Phase I Architecture/History Investigation

Southwest LRT Project, Hennepin County, Minnesota

Volume Eight Supplemental Report Number Five (FEIS)

FEIS Areas in the Following Survey Zones:

St. Louis Park Survey Zone
Minneapolis West Residential Survey Zone

November 2015

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PHASE I ARCHITECTURE/HISTORY INVESTIGATION FOR THE PROPOSED SOUTHWEST LRT PROJECT, HENNEPIN COUNTY, MINNESOTA

Volume Eight
Supplemental Report Number Five (FEIS)

FEIS Areas in the Following Survey Zones:
St. Louis Park Survey Zone
Minneapolis West Residential Survey Zone

CH2M Hill, Inc. Project No. 474576
SHPO File No. 2009-0080
106 Group Project No. 1695

Authorized and Sponsored by:
Metropolitan Council

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November 2015

Executive Summary

In October 2015, The 106 Group Ltd. (106 Group) conducted a supplemental Phase I architecture/history Investigation within the architecture/history Area of Potential Effect (APE) for the Southwest Light Rail Transit (LRT) (METRO Green Line Extension) Project (the Project).

The proposed Southwest LRT Project consists of the construction of an approximately 14.5-mile light rail transit line that will operate between downtown Minneapolis through the southwestern suburban cities of St. Louis Park, Hopkins, Minnetonka, and Eden Prairie, in Hennepin County, Minnesota. The Metropolitan Council (Council) will apply for Federal Transit Administration (FTA) funding for the Project and will seek permits for construction from the United States Army Corps of Engineers; therefore, this project is a federal undertaking and must comply with Section 306108 of the National Historic Preservation Act of 1966, as amended (54 United States Code [U.S.C.] § 306108) (hereinafter referred to as Section 106) and its implementing regulations, 36 Code of Federal Regulations 800 et. seq.; Section 101(b)(4) of the National Environmental Policy Act of 1969, as amended, (42 U.S.C. 4331); and other applicable federal mandates. The Council is in the process of preparing a Final Environmental Impact Statement (FEIS) under the direction of the FTA for compliance with NEPA.

The Minnesota Department of Transportation (MnDOT) Cultural Resources Unit (CRU) is acting on behalf of the FTA for many aspects of the Section 106 process. Therefore, the Council has consulted with the MnDOT CRU to determine an appropriate APE and scope of cultural resources investigations for the project. The parameters for the APE are described in *Southwest Transitway: A Research Design for Cultural Resources* (Roise et al. 2010) and *Southwest Light Rail Transit Project Research Design for Cultural Resources: Supplement Number 1, Additional Parameters for the Area of Potential Effect for Architecture/History Resources* (Mathis 2014). As the Project design has moved forward, additional refinement of the design has resulted in revisions to the APE, most recently in October 2015.

This supplemental Phase I architecture/history investigation includes properties in the October 2015 architecture/history APE that were not previously surveyed for the Draft Environmental Impact Statement (DEIS) or the Supplemental DEIS (SDEIS), to determine if they are potentially eligible for listing in the National Register of Historic Places (NRHP). This survey includes properties built in 1966 or earlier that were not previously surveyed. The properties surveyed as part of this investigation are located within the following survey zones: St. Louis Park Survey Zone and Minneapolis West Residential Survey Zone, in Hennepin County, Minnesota.

During this supplemental Phase I architecture/history survey, a total of eight properties were surveyed; all other properties within the architecture/history APE built in 1966 or earlier were previously surveyed. The eight properties were newly identified properties and all eight properties are recommended as not eligible for listing in the NRHP.

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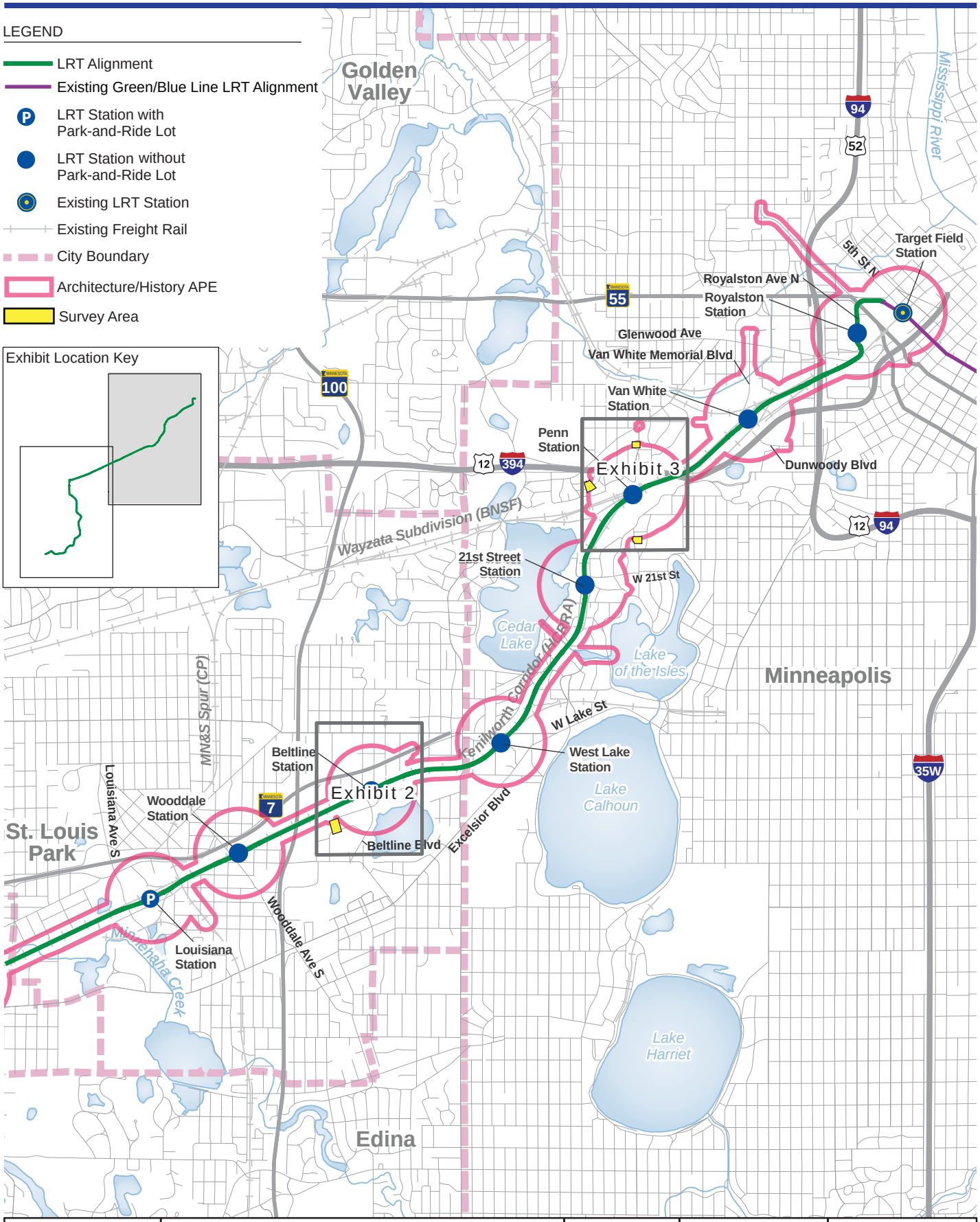
1 Introduction

This report has been prepared to supplement Phase I and II architecture/history investigations conducted between 2010 and 2015 for the proposed Southwest Light Rail Transit (LRT) (METRO Green Line Extension) Project (the Project) in Hennepin County, Minnesota. Results of the previous investigations for the Project can be found in the following volumes of the reports:

- Phase I/Phase II Architecture History Investigation, Volume One: Eden Prairie, Minnetonka, Hopkins, and St. Louis Park Survey Zones (Excluding Railroad-Related Properties) (September 2010)
- Phase I/Phase II Architecture History Investigation, Volume Two: Minneapolis West Residential, Minneapolis South Residential/Commercial, Minneapolis Downtown, Minneapolis Industrial, and Minneapolis Warehouse Survey Zones (February 2012)
- Phase I/Phase II Architecture History Investigation, Volume Three: railroad-related resources in the Minneapolis and St. Louis Railroad; Chicago, Milwaukee and St. Paul Railroad; Minneapolis, Northfield and Southern Railroad; and Great Northern Railroad Survey Zones (October 2010)
- Phase I/Phase II Architecture History Investigation, Volume Four: additional areas/properties in the St. Louis Park; Minneapolis West Residential; Minneapolis, Northfield and Southern Railroad; and Great Northern survey zones (April 2012)
- Supplemental Phase I/Phase II Architecture History Investigation, Volume Five: additional areas/properties in St. Louis Park and Minneapolis West Residential Survey Zones (February 2014)
- Supplemental Phase I/Phase II Architecture History Investigation, Volume Six: SDEIS Areas in the Eden Prairie, Hopkins, St. Louis Park, and Minneapolis West Residential Survey Zones (April 2014)
- Supplemental Phase I Architecture/History Investigation, Volume Seven: FEIS Areas in the Minnetonka, Hopkins, St. Louis Park, an Minneapolis West Residential Survey Zone (July 2015)

This supplemental work was conducted in accordance with *Southwest Transitway: A Research Design for Cultural Resources* (Roise et al. 2010) and *Southwest Light Rail Transit Project Research Design for Cultural Resources: Supplement Number 1, Additional Parameters for the Area of Potential Effect for Architecture/History Resources* (Mathis 2014), located in Attachments A and B of this report. As the Project design has moved forward, additional refinement of the design has resulted in revisions to the Area of Potential Effect (APE), most recently in October 2015.

This supplemental Phase I architecture/history investigation was conducted to investigate properties in the October 2015 architecture/history APE that were not previously surveyed for the Draft Environmental Impact Statement (DEIS) and Supplemental DEIS (SDEIS) (Exhibit 1). This survey includes properties built in 1966 or earlier that were not previously surveyed. During this supplemental Phase I architecture/history survey, a total of eight properties were surveyed; all other properties within the architecture/history APE built in 1966 or earlier were previously surveyed. These properties are located within the St. Louis Park survey zone and Minneapolis West Residential survey zone, in Hennepin County, Minnesota.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52
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100
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7
35W
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APE and Survey Area Locations
Exhibit 1
NORTH
0
1,900
3,800
Feet
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2 Methods and Research Design

2.1 Objectives

The primary objectives of this architecture/history investigation were to determine whether there are any architecture/history properties within the architecture/history APE, the area within which historic properties may be affected by the proposed Project, that have not been previously surveyed for the DEIS or SDEIS, and determine if any are potentially eligible for listing in the National Register of Historic Places (NRHP). This survey includes properties built in 1966 or earlier that were not previously surveyed.

All work was conducted in accordance with the Minnesota State Historic Preservation Office's (SHPO) *Guidelines for History/Architecture Projects in Minnesota, MnDOT's Cultural Resources Unit Project and Report Requirements*, and *The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* [48 Federal Register 44716-44740] (SHPO 2010; MnDOT CRU 2011; NPS 1983). Please see Section 2.2 below for a description of the architecture/history APE.

2.2 Area of Potential Effect

The architecture/history APE for the Project is outlined in *Southwest Transitway: A Research Design for Cultural Resources* (Roise et al. 2010; Appendix A) and *Southwest Light Rail Transit Project Research Design for Cultural Resources: Supplement Number 1, Additional Parameters for the Area of Potential Effect for Architecture/History Resources* (Mathis 2014; Appendix B). As the Project design has moved forward, additional refinement of the design has resulted in revisions to the APE, most recently in October 2015. Generally, the architecture/history APE encompasses an area 300 feet on either side of the centerline of the corridor alignment and a quarter-mile (0.25 mile) radius around each station and operations and maintenance facility (OMF). The Minnesota Department of Transportation (MnDOT) Cultural Resources Unit (CRU) established additional parameters for the architecture/history APE that are detailed below (Table 1) and in Attachment B (Mathis 2014).

Table 1. **Additional Parameters for the Architecture/History APE**

Project Element	APE Limit and Rationale
Modifications to Existing Roadways	
Modifications to existing collector (local) streets	All property within 125' from the perimeter of the construction limits/limits of disturbance (LOD) to account for potential minor visual, noise, and vibrations effects.
Modifications to existing major arterial streets	All property within 150' from the perimeter of the construction limits/LOD to account for potential changes in traffic and noise and vibrations effects.
Modifications to existing highways (limited access)	All property within 300' from the perimeter of the construction limits/LOD to account for potential changes in traffic and noise and vibrations effects.

Project Element	APE Limit and Rationale
Pedestrian and Bicycle Improvements	
Pedestrian (ADA) ramps	All property within 50' from the perimeter of the construction limits/LOD to account for potential minor visual effects and noise/vibrations during construction.
Sidewalks and trail improvements (no above grade elements other than curbs and medians)	All property within 100' from the perimeter of the construction limits/LOD to account for potential minor visual effects and noise/vibrations during construction.
Pedestrian enhancements (e.g. sidewalks and trails) that include above grade elements (e.g. lighting, trees, signage, etc.)	All property within 125' from the perimeter of the construction limits/LOD to account for potential minor visual effects and noise/vibrations during construction.
Barrow/Fill and Floodplain/Stormwater/Wetland Mitigation Areas	
Borrow/fill, and floodplain/stormwater/ wetland mitigation areas	Generally all property within 125' from the perimeter of the construction limits/LOD to account for vibrations during construction and potential permanent visual effects.

2.3 Inventory Forms

A Minnesota Architecture-History Inventory Form was prepared for all properties located within the architecture/history APE that were constructed in or before 1966, that were not previously surveyed for the Southwest LRT Project, or have not been previously listed in or determined eligible for listing in the NRHP.

2.4 Evaluation

Upon completion of the fieldwork, the potential eligibility of each resource for listing in the NRHP was assessed based on the property's historical significance and integrity. The NRHP criteria summarized below were used to assess the potential significance of each property:

- Criterion A – association with the events that have made a significant contribution to the broad patterns of our history;
- Criterion B – association with the lives of persons significant in our past;
- Criterion C – embodiment of the distinctive characteristics of a type, period, or method of construction; representation of the work of a master; possession of high artistic values; or representation of a significant and distinguishable entity whose components may lack individual distinction; or
- Criterion D – potential to yield information important to history (NPS 1995).

The National Park Service (NPS) has identified seven aspects of integrity to be considered when evaluating the ability of a property to convey its significance: location, design, setting, materials, workmanship, feeling, and association. The integrity of each property was assessed in regard to these seven aspects. The properties were also assessed to determine if they represent a type of resource to be evaluated for NRHP eligibility using the Criteria Considerations (NPS 1995).

3 Literature Search

3.1 St. Louis Park Survey Zone

Established state and local contexts, as well as historical contexts prepared for the previous Southwest LRT architecture/history survey reports for the DEIS and SDEIS, and those completed for the Interchange and Bottineau Transitway projects, were reviewed to gain an understanding of the properties located within the survey areas in the St. Louis Park survey zone.

3.1.1 Previously Evaluated Properties

In October of 2015, the 106 Group completed supplemental research of the Minnesota SHPO Architecture-History Inventory files and identified no architecture/history properties that had been previously inventoried, or that were previously listed in or determined eligible for listing in the NRHP that are located within the survey area in the St. Louis Park survey zone.

3.2 Minneapolis West Residential Survey Zone

Established state and local contexts, as well as historical contexts prepared for the previous Southwest LRT architecture/history survey reports for the DEIS and SDEIS, and those completed for the Interchange and Bottineau Transitway projects, were reviewed to gain an understanding of the properties located in the survey areas within the Minneapolis West Residential survey zone.

3.2.1 Previously Evaluated Properties

In October of 2015, the 106 Group completed supplemental research of the Minnesota SHPO Architecture-History Inventory files and identified no architecture/history properties that had been previously inventoried, or that were previously listed in or determined eligible for listing in the NRHP that are located within the survey areas in the Minneapolis West Residential survey zone.

4 Results

Staff from the 106 Group conducted a Phase I architecture/history investigation of the specific survey areas within the architecture/history APE that contain properties built in 1966 or earlier that had not been previous surveyed. Saleh Miller, M.S. served as principal investigator. A full list of project personnel is provided in Attachment C. During the Phase I architecture/history survey, the 106 Group documented eight architecture/history properties that were constructed in or before 1966 that are located within portions of the architecture/history APE that have not been previously surveyed for the Southwest LRT Project. None of these properties are recommended as eligible for listing in the NRHP.

4.1 St. Louis Park Survey Zone

A total of one newly identified architecture/history property was surveyed in the St. Louis Park survey zone (Exhibit 2; Table 2). The property is recommended as not eligible for listing in the NRHP due to a lack of historical significance and a loss of integrity. No further work is recommended for this property.

Table 2. St. Louis Park Survey Zone Surveyed Properties

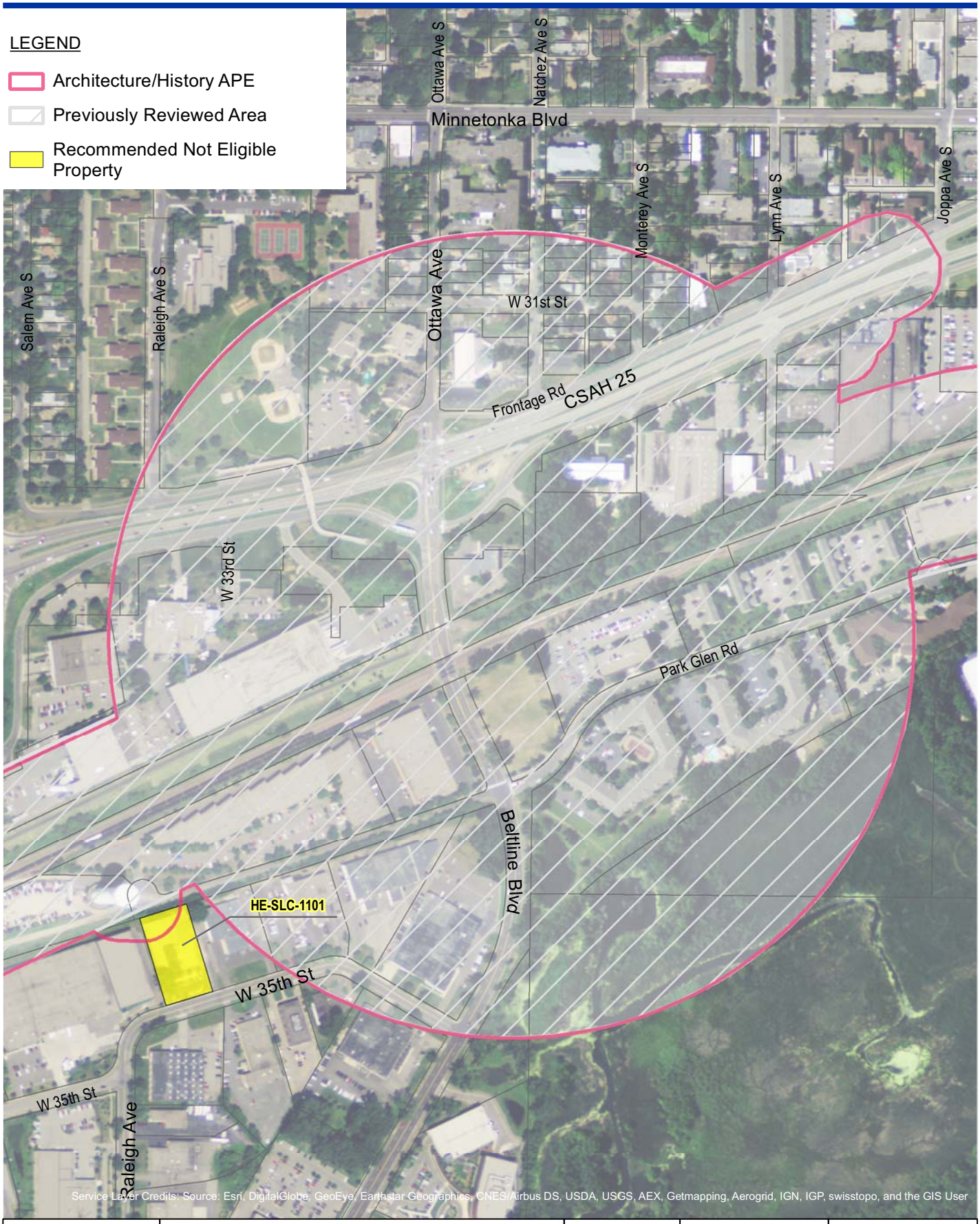
SHPO Number	Current Name	Address	Recommendation
HE-SLC-1101	Commercial Building	5000 35th Street W	Not eligible

4.2 Minneapolis West Residential Survey Zone

A total of seven newly identified architecture/history properties were surveyed in the Minneapolis West Residential survey zone (Exhibit 3; Table 3). All properties are recommended as not eligible for listing in the NRHP due to a lack of historical significance. No further work is recommended for these properties.

Table 3. Minneapolis West Residential Survey Zone Surveyed Properties

SHPO Number	Current Name	Address	Recommendation
HE-MPC-7856	House & Garage	1909 Penn Avenue S	Not eligible
HE-MPC-7857	House & Garage	1913 Penn Avenue S	Not eligible
HE-MPC-7858	House & Garage	436 Penn Avenue S	Not eligible
HE-MPC-7859	House & Garage	440 Penn Avenue S	Not eligible
HE-MPC-7860	House & Garage	1029 Thomas Avenue S	Not eligible
HE-MPC-7874	House & Garage	1033 Thomas Avenue S	Not eligible
HE-MPC-7875	House & Garage	1037 Thomas Avenue S	Not eligible



SOUTHWEST Green Line LRT Extension

Southwest LRT Final EIS

Phase I Architecture/History Investigation

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Results - St. Louis Park Survey Zone

Exhibit 2

NORTH

0 212.5 425

Feet

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SOUTHWEST Green Line LRT Extension

Southwest LRT Final EIS

Phase I Architecture/History Investigation

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Results - Minneapolis West Residential Survey Zone

Exhibit 3

NORTH

0 212.5 425

Feet

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5 Recommendations

During this supplemental Phase I architecture/history investigation, the 106 Group documented eight newly identified architecture/history properties within the architecture/history APE that were constructed in or before 1966. All of these properties were recommended as not eligible for listing in the NRHP due to a lack of historical significance and/or a loss of integrity. No additional architecture/history survey is recommended for these properties. Further information on the properties is provided on new inventory forms, which are being submitted to SHPO for inclusion in the statewide inventory.

6 References Cited

Mathis, Greg

2014 *Southwest Light Rail Transit Project Research Design for Cultural Resources: Supplement Number 1, Additional Parameters for the Area of Potential Effect for Architecture/History Resources.* Prepared for the Metropolitan Council, Southwest LRT Project Office, St. Louis Park, Minnesota.

Minnesota Department of Transportation, Cultural Resources Unit [MnDOT CRU]

2011 *MnDOT's Cultural Resources Unit (CRU) Project and Report Requirements.* MnDOT CRU, 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 [NPS]

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

1995 *National Register Bulletin: How to Apply the National Register Criteria for Evaluation.* United States Department of the Interior, Washington, D.C.

Roise, Charlene, Christina Harrison, Mike Justin, Mike Madsen and Joe Trnka

2010 *Southwest Transitway: A Research Design for Cultural Resources*. Prepared for the Metropolitan Council, Southwest LRT Project Office, St. Louis Park, Minnesota.

Attachment A. Original Research Design

Southwest Transitway:
A Research Design for Cultural Resources
12 February 2010, updated 16 March 2010, 2 April 2010

Prepared by
Charlene Roise, Hess, Roise and Company
Christina Harrison, Archaeological Research Services
Mike Justin, Mike Madson, and Joe Trnka, HDR Engineering

INTRODUCTION

The Hennepin County Regional Rail Authority is proposing to construct the Southwest Light Rail Transit (SWLRT) facility, linking the Intermodal Station in downtown Minneapolis with the central business area in suburban Eden Prairie. The line is located within the cities of Minneapolis, St. Louis Park, Hopkins, Minnetonka, and Eden Prairie.

The Federal Transit Administration (FTA) has determined that the proposed project is an undertaking as defined by the National Historic Preservation Act (NHPA) and is subject to the provisions of Section 106 of the NHPA. Section 106 requires that federal agencies take historic properties into account as part of project planning. The Cultural Resources Unit (CRU) of the Minnesota Department of Transportation (MnDOT) is acting on behalf of FTA for many aspects of the Section 106 review process for SWLRT. The FTA has also determined that the SWLRT is subject to the National Environmental Policy Act (NEPA) and a Draft Environmental Impact Statement (DEIS) is being prepared by Hennepin County under the direction of the FTA.

Through the NEPA scoping process, four build alternatives were identified. To streamline subsequent analysis, these alternatives were divided into five segments. The following table, which was included in the draft "Southwest LRT Technical Memorandum No. 9: Environmental Evaluation" (September 9, 2009), outlines the segments that are associated with each of the alternatives:

Alternative	*Segments*
LRT 1A	1, 4, A
LRT 3A	3, 4, A
LRT 3C-1 (Nicollet Mall)	3, 4, C-1 (Nicollet Mall)
LRT 3C-2 (11th/12th Street)	3,4, C-2 (11th-12th Streets), C-2A (Blaisdell Avenue), C-2B (1st Avenue)

Segment 1 extends northeast from a station in Eden Prairie at TH 5 along a former rail corridor owned by the Hennepin County Railroad Authority (HCRRA) to a station at Shady Oak Road, on the border between Minnetonka and Hopkins.

Segment 3 creates a new corridor, running east from a station at Mitchell Road in Eden Prairie and turning northerly to terminate at the Shady Oak Station.

Segment 4 follows an existing rail corridor east-northeasterly from the Shady Oak Station through Hopkins and Saint Louis Park to the West Lake Station in Minneapolis, near that city's western border.

Segment A continues northeast from the West Lake Station, mostly using an existing rail corridor, to the Intermodal Station on the western edge of downtown Minneapolis.

Segment C also begins at the West Lake Station, traveling east along a former rail corridor (now the Midtown Greenway), north along one of several alternative courses under and on city streets, to and through downtown Minneapolis, and ultimately ending at the Intermodal Station or South Fourth Street. (For the purpose of this cultural resources assessment, all of the "C" variations will be considered as a single group.)

It should be noted that the above segments overlap at three points: the Shady Oak Station, the West Lake Station, and the Royalston/Intermodal Stations. When the results of the cultural resource surveys are sorted by segment, there will be redundancy in the findings at these three points. This redundancy is inevitable if the effects of each segment are to be analyzed. When a single alternative is selected, it will be necessary to eliminate duplicated properties to obtain an accurate representation of the effects of that alternative.

PROPOSED METHODOLOGY FOR ARCHAEOLOGICAL RESOURCES SURVEY

Christina Harrison, Archaeological Research Services
Mike Justin and Mike Madsen, HDR Engineering

This work plan outlines a program to identify archaeological properties which meet the criteria of the National Register of Historic Places in the project's area of potential effect (APE), to be used in assessing potential effects to those properties. Three primary tasks comprise the work plan. First, in order to provide a uniform assessment of available data across the five project segments discussed in the DEIS, the project team will prepare a report (by project segment within a broad APE) to include: results of the literature search, an archaeological probability assessment, and a field survey strategy (Task 1). It is expected that a limited amount of field investigation/sampling may occur as part of this task depending upon the weather. Second, an archaeological inventory/evaluation of the selected alternative will be completed, using a refined APE based on proposed construction (Task 2). Finally, a report of the field investigations of the selected alternative and an assessment of effects will be prepared (Task 3).

Task 1 will involve archaeologists from both HDR and ARS. Support will be provided, as needed, by Hess Roise research staff as well as by geomorphologists and other paleoenvironmental experts provided by HDR. Division of responsibilities will partly depend on what survey needs are identified by the background research, but primary responsibility for precontact and contact period archaeology will rest with Christina Harrison (ARS) and Michael Justin (HDR), and for historic archaeology with Michael Madson (HDR). The personnel for Tasks 2 and 3 are pending.

The survey will be conducted in accordance with all federal, state, and local requirements, including the Minnesota Field Archaeology Act and the Minnesota Private Cemeteries Act.

Area of Potential Effect (APE)

The APE for archaeological resources is generally defined as the anticipated limits of construction activities. At this stage in the project development, factors influencing those limits have not yet been fully identified. The APE, starting with a broad area at first, will be refined as the engineering design advances.

For Task 1, the APE for the literature search and probability assessment will be based, as appropriate, on the project limits as defined in the project engineering drawings used to prepare the DEIS. This will include the full width of existing railroad right-of-way corridors as well as the area within 100 feet on either side of the current engineering alignments. The APE near station areas also includes any undeveloped and/or vacant property within 500 feet that could potentially be utilized for construction/development activities. Depending on the station location, these may include open, green spaces (particularly in suburban areas) and paved parking lots (particularly in urban areas).

If the literature search/probability assessment identifies potentially significant historic features or high probability areas immediately adjacent to the above-referenced APE parameters, and if the significance of potential sites in these areas is expected to relate to National Register criteria A, B, and/or C, the APE for the field strategy for the Phase I-II survey may be adjusted to include these locations.

During Task 2, the APE will be reviewed in light of more detailed engineering plans. Throughout the design phase of the project, the adequacy of the APE will be periodically evaluated and expanded or retracted as necessary as project elements are added or modified. The survey report specified in Task 3 will provide a clear delineation of the surveyed APE, including all additions, so that the adequacy of survey efforts can be readily determined when project changes are proposed.

It should be noted that, generally, the APE for archaeological resources is a smaller area located within the APE for history/architecture resources.

Task 1. Report of Archival Review/Site Probability/Field Strategy

This task will uniformly represent the readily available information across the five project segments discussed in the DEIS. In general the report will be a desktop analysis of existing archaeological research data supplemented by a discussion of probability for previously unidentified archaeological properties. Field inspections may be utilized to confirm existing conditions, particularly to inform the discussion on field survey strategies.

The desktop analysis will utilize documents on file at the State Historic Preservation Office (SHPO) and the Office of the State Archaeologist (OSA). Historic maps and aerial photographs, local histories, and other archival information on file at the Minnesota Historical Society, the Borchert Map Library (at the University of Minnesota), and local libraries and historical societies may also be reviewed.

The task will review:

- archaeological survey reports on file at SHPO, OSA and other repositories in order to establish what segments of the project routes have already been inventoried according to current standards;
- known archaeological sites and/or (if applicable) recommendations/confirmations of NRHP eligibility;
- relevant USGS topographic maps and soil surveys as well as any Mn/Model information and other environmental and paleoenvironmental data pertinent to the assessment of pre-contact archaeological site probability, including land use histories;
- Historic maps and aerial photographs to identify localities with historic-period archaeological site potential.

A preliminary field review will be conducted. The survey team will document visible indications of topographic and hydrological features as well as past and current land use with concomitant loss of soil integrity. The information from field observations will be combined with the data gathered during the archival review to propose archaeological site probability along the five segments.

Pre-contact and historic-period contexts will be briefly reviewed, with a focus to inform the discussion of site types and assessment of probability. The probability assessment will be organized by the five project segments (1, 3, 4, A, and C). For each of the five segments the report will include:

- a general description of the APE;
- a discussion of previous surveys and previously identified sites;
- a discussion of historic site types and the associated conditions that may indicate a historic property;
- a discussion of archaeological probability (for pre-contact/contact period and historic-period), and;
- a survey strategy and methods, including specific places targeted for field investigation.

The survey strategy for precontact and contact period evidence will be guided by Native American and early Euro-American settlement and land use patterns identified by previous archaeological investigations in the vicinity including, for example, the 1992-1994 city-wide cultural resource survey of Eden Prairie, the corridor surveys conducted for Trunk Highway 212 and Trunk Highway 12, and a number of smaller scale compliance surveys conducted within the Nine Mile, Minnehaha and Purgatory Creek watersheds.

The results of Task 1 will be summarized in the DEIS.

Task 2. Inventory/Evaluation (Phase I-II) Survey

For the Inventory/Evaluation survey, the APE will be refined to reflect the updated engineering design. That refined APE will be surveyed in a manner consistent with the recommendations presented in the Task 1 report. Field methods outlined in the Minnesota SHPO and MnDOT CRU guidelines will be generally followed; any exception, as well as more detail specific to the existing conditions along each segment, will have been documented in the Task 1 report.

In the case of precontact/contact period Native American evidence, the field sampling will involve standard methods for identification and the preliminary assessment of horizontal and vertical site dimensions, integrity, and National Register potential. In addition, the survey may utilize targeted geomorphological testing and analysis in areas likely to feature deeply buried archaeological evidence.

Artifacts will be collected and analyzed in a manner consistent with contemporary standards. Artifacts from private property will be collected with written permission of the landowner. Historic period artifacts will only be collected if they appear to represent a potentially significant archaeological property.

Archaeological sites determined to have National Register potential will then require more comprehensive Phase II formal testing. As the Phase I review more than likely will have identified a wide range of site types associated with highly varied environmental settings and precontact to historic period contexts, the scope, research questions, field and analytic needs will be more appropriately defined at that stage of the investigation.

Task 3. Analysis and Reporting

A technical report of the Phase I and Phase II investigations, including the methodology, field work results, and recommendations, will be prepared in accordance with the guidelines of MnDOT's CRU, the Secretary of the Interior's Standards for Identification and Evaluation, and other applicable state and federal guidelines. This includes submittal of Geographic Information Systems (GIS) data per the CRU guidelines. All sites documented during the survey will be recorded on new or updated Minnesota Archaeological Site Forms.

Collected artifacts will be processed and analyzed in compliance with the survey guidelines of the SHPO and the Mn/DOT CRU. Artifacts will be curated at an approved facility as stipulated in the consultant's archaeology license.

PROPOSED METHODOLOGY FOR HISTORY/ARCHITECURE RESOURCES SURVEY

Charlene Roise, Hess, Roise and Company

Area of Potential Effect (APE)

Generally, the APE for history/architecture resources extends 300 feet on either side of the centerline of the alignment of each corridor. Around each station, the APE includes property within a quarter-mile radius. This area addresses anticipated project-related infrastructure work and reasonably foreseeable development.

The APE is illustrated in maps of the five project segments. Exceptions to the parameters outlined above include the following:

- The APE for the Intermodal Station (in segments A and C) includes all property within the boundaries adopted for the "Downtown Minneapolis Transit Hub" Environmental Screening Report (October 28, 2009 review draft) prepared for Hennepin County by Kimley-Horn and Associates. The area shown in the report is extended northeast of Washington Avenue to and across the Mississippi River to include the first tier of properties on Nicollet Island, to provide adequate APE coverage for the three-block potential station area and related developments such as rail storage yards. This area addresses infrastructure work associated with the SWLRT project as well as cumulative effects related to the development of the Intermodal station. (See below for discussion about splitting responsibility for survey of this area between the SWLRT project and the Intermodal Station project.)

- The APE for the 4th Street, 8th Street, 12th Street, Harmon Place, Hawthorne Avenue, Lyndale, and Uptown Stations (in segment C) includes the adjacent blocks in all directions from the station. This area is proposed for the stations in the more densely-built urban area, in comparison to the larger quarter-mile radius for other stations in outlying areas.

- The APE for the proposed tunnel area under Blaisdell, Nicollet, or First Avenues, including the 28th Street and Franklin Stations (in segment C), extends from one-half block west of Blaisdell Avenue to one-half block east of First Avenue. If this alternative is selected, the APE may need to be expanded in light of the design and construction methods for the tunnel.

- Along some portions of the corridor, the 300 foot APE may be extended to take into account visual effects. For example, if the 300 foot area comprises open space, and a row of buildings is located beyond, these buildings may be included in the APE.

- In some station areas, there are known areas of project related work and/or anticipated development outside of the quarter-mile radius, and these areas are included in the APE. This includes areas in downtown Hopkins.

The APE may also be adjusted if a field surveyor recommends that the project may affect a property or properties not included in the established APE boundaries.

As project planning proceeds, additional factors will be assessed to determine if there are other effects (direct, visual, auditory, atmospheric, and/or changes in use) which could require an expansion of the above APE. These factors include:

- Noise analysis, including areas where the use of bells and whistles is anticipated.
- Vibration analysis, including vibration related to project construction and operations.
- The specific locations of project elements, including operations/maintenance facilities, park-and-ride facilities, traction power substations, signal bungalows, and other infrastructure.

Survey Approach

Survey Zones

The project cuts through a number of distinct communities, each with a unique history. As a result, these communities, which share similar physical and historical characteristics, can serve as a framework for conducting the survey. The survey will be organized around the following zones (related project segments and stations are listed in parenthesis):

- Eden Prairie (Segments 1 and 3; Highway 5, Highway 62, Mitchell Road, Southwest Station, Eden Prairie Town Center, Golden Triangle, City West Stations)
- Minnetonka (Segments 1 and 3; Rowland, Opus, Shady Oak Stations)
- Hopkins (Segment 4; Shady Oak, Hopkins, Blake Stations)
- Saint Louis Park (Segment 4; Louisiana, Wooddale, Beltline Stations)
- Minneapolis west residential, including parts of Bryn Mawr, Lowry Hill, East Isles, Kenwood, Cedar-Isles-Dean, and West Calhoun neighborhoods (Segments A and C; West Lake, 21st Street, Penn Stations)
- Minneapolis south residential/commercial, including parts of the Stevens Square/Loring Heights, Whittier, Lowry Hill East, East Isles, and Cedar-Isles-Dean neighborhoods and the Midtown Greenway (Segment C; Uptown, Lyndale, 28th Street, Franklin Stations)
- Minneapolis downtown north of I-94 (Segment C; 12th Street, 8th Street, 4th Street, Harmon Place, Hawthorne Avenue Stations)
- Minneapolis industrial (Segments A and C; Van White, Royalston Stations)
- Minneapolis warehouse (Segments A and C; Intermodal Station)

In addition, there are four railroad corridors that traverse these community boundaries. These corridors will be considered as four individual zones. The corridors (by historic names) are:

- Minneapolis and Saint Louis Railway (Chicago and North Western Railway). Part of the main line is in the APE (Segments 1, 4, A and C). A segment of this line between downtown Minneapolis and Merriam Junction has recently been evaluated by the Surface Transportation Board as not eligible to the National Register; however, the SHPO did not concur with this finding. The line will be further evaluated, focusing on the section within the APE.
- Chicago, Milwaukee and Saint Paul Railway (Milwaukee Road), Benton Cutoff. Part of the CM&SP Benton Cutoff is in the APE (Segments 4, A, and C). Except for the Chicago, Milwaukee and Saint Paul Railroad Grade Separation Historic District, which is listed in the National Register, the Benton Cutoff has previously been determined as not eligible to the National Register by the Federal Highway Administration, with concurrence by the SHPO.
- Saint Paul and Pacific Railway (Great Northern Railway). Part of the main line is in the APE (Segment A). This line will be evaluated.
- Minneapolis, Northfield and Southern Railway. Part of the Auto Club-Luce Line Extension of the MN&S is in the APE (Segment 4). This line has been previously evaluated by Mn/DOT CRU, and the Auto Club-Luce Line Extension has been recommended as not eligible to the National Register. This determination has not been submitted to SHPO for concurrence. The Mn/DOT CRU evaluation will be summarized and incorporated into this survey by reference.

All of the above lines, including those which have been evaluated as not eligible, will be inventoried and evaluated to identify any railroad related features in the APE that are potentially significant in their own right. The statewide railroad context developed by Mn/DOT CRU will serve as a basis for evaluation of railroad resources.

The survey of the above thirteen zones will be completed by three consultants. Hess Roise will complete the surveys for the five zones in Minneapolis, Mead & Hunt will complete the surveys for St. Louis Park, Hopkins, Minnetonka, and Eden Prairie, and Summit Envirosolutions will complete the surveys for the four railroad zones. Each consultant will prepare a report for the Phase I-II survey of the zones completed. An overall summary, integrating the survey results from all thirteen zones, will be prepared for the analysis of effects, within the framework of the five project segments.

The survey will include properties built in 1965 and earlier. Although National Register guidelines use a 50-year cut-off for eligibility (except for properties of exceptional importance), adopting a 45-year cut-off for this survey provides 5 years for project planning before the survey becomes outdated.

NOTE ON RESPONSBILITY FOR SURVEYS IN THE INTERMODAL STATION AREA: There is an overlap of the APEs for the SWLRT project and the Intermodal Station project (currently in the planning stage). The SWLRT survey effort will complete survey work for only

a portion of the SWLRT APE in the vicinity of the Intermodal Station, including where SWLRT construction is anticipated. The remainder of this area will be surveyed as part of the planning for the Intermodal Station project. The survey results from the Intermodal Station survey will be included in the consideration of cumulative effects as part of the SWLRT Section 106 review. (See map for the division of survey responsibilities in this portion of the SWLRT APE.)

Phase I Survey (Reconnaissance Survey)

The primary goal of Phase I is to identify properties that appear to have the potential to qualify for the National Register and merit further analysis. This will eliminate from further consideration any properties that have little or no potential to meet National Register criteria. The Phase I survey will also verify that properties already listed or officially determined eligible for listing in the National Register still retain integrity.

Literature Search

The literature search will focus on areas within the APE, with broader contextual information procured as needed. The literature search will begin by collecting existing reports and research for each zone. Maps, atlases, and other information that can provide specific information about property within the APE for archaeology will be a high priority. Additional research will be conducted for specific areas, and occasionally on specific properties, as appropriate. The literature search will produce:

- A working set of research files, including maps and related materials, for each zone. A copy of these files will be provided to the archaeological team.
- For each zone, a brief context (perhaps with subcontexts) will be developed that is approximately two to five pages in length and comprises a brief narrative, an annotated list of relevant property types, and a preliminary period of significance. (This assumes that extensive narrative contexts will not be developed during this phase.) A similar context will also be prepared for each railway, focusing specifically on segments in the APE. These contexts will also be provided to the archaeological team.

Fieldwork

A project-specific inventory form will be developed. Prior to the onset of fieldwork, a draft inventory form will be submitted to the client for review and approval.

The Hennepin County property database provides building construction dates for tax parcels. These dates will be assumed to be generally reliable for properties erected in the last half of the twentieth century, and will therefore be used to eliminate properties built after 1965 from the survey. During fieldwork, however, surveyors will be observant of properties eliminated from the inventory to identify:

- Inaccuracies: Properties not included in the survey that appear to date from 1965 and earlier (in other words, instances where the county date appears to be incorrect);
- Incomplete data: Properties not included in the survey that contain multiple buildings or other features, where the county date may refer to a newer feature—but older features are also present;
- Exceptional properties: Properties dating from 1966 or later that might be of exceptional importance.

Fieldwork will be conducted by zones. The methodology for each zone is as follows:

- Using information from the Hennepin County database, surveyors will be provided with a spreadsheet listing all properties in the zone built in 1965 or earlier. In addition to the address and year built, the spreadsheet will include the property's use and the name of the owner and taxpayer. The survey will include properties listed or officially determined eligible for listing in the National Register (including those in historic districts) to verify that they retain integrity. Map books will be prepared for reference in the field.
- Surveyors will conduct site visits for each property, recording observations from public rights-of-way with field notes and digital photographs. At a minimum, surveyors will record information on noteworthy features and the property's integrity. Using the data categories for functions and uses outlined in the National Register bulletin *How to Complete the National Register Registration Form*, and with reference to the context information for each zone, the surveyor will suggest data categories that seem the most appropriate for evaluating the property's National Register potential. The surveyor will also provide a preliminary recommendation—and a justification for that recommendation—stating that 1) the property does not appear to be eligible for the National Register, or 2) the property should be evaluated in Phase II.
- All field surveyors will meet the Secretary of the Interior's Professional Qualifications Standards.

Deliverables for Phase I survey

- For each zone:
    - Synopsis for each zone, including the context and property type information.
    - Table of surveyed properties including recommendations for intensive level survey, with justification.
    - Inventory form (2 copies) for each property in the APE built in 1965 or earlier. In addition to the data collected in the field, the inventory forms will incorporate information on the property's location (UTM reference, township/range/section) from the county database. At least one color digital photograph of the property will be included on each form. (NOTE: For properties which go to a Phase II evaluation, the same survey form should incorporate the evaluation information.)
    - Map of zone with properties recommended for intensive-level survey identified.

Phase II Survey (Intensive)

The goal of Phase II is to evaluate properties, as recommended in Phase I, to determine which meet the criteria of the National Register of Historic Places. As with Phase I, the work will be organized by zones.

Literature Search

The literature search will focus on individual properties and districts that have potential to meet National Register criteria. To provide a framework for evaluating some properties, it may be necessary to expand the context synopses developed in Phase I to address specific physical areas, eras, and/or property types.

Fieldwork

Additional field work may be needed to evaluate the physical characteristics of individual properties and districts. It might be necessary to obtain permission to enter some properties for this evaluation—if, for example, there is the potential for a significant interior space, or if a parcel is large and contains a number of buildings and these buildings cannot be adequately evaluated from the public right-of-way, aerial photographs, or other means.

Deliverables for Phase II survey

- For each zone:
    - Table of Phase II properties, including recommendations on eligibility.
    - More detailed inventory form, including the narrative evaluation of eligibility, for each property included in this phase.
    - Map of zone, showing properties that appear to qualify for the National Register identified, along with listed and previously determined eligible properties.
- A Phase I-II survey report (for all zones completed by the same consultant) conforming to Mn/DOT CRU Architecture/History Report requirements and other applicable federal and state guidelines.

At the conclusion of all Phase II history/architecture survey work, a consolidated summary/table incorporating the work from all thirteen zones will be prepared for the analysis of effect. This summary will be organized by the five project segments.

Attachment B. Supplemental Research Design

Minnesota Department of Transportation

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October 14, 2014

To: Nani Jacobson, Assistant Director, Environmental & Agreements
Metropolitan Council

From: Greg Mathis

Re: Southwest Light Rail Transit Project Research Design for Cultural Resources: Supplement Number 1, Additional Parameters for the Area of Potential Effect for Architecture/History Resources

Introduction

The parameters for the Area of Potential Effect (APE) for the Southwest Light Rail Transit Project (Project) are described in *Southwest Transitway: A Research Design for Cultural Resources* (Roise et al. 2010). Since the Project was still in the initial planning stage when the APE was established, the research design identified general APE limits for architecture/ history resources that were used for the preparation of the Draft Environmental Impact Statement (DEIS) for the Project. These limits encompass an area 300 feet on either side of the centerline of the corridor alignment and a quarter-mile (0.25 mile) radius around each station. The research design also includes five exceptions to these parameters. Three of these exceptions were to account for unique conditions related to specific locations and/or features of alignment alternatives that were not carried forward beyond the alternatives analysis in the DEIS, thus no they are no longer applicable to the current Project APE. The other two exceptions are more general in nature and still apply to the entire Project:

- Extending the APE more than 300 feet along some portions of the corridor to take into account visual effects, such as those across open areas; and
- Extending the APE outside of the 0.25 mile radius at some stations to account for project related work and/or anticipated development; and

In addition, the parameters outlined in the research design allow for extending the APE during the field survey to include property or properties not included in the established APE boundaries that a field surveyor recommended may be affected by the Project (Roise et al. 2010).

Recognizing that the full nature and scale of the Project would not become fully known until engineering and design work advanced, the APE parameters require that:

> As project planning proceeds, additional factors will be assessed to determine if there are other effects (direct, visual, auditory, atmospheric,

and/or changes in use which could require an expansion of the above APE. These factors include:

- Noise analysis, including areas where the use of bells and whistles is anticipated.
- Vibration analysis, including vibration related to project construction and operations.
- The specific locations of project elements, including operations/maintenance facilities, park-and-ride facilities, traction power substations, signal bungalows, and other infrastructure (Roise et al. 2010).

Subsequent to the completion of the DEIS, Project engineering and design has advanced from a conceptual level of design (approximately 1 percent design) to approximately 30 percent plans (Preliminary Plans) for the Locally Preferred Alternative. As Project design has progressed, a number of adjustments have been made to the Project, with some adjustment being more significant than others. The more significant adjustments included a shift in the alignment for a segment in the City of Eden Prairie and the addition of a proposed operation and maintenance facility (OMF) in the City of Hopkins. The APE was subsequently revised to account for these more significant changes, using the 300 feet/0.25 mile limits established by the research design. These adjustments to the architecture/ history APE were documented in Section 106 consultation materials dated April 18, 2014.

Minor changes identified in the Preliminary Plans include minor adjustments to the Project alignment and slight shifts of station locations, and the redesign of portions of the Minneapolis segment as a result of a memorandum of understanding (MOU) between the Metropolitan Council and the City of Minneapolis entered into in August 2014. In addition, the Preliminary Plans have better defined a number of Project elements such as the construction limits of vehicular, bicycle and pedestrian access route improvements for stations, and the locations of potential floodplain mitigation sites. Many of these minor changes, which are both contiguous and noncontiguous to the Project corridor and station areas, extend beyond the 300 feet/0.25 mile APE limits, thus requiring a reevaluation of the APE for architecture/history resources.

Supplemental Parameters for the APE for Architecture/History Resources

A number of minor changes and additions were identified in the Preliminary Plans that extend beyond the previously defined APE limits of 300 feet on either side of the Project corridor and/or more than 0.25 miles from the center point of a LRT station. Many of these are consistent in their nature and scale, and resultant effects. Therefore, they can be classified into one of several categories. In addition, it is anticipated that additional similar types of Project elements will continue to be identified as Project planning progresses towards construction documents (100% plans).

The original parameters for the architecture/history APE only required that analysis be done to determine if the APE needed to be expanded. They did not provide parameters for establishing limits to account for effects beyond 300 feet of the alignment or 0.25 miles of stations. Therefore, MnDOT CRU, pursuant to its FTA delegated authority, has established additional parameters for the Project's architecture/history APE. The purpose of these supplemental parameters is to provide consistency in the applicability of the APE parameters to revise the APE for common types of Project elements that extend beyond 300 feet on either side of the project corridor and/or more than 0.25 miles from the center point of a LRT station. This includes those elements identified in the Preliminary Plans and those that will continue to be identified and/or refined as engineering and design advance towards 100% plans. These supplemental parameters are identified in Table 1.

Table 1. Additional Parameters for the Architecture/History APE

Project Element	APE Limit and Rationale
Modifications to Existing Roadways	
Modifications to existing collector (local) streets	All property within 125' from the perimeter of the construction limits/limits of disturbance (LOD) to account for potential minor visual, noise, and vibrations effects.
Modifications to existing major arterial streets	All property within 150' from the perimeter of the construction limits/LOD to account for potential changes in traffic and noise and vibrations effects.
Modifications to existing highways (limited access)	All property within 300' from the perimeter of the construction limits/LOD to account for potential changes in traffic and noise and vibrations effects.
Pedestrian and Bicycle Improvements	
Pedestrian (ADA) ramps	All property within 50' from the perimeter of the construction limits/LOD to account for potential minor visual effects and noise/vibrations during construction.
Sidewalks and trail improvements (no above grade elements other than curbs and medians)	All property within 100' from the perimeter of the construction limits/LOD to account for potential minor visual effects and noise/vibrations during construction.
Pedestrian enhancements (e.g. sidewalks and trails) that include above grade elements (e.g. lighting, trees, signage, etc.)	All property within 125' from the perimeter of the construction limits/LOD to account for potential minor visual effects and noise/vibrations during construction.
Barrow/Fill and Floodplain/Stormwater/Wetland Mitigation Areas	
Borrow/fill, and floodplain/stormwater/ wetland mitigation areas	Generally all property within 125' from the perimeter of the construction limits/LOD to account for vibrations during construction and potential permanent visual effects.

Bibliography

Roise, Charlene, Christina Harrison, Mike Justin, Mike Madson, and Joe Trnka.
2010 *Southwest Transitway: A Research Design for Cultural Resources (Updated 16 March 2010 and 2 April 2010)*. Hess, Roise and Company, Archaeological Research Services, and HDR Engineering, Minneapolis, Minnesota.

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Attachment C. Project Personnel

106 GROUP LIST OF PERSONNEL

Principal-In-Charge	Anne Ketz, M.A., RPA
Project Manager	Jennifer Bring, B.A.
Principal Investigator	Saleh Miller, M.S.
Historians	Kathryn Ohland, M.S. Rebecca Johnson, B.S. Kathryn Scott
Graphics and GIS	Nathan Moe, B.A.