



LOWER MINNESOTA RIVER WATERSHED DISTRICT

November 2019 Administrator report

From: Linda Loomis, Administrator

To: LMRWD Board of Managers

In addition to items on the meeting agenda, work continues on the following District projects and issues:

Other Work

City of Chaska - Harvest West Wetland Project

The City of Chaska is looking to restore a wetland in an area that is slated for a new residential subdivision. They will be applying for grants to assist with the project. This wetland is outside the boundaries of the LMRWD, but is in the West Chaska Creek watershed. West Chaska Creek is impaired for fecal coliform. The City asked the LMRWD to write a letter of support for the project. A copy of the letter is attached for the Board's information

Steven County Drainage

A new drainage improvement has been proposed in Stevens County. The Project will drain about 8,000 acres. The project is in the Pomme de Terre Watershed in the MN River Basin. Citizens filed a petition to request an EAW be prepared. The Izaak Walton League, retired judge and former Congressman David Minge and former LMRWD Manager Len Kremer are involved in the efforts to have the County take a closer look at the project. The petition was filed with the County on September 20th. The County stayed the approval of the project at its September 24th meeting. On October 29th, the County Board issued a negative declaration for the EAW on October 29th. Former Manager Kremer has asked for some LMRWD reports that he intends to use as evidence that high water flows are causing damage downstream far from drainage projects.

I have been trying to follow what is happening with this project. Here is a [link](#) to the Stevens County Board's Resolution and other documents related to the Board's action.

Minnesota River Basin Ag-Urban Partnership Forum

The Water Resource Center at Minnesota State University - Mankato has organized this [Forum](#) which will be held 1:00 to 4:00pm, Monday, November 18, 2019. The goal of this Forum is to catalyze water quality improvements in the Minnesota River through the use of agricultural-urban partnerships. Recent studies show the Minnesota River continues to suffer from many problems. A promising route to accelerate the pace of improvement is to develop an urban and agricultural partnership or pilot.

A Passion for Paddling

In 2015, the LMRWD provided funding for a project called *Paddle Forward* through an organization called the Wild River Academy that sponsors canoe trips for college age students down urban rivers. A group of 7 paddled the Minnesota River, beginning at the headwaters in September of 2015 ending six weeks later at Harriet Island in St. Paul. They met with students at different location along the way and documented much of the trip on [Facebook](#). They even made a stop at the LMRWD dredge site!

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Now one of the organizers of this project, Natalie Warren has been featured in a new video *A Passion for Paddling*. Natalie and another woman, Anne Raiho were the first two women to paddle 2,000 miles from Minneapolis to Hudson Bay in 2011, following the route immortalized by Eric Sevareid in his book "Canoeing with the Cree. A crew from the public television show "Prairie Sportsman" canoed with Natalie on a Minnesota River section of this journey between Mankato and St. Paul to see why canoers and kayakers like to explore the Minnesota despite its muddy reputation. While Natalie acknowledges the river has its problems, she enjoys the Minnesota's seclusion and bluff lands carved by the Glacial River Warren. The Florida native moved to Minnesota in 2007, drawn to the north woods, and has paddled more than 7,000 river miles across the globe.

A Passion for Paddling will air during the "Prairie Sportsman's" 2020 season, which starts in January.

Prior Lake/Spring Lake Agricultural Soil Health Event

The Prior Lake/Spring Lake Watershed District (PLSLWD) is using Clean Water Funds from BWSR through the Metro-area Watershed Based Funding Pilot Program to hold an event that will promote conservation practices, such as cover crops, no-till farming, variable rate application & crop diversity and focus on a holistic approach to farming that is both profitable and sustainable for the farmer and beneficial to water quality. PLSLWD has invited the LMRWD to help plan the event, which will be held February 26, 2020.

"Symposium on Water Resources and Invasive Species"

I have been invited to be on a panel at the "Symposium on Water Resources and Invasive Species" at the University of Minnesota. The event will be on January 24, 2020 in the North Star Ballroom of the St. Paul Student Center. This symposium is being organized by the Water Resources Center (WRC), the Minnesota Aquatic Invasive Species Research Center (MAISRC), and the Minnesota Invasive Terrestrial Plants and Pests Center (MITPPC) I have been asked to participate in a panel on "Management Perspectives on Future Research Needs" focusing on the LMRWD efforts to manage buckthorn on river bluffs and mitigate erosion. They are also interested to hear the LMRWD thoughts about future research on water and invasive species that might be useful, the District's experience in working with the University of Minnesota, and ways to help incorporate research results into management decisions. The Symposium is a half day event and the panel discussion will run from 2:45-4:15pm.

Water Storage Initiative

The [Minnesota River Congress](#) has made water storage on the landscape its first priority. This is the project that Scott Sparlin talked to the Board about in July. A petition drive has been organized in an effort to show the legislature that there is public support for this initiative. The petition is on-line and can be found at <https://www.ipetitions.com/petition/water-storage-initiative>.

Watershed Plan Projects

Eden Prairie Area #3 Stabilization: Staff had hoped to pull together all the parties involved in monitoring the steep slope in this area. Organizing this meeting has been delayed, because staff was working to get the draft rules distributed for final review and to get the bid documents ready for the dredge site and East Chaska Creek project.

Riley Creek Cooperative project/Lower Riley Creek restoration - No new information has been received since the last update. Project website: <http://www.rpbcd.org/whats-happening/projects/lower-riley-creek-ecological-restoration>

Seminary Fen ravine stabilization project: - A meeting has been scheduled for November 20, 2019 with Representative Hansen to discuss finding funds for the LMRWD to replace the grant that was not funded.

Project website: <http://lowermnriverwd.org/projects/bwsr-clean-water-fund-grant-administration>

East Chaska Creek: (Carver County Watershed Based Funding): - The bid documents are complete and ready to be published. A pre-bid meeting has been scheduled for 8:30am, Thursday, November 21 and will be held at the Chaska Fire Station at 285 Engler Blvd. Chaska, MN. Bids will be opened December 3rd at Barr Engineering. Project website: <http://lowermnriverwd.org/projects/east-chaska-creek-bank-stabilization>

Schroeder Acres Park (Scott County Watershed Based Funding): A cooperative agreement has been sent to the City of Savage. I followed up with the City and they said they are working on this. Project website: <http://lowermnriverwd.org/projects/schroeder-acres-parkeagle-creek-sub-watershed-stormwater-study>

Shakopee Downtown BMP Retrofit (Scott County Watershed Based Funding): The Cooperative Agreement has been signed by the City and is on the November agenda for LMRWD Board approval. Project website: <http://lowermnriverwd.org/projects/targeted-bmps-downtown-shakopee>

PLOC (Prior Lake Outlet Channel) Restoration (Scott County Watershed Based Funding): The Cooperative Agreement has been signed by the City and is on the November agenda for LMRWD Board approval. The City has hired Barr and MKSK to complete the design, plans, etc for this project. We just provided the 60% plan review comments. Barr completed a first draft of the Water quality summery/evaluation/verification that I have provided comments to as well. We are targeting a late winter bid and construction to be able to begin spring 2020. Project website: <http://lowermnriverwd.org/projects/prior-lake-outlet-channel-realignmentwetland-restoration>

Dakota County Fen Gap Analysis and Conceptual Model (Dakota County Watershed Based Funding): The Draft Fens sustainability Gaps Analysis is complete and has been distributed to stakeholders. A meeting with stakeholders to discuss the Draft Gaps Analysis has been scheduled for Tuesday, December 17th at 9:30am at the DNR. The [Draft Gaps Analysis](#) has been posted to the LMRWD website. Project website: <http://lowermnriverwd.org/projects/dakota-county-fen-study-management-plan>

Hennepin County Chloride Project (Hennepin County Watershed Based Funding): A meeting for the stakeholders is scheduled for December 17, 2019..

Vegetation Management Plan: No new information since last update.

Sustainable Lake Management Plan - Trout Lakes: Staff has begun work on this project.

Geomorphic Assessment of Trout Streams: Two reports have been prepared for this project and are both available on the LMRWD website. The first report is the [Geomorphic and Habitat Assessments of Trout Streams in the Lower Minnesota River Watershed District](#), which is the report the interns prepared with the data they collected and their assessment of the trout streams. The second report is [Trout Stream Geomorphology Assessment](#). This report was prepared by Barr Engineering and reviewed the data collected by the interns. Just a reminder, this project will be presented at the MAWD Conference.

Spring Creek Cost Share: Staff has not heard back from the city on this project. We have discussed proceeding with the project a a project of the LMRWD.

West Chaska Creek Re-meander: No new information to report since last update.

Project Reviews

Historic Fort Snelling Revitalization: The Visitor Center at Historic Fort Snelling is being reconstructed. Staff received and reviewed plans provided by the engineers for the project. The comments letter sent by the LMRWD is attached

HCRRR MN River Bluffs Regional Trail: The LMRWD received plans from the Hennepin County Railroad Authority to repair the wash out of the trail that occurred in 2014. Staff is reviewing the files provided. Comments are due December 3, 2019.

MNDOT ADA Trail improvements in Mendota: No new information since last update.

MNDOT trail drainage improvements in Lilydale: No new information since last update.

MNDOT Trail - 494: No new information to report since last update.

MNDOT - TH5: No new information to report since last update.

City of Chanhassen - Moon Valley Gravel Pit: No new information to report since last update.

City of Carver - Hawthorne Ridge: No new information to report since last update.

Metropolitan Airport Commission - Environmental Assessment Worksheet for MSP Concourse G Infill -
No new information since last update.

City of Burnsville - Quarry Property, LLC - No new information on this project since last update.

City of Carver - Levee rehabilitation - No new information on this project since last update.

City of Carver - Jonathan Parkway upgrades - No new information on this project since last update.

City of Burnsville - CenterPoint Energy Training Facility - No new information on this project since last update.

City of Burnsville -5337 Properties, LLC: No new information on this project since last update.

City of Burnsville - Freedom Enterprises, LLC: No new information on this project since last update.

City of Burnsville - Industrial Equities - 250 River Ridge Circle North: - No new information on this project since last update.

City of Burnsville - United Properties - 12400 Dupont Avenue North: No new information on this project since last update.

CenterPoint Energy - sign replacement: No new information to report since last update.

City of Burnsville - Kraemer Mining: No new information to report since last update.

Dakota County - MN River Greenway: The LMRWD received a Notice of Application for wetland impacts for this project. The LMRWD did not have any comments. Project website:
<https://www.co.dakota.mn.us/parks/About/TrailPlanning/Pages/minnesota-river.aspx>

City of Shakopee - Jackson Township AUAR: No new information to report since last update.

City of Burnsville - CenterPoint Energy Lyndale Valve Replacement Project: No new information to report since last update.

City of Eden Prairie - C. H. Robinson: No new information to report since last update.

City of Burnsville - Burnsville Sanitary Landfill: On October 3rd, 2019 the Minnesota Pollution Control Agency (MPCA) released their final scoping decision on the Burnsville, MN Landfill Expansion project. Under the intended project scope the plan is to remove the current problematic Freeway Landfill that is sitting mostly on top of a wetland with no lining, and place it on-top of the nearby Burnsville Landfill raising the height of the landfill to 1,082 feet making it the highest point in the Minnesota River Valley. The Izaak Walton League and Friends of the Minnesota Valley started a petition that will be given to the Burnsville City Council asking them to stop "Garbage Mountain". The petition can be found on-line at <https://www.change.org/p/burnsville-city-council-help-stop-garbage-mountain>.

City of Eden Prairie - Peterson Wetland Bank: No new information to report since last update.

City of Chanhassen - TH 101 Improvements: Staff has reviewed the most recent plans provided to the District. An agreement for the future maintenance of the BMPs has been received and is under review.

by technical and legal staff. A copy of the comments provided by the LMRWD is attached. Project website: <https://www.highway101improvements.com/>

Cities of Richfield/Bloomington - TH 77 & 77th Street underpass: No new information to report since last update.

MNDOT - I494 Brush removal: This project has been completed and will be removed from the list.

MNDOT - TH 5 Signage projects: This project is scheduled for completion November 8, 2019. If the project is completed on that date, this item will be removed from the list.

MPCA - MN River TSS TMDL: No new information to report since last update.

MPCA - Watonwan River Watershed Maximum Daily Load Study Draft Report and Watershed Restoration and Protection Strategy: No new information to report since last update.

MPCA - Middle Minnesota River Watershed Total Maximum Daily Load Study Draft Report and Watershed Restoration and Protection Strategy: No new information to report since last update.

MPCA - Lower Minnesota River Watershed Total Maximum Daily Load Study Draft Report and Watershed Restoration and Protection Strategy: No new information to report since last update.

City of Bloomington - MN Valley State Trail: No new information to report since last update. Project website: https://www.dnr.state.mn.us/state_trails/minnesota_valley/plans.html

Hennepin County - CSAH 61/Flying Cloud Drive: The most recent inspection report is attached. Shane Soukup and I attended a field inspection of the project with the Technical Evaluation Panel. The City of Eden Prairie was there as were representatives from Hennepin County, BWSR and the Contractor Ames Construction. The contractor is getting ready to button up the site for the winter and vegetation has been established on many of the disturbed areas. What the Contractor indicated is the problem now is sediment coming from upstream and filling in many of the BMPs. The pictures below are of a 10' by 16' box culvert that was vacuumed out a week before this picture was taken:

MNDOT - I494/TH 5/TH 55 Mill & Overlay project: No new information to report since last update. Project website: <https://www.dot.state.mn.us/metro/projects/i494invergroveheights/>

MNDOT - I35W Bridge Replacement: No new information to report since last update. Project website: <https://www.dot.state.mn.us/metro/projects/i35wbloomington/index.html>

MNDOT - I494 from TH169 to Minnesota River: No new information to report since last update.

Scott County - TH 41/169/78 Interchange: No new information to report since last update. Project website <https://www.scottcountymn.gov/1778/Highways-1694178-Interchange?PREVIEW=YES&PREVIEW=YES&PREVIEW=YES&PREVIEW=YES>

City of Shakopee - Amazon Fulfillment Center drainage: Shakopee held a meeting to discuss progress on plans to address the flooding of burial mounds at Murphy's Landing. The major discussion was the investigation of the area for other burial mounds. Burial mounds cover the area and it was decided that further investigation is necessary. The Shakopee Mdewakaton Sioux Community is overseeing all the investigation. It is likely the alternative the City would like to proceed with will be the one that is approved. It appears that many of the burial sites have already been disturbed by the construction of TH 101. Any remains found in the construction of the project that have already been disturbed will have to be collected for reburial.

MAC/LMRWD/MCWD boundary realignment: No new information to report since last update.

Fort Snelling - Dominion Housing: Staff has reviewed this project and is waiting for an agreement for the future maintenance of the BMPs. The consultant for the project that we have been working with has provided a copy of the maintenance agreement we received for the TH 101 project in Chanhassen.

They are currently waiting for the go-ahead from the developer to finalize plans and apply for necessary permits.

USACOE/USFWS - Bass Ponds, Marsh & Wetland: No new information to report since last update.

Project website: <https://www.scottcountymn.gov/1865/Bass-Ponds-EAW>

Upcoming meetings/events

- LMRWD Work Session, Wednesday, November 20, 2019, 5:30pm, County Board Room, Carver County Government Center
- [Minnesota River Basin Ag-Urban Partnership Forum](#) - Monday, November 18, 2019, 1:00pm to 4:00pm, Mankato Civic Center, sponsored by Minnesota State University/Mankato, Mankato
- Upper Mississippi River Waterway Association - Thursday, November 21, 2019, 11:30am, Lilydale Pool & Yacht Club, 1600 Lilydale Road, St. Paul, MN
- [Minnesota River Congress](#) - Thursday, November 21, 2019, 6:30pm, Kato Ballroom, 200 Chestnut Street, Mankato, MN
- River Resource Forum - no dates yet, but this usually happens in early December (may overlap with MAWD Conference)
- River Resource Forum - no dates yet, but this usually happens in early December (may overlap with MAWD Conference)
- [MAWD Annual Conference](#) - December 5 - 7, Arrowwood Conference Center Alexandria, MN
- Metro MAWD - Tuesday, January 21, 2020, 7:00pm Cap Region Watershed District, 595 Aldine Street, St. Paul
- [MAWD Legislative Reception & Day at the Capitol](#) - March 18 & 19, 2020



LOWER MINNESOTA RIVER
WATERSHED DISTRICT

Carver

Vacant

Dakota

Vacant

Hennepin

David Raby
Secretary/Treasurer

Adam Frey
Vice President

Scott

Jesse Hartmann
President

Linda Loomis, Administrator
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112 East 5th Street
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Chaska, MN 55318

E-mail: lowermnriverwd.org

October 31, 2019

Brent Alcott
Water Recourses Coordinator
One City Hall Plaza
Chaska, MN 55318

RE: Letter of Support for Harvest West Park Wetland Restoration

Dear Mr. Alcott:

The Lower Minnesota River Watershed District (LMRWD) is writing to express support for the Harvest West Park wetland and upland habitat enhancements in the City of Chaska.

The District understands that the City of Chaska is applying for funds to assist with the costs to enhance wetland, woodland, and prairie habitat within a new public park. The LMRWD commends the City's initiative to preserve and enhance these features.

With more than 16,000 square miles of the Minnesota River watershed beyond the LMRWD's control, it is inherent that the LMRWD coordinate with municipalities to protect and improve water quality and reduce point and nonpoint pollutant discharges to the Minnesota River. The City of Chaska has proposed a project that consists of the removal of invasive plants and the enhancement of native vegetation for 1.5 acres wetland, 7 acres of forest, and 3.5 acres of prairie habitat. This project aligns with our goals and management efforts.

Stormwater management is challenging in urban areas and this project proposes to enhance the condition of existing features and preserve natural stormwater runoff hydrology. The public setting of the project allows for the opportunity for additional educational opportunities demonstrating the importance of preserving native habitat and the benefit these resources provide. The City of Chaska's plan to preserve these features within a public space provides an opportunity to ensure that they are maintained for years to come.

We are pleased to offer our support to the City of Chaska for its efforts to continue to pursue opportunities to preserve and enhance wildlife habitat, manage stormwater, and protect water quality.

Sincerely,

Linda Loomis
Administrator
Lower Minnesota River Watershed District

Technical Memorandum

To: Linda Loomis, Administrator
Lower Minnesota River Watershed District

From: Shane Soukup, Water Resources Scientist
Della Schall Young, CPESC, PMP

Date: November 7, 2019

Re: Fort Snelling Revitalization – Project Review (LMRWD Project No. 2019_082)

Leo A Daly (“the Company”) has provided the Lower Minnesota River Watershed District (“the District”) copies of the Fort Snelling Revitalization Project (“the Project”) 95% Civil and Landscape drawings and accompanying documents for the District’s review. Young Environmental Consulting Group (“Young Environmental”) has completed the review on the District’s behalf, and the findings are presented below.

The Project proposes to remove the existing visitor center located just north of Tower Avenue in the Unorganized Territory of Fort Snelling and to landscape the area. In place of the visitor center, the Project proposes to create a park. The Project area encompasses 15.45 acres and proposes a reduction in impervious area of approximately one-and-one-half acres. Portions of the Project area are located within a Steep Slopes Overlay District; however, it is unclear whether the activities proposed therein trigger this standard. For the purposes of this review, the Project triggers the Erosion and Sediment Control Standard, and we assume it also triggers the Steep Slope Standard.

Erosion and Sediment Control Standard

The Project is required to comply with the NPDES General Construction Stormwater Permit (“the General Permit”), which satisfies most of the District’s erosion and sediment control requirements. Included in the plans are site-specific erosion and sediment control details and plans as well as a comprehensive stormwater pollution prevention plan (“SWPPP”). The following should be addressed to fully comply with the District’s standard:

- a. Site stabilization: The SWPPP should be amended to include applicable soil decompaction, assuming there are soils that will need to be roughened or

decompacted to promote infiltration, reduce erosion, trap sediment, and prepare the soil for seeding.

- b. Maintenance: The SWPPP should be amended to require the removal of excess sediment from behind silt fences and biorolls when sediments reach one-third the height of the structure. The current SWPPP calls for removal when sediments reach one-half the height of the structure.
- c. Include the following in the SWPPP narrative: Send the District a copy of the Project's General Permit and notify us 48 hours before the start of construction.

Steep Slopes Standard

It appears most of the work proposed within the Steep Slopes Overlay District involves the removal of invasive vegetation. Care should be taken to avoid using heavy equipment or removing the vegetation by means that would adversely affect the slopes' stability. Widespread clearing should be avoided on large slopes when at all possible, and low-impact equipment (preferably hand tools) should be used to minimize soil disturbance.

Braun Intertec ("Braun") completed a geotechnical evaluation of the Project area to assess the general stability of the bluffs, provide construction considerations related to the bluffs, and determine the risks of rockfall during construction. In the summary report (Geotechnical Evaluation Report or "Report"), page 23 indicates that, based on the site reconnaissance and review of available information, Braun believes construction activities will not increase the potential for large-scale bluff instability. Based on the information provided, the Project is addressing the requirements for construction in a Steep Slopes Overlay District. The following list highlights a few critical items and how they are being addressed:

- a. The engineer's seal and signature on the Report, signifying the engineer of record certifies the suitability of the slopes for the proposed construction.
- b. The Project will neither alter the general drainage patterns of the area nor add new discharge points.
- c. There are no proposed infiltration basins, stormwater ponds, swales, or other soil-saturation-type features are proposed within the overlay district.

Recommendations

The information provided on the Project generally addresses the District's requirements. We recommend approval on the condition that the information highlighted above is addressed and sent to the District within the next three weeks.

Enclosure: LMRWD 2019_082 Project Review Output



LOWER MINNESOTA RIVER WATERSHED DISTRICT PROJECT REVIEW

Project ID	<input type="text" value="2019_082"/>	Authorization Agent	<input type="text" value="Jared Jones"/>
Project Name	<input type="text" value="Fort Snelling Revitalization"/>	Email Address	<input type="text" value="jfjones@leoadaly.com"/>
Organization	<input type="text" value="Leo A Daly"/>	Phone Number	<input type="text" value="6123419595"/>

Notes

Project Summary

Anticipated start date	<input type="text" value="10/29/2019 12:14:52 PM"/>	Date received	<input type="text" value="10/22/2019"/>
Project location	<input type="text" value="Unorganized Territory of For"/>	Project map included?	<input checked="" type="checkbox"/>
Project acres	<input type="text" value="15.45"/>	Is the project in an unincorporated area?	<input checked="" type="checkbox"/>
Total disturbed acres	<input type="text" value="15.45"/>	Is it located in a High Value Resource Area	<input type="checkbox"/>
New impervious acres	<input type="text" value="0"/>	Is it located in a Steep Slope Overlay District	<input checked="" type="checkbox"/>
Local Partners		Other Sensitive Area	

Project Description

The Project consists of demolishing the existing visitor center and creating a park in its place as well as updates to landscaping.

Additional Notes

Review Status

Is this a preliminary review?

Is this a permit review?

Does this project require a technical review

Project Status

Project is pending

Project is active

Project has been archived

Erosion and Sediment Control Standard

This project triggers one or more thresholds for this standard.

<u>Triggers</u>		<u>Criteria</u>	
Disturbs one acre plus	<input checked="" type="checkbox"/>	Erosion and Sediment Control Plan	<input checked="" type="checkbox"/>
Located within the HVRA Overlay District	<input type="checkbox"/>	Inspection and maintenance addressed	<input checked="" type="checkbox"/>
Meets the HVRA threshold	<input type="checkbox"/>	NPDES/SDS General Construction Permit documentation	<input type="checkbox"/>

The documentation requirements for this standard have not been met. A review cannot be completed until all required documentation has been submitted.

Additional Notes

- The SWPPP should be amended to include applicable soil decompaction, assuming there are soils that will need to be roughened or decompacted to promote infiltration, reduce erosion, trap sediment, and prepare the soil for seeding. □
- The SWPPP should be amended to require the removal of excess sediment behind silt fences and biorolls when sediments reach one third the height of the structure, current SWPPP calls for removal at one half the height.
- The following should be included in the SWPPP notes: Send the District a copy of the Project's General Permit and notify us 48 hours before the start of construction.

Floodplain Drainage Alteration Standard

This standard does not apply.

<u>Triggers</u>			
Changes in water surface elevation of floodplain	<input type="checkbox"/>	Calculations by a professional engineer demonstrating no decrease to conveyance	<input type="checkbox"/>
<i>If yes,</i> Compensatory storage equal or greater than volume of fill	<input type="checkbox"/>	Conveyance capacity decrease below 100yr high water elevation	<input type="checkbox"/>
<i>If no,</i> No-rise certification by a professional engineer	<input type="checkbox"/>	Temporary placement of fill	<input type="checkbox"/>
<u>Criteria</u>		Adverse impacts to water quality, habitat, or fisheries	<input type="checkbox"/>
Net decrease of storage capacity OR increase in 100yr elevation	<input type="checkbox"/>	New structures have 2ft+ between lowest enclosed area's floor and 100yr high water elevation	<input type="checkbox"/>
Will floodplain storage be created	<input type="checkbox"/>		

Additional Notes

Stormwater Management Standard

This standard does not apply.

Type of project

Triggers

One acre or more of impervious surface

Are trout streams protected

HVRA Overlay District

Located within the HVRA Overlay District

Rate control exceeded for 1, 2, 10, and 100yr 24-hour event

If yes, Meets the HVRA threshold

Projects with 1+ acres of new impervious: are MPCA's Construction General Permit

Criteria

Post-construction runoff rates exceed existing rates for 1, 2, 10, and 100yr 24-hour events?

Net increase of TP

Net increase of TSS

New Development: the post-construction runoff volume retained onsite equal 1.1 inches of runoff from impervious surfaces

Is maintenance adequately addressed

Redevelopment: the project will capture and retain onsite 1.1 inches from new/fully reconstructed impervious surface

Project will result in a net decrease of TP and TSS

Linear: the site will capture and retain (a) 0.55 inches of runoff from new/fully reconstructed impervious, or (b) 1.1 inches of runoff from the net increase in impervious area

Volume control requirements sufficiently addressed

Alternative Infiltration Measures

Additional Notes

Shoreline and Streambank Alteration Standard

This standard does not apply.

Triggers

Work or alternation below the ordinary high-water mark

Work within the bankfull height of a watercourse

Addition of new material or structural changes to the shoreline or streambank

Criteria

Obtained a DNR permit

Is a copy of the permit included

Shoreline stabilized with minimal encroachment/interference of flow or navigation

Are retaining walls used

Is there a demonstrated need for the wall(s)

Has a registered engineer certified the wall design

Will riprap be placed and sized appropriately

Will transitional layers meet requirements

Will riprap meet height requirements

Will shoreline erosion protection account for soils, wave energy, and ice pressure/movement

The documentation requirements for this standard have not been met. A review cannot be completed until all required documentation has been submitted.

Additional Notes

Steep Slopes Standard

This project triggers one or more thresholds for this standard.

Triggers

Is the project in the Steep Slopes Overlay District

Excavation of 50 cubic yards+ of earth

Displacement of 5,000 sq. ft+ of earth

Vegetation removal or displacement

Activities that require LGU permits

Criteria

Has the project been certified by a professional engineer

Adverse impact to waterbodies

Unstable slope conditions

Degradation of water quality

Preservation of existing hydrology

New discharge points along slope

The submission included the required documentation for this standard.

Additional Notes

Widespread clearing should be avoided on large slopes when at all possible, and low-impact equipment (preferably hand tools) should be used to minimize soil disturbance. A geotechnical evaluation of the project area was completed to assess the general stability of the bluffs and their

suitability for construction activities. The engineer of record indicates that construction activities will not increase the potential for large-scale bluff instability.

Water Appropriations Standard

This standard does not apply.

Triggers

Is the project in the HVRA Overlay District

Will the project withdrawal more than 10,000 gallons per day

Will the project withdrawal more than 1 million gallons per year

Did the project apply for a DNR Water Appropriations Permit

Is a copy of the DNR Water Appropriations Permit included with the submission documents

Has the LMRWD reviewed the DNR Water Appropriations Permit

Criteria

Have documents demonstrated no net change in groundwater levels to adjacent fens

Discharge management plan

Has the plan been reviewed AND accepted by the LMRWD

Additional Notes

Water Crossings Standard

This standard does not apply.

Triggers

Horizontal drilling under a road, highway, utility, bridge, boardwalk or associated structure that is in contact with the bed/bank of a waterbody

Placement of a road, highway, utility, bridge, boardwalk or associated structure in contact with the bed/bank of a waterbody

Altering a waterbody to enclose it within a pipe or culvert

Construction timed to avoid spawning

Aquatic/upland wildlife passages preserved

Hydraulic and navigation capacity retained

Analysis of the effects of the project on the stream/waterway by a qualified professional

Designated trout stream, or contain endangered or threatened species

Status of additional consultation with LMRWD

Criteria

Is the DNR manual "Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-0001" followed

Maintenance agreement

Additional Notes

Technical Memorandum

To: Linda Loomis, Administrator
Lower Minnesota River Watershed District

From: Shane Soukup, Water Resources Scientist
Della Schall Young, CPESC, PMP

Date: November 8, 2019

Re: Trunk Highway 101 Improvements—Final Plan and Response to October 29, 2019, Comments (LMRWD Project No. 2019_065)

On October 29, 2019, the Lower Minnesota River Watershed District (District) provided Kimley-Horn and Associates, Inc. (Kimley-Horn), with preliminary comments on the Trunk Highway 101 Improvements Project (Project). On October 31, 2019, Kimley-Horn responded to those preliminary comments by providing the following: final plans, an amended drainage report, and responses to the comments provided by Young Environmental Consulting Group (Young Environmental) on the District's behalf.

Young Environmental reviewed the information submitted and found that Kimley-Horn satisfactorily addressed the preliminary comments. One key item provided by Kimley-Horn was the draft maintenance agreement. The agreement highlighted the following, which should be considered as a model for future projects:

- **Responsible Party:** The City of Chanhassen, at its cost, will inspect and maintain the stormwater facilities as shown in the site plan.
- **Maintenance Schedule and Required Tasks:**
 - Filtration basins will be inspected annually to validate live storage is within capacity or above the designed volume.
 - Invasive vegetation, excess sediment, and debris will be removed from Best Management Practices (BMPs). The BMPs will be maintained as needed to ensure the facilities operate as designed.

- Grit chambers, sump catch basins, and sump manholes will be inspected in the spring, summer, and fall of each year. Sediment and debris will be removed, as needed, to ensure the facilities operate as designed.

Young Environmental recommends approval of the Project based on the information provided. If the Project significantly changes, a narrative summarizing the proposed change and how they maintain compliance with the District's standards must be submitted to the District.

Enclosure: LMRWD 2019_065 Project Review Output



LOWER MINNESOTA RIVER WATERSHED DISTRICT PROJECT REVIEW

Project ID	<input type="text" value="2019_065"/>	Authorization Agent	<input type="text" value="Ron Leaf"/>
Project Name	<input type="text" value="TH 101 Chanhassen"/>	Email Address	<input type="text" value="Ron.Leaf@kimley-horn.com"/>
Organization	<input type="text" value="City of Chanhassen"/>	Phone Number	<input type="text" value="(612) 249-9742"/>

Notes

Project Summary

Anticipated start date	<input type="text" value="7/22/2019 2:23:46 PM"/>	Date received	<input type="text" value="9/4/2019"/>
Project location	<input type="text" value="TH101 in Chanhassen, in bet"/>	Project map included?	<input checked="" type="checkbox"/>
Project acres	<input type="text" value="32"/>	Is the project in an unincorporated area?	<input type="checkbox"/>
Total disturbed acres	<input type="text" value="32"/>	Is it located in a High Value Resource Area	<input type="checkbox"/>
New impervious acres	<input type="text" value="8.2"/>	Is it located in a Steep Slope Overlay District	<input checked="" type="checkbox"/>
Local Partners		Other Sensitive Area	

Project Description

This project includes reconstruction and realignment of TH 101 from a two-lane undivided roadway to a four-lane divided roadway with turn lanes at key intersections. A paved multi-use trail is proposed along both sides of TH101 from Pioneer Trail to Creekwood Drive and along the east side only from Creekwood Drive to CSAH 61.

Additional Notes

Review Status

Is this a preliminary review?

Is this a permit review?

Does this project require a technical review

Project Status

Project is pending

Project is active

Project has been archived

Erosion and Sediment Control Standard

This project triggers one or more thresholds for this standard.

<u>Triggers</u>		<u>Criteria</u>	
Disturbs one acre plus	<input checked="" type="checkbox"/>	Erosion and Sediment Control Plan	<input checked="" type="checkbox"/>
Located within the HVRA Overlay District	<input type="checkbox"/>	Inspection and maintenance addressed	<input checked="" type="checkbox"/>
Meets the HVRA threshold	<input type="checkbox"/>	NPDES/SDS General Construction Permit documentation	<input type="checkbox"/>

The documentation requirements for this standard have not been met. A review cannot be completed until all required documentation has been submitted.

Additional Notes

October 23, 2019 - Contractor has not yet provides the NPDES General Construction Permit documentation.

October 31, 2019 - Project documents have been updated to require submission of General Permit to the District within 48 hours of receiving.

October 23, 2019 - There is one requirement that isn't addressed within the information received - applicable soils decompaction, assuming there are soils that will need to be doughened up or decompacted to promote infiltration, reduce erosion, trap sediment, and prepare the soil for seeding - Noted on October 23rd, 2019.

October 31, 2019 - Project SWPPP has been amended to include required language.

Floodplain Drainage Alteration Standard

This standard does not apply.

<u>Triggers</u>			
Changes in water surface elevation of floodplain	<input type="checkbox"/>	Calculations by a professional engineer demonstrating no decrease to conveyance	<input type="checkbox"/>
<i>If yes,</i> Compensatory storage equal or greater than volume of fill	<input type="checkbox"/>	Conveyance capacity decrease below 100yr high water elevation	<input type="checkbox"/>
<i>If no,</i> No-rise certification by a professional engineer	<input checked="" type="checkbox"/>	Temporary placement of fill	<input type="checkbox"/>
<u>Criteria</u>		Adverse impacts to water quality, habitat, or fisheries	<input type="checkbox"/>
Net decrease of storage capacity OR increase in 100yr elevation	<input type="checkbox"/>	New structures have 2ft+ between lowest enclosed area's floor and 100yr high water elevation	<input type="checkbox"/>
Will floodplain storage be created	<input type="checkbox"/>		

Additional Notes

The Project has a proposed trail bridge that is within the Zone A Floodplain designated by the Federal Emergency Management Agency. However, all work is planned to be completed above the elevation of the 100-year flood. Nevertheless, a no-rise certificatio

Stormwater Management Standard

This project triggers one or more thresholds for this standard.

Type of project Linear

Triggers

One acre or more of impervious surface

Are trout streams protected

HVRA Overlay District

Located within the HVRA Overlay District

Rate control exceeded for 1, 2, 10, and 100yr 24-hour event

If yes, Meets the HVRA threshold

Projects with 1+ acres of new impervious: are MPCA's Construction General Permit

Criteria

Post-construction runoff rates exceed existing rates for 1, 2, 10, and 100yr 24-hour events?

Net increase of TP

Net increase of TSS

Is maintenance adequately addressed

New Development: the post-construction runoff volume retained onsite equal 1.1 inches of runoff from impervious surfaces

Project will result in a net decrease of TP and TSS

Redevelopment: the project will capture and retain onsite 1.1 inches from new/fully reconstructed impervious surface

Volume control requirements sufficiently addressed

Linear: the site will capture and retain (a) 0.55 inches of runoff from new/fully reconstructed impervious, or (b) 1.1 inches of runoff from the net increase in impervious area

The submission included the required documentation for this standard.

Alternative Infiltration Measures

Additional Notes

October 23, 2019 - maintenance requirements were not provided with the preliminary plans.

October 31, 2019 - a draft maintenance plan was provided by Kimley-Horn satisfying the District's

maintenance requirements.

October 23, 2019 - District requested clarification regarding modifications made to the filtration basins and design specs at an outlet in the east ravine.

October 31, 2019 - Kimley-Horn updated design specifications and provided adequate explanations of the modifications made to the filtration basins.

Shoreline and Streambank Alteration Standard

This standard does not apply.

Triggers

Work or alternation below the ordinary high-water mark	<input type="checkbox"/>	Are retaining walls used	<input type="checkbox"/>
Work within the bankfull height of a watercourse	<input type="checkbox"/>	Is there a demonstrated need for the wall(s)	<input type="checkbox"/>
Addition of new material or structural changes to the shoreline or streambank	<input type="checkbox"/>	Has a registered engineer certified the wall design	<input type="checkbox"/>
		Will riprap be placed and sized appropriately	<input type="checkbox"/>

Criteria

Obtained a DNR permit	<input type="checkbox"/>	Will transitional layers meet requirements	<input type="checkbox"/>
Is a copy of the permit included	<input type="checkbox"/>	Will riprap meet height requirements	<input type="checkbox"/>
Shoreline stabilized with minimal encroachment/interference of flow or navigation	<input type="checkbox"/>	Will shoreline erosion protection account for soils, wave energy, and ice pressure/movement	<input type="checkbox"/>

The documentation requirements for this standard have not been met. A review cannot be completed until all required documentation has been submitted.

Additional Notes

Steep Slopes Standard

This project triggers one or more thresholds for this standard.

Triggers

- Is the project in the Steep Slopes Overlay District
- Excavation of 50 cubic yards+ of earth
- Displacement of 5,000 sq. ft+ of earth
- Vegetation removal or displacement
- Activities that require LGU permits

Criteria

- Has the project been certified by a professional engineer
- Adverse impact to waterbodies
- Unstable slope conditions
- Degradation of water quality
- Preservation of existing hydrology
- New discharge points along slope

The submission included the required documentation for this standard.

Additional Notes

The project route stormwater flows below 25-year rainfall event to the trunk line south into PCH Pond. The design significantly reduced proposed peak discharge rates for all events for existing flow rates through the east ravine discharge point. Bramble Pond is proposed in a Steep Slopes Overlay District and as a result has been designed as a lined filtration basin.

Water Appropriations Standard

This standard does not apply.

Triggers

- Is the project in the HVRA Overlay District
- Will the project withdrawal more than 10,000 gallons per day
- Will the project withdrawal more than 1 million gallons per year

Criteria

- Have documents demonstrated no net change in groundwater levels to adjacent fens

- Did the project apply for a DNR Water Appropriations Permit
- Is a copy of the DNR Water Appropriations Permit included with the submission documents
- Has the LMRWD reviewed the DNR Water Appropriations Permit
- Discharge management plan
- Has the plan been reviewed AND accepted by the LMRWD

Additional Notes

Water Crossings Standard

This standard does not apply.

Triggers

Horizontal drilling under a road, highway, utility, bridge, boardwalk or associated structure that is in contact with the bed/bank of a waterbody

Placement of a road, highway, utility, bridge, boardwalk or associated structure in contact with the bed/bank of a waterbody

Altering a waterbody to enclose it within a pipe or culvert

Construction timed to avoid spawning

Aquatic/upland wildlife passages preserved

Hydraulic and navigation capacity retained

Analysis of the effects of the project on the stream/waterway by a qualified professional

Designated trout stream, or contain endangered or threatened species

Status of additional consultation with LMRWD

Criteria

Is the DNR manual "Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-0001" followed

Maintenance agreement

The documentation requirements for this standard have not been met. A review cannot be completed until all required documentation has been submitted.

Additional Notes

Memorandum



DATE: November 6, 2019 *(Email transmittal)*

TO: Linda Loomis – Administrator, LMRWD

FROM: Shane Soukup, Water Resources Scientist
Della Schall Young, PMP, CPESC

SUBJECT: Stormwater Visit Summary
November 1, 2019, 7:40 a.m.–8:40 a.m.
CSAH 61 – Flying Cloud Drive
Owner – Hennepin County and Contractor – Ames Construction

WEATHER: 30°F, cloudy – per AccuWeather

SITE CONDITIONS/PHASE

Construction was active for roadbed preparation, retaining walls, erosion and sediment control, etc. The bridge is now open and usable. Majority of road is now paved including on the western edge. Effort is underway to stabilize the site and prepare for construction to cease for the winter.

PRESENT

Shane Soukup – Young Environmental Consulting Group

PURPOSE

To observe stormwater management/erosion control techniques being implemented by Ames Construction on the reconstruction of Flying Cloud Drive/County State Aide Highway (CSAH) 61 from Highway 101 to Charlson Road in the cities of Eden Prairie and Chanhassen and in Carver and Hennepin counties.

GENERAL NOTES/OBSERVATIONS

- Inspection began with a check-in at the Contractor's trailer. Photos of the inspection log and rain log were taken.
- Crews had begun work during the site visit.
- Active construction made the road unsafe to pass from approximately 0.4 miles east of the construction trailer to the Richard T. Anderson Conservatory.
- Pictures were taken of the different best management practices (BMPs) being used to prevent and/or minimize sediment and other construction material from reaching adjacent water resources (Rice Lake, Grass Lake, Riley Creek, and Minnesota River).
- Majority of Flying Cloud Drive as well as feeder routes including Dell Road are now paved.
- Extensive use of rock as a BMP that appears generally effective when placed properly and maintained.
- Evidence of site wide seeding (see photos).

Memorandum *(cont'd)*

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- Rock BMP applied to an area of concern noted in previous reports (photos 12 and 13).
- Vegetation is taking hold in infiltration areas (photos 34, 35, 40, 41).
- Small portion of slopes still requiring seed (photos 73 and 74).
- Sediment levels at the outlets of box culvert appear to be maintained below the ½ the height of the silt fence (photos 14, 30-32, 43-45).
- Sediment laden water appears to be leaving the culvert located near Richard T. Anderson Conservatory (photos 16, 17, 20).
- Exposed soil near Riley Creek (photo 84).

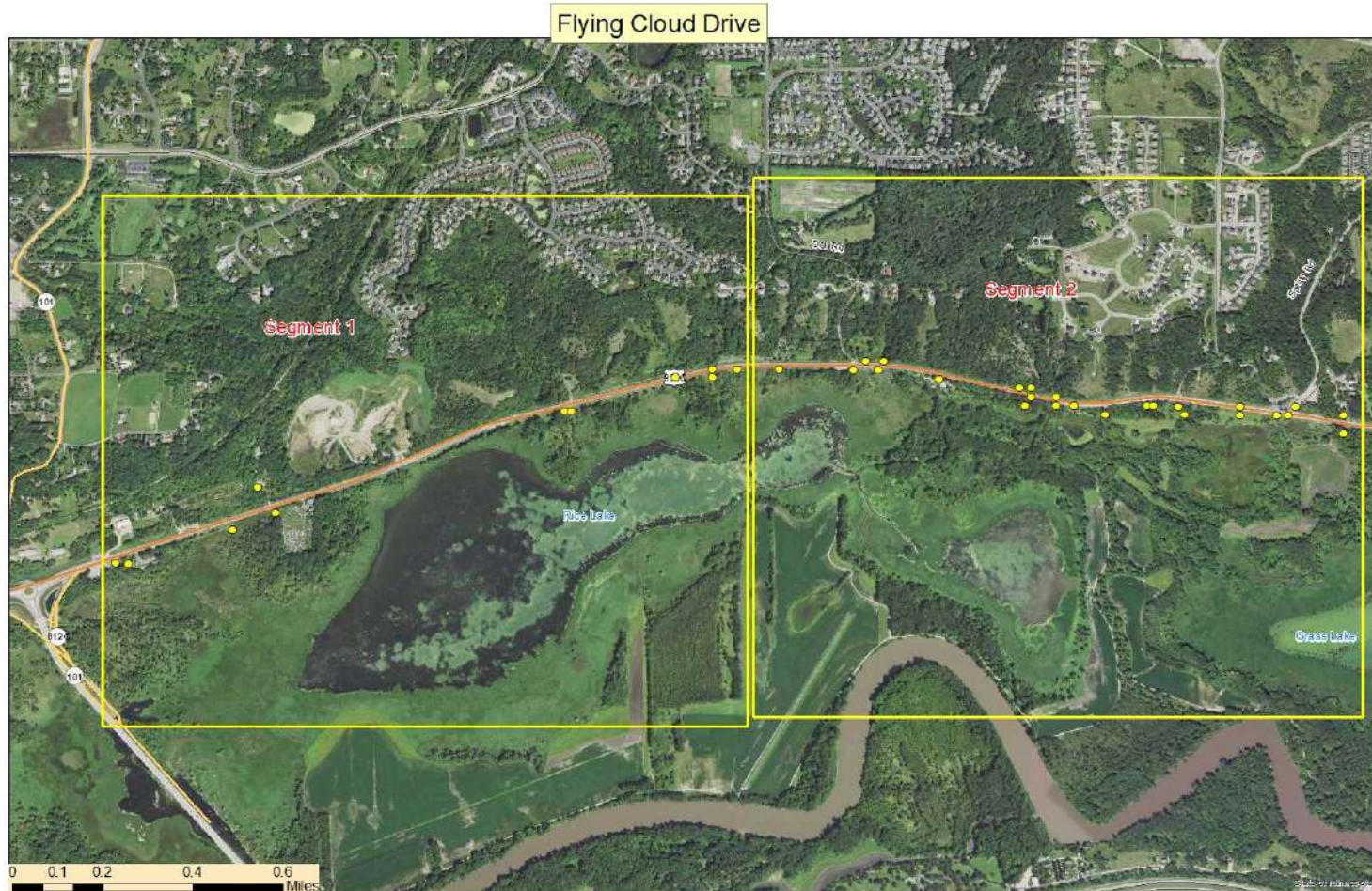
RECOMMENDATIONS

- Stabilize slopes (photos 73 and 74).
- Stabilize soil near Riley Creek (photo 84).
- Keep drainage areas clear of debris (photo 48).
- Continue monitoring water leaving culvert near Richard T. Anderson Conservatory as it appears to be transporting sediment (photos 16, 17, 20). Solution may be necessary to slow the sediment transport.
- Continue to monitor sediment levels at the outlets of box culverts.
- Share recommendations with Ames staff.
- Attend weekly project construction management meetings.
- Continue visits to the project site every other week until frozen ground conditions occur, then reduce site visits to once a month.

Memorandum



Below is a map indicating where photos were taken. Photos include observations, coordinates, and an arrow indicating north (lower right corner).



Memorandum

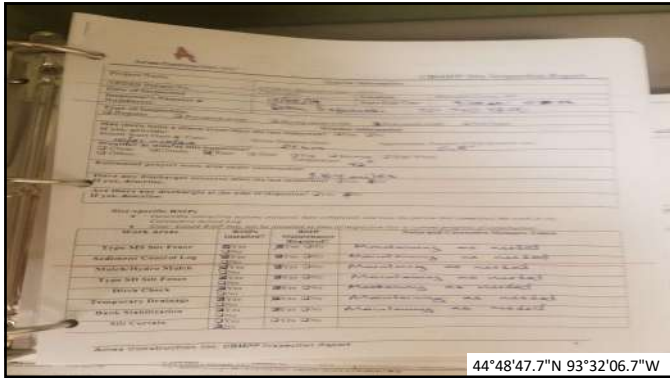
Flying Cloud Drive Segment 1



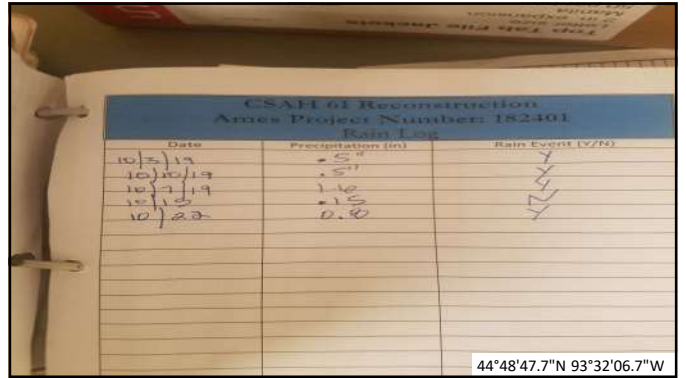
Memorandum (cont'd)

Flying Cloud Drive Segment 2





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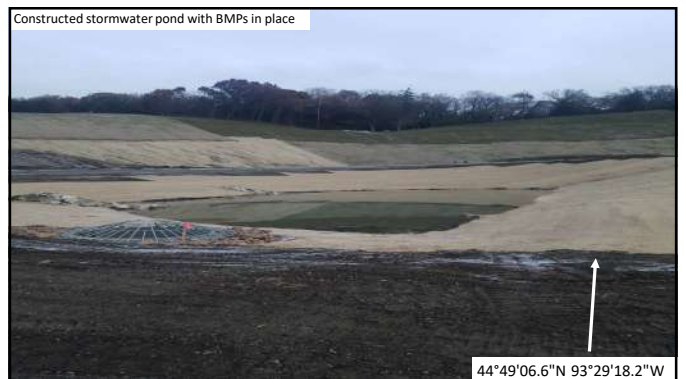
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