ENVIRONMENTAL REVIEW COMMENT RESOLUTION LOG

Fox Meadows Development (August 26, 2022)

Braun Intertec Project No: B2203087

Comment No.	Date Received	EAW Section/Ref.	Exhibit/Table No.	Commenter	Comment Received	Comment Type	Project Proposer Response	EAW Revision	RGU Acceptance
1	8/3/2022	20.a, b (Transportation)	Not Applicable	D. Craig Rosfjord (121 Peggy Lane, Eagle Lake, MN)	If/when the project is completed with 228 units, this will increase the number of commuters in and out of the proposed development area. Will it be feasible for all the increased traffic to be routed only on north and south Agency Street? As per the projects traffic analysis by the Institute of Transportation Engineers (ITE) Trip Generation Report, the ITE identified commuting rates of 10 trips per day and 1 per peak hour for single family units, and 7 trips per day and 0.7 trips per peak hour for multi-family units. The project would result in 1,896 trips per day and 190 trips per peak hour. This is a considerable increase of traffic on Agency Street. Is there any thought of a major north south road on the east side of the project that would connect Township Highway 282/211th. Street to Parkway Avenue? This would give commuters a second entrance point to the development area.	Substantive	The 228 units is for the entire 80 acre property, with the initially developed 40 acres utilizing Agency Street and Maple Street, and a future road on the east side of the 80 acres that would route south to 211th Street, though not likely to Parkway Avenue in the near to middle term.	Not Applicable	Response Acceptable
2	8/8/2022	15 (Historic Properties)	Not Applicable	Minnesota State Historic Preservation Office (Sarah Beimers)	SHPO office concludes that there are no properties listed in the National or State Registers of Historic Places, and no known or suspected archaeological properties in the area that will be affected by this project.	Acknowledgement	Comment noted.	Not Applicable	Not Applicable
3	8/9/2022	20.a, b (Transportation)	Not Applicable	Mark Huebl (500 S. Agency St., Eagle Lake, MN)	I was wondering about the extra traffic on agency Street with the 228 new spaces.	Substantive	Agency Street is designated functionally as a "Major Collector." MnDOT determines Major Collectors to carry a range of Average Daily Traffic (ADT) of 1,000 to 8,000 ADT. In 2021, as part of the Agency Street reconstruction design, Blue Earth County determined the (ADT) of Agency Street at 2650. Although future traffic studies and improvements could be required if intersections or roadway segments experience decreases in Levels of Service, it does not appear that this project will require immediate improvements to Agency Street.	Not Applicable	Response Acceptable
4	8/17/2022	15 (Historic Properties)	Not Applicable	Minnesota Department of Administration - State Archaeologist (Jennifer Tworzyanski)	I am in the process of reviewing the Fox Meadows EAW and would like to request a copy of the phase I cultural resource survey report referenced in section 15 of the EAW document. Once I am able to review the report I will be able to appropriately comment on the EAW. FYI: I copied Dylan Goetsch and Melissa Cerda from the Minnesota Indian Affairs Council's Cultural Resource Department in case they would like a copy of the report as well.	Acknowledgement	Phase I Cultural Resource Survey For Fox Meadows Residential Development report (In Situ Archaeological Consulting, July 6, 2022) and SHPO letter (August 8, 2022) emailed to commentor on August 18, 2022.	Not Applicable	Not Applicable
5	8/24/2022	9 (Permits and Approvals)	Table 9-1	Minnesota Pollution Control Agency (Karen Kromar)	This Section includes the US Army Corps of Engineers (USACE) Wetland Jurisdictional Determination but does not specifically include the USACE Section 404 permit. The MPCA Water Quality Certification does not appear in this section a required approval. However, the EAW mentions other aquatic habitats may be subject to regulations under section 404 or other state statues. Clarification is needed to determine if the section 404 permit is required and if so, then the MPCA 401 Certification is also required. For further information about the 401 Water Quality Certification process. Please contact Bill Wilde at 651-757-2825 or William.wilde@state.mn.us.	Substantive	The USACE Section 404 permit (necessary if proposed wetland impacts are jurisdictional) and MPCA 401 Water Quality Certification (necessary if an Individual Section 404 permit is needed) was added to Table 9-1.	Table 9-1 Revised	Revision Acceptable
6	8/24/2022	9 (Permits and Approvals)	Not Applicable	Minnesota Pollution Control Agency (Karen Kromar)	It may be necessary to obtain a Sanitary Sewer Extension Permit from the MPCA prior to Construction. The application form and additional information on this process can be found at http://www.pca.state.mn.us/water/permits/index.html#sanitarysewer. Questions on the sanitary sewer extension permit process should be directed to Dave Sahil at 651-757-26-87 or David.sahil@state.mn.us	Substantive	MPCA Sanitary Sewer Extension Permit was added to Table 9-1.	Table 9-1 Revised	Revision Acceptable
7	8/24/2022	12.b.i.1 (Water Resources - wastewater)	Not Applicable	Minnesota Pollution Control Agency (Karen Kromar)	While there is discussion about the capacity of the Mankato Water Resources Reclamation Facility (WRRF), which Eagle Lake is connected to, there is no discussion about the available capacity of the existing City of Eagle Lake collection system capacity and whether any improvements may be necessary for the proposed project.	Substantive	The City confirmed there are no sewer collection capacity concerns in terms of available infrastructure and pumping capacity. Future development (outside of Fox Meadows on the south and west sides of the City) may trigger the need for an interceptor sewer and/or improvements to the main lift station/forcemain, depnding on future proposed land uses.	Not Applicable	Response Acceptable
8	8/24/2022	12.b.i (Water Resources - wastewater)	Not Applicable	Minnesota Pollution Control Agency (Karen Kromar)	A map showing the project location, general sewer route and Mankato WRRF would be a nice addition to the EAW.	Recommendation	Comment noted.	Not Applicable	Response Acceptable
9	8/24/2022	12.b.iii (Water Resources - water appropriation)	Not Applicable	Minnesota Pollution Control Agency (Karen Kromar)	There is no discussion of existing drinking water supply issues or the capacity of the existing system or other utility needs for the development.	Substantive	The City confirmed there are no water supply capacity concerns in terms of available infrastructure and well capacity. Future development outside of a fully built Fox Meadows development may trigger well capacity concerns, depending on future land uses and potable water demands.	Not Applicable	Response Acceptable
10	8/24/2022	12.b.ii (Water Resources - stormwater)	Not Applicable	Minnesota Pollution Control Agency (Karen Kromar)	If the site has the ability to discharge stormwater to the unnamed creek along the east side of the proposed development that has construction related impairments, additional erosion and sediment control best management practices (BMPs) will be required during the construction that are not mentioned in the EAW. Additional BMPs include immediately providing temporary soil stabilization measures on any portion of the site with exposed soils that will be unworked for 7 or more days and providing a temporary sediment basin where 5 or more acres drain to a common location. Also, if the site has the ability to discharge to the creek and all phases of the site will result in 50 or more acres of disturbance, the Stormwater Pollution Prevention Plan (SWPPP) will require submittal to the MPCA for review and approval prior to obtaining National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater Permit (CSW Permit) coverage.	Acknowledgement	As noted in Section 12.b.ii and Table 9-1, the project will require NPDES Construction Stormwater Permit coverage and a Stormwater Pollution Prevention Plan (SWPPP), which will define appropriate erosion and sediment control best management practices during and after construction activity.	Not Applicable	Response Acceptable

Comment No.	Date Received	EAW Section/Ref.	Exhibit/Table No.	Commenter	Comment Received	Comment Type	Project Proposer Response	EAW Revision	RGU Acceptance
11	8/24/2022	12.b.ii (Water Resources - stormwater)	Not Applicable	Minnesota Pollution Control Agency (Karen Kromar)	The large wetland at the site will require use of redundant (double) down gradient sediment controls installed if construction must encroach the existing 50 feet of existing natural buffer to the wetland.	Acknowledgement	There is no existing buffer around the large wetland. As noted in Section 12.b.ii and Table 9-1, the project will require NPDES Construction Stormwater Permit coverage and a Stormwater Pollution Prevention Plan (SWPPP), which will define appropriate erosion and sediment control best management practices during and after construction activity.	Not Applicable	Response Acceptable
12	8/24/2022	12.b.ii (Water Resources - stormwater)	Not Applicable	Minnesota Pollution Control Agency (Karen Kromar)	The Project owner will be required to ensure that CSW Permit coverage is maintained for all phases of the development. If portions of the site are sold to new owners for construction, such as through selling of individual lots, the owner will need to ensure that the new owners obtain their own coverage under the permit using the MPCA Subdivision Registration process and that a SWPPP describing remaining BMPs for the site is provided to the new owners.	Acknowledgement	Comment noted.	Not Applicable	Response Acceptable
13	8/24/2022	7 (Climate Adaptation and Resilience)	Not Applicable	Minnesota Pollution Control Agency (Karen Kromar)	The EAW identifies increasing rainfall trends and temperature in the location but does not address the climate trends in the stormwater section of the EAW and how they will be addressed. The Project proposer is strongly encouraged to utilize Low Impact Development strategies and green infrastructure for more sustainable development. The CSW Permit requires volume reduction practices to reduce stormwater discharges which can be met with these practices. Additional trees should be planted within the development to provide shade to reduce heat island affects and help absorb increased stormwater runoff. Use of native plants in stormwater infiltration areas and open spaces provide pollinator habitat in addition to reducing runoff. Questions regarding Construction Stormwater Permit requirements should be directed to Roberta Getman at 507-206-2629 or Roberta.Getman@state.mn.us.	Acknowledgement	Climate considertions for low impact development and water resources is addressed in Table 7-1, "Project Design" and "Land Use" categories.	Not Applicable	Response Acceptable
14	8/24/2022	22 (Other Potential Environmental Effects)	Not Applicable	Minnesota Pollution Control Agency (Karen Kromar)	Please note that chloride (salt) is a growing issue for lakes, streams, and groundwater around the state. Chloride can come from both de-icing salt and water softener salt. For the proposed Project, the MPCA recommends smart salting practices for de-icing streets and driveways during the winter weather months and water softening best practices be used year-round. Additional resources are available at https://www.pca.state.mn.us/water/statewide-chloride-resources.	Acknowledgement	Comment noted.	Not Applicable	Response Acceptable
15	8/24/2022	10.a.iii, iv (Land Use)	Not Applicable	Blue Earth County Property and Environmental Resources Department (Michael Stalberger)	Page 8 The EAW states: "According to Federal Emergency Management Agency (FEMA) flood maps, a flood hazard study has not been completed for the project area." And "No floodplain is known to exist within or adjacent to the project area." It should be noted that there is currently FEMA floodplain mapped in the northeast portion of the property that is proposed to be developed. This floodplain is on the unnamed stream that leads from the outlet of Eagle Lake. FEMA's preliminary floodplain maps show that the mapped floodplain is just northeast of the property that is proposed to be developed. See Attachment A.	Substantive	Sections 10.a.iii and iv have been revised to clarify the floodplain and Zone A flood hazard area in relation to the proiject area.	Sections 10.a.iii and iv Revised	Response Acceptable
16	8/24/2022	11.b (Soils and Topography)	Not Applicable	Blue Earth County Property and Environmental Resources Department (Michael Stalberger)	Page 10. "Soils and topography - Describe the soils on the site, giving NRCS (SCS) classifications and descriptions, including limitations of soils." The EAW describes a Geotechnical Evaluation of the project area. It should be noted that over 87-percent of the soils on the site have a rating of Very Limited for Dwellings with Basements according to the USDA NRCS. See Attachment B.	Substantive	The soil and topography on the site is common for the area. Common construction practices including, but not limited to: dewatering, overexcavation and replacement of soft and wet soils with clean, crushed rock, and minimizing construction traffic on wet subgrades should be expected to facilitate construction.	Not Applicable	Response Acceptable
17	8/24/2022	12.a.ii (water Resources - groundwater)	Not Applicable	Blue Earth County Property and Environmental Resources Department (Michael Stalberger)	Page 12 – The EAW states: "The depth to ground water ranges from 920-940 feet above mean sea level or approximately 70-100 feet below ground surface (Berg 2016) Based on this mapped depth, groundwater is not anticipated to be encountered during excavation for basement levels of the new residential buildings or for the installation of utilities." It should be noted that it is extremely likely that seasonally saturated soils with very shallow water tables will be encountered during the excavations for basements and the installation of utilities for this project. According to USDA's NRCS web soil survey, the soils within the entire project area have a depth to seasonal water table of less than 3 feet. See attachment C. It should additionally be noted that the EAW previously states on page 10: "A shallow water table is present in the project area within wetlands and ranges from the ground surface to depths of approximately 10 feet. This shallow water table is representative of the regional water table aquifer within the project area (Berg 2016)."	Substantive	As indicated by the soil borings, seasonal perched groundwater will likely be present and thus, some temporary construction dewatering may be required in excavations for foundations and utilities. This condition is common for the area. An appropriate subsurface drainage system should be provided to allow for removal of any perched groundwater for structures with below-grade levels.	Not Applicable	Response Acceptable
18	8/24/2022	12.a.ii (water Resources - groundwater)	Not Applicable	Blue Earth County Property and Environmental Resources Department (Michael Stalberger)	Page 12 – The EAW states: "The Minnesota Department of Health (MDH) Minnesota Well Index was reviewed and there are no wells mapped within the project area boundaries or within a quarter mile of the project area as shown in Figure 11." While the County does not know of other in-use wells in the project area, there was a large farmstead in the northwest portion of the property just to the east of S Agency St (513 S Agency Street). A well on this property was sealed in 1991, however there could be another well or wells that previously served the very old farmstead on this property. The County recommends a well search with a magnetometer to help identify unsealed wells in this part of the property before it is developed. Attachment D shows a 1983 aerial photo of the building site.	Opinion/Speculative	Comment noted. As stated in Section 12.b.iii, if wells are discovered during construction, appropriate MDH well sealing measures would be followed by a licensed well contractor.	Not Applicable	Response Acceptable
19	8/24/2022	12.b.ii (Water Resources - stormwater)	Not Applicable	Blue Earth County Property and Environmental Resources Department (Michael Stalberger)	Page 13- The EAW states: "Currently, stormwater runoff flows overland across the agricultural fields on site and follows topography draining into the large wetland in the northeast portion of the project area." It should be noted that over 36 acres of the development drains to other areas other than the wetland in the northeast portion of the property. 9.9 acres of the property currently drains to the north and 26.6 acres drains to the south and west towards CSAH 27 (S Agency St). See Attachment E.	Substantive	Stormwater runoff acreages and direction of flow was added to Section 12.b.ii.	Section 12.b.ii Revised	Revision Acceptable

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20	8/24/2022	12.b.ii (Water Resources - stormwater)	Not Applicable	Blue Earth County Property and Environmental Resources Department (Michael Stalberger)	Page 13. The EAW states: "Infiltration and filtration measures are also under consideration for the project's stormwater management system design and will vary based on the geotechnical evaluation results." It should be noted that 3 feet of separation from seasonally saturated soils is required from the bottom of an infiltration practice. As is shown on the soil survey and from what was submitted with the wetland delineation, it is likely not possible to have three feet of separation from seasonally saturated soils anywhere on the property. The Minnesota Stormwater Manual states: There is a large portion of the state (more than 50 percent) where the seasonal high water table depth is located less than 3 feet from the surface. In these areas it may be impossible to get the 3 feet of separation from the bottom of an infiltration practice to the seasonal high water table depth REQUIRED under the NPDES Construction General Permit (CGP). Non-infiltration BMPs, such as lined filtration or settling practices, should be considered in areas with shallow groundwater."	Acknowledgement	Comment noted. The permanent stormwater management design will take into consideration the Geotechnical results, in comformance with NPDES Construction Stormwater permit requirements.	Not Applicable	Response Acceptable
21	8/24/2022	12.b.iv.a (Water Resources - surface waters - wetlands)	Not Applicable	Blue Earth County Property and Environmental Resources Department (Michael Stalberger)	Page 14 Wetlands - The EAW states: "Five small, farmed wetlands would be filled for construction of the proposed project area. The large wetland in the northeast corner of the site will be avoided (Figure 5)." It should be noted that a Blue Earth County decision on the Wetland Boundary & Type Determinations has not been made as is indicated on page 7. The wetland replacement plan application has also not been submitted to Blue Earth County. When this application is submitted, it will be reviewed for compliance with Minnesota Rules Chapter 8420, specifically the sequencing analysis. As the EAW mentions, the large wetland is being avoided. The application for the replacement plan will be reviewed to determine whether any of the smaller wetlands can also be avoided or disturbance minimized in accordance with Minnesota Rules Chapter 8420.	Acknowledgement	Comment noted.	Not Applicable	Response Acceptable
22	8/24/2022	13.a (Contamination/Hazardous Materials/Wastes)	Not Applicable	Blue Earth County Property and Environmental Resources Department (Michael Stalberger)	Page 15 - 13. Contamination/Hazardous Materials/Wastes - The EAW states: "Based on the results of reviewing the MPCA WIMN database and historical use as cropland, no contaminated environmental media (soil, groundwater etc.) or environmental hazards are expected to be present within the project area." The northwest portion of the property included portions of a farmstead, barns and agricultural buildings as recently as the mid-1990's. The buildings have been removed but it is possible that there is a buried tank or tanks on the northwest portion of the project area. The County's well sealing records for the farmstead from 1991 describe a buried fuel tank and a gas pump. The well was sealed at 513 S Agency Street, but the farmstead extended well into this project area. See Attachment E.	Substantive	Investigation of the farmstead will be considered prior to construction. Section 13.a was revised to include this information.	Section 13.a Revised	Revision Acceptable
23	8/24/2022	Proposed Conditions Map	Figure 6	Blue Earth County Property and Environmental Resources Department (Michael Stalberger)	While the map in the EAW is a concept, it should be noted that there likely will be more roads/impervious surfaces in the development as the currently proposed concept plan does not conform with the Eagle Lakes Subdivision rules which state: " The maximum length of blocks shall be twelve hundred (1,200) feet. Blocks over six hundred (600) feet long may require pedestrian ways at least ten (10) feet wide at their approxiamte centers." The eastern block is currently proposed at over 1,350 feet on the southern section and over 1,426 feet on the north.	Acknowledgement	Comment noted. Future phases of the proposed development will conform to current City planning and zoning requirements at the time of submittal.	Not Applicable	Response Acceptable
24	8/25/2022	12.b.ii (Water Resources - stormwater)	Not Applicable	Minnesota Department of Natural Resources (Joanne Boettcher)	The EAW notes that three stormwater ponds will be installed, and that "the proposed stormwater basin design would reduce stormwater flow rates and pollutant loads leaving the site". However, no modeling or design information is provided. Please provide more information on: • the proposed stormwater ponds' capacity and maintenance • details on the stormwater reuse system • how the pond will be designed to treat water quality • the runoff volumes for a range of storm events and the change in runoff volume and peak flow due to the development • where the stormwater ponds drain to and impacts to any receiving waters • the presence of any agricultural drainage tile, what will be done with it, and how it interacts with the stormwater system. how the pond and its outlet will be designed to assure it does not support and/or propagate invasive fish (e.g., goldfish, carp, etc.). We recommend that development projects hydrologically mitigate changes in the runoff volume and peak flow rates by adding sufficient storage, water use (evapotranspiration), and infiltration capacity within the development. We also recommend that water quality practices are integrated into the project. These factors would prevent additional and more polluted water from being contributed to the Le Sueur River watershed. Most of these concerns could be addressed by incorporating dense, native landscaping and adding dispersed rain gardens as discussed below. Permeable pavement and other design features could also be implemented.	Substantive	Permanent stormwater mamagement design is in progress, and the fesibility of the design is based on geotechnical study and final plat approval (as stated in Seciton 12.b.ii). Agricultural drain tile (if encountered during construction) will be disabled and/or removed during construction. The final stormwater management plan will meet NPDES Construction Stormwater Permit requirements and City of Eagle Lake Stormwater Management Plan standards.	Not Applicable	Response Acceptable

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25	8/25/2022	12.b.ii (Water Resources - stormwater)	Not Applicable	Minnesota Department of Natural Resources (Joanne Boettcher)	Goldfish (Carassius auratus) and koi are regulated invasive species in Minnesota, which means it is legal to possess, sell, buy, and transport, but it is illegal to release them into the environment. Goldfish in urban stormwater ponds have become a frequent issue for cities. Presumably, the goldfish are being placed by residents. Goldfish are destructive to natural environments, and become a management problem. We recommend that either the pond design and/or education be developed to prevent this problem. Ponds can be designed to accommodate predator fish to manage any potential goldfish releases as well as provide angling opportunities for residents, particularly children. Please contact DNR Fisheries staff Craig Soupir for more information or assistance on pond design, management, or education on this topic.	Recommendation	Comment noted. Permanent stormwater management design will consider features to prevent or reduce goldfish presence.	Not Applicable	Response Acceptable
26	8/25/2022	14.b, c (Wildlife)	Not Applicable	Minnesota Department of Natural Resources (Joanne Boettcher)	The EAW does not identify that the project area is within a low potential zone of the Rusty Patch Bumblebee. Please identify what measures will be taken to avoid disturbance of the species. The project should consult USFWS IPAC. As noted in the EAW, the Monarch butterfly is a candidate species for federal listing, as such, no special requirements may be necessary. However, we do want to note that if any wild grass type areas are disturbed during the growing season, this disturbance would likely result in local impacts to monarch larvae. Monarch larvae (caterpillar) eggs are laid on - and the caterpillars can only consume - milkweed. Common milkweed and other milkweed species are found throughout this region, including in small patches of grasses such as road ditches, filed borders, etc. We recommend that wildlife friendly erosion control and invasive species best practices (see attachment) are used during construction. Products containing plastics and especially plastic	Substantive	While the project area is located within a low-potential zone for the Rusty Patched Bumble Bee, as discussed in Section 14.b., suitable habitat for pollinators (including the bee) is not present. Landcover at the site is dominantly cultivated cropland, which does not typically include floral resources for pollinators and provides poor foraging habitat as a result. Additionally, no forested/wooded land, areas of dense shrubs or leaf litter are present within the project area, and therefore suitable nesting or overwintering habitat for the Rusty Patched Bumble Bee is also not present. As result, it is extremely unlikely the bee would be present within the project area. The IPaC report was provided in Appendix A.	Not Applicable	Not Applicable
27	8/25/2022	7.a (Climate Adaptation and Resilience)	Not Applicable	Minnesota Department of Natural Resources (Joanne Boettcher)	The climate change analysis uses a 30-year lifespan. Please explain why the project is only anticipated to last 30 years or update the analysis. A 50 to 100-year lifespan would provide a more realistic or conservative (cautious) analysis. Section 7b of the EAW form asks that the project "describe how the project's proposed activities and how the project's design will interact with those climate trends. Describe proposed adaptations to address the project effects identified." Then Table 7-1 refers readers to item 12 (water resources) and 14 (wildlife and rare features). However, we did not find any specific discussion addressing this topic in these sections. Please provide specific analysis of this topic. Of particular concern are the potential impact to water resources (refer to comments in the Water Resources section above and apply these considerations to 50-100 year life span).	Opinion/Speculative	The Minnesota Climate Explorer is accepted as a reasonable prediction model. 30 years was used as the minimum residential structure life and most reasonable time frame projection based on the current data available. Table 7-1 was revised to include Water Resource and Wildlife considerations and adaptations.	Table 7-1 Revised	Revision Acceptable
28	8/25/2022	Sustainable Building Principles	Not Applicable	Minnesota Department of Natural Resources (Joanne Boettcher)	As currently proposed, the project may not contain any green infrastructure (Table 8-2), with the feasibility of infiltration basins being evaluated. There is also no commitment to use more sustainable building practices. We encourage development planning that better address greenhouse gases and climate change. In order for any proposed development to avoid the detriments of urban sprawl and negative impacts to ecology and hydrology, we recommend the development is designed in accordance with Low Impact Development and Green Infrastructure standards. We recommend the green building of homes and business, such as through a LEED certified structures. The project should consider adding rooftop solar, which is becoming one of the most affordable energy sources and does not rely on fossil fuels.	Recommendation	Comment noted. Sustainable building practices will be incropated into each design, if feasible and financially viable, at the time of individual plan approvals.	Not Applicable	Not Applicable
29	8/25/2022	Landscaping/Land Cover	Table 8-1, Table 8-3	Minnesota Department of Natural Resources (Joanne Boettcher)	The EAW identifies that 8 trees (Table 8-3) will be planted, and there will be 14 acres of grasses and brush (Table 8-1). The project should consider adding a substantial number of trees. Tall, native trees could be planted throughout the project area, in particular, adjacent parking areas and the South and West sides of structures to offer shade and reduce temperatures. Dense native tree and shrub plantings would offer birds food and nesting habitat. Please identify what the 14 acres of grasses and brush will be planted to and if any additional development of these 14 acres is planned for the project lifespan. We again recommend that the area is planted to native species. Turf grass does not offer ecological or water quality benefits and therefore should only be used in areas designed for turf-type uses (e.g. play and picnic areas). Dense, native plant landscaping and small, planted water basins could offer substantial ecological and water quality and quantity benefits and help mitigate impacts	Recommendation	Additional trees will be incorporated into the landscaping plans of private individual lots and blocks, as stated in Table 8-3. As shown on Figure 6 and Table 8-1, the approxiamtely 14 acres will be grass/brushland species, which is not defined as manicured per EQB guidance for land cover. The restoration of this area is several years out, therefore exact seed mix/species is not known at this time.	Not Applicable	Not Applicable
30	8/25/2022	12.b.ii (Water Resources - stormwater)	Not Applicable	Minnesota Department of Natural Resources (Joanne Boettcher)	Instead of diverting all stormwater to three basins, diverting water first to small, shallow, dispersed planted basins or rain gardens would add more storage capacity, evapotranspiration, and water quality treatment within the development. The plants within the rain gardens would increase settling time and provide biological treatments, therefore reducing pollutants from reaching downstream waters. The rain gardens should be planted with native plants that bloom spring through fall, which would offer habitat to native pollinators, including the imperiled monarch butterfly. We encourage the project to develop a detailed conservation and landscaping plan that integrates dense, native plantings and enhanced stormwater treatment incorporating the principles discussed above.	Recommendation	Permanent stormwater mamagement design is in progress, and the fesibility of the design is based on geotechnical study and final plat approval (as stated in Seciton 12.b.ii). Agricultural drain tile (if encountered during construction) will be disabled and/or removed during construction. The final stormwater management plan will meet NPDES Construction Stormwater Permit requirements and City of Eagle Lake Stormwater Management Plan standards.	Not Applicable	Not Applicable

Fristed, Travis

From: Jennifer Bromeland <jbromeland@eaglelakemn.com>
Sent: Thursday, August 4, 2022 1:47 PM
To: Fristed, Travis; troymschrom@gmail.com
Subject: FW: Fox Meadows Development

Good Afternoon,

I'm not sure if this is an official comment for the EAW but to err on the side of caution, wanted to forward to be included.

Thank you.

Jennifer J. Bromeland
City Administrator
City of Eagle Lake
705 Parkway Avenue
PO Box 159
Eagle Lake, MN 56024
P: (507) 257-3218
C: (507) 399-1030

CITY OF
EAGLE LAKE
WHERE OPPORTUNITY SOARS

From: Craig Rosfjord <craigrosfjord@yahoo.com>
Sent: Wednesday, August 3, 2022 10:13 AM
To: Jennifer Bromeland <jbromeland@eaglelakemn.com>
Subject: Fox Meadows Development

Hello Jennifer,

Thank you for publishing the 228-unit Fox Meadows Development proposal. What a great project and addition to Eagle Lake!

COMMENT #1

If/when the project is completed with 228 units, this will increase the number of commuters in and out of the proposed development area. Will it be feasible for all the increased traffic to be routed only on north and south Agency Street? As per the projects traffic analysis by the Institute of Transportation Engineers (ITE) Trip Generation Report, the ITE identified commuting rates of 10 trips per day and 1

COMMENT #1

per peak hour for single family units, and 7 trips per day and 0.7 trips per peak hour for multi-family units. The project would result in 1,896 trips per day and 190 trips per peak hour. This is a considerable increase of traffic on Agency Street. Is there any thought of a major north south road on the east side of the project that would connect Township Highway 282/211th. Street to Parkway Avenue? This would give commuters a second entrance point to the development area.

Thank you for your time.

D. Craig Rosfjord
121 Peggy Lane
Eagle Lake, MN. 56024-9620
(507) 257-3244

DEPARTMENT OF ADMINISTRATION
STATE HISTORIC PRESERVATION OFFICE

August 8, 2022 COMMENT #2

Craig Picka
In Situ Archaeological Consulting
7630 Executive Drive
Eden Prairie, MN 55344

RE: Fox Meadows – Proposed Residential Development
T108 R25 S18, Eagle Lake, Blue Earth County
SHPO Number: 2022-1446

Dear Craig Picka:

Thank you for continuing consultation on the above-referenced project. We have reviewed the cultural resources survey report: *Phase I Cultural Resource Investigation for the Fox Meadows Residential Development Project, Blue Earth County, Minnesota, SHPO Number: 2022-1446* (July 6, 2022, In Situ Archaeological Consulting). Based on the results of the survey, we conclude that there are **no properties** listed in the National or State Registers of Historic Places, and no known or suspected archaeological properties in the area that will be affected by this project.

Please note that this comment letter does not address the requirements of Section 106 of the National Historic Preservation Act of 1966 and 36 CFR § 800. If this project is considered for federal financial assistance, or requires a federal permit or license, then review and consultation with our office will need to be initiated by the lead federal agency. Be advised that comments and recommendations provided by our office for this state-level review may differ from findings and determinations made by the federal agency as part of review and consultation under Section 106.

If you have any questions regarding our review of this project, please contact Kelly Gragg-Johnson, Environmental Review Program Specialist, at kelly.graggjohnson@state.mn.us.

Sincerely,

Sarah J. Beimers
Environmental Review Program Manager

COMMENT #3

Mark Huebl
500 S. Agency st
Eagle Lake
I was wondering about the extra traffic on Agency Street with the 228 new spaces.

COMMENT #4

Fristed, Travis

From: Fristed, Travis
Sent: Thursday, August 18, 2022 9:49 AM
To: Jennifer.Tworzyanski@state.mn.us
Cc: Dylan.Goetsch@state.mn.us; melissa.cerda@state.mn.us; Jennifer Bromeland; troymschrom@gmail.com
Subject: RE: Fox Meadows Development EAW Cultural Resource Report Request
Attachments: MN SHPO_20220808.pdf; Fox Meadows_SHPO Cover Letter_20220707.pdf; Braun_Fox Meadows_Cultural Report_07072022.pdf

Hello Jennifer,
As requested, attached please find the report and SHPO letter for this project.

Thanks,

Travis Fristed, PWS
Group Manager, Principal Scientist
Braun Intertec
11001 Hampshire Avenue S | Minneapolis, MN 55438
952.995.2027 direct | 952.500.1180 mobile

From: Jennifer Bromeland <jbromeland@eaglelakemn.com>
Sent: Wednesday, August 17, 2022 1:52 PM
To: Fristed, Travis <TFristed@braunintertec.com>; troymschrom@gmail.com
Subject: FW: Fox Meadows Development EAW Cultural Resource Report Request
Importance: High

Good Afternoon,

Please see below a request for phase I cultural resource survey report.

Thank you.

Jennifer J. Bromeland
City Administrator
City of Eagle Lake
705 Parkway Avenue
PO Box 159
Eagle Lake, MN 56024
P: (507) 257-3218
C: (507) 399-1030

From: Tworzyanski, Jennifer (ADM) <Jennifer.Tworzyanski@state.mn.us>
Sent: Wednesday, August 17, 2022 1:51 PM
To: Jennifer Bromeland <jbromeland@eaglelakemn.com>
Cc: Goetsch, Dylan (MIAC) <Dylan.Goetsch@state.mn.us>; Cerda, Melissa (MIAC) <melissa.cerda@state.mn.us>
Subject: Fox Meadows Development EAW Cultural Resource Report Request

Hello Jennifer,

I am in the process of reviewing the Fox Meadows EAW and would like to request a copy of the phase I cultural resource survey report referenced in section 15 of the EAW document. Once I am able to review the report I will be able to appropriately comment on the EAW. FYI: I copied Dylan Goetsch and Melissa Cerda from the Minnesota Indian Affairs Council's Cultural Resource Department incase they would like a copy of the report as well.

Thank you,
-Jennifer

Jennifer Tworzyanski *(she/her/hers)*
Assistant to the State Archaeologist
Office of the State Archaeologist
328 West Kellogg Blvd
St Paul, MN 55102
651.201.2265

DEPARTMENT OF ADMINISTRATION
STATE ARCHAEOLOGIST

MINNESOTA POLLUTION CONTROL AGENCY

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

August 24, 2022

Jennifer Bromeland
City Administrator
City of Eagle Lake
705 Parkway Avenue
PO Box 159
Eagle Lake, MN 56024

Re: Fox Meadows Development Environmental Assessment Worksheet

Dear Jennifer Bromeland:

Thank you for the opportunity to review and comment on the Environmental Assessment Worksheet (EAW) for the Fox Meadows Development project (Project) located in Eagle Lake, Blue Earth County, Minnesota. The Project consists of a new residential development. Regarding matters for which the Minnesota Pollution Control Agency (MPCA) has regulatory responsibility and other interests, the MPCA staff has the following comments for your consideration.

Permits and Approvals (Item 9)

Comment #5
- This section includes the US Army Corps of Engineers (USACE) Wetland Jurisdictional Determination but does not specifically include the USACE Section 404 permit. The MPCA 401 Water Quality Certification does not appear in this section a required approval. However, the EAW mentions other aquatic habitats may be subject to regulations under Section 404 or other state statues. Clarification is needed to determine if the Section 404 permit is required and if so, then the MPCA 401 Certification is also required. For further information about the 401 Water Quality Certification process, please contact Bill Wilde at 651-757-2825 or william.wilde@state.mn.us.

Comment #6
- It may be necessary to obtain a Sanitary Sewer Extension Permit from the MPCA prior to construction. The application form and additional information on this process can be found at http://www.pca.state.mn.us/water/permits/index.html#sanitarysewer. Questions on the sanitary sewer extension permit process should be directed to Dave Sahli at 651-757-2687 or David.Sahli@state.mn.us.

Water Resources (Item 12)

Wastewater

Comment #7
- While there is discussion about the capacity of the Mankato Water Resource Reclamation Facility (WRRF), which Eagle Lake is connected to, there is no discussion about the available capacity of the existing City of Eagle Lake collection system capacity and whether any improvements may be necessary for the proposed Project.

Comment #8
- A map showing the project location, general sewer route and Mankato WRRF would be a nice addition to the EAW.

Comment #9
- There is no discussion of existing drinking water supply issues or the capacity of the existing system or other utility needs for the development.

Stormwater

Comment #10
- If the site has the ability to discharge stormwater to the unnamed creek along the east side of the proposed development that has construction related impairments, additional erosion and sediment control best management practices (BMPs) will be required during the construction that are not mentioned in the EAW. Additional BMPs include immediately providing temporary soil stabilization measures on any portion of the site with exposed soils that will be unworked for 7 or more days and providing a temporary sediment basin where 5 or more acres drain to a common location. Also, if the site has the ability to discharge to the creek and all phases of the site will result in 50 or more acres of disturbance, the Stormwater Pollution Prevention Plan (SWPPP) will require submittal to the MPCA for review and approval prior to obtaining National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater Permit (CSW Permit) coverage.

Comment #11
- The large wetland at the site will require used of redundant (double) down gradient sediment controls installed if construction must encroach the existing 50 feet of existing natural buffer to the wetland.

Comment #12
- The Project owner will be required to ensure that CSW Permit coverage is maintained for all phases of the development. If portions of the site are sold to new owners for construction, such as through selling of individual lots, the owner will need to ensure that the new owners obtain their own coverage under the permit using the MPCA Subdivision Registration process and that a SWPPP describing remaining BMPs for the site is provided to the new owners.

Comment #13
- The EAW identifies increasing rainfall trends and temperature in the location but does not address the climate trends in the stormwater section of the EAW and how they will be addressed. The Project proposer is strongly encouraged to utilize Low Impact Development strategies and green infrastructure for more sustainable development. The CSW Permit requires volume reduction practices to reduce stormwater discharges which can be met with these practices. Additional trees should be planted within the development to provide shade to reduce heat island affects and help absorb increased stormwater runoff. Use of native plants in stormwater infiltration areas and open spaces provide pollinator habitat in addition to reducing runoff. Questions regarding Construction Stormwater Permit requirements should be directed to Roberta Getman at 507-206-2629 or Roberta.Getman@state.mn.us.

Comment #14

Other Potential Environmental Effects (Item 22)

Please note that chloride (salt) is a growing issue for lakes, streams, and groundwater around the state. Chloride can come from both de-icing salt and water softener salt. For the proposed Project, the MPCA recommends smart salting practices for de-icing streets and driveways during the winter weather months and water softening best practices be used year-round. Additional resources are available at https://www.pca.state.mn.us/water/statewide-chloride-resources.

We appreciate the opportunity to review this Project. Please provide your specific responses to our comments and notice of decision on the need for an Environmental Impact Statement. Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this EAW, please contact me by email at Karen.kromar@state.mn.us or by telephone at 651-757-2508.

Sincerely,

Karen Kromar

This document has been electronically signed.

Karen Kromar
Planner Principal
Environmental Review Unit
Resource Management and Assistance Division

KK:rs

cc: Dan Card, MPCA, St. Paul
Bill Wilde, MPCA, St. Paul
Dave Sahli, MPCA, St. Paul
Roberta Getman, MPCA, Rochester
Wayne Cords, MPCA, Mankato

BLUE EARTH COUNTY
Effectively and Efficiently Delivering Essential Services
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Historic Courthouse
204 S. Fifth St.
PO Box 168
Mankato, MN 56002
Administration
TEL: 507-304-4150
FAX: 507-304-4344
Human Resources
TEL: 507-304-4150
FAX: 507-304-4344
Extension
TEL: 507-304-4325
FAX: 507-304-4059
Facilities Management
TEL: 507-304-4249

Government Center
410 S. Fifth St.
Mankato, MN 56001
Human Services
PO Box 3526
TEL: 507-304-4319
FAX: 507-304-4379
Property and Environmental Resources
PO Box 3566
TEL: 507-304-4251
FAX: 507-304-4431
License Center
PO Box 3524
TEL: 507-304-4340
FAX: 507-304-4396
Veterans Services
PO Box 168
TEL: 507-304-4246
FAX: 507-304-4225
Finance
PO Box 3524
TEL: 507-304-4182
FAX: 507-304-4077
Information Technology
PO Box 168
TEL: 507-304-4357
FAX: 507-304-4355

Public Works
35 Map Dr.
PO Box 3083
Mankato, MN 56002
TEL: 507-304-4025
FAX: 507-304-4049

Justice Center
401 Carver Road
Mankato, MN 56001
Sheriff's Office
PO Box 228
TEL: 507-304-4800
FAX: 507-304-4818
County Attorney
PO Box 3129
TEL: 507-304-4600
FAX: 507-304-4620
Probation
PO Box 3245
TEL: 507-304-4750
FAX: 507-304-4710

Library
100 E. Main St.
Mankato, MN 56001
TEL: 507-304-4001
FAX: 507-304-4009
www.beclibrary.org
TDD: 507-304-4399

August 24, 2022

Jennifer Bromeland
City Administrator - City of Eagle Lake
PO Box 159
Eagle Lake MN 56024

RE: Environmental Assessment Worksheet for Fox Meadows Development in Eagle Lake

Dear Jennifer,

The purpose of this letter is to provide written comments from the Property and Environmental Resources Department on the Environmental Assessment Worksheet (EAW) for the Fox Meadows Development in Eagle Lake.

We appreciate the opportunity to review the proposed project and have attached written comments.

Please let me know if you would like to discuss any of these matters further.

Respectfully,

Michael Stalberger
Director, Property and Environmental Resources
507-304-4257
michael.stalberger@blueearthcountymn.gov

Enclosure

Fox Meadows Development
Environmental Assessment Worksheet
City of Eagle Lake
Blue Earth County Property and Environmental Resources Review

COMMENT #15 **Page 8** The EAW states: "According to Federal Emergency Management Agency (FEMA) flood maps, a flood hazard study has not been completed for the project area." And "No floodplain is known to exist within or adjacent to the project area."

It should be noted that there is currently FEMA floodplain mapped in the northeast portion of the property that is proposed to be developed. This floodplain is on the unnamed stream that leads from the outlet of Eagle Lake. FEMA's preliminary floodplain maps show that the mapped floodplain is just northeast of the property that is proposed to be developed. See Attachment A.

COMMENT #16 **Page 10.** "Soils and topography - Describe the soils on the site, giving NRCS (SCS) classifications and descriptions, including limitations of soils."

The EAW describes a Geotechnical Evaluation of the project area. It should be noted that over 87-percent of the soils on the site have a rating of Very Limited for Dwellings with Basements according to the USDA NRCS. See Attachment B.

COMMENT #17 **Page 12 –** The EAW states**:** "The depth to ground water ranges from 920-940 feet above mean sea level or approximately 70-100 feet below ground surface (Berg 2016) Based on this mapped depth, groundwater is not anticipated to be encountered during excavation for basement levels of the new residential buildings or for the installation of utilities."

It should be noted that it is extremely likely that seasonally saturated soils with very shallow water tables will be encountered during the excavations for basements and the installation of utilities for this project. According to USDA's NRCS web soil survey, the soils within the entire project area have a depth to seasonal water table of less than 3 feet. See attachment C

It should additionally be noted that the EAW previously states on page 10: "A shallow water table is present in the project area within wetlands and ranges from the ground surface to depths of approximately 10 feet. This shallow water table is representative of the regional water table aquifer within the project area (Berg 2016)."

COMMENT #18 **Page 12 –** The EAW states**:** "The Minnesota Department of Health (MDH) Minnesota Well Index was reviewed and there are no wells mapped within the project area boundaries or within a quarter mile of the project area as shown in Figure 11."

While the County does not know of other in-use wells in the project area, there was a large farmstead in the northwest portion of the property just to the east of S Agency St (513 S Agency Street). A well on this property was sealed in 1991, however there could be another well or wells that previously served the very old farmstead on this property. The County recommends a well search with a magnetometer to help identify unsealed wells in this part of the property before it is developed. Attachment D shows a 1983 aerial photo of the building site.

COMMENT #19 **Page 13-** The EAW states: “Currently, stormwater runoff flows overland across the agricultural fields on site and follows topography draining into the large wetland in the northeast portion of the project area.”

It should be noted that over 36 acres of the development drains to other areas other than the wetland in the northeast portion of the property. 9.9 acres of the property currently drains to the north and 26.6 acres drains to the south and west towards CSAH 27 (S Agency St). See Attachment E.

COMMENT #20 **Page 13.** The EAW states: “Infiltration and filtration measures are also under consideration for the project’s stormwater management system design and will vary based on the geotechnical evaluation results.”

It should be noted that 3 feet of separation from seasonally saturated soils is required from the bottom of an infiltration practice. As is shown on the soil survey and from what was submitted with the wetland delineation, it is likely not possible to have three feet of separation from seasonally saturated soils anywhere on the property. The Minnesota Stormwater Manual states: There is a large portion of the state (more than 50 percent) where the seasonal high water table depth is located less than 3 feet from the surface. In these areas it may be impossible to get the 3 feet of separation from the bottom of an infiltration practice to the seasonal high water table depth REQUIRED under the NPDES Construction General Permit (CGP). Non-infiltration BMPs, such as lined filtration or settling practices, should be considered in areas with shallow groundwater.”

COMMENT #21 **Page 14 Wetlands -** The EAW states: **“**Five small, farmed wetlands would be filled for construction of the proposed project area. The large wetland in the northeast corner of the site will be avoided (Figure 5).”

It should be noted that a Blue Earth County decision on the Wetland Boundary & Type Determinations has not been made as is indicated on page 7. The wetland replacement plan application has also not been submitted to Blue Earth County. When this application is submitted, it will be reviewed for compliance with Minnesota Rules Chapter 8420, specifically the sequencing analysis. As the EAW mentions, the large wetland is being avoided. The application for the replacement plan will be reviewed to determine whether any of the smaller wetlands can also be avoided or disturbance minimized in accordance with Minnesota Rules Chapter 8420.

COMMENT #22 **Page 15 - 13. Contamination/Hazardous Materials/Wastes -** The EAW states: “Based on the results of reviewing the MPCA WIMN database and historical use as cropland, no contaminated environmental media (soil, groundwater etc.) or environmental hazards are expected to be present within the project area.”

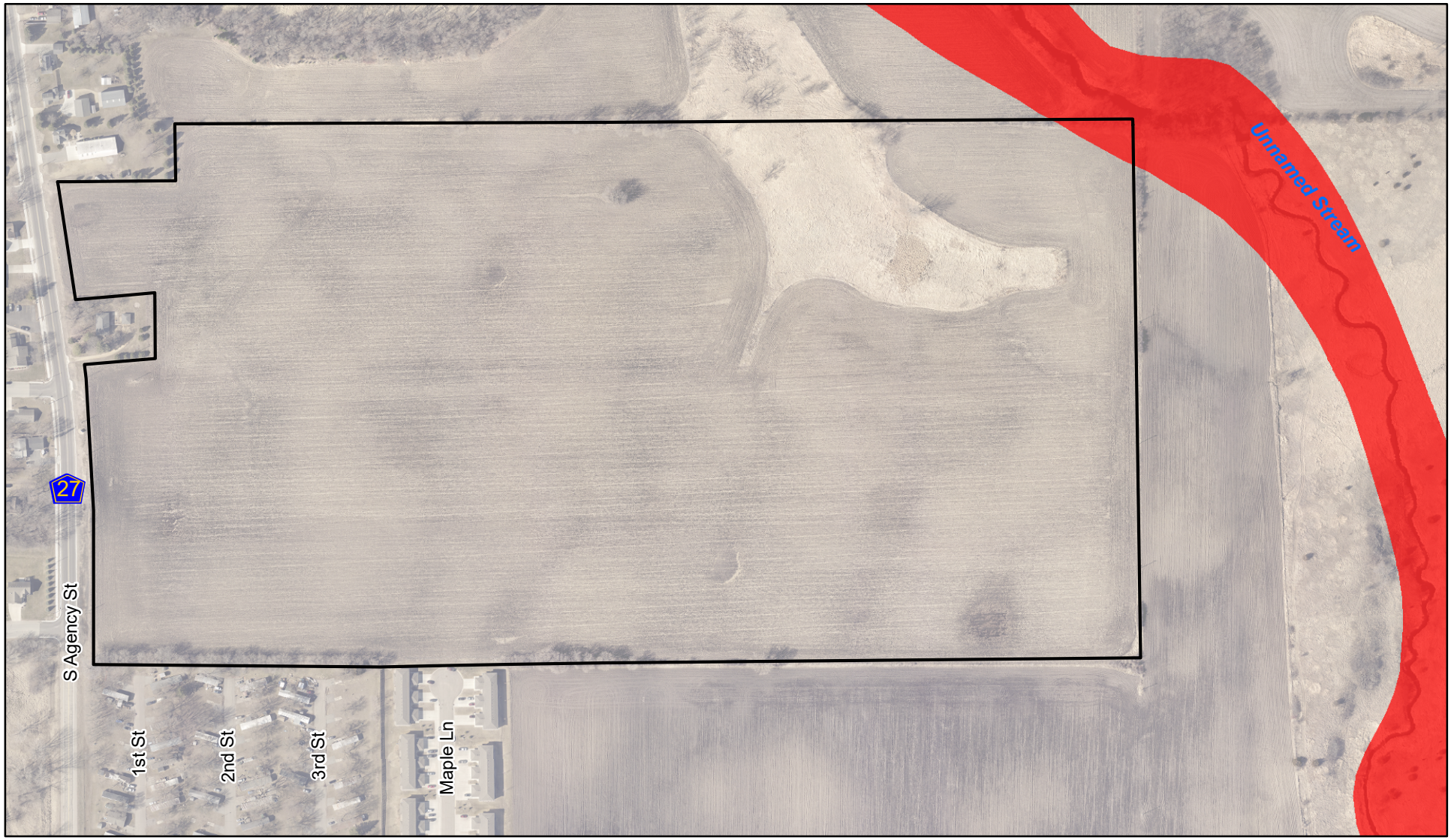
The northwest portion of the property included portions of a farmstead, barns and agricultural buildings as recently as the mid-1990’s. The buildings have been removed but it is possible that there is a buried tank or tanks on the northwest portion of the project area. The County’s well sealing records for the farmstead from 1991 describe a buried fuel tank and a gas pump. The well was sealed at 513 S Agency Street, but the farmstead extended well into this project area. See Attachment E.

COMMENT #23 **Figure 6 – Proposed Conditions Map -** While the map in the EAW is a concept, it should be noted that there likely will be more roads/impervious surfaces in the development as the currently proposed concept plan does not conform with the Eagle Lakes Subdivision rules which state: "The maximum length of blocks shall be twelve hundred (1,200) feet. Blocks over six hundred (600) feet long may require pedestrian ways at least ten (10) feet wide at their approximate centers." The eastern block is currently proposed at over 1,350 feet on the southern section and over 1,426 feet on the north.

Attachment A

Floodplain Maps

Current FEMA Floodplain



Project Area

Current Floodplain

N
W E
S

0 400 800 Feet

Prepared By: Blue Earth County Property & Environmental Resources - 2022

Source: FEMA Q3 Floodplain Data

Preliminary FEMA Floodplain

Project Area

Special Flood Hazard Area

Zone A

N
W E
S

0 400 800 Feet

Prepared By: Blue Earth County
Property & Environmental
Resources - 2022

Source: FEMA Preliminary Floodplain Data

Attachment B

Limitations for Dwellings With Basements

Map Scale: 1:4,430 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Lines
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Soil Rating Points
- Very limited
- Somewhat limited
- Not limited
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Blue Earth County, Minnesota
Survey Area Data: Version 19, Sep 10, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 5, 2013—Sep 19, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Dwellings With Basements

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
211	Lura silty clay, 0 to 1 percent slopes	Very limited	Lura (85%)	Ponding (1.00)	5.9	7.7%
				Depth to saturated zone (1.00)		
				Shrink-swell (1.00)		
			Knoke (10%)	Ponding (1.00)		
				Depth to saturated zone (1.00)		
				Shrink-swell (0.41)		
			Waldorf (5%)	Depth to saturated zone (1.00)		
				Shrink-swell (1.00)		
238B	Kilkenny clay loam, 2 to 6 percent slopes	Somewhat limited	Kilkenny (90%)	Shrink-swell (0.98)	0.8	1.0%
				Depth to saturated zone (0.96)		
238C	Kilkenny clay loam, 6 to 10 percent slopes, moderately eroded	Somewhat limited	Kilkenny, moderately eroded (90%)	Shrink-swell (0.98)	8.8	11.5%
				Depth to saturated zone (0.96)		
286	Shorewood silty clay loam, 1 to 6 percent slopes	Very limited	Shorewood (90%)	Depth to saturated zone (1.00)	50.8	66.8%
				Shrink-swell (1.00)		
287	Minnetonka silty clay loam	Very limited	Minnetonka (90%)	Depth to saturated zone (1.00)	8.9	11.7%
				Shrink-swell (1.00)		
539	Klossner muck, lake plain, depressional, 0 to 1 percent slopes	Very limited	Klossner, drained (85%)	Ponding (1.00)	0.9	1.2%
				Subsidence (1.00)		

Map unit symbol	Map unit name	Rating	Component name (percent)	Rating reasons (numeric values)	Acres in AOI	Percent of AOI
				Depth to saturated zone (1.00)		
			Lura (10%)	Ponding (1.00)		
				Depth to saturated zone (1.00)		
				Shrink-swell (1.00)		
			Brownton (5%)	Depth to saturated zone (1.00)		
				Shrink-swell (0.83)		
Totals for Area of Interest					**76.1**	**100.0%**

Rating	Acres in AOI	Percent of AOI
Very limited	66.5	87.4%
Somewhat limited	9.6	12.6%
Totals for Area of Interest	**76.1**	**100.0%**

Description

Dwellings are single-family houses of three stories or less. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet.

The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification of the soil. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect the specified use. "Not limited" indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. "Somewhat limited" indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. "Very limited" indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

Rating Options

Aggregation Method: Dominant Condition

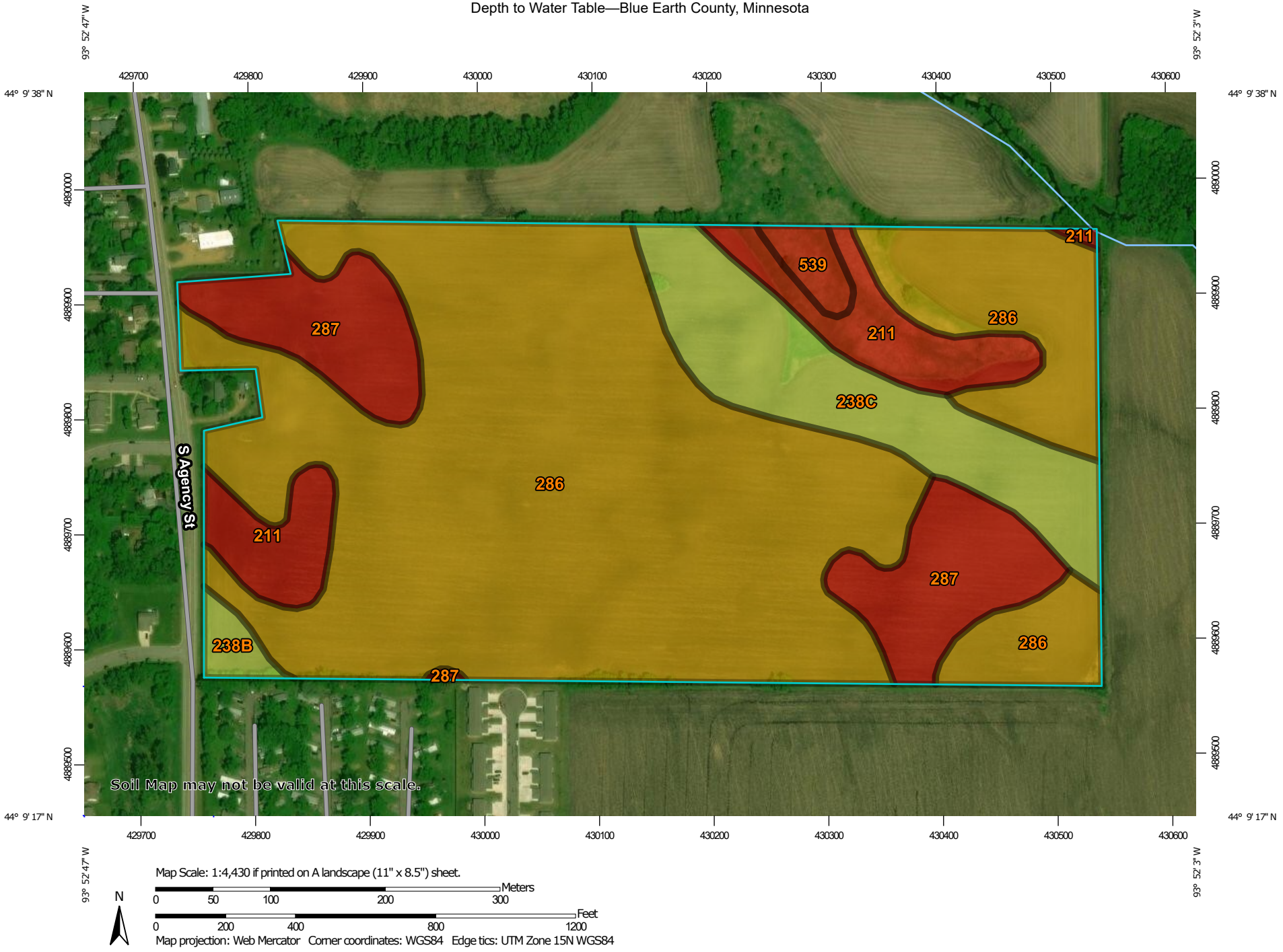
Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Attachment C

Soils Depth to Water Table

Depth to Water Table—Blue Earth County, Minnesota



Map Scale: 1:4,430 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Soil Rating Lines

- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Soil Rating Points

- 0 - 25
- 25 - 50
- 50 - 100
- 100 - 150
- 150 - 200
- > 200
- Not rated or not available

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

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Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Blue Earth County, Minnesota
Survey Area Data: Version 19, Sep 10, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 5, 2013—Sep 19, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Depth to Water Table

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
211	Lura silty clay, 0 to 1 percent slopes	0	5.9	7.7%
238B	Kilkenny clay loam, 2 to 6 percent slopes	90	0.8	1.0%
238C	Kilkenny clay loam, 6 to 10 percent slopes, moderately eroded	90	8.8	11.5%
286	Shorewood silty clay loam, 1 to 6 percent slopes	45	50.8	66.8%
287	Minnetonka silty clay loam	15	8.9	11.7%
539	Klossner muck, lake plain, depressional, 0 to 1 percent slopes	0	0.9	1.2%
Totals for Area of Interest			**76.1**	**100.0%**

Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

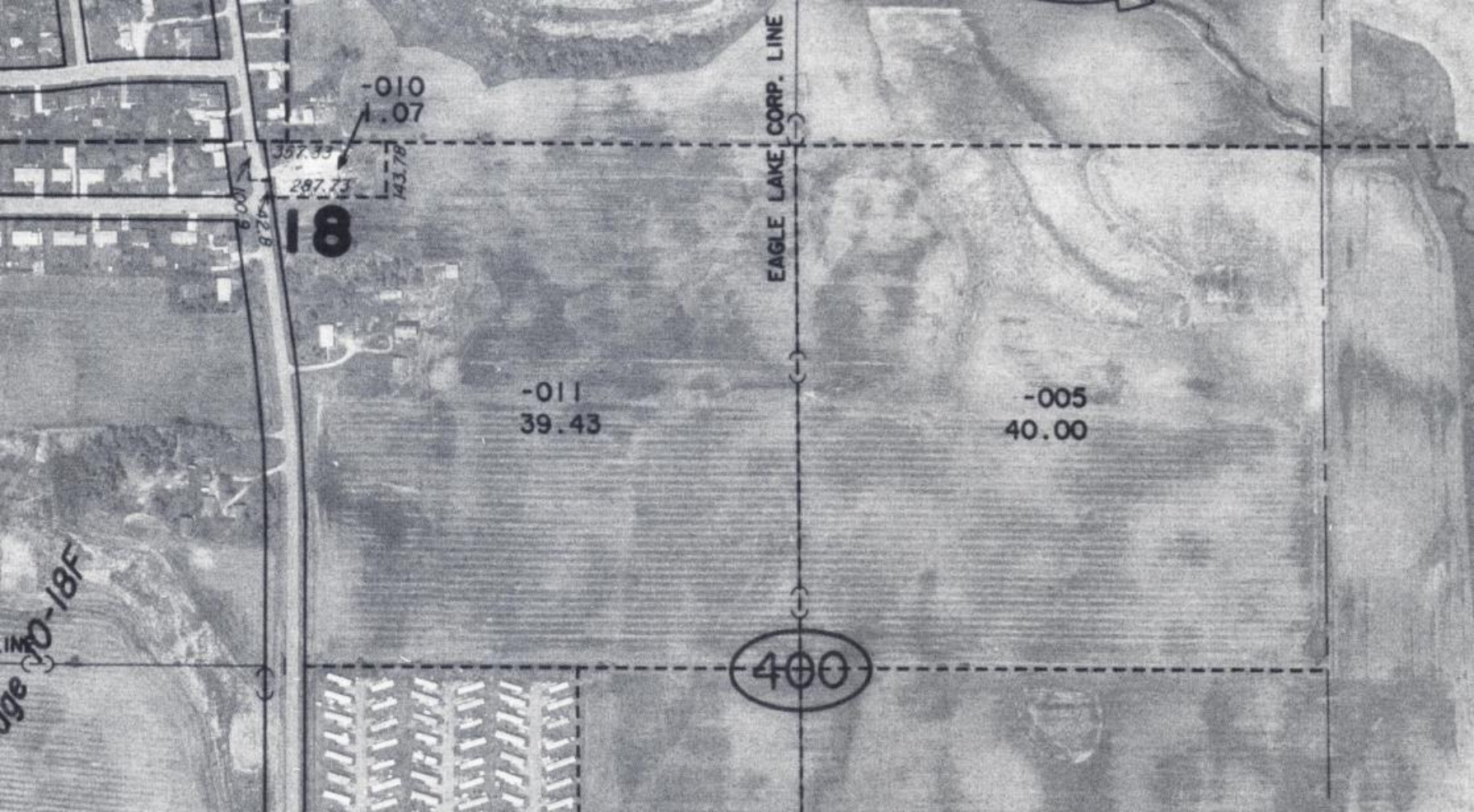
Interpret Nulls as Zero: No

Beginning Month: January

Ending Month: December

Attachment D

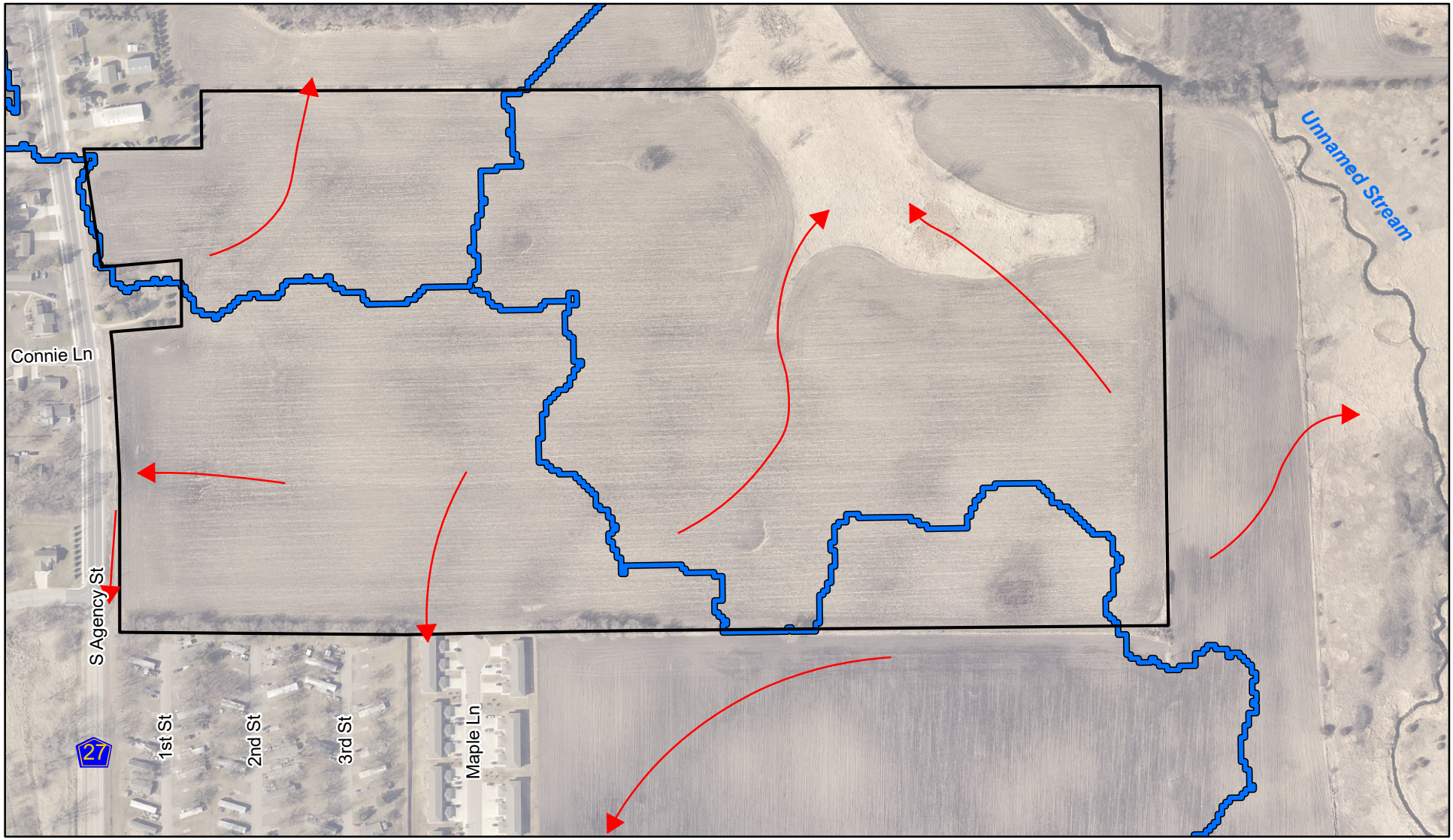
1983 Aerial Photo


-010
1.07
367.33
287.73
143.78
428.00
18
EAGLE LAKE CORP. LINE
-011
39.43
-005
40.00
400
10-18F

Attachment E

Sub-Watersheds

Surface Sub-Watersheds



Surface Water Flow Direction

Surface Sub-Watershed

Project Area

N
W E
S

0 400 800 Feet

NOTE: Watershed boundaries were created using a 3-Meter Digital Elevation Model from the 2012 LiDAR. The boundaries are based on surface water and do not include subsurface tile.

Prepared By: Blue Earth County Property & Environmental Resources - 2022

Source: 2012 LiDAR

DEPARTMENT OF NATURAL RESOURCES
Division of Ecological & Water Resources
Region 4 (Southern Region)
21371 Highway 15 South
New Ulm, MN 56073

August 25, 2022

Jennifer Bromeland
Eagle Lake City Administrator
jbromeland@eaglelakemn.com

Subject: DNR Comments on Fox Meadows Development Project EAW

Dear Jennifer,

Thank you for the opportunity to review the Environmental Assessment Worksheet (EAW) for the Fox Meadows Residential Development Project. Development projects alter the landscape, ecology, and hydrology for the foreseeable future. As climate change and environmental degradations have come to the forefront of global and local concerns, we encourage careful planning to mitigate impacts and leveraging the project as an opportunity to add ecological benefits and climate-change resiliency. Relatively low-cost measures like planting bareroot native trees and shrubs, planning for multiple rain gardens and native plantings, and integrating green building principles like solar panels could help offset impacts to hydrology and climate change while improving the overall ecological value and creating added value for this neighborhood.

Water Resources

The proposed development would create 25.4 acres of new impervious surface area and up to 31.5 acres of lawn/turf. Impervious surfaces (and turf grass to a lesser degree) create high levels of runoff that are high in pollutant concentrations. The Le Sueur River watershed is already highly stressed by altered hydrologic conditions and is impaired by a number of pollutants and stressors. As such, the project has the potential to exasperate degraded conditions in the Le Sueur River watershed.

COMMENT #24

The EAW notes that three stormwater ponds will be installed, and that “the proposed stormwater basin design would reduce stormwater flow rates and pollutant loads leaving the site”. However, no modeling or design information is provided. Please provide more information on:

- the proposed stormwater ponds’ capacity and maintenance
- details on the stormwater reuse system
- how the pond will be designed to treat water quality
- the runoff volumes for a range of storm events and the change in runoff volume and peak flow due to the development
- where the stormwater ponds drain to and impacts to any receiving waters
- the presence of any agricultural drainage tile, what will be done with it, and how it interacts with the stormwater system

COMMENT #24

- how the pond and its outlet will be designed to assure it does not support and/or propagate invasive fish (e.g., goldfish, carp, etc.)

We recommend that development projects hydrologically mitigate changes in the runoff volume and peak flow rates by adding sufficient storage, water use (evapotranspiration), and infiltration capacity within the development. We also recommend that water quality practices are integrated into the project. These factors would prevent additional and more polluted water from being contributed to the Le Sueur River watershed. Most of these concerns could be addressed by incorporating dense, native landscaping and adding dispersed rain gardens as discussed below. Permeable pavement and other design features could also be implemented.

COMMENT #25

Goldfish in Stormwater Ponds

Goldfish (Carassius auratus) and koi are regulated invasive species in Minnesota, which means it is legal to possess, sell, buy, and transport, but it is illegal to release them into the environment. Goldfish in urban stormwater ponds have become a frequent issue for cities. Presumably, the goldfish are being placed by residents. Goldfish are destructive to natural environments, and become a management problem. We recommend that either the pond design and/or education be developed to prevent this problem. Ponds can be designed to accommodate predator fish to manage any potential goldfish releases as well as provide angling opportunities for residents, particularly children. Please contact DNR Fisheries staff Craig Soupir for more information or assistance on pond design, management, or education on this topic.

COMMENT #26

Wildlife

The EAW does not identify that the project area is within a low potential zone of the Rusty Patch Bumblebee. Please identify what measures will be taken to avoid disturbance of the species. The project should consult USFWS IPAC.

As noted in the EAW, the Monarch butterfly is a *candidate* species for federal listing, as such, no special requirements may be necessary. However, we do want to note that if any wild grass type areas are disturbed during the growing season, this disturbance would likely result in local impacts to monarch larvae. Monarch larvae (caterpillar) eggs are laid on - and the caterpillars can only consume - milkweed. Common milkweed and other milkweed species are found throughout this region, including in small patches of grasses such as road ditches, filed borders, etc.

We recommend that wildlife friendly erosion control and invasive species best practices (see attachment) are used during construction. Products containing plastics and especially plastic mesh, which tangles and kills wildlife for decades, should not be used.

COMMENT #27

Climate Change Analysis

The climate change analysis uses a 30-year lifespan. Please explain why the project is only anticipated to last 30 years or update the analysis. A 50 to 100-year lifespan would provide a more realistic or conservative (cautious) analysis.

Section 7b of the EAW form asks that the project "describe how the project's proposed activities and how the project's design will interact with those climate trends. Describe proposed adaptations to address the project effects identified." Then Table 7-1 refers readers to item 12 (water resources) and 14 (wildlife and rare

COMMENT #27

features). However, we did not find any specific discussion addressing this topic in these sections. Please provide specific analysis of this topic. Of particular concern are the potential impact to water resources (refer to comments in the Water Resources section above and apply these considerations to 50-100 year lifespan).

COMMENT #28

Sustainable Building Principles

As currently proposed, the project may not contain any green infrastructure (Table 8-2), with the feasibility of infiltration basins being evaluated. There is also no commitment to use more sustainable building practices. We encourage development planning that better address greenhouse gases and climate change. In order for any proposed development to avoid the detriments of urban sprawl and negative impacts to ecology and hydrology, we recommend the development is designed in accordance with Low Impact Development and Green Infrastructure standards. We recommend the green building of homes and business, such as through a LEED certified structures. The project should consider adding rooftop solar, which is becoming one of the most affordable energy sources and does not rely on fossil fuels.

COMMENT #29

Landscaping for Ecology, Wildlife, and Water Resources

The EAW identifies that 8 trees (Table 8-3) will be planted, and there will be 14 acres of grasses and brush (Table 8-1). The project should consider adding a substantial number of trees. Tall, native trees could be planted throughout the project area, in particular, adjacent parking areas and the South and West sides of structures to offer shade and reduce temperatures. Dense native tree and shrub plantings would offer birds food and nesting habitat. Please identify what the 14 acres of grasses and brush will be planted to and if any additional development of these 14 acres is planned for the project lifespan. We again recommend that the area is planted to native species.

Turf grass does not offer ecological or water quality benefits and therefore should only be used in areas designed for turf-type uses (e.g. play and picnic areas). Dense, native plant landscaping and small, planted water basins could offer substantial ecological and water quality and quantity benefits and help mitigate impacts from this project. Prairies or pollinator plantings could be used instead of turf where open views are desired and attract birds and butterflies. In addition to ecological and water quality benefits, nature is proven to improve the mental and physical health of human residents.

COMMENT #30

Instead of diverting all stormwater to three basins, diverting water first to small, shallow, dispersed planted basins or rain gardens would add more storage capacity, evapotranspiration, and water quality treatment within the development. The plants within the rain gardens would increase settling time and provide biological treatments, therefore reducing pollutants from reaching downstream waters. The rain gardens should be planted with native plants that bloom spring through fall, which would offer habitat to native pollinators, including the imperiled monarch butterfly.

We encourage the project to develop a detailed conservation and landscaping plan that integrates dense, native plantings and enhanced stormwater treatment incorporating the principles discussed above.

Sincerely,

Joanne Boettcher

Joanne Boettcher, PE
Regional Environmental Assessment Ecologist

cc:
Craig Soupir, DNR Area Fisheries
Dan Giralomo, DNR Area Hydrologist
Tim Gieseke, Korey Woodley, Scott Roemhildt, DNR Regional Management
Troy Schrom, Schrom Construction, Project Proposer