

# Memorandum

## Department of Public Works



**TO:** Michael O. Geisel, P.E.  
City Administrator

**FROM:** James A. Eckrich, P.E. *JAE*  
Public Works Dir. / City Engineer

**DATE:** March 4, 2022

**RE:** Eatherton Road and Wild Horse Creek Road Roundabout

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As you know, the Missouri Department of Transportation (MODOT) plans to construct a roundabout at the intersection of Eatherton Road (State Route 109) and Wild Horse Creek Road (State Route CC). This intersection is located at the far southwestern corner of the City of Chesterfield, with the specific city limits coinciding with the existing western right of way of Eatherton Road and the existing southern right of way of Wild Horse Creek Road. MODOT has indicated that this project will be constructed in the fall of 2022.

In late February I was contacted by the City of Wildwood who inquired whether the City of Chesterfield has plans to beautify this roundabout. The City of Wildwood has apparently beautified three other roundabouts on Route 109 and will consider beautification of this roundabout if the City of Chesterfield chooses not to. A review of the MODOT plans shows that the new roundabout will be located approximately eighty percent in the City of Chesterfield, twenty percent in the City of Wildwood.

I have reached out the Project Manager from MODOT who notified me that MODOT would agree to beautify this island if all construction and maintenance costs are funded by Chesterfield / Wildwood. MODOT stated that beautification of the island could include landscaping and stamping / staining of concrete. MODOT also indicated that beautification (such as landscaping) could be performed after the project, but that might cause additional costs for items such as irrigation. The current plans for the roundabout include sod and conventional concrete.

I am unaware of the City of Chesterfield having any plans or desires to beautify this intersection. I am forwarding this request solely because I was contacted by the City of Wildwood and MODOT.

### **Action Recommended**

This matter should be forwarded to the Planning and Public Works Committee of City Council. Should PPW desire to consider beautification of this island it should direct Staff to design an enhancement project and create a cost estimate for construction and perpetual maintenance. Should PPW determine that the City of Chesterfield should not consider beautification of this island it should authorize the Director of Public Works to notify the City of Wildwood and MODOT that the City of Chesterfield will not financially participate in any island beautification project.

cc: Tom McCarthy, Director of Parks, Recreation, and Arts

Please forward to PPW for review and further direction. Staff is unable to spend the necessary time and effort to determine initial installation costs, and perpetual maintenance costs related to landscaping the islands without Council committee authorizing such an effort. It should be emphasized that the landscaping will perpetually increase costs and require additional level of effort.



2022-3-4



## Route 109/Route CC Intersection Safety Project

### What is the current situation?

The intersection of Route CC and Route 109 in St. Louis County is getting congested. With ongoing and anticipated developments in Wildwood, Franklin County and the Chesterfield Valley, that congestion will continue to get worse as times goes by.

MoDOT engineers studied the area to see what possible improvements could be made to the intersection to improve the flow of traffic and help reduce congestion. The department also applied for, and received, Federal funds for this intersection that are specifically set aside for projects that address congestion mitigation and air quality (CMAQ).

### What is the current plan?

Based on that study, MoDOT determined that the best solution to keep traffic flowing in the area would be a two-lane roundabout, similar to those constructed further south on Route 109 between Clayton Road and Manchester. This would reduce backups and improve the movement of traffic in the area.

### Why a roundabout? Why not a signal?

When traffic levels range widely over the course of a day, roundabouts can help move traffic more effectively than a traffic signal. Traffic ebbs and flows at the intersection of Route CC and Route 109. There are some peak traffic times during the morning and evening rush, but most of the remainder of the time, traffic is generally light, but steady in all directions. A signal, even one with detection, cannot adjust quickly to varying levels of traffic.

As a whole, roundabouts are also safer. Since traffic heads in the same direction around the roundabout, there are fewer opportunities for crashes, and those that do occur are potentially much less serious than the crashes at a four-way stop (as it is currently) or a signalized intersection.

### How do you use the roundabout?

The current plan calls for a partial two lane roundabout. Just like any other roundabout, traffic entering the roundabout would yield to any traffic already in the roundabout. Traffic on the outside lane would generally be turning right, while traffic on the inside lane would be heading though the roundabout or heading around the roundabout to turn left.

## What is currently underway?

Right now, MoDOT has completed some surveying and identified the soil types in the area and used this information to develop a preliminary plan showing the layout and potential impacts to surrounding properties

Because of the amount of property owners impacted, MoDOT will hold a virtual public hearing on December 3, 2020. Information on accessing that meeting is available on this web page.

## What is the current timeline?

<b>Task</b>	<b>Completion</b>
Conceptual plan	Completed
Evaluation and preliminary design	Completed
Public hearing	December 3, 2020
Right of way negotiations	Summer 2021
Construction begins	Fall 2022

**DESIGN DESIGNATION**

FUNCTIONAL CLASSIFICATION = MINOR COLLECTOR

ROUTE 109  
MAJOR COLLECTOR/  
MINOR ARTERIAL  
A.D.T. (2018)=14,610  
A.D.T (2045)=18,550

ROUTE CC  
MINOR COLLECTOR/  
MINOR ARTERIAL  
A.D.T. (2018)=6,920  
A.D.T (2045)=9,760

# MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

## PLANS FOR PROPOSED

### STATE HIGHWAY

#### ST. LOUIS COUNTY

#### ROUTE 109 & ROUTE CC

#### PRELIMINARY PLANS



NOT TO SCALE

**INDEX OF SHEETS**

DESCRIPTION	SHEET NUMBER
TITLE SHEET -----	1
TYPICAL SECTIONS (TS) (4 SHEETS)---	2
PLAN SHEETS (PL) -----	4-7
PROFILE SHEETS (PR) -----	8-9

Preliminary  
Plans -  
NOT FOR  
CONSTRUCTION

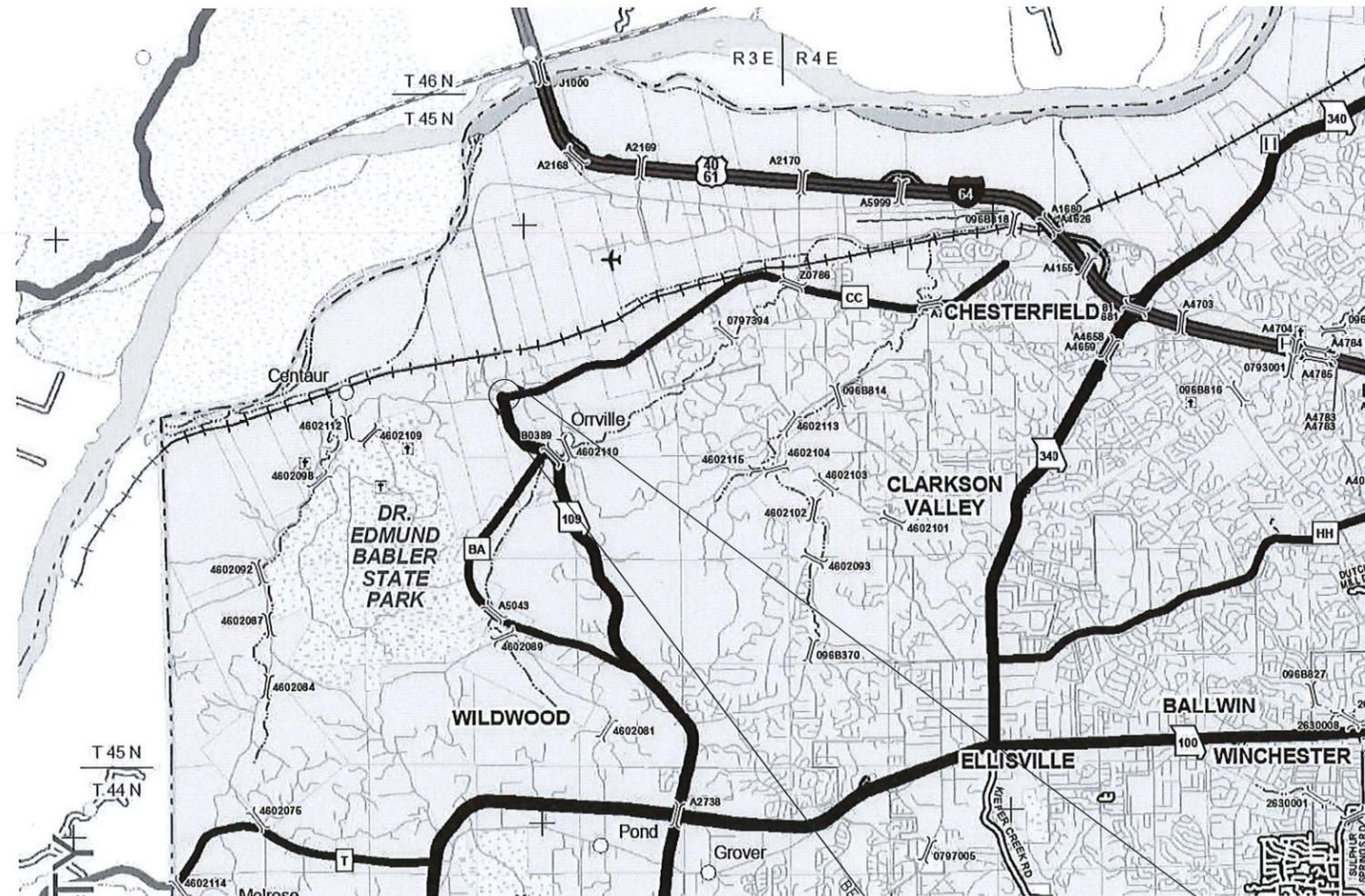
DATE PREPARED 10/8/2020	
ROUTE 109/CC	STATE MO
DISTRICT SL	SHEET NO. 1
COUNTY ST LOUIS	
JOB NO. J6S3351	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	



**CONVENTIONAL SYMBOLS**  
(USED IN PLANS)

	EXISTING	NEW
BUILDINGS AND STRUCTURES		
GUARD RAIL		
CONCRETE RIGHT-OF-WAY MARKER		
STEEL RIGHT-OF-WAY MARKER		
LOCATION SURVEY MARKER		
UTILITIES		
FIBER OPTICS		
OVERHEAD TELEPHONE		
UNDERGROUND TELEPHONE		
OVERHEAD POWER		
UNDERGROUND POWER		
GAS		
WATER		
MANHOLE		
FIRE HYDRANT		
WATER VALVE		
WATER METER		
DROP INLET		
DITCH BLOCK		
GROUND MOUNTED SIGN		
LIGHT POLE		
H-FRAME POWER POLE		
TELEPHONE PEDESTAL		
FENCE		
CHAIN LINK		
WOVEN WIRE		
GATE POST		
BENCHMARK		
REMOVE		
REMOVE & REPLACE		
ADJUST TO GRADE		
USE IN PLACE		
FIELD ENTRANCE		
SIDE ROAD		
COMMERCIAL ENTRANCE		
PRIVATE ENTRANCE		

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES



THE EXISTENCE AND APPROXIMATE LOCATION OF UTILITY FACILITIES KNOWN TO EXIST, AS SHOWN ON THE PLANS, ARE BASED ON THE BEST INFORMATION AVAILABLE TO THE COMMISSION AT THIS TIME. THIS INFORMATION IS PROVIDED BY THE COMMISSION "AS-IS" AND THE COMMISSION EXPRESSLY DISCLAIMS ANY REPRESENTATION OR WARRANTY AS TO THE COMPLETENESS, ACCURACY, OR SUITABILITY OF THE INFORMATION FOR ANY USE. RELIANCE UPON THIS INFORMATION IS DONE AT THE RISK AND PERIL OF THE USER, AND THE COMMISSION SHALL NOT BE LIABLE FOR ANY DAMAGES THAT MAY ARISE FROM ANY ERROR IN THE INFORMATION.

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**LENGTH OF PROJECT**

ROUTE 109 NORTH	202+33.09 TO 206+90.13
ROUTE 109 SOUTH	400+00.00 TO 406+00.47
ROUTE CC WEST	102+49.95 TO 104+50.02
ROUTE CC EAST	300+00.00 TO 309+02.91

APPARENT LENGTH 2160.49 FEET

EQUATIONS AND EXCEPTIONS: NONE

TOTAL CORRECTIONS	0.00 FEET
NET LENGTH OF PROJECT	2160.49 FEET
STATE LENGTH	0.41 MILES

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

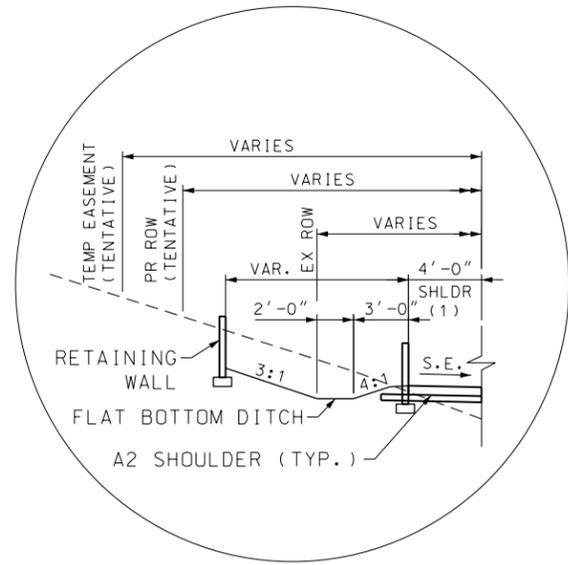
5220 Oakland Avenue  
St. Louis, MO 63110  
314.863.5570



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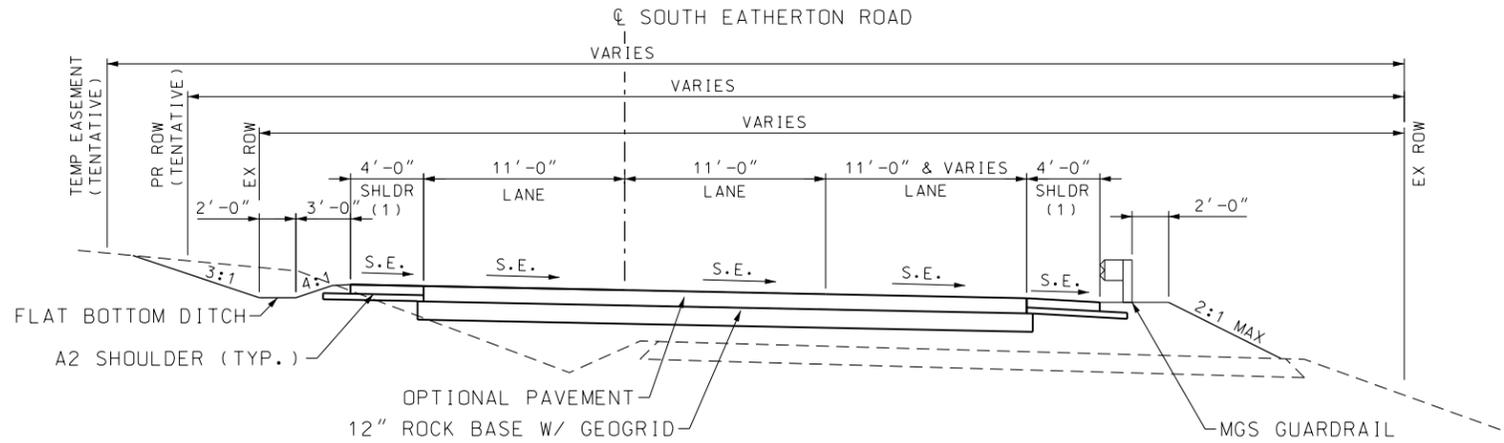
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**RETAINING WALL**

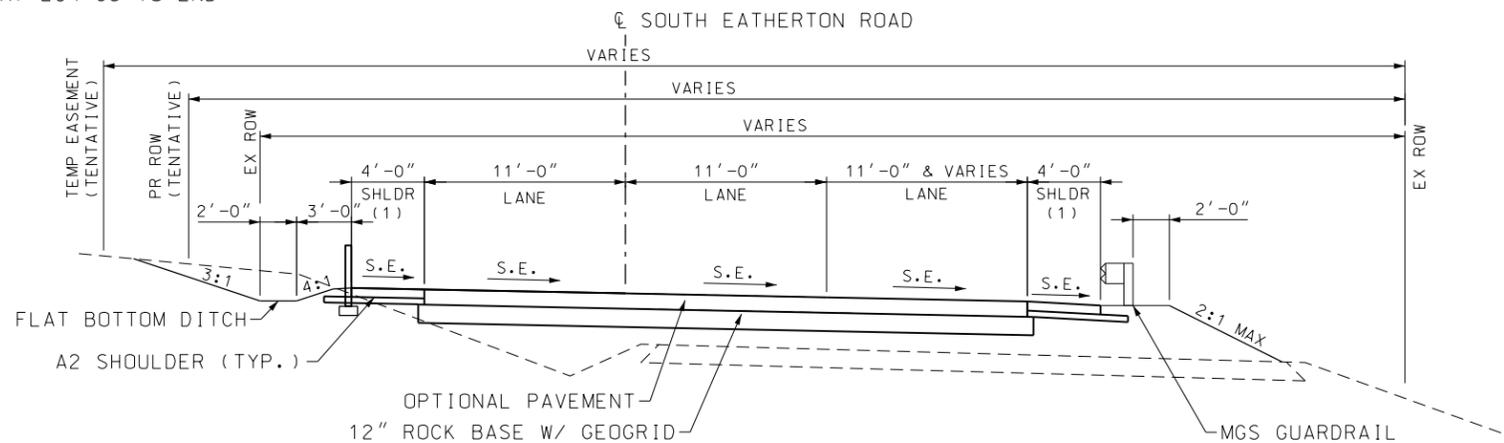
STA. 203+05 TO STA. 203+60  
 STA. 203+90 TO STA. 204+64  
 STA. 204+95 TO END



**SOUTH EATHERTON ROAD**

STA. 202+33.09 TO STA. 203+05.00  
 STA. 203+60.00 TO STA. 204+90.00

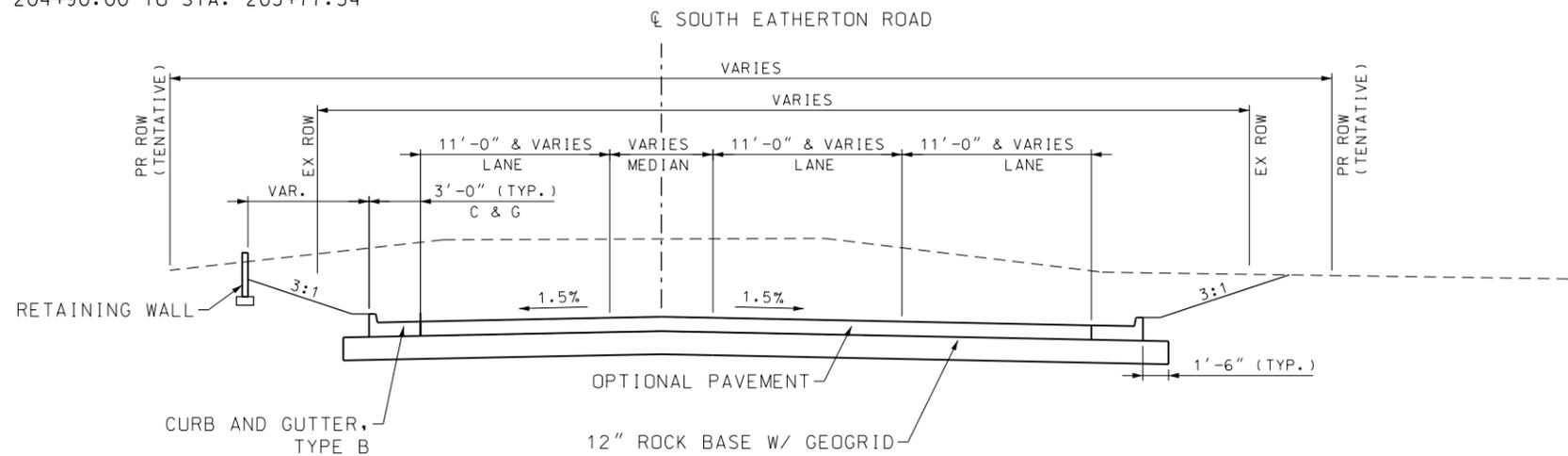
(1) PAVED SHOULDER TRANSITIONS TO CURB & GUTTER AT STA 205+38.59 (LT) AND 205+34.65 (RT)



**SOUTH EATHERTON ROAD**

STA. 203+05.00 TO STA. 203+60.00  
 STA. 204+90.00 TO STA. 205+77.34

NOTES: OPTIONAL PAVEMENT DESIGN  
 9" JPCP (15' JOINT SPACING); WIDENED SLAB  
 OR  
 1.75" SP125CLP W/PG 70-22 OVER  
 3.00" SP250C W/PG 70-22 OVER  
 6.75" SP250C W/ PG 64-22  
 OVER  
 12" ROCK BASE W/ GEOGRID



**SOUTH EATHERTON ROAD**

STA. 205+77.34 TO STA. 206+30.53

Preliminary  
 Plans -  
 NOT FOR  
 CONSTRUCTION

DATE PREPARED  
 10/8/2020  
 ROUTE STATE  
 109/CC MO  
 DISTRICT SHEET NO.  
 SL 2  
 COUNTY  
 ST LOUIS  
 JOB NO.  
 J6S3351  
 CONTRACT ID.

PROJECT NO.  
 BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-275-6636)

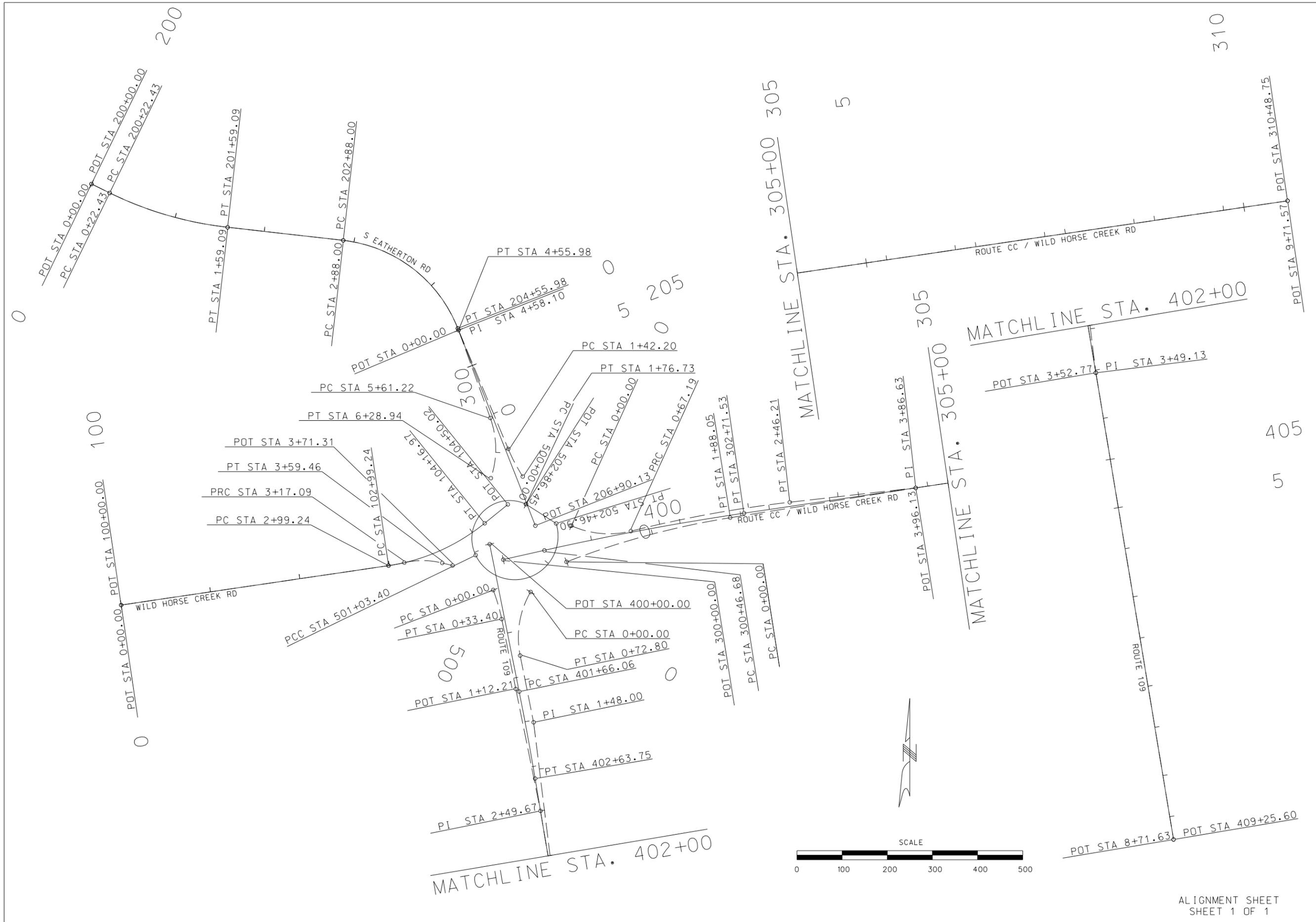
5220 Oakland Avenue  
 St. Louis, MO 63110  
 314.866.5570

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Preliminary Plans - NOT FOR CONSTRUCTION	
DATE PREPARED	10/8/2020
ROUTE	109/CC
STATE	MO
DISTRICT	SL
SHEET NO.	4
COUNTY	ST LOUIS
JOB NO.	J6S3351
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
DESCRIPTION	
DATE	
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION	
	
105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)	
5220 Oakland Avenue St. Louis, MO 63108-3570 	
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ALIGNMENT SHEET  
SHEET 1 OF 1

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PRELIMINARY PLANS

MATCHLINE STA. 205+50, SHEET 6

CAFFRAY THOMAS & SAMMIE M H/W  
266 S EATHERTON RD  
LOC 19W420125

BAX, JAMES L &  
LISA A H/W TRUSTEES ETAL  
18401 WILD HORSE CREEK RD  
LOC 19W410126

BAX, JAMES L &  
LISA A H/W TRUSTEES ETAL  
18409 WILD HORSE CREEK RD  
LOC 19W410094

DEEP WOODS LLC  
18357 WILD HORSE CREEK RD  
LOC 19W420170

CRUZEN, JEFFREY C  
18400 WILD HORSE CREEK RD  
LOC 19W410061

BABLER FARMS, LLC  
303 LAUREY LN  
LOC 19W410050

LAUREY LANE LLC  
305 HIGHWAY 109 ST  
LOC 19W410049

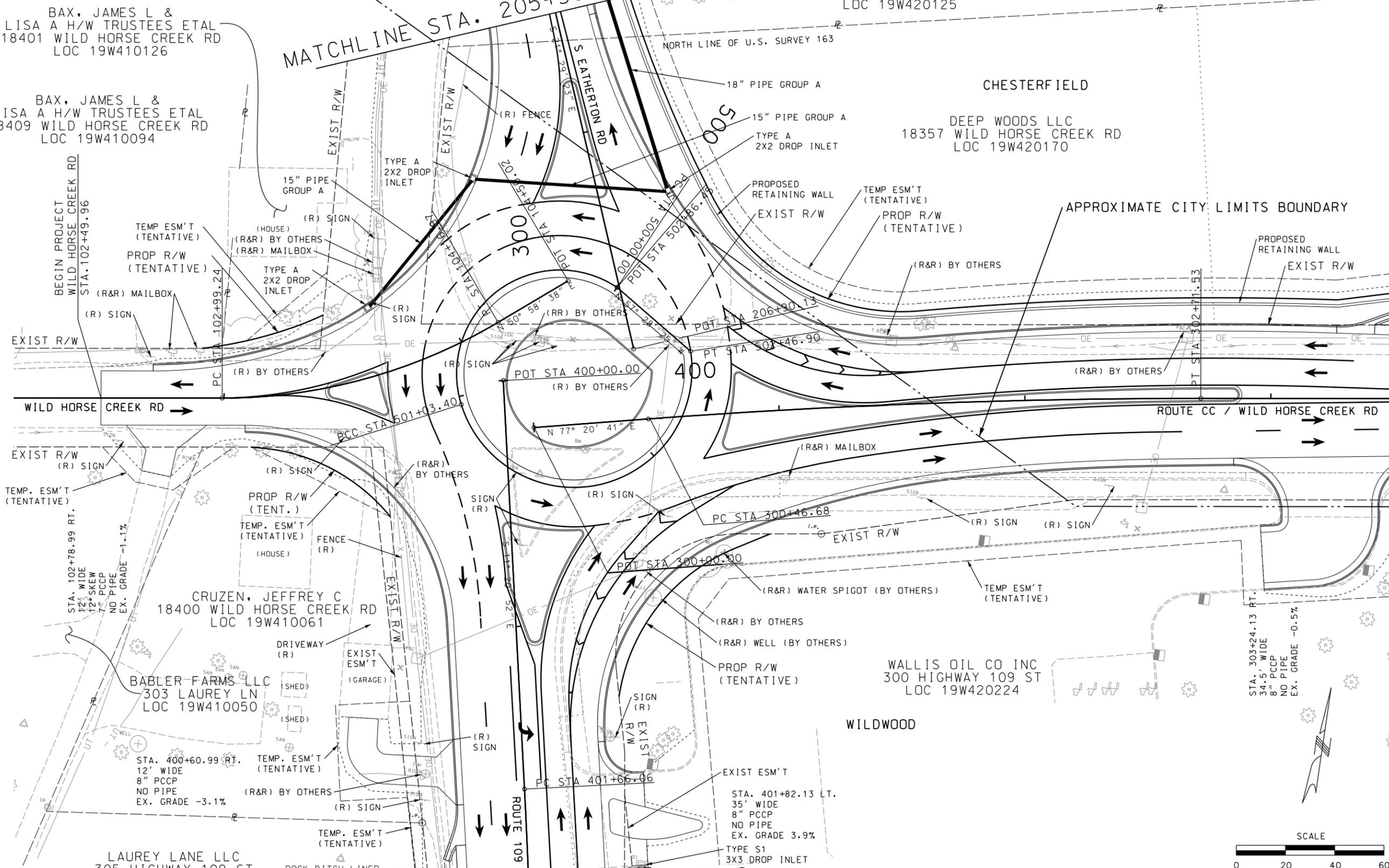
WALLIS OIL CO INC  
300 HIGHWAY 109 ST  
LOC 19W420224

CHESTERFIELD

WILDWOOD

MATCHLINE STA. 402+00, SHEET 8

MATCHLINE STA. 303+50, SHEET 7



PLAN SHEET  
SHEET 1 OF 4

Preliminary  
Plans -  
NOT FOR  
CONSTRUCTION

DATE PREPARED  
10/8/2020

ROUTE STATE  
109/CC MO

DISTRICT SHEET NO.  
SL 5

COUNTY  
ST LOUIS

JOB NO.  
J6S3351

CONTRACT ID.

PROJECT NO.

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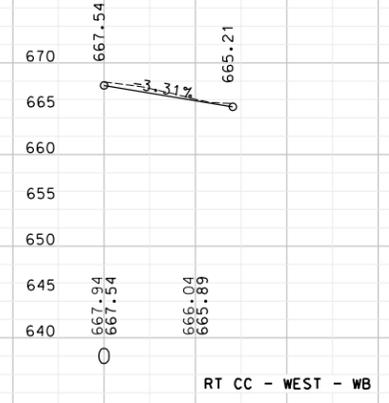
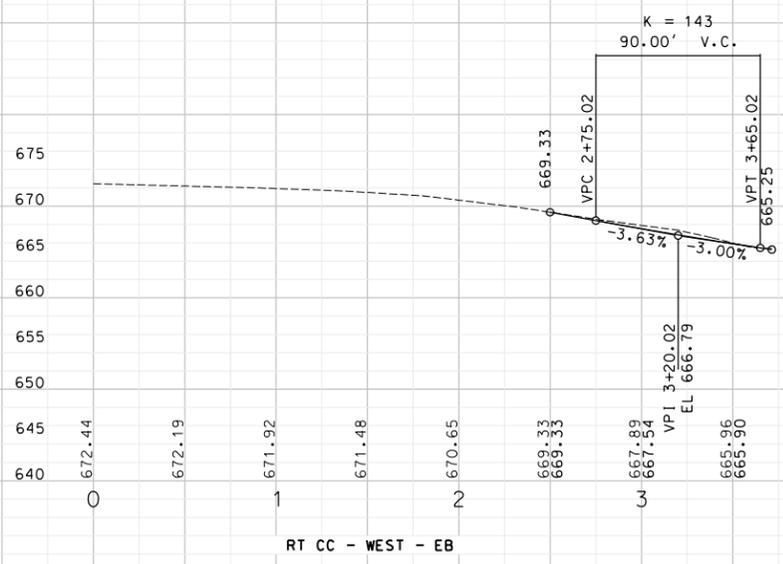
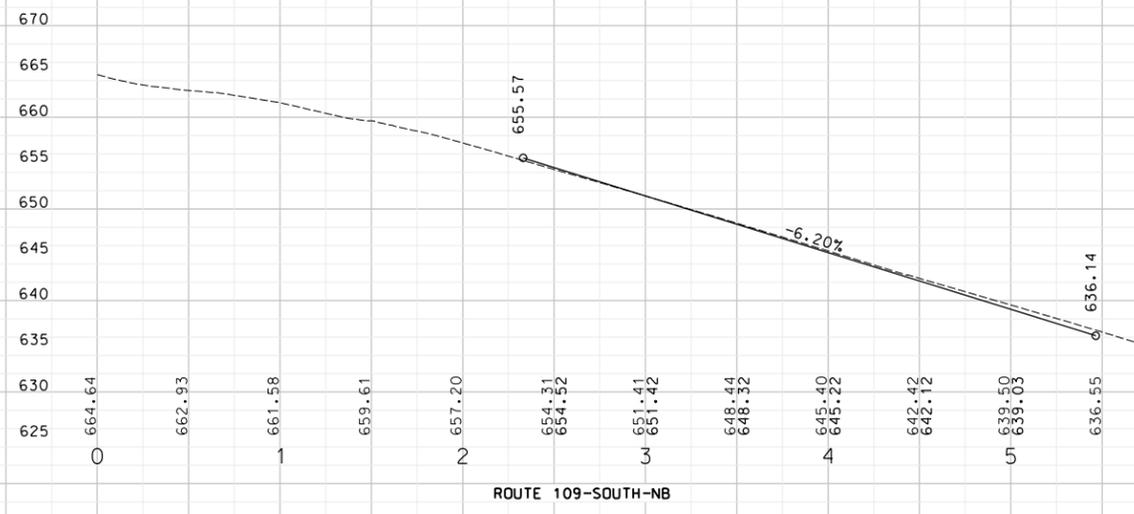
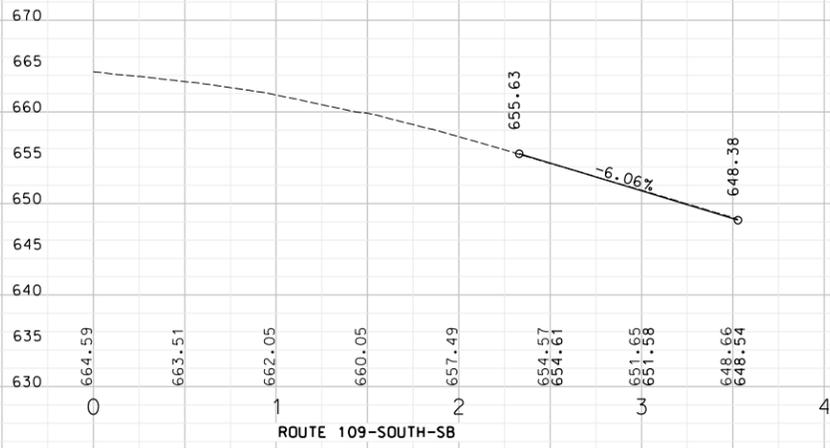
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PROFILE SHEET  
SHEET 2 OF 2

Preliminary  
Plans -  
NOT FOR  
CONSTRUCTION

DATE PREPARED  
10/8/2020  
ROUTE 109/CC STATE MO  
DISTRICT SL SHEET NO. 10  
COUNTY ST LOUIS  
JOB NO. J6S3351  
CONTRACT ID.

PROJECT NO.  
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

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