

# Meeting of the Board of Directors

February 24, 2025 - 1:30 p.m.

THEA Headquarters 1104 E. Twiggs Street First Floor Board Room Tampa, FL 33602

For any person who wishes to address the Board, a sign-up sheet is provided at the Board Room entrance. Presentations are limited to three (3) minutes. When addressing the Board, please state your name and address and speak clearly into the microphone. If distributing backup materials, please furnish ten (10) copies for the Authority Board members and staff. Any person who decides to appeal any decisions of the Authority concerning any matter considered at its meeting or public hearing will need a record of the proceedings and, for such purpose, may need to hire a court reporter to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which an appeal is to be based.

- I. Call to Order and Pledge of Allegiance
- **II.** Public Input/Public Presentations
- III. Consent Agenda

### 1. Approval of Minutes of the January 27, 2025, Board Meeting

### **IV.** Discussion/Action Items

A. Planning & Innovation – John Weatherford – Committee Chair - Bob Frey, Director

1. East Selmon PD&E Final Approval

**Purpose:** In order to keep pace with the growth in the Tampa Bay region, THEA has completed a PD&E study for the East portion of the Selmon Expressway. The limits of the project are from the I-4 Connector to east of US 301. A PD&E is an interdisciplinary process to determine a preferred alternative and determine the potential impacts to the roadway and surrounding area.

The study:

- Outlines corridor characteristics
- Completes a robust public outreach plan to document concerns and commitments

- Evaluates impacts
- Confirms there are no disproportionate impacts
- Informs of proposed mitigation strategies, if needed

Action: Request the Board to accept the East Selmon PD&E Study.

### 2. Adoption of Resolution 676 – East Selmon Project

**Purpose:** Pursuant to Florida Statutes, Section 348.68, THEA shall, by resolution, determine the route or routes of the Expressway System. Resolution 676 accepts the East Selmon PD&E by the Authority and approves the alignments described therein.

Action: Request the Board to adopt Resolution 676 approving the East Selmon Project routes.

**B. Operations & Engineering** – Bennett Barrow – Committee Chair – *Judith Villegas, ITS Manager* 

# 1. Approval of Final Ranking and Contract Award for Construction, Engineering, and Inspection (CEI) Services – ITS Infrastructure and REL Grounding PDP Projects

**Purpose:** To approve the Evaluation Committee's final ranking and authorize the contract award for Construction Engineering and Inspection (CEI) Services related to the ITS Infrastructure for East Selmon, West Selmon, and the REL Grounding Phased Design-Build Project.

Action: Request the Board to:

a. Approve the Evaluation Committee's final ranking for CEI Services.

Firm Name	Rank
Rummel, Klepper & Kahn, LLP	1
WSB, LLC	2

b. Authorize staff to negotiate and execute a contract with the top-ranked firm. If negotiations are unsuccessful, staff will negotiate with the next highest ranked firm. Contract is subject to review and approval by THEA's Chief Legal Officer.

# 2. CEI task to provide construction inspection and testing of the infrastructure rebuild on the east side of Lakewood Dr. in Brandon – KCI – \$82,302

**Purpose:** To execute a task order with KCI to perform field inspections and testing for the Lakewood Drive drainage project in Brandon.

**Funding: Capital Budget** – \$82,302

Action: Request the Board to authorize the Executive Director to sign a task order with KCI for \$82,302 to provide CEI services for the repair/remediation/ replacement of deteriorated infrastructure at Lakewood Drive in Brandon.

# **3.** CEI task to provide construction inspection and testing of the Drainage Upgrade Construction Project – KCI – \$165,055

**Purpose:** To execute a task order with KCI to perform field engineering and testing for the drainage project to upgrade THEA's open drainage system between 22nd Street and I-75.

Funding: Capital Budget – \$165,055

Action: Request the Board to authorize the Executive Director to sign a task order with KCI for \$165,055 to provide CEI services for the construction of the drainage upgrade project from 22nd Street to I-75 in the amount of \$165,055.

### 4. Oversight Assistance on the Drainage Upgrade Design and Construction Project – HNTB - \$124,942

**Purpose:** To utilize the GEC (HNTB) to assist staff with the oversight of the design and construction of the drainage upgrade project to upgrade THEA's open drainage system between 22<sup>nd</sup> Street and I-75.

Funding: Capital Budget - \$124,942

**Action:** Request the Board to authorize the Executive Director to execute a task order with HNTB for assistance with review and oversight of the design and construction of the drainage upgrade project from 22<sup>nd</sup> Street to I-75 in the amount of \$124,942.

C. Procurement - Vince Cassidy - Chair - Amy Lettelleir, Chief Legal Officer

### 1. South Selmon Capacity Project Shortlist Selection

**Purpose:** To approve the Evaluation Committee's recommendation to shortlist three firms responding to THEA's RFP to procure a design build firm for the South Selmon Capacity Project.

Action: Request the Board to approve the Evaluation Committee's recommended shortlist of firms for the South Selmon Capacity Project and direct staff to move forward with proposal evaluations and interviews with the shortlisted firms.

Firm Name
Middlesex Corp.
MasTec Civil Superior Construction Co.
Archer Western Construction, LLC

### 2. Operational Back Office System Shortlist Approval

**Purpose:** To approve the Evaluation Committee's recommendation to shortlist four of nine firms responding to THEA's RFP to procure a firm for the design and implementation of the toll system operational back office.

Action: Request the Board to approve the Evaluation Committee's recommended shortlist of firms for the Operational Back Office and to direct staff to move forward with proposal evaluations and interviews with the shortlisted firms.

Firm Name
Neology, Inc.
Quarterhill, Inc.
A-to-Be USA, LLC
Accenture, LLP

### D. Toll Operations – Bennett Barrow – Committee Chair – Raul Rosario, Director

### 1. UPS (Uninterruptible Power Supply) Battery Replacement – TransCore

**Purpose:** To mitigate Toll System power interruptions at the tolling plaza and headquarter locations. These batteries are approaching their life expectancy.

Funding: Capital Budget- \$70,958

Action: Request the Board to authorize the Executive Director to execute a task order with TransCore for \$70,958 to purchase and replace the UPS and EBMs at all toll sites, excluding the SWE.

### 2. HQ VxRail (Applications) Network Redundancy Install

**Purpose:** To enhance the connectivity and redundancy of THEA's HQ VxRail application cluster by installing a single distribution switch. Currently, the five VxRail nodes are connected directly to the core switch, consuming a total of ten ports and lacking redundancy.

Funding: Capital Budget- \$63,526

Action: Request the Board to authorize the Executive Director to execute a task order with TransCore for \$63,526 to purchase and install a single distribution switch for THEA's HQ VxRail.

### 3. Qumulo (Storage) Top of Rack Switches

**Purpose:** To install, configure, migrate, and test two stacked Top-of-Rack (ToR) switches. The objective is to reduce the number of connections to the core switch from 10 to 4, while ensuring redundancy and scalability.

Funding: Capital Budget- \$115,496

Action: Request the Board to authorize the Executive Director to execute a task order with TransCore for \$115,496 to purchase and install two stacked ToR switches.

### 4. Toll System Firewall Replacement

**Purpose:** Install, configure, migrate, and test two new Palo Alto firewalls to replace the toll system's existing firewalls, which are reaching end of life. The objective is to ensure a seamless transition to the new firewall system while maintaining network security and performance.

### Funding: Capital Budget- \$164,272

Action: Request the Board to authorize the Executive Director to execute a task order with TransCore for \$164,272 to purchase and install two new firewalls.

### V. Team Reports

- **A.** Toll Operations Raul Rosario *Director of Tolling Technology and Customer Experience*
- B. Budget & Finance Jeff Seward Chief Financial Officer
- C. Communications Keisha Pickett Boyd Director, Communications and Community Engagement

### **VI. Executive Reports**

- A. Executive Director Greg Slater, Executive Director
  - 1. Contract Renewals and Expirations
  - 2. Director's Report
- B. Chief Legal Officer Amy Lettelleir, Esquire
- C. Chairman Vince Cassidy
  - 1. Upcoming Meetings
    - Board Meeting March 24, 2025
    - Board Workshop April 14, 2025
    - Board Meeting April 28, 2025

- VII. Old Business
- VIII. New Business
  - IX. Adjournment

Tampa-Hillsborough County Expressway Authority Minutes of January 27, 2025, Board Meeting 1104 E. Twiggs Street Tampa, FL 33602

The Tampa-Hillsborough County Expressway Authority held a public meeting at 1:30 p.m. on January 27, 2025, at THEA Headquarters, 1104 E. Twiggs Street in Tampa, Florida. The following were present:

#### **BOARD:**

Vincent Cassidy, Chairman Bennett Barrow, Vice Chairman John Weatherford, Secretary District Secretary David Gwynn, FDOT Commissioner Donna Cameron Cepeda, Member

### STAFF:

Greg Slater Amy Lettelleir Tim Garrett Keisha Boyd Brian Pickard Bob Frey Jeff Seward Shari Callahan Raul Rosario Gary Holland Charlene Varian

#### **OTHERS:**

Jessica Francois, Quest Jim Drapp, HNTB Len Becker, HNTB Colin Peppard, HNTB Maddi Baptiste, Playbook Sally Dee, Playbook John Generalli, Wells Fargo Christina Matthews, WSP

- Chaketa Mister Felipe Velasco Emma Antolinez Frederick Pekala Julie Aure Toni Nhlapo Pedro Leon Brian McElroy Anna Quinones Judith Villegas
- Sarah Lesch, Playbook Joe Stanton, NMRS Doug Draper, BofA Darren Morse, SPP Alex Bourne, RS&H Stefanie McQueen, HDR Joey Roselli, American Structurepoint

### I. Call to Order and Pledge of Allegiance

Chairman Cassidy called the meeting to order at 1:30 pm, followed by the Pledge of Allegiance.

### **II.** Public Input/Public Presentations

There was no public input.

### III. Consent Agenda

1. Approval of the Minutes of the December 16, 2024, Board Meeting

### 2. Approval of Board Member Travel

- a. TEAMFL January 30-31, 2025
- b. ASECAP Road Safety Conference March 11, 2025

Chairman Cassidy requested a motion to approve the consent items. Mr. Barrow moved approval of the consent items, seconded by Mr. Weatherford.

### The motion passed unanimously.

### **IV.** Discussion/Action Items

Planning & Innovation – John Weatherford, Committee Chair – Bob Frey, Director

### 1. CPMP System Maintenance – WSP

Mr. Frey presented an item for system maintenance of the Comprehensive Project Management Program (CPMP), the web-based tool that manages and maintains the THEA's work program. This system requires ongoing hosting, maintenance, and annual updates.

The requested action is for the Board to approve a task order with WSP for the CPMP maintenance in an amount not to exceed \$90,000 from the capital budget.

Chairman Cassidy requested a motion to approve the consent items. Mr. Barrow moved approval of the item, seconded by Mr. Weatherford.

The motion passed unanimously.

### 2. FY26 Work Program Development Services - WSP

Mr. Frey introduced a task order that will allow WSP to work with THEA to facilitate work sessions with each department, conduct data updates and tracking, develop reports and the FY26 Annual Work Program.

The requested action is for the Board to approve a task order with WSP to facilitate the FY26 Work Program development in the amount not to exceed \$150,000 from the capital budget.

Chairman Cassidy requested a motion to approve the consent items. Mr. Barrow moved approval of the item, seconded by Mr. Weatherford.

The motion passed unanimously.

### 3. Greenway Enhancement Planning – WSP

Mr. Frey introduced a task order to allow THEA to further develop the concepts for the Selmon Greenway, including:

- Meridian Health Trail Concept Plans
- General greenway support Ensuring resources are available to address stakeholder project integration

WSP will provide landscape architect and traffic engineering support to complete concept plans, sketches, 3D models, identify considerations for design, and provide internal and external stakeholder coordination.

The requested action is for the Board to approve a task order with WSP for concept development of Greenway Enhancement Planning in the amount not to exceed \$130,000 from the capital budget.

# Chairman Cassidy requested a motion to approve the consent items. Mr. Barrow moved approval of the item, seconded by Mr. Weatherford.

Chairman Cassidy asked if USF Health was part of this initiative. Mr. Frey noted that THEA is collaborating with TGH on this project.

### The motion passed unanimously.

**Operations & Engineering** – Bennett Barrow – Committee Chair – *Brian Pickard, P.E., Director* 

# 1. Bridge Striping Selmon Expressway Local Lanes from 26<sup>th</sup> Street to 78<sup>th</sup> Street – Webber Infrastructure Management

Mr. Pickard introduced a task order request for Webber Infrastructure Management to install longitudinal striping on the local lanes of the expressway bridges from 26<sup>th</sup> Street to 78<sup>th</sup> Street. He noted that THEA previously solicited competitive bids for this project and none were received. As a result, THEA requested a quote from Webber.

The requested action is for the Board to authorize the Executive Director to sign a task order with Webber Infrastructure Management to install longitudinal bridge striping on the local lanes from 26<sup>th</sup> Street to 78<sup>th</sup> Street for \$215,267 from the capital budget.

Chairman Cassidy requested a motion to approve the consent items. Mr. Barrow moved approval of the item, seconded by Mr. Weatherford.

The motion passed unanimously.

# 2. Design task to rebuild infrastructure east side of Lakewood Dr. in Brandon – Kisinger Campo & Associates (KCA)

Mr. Pickard presented an item for a task order with KCA to develop a design and scope to procure a contractor to repair, remediate, and/or replace the drainage, sidewalk, and retaining wall on the east side of Lakewood Drive in Brandon.

The requested action is for the Board to authorize the Executive Director to sign a task order with KCA for \$155,754 from the capital budget to develop a design and scope to procure a contractor to repair/remediate/replace deteriorated infrastructure at Lakewood Drive in Brandon.

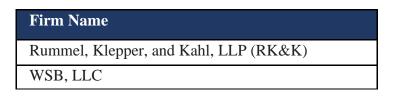
Chairman Cassidy requested a motion to approve the consent items. Mr. Weatherford moved approval of the item, seconded by Mr. Barrow.

The motion passed unanimously.

**3.** Construction Engineering and Inspection (CEI) Services for ITS Infrastructure for East Selmon and West Selmon and REL Grounding PDB Projects: Board Approval of Shortlist Ranking

Mr. Pickard presented the Evaluation Committee's recommendation to shortlist the two firms that responded to THEA's RFP for CEI Services for the ITS Infrastructure for East and West Selmon and REL Grounding Phased Design Build Project.

The requested action is for the Board to approve the Evaluation Committee's recommended shortlist of firms for CEI Services on the upcoming ITS Infrastructure for East and West Selmon and REL Grounding Phased Design Build Projects and direct staff to move forward with interviews with the shortlisted firms.



Chairman Cassidy requested a motion to approve the consent items. Mr. Barrow moved approval of the item, seconded by Mr. Weatherford.

The motion passed unanimously.

### 4. Design Consultant for Pedestrian Safety Upgrades at Brorein/Morgan Street Off-ramp – BCC Engineering

Mr. Pickard's final item is the procurement of design consultant services to develop plans and specifications for a construction contract and post-design services to complete the pedestrian safety upgrades at the Brorein/Morgan Street off-ramp.

He pointed out that the goal of the project is to notify vehicles exiting onto the offramp that pedestrians or bicyclists are present at the bottom of the ramp. An additional benefit to the project is delivering data on pedestrian and bicyclist use for research purposes and development of an overall ramp/pedestrian safety plan to be considered for all THEA off-ramps.

The requested action is for the Board to authorize the Executive Director to execute a task order with BCC Engineering LLC for \$79,231 from the capital budget to provide design and post-design services for constructing the recommended work to provide pedestrian safety improvements at the Brorein/Morgan Street off-ramp.

# Chairman Cassidy requested a motion to approve the consent items. Mr. Barrow moved approval of the item, seconded by Mr. Weatherford.

### The motion passed unanimously.

**Toll Operations** – Bennett Barrow – Committee Chair – *Gary Holland, Toll System Manager* 

### 1. RTCS Spare Parts Inventory – TransCore - \$64,631

Mr. Holland presented an item for the purchase of critical spare parts necessary to maintain THEA's tolling infrastructure to ensure uninterrupted operations of THEA's toll collection system.

The requested action is for the Board to authorize the Executive Director to execute a task order with TransCore for \$64,631 from the capital budget to purchase critical spare parts necessary to maintain THEA's tolling infrastructure.

Chairman Cassidy requested a motion to approve the consent items. Mr. Weatherford moved approval of the item, seconded by Mr. Barrow.

The motion passed unanimously.

**Information Technology and Security** – Bennett Barrow – Committee Chair – *Shari Callahan, Director* 

### 1. Emerging Tech – I-4 FRAME Integration Support – Metric Engineering

Ms. Callahan presented a map depicting the multi-agency corridors to which RSUs will be installed and briefly discussed the integration process. She pointed out that Metric Engineering is THEA's integration expert for ITS devices to securely connect to OPS and CV networks. This item is a task order request for Metric Engineering to provide services for network design, security design, configuration, and integration for all aspects of the I-4 FRAME project.

The requested action is for the Board to authorize the Executive Director to execute a task order with Metric Engineering, to install, configure, integrate, and secure RSUs for the I4 FRAME project for \$54,539 from the capital budget.

### Chairman Cassidy requested a motion to approve the consent items. Mr. Weatherford moved approval of the item, seconded by Mr. Barrow.

Chairman Cassidy asked about the different colors depicted on the map. Ms. Callahan advised that the colors show the different corridors. Mr. Slater added that the colors show ownership of the road.

### The motion passed unanimously.

#### Legal – Amy Lettelleir, Chief Legal Officer

**1.** Reimburse Coca-Cola for the Design and Construction of Upgrades at the Expressway Eastbound Exit at US 301

Ms. Lettelleir brought forth a request for additional funding of \$229,954 to reimburse Coca-Cola for the design and construction of additional turning movement capacity and safety upgrades to the Expressway's US 301 eastbound exit. The increase is the result of mobilization costs that were not considered in the original estimates, for a total project cost of \$3,327,414.

The requested action is for the Board to authorize the Executive Director to execute an agreement with Coca-Cola Florida and to execute a purchase order to reimburse Coca Cola Florida for the design and construction of capacity and safety improvements at the Expressway eastbound exit to US 301 for a not-to-exceed amount of \$3,327,414 from the capital budget.

Chairman Cassidy requested a motion to approve the consent items. Mr. Weatherford moved approval of the item, seconded by Mr. Barrow.

The motion passed unanimously.

### 2. Volusia County Tax Collector Interlocal Agreement

Ms. Lettelleir presented an Interlocal Agreement with Volusia County that will allow THEA customers to pay tolls to the Volusia County Tax Collector office for the release of registration holds and to provide the procedures for remittance and reporting between the parties.

The requested action is for the Board to authorize THEA's Chairman to execute an Interlocal Agreement with the Volusia County Tax Collector Office.

Chairman Cassidy requested a motion to approve the consent items. Mr. Weatherford moved approval of the item, seconded by Mr. Barrow.

The motion passed unanimously.

### **Executive Director** – Greg Slater, Executive Director

### 1. Ernst & Young Real Estate RFI Presentation

Mr. Daniel Edwards of Ernst & Young, LLC provided the Board with an update on the submittals in response to THEAs Real Estate Development Request for Information (RFI).

The objectives of the RFI were to:

- Gain perspective into the development industry's point of view around key THEA assets and their potential for development
- Understand how THEA can work with developers to enhance the community, neighborhood connectivity, and integrated transportation initiatives in downtown Tampa through its land holdings
- Inform THEA's path forward relative to the procurement and/or disposition of key assets

The RFI focused on the Meridian parcel but allowed respondents to focus on other THEA assets. The RFI included specific requests, such as:

- An introduction to the firm
- Proprietary market outlook
- Insights on the Meridian site and/or other THEA assets
- Partnership structures
- Development plan/uses
- Funding
- Timeline
- Challenges and mitigation strategies
- Experience and qualifications

Two submittals were received, each with differing visions, both with very good feedback.

One response came from a local developer with significant local experience. They submitted two proposed development plans

- 38-story multifamily tower with 400 units, 635 parking spaces, and 28,000 square feet of retail
- 38-story multifamily tower with 283 units, 847 parking spaces, 17,000 square feet of retail, and mixed-use TOD project
- Added optionality for THEA office relocation into future development plans.

Their overall project timeline is between 4.5 and 7 years, they proposed multiple transaction structures and noted various challenges due to the irregular shape of the Meridian parcel and infrastructure requirements.

The other response came from a national developer with current exposure to the Tampa market. This developer is proposing a 200-room, 120,000 square foot upper-upscale hotel with ground-floor food and beverage, rooftop bar, and event space. The proposal aims to incorporate public areas to prioritize community enhancements such as pedestrian pathways and enhancements to the Greenway Master Plan. The overall project timeline is between 20 and 24 months. This developer is proposed a 100% equity, fee-simple transaction and would not consider a ground lease structure. They also noted challenges, including existing use as stormwater management and the encroachment of the Whiting Street extension.

Chairman Cassidy asked if a 20–24-month timeline was realistic. Mr. Edwards responded in the affirmative, noting that there tends to be a tighter turnaround in hospitality.

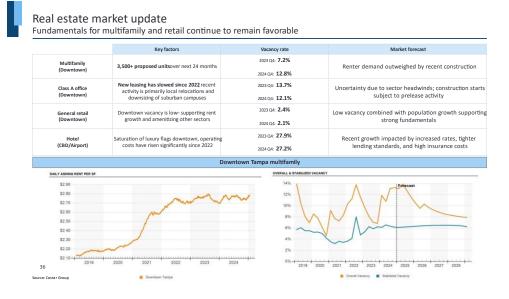
Chairman Cassidy asked for clarification relative to the two proposed development plans from the local developer that the plan would be either one or two and not both. Mr. Edwards responded in the affirmative.

Finally, the Chairman asked if other properties were considered. Mr. Edwards noted only the reference to a THEA office relocation.

Mr. Barrow asked about the long-term economic impact of a very successful multifamily site vs. a hotel.

Mr. Edwards pointed out hotels bring in different levels of impact. For example, a rooftop bar is a destination bringing people into downtown. Multi-family does not have that kind of draw. Multi-family brings in the people who live here, who spend money at the grocery store down the street, they're paying taxes, etc. It really depends on the type of economic activity you are looking for.

Mr. Edwards gave a real estate market update for the areas of focus, noting that fundamentals for multifamily and retail continue to remain favorable.





There was a brief discussion about the defining boundaries of downtown and Mr. Edwards agreed to provide the board with a map depicting that information.

Finally, Mr. Edwards discussed next steps, including coordinating with legal counsel to determine what is allowable and how a procurement would be structured, as the Board considers moving into moving toward an RFP.

Mr. Slater added that THEA is looking to the board to provide instruction on next steps.

#### 2. USF Graphic Studio Presentation

Ms. Margaret Miller, accompanied by Mr. Mark Fredericks, both representing USF Graphicstudio, presented examples of public art projects around the world. The projects included visual, audible, and interactive, both temporary and permanent installations.

Chairman Cassidy asked if USF Graphicstudio works with USF students to create any of this art. Ms. Miller explained that most of the artists featured in the presentation are global.

Mr. Weatherford mentioned public art he experienced in Seoul, Korea, that included images on the street, many of which contained positive messages.

Commissioner Cepeda commented that she would like to see something more functional, like seating/benches.

### **Executive Reports**

Executive Director – Greg Slater, Executive Director

#### 1. Contract Renewals and Expirations

Mr. Slater reported three contract renewals. Two second one-year renewals – one with KCI and one with HNTB, both for professional engineering services. The third was a first one-year renewal with Infotect for Managed Services.

2. Director's Report

Mr. Slater reported the following:

- THEA was awarded a \$4M grant from USDOE to further advance our CV program. THEA is also submitting for a RAISE grant to advance Whiting.
- THEA is beginning the process of budget and work program development.
- THEA submitted FY24 data submission to the FTC to be included in the report to the Governor. THEA has met all its performance targets.
- He will be meeting with Board members over the next several weeks to go over THEA 2025 priorities.
- A text scam associated with SunPass going around.

Finally, Mr. Slater asked the Board to join him in welcoming Raul Rosario as THEA's new Director of Tolls. He also announced the departure of Brian Pickard, who is going to work in the public sector. He thanked him for his service.

Chief Legal Officer – Amy Lettelleir, Esquire

No Report.

Chairman – Vince Cassidy

- 1. Upcoming Meetings
  - Board Workshop February 10, 2025 Cancelled
  - Board Meeting February 24, 2025
  - Board Workshop March 10, 2025 Cancelled
  - Board Meeting March 24, 2025

### **Old Business**

No old business.

### **New Business**

No new business.

### Adjournment

The meeting adjourned at 2:39 p.m.

APPROVED: \_\_\_\_\_\_ATTEST\_\_\_\_\_

Chairman: Vince Cassidy

Vice-Chairman Bennett Barrow

# DATED THIS 24<sup>TH</sup> DAY OF FEBRUARY 2025.

# **SELMON** EXPRESSIVAT

# Project Environmental Impact Report

March 2024

# PROJECT ENVIRONMENTAL IMPACT REPORT SUMMARY

# 1.0 Project Description and Purpose and Need

### a. Project Information:

Project Name:	East Selmon Expressway PD&E Study						
Project Limits:	From I-4 Connector to US 301						
County:	Hillsborough County						
ETDM Number (If applicable):	Not Applicable						
Tampa Hillsborough Expresswa	y Authority (THEA) Project No: <u>P-01619</u>						
THEA Project Manager:	Anna Quiñones, AICP						

### b. Proposed Improvements:

The Tampa Hillsborough Expressway Authority (THEA) conducted a Project Development and Environment (PD&E) Study to evaluate the needs, costs, and effects of adding capacity on the Selmon Expressway (SR 618) from the I-4 Connector to US 301 in Hillsborough County. The Build Alternative proposes to add an additional local lane in each direction of the Selmon Expressway from the I-4 Connector to US 301. In addition, the Build Alternative includes the following improvements:

- Add a signal at the intersection of 78<sup>th</sup> Street and the eastbound off-ramp
- Relocate the ramp from the Reversible Express Lanes (REL) to the westbound local lanes from west of US 301 to east of US 301.

All proposed improvements associated with the Build Alternative are located within existing right-ofway.

### c. Purpose and Need:

The purpose of this project is to accommodate existing and future traffic demands and improve travel time reliability and safety on the Selmon Expressway from the I-4 Connector to US 301. Congestion regularly occurs during the morning and afternoon rush hours. In 2019, 95,000 vehicles per day utilized the Selmon Expressway. By 2046, that number is expected to grow to 167,000, an increase of 75%. In addition, 44% of all crashes involved rear-end collisions indicating congestion as one of the primary contributing factors. Usage of the facility will continue to grow leading to more congestion and crashes if nothing is done.



# 2.0 Environmental Analysis

1. 5 2. E 3. L 4. M 5. A	<b>CIAL and ECONOMIC</b> Social Economic Land Use Changes Mobility Aesthetic Effects	Yes [] [] [] [] [] []	No [X] [ ] [X]	Enhance [] [X]	No Inv	Section A.1
1. 5 2. E 3. L 4. M 5. A	Social Economic Land Use Changes Mobility Aesthetic Effects	[]	[ ] [X]	[X]		
2. E 3. L 4. M 5. A	Economic Land Use Changes Mobility Aesthetic Effects	[]	[ ] [X]	[X]		
3. L 4. M 5. A	Land Use Changes Mobility Aesthetic Effects	[]	[X]			
4. M 5. A	Mobility Aesthetic Effects	[]			[]	Section A.2
5. <i>A</i>	Aesthetic Effects			[]	[]	Section A.3
			[]	[X]	[]	Section A.4
		[]	[X]	[]	[]	Section A.5
6. F	Relocation Potential	[]	[]	[]	[X]	Not Applicable
B. CUL	LTURAL					
1. H	Historic Sites/Districts	[]	[X]	[]	[]	Section B.1
2. <i>I</i>	Archaeological Sites	[]	[X]	[]	[]	Section B.2
3. F	Recreational Areas and Protected	[]	[X]	[]	[]	Section B.3
L	Lands					
C. NAT	TURAL					
1. \	Wetlands and Other Surface Waters	[]	[X]	[]	[]	Section 4.5.1
2. <i>A</i>	Aquatic Preserves and Outstanding	[]	[]	[]	[X]	
F	FL Waters					Not Present
3. \	Water Resources	[]	[]	[]	[]	Section 4.5.2
4. \	Wild and Scenic Rivers	[]	[]	[]	[X]	Not Present
5. F	Floodplains	[]	[]	[]	[]	Section 4.5.3
6. (	Coastal Barrier Resources	[]	[]	[]	[X]	Not Present
7. F	Protected Species and Habitat	[]	[X]	[]	[]	Section 4.5.4
8. E	Essential Fish Habitat	[]	[]	[]	[X]	Not Present
D. PHY	YSICAL					
1. H	Highway Traffic Noise	[]	[X]	[]	[]	Section D.1
2. <i>A</i>	Air Quality	[]	[X]	[]	[]	Section D.2
3. (	Contamination	[]	[X]	[]	[]	Section D.3
4. l	Utilities and Railroads	[]	[X]	[]	[]	Section D.4
5. (	Construction	[]	[X]	[]	[]	Section D.5
6. E	Bicycles and Pedestrians	[]	[]	[X]	[]	Section D.6
7. 1	Navigation	[]	[]	[]	[X]	Not Present

#### Notes:

1 Substantial Impacts: Yes = Substantial Impact; No = No Substantial Impact; Enhance =Enhancement; No Inv = Issue absent, no involvement.

2 Supporting information is documented in the referenced section below.



# **3.0 Anticipated Permits**

Permit	Issuing Agency
Environmental Resource Permit (ERP)	SWFWMD
Section 404 of the Clean Water Act	USACE
National Pollutant Discharge Elimination System (NPDES)	FDEP
Gopher Tortoise Relocation Permit (as necessary)	FWC
Incidental Take Permit (as necessary)	FWC
Incidental Take Permit (as necessary)	USFWS

# 4.0 Engineering Analysis

One Build Alternative was considered for this PD&E Study in addition to the No-Build Alternative. The Build Alternative includes the addition of one local lane in each direction, the addition of a signalized intersection at the eastbound 78<sup>th</sup> Street off-ramp, and the relocation of the REL off-ramp from west of US 301 to east of US 301. The engineering analysis conducted as part of this PD&E Study included a review of roadway, structures, drainage, and utility considerations. A summary of the engineering analysis is contained within the Preliminary Engineering Report (PER) available under separate cover.

# 5.0 Commitments

# **Cultural Resources**

- If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project area, construction activities involving subsurface disturbance in the vicinity of the discovery will cease. The Florida Department of State, Division of Historical Resources, Compliance Review Section will be contacted. The subsurface construction activities will not resume without verbal and/or written authorization.
- In the event that unmarked human remains are encountered during construction activities, all work will stop immediately, and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

### **Natural Resources**

- As needed, THEA will perform updated wildlife surveys for the species discussed in this report and other wildlife species, during the project design phase to ascertain the involvement, if any, of listed species.
- The most recent version of the USFWS Standard Protection Measures for the Eastern Indigo Snake will be adhered to during construction of the proposed project.

### **SELMON** EXPRESSWAY East Selmon PD&E Study Project Environmental Impact Report

• If Florida sandhill crane nests are observed during future surveys prior to construction, then a 400-foot buffer will be used if construction occurs during the nesting season (January through July). THEA will coordinate with the FWC during the project construction phase, if necessary.

### **Highway Traffic Noise**

THEA is committed to constructing the noise barriers to serve Greenridge Estates and Century Crosstown Apartments contingent upon the following:

- Detailed noise analysis during the final design process supports the need for, and the feasibility and reasonableness of, providing the noise barriers as abatement.
- The detailed analysis demonstrates that the cost of a noise barrier would not exceed the costeffective criterion of \$42,000 per benefited property.
- All safety and engineering conflicts or issues related to the construction of a noise barrier are resolved.
- The property owners/renters benefited by a noise barrier desire that a barrier be constructed.

#### Contamination

- Level II Contamination Assessment investigations are recommended for any areas that have proposed dewatering or subsurface work activities (e.g., pole foundations, drainage features) occurring adjacent to or at the Medium and High risk sites.
- If dewatering will be necessary during construction, a SWFWMD Water Use Permit will be required.
- The contractor will be held responsible for ensuring compliance with any necessary dewatering permit(s). All permits will be obtained in accordance with Federal, State, and local laws and regulations.

# 6.0 Preferred Alternative

Based on the engineering and environmental comparative analysis documented in this PD&E study, the Preferred Alternative is the Build Alternative. The Build Alternative best meets the project purpose and need by accommodating future travel demands and improving safety.

# 7.0 Approved for Public Availability

(Before public hearing when a public hearing is required)

3,25,29

Date

Tampa Hillsborough Expressway Authority Robert Frey, AICP, Director of Planning and Innovation



# 8.0 Public Involvement

1.  $\Box$  A public hearing is not required.

2.  $\Box$  A public hearing was held on April 18, 2024. The draft PEIR was publicly available, and comments were allowed to be submitted to the contact below until April 29, 2024.

Contact Information: Communications Department Tampa Hillsborough Expressway Authority 1104 East Twiggs Street Suite 300 Tampa, Florida 33602 info@selmonstudies.com

3.  $\Box$  A public hearing was held on and the transcript is available.

4.  $\Box$  An opportunity for a public hearing was afforded and was documented.

# 9.0 Approval of Final Document

This project has been developed without regard to race, color, national origin, age, sex, religion, disability, or family status.

The final PEIR reflects consideration of the PD&E Study and the Public Hearing.

\_\_\_\_/\_\_\_\_/\_\_\_\_

Tampa Hillsborough Expressway Authority Greg Slater, Executive Director Date

#### **RESOLUTION 676**

A RESOLUTION OF THE TAMPA-HILLSBOROUGH COUNTY EXPRESSWAY AUTHORITY APPROVING THE ROUTE MAP AND CORRIDOR MODIFICATIONS REFERRED TO AS THE EAST SELMON CAPACITY IMPROVEMENTS, APPROVING PRIOR BOARD ACTION, APPROVING AND ACCEPTING THE PROJECT ENVIRONMENTAL IMPACT REPORT AND DIRECTING STAFF TO PROCEED WITH DESIGN AND CONSTRUCTION.

WHEREAS, this AUTHORITY is created by Chapter 348, *Florida Statutes*, for the purpose of constructing an expressway system to provide and improve means of access within the metropolitan area of the City of Tampa and in Hillsborough County, including but not limited to the improvement of all approaches, streets, roads, bridges, and avenues of access for such system; and

WHEREAS, at a regularly scheduled meeting on February 24, 2025, this Board was presented with the findings of the Project Environmental Impact Report ("PEIR") for the capacity improvements to a portion of the Lee Roy Selmon Expressway (now known as the "East Selmon Capacity Improvements") which identified the route map and corridor modifications of the Lee Roy Selmon Expressway, and based on the Board's review of the alternative alignments, costs, safety, environmental and long range planning factors set forth in the PEIR, the Board approved the preferred alternatives for the East Selmon Capacity Improvements which are illustrated in the graphics attached hereto as **Exhibit "A"**; and

WHEREAS, after completion of the PEIR and its review by other administrative agencies as required by law, the East Selmon PEIR is now in final form and ready for acceptance by the AUTHORITY; and WHEREAS, the East Selmon Capacity Improvements increase capacity and safety by adding an additional lane in each direction along the local lanes of the Lee Roy Selmon Expressway from the I-4 Connector to US 301 as sufficiently identified and described in **Exhibit** "A" and in the final form of the East Selmon PEIR.

NOW, THEREFORE, BE IT RESOLVED BY THE TAMPA-HILLSBOROUGH COUNTY EXPRESSWAY AUTHORITY, THIS 24th DAY OF FEBRUARY, 2025, AT ITS REGULAR MEETING ASSEMBLED, AS FOLLOWS:

1. The construction and maintenance of the East Selmon Capacity Improvements and related facilities is consistent and compatible with the long-range planning goals and objectives of the AUTHORITY.

2. After due consideration by this Board of the cost, safety and environmental factors associated with the alternative alignments analyzed by the East Selmon PEIR for the East Selmon Capacity Improvements, the alignments identified in **Exhibit "A"** of this Resolution are hereby approved, ratified and confirmed.

3. The AUTHORITY hereby accepts and formally adopts the East Selmon PEIR.

4. Staff is hereby directed to proceed with the preparation of construction plans and any other materials which may be necessary to design, bid and construct the East Selmon Capacity Improvements.

5. To the extent the design of East Selmon Capacity Improvements determines it is necessary and in the public interest for the AUTHORITY to acquire a fee simple or easement interest in or to any lands not presently owned or controlled by the AUTHORITY, staff is hereby authorized and directed to survey, locate, appraise and negotiate the acquisition of said rights-of-way or easement interests by donation, purchase or exchange.

6. Staff is directed to use independent appraisal reports to support all real property acquisitions.

7. All written agreements obtained for any necessary property interests shall be presented to the Board for review and approval.

PASSED AND ADOPTED BY THE TAMPA-HILLSBOROUGH COUNTY EXPRESSWAY AUTHORITY ON THIS 24<sup>th</sup> DAY OF FEBRUARY, 2025.

> TAMPA-HILLSBOROUGH COUNTY EXPRESSWAY AUTHORITY

By:\_

Vincent Cassidy Chairman

ATTEST:

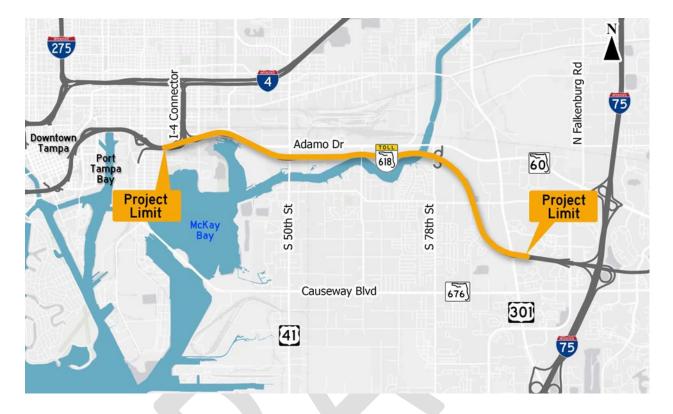
Greg Slater Executive Director

Approved as to legal form and sufficiency:

By:\_

Amy E. Lettelleir, Esq. Chief Legal Officer

# East Selmon PD&E Study Project Location Map:



ISO 9001:2015 CERTIFIED



ENGINEERS • PLANNERS • SCIENTISTS • CONSTRUCTION MANAGERS 4041 Crescent Park Drive • Tampa, FL 33578 • Phone 813-740-2300

# PROFESSIONAL SERVICES AGREEMENT LETTER

February 7, 2025

Tampa Hillsborough Expressway Authority 1104 E. Twiggs Street, Suite 300 Tampa, FL 33602

THEA Authorized Representative: Brian McElroy, Operations Project Manager II

**Subject:** CEI services to oversee the Lakewood Drive Retaining Wall and Sidewalk Repair project Under KCI Contract O-00619, Misc. Design and CEI

KCI Technologies ("KCI") is pleased to submit this professional services proposal (the "Proposal") to Tampa Hillsborough Expressway Authority (THEA) ("Client") for the services (the "Services") described in the Scope of Services section of this Proposal.

# SCOPE OF SERVICES

This Proposal is limited exclusively to the Work as described in this Scope of Services section and anything not expressly described shall be considered expressly excluded from the Work. KCI proposes to perform the Work which is described as follows:

# **1.0 PURPOSE:**

This scope of services describes and defines the Construction Engineering and Inspection (CEI) services which are required for inspection, and materials sampling and testing for the construction project specified above.

# 2.0 ITEMS FURNISHED BY THE CONSULTANT:

# 2.1 Vehicles:

Vehicles will be equipped with appropriate safety equipment and must be able to effectively carry out requirements of this Agreement.

# 2.2 Field Equipment:

Supply survey, inspection, and testing equipment essential to perform services under this Agreement; such equipment includes non-consumable and non-expendable items.

# **3.0 REQUIREMENTS OF THE CONSULTANT:**

### 3.1 **On-site Inspection:**

Monitor the Contractor's on-site construction activities and inspect materials entering into the work in accordance with the plans, specifications, and special provisions for the Construction Contract to determine that the projects are constructed in reasonable conformity with such documents. Maintain detailed accurate records of the Contractor's daily operations and of significant events that affect the work. Provide project management services including meeting management, payment processing, and maintaining contract records. The Client will monitor off-site activities and fabrication unless otherwise stipulated by this Agreement.

Monitor and inspect Contractor's Work Zone Traffic Control Plan if necessary and review modifications to the Work Zone Traffic Control Plan, including Alternate Work Zone Traffic Control Plan, in accordance with the FDOT procedures.

### **3.2 Engineering Services:**

Services shall include maintaining the required level of surveillance of Contractor activities, interpreting plans, specifications, and special provisions for the Construction Contract. Maintain complete, accurate records of all activities and events relating to the project and properly document all project changes. The following services shall be performed

- 1. Inspection Staff will attend Preconstruction meeting and progress meetings as necessary.
- 2. Analyze problems that arise on a project and proposals submitted by the Contractor; work to resolve such issues and process the necessary paperwork.
- 3. Monitor, inspect and document the Lakewood Drive Wall Repair project currently under design by KCA.
- 4. Produce reports, verify quantities, process pay applications, and field measure in accordance with the Purchase order and contractor proposal.
- 5. Photo and video documentation, as required.

# FEES AND PAYMENTS

The following fees are for the performance of the Services listed in the Scope of Services above, The fees listed in this section do not cover any Additional Services, or any other services that are not specifically described as part of the Services.

KCI will submit one invoice after project completion, provided project is less than one month, otherwise the billing will be monthly.

Records of KCI's direct labor costs pertinent to KCI's compensation will be kept in accordance with generally accepted accounting practices. Copies will be made available to Client at cost on request prior to final payment for KCI's Services.

KCI's fee for the Services will be the following hourly rates listed below by personnel classification multiplied by the number of hours worked by each respective person:

Employee	Level	Rate	Hours	Total Cost
Eric Rose	Senior Project Engineer	\$204.32	30	\$6,129.60
Dalton Lefebvre	Project Administrator	\$120.96	100	\$12,096.00
Thomas Henry	Senior Inspector	\$126.13	480	\$60,542.40
Jeff Reed	Inspector	\$75.85	16	\$1,213.60
Zachary Sabo	Contract Support Specialist	\$77.32	30	\$2,319.60
Total	\$82,301.20			

Based upon currently available information, KCI estimates that the cost of the Work listed in the Scope of Services will be approximately \$82,301.20. KCI will not exceed this amount except by prior written authorization from the THEA as Additional Work.

### **ADDITIONAL SERVICES**

Experience indicates that certain additional services ("Additional Services") may be required or necessary that KCI cannot presently determine or estimate. For this reason, the fee for Additional Services is not included in the "Fees and Payments" section of this Proposal. Further, the performance of these Additional Services is not included in the Scope of Services unless expressly described in that section of this Proposal.

These Additional Services are caused by many factors including, but not limited to, the following examples: discretion of the Client and/or its construction contractors possibly from decision to deviate from current policies and standards; or, a reviewing agency/regulator determination. For clarity, Additional Services, for the purposes of this Proposal, include the common understanding and purpose of the terms: extras, change orders, and add-ons.

### FEES AND PAYMENTS FOR ADDITIONAL SERVICES

Fees and payments for Additional Services shall be in addition to any fees and payments for the Services and shall be billed and paid on the same fee and payment terms described for the Services or as mutually agreed upon in writing when the Additional Services are ordered by the Client.

Respectfully,

Eric Rose KCI Practice Leader ISO 9001:2015 CERTIFIED



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# PROFESSIONAL SERVICES AGREEMENT LETTER

February 7, 2025

Tampa Hillsborough Expressway Authority 1104 E. Twiggs Street, Suite 300 Tampa, FL 33602

THEA Authorized Representative: Brian McElroy, Operations Project Manager II

**Subject:** CEI services to oversee the Selmon Drainage Improvements project Under KCI Contract O-00619, Misc. Design and CEI

KCI Technologies ("KCI") is pleased to submit this professional services proposal (the "Proposal") to Tampa Hillsborough Expressway Authority (THEA) ("Client") for the services (the "Services") described in the Scope of Services section of this Proposal.

# SCOPE OF SERVICES

This Proposal is limited exclusively to the Work as described in this Scope of Services section and anything not expressly described shall be considered expressly excluded from the Work. KCI proposes to perform the Work which is described as follows:

# **1.0 PURPOSE:**

This scope of services describes and defines the Construction Engineering and Inspection (CEI) services which are required for inspection, and materials sampling and testing for the construction project specified above.

# 2.0 ITEMS FURNISHED BY THE CONSULTANT:

# 2.1 Vehicles:

Vehicles will be equipped with appropriate safety equipment and must be able to effectively carry out requirements of this Agreement.

# 2.2 Field Equipment:

Supply survey, inspection, and testing equipment essential to perform services under this Agreement; such equipment includes non-consumable and non-expendable items.

# **3.0 REQUIREMENTS OF THE CONSULTANT:**

### 3.1 **On-site Inspection:**

Monitor the Contractor's on-site construction activities and inspect materials entering into the work in accordance with the plans, specifications, and special provisions for the Construction Contract to determine that the projects are constructed in reasonable conformity with such documents. Maintain detailed accurate records of the Contractor's daily operations and of significant events that affect the work. Provide project management services including meeting management, payment processing, and maintaining contract records. The Client will monitor off-site activities and fabrication unless otherwise stipulated by this Agreement.

Monitor and inspect Contractor's Work Zone Traffic Control Plan if necessary and review modifications to the Work Zone Traffic Control Plan, including Alternate Work Zone Traffic Control Plan, in accordance with the FDOT procedures.

### **3.2 Engineering Services:**

Services shall include maintaining the required level of surveillance of Contractor activities, interpreting plans, specifications, and special provisions for the Construction Contract. Maintain complete, accurate records of all activities and events relating to the project and properly document all project changes. The following services shall be performed

- 1. Inspection Staff will attend Preconstruction meeting and progress meetings as necessary.
- 2. Analyze problems that arise on a project and proposals submitted by the Contractor; work to resolve such issues and process the necessary paperwork.
- 3. Monitor, inspect and document the Selmon Drainage Improvements project currently under design by KCA.
- 4. Produce reports, verify quantities, process pay applications, and field measure in accordance with the Purchase order and contractor proposal.
- 5. Photo and video documentation, as required.

# FEES AND PAYMENTS

The following fees are for the performance of the Services listed in the Scope of Services above, The fees listed in this section do not cover any Additional Services, or any other services that are not specifically described as part of the Services.

KCI will submit one invoice after project completion, provided project is less than one month, otherwise the billing will be monthly.

Records of KCI's direct labor costs pertinent to KCI's compensation will be kept in accordance with generally accepted accounting practices. Copies will be made available to Client at cost on request prior to final payment for KCI's Services.

KCI's fee for the Services will be the following hourly rates listed below by personnel classification multiplied by the number of hours worked by each respective person:

Employee	Level	Rate	Hours	Total Cost
Eric Rose	Senior Project Engineer	\$204.32	48	\$9,807.36
Dalton Lefebvre	Project Administrator	\$120.96	200	\$24,192.00
Thomas Henry	Senior Inspector	\$126.13	1000	\$126,130.00
Jeff Reed	Inspector	\$75.85	16	\$1,213.60
Zachary Sabo	Contract Support Specialist	\$77.32	48	\$3,711.36
Total	\$165,054.32			

Based upon currently available information, KCI estimates that the cost of the Work listed in the Scope of Services will be approximately \$165,054.32. KCI will not exceed this amount except by prior written authorization from the THEA as Additional Work.

### **ADDITIONAL SERVICES**

Experience indicates that certain additional services ("Additional Services") may be required or necessary that KCI cannot presently determine or estimate. For this reason, the fee for Additional Services is not included in the "Fees and Payments" section of this Proposal. Further, the performance of these Additional Services is not included in the Scope of Services unless expressly described in that section of this Proposal.

These Additional Services are caused by many factors including, but not limited to, the following examples: discretion of the Client and/or its construction contractors possibly from decision to deviate from current policies and standards; or, a reviewing agency/regulator determination. For clarity, Additional Services, for the purposes of this Proposal, include the common understanding and purpose of the terms: extras, change orders, and add-ons.

### FEES AND PAYMENTS FOR ADDITIONAL SERVICES

Fees and payments for Additional Services shall be in addition to any fees and payments for the Services and shall be billed and paid on the same fee and payment terms described for the Services or as mutually agreed upon in writing when the Additional Services are ordered by the Client.

Respectfully,

Eric Rose KCI Practice Leader

# HNTB PR 2025XXXX HI-0304 C-XX Drainage Ditch Improvements Support (3/1/25 - 6/30/25) Scope Of Services

#### **Purpose & Need**

With their small in-house staff, THEA requires support to provide engineering and administrative support to meet the requirements of the THEA Drainage Ditch Improvements project. Services from 3/1/25 - 6/30/25.

#### Scope

HNTB shall provide administrative/program management support services to oversee the THEA Drainage Ditch Improvements project. These services include:

 Coordinate and review THEA Drainage Ditch Improvements project design along with providing additional survey information. Attendance as requested by THEA at Board Meetings, Staff Meetings and other miscellaneous meetings.
 Assist THEA during the advertisement and procurement process. Support

THEA during the construction of the project.

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PROJECT DESCRIPTION:		Express	way Authority							PR 202										
GEC CONTRACT NO.							Dra	inage I	Ditch Improve	ments S	upport (3/1/25	- 6/30/	25)							
	HI-0304 C-XX																			
PRIME CONSULTANT:	HNTB Corporation																			
		Sr. Tec	hnical Advisor	Project	Manager	Chief E	ng./Planner	Sr. E	ng./Planner	Proi.	Eng./Planner	Enai	ineer/Planner	Sr.	Technician		Clerical		TOTAL	
ACTIVITY					-	Sr. Pro	. Eng.		0	,	5	9						Manhours	Salary Cost	Avg.
		Man	Hourly Rate	Man	Hourly Rate		Hourly Rate	Man	Hourly Rate	Man	Hourly Rate	Man	Hourly Rate		Hourly Rate	Man	Hourly Rate		By	Hourly
		Hours	\$ 173.37	Hours	\$ 144.54	Hours	\$ 102.19	Hours	\$ 79.95	Hours	\$ 61.62	Hours	\$ 48.21	Hours	\$ 38.95	Hours	\$ 22.66	Activity	Activity	Rate
Drainage Ditch Improvement	Desing Oursest		\$0.00	24	\$3.468.96	16	\$1.635.04	16	\$1.279.20	10	\$616.20	0	\$385.68	0	\$311.60		\$181.28	90	\$7.877.96	\$87.53
Drainage Ditch Improvement	s Design Support		\$0.00	24	\$3,468.96	10	\$1,635.04	16	\$1,279.20	10	\$010.20	8	\$385.68	8	\$311.60	8	\$181.28	90	\$7,877.90	\$87.53
Drainage Ditch Improvement	s Procure/Const		\$0.00	24	\$3.468.96	24	\$2,452,56	24	\$1,918.80	16	\$985.92	12	\$578.52	12	\$467.40	8	\$181.28	120	\$10,053.44	\$83.78
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Total	Total Salary																			
Man Hours	[(MHxHR)]	0	\$0.00	24	\$6,937.92	16	\$4,087.60	16	\$3,198.00	10	\$1,602.12	8	\$964.20	8	\$779.00	8	\$362.56	210	\$ 17,931.40	\$85.39
														Racio Ar	ctivities Maximu	um Limit	ing Ecos (Sal	ny Costa)	\$17.931.40	
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															OUCH LIG			Multiplier	\$49,849.29	
Direct Expenses			4.37%		\$ 783.60								SUBTO	OTAL (O	Cost Elements				\$49,849.29	
																	d) Direct Reim		\$783.60	
														Subconsultant- Element Survey (S		/ey (SBE)	\$74,308.71			
																	Total Pro	iect Cost	\$124.941.60	
		1											1			Maxir	num Limiting		\$124,941.60	
																	J			



Date: 12/11/2024

From: Gary Holland

Subject: Justification Memo Eaton UPS & EBM Battery Replacement

Background:

THEA's Roadside Toll Collection System is 14 years and will need to operate for 3 more years.

THEA's toll collection system requires UPSs (Uninterrupted Power Supply) and EBMs (Extended Battery Module) to ensure continued connectivity and operation.

The existing UPSs and EBMs are 7 years old and have a life span of 3 to 5 years.

Replacing the UPSs and EBMs is a proactive measure to mitigate power issues at THEA's Toll Sites and Headquarters, ensuring that the toll system remains operational for the next 3 years, until the new RTCS is installed and ready to go live.

Proposal:

TransCore, THEA's roadside vendor, proposes to provide labor, materials, and coordination efforts required for the replacement of all battery cartridges in UPSs and EBMs at THEA's toll sites and Headquarters, excluding the 3 SWE (Selmon West Extension) sites.

Justification:

1. Business Continuity:

o Replacing the UPSs and EBMs is a proactive measure to mitigate power issues at THEA's Toll Sites and Headquarters, ensuring that the system remains operational for the next years, until the new RTCS is installed and ready to go live.

2. Cost Efficiency:

o The cost of replacing all battery cartridges in UPSs and EBMs is justified by mitigating the risk of revenue loss caused by interrupted power at THEA's toll gantries and Headquarters.

1104 East Twiggs Street Tampa Florida 33602 813-272-6740 www.tampa-xway.com



Conclusion:

Approving this proposal will allow TransCore to proceed with the replacement of all battery cartridges in UPSs and EBMs at THEA's Toll Sites and Headquarters, excluding the 3 sites at SWE.

**Recommendation:** 

I recommend that THEA approve the proposal from TransCore to provide the labor, materials, and coordination efforts required for the replacement of all battery cartridges in UPSs and EBMs at all sites and Headquarters, excluding the SWE sites.

Gary Holland

**Toll Systems Manager** 



# PROPOSAL

# Eaton UPS & EBM Battery Replacement

Date: 12/10/2024

# **Prepared for:**

Tampa Hillsborough Expressway Authority

# **Prepared by:**

Michael Valdes 305-684-4720 Michael.Valdes@TransCore.com

# Contents:

Scope of Services



### Scope of Services Eaton UPS and EBM Battery Replacement Tampa Hillsborough Expressway Authority

#### PURPOSE

This Scope of Services defines the labor, materials, and coordination efforts required for the replacement of all battery cartridges in UPSs and EBMs at all sites, excluding the SWE sites. The batteries, now approximately seven years old, exceed their life expectancy of three to five years. TransCore will perform all the necessary tasks to ensure the successful completion of these replacements.

#### WORK ACTIVITIES TO BE PERFORMED

- Equipment Removal and Replacement
  - UPS Battery:
    - The site power will be bypassed using the PowerPass Distribution Module (PPDM).
    - The UPS will be shut down, and the existing battery cartridge will be removed and replaced with a new cartridge.
    - The UPS will then be powered back on, tested, and restored to UPS-protected status.

#### • EBM Batteries:

- The EBMS will be disconnected from the UPS.
- Two battery cartridges will be removed and replaced with new cartridges.

#### • Timeframe and Resources

- To minimize risk and potential revenue loss, all battery replacements will be performed during nighttime hours. This approach reduces the likelihood of disruptions during peak operational times.
- Small Sites (3 Cartridges Each)
  - Sites: 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70
- Large Sites
  - Site 75 & Qumulo Server Rack: 9 cartridges each.
  - HQ Server Rack: 7 cartridges.



#### ASSUMPTIONS

The following assumptions were made with consideration for both the Scope of Work and pricing:

- Revenue Impact: All possible precautions will be taken to minimize the risk of revenue loss during installation and configuration activities. However, due to the complexities of working with the cabinet power system, there is always a risk of unknowns that may impact operations. TransCore will not be held responsible for any revenue loss.
- Equipment Procurement: TransCore will handle the procurement of all required battery cartridges.
- Timeline Contingency: Should any unexpected technical or logistical issues arise, a contingency period may be necessary to allow for troubleshooting or additional configuration.

#### **REIMBURSEMENT METHOD**

The compensation method for this Task Work Order will be based on Lump Sum.

Equipment						
Resource	Qty	Cost	Subtotal	Markup (15%)		Total
Eaton Replacement Battery Cartridge	64	\$ 735.00	\$ 47,040.00	\$	7,056.00	\$ 54,096.00
Equipment Subtotal			\$ 47,040.00	\$	7,056.00	\$ 54,096.00
Тах			\$ 3,528.00			
Freight			\$ 1,088.00			
Equipment Total Cost	\$ 51,656.00	\$	7,056.00	\$ 58,712.00		
Labor						
Resource	Hou	ſS	Rate			Total
Senior Technician	68		\$	174.00		\$ 11,832.00
Junior Program Manager	2		\$		207.00	\$ 414.00
Labor Total Cost	70					\$ 12,246.00
				Tota	al	\$ 70,958.00

#### **PAYMENT MILESTONES**

- 25% Mobilization
- 25% Upon receipt of equipment
- 50% Upon final approval from THEA

#### LENGTH OF SERVICES AND RESTRICTIONS

- TransCore will provide all the required equipment. Delays in procurement or delivery may impact the project schedule.
- Any modifications to the Scope of Services or additional requirements will require a formal change order and may incur additional charges.

#### **PROPOSED SCHEDULE**

Week	Sites
Week 1	Sites 10, 15, 20, 25, 30, 35
Week 2	Sites 40, 45, 50, 55, 60, 65
Week 3	Site 70, HQ Server Rack Site 75, Qumulo Server Rack

From: Felipe VelascoDate: 2/7/2025Subject: Justification for Adding a Distribution Switch for VxRail Cluster

#### **Overview:**

THEA's Toll Ops network architecture relies on a single core switch to handle all internal routing, VLANs, and critical network services. The VxRail cluster, which is an essential component of our production environment, currently utilizes 10 direct connections to the core switch. This setup presents challenges in scalability and redundancy. To mitigate these risks and enhance network reliability, we propose the implementation of a new distribution switch within the rack housing the VxRail cluster.

#### **Current Challenges:**

- 1. **Single Point of Failure:** The existing architecture directly ties the VxRail cluster to the core switch. Any maintenance or failure of the core switch results in a complete outage of the VxRail cluster, severely impacting production.
- 2. **Limited Redundancy:** There is currently no intermediary network layer to provide failover capabilities, increasing the risk of downtime.

#### **Proposed Solution:**

We propose implementing a new distribution switch within the rack housing the VxRail cluster, which will aggregate VxRail connections and provide 4 uplinks to the core switch. This solution offers several key benefits:

- 1. **Enhanced Redundancy:** The VxRail cluster will remain operational even if the core switch experiences an issue, reducing downtime risk for critical production systems.
- 2. **Scalability:** This architecture allows for easier expansion and management of additional network resources without overwhelming the core switch.
- 3. **Reduced Maintenance Impact:** Network maintenance on the core switch will have a minimal impact on VxRail, ensuring continued availability of critical virtual machines.

#### **Cost Justification:**

While this proposal requires an investment in a new distribution switch, the benefits of increased network resilience, reduced downtime, and optimized performance outweigh the costs. The potential financial impact of VxRail downtime—considering lost productivity, service disruptions, and recovery efforts—far exceeds the cost of this infrastructure improvement.

#### **Conclusion:**

Adding a distribution switch for the VxRail cluster is a strategic investment in our network's reliability and performance. It mitigates the risks of downtime, optimizes traffic distribution, and ensures critical VMs remain accessible even during core switch maintenance. We recommend moving forward with this proposal to enhance our infrastructure's stability and efficiency.



Proposal for HQ VxRail Redundant Switch Installation

Date: 1/8/2025

**Prepared for:** Tampa Hillsborough Expressway Authority

Prepared by: Michael Valdes 305-684-4720 Michael.Valdes@TransCore.com

**Contents:** Scope of Services





### Scope of Services HQ VxRail Redundant Switch Configuration and Installation Tampa Hillsborough Expressway Authority

#### PURPOSE

The purpose of this proposal is to enhance the connectivity and redundancy of THEA's HQ VxRail cluster by installing a single distribution switch. Currently, the five VxRail nodes are connected directly to the core switch (Cisco 4507R+E) via ten redundant 10Gb SFP+ connections (two per node). These connections utilize five ports on each of the core switch's 10Gb line cards, consuming a total of 10 ports.

The new distribution switch will:

- Provide an additional layer of redundancy for the VxRail cluster connections.
- Facilitate future expansion by freeing up 10Gb ports on the core switch.
- Enable critical VMs hosted on the VxRail cluster to maintain connectivity during planned core switch maintenance, such as firmware updates.

#### WORK ACTIVITIES AND TASK DETAILS

#### Activities to be Performed

- Network Switch Configuration:
  - Configure, troubleshoot, and validate the new distribution switch.
  - Ensure compatibility with the VxRail cluster and core switch.
  - Implement redundant uplinks to the core switch and inter-node connectivity.
- Physical Installation:
  - Mount and secure the distribution switch in the server cabinet adjacent to the main HQ rack.
  - Run new fiber and Ethernet cables between the VxRail nodes, the distribution switch, and the core switch.
  - Fish cables through the subfloor for clean and organized cable management.

#### • Testing and Validation:

- Validate the connectivity and redundancy of the VxRail cluster through the new distribution switch.
- Perform failover testing to ensure uninterrupted communication between VxRail nodes.



#### **Task Details**

- Switch Configuration: Estimated 3.5 days.
- Installation and Cabling: Estimated 1 day.
- **Testing and Validation:** Estimated 1 day.

#### ASSUMPTIONS

The following assumptions were made with consideration for both the Scope of Work and pricing:

- Equipment Procurement: TransCore will handle the procurement of all required equipment.
- Timeline Contingency: Should any unexpected technical or logistical issues arise, a contingency period may be necessary to allow for troubleshooting or additional configuration.

#### **REIMBURSEMENT METHOD**

The compensation method for this Task Work Order will be **Lump Sum**, covering all equipment and labor costs.

Equipment										
Redundant Switch for HQ VxRail										
Part	Qty	Cost	Subtotal	Markup (15%)	Total					
Catalyst 9300X 24x25G Fiber Ports, modular uplink Switch	1	\$ 20,745.00	\$ 20,745.00	\$ 3,111.75	\$ 23,856.75					
CX LEVEL 1 8X7NCDCatalyst 9300X 24x25G Fiber Ports modul	1	\$ 12,952.00	\$ 12,952.00	\$ 1,942.80	\$ 14,894.80					
715W AC 80+ platinum Config 1 SecondaryPower Supply	1	\$ 1,038.00	\$ 1,038.00	\$ 155.70	\$ 1,193.70					
CX LEVEL 1 SW SUB C9300 DNA Essentials	1	\$ 155.00	\$ 155.00	\$ 23.25	\$ 178.25					
DNA Essentials 5 Year License	1	\$ 847.00	\$ 847.00	\$ 127.05	\$ 974.05					
Catalyst 9300 2 x 40G/100G Network Module QSFP+/QSFP28	1	\$ 2,116.00	\$ 2,116.00	\$ 317.40	\$ 2,433.40					
Twinax Cables SFP-H10GB-CU1M	10	\$ 110.00	\$ 1,100.00	\$ 165.00	\$ 1,265.00					
		Total	\$ 38,953.00	\$ 5,842.95	\$ 44,795.95					
Тах			\$ 2,921.48							
Shipping			\$ 1,947.65							
Equipment Total Cost			\$ 43,822.13	\$ 5,842.95	\$ 49,665.08					
Labor										
Resource	Hour	s	Rate		Total					
Senior Technicians	18		\$	174.00	\$ 3,132.00					
Senior Engineer	36		\$	275.00	\$ 9,900.00					
Junior Program Manager	4		\$	207.00	\$ 828.00					
Labor Total Cost	58				\$ 13,860.00					
				Total Cost	\$ 63,525.08					



#### **PAYMENT MILESTONES**

- 50% Mobilization
- 50% Upon final approval from THEA

#### LENGTH OF SERVICES AND RESTRICTIONS

- All tasks are expected to be completed within Five (5) business days from the start of the project. This includes configuration, installation, and testing.
- The schedule for this effort will be coordinated with the relevant stakeholders.
- TransCore's work will be performed Non-Peak Hours.
- TransCore will provide the required equipment, with the understanding that any delays in procurement or delivery of these items may cause delays in the installation process.
- Any changes to the scope of work, including additional requirements or modifications, will require a formal change order.
- Any changes not included in this Scope of Services will be subject to additional charges.

#### **PROJECT SCHEDULE**

Phase	Activities	Duration	
Planning and Preparation	Procurement of equipment and receiving of equipment	2 business days	
Configuration	Configuration of Switch by network engineers	3.5 business days	
Physical Installation	Installation and cabling by technicians	1 business day	
Testing and Validation	Testing and validation of connections and setup	1 business day	
Total Duration		~5-6 business days	

All quoted prices are valid for 30 days from the date of this proposal. TransCore reserves the right to adjust materials pricing beyond this period if market conditions or supplier costs change.

From: Felipe VelascoDate: 2/7/2025Subject: Justification for Adding Top-of-Rack Switches for Qumulo Storage Array

#### **Overview:**

THEA's Toll Ops network infrastructure relies on a single core switch for all internal routing, VLANs, and critical network services. The Qumulo storage array, a key component of our storage environment, utilizes 10 connections to the core switch. This setup presents scalability and redundancy challenges that could impact system availability. To address these concerns, we propose implementing two top-of-rack (ToR) switches within the rack housing the Qumulo storage array.

#### **Current Challenges:**

- 1. **Single Point of Failure:** The reliance on a single core switch means that any maintenance, failure, or outage results in complete downtime for the Qumulo storage array and potentially other critical services.
- 2. Limited Redundancy & Flexibility: The current architecture does not allow for an optimized failover mechanism in case of hardware failure or planned maintenance.

#### **Proposed Solution:**

We propose installing two top-of-rack switches within the rack containing the Qumulo storage array. This would enable the following improvements:

- 1. **Increased Redundancy:** The Qumulo storage array would connect to the ToR switches, which would then uplink to the core switch via four connections. This configuration ensures that in the event of core switch maintenance or failure, the critical systems maintain internal connectivity.
- 2. **Scalability:** The addition of ToR switches allows for future expansion of storage or other critical services without overloading the core switch.
- 3. **Reduced Impact of Maintenance:** Routine maintenance on the core switch will no longer result in complete downtime of critical systems, as internal traffic can continue to operate.

#### **Cost Justification:**

While this proposal requires an investment in additional switches, the benefits outweigh the costs due to the increased network reliability and reduced downtime risk. The cost of downtime—both in terms of lost productivity and potential data accessibility issues—far exceeds the investment required for this improvement.

#### **Conclusion:**

Implementing two top-of-rack switches for the Qumulo storage array will significantly improve network resilience and provide a scalable foundation for future growth. We recommend approval of this proposal to enhance our internal network efficiency and reliability.



Proposal for Qumulo Top-of-Rack Switches

Date: 1/8/2025

**Prepared for:** Tampa Hillsborough Expressway Authority

Prepared by: Michael Valdes 305-684-4720 Michael.Valdes@TransCore.com

**Contents:** Scope of Services





### Scope of Services Qumulo Top-of-Rack Switch Configuration and Installation Tampa Hillsborough Expressway Authority

#### PURPOSE

The purpose of this proposal is to improve the connectivity and resource utilization of THEA's Qumulo server rack by installing two stacked top-of-rack (ToR) switches. Currently, the Qumulo equipment connects directly to the core switch in the main HQ server rack via ten redundant fiber connections. This setup utilizes 10 of the 24 available 10Gb ports across two line cards, limiting port availability for other essential connections. By implementing the proposed solution, we will reduce the number of connections to the core switch from 10 to 4, while ensuring redundancy and scalability.

This initiative will:

- Optimize port usage on the core switch.
- Enhance redundancy and network stability.
- Streamline maintenance and future scalability

#### WORK ACTIVITIES AND TASK DETAILS

#### Activities to be Performed

- Network Switch Configuration:
  - Configure, troubleshoot, and validate the two new ToR switches.
  - Ensure compatibility with the Qumulo server rack and core switch.
  - Implement redundancy and uplink configurations.
- Physical Installation:
  - Mount and secure the ToR switches in the Qumulo server rack.
  - Run new fiber and Ethernet cables between the ToR switches and the core switch.
  - Perform cable management to maintain a clean and efficient layout.

#### **Task Details**

- Switch Configuration: Estimated 3.5 days.
- Installation and Cabling: Estimated 1 day.
- **Testing and Validation:** Estimated 1 day.



#### ASSUMPTIONS

The following assumptions were made with consideration for both the Scope of Work and pricing:

- Equipment Procurement: TransCore will handle the procurement of all required equipment.
- Timeline Contingency: Should any unexpected technical or logistical issues arise, a contingency period may be necessary to allow for troubleshooting or additional configuration.

#### **REIMBURSEMENT METHOD**

The compensation method for this Task Work Order will be **Lump Sum**, covering all equipment and labor costs.

Equipment								
Top Of Rack Switch for Qumulo								
Part	Qty	Cost	Subtotal Markup (15%)		Total			
Nexus 9300 48p 1/10/25G, 6p 40/100G, MACsec,SyncE	2	\$ 12,483.00	\$ 24,966.00	\$ 3,744.90	\$ 28,710.90			
CX LEVEL 1 8X7NCD Nexus 9300 48p 1/10/25G, 6p 40/100G, MACse	2	\$ 8,701.00	\$ 17,402.00	\$ 2,610.30	\$ 20,012.30			
Additional memory of 16GB for Nexus Switches	2	\$ 527.00	\$ 1,054.00	\$ 158.10	\$ 1,212.10			
DCN Advantage Term N9300 XF, 3Y	2	\$ 17,946.00	\$ 35,892.00	\$ 5,383.80	\$ 41,275.80			
Twinax Cables SFP-H10GB-CU1M	10	\$ 40.00	\$ 400.00	\$ 60.00	\$ 460.00			
		Total	\$ 79,714.00	\$ 11,957.10	\$ 91,671.10			
Тах			\$ 5,978.55					
Shipping			\$ 3,985.70					
Equipment Total Cost			\$ 89,678.25	\$ 11,957.10	\$ 101,635.35			
Labor								
Resource	Hour	s	Rate	Total				
Senior Technicians	18		\$	174.00	\$ 3,132.00			
Senior Engineer	36		\$	275.00	\$ 9,900.00			
Junior Program Manager	4		\$	207.00	\$ 828.00			
Labor Total Cost	58				\$ 13,860.00			
				Total Cost	\$ 115,495.35			

#### **PAYMENT MILESTONES**

- 50% Mobilization
- 50% Upon final approval from THEA

#### LENGTH OF SERVICES AND RESTRICTIONS

- All tasks are expected to be completed within Five (5) business days from the start of the project. This includes configuration, installation, and testing.
- The schedule for this effort will be coordinated with the relevant stakeholders.



- TransCore's work will be performed Non-Peak Hours.
- TransCore will provide the required equipment, with the understanding that any delays in procurement or delivery of these items may cause delays in the installation process.
- Any changes to the scope of work, including additional requirements or modifications, will require a formal change order.
- Any changes not included in this Scope of Services will be subject to additional charges.

#### **PROJECT SCHEDULE**

Phase	Activities	Duration		
Planning and Preparation	Procurement of equipment and receiving of equipment	2 business days		
Configuration	Configuration of ToR switches by network engineers	3.5 business days		
Physical Installation	Installation and cabling by technicians	1 business day		
Testing and Validation	Testing and validation of connections and setup	1 business day		
Total Duration		~5-6 business days		

All quoted prices are valid for 30 days from the date of this proposal. TransCore reserves the right to adjust materials pricing beyond this period if market conditions or supplier costs change.

From: Felipe Velasco Date: 2/7/2025 Subject: Justification for Replacing End-of-Life Firewalls

#### **Overview:**

THEA's Toll Ops network relies on two firewalls that are approaching their end of life. These firewalls serve as the primary line of defense against cyber threats, unauthorized access, and potential breaches. Maintaining a robust and secure network infrastructure is critical to ensuring compliance, operational stability, and data integrity. To address these concerns, we propose replacing the existing firewalls with state-of-the-art Palo Alto firewalls, which are recognized as the most secure and advanced firewall solutions available today.

#### **Current Challenges:**

- 1. **End-of-Life Status:** The current firewalls will soon reach the end of their vendor-supported lifecycle, meaning they will no longer receive firmware updates, security patches, or technical support, leaving our network vulnerable to emerging threats.
- 2. **Security Risks:** Without timely updates and patches, the likelihood of successful cyberattacks increases, putting sensitive data and critical systems at risk.
- 3. **Audit Findings:** Recent security audits have identified vulnerabilities associated with outdated firewall technology. Addressing these findings is essential to maintaining compliance and safeguarding our infrastructure.
- 4. **Performance Limitations:** The existing firewalls may not have the processing capacity to handle the growing network demands and evolving security threats efficiently.

#### **Proposed Solution:**

We propose replacing the current firewalls with next-generation Palo Alto firewalls. These firewalls offer the following advantages:

- 1. **Advanced Threat Protection:** Palo Alto firewalls provide superior security features, including deep packet inspection, intrusion prevention, and other security features.
- 2. **Continuous Vendor Support:** The new firewalls will receive regular updates, patches, and technical support, ensuring long-term security and reliability.
- 3. **Enhanced Compliance:** Implementing industry-leading security measures will address existing audit findings and help prevent future compliance issues.
- 4. **Scalability:** These firewalls will support future growth and evolving security requirements, making them a long-term investment in network stability.

#### **Cost Justification:**

While the initial investment in Palo Alto firewalls is significant, the cost of a security breach, compliance penalties, and operational downtime far exceed the expense of upgrading to a more secure infrastructure. Additionally, proactive security enhancements reduce the likelihood of costly incident response and recovery efforts.

#### **Conclusion:**

Replacing our end-of-life firewalls with Palo Alto firewalls is a necessary step to protect our internal network, ensure compliance, and enhance overall cybersecurity. This investment will provide long-term benefits by reducing security risks, improving network efficiency, and maintaining vendor support. We recommend proceeding with this upgrade to strengthen our network's security and resilience.



# **Proposal for Firewall Upgrade**

Date: 11/19/2024

# Prepared for:

Tampa Hillsborough Expressway Authority

# Prepared by:

Michael Valdes 305-684-4720 Michael.Valdes@TransCore.com 

# **Contents:**

Scope of Services Project Schedule

# SCOPE OF SERVICES FIREWALL UPGRADE PROJECT PALO ALTO FIREWALL INSTALLATION AND MIGRATION

#### PURPOSE

This document outlines the Scope of Services for the setup, configuration, installation, migration, and testing of two new Palo Alto firewalls, replacing the existing Cisco ASA firewalls. The objective is to ensure a seamless transition to the new firewall system while maintaining network security and performance.

#### ABBREVIATIONS

ACL	Access Control List
AD	Active Directory
DAC	Direct Attachment Cable
DNS	Domain Name Services
DR	Disaster Recovery
НА	High-Availability
HVAC	Heating, Ventilation, and Air Conditioning
ISP	Internet Service Provider
MM	Multi-Mode
NAT	Network Address Translation
PA	Palo Alto
SM	Single-Mode
SMFO	Single-Mode Fiber Optic
TBD	To Be Determined
VM	Virtual Machine

#### WORK ACTIVITIES TO BE PERFORMED

This Task Work Order provides for the following work to be completed as described below:

### PROCUREMENT

- Two PA Firewalls with associated licenses
  - Suggested model: Palo Alto Networks PA-1410
  - Firewall licenses
    - Virtual systems license bundle adds capability of having multiple virtual firewalls on PA hardware.
    - PA security license bundle licenses (subscription-based)
      - Advanced Threat Prevention
      - Advanced URL Filtering



- Advanced Wildfire
- DNS Security
- SD-WAN
- PA remote access VPN licensing (subscription-based) Supports remote connectivity to the toll system
  - GlobalProtect VPN
- Support agreement licensing for technical support of the firewall hardware and software
- NOTE: The equipment quote is valid until 12/31/2024. If a purchase has not been made by this date, the quote will need to be refreshed, which may result in updated pricing and availability.
- System cabling
  - DAC cable (used for connecting firewall units together in an HA configuration)
  - o 1Gbps and 10Gbps Fiber optic transceivers
  - SM/MM fiber jumpers, as appropriate
  - CAT6 cables (slimline preferred)
- Other associated network hardware and cabling that may be needed for other potential integration efforts

### ASSUMPTIONS/CONSIDERATIONS

The following assumptions were made with consideration for both the Scope of Work and pricing based on previous discussion:

- The goal of this scope is to physically replace the existing Cisco ASA firewalls with new Palo Alto firewalls and generally provide the same level of firewall services that the current Cisco ASA firewalls provide. Detailed system hardening or enhancement to basic services would be under another scope.
- The new Palo Alto firewall pair will ultimately take the place of the external firewall at Site 10 and the internal firewall at THEA HQ.
- The new replacement firewall pair will be installed in parallel with the existing production firewall, with an eventual cutover from the current production firewall to the new firewall. This will allow the maintenance of uninterrupted communications in production while the configuration and integration of the new firewall equipment is taking place.
- The new replacement firewall pair will be installed in a rack at HQ.
- Once the initial configuration of the new firewall is complete and determined to be ready to assume responsibility for production communications, one or more cutover windows will be scheduled as needed to perform this.
- Network connections from the ISP demarcation point to the firewall will be able to, at a minimum, support 1Gbps full-duplex connections.
- Network connections from the new PA firewalls to the core switch will be 10Gbps MM fiber connections. Each 10Gbps fiber connection will be to a different line card on the core switch for redundancy.
  - NOTE: This may require some network reconfiguration of the current infrastructure if the ports aren't currently available.



- Existing ISP network terminations will be relocated or extended to THEA HQ for physical security reasons.
  - If the connection is extended from Site 10 to THEA HQ, it's anticipated that each ISP will ultimately have a separate dedicated fiber path from Site 10 to THEA HQ (2 fibers per connection x 2 ISP providers = 4 fiber strands) that terminate in the patch panels at Site 10 and THEA HQ's server room. This will ultimately remove any traffic destined for outbound access from traveling into the ring to be relayed out.
  - If it's desired to deliver ISP communications to two different endpoints simultaneously (e.g., THEA HQ and a DR site), then additional or different network equipment may need to be procured and provisioned, along with the provisioning of additional fiber strands.
- It's assumed that the power and heat load of the firewall, in the context of the server room, will be a negligible additional load to the current power and HVAC infrastructure. No additional power or HVAC capacity increase activities are expected as part of this deployment.

# TASK DETAILS

### 1. System Design/Planning/Investigation

The initial design and planning will set the roadmap for migrating from the old firewall pair to the new firewall pair to achieve THEA's security goals.

- Physical infrastructure site review
  - $\circ$  New firewall location survey
    - Location of new installation (i.e., Server room, placement in existing rack)
    - Site power
  - Availability of outside fiber optic cable infrastructure (fiber strands and patch panel ports) to backhaul the ISP demarcation points from Site 10 to THEA HQ (if needed)
  - o Review of legacy internal firewall connections
- Review of firewall connectivity and configuration (both current and proposed)
  - Current firewall security zones
  - Network routing
  - VPN remote access
- Review of any ISP connectivity migration needs
  - Review of existing ISP connections
  - Availability of public IPs on each ISP for new PA firewall units
  - o Discussion of direction of future ISP connectivity
    - Option #1: Relocate/extend both ISP connections to THEA HQ
    - Option #2: Relocate/extend both ISP connections to THEA HQ and other location (DR TBD)
- Review of current system operations and desired security goals and how those would factor into the new firewall replacement
  - Identification of any security concerns or issues that would need to be addressed during and after the migration (e.g., long-term log retention and analysis)



- Design and planning of what future network/VM segmentation is needed to meet and achieve THEA's security goals
- Determining the plan for deployment of, and timing for, the migration of any VMs to other networks.
- System Installation/Deployment Plan
  - o Initial development of NAT/ACL rules to be put into the new firewall during Phase 3 and 4
  - Develop a connectivity diagram of the proposed installation to go by for installation.
    - This diagram will be modified to reflect as-built conditions after the successful cutover from the legacy firewall to the new firewall.

### 2. Customer Site Preparation

After the site investigations and system design/planning are done, any work needed to prepare the customer site for the new firewall installation will be performed. This will include items such as:

- Network configuration changes (e.g., creation of new VLANs, preliminary adjustments to routing)
- Material procurement for network physical infrastructure changes, as needed (e.g., fiber or network connectivity, adjustment of equipment racks, provisioning of new power outlets)
- Implementation of any preparatory infrastructure changes needed at THEA to support the items above, along with verification once the changes are complete
  - Coordination with ISP providers for the allocation/provisioning of new IP addresses used by the new firewalls
  - Fiber optic cable plant modification
  - o Server room rack/PDU adjustments
  - Provisioning of any needed test VMs in the toll system environment
  - Reconfiguration of 10Gbps network connections to accommodate new firewall connections to the core switch
- Verification that resources are in-place and ready for on-site installation

# 3. Initial Core System Procurement/Configuration (Off-Site Config)

The initial base configuration will consist of the initial procurement of the new network firewalls and supporting network equipment, and initially prepare the new firewalls for installation at the customer's site and verify all the connectivity is present and active before going to the field. This configuration will be done at the TransCore-Orlando office and involves a small-scale mock-up of the THEA network along with some test virtual machines to test some basic connectivity between the security zones set up in the firewall. Initial setup items include:

- Procurement of new PA and other supporting network equipment to be installed at THEA
- Installation/setup of new hardware in the TransCore-Orlando configuration area
- Basic network setup of the PA firewalls
- Registering the new firewall units and licenses with Palo Alto
- Establish active-standby HA connectivity between the new physical units
- Create virtual firewall instances for perimeter and segmentation firewall instances



- Verify Internet connectivity through the new firewall equipment
- Configure multi-ISP capabilities
- Initial preliminary set up of general NAT and ACL policies (both security and base core system connectivity)

### 4. On-Site Installation/Integration

During this phase, the equipment will be transported from the TransCore-Orlando office to the customer's site and installed. After installation into the customer's site is complete, the new firewall pair will be integrated into the toll system and run in parallel to the old firewall while system integration work commences. After the core system integration, migration of individual components (e.g., B2B VPN tunnels) to the new firewall pair will start.

- System integration work
  - o Connection into toll system physical infrastructure
  - Adjustment to configuration of test VM(s) to test connectivity through new firewall (as needed)
  - o Connection into the toll system firewall ISPs and verify connectivity to Internet
  - Integration of firewalls into current AD infrastructure
  - o Integration of the firewalls into the network's dynamic routing infrastructure
  - o Creation and modification of additional NAT and ACL policies
  - o Integration of new firewalls into THEA dynamic routing infrastructure

#### 5. Migration of Services to New Firewall

When the new firewall is configured and ready for assuming an active role in the network, several maintenance windows will be scheduled accordingly to migrate system services. System services to be migrated include:

- B2B VPN tunnels
- Internet connectivity of applicable toll system servers

#### 6. SSL VPN Provisioning

During this phase, user remote access VPN functionality will be configured, provisioned, and tested. A "how-to" document will be prepared to provide to SSLVPN users to demonstrate how to install and use the new GlobalProtect VPN client.

Once VPN setup and integration is complete, then different user groups will be transitioned from the legacy Cisco VPN client to the new Palo Alto GlobalProtect VPN client. The transition from the Cisco VPN to the GlobalProtect VPN will be done per a schedule agreed upon between THEA and TransCore.



### 7. Final Cutover/Decommission Legacy Firewall

For this phase, the Cisco ASA firewalls will be shut down and removed from their current location, final network integration steps performed, and final as-built documentation prepared, including:

- Schedule maintenance windows, as appropriate, for performing the ISP network cutover detailed below.
- ISP network cutover
  - Removal and relocation of ISP Integration Switch #2 from Site 10 to THEA HQ. Adjust configuration of ISP Integration Switch #2 for providing redundant connections from both firewall units to the ISP #2 demarcation point.
  - Installation of copper to SMFO fiber Ethernet media converters at Site 10 to extend the ISP demarcation point back to THEA HQ
  - Move the ISP #2 data connections at HQ from ISP Integration Switch #1 to ISP Integration Switch #2
- Verify system connectivity once the ISP network cutover is complete
- As-Built Documentation

#### **REIMBURSEMENT METHOD**

The compensation for these Task Work Orders will be based on the following:

- System Design/Planning/Investigation (Phase 1): 58 Hours
- Customer Site Preparation (Phase 2): 40 Hours
- Initial Core Configuration (Phase 3): 36 Hours
- On-Site Installation/Provisioning (Phase 4): 64 Hours
- Migration of Services to New Firewall (Phase 5): 16 Hours
- SSL VPN Provisioning (Phase 6): 60 Hours
- Final Cutover/Decommission Legacy Firewall (Phase 7): 26 Hours

Equipment									
Resource	Qty	Cost		Subtotal		Markup (15%)		Total	
Palo Alto Networks PA-1410 Appliance	2	\$	5,529.15	\$	11,058.30	\$	1,658.75	\$	12,717.05
Palo Alto Global Protect (3 Year)	2	\$	3,524.94	\$	7,049.88	\$	1,057.48	\$	8,107.36
Palo Alto Premium Support (3 Years)	2	\$	5,715.57	\$	11,431.14	\$	1,714.67	\$	13,145.81
Palo Alto Core Security (3 Years)	2	\$	15,842.64	\$	31,685.28	\$	4,752.79	\$	36,438.07
Palo Alto Virtual System (Perp. License)	2	\$	1,827.74	\$	3,655.48	\$	548.32	\$	4,203.80
Palo Alto SFP+ Module	2	\$	1,031.37	\$	2,062.74	\$	309.41	\$	2,372.15
Palo Alto 10G Direct Attach Cable	1	\$	345.97	\$	345.97	\$	51.90	\$	397.87
Equipment Subtotal				\$	67,288.79	\$	10,093.32	\$	77,382.11
Тах					1,851.49				
Freight				\$	97.73				
Equipment Total Cost				\$	69,238.01	\$	10,093.32	\$	79,331.33



Labor								
Resource	Hours	Rate		Total				
Florida PE-Certified Engineer	180	\$	311.00	\$ 55,980.00				
Senior Engineer	80	\$	275.00	\$ 22,000.00				
Senior Technician	40	\$	174.00	\$ 6,960.00				
Labor Total Cost	300			\$ 84,940.00				
			Total	\$ 164,271.33				

#### LENGTH OF SERVICES AND RESTRICTIONS

The schedule for this effort will be coordinated with the relevant stakeholders. Any changes to the scope of work, including additional requirements or modifications, will require a formal change order. Any changes not included in this Scope of Services will be subject to additional charges.

# TRANSCORE. Firewall Upgrade Project Schedule

This document outlines the detailed project schedule for the Firewall Upgrade Project. It includes phases, tasks, estimated durations, dependencies, and descriptions to guide the implementation.

# Phase 1: System Design/Planning/Investigation

# **Estimated Hours: 58**

- **Physical Infrastructure Site Review** Review and plan new firewall locations, site power, and fiber optic infrastructure.
- New Firewall Location Survey Survey the server room and plan rack placement for the new firewalls.
- **Review of Legacy Internal Firewall Connections** Analyze current firewall configurations and plan for connectivity migration.

# **Phase 2: Customer Site Preparation**

# **Estimated Hours: 40**

- Network Configuration Changes Create VLANs and adjust routing to prepare for firewall installation.
- Material Procurement Acquire necessary cabling, transceivers, and power outlets.
- Infrastructure Changes Implement preparatory modifications, including fiber optic adjustments and rack updates.

# Phase 3: Initial Core Configuration (Off-Site)

# **Estimated Hours: 36**

- Firewall Procurement Purchase firewalls, licenses, and associated equipment.
- **Basic Network Setup** Register and configure firewalls, including active-standby HA connectivity.
- Initial NAT/ACL Setup Develop core security and connectivity rules.



# **Phase 4: On-Site Installation/Integration**

### **Estimated Hours: 64**

- System Integration Install and integrate the firewalls into the toll system.
- Active Directory and Dynamic Routing Integration Ensure firewalls function with existing AD and routing infrastructure.
- **Policy Modifications** Adjust NAT and ACL policies for seamless network operation.

# **Phase 5: Migration of Services to New Firewall**

### **Estimated Hours: 16**

- **B2B VPN Tunnel Migration** Move VPN connections to the new firewall.
- Server Connectivity Migration Transition servers to the new firewall infrastructure.

# Phase 6: SSL VPN Provisioning

### **Estimated Hours: 60**

- GlobalProtect VPN Setup Configure remote access VPN functionality.
- User Transition Migrate users from Cisco VPN to Palo Alto GlobalProtect.

# **Phase 7: Final Cutover/Decommission Legacy Firewall**

### **Estimated Hours: 26**

• Legacy Firewall Decommissioning Shut down and remove Cisco ASA firewalls.



- Final ISP Network Cutover Relocate ISP connections and verify system connectivity.
- As-Built Documentation Prepare final documentation for the new system configuration.