City of Birmingham
A Walkable Community

MEMORANDUM

Engineering Dept.

DATE: **June 15, 2015**

TO: **Joseph Valentine, City Manager**

FROM: **Paul T. O'Meara, City Engineer**

SUBJECT: **E. Maple Rd. – Poppleton Ave. to Coolidge Hwy.**
National Highway Pavement Preservation
Concrete Patching Program

As discussed previously, the federal government began offering a new funding opportunity devoted to pavement preservation on roads that are considered a part of the National Highway System. In Birmingham, Maple Rd., 14 Mile Rd., and Adams Rd. are designated as such, based on the number of vehicles that regularly travel on them, and their importance to travel in the region. Starting in 2014, approximately $2.4 million is available in Oakland Co.

Working with the Road Commission, we were awarded $24,000 to apply to concrete patching on Maple Rd. between Woodward Ave. and Adams Rd. The program is set up as an 80% federal and 20% local match. In 2014, several bad sections of concrete were replaced in this segment as part of a larger Road Commission for Oakland Co. administered contract.

For the 2015 program, Birmingham was originally awarded $48,000 in federal money, with the intent that we would conduct a $60,000 program to hopefully finish the segment of Maple Rd. from Woodward Ave. to Adams Rd. We were notified that the Road Commission was not interested in working with us again on a joint project. However, since Madison Heights had similar money to use on concrete patching, it was decided that the two cities would work together to issue a joint project for bids. While preparing the plans for 2015, we determined it would be difficult to complete this segment limited to the funds available. The widened section of Maple Rd. just west of Adams Rd. is in generally poor condition, and should be replaced full width. Doing less than this would have left this short segment of road still incomplete. With that in mind, it was our intention to submit plans with an estimated cost of $113,000, which would have resulted in a $48,000 federal share, and a local share of $65,000.

Once the joint project plans were compiled and issued to MDOT and FHWA for approval, a problem developed. Madison Heights was also involved in the 2014 project. When bid prices came in higher than estimated, Madison Heights decided to cut out some parts of their project plan, with the goal that their local match expenditure would be the same as what had been planned. In other words, the 2014 project was reduced in scope in Madison Heights to fit their budget. (Birmingham expanded their local expenditure using both Major Street and Water Fund monies to make sure that all the work that was planned was in fact completed.)

When the 2015 project plan contained work that the FHWA thought had been completed in 2014, they stopped the approval process. Under federal rules, the local jurisdiction is obligated to fund the overage with local funds to ensure that all work that had been authorized is in fact

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completed. (The way to avoid this problem is to not award the project, which can only be authorized if the low bidder's price is 10% or more over the engineer's estimate.) Since the 2014 project was conducted with a reduced scope, FHWA stated that this was a violation of their rules, and chose not to approve the 2015 plans as presented. Further, they indicated that Madison Heights would have to repay to them the federal funds that had been granted in the 2014 project. This resulted in a serious financial penalty to Madison Heights that had not been anticipated. To help their budget recover, they elected to not proceed with using their 2015 federal dollars for this program. After reviewing the situation with the Road Commission, and determining that they were not in a position to use these funds in the short time frame allotted, I managed to get the SEMCOG regional road plan amended, and increased the federal dollars that Birmingham could spend on this project from $48,000 to $206,000. The City's local match will increase from the anticipated $12,000 to $42,000, but the amount of repairs that can be completed on Maple Rd. will be substantially greater.

With the expanded funding available, we are now able to repair all significantly damaged concrete between Poppleton Ave. and Adams Rd., including a full width replacement of the five lane section built just west of Adams Rd. Further, we are now able to patch several areas needing repair on E. Maple Rd. between S. Eton Rd. and Coolidge Hwy., with particular emphasis on the area on both sides of the CN Railroad Bridge. The attached plans help depict the new improved scope of work.

Due to the change in scope, the plans missed the original timetable. Following MDOT's bidding schedule, bids will be opened in early September, leaving the successful contractor little time to complete this work in 2015. Rather than put time limitations that could likely result in no bids (or overpriced bids), we have elected to give the successful contractor the opportunity to complete the work either in late 2015 or early 2016 (though June). Concrete repairs will be done similar to last year. One lane in each direction would be closed at a time, so that traffic will be maintained. The entire project should be completed in about three weeks. If the work is started early in the construction season next year, it is possible that for a short period there may be overlap with work occurring on W. Maple Rd. for sewer improvements. We will work to minimize any disruptions during this short time period.

We will report back to you after bids have been opened.

CITY OF CITY OF BIRMINGHAM

IN COOPERATION WITH

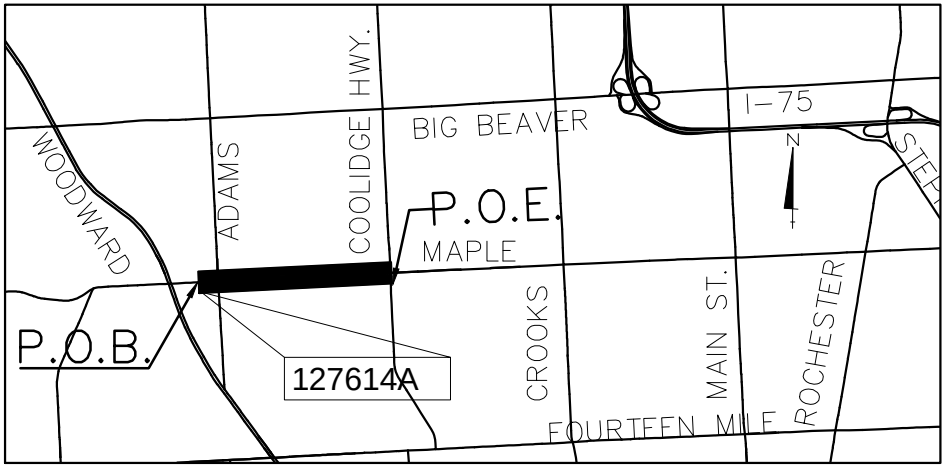
MICHIGAN DEPARTMENT OF TRANSPORTATION

AND

THE FEDERAL HIGHWAY ADMINISTRATION

2015 NHPP SECTIONAL REPAIR PROJECT

E. MAPLE ROAD.
WOODWARD AVE. TO COOLIDGE HWY.
CITY OF BIRMINGHAM
NOWAK & FRAUS JOB NO. I490
MDOT JOB NO. 127614A
MDOT CONTROL SECTION NO. NH 63459
FEDERAL NO.
FEDERAL ITEM NO.



GENERAL PROVISIONS

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE PROPOSAL AND ACCOMPANYING SPECIFICATIONS FOR THIS PROJECT INCLUDING THE 2012 MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION.

PAVEMENT MARKING AND PLACING OF TRAFFIC CONTROL SIGNS SHALL BE DONE IN ACCORDANCE WITH THE 2011 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AS AMENDED. THIS WORK WILL BE DONE PRIOR TO THE FINAL ACCEPTANCE OF THIS PROJECT.

THE LOCATION OF ALL PUBLIC UTILITIES SHOWN ON THESE PLANS IS TAKEN FROM THE BEST AVAILABLE DATA. THE CITES OF BIRMINGHAM, AND MADISON HEIGHTS WILL NOT BE RESPONSIBLE FOR AN OMISSION OR VARIATIONS FROM THE LOCATIONS SHOWN. PURSUANT TO ACT 174 OF THE PA OF 2013 AS A CONDITION OF THIS CONTRACT NOTICE SHALL BE GIVEN TO MISS DIG PRIOR TO UNDERGROUND WORK TO BE PERFORMED IN ACCORDANCE WITH THIS CONTRACT. PHONE (800) 482-7171, (248) 647-7344, OR 811

THE PROPOSED IMPROVEMENTS COVERED BY THESE PLANS ARE IN ACCORDANCE WITH CURRENT MICHIGAN DEPARTMENT OF TRANSPORTATION LOCAL AGENCY PROGRAMS GUIDELINES, 2014 EDITION, PREVENTATIVE MAINTENANCE (PM)

FINAL PLANS: 06-19-2015

PROJECT LIMITS- 127614A		
P.O.B.	5+14	
P.O.E.	66+00	
TRAFFIC VOLUME (AADT)		
ROAD NAME	2014	2034
MAPLE ROAD	12,000	15,000
COMMERCIAL	3.00%	3.00%
DESIGN SPEED		
POSTED SPEED (EXISTING)	25-35 MPH	
DESIGN SPEED	25-35 MPH	

MDOT STANDARD PLANS	
R-28-I	SIDEWALK AND DETECTABLE RAMP
R-31-F	INTEGRAL CONCRETE CURB AND GUTTER
R-39-I	TRANSVERSE PAVEMENT JOINTS (PLAIN CONCRETE PAVEMENT)
R-40-H	LOAD TRANSFER ASSEMBLIES FOR TRANSVERSE JOINTS
R-41-H	LONGITUDINAL PAVEMENT JOINTS
R-42-F	TYPICAL JOINT LAYOUTS FOR CONCRETE PAVEMENT
R-43-I	LOCATION OF TRANSVERSE JOINTS IN PLAIN CONCRETE PAVEMENT
R-44-F	CONCRETE PAVEMENT REPAIR
R-96-E	SOIL EROSION &SEDIMENTATION CONTROL MEASURES
TRAFFIC SAFETY STANDARD PLANS	
WZD-100A*	GROUND DRIVEN SIGN SUPPORTS FOR TEMPORARY SIGNS
WZD-125-E*	TEMPORARY TRAFFIC CONTROL DEVICES
	*REFER TO SPECIAL DETAIL

CITY OF: BIRMINGHAM

MUNICIPAL APPROVAL:

PAUL T. O'MEARA, P.E. ,CITY ENGINEER
CITY OF BIRMINGHAM

PROJECT NO:
127614A

PROJECT NAME:
2015 NHPP SECTIONAL REPAIR PROJECT

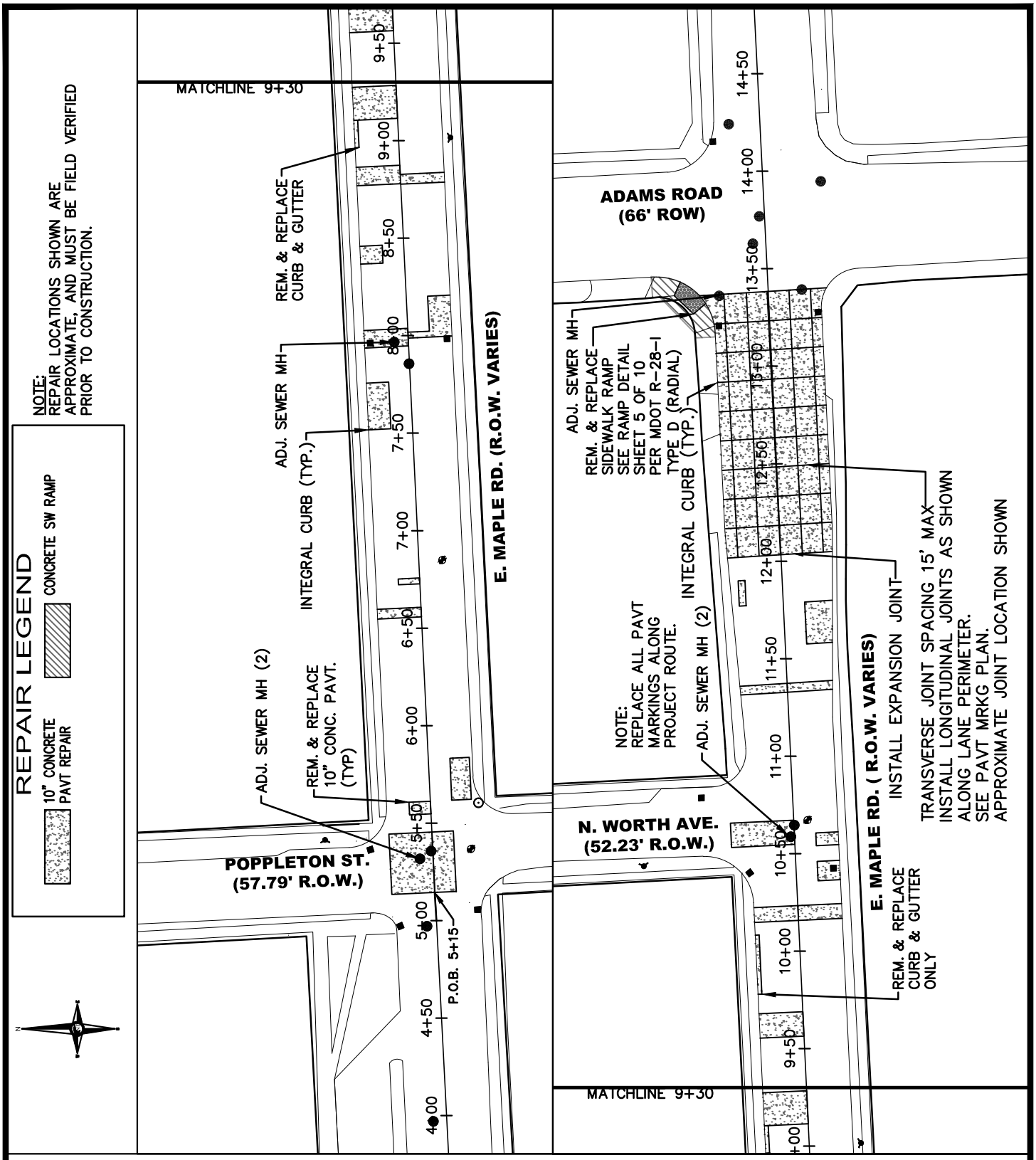
CONTRACT FOR: 1.3 MI INTERMITTENT CONCRETE PAVEMENT PRESERVATION

PREPARED UNDER THE SUPERVISION OF:

BRETT BUCHHOLZ, P.E.

STATE OF MICHIGAN
BRETT J. BUCHHOLZ
ENGINEER NO. 45606
LICENSED PROFESSIONAL ENGINEER

E. MAPLE RD. 2015 NHPP SECTIONAL REPAIR C.S. N.H.63459 J.N. 127614A F.P.N. STP xxxx(xxx) F.P.I. HH xxxx



NF ENGINEERS

NOWAK & FRAUS ENGINEERS
46777 WOODWARD AVENUE
PONTIAC, MI 48342
TEL. (248) 332-7931
FAX. (248) 332-8257

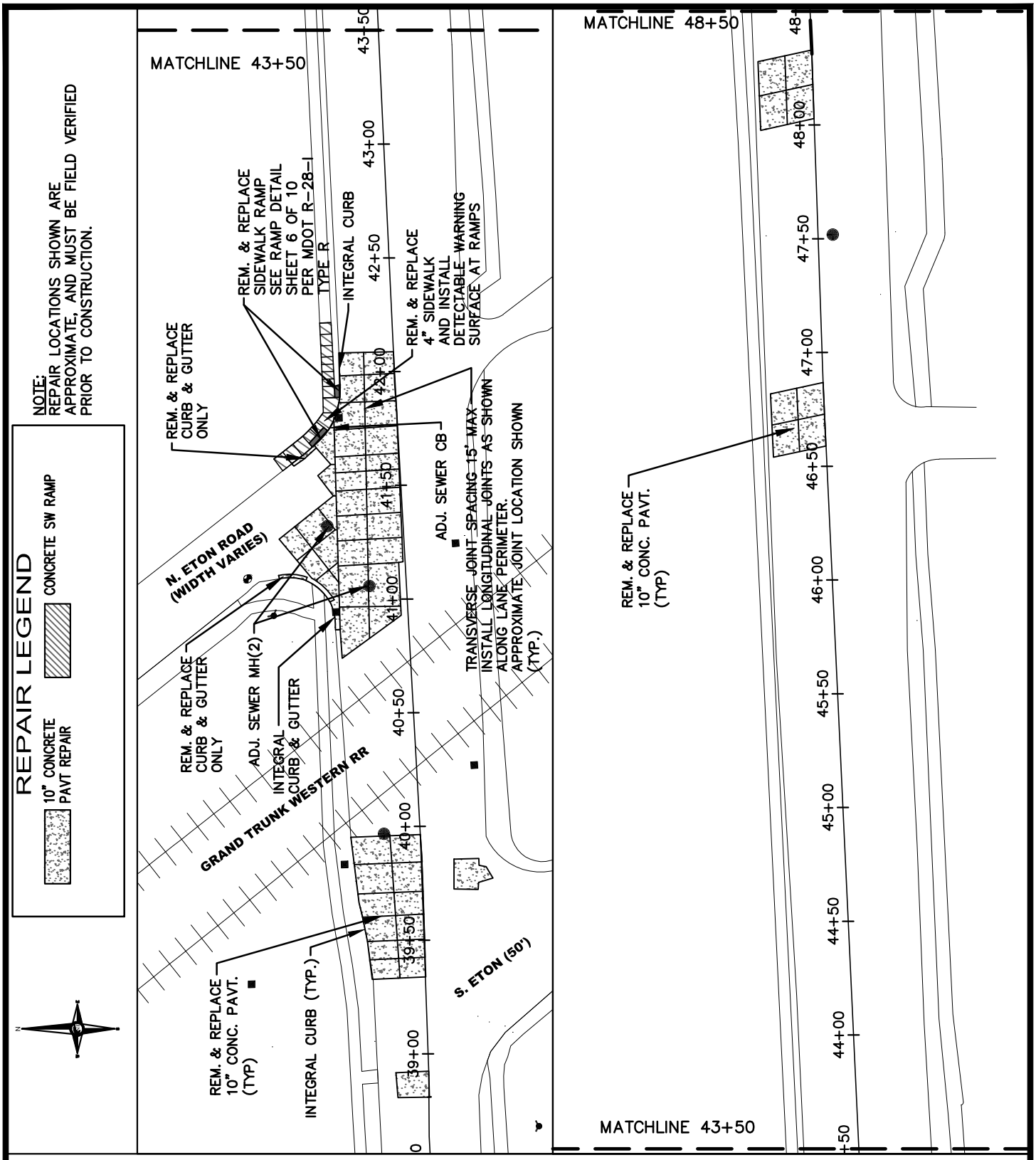
2015 NHPP E. Maple Rd. Sectional Repair

Maple Road- Poppleton Avenue to Adams Road, and S. Eton Street to Coolidge Highway

Prepared For:

CITY OF BIRMINGHAM

SCALE	DATE	DRAWN	JOB NO.	SHEET
1"=70'	06-09-2015	T. WOOD	I490	1 OF 10



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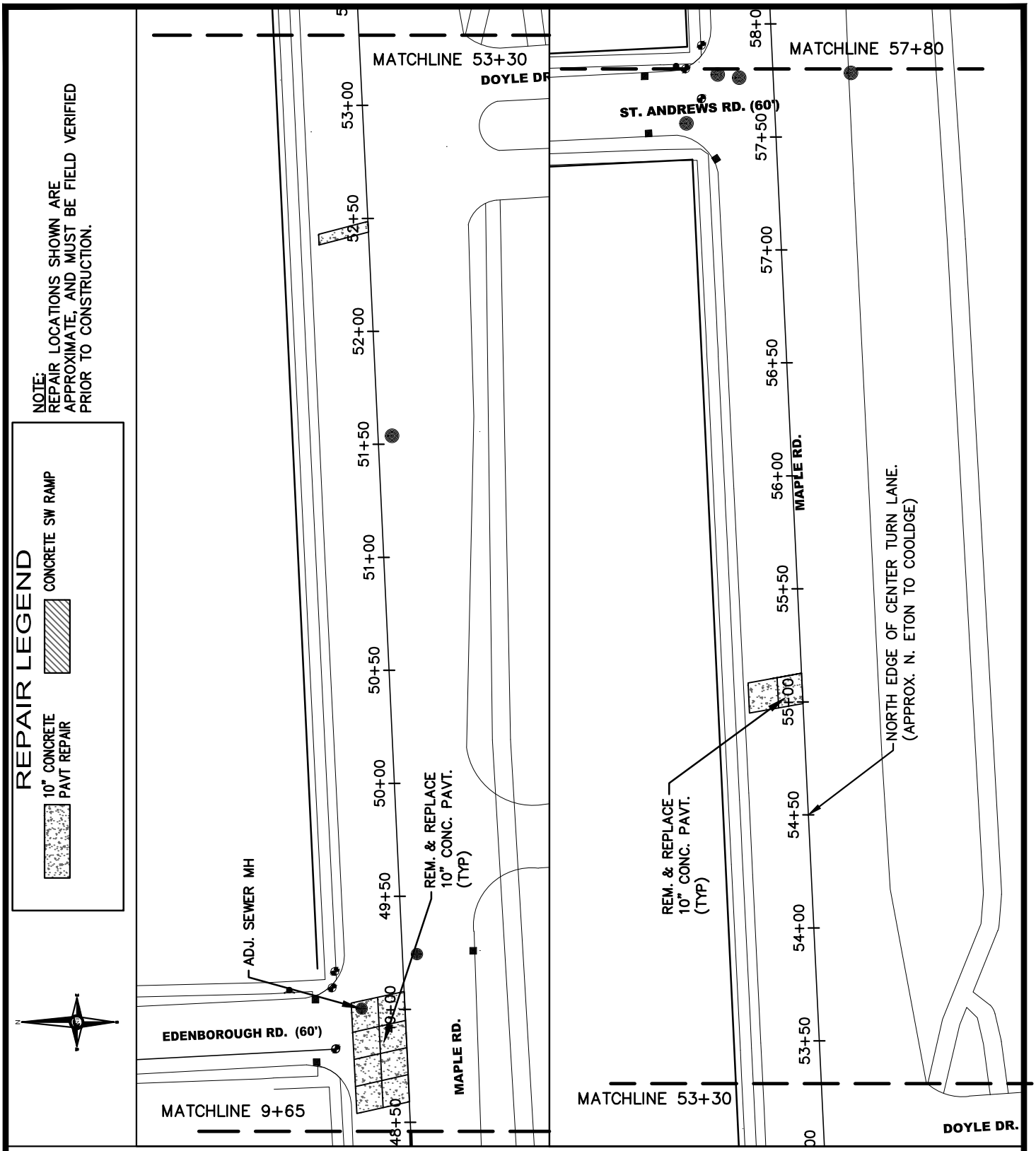

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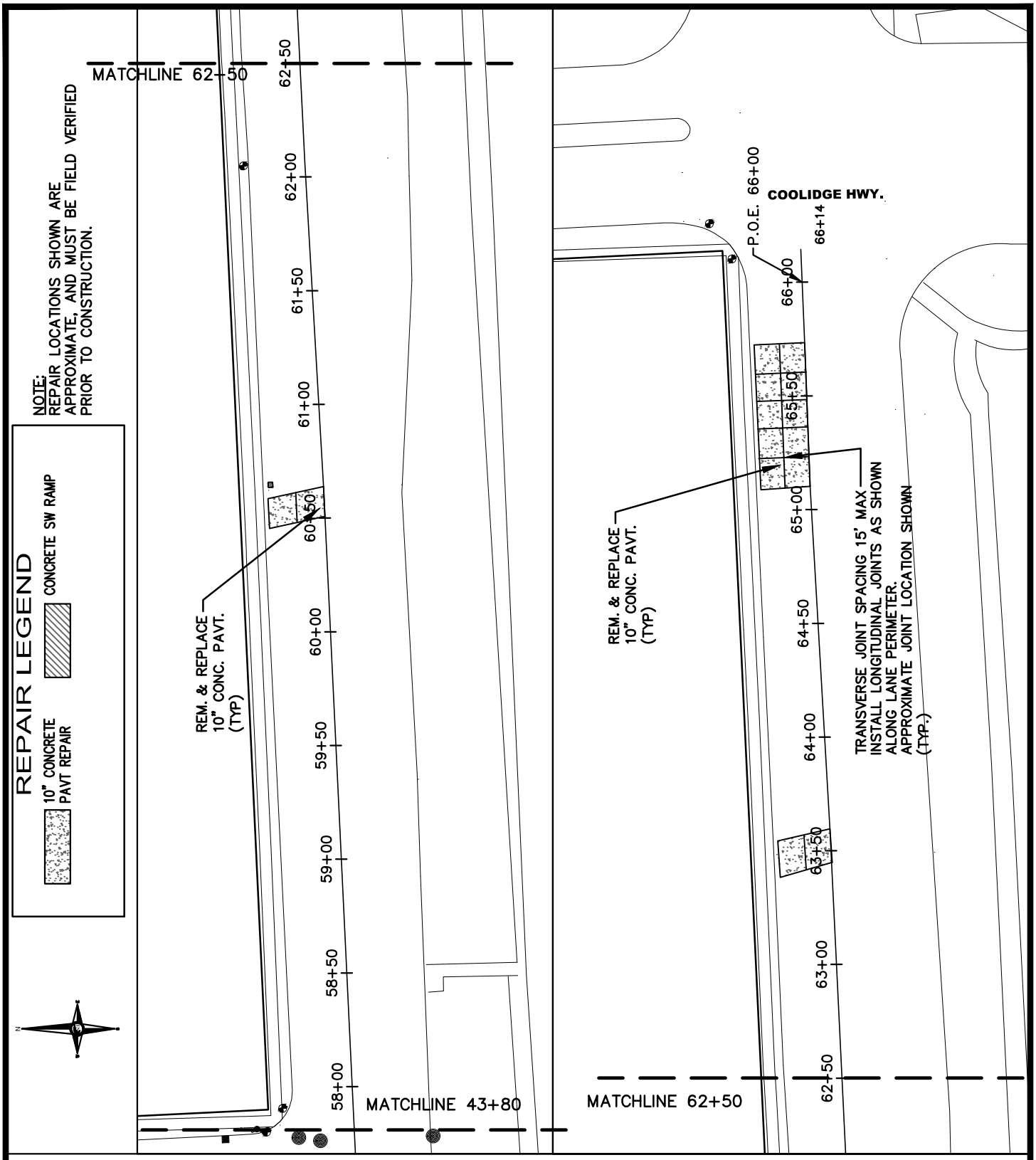

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