST

MISCELLANEOUS

LOS	LIMITS OF OVERHEAD AND SUBSURFACE UTILITY INVESTIGATION
TH	TEST HOLE (QL-A ONLY)
EOI	END OF INFORMATION
	QUALITY LEVEL (QL) DELINEATION
123	POLE ID
A01	SANITARY SEWER MANHOLE (SSMH) ID
C123	CONFLICT LOCATION (UTILITY IMPACT ANALYSIS (UIA) ONLY)

QUALITY LEVELS AND DEFINITIONS

QL-D DEPICTED ACCORDING TO UTILITY RECORD INFORMATION AND IN-FIELD VISUAL INSPECTION. NO ELECTRONIC DESIGNATING INFORMATION WAS OBTAINED.

QL-C EXISTING UTILITY STRUCTURES HAVE BEEN FIELD LOCATED AND SURVEYED TO ASSIST IN DEPICTING THE UTILITIES SHOWN ON RECORDS. NO ELECTRONIC DESIGNATING INFORMATION WAS OBTAINED.

QL-B INFORMATION WAS OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROPRIATE HORIZONTAL POSITION OF THE SUBSURFACE UTILITIES. QL-B DATA SHOULD BE REPRODUCIBLE BY SURFACE GEOPHYSICS AT ANY POINT OF THEIR DEPICTION. THIS INFORMATION IS SURVEYED TO APPLICABLE TOLERANCES DEFINED BY THE PROJECT AND REDUCED ONTO PLAN DOCUMENTS.

QL-A OBTAIN PRECISE HORIZONTAL AND VERTICAL POSITION OF THE UTILITY LINE BY EXCAVATING A TEST HOLE. THE TEST HOLE SHALL BE DONE USING VACUUM EXCAVATION OR COMPARABLE NONDESTRUCTIVE EQUIPMENT IN A MANNER AS TO CAUSE NO DAMAGE TO THE UTILITY LINE. AFTER EXCAVATING A TEST HOLE, A FIELD SURVEY SHALL BE PERFORMED TO DETERMINE THE EXACT LOCATION AND POSITION OF THE UTILITY LINE.

TELEPHONE PAIR SIZE TABLE

TELEPHONE PAIR SIZE	TELEPHONE CABLE DIAMETER
5 - 100	0.50 TO 2.00 IN
101 - 2400	UP TO 3.50 IN

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

REVISION DATES

UTILITY PLANS

BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	24-0000
CORRECTED:		DATE:	
VERIFIED:		DATE:	

10/23/2015 GPLN

EXIST. R/W
*ESA - 25' BUFFER
CANAL 2 BUFFER
N/F
SHREE SAI LLC
*ESA
GRATE INLET
TOP 7.40
I.E. -1.34
I.E. -2.33
CANAL 2
I.E. -1.82
I.E. -1.81
I.E. -1.84
I.E. -1.76
TRIPLE BOX CULVERT 10' X 8'
10'x8' TRIPLE BOX CULVERT
36" RCP
I.E. -1.52
I.E. -2.05
I.E. -2.05
I.E. -1.92
I.E. -2.40
I.E. -2.42
I.E. -2.37
99+00
100+00
101+00
98+50
STORM MANHOLE
TOP 10.54
I.E.(E) 3.20 – 36" RCP
I.E.(W) 3.15 – 36" RCP
STORM MANHOLE
TOP 9.63
I.E. UNABLE TO ACCESS
FULL OF DIRT
N/F
NATIONAL RETAIL PROPERTIES LP
WATER MANHOLE
TOP 10.61
GRATE INLET
TOP 9.67
I.E.(NE) 3.76 – 36" RCP
I.E.(SW) 3.63 – 36" RCP
CANAL 2 BUFFER
BEGIN CONSTRUCTION
BEGIN MILL & OVERLAY
ASPHALT PAVEMENT
STA. 100+13.00
N22°06'17.9"W
CONST ℄ SR 26 SPUR/BURNSED BOULEVARD
CURVE 1
BEGIN PROJECT CSSTP-0006-00(328)
SR 26 SPUR/BURNSED BOULEVARD
STA. 99+00.00
N 764132.4439
E 973106.8155
DRAWING No. 24-0002
102+00
MATCH LINE STA. 102+00
50P-24G
50P-26G
SR 26/US 80
STORM MANHOLE
TOP 8.65
I.E.(NW) 3.87 – 18" RCP
I.E.(SE) 4.02 – 18" RCP
18" RCP
EXISTING FENCE
GRATE INLET
FRAME 10.43
IE (W) 4.12
IE (E) 4.19
STORM MANHOLE
TOP 10.57
I.E.(W) 4.39 – 36" RCP
I.E.(E) 4.82 – 36" RCP
N/F
220 GA HOLDINGS LLC
STORM MANHOLE
TOP 10.56
I.E.(W) 6.19 – 18" RCP
I.E.(E) 6.35 – 18" RCP
AERIAL COAX
N/F
MIKES HOLDINGS, LLC

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-0001
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

MATCH LINE STA. 302+00 DRAWING No. 24-0015
MATCH LINE STA. 351+50 DRAWING No. 24-0015
MATCH LINE STA. 401+50 DRAWING No. 24-0015
MATCH LINE STA. 102+00 DRAWING No. 24-0001
DRAWING No. 24-0003 MATCH LINE STA. 107+50

N/F SHREE SAI LLC
N/F DAVID L LYONS
N/F MIKES HOLDINGS, LLC
N/F RJKA QUICK LOCK, LLC

EXIST. R/W
CANAL 1
CANAL 2
CANAL 3
CANAL 1 BUFFER
CANAL 2 BUFFER
CANAL 3 BUFFER
*ESA
*ESA - 25' BUFFER
CL1 104+21.32 130.04' LT
CL2 106+01.20 144.94' LT
WINGWALL
IE -2.64
IE -2.66
IE -2.65
10'X8' TRIPLE BOX CULVERT
TRIPLE BOX CULVERT 10' X 8'
CONST. @ RAMP A1
CONST. @ RAMP A2
CONST. @ RAMP B
N55°27'10.6"W
N55°27'35.9"W
N55°27'35.9"W
CURVE 1
CURVE 6
CONST ℄ SR 26 SPUR/BURNSED BOULEVARD
EXISTING 30" RCP TO REMAIN
30" RCP
102+00
103+00
104+00
105+00
106+00
107+00
300+00
301+00
350+00
351+00
400+00
401+00
A1
A2
A3
Z1
Z2
STA. 103+79.90 SR 26 SPUR/BURNSED BOULEVARD= STA. 300+00.00 RAMP A1
STA. 105+37.45 SR 26 SPUR/BURNSED BOULEVARD= STA. 350+00.00 RAMP A2
STA. 105+63.47 SR 26 SPUR/BURNSED BOULEVARD= STA. 400+00.00 RAMP B
EXISTING FENCE
BILLBOARD SIGN
IE 9.92
CONCRETE SWALE
IE 6.82
HEADWALL
18" CMP
TH27
W(B)
8" D/P

TH27
UNK SIZE/TYPE WATER
Ground Elev: 8.94'
Utility Depth: 5.25'

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		24-0002
VERIFIED:		DATE:		

10/23/2015 GPLN

CANAL 3 BUFFER
*ESA
IE -2.93
WINGWALL
CL4
107+61.78
124.96' LT
CANAL 3
*ESA
TRIPLE BOX CULVERT 10' X 8'
10'x8' TRIPLE BOX CULVERT
451+00
LIMIT OF CONSTRUCTION
RAMP C
STA. 451+35.00
GRATE INLET
TOP 7.59
I.E. 0.60
N60°46'55.4"W
CONST. @ RAMP C
GRATE INLET
TOP 7.66
THR 7.36
I.E. 0.60
I.E. 0.03
24" RCP
I.E. 2.46
18"
5" GMT
WINGWALL
L1
L2
L3
L4
C1
C2
C3
C4
GPC/85'
GPC/...
GPC/75'
GPC/35'
4ALDPX
GW
N/F
TRAFFIC CIRCLE SHOPPING CENTER
REPLACE STR#16 W/ SS CONCRETE STRUCTURE
*ESA - 25' BUFFER
CANAL 4 BUFFER
CL3
450+86.62
52.07' RT
17
CANAL 4
*ESA
*ESA - 25' BUFFER
CANAL 4 BUFFER
3-6GU-1/0AC
NUSACYD1-600
15" RCP
CURB INLET
TOP 7.02
THR 6.12
I.E. 2.92
MATCH LINE STA. 107+50
DRAWING No. 24-0002
108+00
109+00
110+00
111+00
112+00
DRAWING No. 24-0004
N26°07'44.9"E
CONST ℄ SR 26 SPUR/SR 25/BURNSED BOULEVARD
CURVE 1
450+00
STA. 110+12.43 SR 26 SPUR/SR 25/BURNSED BOULEVARD*
STA. 450+00.00 RAMP C
EXIST. 18" RCP TO REMAIN
479+00
CURVE 2
STA. 110+84.94 SR 26 SPUR/SR 25/BURNSED BOULEVARD*
STA. 479+33.74 RAMP D
CURB INLET
TOP 6.85
THR 5.93
I.E.(N) 2.03
I.E.(S) 1.91
8" DIP
W(B)
SS
I.E. 1.76
HEADWALL
18" RCP
18" CMP
478+00
CURVE TO
CONST. @ RAMP D
D1
CONC.
D2
24" RCP
TH2
8" DIP WATER
STORM MANHOLE
TOP 30.55
THR 29.91
I.E. BOLTED SHUT
ELEC. BOX
TRAFFIC CONTROL CABINET
EXISTING FENCE
REQ'D R/W & L/A
GPC/50'
T#10-7533
BEGIN L/A
477+65.90
73.93' RT
N/F
VIRGINIA MOCK
SEE DWG NO.
60-0008, 60-0022 & 60-0036
MATCH LINE STA. 477+50
DRAWING No. 24-0016

TH2
8" DIP WATER
Ground Elev: 7.75'
Utility Depth: 5.66'

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

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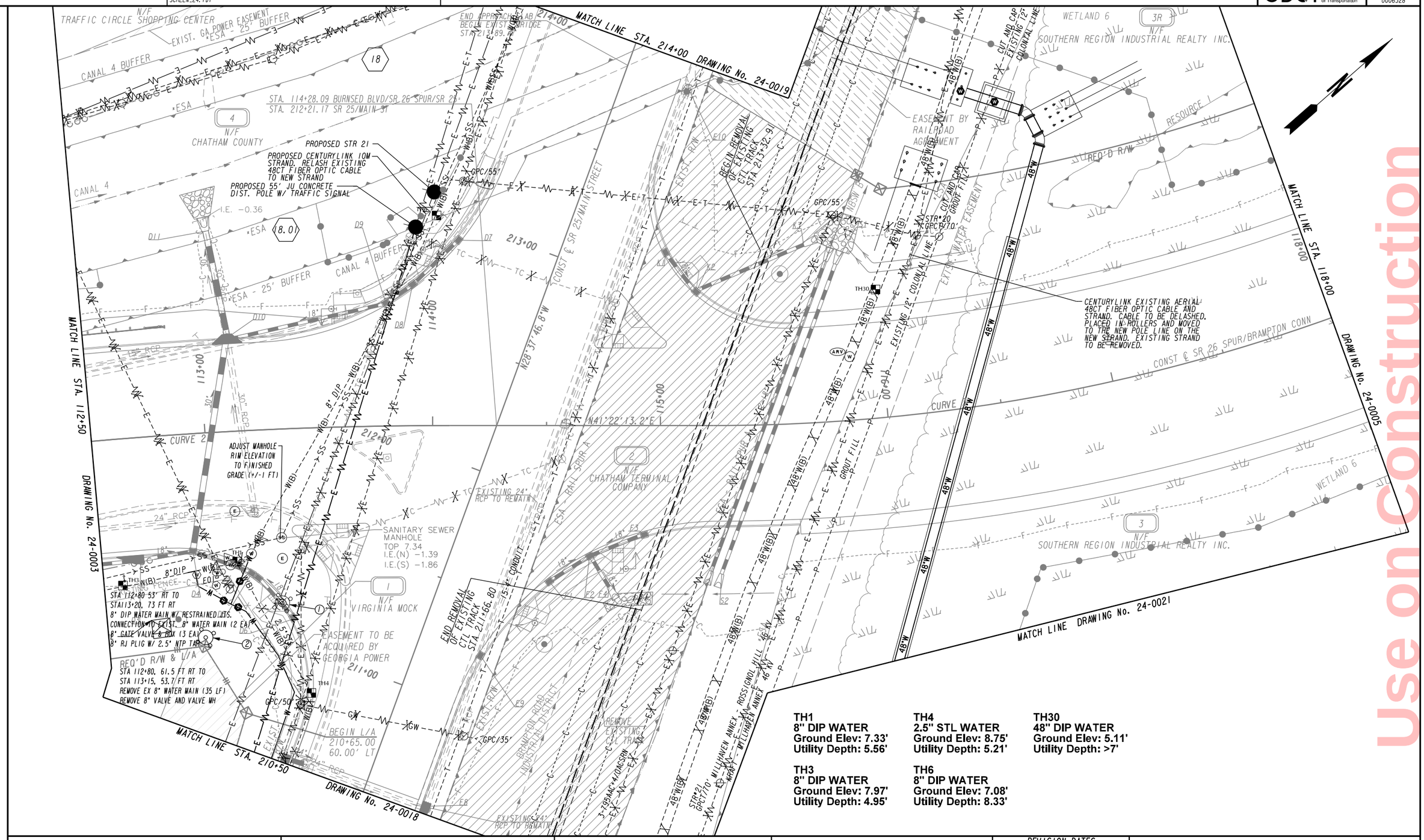
SCALE IN FEET
0 20 40 80

REVISION DATES

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-0003
CORRECTED:		DATE:		
VERIFIED:		DATE:		

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TH1
8" DIP WATER
Ground Elev: 7.33'
Utility Depth: 5.56'

TH3
8" DIP WATER
Ground Elev: 7.97'
Utility Depth: 4.95'

TH4
2.5" STL WATER
Ground Elev: 8.75'
Utility Depth: 5.21'

TH6
8" DIP WATER
Ground Elev: 7.08'
Utility Depth: 8.33'

TH30
48" DIP WATER
Ground Elev: 5.11'
Utility Depth: >7'

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

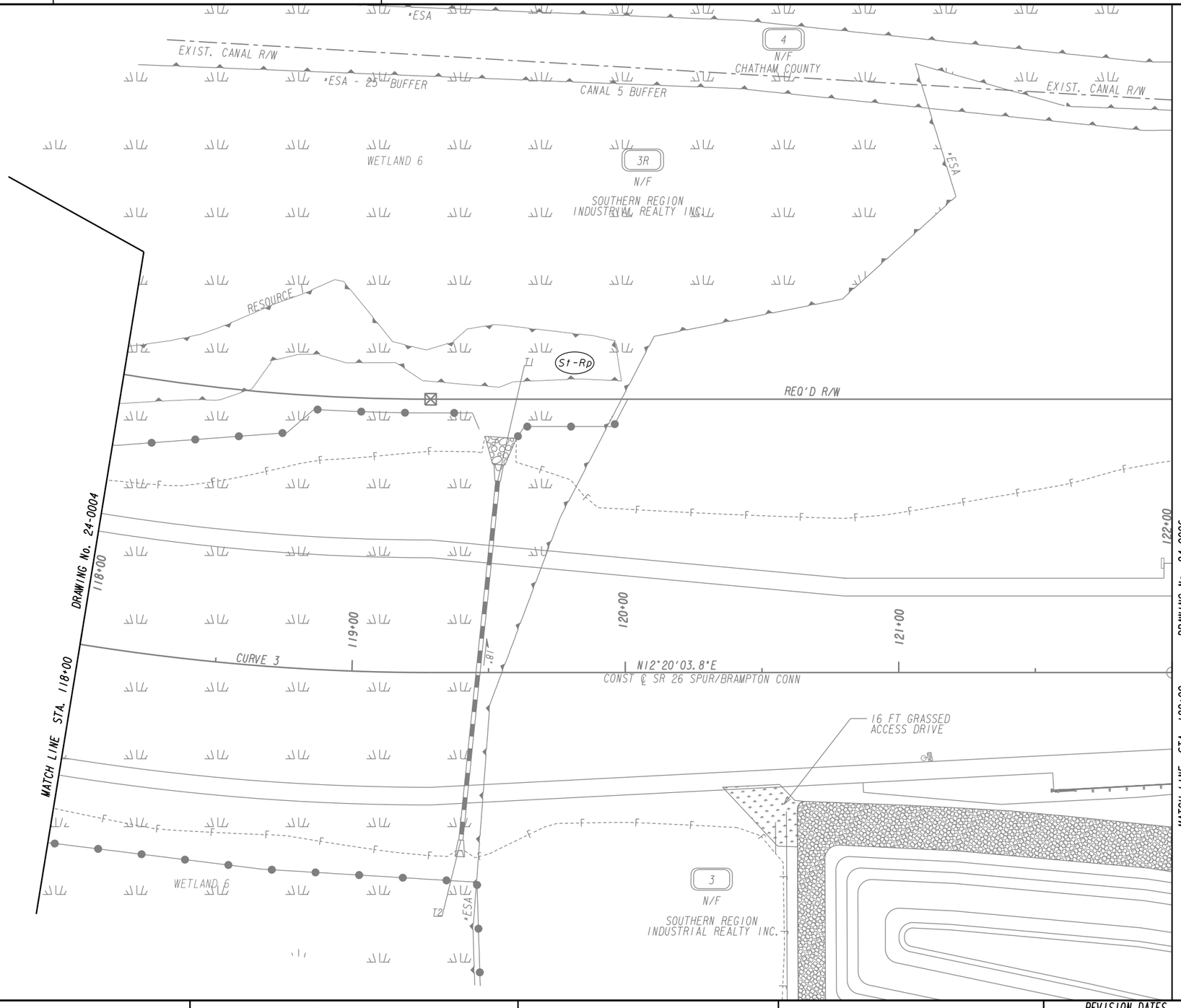
SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21
06-30-21
11-12-21
01-16-23

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-0004
CORRECTED:		DATE:		
VERIFIED:		DATE:		

Use on Construction



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

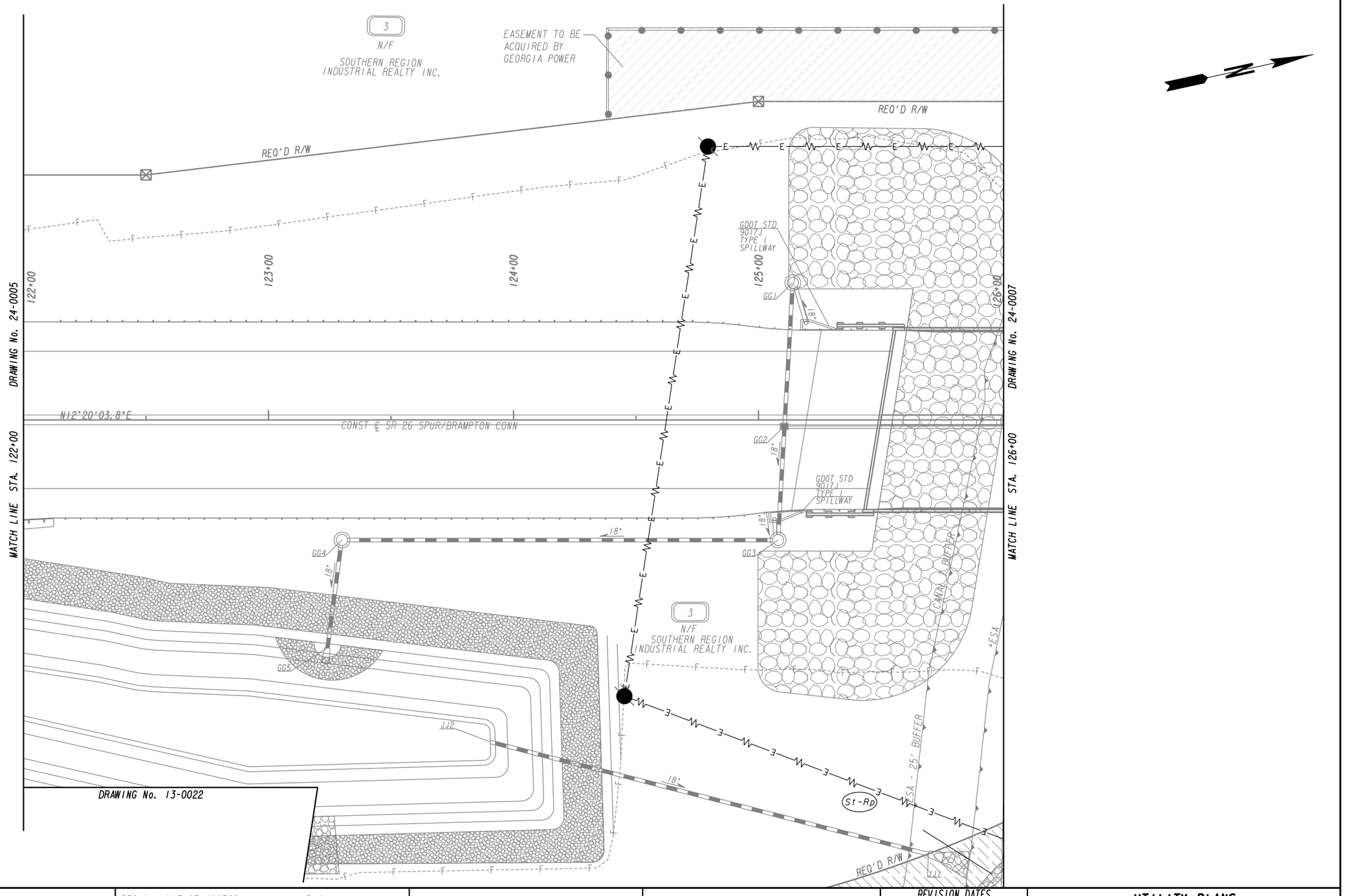
SCALE IN FEET
0 20 40 80

REVISION DATES
11-12-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		24-0005
VERIFIED:		DATE:		

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

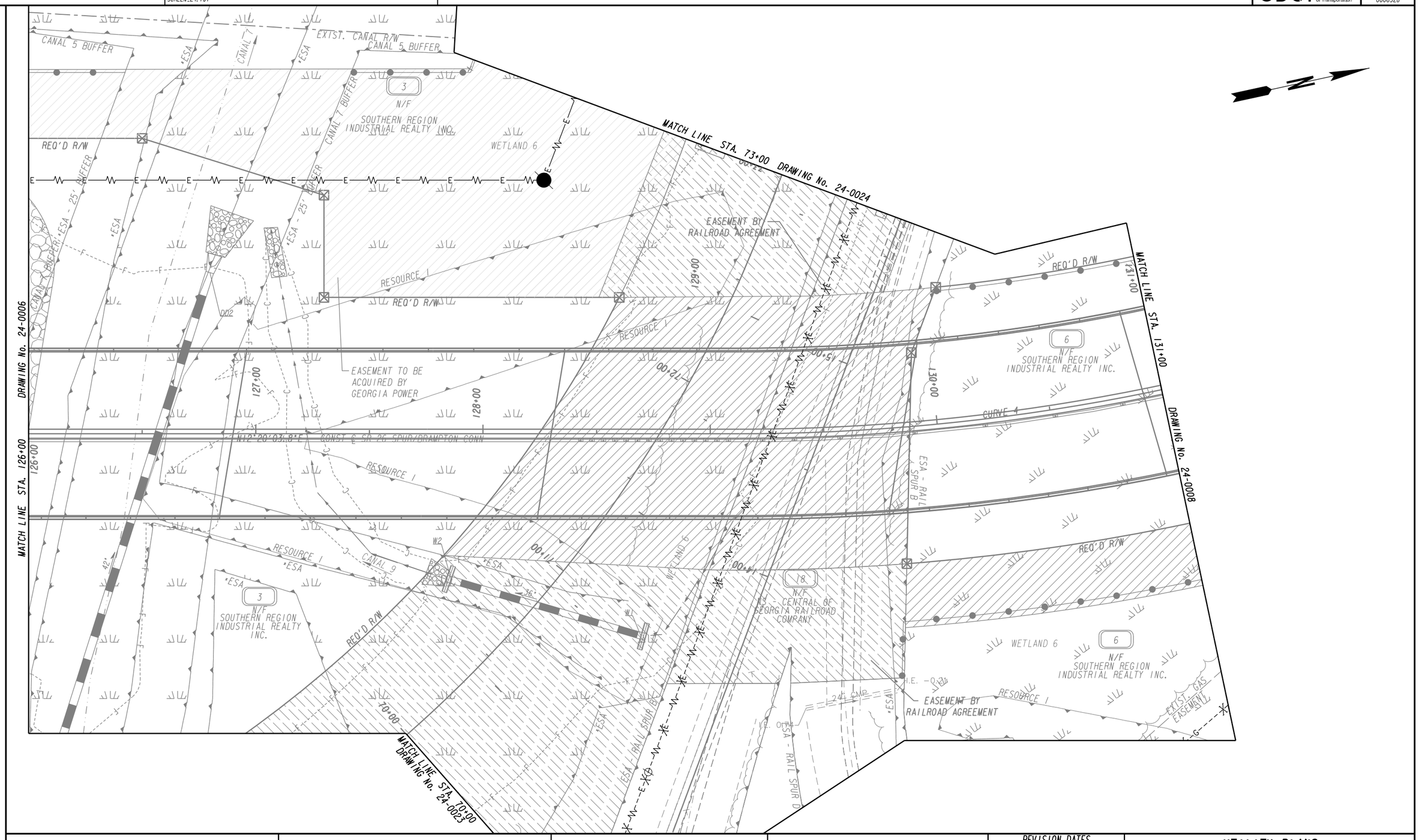
SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-0006
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

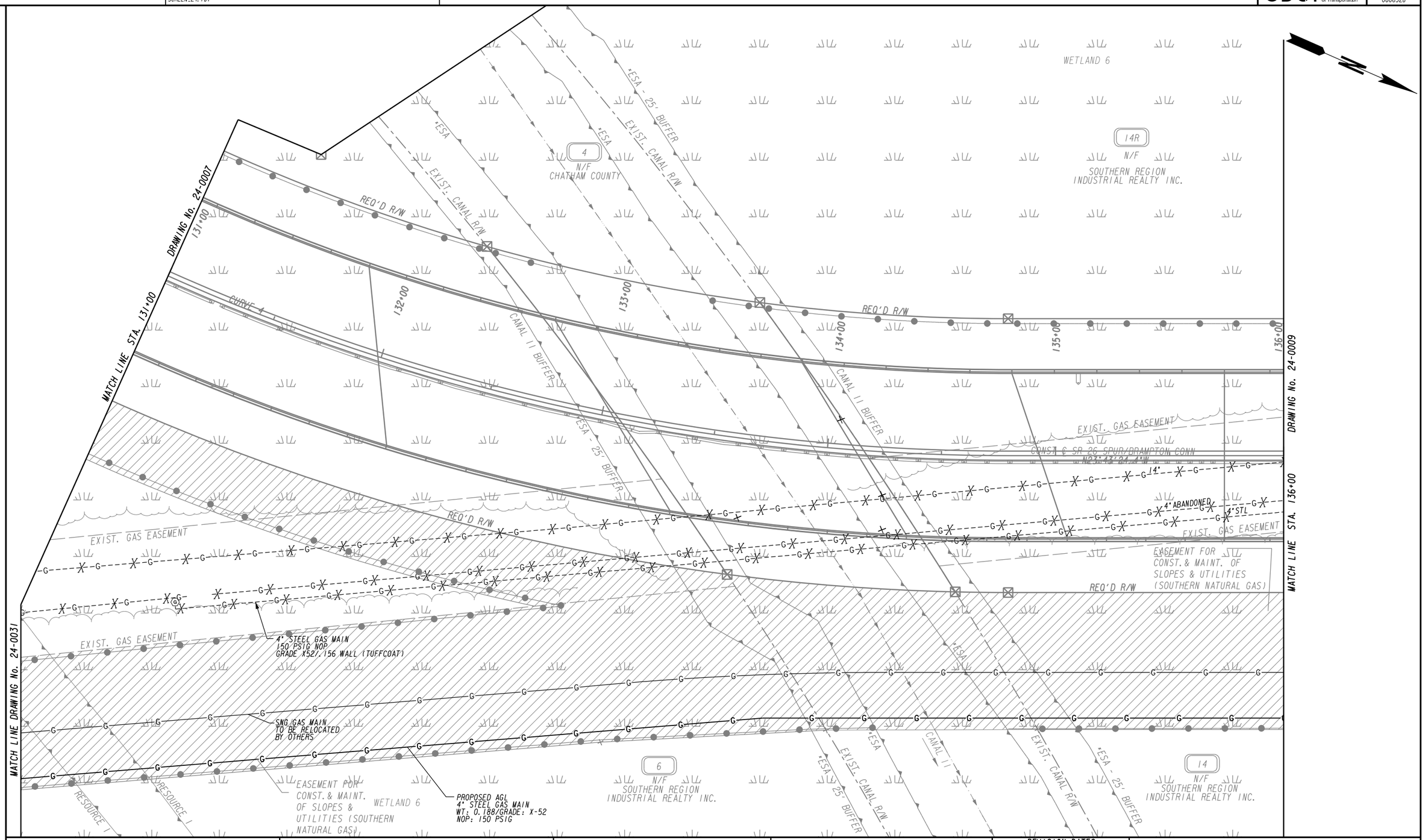
SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-0007
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
11-12-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	24-0008
CORRECTED:		DATE:	
VERIFIED:		DATE:	

WETLAND 6
I.E. 1.80
I.E. 0.06
I.E. 2.09
36" METAL
36" METAL
36" METAL
ESA - RAIL SPUR C
*ESA
CANAL 12
I.E. -1.73
I.E. -1.71
I.E. -0.73
14R
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.
18
N/F
NS - CENTRAL GEORGIA RAILROAD COMPANY
7
N/F
MCDONALD VENTURES XXI LLC
EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS) EASEMENT 2
EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS) EASEMENT 1
WETLAND 10
RESOURCE
*ESA - 25' BUFFER
8
N/F
MCDONALD VENTURES XXI LLC
REQ'D R/W
136+00
137+00
138+00
139+00
140+00
141+00
CANAL 12 BUFFER
I.E. -1.61
EXIST. GAS EASEMENT
14"
4" ABANDONED
4" STL
N23°13'24.4"W
CROSS SR 26 SPAN/BRIDGE BEYOND
TH32
MATCH LINE STA. 136+00
DRAWING No. 24-0008
MATCH LINE STA. 141+50
DRAWING No. 24-0010
TEMPORARY RAILROAD CROSSING
EASEMENT BY RAILROAD AGREEMENT
SNG GAS MAIN TO BE RELOCATED BY OTHERS
PROPOSED AGL 4" STEEL GAS MAIN WT: 0.188/GRADE: X-52 MOP: 150 PSIG
EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS)
14
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.
WETLAND 6
ESA - RAIL SPUR C EXIST. RR R/W
EXIST. RR R/W
ESA - RAIL SPUR C
18
N/F
NS - CENTRAL GEORGIA RAILROAD COMPANY
8
N/F
MCDONALD VENTURES XXI LLC
WETLAND 10

TH32
4.5" STL GAS
Ground Elev: -0.12'
Utility Depth: 4.82'

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
11-12-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		24-0009
VERIFIED:		DATE:		

10/23/2015 GPLN

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS) EASEMENT 1

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS) EASEMENT 2

7 N/F MCDONALD VENTURES XXI LLC

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS) EASEMENT 3

SNG GAS MAIN TO BE RELOCATED BY OTHERS

PROPOSED AGL 4" STEEL GAS MAIN WT: 0.188/GRADE: X-52 MOP: 150 PSIG

4" STEEL GAS MAIN 150 PSIG MOP GRADE X52/.156 WALL (TUFFCOAT)

EXIST PIPE TO REMAIN

OUTLET CONTROL STRUCTURE

8 N/F MCDONALD VENTURES XXI LLC

EXISTING DETENTION POND

I.E. 4.00
F.E.S. I.E. 3.90

30" RCP 30" RCP

18" RCP 18" RCP

*ESA

RESOURCE

WETLAND 10

REQ'D R/W

14" WRENS-SAVANNAH LINE

I.E. 0.94
F.E.S. I.E. 1.49

CANAL 12 BUFFER

4" ABANDONED EXIST. GAS EASEMENT

EXIST. GAS EASEMENT

I.E. 0.67
F.E.S. 0.85

DRAWING No. 24-0009

MATCH LINE STA. 141+50

141+00

142+00

143+00

144+00

145+00

146+00

147+00

DRAWING No. 24-0011

MATCH LINE STA. 147+00

EXIST. GAS EASEMENT

EXIST. GAS EASEMENT

CANAL 12 BUFFER

I.E. 0.63
F.E.S. I.E. 0.91

I.E. 1.27
F.E.S. I.E. 0.81

I.E. 0.73
F.E.S. I.E. 0.81

CANAL 12

*ESA

CONST. @ SR 26 SPUR/BRAMPTON CONN

N23°43'24.4"W

CURVE 5

CANAL 12

*ESA

CANAL 12 BUFFER

I.E. 1.97

CANAL 12 BUFFER

REQ'D R/W

CONTROL STRUCTURE TOP 8.18

REQ'D R/W

WETLAND 10

*ESA

8 N/F MCDONALD VENTURES XXI LLC

WETLAND 10

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS)

EXIST. PIPE TO REMAIN

RESOURCE

EXISTING DETENTION POND

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
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EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES

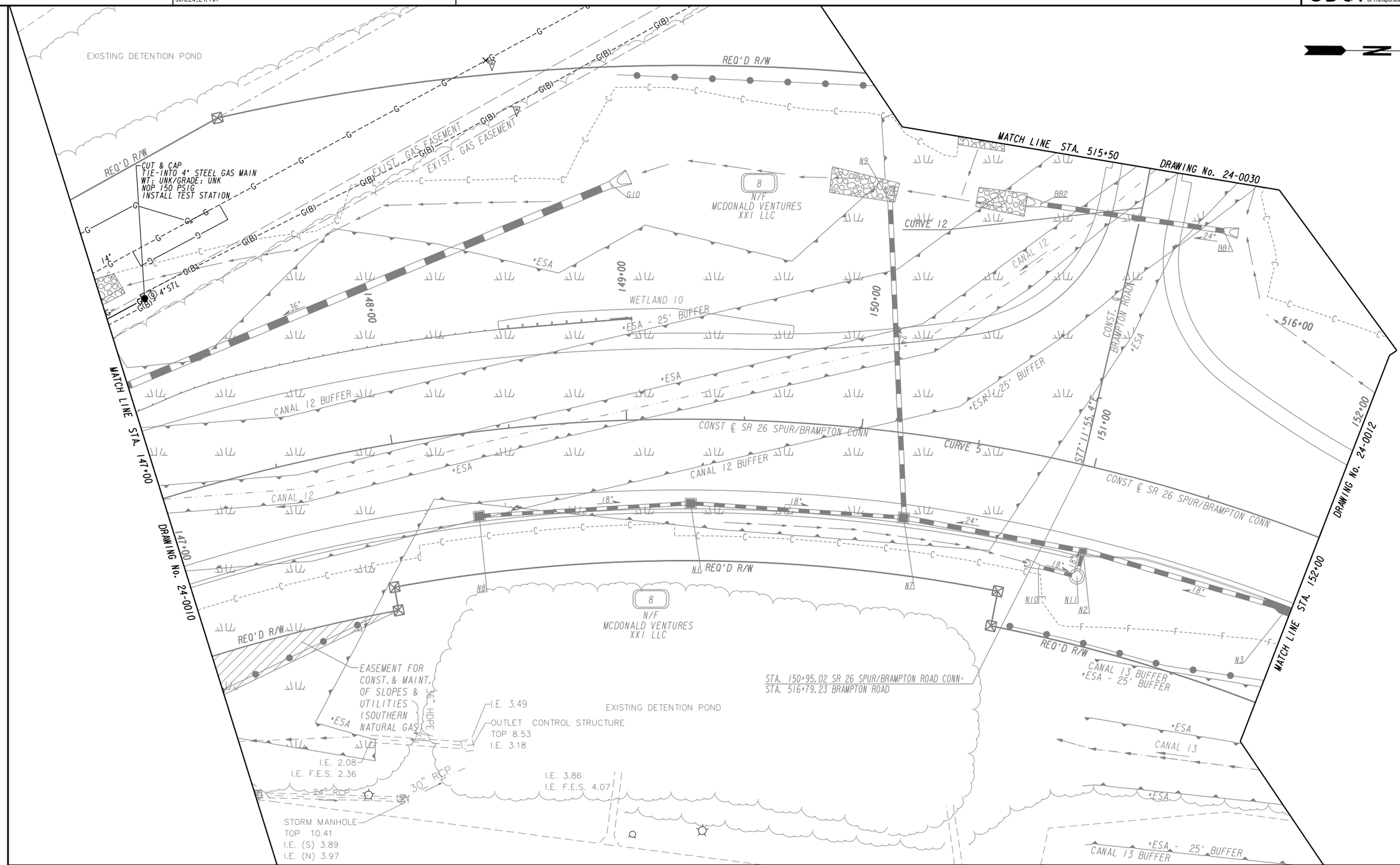
UTILITY PLANS

BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-0010
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

3/22/2021	12:17:04 PM	GPLOT-V8	Q:\SV\5531-02\600 CADD_Active\DGN\0006328_24-0011.dgn	GDOT Georgia Department of Transportation	P.I. No.
USER:fattar		SCREEN_24.tbl			0006328



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES		

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		24-0011
VERIFIED:		DATE:		

10/23/2015 GPLN

MATCH LINE STA. 652+00 DRAWING No. 24-0030

PROPOSED: 1380' X 4" STEEL GAS MAIN WT: 0.156/GRADE: X-52 MOP: 150 PSIG

DIRECTIONAL BORE: (2) 1.25" HDPE SDR11 (1) 144-CT ARMORED FIBER (1) 12 GAUGE THHN TRACER WIRE MINIMUM DEPTH = 42"

EXISTING (1) 24"x36"x36" HANDHOLE (1) 5/8" X 8' GROUND ROD LEAVE 150' SLACK LOOP

CONC. SPILLWAY GA STD. 9013 TP 3

9 N/F GEORGIA PORTS AUTHORITY

EXISTING NEW SOUTHERN LIGHT/UNITI FIBER (2) 1.25" CONDUITS EQUIPPED W/ (1) 144 FOC ALONG REQ'D R/W

PROPOSED DOWNGUY TO TRANSITION TO BURIED SECTION

DBOR UNDER DRAINAGE

REMOVE ATT POLE

REMOVE ATT POLE AND GUYS

EXISTING NEW SOUTHERN LIGHT/UNITI FIBER HANDHOLE TO MEET VERIZON

LIMIT OF CONSTRUCTION GPA DRIVE STA. 656+30.00

AERIAL 2-SVC WIRE TO BE ATTACHED TO NEW FEED

2-SVC WIRE BURIED 600PR COPPER AND 48FOC TO BE SPLICED TO NEW FEED

N 36°54'24.1" W BURIED VERIZON TELECOM CONDUIT

EXISTING FENCE

9A N/F GEORGIA PORTS AUTHORITY

EXIST. VERIZON HH

3-336ACSR+4/0ACSRN

PROP. HANDHOLE

PROP. BURIED 600PR COPPER AND 48FOC 25-4489 25-2 60' JOINT USE SS CONCRETE

NEW 0.625 COAX FEEDER CABLE TO BE INSTALLED

PROPOSED BURIED 600PR COPPER AND 48FOC

AERIAL 24FOC AND 600PR 24G COPPER TO BE REMOVED

REMOVE ATT POLE

34

PROP. AERIAL 50PR COPPER TO NEW POWER POLE

50P-24G

EXIST. R/W

EXIST PIPE TO REMAIN

48F, 400P-24G

N55°32'13.0"E GPA DRIVE

N55°42'00.2"E

CURVE 21 CURVE 22 CURVE 23

N 39°08'49.2" E

N 41°57'14.3" E

652+00 653+00 654+00 655+00 656+00 155+00 156+00 157+00

4"STL 4.5" CSTL BRAMPTON ROAD INDUSTRIAL DISTRICT

VOPAK 6"STL PIPE - 34" OF COVER TYP.

4ALDPX

3-795AAC+4/0ACSRN

12" DIP

TH7 TH8 TH9

EXIST. 20' WATER EASMT

24 CT FIBER, 0.875 X 0.625 AERIEL COAX TRUNK/FEEDER CABLE ON NEW 1/4 INCH STRAND TO BE INSTALLED ON NEW OVERHEAD GPC POLES.

GPC/50'

60' JOINT USE SS CONCRETE

55' SS CONCRETE IN: 3QII/OAXNJ SPLICE KEEP NEW UG CABLE AND SPLICES IN GRASS ISLAND

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES

PROPOSED BURIED 50PR COPPER FROM NEW POLE TO TIE IN WITH EXISTING BURIED CABLE

3-1/0AXN

55'/3 AK3790 CLOSED

4" STEEL GAS MAIN 150 PSIG MOP GRADE/WALL UNKNOWN

CONST ℄ SR 26 SPUR/BRAMPTON CONN

CANAL 13 BUFFER

CANAL 13

ESA

REQ'D R/W

MATCH LINE STA. 152+00 DRAWING No. 24-0011

55' SS CONCRETE -UG UTA SERVICE ON WL #30: TRANSFER SERVICE TO WL #30.01

30.01

8 N/F MCDONALD VENTURES XXI LLC

TH7
4.5" STL GAS
Ground Elev: 14.63'
Utility Depth: 3.08'

TH8
4.5" CSTL FUEL
Ground Elev: 12.97'
Utility Depth: 2.69'

TH9
12" DIP WATER
Ground Elev: 14.56'
Utility Depth: 5.94'

NOTE: VOPAK 6" STEEL PIPE IS ABANDONED AND CONTINUES PAST STA 168+00.

MATCH LINE STA. 157+50 DRAWING No. 24-0013

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET 0 20 40 80

REVISION DATES
06-30-21
08-19-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 24-0012

10/23/2015 GPLN

T* 1018544

9A N/F GEORGIA PORTS AUTHORITY

GUARD SHACK

EXIST. 18D 50' WATER EASMT

PUMP

EXISTING FENCE

GATE

SIGN

9 N/F GEORGIA PORTS AUTHORITY

END PROJECT CSSTP-0006-00(328)
SR 26 SPUR/BRAMPTON ROAD CONN
STA. 162+70.00
N 769782.6668
E 974135.9108

CUT AND CAP
TIE-IN 4" STEEL
GAS MAIN
WT:UNK/GRADE:UNK
NOP 150 PSIG
INSTALL TEST STATION

END CONSTRUCTION
STA. 161+70.00

158+00 159+00 160+00 161+00 162+00 163+00

DRAWING No. 24-0012 DRAWING No. 24-0014

MATCH LINE STA. 157+50 MATCH LINE STA. 157+50

4ALDPX 3-1/0ACSR+1/0ACSRN

GPC/40' AER SVC WIRE

ATT PED TIE IN SERVICE

DBOR UNDER DRAINAGE

REMO ATT POLE AND GUYS

GPC/35' GPC/45'

1/0ALTPX

24F 400P-24

CONC. SPILLWAY GA STD. 9013 TP 37

EXIST. R/W

EXIST. FIBE TO REMAIN

24F & 400P-24G

PROPOSED DOWNGUY TO TRANSITION TO BURIED SECTION

AERIAL 24FOC AND 400PR-24G COPPER TO BE REMOVED

N55°42'56.2"E

CONST ℄ SR 26 SPUR/BRAMPTON CONN

TH12 TH10 TH11

4.5" STL

6.5" CSTL

12" DIP

3-795AAC+4/0ACSRN

BRAMPTON ROAD INDUSTRIAL DISTRICT

EXIST. 20' WATER EASMT

REQ'D R/W

GPC/50'

24 CT FIBER. 0.875 / 0.625 AERIEL COAX TRUNK/FEEDER CABLE ON NEW 1/4 INCH STRAND TO BE INSTALLED ON NEW OVERHEAD GPC POLES.

AK3943 55' SS CONCRETE 300A SOLID BAR CUTOUTS-CLOSED

50'/3

EXISTING:
4" STEEL GAS MAIN
WT: UNK/GRADE :UNK
NOP: 150 PSIG
CP RECTIFIER

END CONCRETE PAVEMENT
BEGIN ASPHALT PAVEMENT
WIDENING & OVERLAY
STA. 157+75.10

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES

8 N/F MCDONALD VENTURES XXI LLC

10 N/F CHEMTRADE SOLUTIONS LLC. F/K/A GENERAL CHEMICAL LLC

EXIST. 18&D 50' WATER EASMT

TH10
6.5" CSTL FUEL
Ground Elev: 15.89'
Utility Depth: 3.48'

TH11
12" DIP WATER
Ground Elev: 15.23'
Utility Depth: 3.62'

TH12
4.5" STL GAS
Ground Elev: 16.95'
Utility Depth: 3.86'

NOTE:
1. VOPAK 6" STEEL PIPE IS ABANDONED AND CONTINUES PAST STA 168+00.
2. 4" GAS MAIN CONTINUES PAST STA 168+00.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
06-30-21
11-12-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	
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CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 24-0013

10/23/2015 GPLN

9
N/F
GEORGIA PORTS AUTHORITY

163+00 164+00 165+00 166+00 167+00 168+00 168+13

MATCH LINE 163+00

DRAWING No. 24-0013

IE 6.77
IE 13.67 24" RCP IE 12.19
24F & 400P-24G
AERIAL 24FOC AND 400PR-24G COPPER TO BE REMOVED
EXIST. AERIAL 400PR COPPER & 24FOC TO REMAIN
24F & 400P-24G
CONST ℄ SR 26 SPUR/BRAMPTON CONN
3-795AAC++ 4/0ACSRN
GPC/45'
REQ'D R/W
2-SVC WIRES

10
N/F
CHEMTRADE SOLUTIONS LLC. F/K/A GENERAL CHEMICAL LLC

NOTE:
1. VOPAK 6" STEEL PIPE IS ABANDONED AND CONTINUES PAST STA 168+00.
2. 4" GAS MAIN CONTINUES PAST STA 168+00.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
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LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

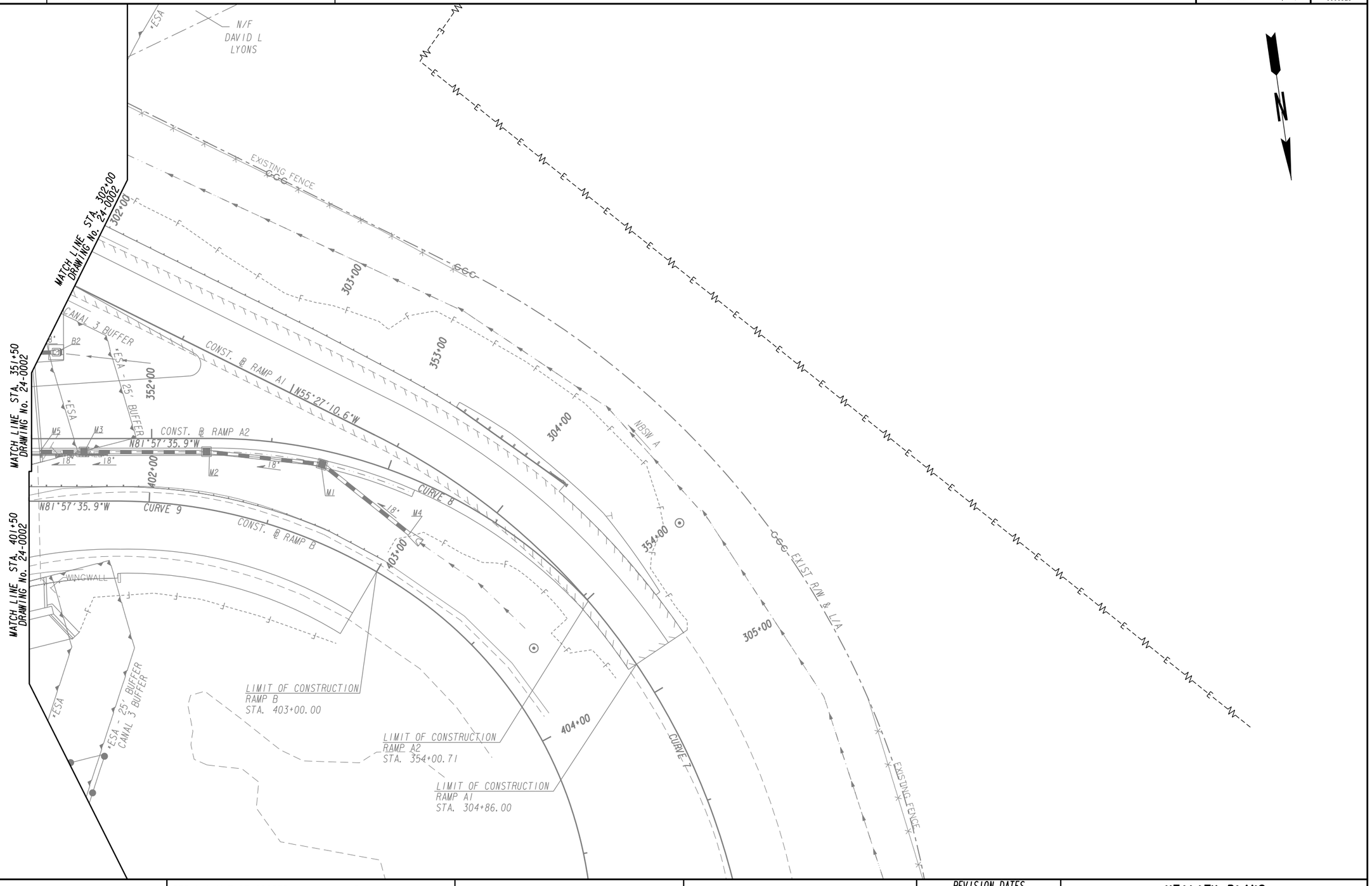
SCALE IN FEET
0 20 40 80

REVISION DATES
11-12-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
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CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
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ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

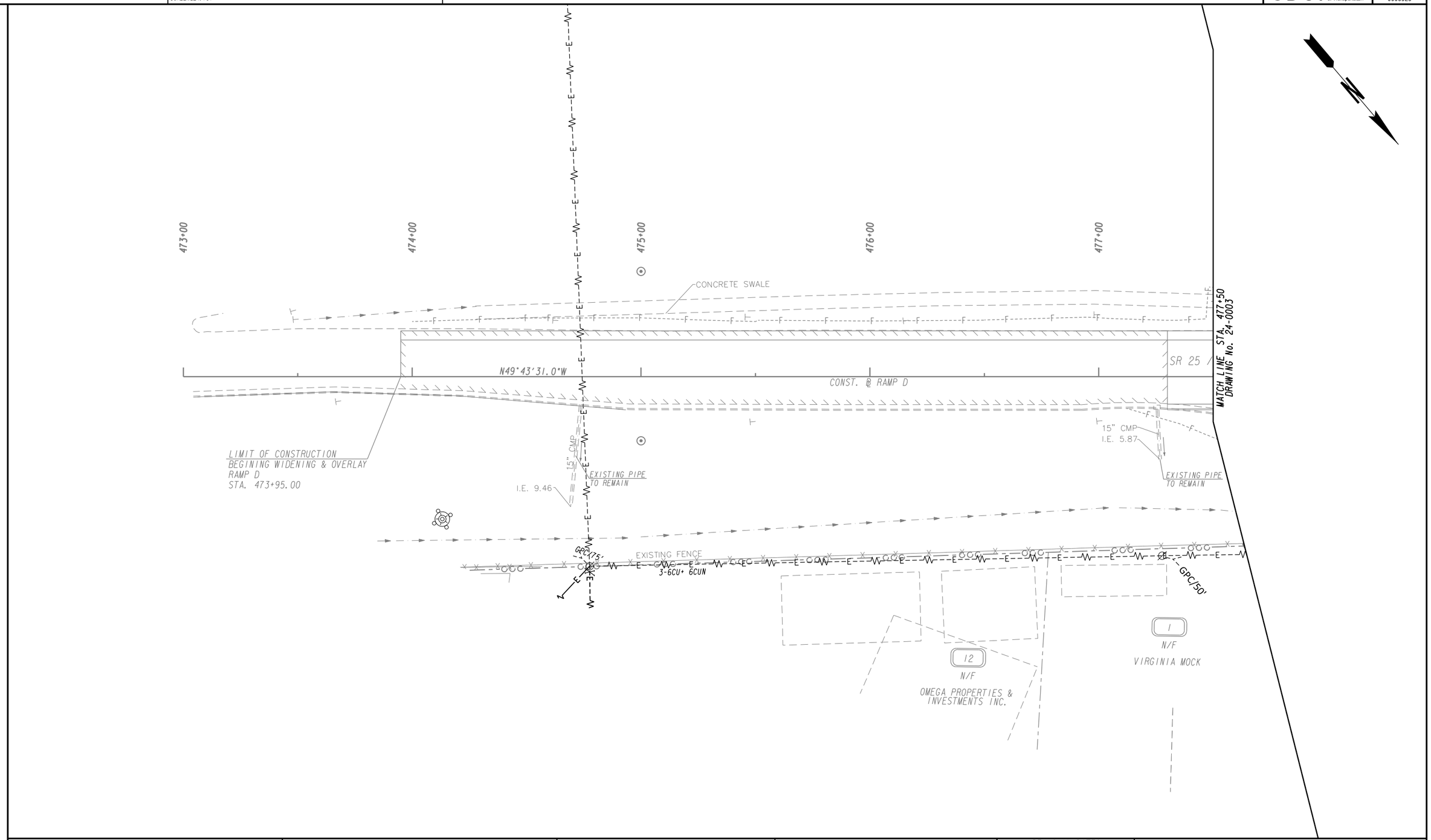
SCALE IN FEET
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REVISION DATES

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

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10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
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ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
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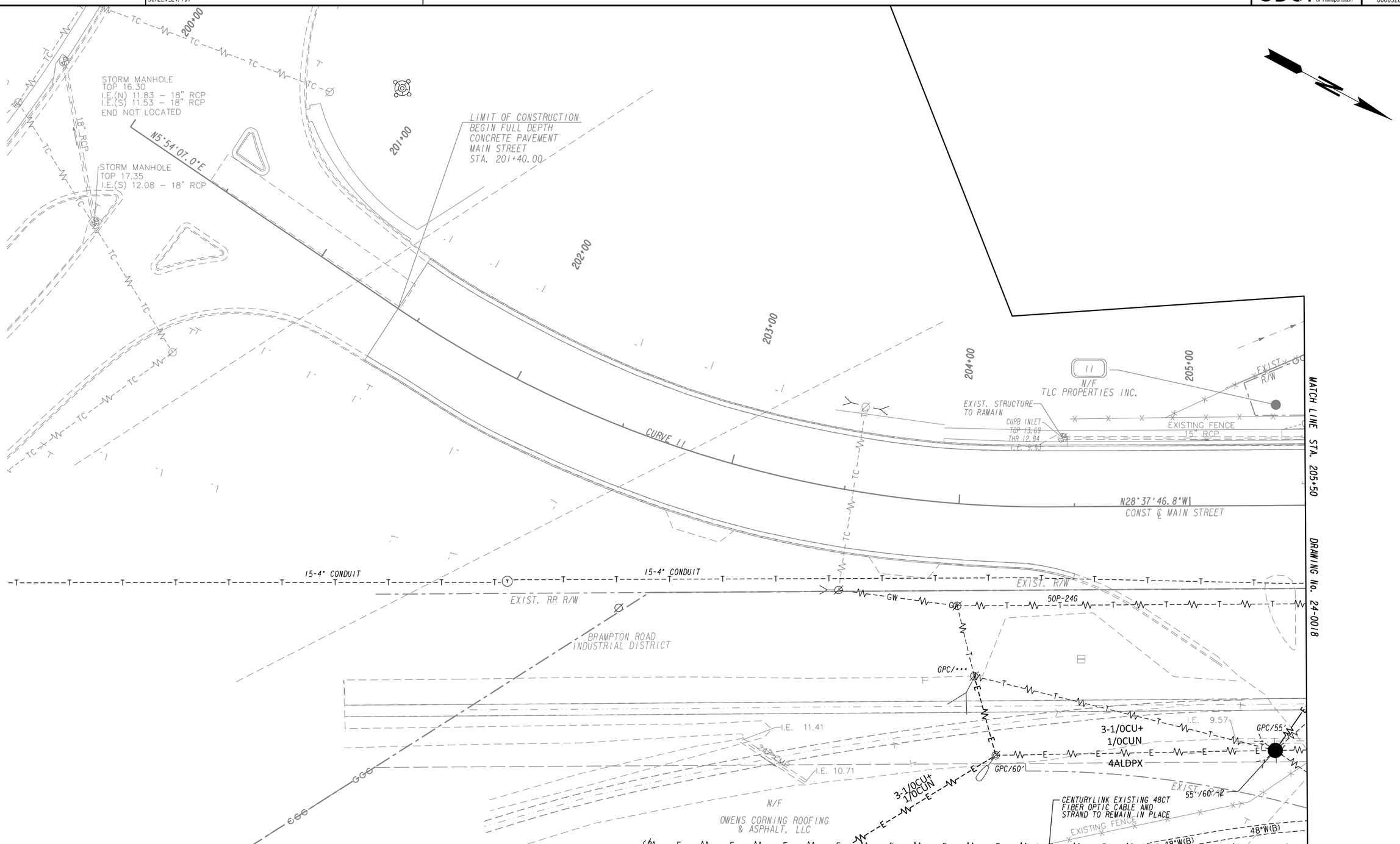
REVISION DATES

UTILITY PLANS

BRAMPTON ROAD CONNECTOR

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10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

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ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

moffatt & nichol

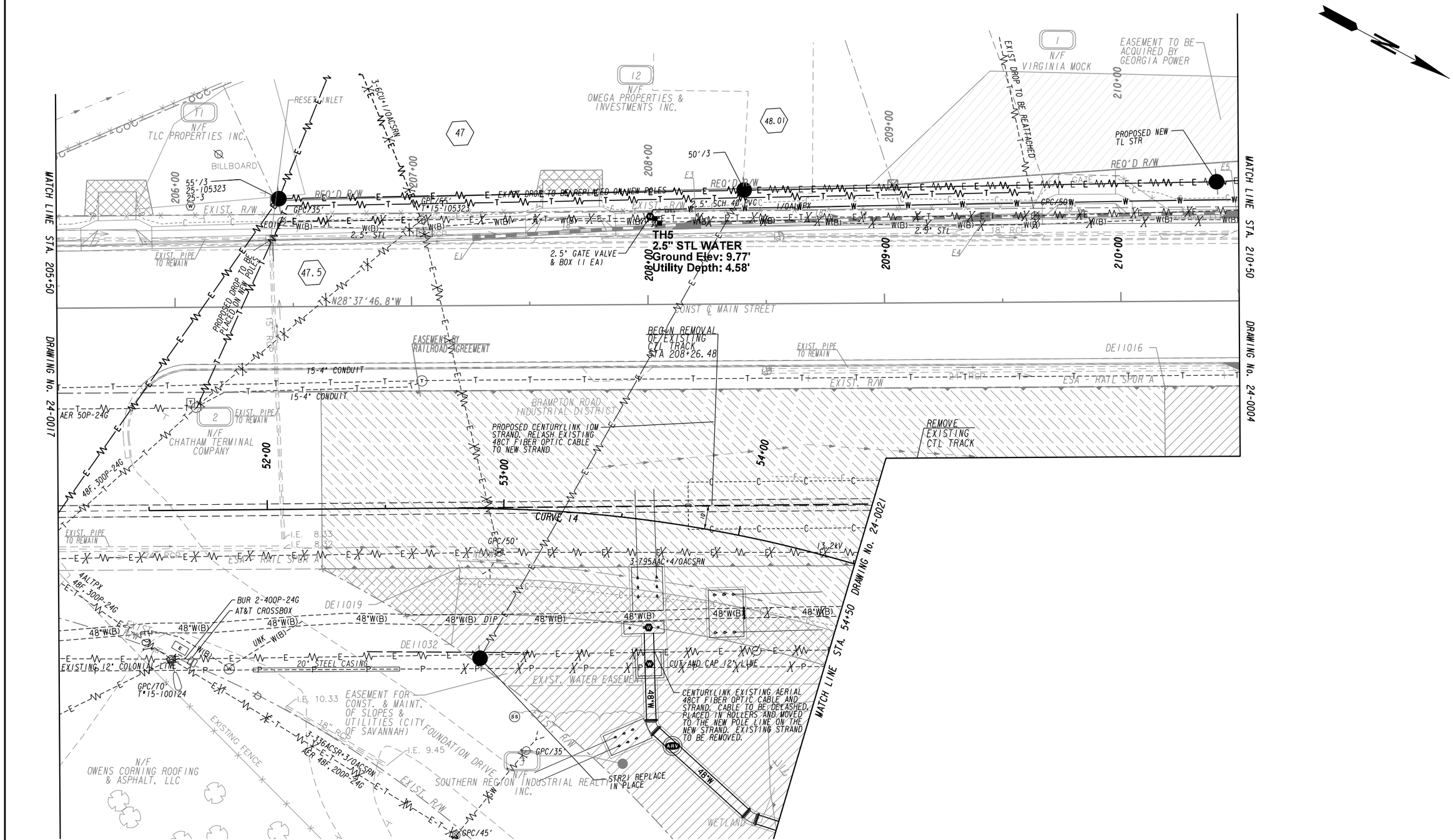
SCALE IN FEET
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REVISION DATES

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

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10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
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EASEMENT FOR CONSTR OF SLOPES
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ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
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REVISION DATES
05-12-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

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10/23/2015 GPLN

SANITARY SEWER MANHOLE
TOP 6.22
I.E. (N) -2.98
I.E. (S) -2.72

EXIST. GA POWER EASEMENT

EASEMENT TO BE ACQUIRED BY GEORGIA POWER

BEGIN APPROACH SLAB
END EXIST. BRIDGE
STA 214+61.01

ESA - 25' BUFFER

STR 17

GPC/70'

4ALDPX

3-795AAC+4/0ACSRH

SIGN

8" DIP

W(B)

15" RCP

PROPOSED CENTURYLINK 10M STRAND. RELASH EXISTING 48CT FIBER OPTIC CABLE TO NEW STRAND

EXISTING 24" RCP TO REMAIN

SANITARY SEWER MANHOLE
TOP 5.61
I.E. (N) -3.78
I.E. (S) -3.69

PROPOSED STR 87 50'/3

EXISTING 24" RCP

N/F
TRAFFIC CIRCLE SHOPPING CENTER

EXIST. TO UTILITY EASMT

SANITARY SEWER MANHOLE
TOP 6.54
I.E. (S) -4.38
I.E. (W) -4.42

N/F
GARDEN CITY

PROPOSED NEW TL STR 86

4ALTPX

8" DIP

30" RCP

EXISTING 30" RCP TO REMAIN

SANITARY SEWER MANHOLE
TOP 4.12
I.E. (N) -5.00
I.E. (S) -4.98
I.E. (E) -4.76
I.E. (W) -4.45

GPC/50'

33372-9445

3-795AAC+4/0ACSRH

8" DIP

4ALDPX

CENTURYLINK EXISTING 48CT FIBER OPTIC CABLE AND STRAND TO REMAIN IN PLACE

GPC/30'

N/F
MORTON & BAXTOR
KAREN & BETTY

NBSW D

EXIST. R/W

EXISTING FENCE

SFM

SF

12" RCP

200P-26G

DRAWING No. 24-0004

DRAWING No. 24-0020

MATCH LINE STA. 214+00

MATCH LINE STA. 219+50

214+00

215+00

216+00

217+00

218+00

219+00

25/MAIN ST
LIMIT = 45MPH

CANAL 5

CONST ℄ SR 25/MAIN STREET

N28°37'46.8"W

BEGIN EXISTING RR BRIDGE
STA 214+67.40
85.39' RT

REMOVE EXISTING RR BRIDGE
RESTORE CANAL TO ORIGINAL CONDITION

END EXISTING RR BRIDGE
STA 215+54.52
85.45' RT

END REMOVAL OF EXISTING CTL TRACK
STA 215+94.52

EXISTING 15" RCP TO REMAIN

15" RCP

24" RCP

EXIST. R/W

BUR 18-4" CONDUIT

EXIST. PIPE TO REMAIN

CONC. HEADWALL

REMOVE EXISTING CTL TRACK

BRAMPTON ROAD
NBSW C INDUSTRIAL DISTRICT

2
N/F
CHATHAM TERMINAL COMPANY

EASEMENT BY RAILROAD AGREEMENT

INSTALL EARTHMOUND

NBSW B

ESA - RAIL SPUR A

EXISTING CTL TRACK TO REMAIN COLONIAL OIL 12" PIPELINE STEEL 5' COVER

48"W(B)

CENTURYLINK EXISTING AERIAL 48CT FIBER OPTIC CABLE AND STRAND. CABLE TO BE DELASHED. PLACED IN ROLLERS AND MOVED TO THE NEW POLE LINE ON THE NEW STRAND. EXISTING STRAND TO BE REMOVED.

WATER LINE IS ABOVE GROUND FROM THIS POINT GOING NORTH TO THE EXPOSED PIPE LOCATION

EXISTING 12" COLONIAL LINE

EXIST. CANAL R/W

WETLAND 6

EXIST. WATER EASEMENT

N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	24-0019
CORRECTED:		DATE:	
VERIFIED:		DATE:	

10/23/2015 GPLN

N/F
MORTON & BAXTOR
KAREN & BETTY

N/F
SHAVERS & BAXTER
DEZZIE JR & BETTY

N/F
LL, LLC

N/F
SOMMERS BROTHERS
PARTNERSHIP

N/F
SOMMERS BROTHERS
PARTNERSHIP

EXIST. R/W

GPC/45'

CURB INLET
TOP 6.87
THR 6.77

EXIST. R/W

220+00

221+00

222+00

223+00

224+00

DRAWING No. 24-0019

SFM

LIMIT OF CONSTRUCTION
END MILL & INLAY
SR 25/MAIN STREET
STA 220+00.00

AER 25P 26G

CENTURYLINK EXISTING 48CT
FIBER OPTIC CABLE AND
STRAND TO REMAIN IN PLACE

CONST. ℄ SR 25/MAIN STREET

N28°37'46.8"W

CURB INLET
TOP 7.84
THR 6.93
I.E. (N) 2.82
I.E. (S) 2.78

EXIST. PIPE
TO REMAIN

MATCH LINE STA. 219+50

BUR 15-4" CONDUIT

3-795AAC+470ACSRN 200P-26G

GPC/55'

200P-26G

33372-9445 4ALDPX

GPC/...

ESA - RAIL SPUR A

33382-9445 4ALDPX

BRAMPTON ROAD
INDUSTRIAL DISTRICT

EXIST. R/W

NBSW C

STORM MANHOLE
TOP 7.73

15" RCP

EXISTING CTL
TRACK
TO REMAIN

I.E. -0.61

ESA - RAIL SPUR A

SS

SS

GW

48"W(B) 48"W(B) 48"W(B) 48"W(B) 48"W(B) 48"W(B) 48"W(B) 48"W(B) 48"W(B) DIP 48"W(B) 48"W(B) 48"W(B) 48"W(B)

GW

N/F
SOUTHERN REGION
INDUSTRIAL REALTY
INC.

EXIST. WATER EASEMENT

WETLAND 6

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

moffatt & nichol

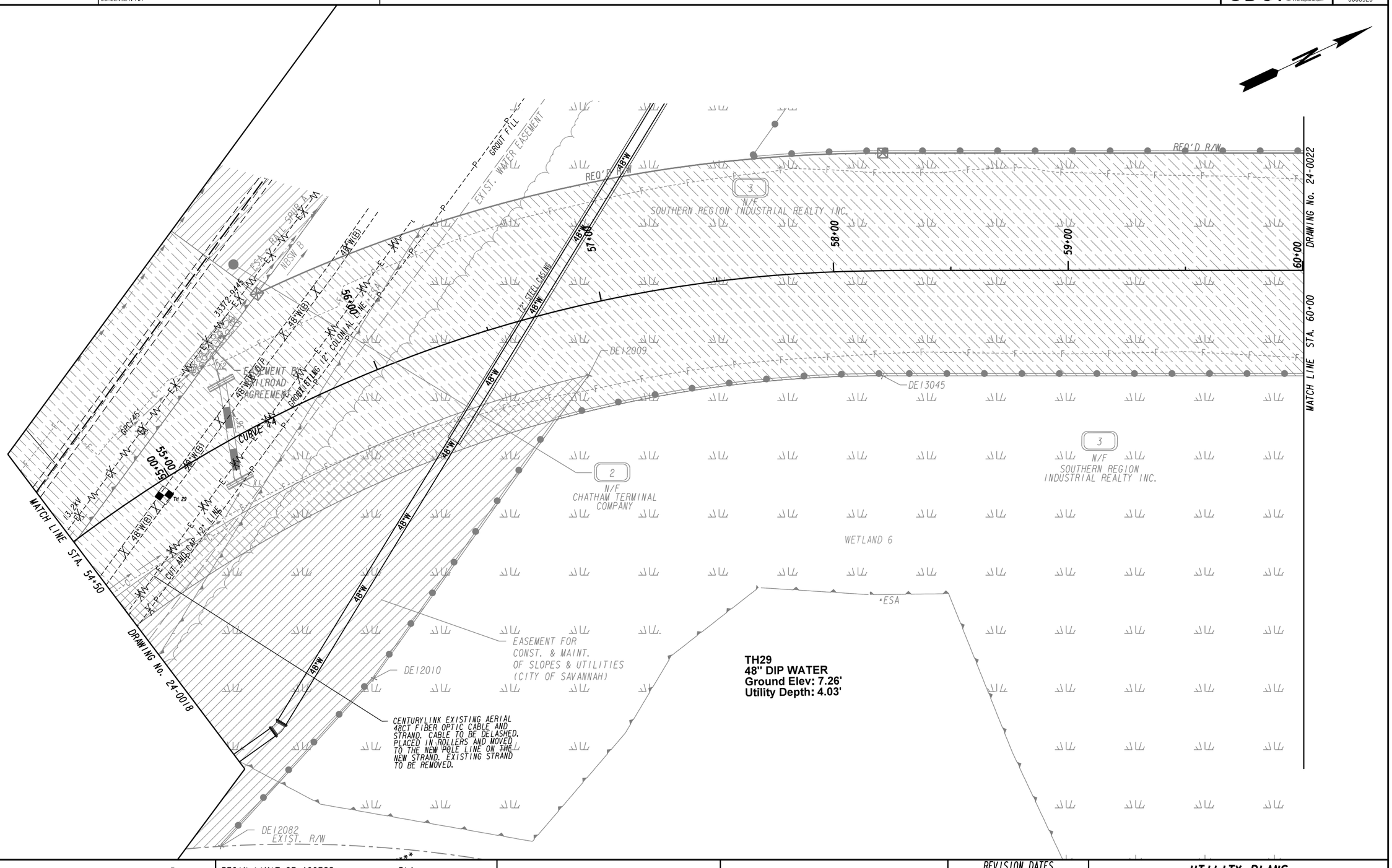
SCALE IN FEET
0 20 40 80

REVISION DATES
11-29-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-0020
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

UTILITY PLANS
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		24-0021
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

EXIST. R/W
TRIPLE BOX CULVERT 10' X 8'
I.E. -1.52
I.E. -0.76
36" RCP
18" RCP
EXIST. R/W
N/F
NATIONAL RETAIL PROPERTIES LP
EXIST. R/W
36" RCP
36" RCP
36" RCP
EXIST. R/W
EXIST. R/W
CONCRETE DRIVE
EXIST. R/W
36" RCP
CONCRETE DRIVE
N/F
220 GA HOLDINGS LLC
CANAL 2
*ESA - 25' BUFFER
*ESA
CANAL 2 BUFFER
N/F
SHREE SAI LLC
R 32.00'
101+12.00
73.75' LT
BEGIN CURB & GUTTER TP 2
STA 101+64.00 76.00' LT
MATCH EXISTING
END CURB & GUTTER TP 2
100+40.04 76.00' LT
R 35.00'
101+96.80
65.00' LT
EXIST. R/W
ASPHALT DRIVE
TRIPLE BOX CULVERT 10' X 8'
26'
CANAL 2
99+00
100+00
101+00
BEGIN CURB & GUTTER TP 2
100+13.00 42.00' LT
TYPE III CONCRETE
STRAIN POLE
101+00.00
58.00' LT
98+50
POB 98+50.00
BEGIN CONSTRUCTION
BEGIN MILL & OVERLAY
ASPHALT PAVEMENT
STA. 100+13.00
MATCH EXISTING +13.00 1.00%
42'
B.F.S. +18.00 3.00%
2" MILL & ASPHALT
6.5'
30'
CANAL 2 BUFFER
END CURB & GUTTER TP 2
STA 101+97.00 30.00' LT
N22°06'17.9"W
P.C. 100+04.83
CONST ℄ SR 26 SPUR/BURNSED BOULEVARD
CURVE 1
DRAWING No. 13-0002
102+00
MATCH LINE STA. 102+00
BEGIN PROJECT CSSTP-0006-00(328)
SR 26 SPUR/BURNSED BOULEVARD
STA. 99+00.00
N 764132.4439
E 973106.8155
BLA
99+44.76
84.41' RT
SR 26/US 80
18" RCP
EXIST. R/W & L/A
EXIST. POLE
+23.40
66.54' RT
MATCH EXISTING +13.00 1.00%
TYPE III CONCRETE
STRAIN POLE
101+00.00
53.00' RT
CONTRACTOR SHALL
CUT PAVEMENT
TO NEAT EDGE
6.5'
EXIST. R/W & L/A
BEGIN TAPER BEGIN
CURB & GUTTER TP 2
100+13.00 42.00' RT
EXIST. POLE
+17.11
56.17' RT
EXIST. POLE
+66.75
76.63' RT
END CURB & GUTTER TP 2
STA 101+97.00 33.07' RT
EXIST. R/W
N/F
MIKES HOLDINGS, LLC

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0001
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

N/F SHREE SAI LLC

N/F DAVID L LYONS

EXIST. R/W

EXIST. R/W & L/A

CANAL 1

CANAL 2

CANAL 3

*ESA CANAL 1 BUFFER

CANAL 2 BUFFER

*ESA - 25' BUFFER

*ESA

CANAL 3 BUFFER *ESA - 25' BUFFER

BLA 301+25.94 74.71' LT

CL1 104+21.32 130.04' LT

301+29.56 16.00' LT

MATCH LINE STA. 302+00 DRAWING No. 13-0015

MATCH LINE STA. 351+50 DRAWING No. 13-0015

MATCH LINE STA. 401+50 DRAWING No. 13-0015

12' PAVED SHOULDER

TRIPLE BOX CULVERT 10' X 8'

CANAL 3 R.C. *32.00 2.00%

CONST. @ RAMP A2 N55°27'10.6"W 335.9'

CONST. @ RAMP B N18°57'35.9"W

BEGIN V-GUTTER STA 351+10.00 5.50' RT

DETECTABLE WARNING STRIP

BEGIN TAPER 350+65.00 16.00' LT

10' PAVED SHOULDER

#PK NAIL SET

EXISTING 30" RCP TO REMAIN

MATCH BURNSED BLVD *37.00 -0.39%

MATCH BURNSED BLVD *37.00 0.43%

DETECTABLE WARNING STRIP

R.C. *93.00 -2.00%

Z.S. *90.00 0.00%

0.00% Z.S. *50.00

R 2.00'

R 205.00'

R 3.00'

20'

12'

12' PAVED SHOULDER

CL2 106+01.20 144.94' LT END W-BEAM GUARDRAIL STA 351+25.01 6.33' RT TYPE 12A ANCHOR GDOT STD 4380 & 4384

R 185.00' 401+85.14 205.00' RT

BEGIN W-BEAM GUARDRAIL STA 401+26.00 42.20' RT TYPE 12A ANCHOR GA STD 4384 & 4380

BEGIN W-BEAM GUARDRAIL STA 401+04.21 6.00' LT TYPE 12A ANCHOR GDOT STD 4384 & 4380

BEGIN W-BEAM GUARDRAIL STA 400+75.00 71.59' RT TYPE 12A ANCHOR GDOT STD 4384 & 4380

BEGIN T-BEAM GUARDRAIL STA 107+40.00 39.50' LT TYPE I ANCHOR GDOT STD 4383 & 4382

BEGIN W-BEAM GUARDRAIL STA 350+46.50 6.33' RT TYPE I ANCHOR GDOT STD 4383 & 4380

6" INTEGRAL CONCRETE RAISED ISLAND, TP 7 FACE, GA STD 9032B

RIP RAP TP. 3, 18"

102+97.76 30.00' LT

BEGIN W-BEAM GUARDRAIL STA 103+23.26 44.17' LT TYPE I ANCHOR GDOT STD 4383 & 4380

P.T. 300+47.14

P.C. 300+02.16

CURVE 1 44°16'50.2"

CURVE 6 88°21'25.2"

86°48'13.7"

CONST. @ RAMP A1

CONST. @ SR 26 SPUR/BURNSED BOULEVARD

EXISTING 30" RCP TO REMAIN

10' PAVED SHOULDER

END TAPER 102+58.00 30.00' RT

BEGIN TAPER 105+16.00 30.00' RT

END TAPER 105+71.00 27.50' RT

BEGIN W-BEAM GUARDRAIL STA 105+62.00 35.83' RT TYPE 12A ANCHOR GA STD 4384 & 4380

STA. 103+79.90 SR 26 SPUR/BURNSED BOULEVARD= STA. 300+00.00 RAMP A1

END MILL AND INLAY BEGIN CONCRETE FULL DEPTH STA. 105+00.00

STA. 105+37.45 SR 26 SPUR/BURNSED BOULEVARD= STA. 350+00.00 RAMP A2

STA. 105+63.47 SR 26 SPUR/BURNSED BOULEVARD= STA. 400+00.00 RAMP B

END W-BEAM GUARDRAIL BEGIN T-BEAM GUARDRAIL STA 109+99.35 35.50' RT GA STD 4380

END T-BEAM GUARDRAIL STA 107+20.00 35.50' RT BEGIN CONCRETE SIDE BARRIER GA STD 4382 & GA SPECIAL CONST. DETAIL 4949A(TP 7-CS)

ELA 106+48.55 116.68' RT

18" CMP

N/F MIKES HOLDINGS, LLC

N/F RJKA QUICK LOCK, LLC

EXIST. R/W & L/A

MATCH LINE STA. 102+00 DRAWING No. 13-0001

MATCH LINE STA. 107+50 DRAWING No. 13-0003

Z1 RELOCATE EXISTING LIGHT POLE TO STA. 105+47.42, 58' LT (SEE SHEET 25-0001)

Z2 RELOCATE EXISTING LIGHT POLE TO STA. 103+23.26, 44.17' LT (SEE SHEET 25-0001)

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET 0 20 40 80

REVISION DATES

CONSTRUCTION PLAN

BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		13-0002
VERIFIED:		DATE:		

10/23/2015 GPLN

CANAL 3 BUFFER
*ESA
CL4
107+61.78
124.96' LT
CANAL 3
*ESA
TRIPLE BOX CULVERT 10' X 8'
LIMIT OF CONSTRUCTION
RAMP C
STA. 451+35.00
END CONCRETE SIDE BARRIER
STA 450+57.00 14.00' LT
GA SPECIAL CONST. DETAIL
4949A (TP 7-CS)
451+00
+69.00
15.06' LT
BEGIN CONCRETE SIDE BARRIER
GDOT STD 4382 & GA SPECIAL
CONST. DETAIL 4949A (TP 7-CS)
STA. 107+70.00 35.50' LT
END T-BEAM GUARDRAIL
STA. 107+72.50 35.50' LT
BEGIN 4' PAVED SLOPE
STA 107+92.41
END 4' PAVED SLOPE
STA 109+37.54
TYPE IV STRAIN POLE
109+85.00 60.00' LT
R 50.00'
450+76.36
50.00' LT
108+00
109+00
+92.41
41.00' LT
I-516 BRIDGE COLUMNS (TYP.)
BRIDGE COLUMN
4' SLOPE CONC. PAV. (TYP.)
109+75.00
35.50' LT
+33.95
27.50' LT
PAVED SHOULDER
8'
27.5'
E.F.S. +3.00%
R.C. -2.00%
LOCATION CD
#PK NAIL SET
N26°07'44.9"E
CONST ℄ SR 26 SPUR/SR 25/BURNSED BOULEVARD
CURVE 1
MATCH LINE STA. 107+50
DRAWING No. 13-0002
P.T. 108+13.00
BEGIN TAPER
109+25.00
27.50' RT
P.C. 109+33.95
END CONCRETE SIDE BARRIER
STA 109+45.00 36.23' RT
BEGIN T-BEAM GUARDRAIL
GDOT STD 4382 & 4382 &
GA SPECIAL CONST. DETAIL
4949A (TP 7-CS)
END T-BEAM GUARDRAIL
STA 109+58.16 36.78' RT
BEGIN W-BEAM GUARDRAIL
GDOT STD 4380. 4391. & 4382
DO NOT DISTURB EXISTING LIGHTING
TYPE IV STRAIN POLE
110+02.00
57.00' RT
478+00
END W-BEAM GUARDRAIL
STA 478+36.80 21.50' LT
TYPE 12A ANCHOR
GDOT STD 4380 & 4384
END EXIST PAVED DITCH (6-FT)
18" CMP
4' SLOPE CONC. PAV.
BRIDGE COLUMN (TYP.)
MATCH LINE STA. 477+50
DRAWING No. 13-0016
P.C. 477+64.96
BEGIN L/A
477+65.90
73.93' RT
REQ'D R/W & L/A
EXIST. R/W & L/A
N/F
VIRGINIA MOCK
1
CONST. ℄ RAMP C
N60°46'55.4"W
MATCH EXISTING
+35.00
-0.02%
4'
20'
L1
L2
L3
L4
18"
C1
C2
C3
C4
D1
D2
D12
BEGIN CURB & GUTTER TP 2
STA 451+35.00 19.70' RT
MATCH EXISTING
TIE TO EXIST. GUARDRAIL
STA 451+43.00 22.86' RT
GDOT STD 4390
BEGIN GUARDRAIL TRANSITION
STA 450+91.00 33.50' RT
BEGIN W-BEAM GUARDRAIL
GDOT STD 4390 & 4380
BLA
451+43.00
33.70' RT
I.E. 2.46
N/F
TRAFFIC CIRCLE SHOPPING CENTER
*ESA - 25' BUFFER
CANAL 4 BUFFER
EXIST. R/W & L/A
*ESA
R 75.00'
451+12.00
95.00' RT
CL3
450+86.62
52.07' RT
END W-BEAM GUARDRAIL
STA 112+30.48 46.50' LT
TYPE 12A ANCHOR
GDOT STD 4380.4381.4384. & 4391
TYPE III CONCRETE STRAIN POLE
112+41.00
57.00' LT
CANAL 4
+69.00
4.06' LT
I.E. 0.03
24" RCP
TYPE IV STRAIN POLE
111+48.00 56.00' LT
R 93.00'
R 2.00'
MATCH BURNSED BLVD
0.89%
+27.5
R 2.00'
6" INTEGRAL CONCRETE RAISED ISLAND. TP 7 FACE. GA STD 9032B
*ESA - 25' BUFFER
CANAL 4 BUFFER
15" RCP
111+00
112+00
DRAWING No. 13-0004
R 2.00'
89°26'24"
450+00
STA. 110+12.43 SR 26
SPUR/SR 25/BURNSED BOULEVARD
STA. 450+00.00 RAMP C
EXIST. 18" RCP TO REMAIN
48°28'48"
CURVE 2
P.I. 479+33.74
STA. 110+84.94 SR 26
SPUR/SR 25/BURNSED BOULEVARD
STA. 479+33.74 RAMP D
479+00
18" RCP
CONST. ℄ RAMP D
MATCH BURNSED BLVD
+77.65
2.00%
CURVE 10
+15.60
53.20' RT
24" RCP
I.E. 0.00
TYPE IV STRAIN POLE
111+35.00
62.00' RT
OBLITERATE EXISTING PAVEMENT AND BASE. GRADE TO DRAIN AND GRASS
R 100.00'
477+96.31
112.00' RT
END TAPER
111+50.00
38.50' RT
TYPE III CONCRETE STRAIN POLE
112+41.00
65.00' RT
REQ'D R/W & L/A
MATCH LINE STA. 112+50
38.5'
49.5'

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0003
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

TRAFFIC CIRCLE SHOPPING CENTER N/F
EXIST. GA POWER EASEMENT
*ESA - 25' BUFFER
EXIST. R/W & L/A
CANAL 4 BUFFER
R 120.00'
113+26.23
158.50' LT
END APPROACH SLAB
BEGIN EXIST. BRIDGE
STA 213+89.47
END CURB & GUTTER TP 2
STA 213+30.91 36.00' LT
MATCH EXISTING
END 5' SIDEWALK
STA 114+27.57
116.98' LT
END CURB & GUTTER TP 2
STA 213+61.04 24.00' RT
MATCH EXISTING
+91.97
24.00' RT
MATCH LINE STA. 214+00 DRAWING No. 13-0019
WETLAND 6
3R
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.
LOCATION CD
▼ #PK NAIL SET
*ESA
STA. 114+28.09 BURNSED BLVD/SR 26 SPUR/SR 25
STA. 212+21.17 SR 25/MAIN ST
BEGIN EXISTING
APPROACH SLAB
213+69.26
4
N/F
CHATHAM COUNTY
RIP RAP
TP. 3, 18"
BEGIN 5' SIDEWALK
STA 113+58.04
53.56' LT
+34.44
36.00' LT
EASEMENT BY
RAILROAD
AGREEMENT
REMOVE
EXISTING
CTL TRACK
EXIST. RR R/W
E10
RESOURCE 1
REQ'D R/W
CANAL 4
I.E. -0.36
D11
D9
D7
213+00
R 60.00'
213+61.04
84.00' RT
RIP RAP
TP. 3, 18"
MATCH LINE STA. 118+00
6.5' PAVED SHOULDER
EXIST. WATER EASEMENT
TYPE IV
STRAIN POLE
115+55.00
66.00' LT
CANAL 4 BUFFER
*ESA - 25' BUFFER
D10
D8
114+00
R 30.00'
R 2.00'
R 84.00'
E.F.S.
+85.00
2.40%
R.C.
+85.00
2.00%
6' INTEGRAL
CONCRETE RAISED
ISLAND,
TP 7 FACE,
GA STD 9032B
CONST ℄ SR 25/MAIN STREET
N28°37'46.8"W
24" RCP
REMOVE
EXISTING
CTL TRACK
R.C.
+14.00
2.00%
R 2.00'
R 84.00'
70°00'00"
800.38'
N41°22'13.2"E
115+00
R.C.
-14.00
2.00%
P.C. 115+23.38
LOCATION CD
#"5/8"" IRON REBAR SET"
ARV
W
MATCH LINE STA. 112+50
38.5'
30'
30' R/W
113+00
CURVE 2
212+00
CURVE 3
117+00
42'
CONST ℄ SR 26 SPUR/BRAMPTON CONN
DRAWING No. 13-0005
TYPE IV
STRAIN POLE
112+83.00
84.00' RT
49.5'
24" RCP
R 2.00'
6' INTEGRAL
CONCRETE RAISED
ISLAND,
TP 7 FACE,
GA STD 9032B
R 84.00'
1
N/F
VIRGINIA MOCK
EXIST. R/W & L/A
D4
D5
D6
D3
TRAFFIC CONTROL
CABINET
EASEMENT TO BE
ACQUIRED BY
GEORGIA POWER
ELA
210+80.19
39.91' LT
33'
211+00
REQ'D R/W & L/A
R 60.00'
210+66.22
93.00' LT
BEGIN L/A
210+65.00
60.00' LT
24'
MATCH LINE STA. 210+50
DRAWING No. 13-0018
EXIST. 24" RCP
CONC. S/W
P.T. 114+07.45
EXISTING 24"
RCP TO REMAIN
2
N/F
CHATHAM TERMINAL
COMPANY
ESA - RAIL SPUR A
CONC. 5' S/W
RIP RAP
TP. 3, 18"
F1
F2
F3
F4
S2
END CURB & GUTTER TP 2
STA 115+59.48 42.00' LT
6.5' PAVED SHOULDER
WETLAND 6
3
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.
END CURB & GUTTER TP 2
STA 115+59.48 42.00' RT
MATCH LINE DRAWING No. 13-0021
EXIST. R/W
E9
BRAMPTON ROAD
INDUSTRIAL DISTRICT
REMOVE
EXISTING
CTL TRACK
EXIST. RR R/W
TYPE IV
STRAIN POLE
114+49.00
96.00' RT
R 125.00'
210+97.69
149.00' RT
EB
EXISTING 24"
RCP TO REMAIN

Ⓩ RELOCATE EXISTING LIGHT POLE TO STA. 112+94.64, 90' RT (SEE SHEET 25-0002)

NOTES
1. HWL POLE TO BE RELOCATED. REMOVE (8) HPS LIGHT FIXTURES AND REPLACE WITH HOLOPHANE HWLED4-P2-30K-MVOLT-HGR-AWS-PCLL. RELOCATE POLE AND INSTALL NEW LIGHT FIXTURES TO LOCATION SHOWN. DEMOLISH FOUNDATION.

2. PROVIDE NEW FOUNDATION FOR RELOCATED HIGH MAST LIGHT. SEE SHEET 25-0003. PROVIDE 30A, 30A FUSE, 2P, NEMA 3R SERVICE ENTRANCE RATED DISCONNECT SWITCH WITH #8 GROUNDING ELECTRODE CONDUCTOR AT NEW GEORGIA POWER SERVICE FOR TRAFFIC CONTROL CABINET. PROVIDE (2) #10, #10G IN 2" CONDUIT TO HWL.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21
06-30-21
11-12-21
01-16-23

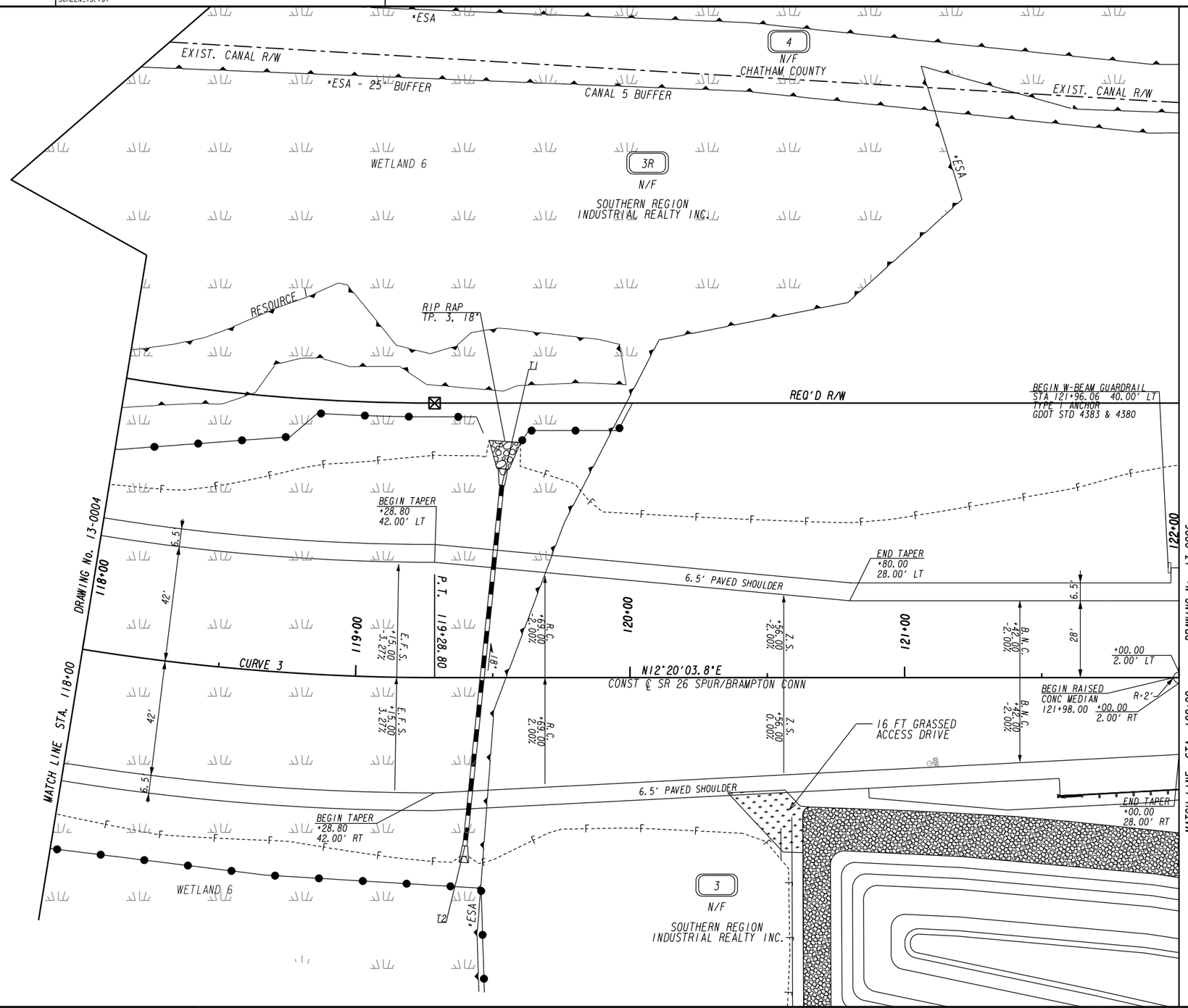
CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 13-0004

10/23/2015 GPLN

Use on Construction



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

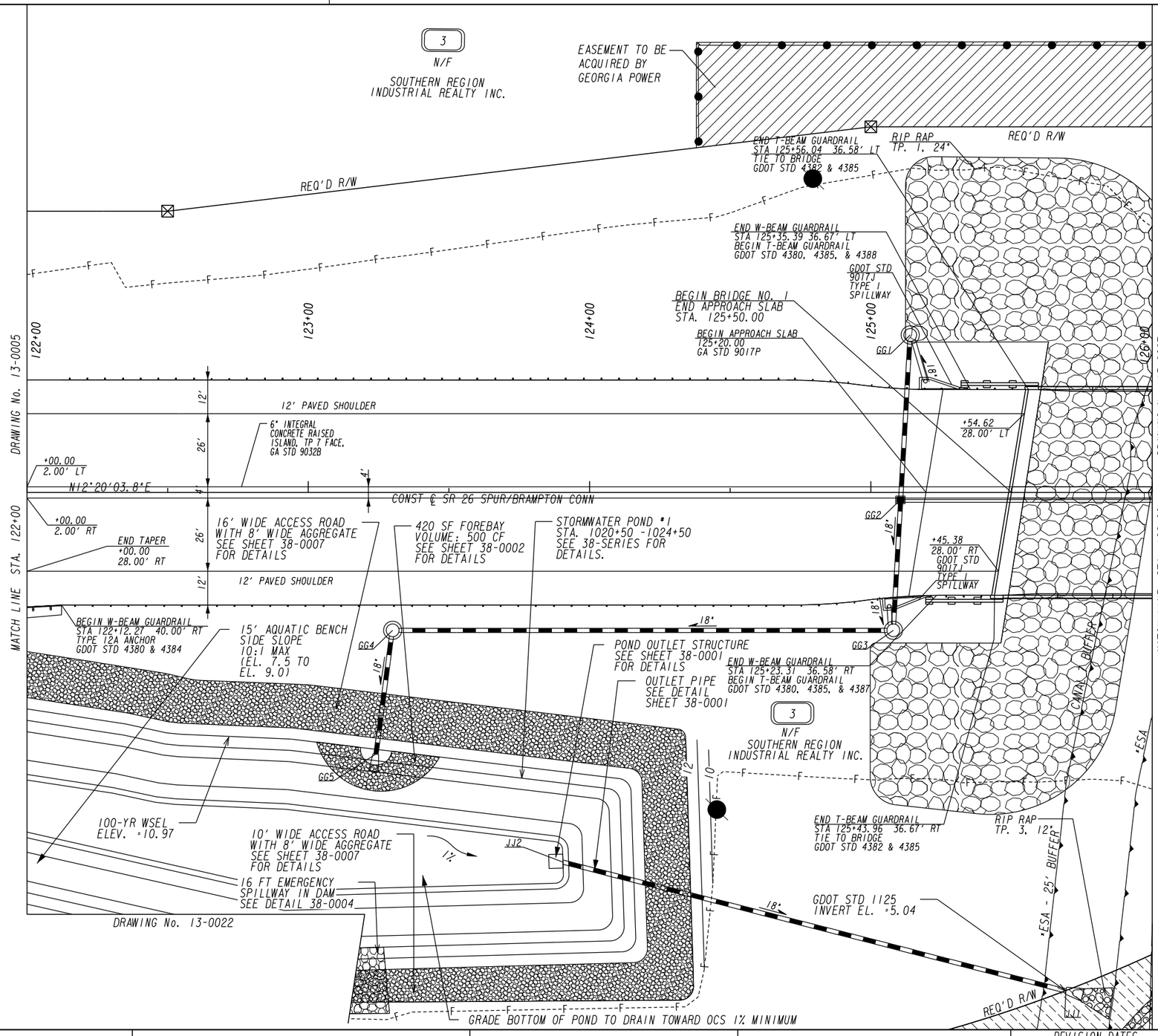
SCALE IN FEET
0 20 40 80

REVISION DATES
11-12-21

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		13-0005
VERIFIED:		DATE:		

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		13-0006
VERIFIED:		DATE:		

10/23/2015 GPLN

CANAL 5 BUFFER
CANAL 7
ESA
EXTST. CANAL R/W
CANAL 5 BUFFER
3
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.
WETLAND 6
MATCH LINE STA. 73+00
DRAWING No. 13-0024
REQ'D R/W
RIP RAP TP. 1, 24"
BUFFER
ESA - 25' BUFFER
CANAL 7 BUFFER
RIP RAP TP. 1, 24"
EASEMENT BY RAILROAD AGREEMENT
EXIST. RR R/W
129+00
RESOURCE 1
REQ'D R/W
002
DITCH STA. 1+50
MATCH LINE STA. 131+00
DRAWING No. 13-0008
6
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.
EASEMENT TO BE ACQUIRED BY GEORGIA POWER
127+00
128+00
130+00
CURVE 1
N12°20'03.8"E CONST. ℄ SR 26 SPUR/BRAMPTON CONN
DITCH STA. 1+00
RESOURCE 1
SEE SHEET 22-0014 AND 23-0073 FOR DITCH DETAIL
ESA - RAIL SPUR B
MATCH LINE STA. 126+00
DRAWING No. 13-0006
DITCH STA. 0+50
RESOURCE 1
CANAL 9
W2
42"
16"
W1
WETLAND 6
18
N/F
NS - CENTRAL OF GEORGIA RAILROAD COMPANY
REQ'D R/W
3
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.
RIP RAP TP. 1, 24"
DITCH STA. 0+00
LOCATION CD #PK NAIL SET
24" CMP
EASEMENT BY RAILROAD AGREEMENT
RESOURCE 1
EXIST. GAS EASEMENT
ESA - RAIL SPUR B
EXIST. RR R/W
ESA - RAIL SPUR D
MATCH LINE STA. 70+00
DRAWING No. 13-0023

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
05-12-21

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		13-0007
VERIFIED:		DATE:		

10/23/2015 GPLN

WETLAND 6

4
N/F
CHATHAM COUNTY

14R
N/F
SOUTHERN REGION
INDUSTRIAL REALTY INC.

*ESA - 25' BUFFER
*ESA
EXIST. CANAL R/W
R/W MARKER INSTALLED BY HAND
REQ'D R/W
CANAL 11 BUFFER
CANAL 11
CURVE 4
EXIST. GAS EASEMENT
CONST & SR 26 SPUR/BRAMPTON CONN
N23°13'24"W
E.F.S. -3.12% +69.00
R.C. 200.00 -2.69+
S.E. 200.00 -2.69+
EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS)
P.T. 134+79.23
WETLAND 6
RESOURCE 1
6
N/F
SOUTHERN REGION
INDUSTRIAL REALTY INC.
14
N/F
SOUTHERN REGION
INDUSTRIAL REALTY INC.

MATCH LINE STA. 131+00
MATCH LINE DRAWING No. 13-0007
MATCH LINE DRAWING No. 13-0031
MATCH LINE DRAWING No. 13-0009
MATCH LINE STA. 136+00

131+00 132+00 133+00 134+00 135+00 136+00

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
11-12-21

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		13-0008
VERIFIED:		DATE:		

10/23/2015 GPLN

WETLAND 6

I.E. 1.80
I.E. 0.06
I.E. 2.09

14R
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.

ESA - RAIL SPUR C

36" METAL

CANAL 12
I.E. -1.73
I.E. 1.71
I.E. -0.73

*ESA

18
N/F
NS- CENTRAL GEORGIA RAILROAD COMPANY

7
N/F
MCDONALD VENTURES XXI LLC

*ESA - 25' BUFFER

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS) EASEMENT 2

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS) EASEMENT 1

WETLAND 10

RESOURCE

8
N/F
MCDONALD VENTURES XXI LLC

R/W MARKER INSTALLED BY HAND
REQ'D R/W
136+00
137+00
138+00
139+00
140+00
141+00

*ESA - 25' BUFFER

CANAL 12 BUFFER

I.E. -1.61

DRAWING No. 13-0008
DRAWING No. 13-0010

EXIST. GAS EASEMENT

B.N.C. +2.00% / -2.00%

N23°43'24.4"W

Location of CL of EXIST @ SR 26 SPUR/BRAMPTON CONN PK RAIL SERVICE

MATCH LINE STA. 136+00
MATCH LINE STA. 141+50

TEMPORARY RAILROAD CROSSING

EASEMENT BY RAILROAD AGREEMENT

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS)

WETLAND 6

14
N/F
SOUTHERN REGION INDUSTRIAL REALTY INC.

ESA - RAIL SPUR C EXIST. RR R/W

*ESA

18
N/F
NS- CENTRAL GEORGIA RAILROAD COMPANY

EXIST. RR R/W ESA - RAIL SPUR C

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS)

8
N/F
MCDONALD VENTURES XXI LLC

WETLAND 10

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES
11-12-21

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0009
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS) EASEMENT 1

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS) EASEMENT 2

7 N/F MCDONALD VENTURES XXI LLC

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS) EASEMENT 3

DO NOT DISTURB EXISTING CURB AND DRAINAGE STRUCTURES

BEGIN TAPER +50.00 28.00' LT

EXIST. PIPE TO REMAIN

EXISTING DETENTION POND

OUTLET CONTROL STRUCTURE

RIP RAP TP. 3, 18"

8 N/F MCDONALD VENTURES XXI LLC

END T-BEAM GUARDRAIL STA 146+73.15 38.56' LT
BEGIN W-BEAM GUARDRAIL GDOT STD 4380 & 4387

BEGIN SPECIAL DITCH

30" RCP

18" RCP

*ESA

RESOURCE

WETLAND 10

REQ'D R/W

LOCATION CD
#IRON REBAR FOUND
#"5/8"" IRON REBAR SET"

END RAISED CONC MEDIAN 144+48.00
6' INTEGRAL CONCRETE RAISED ISLAND, TP 7 FACE, GA STD 9032B

BEGIN MSE WALL STA 146+55.00 38.50' LT
BEGIN T-BEAM GUARDRAIL GDOT STD 4382

RIP RAP TP. 3, 18"

CANAL 12 BUFFER

EXIST. GAS EASEMENT

DRAWING No. 13-0009

DRAWING No. 13-0011

142+00

143+00

144+00

145+00

146+00

147+00

+14.00 28.00' LT

+46.00 2.00' LT

+46.00 2.00' RT

CONST ℄ SR 26 SPUR/BRAMPTON CONN

CANAL 12

N23°43'24.4"W

CURVE 5

P.C. 146+20.46

END TAPER +20.00 30.00' LT

BEGIN TAPER +50.00 28.00' RT

END TAPER +20.00 30.00' RT

B.F.S. +55.00 3.36%

E.N.C. +73.00 -2.00%

R.C. +09.00 -2.00%

F.S. +41.00 0.00%

MATCH LINE STA. 141+50

MATCH LINE STA. 147+00

RIP RAP TP. 3, 18"

REQ'D R/W

R1 R2 R3 R4

G1 G2 G3 G4 G5 G6 G7 G8 G9 G10 G11 G12

Z1 Z2

+14.00 28.00' RT

8 N/F MCDONALD VENTURES XXI LLC

END APPROACH SLAB 144+44.00 GA STD 9017P

END BRIDGE NO. 1 BEGIN APPROACH SLAB STA. 144+14.00

BEGIN HEADER CURB STA 145+02.88 80.50' RT

END HEADER CURB STA 145+91.16 80.50' RT TIE TO EXISTING

DO NOT DISTURB POND BANK AND OUTLET CONTROL STRUCTURE

CONCRETE PARKING

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS)

EXIST. PIPE TO REMAIN

EXISTING DETENTION POND

RESOURCE 1

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0010
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

EXISTING DETENTION POND

REQ'D R/W

EXIST. GAS EASEMENT

EXIST. GAS EASEMENT

RIP RAP TP. 3. 18"

R 70.00'
515+69.00
82.00' RT

RIP RAP TP. 3. 18"

N9

8
N/F
MCDONALD VENTURES
XXI LLC

G10

MATCH LINE STA. 515+50

DRAWING No. 13-0030

END 4' PAVED SHOULDER
BEGIN 6.5' PAVED SHOULDER

BB2

E.F.S. +58.00 -4.00%

E.F.S. +58.00 4.00%

R=50'

CURVE 12

P.T. 515+73.32

24"

BB1

END 2' PAVED SHOULDER
BEGIN 6.5' PAVED SHOULDER

R 65.00'
515+72.93
77.00' LT

516+00

CANAL 12

R.C. +96.00 -2.00%

R.C. +96.00 2.00%

CONST. BRAMPTON ROAD

*ESA

MATCH BRAMPTON CONN +35.00 -1.21%

MATCH BRAMPTON CONN +35.00 1.21%

*ESA - 25' BUFFER

+53.20
12.00' LT

151+55.47

S77°11'55"E

89°58'12"

151+00

152+00

CONST ℄ SR 26 SPUR/BRAMPTON CONN

DRAWING No. 13-0012

MATCH LINE STA. 152+00

END C&G TAPER
151+30.10
32.50' RT

N11

N10

N2

18"

24"

N3

CANAL 13 BUFFER
*ESA - 25' BUFFER

END W-BEAM GUARDRAIL
STA 148+50.00 42.00' LT
TYPE 12A ANCHORAGE
GDOT STD 4380 & 4384

36'

148+00

149+00

WETLAND 10

+44.31
30.00' LT

*ESA - 25' BUFFER

150+00

CANAL 12 BUFFER

*ESA

12'

30'

CANAL 12

CONST ℄ SR 26 SPUR/BRAMPTON CONN

CURVE 5

CANAL 12 BUFFER

*ESA

18"

18"

24"

N1

REQ'D R/W

N8

N7

8
N/F
MCDONALD VENTURES
XXI LLC

MATCH LINE STA. 147+00

DRAWING No. 13-0010

REQ'D R/W

REQ'D R/W

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES (SOUTHERN NATURAL GAS)

*ESA

36" HDPE

I.E. 3.49

OUTLET CONTROL STRUCTURE
TOP 8.53
I.E. 3.18

EXISTING DETENTION POND

STA. 150+95.02 SR 26 SPUR/BRAMPTON ROAD CONN.
STA. 516+79.23 BRAMPTON ROAD

END MSE WALL
BEGIN C&G TAPER
STA. 151+00.00
38.00' RT

*ESA

CANAL 13

*ESA

*ESA - 25' BUFFER
CANAL 13 BUFFER

I.E. 2.08
I.E. F.E.S. 2.36

24" RCP

30" RCP

I.E. 3.86
I.E. F.E.S. 4.07

CONCRETE PARKING

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES

CONSTRUCTION PLAN

BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0011
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

LIMIT OF CONSTRUCTION
GPA DRIVE
STA. 656+30.00

9
N/F
GEORGIA PORTS AUTHORITY

9A
N/F
GEORGIA PORTS AUTHORITY

BEGIN CURB & GUTTER TP 2
STA 652+52.87 12.00' LT

CONC. SPILLWAY
GA STD. 9013 TP 3

BEGIN CURB & GUTTER TP 2
STA 652+60.00 12.00' RT

END CURB & GUTTER TP 2
STA 655+64.83 10.00' LT

END SAW CUT
STA. 654+62.73
25.00' LT

END CURB & GUTTER TP 2
STA 655+64.83 10.00' RT

CONCRETE PARKING

END CURB & GUTTER TP 2
STA 655+14.13 16.00' LT

R 6.00'
655+10.30
16.00' LT

R 6.00'
655+49.16
16.00' LT

BEGIN CURB & GUTTER TP 2
STA 655+45.67 15.80' LT

CONTRACTOR SHALL CUT PAVEMENT TO NEAT EDGE

END WIDENING & OVERLAY
BEGIN FULL DEPTH
STA. 654+73.12

BEGIN SAW CUT
STA. 654+00.53
25.00' LT HH4

R 100.00'
155+60.86
130.00' LT

N 36°54'24.1" W

ASPHALT DRIVE

+41.57
133.00' LT

+99.80
133.00' LT

60'

MATCH EXIST. +30.00

MATCH EXIST. +30.00

PT 656+15.29

TYPE IV STRAIN POLE
157+14.39
51.87' LT

R 35.00'
157+34.80
53.00' LT

REQ'D R/W

GPA GATE 3

END CURB & GUTTER TP 2
STA 156+41.85 123.91' LT
MATCH EXISTING

BEGIN CURB & GUTTER TP 2
STA 156+99.80 53.00' LT

END MILL & INLAY
BEGIN WIDENING & OVERLAY
STA. 652+60.00

EXIST. R/W

+70.27
12.00' LT

+20.53
10.00' LT

EXIST. PIPE TO REMAIN

CURVE 22
N 41°57'14.3" E

CURVE 23

CURVE 21
N 39°08'49.2" E

PC 653+20.27

PT 654+26.39

PC 654+80.43

PT 655+37.46

PC 655+63.45

PT 656+53.38

N55°32'13.0"E
GPA DRIVE

+70.00
12.00' RT

+20.53
10.00' RT

N55°42'56.2"E

TYPE IV STRAIN POLE
156+00.00
64.00' LT

CONCRETE 5' S/W

RIP RAP
TP. 3, 18"

BRAMPTON ROAD
INDUSTRIAL DISTRICT

EXIST. R/W

END CURB & GUTTER
BEGIN HEADER CURB
STA 156+47.33 43.32' RT

NBSW F

CONC. 5' S/W

EXIST. 20' WATER EASMT

REMOVE EXISTING FENCE

END 6.5' PAVED SHOULDER
BEGIN CURB & GUTTER TP 2
STA 153+00.00 30.00' LT

CONST ℄ SR 26 SPUR/BRAMPTON CONN

CANAL 13 BUFFER

•ESA

+38.60
30.00' LT

REQ'D R/W

R 5.00'
155+11.26
35.00' RT

TYPE IV STRAIN POLE
156+07.00
50.00' RT

R 35.00'
156+20.50
65.00' RT

R 8.00'
156+40.98
48.66' RT

BEGIN CURB & GUTTER
STA 155+23.45 62.48' RT
MATCH EXISTING

BEGIN CURB & GUTTER
BEGIN HEADER CURB
STA 156+91.10 46.61' RT

R 8.00'
156+97.74
51.07' RT

END HEADER CURB
STA 157+07.50 59.05' RT

TYPE IV STRAIN POLE
157+17.00
50.00' RT

R 35.00'
157+18.50
65.00' RT

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES

ASPHALT PARKING

END HEADER CURB
STA 154+28.73
64.00' RT

R 75.00'
154+22.84
105.00' RT

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES

CONCRETE PARKING

END CURB & GUTTER
STA 154+88.76 81.52' RT
MATCH EXISTING

R 26.37'
154+61.85
70.62' RT

8
N/F
MCDONALD VENTURES XXI LLC

BEGIN HEADER CURB
STA 153+80.40 64.00' RT

MATCH LINE STA. 652+00

MATCH LINE STA. 152+00

MATCH LINE STA. 157+50

DRAWING No. 13-0030

DRAWING No. 13-0011

DRAWING No. 13-0013

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES

CONSTRUCTION PLAN

BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0012
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

ASPHALT PARKING

9A
N/F
GEORGIA PORTS AUTHORITY

EXIST. 18D 50' WATER EASMT

END CURB & GUTTER TP 2
STA 157+90.08 33.60' LT

+87.07
42.00' LT

+87.07
38.23' LT

BEGIN CURB & GUTTER TP 2
STA 158+24.69 41.92' LT

+24.70
42.00' LT

R 15.00'
157+75.10
33.00' LT

158+00

R 25.00'
158+49.68
41.03' LT

159+00

J6

END TAPER
+50.00
12.00' LT

GATE

9
N/F
GEORGIA PORTS AUTHORITY

161+00

162+00

163+00

END PROJECT CSSTP-0006-00(328)
SR 26 SPUR/BRAMPTON ROAD CONN
STA. 162+70.00
N 769782.6668
E 974135.9108

END CONSTRUCTION
STA. 161+70.00

EXIST. R/W

EXIST. PIPE TO REMAIN

CONC. SPILLWAY GA STD. 9013 TP 3

CONC. 5' S/W

J8

J7

BEGIN TAPER
+00.00
18.00' LT

END CURB & GUTTER TP 2
STA 159+50.00 12.00' LT

160+00

N55°42'56.2"E

CONST ℄ SR 26 SPUR/BRAMPTON CONN

END WIDENING & OVERLAY
BEGIN MILL & INLAY
STA. 159+50.00

MATCH LINE STA. 157+50

MATCH LINE STA. 163+00

EXIST. R/W

NBSW F

END TAPER
158+75.80
26.31' RT

J1

REQ'D R/W

BRAMPTON ROAD INDUSTRIAL DISTRICT

EXIST. 20' WATER EASMT

EXISTING FENCE

BEGIN TAPER
+00.00
30.00' RT

REMOVE EXISTING FENCE

R 35.00'
158+77.50
61.27' RT

+55.85
58.20' RT

J3

R 35.00'
159+77.50
56.42' RT

END EXIST FENCE REMOVAL
STA. 162+35.68

END CONCRETE PAVEMENT
BEGIN ASPHALT PAVEMENT
WIDENING & OVERLAY
STA. 157+75.10

END CURB & GUTTER
STA 159+07.23 58.2' RT

R 10.00'
159+09.88
54.43' RT

EASEMENT FOR CONST. & MAINT. OF SLOPES & UTILITIES

8
N/F
MCDONALD VENTURES XXI LLC

10
N/F
CHEMTRADE SOLUTIONS LLC. F/K/A GENERAL CHEMICAL LLC

EXIST. 18D 50' WATER EASMT

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

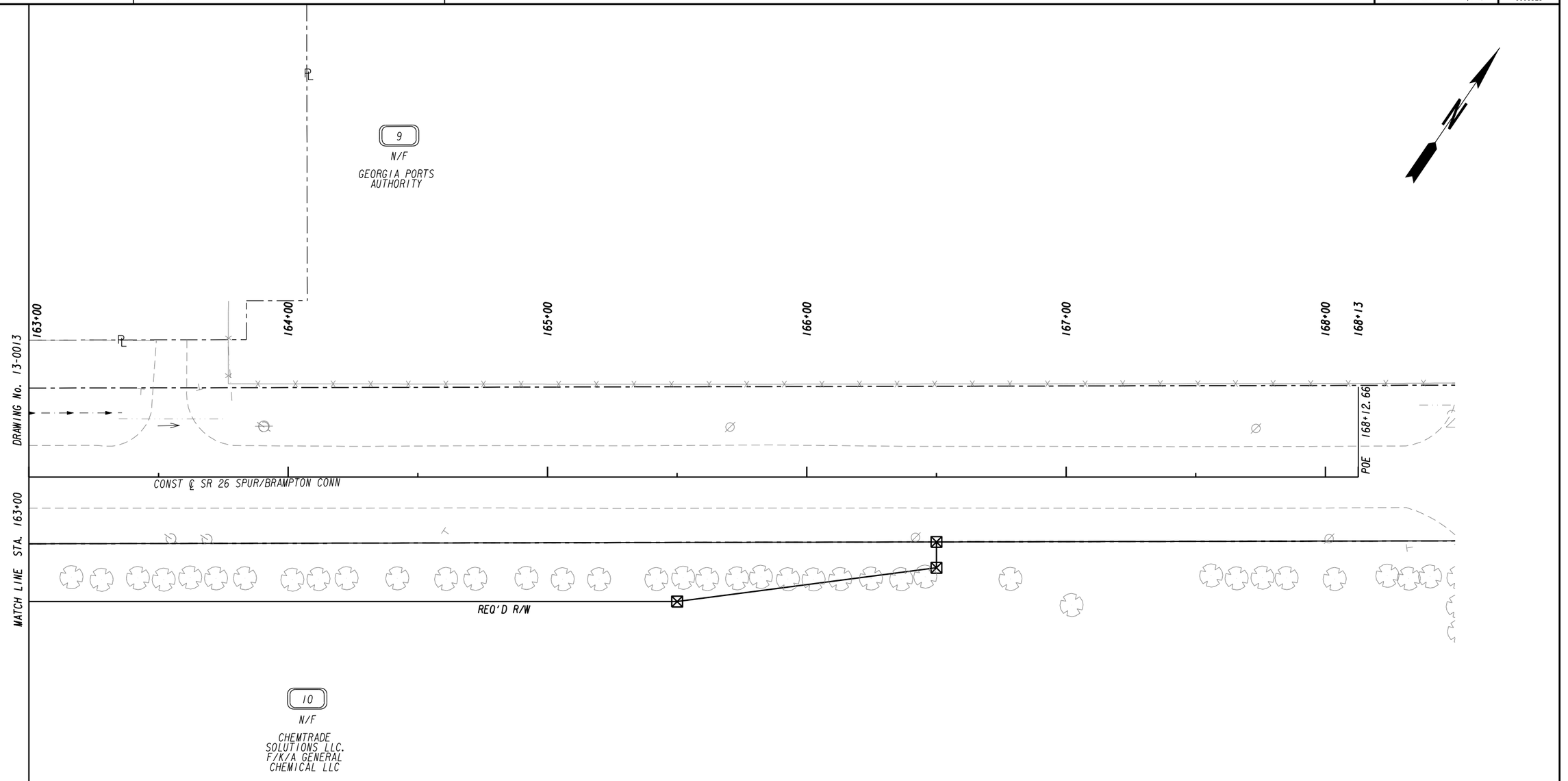
SCALE IN FEET
0 20 40 80

REVISION DATES

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		13-0013
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

moffatt & nichol

SCALE IN FEET
0 20 40 80

REVISION DATES

CONSTRUCTION PLAN
BRAMPTON ROAD CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		13-0014
VERIFIED:		DATE:		

10/23/2015 GPLN

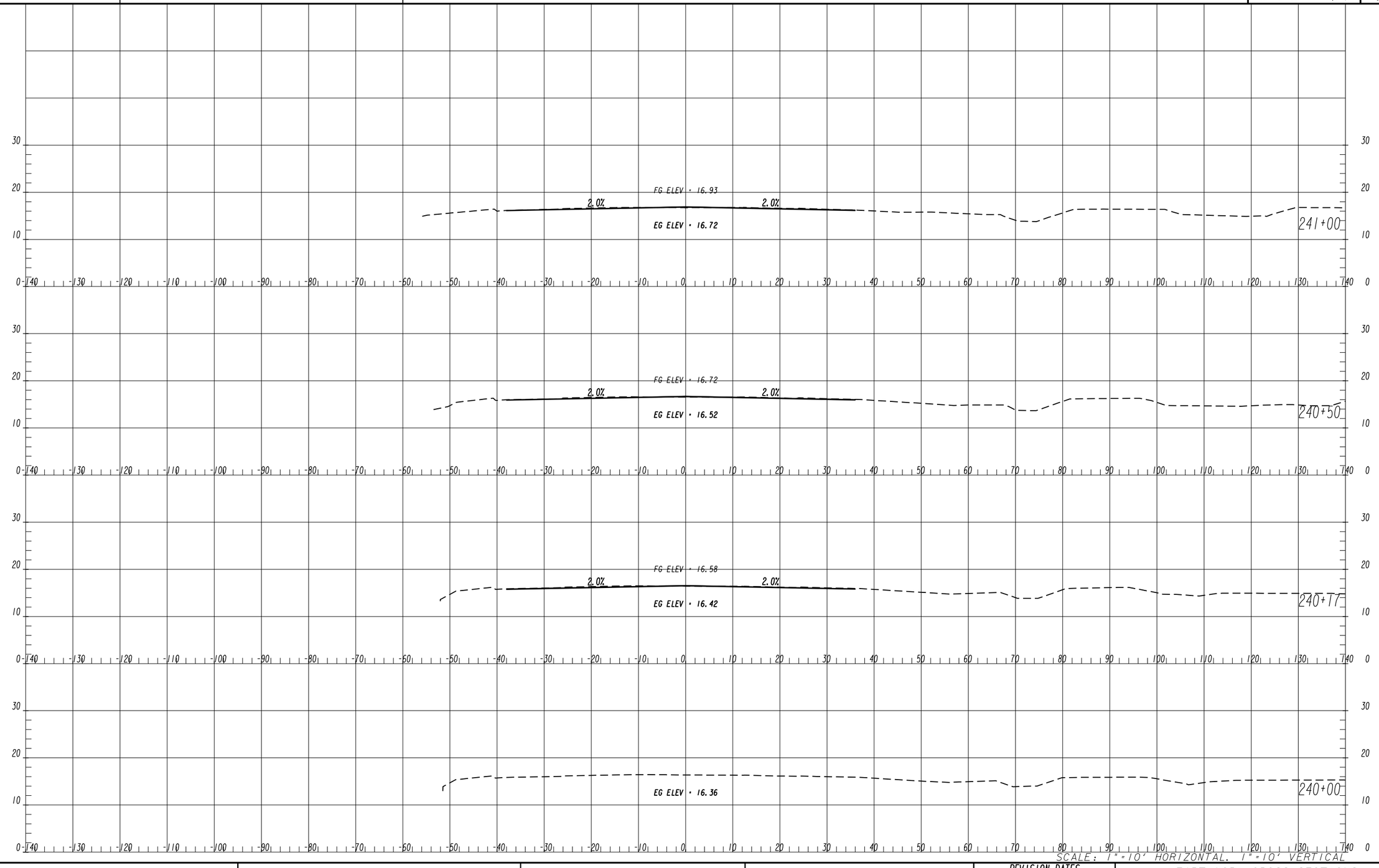
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GPLOT-V8
SCREEN_MISC.tbl

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GDOT Georgia Department of Transportation

P. I. No.
0006328



SCALE: 1"=10' HORIZONTAL. 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

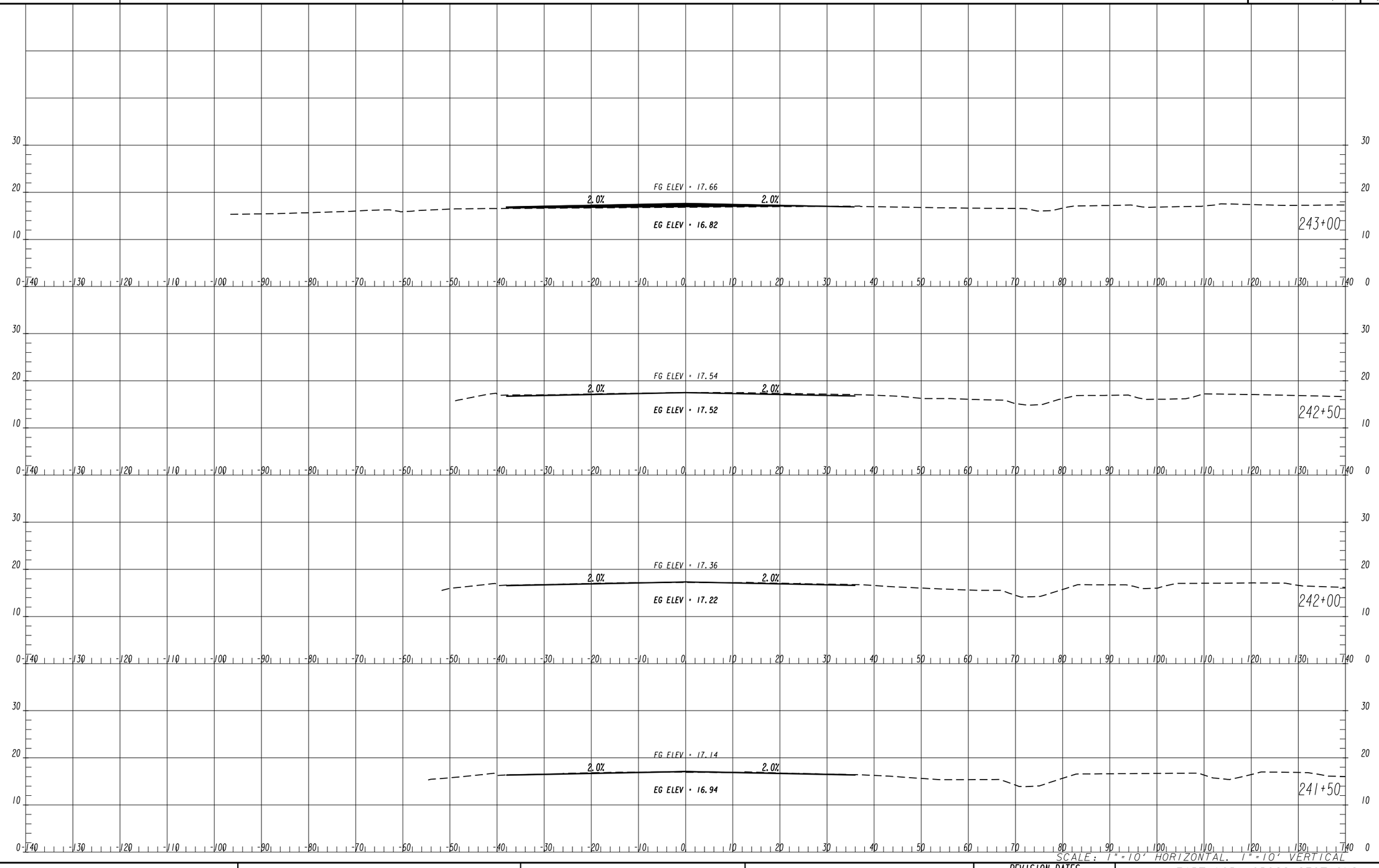
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

SR 25 / MAIN STREET

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	23-0047
VERIFIED:		DATE:	

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL. 1"=10' VERTICAL

moffatt & nichol

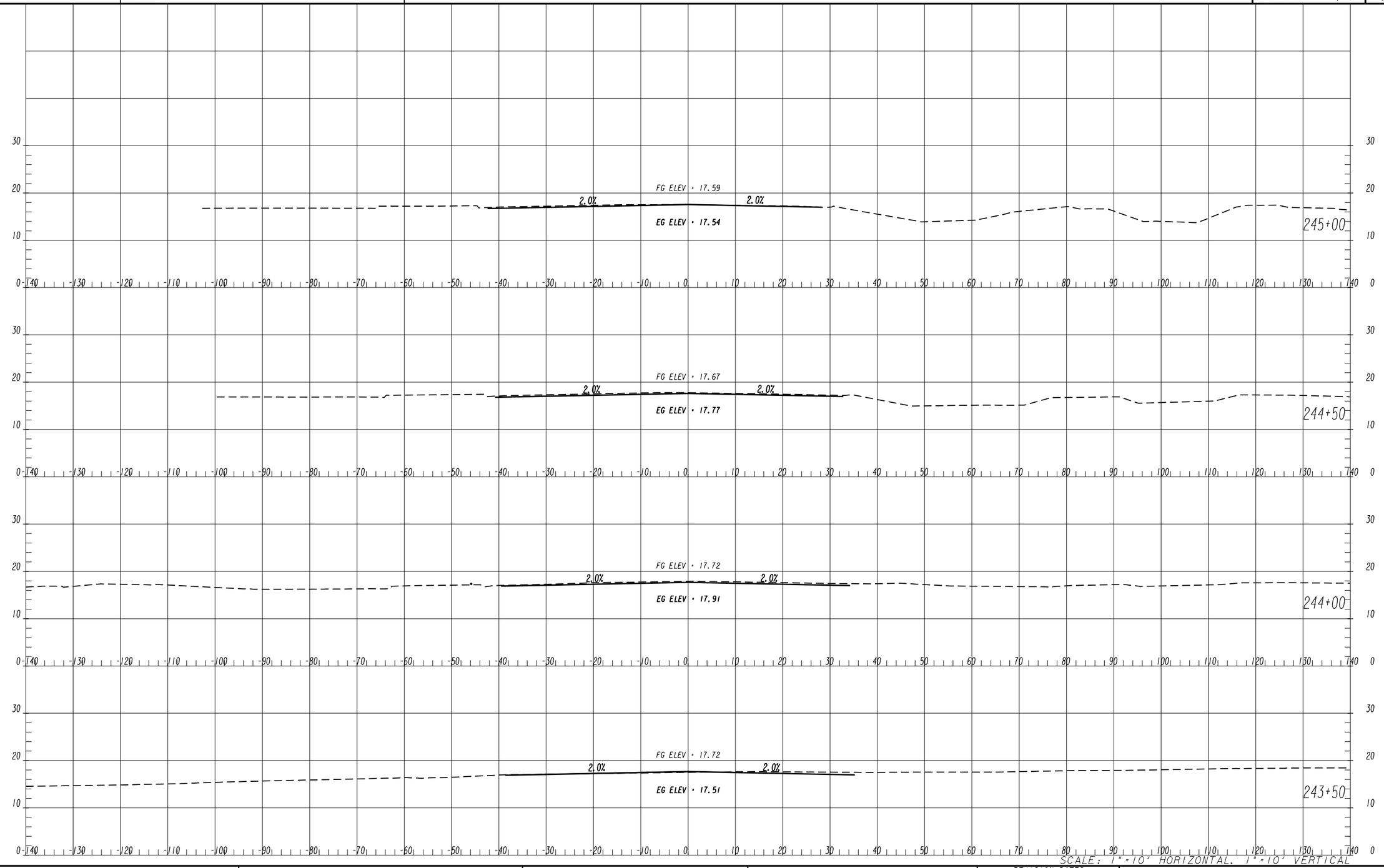
REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

SR 25 / MAIN STREET

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	23-0048
VERIFIED:		DATE:	



SCALE: 1"=10' HORIZONTAL. 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

SR 25 / MAIN STREET

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	23-0049
VERIFIED:		DATE:	

10/23/2015 GPLN

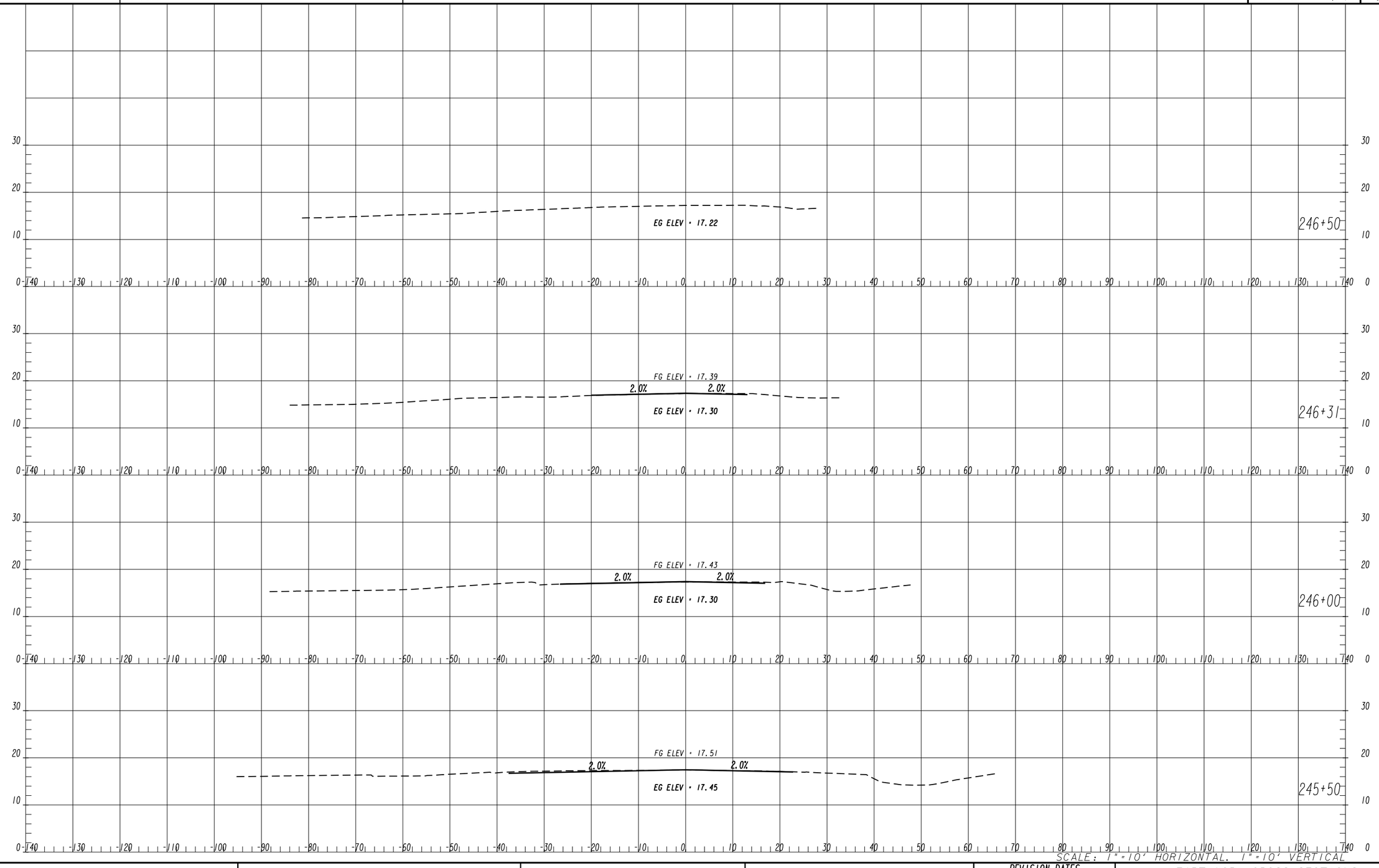
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GPLOT-V8
SCREEN_MISC.tbl

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GDOT Georgia Department of Transportation

P. I. No. 0006328



SCALE: 1"=10' HORIZONTAL. 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

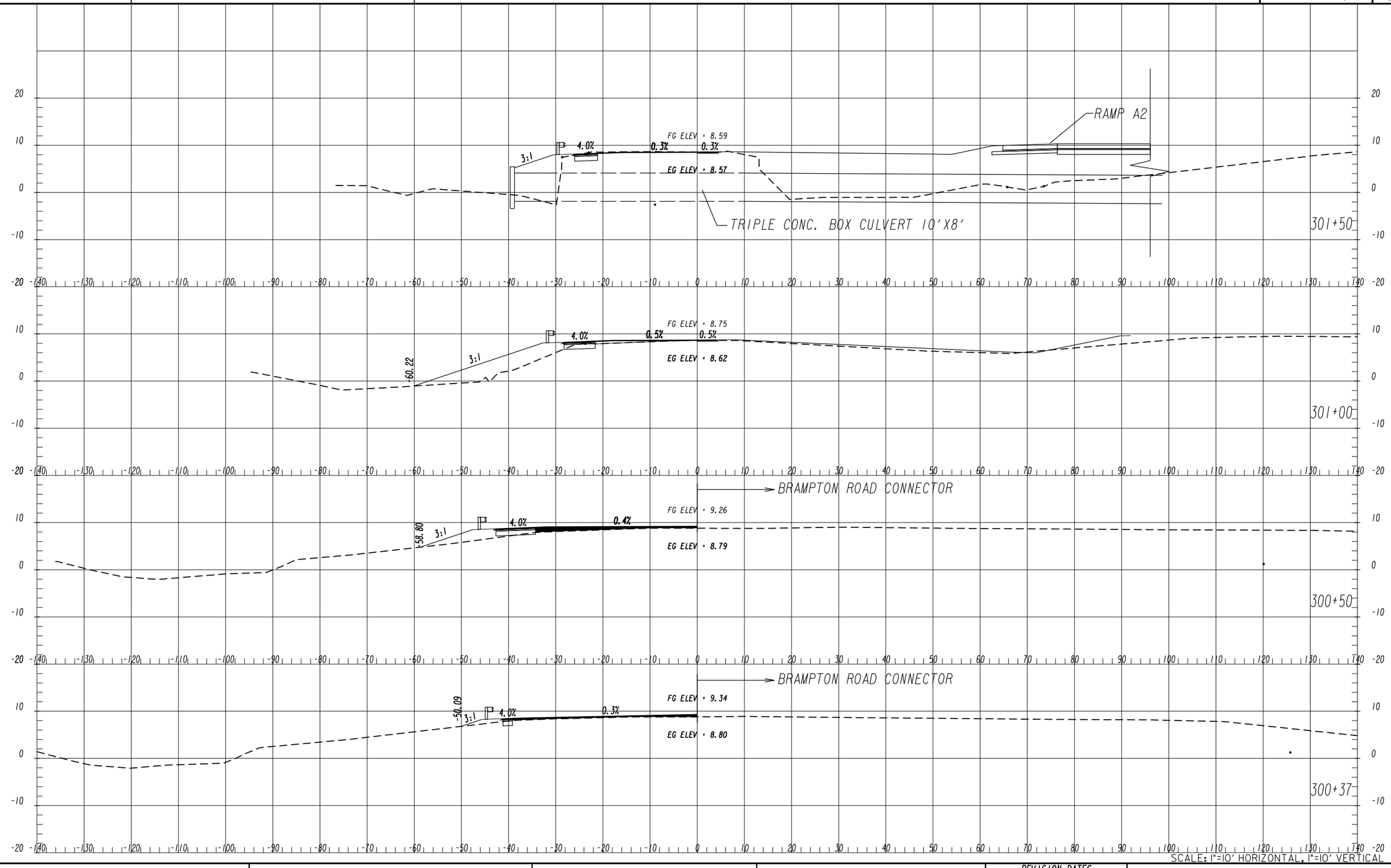
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

SR 25 / MAIN STREET

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BACKCHECKED:		DATE:	
CORRECTED:		DATE:	23-0050
VERIFIED:		DATE:	

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

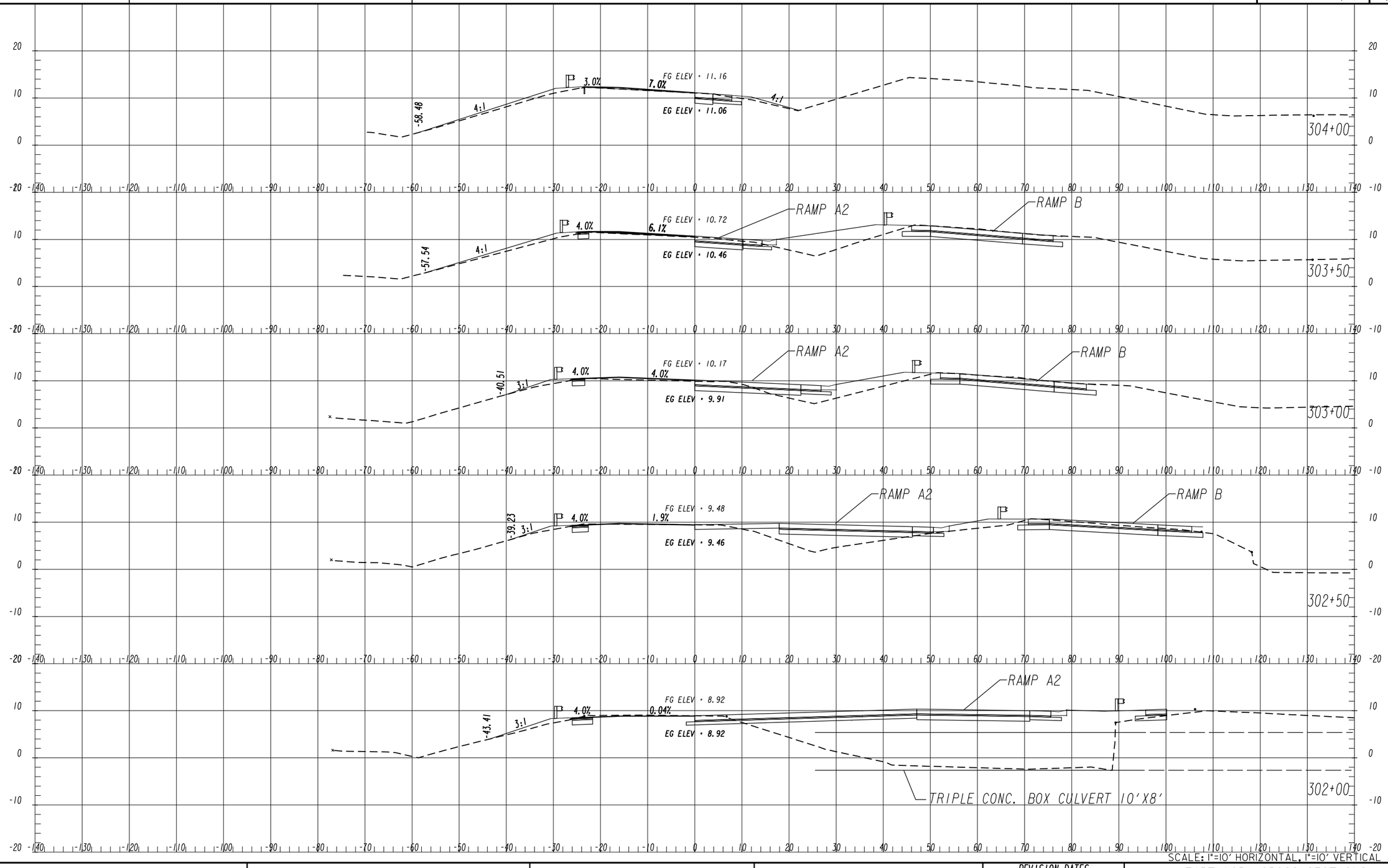
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

RAMP A1

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0051
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

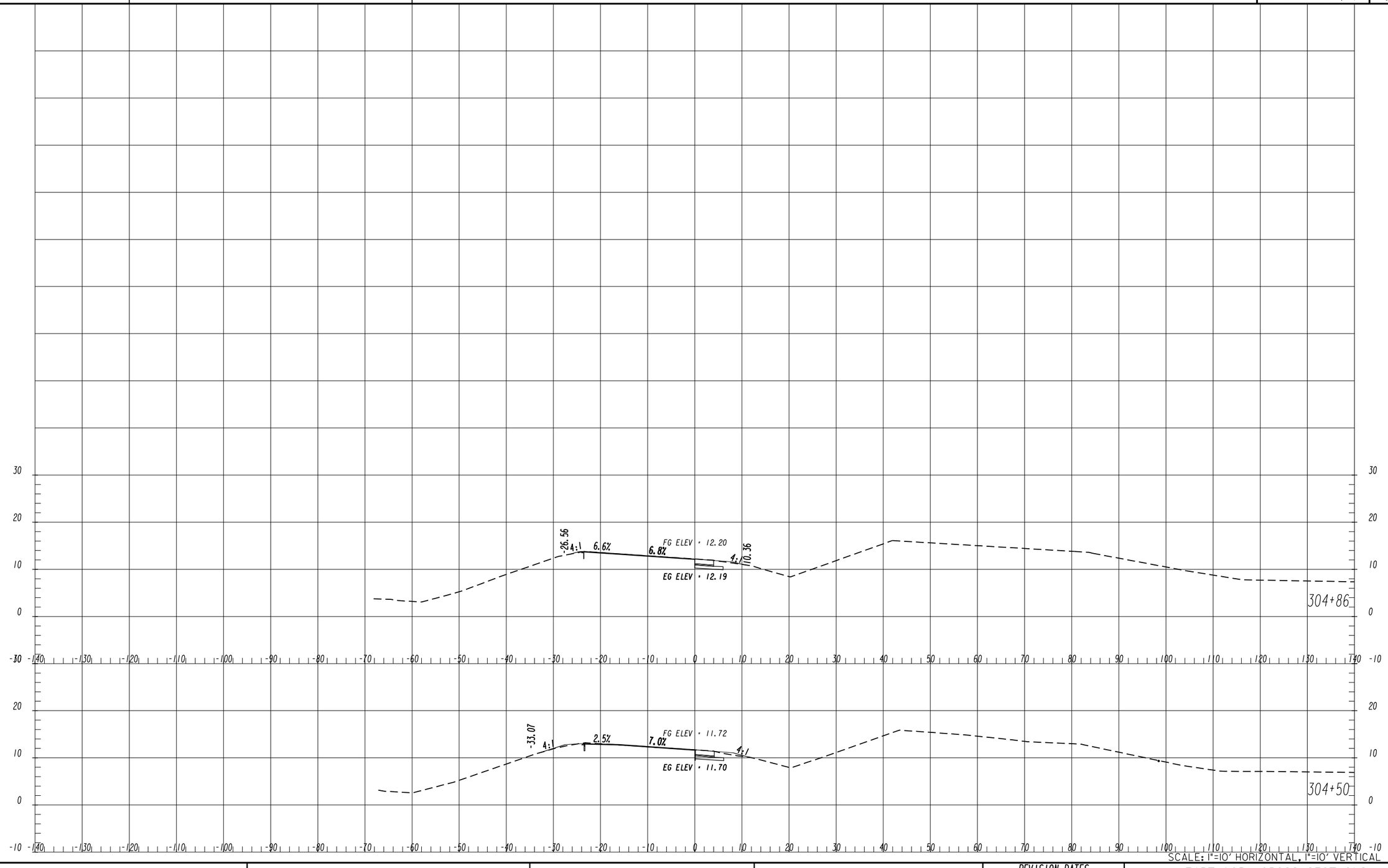
REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

RAMP A1

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	23-0052
VERIFIED:		DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

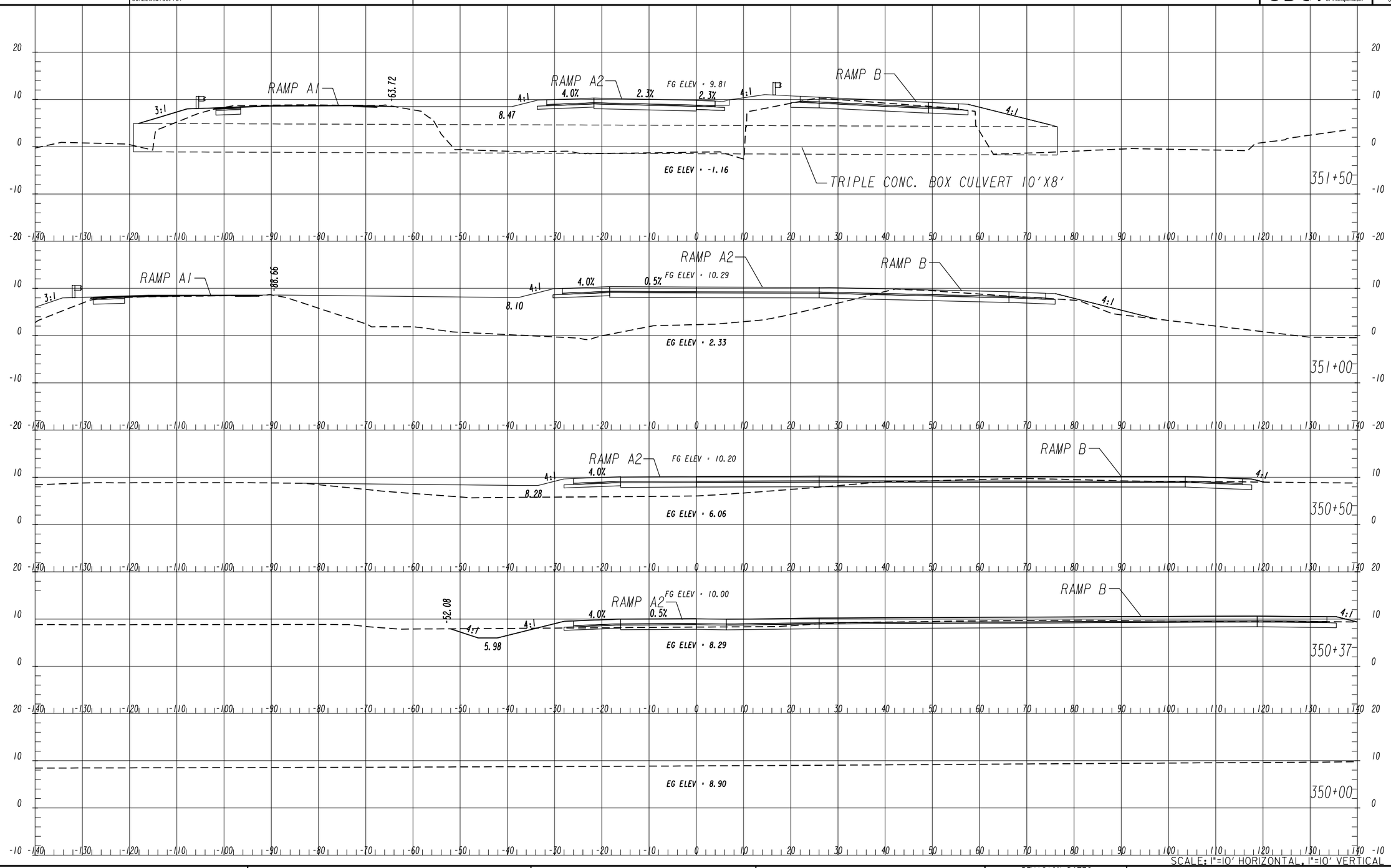
REVISION DATES		

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

RAMP A1

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0053
CORRECTED:		DATE:		
VERIFIED:		DATE:		



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

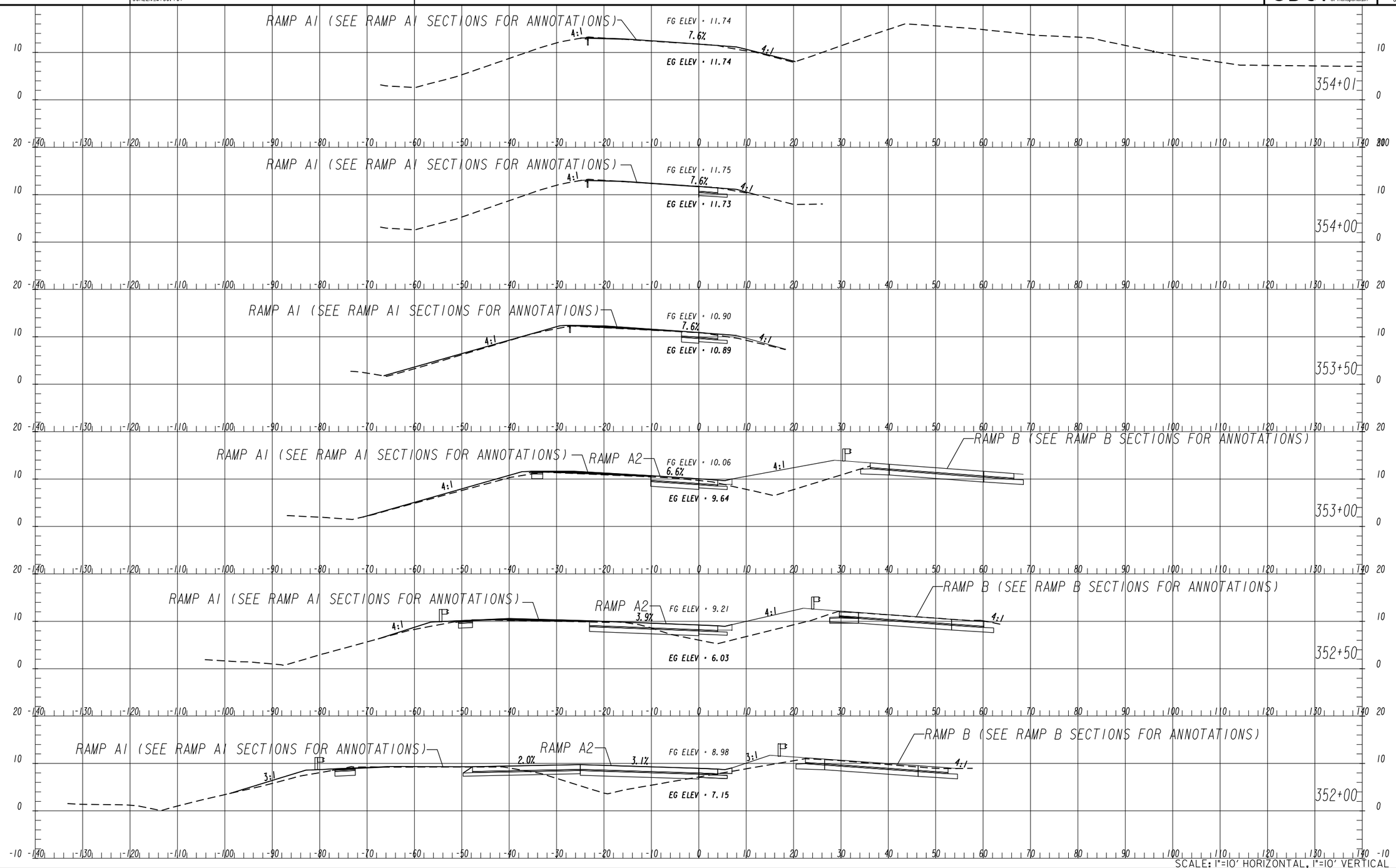
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

RAMP A2

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0054
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

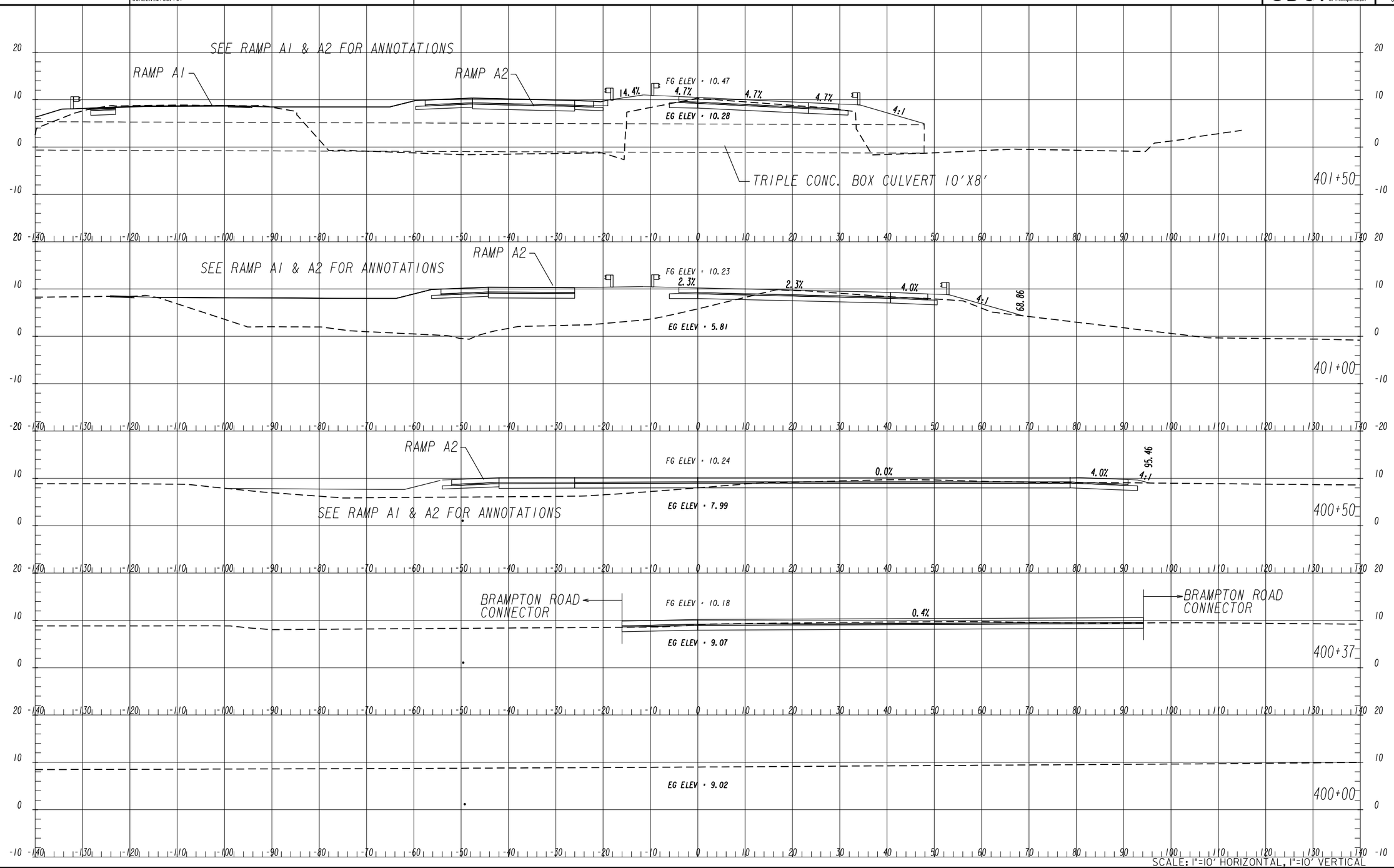
REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

RAMP A2

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0055
CORRECTED:		DATE:		
VERIFIED:		DATE:		



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

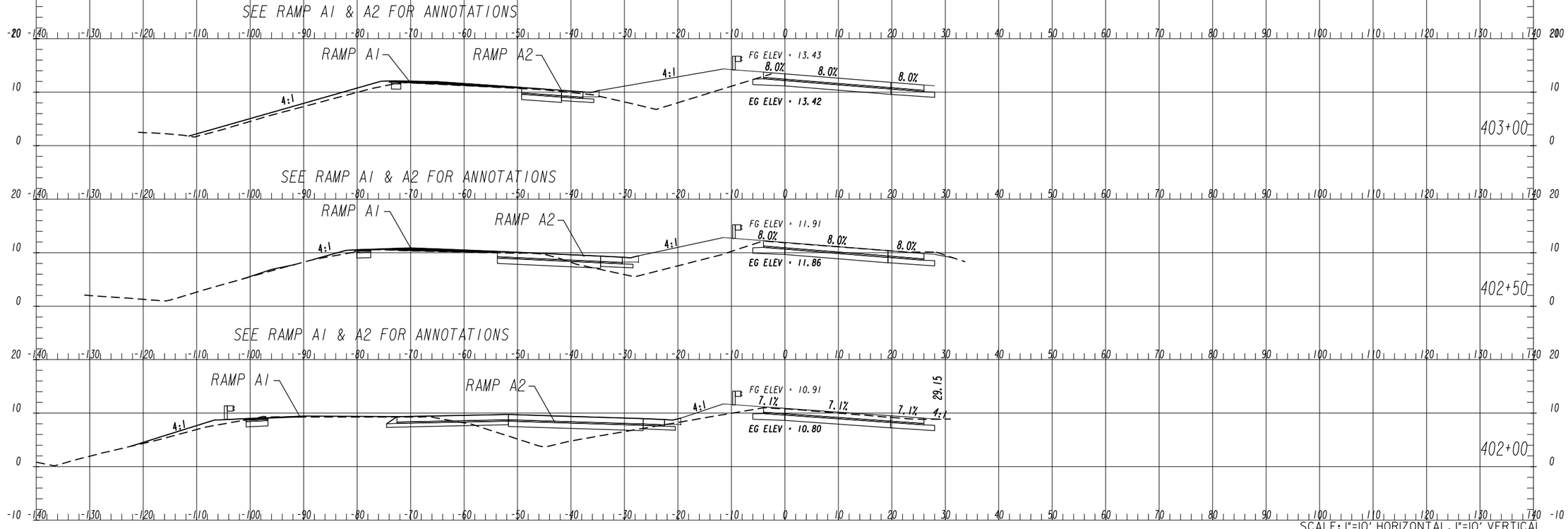
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

RAMP B

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0056
CORRECTED:		DATE:		
VERIFIED:		DATE:		

SEE RAMP A1 & A2 FOR ANNOTATIONS



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

RAMP B

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	23-0057
CORRECTED:		DATE:	
VERIFIED:		DATE:	

10/23/2015 GPLN

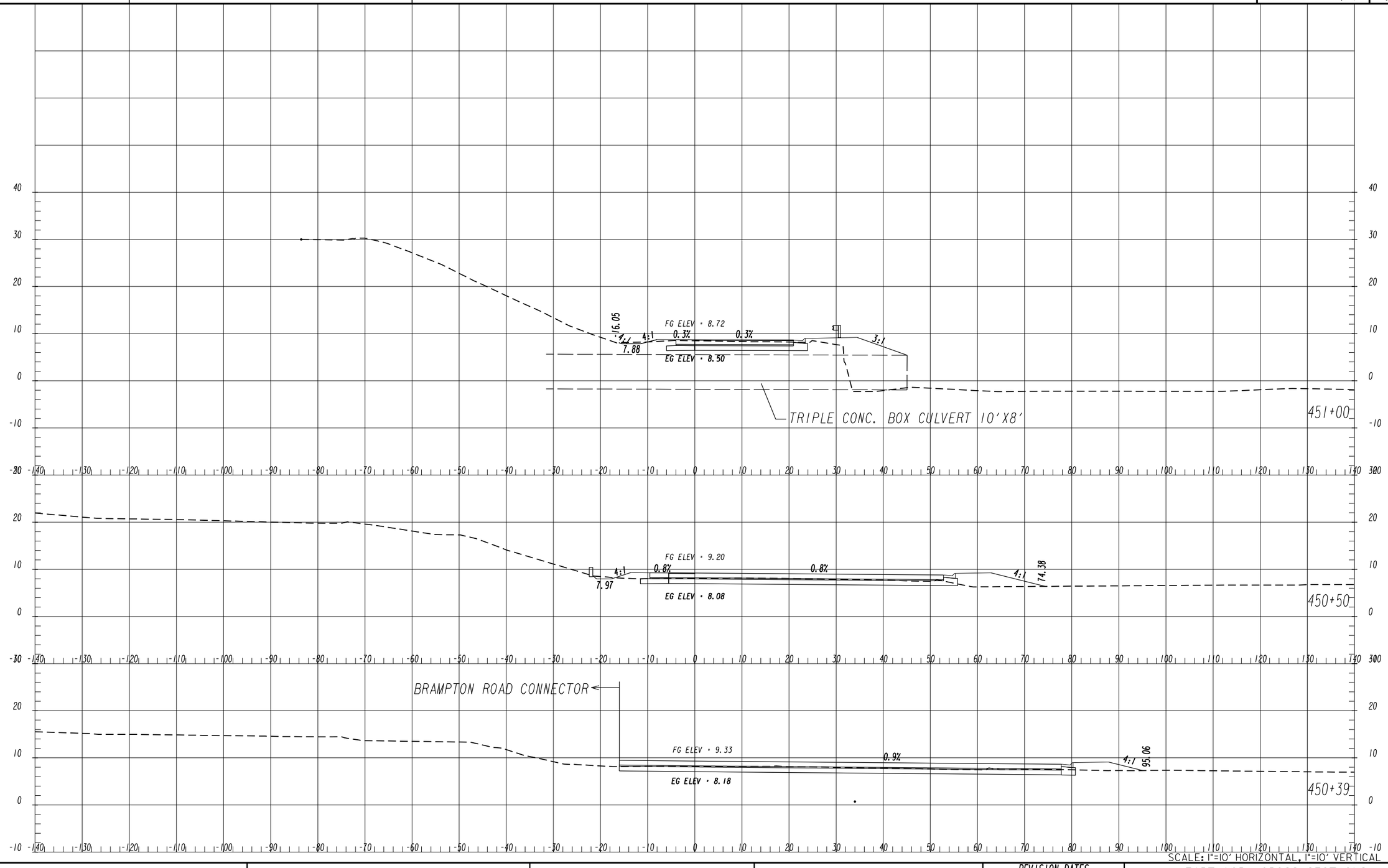
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GDOT Georgia Department of Transportation

P.I. No. 0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

RAMP C

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0058
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

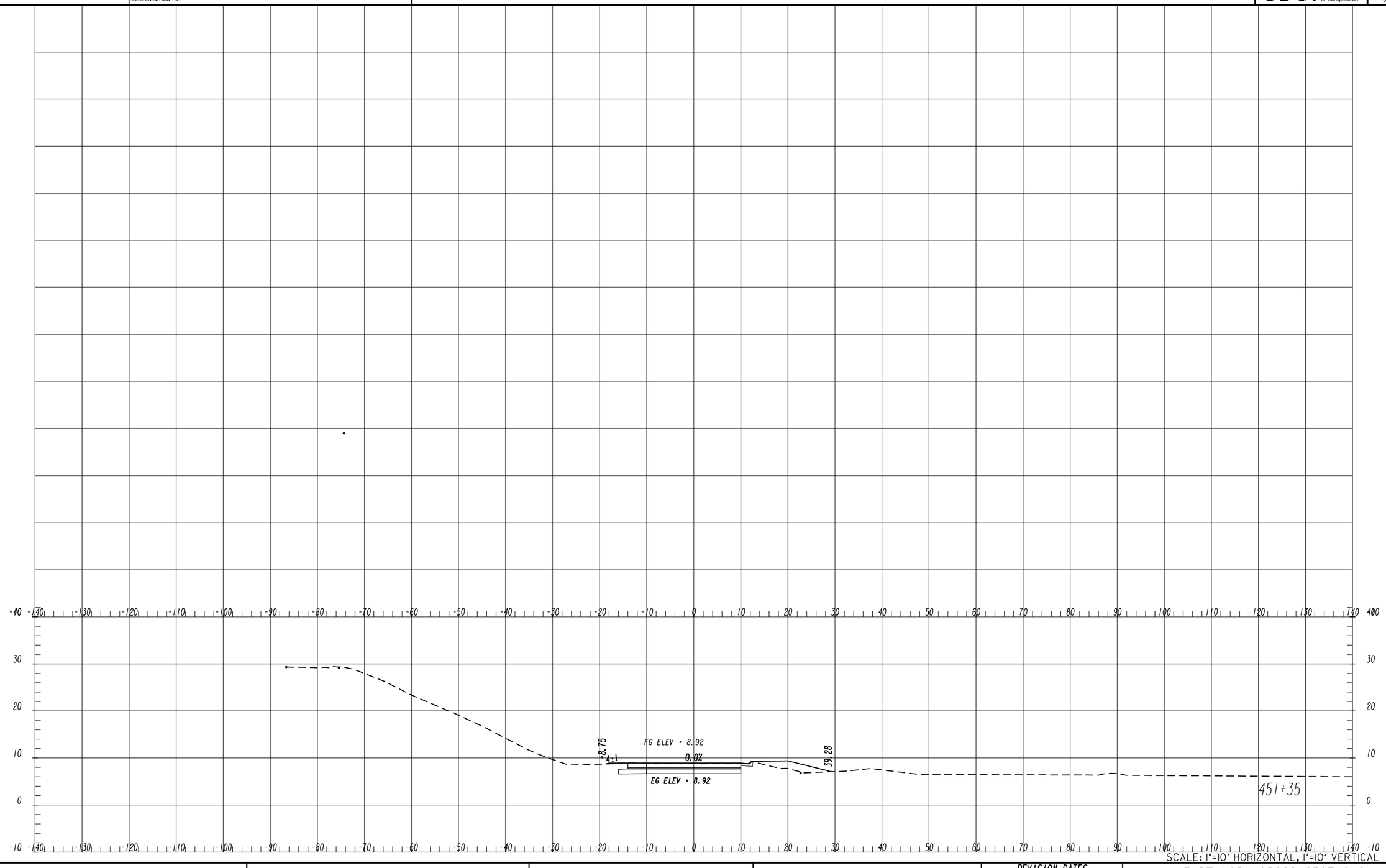
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GDOT Georgia Department of Transportation

P. I. No.
0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

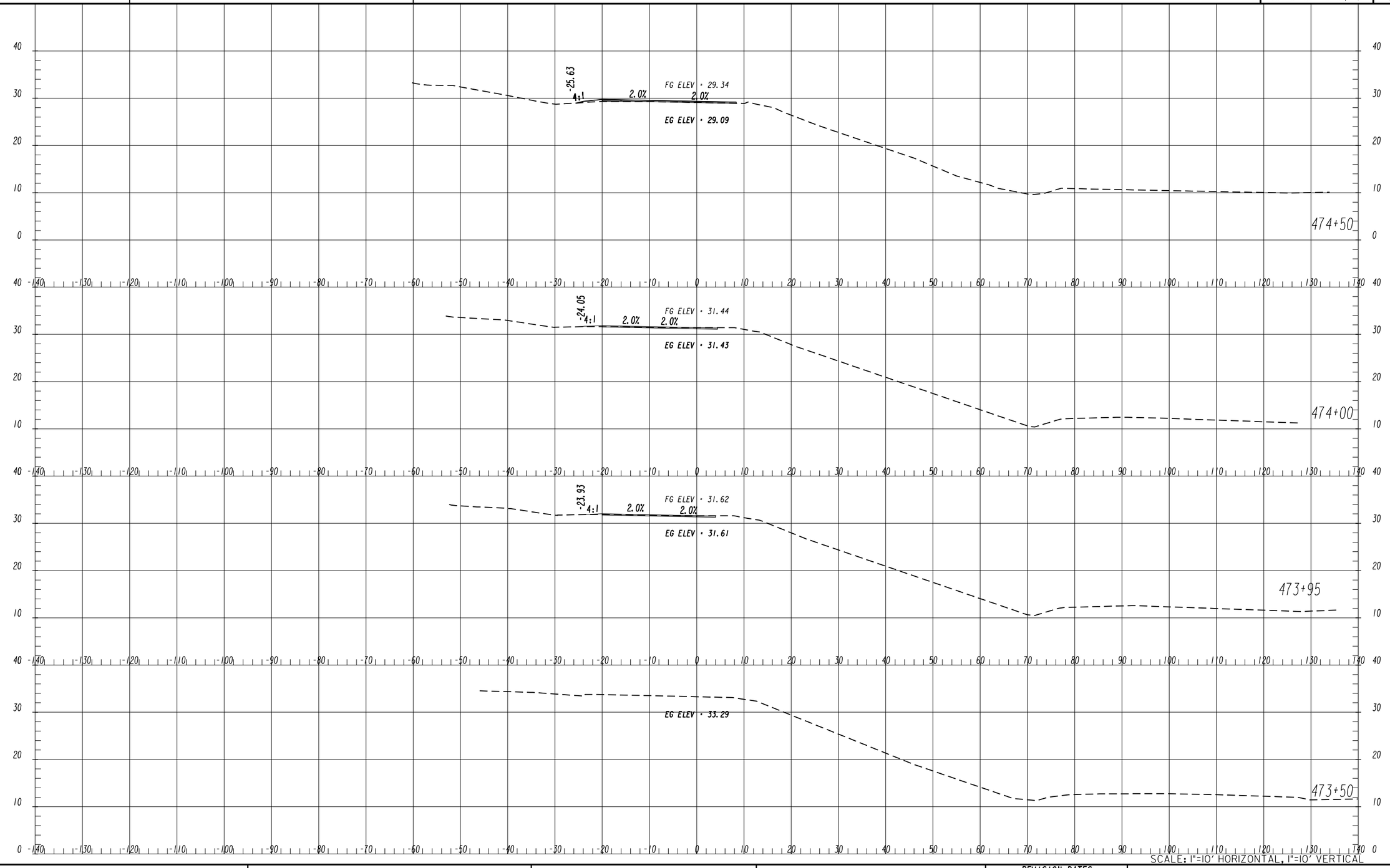
RAMP C

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No.
23-0059

moffatt & nichol

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

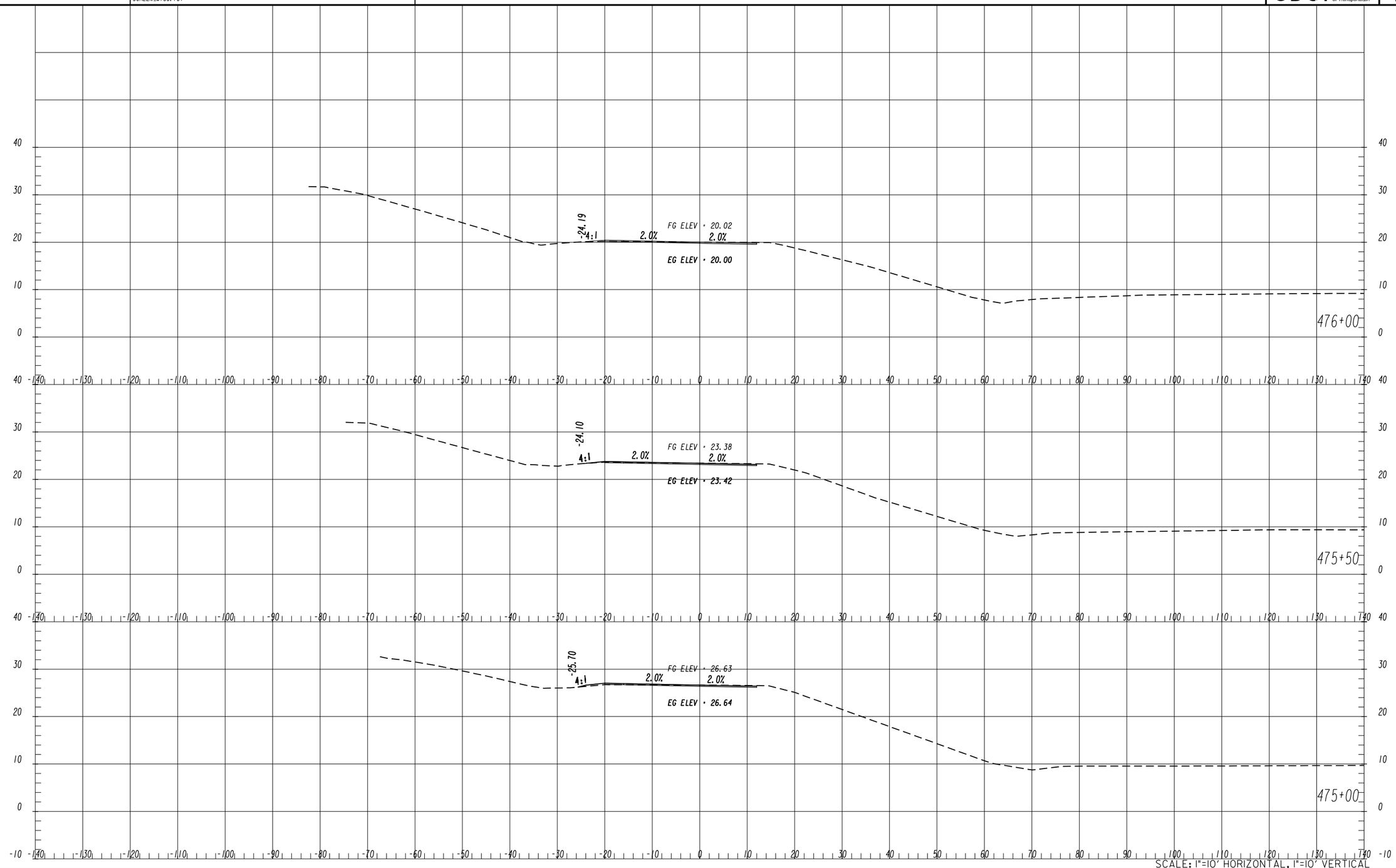
REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

RAMP D

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0060
CORRECTED:		DATE:		
VERIFIED:		DATE:		



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

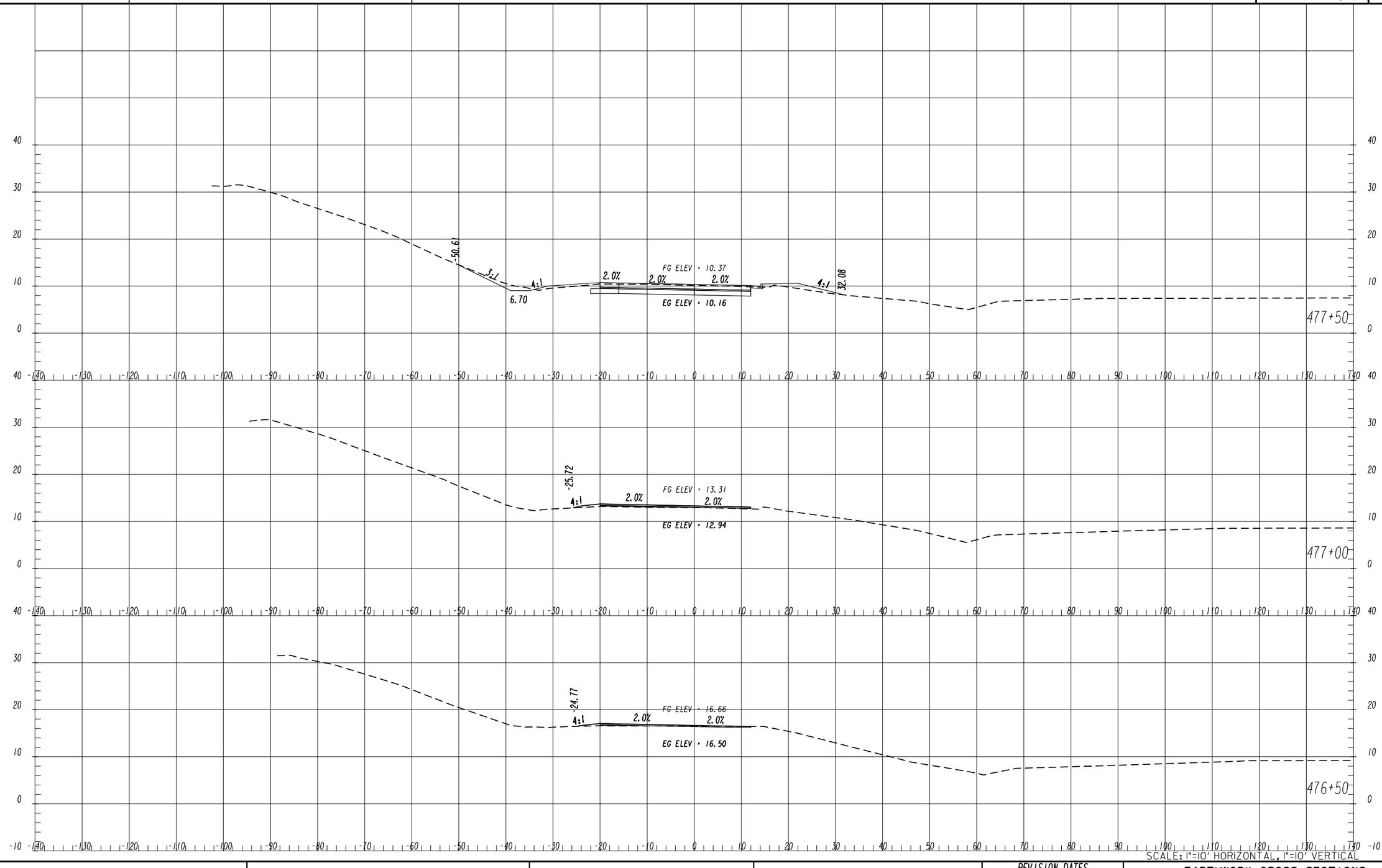
REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

RAMP D

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0061
CORRECTED:		DATE:		
VERIFIED:		DATE:		



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

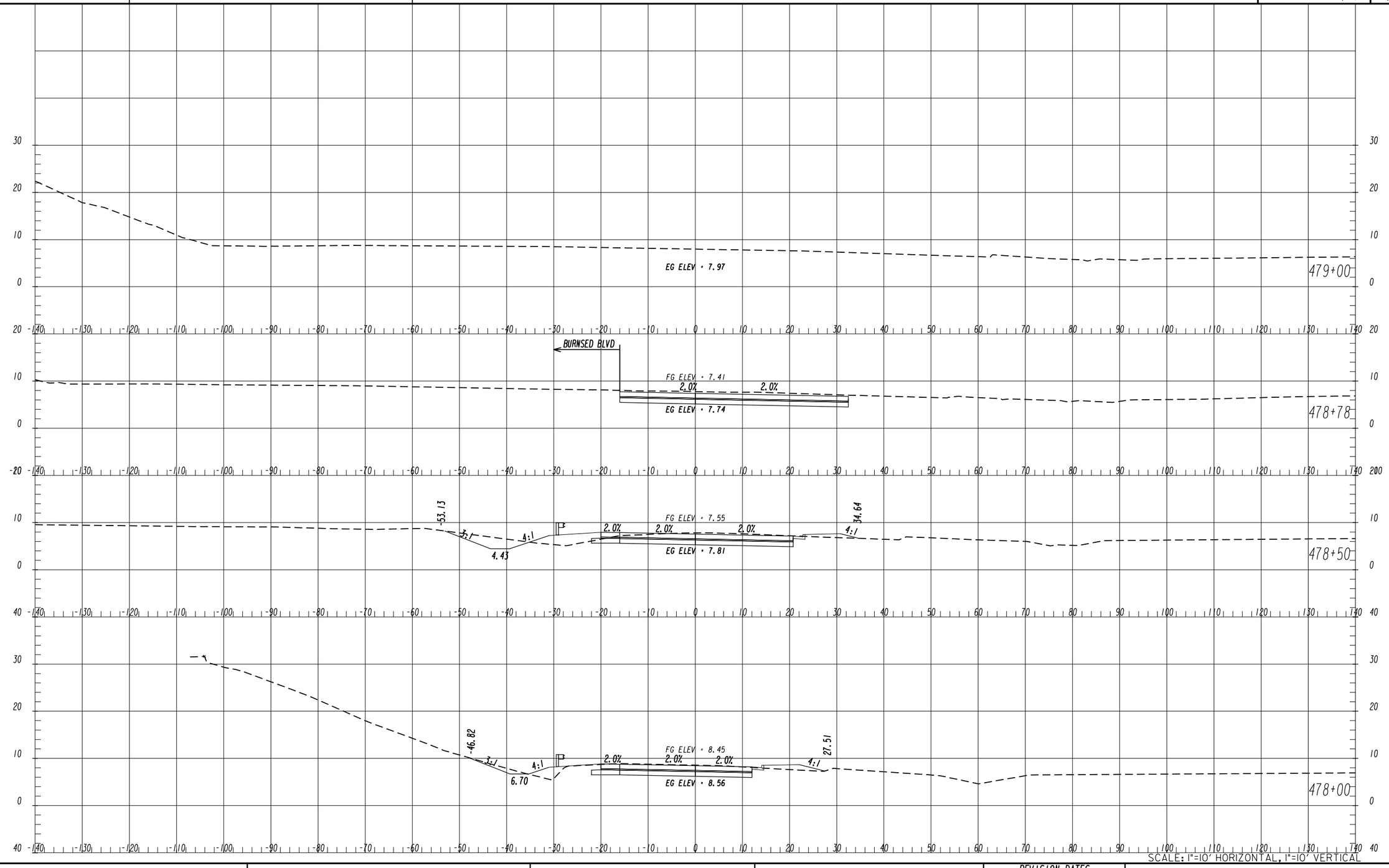
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

RAMP D

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BACKCHECKED:		DATE:		23-0062
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

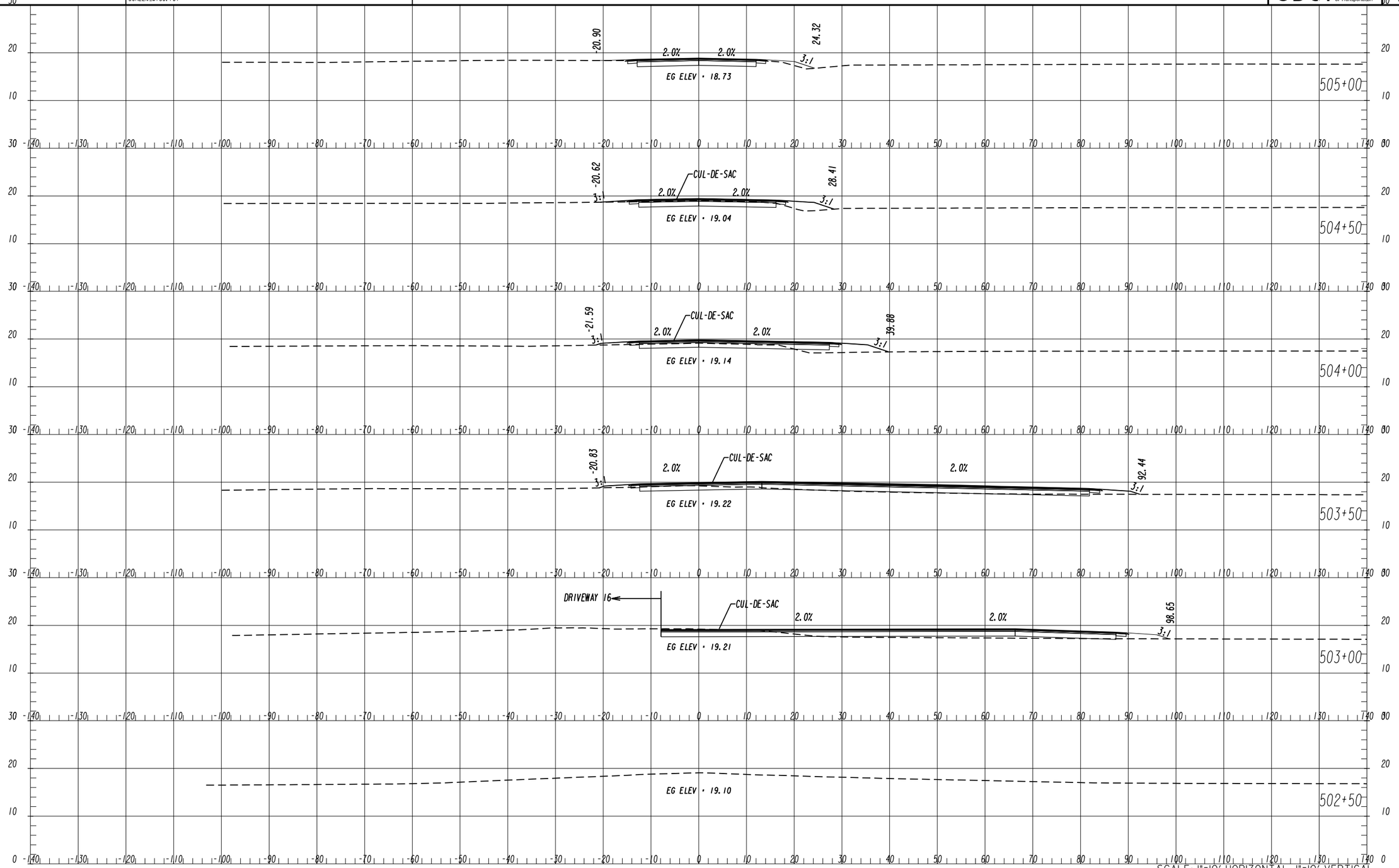
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

RAMP D

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		23-0063
VERIFIED:		DATE:		

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON ROAD

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0064
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

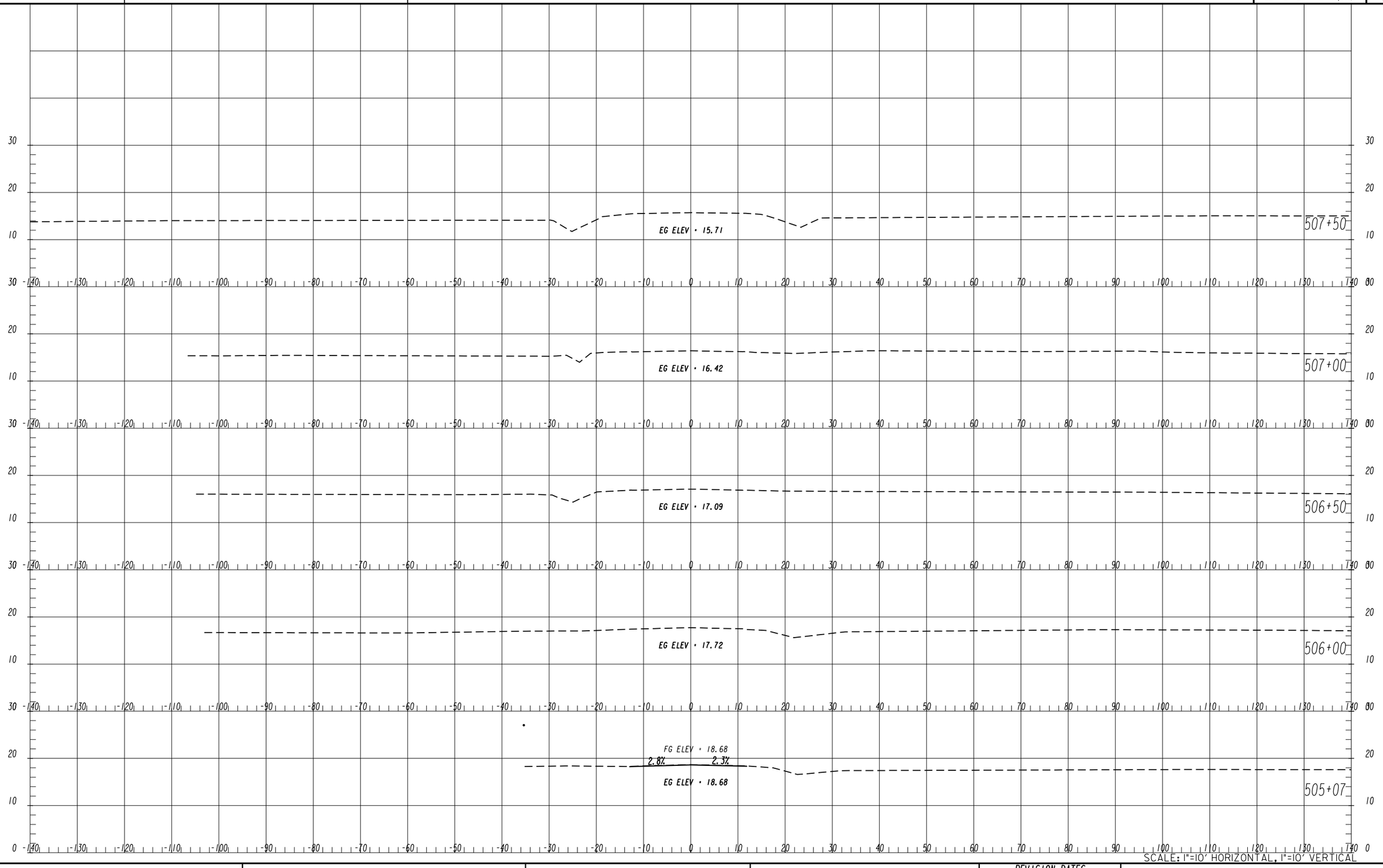
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GPLOT-V8
SCREEN_MISC.tbl

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GDOT Georgia Department of Transportation

P. I. No.
0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

REVISION DATES

moffatt & nichol

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON ROAD

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0065
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

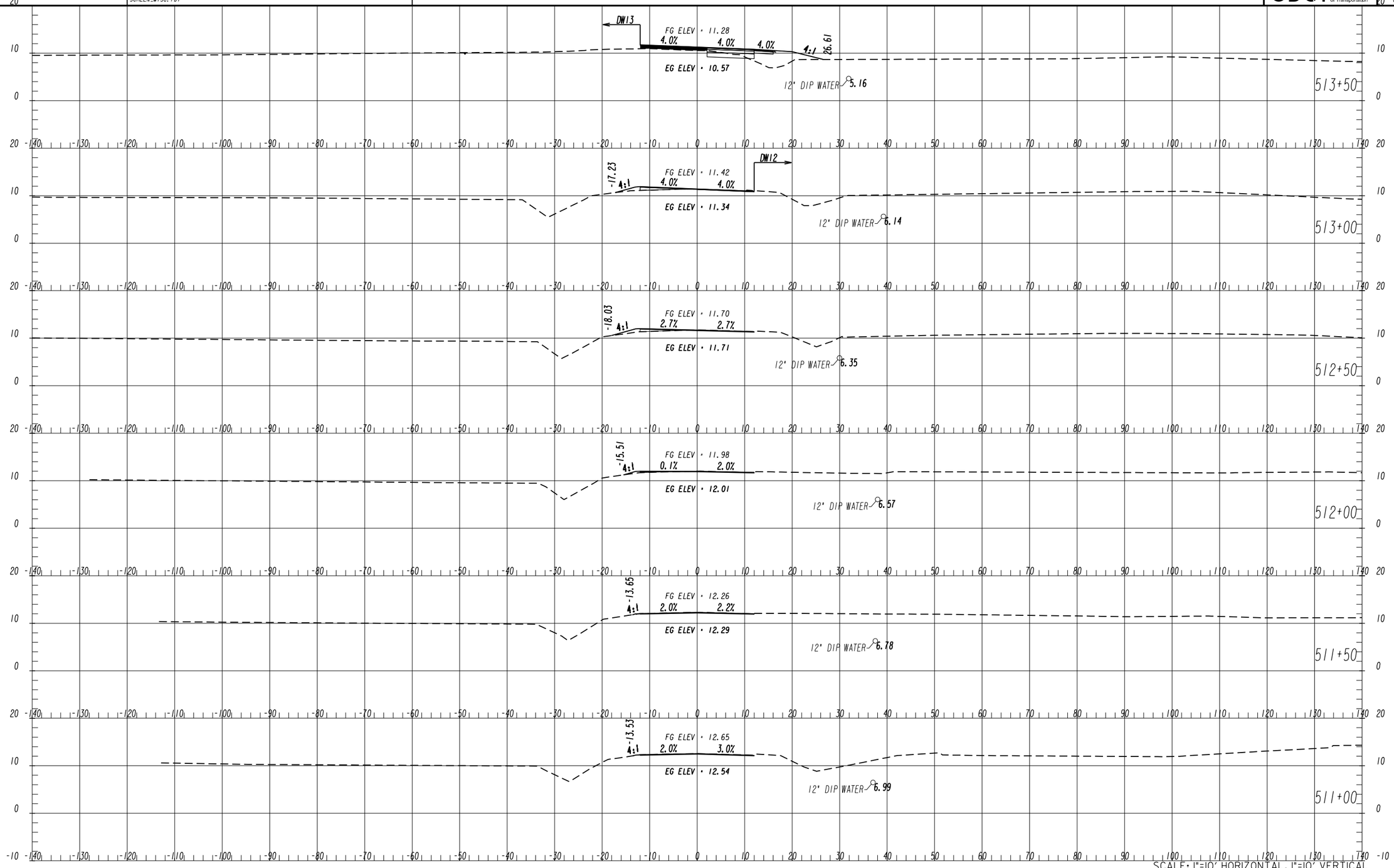
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SCREEN_MISC.tbl

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GDOT Georgia Department of Transportation

P. I. No. 0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

10/23/2015 GPLN

moffatt & nichol

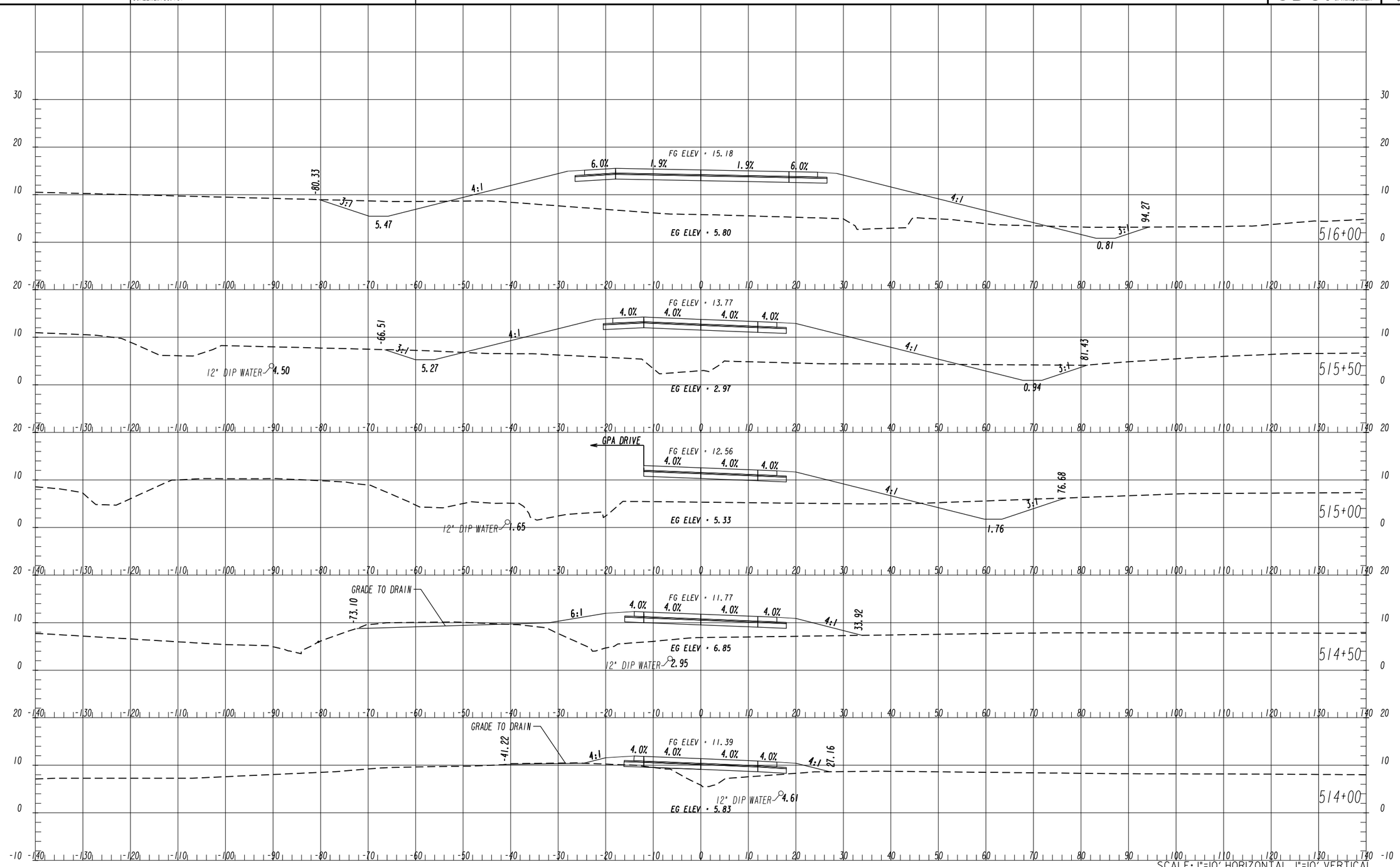
REVISION DATES		

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON ROAD

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0066
CORRECTED:		DATE:		
VERIFIED:		DATE:		



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON ROAD

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0067
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

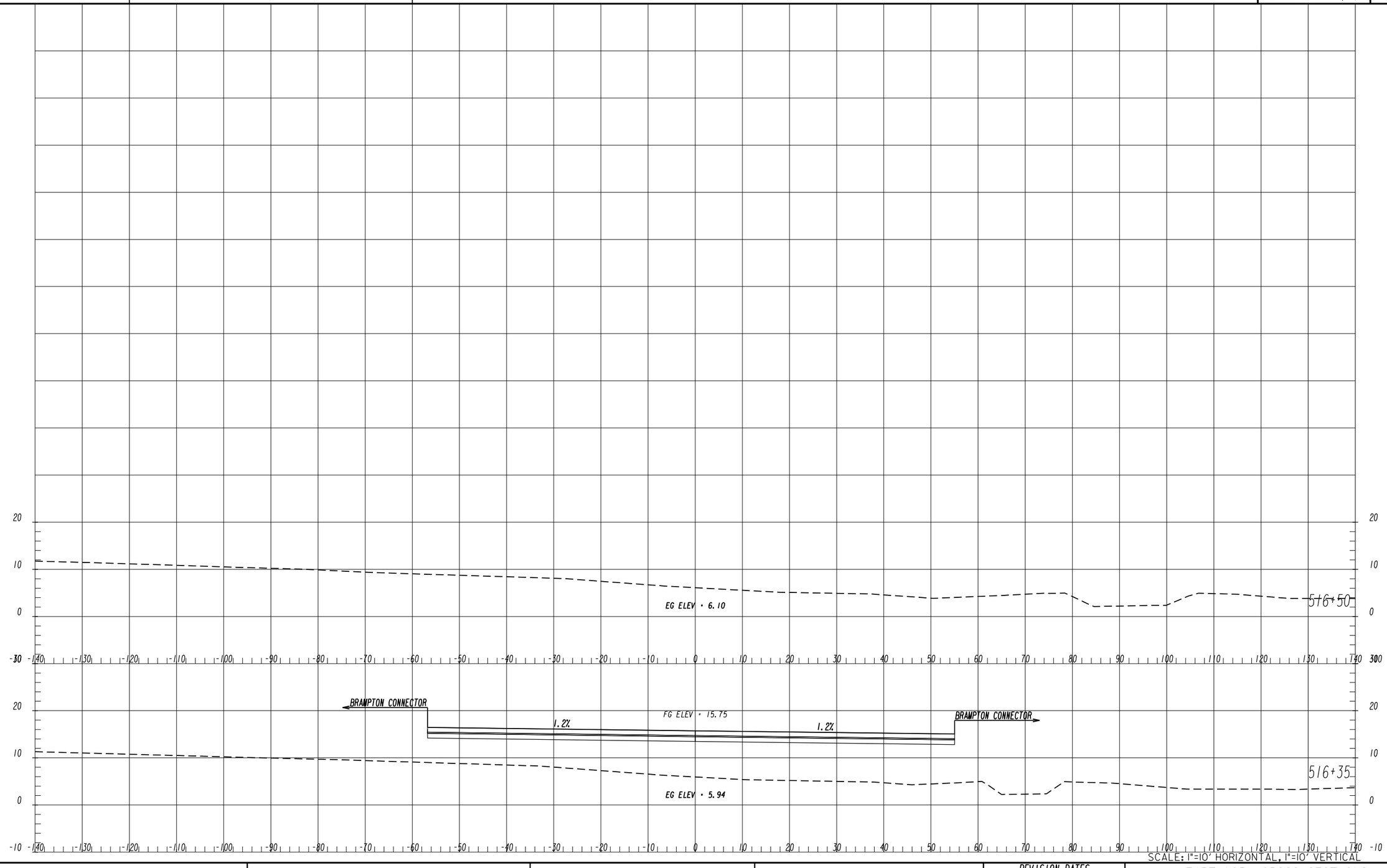
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GPLOT-V8
SCREEN_MISC.tbl

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GDOT Georgia Department of Transportation

P. I. No.
0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

REVISION DATES

moffatt & nichol

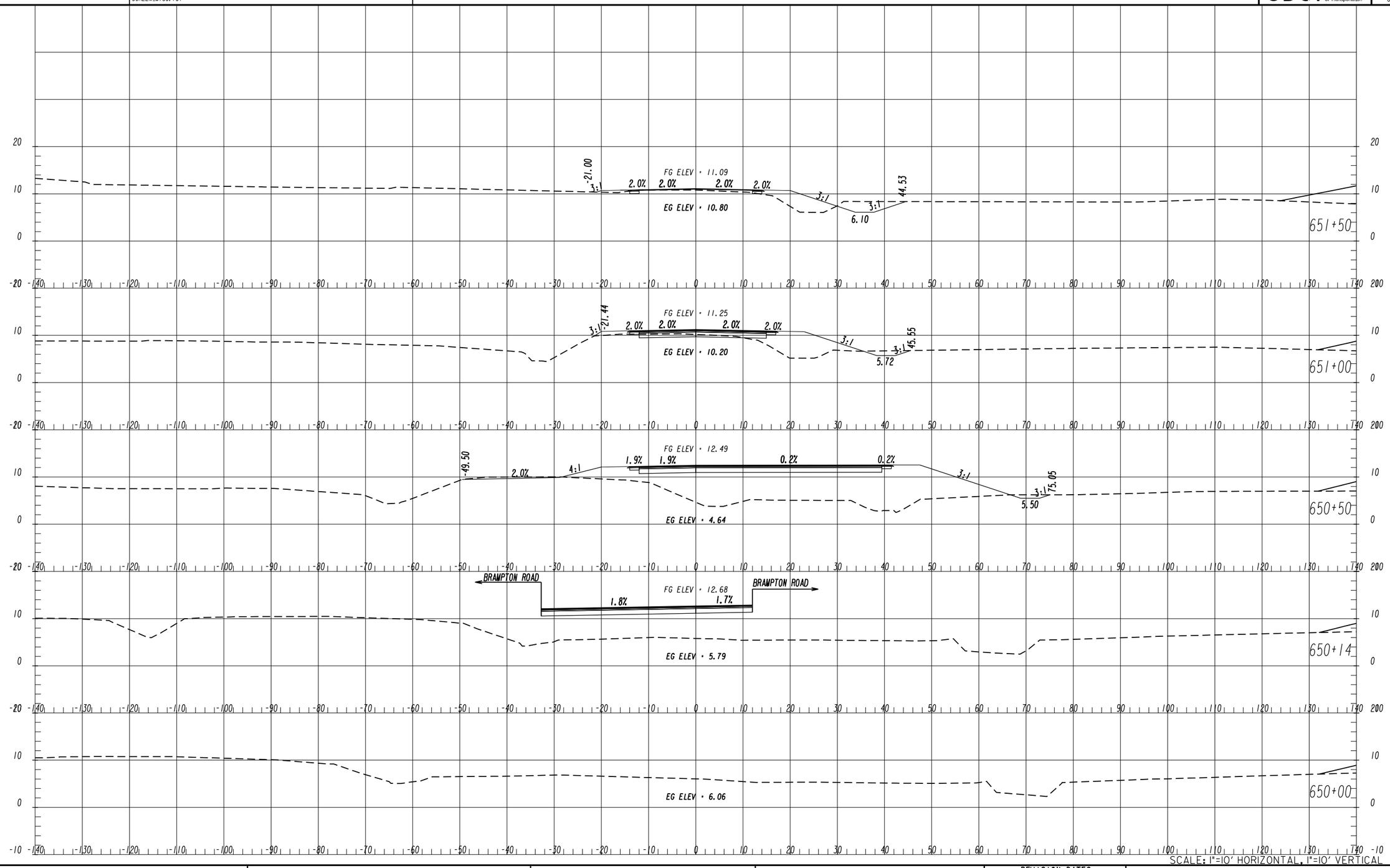
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON ROAD

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		23-0068
VERIFIED:		DATE:		

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

REVISION DATES

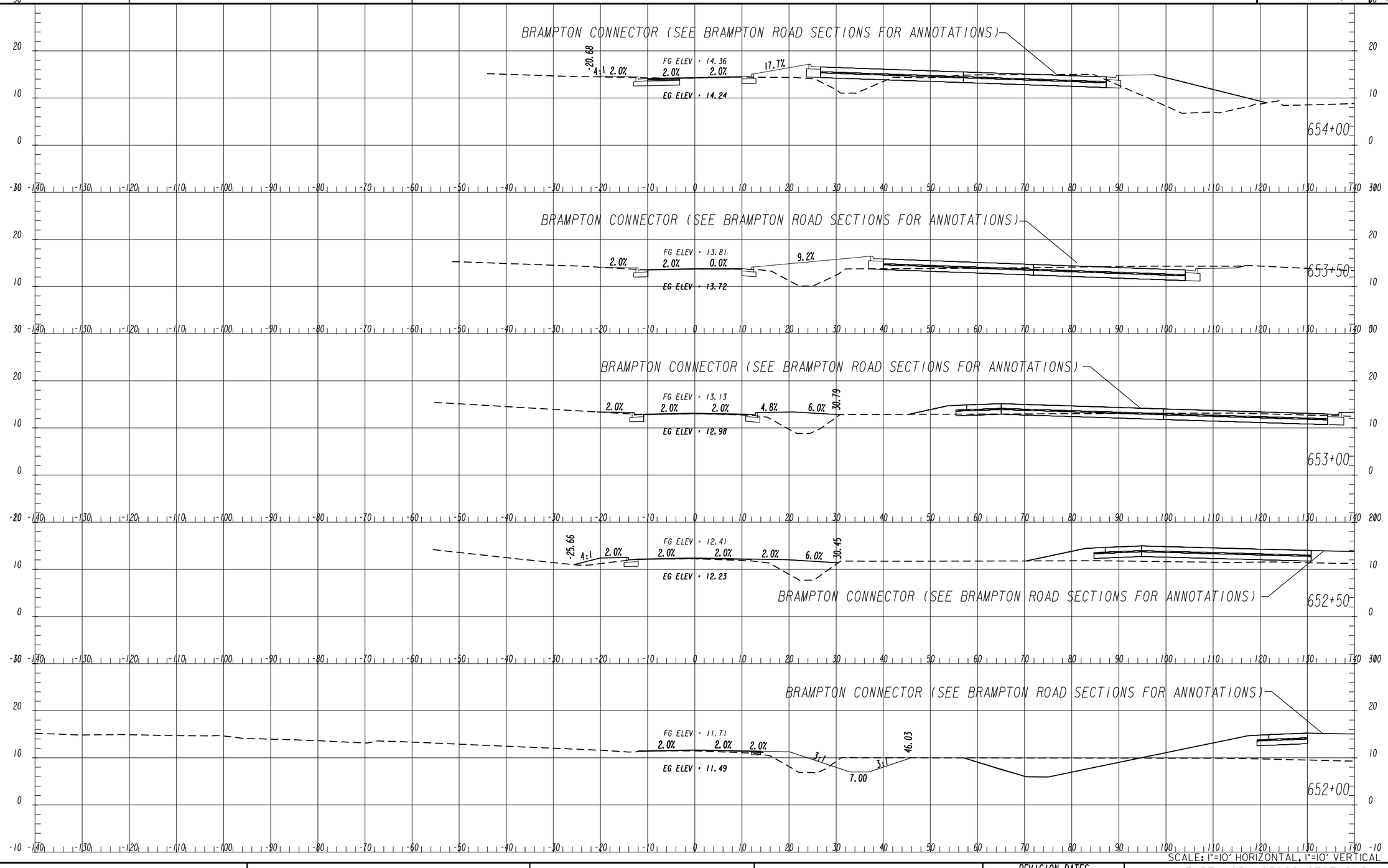
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

GPA DRIVE

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0069
CORRECTED:		DATE:		
VERIFIED:		DATE:		

moffatt & nichol



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

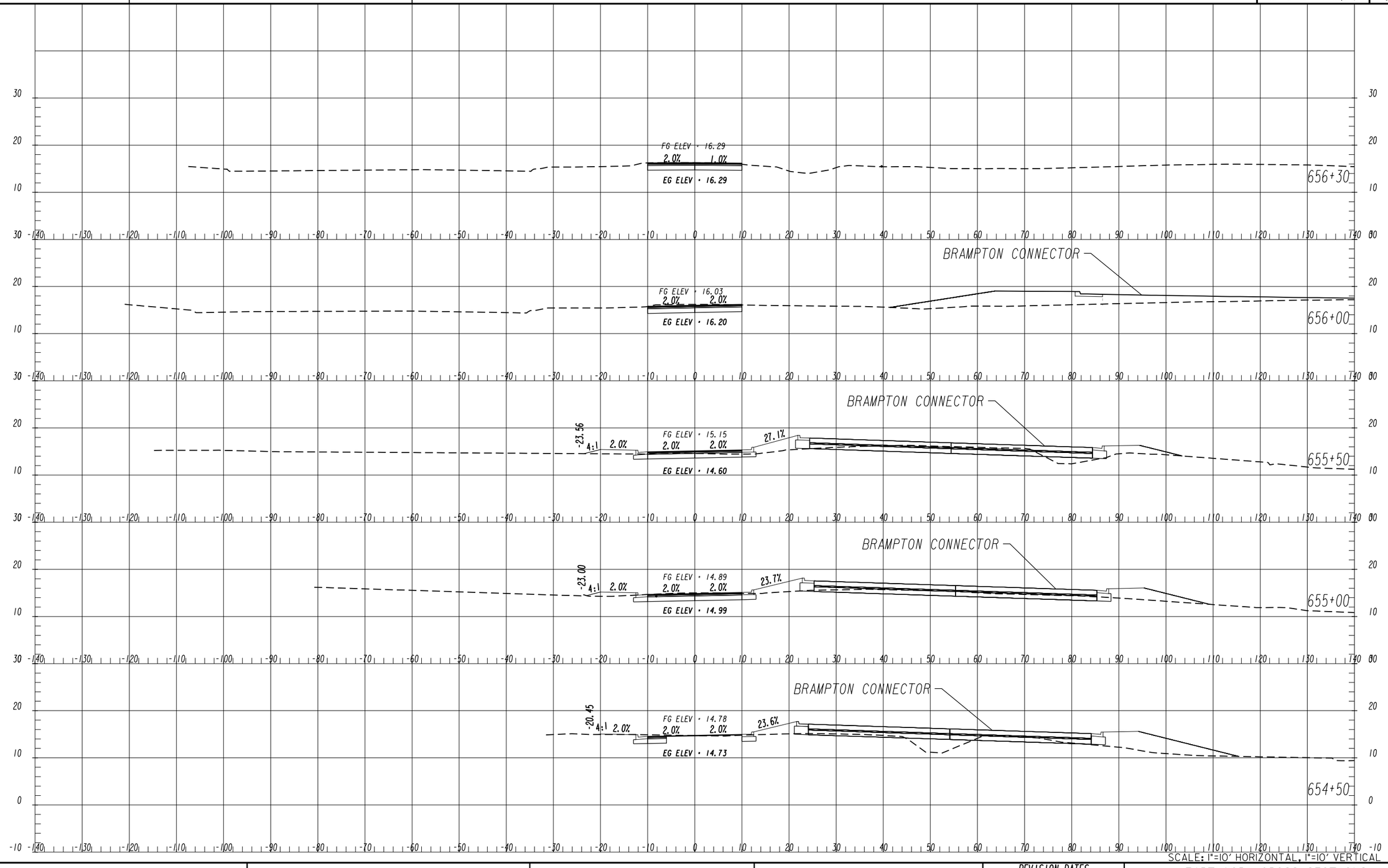
REVISION DATES		

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

GPA DRIVE

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0070
CORRECTED:		DATE:		
VERIFIED:		DATE:		



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

REVISION DATES

moffatt & nichol

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

GPA DRIVE

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0071
CORRECTED:		DATE:		
VERIFIED:		DATE:		

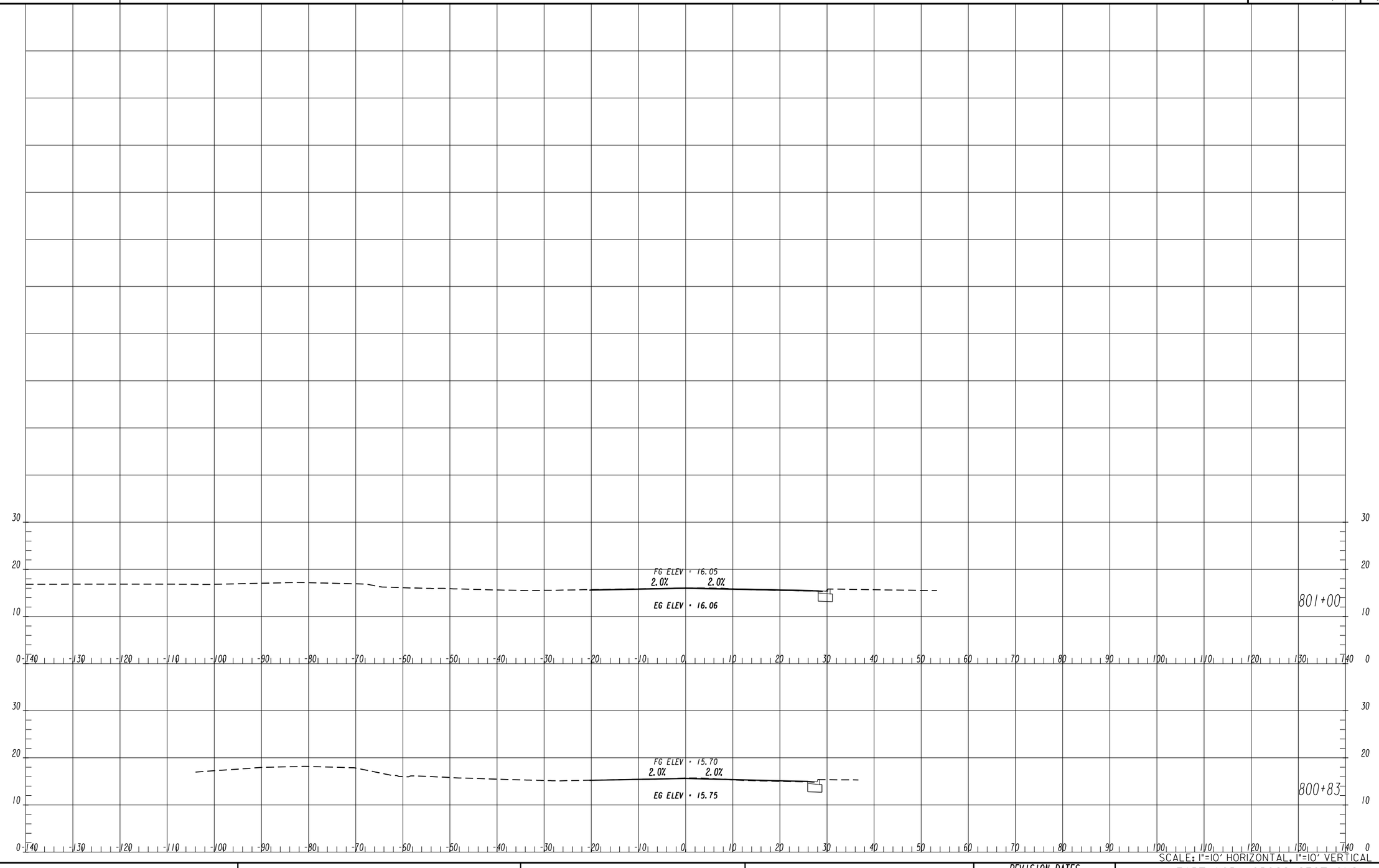
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USER:fattar

GPLOT-V8
SCREEN_MISC.tbl

Q:\SV\5531-02\600 CADD_Active\DGN\0006328_23-0010(Brampton_West).dgn

GDOT Georgia Department of Transportation

P. I. No.
0006328



moffatt & nichol

REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON ROAD

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		23-0072
VERIFIED:		DATE:		

10/23/2015 GPLN

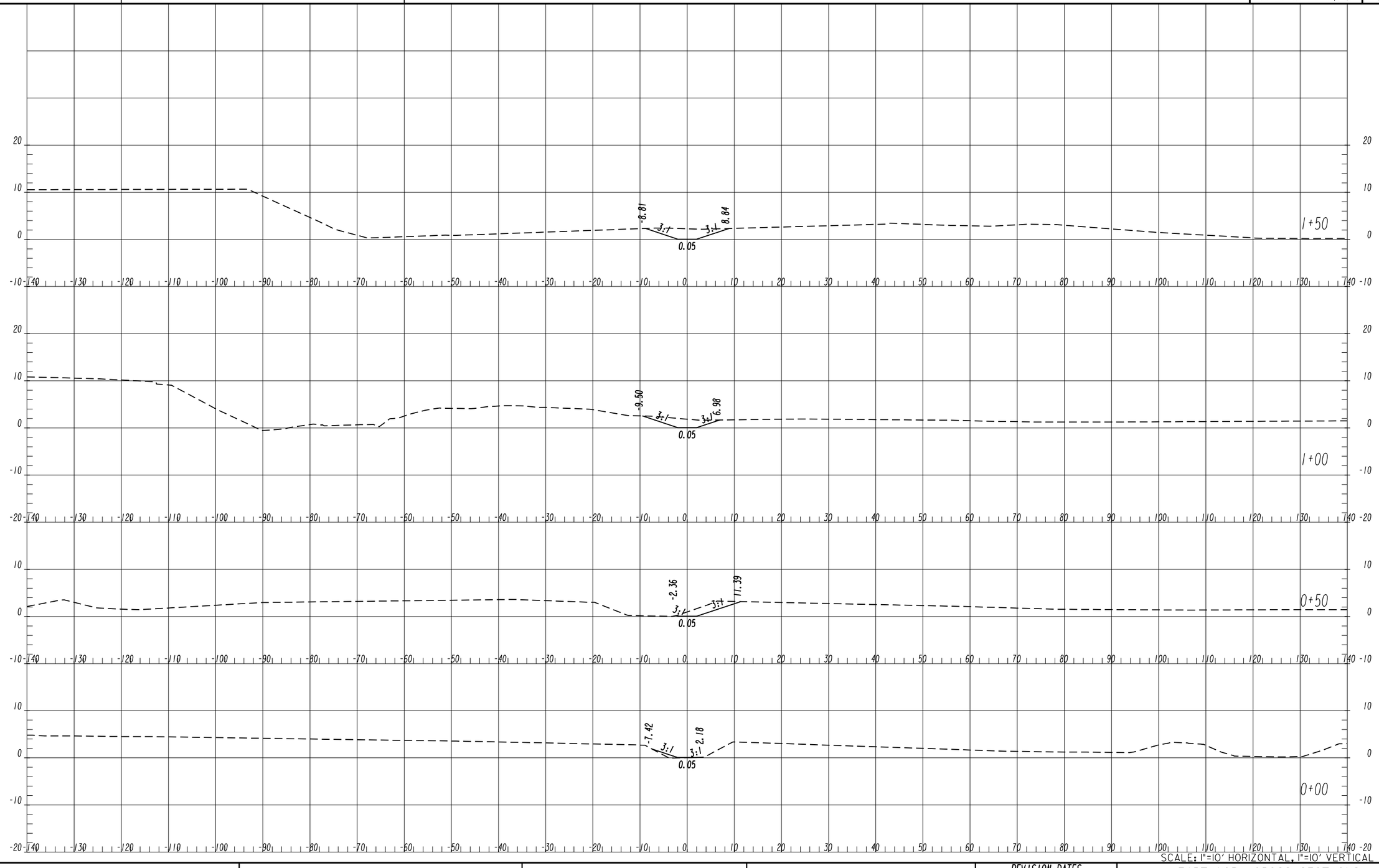
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USER:fattar

GPLOT-V8
SCREEN_MISC.tbl

Q:\SV\5531-02\600 CADD_Active\DGN\0006328_23-0011(DITCH_W).dgn

GDOT Georgia Department of Transportation

P. I. No. 0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

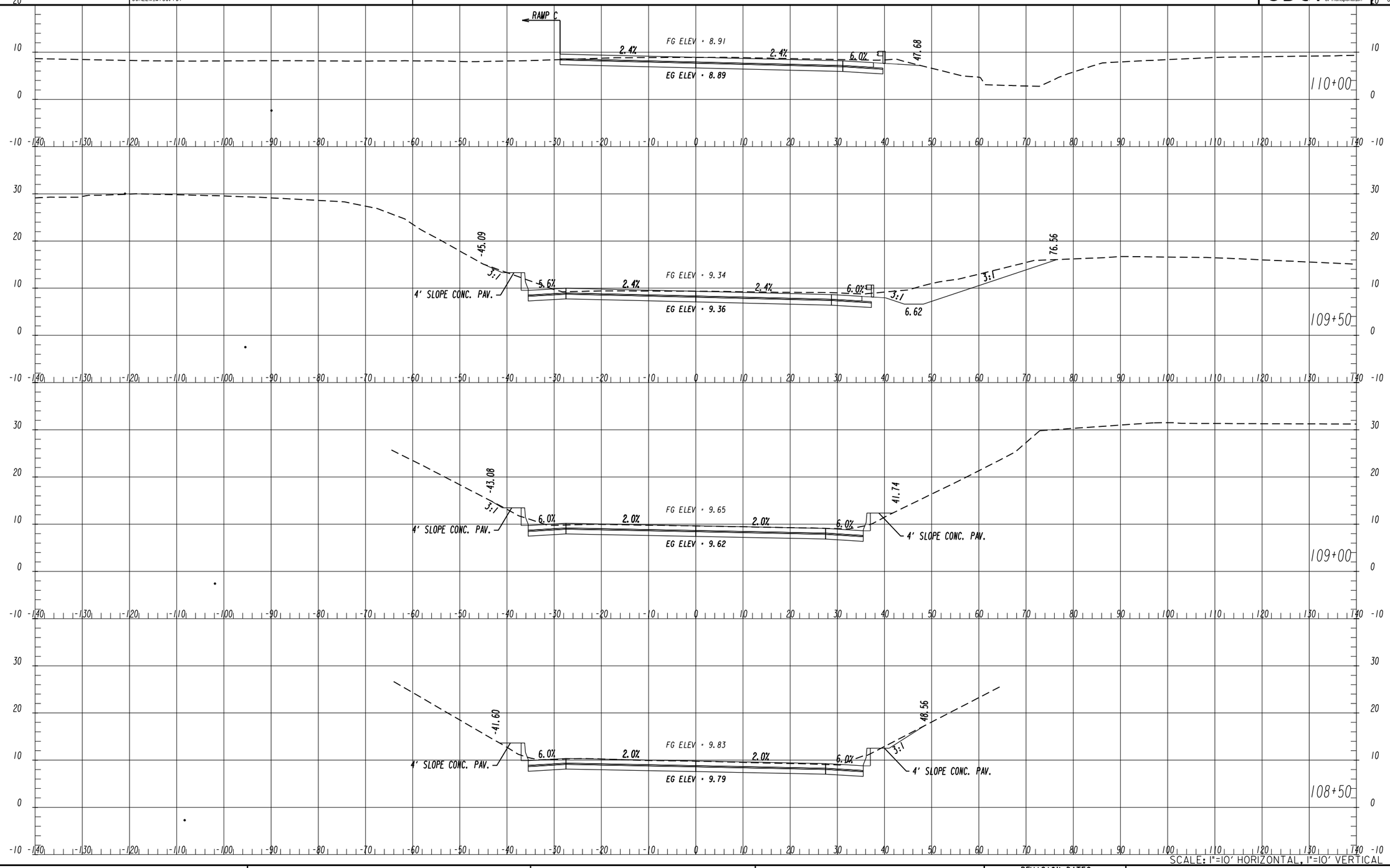
DITCH AT PIPE W

CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	

DRAWING No. 23-0073

moffatt & nichol

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

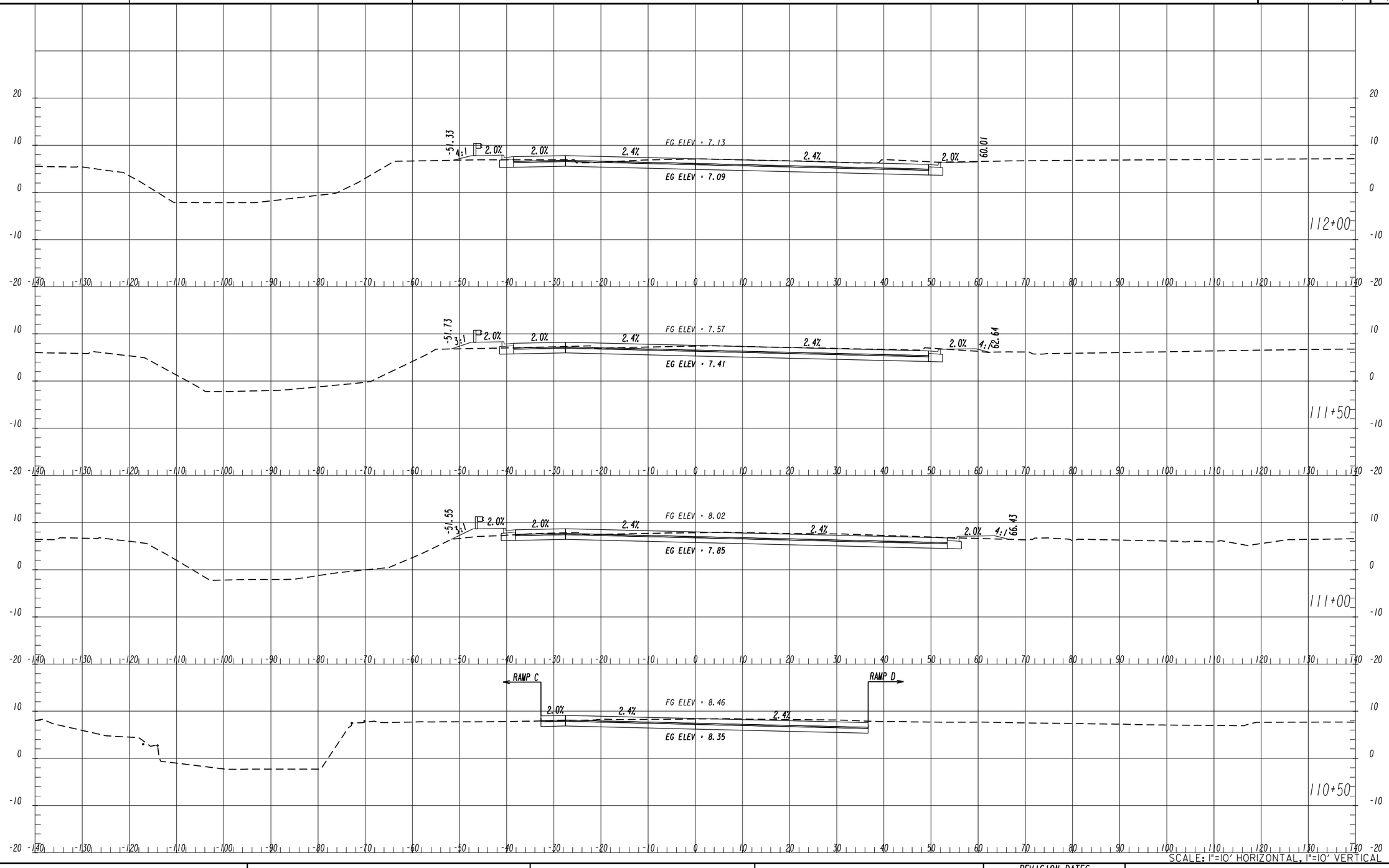
REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	23-0005
CORRECTED:		DATE:	
VERIFIED:		DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

REVISION DATES

moffatt & nichol

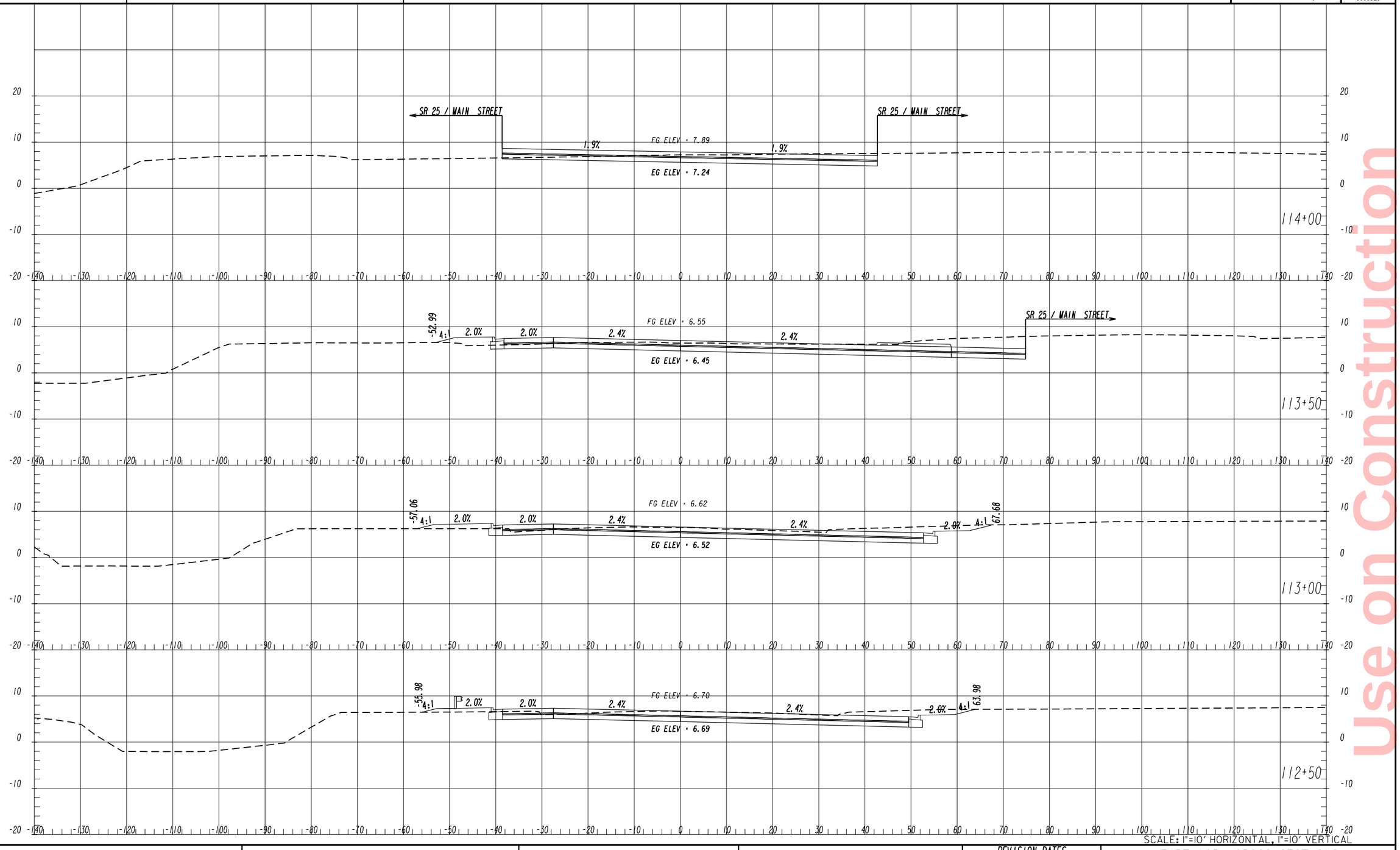
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0006
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



Use on Construction

moffatt & nichol

REVISION DATES
01-16-23

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		23-0007
VERIFIED:		DATE:		

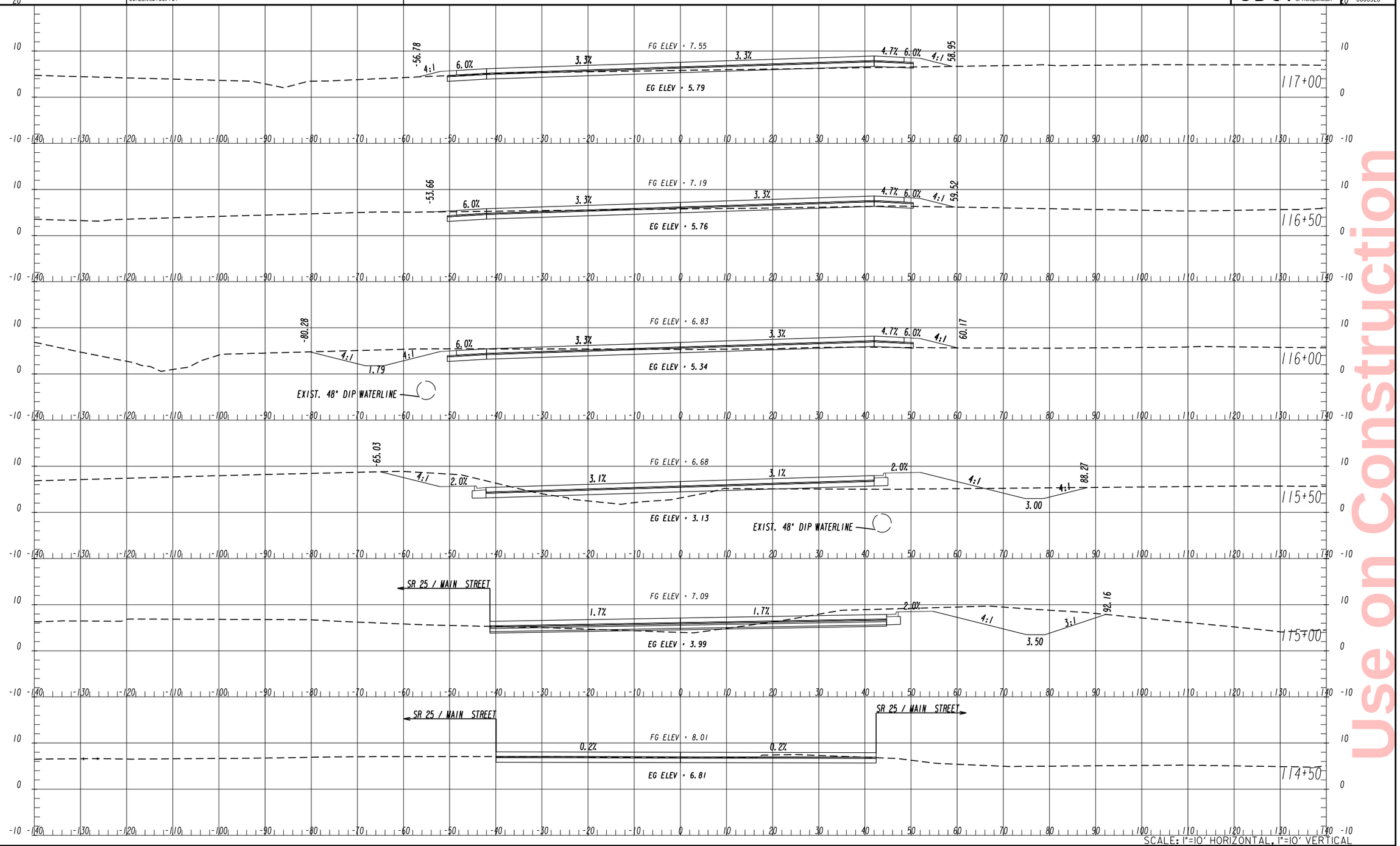
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USER:rvachhani

GPLOT-V8
SCREEN_MISC.tbl

Q:\SV\5531-02\600 CADD_Active\DGN\0006328_23-0001(BRAMPTON_CONNECTOR).dgn

GDOT Georgia Department of Transportation

P.I. No. 0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

Not to be used on Construction

moffatt & nichol

REVISION DATES
01-16-23

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	23-0008
CORRECTED:		DATE:	
VERIFIED:		DATE:	

10/23/2015 GPLN

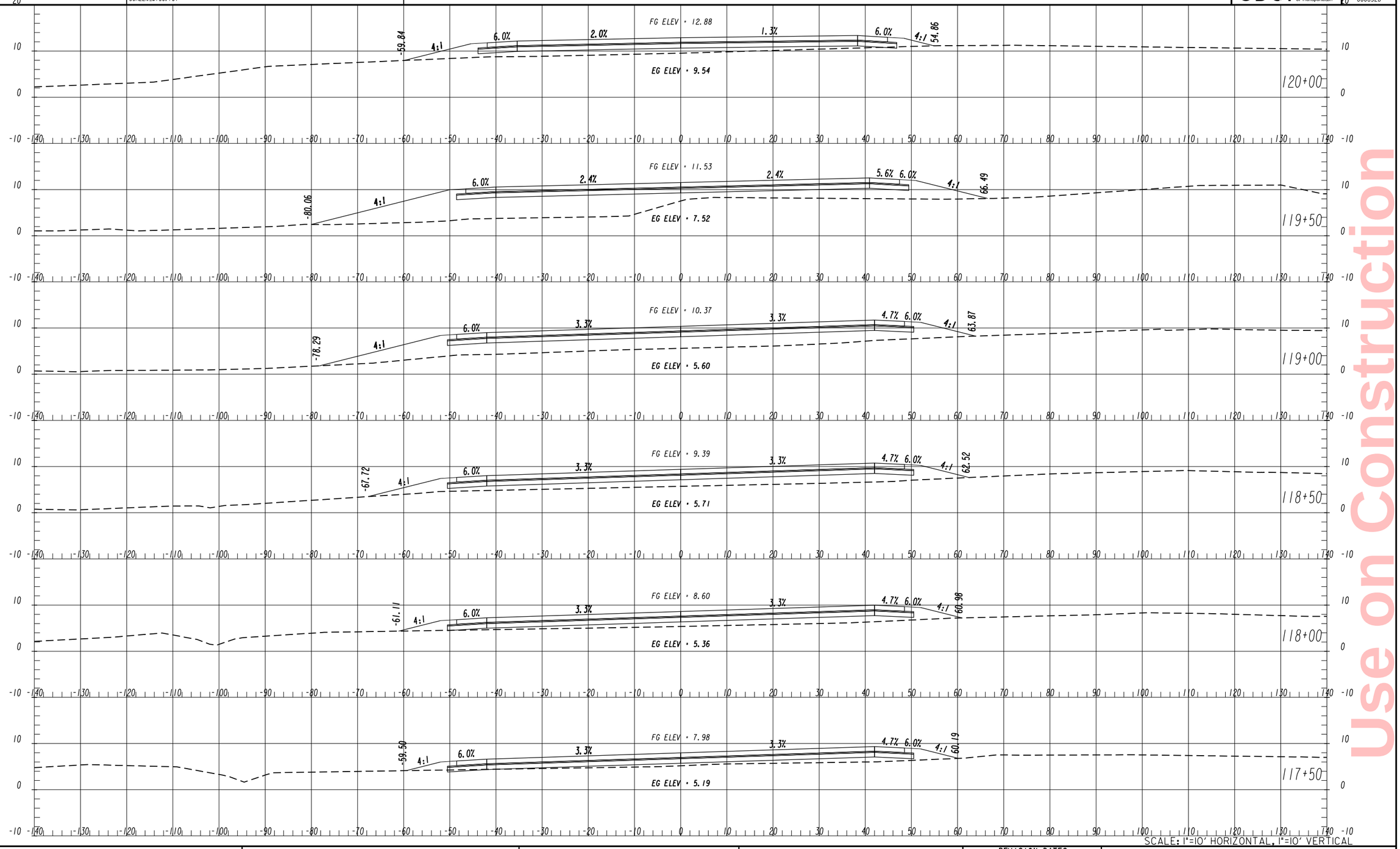
1/16/2023 2:26:37 PM
USER:rvachhani

GPLOT-V8
SCREEN_MISC.tbl

Q:\SV\5531-02\600 CADD_Active\DGN\0006328_23-0001(BRAMPTON_CONNECTOR).dgn

GDOT Georgia Department of Transportation

P. I. No. 0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

Use on Construction

moffatt & nichol

REVISION DATES
01-16-23

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0009
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

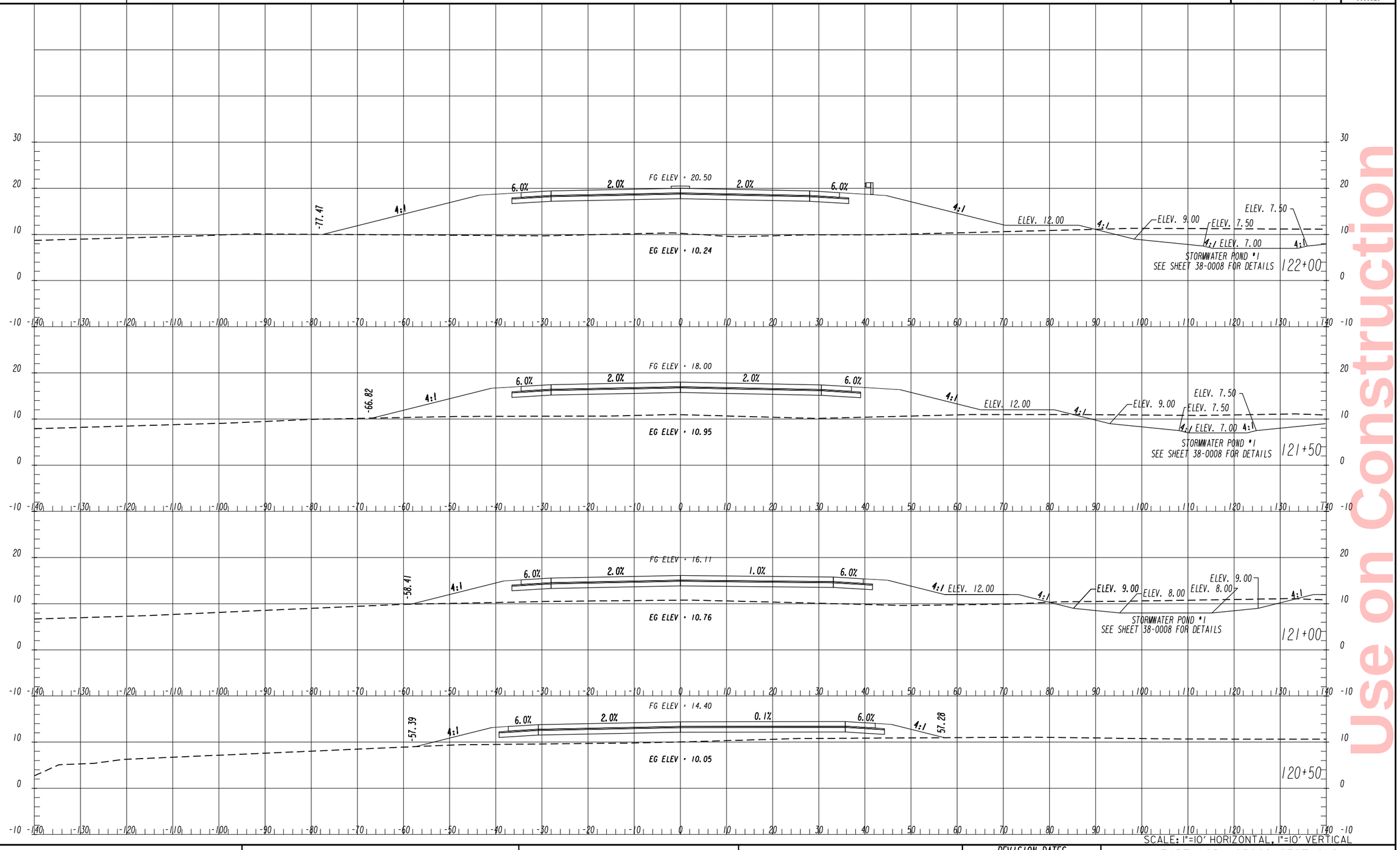
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GPLOT-V8
SCREEN_MISC.tbl

Q:\SV\5531-02\600 CADD_Active\DGN\0006328_23-0001(BRAMPTON_CONNECTOR).dgn

GDOT Georgia Department of Transportation

P. I. No.
0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

Use on Construction

moffatt & nichol

REVISION DATES
5-12-21
01-16-23

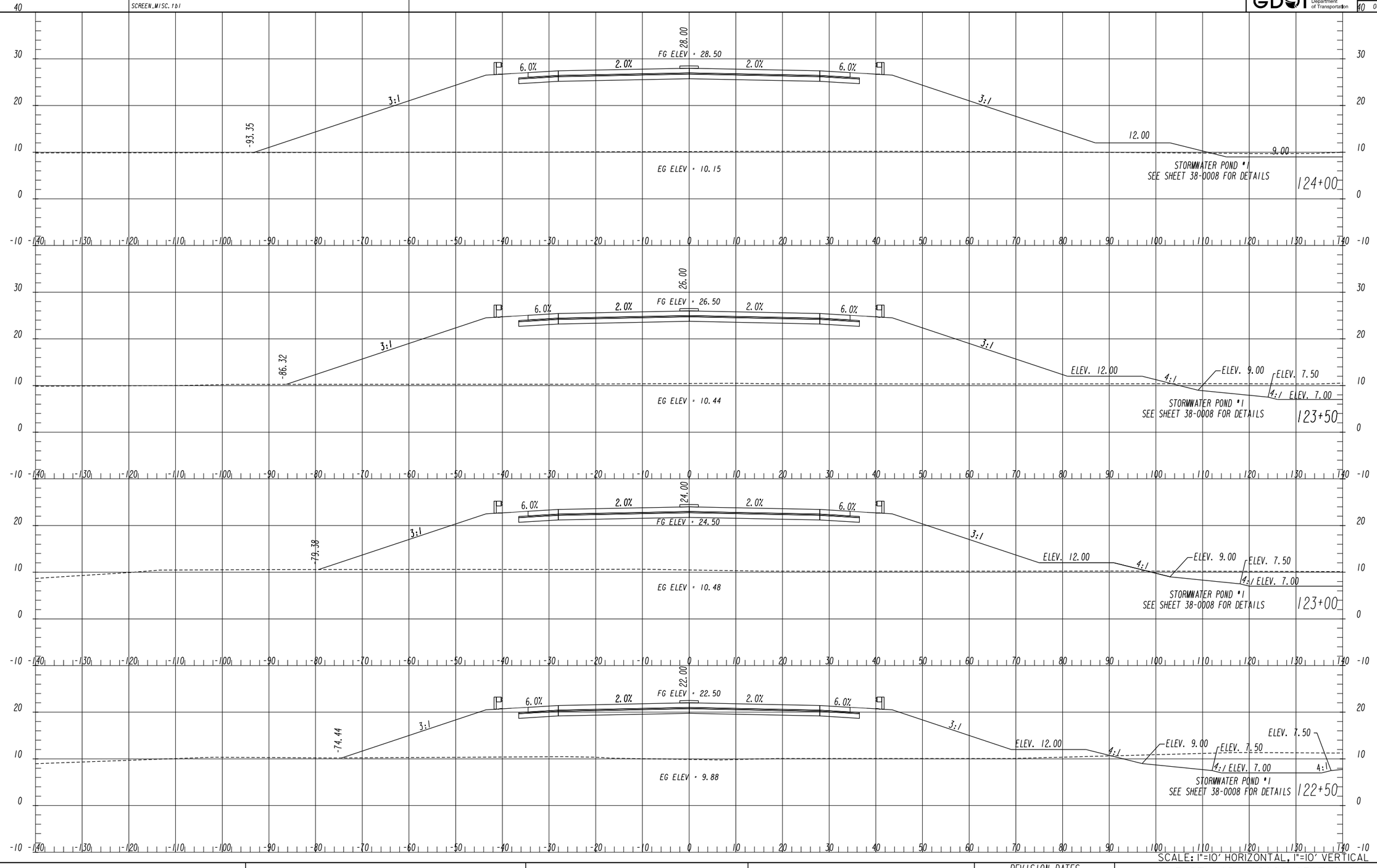
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0010
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

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REVISION DATES
05-12-21

EARTHWORK CROSS SECTIONS
BRAMPTON ROAD CONNECTOR
BRAMPTON CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0011
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

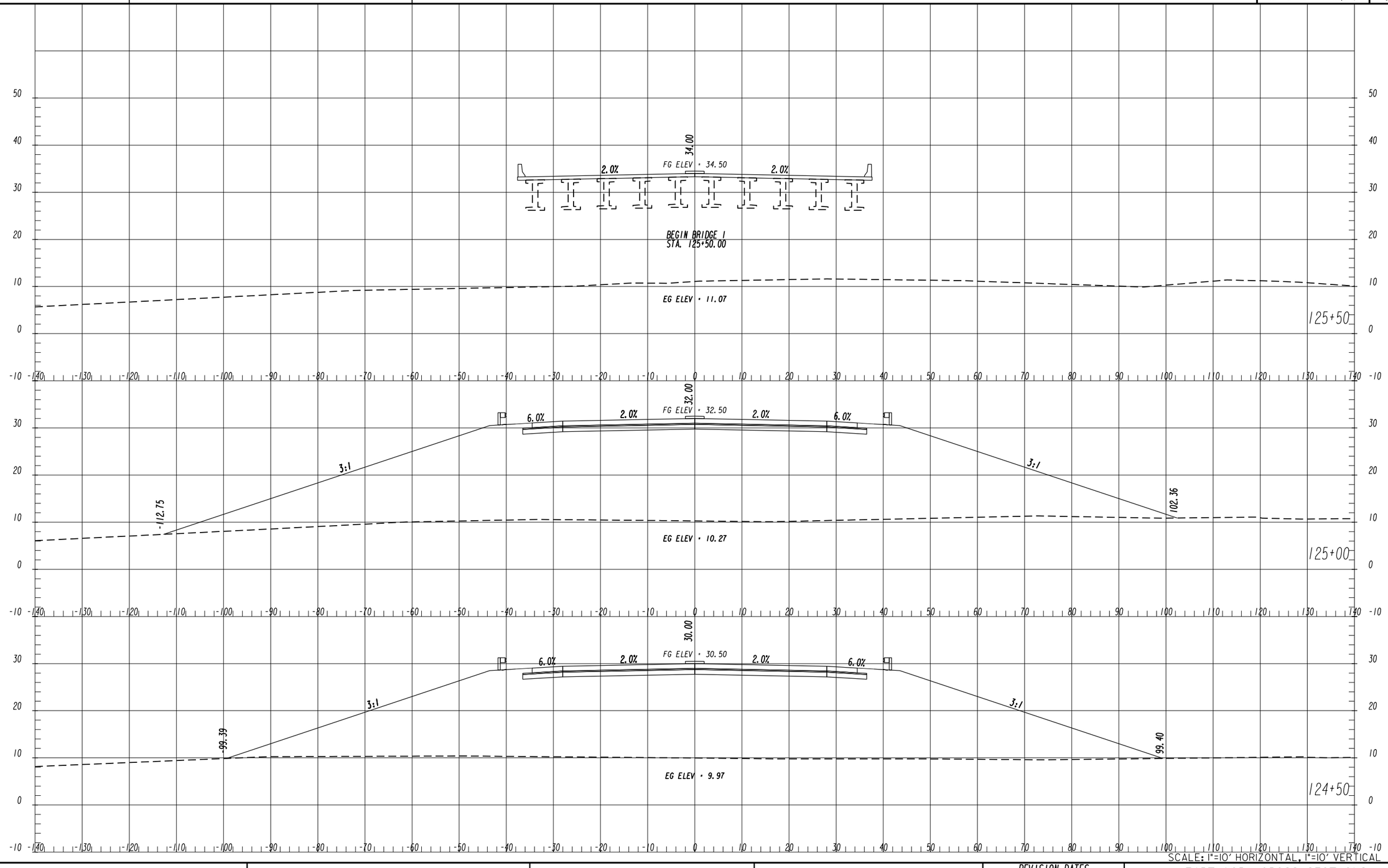
3/16/2021 7:35:24 AM
USER:fattar

GPLOT-V8
SCREEN_MISC.tbl

Q:\SV\5531-02\600 CADD_Active\DGN\0006328_23-0001(BRAMPTON_CONNECTOR).dgn

GDOT Georgia Department of Transportation

P. I. No.
0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

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REVISION DATES

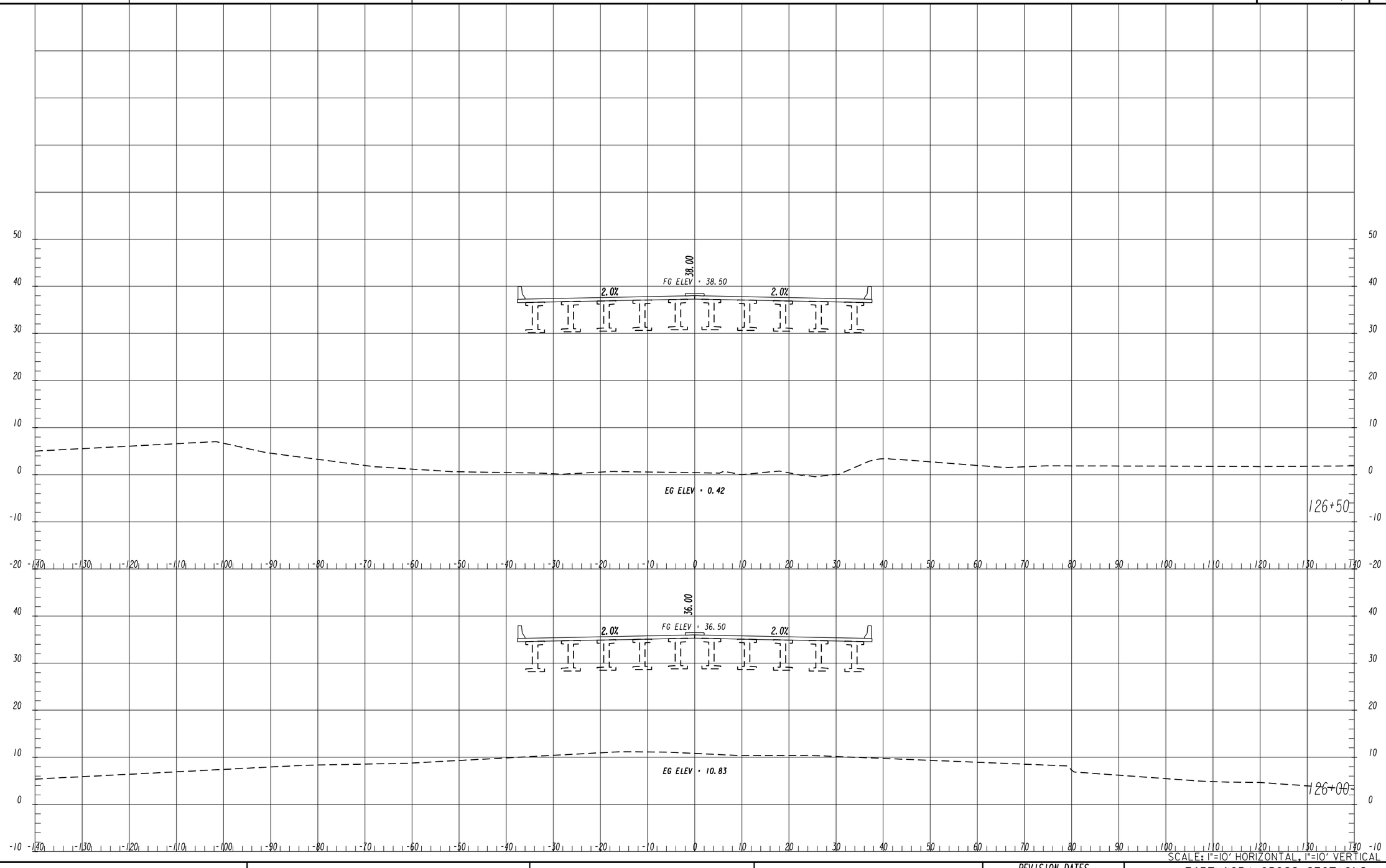
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:		DRAWING No.
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CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

REVISION DATES

moffatt & nichol

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

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CORRECTED:		DATE:	23-0013
VERIFIED:		DATE:	

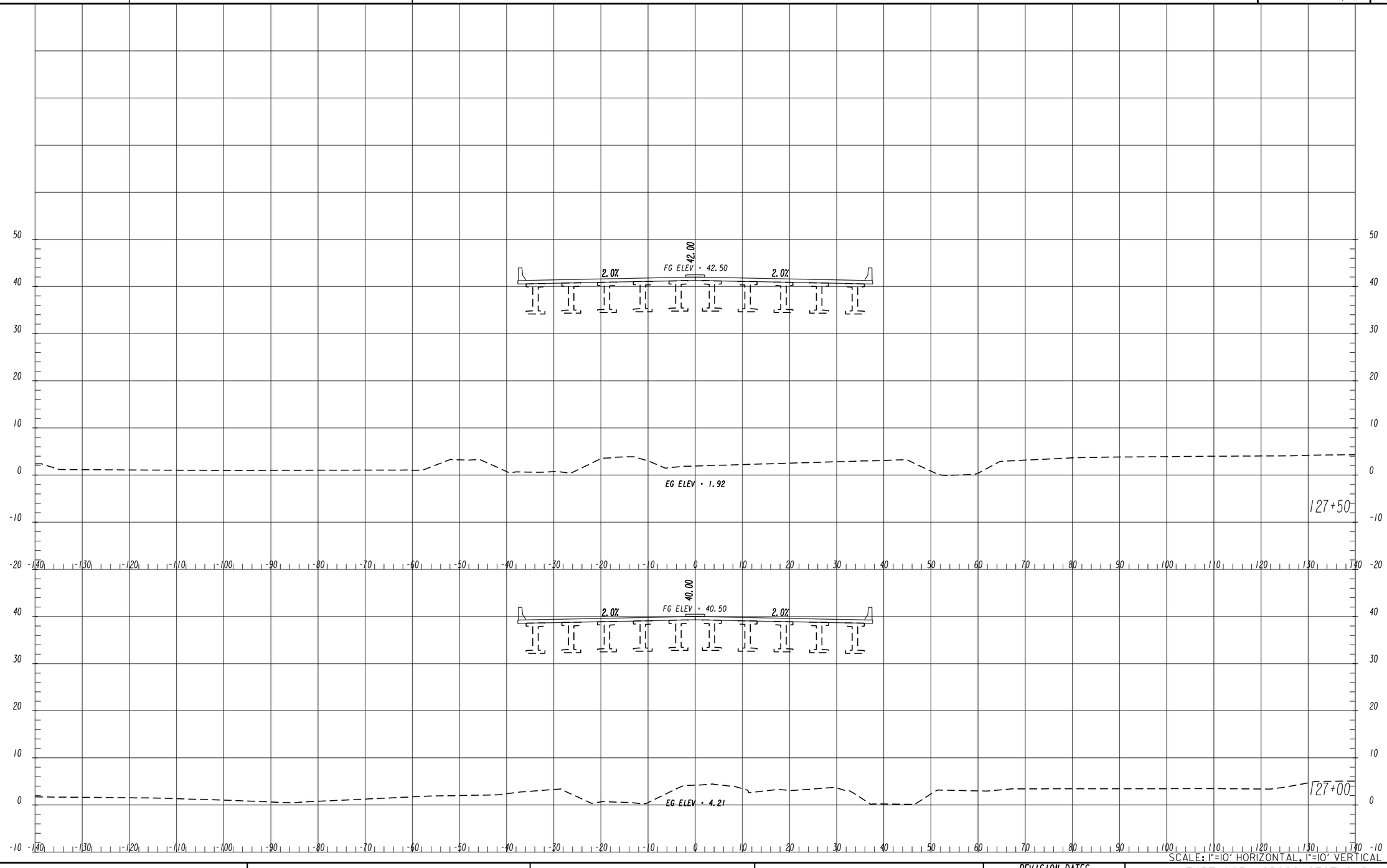
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GPLOT-V8
SCREEN_MISC.tbl

Q:\SV\5531-02\600 CADD_Active\DGN\0006328_23-0001(BRAMPTON_CONNECTOR).dgn

GDOT Georgia Department of Transportation

P.I. No. 0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

10/23/2015 GPLN

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REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:		DRAWING No.
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CORRECTED:		DATE:		
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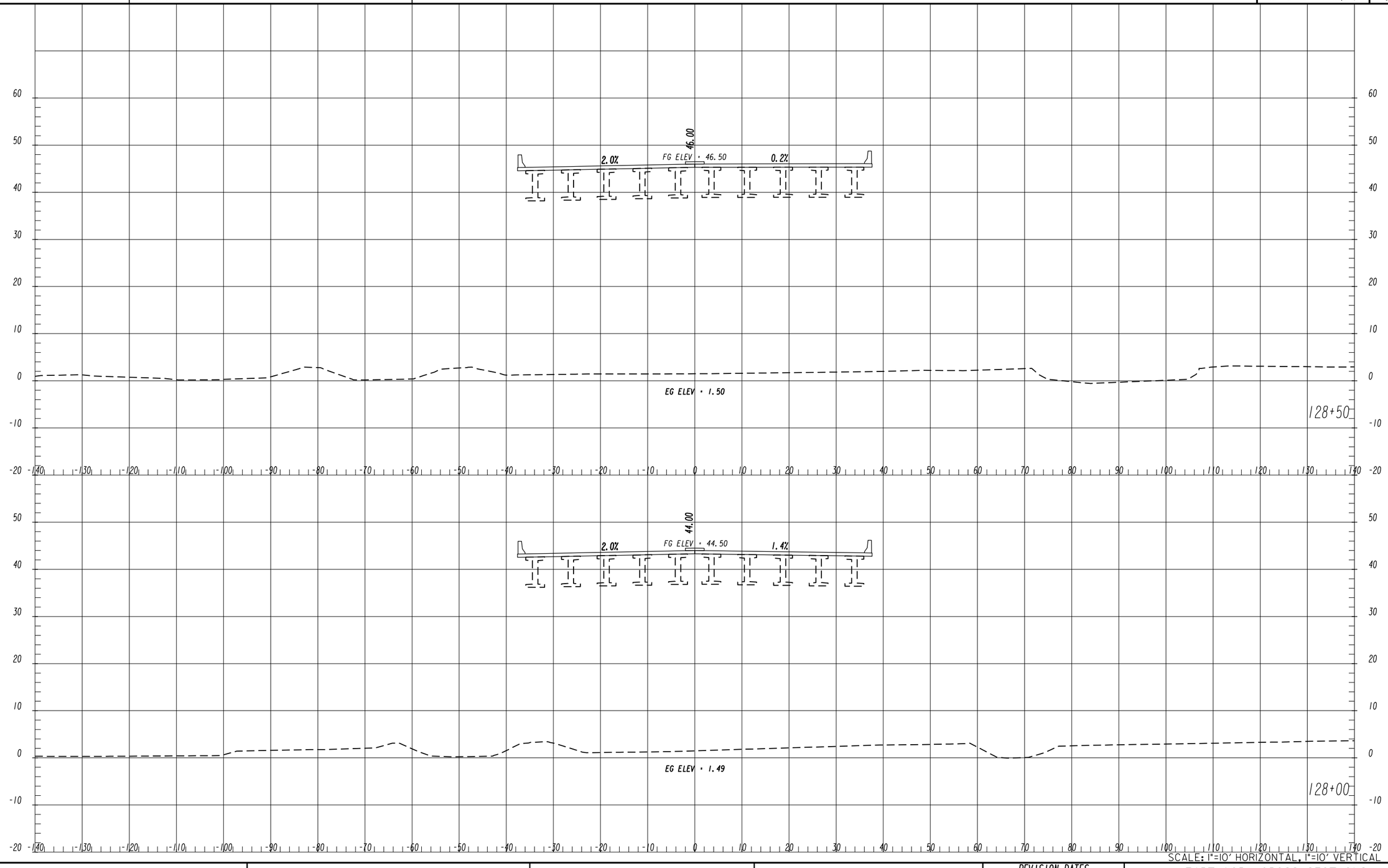
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GPLOT-V8
SCREEN_MISC.tbl

Q:\SV\5531-02\600 CADD_Active\DGN\0006328_23-0001(BRAMPTON_CONNECTOR).dgn

GDOT Georgia Department of Transportation

P. I. No.
0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	23-0015
VERIFIED:		DATE:	

10/23/2015 GPLN

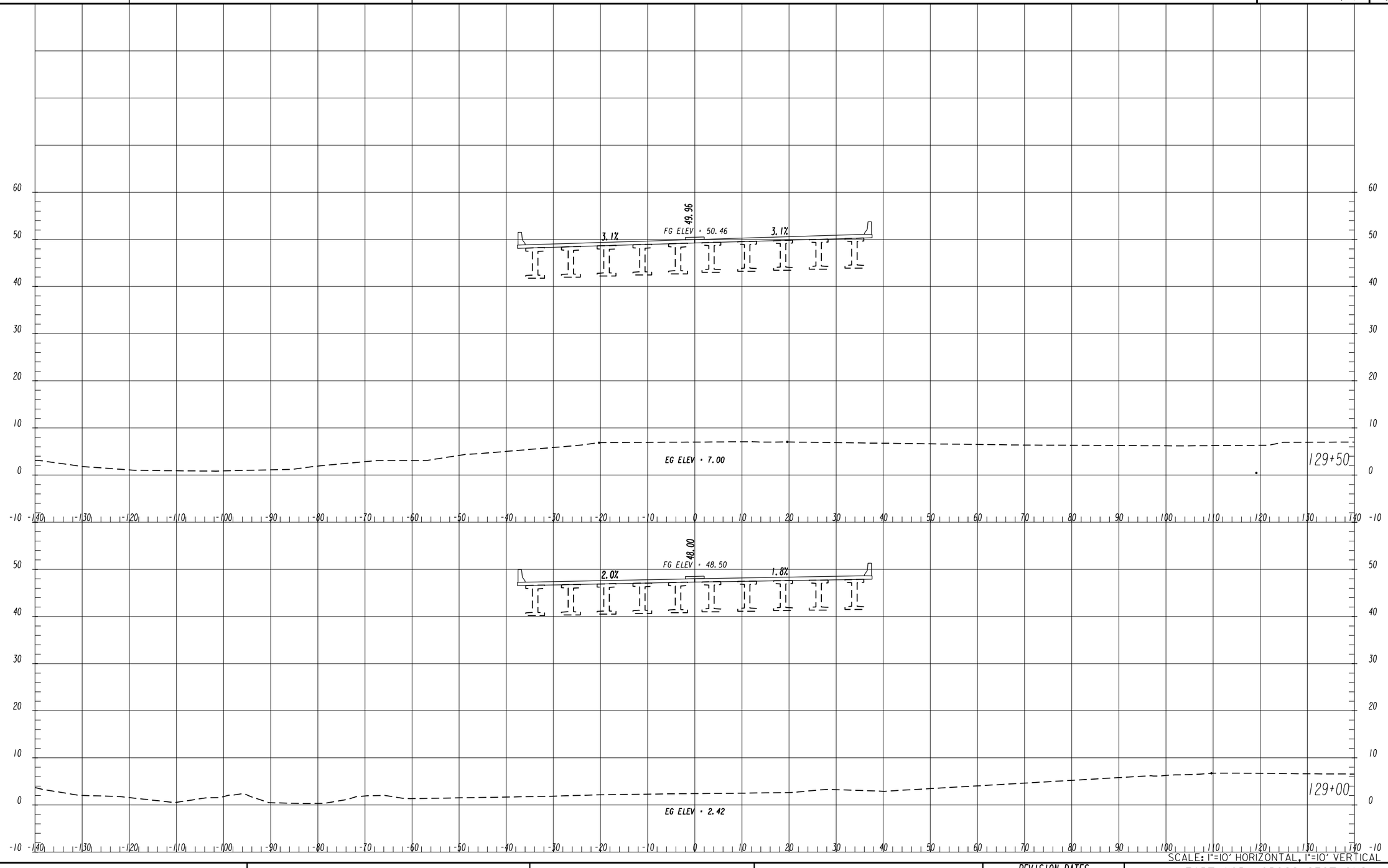
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GPLOT-V8
SCREEN_MISC.tbl

Q:\SV\5531-02\600 CADD_Active\DGN\0006328_23-0001(BRAMPTON_CONNECTOR).dgn

GDOT Georgia Department of Transportation

P.I. No. 0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	23-0016
VERIFIED:		DATE:	

10/23/2015 GPLN

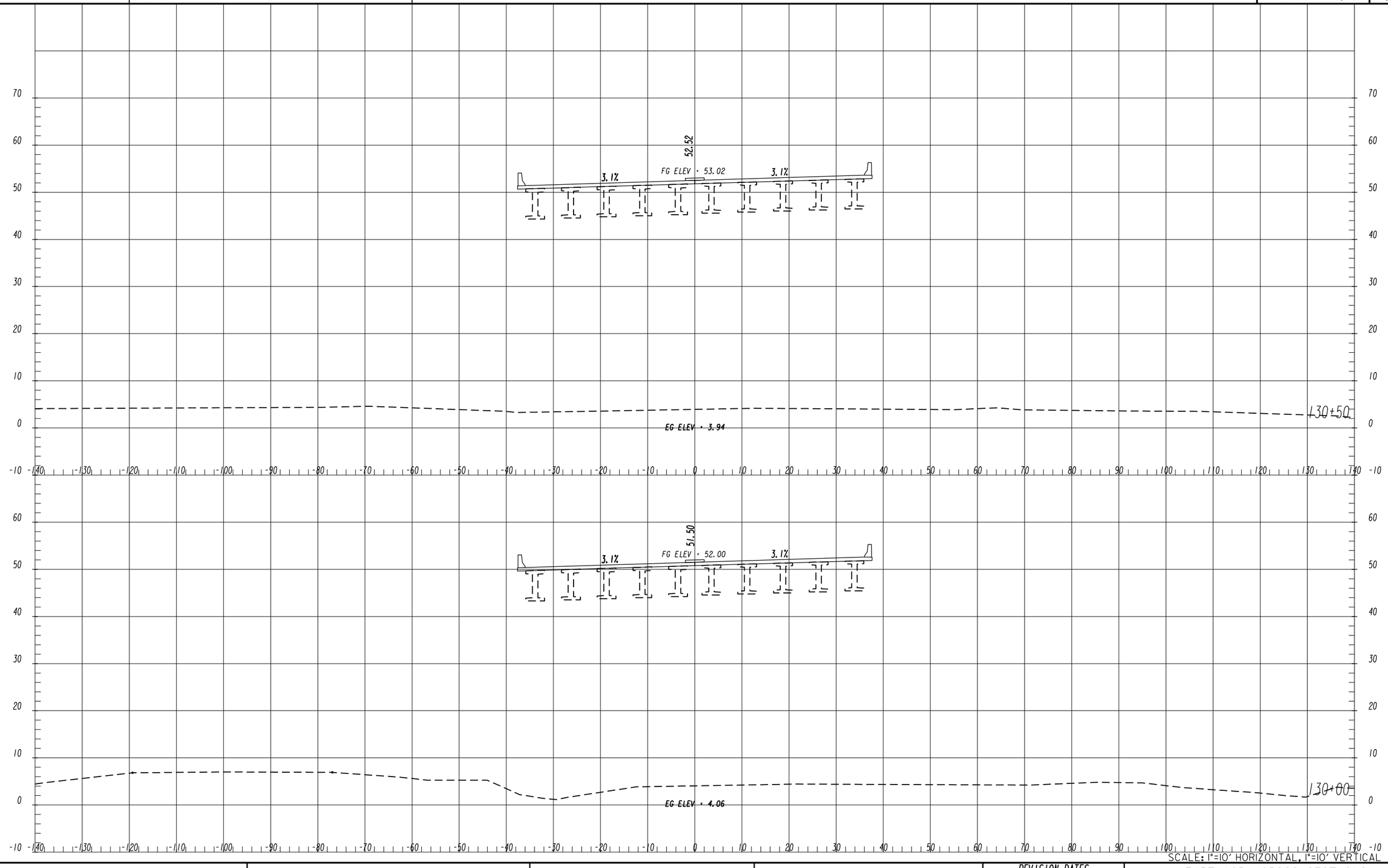
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GPLOT-V8
SCREEN_MISC.tbl

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GDOT Georgia Department of Transportation

P. I. No.
0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

REVISION DATES

moffatt & nichol

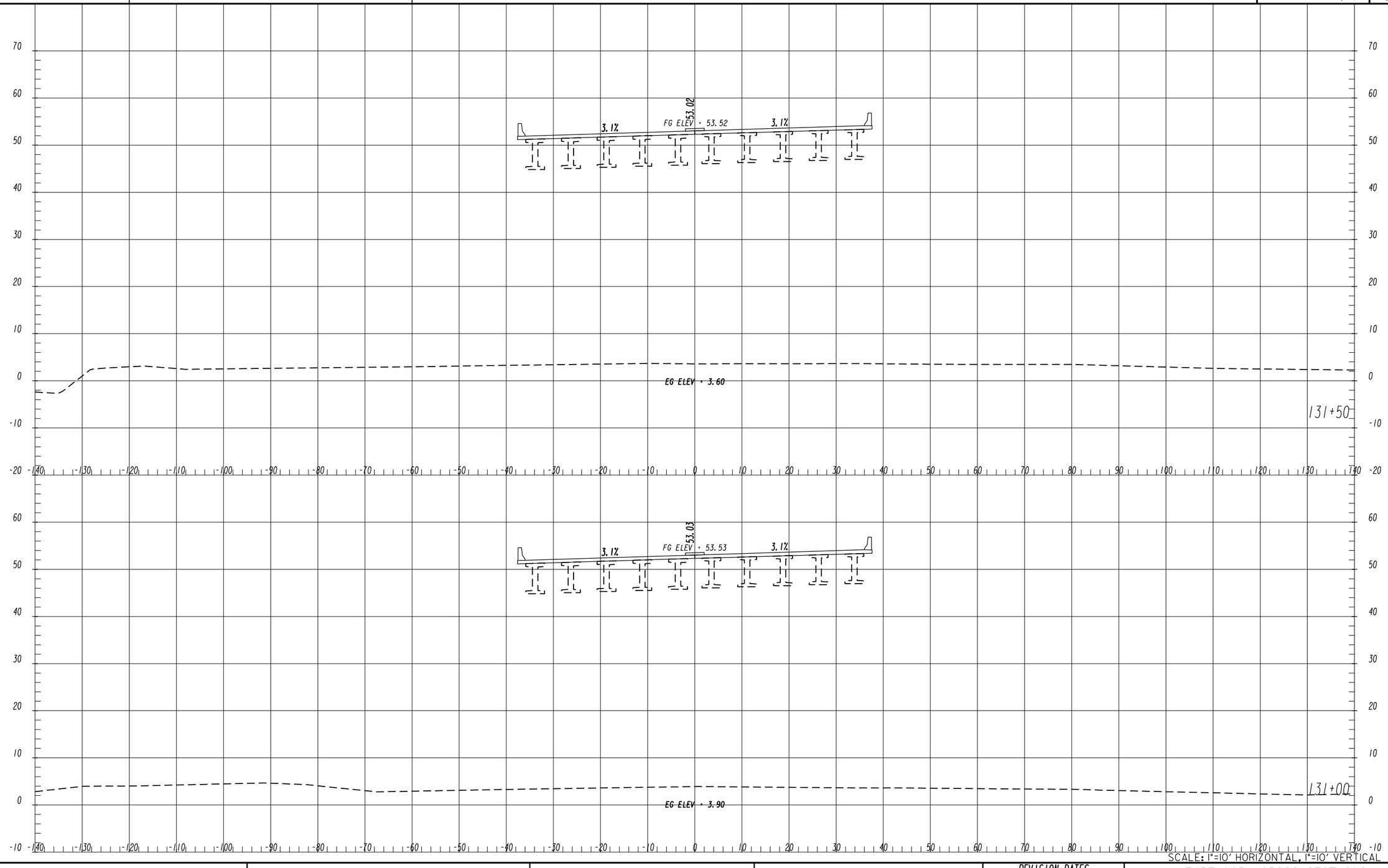
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		23-0017
VERIFIED:		DATE:		

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

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BACKCHECKED:		DATE:		23-0018
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VERIFIED:		DATE:		

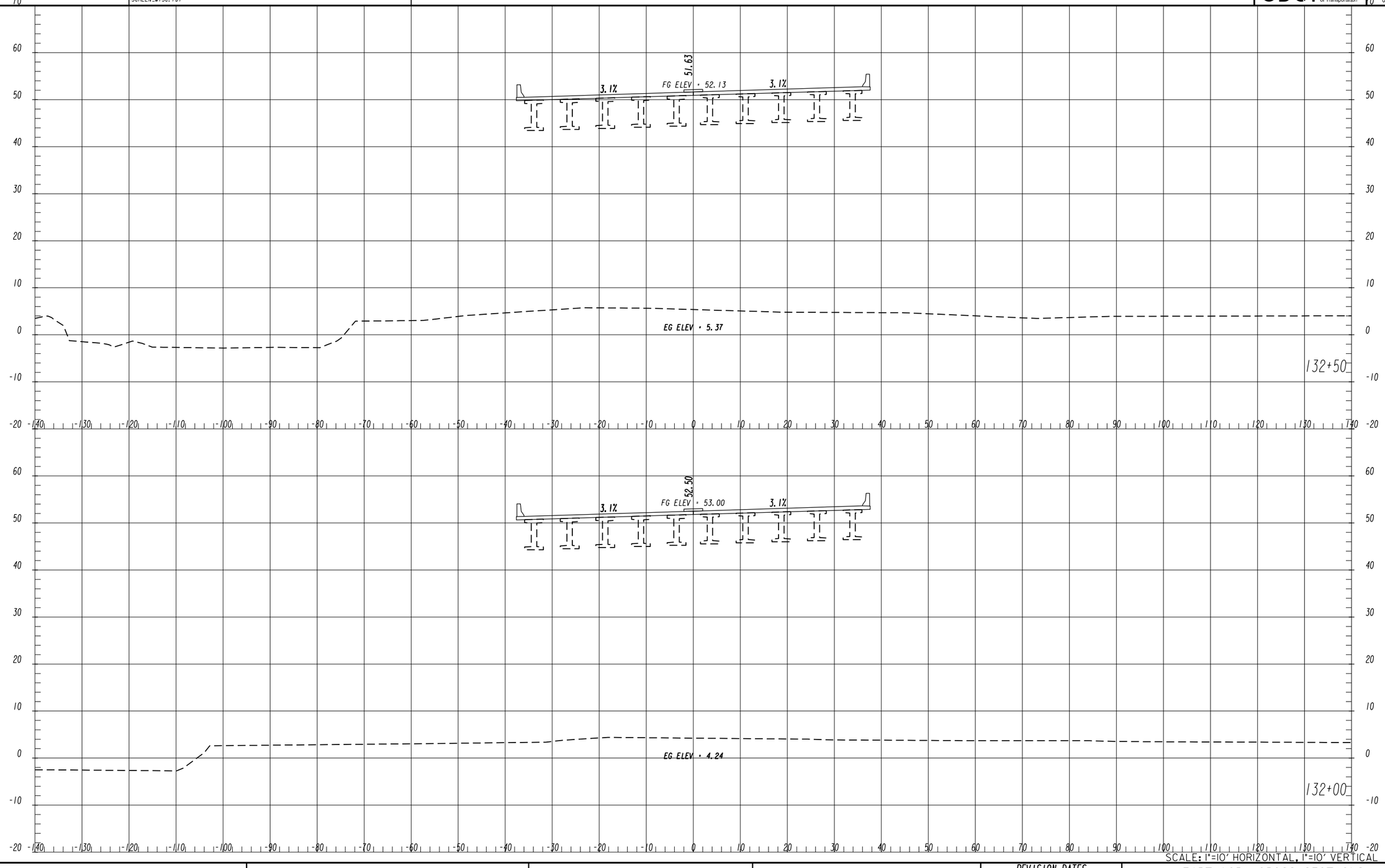
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GPLOT-V8
SCREEN_MISC.tbl

Q:\SV\5531-02\600 CADD_Active\DGN\0006328_23-0001(BRAMPTON_CONNECTOR).dgn

GDOT Georgia Department of Transportation

P. I. No. 0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

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REVISION DATES

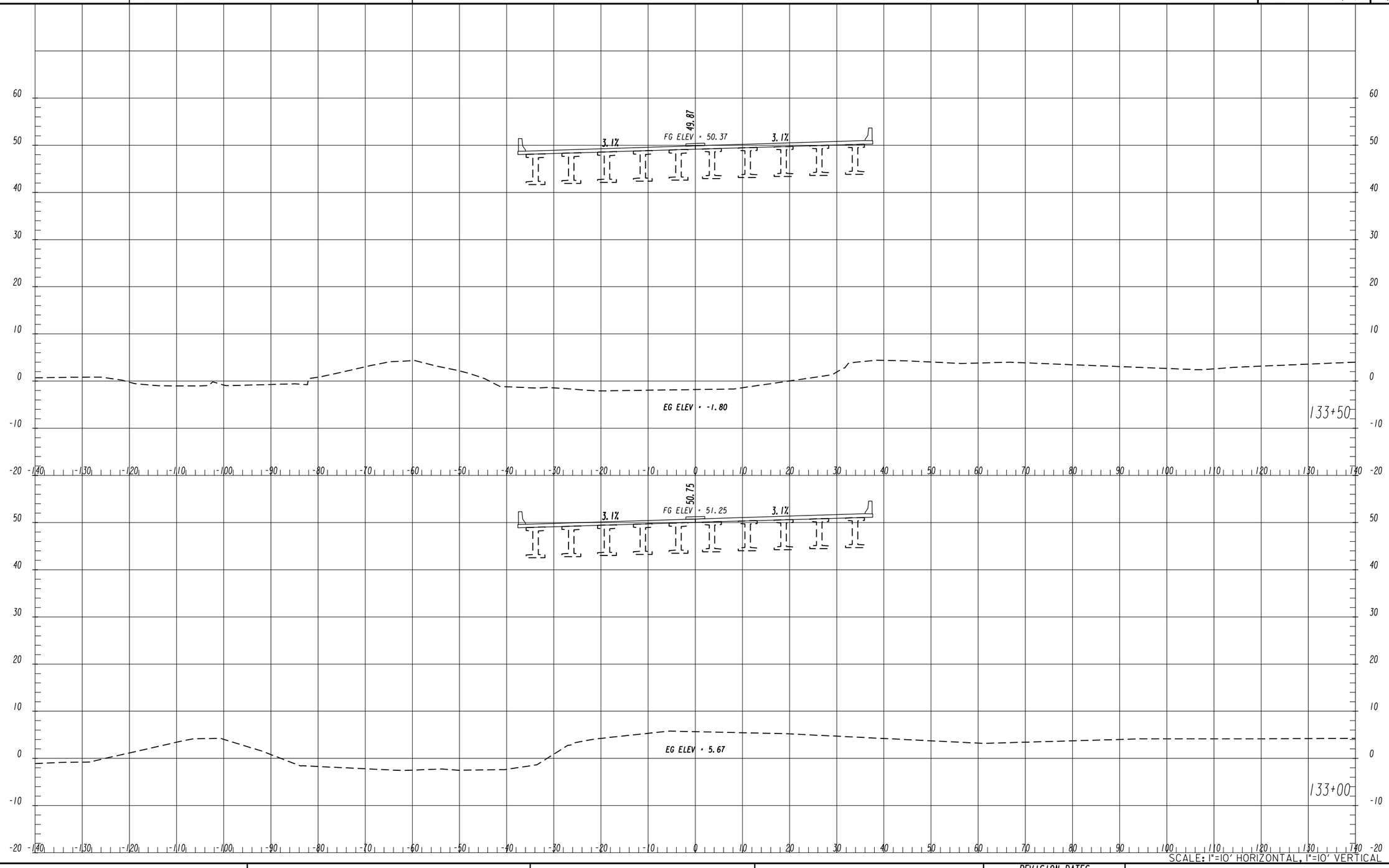
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0019
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
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VERIFIED:		DATE:	

10/23/2015 GPLN

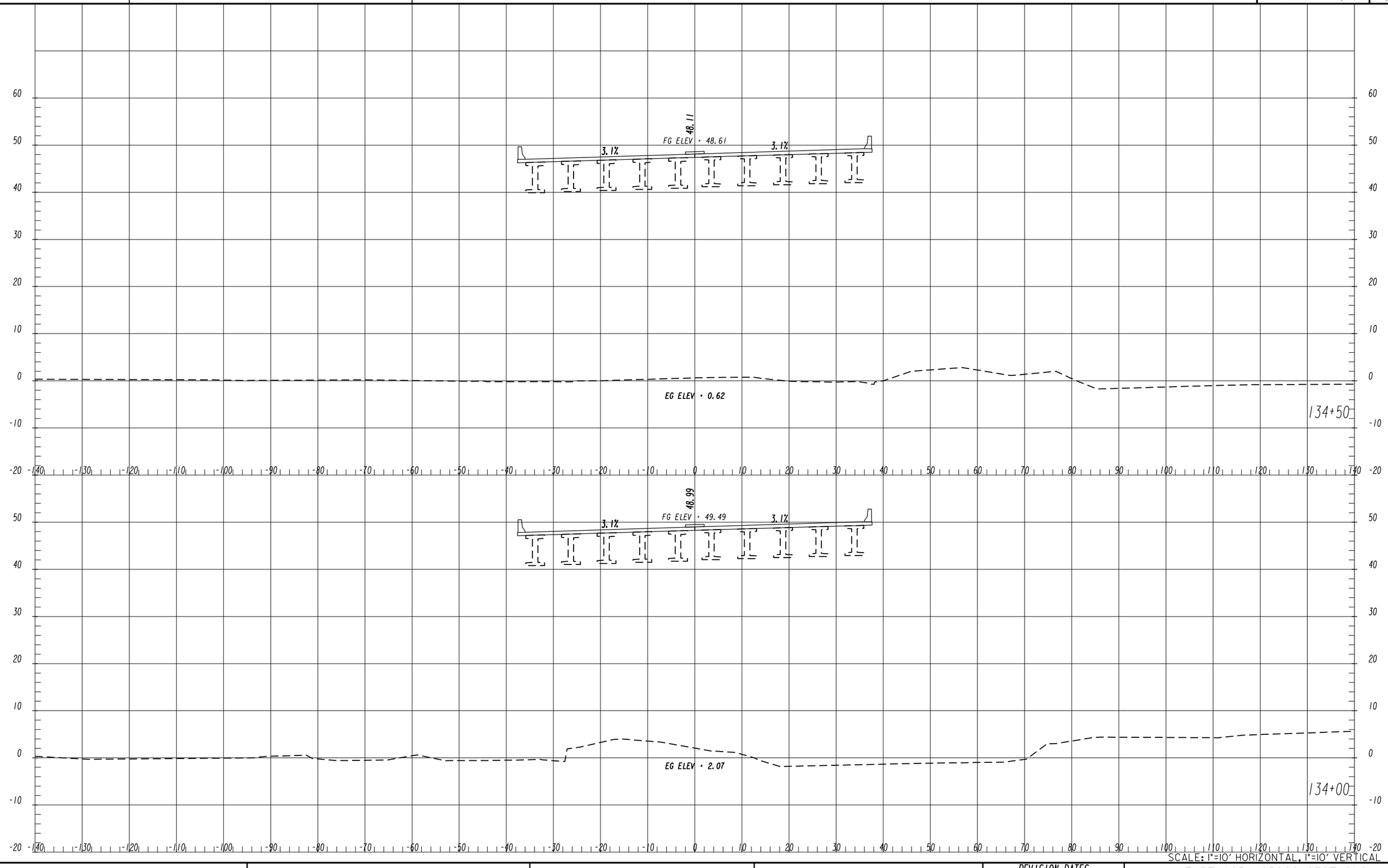
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GPLOT-V8
SCREEN_MISC.tbl

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GDOT Georgia Department of Transportation

P. I. No.
0006328



moffatt & nichol

REVISION DATES

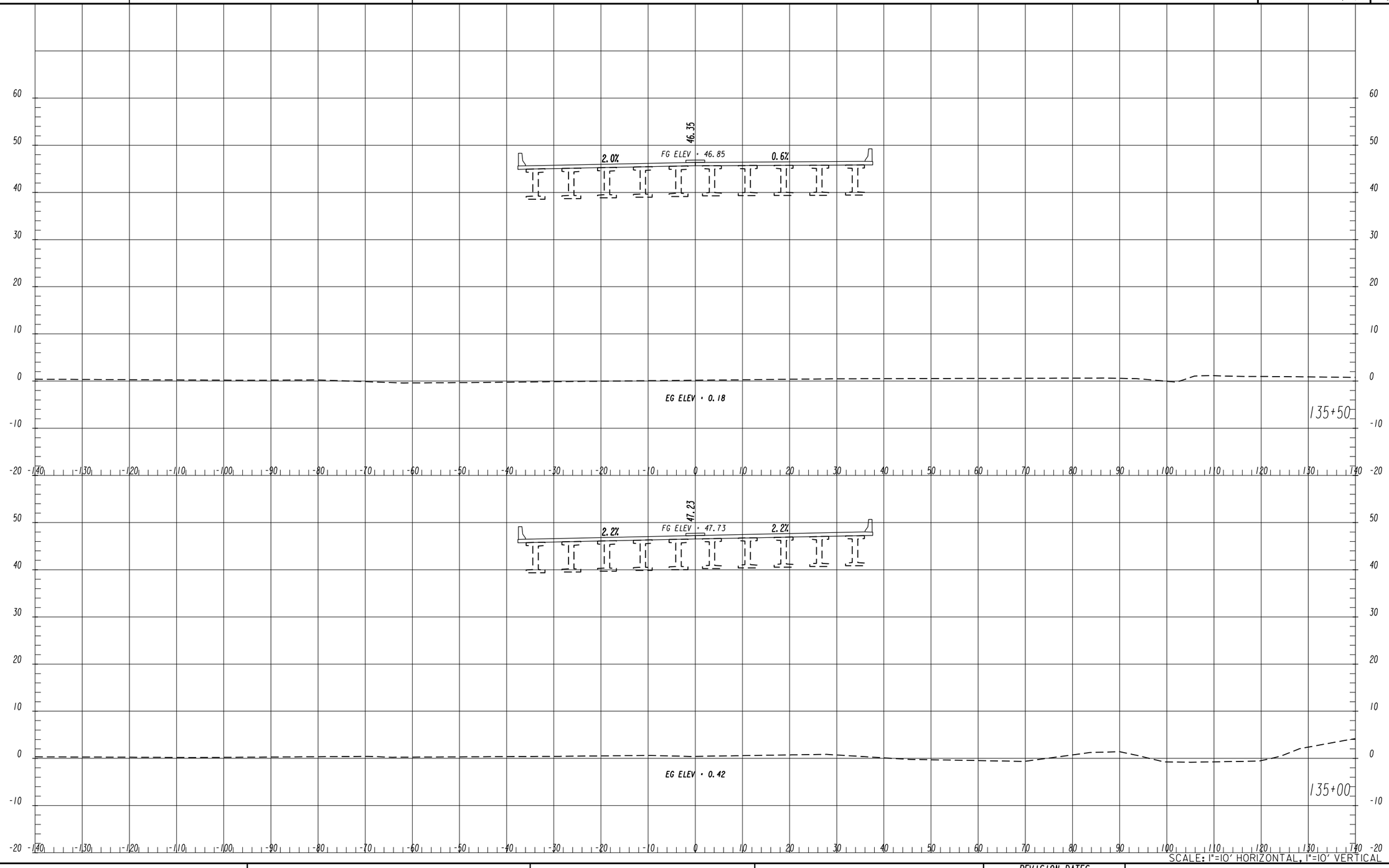
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	23-0021
VERIFIED:		DATE:	

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0022
CORRECTED:		DATE:		
VERIFIED:		DATE:		

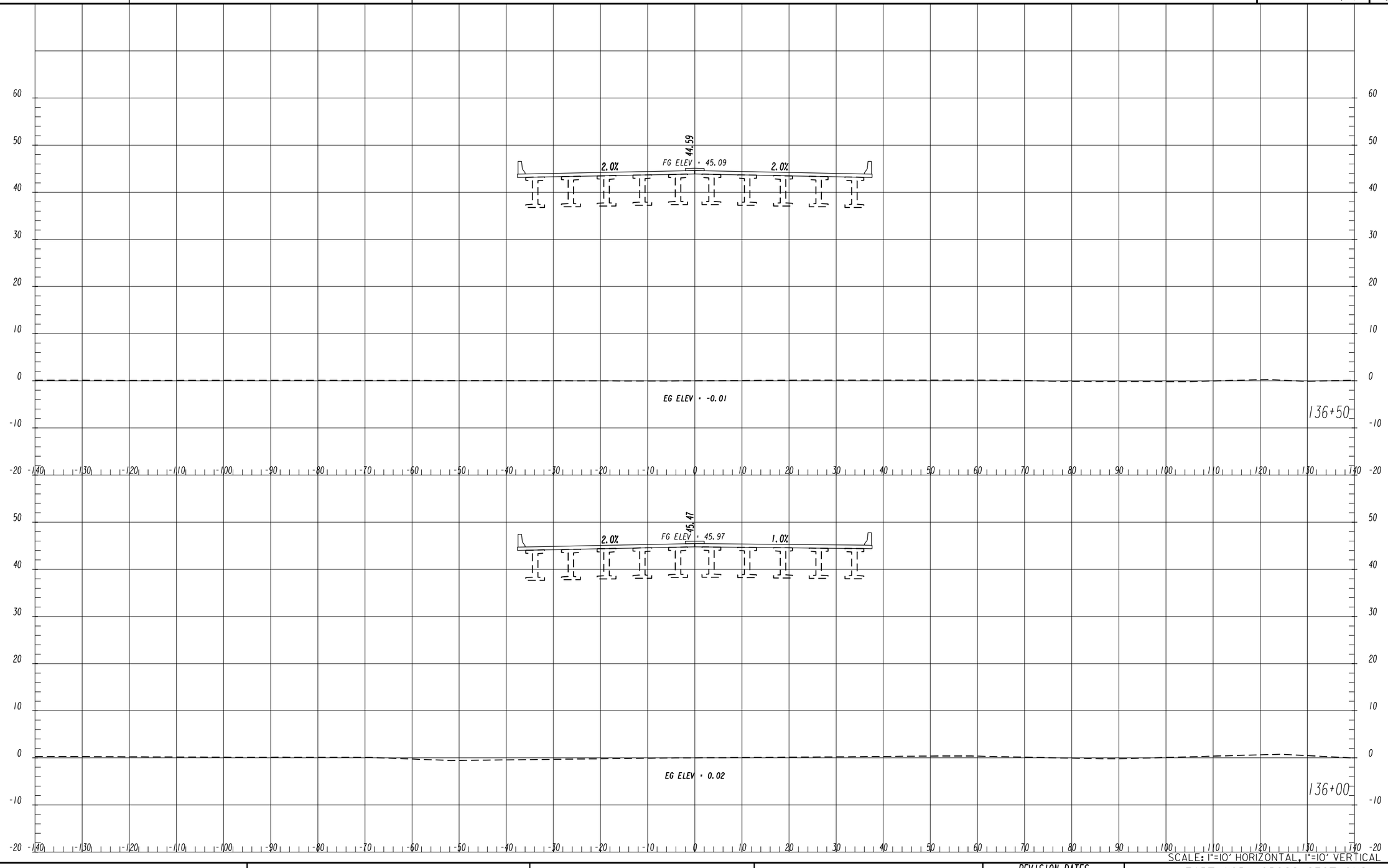
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GPLOT-V8
SCREEN_MISC.tbl

Q:\SV\5531-02\600 CADD_Active\DGN\0006328_23-0001(BRAMPTON_CONNECTOR).dgn

GDOT Georgia Department of Transportation

P. I. No.
0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

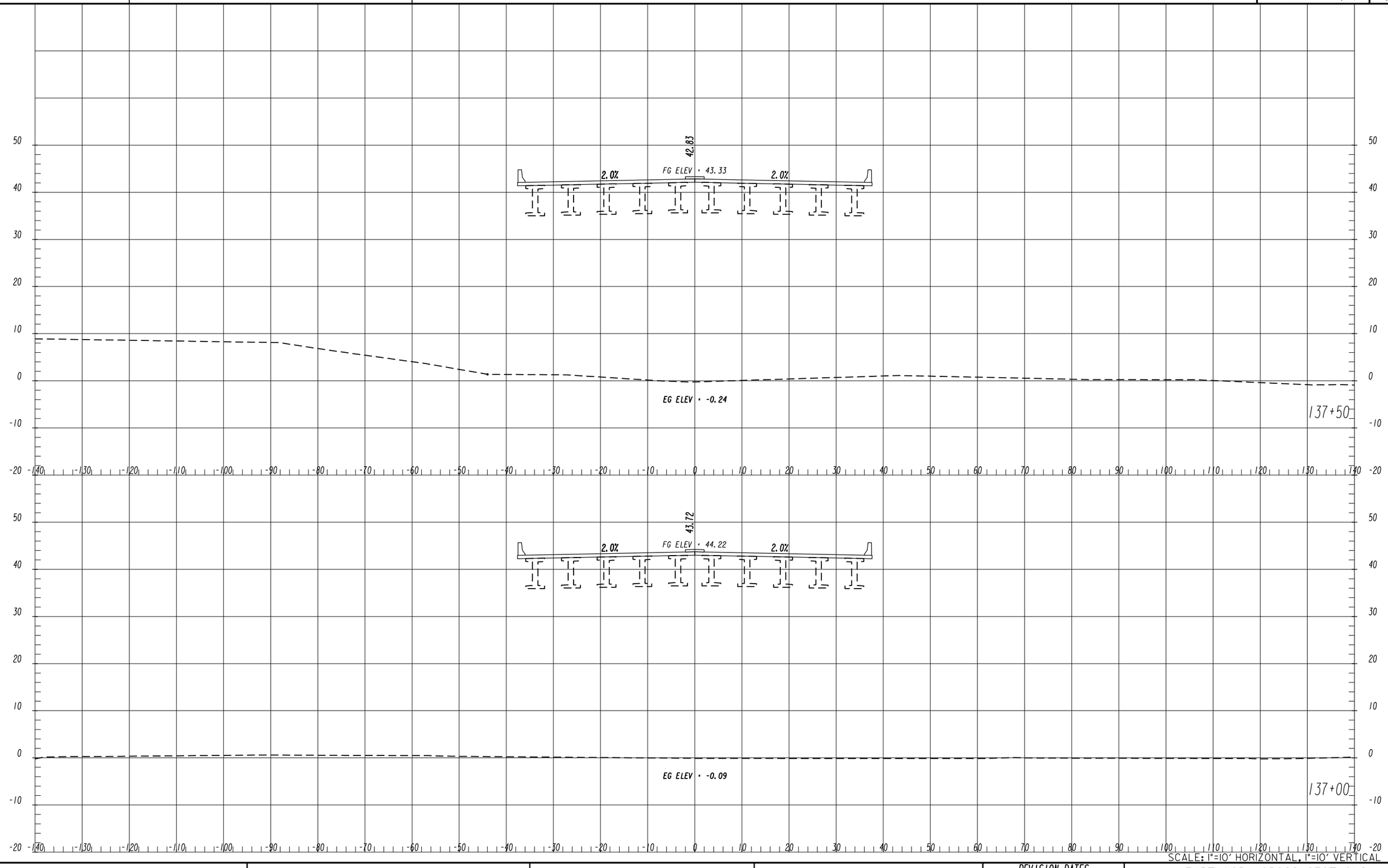
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	23-0023
VERIFIED:		DATE:	

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

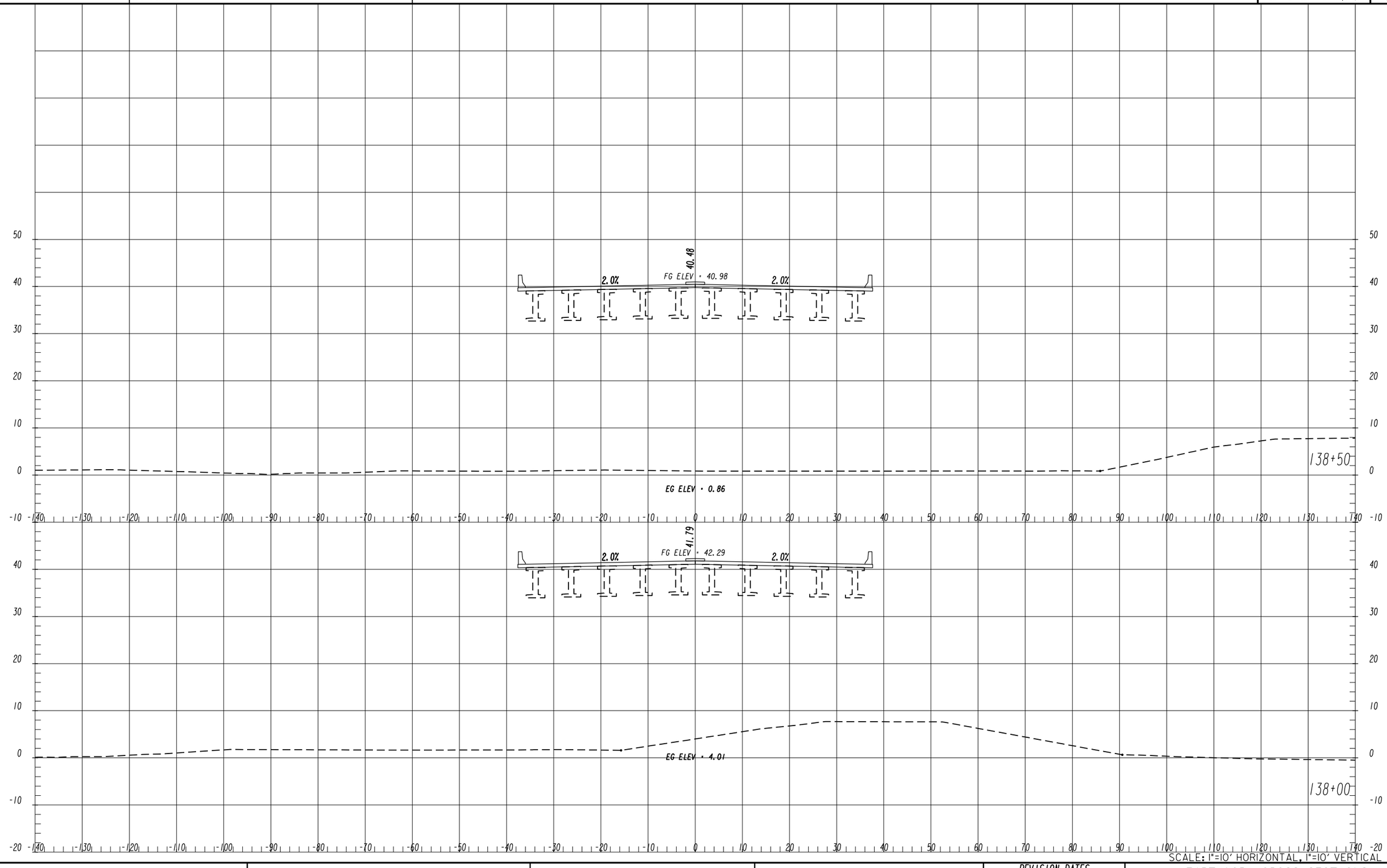
REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	23-0024
VERIFIED:		DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

REVISION DATES

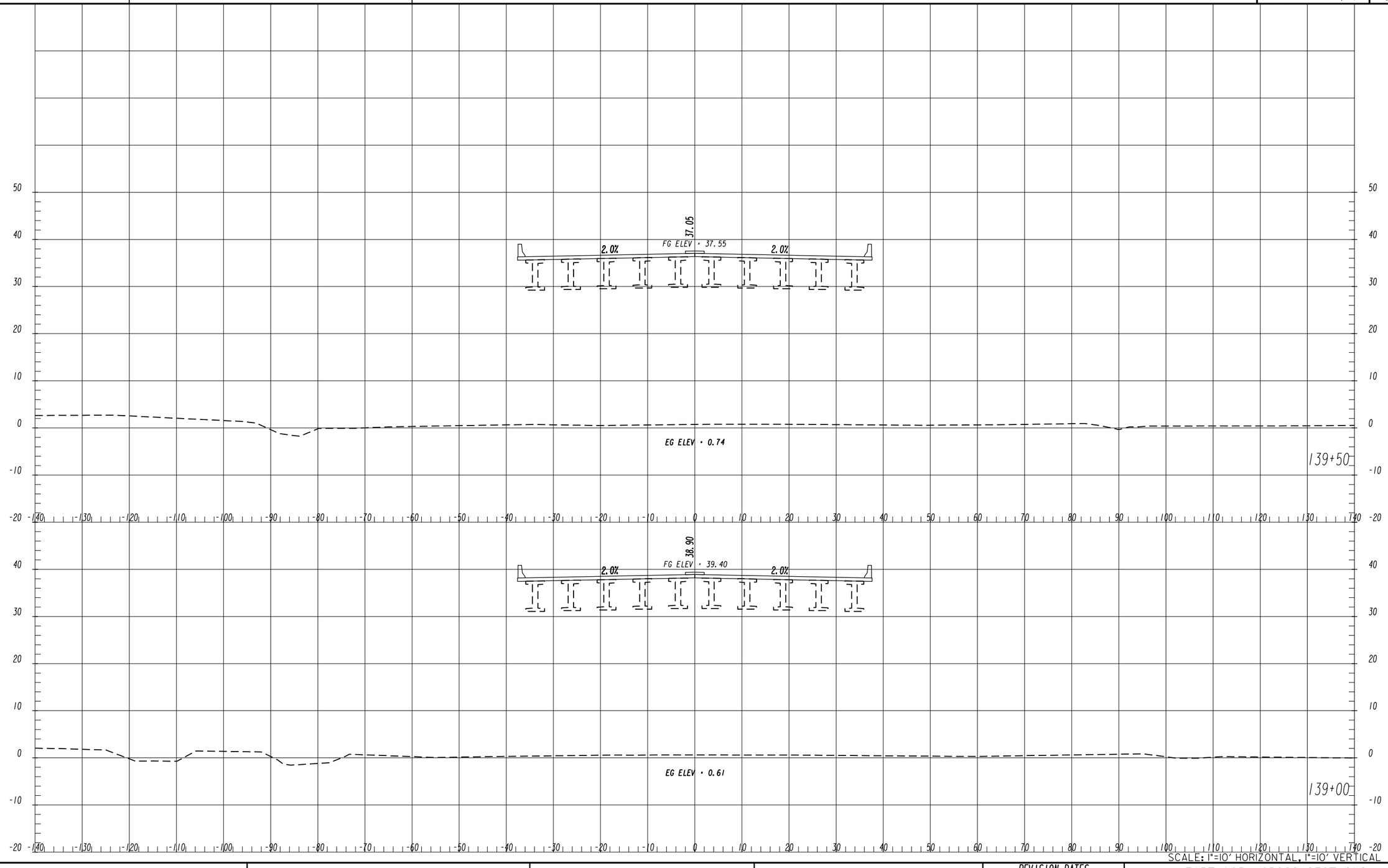
moffatt & nichol

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	23-0025
CORRECTED:		DATE:	
VERIFIED:		DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

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BACKCHECKED:		DATE:	23-0026
CORRECTED:		DATE:	
VERIFIED:		DATE:	

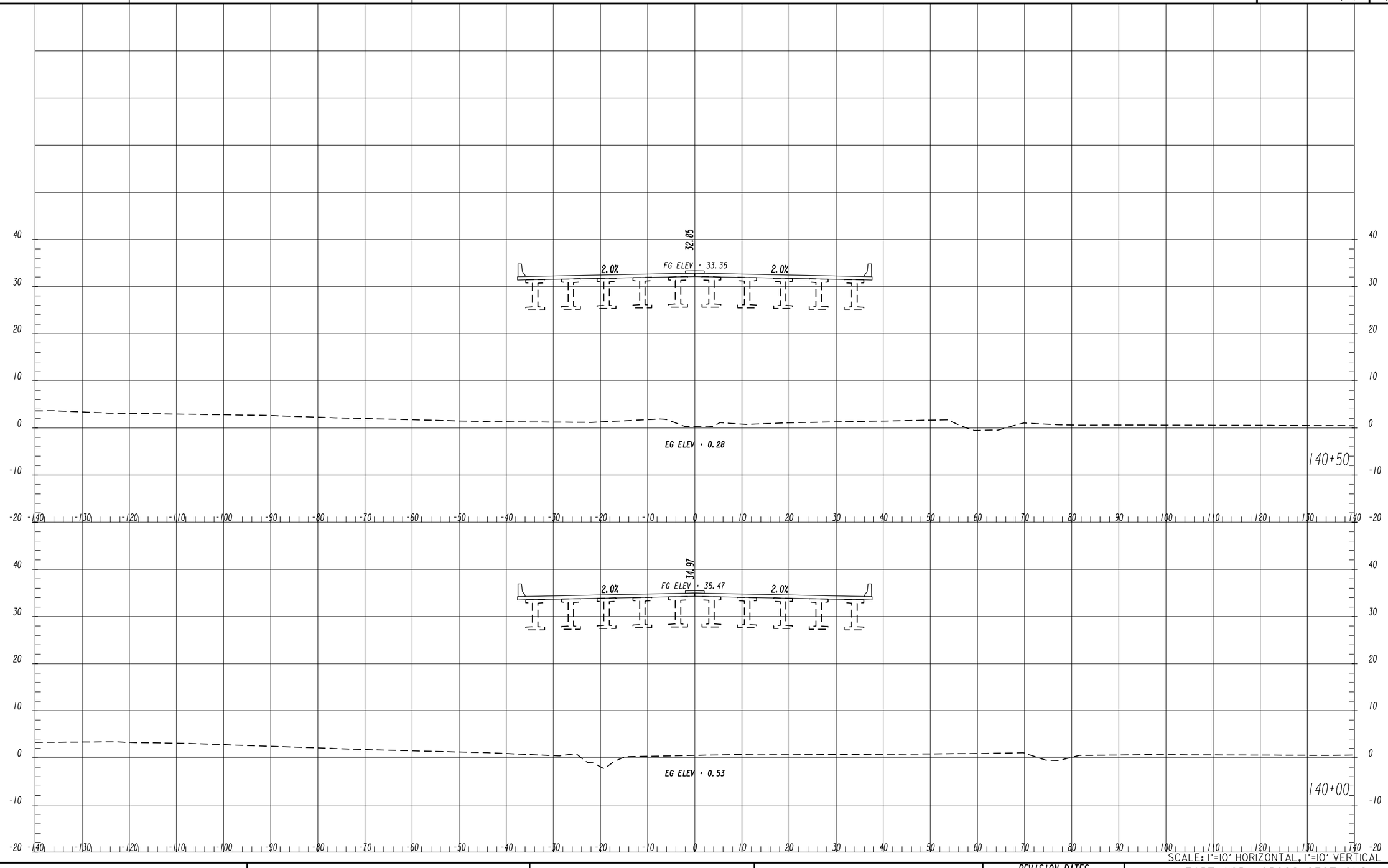
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GPLOT-V8
SCREEN_MISC.tbl

Q:\SV\5531-02\600 CADD_Active\DGN\0006328_23-0001(BRAMPTON_CONNECTOR).dgn

GDOT Georgia Department of Transportation

P. I. No.
0006328



REVISION DATES

moffatt & nichol

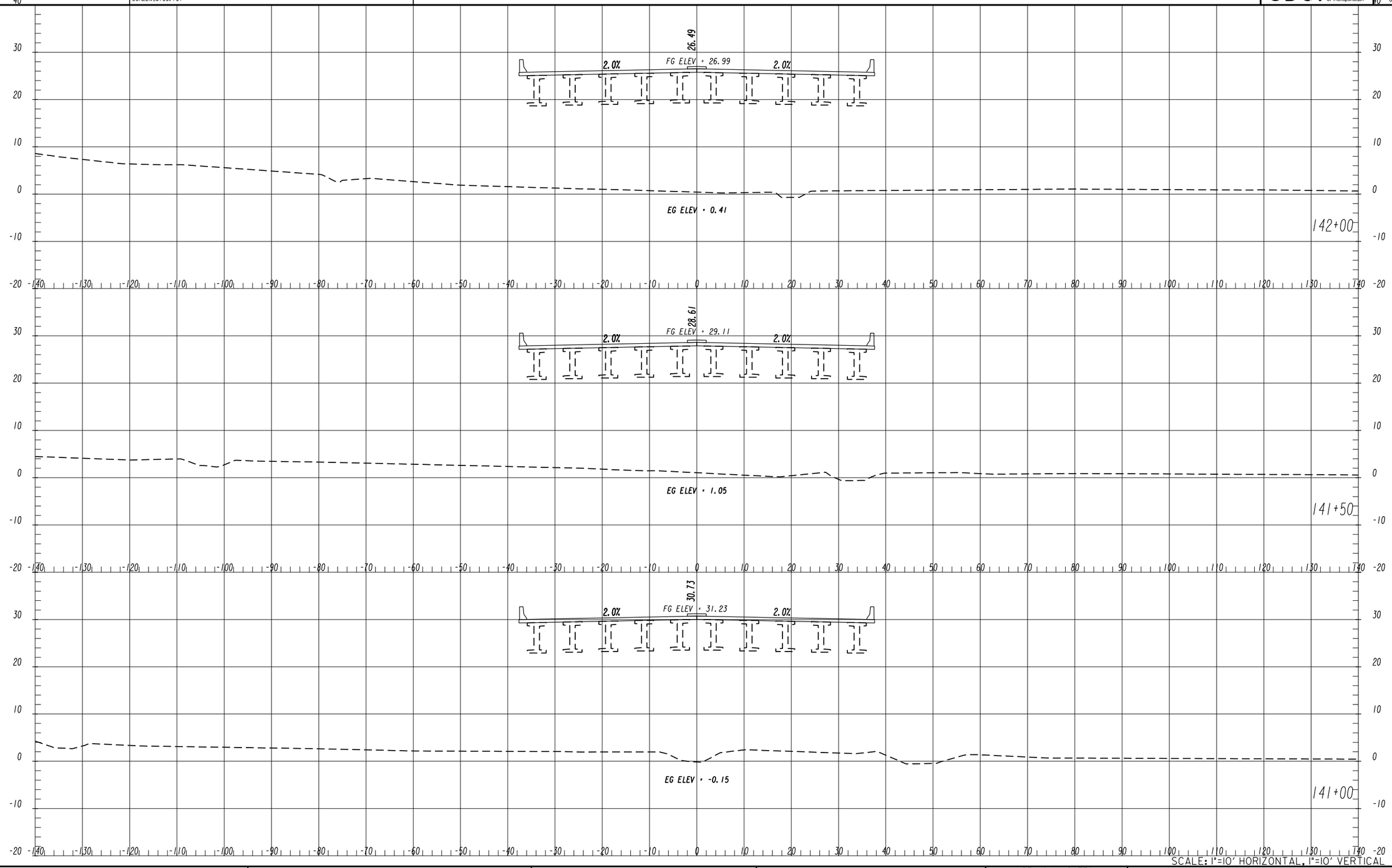
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

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BACKCHECKED:		DATE:	
CORRECTED:		DATE:	23-0027
VERIFIED:		DATE:	

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

REVISION DATES

moffatt & nichol

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

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BACKCHECKED:		DATE:		23-0028
CORRECTED:		DATE:		
VERIFIED:		DATE:		

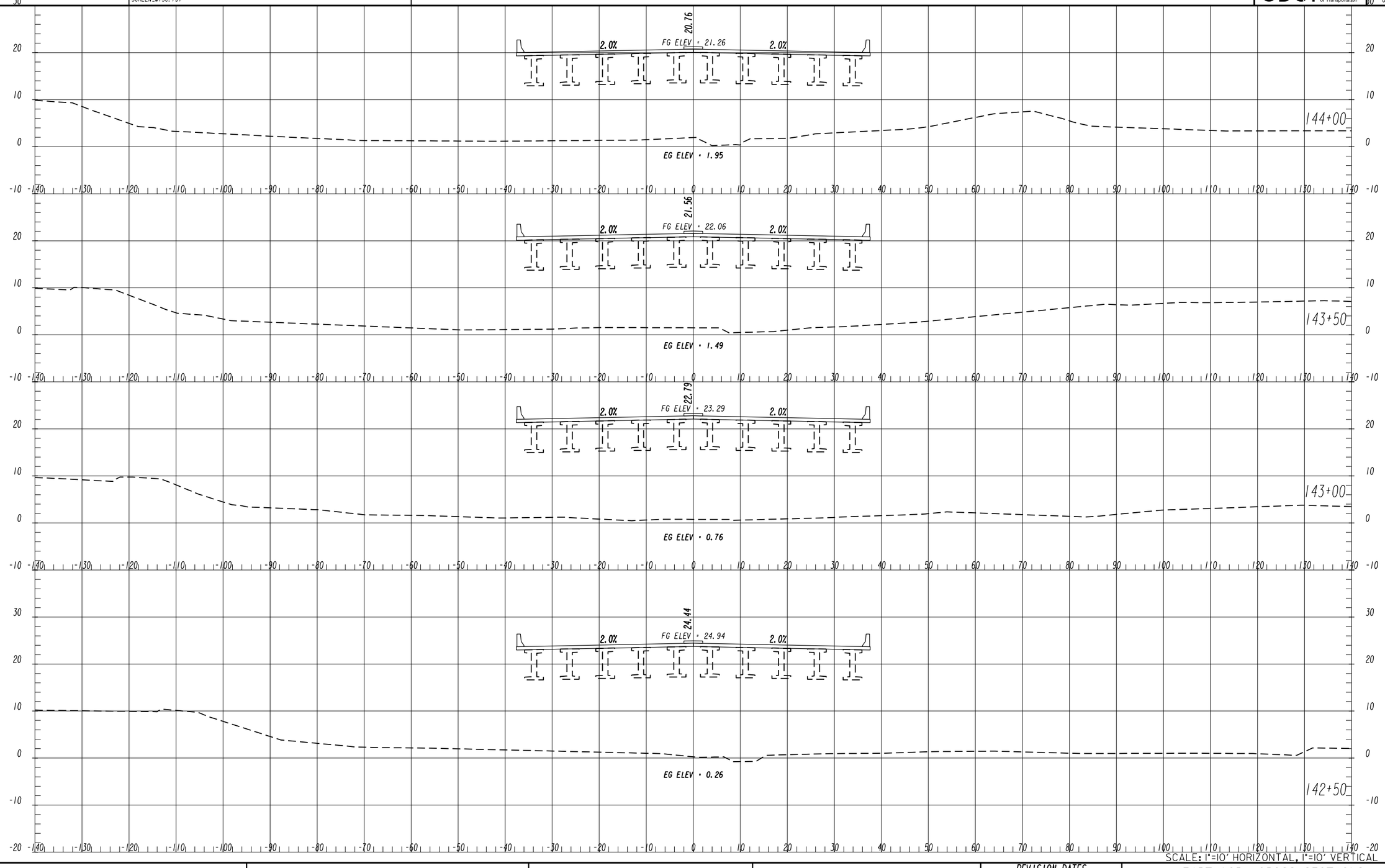
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GPLOT-V8
SCREEN_MISC.tbl

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GDOT Georgia Department of Transportation

P. I. No. 0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

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REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0029
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

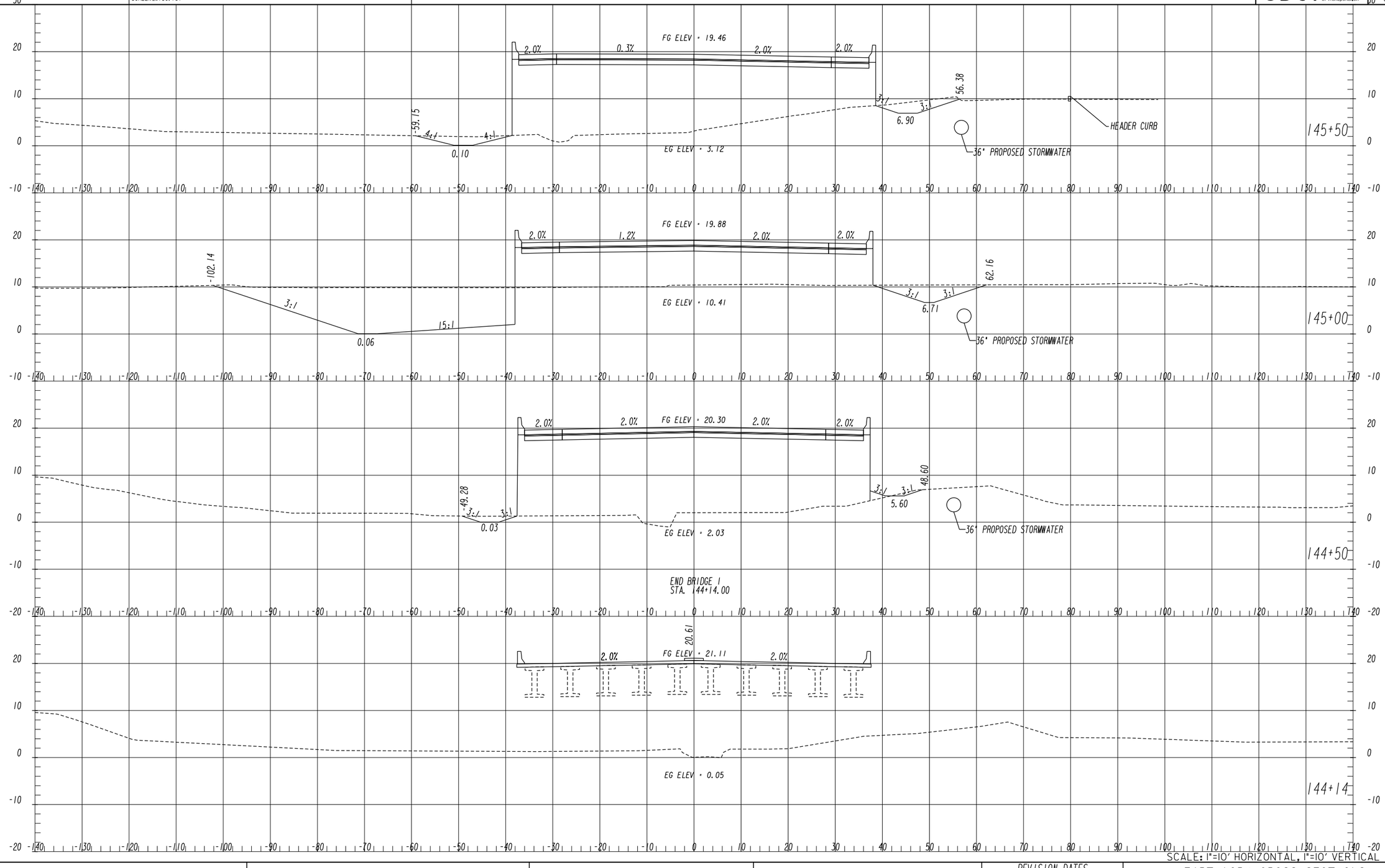
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GPLOT-V8
SCREEN_MISC.tbl

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GDOT Georgia Department of Transportation

P.I. No. 0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

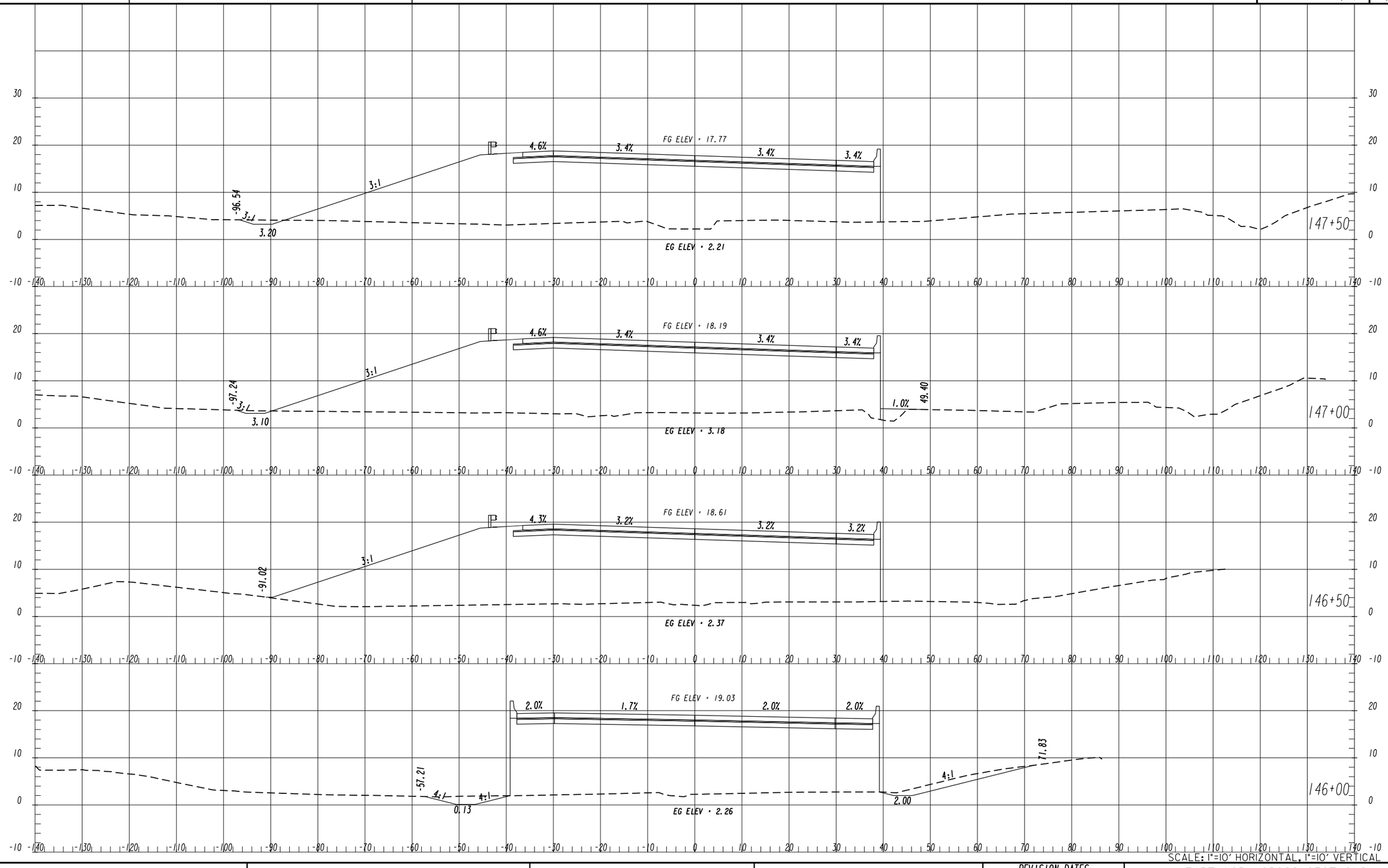
moffatt & nichol

REVISION DATES
05-14-21

EARTHWORK CROSS SECTIONS
BRAMPTON ROAD CONNECTOR
BRAMPTON CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0030
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

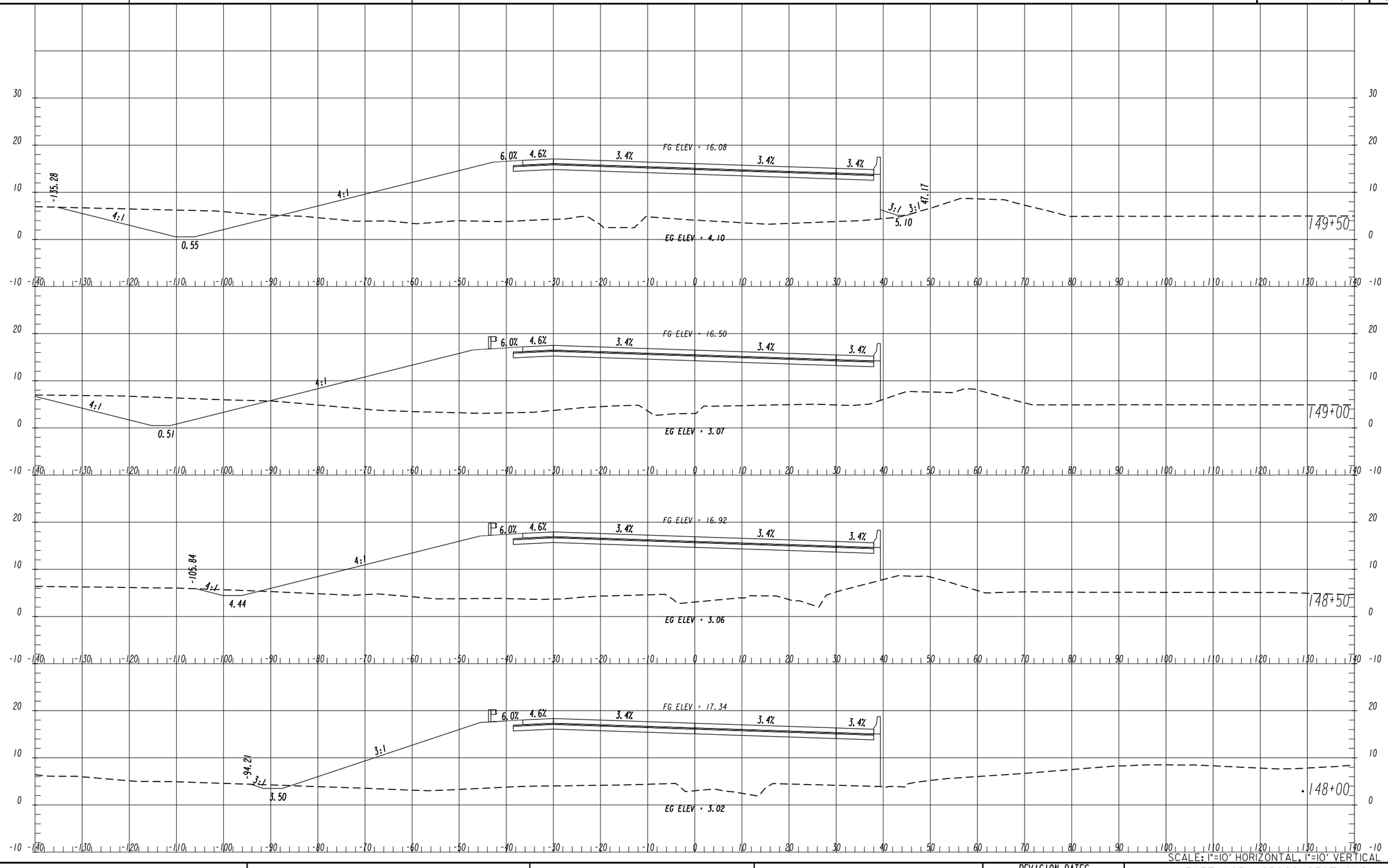
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EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

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BACKCHECKED:		DATE:		
CORRECTED:		DATE:		23-0031
VERIFIED:		DATE:		



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REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

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CORRECTED:		DATE:		
VERIFIED:		DATE:		

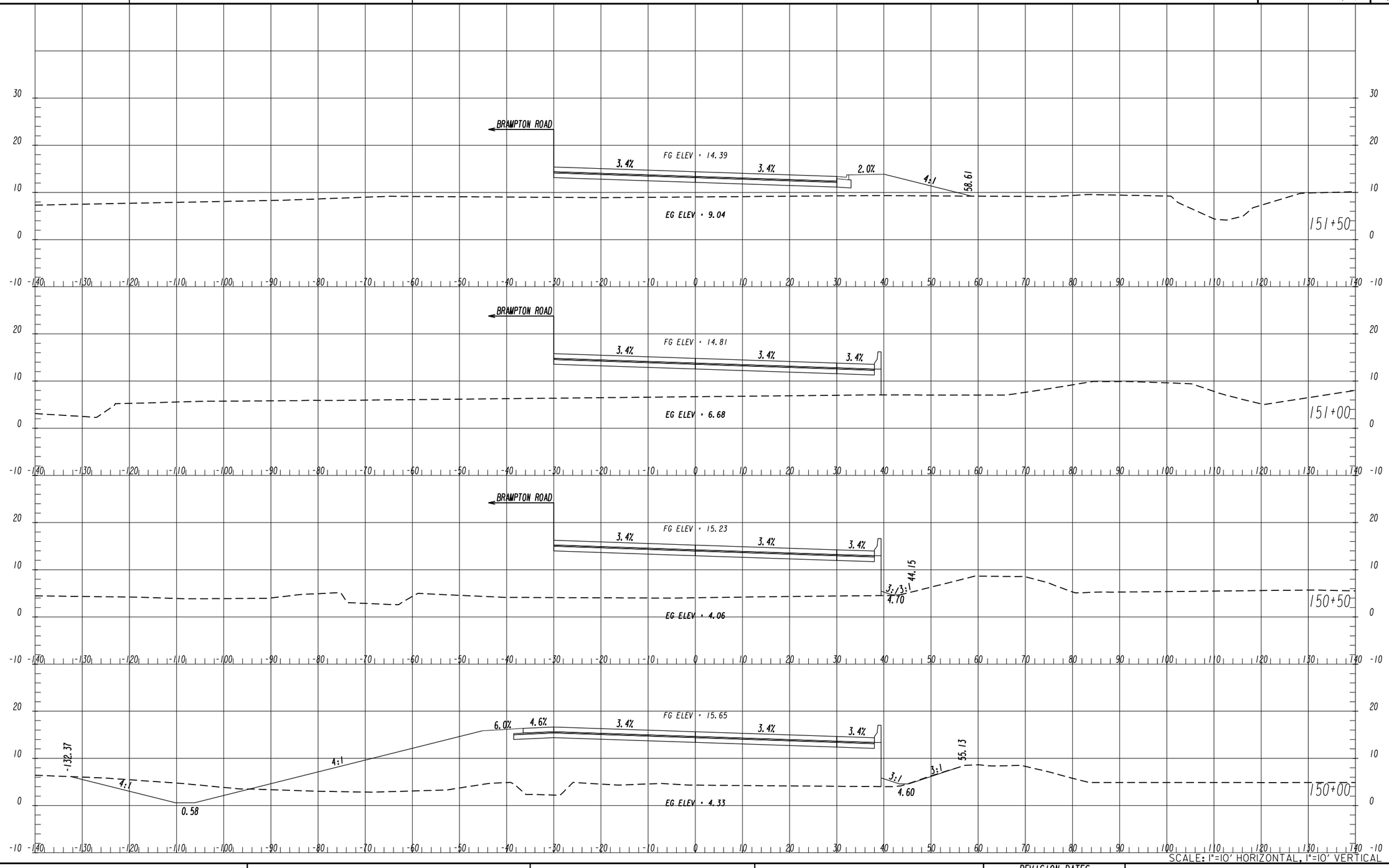
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GPLOT-V8
SCREEN_MISC.tbl

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GDOT Georgia Department of Transportation

P. I. No. 0006328



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

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REVISION DATES

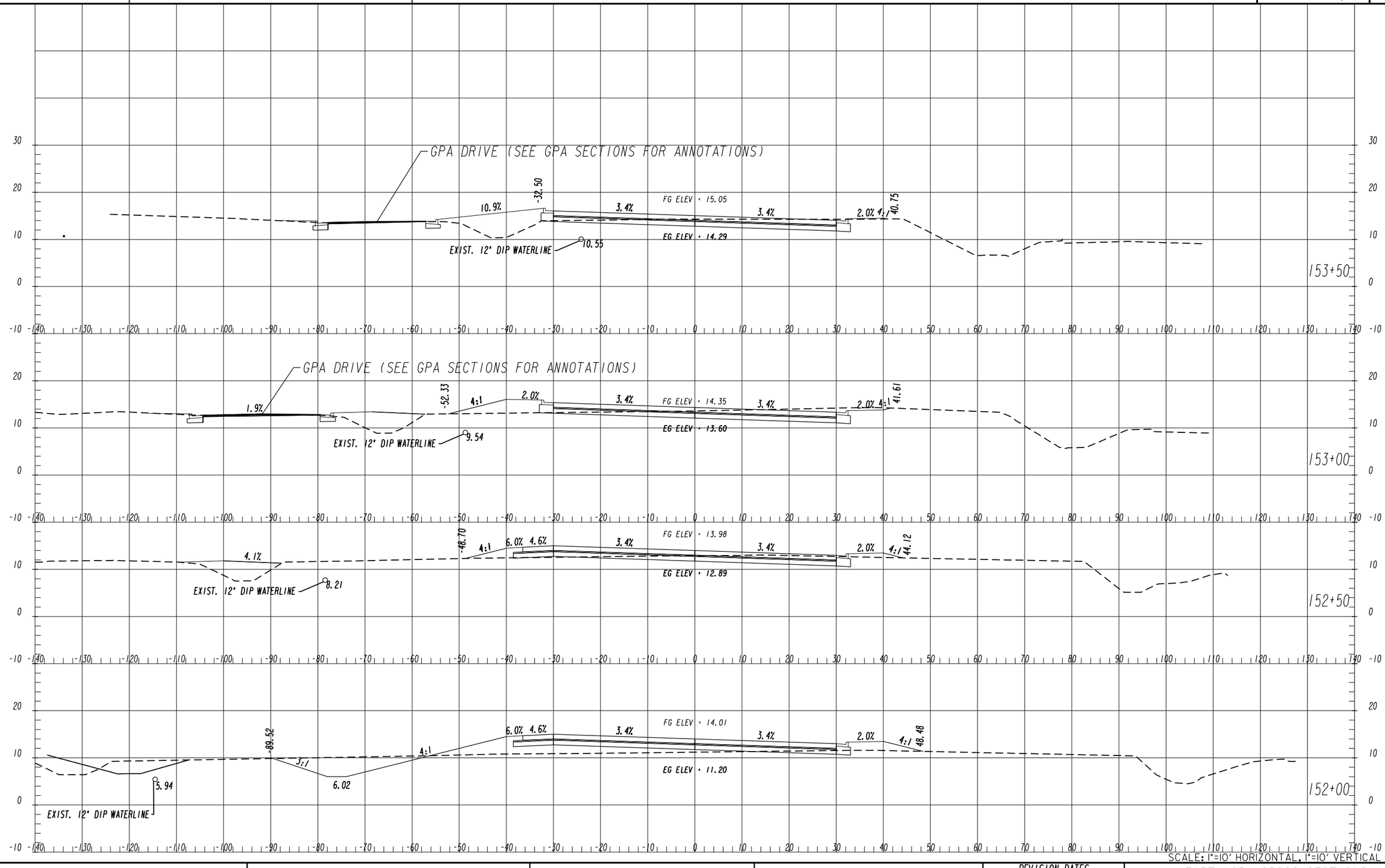
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

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CORRECTED:		DATE:		23-0033
VERIFIED:		DATE:		

10/23/2015 GPLN



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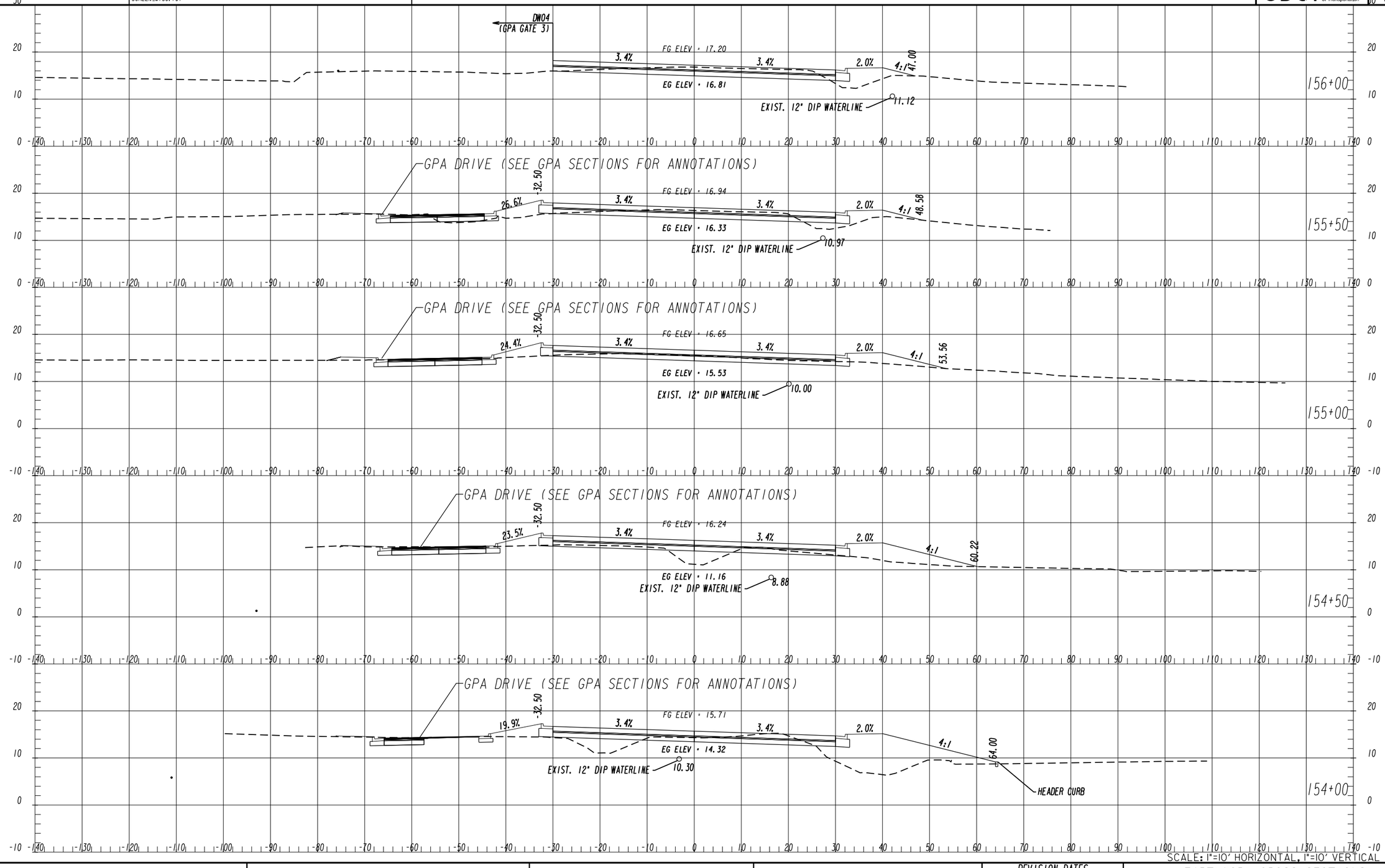
REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

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BACKCHECKED:		DATE:		23-0034
CORRECTED:		DATE:		
VERIFIED:		DATE:		



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

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REVISION DATES

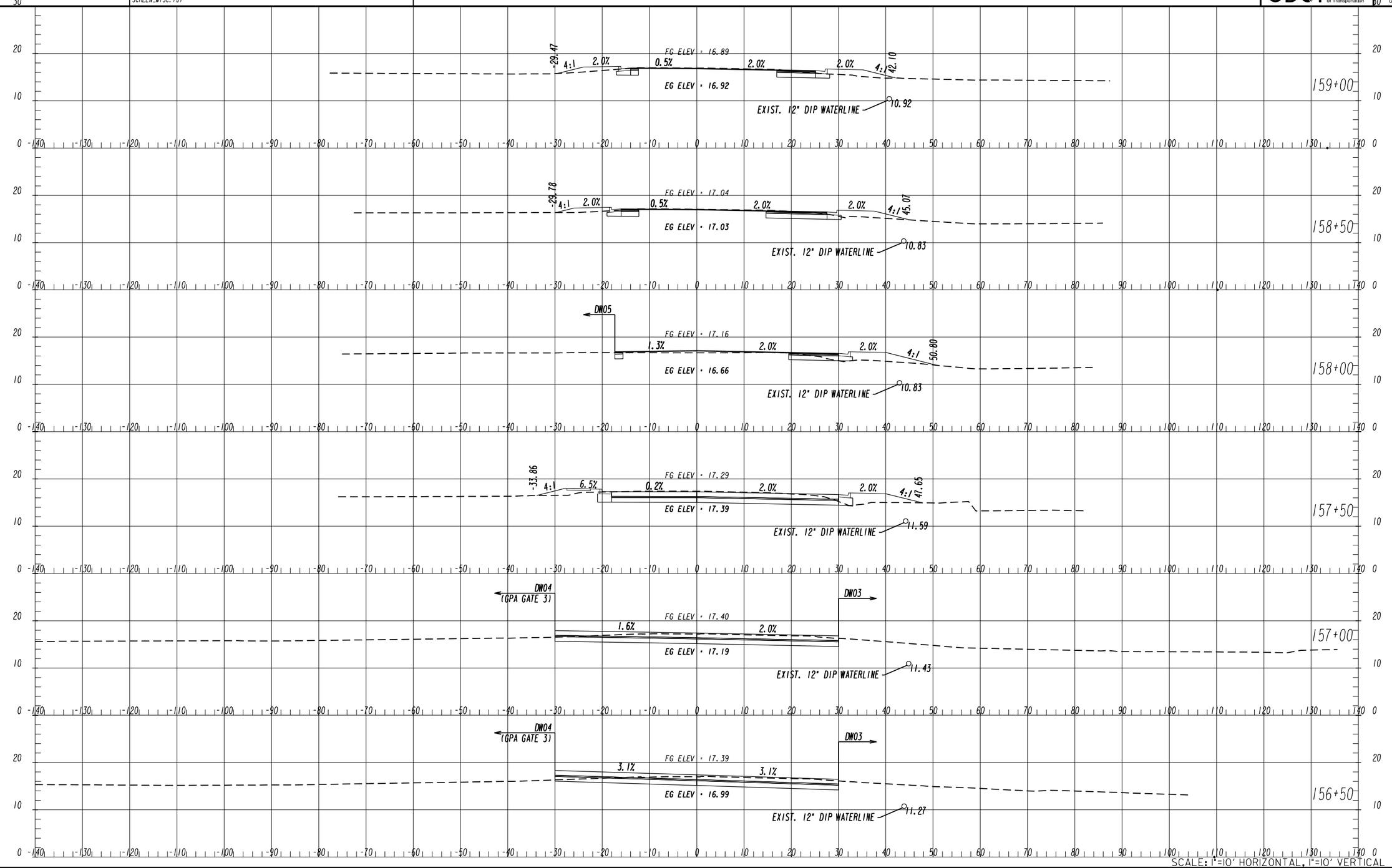
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

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BACKCHECKED:		DATE:		
CORRECTED:		DATE:		23-0035
VERIFIED:		DATE:		

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

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REVISION DATES

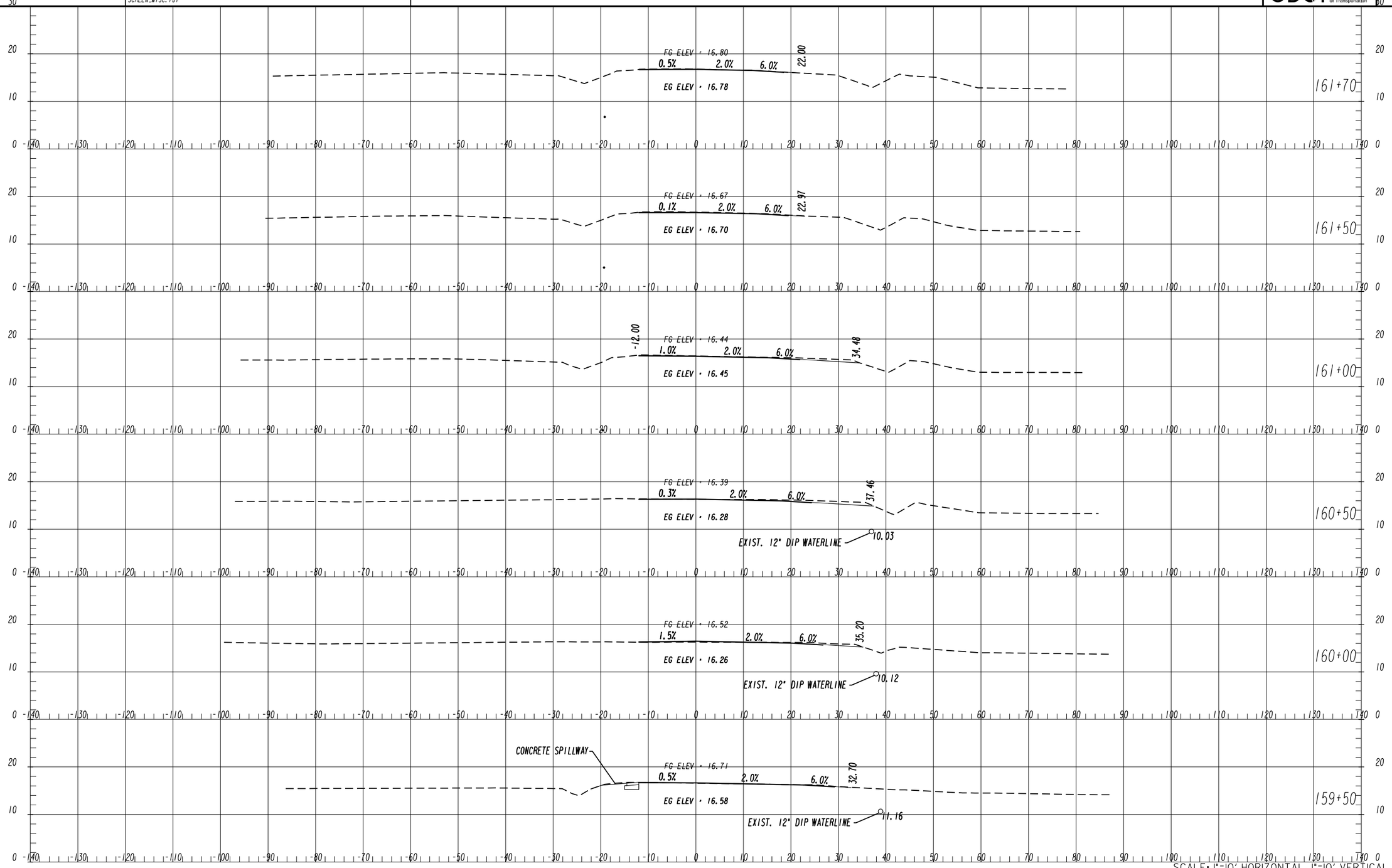
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BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

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CORRECTED:		DATE:	
VERIFIED:		DATE:	

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

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REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

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BACKCHECKED:		DATE:		
CORRECTED:		DATE:		23-0037
VERIFIED:		DATE:		

10/23/2015 GPLN

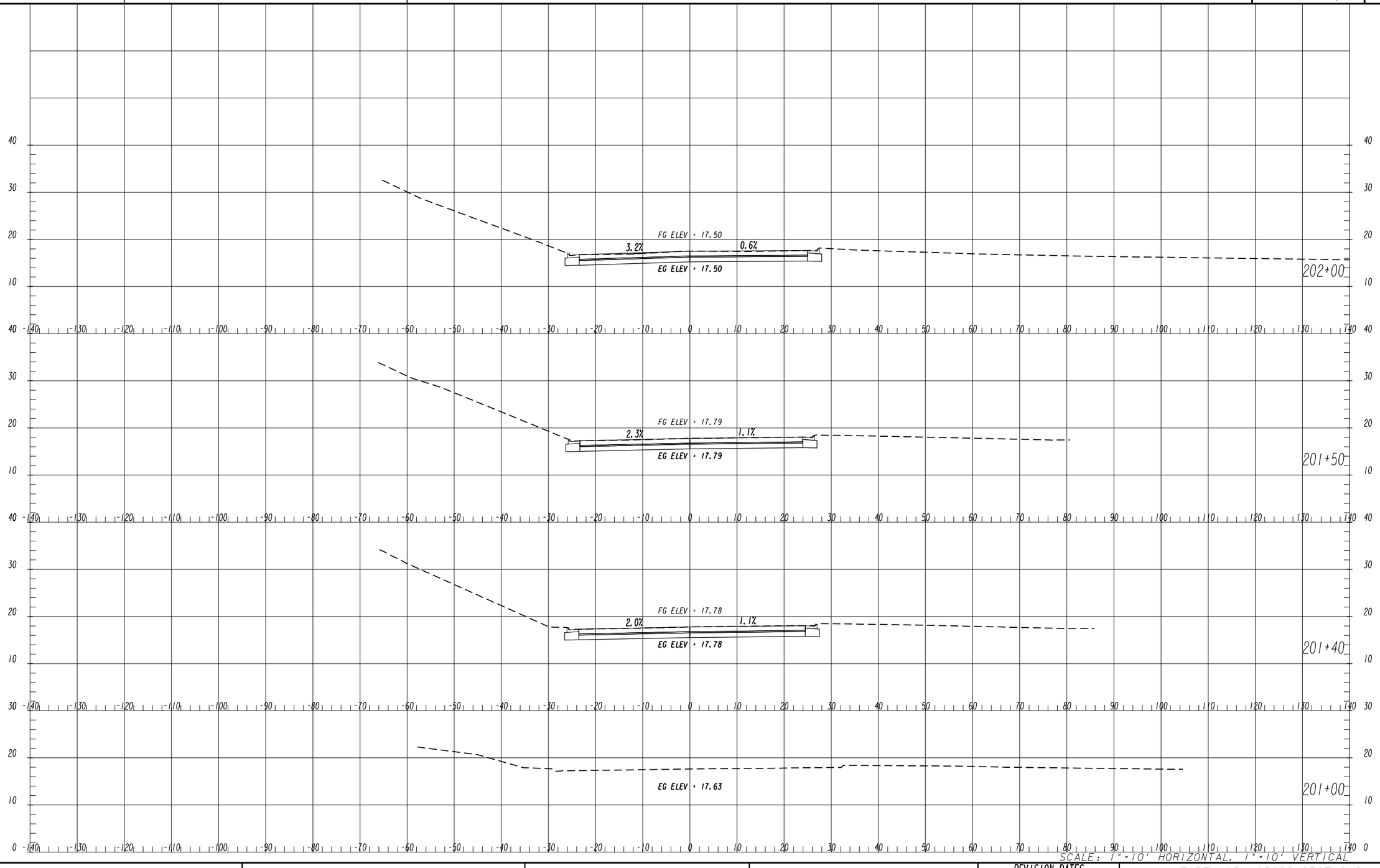
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GPLOT-V8
SCREEN_MISC.tbl

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GDOT Georgia Department of Transportation

P. I. No. 0006328



SCALE: 1"=10' HORIZONTAL. 1"=10' VERTICAL

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REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

SR 25 / MAIN STREET

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	23-0038
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10/23/2015 GPLN

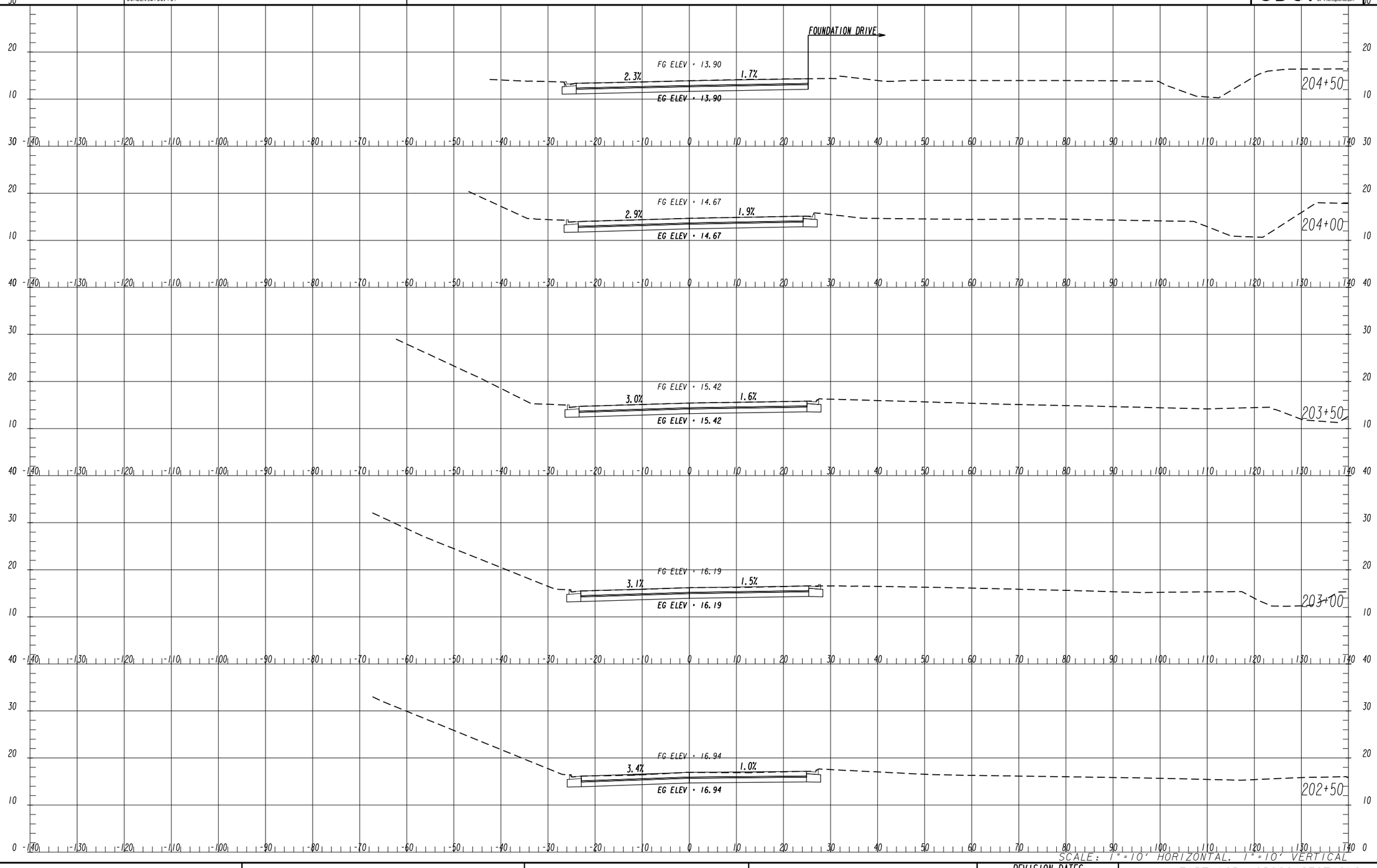
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GPLOT-V8
SCREEN_MISC.tbl

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GDOT Georgia Department of Transportation

P. I. No.
0006328



SCALE: 1"=10' HORIZONTAL. 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

SR 25 / MAIN STREET

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	23-0039
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VERIFIED:		DATE:	

10/23/2015 GPLN

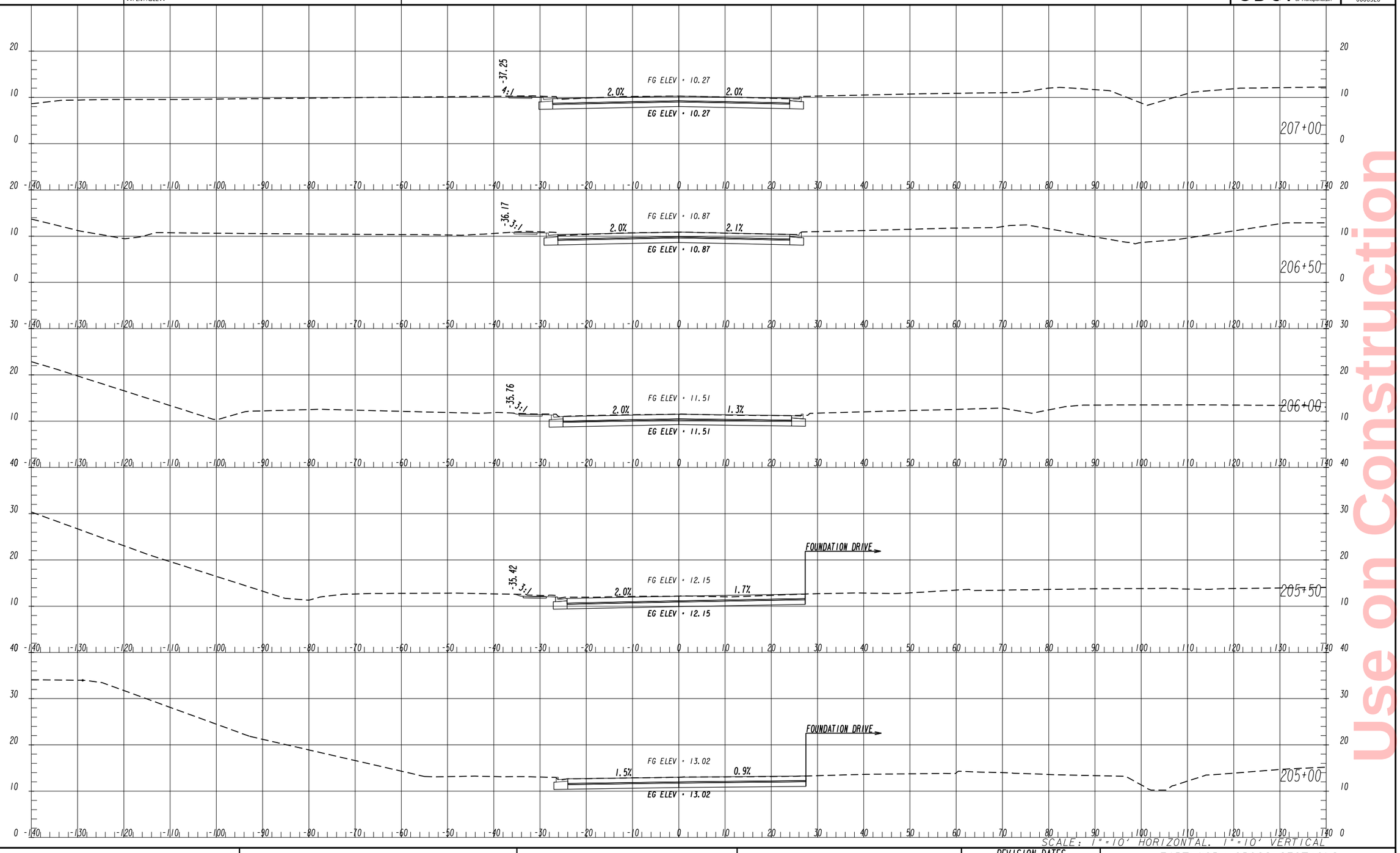
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DGN

GDOT Georgia Department of Transportation

P. I. No.
0006328



SCALE: 1"=10' HORIZONTAL. 1"=10' VERTICAL

Not to be used on Construction

moffatt & nichol

REVISION DATES
01-16-23

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

SR 25 / MAIN STREET

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		23-0040
VERIFIED:		DATE:		

10/23/2015 GPLN

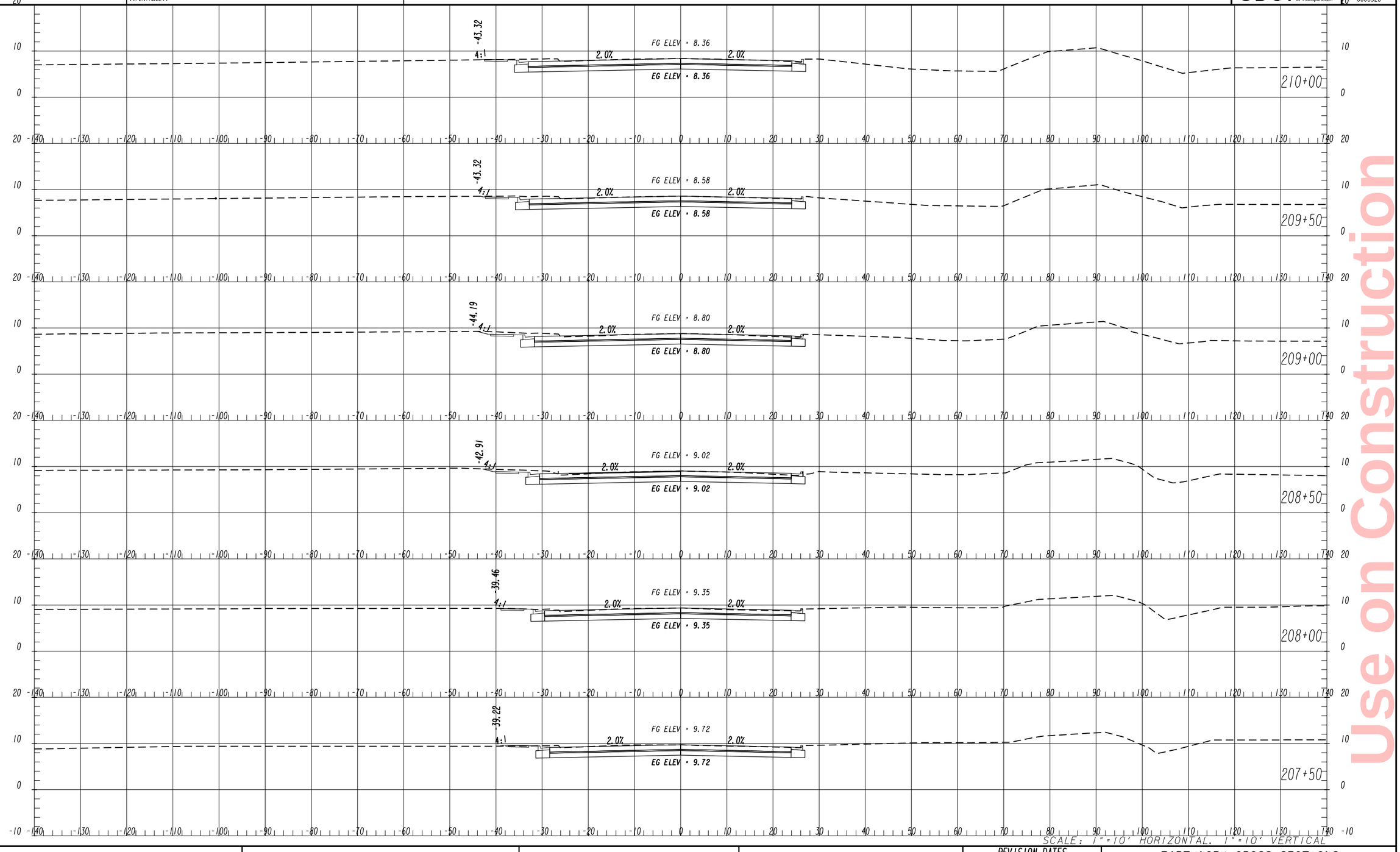
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DGN

GDOT Georgia Department of Transportation

P. I. No. 0006328

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$REF12$



SCALE: 1"=10' HORIZONTAL. 1"=10' VERTICAL

Use on Construction

10/23/2015 GPLN

moffatt & nichol

REVISION DATES
01-16-23

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

SR 25 / MAIN STREET

CHECKED:		DATE:	DRAWING No.
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CORRECTED:		DATE:	23-0041
VERIFIED:		DATE:	

DATE$$$ TIME$$$
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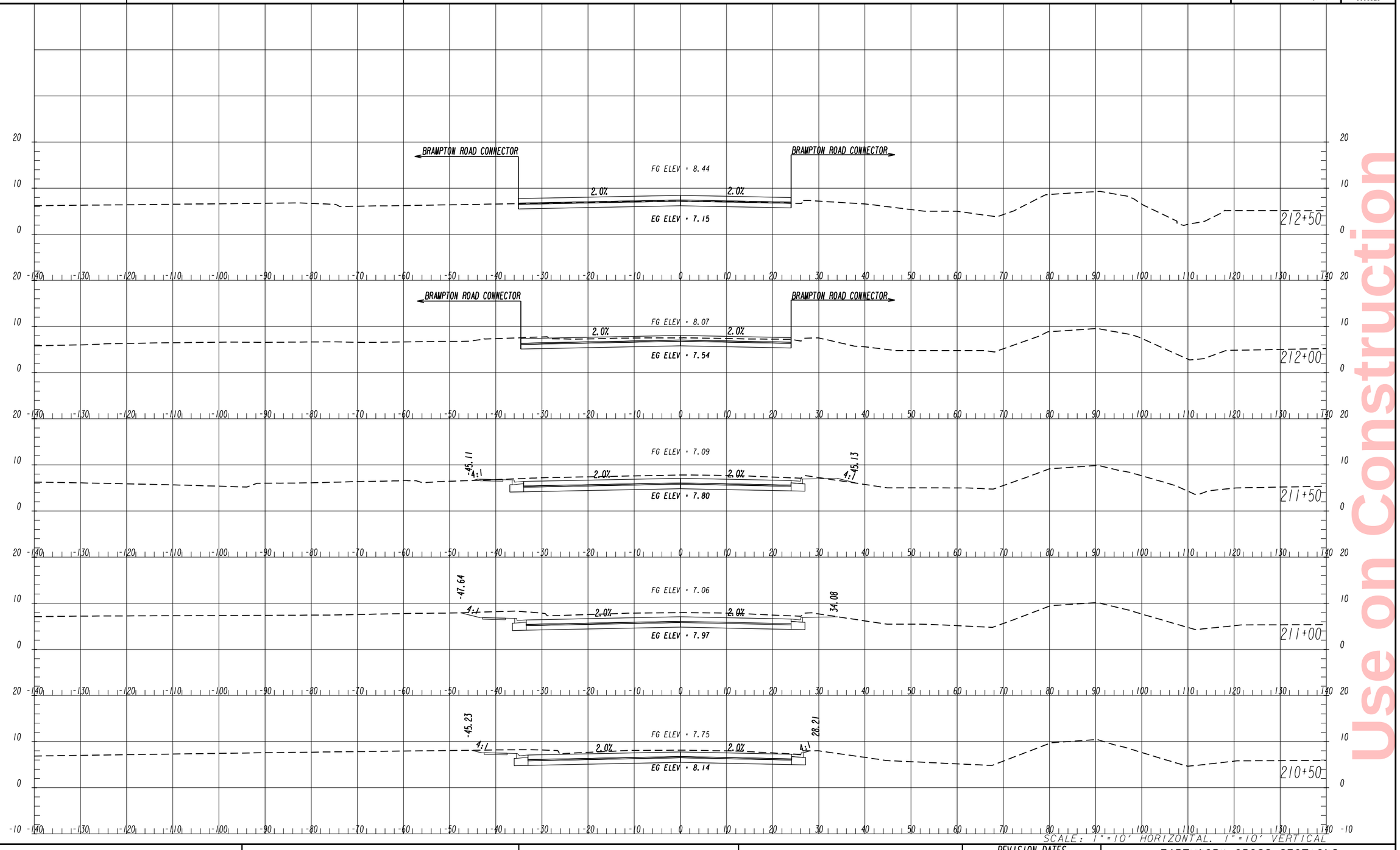
DGN

GDOT Georgia Department of Transportation

P. I. No.
0006328

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SCALE: 1"=10' HORIZONTAL. 1"=10' VERTICAL

Use on Construction

10/23/2015 GPLN

moffatt & nichol

REVISION DATES
01-16-23

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

SR 25 / MAIN STREET

CHECKED:		DATE:		DRAWING No.
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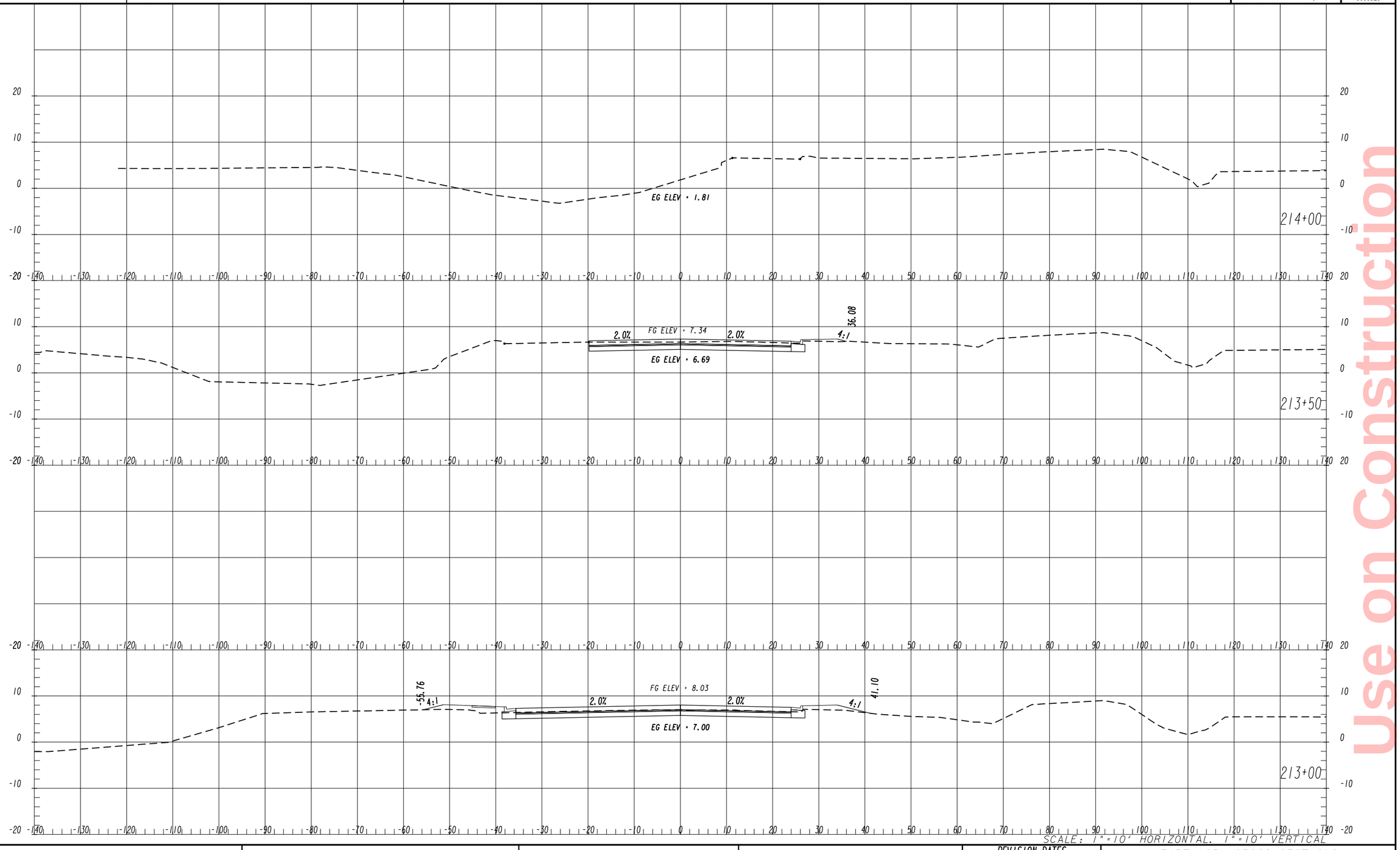
DGN

GDOT Georgia Department of Transportation

P. I. No.
0006328

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SCALE: 1"=10' HORIZONTAL. 1"=10' VERTICAL

Use on Construction

10/23/2015 GPLN

moffatt & nichol

REVISION DATES
01-16-23

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

SR 25 / MAIN STREET

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VERIFIED:		DATE:		

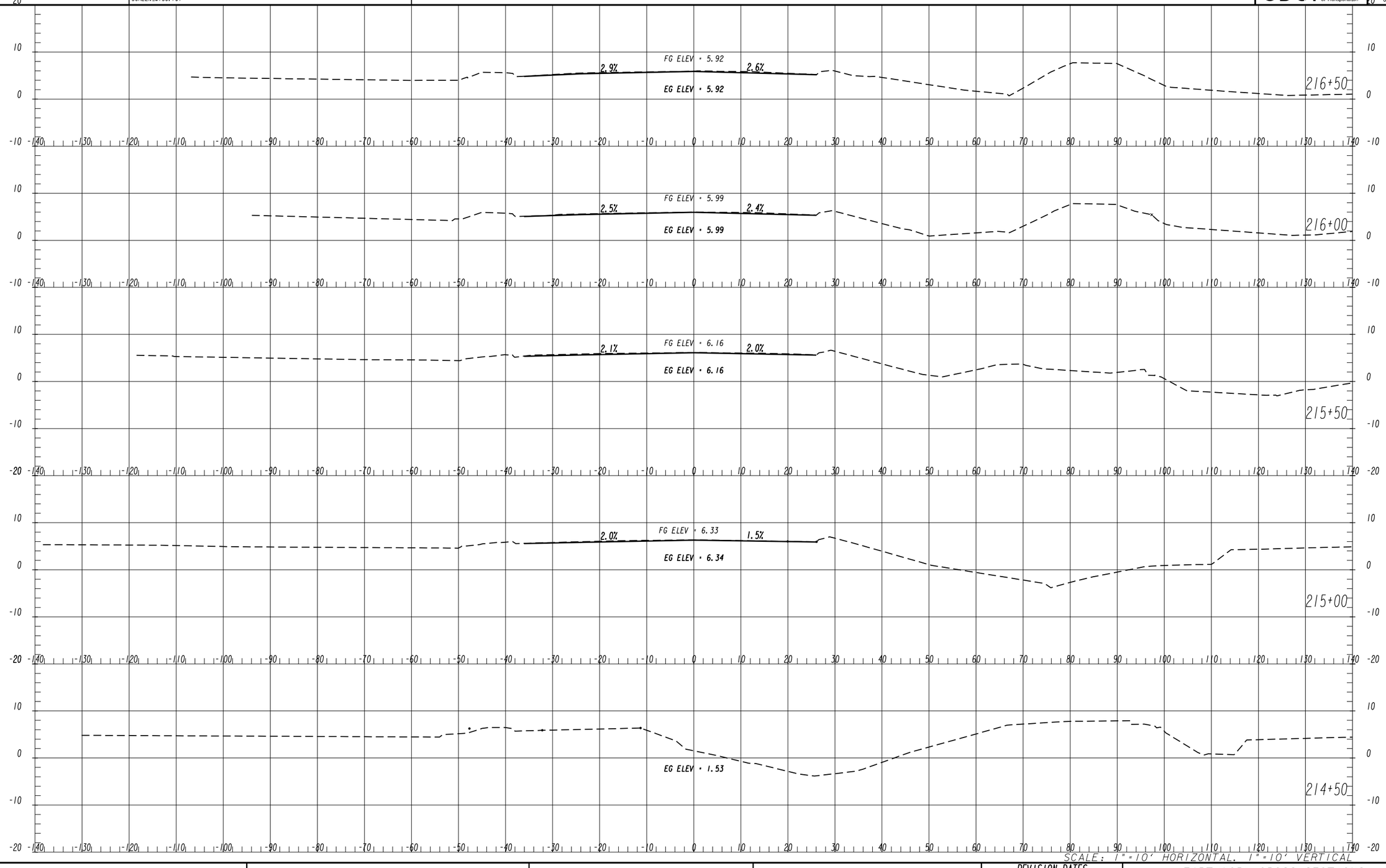
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GPLOT-V8
SCREEN_MISC.tbl

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GDOT Georgia Department of Transportation

P. I. No. 0006328



SCALE: 1"=10' HORIZONTAL. 1"=10' VERTICAL

REVISION DATES

moffatt & nichol

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

SR 25 / MAIN STREET

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0044
CORRECTED:		DATE:		
VERIFIED:		DATE:		

10/23/2015 GPLN

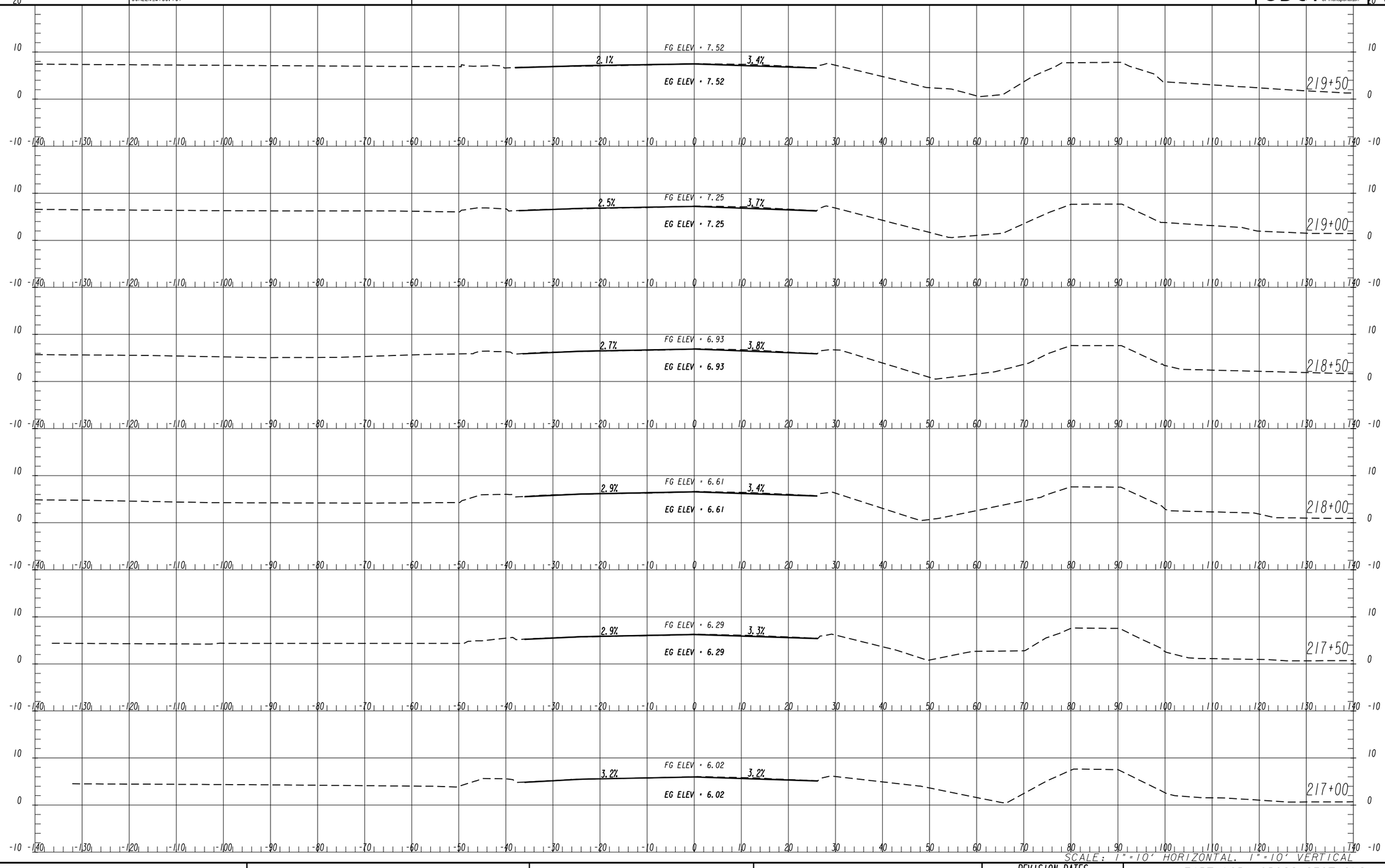
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GPLOT-V8
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GDOT Georgia Department of Transportation

P. I. No.
0006328



SCALE: 1"=10' HORIZONTAL. 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

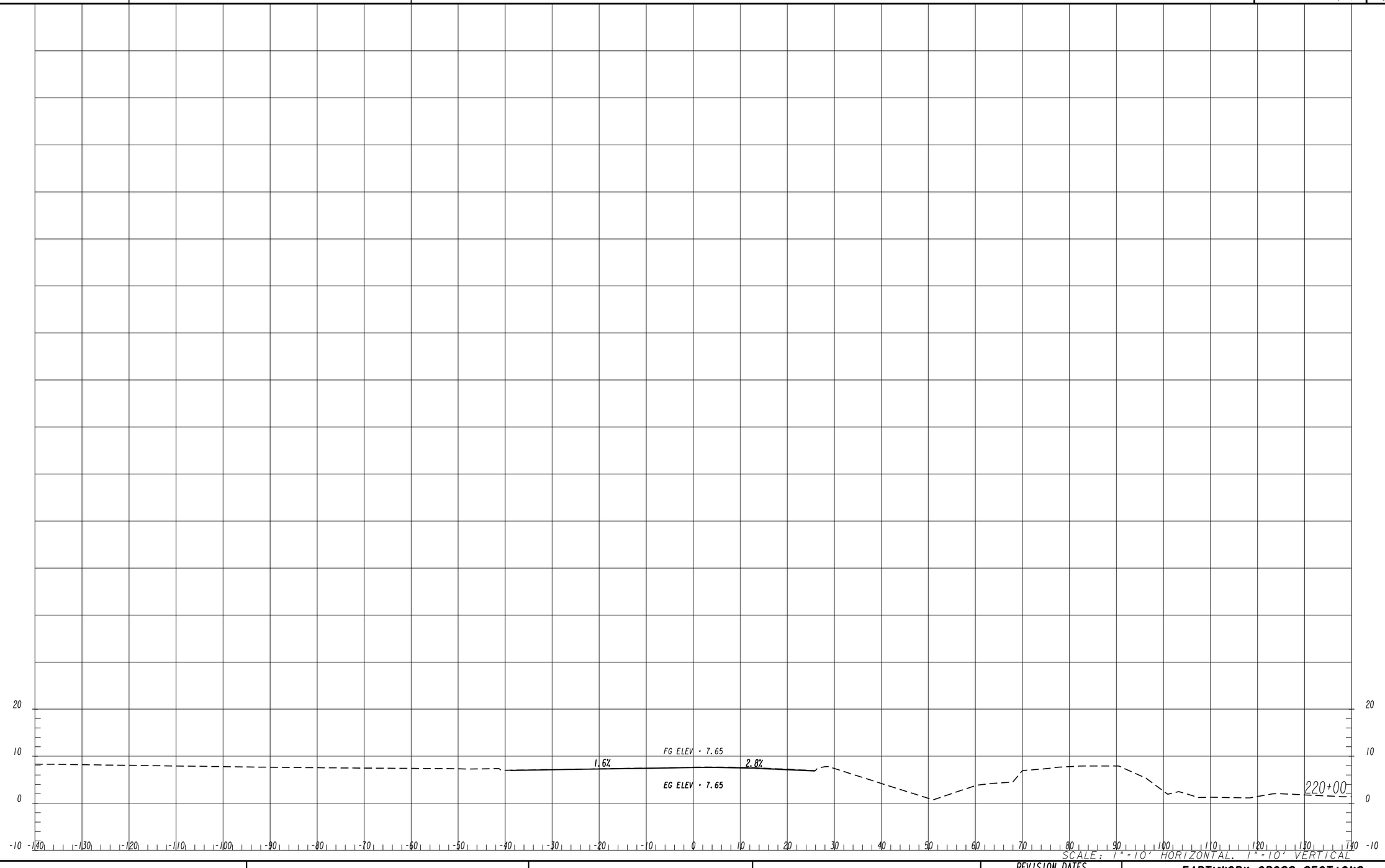
EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

SR 25 / MAIN STREET

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BACKCHECKED:		DATE:	
CORRECTED:		DATE:	23-0045
VERIFIED:		DATE:	

10/23/2015 GPLN



SCALE: 1"=10' HORIZONTAL. 1"=10' VERTICAL

moffatt & nichol

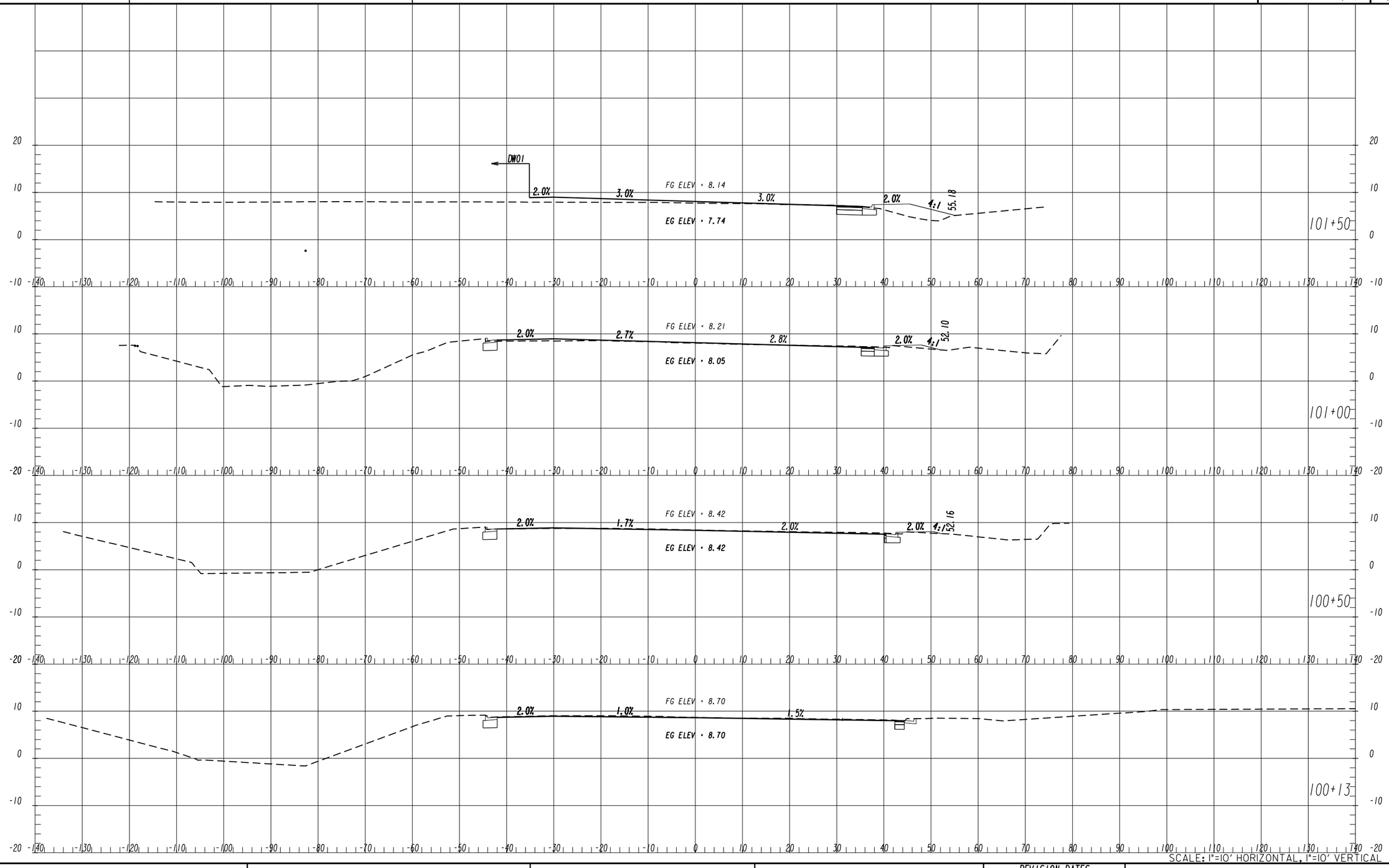
REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

SR 25 / MAIN STREET

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	23-0046
VERIFIED:		DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

REVISION DATES		

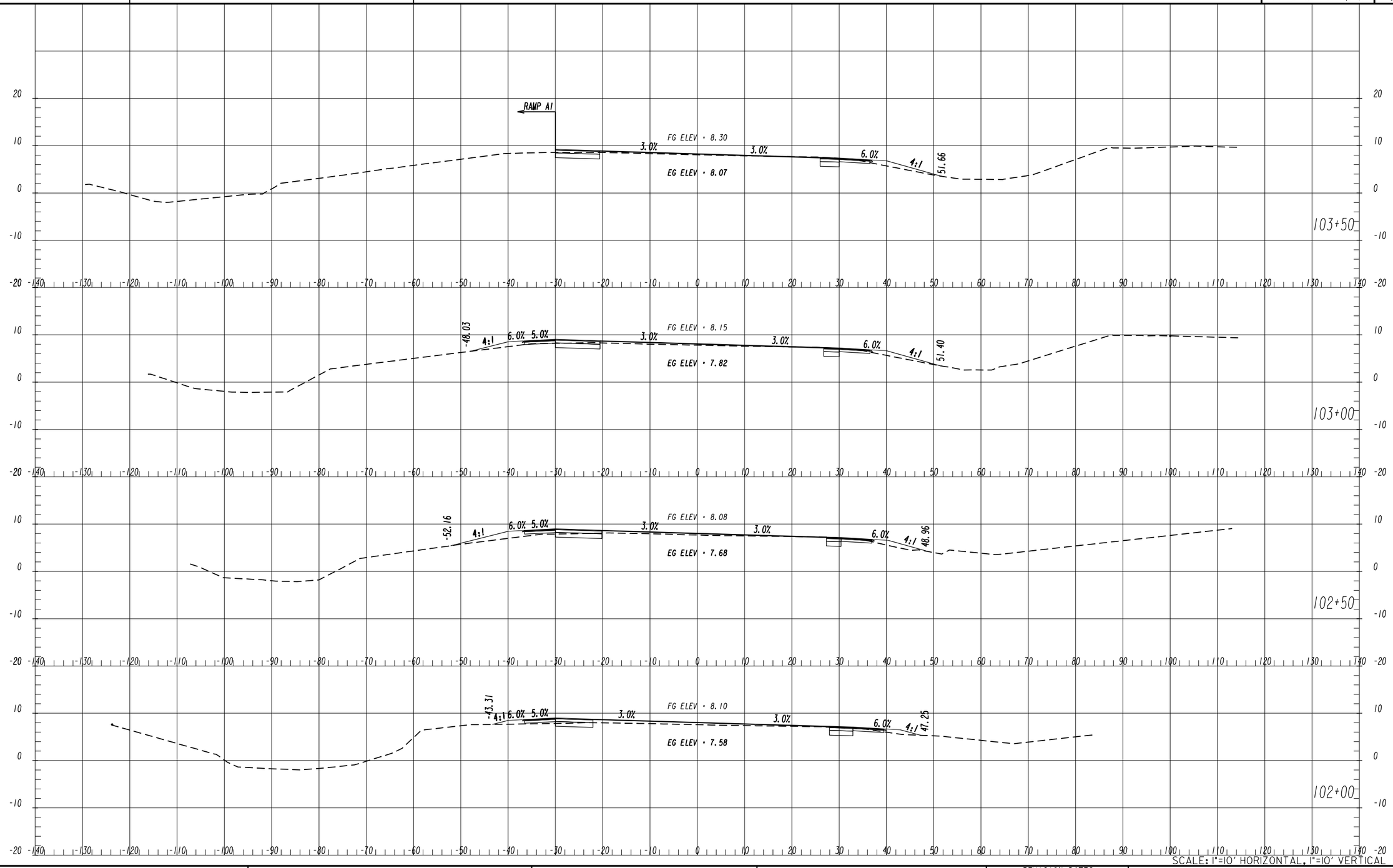
moffatt & nichol

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:		DRAWING No.
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CORRECTED:		DATE:		
VERIFIED:		DATE:		



moffatt & nichol

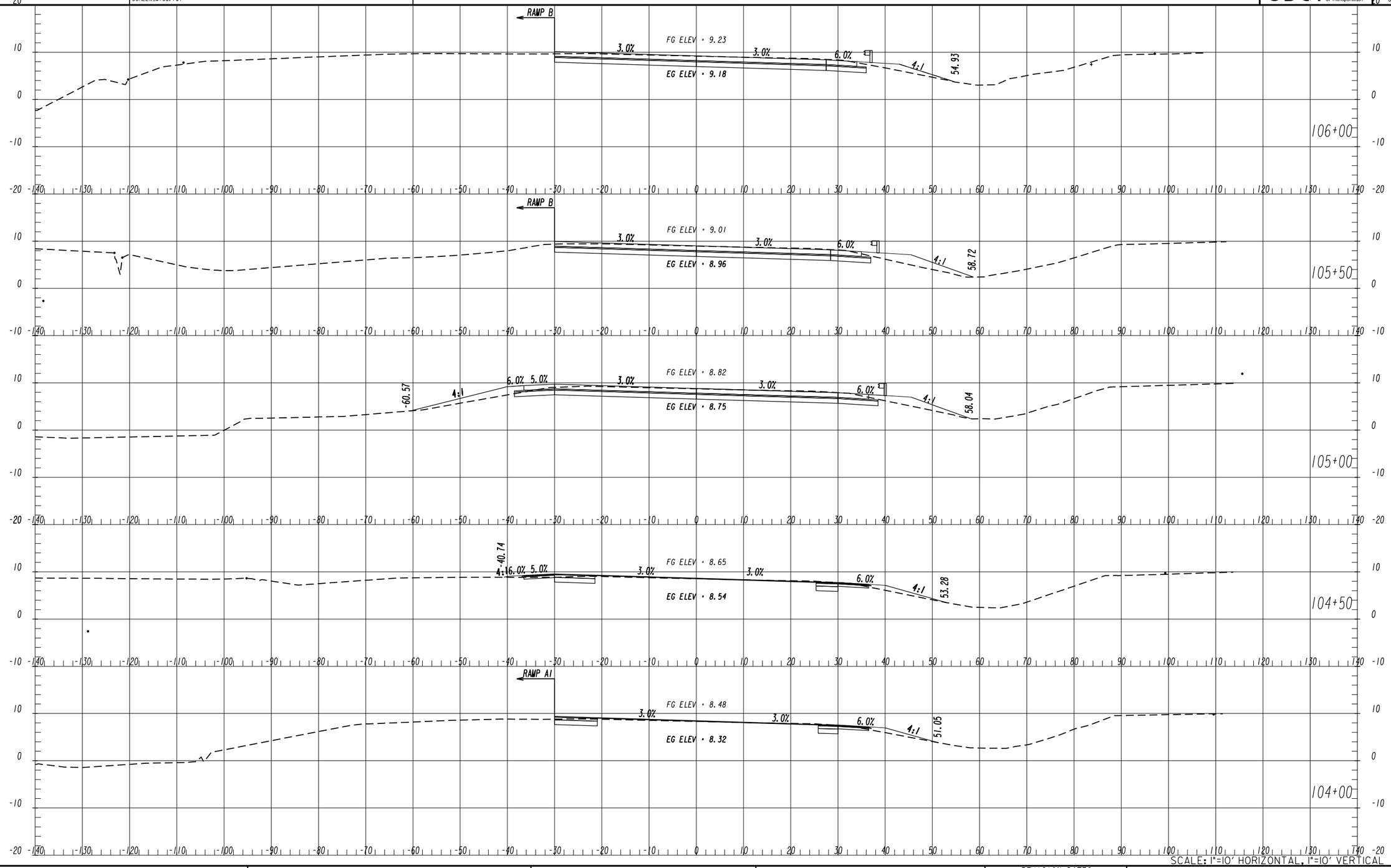
REVISION DATES

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	23-0002
VERIFIED:		DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

REVISION DATES

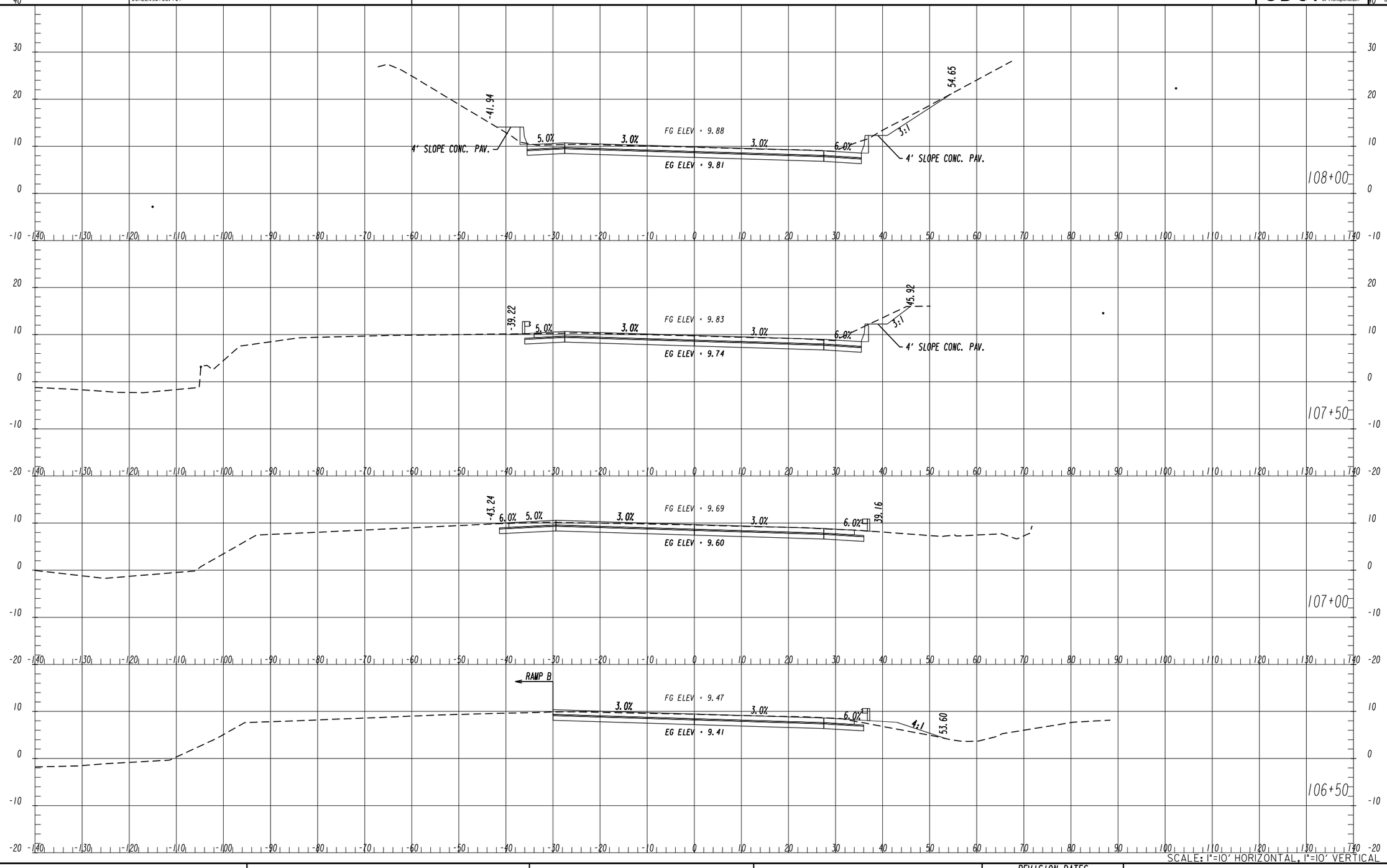
moffatt & nichol

EARTHWORK CROSS SECTIONS

BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		
CORRECTED:		DATE:		23-0003
VERIFIED:		DATE:		



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

moffatt & nichol

REVISION DATES

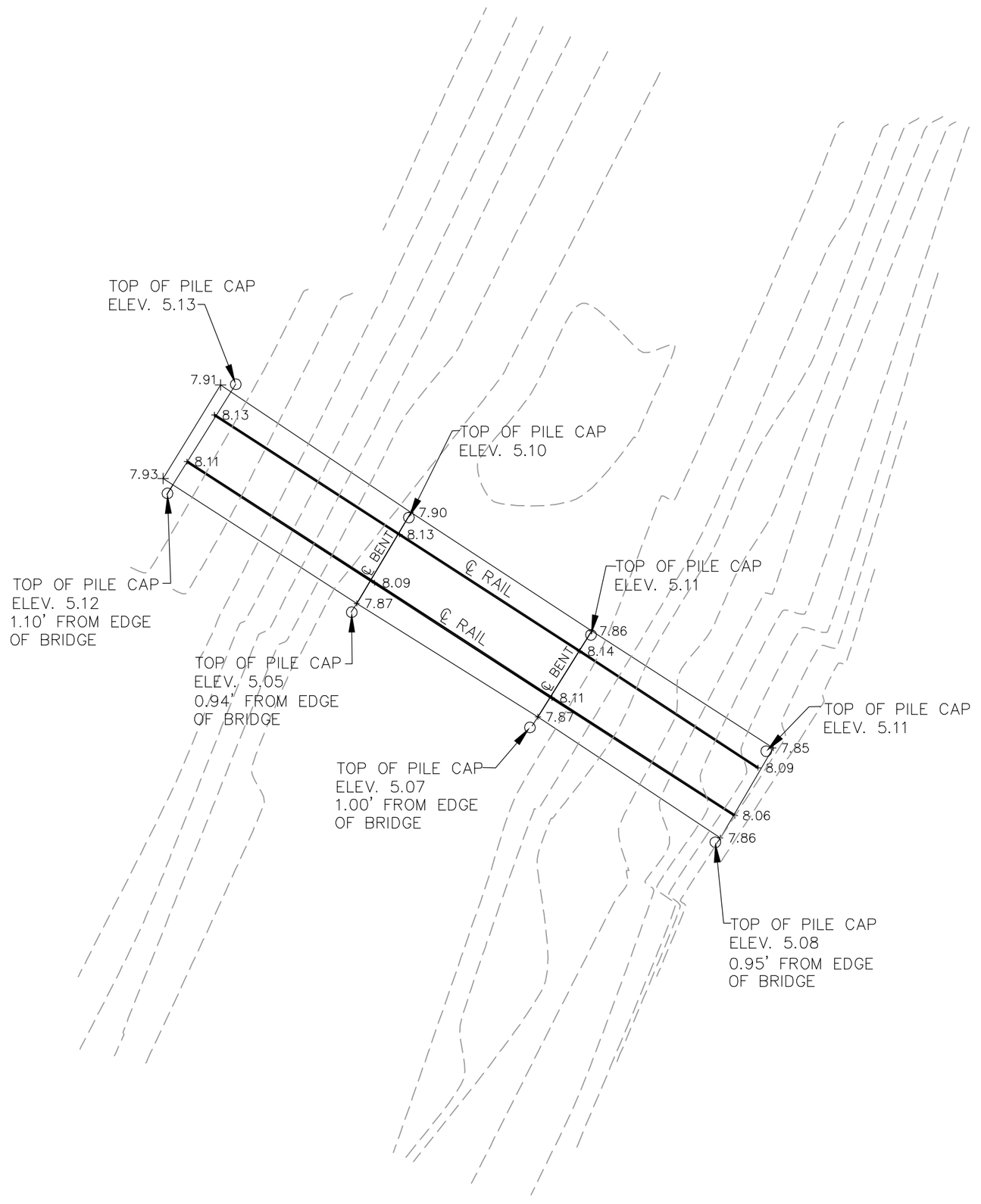
EARTHWORK CROSS SECTIONS

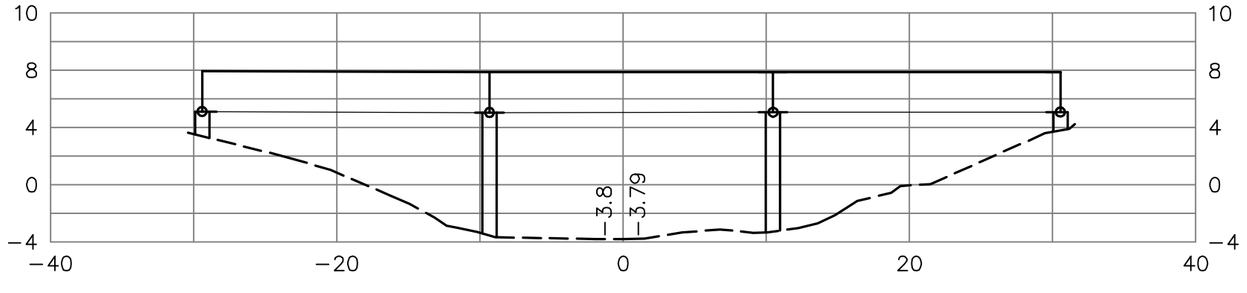
BRAMPTON ROAD CONNECTOR

BRAMPTON CONNECTOR

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		23-0004
CORRECTED:		DATE:		
VERIFIED:		DATE:		

GRID NAD 83





RAILROAD BRIDGE AT CANAL

NOTE: HORIZONTAL CONTROL IS BASED ON GA EAST ZONE NAD 83. VERTICAL CONTROL IS BASED ON NAVD 88 DATUM

NO.	BY	DATE

10' 5' 0' 10'
GRAPHIC SCALE: 1"=10'-0"

EMC ENGINEERING SERVICES, INC.

CIVIL
MARINE
ENVIRONMENTAL

POST OFFICE BOX 8101
23 EAST CHARLTON STREET
SAVANNAH, GEORGIA 31412
PHONE: (912) 644-3200
FAX: (912) 233-4580
savannah@emc-eng.com

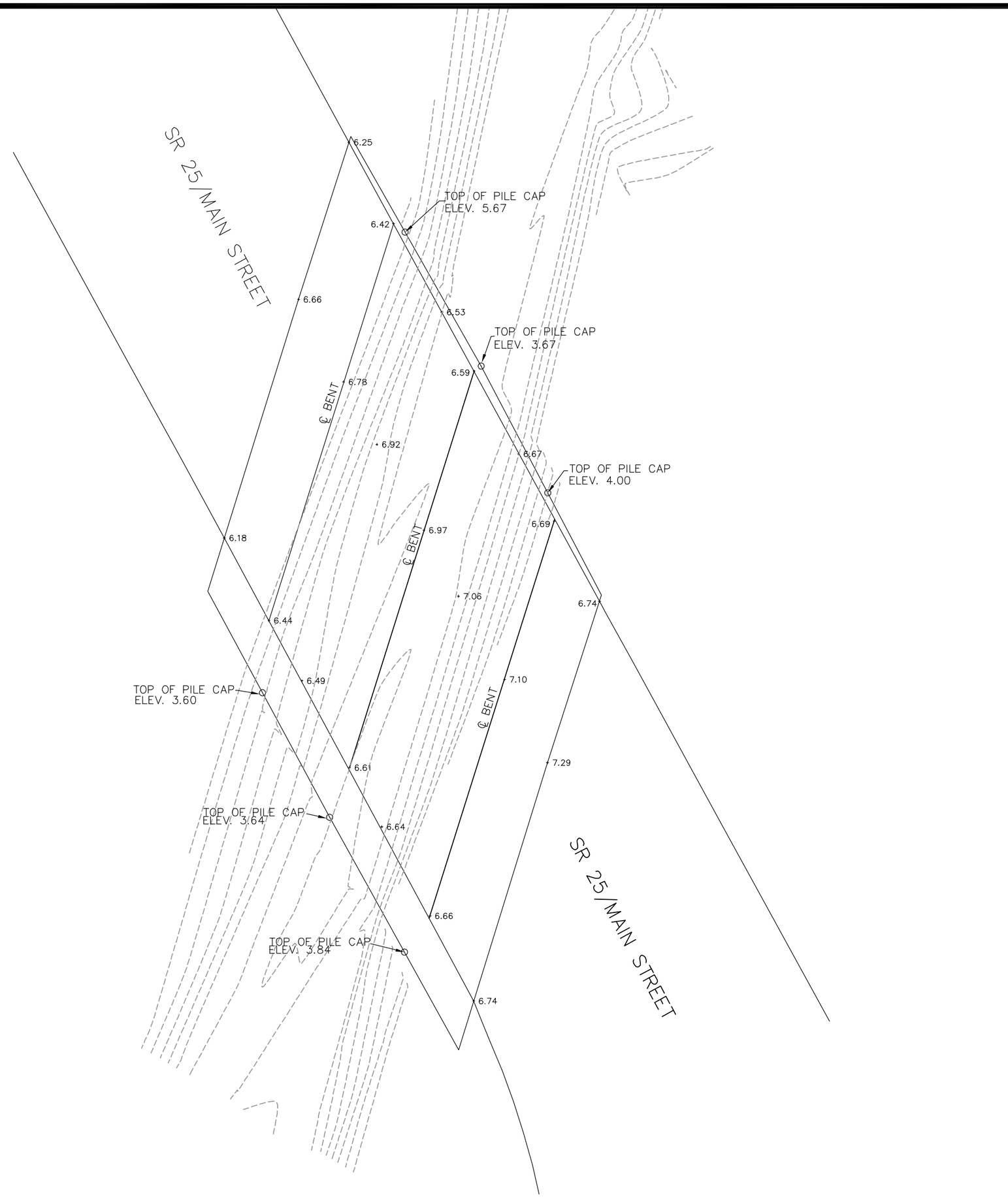
BRIDGE EXHIBIT OF BRAMPTON ROAD

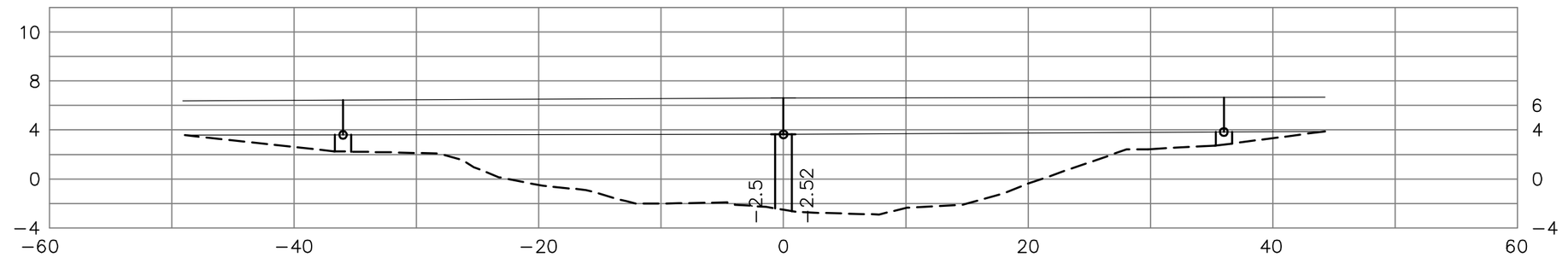
7TH G.M. DISTRICT
GARDEN CITY, CHATHAM COUNTY, GEORGIA
Prepared for:
GEORGIA DEPT OF TRANSPORTATION

PROJECT NO.:	08-0131.20
DRAWN BY:	SCH
DESIGNED BY:	-
SURVEYED BY:	EW
SURVEY DATE:	02/04/2010
CHECKED BY:	CWT
SCALE:	1"=10'
DATE:	02/11/2010

SHEET 1 OF 3

GRID YAD 88





BRIDGE AT SR 25

NOTE: HORIZONTAL CONTROL IS BASED ON GA EAST ZONE NAD 83. VERTICAL CONTROL IS BASED ON NAVD 88 DATUM

NO.	BY	DATE

20' 10' 0' 20'
GRAPHIC SCALE: 1"=20'-0"

EMC ENGINEERING SERVICES, INC.

POST OFFICE BOX 8101
23 EAST CHARLTON STREET
SAVANNAH, GEORGIA 31412
PHONE: (912) 644-3200
FAX: (912) 233-4580
savannah@emc-eng.com

CIVIL
MARINE
ENVIRONMENTAL

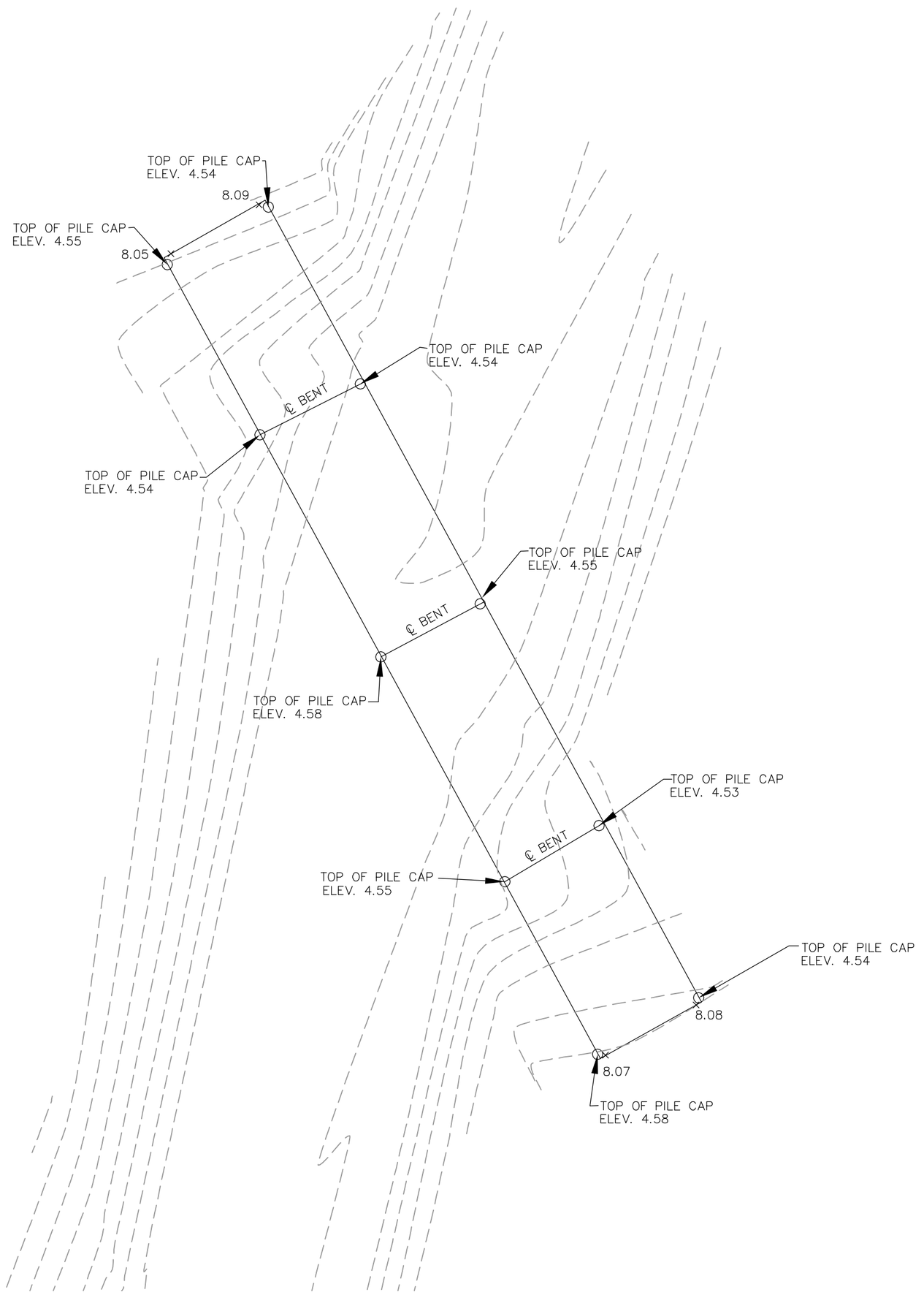
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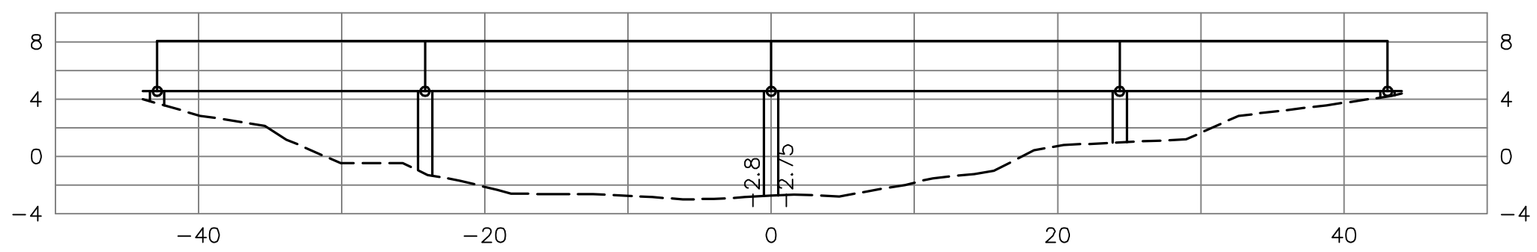
BRAMPTON ROAD

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CHECKED BY:	CWT
SCALE:	1"=20'
DATE:	2/11/2010

GRID NAD 83





RAILROAD BRIDGE AT SR 25

NOTE: HORIZONTAL CONTROL IS BASED ON GA EAST ZONE NAD 83. VERTICAL CONTROL IS BASED ON NAVD 88 DATUM

NO.	BY	DATE

10' 5' 0' 10'
GRAPHIC SCALE: 1"=10'-0"

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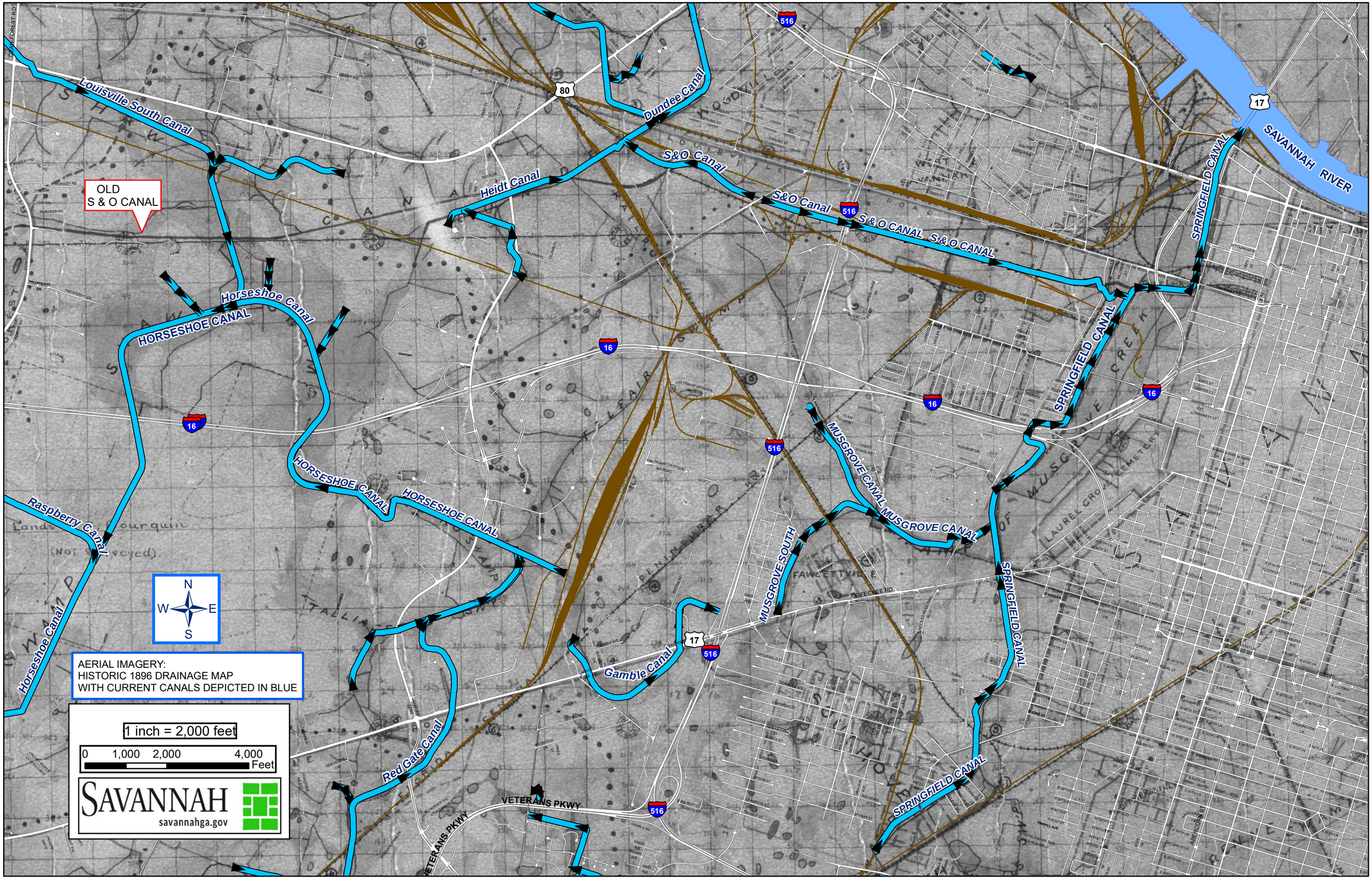
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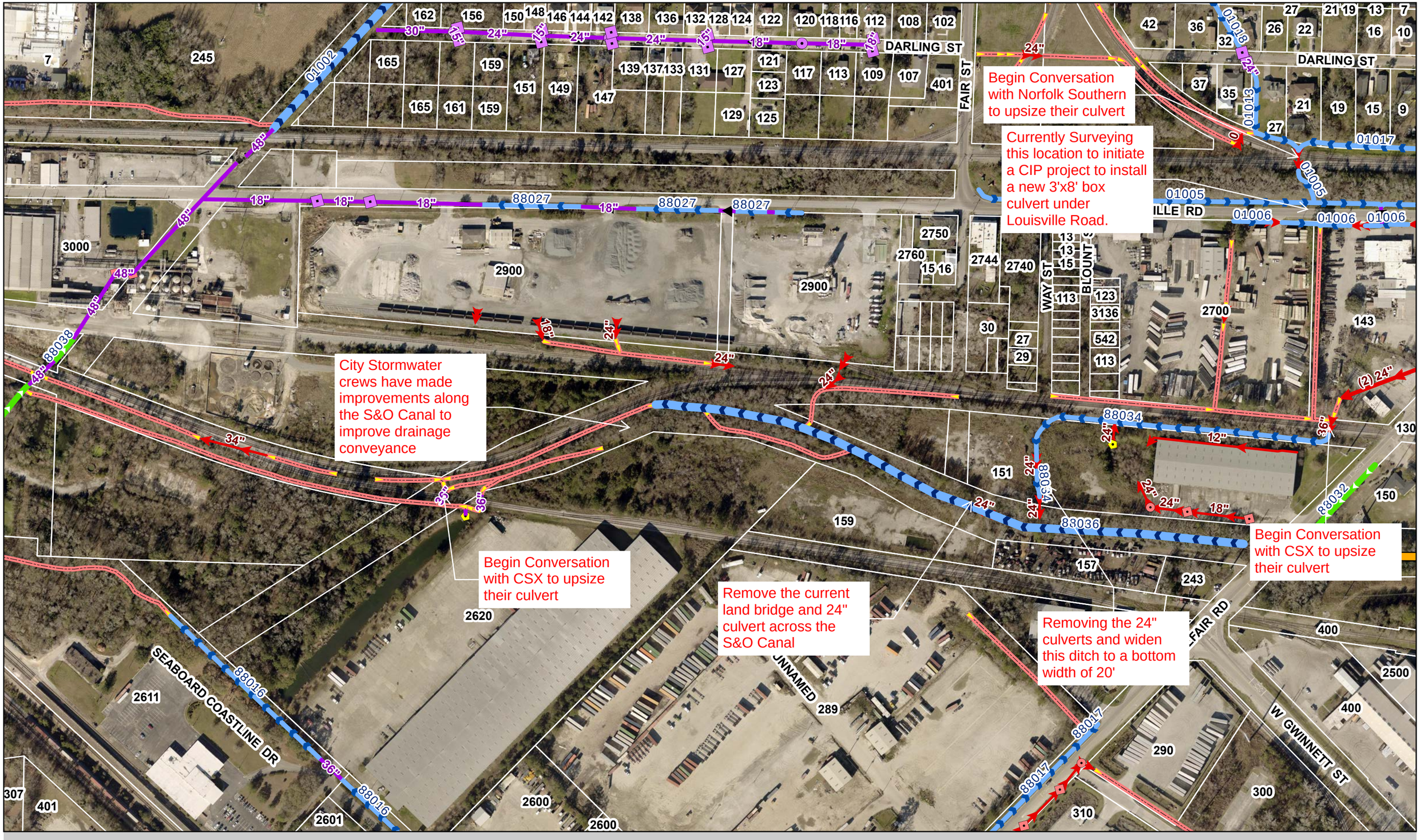
BRAMPTON ROAD

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SCALE:	1"=10'
DATE:	02/11/2010

SHEET
3
OF 3


Louisville South Canal
OLD
S & O CANAL
Heidt Canal
Dundee Canal
S&O Canal
S&O Canal
S & O CANAL S & O CANAL
SAVANNAH RIVER
SPRINGFIELD CANAL
SPRINGFIELD CANAL
Horseshoe Canal
HORSESHOE CANAL
HORSESHOE CANAL
HORSESHOE CANAL
Raspberry Canal
Horseshoe Canal
MUSGROVE CANAL
MUSGROVE CANAL
MUSGROVE SOUTH
SPRINGFIELD CANAL
SPRINGFIELD CANAL
Gamble Canal
Red Gate Canal
VETERANS PKWY
VETERANS PKWY
80
516
16
17
N
W
E
S
AERIAL IMAGERY:
HISTORIC 1896 DRAINAGE MAP
WITH CURRENT CANALS DEPICTED IN BLUE
1 inch = 2,000 feet
0 1,000 2,000 4,000 Feet
SAVANNAH
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S & O CANAL DRAINAGE