



City of Plymouth  
3400 Plymouth Boulevard | Plymouth, MN 55447-1482  
(763) 509-5000

July 10, 2012

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**ENVIRONMENTAL  
ASSESSMENT  
Worksheet**  
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Peony Lane/Lawndale  
Lane Extension

Plymouth, Minnesota

**EAW Comment Period: July 23 - August 22, 2012**

*WSB Project Number: 02080-00*



701 Xenia Avenue South, Suite 300  
Minneapolis, MN 55416  
Tel: (763) 541-4800 · Fax: (763) 541-1700  
wsbeng.com

# ENVIRONMENTAL ASSESSMENT WORKSHEET

**Note to preparers:** This form and EAW Guidelines are available at the Environmental Quality Board's website at: <http://www.eqb.state.mn.us/EnvRevGuidanceDocuments.htm>. The Environmental Assessment Worksheet provides information about a project that may have the potential for significant environmental effects. The EAW is prepared by the Responsible Governmental Unit or its agents to determine whether an Environmental Impact Statement should be prepared. The project proposer must supply any reasonably accessible data for — but should not complete — the final worksheet. The complete question as well as the answer must be included if the EAW is prepared electronically.

**Note to reviewers:** Comments must be submitted to the RGU during the 30-day comment period following notice of the EAW in the *EQB Monitor*. Comments should address the accuracy and completeness of information, potential impacts that warrant further investigation and the need for an EIS.

**1. Project Title:** Peony Lane / Lawndale Lane Extension

**2. Proposer:** City of Plymouth, MN  
**Contact person** Doran Cote  
**Title** Public Works Director  
**Address** 3400 Plymouth Blvd  
**City, state, ZIP** Plymouth, MN 55447  
**Phone** 763-509-5500  
**Fax** 763-509-5060  
**E-mail** dcote@plymouthmn.gov

**3. RGU:** Same as No. 2 above

**4. Reason for EAW preparation:** (check one)  
☐ EIS scoping ☒ Mandatory EAW ☐ Citizen petition ☐ RGU discretion ☐ Proposer volunteered

If EAW or EIS is mandatory give EQB rule category subpart number and subpart name:

Mandatory EAW Category: Part 4410.4300, Subpart 22(A) Highway Projects - Construction of a road on a new location over one mile in length that will function as a collector roadway.

**5. Project location** **County:** Hennepin  
**City/Township:** Plymouth  
**Section:** 5, 6, 7 **Township:** 118N **Range:** 22W  
**GPS Coordinates** NA

**Attach each of the following to the EAW:**

- County map showing the general location of the project; **Figure 5-1**
- U.S. Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries (photocopy acceptable); **Figure 5-2**
- Site plan showing all significant project and natural features. **Figure 5-3a and 5-3b**

## 6. Description

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**a. Provide a project summary of 50 words or less to be published in the *EQB Monitor*.**

The City of Plymouth proposes to extend Peony Lane from 54th Avenue to Lawndale Lane. The extended roadway will intersect County Road 47 and continue north to the border with the City of Maple Grove. The project includes construction of a four-lane roadway, a trail, a sidewalk, dedicated turn lanes and storm water ponding.

**b. Give a complete description of the proposed project and related new construction. Attach additional sheets as necessary. Emphasize construction, operation methods and features that will cause physical manipulation of the environment or will produce wastes. Include modifications to existing equipment or industrial processes and significant demolition, removal or remodeling of existing structures. Indicate the timing and duration of construction activities.**

Project Description

The City of Plymouth proposes to extend Peony Lane northward from its current terminus at 54<sup>th</sup> Avenue to Lawndale Lane and the border with the City of Maple Grove. The proposed project is 1.52 miles in length. A new four-lane, urban roadway with shoulders, dedicated turn lanes, a trail, sidewalk, and ponding will be constructed.

The project will include constructing a storm sewer system to collect and treat storm water on site prior to discharge to surrounding wetlands and Elm Creek. Municipal watermain will also be constructed throughout the length of the Peony Lane/Lawndale Lane Extension project. A trail will be constructed on the east side of the road as part of the proposed Northwest Greenway Trail and allow for future connections of the trail to the east. A sidewalk will be constructed on the west side of the road. Some wetland and floodplain impact will occur with the project. Floodplain impacts will be mitigated on-site. Wetland mitigation is preferred on-site; however, if site conditions preclude this on-site mitigation, off-site banking credits will be obtained.

During construction, grading of the road alignment will occur. This will include stripping topsoil and existing vegetation, cutting and filling, and excavation for storm ponds. The project will include excavating approximately 200,000 cubic yards of material within the project area. Of this amount, approximately 34,000 cubic yards would not be suitable for the roadway construction and will be hauled off-site. The remainder will be reused on site and an additional 56,000 cubic yards of sand and 19,000 cubic yards of aggregate will also be brought in for the road construction.

Two historic properties were identified within the project area through the State Historic Preservation Office (SHPO) database. The structures within these properties are anticipated to be removed or impacted by the project. **Appendix C** contains a report completed as part of the EAW process regarding additional investigation of these properties. The report concludes that there is a lack of significance and integrity on both properties and recommends that the properties are not eligible for the National Register of Historic Places.

Construction Staging/Project Schedule

The proposed project is scheduled for construction in 2014. The project may be constructed in two phases with the first phase including construction of a two-lane urban roadway with turn lanes. Timing of the second phase with the two additional lanes could then occur in the future and will be dependent on the timing of surrounding development.

Because a majority of the project involves constructing a new roadway on a new alignment, impacts to through traffic will be minimized. There will be impacts to traffic from just north of the Wayzata High School to 54<sup>th</sup> Avenue and on Lawndale Lane both north and south of County Road 47. Access for local traffic will be maintained during the construction process.

Construction staging plans will be developed as part of the preliminary and final design.



**c. Explain the project purpose; if the project will be carried out by a governmental unit, explain the need for the project and identify its beneficiaries.**

Project Purpose

Peony Lane is an important component of the City of Plymouth's transportation network and extension of Peony Lane and Lawndale Lane has been identified in both the City's and County's Transportation Plans. County State Aid Highway (CSAH) 101 south of Trunk Highway 55 aligns with the existing Peony Lane north of Trunk Highway 55. Together, this alignment is an "A" minor arterial roadway that runs from Trunk Highway 12 in Wayzata to Maple Grove. The purpose of the project is to provide a direct connection of Peony Lane from south of 54<sup>th</sup> Avenue to Lawndale Lane north of County Road 47 to extend and connect the "A" minor arterial roadway. The intent of the roadway is to provide a transportation connection where one does not exist today and to complete a four-lane roadway and trail.

Project Need

The City of Plymouth has been planning for the eventual development of the northwestern portion of the City for a number of years. The City's comprehensive plan has evaluated a number of land use scenarios and transportation improvements for this area. One of the key transportation improvements identified for the area was the northerly extension of Peony Lane to Lawndale Lane. It is appropriate timing for transportation infrastructure improvements to serve the existing and planned land uses for the area. The extension of Peony Lane has also been anticipated in the Hennepin County Transportation Plan.

Project Beneficiaries

The project will benefit residents in the area as well as the traveling public by providing a more direct connection between Schmidt Lake Road and Lawndale Lane.

**d. Are future stages of this development including development on any other property planned or likely to happen? ☒ Yes ☐ No**

**If yes, briefly describe future stages, relationship to present project, timeline and plans for environmental review.**

The City may only construct two of the four travel lanes initially. Timing for the additional two lanes will depend upon traffic volume increases, development in the area, safety and other transportation needs. This environmental document takes into consideration the impacts associated with a four-lane roadway.

**e. Is this project a subsequent stage of an earlier project? ☐ Yes ☒ No**

**If yes, briefly describe the past development, timeline and any past environmental review.**



**7. Project magnitude data**

**Total project acreage:** 41.1 acres

**Total project length:** 1.52 miles

**Number of residential units:** Not Applicable

**Commercial, industrial or institutional building area (gross floor space) total square feet:** Not Applicable

**Indicate areas of specific uses (in square feet):**

**Office:** Not Applicable

**Retail:** Not Applicable

**Warehouse:** Not Applicable

**Light industrial:** Not Applicable

**Other commercial (specify):** Not Applicable

**If over 2 stories, compare to heights of nearby buildings:** Not Applicable

**Manufacturing:** Not Applicable

**Other industrial:** Not Applicable

**Institutional:** Not Applicable

**Agricultural:** Not Applicable

**Building height:** Not Applicable

**8. Permits and approvals required. List all known local, state and federal permits, approvals and financial assistance for the project. Include modifications of any existing permits, governmental review of plans and all direct and indirect forms of public financial assistance including bond guarantees, Tax Increment Financing and infrastructure. All of these final decisions are prohibited until all appropriate environmental review has been completed. See Minnesota Rules, Chapter 4410.3100.**

<i>Unit of Government</i>	<i>Type of Application</i>	<i>Status</i>
US Army Corps of Engineers	Section 404 Permit	To be obtained
Pollution Control Agency	NPDES Storm Water Permit	To be obtained
Pollution Control Agency	Section 401 Water Quality Certification Permit	To be obtained as part of US Corps of Engineers permit
Minnesota Department of Health	Watermain extension	To be obtained
Department of Natural Resources	Temporary dewatering for construction	To be obtained
Department of Natural Resources	Work in Public Waters	To be obtained
Hennepin County	Right-of-Way permit	To be obtained
City of Plymouth	WCA Approval	To be obtained
Elm Creek Watershed Management Commission	Stormwater and erosion control review	To be obtained

The funding will be from local sources such as the municipal state aid funds (MSA), special assessments, or Hennepin County funding.

**9. Land use. Describe current and recent past land use and development on the site and on adjacent lands. Discuss project compatibility with adjacent and nearby land uses. Indicate whether any potential conflicts involve environmental matters. Identify any potential environmental hazards due to past site uses, such as soil contamination or abandoned storage tanks, or proximity to nearby hazardous liquid or gas pipelines.**

Land Use and Compatibility

Existing and past land use in the project area includes agricultural, residential, and institutional.

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Wayzata High School and a residential development (Elm Creek Highlands) are located at the south end of the Peony Lane project area. The remainder of the project is within rural residential and agricultural land uses. Elm Creek bisects the project area in the southern portion of the project and a large wetland complex is located east of the project.

The Metropolitan Council has a sewer interceptor line that crosses the project area at 54<sup>th</sup> Avenue and then turns north along Lawndale Lane (**Figure 5-3a**). There are no other known major underground utilities.

The purpose of the project is to provide a more direct connection of Peony Lane from south of 54<sup>th</sup> Avenue to Lawndale Lane north of County Road 47. The intent of the roadway is to provide a transportation connection where one does not exist today by constructing a four-lane roadway.

The City's 2030 Land Use Plan guides the surrounding area as a Rural-to-Urban transition zone with Living Area 1 and 2 designations as well as Public/Semi-Public and Institutional. The Living Area 1 and 2 designations are for 1-2 units per acre and 2-4 units per acre, respectively. The Rural-to-Urban Transition zone is designated primarily for northwestern Plymouth, where the road project is located. More than 70 percent of the City's anticipated housing growth from 2000 to 2030 will occur in northwest Plymouth. The planned residential land uses in this area will accommodate a potential range of 2,912 to 5,610 new households and density range of 2.87 to 5.54 dwelling units per acre. The Peony Lane project is compatible with adjacent land uses and has been planned for in the City's and County's Transportation Plans.

#### Potential Environmental Hazards

Available background information was reviewed regarding the location of potentially contaminated properties within a half mile of the project site. The information reviewed included the following:

- Minnesota Pollution Control Agency (MPCA) Master Entity System "What's in My Neighborhood?" website search
- MPCA Storage Tank/Leak site website search

This search identified two sites within 0.5-mile of the project area. The two sites identified include a leak site located near the intersection of Fieldstone Boulevard and Merrimac Lane North in Maple Grove (Site 1) and a site with a recorded tank and leak near the intersection of Peony Lane and Old Rockford Road in Plymouth (Site 2). **Figure 9-1** shows the locations of these sites. These sites are not anticipated to be affected by the proposed project. No potentially contaminated sites were found within the project boundaries or within 0.125-mile of the project area.

The project area is primarily rural and agricultural in nature. Farms or rural residential homes may have above or underground storage tanks for fuels and may also have areas used for dumping of household or farm waste. These areas have the potential to contain hazardous waste; however, the amounts would be localized and consistent with rural uses.

**10. Cover types. Estimate the acreage of the site with each of the following cover types before and after development:**

The following cover type information is based on preliminary design information.

	Before	After		Before	After
<b>Types 1-8 wetlands</b>	5 ac	1.4 ac*	<b>Lawn/landscaping</b>	5.4 ac	0 ac
<b>Wooded/forest</b>	1.5 ac	0 ac	<b>Impervious surfaces</b>	3.5 ac	16.1 ac
<b>Brush/Grassland</b>	15.8 ac	21.1 ac	<b>Storm water pond</b>	0	2.4
<b>Cropland</b>	9.9 ac	0.1 ac	<b>Other (describe)</b>		
<b>TOTAL</b>	<b>41.1</b>	<b>41.1 ac</b>			

\*Does not include wetland mitigation. Mitigation may be on-site or purchased from a wetland bank.

If **Before** and **After** totals are not equal, explain why:

**11. Fish, wildlife and ecologically sensitive resources**

**a. Identify fish and wildlife resources and habitats on or near the site and describe how they would be affected by the project. Describe any measures to be taken to minimize or avoid impacts.**

Information about the existing conditions in the Peony Lane project area was obtained through Hennepin County's Minnesota Land Cover Classification System database (**Figure 11-1**) and the wetland delineation report for the project dated December 2011. These resources identified the following predominant habitat/cover types in the project area:

Planted or Cultivated Vegetation

Much of the existing land use is agricultural cropland. Annually cropped areas provide minimal habitat for wildlife, except for resting areas for birds during migration. Croplands provide minimal cover and an occasional, monotypic food source. The frequent cultivation results in wildlife that is accustomed to frequent disturbance.

Forest and Woodland

Scattered forest and woodland areas are adjacent to and within the proposed project corridor. The largest wooded area is around Elm Creek in the southern half of the project. Immediately next to the proposed road project is a Lowland Hardwood Forest (Rated C) and an altered, non-native plant community. To the west of the proposed road near Elm Creek, the area contains Oak Forest (Rated B) and Maple-Basswood Forest (Rated B). The rating system is based on the Minnesota Land Cover Classification System surveys where an "A" rating indicates an excellent quality natural community and a "D" rating indicates a poor quality natural community.

The Oak Forest and Maple-Basswood areas will not be impacted by the project. Some trees in the Lowland Hardwood Forest and non-native wooded area around Elm Creek will be removed for construction of the road.

There are a few, smaller, scattered woodland areas that will be impacted by the project just north of the existing 54<sup>th</sup> Avenue. These areas are identified as altered, non-native wooded areas based on the Minnesota Land Cover Classification System. They are small and do not provide significant habitat.



### Wetlands

The shrublands and herbaceous vegetation shown on **Figure 11-1** are primarily associated with the wetlands within the project area. These areas are classified as altered, non-native shrublands and seasonally flooded altered, non-native areas in the Minnesota Land Cover Classification System data. According to the wetland delineation, dated December 2011, the site contains 13 wetlands on approximately five acres. The wetlands on the site have been degraded by adjacent agricultural activities, but similar to the brush and grassland areas, they do offer some habitat for species. The wetland to the east of the project area is a large complex surrounding Elm Creek, and extends beyond the boundaries of the project area. While the wetland contains both native and invasive species, its contiguous nature provides a natural corridor to the north and south. **Figure 12-1** shows the National Wetlands Inventory, DNR Public Water wetlands, and delineated wetlands in and near the project area.

Four alignment options were reviewed as part of the development of this project. The chosen alternative minimizes habitat impact while also balancing other impact design considerations, such as right-of-way acquisition, safety, and storm water management. The project will convert cropland and cultivated vegetation, a small amount of wooded area, and some wetland to the roadway and storm water ponds. Wetland impacts will be mitigated in conformance with state and federal requirements (and are further discussed in Item 12).

**b. Are any state-listed (endangered, threatened or special concern) species, rare plant communities or other sensitive ecological resources on or near the site? X Yes    No**

**If yes, describe the resource and how it would be affected by the project. Describe any measures that will be taken to minimize or avoid adverse impacts. Provide the license agreement number (LA-579) and/or Division of Ecological Resources contact number (ERDB# 20120349) from which the data were obtained and attach the response letter from the DNR Division of Ecological Resources. Indicate if any additional survey work has been conducted within the site and describe the results.**

The review and correspondence with the DNR regarding threatened and endangered species is included in **Appendix B**. The Peony Lane/Lawndale Lane Extension project area was reviewed for potential conflicts with known occurrences of rare features. A review of the DNR licensed Natural Heritage Information System (NHIS; # LA-579, issued May 16, 2011) revealed that no state threatened, endangered, or special concern species are located within approximately one mile of the project area. However, the DNR indicated that the state-listed threatened Blanding's turtles are known to occur outside the one mile radius of the project. The DNR's fact sheet will be provided to the contractor for the project. Additionally, the City will consider erosion control measures that are less hazardous to the turtles, such as natural netting erosion control blankets rather than plastic mesh erosion control blankets.

Three occurrences of Areas of Biodiversity Significance (Maple-Basswood Forests and Oak Forest) do occur within one mile of, and in one instance adjacent to, the project area (**Figure 11-2**). Two of these communities are located east and outside of the proposed project boundary and will not be affected by the project. Given the type of development proposed (road construction) a minimal amount of tree removal will be required along the eastern edge of one of the plant communities south of Elm Creek. Currently, this area contains mowed and grassy areas around ponding areas therefore it appears that the database information about the Area of Biodiversity Significance is no longer completely accurate. Vegetation impact would occur within the new right-of-way to accommodate sight lines and construction. However, this vegetation removal will be minimal and overall the plant community is not anticipated to be impacted by this project. Best Management Practices (e.g., silt fence) will be used during construction to avoid impacts to any of the forested areas adjacent to the project.

**12. Physical impacts on water resources. Will the project involve the physical or hydrologic alteration — dredging, filling, stream diversion, outfall structure, diking, and impoundment — of any surface waters such as a lake, pond, wetland, stream or drainage ditch? X Yes \_\_\_No**

**If yes, identify water resource affected and give the DNR Public Waters Inventory number(s) if the water resources affected are on the PWI: 456W & Elm Creek**

**Describe alternatives considered and proposed mitigation measures to minimize impacts.**

While the majority of the site consists of agricultural cropland and grasslands, a large wetland complex borders the project area to the east and several wetlands have been identified within the project area. A wetland delineation report, dated December 6, 2011, identified 13 wetlands throughout the project area. These wetlands are summarized in **Table 12.1** below.

**Table 12.1: Wetlands Impacts Within Project Area**

<b>Wetland ID</b>	<b>NWI</b>	<b>PWI</b>	<b>Dominant Vegetation</b>	<b>Wetland Type</b>	<b>Approximate Impact (acres)</b>
1*	No	No	Sedge, Cattail, Willow, Reed Canary Grass	¾	NA
2*	PEMC	Elm Creek flow through wetland	Sedge, Cattail, Willow, Reed Canary Grass	¾	0.33
3	PEMCd	No	Sedge, Cattail, Willow	3	0.27
4	No	Elm Creek flows through wetland	Sedge, Cattail, Willow	3	0.29
5	No	No	Sedge, Cattail, Reed Canary Grass	3	0.11
6	PEMCd	456W	Reed Canary Grass	3	2.21
7	PEMC	No	Reed Canary Grass	¾	NA
8	PEMCd	No	Reed Canary Grass	2	NA
9	PEMCd	No	Reed Canary Grass	3	0.32
10	PEMCd	No	Sedge, Reed Canary Grass	2	0.02
11	PEMCd	No	Sedge, Reed Canary Grass	2	0.04
12	No	No	Reed Canary Grass	1	0.001
A	No	No	Cattail	3	0.03
				<b>TOTAL:</b>	<b>3.62</b>

*\*Wetland 1 and the northern basin of Wetland 2 are wetland mitigation sites that were created in the mid 1990's to mitigate for wetland impacts associated with Wayzata High School and the previous Peony Lane reconstruction. The proposed Peony Lane/Lawndale Lane project is not anticipated to impact these mitigation areas.*

Impacts to these wetlands will follow the sequencing measures outlined in the Wetland Conservation Act and the City will obtain approval through an Army Corps of Engineers Section 404 permit, the City of Plymouth Wetland Conservation Act approval, and DNR Public Waters Work Permit.

Additionally, the watercourse that is tributary to Elm Creek (Wetland 7) is proposed to be realigned for approximately 200 feet. The purpose of this realignment is to provide for a perpendicular crossing of the watercourse under the roadway instead of the skewed crossing that would occur if the watercourse was not realigned. This impact is included in the total wetland impact noted in **Table 12.1**.

The City has a wetland buffer requirement for development projects. However, if road projects need to be aligned adjacent to wetlands, additional wetland filling to create buffer is not required. The project has minimized impacts to wetlands to the greatest extent feasible and will reduce vegetation disturbance to wetlands and buffers as much as possible.

Three other options were considered for the roadway extension that would have resulted in differing wetland impact than the chosen option. All alternatives were on the same alignment as the existing Peony Lane on the south side of the project and the existing Lawndale Lane on the north side of the project. The differences were how the alternatives connected the two existing road segments. These options were evaluated based on their overall ability to address the purpose and need of the project as well as historical, social, environmental, and economic impacts. These options are summarized below:

**Alternative 1:** Alternative 1 was 1.54 miles long and was slightly west of the chosen alternative. This alternative had 3.2 acres of wetland impact and 2.8 acres of floodplain impact. These impacts are similar to the chosen alternative. While Alternative 1 had slightly less wetland impact than the chosen alternative, there was greater impact to two historic properties than the other alternatives. Therefore, this alternative was rejected.

**Alternative 2:** Alternative 2 was 1.54 miles long and was shifted north and west of the chosen alternative. This alternative had 2.9 acres of wetland impact and 2.8 acres of floodplain impact. While this alternative had the least wetland impact, the alignment would have resulted in a skewed intersection at County Road 47 and thus would not address the need for a safe alignment for the project. Additionally, a frontage road would have been required to provide driveway access to the residences that are located east of the road. Therefore, this alternative was rejected.

**Alternative 4:** Alternative 4 was 1.47 miles long and was shifted south and east of the chosen alternative. This alternative had the most wetland and floodplain impact with 7.0 acres and 8.1 acres, respectively. These wetland impacts were part of the reason to reject this alternative.

**13. Water use. Will the project involve installation or abandonment of any water wells, connection to or changes in any public water supply or appropriation of any ground or surface water (including dewatering)? ☒ Yes ☐ No**

**If yes, as applicable, give location and purpose of any new wells; public supply affected, changes to be made, and water quantities to be used; the source, duration, quantity and purpose of any appropriations; and unique well numbers and DNR appropriation permit numbers, if known. Identify any existing and new wells on the site map. If there are no wells known on site, explain methodology used to determine.**

The Peony Lane / Lawndale Lane extension project may require temporary dewatering to complete construction. If this is deemed necessary, a permit from the DNR will be obtained.

The project is not within a Wellhead Protection Area or a Drinking Water Supply Management Area. Based on information obtained from the Minnesota Pollution Control Agency, there are nine wells that exist within or near the proposed project area (**Table 13-1; Figure 13-1**). Three of these wells have a known location and it appears they will not be affected by the project. Six of the wells do not have exact known locations from this data. The well locations that did not have a known exact location in the database are shown on **Figure 13-1** in the location that the County Well Index database indicates. However, the actual address for Map ID 7 and 9 appears to be west of the proposed project area.



**Table 13-1: Wells Near Peony Lane / Lawndale Lane Extension Project**

Map ID	Unique ID	Address*	Use	Located
1	118898	6020 Lawndale Lane	DO	Yes
2	204204	5910 Lawndale Lane	DO	Yes
3	204207	5705 Lawndale Lane	DO	Yes
4	547591	6140 Lawndale Lane	DO	No
5	658664	17425 CR 47	DO	No
6	672872	5705 Lawndale Lane	DO	No
7	450328	5450 Vagabond Lane	DO	No
8	435888	5620 Ranier Lane N	DO	No
9	472082	5405 Vagabond Lane	DO	No

\* All Addresses Are Located In Plymouth MN

Source: Minnesota Department of Health County Well Index

DO = Domestic

If wells will be impacted by the project, they will be relocated if in active use and the old location will be sealed and abandoned in conformance with state requirements.

- 14. Water-related land use management district. Does any part of the project involve a shoreland zoning district, a delineated 100-year flood plain, or a state or federally designated wild or scenic river land use district?**  X  Yes   No

**If yes, identify the district and discuss project compatibility with district land use restrictions.**

The proposed project area contains a FEMA delineated 100-year floodplain (**Figure 5-3b**). Approximately 3.9 acres of floodplain impact is anticipated with the project. This impact will be mitigated onsite at a 1:1 ratio.

Elm Creek is identified in the City's shoreland ordinance as a Tributary Stream. The ordinance does not prohibit road construction in the area. The use of erosion control Best Management Practices as minimization of vegetation disturbance will be employed around Elm Creek to meet the conditions of the ordinance.

- 15. Water surface use. Will the project change the number or type of watercraft on any water body?**   Yes  X  No

- 16. Erosion and sedimentation. Give the acreage to be graded or excavated and the cubic yards of soil to be moved:**  41.1  acres;  200,000  cubic yards.

**Describe any steep slopes or highly erodible soils and identify them on the site map. Describe any erosion and sedimentation control measures to be used during and after project construction.**

A detailed list of the soils present on the site is provided in **Item 19**. The site can be described as generally gently rolling throughout the project corridor. Of the soils on the site, the following are listed as highly erodible (HEL) (see **Figure 16-1**):

- L22D2: Lester loam, 6-12 percent slopes
- L22F: Lester loam, 25-25 percent slopes
- L26C2: Shorewood silty clay loam, 6-12 percent slopes

The footprint of the proposed road would be completely graded. An erosion and sediment control plan in conformance with the Elm Creek Watershed Management Commission and the NPDES permit requirements will be developed as part of the design of the project. Erosion and sediment control elements will include silt fence, biorolls, rock energy dissipation devices, temporary and permanent seeding, erosion control blankets, and storm water ponds.

**17. Water quality: surface water**

**a. Compare the quantity and quality of site runoff before and after the project. Describe permanent controls to manage or treat runoff. Describe any storm water pollution prevention plans.**

**b. Identify routes and receiving water bodies for runoff from the site; include major downstream water bodies as well as the immediate receiving waters. Estimate impact runoff on the quality of receiving waters.**

In the existing conditions, storm water south of County Road 47 is directed via overland flow through agricultural areas and wetlands to Elm Creek and the large wetland complex to the east of the project. Elm Creek is listed as impaired for aquatic life and a Total Maximum Daily Load (TMDL) for dissolved oxygen is needed. Storm water north of County Road 47 is directed north and east into Elm Creek.

As part of the project, storm water ponds to treat the water prior to discharge into surrounding wetlands and Elm Creek will be constructed. The storm water management plan for the project will meet the City of Plymouth's requirements in the City's Surface Water Management Plan, the requirements of the Elm Creek Watershed Management Commission (ECWMC), and the requirements of the National Pollutant Discharge Elimination System (NPDES) permit. The City and ECWMC require that storm water be managed to maintain pre-development discharge rates for the 2-, 10-, and 100-year events and maintain in-stream flow rates in Elm Creek to pre-project rates. The City and ECWMC also require water quality treatment to meet Nationwide Urban Runoff Program (NURP) guidelines and non-degradation guidelines. Therefore, storm water will be managed to limited post-project nutrient loading to pre-project nutrient loading.

As stated, Elm Creek is listed as an impaired water for aquatic life and a dissolved oxygen TMDL will be developed by the Minnesota Pollution Control Agency (MPCA). This TMDL has not yet been completed and as such, there is not a specific design standard that the project will have to meet. However, the project is required to meet the NPDES permits for work near an impaired water. This includes infiltrating at least 0.5 inches of water quality volume where site conditions allow. The City encourages infiltration of the 0.5 inch rainfall event from new impervious surface where soils are conducive. The ECWMC encourages infiltration of the 2-year rainfall event. The soils in the project area are not generally the best soils to allow for infiltration. However, the design of the storm water management system will take this into account and if the infiltration requirement cannot be accommodate, it will be documented in the Storm Water Pollution Prevention Plan (SWPPP).

The estimated storm water treatment requirements for the Peony Lane/Lawndale Lane extension project are summarized in the table below. The methods used to estimate each area and volume for the road project are described below. **Figure 17-1** shows the possible ponding locations and segments of the road used in the storm water analysis.

Impervious surface: The impervious surface is based on an average roadway width of 70 feet.

NURP Volume: The volume is estimated using the runoff from a 2.5-inch rainfall event based on a right-of-way width of 150 feet and using SCS Curve Numbers of 98 and 75, respectively, for impervious and turf areas. Since infiltration will be used, the actual amount of dead-pool storage required may be reduced during the final design process.

Live-pool Volume: The live-pool volume is estimated as the volume from six inches of runoff over all new impervious surfaces. This does not take into account any initial abstraction and, therefore, is conservative.

Infiltration Volume: The needed infiltration volume is estimated as the volume from 0.5 inches of runoff over all impervious surfaces. The location and configuration of the infiltration basins will be determined as part of the final design.

<i>Segment #</i>	<i>Low Point Station</i>	<i>Length</i>	<i>Estimated Impervious Surface (acres)</i>	<i>NURP Volume (ac-ft)</i>	<i>Live-pool Volume (ac-ft)</i>	<i>Infiltration Volume (ac-ft)</i>
1	301+24	1585	2.55	0.46	1.27	0.11
2	316+15	1372	2.20	0.40	1.10	0.09
3	327+34	1464	2.35	0.42	1.18	0.10
4	343+85	1791	2.88	0.52	1.44	0.12
5	369+65	1553	2.50	0.45	1.25	0.10
TOTALS		7765	12.48	2.25	6.24	0.52

The design of the storm water management system will meet the requirements of the City, ECWMC, and NPDES permit. As such, the project is not expected to impact the quality or quantity of the receiving water bodies.

#### **18. Water quality: wastewaters**

##### **a. Describe sources, composition and quantities of all sanitary, municipal and industrial wastewater produced or treated at the site.**

This project will not generate municipal or industrial wastewater.

##### **b. Describe waste treatment methods or pollution prevention efforts and give estimates of composition after treatment. Identify receiving waters, including major downstream water bodies (identifying any impaired waters), and estimate the discharge impact on the quality of receiving waters. If the project involves on-site sewage systems, discuss the suitability of site conditions for such systems.**

Not applicable

##### **c. If wastes will be discharged into a publicly owned treatment facility, identify the facility, describe any pretreatment provisions and discuss the facility's ability to handle the volume and composition of wastes, identifying any improvements necessary.**

Not applicable

#### **19. Geologic hazards and soil conditions**

##### **a. Approximate depth (in feet) to ground water: 0 minimum, 10 average; to bedrock: 149 minimum, 175 average.**

The project is located in the hummocky loamy till of the New Ulm Formation. There are many perched water tables scattered in the hilly terrain. For example, near the middle of the project area there are wetlands within 400 feet of each other with elevations of 975, 955, and 945 feet respectively, which indicates the lack of hydraulic connection between these three water tables. Local drift wells are



finished in a confined sand and gravel aquifer underneath the New Ulm Formation, and therefore do not represent water table conditions. Water table conditions may vary over the area independent of elevation. The source of this information is the County Well Index, topography maps, and information from the Minnesota Geological Survey maps.

**Describe any of the following geologic site hazards to ground water and also identify them on the site map: sinkholes, shallow limestone formations or karst conditions. Describe measures to avoid or minimize environmental problems due to any of these hazards.**

There are no sinkholes, shallow limestone formations, or karst conditions within the project area.

**b. Describe the soils on the site, giving NRCS (SCS) classifications, if known. Discuss soil texture and potential for groundwater contamination from wastes or chemicals spread or spilled onto the soils. Discuss any mitigation measures to prevent such contamination.**

The soils within the study area are loams and sandy loams. Most of the area contains soils with a hydrologic soil group of B with some areas of D. In general, Group B soils have moderate infiltration rates and Group D soils have very slow infiltration rates. Based on information from the Hennepin County Geologic Atlas, the area has a moderate sensitivity to groundwater pollution. **Table 19-1** lists the soils present on the site and **Figure 16-1** shows the location of these soils.

**Table 19-1. Soils within the Study Area**

Map Symbol	Map Unit Name	Hydrologic Group	Hydric
L16A	Muskego, Blue Earth, & Houghton Soils	A/D; B/D; D	Yes
L22C2, D2	Lester loam	B	No
L23A	Cordova loam	B/D	Yes
L24A	Glencoe loam	B/D	Yes
L26A, B, C2	Shorewood silty clay loam	C	No
L28A	Suckercreek fine sandy loam	NA	No
L35A	Lerdal loam	C	No
L36A	Hamel overwash	C	Yes
L37B	Angus loam	NA	No
L45A	Dundas-Cordova complex	B/D	Yes

## **20. Solid wastes, hazardous wastes, storage tanks**

**a. Describe types, amounts and compositions of solid or hazardous wastes, including solid animal manure, sludge and ash, produced during construction and operation. Identify method and location of disposal. For projects generating municipal solid waste, indicate if there is a source separation plan; describe how the project will be modified for recycling. If hazardous waste is generated, indicate if there is a hazardous waste minimization plan and routine hazardous waste reduction assessments.**

The construction of this project is not anticipated to generate hazardous waste. Construction debris will be collected from the site and disposed of properly.

**b. Identify any toxic or hazardous materials to be used or present at the site and identify measures to be used to prevent them from contaminating groundwater. If the use of toxic or**

**hazardous materials will lead to a regulated waste, discharge or emission, discuss any alternatives considered to minimize or eliminate the waste, discharge or emission.**

During construction, vehicles containing fuels will be present on site. As required by the NPDES Construction permit, the fuel containers will be required to have secondary containment by either being bermed or stored in a truck or other facility. Fuel tanks and any other hazardous material is required to be locked when not in use to avoid vandalism.

**c. Indicate the number, location, size and use of any above or below ground tanks to store petroleum products or other materials, except water. Describe any emergency response containment plans.**

Once the project has been constructed, there will be no above or below ground petroleum storage tanks within the site.

## **21. Traffic.**

**Parking spaces added:** N/A

**Existing spaces (if project involves expansion):** N/A

**Estimated total average daily traffic generated:** N/A

**Estimated maximum peak hour traffic generated and time of occurrence:** N/A

**Indicate source of trip generation rates used in the estimates.**

***If the peak hour traffic generated exceeds 250 vehicles or the total daily trips exceeds 2,500, a traffic impact study must be prepared as part of the EAW. Using the format and procedures described in the Minnesota Department of Transportation's Traffic Impact Study Guidance (available at: <http://www.oin.dot.state.mn.us/access/pdfs/Chapter%205.pdf>) or a similar local guidance, provide an estimate of the impact on traffic congestion on affected roads and describe any traffic improvements necessary. The analysis must discuss the project's impact on the regional transportation system.***

The existing roadway section on Peony Lane, through the Schmidt Lake Road intersection south of the proposed project, includes four-lanes (two in each direction) separated with a raised concrete median. Left turn lanes and some right turn lanes are provided at the primary intersections in the corridor. The roadway transitions from four-lane divided to a two-lane rural roadway north of the Wayzata High School entrance (north of Schmidt Lake Road). Peony Lane currently ends at 54<sup>th</sup> Avenue where the roadway turns. The roadway then follows 54<sup>th</sup> Avenue to Ranier Lane to 56<sup>th</sup> Avenue to Troy Lane through a series of curves connecting to County Road 47.

Existing traffic volumes on the roadways surrounding the Peony Lane/Lawndale Lane Extension project were collected in 2009 as part of the City's State Aid traffic counting program. The traffic volumes on the existing segments of Peony Lane range from 2,450 vehicles per day north of Schmidt Lake Road to 9,200 vehicles per day south of Schmidt Lake Road. **Figure 21-1** shows the existing 2009 daily traffic volumes.

The proposed Peony Lane/Lawndale Lane Extension project will provide a direct connection from 54<sup>th</sup> Avenue to County Road 47. A portion of the existing traffic on the local streets (54<sup>th</sup> Avenue, Ranier Lane, 56<sup>th</sup> Avenue and Troy Lane), will be diverted to the new Peony Lane connection. Currently there are approximately 30 residential homes along these local roadways. Assuming approximately 10 daily trips per home, it can therefore be estimated that these roadways would carry approximately 300 vehicles per day. The remaining vehicles, approximately 2,000 vehicles per day, would use the new Peony Lane connection to County Road 47. **Figure 21-1** includes the estimated existing daily traffic volumes assuming the new Peony Lane roadway connection.

The City's Comprehensive Plan shows the roadway as a future A-minor arterial, which corresponds to a posted speed of 35-45 mph. Previous study for the corridor indicated a 45 mph design speed and

four-lane section with a multi-use trail along the east side and a sidewalk along the west side should be provided.

The City's Comprehensive Plan developed 2030 traffic forecasts for the area roadway including this proposed segment on Peony Lane. The 2030 traffic forecast for this segment of Peony Lane is 10,400 vehicles per day. The proposed roadway section will adequately serve the forecasted volumes for this corridor. **Figure 21-2** shows the forecasted 2030 traffic volumes on the area roadways.

**22. Vehicle-related air emissions. Estimate the effect of the project's traffic generation on air quality, including carbon monoxide levels. Discuss the effect of traffic improvements or other mitigation measures on air quality impacts.**

No increase in vehicle-related air emissions are anticipated as a result of the Peony Lane Extension project. No "new" traffic will generated as a result of the project or any congestion anticipated that would cause increases in air emissions.

**23. Stationary source air emissions. Describe the type, sources, quantities and compositions of any emissions from stationary sources of air emissions such as boilers, exhaust stacks or fugitive dust sources. Include any hazardous air pollutants (consult *EA W Guidelines* for a listing) and any greenhouse gases (such as carbon dioxide, methane, nitrous oxide) and ozone-depleting chemicals (chloro-fluorocarbons, hydrofluorocarbons, perfluorocarbons or sulfur hexafluoride). Also describe any proposed pollution prevention techniques and proposed air pollution control devices. Describe the impacts on air quality.**

This project does not include any stationary sources of air emissions.

**24. Odors, noise and dust. Will the project generate odors, noise or dust during construction or during operation? ☒ Yes ☐ No**

**If yes, describe sources, characteristics, duration, quantities or intensity and any proposed measures to mitigate adverse impacts. Also identify locations of nearby sensitive receptors and estimate impacts on them. Discuss potential impacts on human health or quality of life. (Note: fugitive dust generated by operations may be discussed at item 23 instead of here.)**

Construction Odors, Noise and Dust

The proposed project would not generate any odors during construction. Noise and dust normal to construction would occur as a result of this project. Construction noise would be limited to daytime hours in accordance with city ordinances. Construction equipment would be fitted with mufflers that would be maintained during the construction process. Dust generated during construction would be minimized through standard dust control measures such as watering. After construction is complete, dust levels are anticipated to be minimal because all soil surfaces would be in permanent cover (i.e., pavement or grassed areas).

Traffic-Related Noise (Operations)

The project would be located on a City of Plymouth roadway without full control of access. County and City roads without full control of access outside the Cities of Minneapolis and St. Paul are exempt from Minnesota state noise standards per Minnesota Statute 116.07, Subdivision 2a. State standards therefore, would not apply to Peony Lane.

**25. Nearby resources. Are any of the following resources on or in proximity to the site?**

**Archaeological, historical or architectural resources?** ☒ Yes ☐ No

**Prime or unique farmlands or land within an agricultural preserve?** ☒ Yes ☐ No

**Designated parks, recreation areas or trails?** ☐ Yes ☒ No

**Scenic views and vistas?** ☐ Yes ☒ No

**Other unique resources?** ☐ Yes ☒ No

*Peony Lane/Lawndale Lane Extension EAW*

*July 10, 2012*

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**If yes, describe the resource and identify any project-related impacts on the resource. Describe any measures to minimize or avoid adverse impacts.**

**Archaeological, historical, or architectural resources:** Information was obtained from the State Historic Preservation Office (SHPO). This information indicated that there were two historic properties within the study area (**Figure 5-3a**). The structure at 5705 Lawndale Lane was noted as an historic house and the structure at 17510 County Road 47 was noted as an historic schoolhouse. The project will remove the structures at 17510 County Road 47 and impact some outbuildings at 5705 Lawndale Lane. As part of the EAW, additional investigation was completed for these properties and the results are included in **Appendix C**. The report concludes that there is a lack of significance and integrity on both properties and recommends that the properties are not eligible for the National Register of Historic Places.

**Prime Farmland:** Based on the Hennepin County Soil Survey, the Lester Loam (L22C2; see **Figure 16-1**) is listed as prime farmland within the study area. These soils cover a small part of the project. These areas will be impacted for the road and storm water ponding areas.

**Designated parks, recreation areas, or trails:** There are no parks or trails within the project area. With the construction of the project, portions of the proposed greenway trail will be constructed where the trail will be parallel to the road to the east. A sidewalk will be constructed on the west side of the road. The City also owns land within the project area (see **Figure 5-3a**) but this is not parkland.

- 26. Visual impacts. Will the project create adverse visual impacts during construction or operation? Such as glare from intense lights, lights visible in wilderness areas and large visible plumes from cooling towers or exhaust stacks?** ☐ Yes ☒ No  
If yes, explain.

- 27. Compatibility with plans and land use regulations. Is the project subject to an adopted local comprehensive plan, land use plan or regulation, or other applicable land use, water, or resource management plan of a local, regional, state or federal agency?** ☒ Yes ☐ No.

**If yes, describe the plan, discuss its compatibility with the project and explain how any conflicts will be resolved. If no, explain.**

This project is subject to and in conformance with a number of plans as follows:

City of Plymouth Comprehensive Transportation Plan and Hennepin County Transportation Plan: The extension of Peony Lane is outlined in the City's and County's Comprehensive Transportation Plan and is in conformance with those plans.

City of Plymouth Surface Water Management Plan: Development and land disturbing activities are required to meet the policies in the City's Surface Water Management Plan. The project will include storm water treatment to meet the City's requirements.

Elm Creek Watershed Management Plan: The Elm Creek Watershed Management Commission's Watershed Management Plan contains storm water management policies. The project will be designed to meet these requirements.

- 28. Impact on infrastructure and public services. Will new or expanded utilities, roads, other infrastructure or public services be required to serve the project? X Yes \_\_\_No.**  
**If yes, describe the new or additional infrastructure or services needed. (Note: any infrastructure that is a connected action with respect to the project must be assessed in the EAW; see *EAW Guidelines* for details.)**

In addition to extension of Peony Lane, watermain will be constructed along the length of the roadway to provide extension and connection of the municipal water system. A storm sewer system will also be constructed with the road to provide for collection and treatment of storm water.

Peony Lane will be a city roadway and as such, the City will maintain the road once it is constructed. No other additional infrastructure will be needed as part of the project.

- 29. Cumulative potential effects. Minnesota Rule part 4410.1700, subpart 7, item B requires that the RGU consider the "cumulative potential effects of related or anticipated future projects" when determining the need for an environmental impact statement.**

**Identify any past, present or reasonably foreseeable future projects that may interact with the project described in this EAW in such a way as to cause cumulative potential effects. (Such future projects would be those that are actually planned or for which a basis of expectation has been laid.)**

**Describe the nature of the cumulative potential effects and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to these cumulative effects (or discuss each cumulative potential effect under appropriate item(s) elsewhere on this form).**

Both the City of Plymouth's and Hennepin County's Transportation Plans include the extension of Peony Lane between 54<sup>th</sup> Avenue and Lawndale Lane. This road extension will accommodate existing traffic as well as future traffic that is forecasted for the area.

#### Long-term future growth

There are no specific, known development projects within or adjacent to the study area. However, the City's 2030 Land Use Plan guides the surrounding area as a Rural-to-Urban Transition Zone with a Living Area 1 and 2 designation as well as Public/Semi-Public, and Institutional. The Living Area 1 and 2 designations are for 1-2 units per acre and 2-4 units per acre.

The Rural-to-Urban Transition Zone is designated primarily for northwestern Plymouth, where the road project is located. More than 70 percent of the City's anticipated housing growth from 2000 to 2030 will occur in northwest Plymouth. The planned residential land uses in this area will accommodate a potential range of 2,912 to 5,610 new households and density range of 2.87 to 5.54 dwelling units per acre.

When development is proposed in this area, it will be required to meet local, state, and federal requirements and environmental review may be needed. The City will determine the need for environmental review when a development project is proposed.

#### Past and existing projects

There are two areas where residential development has been approved and is ongoing both north and south of the proposed project in Maple Grove and Plymouth, respectively. North of the proposed project in Maple Grove, the Bonaire development is located west of Lawndale just north of the Peony Lane project area. The development began in 2007 and included approximately 94 single family units and 80 twin home units. The Whistling Pines development is located east of Lawndale just north of the Peony Lane project area. The development began in 2011 and included 25 single-family lots. A

number of residential units have been developed and construction is ongoing today.

In Plymouth south of the Peony Lane project area, Elm Creek Highlands development began in 2009/2010. It included 80-100 single family lots. A number of residential units have been developed and construction is ongoing today.

These past developments were anticipated in both Cities' Comprehensive Plans and reflect the growth in northwest Plymouth that the City has anticipated. The extension of Peony Lane is intended to serve this and future growth in the area.

**30. Other potential environmental impacts. If the project may cause any adverse environmental impacts not addressed by items 1 to 28, identify and discuss them here, along with any proposed mitigation.**

None identified.

**31. Summary of issues. Do not complete this section if the EAW is being done for EIS scoping; instead, address relevant issues in the draft Scoping Decision document, which must accompany the EAW. List any impacts and issues identified above that may require further investigation before the project is begun. Discuss any alternatives or mitigative measures that have been or may be considered for these impacts and issues, including those that have been or may be ordered as permit conditions.**

**Wetland Impact:** Approximately 3.62 acres of wetland will be impacted, including approximately 200 feet of a watercourse diversion. Three other alternatives were reviewed as part of the concept design process for the Peony Lane / Lawndale Lane Extension project. The chosen alternative discussed in this EAW was the alternative that had the least amount of wetland impact while balancing the other environmental and design factors. The City will first look to construct wetland mitigation on-site. The full 7.24 acres of wetland mitigation may not be able to be fully accommodated on-site. If on-site mitigation cannot be provided on-site, the City will obtain mitigation from a wetland bank. The wetland sequencing and mitigation will be fully addressed through local, state, and federal wetland permitting process.

**Impact to Wooded Areas and Native Plant Communities:** The Areas of Biodiversity Significance and native plant communities database shows an area immediately along the western edge of the project near Elm Creek. However, existing conditions in this area include a mowed area and ponding areas. Therefore, the impact to native plant communities is not as much as shown from the available data. There will be some wooded area that will be removed around Elm Creek to accommodate the road in this area. The road improvements at Elm Creek will remain on the existing alignment where the road exists today, thus reducing impacts to the wooded area than if the road were realigned in this area. Impacts to the wooded areas have been reduced to the greatest extent feasible within the design and safety parameters of the road project.

**Floodplain Impact:** The 100-year FEMA floodplain for Elm Creek and a tributary is within the project area. Approximately 3.9 acres of floodplain will be impacted by the project. Compensatory mitigation of the floodplain and a 1:1 ratio will be provided on-site to mitigate this floodplain impact.


**Storm Water Management:** The project will increase impervious surface and install a storm sewer system to direct water to constructed treatment areas. The project will be required to treat storm water to City, ECWMC, and NPDES standards. The project includes constructing five ponding areas to provide water quality treatment, rate control, and volume control prior to discharge to Elm Creek and the surrounding wetlands. This storm water management system will allow treatment of the storm water so there is no downstream impact to receiving water bodies.

**Historical Properties:** Based on the information from the SHPO database, there are two historical properties that will be impacted in their entirety or in part as part of the project. As part of the EAW process, additional information about the sites was developed (see **Appendix C**). The report concludes that there is a lack of significance and integrity on both properties and recommends that the properties are not eligible for the National Register of Historic Places.

**RGU CERTIFICATION.** *(The Environmental Quality Board will only accept **SIGNED** Environmental Assessment Worksheets for public notice in the EQB Monitor.)*

**I hereby certify that:**

- The information contained in this document is accurate and complete to the best of my knowledge.
- The EAW describes the complete project; there are no other projects, stages or components other than those described in this document, which are related to the project as connected actions or phased actions, as defined at Minnesota Rules, parts 4410.0200, subparts 9b and 60, respectively.
- Copies of this EAW are being sent to the entire EQB distribution list.

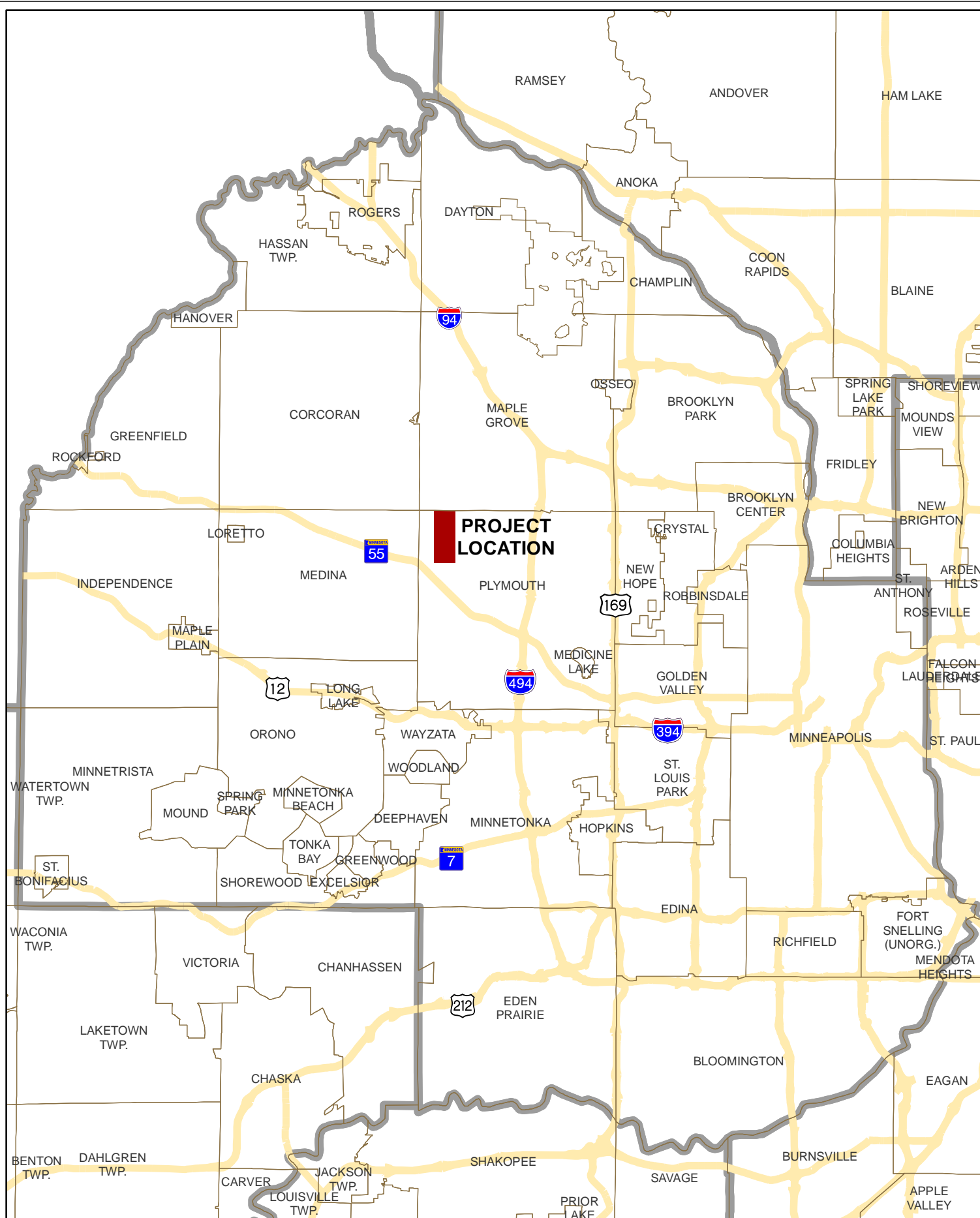
Signature  Date 7/10/12

Title Public Works Director

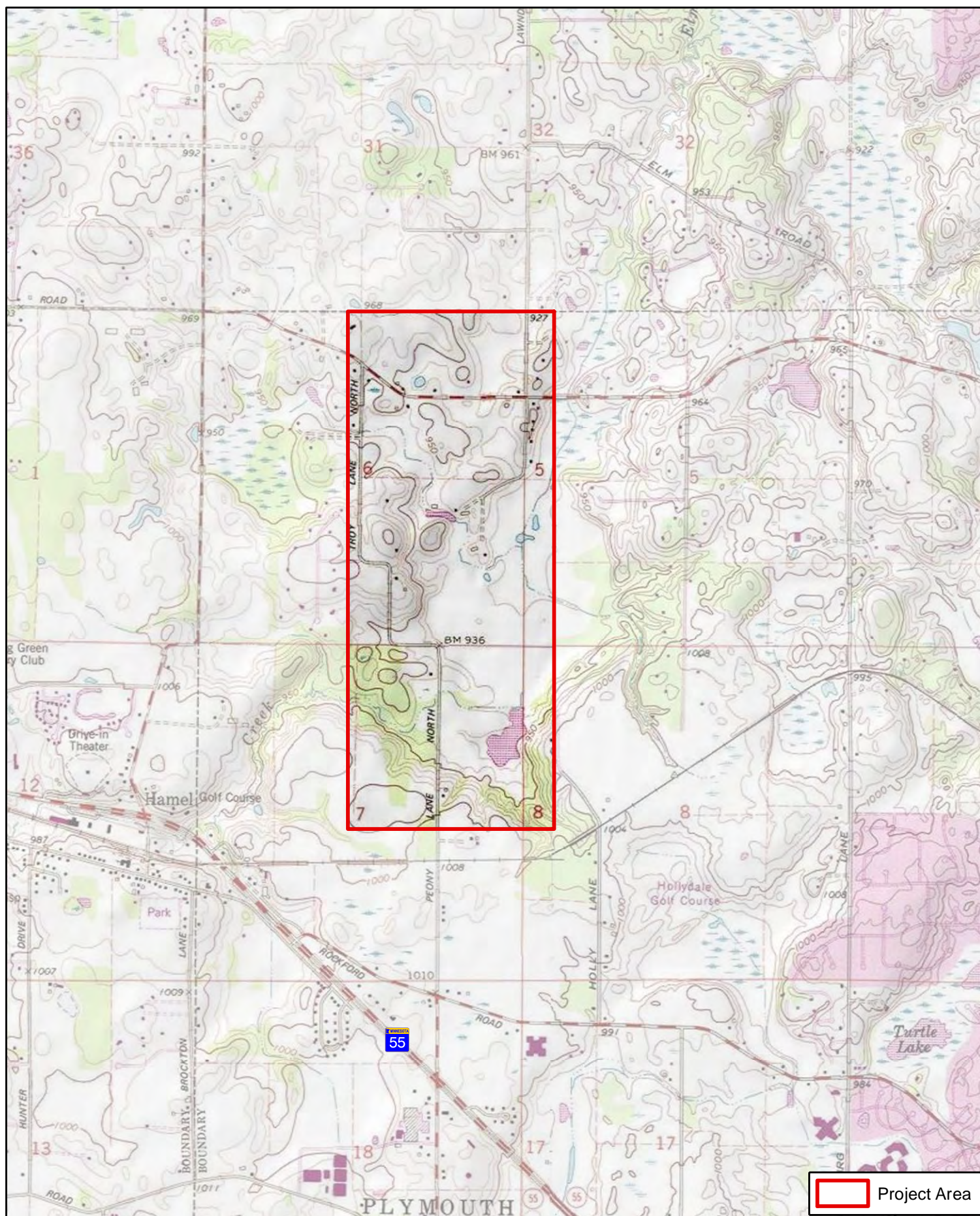
**Environmental Assessment Worksheet** was prepared by the staff of the Environmental Quality Board at the Minnesota Department of Administration, Office of Geographic and Demographic Analysis. For additional information, worksheets or for *EAW Guidelines*, contact: Environmental Quality Board, 658 Cedar St., St. Paul, MN 55155, 651-201-2492, or <http://www.eqb.state.mn.us>

## **Appendix A**

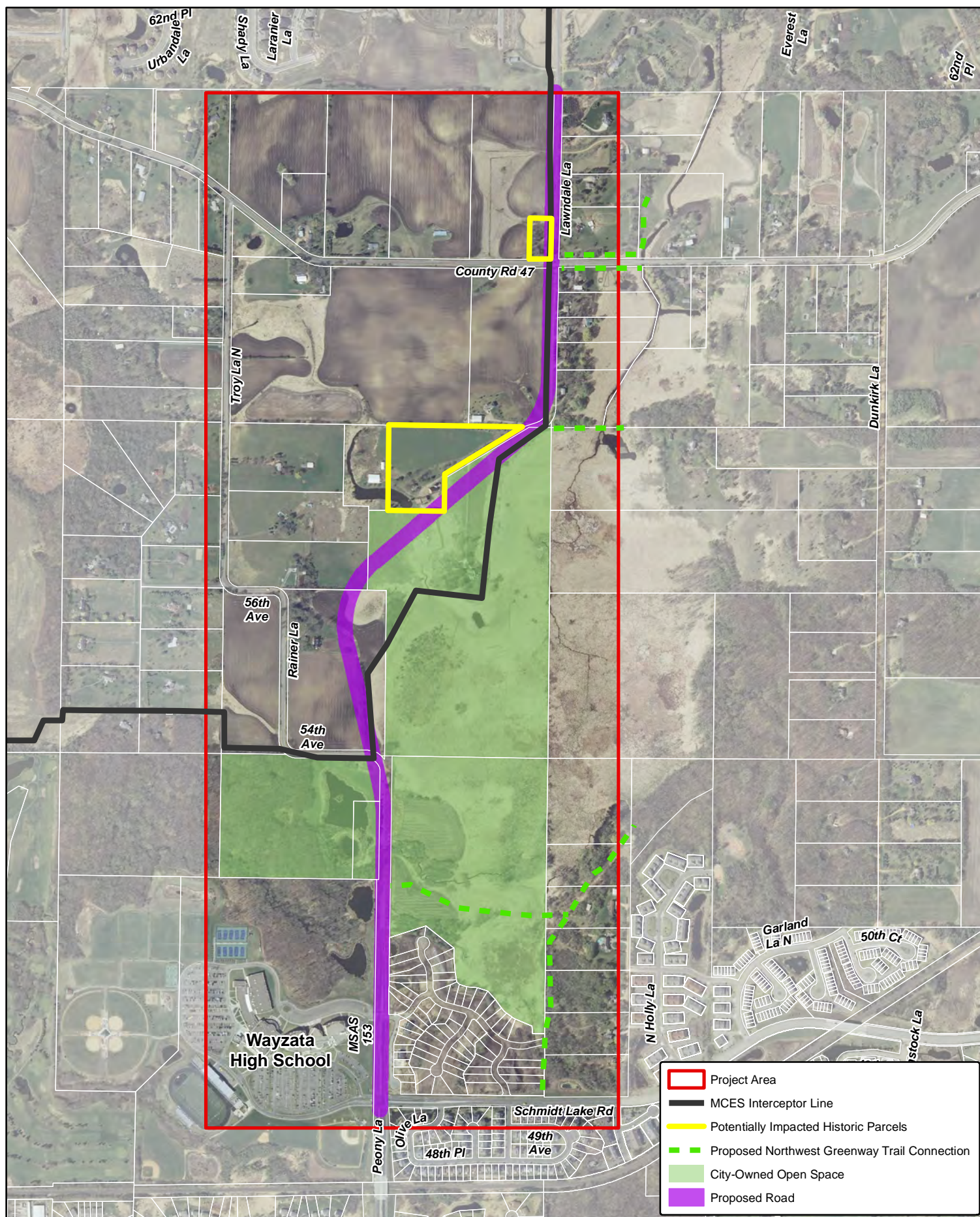
### Figures



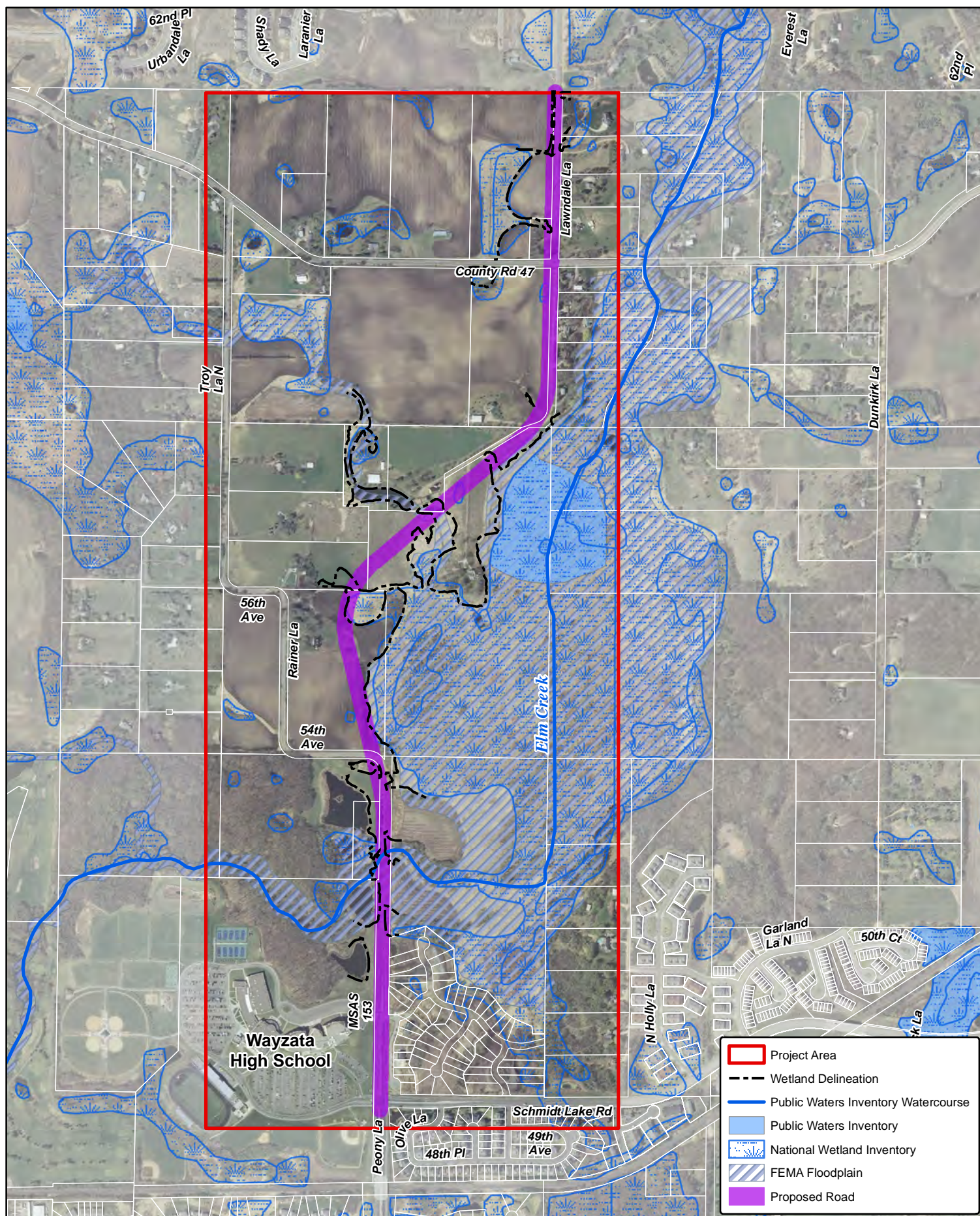




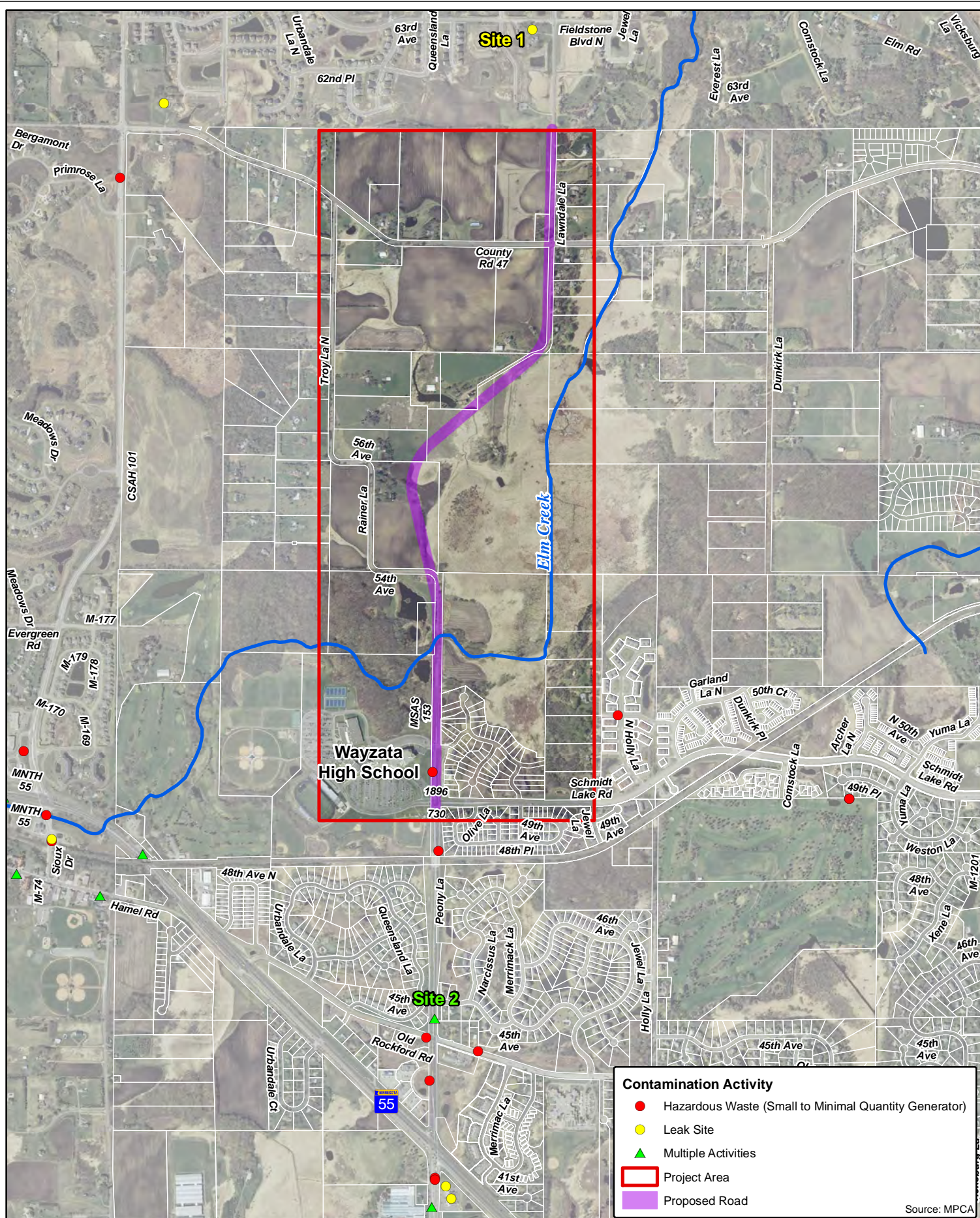




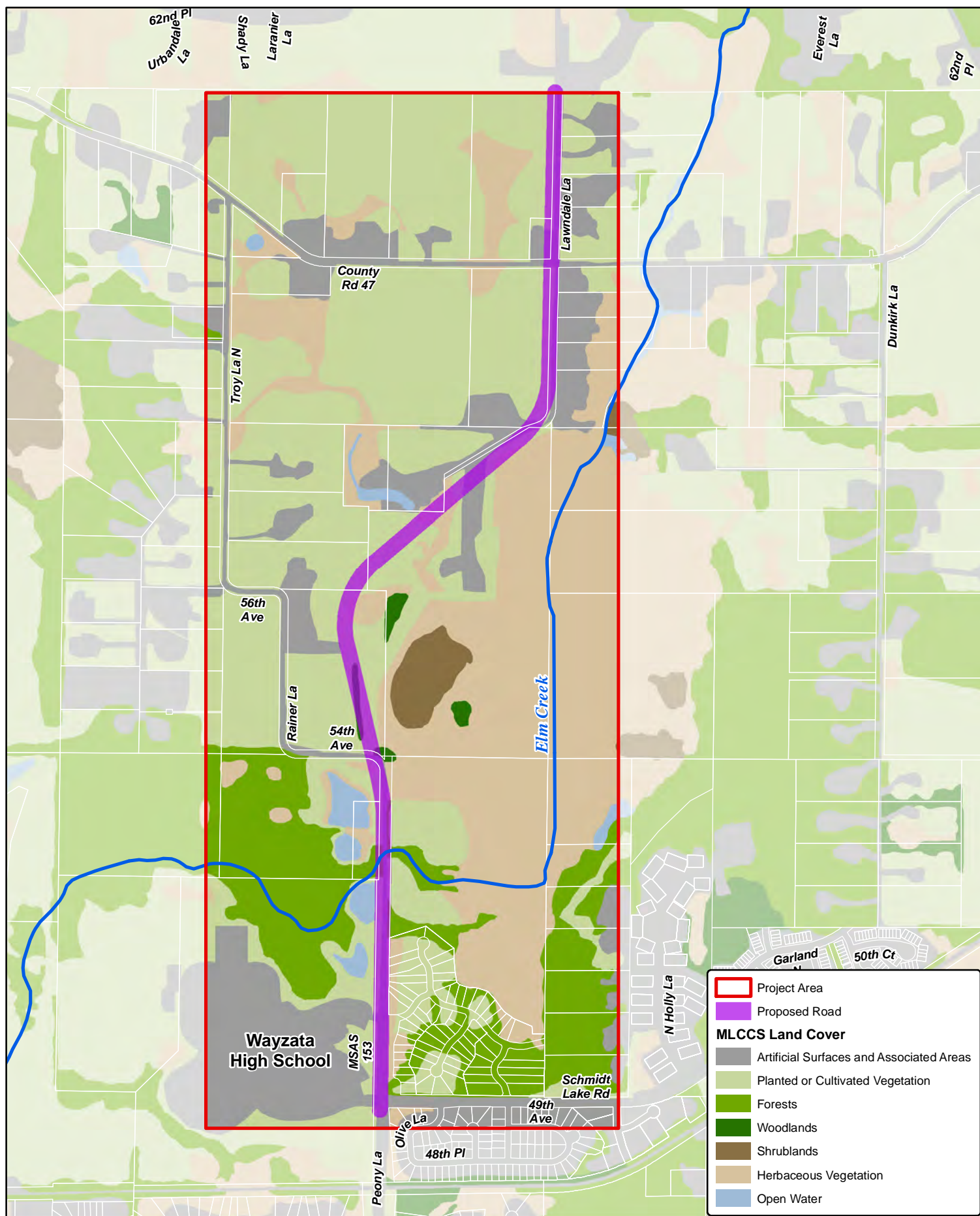




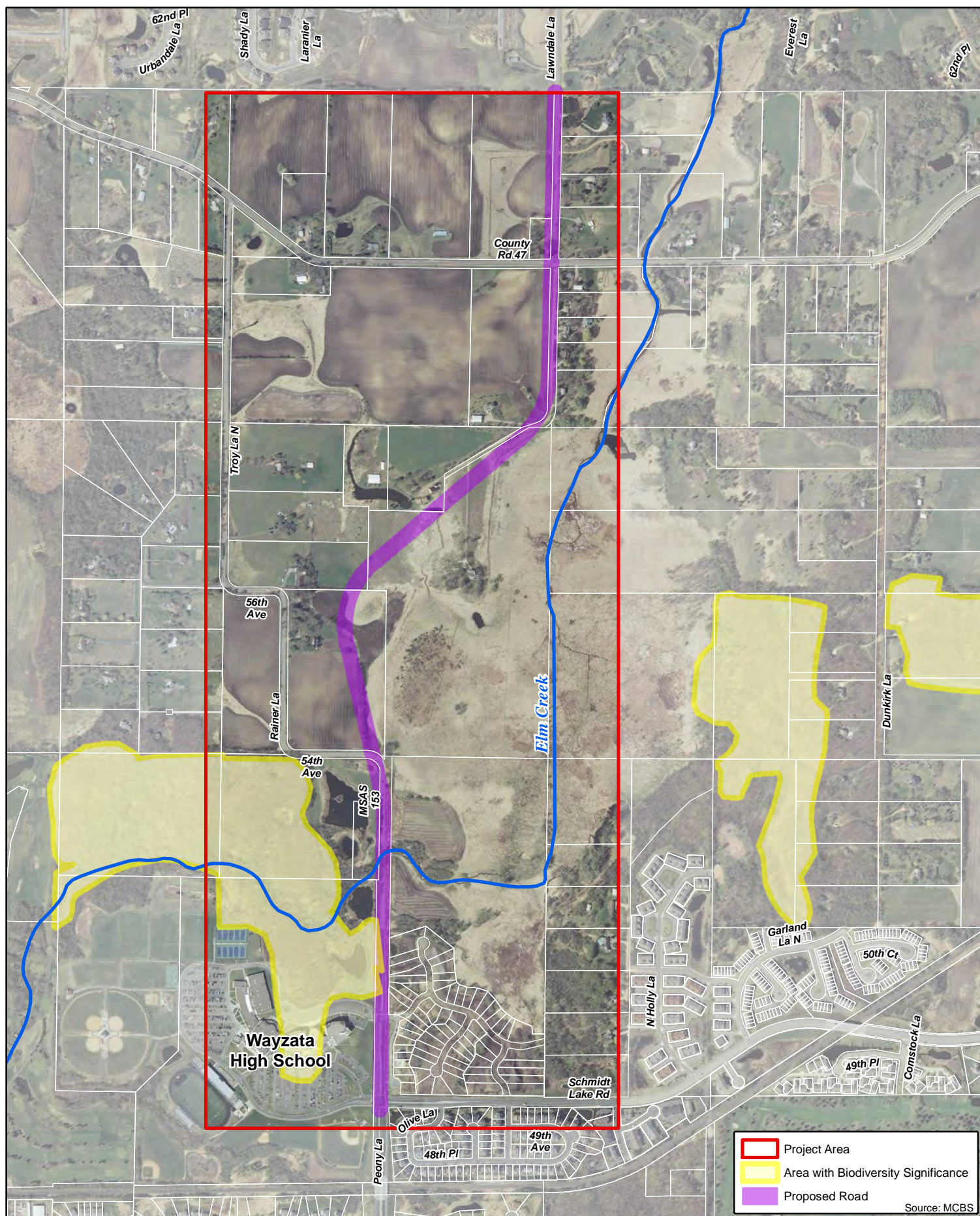




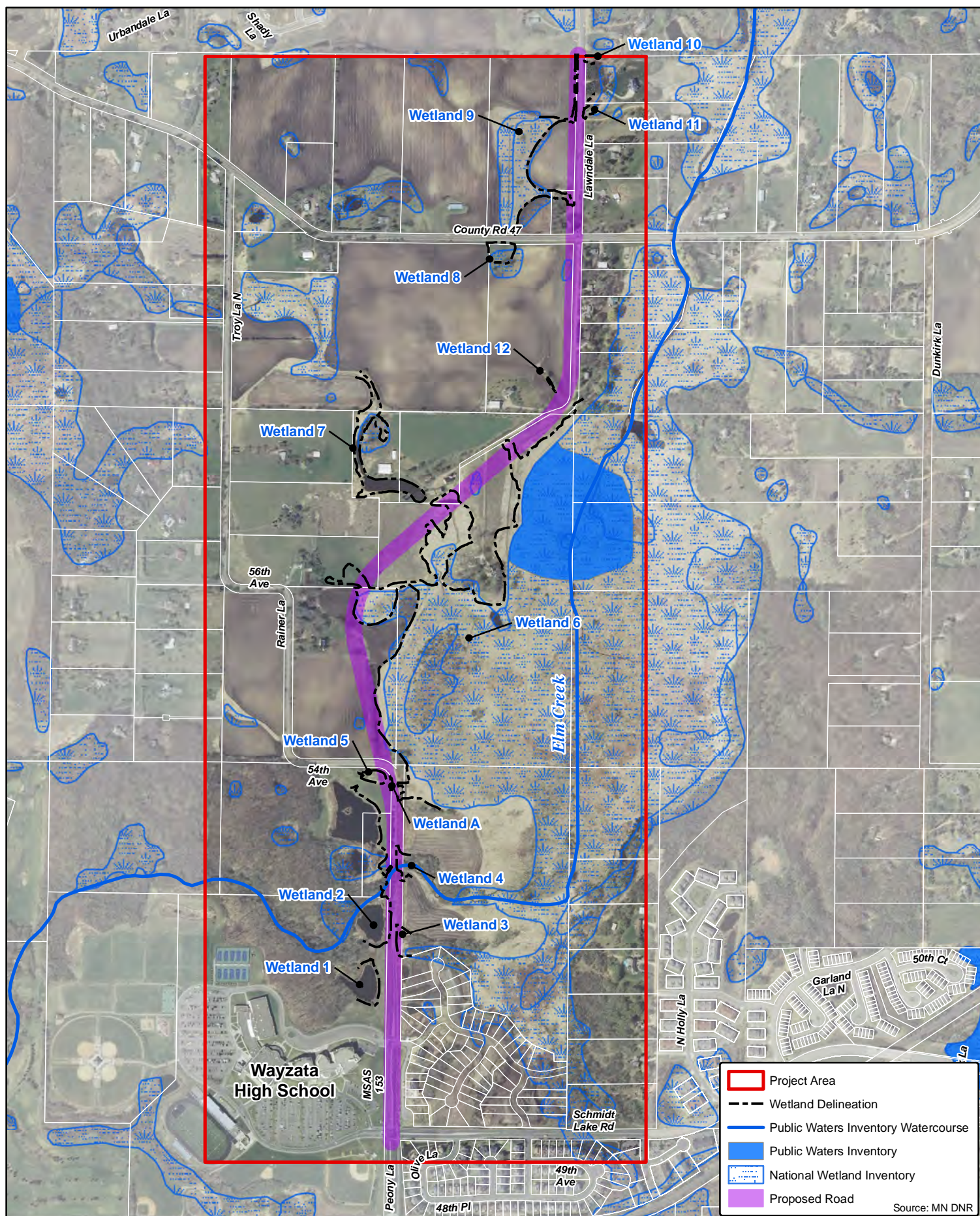




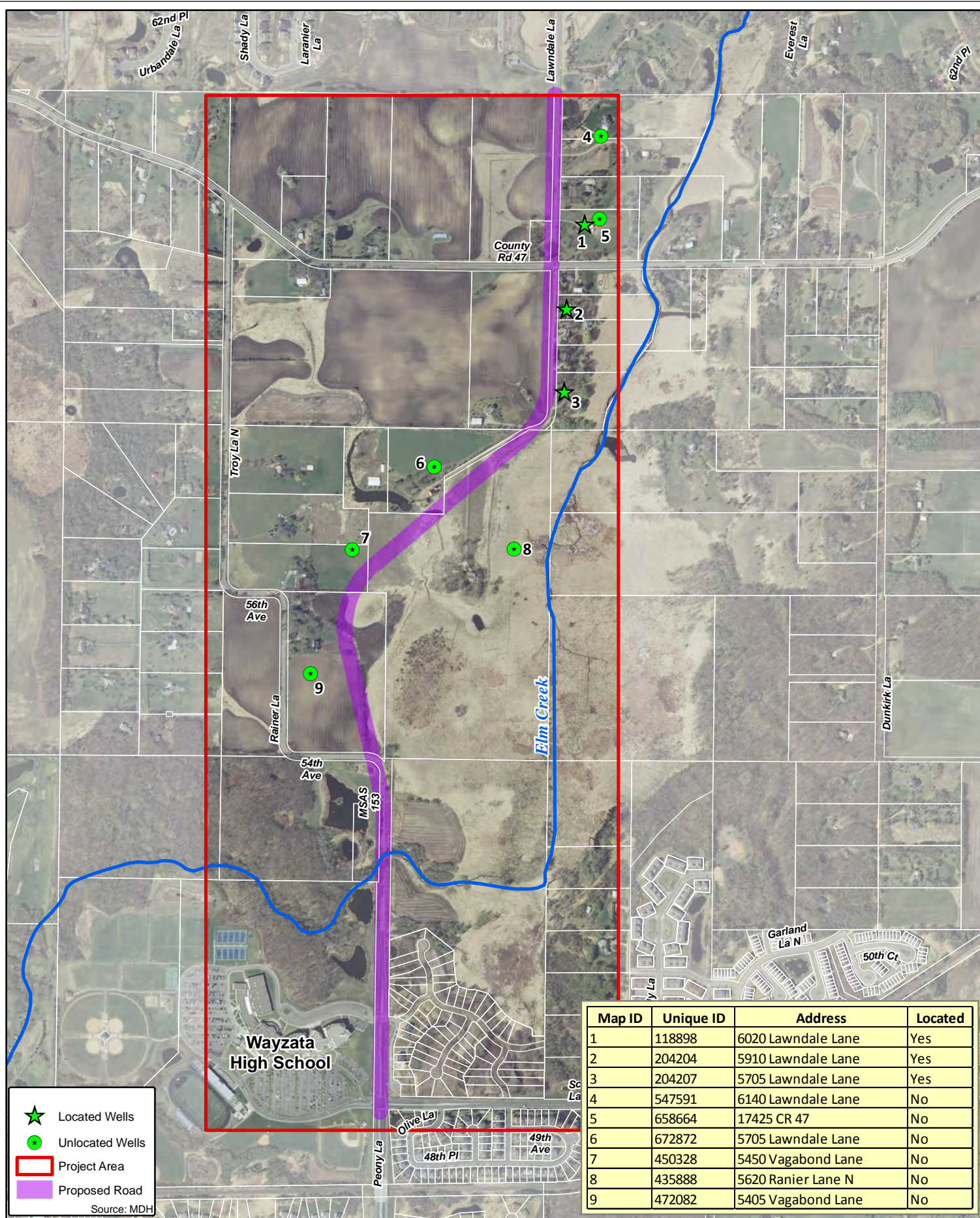




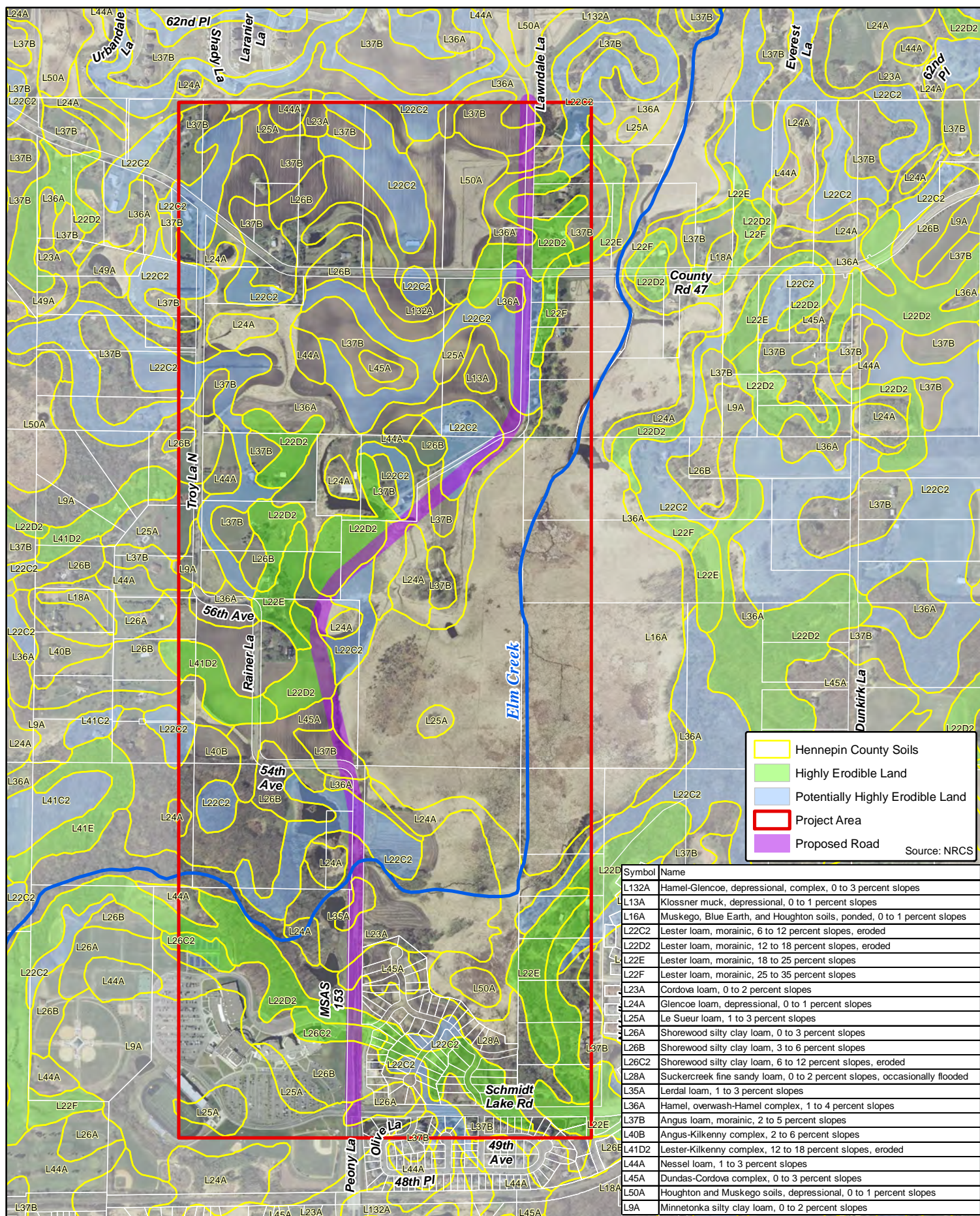




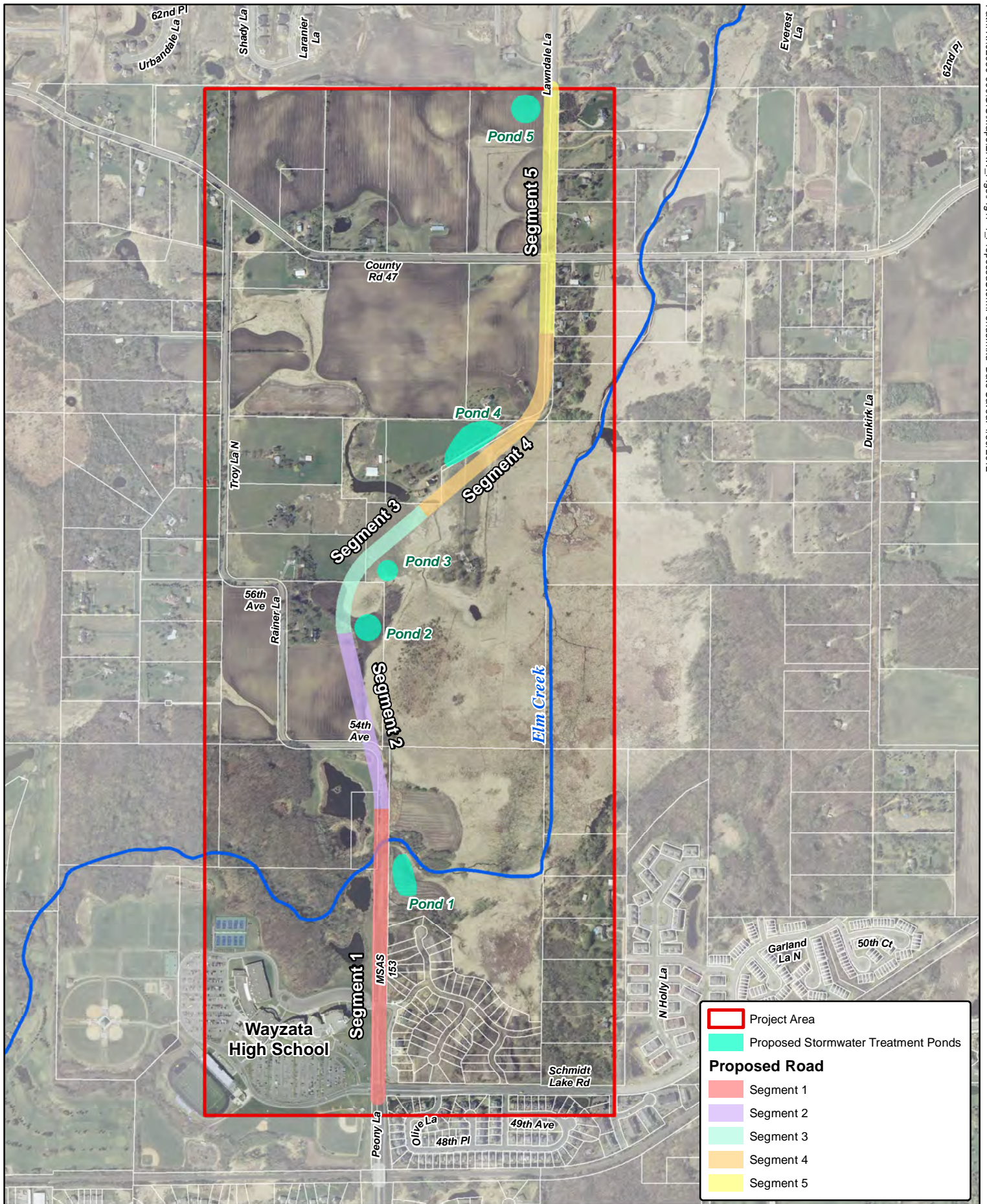




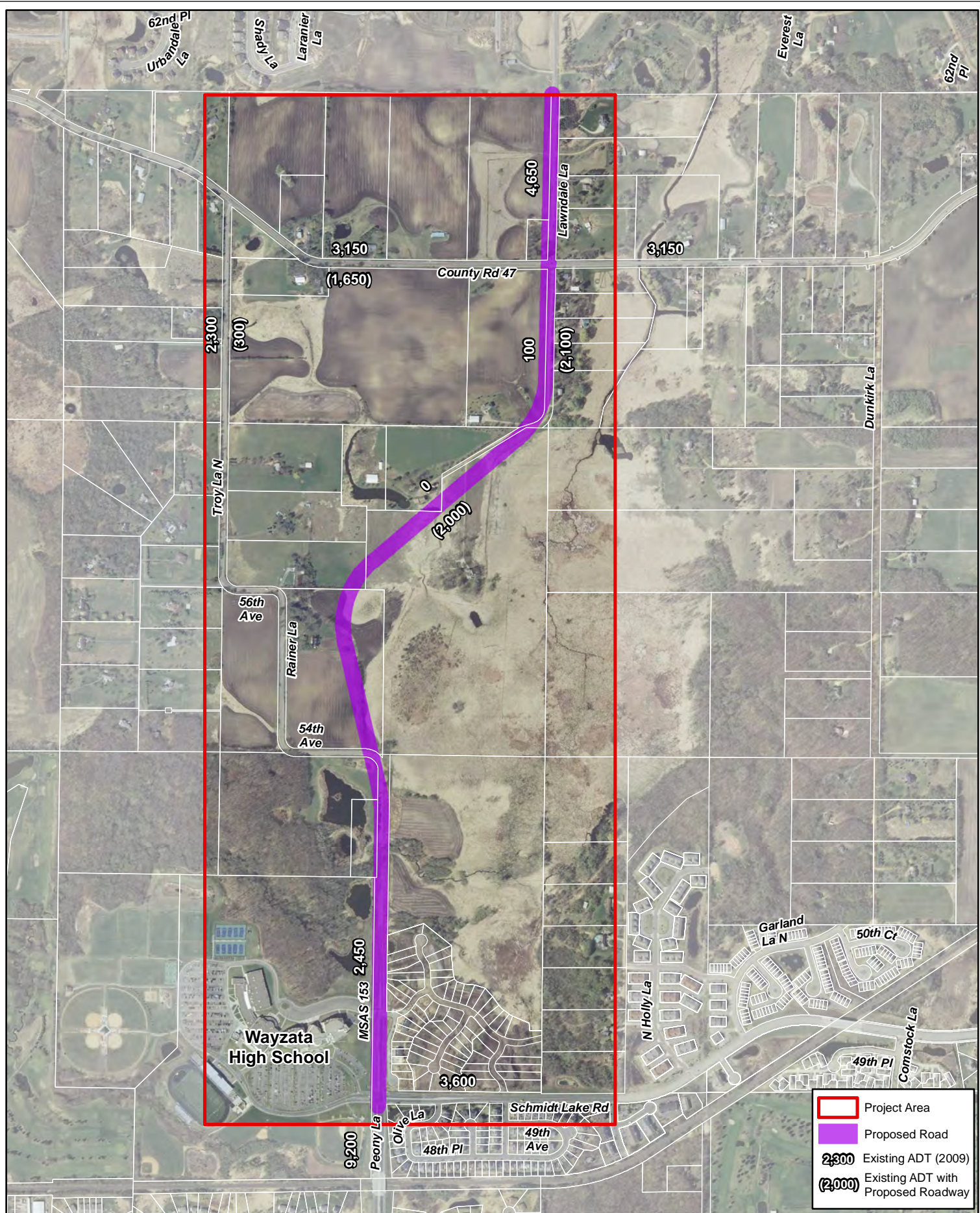




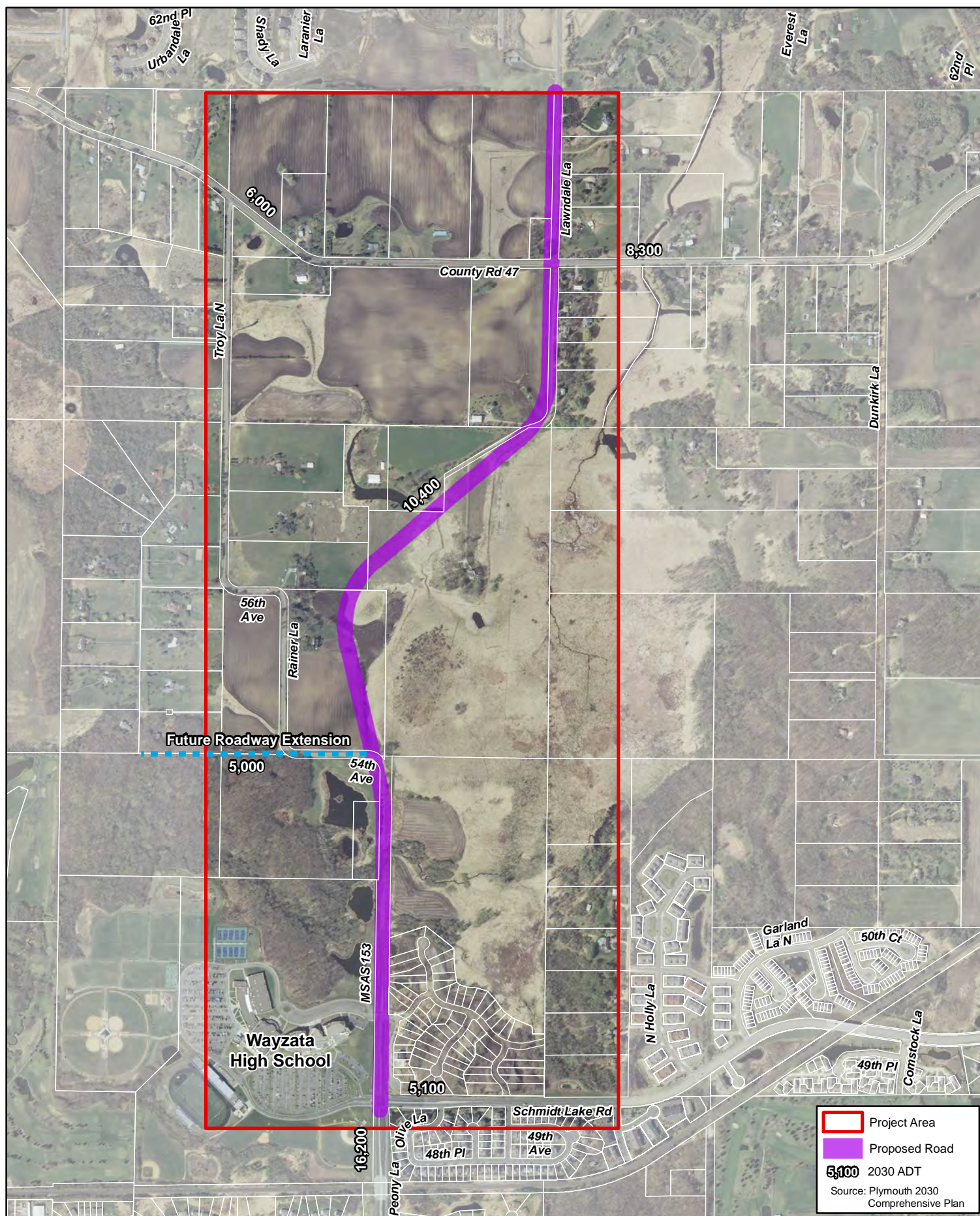












**Appendix B**  
Agency Correspondence



**From:** [Thomas Cinadr](#)  
**To:** [Alison Harwood](#)  
**Subject:** Re: Cultural Resources request for proposed Peony Lane Realignment project in Plymouth, MN  
**Date:** Wednesday, March 14, 2012 9:46:57 AM  
**Attachments:** [Historic.rtf](#)  
[Archaeology.rtf](#)

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**THIS EMAIL IS NOT A PROJECT CLEARANCE.**

**This message simply reports the results of the cultural resources database search you requested. The database search produced results for only previously known archaeological sites and historic properties. Please read the note below carefully.**

Archaeological sites and historic properties were identified in a search of the Minnesota Archaeological Inventory and Historic Structures Inventory for the search area requested. **Reports containing the results of the search are attached.**

The result of this database search provides a listing of recorded archaeological sites and historic architectural properties that are included in the current SHPO databases. Because the majority of archaeological sites in the state and many historic architectural properties have not been recorded, important sites or structures may exist within the search area and may be affected by development projects within that area. Additional research, including field survey, may be necessary to adequately assess the area's potential to contain historic properties.

If you require a comprehensive assessment of a project's potential to impact archaeological sites or historic architectural properties, you may need to hire a qualified archaeologist and/or historian. If you need assistance with a project review, please contact Kelly Gragg-Johnson in Review and Compliance @ 651-259-3455 or by email at [kelly.graggjohnson@mnhs.org](mailto:kelly.graggjohnson@mnhs.org).

The Minnesota SHPO Survey Manuals and Database Metadata and Contractor Lists can be found at <http://www.mnhs.org/shpo/survey/inventories.htm>

**SHPO research hours are 8:00 AM – 4:00 PM Tuesday-Friday.  
The Office is closed on Mondays.**

*Tom Cinadr*  
Survey and Information Management Coordinator  
651-259-3453

On Tue, Mar 13, 2012 at 2:32 PM, Alison Harwood <[aharwood@wsbeng.com](mailto:aharwood@wsbeng.com)> wrote:

Good afternoon Tom,

I would like to request an inventory of any historical, cultural, archaeological, and architectural resources that may be present in the project area shown on the attached map. The project is located in portions of Sections 5, 6, and 7, Township 118N, Range 22W in Hennepin County in the city of Plymouth. One of the four alignments shown on the map will be chosen. Please let me know if you need any additional information.

Thank you,

**Alison Harwood**

Environmental Planning & Natural Resources Scientist

d: 763-231-4847 | c: 612-360-1320

WSB & Associates, Inc. | 701 Xenia Avenue South, Suite 300 | Minneapolis, MN 55416



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# History/Architecture Inventory

PROPERTY NAME	ADDRESS	Twp	Range	Sec	Quarters	USGS	Report	NRHP	CEF	DOE	Inventory Number
<b>COUNTY:</b> Hennepin											
<b>CITY/TOWNSHIP:</b> Multiple											
Minneapolis, St. Paul & Sault St. Marie (Soo Line) Railroad		118	22	7					Y		HE-XXX-0001
<b>CITY/TOWNSHIP:</b> Plymouth											
farmhouse	18035 Co. Rd. 47	118	22	6	C-NE-NW	Hamel	HE-88-1H				HE-PLC-004
farmhouse	18935 Co. Rd. 47	118	22	6	NE-SW-NE	Hamel	HE-88-1H				HE-PLC-005
house	19045 Hamel Rd.	118	22	7	NW-SW-SW	Hamel					HE-PLC-033
house	5705 Lawndale	118	22	6	NW-NE-SE	Hamel					HE-PLC-042
house	4860 Peony Lane	118	22	7	NW-NE-SE	Hamel					HE-PLC-068
house	5000 Peony Lane	118	22	7	S-NE-NE	Hamel					HE-PLC-069
house	5505 Vicksburg Lane	118	22	5	SE-SE-SE	Osseo					HE-PLC-083
house	5635 Vicksburg Lane	118	22	5	S-NE-SE	Osseo					HE-PLC-085
house	15920 Co. Rd. 47	118	22	5	NE-NE-NE	Osseo					HE-PLC-133
house	16440 Co. Rd. 47	118	22	5	NE-NW-NE	Osseo					HE-PLC-134
farmstead	17210 Co. Rd. 47	118	22	5	SE-NW-NW	Osseo					HE-PLC-135
school house	17510 Co. Rd. 47	118	22	6	SE-NE-SE	Hamel					HE-PLC-136
house	18100 Co. Rd. 47	118	22	6	SE-NE-NE	Hamel					HE-PLC-137
house	18500 Co. Rd. 47	118	22	6	NW-NE-NW	Hamel					HE-PLC-138
house	18800 TH 55	118	22	7	NW-SW	Hamel	XX-2006-1H				HE-PLC-164
house		118	22	7	NW-SW	Hamel	XX-2006-2H				HE-PLC-164
house	18810 TH 55	118	22	7	NW-SW	Hamel	XX-2006-1H				HE-PLC-165
house		118	22	7	NW-SW	Hamel	XX-2006-2H				HE-PLC-165

PROPERTY NAME	ADDRESS	Twp	Range	Sec	Quarters	USGS	Report	NRHP	CEF	DOE	Inventory Number
<b>COUNTY:</b> Hennepin											
<b>CITY/TOWNSHIP:</b> Plymouth											
house	18930 TH 55	118	22	7	NW-SW	Hamel	XX-2006-1H				HE-PLC-166
house		118	22	7	NW-SW	Hamel	XX-2006-2H				HE-PLC-166
house	18910 Hamel Rd.	118	22	7	NW-SW	Hamel	XX-2006-1H				HE-PLC-167
house		118	22	7	NW-SW	Hamel	XX-2006-2H				HE-PLC-167
commercial building	18710 TH 55	118	22	7	NW-SW	Hamel	XX-2006-1H				HE-PLC-169
commercial building		118	22	7	NW-SW	Hamel	XX-2006-2H				HE-PLC-169
Bridge No. 5847	MONTH 55 under Soo Line RR	118	22	7							HE-PLC-190



# Archaeological Site Locations

Site Number	Site Name	Twp.	Range	Sec.	Quarter Sections	Acres	Phase	Site Description	Tradition	Context	Reports	NR	CEF	DOE
County: 21HE0253	Hennepin Wayzata School	118	22	7	NE-SE-NW	1	1	LS			HE-94-26			

# elm creek

## Watershed Management Commission

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ADMINISTRATIVE OFFICE  
3235 Fernbrook Lane  
Plymouth, MN 55447  
PH: 763.553.1144  
FAX: 763.553.9326  
E-mail: [judie@jass.biz](mailto:judie@jass.biz)  
[www.elmcreekwatershed.org](http://www.elmcreekwatershed.org)

TECHNICAL OFFICE  
Hennepin County, DES  
701 Fourth Avenue South, Suite 700  
Minneapolis, MN 55415  
PH: 612.596.1171  
FAX: 612.348.8532  
E-mail: [Ali.Durgunoglu@co.hennepin.mn.us](mailto:Ali.Durgunoglu@co.hennepin.mn.us)

March 27, 2102

Ms. Alison Harwood  
WSB & Associates, Inc.  
701 Xenia Avenue South  
Suite 300  
Minneapolis, MN 55416

Re: Peony Lane Realignment Project, Plymouth  
Minnesota Environmental Assessment Worksheet

Dear Ms. Harwood:

Thank you for giving the Watershed the opportunity to comment.

Elm Creek WMC would prefer the alignment that would impact the least amount of floodplain and wetlands. Other environmental issues to be considered are the amount of new impervious surfaces and the footprint of any stream crossings.

The amount of new impervious surfaces will likely dictate the amount of stormwater management BMPs required by the Watershed for nutrient management, runoff volume control and ponding.

I am sure I will be able to provide more comprehensive comments when more detailed alignment plans are available.

Thank you,



Ali Durgunoğlu, PhD, PE  
Technical Advisor to the Commission



## *Technical Memorandum*

**To:** *Lisa Joyal, Department of Natural Resources*

**CC:** *Melissa Doperalski, Department of Natural Resources*  
*Jack Corkle, WSB & Associates*

**From:** *Alison Harwood, WSB & Associates*

**Date:** *March 14, 2012*

**Re:** *Peony Lane Extension Project*  
*Rare Features Review*  
*WSB Project No. 2080-000*

---

The above-referenced project was reviewed for potential conflicts with known occurrences of rare features. The Peony Lane Extension Project Area is approximately 89 acres and is located in the City of Plymouth in portions of Sections 5, 6, and 7, Township 118N, Range 22W (**Figure 1**). The proposed project will realign Peony Lane between Schmidt Lake Road and Hackamore Road, where it will then merge back into Lawndale Lane north of Hackamore Road. Four alignments are being considered. All of these alignments are located within the Project Area (**Figure 2**). The preferred alignment will be chosen based on an evaluation of all environmental, economic, and social factors. This memo serves to solicit information from the DNR and summarize the rare features near the project in an effort to determine potential environmental impacts for the EAW being developed for the project.

The current land use is a combination of rural residential and agricultural. The proposed project will require grading within the chosen alignment and has the potential to result in filling, discharge to, and dewatering of wetlands and/or other waters. DNR Public Water 456W is located adjacent to the project area and Elm Creek bisects it. On behalf of the City of Plymouth, we are requesting concurrence from the DNR that the findings from this review are accurate.

A review of the Minnesota DNR licensed Natural Heritage Information System (NHIS; License # LA-579, issued May 16, 2011), a collection of databases that contain information about Minnesota's rare features, revealed that no state threatened or endangered species are located within an approximate 1 mile radius surrounding the Project Area. Three occurrences of Native Plant Communities (two Maple-Basswood Forests and one Oak Forest) do occur within the 1 mile radius of, and in one instance adjacent to, the Project Area. The locations of these sites are summarized in **Table 1**.

The Minnesota County Biological Survey (MCBS) Sites of Biodiversity Significance and the Regionally Significant Ecological Areas (RSEA) databases were also reviewed and also

identified the plant communities identified by the NHIS. The MCBS gave each site a rank of "Moderate" and the RSEA gave each a score of 1 (lowest regional significance), with the exception of a portion the plant community in Section 8, which it gave a score of 2.

**Table 1: Results of Rare Features Review**

<b>Feature</b>	<b>Location</b>	<b>MCBS Rank</b>	<b>RSEA Score</b>
Maple-Basswood Forest	T118N, R22W, S6 & 7	Moderate	1
Oak Forest, Mesic Subtype	T118N, R22W, S5 & 8	Moderate	1, 2
Maple-Basswood Forest	T119N, R22W, S32	Moderate	1

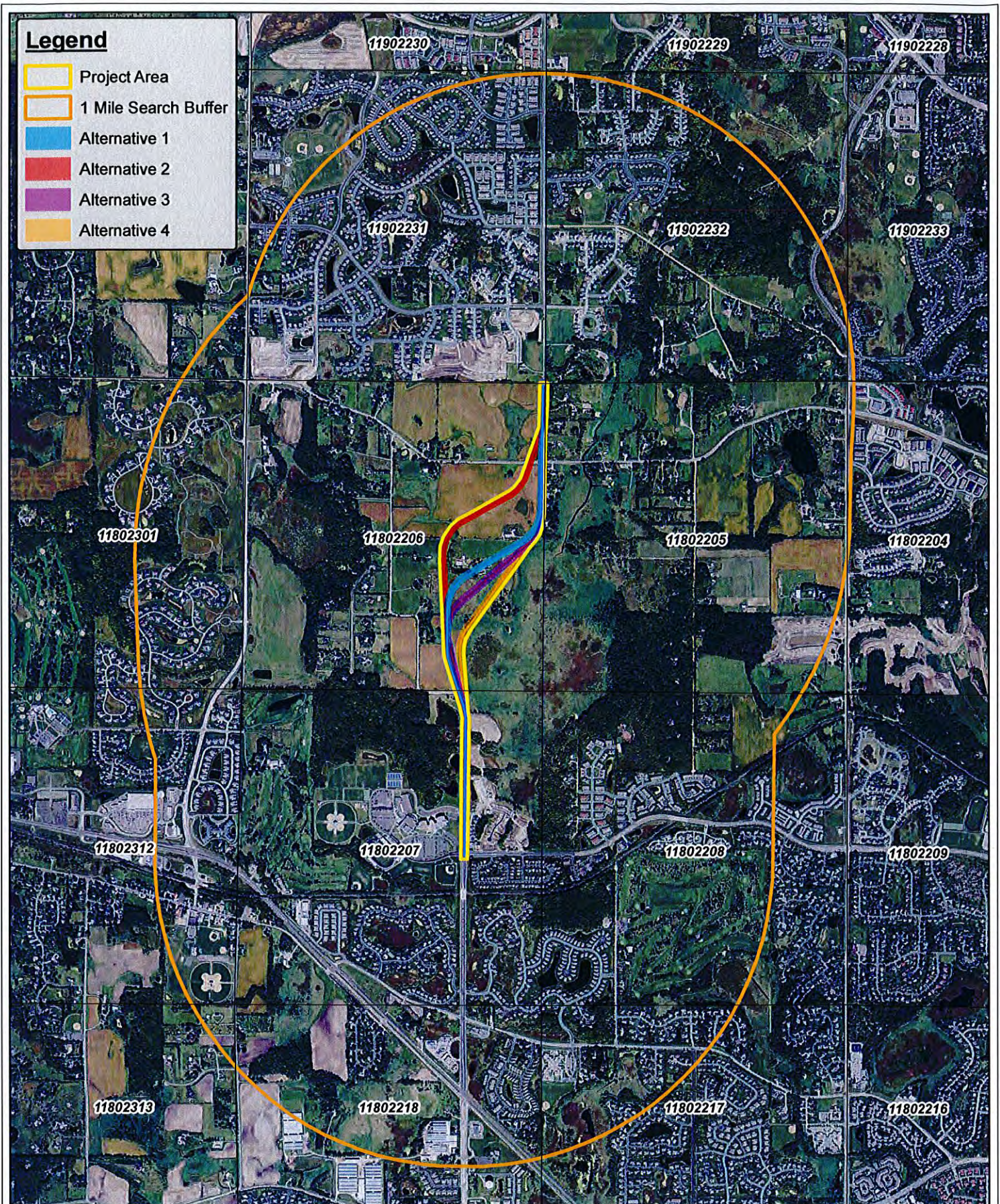
Given the type of development proposed (road construction) a minimal amount of tree removal may be required within the right-of-way to accommodate required sight lines and construction. This would occur along the eastern edge of one of the plant communities. However, this removal will be minimal and overall the plant communities are not anticipated to be impacted by this project. Best Management Practices (e.g., silt fence) will be used during construction to avoid impacts to any of the forested areas adjacent to the project.

The NHIS, MCBS, and RSEA are maintained by the DNR's Division of Ecological and Water Resources. These databases do not represent a complete inventory of Minnesota's rare features; therefore, rare and ecologically significant features for which there is no record may exist within the project area. A review of these databases does not constitute an approval by the DNR. It only identifies potential issues regarding known occurrences of rare features within the project area. Additional approvals to conduct work within this project area may still be required.

The results of this review are valid only for the project area and project details as described above. If the project location or details change an update may need to occur.

If you have any questions or concerns regarding this review, please feel free to contact me at (763) 231-4847 or [aharwood@wsbeng.com](mailto:aharwood@wsbeng.com).

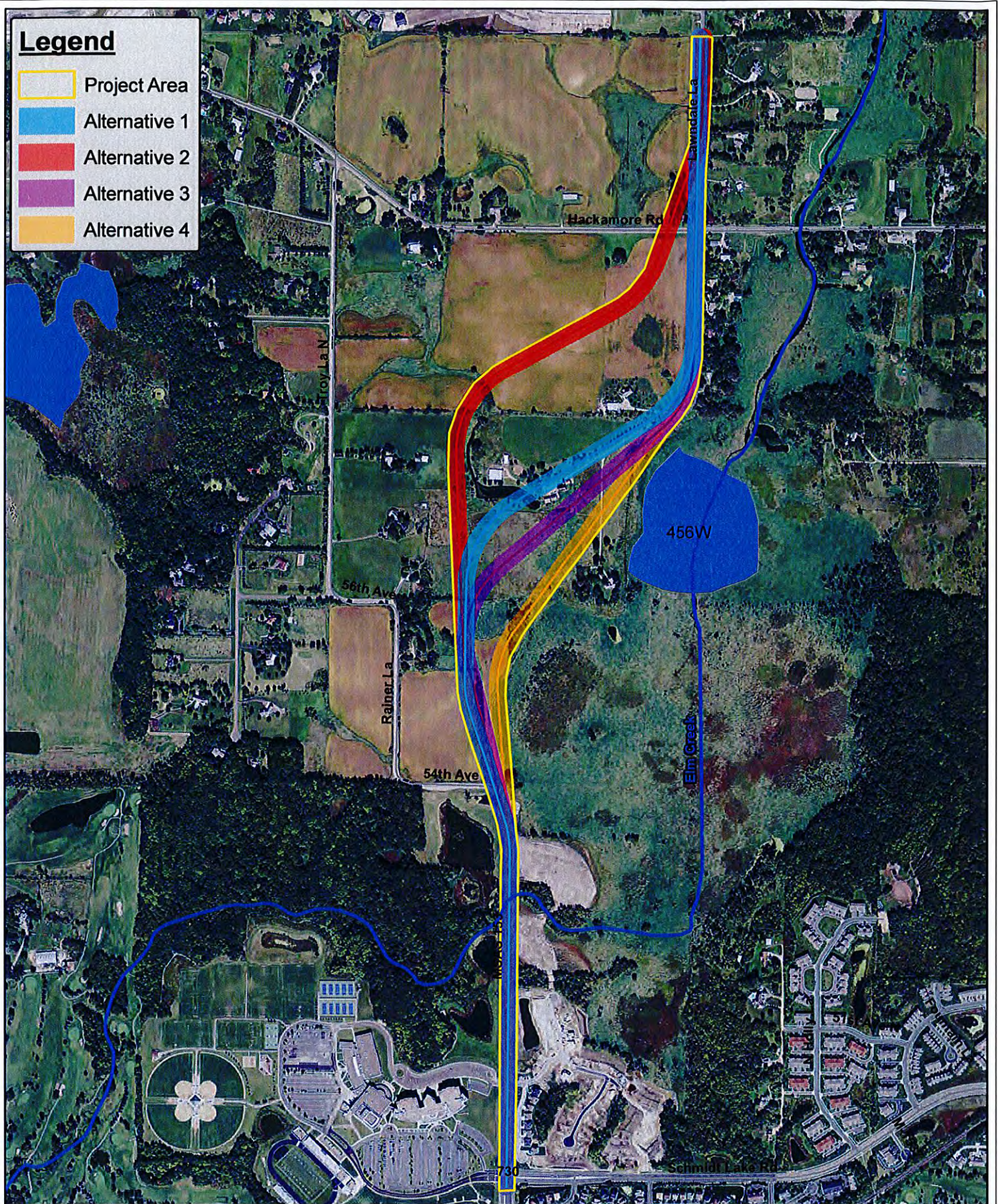






## Legend

- Project Area
- Alternative 1
- Alternative 2
- Alternative 3
- Alternative 4





**From:** [Joyal, Lisa \(DNR\)](#)  
**To:** [Alison Harwood](#)  
**Cc:** [Doperalski, Melissa \(DNR\)](#); [Jack Corkle](#); [Hoaglund, Erica \(DNR\)](#)  
**Subject:** Peony Lane Extension: Rare Features Review  
**Date:** Friday, April 13, 2012 8:16:39 PM  
**Attachments:** [PeonyLane\\_RareFeaturesReviewmemo\\_20120314.pdf](#)  
[Ebfactsheet2008.pdf](#)  
[Ebflyer2008.pdf](#)  
[Erosion Control and Mesh Netting.pdf](#)

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Hi Alison,

I have reviewed the attached letter regarding the above project, and concur with your assessment. Please note, however, that there are several occurrences of Blanding's turtles (*Emydoidea blandingii*), state-listed as threatened, in the surrounding area (outside of the one-mile radius). For your information, I have attached a Blanding's turtle fact sheet that describes the habitat use and life history of this species. The fact sheet also provides two lists of recommendations for avoiding and minimizing impacts to this rare turtle. **Please refer to the first list of recommendations for your project.** If greater protection for turtles is desired, the second list of additional recommendations can also be implemented. In addition, if erosion control blankets will be used, we recommend that they be limited to 'bio-netting' or 'natural-netting' types as the plastic mesh netting can be dangerous to reptiles (please see enclosed fact sheet).

The attached flyer should be given to all contractors working in the area. If Blanding's turtles are found on the site, please remember that state law and rules prohibit the destruction of threatened or endangered species, except under certain prescribed conditions. If turtles are in imminent danger they should be moved by hand out of harm's way, otherwise they should be left undisturbed.

Thank you for notifying us of this project, and for the opportunity to provide comments. The reference number for this correspondence is ERDB #20120349.

Sincerely,

*Lisa Joyal*

~~~~~

Lisa Joyal  
Endangered Species Review Coordinator  
NHIS Data Distribution Coordinator  
Division of Ecological and Water Resources  
Minnesota Department of Natural Resources  
500 Lafayette Road, Box 25  
St. Paul, MN 55155

phone: 651-259-5109  
[lisa.joyal@state.mn.us](mailto:lisa.joyal@state.mn.us)

[www.mndnr.gov/eco](http://www.mndnr.gov/eco)

---

**From:** Alison Harwood [mailto:aharwood@wsbeng.com]  
**Sent:** Wednesday, March 14, 2012 3:47 PM  
**To:** Joyal, Lisa (DNR)  
**Cc:** Doperalski, Melissa (DNR); Jack Corkle  
**Subject:** Peony Lane Extension: Rare Features Review

Good afternoon Lisa,

Attached is a rare features review I completed for the Peony Lane Extension Project in Plymouth. We are seeking your concurrence on the review as well as any other comments you may have regarding the 4 potential alignments described in the document/maps. If you would like any additional information, please feel free to contact me.

Thank you,

**Alison Harwood**

Environmental Planning & Natural Resources Scientist

d. 763-231-4847 | c. 612-360-1320

WSB & Associates, Inc. | 701 Xenia Avenue South, Suite 300 | Minneapolis, MN 55416



Engineering • Planning  
Environmental • Construction

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# Looming Issue with Plastic Mesh/Netting in Erosion Control Products

Plastic mesh netting is a common material in erosion control products. It is utilized to hold loose fibrous materials in place (EG straw) until vegetation is established. These products have been used extensively and are successful for reducing soil erosion, benefitting both soil health and water quality. Unfortunately there is a negative side of this component: It is increasingly being documented that it poses dangers to reptiles, amphibians, and mowing machinery.

## Potential Problems:

- Plastic netting lays on the surface long after other components have decomposed.
- Plastic mesh netting can result in entanglement and death of a variety of reptiles (snakes, frogs, toads, and turtles). Ducklings have also been documented entangled in the netting.
- Road maintenance machinery can snag the plastic mesh and pull up long lengths into machinery, thus binding up machinery and causing damage and/or loss of time cleaning it out.

## Suggested Alternatives:

- Do not use in known locations of reptiles or amphibians that are listed as Threatened or Endangered species.
- Limit use where reptiles are likely (near wetlands, lakes, watercourses, or rock outcrops).
- Use rapidly degradable material in all components of erosion control blanket, netting or biologs (fiber rolls) that are to be left on site as part of final stabilization.
- Use types with smaller mesh size (smaller than ½") or use types with non-welded netting.



Areas near wetlands, lakes, watercourses or rock outcrops are likely habitat for reptiles and amphibians and may not be suitable for plastic mesh erosion control materials.



Snakes get caught in the plastic mesh



# CAUTION



## BLANDING'S TURTLES MAY BE ENCOUNTERED IN THIS AREA

The unique and rare Blanding's turtle has been found in this area. Blanding's turtles are state-listed as Threatened and are protected under Minnesota Statute 84.095, Protection of Threatened and Endangered Species. Please be careful of turtles on roads and in construction sites. For additional information on turtles, or to report a Blanding's turtle sighting, contact the DNR Nongame Specialist nearest you: Bemidji (218-308-2641); Grand Rapids (218-327-4518); New Ulm (507-359-6033); Rochester (507-280-5070); or St. Paul (651-259-5764).

**DESCRIPTION:** The Blanding's turtle is a medium to large turtle (5 to 10 inches) with a black or dark blue, dome-shaped shell with muted yellow spots and bars. The bottom of the shell is hinged across the front third, enabling the turtle to pull the front edge of the lower shell firmly against the top shell to provide additional protection when threatened. The head, legs, and tail are dark brown or blue-gray with small dots of light brown or yellow. A distinctive field mark is the bright yellow chin and neck.

**BLANDING'S TURTLES DO NOT MAKE GOOD PETS  
IT IS ILLEGAL TO KEEP THIS THREATENED SPECIES IN CAPTIVITY**



## **SUMMARY OF RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS TO BLANDING'S TURTLE POPULATIONS**

*(see Blanding's Turtle Fact Sheet for full recommendations)*

- This flyer should be given to all contractors working in the area. Homeowners should also be informed of the presence of Blanding's turtles in the area.
- Turtles that are in imminent danger should be moved, by hand, out of harms way. Turtles that are not in imminent danger should be left undisturbed to continue their travel among wetlands and/or nest sites.
- If a Blanding's turtle nests in your yard, do not disturb the nest and do not allow pets near the nest.
- Silt fencing should be set up to keep turtles out of construction areas. It is critical that silt fencing be removed after the area has been revegetated.
- Small, vegetated temporary wetlands should not be dredged, deepened, or filled.
- All wetlands should be protected from pollution; use of fertilizers and pesticides should be avoided, and run-off from lawns and streets should be controlled. Erosion should be prevented to keep sediment from reaching wetlands and lakes.
- Roads should be kept to minimum standards on widths and lanes.
- Roads should be ditched, not curbed or below grade. If curbs must be used, 4" high curbs at a 3:1 slope are preferred.
- Culverts under roads crossing wetland areas, between wetland areas, or between wetland and nesting areas should be at least 36 in. diameter and flat-bottomed or elliptical.
- Culverts under roads crossing streams should be oversized (at least twice as wide as the normal width of open water) and flat-bottomed or elliptical.
- Utility access and maintenance roads should be kept to a minimum.
- Because trenches can trap turtles, trenches should be checked for turtles prior to being backfilled and the sites should be returned to original grade.
- Terrain should be left with as much natural contour as possible.
- Graded areas should be revegetated with native grasses and forbs.
- Vegetation management in infrequently mowed areas -- such as in ditches, along utility access roads, and under power lines -- should be done mechanically (chemicals should not be used). Work should occur fall through spring (after October 1<sup>st</sup> and before June 1<sup>st</sup>).



## Environmental Review Fact Sheet Series

### Endangered, Threatened, and Special Concern Species of Minnesota

## Blanding's Turtle (*Emydoidea blandingii*)

Minnesota Status: Threatened  
Federal Status: none

State Rank<sup>1</sup>: S2  
Global Rank<sup>1</sup>: G4

### HABITAT USE

Blanding's turtles need both wetland and upland habitats to complete their life cycle. The types of wetlands used include ponds, marshes, shrub swamps, bogs, and ditches and streams with slow-moving water. In Minnesota, Blanding's turtles are primarily marsh and pond inhabitants. Calm, shallow water bodies (Type 1-3 wetlands) with mud bottoms and abundant aquatic vegetation (e.g., cattails, water lilies) are preferred, and extensive marshes bordering rivers provide excellent habitat. Small temporary wetlands (those that dry up in the late summer or fall) are frequently used in spring and summer -- these fishless pools are amphibian and invertebrate breeding habitat, which provides an important food source for Blanding's turtles. Also, the warmer water of these shallower areas probably aids in the development of eggs within the female turtle. Nesting occurs in open (grassy or brushy) sandy uplands, often some distance from water bodies. Frequently, nesting occurs in traditional nesting grounds on undeveloped land. Blanding's turtles have also been known to nest successfully on residential property (especially in low density housing situations), and to utilize disturbed areas such as farm fields, gardens, under power lines, and road shoulders (especially of dirt roads). Although Blanding's turtles may travel through woodlots during their seasonal movements, shady areas (including forests and lawns with shade trees) are not used for nesting. Wetlands with deeper water are needed in times of drought, and during the winter. Blanding's turtles overwinter in the muddy bottoms of deeper marshes and ponds, or other water bodies where they are protected from freezing.

### LIFE HISTORY

Individuals emerge from overwintering and begin basking in late March or early April on warm, sunny days. The increase in body temperature which occurs during basking is necessary for egg development within the female turtle. Nesting in Minnesota typically occurs during June, and females are most active in late afternoon and at dusk. Nesting can occur as much as a mile from wetlands. The nest is dug by the female in an open sandy area and 6-15 eggs are laid. The female turtle returns to the marsh within 24 hours of laying eggs. After a development period of approximately two months, hatchlings leave the nest from mid-August through early-October. Nesting females and hatchlings are often at risk of being killed while crossing roads between wetlands and nesting areas. In addition to movements associated with nesting, all ages and both sexes move between wetlands from April through November. These movements peak in June and July and again in September and October as turtles move to and from overwintering sites. In late autumn (typically November), Blanding's turtles bury themselves in the substrate (the mud at the bottom) of deeper wetlands to overwinter.

### IMPACTS / THREATS / CAUSES OF DECLINE

- loss of wetland habitat through drainage or flooding (converting wetlands into ponds or lakes)
- loss of upland habitat through development or conversion to agriculture
- human disturbance, including collection for the pet trade\* and road kills during seasonal movements
- increase in predator populations (skunks, raccoons, etc.) which prey on nests and young

\*It is illegal to possess this threatened species.



## RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS

These recommendations apply to typical construction projects and general land use within Blanding's turtle habitat, and are provided to help local governments, developers, contractors, and homeowners minimize or avoid detrimental impacts to Blanding's turtle populations. **List 1** describes minimum measures which we recommend to prevent harm to Blanding's turtles during construction or other work within Blanding's turtle habitat. **List 2** contains recommendations which offer even greater protection for Blanding's turtles populations; this list should be used *in addition to the first list* in areas which are known to be of state-wide importance to Blanding's turtles (contact the DNR's Natural Heritage and Nongame Research Program if you wish to determine if your project or home is in one of these areas), or in any other area where greater protection for Blanding's turtles is desired.

| List 1. Recommendations for all areas inhabited by Blanding's turtles.                                                                                                                                                                                                          | List 2. Additional recommendations for areas known to be of state-wide importance to Blanding's turtles.                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GENERAL                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                           |
| A flyer with an illustration of a Blanding's turtle should be given to all contractors working in the area. Homeowners should also be informed of the presence of Blanding's turtles in the area.                                                                               | Turtle crossing signs can be installed adjacent to road-crossing areas used by Blanding's turtles to increase public awareness and reduce road kills.                                                                                                                                                                                     |
| Turtles which are in imminent danger should be moved, by hand, out of harms way. Turtles which are not in imminent danger should be left undisturbed.                                                                                                                           | Workers in the area should be aware that Blanding's turtles nest in June, generally after 4pm, and should be advised to minimize disturbance if turtles are seen.                                                                                                                                                                         |
| If a Blanding's turtle nests in your yard, do not disturb the nest.                                                                                                                                                                                                             | If you would like to provide more protection for a Blanding's turtle nest on your property, see "Protecting Blanding's Turtle Nests" on page 3 of this fact sheet.                                                                                                                                                                        |
| Silt fencing should be set up to keep turtles out of construction areas. It is <u>critical</u> that silt fencing be removed after the area has been revegetated.                                                                                                                | Construction in potential nesting areas should be limited to the period between September 15 and June 1 (this is the time when activity of adults and hatchlings in upland areas is at a minimum).                                                                                                                                        |
| WETLANDS                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                           |
| Small, vegetated temporary wetlands (Types 2 & 3) should not be dredged, deepened, filled, or converted to storm water retention basins (these wetlands provide important habitat during spring and summer).                                                                    | Shallow portions of wetlands should not be disturbed during prime basking time (mid morning to mid- afternoon in May and June). A wide buffer should be left along the shore to minimize human activity near wetlands (basking Blanding's turtles are more easily disturbed than other turtle species).                                   |
| Wetlands should be protected from pollution; use of fertilizers and pesticides should be avoided, and run-off from lawns and streets should be controlled. Erosion should be prevented to keep sediment from reaching wetlands and lakes.                                       | Wetlands should be protected from road, lawn, and other chemical run-off by a vegetated buffer strip at least 50' wide. This area should be left unmowed and in a natural condition.                                                                                                                                                      |
| ROADS                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                           |
| Roads should be kept to minimum standards on widths and lanes (this reduces road kills by slowing traffic and reducing the distance turtles need to cross).                                                                                                                     | Tunnels should be considered in areas with concentrations of turtle crossings (more than 10 turtles per year per 100 meters of road), and in areas of lower density if the level of road use would make a safe crossing impossible for turtles. Contact your DNR Regional Nongame Specialist for further information on wildlife tunnels. |
| Roads should be ditched, not curbed or below grade. If curbs must be used, 4 inch high curbs at a 3:1 slope are preferred (Blanding's turtles have great difficulty climbing traditional curbs; curbs and below grade roads trap turtles on the road and can cause road kills). | Roads should be ditched, not curbed or below grade.                                                                                                                                                                                                                                                                                       |



| ROADS cont.                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Culverts between wetland areas, or between wetland areas and nesting areas, should be 36 inches or greater in diameter, and elliptical or flat-bottomed.                                                                                                                                          | Road placement should avoid separating wetlands from adjacent upland nesting sites, or these roads should be fenced to prevent turtles from attempting to cross them (contact your DNR Nongame Specialist for details).                                                                                                                   |
| Wetland crossings should be bridged, or include raised roadways with culverts which are 36 in or greater in diameter and flat-bottomed or elliptical (raised roadways discourage turtles from leaving the wetland to bask on roads).                                                              | Road placement should avoid bisecting wetlands, or these roads should be fenced to prevent turtles from attempting to cross them (contact your DNR Nongame Specialist for details). This is especially important for roads with more than 2 lanes.                                                                                        |
| Culverts under roads crossing streams should be oversized (at least twice as wide as the normal width of open water) and flat-bottomed or elliptical.                                                                                                                                             | Roads crossing streams should be bridged.                                                                                                                                                                                                                                                                                                 |
| UTILITIES                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                           |
| Utility access and maintenance roads should be kept to a minimum (this reduces road-kill potential).                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                           |
| Because trenches can trap turtles, trenches should be checked for turtles prior to being backfilled and the sites should be returned to original grade.                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                           |
| LANDSCAPING AND VEGETATION MANAGEMENT                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                           |
| Terrain should be left with as much natural contour as possible.                                                                                                                                                                                                                                  | As much natural landscape as possible should be preserved (installation of sod or wood chips, paving, and planting of trees within nesting habitat can make that habitat unusable to nesting Blanding's turtles).                                                                                                                         |
| Graded areas should be revegetated with native grasses and forbs (some non-natives form dense patches through which it is difficult for turtles to travel).                                                                                                                                       | Open space should include some areas at higher elevations for nesting. These areas should be retained in native vegetation, and should be connected to wetlands by a wide corridor of native vegetation.                                                                                                                                  |
| Vegetation management in infrequently mowed areas -- such as in ditches, along utility access roads, and under power lines -- should be done mechanically (chemicals should not be used). Work should occur fall through spring (after October 1 <sup>st</sup> and before June 1 <sup>st</sup> ). | Ditches and utility access roads should not be mowed or managed through use of chemicals. If vegetation management is required, it should be done mechanically, as infrequently as possible, and fall through spring (mowing can kill turtles present during mowing, and makes it easier for predators to locate turtles crossing roads). |

**Protecting Blanding's Turtle Nests:** Most predation on turtle nests occurs within 48 hours after the eggs are laid. After this time, the scent is gone from the nest and it is more difficult for predators to locate the nest. Nests more than a week old probably do not need additional protection, unless they are in a particularly vulnerable spot, such as a yard where pets may disturb the nest. Turtle nests can be protected from predators and other disturbance by covering them with a piece of wire fencing (such as chicken wire), secured to the ground with stakes or rocks. The piece of fencing should measure at least 2 ft. x 2 ft., and should be of medium sized mesh (openings should be about 2 in. x 2 in.). It is *very important* that the fencing be **removed before August 1<sup>st</sup>** so the young turtles can escape from the nest when they hatch!

## REFERENCES

- <sup>1</sup>Association for Biodiversity Information. "Heritage Status: Global, National, and Subnational Conservation Status Ranks." NatureServe. Version 1.3 (9 April 2001). <http://www.natureserve.org/ranking.htm> (15 April 2001).
- Coffin, B., and L. Pfannmuller. 1988. Minnesota's Endangered Flora and Fauna. University of Minnesota Press, Minneapolis, 473 pp.

### **REFERENCES (cont.)**

- Moriarty, J. J., and M. Linck. 1994. Suggested guidelines for projects occurring in Blanding's turtle habitat. Unpublished report to the Minnesota DNR. 8 pp.
- Oldfield, B., and J. J. Moriarty. 1994. Amphibians and Reptiles Native to Minnesota. University of Minnesota Press, Minneapolis, 237 pp.
- Sajwaj, T. D., and J. W. Lang. 2000. Thermal ecology of Blanding's turtle in central Minnesota. *Chelonian Conservation and Biology* 3(4):626-636.





March 19, 2012

William Moore  
Metropolitan Council  
390 Robert St. N.  
St. Paul, MN 55101

Subject: Peony Lane Realignment Project, Minnesota Environmental Assessment Worksheet

Dear William:

On behalf of the City of Plymouth, WSB & Associates is requesting early coordination with the Metropolitan Council for the Peony Lane Realignment project's Environmental Assessment Worksheet. The Peony Lane Realignment project area is approximately 89 acres and is located in the City of Plymouth in portions of Sections 5, 6, and 7, Township 118N, Range 22W. The proposed project will extend Peony Lane northward from its current terminis at 54th Avenue to Lawndale Lane. The City of Plymouth's Comprehensive Plan, and the Metropolitan Council, list the Peony Lane extension as a planned A-Minor Arterial (Expander), which will complete a gap between two existing A-Minor Arterials.

Four alignments are currently being considered. All of these alignments are located within the Project Area (**Figure 1**). The preferred alignment will be chosen based on an evaluation of environmental, economic, and social factors. This memo serves to solicit comments from the Metropolitan Council in an effort to determine potential environmental impacts for the project and ultimately choose the preferred alignment.

As part of the project, the city will be preserving enough right of way (120 feet) to allow for the construction of a four-lane facility at some time in the future. The ultimate facility will consist of a four-lane divided roadway with dedicated turn lanes, center median, trail construction, and appropriate ponding.

We understand that the Met Council has had previous correspondence with the city regarding the sanitary sewer interceptor line that crosses the project area. Specifically, in a meeting held with MCES staff on March 8, 2011 regarding Alternative Alignment 4, it was indicated that MCES would allow the roadway to encroach on their easement provided the interceptor pipe is properly protected and that agreements would be made between the City of Plymouth and any other agencies or utilities that would be placed in or adjacent to the existing MCES easements and proposed right of way.

A grade-separated trail is also proposed as part of the ultimate development of the roadway. The proposed trail alignments would place a pedestrian crossing near the

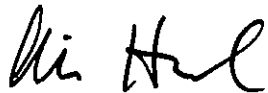
Mr. William Moore  
March 19, 2012  
Page 2

interceptor pipe. In consideration of the proximity to the interceptor line, the city recognizes that further evaluation is needed to assess several factors such as soil strength, depth of interceptor pipe, water table, embankment fill weight, and manhole extensions.

We request that verification of the conclusions from the March 8, 2011 meeting, and that any additional input you may have, be sent to: Alison Harwood, WSB & Associates, Inc. 701 Xenia Avenue South, Suite 300, Minneapolis, Minnesota 55416 by April 2, 2012.

If you have any questions, please feel free to contact me at 763/231-4847 or by email at [aharwood@wsbeng.com](mailto:aharwood@wsbeng.com).

Thank you,



Alison Harwood, WSB & Associates, Inc.  
Environmental Scientist

Attachments

cc: Jupe Hale, WSB & Associates  
Jack Corkle, WSB & Associates



March 19, 2012

David Vessel  
Metropolitan Council  
390 Robert St. N.  
St. Paul, MN 55101

Subject: Peony Lane Realignment Project, Minnesota Environmental Assessment Worksheet

Dear David:

On behalf of the City of Plymouth, WSB & Associates is requesting early coordination with the Metropolitan Council for the Peony Lane Realignment project's Environmental Assessment Worksheet. The Peony Lane Realignment project area is approximately 89 acres and is located in the City of Plymouth in portions of Sections 5, 6, and 7, Township 118N, Range 22W. The proposed project will extend Peony Lane northward from its current terminis at 54th Avenue to Lawndale Lane. The City of Plymouth's Comprehensive Plan, and the Metropolitan Council, list the Peony Lane extension as a planned A-Minor Arterial (Expander), which will complete a gap between two existing A-Minor Arterials.

Four alignments are currently being considered. All of these alignments are located within the Project Area (**Figure 1**). The preferred alignment will be chosen based on an evaluation of environmental, economic, and social factors. This memo serves to solicit comments from the Metropolitan Council in an effort to determine potential environmental impacts for the project and ultimately choose the preferred alignment.

As part of the project, the city will be preserving enough right of way (120 feet) to allow for the construction of a four-lane facility at some time in the future. The ultimate facility will consist of a four-lane divided roadway with dedicated turn lanes, center median, trail construction, and appropriate ponding.

We understand that the Met Council has had previous correspondence with the city regarding the sanitary sewer interceptor line that crosses the project area. Specifically, in a meeting held with MCES staff on March 8, 2011 regarding Alternative Alignment 4, it was indicated that MCES would allow the roadway to encroach on their easement provided the interceptor pipe is properly protected and that agreements would be made between the City of Plymouth and any other agencies or utilities that would be placed in or adjacent to the existing MCES easements and proposed right of way.

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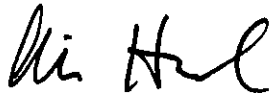
Mr. David Vessel  
March 19, 2012  
Page 2

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We request that verification of the conclusions from the March 8, 2011 meeting, and that any additional input you may have, be sent to: Alison Harwood, WSB & Associates, Inc. 701 Xenia Avenue South, Suite 300, Minneapolis, Minnesota 55416 by April 2, 2012.

If you have any questions, please feel free to contact me at 763/231-4847 or by email at [aharwood@wsbeng.com](mailto:aharwood@wsbeng.com).

Thank you,



Alison Harwood, WSB & Associates, Inc.  
Environmental Scientist

Attachments

cc: Jupe Hale, WSB & Associates  
Jack Corkle, WSB & Associates





March 19, 2012

Ms. Melissa Jenny  
Army Corps of Engineers  
St. Paul District Office  
180 5th St E, Ste 700  
St. Paul, MN 55101

RE: Peony Lane Realignment Project, Minnesota Environmental Assessment Worksheet

Dear Ms. Jenny:

On behalf of the City of Plymouth, WSB & Associates is requesting early coordination with the Army Corps of Engineers for the Peony Lane Realignment project's Environmental Assessment Worksheet. The Peony Lane Realignment project area is approximately 89 acres and is located in the City of Plymouth in portions of Sections 5, 6, and 7, Township 118N, Range 22W. The proposed project will extend Peony Lane northward from its current terminis at 54th Avenue to Lawndale Lane. In the City of Plymouth's Comprehensive Plan, the Peony Lane extension is listed as a Future A-Minor Arterial (Expander) which will complete a gap between two existing A-Minor Arterials.

Four alignments are currently being considered. All of these alignments are located within the Project Area (**Figure 1**). The preferred alignment will be chosen based on an evaluation of environmental, economic, and social factors. This letter serves to solicit comments from the Army Corps of Engineers in an effort to determine potential environmental impacts for the project and ultimately choose the preferred alignment.

As part of the project, the City will be preserving enough right of way (120 feet) to allow for the construction of a four-lane facility at some time in the future. The ultimate facility will consist of a four-lane divided roadway with dedicated turn lanes, center median, trail construction, and appropriate ponding.

The current land use is a combination of rural residential and agricultural. The proposed project will require grading within the chosen alignment and has the potential to result in filling, discharge to, and dewatering of wetlands and/or other waters.


A number of water resource related permits and approvals will be sought for this project. We would appreciate your input at this stage of the project in order to assist in the design and environmental assessment. We request your input be sent to: Alison Harwood, WSB & Associates, Inc. 701 Xenia Avenue South, Suite 300, Minneapolis, Minnesota 55416 by April 2, 2012.

Ms. Melissa Jenny  
March 19, 2012  
Page 2

If you have any questions, please feel free to contact me at 763-231-4847 or by email at [aharwood@wsbeng.com](mailto:aharwood@wsbeng.com).

Thank you,

***WSB & Associates, Inc.***

A handwritten signature in black ink, appearing to read 'Alison Harwood', written in a cursive style.

Alison Harwood, WSB & Associates, Inc.  
Environmental Scientist

Attachments

ef

cc: Jupe Hale, WSB & Associates  
Jack Corkle, WSB & Associates



March 19, 2012

Ms. Stacey Lijewski  
Hennepin Conservation District  
701 4th Ave S, Ste 700  
Minneapolis, MN 55415

RE: Peony Lane Realignment Project, Minnesota Environmental Assessment Worksheet

Dear Ms. Lijewski:

On behalf of the City of Plymouth, WSB & Associates is requesting early coordination with the Hennepin Conservation District for the Peony Lane Realignment project's Environmental Assessment Worksheet. The Peony Lane Realignment project area is approximately 89 acres and is located in the City of Plymouth in portions of Sections 5, 6, and 7, Township 118N, Range 22W. The proposed project will extend Peony Lane northward from its current terminis at 54th Avenue to Lawndale Lane. The City of Plymouth's Comprehensive Plan lists the Peony Lane extension as a Future A-Minor Arterial (Expander), which will complete a gap between two existing A-Minor Arterials.

Four alignments are currently being considered. All of these alignments are located within the Project Area (**Figure 1**). The preferred alignment will be chosen based on an evaluation of environmental, economic, and social factors. This letter serves to solicit comments from the Hennepin Conservation District in an effort to determine potential environmental impacts for the project and ultimately choose the preferred alignment.

As part of the project, the City will be preserving enough right of way (120 feet) to allow for the construction of a four-lane facility at some time in the future. The ultimate facility will consist of a four-lane divided roadway with dedicated turn lanes, center median, trail construction, and appropriate ponding.

The current land use is a combination of rural residential and agricultural. The proposed project will require grading within the chosen alignment and has the potential to result in filling, discharge to, and dewatering of wetlands and/or other waters.

A number of water resource related permits and approvals will be sought for this project. We would appreciate your input at this stage of the project in order to assist in the design and environmental assessment. We request your input be sent to: Alison Harwood, WSB & Associates, Inc. 701 Xenia Avenue South, Suite 300, Minneapolis, Minnesota 55416 by April 2, 2012.




Ms. Stacey Lijewski  
March 19, 2012  
Page 2

If you have any questions, please feel free to contact me at 763-231-4847 or by email at [aharwood@wsbeng.com](mailto:aharwood@wsbeng.com).

Thank you,

***WSB & Associates, Inc.***

A handwritten signature in black ink, appearing to read 'Alison Harwood', written in a cursive style.

Alison Harwood, WSB & Associates, Inc.  
Environmental Scientist

Attachments

ef

cc: Jupe Hale, WSB & Associates  
Jack Corkle, WSB & Associates

**Appendix C**  
Evaluation of Potentially Historical Properties



**An Evaluation of the Egan School House and Cook Farmstead for the  
Proposed City of Plymouth Peony Lane Realignment Project,  
Plymouth, Hennepin County, Minnesota**

**by  
Steven J. Blondo, MA  
Principal Investigator  
Blondo Consulting, LLC**

**SHPO Review and Compliance Number: N.A.**

**June 5, 2012  
FINAL REPORT**



STEVEN J. BLONDO, MA  
3939 SAND HILL RD., KETTLE RIVER, MN 55757  
218-485-1174 • STEVEN@BLONDOCONSULTING.COM  
WWW.BLONDOCONSULTING.COM

## **Management Summary/Abstract**

The City of Plymouth is proposing a realignment of a portion of Peony Lane. For the evaluation of the two historic buildings, the Area of Potential Effect (APE) contains the two parcels located within the proposed alignment corridor. The APE is located in Hennepin County in Township 118N, Range 22W, Section 7. Blondo Consulting, LLC (Blondo Consulting) was retained to complete an Evaluation of the Egan School House and Cook Farmstead for the Proposed City of Plymouth Peony Lane Realignment Project, Plymouth, Hennepin County, Minnesota. The purpose of the investigation is to evaluate two previously recorded historic buildings to determine the eligibility of the historic structures. The investigation involved background research and field visit to photograph and assess the historic significance and integrity of the existing properties.

An assessment of both the Egan School House and the Cook Farmstead revealed a lack of significance and lack of integrity for both properties. Therefore, Blondo Consulting recommends both the Egan School House and Cook Farmstead as **not eligible** for the *National Register of Historic Places*. No further work is recommended for these two parcels.



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**References Cited/Bibliography**

**Site Forms**

**Maps**

**Photographs**

## **1.0 INTRODUCTION**

Blondo Consulting, LLC (Blondo Consulting) was retained to complete an Evaluation of the Egan School House and Cook Farmstead for the Proposed City of Plymouth Peony Lane Realignment Project, Plymouth, Hennepin County, Minnesota. The purpose of the investigation is to evaluate two previously recorded historic buildings to determine the *National Register* eligibility of the structures. The investigation involved background research and field visit to photograph and assess the historic significance and integrity of the properties.

## **2.0 PROJECT AND SITE DESCRIPTION**

The City of Plymouth is proposing a realignment of a portion of Peony Lane. For the evaluation of the two historic buildings, the Area of Potential Effect (APE) contains the two parcels located within the proposed alignment corridor. The APE is located in Hennepin County in Township 118N, Range 22W, Section 7 (Exhibit 1). A full description of the project area as described in the Environmental Assessment Worksheet (EAW) follows.

The City of Plymouth proposes to extend Peony Lane northward from its current terminus at 54<sup>th</sup> Avenue to Lawndale Lane and the border with the City of Maple Grove. The proposed project is 1.52 miles in length. A new two-lane, urban roadway with shoulders, dedicated turn lanes, a trail, sidewalk, and ponding will be constructed. As part of the project, the City will be preserving enough right-of-way (generally 120 feet) to allow for the ultimate construction of a four-lane facility.

The project will include constructing a storm sewer system to collect and treat storm water on site prior to discharge to surrounding wetlands and Elm Creek. Municipal water main will also be constructed throughout the length of the Peony Lane/Lawndale Lane Extension project. A trail will be constructed on the east side of the road project as part of the proposed Northwest Greenway Trail and allow for future connections of the trail to the east. A sidewalk will be constructed on the westside of the road. Some wetland and floodplain impact will occur with the project. Floodplain impacts will be mitigated on-site. Wetland mitigation is preferred on-site; however, if site conditions preclude this on-site mitigation, off-site banking credits will be obtained.

During construction, grading of the road alignment will occur. This will include stripping topsoil and existing vegetation, cutting and filling, and excavation for storm ponds. The project will include excavating approximately 200,000 cubic yards of material within the project area. Of this amount, approximately 34,000 cubic yards would not be suitable for the roadway construction and will be hauled off-site. The remainder will be reused on site and an additional 56,000 cubic yards of sand and 19,000 cubic yards of aggregate will also be brought in for the road construction.

Two historic properties were identified within the project area through the State Historic Preservation Office (SHPO) database. The structures within these properties are anticipated to be removed or impacted by the project.

## **3.0 METHODOLOGY**

Steven Blondo conducted background research and literature review at the State Historic Preservation Office and Minnesota State Archives. Additional historic resources included Hennepin County Historical Society, Plymouth Historical Society, Wayzata Historical Society, Minneapolis Public Library, the University of Minnesota Borchert Map Library, and the Wayzata Public School District. During this research, Mr. Blondo examined the *National Register of Historic*



Places files, historic plat maps, and current and historic aerial photographs. Phone interviews with two former Egan School Students were completed.

Fieldwork was conducted May 1, 2012. Field methods included site visits to each historic building to assess integrity and document architectural design. Photographs and notes were taken of each property.

#### **4.0 HISTORICAL CONTEXT**

Statewide contexts have been developed by the Minnesota State Historic Preservation Office (SHPO), which examines Minnesota's recent Prehistoric through Historic past. These contexts are based on archaeological and historic research. They describe the history of the state, and assist in predicting where specific types of sites may occur both geographically and temporally. In the instance of historic properties, they assist in understanding significance and give criteria for determining integrity. No context for public schools in Minnesota has been completed. A farmstead context was completed by the Minnesota Department of Transportation in 2005.

##### ***A Brief Overview of Education in Minnesota and Hennepin County***

In the online article "A Brief History of Education in America" article from the Clare Booth Luce Policy Institute, the history of education in America is divided into four stage. The first stage from 1642 to 1821, known as the "Permissive" Era is defined by government permitting the "organization of public schools subject to the approval of local voters" (A Brief History of Education in America website accessed 3 June 2012 at <http://www.cblpi.org/ftp/School%20Choice/EdHistory.pdf>). The stage is "marked by complete parental authority."

The second stage, according to the article begins in 1826 when Massachusetts passed a law requiring each community to choose a school committee, beginning the organization of schools under a single authority. This stage is referred to as the "Encouraging" Era and is defined as government not requiring but rather encouraging establishment of schools. The stage is "marked by parental authority; children were not compelled to attend a public school" (A Brief History of Education in America).

The article describes the third stage, beginning in 1855, two years prior the founding of the National Education Association (NEA), and ending in 1980 (when the Department of Education was elevated to Cabinet level status) as the "Compulsory" Era. During this stage "government compels the establishment of school districts, taxation for government schools, curriculum and structure, and children's school attendance" (A Brief History of Education in America website accessed 3 June 2012 at <http://www.cblpi.org/ftp/School%20Choice/EdHistory.pdf>). The stage is marked by the "decline of parental authority; children of certain ages compelled to attend school" (A Brief History of Education in America).

The last stage beginning in 1980, is referred to as the "Freedom or School Choice" Era and is defined by "education options for children expand through homeschooling, vouchers, tuition tax credits, scholarship tax credits, education deductions, and charter schools" (A Brief History of Education in America). The stage is "marked by increased parental authority and options" (A Brief History of Education in America).

The history of education in Minnesota begins in 1849 when the territorial legislature passed the first law pertaining to education. The law stated that common schools be open to all persons between the ages of four and 21. It also stated that townships “were to be divided into school districts when the districts contained more than five families”. To support the schools, the law levied a general tax of 2½ mills and supplemented it with 15 per cent of the funds collected from liquor licenses and fines for criminal offenses” (A History of the State Department of Education in Minnesota website accessed 3 June 2012 at <http://www.mnddc.org/past/pdf/60s/67/67-AHO-MDE.pdf>). Formal education in Minnesota developed slowly. There were only three schools in the territory in 1851, enrolling a total of 250 children (A History of the State Department of Education in Minnesota).

By 1858, when Minnesota achieved statehood, one of the first acts of the newly formed state legislature was to provide for the appointment of a state superintendent of public instruction. The former territorial superintendent, Edward D. Neill, became the first state superintendent (A History of the State Department of Education in Minnesota). In 1861, the legislature stipulated that every township would be a school district. Known as the “township plan,” the law appointed town supervisors as school trustees ex officio, and town clerks, and treasurers as school officials (A History of the State Department of Education in Minnesota). The plan lasted only a year before the legislature adopted the “neighborhood plan”, which “firmly established the district system of public schools -- a system still in existence today” (A History of the State Department of Education in Minnesota).

Two other types of school districts were defined early in the state’s history. First, “recognizing that areas of significant population density should have greater control over their schools, in 1865 the legislature granted incorporated cities, towns, and villages the right to establish independent school districts” (A History of the State Department of Education in Minnesota). Secondly, “at the request of several villages and cities, the Minnesota Legislature. . . enacted legislation establishing special school districts” (A History of the State Department of Education in Minnesota). The number of special school districts have gradually decreased. Reasons for the decrease include, most importantly, “A special district may not annex property outside the city or village limits. Growth of the school district, therefore, is tied to the often slow expansion of the city boundaries” (A History of the State Department of Education in Minnesota). Additionally, voters ratified a constitutional amendment in 1892 which prohibited further special charters for school districts. In 1965, only five special districts remained “with the prospects bright that the number will decrease further in the next few years” (A History of the State Department of Education in Minnesota).

Educational progress in the years following statehood was substantial compared to the territorial period. “In 1868 Governor William R. Marshall reported that Minnesota had more school buildings than any other state with comparable population and taxable property” (A History of the State Department of Education in Minnesota). During this period, common schools provided only basic education. The university was available to those who could afford and desired an extensive education. The high school system was established in 1878 when “the



legislature enacted the first law recognizing the need for high schools” (A History of the State Department of Education in Minnesota).

Attendance laws were enacted to try to counter poor attendance. In 1885, the Minnesota Legislature “enacted a measure requiring every parent or guardian of a child between the ages of 8 and 18 to send him to a public or private school for 12 weeks each year. Disobeying the law was a misdemeanor” (A History of the State Department of Education in Minnesota). The weakness of the law was a series of exceptions allowed including cases “where the parent or guardian was too poor to clothe the child, when the child was physically or mentally unable to attend school, when the child was being taught at home or had already acquired the ordinary school training, or where there was no school within two miles of the home” (A History of the State Department of Education in Minnesota).

Another attempt to counter poor attendance occurred in 1899 under Superintendent John Lewis who urged the legislature to pass a law to strengthen the compulsory attendance law. The act “authorized school boards in cities and large villages to appoint truant officers with power to arrest truants, take them to school, and to file complaints against their parents or guardians” (A History of the State Department of Education in Minnesota). The law was weak in smaller villages and rural areas where the majority of children lived. At the turn of the century, many children still remained out of school. The second development under Superintendent Lewis dealt with teacher qualifications. “Prior to 1899 there were no meaningful requirements for the preparation of teachers. Frequently a classroom was staffed by someone with almost no education, and there was little the office of public instruction could do to require much more. But in 1899, the legislature required that prospective teachers take an examination of prepared by the office of public instruction, and that upon satisfactory completion of the test the teacher be issued one of three certificates, depending on academic and professional preparation” (A History of the State Department of Education in Minnesota).

Legislative funding for education was first established in 1878 with the distribution of state monies to high schools. In 1885, the legislature “made two important steps toward state financial aid to schools. First, the mode of distribution of funds from the permanent fund was changed: it would be made in proportion to the number of pupils in attendance at a school not according to a census of school-age children in the district. Second, the legislature proposed a constitutional amendment that would authorize loans from the fund for county and school buildings. The amendment was authorized by voters in 1887” (A History of the State Department of Education in Minnesota). In 1895, 1897, and 1899, legislation provided for grants of some type for funding public schools. “However, it must be noted that the aid was initially inadequate to meet the needs of the schools; more substantial aid was to come after the turn of the century” (A History of the State Department of Education in Minnesota).

In the online article A History of the State Department of Education in Minnesota, the author theorizes that, “If one educational issue in Minnesota could be designated as that which stirred up more controversy than most others in the past 20 years, it would be school consolidation” (A History of the State Department of Education in Minnesota). At the turn of the twentieth century there were about 8,000 school districts in the state. Legislation was

passed in 1901, 1903, and 1905 enabling various types of districts to merge. But efforts failed and by 1913, the number of districts had only dropped to 7,900. Governor A. O. Eberhart, a product of a one-room school house, noted that there were more than 2,000 one-room schools with less than 21 pupils, and another 300 with less than 11 pupils. He “felt his education was less than adequate. ‘He feelingly recalled the old school with its little one-room building, bare walls, benches, wood bucket, and dipper, its narrow course of inferior teaching, its unattractive and unsanitary construction, and pleaded with the Legislature for state aid to encourage consolidation’” (A History of the State Department of Education in Minnesota).

In 1911, “Primarily due to the Governor’s urgings and backing from the office of public instruction, the legislature passed a law offering a financial incentive to newly consolidated districts. The new districts were given one-fourth of the cost of erecting a building and were granted annual aid up to \$1,500 a year if the school met eight months of the year and supplied transportation for pupils living long distances from the school building” (A History of the State Department of Education in Minnesota). Within five years, 170 districts consolidated. Between 1915 and 1947 “There was no legislation of significance aimed at decreasing the number of districts” (A History of the State Department of Education in Minnesota). In 1947, further consolidation became a priority. There were still 7,679 districts in the state when the legislature enacted a law that provided for the appointment of a state advisory commission on school reorganization by the state board of education. The commission served in an advisory capacity to the commissioner of education. “In addition, local survey committees were created to formulate recommendations for reorganization to be submitted to the people in a referendum. The first election on reorganization under this program, on December 21, 1948, resulted in the merger of nine districts into one larger administrative unit with offices in Roseville, Minnesota” (A History of the State Department of Education in Minnesota). Like so many education related laws, the 1947 act for consolidation and reorganization was still voluntary.

In 1963, the first mandatory reorganization legislation was enacted. It provided for “The automatic dissolution of all non-operating school districts that did not join a district maintaining a high school. On the whole, the legislation was a success; most non-operating districts voluntarily joined a so-called high school district. However, it was not expected that so many non-operating districts would join common school districts maintaining only elementary schools. This development deferred and often complicated the later establishment of desirable school districts” (A History of the State Department of Education in Minnesota).

By July 1, 1965, there were 1,742 districts, a decrease of more than 5,800 in an 18-year period. Today, Minnesota has 339 independent school districts, three intermediate districts, five integration districts, 17 education districts, four tribal schools, 20 cooperative districts, 9 telecommunications districts, and 136 charter schools for a total of 633 districts. According to the Secretary of State’s website, these districts serve about 828,000 students from kindergarten through grade 12. Interesting numbers showing growth in school attendance from 1910 to 1950 can be found in the following table.



| <b>Table I. School Age Population and Attendance</b> |                    |                |                    |                |                    |                |                    |                |                    |                |
|------------------------------------------------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|--------------------|----------------|
|                                                      | <b>1910</b>        |                | <b>1920</b>        |                | <b>1930</b>        |                | <b>1940</b>        |                | <b>1950</b>        |                |
|                                                      | Hennepin<br>County | State of<br>MN | Hennepin<br>County | State of<br>MN | Hennepin<br>County | State of<br>MN | Hennepin<br>County | State of<br>MN | Hennepin<br>County | State of<br>MN |
| <b>Total<br/>Persons 6-14</b>                        | 45875              | 389622         |                    |                |                    |                |                    |                |                    |                |
| <b>Attending<br/>School 6-14</b>                     | 41255              | 346172         |                    |                |                    |                |                    |                |                    |                |
| <b>Percentage<br/>Attending<br/>School</b>           | 89.93%             | 88.85%         |                    |                |                    |                |                    |                |                    |                |
|                                                      |                    |                |                    |                |                    |                |                    |                |                    |                |
| <b>Total<br/>Persons<br/>15-17</b>                   | 17147              | 127497         |                    |                |                    |                |                    |                |                    |                |
| <b>Attending<br/>School 15-17</b>                    | 10321              | 76337          |                    |                |                    |                |                    |                |                    |                |
| <b>Percentage<br/>Attending<br/>School</b>           | 60.19%             | 59.87%         |                    |                |                    |                |                    |                |                    |                |
|                                                      |                    |                |                    |                |                    |                |                    |                |                    |                |
| <b>Total<br/>Persons 5-6</b>                         |                    |                |                    |                |                    |                | 13545              | 86305          | 21135              | 109700         |
| <b>Attending<br/>School 5-6</b>                      |                    |                |                    |                |                    |                | 10243              | 45356          | 7920               | 42640          |
| <b>In<br/>Kindergarten<br/>5-6</b>                   |                    |                |                    |                |                    |                |                    |                | 8595               | 23900          |
| <b>SUM School<br/>5-6</b>                            |                    |                |                    |                |                    |                |                    |                | 16515              | 66540          |
| <b>Percentage<br/>Attending<br/>School</b>           |                    |                |                    |                |                    |                | 75.62%             | 52.55%         | 78.14%             | 60.66%         |
|                                                      |                    |                |                    |                |                    |                |                    |                |                    |                |
| <b>Total<br/>Persons 7-13</b>                        |                    |                | 44926              | 335458         | 60273              | 359072         | 53,395             | 323,834        | 61350              | 339850         |
| <b>Attending<br/>School 7-13</b>                     |                    |                | 42366              | 314905         | 59469              | 352019         | 52415              | 316245         | 59630              | 329140         |
| <b>Percentage<br/>Attending<br/>School</b>           |                    |                | 94.30%             | 93.87%         | 98.67%             | 98.04%         | 98.16%             | 97.66%         | 97.20%             | 96.85%         |
|                                                      |                    |                |                    |                |                    |                |                    |                |                    |                |
| <b>Total<br/>Persons<br/>14-15</b>                   |                    |                | 11332              | 89059          | 16793              | 100499         | 17285              | 99234          | 14000              | 85385          |
| <b>Attending<br/>School 14-15</b>                    |                    |                | 10228              | 76759          | 16416              | 91563          | 16794              | 89667          | 13605              | 80475          |
| <b>Percentage<br/>Attending<br/>School</b>           |                    |                | 90.26%             | 86.19%         | 97.76%             | 91.11%         | 97.16%             | 90.36%         | 97.18%             | 94.25%         |
|                                                      |                    |                |                    |                |                    |                |                    |                |                    |                |

| <b>Table I. School Age Population and Attendance</b> |             |  |             |        |             |        |             |        |             |        |
|------------------------------------------------------|-------------|--|-------------|--------|-------------|--------|-------------|--------|-------------|--------|
|                                                      | <b>1910</b> |  | <b>1920</b> |        | <b>1930</b> |        | <b>1940</b> |        | <b>1950</b> |        |
| <b>Total Persons 16-17</b>                           |             |  | 12212       | 89606  | 15781       | 97256  | 18232       | 102534 | 14635       | 83505  |
| <b>Attending School 16-17</b>                        |             |  | 6094        | 38055  | 10957       | 55476  | 15389       | 72713  | 12405       | 66875  |
| <b>Percentage Attending School</b>                   |             |  | 49.90%      | 42.47% | 69.43%      | 57.04% | 84.41%      | 70.92% | 84.76%      | 80.09% |

### **A Brief Overview of Farming in Minnesota and Hennepin County**

The *Minnesota Historic Farms Study* divides the state into a number of regions to assist in understanding farming practices in the area. The project lies in an area identified as “Area 9 - Twin City Suburban Truck, Dairy, and Fruit.” The region is comprised of the area immediately surrounding Minneapolis and St. Paul. “In 1940 the Twin Cities Suburban farming area was a region of intensive, small-scale agriculture, generally organized to supply food to Twin Cities residents” (Granger and Kelly 2005:4.22). Food supplied to the local market included perishable foods such as vegetables, berries, small fruits, milk, cream, and eggs. The terrain of the area consists of level to hilly and rolling land. The growing season is relatively long (averaging 160 days in much of the area) (Granger and Kelly 2005:4.22).

“In 1939 there were about 5,100 farms in Area 9. They averaged 57 acres in size” (Granger and Kelly 2005:4.23). The area had more diversity in types of farms than other regions. In 1930 “40 percent of farms in the region were classified as dairy farms, 10 percent were general or diversified, 10 percent were truck farms, 8 percent were crop speciality farms, 6 percent were fruit farms, and 4 percent were poultry farms” (Granger and Kelly 2005:4.23).

## **5.0 RESULTS OF BACKGROUND AND ARCHIVAL RESEARCH**

An inquiry by Mr. Blondo at the SHPO resulted in site forms for both previously surveyed properties. The Egan School House and Cook Farmstead were surveyed as a part of the statewide surveys of historic buildings. The Plymouth Historical Society recorded both structures in April 1985.

### **5.1 Egan School House**

Recorded as Inventory number HE-PLC-136, the building is located at 17510 County Road 47. According to the Historic Properties Inventory Form, the building was constructed in 1890 as a school house for School District 120. By 1985, when the inventory form was completed, the building was being used as a residence.

Although it is unclear how the “1890 construction date” was arrived at, it seems relatively accurate. There is nothing mapped nearby on the George B. Wright 1873 or the 1874 Andreas Atlas. The first reference to the school house is 1898 on the property of “Keern Dolan” (P. M. Dahl plat map). Neighboring parcels are owned by W. Egan and Margaret Egan. The entire neighborhood is labeled “School District 120.” Susan Larson-Fleming of Hennepin County Historical Society stated that an undated “but probably around 1906” plat map in the collections of the Historical Society shows “School District 120.” Schools and School Districts are not



mapped on the Hennepin Atlas and Publishing Company plat map of 1913 but the school is depicted on the 1916 State of Minnesota Map. No additional details are given about the school.

A properties search at the Hennepin County Courthouse revealed the following chain of title for the parcel. No information directly tying a school house to the parcel was found. The surname Egan, although present on neighboring parcels mapped on plat maps, does not appear in the parcel abstract.

| <b>Table 2. Chain of Title for School House at 17510 County Road 47</b> |                                                                                                                                       |                                                                                         |                                                                                                                                                         |
|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Date Recorded</b>                                                    | <b>Grantor</b>                                                                                                                        | <b>Grantee</b>                                                                          | <b>Notes</b>                                                                                                                                            |
| February 5, 1860                                                        | Harlow A. Gale,<br>County Auditor                                                                                                     | Matthew Wren                                                                            | Tax Sale - Delinquent Tax Years<br>1857, 1858, 1860 and 1861                                                                                            |
| June 8, 1864                                                            | Matthew Wren                                                                                                                          | William Wren                                                                            | 80 acres                                                                                                                                                |
| August 6, 1867                                                          | William Wren                                                                                                                          | Alden G. Spencer                                                                        | Mortgages and Assignments                                                                                                                               |
| August 6, 1867                                                          | Alden G. Spencer                                                                                                                      | Michael Hoy                                                                             | Mortgages and Assignments                                                                                                                               |
| August 6, 1867                                                          | Michael Shannahan                                                                                                                     | William Wren                                                                            | Mortgages and Assignments                                                                                                                               |
| January 15, 1870                                                        | Frannie McLaughlin                                                                                                                    | Michael and Margaret<br>Shannahan                                                       | Mortgage                                                                                                                                                |
| January 15, 1870                                                        | Frannie Bradford<br>(formerly<br>McLaughlin)                                                                                          | Michael and Margaret<br>Shannahan                                                       | Satisfaction of Mortgage                                                                                                                                |
| April 25, 1870                                                          | Michael Hoy<br>(administrator for<br>Harvey Estate),<br>William Wren<br>(guardian of infant<br>heirs) and estate of<br>Patrick Harvey | 1/3 to Michael Hoy<br>1/3 to Michael<br>Shannahan<br>1/3 to estate of<br>William Byrnes | Order and Judgement - an error<br>in recording description of land,<br>and sale of Patrick Harvey's<br>estate                                           |
| January 11, 1876                                                        | Michael and<br>Margaret<br>Shannahan                                                                                                  | Keeren Dolan                                                                            | \$1,450 sale payable as \$250 in 3<br>weeks and \$200 within one year<br>plus 10% interest payable<br>annually                                          |
| November 24, 1899                                                       | Keeren and Nancy<br>J. Dolan                                                                                                          | John Dolan (their<br>son)                                                               | Condition: Pay Keeren Dolan<br>\$150 per year without interest<br>on December 1 of the year<br>during the full term of his natural<br>life              |
| October 19, 1906                                                        | John Dolan                                                                                                                            | William Dolan                                                                           | Condition: Pay Keeren Dolan (his<br>father) \$150 per year without<br>interest on December 1 of the<br>year during the full term of his<br>natural life |

| <b>Table 2. Chain of Title for School House at 17510 County Road 47</b> |                               |                             |                                                                                                                                                        |
|-------------------------------------------------------------------------|-------------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Date Recorded</b>                                                    | <b>Grantor</b>                | <b>Grantee</b>              | <b>Notes</b>                                                                                                                                           |
| April 13, 1915                                                          |                               |                             | Affidavit - Keeren Dolan died November 18, 1908. He resided at the NW¼ of the NE¼ of Section 6, T118N R22W for "more than 25 years prior to his death" |
| <b>Gap in Research</b>                                                  |                               |                             |                                                                                                                                                        |
| December 15, 1988                                                       | Walter W. and Margie L. Dolan | Alvin N. and Judith C. Sand |                                                                                                                                                        |
| August 5, 1992                                                          | Richard R. Theisen            | Kimberly Jayne Theisen      | Richard died on December 19 in car crash leaving property to his wife Kimberly                                                                         |
| March 26, 2001                                                          | Kimberly Jayne Theisen        | Jeremy R. Theisen           | Quit Claim Deed                                                                                                                                        |

References to the school house and School District 120 are scarce. The transcription of a 1938 Hennepin County Graduation Program is described as follows:

In 1938, Hennepin County tried something new for 8th grade graduating classes. Rather than each school holding their own ceremony, the school board held one large program for all students graduating from the rural (non-Minneapolis) schools. The ceremony was held at Excelsior Amusement Park, which then allowed the students and their families to enjoy a day at the park after the ceremony. It lists approximately 550 8th grade students, their teachers, and the name of the school. Also the names of persons who participated in the ceremony and the school board members. This ceremony was never repeated and they returned to individual school ceremonies (1938 Hennepin County Graduation Program found at <http://www.rootsweb.ancestry.com/~mnhennepe/1938graduationprogram.htm> accessed 4 June 2012).

Within the 1938 Graduation List is the following entry:

District #120 Miss Ella Bierman  
Wallace Darsow  
Mary Jane Herman

Gary Schiebe of the Plymouth Historical Society provided a photograph from 1947. The photo depicts twenty-nine students (fourteen girls and fifteen boys) and their teacher sitting in front of the school. A typewritten label on the back of the photograph states "District 120 1947" and labels most of the students: "Lucille Simmons, David Zebarth, Jeannette Bilsner, Francis Hadley, Philippa Gleason, Walter Schindel, Jeanete Kluck, Teacher Irene Baer Jesen Deziel, Warren Dolan, Edna Mae Gleason, Marlys Schaber, Dorothy Dickey, Shirley DeGerals, Marlene Ziebarth, Darlene Simmons, \_\_\_, Joanne Brunner, Judy Gorman, Ed Egan, Ed Hadley, Ken Kluck, David Dickey, Norm Simmons, Rich Brummer, Emmett Gleason, James Baer, Robert Egan, Jim Gorman, Donald Bilsner, and Donal Schaber".

The discovery of two undated, unnamed documents in the files of the Wayzata Public School District 284 shed further light on the consolidation of School District 120 and the Egan School. The first states “a list of recommendations and suggestions made by the University of Minnesota Field Study Survey with respect to School District No. 144.” It describes ‘Unification of the District’ by recommending that “School Districts 47, 63, 104, 120, 127, 137 and 144 unite to form one school district and at the same time assume their proportionate share of all bonded indebtedness.”

The second document appears to be a working draft labeled “School History.” It describes various consolidations including a 1946 consolidation of School Districts 95 (Beacon Heights), 144 (Wayzata), 51 (Medicine Lake), and parts of 52 and 53. More importantly, the document states that, “In the spring of 1956, District 47 (Deziel), District 63 (Pouliot), District 104 (Oakwood), District 120 (Egan), and District 127 (Hamel) were dissolved and added to our school district.” A map on the document shows the locations of each of these districts.

In phone interviews with former Egan School Graduates, Emmett “Bud” Gleason and Ken Kluck, details of the school emerged. Gleason and Kluck were born in 1935 and attended the school from 1941 to 1948. Gleason was a spelling bee champion in 6th, 7th, and 8th grade and traveled to the Hennepin County Courthouse to compete in competitions. Gleason’s father attended the school from 1904 through about 1912. He later served on the school board. Both Kluck and Gleason described the exterior of the school as having large five to six inch lapboard siding. A large cement slab was located “out front” according to Kluck. Inside the front entrance were boys and girls cloakrooms and bathrooms. The basement contained a large room that was used when inclement weather prevented students from going outside for recess. It also housed the furnace and a large chemical tank for the chemical toilets. Students studied general subjects such as math, reading, spelling, history, English, and geography. Sometime around 1945, after years of bagged lunches, local woman began preparing and delivering hot dishes and other hot meals for the kids. Kluck recalled the following teachers: Ms. Schaber, Mrs. Williams, Mrs. Baer Jessen Deziel, and Ms. McWilliams. Most teachers were married and from local communities (Personal Communication Kluck and Gleason, June 4, 2012).

After the school consolidated “sometime in the late 1950s”, according to Gleason. He remembered two different families moving into the house. First he recalled Jim Hedtke living there for “quite some time.” Secondly, he remembered the Theisen family moving in. “Rick” and his daughter died in a car accident sometime around Christmas 1991. His wife and son survived. They continued to live at the house until Kim’s death. Jeremy was the last known resident.

In conclusion, assumptions can be made regarding the history of the Egan School. The one room school house was constructed sometime between 1874 and 1898. Classes were small, as evidenced in the graduation of two 8th grade students in 1938 and a total of 29 students in 1947. The school served the local rural population. The school was consolidated in 1956. Sometime after 1956 the building was converted to a residence.



## 5.2 Cook Farmstead

Recorded as Inventory number HE-PLC-42, the building is located at 5705 Lawndale. According to the Historic Properties Inventory Form, the building was constructed in 1930 and its original owner was Cook. In 1985, when the inventory form was completed, the residence was owned by John Hanley.

A search of historic plat maps reveals nothing on the parcel before 1914. On the 1914 County Plat Map a house appears near the current farmstead. The property is owned by George Cook. The 1916 plat map looks the same.

A properties search at the Hennepin County Courthouse revealed the following chain of title for the parcel. No information identifying buildings on the parcel were found. A break in the title appears between 1922 and 1988.

| Table 3. Chain of Title for Farmstead at 5705 Lawndale |                                    |                                      |                                                                   |
|--------------------------------------------------------|------------------------------------|--------------------------------------|-------------------------------------------------------------------|
| Date Recorded                                          | Grantor                            | Grantee                              | Notes                                                             |
| August 4, 1858                                         | Catherine Devery                   | John Devery                          | \$500 - 80 acres                                                  |
| December 17, 1888                                      | John Devery                        | Ellen Cook                           | \$2,500 - 80 acres                                                |
| February 26, 1892                                      | Ellen and George Cook              | Theodore Pouliot                     | \$2,000 - 80 acres                                                |
| June 10, 1922                                          | George and Hulda Cook              | Raymond Cook                         | \$6,000 - 80 acres                                                |
| <b>Gap in Research</b>                                 |                                    |                                      |                                                                   |
| January 6, 1988                                        | Howard N. and Rebecca L. Gangestad | James C. Grimes and Kristin A. Pouti |                                                                   |
| 1999                                                   |                                    | James C. Grimes                      | Awarded property after divorce from wife Kristin Ann Pouti-Grimes |

Research at the Minnesota Historical Society Library and online at Ancestry.com reveal more details about the Cook family. The Federal Census for 1910 lists George Cook and wife Hulda with Raymond their son. Other residents include George's nephew Hugh Cook, and three hired men George Budwick, John Burnett, and Thomas Founder. All residents are listed as living in the same household. The Federal Census of 1920 lists Raymond and his sister renting the property.

The Federal Census for 1930 lists Raymond Cook as head of household. He owns the farm and lives with his wife Josephine, daughter Marjorie, son Paul, boarder Charles Johnson and sister-in-law Bernice Berglund. At a separate residence at the same farm is Susan McMillan. She is listed as widowed with no occupation.

Based on historical documentation, the following assumptions can be made. George Cook constructed a home on the parcel around 1914. He resided at the farm with his wife and raised a family. His son and daughter were renting the farm in 1920 and George purchased the property in 1922. He married Josephine between 1920 and 1930. According to Emmett “Bud” Gleason, a neighbor, Cook’s farm raised cattle, corn, oats, hay. Ken Kluck remembered Ray Cook raising pigs.

## **6.0 FIELD RESULTS**

Blondo Consulting visited the sites on May 1, 2012. Photographs were taken of each building at the two sites. Notes were taken regarding condition and integrity. The following descriptions of each property are based on the field visits.

### **6.1 Egan School House**

The Egan School House is a single story three bay gabled structure. Historically the building was clad in wood, but has been remodeled and is currently clad in stucco. Asphalt shingles cover the roof. The building was converted to a residence sometime between 1956 and 1985. Today, the building is vacant. Cement slabs serve as porches at the front and rear entrances. Three large windows semi-equally spaced windows are located along each side. A cement basement with small windows appears present on the west and east elevations. An enclosed mudroom is present at the rear entrance. A two stall detached garage is located east of the school house on the parcel.

### **6.2 Cook Farmstead**

The Cook Farmstead consists of a mixture of historic and recently constructed buildings. The farmhouse is a large 1½ story “t-shaped” cross-gabled house. A cross-gable rear addition, enclosed porches, and lean-to attachment have been recently completed. New asphalt shingles, modern windows, and wood siding are the result of massive remodeling efforts. Little remains of the original historic farmhouse.

Five additional structures are present in the immediate farm yard. These consist of a concrete stave silo, gambrel roofed barn, two modern garages, and remodeled smaller barn. A large pond has been excavated south of the farm house and in a large meadow behind (to the west) of the house are two large modern steel sheds currently used for storing large recreational vehicles and boats.

The barn is a large gambrel roofed structure located southeast of the farmhouse on the edge of the current driveway. It is covered in vertical wood siding. A large door located on the side of the barn has been replaced with a steel sectional garage door. The roof is covered in black asphalt shingles. The barn sits on a concrete block foundation. Adjacent to the barn is a concrete stave silo.

A smaller building whose original function may have been a pig or dairy cattle barn is situated between the large barn and the pond. The gable roof wood frame structure sits on a concrete block foundation. The lower block “basement” is partitioned off for livestock. It is possible this barn was used for milking cows or raising pigs. The structure has two small windows, a large

sliding wooden door on the north elevation and a cupola atop the asphalt shingled roof. Remodeling of the structure includes the addition of a large sliding glass door at the loft level of the gable end overlooking the pond.

A modern three stall garage is located east of the barn. Another three stall barn, designed to look like a farm structure complete with two cupolas atop the roof, is located adjacent to the small barn. Both garages are modern in construction.

## **7.0 Evaluation of Egan School House and Cook Farmstead**

For a historic architectural property to be considered important within a cultural resource management they must meet a level of significance and retain historic integrity for *National Register of Historic Places* listing. To be listed on the National Register of Historic Places, a property must be at least 50 years old and meet one or more of four broad criteria:

**Criterion A:** Sites that are associated with events that have made a significant contribution to the broad patterns of our history.

**Criterion B:** Sites that are associated with the lives of persons significant in our past.

**Criterion C:** Sites that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

**Criterion D:** Sites that have yielded or may be likely to yield information important in prehistory or history.

Once a site has been shown to be significant under one or more of the four above listed criteria, it must then be shown to be able to convey that significance. This is what the National Register means by integrity. There are seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association.

The Egan School House (School District 120) is an example of a late nineteenth century rural one-room school house. The State Historic Preservation Office does not have a school context for assisting in evaluation of school properties. Significance is based on local importance and thorough research is important in assessment. Background research revealed that the Egan School House lacks significance.

The Cook Farmstead is an example of a typical early twentieth century farm. The Minnesota Historic Farmstead Context is a multivolume historic document that offers an overview of farming in Minnesota and assistance in the assessment of and evaluation of historic farmsteads. It defines farmstead significance of local, statewide, and national importance. Background research revealed that the Cook Farmstead lacks significance.

Neither the Egan School House or the Cook Farmstead possess thorough integrity of location, design, setting, materials, workmanship, and association without substantial alterations and represents new construction, not an addition or expansion. The following discusses the Egan School House and the Cook Farmstead and application of the *National Register of Historic Places* seven aspects of integrity.



*Location* – defined as “the place where the historic property was constructed or the place where the historic event occurred” (NRHP Bulletin “How to Apply the National Register Criteria for Evaluation” 1998:44). The Egan School House retains integrity of location. It has not been moved from its original location where it was constructed. The Cook Farmstead has compromised integrity of location. Some of the buildings appear to have moved from their original location and the farmyard layout has been changed from its original functional design (see below).

*Design* – defined as “the combination of elements that create the form, plan, space, structure, and style of a property” (NRHP Bulletin 1998:44). The Egan School House does not have integrity of design. The introduction of a garage has compromised the school’s integrity. The Cook Farmstead has compromised integrity of design. Within a farmyard, when buildings are moved, or in the case of the introduction of two modern garages, integrity is compromised.

*Setting* – defined as “the physical environment of a historic property” (NRHP Bulletin 1998:44). Both the Egan School House and the Cook Farmstead retain integrity of Setting. Physical features that constitute the setting including topographic features, vegetation, man-made features and relationships between other features are all present and virtually unchanged from when the buildings were constructed.

*Materials* – defined as “the physical elements that were combined or deposited during a particular time and in a particular pattern or configuration to form a historic property” (NRHP Bulletin 1998:44). Neither the Egan School House or the Cook Farmstead retain integrity of materials. Original wood siding has been replaced by stucco on the School House. New siding on the Cook Farmstead and remodeling of the secondary barn have drastically compromised the materials of the Farmstead.

*Workmanship* – defined as “the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory” (NRHP Bulletin 1998:44). The Neither property retains integrity of Workmanship. As mentioned above under materials, rehabilitation of the School House and Farmhouse has occurred, signs of original workmanship are no longer apparent.

*Feeling* – defined as “a property’s expression of the aesthetic or historic sense of a particular period of time” (NRHP Bulletin 1998:44). Neither property retains integrity of feeling. New housing and other modern visual intrusions can be seen from the sites.

*Association* – defined as “the direct link between an important historic event or person and a historic property” (NRHP Bulletin 1998:44). Both properties lack integrity of association. Neither the Egan School House or the Cook Farmstead have a direct link between an important historic event or person and a historic property.

- (1) A building or structure need not retain its original function if historic physical integrity is retained.

Neither the Egan School House or the Cook Farmstead retain their original function.

## **8.0 CONCLUSION**

The City of Plymouth is proposing a realignment of a portion of Peony Lane. For the evaluation of the two historic buildings, the Area of Potential Effect (APE) contains the two parcels located within the proposed alignment corridor. The APE is located in Hennepin County in Township 118N, Range 22W, Section 7. Blondo Consulting, LLC (Blondo Consulting) was retained to complete an Evaluation of the Egan School House and Cook Farmstead for the Proposed City of Plymouth Peony Lane Realignment Project, Plymouth, Hennepin County, Minnesota. The purpose of the investigation is to evaluate two previously recorded historic buildings to determine the eligibility of the historic structures. The investigation involved background research and field visit to photograph and assess the historic significance and integrity of the existing properties.

An assessment of both the Egan School House and the Cook Farmstead revealed a lack of significance and lack of integrity for both properties. Therefore, Blondo Consulting recommends both the Egan School House and Cook Farmstead as **not eligible** for the *National Register of Historic Places*. No further work is recommended for these two parcels.

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## FARMSTEAD INVENTORY FORM

|                         |                    |                                           |                                                                               |
|-------------------------|--------------------|-------------------------------------------|-------------------------------------------------------------------------------|
| <b>Property Name</b>    | BC001              | <b>Photo Number(s)</b>                    | 6378-6437                                                                     |
| <b>Current Owner</b>    | James C. Grimes    | <b>Survey Name</b>                        | Peony Lane Realignment                                                        |
| <b>Address</b>          | 5705 Lawndale      | <b>Form Prepared By</b>                   | Steven J. Blondo, MA                                                          |
| <b>County</b>           | Hennepin           | <b>Date Surveyed</b>                      | May 1, 2012                                                                   |
| <b>City/Township</b>    | Plymouth           | <b>Description</b>                        | Old farmhouse; 2 det. garages; silo; gambrel barn; secondary barn; 2 mod shed |
| <b>Inventory Number</b> | BC078              | <b>Historic Map Reference(s)</b>          | 1914, 1916 -- George Cook                                                     |
| <b>UTM</b>              |                    | <b>Recommendation of NRHP Eligibility</b> | Not Eligible                                                                  |
| <b>T/R/S, 1/4 Sec</b>   | T118N, R22W, Sec 7 |                                           |                                                                               |
| <b>USGS Quad</b>        |                    | <b>Notes</b>                              |                                                                               |

| Elements Present                    |                 |                                     |                 |
|-------------------------------------|-----------------|-------------------------------------|-----------------|
| <b>Domestic Elements</b>            | <b>Presence</b> | <b>Animal Husbandry Elements</b>    | <b>Presence</b> |
| Farmhouse                           | x               | Animal Underpass                    |                 |
| Hired Worker's Housing              |                 | Cattle Guard                        |                 |
| Gardens (vegetable)                 |                 | Beef Barn                           |                 |
| Lawn and Ornamental Plantings       | x               | Brooder House                       |                 |
| Sauna                               |                 | Bull Barn                           |                 |
| Summer Kitchen                      |                 | Dairy Barn                          |                 |
| Other                               |                 | Fences                              | x               |
|                                     |                 | Fields and Pastures                 | x               |
| <b>Service and Utility Elements</b> | <b>Presence</b> | General Purpose or Combination Barn | x               |
| Acetylene or Carbide Gas Structure  |                 | Hog Barn or Hog Cot                 | ?               |
| Airplane Hanger                     |                 | Horse Barn                          |                 |

| Elements Present                |   |                                        |                 |
|---------------------------------|---|----------------------------------------|-----------------|
| Boundary Markers                |   | Housebarn                              |                 |
| Cesspool or Septic Tank         |   | Milk House                             |                 |
| Cistern                         |   | Milking Barn                           | ?               |
| Combination Building            | x | Manure Pit or Bunker                   |                 |
| Farm Shop                       |   | Sheep Barn                             |                 |
| Farmyard                        | x | Smokehouse                             |                 |
| Garage                          | x | Stock Tank                             |                 |
| Icehouse                        |   | Stockyard                              |                 |
| Implement or Machine Shed       |   | Other                                  |                 |
| Power House                     |   |                                        |                 |
| Privy                           |   | <b>Crop Husbandry Elements</b>         | <b>Presence</b> |
| Propane Gas Structure           |   | Corncrib                               |                 |
| Pumps and Pump House            |   | Drainage Structure                     |                 |
| Roads, Lanes, Tracks, Sidewalks | x | Erosion Control Structure              |                 |
| Roadside Market                 |   | Field Rock Pile                        |                 |
| Springhouse and Springbox       |   | Fields and Pastures                    |                 |
| Utility Poles and Equipment     | x | Granaries, Elevators, Bins, and Dryers |                 |
| Water Power Structure           |   | Greenhouse, Hotbed, Coldframe          |                 |
| Water Tank and Tank House       |   | Hay Barn or Shed                       |                 |
| Well                            |   | Irrigation Structures                  |                 |
| Wetlands                        |   | Orchards                               |                 |
| Windbreak                       | x | Potato Warehouse                       |                 |
| Windmill                        |   | Root Cellar                            |                 |
| Woodlot                         |   | Scale House                            |                 |
| Woodshed                        |   | Shelterbelt                            |                 |



| Elements Present |  |                |   |
|------------------|--|----------------|---|
| Other            |  | Silo           | x |
|                  |  | Sugarhouse     |   |
|                  |  | Threshing Barn |   |
|                  |  | Tobacco Barn   |   |
|                  |  | Other          |   |

## Architectural History Inventory Form

### Identification Information

**Site #:** BC002

**PIN #:** 06-118-22-11-0003

**Review and Compliance #:**

### Location

**Address:**

17510 Co Rd No 47

**City:** Plymouth

**County:** Hennepin

**UTM:**

**USGS Quad:**

**TWP:** 118N

**Range:** 22W

**Section:** 7

**Legal:** NE $\frac{1}{4}$  NE $\frac{1}{4}$

### Description

**Style:**

**Stories:** single

**Foundation:** Concrete Block

**Frame:** wood

**Window Shape:**

**Roof Form** (gable, hipped, etc.): gable

**Window Type** (single-hung, etc):

**Roof Material:** Asphalt

**Window Glazing** (4/1, 6/1, 2/1):

**Primary Exterior** (aluminum siding, wood clapboard, etc): stucco

**Additional Information:**

**Secondary Exterior:**

**Condition:** fair to poor

**Integrity:** poor

**Site Features** (buildings present, landscape, etc.): detached garage

## Architectural History Inventory Form

### *Historic Information*

**Historic Use:** school

**Historical Name:** Egan School - School District 120

**Original Owner's Name(s):** School District 120

**Year Built:** circa 1890

**Architect/Contractor:**

**Date Source:** Plat maps

**Historic Contexts** (agricultural, industrial, commercial, religious, etc.):

### *Site Information*

**Present Use:** residence

**Current Owners:** Jeremy Theisen

**NR-Eligible (Y/N):** N

**Consultant Recommendation:** Not Eligible - lacks significance and integrity

**Current Threats:** neglect, development

**Prepared by:** Steven Blondo

**Date:** June 5, 2012



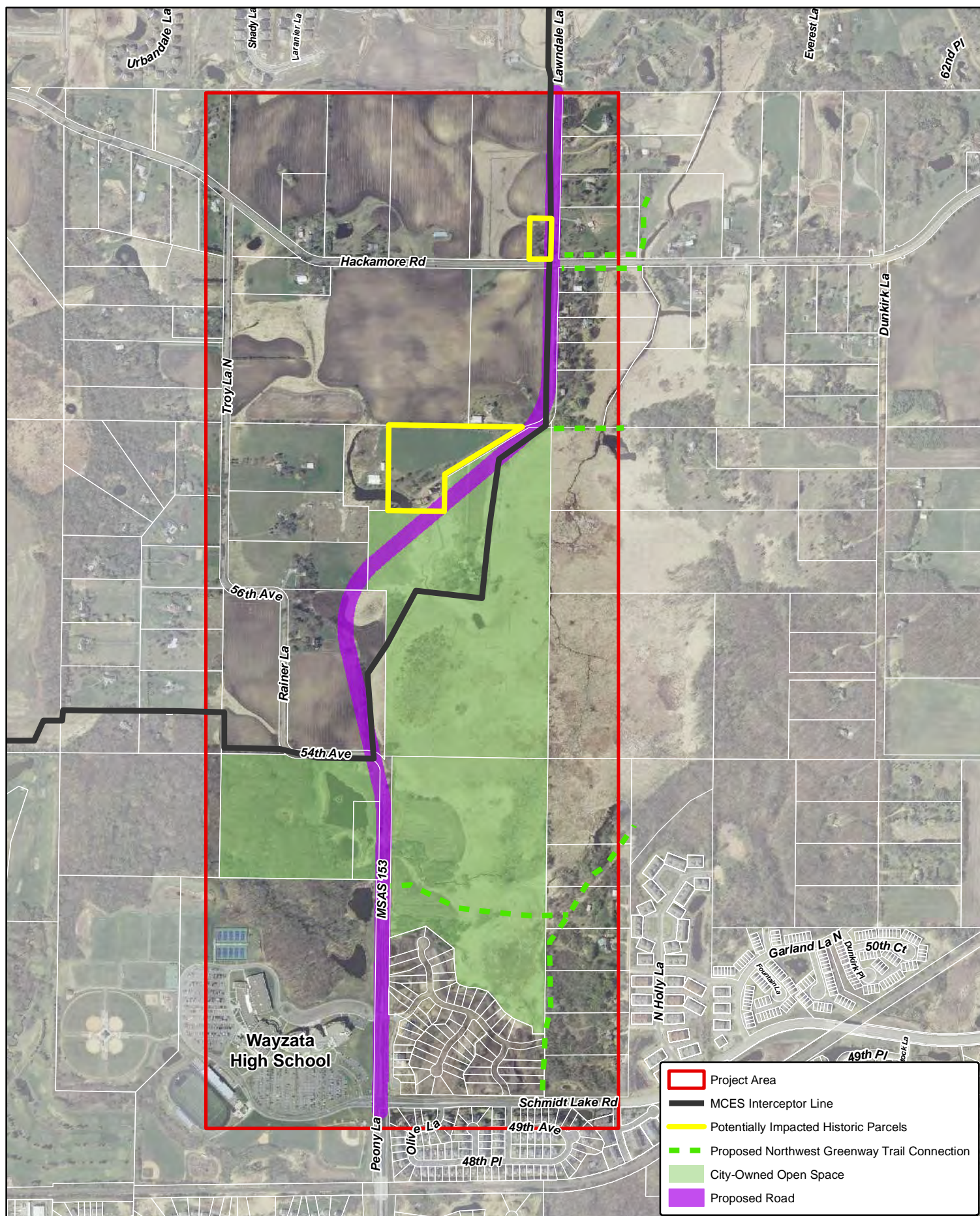






Photo 1: Cook Farmstead Garage, Silo, and Barn



Photo 2: Cook Farmstead Barn West Elevation



Photo 3: Cook Farmstead Facing West showing Pond



Photo 4: Cook Farmstead Secondary Barn showing Lean-to and Sliding Glass Doors





Photo 5: Cook Farmstead Modern Shed



Photo 6: Cook Farmstead Modern Shed



Photo 7: Cook Farmhouse facing Southeast



Photo 8: Cook Farmstead Barn and Silo





Photo 9: Cook Farmstead Garage and Secondary Barn



Photo 10: Cook Farmhouse Facing West





Photo 11: Egan School Facing West



Photo 12: Egan School East Elevation





Photo 13: Egan School Garage



Photo 14: Egan School North Elevation





Photo 15: Egan School East Elevation



Photo 16: Egan School South Elevation