

**ALL ELECTRONIC TOLL (AET) – PHASE 4A  
FIN: 415462-2-52-02  
CONTRACT NO. E8L99  
COUNTY: MIAMI-DADE & BROWARD**

**CEI: BCC ENGINEERING, INC.  
William Garcia, P.E., Senior Project Engineer**

**FTE CONSTRUCTION PROJECT MANAGER  
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**ENGINEER OF RECORD:**

**REYNOLDS SMITH AND HILLS, INC.  
1000 Legion Place, Suite 800  
Orlando, Florida 32801**

- Roadway, Drainage, TCP, Erosion Control, Utility Adjustments, Signing & Pavement Markings, Landscaping, Structures and Toll Facilities.

**METRIC ENGINEERING, INC.  
615 Crescent Executive Court, Suite 524  
Lake Mary, Florida 32746**

- Signalization, ITS and Lighting.

**CONTRACTOR:**

**COMMUNITY ASPHALT CORP  
14005 NW 186<sup>th</sup> Street  
Hialeah, Florida 33018**

## **Project Description**

### **Site 1 – Golden Glades Mainline Toll Plaza, MP 0.201X to MP 1.118X**

Modifications to the existing Golden Glades Mainline Toll Plaza to convert to an all-electronic tolling (AET) facility. Cash collection was removed and tolling shifted to a new Signature Gantry Toll Equipment Structure and pre-fabricated toll equipment building. Other improvements included complete demolition of the existing toll plaza, roadway reconstruction, asphalt milling, resurfacing, & overbuild operations to straighten the mainline alignment, and landscape installation.

### **Site 3 – Widen NB HEFT to NB Mainline On Ramp, MP 47.529 to MP 48.135**

Improvements to widen the existing Northbound Homestead Extension Florida Turnpike (HEFT) to Northbound Turnpike Mainline on-ramp from one-lane ramp to two-lane ramp. Improvements include drainage, roadway lighting, ITS installation, and asphalt milling, resurfacing, & overbuild.

### **Site 4 – New SB Off Ramp to Hollywood Boulevard Westbound, MP 49.737 to MP 50.569**

Construction of a new tolled Southbound Mainline Turnpike to Westbound Hollywood Boulevard Off-Ramp. Structural improvements include, the construction of a 2,100' long mechanically stabilized earth (MSE) wall with noise wall for the new Off-Ramp, and a 180' long 24" diameter jack and bore operation beneath the entire northbound and southbound Turnpike. Other improvements included the installation of a temporary tolling point and traffic signalization system for the new off-ramp.

Improvements at all 3 sites included the construction of fifteen overhead and cantilevered sign structures, roadway lighting, Intelligent Transportation system (ITS) trunk line with various lateral drops, and single- and multi-post signage.

## SUMMARY OF ISSUES:

### ROADWAY:

<b>Topic</b>	Ramp Closure Allowable Hours
<b>Issue Summary</b>	Traffic Control Plans did not specify hours/days for full ramp closures within the project limits. Contractor claimed hours provided during construction were not anticipated and not equivalent to a full work shift.
<b>Resolution</b>	Coordination with FTE Traffic Operations was required to determine closure hours allowed.
<b>Lessons Learned</b>	If scope of work requires full ramp closures, TCP should specify in detail closure hours and days allowed for each ramp impacted. This will avoid disputes with Contractor claiming not having enough time to complete planned work and/or requesting extra time. TCP should also specified the number of times each ramp is allowed to close. This will encourage the Contractor to plan his work requiring ramp closures accurately to avoid unnecessary closures in order to minimize impacts to the public and toll suspensions.

<b>Topic</b>	Use of Removable Tape Temporary Pavement Markings
<b>Issue Summary</b>	Traffic Control Plans show all pavement markings as Temporary. According to Specifications, all temporary markings shall be paint unless otherwise shown in the plans. Contract includes pay items for paint and removable tape.
<b>Resolution</b>	Provide specific locations in TCP and/or notes where removable tape is to be used.
<b>Lessons Learned</b>	By including locations where removable tape is required, will avoid disputes with the Contractor claiming to be reimbursed for the cost to obliterate temporary markings in conflict or to be removed in subsequent MOT Phases.

<b>Topic</b>	Construction Access for Closed MOT Work Zones
<b>Issue Summary</b>	Several MOT phases required long work zones protected by temporary concrete barrier wall without sufficient openings for construction vehicle access.
<b>Resolution</b>	Additional openings in the barrier wall were provided by installing additional temporary attenuators to provide increased construction vehicle access to Work Zone.
<b>Lessons Learned</b>	Provide construction vehicle access points at 750' intervals (approximately) in long work zones enclosed by barrier wall.

**UTILITIES:**

<b>Topic</b>	Existing Water Main and Sewer Systems Removals
<b>Issue Summary</b>	The Utility Adjustment Plan Sheets require the removal of the abandoned water and sanitary sewer service lines to the demolished Golden Glades Toll Plaza Building. In addition, the Utility Work Schedule also requires to remove the services. However, there were inconsistencies within these 2 documents as to the limits of the required removals. The City of North Miami Beach, the utility owner and service provider, required the services to be removed all the way to the City-owned water and sanitary sewer force mains, including the removal of an existing sewer manhole. The removals also required the repair of an existing local asphalt roadway, existing irrigation system, and sodding.
<b>Resolution</b>	Due to the inconsistencies within the contract documents, FTE has identified potential exposure on this issue.
<b>Lessons Learned</b>	Even though removal work was clearly described under the Utility Work Schedule and included as part of the Contract, this removal work should be shown in details with limits in Utility Adjustment Plans and Toll Facilities Demolition Plans.