Midtown Corridor Transitway Alternatives Analysis

APPENDIX A Cultural Resources Literature Review and Concepts Analysis

10/18/2013

Prepared by the SRF Consulting Group Team

CULTURAL RESOURCES LITERATURE REVIEW AND CONCEPTS ANALYSIS FOR THE MIDTOWN CORRIDOR TRANSITWAY ALTERNATIVES ANALYSIS, MINNEAPOLIS, HENNEPIN COUNTY, MINNESOTA

SRF Project No. 7863 SHPO File No. Pending 106 Group Project No. 1721

Prepared for: SRF Consulting Group, Inc. One Carlson Parkway North Suite 150 Plymouth, MN 55447

> Submitted by: The 106 Group Ltd. The Dacotah Building 370 Selby Avenue St. Paul, MN 55102

> > Report Author: Saleh Miller, M.S.

October 2013

Executive Summary

A cultural resources literature review and concepts analysis was conducted to inform the Midtown Corridor Transitway Alternatives Analysis (AA). Projects that apply to receive federal funds must comply with Section 106 of the National Historic Preservation Act, as amended (Section 106); and with other applicable state mandates such as the Minnesota Historic Sites Act, Minnesota Field Archaeology Act, and Minnesota Private Cemeteries Act. To comply with Section 106, potential impacts to historic properties must be taken into account during project planning and design. Section 106 requires federal agencies to consider the effects of their actions on historic properties before undertaking a project.

Three proposed alternatives are being studied in the AA: Enhanced Bus on Lake Street, Double/Single Track Rail in the Midtown Greenway, and a Dual alternative which is a combination of the alternatives. Within the Midtown Greenway lies the Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District which is listed in the National Register of Historic Places (NRHP) and includes many historic bridges and other contributing resources. Lake Street, although not an NRHP-listed or eligible corridor, has several properties that are listed in or are eligible for listing in the NRHP sited along the corridor. Since the Midtown Corridor has been extensively studied for cultural resources, the focus of this analysis was to: 1) determine how elements of the proposed alternatives, such as vertical access to street level within the Greenway or overhead catenary systems for rail, may impact historic properties; 2) identify alternative designs that may minimize impacts; and, 3) evaluate the proposed alternatives to balance the potential impacts to historic properties while meeting the purpose and need of the project. The cultural resources review for the AA will provide preliminary cultural resources information and focuses on known cultural resources within the corridor to aid in evaluating the proposed alternatives, but does not include a systematic survey to identify or evaluate any unknown resources along the corridors. More detailed investigations to determine the NRHP eligibility of resources that may be affected by the proposed project would be part of future stages of the project to support the National Environmental Policy Act (NEPA) and Section 106 processes.

The literature review identified almost 500 previously inventoried cultural resources within the study areas for the three alternatives. Of these previously inventoried resources, there are no previously listed or eligible archaeological sites, nor any previously identified Native American mound sites, burial grounds, or Traditional Cultural Properties (TCPs). However, there are 53 previously NRHP-listed and 69 previously determined eligible architectural history properties. A large percentage of the previously listed properties consist of the Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District and its associated resources. A large percentage of the previously determined eligible properties consist of the Grand Rounds, Lake of the Isles Residential, and Lyndale Corners historic districts and their associated resources.

Based on the results of the literature review, it appears that the Dual alternative and the Double/Single Track Rail alternative both have the potential to impact the greatest amount of known cultural resources. The number of previously NRHP-listed and eligible cultural resources only indicates what is already known about the study areas and is not indicative of how many currently unknown

archaeological sites and architectural history properties may be located within the study areas; therefore, the true impacts to all potential cultural resources cannot be known at this time. Once the project moves into the next stage and specific improvements of the project have been defined, an area of potential effect (APE) can be developed for the project. The APE would then need to be surveyed to identify archaeology sites and architectural history properties that may be eligible for listing in the NRHP to comply with Section 106 and NEPA. Effects to NRHP-listed and eligible properties would then need to be assessed.

Based on the results of the concepts analysis, it appears that the Dual alternative would have the potential to impact the greatest amount of known cultural resources. This is mainly due to the potential for direct and indirect impacts on the NRHP-listed Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District from the Double/Single Track Rail alternative and the potential for indirect impacts on individually listed and eligible properties, and three eligible historic districts from the Double/Single Track Rail and Enhanced Bus alternatives.

Table of Contents

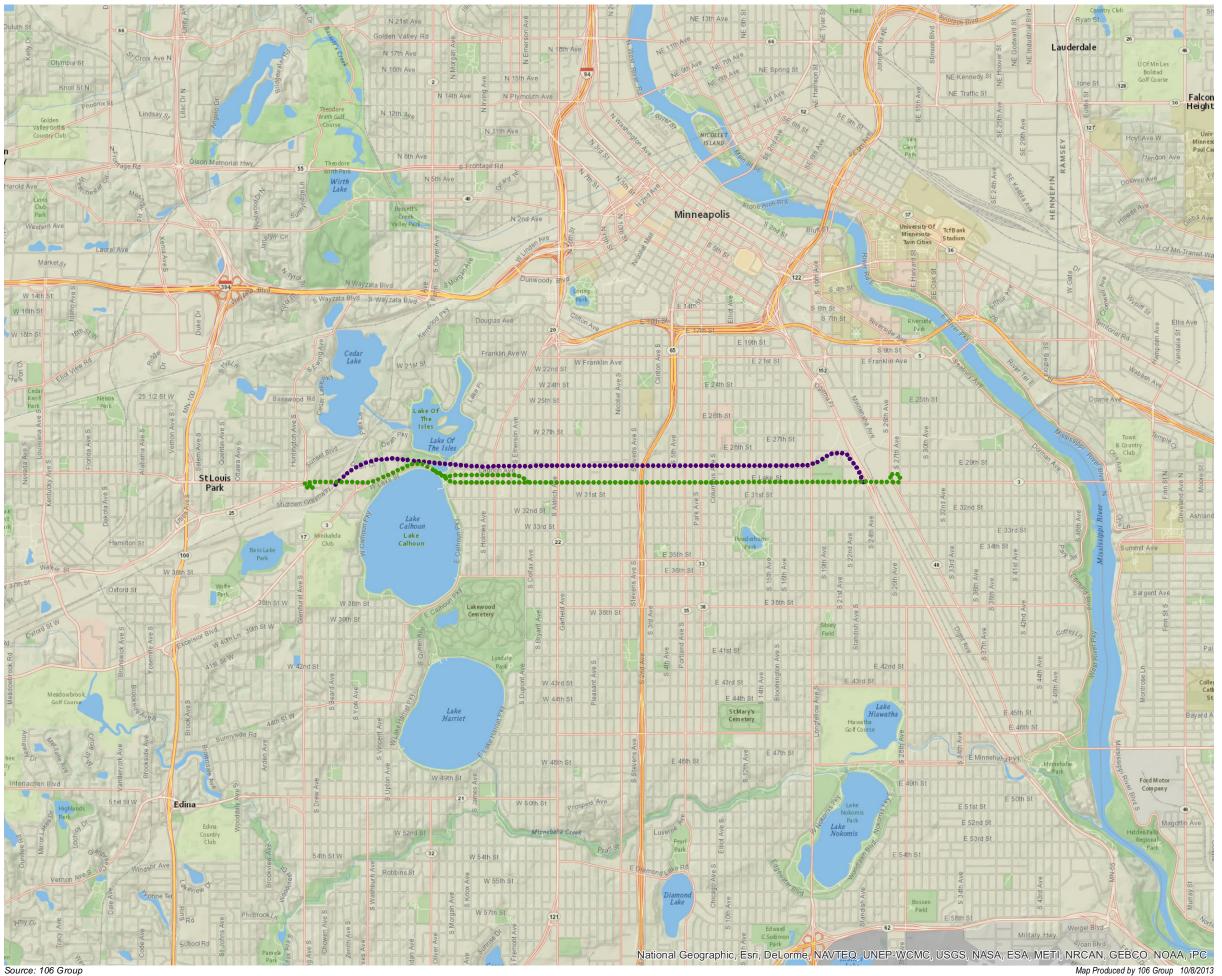
Executive Summary	i
Introduction	
Methodology	
Objectives	
Study Area	
Background Research	6
Cultural Resources Literature Review	7
Previous Archaeology Studies	7
Previous Architectural History Studies	8
Previously Identified Cultural Resources	9
Concepts Analysis	13
Enhanced Bus Alternative	13
Double/Single Track Rail Alternative	
Recommendations	22
Literature Review	22
Concepts Analysis	22
Next Stages	23
References Cited	25
APPENDIX A: PREVIOULSY LISTED AND DETERMINED ELIGIBLE ARCHITECTURAL HISTO APPENDIX B: PROJECT PERSONNEL	DRY PROPERTIES
Tables	
Table 1. Previous Archaeology Studies	7
Table 2. Previous Architectural History Studies	
Table 3. Cultural Resources Literature Review Results	
Figures	
Figure 1. Project Location	2
Figure 2. Study Areas	
Figure 3. Previously Listed and Eligible Architectural History Properties	

Introduction

A cultural resources literature review and concepts analysis was conducted to inform the Midtown Corridor Transitway Alternatives Analysis (AA). Projects that apply to receive federal funds must comply with Section 106 of the National Historic Preservation Act, as amended (Section 106); and with other applicable state mandates such as the Minnesota Historic Sites Act, Minnesota Field Archaeology Act, and Minnesota Private Cemeteries Act. To comply with Section 106, potential impacts to historic properties must be taken into account during project planning and design. Section 106 requires federal agencies to consider the effects of their actions on historic properties before undertaking a project.

Three proposed alternatives are being studied in the AA: Enhanced Bus on Lake Street, Double/Single Track Rail in the Midtown Greenway, and a Dual alternative which is a combination of the alternatives (Figure 1). Within the Midtown Greenway lies the Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District which is listed in the National Register of Historic Places (NRHP) and includes many historic bridges and other contributing resources. Lake Street, although not an NRHP-listed or eligible corridor, has several properties that are listed in or are eligible for listing in the NRHP sited along the corridor. Since the Midtown Corridor has been extensively studied for cultural resources, the focus of this analysis was to: 1) determine how elements of the proposed alternatives, such as vertical access to street level within the Greenway or overhead catenary systems for rail, may impact historic properties; 2) identify alternative designs that may minimize impacts; and, 3) evaluate the proposed alternatives to balance the potential impacts to historic properties while meeting the purpose and need of the project. The cultural resources review for the AA will provide preliminary cultural resources information and focuses on known cultural resources within the corridor to aid in evaluating the proposed alternatives, but does not include a systematic survey to identify or evaluate any unknown resources along the corridors. More detailed investigations to determine the NRHP eligibility of resources that may be affected by the proposed project would be part of future stages of the project to support the National Environmental Policy Act (NEPA) and Section 106 processes.

This report describes project methodology, development of study areas, literature review results, analysis of initial design concepts, and recommendations of potential cultural resources impacts. Appendix A contains a table of all previously listed and determined eligible architectural history properties located within the study areas. Appendix B contains a list of project personnel.



Midtown Corridor Transitway Alternatives Analysis Cultural Resources Literature Review and Concepts Analysis Minneapolis, Hennepin County, Minnesota

•••• Enhanced Bus Alternative

•••• Double / Single Track Rail Alternative





Project Location

Methodology

Objectives

The primary objectives of this investigation were to: 1) identify archaeological sites, Native American mound sites, burial grounds, Traditional Cultural Properties (TCPs), and architectural history properties that are located within the study areas that are previously listed in or eligible for listing in the NRHP to aid in determining the potential of each alternative to impact significant known resources; 2) determine how the proposed project elements may impact historic properties to try to identify designs that may minimize impacts to historic properties; and 3) evaluate the proposed alternatives to balance the potential impacts to historic properties. All work was conducted in accordance with the State Historic Preservation Office's (SHPOs) *Guidelines for History/Architecture Project in Minnesota* (SHPO 2010), SHPO Guidelines for Archaeological Projects in Minnesota (Anfinson 2005), and The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation [48 Federal Register 44716-44740] (National Park Service 1983).

Study Area

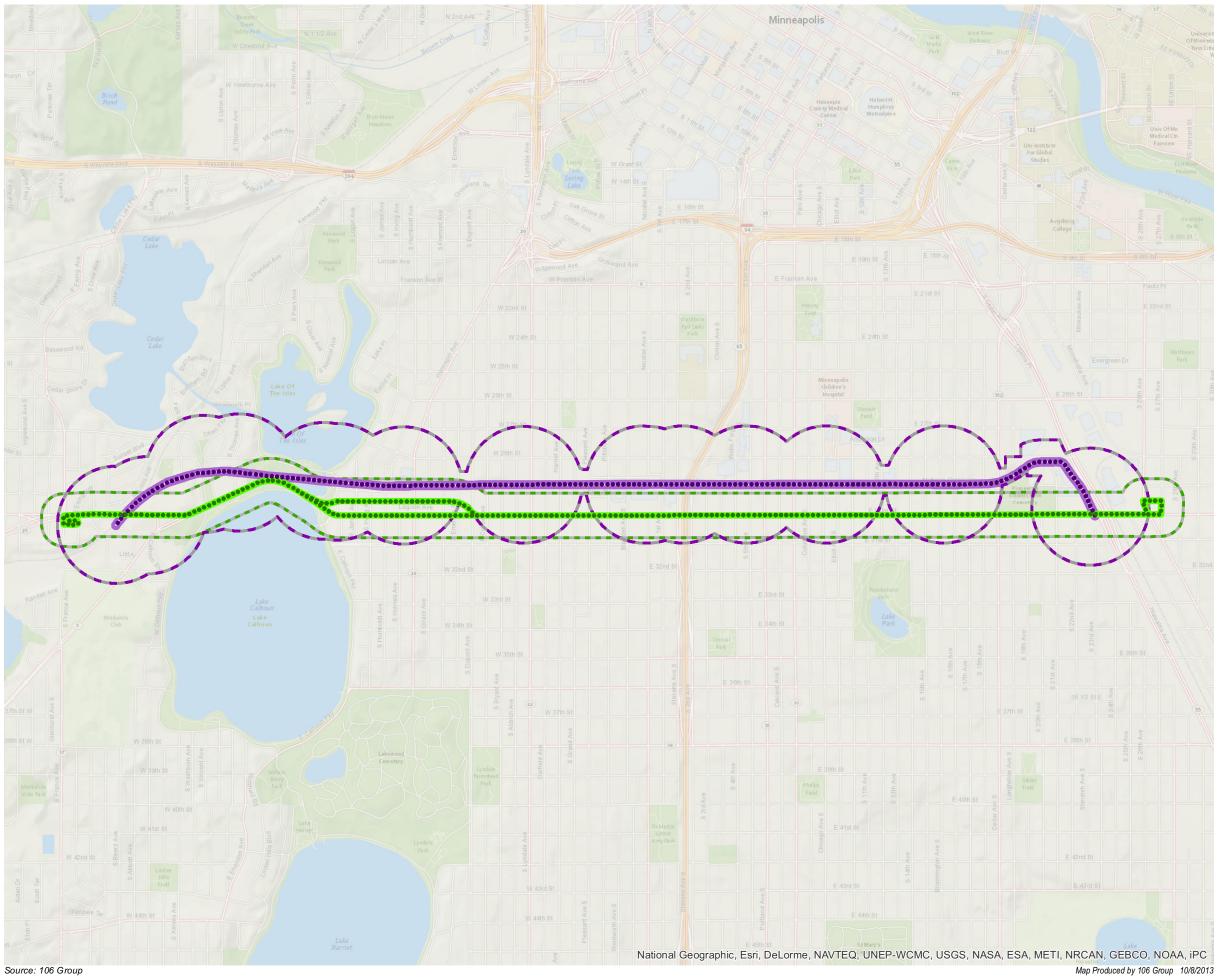
The potential effects to cultural resources are different for the Enhanced Bus and the Double/Single Track Rail alternatives. Therefore, for the purposes of this cultural resources study the potential effects associated with each alternative has been analyzed in order to develop an appropriate study area for archaeology and architectural history resources (Figure 2). These study areas will identify the area where cultural resources have the potential to be impacted by the proposed alternatives based on available design information. In addition, they may inform the development of an appropriate area of potential effect (APE) during future stages of the project when the plans for the alternatives are better defined to support compliance with NEPA and Section 106.

Enhanced Bus Alternative

The potential effects from the Enhanced Bus alternative on this existing transportation corridor include potential increases in noise and vibrations due to increased bus traffic, potential visual effects from proposed stations, and potential direct effects associated with construction or other ground-disturbing activities. In heavily developed urban areas, which comprise most of this corridor, the potential indirect effect of proposed transit corridors is less because there is already significant vehicular traffic.

Archaeology

Based on the Enhanced Bus concepts dated August 29, 2013 and Curbside Platform Station Layout concepts dated September 4, 2013, the potential for direct effects associated with construction or other ground-disturbing activities associated with the corridor and stations would likely not extend beyond 100 feet from the centerline of Lake Street. Therefore, an archaeology study area of 100 feet on either side of the roadway centerline for the Enhanced Bus alternative and stations is appropriate (see Figure 2). The archaeology study area for the Enhanced Bus alternative covers approximately 43.0 acres (17.4 hectares [ha]).



Midtown Corridor Transitway Alternatives Analysis Cultural Resources Literature Review and Concepts Analysis

Minneapolis, Hennepin County, Minnesota

•••• Enhanced Bus Alternative

•••• Double / Single Track Rail Alternative

Study Areas

Enhanced Bus Alternative - Archaeology

Enhanced Bus Alternative - Architectural History

Double / Single Track Rail Alternative - Archaeology

Double / Single Track Rail Alternative - Architectural History



1:26,000





Study Areas

Architectural History

An appropriate study area for architectural history properties accounts for any physical, auditory, atmospheric (air quality), or visual impacts to historic properties. Based on a review of the proposed concepts, an architectural history study area for the Enhanced Bus alternative of 500 feet on either side of the roadway centerline will be sufficient to encompass all direct and indirect effects because the Enhanced Bus alternative would operate within mixed traffic on the existing roadway, and use the existing lanes.

Based on Curbside Platform and Station Layout concepts dated September 4, 2013, the proposed Enhanced Bus stations will likely include curb extensions; widened sidewalk areas; a platform raised three inches above the existing sidewalk; five feet wide ramps up to the platform from the sidewalk; and a bus shelter approximately eight feet in height, four feet in width, and varying from eight to 16 feet in length. Proposed stations would also have a 500 foot study area on either side of the roadway centerline because potential direct and indirect effects would be similar to the corridor and it is assumed that any development/redevelopment near the stations would remain focused on the corridor. The architectural history study area for the Enhanced Bus alternative covers approximately 632.5 acres (255.9 ha).

Double/Single Track Rail Alternative

The potential effects from the Double/Single Track Rail alternative on this existing corridor include potential increases in noise and vibrations due to the operation of the rail in the Midtown Greenway and potential visual effects from proposed stations, vertical circulation headhouses, bridge modifications, and new bridges. Potential direct effects are associated with construction or other ground-disturbing activities.

Archaeology

Based on Alignment Plan concepts dated September 4, 2013, the potential for direct effects associated with construction or other ground-disturbing activities related to the proposed double/single track alignment, stations, vertical circulation, bridge modifications, and construction of new parallel bridges would likely not extend beyond 200 feet from the centerline of the alignment. Therefore, an archaeology study area of 200 feet on either side of the alignment centerline for the Double/Single Track Rail alternative is appropriate (see Figure 2). The archaeology study area for the Double/Single Track Rail alternative covers approximately 65.5 acres (26.5 ha).

Architectural History

An appropriate study area for architectural history properties accounts for any physical, auditory, atmospheric (air quality), or visual impacts to historic properties. The potential effects on the existing corridor include increases in noise and vibrations due to the operation of the rail. The construction of stations and vertical circulation headhouses, modifications to bridges, construction of new bridges, and other ancillary features will have a higher potential for physical, auditory, or visual impacts due to the new construction, as well as the increase in pedestrian and vehicular traffic around the station areas, and the potential for development and redevelopment. The following study areas are similar to those used for other transit projects in the Twin Cities metro area, in order to encompass all potential direct

and indirect effects. Therefore, based on information currently available for the project, the following study areas for architectural history have been determined (see Figure 2):

- Proposed alignment at- or above-grade, located outside of the Chicago, Milwaukee & St.
 Paul Railroad Grade Separation Historic District trench 500 feet either side
- Proposed alignment within the trench of the Chicago, Milwaukee & St. Paul Railroad Grade
 Separation Historic District, due to the geography and the limited visibility of the corridor outside of the trench parcels located adjacent to the trench edge
- Stations and vertical circulation headhouses 0.25 mile radius (primarily due to potential development/redevelopment and visual effects)
- New structures (new or replacement bridges, assumes pile driving may be necessary) 0.25
 mile radius
- Existing structures Modification (widening/reconstruction of existing structures, assumes pile driving may be necessary) 0.25 mile radius (Once project components have been further refined and prior to developing an APE, it may be possible to reduce the study area for modifications to existing structures if the proposed modifications only include pier modifications and would not require the use of pile driving. For other similar projects in the Twin Cities a study area and APE of 500 feet has been used.)

Based on the assumptions above, the architectural history study area for the Double/Single Track Rail alternative covers approximately 1,275.6 acres (516.2 ha).

During future stages of this project to support NEPA and Section 106 compliance, an APE for cultural resources that accounts for all potential direct and indirect effects to historic properties will need to be determined in consultation with the lead agency. At that time, the current study areas should be reexamined and refined in light of more detailed and defined plans for each of the alternatives.

Background Research

In September of 2013, research was conducted at the Minnesota SHPO to identify information on previously listed and eligible archaeological sites and architectural history properties, and previously identified Native American mound sites, burial grounds, and TCPs located within the study areas. Previous cultural resources surveys located within the study areas were also consulted.

Cultural Resources Literature Review

Previous cultural resources investigations along portions of the Midtown corridor have resulted in the identification of archaeological sites and architectural history properties (see Tables 1-2).

Previous Archaeology Studies

Six archaeology surveys and assessments have been previously conducted within the archaeology study areas (Table 1).

Table 1. Previous Archaeology Studies

SHPO Report No.	Date	Title	Author(s)	Project Area Location
HE-95-02	1995	Phase IB/II Historic Archaeological Evaluation of Selected Parcels, Interstate 35W Improvement Program (MnDOT S.P. 1981-78/2782- 226), Minneapolis, Hennepin County, Minnesota John P. McCarthy, Clark A. Dobbs, Karl Hagglund, and Antone J. Mathys		I-35W Corridor between the Mississippi River (Minneapolis) and County Road 42 (Burnsville)
HE-99-13	1999	Four Islands at Lake of the Isles: A Reconnaissance Survey	Christina Harrison	Islands within the Lake of the Isles: Mikes Island, Raspberry Island, Maples Islands West and East
HE-00-16	2000	Report on Archaeological Investigations Conducted on Four Islands in Lake of the Isles, Minneapolis, Hennepin County, Minnesota	Christina Harrison	Islands within the Lake of the Isles: Mikes Island, Raspberry Island, Maples Islands West and East
HE-2004-8H	2004	Phase I and II Architectural History Investigations for the Lake Street Repaving and Streetscape Design Project, Minneapolis, Hennepin County, Minnesota	William E. Stark and Andrea Vermeer	Sections 33, 34, 35, and 36 in T29N, R24W; Sections 1, 2, 3, and 4 in T28N, R24W; Sections 31 and 32 in T29N, R23W; and Sections 5 and 6 in T28N, R23W
Unknown	2009	Cultural Resources Assessment for the Xcel Energy Hiawatha Project, Minneapolis, Hennepin County, Minnesota	William E. Stark and Andrea Vermeer	Sections 1, 2, 3, 34, 35, and 36 in T29N, R24W

Table 1. Previous Archaeology Studies

SHPO Report No.	Date	Title	Author(s)	Project Area Location
Unknown	2012	Phase I Archaeological Survey for Southwest Light Rail Transit Project in Minneapolis, St. Louis Park, Hopkins, Minnetonka, and Eden Prairie, Minnesota	Christina Harrison, Michael Madson, Sigrid Arnott, and David Maki	Southwest LRT proposed route between Minneapolis and Eden Prairie

Previous Architectural History Studies

Eight architectural history surveys have been previously conducted within the architectural history study areas (Table 2).

Table 2. Previous Architectural History Studies

SHPO Report No.	Date	Title	Author(s)	Project Area Location
HE-90-10H	1990	Final Report of the Minneapolis Neighborhood Motion Picture Theatre Study	Beth Bartz	Theaters located in Minneapolis
HE-96-5H	1996	Context, Public Libraries in Minneapolis, 1859-1985	Garneth O. Peterson	Public libraries located in Minneapolis
HE-2001-5H	2001	Phase I Architectural History Survey Summary Report for the Proposed Midtown Greenway, Minneapolis, Hennepin County, Minnesota	William E. Stark and Andrea Vermeer	Section 5 in T28N, R24W and Sections 32, 33, 34, 35, and 36 in T29N, R24W
HE-2001-6H	2001	Phase II Architectural History Investigation of the Stewart- Cepro Grain Elevator, Minneapolis, Hennepin County, Minnesota	William E. Stark and Kristen M. Zschomler	2836 11 th Avenue South, Minneapolis
HE-2002-7H	2002	Phases I and II Architectural History Investigation for the Proposed Midtown Greenway, Minneapolis, Hennepin County, Minnesota	William E. Stark, Andrew Vermeer, Michelle Terrell, and Kristen Zschomler	Midtown Greenway Corridor

Table 2. Previous Architectural History Studies

SHPO Report No.	Date	Title	Author(s)	Project Area Location
HE-2004-8H	2004	Phase I and II Architectural History Investigations for the Lake Street Repaving and Streetscape Design Project, Minneapolis, Hennepin County, Minnesota	William E. Stark and Andrea Vermeer	Sections 33, 34, 35, and 36 in T29N, R24W; Sections 1, 2, 3, and 4 in T28N, R24W; Sections 31 and 32 in T29N, R23W; and Sections 5 and 6 in T28N, R23W
HE-2004-9H	2004	Addendum to Phase I and II Architectural History Investigations for the Lake Street Repaving and Streetscape Design Project, Minneapolis, Hennepin County, Minnesota	Stark, William A. and Betsy H. Bradley	Portions of East Lake Street
HE-2012-9H	2012	Phase I/Phase II Architecture History Investigation for the Proposed Southwest Transitway Project Hennepin County Minnesota	Charlene Roise, Elizabeth Gales, Stephanie Atwood, Linda Pate, and Penny Peterson	Portions of Southwest Minneapolis

Previously Identified Cultural Resources

Previous cultural resources investigations have resulted in the inventory of two archaeological sites (neither of which has been listed or determined eligible, nor are potential mounds, burials, or TCPs) and almost 500 architectural history properties within the study areas. These previously identified resources include a large number of architectural history properties that are listed in or are eligible for listing in the NRHP, the official list of the nation's historic places worthy of preservation managed by the National Park Service (see Table 3).

The number of previously identified cultural resources only indicates what is already known about the study areas and does not indicate how many currently unknown archaeological sites and architectural history properties may be located within the study areas or their eligibility for listing in the NRHP; therefore, the true impacts to all potential cultural resources cannot be known at this time. Further analysis and field investigation to determine the eligibility of any currently unknown resources and the potential impact the proposed alternatives may have on those resources would be part of a future stage of this project to support the NEPA and Section 106 processes. Also, this analysis does not include any detailed examination of the potential for TCPs; properties of religious or cultural significance to a cultural group, primarily Native American tribes, except to list any that may have been previously identified within the study areas. Consultation with appropriate Native American tribes to try to identify

properties of potential religious or cultural significance should be conducted during any future cultural resources analysis for this project to comply with Section 106.

Previously Listed and Eligible Sites and Properties

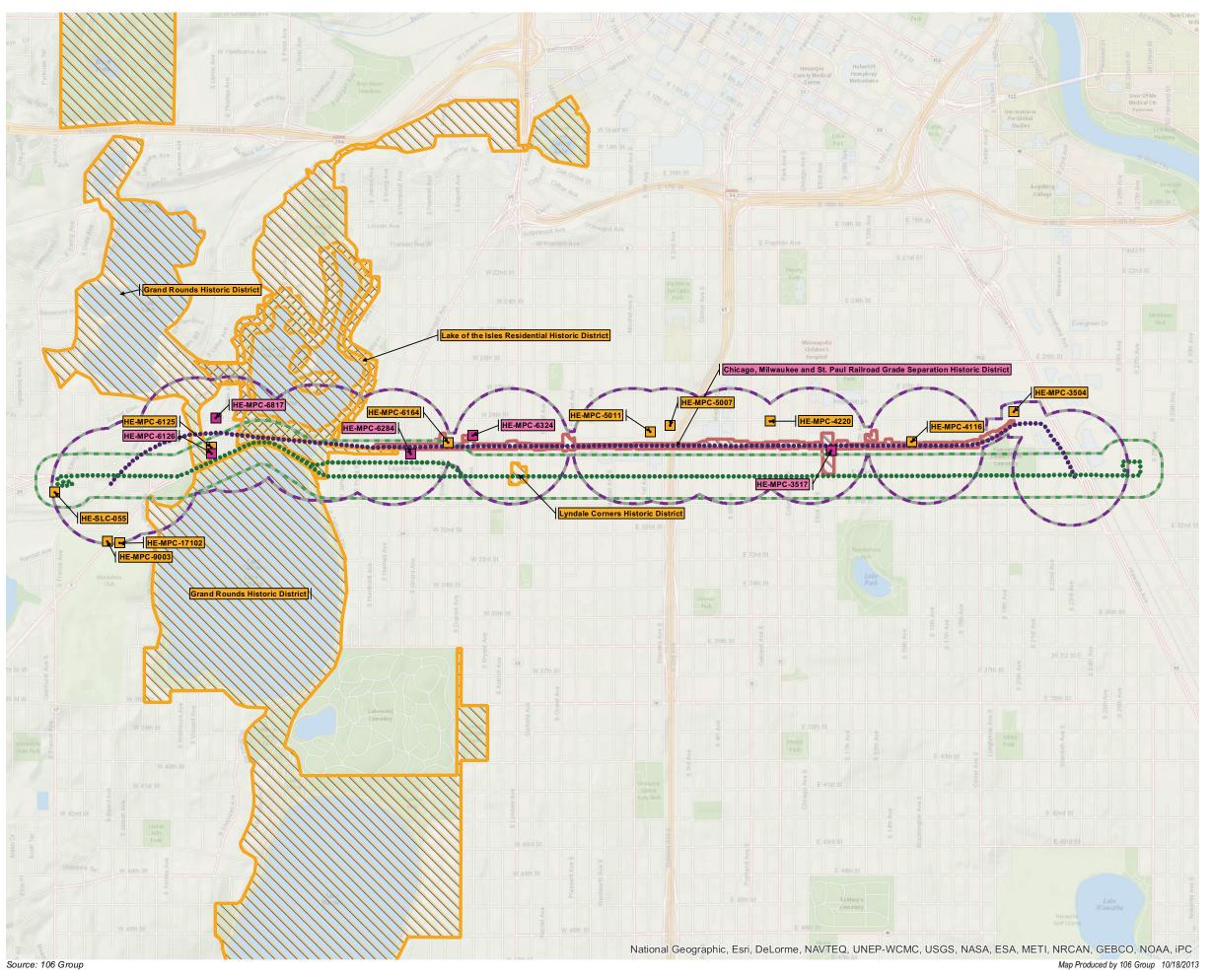
To inform a comparison of the proposed alternatives, previously NRHP-listed and eligible archaeological sites and architectural history properties, and previously identified Native American mound sites, burial grounds, and TCPs located within the study areas were reviewed (Table 3; Figure 3). There are no listed or eligible archaeological sites, nor any previously identified Native American mound sites, burial grounds, or TCPs located within the study areas. Additionally, one of the previously determined eligible architectural history properties (Darrow Rowhouse HE-MPC-5010) has been demolished, and is, therefore, not included in the cultural resources literature review results below or the potential impacts analysis.

The largest concentration of listed architectural history properties located within the study areas are part of the NRHP-listed Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District. This district consists of 48 associated resources including a trench, discontiguous retaining wall, modern bicycle/pedestrian trail, 37 bridges, and eight buildings, all of which are located within the Double/Single Track Rail alternative study area. A large percentage of the previously determined eligible properties consist of the Grand Rounds, Lake of the Isles Residential, and Lyndale Corners historic districts and their associated resources. The study area for the Double/Single Track Rail alternative encompasses all of the known listed and eligible resources within the Enhanced Bus alternative; therefore, the number of listed and eligible architectural history properties within the Double/Single Track Rail alternative study area and the study area for the Dual alternative are the same (see Table 3). See Appendix A for a table of all listed and eligible architectural history properties located within the study areas.

Table 3. Cultural Resources Literature Review Results

Proposed Alternative	Listed and Eligible Archaeology Sites or Previously Identified Native American Mound Sites, Burial Grounds, and TCPs	Listed Architectural History Properties	Eligible Architectural History Properties
Enhanced Bus alternative*	0	11 (including the Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District)	36 (including the Grand Rounds Historic District, Lake of the Isles Residential Historic District, and Lyndale Corners Historic District)
Double/Single Track Rail alternative*	0	53 (including the Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District)	69 (including the Grand Rounds Historic District, Lake of the Isles Residential Historic District, and Lyndale Corners Historic District)
Dual alternative	0	53 (including the Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District)	69 (including the Grand Rounds Historic District, Lake of the Isles Residential Historic District, and Lyndale Corners Historic District)

^{*}In many areas the Enhanced Bus and Double/Single Track Rail study areas overlap (see Figure 3).



Midtown Corridor Transitway Alternatives Analysis Cultural Resources Literature Review and Concepts Analysis

Minneapolis, Hennepin County, Minnesota

•••• Enhanced Bus Alternative

•••• Double / Single Track Rail Alternative

Enhanced Bus Alternative Architectural
History Study Area

Double / Single Track Rail Alternative Architectural History Study Area

NRHP-Listed Historic District

NRHP-Eligible Historic District

Individually NRHP-Listed Architectural
History Property

Individually NRHP-Eligible Architectural
History Property



1:26,000





Previously Listed and Eligible Architectural History Properties

Concepts Analysis

Proposed concepts developed to date were reviewed in order to determine how the proposed project elements may impact historic properties. In addition, potential design modifications were identified that may minimize impacts to historic properties.

Enhanced Bus Alternative

Archaeology

A large portion of the Enhanced Bus alternative study area was assessed for archaeological potential during the Lake Street Repaving and Streetscape Design Project in 2003. This included an assessment of the areas previously disturbed by the original construction of Lake Street, its curbs, and its sidewalks located between I-35W and the Mississippi River. The assessment found that, with the exception of the land adjacent to the Mississippi River, the entire project area had been previously disturbed by urban development and has low archaeological potential (Stark & Vermeer 2003:23).

In 2009, during the Xcel Energy Hiawatha Project, an archaeological assessment was conducted for the Midtown Greenway within the area bounded by East 25th Street on the north, Minnehaha Avenue on the east, East 32nd Street on the south, and 5th Avenue South on the west. The assessment determined that because the study area,

"...historically did not exhibit any topographically prominent features and was located at a considerable distance from any water sources or wetlands, it is considered to have low potential for containing precontact archaeological resources. Further, based on the substantial urban development that has occurred in the study area since the precontact period, it is unlikely that any potential precontact archaeological resources would remain intact (Stark & Vermeer 2009:40)."

The 106 Group concurs with this assessment.

West of I-35W, there does not appear to have been any previous studies that assessed the archaeological potential. Therefore, a cursory review of vacant or undeveloped parcels along this portion of the corridor was completed to identify areas that may need to be reviewed further to determine if they have potential for archaeological resources. Along Lake Street up to the termination of the proposed Midtown Corridor at France Avenue South, there are approximately 45 vacant or undeveloped parcels of land (most of these consisting of paved parking lots) sited adjacent to either side of the roadway. Most of this area has been previously disturbed by urban development and likely has a low archaeological potential, with the exception of the open land located on either side of Lake Street between Lake of the Isles and Lake Calhoun.

Architectural History

Historic properties located within the Enhanced Bus alternative study area consist of the NRHP-listed Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District; the eligible Grand Rounds,

Lake of the Isles Residential, and Lyndale Corners historic districts; and seven individually listed or eligible architectural history properties (see Figure 3; Appendix A). Based on design concepts developed to date for the Enhanced Bus alternative, potential impacts from the construction and operation of this alternative are likely limited to increases in noise from increased bus traffic along the corridor and visual effects from the proposed new stations. The potential indirect effects from noise will likely be similar to the traffic noise already present in the corridor, and therefore, this effect will likely be minimal. However, the potential visual effects and development/redevelopment impacts near stations could potentially have adverse effects on the previously listed and determined eligible architectural history properties located within the study area.

Ways to minimize the potential visual effects and development/redevelopment impacts that could occur near stations, would be to adjust the visibility of the design of any stations or eliminate/move these station locations so they are not located directly adjacent to historic properties, or within a significant viewshed from the historic properties. Enhanced Bus stations that may have potential visual effects and development/redevelopment impacts due to their proximity to eligible historic districts or other individually listed or eligible historic properties include:

- Calhoun Parkway West Station located within the boundaries of the eligible Grand Rounds
 Historic District and adjacent to the NRHP-listed Calhoun Beach Club (HE-MPC-6126) and eligible
 Calhoun Beach Apartments (HE-MPC-6125)
- Knox Avenue Station located adjacent to the eligible Grand Rounds Historic District
- Lyndale Avenue Station located within the boundaries of the eligible Lyndale Corners Historic
 District

Double/Single Track Rail Alternative

Archaeology

A large portion of the Midtown Greenway was assessed for archaeological potential during the Xcel Energy Hiawatha Project in 2009, which is discussed more in-depth above. The assessment was conducted within the area bounded by East 25th Street on the north, Minnehaha Avenue on the east, East 32nd Street on the south, and 5th Avenue South on the west, and recommended that the area had low potential for containing precontact archaeological resources (Stark & Vermeer 2009:40). The 106 Group concurs with this assessment.

West of 5th Avenue South up to the Hiawatha Midtown Station there does not appear to have been any previous studies that assessed the archaeological potential. Therefore, a cursory review of vacant or undeveloped parcels along this portion of the corridor was completed to identify areas that may need to be reviewed further to determine if they have potential for archaeological resources. In this area, there are approximately 25 vacant or undeveloped parcels of land (most of these consisting of paved parking lots) sited adjacent to the Midtown Greenway. Most of this area has likely been previously disturbed by urban development and likely has a low archaeological potential, with the exception of the open land located on either side of the Midtown Greenway between Lake of the Isles and Lake Calhoun.

Architectural History

The proposed Double/Single Track Rail alternative will likely have potential physical, auditory, atmospheric, and visual impacts on historic properties located within the study area. The largest potential impact from the proposed rail alternative in the Midtown Greenway will be on the NRHP-listed Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District, which is a part of the Midtown Greenway. The proposed alternative will also likely have potential impacts on the eligible Grand Rounds, Lake of the Isles Residential, and Lyndale Corners historic districts and their associated resources, as well as 14 individually listed and eligible properties that are located within the study area (see Figure 3; Appendix A).

Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District

The proposed Double/Single Track Rail alternative will likely have potential direct and indirect impacts on the listed Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District. The district is bounded by the parcels of the eight associated buildings and the top of the trench walls sited between Humboldt Avenue South on the west and East 28th Street on the east. The district is significant at the local level under NRHP Criterion A, within the area of community planning and development as a representation of the culmination of efforts by City of Minneapolis citizens, government, and planners to direct the future of growth and appearance of south Minneapolis while ensuring the safety of its residents (Vermeer & Stark 2004:8-1).

The district has 48 associated resources including a contributing trench, a contributing discontiguous retaining wall, a non-contributing modern bicycle/pedestrian trail, 28 contributing bridges, nine non-contributing bridges, one contributing building that is no longer extant, and seven non-contributing buildings. Character-defining features of this historic district include the 22 foot (6.7 meter) deep trench through which the historical railroad passed, historical street bridges that spanned the trench, and adjacent buildings that formed the walls of the trench (Vermeer & Stark 2004:7-1).

The following sections of the concepts analysis are divided into the proposed improvements for the Double/Single Track Rail alternative and how they will likely impact the Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District, and possible ways to minimize these potential impacts.

Tracks

During the period of significance (1912-1916) of the Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District the corridor would have had a minimum of two tracks, one for eastbound and one for westbound traffic (Vermeer & Stark 2004:7-6). The proposed construction of a double/single track rail line within the trench of the historic district is in keeping with the historic use and feeling of the railroad corridor, and will likely not have an adverse effect on the historic district.

However, some proposed modifications to portions of the trench slope required in order to fit the double/single track rail line and the pedestrian/bike trail within the corridor will potentially have a direct adverse effect on the trench, a character-defining feature of the district. The historical characteristics of the trench include its 22 foot depth, the earthen embankment with a ratio of one-and-a-half horizontal to one vertical, the width of the trench at the former track grade, and the width of the trench at the top

of the slope (Vermeer & Stark 2004:7-1). Based on the Greenway Bridge Typical Sections concepts dated September 4, 2013, such proposed modifications that will potentially have adverse effects on the historic district include:

- Tracks at Dupont and Emerson Avenue Bridges In order to fit the double-track rail and trail under the DuPont Avenue Bridge it is proposed to relocate the trail to the north portal of the bridge. This trail relocation would require cutting and leveling of the entire trench slope at this location, and construction of a new 8-10 foot retaining wall (Greenway Bridge Typical Sections Sheet No. 2). The plans notate the Emerson Avenue Bridge would have a similar section; modifications to the trench slope under that bridge would also potentially have an adverse direct effect.
 - O The DuPont Avenue Bridge is located adjacent to the Twin City Separator Company Building, which is a contributing resource to the district because the building's south wall forms the slope of the trench in that location. It appears that since the time of the NRHP nomination the building has been demolished, however the building wall that forms the trench slope remains. This was one of eight buildings included within the district's boundaries; however, it is the only contributing building, therefore it is recommended that any trench wall modifications do not directly impact this building wall. At this time the concept plan does not appear to directly affect this wall (Greenway Bridge Typical Sections Sheet No. 2). For a full list of the buildings associated with the historic district see Appendix A.
- Tracks at Colfax, Bryant, Aldrich, Harriet, Grand, and 1st Avenue Bridges In order to fit the double-track rail and trail under the Colfax Avenue Bridge it is proposed to cut into and level a portion of the south trench slope and construct a new 10-12 foot retaining wall (Greenway Bridge Typical Sections Sheet No. 3). The plans notate that the Bryant, Aldrich, Harriet, Grand, and 1st Avenue Bridges would have a similar section; modifications to the trench slopes under those bridges would also potentially have an adverse direct effect.
- Tracks at Lyndale and Garfield Avenue Bridges In order to fit the double-track rail, station platform, and trail under the Lyndale Avenue Bridge it is proposed to cut into and level the entire south trench slope and reconstruct the south abutment of the bridge in this location (Greenway Bridge Typical Sections Sheet No. 4). Effects from this bridge modification are discussed in the bridge section below. The plans notate that the Garfield Avenue Bridge would have a similar section; modifications to the trench slope under that bridge would also potentially have an adverse direct effect.
- <u>Tracks at Chicago and Park Avenues and I-35W Bridges</u> In order to fit the double-track rail, station platform, and trail under the Chicago Avenue Bridge it is proposed to cut into and level a portion of the south trench slope and construct a new 5-6 foot retaining wall (Greenway Bridge Typical Sections Sheet No. 6). The plans notate that the I-35W and Park Avenue Bridges would

have a similar section; modifications to the trench slopes under those bridges would also potentially have an adverse direct effect.

- Tracks at Bloomington, Pleasant, Pillsbury, Nicollet, and 16th Avenue Bridges In order to fit the double-track rail, station platform, and trail under the Bloomington Avenue Bridge it is proposed to cut into and level the majority of the south and north trench slopes and construct a new 7-8 foot retaining wall on the south side and a 10-12 foot retaining wall on the north side (Greenway Bridge Typical Sections Sheet No. 8). The plans notate that the Pleasant, Pillsbury, Nicollet, and 16th Avenue Bridges would have a similar section; modifications to the trench slopes under those bridges would also potentially have an adverse direct effect.
- Tracks at 18th, Fremont, Columbus, 12th, 15th, 17th, 18th, and Cedar Avenue Bridges In order to fit the single-track line and trail under the 18th Avenue Bridge it is proposed to cut and level the majority of the south trench slope and construct a new 7-8 foot retaining wall (Greenway Bridge Typical Sections Sheet No. 9). The plans notate that the Fremont, Columbus, 12th, 15th, 17th, 18th, and Cedar Avenue Bridges would have a similar section; modifications to the trench slopes under those bridges would also potentially have an adverse direct effect.

Potential ways to minimize the direct impacts from the trench slope modifications include limiting the amount of trench slope proposed for cutting and leveling at each location and limiting the frequency within the historic district for these types of modifications. The cumulative effect of cutting and leveling portions of the trench slopes around 26 of the 37 bridges located within the district and interrupting the visual feeling of the linear trench will likely have an adverse direct effect on the design and materials of the district as well as an indirect visual effect on the feeling and association of the historic district.

Overhead Catenary Systems

The proposed construction of overhead catenary systems (OCS), which according to Greenway Bridge Typical Sections concepts appear to be 16 feet in height, along the entire corridor of the Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District introduces non-historic features to the corridor which will potentially affect the feeling of the overall historic district. Based on these concepts, it appears that the OCS wires required to operate the rail need to be sited between the bridge piers, instead of placed in-line with the piers which could possibly minimize the cumulative visual effect on the corridor; therefore, there are no recommended ways to minimize the visual indirect effect these OCS wires could potentially have on the historic district.

OCS Safety Screens

Concepts have not yet been developed for the OCS safety screen for the Midtown Corridor; however they will be similar to the screens proposed as part of the Central Corridor LRT project in Minneapolis and St. Paul. OCS safety screens or shields are typically located above OCS wires at bridges where there is pedestrian access above the wires, in order to protect the wires from damage and protect people from coming into contact with the wires. Based on the OCS wire contact shielding plans, elevations, and sections from the Central Corridor LRT project, the OCS safety screens would extend horizontally from the surface of the bridge superstructure by approximately six feet and be eight feet in width. One six by

eight foot OCS screen would be required over each track, so in portions of the corridor where a double-track is proposed it would require two screens. The connection system between the OCS screens and the bridges has not been determined yet, therefore this would need to be determined in the next stage and discussed in consultation with FTA, or the Minnesota Department of Transportation (MnDOT) Cultural Resources Unit on their behalf, and the SHPO.

Potential ways to minimize the possible direct effect on the bridges and visual effect on the overall historic district from the OCS safety screens would be to use a material that is less visually obtrusive, and have the screens extend directly out from the bridge and have the shape of the screens follow the curve of the bridge portals versus a lower connection where the screen would hang in the bridge portal as was proposed for the Cedar Street Bridge during the Central Corridor LRT project.

Stations and Vertical Circulation

The proposed construction of seven station platforms and vertical circulation headhouses within the boundaries of the Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District introduces non-historic features to the corridor which will potentially affect the feeling of the overall historic district. Based on the Vertical Circulation concepts dated August 30, 2013, new construction that will potentially have an adverse effect on the feeling of the historic district includes:

- Any modifications to the trench walls and trench slope in order to construct the vertical circulation headhouses and pedestrian access walkways.
- The cumulative visual affect of the station platforms, shelters, and other furnishing options such as fare collection machines, trash receptacles, station markers, and wayfinding markers.
- Construction of new retaining walls.

There are potential ways to minimize the visual effect to the historic district from the station platforms and vertical circulation headhouses including:

- Minimizing the height of the station platform and ramps from the existing topography.
- Minimizing the width of all platform shelters and aligning their placement within the corridor to be visually in-line with the nearest bridge piers.
- Designing the vertical circulation headhouses to blend with the industrial nature of the surrounding buildings, and keeping the overall height of the structure outside of the trench to one-story in height so it is not more visually prominent than the surrounding buildings.
- Minimizing the visual presence of the wayfinding markers, which are currently proposed to stand approximately 10 feet above the top of headhouses, by locating them at street level.
- Design the new proposed retaining walls so they are sensitive to the design of the historic retaining walls. The design of the new walls should not mimic the historic design, but try and be sympathetic to the characteristics of the historic retaining walls.

Bridge Modifications & New Bridges

Some proposed bridge modifications required in order to fit the double/single track rail line and the pedestrian/bike trail within the corridor could potentially have adverse effects. However, based on Greenway Bridge Typical Sections and Alignment Plans dated September 4, 2013, proposed bridge modifications that would directly impact the design or materials of the bridges appear to be limited to non-contributing bridges located within the Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District. These bridge modifications consist of:

Lyndale and Garfield Avenue Bridge Modifications - In order to fit the double-track line, station platform, and trail under the Lyndale and Garfield Avenue Bridges it is proposed to reconstruct the south abutment for both bridges (Greenway Bridge Typical Sections Sheet No. 4). These two bridges are non-contributing resources to the Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District; therefore, there will likely be no direct adverse effect to the bridges. However, the cumulative effect from such potential effects to the overall district will need to be considered. Effects from this bridge abutment modification to the overall feeling of the corridor are discussed above in the Tracks section.

Pier Protection

Concepts have not yet been developed for pier protection in the Midtown Corridor; however it is known that MnDOT will require protection on all bridge piers located along the Double/Single Track Rail alternative. The pier protection will likely include the construction of a concrete casing built around the base of each pier that would extend six inches from the current width of the pier and would extend six to 12 feet in height along the piers. These modifications could potentially impact the historic design of all of the bridges located within the Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District.

Potential ways to minimize the possible effect to the historic district from the pier protection include:

- Finishing the concrete pier protection casing to blend with the historic finish of the bridge piers.
- Minimizing the overall height of the pier protection.

Grand Rounds Historic District

The proposed Double/Single Track Rail alternative will likely have potential direct and indirect impacts on the eligible Grand Rounds Historic District. The Grand Rounds is a byway system designed by landscape architect Horace W.S. Cleveland. The Grand Rounds consists of seven byways that connect the City of Minneapolis park system. Within the study area the Grand Rounds Historic District contains lakes, lagoons, parkways, boulevards, and bridges. See Appendix A for a full list of all associated Grand Rounds Historic District properties.

Bridge Modifications & New Bridges

Some proposed bridge modifications and new bridges required in order to fit the double/single track rail line and the pedestrian/bike trail within the Midtown Greenway corridor could potentially have adverse

effects on the eligible Grand Rounds Historic District. Based on Greenway Bridge Typical Sections and Alignment Plans dated September 4, 2013, proposed bridge modifications and new bridges consist of:

- Dean Parkway Bridge Expansion According to Alignment Plans dated September 4, 2013, the existing Midtown Greenway Bridge over Dean Parkway (HE-MPC-5341) is proposed for expansion. Exact details on the expansion are unknown at this point; however they would only include work necessary to make sure that the bridge is structurally sound to carry a single-track rail. This bridge is a contributing resource to the eligible Grand Rounds Historic District; therefore, there could be potential direct and indirect effects to this district based on what plans are developed for the proposed expansion to this bridge. Because design details are not known at this time consultation with FTA, or MnDOT CRU on their behalf, and SHPO will be required to find ways to try and minimize effects to the historic district.
- New Parallel Bridges to Channel Bridge and East Calhoun Parkway Bridge According to Alignment Plans dated September 4, 2013, in order to fit the double-track rail line and pedestrian/bike trail within the corridor it is proposed to build two new bridges parallel to the existing Midtown Greenway bridges that cross a channel between the Lake of the Isles and Lake Calhoun (HE-MPC-1835) and Calhoun Parkway (HE-MPC-5335) for the trail. These two existing bridges are contributing resources to the eligible Grand Rounds Historic District; therefore, there could be potential indirect visual effects to these properties and the overall district from the proposed new bridges.

Potential ways to minimize the possible effect to the historic district from the new parallel bridges include:

- Design the new parallel bridges so they are sympathetic to the characteristics of the existing historic bridge.
- Design the new parallel bridges so they are indeed separate structures, and have no connections between the new bridge and the existing historic bridges.

Lake of the Isles Residential Historic District, Lyndale Corners Historic District, and Individually Listed and Eligible Architectural History Properties

The proposed Double/Single Track Rail alternative will likely have potential indirect impacts on the eligible Lake of the Isles Residential and Lyndale Corners historic districts and their associated resources, as well as 15 individually listed and eligible properties that are located within the study area (see Figure 3; Appendix A). Based on concepts developed to date for the Double/Single Track Rail alternative, potential impacts to individually listed and eligible properties sited along the corridor, and the Lake of the Isles and Lyndale Corners historic districts are likely limited to indirect effects such as increases in noise during construction and from operation of the rail, visual effects from the proposed stations and vertical circulation headhouses, and possible development/redevelopment along the corridor and around stations. These potential indirect effects could possibly adversely affect these historic properties.

Potential ways to minimize the possible visual effects and development/redevelopment impacts that could occur near stations would be to adjust the visibility of the design of any stations or eliminate/move these station locations so they are not located directly adjacent to historic properties, or within a significant viewshed from the historic properties. Proposed stations for the Double/Single Track Rail alternative that may have potential visual effects and development/redevelopment impacts due to their proximity to eligible historic districts or other individually listed or eligible historic properties include:

Calhoun Beach Station - located within the boundaries of the eligible Grand Rounds Historic
District and adjacent to the NRHP-listed Calhoun Beach Club (HE-MPC-6126) and eligible
Calhoun Beach Apartments (HE-MPC-6125)

Recommendations

Literature Review

All proposed alternatives likely include improvements and, therefore, have the potential to affect resources in these areas. According to the literature review, since the study area for the Double/Single Track Rail alternative encompasses all of the previously listed and eligible resources within the study area for the Enhanced Bus alternative, the study area for the Dual alternative and the Double/Single Track Rail contain the most previously NRHP-listed or eligible architectural history properties (see Table 3; Figure 3). As a result, both of these alternatives have a greater potential to impact known NRHP-listed and eligible cultural resources.

However, as previously stated, the number of previously identified cultural resources only indicates what is already known about the study areas and is not indicative of how many currently unknown archaeological sites, Native American mound sites, burial sites, TCPs, and architectural history properties may be located within the study areas; therefore, the true impacts to all potential cultural resources cannot be known at this time. In addition, the current analysis only identifies the number of known resources along each alternative to determine which alternative has the greater potential to impact more known cultural resources; however, it is unknown if any effects to known or unknown cultural resources that may result from any of these alternatives would be considered adverse. This level of more detailed analysis would be completed during a future stage of the project to support the NEPA and Section 106 processes.

Concepts Analysis

Archaeology

Based on the concepts analysis, most of the study areas for all alternatives have been previously disturbed by urban development and likely have a low archaeological potential; however, during future stages of cultural resources surveys an archaeology assessment would be required to determine the potential for unknown archaeological sites within the study areas.

Architectural History

Potential Indirect Effects

The Enhanced Bus and Double/Single Track Rail alternatives both have the potential to indirectly affect known historic properties. However, based on current design concepts the Enhanced Bus alternative has the potential to only indirectly affect known historic properties, and not directly affect them, including the NRHP-listed Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District; the eligible Grand Rounds, Lake of the Isles Residential, and Lyndale Corners historic districts; and seven individually listed or eligible architectural history properties (see Figure 3; Appendix A).

Potential Direct Effects

Based on design concepts developed to date for the Midtown Corridor Transitway the Double/Single Track Rail alternative has the potential to both indirectly <u>and</u> directly affect known historic resources.

The Double/Single Track Rail alternative has the potential to directly affect the NRHP-listed Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District, and possibly the eligible Grand Rounds Historic District depending on what the expansion requirements are for the Dean Parkway Bridge.

Since the Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District was listed in the NRHP in 2004 some additional studies have been conducted on the bridges within the district and have made note of the fair level of integrity that the overall district retains. A historic bridge study of the corridor in 2007 notated that "the best hope for retaining a justifiable district lies in preserving the section east of 11th Avenue. The loss of any bridge in this section, given the integrity problems to the west could be the last straw for the district" (TKDA and Hess Roise 2007:3). The current design concepts for the Double/Single Track Rail alternative do not include replacement of existing bridges within the district. However, if plans should change and require replacement of existing historic bridges, the potential for direct effects on the historic district that would significantly impact the overall integrity of the district and its ability to remain listed in the NRHP, especially if replacement is proposed for bridges that retain a good level of integrity which are primarily located east of 11th Avenue.

Overall Impacts

Due to the potential for direct <u>and</u> indirect impacts on the NRHP-listed Chicago, Milwaukee & St. Paul Railroad Grade Separation Historic District and the eligible Grand Rounds Historic District from the Double/Single Track Rail alternative and the potential for indirect impacts on other previously listed and eligible properties from the Double/Single Track Rail and Enhanced Bus alternatives, the Dual alternative has a greater potential to impact known NRHP-listed and eligible cultural resources. However, the majority of these potential effects are associated with the Double/Single Track Rail alternative.

The magnitude of the potential effects cannot be determined until more detailed design information is known. Recommendations for minimizing impacts discussed in the Concepts Analysis section need to be balanced with potential impacts from other technical factors while still meeting the purpose and need of the project. Additionally, more detailed design concepts developed during the future stages of work will inform more detailed effects analysis on historic properties as well as consultation with SHPO and MnDOT CRU, on behalf of FTA, to determine the extent of any effects to historic properties.

Next Stages

Prior to implementation of any of the proposed alternatives, a cultural resources survey would likely be required to support the NEPA and Section 106 processes for this project to identify any currently unknown archaeological sites, Native American mound sites, burial sites, TCPs, and architectural history properties that may be eligible for listing in the NRHP, as well as determine the eligibility of those already identified but not yet evaluated for their historical significance. Prior to conducting a survey, an APE for cultural resources that accounts for all potential direct and indirect effects to historic properties will need to be determined in consultation with the lead agency. The development of an APE will take into account refined project details that were not available during this stage; therefore, it is possible that a future APE would be less than the current study areas.

Effects that the proposed project may have on NRHP-listed and eligible properties would then need to be assessed. The magnitude of the potential effects of the project cannot be determined until more detailed design information is known. The results of these investigations will aid in complying with appropriate federal and state cultural resources laws, such as Section 106, as well as inform any necessary environmental documentation required to comply with NEPA. As previously stated, this current analysis does not include any detailed examination of the potential for TCPs, properties of religious or cultural significance to a cultural group, primarily Native American tribes, except to list any that may have been previously identified within the study areas. Consultation with appropriate Native American tribes to identify properties of potential religious or cultural significance should be conducted during any future cultural resources analysis for this project.

Mitigation

Based on the concepts analysis the proposed alternatives are likely to have some form of direct and indirect effect on known historic properties. Therefore, during future stages of work, ways to possibly avoid or minimize any adverse effects will need to be examined in consultation with SHPO. If adverse effects cannot be avoided or appropriately minimized, mitigation for any adverse effects will need to be determined in consultation with SHPO. Mitigation may take many forms; however, in the past, mitigation for transit corridors has typically included completion of Minnesota Historic Property Record (MHPR) photographic and narrative documentation or interpretive signage.

References Cited

Anfinson, Scott F.

2005 SHPO Manual for Archaeological Projects in Minnesota. State Historic Preservation Office, St. Paul, Minnesota.

Minnesota State Historic Preservation Office [SHPO]

2010 *Guidelines for History/Architecture Projects in Minnesota*. On file at the State Historic Preservation Office, St. Paul, Minnesota.

National Park Service

1983 Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation. *Federal Register* 48(190):44716-44740.

Stark, William E., and Andrea Vermeer

2003 Phase I Architecture-History Investigation for the Lake Street Repaving and Streetscape Design Project, Minneapolis, Hennepin County, Minnesota. Prepared by the 106 Group Ltd., St. Paul, Minnesota. On file at the State Historic Preservation Office, St. Paul, Minnesota.

2009 Cultural Resources Assessment for the Xcel Energy Hiawatha Project, Minneapolis, Hennepin County, Minnesota. Prepared by Stark Preservation Planning, LLC, Minneapolis and Summit Envirosolutions, Inc., St. Paul, Minnesota. On file at the State Historic Preservation Office, St. Paul, Minnesota.

TKDA and Hess Roise

2007 *Midtown Corridor Historic Bridge Study*. Prepared by TKDA and Hess Roise. Prepared for the Public Works Department, Minneapolis, Minnesota.

Vermeer, Andrea C., and William E. Stark

2004 Chicago, Milwaukee and St. Paul Railroad Grade Separation National Register of Historic Places Registration Form. Prepared by the 106 Group Ltd., St. Paul, Minnesota. On file at the State Historic Preservation Office, St. Paul, Minnesota.

Midtown Corridor Transitway	Cultural Resources Literature Review & Concepts Analysis
	AND ELIGIBLE ARCHITECTURAL HISTORY
PROPERTIES	

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-9959	Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Vicinity of 29 th St., between Humboldt and Hiawatha Aves.	Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed	Х	X
HE-MPC-7301	Trench	Along the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed	х	х
HE-MPC-7302	Retaining Wall	Along the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed	х	х
HE-MPC-7303	Bicycle/Pedestrian Trail	Along the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Non-contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed	Х	х
HE-MPC-7304	Cedar Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-7305	Eighteenth Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7306	Seventeenth Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		Х
HE-MPC-7307	Sixteenth Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7308	Bloomington Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7309	Fifteenth Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-7310	Fourteenth Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7311	Thirteenth Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		Х
HE-MPC-7312	Twelfth Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7313	Eleventh Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-9012	Tenth Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-7315	Elliot Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7316	Chicago Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		Х
HE-MPC-7314	Columbus Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7317	Park Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7318	Oakland Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-7319 (also inventoried as HE-MPC-4810)	Portland Avenue South Bridge (Bridge No. 90494)	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7320	Fourth Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Non-Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		х
HE-MPC-7321	Second Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Non-Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		x
HE-MPC-7322	I-35W Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Non-Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		х
HE-MPC-7323	Stevens Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		x

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-7324	First Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7325	Nicollet Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		Х
HE-MPC-7326	Blaisdell Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Non-Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7327	Pillsbury Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7328	Pleasant Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-9010	Grand Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7329	Harriet Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7330	Garfield Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Non-Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7331	Lyndale Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Non-Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7332	Aldrich Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		Х

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-7333	Bryant Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-7334	Colfax Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		х
HE-MPC-7335	Dupont Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Non-Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed	X	X
HE-MPC-7336	Emerson Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Non-Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed	х	X
HE-MPC-7337	Fremont Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed	Х	X

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-7338	Hennepin Avenue South Bridge	Over the Chicago, Milwaukee and St. Paul Railroad Grade Separation	Non-Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed	Х	Х
HE-MPC-3528	Norris Creameries Building	2808 Emerson Avenue South	Non-contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		х
HE-MPC-3502	Twin City Separator Company Building (demolished since NRHP listing)	2841 Dupont Avenue South	Contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		х
HE-MPC-3503	Bruer Bros. Lumber Company	2836 Lyndale Avenue South	Non-contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		х
HE-MPC-15370	Western Alloyed Steel Casting Company Building	2848 Pleasant Avenue South	Non-contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		х

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-15371	Eighth Ward Warehouse Building	2900 Pleasant Avenue South	Non-contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		X
HE-MPC-3517	Sears Building	2843-2929 Elliot Avenue South	Non-contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed; Individually Listed	х	х
HE-MPC-0625	Stewart-Cepro Grain Elevator	2836 11 th Avenue South	Non-contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		х
HE-MPC-10686	Dayton Rogers Manufacturing Company Building	2820 13 th Avenue South	Non-contributing resource of the Chicago, Milwaukee and St. Paul Railroad Grade Separation Historic District	Listed		х
HE-MPC-6126	Calhoun Beach Club	2730 Lake St. W./2925 Dean Pkwy.	N/A	Listed	Х	х
HE-MPC-6284	Walker Branch Library	2901 Hennepin Ave. S.	N/A	Listed	Х	X

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-6324	Buzza Company Building	1006 Lake St. W.	N/A	Listed		x
HE-MPC-6817	Linden Hills Branch Library	2900 43rd St. W.	N/A	Listed		х
HE-MPC-17102	The Minikahda Club	3205 Excelsior Blvd.	N/A	Eligible		Х
HE-MPC-3504	South Side Destructor	2850 20th Ave. S	N/A	Eligible		Х
HE-MPC-4116	Avalon Theater	1500 Lake St. E.	N/A	Eligible		Х
HE-MPC-4220	Zinsmaster Baking Company	2900 Park Ave. S.	N/A	Eligible		Х
HE-MPC-5007	The Minerva	2809 Stevens Ave. S.	N/A	Eligible		Х
HE-MPC-5011	The Carlton	2820 1st Ave. S.	N/A	Eligible		Х
HE-MPC-6125	Calhoun Beach Apartments	2901-2915 Dean Pkwy.	N/A	Eligible	Х	X
HE-MPC-6164	Temple Israel	2324 Emerson Ave. S.	N/A	Eligible	Х	Х
HE-MPC-7855	Lyndale Corners Historic District	Lyndale Avenue and Lake Street	Lyndale Corners Historic District	Eligible	Х	Х
HE-MPC-6321	Johnson Block	3001 Lyndale Ave. S	Lyndale Corners Historic District	Eligible	Х	Х
HE-MPC-6453	New Lyndale Theater (Theater Antiques)	2934 Lyndale Ave. S.	Lyndale Corners Historic District	Eligible	Х	Х

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-6454	Latham Building	3008-3010 Lyndale Ave. S.	Lyndale Corners Historic District	Eligible	X	Х
HE-MPC-7207	Power's Transfer Company Storage Warehouse	611 Lake St. W	Lyndale Corners Historic District	Eligible	х	х
HE-MPC-7213	The Lyndale	701 Lake St. W	Lyndale Corners Historic District	Eligible	Х	Х
HE-MPC-7214	Commercial Building	2944 Lyndale Ave. S	Lyndale Corners Historic District	Eligible	Х	х
HE-MPC-7215	Crowell Block (It's Greek to Me)	2957 Lyndale Ave. S	Lyndale Corners Historic District	Eligible	Х	Х
HE-MPC-7230	Commercial Building	705 Lake St. W	Lyndale Corners Historic District	Eligible	Х	X
HE-MPC-7238	Commercial Building	610 Lake St. W	Lyndale Corners Historic District	Eligible	Х	Х
HE-MPC-9003	Bridge No. 90448	Pedestrian walkway over Excelsior Blvd.	N/A	Eligible		Х
HE-MPC-6896	Park Board Bridge No. 1 (Bridge No. 90449)	Lake St. over Lake Calhoun channel	Contributing resource of the Grand Rounds Historic District	Eligible	Х	Х

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-1811	Lake Calhoun	Lake Calhoun	Contributing resource of the Grand Rounds Historic District	Eligible	х	Х
HE-MPC-1823	Lake Calhoun-Lake of the Isles Channel, The Lagoon	N/A	Contributing resource of the Grand Rounds Historic District	Eligible		х
HE-MPC-1824	Lake of the Isles	Lake of the Isles	Contributing resource of the Grand Rounds Historic District	Eligible	х	Х
HE-MPC-1825	Lake of the Isles Parkway	Lake of the Isles Parkway	Contributing resource of the Grand Rounds Historic District	Eligible	х	Х
HE-MPC-1827	The Mall	1420 Knox Ave. S	Contributing resource of the Grand Rounds Historic District	Eligible	х	х
HE-MPC-1834	Calhoun Terrace; Lake Calhoun Boulevard	West Calhoun Parkway; East Calhoun Parkway	Contributing resource of the Grand Rounds Historic District	Eligible	х	Х
HE-MPC-1835	Bridge No. 93809	RR Bridge over Lake Calhoun-Lake of the Isles Channel	Contributing resource of the Grand Rounds Historic District	Eligible	х	Х

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-5341	CM&StP RR Bridge over Dean Parkway	RR Bridge over Dean Parkway	Contributing resource of the Grand Rounds Historic District	Eligible		х
HE-MPC-8727	Dean Parkway	Dean Parkway	Contributing resource of the Grand Rounds Historic District	Eligible	х	х
HE-MPC-5335	Bridge No. L5728	RR Bridge over Calhoun Parkway	Contributing resource of the Grand Rounds Historic District	Eligible	х	Х
HE-MPC-6900	Isles Parkway Bridge	Bridge over Calhoun- Isles Channel	Contributing resource of the Grand Rounds Historic District	Eligible		Х
HE-MPC-5107	Royal Laundry (Herkimer Pub & Brewery)	2922 Lyndale Ave. S	Lyndale Corners Historic District	Eligible	х	х
HE-MPC-5109	Commercial Building (Tatters)	2928 Lyndale Ave. S	Lyndale Corners Historic District	Eligible	х	х
HE-MPC-5112	Commercial Building	2936-2938 Lyndale Ave. S	Lyndale Corners Historic District	Eligible	Х	х
HE-MPC-5114	Restaurant	2940-2942 Lyndale Ave. S	Lyndale Corners Historic District	Eligible	Х	Х
HE-MPC-5116	Commercial Building (Jungle Theater)	2945-2951 Lyndale Ave. S	Lyndale Corners Historic District	Eligible	Х	X

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-5117	Commercial Building (La Bodega)	3007 Lyndale Ave. S	Lyndale Corners Historic District	Eligible	×	Х
HE-MPC-5118	Commercial Building (Country Bar & Grill)	3006 Lyndale Ave. S	Lyndale Corners Historic District	Eligible	Х	х
HE-MPC-5335	Bridge No. L5728	RR Bridge over East Calhoun Parkway	Lyndale Corners Historic District	Eligible	Х	х
HE-MPC-5873	Commercial Building	2940-2942 Lyndale Ave. S	Lyndale Corners Historic District	Eligible	Х	х
HE-MPC-9860	Lake of the Isles Residential Historic District	Vicinity of W. and E. Lake of the Isles Parkways	Lake of the Isles Residential Historic District	Eligible	х	х
HE-MPC-16656	House	2863 Lake of the Isles Parkway E	Lake of the Isles Residential Historic District	Eligible	Х	Х
HE-MPC-6343	Buholz, Charles A., House	2427 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible		х
HE-MPC-6348	Stiles, George C., House	2801 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible		Х
HE-MPC-6409	Gillette, George, House	2700 Lake of the Isles Blvd. W.	Lake of the Isles Residential Historic District	Eligible		Х
HE-MPC-6410	J.R. Martin Carriage House	2702 Lake of the Isles Blvd. W.	Lake of the Isles Residential Historic District	Eligible		Х

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-6411	Purdy, Milton D., House	2706 Lake of the Isles Blvd. W.	Lake of the Isles Residential Historic District	Eligible		x
HE-MPC-6412	Hecht, William, House	2728 Lake of the Isles Blvd. W.	Lake of the Isles Residential Historic District	Eligible		х
HE-MPC-6413	Boutin, Frank, House	2740 Lake of the Isles Blvd. W.	Lake of the Isles Residential Historic District	Eligible		Х
HE-MPC-6414	Perlee, John A., House	2754 Lake of the Isles Blvd. W.	Lake of the Isles Residential Historic District	Eligible		Х
HE-MPC-6415	Baehr, Edward J., House	2764 Lake of the Isles Blvd. W.	Lake of the Isles Residential Historic District	Eligible		Х
HE-MPC-6416	Bisbee, Edgar C., House	2774 Lake of the Isles Blvd. W.	Lake of the Isles Residential Historic District	Eligible		Х
HE-MPC-6729	Hutchins, Charles C., House	2735 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible		Х
HE-MPC-6731	Bateman, Charles E., House	2737 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible		Х
HE-MPC-6732	Oster, Louise, House	2809 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible		Х
HE-MPC-6733	Lewis, Jennie M., House	2815 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible		Х

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-6734	Benton, Webster A., House	2821 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible		Х
HE-MPC-6735	Hallstrom, John L., House	2825 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible		Х
HE-MPC-6736	Colburn, Richard R., Duplex	2829 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible		х
HE-MPC-6737	Colburn, Richard R., Duplex	2833 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible		х
HE-MPC-6738	Colburn, Richard R., Duplex	2837 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible		х
HE-MPC-6739	Engquist, John, House	2841 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible		х
HE-MPC-6740	Engquist, Ida, House	2847 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible		Х
HE-MPC-6741	Baillie, James L., House	2851 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible		Х
HE-MPC-6742	Horneland, Knut, House	2855 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible	Х	Х
HE-MPC-6743	Anderson, Albert W., House	2859 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible	Х	Х

Inventory No.	Property Name	Address	Associated Historic District	NRHP Status	Located within Enhanced Bus Study Area	Located within Double/Single Track Rail Study Area
HE-MPC-6744	Waldron, Henry B., House	2863 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible	Х	х
HE-MPC-6745	Waldron, Charles J., House	2867 Lake of the Isles Blvd. E.	Lake of the Isles Residential Historic District	Eligible	Х	х
HE-SLC-055	Hoffman Callan Company	3007 Highway 7/3000 France Ave. S	N/A	Eligible	Х	Х

Midtown Corridor Transitway	Cultural Resources Literature Review & Concepts Analysis
APPENDIX B: PROJECT PERSONNEL	

LIST OF PERSONNEL

Project Manager Jennifer Bring, B.A.

Principal Investigator

Archaeological Anne Ketz, M.A., RPA Architectural History Saleh Miller, M.S.

Graphics and GIS Nathan Moe, B.A.