

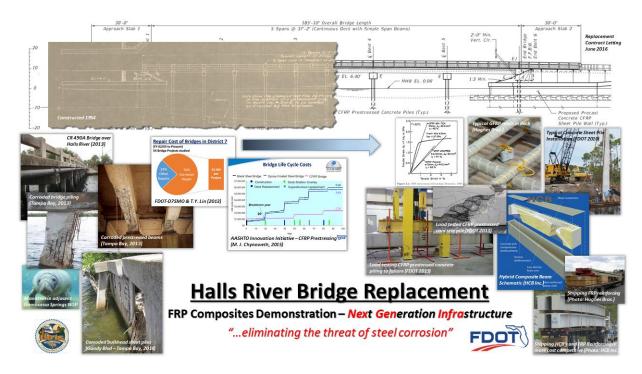
### FDOT – Halls River Bridge FRP Workshop Outline

**Date:** May 3<sup>rd</sup> - 4<sup>th</sup> 2017

**Location:** FDOT - District 7 HQ, Auditorium

11201 North Malcom McKinley Drive

Tampa, Florida 33612



#### **AGENDA**

#### 5/3/2017 - Wednesday 1:00 pm to 5:00 pm, D7-HQ Presentations

- 1. Welcome (5 min.)
- 2. Presentations (3 hrs)
  - a. Bridge Design (Masseus & Siddiqui)
    - i. Project overview
    - ii. Hybrid Composite Beams
    - iii. GFRP-RC Design
    - iv. Challenges and Lessons Learned

#### (Break 15 min)

- b. Developmental Design Standards (Nolan)
  - i. CFRP Prestressed Bearing Piles
  - ii. GFRP/CFRP Prestressed Concrete Sheet Pile Walls
  - iii. Gravity Walls
  - iv. GFRP-Approach Slabs & Traffic Railings
- c. Research Project & Monitoring Discussion (Roddenberry)
- d. CEI's Insight & Future Recommendations (CEI/D7 Construction)
- e. Contractor's Perspective (Astaldi)
- 3. Open Discussion (30 min.)
- 4. Closing Remarks (5 min.)



5/4/2017: Halls River Site Visit (FDOT/SEACON-WP4 collaboration)

7:30 am - 9:00 am Travel 1.5 hrs - (not provided)

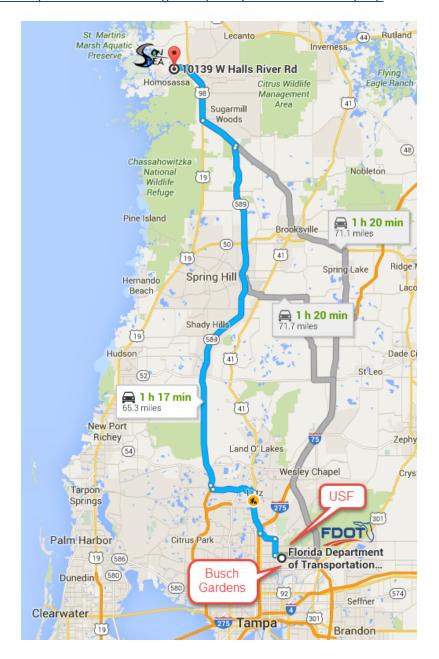
9:00 am - 11:30 am Site Tour (2.5 hrs by Contractor, CEI and Designer)

- 1. Carpool from Staging Area and Assemble at site viewing area (30 mins)
- 2. Contractor Overview
- 3. Walk the site if possible (2 or 3 groups)

11:30 am adjourn (Return to Tampa or travel directly home)

For those attending the Site Visit on Thursday May 4, please bring your own hard hat & safety vest (if possible) and protective footwear.

Map from Tampa to Halls River Bridge Site (FDOT/SEACON-WP4 Project):





Site Visit Staging Area:

Homosassa Springs Shopping Center Springs Plaza, 3942 S Suncoast Blvd. Homosassa, FL 34448

Site Location:

W Halls River Rd.

Coordinates: 28.801164, -82.602774

(28°48'04.2"N 82°36'10.0"W)

Closest Address: 10250 W Halls River Rd.

Homosassa, FL 34448

A block of rooms has been set-up at the West Wing Hotel in Tampa on May 3<sup>rd</sup> at:

#### West Wing Boutique Hotel

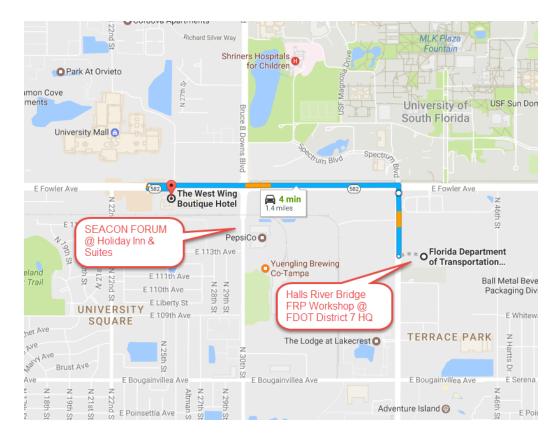
2501 East Fowler Tampa, FL 33612

Please call the hotel directly at 813-559-8000

Rate: \$109 (FDOT) - Present FDOT badge when checking in to get the rate

Group Block: FDOT Halls River Bridge Workshop

Reservation deadline: 4/22/17





Preceding SEACON FORUM (separate event)
5/3/2017: Wednesday 8:00 am to 12:00 pm, SEACON Meeting
Holiday Inn & Suites Tampa North
11310 North 30th Street, Tampa, Florida 33612
<a href="http://seacon.um-sml.com/seacon-forum.html">http://seacon.um-sml.com/seacon-forum.html</a>





#### **FDOT Recommended Reading Resources:**

- Invitation to Innovation FRP Reinforcing (website)
- Developmental Design Standards
- Structures Manual, Volume 4 Fiber Reinforced Polymer Guidelines.
- Materials Manual (Chapter 12) and FRP Producer QC Program requirements
- FDOT/FHWA Corrosion-Resistant Rebar (CRRB) Seminar (July 17, 2012)
  - o FRP Composite Rebar (John Busel ACMA)
  - Cost Comparison of CRRB (Lou Triandafilou FHWA)
- <u>FHWA/NCHRP 20-68A U.S. Domestic Scan 13-03</u> meeting with FDOT (June 4-5, 2015)
- <u>2014 FDOT Design Expo</u> (June 10-12):
  - o <u>Fiber Reinforced Polymer (FRP) Composites</u>
- <u>2015 FDOT Design Expo</u> (June 9-11, 2015):
  - o <u>Composites and FDOT Direction</u>
  - o <u>Design of First FRP Reinforced Concrete Bridge in Florida</u>
- 2016 Design Expo
  - o 6/13/16 Corrosion Resistant Piling & Precast Bent Cap Standards
  - o 6/14/16 <u>High-Strength and Fiber-Reinforced Concrete Design</u>
  - o 6/14/16 Halls River Composite Bridge Update
- FDOT-GFRP Rebar Industry Workshop (June 15, 2016) following 2015 Design Expo
- 2016 CAMX (Anaheim Sept. 26-29)
  - o 9/29/16 FDOT-FRP Deployment for Structural Applications
  - o 9/29/16 ACMA-Transportation Structure Council meeting FDOT Presentation

#### **Other Recommended Reading Resources:**

- AASHTO Innovation Initiative CFRP Strands
- ASTM <u>WK43339</u> New Specification for Solid Round Glass Fiber-Reinforced Polymer Bars for Concrete Reinforcement
- SEACON-Infravation (FHWA/ERA-NET Plus sponsored)

#### **Mission Critical Statement:**

In support of FDOT's <u>Invitation to Innovation</u> initiative in Fiber Reinforced Polymer (FRP) Reinforcing Bars and Strands, the <u>Halls River Bridge FRP Workshop</u> is proposed to be held at the District 7 Headquarters, in Tampa, Florida. Based on FDOT District interest and the importance of this project in innovative design, this training is critical for showing practical implementation of design and material criteria to effectively leverage the most benefit from FRP materials. This workshop is aimed at educating designers and furthering collaboration with the FRP Industry producers and academia in previously identified areas of interest to the FDOT. This workshop provides stakeholders with the opportunity to improve FRP deployment through design criteria and specification refinement in support of the Florida Department of Transportation's statewide mission to improve road user safety, mobility, and preservation of the quality of our environment.

FDOT's Fiber-Reinforced Polymer Deployment Train has left the Station

What next???

GFRP Reinforcing Bars CFRP Prestressed Piles

Fender Systems External FRP Laminate Repairs

