

MEMORANDUM

Missouri Department of Transportation Design Southwest District

TO: Stacy Reese

District Engineer

CC: Assistant District Engineer – Greg Chapman

District Design Engineer – John Sanders Design Liaison – Alvin Nieves-Rosario

Area Engineer – Beth Schaller

District Utility Manager – Jason Stweart

District Construction Engineer – Johnny Teegardin

Resident Engineer -

District Maintenance Engineer – Darin Hamelink

District Maintenance Superintendent -

District Traffic Engineer – Cindy Dunnaway

Traffic Center Manager – Marc Lewis

Incident Management Coordinator - Ben Arnall

TMC Traffic Specialist – Keith Chandler

District Right of Way Manager - Andy Ellsworth

District ADA Coordinator - Cameron Sooy

District Geologist – Nicole Preuss

FROM: Transportation Project Manager – Warner "Bud" Sherman

Transportation Project Designer – Kevin Fox

DATE: May 25, 2024

SUBJECT: Job No: J8S0836B

Route MM Greene County

Preliminary Plans Submittal/Approval

Preliminary plans are being submitted for review and approval. The scope of this project is to widen Route MM, from Interstate 44 (I-44) and James River Freeway (JRF) from 2-lanes to 5-lanes with curb & Gutter. A traffic signal will be installed at Farm Road 144 intersection.

Signal improvements planned with project J8S3239, which is adjacent to the north project limits at I-44.

The current milestone dates for this project are as follows:

R/W Plans March 7, 2025 PS&E submittal January 4, 2026 Letting March 4, 2026

DESIGN CRITERIA

A.A.D.T. = 31,330Trucks = 6%DHV = 13%Design Speed = 45mph

PAVEMENT

Equivalent Pavement Design(1)							
Location	Base Type	HMA Design	PCCP Design	Shoulders ⁽²⁾			
Route MM	6" Type 5	<u>11" HMA</u>	<u>9" PCCP</u>	A2 or Full			
(Widening)	Aggregate	2" SP125C w/ PG 70-22	10" PCCP at 15	Depth			
	Base	over 2" SP125C w/ PG 70-22	ft. joints w/ 1 1/4"				
		over 7" SP250C w/ PG 64-22	dowels				

⁽¹⁾ Refer to the EPG "Other Aspects of Pavement Design – Alternate Categories" for guidance on setting up alternate or optional pavement bid items for the contract or contact Central Office Design for assistance.

ADA

A future sidewalk will be added from Carnahan Road to JRF under Project J8S0836E.

BRIDGE

There are no bridge involvements with this project.

UTILITIES

Impacted utilities exist on the project. Most notably, overhead power lines run parallel with the west side of Route MM. Gas runs north and south along Route MM under the proposed pavement along with various fiber optic and telecommunication lines. Sanitary sewer manhole adjustments and various water line adjustments may be needed.

RIGHT OF WAY

Right of way, permanent drainage, permanent utility, and temporary construction easements will be needed for the project.

- RW = 431,813.7 SF
- PDE = 62,438.0 SF
- TCE = 75,820.2 SF

TRAFFIC CONTROL

Construction will be completed in stages with access to residences and commercial properties at all times. Route MM will be built under traffic keeping one lane of traffic in each direction.

PUBLIC INVOLVEMENT

⁽²⁾ Shoulders 4' or less in width may be constructed as full depth pavement as part of travel way.

An initial public Meeting for the overall Route MM corridor was held on February 28, 2022 at the Republic Community Center to introduce the overall project concepts. An additional public hearing for this project specific improvements will be scheduled at a later date.

SAFETY

The widening of Route MM from a two-lane roadway to a five-lane roadway and improvements to intersection traffic control are expected to enhance the safety of the corridor. These improvements are expected to provide dedicated deceleration and stacking lanes for turning vehicles, reduce congestion along the mainline, allow for controlled turning movements to/from the side streets. As development occurs along Route MM and traffic increases, these improvements are expected to improve safety and vehicle operations compared to the existing two-lane conditions.

BRIDGE SIGHT DISTANCE

Not applicable as there is no bridge within project limits.

SOIL SURVEY

No soil survey been completed for the project.

DESIGN EXCEPTIONS

No design exceptions are anticipated.

ENVIRONMENTAL

Preliminary RES was submitted on 5.15.2023.

Since this project is located near an MS4 jurisdictional district, special consideration will be given during the design to ensure that overall stormwater quality is maintained, and applicable permitting processes (as required) will be followed. As the design process progresses, additional information will be provided to the Environmental Department to address any potential environmental impacts. Potential and known issues that will need to be addressed include:

- Mitigation of additional runoff including storm system outlet protection
- Area sinkholes
- Overall disturbed areas.

RAILROAD

There is no railroad coordination, impacts, or involvement with this project.

AIRPORT

The Springfield - Branson National Airport is within four miles of the project, therefore a FAA filing maybe needed.

AGREEMENTS

Municipal Agreements will be needed with Republic.

ESTIMATE SUMMARY

Project Category	Programmed**	Preliminary Estimate**	% Difference from Programmed
Contract Estimate	\$x,000	\$11,472	-X%
Utilities	\$0	\$505	-
RW	\$0	\$2,962	-
RW Incidentals	\$0	\$270	-
PE	\$xx	\$998	-
CE	\$xx	\$1,509	-

^{**} In thousands

Explanation of Difference in Programmed Amount vs. Estimate Construction cost escalation.

Attachments: Title Sheet, Typical Sections, I	Estimate, Plan Sheets	
District Engineer Comments:		
Approved by:		
Stacy Reese, P.E.	Date	
District Engineer		