CITY of DULUTH
PROJECT SPECIFICATIONS

Duluth Traverse Trail: Phase 1 Mission Creek

City of Duluth, MN
411 West 1st St.
Duluth, MN 55802

City Project #: 1224

Bid # 13-10DS

Opening Date: May 28, 2013

Time: 2:00 PM

Place: Room 100, City Hall

CITY OF DULUTH
INVITATION TO BID (ENG)

PROJECT NAME/DESCRIPTION: Duluth Traverse Trail Phase I – Mission Creek

PROJECT NUMBER: 1224

BID NUMBER: 13-10DS

Sealed bids will be received by the City Purchasing Agent in and for the Corporation of the City of Duluth, Minnesota, at his office, Room 100 City Hall, Duluth, Minnesota, 55802, (218) 730-5340 until 2:00 PM local time on April 11, 2013 for the above named project. Immediately thereafter, bids will be taken to room 207 City Hall, where they will be publicly opened and read aloud.

NOTICE TO BIDDERS:

1. **A Project Labor Agreement (PLA) will be required for any bid that is over or could virtually go over $150,000.**
2. **Unless a Certificate of Exemption is provided, any out-of-state bidder receiving a bid award will have 8% retained from invoice payments on any contracts over $50,000. Submit a signed copy from the State of Minnesota when submitting Payment and Performance Bonds. This form may be found at the following web address: http://taxes.state.mn.us/Forms_and_Instructions/sde.pdf**

Project includes construction of up to approx. 6 miles of single track trail, turns, boardwalk, bridges, and armoring.

Questions pertaining to this project should be directed to: Patrick Loomis, Project Engineer; (218) 730-5094

Each bidder must review the 2013 edition of the City of Duluth Public Works/Utilities Department – Engineering Division Standard Construction Specifications on the city website (www.duluthmn.gov) as these Specifications are incorporated by reference and adeemed to be a part hereof this project as if fully incorporated and set forth herein.

Plans and specifications may be secured from the City of Duluth website at http://www.duluthmn.gov/purchasing/bid_information.cfm. Those wishing to be listed as plan holders should call the City Engineering office at (218) 730-5200 to be added to the plan holders list.

Plans and specifications are on file for inspection at the City Engineering office, Duluth Builders Exchange, F.W. Dodge Plan Room, Minneapolis Builders Exchange and St. Paul Builders Exchange.

A certified check or bank draft, payable to the order of the City of Duluth, negotiable U.S. Government Bonds (at par value), or a satisfactory bid bond executed by the bidder and acceptable surety, in an amount equal to five per cent (5%) of the total bid, shall be submitted with each bid.

Attention is called to the fact that not less than the minimum salaries and prevailing wages as set forth in the contract documents must be paid on this project. The contractor must take affirmative action to ensure that the employees and applicants for employment are not discriminated against because of their race, color, creed, sex or national origin, and must meet the affirmative action goals. Contractors are encouraged to subcontract with Disadvantaged Business Enterprises when possible.

Contractor will comply with all applicable Equal Employment Opportunity laws and regulations.

The City of Duluth is an Equal Opportunity employer.

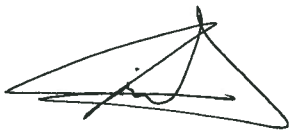
CITY OF DULUTH

Date posted to web:
May 7, 2013

Dennis Sears
Purchasing Agent

SPECIFICATIONS SIGNATURE PAGE

I HEREBY CERTIFY THAT THIS PLAN, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Landscape Architect under the laws of the State of Minnesota.



Signature	**James M. Shoberg** Typed or Printed Name
5/7/2013 Date	**45577** Registration No.

SPECIAL PROVISIONS
Job Number: 1224
Duluth Traverse Trail: Phase 1 Mission Creek
May 7, 2013

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COGGS/IMBA Trail Specifications		44 pages
Instructions to Bidders – Engineering 6/02/10		4 pages
Certified Payroll Checklist rev 4/5/11		3 pages
Data for Labor Cost Bidding		1 page
Prevailing Wage Rates	U S DOL Highway MN130001 01-04-2013	5 pages
	U S DOL Heavy MN130105 03-29-2013	6 pages
	State of Minnesota Region 1 Highway-Heavy 04-15/13	11 pages
	State of Minnesota Truck Rental Rates 05-01-2012	1 page
Project Insurance Requirements 2/16/2011		3 pages
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Appendix A: Trail Slope Analysis Maps		2 pages
Appendix B: Trail Specification Matrix		1 page
Appendix C: Storm Water Pollution Prevention Plan (SWPPP)		88 pages
Appendix D: NPDES Permit		4 pages

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The following forms and regulations/rules/statutes and interpretations, which are incorporated by reference in this contract, are available on the World Wide Web at the sites listed below. The City of Duluth will use its best efforts to ensure that the most recent, applicable forms and regulations/rules/statutes and interpretations are included on the web sites provided; however, if you are the successful bidder, prior to signing the contract, you are responsible for comparing the versions of the forms and regulations/rules/statutes and interpretations attached to the contract which you are signing with the versions on the web to ensure conformity.

THE VERSIONS OF THE FORMS AND REGULATIONS/RULES/STATUTES and INTERPRETATION ATTACHED TO THE CONTRACT WILL BE CONTROLLING. HARD COPIES OF ALL FORMS ARE AVAILABLE AT THE ENGINEERING DIVISION, EXCEPT THE NON-COLLUSION AND AFFIRMATIVE ACTION POLICY STATEMENT, WHICH ARE AVAILABLE AT THE CITY OF DULUTH PURCHASING DEPARTMENT.

Item listing from web:

FORM	WEB SITE
Affidavit of Non-Collusion (required by awarded contractor only)	www.duluthmn.gov/engineering/construction_documents.cfm
Affirmative Action Policy Statement/Certificate - EEO (required by awarded contractor only)	www.duluthmn.gov/engineering/construction_documents.cfm
Bidder's Label for submitting project bids	www.duluthmn.gov/engineering/construction_documents.cfm
Certified Payroll Report form WH347 (front side only)	www.dol.gov/whd/forms/WH347.pdf
Contractor's Haul Route	www.duluthmn.gov/engineering/construction_documents.cfm
Debarment/Suspension Notice 2-10-2012	www.dot.state.mn.us/pre-letting/prov/order/suspension.pdf
HUD 4010	www.hud.gov/offices/adm/hudclips/forms/files/4010.pdf
IC-134 form	www.taxes.state.mn.us/Forms_and_Instructions/ic134.pdf
IC-134 on-line submittal (click: Submit Contractor Affidavit; r-side of screen)	www.mndor.state.mn.us/
MN Rules 5200.1105 & .1106	www.duluthmn.gov/engineering/construction_documents.cfm
MN Statutes 177.41 to 177.44	www.revisor.mn.gov/statutes/?id=177
Notice to Bidders Prompt Payment to Subs *(city funded projects only)*	www.duluthmn.gov/engineering/construction_documents.cfm
Notice to Bidders Prompt Payment to Subs *(state & federal funded projects only)*	www.duluthmn.gov/engineering/construction_documents.cfm
One-Call Instructions	www.duluthmn.gov/engineering/construction_documents.cfm
Purchasing Division General Specifications	www.duluthmn.gov/engineering/construction_documents.cfm
Request to Sublet TP-21834 (5-12-09)	www.duluthmn.gov/engineering/construction_documents.cfm
Statement of Compliance Form (12-10) *(city and state funding only)*	www.dot.state.mn.us/const/labor/forms.html
Supplemental General Conditions Part II 4/15/11	www.duluthmn.gov/engineering/construction_documents.cfm
Truck Rental Rates 4/4/11 *(state funded projects only)*	www.dot.state.mn.us/const/labor/contractdocuments.html
Mn/DOT forms:	
Contractor/Vendor form MnDOT (12/2010) *(state funded projects only)*	www.dot.state.mn.us/const/labor/documents/forms/contractor-vendor-form.pdf
Month End Trucking Report Form A & B (12-10) *(state funded projects only)*	www.dot.state.mn.us/const/labor/forms.html
Month-End Trucking Report Statement of Compliance (12-10) *(state funded projects only)*	www.dot.state.mn.us/const/labor/forms.html
Trucking Company-Vendor form MnDOT (12/2010) *(state funding only)*	www.dot.state.mn.us/const/labor/documents/forms/trucking-company-vendor-form.pdf

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NOTICE TO ALL BIDDERS:

The City of Duluth Public Works & Utilities Department – Engineering Division 2013 Edition Standard Construction Specifications book with any amendments, addendums or supplements is incorporated by reference and is deemed to be a part hereof as if fully incorporated and set forth herein. The Standard Construction Specification is available on the City website at www.duluthmn.gov/engineering/index.cfm.

SP-1 SCOPE OF WORK

The work outlined in this document shall be completed by November 1st 2013.

Overall, the project's scope of work includes at least ±6.0 gross miles of new trail construction including: constructed and bermed turns, technical trail feature (TTF) boardwalk, rock armoring, bridges, and closure of all obsolete trail segments. The Storm Water Pollution Prevention Plan (SWPPP) outlines general construction information and best management practices (BMPs) as they apply to the trail project construction activities.

This project is funded by a grant from the Minnesota Department of Natural Resources Legacy Grant Program as well as funding from the local mountain bike club Cyclist of Gitchi Gumi Shores (COGGS) and funding support from the City of Duluth.

SP-2 SPECIAL INSTRUCTIONS TO BIDDERS

SP-2.1 CONSTRUCTION START

Contract award is scheduled for mid-June. All construction that is awarded as part of this contract must be completed by November 1st 2013.

SP-2.2 REBID

The City of Duluth reserves the right to reject any or all bids according to budget constraints and re-bid accordingly.

SP-2.3 CHECKLIST

Be sure to include both Bid Worksheets A and B along with any city of Duluth required documentation as part of your submittal to City of Duluth Purchasing Department. It is the responsibility of the contractor to ensure they provide all required documentation and information necessary for a qualified bid.

SP-2.4 TRAIL MATRIX

Please refer to the "Trail Specifications Matrix" for detailed trail design and construction requirements.

SP-2.5 GOVERNING SPECIFICATION

The COGGS / IMBA Specification shall be the governing specification.

SP-2.6 UNIT BIDS

Contractor must provide price for all units and trail types on bid sheet if not bidding on all segments of project even if there is a zero quantity noted in the Bid Worksheet. Final quantities may be modified in the field, but unit prices are fixed. Failure to provide a unit bid price for any item will invalidate the bid for that project.

SP-2.7 MOBILIZATION

Contractor is only allowed one mobilization unit item even if awarded multiple trail segments.

SP-2.8 PROJECT BASE BID

Hill Side Trail and River Side Trail

The City of Duluth reserves the right to award additional trail sections in addition to the BASE BID to the winning contractor as funding permits, and availability of the contractor to perform work.

SP-2.9 EROSION CONTROL MATERIALS

Contractor will be fully responsible to provide and install all erosion control materials including: temporary and permanent seed and mulch, rock checks, coir rolls, erosion control blankets category 3 and 4.

SP-2.10 WOOD AND OTHER MATERIALS

All other materials besides erosion control materials that are not native to the worksite and that are used in trail construction will be provided by the City of Duluth.

Materials necessary in the construction of bridges and boardwalks will be purchased and delivered by the City of Duluth to the nearest trail access point accessible by the delivery vehicle.

Delivery to the project site will be the responsibility of the City of Duluth and moving them to the work location within the project site is the responsibility of the contractor.

SP-2.11 PURCHASES
Non erosion control materials needed by contractor must be communicated to the Landscape Architect in writing at least 7 days prior to contractor's need of them on site. Purchases must be approved by the Owner and coordinated with the Landscape Architect to ensure timely delivery to site.

SP-2.12 BOARDWALKS / TTFs
There are no permits necessary for the contractor to obtain for the construction of the Boardwalks/TTFs. All necessary permits will be in place by the start of construction. Boardwalks/TTFs are to be built and field fit following the designs in the plans and specifications and constructed by the selected contractor as part of this contract. Upon construction of the Boardwalks/TTFs final approval of structures will be done by the Owner or Owner's Representative.

SP-2.13 SEED AND MULCH
Temporary and permanent seed and mulch is included in the unit bid price for all trail construction types A, B and C for areas disturbed by the construction of the trail and any built features and components. Discretionary temporary and permanent seed and mulch are for areas outside the trail such as lands slide area. Payment for discretionary temporary and permanent seed and mulch will be paid based on the contractor's unit bid price. Extent and location of areas to receive discretionary temporary and permanent seed and mulch will be selected by the Owner's Representative or Landscape Architect in the field at the time of construction.

SP-2.14 FIELD ALIGNMENT
Detailed design of next segments for construction will be done by an IMBA Trail Specialist. Design will be represented in the field with pin and/or hang flags of sufficient density to communicate intent to construction team(s). Distance of trail flagged will provide sufficient work for contracting team to last until next scheduled visit by the IMBA Trail Specialist. Refer to the plan set and specifications for further details on field alignment protocol.

SP-2.15 TREAD HARDENING / TURF BLOCK PAVERS
Tread hardening using native stone will be implemented where native stone is available. Turf block pavers or approved equal product will be used when there is not any native stone available. Any alternative pre-manufactured armoring products that the contract would like to use must be pre-approved by the Landscape Architect prior to them being accepted as an approved alternative product. If turf stone is deemed necessary it will be purchased by the City and delivered to the site. It will be up to the contractor to determine a safe and secure location for storage on the job site. If native stone cannot be found within the 50 trail corridor the Owner or Owner's Representative will approved either; going outside of the 50 foot corridor to gather rocks that are visible and easily collected without significant disturbance, or approve use of turf block pavers or an approved equal product in place of the rock armoring.

SP-2.16 EQUIPMENT WIDTH
The contractor shall perform the required work using hand tools and/or small mechanized equipment that is a maximum of fifty inches (50") in width. Equipment with adjustable width tracks should be able to reduce track width to less than fifty inches (50").

SP-2.17 WET AREAS
Wet areas that are to be avoided in the field by the contractor will be marked in the field by the Owner or the Owner's Representative.

SP-2.18 WARRANTY PERIOD
The warranty period is one year from the date of acceptance by the Owner.

SP-2.19 TRAIL ACCESS POINTS
Directions to the flag lines and project locations can be found in the COGGS/IMBA Specifications sections along with detailed descriptions of the project. Refer to the plan set for information on existing ATV trails and road locations that can provide access to the trail construction areas. Any damage caused by the contractors vehicles and/or equipment must be fully restored and vegetation that is disturbed on these existing trails must be reestablished to prevent erosion.

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SP-3 **(1806) DETERMINATION AND EXTENSION OF CONTRACT TIME**
The Contract Time will be determined in accordance with the provisions of Mn/DOT 1806 and the following:

SP-3.1 Construction operations shall be started within 10 days following receipt of the "Notice to Proceed". The "Notice to Proceed" will not be issued until agency agreement between the City and the DNR are finalized.

SP-3.2 All work required under this Contract shall be completed by November 1, 2013.

SP-3.3 The provisions of Mn/DOT 1806.1C(3) are modified to the extent that the phrase "during the inclusive period from November 15 to April 15," is deleted. A similar phrase set forth in the second paragraph of Mn/DOT 1807.2 is also deleted.

SP-3.4 No work which will restrict or interfere with traffic shall be performed between 12:00 noon on the day preceding and 6:30 a.m. on the day following any consecutive combination of a Saturday, Sunday, and legal holiday without written permission from the Engineer. If the Contractor chooses not to work at all on the day preceding the holiday period, no working day charges will be assessed. If the Contractor chooses to work prior to 12:00 noon on the day preceding the holiday period or if the Contractor obtains written permission to work after 12:00 noon on the day preceding the holiday period, working day charges will be assessed only for the actual hours worked.

SP-3.5 When all, or a portion, of the Contract Time is specified as a calendar completion date, as provided in Mn/DOT 1103, the time is presumed to have been determined by considering the Proposal quantities, normal weather for the locality and season of the year, and the necessity of having the work completed by the specified date. The time may be extended by the Engineer only in accordance with the following:

When the Contract Time is specified as a fixed calendar completion date, any time extensions granted must be justified on the basis of unavoidable delay in starting or completing the progress controlling operations, and then, only when and to the extent that it is shown that delay time could not be overcome and the work brought back on schedule through reasonable adjustments in the Progress Schedule. Provided the Contractor has made all reasonable efforts to maintain an adequate and acceptable Progress Schedule, the specified completion date may be extended as the Engineer determines to be justified, for any of the following reasons:

1) Delays caused by failure of the City Council to award the Contract at least 10 calendar days in advance of the latest date specified for beginning construction operations.
2) Delays caused by an earthquake, flood, cloudburst, cyclone, tornado, or other cataclysmic phenomenon of a nature beyond the power of the Contractor to foresee and make preparations in defense against.
3) Delays caused by acts of the Government or a political subdivision, or by acts of the public enemy, including fires, epidemics, and strikes not caused by improper acts or omissions of the Contractor.
4) Delays caused by an action or non-action of the Department, such as suspension of work by order of the Engineer through no fault on the Contractor.
5) Delays caused in incompletion of work being done by other Contractors or utility owners, or due to other unforeseeable interferences not the fault of the Contractor.
6) Delays direction attributable to the performances of Extra Work or increased quantities or work.
7) Extraordinary delays in delivery or materials, resulting from strikes, lockouts, freight embargoes, governmental acts, or sudden disaster, or a nature beyond the power of the Contractor or his/her supplier to foresee and forestall.

Delays caused by plant and equipment failure, and delays due to unsuitable weather or conditions resulting therefrom, will not be allowed as justification for time extension except when and only to the extent the Engineer considers justified in view of unavoidable circumstances or events. Normal weather delays and the usual plant and equipment failures must be allowed for establishing work schedules. An extension of time may be granted for such delays as are considered to be in excess of the normal, but only when it is shown that the lost time would not reasonably be made up through acceleration of the remaining work. Failure to prosecute the work continuously and effectively for the full time allowed, with adequate work force and schedule, will be cause for denial of any such time extension that may otherwise be allowed.

SP-4 **(1903) INCREASED OR DECREASED QUANTITIES**
The provisions of Mn/DOT 1903 regarding overruns and underruns shall not apply to the following items of work under the Contract:

TRAIL CONSTRUCTION TYPES A, B AND C
CONSTRUCTED TURNS TYPES A, B AND C
BERMED TURN TYPES A, B AND C
DISCRETIONARY PERMANENT SEED AND MULCH
DISCRETIONARY TEMPORARY SEED AND MULCH
TRAIL TREAD ROCK ARMORING

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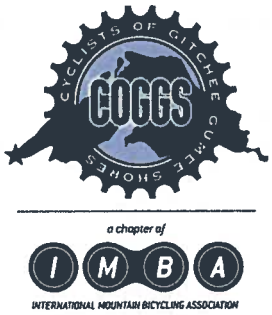
SIDESLOPE HARDENING
ROCK CRIB WALL
TURF BLOCK PAVERS
ROCK JUMP
ROCK CHECKS
EROSION CONTROL BLANKET CATEGORY 3 & 4
COIR ROLLS
ALL WIDTHS OF TTF BOARDWALK
BRIDGES WITH AND WITHOUT RAILINGS



COGGS/IMBA
Mountain Bike Trail Specifications

For

(Mission Creek)
Duluth Traverse
Mountain Bike Trail System
Phase 1

ARCHITECTURAL
RESOURCES • INC.

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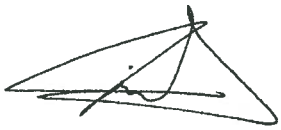
NOTE: IN MOST INSTANCES THE TERM "CLIENT" HEREIN INCLUDES CLIENT'S REPRESENTATIVE.

1.0 Certification

DATE: MAY 7, 2013

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT OR ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

NAME	REGISTRATION NUMBER



JAMES M. SHOBERG, LANDSCAPE ARCHITECT	**45577**

ARCHITECT: **ARCHITECTURAL RESOURCES, INC.**

126 EAST SUPERIOR STREET

DULUTH, MINNESOTA 55802

(218)727-8481

SECTION 1: PROJECT DESCRIPTION AND SCOPE

1.1 General Project Description

The City of Duluth, Minnesota (herein referred to as "client") is seeking a contractor to provide an experienced trail crew to construct approximately 10 miles of new mountain bike-specific natural surface singletrack trails on public lands in two locations in Duluth, approximately 6 miles in Mission Creek and approximately 3.5 miles in Lester Park. This is Phase 1 of a multi-year project that seeks to create upwards of 100 miles of singletrack, the largest system of its type within an urban environment. Duluth, the fourth largest city in Minnesota, is situated at the western most point of the Great Lakes on the north shore of Lake Superior.

The surrounding city park lands demand a high standard-of-care during construction activities due to steep topography, erodible soils and proximity to trout streams. The contractor will also be responsible for implementing and maintaining the erosion control plan supplied by the client.

The area is front country, with many areas of mobile phone coverage, and is located less than one hour from emergency medical service.

1.2 Mountain Bike-Specific Singletrack

It cannot be more strongly emphasized that this project is purpose-built for mountain bike natural surface singletrack trail. Desired characteristics include: cambered trail surfaces, insloped turns, aggressively rolling terrain, incorporation of native rock features, and seamless transitions between trail types. Trail features and flow should *progress* as a user gets deeper into the system; larger, tighter, more narrow examples of similar elements moving from "green" (easier) to "blue" (more difficult) to "black" (most difficult) areas. Along segments intended for more skilled trail users, optional lines available only to more-skilled riders are highly desirable.

In partnership with the client, the contractor will be expected to maximize the potential of the landscape hosting the trail corridors. Creativity is encouraged. A portfolio of previous mountain bike-focused work will be heavily weighted in the selection process.

Note! Client is the final arbiter of the correctness of completed work. Inspection of work will be both visual and dynamic. The client will validate the riding experience of each sub-project as a prerequisite to final approval. Sections that do not ride properly will be improved and/or rebuilt until they are deemed acceptable to client.

1.3 Project Scope

To satisfy funding requirements for the project, the work outlined in this document shall be completed by November 1st 2013.

Overall, the project's scope of work includes at least ±6.0 gross miles of new trail construction including: constructed and bermed turns, technical trail feature (TTF) boardwalk, rock armoring, bridges, and closure of all obsolete trail segments. The Storm Water Pollution Prevention Plan (SWPPP) outlines general construction information and best management practices (BMPs) as they apply to the trail project construction activities.

This project is funded by a grant from the Minnesota Department of Natural Resources Legacy Grant Program as well as private funding from the local mountain bike club Cyclist of Gitchee Gumee Shores (COGGS) and funding support from the City of Duluth.

1.4 Additions and Deletions

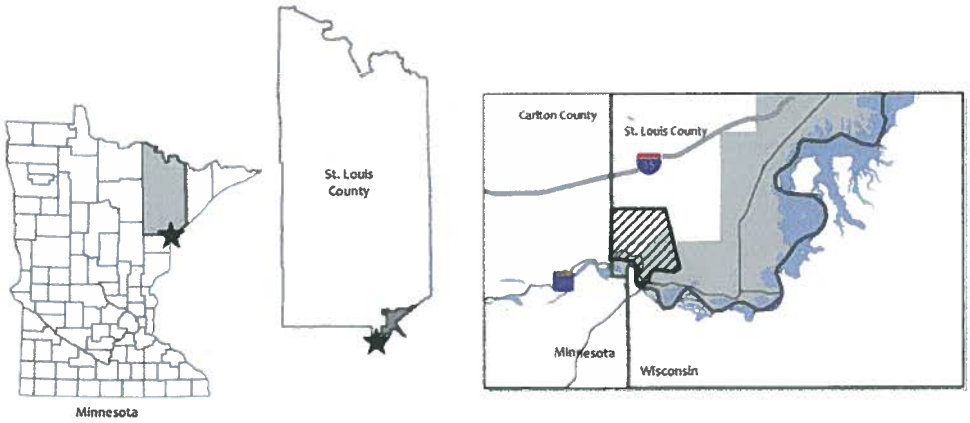
No extras or additional work will be allowed or paid for unless such extras or additional work are ordered in writing by the client, and the price fixed and agreed upon before such work is performed. The client will not accept any overruns nor will it pay any quantities beyond those specified.

The client shall have the right, without invalidating the contract, to make additions to or deductions from the work defined in this document, and in case such deductions or additions are made, an equitable adjustment of the addition to or deduction in cost shall be made between the client and the contractor, but must be agreed to in writing.

1.5 Discrepancies

Should the contractor discover discrepancies in this document, the matter shall at once be brought to the attention of the client, and the discrepancies corrected before proceeding further.

SECTION 2: PROJECT LOCATION MAP



2.1 Project Location Descriptions

The primary trail head for access to the Base Bid flag lines projects 1 and 2 are located in Duluth, MN in Chambers Grove Park at the intersection of Highway 23 and Highway 210 right on the St. Louis River. The flag line starts behind the toilet building along the hill side of the park away from the river.

GPS Coordinates: 46°39'39.52" N and 92°16'55.37" W

Address: Hwy. 23 & 137th Ave. W Duluth, MN 55808

SECTION 3: PROJECT DETAILS

Throughout Mission Creek Park landslide areas may be encountered by the contractor during the construction of the trail segments due to the June 2012 flood. These landslide areas are not identified or represented in the LIDAR topographic data found in the construction documents because that data was created prior to the flood. When proposed trail segments are encountered in landslide areas consult with the owner's representative prior to construction. Discretionary erosion control BMP measures may need to be implemented and will be paid based on the contractors unit bid price.

3.1 Base Bid – Hill Side Trail

Description: [Green Traditional Two Way]. This section of trail will act as the primary artery into the trail system from the western end of town and will be part of the "Connector Trail" that traverses the entire city along the ridge line.

Concern: Landslides may be encountered. A historic Native American grave yard is in the vicinity of this trail section and must be avoided by at least 100 LF in all directions of its perimeter fence. This grave yard is defined in the plans and in the EAW. There is an ATV trail that intersects portions of trail. Vandalism may be an issue.

Length: Estimated 18,240 linear feet

3.2 Base Bid – River Side Trail

Description: [Blue Bump Pump One Way]. This section of trail goes through a dramatic landscape of alternating ridges and coulees with tremendous vantage points of the St. Louis River. The forest has a significant number mature trees dominated by pines. An emphasis on downhill flow is required for this segment of trail.

Concern: Landslides may be encountered.

Length: Estimated 13,184 linear feet

SECTION 4: FINISHED TRAIL CONSTRUCTION AND MAINTENANCE GUIDELINES

4.1 Trail Design

Design of any new segments or reroutes must be guided by the sustainable trail principles promulgated by accepted resources such as the current editions of the *Trail Solutions; IMBA's Guide to Building Sweet Singletrack*; *Managing Mountain Biking; IMBA's Guide to Providing Great Riding;* the USDA's *Trail Construction and Maintenance Notebook* and the *Minnesota Department of Natural Resources' Trail Planning, Design, and Development Guidelines.*

4.2 Bike-Specific Trail Flow

All trails constructed as part of this project shall be natural surface singletrack trail that is purpose-built for mountain bicyclists, sometimes described as *flow trails*. A subset of the larger family of rolling contour trails, flow trails share the following basic characteristics:

- *Synergy with the landscape:* Making the most of what the natural terrain provides by using the trail to explore the topography and features (rocks, trees, waterways) present. Some describe a trail with good flow as one that has been revealed, not so much as constructed.
- *Opposition to user forces:* Flow trails maximize the efficiencies afforded by using a bicycle, and are designed to counteract forces that direct a user off the trail. Bermed turns and cambered tread surfaces, for example, promote traction, safety, sustainability, and enjoyment.
- *Conservation of momentum:* The ideal trail avoids "flow killers" such as sharp turns, incongruent features, and disjointed climbs and descents. Instead, it utilizes undulations and cambered turns to rewards smooth, deliberate riding and maximize forward motion. A flow trail encourages a better understanding of the bicyclist/bicycle interface, allowing riders to reach that unique sensation of floating through the landscape.
- *Leading the user forward:* A sense of discovery, combined with a design that maximizes a rider's forward momentum, helps to draw the user forward. The trail is never repetitive or predictable, nor is it "awkward", with variety and innovation combining to create an intuitive feel.

4.3 Trail Specifications

The trail system is composed of a number of loops and segments design, constructed, and maintained to a variety defined trail specifications. Making use of a range of different specifications when creating the overall design results in a

complete trail system that appeals to a wide range of users, with different fitness, technical proficiency, or preferred modality. It is important that individual segments and loop maintain consistent specification over their length to ensure visitors have the experience they expect.

A project-specific trail specification matrix is included along with the definition of project units.

4.4 Erosion and Sedimentation Control

Management of erosion and sediment on this project is defined in the provided Storm Water Pollution Prevention Plan (SWPPP). All construction activities must conform to the requirements of the SWPPP. Any inconsistencies created by the construction specifications do not excuse the contractor violating the procedures and requirements laid out in the SWPPP.

No excavation or fill is permitted in wetlands. Wetlands will not be marked in the field. It is the responsibility of the contractor to consult with client prior to doing any work within suspected wetlands areas.

4.5 Trail Construction Best Practices

To satisfy erosion and sediment control requirements, trail must be finished as the project advances. Ideally, all roughed-in corridor will be finished the same day. Any segments requiring delayed finishing must be approved in advance by client.

4.6 Corridor Clearing

Corridor clearing shall be confined to within four (4) feet of trail and backslope edges. Specific values are enumerated in the trail specifications matrix included along with the definition of project units.

4.7 Debris

Cut and scatter all branches and brush to maximum height of eighteen inches (18"). No debris shall be left within ten feet (10') of trail. Butt-ends of any sawed limbs must face away from trail. Cut brush and slash must be disposed of in an upland location and must be kept out of streams, gullies, swales, low areas, and suspected wetlands.

4.8 Tread

All tread should be constructed as full bench whenever possible. If fill is required, it should be supported by a stone retaining wall sufficient to support potential equestrian use.

Specific tread widths are a function of their location in the system. Specific values are enumerated in the trail specifications matrix included along with the

definition of project units. Narrower gateways through natural obstacles (trees, rock outcrops) are encouraged. Tread widths in areas of dynamic flow, jump landings, and insloped turns, for example, may be wider to accommodate the full range of riding experiences. Significant deviations from these examples require approval of the client.

4.9 Trees

The trail is to be built with minimal impact to the over story trees and the surrounding forest. Only brush and small trees should be removed from the trail corridor. Trees larger than 4" DBH require permission from the client before they are removed and trees larger than 6" also require permission from the land manager. Removal of healthy trees approaching this size should be avoided and only done when there is not a better option. Non-merchantable timber, dead, dying, and rotted trees can be removed to open up the trail corridor as necessary for grading or if they present a clear hazard to trail builders or trail users.

Improper remove of trees may result in a penalty ranging up to the replacement value + fine as assessed by the property owner and outlined in the City of Duluth's Unified Development Code "UDC".

4.10 Rocks

Maximum size rock material to be left in trail is a function of its location in the system. Specific values are enumerated in the trail specifications matrix included along with the definition of project units.

Rocks that are unearthed during grading shall be built into trail features or stabilized not more than five feet (5') away from the trail-edge. It is not permitted to allow rocks to roll down the slope. The trail will be routed around or over rocks and fractured stones that cannot be moved with the approved equipment.

These requirements do not apply in areas where rocky tread is integral to the flow goals of a specific segment (e.g., technical rock gardens, slabs that provide jump or "kicker" opportunities). Exceptions also apply in boulder fields or where only a portion of the tread is obstructed. All rock embedded in the trail surface should be stable. When used in structures, care will be taken to match rock to the immediate surroundings; grain patterns, lichen growth, etc. Excess tool marks on rocks is not acceptable. Non-native rock may not be imported into a work area without approval of client.

4.11 Woody Material

Woody material such as stumps, logs, and brush shall be removed from the trail tread. No stumps less than twelve inches (12") in diameter shall be left within four feet (4') of the trail tread. Wood chips created from the slash as a result of the trail corridor clearing are an acceptable mulch alternative to weed

free straw. Contractor may ONLY chip woody material that was created as a result of the corridor clearing.

4.12 Fall Zone Clearing

Areas adjacent to dynamic trail segments where visitors have a greater potential to exit the immediate trail corridor will be cleared of impact focusers; butt-end branches, stumps, and rocks under six-inch (6") diameter.

4.13 Backslope

Backslope of trail should be graded to three-to-one (3:1) slope or until it matches the existing slope. In areas where the backslope has the potential to become part of the active tread it must be finished to trail tread specifications.

4.14 Trail, Finished Condition

Hand finish and grading of trail tread, backslope, down slope spoils, and drainage features shall leave a surface that matches the texture of the surrounding forest floor while enabling water to drain off the trail.

4.15 Spoils Stabilization

All excavated materials not used in the trail tread or other trail structures must be stabilized within seven (7) days of not being worked. Spoils should be distributed in a thin layer adjacent to the trail tread. Care should be taken to avoid placing spoils in drainages or swales. When possible, spoils should be mulched with native materials to discourage erosion while native seed stocks reestablish. In areas without adequate native mulch, sterile wood mulch may be substituted. Straw, seed-free or otherwise, is not acceptable. In certain circumstances, installation of formal erosion control measures may be required.

At all times, spoils stabilization must satisfy the terms of the project SWPPP.

4.16 Turns

A turn is defined as a change of direction across the local landscape requiring the trail to cross the fall line. All turns are insloped switchbacks also known as *switchberms* or, on slopes with a maximum cross grade of twenty percent (20%), an at-grade insloped turn. Acceptable values for turn radii and grades across the turns are enumerated in the trail specifications matrix included along with the definition of project units. Insloped turns should be constructed to have good flow for wheeled trail users. All turns must include an entrance and exit rolling grade dip. If conditions warrant, a traditional rolling crown switchback may be substituted for either type with prior approval of client.

4.17 Grade Reversals

A designed grade reversal or constructed rolling grade dip should occur at least every one hundred feet (100') and preferably more frequently. Any grade reversal must be strongly anchored to discourage short cutting.

In mountain bike-specific trails, grade reversals also double as flow elements, such as rollers, jumps, and pump/rhythm sections. In this context grade reversal shape, size, and placement should reflect the specifications for its location within the system. Specific details will be determined by the contractor in partnership with the client.

4.18 Above-Grade Earthen Structures

Any portion of trail rising above the grade of its surroundings must be composed of mineral soil. If soil is scarce, a rock core may be used so long as it provides less than fifty percent (50%) of the total volume of the structure. Use of organic materials, duff, woody materials, etc., is absolutely prohibited.

Fill structures must have a fill slope of at least two-to-one (2:1) or the angle of repose of the local soil, whichever is greater. A retaining wall may be substituted for a fill slope with permission of the client. Fill structures must be completely stabilized and compacted in no greater than six-inch (6") lifts. Acceptable techniques include track-packing or compaction via a dedicated tamping unit. Hand tamping is not acceptable. Raw soil faces that do not become tread must be mulched and seeded in the same fashion as spoils and satisfy the terms of the project SWPPP.

Examples of above-grade earthen structures include aggressive grade reversals ("rollers", "jumps"), berms, and turn pads on insloped switchbacks.

4.19 Water Diversions

All tread should be outsloped at five percent (5%). When not possible or desirable due to purpose-built insloping, resource concerns, or obstruction, water can be directed down the trail for up to fifty feet (50') before a water diversion location.

4.20 Invasive Species

To reduce the spread of invasive plant species all hand tools and mechanized equipment should be free of invasive seeds and clean of any dirt and mud when entering a project site. When transferring materials between distinct locations within the project site all tools and equipment must again be cleaned to discourage transport of invasives in the local landscape.

4.21 Filter Strips

Filter strips are vegetated areas downslope of the trail corridor intended to treat sheet flows coming off the tread. Filter strips function by slowing down flow velocities, filtering out sediments, and providing an opportunity for infiltration into the underlying soils. Properly mulched spoils may be designated as part of the filter strip. Filter strips shall not be used as regular travelways for equipment and materials. Areas with inadequate filter strip capacity above waterways may require installation of formal erosion control measures to satisfy erosion and sediment control plan requirements.

At all times, filter strip characteristics must satisfy the terms of the project SWPPP.

4.22 Environmental and Historic Preservation

The corridors identified in the provided design have been vetted through an assessment process to ensure they respect sensitive environmental and historic areas. The construction shall avoid any disruption or dislocation of sensitive cultural resources found on the site unless expressly authorized in writing by the client. Any known sensitive cultural areas will be communicated to the contractor in writing before construction begins. In the event that previously unidentified historical artifacts are found during the construction process, trail construction must be immediately suspended in that area until it can be evaluated and a determination made on how to proceed. The client will need to make final determination on how to proceed around sensitive cultural resources after consulting with appropriate archeologist personnel. The trail may be rerouted around the sensitive area or special accommodations may be made such as boardwalk. The decision on how to proceed will depend on the type and sensitivity of the resource and the distance separating it from the planned trail.

4.23 Signage and Wayfinding

Installations of intersection trail signage and wayfinding aids are the responsibility of the owner and are not part of this bid package. Any details on the signage plan have been included in the project plans as a convenience to the contractor and to the owner. Signage and its installation will comply with all the requirements of the governing agencies. Construction documents and maps will identify the signage requirements, locations, frequency, and physical design plus materials standards.

4.24 Mechanized Equipment Best Practices

All track marks will be raked smooth. Affected area will be finished to have a *nature shape*, e.g., spoils piles rounded, smoothed and cleared of significant brush, blade edges blended. A spill kit suitable for five gallons of fluid will be

onsite and within 500 feet of mechanized equipment whenever equipment is being operated. Scarring of trees is to be avoided. Significant and repeated scarring may result in a financial penalty of with a minimum $100 and up to the replacement value + fine as assessed by the property owner per tree over four inches (4") DBH and as outlined in the City of Duluth's Unified Development Code "UDC".

Machine service and fueling is not permitted with 500 feet of a wetland or drainage.

Machine access is restricted to the trail corridor. Separate access routes may only be created and used with the prior permission of the client. Any approved access route must be retired and reclaimed back to its original condition upon project completion.

SECTION 5: UNIT DEFINITIONS AND DETAIL DRAWINGS

Any accompanying figures are for illustrative purposes only and do not relieve contractor of the need to satisfy written requirements. All units may not be used in all projects. Additional units may be required. In this case, the client will establish their definition via a change order process.

5.1 Trails Specifications (table 1)

A trail specifications matrix provides the foundation for the possible trail styles and a starting point for their defining characteristics. Contractor should always start here, whether composing their bid or designing/constructing trail elements. The client understands that all trail, and especially bike-specific trail, is an art form strongly driven by local conditions and anticipates a collaborative process developing as-constructed details for individual segments.

Note that all types fit within the sustainable trail guidelines framework. While short specific grades may exceed typical suggested maximums, armoring is suggested in these cases. It is not acceptable to sacrifice "the half rule" or eliminate grade reversals to meet experiential goals. To the contrary, when creating trails at these upper limits, grade reversals are more important then ever.

A top-level summary of the various styles detailed in the matrix:

- *Traditional* – Typical shared-use natural surface singletrack as described in the standard trail texts. May include bike-specific elements, like in-sloped turns, rollers, and jumps.
- *Bump and Pump* – Natural surface singletrack strongly influenced by pump tracks. Distinguishing feature is the high frequency of roller features. Proper shaping and spacing of rollers is critical, both to increase their utility as a method of propulsion and to match the intended speed and flow style of the segment. All turns are insloped. Tread surface is smoother then average. More difficult Bump and Pump segments may add smaller technical features and tread texture.
- *Jump* – A natural surface trail more focused on jump opportunities. Similar to Bump and Pump but with longer features less frequently placed. Tread is wider then average in recognition of the dynamic riding style likely on these segments. Corridor clearing limits are larger as well for similar reasons. Most Jump segments are directional.
- *Gravity* – An extremely technical downhill-specific trail. More difficult Gravity segments include mandatory drops in the tread. These segments may include structures to manufacture the desired experience when natural terrain is lacking. May include elements of Bump and Pump or Jump. Gravity trails are directional.

5.2 Trail Flagging

In this project, final trail flagging is the responsibility of the client and owner.

Trail flagging encapsulates final trail design. Final design must reside within the approved corridor. Corridor is marked with pink hang flags. Flags indicate centerline; the approved corridor is +/- twenty-five feet (25'), archeologically sensitive areas excepted. Final trail design should be at least fifty feet (50') from property boundaries unless otherwise authorized by client.

The trail design will be pin flagged by the contractor at a minimum of 20' intervals. Contractor shall mark with flagging tape all trees over four inches (4") DBH that are to be removed. Final determination on removal lies with the client. Removal of trees over six inches (6") DBH requires the additional permission of the land owner.

The trail should have a grade reversal a minimum of every one-hundred feet (100'). Trail should follow a rolling a contour alignment and abide by the Half Rule. Grades must match the trail type defined by the client for a specific segment.

The client must approve the final alignment before construction can commence.

5.3 Trail Construction (figures 1 - 4)

Trail construction unit costs are a combination of trail specification and landscape type. For each project, the specification is constant. But as the landscape changes, different construction units apply, matching the local terrain. The range of units as a function of landscape type, A through C, is enumerated in the plan set and on bid worksheets.

Measurement and payment for trail construction is based on landscape averages as depicted in the plan set. Grading through localized uneven grades and undulations is included in the contractor's unit bid price.

Creation of typical trail features as enumerated in the specifications (ex. Rollers) is included in the trail construction units. The larger whole is broken into unique sub projects to capture the different efforts required to create the various trail experiences.

Each linear foot unit shall satisfy the enumerated guidelines for the specification associated with the specific segment. Trail width guidelines apply to active tread only; backslope and any fill slopes are not included. Tread variance will satisfy the guidelines for its location in the system. Note the global design attempts to match trail specifications to the landscape most suited for that type. But in local landscapes where there is a mismatch, the contractor will be expected to modify the area to match the trail specification. Example is creating an easier "green" style trail through a locally rocky area.

The trail corridor shall be cleared of all woody plants less than four inches (4") DBH. The extent of corridor clearing will meet the requirements for the specific trail type. Any stumps resulting from the clearing should be excavated and removed. Any woody debris not used in trail closure should be removed from sight of the trail or arranged to blend into the landscape.

Limb trimming will be done to open up the trail corridor as defined in specification for the specific segment. Limb trimming and pruning shall be completed using approved trimming techniques that comply with the guidelines for tree care operations from the American National Standards Institute (ANSI) contained in the ANSI A300 Pruning Standards and ANSI Z133.1-2000.

The trail tread shall consist of packed earth or rock. Any stumps and/or roots should be excavated and removed from the trail tread. Backslope dimensions are derived from surrounding area such that they satisfy the earlier stated three-to-one (3;1) definition. Any stumps and/or roots in the backslope should be flush-cut. In areas where the backslope has the potential to become part of the active tread (ex. naturally formed inslopes or berms) it must be finished to trail tread specifications.

The trail should contain frequent grade reversals. To encourage self-cleaning the grade of the drains at the bottom of the grade reversals must be at least fifteen percent (15%) and typically not greater than twenty-five percent (25%). If the drain grade exceeds twenty-five percent (25%) then installing Rock Rip-Rap (see Section 5 – Rock Rip-Rap) in the bottom of the drain to prevent headcutting may be requested by the client. If grade reversals result in a fill slope, these slopes and the associated feature(s) will be finished to satisfy the above-grade earthen structure guidelines. Contractor is expected to create frequent grade reversal regardless of the local landscape. This may require localized topography modification when building through landscapes with low slope angles.

Any downslope spoils must be distributed such that no berm is present. When distributing, care shall be taken to match the local terrain. Spoils must be stabilized within seven (7) days of not being worked with a covering of forest duff. In areas with insufficient duff, sterile wood chips may be substituted for forest materials. Excess soil shall not be distributed into drainages or adjacent to streams. Refer to SWPPP for further details.

If borrow pits are created in the course of trail construction they will be finished to satisfy the requirements of the trail and its surroundings: slopes graded to the local angle of repose, stumps and roots trimmed, spoils stabilized and covered with forest duff.

For billing purposes, trail construction is measured along the centerline of the tread.

5.4 Armored Tread/Stone Pitching (figure 5)

Width of armored tread should be at least 1.5 times the width of the local trail specification to permit users to find their line as the trail matures, and at least two (2) times in areas where more variation is likely (e.g., jump landings, insloped turns).

Stone pitching must extend at least ten inches (10") deep with a minimum of two-thirds (2/3) of the rock buried below the surface of the surrounding grade. Stones should be stable and aligned perpendicular to the direction of travel. Each end of a pitched section shall be supported by larger "bookend" stones embedded in the ground. Stones used for armoring should be two inches (2") to twenty-four inches (24") thick and twelve inches (12") to forty-eight inches (48") wide. Voids shall be filled with compacted native soil, crushed rock, and/or crusher fines. Client may require additional guide stones along the edges of the trail if the final surface of the trail appears more rugged than the adjacent landscape.

For billing purposes, armoring is measured along the centerline of the tread. This unit includes the construction of the trail as well as armoring. Contractor cannot invoice for both trail construction and armoring of a given linear foot of trail.

5.5 Armored Tread/Turf Block Pavers (figure 6)

Turf block pavers are an alternate armoring technique to stone pitching where it is difficult to source appropriate native stone. As turf block pavers allow a more predictable tread surface, they are particularly appealing for "green"-style trails or for flow elements where excessive tread variance is not desired (e.g., high-speed insloped turns, some constructed jump elements.

Width of armored tread should be at least 1.5 times the width of the local trail specification to permit users to find their line as the trail matures, and at least two (2) times in areas where more variation is likely (e.g., jump landings, insloped turns). Turf blocks pavers must be installed as directed by manufacturers instruction. Final installation should be nominally at-grade with the surrounding landscape. Individual paver blocks should be completely supported to reduce the chance of breakage. Height variance and joint spacing should both be less than one-half inch (0.5"). Blocks should be laid in a pattern to minimize joint lines. Paver voids are filled with local materials compacted to reduce settling.

This unit includes mobilizing pavers into the project area and installation. Pavers are provided by the client.

For billing purposes, armoring is measured along the centerline of the tread. This unit includes the construction of the trail as well as armoring. Contractor cannot invoice for both trail construction and armoring of a given linear foot of trail.

5.6 Rolling Grade Dip (figure 7)

A rolling grade dip is a drainage feature added to existing trail.

The minimum length of the drain portion shall be six feet (6') and the rise must be at least ten feet (10') long; the height differential between the bottom of the dip and the top of rise shall be approximately twelve inches (12") to twenty-four inches (24"). The sides of rise must have a fill slope of at least two-to-one (2:1) or the angle of repose of the local soil, whichever is greater.

To encourage self-cleaning the grade of the drains at the bottom of the grade reversals must be at least fifteen percent (15%) and typically not greater than twenty-five percent (25%). If the drain grade exceeds twenty-five percent (25%) then installing Rock Rip-Rap (see Section 5 – Rock Rip-Rap) in the bottom of the drain to prevent headcutting may be requested by the Client. If grade reversals result in a fill slope, these slopes and the associated feature(s) will be finished to satisfy the above-grade earthen structure guidelines.

Rolling grade dips must be sited at least thirty feet (30') uphill from significant turns in order to reduce the effects of unweighting on higher speed users. Exceptions on these dimensions and requirements may be made on a site-by-site basis to accommodate terrain constraints. In certain locations the client may determine that smaller structures reinforced with large rocks that fit the character of the trail may an acceptable substitute.

A rolling grade dip is billed as a "whole" unit.

5.7 Terrace (figure 8)

A terrace is a combination of landing, drain, retaining wall, and step useful for creating sustainable shared-use trail in steeper corridors than would be supported by the natural surface tread alone. Steps are used to accelerate the climb/descent while the use of landings between risers allows continued use by bicycles and equestrians. Terraces may be incorporated in new trail construction or applied as a corrective maintenance measure.

Step risers should be constructed out of stone; rot-resistant wood may be substituted with the approval of the client. Maximum riser height is determined from the step height requirements of the trail segment. The riser shall be battered in the direction of uphill travel. A riser may be assembled from multiple stones with the understanding it must withstand the dynamic loading of climbing and descending users.

The landing must have a minimum length of at least 1.5 times the stride or wheelbase of the longest users. Each landing must contain a drain to the downhill side; it is not acceptable for a landing to drain over its riser. Drain differential must be at least six inches (6"). The fill required to create the landing is included in this unit.

The downhill edge of the landing must be supported by a retaining wall of stone; rot resistant wood may be substituted with the approval of the client. The landing's retaining wall must satisfy all the requirements of a stand-alone wall (see Section 5 – Rock Retaining Wall).

A terrace is billed per riser. For example, the figure shows parts of three (3) terraces

5.8 Rock Retaining Wall (figure 9)

The bidding unit of a rock retaining wall is square-feet, calculated from the exposed vertical face. Rock retaining walls should be stable and battered (inclined back into the slope) a minimum of fifteen percent (15%) from vertical. All walls should have rubble backfill of at least six inches (6") in depth behind the wall to allow for drainage and to prevent damage from frost heaves. The base of the wall should be placed on firm compacted mineral soil or rock outcroppings. Any small stones used to "chink" larger stones in place should be placed in the back of the wall. The top of the wall shall not be counted in the width of the trail tread. The top layer of stones shall be installed in a manner to avoid being accidentally dislodged by trail users. Deadmen (stones that extend from the wall into the slope) should be used to ensure integrity. There should one deadman for every five square feet (5 SF) of wall.

5.9 Berm (figure 10)

A berm is a constructed insloped change-of-direction that does not satisfy the definition of turn. Changes of direction resulting from following the natural folds of the landscape are not berms and are included in the trail construction unit. Determination of the placement and configuration of a berm will be done in consultation with the client.

Specifications for radius and cross slope across the berm are the same as those defined for turns in the specifications for the particular trail segment. Berm radii should be consistent.

Fill structure for a berm will comply with composition, compaction, and fill slope requirements of an Above-Grade Earthen Structure.

For billing purposes, a berm is measured along the centerline of the tread. This unit includes the construction of the trail as well as the berm. Contractor cannot invoice for both trail construction and creating a berm over a given linear foot of trail.

5.10 Constructed Turn/Insloped Switchback (figure 11)

A constructed turn is defined as a change of direction across the local landscape requiring the trail to cross the fall line. The constructed turn unit includes any walls, armoring, setup berm, and drainage features associated with

the structure as well as the trail itself. Determination of the placement and configuration of a turn will be done in consultation with the client.

Like trail construction, turn unit costs are a combination of trail specification and landscape type. For each project, the specification is constant. But as the landscape changes, different turn units apply, matching the local terrain. The range of units as a function of landscape type is enumerated in the plan set and on bid worksheets.

Measurement and payment for a turn is based on landscape averages as depicted in the plans. Building through uneven grades and undulations local to a specific turn is included in the contractor's unit bid price.

Each insloped switchback requires a Grade Reversal or Rolling Grade Dip before and after; these shall not be counted as separate units for cost estimating or payment purposes. The dips for these drainage features should be a minimum of six feet (6') long. To encourage self-cleaning the grade of the drains at the bottom of the reversal/dip must be at least fifteen percent (15%) and typically not greater than twenty-five percent (25%). If the drain grade exceeds twenty-five percent (25%) then installing Rock Rip-Rap (see Section 5 – Rock Rip-Rap) in the bottom of the drain to prevent headcutting may be requested by the Client. The uphill dip should be sited to minimize unweighting effects for higher speed users.

All constructed turns will be created with an insloped turnpad. Specifications for radius and cross slope across the turn are defined in the specifications for the particular trail segment. Turning radii should be consistent. Turns with a running grade of twenty percent (20%) or greater in the apex should have a rock armored drain two feet (2') wide following the inside the turn. Interior of legs shall be anchored by and filled with large rocks and/or woody debris to discourage shortcutting.

If required, the fill structure for the turnpad will comply with composition, compaction, and fill slope requirements of an Above-Grade Earthen Structure. Client may require that a retaining wall be employed in place of a fill slope. Any retaining structures will be constructed of stone and comply with all Rock Retaining Wall specifications. If multiple switchbacks are required, they will be sited to minimize "stacking".

An insloped switchback is billed as a "whole" unit. The unit starts at the initiation of the uphill and completion of the downhill drainage structures.

5.11 Rock Jump

The drop of the jump should match the specifications of the segment containing it. Width of the jump should be at least 1.5 times the width of the trail specification to permit users to find their line as the trail matures. Determination

of the placement of any rock jumps will be done by the client after the completion of the rough grading.

Rocks creating the jump must extend at least ten inches (10") deep with a minimum of two-thirds (2/3) of the rock buried below the surface of the surrounding grade. Stones should be stable and aligned perpendicular to the direction of travel. Voids shall be filled with compacted native soil, crushed rock, and/or crusher fines. Client may require additional guide stones along the edges of the trail if the final surface of the trail appears more rugged than the adjacent landscape.

A rock drop is billed as a "whole" unit.

5.12 Technical Trail Features and Boardwalks (figure 12)

Placement and detailed design of any Technical Trail Feature (TTF) and Boardwalks will be a collaborative effort between the contractor and the client. Design specifications will be derived from the trail specifications of the host segment and adhere to current best practices for the design and construction of TTFs.

TTFs and Boardwalks should have a playful and organic appearance to better match the natural environment. Recommendations include curved structures instead of straight lines or angles and trail deck that pitch, yaw, and vary in width.

Specific guidelines for TTFs and boardwalks are include in the plan set supplied for the project.

General guidelines include the following. Wooden structures must be designed and constructed with the assistance of an experienced professional. Rot-resistant materials must be employed and choices approved by the client. Examples of acceptable materials include: Red Pine, Cedar, Cypress, and Treated Lumber. Treated lumber shall be treated in accordance with AWPA Standard C2/C9 with ACQ 0.4 LBS/CF Ret. And 0.6 LBS/CF Ret. for 6x6's and wood in contact with the ground. Unapproved treated lumber, creosote soaked railroad ties, or similar lumber cannot be used since these would introduce toxins into the natural environment.

All cuts and drilled holes shall be saturated with 2 coats of copper Napthenate in a 2% solution. Allow treatment to absorb into wood prior to applying second coat. Avoid applying treatment over water and be extra careful whenever applying this treatment over or near water to prevent contaminating the water. Follow the treatment manufacturer's recommendations.

Hardware shall be corrosion/rust resistant, like triple dipped hot dip-hot dipped galvanized or stainless steel, intended for outdoor use, and matched to the material to insure long-term integrity. All hardware shall meet ASTM A307. All hardware that is hot dipped galvanized shall meet ASTM A153. Nails are not an acceptable fastener and will be rejected.

Manufactured materials should be rough-cut or finished with a slip-prevention coating to maximize traction. Approaches and configuration of structures shall be adjusted to reduce the accumulation of organic material on deck surface. A fall zone sufficient to accommodate the likely trajectory of a trail user accidentally leaving the structure shall be cleared of all materials that could focus impact (e.g., stumps, sharp rocks, woody materials).

To reduce the amount of toxic chips introduced into the landscape, preparatory tasks (primary cutting and drilling, refinishing of cut edges) shall occur offsite. At the project site, all final drilling, fitting, and retreating will be done in a "temporary workshop" area where a tarp or similar is used to capture chips and any spilled preservatives.

This unit includes design, preparatory tasks, mobilizing materials into the project area, and installation. All materials are provided by the client as are any required engineering and permitting costs.

For billing purposes, a boardwalk or bridge is measured along the centerline of the tread. This unit includes the construction of the trail as well as the boardwalk. Contractor cannot invoice for both trail construction and boardwalk of a given linear foot of trail.

5.13 Reconstruct Tread

Any tread reconstruction should match the new trail construction listed above. For billing purposes, reconstructed tread is measured along the centerline.

5.14 Rock Rip-Rap

Rock Rip-Rap is a six inch (6') deep layer of placed stone intended to stabilize slopes with concentrated storm flow. Typically this technique will be used to protect drains of rolling grade dips and drainage channels below an armored crossing. Individual stones should be gabion-class or equivalent. Rock Rip-Rap is measured by the square yard.

5.15 Straw Wattle Installation (figure 13)

Straw wattles are formal erosion control measures. They are installed in areas where the existing filter strip is inadequate to prevent sediment from reaching adjacent water courses. See project SWPPP for additional detail.

Wattles are placed parallel to trail and/or anticipated concentrated flows, set in a minor indentation excavated approximately two inches (2") deep. They are held in place with one inch-by-one inch (1"x1") or one inch-by-two inch (1"x2") wooden bio degradable stakes driven through the center of the wattle at least six inches (6") into the ground, stopping about two inches (2") above the wattle. Use five (5) stakes twenty inches (20") to twenty-four (24") long in the typical wattle,.

Set the wattle with foot-tamped backfill on the uphill side to prevent water from flowing underneath.

This unit includes mobilizing wattles into the project area and installation.

5.16 Trail Closure (figure 14)

Compacted tread will be scarified to encourage regrowth of native seed stock. Small plants and other nearby growth will be transplanted into scarified treadway. Client may provide appropriate local native seed stocks for distribution. Exposed soils will be covered with local leaf litter. Trail tread will be disguised with woody debris. If trail is incised, check dams will be placed at a minimum of every twenty feet (20') to capture sediment. If trail is actively eroding, grade reversals will be added to stem continued damage. Trail corridor will be erased via the placement of vertical debris. If length of trail to be closed is greater than one hundred (100) linear feet than vertical debris must extend a minimum of fifty feet (50') from each end or until visible sight line is diminished, which ever is greater.

For billing purposes, closure is measured along the centerline.

5.17 Modifications

Modifications to the specifications may be allowed, however, they must be made to the client in writing.

5.18 Tables And Figures

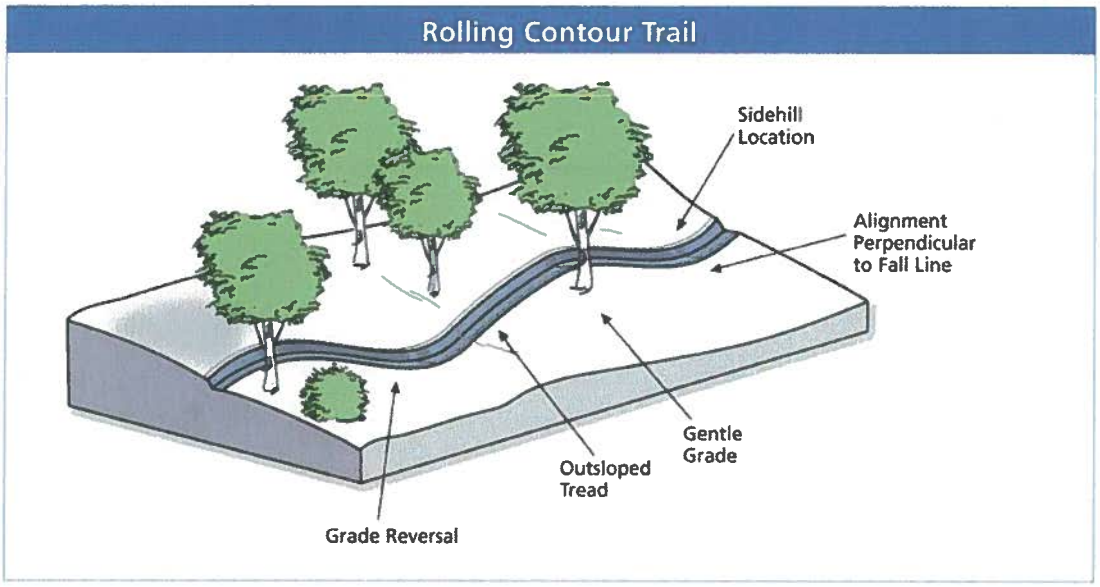


Figure 1: Rolling Contour Trail

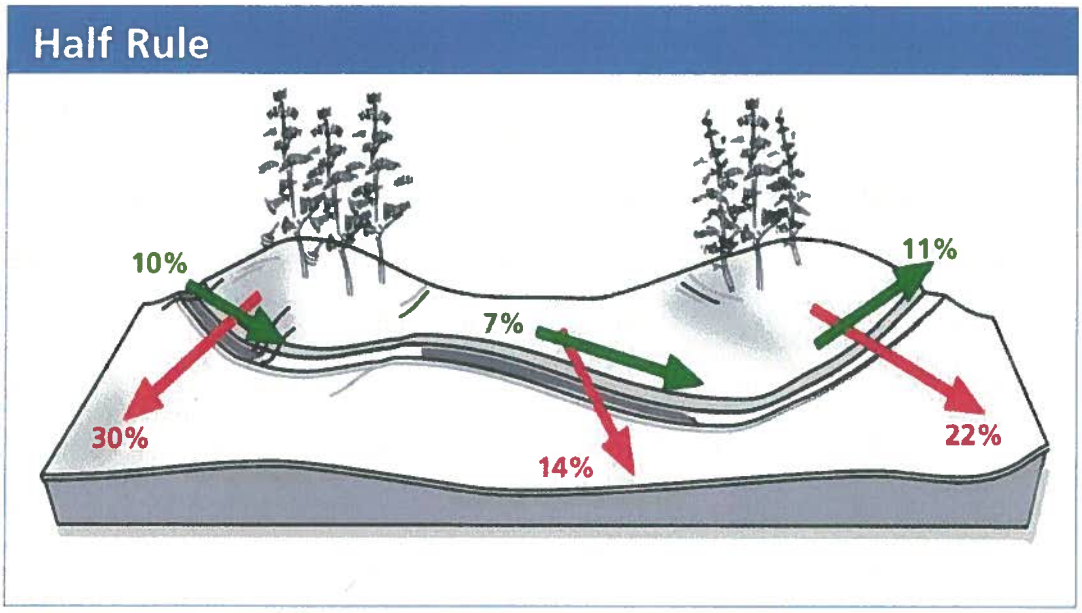


Figure 2: Illustration of The Half Rule

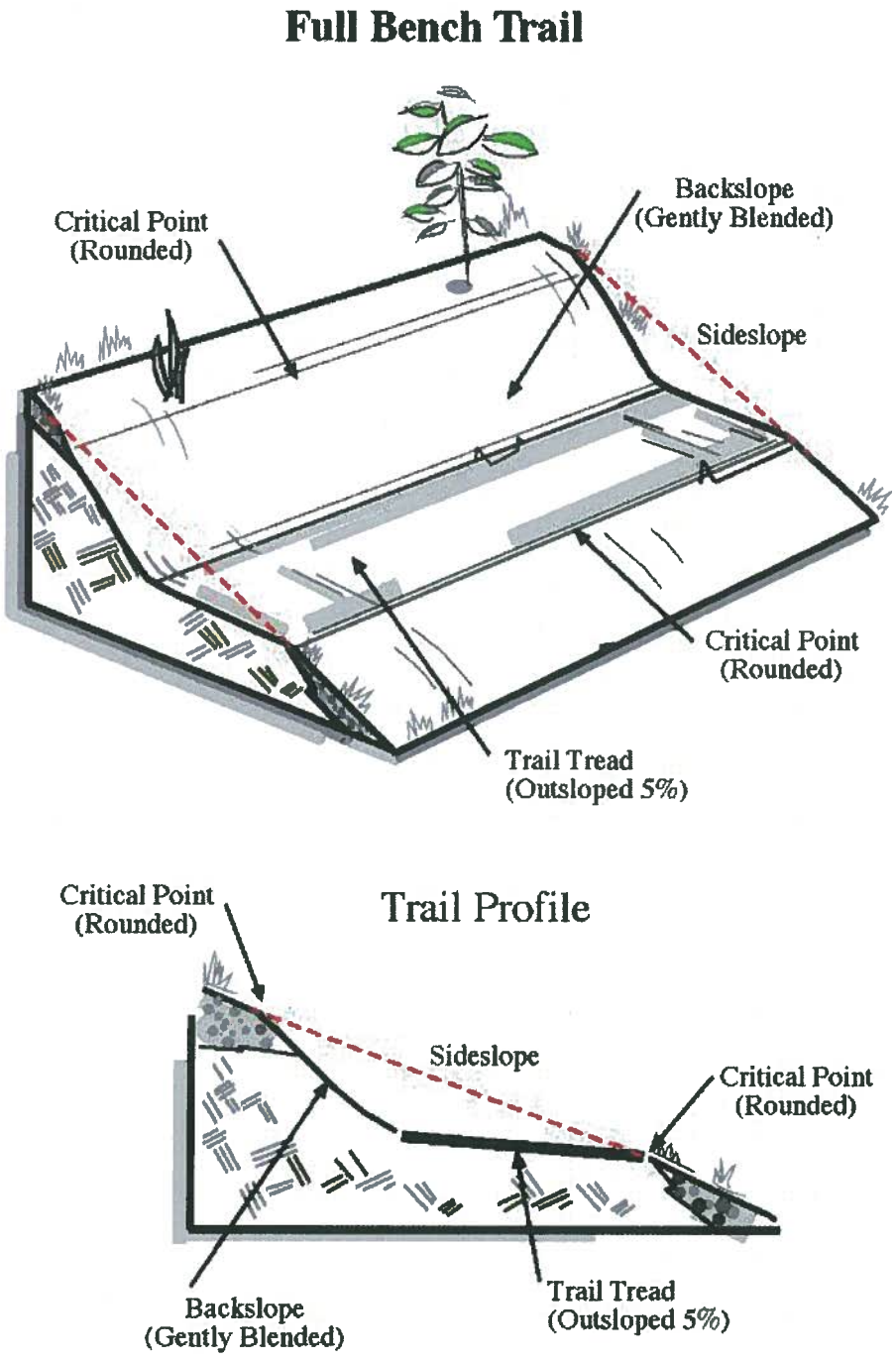


Figure 3: Full Bench Trail

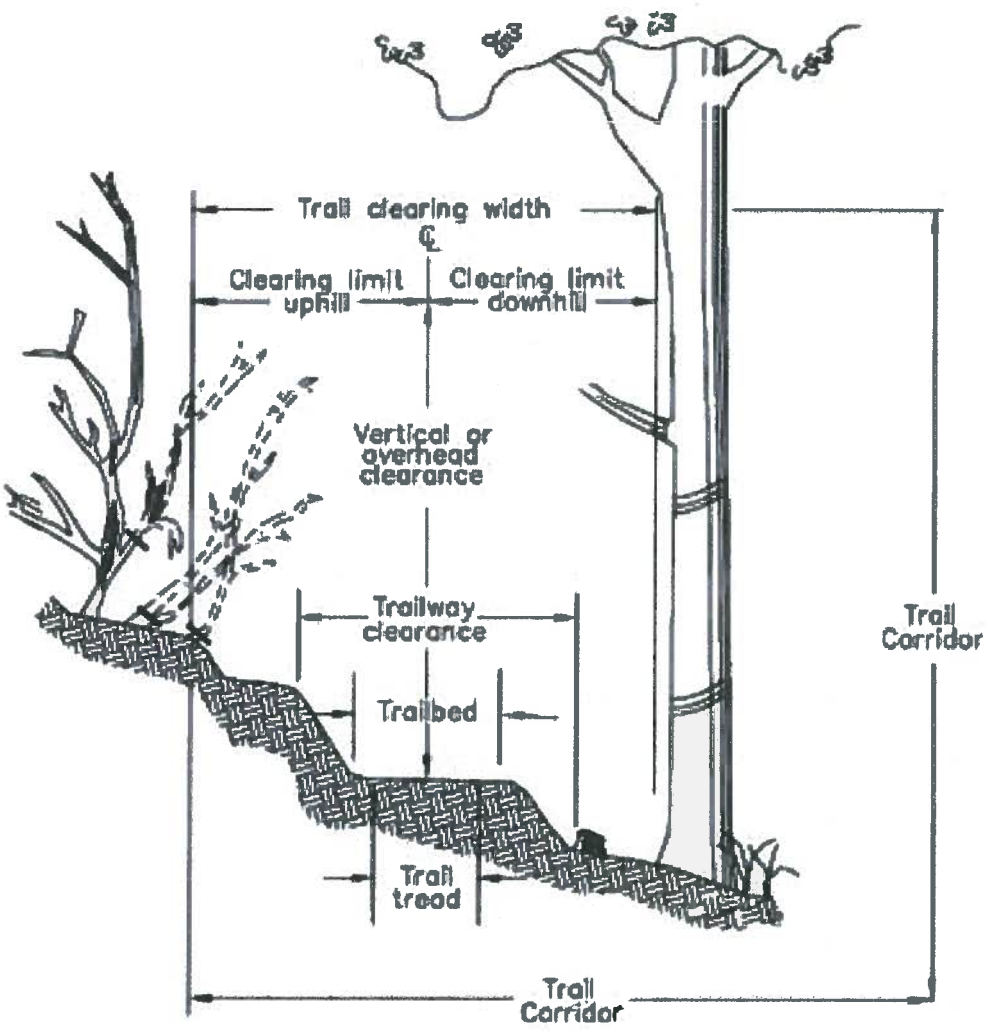


Figure 4: Clearing limits

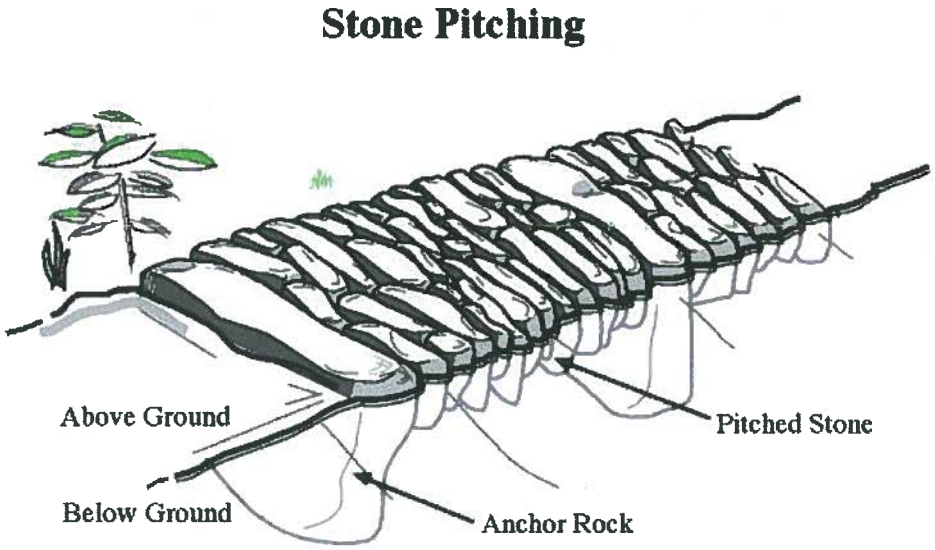


Figure 5: Tread Rock Armoring

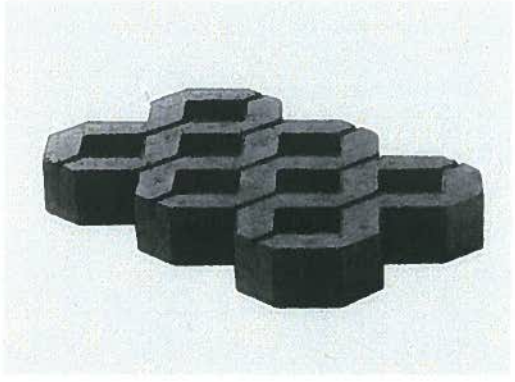


Figure 6: Turf Block Pavers

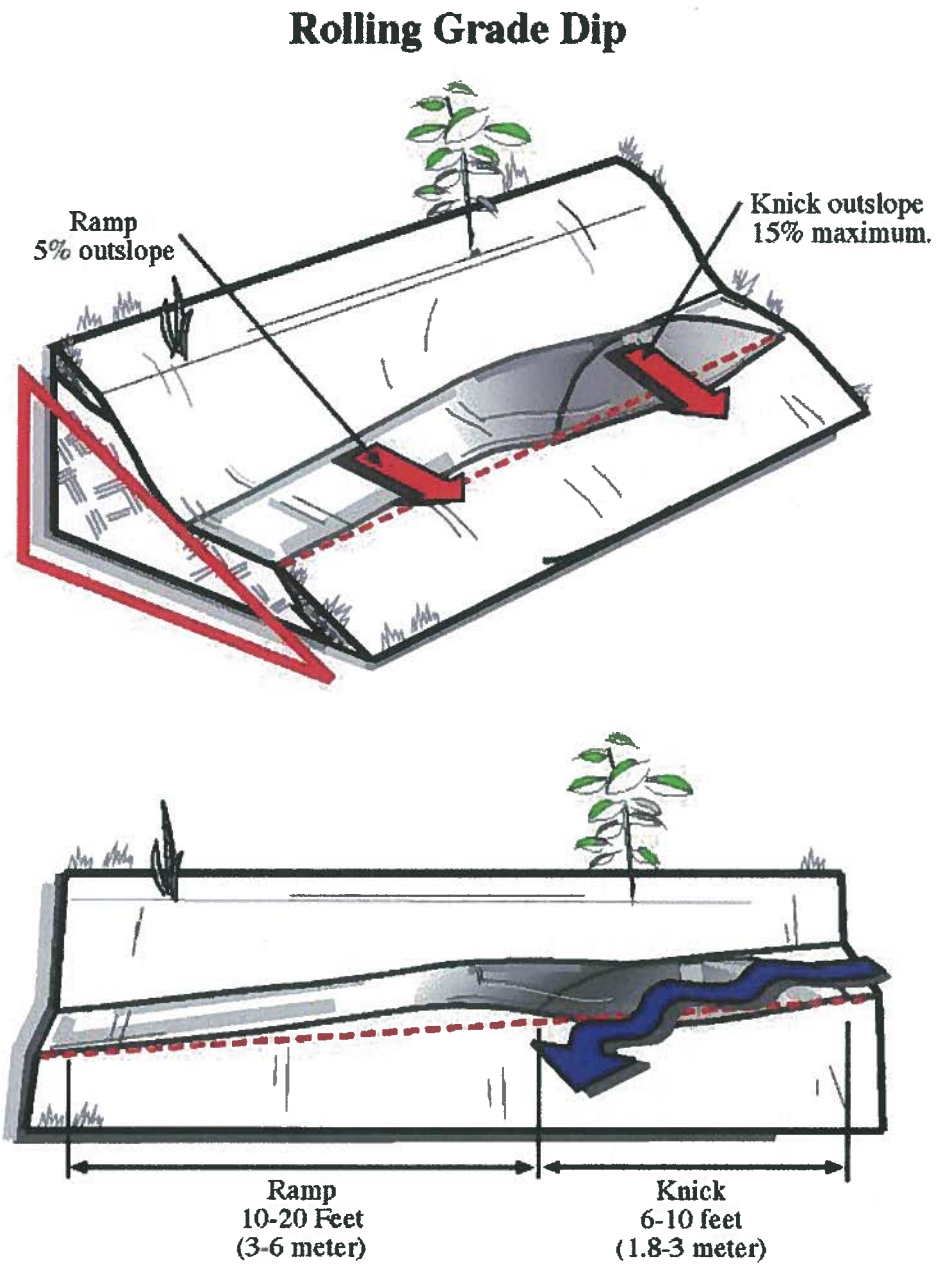


Figure 7: Rolling Grade Dip

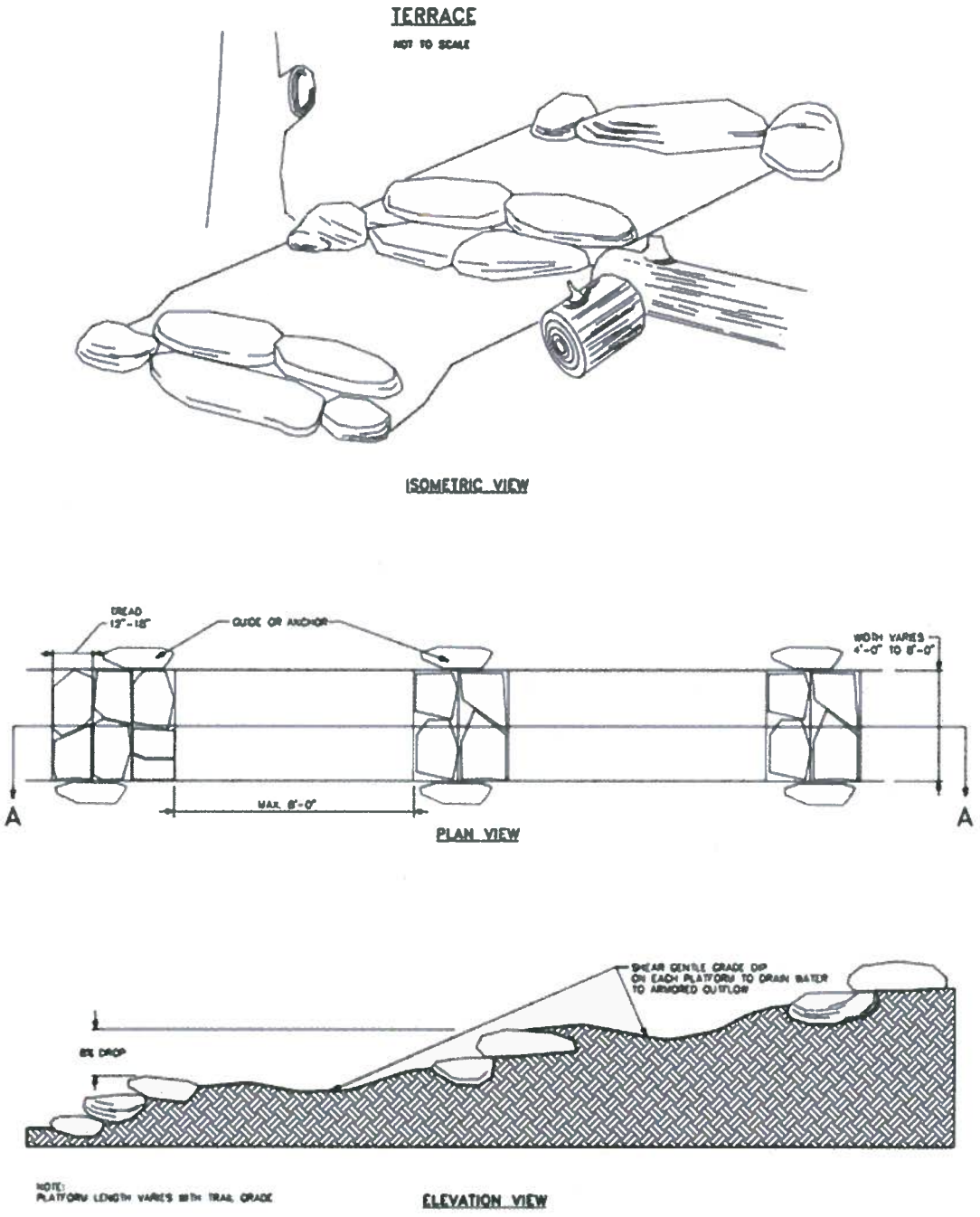


Figure 8: Terrace

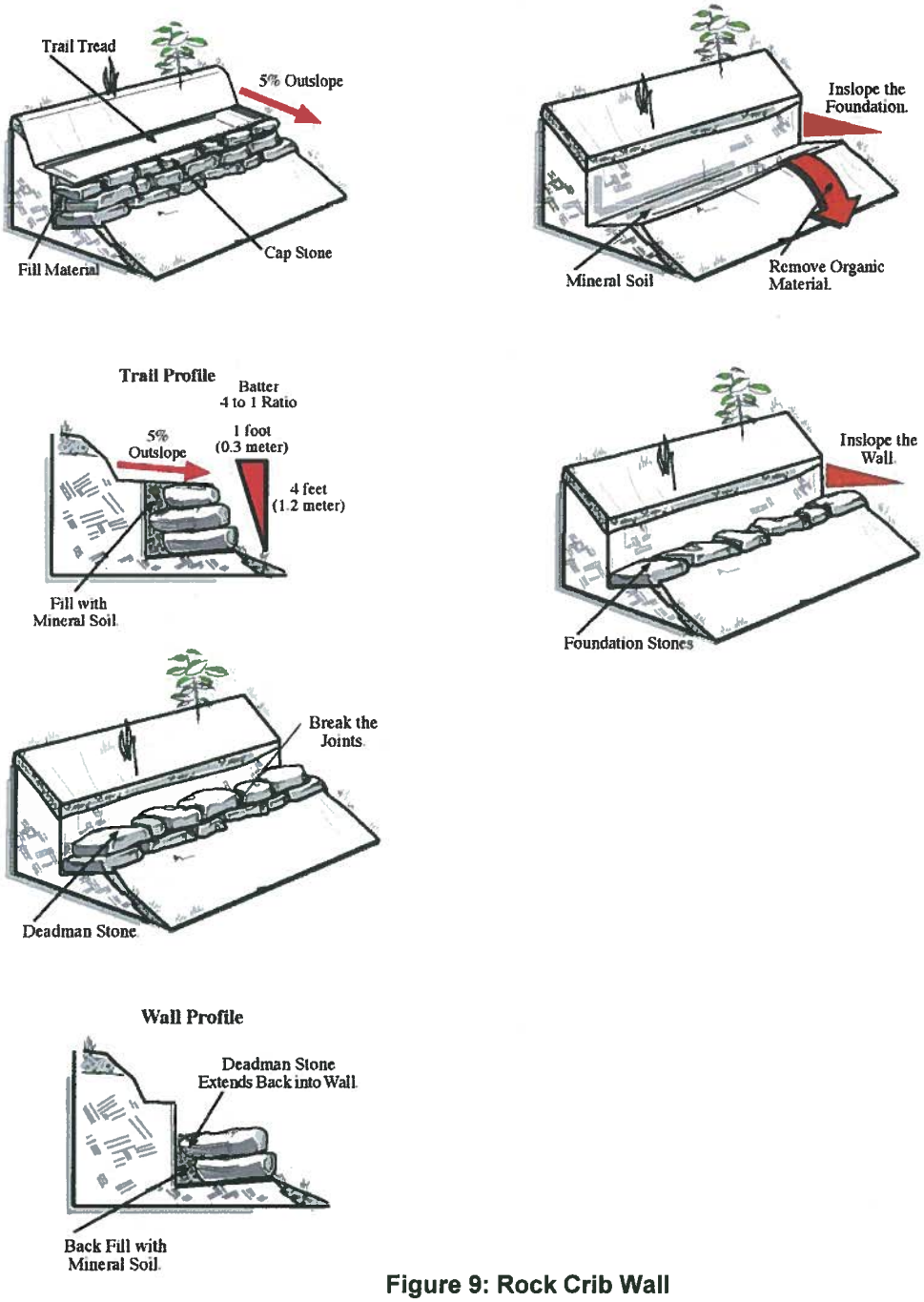


Figure 9: Rock Crib Wall

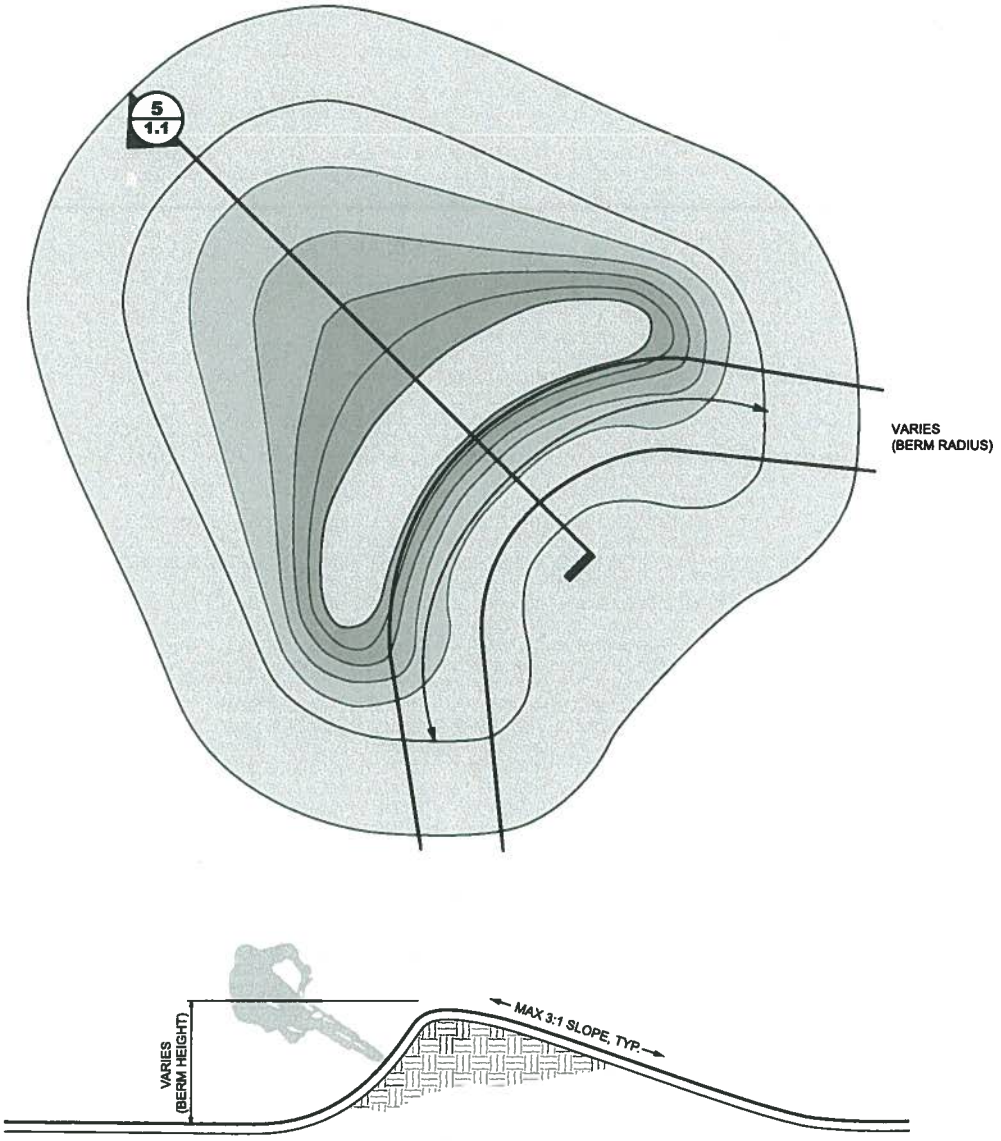


Figure 10: Berm

Insloped Turn

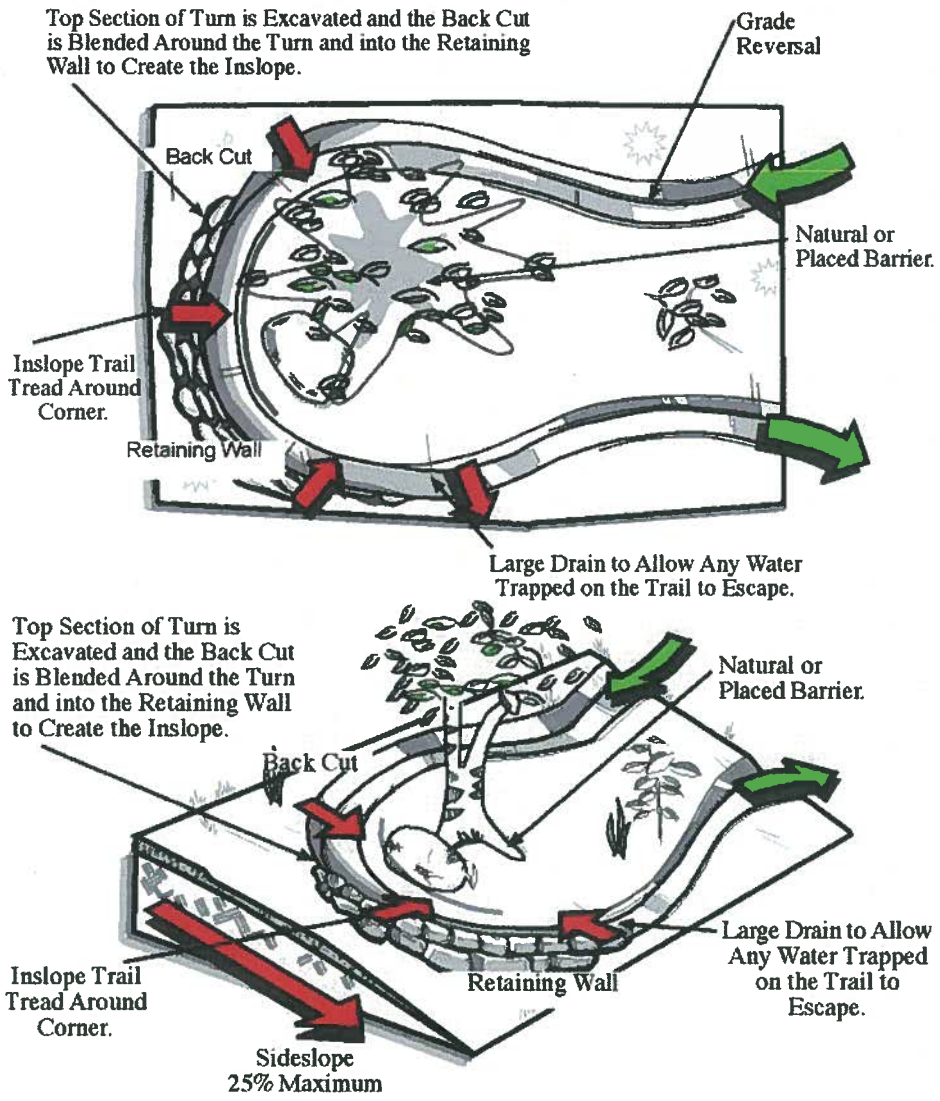


Figure 11: Insloped Turn

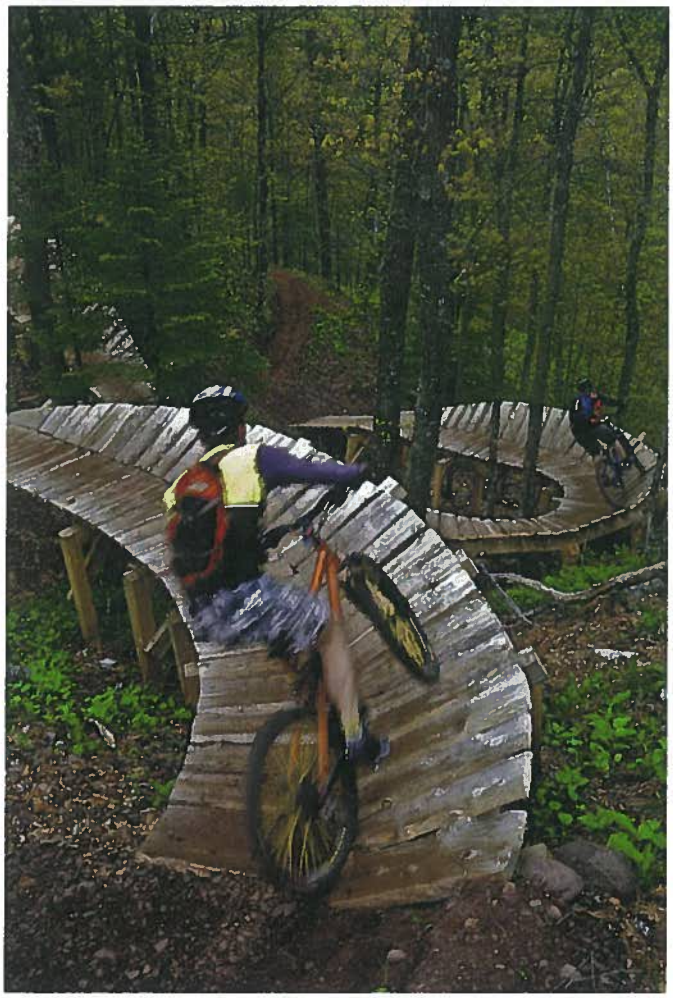


Figure 12: Technical Trail Feature Boardwalk

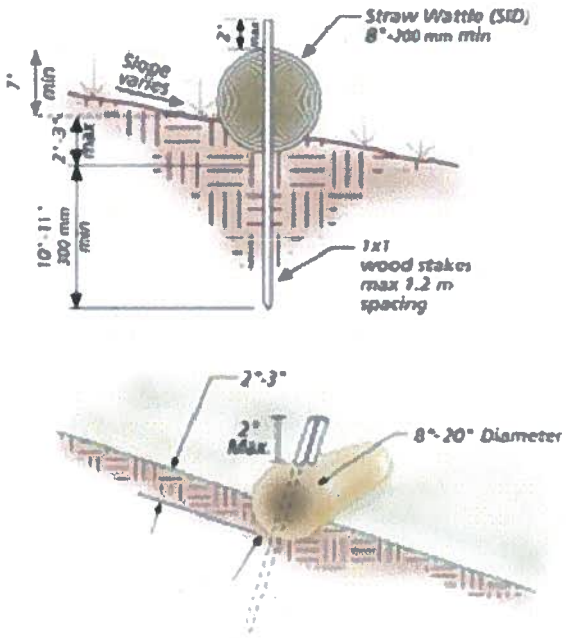


Figure 13: Straw Wattle Installation

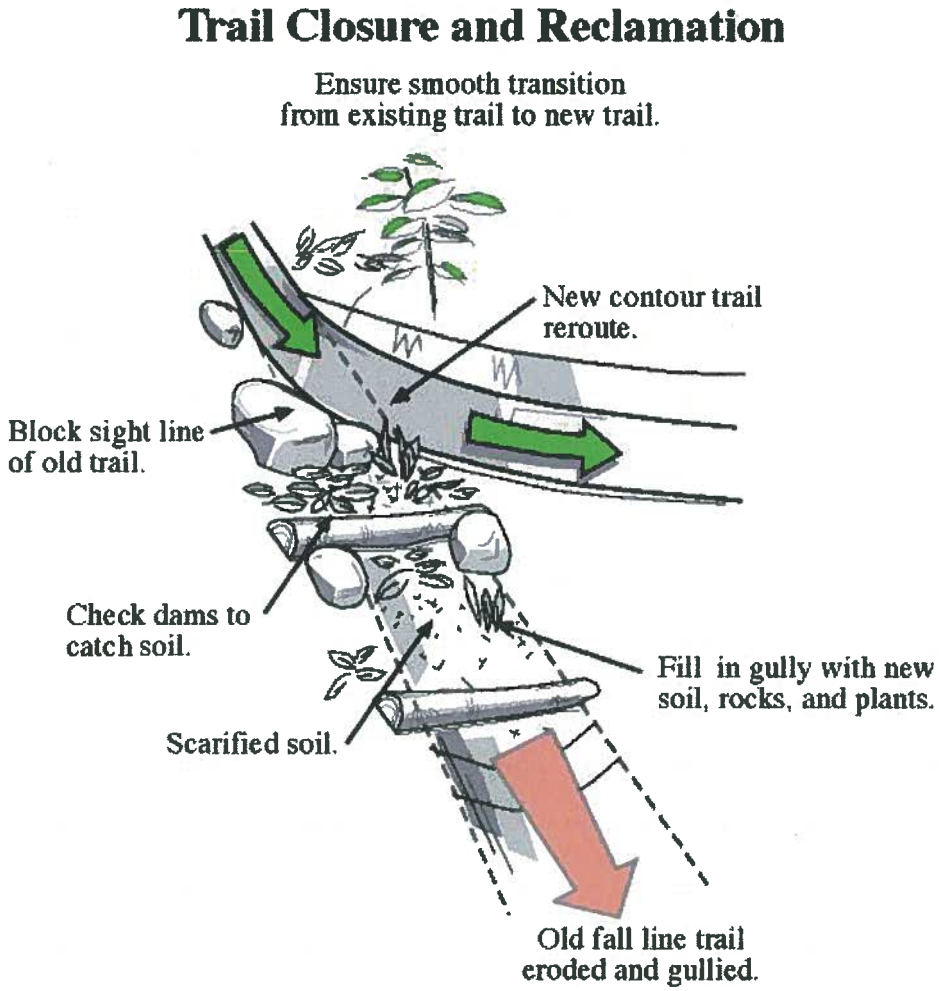


Figure 14: Trail Closure

SECTION 6: CONTRACTOR QUALIFICATIONS, REQUIREMENTS AND RESPONSIBILITIES

6.1 Professional Association

The contractor shall be a Professional Trailbuilders Association (PTBA) member in good standing. Equivalent professional experience and ability, as determined by the client, is acceptable.

6.2 Mountain Bike-Optimized Experience

The contractor shall have demonstrable experience in building sustainable mountain bike-optimized singletrack trail in a backcountry environment. Mountain bike-optimized singletrack is that which maximizes the fun and efficiency of the bicycling experience through the provision of trail features and macro- and micro-design techniques.

6.3 Tools

The contractor shall perform the required work using hand tools and/or small mechanized equipment that is a maximum of fifty inches (50") in width. Equipment with adjustable width tracks should be able to reduce track width to less than fifty inches (50"). Some sites may not be suitable for equipment this large and other sites may not be suitable for any mechanized equipment regardless of size due to terrain constraints. Permanent modification of trail outside the scope of work to accommodate equipment access (e.g., widening of an existing trail) is not desirable and must be specifically approved by in advance by the client.

6.4 Mechanized Equipment Best Practices

Using mechanized equipment equipped with tracks is strongly recommended. On project work, tracks are required for heavy equipment (greater then 500 lbs. gross weight).

All equipment will be clean and free of debris before introduced to work site. Equipment is subject to inspection at the start and during the project.

All mechanized equipment shall be in good mechanical condition, free of any fluid leaks and be equipped with spark arrestors if applicable.

Each machine will be equipped with a readily accessible fully charged fire extinguisher. Heavy equipment must have two extinguishers. Mounting locations should be chosen such that at least one fire extinguisher is accessible in the event of a rollover.

A spill kit with appropriate capacity must be mounted on the machine or available within 500 feet whenever equipment is operating.

Any equipment that does not meet these criteria shall be shutdown until in compliance. If not correctable it will be removed from the project site at the request of the client's representative and at no additional cost to the client.

As part of their bid package, the contractor will be asked to supply the expected list of mechanized equipment required to complete the project.

6.5 Backcountry Protocol

The Contractor's crew shall be familiar with backcountry operation and safety protocols as well as be familiar and adept at "leave no trace" practices.

When operating mechanized equipment, at least two workers will be in close proximity to provide assistance in the event of an emergency. Each worker will have a cell phone or radio with them that can be used to summon emergency service personnel. At least one GPS type device should be on hand at each worksite to help give location information to emergency dispatch personnel.

6.6 Personal Protective Equipment

It is the responsibility of the contractor to ensure that all employees working on the project equipped with and are using as appropriate the proper Personnel Protective Equipment (PPE) for the work being done. Helmets, eye protection, hearing protection, protective gloves, steel-toed boots, sunscreen, and protective clothing are considered some of the basic PPE. Face shields, breath protection, insect repellent, knee pads, shin guards, chaps are some of the other PPE that should be deployed where appropriate for the work being performed and the conditions. The contractor must have at least one OSHA-compliant First Aid Kit readily available at each worksite.

6.7 Timetable

As part of their bid package, the Contractor will provide an approximate timetable and schedule detailing how all project work will be met.

6.8 Meetings and Progress Reviews

The contractor shall meet with the client representative at the beginning of each work week or as otherwise agreed upon by both parties to review progress and project expectations for the week.

6.9 What Contractor Provides

The Contractor shall provide the necessary supervision, equipment, materials, and tools to perform specified trail maintenance and trail construction on identified trails and sites, including fuel for any mechanized equipment/tools and any and all personal protection and safety equipment required.

6.10 Food and Water

The Contractor shall be responsible for providing food and water for self and staff.

6.11 Toilet Facilities

The contractor will be responsible for providing worksite sanitary facilities (ex. Porta-potties) for project staff or make alternate arrangements as appropriate for work areas where restroom facilities are not readily accessible.

The use of Porta-potties will be dependent on the location of the worksite relative to vehicle accessibility and concerns about potential vandalism in remote locations.

6.12 Parking

Construction personnel shall confine parking of private vehicles to within the area of the project limits or to those parking spaces available on public streets.

6.13 Public Safety

The Contractor shall ensure that reasonable precautions are taken to protect the public at all times where work is being performed.

6.14 Environmental Footprint

Contractor will be expected to institute practices to minimize the environmental footprint of construction activities. Examples are minimizing the running time of idle mechanized equipment, running equipment on bio-fuels such as bio-diesel, or buying carbon credits to offset carbon dioxide emission from the fossil fuels consumed.

6.15 Fees for Licenses, Permits, and Insurance

All costs for required licenses, permits, and insurance shall be borne by the contractor.

6.16 Employee/Subcontractor Conduct

All of the contractor's employees and subcontractors shall conduct themselves in a proper manner at all times. Intoxication or any unsafe behavior by the contractor's employees while performing duties related to this contract is strictly prohibited. The contractor will be required to remove from the site any individual whose continued employment or retainer is deemed to be contrary to the public interest or inconsistent with the best interests of this trail construction project, and will not use such individual to perform services under this contract.

6.17 Employee Competence

The contractor may be required to immediately remove from the worksite any employee or subcontractor of the contractor who is incompetent or who endangers persons or property or whose physical or mental condition is such that it would impair the employee's ability to satisfactorily perform the work. Notification to the contractor shall be made by voice promptly and confirmed in writing as soon as possible. No such removal shall reduce the contractor's obligation to perform all work required under this contract.

6.18 Compliance with Modern Practices

All work shall be performed and completed in a thoroughly skillful, efficient and professional manner in accordance with best modern practices, regardless of any omissions from the attached specifications and/or drawings.

6.19 Condition of Materials and Equipment

All materials and equipment incorporated into the trail shall be new or otherwise in good working order and shall comply with the applicable standard in every case where such a standard has been established for the particular type of material in question.

6.20 Disposal of Materials and Supplies Not Approved

Materials, supplies, etc., that have been delivered to the job but do not comply with specifications and have not been approved, upon notification, the contractor shall immediately remove from the premises any such condemned material, supplies, etc., and replace them with material, supplies, etc., in full accordance with the specifications.

6.21 Disposal of Materials and Supplies Not Used

Materials, supplies, etc., have been delivered to the job but are not used shall be removed from the site and properly disposed by the contractor.

6.22 Access Control

The contractor is prohibited from installing gates, cables, chains, fences, and other types of barricades to limit access to the project site without prior written permission from the client and land manager.

6.23 Use of Premises – Storage

Contractor shall confine its apparatus, storage of materials, and operation of its employees/subcontractors to limits indicated by law, ordinance, permits, and/or directions of the client, and shall not unreasonably encumber the

premises with it's materials. Before any work is undertaken the contractor shall consult with the client's representative and secure from client the use of such space as may be available for the storage of materials and/or equipment. Contractor will be held responsible for any damage done in connection with the use of this location for storage.

The client is not responsible for any damages that may occur to the contractor's equipment during storage whether it is from natural causes or caused by man from such unlawful acts as theft, vandalism, and arson. The contractor is responsible for providing their own property insurance. The contractor is responsible for providing their own storage and transportation equipment such as trailers, tarps, locks, or other security devices.

6.24 Trail Rehabilitation

The Contractor shall rehabilitate sections of trail that will be closed as a result of trail realignment. Any travel-ways created as a result of construction and/or ingress/egress will be restored to their original condition.

6.25 Use of Subcontractors

The Contractor shall be able to use subcontractors to complete the work provided the subcontractors meet all qualifications and satisfy all conditions defined in this RFQ. Contractor is responsible for all actions of their subcontractor.

Subcontractor staff must be described in the bid submission. Use of subcontractors not described in the bid submission will only be allowed with written permission of the client.

6.26 Indemnity

The contractor shall indemnify, save, and hold harmless the client, the land owner, and their employees and agents, against any and all claims, damages, liability and court awards including costs, expenses, and attorney fees and related costs, incurred as a result of any act or omission by the contractor, or it's employees, agents, subcontractors, or assignees pursuant to the terms of this contract.

6.27 Protection of Finished Construction

Contractor shall assume the responsibility for the protection of all finished construction under his Contract and shall repair and restore any and all damage of finished work to its original state.

Where responsibility can be established for damage to finished construction, the cost for repair or replacement shall be charged to the party responsible.

SECTION 7: FINAL INSPECTION AND PAYMENT

Upon the completion of the contract work, the client's shall accompany the contractor on an inspection of the work. All defects found in the work will be corrected before final payment will be authorized.

Client is the final arbiter of the correctness of completed work. Inspection of work will be both visual and dynamic. The client will validate the riding experience of each sub-project as a prerequisite to final approval. A general discussion of what makes this experience is described in Section 4 – Bike Specific Trail Flow. A specific example of one element of this experience is a well-functioning insloped turn or berm;

- Correctly positioned entry so rider enters turn without the need to "square off".
- Proper radius and berm height so braking is not required while in turn.
- Tail of turn continues such that rider exits properly but not so much that puddling occurs.

Sections that do not ride properly will be improved and/or rebuilt until they are deemed acceptable to client.

Payment will be made upon one-hundred percent (100%) completion and approval of work per sub-project.

City of Duluth Public Works/Utilities - Engineering
06/02/10

INSTRUCTIONS TO BIDDERS

1) Use of Separate Bid Forms These contract documents include a complete set of bidding and contract forms which are for the convenience of bidders and are not to be detached from the contract document, completed, or executed. **Separate copies of bid forms are furnished for that purpose.**

2) Interpretations or Addenda No oral interpretation will be made to any bidder as to the meaning of the contract documents or any part thereof. Every request for such an interpretation shall be made in writing to the city of Duluth. Any inquiry received seven or more days prior to the data fixed for opening of bids will be given consideration. Every interpretation made to a bidder will be in the form of an addendum to the contract documents, and when issued, will be on file in the office of the city engineer at least five days before bids are opened. In addition, all addenda will be mailed to each person holding contract documents, but it shall be the bidder's responsibility to make inquiry as to the addenda issued. All such addenda shall become part of the contract and all bidders shall be bound by such addenda, whether or not received by the bidders.

3) Inspection of Site Each bidder should visit the site of the proposed work and fully acquaint himself with the existing conditions there relating to construction and labor, and should fully inform himself as to the facilities involved, the difficulties, and the restrictions attending the performance of the contract. The bidder should thoroughly examine and familiarize himself with the drawings, technical specifications, and all other contract documents. The contractor, by the execution of the contract, shall in no way be relieved of any obligation under it due to his failure to receive or examine any form or legal instrument or to visit the site and acquaint himself with the conditions there existing; the city of Duluth will be justified in rejecting any claim based on facts regarding which he should have been on notice as a result thereof.

4) Alternative Bids No alternative bids or bid items will be considered unless alterative bids are specifically requested by the technical specifications.

5) Bids

a) All bids must be submitted on forms supplied by the city engineer and shall be subject to all requirements of the contract documents, including the drawings, and these **Instructions to Bidders**. All bids must be regular in every respect; no interlineations, excisions, or special conditions shall be made or included in the bid form by the bidder.

b) Bid documents, including the bid and the bid guaranty, shall be enclosed in an envelope which shall be sealed and clearly labeled with the project number, if any, name of bidder, and date and time of bid opening, in order to guard against premature opening of the bid. If the proposal is mailed, this envelope shall be placed in another envelope which shall be sealed and labeled with project number, if any, name of bidder, and date and time of bid opening -- and addressed to city of Duluth purchasing manager, 100 City Hall, Duluth, Minnesota 55802.

c) The city of Duluth may consider as irregular any bid on which there is an alteration of or departure from the bid form hereto attached and, at its option, may reject the same.

d) If the project is awarded, it will be awarded by the city of Duluth to the lowest responsible bidder assuming that the bids are within funds available based on the lowest base bid and or in combination with selected alternates (if any). The alternates will be accepted in descending order. By the award of the contract, it is assumed that the work will be completed within the time-frame as specified within the contract documents.

e) Each bidder shall include in his bid the following information:

Principals – names, home addresses including city, state, and zip code

Firm – name, federal i.d. number, address, city, state, and zip code

Mechanical & Electrical Subcontractors -- names of firms that will do the mechanical and electrical work and the amounts of the mechanical and electrical sub-bids, if applicable and when (where indicated on Bid Proposal form).

6) Bid Guaranty

a) The bid must be accompanied by a bid guaranty which shall not be less than five percent (5%) of the amount of the bid. At the option of the bidder, the guaranty may be a certified check, bank draft, negotiable U.S. Government bond (at par value), or a bid bond. No bid will be considered unless it is accompanied by the required guaranty. Certified check or bank draft must be made payable to the order of the city of Duluth, Minnesota. Cash deposits will not be accepted. The bid guaranty shall insure the execution of the agreement and the furnishing of the surety bond or bonds by the successful bidder, all as required by the contract documents.

b) Revised bids submitted before the opening of bids, whether forwarded by mail, fax, or in person, if representing an increase in excess of two percent (2%) of the original bid, must have bid guaranty adjusted accordingly; otherwise, the bid will not be considered.
c) Certified checks or bank drafts, or the amount thereof, bid bonds, and negotiable U.S. Government bonds of unsuccessful bidders, will be returned as soon as practical after the opening of bids.

7) Collusive Agreements

a) The successful bidder on each city of Duluth construction project shall be required to execute a city of Duluth non-collusive affidavit to the effect that he has not entered into a collusive agreement with any other person, firm, or corporation in regard to any bid submitted.
b) Before executing any subcontract, the successful bidder shall submit the name of any proposed subcontractor for prior approval on the MnDOT Request to Sublet Form (Standard Specification 1801) TP-21834 (5/18/2007).

8) Unit Prices The unit price, for each of the several items in the proposal of each bidder, shall include its prorata share of overhead so that the sum of the products obtained by multiplying the quantity shown for each item by the unit price bid represents the total bid. Any bid not conforming to this requirement may be rejected as informal. The special attention of all bidders is called to this provision; for should conditions make it necessary to revise the quantities, no limit will be fixed for such increased or decreased quantities nor extra compensation allowed, provided the net monetary value of all such additive and subtractive changes in quantities of such items of work (i.e., difference in cost) shall not increase or decrease the original contract price by more than twenty-five percent (25%), except for work not covered in the drawings and technical specifications.

9) Corrections Erasures or other changes in the bids must be explained or noted over the signature of the bidder.

10) Time for Receiving Bids

a) Bids received prior to the advertised hour of opening will be securely kept, sealed. The officer, whose duty it is to open them, will decide when the specified time has arrived and no bid received thereafter will be considered; except that when a bid arrives by mail after the time fixed for opening, but before the reading of all other bids is completed, and it is shown to the satisfaction of the city purchasing office that the non-arrival on time was due solely to delay in the mails for which the bidder was not responsible, such bid will be received and considered.

b) Bidders are cautioned that, while fax modifications of bids may be received as provided above, such modifications, if not explicit and if in any sense subject to misinterpretation, shall make the bid so modified or amended, subject to rejection.

11) Opening of Bids At the time and place fixed for the opening of bids, the city purchasing manager will cause to be opened and publicly read aloud every bid received within the time set for receiving bids, irrespective of any irregularities therein. Bidders and other persons properly interested may be present in person or by representative.

12) Withdrawal of Bids Bids may be withdrawn on written or faxed request dispatched by the bidder in time for delivery in the normal course of business to the time fixed for opening; provided, that written confirmation of any faxed withdrawal over the signature of the bidder is placed in the mail and postmarked prior to the time set for bid opening. The bid guaranty of any bidder withdrawing his bid in accordance with the foregoing conditions will be returned promptly.

13) Award of Contract: Rejection of Bids

a) The contract will be awarded to the responsible bidder submitting the lowest bid complying with the conditions of the Invitation to Bid. The bidder, to whom the award is made, will be notified at the earliest possible date. The city of Duluth, however, reserves the right to reject any and all such bids and to waive any informality in bids received whenever such rejection or waiver is in its interest.

b) The city of Duluth reserves the right to consider as unqualified to do the work of general construction, any bidder who does not habitually perform with his own forces the major portions of the work involved in construction of the improvements embraced in the contract documents. A project labor agreement will be included in all contracts exceeding $150,000.

14) Execution of Agreement: Performance and Payment Bond.

a) Subsequent to the award and within ten (10) days after the prescribed forms are presented for signature, the successful bidder shall execute and deliver to the city of Duluth an agreement in the form as furnished by the City, in such number of copies as the city of Duluth may require.

b) Having satisfied all conditions of award as set forth elsewhere in these documents, the successful bidder shall, within the period specified in paragraph "a" above, furnish:

1) A performance bond for the use and benefit of the city of Duluth to complete the contract according to its terms, and conditioned on saving the city of Duluth harmless from all costs and charges that may accrue on account of completing the specified work; and

2) A payment bond for the use and benefit of all persons furnishing labor and materials for the performance of the contract conditioned upon the payment, as they become due, of all just claims for labor and materials.

Both the performance bond and the payment bond shall be in a penal sum of not less than the amount of the contract awarded. Such bonds shall be in the same form as that included in the contract documents and shall bear the same date as, or a date subsequent to, that of the agreement. A current power of attorney for the person who signs for any surety company shall be attached to such bonds.

c) The failure of the successful bidder to execute such agreement to supply the required bond or bonds within ten (10) days after the prescribed forms are presented for signature, or within such extended period as the city of Duluth may grant, based on reasons determined sufficient by the city of Duluth, shall constitute a default, and the city of Duluth may either award the contract to the next lowest responsible bidder or re-advertise for bids, and may charge against the bidder the difference between the amount of the bid and the amount for which a contract for the work is subsequently executed, irrespective of whether the amount thus due exceeds the amount of the bid bond. If a more favorable bid is received by re-advertising, the defaulting bidder shall have no claim against the city of Duluth for a refund.

15) Wages and Salaries

a) Attention of bidders is particularly called to the requirements concerning the payment of not less than the prevailing wage and fringe benefit rates specified in the contract documents and the conditions of employment with respect to certain categories and classifications of employees.

b) The rates of pay set forth in prevailing wage schedule(s) are *potentially* the minimums to be paid during the life of the contract. Project funding sources, bid opening date, contract award date, and the contract start date may be factors resulting in a change of prevailing wage schedules. It is, therefore, the responsibility of bidders to inform themselves as to local labor conditions, such as the length of work day hours in conjunction with the project's funding sources, overtime compensation, health and welfare contributions, labor supply, and prospective changes or adjustments of rates. A project labor agreement will be included in all contracts exceeding $150,000.

16) Equal Employment Opportunity Attention of bidders is particularly called to the requirement for ensuring that employees and applicants for employment are not discriminated against because of their race, color, religion, sex, or national origin. (See Supplementary General Conditions, Part II, Section 11).

17) Employment and Business Attention of bidders is particularly called to the requirement that, to the greatest extent feasible, opportunities for training and employment made possible by this project shall be given to lower income residents of the city of Duluth. Additionally, if any work is subcontracted, efforts should be made to award subcontracts to concerns located in or owned in substantial part by persons residing in the city of Duluth.

18) Sales and Use Taxes It is assumed that, in the preparation of his proposal, the bidder has taken into consideration his/her liability from any sales, use, or excise tax that might be assessed in the purchase of, storage, use, or consumption of any materials, services, or supplies for performance of the contract work. Any such tax paid by the contractor will be considered as his/her expense, for which no direct compensation will be made by the city to the contractor over and above the accepted bid.

19) Pre-Bid/Pre-Construction Meetings

a) Should a pre-bid meeting will be held, it will be conducted seven (7) days prior to the bid date (see **Bid Form** for time and place). All prime bidders are requested to attend. All bidders will be allowed to make inquiries regarding the contract documents. All formal decisions will be documented by addendum. Failure of any

prime bidders to attend this meeting could jeopardize the contract award.

b) Approximately seven (7) days after city council approval of contract award, the successful bidder is required to attend a pre-construction meeting. At this meeting, the successful bidder will present his/her construction schedule, cost breakdown, required submittals, etc.

20) Equal Employment Opportunity (EEO) Affirmative Action Police Statement and Compliance Certificate.

a) The successful bidder on each city of Duluth construction project shall be required to execute a certificate substantially in the form herein provided.

b) Before executing any subcontract in excess of $2,500, the successful bidder shall require the subcontractor to execute a form similar in nature to the form herein provided.

City of Duluth
CERTIFIED PAYROLL CHECKLIST

[State of MN funded projects with or without City funds rev 4/5/11]
www.duluthmn.gov/engineering/construction_documents.cfm

For ease of communication, the e-mail address of the person responsible for certified payroll reports (CPRs) is necessary from the prime contractor and all subcontractors.
Please reply to the e-mail address in item #20.

1) Contractor's name and address must appear on the top line of each **certified payroll report (CPR).**

2) **City project number, name, and location must appear on each weekly CPR AND the Statement of Compliance.**

3) **CPRs must be numbered sequentially.** For example, #1, #2, #3, etc.
   - **Should the prime contractor or any subcontractor NOT perform work on a project for one or several weeks, DO NOT submit any CPRs at all. When work resumes, mark the CPR with the next sequential number.**
   - **Should a project continue into another year, continue with the same number sequence.**

4) Each **employee's complete address** and the **last four digits of the social security number** must be on the first CPR his/her name appears; subsequent CPRs need only show the name.
   - Hours of work must clearly correspond with the appropriate dates; overtime hours listed separately.

5) **CLASSIFICATION and CODE NUMBERS**
Each employee's classification title, group number, and code number **must be indicated on each CPR** using the State of Minnesota Master Job Classification listing.
   - **NOTE** that the U S DOL prevailing wage schedules DO NOT match the State of Minnesota's for every classification—use caution when applying these code and group numbers.
   - **A listing of simply "operator" or "laborer" or "driver," etc. will not be accepted.**
     - » **CPRs will be returned for correction and monthly project payments could be delayed.**
   - Employees who work in more than one classification must have the hours spent in each classification clearly indicated on separate lines with the appropriate wage.
   - Web site: https://www.revisor.mn.gov/rules/?id=5200.1100

6) - The U S DOL form WH-347 may be used for preparing the actual certified payroll report.
   web site: http://www.dol.gov/whd/wh347.pdf
   Any other form or software may be used providing it mirrors the format of the report above.

7) **Total Pay Package**
   - The total pay package—base rate plus fringe benefits—must be equal to or greater than that established in the project prevailing wage decision(s) **or** the project labor agreement (PLA), if the project is subject to one.
     - » An employer may pay a lower hourly rate and higher fringe benefit rate than stated in the project's wage decision for regular time PROVIDING the total is equal to or greater than that of the wage decision— overtime must be applied to the higher prevailing wage rate in the project's wage decision.
   - **The overtime rate must be paid at NO LESS than the rate of pay as established in the project's wage decision multiplied by one and one-half OR the base rate the employee is being paid if it is higher than the wage decision base rate.**

   - **The MnDOT Prime Contractor-Subcontractor's Statement of Compliance form (12-2010) MUST BE USED. The second page must be completed in full regarding the fringe benefits.**
     web site: http://dot.state.mn.us/const/labor/forms.html

- The fringe benefit package is an integral portion of the prevailing wage. Should the **prime contractor or any subcontractor (regardless of tier)** become delinquent with any fringe benefit plan administrator's requirements for monthly payment, an estimated amount due that plan plus penalties may be withheld from the monthly estimate(s) **OR** the entire monthly estimate(s) may be withheld. See item #10.

8) **Other Deductions**
- **"Other Deductions"** must be identified; for example: garnishment, alimony, child support, other court ordered deductions, specific fringe benefits, etc. Copies of these documents must be submitted with the first certified payroll report the deduction appears OR an involuntary deduction form must be included with the first certified payroll report the deduction appears.
- **Voluntary deductions** must be clearly marked as to the type: medical, life insurance, 401K, loan payment, etc. A copy of the employee's signed authorization for the voluntary deduction(s) must be included with the first certified payroll the deduction appears.
- **Union dues, union vacation pay, etc.** do not need an authorization form; however, those deductions must be clearly marked on the CPR and the Statement of Compliance which accompanies each CPR.
  web site: www.duluthmn.gov/engineering/construction_documents.cfm

9) **Apprentices**
- **Apprentices must be clearly identified on each certified payroll.**
- **A copy of the official state-approved apprenticeship agreement ALONG WITH the ratio language for that particular trade must be included with the first certified payroll report the apprentice appears.**
- Failure to complete the complete apprenticeship papers may result in a delay of monthly project payments.

10) **Fringe Benefits**
- Only plans approved by the U.S. Department of Labor will be allowed.
- Payments made to bonafide plans must be timely per the stipulations of the plan administrator.
- Delinquent payments may result in a delay of monthly estimates or an estimated dollar amount due deducted from the monthly estimate. MnDOT 1906 Partial Payments will be implemented.

11) **Trucking Operations**
- **CPRs are required from ALL multiple truck operations (MTOs), partnerships, and corporations which have workers on a city of Duluth construction project.**
- **CPRs are required** from MTOs, partnerships, and corporations who have a contract with a broker and use their own employees or themselves (in a partnership or corporation) on a city of Duluth construction project.
  - » Each *partner* performing work on a project must submit a copy of his/her commercial driver's license (CDL), cab card, and insurance certificate for the truck being operated with that weekly CPR. It is not necessary to repeat such supporting documentation until a different truck is used and/or certificates have expired.
- **Independent truck operators (ITOs)** must submit copies of their CDL, cab card, and insurance certificate for each truck being operated before commencing work on the construction project. These documents must be sent to the prime contractor who will, then, forward the material to Labor Compliance Specialist (see item #20). No CPRs are required.

12) **Month End Trucking Reports**
MnDOT's Month-End Trucking Report must be submitted within five working days of the month ending to Labor Compliance Specialist (see item #20). web site: www.dot.state.mn.us/const/labor/forms.html

13) **Owners/Salaried Persons**
City Ordinance 8940, 6/18/85 defines a laborer, mechanic: all persons utilized, employed, or working on a project who are doing work usually done by mechanics and laborers, including proprietors, partners, and members of cooperatives.
- This means that all persons working on a City of Duluth project including owners, partners, salaried person, working foremen, etc. performing laborer and/or mechanic work shall be reported on the certified payroll reports including all data required of any laborer or mechanic.

14) **Base Workweek**
The base workweek on this project is: five 8-hour days.
- Daily overtime must be paid on hours exceeding eight per day.

15) **Overtime**
On this project, time and one-half times the regular hourly rate is paid for hours exceeding eight per day / all hours after 40 per week.
- An employer may not withhold overtime payment exclusively until 40 hours per week are satisfied. Daily overtime must be paid as it is earned.

16) **Originals**
ORIGINAL certified payroll reports must be **submitted WEEKLY.** The prime contractor is responsible for all subcontractors' certified payroll reports.
FAXED certified payroll reports WILL NOT be accepted.
QUICKEN BOOK users will need to provide data in a format as the WH-347 payroll form.
(See web site in item #6)

17) **Statement of Compliance**
The **MnDOT Prime Contractor-Subcontractor's Statement of Compliance form (12-2010)** must be completed in full and attached to each weekly certified payroll report.
- Check box A or B for fringe benefit allocation (on the front side).
- The back side of this form requires the amount paid by classification and category plus the fringe benefit plan.
- Any employee who has an exception to the fringe benefits must be explained in section "C."
- For fringe benefits paid in cash:
  - » indicate this in section "C"
  - » the fringe amount will be added to the employee's regular hourly rate; this total amount will appear on the certified payroll report and is subject to all payroll taxes
    - overtime is calculated at one and one-half the regular hourly rate [see #6 above] plus the fringe benefit amount
- A handwritten—**original**—signature must appear on the back side.

18) **EEO Reprots are required on this project.**
- Use the MnDOT EEO-13 form. Web site: http://www.dot.state.mn.us/civilrights/forms.html
- See the project's specifications/contract for specifics.
- Submit the monthly reports to the Labor Compliance Specialist in item #20

19) **IC-134**
Form IC-134, Withholding Affidavit for Contractors must be submitted before the full retainage can be released.
- on-line: www.mndor.state.mn.us lower right side of screen, click: Submit Contractor Affidavit
- hard copies: www.taxes.state.mn.us/forms/ic134.pdf

20) Send weekly original certified payroll reports and EEO reports to:

direct: 218/730-5200
fax: 218/730-5907

Labor Compliance Technician
City of Duluth
211 City Hall
411 West 1st St
Duluth, MN 55802-1191

Note to subcontractors: the original certified payroll reports must be submitted to the prime contractor. The prime contractor will make a copy for its records and send the originals to the address in item #20.

DATA FOR LABOR COST BIDDING

NOTE:
Wage Decisions are subject to change due to lock-in rules and revisions near the bid opening.

Project No.: 1224

Name: Duluth Traverse Trail Phase 1 – Mission Creek

This **project is funded** by:

State of Minnesota without federal funding
with City of Duluth funding

The **base workweek**:

Five 8-hour days--OT on daily hours exceeding eight / OT on all hours after 40 per week

The project DOES contain a *project labor agreement (PLA).*
Should a project contain a project labor agreement:
1) Union scale may **not** be reflected in the prevailing wage schedule(s)
2) Note Article II Section 10 for trucking labor costs

OVERTIME REQUIREMENTS:
Overtime must be paid on hours worked in excess of eight hours per day. Contractors (including sub-contractors) are not allowed to pay overtime solely on hours in excess of forty per week.

The overtime rate must be paid at NO LESS than the rate of pay as established in the project's wage decision multiplied by one and one-half OR the base rate the employee is being paid if it is higher than the wage decision base rate.

Project Prevailing Wage Decisions: U S DOL Highway MN130001 01-04-2013
U S DOL Heavy MN130105 03-29-2013
State of Minnesota Region 1 Highway-Heavy 04-15-2013
State of Minnesota Truck Rental Rates 05-01-2012

General Decision Number: MN130001 01/04/2013 MN1

Superseded General Decision Number: MN20120001

State: Minnesota

Construction Type: Highway

Counties: Carlton, Cook, Itasca, Koochiching, Lake, Pine and St Louis Counties in Minnesota.

HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	01/04/2013

* SUMN2010-001 10/29/2012

	Rates	Fringes
BRICKLAYER	$ 29.02	22.04
CARPENTER	$ 30.37	17.40
CEMENT MASON/CONCRETE FINISHER	$ 32.78	16.80
ELECTRICIAN		
Electrician	$ 34.71	19.37
Ground Person	$ 24.99	12.37
Lineman	$ 37.30	16.00
Wiring System Installer	$ 22.46	8.65
Wiring System Technician	$ 32.09	10.61
IRONWORKER	$ 29.24	21.20
LABORER		
Blaster	$ 28.89	15.33
Common or General	$ 26.14	15.33
Flag Person	$ 26.14	15.33
Landscape	$ 17.49	12.04
Skilled	$ 26.14	15.33
Underground & Open Ditch (8 ft below grade)	$ 26.84	15.33
MILLWRIGHT	$ 20.00	
PAINTER (Including Pavement Marking)	$ 27.81	14.69
PILEDRIVERMAN	$ 30.42	17.35
POWER EQUIPMENT OPERATOR:		
GROUP 2	$ 31.97	16.70
GROUP 3	$ 31.42	16.70
GROUP 4	$ 31.12	16.70
GROUP 5	$ 28.08	16.70

GROUP 6.....	$ 26.87	16.70
Speciality Equipment		
Articulated Hauler.....	$ 31.12	16.70
Boom Truck.....	$ 31.12	16.70
Off-Road Truck.....	$ 31.12	16.70

OPERATING ENGINEER CLASSIFICATIONS

GROUP 2: Helicopter Pilot; Concrete Pump; Cranes over 135 ft boom excluding jib; Dragline, Crawler, Hydraulic Backhoe and other similar equpment with shovel-type controls including attachments 3 cu yd & over; Grader or Motor Patrol; Pile Driving

GROUP 3: Asphalt Bituminous Stabilizer Plant; Cableway; Concrete Mixer, Stationary Plant; Derrick (guy or stiff leg)(power)(skids or stationary); Dragline, Crawler, Hydraulic Backhoe and other similar equpment with shovel-type controls including attachments up to 3 cu yd; Dredge or Engineers Dredge (Power); Front end loader 5 cu yd & over including attachments; Locomotive Crane Operator; Mixer (paving) concrete paving, Road Mole including Mucking operations, Conway or similar type; Mechanic, Welder; Tractor, Boom type. Tandem Scraper; Truck Crane, Crawler Crane; Tugboat 100 H.P. & over.

GROUP 4: Air Track Rock Drill; Automatic Road Machine CMI or similar; Backfiller; Concrete Batch Plant; Bituminous Roller Rubber Tire or Steel Drum 8 tons & over; Bituminous Spreader & Finishing Machine (power), including pavers, Macro Surfacing & Micro Surfacing or similar types (Operator & Screed person); Brokk or RTC remote control or similar type with attachments; Cat Challenger Tractor or similar types pulling Rock Wagons; Bulldozer & Scraper; Chip Harvester & Tree Cutter; Concrete Distributor & Spreader Finishing Machine, Longitudinal Float, Joint Machine, Spray Machine; Concrete Mixer on jobsite; Concrete Mixer; Crusing Plant (gravel, stone) or Gravel Washing, Crushing & Screening Plant; Curb Machine; Directional Boring Machine; Drill Rigs, Heavy Rotary or Churn or Cable Drill; Dual Tractor; Elevating Grader; Fork Lift; Front End, Skid Steer 1 to 5 cu yd; GPS Remote Operating of equpment; Hoist Engineer (power); Hydraulic Tree Planter; Locomotive; Milling, Grinding, Planing, Fine Grade, or Trimmer Machine; Multiple Machines such as Air Compressors, Welding Machines, Generators, Pumps; Pavement Breaker or Tamping Machine, Mighty Mite or similar type; Pickup Sweeper 1 cu yd & over hopper capacity; Horizontal Boring Machine power actuated over 6 inches; Pugmill; Pumpcrete; Rubber Tired Farm Tractor with Backhoe attachment; Scraper; Self-Propelled Soil Stabilizer; Slip Form (power driven) paving; Tractor, Bulldozer; Wheel type Tractor over 50 hp with PTO; Trenching Machine excludes walk behind Trencher; Tub Grinder, Morbark or similar type; Well Point installation or Dismantling.

GROUP 5: Air Compressor 600 cfm or over; Bituminous Roller under 8 tons; Concrete Saw multiple blade; Form Tench Digger (power); Front End Skid Steer up to 1 cu yd; Guniate, Gunall; Hydraulic Log Splitter; Loader, Barber Greene or similar; Post

Hole Driving Machine/Post Hole Auger; Power Actuated Auger & Boring Machine; Power Actuated Jack; Pump; Self-Propelled Chip Spreader (Flaherty or similar); Sheep Foot Compactor with blade 200 hp & over; Shouldering Machine (Power) APSCO or similar type including self-propelled Sand and Chip Spreader; Stump Chipper and Tree Chipper; Tree Farmer (Machine).

GROUP 6: Cat, Challenger or siliar tractor when pulling Disk or Roller; Conveyor; Dredge Deck Hand; Fire Person or Tank Car Heater; Gravel Screening Plant (portable, not crushing or washing); Greaser (tractor); Lever Person; Oiler (Power Shovel, Truck Crane, Dragline, Crusher and Milling Mazchine; Power Sweeper; Sheep Foot Roller & Rollers on Gravel Compaction including vibrating rollers; Wheel type Tractor over 50 hp.

TRUCK DRIVER		
GROUP 1	$ 27.10	13.65
GROUP 2	$ 26.55	13.65
GROUP 3	$ 26.45	13.65
GROUP 4	$ 26.20	13.65

TRUCK DRIVER CLASSIFICATIONS:

GROUP 1: Mechanic, Welder; Tractor Trailer; Truck hauling machinery including operation of hand and power operated winches.

GROUP 2: Four or more axle unit straight body truck.

GROUP 3: Bituminouos Distributor driver; Bituminous Distributor (one person operation); Three Axle units.

GROUP 4: Bituminous Distributor Spray operator (rear and oiler); Dump Person; Greaser; Pilot Car; Rubber Tire self-propelled Packer under 8 tons; Two Axle unit; Slurry Operator; Tank Truck Tender (gas, road oil, water); Tractor under 50 hp.

Tunnel Miner	$ 26.84	15.33

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the

cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination

* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

General Decision Number: MN130105 03/29/2013 MN105

Superseded General Decision Number: MN20120105

State: Minnesota

Construction Type: Heavy

County: St Louis County in Minnesota.

HEAVY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	01/04/2013
1	02/22/2013
2	03/29/2013

BOIL0647-004 01/01/2013

	Rates	Fringes
BOILERMAKER	$ 32.40	25.37

CARP0361-020 07/11/2011

ST LOUIS COUNTY (Southern 1/3 including Cotton, Floodwood, Fond Du Lac, and Proctor)

	Rates	Fringes
CARPENTER (Including Form Work)	$ 31.07	15.80

CARP0361-021 07/11/2011

ST LOUIS (Duluth)

	Rates	Fringes
CARPENTER (Including Form Work)	$ 31.47	15.80

CARP0606-010 05/01/2011

ST LOUIS COUNTY (Northeast 2/3 including Cook, Cusson, Ely; and Western part including Chisholm, Greaney, and Orr)

	Rates	Fringes
CARPENTER (Including Form Work)	$ 31.07	15.80

ELEC0242-012 06/03/2012

ST. LOUIS (South part bounded on the north by the north line of

Kelsey Township extended east & west)

	Rates	Fringes
ELECTRICIAN	$ 31.27	23.12

ELEC0294-006 06/03/2012

ST. LOUIS (North part bounded on the south by the south line of Ellsburg Township, extended east & west)

	Rates	Fringes
ELECTRICIAN	$ 32.63	23.74

ENGI0049-064 05/01/2012

	Rates	Fringes
OPERATOR: Power Equipment		
Group 2	$ 31.97	16.70
Group 3	$ 31.42	16.70
Group 4	$ 31.12	16.70
Group 5	$ 28.08	16.70
Group 6	$ 26.87	16.70

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 2: Crane with over 135' Boom, excluding jib; Dragline & Hydraulic Backhoe with shovel-type controls, 3 cubic yards and over; Grader/Blade finishing earthwork and bituminous.

GROUP 3: Dragline & Hydraulic Backhoe with shovel-type controls up to 3 cubic yards; Loader 5 cu yd and over; Mechanic; Tandem Scraper; Truck Crane; Crawler Crane

GROUP 4: Bituminous Roller 8 tons & over; Crusher/Crushing Plant; Drill Rig; Elevating Grader; Loader over 1 cu yd; Grader; Pump; Scraper up; to 32 cu yd; Farm Tractor with Backhoe attachment; Skid Steer Loader over 1 cu yd with Backhoe attachment; Bulldozer over 50 hp.

GROUP 5: Bituminous Roller under 8 tons; Bituminous Rubber Tire Roller; Loader up to 1 cu yd; Bulldozer 50 hp or less.

GROUP 6: Oiler; Self-Propelled Vibrating Packer 35 hp and over.

CRANE OVER 135' BOOM, EXCLUDING JIB - $ .25 PREMIUM;
CRANE OVER 200' BOOM, EXCLUDING JIB - $ .50 PREMIUM

UNDERGROUND WORK:
UNNELS, SHAFTS, ETC. - $ .25 PREMIUM
UNDER AIR PRESSURE - $ .50 PREMIUM

HAZARDOUS WASTE PROJECTS (PPE Required):
LEVEL A - $1.25 PREMIUM
LEVEL B - $ .90 PREMIUM
LEVEL C - $ .60 PREMIUM

IRON0512-028 05/01/2012

	Rates	Fringes
IRONWORKER, STRUCTURAL AND REINFORCING	$ 29.24	21.20

LABO0132-038 05/01/2009

	Rates	Fringes
LABORER		
Common or General (Natural Gas Pipeline only)	$ 16.70	10.49

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* LABO0563-034 05/01/2012

ST LOUIS (South of T. 55 N)

	Rates	Fringes
LABORERS		
(1) Common or General	$ 26.14	15.33
(2) Mason Tender Cement/Concrete	$ 26.34	12.94
(6) Pipe Layer	$ 28.14	15.33

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* LABO0563-035 05/01/2012

ST LOUIS (North of T. 55 N)

	Rates	Fringes
LABORERS		
(1) Common or General	$ 24.26	17.21
(2) Mason Tender Cement/Concrete	$ 24.46	17.21
(6) Pipe Layer	$ 26.26	17.21

PLAS0633-036 05/01/2012

ST. LOUIS COUNTY (North of T 55N)

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	$ 26.71	14.64

PLAS0633-039 05/01/2012

ST. LOUIS COUNTY (South of T 55N)

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	$ 32.78	16.80

SUMN2009-072 09/28/2009

	Rates	Fringes
LABORER: Landscape	$ 12.88	4.61

TEAM0160-018 05/01/2012

	Rates	Fringes
TRUCK DRIVER (DUMP)		
(1) Articulated Dump Truck	$ 26.70	14.05
(2) 3 Axles/4 Axles; 5 Axles receive $0.30 additional per hour	$ 26.15	14.05
(3) Tandem Axles; & Single Axles	$ 26.05	14.05

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination.

The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations

Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

MINNESOTA DEPARTMENT OF LABOR AND INDUSTRY PREVAILING WAGES FOR STATE FUNDED CONSTRUCTION PROJECTS

THIS NOTICE MUST BE POSTED ON THE JOBSITE IN A CONSPICUOUS PLACE

Construction Type: Highway and Heavy

Region Number: 01

Counties within region:

- CARLTON-09
- COOK-16
- ITASCA-31
- KOOCHICHING-36
- LAKE-38
- PINE-58
- ST. LOUIS-69

Effective: 2012-10-29 Revised: 2013-04-15

This project is covered by Minnesota prevailing wage statutes. Wage rates listed below are the minimum hourly rates to be paid on this project.

All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at a rate of one and one half (1 1/2) times the basic hourly rate.

Violations should be reported to:

Department of Transportation
Office of Construction
Transportation Building MS650
John Ireland Blvd
St. Paul, MN 55155
(651) 366-4209

Refer questions concerning the prevailing wage rates to:

Department of Labor and Industry
Prevailing Wage Section
443 Lafayette Road N
St Paul, MN 55155
(651) 284-5091
DLI.PrevWage@state.mn.us

LABOR CODE AND CLASS

	EFFECT DATE	BASIC RATE	FRINGE RATE	TOTAL RATE
LABORERS (101 - 112) (SPECIAL CRAFTS 701 - 730)				
101 LABORER, COMMON (GENERAL LABOR WORK)	2012-10-29	26.14	15.33	41.47
	2013-05-01	26.11	15.61	41.72
102 LABORER, SKILLED (ASSISTING SKILLED CRAFT JOURNEYMAN)	2012-10-29	26.14	15.33	41.47
	2013-05-01	26.11	15.61	41.72
103 LABORER, LANDSCAPING (GARDENER, SOD LAYER AND NURSERY OPERATOR)	2012-10-29	17.49	12.04	29.53
	2013-05-01	18.00	12.43	30.43
104 FLAG PERSON	2012-10-29	26.14	15.33	41.47
	2013-05-01	24.26	17.46	41.72
105 WATCH PERSON	2012-10-29	17.97	7.71	25.68
106 BLASTER	2012-10-29	28.89	15.33	44.22
107 PIPELAYER (WATER, SEWER AND GAS)	2012-10-29	28.14	15.33	43.47
	2013-05-01	28.11	15.61	43.72
108 TUNNEL MINER	2012-10-29	26.84	15.33	42.17
	2013-05-01	26.81	15.61	42.42
109 UNDERGROUND AND OPEN DITCH LABORER (EIGHT FEET BELOW STARTING GRADE LEVEL)	2012-10-29	26.84	15.33	42.17
	2013-05-01	26.81	15.61	42.42
110 SURVEY FIELD TECHNICIAN (OPERATE TOTAL STATION, GPS RECEIVER, LEVEL, ROD OR RANGE POLES, STEEL TAPE MEASUREMENT; MARK AND DRIVE STAKES; HAND OR POWER DIGGING FOR AND IDENTIFICATION OF MARKERS OR MONUMENTS;	2012-10-29	26.14	15.33	41.47

	PERFORM AND CHECK CALCULATIONS; REVIEW AND UNDERSTAND CONSTRUCTION PLANS AND LAND SURVEY MATERIALS). THIS CLASSIFICATION DOES NOT APPLY TO THE WORK PERFORMED ON A PREVAILING WAGE PROJECT BY A LAND SURVEYOR WHO IS LICENSED PURSUANT TO MINNESOTA STATUTES, SECTIONS 326.02 TO 326.15.				
		2013-05-01	26.11	15.61	41.72
111	TRAFFIC CONTROL PERSON (TEMPORARY SIGNAGE)	2012-10-29	26.14	15.33	41.47
		2013-05-01	26.11	15.61	41.72
112	QUALITY CONTROL TESTER (FIELD AND COVERED OFF-SITE FACILITIES; TESTING OF AGGREGATE, ASPHALT, AND CONCRETE MATERIALS); LIMITED TO MN DOT HIGHWAY AND HEAVY CONSTRUCTION PROJECTS WHERE THE MN DOT HAS RETAINED QUALITY ASSURANCE PROFESSIONALS TO REVIEW AND INTERPRET THE RESULTS OF QUALITY CONTROL TESTERS. SERVICES PROVIDED BY THE CONTRACTOR.	2012-10-29	21.40	13.51	34.91
	SPECIAL EQUIPMENT (201 - 204)				
201	ARTICULATED HAULER	2012-10-29	31.12	16.70	47.82
		2013-05-01	31.37	16.70	48.07
202	BOOM TRUCK	2012-10-29	31.12	16.70	47.82
		2013-05-01	31.37	16.70	48.07
203	LANDSCAPING EQUIPMENT, INCLUDES HYDRO SEEDER OR MULCHER, SOD ROLLER, FARM TRACTOR WITH ATTACHMENT SPECIFICALLY SEEDING, SODDING, OR PLANT, AND TWO-FRAMED FORKLIFT (EXCLUDING FRONT, POSIT-TRACK, AND SKID STEER LOADERS), NO EARTHWORK OR GRADING FOR ELEVATIONS	2012-10-29	17.49	12.04	29.53
		2013-05-01	18.00	12.43	30.43
204	OFF-ROAD TRUCK	2012-10-29	31.12	16.70	47.82
		2013-05-01	31.37	16.70	48.07

205	PAVEMENT MARKING OR MARKING REMOVAL EQUIPMENT (ONE OR TWO PERSON OPERATORS); SELF-PROPELLED TRUCK OR TRAILER MOUNTED UNITS.	2012-10-29	27.81	14.69	42.50
		2013-05-01	28.36	14.69	43.05

HIGHWAY/HEAVY POWER EQUIPMENT OPERATOR

GROUP 2		2012-10-29	31.97	16.70	48.67
		2013-05-01	32.22	16.70	48.92

302 HELICOPTER PILOT (HIGHWAY AND HEAVY ONLY)

303 CONCRETE PUMP (HIGHWAY AND HEAVY ONLY)

304 ALL CRANES WITH OVER 135-FOOT BOOM, EXCLUDING JIB (HIGHWAY AND HEAVY ONLY)

305 DRAGLINE, CRAWLER, HYDRAULIC BACKHOE (TRACK OR WHEEL MOUNTED) AND/OR OTHER SIMILAR EQUIPMENT WITH SHOVEL-TYPE CONTROLS THREE CUBIC YARDS AND OVER MANUFACTURER.S RATED CAPACITY INCLUDING ALL ATTACHMENTS. (HIGHWAY AND HEAVY ONLY)

306 GRADER OR MOTOR PATROL

307 PILE DRIVING (HIGHWAY AND HEAVY ONLY)

308 TUGBOAT 100 H.P. AND OVER WHEN LICENSE REQUIRED (HIGHWAY AND HEAVY ONLY)

GROUP 3		2012-10-29	31.42	16.70	48.12
		2013-05-01	31.67	16.70	48.37

309 ASPHALT BITUMINOUS STABILIZER PLANT

310 CABLEWAY

311 CONCRETE MIXER, STATIONARY PLANT (HIGHWAY AND HEAVY ONLY)

312 DERRICK (GUY OR STIFFLEG)(POWER)(SKIDS OR STATIONARY) (HIGHWAY AND HEAVY ONLY)

313 DRAGLINE, CRAWLER, HYDRAULIC BACKHOE (TRACK OR WHEEL MOUNTED) AND/OR SIMILAR EQUIPMENT WITH SHOVEL-TYPE CONTROLS, UP TO THREE CUBIC YARDS MANUFACTURER.S RATED CAPACITY INCLUDING ALL ATTACHMENTS (HIGHWAY AND HEAVY ONLY)

314 DREDGE OR ENGINEERS, DREDGE (POWER) AND ENGINEER

315 FRONT END LOADER, FIVE CUBIC YARDS AND OVER INCLUDING ATTACHMENTS. (HIGHWAY AND HEAVY ONLY)

316 LOCOMOTIVE CRANE OPERATOR

317 MIXER (PAVING) CONCRETE PAVING, ROAD MOLE, INCLUDING MUCKING OPERATIONS, CONWAY OR SIMILAR TYPE

318 MECHANIC . WELDER ON POWER EQUIPMENT (HIGHWAY AND HEAVY ONLY)

319 TRACTOR . BOOM TYPE (HIGHWAY AND HEAVY ONLY)

320 TANDEM SCRAPER

321 TRUCK CRANE . CRAWLER CRANE (HIGHWAY AND HEAVY ONLY)

322 TUGBOAT 100 H.P AND OVER (HIGHWAY AND HEAVY ONLY)

GROUP 4	2012-10-29	31.12	16.70	47.82
	2013-05-01	31.37	16.70	48.07

323 AIR TRACK ROCK DRILL

324 AUTOMATIC ROAD MACHINE (CMI OR SIMILAR) (HIGHWAY AND HEAVY ONLY)

325 BACKFILLER OPERATOR

326 CONCRETE BATCH PLANT OPERATOR (HIGHWAY AND HEAVY ONLY)

327 BITUMINOUS ROLLERS, RUBBER TIRED OR STEEL DRUMMED (EIGHT TONS AND OVER)

328 BITUMINOUS SPREADER AND FINISHING MACHINES (POWER), INCLUDING PAVERS, MACRO SURFACING AND MICRO SURFACING, OR SIMILAR TYPES (OPERATOR AND SCREED PERSON)

329 BROKK OR R.T.C. REMOTE CONTROL OR SIMILAR TYPE WITH ALL ATTACHMENTS

330 CAT CHALLENGER TRACTORS OR SIMILAR TYPES PULLING ROCK WAGONS, BULLDOZERS AND SCRAPERS

331 CHIP HARVESTER AND TREE CUTTER

332 CONCRETE DISTRIBUTOR AND SPREADER FINISHING MACHINE, LONGITUDINAL FLOAT, JOINT MACHINE, AND SPRAY MACHINE

333 CONCRETE MIXER ON JOBSITE (HIGHWAY AND HEAVY ONLY)

334 CONCRETE MOBIL (HIGHWAY AND HEAVY ONLY)

335 CRUSHING PLANT (GRAVEL AND STONE) OR GRAVEL WASHING, CRUSHING AND SCREENING PLANT

336 CURB MACHINE

337 DIRECTIONAL BORING MACHINE

338 DOPE MACHINE (PIPELINE)

339 DRILL RIGS, HEAVY ROTARY OR CHURN OR CABLE DRILL (HIGHWAY AND HEAVY ONLY)

340 DUAL TRACTOR

341 ELEVATING GRADER

342 FORK LIFT OR STRADDLE CARRIER (HIGHWAY AND HEAVY ONLY)

343 FORK LIFT OR LUMBER STACKER (HIGHWAY AND HEAVY ONLY)

344 FRONT END, SKID STEER OVER 1 TO 5 C YD

345 GPS REMOTE OPERATING OF EQUIPMENT

346 HOIST ENGINEER (POWER) (HIGHWAY AND HEAVY ONLY)

347 HYDRAULIC TREE PLANTER

348 LAUNCHER PERSON (TANKER PERSON OR PILOT LICENSE)

349 LOCOMOTIVE (HIGHWAY AND HEAVY ONLY)

350 MILLING, GRINDING, PLANNING, FINE GRADE, OR TRIMMER MACHINE

351 MULTIPLE MACHINES, SUCH AS AIR COMPRESSORS, WELDING MACHINES, GENERATORS, PUMPS (HIGHWAY AND HEAVY ONLY)

352 PAVEMENT BREAKER OR TAMPING MACHINE (POWER DRIVEN) MIGHTY MITE OR SIMILAR TYPE

353 PICKUP SWEEPER, ONE CUBIC YARD AND OVER HOPPER CAPACITY(HIGHWAY AND HEAVY ONLY)

354 PIPELINE WRAPPING, CLEANING OR BENDING MACHINE

355 POWER PLANT ENGINEER, 100 KWH AND OVER (HIGHWAY AND HEAVY ONLY)

356 POWER ACTUATED HORIZONTAL BORING MACHINE, OVER SIX INCHES

357 PUGMILL

358 PUMPCRETE (HIGHWAY AND HEAVY ONLY)

359 RUBBER-TIRED FARM TRACTOR WITH BACKHOE INCLUDING ATTACHMENTS (HIGHWAY AND HEAVY ONLY)

360 SCRAPER

361 SELF-PROPELLED SOIL STABILIZER

362 SLIP FORM (POWER DRIVEN) (PAVING)

363 TIE TAMPER AND BALLAST MACHINE

364 TRACTOR, BULLDOZER (HIGHWAY AND HEAVY ONLY)

365 TRACTOR, WHEEL TYPE, OVER 50 H.P. WITH PTO UNRELATED TO LANDSCAPING (HIGHWAY AND HEAVY ONLY)

366 TRENCHING MACHINE (SEWER, WATER, GAS) EXCLUDES WALK BEHIND TRENCHER (HIGHWAY AND HEAVY ONLY)

367 TUB GRINDER, MORBARK, OR SIMILAR TYPE

368 WELL POINT DISMANTLING OR INSTALLATION (HIGHWAY AND HEAVY ONLY)

GROUP 5	2012-10-29	28.08	16.70	44.78
	2013-05-01	28.33	16.70	45.03

369 AIR COMPRESSOR, 600 CFM OR OVER (HIGHWAY AND HEAVY ONLY)

370 BITUMINOUS ROLLER (UNDER EIGHT TONS)

371 CONCRETE SAW (MULTIPLE BLADE) (POWER OPERATED)

372 FORM TRENCH DIGGER (POWER)

373 FRONT END, SKID STEER UP TO 1C YD

374 GUNITE GUNALL (HIGHWAY AND HEAVY ONLY)

375 HYDRAULIC LOG SPLITTER

376 LOADER (BARBER GREENE OR SIMILAR TYPE)

377 POST HOLE DRIVING MACHINE/POST HOLE AUGER

378 POWER ACTUATED AUGER AND BORING MACHINE

379 POWER ACTUATED JACK

380 PUMP (HIGHWAY AND HEAVY ONLY)

381 SELF-PROPELLED CHIP SPREADER (FLAHERTY OR SIMILAR)

382 SHEEP FOOT COMPACTOR WITH BLADE . 200 H.P. AND OVER

383 SHOULDERING MACHINE (POWER) APSCO OR SIMILAR TYPE INCLUDING SELF-PROPELLED SAND AND CHIP SPREADER

384 STUMP CHIPPER AND TREE CHIPPER

385 TREE FARMER (MACHINE)

GROUP 6	2012-10-29	26.87	16.70	43.57
	2013-05-01	27.12	16.70	43.82

387 CAT, CHALLENGER, OR SIMILAR TYPE OF TRACTORS, WHEN PULLING DISK OR ROLLER

388 CONVEYOR (HIGHWAY AND HEAVY ONLY)

389 DREDGE DECK HAND

390 FIRE PERSON OR TANK CAR HEATER (HIGHWAY AND HEAVY ONLY)

391 GRAVEL SCREENING PLANT (PORTABLE NOT CRUSHING OR WASHING)

392 GREASER (TRACTOR) (HIGHWAY AND HEAVY ONLY)

393 LEVER PERSON

394 OILER (POWER SHOVEL, CRANE, TRUCK CRANE, DRAGLINE, CRUSHERS, AND MILLING MACHINES, OR OTHER SIMILAR HEAVY EQUIPMENT) (HIGHWAY AND HEAVY ONLY)

395 POWER SWEEPER

396 SHEEP FOOT ROLLER AND ROLLERS ON GRAVEL COMPACTION, INCLUDING VIBRATING ROLLERS

397 TRACTOR, WHEEL TYPE, OVER 50 H.P., UNRELATED TO LANDSCAPING

TRUCK DRIVERS

GROUP 1	2012-10-29	27.10	13.65	40.75
	2013-05-01	27.25	14.00	41.25

601 MECHANIC . WELDER

602 TRACTOR TRAILER DRIVER

603 TRUCK DRIVER (HAULING MACHINERY INCLUDING OPERATION OF HAND AND POWER OPERATED WINCHES)

GROUP 2	2012-10-29	26.55	13.65	40.20

	2013-05-01	26.70	14.00	40.70
604 FOUR OR MORE AXLE UNIT, STRAIGHT BODY TRUCK				
GROUP 3	2012-10-29	26.45	13.65	40.10
	2013-05-01	26.60	14.00	40.60
605 BITUMINOUS DISTRIBUTOR DRIVER				
606 BITUMINOUS DISTRIBUTOR (ONE PERSON OPERATION)				
607 THREE AXLE UNITS				
GROUP 4	2012-10-29	26.20	13.65	39.85
	2013-05-01	26.35	14.00	40.35
608 BITUMINOUS DISTRIBUTOR SPRAY OPERATOR (REAR AND OILER)				
609 DUMP PERSON				
610 GREASER				
611 PILOT CAR DRIVER				
612 RUBBER-TIRED, SELF-PROPELLED PACKER UNDER 8 TONS				
613 TWO AXLE UNIT				
614 SLURRY OPERATOR				
615 TANK TRUCK HELPER (GAS, OIL, ROAD OIL, AND WATER)				
616 TRACTOR OPERATOR, UNDER 50 H.P.				
SPECIAL CRAFTS				
701 HEATING AND FROST INSULATORS	2012-10-29	21.53	14.71	36.24
702 BOILERMAKERS	2012-10-29	31.87	24.40	56.27
	2013-01-01	33.52	24.40	57.92
703 BRICKLAYERS	2012-10-29	28.58	20.66	49.24
	2012-10-29	29.02	22.04	51.06
704 CARPENTERS	2012-10-29	30.37	17.40	47.77
	2013-05-01	30.87	17.40	48.27
705 CARPET LAYERS (LINOLEUM)	2012-10-29	22.58	7.50	30.08

706 CEMENT MASONS	2012-10-29	32.78	16.80	49.58
707 ELECTRICIANS	2012-10-29	34.71	19.37	54.08
	2013-06-01	35.42	19.77	55.19
708 ELEVATOR CONSTRUCTORS	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
709 GLAZIERS	2012-10-29	25.58	15.12	40.70
	2013-05-01	26.58	15.12	41.70
710 LATHERS	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
711 GROUND PERSON	2012-10-29	24.99	12.37	37.36
	2013-03-31	25.74	12.59	38.33
712 IRONWORKERS	2012-10-29	29.24	21.20	50.44
713 LINEMAN	2012-10-29	37.30	16.00	53.30
	2013-03-31	38.42	16.33	54.75
714 MILLWRIGHT	2012-10-29	20.00	0.00	20.00
715 PAINTERS (INCLUDING HAND BRUSHED, HAND SPRAYED, AND THE TAPING OF PAVEMENT MARKINGS)	2012-10-29	27.81	14.69	42.50
	2013-05-01	28.36	14.69	43.05
716 PILEDRIVER (INCLUDING VIBRATORY DRIVER OR EXTRACTOR FOR PILING AND SHEETING OPERATIONS)	2012-10-29	30.42	17.35	47.77
	2013-05-01	30.92	17.35	48.27
717 PIPEFITTERS . STEAMFITTERS	2012-10-29	35.56	16.38	51.94
	2013-05-01	36.31	16.38	52.69

718	PLASTERERS	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
719	PLUMBERS	2012-10-29	34.42	17.52	51.94
		2013-05-01	35.17	17.52	52.69
720	ROOFER	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
721	SHEET METAL WORKERS	2012-10-29	30.66	20.59	51.25
722	SPRINKLER FITTERS	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
723	TERRAZZO WORKERS	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
724	TILE SETTERS	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
725	TILE FINISHERS	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
726	DRYWALL TAPER	FOR RATE CALL 651-284-5091 OR EMAIL DLI.PREVWAGE@STATE.MN.US			
727	WIRING SYSTEM TECHNICIAN	2012-10-29	32.09	10.61	42.70
728	WIRING SYSTEMS INSTALLER	2012-10-29	22.46	8.65	31.11
729	ASBESTOS ABATEMENT WORKER	2012-10-29	25.66	5.92	31.58

State of Minnesota

Region 1 -- minimum truck rental rates

The operating costs were determined by survey on a statewide basis. The operating cost for "four or more axle units, straight body trucks" is determined to be $51.58 an hour. The operating cost for "three axle units" is determined to be $37.35 an hour. The operating cost for "tractor only" is determined to be $41.43 an hour. The operating cost for "tractor trailers" is determined to be $52.89 an hour.

Adding the prevailing wage for drivers of these four types of trucks from each of the state's 10 highway and heavy construction areas to the operating costs, the minimum hourly truck rental rate for the four types of trucks in each area is certified to be as follows.

Minimum hourly truck rental rates

Region 1	Tractor trailer	4 or more axle	3 axle	Tractor only
May 1, 2012	$93.64	$91.78	$77.45	$82.18

Minnesota Department of Labor and Industry
443 Lafayette Road N., St. Paul, MN 55155
Phone: (651) 284-5070 (Labor Standards), (651) 284-5091 (prevailing wage) or 1-800-DIAL-DLI (1-800-342-5354); TTY: (651) 297-4198
Send email messages to Labor Standards at dli.laborstandards@state.mn.us.
Send email messages about prevailing wage to dli.prevwage@state.mn.us.

City of Duluth
Indemnification & Insurance Requirements

(Updated February 16, 2011)

(Please Be Sure These Requirements Can Be Met before Submitting Your Response)

INDEMNIFICATION CLAUSE

The Contractor will defend, indemnify and save the City harmless from all costs, charges, damages, and loss of any kind that may grow out of the matter covered by this contract. Said obligation does not include indemnification of the City for claims of liability arising out of the sole negligent or intentional acts or omissions of City but shall include but not be limited to the obligation to defend, indemnify and same harmless the City in all cases where claims of liability against the City arise out of acts or omissions of City which are derivative of the negligence or intentional acts or omissions of Contractor such as, and including but not limited to, the failure to supervise, the failure to warn, the failure to prevent such act or omission by Contractor and any other such source of liability. In addition, Contractor will comply with all local, state and federal laws, rules and regulations applicable to this contract and to the work to be done and things to be supplied hereunder.

INSURANCE

a. Contractor shall provide the following minimum amounts of insurance from insurance companies authorized to do business in the state of Minnesota, which insurance shall indemnify Contractor and City from all liability described in the paragraph above, subject to provisions of subparagraph below.

(1) Worker's compensation in accordance with the laws of the state of Minnesota.

(2) Public Liability and Automobile Liability Insurance with limits not less than **$1,500,00** Single Limit, and twice the limits provided when a claim arises out of the release or threatened release of a hazardous substance; shall be in a company approved by the city of Duluth; and shall provide for the following: Liability for Premises, Operations, Completed Operations, Independent Contractors, and Contractual Liability.

(3) City of Duluth shall be named as **Additional Insured** under the Public Liability, Excess/Umbrella Liability* and Automobile Liability, or as an alternate, Contractor may provide Owners-Contractors Protective policy, naming itself and the City of Duluth. Contractor shall also provide evidence of Statutory Minnesota Worker's Compensation Insurance. Contractor to provide Certificate of Insurance evidencing such coverage with 30-days notice of cancellation, non-renewal or material change provisions included. The City of Duluth does not represent or guarantee that these types or limits of coverage are adequate to protect the Contractor's interests and liabilities.

**An umbrella policy with a "following form" provision is acceptable if written verification is provided that the underlying policy names the City of Duluth as an additional insured.*

(4) If a certificate of insurance is provided, the form of the certificate shall contain an unconditional requirement that the insurer notify the City without fail not less than 30 days prior to any cancellation, non-renewal or modification of the policy or coverages evidenced by said certificate and shall further provide that failure to give such notice to City will render any such change or changes in said policy or coverages ineffective as against the City.

(5) **The use of an "Acord" form as a certificate of insurance shall be accompanied by two forms – 1) ISO Additional Insured Endorsement (CG-2010 pre-2004) and 2) Notice of Cancellation Endorsement (IL 7002) or equivalent, as approved by the Duluth City Attorney's Office.**

b. The insurance required herein shall be maintained in full force and effect during the life of this Agreement and shall protect Contractor, its employees, agents and representatives from claims and damages including but not limited to personal injury and death and any act or failure to act by Contractor, its employees, agents and representatives in the negligent performance of work covered by this Agreement.

c. Certificates showing that Contractor is carrying the above described insurance in the specified amounts shall be furnished to the City prior to the execution of this Contract and a certificate showing continued maintenance of such insurance shall be on file with the City during the term of this Contract.

d. The City shall be named as an additional insured on each liability policy other than the workers' compensation policies of the Contractor.

e. The certificates shall provide that the policies shall not be changed or canceled during the life of this Contract without at least 30 days advanced notice being given to the City.

f. Contractor shall be required to provide insurance meeting the requirements of this Paragraph unless Contractor successfully demonstrates to the satisfaction of the City Attorney, in the exercise of his or her discretion, that such insurance is not reasonably available in the market. If Contractor demonstrates to the satisfaction of the City Attorney that such insurance is not reasonably available, the City attorney may approve an alternative form of insurance which is reasonably available in the market which he or she deems to provide the highest level of insurance protection to the City which is reasonably available.

Procedure verified by:

Date 9/20/12

Don Douglas, Claims Adjuster
Duluth City Attorney's Office

PRE-2004 CG 2010

A. **Section II - Who Is an Insured** is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of your ongoing operations performed for that insured.

****

NOTICE OF CANCELLATIONS ENDORSEMENT IL-7002 (10-90)

All Coverage Parts included in this policy are subject to the following condition: If we cancel this policy for any reason other than non-payment of premium, we will mail advance notice to the person(s) or organization(s) as shown in the Schedule.

Schedule

Person or Organization (Name and Address)	Advance Notice (Days)
City of Duluth Purchasing Division Room 100 City Hall 411 West First Street Duluth, MN 55802	30

PROJECT LABOR AGREEMENT

NO STRIKE, NO LOCKOUT

PUBLIC SECTOR

CITY OF DULUTH

&

(Name of Contractor)

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AGREEMENT

This Project Labor Agreement (hereinafter, the "Agreement"), is entered into effective the _____day of _____, 2013, by and between the various contractors engaged in the construction of facilities to be known as the (Project). The parties to this Agreement are the Building and Construction Trades Council, on behalf of its affiliated Local Unions (hereinafter "Union" or "Unions"), the City of Duluth (hereinafter "Owner") and Contractor (hereinafter "Construction Manager/General Manager," "Contractor," and "Contractors").

It is understood by the parties to this Agreement that it is the policy of the Owner that the construction work covered by this Agreement shall be contracted to Contractors who agree to be bound by the terms of this Agreement. Therefore, the Union agrees that other Contractors may execute the Agreement for the purpose of covering that work. The Construction Manager/General Contractor shall monitor compliance with this Agreement by all Contractors who through their execution of this Agreement, together with their subcontractors, have become bound hereto.

The term "Contractor" shall include all Contractors and subcontractors of whatever tier engaged in on-site construction work within the scope of this Agreement.

The Union and all signatory Contractors agree to abide by the terms and conditions contained in this Agreement with respect to the administration of the Agreement by the Owner and the performance of the construction by the Contractor of the Project. This Agreement represents the complete understanding of the parties, and it is further understood that no Contractor party is required to sign any other agreement as a condition of performing work within the scope of this Agreement. No practice, understanding or agreement between a Contractor and a Union party which is not explicitly set forth in this Agreement shall be binding on any other party unless endorsed in writing by the Project Contractor.

ARTICLE I - PURPOSE

The (Project), an undertaking of the Owner, is a public project which will employ numbers of skilled and unskilled workers. Construction of the Project will entail utilization of the construction industry in an area having multiple labor contracts and employer associations. Consequently, conflicts within labor-management relations could cause delay or disruption of the efficient completion of the .project unless maximum cooperation of all segments of the construction industry is obtained. This Agreement is to establish as the minimum standards on the Project the hours and working conditions as those prevailing for the largest number of workers engaged in the same classes of work within the area.

It is in the public interest that the Project progress and be completed in an expeditious and efficient manner, free of disruption or delay of any kind. Therefore, it is essential to secure optimum productivity and to eliminate any delays in the work. In recognition of the special needs of this Project and to maintain a spirit of harmony, labor-management peace and stability during the term of this Project Labor Agreement, the parties agree to establish effective and binding methods for the settlement of all misunderstandings, disputes or grievances which may arise. Therefore, the Unions agree not to engage in any strike, slowdown or interruption of work and the Contractor agrees not to engage in any lockout.

ARTICLE II - SCOPE OF THE AGREEMENT

Section 1. This Agreement, hereinafter designated as the "Project Labor Agreement" or "Agreement," shall apply and is limited to all construction work included in all Bid Categories for the (Project), under the direction of the signatory Contractors and performed by those Contractor(s) of whatever tier which have contracts awarded for such work on and after the effective date of this Agreement with regard to the Project.

Such Project is generally described as the construction of:
(Project)

Section 2. It is agreed that all direct subcontractors of a Contractor, of whatever tier, who have been awarded contracts for work covered by this Agreement on or after the effective date of this Agreement shall be required to accept and be bound by the terms and conditions of the Project Labor Agreement.

Section 3. The provisions of this Project Labor Agreement shall apply to all craft employees represented by any Union listed in Schedule A hereto attached and shall not apply to other field personnel or managerial or supervisory employees as defined by the National Labor Relations Act.

Section 4. All employees covered by this Agreement shall be classified in accordance with work performed and paid the base hourly wage rates for those classifications as specified in the attached Schedule A.

Section 5. The Contractors agree to pay contributions to the established employee benefit funds in the amounts designated in the appropriate Schedule A.

Contractors that are not signatory to a collective bargaining agreement beyond the scope of this Agreement ("PLA contractor") may select to participate in the legally established industry health reimbursement arrangement ("HRA") plan, in lieu of contributing to the respective bona fide benefit funds as designated in Schedule A. The amount of the contribution is based on the difference between the contribution amount of the bona fide Schedule A benefit funds and the cost of the PLA contractor's bona fide non-discretionary plans. Contributions must be made on behalf of named employees. Participating contractors will submit to the Trustees of the HRA trust and plan a copy of their plan, summary plan description, and the premium structure for workers covered under the PLA contractor's bona fide, non-discretionary plans. The value of the PLA contractor's benefit plans are subject to confirmation by the Trustees of the HRA trust and plan. This may include an independent audit according to a policy as established by the Trustees. Contractors are required to submit certified payroll reports to the Trustees or authorized administrator in order to confirm compliance with the terms of the HRA. trust and plan.

The Contractors adopt and agree to be bound by the written terms of the legally-established Trust Agreements (or in lieu thereof, the aforementioned HRA plan and trust including any policies) specifying the detailed basis on which payments are to be made into, and benefits paid out of, such Trust Funds. The Contractors authorize the parties to such Trust Agreements to appoint trustees and successor trustees to administer the Trust funds and hereby ratify and accept theTrustees so appointed as if made by the Contractors.

Section 6. In the event of any conflict between any provisions of this Agreement and in the Local Area Agreements, the terms of this Agreement will be applied. In other words, where a subject covered by the provisions of this Project Labor Agreement is also covered by the Local Area Agreement the provisions of this Project Labor Agreement shall prevail. Where a subject is covered by the Local Area Agreement and not covered by this Project Labor Agreement, the Local Area Agreement provisions shall prevail.

Section 7. This Agreement shall only be binding on the signatory parties hereto and shall not apply to the parents, affiliates, subsidiaries, or other ventures of any such party.

Section 8. This Agreement shall be limited to work historically recognized as construction work. Nothing contained herein shall be construed to prohibit, restrict, or interfere with the performance of any other operation, work or function which may occur in or around the Project site or be associated with the development of the Project, or with the ongoing operations of the Owner.

Section 9. It is understood that the liability of any Contractor and the liability of the separate Unions under this Agreement shall be several and not joint. The Union agrees that this Agreement does not have the effect of creating any joint employment status between or among Owner and any Contractor.

Section 10. All workers delivering fill, sand, gravel, crushed rock, transit/concrete mix, asphalt or other similar materials and all workers removing any materials from the construction site as required by the specifications are subject to the provisions of the Minnesota state

prevailing wage law and are entitled to the appropriate area standard wage. For purposes of this contract, such materials are for specified future use and per Minnesota state prevailing wage law delivery and pickup of the above-listed materials constitutes incorporation.

ARTICLE III - UNION RECOGNITION AND REPRESENTATION

Section 1. The Contractor recognizes the Union as the sole and exclusive bargaining representative of all craft employees working on facilities within the scope of this Agreement.

Section 2. Authorized representatives of the Union shall have access to the Project, provided they do not interfere with the work of employees and further provided that such representatives fully comply with the posted visitor and security and safety rules of the Project.

ARTICLE IV - LABOR HARMONY CLAUSE

The contractor shall furnish labor that can work in harmony with all other elements of labor employed on that (Project) and shall submit a labor harmony plan to demonstrate how this will be done. "Harmony" shall include the provision of labor that will not, either directly or indirectly, cause or give rise to any work disruptions, slow downs, picketing, stoppages, or any violence or harm to any person or property while performing any work, or activities incidental thereto at the (project). The labor harmony plan should include the company's labor management policies, collective bargaining agreements if any and their expiration dates, past labor relations history, a listing of activities anticipated under this contract that may potentially cause friction with on-site workers, and procedures the company will undertake to eliminate this friction.

The contractor agrees that it shall require every lower-tier subcontractor to provide labor that will work in harmony with all other elements of labor employed in the work, and will include the provisions contained in the paragraph above, in every lower-tier subcontract let for work under this contract.

The requirement to provide labor that can work in harmony with all other elements of labor employed in the work throughout the contract performance is a material element of this contract. Failure by the contractor or any of its lower tier subcontractors to comply with this requirement shall be deemed a material breach of the contract which will subject the contractor to all rights and remedies the city of Duluth may have, including without limitation the right to terminate the contract.

ARTICLE V - WORK STOPPAGES AND LOCKOUTS

Section 1. There shall be no strike, picketing, work stoppages, slowdowns or other disruptive, activity for any reason by the Union or employees against any Contractor covered under this Agreement, and there shall be no lockout by the Contractor. Failure of any Union or employee to cross any picket line established by any union, signatory or non-signatory, or any other organization, at or in proximity to the Project site is a violation of this Article.

Section 2. Any party alleging a breach of Section 1, of Article IV shall have the right to petition a court for temporary and permanent injunctive relief. The moving party need not show the existence of irreparable harm, and shall be required to post bond only to secure payment of court costs and attorney fees as may be awarded by the court.

ARTICLE VI - DISPUTES AND GRIEVANCES

Section 1. This Agreement is intended to provide close cooperation between management and labor. The Construction Manager/General Contractor and the Building and Construction Trades Council shall each assign a representative to this Project for the purpose of assisting the Local Unions, together with the Contractor, to complete the construction of the Project economically, efficiently, continuously and without interruption, delays or work stoppages.
Each Contractor shall hold a pre-job conference with the Union and Construction Manager/General Contractor to clear up any project question and work assignments in which there is thought to be a difference in opinion. Every effort will be made to hold such conference well in advance of actual work performance.

Section 2. The Contractor, Union, and employees collectively and individually, realize the importance to all parties to maintain continuous and uninterrupted performance of the work of the Project, and agree to resolve disputes over grievances in accordance with the arbitration provisions set forth in the Local Area Agreements in effect with the Unions listed in Schedule A attached hereto.

ARTICLE VII - JURISDICTIONAL DISPUTES

Section 1. There will be no strikes, work stoppages, slowdowns, or other disruptive activity arising out of any jurisdictional dispute. Pending the resolution of the dispute, the work shall continue uninterrupted as assigned by the Contractor.

Section 2. Building construction work shall be assigned by the Contractor in accordance with the procedural rules of the Plan for the Settlement of Jurisdictional Disputes in the Construction Industry (hereinafter the "Plan"). Any jurisdictional dispute over the Contractor's assignment of work shall be settled in accordance with the provisions of the Plan.

Section 3. Where a jurisdictional dispute involves the International Brotherhood of Teamsters, it shall be referred for resolution to that International Union and the disputing International Union. The resolution of the dispute shall be reduced to writing, signed by the authorized representative of the International Unions and the Contractor. The assignments made by the Contractor shall be followed until such time as the dispute is resolved in accordance with this Section.

ARTICLE VIII - NO DISCRIMINATION

Section 1. The Contractor and Union agree that they will not discriminate against any employee or applicant for employment because of his or her membership or nonmembership in a Union or based upon race, color, religion, sex, national origin or age in any manner prohibited by law or regulation.

Section 2. Any complaints regarding application of the provisions of Section 1, should be brought to the immediate attention of the involved Contractor for consideration and resolution.

Section 3. The use of the masculine or feminine gender in this Agreement shall be construed as including both genders.

ARTICLE IX - SAVINGS AND SEPARABILITY

It is not the intention of the parties to violate any laws governing the subject matter of this Agreement. The parties hereto agree that in the event any provisions of the Agreement are finally held determined to be illegal or void as being in contravention of any applicable law, the remainder of the Agreement shall remain in full force and effect unless the part or parts so found to be void are wholly inseparable from the remaining portions of this Agreement. Further, the contractor and Union agree that if and when any and all provisions of this Agreement are finally held or determined to be illegal or void by Court of competent jurisdiction, the parties will promptly enter into negotiations concerning the substance affected by such decision for the purpose of achieving conformity with the requirements of an applicable law and the intent of the parties hereto.

ARTICLE X DURATION OF THE AGREEMENT

The Project Labor Agreement shall be effective the _____ day of _____, 2008, and shall continue in effect for the duration of the Project construction work described in Article II hereof Construction of any phase, portion, section or segment of the project shall be deemed complete when such phase, portion, section or segment has been turned over to the Owner and has received the final acceptance from the Owner's representative.

Since there are provisions herein for no strikes or lockouts in the event any changes are negotiated and implemented under a Local Area Agreement during the term of this Agreement, the Contractor agrees that, except as specified herein, such changes shall be recognized and shall apply retroactively to the termination date in the particular Local Agreement involved. Each Contractor which has a Local Agreement with a Union at the time that its contract at the project

commences shall continue it in effect with each said Union so long as the Contractor remains on the project. In the event any such Local Area Agreement expires, the Contractor shall abide by all of the terms of the expired Local Agreement until agreement is reached on a new Local Agreement, with any changes being subject to the provisions of this Agreement.

The Union agrees that there will be no strikes, work stoppages, sympathy actions, picketing, slowdowns or other disruptive activity affecting the Project by any Union involved in the negotiation of a Local Area Agreement nor shall there be any lockout on this Project affecting the Union during the course of such negotiations.

IN WITNESS WHEREOF the parties have entered into this Agreement to be effective as of the day and year above written.

DULUTH BUILDING AND CONSTRUCTION TRADES COUNCIL

By: _____

Its _____
(Printed Name/Title)

Date: _____

CONTRACTOR

By: _____

Its _____
(Printed Name/Title)

Date: _____

CITY OF DULUTH

By:_____
Mayor

Attest:

_____
City Clerk

Date: _____

_____
City Auditor

Date: _____

_____
Assistant City Attorney

Date: _____

SCHEDULE "A"

A1 Asbestos Workers Local 49
A-2 Boilermakers Local 647
A-3 BAC Local 1 Chapter 3 Duluth & Iron Range
A-4 Carpenters Local 361
A-5 Cements Masons/Plasterers Local 633
A-6 Elevator Constructors Local 9
A-7 IBEW Local 242
A-8 Iron Workers Local 512
A-9 Laborers Local 1091
A-10 Millrights & Machinery Erectors Local 1348
A-11 Operating Engineers Local 49
A-12 Painters & Allied Trades Local 106
A-13 Plumbers & Fitters Local 11
A-14 Roofers Local 96
A-15 Sheet Metal Workers Local 10
A-16 Sprinkler Fitters Local 669
A-17 Teamsters Local 346

REQUEST FOR BID
DATE 5/7/2013
BID # 13-10DS

RETURN BY BID OPENING TIME TO:

PURCHASING DIVISION
100 CITY HALL
Duluth, MN 55802
Dennis Sears
PHONE: 218-730-5340
FAX: 218-730-5921

Duluth Traverse Trail Phase 1 - Mission Creek

BID OPENING AT 2:00 PM on May 28, 2013

Note: all bids must be written, signed and transmitted in a sealed envelope, plainly marked with the bid number, subject matter and opening date. The City of Duluth reserves the right to split award where there is a substantial savings to the City, waive informalities and to reject any and all bids. Bidder should state in proposal if bid price is based on acceptance of total order. Sales tax is not to be included in the unit price. Bidder to state freight charges if the proposal F.O.B. is shipping point, freight not allowed. Low bid will not be the only consideration for award of bid. All pages shall be signed or initialed by authorized bidder's representative as indicated at the bottom of the page(s) of the request for bid form.

RETURN BID IN DUPLICATE WITH DUPLICATE DESCRIPTIVE LITERATURE
FOR BID RESULTS, ENCLOSE A SELF-ADDRESSED, STAMPED ENVELOPE WITH BID

BID DEPOSIT REQUIREMENTS: 5% OF BID AMOUNT
Deposit shall mean cash, cashier's check or corporate surety bond payable to or in favor of the City of Duluth.

A PERFORMANCE BOND AND A PAYMENT BOND shall be required of the successful bidder, BOTH in the full amount of the bid.

INSUREANCE CERTIFICATE required per attached requirements.
Designated F.O.B. Point:
Engineering Division
Jobsite(s)

Tax: Federal Excise Tax Exemption
Account No. 41-74-0056 K

Vendor Email Address: _____

NAME: _____
ADDR1: _____
ADDR2: _____
ADDR3: _____

GRAND TOTAL BID PRICE # _____
TO INCLUDE ANY ADDITIONAL PAGES.

BY: _____
(Print) (Title)

_____
(Signature) (Tele. #)

The City of Duluth is an Equal Opportunity Employer.

PRE-BID INFORMATION

C I T Y O F D U L U T H

DATE: **5/7/2013**

BID #: **13-10DS**

Item No.	Spec. #	Qty	U/OM	Item Description	Unit Price	Total Price

************SCHEDULE OF PRICES************

Duluth Traverse Trail Phase 1 - Mission Creek

City Project #1224

Delivery Contact: Patrick Loomis
Engineering
218-730-5094

_____
(Initial)

DATE: 5/7/2013

BID #: 13-10DS

************SCHEDULE OF PRICES************

Duluth Traverse Trail Phase 1 - Mission Creek

City Project #1224

Make all extensions and total the bid.

****

Make all extensions and total the bid.

Item No.	Spec. #	Qty	U/OM	Item Description	Unit Price	Total Price
001		1	Each	**GRAND TOTAL from Worksheet B**	$ _____	$ _____
				(Worksheet A and B Must Be Returned With The Bid)		

TOTAL $ _____

ADDENDUM NO. _____ , DATED _____

ADDENDUM NO. _____ , DATED _____

TOTAL BID IN WORDS:

_____

CONTRACTOR NAME:

_____

THE CONTRACTOR AGREES TO ALL OF THE PROVISIONS CONTAINED IN THE CONTRACT DOCUMENTS. ENCLOSED HEREWITH FIND A CERTIFIED CHECK OR BID BOND IN THE AMOUNT OF AT LEAST 5% OF THE AMOUNT OF PROPOSAL MADE PAYABLE TO THE CITY OF DULUTH AS A PROPOSAL GUARANTEE WHICH IT

(see additional page(s))

_____

(Initial)

IS AGREED BY THE UNDERSIGNED WILL BE FORFEITED IN THE EVENT THE FORM OF CONTRACT AND BOND IS NOT EXECUTED, IF AWARDED TO THE UNDERSIGNED.

The bidder hereby certifies that he/she has received or viewed on-line the 2013 City of Duluth Public Works/Utilities Department - Engineering Division Standard Construction Specifications booklet and has incorporated the terms hereof in its bid.

SIGNED: _____ FOR

_____

A PARTNERSHIP (OR)

_____

A CORPORATION INCORPORATED UNDER THE LAWS OF THE STATE OF:

_____

PRESIDENT _____
VICE-PRES. _____
SECRETARY _____
TREASURER _____

ADDRESS(ES) _____

_____

BEING DULY SWORN, DEPOSES AND SAYS THAT THERE ARE NO OTHER PERSONS COMPRISING ABOVE COMPANY OR FIRM THAN THE ABOVE NAMES, AND THAT THERE ARE NO PERSONS OR CORPORATIONS INTERESTED IN THE FORGOING PROPOSALS, EITHER AS PRINCIPAL OR SUBCONTRACTOR, OTHER THAN THE ABOVE NAMES; ALSO THAT THE PROPOSALS ARE MADE WITHOUT ANY CONNECTION WITH ANY PERSON OR PERSONS MAKING ANY PROPOSAL FOR THE ABOVE WORK; THAT THEY ARE IN ALL RESPECTS FAIR AND WITHOUT COLLUSION OR FRAUD; AND THAT NO PERSON ACTING IN ANY OFFICIAL CAPACITY FOR THE CITY OF DULUTH IS DIRECTLY OR INDIRECTLY INTERESTED THEREIN, OR IN ANY PORTION OF THE PROFIT THEREOF.

(see additional page(s))

_____
(Initial)

SUBSCRIBED AND SWORN TO BEFORE ME THIS

DAY OF A.D.,

NOTARY PUBLIC

IMPORTANT NOTE BIDDERS:
PLEASE DISREGARD THE NOTE ON PAGE 1 REGARDING SALES TAX FOR THIS BID. ALL APPLICABLE SALES AND/OR USE TAXES ARE TO BE INCLUDED IN BID PRICING. ALSO, ALL BIDS ARE TO BE F.O.B. JOBSITE. THE BLANK ON PAGE ONE FOR FREIGHT IS TO TO BE LEFT BLANK.

(Initial)

BID WORKSHEET A

1.1 Duluth Traverse Trail Phase I – Mission Creek

Company name _____

Contact person _____

Contact person's phone number _____

Contact person's email _____

Company address _____

_____

_____

PTBA member _____ Yes _____ No Member since _____
If bidder is not a member of the Professional Trailbuilders Association please provide a separate document that describes why and details equivalent experience and expertise.

Experienced in constructing sustainable bike-specific singletrack trails?
_____Yes _____ No

Please list similar past projects on a separate sheet along with a brief narrative. Include projects that highlight the Contractor's ability to satisfy the qualifications and requirements listed in section 6.

Please attach one (1) letter of recommendation from a previous client.

Please provide three (3) references from previous shared use trail construction projects with contact information (phone numbers and email addresses).

1.

2.

3.

Provide a detailed list of proposed project team members, including subcontractors, and their skill sets and relevant experience.

Provide a list of the equipment and tools intended to be used in completing the scope of work.

Provide a recommended schedule/timetable that allows for work completion per the specified schedule.

For each project site provide bid total and information about the intended team, equipment, workflow description, and schedule.

Project 1 – Base Bid – Hill Side Trail (segments 1,2,3,4)

Bid Total:

Team:

Equipment/Tools:

Workflow Description:

Start Date: End Date:

Project 2 – Base Bid – River Side Trail (segment 5)

Bid Total:

Team:

Equipment/Tools:

Workflow Description:

Start Date: End Date:

By signing this, I certify that I have am fully aware of the site locations, their conditions, access restrictions and other constraints. I accept the terms and conditions expressed and contained in the specifications included in and attached to this RFQ.

(sign here and date) _____

BID WORKSHEET B

DULUTH TRAVERSE MOUNTAIN BIKE TRAIL SYSTEM - PHASE 1
MISSION CREEK

Instructions...

- *For each project bid, fill in unit price for all items.*
- *Failure to provide a unit price for any item will invalidate the bid for that project.*
- *Unit prices made on a per-project basis.*
- *Quantities for each project are estimated. Final quantities may change, but the unit price is fixed!*
- *Insert total for each project on summary sheet.*
- *Provide cost for one roundtrip mobilization on summary sheet.*
- *Bid tabulation sheets quantities take precedence over quantity discrepancies in the construction documents.*

Summary Sheet

Project #	*Project Name*	*Total*
1	Hill Side Trail	
2	River Side Trail	
One Mobilization (r/t)		
GRAND TOTAL		

_____
initial

BID WORKSHEET B

DULUTH TRAVERSE MOUNTAIN BIKE TRAIL SYSTEM - PHASE 1
MISSION CREEK

_____
initial

Instructions...

- *For each project bid, fill in unit price for all items.*
- *Failure to provide a unit price for any item will invalidate the bid for that project.*
- *Unit prices made on a per-project basis.*
- *Quantities for each project are estimated. Final quantities may change, but the unit price is fixed!*
- *Insert total for each project on summary sheet.*
- *Provide cost for one roundtrip mobilization on summary sheet.*
- *Bid tabulation sheets quantities take precedence over quantity discrepancies in the construction documents.*

Project #: *1 - Base Bid*
Project Name: *Hill Side Loop*
Specification Types: *Green Traditional Singletrack (Spec 1)*

Work	Unit measure	Estimated Quantity	UNIT PRICE	TOTALS
TRAIL CONSTRUCTION TYPE 'A'	LIN FT	740		
TRAIL CONSTRUCTION TYPE 'B'	LIN FT	15,440		
TRAIL CONSTRUCTION TYPE 'C'	LIN FT	804		
CONSTRUCTED TURN TYPE 'A'	EACH	0		
CONSTRUCTED TURN TYPE 'B'	EACH	16		
CONSTRUCTED TURN TYPE 'C'	EACH	1		
BERMED TURN TYPE 'A'	LIN FT	105		
BERMED TURN TYPE 'B'	LIN FT	555		
BERMED TURN TYPE 'C'	LIN FT	0		
FURNISH AND INSTALL DISCRETIONARY PERMANENT SEED AND MULCH	SQ YD	0		
FURNISH AND INSTALL DISCRETIONARY TEMPORARY SEED AND MULCH	SQ YD	0		
ROCK ARMORING	SQ YD	105		
INSTALL 48" BOARDWALK	LIN FT	326		
INSTALL 48" BRIDGE	LIN FT	16		
INSTALL 48" BRIDGE WITH RAILING	LIN FT	16		
ROCK CRIB WALL	SQ FF	0		
TURF BLOCK PAVERS	SQ YD	0		
ROCK JUMP	EACH	0		
INSTALL IRON RANGER FEE STATION	EACH	1		
INSTALL "STOP" SIGN	EACH	2		
INSTALL "TRAIL CROSSING SIGN AND DOWN ARROW SIGN"	EACH	2		
INSTALL "TRAIL CROSSING SIGN AND 250FT SIGN"	EACH	2		
TRAFFIC CONTROL	EACH	1		
ROCK CHECKS	SQ YD	36		
FURNISH AND INSTALL EROSION CONTROL COIR ROLLS	LIN FT	504		
FURNISH AND INSTALL EROSION CONTROL BLANKET CATEGORY 3	SQ YD	905		
FURNISH AND INSTALL EROSION CONTROL BLANKET CATEGORY 4	SQ YD	0		
PROJECT TOTAL				

BID WORKSHEET B

DULUTH TRAVERSE MOUNTAIN BIKE TRAIL SYSTEM - PHASE 1
MISSION CREEK

_____
initial

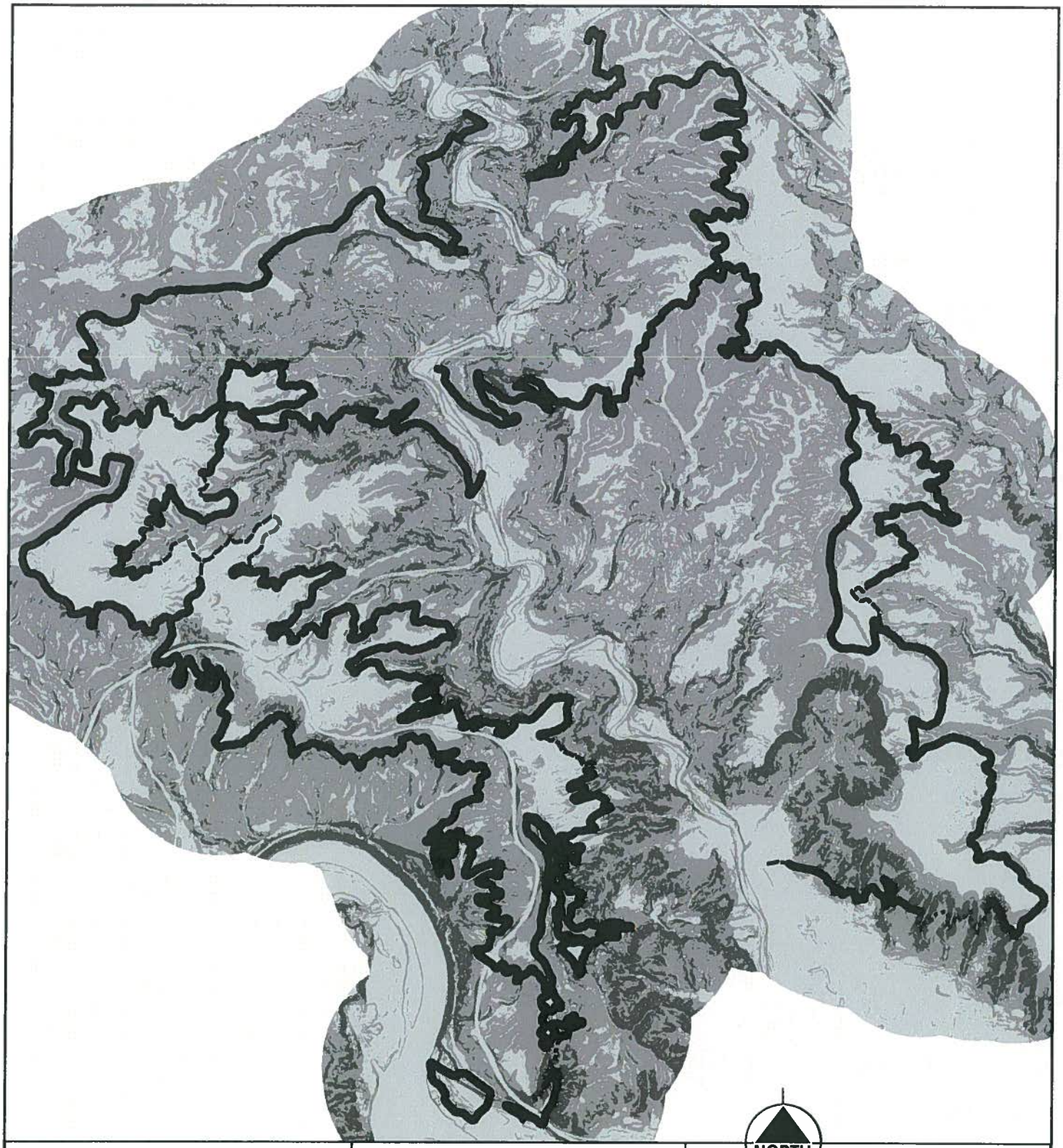
Instructions...

- *For each project bid, fill in unit price for all items.*
- *Failure to provide a unit price for any item will invalidate the bid for that project.*
- *Unit prices made on a per-project basis.*
- *Quantities for each project are estimated. Final quantities may change, but the unit price is fixed!*
- *Insert total for each project on summary sheet.*
- *Provide cost for one roundtrip mobilization on summary sheet.*
- *Bid tabulation sheets quantities take precedence over quantity discrepancies in the construction documents.*

Project #: *2 - Base Bid*
Project Name: *River Side Trail*
Specification Types: *Blue Bump Pump Singletrack (Spec 5)*

Work	Unit measure	Estimated Quantity	UNIT PRICE	TOTALS
TRAIL CONSTRUCTION TYPE 'A'	LIN FT	23		
TRAIL CONSTRUCTION TYPE 'B'	LIN FT	11,866		
TRAIL CONSTRUCTION TYPE 'C'	LIN FT	0		
CONSTRUCTED TURN TYPE 'A'	EACH	0		
CONSTRUCTED TURN TYPE 'B'	EACH	12		
CONSTRUCTED TURN TYPE 'C'	EACH	0		
BERMED TURN TYPE 'A'	LIN FT	0		
BERMED TURN TYPE 'B'	LIN FT	670		
BERMED TURN TYPE 'C'	LIN FT	0		
FURNISH AND INSTALL DISCRETIONARY PERMANENT SEED AND MULCH	SQ YD	0		
FURNISH AND INSTALL DISCRETIONARY TEMPORARY SEED AND MULCH	SQ YD	0		
ROCK ARMORING	SQ YD	61		
INSTALL 36" BOARDWALK	LIN FT	348		
ROCK CRIB WALL	SQ FF	0		
TURF BLOCK PAVERS	SQ YD	0		
ROCK JUMP	EACH	0		
INSTALL "STOP" SIGN	EACH	4		
INSTALL "TRAIL CROSSING SIGN AND DOWN ARROW SIGN"	EACH	4		
INSTALL "TRAIL CROSSING SIGN AND 250FT SIGN"	EACH	4		
TRAFFIC CONTROL	EACH	2		
ROCK CHECKS	SQ YD	0		
FURNISH AND INSTALL EROSION CONTROL COIR ROLLS	LIN FT	408		
FURNISH AND INSTALL EROSION CONTROL BLANKET CATEGORY 3	SQ YD	0		
FURNISH AND INSTALL EROSION CONTROL BLANKET CATEGORY 4	SQ YD	0		
PROJECT TOTAL				

APPENDIX A



CITY OF DULUTH

Duluth Traverse Trail
Phase 1
Mission Creek

Trail Slope Analysis
shown within ~1000 feet of
Duluth Traverse Trail

Trail Construction Type

- Type A (0-15% slope)
- Type B (16-60% slope)
- Type C (>61% slope)

Percent slope

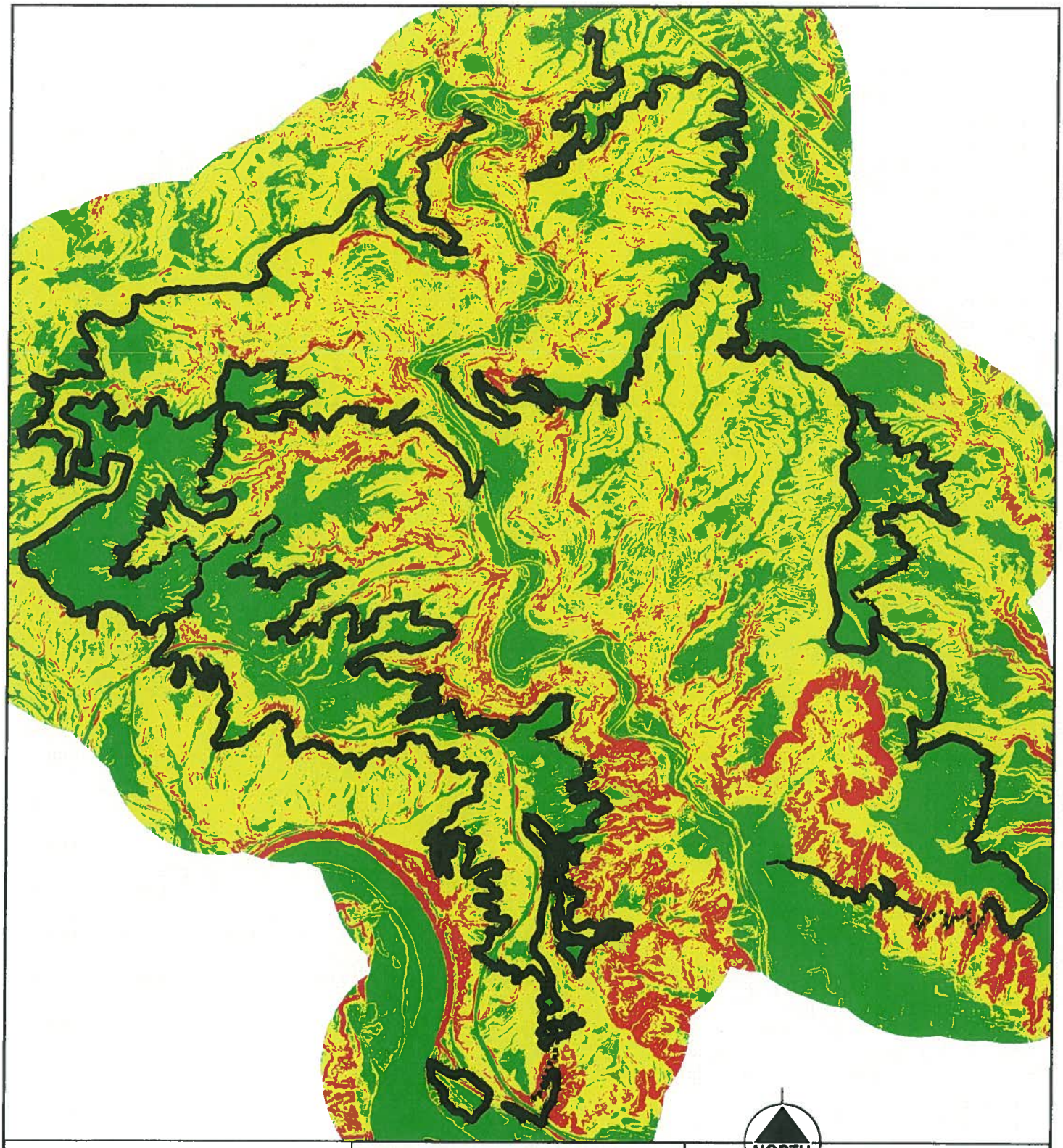
- 0 - 15 %
- 16 - 60 %
- > 61 %

NORTH

0 500 1,000 Feet

Data Attribution: Minnesota Department of Natural Resources, Arrowhead LiDAR 2011.
Data collection spring 2011.
Data resolution 1-meter
Coordinate System: NAD83 UTM Z15 N
www.mngeo.state.mn.us

Map produced 3/4/2013
GeoVeloCartography



CITY OF DULUTH

Duluth Traverse Trail
Phase 1
Mission Creek

Trail Slope Analysis
shown within ~1000 feet of
Duluth Traverse Trail

Trail Construction Type

- Type A (0-15% slope)
- Type B (16-60% slope)
- Type C (>61% slope)

Percent slope

- 0 - 15 %
- 16 - 60 %
- > 61 %

NORTH

0 500 1,000 Feet

Data Attribution: Minnesota Department of Natural Resources, Arrowhead LiDAR 2011.
Data collection spring 2011.
Data resolution 1-meter
Coordinate System: NAD83 UTM Z15 N
www.mngeo.state.mn.us

Map produced 3/4/2013
GeoVeloCartography

APPENDIX B

Trail Specifications Matrix
Duluth Traverse Trail System
Version: 1.1 (130207)

Label	Working title	Difficulty Rating	Symbol[1]	Use	Directional	Feature Frequency[2]	Constructed Tread Width[3]	Ave Trail Grade per 1000'	Max Trail Grade: climbing[4]	Max Trail Grade: descending[5]	Min Turn Radius	Max Turnpad Grade[6]	Max Berm/Turn Camber[7]	Corridor Width (4' above tread)	Corridor Height Minimum	Unavoidable Obstacles	Avoidable Obstacles (over 50% of tread or less)	Rollable Feature Height (jumps, berms, etc)	Roughasity (surface texture)[8]	Tread and trail features	Notes
Spec 1	Green Singletrack (Traditional shared-use singletrack)	Easier	Green Circle	bike, foot	Two-Way	Low	48"	5%	20%	20%	10'	10%	15%	48"-72"	10-12'	less then 2"	less then 6"	9"	low	Firm trail surface. May include rock armored section.	
Spec 2	Blue Singletrack (Traditional bike-optimized singletrack)	More Difficult	Blue Square	bike, foot	Two-Way	Medium	36"	7%	25%	50% (armored over 25%)	8'	15%	30%	36"-72"	8-12'	less then 8"	less then 24"	24"	med	Modest rough tread is expected. May include steps and terraces.	May include features similar to those on easier "Bump and Pump" or "Jump" trails.
Spec 3	Black Singletrack (Traditional technical singletrack)	Most Difficult	Black Diamond	bike, foot	Preferred	High	18"	10%	50% (armored over 25%)	100% (armored over 25%)	6'	15%	50%	36"-48"	8-12'	less then 18"	less then 48"	18"	high, some very high	Significant unavoidable obstacles are expected. May include steps, stairs, rock gardens, loose rock, and significantly	Seek out rocky ridges. Selective machine work to create very organic appearing rock strewn tread. Most rock and tread work is aimed at sustainability rather than ease of passage. Trials-like
Spec 4	Green Bump Pump	Easier	Green Circle	bike, foot	Preferred	High	48"	3-5%	20%	30% (armor as function of flow)	15'	10%	30%	48-72"	8-10'	less then 2"	less then 6"	12"	low	Firm trail surface. Rollers and berms. May include rock surfaced sections.	
Spec 5	Blue Bump Pump	More Difficult	Blue Square	bike, foot	Preferred	High	36"	7-10%	30%	100% (armor as function of flow)	10'	15%	50%	36"-72"	10'-12'	less then 2"	less then 24"	24"	low	Firm trail surface. Rollers, roller doubles, berms predominate. May include significant armored sections.	Demonstration trail at Spirit Mtn is an example of the upper end of this spectrum.
Spec 6	Black Bump Pump	Most Difficult	Black Diamond	bike	One-Way	High	36"	10-12%	n/a	150% (armor as function of flow)	7'	25%	150%	36"-72"	10'-12'	less then 8"	less then 48"	36"	med	Firm trail surface. Rollers, roller doubles, berms predominate. May also include steps, stairs, rock gardens and exposed	
Spec 7	Green Jump	Easier	Green Circle	bike	One-Way	Medium	48"+	3-5%	n/a	30% (armor as function of flow)	20'	10%	150%	48-72"	10-12'	less then 2"	less then 6"	18"	low	Smooth continuously cambered trail surface. Easily rollable jumps.	A green jump trail could fit within a stacked-loop system. Blue and Black are likely best done at a resort.
Spec 8	Blue Jump	More Difficult	Orange Pill, medium	bike	One-Way	Low	48"+	7-10%	n/a	100% (armor as function of flow)	15'	15%	∞%	48-72"	12'-15'	less then 2"	less then 24"	30"	low	Smooth continuously cambered trail surface. May include significant armored sections. More complex jump	Complete berms, plan on extreme drainage solutions - sumps + culverts.
Spec 9	Black Jump	Most Difficult	Orange Pill, large	bike	One-Way	Low	48"+	10-12%	n/a	150% (armor as function of flow)	15'	25%	∞%	48-72"	12'-15'	less then 8"	less then 48"	48"	med	Firm trail surface. May include rock surfaced sections. Some jumps may not be rollable.	Complete berms, plan on extreme drainage solutions - sumps + culverts.
Spec 10	Green Gravity	Easier	Orange Pill, small	bike	One-way	Medium	48"	7-10%	n/a	100% (armor as function of flow)	20'	15%	150%	48-72"	12'	less then 18"	less then 24"	18"	high	Entry level downhill course. Will include rocks, steps, and terraces. Drops will be rollable.	For all DH types, potentially only at Spirit Mtn.
Spec 11	Blue Gravity	More Difficult	Orange Pill, medium	bike	One-way	Medium	36"	10-15%	n/a	∞% (mandatory drops	15'	25%	∞%	36"-72"	12'	less then 48"	n/a	30"	very high	Intermediate level downhill course. Mandatory drops. Will include significant steps, stairs, rock gardens and exposed	
Spec 12	Black Gravity	Most Difficult	Orange Pill, large	bike	One-way	High	24"	15-20%	n/a	∞% (mandatory drops	15'	25%	∞%	36"-72"	12'	less then 72"	n/a	48"	very high	Advanced level downhill course. Significant mandatory drops. Will include extreme terrain that has a high penalty for failure.	
Spec 13	Gateway trail	Easiest	Green Circle	bike, foot, horse	Two-Way	low	48"+	3-5%	10%	15%	12'		10%		10-12'						Very front-country, likely connected to a recreation park. Typically under a mile.
Spec 14	Accessible trail	Easiest		bike, foot, horse	Two-Way	none															AASTHO spec trail.

Footnotes...
1. Orange Pill Symbol assumes trails inside controlled-access facilities, like bike parks or resorts.
2. Feature Frequency is averaged over long distances. Per 100': "low" = 2-3 features, "med" = 3-5 features, "high" = 5-10 features.
3. Constructed tread width may narrow over short distances to 50% of spec. Examples include rock or tree gateways.
4 & 5. Max grades climbing and descending refer to extremely short segments, 10 feet or less.
6. Turnpad grade measures the rise/fall across the turning surface at the base of any inslope.
7. Max camber is measured at the top of the inslope. More advanced berms will go to "vertical".
8. Roughasity attempts to capture average tread coarseness. Tread area with obstacles: "low" = less then 5%, "med" = less then 20%, "high" = over 20%, "very high" = over 50%.

General Note! All trails should have a minimum grade and camber (in/outslope) of 3% to ensure a well-drained tread.

APPENDIX C

Stormwater Pollution Prevention Plan

"Duluth Traverse" Mountain Bike Trail System

Prepared for
City of Duluth

February 2013

BARR

332 West Superior St.
Duluth, MN 55802
Phone: (218) 529-8200

"Duluth Traverse"
Construction Stormwater Pollution Prevention Plan

February 2013

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Duluth Traverse: Project Construction SWPPP

This SWPPP is based on the Minnesota Pollution Control Agency's SWPPP Template. The General Stormwater Permit for Construction Activity is included as Appendix C to this SWPPP.

A NPDES Construction Stormwater Permit has been applied for the entire Duluth Traverse Mountain Bike Trail System. However, this SWPPP document titled "Duluth Traverse Phase 1 Construction SWPPP" has been designed for the Phase 1 portion of the project. The SWPPP will be amended as needed and for future phases. This SWPPP has been design to be in compliance with the Minnesota Stormwater General Permit for Construction Activity (MNR100001). The main SWPPP outlines general construction information and best management practices (BMPs) as they apply to the overall Duluth Traverse Project construction activities.

Construction Activity Information

Project name: Duluth Traverse Phase 1 Construction:

Project location: (Briefly describe where construction activity occurs. Include address if available.)

Address or describe area: Construction will start in Lester Park in Duluth, MN and also in the Mission Creek watershed located near Fond Du Lac, MN.

City or Township: Duluth State: MN Zip code: 55802

Latitude/longitude of approximate centroid of project: 46^0 45' 39.80" 92^0 09' 4.32"

Method of collection of latitude/longitude:

☐ GPS ☒ Online tool ☐ USGS Topographic map Scale used:

All cities where construction will occur: Duluth

All counties where construction will occur: Carlton, St. Louis

All townships where construction will occur: Midway

Project size (number of acres to be disturbed): 35.53 acres

Project type:

☐ Residential ☐ Commercial/Industrial ☐ Road construction

☐ Residential and road construction ☒ Other (describe): Construction of natural surface trail

Cumulative impervious surface:

Existing area of impervious surface: 0 (to the nearest quarter acre)

Post construction area of impervious surface: 10.25 (to the nearest quarter acre)

Receiving waters

Water body ID*	Name of water body	Type (ditch, pond, wetland, lake, stream, river)	Special water? (See Stormwater Permit Appendix A)	Impaired Water?** (See Stormwater Permit Appendix A)
	Mission Creek and tributaries	stream	☒ Yes ☐ No	☐ Yes ☒ No
	Sargent Creek and tributaries	stream	☒ Yes ☐ No	☐ Yes ☒ No
	Lester River and tributary	stream	☒ Yes ☐ No	☐ Yes ☒ No
	Associated wetlands	Wetlands	☐ Yes ☒ No	☐ Yes ☐ No

* Water Body identification (ID) might not be available for all water bodies. Use the Special and Impaired Waters Search Tool at: www.pca.state.mn.us/water/stormwater/stormwater-c.html.

** Impaired water for the following pollutant(s) or stressor(s): phosphorus, turbidity, dissolved oxygen, or biotic impairment.

Dates of construction (Briefly describe where construction activity occurs. Include address if available.)

Construction start date: June 2013 **Estimated completion date:** November 2013

Contact Information

Owner of the site

Business or firm name: City of Duluth

Corporate Authority (Owner): Cindy Voigt **Title:** City Engineer

Mailing address: City Engineer, 411 West 1st Street 2nd Floor

City: Duluth **State:** MN Zip code: 55802

E-mail address: cvoigt@duluthmn.gov **Telephone** (218) 730-5200

Contact name: Matt Decur **Title:** Engineer

Mailing address: City Engineer, 411 West 1st Street 2nd Floor

City: Duluth **State:** MN Zip code: 55802

E-mail address: mdecur@duluthmn.gov **Telephone** (218) 730-5104

Contractor (Person who will oversee implementation of the SWPPP)

Business or firm name:

Party responsible for long-term operation and maintenance of the permanent Stormwater Management System

Business or firm name: N/A

Corporate Authority (Owner): _____ **Title:** _____

Mailing address: _____

City: _____ **State:** _____ **Zip code:** _____

E-mail address: _____ **Telephone:** _____

Contact name: _____ **Title:** _____

Mailing address: _____

City: _____ **State:** _____ **Zip code:** _____

E-mail address: _____ **Telephone:** _____

General Construction Project Information

Describe the construction activity (what will be built, general timeline, etc.):

The City of Duluth proposes to construct the Duluth Traverse, a mountain bike trail system over the next five to seven years depending on financing and upon approval of all necessary permits and authorizations. Phase 1 construction is scheduled to take place in the Lester Park (3.64 miles) and Mission Creek (13-21.5 miles) areas of Duluth, Minnesota in 2013 depending on funding.

The project will construct:

- A bike treadway approximately 18-36" wide within a trail corridor approximately 60" wide
- Boardwalks to cross wetlands
- Timber bridges to cross ravines, swales and streams where existing crossings are not available
- Grade reversals and turns to slow stormwater flow

Describe soil types found at the project:

The proposed trail will cross soils that are primarily composed of Duluth glacial till soils that vary from silty to sandy loams with clay and shallow bedrock. Occasional rock outcrops can be viewed along various proposed trail routes. Trail excavation will be avoided, and will be crossed with boardwalks in unavoidable encounters with in peat and mucky soils.

General Site Information (III.A)

1. **Describe the location and type of all temporary and permanent erosion prevention and sediment control Best Management Practices (BMPs). Include the timing for installation**

and procedures used to establish additional temporary BMPs as necessary. (General Permit Part III.A.4.a)

BMPs that will be implemented project-wide where applicable include:

Pre-Construction Protocol

- Soil disturbance will be minimized wherever possible, primarily through a multi-phased construction approach. This will minimize the amount of disturbed areas that are not stabilized at any one time. (General Permit Part IV.B.2)
- All BMPs within 200 feet of site surface water shall be stabilized within 24 hours. Temporary (or permanent) sediment basins are not needed in this project because of the minimal footprint and sheet flow construction design. (Part IV.B.3).
- Contractor will be required to limit soil disturbance area in advance of actively working it, and must have the ability to stabilize and restore prior to forecasted rain events and weekends if not working on weekends.

Pre-Construction Steps

- Before land disturbing work activities begin, the limits of the area to be disturbed will be delineated with flagging, stakes, signs, or other equivalent means. Area(s) not to be disturbed will be clearly labeled (from Part IV.B.1).
- Prior to soil disturbance temporary BMPs will be used downgradient and/or in areas that are anticipated to have concentrated flow. These BMPs may include:
    - Sediment control for sheet flow
    - Vegetated buffer strips (retain existing vegetation where possible)
    - Native material barriers (e.g., topsoil stockpile/berm)

During Construction Protocol

Erosion Prevention

- Existing vegetation will be preserved where possible to limit exposed soil.
- Boardwalks and bridges will be used to cross wetlands and streams respectively minimizing soil disturbance and impact to water resources.
- Trail treadways will be constructed and shape to shed water to provide sheet flow to vegetated areas for filtration and infiltration.
- Berms will be constructed to facilitate turns on the trail treadways to slow erosion potential.
- Diversion berms with downgradient slopes within 200 feet of surface water stabilized within 24 hours.
- Stabilization of exposed soil on the back side of the berms will include seed, mulch, or blankets or similar measures.
- Grade reversals are to be installed concurrent with wattles (biologs, staked in place) to help with erosion.
- Rock hardening (armoring) in concentrated flow areas of the trail tread (not installed in wetland areas)

Sediment Control

- Vehicle tracking of sediment from the site onto nearby streets is not expected, but will be minimized by the use of smaller equipment
- If sediment tracking occurs, then regular street sweeping will be utilized and

installation of rock entrance/exit pad(s) will be considered.

- Stabilization of soils during construction within 7 days of soil being worked.
- The trail tread will constructed to shed water.
- Grade Reversals are to be installed concurrent with wattles (biologs, staked in place) to help with erosion.
- Ditches are not planned as part of this project, however in the event that they are encountered and disturbed, the normal wetted perimeter of drainage ditches or swales must be stabilized within 24 hours after connecting to surface water (at least the 200 lineal feet closest to the surface water).
- Uninterrupted earthen slopes for grades 3:1 or steeper will be kept to no more than 75 feet in length through the utilization of bio rolls, rock checks, tread drains/grade dips or through other acceptable practices (Part IV.C.1.c.).

Good housekeeping

- Good housekeeping procedures will be implemented to ensure minimization for potential spills and other hazards through:
- Appropriate material handling procedures, labeling of materials, and storage of materials inside when possible or within adequate storage containers
- Any generated solid waste will be properly disposed.

Stormwater Inspections

- Stormwater inspections will be conducted by a trained inspectors within the following time intervals:
    - Once every 7 days during active construction AND
    - Within 24 hours after a rainfall event greater than 0.5 inches in 24 hours, and again within 7 days after such rainfall events. (Part IV.E.1)
    - A stormwater inspection form is available in Appendix E to this SWPPP
- During stormwater inspections the site will be monitored for areas where erosion or sedimentation is occurring and, if necessary, the appropriate actions will be taken and/or additional BMPs will be installed. These actions may include:
    - BMPs will be maintained and repaired.
    - BMPs will be replaced and or cleaned when sediment accumulates up to 1/2 of the device's height no later than 72 hours after discovery (Part IV.E.4.b.).
    - All non-functioning BMPs will be repaired or replaced no later than 24 hours of discovery (Part IV. E.4.a.).
    - Sediment and deltas will be removed that are deposited in surface waters within 7 days of discovery (Part Iv.E.4.d.).
    - Sediment will be removed if tracked onto paved roads within 24 hours of discovery (Part IV. E.4.d.).
    - Sediment that has escaped off site will be removed in a manner and at a frequency sufficient to minimize offsite impacts (Part IV.E.4.f.).

Post-Construction Protocol

- Temporary and Final stabilization must occur after construction on a portion of the site has temporarily or permanently ceased as a means to prevent erosion.
    - All disturbed soils (except for the trail treadway) will be stabilized with seed and/or mulch or if necessary by other means. This will be accomplished as soon as possible to limit soil erosion, but in no case later than 7 days after

the construction activity has temporarily or permanently ceased.
    - All exposed soil will be stabilized with permanent cover (uniform perennial vegetative cover to a density of 70% or constructed to shed water in a manner that minimizes soil erosion.
    - Mulch will be used as part of establishment of permanent vegetative cover.
    - All sediment will be removed from ditches and BMPs.
    - All temporary non-biodegradable BMPs will be removed and appropriately disposed/recycled.
- Stabilization will in no case shall the stabilization occur later than:
    - Within 24 hours for BMPs located within 200 feet of surface water (Part IV.B.3.).
    - Or within 7 days for other construction areas (Part IV.B.3.).
    - After final stabilization is achieved (uniform perennial vegetative cover to a density of 70% or greater over the entire pervious surface) of all originally proposed construction activity has been completed and permanent cover established on those areas a Notice of Termination must be completed and returned to the MPCA (Part IV.G.6.).
- Notice of Termination form is available as Appendix G to this document.

2. **Attach to this SWPPP a table with the anticipated quantities for the life of the project for all erosion prevention and sediment control BMPs (III. A. 4.b).**

   A table with the anticipated quantities of BMPs is included in sub-project SWPPPs available in Appendix A.

3. **Site maps that include the following features (General Permit III.A.3.b – f) are located in Appendix B:**

   - Due to the length of trail and the steep terrain, existing and final grades were not determined within the project limits. However, locations of boardwalks and bridges are shown for reference in the maps.
   - Locations of soil types.
   - Location of areas of construction

   Figures 1-10 shows the Duluth Traverse (including Phase 1) in relation to all surface waters and existing wetlands within one mile from the project boundaries that will receive stormwater runoff from the site (identifiable on maps such as USGS 7.5 minute quadrangle maps or equivalent).

4. **Were stormwater mitigation measures required as the result of an environmental, archaeological, or other required local, state, or federal review of the project?**

   ☐ Yes ☒ No

   If yes, describe how these measures were addressed in the SWPPP. (III.A.6.)

   Not applicable

5. **Is the project located in a karst area such that additional measures would be necessary to protect drinking water supply management areas as described in Minn. R. chapters 7050 and 7060?** ☐ Yes ☒ No

If yes, describe the additional measures to be used. (III.A.7.)

Not applicable

6. **Does the site discharge to a calcareous fen listed in Minn. R. 7050.0180, subp. 6. b.?** ☐ Yes ☒ No

If yes, a letter of approval from the Minnesota Department of Natural Resources must be obtained prior to application for this permit. (Part I B.6 and Part III.A.8)

7. **Does the site discharge to water that is listed as impaired for the following pollutant(s) or stressor(s): phosphorus, turbidity, dissolved oxygen or biotic impairment?** Use the Special and Impaired Waters Search Tool at: www.pca.state.mn.us/water/stormwater/stormwater-c.html. ☒ Yes ☐ No

Unnamed tributaries to Mission Creek, Mission Creek, Unnamed tributaries to Sargent Creek, Sargent Creek, Unnamed tributary to Lester River, Lester River and associated wetlands.

Does the impaired water have an approved Total Maximum Daily Loads (TMDL) with an Approved Waste Load Allocation for construction activity? ☐ Yes ☒ No

If yes:

List the receiving water, the areas of the site discharging to it, and the pollutant(s) identified in the TMDL.
List the BMPs and any other specific construction stormwater related implementation activities identified in the TMDL.

If the site has a discharge point within one mile of the impaired water and the water flows to the impaired water but no specific BMPs for construction are identified in the TMDL, the additional BMPs in Appendix A (C.1 and C.2) must be added to the SWPPP and implemented. (III.A.7). The additional BMPs only apply to those portions of the project that drain to one of the identified discharge point.

Training (III.A)

- In accordance with R10001 Part III.A.2, individuals involved with preparing, reviewing, revising, and amending this SWPPP have been properly trained in erosion prevention, sediment control, and stormwater management. At least one Contractor representative must be trained.
- Appendix D contains certificates of personnel involved with this SWPPP, and includes:
  - the names of the personnel trained that prepared this SWPPP;
  - the dates of the training;
  - name of instructor(s) and entity providing training;
  - and content of training course or workshop (including number of hours of training).

Selection of a Permanent Stormwater Management System (III.C)

1. **Will the project create a new cumulative impervious surface greater than or equal to one acre?** ☒ Yes ☐ No

The issue of impervious surface and permit requirements for the Duluth Traverse was reviewed with the MPCA. There will be 58.3 miles of new trial associated with the Duluth Traverse Mountain Bike Trail. Assuming the driving width will be approximately 18" wide, there will be 10.6 acres of new bike trail driving lane constructed. The soils in the driving lane will get compacted with use, creating a surface that retards infiltration and will result in an increase in rate and volume of stormwater runoff. The trail cross section is designed to shed water. For these reasons, the driving lane portion of the trail cross section is considered impervious. The alignment of the trail has been carefully selected to avoid wet areas and will be constructed with considerable emphasis on sustainability. The compacted trail surface will resist erosion and not be a significant source of sediment. Because of the careful design considerations, minimal sediment load and the lack of opportunity to provide permanent stormwater treatment associated with the trail, the MPCA has decided that it will not, generally, require permanent stormwater treatment for the trail portions of the project.

2. **Describe which method will be used to treat runoff from the new impervious surfaces created by the project (III.C):**

- Infiltration/Filtration

Include all calculations and design information for the method selected. See Part III.C of the permit for specific requirements associated with each method.

Due to the limited impact and the limited space available for basins and ponds, the project has been designed for infiltration and filtration using natural vegetation buffers, and BMPs to produce sheet flow rather than areas that promote concentrated flows.

3. **If it is not feasible to meet the treatment requirement for the water quality volume, describe why. This can include proximity to bedrock or road projects where the lack of right of way precludes the installation of any permanent stormwater management practices. Describe what other treatment, such as grasses swales, smaller ponds, or grit chambers, will be implemented to treat runoff prior to discharge to surface waters. (III.C)**

See item 1 discussion.

4. **If proposing an alternative method to treat runoff from the new impervious surfaces, describe how this alternative will achieve approximately 80 percent removal of total suspended solids on an annual average basis (III.C.5).**

Note: If proposing an alternative method, you must submit your SWPPP to MPCA at least 90 days prior to the starting date of the construction activity.

Not applicable

Erosion Prevention Practices (IV.B)

1. **Describe construction phasing, vegetative buffer strips, horizontal slope grading, and other construction practices to minimize erosion. Delineate areas not to be disturbed (e.g., with flags, stakes, signs, silt fence, etc.) before work begins.**

    - The Duluth Traverse Phase 1 construction activities will be phased, beginning in May 2013 (pending all authorizations). Use of a multi-phased approach will limit the area of soil exposed at one time and allow for greater attention to implementing erosion prevention practices within each defined sub-project area.
    - Duluth Traverse Phase 1 construction activities will be staged to the maximum extent practicable: a) to minimize the amount of disturbed area exposed at any one time; b) to stabilize disturbed areas as soon as possible; c) provide additional BMPs to protect portions of the work that have reached final stabilization.
    - Prior to the start of land disturbing activities, site preparation BMPs shall be implemented along the downgradient perimeter of the sub-project.
    - Erosion prevention practices will commence prior to the start of construction. Areas not to be disturbed will be delineated with flagging, stakes, and/or fencing. To prevent erosion and to control sediment from entering these areas, bio rolls, berms of topsoil or another adequate BMP will be put in place downgradient.
    - During construction native vegetative buffers will be retained wherever possible.
    - However, during the course of construction in some areas it may not be possible to retain native vegetation. Where vegetation interferes with construction activities it may be graded. The non-trail tread area will be stabilized with seed and/or mulch to minimize erosion. The trail tread will be designed to shed water to vegetated areas.
        - All non-trail tread exposed areas will be stabilized as soon as possible to limit soil erosion, but in no case later than 7 days after construction activity in that portion of the site has temporarily or permanently ceased.

2. **Describe temporary erosion protection or permanent cover used for exposed soil. All exposed soil areas must be stabilized as soon as possible but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased (part IV.B.2).**

    - Temporary erosion protection may include, but is not limited to: straw, mulch, erosion blanket, geotextiles, rock, and similar methods.
    - Permanent erosion protection may include, but is not limited to: packed trail surface, rock hardening or armoring, permanent vegetation, and other landscaped material that will permanently arrest soil erosion.

3. **For drainage or diversion ditches, describe practices to stabilize the normal wetted perimeter within 200 lineal feet of the property edge or point of discharge to surface water. The remaining portions of the temporary or permanent ditch or swale must be stabilized within 14 days after connecting to surface waters and construction in that portion of the ditch has temporarily or permanently ceased.**

    - In general, excavation in drainage or diversion ditches will be avoided but if construction in ditches is required, it will be stabilized with rip rap, anchored mats, geotextiles, and/or other permanent stabilization methods designed to withstand concentrated flow.

- Application of mulch, hydromulch, tackifier, polyacrylamide, or similar erosion prevention practices are not acceptable temporary or permanent stabilization methods in drainage ditches or areas where concentrated flow occurs.

4. **Describe other erosion prevention practices (list and describe).**

    - See Appendix A for project quantity estimates.

Sediment Control Practices (IV.C)

Describe sediment control practices used to minimize sediments from entering surface waters, including curb and gutter systems and storm drain inlets. Sediment control practices must include:

The sediment control practices utilized to minimize sediment from entering surface waters, curb and gutter systems, and storm drain inlets are described here. The following list comprises the minimum sediment control practices that will be implemented throughout Project Duluth Traverse. Site-specific, detailed sediment control practices are available in Appendix A.

- Unbroken earthen slopes for grades of 3:1 or steeper will be kept to no more than 75 feet in length (Part IV.C1.c.).
- Sediment control practices at all down gradient perimeters will be established before land disturbing activities begin (Part IV.C.1.b). These practices may include:
    - Grade reversals
    - Turns
    - Filter logs (biorolls)
    - Rock checks
- Storm drain inlets will be adequately protected if located nearby and potentially affected by the proposed project (Part IV.C.4).
- Vehicle tracking of sediment from the site and onto paved roads (through the use of mulch, course rock or equivalent systems) will be minimized (Part IV.C.6.).
    - If tracking occurs, street sweeping will be utilized within 24 hours of discovery and installation of a rock entrance/exit pad will be considered.
- Temporary stockpiles will be protected with bio rolls or equivalent and appropriate sediment controls (Part IV.C.5.).
- Sediment control practices will be utilized. These practices may include:
    - Vegetative buffer/filter strips or native vegetation
    - Slash barriers
    - Other native material barriers
    - Bio rolls
    - Grade reversals
    - Turns
    - Check dams
    - Rock dams

Dewatering and Basin Draining (IV.D)

1. **Will the project include dewatering or basin draining?** ☐ Yes ☒ No

Dewatering is not expected.

2. **If yes, describe BMPs used so the discharge does not adversely affect the receiving water or downstream landowners.** n/a

Additional BMPs for Special Waters and Discharges to Wetlands (Appendix A, Parts C and D)

1. Special Waters. Does your project discharge to special waters? ☒ Yes ☐ No

2. **If proximity to bedrock or road projects where the lack of right of way precludes the installation of any of the permanent stormwater management practices, then other treatment such as grassed swales, smaller ponds, or grit chambers is required prior to discharge to surface waters. Describe what other treatment will be provided.**

   The proposed trail will be constructed to shed water to existing vegetated buffer/filter strips. Tread drains and grade dips will be constructed to direct water to the buffer strips filtered with bio rolls.

3. **Describe erosion and sediment controls for exposed soil areas with a continuous positive slope to a special waters, and temporary sediment basins for areas that drain five or more acres disturbed at one time.**

   The project proposes no ditches and is not expected to drain 5 or more acres at one time. The project was reviewed in consultation with the MPCA, and as designed, the Agency has not required the construction of temporary sediment basins.

4. **Describe the undisturbed buffer zone to be used (not less than 100 linear feet from the special water).**

   The project will use undisturbed buffer zones within 100 feet of the special waters wherever possible. However, portions of the trail are constructed within this buffer. Within this zone, removal of woody vegetation will be avoided as much as possible. Boardwalks and bridges will be used to maintain the natural buffer and avoid soil disturbance in these areas to the extent practicable.

5. **Describe how the permanent stormwater management system will ensure that the pre and post project runoff rate and volume from the 1, and 2-year 24-hour precipitation events remains the same.**

   Wherever possible, the project has been designed to slow the flow of stormwater to sheet flow, to naturally vegetated buffer strips for filtering and infiltration.

6. **Describe how the permanent stormwater management system will minimize any increase in the temperature of trout stream receiving waters resulting in the 1, and 2-year 24-hour precipitation events.**

   The project will be designed to minimize the removal of natural vegetation adjacent to trout streams and cross perpendicular to streams to maximize natural shading. Existing bridges will be used wherever possible to minimize new crossings of these resource waters.

7. **Wetlands. Does your project discharge stormwater with the potential for significant adverse impacts to a wetland (e.g., conversion of a natural wetland to a stormwater pond)?** ☐ Yes ☒ No

If Yes, describe the wetland mitigation sequence.

Inspections and Maintenance (IV.E)

Describe procedures to routinely inspect the construction site:

- Inspections must include stabilized areas, erosion prevention and sediment control BMPs, and infiltration areas.

- Stormwater Inspections will be conducted by City Engineering staff, a COGGS member and/or the contractor trained in inspection and installation in accordance with General Permit No. MNR100001. Inspections will be conducted:
    - once every 7 days during active construction, and
    - within 24 hours after a rainfall event greater than 0.5 inches in 24 hours, and within 7 days after such rainfall.
    - Inspections will include monitoring for areas where erosion or sedimentation is occurring. Installation of additional BMPs will be considered to correct erosion and sedimentation.
- BMPs will be maintained and repaired as follows:
    - All non-functioning BMPs will be repaired or replaced within 24 hours of discovery.
    - Sediment deposited in surface waters will be removed within 7 days of discovery.
    - Sediment tracked onto paved roads will be removed within 24 hours of discovery.

Pollution Prevention Management Measures (IV.F)

1. **Describe practices to properly manage and dispose of solid waste, including trash (IV.F.1):**
Care will be taken to prevent wastes from contacting stormwater. Collected sediment, floating debris, paper, plastic, fabric, construction debris, and other wastes will be properly disposed of in appropriate covered waste containers in order to minimize stormwater contact with waste products. All solid wastes will be collected by the contractor and removed from the site.

2. **Described practices to properly manage hazardous materials (IV.F.2):**
Care will be taken to prevent hazardous materials from contacting stormwater. Appropriate materials handling procedures will be implemented on-site. Oil, gasoline, and any other hazardous substances will be properly stored to prevent spills or leaks. The containers will be properly labeled and secured (via padlock when off-site) in appropriate secondary containment whenever possible.

3. **Describe practices for external washing of trucks and other construction vehicles (IV.F.3):**
If vehicle tracking is found to be contributing to the stormwater sediment load, then a vehicle washing station will be set up before the vehicle site exit to facilitate the removal of excess dirt prior to exiting the site. If necessary during muddy conditions, physical cleaning or pressure washing of the undercarriage may be employed. Runoff from the wash area will be contained to settle sediment prior to it leaving the immediate wash area.

4. **Describe how are you going to provide a safe, lake proof, concrete washout on site (IV.F.4):**
Concrete is not planned to be used on this project.

5. **Describe your spill prevention plan:**
Care will be taken to prevent spills, including implementation of good housekeeping measures and minimization of the amount of chemicals, waste-generating products, and hazardous materials brought on site.

6. **Describe measures to address sanitary and septic waste:**

Portable sanitary facilities may be brought on site. Sanitary waste from the portable facilities will be disposed of, as necessary by a licensed sanitary waste provider in accordance with applicable regulations. Facilities will be secured to prevent spilling waste/chemicals from portable toilets caused by vandalism.

Final Stabilization (IV.G)

Describe how you will achieve final stabilization of the site (IV.G).

All exposed non-trail tread soil will be stabilized with permanent cover (uniform perennial vegetative cover with a density of 70% over the entire pervious surface). The native trail tread designed to shed water will be stabilized through compaction during construction and use.

Records Retention (III.D)

Describe your record retention procedures (must be kept at the site) (III.D). Records must include:

- Copy of SWPPP and any changes
- Training documentation (III.A.2.)
- Inspection and maintenance records
- Permanent operation and maintenance agreements
- Calculations for the design of temporary and permanent stormwater management systems

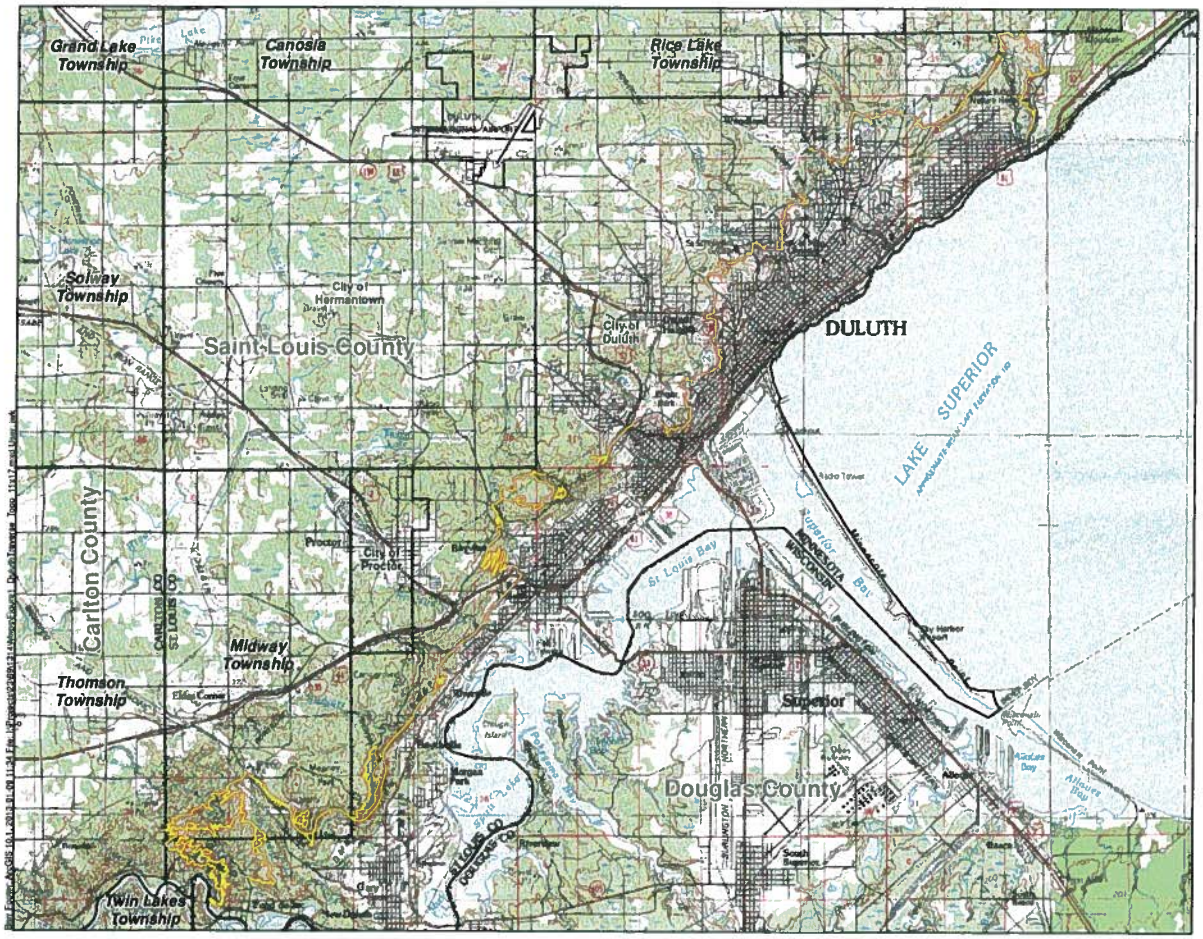
This SWPPP is a template for the entire Duluth Traverse Mountain Bike Trail System. Specifications are primarily designed for Phase 1 construction of trails in the Lester Park and Mission Creek areas. Future phases of the Traverse are dependent on funding and permitting approvals. This SWPPP will need to be amended as needed by the contractor and City of Duluth for this project and future phases of construction.

The following records will be retained on-site along with this SWPPP:

- Training documentation (Appendix D).
- SWPPP Amendments (Appendix F), which will include updates as they apply to Phase 1 and any future phase work.
- Inspection and maintenance records (Appendix E).

If engineered temporary or permanent stormwater controls are installed then long-term operation and maintenance agreements as well as design calculations will be added to this plan as appropriate.

Figures



Duluth Traverse Trails

Minor Civil Divisions

0 1.5 3

Miles

1 inch = 1.5 Miles

Figure 1

TRAIL LOCATION
Duluth Traverse
Duluth, Minnesota

BARR

Proposed Lester River Trail - Phase 1

Proposed Mission Creek Trail - Phase 1

Other Duluth Traverse Trails

Minor Civil Divisions

N

0 1.5 3

Miles

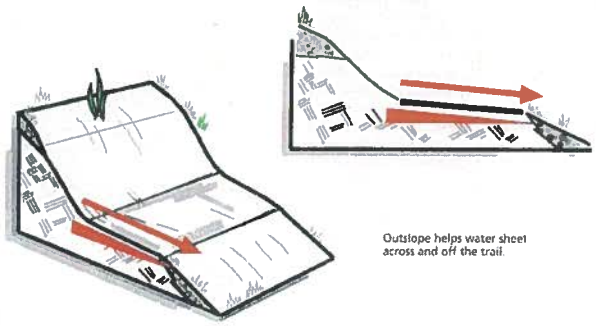
1 Inch = 1.5 Miles

Figure 2

PHASE 1 TRAIL LOCATIONS
Duluth Traverse
Duluth, Minnesota

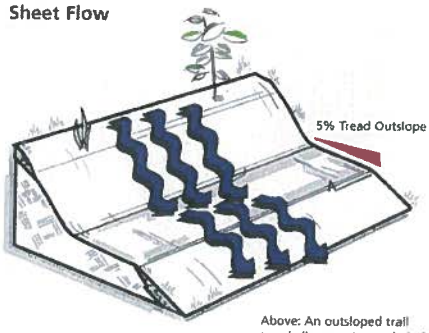
BARR

Outslope



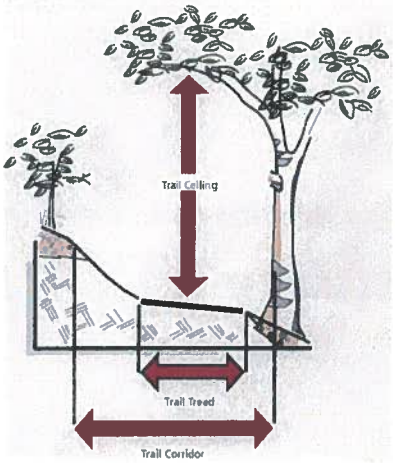
Outslope helps water sheet across and off the trail.

Sheet Flow

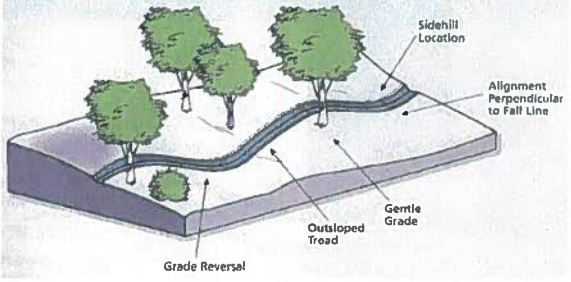


Above: An outsloped trail tread allows water to drain in a gentle, non-erosive manner called "sheet flow."

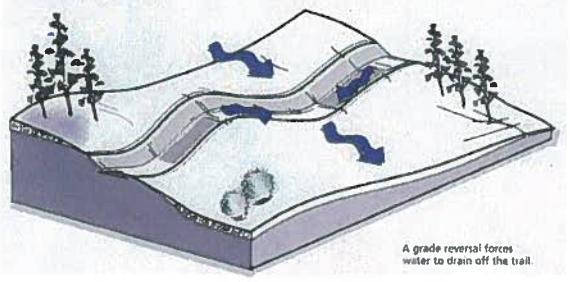
Trail Corridor



Rolling Contour Trail



Grade Reversal



A grade reversal forces water to drain off the trail.

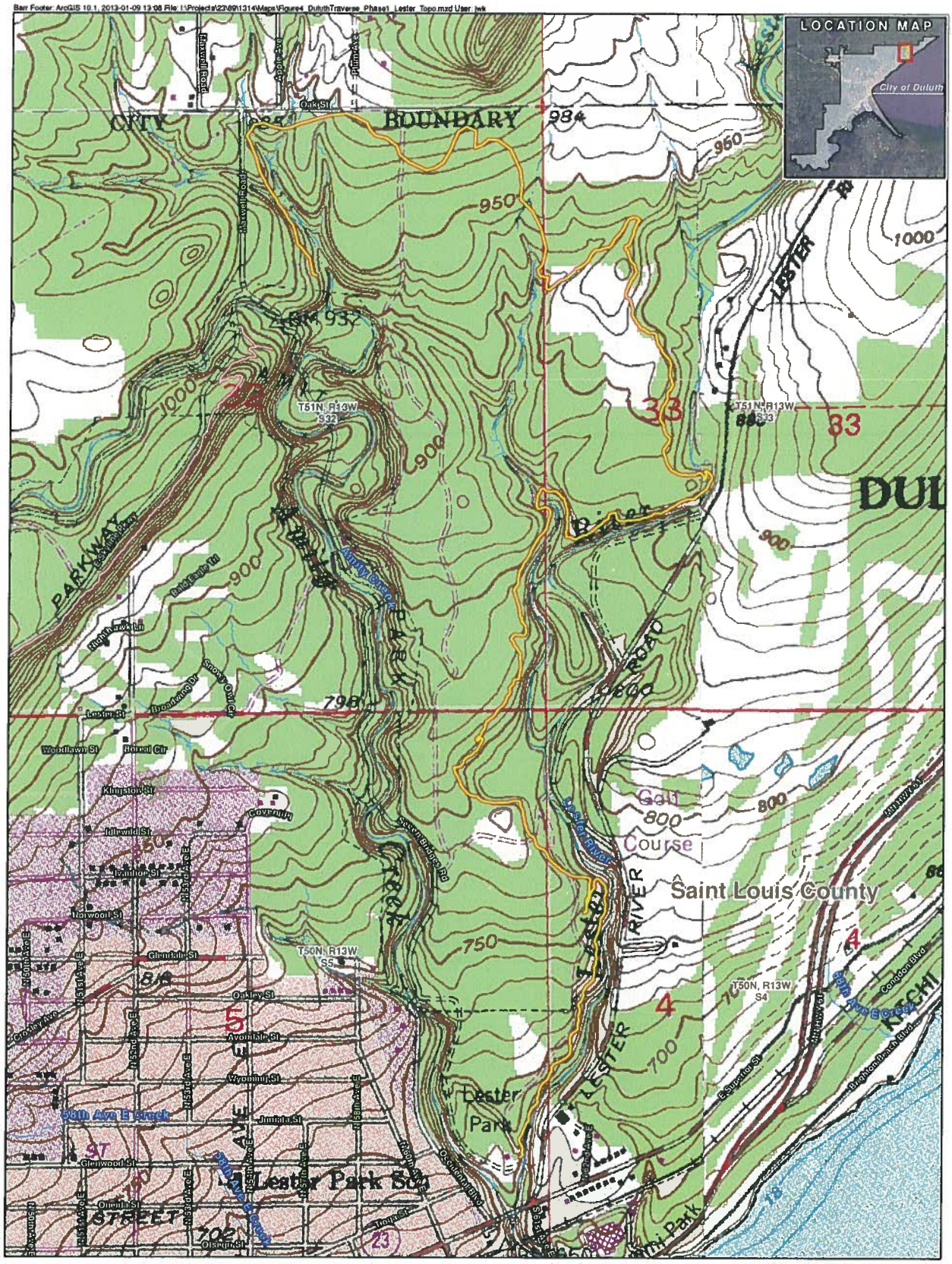
All images provided courtesy of International Mountain Bike Association (IMBA)

Figure 3

TRAIL CONFIGURATIONS
Duluth Traverse
Duluth, Minnesota

BARR

Barr Footer: ArcGIS 10.1 2013-01-09 14:25 File: J:\Projects\23568\131\Mxd\Figure3_DuluthTraverse_TrailElements_11x17.mxd User: mrk



BARR

Figure 4

LESTER RIVER PROPOSED TRAIL
PHASE 1
Duluth Traverse
Duluth, Minnesota

0 800 1,600
Feet

All data overlaid USGS 7.5' Topographic Map

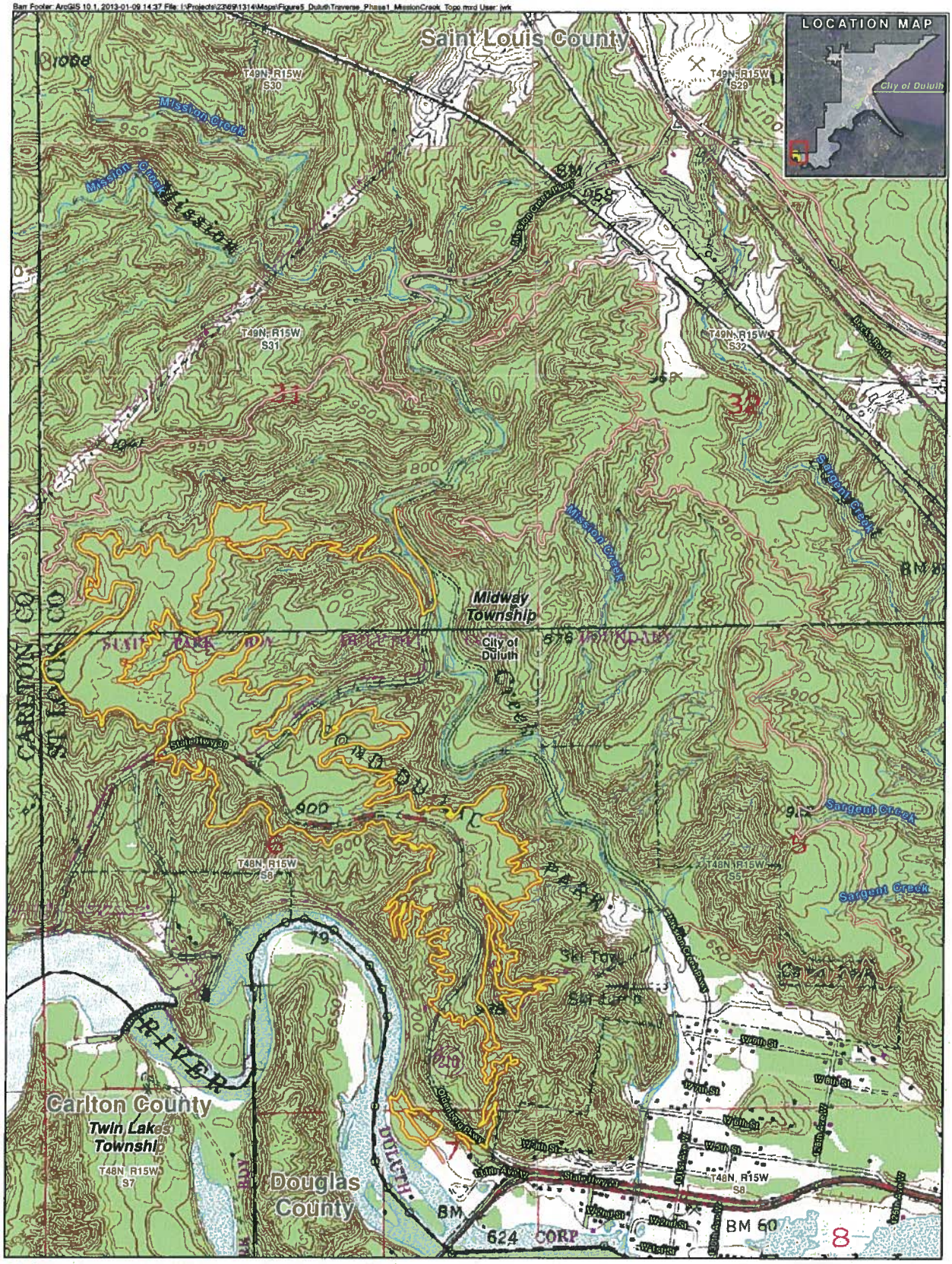
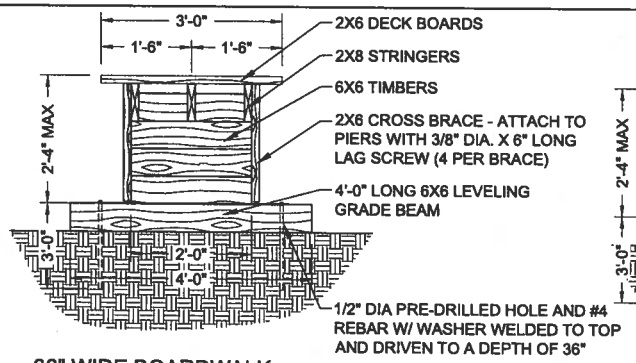
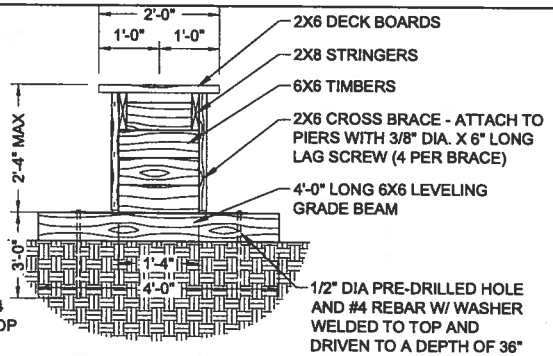


Figure 5

MISSION CREEK PROPOSED TRAIL
PHASE 1
Duluth Traverse
Duluth, Minnesota



36" WIDE BOARDWALK
NOT TO SCALE



24" WIDE BOARDWALK
NOT TO SCALE

MATERIAL NOTES:

A. LUMBER SHALL BE ROUGH SAWN RED PINE #2 OR BETIER, SIZED TO THE FULL DIMENSIONS SHOWN ON THE PLANS UNLESS NOTED OTHERWISE. ALL LUMBER SHALL BE TREATED ACCORDING TO THE OPTIONS INDICATED BELOW. TREATMENTS OTHER THAN THOSE LISTED MUST BE APPROVED BY THE ENGINEER PRIOR TO BIDDING.

A.1. PRESERVATIVE TREATMENT:

A.1.1. LUMBER SHALL BE TREATED IN ACCORDANCE WITH AWPA STANDARD C2/C9 .

A.1.1.1. PRESERVATIVES FOR MEMBERS NOT IN GROUND CONTACT SHALL BE ACQ (0.4 LBS/CF RET.)

A.1.1.2. PRESERVATIVES FOR 6x6's OR OTHER MEMBERS IN GROUND CONTACT SHALL BE ACQ (0.60 LBS/CF RET.)

A.1.2. FIELD TREATMENT: ALL FIELD CUTS AND DRILLED HOLES SHALL BE SATURATED WITH 2 COATS OF COPPER NAPTHENATE (2% SOLUTION). ALLOW TREATMENT TO ABSORB INTO WOOD PRIOR TO APPLYING SECOND COAT AS PER TREATMENT MANUFACTURERS RECOMMENDATIONS.

A.1.2.1. WHENEVER POSSIBLE APPLY THIS TREATMENT AWAY FROM WATER. USE EXTRA CARE IN THIS TREATMENT PROCESS NEAR OR OVER WATER. REFER TO MANUFACTURER'S RECOMMENDATIONS.

A.2. HARDWARE

A.2.1. HOT-DIP GALVANIZED (TRIPLE DIPPED): ALL HARDWARE SHALL MEET ASTM A307. HOT DIP GALVANIZE ALL HARDWARE IN ACCORDANCE WITH ASTM A153.

A.2.2. ATTACH DECKING TO STRINGERS WITH 4" X #10 SCREWS. TWO PER DECK BOARD TO EACH STRINGER CONNECTION.

A.2.3. ATTACH STRINGERS TO PIERS WITH 3/8 " DIA. LAG SCREWS WITH FLAT WASHER ON HEAD END. TWO LAG SCREWS PER STRINGER TO PIER CONNECTION.

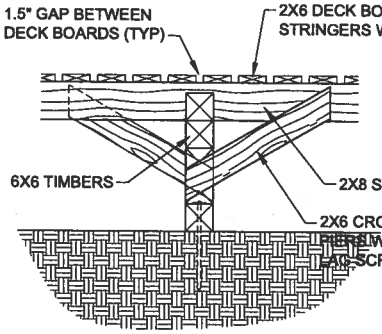
A.2.3. ATTACH 6X6's TOGETHER WITH 10" LONG RING-SHANK SPIKES. STAGGER SPIKES - MINIMUM OF 4 SPIKES FOR EACH 6X6 TO 6X6 CONNECTION.

A.2.4. ATTACH HEADERS TO STRINGERS WITH 4" LONG X #10 SCREWS. THREE PER HEADER TO STRINGER CONNECTION.

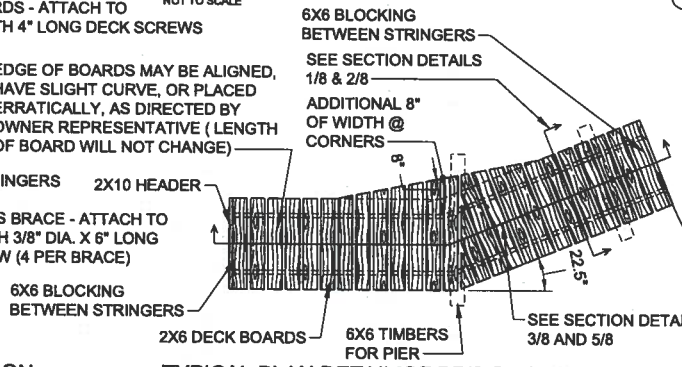
A.2.5. ATTACH HEADER AND STRINGER TO 6X6 BLOCKING WITH 4" LONG X #10 SCREWS. TWO PER HEADER TO LEVELING GRADE BEAM OR STRINGER TO LEVELING GRADE BEAM CONNECTION.

A.3. LEVELING GRADE BEAMS SHALL BE SHIMMED LEVEL WITH 2 X 6 ROUGH SAWN RED PINE #2 OR BETTER SIZED TO THE FULL DIMENSIONS SHOWN ON PLAN.

A.3.1. PRESERVE LUMBER IN ACCORDANCE TO ABOVE AWPA PRESERVATION TREATMENT.

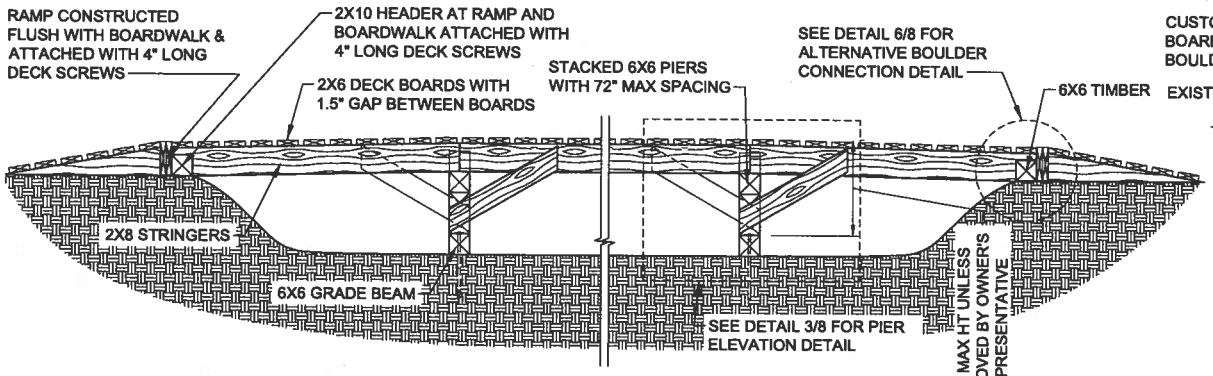


TYPICAL ELEVATION @ PIER LOCATION
NOT TO SCALE

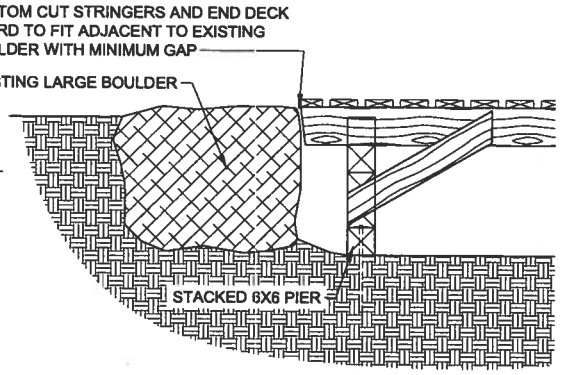


TYPICAL PLAN DETAIL OF BRIDGE (36" WIDE SHOWN)
NOT TO SCALE

NO EXCAVATION OR FILL IS PERMITTED IN WETLANDS, CONSULT WITH OWNER'S REPRESENTATIVE



TYPICAL ELEVATION DETAIL FOR BOARDWALK (WET AREA CROSSINGS)
NOT TO SCALE



BOARDWALK CROSSING ABUTTING TO BOULDER
NOT TO SCALE

CITY OF DULUTH PROJECT NO. XXXXX	DRAWN BY: TTP	SHEET NO. 9 OF X

ARCHITECTURAL RESOURCES • INC.
• ARCHITECTURE
• ENGINEERING
• LANDSCAPE ARCHITECTURE
• INTERIOR DESIGN
WEB SITE: www.arinc.com
704 EAST HOWARD STREET
HIBBING, MINNESOTA 55746
PHONE: 218-263-6868
FAX: 218-722-8503
EMAIL: archres@arinc.com
128 EAST SUPERIOR STREET
DULUTH, MINNESOTA 55802
PHONE: 218-727-8481
FAX: 218-727-8483
EMAIL: archres@spliternet.com

DULUTH TRAVERSE TRAIL
LESTER PARK PHASE 1
DULUTH, MINNESOTA

PROJECT NO.: 12-039
DATE: JANUARY-2013
DRAWN BY: TTP
REVISIONS:

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED [illegible] UNDER THE LAWS OF THE STATE OF MINNESOTA
PRELIMINARY DO NOT USE FOR CONSTRUCTION
[illegible] JANUARY 2013
[illegible]

TRAIL DETAILS

Figure 6

MATERIAL NOTES:

A. LUMBER SHALL BE ROUGH SAWN RED PINE #2 OR BETIER, SIZED TO THE FULL DIMENSIONS SHOWN ON THE PLANS UNLESS NOTED OTHERWISE. ALL LUMBER SHALL BE TREATED ACCORDING TO THE OPTIONS INDICATED BELOW. TREATMENTS OTHER THAN THOSE LISTED MUST BE APPROVED BY THE ENGINEER PRIOR TO BIDDING.

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A.1.2.1. WHENEVER POSSIBLE APPLY THIS TREATMENT AWAY FROM WATER. USE EXTRA CARE IN THIS TREATMENT PROCESS NEAR OR OVER WATER. REFER TO MANUFACTURER'S RECOMMENDATIONS.

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A.2.2. ATTACH DECKING TO STRINGERS WITH 4" X #10 SCREWS. TWO PER DECK BOARD TO EACH STRINGER CONNECTION.

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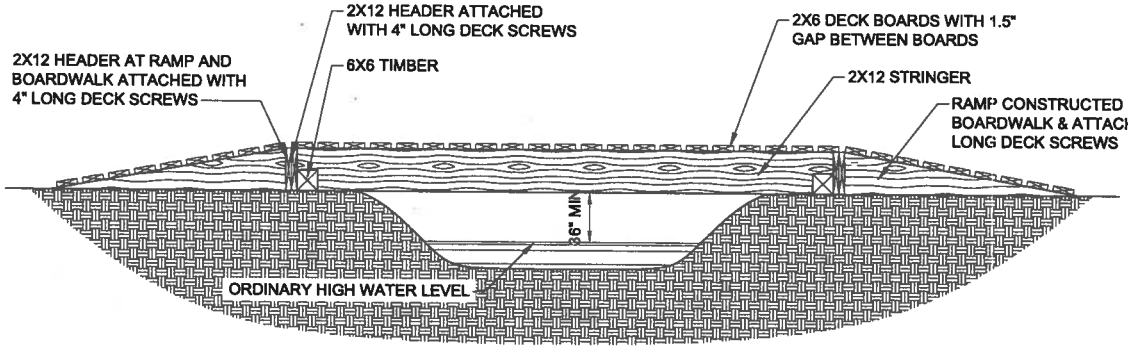
A.3.1. PRESERVE LUMBER IN ACCORDANCE TO ABOVE AWPA PRESERVATION TREATMENT.

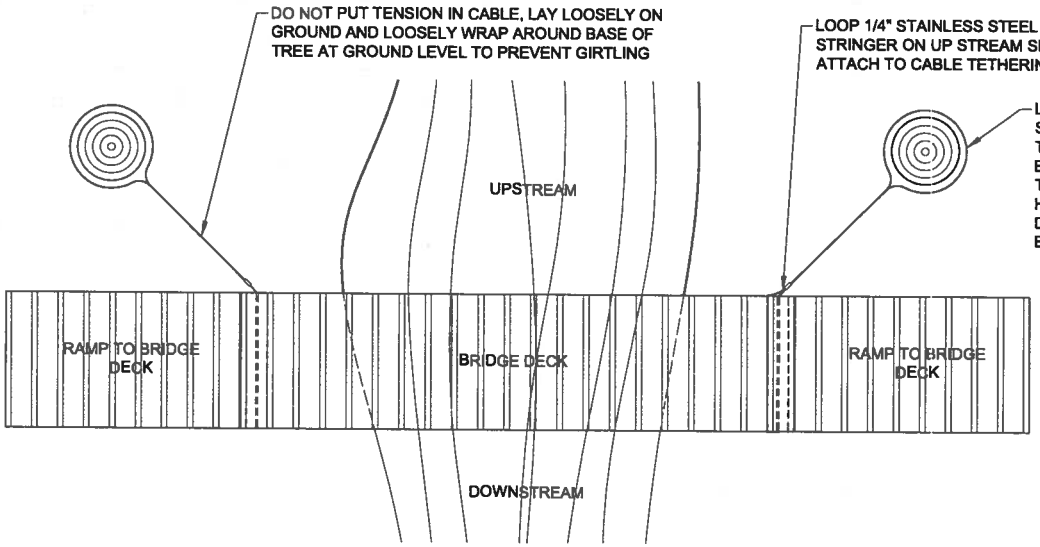
GENERAL NOTES:

1. SEE SPECIFICATIONS SECTION 3 FOR PROJECT DETAILS
2. SEE SPECIFICATIONS SECTION 4 FOR FINISHED TRAIL CONSTRUCTION DETAILS.
3. SEE SPECIFICATIONS SECTION 5 FOR UNIT DEFINITIONS AND TREAD CONSTRUCTION DETAIL DRAWINGS.
4. ALL DISTURBED AREAS NOT PART OF ACTIVE TREAD TO BE SEEDED AND MULCHED WITHIN 7 DAYS OF NOT BEING WORKED. SEE (SWPPP) STORM WATER POLLUTION PREVENTION PLAN FOR DETAILS.
5. CUT BRUSH AND SLASH MUST BE DISPOSED IN AN UPLAND LOCATION AND MUST BE KEPT OUT OF STREAMS, GULLIES, SWALES, WETLANDS, AND LOW AREAS. SEE SPECIFICATIONS FOR DETAILS.
6. NO EXCAVATION OR FILL PERMITTED IN WETLANDS CONSULT WITH OWNERS REPRESENTATIVE PRIOR TO DOING ANY WORK WITHIN SUSPECTED WETLAND AREAS.



TYPICAL ELEVATION DETAIL FOR BRIDGE (CREEK CROSSINGS)

NOT TO SCALE



TYPICAL PLAN DETAIL FOR BRIDGE (CREEK CROSSINGS)

NOT TO SCALE

ARCHITECTURAL RESOURCES • INC.

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- ENGINEERING
- LANDSCAPE ARCHITECTURE
- INTERIOR DESIGN

WEB SITE: www.arkrsc.com

704 EAST HOWARD STREET
HIBBING, MINNESOTA 55746
PHONE 218-263-8868
FAX 218-722-8803
EMAIL: arkhib@arkrsc.com

128 EAST SUPERIOR STREET
DULUTH, MINNESOTA 55802
PHONE 218-727-8481
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EMAIL: arkdul@arkrsc.com

DULUTH TRAVERSE TRAIL
LESTER PARK PHASE 1
DULUTH, MINNESOTA

PROJECT NO.: 12-039
DATE: JANUARY-2013
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REVISIONS:

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRELIMINARY DO NOT USE FOR CONSTRUCTION

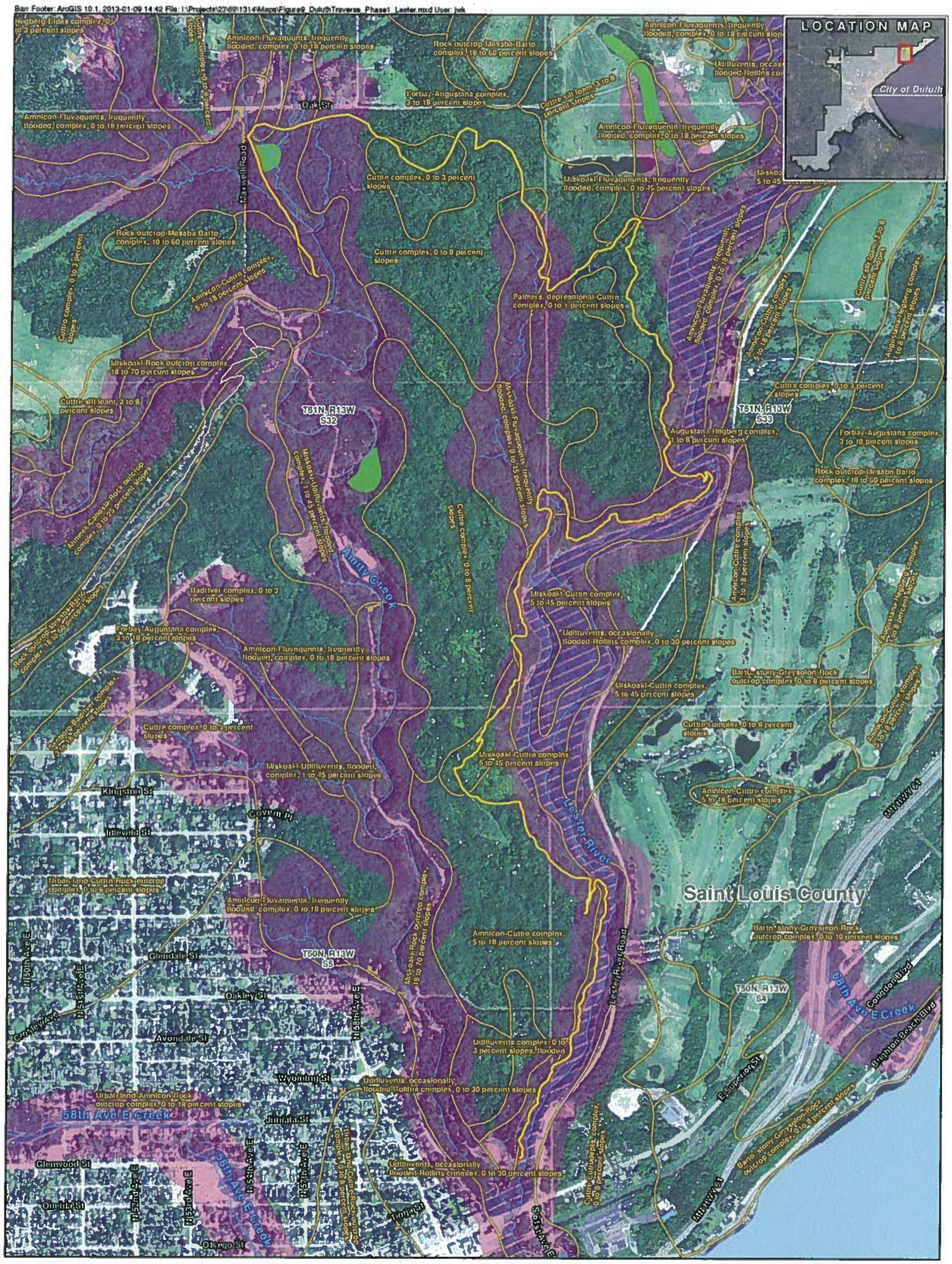
NAME: [illegible] DATE: JANUARY -2013

LICENSE NO. [illegible]

TRAIL DETAILS

Figure 7

CITY OF DULUTH PROJECT NO. XXXXX	DRAWN BY: TTP	SHEET NO. 10 OF X



- Lester Proposed Trail
- Duluth Traverse Proposed Trails
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine
- Duluth Streams
- Soils
- City of Duluth Shoreline Zoning Districts
- FEMA Floodplain

0 800 1,600

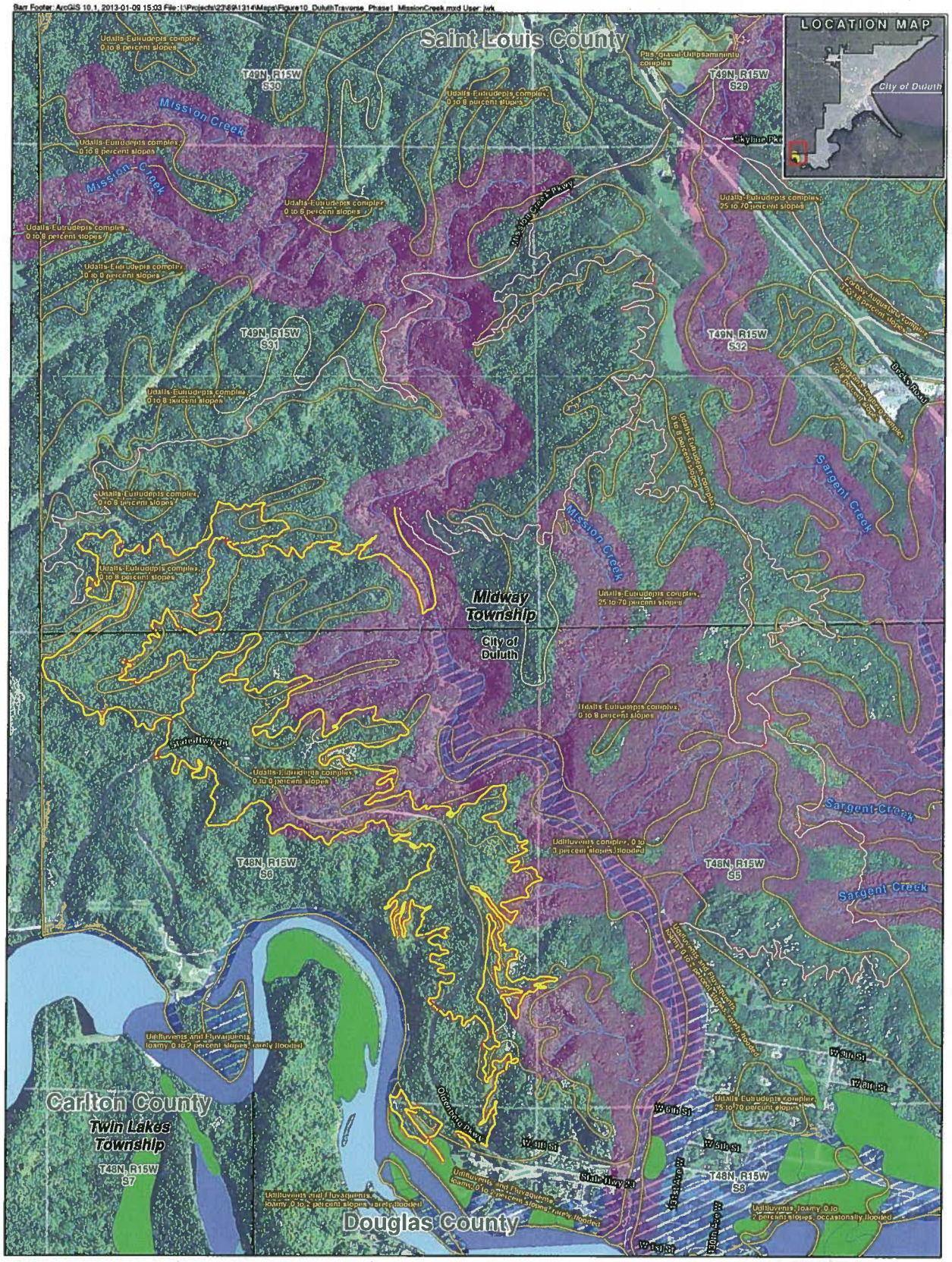
Feet

USDA FSA Imagery Circa August, 2010

BARR

Figure 9

LESTER RIVER PROPOSED TRAIL PHASE 1
Duluth Traverse
Duluth, Minnesota



BARR

Figure 10

MISSION CREEK PROPOSED TRAIL
PHASE 1
Duluth Traverse
Duluth, Minnesota

Appendices

Appendix A

Duluth Traverse Estimated Quantities and Design Computations

Duluth Traverse, Phase 1 - Mission Creek Project.
Trail length including features: 21.6 miles

Estimate of Structures

- Boardwalks: 98 totaling 1,669 ft (crossing flat areas)
- Elevated Boardwalks: 41 totaling 611 ft (crossings over swales or ditches)
- Rock Hardenings: 10 totaling 77.5 ft (concentrated flow areas)
- Bridges: 7 totaling 94 ft (crossings over 3' in height above grade)

Points with no Attributed Lengths

- 149 Berms (turns)
- 9 Switchbacks (turns)

****

Duluth Traverse, Phase 1 - Lester River Project.
Trail length including features: 3.5 miles

Estimate of Structures

- Boardwalks: 25 totaling 502 ft (crossing flat areas)
- Rock Crib Wall: 1 totaling 10.5 ft
- Rock Hardenings: 1 totaling 14 ft (concentrated flow areas)
- Bridge w/ Railing: 1 totaling 21 ft (crossings over 3' in height above grade)

Points with no Attributed Lengths

- 18 Berms – turns (Estimated total length of 242 ft)

Assumptions: 2 rolling grade dips/drains per turn (berm or switch back)
Install one (1) 6" 4-6' long bio roll per trail rolling grade dip/. Install 1 stake per 2' length of bio roll.

Assume a disturbed area 2' wide adjacent to trail of side cast topsoil to be reseeded based on length of trail less boardwalk and bridge lengths for temporary seeding. Assumptions native seed regenerating in duff layer, and 15-20 % of disturbed area will need permanent seed mix.

Rock hardenings shall be installed in concentrated flow sections of trail tread where needed but not in wetland areas.

Boardwalks / bridges will cross wetlands, swales and ditches / streams respectively.

Temporary Erosion Control Seed Mix			
		Seeding Rate lb/ac	% of Mix Component
Common Name	***Scientific Name***		
Canada/Nodding Wild Rye	*Elymus canadensis*	4	10
Winter Wheat	*Triticum* spp.	16	40
Oats	*Avena sativa*	16	40
Virginia Wild Rye	*Elymus virginicus*	4	10
	Cover Crop Totals:	**40**	**100**

Temporary Seeding Assumptions: Project will disturb an estimated 2' wide path for removal of topsoil and berm construction across project length less boardwalks and bridges areas. The estimated quantity is for the temporary seeding of 6.0 acres @ 40 lbs. /ac. is 240 lbs.

Mulch – Use certified weed-free straw mulch or approved weed free equivalent @ 2 tons per acre. Temporary seeding estimated @ 6 acres * 2 tons per acre or 12 tons.

Permanent Erosion Control Seed Mix			
		Seeding Rate lb/ac	% of Mix Component
Common Name	***Scientific Name***		
Fringed Brome Grass	*Bromus ciliatus*	2	6
Bluejoint	*Calamagrostis canadensis*	0.13	0.4
Poverty Grass	*Danthonia spicata*	0.5	1.5
Canada Wild Rye	*Elymus canadensis*	1.25	4
Slender Wheatgrass	*Elymus trachycaulus*	2	6
Fowl Bluegrass	*Poa palustris*	1	3
False Melic	*Schizachne purpurascens*	0.25	1
	Total Grasses:	**7.13**	**21.9**
Oats	*Avena sativa*	**25.0**	**78.1**
	Cover Crop Totals:	**32.13**	**100**

Permanent Seeding Assumptions: Project will require have natural seed in duff layer in topsoil with an estimated 20% will need to be permanently seeded. Twenty % of the estimated temporary seed quantity 6.0 acres is 1.2 acres @ 32.13 lbs. /ac. or 38 lbs. for the permanent seed mixture.

Mulch – Use certified weed-free straw mulch or approved weed free equivalent @ 2 tons per acre. Permanent seeding estimated @ 1.2 acres * 2 tons per acre or 2.4 tons

SECTION 31 25 00 EROSION & SEDIMENTATION CONTROLS

PART 1 - GENERAL

1.01 SUMMARY

A. The Conditions of the Contract and the Provisions of Division 01 apply to all work of this Section.

B. Section Includes:
   1. Temporary measures to control soil erosion or sediment control devices.
   2. Furnishing, installing and maintaining erosion or sediment control devices.

C. Related Work Specified Elsewhere:
   1. None

D. Method of Measurement
   1. Bale Checks
      a. Measure by number of bales furnished and acceptably installed.
   2. Erosion Control Blanket
      a. Erosion control blanket quantities will be measured by square yard and acceptably installed.
   3. Sediment Logs/Coir Logs
      a. Measured by linear foot accepted and installed.
   4. Rock Armoring/Hardening
      a. Measured on by the square yard accepted and installed.
   5. Rock Checks
      a. Measured on by the square yard accepted and installed.
      b. Native stone/rock where possible
      c Imported stone/rock must be approved by Owner's Representative and from a local source

1.02 REFERENCES

A. Mn/DOT 1803.5 Erosion Control

B. Mn/DOT 2573 – Temporary Erosion Control

C. Protecting Water Quality in Urban Areas- Best Management Practices for Minnesota, published by the Minnesota Pollution Control Agency.

D. Storm Water Pollution Prevention Plan (SWPPP) as prepared by Barr Engineering.

1.03 DEFINITIONS

A. For the NPDES permit process, the operator is defined as the Contractor.

1.04 PERMITS

A. Owner is obtaining SWPPP and NPDES permits as required by State and Federal law. Contractor shall apply and obtain any other additional permits as required by local, State or Federal law.

B. Secure additional permits for work outside indicated right of way, construction strips, or work limits for County or Municipal sediment control or grading permits, State Waterway Construction, or Wetlands Permits, or other environmental permits as required by Law.
   1. Secure arrangements in writing, including statement that requirements and standards of restabilization and restoration for access ways and all other disturbed areas shall meet or exceed

restabilization and restoration standards. Send copy of final access agreement and copy of additionally required State or County permits to Landscape Architect, before beginning work in areas outside work limits.

1.05 UTILITIES

A. Rules and regulations governing the respective utilities shall be observed in executing all work under this Section.

B. Active utilities shown on the drawings shall be adequately protected from damage and removed and relocated only as indicated or specified. Where active utilities are encountered but are not shown on the drawings, the Landscape Architect shall be advised; the work shall be adequately protected, supported or relocated as directed by the Landscape Architect; the contract price will be adjusted for such additional work.

C. This contractor shall contact the local governing utility for assistance in locating utilities.

D. As per Minnesota Statutes Chapter 216D, this Excavator shall give 48 hours notice (prior to digging) to the Minnesota State Gopher One Call Excavation Hotline 1-800-252-1166.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Bale Checks – shall be in accordance with Erosion Control 1803.5 – 2 Mn/DOT 3822, Type 1.

B. Erosion Control Blanket – shall be in accordance with MN/DOT 3885.

C. Sediment Logs/Coir Logs – Curlex Sediment Logs or approved equal.

D. Rock Armoring/Hardening – shall be in accordance with IMBA Specifications

E. Rock Checks – shall be in accordance with MN/DOT 3601 Riprap, Type I

2.02 EROSION CONTROL BLANKET

A. Double Woven 100% Biodegradable Net Straw Fiber Erosion Control Blanket (North American Green **S150BN**)
   1. Matrix: 100% agricultural straw, min. wt. 0.50 lbs/yd2 (0.27 kg/m2)
   2. Netting: Top and bottom woven natural fiber with opening sizes of 0.50 - 1.00 in (1.27 - 2.54 cm)
   3. Stitching: Biodegradable thread on 1.50 in (3.81 cm) centers
   4. Roll Size: 6.67ft (2.03m) x 108.00ft (32.92m), 80.00yd2 (66.89 m2)
   5. Roll Weight ± 10%: 52.22 lbs (23.69 kg)

PART 3 - EXECUTION

3.01 GENERAL REQUIREMENTS

A. The Contractor shall control drainage and erosion on the Project including: haul roads, temporary construction, waste disposal sites, plant and storage locations, and borrow pits other than commercially operated sources. The Contractor shall clean up the area, shape the area to allow storm runoff with minimum erosion, replace topsoil, and establish vegetative cover to the satisfaction of the Owner on areas where the potential for pollution has been increased due to the Contractors' operations.

1. Before Construction the Contractor shall install temporary erosion control measures in areas tributary to public waters before construction in a drainage area.

2. During Construction the Contractor shall schedule and install temporary and permanent erosion control measures, construct drainage facilities, finish earthwork operations, place topsoil, establish turf, and conduct other work that will contribute to the control of erosion and sedimentation. Unless precluded by snow cover, all exposed soil areas with a continuous positive slope within 200 feet of surface waters, or from a curb, gutter, storm sewer inlet, temporary or permanent drainage ditch, or other storm water conveyance system, shall have temporary protection or permanent cover for the exposed soil areas within twenty-four (24) hours of discovery. (For the purposes of this provision, exposed soil areas do not include stockpiles or surcharge areas of sand, gravel, aggregate, concrete, or bituminous.)
3. Vehicle Tracking. The Contractor shall minimize vehicle tracking of sediment or soil off site at locations where vehicles exit the construction site onto paved surfaces. Tracked sediment shall be removed from paved surfaces, which do not drain back into the construction site, within 24 hours of discovery.
4. Suspension of Grading. The Contractor shall shape exposed soil and incorporate temporary and permanent erosion control measures to the satisfaction of the Owner before suspension of grading operations for any appreciable length of time.

B. **Erosion Control Schedule.** The Contractor shall prepare and submit a weekly schedule of proposed erosion control activities for the Owner's approval. The Owner may require schedules to be submitted orally or in writing. The schedule shall provide a discussion of:
1) Proposed erosion control installations and when they will be installed.
2) Areas ready for permanent turf establishment and when it will be accomplished.
3) Grading operations and how erosion control will be incorporated into the work.
4) Repair or maintenance required on erosion control installations and when it will be accomplished.
5) Proposed erosion control measures during periods of suspension of work. The Owner may also require the Contractor to submit a site plan detailing proposed erosion control and sediment control measure and a chart indicating starting and completion times for each of the construction operations at the site. The Contractor shall not start work in the affected areas until the erosion control schedule and required documents have been accepted by the Owner.

C. **Compensation.** The Contractor will receive compensation for erosion control as provided for in the Contract. All other expenses incurred in complying with these provisions and Air, Land and Water Pollution (Mn/DOT 1717) shall be borne by the Contractor. The Contractor will not receive compensation for erosion control out of the 50' trail alignment corridor unless so specified in the Contract. Temporary and permanent erosion or pollution control measures ordered by the Owner, which are necessitated by additional Contract work or by unforeseen failure of the original erosion or sediment control work provided for in the Contract, will be paid for at the appropriate Contract prices for like work or as Extra Work in the absence of comparable items of work.

D. **Withholding of Payment.** When the Contractor fails to install erosion or sediment control measures ordered by the Owner, the Owner may withhold payment from related work until the control measures are undertaken by the Contractor.

3.02 PLACING TEMPORARY EROSION CONTROL ITEMS

A. Construct items in conformance with typical sections and elevation controls shown on the plans.

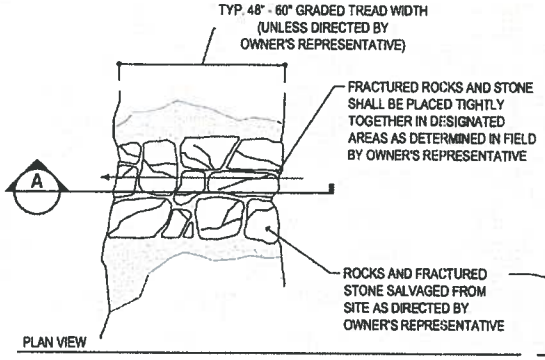
B. Remove all items upon completion of the contract work.

C. Spread and shape accumulated sediment to permit natural drainage and provide for turf establishment.

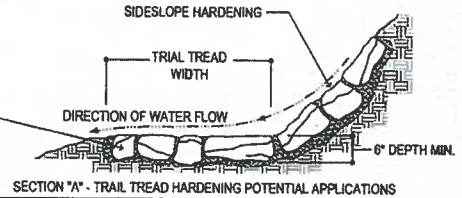
3.03 ACCEPTANCE OF WORK

A. Maintain and repair erosion control item to ensure proper function.

END OF SECTION



NOTE: PAYMENT FOR TREAD HARDENING WILL BE ON A SQUARE YARD BASIS.

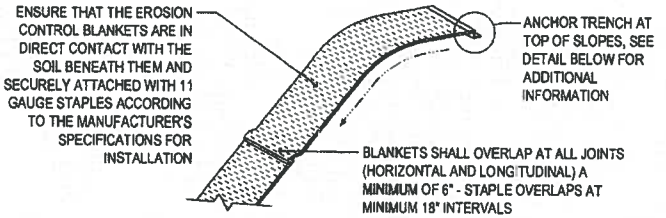


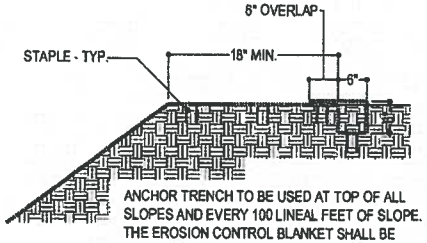
SECTION "A" - TRAIL TREAD HARDENING POTENTIAL APPLICATIONS

EXAMPLE IMAGE OF TRAIL TREAD HARDENING

TRAIL TREAD HARDENING AND SIDESLOPE HARDENING DETAIL

NOT TO SCALE





ANCHOR TRENCH TO BE USED AT TOP OF ALL SLOPES AND EVERY 100 LINEAL FEET OF SLOPE. THE EROSION CONTROL BLANKET SHALL BE PLACED IN A 6"x6" TRENCH, STAPLED IN PLACE AND BACKFILLED WITH SOIL AND COMPACTED - BLANKET SHALL BE OVERLAPPED A MINIMUM OF 6" AS SHOWN ABOVE THE BLANKET AND SECURED IT WITH STAPLES

ANCHOR TRENCH SECTION DETAIL

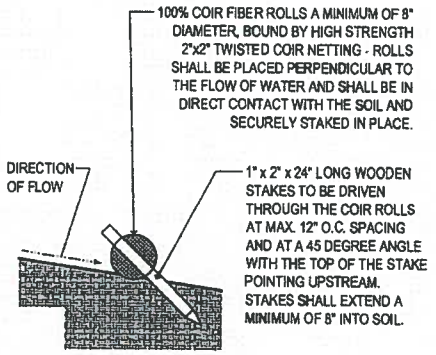
EROSION CONTROL BLANKET:

CATEGORY 3: AS DIRECTED BY OWNER'S REPRESENTATIVE FOR DISTURBED AREAS WITH SLOPES BETWEEN 3:1 AND 2:1, COVER WITH CATEGORY 3 EROSION CONTROL BLANKET CONSISTING OF 100% STRAW MATRIX, SUCH AS WESTERN EXCELSIOR EXCEL SS-2 WITH ALL NATURAL NETTING (OR APPROVED EQUAL) MEETING THE MnDOT SPECIFICATION SECTION 3885 REQUIREMENTS.

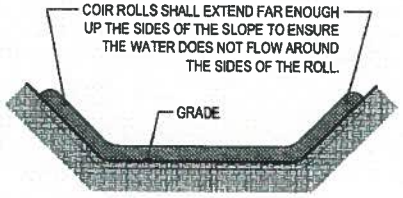
CATEGORY 4: AS DIRECTED BY OWNER'S REPRESENTATIVE FOR DISTURBED AREAS WITH 2:1 SLOPES OR OVER, COVER WITH CATEGORY 4 EROSION CONTROL BLANKET CONSISTING OF 30% COCONUT / 70% STRAW BLEND, SUCH AS WESTERN EXCELSIOR EXCEL CS-3 WITH ALL NATURAL NETTING (OR APPROVED EQUAL) MEETING THE MnDOT SPECIFICATION SECTION 3885 REQUIREMENTS.

WOOD FIBER BLANKET DETAIL

NOT TO SCALE



CROSS-SECTION DETAIL



SECTION VIEW

COIR ROLL DETAIL

NOT TO SCALE

ARCHITECTURAL RESOURCES • INC.

- ARCHITECTURE
- ENGINEERING
- LANDSCAPE ARCHITECTURE
- INTERIOR DESIGN

WEB SITE: www.arkinc.com

704 EAST HOWARD STREET
HIBBING, MINNESOTA 55746
PHONE 218-263-8868
FAX 218-722-6803
EMAIL: archres@arkinc.com

128 EAST SUPERIOR STREET
DULUTH, MINNESOTA 55802
PHONE 218-727-8481
FAX 218-727-8483
EMAIL: archres@qwestmail.com

DULUTH TRAVERSE TRAIL
MISSION CREEK PHASE 1
DULUTH, MINNESOTA

PROJECT NO.: 12-039
DATE: JANUARY-2013
DRAWN BY: TTP
REVISIONS:

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED [illegible] UNDER THE LAWS OF THE STATE OF MINNESOTA

PRELIMINARY
DO NOT USE FOR CONSTRUCTION
JANUARY-2013

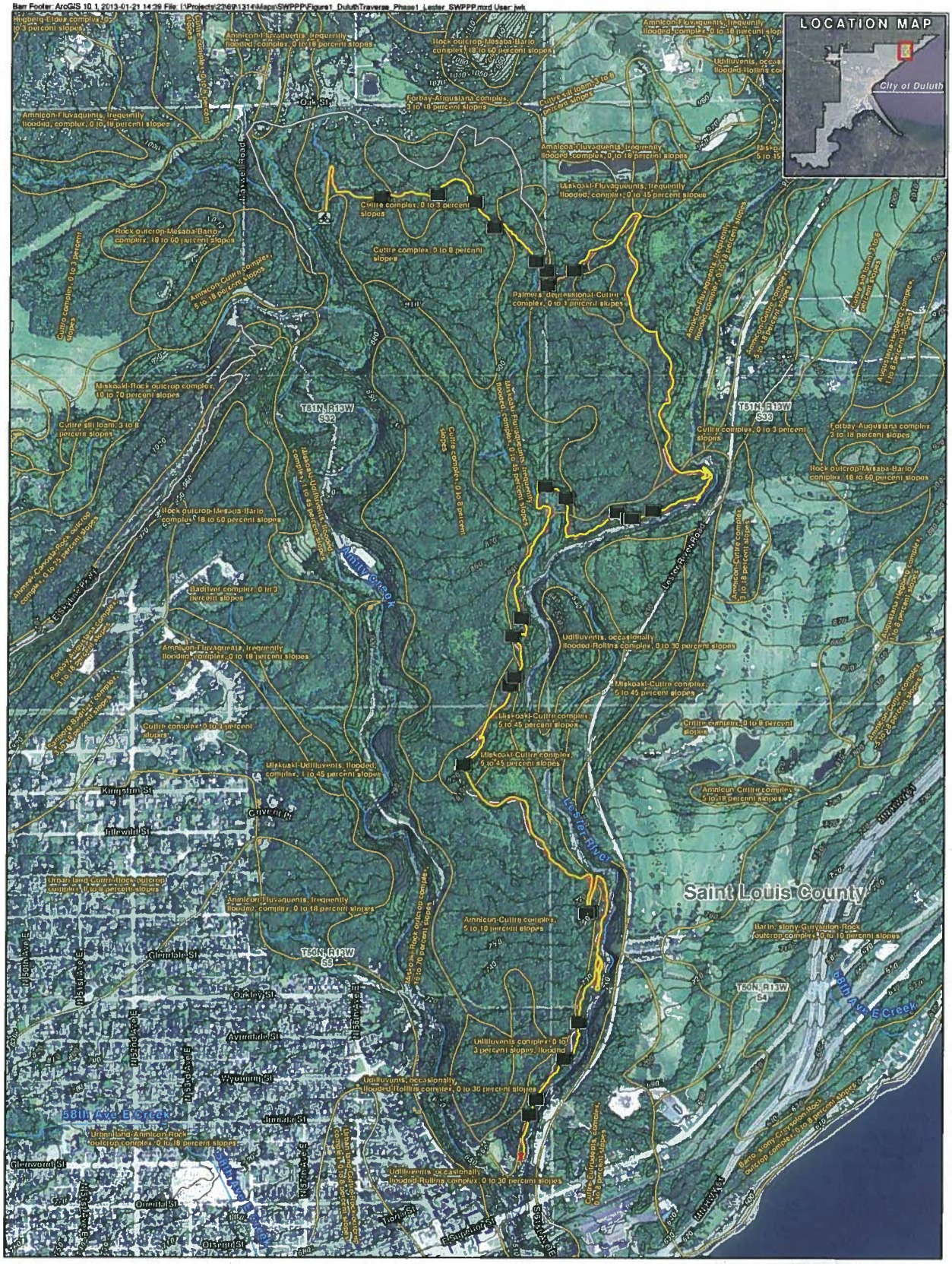
SWPPP DETAILS

10

CITY OF DULUTH PROJECT NO. XXXXX | DRAWN BY: TTP | SHEET NO. 8 OF X

Appendix B

Site Plans



- Lester Proposed Trail
- Proposed Boardwalk Locations
- COGGS Loop Connector
- Trail Start
- Duluth Traverse Proposed Trails
- Duluth Streams
- 10-Foot Contours (MNDNR 2009)
- Soils

0 800 1,600

Feet

USDA FSA Imagery Circa August, 2010

BARR

Figure 1

LESTER RIVER PROPOSED TRAIL
PHASE 1
Duluth Traverse
Duluth, Minnesota

- Mission Creek Proposed Trails
- Proposed Boardwalk Locations
- Duluth Traverse Proposed Trails
- Duluth Streams
- 10-Foot Contours (MNDNR 2009)
- Soils

0 1,000 2,000

Feet

USDA FSA Imagery Circa August, 2010

BARR

Figure 2

MISSION CREEK PROPOSED TRAIL
PHASE 1
Duluth Traverse
Duluth, Minnesota

Appendix C

MPCA NPDES Permit Application and Construction Stormwater General Permit

Minnesota Pollution Control Agency

Complete your application online!

Application for General Stormwater Permit for Construction Activity (MN R100001)

National Pollutant Discharge Elimination System / State Disposal System (NPDES/SDS)

Please submit to: Minnesota Pollution Control Agency
Construction Stormwater Permit Program
520 Lafayette Road North, St. Paul, MN 55155-4194

PLEASE READ: This form is for new permit applications only. Use the Notice of Termination/Permit Modification form to transfer permit coverage for a project or a portion of a project to a new owner/contractor. Forms are available at the MPCA's Construction Stormwater Web site: www.pca.state.mn.us/water/stormwater/stormwater-c.html. Complete your application online!

Please refer to the application instructions and the NPDES/SDS General Stormwater Permit for Construction Activity (MN R100001) as you complete this form. Brackets '[ ]' refer to specific parts of the permit. For assistance, call the Stormwater Program at 651-757-2119 or toll-free at 800-657-3804.

Are you ready to apply?

1. Stormwater Pollution Prevention Plan (SWPPP)

a. Has a Stormwater Pollution Prevention Plan been developed for this project and incorporated into the project's plans and specifications [Part III.A] — ☒ Yes ☐ No

b. If an environmental review was required for this project or a common plan of development or sale that includes this project, has the environmental review been completed and all stormwater mitigative requirements been incorporated in the SWPPP as required in Part III.A.6 of the permit? — ☒ Yes ☐ No ☐ NA

2. Discharges to Special or Impaired Waters

a. If any portion of the project has a discharge point within 1 mile of a special water or a water that is impaired for sediment or a sediment related parameter (see Appendix A.B), does the SWPPP contain the additional requirements found in Appendix A, Part A-C? If the project does not have a discharge point within 1 mile of a special water or a water that is impaired for sediment or a sediment related parameter of the permit indicate "NA" — ☒ Yes ☐ No ☐ NA

b. If this project is discharging to a Calcareous fen, has an approval letter been obtained from the DNR as required in Part III.A.8 of the permit? — ☐ Yes ☐ No ☒ NA

STOP if you responded 'No' to any question above. A SWPPP must be developed prior to submitting a permit application. Complete the above requirements and check 'Yes' before submitting this application. Continue if you responded 'Yes' or 'NA' to all questions above.

3. Additional Application Review:

a. Will the project include alternative treatment methods? [Part III.C.5] If yes, this application and the alternative treatment plans must be submitted a minimum of 90 days before construction starts. — ☐ Yes ☒ No

b. If yes, are the plans attached? — ☐ Yes ☐ No

c. Will the project disturb 50 acres? AND Is there a discharge point within one mile of an impaired or special water whose discharge may reach an impaired or special water listed in Appendix A of the permit? [Part II.B.1.b] If yes, this application and the SWPPP must be submitted a minimum of 30 days before construction starts. — ☐ Yes ☒ No

d. If 'Yes,' is the SWPPP attached? — ☐ Yes ☒ No

4. Application Fee:

Is the required $400 Application Fee (payable to the MPCA) enclosed? ☒ Yes

Construction Activity Information

5. Project name: Duluth Traverse Mountain Bike Trail

6. Project location:

a. Briefly describe where the construction activity occurs (For example: "Intersection of 45th St. and Irving Ave.") Include address if available: From Lester Park to Mission Creek in the City of Duluth.

b. All cities where project will occur: Duluth.

c. All counties where project will occur: St. Louis

d. All townships where project will occur: Midway

e. Project ZIP Code: Varies

f. Latitude and longitude of approximate centroid of project:

Latitude:		*Longitude:*	
__.____ ○	N (decimal) *Preferred*	__.____ ○	W (decimal) *Preferred*
46○45'39	N (degrees, minutes, seconds)	92○09'04	W (degrees, minutes, seconds)

g. Method used to collect latitude and longitude:

☐ GPS

☐ USGS Topographic map — Map scale: GIS

☒ Other

7. Project size:

Number of acres to be disturbed to the nearest quarter acre: 35.50 acres

8. Project map:

A map must be included with the application for all projects disturbing 50 acres or more. Is a project map included? ☒ Yes ☐ No

9. Project type:

☐ Residential
☐ Commercial / Industrial
☐ Road construction
☐ Residential / Road construction
☐ Commercial / Road construction
☐ Commercial / Residential / Road construction
☒ Other: Natural surface mountain bike trail

10. Cumulative impervious surface:

a. Existing area of impervious surface in acres: 0.0

b. Post-construction area of impervious surface in acres (If additional new impervious surface created by the project is less than one acre, skip to Question 12): 10.25

11. Permanent stormwater management:

- ☐ Wet sedimentation basin
- ☐ Infiltration / filtration
- ☐ Regional ponding
- ☒ Other (Use only if there is no feasible way of installing the treatment systems listed above for reasons such as lack of right-of-way or proximity to bedrock)
- ☐ Alternative methods (If using alternative methods, construction cannot commence until receiving approval from the MPCA.)

12. Receiving waters:

Identify surface waters within one mile of project boundary that will receive storm water from the site or discharge from permanent Stormwater management system. Include waters shown on USGS 7.5 minute quad or equivalent, all Special Waters and Impaired waters identified in Appendix A of the permit (To find Special or Impaired Waters, use the Special and Impaired Waters Search tool at www.pca.state.mn.us/water/stormwater/stormwater-c.html.

The Impaired Waters* list, also known as the Section 303(d) list can be found at http://www.pca.state.mn.us/water/tmdl/index.html Use additional paper if necessary.

* Impaired waters for the purpose of this permit are those identified as impaired for the following pollutant(s) or stressor(s): phosphorus, turbidity, dissolved oxygen, or biotic impairment

Name of water body	Type of water body (Ditch, pond, wetland, stream, river)	Special Water? See Stormwater Permit, Appendix A	Impaired Water? See Stormwater Permit, Appendix A
Mission Creek and unnamed tributaries	stream	☒ Yes ☐ No	☐ Yes ☒ No
Sargent Creek and unnamed tributaries	stream	☒ Yes ☐ No	☐ Yes ☒ No
Lester River and unnamed tributary	stream	☒ Yes ☐ No	☐ Yes ☒ No
Associated wetlands	wetland	☐ Yes ☒ No	☐ Yes ☒ No

13. Dates of construction

a. Start date: 06 / 01 / 13

b. Estimated Completion date: 11 / 30 / 13

STOP This form will not be accepted if the Owner and Contractor contact information sections, below, are BOTH not completed and signed. If the owner is also the contractor, or a contractor hasn't yet been selected, the owner must also fill out the contractor information section and sign again.

Responsible parties — BOTH PARTIES MUST SIGN

Owner

City of Duluth			
Business or firm name			
Voight	Cindy	City Engineer	
Last name	First name	Title	
cvoight@duluthmn.gov		218-730-5200	
E-mail		Phone (include area code)	
411 West 1st Street 2nd Floor	Duluth	MN	55802
Mailing address	City	State	ZIP Code
Matt Decur	mdecur	218-730-5104	
Alternate contact name	E-mail	Phone (include area code)	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or the persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify under penalty of law that I have read, understood, and accepted all terms and conditions of the NPDES/SDS General Stormwater Permit Construction Activity (MN R100001) that authorizes stormwater discharges associated with the construction site identified on this form.

X Authorized signature: _____ Date: _____

This Application must be signed by:

- ***Corporation:** a principal executive officer of at least the level of vice-president or the duly authorized representative or agent of the executive officer if the representative or agent is responsible for the overall operation of the facility that is the subject of the permit application.*
- ***Partnership or Sole Proprietorship:** a general partner or the proprietor.*
- ***Municipality, State, Federal or Other Public Agency:** principal executive officer or ranking elected official.*

Contractor

Business or firm name			
Last name	First name	Title	
E-mail		Phone (include area code)	
Mailing address	City	State	ZIP Code
Alternate contact name	E-mail	Phone (include area code)	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or the persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify under penalty of law that I have read, understood, and accepted all terms and conditions of the NPDES/SDS General Stormwater Permit Construction Activity (MN R100001) that authorizes stormwater discharges associated with the construction site identified on this form.

X Authorized signature: _____ Date: _____

This Application must be signed by:

- ***Corporation:** a principal executive officer of at least the level of vice-president or the duly authorized representative or agent of the executive officer if the representative or agent is responsible for the overall operation of the facility that is the subject of the permit application.*
- ***Partnership or Sole Proprietorship:** a general partner or the proprietor.*
- ***Municipality, State, Federal or Other Public Agency:** principal executive officer or ranking elected official.*

- *Municipality, State, Federal or Other Public Agency: principal executive officer or ranking elected official.*

Minnesota Pollution Control Agency

INSTRUCTIONS FOR THE APPLICATION FOR MINNESOTA'S NPDES/SDS GENERAL STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY

Submission of an application is notice that the owner and general contractor identified on the application intend to be authorized by an NPDES/SDS permit issued for Stormwater discharges associated with a construction activity in the State of Minnesota.

Are you ready to apply?

1. Indicate if a **Stormwater Pollution Prevention Plan** (SWPPP) has been prepared and the appropriate sections (a and b of this question) have been addressed by answering **"Yes" or "No"**. A SWPPP is a plan for Stormwater discharge that includes erosion prevention measures and sediment controls that, when implemented, will decrease soil erosion on a parcel of land and decrease pollution in receiving waters. This plan must be developed prior to submitting a permit application. A sample plan and development tools are available from the U.S. Environmental Protection Agency Stormwater Pollution Prevention Plans for Construction Activities and from the MPCA "Stormwater Compliance Tool Kit for Small Construction Operators"

   For section "b" indicate if an **Environmental Review** has been completed if required, by answering **"Yes" or "No" or "NA"** (not applicable). Environmental review looks at how a proposed project could potentially affect the environment and looks at ways to avoid or minimize impacts before the project is permitted and built. Examples of categories that may need an environmental review include residential development; industrial, commercial, and institutional facilities; and also highway projects. For certain projects, environmental review is mandatory. For more details see the Guide to Minnesota Environmental Review Rules, Chapter 6.

2. Discharges to Special or Impaired Waters
   a. Special waters have qualities that warrant extra protection. There are several categories of special waters and the requirements are different for each. A list of these special water categories can be found in Appendix A of the permit. The additional requirements apply only to those portions of a project that drain to a discharge point on the project that is within 1 mile of and flows to the special water. Refer to Appendix A of the permit for the list of special waters and what additional requirements apply to each. The information is also available using the Special and Impaired Waters Search Tool .

      Impaired waters are bodies of water that do not meet the water quality standards set up for their designated use as determined by the State. Projects discharging to impaired waters also have additional requirements. The additional requirements apply only to those portions of a project that drain to a discharge point on the project that is within 1 mile of and flows to the impaired water. The specific requirements can be found in Appendix A of the permit. Impaired waters for the purpose of this permit are limited to those identified as impaired pursuant to section 303(d) of the Clean Water Act where the pollutant(s) or stressor(s) are phosphorus (nutrient eutrophication biological indicators), turbidity, dissolved oxygen, or biotic impairment (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebtrate bioassessment). Use the interactive Special and Impaired Waters Search Tool to determine if your project is required to follow the additional requirements. On the application, indicate if the SWPPP for the project incorporates the additional requirements, if applicable. Consult the web page General Information about Impaired Waters and Current TMDL List of Impaired Waters for additional information including a list of impaired waters.
   b. An approval letter from the Department of Natural Resources (DNR) is needed to discharge to calcareous fens. If the DNR does not respond to the request for a letter of approval within 30

calendar days, you may apply for permit coverage and check the NA box. Document this process in the SWPPP for the project.

3. Additional Application Review
   a. Indicate by answering **"Yes" or "No"** whether the project will include **alternative methods** for the permanent stormwater management system. You have the option of proposing an alternative, innovative, permanent stormwater management system. You must send in the permit application and the additional required information (see Part III.C.5 of the Permit) at least **90** days prior to the start of construction if you choose this approach. You must receive an approval letter from the MPCA for this method before beginning construction.
   b. Attach the plans for the alternative system.
   c. If the project disturbs **50 acres or more** and has a discharge point (including sheet flow) that is within one mile of and flows to an impaired or special water listed in Appendix A, the application and SWPPP need to be submitted to the MPCA a minimum of **30** days prior to the start of construction.

4. The application requires a $400 application **fee**. Indicate that the application fee has been enclosed by answering **"Yes"**. Please make checks payable to: **Minnesota Pollution Control Agency** and submit the check with the completed application to: MPCA, Construction Stormwater Permit Program, 520 Lafayette Road North, St. Paul, MN 55155-4194. Applications received without the required fee will be returned to the sender.

Construction Activity Information

5. List the construction project's **name**. Be specific. Examples: "Driveway at 123 Main St, Hudson", "Highway 169 bridge replacement (#79605) at the Rum River".

6. Project Location
   a. Provide an **address** (if available) and **brief description** of the construction activity's location (**for example**, "North West Corner of the Intersection of 45th Street and Irving Avenue, Minneapolis, MN"). Use any type of description that accurately portrays the project location.
   b-e. Provide the names of all cities, counties, zip codes, and townships the construction activity takes place in (**for example**, a roadway may cross county, city, or township boundaries).
   f. Give the latitude and longitude of the centroid of the site. If the centroid of the site is not within the site, give the latitude and longitude of a point within the site that is closest to the centroid of the site. Give these values in degrees and decimal of degrees (preferred) alternatively in degrees, minutes and seconds. To obtain the decimals of a degree, divide the minutes by 60 and the seconds by 360 and add this to the degrees.
   g. State how the information was gathered, if by GPS, by using a USGS topographic map (give the scale), or an online tool such as the Toxics Release Inventory Facility Siting Tool. To use this tool, type either the zip code or the city/township and the state. Zoom in to obtain the latitude and longitude.

7. List, in acres, the **amount** of area that will be **disturbed** for this project. This is not the size of the property; do not include areas of the project that will not be disturbed.

8. **Add** the **map** to the SWPPP. United States Geological Survey (USGS) 7.5-minute quad maps or equivalent maps may be used. USGS 7.5-minute quad maps may be printed from the Special and Impaired Waters Search Tool or ordered at the USGS store. The map does not need to be submitted with the application unless the project is disturbing 50 acres or more. The map should include the project boundaries. The project boundaries can be added to the map electronically using the search tool above.

9. Indicate the type of construction activity by **checking the appropriate box**. Check "Residential and Road Construction" if the road is part of a common plan of development and is developed in association with residential development. If you check "Other", describe the project.

10. Indicate to the nearest quarter acre, the existing and resulting **areas of impervious surfaces**. Impervious surface means a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. **Examples** include rooftops, sidewalks, patios, driveways, parking lots, storage areas, and concrete, asphalt, or gravel roads. (a.) "Existing" area means the area of impervious surface that is present prior to the start of this construction project. (b.) "Post construction" means the entire area of impervious surface after construction is completed. Subtract (a.) from (b.) to determine the area of new impervious

surface.

11. For projects creating one or more acres of cumulative new impervious surfaces, **check the appropriate box** to indicate which type(s) of **permanent stormwater management practices** will be used. The "Other" box is limited to those situations (such as proximity to bedrock) that are described in Part III.C of the permit. See the permit for a further description. If the "Other' box is checked, describe which situation outlined in Part III. C. fits the project and what other permanent treatment (such as grassed swales, smaller ponds and/or grit chambers) will be used on the project.

12. BRIEFLY describe which **water body(s)** will receive stormwater runoff from the construction site or from the discharge from permanent Stormwater management systems by **completing the table**. To determine which water body(s) will receive stormwater runoff discharges, make a brief survey of the project's surrounding area. Include the waters identified on a USGS 7.5-minute quad or equivalent map. See Appendix A of this permit to determine if a water body is a special water or visit the website Special Waters Document. Impaired waters for the purpose of this permit are those identified as impaired for the following pollutant(s) or stressor(s) phosphorus (nutrient eutrophication biological indicators), turbidity, dissolved oxygen, or biotic impairment (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebrate bioassessment). The easiest way to find special or impaired waters in addition to all waterbodies is to use the interactive map tool, Special and Impaired Waters Search tool. Impaired waters are also listed here: http://www.pca.state.mn.us/water/tmdl/index.html

13. List the **start** and estimated **completion dates** of the construction project.

Responsible Parties

14. **Owner Information:** Provide the information requested of the owner of the company, organization, or other entity for which this construction project is being done. The **Owner** means the person or party possessing the title of the land on which the construction activities will occur; or if the construction activity is for a lease, easement, or mineral rights license holder, the party or individual identified as the lease, easement or mineral rights license holder; or the contracting government agency responsible for the construction activity. **The owner is the party responsible for the compliance with all terms and conditions of the permit.** The **alternate contact** should be the owner's representative in charge of the project.

    After completing this application, certify it with a **signature and date** from an individual authorized to sign the application. This application form must be signed by either a principal executive officer, vice president, representative agent responsible for overall operations, general partner, or a proprietor. If the activity is being conducted by a unit of government (state, county, municipality, or township), this application must be signed by a principal executive officer or ranking elected official **(for example**, city or county engineer, administrator, or manager; director of public works; mayor, etc.) For additional information, see Minnesota Rules 7001.0060.

15. **Contractor (Operator) Information:** Provide the information requested of the contractor. The **Contractor** means the party who signs the construction contract with the owner to construct the project described in the final plans and specifications. Where the construction project involves more than one contractor, the general contractor will be the party responsible for managing the project on behalf of the owner. In some cases the owner may be the general contractor. In these cases, the owner may contract an individual as the operator who would be the co-permittee. **The operator (usually the general contractor) is jointly responsible with the owner for compliance with Part II.B., Part II.C., and Part IV of the permit.**

    After this application has been completed by the owner, the contractor must certify it with a **signature and date** from an individual authorized to sign the form. The application must be signed by either a principal executive officer, vice president, representative agent responsible for overall operations, general partner, or a proprietor. If the general contractor is a unit of government (state, county, municipality, or township), this application must be signed by a principal executive officer, ranking elected official, administrator, manager, coordinator, or engineer. (For additional information, see Minnesota Rules 7001.0060.) The **alternate contact** should be the contractor's representative in charge of the project.

Send the completed application and fee to: **MPCA Construction Stormwater Permit Program 520 Lafayette Road North St. Paul, MN 55155-4194**	Questions? For more information, call the MPCA Stormwater Hotline at 651-757-2119 or 800-657-3804.

GENERAL PERMIT
AUTHORIZATION TO DISCHARGE
STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY
UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION
SYSTEM/STATE DISPOSAL SYSTEM PERMIT PROGRAM

ISSUANCE DATE: **August 1, 2008** **EXPIRATION DATE:** **August 1, 2013**

In compliance with the provisions of the Clean Water Act, as amended, (33 U.S.C. 1251 et seq.), 40 CFR 122, 123, and 124, as amended, et seq.; Minn. Stat. chs. 115 and 116, as amended, Minn. R. chs. 7001 and 7090:

This permit regulates the discharges of **stormwater** to the **waters of the state** of Minnesota associated with **construction activity**. This permit covers the **stormwater** discharges identified in Part I.A. of this permit. The limitations on permit coverage are identified in Part I.B. of this permit.

This permit requires the development and implementation of a **Storm Water Pollution Prevention Plan (SWPPP)**. No person shall commence **construction activity** covered by Part I.A. until permit coverage under this permit is effective or, if applicable, until the Minnesota Pollution Control Agency (MPCA) has issued an individual **National Pollutant Discharge Elimination System (NPDES)**/State Disposal System (SDS) construction **stormwater** permit for the project. The **SWPPP** must be completed prior to submitting any permit application and prior to conducting any **construction activity** by any required **Permittee**.

Unless notified by the MPCA to the contrary, applicants who submit a complete and accurate application (including permit fee) in accordance with the requirements of this permit are authorized to discharge **stormwater** from construction sites under the terms and conditions of this permit as described in Part II.B.

Signature: _____

Brad Moore
Commissioner
Minnesota Pollution Control Agency

If you have questions on this permit, including the specific permit requirements, permit reporting or permit compliance status, please contact the appropriate MPCA offices.

Minnesota Pollution Control Agency
Municipal Division
Construction Stormwater Program
520 Lafayette Road North
St. Paul, MN 55155-4194

Telephone: 651-296-6300
Toll-free in Minnesota: 800-657-3864

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PART I. PERMIT COVERAGE AND LIMITATIONS

A. PERMIT COVERAGE

1. This permit is required for **construction activity** and **small construction activity** as defined in 40 CFR pt. 122.26(b)(14)(x) and (b)(15), respectively.

2. This permit authorizes, subject to the terms and conditions of this permit, the discharge of **stormwater** associated with **construction activity** and **small construction activity.**

   Construction activity includes clearing, grading and excavation, that disturbs land of equal to or greater than five (5) acres and includes the disturbance of less than five (5) acres of total land area that is a part of a larger **common plan of development or sale** if the larger common plan will ultimately disturb five (5) acres or more.

   Small construction activity includes clearing, grading and excavation, that disturbs land of equal to or greater than one (1) acre, and includes the disturbance of less than one (1) acre of total land area that is part of a larger **common plan of development or sale** if the larger common plan will ultimately disturb equal to or greater than one and less than five (5) acres. **Small construction activity** does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility.

3. This permit covers all areas of the State of Minnesota.

4. For Parts I.B through Appendix A of this permit, all reference to **construction activity** includes both **small construction activity** and **construction activity**.

5. Coverage under this permit is not required when all runoff from **construction activity** or **small construction activity** is routed directly to and treated by a "treatment works", as defined in Minn. Stat. § 115.01, subd. 21, that is operated under an individual NPDES/SDS permit with a Total Suspended Solids effluent limit for all treated runoff.

6. Previously Permitted Ongoing Projects. **Permittee(s)** of ongoing projects covered initially under the previous MPCA-issued NPDES/SDS Construction Stormwater General Permit (issuance date August 1, 2003) must continue coverage under this reissued permit. The **Permittee(s)** of those ongoing projects shall amend the **SWPPP** for the project to meet the requirements of this reissued permit no later than 18 months after the issuance date of this reissued permit if the termination-of-coverage requirements in Part II.C. will not be met within 18 months of the issuance date of this reissued permit. Any additional permanent treatment in Appendix A. Part C.2 is not required for previously permitted projects that have discharges to impaired waters or if the project is located between 2000 feet and one mile of, and discharges to, a special water.

   a. If the previously permitted ongoing project will meet the termination-of-coverage requirements in Part II.C within 18 months of the issuance date of this reissued permit, the **Permittee(s)** shall comply with the 2003 construction general permit until the project is complete and a **Notice of Termination** consistent with Part II.C. of this reissued permit is submitted.

   b. If the previously permitted ongoing project will not be able to meet the terms and conditions of this reissued permit, an individual permit will be required in accordance with Minn. R. ch. 7001.

B. LIMITATIONS OF COVERAGE

This permit does not cover the following activities:

1. Discharges or releases that are not **stormwater** except those non-**stormwater** discharges authorized under Part IV.D.

2. The placement of fill into **waters of the state** requiring local, state, or federal authorizations (such as U.S. Army Corps of Engineers Section 404 permits, Minnesota Department of Natural Resources Public Waters Work Permits or Local Governmental Unit Wetland Conservation Act replacement plans or determinations).

3. **Stormwater** discharges associated with industrial activity that originate from the site after construction activities have been completed and the site has undergone **Final Stabilization**. Post-construction, industrial **stormwater** discharges may need to be covered by a separate NPDES/SDS permit.

4. Non-point source agricultural and silvicultural discharges excluded from **NPDES** permit requirements under 40 CFR pt. 122.3(e).

5. Discharges to the waters identified below unless the requirements of Appendix A. are complied with:

   a. Discharges into **outstanding resource value waters** as listed in Minn. R. 7050.0180, subp. 3, 4, 5, 6 and 6a, except calcareous fens listed in Minn. R. 7050.0180, subp. 6b.

   b. Discharges into Trout waters as listed in Minn. R. 6264.0050, subp. 2 and 4.

   c. Discharges into **wetlands** as defined in Minn. R. 7050.0130, item F.

   d. Discharges from projects that have not met applicable Environmental Review requirements under state or federal laws.

   e. Discharges that adversely impact or contribute to adverse impacts on a state or federal listed endangered or threatened species or adversely modify a designated critical habitat.

   f. Discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places or affecting known or discovered archeological sites.

6. Discharges to calcareous fens listed in Minn. R. 7050.0180, subp. 6b, without a letter of approval from the Minnesota Department of Natural Resources (DNR). If the DNR does not respond to the permittee's request for approval within 30 calendar days, the application can be submitted.

7. Discharges to waters identified as impaired pursuant to section 303 (d) of the federal Clean Water Act (33 U.S.C. § 303(d)) where the identified pollutant(s) or stressor(s) are phosphorus (nutrient eutrophication biological indicators), turbidity, dissolved oxygen, or biotic impairment (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebrate bioassessment), and with or without a U.S. Environmental Protection Agency (USEPA) approved Total Maximum Daily Load (TMDL) for any of these identified pollutant(s) or stressor(s), unless the applicable requirements of Part III.A.9 are met.

PART II. SUBMITTING THE APPLICATION

A. PREREQUISITE FOR SUBMITTING A PERMIT APPLICATION

The **owner** must develop a **SWPPP** in accordance with Part III (Storm Water Discharge Design Requirements) of this permit. The plans are not to be submitted to the MPCA (unless the project size is 50 acres or more and will discharge to certain waters as described in Part II.B.1.b.) but are to be retained by the **owner** in accordance with Part III.D (Record Retention). The applicants' failure to complete the **SWPPP** prior to submitting the application will result in the application being returned and the **stormwater** discharges associated with **construction activity** will not be authorized by this permit.

B. APPLICATION AND DURATION OF COVERAGE

1. Application Required.

   a. The **owner** and **operator** shall submit a complete and accurate application form (or a photocopy thereof) with the appropriate fee for project size (see application form) to the MPCA for each project which disturbs one (1) or more acres of land. The **owner** and **operator** of a **common plan of development or sale** that will ultimately disturb one (1) or more acres must submit a complete and accurate application to the MPCA.

   b. For certain projects or **common plans of development or sale** disturbing 50 acres or more, the application must be submitted at least 30 days before the start of construction activity. This requirement pertains to projects that have a discharge point on the project that is within one mile of, and flows to, a special water listed in Appendix A, Part B. or waters listed as impaired under section 303(d) of the federal Clean Water Act (see the MPCA's web site) where the identified pollutant(s) or stressor(s) are phosphorus (nutrient eutrophication biological indicators), turbidity, dissolved oxygen, or biotic impairment (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebrate bioassessment). Applicants must submit a complete and accurate application form and **SWPPP** including all calculations for the Permanent **Stormwater** Management System (see Part III.A – C).

2. The **Owner** and **Operator** are **Permittee(s)**. The **owner** who signs the application is a **Permittee** and is responsible for compliance with all terms and conditions of this permit. The **operator** (usually the **general contractor**) who signs the application is a **Permittee** for Parts II.B., Part II.C., Part IV. and applicable construction activity requirements found in Appendix A. Part C. of this permit and is jointly responsible with the **owner** for compliance with those portions of the permit.

3. Permit Coverage. The commencement of any **construction activity** (e.g., land disturbing activities) covered under Part I.A. of this permit is prohibited until permit coverage under this permit is effective or, if applicable, until the MPCA has issued an individual NPDES/SDS construction **stormwater** permit for the project.

   a. Except as provided in subp. 3.b., 3.c. and 3.d below, permit coverage will become effective seven (7) calendar days after the postmarked date of the completed application form.

b. For projects disturbing 50 acres or more, that have a discharge point on the project that is within one mile of, and flows to, a special water listed in Appendix A, Part B. or waters listed as impaired under section 303(d) of the federal Clean Water Act, the applicants must submit a complete application and **SWPPP** to the MPCA at least thirty (30) calendar days prior to the commencement of **construction activity**. MPCA staff will review the **SWPPP** submitted with the complete application and permit coverage will become effective 30 calendar days after the postmarked date or MPCA date stamp (whichever is first) of the complete application or on the effective date identified within a permit coverage letter issued by the MPCA. For incomplete applications (e.g. lack of fees or signature) or incomplete **SWPPPs** (e.g. missing calculations, **Best Management Practice (BMP)** specifications or timing of **BMP** installation narrative), the 30 calendar day review period begins on the date that all required information is submitted.

c. For proposals to use Alternative Method(s) for the Permanent Stormwater Management System under Part III.C.5, the applicants must submit a complete application and **SWPPP**, including the Alternative Method documentation under Part III.C.5, to MPCA for review and approval at least 90 days prior to the proposed starting date of **construction activity**.

   i. The MPCA will notify the applicant within the 90-day period, in writing, whether the alternative method is approved or not approved and, if applicable, the basis for denial.

   ii. The applicant may re-submit the alternative method after addressing the MPCA's basis for denial. The MPCA will respond within 30 days.

   iii. Permit coverage will become effective upon receipt of an alternative treatment method approval letter from MPCA. Any **construction activity** on the project is not covered under this permit until receiving the alternative treatment approval letter.

d. Except as provided in parts 3.b. and 3.c., for, projects that apply online, permit coverage will become effective two (2) calendar days after the online application process is complete.

4. Coverage Letter. For projects under subpart 3.a. of this part, the **Permittee(s)** will receive a permit letter and certificate acknowledging permit coverage, usually within 30 days of the postmarked date of the complete application.

5. Change of Coverage. For construction projects where the **owner** or **operator** changes, (e.g., an original developer sells portions of the property to various homebuilders or sells the entire site to a new owner):

   a. The original/current **owner** shall provide a copy of the complete notice of termination/permit modification form (as required in Part II.C.2.b) to the new **owner**. The original/current **owner** shall provide a **SWPPP** to the new **owner** and **operator** that specifically addresses the remaining **construction activity**. Note: The notice of termination/permit modification form replaces the subdivision registration, permit transfer/modification and notice of termination forms.

   b. The new **owner** or **operator** shall submit a complete and signed permit modification portion (permit modifications include subdivision registration or permit transfer) of the notice of termination/permit modification form to the MPCA prior to commencing **construction activity** on site or in no case later than seven (7) days after taking ownership of the property. The new **Permittee(s)** are responsible for compliance with all terms and conditions of this permit as described in Part II.B.2.

c. If an **operator** or **general contractor** has completed their portion of work on the site, is no longer in operational control of the project, and all contractual obligations between the **owner** and **operator** or **general contractor** relating to compliance with the terms and conditions of this permit have been met, the **operator** or **general contractor**, may transfer permit coverage back to the **owner** or to a new **operator** using the notice of termination/permit modification form. A signature from both the owner and operator is required.

C. TERMINATION OF COVERAGE

1. **Permittee(s)** wishing to terminate coverage under this permit must submit a **Notice of Termination (NOT)** to the MPCA. Compliance with this permit is required until a **NOT** is submitted. The **Permittee(s)** coverage under this permit terminates at midnight on the postmark date of the **NOT**, or on the date an online **NOT** is submitted to the MPCA.

2. Termination of coverage scenarios:

   a. Termination of coverage for the entire project.

      i. All **Permittee(s)** must submit a **NOT** within 30 days after **Final Stabilization** (see Part IV.G.) has been completed on all portions of the site for which the **Permittee** is responsible and all **construction activity** has been completed. If the site includes permanent stormwater management systems, the requirements for final cleanout/maintenance must be performed as required in **Final Stabilization**, Part IV.G.2.

      ii. **Permittee(s)** must submit a **NOT** within 30 days after selling the entire site including roads and stormwater infrastructure, and coverage is transferred to another owner as described in Part II.B.5.

   b. Termination of coverage for a portion of the entire project.

      All **Permittee(s)** must submit a **NOT** within seven (7) days after selling or otherwise legally transferring portions of the site to another party and they are no longer the **owner** or **operator**. The portions of the site being sold to another party must be in compliance with the permit (e.g. all **temporary erosion protection** and **sediment control** measures must be in place). The form must include signatures from the original **Permittee(s)** and contact information for the new **owner** of the property.

   c. Termination of coverage obtained using a subdivision registration.

      If permit coverage was obtained using the subdivision registration process, **Permittee(s)** are required to submit a **NOT** within 30 days after achieving **Final Stabilization** (see Part IV.G.).

3. **Permittee(s)** that use an alternative method for the Permanent **Stormwater** Management System as described in Part III.C.5, are prohibited from terminating this permit until **Final Stabilization** has been achieved on site and either:

a. The two years of monitoring data required in Part III.C.5 has been submitted to the MPCA and the MPCA has determined that the required treatment has been achieved. The **Permittee** will be notified in writing within 30 days after the monitoring data has been submitted. If the **Permittee** has not heard from the MPCA within 30 days after submitting the required data, the Permittee can submit a **NOT**.

b. The Permittee can submit a **NOT**, even if the timeframe is less than two years, if the MPCA determines that the alternative method is achieving the required treatment.

During the monitoring and evaluation of the alternative method, the **Permittee** is not responsible for other permit requirements that have been transferred as described in Part II.B.5.

PART III. STORMWATER DISCHARGE DESIGN REQUIREMENTS

A. STORM WATER POLLUTION PREVENTION PLAN

The **owner** must develop a Storm Water Pollution Prevention Plan **(SWPPP).** The **SWPPP** shall be completed prior to submitting any permit application and prior to conducting any **construction activity** by any required **Permittee(s)**. The plan must be a combination of narrative, plan sheets and if appropriate standard detail sheets that address the foreseeable conditions, at any stage in the construction or post construction activities. The plan must include a description of the nature of the **construction activity**. The plan must address the potential for discharge of sediment and/or other potential pollutants from the site. For **stormwater** discharges from **construction activity** where the **owner** or **operator** changes, the new **owner** or **operator** can implement the original **SWPPP** created for the project, modify the original SWPPP, or develop and implement their own **SWPPP**. **Permittee(s)** shall ensure either directly or through coordination with other **Permittee(s)** that their **SWPPP** meets all terms and conditions of this permit and that their activities do not render another party's **erosion prevention** and **sediment control BMPs** ineffective.

1. As part of the **SWPPP** the **owner** must identify a person knowledgeable and experienced in the application of **erosion prevention** and **sediment control BMPs** who will oversee the implementation of the **SWPPP**, and the installation, inspection and maintenance of the **erosion prevention** and **sediment control BMPs** before and during construction. The **owner** must identify who will have the responsibility for long term operation and maintenance of the Permanent **Stormwater** Management System (see Part III.C.). The **owner** shall develop a chain of responsibility with all **operators** on the site to ensure that the **SWPPP** will be implemented and stay in effect until the construction project is complete, the entire site has undergone **Final Stabilization**, and a **NOT** has been submitted to the MPCA.

2. Training requirements. **Permittee(s)** must comply with these training requirements no later than 18 months after the issuance date of this permit. The **Permittee(s)** shall ensure the individuals identified in this part have been trained in accordance with this Permit's training requirements. The **Permittee(s)** shall ensure the training is recorded in or with the **SWPPP** before the start of construction or as soon as the personnel for the project have been determined.

   a. Who must be trained:

      i. Individual(s) preparing the **SWPPP** for the project.

      ii. Individual(s) overseeing implementation of, revising, and amending the **SWPPP** and individual(s) performing inspections as required in Part IV.E. One of these individual(s) must be available for an on site inspection within 72 hours upon request by the MPCA.

iii. Individual(s) performing or supervising the installation, maintenance and repair of **BMPs**. At least one individual on a project must be trained in these job duties.

b. Training content. The content and extent of training must be commensurate with the individual's job duties and responsibilities with regard to activities covered under this permit for the project. At least one individual present on the permitted project site (or available to the project site in 72 hours) must be trained in the job duties described in Part III.A.2.a.ii and Part III.A.2.a.iii.

c. Training documentation.

i. Documentation must be in or with the **SWPPP** or be available within 72 hours upon request.

ii. Names of the personnel associated with this project that are required to be trained per Part III.A.2.a. of this permit.

iii. Dates of training and name of instructor(s) and entity providing training.

iv. Content of training course or workshop (including number of hours of training).

d. The **Permittee(s)** shall ensure that the individuals are trained by local, state, federal agencies, professional organizations, or other entities with expertise in **erosion prevention**, **sediment control** or permanent **stormwater** management such as the University of Minnesota, Minnesota Erosion Control Association, Soil and Water Conservation Districts or the MPCA.

3. The **SWPPP** must incorporate the requirements of Part III (Stormwater Discharge Design Requirements), Part IV (Construction Activity Requirements) and Appendix A for the project. A narrative describing the timing for installation of all **erosion prevention** and **sediment control BMPs** required in Part III, Part IV and Appendix A must also be included in the **SWPPP**.

4. The **SWPPP** requirements must be incorporated into the project's final plans and specifications and/or project documentation, as appropriate, and must include:

a. Location and type of all temporary and permanent **erosion prevention** and **sediment control BMPs** along with procedures to be used to establish additional temporary **BMPs** as necessary for the site conditions during construction. **Standard plates** and/or specifications for the **BMPs** used on the project must be included in the final plans and specifications for the project.

b. Estimated preliminary quantities tabulation anticipated at the start of the project for the life of the project must be included for all **erosion prevention** and **sediment control BMPs** in the **SWPPP**.

c. The **SWPPP** must include the number of acres of impervious surface for both pre- and post-construction.

d. A site map with existing and final grades, including dividing lines and direction of flow for all pre-and post-construction **stormwater** runoff drainage areas located within the project limits. The site map must also include **impervious surfaces** and soil types.

e. Locations of areas not to be disturbed. Buffer zones, if required in Appendix A. Part C.3, must be described and identified on plan sheets or project maps in the **SWPPP**.

f. Location of areas where construction will be phased to minimize duration of exposed soil areas.

g. All **surface waters** and existing **wetlands**, which can be identified on maps such as United States Geological Survey 7.5 minute quadrangle maps or equivalent maps within one mile from the project boundaries, which will receive **stormwater** runoff from the construction site, during or after construction. Where **surface waters** receiving runoff associated with **construction activity** will not fit on the plan sheet, they must be identified with an arrow, indicating both direction and distance to the **surface water**. The **SWPPP** must identify if the **surface water** is a special or impaired water.

h. Methods to be used for **Final Stabilization** of all exposed soil areas.

5. The **Permittee(s)** must amend the **SWPPP** as necessary to include additional requirements, such as additional or modified **BMPs**, designed to correct problems identified or address situations whenever:

   a. There is a change in design, construction, operation, maintenance, weather or seasonal conditions that has a significant effect on the discharge of pollutants to **surface waters** or **underground waters**;

   b. Inspections or investigations by site **operators**, local, state or federal officials indicate the **SWPPP** is not effective in eliminating or significantly minimizing the discharge of pollutants to **surface waters** or **underground waters** or that the discharges are causing water quality standard exceedances (e.g. nuisance conditions as defined in Minn. R. 7050.0210, subp. 2); or

   c. The **SWPPP** is not achieving the general objectives of minimizing pollutants in **stormwater** discharges associated with **construction activity**, or the **SWPPP** is not consistent with the terms and conditions of this permit.

   d. At any time after permit coverage is effective, the MPCA may determine that the project's **stormwater** discharges may cause, have reasonable potential to cause, or contribute to non-attainment of any applicable water quality standard, or that the **SWPPP** does not incorporate the applicable requirements in Part III.A.9, Discharges to Impaired Waters and TMDLs. If MPCA makes such determination(s) or any of the determinations in Parts III.A.5.a.-.c., MPCA will notify the **Permittee(s)** in writing. In response, the **Permittee(s)** must develop a supplemental **BMP** action plan or appropriate **SWPPP** amendments describing **SWPPP** modifications to address the identified concerns and submit information requested by MPCA, which may include an individual permit application. If MPCA's written notification requires a response, failure to respond within the specified timeframe constitutes a permit violation.

6. The **SWPPP** must factor in any findings of and include any **stormwater** mitigation measures required as the result of any environmental, archeological or other required local, state or federal review conducted for the project. For the purposes of this permit provision, mitigation measures mean avoiding, minimizing, rectifying (e.g., repairing, rehabilitating, restoring), reducing, eliminating or compensating for impacts related to: (1) **stormwater** discharges associated with the project's **construction activity**; and (2) **erosion prevention**, **sediment control** and the Permanent **Stormwater** Management System for the project.

7. The **SWPPP** must provide additional measures as necessary to assure compliance with **surface and ground water** standards in Minn. R. chs. 7050 and 7060 in karst areas and to ensure protection of drinking water supply management areas (see Minn. R. 4725.4450).

8. If runoff from the site discharges to a calcareous fen listed in Minn. R. 7050.0180, subp. 6b, and a letter of approval from the Minnesota Department of Natural Resources (DNR) has been obtained, this must be documented in the **SWPPP** for the project. Any additional **stormwater** mitigation measures contained in the DNR approval letter must be incorporated into the **SWPPP** for the project. If the DNR does not respond to the request for a letter of approval within 30 calendar days, this must be documented in the SWPPP for the project.

9. Discharges to Impaired Waters and TMDLs

   This part describes the requirements for projects that have a discharge point on the project that is within one mile of, and flows to, an impaired water that is identified on the most recent USEPA approved list of impaired waters. Impaired waters for the purposes of this permit are those waters identified as impaired pursuant to section 303(d) of the Clean Water Act where the identified pollutant(s) or stressor(s) are phosphorus (nutrient eutrophication biological indicators), turbidity, dissolved oxygen, or biotic impairment (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebrate bioassessment), and a TMDL is either required, or complete and USEPA approved, for any of the identified pollutant(s) or stressor(s).

   a. Requirements for Discharges to Impaired Waters

      For projects that have a discharge point on the project that is within one mile of, and flows to, an impaired water, the **Permittee(s)** must identify the impaired water(s) in the **SWPPP**, and whether there is a USEPA approved TMDL for the pollutant(s) or stressor(s) identified in this part. Unless otherwise notified by the MPCA in writing, the **Permittee(s)** identification of impaired waters must be based on the most recent USEPA approved section 303(d) Clean Water Act list of impaired waters and USEPA approved TMDLs at the time a complete permit application is submitted. The **Permittee(s)** identification must include those TMDLs applicable to the project's **stormwater** discharge that were approved at any time prior to permit application submittal and are still in effect.

   b. Impaired Water Without an Approved TMDL or With an Approved TMDL and No Waste Load Allocation

      If runoff from the site discharges to an impaired water, and a TMDL has not been approved by USEPA or there is a USEPA approved TMDL that does not establish a Waste Load Allocation (WLA) for construction **stormwater**, the **Permittee(s)** must incorporate into their **SWPPP**, and implement, the additional **BMPs** in Appendix A, Part C.1 and C.2.

c. Impaired Water With an Approved TMDL and WLA

If runoff from the site discharges to an impaired water for which there is a USEPA approved TMDL that establishes a WLA for construction **stormwater**, and the TMDL does not identify any specific implementation activities that would apply to the site discharges, the **Permittee(s)** must incorporate into their **SWPPP**, and implement, the additional BMPs in Appendix A, Part C.1 and C.2. If the TMDL identifies specific implementation activities regarding construction stormwater that would apply to the site discharges, the Permittee(s) must include the following in the **SWPPP**:

i. Identify the receiving water, the areas of the site discharging to it, and the pollutant(s) identified in the TMDL; and

ii. **BMPs** identified in the TMDL and any other specific construction stormwater related implementation activities identified in the TMDL.

B. TEMPORARY SEDIMENT BASINS

Where ten (10) or more acres of disturbed soil drain to a common location, a temporary (or permanent) sediment basin must be provided prior to the runoff leaving the construction site or entering **surface waters**. The **Permittee** is encouraged, but not required, to install temporary sediment basins where appropriate in areas with steep slopes or highly erodible soils even if less than ten (10) acres drains to one area. The basins must be designed and constructed according to the following requirements:

1. The basins must provide storage below the outlet pipe for a calculated volume of runoff from a two (2) year, 24 hour storm from each acre drained to the basin, except that in no case shall the basin provide less than 1800 cubic feet of storage below the outlet pipe from each acre drained to the basin.

2. Where no such calculation has been performed, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage below the outlet pipe per acre drained to the basin, shall be provided where attainable until **permanent cover** is established for the entire drainage area of the temporary basin.

3. Temporary basin outlets must be designed to prevent short-circuiting and the discharge of floating debris. The basin must be designed with the ability to allow complete basin drawdown (e.g., perforated riser pipe wrapped with filter fabric and covered with crushed gravel, pumps or other means, see Part IV.D.) for maintenance activities, and provide a **stabilized** emergency overflow to prevent failure of pond integrity. **Energy dissipation** must be provided for the basin outlet (see Part IV.B.4).

4. The temporary (or permanent) basins must be constructed and made operational concurrent with the start of soil disturbance that is upgradient of the area and contributes runoff to the pond.

5. Where the temporary sediment basin is not attainable due to site limitations, equivalent **sediment controls** such as smaller sediment basins, and/or sediment traps, silt fences, vegetative buffer strips, or any appropriate combination of measures are required for all down slope boundaries of the construction area and for those side slope boundaries deemed appropriate as dictated by

individual site conditions. In determining whether installing a sediment basin is attainable, the **Permittee** must consider public safety and may consider factors such as site soils, slope, and available area on site. This determination must be documented in the **SWPPP**.

C. PERMANENT STORMWATER MANAGEMENT SYSTEM

All **stormwater** must be discharged in a manner that does not cause nuisance conditions, erosion in receiving channels or on downslope properties, or inundation in **wetlands** causing a significant adverse impact to the **wetlands**.

Where a project's ultimate development replaces vegetation and/or other pervious surfaces with one or more acres of cumulative **impervious surface**, a **water quality volume** of ½ inch of runoff from the new **impervious surfaces** created by the project must be treated by one of the methods outlined in Part III.C.1 through Part III.C.5 prior to the runoff leaving the construction site or entering **surface waters** (excluding man made drainage systems that convey **stormwater** to a constructed permanent **stormwater** management facility designed to treat the **water quality volume** from the project).

For those areas of a project where there is no feasible way to meet the treatment requirement for the **water quality volume**, other treatment such as grassed swales, smaller ponds or grit chambers is required prior to discharge to **surface waters**. A cumulative maximum of three (3) acres or 1% of project size whichever is larger can be treated in this manner.

Where the proximity to bedrock precludes the installation of any of the permanent **stormwater** management practices outlined in Part III.C., other treatment, such as grassed swales, smaller ponds, or grit chambers, is required prior to discharge to **surface waters**.

For work on linear projects where the lack of right of way precludes the installation of any of the permanent **stormwater** management practices outlined in Part III.C., other treatment such as grassed swales, smaller ponds, or grit chambers, is required prior to discharge to **surface waters**. A reasonable attempt must be made to obtain right of way during the project planning process. Documentation of these attempts must be in the **SWPPP** for the project or made available upon request within 72 hours.

1. Wet Sedimentation Basin

   a. The basin must have a permanent volume of 1800 cubic feet of storage below the outlet pipe for each acre that drains to the basin. The basin's permanent volume must reach a minimum depth of at least 3 feet and must have no depth greater than 10 feet. The basin must be configured such that scour or resuspension of solids is minimized.

   b. The basin's **water quality volume** is calculated as ½ inch of runoff from the new **impervious surfaces** created by the project.

   c. Basin outlets shall be designed such that the **water quality volume** is discharged at no more than 5.66 cubic feet per second (cfs) per acre of surface area of the pond.

   d. Basin outlets must be designed to prevent short-circuiting and the discharge of floating debris. Basin outlets must have **energy dissipation**.

e. The basin must provide a **stabilized** emergency overflow to accommodate storm events in excess of the basin's hydraulic design.

f. Adequate maintenance access must be provided (typically 8 ft. wide) along with a maintenance plan identifying whom will be performing future maintenance of the basin.

2. Infiltration/Filtration

Infiltration/Filtration options include but are not limited to: infiltration basins, infiltration trenches, rainwater gardens, sand filters, organic filters, bioretention areas, enhanced swales, dry storage ponds with underdrain discharge, off-line retention areas, and natural depressions. Infiltration must be used only as appropriate to the site and land uses. Settleable solids, floating materials, oils and grease should be removed from the runoff to the maximum extent practicable before runoff enters the infiltration/filtration system. Filtration systems must have a reasonable chance of achieving approximately 80% removal of total suspended solids. The **Permittee(s)** must evaluate the impact of constructing an infiltration practice on existing hydrologic features (e.g., existing **wetlands**) and try to maintain pre-existing conditions (e.g., do not breach a perched water table which is supporting a **wetland**). For a discussion of potential stormwater hotspots, ground water warnings, design measures, maintenance considerations or other retention, detention, and treatment devices, see the **Minnesota Stormwater Manual** or MPCA's **Protecting Water Quality in Urban Areas** found on the MPCA's web-site.

a. Infiltration systems should not be excavated to final grade until the contributing drainage area has been constructed and fully **stabilized**.

b. During construction of an infiltration system, rigorous **erosion prevention** and **sediment controls** (e.g., diversion berms) should be used to keep sediment and runoff completely away from the infiltration area. The area must be staked off and marked so that heavy construction equipment will not compact the soil in the proposed infiltration area.

c. To prevent clogging of the infiltration or filtration system, a pretreatment device such as a vegetated filter strip, small sedimentation basin, or water quality inlet (e.g., grit chamber) must be used to settle particulates before the **storm water** discharges into the infiltration or filtration system.

d. Infiltration or filtration systems shall be sufficient to infiltrate or filter a **water quality volume** of ½ inch of runoff from the new **impervious surfaces** created by the project.

e. The **water quality volume** shall discharge through the soil surface or filter media in 48 hours or less. Additional flows that cannot be infiltrated or filtered in 48 hours should be routed to bypass the system through a **stabilized** discharge point. A way to visually verify that the system is operating as designed must be provided.

f. Appropriate on-site testing consistent with the recommendations found in the **Minnesota Stormwater Manual** shall be conducted to ensure a minimum of 3 feet of separation from the seasonally **saturated soils** (or from bedrock) and the bottom of the proposed infiltration system. Calculations or computer model results that demonstrate the design adequacy of the infiltration system must be included as part of the **SWPPP**.

g. Adequate maintenance access must be provided (typically 8 ft. wide) along with a maintenance plan identifying whom will be performing future maintenance of the infiltration or filtration system.

h. Use of designed infiltration systems receiving runoff from vehicle fueling and maintenance areas is prohibited.

3. Regional Ponds

Regional ponds can be used provided that they are constructed ponds, not a natural **wetland** or water body, (**wetlands** used as regional ponds must be mitigated for, see Appendix A) and designed in accordance with this permit's design requirements (see Part III.C.1) for all water from **impervious surfaces** that reach the pond. **Permittee(s)** shall not construct regional ponds in **wetlands**, regardless of their condition, quality or designation by local plans, unless the mitigative sequence in Appendix A. D. of this permit has been completed. There must be no significant degradation of the waterways between the project and the regional pond. The **owner** must obtain written authorization from the applicable local governmental unit (LGU) or private entity that owns and maintains the regional pond. The LGU's or private entity's written authorization must identify that the regional pond will discharge the **water quality volume** (½ inch of runoff from the impervious watershed area) at no more than 5.66 cfs per acre of surface area of the pond. The **owner** must include the LGU's or private entities' written authorization in the **SWPPP**. The LGU's or private entity's written authorization must be obtained before the **owner** finalizes the **SWPPP** and before any application for this permit is made to the MPCA.

4. Combination of Practices

A combination of practices, including those required by a LGU, which meet the requirements of Part III.C.1, 2 and 3 respectively, (i.e., wet sedimentation basins, infiltration/filtration, and regional ponds) may be used such that the **water quality volume** of ½ inch of runoff from the new **impervious surfaces** created by the project is accounted for in the **owner's** permanent **storm water** management system (e.g., ¼ inch infiltrated and ¼ inch treated through a wet sedimentation basin). If any combination of these practices is used, the **SWPPP** must contain documentation (e.g., LGU or private entity's authorization, infiltration computer model results or calculations, etc.) identifying the volume that each practice addresses.

5. Alternative Method

Where an alternative, innovative treatment system is proposed and demonstrated by calculation, design or other independent methods to achieve approximately 80% removal of total suspended solids on an annual average basis, the **Commissioner** will approve the method if the process outlined in Part II.B.3.c. is completed, and the following information is submitted:

a. All calculations, drainage areas, plans, and specifications for the proposed alternative method and a graphic representation of the area to be served by the method. These items must be included in the **SWPPP** and submitted to the MPCA at least 90 days prior to the proposed starting date of the **construction activity**.

b. A two (2) year monitoring plan to sample runoff from the proposed method. The plan must include a discussion of the methods used to collect samples, location where samples will be taken (upstream and downstream of the proposed method), frequency of samples (minimum of six runoff events sampled), identify lab used to analyze the samples and quality assurance and quality control methods to be used. The plan must include a schedule for submitting the monitoring data annually.

c. A mitigation plan that addresses how the **water quality volume** will be treated in the event that the monitoring data shows the proposed alternative treatment method does not function as designed.

d. The alternative method must achieve approximately 80% removal of total suspended solids on an average annual basis for the conditions expected at the site. The design must also consider public safety, health and water quality concerns. Proprietary information on effectiveness will not be considered for alternative treatment method review and approval.

No **construction activity** on the project is covered under this permit until the applicant receives an alternative treatment approval letter from the MPCA as described in Part II.B.3.c.

D. RECORD RETENTION

The **SWPPP** (original or copies) including, all changes to it, and inspections and maintenance records must be kept at the site during construction by the **Permittee** who has operational control of that portion of the site. The **SWPPP** can be kept in either the field office or in an on site vehicle during normal working hours.

All **owner(s)** must keep the **SWPPP**, along with the following additional records, on file for three (3) years after submittal of the **NOT** as outlined in Part II.C. This does not include any records after submittal of the **NOT**.

1. Any other permits required for the project;

2. Records of all inspection and maintenance conducted during construction (see Part IV.E. Inspections and Maintenance);

3. All permanent operation and maintenance agreements that have been implemented, including all right of way, contracts, covenants and other binding requirements regarding perpetual maintenance; and

4. All required calculations for design of the temporary and Permanent **Stormwater** Management Systems.

PART IV. CONSTRUCTION ACTIVITY REQUIREMENTS

A. STORM WATER POLLUTION PREVENTION PLAN

The **Permittee(s)** must implement the **SWPPP** and the requirements of this part. The **BMPs** identified in the **SWPPP** and in this permit must be selected, installed, and maintained in an appropriate and functional manner that is in accordance with relevant manufacturer specifications and accepted engineering practices.

B. EROSION PREVENTION PRACTICES

1. The **Permittee(s)** must plan for and implement appropriate construction phasing, vegetative buffer strips, horizontal slope grading, and other construction practices that minimize erosion, so that the inspection and maintenance requirements of Part IV.E. are complied with. The location of areas not to be disturbed must be delineated (e.g. with flags, stakes, signs, silt fence etc.) on the development site before work begins.

2. All exposed soil areas must be **stabilized** as soon as possible to limit soil erosion but in no case later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Temporary stockpiles without significant silt, clay or organic components (e.g., clean aggregate stockpiles, demolition concrete stockpiles, sand stockpiles) and the constructed base components of roads, parking lots and similar surfaces are exempt from this requirement but must comply with Part IV.C.5.

3. The **normal wetted perimeter** of any temporary or permanent drainage ditch or swale that drains water from any portion of the construction site, or diverts water around the site, must be **stabilized** within 200 lineal feet from the property edge, or from the point of discharge into any **surface water**. Stabilization of the last 200 lineal feet must be completed within 24 hours after connecting to a **surface water**.

   Stabilization of the remaining portions of any temporary or permanent ditches or swales must be complete within 14 days after connecting to a **surface** water and construction in that portion of the ditch has temporarily or permanently ceased.

   Temporary or permanent ditches or swales that are being used as a sediment containment system (with properly designed rock ditch checks, bio rolls, silt dikes etc.) do not need to be **stabilized**. These areas must be **stabilized** within 24 hours after no longer being used as a sediment containment system.

4. Pipe outlets must be provided with temporary or permanent **energy dissipation** within 24 hours after connection to a **surface water**.

C. SEDIMENT CONTROL PRACTICES

1. **Sediment control** practices must minimize sediment from entering **surface waters**, including curb and gutter systems and storm sewer inlets.

   a. Temporary or permanent drainage ditches and sediment basins that are designed as part of a sediment containment system (e.g., ditches with rock check dams) require **sediment control** practices only as appropriate for site conditions.

   b. If the down gradient treatment system is overloaded, additional upgradient **sediment control** practices or redundant BMPs must be installed to eliminate the overloading, and the **SWPPP** must be amended to identify these additional practices as required in Part III.A.4, a. through c.

   c. In order to maintain sheet flow and minimize rills and/or gullies, there shall be no unbroken slope length of greater than 75 feet for slopes with a grade of 3:1 or steeper.

2. **Sediment control** practices must be established on all down gradient perimeters before any upgradient land disturbing activities begin. These practices shall remain in place until **Final Stabilization** has been established in accordance with Part IV.G.

3. The timing of the installation of **sediment control** practices may be adjusted to accommodate short-term activities such as clearing or grubbing, or passage of vehicles. Any short-term activity must be completed as quickly as possible and the **sediment control** practices must be installed immediately after the activity is completed. However, **sediment control** practices must be installed before the next precipitation event even if the activity is not complete.

4. All storm drain inlets must be protected by appropriate **BMPs** during construction until all sources with potential for discharging to the inlet have been **stabilized**. Inlet protection may be removed for a particular inlet if a specific safety concern (street flooding/freezing) has been identified and the **Permittee(s)** have received written correspondence from the jurisdictional authority (e.g. city/county/township/MnDOT engineer) verifying the need for removal. The written correspondence must be documented in the **SWPPP** or available within 72 hours upon request. When written correspondence can not be obtained in a timely manner, the specific inlet protection can be removed to alleviate the immediate safety concern. However, efforts to obtain written correspondence must be documented in the SWPPP and available within 72 hours upon request. Permission to remove inlet protection based on a specific safety concern must still be obtained from the jurisdictional authority within 30 days of removal.

5. Temporary soil stockpiles must have silt fence or other effective **sediment controls**, and cannot be placed in **surface waters**, including **stormwater** conveyances such as curb and gutter systems, or conduits and ditches unless there is a bypass in place for the stormwater.

6. Vehicle tracking of sediment from the construction site (or onto streets within the site) must be minimized by **BMPs** such as stone pads, concrete or steel wash racks, or equivalent systems. Street sweeping must be used if such **BMPs** are not adequate to prevent sediment from being tracked onto the street (see Part IV.E.4.d.).

7. The **Permittee** must install temporary sedimentation basins as required in Part III.B. of this permit.

D. DEWATERING AND BASIN DRAINING

1. **Dewatering** or basin draining (e.g., pumped discharges, trench/ditch cuts for drainage) related to the **construction activity** that may have turbid or sediment laden discharge water must be discharged to a temporary or permanent sedimentation basin on the project site whenever possible. Discharge from the temporary or permanent sedimentation basin must be visually checked to ensure adequate treatment is obtained in the basin and that nuisance conditions (see Minn. R. 7050.0210, subp. 2) will not result from the discharge. If the water cannot be discharged to a sedimentation basin prior to entering the **surface water**, it must be treated with the appropriate **BMPs**, such that the discharge does not adversely affect the receiving water or downstream landowners. The **Permittee(s)** must ensure that discharge points are adequately protected from erosion and scour. The discharge must be dispersed over natural rock riprap, sand bags, plastic sheeting, or other accepted **energy dissipation** measures. Adequate sedimentation control measures are required for discharge water that contains suspended solids.

2. All water from **dewatering** or basin draining activities must be discharged in a manner that does not cause nuisance conditions, erosion in receiving channels or on downslope properties, or inundation in **wetlands** causing significant adverse impact to the **wetland.**

E. INSPECTIONS AND MAINTENANCE

1. The **Permittee(s)** (either the **owner** or **operator**, whoever is identified in the **SWPPP**) must routinely inspect the entire construction site at least once every seven (7) days during active construction and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours. Following an inspection which occurs within 24 hours after a rainfall event, the next inspection must be conducted within seven (7) days after that.

2. All inspections and maintenance conducted during construction must be recorded in writing and these records must be retained with the **SWPPP** in accordance with Part III.D. Records of each inspection and maintenance activity shall include:

   a. Date and time of inspections;

   b. Name of person(s) conducting inspections;

c. Findings of inspections, including recommendations for corrective actions;

d. Corrective actions taken (including dates, times, and party completing maintenance activities);

e. Date and amount of all rainfall events greater than 1/2 inch (0.5 inches) in 24 hours;

f. Documentation of changes made to the **SWPPP** as required in Part III.A.4; and

3. Where parts of the construction site have **permanent cover**, but work remains on other parts of the site, inspections of the areas with **permanent cover** may be reduced to once per month. Where construction sites have **permanent cover** on all exposed soil areas and no construction activity is occurring anywhere on the site, the site must be inspected for a period of twelve (12) months (the inspections may be ceased during frozen ground conditions). Following the twelfth month of **permanent cover** and no **construction activity**, inspections may be terminated until construction activity is once again initiated or sooner if notified in writing by the MPCA. Where work has been suspended due to frozen ground conditions, the required inspections and maintenance schedule must begin within 24 hours after runoff occurs at the site or prior to resuming construction, whichever comes first.

4. All **erosion prevention** and **sediment control BMPs** must be inspected to ensure integrity and effectiveness. All nonfunctional **BMPs** must be repaired, replaced, or supplemented with functional **BMPs** within 24 hours after discovery, or as soon as field conditions allow access unless another time frame is specified below. The **Permittee(s)** must investigate and comply with the following inspection and maintenance requirements:

   a. All silt fences must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches 1/3 of the height of the fence. These repairs must be made within 24 hours of discovery, or as soon as field conditions allow access.

   b. Temporary and permanent sedimentation basins must be drained and the sediment removed when the depth of sediment collected in the basin reaches 1/2 the storage volume. Drainage and removal must be completed within 72 hours of discovery, or as soon as field conditions allow access (see Part IV.D.).

   c. **Surface waters**, including drainage ditches and conveyance systems, must be inspected for evidence of erosion and sediment deposition. The **Permittee(s)** must remove all deltas and sediment deposited in **surface waters**, including drainage ways, catch basins, and other drainage systems, and restabilize the areas where sediment removal results in exposed soil. The removal and stabilization must take place within seven (7) days of discovery unless precluded by legal, regulatory, or physical access constraints. The **Permittee** shall use all

reasonable efforts to obtain access. If precluded, removal and stabilization must take place within seven (7) calendar days of obtaining access. The **Permittee** is responsible for contacting all local, regional, state and federal authorities and receiving any applicable permits, prior to conducting any work.

d. Construction site vehicle exit locations must be inspected for evidence of off-site sediment tracking onto paved surfaces. Tracked sediment must be removed from all paved surfaces, within 24 hours of discovery, or if applicable, within a shorter time to comply with Part IV.C.6.

e. The **Permittee(s)** are responsible for the operation and maintenance of temporary and permanent water quality management **BMPs**, as well as all **erosion prevention** and **sediment control BMPs**, for the duration of the construction work at the site. The **Permittee(s)** are responsible until another **Permittee** has assumed control according to Part II.B.5 over all areas of the site that have not been finally **stabilized** or the site has undergone **Final Stabilization**, and a **NOT** has been submitted to the MPCA.

f. If sediment escapes the construction site, off-site accumulations of sediment must be removed in a manner and at a frequency sufficient to minimize off-site impacts (e.g., fugitive sediment in streets could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets).

5. All infiltration areas must be inspected to ensure that no sediment from ongoing **construction activity** is reaching the infiltration area and these areas are protected from compaction due to construction equipment driving across the infiltration area.

F. POLLUTION PREVENTION MANAGEMENT MEASURES

The **Permittee(s)** shall implement the following pollution prevention management measures on the site:

1. Solid Waste: Collected sediment, asphalt and concrete millings, floating debris, paper, plastic, fabric, construction and demolition debris and other wastes must be disposed of properly and must comply with MPCA disposal requirements.

2. Hazardous Materials: Oil, gasoline, paint and any hazardous substances must be properly stored, including secondary containment, to prevent spills, leaks or other discharge. Restricted access to storage areas must be provided to prevent vandalism. Storage and disposal of hazardous waste must be in compliance with MPCA regulations.
3. External washing of trucks and other construction vehicles must be limited to a defined area of the site. Runoff must be contained and waste properly disposed of. No engine degreasing is allowed on site.

4. Concrete washout onsite: All liquid and solid wastes generated by concrete washout operations must be contained in a leak-proof containment facility or impermeable liner. A compacted clay liner that does not allow washout liquids to enter ground water is considered an impermeable liner. The liquid and solid wastes must not contact the ground, and there must not be runoff from the concrete washout operations or areas. Liquid and solid wastes must be disposed of properly and in compliance with MPCA regulations. A sign must be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities.

G. FINAL STABILIZATION

The **Permittee(s)** must ensure **Final Stabilization** of the site. **Final Stabilization** requires all of Parts IV.G.1-5 or Part IV.G.6:

1. **Final Stabilization** requires that all soil disturbing activities at the site have been completed and all soils must be **stabilized** by a uniform perennial vegetative cover with a density of 70% over the entire pervious surface area, or other equivalent means necessary to prevent soil failure under erosive conditions.

2. The **Permittee(s)** must ensure that the permanent **stormwater** treatment system meets all requirements in Part III, C. This includes but is not limited to, a final clean out of temporary or permanent sedimentation basins that are to be used as permanent water quality management basins and final construction or maintenance of infiltration basins. All sediment must be removed from conveyance systems and ditches must be **stabilized** with **permanent cover**.

3. Prior to submission of the **NOT**, all temporary synthetic and structural **erosion prevention** and **sediment control BMPs** (such as silt fence) must be removed on the portions of the site for which the **Permittee** is responsible. **BMPs** designed to decompose on site (such as some compost logs) may be left in place.

4. For residential construction only, individual lots are considered finally **stabilized** if the structure(s) are finished & **temporary erosion protection** and downgradient perimeter control has been completed and the residence has been sold to the homeowner. Additionally, the **Permittee** must distribute the MPCA's "**Homeowner Fact Sheet**" to the homeowner to inform the homeowner of the need for, and benefits of, **permanent cover**.

5. For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land) **Final Stabilization** may be accomplished by returning the disturbed land to its preconstruction agricultural use.

6. A **Permittee** may terminate permit coverage prior to completion of all **construction activity** if all of the following conditions are met in addition to Part IV.G.2 through Part IV.G.3 and where applicable, Part IV.G.4 or Part IV.G.5.

   a. **Construction activity** has ceased for at least 90 days.

   b. At least 90% (by area) of all originally proposed **construction activity** has been completed and **permanent cover** established on those areas.

   c. On areas where **construction activity** is not complete, **permanent cover** has been established.

PART V. GENERAL PROVISIONS

A. APPLICABILITY CRITERIA

1. If the **Commissioner** determines that **stormwater** discharges associated with a **construction activity** are contributing to a violation of a water quality standard or would be more appropriately regulated by an individual permit, the **Commissioner** may require the **owner** to be covered by an individual **stormwater** discharge permit. The **Commissioner** may require the **owner** to develop and implement specific **BMPs** and monitor the discharge from the site. If applicable, upon issuance of an individual permit, this general permit would no longer apply.

2. If the terms and conditions of this general permit cannot be met, an **owner** may request an individual permit, in accordance with Minn. R. 7001.

3. Any interested person may petition the MPCA to require an individual NPDES/SDS permit in accordance with 40 CFR 122.28(b)(3).

B. RESPONSE

The **SWPPP**, including all certificates, reports, records, or other information required by this permit, must be made available to federal, state, and local officials within 72 hours upon request for the duration of the permit and for three years following the **NOT**. This does not include any records after submittal of the **NOT**.

C. PROHIBITIONS

This permit prohibits discharges of any material other than **stormwater,** and discharges from **dewatering** or basin draining activities in accordance with Part IV.D.1 and 2. For example, prohibited discharges include but are not limited to vehicle and equipment washing, maintenance spills, wash water, and discharges of oil and other hazardous substances.

D. TRANSFER OF OWNERSHIP OR CONTROL

This permit may not be assigned or transferred by the permit holder except when transfer occurs in accordance with the applicable requirements of Part II.B.5.

E. CIVIL AND CRIMINAL LIABILITY

Nothing in this permit must be construed to relieve the **Permittee(s)** from civil or criminal penalties for noncompliance with the terms and conditions provided herein. Nothing in this permit must be construed to preclude the initiation of any legal action or relieve the **Permittee(s)** from any responsibilities, liabilities, or penalties to which the **Permittee(s)** is or may be subject to under Section 311 of the Act and Minn. Stat. chs. 115 and 116, as amended. The **Permittee(s)** are not liable for permit requirements for activities occurring on those portions of a site where another party has submitted a notice of termination/permit modification form as described in Part II. B.5.b or the permittee has submitted the notice of termination/permit modification form as described in Part II.C.2.b except for monitoring responsibilities listed under Part III.C.5 if applicable.

F. SEVERABILITY

The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit must not be affected thereby.

G. NPDES/SDS RULE STANDARD CONDITIONS

The **Permittee(s)** must comply with the provisions of Minn. R. 7001.0150, subp. 3 and Minn. R. 7001.1090, subp. 1(A), 1(B), 1(C), 1(H), and 1(I). This permit does not require the submittal of a data monitoring report, except where monitoring is required in Part III.C.5.

H. INSPECTION AND ENTRY

The **Permittee(s)** must comply with the provisions of 40 CFR 122.41(i), Minn. Stat. ch. 115.04 and Minn. Stat. ch. 115B.17. The **Permittee(s)** shall allow representatives of the MPCA or any member, employee or agent thereof, when authorized by it, upon presentation of credentials, to enter upon any property, public or private, for the purpose of obtaining information or examination of records or conducting surveys or investigations.

APPENDIX A

A. GENERAL REQUIREMENTS

All requirements in this Appendix are in addition to **BMPs** already specified in the permit. Where provisions of Appendix A conflict with requirements elsewhere in the permit, the provisions in Appendix A take precedence. All **BMPs** used to comply with this Appendix must be documented in the **SWPPP** for the project. If the terms and conditions of this Appendix cannot be met, an individual permit will be required in accordance with Minn. R. ch. 7001.

B. REQUIREMENTS FOR DISCHARGES TO SPECIAL WATERS AND IMPAIRED WATERS

Additional **BMPs** together with enhanced runoff controls are required for discharges to the following special waters (part B.1 through B.8 of Appendix A) and impaired waters (part B.9 of Appendix A). The **BMPs** identified for each special or impaired water are required for those areas of the project draining to a discharge point on the project that is within one mile of a special or impaired water and flows to that special or impaired water.

1. **Wilderness areas:** Boundary Waters Canoe Area Wilderness; Voyageurs National Park; Kettle River from the site of the former dam at Sandstone to its confluence with the Saint Croix River; Rum River from Ogechie Lake spillway to the northernmost confluence with Lake Onamia. Discharges to these waters must incorporate the **BMPs** outlined in C.1, C.2, C.3 and C.4 of this Appendix.

2. **Mississippi River:** Those portions from Lake Itasca to the southerly boundary of Morrison County that are included in the Mississippi Headwaters Board comprehensive plan dated February 12, 1981. Discharges to these waters must incorporate the **BMPs** outlined in C.1, C.2 and C.3 of this Appendix.

3. **Scenic or recreational river segments:** Saint Croix river, entire length; Cannon River from northern city limits of Faribault to its confluence with the Mississippi River; North Fork of the Crow River from Lake Koronis outlet to the Meeker-Wright county line; Kettle River from north Pine County line to the site of the former dam at Sandstone; Minnesota River from Lac qui Parle dam to Redwood County state aid highway 11; Mississippi River from county state aid highway 7 bridge in Saint Cloud to northwestern city limits of Anoka; and Rum River from state aid Highway 27 bridge in Onamia to Madison and Rice streets in Anoka. Discharges to these waters must incorporate the **BMPs** outlined in C.1, C.2 and C.3 of this Appendix.

4. **Lake Superior:** (Prohibited and restricted.) Discharges to Lake Superior must incorporate the **BMPs** outlined in C.1, C.2 and C.3 of this Appendix.

5. **Lake Trout Lakes:** Identified in Minn. R. 7050.0470, including those inside the boundaries of the Boundary Waters Canoe Area Wilderness and Voyageurs National Park. Discharges to these waters must incorporate the **BMPs** outlined in C.1, C.2, C.3 and C.4 of this Appendix.

6. **Trout Lakes:** Identified in Minn. R. 6264.0050, subp. 2. Discharges to these waters must incorporate the **BMPs** outlined in C.1, C.2, C.3, and C.4 of this Appendix.

7. **Scientific and natural areas:** Boot Lake, Anoka County; Kettle River in sections 15, 22, 23, T 41 N, R 20, Pine County; Pennington Bog, Beltrami County; Purvis Lake-Ober Foundation, Saint Louis County; Waters within the borders of Itasca Wilderness Sanctuary, Clearwater County; Iron Springs Bog, Clearwater County; Wolsfeld Woods, Hennepin County; Green Water Lake, Becker County; Blackdog Preserve, Dakota County; Prairie Bush Clover, Jackson County; Black Lake Bog, Pine County; Pembina Trail Preserve, Polk County; and Falls Creek, Washington County. Discharges to these waters must incorporate the **BMPs** outlined in C.1, C.2, C.3 and C.4 of this Appendix.

8. **Trout Streams:** Listed in Minn. R. 6264.0050, subp. 4. Discharges to these waters must incorporate the **BMPs** outlined in C.1, C.2, C.3, and C.5 of this Appendix.

9. **Impaired Waters**: waters identified as impaired under section 303 (d) of the federal Clean Water Act for phosphorus (nutrient eutrophication biological indicators), turbidity, dissolved oxygen or aquatic biota (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebrate bioassessment). Discharges to these waters must incorporate the **BMPs** outlined in C.1 and C.2 of this Appendix.

Note on impaired waters listing terminology: The terms in parenthesis in Appendix A Part B.9 above are the most current terminology used to list waters as impaired at the time of permit issuance. These terms are subject to change. For example, at one time waters were listed as impaired for phosphorus and now those same waters are listed as impaired for nutrient eutrophication biological indicators. If the terminology changes for one of the pollutant(s) or stressor(s) identified in the permit, the MPCA will keep a list of the new terms on its construction **stormwater** web site.

C. ADDITIONAL BMPS FOR SPECIAL WATERS AND IMPAIRED WATERS

For the BMPs described in C.2, C.4 and C.5 of this Appendix:

Where the proximity to bedrock precludes the installation of any of the permanent **stormwater** management practices outlined in Appendix A, other treatment such as grassed swales, smaller ponds, or grit chambers is required prior to discharge to **surface waters**.

For work on linear projects where the lack of right of way precludes the installation of any of the permanent **stormwater** management practices outlined in Appendix A, other treatment such as grassed swales, smaller ponds, or grit chambers is required prior to discharge to **surface waters**.

1. During construction.

   a. All exposed soil areas must be **stabilized** as soon as possible to limit soil erosion but in no case later than seven (7) days after the **construction activity** in that portion of the site has temporarily or permanently ceased.

   b. Temporary sediment basin requirements described in Part III.B.1-5 must be used for common drainage locations that serve an area with five (5) or more acres disturbed at one time.

2. Post construction. The **water quality volume** that must be treated by the project's permanent **stormwater** management system described in Part III.C. shall be one (1) inch of runoff from the new **impervious surfaces** created by the project. Where site conditions allow, at least ½ inch of the **water quality volume** must be infiltrated. See Part III.C.2 for more information on infiltration design and appropriate site conditions. If it is determined that site conditions are not appropriate for infiltration (e.g. lack of 3 ft. of separation to seasonally saturated ground water, proximity to bedrock, contaminated soils) the reasons should be documented in the **SWPPP** for the project. Infiltration is not required in Hydrologic Soil Group D soils.

3. Buffer zone. An undisturbed buffer zone of not less than 100 linear feet from the special water (not including tributaries) shall be maintained at all times. Exceptions from this requirement for areas, such as water crossings, limited water access and restoration of the buffer are allowed if the **Permittee** fully documents in the **SWPPP** the circumstances and reasons that the buffer encroachment is necessary. Replacement of existing impervious surface within the buffer is allowed under this permit. All potential water quality, scenic and other environmental impacts of these exceptions must be minimized by the use of additional or redundant **BMPs** and documented in the **SWPPP** for the project.

4. Enhanced runoff controls. The Permanent **Stormwater** Management System must be designed such that the pre- and post-project runoff rate and volume from the 1 and 2-year 24-hour precipitation events remain the same or are reduced.

5. Temperature Controls. The Permanent **Stormwater** Management System must be designed such that the discharge from the project will minimize any increase in the temperature of trout stream receiving waters resulting from the 1-and 2-year 24-hour precipitation events. This includes all tributaries of designated trout streams within the section that the trout stream is located. Projects that discharge to trout streams must minimize the impact using one or more of the following measures, in order of preference:

   a. Minimize new **impervious surfaces**.

   b. Minimize the discharge from connected **impervious surfaces** by discharging to vegetated areas, or grass swales, and through the use of other non-structural controls.

   c. Infiltration or evapotranspiration of runoff in excess of pre-project conditions (up to the 2-year 24-hour precipitation event).

d. If ponding is used, the design must include an appropriate combination of measures such as shading, filtered bottom withdrawal, vegetated swale discharges or constructed **wetland** treatment cells that will limit temperature increases. The pond should be designed to draw down in 24 hours or less.

e. Other methods that will minimize any increase in the temperature of the trout stream.

D. REQUIREMENTS FOR DISCHARGING TO WETLANDS

If the project has any **stormwater** discharges with the potential for significant adverse impacts to a **wetland** (e.g., conversion of a natural **wetland** to a **stormwater** pond) , the **Permittee(s)** must demonstrate that the **wetland** mitigative sequence has been followed in accordance with D.1 or D.2 of this appendix.

1. If the potential adverse impacts to a **wetland** on a specific project site have been addressed by permits or other approvals from an official statewide program (U.S. Army Corps of Engineers 404 program, Minnesota DNR, or the State of Minnesota Wetland Conservation Act) that are issued specifically for the project and project site, the **Permittee** may use the permit or other determination issued by these agencies to show that the potential adverse impacts have been addressed. For the purposes of this permit, deminimus actions are determinations by the permitting agency that address the project impacts, whereas a non-jurisdictional determination does not address project impacts.

2. If there are impacts from the project that are not addressed in one of the permits or other determinations discussed in Appendix A, Part D.1 (e.g., permanent inundation or flooding of the **wetland**, significant degradation of water quality, excavation, filling, draining), the **Permittee** must minimize all adverse impacts to **wetlands** by utilizing appropriate measures. Measures used must be based on the nature of the **wetland**, its vegetative community types and the established hydrology. These measures include in order of preference:

   a. Avoid all significant adverse impacts to **wetlands** from the project and post-project discharge.

   b. Minimize any unavoidable impacts from the project and post-project discharge.

   c. Provide compensatory mitigation when the **Permittee** determines that there is no reasonable and practicable alternative to having a significant adverse impact on a **wetland**. For compensatory mitigation, **wetland** restoration or creation shall be of the same type, size and whenever reasonable and practicable in the same watershed as the impacted **wetland**.

E. DISCHARGES REQUIRING ENVIRONMENTAL REVIEW

This permit does not replace or satisfy any environmental review requirements, including those under the Minnesota Environmental Policy Act or the National Environmental Policy Act. The **owner** must verify that any environmental review required by law, including any required Environmental Assessment Work Sheets or Environmental Impact Statements, Federal environmental review, or other required review is complete, and the **owner** must incorporate any **stormwater** mitigation measures required as the result of any environmental review into the **SWPPP** for the project. If any part of your common plan of development or sale requires environmental review, coverage under this permit can not be obtained until such environmental review is complete.

F. DISCHARGES AFFECTING ENDANGERED OR THREATENED SPECIES

This permit does not replace or satisfy any review requirements for endangered or threatened species, from new or expanded discharges that adversely impact or contribute to adverse impacts on a listed endangered or threatened species, or adversely modify a designated critical habitat. The **owner** must conduct any required review and coordinate with appropriate agencies for any project with the potential of affecting threatened or endangered species, or their critical habitat.

G. DISCHARGES AFFECTING HISTORIC PLACES OR ARCHEOLOGICAL SITES

This permit does not replace or satisfy any review requirements for historic places or archeological sites, from new or expanded discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places or affecting known or discovered archeological sites. The **owner** must be in compliance with National Historic Preservation Act and conduct all required review and coordination related to historic preservation, including significant anthropological sites and any burial sites, with the Minnesota Historic Preservation Officer.

APPENDIX B. - DEFINITIONS

1. "**Best Management Practices (BMPs)**" means **erosion prevention** and **sediment control,** and water quality management practices that are the most effective and practicable means of controlling, preventing, and minimizing degradation of **surface water**, including avoidance of impacts, construction-phasing, minimizing the length of time soil areas are exposed, prohibitions, and other management practices published by state or designated area-wide planning agencies.

   Individual **BMPs** found in this permit are described in the current version of **Protecting Water Quality in Urban Areas**, Minnesota Pollution Control Agency 2000. **BMPs** must be adapted to the site and can be adopted from other sources. However, they must be similar in purpose and at least as effective and stringent as MPCA's **BMPs**. (Other sources include manufacturers specifications, **Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices**, U.S. Environmental Protection Agency 1992, and **Erosion Control Design Manual**, Minnesota Department of Transportation, et al, 1993).

2. **"Commissioner"** means the **Commissioner** of the MPCA or the **Commissioner's** designee.

3. **"Common Plan of Development or Sale"** means a contiguous area where multiple separate and distinct land disturbing activities may be taking place at different times, on different schedules, but under one proposed plan. One plan is broadly defined to include design, permit application, advertisement or physical demarcation indicating that land-disturbing activities may occur.

4. "**Construction Activity**" includes **construction activity** as defined in 40 C.F.R. pt. 122.26(b)(14)(x) and **small construction activity** as defined in 40 C.F.R. pt. 122.26(b)(15). This includes a disturbance to the land that results in a change in the topography, existing soil cover (both vegetative and non-vegetative), or the existing soil topography that may result in accelerated **stormwater** runoff, leading to soil erosion and movement of sediment into **surface waters** or drainage systems. Examples of **construction activity** may include clearing, grading, filling, and excavating. **Construction activity** includes the disturbance of less than one acre of total land area that is a part of a larger **common plan of development or sale** if the larger common plan will ultimately disturb one (1) acre or more.

5. **"Dewatering"** means the removal of water for **construction activity**. It can be a discharge of appropriated surface or groundwater to dry and/or solidify a construction site. It may require Minnesota DNR permits to be appropriated and if contaminated may require other MPCA permits to be discharged.

6. "**Energy Dissipation**" means methods employed at pipe outlets to prevent erosion. Examples include, but are not limited to: concrete aprons, riprap, splash pads, and gabions that are designed to prevent erosion.

7. **"Erosion Prevention"** means measures employed to prevent erosion including but not limited to: soil stabilization practices, limited grading, mulch, temporary erosion protection or **permanent cover**, and construction phasing.

8. "**Final Stabilization**" See part IV.G.

9. "**General Contractor**" means the party who signs the construction contract with the **owner** or **operator** to construct the project described in the final plans and specifications. Where the construction project involves more than one contractor, the **general contractor** could be the party responsible for managing the project on behalf of the **owner** or **operator**. In some cases, the **owner** or **operator** may be the **general contractor**. In these cases, the **owner** may contract an individual as the **operator** who would become the Co-**Permittee**.

10. **"Homeowner Fact Sheet"** means a fact sheet developed by the MPCA to be given to homeowners at the time of sale by a builder to inform the homeowner of the need for, and benefits of, **Final Stabilization**.

11. "**Impervious Surface**" means a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, sidewalks, patios, driveways, parking lots, storage areas, and concrete, asphalt, or gravel roads.

12. "**National Pollutant Discharge Elimination System (NPDES)**" means the program for issuing, modifying, revoking, reissuing, terminating, monitoring, and enforcing permits under the Clean Water Act (Sections 301, 318, 402, and 405) and United States Code of Federal Regulations Title 33, Sections 1317, 1328, 1342, and 1345..

13. "**Normal Wetted Perimeter**" means the area of a conveyance, such as a ditch, channel, or pipe that is in contact with water during flow events that are expected to occur once every year.

14. "**Notice of Termination**" means notice to terminate coverage under this permit after construction is complete, the site has undergone **Final Stabilization**, and maintenance agreements for all permanent facilities have been established, in accordance with all applicable conditions of this permit.

15. **"Operator"** means the person (usually the **general contractor**), designated by the **owner**, who has day to day operational control and/or the ability to modify project plans and specifications related to the **SWPPP**. The person must be knowledgeable in those areas of the permit for which the **operator** is responsible, (Part II.B. and Part IV.) and must perform those responsibilities in a workmanlike manner.

16. "**Owner**" means the person or party possessing the title of the land on which the construction activities will occur; or if the **construction activity** is for a lease, easement, or mineral rights license holder, the party or individual identified as the lease, easement or mineral rights license holder; or the contracting government agency responsible for the **construction activity**.

17. "**Permanent Cover**" means surface types that will prevent soil failure under erosive conditions. Examples include: gravel, asphalt, concrete, rip rap, roof tops, perennial cover, or other landscaped material that will permanently arrest soil erosion. A uniform perennial vegetative cover (e.g., evenly distributed, without large bare areas) with a density of 70% of the native background vegetative cover for the area must be established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures. **Permanent cover** does not include the practices listed under temporary erosion protection.

18. "**Permittee**" means a person or persons, firm, or governmental agency or other institution that signs the application submitted to the MPCA and is responsible for compliance with the terms and conditions of this permit.

19. "**Public Waters**" means all water basins and watercourses that are described in Minn. Stat. 103G.005 subd. 15

20. **"Saturated Soil"** means the highest seasonal elevation in the soil that is in a reduced chemical state because of soil voids being filled with water. **Saturated soil** is evidenced by the presence of redoximorphic features or other information.

21. "**Sediment Control**" means methods employed to prevent sediment from leaving the site. **Sediment control** practices include silt fences, sediment traps, earth dikes, drainage swales, check dams, subsurface drains, pipe slope drains, storm drain inlet protection, and temporary or permanent sedimentation basins.

22. "**Small Construction Activity**" means small construction activity as defined in 40 C.F.R. part 122.26(b)(15) . Small construction activities include clearing, grading and excavating that result in land disturbance of equal to or greater than one acre and less than five acres. **Small construction activity** includes the disturbance of less than one (1) acre of total land area that is part of a larger **common plan of development or sale** if the larger common plan will ultimately disturb equal to or greater than one and less than five (5) acres.

23. "**Stabilized**" means the exposed ground surface has been covered by appropriate materials such as mulch, staked sod, riprap, erosion control blanket, mats or other material that prevents erosion from occurring. Applying mulch, hydromulch, tackifier, polyacrylamide or similar **erosion prevention** practices is not acceptable stabilization in temporary or permanent drainage ditches or areas where concentrated overland flow occurs. Grass seeding is not stabilization.

24. "**Standard Plates**" means general drawings having or showing similar characteristics or qualities that are representative of a **construction activity** or practice.

25. "**Stormwater**" is defined under Minn. R. 7077.0105, subp. 41(b), and includes precipitation runoff, **stormwater** runoff, snowmelt runoff, and any other surface runoff and drainage.

26. **"Storm Water Pollution Prevention Plan"** means a plan for **stormwater** discharge that includes **erosion prevention** measures, **sediment controls** and Permanent **Stormwater** Management Systems that, when implemented, will decrease soil erosion on a parcel of land and decrease off-site nonpoint pollution.

27. **"Surface Water or Waters"** means all streams, lakes, ponds, marshes, **wetlands**, reservoirs, springs, rivers, drainage systems, waterways, watercourses, and irrigation systems whether natural or artificial, public or private.

28. "**Temporary Erosion Protection**" means methods employed to prevent erosion. Examples of temporary erosion protection include; straw, wood fiber blanket, wood chips, and erosion netting.

29. "**Underground Waters**" means water contained below the surface of the earth in the saturated zone including, without limitation, all waters whether under confined, unconfined, or perched conditions, in near surface unconsolidated sediment or regolith, or in rock formations deeper underground. The term ground water shall be synonymous with underground water.

30. **"Waters of the State"** (as defined in Minn. Stat. § 115.01, subd. 22) means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, reservoirs, aquifers, irrigation systems, drainage systems and all other bodies or accumulations of water, surface or underground, natural or artificial, public or private, which are contained within, flow through, or border upon the state or any portion thereof.

31. **"Water Quality Volume"** means ½ inch of runoff from the new **impervious surfaces** created by this project and is the volume of water to be treated in the Permanent **Stormwater** Management System, as required by this permit except as provided in Appendix A.C.2.

32. **"Wetland" or "Wetlands"** is defined in Minn. R. 7050.0130, subp. F and includes those areas that are inundated or saturated by **surface water** or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in **saturated soil** conditions. **Wetlands** generally include swamps, marshes, bogs, and similar areas. Constructed **wetlands** designed for wastewater treatment are not **waters of the state**. **Wetlands** must have the following attributes:

    a. A predominance of hydric soils;

    b. Inundated or saturated by **surface water** or ground water at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in a **saturated soil** condition; and

    c. Under normal circumstances support a prevalence of such vegetation.

Appendix D

Construction Stormwater Training Documentation

Tom Tri

UNIVERSITY OF MINNESOTA

Certificate of Attendance

2004-2005 Erosion/Sediment Control Certification

Professional Development Hours

Tom Tri

Participant

Design of Stormwater Pollution Prevention Plans

Educational Activity

University of Minnesota

Activity Sponsor

Leo Holm, Dwayne Stenlund, John Chapman

Instructor/Leader

January 24-25 2005

Activity Date

12

Professional Development Hours

Please retain any or all of the following for your records: Registration Receipts, Agenda/syllabus, course plan, seminar brochure, and any narrative of the content or expected outcome of the education activity

UNIVERSITY OF MINNESOTA
Erosion and Sediment Control Program
Department of Bioproducts and Biosystems Engineering
1390 Eckles Avenue
St. Paul, MN 55108
612-625-9733 or 800-646-2282
http://www.erosion.umn.edu

2/11/2009

TOM TRI
BARR ENGINEERING
332 WEST SUPERIOR STREET
SUITE 600
DULUTH MN 55802

Your test score(s) for all Erosion and Sediment Control Certification workshops that you have attended to date are listed below. A score of 70% or above is required for certification.

If your score is lower, you have not received certification, However, you have the option of re-taking the exam at one of the remaining scheduled courses. Please contact our office at the address or phone above for instructions.

You will receive a wallet-sized certification card in June. Until then, this letter is your proof of certification for all courses.

If you have questions about this program, or if you have received this notice in error, please contact us at the above address or phone number.

UNIVERSITY OF MINNESOTA
Erosion/Sediment Control Certification Program

2/11/2009

TRI, TOM
BARR ENGINEERING
332 WEST SUPERIOR STREET
SUITE 600
DULUTH MN 55802

This letter expires June 30, 2009

	Event	Score	Date	Location	Certification Expires
Certified	Site Mgmt Recert	91%	Mar 23, 2006	Carlton	2009*
Certified	Design of SWPPP Rec	92%	Oct 25, 2007	Arden Hills	2011
Certified	Site Management Rec	92%	Feb 04, 2009	Baxter	2012

An asterisk (*) indicates this certification is about to expire - attend a class this year to continue the certification

Erosion/Sediment Control Inspector/Installer

For those who install or inspect the installation of erosion/sediment control devices and the establishment of vegetation.

Erosion/Sediment Control Site Management

For those who supervise, run, or direct grading work, culvert replacement work, and bridge construction work over rivers and streams.

Design of Stormwater Pollution Prevention Plans

For those who are involved with the design of stormwater pollution prevention plans.

BARR ENGINEERING COMPANY

CERTIFIES THAT

KIT GRAYSON

HAS SUCCESSFULLY COMPLETED

Construction Stormwater Inspector/Installer Training
January 20, 2012

Lead Course Instructor:

Dwayne Stenlund, CPESC
Minnesota Department of Transportation
with assistance from Jacob Thompson and Jennifer Flemming, Barr Engineering

BARR

Appendix E

SWPPP Inspection Forms

NPDES/SDS Construction Stormwater Inspection Report

Corrective Actions Needed *yes* ☐ *no* ☐

Project Name / Location			
	( ) - ext.	( ) - ext.	
Owner Name	Telephone	Fax	
	( ) - ext.	( ) - ext.	
Contractor Name	Telephone	Fax	
	( ) - ext.	( ) - ext.	
Inspector Name	Telephone	Fax	
	( ) - ext.	( ) - ext.	
/ /		☐ Weekly ☐ Monthly	
Inspection Date /Time	Weather Conditions	Type of Inspection	

1) **Erosion Control Practices During Construction**
check for corrective actions needed

a) Does the Pond have side slopes MISSING temporary protection or permanent cover *Separate basin checklist completed*? *yes* ☐ *no* ☐

b) Is the normal wetted perimeter of temporary or permanent (connected) ditch that drains water is stabilized within 24 hrs (200' back from surface water) *yes* ☐ *no* ☐

c) Are exposed, erodible soils w/ positive slopes MISSING stabilization BMPs *(installed in appropriate or functional manner)* ☐ Localized ☐ Widespread

d) Is there temporary or permanent energy dissipation (w/ 24 hour) MISSING at outlets connected to surface water *yes* ☐ *no* ☐

Description of Corrected Action Needed:

2) **Sediment Control Practices During Construction** *check for corrective actions needed*

a) Has there been a discharge of sediment? (additional upgradient controls required) If so, is it ☐ Localized ☐ Widespread

b) Are there MISSING temporary sedimentation basins (disturbance > 10 acres, or > 5 acres near special water areas) *yes* ☐ *no* ☐

c) Are the Inlet control BMPs NOT functional or missing? *yes* ☐ *no* ☐

d) Are there Perimeter controls MISSING downgradient prior to land disturbing activities *yes* ☐ *no* ☐

Description of Corrected Action Needed:

3) **Maintenance** *check for corrective actions needed*

a) Do erosion and sediment control BMPs need repair, replacement or enhancement? *yes* ☐ *no* ☐

b) Has temporary sedimentation basin maintenance been performed (collected sediment > ½ basin volume) *yes* ☐ *no* ☐

c) Are there sediment deposits in ditches or surface waters NOT removed, describe affected area or water ☐ Localized ☐ Widespread

d) Is there sediment tracking on paved surfaces at exits *yes* ☐ *no* ☐ Is it ? ☐ Localized ☐ Widespread

Description of Corrected Action Needed:

4) **Inspections** *check for corrective actions needed*

a) Stormwater Pollution Prevention Plan (SWPPP): SWPPP ON site ☐ SWPPP NOT on site ☐ SWPPP not reviewed at inspection ☐

Inspections/maintenance (1 per 7 days or 24 hours of .0.5 inch precip.) Is there MISSING data: date, name, findings, corrective actions, rainfall, changes to SWPPP ☐

Description of Corrected Action Needed:

5) **Stormwater Management** (site hydrology) 1 acre or more of new impervious surface added yes ☐ no ☐ *check for corrective actions needed*

a) Wet sedimentation basin ☐ Regional pond ☐ Infiltration/filtration ☐ Alternative method ☐

b) When required, pretreatment MISSING ☐ c1) Dewatering Activities c2) Turbid discharges to surface waters or causing erosion off site ☐

d) Project causing wetland impacts ☐ If yes: WCA permit required ☐ DNR permit required ☐

Description of Corrected Action Needed:

6) **Management Pollution Prevention** *check for corrective actions needed Are there:*

a) Is there Solid waste NOT disposed of properly ☐

b) Are there Hazardous materials NOT in secondary containment or/and NOT restricted access ☐

c) Undefined areas for construction vehicles external washing ☐

d) Undefined concrete washout areas on site and post a sign ☐

Corrected Action Needed:

7) **Record Observations for Future Documentation**

☐ Photographs of site ☐ Document where corrective action is needed ☐ Sample runoff taken

Appendix F

SWPPP Update Form

SWPPP Modification Log

Inspection Date	Corrective Action Identified	Corrective Action Taken	SWPPP Modified Date

Appendix G

Notice of Termination/Transfer Forms

Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, MN 55155-4194

Notice of Termination/ Permit Modification Form

NPDES Construction Stormwater Permit Program

Transfer or terminate your National Pollutant Discharge Elimination System (NPDES) Construction Stormwater Permit. Allowable changes are permit termination and permit transfer for all or a portion of the site. This form replaces the Notice of Termination (NOT), Permit Transfer, Permit Modification, and Subdivision Registration forms used under the former permit.

Instructions for this form are located on the Internet at http://www.pca.state.mn.us/publications/wq-strm2-60i.pdf.

Form will be invalid and returned to sender unless the checkbox associated with the applicable actions is checked and the corresponding signature is provided in section A-1, A-2, A-3, and or A-4.

Please submit to: **Construction Stormwater Permit Program**
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Existing Permit Identification

a. Current permit ID: C000 _ _ _ _ _ or SUB00 _ _ _ _ _

b. Project name: _____

Project location: _____

_____

Briefly describe where the construction activity occurs (for example: Intersection of 45th St. and Irving Ave.). Include address if available.

Select Option 1, 2, or 3

1. Notice of Termination (NOT) for entire site by existing owner

Select this option when a project has achieved final stabilization with existing owner / contractor and no part of the site is being transferred to a new owner and all construction activity is complete.

c. ☐ Notice of Termination for entire existing permitted site or a subdivided site. (Current owner and contractor must sign under the "Current" Owner and "Current" Contractor sections respectively).

Check above box and sign section A-1 and A-2 on page 2.

2. Transfer of entire site to new owner or contractor (Transfer/Modification)

Select this option if the ***entire*** site (represented by the ID above) has either a new owner and/or new general contractor. Check all the boxes below that apply.

d ☐ New Owner for entire existing permitted site.
e. ☒ New Contractor for entire existing permitted site.
f. ☐ Current Owner for entire existing permitted site.
g. ☐ Current Contractor for entire existing permitted site.

Check above box(es) and sign section A-3 and A-4 page 3 and or check above box(es) and sign section A-1 and A-2 page 2
Both "Current" and "New" Parties must sign this form (preferred), however, separate forms are acceptable.

3. Transfer of a portion of a site to a new owner or contractor (Subdivision)

Select this option if *a **portion*** of a site (permitted under the ID above) has either a new owner and/or new general contractor. Check the boxes below that apply.

h. Describe the portion of the site being transferred: Lot _____ Block _____

Project location/address: _____

City, State, and Zip: _____

Example: SW quadrant of 45th Street and Irving Avenue or Lots 1-17 of block 20. Include list of addresses if available or include a map

i. ☐ New Owner for portion of existing site.
j. ☐ New Contractor for portion of existing site.
k. ☐ Current Owner of the portion to be transferred.
l. ☐ Current Contractor of the portion to be transferred.

Check above box(es) and sign section A-3 and A-4 page 3 and or check above box(es) and sign section A-1 and A-2 page 2
Both "Current" and "New" Parties must sign this form (preferred), however, separate forms are acceptable.

Current Owner Authorized Signature (A-1)

Business/Firm name: _____

Last name: _____ First name: _____ Title: _____

E-mail address: _____ Telephone: (___) _____ Ext. _____

Mailing address: _____

City: _____ State: _____ Zip code: _____

Alternate contact:

Last name: _____ First name: _____ Title: _____

E-mail address: _____ Telephone: (___) _____ Ext. _____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or the persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify under penalty of law that I have read, understood, and accepted all terms and conditions of the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) General Stormwater Permit Construction Activity (MN R100001) that authorizes stormwater discharges associated with the construction site identified on this form.

Authorized signature: _____ Date: _____

This Application must be signed by: ***Corporation:*** *a principal executive officer of at least the level of vice-president or the duly authorized representative or agent of the executive officer if the representative or agent is responsible for the overall operation of the facility that is the subject of the permit application.* ***Partnership or Sole Proprietorship****: a general partner or the proprietor.* ***Municipality, State, Federal or Other Public Agency:*** *principal executive officer or ranking elected official.*

Current Contractor Authorized Signature (A-2)

Business/Firm name: _____

Last name: _____ First name: _____ Title: _____

E-mail address: _____ Telephone: (___) _____ Ext. _____

Mailing address: _____

City: _____ State: _____ Zip code: _____

Alternate contact:

Last name: _____ First name: _____ Title: _____

E-mail address: _____ Telephone: (___) _____ Ext. _____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or the persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify under penalty of law that I have read, understood, and accepted all terms and conditions of the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) General Stormwater Permit Construction Activity (MN R100001) that authorizes stormwater discharges associated with the construction site identified on this form.

Authorized signature: _____ Date: _____

This Application must be signed by: ***Corporation:*** *a principal executive officer of at least the level of vice-president or the duly authorized representative or agent of the executive officer if the representative or agent is responsible for the overall operation of the facility that is the subject of the permit application.* ***Partnership or Sole Proprietorship****: a general partner or the proprietor.* ***Municipality, State, Federal or Other Public Agency:*** *principal executive officer or ranking elected official.*

"New" Owner Authorized Signature (A-3)

Business/Firm name: _____

Last name: _____ First name: _____ Title: _____

E-mail address: _____ Telephone: ( ) _____ Ext. _____

Mailing address: _____

City: _____ State: _____ Zip code: _____

Alternate contact:

Last name: _____ First name: _____ Title: _____

E-mail address: _____ Telephone: ( ) _____ Ext. _____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or the persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify under penalty of law that I have read, understood, and accepted all terms and conditions of the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) General Stormwater Permit Construction Activity (MN R100001) that authorizes stormwater discharges associated with the construction site identified on this form.

Authorized signature: _____ Date: _____

This Application must be signed by: ***Corporation:*** *a principal executive officer of at least the level of vice-president or the duly authorized representative or agent of the executive officer if the representative or agent is responsible for the overall operation of the facility that is the subject of the permit application.* ***Partnership or Sole Proprietorship****: a general partner or the proprietor.* ***Municipality, State, Federal or Other Public Agency:*** *principal executive officer or ranking elected official.*

"New" Contractor Authorized Signature (A-4)

Business/Firm name: _____

Last name: _____ First name: _____ Title: _____

E-mail address: _____ Telephone: ( ) _____ Ext. _____

Mailing address: _____

City: _____ State: _____ Zip code: _____

Alternate contact:

Last name: _____ First name: _____ Title: _____

E-mail address: _____ Telephone: ( ) _____ Ext. _____

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or the persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I also certify under penalty of law that I have read, understood, and accepted all terms and conditions of the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) General Stormwater Permit Construction Activity (MN R100001) that authorizes stormwater discharges associated with the construction site identified on this form.

Authorized signature: _____ Date: _____

This Application must be signed by: ***Corporation:*** *a principal executive officer of at least the level of vice-president or the duly authorized representative or agent of the executive officer if the representative or agent is responsible for the overall operation of the facility that is the subject of the permit application.* ***Partnership or Sole Proprietorship****: a general partner or the proprietor.* ***Municipality, State, Federal or Other Public Agency:*** *principal executive officer or ranking elected official.*

If you have questions about the administrative details of the permit process go to: http://www.pca.state.mn.us/publications/wq-strm2-60i.pdf or call the Minnesota Pollution Control Agency at **651-296-6300 or 800-657-3864** and ask for *"Construction Stormwater."* If you have technical questions, ask for the *"Stormwater Policy and Technical Assistance Unit."*

APPENDIX D

Minnesota Pollution Control Agency

4/9/2013

Cindy Voigt
City of Duluth
411 West First Street Room 211
Duluth, MN 55802

RE: NPDES/SDS General Stormwater Permit for Construction Activity (MNR100001) Application
Permit ID Number: C00035445
Project Name: Duluth Traverse Mountain Bike Trail CSW

Dear Cindy Voigt:

The Duluth Traverse Mountain Bike Trail CSW project has been granted coverage by the Minnesota Pollution Control Agency (MPCA) under the National Pollutant Discharge Elimination System (NPDES)/State Disposal System (SDS) Stormwater Permit (Permit) for Construction Activity. Permit coverage is effective for this project on Wednesday, April 10, 2013.

You are required to comply with the terms of the Permit to prevent erosion and control sediment from your site with the procedures established in your Stormwater Pollution Prevention Plan (SWPPP). You are also required to upgrade your SWPPP and erosion prevention and sediment control Best Management Practices (BMPs) as site and weather conditions dictate throughout the entire term of the project.

Once all construction activity has been completed at this project, you must submit a Notice of Termination (NOT) form to the MPCA within 30 days of meeting the conditions outlined in Part II (C) of the permit. Please check the MPCA website (http://www.pca.state.mn.us/water/stormwater) or call to request an NOT form and fact sheet.

Please save this letter for your records. If you have any questions about permit coverage for this project, please contact the Construction Stormwater Program at 651-757-2119 or toll free at 800-657-3804.

Minnesota Pollution Control Agency

520 Lafayette Road North
Saint Paul, MN 55155

Construction Stormwater Permit Application

Project: Duluth Traverse Mountain Bike Trail

1. Stormwater Pollution Prevention Plan (SWPPP)

☑ a. A Stormwater Pollution Prevention Plan been developed for this project and incorporated into the project's plans and specifications as required in the General Stormwater Permit [Part III.A]

☑ b. If an environmental review was required for this project or any part of a common plan of development or sale that includes this project, said review has been completed and all Stormwater related mitigation measures contained in the review have been incorporated into the SWPPP [Part III.A.6]

2. Discharges to Special or Impaired Waters

☑ a. Any portions of the project having a discharge point within one mile of a special water or a water that is impaired for sediment, or a sediment related parameter of the permit are included in the SWPP [Appendix A, Part A-C]

☑ b. Any portions of the project discharging to a Calcareous fen have an approval letter from the DNR [Part III.A.8]

Applicant's Role in the Project

☑ Owner of Project or Site (company)
☐ Operator/General Contractor
☐ 3rd Party Agent on behalf of Permittee

Owner Permittee

Business Name:	City of Duluth
Business Type:	Local Government
Name:	Voigt Cindy , City Engineer
E-mail Address:	cvoigt@duluthmn.gov
Telephone:	218.730.5200
Mailing Address:	411 West First Street Room 211
City State Zip:	Duluth MN 55802

Owner Construction Site Contact

Name:	Voigt Cindy , City Engineer
E-mail Address:	cvoigt@duluthmn.gov
Telephone:	218.730.5200

Contractor Permittee

Business Name:	City of Duluth
Business Type:	Local Government
Name:	Cindy Voigt , City Engineer
E-mail Address:	cvoigt@duluthmn.gov
Telephone:	218.730.5200
Mailing Address:	411 West First Street Room 211
City State Zip:	Duluth MN 55802

Contractor Construction Site Contact

Name:	Cindy Voigt , City Engineer
E-mail Address:	cvoigt@duluthmn.gov
Telephone:	218.730.5200

3rd Party Applicant - NOT APPLICABLE

Minnesota Pollution Control Agency
520 Lafayette Road North
Saint Paul, MN 55155

Construction Stormwater Permit Application

Project Information

Project Type:	Other
Project Name:	Duluth Traverse Mountain Bike Trail
Project Location:	from Lester Park to Mission Creek in the City of Duluth
Street Address:	
City State Zip:	Duluth MN 55802
County Parcel ID:	
Project Size:	35.5 acres
Existing Impervious:	0 acres
Resulting Impervious:	10.25 acres
Start Date:	6/1/2013
Est. Complete Date:	11/3/2013
Mgmt. Method:	Exempt/Not Feasible

Project Location - Counties, Cities, Townships

County:	St. Louis
City:	Duluth

Project Location - Geographic Coordinate Measurement

Latitude:	46.760833
Longitude:	-92.151111

Waterbodies

Description	Name	Special Water	Impaired Water
Wetland	wetlands	N	N
Stream	Lester River	Y	N
Stream	Sargent Creek	Y	N
Stream	Mission Creek	Y	N

Permit Identification and Payment Information

Transaction ID:	65865368
Amount:	$400.00
Permit ID:	C00035445
Payment Confirmation:	MNPPCA000013179

Minnesota Pollution Control Agency

Coverage Card

Construction Stormwater
National Pollutant Discharge Elimination System/State Disposal System General Permit MNR100001

The Construction site identified below is covered under the National Pollutant Discharge Elimination System/State Disposal System General Permit MNR100001 and is authorized by the Minnesota Pollution Control Agency (MPCA) to discharge stormwater associated with construction activities.

Permit ID Number: C00035445
Owner: City of Duluth
General Contractor: City of Duluth
Project Name: Duluth Traverse Mountain Bike Trail CSW

Permit Coverage Date: 4/10/2013

If you have questions regarding the stormwater program for construction activity, please access the MPCA Stormwater website at http:www.pca.state.mn.us/stormwater, or call the Construction Stormwater Program at 651-757-2119 or toll free at 800-657-3804.