

APPENDIX E

Environmental Screening

Carver County Arboretum Transportation Study Environmental Screening Table

Please note: This table does not include Land Use, which is summarized under the Study Area Characteristics heading of the Existing Conditions Memorandum.

Mapping for this Environmental Screening includes:

- Project Overview (includes regional trails and drainage information)
- Social and Public Features (one sheet per Subarea)
- Natural Features (one sheet per Subarea)

Social, Economic, or Environmental Topic	Considerations	Existing/Planned Conditions
Social and Community	<ul style="list-style-type: none"> • Access and compatibility considerations • Hospitals, schools, libraries, churches, government buildings 	Social and institutional resources are depicted in the attached Social and Public Features mapping. In general, there is only a limited number of public or civic buildings in the vicinity of the project corridors, and these are generally concentrated in Victoria. The Mount Olivet Lutheran Church is directly adjacent to CSAH 13 across from Interlachen Road.
Environmental Justice	<ul style="list-style-type: none"> • Avoid/mitigate disproportionate impacts to low income and minority populations • Federal funding triggers review and potential mitigation requirements 	There are no known concentrations of low income or minority populations in the study area, and Environmental Justice is not anticipated to be a notable consideration regarding roadway planning and design in the study area. If future improvements involve federal funding, more detailed documentation procedures would be required per FHWA Order 6640.23.
Section 4f/6f Resources	<ul style="list-style-type: none"> • Require special evaluation, coordination, and documentation: <ul style="list-style-type: none"> ○ Parks and trails ○ Wildlife & waterfowl refuges ○ School playgrounds ○ Public golf courses 	Section 4(f) Regional trails are depicted in the attached Social and Public Features mapping; the only regional trail which crosses the project corridors is the Lake Minnetonka LRT/Southwest Regional Trail which crosses CSAH 13 approximately ½ mile north of TH 5, and crosses TH 5 in downtown Victoria. There is also local trail along the east side of CSAH 13 and along the north side of TH 5 between CSAH 13 and Minnewashta Parkway.

Social, Economic, or Environmental Topic	Considerations	Existing/Planned Conditions
		<p>Parks are depicted in the attached Social and Public Features mapping. The U of M Arboretum is not a traditional park or wildlife refuge, but is a Section 4(f) resource subject to applicable protections and review requirements. The other regional Section 4(f) resource in the project area is the Carver Park Reserve. There are also various local parks in the vicinity of TH 5 and CSAH 13 in the overall project area as depicted in Social and Public Features mapping.</p> <p>Section 6(f) Section 6(f) resources have this designation because of the receipt of federal Land and Water Conservation Fund (LAWCON) monies. Section 6(f) has a set of review and mitigation requirements, beyond Section 4(f) requirements, which need to be approved by the US National Parks Service (NPS). Mitigation has to be in the form of resource replacement. Section 6(f) review, coordination, and mitigation requirements can be significant, as can the associated project schedule requirements.</p> <p>Both the U of M Arboretum and the Carver Park Reserve have received federal funding which triggers Section 6(f) requirements. These requirements only apply to the portions of the resource which were in place at the time of the time the federal grant was closed. As provided by the Department of Natural Resources, mapping of the portions of the U of M Arboretum and the Carver Park Reserve, respectively, subject to Section 6(f) requirements are depicted in the attachment to this Environmental Screening. For the Carver Park reserve the areas subject to 6(f) requirements are depicted in purple.</p> <p>It may be noted that the approval of impacts to the U of M Landscape Arboretum need to be approved by the U of M Board of Regents.</p>
Traffic Noise	<ul style="list-style-type: none"> • Identify noise receptors • Comply with federal and state regulatory requirements • Potential mitigation (walls or other measures) 	<p>There are various potential noise receptors adjacent to the study corridors as defined in MnDOT requirements and guidelines (http://www.dot.state.mn.us/environment/noise/pdf/2017-noise-requirements.pdf). The largest residential concentrations adjacent to the project corridors occur in downtown Victoria, along TH 5 between 78th St and CSAH 13, along CSAH 13 between TH 7 and TH 5, Along CSAH 13 between TH 5 and CSAH 18, and on the south side of TH 5 in the vicinity of Lone Cedar Lane. The primary Section 4(f) noise receptors are the U of M Landscape</p>

Social, Economic, or Environmental Topic	Considerations	Existing/Planned Conditions
		Arboretum and the Carver Park Reserve. Noise would also be a consideration for historic structures or properties.
Farmland	<ul style="list-style-type: none"> Farmland conservation policies 	<p>There is little, if any, land in conventional agricultural development adjacent to the project corridors. As part of the U of M Landscape Arboretum, there are vineyards on the north and north and south sides of TH 5 east of CSAH 13, and on the west side of CSAH 13 north of TH 5. Any corridor improvement project impacting farmland would need to address applicable regional and local farmland conservation policies. If federal funding is involved, coordination with the National Resources Conservation Service using Form AD 1006 could be required. It is not anticipated that farmland impacts would be a notable constraint regarding roadway planning and design in the study area.</p>
Historic/archaeological	<ul style="list-style-type: none"> Require special evaluation, coordination, and documentation Avoid impacts per state, federal, and local regulations and guidelines 	<p>Historic</p> <p>The Minnesota State Historic Preservation Office (SHPO) maintains a file of historic, or potentially historic, sites throughout the state. These are categorized as follows:</p> <ul style="list-style-type: none"> SHPO-inventoried structure: a structure has been brought to SHPO's attention through some means that it may have significance under applicable law and guidelines; however, further review would be required. Property Considered Eligible: consultation between SHPO and a lead agency (e.g. MnDOT's Cultural Resources Unit) has determined that for the purpose of identifying appropriate treatment, the structure would likely be included in the National Register of Historic Places if the applicable administrative procedures were initiated. Listed on the National/State Register of Historic Places ("listed"): the structure has the protections identified under the National Historic Preservation Act and the Minnesota Historic Sites Act. <p>SHPO's database for the study area was reviewed and summary information is presented in the attached Social and Public Features mapping. No listed sites were identified. However, a number of structures have been identified as eligible for listing. Two structures are in the downtown Victoria area. While they are not directly adjacent to TH 5, they would need to be considered in the planning and preliminary design process. The remaining eligible structures are associated with former U of M agricultural research activities.</p>

Social, Economic, or Environmental Topic	Considerations	Existing/Planned Conditions
		<p>These are located in the northeast quadrant of the TH 5/CSAH 13 intersection and in the northwest quadrant of the TH 41/TH 5 intersection, and are now part of the U of M Landscape Arboretum. Given the potential for federal funding to be part of future improvement projects, planning for such projects will need to consider visual, noise, access, direct/physical, and other types of impacts to these sites. Federal funding would trigger significant agency coordination, site/impact evaluation, documentation, and potentially mitigation requirements under Section 106.</p> <p>The SHPO-inventoried structures identified in downtown Victoria and at the intersection of CSAH 13 and CSAH 18 should also be further investigated as part of project planning.</p> <p>Archaeology There are 11 known sites (artifacts have been discovered) and 3 site leads (information of some form suggests the potential presence of a site) within one mile of the project corridors. Due to distance or other factors, the known sites are unlikely to be impacted by improvements resulting from this study. Site 21CRj is at the western end of the TH5 corridor; however, this site is a reported ghost town, many of which do not actually exist. Road expansion and geometric corrections in areas near water with coarser soils have the greatest potential to contain unidentified archaeological sites, and coordination with the SHPO or a federal permitting/funding agency may be needed to further consider potential impacts to archaeological resources, including 21CRj.</p>
Soils/Erosion	<ul style="list-style-type: none"> Compatibility with construction/drainage design 	<p>A preliminary review of soils information using the Natural Resources Conservation Service (NRCS) Web Soil Survey indicates that most soils in the project area are Hydrologic Group C, C/D, or D. This means that the soils have high to very fines/clay content and infiltration rates are correspondingly low. This is borne out by the frequent presence of surface water features in the larger project area. This overall soils profile has the following ramifications for roadway construction projects:</p> <ul style="list-style-type: none"> Erosion during construction should not be a substantial issue if proper best management practices are used consistent with NPDES regulatory requirements.

Social, Economic, or Environmental Topic	Considerations	Existing/Planned Conditions
		<ul style="list-style-type: none"> It will be challenging to achieve desired infiltration rates with permanent stormwater controls – early coordination with drainage regulatory agencies will be important regarding appropriate rate and volume control measures. Native soils are not optimal from a structural stability perspective. <p>Prior to the construction of any improvements in the project corridor, geotechnical analysis would be performed which would evaluate the suitability of the local soils for construction and identify any corrective measures needed.</p>
Utilities	<ul style="list-style-type: none"> Conflicts with utilities may increase schedule/cost requirements 	<p>There are regional overhead power transmission lines along TH 5, CSAH 13, and CSAH 18 in the study area which would need to be accounted for in planning and preliminary design activities. There is what appears to be a local overhead power distribution line power along TH 41 between TH 5 and 82nd Street West. A review of US DOT’s National Pipeline Mapping System indicates that there is a regional gas pipeline under TH 41 in the study area, and a generally east-west oil pipeline south of CSAH 18. The closest point of the oil pipeline to CSAH 18 is approximately 400 feet, directly south of the CSAH 18/McKnight Road intersection. Carver County and/or MnDOT would need to coordinate with the applicable city regarding potential sanitary sewer and watermain considerations regarding roadway planning, design, and construction. Most of the study area has rural section stormwater conveyance design. Communications utilities are likely present throughout the study area, but these should not be a major consideration for the purposes of this study.</p>
Water Resources	<ul style="list-style-type: none"> Impacts need to be avoided/limited per regulatory requirements 	<p>Wetlands</p> <p>National Wetland Inventory (NWI) wetland areas as defined by the US Fish and Wildlife are depicted in the attached Natural Features mapping. While any improvement project or projects in the study corridor would need to have field wetland delineations performed, NWI mapping is a desktop exercise that indicates the scale of wetland impacts which could be encountered. The NWI information gives evidence that wetland resources are prevalent in the overall study area and should be carefully considered in roadway planning and design activities.</p>

Social, Economic, or Environmental Topic	Considerations	Existing/Planned Conditions
		<p>Floodplain FEMA 100-year floodplain information is provided in the attached Natural Features mapping. It can be seen that floodplain considerations will need to be addressed in corridor planning and design, particularly relative to Lake Auburn East and Minnewashta Lake.</p>
<p>Drainage</p>	<ul style="list-style-type: none"> • Existing drainage systems • Sensitive waters • Regulatory requirements 	<p>Except for curb and gutter design associated with a two block stretch of TH 41 in downtown Victoria and the 1,500 feet of CSAH 18 (Lyman Boulevard) west of TH 41, all the project roadways have rural section design (drainage via ditching).</p> <p>As depicted in the attached Project Overview map, the overall project area involves three surface water management jurisdictions: a) the Minnehaha Creek Watershed District (the greatest portion of the project area, including all of the TH 5 corridor and all of the CSAH 13 corridor north of TH 5), b) the Carver County Watershed Management Organization (covers most of the CSAH 18 project element as well as the southern half of the TH 41 element), and c) the Riley-Purgatory-Bluff Creek Watershed Management District (generally east of TH 41). Each of these organizations have stormwater control requirements which are more stringent than standard National Pollutant Discharge Elimination System (NPDES) requirements. Based on information from the respective watershed management plans from these organizations, regional flow direction information is depicted in the attached Project Overview map.</p> <p>Impaired water bodies within one mile of the project area are:</p> <ul style="list-style-type: none"> • Auburn Lake East (nutrients) • Wasserman Lake (mercury in fish tissue, nutrients) • Church Lake (nutrients) • Tamarack Lake (nutrients) • Lake Virginia (mercury in fish tissue, nutrients) • Church Lake (nutrients) • McKnight Lake (nutrients) • Jonathan Lake (nutrients) • Hazeltine Lake (nutrients)

Social, Economic, or Environmental Topic	Considerations	Existing/Planned Conditions
		<p>There is one impaired stream within one mile of the project area:</p> <ul style="list-style-type: none"> • Bluff Creek (fishes bioassessments, turbidity) <p>Bluff Creek receives the drainage from the portion of the study area within the Riley-Purgatory-Bluff Creek Watershed Management District.</p> <p>Any roadway improvement project will need to comply with NPDES stormwater control requirements as administered by the Minnesota Pollution Control Agency (MPCA), as well as control requirements associated with the Minnehaha Creek Watershed District, the Carver Count Watershed Management Organization, and/or the Riley-Purgatory-Bluff Creek Watershed Management District, as appropriate. In general, the watershed district/organization area where the majority of the work is taking place will assume local water management jurisdiction.</p>
Contaminated Properties	<ul style="list-style-type: none"> • Potential construction delays/costs • Potential cleanup liability 	<p>The Minnesota Pollution Control Agency’s (MPCA’s) “What’s In My Neighborhood” (WIMN) database is a useful tool for preliminary screening and planning purposes. WIMN data was reviewed as part of this screening. Since much of the data was not pertinent, such as existing or past NPDES construction permits, registered storage tanks (with no spill/contamination issues), or small quantity hazardous waste generators (e.g. medical/dental offices), it was not presented in the attached mapping.</p> <p>Generally, the only sites potentially of interest for this study were past petroleum-product leaksites. However, all these sites have been administratively closed by the MPCA, meaning no further investigation and/or remediation is warranted per current land use. A listing of the leaksites is provided below:</p> <p>TH 5:</p> <ul style="list-style-type: none"> • Minnesota Victoria Oil, 1793 Arboretum Boulevard, Victoria, administratively closed July 2002 • City of Victoria, 1670 Steiger Lake Lane, Victoria, administratively closed April 2014 • Food N Fuel, 1510 Commercial Avenue, Victoria, administratively closed November 2000

Social, Economic, or Environmental Topic	Considerations	Existing/Planned Conditions
		<ul style="list-style-type: none"> • Kahnke Brothers Inc., 1400 Arboretum Boulevard, Victoria, administratively closed June 1995 • David and Marilyn Boorsma, 185 Arboretum Boulevard, Chaska, administratively closed July 2007 <p>CSAH 13:</p> <ul style="list-style-type: none"> • Tschemperle Property, 8121 Bavaria Road, administratively closed January 2000 <p>CSAH 18: No sites identified</p> <p>TH 41:</p> <ul style="list-style-type: none"> • Super America #5001, 2960 W 82nd St, administratively closed October 2007 • City of Chanhassen/Nordic Track, 82nd St and TH 41, administratively closed March 1992 <p>In addition, one 30-acre brownfields investigation and cleanup is identified north of West 82nd Street and west of TH 41. No site name or address are provided. This site received remediation actions and was administratively closed by the MPCA in September of 1999.</p> <p>While more detailed review will likely be required as part of preliminary and final design for future improvement projects, it is not anticipated that contaminated properties will be a substantial consideration relative to preliminary planning/conceptual design activities. There is no history of heavy industry in the project area.</p>
Fisheries	<ul style="list-style-type: none"> • Trout streams • Fish migrations • Spawning runs • Unique habitat conditions 	There are no trout streams within a mile of the project corridors or known unique fisheries considerations.
Vegetation	<ul style="list-style-type: none"> • Native plant communities • Landscape vegetation 	The MnDNR has conducted a landscape scale assessment of the seven-county metro area to identify terrestrial and wetland areas of ecological significance.

Social, Economic, or Environmental Topic	Considerations	Existing/Planned Conditions
	<ul style="list-style-type: none"> • Functional vegetation • High value vegetation • Hazard trees 	<p>Identified areas, referred to as Regionally Significant Ecological Areas (RSEAs), include places where intact native plant communities and/or native animal habitat are still found in the region and continue to provide important ecological functions.</p> <p>It can be seen in the attached Natural Features mapping that RSEAs are relatively prominent in the overall project area. They are primarily associated with the Carver Park Reserve and the U of M Landscape Arboretum, but are also shown on the south side of CSAH 18 east of CSAH 13.</p>
Protected Species	<ul style="list-style-type: none"> • Federal and state designations • Coordination and review requirements 	<p>Based on online US Fish and Wildlife Service (USFWS) information, there are only two federally protected species known to be in Carver County:</p> <ul style="list-style-type: none"> • Northern long-eared bat • Rusty-patched bumble bee <p>Future improvement projects would involve review and potential mitigation using USFWS guidance.</p> <p>MnDNR's Natural Heritage Information System (NHIS) database was reviewed as part of this environmental screening. Known occurrences of the following species were identified within ½ mile of the project corridors:</p> <ul style="list-style-type: none"> • Rusty-patched bumble bee; within the U of M Landscape Arboretum • Minnesota Dwarf Trout Lily; within the U of M Landscape Arboretum – This species is actually a federally listed Endangered Species, and should have been listed in USFWS information, above • Least Darter, within Minnewashta Lake – this is not an Endangered or Threatened Species, but a Minnesota Species of Special Concern