



EXTINGUISH THE TORCH MEETING SESSION ONE

FIN: 435166-1-52-01 & 435168-1-52-01

Contract No.: E8Q45

Project: Resurfacing & Safety Upgrades of SR 91 between MM 185 - 190.5

Contractor: Ranger Construction, Inc.

Project Acceptance Date: 7/25/2018

Counties: Okeechobee and Indian River

MEETING AGENDA

1. Introductions

CEI Senior Project Engineer: Harold Dubon, P.E., Carnahan, Proctor and Cross, Inc.

CEI Project Administrator: Glenn Bridges, P.E., Carnahan, Proctor and Cross, Inc.

FTE Project Manager: Christopher NeSmith, P.E.

FTE Design Project Manager: Patrick Muensch, P.E.

Engineer of Record: Truong Trinh, P.E., Scalar Consulting Group, Inc.

Contractor Project Manager: Candace Ercolano, Ranger Construction Inc.

2. Project Scope of Work

3. Contract Time and Money

4. Supplemental Agreements and Work Orders – See Attachment

5. Contractor's Notices of Intent to File Claims – No NOI's

6. Review and discussion of Lessons Learned incorporated into the Summary Report

a) What worked well:

b) Lessons learned – what needed improvement

LESSONS LEARNED

SUMMARY REPORT

Carnahan, Proctor and Cross, Inc.

Harold Dubon, PE – Senior Project Engineer
Glenn Bridges – Project Administrator

Florida Turnpike Enterprise

Christopher NeSmith, PE – Construction Project Manager
Patrick Muensch, PE – Design Project Manager

Truong Trinh, PE – Engineer of Record

Scalar Consulting Group, Inc.
2250 Lucien Way, Suite 120
Maitland, FL 32751

Michael L. Herbert- Structure Engineer of Record

Florida Bridge & Transportation, Inc.
633 Dartmouth Street
Orlando, Florida 32804

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1) PROJECT DESCRIPTION & LIMITS:

GENERAL	
Description & Limits:	Milling and Resurfacing with Safety Improvements from MP 185 to MP 190.5
FPNs:	435166-1-52-01, 435166-3-52-01, 435168-1-52-01 & 435168-3-52-01
Contract No:	E8Q45
County:	Okeechobee & Indian River
Contractor:	Ranger Construction Industries, Inc

2) CONTRACT DETAILS:

CONTRACT TIME	
Original Contract Days:	245
Contract Begin Date:	July 15, 2017
Original Contract Completion Date:	March 16, 2018
Type	CONTRACT DAYS
Weather Days:	70
Holiday Days:	43
Special Event Days:	5
Time Extension Days:	17
TOTAL DAYS ADDED:	135
Allowable Contract Days:	380
Final Acceptance Date:	July 25, 2018
Percent Days Added (Other than Weather, Holiday or Special Event Days):	6.94%
Performance Measure (Is the Contract Time Increase <20%):	YES

CONTRACT AMOUNT	
Original Contract Amount:	\$10,174,450.60
Contract Changes:	\$117,152.60
Revised Contract Amount:	\$10,266,602.60
Percent Amount Added (SAs):	1.15%
Performance Measure (Is the Contract Amount Increase <10%):	YES
Final Estimate Amount:	\$10,291,603.20

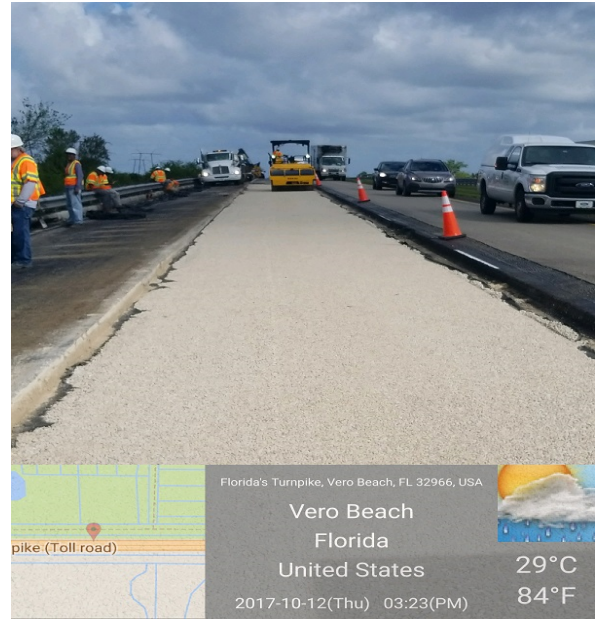
3) PERFORMANCE MEASURES - Review of Reasons if Measures are Exceeded:

N/A – Performance Measures for both Contract Time and Contract Amount are within acceptable parameters

4) LESSONS LEARNED - ENTERED INTO PROJECT SOLVE (*See Attachments*):

- **Emergency Response Plan**

ISSUE SUMMARY: During the deep milling and resurfacing on E8Q41 Contract we encountered two base failure. These base failure caused an emergency lane closure causing as much as a 7 mile backup. The challenges came when we needed filter fabric and # 57 stone in the middle of the night or over the weekend. The concern was that a similar base failure could occur on this project.



RESOLUTION: We developed a plan to have on hand enough material readily available as a precaution measure just in case a similar failure occurred on this project.

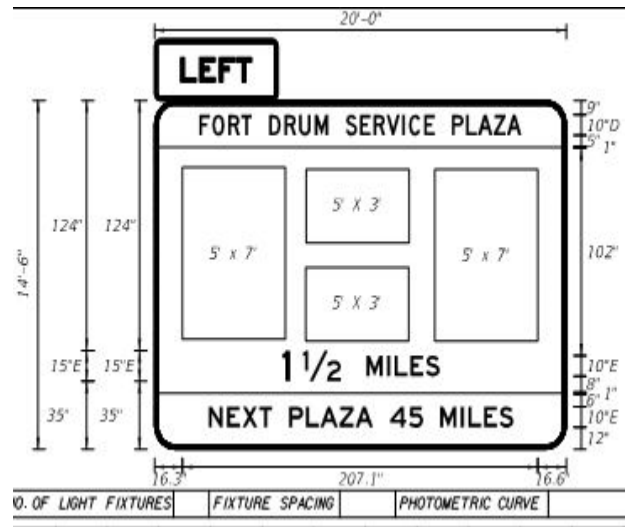
- **Galvanization of Steel Grate**

ISSUE SUMMARY: Contractor had to be compensated by a Work Order the amount of \$290.42 for the galvanization of replacement grate not shown in plans.

RESOLUTION: Turnpike’s request for all steel grates to be galvanized should be listed in plans moving forward.

- **Service Plaza Signs**

ISSUE SUMMARY: The signing plans showed a block out with measurements for the vendors logo for the Ft. Drum Service Plaza.



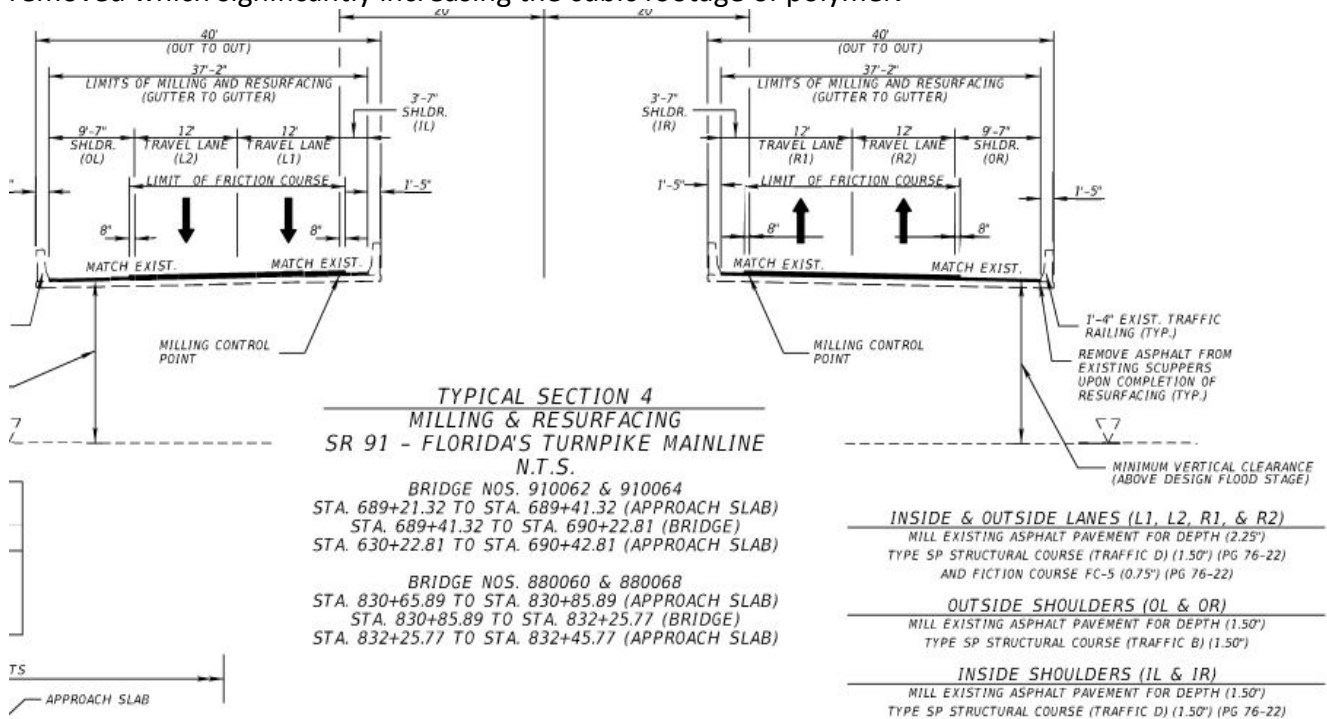
RESOLUTION: Had to compensate the contractor to overlay the sign blanks with blue background. Also reached out to the design Project Manager to make sure this was addressed on future project.

COST INCREASE: \$ 2,445.22

TIME INCREASE: 0 Day's

Polymer Nosing For Bridge Deck Expansion Joint Overrun

ISSUE SUMMARY: The typical sections for the bridges shows milling 2.25", over the existing asphalt was much thicker. All of the remaining asphalt within the 16" polymer nosing system had to be removed down to the bridge deck since it will not adhear to asphalt. This additional asphalt thickness had to be removed which significantly increasing the cubic footage of polymer.



Bridge joint prior to the installation of the polymer nosing system

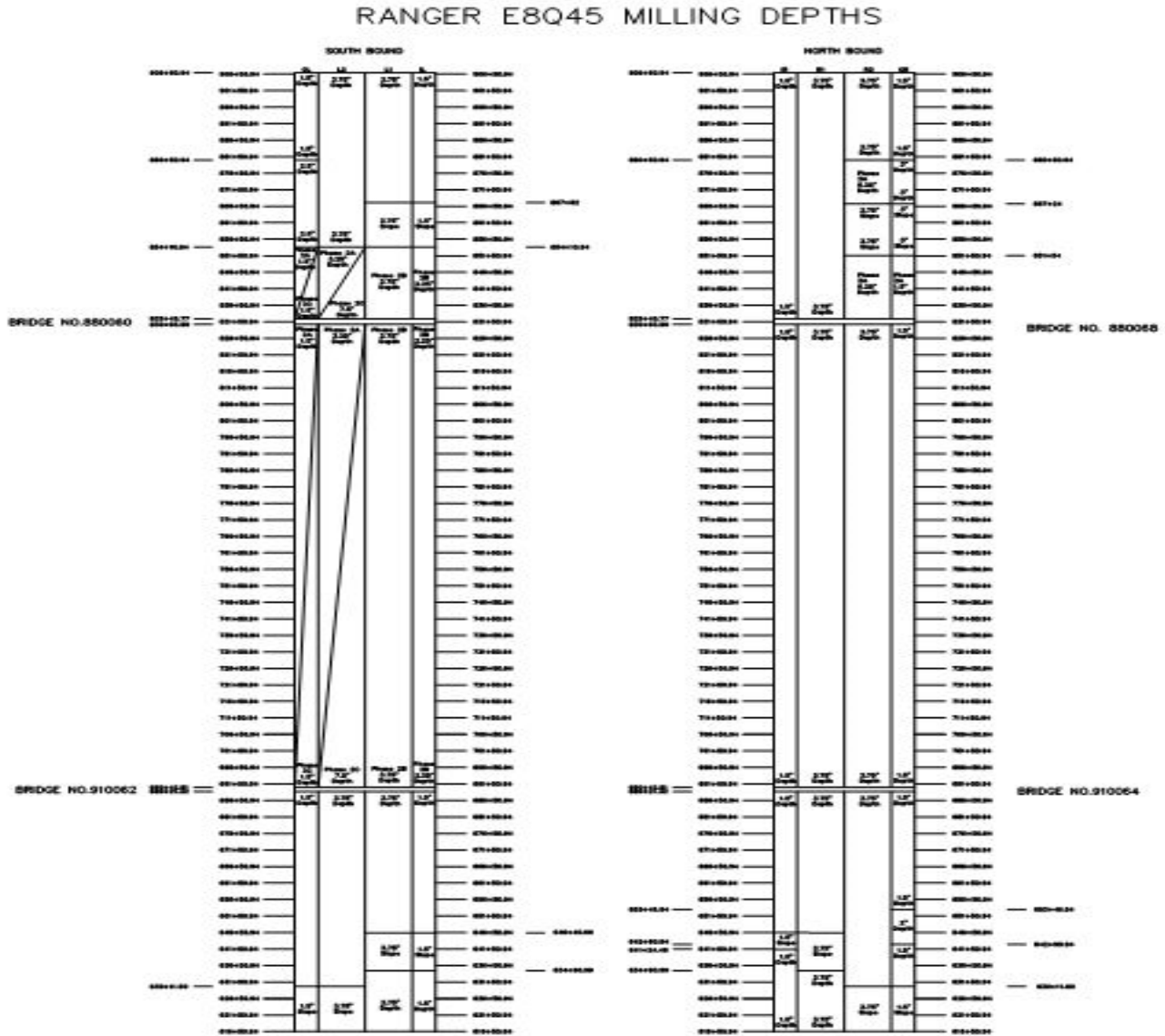
RESOLUTION: Prior to the milling operation determine how much asphalt is on the bridge deck by drilling through the overlay. Based on this measurement you can then determine milling depth.

COST INCREASE: \$ 64,014.50

TIME INCREASE: 0 Day's

- **Development of the Millings Spreadsheet**

ISSUE SUMMARY: The project has 21 different typical section for cross slope correction and milling depths. Within these typical sections the plans would refer you to multi locations to determine the construction sequence which became extremely time consuming. With multi cross referencing this also became very confusing for the contractor.



RESOLUTION: A milling depth/cross slope spread sheet was developed to give a clear and concise direction to both the CEI staff and the Contractor. This took the 21 different typical sections and condensed to one page. The CEI and the Contractor would get together each night prior to the milling operation to review the spread sheet. This impromptu meeting made sure everyone was on the same page which ultimately increased production and minimized the confusion.

COST INCREASE: \$0.00
TIME INCREASE: 0 Day's

- Rumble Strip Overlay**

ISSUE SUMMARY: Other projects quantify the overlay of the rumble strips by using different pay items. Ranger's project included the asphalt in the 334 pay item with required tracking and testing. The contractor's project manager actually thought they had included the tonnage in their lump sum MOT because that is the way it has always been done in the past. To the contractor's surprise, the CEI had to ask for a Roadway Report showing the tonnage placed to cover the rumble strips under the 334 pay item.

		690+42.81	801+30.94	LT	11088.1	10.0	3	1016.4		OUTSIDE SHOULDER (OL) - (1.5')
		778+58.62	783+02.38	MED	443.8			(30.6)		MEDIAN CROSSOVER
334	13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C					TN		1016.4	
		690+42.81	801+30.94	LT	11088.1	12.0		813.1		PHASE 11A - TRAVEL LANE (L2) (1.0" SACRIFICIAL ASPH.)
		690+42.81	801+30.94	LT	11088.1	4.0		203.3		PHASE 1 - (1L) (0.75" SACRIFICIAL ASPH.)

RESOLUTION: After more review of this issue, we believe all temporary asphalt, including overlaying of rumble strips needs to be included in the contract as a lump sum Special Detour. This recommendation is based on a design memo and current basis of estimates procedures. Including the rumble strip overlay as a lump sum Special Detour will bring consistency to all projects and will keep contractors bidding on the same items. Lump Sum Special Detour would keep the temporary asphalt (no testing and no tracking required) and the designers would not need to summarize the asphalt quantities. The designer needs to identify the following: station to station, the shoulder being covered (inside or outside), ¾" temporary asphalt 2' wide, and the purpose (to cover rumble strips).

COST INCREASE: \$ 0.00
TIME INCREASE: 0 Day's

5) SUMMARY OF ISSUES – ORGANIZED BY FUNCTIONAL AREA (with before & after pictures if available for non-aggregate issues)

- **Changes: OUTSIDE AGENCY REQUESTING EXTRA WORK**
 - Aggregate Cost: **\$12,132.31 added by WO for stabilization of existing haul road adjacents to SR 91 with compacted millings. Outside Agency Requesting Extra Work.**
 - Aggregate Time: **0 Days added.**

- **Changes: TURNPIKE REQUESTED ADDITIONAL WORK**
 - Aggregate Cost: ***\$78,145.47 added by WO to compensate for additional work for Anchorage assemblies, emergency repairs to shoulder and roadway over storm water culvert 91Q002 and base shoulder repairs.***
 - Aggregate Time: ***0 Days added for end anchorage assemblies.***
 - Aggregate Time: ***12 days added for area over Culvert 91Q002.***
 - Aggregate Time: ***0 Days added for base Shoulder Repairs***

- **Changes: 3rd PARTY DAMAGE GUARDRAIL CLAIMS**
 - Aggregate Cost: ***\$64,971.76 added by WO's for remove and repair or replace guardrails and posts damaged by 3rd parties.***
 - Aggregate Time: ***7 Days added.***

- **SPECIFICATION DISCREPANCIES:**
 - Aggregate Cost: ***N/A***
 - Aggregate Time: ***N/A***

- **UNUSUAL ITEMS RESOLVED IN THE FIELD (No Cost):**
 - Aggregate Time: ***N/A***

- **CLAIMS or NOIs:**
 - ***None.***

ATTACHMENT

WORK ORDERS & SUPPLEMENTAL AGREEMENTS

Work Order #:	Description	Amount	Status
999-21-01/435166-3	3 rd Party Damages – Guardrail 682+00 – 684+00	\$1,991.73 (partial of 2,845.82)	Paid
999-25-01/435166-3	Bridge Anchorage Assemblies	\$2,365.00	Executed
999-25-01/435168-3	Bridge Anchorage Assemblies	\$4,730.00	Executed
999-21-02/435166-3	3 rd Party Damages – Guardrail 655+40	\$7,597.70	Pending
999-21-03/435166-3	3 rd Party Damages – Service Plaza	\$1,468.50	Being written
999-21-01/435168-3	Guardrail Repairs – 3 rd Party Damages in various locations	CSS preparing paperwork.	Pending
999-21-01/435168-3	Galvanization of Inlet Grates	\$286.42 (partial of \$419.05)	
999-21-02/435168-3	3 rd Party Damages – Guardrail MM 190.3	\$2,971.32	Ready for payment
999-21-03/435168-3	3 rd Party Damages – Guardrail MM 189.5	\$17,950.76	Ready for payment
999-21-04/435168-3	3 rd Party Damages – 860+00 – 862+00	\$1,108.47	Accident reports not received.
999-21-05/435168-3	3 rd Party Damages – 904+00	\$2144.56	Accident reports not received.
999-25-02/435168-3	Galvanization of Inlet Grates	\$132.63 (partial of \$419.05)	
999-25-01/435166-1	Emergency Access Road Improvements – Okeechobee County Fire Rescue.	\$12,132.31	Paid
999-25-02/435166-1	Shoulder Base Repairs various locations	\$22,661.16	Paid
999-25-02/435166-3	3 rd Party Damages – Guardrail 650+00 Median	\$1,136.60	Paid
999-25-03/435166-3	3 rd Party Damages – Guardrail 682+00 – 684+00	\$854.09 (partial of \$2,845.82)	Paid
Supplemental Agreement	Description	Amount	Status
SA #01 (CHG #9) – Add Plan Revisions 2 and 3	Add Revision #02 & #03 to the Contract (additional pay items, reconfigure asphalt milling depths).	\$32,152.60	Ready for payment
CSA #01 (CHG #14) 435166-3	Additional Contingency Funding	\$30,000.00	Executed
CSA #02 (CHG #15) 435168-3	Additional Contingency Funding	\$30,000.00	Executed
SA #02 – Hurricane Irma Repairs	Hurricane Irma recovery.	\$25,588.19	CSS to redo package.
SA #03 - Add Plan Revisions	Add Revision #04 Revised TSP and Revised culvert design.	TBD	BIC-EOR

ATTACHMENTS

Time Extensions

Contract: E8Q45
FIN: 435166-1-52-01/435168-1-52-01
 435166-3-52-01/435168-3-52-01
Contractor: Ranger Construction Industries, Inc.

SA # or WO #:	Description:	Total Days Granted	Compensable:	Explanation:
N/A	Hurricane Irma	12	0	"Compensation calculated as per 4-3.2"
999-25-03 (435166-	Box Culvert Emergency Rep	14	0	"Compensation calculated as per 4-3.2.1.4"
999-25-04	Tractor Trailer Rollover	7	0	"Compensation calculated as per 4-3.2.1.4"

* Pending Execution

All Other time granted has been Weather, or weather recovery in addition to Holidays/Special Events included in the Contract.

ATTACHMENTS

RFI's

1. **RFI 01** – Missing Pay Item and guardrail quantity– **CLOSED:** The Roadway Plans did not call for Guardrail Bridge Anchorage Assembly being installed. To cover for payment of the plan callouts at sta. 690+25 to 690+63, a pay item needs to be included as a part of the guardrail retrofit.
2. **RFI 02** – Missing Pay Item and Guardrail Quantity– **CLOSED:** Matter resolved with the FTE, CEI and contractor.
3. **RFI 03** – Ranger proposed utilizing the attached dome inlet protections in lieu of synthetic bales and silt fence as shown in the detail on sheet 128– **CLOSED:** Per the attachment, it appears that these devices are not appropriate for curb inlets, but are OK for the ditch bottom inlets in sump conditions. Since there are no curb inlets within the project limits and if the contractor selected to use these devices, then it is recommended that they be inspected for bypass flows causing staging up out of any ditches downstream.
4. **RFI 04** – Traffic Control Plans– **CLOSED:** In the Traffic Control Plans for Phase II and Phase III of the Special Detours it has us posting a 20-mph sign as part of the assembly. During our onsite meeting at the southbound entrance to the Service Plaza we noticed the existing posted speed limit is 15-mph; therefore, creating a conflict.

EOR Response: The proposed 20mph posted speed limit intent is to match with the existing advisory speed limit approaching the service plaza. This existing sign can be found at the beginning ramp painted terminal.

5. **RFI 05** – Ditch Bottom Inlet Protections – **CLOSED:** Contractor requesting permission to use the attached alternate inlet protection in lieu of synthetic bales.

EOR Response: FTE Maintenance, Roadway and Drainage take no issue with the use for ditch bottom inlets or inlets along the ramps with curb and gutter. The use for shoulder gutter inlets, barrier wall inlets and other types of inlets will have to be evaluated to confirm that no roadside hazard exists.

6. **RFI 06** – Missing Pay Item - **CLOSED:** Please add pay item 102-78 for the use of temporary retro-reflective pavement markers.
7. **RFI 07** – Type B Stabilization - **CLOSED:** Contractor asked, on Sheet 34 in the detail diagram it shows an activity to do a 2' wide type B stabilization strip prior of placement of miscellaneous asphalt. Sheets SQ-10 and Sq-12 do not recognize quantities for this location. Please review and provide station to station quantities.

CEI RESPONSE: The offset to the face of the guardrail will remain 12' and the existing paved shoulder width will remain 9'. Instead of constructing Type B Stabilization, miscellaneous asphalt should be placed from the 9' paved shoulder line to 2.5' behind the face of the guardrail (total 5.5' width of misc. asphalt).

8. **RFI 08** – Regular Excavation - **CLOSED:** On sheet SQ-7 under FIN 435166-1-52-01 there are no quantities recognized northbound. Contractor believes there should be quantities to support the excavation of the type B stabilization activities between stations 2640+08 to 2643+32 and 798+36 to 813+13.

EOR RESPONSE: Excavation quantities for the Type B Stabilization between sta. 2640+08 to sta.2643+45 is 35.9 CY. Type B Stabilization is deleted (see E8Q45-0007 response). Note the quantities on the cross section sheets include only earthwork for the superelevated sections).

9. **RFI 09** – Guardrail Extension Detail - **CLOSED:**

Contractor wanted clarification on the following:

1. Contractor is uncertain from station to station detail section A-A should be performed? ie. the length of the guardrail run or where the A-A to the end of the guardrail shown on sheet 23.

2. Contractor uncertain of the width of the standard clearing limits from type b stab to match exist. Ground.
3. Sheet SQ-6 shows sta. 2634+06 to 2646+87 Rt. to be C&G at 10 ft. and 2.67 ft. Which one covers the guardrail location? Depending on the response to questions 1&2 we would like to confirm the AC is covered.

FOR RESPONSE AS FOLLOWS:

1. Section A-A is from sta. 2640+08.80 to sta. 2643+45.55
 2. The standard clearing and grubbing extends from the edge of the inside shoulder to the toe of slope (see cross section and superelevation details).
 3. See Superelevation Correction details 3, 4, 5 and 6 for shoulder treatment.
10. **RFI 10** – Clearing and Grubbing - **CLOSED**: What is the intent of the width of 2.67 in the clearing & grubbing limits? We are uncertain which side of the road the width is applicable, because the Rt. and Lt. do not always match the Rt. and Lt. in the roadway plans.

FOR RESPONSE: The 2.67' C&G limit refers to the 2'-8" Sod Treatment 1 (Index 105) for the outside shoulder in this area. (Refer to the superelevation details). The LT and RT were based on "BL Survey & Const. SR 91"; However, the C&G limits were based on "BL Northbound SR 91".

11. **RFI 11** – Earthwork – **CLOSED**: On sheet 34 it has a diagram section 1-1. The detail shows to re-work shoulder (earthwork) as a 1:4 max. The plans do not include cross sections for this location, so we have no way to verify quantities for embankment & regular excavation. Can you please show the data to support the earthwork activities?

FOR RESPONSE: The embankment quantity to rework the shoulder is 16.3 CY for Okeechobee County and 65.1 CY for Indian River County. Cross Sections within this area were not required per discussion with turnpike during design.

12. **RFI 12** – Farm Crossing 88Q007 – **CLOSED**: **Plan notes refer contractor to farm crossing culvert details shown on sheet 129. They just want verification if there should be miscellaneous asphalt quantities to support the guardrail installation because farm crossing 88Q008 does.**

FOR RESPONSE: Quantities are correct, since the posts for the guardrail at the farm crossing is secured to the back of the headwall, there is no need for miscellaneous asphalt directly on the farm crossing. The first 4 rows of the summary of miscellaneous asphalt table for 435168 on sheet SQ-12 refers to farm crossing 88Q007. Limits Sta. 801+30.94 to Sta. 806+76.42, Sta. 806+40.85 to Sta. 806+76.28, Sta. 806+92.86 to Sta. 816+00.50, and Sta. 806+92.26 to Sta. 813+18.47.

13. **RFI 13** – Gore Striping – **CLOSED**: **Gores entering the Ft. Drum Service Plaza shows 18" Chevrons. Design standards indicate removal of striping.**

FOR RESPONSE: The intent of the plans is to remove the 18" Chevrons which is in accordance with the Design Standards.

14. **RFI 14** – Guardrail – **CLOSED**: It appears that there are missing guardrail quantities over the farm crossing right roadway at station 806+06.64. While reviewing can you also please look at the left roadway.

FOR RESPONSE: Per our discussion with the CEI, below is the updated guardrail quantities and limits:

Pay item 538-1 – Guardrail Reset

From Sta. 801+30.94 to Sta. 806+06.64 = 475.7-LF

From Sta. 807+31.64 to Sta. 813+10.59 = 578.9-LF

Total = 3,544-LF

Pay Item 536-1-1 – New Guardrail

From Sta. 806+06.64 to Sta. 807+31.64 = 125.0-LF

Total = 1,325-LF

Project Resurface Turnpike MP 185 to 190.5
Financial Project ID: 435166-1-52-01, 435166-3-52-01, 435168-1-52-01 and 435168-3-52-01
Construction Contract # E8Q45

Contractor: Ranger Construction
CEI: Carnahan, Proctor & Cross
Designer of Record: Scalar Consulting Group

(RFI) Request for Information
(RFM) Request for Modification
(RFC) Request for Correction

GENERAL INFO					TRACKING DATES				RESPONSE
ISSUE	NUMBER	INITIATED BY	DATE REC'D	DESCRIPTION/QUESTION	FWD TO EOR:	RESPONSE DATE	TO CPC	# DAYS	
RFI	1	CPC	6-Jul-17	Missing pay item and guardrail quantity	6-Jul-17	1-Aug-17	CPC	26	Roadway plans did not call for Guardrail Bridge Anchorage Assembly. Pay item added as part of Guardrail Retro-fit.
RFI	2	CPC	26-Jul-17	Missing pay item and guardrail quantity	26-Jul-17	6-Oct-17	CPC	83	Resolved with FTE, CPC and RCI
RFI	3	RCI	2-Aug-17	Contractor wants to use dome inlet protections in lieu of synthetic bales and silt fence.	2-Aug-17	9-Aug-17	CPC	7	Devices are not appropriate for curb inlets, but are ok for ditch bottom inlets in sump conditions. Recommended that they be inspected for bypass flows.
RFI	4	RCI	23-Aug-17	Traffic Control Plans	23-Aug-17	24-Aug-17	CPC	10	The proposed 20mph posted speed limit intent is to match with the existing advisory speed limit approaching the service plaza. This existing sign can be found at the beginning ramp painted terminal.
RFI	5	RCI	31-Aug-17	Ditch Bottom Inlet Protections	31-Aug-17	4-Oct-17	CPC	34	FTE Maintenance, Roadway and Drainage take no issue with the use for ditch bottom inlets or inlets along the ramps with curb and gutter. The use for shoulder gutter inlets, barrier wall inlets and other types of inlets will have to be evaluated to confirm that no roadside hazard exists.
RFI	6	CPC	21-Sep-17	Missing pay item 102-78 Temporary Retro-reflective Pavement Markers	21-Sep-17	4-Oct-17	CPC	13	Pay-item 102-78 will be added to quantities.
RFI	7	CPC	18-Oct-17	Type B Stabilization quantities not shown, Please provide station to station and quantities.	18-Oct-17	2-Nov-17	CPC	15	The offset to the face of the guardrail will remain 12' and the existing paved shoulder width will remain 9'. Instead of constructing Type B Stabilization, miscellaneous asphalt should be placed from the 9' paved shoulder line to 2.5' behind the face of the guardrail (total 5.5' width of misc. asphalt).
RFI	8	RCI	18-Oct-17	Regular Excavation - No quantities recognized for northbound	18-Oct-17	25-Oct-17	CPC	7	Excavation quantities for the Type B Stabilization between sta. 2640+08 to sta.2643+45 is 35.9 CY. Type B Stabilization is deleted.
RFI	9	RCI	18-Oct-17	Guardrail Extension Detail Clarification - 1. We are uncertain from station to station detail section A-A should be performed? ie. the length of the guardrail run or where the A-A to the end of the guardrail shown on sheet 23. 2. We are uncertain of the width of the standard clearing limits from type b stab to match existing. 3. Sheet SQ-6 shows sta. 2634+06 to 2646+87 Rt. to be C&G at 10 ft. and 2.67 ft. Which one covers the guardrail location? Depending on the response to questions 1&2 we would like to confirm the AC is covered.	18-Oct-17	25-Oct-17	CPC	7	1. Section A-A is from sta. 2640+08.80 to sta. 2643+45.55 2. The standard clearing and grubbing extends from the edge of the inside shoulder to the toe of slope (see cross section and superelevation details) 3. See Superelevation Correction details 3, 4, 5 and 6 for shoulder treatment.

RFI	10	RCI	18-Oct-17	Clearing and Grubbing - What is the intent of the width of 2.67 in the clearing & grubbing limits?	18-Oct-17	25-Oct-17	CPC	7	The 2.67' C&G limit refers to the 2'-8" Sod Treatment 1 (Index 105) for the outside shoulder in this area. The LT and RT were based on "BL Survey & Const. SR 91"; However, the C&G limits were based on BL Northbound SR 91.
RFI	11	RCI	18-Oct-17	Earthwork Plan Sheets - The detail shows to re-work shoulder (earthwork) as a 1:4 max. The plans do not include cross sections for this location, so we have no way to verify quantities for embankment & regular excavation.	18-Oct-17	25-Oct-17	CPC	7	The embankment quantity to rework the shouder is 16.3 CY for Okeechobee County and 65.1 CY for Indian River County. Cross Sections within this area were not required per discussion with turnpike during design.
RFI	12	RCI	18-Oct-17	Farm Crossing 88Q007 - Should there be Miscellaneous asphalt quantities?	18-Oct-17	25-Oct-17	CPC	7	The quantities are correct. Since the posts for the guardrail at the farm crossing is secured to the back of the headwall, there is no need for misc. asphalt directly on the farm crossing. The first 4 rows of the summary of Misc asphalt table for 435168 on sheet SQ-12 refers to farm crossing 88Q007.
RFI	13	CPC	21-Nov-17	Gore Striping - gores entering the Fort Drum Service Plaza shows 18" Chevron's. Current Design Standard has removed the striping.	21-Nov-17	21-Nov-17	CPC	0	The intent of the plans is to remove the 18" Chevrons which is in accordance with the Design Standards.

ATTACHMENTS

Shop Drawings

Shop Drawing Module

View Shop Drawing

Distribute Shop Drawing Resubmit Shop Drawing Reopen Shop Drawing Close Window Manage Attachments Printable Version

Florida's Turnpike Enterprise
Construction
Resurface Turnpike (SR91) (MP 185-190)

Shop Drawing

Shop Drawing #: E8Q45-0001.1	Contract #: E8Q45 Resurface Turnpike (SR91) (MP 185-190)
Financial Project #: 435166-1-52-01, 435168-1-52-01	Spec Section/Pay Item #: 458 Expansion Joint
Schedule Item: 458 Polymer Bridge Deck Expansion Joint Product Data	Title: 458 Polymer Nosing System/Joint Sealant Product Data
Division: DIV II - Structures	Contractor Submittal #: RCI No: 350-5135
Date: December 7, 2017	Turnpike Submittal #: E8Q45-0001.1
EOR Submittal #:	Reply Needed By: December 27, 2017
From: CON Marie Buffill	Assigned Date:
BIC:	CEI Response Date: December 11, 2017
CEI Approval Status: Not Reviewed	EOR Response Date: December 11, 2017
EOR Approval Status: Approved	Turnpike Response Date: December 11, 2017
Turnpike Approval Status: No Review Required	Description: 458 Polymer Bridge Deck Expansion Joint Product Data
Other Reviewers:	

Attachments (View Attachment History):

E8Q45-0001.1.pdf

Comments:

E8Q45-0001.1 - Response from FBT by Truong Trinh on 12/8/2017 4:35:08 PM :
FBT has reviewed the shop drawing and has no further comments.

Note: No Turnpike Review Required. by Marie Buffill on 12/11/2017 12:51:00 PM :

History:

Created by CON Marie Buffill on 12/7/2017 3:27:00 PM
Reviewed-Routed Forward by EOR Truong Trinh on 12/8/2017 4:35:27 PM
Reviewed-Routed Forward by CEI Marie Buffill on 12/11/2017 9:01:37 AM
Reviewed-Routed Forward by EOR Marie Buffill on 12/11/2017 12:52:04 PM
Answered-Routed to Initiator by Turnpike Marie Buffill on 12/11/2017 12:52:16 PM

BIC Time:

CEI - 2 days, 16 hours, 26 minutes
EOR - 1 days, 4 hours, 59 minutes
Turnpike - 0 days, 0 hours, 0 minutes

ATTACHMENTS

WARRANTIES



DOW CORNING/SSI XJS EXPANSION JOINT SYSTEM
5 YEAR MATERIAL ONLY WARRANTY APPLICATION

SSI will warrant the XJS Expansion Joint System for a period of 5 years providing the following criteria is met: (See sample warranty for specifics of coverage)

- 1) Prior to installation of system, the joint configuration shall be submitted to SSI for review along with a copy of the project specifications requiring the material warranty.
- 2) The system is installed in strict compliance with both Dow Corning's and SSI's published installation procedures.
- 3) All components of the system are installed on compatible and sound substrates.
- 4) All materials are installed within their respective shelf-life.
- 5) Prior to the start of work, the Distributor Representative and Installation Contractor shall meet and discuss method of installation for the XJS System.
- 6) The Distributor Representative shall be on site at the start of work to demonstrate to the Installation Contractor and Owner/Owner's Representative the acceptable manner to install the XJS System. This shall include both the End Dam and Sealant installations.
- 7) For Projects that are on-going, the Distributor Representative shall make periodic visits to the project site to inspect work as it progresses.
- 8) At completion of work, the Distributor Representative shall inspect the completed work to ensure the End Dam is installed correctly and the sealant is recessed at the appropriate distance below the road surface. There shall be one (1) Field Adhesion Test performed per structure or 500' of joint installed.
- 9) Warranty Application shall be submitted to SSI in writing within 60 days of completion of work.

Installation Contractor Declaration:

I hereby certify that the DOW CORNING/SSI XJS Expansion Joint System has been installed in accordance with both SSI's and Dow Corning's published installation procedures and that all of the above conditions have been met.

Installation Contractor:


Name _____ Date 7/25/18

Interstate Construction
Company Name

Address: 2501 SW 160 Ave

STE 400
Miramar, FL 33027

Distributor Declaration:

I visited the project site on 4 occasion(s) and personally observed 4 successful field adhesion test(s) out of 4 field adhesion test(s) performed. I also observed the installation of approximately 126 linear feet of End Dam and Sealant installation. These materials were installed in accordance with Dow Corning's and SSI's published installation procedures

Distributor Representative:

Gregory J. Harwin 07-25-18
Name Date

Coastal Construction Products
Company Name

Project Information:

Pre-installation Conference
Date: 06-03-18

Installation Completion Date: 07-16-18

Installation Start Date: 06-03-18
To: Florida Turnpike Enterprise
MP 263 Bldg 5315
P.O. Box 613069
Dcoee, Fl. 34761

Product Quantity:
Silspec 900PNS: 208.5 CUFT.
DC-902RCS: 88 GAL (PAKS)

Project Reference: E8Q45
Resurface of Turnpike
Mainline Call Order 002
Bridge# 880060, 880068,
910069, 910064, MP 188.7-190.4

Project consisted of 753 LF. of XJS Joint System.

To obtain a 5 Year Material Only Warranty this application must be filled out completely, signed by both the Installing Contractor and Distributor, and submitted via mail or fax to SSI at:

SSI
PO Box 50009
Tulsa, OK. 74150
Fax: (918)582-7510

Please indicate which party the warranty is to be sent to.



DOWSIL™ 902 RCS Joint Sealant
LIMITED WARRANTY

To: Florida Turnpike Enterprise
P.O. Box 613069
Ocoee, FL 34761

Date: 7/27/18

Product Quantity / Package Size:
88 units/40oz

Project Reference:
E8Q45 call order 002
Resurface of turnpike
Mainline Bridge #
880060, 880068, 910062
910064

Warranty No.: 2018-902 RCS-001

Completion Date: 07/16/2018

Dow warrants that the **DOWSIL™ 902 RCS Joint Sealant** indicated above will remain elastomeric and will not fail adhesively or cohesively for a period of 5 years from the date of completion, as referenced above, if:

- a) Dow is notified prior to project startup and a copy of the project specifications requiring Warranty are on record with Dow, and
- b) The sealant is applied in strict compliance with Dow's published installation procedures, and
- c) The sealant is used with compatible materials and substrates, and
- d) The sealant is installed within its stated shelf life, and
- e) Prior to work of any kind pertaining to joint sealing, the joint sealing contractor in combination with the Owner/Owners Rep and Dow/Dow's Rep, shall meet and discuss method of installation and install a test section consisting of a minimum of 3 feet (about one meter) of typical joints, and
- f) A field adhesion test shall be successfully performed on the test section above as outlined in our Field Adhesion Test Procedure to confirm adhesion under site conditions. Successful adhesion tests must be performed for sealant installed thereafter throughout the project. A minimum of one field adhesion test must be performed per bridge, per substrate, and
- g) The above adhesion test results are submitted to Dow in writing within 60 days of above referenced completion date.

I hereby certify that the DOWSIL™ 902 RCS Joint Sealant has been installed in accordance with Dow's published installation procedures and that all of the above conditions have been met:

Installation Contractor:

Alek Gruperu 7/27/18 Interstate Construction
 Name Date Company Name

I visited the project site on 4 occasion(s) and personally observed 4 successful field adhesion test(s) out of 4 field adhesion test(s) performed. I also personally observed the installation of approximately 126 linear feet of sealant which was being installed in accordance with Dow Corning's published installation procedures.

Dow Authorized Representative

Gregory J. Harvin 07-27-18 Coastal Construction Products
 Name Date Company Name

LIMITATIONS

This warranty specifically excludes adhesive and or cohesive failure of the sealant due to:

- a) Natural causes such as lightning, earthquake, hurricane, flooding, tornado, fire, etc., or
- b) Movement of the pavement resulting in stresses on the sealant which exceed Dow's published specifications for elongation and/or compression for the sealant, whether due to structural settlement, design error, or construction error, or
- c) Improper design, installation, or
- d) Improper drainage of the pavement/deck surface or subgrade.

And does not cover damage to, or failure of, the sealant due to:

- a) Disintegration of the underlying substrates, or
- b) Mechanical damage caused by individuals, tools, or other outside agents.

Dow does not encourage, warrant, or pursue the use of **DOWSIL™ 902 RCS Joint Sealant**, or any **DOWSIL™ Silicone Pavement Joint Sealant**, for containment area applications.

This warranty shall be null and void if Dow or the Dow distributor has not received payments for the products used.

REMEDIES

In the event of a claim under this warranty, you must notify Dow within 30 days of the claimed defect and provide Dow with the opportunity to inspect. Dow shall, for a period of five (5) years from the date of completion be responsible for the cost of replacement silicone materials and labor for any repairs made necessary by a failure of the sealant under this warranty up to a maximum of five (5) times the purchase price of the sealant utilized to make the necessary repairs.

DOW SHALL NOT BE RESPONSIBLE FOR DAMAGE TO THE SEALANT DUE TO CONTRACTOR'S/OWNER'S FAILURE TO MAINTAIN, TO NOTIFY, OR TO MITIGATE.

DOW SHALL NOT BE LIABLE FOR AND EXPRESSLY DISCLAIMS ANY LIABILITY FOR ANY DAMAGE TO THE PAVEMENT OR FOR CONSEQUENTIAL OR INCIDENTAL DAMAGE, WHETHER IN CONTRACT OR IN TORT, INCLUDING NEGLIGENCE. THIS WARRANTY IS IN LIEU OF ALL OTHER WRITTEN OR ORAL, EXPRESS OR IMPLIED WARRANTIES AND DOW SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE. THIS WARRANTY AGREEMENT IS GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH MICHIGAN LAW.

All claims or controversies between Dow and the Owner arising out of, or relating to the performance of the Dow product or to any alleged breach of this Warranty which cannot be resolved by mutual agreement among the parties shall be decided by arbitration in Detroit, Michigan, in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association. This agreement to arbitrate shall be specifically enforceable. Any award rendered by the arbitrators shall be final, and judgment may be entered in accordance with applicable law in any court having jurisdiction.

NOTE: Warranty not in effect unless signed by Dow



Jason Sika Date 7/27/2018
Program Manager - Pavement Products
Dow

For questions on this warranty, please contact Dow at (989)-496-4549 or fax: (989)-496-8909.

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**SECTION 338
VALUE ADDED ASPHALT PAVEMENT**

338-1 Description.

Construct Value Added Asphalt Pavement consisting of Asphalt Concrete Structural Course and Asphalt Concrete Friction Course, subject to a three year warranty period after final acceptance of the Contract in accordance with 5-11.

For purposes of this Specification, the Responsible Party, as designated herein, is responsible for performance of the Value Added Asphalt Pavement including continued responsibility for performing all remedial work associated with pavement distresses exceeding threshold values determined in accordance with this Section, and as to which notice was provided to the Responsible Party.

The work specified in this Section will not be paid for directly, but will be considered as incidental to other Contract items.

338-2 Materials and Construction Requirements.

Meet the following requirements:

- Hot Bituminous Mixtures - Plant, Methods and EquipmentSection 320
- Hot Bituminous Mixtures - General Construction RequirementsSection 330
- Superpave Asphalt ConcreteSection 334
- Asphalt Concrete Friction CoursesSection 337

338-3 Responsible Party.

Prior to any Value Added Asphalt Pavement being placed on the project, the Contractor shall designate a Responsible Party to accept responsibility for maintaining the Value Added Asphalt Pavement, when remedial work is required. When the scope of the asphalt work is only milling and resurfacing, and there is no construction of the embankment, subgrade or base below the pavement included in the Contract, the Responsible Party may be either the Contractor or the Department approved subcontractor performing the Value Added Asphalt Pavement work. When the construction of the embankment, subgrade or base below the pavement is included in the Contract, in addition to the construction of the Asphalt Concrete Structural Course and Asphalt Concrete Friction Course, the Contractor shall be considered as the Responsible Party.

When the Responsible Party is a subcontractor, the subcontractor must be pre-qualified with the Department in the category of asphalt, and such designation must be made to the Department by the Contractor. The proposed subcontractor must execute and submit to the Department a form, provided by the Department, prior to or concurrent with the Contractor's request to sublet any Value Added Asphalt Pavement work, stipulating that the subcontractor assumes all responsibility as the Responsible Party for the Value Added Asphalt Pavement within the three-year warranty period. Failure to timely designate the Responsible Party will result in the Contractor being the Responsible Party unless otherwise agreed to in writing by the Department.

Upon final acceptance of the Contract in accordance with 5-11, the Contractor's responsibility for maintenance of all the work or facilities within the project limits of the Contract will terminate in accordance with 5-11; with the sole exception that the obligations set

ATTACHMENTS

Print-out of Lessons Learned over the Project Duration

6) OUTSTANDING WORK TO BE DONE AFTER FINAL ACCEPTANCE

- **Farm crossings need to be re-done as original repair work was not up to standards, nor was the operation overseen by inspectors as per the Technical Special Provisions.**

6) OUTSTANDING WORK TO BE DONE AFTER FINAL ACCEPTANCE

- **Farm crossings need to be re-done as original repair work was not up to standards, nor was the operation overseen by inspectors as per the Technical Special Provisions.**