



Consulting Engineers P.A.

July 1, 2026

James Shoberg, PLA
City of Duluth
1532 W. Michigan Street
Duluth, MN 55802

**Re: 25-99163 Professional Engineering & Design Services for 2023 – 2024 Flood Damages
Amendment #1 Request**
AMI Project # 251009

Mr. Shoberg,

The following Amendment Request has been prepared for the City of Duluth 2023-2024 Flood Damage project. AMI Consulting Engineers (AMI) currently has a Contract with the City to provide preliminary and final design documents, permitting, bidding, and construction survey and layout for this project. AMI made assumptions to the project schedule based on the information provided in the RFP (see Attachment #1 for AMI's proposal).

AMI spent a significant amount of time confirming the accuracy of the FEMA documentation by visiting the sites and double checking the information provided in the Site Inspection Reports and Damage Descriptions and Dimensions files in Grants Portal. AMI found numerous errors in site locations, damage description errors such as incorrect culvert sizing/material quantities, and sites that work had already been completed and undocumented (see Attachment #2 for documented errors). AMI appreciates working with the City on this project and in turn will absorb these additional costs.

AMI has provided 4 additional items requested to be modified in the contract.

Item No. 1 - Project Schedule Change

The current contract has the Construction Administration and Inspections Phase being completed by June 30, 2026. AMI proposes extending this deadline to June 30, 2027, given the number of project sites needing to be constructed and final permits are in the process of being completed.

Item No. 2 – 2026 Permitting Scope Change

The MNDNR permits require additional work outside of AMI's assumptions highlighted on pages 16 and 17 in AMI's proposal. Based on the information provided by the RFP, AMI assumed that most sites located in the flood plain or on public waters would not require hydraulic modeling or letters of map change and that a letter of professional opinion for a no-rise would be sufficient for sites that would be replaced in-kind (culverts and boardwalks).

The City of Duluth General Permit, issued 04/16/2025, and the General Permit checklist require topographic survey of all culvert sites along with hydraulic reports, plan views, and cross-sections. The topographic surveys would focus on the upstream and downstream ends of each

culvert to achieve a longitudinal profile. These criteria will be applied to 12 sites that were expected to not need hydraulic modeling or survey.

DNR Sites Requiring Additional Survey and Modeling: 12 Sites

- Lester Ski Trails Site #6
- Lester Ski Trails Site #10
- Lester Ski Trails Site #11
- Lester Ski Trails Site #12
- Tree Farm
- Hartley Nature Center
- Lester Concrete Snowmobile Bridge
- Chester Hiking Trails Below Skyline Site #7
- Piedmont Park Snowmobile Trail Site #2
- Piedmont Park Nordic Trail Site #8a-d
- Piedmont Park Nordic Trail Site #7a-b
- Brewer Haines Snowmobile Bridge

Through additional coordination and negotiation efforts with the MNDNR, AMI was able to reduce the drafting efforts to just longitudinal profiles. These profiles along with our typical culvert detail and KMZ file will satisfy the DNR requirements. This reduced the amount of time required on the DNR's General Permit Checklist items by 20 %.

In November of 2023 the MPCA deemed Lake Superior and its tributaries outstanding resources to the state of Minnesota which now requires the DNR to send all permit information over to the MPCA for additional review. During the permitting process the MPCA works closely with USACE as well as notifying neighboring property owners and local tribes of the proposed work. The MPCA 401 WQC permitting was outside of AMI's assumptions (see pages 16 and 17 in AMI's proposal). This is an extensive permit process that requires a pre-application meeting, multiple permit forms, and a 120-day comment period. This permitting process is applied to 16 sites. The MPCA also required hydraulic modeling and shear stress analysis of bank stabilization efforts.

MPCA Permits Required: 16 Permits

- Amity Creek Southside Trail
- Amity Trail Site #1
- Amity Trail Site #2
- Lester Ski Trails Site #6
- Lester Ski Trail Site #10
- Lester Ski Trail Site #11
- Lester Snowmobile Trail Site #1
- Tree Farm
- Lester River Concrete Snowmobile Bridge
- Lester River Pedestrian Bridge
- Brewery Creek Culvert
- Brewer Haines Snowmobile Bridge
- Piedmont Park Nordic Trail Site #07a-b
- Piedmont Park Nordic Trail Site #08a-d

- Piedmont Snowmobile Trail Site #2
- Lake Superior Zoo Kingsbury Bridge Site #3a

MPCA Permits AMI had Eliminated through Coordination: 10 Permits

- Chester Below Skyline Site #7
- Hartley Nature Center
- Piedmont Site 3
- Piedmont Site 4
- Piedmont Site 5
- Piedmont Site 6
- Spirit Mountain Sites 2,3b
- Spirit Mountain Sites 3,3a
- Brewery Creek Culvert
- Lincoln Park

AMI assumed all City Permits would be the contractor's responsibility as highlighted on page 17 of AMI's proposal. To expedite the permitting process for the contractor to start working as soon as one was selected through the bidding phase, AMI completed 42 Shoreland Permits and 1 County Ditch Permit with the City of Duluth and paid for the permit fees (permit fee receipt in Attachment 4). This coordination effort also created the framework on groupings for which the contractor needed to submit the remaining city permits. A list of the shoreland permits completed is provided below.

City Shoreland Permits: 43 Permits

- Amity Creek Southside Trail
- Amity Trail Site #1
- Amity Trail Site #2
- Lester River Hiking Trail (Both City and County Permit)
- Amity Creek Hawk Ridge Trail
- Lester Ski Trails Site #4
- Lester Ski Trails Site #5
- Lester Ski Trails Site #6
- Lester Ski Trail Site #10
- Lester Ski Trail Site #11
- Lester Snowmobile Trail Site #1
- Lester Snowmobile Trail Site #2
- Tree Farm
- Lester River Concrete Snowmobile Bridge
- Lester River Pedestrian Bridge
- 42nd Ave East Beach
- Chester Below Skyline Site #7
- Chester Below Skyline Site #9
- Chester Below Skyline Site #10
- Chester Below Skyline Site #11
- Chester 8th and 9th Street
- Congdon Bridal Bath Site #1
- Congdon Bridal Bath Site #2

- Congdon Bridal Bath Site #3
- Hartley Nature Center
- Brewer Park Site #5
- Brewer Haines Snowmobile Bridge
- Lincoln Park
- Mission Creek Snowmobile Trail Site #3a
- Mission Creek Snowmobile Trail Site #3b
- Mission Creek Snowmobile Trail Site #3c
- Mission Creek Trail Site 11 a-b
- Mission Creek DT Site #7
- Mission Creek DT Site #8
- Mission Creek DT Site #8a
- Piedmont Park Nordic Trail Site #07a-b
- Piedmont Park Nordic Trail Site #08a-d
- Piedmont Snowmobile Trail Site #2
- Superior Zoo Kingsbury Trail Site #7a
- Superior Zoo Kingsbury Trail Site #7b
- Superior Zoo Kingsbury Trail Site #7c
- Lake Superior Zoo Kingsbury Bridge Site #3a

Based on the additional coordination of 69 permits and 12 sites requiring additional survey for hydraulic modeling, AMI is requesting an increase of \$120,200.00 (average permit cost of \$1,742.00) to the contract to cover the additional survey, HY8 hydraulic modeling, permitting coordination, permit fee reimbursements, and drafting for 2026.

Item No. 3 – Construction Administration and Inspections Change

AMI's proposal and fee schedule provided assumptions into the effort and timeframe required for construction. A 1.5 full-time equivalent (FTE) per week over 12 weeks was assumed as a starting point for construction. This equates to 18 weeks (4.5 months) of full-time construction. Based on KTM's construction schedule (Attachment 5) for the final design extending 5 months with multiple sites being worked on at the same time across the City, AMI is requesting to add an additional 1.5 months of full-time construction administration increasing the construction administration budget from \$191,780.00 to \$255,706.00.

Item No. 4 – 2027 Permitting Costs

The Department of Natural Resources has a limited capacity for how many permits they can review each year. Because this project has significant number of DNR permits required and the DNR was not made aware of this work a year in advance, they are only going to review up to 4 of the sites requiring DNR permits in 2026 to make sure other entities are able to submit permits this year for the DNR to review. This will push 16 sites into the year 2027 to start the permitting process. AMI is assuming that the same submittals from the MnDNR General Permit Checklist (Attachment 3) will apply to these 16 sites along with the MnDNR forwarding our information to the USACE and MPCA to comment and determine if a permit is required from them as well. Our assumptions are based on what the DNR has required for submittal information on this project in 2026. AMI is requesting an increase of \$84,000.00 to the contract to cover additional topographic survey, HY8 hydraulic modeling, permitting coordination, and permit fee reimbursements up to the DNR threshold of \$3,000.00 for 2027.

2027 MnDNR, USACE and MPCA Permits: Up to 42 Permits between three agencies

- Amity Creek Southside Trail
- Lester Ski Trails Site #6
- Lester Ski Trail Site #10
- Lester Ski Trail Site #11
- Lester Ski Trail Site #12
- Lester Snowmobile Trail Site #1
- Tree Farm
- Lester River Concrete Snowmobile Bridge
- Lester River Pedestrian Bridge
- Chester Below Skyline Site #7
- Brewer Haines Snowmobile Bridge
- Piedmont Park Nordic Trail Site #07a-b
- Piedmont Park Nordic Trail Site #08a-d
- Piedmont Snowmobile Trail Site #2

Summary of Fees

The fees provided below are based on the assumption that AMI is only allowed one approved amendment request for the project.

- Item No. 1 - Schedule Changes: Extend the contract deadline from June 30, 2026, to June 30, 2027.
- Item No. 2 – Permitting Cost Changes: AMI proposes to increase the contract by \$120,200.00 to account for the additional services needed to complete the required permits for 2026.
- Item No. 3 – Construction Administration Cost Changes: Increase of \$63,926.00
- Item No. 4 – 2027 Permitting Costs: Increase of \$84,000.00

Summary

AMI is requesting a change order in the amount of **\$268,126.00** which would bring the current contract value **from \$599,900.00 to \$868,026.00.**

We appreciate the opportunity to work with the City of Duluth on this project. We look forward to continuing to support the City throughout the remaining duration of the project.

Please let us know if you have any questions regarding this change order request, or if you feel any of the information above is listed in error. You may contact me directly at 715-718-5722.

Respectfully Submitted,

Ryan Dagger, PE
Assistant Coastal Engineering Manager
AMI Consulting Engineers, P.A.

Attachments:

- AMI Proposal (Pages 16-17)

- Project Documentation Errors
- City of Duluth General Permit and MnDNR General Permit Checklist
- Shoreland Permit Fees Receipt
- KTM Project Schedule

Attachment #1



Alternative Projects

When significant design modifications are necessary to mitigate future flood damage, AMI will support the City in developing FEMA-compliant Alternative Projects. The City has identified seven (7) repair sites that will likely require relocation rather than in-place reconstruction. For these sites, AMI will collaborate with the City and funding agencies to develop relocation plans that align with FEMA's Alternative Procedures while ensuring compliance with local requirements. AMI will also work to maximize available funding from disaster recovery programs by coordinating eligibility determinations, cost-effectiveness analyses, and project justification to meet FEMA's approval criteria. AMI understands that these projects will include the relocation of trails within Hartley Park and Chester Park. AMI assumes relocation of approximately 200 linear feet of Hartley Park Trail and 400 linear feet of Chester Creek Park Trail.

Design Documents

Based on FEMA, state agency, and City comments during the design process, AMI will develop the design and quantities, begin technical specifications for the project, write design specific verbiage for the City to include in their front-end documents, and produce detailed cost estimates. AMI will coordinate with Nordic Group to validate and refine material and mobilization costs to ensure high accuracy estimates during this phase. Design documents will be submitted to the City for review at 30% and 60%.

Plan Sets

AMI assumes developing one full plan set per bid package, using a combination of GIS and CAD-based files for plans based on site grouping and repair complexity, for a total of four (4) plan sets. The plan sets will be well-organized, concise, and detailed. If all sites contained within a plan set are unable to move forward simultaneously, we will break the plan set out into phases. This will be possible due to careful planning, clarity, and detail in the bid documents. In our experience, this additional time spent during the design process saves time during construction administration (reduced RFIs, change orders, ambiguities, constructability, etc.). Plan sets will be submitted to the City for review at 30% and 60%.

Project Permitting

Once 60% designs have been approved by the City, the State, and a FEMA liaison, AMI will coordinate environmental review and permitting for the projects in the groups determined during Task 1. This will streamline agency communications and tracking for construction compliance. AMI anticipates coordinating with the MN DNR, USACE, City of Duluth, and State Historic Preservation Office (SHPO). AMI will coordinate with the City and regulatory agencies throughout the permitting process to facilitate project regulatory approvals. Upon receipt of all regulatory approvals, AMI will develop a summary of permit requirements for inclusion in project specifications and designs.

To determine the likely environmental permitting and coordination needs, AMI completed an initial GIS desktop review based on the provided location information, damage descriptions, estimated scopes, and hazard mitigation concepts. The project site locations were compared to publicly available wetland, waterway, and floodplain data to determine their proximity to these regulated resources. Many of the project sites were located along Minnesota Public Water watercourses, riparian or palustrine wetlands, and/or mapped flood hazard zones.

Wetland & Waterway Permitting

AMI estimates that 52 sites will require coordination with the MN DNR for work in a public water and/or coordination with the City for potential wetland or waterbody impacts. These projects range from the restoration of stream banks and installation of culverts to replacement of boardwalks or bridges and repair of retaining walls. Based on early communication with regulatory agency, AMI will group repair projects accordingly to streamline the permitting process.

Hydraulic Modeling & Floodplain Permitting

After reviewing the documentation provided, AMI estimates that 49 sites will require coordination with the MN DNR Floodplain Management Department and/or the City regarding work within a mapped floodplain or waterway. Considering the provided project scopes and their locations, AMI assumes that most sites located in the flood plain will not require hydraulic modeling to be conducted. It is anticipated that many of these projects will be considered replacements in kind, needing only a letter of professional opinion for a no-rise.

For project sites with more involved designs, located within or across the floodplain, AMI assumes that hydraulic modeling will be required and prudent. Using modeling will ensure that trails are properly relocated outside of the floodplain and that bridges are sufficiently elevated above the base flood elevation. These models will be limited in use to sites such as the Lester River Pedestrian Bridge where floodplain considerations are critical. However, as clarified in Addendum 2, AMI does not anticipate modeling any sites to conduct letters of map change such as LOMRs, LOMAs, and their variations.

Stormwater Design for Permitting

In addition to wetland, waterway, and floodplain permitting, AMI will provide designs for stormwater management in accordance with City ordinances. AMI assumes that no individual repair project will disturb more than one (1) acre of land and that the sites are sufficiently separated to avoid being considered a common plan of development. Furthermore, AMI assumes that the project will not result in an increase in impervious surface that would trigger post construction stormwater designs. Erosion and sediment control measures to protect water resources will be incorporated into the design documents, with the selected contractor responsible for applying for any necessary MPCA or City stormwater permits if disturbed area thresholds are exceeded.

Stakeholder Meetings

The design development phase will involve multiple meetings with all stakeholders, and AMI will facilitate these discussions, ensuring active participation from all involved. Stakeholder engagement is essential for the success of the project. AMI will collaborate with the City of Duluth to ensure representation from relevant City

departments throughout this process. We anticipate holding at least two stakeholder meetings during this phase: one prior to submitting the design development deliverable, and another after it has been submitted and reviewed. A third meeting may be necessary, depending on stakeholder feedback.

TASK 2 DELIVERABLES

- ➔ PA Construction Cost Estimates for All Repair Sites.
- ➔ 30% / 60% Design Concepts for Repair Sites not requiring Hazard Mitigation.
 - ➔ List provided by City includes 12 repairs without HM at 11 Sites.
- ➔ 30% / 60% Design Concepts & Cost Estimates for HM Sites.
- ➔ 30% / 60% Design Concepts & Cost Estimates for Alternative Projects.
 - ➔ List provided by City includes seven (7) repairs requiring an alternative project.
- ➔ Project Permits.

TASK 3 - FINAL DESIGN

To ensure a seamless transition from design to construction, AMI will guide the project through the final stages of design development, bidding, and contractor selection. The following tasks outline our approach to refining designs, preparing bid documents, and supporting the City of Duluth throughout the bidding process. Our focus will be on incorporating stakeholder feedback, ensuring regulatory compliance, and facilitating smooth communication between the City, contractors, and relevant parties to ensure the project is ready for construction.

Final Design

AMI will revise the design development drawings, cost estimates, and technical specifications based on feedback from the City of Duluth and stakeholders. We will produce a 90% drawing set for inclusion in each bid package and submit it to the City for final review. A meeting with the City and relevant stakeholders will be held after the review of the 90% submittal to address any remaining comments.

Bid Documents

Based on feedback from the 90% submittal, AMI will prepare the complete bidding documents, which will include detailed cost estimates, bid forms, technical specifications, and supplemental front-end verbiage for the City's inclusion of any FEMA or State Disaster requirements. The project will be split into four (4) bid packages, each containing multiple sites.

Attachment #2



Consulting Engineers P.A.

Projects with Errors

Wrong Location:

- Amity Creek South Side Trail (Vermillion to Jean Duluth) (State September 2023)
Description- bank sloughing into creek below trail x2 locations 10 cy soil lost each site.
- Lester Ski Trails Site #7 (State September 2023) Description- culvert exposed needs resetting.
- Congdon Park Bridal Path Site 3 (State September 2023) Description- erosion at eastern trailhead access points.
- Piedmont Ski Trails (State September 2023) Description- washouts above culverts, soil lost.
- Kingsbury Creek (State September 2023) Description- channelization top to bottom, gravel loss; spring flood area.
- Amity Creek Hawk Ridge Trail (Jean Duluth to Skyline) Site #1 (State September 2023)
Description- willow leaning up against bridge 2 on 7-Bridges road. City of Duluth agreed to drop this project.
- Lester Ski Trails Site #2 (State September 2023) Description- 12" metal culvert displaced.

Damage Description Errors:

- Hartley Trail Site 1b Bridge 1 (FEMA #1350832) Description- Superstructure - 1 each of Bridge - wooden trail, 26 FT long x 5 FT wide x 10 IN deep, 4 each of Green Treated. Bridge substructure wood beams., 9 FT long x 2 IN wide x 6 IN deep. Deck - 18 each of Green Treated. Bridge wood decking., 5 FT long x 2 IN wide x 6 IN deep. Guard Rail - 2 each of Green Treated. Bridge wood decking edge board., 9 FT long x 4 IN wide x 4 IN deep
- Hartley Trail Site 1b Bridge 2 (FEMA #1350832) Description- Superstructure - 1 each of Bridge - wooden trail, 10 FT long x 5 FT wide x 10 IN deep, 4 each of Green Treated. Bridge #2 - substructure wood beams., 14 FT long x 2 IN wide x 6 IN deep. Deck - 28 each of Green Treated. Bridge wood decking., 5 FT long x 2 IN wide x 6 IN deep. Guard Rail - 2 each of Green Treated. Bridge wood decking edge board., 14 FT long x 4 IN wide x 4 IN deep.
- Lester Ski Trails Site #3 (State September 2023) Description: 12" plastic culvert fully displaced, 5 yds of material displaced. Site investigation shows a 15" x 13' PVC culvert.
- Lester Ski Trails Site #6 (State September 2023) Description: 20" metal culvert unearthed, 5 yds of material displaced. Site investigation shows a 24" x 20' CMP culvert.

- Lester Ski Trails Site #9 (State September 2023) Description: 10” culvert broken, 3 yds of material displaced. Site investigation shows 2, 8” x 13’, PVC culverts in need of replacing.
- Lester Ski Trails Site #10 (State September 2023) Description: 24” culvert eroded around, 10-15 yds of material displaced. Site investigation shows 2, 15” x 18’ CMP culverts.
- Lester Ski Trails Site #11 (State September 2023) Description: 16” metal culvert unearthed, 5-8 yds of material displaced. Site investigation shows an 18” x 16’ CMP culvert.
- Lester Ski Trails Site #12 (State September 2023) Description: 20” metal culvert unearthed, 5-8 yds of material displaced. Site investigation shows an 18” x 16’ CMP culvert.
- Tree Farm (State September 2023) Description: 30’ long, 3’ culvert, collapsed and washed out. Site investigation shows a 48” x 25’ CMP culvert.

Funding Discrepancies:

- Lester Snomobile Trail (State September 2023). Funding from State notes \$125,000. Funding from City notes \$12,500.
- Amity Creek Hawk Ridge Trail (Jean Duluth to Skyline) (State September 2023). Funding from State notes \$50,000. Funding from City notes \$5,000.
- Chester Culvert at 8th/9th Bridge (State September 2023). Funding from State notes \$185,000. Funding from City notes \$37,000.

Attachment #3

Amended

Public Waters Work General Permit

Expiration Date: 04/16/2030

Pursuant to Minnesota Statutes, Chapter 103G, and on the basis of statements and information contained in the permit application, letters, maps, and plans submitted by the applicant and other supporting data, all of which are made part hereof by reference, **PERMISSION IS HEREBY GRANTED** to the applicant to perform actions as authorized below. This permit supersedes the original permit and all previous amendments.

Project Name: City of Duluth Engineering and Property and Facilities Management Bridges & Culverts General Permit	County: St. Louis	Watershed: Lake Superior - South, St. Louis River, Cloquet River, Nemadji River	Resource: All Public Waters
Purpose of Permit: Construction, reconstruction, and repair of bridges, culverts, and intakes/outfalls.		Authorized Action: Upon notification to and authorization through MPARS by DNR personnel, construct, reconstruct, and repair bridges and culverts and intakes/outfalls on public waters where all of the conditions of this permit are met. The work will be done according to plans and specifications submitted as part of the application for authorization and subject to all terms and conditions of this permit. Any work on culvert or bridge crossings that serve as water level control structures is not authorized under this General Permit and requires an Individual Permit. All work authorized by this permit must be designed under the supervision of a registered professional engineer, unless specifically waived by the DNR.	
Permittees (2): CITY OF DULUTH - ENGINEERING CONTACT: JOHNSON, TOM, (218) 730-5103 411 WEST FIRST STREET CITY HALL ROOM 240 DULUTH , MN 55802 (218) 730-5200 CITY OF DULUTH - PROPERTY & FACILITIES MANAGEMENT CONTACT: SHOBERG, JAMES, (218) 730-4415 1532 W. MICHIGAN STREET DULUTH, MN 55806 (217) 730-4435		Authorized Agent: N/A	
Property Description (land owned or leased or where work will be conducted):			
Issued Date: 04/16/2025		Effective Date: 04/16/2025	
		Expiration Date: 04/16/2030	
Authorized Issuer: Tom Hovey	Title: Water Regulations Unit Supervisor	Email Address: tom.hovey@state.mn.us	Phone Number: 651-259-5654

This permit is granted **subject to** the following **CONDITIONS**:

APPLICABLE FEDERAL, STATE, OR LOCAL REGULATIONS: The permittee is not released from any rules, regulations, requirements, or standards of any applicable federal, state, or local agencies; including, but not limited to, the U.S. Army Corps of Engineers, Board of Water and Soil Resources, MN Pollution Control Agency, watershed districts, water management organizations, county, city and township zoning.

NOT ASSIGNABLE: This permit is not assignable by the permittee except with the written consent of the Commissioner of Natural Resources.

NO CHANGES: The permittee shall make no changes, without written permission or amendment previously obtained from the Commissioner of Natural Resources, in the dimensions, capacity or location of any items of work authorized hereunder.

SITE ACCESS: The permittee shall grant access to the site at all reasonable times during and after construction to authorized representatives of the Commissioner of Natural Resources for inspection of the work authorized hereunder.

TERMINATION: This permit may be terminated by the Commissioner of Natural Resources at any time deemed necessary for the conservation of water resources of the state, or in the interest of public health and welfare, or for violation of any of the conditions or applicable laws, unless otherwise provided in the permit.

COMPLETION DATE: Construction work authorized under this permit shall be completed on or before the date specified above. The permittee may request an extension of the time to complete the project by submitting a written request, stating the reason thereof, to the Commissioner of Natural Resources.

WRITTEN CONSENT: In all cases where the permittee by performing the work authorized by this permit shall involve the taking, using, or damaging of any property rights or interests of any other person or persons, or of any publicly owned lands or improvements thereon or interests therein, the permittee, before proceeding, shall obtain the written consent of all persons, agencies, or authorities concerned, and shall acquire all property, rights, and interests needed for the work.

PERMISSIVE ONLY / NO LIABILITY: This permit is permissive only. No liability shall be imposed by the State of Minnesota or any of its officers, agents or employees, officially or personally, on account of the granting hereof or on account of any damage to any person or property resulting from any act or omission of the permittee or any of its agents, employees, or contractors. This permit shall not be construed as estopping or limiting any legal claims or right of action of any person other than the state against the permittee, its agents, employees, or contractors, for any damage or injury resulting from any such act or omission, or as estopping or limiting any legal claim or right of action of the state against the permittee, its agents, employees, or contractors for violation of or failure to comply with the permit or applicable conditions.

EXTENSION OF PUBLIC WATERS: Any extension of the surface of public waters from work authorized by this permit shall become public waters and left open and unobstructed for use by the public.

GP AUTHORIZATION - APPLY USING MPARS: The permittee shall apply for prior authorization for all projects to be constructed under this General Permit using the MNDNR Permitting and Reporting System (MPARS) at www.mndnr.gov/mpars/signin. Users will need to create an account the first time they access the system. Once created, click on the link for 'Apply for a New Permit/Authorization' under the Actions box and complete the application questions.

WETLAND CONSERVATION ACT: Where the work authorized by this permit involves the draining or filling of wetlands not subject to DNR regulations, the permittee shall not initiate any work under this permit until the permittee has obtained official approval from the responsible local government unit as required by the Minnesota Wetland Conservation Act.

INVASIVE SPECIES - EQUIPMENT DECONTAMINATION: All equipment intended for use at a project site must be free of prohibited invasive species and aquatic plants prior to being transported into or within the state and placed into state waters. All equipment used in designated infested waters, shall be inspected by the Permittee or their authorized agent and adequately decontaminated prior to being transported from the worksite. The DNR is available to train inspectors and/or assist in these inspections. For more information refer to the "Best Practices for Preventing the Spread of Aquatic Invasive Species" at https://files.dnr.state.mn.us/publications/ewr/invasives/ais/best_practices_for_prevention_ais.pdf. Contact your regional Invasive Species Specialist for assistance at www.mndnr.gov/invasives/contacts.html. A list of designated infested waters is available at www.mndnr.gov/invasives/ais/infested.html. A list of prohibited invasive species is available at www.mndnr.gov/invasives/laws.html#prohibited.

EROSION AND SEDIMENT CONTROL: In all cases, methods that have been determined to be the most effective and practical means of preventing or reducing sediment from leaving the worksite shall be installed in areas that slope to the

GENERAL PERMIT CONDITIONS *(Continued from previous page)*

water and on worksite areas that have the potential for direct discharge due to pumping or draining of areas from within the worksite (e.g., coffer dams, temporary ponds, stormwater inlets). These methods, such as mulches, erosion control blankets, temporary coverings, silt fence, silt curtains or barriers, vegetation preservation, redundant methods, isolation of flow, or other engineering practices, shall be installed concurrently or within 24 hours after the start of the project, and will be maintained for the duration of the project in order to prevent sediment from leaving the worksite. DNR requirements may be waived in writing by the authorized DNR staff based on site conditions, expected weather conditions, or project completion timelines.

BEST PRACTICES - MNDOT: Please refer to the manual "Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-0001" for guidance to meeting these and other conditions of this General Permit. A PDF version is available at: http://www.dnr.state.mn.us/waters/watermgmt_section/pwpermits/gp_2004_0001_manual.html.

APPLICABLE PROJECTS: To qualify under this general permit, unless specifically waived by authorized DNR personnel, all projects affecting public waters must be designed under the supervision of a registered professional engineer. Any project not meeting applicable conditions of this permit or a project the DNR identifies as having the potential for significant resource impacts, is not authorized herein. Rather, such projects will require an individual permit application.

DNR NOTIFICATION: The permittee shall provide the DNR Area Hydrologist with an Excel table of the summer construction schedule prior to the commencement of work and a list of completed projects at the end of the construction season. The permittee shall notify the Area Hydrologist of all significant schedule changes.

REPORT / ANNUAL MEETING: Prior to April 15 of each year, the permittee shall submit to the Division of Ecological and Water Resources a list of proposed projects to be constructed under this permit. If emergency or unforeseen projects arise that are not included in the annual report, or if a previously approved project causes unanticipated impacts to public waters once the project is underway, the permittee shall notify the Division of Ecological and Water Resources at the earliest opportunity to provide details and discuss project design and applicable performance standards. When the Division notifies the permittee that it wishes to inspect and/or comment on a specific project, then the project shall not proceed until after the receipt of the Division's recommendations.

FISHERY PROTECTION - EXCLUSION DATES: No work affecting the bed of any public watercourse may be conducted during the following exclusion dates: Designated trout streams - September 15 through June 30 of the following year; All other public watercourses, including the St. Louis River - April 1 through June 30 of the same year; Public waters basins and wetlands – April 1 through June 30 of the same year; Lake Superior – October 1 through May 30 of the following year. These exclusion dates may be waived only upon written approval from the Area Fisheries Supervisor.

FISH PASSAGE AND MOVEMENT: Crossings shall provide for the passage of water, fish and sediment load through the proposed structure(s). A hydrologic / hydraulic data report showing calculated flow velocities through the structure at 2-, 50-, and 100-year peak flows shall be provided for each project by the permittee. Two-year peak flow velocities through the structure shall not exceed the natural channel 2-year peak flow velocity. Where feasible, a single culvert shall be used, either alone or paired with floodplain culverts. In single and multiple culvert installations, culvert invert elevation shall be depressed below the elevation of the stream bed slope at a depth that promotes movement of sediment load. Culvert(s) shall be buried to a depth of 1/6th the bankfull width with a minimum depth of 1 foot and a maximum depth of 2 feet. All structures shall match the alignment and slope of the existing channel unless the crossing geometry needs to be realigned to restore the movement of water, fish and sediment load. Other specific recommendations shall be incorporated into the design.

NATURAL WIDTH / FLOWLINE / GRADIENT NOT CHANGED: Replacement of culverts or crossings are to follow (or be restored to) the natural alignment, width and profile of the stream. Changes from the existing flowline, gradient or alignment must be consistent with the Fish Passage condition in this permit and authorized by the Area Hydrologist.

REVEGETATION: On areas of disturbed soil adjacent to public waters, final vegetation plans should include native species suitable to the local habitat. This may include trees, shrubs, grasses, and/or forbs. Also see MnDOT's "Native Seed Mix Design for Roadsides" document (<http://www.dot.state.mn.us/environment/erosion/pdf/native-seed-mix-dm.pdf>). If the portion of the site that contributes direct runoff to surface waters cannot be stabilized with vegetation before October 15 of any year, all exposed soil shall be adequately protected, with preference for biodegradable natural netting or erosion control blanket or mulched at a rate of not less than 3500 lbs/acre, leaving no more than 20 percent visible soil surface and maintained until seeding/sodding can be achieved.

TEMPORARY IMPACTS DURING CONSTRUCTION: Construction methods not shown in permit documents shall be submitted for review and approval at a later date. Temporary work below the Ordinary High Water (OHW) elevation, such

GENERAL PERMIT CONDITIONS *(Continued from previous page)*

as channel diversions, placement of temporary fill, structures for work pads/dock walls, bypass roads, coffer dams, or staging areas to aid in the demolition or construction of any authorized structure shall be submitted for review and approval in writing by the DNR Area Hydrologist prior to beginning work. This is normal procedure for bridge or culvert projects as we recognize that final project designs are often posted for bid without final construction/demolition plans. Stream diversion water such as flow through a pump bypass shall be immediately returned to the original channel downstream, maintaining run of the stream.

NAVIGATION MAINTAINED OR IMPROVED: Permittee is responsible for maintaining, or improving, existing navigation to meet public needs for use of and access to public waters. For bridges over public watercourses, three (3) feet of clearance above the calculated 50-year recurrence interval flood stage ordinarily satisfies this requirement.

FILL PLACEMENT: All fill placement shall comply with applicable floodplain and wetland management standards and ordinances.

ENVIRONMENTAL REVIEW: If the bridge/culvert construction is part of a road project that requires mandatory environmental review pursuant to MN Environmental Quality Board rules, then the project shall not proceed until environmental review is completed. The outcome of the environmental review may affect work authorized by this permit.

STATE AND FEDERAL LISTED SPECIES PROHIBITION: If federal or state listed species are identified within a one mile radius of the proposed project area by trained DNR staff, the Area Hydrologist will contact the Regional Ecologist or Regional Environmental Assessment Ecologist, who will work with the Endangered Species Review Coordinator to complete a full NHIS review if necessary. If the review identifies potential impacts to federal or state listed species, and if satisfactory agreements cannot be reached to avoid the impact, this general permit is not applicable. Such projects will require an endangered or threatened species taking permit application.

BATS: Projects located on bridges and culverts >36 inches that will occur during the bat's active period (April 15th – Oct 15th) should be inspected for bats. If bats are active/present or signs of bats are observed (droppings, urine staining, chirping/chattering, contact the DNR to determine if additional surveys or permits are required. To ensure compliance with federal law, the project proposer should also conduct a federal regulatory review using the U.S. Fish and Wildlife Service's online tool: <https://ipac.ecosphere.fws.gov/>.

FLOOD STAGES / DAMAGES NOT INCREASED: (A). No approach fill for a crossing shall encroach upon a DNR approved community designated floodway. When a floodway has not been designated or when a floodplain management ordinance has not been adopted and approved, increases in flood stage in the regional flood of up to one-half of one foot shall be approved if they will not materially increase flood damage potential. Additional increases may be permitted if: a field investigation and other available data indicate that no significant increase in flood damage potential would occur upstream or downstream, and any increases in flood stage are reflected in the floodplain boundaries and flood protection elevation adopted in the local floodplain management ordinance as determined by the applicable DNR Hydrologist. (B). If the existing crossing has a swellhead of one-half of one foot or less for the regional flood, the replacement crossing shall comply with the provisions for new crossings in (A). If the existing crossing has a swellhead of more than one-half of one foot for the regional flood, stage increases up to the existing swellhead may be allowed if field investigation and other available data indicate that no significant flood damage potential exists upstream from the crossing based on analysis of data submitted by the applicant. The swellhead for the replacement crossing may exceed the existing swellhead if it complies with the provisions found in (A) above.

HYDROLOGIC / HYDRAULIC REPORTS: A hydrologic / hydraulic data report shall be provided for each project by the permittee. This report, along with one set of construction plans, must be submitted as part of the application. The following information must be included in the report/plans: (1) calculated stage increase for existing structure; (2) calculated mean flow velocity (ft/s) through the natural channel (for both culvert and bridge projects); (3) calculated mean flow velocities (ft/s) for the 2-, 50- and 100-year peak flow events through the proposed structure (for both culvert and bridge projects); (4) number of culverts; (5) if the culvert(s) is(are) depressed below the streambed provide depth of depression; (6) invert elevations for the proposed and existing culvert(s); (7) bankfull width at the proposed crossing; (8) elevations of the 50- and 100-year flood stages for the proposed and existing bridge; (9) low member elevations for the proposed and existing bridge.

TERRESTRIAL SPECIES MOVEMENT: Structures shall not be detrimental to significant wildlife habitat. If the crossing is located at a significant wildlife travel corridor as determined by DNR Wildlife or Ecological & Water Resources staff, the crossing shall be designed to minimize concerns. This is typically accomplished with the presence of a walkable surface (dry ground) at normal flow conditions. For bridges this is known as a 'Passage Bench', which is incorporated into bridge abutment riprap. On multiple culvert installations, outer culvert inverts can be set at an elevation higher than normal flow to

GENERAL PERMIT CONDITIONS *(Continued from previous page)*

allow terrestrial species use during non-flood conditions. See 'Passage Bench Design' as well as other species protection measures in Chapter 1 of the collection of "Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-0001" online at: http://www.dnr.state.mn.us/waters/watermgmt_section/pwpermits/gp_2004_0001_manual.html.

INVASIVE SPECIES – TRANSPORT, POSSESSION, AND DISPOSAL: To comply with Minnesota's invasive species laws and associated rules, the permittee or contractor may need to obtain an additional permit to possess, transport and dispose of prohibited and regulated invasive species. Please contact your regional Invasive Species Specialist for assistance or fill out a permit application for Prohibited and Regulated Invasive Species at: https://www.dnr.state.mn.us/permits/invasive_species/prohibited_regulated.html.

INVASIVE SPECIES – INFESTED WATERS DIVERSION OR TRANSPORT: To comply with Minnesota's invasive species laws and associated rules, the permittee or contractor may need to obtain an additional permit to take or transport any amount of infested water from designated infested waters, even if the amount of water to be taken is less than the amount that triggers a water appropriation permit. There are no fees for these permits. Applications are reviewed and issued through the DNR Invasive Species Program. To apply for a permit to appropriate, divert, or transport water from designated infested waters, download and print the application form available online or request that a form be sent by mail. Complete the form furnishing all requested information and supporting documents. Submit the application per the instructions on the form. Minnesota Rules allow up to 90 days for the Department to act upon the permit application. Please contact your regional Invasive Species Specialist for assistance or to fill out a permit application at: https://www.dnr.state.mn.us/waters/watermgmt_section/appropriations/permits.html#infested.

cc: Cliff Bentley, EWR District Manager
James Shoberg, City of Duluth
Tom Johnson, City of Duluth
Bri Speldrich, DNR
Jen Sorensen, DNR

City of Duluth Bridge/Culvert Projects #2011-0409

Application Data Submittal Checklist

- ☐ **Longitudinal Profile**
 - Sufficient length to determine the channel slope and culvert elevation (minimum 3 riffles) upstream and downstream of the culvert to extend beyond influence of existing structure
 - Elevations taken in thalweg
 - Elevations taken at water surface
 - Bankful elevations when possible/observed
- ☐ **Cross-sections**
 - Cross sections taken at reference riffle locations outside influence of existing structure
 - Cross section locations noted on the longitudinal profile stationing
 - Sufficient amount of data points collected to note bankful indicators (i.e. points taken every 2' for 15' wide channel)
 - Bankful elevation noted on the cross-section
 - Cross-section length should extend past bankful elevation (i.e. points taken 10' beyond bankful indicator)
- ☐ **Bed Material**
 - Note predominate bed material in reference riffles (where cross sections are taken) if possible
 - Substrate in culvert may be required when Q2 velocity is high relative to fish swimming capabilities or depending on predominant bed material size. Substrate details and specifications should be included in submittal.
- ☐ **Hydraulics Report**
 - Use gaged flow data when available and note where flow data is from (i.e. StreamStats, hydrologic model, gage, etc.)
 - Q2 velocities and elevations (natural, existing, proposed)
 - Q50 elevations (natural, existing, proposed); include low member elevations (existing and proposed)
 - Q100 elevations (natural, existing, proposed)
 - Report includes no rise statement if in floodplain and/or no increase in flood damage potential statement if nearby structures
- ☐ **Plan Set**
 - Include existing and proposed structures on longitudinal profile
 - Include stationing, cross-section locations, and bankfull locations
 - Show stream slope/riffle flowline
 - Show Q2, Q50, and Q100 elevations
 - Existing and proposed conditions cross sections
 - Include stationing, bankful locations, and bankful widths
 - Viewable scales
 - If applicable, show removal of any existing pilings or supports, existing scour holes, etc.
- ☐ **Construction Methods/Temporary Impacts**
 - Detailed plans should include methods, elevations, duration, quantities, etc.

Attachment #4



Thank you for your payment



***** Please print this receipt for your record of payment. This receipt will include your service fee. Allow up to 48 hours for your payment to be reflected on your account statement.

An email confirmation was sent to emma.karsell@amiengineers.com.

City of Duluth, MN
411 W 1st Street Duluth, MN 55802
(218) 730-4050
<https://duluthmn.gov/>

Transaction details

Date: May 21, 2026 01:04 PM CDT

Permit: PLSHORE-2603-0012 Invoice: INV-00034211	\$100.00
Permit: PLSHORE-2603-0011 Invoice: INV-00034209	\$100.00
Permit: PLSHORE-2603-0010 Invoice: INV-00034206	\$100.00
Permit: PLSHORE-2603-0013 Invoice: INV-00034365	\$100.00
Permit: PLSHORE-2603-0015 Invoice: INV-00034424	\$100.00
Permit: PLSHORE-2603-0021 Invoice: INV-00034477	\$100.00

Payment information

Zachary Morris
Visa ending in 2492
Confirmation number: TYLX65882496
Transaction type: Purchase

Utility Payments - Comfort Systems 218-730-4050 Professional and Business Licenses - Clerks 218-730-5500 Building Permits (Including Plumbing and HVAC) - Construction Services and Inspections 218-730-5240 Planning Applications - Planning and Economic Development 218-730-5580 Rental Licenses/Operational Permits - Life Safety/Fire Operations 218-730-4380 Excavation/Transportation/Obstruction/Control Permits - Engineering 218-730-5200 Residential/Visitor/Contractor Permits - Parking Services 218-730-5470

Utility Payments - 218-730-4050



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Permit: PLSHORE-2603-0020 Invoice: INV-00034465	\$100.00
Permit: PLSHORE-2603-0017 Invoice: INV-00034445	\$100.00
Permit: PLSHORE-2603-0018 Invoice: INV-00034461	\$100.00
Permit: PLSHORE-2603-0022 Invoice: INV-00034480	\$100.00
Permit: PLSHORE-2603-0016 Invoice: INV-00034434	\$100.00
Permit: PLSHORE-2603-0027 Invoice: INV-00034540	\$100.00
Permit: PLSHORE-2603-0026 Invoice: INV-00034533	\$100.00
Permit: PLSHORE-2603-0024 Invoice: INV-00034522	\$100.00
Permit: PLSHORE-2603-0025 Invoice: INV-00034529	\$100.00
Permit: PLSHORE-2603-0023 Invoice: INV-00034515	\$100.00
Permit: PLSHORE-2604-0031 Invoice: INV-00034669	\$100.00
Permit: PLSHORE-2604-0028 Invoice: INV-00034639	\$100.00
Permit: PLSHORE-2604-0029 Invoice: INV-00034642	\$100.00

Subtotal \$1,900.00
Processing fee \$66.50

Total \$1,966.50



Thank you for your payment



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City of Duluth, MN

411 W 1st Street Duluth, MN 55802

(218) 730-4050

<https://duluthmn.gov/>

Transaction details

Date: June 10, 2026 11:57 AM CDT

Permit: PLSHORE-2603-0019	\$100.00
Invoice: INV-00034464	

Permit: PLSHORE-2604-0030	\$100.00
Invoice: INV-00034655	

Subtotal \$200.00
Processing fee \$7.00

Total \$207.00

Payment information

Zachary Morris

Visa ending in 2492

Confirmation number: TYLX74926406

Transaction type: Purchase

Utility Payments - Comfort Systems 218-730-4050 Professional and Business Licenses - Clerks 218-730-5500 Building Permits (Including Plumbing and HVAC) - Construction Services and Inspections 218-730-5240 Planning Applications - Planning and Economic Development 218-730-5580 Rental Licenses/Operational Permits - Life Safety/Fire Operations 218-730-4380 Excavation/Transportation/Obstruction/Ero Control Permits - Engineering 218-730-5200 Residential/Visitor/Contractor Permits - Parking Services 218-730-5470

Utility Payments - 218-730-4050



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An email confirmation was sent to emma.karsell@amiengineers.com.

City of Duluth, MN

411 W 1st Street Duluth, MN 55802

(218) 730-4050

<https://duluthmn.gov/>

Transaction details

Date: May 04, 2026 12:30 PM CDT

Plan: PLVAR-2605-0012 | Invoice: INV-00036629

\$1,300.00

Subtotal \$1,300.00

Processing fee \$45.50

Total \$1,345.50

Payment information

Zachary Morris

Visa ending in 2492

Confirmation number: TYLX57000906

Transaction type: Purchase

Utility Payments - Comfort Systems 218-730-4050 Professional and Business Licenses - Clerks 218-730-5500 Building Permits (Including Plumbing and HVAC) - Construction Services and Inspections 218-730-5240 Planning Applications - Planning and Economic Development 218-730-5580 Rental Licenses/Operational Permits - Life Safety/Fire Operations 218-730-4380 Excavation/Transportation/Obstruction/Ero Control Permits - Engineering 218-730-5200 Residential/Visitor/Contractor Permits - Parking Services 218-730-5470

Utility Payments - 218-730-4050



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Attachment #5



COD STORM DAMAGE - SCHEDULE

Project Manager: Alaina Dodaro

Project Name: COD Storm Damage Civil Sites Repairs KTM Job #:226-109

[illegible]

