

**JAMES RIVER ROAD OP**

# AGENDA

- Project Overview
- Issues and Resolutions
  - Existing Deck Patching
    - Deck Overlay
  - Railroad Flagger Delay
    - Project Acceleration
- Summary

# PROJECT SPECIFICS

- ❖ **CID: 2018001357**
- ❖ **NHPP-0052(339)DTC**
- ❖ **District 2 – Cabell county**
- ❖ **Winning bid of \$10,431,061.91 by Kokosing on July 23, 2023**
- ❖ **Bridge Length - 413.5 LF**
- ❖ **Crosses CSX Railroad, James River Road and Four Pole Creek**

# PROJECT DETAILS

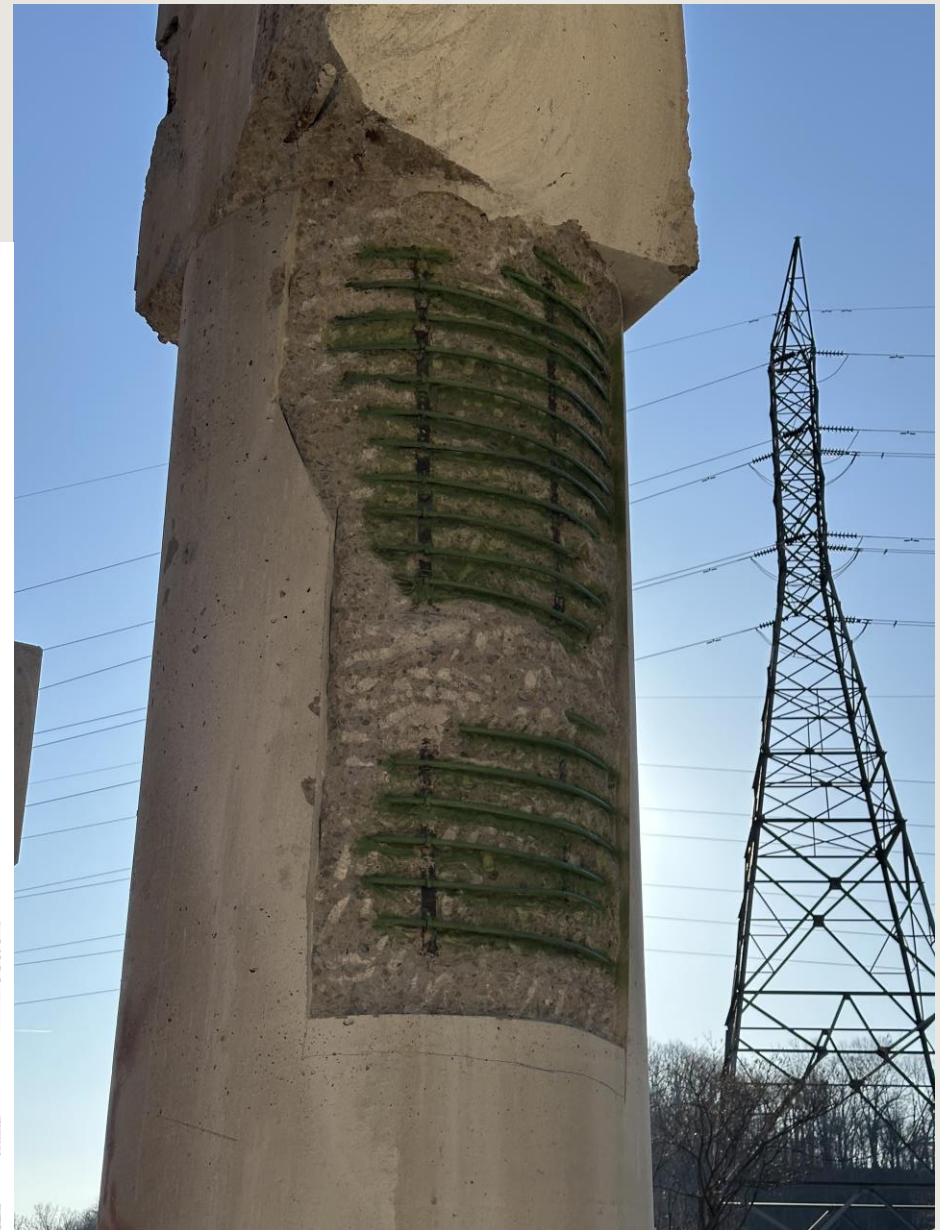
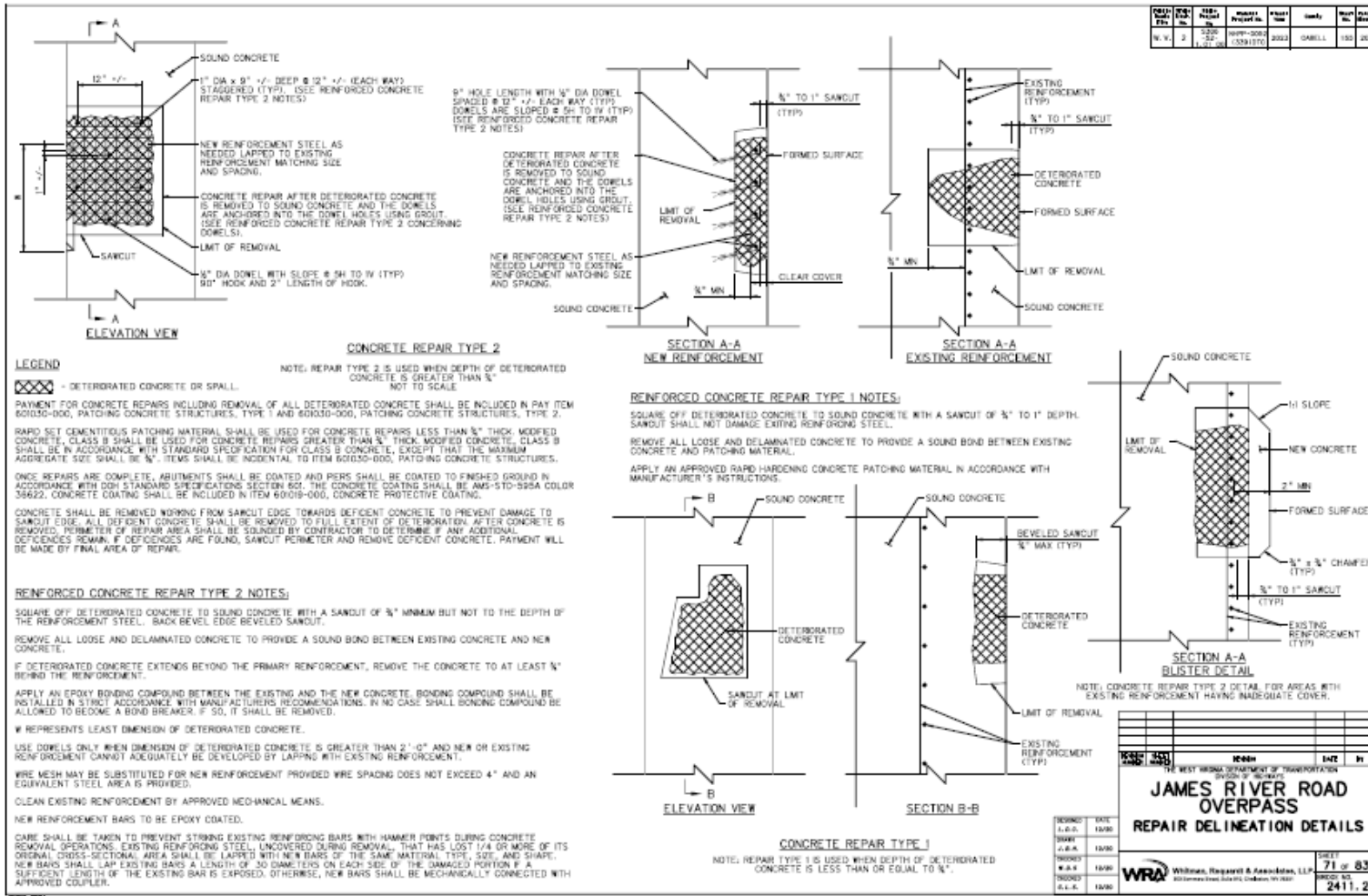
## Substructure Rehab

- **Abutment 1 and 2**
  - **Type 2 Concrete Patching**
  - **Existing Footings to Remain/New Beam Seats and Diaphragms**
- **Pier 1**
  - **Type 2 Concrete Patching**
  - **Cap Replacement**
- **Piers 2 and 3**
  - **Type 2 Concrete Patching**
  - **Pedestal Replacement**
  - **FRP Wrap**





# Type 2 Concrete Patching



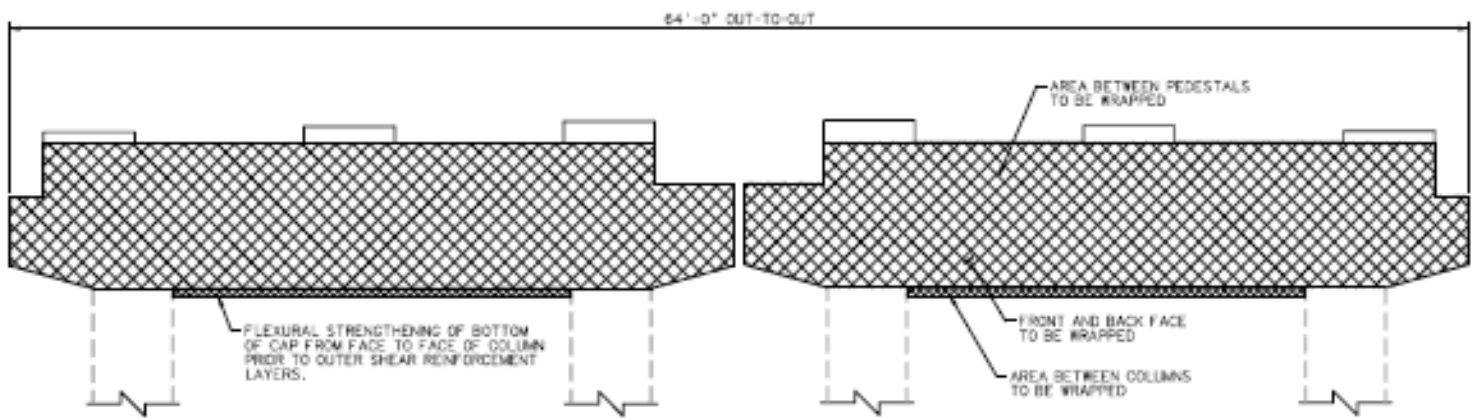
# FRP WRAP SYSTEM

- ❖ Flexural strengthening applied to bottom of cap.
- ❖ Shear reinforcement layer applied to all areas of cap except for pedestals.
- ❖ Pull off tests ran to ensure adequate bonding.

|                      |   |                       |                    |                |                     |      |      |             |        |              |     |             |     |
|----------------------|---|-----------------------|--------------------|----------------|---------------------|------|------|-------------|--------|--------------|-----|-------------|-----|
| FDL-<br>Sheet<br>No. | 2 | FRP-<br>Detail<br>No. | FRP-005<br>1-21-08 | Project<br>No. | 1000-005<br>1000070 | Year | 2003 | Drawn<br>By | GABILL | Sheet<br>No. | 104 | Page<br>No. | 201 |
|----------------------|---|-----------------------|--------------------|----------------|---------------------|------|------|-------------|--------|--------------|-----|-------------|-----|



TOP OF PIER CAP  
SCALE: 1" = 3'-0"



PIER ELEVATION VIEW  
SCALE: 1" = 3'-0"



BOTTOM OF PIER CAP  
SCALE: 1" = 3'-0"

**NOTES:**

REQUIRED FOR PIER 2 AND 3 CAPS, NOT REQUIRED FOR PIER 1 CAPS.

THE CONTRACTOR SHALL VERIFY DIMENSIONS AND QUANTITIES SHOWN IN THE PLANS.

ALL WORK RELATED TO THE FRP WRAP SYSTEM IS TO BE DONE IN ACCORDANCE WITH SPECIAL PROVISION 801 AND INCLUDED IN ITEM 60105-005, FRP WRAP SYSTEM. THE SYSTEM WILL BE USED FOR BOTH SHEAR STRENGTHENING AND SHEAR AND FLEXURE STRENGTHENING AS SHOWN.

NO FRP WRAP SYSTEM IS TO BE APPLIED UNTIL THE ENGINEER HAS APPROVED THE PATCHING WORK.

AREAS THAT ARE TO BE WRAPPED WITH FRP WRAP SYSTEM ARE THE FRONT AND BACK FACES OF THE PIER CAPS, THE TOP OF THE PIER CAPS INCLUDING THE AREA BETWEEN THE PEDESTALS, THE BOTTOM OF THE PIER CAPS INCLUDING THE AREAS BETWEEN THE COLUMNS AND THE ENDS OF THE PIER CAP, TOP OF PEDESTALS WHERE BEARINGS/BEAMS ARE SEATED AND SIDES OF PEDESTALS ARE NOT TO BE WRAPPED IN FRP WRAP SYSTEM.

THE WRAP SHOULD BE INSTALLED SO THAT VERTICAL SEAMS DO NOT ALLOW FOR WATER INTRUSION (I.E. LOWER WRAPS SHALL NOT OVERLAP UPPER WRAPS).

THE COATING SYSTEM COLOR SHALL BE AMS-STD-595A, COLOR 36622 (LIGHT GRAY) INCLUDE COST IN CONCRETE PROTECTIVE COATING, ITEM 60019-001.



SIDE VIEW



ITEM 60105-005, FRP WRAP SYSTEM



FLEXURAL STRENGTHENING

THIS SHEET FOR INFORMATION ONLY  
CONTRACTOR TO VERIFY ALL  
DIMENSIONS FOR FRP WRAP

|          |       |  |  |
|----------|-------|--|--|
| DESIGNED | DATE  |  |  |
| C.L.S.   | 12/00 |  |  |
| DRAWN    | DATE  |  |  |
| J.B.S.   | 12/00 |  |  |
| CHECKED  | DATE  |  |  |
| M.S.S.   | 12/00 |  |  |
| APPROVED | DATE  |  |  |
| C.L.S.   | 12/00 |  |  |

THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**JAMES RIVER ROAD  
OVERPASS**

**FRP WRAP SYSTEM DETAILS  
PIERS 2 & 3**

WRA  
Willman, Raup & Associates, LLP  
400 Commerce Street, Suite 400, Charleston, WV 25302

SHEET  
**80** OF **83**

DRAWING NO.  
**2411.2**

















# PROJECT DETAILS

## Superstructure Replacement

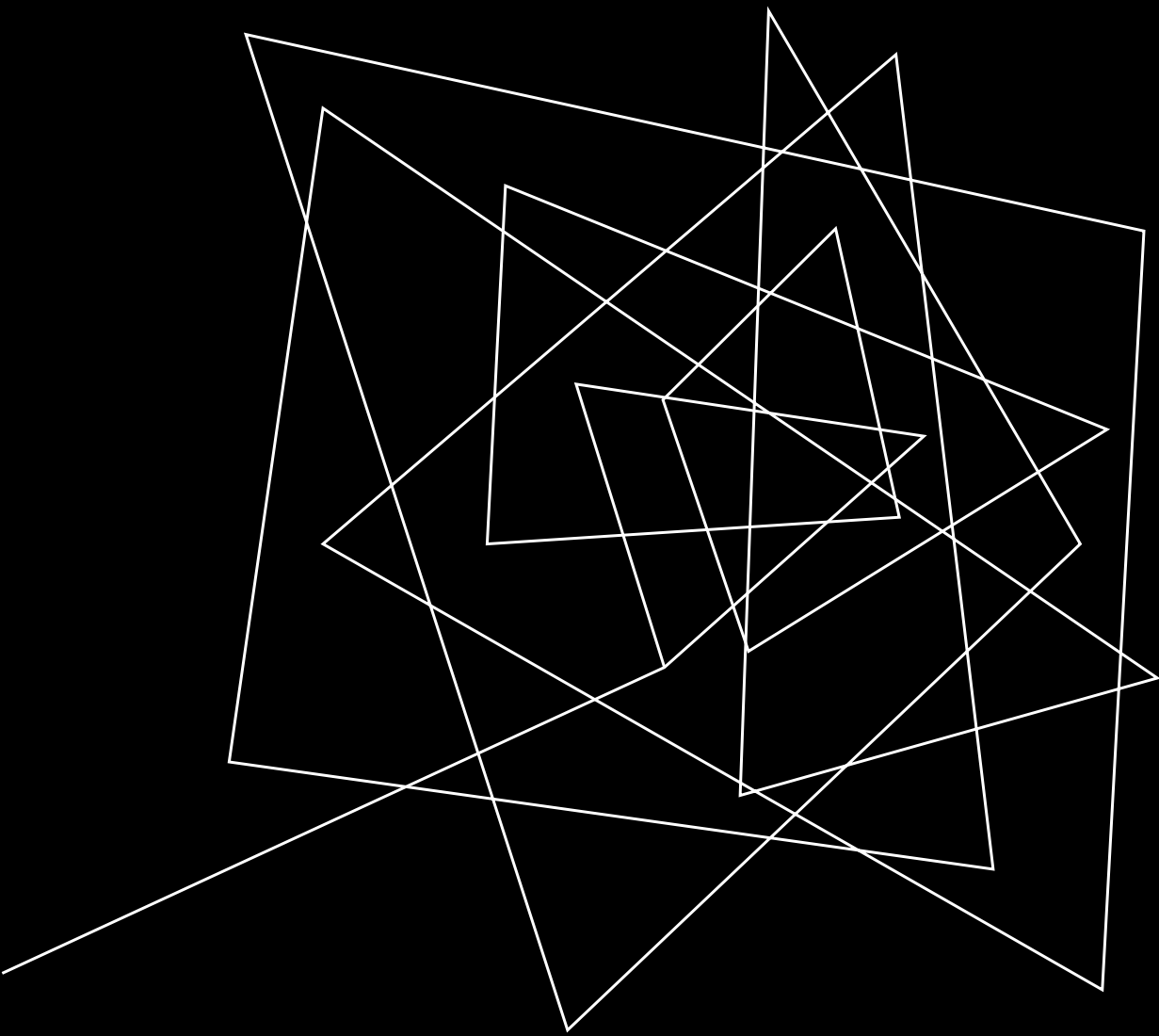
- **4 Span Bridge**
- **Steel Superstructure**
- **4' Wide Raised Median**
- **Barrier Fence on CSX ROW**
- **3 Lighting Poles with LED Luminaires**











**MAJOR ISSUE #1**



## PHASE 3 – SOUTHBOUND BRIDGE CONSTRUCTION

### **Existing NB Bridge Deck Deteriorates**

- Force Account Patching as per Plans
- Claims for Damage to Vehicles
- Public Safety Concerns
- Required 24 hours monitoring.





By early afternoon the potholes had been filled, the West Virginia Department of Highways, (DOH) said in a statement.

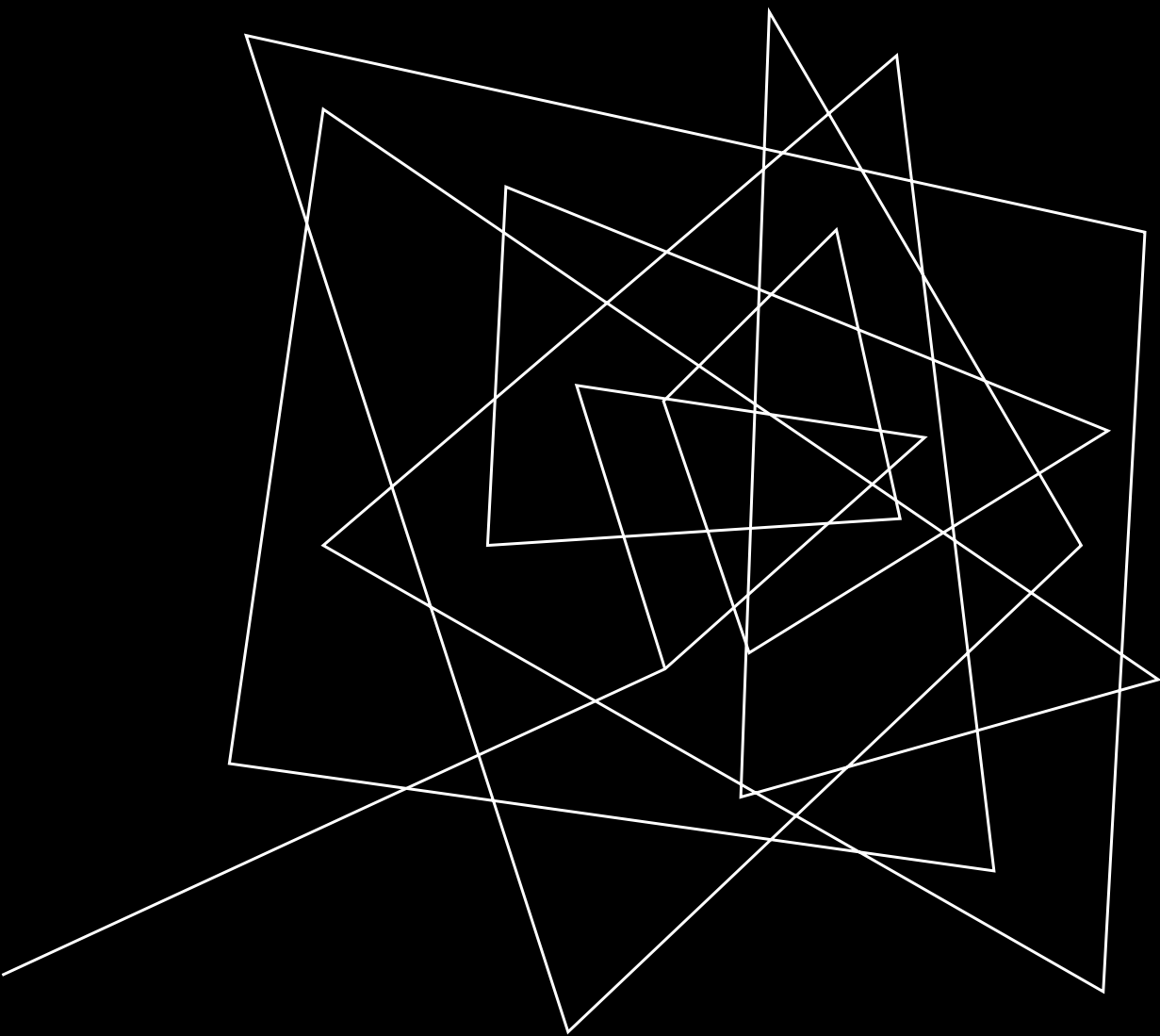
The statement said, "Kokosing Construction repaired several potholes on US 52, off Exit 6 of I-64 in West Huntington on Thursday, January 25, 2024. There were intermittent closures for patching. WVDOT is evaluating long-term options for pothole repairs in that area. The WVDOT holds contractors accountable for maintaining passage through work zones for the traveling public while a construction contract is in place. From the time a contract is initiated until the project is complete, WVDOT requires the contractor to make repairs immediately when issues arise. Drivers whose cars may have been damaged on the stretch of road may file a claim with the West Virginia Legislative Claims Commission. For more information call 304-347-4851 or 1-877-562-6878 (toll free). Drivers may also contact the contractor."

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# CHANGE ORDER # 2 - EXISTING NB DECK OVERLAY

- Added Work Change Order in the amount of \$94,024.90.
- Intended to Last 1 Winter Cycle
- Included:
  - Offseason Plant Opening Fee
  - Additional Mobilization
  - Paving Quantities





# MAJOR ISSUE #2



# RAILROAD FLAGGER DELAY

- Flagger Pulled on June 10, 2024
- Flagger Returned on August 12, 2024
- Pushed Work Items through the Winter
- Resulted in a CPM Schedule Delay of 209 Days



### James River Road - Proposal to Accelerate for Traffic Switch

Thu, Oct 10, 2024 at 12:45 PM

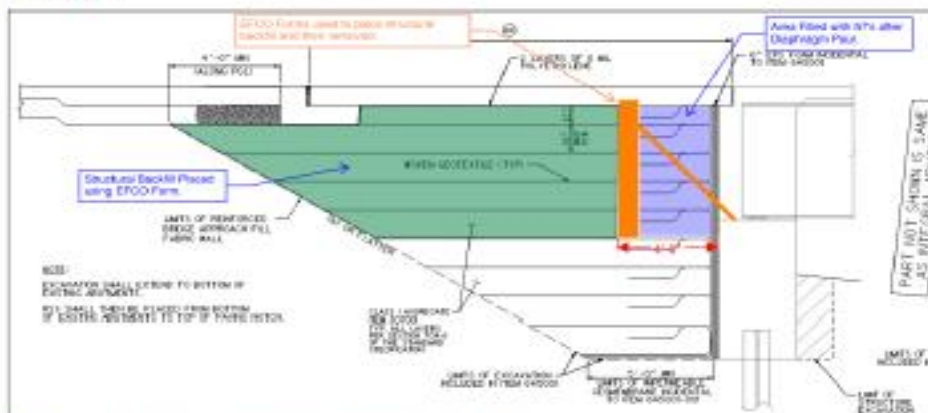
Jason Jackson <jj@kokosing.biz>  
To: "Canfield, Ryan M" <ryan.m.canfield@wv.gov>  
Cc: "Jason G. Hamilton" <jason.g.hamilton@wv.gov>, Andrew Simon <asimon@kokosing.biz>, Adam Carnella <acarnella@kokosing.biz>, Ryan Cocco <rmc2@kokosing.biz>, Mack Parsons <mack.parsons@kokosing.biz>, "Ramey, Michael P" <michael.p.ramey@wv.gov>, 16833 WVDOT - James River Road <KCC16833@kokosing.biz>

Ryan,

Per our discussions on James River Road, please see the following pricing on items that we believe may be necessary to make the traffic switch onto the new James River Road Bridge this year.

1. Asphalt Approaches – The asphalt needs to be placed prior to Asphalt Plant Shutdown which is typically sometime around mid-November.
  - a. Kokosing is proposing to place a form kicked off approximately 4' from the diaphragm. Then place the structural backfill against the form. The fabric used in the structural backfill will hold the placed fill for forming the diaphragm at a later date. This will allow the sleeper slab to be constructed and asphalt placed prior to Asphalt Plant shutdown. 57's will be placed in the void between the structural backfill and the diaphragm.

#### I. Plan Description:



- ii. ELR's Design Cost to analyze structural backfill to support slope = \$9,560.00.
  1. **ELR's Design will take approximately 2 to 3 weeks to complete. We need a response from the WVDOT on this item by end of business on October 14<sup>th</sup> in order to have an opportunity to place anything in early November.**
- iii. KCC additional cost to install/remove EFCO form to hold slope = \$7,400.00
- iv. Price to place 57's is equitable to placing the structural backfill and can be paid at the contract unit price for structural backfill.

#### 2. Winter Concrete Pricing:

- a. Concrete Plant Winter Handling: \$11.5/ICY
- b. Install & Remove Concrete Bunkers: \$3,000/SP
- c. Install & Remove Glycol Heaters (Each Set Up): \$5,000.00 EA
- d. Glycol Heater Rental (We anticipate needing 2 Ea.): \$11,350.00/Month/EA.

#### 3. Overtime Premium Pricing:

- a. We recommend tracking manhours on premium time with work authorizations due to the fluctuation of manpower that may be needed on any given premium shift.

#### 4. The pricing provided above does not include

- a. Heating the underside of the bridge deck.
- b. Subcontractor Premium Time.
- c. High early concrete.
- d. Any other acceleration measures not listed in this proposal.

We have looked at our schedule and believe that using the revised structural backfill, winter curing when needed, and premium time when needed will give us the opportunity to switch traffic sometime around the week of December 30th. However, we cannot guarantee that we can meet this date due to weather and other circumstances that may arise that are out of our control. It is difficult to determine, at this time, but moving forward with these measures may bring some or all of Phase 4 Activities back into the 2025 construction season.

Please let us know if you would like to have a meeting on October 11<sup>th</sup> to discuss any of these items.

Jason J. Jackson, P.E., DBIA

Area Manager

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LEAD WITH SAFETY!

# EVALUATING ACCELERATION OPTION

## Non-accelerated Option

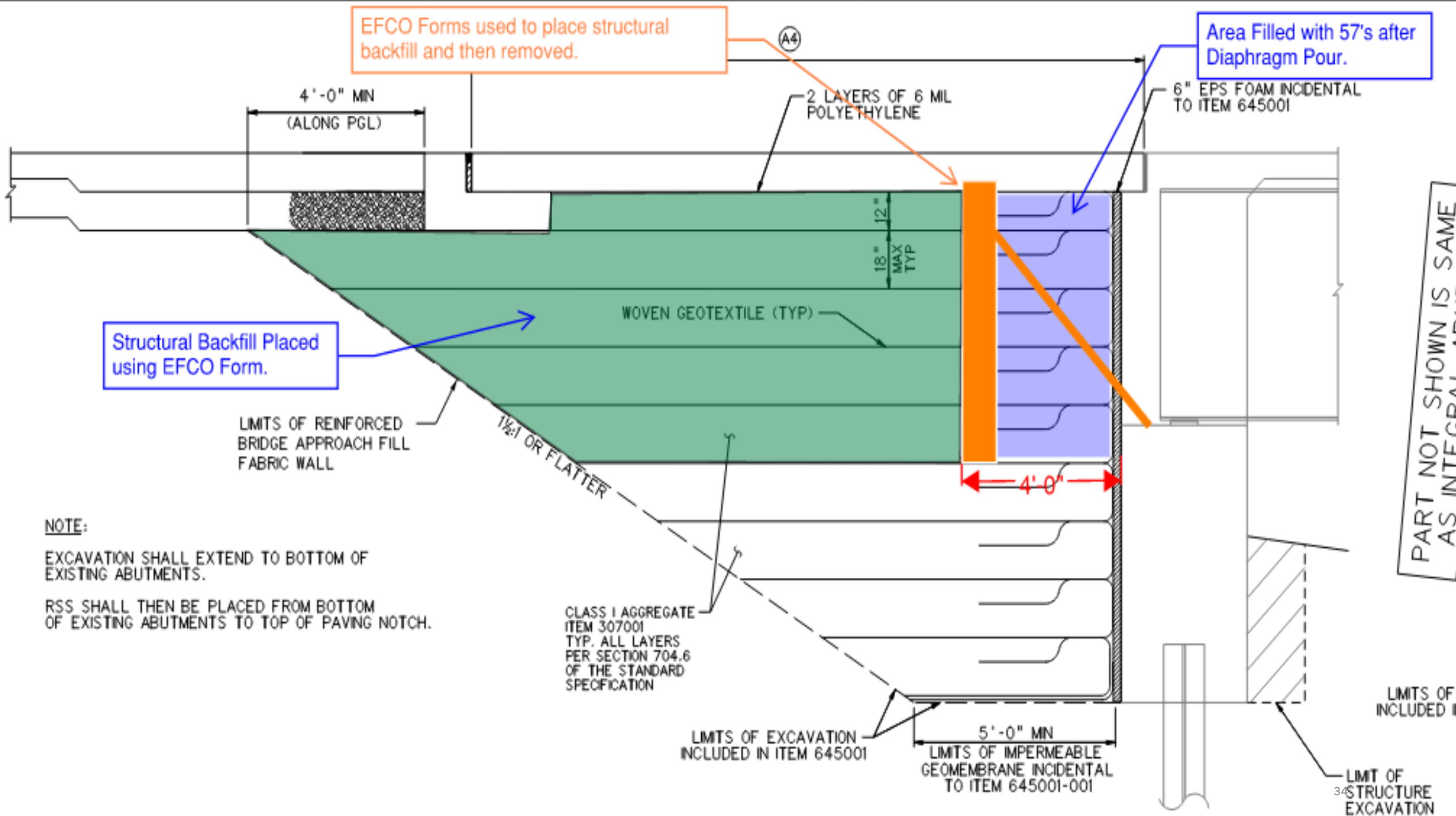
- Potential Delay Claim
  - \$5,550/day @ 209 days = \$1,159,950
- Wintering on Existing Bridge Deck
- May 2026 Completion Date

## Accelerated Option

- Reduce/Eliminate Delay Claim
- Cost Up to \$160,000
- Traffic Switched to Newly Constructed Bridge prior to Winter
- October 2025 Completion Date

# CHANGE ORDER # 5 – TRAFFIC SWITCH ACCELERATION

- Change Order generated with agreed upon unit prices.
- Some work done as force account.
- Involved use of a form wall to allow construction of the backfill behind abutments, placement of sleeper slabs, and paving up to the sleeper slabs prior to construction of the pier diaphragms.







# PROJECT ACCELERATION RESULTS

- Eliminated Delay Claim (\$ 1,159,950 estimated savings)
- Change Order was \$80,243.55, significantly less than the \$160,000 cap

**Total Estimated Savings = \$1,079,706.45**

# FINAL TAKEAWAYS



## **Teamwork makes the dreamwork**

- Cooperation by the Department and Contractor are critical.
- Resolutions that are beneficial to both parties can be made.



# THANK YOU

Ryan Canfield

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