



September 26, 2018

**Extinguish the Torch Meeting
Veterans Section 5 Widening from Sugarwood to Van Dyke
FIN 429350-4-52-01
Contract E8N52**

Jacobs CEI Team

Zach Adams, PE – Senior Project Engineer - Zach.adams@jacobs.com
Robert Weimer, Jr – Project Administrator - robert@jbseng.com
Chris Geisler – Contract Support Specialist (no longer with Jacobs)
Fernando Banda – Senior Roadway Inspector – fernando.banda@jacobs.com

FTE Staff

Tracie Rose, PE – Construction PM – tracie.rose@dot.state.fl.us
Thomas Neyer, PE – Design PM – Thomas.neyer@dot.state.fl.us

Design Firms

GAI Consultants – Prime Consultant

618 E. South Street, Suite 700
Orlando, FL 32801
407-423-8398

Luis Tellechea, PE – Director of Major Projects
Judson Fohr, PE – Roadway Plans EOR
Jeffrey Tuell, PE – Structures Plans EOR
Sylvester Asiamah, PE – Signalization Plans EOR
Sylvester Asiamah, PE – Signing and Pavement Marking Plans EOR

FR Aleman and Associates – ITS Plans EOR

Amazia Kiboko, PE – EOR
10305 NW 41 Street, Suite 200
Doral, FL 33178
305-591-8777

Comprehensive Engineering Services, Inc. – Lighting Plans EOR

Michael Manzano, PE – EOR
201 S. Orange Avenue, Suite 1300
Orlando, FL 32801
407-423-1600

1. Project Description & Limits

This project included widening of the Veterans Expressway (SR-589) from 4 lanes to 8 lanes, surface street and ramp operation improvements on Hutchison Road, and completion of all construction activities necessary to implement the mainline express lanes along the Veterans Expressway from south of Gunn Highway to the north project limits. The project limits are from the Sugarwood Plaza (MP 11.016) to Van Dyke Road (MP 14.204).

2. Contract Details – See page 3

3. Lessons Learned

- a. MOT Notes page 4
- b. Existing Perimeter Wall page 5
- c. RFP Construction Limits page 6
- d. Shoulder Mounted Noise Wall Gap page 7
- e. MOT Lane Shifts page 8
- f. Conductors for Power Service page 9
- g. Existing Signs Inventory on DB Plans page 10

4. Summary of Issues

- a. Drainage Changes: \$111,643.46 – Underdrain Design and Standalone Plan Set
- b. ITS Changes: \$265,713.72 – See Lessons Learned Item C above
- c. Structures Changes: \$25,030.53 – Wilcox Trash Collector Issue (Maintenance Request)
- d. Signing & Pavement Marking Changes: \$474,403.92
- e. Claims & NOIs – see attachment 2
- f. Other items resolved without time or cost impacts:
 - 1. Shop Drawing review vs. Standard Index requirements for lighting conduit routing in pre-cast MSE coping sections – see Shop Drawing 0097
 - 2. Specialty Engineer requirements on shop drawings
 - 3. Daktronics DMS water intrusion issues
 - 4. Sign Structure Shop Drawings – Furnish as Noted vs. Rejected – Splice locations – See Shop Drawings 0091, 0094, 0096
 - 5. ITS – Conduit in drilled shafts – RFI 0069
 - 6. Drilled Shaft Diameter increases – RFI 0074

5. Outstanding Work After Final Acceptance - None

Attachments

- 1. Lessons Learned pages 4-10
- 2. Claims & NOIs page 11
- 3. Work Order Log page 12
- 4. Time Extensions page 13
- 5. SA Log page 14
- 6. RFI Spreadsheet page 15-30
- 7. Shop Drawings List page 31-44
- 8. Warranty List page 45

Widen Veterans Sugarwood to Vandyke Road, D/B

FPID: 429350-4-52-01

CONTRACT NO: E8N52

COUNTY: Hillsborough

PROJECT LIMITS: 11.016 - 14.204

NTP DATE: Jan 5, 2015

CONTRACT COMPLETION DATE: Jul 26, 2018

PROJECT START DATE: Jan 5, 2015

CEI'S ESTIMATED COMPLETION DATE: Jul 26, 2018

CPPR: 92

FTC COST: 101.71%

PROJECT PERSONNEL

CONTRACTOR	CEI SENIOR PROJECT ENGINEER	CONSTRUCTION PROJECT MANAGER	ENGINEER OF RECORD	DESIGN PROJECT MANAGER
Liz Howard Prince Contracting, LLC. 407.259.1457	Zach Adams, P.E. Jacobs Engineering 813.244.8568	Tracie Rose, P.E. FDOT/WSP USA 813.541.7944	Stephen Boylan, P.E. GAI Consultants 407.423.8398	Tom Neyer, P.E. FDOT/HNTB 407.264.3424

CONTRACT AMOUNTS

Original Contract Amount	\$50,984,589	Actual Amount Earned to Date	\$50,029,964
Original Contingency Amount	\$150,000	Percent of Current Contract	98.42%
Executed SA's	\$608,474	Scheduled Earnings	\$51,593,063
Pending SA's	\$113,214	Contract Amount to Complete	\$1,563,099
Anticipated SA's	\$0	Variance Earned	(\$1,563,099)
Anticipated at Completion	\$51,706,277	% Anticipated at Completion	101.71%

CONTRACT TIME

Original Contract Time	1050	Weather Days	147
Executed SA's	0	Holiday/Time Extensions	68
Pending SA's	0	Actual Time Charged to Date	1323
Anticipated SA's	0	% Time Charged to Date	105.52%
Anticipated at Completion	1050	% Anticipated at Completion	100.00%

ACCIDENT REPORTING



PROJECT UPDATE

CURRENT PROJECT STATUS (INCLUDING CURRENT ISSUES AND SOLUTIONS):

Final Acceptance July 26, 2018.

UPCOMING ACTIVITIES:

Final Acceptance July 26, 2018.

OUTSTANDING NOTICE OF INTENT TO CLAIM

No.	Description	Date	Status



Turnpike Lesson Learned



Entry Date 2/20/2017

Issue Title Design Build MOT Notes

Project E8N52, 429350-4-52-01, Veterans Expressway-Sugarwood Plaza to south of Van Dyke Rd - DB

Main Contact: Zach Adams, PE
Senior Project Engineer
813-244-8568
zach.adams@jacobs.com

Discipline Design

Roadway Spec •

CSI Spec.

Design Index

Key Word(s) MOT Notes

Issue Detail:

The Design Build Team Engineer of Record did not include General Note No 4 from the TPPPH MOT guide drawings that requires the use of a Traffic Control Officer for all lane closures. The DB contractor stated that at time of bid, they did not agree that this was mandatory and their analysis of the project did not require a Traffic Control Officer for all lane closures.

Resolution:

The DB EOR analyzed the project and provided their professional guidance that an officer was not required for all lane closures based on the geometry and required speed limit. Additional reviews and discussions were held with FTE Design early in the project to come to this resolution and the ultimate liability rested with the DB Team. The Speed Enforcement Officer is still used with the Motorist Awareness System.

Lesson Learned:

Consider adding verbiage in the RFP or TPPPH that the 'General Notes' are mandatory and shall be included in all plan sets.



Turnpike Lesson Learned



Entry Date 2/20/2017

Issue Title Existing Perimeter Wall

Project E8N52, 429350-4-52-01, Veterans Expressway-Sugarwood Plaza to south of Van Dyke Rd - DB

Main Contact: Zach Adams, PE
Senior Project Engineer
813-244-8568
zach.adams@jacobs.com

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Design Index

Key Word(s) Existing Features to Remain

Issue Detail:

The Veterans Expressway has existing perimeter walls throughout the corridor that were constructed when the road was originally built. They are not sound walls, but mainly a privacy wall approximately 5' - 6' off the right of way separating the Expressway from adjacent neighborhoods or businesses. The DB Team designed the current project in close to proximity to one of the perimeter walls adjacent to the NB on ramp at Hutchison Road. This wall provides privacy/separation for the back yards of the adjacent homes. Since the RFP did not require these walls to remain, the original approach from the contractor was to remove the wall to facilitate construction of the drainage and cast in place retaining wall for the ramp.

Resolution:

The design was developed to stay away from the wall. After numerous discussions, the contractor agreed to construct the drainage and retaining wall in phases to avoid compromising long stretches of the perimeter wall. The wall was monitored during construction operations to ensure no damage occurred.

Lesson Learned:

Consider adding specific language in future Design Build RFPs for these types of perimeter walls or any other items that cannot be removed.



Turnpike Lesson Learned



Entry Date	7/16/2018
Issue Title	Construction Limits in Request for Proposal
Project	E8N52, 429350-4-52-01, Veterans Expressway-Sugarwood Plaza to south of Van Dyke Rd - DB
Main Contact:	Zach Adams, PE Jacobs Engineering zach.adams@jacobs.com 813-244-8568
Discipline	Design
Roadway Spec	
CSI Spec.	
Design Index	
Key Word(s)	RFP Construction Limits

Issue Detail:

The Request for Proposal (RFP) required the DB Team to implement Express Lanes on the Veterans Expressway that were outside the limits of widening of the project. This work extended into the limits of recently completed widening projects on the Veterans and required the DB Team to utilize some of the ITS infrastructure installed by these projects which was shown in Reference Documents with the RFP. The RFP expressed the requirement to implement the Express Lanes and noted what items were required which included asphalt friction course, express lane markers, ITS cameras, static signs and DMS signs. However, the RFP also included a southernmost construction limit as far south as 1479+00 which did not account for the work required south of STA 1479 (fiber optic cable, conduit, camera poles, cameras, electrical conductors, etc).

Resolution:

The work was completed as required, however, the DB Team submitted a Notice Intent to File Claim to be compensated for the additional design and construction work based on the construction limit included in the RFP.

Lesson Learned:

Ensure that any work required by the RFP is within the construction limits specified. There are 2 possible ways to handle this:

- 1) Thoroughly review all concept plans and RFP language to ensure construction limits are accurate.
- or
- 2) Do not include a specific STA limit in the RFP, rather, just include the original statement that required the DB Team to 'Complete all construction activities necessary to implement the mainline express lanes along the section of SR 589 (Veterans Expressway) from south of Gunn Hwy to the north project limits of this project.'



Turnpike Lesson Learned



Entry Date 7/17/2018

Issue Title Shoulder Mounted Noise Wall

Project E8N52, 429350-4-52-01, Veterans Expressway-Sugarwood Plaza to south of Van Dyke Rd - DB

Main Contact: Zach Adams, PE
Senior Project Engineer
Jacobs Engineering
zach.adams@jacobs.com

Discipline Construction

Roadway Spec

CSI Spec.

Design Index

Key Word(s) Noise Wall

Issue Detail:

During the proposal and ATC phase of the project, one of the non-winning Design Build Teams submitted an ATC to change a stand alone 14' tall noise wall to an 8' shoulder mounted noise wall. The ATC was subsequently accepted by FTE and the winning team adopted this ATC and incorporated the change into the RFC plans. The original noise wall study included a mix of shoulder mounted and stand alone noise walls. The accepted ATC created a 60' gap in the shoulder mounted noise walls which was not considered until construction of the noise walls was complete.

Resolution:

No changes were made to the RFC plans and the gap in the noise wall remains. While it does not affect the adjacent residents, the gap creates a visual effect that construction may not have been completed in this area.

Lesson Learned:

When future changes are made to noise wall types or locations, it will be best to ensure that adjacent walls are reviewed to ensure that small gaps are not created and the walls are continuous.



Turnpike Lesson Learned



Entry Date 9/17/2018

Issue Title MOT Lane Shifts

Project E8N52, 429350-4-52-01, Veterans Expressway-Sugarwood Plaza to south of Van Dyke Rd - DB

Main Contact: Zach Adams, PE
Senior Project Engineer
813-244-8568
zach.adams@jacobs.com

Discipline MOT

Roadway Spec

CSI Spec.

Design Index

Key Word(s) TCP Lane Shifts

Issue Detail:

During the course of construction, the contractor progressed in certain TCP phases ahead of schedule and had the opportunity to implement interim phases and lane shifts to expedite the project schedule. This required lane shifts to be designed by the Design Build EOR which were subsequently designed using S-Curves rather than tangent tapers/shifts. While the S-Curves met all design requirements for the design speed and geometry of the project, they seemed to create safety issues due to this project not having long tangent sections of roadway. There was not a noticeable difference in crashes due to the interim TCP phases, however, the s-curves appeared to impact the travelling public by creating additional backups.

Resolution:

It is recommended to include language in the DB RFP to not allow s-curves for lane shifts except in long tangent sections of roadway. Reviews by FTE design group of DB projects can also assist to provide comments and/or reject these type of lane shift designs.

Lesson Learned:

It will be beneficial for CEI, DB Team, and FTE design staff to review interim TCP plans for how they may impact traffic even when they meet design requirements and require more stringent designs which ultimately improve safety in the construction projects.



Turnpike Lesson Learned



Entry Date 9/17/2018

Issue Title Lighting Conductor from Power Company Poles

Project E8N52, 429350-4-52-01, Veterans Expressway-Sugarwood Plaza to south of Van Dyke Rd - DB

Main Contact: Zach Adams, PE
Senior Project Engineer
813-244-8568
zach.adams@jacobs.com

Discipline Lighting

Roadway Spec

CSI Spec.

Design Index

Key Word(s) Lighting Conductor Power Service

Issue Detail:

The DB Plans indicated that the conductors from the utility transformer to the meter at the load center would be installed by Tampa Electric. During inspection and activation of the power service, Tampa Electric stated that this was not their responsibility. Ultimately, the DB Team was required to install the conductors in order to make the new load center and lighting system functional.

Resolution:

DB Team installed the required conductors.

Lesson Learned:

Design and Construction will need to review load center details designed in the plans to ensure that they do not place responsibility on the utility company to install conductors that are not their responsibility. This applies to conventional and Design Build projects.



Turnpike Lesson Learned



Entry Date 9/17/2018

Issue Title DB S&PM Plans - Existing Sign Inventory

Project E8N52, 429350-4-52-01, Veterans Expressway-Sugarwood Plaza to south of Van Dyke Rd - DB

Main Contact: Zach Adams, PE
Senior Project Engineer
813-244-8568
zach.adams@jacobs.com

Discipline Signing and Pavement Marking

Roadway Spec

CSI Spec.

Design Index

Key Word(s) Existing Sign Inventory on DB Project

Issue Detail:

The project RFP did not require the Signing and Pavement Marking Plans to identify all existing shoulder mounted signs, only the overhead signs. As a result, the DB Team developed the plans to only show the new shoulder mounted signs which ultimately omitted the removal and replacement of certain signs (route markers, speed limit, pedestrian restrictions signs, etc.). This also created issues identifying in the field which existing signs were no longer necessary and should be removed.

Resolution:

Prior to final acceptance, FTE design performed a project review and noticed that certain signs were not removed and replaced to provide up to date signs. The request was directed to the DB Team and they were directed to replace the signs that were not included in their original plans.

Lesson Learned:

Future RFPs should include language for the S&PM plans to show all existing signs and include language to ensure all signs are replaced in order to provide a fully up to date sign inventory for maintenance. This would align the process to mirror what is required on conventional projects.