



I-435 South Loop Link Design-Build Project





Project Location





Awarded as the Best Value Proposer

**WILSON
& COMPANY**

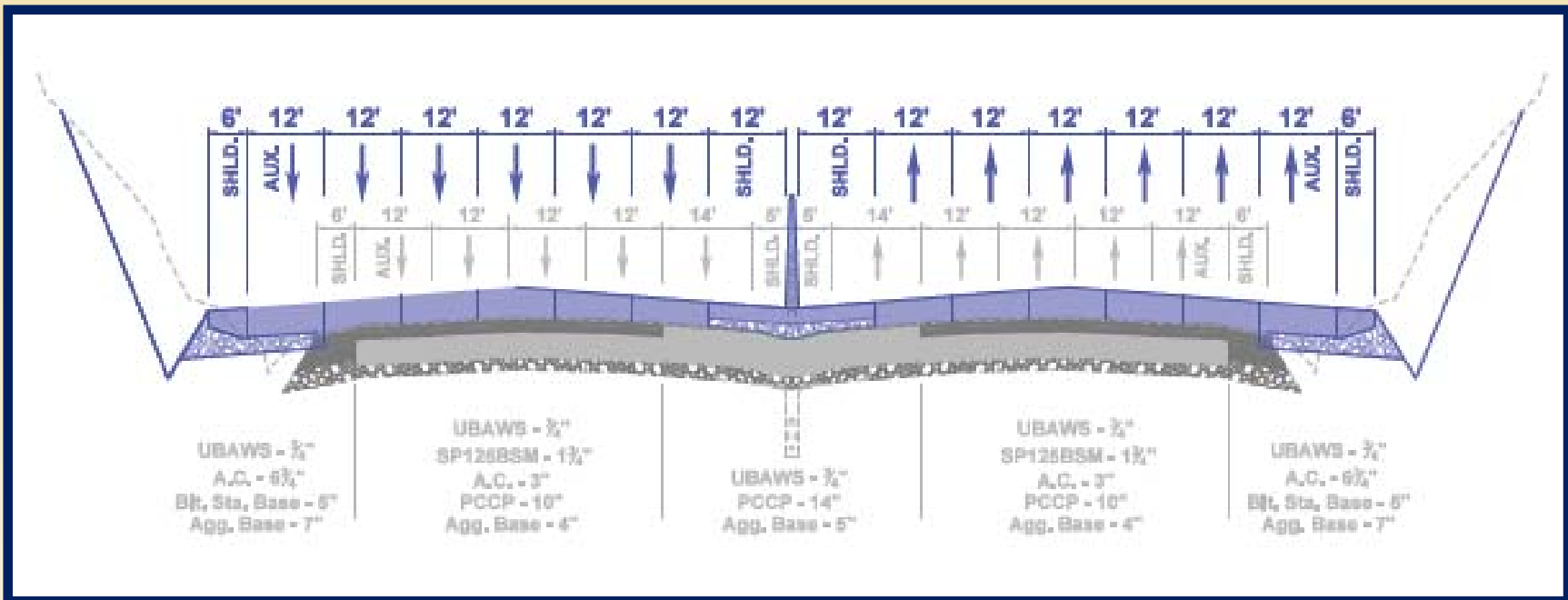
RBE

- Heavy Highway
- Water & Sewer Treatment Plants
- Industrial/Power

Radmacher Brothers Excavating Company, Inc.



Concrete Overlay



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Project Goals



1. Deliver the project utilizing a diverse workforce by May 1, 2020 within the program budget of \$74.8 million.
2. Minimize impacts to the traveling public during construction.
3. Maximize safety and peak period travel speeds on the I-435 corridor.
4. Minimize future maintenance needs.



Quality Management



- Both quality control and quality assurance are administered by Radmacher.
- Radmacher has chosen to utilize a third party testing corporation, Geotechnology Inc., to complete all quality testing.





Quality Verification



Acceptance Criteria	Minimum Frequency		QC Documents		
	Contractor QC	Agency Acceptance	Checklist	Test Record	Misc.
testing	1 per 500 CY	1 Per 10000 CY		✧	
testing	na	1 per Project		✧	
testing	1 per source/year	1 per Project		✧	
testing	1 from first truckload and 1 per 100 CY thereafter per day per mix	1 per 7500 CY		✧	
visual / certification	1 per activity	1 per month		✧	

- MoDOT provides quality verification as agency acceptance.
- Inspection and Testing Plan is modified to include testing rates at which MoDOT will verify that quality is being met on the project (typically 10% of the QA testing rate).



Acceptance



- No pay factors
- Concrete pavement is accepted on satisfactory test results and pavement smoothness.



12/12/2018





Acceptance



- We have adopted an existing JSP allowing concrete pavement to be open to traffic at 2500 psi
- This was done in efforts to accelerate the schedule and minimize impacts to the public during specific phases of concrete paving.

Paving concrete mixture shall obtain a compressive strength of 2,500 pounds per square inch prior to opening to traffic. When opening to traffic at a compressive strength of 2500 pounds per square inch type III cement and chloride based accelerators shall not be used.



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Work Zone Constraints



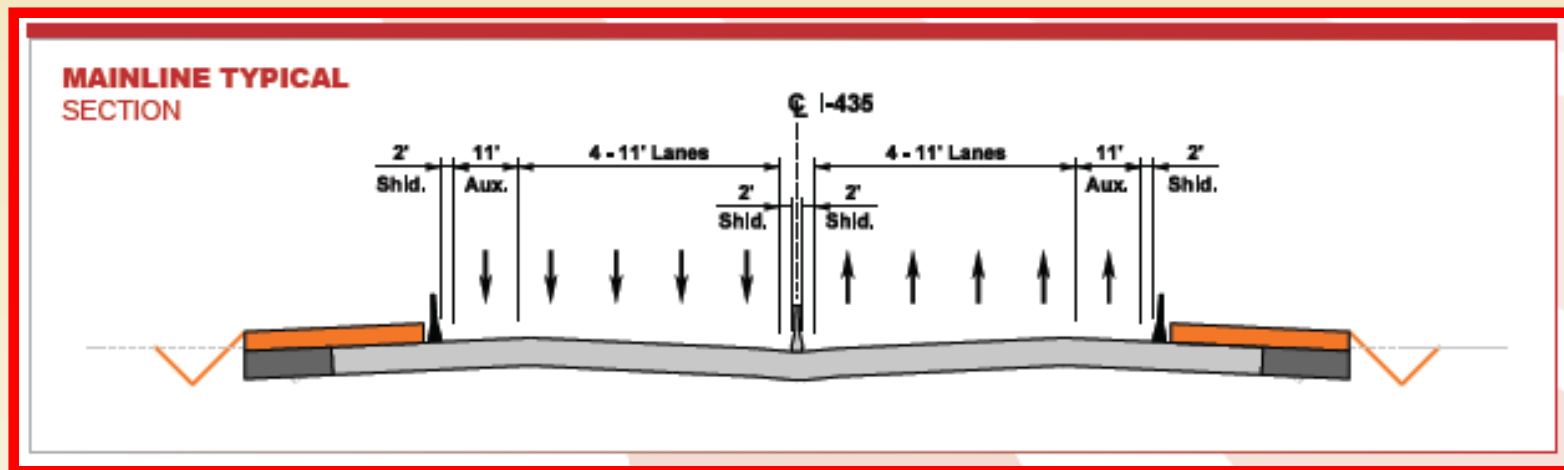


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■ Phase 1B – August 2018 to October 2018

1. Continue Phase 1 bridge construction
2. Move ramps to new ramp pavement
3. Construct remainder of ramp width



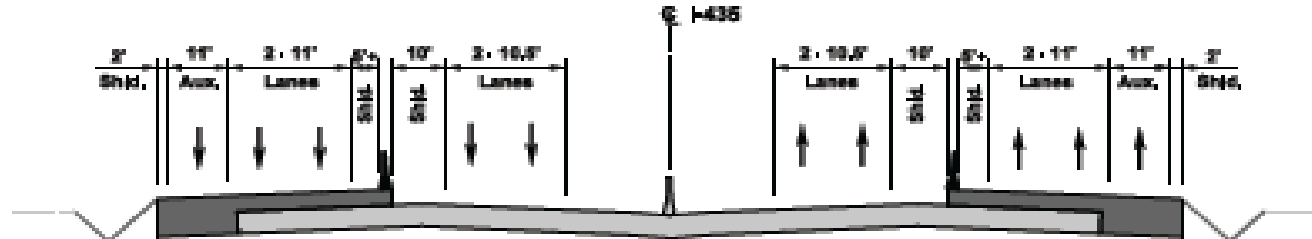


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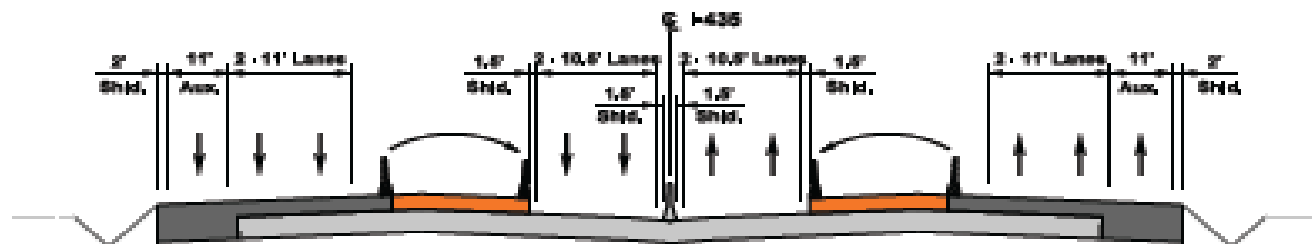


- Phase 2 – November 2018 to May 2019
 1. Move 2 lanes of traffic to the new outside lanes
 2. Leave 2 lanes of traffic adjacent to the median barrier
 3. Construct the new lanes between the travel lanes

MAIN LINE TYPICAL SECTIONS: STEP 1



STEP 2



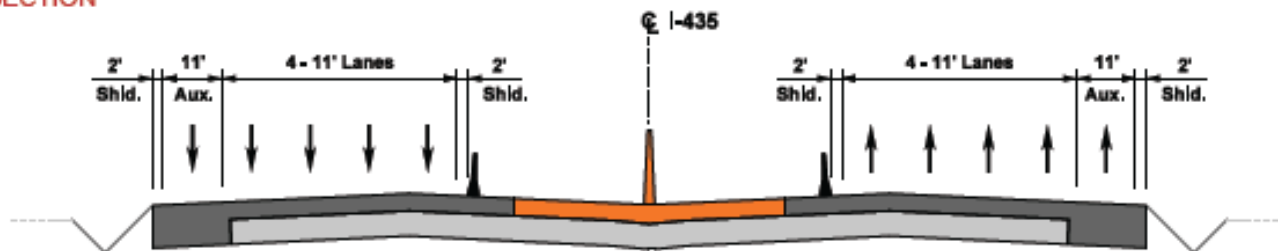


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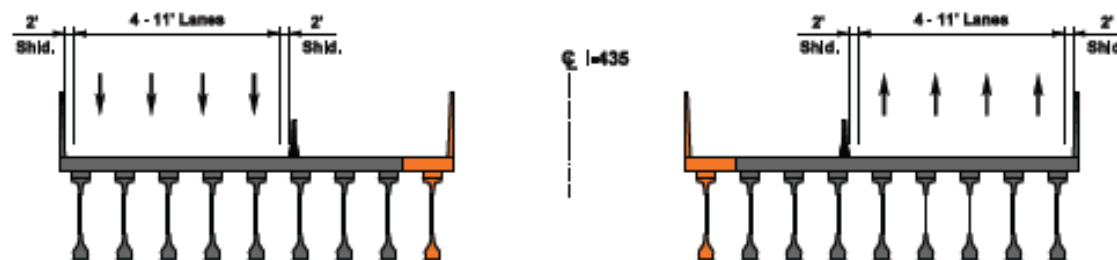


- Phase 3 – May 2019 to September 2019
 1. Move all 4 lanes to new pavement (outside)
 2. Construct median pavement
 3. Construct median side of bridges

**MAINLINE TYPICAL
SECTION**

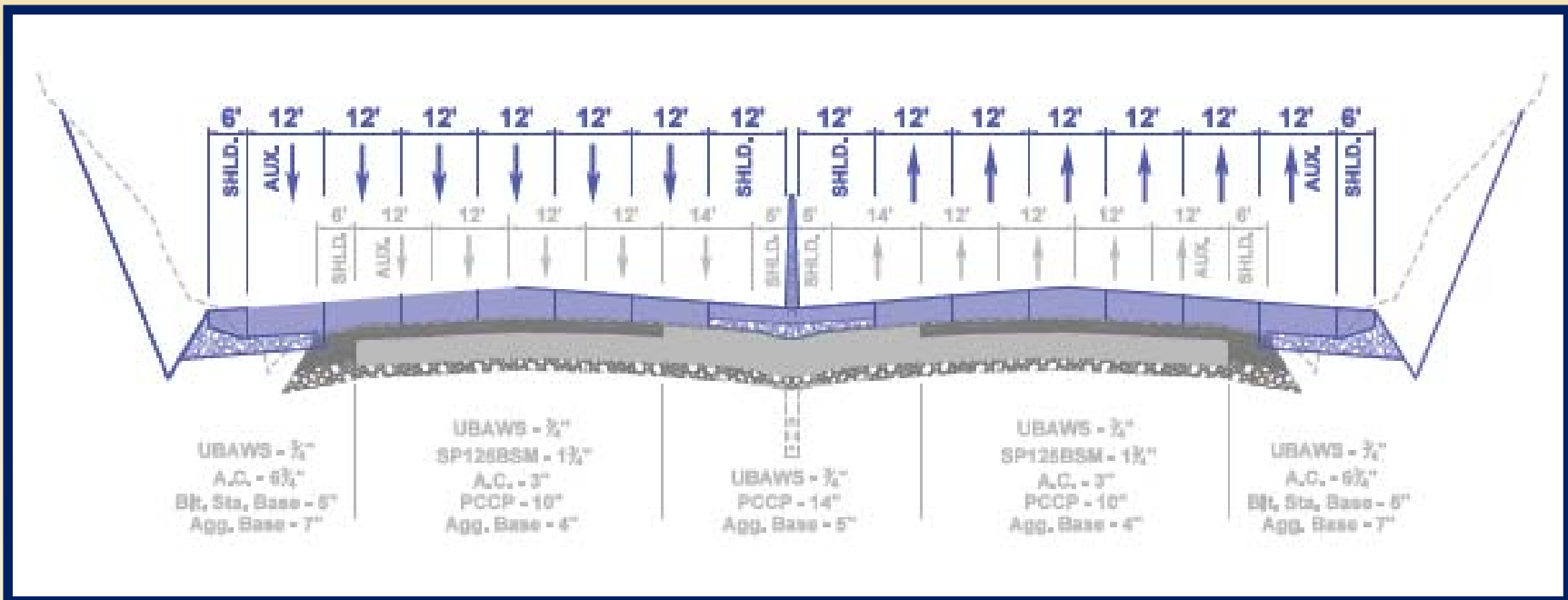


**BRIDGE TYPICAL
SECTION**





Concrete Overlay



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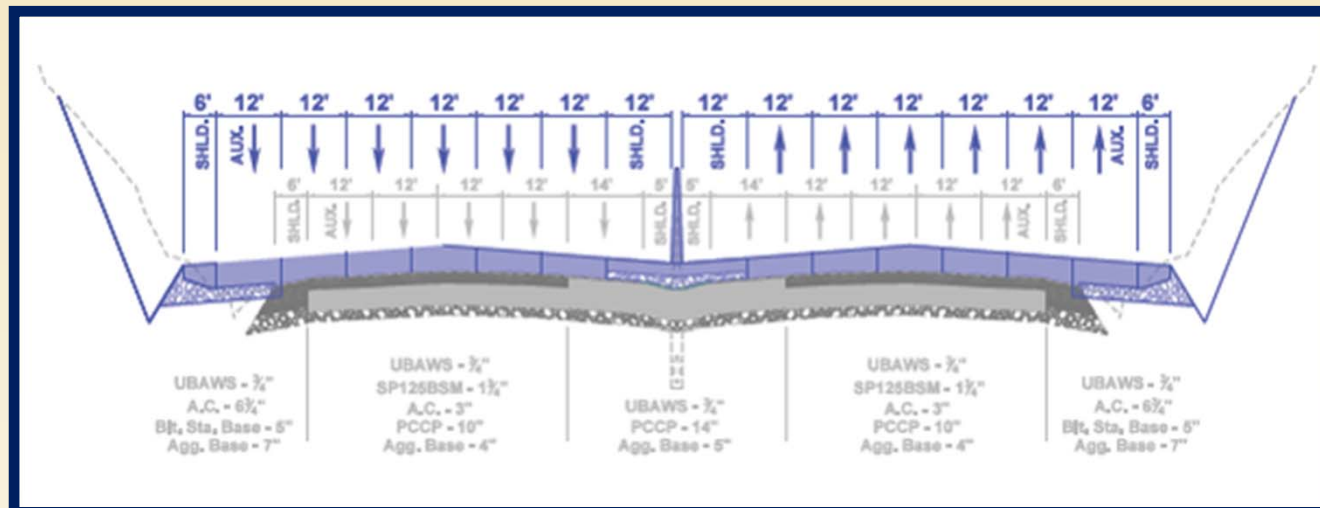


■ RFP New Pavement Section

1. 6" Agg Base
2. 11" PCCP
3. 1.25" dowels at 15' o/c
4. 30" tie bars at 30" o/c

■ RBE Overlay Section

1. Existing UBAWS interlayer
2. 8.5" PCCP
3. 1.5" dowels at 12' o/c
4. 18" tie bars at 24" o/c





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Radmacher Brothers Excavating Company, Inc.

TREKK
DESIGN GROUP, LLC

JACOBSTM



Leigh & O'Kane

SEB

PARSON **PA**
+ ASSOCIATES

TSi GEOTECHNICAL, INC.



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PINE VALLEY Contracting Inc.
Est. 1986

**COLLINS &
HERMANN**
INFRASTRUCTURE SOLUTIONS

Black & McDonald



THE TEAM!



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Not all Design-Builds are created equal but its
still the People that make all the difference!