

Appendix D

Road Safety Audit Report

(Submitted under separate cover)

Appendix E

Ecological Assessment Report

(Submitted under separate cover)

Appendix F

Noise Analysis Report

(Submitted under separate cover)

Appendix G

Project Area Contamination Survey Report

(Submitted under separate cover)

Appendix H

Geotechnical Considerations Report

(Submitted under separate cover)

Appendix I

Project Meeting Notes

Memorandum



TO: MDOT
FROM: Wilbur Smith Associates (WSA)
DATE: April 4, 2012
SUBJECT: Phase 1 Kickoff Meeting
PROJECT: JN 115379, I-275 at Ford Road Phase 1

LOCATION: MDOT – Taylor TSC

ATTENDEES: Sign in sheet attached

The following represents the key points of discussion at this meeting.

Schedule:

Phase 1 is anticipated to last until mid May.

Wilbur Smith expressed concerns that a delay in STIP/TIP approval could affect the project end date of January 2nd, 2013. This end date can slide a couple weeks but is set by TIGER funding selection on or before June 2012. If TIGER funding is not granted, another source must be identified to get the EA signed.

MDOT review time may be reduced from ten days to five days, with backup reviews identified. Wilbur Smith intends to have interim submittals where possible to expedite reviews of milestone submittals.

Wilbur Smith will notify MDOT immediately of any critical study findings to limit delay.

Traffic:

Traffic counts have been collected and are in the QA process. These will be provided to Wilbur Smith by April 6th.

The DRAFT existing traffic tech memo shall be provided to MDOT for review prior to the Stakeholder/Public Kick-Off Meeting (#1).

SEMCOG recently published population projections. Canton Township questioned the projections. A factor may be added to the model to account for Canton Township's concern. Wilbur Smith will discuss the model with SEMCOG and then inform Canton Township what direction we will take on projections for this study.

Wilbur Smith has a meeting scheduled with SEMCOG on April 12th. MDOT Traffic will also attend.

SYNCHRO 7 will be used for traffic modeling.

Environmental:

Lori Noblet (MDOT) stated that they could start the endangered species assessment at any time. She will coordinate this with Dave Schuen and let the project team know when scheduled.

FHWA requested that study area demographics be included in the Public Information Plan since this information is useful for future environmental studies.

Lori would like to review all DRAFT environmental documents. She also stated that review comments will be of a technical nature and will insist the Department hold off on grammatical-type comments during the formal review process.

Utilities:

MDOT provided Wilbur Smith with utility contacts along I-275, Ford Road and within the study area through the Miss Dig database. Wilbur Smith will verify with Wayne County that no additional utilities are within study area.

Wilbur Smith will create a utility letter representing both MDOT and Wayne County. This letter will be provided for review prior to distribution. Although not required for Phase 1 work, this letter will be distributed during this phase to start the clock on receipt of utility information.

Road Safety Audit:

Taylor TSC Traffic will provide a list of attendees.

The RSA is currently scheduled for 2 days during the week of May 11 – 17. Canton Township confirmed their meeting room is available for that week.

The RSA will be conducted during Phase 1 however the report will not be finalized until Phase 2.

Public Meetings:

MDOT requested that all meeting materials be provided two weeks prior to meetings for review.

Canton Township will generate stakeholder invitee list once given project area.

Existing traffic analysis and road safety audit will be done prior to Stakeholder/Public Kick-Off Meeting (#1) so results can be presented.

A sample Purpose and Need will be available for stakeholder reference.

Wilbur Smith will follow Level 3 Engagement in accordance with MDOT's Stakeholder Engagement Guidelines.

Original Data:

Taylor TSC Traffic to provide crash data once criteria are given (limits, year range and type). Bergmann Associates will provide this data to the TSC.

MDOT provided Wilbur Smith with a CD of information (existing plans, traffic counts, soil borings, and previous reports).

Wilbur Smith discussed the list of outstanding information needs. E-mails were sent to concerned parties after the meeting summarizing these and when they are needed. Wilbur Smith will create a project .ftp site for ease of transferring information.

Canton Township provided access management minutes for 2005 through 2011.

MDOT does not have speed data. Wilbur Smith will ask SEMCOG for this information.

Taylor TSC Traffic to provide IKEA traffic impact study.

Previous safety studies are all older than five years and shall not be incorporated.

Study Area:

City of Westland requested that the study area be expanded to the east to at least the RR underpass if not to Hix Road. The concern is traffic backups along Ford Road from I-275 through Lotz Road. The Lotz Road signalized intersection is within the study area.

FHWA stated that the study area must be clearly defined in case the project must go through the NEPA process. The broader study footprint is acceptable at this stage, however it is assumed this area will be tightened down as the process continues.

Miscellaneous:

MDOT will inform Tom Zurburg of the noise analysis being performed in this study.

Wilbur Smith will create a list of primary and backup project contacts. This list will be sent to MDOT for finalization. These will be the contacts that will receive interim review submittals prior to milestone deliverables to keep the project on schedule.

FHWA suggested that numbered sentence lines be added to major report submittals for use in a reviewer's comment log to expedite the review process. Wilbur Smith stated that each reviewer will be provided a comment log to be able to provide their comments. This log will then be combined, comments responded to, and a copy will be provided in the Environmental Study Report. Reviewers will be reminded to only review their "discipline" content to minimize review time.

Wilbur Smith will use MDOT's CSS manual.

I-275/Ford Rd Kick-Off Meeting

Project: CS 82292 - JN 115379/115177

Date: April 4, 2012

Name	Representing	Email	Phone
Gorette Yung	MDOT - Taylor TSC	yungg@michigan.gov	(313)375-2427
Mike Bellini	MDOT - Taylor TSC	bellini@michigan.gov	(313)375-2420
MATT WENDLING	WILBUR SMITH ASSOC.	wendlingm@csmith.com	517.622.2500
Brian Smith	"	smithb@csmith.com	"
MATT HUNTER	"	hunterm@csmith.com	"
JOHN F. SANFORD	MDOT - Taylor - Operations	sanfordj@michigan.gov	313-375-2408
MARIO QUAGLIATA	BERGMANS ASSOCIATES	mquagliata@bergmannpc.com	517-272-9835
KEITH SIMONS	"	SIMONS & BERGMANN PC.COM	"
Kevin L. Buford	City of Westland	kbuford@cityofwestland.com	(313)469-3241
Ken Kucel	Wayne Co. DPS	kkucel@co.wayne.mi.us	313/224-8142
Dave Dortman	MDOT - Metro	dortmand@michigan.gov	248-483-5157
Tim Haas	Clinton	tim.haas@clinton-mi.org	734.384.5160
Rachell Laderach	MDOT - Taylor TSC	laderach@michigan.gov	313.375.2426
Mike Budai	MDOT - Taylor	budaim@michigan.gov	313.375.2403

Memorandum



TO: MDOT
FROM: Wilbur Smith Associates (WSA)
DATE: April 12, 2012
SUBJECT: Traffic Meeting
PROJECT: JN 115379, I-275 at Ford Road Phase 1

LOCATION: Phone Conference

ATTENDEES:

Mike Bellini, MDOT Deputy PM	Tom Bruff, SEMCOG
John Lanum, MDOT Traffic	Keith Simons, Bergmann
Michael Linacre, MDOT Traffic	Matt Wendling, WSA PM
Dave Berridge, MDOT Special Projects	Jonathan Avner, WSA
John Watkin, MDOT Modeling	Saurabh Shukla, WSA
Donna Wittl, MDOT Modeling	Paul Herskowitz, WSA
Brad Sharlow, MDOT Modeling	Matt Hunter, WSA
Liyang Feng, SEMCOG	

The following represents the key points of discussion at this meeting.

WSA provided an overview of the scope and schedule of the project. The overall modeling methodology includes:

- Use of SEMCOG Model to develop a subarea trip table and network for the study area.
- The subarea trip table will be adjusted to current conditions based on traffic counts and additional information from MDOT.
- The adjustment factors developed in the previous step will be used in the forecasting process on the No-Build and alternatives. The alternatives will be tested with the subarea assignment model to produce revised volumes.

There was discussion regarding the appropriate base year to use for the analysis. Initially WSA proposed to interpolate a 2012 trip table from the 2005 and 2015 SEMCOG models. SEMCOG reported that a 2010 trip table was available and is based on the latest trends in the region. It was agreed that WSA would use the 2010 trip table as the basis for the subarea model for existing conditions. WSA asked SEMCOG about model specifics:

- SEMCOG reported the following periods are included in the model: AM (7 to 9) Mid Day (9 to 3) PM (3 to 6) Normal Traffic: (6 to 6). WSA will develop Subarea trip tables based on the appropriate periods for analysis for this study.
- SEMCOG is preparing an assignment only version of the model that will be provided to WSA for use on this study.

SEMCOG confirmed that the 2035 model is still the latest version and that the 2040 revised model will not be final until June 2012. The 2035 shows a higher growth rate of 9-10% compared to the 2040 growth of 2-3%. The 2035 model will be used for this analysis and not recalibrated to include the revised 2040 data.

MDOT and SEMCOG were in agreement with the proposed modeling and forecasting procedure.

WSA will verify forecasting methods are cohesive with MDOT methods.

The original schedule for the traffic analysis and modeling efforts assumed that only existing conditions would be analyzed prior to the May 17th, 2012 public meeting. Subsequent to this meeting the PI Meeting was pushed to June 5th, 2012 based on constraints from the township, therefore the 2035 conditions will be modeled and analyzed using Synchro prior to the PI Meeting.

The forecasting methods and outputs for the 2035 model outputs need to be agreed on by MDOT, SEMCOG, and Canton Township prior to commencing the 2035 No-Build traffic analysis.

Matt Hunter set up FTP access for all meeting participants which will be utilized for all data exchanges. The FTP site currently has the existing traffic counts and other traffic data posted. SEMCOG will post the 2005 and 2035 models and other supporting data to the site by Wednesday 18th April, 2012.

Memorandum



TO: MDOT

FROM: Wilbur Smith Associates (WSA)

DATE: May 17, 2012

SUBJECT: Traffic Meeting #2

PROJECT: JN 115379, I-275 at Ford Road Phase 1

LOCATION: Phone Conference

Attendees:

Gorette Yung, MDOT PM	Liyang Feng, SEMCOG
Mike Bellini, MDOT Deputy PM	Tim Faas, Canton Township
John Lanum, MDOT Traffic	Bill Serchak, Canton Township
Michael Linacre, MDOT Traffic	Jeff Goulet, Canton Township
Dave Berridge, MDOT Special Projects	Jonathan Avner, WSA
Donna Wittl, MDOT Modeling	Matt Hunter, WSA
Brad Sharlow, MDOT Modeling	

The following represents the key points of discussion at this meeting.

- WSA presented to the group the purpose of the call which was to discuss the findings from the SEMCOG model as it relates to the I-275 at Ford Road Study and agree upon methodology for moving forward.
- WSA presented the information from the Traffic Memo distributed to the group on the morning of May 17th:
 - a. Count Comparison
 - WSA discussed how the SEMCOG 2010 AM and PM Period Models were used to develop the AM and PM peak hour volumes for comparison to the traffic counts collected for this study. The methodology used for developing leg volumes from the peak turning counts was also discussed. SEMCOG raised the point that the model is intended to represent AWDT. Because of general variability in counts and the lack of axle or seasonal adjustments to the counts it was agreed that there is possibility for variation in these results.
 - The count comparison was only made to assess the general accuracy of the model in the study area. Variation between count and model volumes along Ford Road was discussed. Even though the volume difference on Ford was considerable, the model was accurately showing the correct directionality of the volumes, but to a lesser extent than the counts.
 - b. SEMCOG Forecasts

- WSA presented its findings on comparing the 2010 and 2035 SEMCOG model inputs and output trip tables. The growth rate in population and employment within the study area seemed reasonable with the exception of two zones east of I-275 on Ford Road per Canton Township. The regional growth in the trip tables was as expected by SEMCOG.
- SEMCOG asked that the following be added to the traffic memo:
 - Subarea trip table comparison
 - VMT comparison for 2010 and 2035 for the study area

Next Steps

Study Methodology

- Based on the findings of the review of the SEMCOG forecasts the following methodology was agreed upon by the group:
 - a. No Build conditions would be modeled based on applying a static growth rate to the turning data collected for input into the microsimulation. This information would then be what is presented at the upcoming public meeting.
 - b. For testing of alternatives, WSA will modify the 2035 TransCAD network and rerun only the traffic assignment phase of the model using the application provided by SEMCOG to test impacts on the traffic patterns in the study area. Using professional judgment, these changes will be reflected in the no build volumes for analysis of the alternatives.
- Growth Rate
 - a. Group discussed an appropriate growth rate to be applied to the traffic counts in the study area. The 0.388 percent per year identified by MDOT on Ford Road was discussed as being consistent with the population and employment growth in the study area. The growth in internal traffic generation is balanced by a low growth in external traffic to the study area.
 - b. It was felt that the 0.388 percent because of its basis in 1995 to 2010 historical data would capture new development as discussed by Canton Township, but to provide the most conservative (worst case) forecasts, the group agreed upon a growth rate of 0.5 percent per year.
- Sensitivity Analysis
 - a. To accommodate the proposed development on the east side of I-275, the group decided that a sensitivity analysis being completed by running the SEMCOG 2035 model with updated demographic inputs for the two zones in question. WSA will then review the output of that model run to identify it creates a change in travel patterns or growth in the study area that is not captured by the static trip rates. If the findings show a significant change, then these findings will be incorporated into the alternative analysis.

Action Items

- Traffic Memo Updates
 - a. Provide a comparative table of the intersection legs with counts and model output
 - b. Develop summary of subarea trip table growth
 - c. Calculate Subarea 2010 and 2035 VMT statistics
- Information for Canton Township
 - a. WSA to provide to Canton Township an excel file showing the SEMCOG model inputs for the zones in the study area.

- b. Canton Township to provide to SEMCOG appropriate values for 2035 for input into the sensitivity run of the model.
- SEMCOG
 - a. Based on inputs from Canton Township, SEMCOG will run a 2035 forecast with the revised land use inputs. Outputs (trip tables, SE file, volumes) to be provided to WSA for review and analysis.

Memorandum



TO: MDOT

FROM: Wilbur Smith Associates (WSA)

DATE: August 16th, 2012 (rev. 9/11/12)

SUBJECT: Illustrative Alternative Study Team Meeting

PROJECT: JN 115177, I-275 at Ford Road Study

LOCATION: MDOT – Taylor TSC

ATTENDEES: Sign in sheet attached

WSA and Bergmann Associates presented the Illustrative Alternatives along with the pros and cons of each relative to cost, ROW impacts, level-of-service, and geometrics. This presentation also included project background, comments received from the public, draft Purpose and Need, steps taken to reach this point, and additional improvements that could apply to numerous alternatives. The objective of the meeting was to reach consensus that the Illustrative Alternatives meet the Purpose and Need statement and to determine which alternatives should be presented as moving on to the Practical Alternative stage. The following represents the key discussion points regarding specific alternatives and general.

Alternative 2 – Operational Improvements:

Mark Fisher questioned how soon after the additional capacity is added the LOS would deteriorate to existing conditions.

Alternative 3A – Ford Road Boulevard:

Alternative 3A was presented as a full-width, worse case footprint with the greatest ROW impact. Mark Fisher stated that the median width is flexible and can be reduced to a 30' minimum width with loons used for truck turnarounds at select locations.

Dave Dortman noted that wetlands exist just outside of MDOT ROW including a conservation easement in the southeast quadrant with Morton Taylor Road.

John Lanum questioned whether a roundabout would work at the Haggerty Road intersection. Mark Fisher stated that soon the US Access Board may require HAWK signals for multi-lane roundabouts. Ken Kucel said that in the past Wayne County residents have not been receptive to roundabouts.

Tim Faas noted that if ROW is needed along Ford Road the green space offset will need to be accounted for.

Alternative 3B – Haggerty Road Boulevard:

Alternative does not improve the Haggerty\Ford Road intersection as well as Alternative 3A.

Alternative 3C – Ford and Haggerty Road Boulevard:

No noteworthy comments.

Alternative 4 – WWTIP Study:

This alternative does not improve Haggerty Road much from the existing condition.

Jeff Forster (FHWA) stated this alternative would be difficult to get an IACR for. Jeff also noted the difficulty of conveying movements to motorists (driver expectation). Following the meeting, FHWA stated they do not believe Alternative 4 can be brought forward as a practical alternative because it does not meet the purpose and need and changes the configuration of I-275. Furthermore, Alternative 4 degrades the operations at the I-275 interchange.

Alternative 5 – Warren and Cherry Hill Road Interchanges:

There is a DEQ conservation easement in the northeast quadrant of Cherry Hill Road and I-275. Difficulties in this alternative were discussed regarding proximity of new interchanges to Ford Road and the weave/merge movements that would be introduced. If operational problems were discovered during the traffic analysis this alternative may not meet the IACR requirement for approval.

Additional Improvements:

Limit the number of these presented at Public Information Meeting (PIM) #2.

Quantify benefits of each to warrant its inclusion and how it fits within the Purpose and Need.

If improvement is within Wayne County jurisdiction, WSA needs to make the recommendation so they can be included in their transportation plan.

List what improvements are including in each alternative.

General Discussion:

MDOT recommends that all illustrative alternatives be presented at PIM #2 along with the pros and cons of each. Design team recommendations on practical alternatives shall also be presented.

WSA will convert the presented diversion percentages to an improvement to level-of-service factor for PIM #2.

Design team alternative comments to be sent to MDOT and WSA within two weeks (August 30th).

Information presented at PIM #2 should be generalized to avoid backlash by showing impacts that likely will not occur. Lori Noblet suggested that ROW impacts be more closely determined.

Dave Dortman stated that only one acre of wetland bank is available in the Rouge River watershed so wetland impacts would likely lead to new wetland construction depending on the wetland type impacted and the corresponding mitigation ratio.

Prior to the meeting, Dave Dortman distributed existing DEQ conservation easement information and FEMA floodplain maps for the study area. Modifying these easements requires approval from the DEQ Director. These modifications are a time consuming process and very rarely approved. The easements GIS layer are available on DEQ's website.

PIM #2 will be delayed to allow time to meet with Canton Township Downtown Development Authority and address their concerns. Tim Faas will provide potential meeting dates. WSA will present options for Alternative 3A to minimize the ROW impact. Canton Township will provide WSA truck turning movement information to assist in locating the truck crossovers and/or direct driveway access.

I-275/Ford Rd Alternative Ideas Workshop

Project: CS 82292 - JN 115379/115177

Date: August 16, 2012

Name	Representing	Email	Phone
Gorette Yung	MDOT - Taylor TSC	yungg@michigan.gov	(313)375-2427
Mike Bellini	MDOT - Taylor TSC	bellini@michigan.gov	(313)375-2420
MATT HUNTER	WILBUR SMITH	hunterms@cdmsmith.com	(517) 622-1500
MATT WENDLING	WILBUR SMITH	wendling@cdmsmith.com	517.622.2500
Brian Smith	Wilbur Smith	Smithb@cdmsmith.com	517-622-1500
KETH SIMONS	BERGMANN ASSOCIATES	K.SIMONS@BERGMANNPC.COM	517-272-9225
Jeff Forster	FWA	Jeff.Forster@dot.gov	517-702-1831
Doug LaVoie	Wilbur Smith	LaVoieD@cdmsmith.com	517-622-2500
Ken Kucel	Wayne County DPS	k.kucel@co.wayne.mi.us	313-224-8142
TIM TOOF	CANTON	tim.toof@canton-mi.org	734.394.5161
David Dartman	MDOT - Region Ferriets	dortmand@michigan.gov	248- 483 ⁴¹⁹ 5167
LUK KINTARA	MOOT - METRO	KINTARA@METRO.ED	248 483 5167
John Sanderson	MDOT TAYLOR	Sandorj@michigan.gov	313.375-2408
Kori Noblet	MDOT - Environment	noblet@michigan.gov	517-335-2906

I-275/Ford Rd Alternative Ideas Workshop

Project: CS 82292 - JN 115379/115177

Date: August 16, 2012

Name	Representing	Email	Phone
MARK FISHER	MDOT - GEOMETRICS	fisherm@michigan.gov	517 335-1204
John Lanman	MDOT - Traffic Study	lanmanj@michigan.gov	517-335-2949
Margaret Beroness	MDOT - Environmental	beronessm@michigan.gov	517-335-2621



Memorandum

TO: MDOT

FROM: Wilbur Smith Associates (WSA)

DATE: August 23rd, 2012

SUBJECT: Illustrative Alternative Canton Twp Supervisor Meeting

PROJECT: JN 115177, I-275 at Ford Road Area Study

LOCATION: Canton Township Municipal Offices

ATTENDEES: Phil LaJoy – Canton Township Supervisor
Tim Faas – Canton Municipal Services Director
Bill Serchak – Canton Township Engineering
Kim Avery – MDOT Taylor TSC
Gorette Yung – MDOT Taylor TSC
Mark Fisher – MDOT Geometrics
Matt Wendling - WSA

MDOT and WSA presented the Illustrative Alternatives along with the pros and cons of each to Canton Township. It was noted that the level of detail for each of the alternative is only enough to determine whether geometric standards can be met, approximate ROW impacts, and if alternative meets the draft Purpose and Need statement. The purpose of this meeting was to brief the Township Supervisor prior to arranging a meeting with the DDA Board. The following represents the key discussion items.

General Alternative Concerns

The Township is concerned with impacts to existing features along the corridor such as landscaping, retaining walls, signs, utilities, and streetscape lighting and mast arm mounted traffic signals. The DDA has spent over \$9M to date in improvements along the corridor.

The economic impact to businesses would be too great to overcome if ROW impacts require full takes along the corridor. Construction impacts, regardless of extent, will be difficult to stomach for businesses in the DDA.

The Township requested the team take another look at the boulevard alternative (Alt. 3) and come up with something that is not as drastic and minimizes ROW impacts to the greatest extent. The team presented options to the boulevard that provide loons at locations which can

be adjusted based on further discussion with MDOT Real Estate and the Township DDA. Furthermore, limited truck access can be investigated which will restrict turns at specific locations which would minimize ROW impacts at only loon locations.

The Township requested that examples of other loons on state trunklines be provided for reference. Following the meeting, MDOT provided WSA a listing of various loons throughout the state and requested that the ADT and number of lanes be included for comparison to Ford Rd. **FIGURE 1** below illustrates representative loons throughout the state.

FIGURE 1 – Loons located on State Trunklines

Region	County	City	Roadway	Nearest Cross Street	ADT*	# of Lanes Crossed
Metro	Oakland	Oxford Township	M-24	Oakwood Road	36,800	2
Metro	Oakland	Oxford Township	M-24	Market Street	36,800	2
Bay	Saginaw	Saginaw Township	M-46	Van Wormer Road	25,300	2
Bay	Lapeer	Lapeer	M-24	Briar Hill Road	16,400	2
University	Monroe	Monroe	M-50	Raisinville Road	12,300	2
Southwest	Allegan	Holland	US-31 (I-96 BL)	Central Avenue	18,500	2
Southwest	Allegan	Holland	US-31 (I-96 BL)	Lincoln Avenue	18,500	2
Grand	Ottawa	Grand Haven	US-31	Numerous (Robbins, Comstock, Hayes, Croswell, Bagley, Port Sheldon, New Holland)	21,300	2
Grand	Ottawa	Holland	I-196 BL	Van Hill Dr, State St & Fairview Rd	26,300	2
Grand	Ottawa	Zeeland	M-121	84th St Felch St	10,100	2
North	Crawford	Grayling	I-75 BL	Huron Street	~15,000	2

* Ford Road ADT for comparison is 39,800 vpd

The Township asked that additional access management be considered for all alternatives to consolidate driveways and share common entrances for businesses for safety reasons. The Township has worked with businesses on many past projects to accomplish this since the Access Management Plan was adopted by MDOT and the Township.

Utilities impacted along the corridor may require relocation and if a private utility is located within MDOT ROW, the relocation would be at the owner’s cost. The team will investigate further in the Practical Alternative stage which utilities will remain in place and will be able to better estimate impacts.

The Township stated that the information provided is sufficient (with modifications as discussed) to present to the DDA. The next MDOT PPRB meeting is Monday, September 17th where Gorette will present the alternative and status of the project. If approved by PPRB to proceed, MDOT/WSA will present to the DDA board.

Next steps:

1. MDOT/WSA will prepare presentation for DDA with all Illustrative Alternatives including variations on the boulevard option. Per the suggestion of the Township, WSA will begin with the minimum impact approach.
2. MDOT PPRB meeting on Monday, September 17th.
3. DDA meeting currently scheduled for Wednesday, September 19th at 8am in the Township Municipal Office.

The above represents the interpretation of the author regarding major points of discussion. Any changes or corrections should be brought to the attention of the author within five (5) days of the issue date.

Memorandum



TO: MDOT
FROM: Wilbur Smith Associates (WSA)
DATE: September 19, 2012
SUBJECT: DDA Meeting
PROJECT: JN 115177, I-275 at Ford Road Study

LOCATION: Canton Administration Building

ATTENDEES: See DDA Notes

WSA/MDOT presented the Illustrative Alternatives to the Canton Township Downtown Development Authority (DDA) and answered questions.

Phil Lajoy explained that this study is the next step in the analysis, whereas the previous WWTS focused purely on traffic. This study utilized 2035 projected traffic volumes which will require additional improvements to Ford Road to achieve acceptable Level-of-service (LOS).

Questions and Answers

General

Q – Will the project include the additional traffic impacts on adjacent streets?

A – The study is focused on Ford Road but we are looking at the traffic impact to the wider study area.

Q – What is the end product of this study?

A – After receiving public input the end product will be a recommended short term and long term alternative.

Q – When will this study be complete?

A – The final report will be complete in spring 2013.

Q – Can Alternatives be combined to produce a best of all alternatives fix?

A – Yes, is it makes sense based on the public comments and the analysis.

Q – When will this project be added to the programmed project list?

A – That depends on which alternative is recommended from the study and the corresponding environmental impacts which dictate the level of environmental analysis is required. The environmental process needs to be complete to allow for grant applications to be submitted.

Q – The DDA has a long history with Ford Road improvements and is concerned about losing their investment and the impact to business during construction. Will the replacement of the existing decorative walls be paid for by MDOT?

A – This project includes mitigation, which will likely require a match from locals. MDOT will look into.

Q – How long will the project take to construct?

A – It will take 1 construction season.

Q – Paving rural roads has been approved by the Canton Township, and low cost alternatives are preferred so will paving Lotz be looked at for this study

A – This was looked at as an option but as the interchange is only part of the problem, low cost fixes will not have a long term benefit.

Alternative 3

Q – Can controlled access be used in lieu of indirect lefts, providing direct lefts at signals?

A – The indirect lefts are needed to achieve the improved LOS.

Q – Will signals be located at loons?

A – In some instances yes. WSA clarified that additional access points will be provided along the median for non-semi trucks. Access will be studied in more detail at the next phase of analysis.

Statement – How will gas trucks gain access? More north south connection is needed.

Alternative 4

This alternative was updated to 2012 design standards. There is concern over driver expectations and the effects of constructing the southern ramp so close to the existing drainage course.

Statement – the DDA preferred the slip ramp Alternative 4 and the fact that it does not have much impact to Ford Road.

Q - This analysis studied the mid-range alternative completed as part of the WWTS (Alternative 4). The WWTS included a ultimate build out of a boulevard option.

Alternative 5

Q – The impacts to properties are large and this alternative is unlikely to happen, so why are we looking at this?

A – The public comments asked for additional access points to I-275.



Memorandum

TO: MDOT
FROM: Wilbur Smith Associates (WSA)
DATE: November 14th, 2012
SUBJECT: Practical Alternative Selection Meeting
PROJECT: JN 115177, I-275 at Ford Road Study

LOCATION: MDOT – Taylor TSC

ATTENDEES: Sign in sheet attached

WSA presented and summarized Public Meeting #2, including comments received from the public and project stakeholders. The meeting's objective was to select alternatives to advance as Practical Alternatives. The study team was presented each alternative as well as advantages and disadvantages of each. Based on the support material listed below, comments received from the public and project stakeholders, and team discussion; the Study Team decided to advance Alternative 1 – No Build, Alternative 2 – Operational Improvements, and Alternative 3 – Boulevard as Practical Alternatives. Further discussion on each alternative is included below.

Support Material Presented:

- Comments from PIM#1
- Crash History (presented at previous Study Team meeting)
- Road Safety Audit (presented at RSA meeting)
- Project Constraints (presented at previous Study Team meeting)
- Comparison of potential project costs (relative to each other)
- Public input on factors for Practical Alternative consideration

Alternative 1 – No-Build:

This alternative will continue through the Practical Alternative stage as a base-line to compare other alternatives to.

Alternative 2 – Operational Improvements:

This alternative will be analyzed further as a short term fix since traffic will degrade to existing levels within approximately five to ten years after implementation. Additional analysis is

needed to confirm this timeframe. This alternative will allow time for funding, design and construction of long term alternative.

Comments received to date reflect that the community expects such a fix to be constructed soon.

Alternative 3- Boulevard:

This alternative will advance with options to maximize operations at the Ford and Haggerty Rd intersection. A brainstorming meeting will be scheduled with the Study Team to explore potential alternative options.

Wayne County DPS asked if a 3-lane boulevard has been explored to eliminate the need for loons. WSA stated that the 2-lane boulevard performs well through the design year. To verify this, a 30% increase in the model was performed as a sensitivity check to verify the point at which a 3rd lane is needed. ROW would also need to be purchased along the entire project limits for the 3 lane boulevard and this would also impact the conservation easement near Morton Taylor Road.

It has been recognized that significant funds have been invested in Ford Road within the study limits as it is considered the gateway to Canton Township. The cost share of impacts to these improvements (retaining walls, lamps, etc) will be of concern if this alternative is chosen as the Preferred Alternative and advances to design.

Environmentally this alternative could be a Categorical Exclusion if there is limited ROW impact that is deemed acceptable by the public and FHWA.

Alternative 4 – WWTIP Study:

Not advanced for the following reasons:

- Does not meet the Purpose and Need due to negative impact on I-275
- FHWA would not grant an Interstate Access Change Request
- May require design exceptions for proximity of sequential ramps and weave/merge distance for slip ramps
- Does not address traffic and safety concerns along Ford Road and traffic west of Haggerty Road

It was noted however that a concern over truck movements at Ford/Haggerty intersection makes the north slip ramp attractive. The design team will explore other options to accommodate this truck movement through the Ford/Haggerty intersection.

Alternative 5 – Warren and Cherry Hill Road Interchanges:

Not advanced for the following reasons:

- Does not meet the Purpose and Need due to negative impact on I-275

- Environmental impacts due to ROW purchase, including conservation easement in the NE quadrant of I-275 and Cherry Hill Road
- High costs with less than desired traffic diversion from Ford Road
- Would require a design exception due to inadequate distance between interchanges (Warren and Ford) and an unsafe weave/merge lane that is introduced
- FHWA would not grant an Interstate Access Change Request
- Does not address safety concerns along Ford Road and traffic west of Haggerty Road
- Increases traffic on Warren and Cherry Hill Roads, which currently carries residential traffic

Additional Improvements:

The additional improvements presented were those identified in the Road Safety Audit that should be considered to improve safety in the study area or improvements to side roads that may benefit intersections along the Ford Road corridor. Much of the work would be included on Wayne County roads so further coordination with the project partners will be necessary.

Additional improvements must be analyzed against the Purpose and Need and benefit versus cost. The team will determine if the improvements provide enough benefit to better operations on Ford Road and should be included for further consideration, or if the benefit is not enough to warrant consideration. WSA will verify if the improvements are required in the NEPA process to assist Wayne County with potential implementation. WSA will forward list to Wayne County and determine if any of these are already locally programmed. It was noted that paving Lotz Road is not currently programmed. These will be categorized as short, mid or long term improvements.

Cherry Hill and Warren Roads are both in Wayne County's long range plan to be expanded to five lanes. Any proposed intersection improvements along both roadways will take this into consideration as the study progresses.

General Discussion:

WSA will add 2012 traffic shown in the Alternative 1 exhibit to Alternatives 2 and 3 in the next public meeting.

The public listed "Traffic Flow" as the largest factor for Practical Alternative comparison criteria in the "other" category during Public Meeting #2, demonstrating its importance. This will be included in the Practical Alternative selection criteria as the alternatives are progressed.

FHWA and MDOT Environmental will provide comments on the Draft Purpose and Need. WSA will address these comments, distribute to the Study Team for review and then finalize.

WSA will verify in Planning and Environmental Linkages (PEL) that these meeting notes will suffice to eliminate Alternatives 4 and 5 from further analysis.

It was noted that an origin/destination study was conducted as part of the WWTP Study. Wayland is a new trucking company since the study was completed which has added 2000 trucks per week to Haggerty Road. Canton Township will provide additional truck movement information. Currently commercial truck volume is at four percent, which is likely low due to use of adjacent interchanges. This percentage could increase once traffic flow improves. A different route from north of the project site to I-275 via Warren and Lotz Roads was discussed but turning radii and narrow roads are restrictive.

Canton Township stated there are a large number of commercial vehicles that access northbound Haggerty Road from the I-275 interchange and hoped that a slip ramp might separate trucks from passenger vehicles. It was also discussed that trucks access various points within the study area from either Michigan Avenue to the south or Ann Arbor Road to the north, and avoid Ford Road if they are able. The Study Team agreed that truck movement through the Ford/Haggerty intersection is a concern that the Preferred Alternative needs to address.

Due to MAP21 implementation and the amount of potential freight volume within the study area, a localized freight analysis may be beneficial to this project.

A conference call between the design team and MDOT Environmental will be scheduled to ensure that the project is in alignment with the PEL process.

The Study Team feels that the study process has been going well due to quality public outreach & comments, all transportation modes are being explored and a quality Purpose & Need was created.

Next Steps:

- Finalize and distribute P&N
- Complete Illustrative Alternatives Document
- Practical Alternatives Brainstorming Workshop – January 9th, 2013
- Public Information Meeting #3 – February (tentative)

I-275/Ford Study Practical Alternative Selection Meeting

Project: CS 82292 - JN 115177

Date: November 14, 2012

Name	Representing	Email	Phone
Gorette Yung	MDOT - Taylor TSC	yungg@michigan.gov	(313)375-2427
Matt Wendling	Wilbur Smith	wendingmd@cdmsmith.com	(517)622-2500
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Matt Hunter	Wilbur Smith	hunterms@cdmsmith.com	(517)622-2500
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Bill Senczak	Canton Twp	userchak@canton-mi.org	734 394-5149
KATHREEN SALLA	CANTON DDA	KSALLA@CANTON-MI.ORG	(734)394-5186
Phil Lynwood	FHWFA	Phillip.Lynwood@dot.gov	517 702-1859
KEITH SIMONS	BERGMANN ASSOCIATES	K.SIMONS@BERGMANNR.COM	517-272-9835

CONFERENCE CALL ATTENDEES NEXT SHEET

I-275/Ford Study Practical Alternative Selection Meeting

Project: CS 82292 - JN 115177

Date: November 14, 2012

Name	Representing	Email	Phone
MARGARET BARONDESS	MDOT		
CORI NOBLET	MDOT		
MARK FISHER	MDOT		
IMAD GEBADUN	MDOT		
JEFF FORSTER	FHWA		
DAVE WILLIAMS	FHWA		
JOHN LANUM	MDOT		

Memorandum



TO: MDOT

FROM: Wilbur Smith Associates (WSA)

DATE: January 9, 2013

SUBJECT: Practical Alternative Workshop

PROJECT: JN 115177, I-275 at Ford Road Study

LOCATION: MDOT – Taylor TSC

ATTENDEES: Sign in sheet attached

WSA presented a project update, information regarding the Practical Alternatives, and the upcoming steps. The goal of the meeting was to discuss concerns that were brought up during the Practical Alternatives Selection Meeting and gather feedback from the Study Team prior to moving forward with the Practical Alternatives analysis. Participation was encouraged throughout to gather comments and ideas on the information presented.

Alternative 1 – No-Build:

Alternative 1 would likely require a full reconstruction in the near future. Taylor TSC records date back to the late 1970s only indicate lane repairs or a mill and overlay. WSA will verify condition of pavement via the most recent cores and will tie down a potential timeframe for reconstruction.

Alternative 2 – Operational Improvements:

Alternative 2 has evolved to now include potential ROW impacts. WSA will note this potential in the Illustrative Alternative Report.

In regards to this alternative providing a short to mid-term fix, WSA presented sensitivity information regarding Alternative 2's life expectancy until intersections returned to a failing LOS. Haggerty is currently at LOS D or worse for AM and PM peaks, and Lilley and Sheldon both fail in the PM peak within 1 – 4 years. This information was for overall intersection performance so even if its LOS is acceptable, individual movements are shown to be failing. WSA suggested they no longer want to consider Alternative 2 as a mid-term fix since there would potentially be throwaway work and multiple construction disturbances (addition of 3rd lanes and then full pavement reconstruction or full-build out in 5+ years).

Wayne County DPS asked what could be done to improve southbound Haggerty Road traffic turning left on to Ford Road. WSA will explore options such as dual lefts along with other improvements to increase Alternative 2's long term viability.

Safety would not improve in Alternative 2 but would likely worsen due to left turns across additional lane.

Alternative 3- Boulevard:

A discussion occurred on the need for loons at every major intersection. Taylor TSC T&S and Operations both stated that major intersection loons would be desired to meet driver expectation. Loons will not only accommodate trucks but also residents pulling trailers and emergency vehicles. If loons are not provided truck drivers would likely use passenger turnarounds with tighter turns. Consistent enforcement and concise signing would be necessary to deter incorrect movements and direct correct ones. Loons may be shifted further from each intersection to utilize more attainable ROW so that they are not located at the first crossover however this is pending MDOT Geometric approval. Wayne County DPS stated that they have a situation similar to this and truck drivers continue to use the first available crossover.

Canton Township suggested left turns be allowed at intersections in the absence of loons. WSA will look into this further to determine which, if any, loons could be removed and still accommodate traffic demand via direct left turns. Direct left turns will be looked at on a case by case basis and consistency will need to be considered. One loon location of concern is just east of Morton Taylor Road in front of an apartment complex.

Canton Township offered to walk the site to look at loon locations, potential ROW impacts, and recommended access management locations. WSA will provide exhibits detailing each loon location. WSA and MDOT previously conducted a field review of loon locations. This review did not cover the Haggerty Road loons so further review is necessary.

WSA presented two exhibits showing indirect and partial direct left turns options at Haggerty Road. WSA stated that with the indirect left turn option the loon west of Haggerty Road on Ford Road could be removed. Taylor TSC T&S recommended that the crossover remain to increase left turn capacity during peak traffic. They also recommended that both the indirect and partial direct left options remain in case ROW acquisition along Haggerty Road is an issue. The Haggerty Road loon south of Ford Road would require a culvert extension or replacement.

WSA presented exhibits showing a boulevard on existing alignment and one on a meandering alignment. The meandering alignment leads to a greater overall ROW impact but splits the width between both bounds, potentially leading to only partial parcel impact instead of a whole parcel impact. Taylor TSC Operations expressed concerns due to roadway constructability and operations. A meandering alignment would lead to a ROW impact at the conservation easement in the southeast quadrant of Morton Taylor Road and Ford Road. MDOT will provide WSA with the legal description for the conservation easement south of Ford Road. WSA will

investigate the overall impact of each boulevard option during the Practical Alternatives analysis.

Following the meeting, Dave Dortman provided the following comment regarding the proposed loon location on Haggerty Road, south of Ford Road;

This watercourse is regulated by DEQ under Part 301 Inland Lakes and Streams and, as shown in the slides, the proposed culvert extension east of Haggerty Rd. will require a DEQ permit for work below the ordinary high water mark. If there is any opportunity to shift that loon north or south and eliminate the culvert extension all together, then that would likewise eliminate the need for a DEQ permit at this location. Or, if the loon cannot be shifted north or south to eliminate the culvert extension, a shift south will at least reduce the proposed extension length. If ultimately a DEQ permit is applied for an extension of this culvert, I will need to provide a narrative of why the loon is required at that location for a Part 301 feasible and prudent alternative analysis and will need to get some additional information from you regarding the chosen location.

Additional Improvements:

WSA presented an upgrade plan to route southbound Haggerty Road trucks to the I-275 interchange via Warren and Lotz Roads to help alleviate freight movement concerns. Wayne County DPS stated that currently Warren Road between Haggerty and Lotz Roads is a Class B roadway and could not handle large trucks. The Warren Road bridge over I-275 was reconstructed in 2012 and can handle truck loadings. Also any ROW impact to the north would be an issue. Lotz Road between Warren and Ford Roads is Class A. WSA will include costs to upgrade to Class A.

WSA presented recommended access management along corridor. Canton Township stated that some of these recommendations have recently been completed. Taylor TSC stated that access management recommendations are a standard procedure during design where often times a business with multiple drives gets consolidated into one wide drive. Driveway permits are valid until property is developed for a different use.

Bergmann Associates presented information necessary to pave and upgrade Lotz Road geometrics between Cherry Hill and Ford Roads to provide another north-south option to alleviate traffic at the Haggerty and Ford Roads intersection. This improvement was highly recommended at the two public meetings. WSA will determine the traffic shift (diversion) from Haggerty Road to Lotz Road and present at the next Study Team meeting. Lotz Road improvements would require a design speed of 50 MPH which would lead to an alignment shift of 20 feet to 30 feet for one existing curve. Canton Township currently owns property in this area in anticipation of an upgrade. Multiple culverts, including double barrel 96 inch metal culverts, would need to be lengthened or replaced to accommodate the proposed three-lane roadway. Currently Lotz Road is not a federal-funded eligible roadway. FHWA will check into if and how it may be considered.

WSA will determine the cost versus benefit of the additional improvements gathered from the public meetings and road safety audit. A discussion took place regarding how best these should

be incorporated into the practical alternatives. FHWA recommended that the practical alternatives be minimized and keep the additional improvements as a prioritized separate list. Certain improvements will be incorporated into the practical alternatives regardless such as sidewalk addition under I-275 and at the bike path crossing of Ford Road. MDOT Environmental noted that these will need to meet the project Purpose and Need. FHWA stated that decision making process will need to be documented. WSA will prepare a comparison of Practical Alternatives distinguishing between no ROW impacts vs. ROW impacts, and will list out any options that fall outside MDOT's responsibility and the benefit these options may have on the Ford Road area.

General Discussion Items:

WSA provided the following project update:

- WSA submitted the Illustrative Alternatives Report and asked the study team to provide comments or email their concurrence with the process to date.
- Project Area Contamination Survey and Wetland & Habitat DRAFT Reports are being completed for review. Both reports were held until the Practical Alternative stage to ensure that the full project footprint is covered.
- Noise analysis has been completed. DRAFT report will be submitted for review soon.
- The Planning and Environmental Linkages (PEL), although submitted in the Illustrative Alternative Report, is a living document and is being updated as the project progresses.

Wayland Trucking Company has approximately 2000 trucks per week, which is the amount WSA used in the traffic model. Canton Township has not received confirmation of this to date, although has enquired.

Kathleen Salla has retired as Canton Township's DDA Coordinator. Amy Colligan has replaced her.

Mark Fisher was not able to attend the meeting so MDOT Environmental will update him on the results.

Next Steps:

- Analyze Practical Alternatives
- Complete Practical Alternatives (mid-February)
Present Practical Alternatives to Study Team (late-February)
- Public Information Meeting #3 (early March)

I-275/Ford Study Practical Alternatives Workshop

Project: CS 82292 - JN 115177

Date: January 9, 2013

Name	Representing	Email	Phone
Gorette Yung	MDOT - Taylor TSC	yungg@michigan.gov	(313)375-2427
Matt Wendling	Wilbur Smith	wendlingmd@cdmsmith.com	(517)622-2500
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Matt Hunter	Wilbur Smith	hunterms@cdmsmith.com	(517)622-2500
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Tim Ford	CANTON	tim.ford@canton-mi.org	734.320.2481
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CONFERENCE CALL ATTENDEES ON NEXT PAGE

I-275/Ford Study Practical Alternatives Workshop

Project: CS 82292 - JN 115177

Date: January 9, 2013

Name	Representing	Email	Phone
MARGARET BARONBEISS	MDOT		
LOREI NOBLETT	MDOT		
JOHN LANUM	MDOT		
DAVE WILLIAMS	FHWA		

Memorandum



TO: MDOT
FROM: CDM Smith Michigan Inc.
DATE: February 20, 2013
SUBJECT: DDA Meeting #2 – Practical Alternatives Discussion
PROJECT: JN 115177, I-275 at Ford Road Study

LOCATION: Canton Township Administration Building

ATTENDEES:

Melissa McLaughlin – DDA
Dave Wisniewski – DDA
Dianne Cojei – DDA
Greg Green – DDA
Seth Kleinglass – DDA
Patrick Rugiero – DDA
Janet Volante – DDA
Mark Walbauer - DDA
Amy Cooligan – DDA

Christine Popoff – DDA
Tim Faas – Canton Township
William Serchak – Canton Township
Darrell Clem – Canton Twp Observer
Dan Fredenthal – OHM
Kim Avery – MDOT
Gorette Yung – MDOT
Mark Fisher – MDOT
Matt Wendling – CDM Smith

The purpose of this meeting was to address any questions Canton Township and the Downtown Development Authority (DDA) had regarding the Practical Alternatives, however the DDA wanted to focus on Alternative 3 – Boulevard and in particular the proposed loon locations. WSA/MDOT summarized all of the Practical Alternatives and work done to date prior to opening up the meeting for general discussion.

The following represents key comments/discussion items regarding Alternative 3 (from west to east):

Sheldon at Ford

1. Shorten median length at end of boulevard to allow turning movements from the Jo-Ann Fabric/McDonalds driveway to the north.
2. No comments on western loon location.
3. DDA prefers to shift the eastern loon to location of the west Lowe's drive. They anticipate this will create less ROW impact. The DDA stated their concern is the impact to parking at the Firestone store, however stated they will work with the property

owner behind the building to discuss potential opportunities to acquire property for parking lot relocation.

4. Canton Twp indicated the western loon is in a good location and only impacts one street lamp, and the ROW impact in the northeast quadrant impacts the landscape wall and numerous street lamps.

Morton Taylor at Ford

1. DDA prefers a shift of the western loon further westward to the driveway opening to avoid ROW impacts to the Canton Cinema parking lot. They indicated previous problems with the owner and that ROW acquisition would be difficult.
2. The DDA requested that the eastern loon be relocated eastward to the residential property located east of the Nottingham Forest subdivision. This area has the potential for large future development as well as a connector to Hanford Road to the north and Lilley Rd to the east. CDM Smith will consider this loon location however this exceeds the allowable distance from the intersection by a considerable amount and may lead to driver confusion.
3. Canton Twp requested the western loon be shifted as far west as possible to avoid 70-80 feet of landscape wall impact. They also stated the eastern loon as shown was in the best location.

Lilley at Ford

1. The DDA indicated a potential issue with the property owner (Hobby Lobby) for the western loon location. They did not request an alternate location.
2. The DDA did not have any comments on the eastern loon location.
3. Canton Twp stated the western loon as shown was in a good location with no wall and only two street lamp impacts. The EB Ford Road right turn bay will impact approximately 200-300 feet of landscape wall and numerous street lamps. They also requested the eastern loon be shifted east to align with entrance drive to Panera Bread.

Haggerty at Ford

1. The DDA did not have any comments on the western loon location.
2. Canton Twp stated the western loon as shown was in a good location with no wall impacts. The ROW impact for the right turn bays along EB and WB Ford Road will impact approximately 400 feet of landscape wall in each direction.

Haggerty Road Boulevard

1. It was requested that the southern end of the boulevard be shortened to allow turning movements from hotel/Lifetime Fitness drive.
2. The DDA requested the southern loon be shifted north to minimize impacts to the stream crossing and business immediately south.

3. The DDA did not have any comments on the northern loon location. They did state however that impacts to the IKEA overflow lot shouldn't be a concern as they do not believe it has been used since the store opened.

General Comments:

- The DDA indicated a desire to create an access road behind businesses along Ford between Haggerty and Lilley. This road would pass through potential future development areas and allow for a diversion for drivers from Ford Road as well as providing storefront opportunities for businesses.
- The DDA indicated a concern for pedestrians crossing freeway on-ramps. The CDM Smith team will investigate potential safety features in the preferred alternative stage.
- The DDA requested a pedestrian bridge or tunnel be considered at the I-275 Bike Path crossing. This would eliminate the need for pedestrians to divert from their route to Lotz Road to cross at the signal.
- In order to minimize ROW impacts, the CDM Smith team will investigate 11 foot turn lanes in all locations.
- Only show signals at loon locations where required. Following the meeting it was determined that signals will be required at each loon location as indicated. The signals will be synched with the intersection signal so that traffic clears when the intersecting street is green.
- Change ROW line colors to better delineate between existing and proposed ROW.

The above represents the interpretation of the author regarding major points of discussion. Any changes or corrections should be brought to the attention of the author within five (5) days of the issue date.



Memorandum

TO: MDOT

FROM: CDM Smith

DATE: May 15th, 2013

SUBJECT: Preferred Alternative Selection Meeting

PROJECT: JN 115177, Ford Road at I-275 Study

LOCATION: MDOT – Taylor TSC

ATTENDEES: Sign in sheet attached

CDM Smith presented and summarized Public Meeting #3, including comments received from the public and project stakeholders. The meeting's objective was to select the Preferred Alternative. The Study Team was presented each Practical Alternative as well as advantages and disadvantages of each. Based on the support material listed below, comments received from the public and project stakeholders, and team discussion; the Study Team selected Alternative 3 – Boulevard as the Preferred Alternative. Further discussion from the meeting is included below.

Support Material Presented:

- Overview from PIM #1 and #2
- Summary of PIM #3 which included Practical Alternatives, Final Purpose and Need and performance measures
- Public comments on Practical Alternatives including votes (Alternative 1 – No Build: 0, Alternative 2 – Operational Improvements: 2 and Alternative 3 – Boulevard: 13)
- Expected crash frequency for Practical Alternatives along entire Ford Road corridor along with intersections at Haggerty and Lilley Roads
- Additional design options and recommendations (retaining wall, staging, and multi-modal linkages)

PIM #4 Information and Materials:

CDM Smith will add public votes on Preferred Alternative from PIM #3 in performance measures. They will also explore adding information regarding expected longevity of traffic operations for each.

Bergmann Associates will add crash frequency percent reduction compared to existing conditions in the presented graphic. They will also explore adding crash severity to graphic.

CDM Smith to add individual lane level-of-service to the Preferred Alternative graphic.

State in meeting material that meeting date was advanced from early July to May 30th for the grant application.

The meeting materials will not be presented in person to PPRB but will obtain their approval through e-mail correspondence.

Preferred Alternative:

CDM Smith will compile a green sheet that will be carried forward to design.

CDM Smith to reassess access management potential for the Preferred Alternative.

The presented phasing of Ford Road construction separate from Haggerty Road allows for flexibility if funding or permitting issues. Wayne County stated that obtaining a construction permit for Haggerty Road would not be an issue.

Canton Township stated that since the anticipated right-of-way (ROW) acquisitions lie within the central business district, zoning waivers can be granted which may reduce or eliminate the need for full parcel purchases. ROW impact will likely be the differentiator on whether or not a Categorical Exclusion is granted and will be a large step to reach design.

MDOT requested that the study team members provide a letter of concurrence with the Illustrative Alternative report, Practical Alternatives and the Preferred Alternative by May 17th.

Canton Township's Tiger Grant V Application:

Application will include boulevards on Ford and Haggerty Roads but not the additional improvements of paving Lotz Road between Cherry Hill and Ford Roads and upgrading the southbound Haggerty Road – eastbound Warren Road – southbound Lotz Road route to accommodate alternative truck access to the I-275 interchange.

Canton Township to emphasize in grant the safety benefit a boulevard provides to pedestrians due to the refuge islands provided within the median.

Canton Township's largest concern is project construction phasing since the grant award is typically capped at \$12 million. Grant does not cover ROW cost.

Grant application and/or name to highlight Canton Township's business, non-motorized paths and multi-modal features as its strength. Application will also highlight their proximity and transit link between Ann Arbor and Detroit.

If grant is not approved, FHWA recommends that a business plan is created to obtain alternative funding. MDOT stated that securing funding should not be an issue. Project will likely be a design-build if grant is not approved.

Draft application to be submitted on May 24th.

Additional Discussion:

Final versions of the previously submitted reports will be compiled now that a Preferred Alternative has been selected. These also include air and noise analysis reports.

Wayne County expressed concern that Illustrative Alternative report concurrence would include additional improvements such as paving Lotz Road and upgrades to provide an additional truck route from southbound Haggerty Road to the I-275 interchange. CDM Smith stated that the boulevard construction is independent of these improvements and are merely recommendations for Wayne County.

The pump station in the southwest quadrant of Lotz and Warren Roads will be relocated further from the roadway. Bergmann Associates will redo the memorandum and cost estimate for the proposed truck route upgrade. This memorandum along with the one for paving Lotz Road between Cherry Hill and Ford Roads will be sent to Wayne County when complete. CDM Smith to provide some cost/benefit information regarding paving Lotz Road.

MDOT Environmental expressed gratitude for the relationships established during this project along with desire to maintain these through design and construction. Canton Township recommends utilizing the letter of agreement found in their access management plan.

The location of utilities along Ford Road is well known due to the recent effort to place them underground. This knowledge will be very beneficial if the project goes to a design-build.

Next Steps:

- Further refine Preferred Alternative (traffic model, etc.)
- Prepare and hold PIM #4 – May 30, 2013
- Finalize and submit Traffic and Environmental Report including PEL checklist

I-275/Ford Study - Preferred Alternative Selection

Project: CS 82292 - JN 115177

Date: May 15, 2013

Name	Representing	Email	Phone
Gorette Yung	MDOT - Taylor TSC	yungg@michigan.gov	(313)375-2401
Matt Wendling	CDM Smith	wendingmd@cdmsmith.com	(517)622-2500
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Matt Hunter	CDM Smith	hunterms@cdmsmith.com	(517)622-2500
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Mike Bellini	MDOT - Taylor TSC	bellinim@michigan.gov	(313)375-2420
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David Williams	FLWA	David.Williams@DOT.gov	517-702-1850
Mike Budzi	MDOT - Taylor TSC	budzi@michigan.gov	313-375-2403

I-275/Ford Study - Preferred Alternative Selection

Project: CS 82292 - JN 115177

Date: May 15, 2013

Name	Representing	Email	Phone
Shannon Price	Wayne County	Spice@waynecounty.com	218-756-0088
Cath Wagner			
ANDY IWIN	MDOT		

*

* CONFERENCE CALL

Memorandum



TO: MDOT
FROM: CDM Smith
DATE: May 23, 2013
SUBJECT: Traffic Meeting #3
PROJECT: JN 115379, I-275 at Ford Road

LOCATION: Phone Conference

Attendees: Liyang Feng, SEMCOG
Tom Bruff, SEMCOG
Tim Faas, Canton Township
Bill Serchak, Canton Township
John Lanum, MDOT Traffic
John Watkin, MDOT Modeling
Brad Sharlow, MDOT Modeling
Mark Fisher, MDOT Geometrics
Jonathan Avner, CDM Smith
Matt Hunter, CDM Smith

The following represents the key points of discussion at this meeting.

- CDM Smith re-ran the TDM runs for alternative 2 and 3 to represent the latest geometry and provide a true comparison of alternatives
- CDM Smith presented the findings of the revised TDM model runs which indicated a small increase in overall traffic along the M-153 corridor for both alternatives in comparison to the No-Build option
- All attendees were in agreement with the findings and requested that Brad cross check the SEMCOG model files which were posted to the FTP site
- CDM Smith will then model the revised TDM outputs in Synchro
- The results will be updated in the traffic report and submitted to the team for review

Appendix J

Study Team Members List

List of State of Michigan Contacts, Local Agencies and Officials, and Design Team Members for the I-275 at M-153 (Ford Road) Area
Traffic and Environmental Study and Evaluation

MDOT - Taylor TSC		Street Address
Name	Affiliation	
Gorette Yung	Project Manager	
Mike Bellini	Assistant Project Manager	
Mike Budai	Traffic & Safety	
John Sanford	Operations	6510 Telegraph Road, Taylor, MI 48180
John Paepke	Traffic/Operations	
Rachel Laderach	Utilities	
Andrea Jones	Utilities	
MDOT - Metro Region		Street Address
Name	Affiliation	
Lex Kinter	Soils	
Nishantha Bandara	Soils	
Tom Jay	Real Estate	
Robert Morosi	Communications	
Jim Schultz	Planning	
Kay Adefeso	Structures	
Tim Smith	Traffic & Safety	
Sharon Ferman	Resource Analyst	
Dave Dorfman	Environmental Permits	18101 W. Nine Mile Road, Southfield, MI 48075
MDOT - Lansing/ FHWA		Street Address
Name	Affiliation	
Lori Noblet	Environmental	
Margaret Barondess	Environmental	
Chris Potvin	Drainage	
Erik Carlson	Drainage	
Scott Goeman	Real Estate	
Mark Fisher	Geometrics	
Imad Gedaoun	Geometrics	
John Lobbestael	Survey	
Gerard Feuerstein	Structures	
Bob Parsons	Communications	
John Lanum	Traffic (Supervisor)	
John Watkin	Modeling (Supervisor)	
Donna Wittl	Modeling	
Dave Berridge	Special Projects Coordinator	
Tom Zurburg	Noise Analysis	
Tom Hanf	Noise Analysis	
Phil Lynwood	FHWA	
Jeff Forster	FHWA	
David Williams	FHWA	315 W. Allegan, Lansing, MI 48933

Local Government		Affiliation	Street Address
Name	Affiliation	Street Address	
Tim Faas	Canton Township	1150 Canton Center Road, Canton, MI 48188	
Bill Serchak	Canton Township	1150 Canton Center Road, Canton, MI 48188	
Kathleen Salla	Canton Township - DDA	1150 Canton Center Road, Canton, MI 48188	
Kevin Buford	City of Westland	36601 Ford Road, Westland, MI 48185	
Ron Agacinski	Wayne County DPS	400 Monroe, 3rd Floor, Detroit, MI 48201	
Tom Bruff	SEMCOG	535 Griswold Street, Suite 300, Detroit, MI 48226	
Li-yang Feng	SEMCOG	535 Griswold Street, Suite 300, Detroit, MI 48226	
Consultant		Affiliation	Street Address
Name	Affiliation	Street Address	
Matt Wendling	WSA\Project Manager		
Brian Smith	WSA\Lead Engineer		
Matt Hunter	WSA\Traffic Engineer	8164 Executive Court, Suite A, Lansing, MI 48917	
Todd Davis	WSA\Environmental Lead		
Lindsay Maki	WSA\GIS Analyst		
Rick Chelloti	Bergmann Associates\Project Manager		
Keith Simons	Bergmann Associates\Traffic Engineer	1427 W. Saginaw Street, Suite 200, E. Lansing, MI 48823	
Jeremy Hedden	Bergmann Associates\Sr. Bridge Engineer		
Mario Quagliata	Bergmann Associates\Bridgje Engineer		
Kelly Rice	Cardho JFNew\Project Manager		
Al Halbeisen	HH Engineering\Project Manager	11181 Marwell Avenue, West Olive, MI 49460	
David Strockis	HH Engineering\Drainage Engineer	220 Bagley Avenue, Suite 500, Detroit, MI 48226	
Jeff Bartlett	SSA\Project Manager	220 Bagley Avenue, Suite 500, Detroit, MI 48226	
Jon Zaremski	Somat Engineering\Project Manager	4471 M-61, Standish, MI 48658	
		26445 Northline Road, Taylor, MI 48180	

Appendix K

Public Information Meeting Summaries

(Submitted under separate cover)

Appendix L

Illustrative Alternative Exhibits

ALTERNATE 2 - OPERATIONAL IMPROVEMENTS

- Additional westbound thru lane from I-275 to Sheldon
- Conversion of westbound right turn bay to thru and right at Haggerty
- Conversion of northbound and southbound right turn bay to thru and right at Lilley, and additional pavement for receiving lane
- Modified geometry of I-275 northwest loop ramp
- Continuity and addition of sidewalk



ALTERNATE NO. 2



- Existing Pavement
- Proposed Pavement
- Proposed Sidewalk

ALTERNATE 3A - FORD RD. BOULEVARD
 - Boulevard from I-275 to Sheldon Rd.
 - Modified geometry of I-275 northwest loop ramp
 - Continuity and addition of sidewalk



ALTERNATE NO. 3A



- Proposed Right-of-Way
- Existing Right-of-Way
- Proposed Pavement
- Proposed Sidewalk

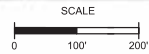
WilburSmith
 CONSULTANTS



ALTERNATE 3B - HAGGERTY BOULEVARD
- Boulevard on Haggerty Rd. at Ford Rd.
- Continuity and addition of sidewalk



ALTERNATE NO. 3B

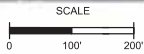


- Existing Pavement
- Proposed Pavement
- Proposed Sidewalk

ALTERNATE 3C - FORD RD. & HAGGERTY RD. BOULEVARDS
 - Boulevard along Haggerty Rd. and Ford Rd.
 - Continuity and addition of sidewalk



ALTERNATE NO. 3C



- Proposed Pavement
- Proposed Sidewalk



ALTERNATE NO. 4 - SOUTH

- Existing Pavement
- Proposed Pavement
- Existing Shoulder
- Proposed Shoulder
- Proposed Sidewalk
- Proposed Bike Path
- Limits of Disturbed Area





ALTERNATE 4 - WWTIP STUDY
 - Northbound I-275 entrance ramp modification
 - New southbound exit ramp to N. Haggerty

NO BRIDGE WORK
 ANTICIPATED



WilburSmith
 ASSOCIATES

- Existing Pavement
- Proposed Pavement
- Proposed Shoulder
- Proposed Sidewalk
- Proposed Bike Path
- Limits of Disturbed Area



ALTERNATE NO. 4 - NORTH



ALTERNATE 5A - FULL INTERCHANGE AT CHERRY HILL ROAD

- This Alternate will include several potential mitigations shown in Alternatives 2 and 3
- Construct new auxiliary lane between the proposed NB I-275 entrance ramp and the existing NB I-275 exit ramp at M-153



ALTERNATE NO. 5A



- Existing Pavement
- Proposed Pavement



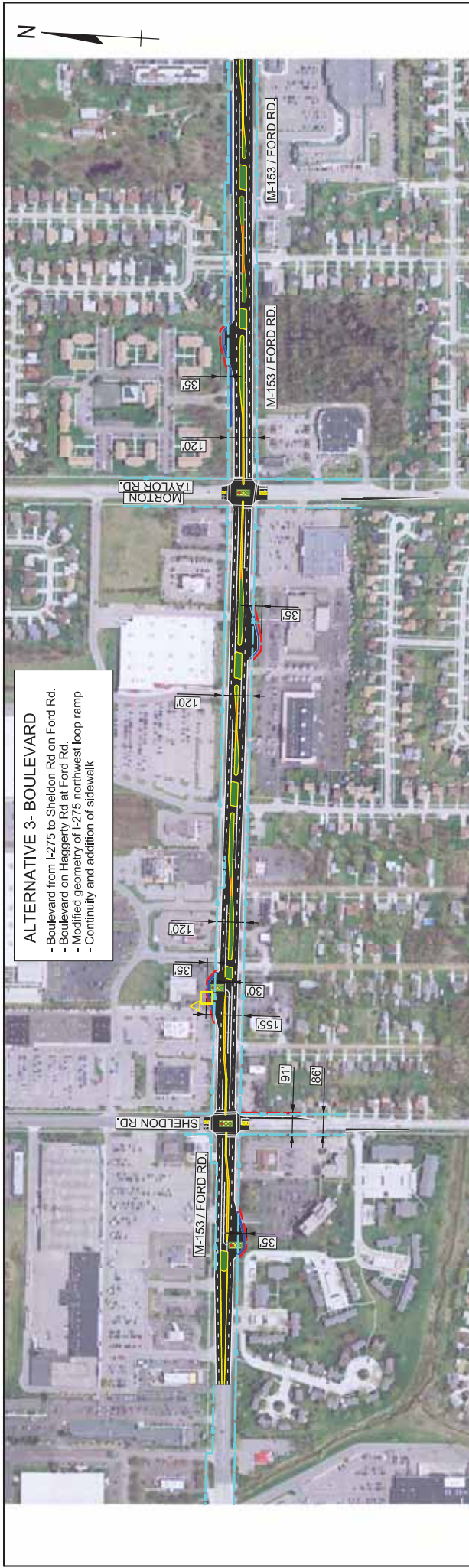
ALTERNATE 5 - FULL INTERCHANGE AT WARREN ROAD
- This Alternate will include several potential mitigations shown in Alternatives 2 and 3
- Construct new auxiliary lane between the proposed SB I-275 entrance ramp and the existing SB I-275 exit ramp at M-153
- Construction of two (2) new culverts at the SB I-275 entrance ramp and NB I-275 Entrance ramp



█ - Existing Pavement
█ - Proposed Pavement

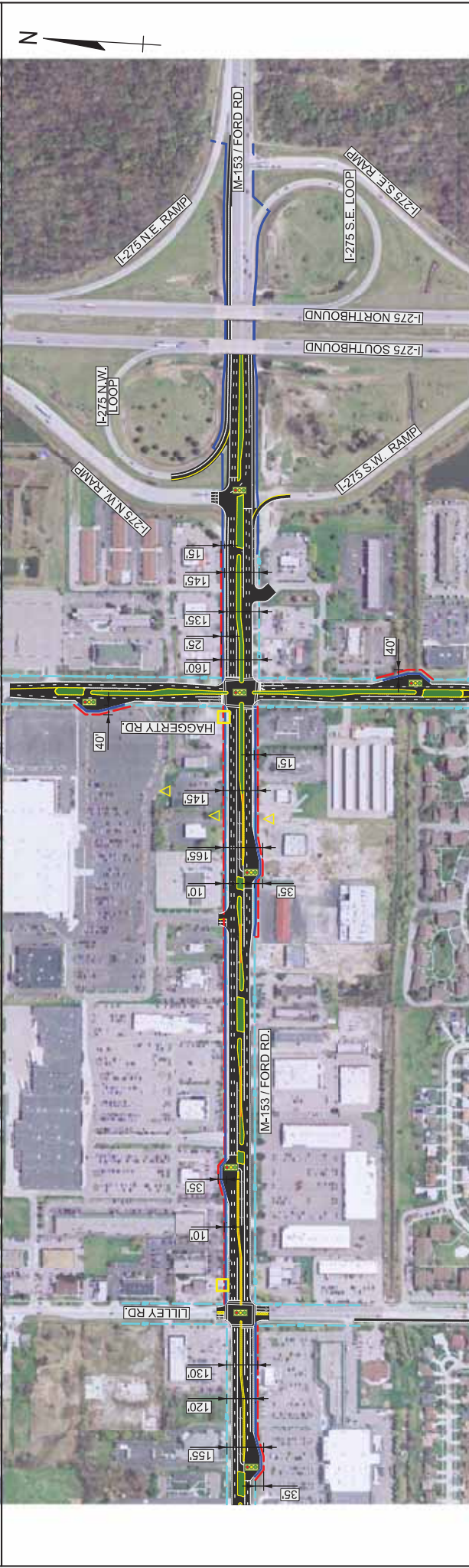
Appendix M

Practical Alternative Exhibits



ALTERNATIVE 3- BOULEVARD

- Boulevard from I-275 to Sheldon Rd on Ford Rd.
- Boulevard on Haggerty Rd at Ford Rd.
- Modified geometry of I-275 northwest loop ramp
- Continuity and addition of sidewalk



ALTERNATIVE NO. 3

SCALE: 0 200' 400'

- Existing Pavement
 - Proposed Pavement
 - Proposed Softscape
 - Proposed Hardscape

- Proposed Right-of-Way
 - Existing Right-of-Way
 - Driveway Closure
 - Improved Drive Connectivity

WilburSmith
 ASSOCIATES
 A
 SUBSIDIARY
 OF
 MDOT
 MICHIGAN DEPARTMENT OF TRANSPORTATION

Appendix N

Hydraulic Analysis Reports

(Submitted under separate cover)

Appendix O

Additional Improvement Information



- Proposed Shoulder
 - Proposed Roadway



ADDITIONAL FREEWAY IMPROVEMENT - EXTEND SB I-275 EXIT RAMP WEAVE

Memorandum

To: CDM Smith

From: Bergmann Associates

Date: July 2, 2013

Re: Haggerty Suggested Truck Routing

Haggerty Suggested Truck Routing

While M-153(Ford Rd) is typically not a highly industrialized corridor, a high volume of truck movements were observed at the M-153/Haggerty Rd intersection during field reviews. Based upon correspondence with local officials, it was determined that a majority of these truck trips are destined to industrial facilities located north of M-153 on Haggerty Road. Several of these truck trips utilize the M-153/Haggerty Rd intersection to access I-275 and vice versa. This intersection experiences approximately 60,070 vehicles per day and based upon a crash analysis that was conducted for this area, it was found that it has a crash rate significantly higher than average rates for similar intersections in Southeast Michigan. In addition, operations analyses of this intersection showed significant capacity issues which were confirmed during field reviews. To help lessen the number of vehicles entering this intersection, primarily commercial trucks, it has been suggested that an alternate truck route be developed. The suggested alternate truck route would utilize Lotz Rd between M-153 and Warren Rd, rather than Haggerty Rd, to provide access to Ford Rd and I-275. This suggested alternate route may improve not only traffic operations but, also safety within the M-153 corridor and surrounding roadway network. This memo intends to provide analysis of the potential impacts to the Lotz Rd and Warren Rd corridors and any constraints associated with this potential modification. Exhibit 1 shows the existing route along with the proposed reroute for commercial traffic.



Exhibit 1: Existing and Proposed Commercial Truck Route

Site Conditions

Haggerty Rd is a two-lane to five-lane, undivided, north-south collector-distributor with 12 ft concrete travel lanes located approximately one third mile west of I-275. The land use in this study area consists of both commercial and residential usage, with multiple un-signalized driveways and intersections. As mentioned previously, traffic congestion and crash rates along Haggerty Rd and at the M-153 / Haggerty Rd intersection are higher than average for similar areas in Southeast Michigan.



Memorandum

Warren Rd is a two-lane to five-lane, undivided, east-west local roadway with 12 ft concrete travel lanes located one mile north of M-153. The land use in this study area is primarily residential with multiple direct access drives. Warren Rd travels over I-275 via a bridge structure just east of its intersection with Haggerty Rd. The deck of this structure has been replaced recently and, for the purposes of this analysis, it has been assumed that it will support an increase in truck traffic without the need for additional mitigations.

Lotz Rd is a three-lane, undivided, north-south local roadway with 12 ft concrete travel and center left-turn lanes located one (1) mile east of I-275. The land use in this area is a mix of both residential and commercial uses. Access drives to an apartment complex and multiple entrances to major and minor commercial shopping centers exist within the project limits. This section of Lotz Rd has recently been upgraded to meet requirements of a Class A (concrete) roadway as provided by the Wayne County Department of Roads.

Reconstruction Suggestions

Based upon consultation with the Wayne County Department of Roads, Warren Rd between Haggerty Rd and Lotz Rd is currently not constructed to Class A standards. To achieve the proposed reroute of commercial traffic, reconstruction of Warren Rd to meet Class A requirements and modifications to the surrounding road network must be performed to allow adequate accessibility for commercial traffic while providing safe and efficient travel for all road users. Based upon review of the Warren Rd and Lotz Rd corridors, the following areas will require modifications to allow for the proposed reroute:

1. Haggerty Rd / Warren Rd Approach: The proposed modification and work for this location includes re-striping the approach for SB traffic to allow for 300' of storage for left turning vehicles. This modification can be accomplished via simply re-striping the existing pavement because there is currently sufficient pavement width to adequately fit this increased storage and accompanying taper without the need to widen the pavement. Please see Exhibit 2 for the proposed left turn lane location. Turning templates for AASHTO WB-62 were utilized to check the existing pavement widths for turning movements. It was found that this intersection could remain as-is to accommodate the proposed left-hand turning movement for these trucks.

2. Warren Rd Reconstruction: As stated above, Warren Rd is currently an HMA pavement that would need to be upgraded to a Class A (concrete) pavement section. It is proposed that the pavement be upgraded to

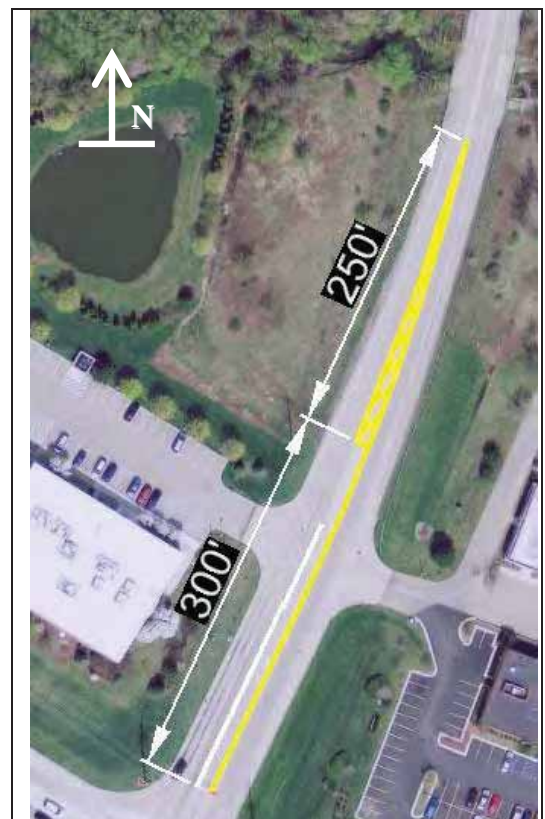


Exhibit 2: Haggerty / Warren Rd Left Turn Lane Modification.



Memorandum

meet the 'Primary Road Class "A" Cross-Section' Standard from the Wayne County Department of Roads, which consists of two (2) thirteen foot (13') travel lanes with integral curb and gutter. The anticipated pavement section for Warren Rd is as follows:

- Ten inches (10") of non-reinforced concrete
- Nine inches (9") of 21AA aggregate base course
- Six inch (6") subgrade underdrains

Reconstruction of Warren Rd in this manner would have little impact on the surrounding area, as the limits of construction stay within the existing roadway footprint. Included in this reconstruction is modifying the Warren Rd/Lotz Rd intersection to accommodate right turning trucks. A pump station in the southwest quadrant owned by Canton Township is being reconstructed west of its current location 4' from the edge of pavement during the fall of 2013. The relocated pump station will not hinder the widening necessary to accommodate the turning radius of an AASHTO WB-62 design vehicle. Exhibit 3 shows the proposed widening of the Warren Rd/Lotz Rd intersection.



Exhibit 3: Warren Rd / Lotz Rd Intersection Widening

3. Lotz Rd / M-153 Right Turn Lane Extensions: The proposed modifications and work at this location includes; constructing a right turn lane for SB Lotz Rd at the Lotz Rd / M-153 intersection; modifying the existing radius in the NW quadrant of the intersection; and reconstructing and extending the existing right turn lane on WB M-153, from the Lotz Rd intersection west to the existing taper for the entrance ramp to NB I-275. Exhibit 4 shows the proposed limits of work for this location.

Based upon a review of the parcel maps that were provided by Canton



Exhibit 4: Lotz Rd / M-153 RTL Reconstruct - Extensions



Memorandum

Township, Right-of-Way may be impacted on Lotz Rd. There appears to be adequate Right-of-Way on M-153 to extend the existing right turn lane in the manner stated above. Impacts to the existing sidewalk in the NW quadrant of the intersection are also anticipated. Review of the area shows that while modifying the existing radius to allow enough space for right turning trucks will limit the available space for a sidewalk ramp, it will still be possible to construct a new ramp at that location. It was also found that adequate space is provided in the existing Right-of-Way to relocate the sidewalk in the right turn lane extension location. The pavement section that was assumed for this location is the same Wayne County “Class A” Standard as stated in the **Warren Rd Reconstruction** Section.

For estimation purposes, it has been assumed that the proposed modifications to the Lotz / M-153 intersection are included within the Ford Road Operational improvements portion of this project. See the Ford Road Operational improvements estimate for a breakdown of anticipated costs for this modification.

Cost Estimate

A preliminary cost estimate has been prepared for the modifications and reconstruction as detailed and discussed above. Please note that this estimate **does not include Right-of-Way costs** that may be realized due to intersection modifications and widening of the roadway. A detailed survey will be required to determine the extent of the impacts and to determine the associated costs due to these impacts. The preliminary construction costs for each of the above locations are shown in the following table:

Table 1: Construction Cost Estimate

Location	Year	Construction Estimate			
1. Warren Rd/ Lotz Rd Reconstruction	2013	\$1,631,240			
2. SB Warren Rd Pavement Markings	2013	\$800	Preliminary Engineering (10%)	Construction Engineering (10%)	Total Estimated Cost
Total Construction Cost	2013	\$1,632,040	\$163,204	\$163,204	\$1,958,448
	2020	\$2,296,444	\$229,644	\$229,644	\$2,755,732

Construction costs have been estimated in 2013 dollars based on average bid-based unit prices. The construction costs, and associated PE and CE costs, were adjusted to an anticipated construction year of 2020 using a 5% inflation rate.



Memorandum

To: CDM Smith

From: Bergmann Associates

Date: August 12, 2013

Re: Lotz Rd Reconstruction-Cherry Hill to Ford

Lotz Rd Reconstruction – Cherry Hill Road northerly to M-153 (Ford Rd)

Based upon review of the project area and existing traffic operations, it was determined that upgrading the existing Lotz Rd road surface from an aggregate surface to a paved surface between Cherry Hill Rd and M-153 may improve not only traffic operations but, also safety within the M-153 corridor and surrounding roadway network. This memo intends to provide analysis of the potential impacts to the existing Lotz Rd roadway and surrounding constraints associated with this potential upgrade. It is important to note that at the time of this memo, this segment of Lotz Rd was under the jurisdiction of the Wayne County Department of Roads and was not Federal Aid eligible therefore; there were no immediate plans to upgrade the existing roadway. Based upon correspondence with the Federal Highway Administration, the Wayne County Department of Roads was in the process of reviewing their desire to register this segment of Lotz Rd for Federal Aid eligibility. The approximate limits for the Lotz Rd reconstruction are shown in Exhibit 1.



**Exhibit 1: Lotz Rd Reconstruction -
Approximate Limits**

Existing Conditions

Lotz Rd is a two to three-lane; north-south local roadway located approximately one half mile east of I-275 in Canton, MI. The section of Lotz Rd under review for reconstruction is the segment located from Cherry Hill Rd northerly to M-153. Land use throughout this segment is primarily residential with two apartment complexes located north of Cherry Hill Rd and direct drive access to multiple residences. However, near M-153, Lotz Rd transitions to a more commercial section with direct access to both major and minor shopping centers. Above ground utilities exist on both sides of the roadway throughout the limits and the existing speed limit is 45 mph.

Lotz Rd crosses both the Willow Creek and Canal Ditch County Drains within the proposed construction limits. The Canal Ditch is located approximately 0.3 miles north of Cherry Hill Rd with an existing 48" concrete



**Exhibit 2: Existing 96" Cross Culverts
Conveying Willow Creek**



Memorandum

culvert under Lotz Rd; Willow Creek is located approximately 0.25 miles south of M-153 with dual 96" CMP culverts under Lotz Rd as shown in Exhibit 2. The existing drainage throughout this segment of roadway is an open system. Ditches alongside the roadway have very steep slopes but, looked to be in fair to good condition based upon field review.

This segment is primarily a two lane aggregate surfaced roadway but, contains three lane concrete pavement sections with integral curb that exist approximately 800' north of the Lotz Rd / Cherry Hill intersection and approximately 1000' south of the Lotz Rd / M-153 intersection. Pavement width of the aggregate roadway is twenty six feet (26'), accommodating two-way travel, with three to four foot (3'-4') shoulders. The pavement width in the concrete sections noted above, consists of two twelve foot (12') travel lanes with a twelve foot (12') center left turn lane (CLTL) and concrete sidewalk located approximately fifteen to twenty foot (15'-20') behind the back of curb.



**Exhibit 3: Lotz Rd Horizontal Curve
(250' Radius – facing south)**

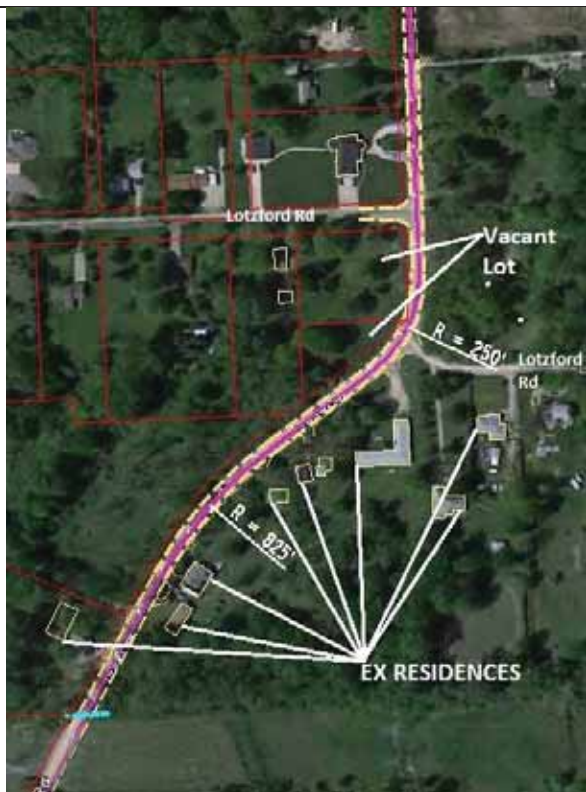


Exhibit 4: Lotz Rd Ex Horizontal Alignment

Four horizontal curves exist within the limits of this analysis. The location of most concern regarding the existing horizontal alignment occurs at a reverse curve area where an 825' radius curve transitions to a 250' radius curve, located approximately one half mile north of Cherry Hill Rd and is shown in Exhibit 3. The 250' radius curve is much lower than the minimum for this design speed. Field review of Lotz Rd noted existing poor road conditions make it difficult to reach posted speeds and vehicles traveling on the roadway slowed adequately to safely traverse this curve. Upgrading the existing pavement to a paved surface will allow motorists to travel at the posted speed and create the need to modify this horizontal curve. As shown in Exhibit 4, parcel lines on the west side of the roadway have been shown in red and existing residences have been called out on the east side of the roadway as parcel maps were not available for the east side. Multiple residences border the existing roadway, some with short offsets from the roadway. This limits how these curves can be realigned. Two



vacant lots located in the SW quadrant of W Lotzford Rd, however, provide an area where the curves can be modified without impacting any existing residential houses, but would require coordination with Canton Township.

Proposed Reconstruction

It has been proposed that Lotz Rd be reconstructed throughout this segment with a Class A (concrete) section, connecting the existing concrete pavement sections at M-153 and Cherry Hill Rd. The pavement width would be widened and upgraded to meet the 'Primary Road Class "A" Cross-Section' Standard from the Wayne County Department of Roads, which consists of two (2) thirteen foot (13') travel lanes with integral curb and gutter and a twelve foot (12') CLTL. Following is the anticipated pavement section:

- Ten inches (10") of non-reinforced concrete
- Nine inches (9") of 21AA aggregate base course
- Six inch (6") subgrade underdrains

Concrete sidewalk on the east and west side of the roadway with an offset of five feet (5') from the back of curb is also included in this proposed reconstruction. Reconstructing the roadway in this manner would widen the roadway from the existing thirty two feet (32') (including shoulders) to a pavement width of thirty nine feet (39'). With the proposed sidewalk included, the total impacted width increases to fifty nine feet (59'). The majority of existing drives and roadway approaches (Lotzford Rd) that are impacted by this widening are gravel, which can be easily integrated into the new pavement section. Above-ground utilities, however, would need to be relocated to accommodate the proposed widening. A Right-of-Way survey was not conducted as a part of this analysis but, parcel maps were provided by Canton Township. The main impact anticipated by reviewing the parcel maps is located from Willow Creek northerly to the proposed POE. This segment is approximately 600' in length and would require Right-of-Way acquisitions along the west side of the roadway to accommodate the widening of the roadway. The impacted parcels for modifying the horizontal alignment are owned by Canton Township and are discussed below. It is also anticipated that grading permits will be required throughout the road reconstruction limits for construction of the proposed sidewalk.

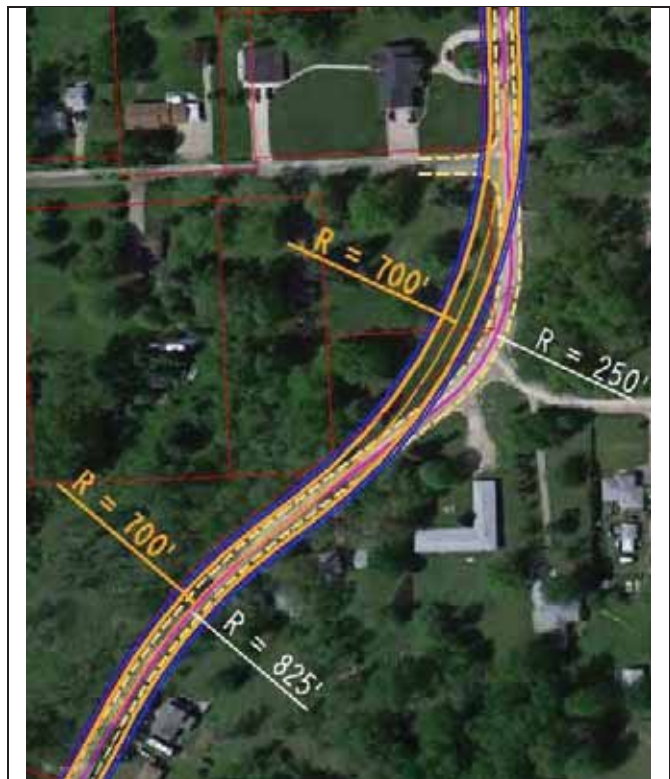


Exhibit 5: Lotz Rd Horizontal Alignment Modifications



The horizontal alignment of the roadway is proposed to be retained, except at the reverse horizontal curves that were noted previously and that are shown in Exhibit 5. As shown, the existing 825' curve will be modified to a radius of 700' and the existing 250' curve will be modified to a radius of 700'. Each curve is proposed to have a superelevation rate of 2.0%. The proposed radii and superelevation rate for these curves meet MDOT Standard Plan R-107 Series for a design speed of 45 mph. Minimum radii requirements for a design speed of 50 mph were not attainable due to Right-of-Way restrictions and existing residences that are proposed to be retained. However, a Design Exception is not anticipated to be required for this location. Parcel lines have been shown (in red) in Exhibit 4; and it should be noted that the two parcels that the proposed curve travels through are owned by Canton Township. Coordination with the Township will be required during the design phase to fully assess the project-specific effects of these impacts.

Old plans were not available at the time of this analysis to investigate the existing vertical alignment but, field review did not reveal any significant vertical curves. It is proposed to retain the existing vertical alignment. A detailed review of the vertical alignment will be required during the design phase to confirm that no issues exist and that it can be retained.

The two cross culverts identified within the limits of reconstruction are proposed to be replaced in kind, with the exception that the existing dual 96" CMP culverts will be replaced with reinforced concrete pipes due to minimal cover depth. Additional review will be required during the design phase to determine if the existing vertical alignment can be modified to provide additional cover depth over these existing culverts or if use of an elliptical culvert would better suit conditions at this location. The existing open drainage is proposed to be modified to an enclosed drainage system throughout the limits of reconstruction. It has been assumed that existing conditions can adequately support this proposed drainage system by directing water to the county drains crossing Lotz Rd. A detailed hydraulic analysis and survey will be required to ensure that the existing conditions are sufficient to support an enclosed drainage system.

Cost Estimate

A preliminary cost estimate has been prepared for the reconstruction of Lotz Rd, as detailed and discussed above. Please note that this estimate **does not include Right of Way costs** that may be realized due to the widening of this roadway. A detailed survey will be required to determine the extent of the impacts and to determine the associated costs due to these impacts. The preliminary construction cost and the cost per lane mile is shown in the following table:

Table 1: Construction Cost Estimate



Memorandum

	Year	Construction Estimate	Preliminary Engineering (10%)	Construction Engineering (10%)	Cost Per Lane Mile*
Lotz Rd Reconstruction	2013	\$2,214,000	\$221,370	\$221,370	\$925,450
	2020	\$3,114,900	\$311,490	\$311,490	\$1,302,200

*Cost per lane mile does not include Preliminary or Construction Engineering costs.

Construction costs have been estimated in 2013 dollars based on average bid-based unit prices. The construction costs, and associated PE and CE costs, were adjusted to an anticipated construction year of 2020 using a 5.0% inflation rate. Costs will have to be adjusted to the actual proposed construction year during the design phase.



Bergmann Associates, Inc.
Proposed Reconstruction of Lotz Rd

Item	Pay Code	Unit	Quantity	Unit Cost	Total
Pavt, Rem	2040050	Syd	2090	\$ 4.00	\$ 8,360.00
Embankment, CIP	2050010	Cyd	2520	\$ 4.50	\$ 11,340.00
Excavation, Earth	2050016	Cyd	14000	\$ 5.00	\$ 69,997.73
Aggregate Base, 9 inch	3020022	Syd	23085	\$ 8.75	\$ 201,992.29
Culv End Sect, Conc, 12 inch	4010047	Ea	2	\$ 423.25	\$ 846.50
Culv End Sect, Conc, 18 inch	4010049	Ea	2	\$ 495.00	\$ 990.00
Culv, Rem, 24 inch to 48 inch	2030001	Ea	1	\$ 200.00	\$ 200.00
Culv, Rem, Over 48 inch	2030003	Ea	2	\$ 2,100.00	\$ 4,200.00
Culv, CI E, 48 inch	4010546	Ft	61	\$ 130.00	\$ 7,930.00
Culv, CI E, 96 inch	4010554	Ft	121	\$ 300.00	\$ 36,300.00
Sewer, CI A, 12 inch, Tr Det A	4020004	Ft	4460	\$ 27.00	\$ 120,420.00
Sewer, CI A, 18 inch, Tr Det A	4020006	Ft	1650	\$ 31.00	\$ 51,150.00
Dr Structure Cover, Type K	4030050	Ea	35	\$ 568.00	\$ 19,880.00
Dr Structure, 48 inch dia	4030210	Ea	35	\$ 1,232.00	\$ 43,120.00
Underdrain, Subbase, 6 inch	4040063	Ft	8841	\$ 3.25	\$ 28,733.25
Underdrain, Outlet, 6 inch	4040093	Ft	609	\$ 10.30	\$ 6,272.70
Underdrain, Outlet Ending, 6 inch	4040111	Ea	29	\$ 111.25	\$ 3,226.25
Conc Pavt with Integral Curb, Nonreinf, 10 inch	6020168	Syd	19450	\$ 48.00	\$ 933,600.00
Joint, Contraction, Cp	6020200	Ft	11660	\$ 8.50	\$ 99,110.00
Pavt Mrkg, Waterborne, 4 inch, Yellow	8110232	Ft	10740	\$ 0.06	\$ 644.40
Slope Restoration, Type A	8160100	Syd	6940	\$ 3.00	\$ 20,820.00
Sidewalk Quantities					
Excavation, Earth	2050016	Cyd	1150	\$ 4.96	\$ 5,704.00
Aggregate Base, 4 inch	3020010	Syd	4590	\$ 5.41	\$ 24,831.90
Detectable Warning Surface	8030010	Ft	20	\$ 32.29	\$ 645.80
Sidewalk, Conc, 4 inch	8030044	Sft	39660	\$ 2.60	\$ 103,116.00
Sidewalk Ramp, Conc, 6 inch	8030046	Sft	200	\$ 3.44	\$ 688.00
Topsoil Surface, Furn, 2 inch	8160060	Syd	4410	\$ 2.00	\$ 8,820.00
Construction Subtotal					\$ 1,812,938.82
Miscellaneous Quantities					
Mobilization, Max	1500001	LS	1	5.00%	\$ 90,646.94
Project Contingency	-	LS	1	15.00%	\$ 271,940.82
Contractor Staking	8240001	LS	1	2.00%	\$ 36,258.78
Staking Plans Errors and Extras, One Person	8240020	Hr	20	\$ 52.38	\$ 1,047.60
Staking Plans Errors and Extras, Two Persons	8240021	Hr	8	\$ 86.89	\$ 695.12
Staking Plans Errors and Extras, Three Persons	8240022	Hr	12	\$ 12.14	\$ 145.68
Total Estimated Construction Cost					\$ 2,213,673.76
Preliminary Engineering Costs					
Preliminary Engineering (PE)	-	LS	1	10.00%	\$ 221,367.38
Total Preliminary Engineering Costs					\$ 221,367.38
Construction Engineering Costs					
Construction Engineering (PE)	-	LS	1	10.00%	\$ 221,367.38
Total Construction Engineering Costs					\$ 221,367.38
2013 Total Estimated Cost with Sidewalk =					\$ 4,470,000.00
2020 Total Estimated Cost with Sidewalk (5% inflation) =					\$ 6,289,800.00

Cost per Lane Mile

		Excluding Bridges	
2013	Total Number of Lane Miles:	2.392	
	Cost Per Lane Mile:	\$ 925,448.90	
2020	Total Number of Lane Miles:	2.392	
	Cost Per Lane Mile:	\$ 1,302,199.54	

Appendix P

Project Memorandums



STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
TAYLOR TRANSPORTATION SERVICE CENTER

RICK SNYDER
GOVERNOR

KIRK T. STEUDLE
DIRECTOR

February 8, 2013

Ms. Melissa McLaughlin, Chairperson
Canton Downtown Development Authority
1150 Canton Center S.
Canton, MI 48188

**Re: Conceptual Illustrative Alternatives – I-275 at M-153
(Ford Road) Area Traffic and Environmental Study**

Dear Ms. McLaughlin,

Thank you very much for your inputs to the subject study. This letter is in response to your comments dated October 4, 2012. The comments were taken into account during the Practical Alternatives Selection Meeting that was held on November 14, 2012. Also, the information is being incorporated into the illustrative alternatives report for the subject study and will guide the future development of this project.

I understand Canton Downtown Development Authority (DDA) Board is concerned about both safety and traffic flow along Ford Road and accessibility of the interchange at I-275 and Ford Road. I would like to ensure you that both issues are being investigated as part of the subject study and the study will seek solutions to address the issues.

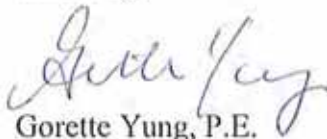
Regarding the comments on each alternative, I would like to offer the following information:

1. "No- Build" alternative will be included in the next phase of the study and will serve as a baseline for comparison purposes.
2. In the case of any construction on Ford Road, regardless of the alternatives,
 - a. Construction impacts to right-of-way and streetscape amenities will be determined based on detailed analyses during design phase.
 - b. Depending on the design and its construction impact, a construction schedule and phasing will be developed using Critical Path Method (CPM) with a goal to minimize impact to the communities.
 - c. Depending on the design and equipment needs, a Maintenance of Traffic (MOT) plan will be developed to minimize impact to all stakeholders and to allow access to businesses along Ford Road at all time during construction.
 - d. Restoration of streetscape amenities will be eligible for federal funding if the items are impacted by construction unless a previous agreement has been stated otherwise.

- e. During design and construction of the project, the DDA along with Canton Township will be a key partner and will be invited to all milestone meetings of the project. DDA can also act as a liaison with the businesses to solicit their inputs and to keep the community well informed.
3. If the case the boulevard option is preferred,
- a. We are happy to work with Canton DDA for a Transportation Alternative (TA) grant for the newly established median areas to improve pedestrian accessibility and other features along Ford Road.
 - b. The median can be constructed with different materials, including but not limited to streetlights, landscaping etc., if federal and state safety requirements are satisfied.
 - c. We will negotiate a maintenance agreement with Wayne County and/or Canton Township during design of the project and the agreement will be executed prior to the construction of the median.

I am looking forward to continue work with you on future phases of this project. If you have any additional questions, please do not hesitate to contact me at (313) 375-2401 or email yungg@michigan.gov

Sincerely,



Gorette Yung, P.E.
Project Manager
MDOT Taylor TSC

cc Tim Fass
Bill Sercheck
Kimberly Avery
Michael Bellini

Smith, Brian David

Subject: FW: Ford Road Scoping
Attachments: JN 84E Scoping Memo.pdf

From: Bugg, John (MDOT) [<mailto:BUGGJ@michigan.gov>]
Sent: Wednesday, August 28, 2013 9:41 AM
To: Davis, Todd J
Cc: Barondess, Margaret (MDOT)
Subject: RE: Ford Road Scoping

Todd,

Attached is a scoping review memo summarizing environmental concerns near the 275/Ford Road project. Note that our review, completed in 2010-2011, included alternatives such as a new service drive, new ramps, widening on Cherry Hill, and did NOT include the western portion of Ford Road, from Sheldon to Haggerty, that is now included in the project. Knowing this, please understand the limitations of this document.

I will discuss with Margaret if it is appropriate to re-study or re-scope the project with the preferred alternative now.

Regards,

John Bugg
MDOT - Metro Region Environmental Coordinator
(517) 373-2259
buggj@michigan.gov

From: Davis, Todd J [<mailto:davistj@cdmsmith.com>]
Sent: Tuesday, August 27, 2013 4:21PM
To: Bugg, John (MDOT)
Subject: Contact Info

Todd J. Davis, AICP | Vice President | CDM Smith |
8164 Executive Ct., Suite A | Lansing, MI 48917 | T/F: 517.622.2500 | Cell: 517.282-7216 |
DavisTJ@cdmsmith.com | cdmsmith.com



OFFICE MEMORANDUM

DATE: August 28, 2013

TO: Todd Davis, Vice President
CDM Smith

FROM: John Bugg
Environmental Section
Design Division

SUBJECT: CS: 82292 Scoping Review: (84E)

I-275: Cherry Hill Rd. northerly to the M-153 interchange. Wayne County, Metro Region.

Add new exit ramp from SB I-275 to Haggerty Road near the existing Ford Road interchange, add new entrance ramp from Haggerty Road to SB I-275 near the existing Ford Road interchange, widen Cherry Hill Road to 5 lanes from west of Haggerty

Summarized below are the results of the Environment Scoping Review. These concerns should be addressed during the scoping process.

THIS DOCUMENT DOES NOT PROVIDE ENVIRONMENTAL CLEARANCE.

Agriculture

No impacts to FPPA. No PA116 enrolled parcels are in the listed Town, Range, and Sections.

NPDES

An NPDES construction site stormwater permit may be required. The project involves earth disturbance of five or more acres of land. A *Notice of Coverage* form will need to be submitted prior to initiation of construction to ensure coverage.

Coastal Zone

No involvement.

Wetlands/Streams/Floodplains

WETLANDS

Steps to minimize and avoid wetland impacts should be taken during the design phase. A DEQ Part 303 permit is likely to be required for fill in wetland complexes. The proposed service road is expected to impact at least two known forested wetland complexes. The southbound on-ramp may impact an open water wetland.

STREAMS/LAKES/DRAINS

There will be no substantial impact on the water or aquatic resources in the bodies of water adjacent to the proposed project. A DEQ Part 301 permit is likely to be required for work in a several regulated watercourses. The widening of Cherry Hill Street is expected to impact Fellows Creek. The proposed southbound ramp to I-275 may impact a regulated drain (tributary to Willow Creek). The proposed service drive will impact a regulated drain 1800 feet north of Cherry Hill and a tributary to Willow Creek about 4440 feet north of Cherry Hill. There is also the potential to impact Willow Creek if the alignment is moved to the east. Please see the map in ProjectWise.

FLOODPLAINS

The existing roadway and drainage structures are not causing an existing flooding problem. The proposed improvement should not result in any change in the natural and beneficial floodplain values, flood risk or damage, and should not have a potential for interruption or termination of a sole emergency. A DEQ Part 31 permit is likely to be required for work in the 100-year floodplain. There is a lot of 100-year floodplain in the area. The entire proposed SB off-ramp to Haggerty is 100-year floodplain, all of the Cherry Hill Street widening area west of I-275 is in 100-year floodplain, and about

1200 feet of the service road from Ford Street south is in 100-year floodplain. Any fill in the 100-year floodplain will likely require compensatory cut so that there is no net increase in floodplain fill.

Water Quality

The proposed project will potentially result in significant impacts to water quality and the fisheries resources. There are several streams within the project area that will be affected by construction of new ramps, a service drive, and widening of Cherry Hill Road.

Potential impacts will be related to:

1. Stream crossings (new crossings or existing, if replaced or extended),
2. Potential stream relocations,
3. Extensive removal of riparian trees and/or vegetation,
4. Increases in stormwater runoff due to increased impervious surface area
5. Increases in pollutant load in stormwater runoff from increased traffic volumes.

Willow Creek, an unnamed tributary to Willow Creek, Fellows Creek, and an unnamed tributary to Fellows Creek are located within the project limits and are potentially affected by the project. These streams are within the Rouge River watershed and all are listed by the DEQ and the USEPA as not attaining the state Water Quality Standards. The Designated Uses listed as impaired due to poor ratings for fish and macro invertebrate communities are 1) the warm water fishery and 2) other indigenous aquatic life and wildlife. There is also an impairment listed for Total Dissolved Oxygen (temperature).

There is a Total Maximum Daily Load (TMDL) published for the Rouge River watershed which applies to all of the streams within the project area. The TMDL affects all National Pollutant Discharge Elimination System Permit holders. This is the permit that MDOT holds in order to legally discharge our stormwater from our transportation system. The TMDL has a numeric target for the watershed of a mean annual in-stream Suspended Solid concentration of 80 mg/L for wet weather events. The Waste Load Allocation for MDOT is a 43% reduction over 2007 conditions.

Since these streams are also listed for impairments to warm water fisheries, in-stream habitat, stream connectivity (fish passage), temperature, riparian vegetation, and sedimentation will also be significant when determining impacts.

On a previous project in the same geographic area, MDOT has been required as a provision in our DEQ Permit, to perform compensatory stream mitigation. If stream relocation is necessary for this project, we could potentially have similar requirements.

Impacts to fisheries and water quality will also likely result if this project leads to increased development of currently undeveloped areas. Increases to impervious area from road construction and from construction of buildings and parking lots will result in increases in stormwater runoff volume and rate. The pollutant load of the runoff could also be expected to increase due to increased traffic volumes.

We should expect to provide environmental mitigation for impacts at stream crossings, stream relocations, impacts to riparian areas, and increased stormwater runoff. Mitigation could involve purchase of extra right-of-way for detention ponds or stream relocations. Compensatory stream mitigation could also be required if any streams, or portions thereof, are relocated. Stormwater best management practices to control stormwater runoff should be expected.

Migratory Birds

No involvement.

Air Quality

No involvement.

Bridge Painting

No involvement.

Endangered Species

Flora: Due to the presence of several state listed plant species known to occur in the area, field surveys are required to determine if potential impacts would occur. Impacts associated with the new road through forested habitat to the east of I-275 is the primary concern as well as impacts from the widening of Cherry Hill and the new access roads to Haggerty Road. This project should be surveyed twice during the year to document the habitats and species present in this corridor.

Fauna: Given the total area of forested wetland and floodplain that may be impacted, surveys for Indiana Bat (a federally listed endangered species) will be required. A number of local road agency projects in southern Oakland County and Wayne County have been required to conduct a habitat suitability assessment for Indiana Bat. This project would likely require the same approach by USFWS.

Contamination

No significant impact as long as all contaminated media is handled and disposed of appropriately in accordance with state and federal regulations.

A Project Area Contamination Survey (i.e., PACS, Phase I Environmental Site Assessment) is required prior to purchase of fee right-of-way (ROW), and may be required for grading permit/easement ROW. Please contact Michael Anglebrandt, MDOT Real Estate Environmental Quality Specialist, @ 517-335-2271 if you have any questions.

Based on a general Michigan Department of Environmental Quality (MDEQ) database search, the following Leaking Underground Storage Tank (LUST) sites have been identified within or adjacent to the proposed project area:

1. Open LUST Site Facility ID#00010421, Shell Gas Station, 5640 N. Haggerty Rd.;
2. Open LUST Site Facility ID#00018521, Knight #31, 41350 Ford Rd.; and
3. Closed LUST Site Facility ID#00004949, Canton Amoco, 41345 Ford Rd.

An Open LUST site is a location where a release(s) has occurred from an underground storage tank system regulated under Part 213, and where corrective actions have not been completed to meet the appropriate land use criteria. A Closed LUST site is a location where a release(s) has occurred from an underground storage tank system regulated under Part 213, and where corrective actions have been completed to meet the appropriate land use criteria.

Water Quality

No involvement.

Historic

No impacts. No historic above-ground resources are located within the Area of Potential Effect.

Archaeology

Based on consultation with the Office of the State Archaeologist, the portion of the project west of I-275 will not require a survey. The proposed new service drive between M-153 (Ford Road) and Cherry Hill Road, east of I-275, will require a survey since it traverses some of the only undeveloped land left in this part of Wayne County. In addition, indirect and cumulative impacts resulting from new development along and beyond the new service drive would take place in areas of elevated archaeological sensitivity and, in some areas, could traverse known archaeological sites. Additional survey in areas subject to indirect and cumulative effects will be required.

4(f)/6(f)

No impact.

Social

Fee right-of-way, easements, or grading permits be required. If the purchase of ROW is necessary, there should be no long-term adverse impacts provided that all State and Federal guidelines and regulations pertaining to real estate acquisition are followed, including the *Uniform Relocation Assistance and Real Property Acquisition Act of 1970*. If total takes are needed, additional review and FHWA coordination is required. If the property is occupied, then a relocation plan is required. Access to businesses and residential properties must be maintained throughout the project. Additionally, pedestrian detours must be present if there will be any sidewalk work.

Detour

A detour may be required for work related to the scope of this project. If a detour is required, then no long-term impacts are anticipated. Contact should be made locally concerning the detour route and the duration of the detour. Currently, there is no controversy concerning either impact. If controversy arises due to the duration of the detour, this project may need to be re-evaluated. Currently, no upgrades are proposed. If upgrades become necessary, additional environmental review will be required. Additionally, coordination with emergency services should take place concerning the dates and routes of the detour.

Controversy

Controversy is not anticipated from the scope of work associated with this project. If controversy does arise, a public information meeting should be held and a stakeholder group be formed. If there is still controversy after the meeting, the project may need to be re-evaluated. Please contact Richard Bayus with any concerns at 517-373-8046.

Noise

The new exit ramp is proposed through a commercial area. MDOT typically does not consider noise abatement for projects adjacent to commercial property. Noise abatement is typically in the form of a noise barrier which will shield the establishment from view of their prospective customers. The proposed service drive may come within proximity to a couple of residential properties, but the area is primarily undeveloped and does not warrant noise abatement.

Tree Removals

Where tree removals are anticipated, the MDOT Region Resource Specialist must be contacted to identify tree removal locations and appropriate tree replacements.

Indirect/Cumulative

There will likely be indirect and cumulative impacts, however the extent of these impacts cannot be determined until the scope of work is known and all specialty areas have been reviewed.

THIS DOCUMENT DOES NOT PROVIDE ENVIRONMENTAL CLEARANCE.

If you have any questions or concerns regarding any portion of this review, please let me know.

An official environmental review and classification must be completed prior to final design activities.



Environmental Clearance Coordinator

08/28/2013

Date

Smith, Brian David

Subject: FW: JN 115177 Ford Road at I-275 Study - Archaeological Comments

From: Bugg, John (MDOT) [<mailto:BUGGJ@michigan.gov>]
Sent: Tuesday, September 10, 2013 11:50 AM
To: Wendling, Matthew D.
Cc: Barondess, Margaret (MDOT); Davis, Todd J
Subject: RE: JN 115177 Ford Road at I-275 Study - Archaeological Comments

Hi Matt,

Below are the comments from our historian and archaeologist regarding cultural resources within the proposed project area (including the western portion of Ford Road that was not originally included in our review). Neither have any concerns with the project location. The archaeologist's concerns are with the area east of 275. The historian has no concerns.

Archaeology:

Based on consultation with the Office of the State Archaeologist, the portion of the project west of I-275 will not require survey. A proposed new service drive between M-153 (Ford Road) and Cherry Hill Road, east of I-275, will require archaeological survey as it traverses some of the only undeveloped land left in this part of Wayne County. In addition, indirect and cumulative impacts resulting from new development along and beyond the new service drive would take place in areas of elevated archaeological sensitivity and, in some areas, could traverse known archaeological sites. Additional survey in areas subject to indirect and cumulative effects will be required.

History:

There are no historic above-ground resources located within or in proximity to the Area of Potential Effect.

John Bugg
MDOT - Metro Region Environmental Coordinator
(517) 373-2259
buggj@michigan.gov

From: Barondess, Margaret (MDOT)
Sent: Thursday, September 05, 2013 4:49PM
To: Wendling, Matthew D.
Cc: Bugg, John (MDOT)
Subject: RE: JN115177 Ford Road at I-275 Study - Archaeological Comments

Hi Matt: Ann usually does recreational property reviews, so I am not sure about the archaeological information. John Bugg is having the cultural resource staff do an archaeological and historic property review for the portion of the project west of Haggerty Road, so I expect results from that soon.

From: Wendling, Matthew D. [<mailto:wendingmd@cdmsmith.com>]
Sent: Thursday, September 05, 2013 3:47 PM
To: Barondess, Margaret (MDOT)
Subject: RE: JN115177 Ford Road at I-275 Study - Archaeological Comments



May 15, 2013

Gorette Yung
MDOT Taylor TSC Manager
6510 Telegraph Rd.
Taylor, MI 48180

RE: Ford Road @ I-275 Traffic & Environmental Study
Right-of-Way Variance

Dear Gorette:

The Ford Road Corridor is located in Canton's Central Business District Overlay as provided in Section 6.10 of Appendix A - Zoning of the Code of Ordinances. The Overlay District allows for a 50 foot front setback versus an 85 foot setback normally required in the commercial zoning districts. This 50 foot setback can be further reduced upon the recommendation of the Planning Commission based on site plan design considerations.

Since the Planning Commission and Township Board have the authority to reduce the front setbacks in the Overlay District without variances from the Zoning Board of Appeals, any additional setback modifications identified due to right-of-way needs for the Ford Road boulevard design can be accommodated via a township initiated amendment to the site plans for the affected parcels.

Yours truly,

Jeff Goulet
Community Planner

cc: Tim Faas, Municipal Services Director
Bill Serchak, Engineering Services Manager
Phil LaJoy, Township Supervisor
Amy Colligan, DDA Coordinator

Tim Faas, Director
734/394-5160

Building & Inspection Services
734/394-5200

DEPARTMENT OF MUNICIPAL SERVICES
1150 Canton Center S.
Canton, MI 48188-1699
www.canton-mi.org

Planning Services
734/394-5170
Public Works
734/394-5150



Memorandum

To: CDM Smith

From: Bergmann Associates

Date: June 26, 2013

Re: M-153 Air Quality

Air Quality

A cursory review of the anticipated air quality impacts associated with the preferred alternative was performed to describe the potential general impacts that the preferred alternative will have on air quality emission parameters if constructed. The net change in air quality emission parameters have not been quantified as a part of this study however, based upon trends and results from the traffic forecast analysis, several conclusions may be made as discussed below.

The field reviews and the traffic analysis that were performed for M-153 (Ford Road) between Sheldon Road and Lotz Road (including the I-275 interchange and surrounding roadway network) indicated that the M-153 corridor currently possesses a poor Level of Service (LOS) rating. The proposed roadway modifications are anticipated to improve the LOS rating, reduce vehicle delay, and increase the number of vehicles using this stretch of roadway for the corridor. A traffic analysis comparison of the future no-build conditions versus the proposed construction conditions found that fuel consumption will increase by 10% and 7% during the peak AM and PM periods, respectively, and decrease by 10% during off-peak periods as a result of the build condition modifications. These changes in emissions are directly associated with the anticipated 9% and 6.5% increase in traffic volumes during the AM and PM periods, respectively, and the 9% decrease in traffic volumes during the off-peak period. The results of the traffic analysis indicated that the changes in traffic volumes are partially attributed to population growth but are largely attributed to a shift in traffic patterns from the surrounding roadway network to the M-153 corridor during the peak hours and away from the M-153 corridor during off-peak periods when compared to no-build conditions. Due to the fact that fuel consumption is directly linked to some air quality emission parameters, such as carbon monoxide, it is anticipated that the proposed roadway configuration could have an effect on air quality during peak hours. This potential impact will be off-set by the improvements that are anticipated for the off-peak hour condition and result in no overall impacts to air quality. The air quality along the roadways within the vicinity of M-153 should be improved as a result of the proposed configuration due to the anticipated decrease in traffic volumes during the peak and off-peak hours.

The proposed configuration of the M-153 may result in increases in the total Vehicle Miles Traveled (VMT). The total VMT, which are frequently viewed as the most important factor in determining emissions, are anticipated to increase as a result of the increased distance needed to perform left turn movements. This increase will be very minor and will be offset by the reduction in emissions from the idling traffic that is waiting to perform turning movements.

In conclusion, the improvements that are being made to the off-peak hour condition and the reduction in idling traffic should result in no overall impacts to air quality within the M-153 corridor.



Appendix Q

Project Mitigation Measures Summary

Project Mitigation Measures Summary **For the Preferred Alternative**

December, 2013

Ford Road at I-275 Area
Traffic and Environmental Study
Canton Township
Wayne County, Michigan

This project mitigation measures summary contains the measures being considered at this time. These mitigation items and commitments should be considered conceptual and may be modified during the final design, right-of-way acquisition or construction phases of this project.

I. Social and Economic Environment

- a. *Visual Resources* – MDOT should facilitate a “context sensitive design workshop” during the design phase to involve the community and Canton Township DDA on aesthetic features.
- b. *Environmental Justice* – If changes are made to the Preferred Alternative during design that result in relocations, census and other data sources should be checked to determine the potential of environmental justice populations being affected.
- c. *Local Agency Coordination* – During future project phases, the Canton Township DDA will need to be involved in discussions regarding the maintenance or replacement of their current roadside aesthetic treatments.

II. Natural Environment

- a. *Wetlands* – The project needs to avoid all impacts associated with the wetland/conservation easement located on the south side of Ford Road just east of Morton Taylor Road.
- b. *Stream Crossing* – Removal of the existing culvert at the Smith Drain on Haggerty Road south of Ford Road will take place during a historical low flow period. Flow will be maintained utilizing a temporary smaller culvert within the existing drain limits. A construction staging plan that details culvert removal and construction steps will be prepared during the design phase. Coordination with permitting agencies will occur during the permit application phase of the project. Soil erosion and sedimentation control measures will be included in the design plans and enforced during construction. This watercourse is MDEQ regulated.

- c. *Water Quality* – Compliance with MDOT’s MS4 NPDES permit will be required. All storm water outfalls will be properly labeled. Best Management Practices (BMPs) will be utilized during design to mitigate water quality issues identified.

III. Hazardous/Contaminated Materials

- a. *Project Contamination* – A Project Area Contamination Survey (PACS) was performed for this project. There are two recognized environmental conditions (RECs) identified within the preferred alternative footprint. These are both gas stations with multiple active underground storage tanks (USTs). If the proposed project will involve subsurface work such as excavation or dewatering, it is recommended that further environmental evaluation in the form of a Phase II ESA be conducted to assess the presence of soil/groundwater contamination.
- b. *Contamination Mitigation* – All areas of contamination will be identified in the plans and an estimated quantity of non-hazardous contaminated media will be included in the project proposal for the appropriate handling and disposal of contaminated soil. Conditions stipulated in the “Special Provision for Non-Hazardous Contaminated Material Handling and Disposal” must be met during construction; including laboratory testing to solicit landfill approval, temporary storage requirements, and restrictions for reusing contaminated media as fill. Proper measures must be taken to contain disturbed soil and sediment. Soil erosion and sedimentation controls based on BMPs will minimize sediment disturbance and control sediment loss.
- c. *Contamination Exposure* – A Workers Health and Safety Plan will be prepared if any asbestos, lead, or other contamination is identified.

IV. Construction

- a. *Construction Permits* – Permits under Act 451, Part 31 (Water Quality and Floodplains), and Part 301, (Inland Lakes and Streams) may be required from the MDEQ for this project. Coverage under the National Pollutant Discharge Elimination System (NPDES), which is administered by the MDEQ, will be required.
- b. *Construction Restriction Dates* – Adhere to the construction requirements specified in the Special Provision 12SP107(D) Migratory Bird Protection for the replacement of the Smith Drain culvert.
- c. *Construction Noise* - Construction noise will be minimized by measures such as requiring that construction equipment have mufflers, that portable compressors meet federal noise-level standards for that equipment, and that all portable equipment be placed away from or shielded from sensitive noise receptors.

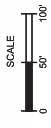
- d. *Construction Vibration* - Basement/foundation surveys will be offered to structures within 150 feet of any construction activity in areas where vibration effects could occur, where pavement will be removed or where piling and/or steel sheeting is planned. These areas will be identified during the design phase and would include work at the I-275 bridges. Monitoring will occur before, during and after the construction phase. Vibration impacts are not expected at this time.
- e. *Maintaining Accessibility* - Access to businesses and residential properties will be maintained throughout construction. If sidewalks area closed a pedestrian detour route must be posted.
- f. *Maintaining Traffic* – Traffic will be maintained on alignment through the use of phased construction and temporary pavement. Coordination with local officials will occur to facilitate emergency service and school bus routes. Access to all residences and businesses within the project area will be maintained during construction.

Appendix R

Construction Phasing

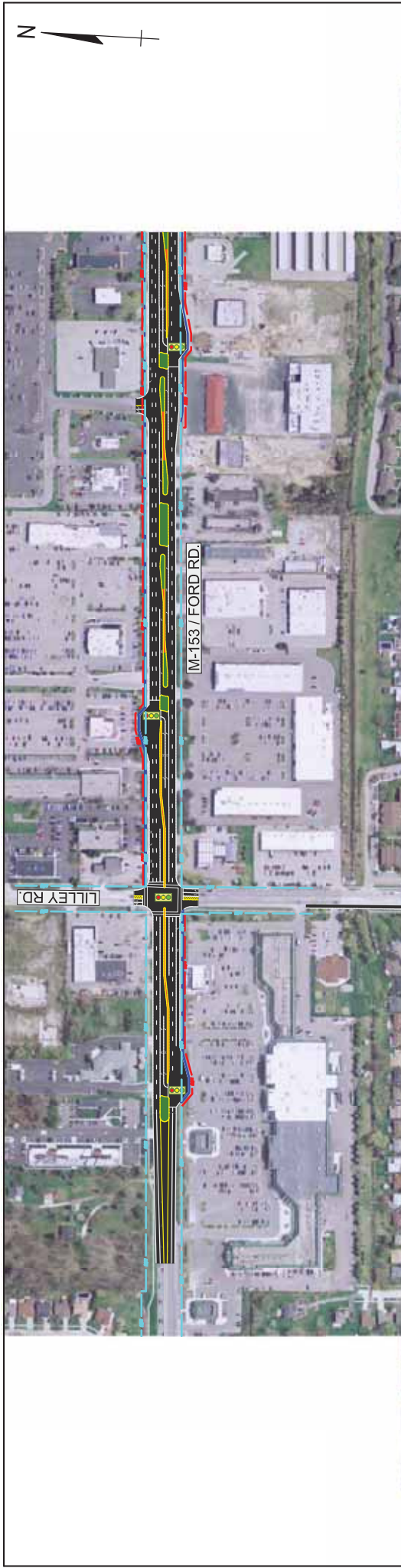


Existing Right-of-Way
Proposed Sidewalk



FORD ROAD OPERATION IMPROVEMENTS





FORD ROAD PHASE 1 - CONSTRUCTION FROM WEST OF LILLEY TO LOTZ

SCALE
0 100' 200'

- Proposed Right-of-Way
- Existing Right-of-Way

- Proposed Softscape
- Proposed Hardscape
- Proposed Sidewalk



SHeldon RD

M-153 / FORD RD.

MORTON
TAYLOR RD.

M-153 / FORD RD.

FORD ROAD PHASE 2 - CONSTRUCTION FROM SHELDON TO WEST OF LILLEY



- Proposed Right-of-Way
- Existing Right-of-Way
- Proposed Softscape
- Proposed Hardscape
- Proposed Sidewalk



JN 115177 Operation Improvements Summary

BDS, 7-2-13

- **EB Ford Road at Haggerty Road RTL Conversion:** The existing right turn lane is converted to a right turn/thru lane by modifying signing, striping and extending it to the west. The length doubles from approximately 250' to 500'.
- **EB Ford Road entrance ramp to SB I-275:** Reconstruct the ramp with a larger radius to accommodate more vehicles. Remove unused existing ramp pavement.
- **Shorten Ford Road raised median between Haggerty Road and I-275:** Remove approximately 150' of median rolled curb and sidewalk to provide additional left turn queue length to SB Haggerty Road.
- **Stripe double exit ramp turns:** This recommendation came from a resident at the first public meeting who has witnessed lane encroachment.
- **Sidewalk connectivity through I-275 interchange:** Cut back I-275 slope paving as shown in the provided exhibit to accommodate the construction of sidewalk from the I-275 Metro Trail to existing sidewalk west of the interchange. Stakeholders and residents have all expressed desire for this connectivity.
- **Maintain three thru lanes for WB Ford Road from Lotz Road through Haggerty Road intersection:** To accomplish this additional construction is necessary just west of Lotz Road and between the WB Ford Road ramps along with modification of signing and striping at Haggerty Road. In addition the parallel WB Ford Road entrance ramp to SB I-275 requires relocation along with reconstruction of a portion of the ramp.

Memorandum

To: CDM Smith

From: Bergmann Associates

Date: August 28, 2013

Re: Sidewalk Options at S08 & S15 of 82292

Introduction

As part of the I-275/M-153 interchange study, Bergmann Associates (BA) has reviewed options for constructing a sidewalk on each side of M-153 under the existing bridges at the site. The scope of this review is limited to the areas under and adjacent to the bridges that carry I-275 over M-153 (S08 & S15 of 82292). The options considered and recommendations are discussed below.

Site Conditions

The existing twin bridges that carry I-275 over M-153 are two span steel plate girder structures with a total length of 180ft. The superstructures are supported by stub abutments on spread footings which are situated on top of 1 on 2 slopes with slope paving. The 1 on 2 slopes in front of the abutments continue as unpaved 1 on 2 slopes in the median area between the two bridges. The current minimum vertical clearance is approximately 16 ft – 5in (per MDOT Report 44) and is located at the center pier on the east fascia of the southbound bridge.

The existing I-275/M-153 interchange is a partial cloverleaf with loop ramps in the northwest and southeast quadrants. Within the interchange the existing M-153 roadway section consists of 3 lanes in each direction with a median lane and open ditch drainage on each side of the road. The low point of the M-153 vertical profile is located west of the I-275 bridges. There are sidewalks along both sides of M-153 outside of the interchange, and the I-275 pathway is located on the east side of the interchange, but there are no pedestrian facilities within the interchange itself. In order to ultimately link these existing pedestrian facilities and provide non-motorized connectivity between M-153 west of I-275 and the I-275 pathway, the proposed sidewalk construction will require modifications at the existing bridges.

Sidewalk Options

Options for constructing both at grade and elevated sidewalks under the existing I-275 bridges were evaluated. The options considered account for the proposed M-153 roadway sections in Interchange Alternatives 1, 2, and 3. The sidewalk options are based on the design criteria listed below, with a 6 foot sidewalk width used to match the existing pedestrian facilities outside of the interchange. References made to AASHTO are based on the Guide for Development of Bicycle Facilities (2012).

- 6' sidewalk with 2' shy distance to obstructions (8' total width) (AASHTO)
- 2% cross slope (MDOT RDM 12.12.08)
- 5% maximum longitudinal grade (MDOT RDM 12.12.08 & ADA)
- 10'-0" minimum vertical clearance (desired per MDOT BDM 7.01.08.A)
- 5' minimum separation from edge of roadway to edge of sidewalk, or a separator barrier is required (AASHTO)

Interchange Alternative 1

In this interchange alternative the existing M-153 roadway geometry will be maintained at the I-275 bridges and the proposed sidewalk would be constructed at grade with the roadway. The sidewalk would be built by cutting into the existing 1 on 2 slopes and constructing a retaining wall to support the slope cut (see attached cross section). The retained height would be approximately 2 feet, which would allow for the use of a modular block retaining wall. For this wall type and height the width at the base would be minimal which would limit the amount of excavation in the 1 on 2 slopes. Removal and



Memorandum

replacement of the existing slope paving would be necessary due to the slope cut. While it is beyond the scope of this review, a global stability analysis of the existing abutment spread footing and proposed retaining wall would be necessary during the design phase for both the construction and final condition.

The sidewalk location adjacent to the road would require the existing roadside ditches to be filled. Curb and gutter is recommended between the sidewalk and roadway for drainage purposes and to also provide separation between the two. With the sidewalk at grade the limits of the wall construction described above would extend to the ends of the I-275 1 on 2 side slopes, resulting in a total wall length of approximately 300 feet.

The associated cost with wall and sidewalk construction at the I-275 bridges in Interchange Alternative 1 is approximately **\$222,000** in 2013 dollars, and **\$320,000** in 2020 dollars (see the attached cost estimate for details).

Interchange Alternatives 2 and 3

In these interchange alternatives the existing EB M-153 roadway geometry will be maintained at the I-275 bridges and the sidewalk on this side of the road would be constructed as described above in Interchange Alternative 1. For WB M-153 the sidewalk would be elevated due to the proposed widening of M-153 to the north towards the existing bridge abutments in these interchange alternatives. A cantilevered retaining wall is proposed adjacent to the roadway with an exposed wall height of approximately 5 feet (see attached cross section). Despite the wall height, the existing bridge vertical under clearance would still provide for more than 10 feet of clearance to the sidewalk in this option, based on the record plan data.

The limits of wall construction would extend approximately 100' beyond the I-275 1 on 2 side slopes in order to ramp the sidewalk down to grade at a 5% slope, with a total wall length of approximately 410 feet. Removal and replacement of the existing slope paving would be required to allow for excavation and construction of the wall footing. While it is beyond the scope of this study, a global stability analysis of the existing abutment spread footing and proposed retaining wall would be necessary during the design phase for both the construction and final condition. Based upon a preliminary review of the existing soils in the area and proposed scope of work for the north abutments, however, it is anticipated that micropiles will be required to stabilize the abutments during construction given the amount of excavation required to construct the proposed wall.

A 42 inch tall railing is required in this option to protect pedestrians from the drop off at the top of the retaining wall. The sidewalk would be sloped towards the roadway to allow drainage to flow over the top of the wall. For roadway drainage, a valley gutter adjacent to the concrete barrier is proposed.

The associated cost with wall and sidewalk construction at the I-275 bridges in Interchange Alternative 2 or 3 is approximately **\$819,000** in 2013 dollars, and **\$1,160,000** in 2020 dollars (see the attached cost estimate for details).

The use of an MSE wall was also considered as an option on WB M-153. For MSE walls adjacent to traffic, MDOT typically requires the wall to be protected from vehicular traffic by a separate concrete barrier. This requirement would locate the sidewalk closer to the existing bridge abutments and may result in the excavation limits for the MSE wall construction extending underneath the existing bridge footings. This option may result in a cost savings compared to a cantilever retaining wall, and could be considered during the design phase once survey data is available to more accurately layout the excavation limits and the required strap length for the MSE wall is known based on a geotechnical analysis of the system.



I-275 @ M-153 Feasibility Study: M-153 Sidewalk under I-275 Bridges

Summary of Wall and Sidewalk Costs by Interchange Alternative

Interchange Alternative		Subtotal (2013)	Subtotal (2020)	Total Costs (2013)	Total Costs (2020)
1	EB M-153	\$111,000	\$160,000	\$222,000	\$320,000
	WB M-153	\$111,000	\$160,000		
2	EB M-153	\$111,000	\$160,000	\$819,000	\$1,160,000
	WB M-153	\$708,000	\$1,000,000		
3	EB M-153	\$111,000	\$160,000	\$819,000	\$1,160,000
	WB M-153	\$708,000	\$1,000,000		

Notes:

- * Assume 5% compounded inflation per year (1.05^7 years = 40.7% inflation)
- * Costs include 30% contingency
- * Costs include 10% for Preliminary Engineering and 10% for Construction Engineering

ENGINEER'S PRELIMINARY ESTIMATE OF COST
Sidewalk - At Grade



PROJECT NAME M-153 Sidewalk under I-275 Bridges **CONTROL SECTION** S08 & S15 of 82292

LOCATION City of Canton, Wayne County **MDOT JOB NUMBER**

ITEM CODE	PAY ITEM DESCRIPTION	SUPPLEMENTAL DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
2060002	Backfill, Structure, CIP		400	Cyd	\$12.00	\$4,800.00
2050016	Excavation, Earth		100	Cyd	\$5.00	\$500.00
2060010	Excavation, Fdn		450	Cyd	\$8.00	\$3,600.00
8130015	Slope Paving Header		140	Ft	\$55.00	\$7,700.00
8130020	Slope Paving, Conc		360	Syd	\$50.00	\$18,000.00
3010002	Subbase, CIP		35	Cyd	\$9.00	\$315.00
8030044	Sidewalk, Conc, 4 inch		2400	Sft	\$2.50	\$6,000.00
8020017	Curb and Gutter, Conc, Det B3		300	Ft	\$13.00	\$3,900.00
3020016	Aggregate Base, 6 inch		125	Syd	\$5.00	\$625.00
7067010		Modular Block Wall	900	Sft	\$25.00	\$22,500.00
					Subtotal	\$68,000.00
					Mobilization (5%)	\$3,000.00
					Total	\$71,000.00
					Contingencies (30%)	\$21,000.00
					Total Construction Cost (2013)	\$92,000.00
					Preliminary Engineering (10%)	\$9,200.00
					Construction Engineering (10%)	\$9,200.00
					Grand Total (2013)	\$111,000.00
					GRAND TOTAL (2020)	\$160,000.00

Notes:

Applies to EB & WB M-153 in Interchange Alternative 1.
 Applies to EB M-153 in Interchange Alternative 2 or 3.
 The cost estimate is based on the sidewalk extending to the end of the 1 on 2 side slopes for the M-153 bridges.
 Costs are based on construction on the EB side of M-153 only (WB costs are similar in Interchange Alternative 1).

ENGINEER'S PRELIMINARY ESTIMATE OF COST
Sidewalk - Elevated



PROJECT NAME	CONTROL SECTION
M-153 Sidewalk under I-275 Bridges	S08 & S15 of 82292

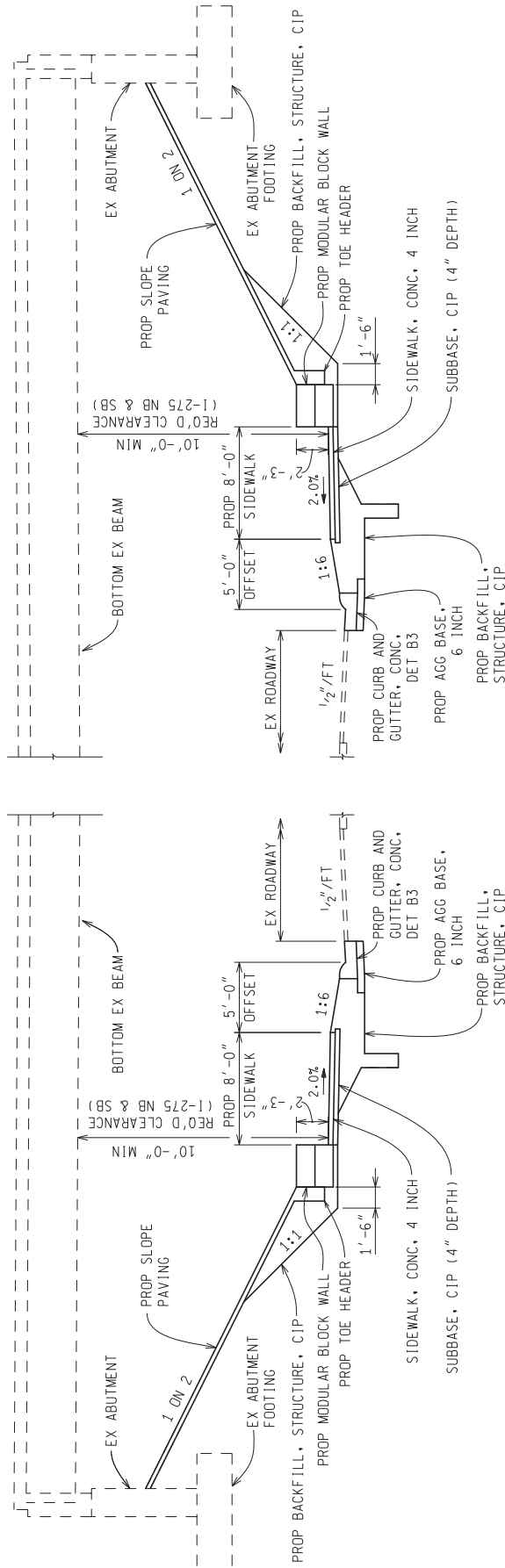
LOCATION	MDOT JOB NUMBER
City of Canton, Wayne County	

ITEM CODE	PAY ITEM DESCRIPTION	SUPPLEMENTAL DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
2060002	Backfill, Structure, CIP		1700	Cyd	\$12.00	\$20,400.00
2060010	Excavation, Fdn		1650	Cyd	\$8.00	\$13,200.00
8130015	Slope Paving Header		140	Ft	\$55.00	\$7,700.00
8130020	Slope Paving, Conc		270	Syd	\$50.00	\$13,500.00
3010002	Subbase, CIP		45	Cyd	\$9.00	\$405.00
8030044	Sidewalk, Conc, 4 inch		3280	Sft	\$2.50	\$8,200.00
8020060	Valley Gutter, Conc		410	Ft	\$20.50	\$8,405.00
3020016	Aggregate Base, 6 inch		190	Syd	\$5.00	\$950.00
7060092	Reinforcement, Steel, Epoxy Coated		30000	Lb	\$1.00	\$30,000.00
8080010	Fence, Chain Link, 42 inch		410	Ft	\$25.00	\$10,250.00
7060100	Substructure Conc		300	Cyd	\$350.00	\$105,000.00
	Micropile Retrofit for Abutment Support During Wall Construction		1	LS	\$300,000.00	\$300,000.00
					Subtotal	\$518,010.00
					Mobilization (5%)	\$26,000.00
					Total	\$544,010.00
					Contingencies (30%)	\$163,000.00
					Total Construction Cost (2013)	\$707,010.00
					Preliminary Engineering (10%)	\$70,701.00
					Construction Engineering (10%)	\$70,701.00
					Grand Total (2013)	\$708,000.00
					GRAND TOTAL (2020)	\$1,000,000.00

Notes:



Applies to WB M-153 in Interchange Alternative 2 or 3.
 The cost estimate is based on the sidewalk extending to the end of the 1 on 2 side slopes plus the distance required to ramp down to existing grade.

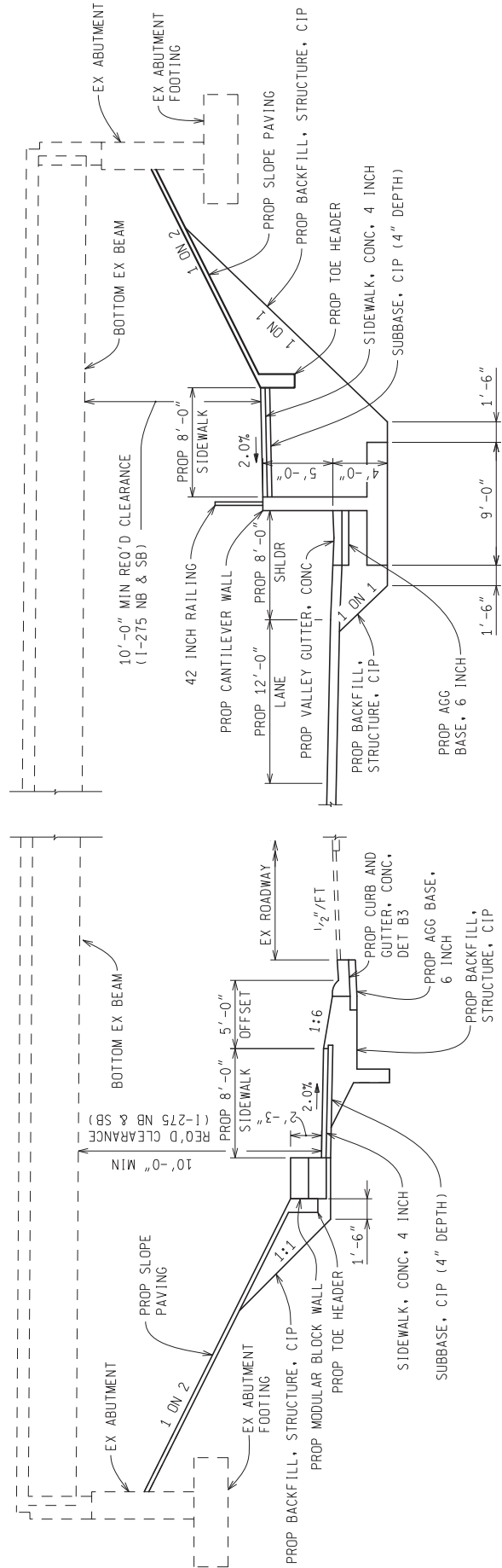
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PROPOSED WB M-153 UNDER I-275



PROPOSED EB M-153 UNDER I-275

		INTERCHANGE ALTERNATIVE 1			
		DATE 03/01/13	SCALE 1"=12'	CONT. SEC.	JOB NO.



PROPOSED WB M-153 UNDER I-275

PROPOSED EB M-153 UNDER I-275

		INTERCHANGE ALTERNATIVE 2 OR 3			
		DATE 03/01/13	SCALE 1"=12'	CONT. SEC.	JOB NO.

Appendix S

Project Acceptance

Re: JN 115177 – Final Acceptance –
M-153 (Ford Road) at I-275 Traffic and Environmental Study

The Traffic and Environmental Report for the M-153 (Ford Road) at I-275 Corridor Study is complete in accordance with the Federal Highway Administration's (FHWA) Planning and Environmental Linkages (PEL) process. This study was completed as a result of an effort between all agencies. As stakeholders of the system, it is beneficial that we came together, providing solutions to deliver a safer and more efficient traffic flow within the study area. As members of the study team, we are integral in this process and the input is an important element in its success.

As an acknowledgment of partnership for this study, in which the entire group has been involved with from the beginning, we are in concurrence with the Final M-153 (Ford Road) at I-275 Traffic and Environmental Report.



FHWA 2/26/2014
Date



MDOT 12-19-13
Date



Canton Township 12/19/2013
Date



Wayne County DPS 12/19/2013
Date



City of Westland 12/13/13
Date



CDM/Smith 12/13/13
Date



STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
LANSING

RICK SNYDER
GOVERNOR

KIRK T. STEUDLE
DIRECTOR

March 3, 2014

FEDERAL HIGHWAY ADMIN.

MAR 06 2014

MICHIGAN DIVISION
LANSING, MICHIGAN

Mr. Don Cameron
FHWA Planning and Program Development Manager
315 W. Allegan, Room 201
Lansing, MI 48933

RE: JN 115177 M-153 (Ford Rd) at I-275 Area Traffic and Environmental Study Final Report

Dear Mr. Cameron:

Thank you for taking the time to discuss the October 2013, *M-153 (Ford Road) at I-275 Area Traffic and Environmental Study Final Report* (PEL Study/Final Report). This study followed FHWA's Planning and Environmental Linkages (PEL) process. We recently held an acceptance meeting for the affected agencies, in which consensus was achieved. We will be including the acceptance signature sheet as part of the Final Report. In this letter we recommend FHWA's concurrence that the study was conducted consistent with the PEL approach and that the planning information and decisions, summarized below and documented in the final report can be utilized in subsequent NEPA actions.

A Study Team was assembled at the kick-off of the project and included the applicable Federal, State, and local agencies, including MDOT, FHWA, Canton Township, Canton Township DDA, City of Westland, Wayne County Department of Public Works, and the consultant team (see Appendix J for a list of Study Team members). The Study Team's effort included an extensive stakeholder and public involvement process (see Sec. 4). The purpose and need was developed with input from the Study Team and public and identified current operation and safety issues along Ford Road as the highest priorities (see Sec. 5). The Study Team and public assisted in developing the Illustrative Alternatives and advancing them through the Practical Alternative stage to the Preferred Alternative: a boulevard along Ford and Haggerty Roads (see Sec 6). Extensive data collection supported planning assumptions and included, for example, traffic counts and models, crash history, a road safety audit, and assessments of the human and natural environment (see Sec 3). MDOT is working towards amending the long-range transportation plan and TIP to qualify for Federal aid prior to initiating NEPA for the proposed boulevard.

An analysis of the affected environment and environmental consequences was completed (see Sec 9). This documentation is not meant to provide MDOT with enough information for NEPA environmental clearance for this project, but to instead provide MDOT with the information necessary to make a determination of needed environmental documentation (CE or EA) once the project moves into the next phase of project development. Although mitigation measures were not specifically discussed with the Study Team, a list of potential mitigation measures is included in Appendix Q based on Study Team input. In the future, MDOT will use the classification process in the Environmental Procedures Manual to document the analysis of all environmental factors, including indirect and cumulative effects, which were largely avoided due to the Study process. We include additional information on the Preferred Alternative and additional short-term operational improvements, below.

The Preferred Alternative, a boulevard reconstruction, is a long-term resolution to the purpose and need. We anticipate the need for complete pavement replacement within the next 10 years. MDOT is pursuing

funding for construction of the boulevard, but has yet to identify a funding source for either the boulevard or the pavement reconstruction. Preliminary estimates for the boulevard reconstruction include \$4 million for design, \$20 million for construction, \$3 million for construction engineering, and a range of \$8 million to \$40 million for ROW. The Preferred Alternative will require minor right-of-way acquisitions although no relocations are anticipated. The Final Report provides a foundation for NEPA classification. Based on the study, the boulevard alternative would have no significant detrimental environmental impacts. We will further define right of way acquisition needs during design as we seek ways to minimize impacts to businesses and to existing aesthetic treatments already located in the corridor.

For the design, right of way acquisition and construction phases of the boulevard, we will pursue the appropriate planning steps with SEMCOG once funding is identified. We recommend that the boulevard alternative proceed under an individual Categorical Exclusion and will supply the appropriate documentation using information from the PEL Study. If the project does not proceed to construction within ten years a new study will need to be conducted. Furthermore, a review of the traffic analysis is necessary after five years and three years for the environmental analysis to determine if they need updating.


We are also proposing to implement short-term Operational Improvements. The Operational Improvements were developed as part of the PEL Study in the event the Preferred Alternative was unable to obtain immediate funding. MDOT is currently developing a "request for proposals" and will begin design of the Operational Improvements in the spring of 2014 for 2015 construction. The Operational Improvements project is on the GPA of the STIP/TIP in which federal funds are included. The Operational Improvements will not preclude a future boulevard. These improvements have independent utility from the boulevard, representing a stand-alone improvement regardless of future funding for the boulevard alternative. The short term less costly operational improvements help satisfy the purpose and need identified by the PEL Study until financing for the preferred long-term solution can be identified. Preliminary estimates for the Operational Improvements include \$400 thousand for design, \$2 million for construction, and \$300 thousand for construction engineering. ROW is not anticipated.

We recommend the Operational Improvements project receive NEPA classification as an Individual Categorical Exclusion. You will be receiving a formal submittal on that project from our Metro Region Environmental Coordinator for your information. We expect the environmental classification documentation to be completed by June 2014. For more detailed information, please refer to the PEL checklist in Appendix A of the Final Report. Should you have any questions, please contact me at (517) 335-2621.

Sincerely,


Margaret Barondess
MDOT Environmental Services Manager

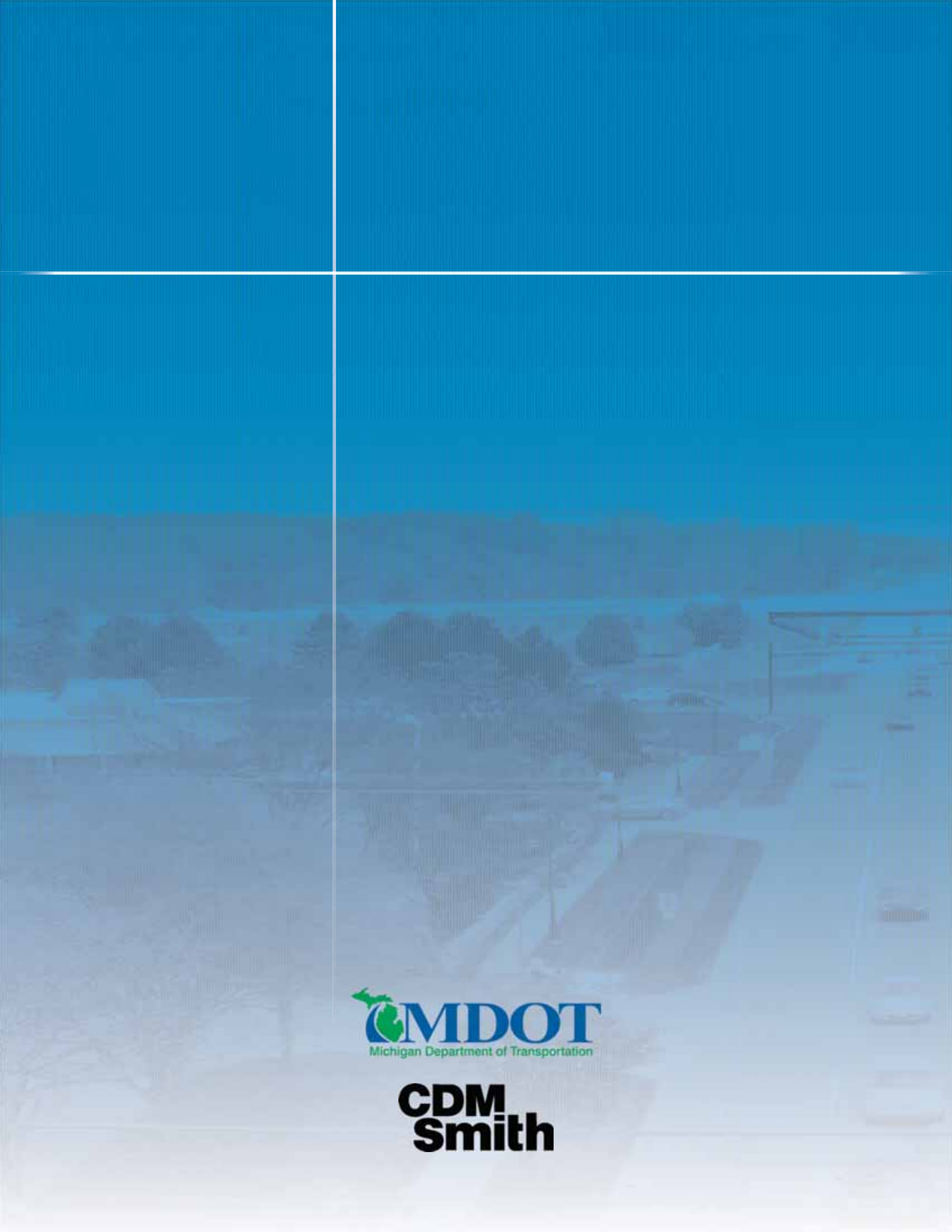
I do/ ~~not~~ concur,


Don Cameron
FHWA Planning and Program Development Manager 3-14-14

BOHD:ESS:MB:ab

Enclosures

Cc: Mike Bellini, MDOT
Ann Lawrie, MDOT
Phil Lynnwood, FHWA
Jeff Forster, FHWA



**CDM
Smith**