



LOWER MINNESOTA RIVER WATERSHED DISTRICT

August 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

LMRWD records management

Interns from Young Environmental Consulting Group were able to spend several days in the LMRWD office going through mountains of files. Files were sorted through, reorganized and purged of old documents according to the "General Records Retention Schedule for Minnesota Cities". Many of the documents were not ones that needed to be kept at all.

LMRWD Exempt from Sales Tax

The MN State Legislature passed legislation in 2017 that exempted watershed district from state sales tax. Emily Javens from MAWD provided information explaining what the LMRWD needed to do to notify vendors that it is exempt. Appropriate documents have been provided to the company financing the copier, the copier maintenance company and with Tierney Brothers to make sure the District is not charged with sales tax.

Expenses that are incurred and reimbursement are not subject to the sales tax exemption, i.e. expenses incurred by contractors for the LMRWD, such as Naiad Consulting and Young Environmental Group must still pay sales tax.

Lower Minnesota River Watershed One Watershed One Plan

BWSR informed the LMRWD that the Lower Minnesota River Watershed HUC 8, was chosen for the next round of One Watershed One Plan (1W1P). The boundaries of the 1W1P are the western half of the HUC 8, stopping at Carver and Scott County borders. Technically the LMRWD is not a part of this area; however the outcome will directly impact us. Steve Christopher, the area hydrologist for the LMRWD said he asked that the LMRWD be informed of activities of the 1W1P.

Well capping in Scott County

Scott County informed the LMRWD that a deep well the LMRWD has been monitoring is being capped. The County apparently was not aware the LMRWD was monitoring the water level in the well and therefore did not notify the LMRWD until the week the contractor was scheduled to cap it.

We did not have time to evaluate the importance of the data acquired from the well monitoring.

Joint Carver/Scott Board meeting

Carver County and Scott County Boards plan to hold a joint meeting on August 27, 2019 at 10:00am at the Carver County Government Center. The LMRWD has been invited to the meeting to discuss with the Boards how the LMRWD interacts and works with both counties.

Article in Savage Pacer

A reporter from the Savage Pacer was in the audience at the Savage city Council meeting. She called the LMRWD for more information for an article she was writing regarding the dredge site. The article is attached.

Watershed Plan Projects

Eden Prairie Area #3 Stabilization: Braun Intertech has been asked to provide the raw data from the monitoring of the inclinometers. Once the raw has been received, Barr Engineering will review the data for QA/QC. Della not hearing from Braun - Braun was also concerned about the readings and have gone back prior years. We are still trying to get the information needed to check the data received.

Riley Creek Cooperative project/Lower Riley Creek restoration - Young Environmental Consulting completed its review of the project and the review is attached. Project website: <http://www.rpbcwd.org/whats-happening/projects/lower-riley-creek-ecological-restoration>

Seminary Fen ravine stabilization project: Kevin Bigalke called Friday, August 16 to say that a letter was being sent to the LMRWD that the Seminary Fen Grant will not be paid. Project website: <http://lowermnrivewd.org/projects/bwsr-clean-water-fund-grant-administration>

East Chaska Creek: (Carver County Watershed Based Funding): The 60% design is complete and LMRWD staff met with the city. The City will approve the project administratively. The Board of Manager will send a letter requesting the City's approval of the project. Staff is preparing a letter for the Board to approve and send to the city. Staff is in the process of getting approvals from the required permitting agencies. Project website: <http://lowermnrivewd.org/projects/east-chaska-creek-bank-stabilization>

Schroeder Acres Park (Scott County Watershed Based Funding): This project has not begun and staff developing a cooperative agreement between the city and the LMRWD. Project website: <http://lowermnrivewd.org/projects/schroeder-acres-parkeagle-creek-sub-watershed-stormwater-study>

Shakopee Downtown BMO Retrofit (Scott County Watershed Based Funding): This project has not begun and staff developing a cooperative agreement between the city and the LMRWD. Project website: <http://lowermnrivewd.org/projects/targeted-bmps-downtown-shakopee>

PLOC (Prior Lake Outlet Channel) Restoration (Scott County Watershed Based Funding): This project has not begun and staff developing a cooperative agreement between the city and the LMRWD. Project website: <http://lowermnrivewd.org/projects/prior-lake-outlet-channel-realignmentwetland-restoration>

Dakota County Fen Gap Analysis and Conceptual Model (Dakota County Watershed Based Funding): Staff has completed the first phase of this project which was a GAPS Analysis. Staff will now begin the relevés. A kick-off for this work was held Friday, August 16th with DNR staff. Staff is preparing a scope of work for the relevés. Project website: <http://lowermnrivewd.org/projects/dakota-county-fen-study-management-plan>

Hennepin County Chloride Project (Hennepin County Watershed Based Funding): No new information to share since last update.

Vegetation Management Plan: Staff has prepared a one page brochure to have available for residents when the LMRWD tables at an event. The brochure will direct residents to the Vegetation Management Plan.

Sustainable Lake Management Plan - Trout Lakes: This project is currently on hold while staff works on other projects.

Geomorphic Assessment of Trout Streams: The report was presented August 14th. Thank you to Managers Raby and Frey for attending. All documentation will be assembled (the report and all supporting documentation) will be uploaded to the LMRWD website

Spring Creek Cost Share: The initial staff report is complete. We are waiting for the engineer's evaluation.

West Chaska Creek Re-meander: Carver County WMO reported that work is underway for phase one of this project. CCWMO said that would like to use the LMRWD funding for phase 2 of the project. Staff is working on a cooperative agreement between CCWMO and LMRWD.

Project Reviews

MNDOT Trail - 494: MNDOT is proposing routine maintenance rehabilitating the trail near the TH 494 Minnesota River Bridge. The trail is to be reconstructed with no major change to overall drainage patterns. The only change to the plans of note is to add 2 rows of bio-roll between the trail and river as well as inclusion of a SWPPP. The trail's area for reconstruction is 0.9 acre and the other associated earthwork is 0.39 acre of fill. This is above the LMRWD threshold of one acre, so staff reviewed the plans. A summary of the project and recommendations are attached.

MNDOT - TH5: MnDOT will be completing a preservation project on TH 5 between 34th Avenue and Mississippi River Bridge. The project is scheduled for 2020 construction.

The project is not located in a High Value Resource and is located in a Steep Slope. The work is being completed to address failing pipes and existing erosion issues. The summary of the LMRWD review is attached



City of Chanhassen - Moon Valley Gravel Pit

Moon Valley has applied for an Interim Use Permit for a mining operation. Moon Valley has been operating as a gravel pit and staging area for the Hennepin County Flying Cloud Drive project. Ames will be removing its equipment in the near future and the area used for staging will be restored. An area that has been mined will be restored and a new area will be opened up.

The LMRWD has requested and all restoration is completed before new mining is begun in another area.

City of Carver - Hawthorne Ridge

Hawthorn Ridge is a new development in the city of Carver. This site is 122 acres that will be developed into single family residential housing. The city has completed a hydrological study, which has been provided to us. Additional documentation has not been provided and it is not clear how storm water will be managed. There was a proposal to clean out a blocked culvert and use a series of check dams to regulate flow. The LMRWD was informed that the city decided to not use the configuration that included the check dams because of the expense involved. Engineers for the project have only told us that run-off will be less than the current condition. Staff has not been able verify this claim.

Metropolitan Airport Commission - Environmental Assessment Worksheet for MSP Concourse G Infill -

The LMRWD received an EAW for the proposed MSP Concourse G Infill project. Staff is still reviewing the EAW.

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 No new information to report since last update. 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: CenterPoint Energy Natural Gas Operations (CenterPoint Energy) is proposing to perform maintenance on existing natural gas pipelines and facilities at their Dakota Station in the City of Burnsville. This project is in one the LMRWD's High Value Resource Areas. The area of the project has been previously disturbed. It was confirmed that the project is outside wetlands and no dewatering is planned. A City of Burnsville Grading Permit will be obtained for the project. CenterPoint Energy has informed the LMRWD that dewatering will be needed on this project due to the amount of precipitation received this year.

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

City of Burnsville - Burnsville Sanitary Landfill: No new information to report since last update.

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

City of Chanhassen - TH 101 Improvements: The consultant for this project has scheduled a meeting with the Watershed Districts for August 27th. Project website:

<https://www.highway101improvements.com/>

City of Savage - 12113 Lynn Avenue: This project has been withdrawn as Mosaic is moving its facility to Hastings. Mosaic purchased the CF Brennan plant on the Mississippi River.

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

MNDOT - I494 Brush removal: No new information to report since last update.

MNDOT - TH 5 Signage projects: No new information to report since last update.

MPCA - MN River TSS TMDL: This TMDL Study is one of the four studies that the MPCA released for public for comment on July 22nd. Notice of these TMDL and WRAPS are featured as a news article on the LMRWD website: <http://www.lowermnriverwd.org/news/state-research-offers-fresh-look-troubled-minnesota-river>

City of Bloomington - MN Valley State Trail: A revision was made to the Wetland delineation for this project. 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.

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: Staff has been informed that the City of Richfield will not allow MNDOT to use Wood Lake for storm water storage. The LMRWD has not been informed how this will impact the project plans. Staff is waiting for the engineering reports before preparing a resolution to rescind the LMRWD Board's 2007 resolution.

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: - Staff has not received a response from Shakopee since the report on the ravine has been sent to them.

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

Fort Snelling - Dominion Housing: No new information to report since last update.

USACOE/USFWS - Bass Ponds, Marsh & Wetland: MNDNR has issued permits for this project. Project website: <https://www.scottcountymn.gov/1865/Bass-Ponds-EAW>

Upcoming meetings/events

- MN River Boat Tour - hosted by LMRWD, MPCA & Savage Chamber of Commerce - Wednesday, August 28, 2019, 3:30pm begin boarding at CHS, 6200 West Highway 13, Savage, MN, return to CHS 7:30/8:00pm
- Upper Mississippi River Waterway Association - Annual Meeting, Thursday, September 19, 2019, 5:30pm, Southview Country Club, 239 East Mendota Road, West St. Paul, MN
- Metro MAWD - Tuesday, October, 15, 7:00pm Cap Region Watershed District, 595 Aldine Street, St. Paul

Amid challenges, Savage river dredge site to see improvements

By Christine Schuster cschuster@swpub.com
Aug 14, 2019



The Lower Minnesota River Watershed District's dredge site at 12020 Vernon Avenue is on-track to see improvements by next fall. The site was purchased by the watershed district in 2006 to store and manage dredge materials pulled from the Minnesota River.

Photo by Christine Schuster

A 19-acre property with an important role in keeping the river clear for barges is on track to see \$1.3 million in improvements by next fall, bringing a silver lining to a year of challenges for river navigation.

“We are hoping to keep this a sustainable site,” said Linda Loomis, district administrator with The Lower Minnesota Watershed District.

The U.S. Army Corps of Engineers annually dredges around 60,000 cubic yards of river material from the 9-foot navigational channel and the private slips of Cargill, CHS and Savage Riverport. Since its establishment in 1960, the watershed district has been responsible for storing and figuring out what to do with the resulting pile of sediment.

The dredge material dries out along the banks of the Minnesota River on the Vernon Avenue site, purchased from Cargill in 2006. Then the watershed district finds buyers, typically construction companies looking for fill, or carries it to the landfill.

In 2014, the site neared capacity with 190,000 cubic yards of material. Loomis said today’s construction market is robust and district has been able to sell materials regularly and pay for its operations.

The planned improvements will reconfigure the site’s three storage areas and add permanent berms around each site. Loomis said this will help move materials in and out of the site, make it more durable and improve the drying process.

The Savage City Council unanimously approved the plans on Aug. 12.

The site is located in the floodway district, and engineers on the project confirmed the berms won’t make flooding worse for other properties. The operation’s previous permits required the watershed district to move the materials when a flood is coming, but Loomis said it wasn’t a practical plan and it had never been done.

In 2017, the watershed district received \$960,000 from the Legislature to go toward the \$1.3 million improvement project. Sen. Dan Hall, R-Burnsville, carried the legislation.

Hall said the channel plays a vital role in the transportation system, and barge traffic is “a lot safer and a lot cheaper” than other modes of transportation. He said he hopes to also see improvements to Highway 13 in the future with removing some traffic lights and adding overpasses.

'A challenging year'

Dredging brings its own set of variables to the web of challenges faced annually by those who operate and depend on barge traffic.

Sediment is increasing, Loomis said, because of increased rainfall and the farming of corn, soybeans and other crops that increase the flow of water to tributaries and the rivers and cause faster erosion.

This year, flooding downstream on the Mississippi River delayed Savage-bound barges until July.

High water also means dredging operations haven't happened this year, said Greg Oberle, the Savage terminal manager for CHS. However, he said, the dredging itself has little impact on their operations in the face of the real problem, flooding.

Loomis said dredging might take place in September when the water levels are lower. Last year, Corps of Engineers were pulled off the river because of high water before completing the task, she said.

Patrick Moes, a spokesman for the St. Paul district of the Corps of Engineers, said severe flooding brought sediment into unexpected areas and forced crews to return to areas that had already been dredged.

"We are just putting fires out," he said.

He added dredging needs to happen throughout the entire system all the way down to New Orleans, and the Corps is trying to maximize what can be done with limited resources. He's unsure when crews will make it to the Minnesota River in Savage.

"With respect to dredging, take normal and throw it out the window," he said.



Young Environmental Consulting
Group, LLC

Technical Memorandum

To: Linda Loomis, Administrator
Lower Minnesota River Watershed District

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

Date: August 8, 2019

Re: Lower Riley Creek Ecological Restoration – Funding Review Request

The Riley Purgatory Bluff Creek Watershed District (RPBCWD) requested \$150,000 from the Lower Minnesota River Watershed District (District) for the Lower Riley Creek Ecological Restoration Project (Project). A summary of the Project and Young Environmental Consulting Group's (Young Environmental) recommendation are presented below.

In 2016, the District and RPBCWD partnered on a study of Riley Creek (Creek) to identify feasible ways to improve the Creek's water quality. The study considered stabilizing banks along the Creek, reconnecting the Creek to its floodplain, and addressing scour and other velocity-related issues in the Creek within both the District's and RPBCWD's jurisdiction. The study recommended repairs in two reaches in RPBCWD and one in the District, just downstream of Flying Cloud Drive. As part of the fall 2018 Hennepin County Flying Cloud Drive reconstruction project, the area in the District downstream of Flying Cloud Drive was repaired. The purpose of the Project is to stabilize an eroding section of Lower Riley Creek and an accompanying ravine located between Pioneer Trail and Flying Cloud Drive in Eden Prairie, Minnesota, within the RPBCWD. The Lower Riley Creek is impaired for aquatic life, with turbidity being identified as the key stressor. Stabilizing this reach and the accompanying ravine will reduce streambank erosion, thereby reducing total suspended solids (TSS) and total phosphorus (TP) transport to downstream waterbodies, including the Minnesota River.

The \$1.52 million Project consists of installing rock riffles and log/rock step pools as well as stabilizing scarp toes and scarp surfaces. The scarp surfaces will be regraded and revegetated with appropriate vegetation; this method is expected to provide a natural solution while also limiting disturbance to surrounding areas. The ravine will be

stabilized by implementing riprap, cross checks, scarp toe, and scarp. The Project would reduce TSS by approximately 2.1 million pounds per year and TP by approximately 1,261 pounds per year entering the Minnesota River.

Summary and Recommendation

The Project addresses the following issues and goals outlined in the District's Watershed Management Plan:

- Issue 3: Water Quality
- Issue 5: Erosion and Sediment Control
- Issue 7: Commercial and Recreational Navigation
- Goal 2: Surface Water Management — to protect, improve, and restore surface water quality
- Goal 4: Unique Natural Resources Management — to protect and manage unique natural resources
- Goal 7: Erosion and Sediment Control — to manage erosion and control sediment discharge
- Goal 8: Commercial and Recreational Navigation — to maintain and improve navigation and recreational use of the Lower Minnesota River

The Project embodies the District's strategy to partner with local governments inside and outside of its jurisdiction to leverage resources to protect, preserve, and manage water and natural resources within the District. Because the Project goals align with the District's, Young Environmental recommends approving RPBCWD's request for \$150,000. The District should consider requiring water quality data from RPBCWD for the next ten years showing changes resulting from the Project.

Technical Memorandum

To: Linda Loomis, Administrator
Lower Minnesota River Watershed District

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

Date: August 8, 2019

Re: TH494 SP 1986-46 Trail Rehabilitation – Project Review

The Minnesota Department of Transportation (MNDOT) provided the Lower Minnesota River Watershed District (District) with the Stormwater Pollution Prevention Plan (SWPPP), SWPPP notes, and combined plan set for the Trunk Highway 494 SP 1986-46 Trail Rehabilitation Project (Project). MNDOT projects are subject to District review. As a result, the District asked Young Environmental Consulting Group (Young Environmental) to conduct the review on their behalf for compliance with standards outlined in Appendix K of the Watershed Management Plan.

A summary of Young Environmental's review of the Project is attached; the summary recommendation is presented below.

Summary Recommendation

The project as presented only triggers this District's Steep Slope Standard and addresses the requirements as following:

- The engineer's seal and signature on the plan sheets signify the engineer of record certifies the suitability of the slopes for the proposed construction.
- Erosion and sediment control best management practices (BMPs) will be used to stabilize the site, manage erosion, and contain sediment. BMPs were incorporated to prevent the transport of sediment-laden stormwater generated by the Project from traveling towards adjacent waterbodies including Gun Club Lake and the Minnesota River.
- Trail repair will be consistent with the existing typical section and alignment and will not result in major changes to drainage patterns.

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 it maintains compliance with the Steep Slope Standard, or other standards it may trigger with the changes, must be submitted to the District.

Enclosure: LMRWD 2019_069 Project Review Output



LOWER MINNESOTA RIVER WATERSHED DISTRICT PROJECT REVIEW

Project ID	<input type="text" value="2019_069"/>	Authorization Agent	<input type="text" value="Chris Chatfield"/>
Project Name	<input type="text" value="TH494 SP 1986-46 Trail Rehabilitation"/>	Email Address	<input type="text" value="christopher.chatfield@state.mn.us"/>
Organization	<input type="text" value="Minnesota Department of Transportation"/>	Phone Number	<input type="text" value="6512347365"/>

Notes

Project Summary

Anticipated start date	<input type="text" value="10/1/2019"/>	Is this a linear project?	<input checked="" type="checkbox"/>
Project location	<input type="text" value="Bloomington, Eagan"/>	Will there be more than one acre of new impervious?	<input type="checkbox"/>
Is the project in an unincorporated area?	<input type="checkbox"/>	Is it located in a High Value Resource Area	<input type="checkbox"/>
Project acres	<input type="text" value="0.9"/>	Is it located in a Steep Slope Overlay District	<input checked="" type="checkbox"/>
Total disturbed acres	<input type="text" value="0.39"/>	Other Sensitive Area	
Local Partners			

Project Description

Rehabilitation of existing trail. The trail is to be reconstructed with no major changes to overall drainage patterns.

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 standard does not apply.

Triggers

- Disturbs one acre plus
- Located within the HVRA Overlay District
- Meets the HVRA threshold

Documentation

- Erosion and Sediment Control Plan
- Inspection and maintenance addressed
- NPDES/SDS General Construction Permit documentation

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

Additional Notes

Floodplain Drainage Alteration Standard

This standard does not apply.

Triggers

- Changes in water surface elevation of floodplain
- If yes,* Compensatory storage equal or greater than volume of fill
- Net decrease of storage capacity OR increase in 100yr elevation
- Conveyance capacity decrease below 100yr high water elevation
- Temporary placement of fill
- Adverse impacts to water quality, habitat, or fisheries

Documentation

- No-rise certification by a professional engineer
- Calculations by a professional engineer demonstrating no decrease to conveyance

Additional Notes

Stormwater Management Standard

This standard does not apply.

Triggers

One acre or more of impervious surface

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

HVRA Overlay District

Located within the HVRA Overlay District

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

If yes, Meets the HVRA threshold

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

Documentation

Is maintenance adequately addressed

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

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

Project will result in a net decrease of TP and TSS

Are trout streams protected

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

Documentation

Obtained a DNR permit

Is a copy of the permit included in the project submission documents

Are retaining walls used

Is there a demonstrated need for the wall(s)

Has a registered engineer certified the wall design

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

Documentation

Has the project been certified by a professional engineer

The submission included the required documentation for this standard.

Additional Notes

No major changes to existing hydrology. Two rows of bioroll between the trail and the Minnesota river were added to mitigate/prevent transporting sediment-laden stormwater from the Project.

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

Documentation

Did the project apply for a DNR Water Appropriations Permit

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

Discharge management plan

Has the plan been reviewed AND accepted by the LMRWD

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

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

Documentation

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

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

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: August 8, 2019

Re: Trunk Highway 5 SP 2732-105 Review

TKDA (the Company) provided the Lower Minnesota River Watershed District (District) select plan sheets for the State Project Number 2732-105 (Project). These plan sheets contain Inplace Drainage, Proposed Drainage and Profiles, Contours, and Erosion/Turf Establishment. The Company has asked the District to review the provided plan sheets for compliance with District standards. Young Environmental Consulting Group (Young Environmental) reviewed the plan sheets on the District's behalf; the findings are below.

The Project is located on Trunk Highway 5 (TH 5) between 34th Avenue and the Mississippi River Bridge in St. Paul, Minnesota. The Project consists of concrete pavement rehabilitation, unbonded concrete overlay, bituminous mill and overlay, drainage replacement/preservation, bridge approach panels, guardrail replacement, and erosion control/turf establishment. The Project will excavate 50 cubic yards or more of earth within the District's Steep Slopes Overlay District, thereby triggering the Steep Slopes Standard. The Steep Slopes Standard (in Appendix K of the District's Watershed Management Plan) requires the Project to comply with the following:

- A. Land-disturbing activities as regulated in this section may occur within the Steep Slopes Overlay District, provided a qualified professional/professional engineer registered in the state of Minnesota certifies the suitability of the area for the proposed activities, structures, or uses resulting from the activities and the following requirements are addressed:
1. Minimum erosion and sediment control best management practices (BMPs) include site stabilization and slope restoration measures to ensure the proposed activity will not result in

- i. adverse impacts to adjacent and/or downstream properties or water bodies;
 - ii. unstable slopes conditions; and
 - iii. degradation of water quality due to erosion, sedimentation, flooding, and other damage.
2. Preservation of existing hydrology and drainage patterns. Land-disturbing activities may not result in any new water discharge points on steep slopes or along the bluff.

Findings:

- The engineer's seal and signature on the plan sheets signify that the engineer on record certifies the suitability of the slopes for the proposed construction.
- BMPs are proposed to stabilize the Project and assist with erosion control; these BMPs include silt fences, erosion control blankets, mulch, and seeding.
- The Project replaces five existing pipe flumes and will plug and abandon six existing pipe flumes; however, drainage at each discharge point will not be changed.

As proposed, the Project complies with the District's Steep Slopes Standard's requirements. Sufficient information was not provided to determine if the Project triggers the Erosion and Sediment Control Standard. If the Project significantly changes, a narrative summarizing the proposed change and how it maintains compliance with the Steep Slope Standard or other standards it may trigger with the changes must be drafted.

Enclosure: LMRWD 2019_068 Project Review Output



LOWER MINNESOTA RIVER WATERSHED DISTRICT PROJECT REVIEW

Project ID	<input type="text" value="2019_068"/>	Authorization Agent	<input type="text" value="Patrick McLarnon"/>
Project Name	<input type="text" value="TH 5 SP 2732-105"/>	Email Address	<input type="text" value="patrick.mclarnon@tkda.com"/>
Organization	<input type="text" value="Minnesota Department of Transportation"/>	Phone Number	<input type="text" value="6512924545"/>

Notes

Project Summary

Anticipated start date	<input type="text" value="10/1/2019"/>	Is this a linear project?	<input type="checkbox"/>
Project location	<input type="text" value="TH 5 between 34th Avenue a"/>	Will there be more than one acre of new impervious?	<input checked="" type="checkbox"/>
Is the project in an unincorporated area?	<input type="checkbox"/>	Is it located in a High Value Resource Area	<input type="checkbox"/>
Project acres	<input type="text" value="0"/>	Is it located in a Steep Slope Overlay District?	<input checked="" type="checkbox"/>
Total disturbed acres	<input type="text" value="0"/>	Other Sensitive Area	
Local Partners			

Project Description

The project generally includes concrete pavement rehabilitation' unbonded concrete overlay; bituminous mill and overlay; drainage replacement/preservation; bridge approach panels; guardrail replacement; and erosion control/turf establishment.

Additional Notes

Total project area and total disturbed area was not included in available information.

Review Status

Is this a preliminary review?	<input checked="" type="checkbox"/>
Is this a permit review?	<input type="checkbox"/>
Does this project require a technical review	<input type="checkbox"/>

Project Status

Project is pending	<input type="checkbox"/>
Project is active	<input type="checkbox"/>
Project has been archived	<input type="checkbox"/>

Erosion and Sediment Control Standard

This standard does not apply.

Triggers

- Disturbs one acre plus
- Located within the HVRA Overlay District
- Meets the HVRA threshold

Documentation

- Erosion and Sediment Control Plan
- Inspection and maintenance addressed
- NPDES/SDS General Construction Permit documentation

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

Additional Notes

Sufficient information was not provided to determine if the Erosion and Sediment Control Standard is applicable

Floodplain Drainage Alteration Standard

This standard does not apply.

Triggers

- Changes in water surface elevation of floodplain
- If yes,* Compensatory storage equal or greater than volume of fill
- Net decrease of storage capacity OR increase in 100yr elevation
- Conveyance capacity decrease below 100yr high water elevation
- Temporary placement of fill
- Adverse impacts to water quality, habitat, or fisheries

Documentation

- No-rise certification by a professional engineer
- Calculations by a professional engineer demonstrating no decrease to conveyance

Additional Notes

Stormwater Management Standard

This standard does not apply.

Type of project Linear

Triggers

One acre or more of impervious surface

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

HVRA Overlay District

Located within the HVRA Overlay District

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

If yes, Meets the HVRA threshold

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

Documentation

Is maintenance adequately addressed

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

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

Project will result in a net decrease of TP and TSS

Are trout streams protected

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

Documentation

Obtained a DNR permit

Is a copy of the permit included in the project submission documents

Are retaining walls used

Is there a demonstrated need for the wall(s)

Has a registered engineer certified the wall design

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

Documentation

Has the project been certified by a professional engineer

The submission included the required documentation for this standard.

Additional Notes

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

Documentation

Did the project apply for a DNR Water Appropriations Permit

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

Discharge management plan

Has the plan been reviewed AND accepted by the LMRWD

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

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

Documentation

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

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

Maintenance agreement

Additional Notes

Memorandum



DATE: August 16, 2019

(Email transmittal)

TO: Linda Loomis – Administrator, LMRWD

FROM: Shane Soukup, Water Resources Scientist

SUBJECT: Stormwater Visit Summary
August 9, 2019, 5:40 a.m.–7:00 a.m.
CSAH 61 – Flying Cloud Drive
Owner – Hennepin County and Contractor – Ames Construction

WEATHER: 65°F, clear – per AccuWeather

SITE CONDITIONS/PHASE

Construction was active for road base pylons, retaining walls, bridge, erosion and sediment control, etc.

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

- Checked construction trailer and took photos of the inspection log and rain log.
- Crews had begun work during the site visit.
- Drove from the construction trailer to Dell Road, where active construction made it unsafe to travel further. Section between Dell Road and Spring Road was inaccessible. Photos were then taken at the intersection of Spring Road and Flying Cloud Drive, east and west of the intersection.
- 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).
- Extensive use of plastic and rock as BMPs and that appeared generally effective when placed properly and maintained.
- Vegetation has taken hold on most landside slopes. However, there are areas along the slopes that show signs of erosion/sluffing (photos 10, 11, 14, 15, 69, 70).

Memorandum *(cont'd)*

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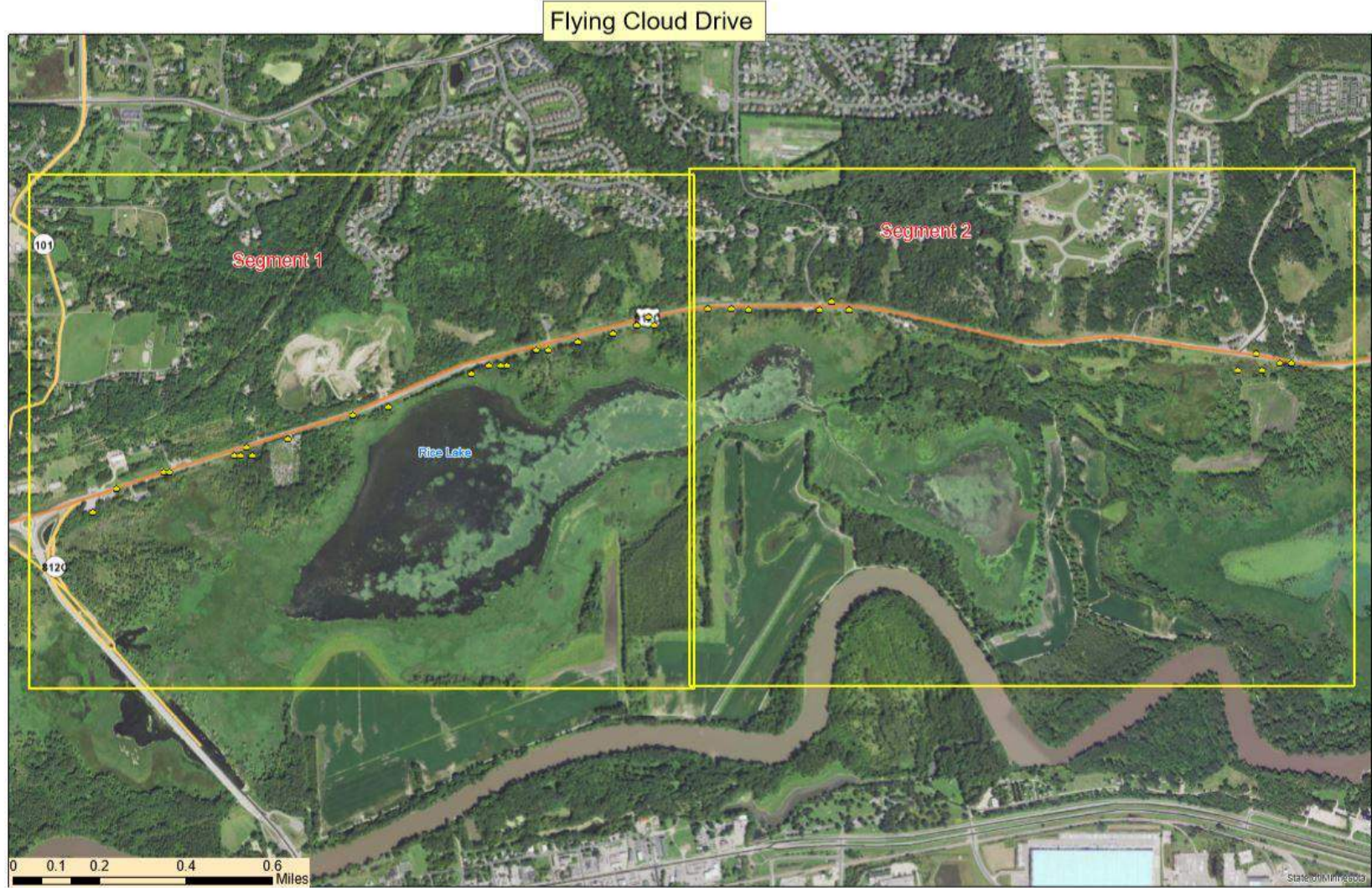
- New BMPs in place (photos 5-7).
- Landside slopes in photos 14 and 15 have had exposed soil for over 14 calendar days and has signs of erosion.
- Vegetation on recently graded slopes beginning to take hold (photos 53-55, 64-67, 78-80)
- Silt fence is down and appears to have failed due to excessive sediment (photo 24).

RECOMMENDATIONS

- Landside slopes in photos 14 and 15 have been exposed for over 14 calendar days which is in violation of the NPDES Construction Stormwater General Permit. These slopes should be stabilized immediately.
- Consider additional BMPs to stabilize slopes near Grass Lake and Lions Tap (photos 78-80).
- Maintain and repair BMPs that have failed.
- Keep drainage areas clear of debris.
- Attend weekly project construction management meetings.
- Continue every other week visits to the project site.

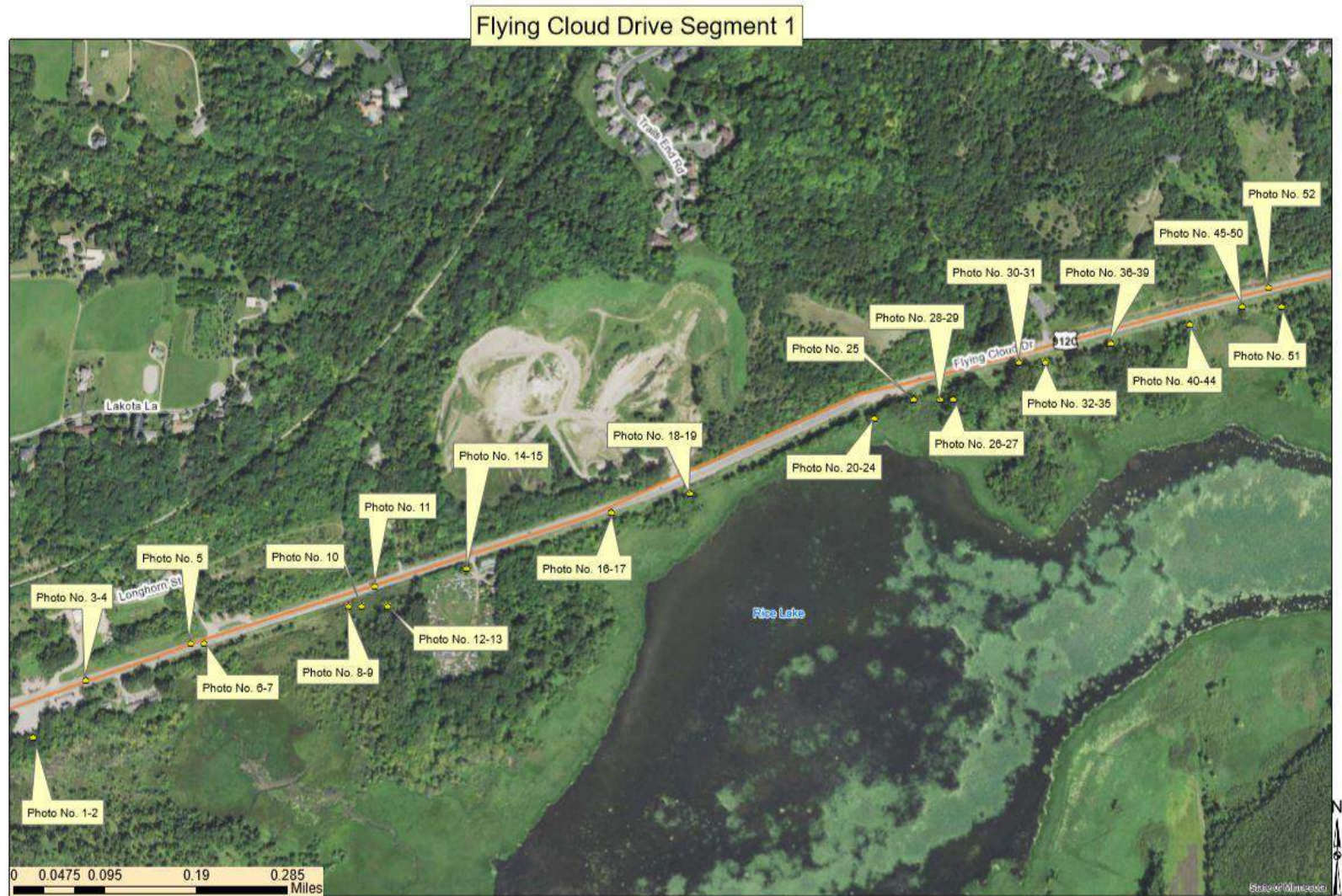
Memorandum

Below is a map indicating where photos were taken. Photos include coordinates and a white arrow indicating north.



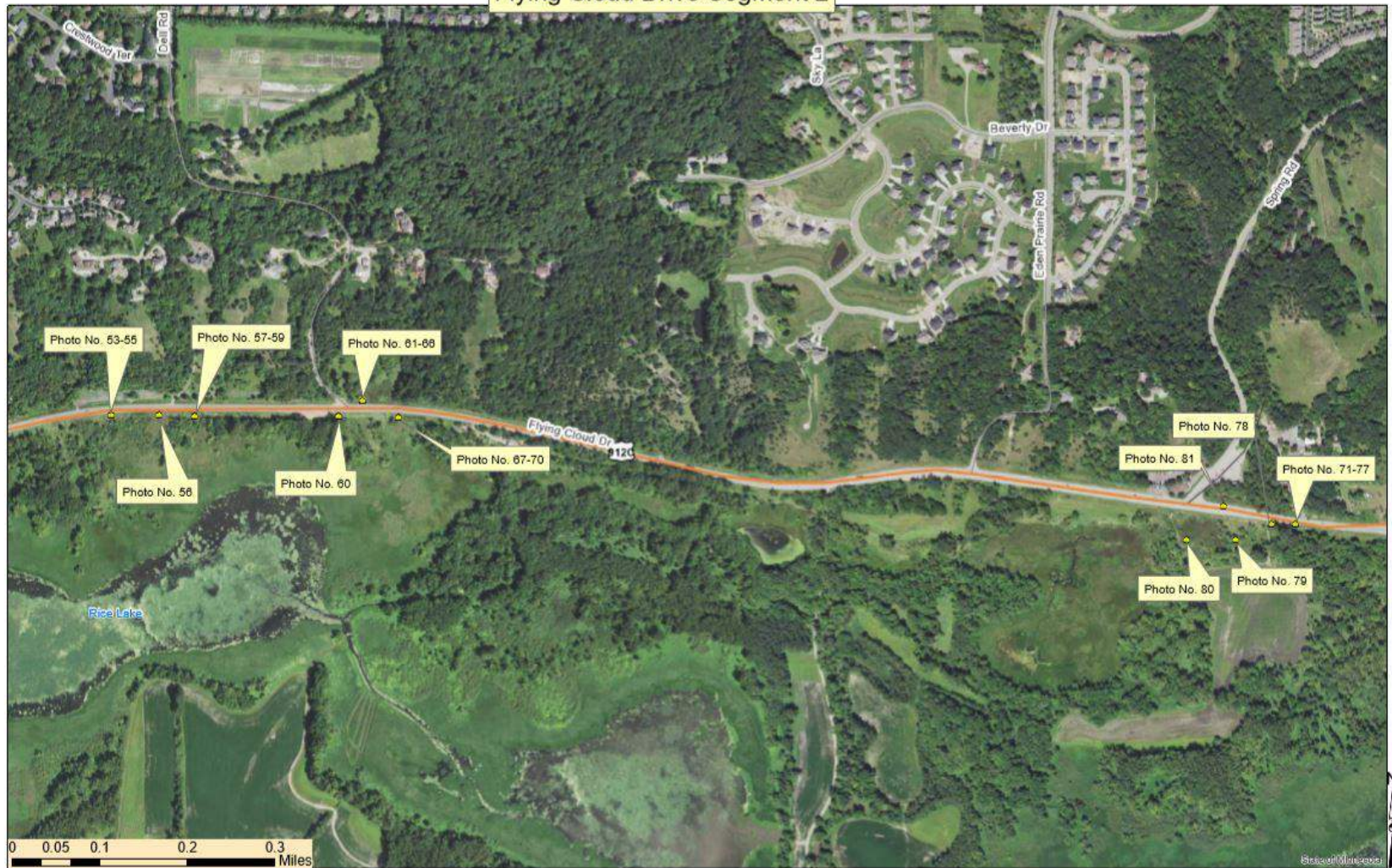
Memorandum (cont'd)

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Memorandum (cont'd)

Flying Cloud Drive Segment 2



**CSAH 61 Reconstruction
Ames Project Number: 182401
Rain Log**

Date	Precipitation (in)	Rain Event (Y/N)
7/1/19	.4"	Y Y Y Y Y Y
7/9/19	.4"	
7/15/19	2.07"	
7/20/19	2.7"	
7/28/19	0.8"	
8/5/19	0.9" (not 0.89 inches)	

44°48'45.6"N 93°32'09.0"W

1

CRISPE Site Inspection Report

Project Name: _____
 Date of Inspection: 8/16/19
 Inspector: _____
 Location: _____

Site Description: _____
 Work Area: _____
 Safety: _____
 Environmental: _____
 Other: _____

Site-specific MAPS: _____

Item	Inspected?	Maintained?	Notes
Signs	Y	Y	
Lighting	Y	Y	
Drainage	Y	Y	
Grading	Y	Y	
Other	Y	Y	

44°48'45.6"N 93°32'09.0"W

2



44°48'48.3"N 93°32'05.9"W

3



44°48'48.2"N 93°32'05.8"W

4



44°48'50.2"N 93°31'57.3"W

5



44°48'50.0"N 93°31'56.1"W

6



7



8



9



10



11



12



13



14



15



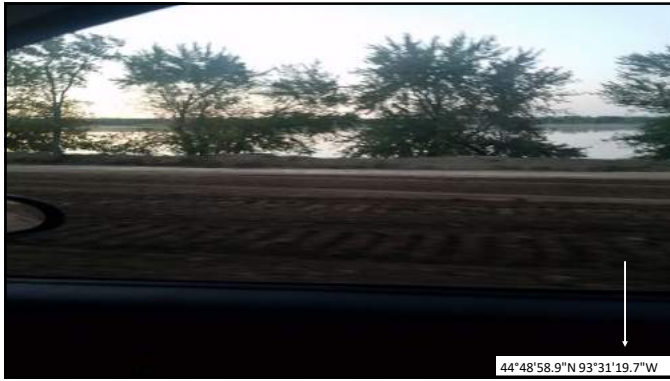
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