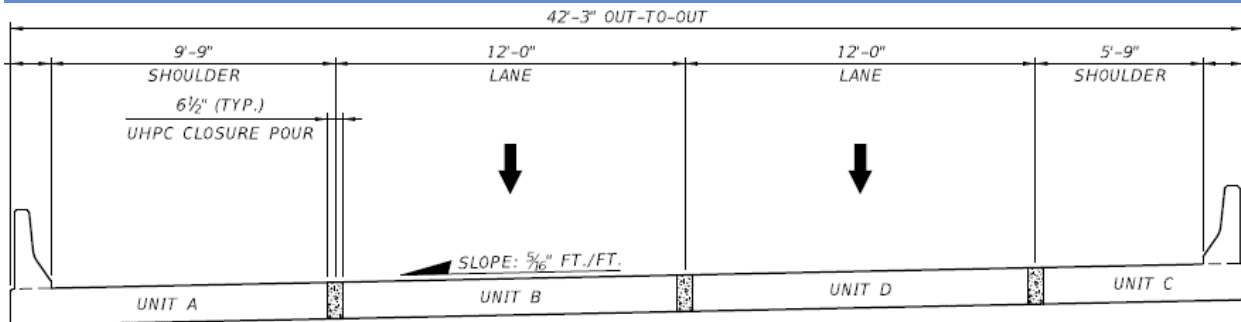


FDOT Transportation Innovation Initiative: UHPC – Design Innovation

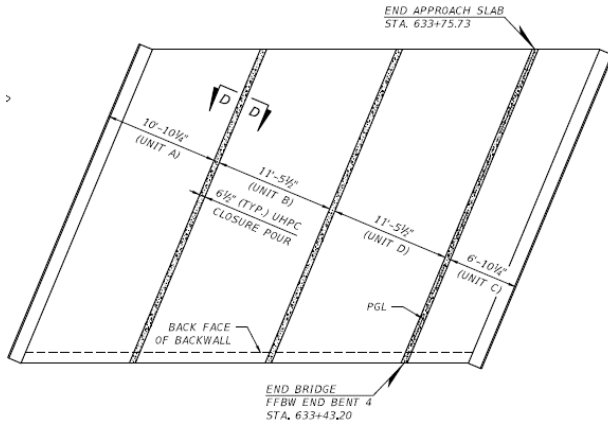


*PHASE IV TRAFFIC (DAY) & FINAL APPROACH SLAB CONFIGURATION
(LOOKING EAST)*

**Fast
Facts:
Ultra-High
Performance
Concrete**

- Project Location:** FDOT District Three
Gadsden County, Florida
- Agency:** Florida Department of Transportation
- URL:** <http://www.fdot.gov/structures/innovation/UHPC.shtm>
- Project Name:** I-10 (SR 8) over CR-268A
Bridge No. 500080
FPID: 445645-1
- Project Description:** Approach Slab replacement at End Bridge (east side) westbound bridge with precast slab units and full depth longitudinal UHPC joints.
- Project Purpose & Need:** Replace deteriorated approach slab using accelerated construction techniques and four construction phases to minimize traffic impacts.
- Overall Budget/Cost Estimate:** \$980,000 (Construction)

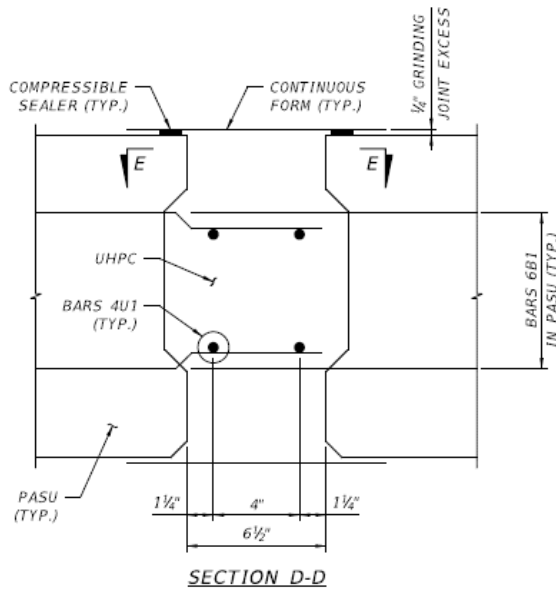




What was unique about this project? First UHPC for connection for precast approach slabs in Florida.

Describe Traditional Approach: Traditional approach requires cast-in-place concrete.

Describe New Approach: Utilization of short length straight #6 bar lap splices with 6" overlap using UHPC closure pour.



Top Innovations Employed: Utilization of UHPC connections for rapid replacement of damaged/deteriorated Interstate bridge approach slab.

Primary Benefits Realized/Expected: More robust and longer service life from precast deck slabs and UHPC connections. Short closure time for highway bridge lane.

Project Start Date/Substantial Completion Date:
Fall 2020 – Spring 2021

Quantities:

0916 400 X	PRECAST APPROACH SLAB UNIT, PROJECT 445465-1-52-01	APPROACH SLAB 2	SF	1375	1375
0918 349 X	ULTRA HIGH PERFORMANCE CONCRETE - UHPC, PROJECT 445465-1-52-01	APPROACH SLAB 2	CY	3.0	3.0

Affiliations: PE Consultant: American Consulting Engineers of Florida, LLC.
Construction Contractor: TBA
Construction Engineering Inspection: TBA.

Project Contacts: Engineer of Record: Leahann Powell, P.E. (American Consulting Engineers of Florida)
FDOT Project Manager: Hunter Hambright
FDOT District 3/HNTB
Hunter.Hambright@dot.state.fl.us

