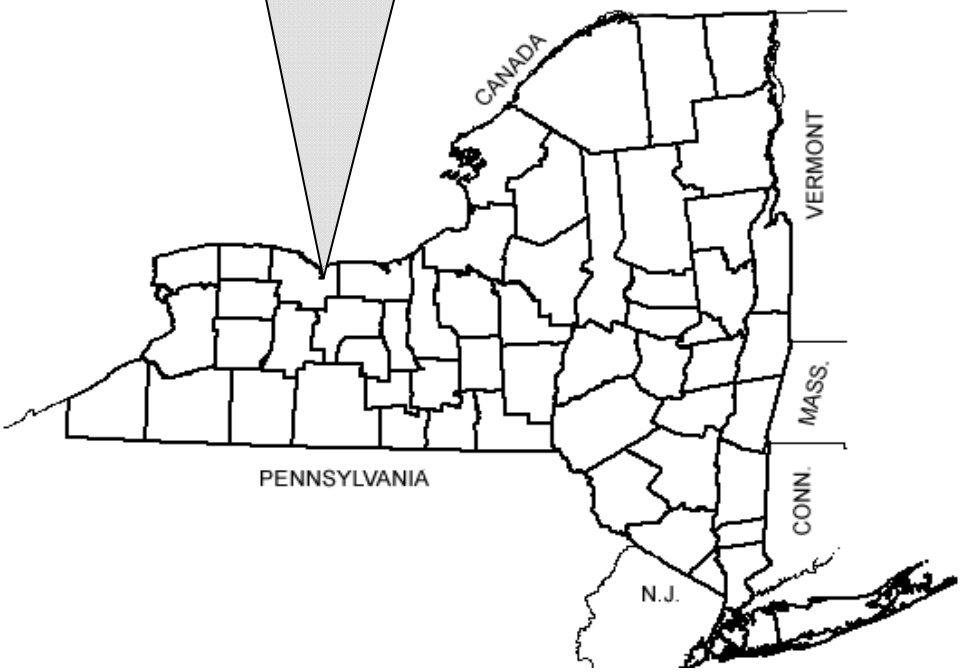
TRANSPORTATION

FINAL
PROJECT SCOPING REPORT/
FINAL DESIGN REPORT

July 2014

Lake Avenue Improvement Project
Merrill Street to Burley Road
P.I.N. 4754.38
Monroe County
City of Rochester



PROJECT REPORT

CITY OF ROCHESTER, NEW YORK
LOVELY A. WARREN, Mayor

U.S. Department of Transportation Federal Highway Administration

NEW YORK STATE DEPARTMENT OF TRANSPORTATION
ANDREW M. CUOMO, Governor JOAN MCDONALD, Commissioner

PROJECT APPROVAL SHEET

A. IPP Approval:

The project cost and schedule are consistent with the Regional Capital Program.
The IPP was signed by:

original signed by _____ 11/28/07

Kevin O'Buckley
then Regional Director

B. Recommendation for Scoping & Design Approval:

The NYSDOT on behalf of FHWA (based on the NEPA Checklist) concurs with the classification of this project as a NEPA Class II, Programmatic Categorical Exclusion as described in this document.

_____ 8/7/14

Daniel Hallowell
Regional Planning & Program Manager

C. Recommendation for Scoping & Design Approval:

Environmental Determination & Federal Aid Process Concurrence

Procedurally, this project was progressed using the NYSDOT Locally Administered Federal Aid Procedure Manual. All requirements requisite to these actions and approvals have been met, the required independent quality control reviews separate from the functional group reviews have been accomplished, and the work is consistent with established standards, policies, regulations and procedures, except as otherwise noted and explained.

_____ 8/7/14

Dennis J. Kennelly, P.E.,
T.Y. Lin International

D. Public Hearing Certification (23 USC 128):
Nonstandard Feature Approval
Scoping & Design Approval:

A public hearing was not required. A public information meeting was held on _____.

No nonstandard features have been identified, created or retained.

The required environmental determinations have been made and the preferred alternative for this project is ready for final design.

_____ 8/7/14

James R. McIntosh, P.E.
City Engineer, Rochester, Monroe County

LIST OF PREPARERS

Group Director Responsible for Production of the Design Approval Document:

Dennis J. Kennelly, P.E., Principal, T.Y. Lin International

Description of Work Performed by Firm: Directed the preparation of the Design Approval Document in accordance with established standards, policies, regulations and procedures, except as otherwise explained in this document.

Note: *It is a violation of law for any person, unless they are acting under the direction of a licensed professional engineer, architect, landscape architect, or land surveyor, to alter an item in any way. If an item bearing the stamp of a licensed professional is altered, the altering engineer, architect, landscape architect, or land surveyor shall stamp the document and include the notation "altered by" followed by their signature, the date of such alteration, and a specific description of the alteration.*

TABLE OF CONTENTS

CHAPTER 3 – SOCIAL, ECONOMIC AND ENVIRONMENTAL CONSIDERATIONS

APPENDICES	
A.	Maps, Plans, Profiles & Typical Sections
B.	Environmental Information
C.	Traffic Information: Corridor Improvements Impact Study
D.	Pavement Information & Subsurface Investigations
E.	NEPA Checklist
F.	Stakeholders and Public Input
G.	Construction Cost Estimates

CHAPTER 1 - EXECUTIVE SUMMARY

1.1. Introduction

This project represents a continuation of improvements that have been made along the Lake Avenue corridor over the past several years. The project area includes the segment of Lake Avenue from Merrill Street to just south of Burley Road, which is unique in that the majority of the adjacent area is comprised of large cemetery parcels, with few points of cross access. At Merrill Street, Lake Avenue is six lanes wide, as this portion of the corridor is just north of the Eastman Business Park and Route 104. The roadway tapers to four lanes, two in each direction, approximately 400 feet north of Winchester Street. Lake Avenue remains a four lane road throughout the remainder of the project area. The intersection at Merrill Street and Lake Avenue is signalized, and there is also a traffic signal at the entrance gate/main driveway to Holy Sepulchre Cemetery.

Given that there are no vehicular bridges crossing the Genesee River between Route 104 and the Port of Rochester in Charlotte, Lake Avenue serves as a north/south urban principal arterial on the City's west side connecting Charlotte and its environs to Route 104, and further south, to downtown Rochester. Lake Avenue also serves as a major Regional Transit Service (RTS) bus route, 1 Lake/Park.

In addition to the two cemeteries adjacent to the central project area - Holy Sepulchre Cemetery and Riverside Cemetery - the other balance of contiguous land use is residential. Large neighborhoods of single family homes are located at the northern and southern project limits.

The former St. Bernard's Seminary is located about a third of the way into the project corridor north of Winchester Street. The facility has been converted to housing for seniors through adaptive reuse. A highly utilized multi-use trail - the Genesee Riverway Trail - runs along the west side of the Genesee River Gorge, and can be accessed to the south and north for the project limits. The Riverway Trail does not continue alongside the river gorge in the vicinity of the project area due to steep topography. Instead, trail users connect to the disparate segments of the Riverway Trail via the sidewalk along the east side of Lake Avenue between Eastman Avenue and a point just south of Burley Road.

1.2. Purpose and Need

1.2.1. Where is the Project Located?

The project is located within the City of Rochester, Monroe County, and is a major north/south street running parallel with, and west of, the Genesee River. The overall project length is just over one mile (approximately 5,500 feet), stretching from Merrill Street north to a point just south of Burley Road.

1.2.2. Why is the Project Needed?

The existing road segment is in need of a full reconstruction as the street surface and subsurface are in poor condition, and there are existing deficiencies within the project area with regard to best accommodating non-motorized users. There is currently no connection for bicyclists between the bicycle lane south of Merrill Street and the Genesee Riverway Trail. The project will provide opportunities for improvements to both safety and aesthetics.

1.2.3. What are the Objectives/Purposes of the Project?

The project objectives include the following:

- Reconstruction of the existing pavement profile including new granite curbing.
- Addition of bike lanes, where possible.
- Improve the Genesee Riverway Trail along the east side of the road.
- Assessment of the potential to reduce the number of lanes from four lanes to a two-lane road segment with turning lanes at key intersections, including use of a center median, to reduce speeds through the corridor.
- Addition of high visibility crosswalks, where appropriate.
- Replacement of the existing street lighting.
- Addition of new street trees.

1.3. What Alternative is Being Considered?

The project alternatives being considered are as follows:

Alternative 1: **Null or No-Build Alternative**

This alternative would leave the project area in its existing state, and would therefore not meet any of the project objectives.

Alternative 2: **Reconstruction as a 4-lane Road**

This alternative would meet some of the project objectives in that it would provide a fully rebuilt roadway, but would continue to operate as a four lane road. This alternative would also include the proposed improvement to the Genesee Riverway Trail along the east side of the road, exclusive bike lanes/trails, replacement of the street lighting, and addition of street trees and crosswalks, but would do little to address the existing speed conditions through the corridor.

Alternative 3: Reconstruction as a 2-lane Road with Median and Turning Lanes

This alternative would meet the most project objectives, as it results in a fully rebuilt roadway with new lighting, street trees, and crosswalks, but has the added benefit of including traffic calming strategies through the use of a center median. The road would be reduced from four lanes to two, and turning lanes would be provided at the signalized entrances to Holy Sepulchre Cemetery. The area formerly occupied by the other two lanes would be used to accommodate the median, and incorporate bike lanes on either side of the roadway. Improvement to the Genesee Riverway Trail along the east side of the road is included in this Alternative.

1.4 Environmental Review

Social, Economic and Environmental Resources Checklist				
PIN: 4754.38	TYPE FUNDING: NHS, STP, HSIP, Local			
DESCRIPTION: Lake Avenue Improvement Project	DATE: June 2012			
	REVISION DATE: N/A			
CITY: Rochester	NEPA CLASS: Class II - Programmatic Categorical Exclusion			
COUNTY: Monroe	SEQRA TYPE: Type II			
SOCIAL, ECONOMIC AND ENVIRONMENTAL CONSIDERATIONS	**PRESENCE OR ANALYSIS NEEDED?**		**IMPACT OR ISSUE?**	
	YES	**NO**	**YES**	**NO**
Social				
Land Use			☐	☒
Neighborhoods and Community Cohesion	☒	☐	☐	☒
General Social Groups	☐	☒	☐	☒
School Districts, Recreation Areas and Places of Worship	☒	☐	☐	☒
Economic				
Regional and Local Economies			☐	☒
Business Districts	☐	☒	☐	☒
Specific Business Impacts	☐	☒	☐	☒
Environmental				
Wetlands	☐	☒	☐	☒
Surface Waterbodies and Watercourses	☐	☒	☐	☒
Wild, Scenic, and Recreational Rivers	☐	☒	☐	☒
Navigable Waters	☐	☒	☐	☒
Floodplains	☐	☒	☐	☒
Coastal Resources	☐	☒	☐	☒
Aquifers, Wells, and Reservoirs	☐	☒	☐	☒
Stormwater Management	☒	☐	☒	☐
General Ecology and Wildlife Resources	☐	☒	☐	☒
Critical Environmental Areas	☐	☒	☐	☒
Historic and Cultural Resources	☒	☐	☐	☒
Parks and Recreational Resources	☒	☐	☐	☒
Visual Resources	☒	☐	☐	☒
Farmlands	☐	☒	☐	☒
Air Quality Analysis	☐	☒	☐	☒
Energy Analysis	☐	☒	☐	☒
Noise Analysis	☒	☐	☐	☒
Asbestos	☐	☒	☐	☒
Contaminated and Hazardous Materials	☐	☒	☐	☒
Construction Effects	☒	☐	☒	☐
Indirect (Secondary) Effects	☐	☒	☐	☒
Cumulative Effects	☐	☒	☐	☒

The NEPA Checklist is included in Appendix E.

ANTICIPATED PERMITS
NYSDEC, State Pollutant Discharge Elimination System (SPDES) General Permit
City of Rochester – Work in the right-of-way; water system and street lighting system adjustments
Monroe County – Traffic signal work; sewer adjustments

1.5 How will the Alternatives Affect the Environment?

Category	Null	2: 4-lane	3: 2-lane with median
Wetland impacts	None	None	None
100 year floodplain impact	None	None	None
Archeological Sites Impacted	None	None	None
Section 106/Section 4(f) impacts	None	None	None
Noise	None	Construction Only	Construction Only
Impact to forested areas	None	None	None
Noise Impacts	None	None	None
Property impacts	None	None	None
Construction Cost (2014 $'s)	None	$4.30M	$4.605M

Proposed Mitigation: Construction noise is the only environmental impact. The City's noise ordinance limits the hours of construction or excessive noise sources.

Refer to Chapter 3 Section(s) 3.3 for mitigation measures that are proposed for this project. Project documents have been submitted to the New York State Office of Parks Recreation and Historic Preservation. A letter dated October 19, 2012 was received from them stating their findings: there will be "No Adverse Effect upon cultural resources in or eligible for inclusion the Nations Registers of Historic Places."

1.6 What are the Costs & Schedules?

Design Approval is scheduled for August 2014. Construction is scheduled for 2015, to last from Spring to Fall of 2015.

Exhibit 1.2 - Project Schedule	
Activity	**Date Occurred/Tentative**
Scope Approval	Fall 2012
Design Approval	July 2014
ROW Acquisition	N/A
Construction Start	Spring 2015
Construction Complete	Late Fall 2015

Activities	Alternative 1 No-Build	Alternative 2 4-Lane	Alternative 3 2-lane
Construction Costs (2014 $'s)	0	$4.30M	$4.605M
Wetland Mitigation	N/A	N/A	N/A
SPDES Permit Compliance	0	Included in above	Included in above
Incidentals (10%)	0	N/A	N/A
Subtotal 1	0	$4.30M	$4.605M
Contingency (15% at Design Approval)	0	$645k	$695k
Subtotal 2	0	$4.95M	$5.30M
Mobilization (4%)	0	Included in above	Included in above
Subtotal 3	0	$4.95M	$5.30M
Expected Award Amount (Inflate current costs/prices at 3%/yr. to midpoint of construction)	0	$5.20M	$5.80M
Construction Inspection (10%)	0	$520k	$580k
ROW Costs	0	$0	$0
Total Alternative Costs	0	$5.72M	$6.38M

The budgeted amount for Construction (per the March 2012 TIP) is $6,026,500, excluding ROW incidentals ($108,000).

1.7 Which Alternative is Preferred?

Alternative 2 - Reconstruction as a 4-lane Road.
Alternative 2 meets some of the project objectives, as it will improve the roadway structure and implements a "complete street" approach by taking non-motorized users into consideration. While maintaining four lanes, improvements for bicyclists and pedestrians are accommodated with new and reconstructed facilities without impacts to the motorized levels of service. The addition of new trees in the tree lawn area will visually narrow the roadway and help to facilitate traffic calming through the corridor. This alternative will create a strong connection between existing segments of the Genesee Riverway Trail by providing on-road bicycle lanes and bicycle lanes/trails through the project area.

Alternative 3 meets most of the project objectives and would be the preferred alternative. However, upon receipt of public input, the majority objected to lane reductions. In response, the City decided to progress Alternative 2 as the preferred alternative.

1.8 Who will decide which Alternative is Chosen And How Can I Be Involved In This Decision?

Several coordination meetings with the City have been held, and a Public Information Meeting was held in Fall 2013 at which the general public commented on the project, including its alternatives. An alternative will ultimately be selected by the City of Rochester and the reviewing agencies (NYSDOT and MCDOT), based on the ability of the alternative to meet the project objectives, public input obtained from the information meeting, and the outcome of the traffic analysis which will determine the feasibility of reducing the road from four lanes to two.

Exhibit 1.4
Public Involvement Plan Schedule of Milestone Dates

Activity	Date Occurred/Tentative
Initial Environmental Findings	Summer 2012
In-house DOT scoping meeting	2011
Public Informational Meeting	November 25, 2013
Current Project Letting date	Winter 2015

Additional comments concerning this project should be directed to Rich Koss, City of Rochester Project Manager.

Rochester City Hall
Street Design Division, Rm 300B
30 Church Street
Rochester, New York 14614
(585) 428-6862 or RKOSS@cityofrochester.gov

CHAPTER 2 – PROJECT INFORMATION

2.1 Local Plans for the Project Area

This project is on the approved Transportation Improvement Program (TIP) as project No. H07-08-MN1

There are no approved developments planned within the project area that will impact traffic operations. However, the Eastman Business Park (former portions of Kodak Park), located just south of the project limits, is actively being marketed for industrial re-development and the Port of Rochester Marine project is proposed to the north of the project in Charlotte. The traffic impact study takes these background developments into consideration, and the traffic analysis includes traffic volumes for the growth of Eastman Business Park.

2.2. Abutting Highway Segments and Future Plans for Abutting Highway Segments

The surrounding street segments abutting Lake Avenue consist of Merrill Street and Winchester Street at the southern project limit. In addition, there is signalized intersection for the entrance to Holy Sepulchre Cemetery in the midpoint of the project area.

There are no plans to reconstruct the abutting street segments at this time.

2.3 Transportation Conditions, Deficiencies and Engineering Considerations

2.3.1 Traffic and Safety and Maintenance Operations

2.3.1.1 Functional Classification and National Highway System (NHS)

Exhibit 2.1 Classification Data	
Route	NA
Functional Classification	Urban Principal Arterial
National Highway System (NHS)	Yes
Designated Truck Access Route	No
Qualifying Highway/ Access Highway	Yes (Access Highway, Un-numbered)
Within 1 mile of a Qualifying Highway	Yes, Route 104
Within the 16-foot vertical clearance network	No

2.3.1.2 Control of Access

The corridor is a full access corridor governed by the City of Rochester codes and regulations.

2.3.1.3 Traffic Control Devices

The intersections at Lake Avenue and Merrill Street, and Lake Avenue and the entrances to Holy Sepulchre Cemetery are signalized intersections with traffic devices operated and maintained by Monroe County, with the county being reimbursed to maintain the private signal at Holy Sepulchre. The

intersection of Lake Avenue and Winchester Street is controlled by stop signs on Winchester Street. Posted speed limit signs throughout the corridor are 35 MPH.

2.3.1.4 Traffic Volumes

The Average Daily Traffic Volume (ADT) listed below was obtained from MCDOT. The future ADT was calculated based on a 0.5% annual growth rate and projected new volume from the background development (Eastman Development.)

Exhibit 2.2
Existing and Future Traffic Volumes

	LAKE AVENUE (with 0.5% Annual Growth Only)		LAKE AVENUE (w/ Growth and Estimated Eastman Development)	
Year	**ADT**	**DHV**	**ADT**	**DHV**
Existing (2011)	18,933	3,029	-	-
ETC (2015)	19,122	3,060	19,486	3,118
ETC+20 (2035)	21,035	3,366	21,399	3,424

Note: ETC is the Estimated Time of Completion

Future no-build design year traffic volume forecasts – The Estimated Time of Completion (ETC) + 20 design year was selected per PDM Appendix 5.

2.3.1.5 Level of Service

The existing and future conditions were analyzed using Trafficware software, Synchro 7. Exhibit 2.3 identifies the Arterial Levels of Service (LOS) for the segments between the signalized intersections along Lake Avenue within the study area.

Exhibit 2.3
Corridor Level of Service Summary Table – Existing, Alternatives 2 & 3

	Existing 2011 TWO LANES				Alternative 2 Future ETC TWO LANES				Alternative 3 Future ETC ONE LANE				Alternative 2 Future ETC+20 TWO LANES				Alternative 3 Future ETC+20 ONE LANE			
	AM		PM		AM		PM		AM		PM		AM		PM		AM		PM	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
Merrill to Cemetery	A	B	A	B	A	B	A	B	A	A	B	B	A	B	A	B	A	A	B	B
Cemetery to Wyndham Road	A	A	A	A	A	A	A	A	A	B	B	A	A	A	A	A	A	C	B	A
Arterial Class	I	II	I	II	I	II	I	II	III	III	II	III	I	II	I	II	III	III	II	III
OVERALL	**A**	**A**	**B**	**A**	**A**	**A**	**B**	**A**	**A**	**B**	**B**	**A**	**A**	**A**	**B**	**A**	**A**	**C**	**B**	**B**

Note: Arterial Class is defined by the range of free flow speeds, see Appendix C-3

Alternative 2; 4-Lane Road (Two Lane Analysis)

The existing four-lane Lake Avenue corridor was analyzed with the existing and future ETC and ETC+20 traffic volumes and is represented in Exhibit 2.3 as Alternative 2. To replicate the existing speeds on Lake Avenue, the 85th percentile speed of 47 MPH was used in the analysis. In the northbound direction, the corridor currently operates at a LOS 'A' for the AM Peak hour and at a LOS 'B' for the PM peak hour.

The southbound direction currently operates at a LOS 'A' for both peak hours studied. The corridor is anticipated to continue to operate at current levels of service for the future ETC and ETC+20 scenarios analyzed for Alternative 2. The Speed Reports are included in Appendix C-5

Alternative 3; 2-Lane Road (One Lane Analysis)

Within the project area, the Lake Avenue corridor was analyzed for Alternative 3 with one lane in each direction for the future ETC and ETC+20 scenarios. Link speeds of 35 MPH were used in the future analysis as the "Road Diet" is presumed to reduce the overall travel speed along the corridor. For the future scenarios analyzed with the reduced lane configuration, all links are anticipated to operate at similar levels of service. However, the southbound link between the northern project limits and the Cemetery is anticipated to degrade slightly from a LOS 'A' to a LOS 'B' and a LOS 'C' during the Future ETC and Future ETC+20 AM peak hours, respectively. Similarly, the northbound link between the Cemetery and the northern project limit is anticipated to degrade slightly from a LOS 'A' to a LOS 'B' during the Future ETC and Future ETC+20 PM peak hour scenarios. Overall, it is anticipated that the Lake Avenue corridor would operate at level 'C' or better for the future conditions analyzed with one lane in each direction and left turn lanes at intersecting streets. However, in the free flow sections any traffic signal actuation on the side streets would diminish the conditions during the peak hour periods.

Exhibit 2.4 identifies the Levels of Service (LOS) for the signalized intersections and unsignalized intersections along Lake Avenue within the study area.

Exhibit 2.4
Intersection Level of Service Summary Table – Existing, Alternatives 2 & 3

Intersection	Existing 2011 Two Lanes		Alternative 2 Future ETC Two Lanes		Alternative 3 Future ETC One Lane		Alternative 2 Future ETC+20 Two Lanes		Alternative 3 Future ETC+20 One Lane	
Approach	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Lake Avenue & Merrill Street										
EB L	D (54)	D (51)	D (54)	D (55)	D (54)	D (55)	D (53)	D (55)	D (53)	D (55)
EB TR	D (54)	D (50)	D (53)	D (53)	D (53)	D (53)	D (53)	D (52)	D (53)	D (52)
WB LTR	D (54)	D (50)	D (54)	D (53)	D (54)	D (53)	D (54)	D (53)	D (54)	D (53)
NB L	A (4)	A (2)	A (5)	A (3)	B (10)	A (3)	A (7)	A (3)	B (19)	A (4)
NB T TR	A (3)	A (3)	A (3)	A (5)	A (3)	A (5)	A (3)	A (6)	A (3)	A (6)
SB L	A (4)	A (8)	A (4)	B (10)	A (5)	A (10)	A (5)	B (11)	A (6)	B (12)
SB T TR	A (7)	A (9)	A (7)	B (12)	A (9)	B (13)	A (9)	B (13)	B (15)	B (15)
OVERALL	**A (9)**	**A (8)**	**A (9)**	**B (11)**	**B (10)**	**B (11)**	**B (10)**	**B (11)**	**B (15)**	**B (12)**
Lake Avenue & Winchester Street (Unsignalized)										
EB LR	C (19)	E (45)	C (21)	F (50)	D (28)	F (50)	D (26)	F (65)	E (36)	F (65)
NB L	B (14)	A (9)	C (15)	A (9)	C (15)	A (9)	C (17)	A (10)	C (17)	A (10)
OVERALL	**N/A**		**N/A**		**N/A**		**N/A**		**N/A**	
Lake Avenue & Holy Sepulchre Cemetery										
EB LTR	C (27)	C (31)	C (27)	C (31)	D (55)	E (57)	C (27)	C (29)	D (55)	E (57)
WB LTR	C (27)	C (31)	C (27)	C (31)	E (55)	E (57)	C (27)	C (29)	E (55)	E (57)
NB LT TR	A (2)	A (3)	A (2)	A (3)	-	-	A (2)	A (4)	-	-
NB L	-	-	-	-	C (21)	A (1)	-	-	C (24)	A (1)
NB TR	-	-	-	-	A (4)	A (7)	-	-	A (2)	B (14)
SB LT TR	A (4)	A (1)	A (5)	A (1)	-	-	A (6)	A (1)	-	-
SB L	-	-	-	-	A (1)	A (1)	-	-	A (1)	A (1)
SB TR	-	-	-	-	C (32)	A (2)	-	-	E (64)	A (2)
OVERALL	**A (4)**	**A (2)**	**A (5)**	**A (2)**	**C (26)**	**A (6)**	**A (5)**	**A (3)**	**D (49)**	**B (11)**

Lake Avenue & Merrill Street
This intersection is currently signalized. However, without signalization, the eastbound left-turn movement and the westbound approach for this intersection are anticipated to "fail" for the future ETC and ETC+20 conditions during the weekday morning and weekday evening peak hours. Additionally, the delay for the northbound left-turn movement is anticipated to increase during the AM peak hour from a LOS 'A' to a LOS 'C' (which is acceptable) due to the limited number of gaps presumed in southbound AM traffic flow. However, the unsignalized capacity analysis often exaggerates the delay. The actual delay conditions will most likely going be less than predicted by the capacity analysis. Additionally, the volume to capacity (v/c) ratio on the side street is low (0.34) which is an indication that they will not back up.

Lake Avenue & Winchester Street
Although this intersection is currently unsignalized, the eastbound approach is anticipated to fail during the weekday evening peak hour for the background (two-lane) ETC and ETC+20 scenarios. With the traffic signal removed from the intersection of Lake Avenue and Merrill Street, the delay for the eastbound approach during the weekday evening peak hour is anticipated to increase further for the future ETC and ETC+20 scenarios for Alternative 3 (one-lane). Additionally, without the gaps created by the adjacent signal to the south, excessive queues are projected to occur on Winchester Street. As noted above, the unsignalized capacity analysis often exaggerates the delay. The volume to capacity (v/c) ratio on the side street is low (0.34) which is an indication that they will not back up. The actual delay conditions will most likely going be less than predicted by the capacity analysis.

Lake Avenue & Holy Sepulchre Cemetery
This intersection is currently signalized. However, without signalization the westbound approach is anticipated to "fail" for the future ETC and ETC+20 conditions for Alternative 3 (one-lane) during the weekday morning and weekday evening peak hours. The eastbound approach is anticipated to "fail" during the weekday morning peak hour for the future ETC and ETC+20 conditions for this alternative. As noted above, the unsignalized capacity analysis often exaggerates the delay. The volume to capacity (v/c) ratio on the side street is low (0.34) which is an indication that they will not back up. The actual delay conditions will most likely going be less than predicted by the capacity analysis.

2.3.1.6 Work Zone Safety & Mobility

A. Work Zone Traffic Control Plan

Two-way traffic will be maintained at all times via lane shifts within the existing paved area. No off site detours will be required. Three phases are assumed, as follows:

- Construct the east side, near to the centerline, while maintaining a minimum pavement width of 22-ft for 2-way traffic on the west side.
- Shift the 2-way traffic onto the newly constructed east side. Construct the west side, near to the centerline, and maintain a minimum pavement width of 22-ft for 2-way traffic on the east side.
- Shift NB traffic to the east curb lane; shift SB traffic to the west curb line. Construct the center pavement /median area.

Routes for emergency vehicles will be maintained and open during construction. The details for the work zone traffic control will be prepared and evaluated during final design.

B. Special Provisions

Due to the ability to maintain traffic with acceptable delays during the daylight hours, night time construction will not be utilized. The use of time related provisions will be evaluated during final design. The work zone traffic control will need to be coordinated with local officials and property owners.

C. Significant Projects (per 23 CFR 630.1010)

As defined in 23 CFR 630.1010, a significant project is one that, alone or in combination with other concurrent projects nearby is anticipated to cause sustained work zone impacts. There are no other significant transportation system projects planned for the area.

A Maintenance and Protection of Traffic Plan (MPT) will be prepared for the project consistent with 23 CFR 630.1012.

2.3.1.7 Safety Considerations, Accident History and Analysis

A three-year accident analysis was performed in accordance with NYS Highway Design Manual Chapter 5 and Monroe County DOT policies and procedures. The accident reports were reviewed for a three-year period between November 1, 2008 and October 31, 2011. The purpose of the accident analysis was to determine patterns of accidents and high accident locations that may be mitigated by the proposed improvements within the study area.

Within the time period studied, accidents occurred at the following intersections:

- Lake Avenue @ Merrill Street
- Lake Avenue @ Winchester Street
- Lake Avenue @ Holy Sepulchre Cemetery
- Lake Avenue @ Riverside Cemetery

Accidents occurred on Lake Avenue within the following midblock locations:

- Winchester Street to Holy Sepulchre Cemetery
- Holy Sepulchre Cemetery to Riverside Cemetery
- Riverside Cemetery to the northern project limit (600 ft south of Burley Road)

In the 1 mile corridor of Lake Avenue between Merrill Street and the northern project limit (600 ft south of Burley Road), sixty-seven (67) reportable accidents occurred within the three-year study period. Approximately 49% of the accident types that occurred within the project area were rear-end and overtaking collisions. However, improvements to the lighting and the pavement surface along the corridor are countermeasures that can be applied to all the types of accidents that occurred within the project limits.

There are no high accident locations (HALs) within the study area.

The severity and predominate accident types are summarized in Exhibits 2.5 and 2.6.

Exhibit 2.5
Summary of Accident Severity
Lake Avenue, From Merrill Street to Burley Road

Type of Collision	Number	Percentage
Fatal	0	0
Injury	15	22
Property Damage	52	78
Non-Reportable (<$1,000 damage)	0	0

Exhibit 2.6
Accident Type Summary
Lake Avenue, From Merrill Street to Burley Road

Type of Collision	Number	Percentage
Rear End	18	26.9
Overtake	15	22.4
Right Angle	5	7.5
Left Turn	4	6.0
Head On	3	4.5
Sideswipe	3	4.5
Pedestrian	2	3.0
Parked Vehicle	1	1.5
Backing	1	1.5
Run off the Road	12	17.9
Animal	3	4.5

Refer to Appendix C for the accident analysis, collision summaries and diagrams, accident average rate comparisons, and recommendations for improvements.

The accident analysis recommends consideration of the following countermeasures:

- Lake Avenue and Holy Sepulchre Cemetery
  The pattern of rear-end accidents at the signalized intersection could indicate there is a need to improve the traffic signal timing or to provide a protected/permitted left turn phase. Removing the signal is also an option that could reduce the occurrence of this type of accident.

Intersection of Lake Ave and Holy Sepulchre Cemetery (northbound).

- Lake Avenue from Winchester Street to Holy Sepulchre Cemetery
  Overtaking accidents and rear-end accidents were the most common types of accidents within this section of Lake Avenue. Overtaking accidents may be mitigated with corridor improvements which reduce the number of lanes in each direction to single lanes. However, rear-end accidents may be more likely with a reduced lane configuration.

- Lake Avenue from Holy Sepulchre Cemetery to Riverside Cemetery
  Accidents involving vehicles running off the road occurred most frequently within this midblock section. This type of accident may be mitigated with pavement improvements and enhanced lighting.

2.3.1.8 Ownership and Maintenance Jurisdiction

The City of Rochester owns and maintains Lake Avenue.

2.3.2 Multimodal

2.3.2.1 Buses

The Rochester Genesee Regional Transportation Authority (RGRTA) provides RTS bus service along Lake Avenue within the project limits. This section of Lake Avenue is part of the 1/1X route which provides service from downtown Rochester to the Port of Rochester at the northern terminus of Lake Avenue in Charlotte.

Between Merrill Street and Burley Road there are five (5) bus stops along the west side and four (4) along the east side. Only one of these bus stops includes a bus shelter, which is located across the street from the St. Bernard's Park apartment complex. The bus shelter is comprised of the same stone material as the wall along Holy Sepulchre Cemetery, and is likely mainly used by the apartment residents which take the bus southbound. Currently, these residents must cross four lanes of traffic without a crosswalk or pedestrian signal to assist them.

2.3.2.2 Pedestrians

Pedestrians are currently accommodated via concrete sidewalks on either side of Lake Avenue, separated from the roadway by grassed tree lawns of varying width. Existing sidewalk widths are as follows:

West Side:
Merrill Street to Burley Road = 5-ft.

East Side:
South of Merrill Street to Merrill Street = 5-ft.
Merrill Street to 300' South of Burley Road = 8-ft.
300' South of Burley Road = 5-ft.

The existing sidewalks will be replaced, where needed, with new concrete sidewalks which will maintain pedestrian accommodations throughout the corridor. High visibility crosswalks will also be incorporated at the major roadway intersections, as well as at the crossing from the St. Bernard's Park apartment complex to the bus stop located on the west side of Lake Avenue and across the driveway approaches at the signalized intersection of Holy Sepulchre Cemetery.

In 2011, the Monroe County Department of Transportation (MC DOT) evaluated conditions for pedestrians at the St. Bernard's Park Apartment complex to determine if additional traffic control devices were appropriate. The study included field reviews of the area, a gap study and pedestrian count of pedestrians crossing Lake Avenue during weekday AM and midday periods, a spot speed study of traffic on Lake Avenue, and review of the accident history for a five year period through November 30, 2010.

The complex has 150 apartments for seniors, a medical doctor's office, an adult day care, and a home health care agency. There is an RTS bus stop and shelter for southbound traffic located on the west side of Lake Avenue opposite St. Bernard's. Southbound RTS buses also enter the site at various times on weekdays, and on weekends to pick up passengers. There are existing advance pedestrian warning signs for northbound and southbound traffic on Lake Avenue.

Results:

- The accident history review did not reveal any significant accident patterns; there were no accidents involving pedestrians crossing Lake Avenue.
- Gaps in the two-way traffic stream on Lake Avenue were inadequate (less than one gap per minute) for pedestrians to cross without excessive delay.
- Warrants for installation of a pedestrian activated traffic signal or the criteria for installation of a marked crosswalk across Lake Avenue were not met due to minimal pedestrian activity.

Recommendations:

- Based on the findings, installation of a pedestrian activated traffic signal was not recommended.
- To improve pedestrian safety, MC DOT recommended one of the following alternatives:
    1. Reroute the RTS bus route to drop off/pick passengers within the complex site.
    2. If the RTS on-site pick-up location cannot be adjusted, a marked crosswalk across Lake Avenue could be considered, though this would not increase gaps.
    3. A pedestrian refuge center median constructed as part of the reconstruction project should be considered as a desirable pedestrian treatment. This feature would greatly increase gaps for pedestrians to cross Lake Avenue, and function as a traffic calming gateway between the Charlotte area neighborhoods to the north and the Eastman Kodak area neighborhoods to the south.

The April 12, 2011 MC DOT study report and a memo dated May 2, 2014 regarding sight distance is included in Appendix C.

2.3.2.3 Bicyclists

Bicycle lanes/trails will be incorporated throughout the project area. Six foot bicycle lanes will be constructed along both sides of the roadway to provide a connection to the bicycle lanes just south of the project limits at Merrill Street. At a point just north of Winchester Street, the bicycle lanes will transition to a 5 ft bicycle lane/trail along the east and west sides of the street with a tree lawn buffer along a majority of the project to the signalized intersection of Lake Avenue and Holy Sepulcher Cemetery. A two way bicycle lane/trail will continue northward to the northern limit of the project area, where a direct connection to the Genesee Riverway Trail may be made. The City of Rochester is coordinating to improve trail signage which may or may not be included in this project.

2.3.3 Infrastructure

2.3.3.1 Design Standards

The design criteria for this project is based on the NYSDOT Highway Design Manual, Chapter 2, and modified per the City of Rochester code where applicable.

2.3.3.2 Critical Design Elements

Exhibit 2.7
Critical Design Elements for Lake Avenue

PIN:	4754.38	NHS (Y/N):	Yes
Route No. & Name:	Lake Avenue	Functional Classification:	Urban Principal Arterial
Project Type:	Reconstruction	Design Classification:	Urban Arterial (*HDM Exhibit 2-4*)
% Trucks:	2	Terrain:	Level
ADT:	18,000	Truck Access/Qualifying Hwy.	Neither

	Element	Standard	Existing Condition	Proposed Condition
1	Design Speed	30 - 40 mph	35 mph	35 mph
2	Lane Width	11' minimum	11'	10'/11'/12'
3	Shoulder Width	0' minimum, 1 - 2' Desirable (left shoulder) 5' minimum (right shoulder for bike lane) Sections 2.7.2.2 Table 2-4	0'	6' Rt. (Bike Lane) / 0' (5' Off Street Bike Lane)
4	Maximum Grade	7% HDM Section 2.7.2.2 E, Exhibit 2-4	1.3%	1.3%
5	Horizontal Curvature	371' (@ e = 4.0%) HDM Section 2.7.2.2 F, Exhibit 2-4	1050'	1050'
6	Superelevation Rate	4% Maximum HDM Section 2.7.2.2 G	N/A	N/A
7	Stopping Sight Distance	250' Minimum HDM Section 2.7.2.2 H, Exhibit 2-4	275'	275'
8	Horizontal Clearance	HDM Section 2.7.2.2 I	2.5'	2.5'
9	Vertical Clearance	N/A	N/A	N/A
10	Travel Lane Cross Slope	1.5% Min. to 2% Max. HDM Section 2.7.2.2 K	3%	2% / 3%
11	Rollover	4% between travel lanes; 8% at edge of traveled way; HDM Section 2.7.2.2 L	NA	NA
12	Structural Capacity	N/A	-	-
13	Pedestrian Accommodation	5' wide sidewalk Complies with HDM Chapter 18 and ADAAG	Sidewalk	Sidewalk
14	Median Width	N/A	None	0' to 8'' wide
15	Bicycle Accommodation	5' minimum	None	6' / 5'

(1) The posted speed limit is 35 mph. As noted in previous sections, the 85th percentile speed is currently 48 mph and the project goal is to reduce the 85th percentile speed to the posted speed.

2.3.3.3 Other Design Parameters

There are no other controlling elements.

2.3.3.4 Existing and Proposed Street Plan and Section

Refer to the existing and proposed pavement sections in the Appendix A.

2.3.3.5 Non Standard/Non Conforming Features

The proposed design alternatives include non standard 10' travel lanes between Merrill Road and Winchester Road to transition from 11'travel lanes to the 10 ' widths installed on the completed City project to the south.

The existing travel lane cross slope is 3%, and is non-conforming. Where possible, the proposed design alternative will modify the cross slope to conform to the HDM standards. However, approximately 3,300 LF of curb along the eastside of the street will be preserved along Lake Avenue to minimize project impacts to utilities and the existing features within and adjacent to the right of way The 3% cross slope will therefore be retained on one side of the street, so existing cross section conditions can be matched and impacts minimized.

2.3.3.6 Pavement and Shoulder Conditions

The streets surface and subsurface are in poor condition. Extensive alligator cracking is present.

Based on the pavement cores taken, the pavement structure varies in course thickness and base material as noted below.

Asphalt top course:	1.5-3.5 inches
Asphalt binder course:	1.5-5 inches
Asphalt base/concrete base course:	5-12 inches
Subbase material:	11-12 inches, material varies: crushed stone; medium to fine sand, some fine gravel, little silt; weathered / broken concrete

The roadway does not include shoulders, but rather is divided into travel lanes from curb to curb (primarily, 4 11-ft. wide travel lanes). Existing pavement widths are as follows:

Section	Pavement width (feet)
Merrill Street to 170' North of Winchester Street	64
170' North of Winchester Street to 490' North of Winchester Street	Varies 64 to 44
490' North of Winchester Street to 900' South of Burley Road	44
900' South of Burley Road to 500' South of Burley Road	46
500' South of Burley Road to 350' South of Burley Road	Varies 46 to 41
350' South of Burley Road to Burley Road	41

2.3.3.7 Drainage Systems

Drainage is poor. The existing storm sewer system will be retained, with modification and repairs made as necessary based on condition assessment.

2.3.3.8 Geotechnical

There are no special geotechnical concerns with the soils or rock within the project area. Geotechnical investigations were completed in August 2012. Based on the borings taken, there appears to be no indication of bedrock, soft soil, organic matter or free groundwater in the project area. Results of the corings and bores are included in Appendix D.

DIPRA (Ductile Iron Pipe Research Association) 10-point tests were taken as part of the Geotechnical investigations to determine the corrosion potential of the soil. The results will be used to determine the recommended water main material and if any corrosive preventative measures are required.

2.3.3.9 Structures

There are no structures within the project limits.

2.3.3.10 Hydraulics of Bridges and Culverts

There are no bridges or culverts within the project limits.

2.3.3.11 Utilities

Water

MCWA owns and operates a 36" DIP water main along this section of Lake Avenue. The main is located within the east side of the pavement from Merrill Street and crosses over to the west side of the pavement approximately 250 feet north of Merrill Street. From that point it extends northerly to approximately 350 feet north of Winchester Street where it then heads westerly within the Holy Sepulchre Property. The main was installed in 2002 as part of a MCWA water main replacement project.

The City of Rochester Water Bureau owns and operates several water mains along this section of Lake Avenue.

There is an 8" cast iron water main from Merrill Street to approximately 350 feet north of Winchester Street. The main primarily runs down the center of the pavement and was originally constructed in 1905.

There is a 12" water main from Merrill Street to approximately 150 feet north of Winchester Street. The main runs down the east side of Lake Avenue within the existing pavement. The water main was originally constructed in 1953.

There is a 16" main from Winchester Street to Burley Road. This main primarily runs along the west side approximately 5 feet from the western curb line. According to the record mapping the main was installed in 1986 and 1990.

There are existing 8" water mains along Merrill Street and Burley Road as well as an existing 12" water main along Winchester Street.

Storm Sewer

Along this section of Lake Avenue storm water runoff is collected via a closed drainage system that primarily runs along the east side within the existing pavement. Storm water runoff is collected in catch basins along this section of Lake Avenue and outlets to two primary points.

The first outlet point at the south end of project, at Merrill Street, there is an existing 5'-6" segmental block storm sewer which runs easterly along Merrill Street and crosses over Lake

Avenue where it intersects a 7' concrete pipe along the east side of the intersection. The 7' concrete pipe extends easterly where it outlets into the Genesee River approximately 350 feet from Lake Avenue. Storm water along Lake Avenue from Merrill Street to approximately 1800 feet north of Merrill Street (adjacent to St. Bernard's) is conveyed into the 7' outfall pipe via a series of pipes ranging in size from 12" to 30".

The second outlet point is located along the old railroad right of way approximately 350 feet south of Burley Road. Storm water along Lake Avenue from approximately 2100' north of Merrill Street (at the northern end of St. Bernard's) to 350 feet South of Burley Road is again collected in catch basins and conveyed in the outlet pipe via a series of pipes ranging from 12" to 18". The closed drainage system extends approximately 2000 feet easterly along the old railroad right of way and outlets to a ditch which in turn outfalls to the Genesee River.

Sanitary Sewer

There is an existing sanitary sewer system that runs between Merrill Street and 900 feet north of Winchester Street. The sewer system runs along the west side of Lake Avenue, within the existing pavement, between Merrill Street and Winchester Street. Approximately 150 feet north of Winchester Street the sanitary sewer traverses easterly and continues northerly in the east side tree lawn where it connects with the system that originates from the cemetery property along the east side of Lake Avenue. The sanitary sewer system pipes range in size from 4" to 12".

On this section of sanitary sewer there are two pump stations which service the system. The first is located on the cemetery property along the east side of Lake Avenue. This pump station discharges waste to the manhole located in the east side tree lawn area approximately 900 feet north of Winchester Street. From that manhole waste is gravity fed until it reaches the second pump station located at the Merrill Street/Lake Avenue intersection where it then continues southward along Lake Avenue. According to record plan provided from Rochester Pure Waters the pump station was originally constructed in the 1920's. The wet well and dry (pump) pit are within a 13' x 13' concrete structure, the center of which is approximately 45 feet south of and 9.5 feet west of the center of the Lake-Merrill intersection. When Lake Ave was widened in 1953, an access tunnel (4'x6' interior dimensions) was extended from the pump station to the tree lawn area west of the pump station. There is an aluminum hatch between the curb and sidewalk at the southwest corner of the Lake-Merrill intersection which provides access to the pump station via a 3'x4' tunnel. The RG&E meter for the pump station is located in a cabinet adjacent to the access hatch.

There is a second sanitary sewer system which originates approximately 100 feet south of Burley Road and continues northward along Lake Avenue. The sanitary sewer is an 8" sewer and is located towards the center of the existing pavement along the east side. In addition to the sanitary sewers that run along Lake Avenue there also are two 8" sanitary sewers on Merrill Street as well as a 12" sanitary sewer on Winchester Street. These side street sanitary sewers connect to the sanitary sewers along Lake Avenue.

Gas

Rochester Gas & Electric owns and operates the existing gas system along Lake Avenue. From Merrill Street to approximately 150 feet north of Merrill Street there is an existing 16" cast iron gas main which was installed in 1913 that runs along the eastern edge of pavement. The 16" gas main transitions to a 12" wrapped steel main and continues beneath the east side sidewalk where it then crosses Lake Avenue at the Winchester Street intersection. The 12" wrapped steel gas main, which was installed in 1972, continues the entire length of Lake Avenue between Winchester Street and Burley Road primarily located between the existing sidewalk and the cemetery stone wall along the west side of Lake Avenue.

In addition to the existing gas main along Lake Avenue, RG&E has gas facilities along the intersecting side streets as well. There is an 8" P.E. gas main which was installed in 1996 along Merrill Street, a 4" P.E. gas main which was installed in 1988 along Winchester Street.

Electric

Between Merrill Street and Burley Road electric facilities are primarily located underground. The underground electric system runs primarily beneath the existing sidewalk on the east side except at the north end near Burley Road where it is located in the existing pavement area. On the west side the existing underground electric system consists of two systems with one located beneath the existing sidewalk and the other primarily located in the tree lawn area with the exception of the section from Merrill Street to 250 feet north of Winchester Street, where the system is located in the existing pavement area.

There are also overhead electric facilities along the east side of Lake Avenue between Merrill Street and 100' north of Winchester Street. At the main cemetery entrance there is one overhead electric crossing. At Burley Road there is overhead electric along the east side. The overhead electric facilities within the project limits are mounted on RG&E owned and maintained wood utility poles.

Street Lighting

The existing street lighting system is owned and maintained by the City of Rochester. The existing system consists of metal poles with davit arms and cobra style luminaires. The metal poles range in height from 30' to 35'. The luminaires have 150 watt HPS lamps that provide an average light level of 0.87 +/- foot-candles (fc) along the corridor. The lighting system is fed by an underground conduit system that is primarily located along the east side of Lake Avenue within the existing tree lawn area.

At the northern end toward Burley Road the lighting system consists of black fiberglass poles with decorative ancestral style luminaires. The lighting along this section of Lake Avenue was installed as part of a previous Lake Avenue improvement project.

Cable Television

Time Warner owns and maintains an underground cable system along Lake Avenue from Winchester Street to Burley Road. The system is primarily located along the west side of Lake Avenue adjacent to the existing stone cemetery wall. At the northern end there is a roadway crossing which continues the underground system down the backside of the properties along Burley Road. At Burley Road, along Lake Avenue, the system also continues down the west side within the existing tree lawn area.

In addition to underground facilities on Lake Avenue, Time Warner also has underground cable along Winchester Street. The existing underground facilities on Winchester Street are located along the south curb line.

Time Warner also has overhead cable between Merrill Street and Winchester Street. The overhead cable is mounted on the RG&E owned wood utility poles along the east side of Lake Avenue.

Telephone

Frontier Telephone has both underground and overhead facilities along Lake Avenue.

The overhead facilities are between Merrill Street and Winchester Street mounted on the RG&E owned wood utility poles along the east side of Lake Avenue.

The underground facilities are located primarily along the west side of Lake Avenue from approximately 150 feet north of Winchester Street and terminate at an existing wood utility pole located approximately 450 feet south of Burley Road. There are also underground telephone facilities along the east side from approximately 150 feet north of Winchester Street to the St. Barnard's apartment complex building.

Fiber Optic

FiberTech has two locations where they own and maintain underground fiber optic lines. The first is at the Winchester Street intersection. Their underground cable is located along the east side of Lake Avenue / Winchester Street intersection, it extends from the existing RG&E manhole located in the east side tree lawn area to the wood utility approximately 20 feet south of the manhole. The second location is at the St. Bernard's property, the existing fiber optic cable originates from the RG&E manhole located approximately 260 feet north of the front entrance to the seminary and extends easterly to provide service to the building.

Monroe County Department of Transportation (MCDOT) has fiber optic facilities extending the entire length of the project from Merrill Street to Burley Road. The fiber optic facilities are primarily located along the west side of Lake Avenue within the tree lawn area. The fiber optic cables are between 2 feet and 4 feet deep and located in a 4" PVC conduit. At the south end between Merrill Street and Winchester Street the fiber optic facilities are within the shared duct system with City of Rochester street lighting.

Utility Coordination
Each of the utilities/agencies has been contacted and advised of the project. Each was requested to verify locations of existing facilities, and to submit planned facility improvements. Utility/ Agency coordination will continue throughout the preliminary, design and bidding phases.

2.3.3.12 Right of Way

The right of way width varies through the project area.

Street Section	Right-of-way width, ft.
• Merrill Street to 1100' North of Winchester Street	100
• 1100' North of Winchester Street to 1800' South of Burley Road	99
• 1800' South of Burley Road to 1200' South of Burley Road	Varies from 110 to 97.5
• 1200' South of Burley Road to 370' South of Burley Road	97.5
• 370' South of Burley Road to Burley Road	93

• Merrill Street	66
• Winchester	50
• Burley Road	50

2.3.3.13 Landscaping/Environmental Enhancement

The existing green areas on both sides of the roadway will be maintained, and street trees will be planted in the tree lawns on both sides of the street. The central median may also receive landscape treatment which will be determined as part of final design.

2.4 Miscellaneous

2.4.1 Railroads

There are no railroads within the project limits, and no at-grade crossings within ½ mile that could impact traffic conditions.

2.4.2 Parking Regulations

Parking is restricted on the west side of Lake Avenue between Merrill Street and Winchester ("No Parking 7AM –6PM"). Between Winchester Street and the Burley Road area, Lake Avenue is unsigned, though there were no observations of any on-street parking at any time during numerous site visits.

Chapter 3 – Social, Economic and Environmental Considerations

3.0 Introduction

The purpose of this chapter is to identify the social, economic and environmental consequences of this project, to identify avoidance or mitigation measures if necessary, to satisfy the applicable social, economic, and environmental laws and to identify all permits and approvals required. This project proposes to improve Lake Avenue from Merrill Street to 600' south of Burley Road in the City of Rochester, Monroe County, New York. An Environmental Checklist for which this project was screened is included in Appendix B.

3.1 National Environmental Policy Act (NEPA):

The proposed project meets the criteria established for a NEPA Class II, Programmatic Categorical Exclusion in accordance with 23 CFR 771.117d. Class II actions that do not individually or cumulatively have a significant environmental effect are excluded from the requirement to prepare an Environmental Impact Statement (EIS) or an Environmental Assessment (EA). The NEPA checklist is included in Appendix E. Programmatic Categorical Exclusions do not require FHWA's concurrence.

3.2 State Environmental Quality Review Act (SEQRA)

The City of Rochester is the SEQRA lead agency as per 17 NYCRR Part 15 "Procedures for Implementation of State Environmental Quality Review Act", Section 15.5.

The City has determined that this project is a SEQRA Type II Action in accordance with 17 NYCRR, Part 15. No further SEQRA processing is required. The project has been identified as a Type II action, per 17 NYCRR Section 15.14, Subdivision (e), Item 37, Paragraph (v). This permits the project to be classified as Type II since the project does not violate any of the criteria contained in subdivision (d) of Section 15.14, and is of a scale and scope illustrated by the following:

> (v) minor reconstruction or rehabilitation of existing highways within existing right-of-way, or involving minimal right-of-way acquisition.

Specifically, the project **does not** include or result in:

1. The acquisition of an occupied dwelling or business structure;
2. Significant changes in passenger or vehicle traffic volumes, vehicle mix, local travel patterns or access;
3. More than minor social, economic or environmental effects upon occupied dwelling units, businesses, abutting properties or other established human activities;
4. Significant inconsistency with current plans or goals that have been adopted by local government bodies;
5. Physical alteration of more than 1 ha (2.5 ac) of publicly owned or operated park land, recreational area or designated open space;
6. An effect on a district, building, structure or site eligible for, or listed on, the National Register of Historic Places;
7. More than minor alteration of, or adverse effect upon, any property, protected area, or natural or man-made resource of national, State or local significance, including but not limited to:
    (i) Wetlands and associated areas;
    (ii) Floodplains;
    (iii) Prime or unique agricultural land;

(iv) Agricultural districts, when more than one acre may be affected;

(v) Water resources, including lakes, reservoirs, rivers and streams;

(vi) Water supply sources;

(vii) Designated wild, scenic and recreational rivers;

(viii) Unique ecological, natural wooded or scenic areas;

(ix) Rare, threatened or endangered species;

(x) Any area designated as a critical environmental area;

8. Requirement for an indirect air source quality permit.

3.3 Additional Environmental Information –

3.3.1 Social Consequences

The purpose of this section is to discuss the social environment of the project corridor. The project includes the Lake Avenue corridor from Merrill Street to 600' south of Burley Road which is a developed area at low to moderate density. The proposed build alternatives will involve the full depth reconstruction of Lake Avenue on existing alignment, the replacement of granite curbs along the west side of the corridor, and as needed the replacement of existing sidewalks along the entire corridor and increased green space. Alternative 2 includes adding dedicated bike lanes and improving pedestrian accommodations through the project corridor.

3.3.1.1 Land Use

Demographics and Affected Population

The project area is developed at low to moderate density. The project corridor is primarily surrounded by Holy Sepulchre Cemetery and Riverside Cemetery. The exceptions include: the Saint Bernard's Park Apartments, Park Place at Saint Bernard's, and Unity Family Medicine at Saint Bernard's all of which are located along the southeast portion of the project corridor on the campus of the former Saint Bernard's Seminary; single family houses are located in the southwest/southeast corner of the project corridor.

Comprehensive Plans and Zoning

This project is compatible with the City of Rochester master plans. The project objectives are consistent with the City of Rochester's goals relating to streets, sidewalks and infrastructure.

3.3.1.2 Neighborhoods and Community Cohesion

The project will not divide neighborhoods, isolate part of a neighborhood, generate new development or otherwise affect community cohesion.

Home and Business Relocations

Since this project involves the reconstruction of an existing highway on predominately the existing alignment and does not require the acquisition of occupied dwellings/businesses, it will not cause adverse impacts upon neighborhood character and stability. The proposed alternative would require no displacement of residences or businesses and therefore there would be no relocation impacts.

3.3.1.3 Social Groups Benefited or Harmed

Elderly and/or Disabled Persons or Groups

The project would not adversely impact any particular social, minority or special interest group. During construction activities there may be delays for the residents of Saint Bernard's Park Apartments and individuals going to Park Place at Saint Bernard's adult day care facility. Access will be maintained for both of these facilities so there will be no effects on seniors and/or disabled persons other than

construction noise and traffic. Upon completion the improvements to the sidewalk facilities and crosswalks will benefit the residents of Saint Bernard's Park Apartments. Likewise, the project will not have a disproportionately high and adverse health and environmental effect on minority or low income-income populations.

Transit Dependent, Pedestrians, and Bicyclists

The corridor currently rates very low on the "Existing Bicycling Conditions" map contained in the City of Rochester Bicycle Master Plan. Lake Avenue, throughout the entire length of the project corridor, gets a rating of an E for current bicycle level of service. The "Existing Bicycling Conditions" map rates streets on a scale from A to F with A being the best and F being the worst.

Alternative 2 and Alternative 3 would improve the pedestrian facilities and provide bike lanes on both sides of the roadway for the majority of the project corridor.

Low Income, Minority and Ethnic Groups (Environmental Justice)

The project corridor is not located within an Environmental Justice Area. No impact is anticipated to potential environmental justice areas.

3.3.1.4 Changes in Travel Patterns or Accessibility

Alternative 1 would have no impact at all as it in the no-build alternative.

Alternative 2 will have a limited impact. It will remain on the same alignment but will improve the infrastructure for both vehicles and pedestrians.

Alternative 3 will have the most impact with the proposed reduction in through traffic lanes from 4 lanes to 2 lanes and the addition of a center median. This will slow traffic speed conditions and will likely result in a slight increase in commuter travel time within the project corridor. The improvement of sidewalks and addition of crosswalks and bike lanes will benefit pedestrians and bicyclists.

Impacts on Police, Fire Protections and Ambulance Access

The proposed project will not permanently adversely impact emergency vehicle access. Alternatives 1 and 2 will not alter the number of existing travel lanes and will not impact access for emergency vehicles. Alternative 3 proposes a reduction in through traffic lanes from 4 lanes to 2 lanes. Bicycle lanes and a center median with mountable curb are included in this alternative to provide access for emergency vehicles. Emergency response time to calls along Lake Avenue may temporarily increase due to construction components. Clear and frequent communication with all local emergency service organizations is recommended during construction.

Impacts on Highway Safety, Traffic Safety, and Overall Public Safety

The proposed project will not adversely impact highway safety, traffic safety or overall public safety. Alternatives 1 and 2 will not permanently alter the existing travel patterns and will not have an effect on highway safety, traffic safety or overall public safety. Alternative 3 proposes a reduction in through traffic lanes from 4 lanes to 2 lanes and the addition of a center median. The lane reduction and center median is proposed as a traffic calming measure addressing speed and safety conditions. This alternative is expected to have a long term positive impact on highway safety, traffic safety and overall public safety.

3.3.1.5 School Districts, Recreational Areas, and Places of Worship

School Districts

The proposed project is within the Rochester City School District. No schools are located within or adjacent to the project corridor. One building within the project corridor was formerly the home of Saint Bernard's Seminary but it has not been used as a school since 1981.

Recreational Areas

A highly utilized multi-use trail – the Genesee Riverway Trail – runs along the west side of the Genesee River Gorge, and can be accessed to the south and north of the project limits. The Riverway Trail does not continue alongside the river gorge in the vicinity of the project area due to steep topography. Instead trail users connect to the disparate segments of the Riverway Trail via the sidewalk along the east side of Lake Avenue between Eastman Avenue and a point just south of Burley Road. During construction activities there may be some issues for trail users. The long term effects will be positive due to sidewalk/bicycle facility improvements along the project corridor.

Places of Worship

Dewey Avenue Presbyterian Church exists at the corner of Christian Avenue and Dewey Avenue which is adjacent to the project corridor at the southwest corner of the project limit. People from surrounding neighborhoods congregate at this church on a weekly basis. During construction there may be delays for some motorists traveling through the project corridor. However, the church is accessible from all directions with the use of surrounding roads. The delay in accessibility during construction would be temporary and relatively minor.

3.3.2 Economic

The project will have no affect on the economic environment of the project corridor.

3.3.2.1 Regional and Local Economies

The proposed project is not expected to alter the general population or encourage new development that would stimulate economic activity and alter the economic viability within the project limits. Therefore, no significant impacts are anticipated for the regional and local economies.

3.3.2.2 Business Districts

Effects on Business Districts

There are no established business districts within the project limits. However, the Eastman Business Park is located just south of the project corridor. The project considers and accommodates the projected traffic volume growth associated with the park.

3.3.2.3 Specific Business Impacts

Established Businesses

Businesses that exist along the corridor are limited to Holy Sepulchre Cemetery, Riverside Cemetery, and Park Place at Saint Bernard's adult daycare, Saint Bernard's senior housing, and Unity Family Medicine at Saint Bernard's. During construction, customers and employees may experience temporary inconvenience; however access to all businesses will be maintained throughout the construction phase.

Effects Assessment

There will be minor impacts to established businesses during project construction. Businesses located along the project corridor may see lower levels of traffic during the construction operations. However, none of these businesses are dependent on drive-by traffic for business. Other than impacts directly relating to project construction, the business climate along Lake Avenue is not expected to experience appreciable changes.

3.3.3 Environmental

3.3.3.1 Wetlands

State Freshwater Wetlands

There are no NYSDEC regulated freshwater wetlands within the project area, as per the NYSDEC Freshwater Wetlands Map, Rochester West Quadrangle, and the NYSDEC online Environmental Resource Mapper. No further investigation is required.

Federal Jurisdiction Wetlands

The National Wetlands Inventory (NWI) online mapper accessed from the United States Fish and Wildlife Service (USFWS) indicated that there are no federally regulated wetlands within the project limits.

The National Resources Conservation Service (NRCS) Web Soil Survey of the project location indicated the presence of non-hydric soils.

A field visit was conducted on June 19, 2012. Observations of the vegetation present at the project location indicate that non-hydrophytic vegetation is present. No further investigation is required.

3.3.3.2 Surface Waterbodies and Watercourses

There are no surface waters within the project corridor. No further review is required.

3.3.3.3 Wild, Scenic, and Recreational Rivers

There are no rivers within the project corridor. Therefore, no further review is required regarding State Wild, Scenic and Recreational River or National Wild and Scenic Rivers. However, the Genesee River is located just east of the Lake Avenue corridor. Access to the Riverway Trail is located at the northern end of the project limits.

3.3.3.4 Navigable Waters

There are no navigable waters within the project corridor. Therefore, no further review regarding navigable waters is required.

3.3.3.5 Floodplains

The FEMA map panels for the project corridor (36055C0184G & 36055C0182G) indicate that the project corridor is designated as Zone X. The areas of minimal flood hazard, which are the areas outside the Special Flood Hazard Area (SFHA) and higher than the elevation of the 0.2-percent-annual-chance flood, are labeled Zone C or Zone X (unshaded). As it is designated as Zone X the project corridor is an area of minimal flood hazard. No further review is required.

3.3.3.6 Coastal Resources

According to NYS DOS “List of Approved Coastal Local Waterfront Revitalization Programs (LWRPs),” dated March 2007, the proposed project is located in a Local Waterfront Revitalization Area. The City of Rochester has an approved Local Waterfront Revitalization Program (LWRP). Coordination with the City of Rochester will be required, including a notification that the project will occur within the boundaries of its LWRP, and requesting the municipality’s coastal consistency determination.

3.3.3.7 Groundwater Resources, Aquifers, and Reservoirs

Aquifer

NYSDEC aquifer GIS data indicate that the proposed project is not located in a Primary Water Supply or Principal Aquifer Area. No further review is required.

A review of the EPA designated Sole Source Aquifer map for Region 2 indicates that Monroe County is not located within a Sole Source Aquifer System. No further review is required.

Unconfined Aquifer

The USGS Numbered Series map from the Water-Resources Investigations Report entitled "Potential Yields of Wells in Unconsolidated Aquifers in Upstate New York, Finger Lakes Sheet," dated 1988, indicates there are no designated confined or unconfined aquifers within the project area.

Toler Analysis

Because the project is not located above an aquifer and does include an increase in lane miles, a Toler Analysis is not necessary.

3.3.3.8 Stormwater Management

It is not expected that the project will result in changes to the overall surface water drainage patterns and will not significantly increase pavement surface area. Alternative 2 will maintain the existing roadway width throughout the corridor. Alternative 3 proposes a reduction in through traffic lanes from 4 lanes to 2 lanes and the addition of a center median, which will create "green space" for surface water to be absorbed. An increase in the surface water runoff rates and volumes are not expected for either build alternative.

During construction, storm water runoff from exposed soil surfaces may flow into the existing surface conveyance system and subsequently into adjacent surface water streams. These flows will be managed by the use of sediment and erosion control techniques. These techniques will be part of a sediment and erosion control plan to be implemented during construction and will conform with the requirements of the NYS Department of Transportation "Standard Specification for Temporary Soil Erosion and Water Pollution Control" and the "NYS Guidance for Urban Erosion and Sediment Control," which will be a part of the final contract documents.

It is expected that the proposed project will result in a total area of disturbance that will exceed the designated disturbance threshold of 1-acre. Therefore, a Stormwater Pollution Prevention Plan will be required in accordance with NYSDEC State Pollution Discharge Elimination System General Permit for Stormwater Discharges from Construction Activity, and a Notice of Intent (NOI) submitted to the NYSDEC. It is anticipated that the SWPPP will be developed as part of the final design.

3.3.3.9 General Ecology and Endangered Species

Federal Listed Threatened or Endangered Species

The National Oceanic and Atmospheric Administration (NOAA) division of National Marine Fisheries Service (NMFS) and the United States Fish and Wildlife Service (USFWS) share the responsibility for managing federally listed threatened and endangered species. NOAA division of NMFS manages marine and anadromous species while the USFWS typically manages land and freshwater species. There are no waterbodies within the project limits; therefore, further coordination with NOAA-NMFS is not required. The USFWS online Monroe County list of species was reviewed. The bog turtle is a threatened species with known or likely occurrence in Riga and Sweden Townships; since the proposed project is not in Riga or Sweden Townships further coordination with USFWS is not required.

State Listed Threatened or Endangered Species

The New York State Department of Environmental Conservation (NYSDEC) was contacted for information regarding the presence of state listed threatened, endangered or special concern species that may be impacted by the proposed project. A response from the NYSDEC was received on May 29, 2012 indicating, "We have no records of rare or state listed animals or plants, significant natural communities or other significant habitats on or in the immediate vicinity of your project site". No further review is required.

A copy of applicable correspondence is included in Appendix B of this report.

3.3.3.10 Critical Environmental Areas

The project corridor falls within a Critical Environmental Area which is defined as: Land within 100' of the Genesee River, Barge Canal, Lake Ontario or River Gorge except in manufacturing industrial zone Critical Environmental Area (CEA). According to the City of Rochester code, if the project is considered a Type II action, further review regarding Critical Environmental Areas is not required. The improvements to Lake Avenue are considered a Type II action per section 48-5.B.(3) "Street maintenance, reconstruction or rehabilitation work and underground utility work within the existing street right-of-way." Therefore additional coordination regarding Critical Environmental Areas is not required.

3.3.3.11 Historic and Cultural Resources

National Register of Historic Places

Records from the New York State Historic Preservation Office (SHPO) and National Register of Historic Places were reviewed for listed historic properties that may be impacted by the proposed project. There is one State Listing on the National Registry which is adjacent to the project corridor:

St. Bernard's Seminary 2260 Lake Avenue, Rochester

Project components will not impact this Nationally Registered State Listing.

Archaeological Resources

The project corridor is located within an archeologically sensitive area per the New York State Office of Parks, Recreations and Historic Preservation internet map. Project component will be limited to areas that have been previously disturbed.

Conclusion

It is anticipated that project components will occur within previously disturbed land. However, since there is a Nationally Registered State Listing adjacent to the project corridor and since the project corridor is considered an archeologically sensitive area, further coordination with SHPO may be required. A Phase 1A Cultural Resources Reconnaissance Survey may be warranted.

Project review requests were prepared and submitted to the NYSDOT Region 4 SHPO liaison for review and submittal to the New York State Office of Parks Recreation and Historic Preservation. Project documents were submitted to the NYS OPR&HP. A letter dated October 19, 2012 was received from them stating their findings that there will be "No Adverse Effect upon cultural resources in or eligible for inclusion the Nations Registers of Historic Places." Therefore, no further review or action regarding Section 106 of the National Historic Preservation Act is necessary. Applicable documentation is included in Appendix B.

3.3.3.12 Parks and Recreational Resources

A highly utilized multi-use trail – the Genesee Riverway Trail – runs along the west side of the Genesee River Gorge, and can be accessed to the south and north of the project limits. The Riverway Trail does not continue alongside the river gorge in the vicinity of the project area due to steep topography. Instead, trail users connect to the disparate segments of the Riverway Trail via the sidewalk along the east side of Lake Avenue between Eastman Avenue and a point just south of Burley Road. Although sidewalk rehabilitation and reconstruction is proposed, efforts will be made to maintain and accommodate pedestrian and bicycle traffic during construction thus minimizing impacts to trail users. The long term effects will be positive due to sidewalk/bicycle facility improvements along the project corridor.

3.3.3.13 Visual Resources

The implementation of this project will result in positive visual impacts to the immediate visual environment.

3.3.3.14 Farmlands

State Farmland and Agricultural Districts

Based on a review of the NYS Agricultural District Maps for Monroe County, the proposed project is not located in or adjacent to an Agricultural District.

Federal Prime and Unique Farmland

The proposed project activities will not convert any prime or unique farmland, or farmland of state or local importance, as defined by the USDA Natural Resources Conservation Service, to a nonagricultural use. No further review is required.

3.3.3.15 Air Quality

An Air Quality Analysis is not necessary since the project will not increase traffic volumes, reduce source-receptor distances, or change other existing conditions to such a degree as to jeopardize attainment of the National Ambient Air Quality Standards.

During construction, air quality is most affected by the increase of airborne particulates (dust). This increase is sporadic and temporary in nature and would be most noticeable in the area immediately adjacent to construction. The impacts can be minimized by the use of dust control provisions found in the NYSDOT Standard Specifications for Construction.

3.3.3.16 Energy

The proposed project will not have an impact on energy usage.

3.3.3.17 Noise

The project will not significantly change either the horizontal or vertical alignment, or increase the number of through-traffic lanes. Therefore, this project is not a Type I project and does not require a traffic noise analysis as per 23 CFR 772.

3.3.3.18 Asbestos

An asbestos screening was conducted for the proposed project. The purpose of the screening was to identify suspect asbestos containing materials (ACM) that have the potential to be impacted by project construction. This screening included a review of available records. A copy of records reviewed is available upon request.

Record Review

Sanitary and Storm Sewer: The following record drawings were reviewed;

- 'Department of Public Works, Division of Engineering, Lake Avenue Sanitary Sewer Reconstruction, Merrill to Winchester Street', dated October 1953,
- 'R.P.W.D. 1930-023-01245-064-05-0', dated July 1934,
- 'R.P.W.D. 1930-024-01245-064-05-0', dated September 1934,
- 'City of Rochester Department of Public Works, Sewer Design Section, City Mile Square 64', dated September, 1966 and
- 'City of Rochester Department of Public Works, Sewer Design Section, City Mile Square 54', dated September 1966. The following information was obtained:

    - From Merrill Street to approximately the south entrance to Saint Bernard's Seminary the storm and sanitary sewers are separate systems that run parallel. The sanitary system travels east to a pump station. The remaining portion of the project contains only the storm system.
    - The existing 12-inch, 15-inch, 18-inch, and 24-inch storm sewer pipe line is vitrified tile.

- The existing 8-inch and 12-inch sanitary sewer is vitrified tile.

Conclusion(s): Vitrified tile is not a suspect asbestos containing material. No other suspect asbestos containing materials were identified.

Gas and Electric: A request for underground gas and/or electric maps for planning purposes were requested of Rochester Gas and Electric Corporation (RGE) by TY Lin International for the project corridor. In response, RGE provided Gas Map #'s 316, 318, 320, and 322 and Electric Map #'s 48.22 – 48.30 were reviewed.

- Gas Map #s 316 – 322, dated October 4, 2011: Gas mains exist on the west side of Lake Avenue. The sizes include 6, 8, and 12 inches in diameter. All mains are wrapped steel and have various installation dates beginning in 1972.
- Electric Map #s 48.22 – 48.29 dated September 14, 1992 and 48.30 dated September 23, 2003: There is underground electric along the project corridor. The size of the ducts include 3 ½, 4, 4 ½, and 5-inch diameter. The materials are identified as PVC duct, fiber duct, iron duct, transite duct and kordite duct.

Conclusion(s): Wrapped steel is a suspected asbestos containing material associated with gas mains. Transite and kordite are suspected asbestos containing materials associated with electrical ducts. No other suspect asbestos containing materials were identified.

Water Main: The drawing titled '36" Water Main Replacement, Lake Avenue STA.0 + 00A to STA.9 + 20A, City of Rochester', dated December 2001 identifies the following:

- The existing water main along the project corridor runs from south of Merrill Street to north of Winchester Street then turns west out of the project corridor. There is a 36-inch main composed of Ductile Iron and Pre-stressed Concrete Cylinder Pipe.

Conclusion(s): Ductile iron and pre-stressed concrete cylinder pipe are not suspect asbestos containing materials. No other suspect asbestos containing materials were identified.

Asbestos Screening Conclusions and Recommendations

An asbestos screening was conducted for the proposed project. Available records were reviewed for suspect asbestos containing materials.

The existing gas main is composed of wrapped steel which is a suspect asbestos containing material. If this utility is to be impacted by the proposed project, it is the responsibility of RGE to test for the presence of asbestos and remove/dispose of materials according to State and Federal Regulations.

Some of the existing underground electrical ducts are composed of transite and kordite which are suspect asbestos containing materials. If this utility will be impacted by the proposed project, it is the responsibility of RGE to test for the presence of asbestos and remove/dispose of materials according to State and Federal Regulations.

Due to the nature of the proposed project, it is recommended that an Asbestos Assessment be conducted by NYSDOL certified inspectors in accordance with the requirements of Code Rule 56 and NYSDOT protocols.

3.3.3.19 Hazardous Waste and Contaminated Materials

Introduction

A Hazardous Waste/Contaminated Materials (HW/CM) Screening was conducted for the project corridor. This screening included a review of available records and a project corridor site walkover conducted on

June 18, 2012. The purpose of this screening is to identify potential areas of environmental concern that may be disturbed during construction of the proposed project.

Environmental Data Resources (EDR)

A review of local, State and Federal environmental databases was conducted. EDR Inc. was contracted to provide a comprehensive review of Federal, State and local listed data on potential hazardous waste sites within the project vicinity. This data search was performed in accordance with ASTM E-1527-05 standards. The use of the EDR resource allows for a comprehensive listing of sites of potential concern. The following table summarizes the information available through the EDR report and the subsequent findings of this search.

Table 3-1: Environmental Records Review

STANDARD Environmental Record Sources	Minimum Search Distance: ASTM Standard- Miles	No. of Listed Properties[1] (summarized from the EDR Report)
Federal NPL Site List	1.0	0
Federal Delisted NPL Site List	1.0	0
Federal CERCLIS List	0.5	0
Federal CERCLIS NFRAP Site List	0.5	0
Federal RCRA CORRACTS Facilities List	1.0	0
Federal RCRA non-CORRACTS TSD Facilities List	0.5	0
Federal RCRA Generators List	0.25	1
Federal Institutional Control/ Engineering Control Registries	0.5	0
Federal ERNS List	TP	0
State and Tribal Hazardous Waste Sites – equivalent NPL	1.0	0
State and Tribal Hazardous Waste Sites – equivalent CERCLIS	1.0	3
State and Tribal Landfill and/or Solid Waste Disposal Site Lists	0.5	0
State and Tribal Leaking Storage Tank Lists	0.5	8
State and Tribal Historic Leaking Storage Tank Lists	0.5	0
State and Tribal Registered Storage Tank Lists	0.25	5
State and Tribal Institutional Control/Engineering Control Registries	Site only	0
State and Tribal Voluntary Cleanup Sites	0.5	0
State and Tribal Brownfield Sites	0.5	0
Additional Environmental Records		
Local Brownfield lists-US Brownfields	0.5	0
Local Lists of Registered Storage Tanks-HIST UST	0.250	2
Records of Emergency Release Reports		
NY Spills	0.125	4
NY Historic Spills	0.125	4

Table 3-1: Environmental Records Review

STANDARD Environmental Record Sources	Minimum Search Distance: ASTM Standard- Miles	No. of Listed Properties[1] (summarized from the EDR Report)
Other Ascertainable Records		
RCRA-Non Gen	0.250	2
MANIFEST	0.250	3
DRYCLEANERS	0.250	0

Sites may be listed in more than one database.

EDR Findings Overview

Thirty-two (32) properties were indentified in the EDR report within a one mile radius of the project corridor. In most cases, the majority of sites can be eliminated from further review due to one or more of the following:

- Project components are minor and it is likely that contamination will not be present
- Distance from the site in relation to the project corridor
- The contaminant of concern is non-persistent or a gas. An example is a release of chlorine gas inadvertently released in the past and contamination has been diluted
- The issue/spill was minor in nature and cleaned up immediately. An example is antifreeze from a car accident
- The site is in the EDR report due to legal disposal records where no violation was reported.

The following properties indicated in the EDR report are adjacent to, or within the project corridor and therefore were thoroughly reviewed. The following table contains information relating to the sites and an environmental concern determination.

Table 3-2 Identified Sites

EDR ID #	Site Name	Address	Spill #	Spill Date	Spill Close Date	Environmental Concern: Y/N
2	Former Saint Bernard's Seminary	2260 Lake Avenue	9012771	3/13/91	3/14/91	N
B3	2063 Lake Avenue	2063 Lake Avenue	9970178	6/22/99	6/22/99	N
A7	Holy Sepulcher Cemetery	2461 Lake Avenue	9609758	11/5/96	6/25/03	N
11	Private Residence	115 Burley Road	9600875	4/15/96	4/23/96	N

EDR Conclusion

Thirty-two (32) sites were identified by the EDR report within a one mile radius of the project corridor. Four (4) sites identified by EDR adjacent to, or within the project corridor. After further review of those sites it has been determined that none of the sites pose an environmental concern to the proposed project.

Kodak Park East (KPE) is an industrial area located on the southern border of the project corridor. This area has a history of heavy contamination in the groundwater and bedrock with methylene chloride. The site is divided into 2 operable units that represent a portion of a remediation program. Operable Unit 1 (OU1) is in the northeast section of KPE and is bordered by Merrill Street to the north. Due to the close

proximity to the project corridor it is recommended that soil screening take place during construction activities at the south end of the project corridor from Merrill Street to the southern edge of Holy Sepulcher cemetery.

Aerial Photography Review

Aerial photos of the project location were reviewed for the following years: 1985, 1980, 1966, and 1958. No items of environmental concern were identified with regard to the proposed project.

Historical Sanborn Map Review

Sanborn Maps are utilized as part of the HW/CM Screening since they serve as an historical reference to prior land use. Sanborn maps from 1971, 1967, 1950, 1924, and 1911 were reviewed. No items of environmental concern were identified with regard to the proposed project.

EDR City Directory Review

EDR was contracted to develop a City Directory Abstract of the project corridor. The City Directory is a useful tool for identifying past land use. The City Directory was developed by EDR utilizing the Polk's Directory by R.L. Polk Co. Publishers to identify businesses along the project corridor for the years 2004 and 2011.

The City Directory Abstract was reviewed. No sites of concern were identified with regard to Hazardous Waste and Contaminated Materials.

Historical Plat Map Review

Plat Maps are utilized as part of the HW/CM Screening since they serve as an historical reference to prior land use. Available Plat Maps of the project corridor were reviewed.

- Volume Four Plat Book of the City of Rochester, compiled under the direction of and published by G. M. Hopkins Co. Publishers, Copyrighted 1936, Plate 29 and Plate 31 were reviewed. No items of environmental concern were identified.
- Plat Book of the City of Rochester, N.Y. and vicinity compiled under the direction of and published by G. M. Hopkins Co. Publishers, Copyrighted 1918, Plate 43 and Plate 42 were reviewed. No items of environmental concern were identified.
- Town of Greece, Copyrighted 1902 by J. M. Lanthrop and Roger H. Pidgeon, was reviewed. No items of environmental concern were identified.

Project Site Walkover

The HW/CM Screening included a walkover of the project corridor, conducted on June 18, 2012. During the site walkover it was observed that there is a pole mounted transformer between Winchester and Merrill Streets and a ground level transformer located on the Saint Bernard's Seminary property; however there are no signs of leaks or issues associated with them. Paint is present on the metal fence along the Riverside Cemetery border; this paint is assumed to contain lead. No other items of concern were identified.

HW/CM Screening Conclusions/Recommendations

Available records were reviewed and a site visit was conducted to screen for the potential of hazardous waste and/or contaminated materials within the project corridor that may be disturbed by project construction. Although unlikely, chlorinated solvent contamination may be encountered during construction in the vicinity of Merrill Street, therefore it is recommended that this location be called out on the plans and a specification be added to the contract documents for the screening, segregations, sampling and potential disposal of contaminated soil associated with the KPE, OU1 site.

Overall Conclusion

As with any environmental assessment in areas where subsurface testing was not completed, the possibility of unknown subsurface contamination exists. Should suspect materials be encountered during the course of project execution, appropriate measures should be taken to report such contamination, determine the nature and extent of any possible hazardous materials and for proper management of such materials. Provisions will be included within the construction documents that will require the contractor to properly dispose of any contaminated materials during construction.

3.3.3.20 Construction Impacts

Noise, dust and delays are inevitable but temporary impacts of construction. However, increased noise will be limited to the hours outlined in the City Noise Ordinance. Dust will be controlled by the Contractor's adherence to "dust control" specifications, and delays due to lane reduction will be minimal via phased construction to maintain two-way traffic. During the construction period, pedestrian access will be maintained throughout the corridor on either the east or west side of the roadway, with appropriate signage to direct pedestrians. Upon completion of the project, travel patterns and accessibility will return to normal.

3.3.3.21 Anticipated Environmental Permits/Certifications, Detailed Studies and Agency Coordination

- Notice of Intent (NOI) for coverage under NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from General Construction Activity (Permit No. GP-0-10-001)
- Development of a Storm Water Pollution Prevention Plan (SWPPP)
- Asbestos Assessment
- Coordination with the City of Rochester regarding:
  - Coastal Resources

APPENDICES