

Permit Number

2019-2124
Amended

Public Waters Work Permit

Expiration Date: 08/27/2024

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

Project Name: Knife River Reach 4	County: Lake	Watershed: Lake Superior - South	Resource: Stream/River: Knife River (S-017); Stream/River: Unnamed Stream (S-017-007.1)
Purpose of Permit: Waterward Navigation Channel Excavation, Stream Barbs/Vanes/J Hooks, Erosion/Flood Prevention, Erosion Control/Stabilization Fill & Grading, Channelization/Realignment		Authorized Action: Restoration of the upper reach only (station 10+00 through station 32+00) of a planned approximately 6800 linear foot project to a stable dimension, pattern and profile using natural channel design methodology consisting of the excavation and filling of material to realign sections of river, remove woody and cobble debris, create riffles and pools, place rock grade-control structures, construct toe-wood bank stabilization areas, and create floodplain areas. All work shall be done according to the plans submitted with the permit application and any necessary onsite field corrections determined by DNR field staff during construction, and in compliance with the conditions of this permit. This permit only authorizes construction of the upper reach from station 10+00 through station 32+00. Authorization for construction of the remainder of the project must be requested by amendment to this permit following further coordination with DNR.	
Permittees (2): LAKE COUNTY LAND DEPT CONTACT: EIDE, NATE, (218) 834-8340 601 3RD AVE TWO HARBORS, MN 55616 (218) 834-8346 MN DNR CONTACT: TILLMA, JEFF, (218) 328-8834 1201 EAST HIGHWAY 2 GRAND RAPIDS, MN 55744 (218) 327-4452		Authorized Agent: CRAIG WILSON 3825 GRAND AVENUE DULUTH, MN 55816-0034 (218) 349-5906 cwilson@etsmn.com	
Property Description (land owned or leased or where work will be conducted):			

UTM zone 15N, 593491m east, 5213038m north,
 SWNW of Section 20, T53N, R11W,
 UTM zone 15N, 593492m east, 5213034m north,
 SWNW of Section 20, T53N, R11W,
 UTM zone 15N, 593666m east, 5212599m north (centroid),
 SWNW of Section 20, T53N, R11W,
 SENW of Section 20, T53N, R11W,
 NESW of Section 20, T53N, R11W,
 NWSW of Section 20, T53N, R11W,
 NWSE of Section 20, T53N, R11W,
 SWSE of Section 20, T53N, R11W,
 UTM zone 15N, 593672m east, 5212591m north (centroid),
 SWNW of Section 20, T53N, R11W,
 SENW of Section 20, T53N, R11W,
 NESW of Section 20, T53N, R11W,
 NWSW of Section 20, T53N, R11W,
 NWSE of Section 20, T53N, R11W,
 SWSE of Section 20, T53N, R11W,
 UTM zone 15N, 593670m east, 5212593m north (centroid),
 SWNW of Section 20, T53N, R11W,
 SENW of Section 20, T53N, R11W,
 NESW of Section 20, T53N, R11W,
 NWSW of Section 20, T53N, R11W,
 NWSE of Section 20, T53N, R11W,
 SWSE of Section 20, T53N, R11W

Issued Date: 08/27/2019		Effective Date: 08/27/2019		Expiration Date: 08/27/2024	
Authorized Issuer: Cliff Bentley		Title: Area Hydrologist		Email Address: cliff.bentley@state.mn.us	
				Phone Number: 218-834-1441	

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

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

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

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

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

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

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

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

PERMISSIVE ONLY / NO LIABILITY: This permit is permissive only. No liability shall be imposed by the State of

CONDITIONS (Continued from previous page)

Minnesota or any of its officers, agents or employees, officially or personally, on account of the granting hereof or on account of any damage to any person or property resulting from any act or omission of the permittee or any of its agents, employees, or contractors. This permit shall not be construed as estopping or limiting any legal claims or right of action of any person other than the state against the permittee, its agents, employees, or contractors, for any damage or injury resulting from any such act or omission, or as estopping or limiting any legal claim or right of action of the state against the permittee, its agents, employees, or contractors for violation of or failure to comply with the permit or applicable conditions.

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

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

CONTRACTOR RESPONSIBILITY: The permittee shall ensure the contractor has received and thoroughly understands all conditions of this permit. Contractors must obtain a signed statement from the property owner stating that permits required for work have been obtained or that a permit is not required, and mail a copy of the statement to the regional DNR Enforcement office where the proposed work is located. The Landowner Statement and Contractor Responsibility Form can be found at: https://bwsr.state.mn.us/sites/default/files/2019-01/Wetland_WCA_Contractor_Responsibility_Form.doc

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

CONSTRUCTION DEWATERING - GENERAL: All construction dewatering in excess of 10,000 gallons per day or one million gallons per year must be authorized by a separate water appropriation permit. All worksite discharge water must be treated for sediment reduction prior to return to the surface water. Water from designated infested waters shall not be diverted to other waters, transported on a public road, or transported or appropriated off property riparian to infested waters without a DNR permit specifically for this use. All equipment in contact with infested waters must be decontaminated upon leaving the site.

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

FISHERY PROTECTION - EXCLUSION DATES: No activity affecting the bed of the protected water may be conducted between April 1 and June 30, to minimize impacts on fish spawning and migration. If work during this time is essential, it shall be done only upon written approval of the Area Fisheries Manager. See contact list at: http://files.dnr.state.mn.us/fisheries/management/dnr_fisheries_managers.pdf. Should work begin elsewhere in the project area within these dates, all exposed soils that are within 200 feet of Public Waters and drain to those waters must complete erosion control measures within 24 hours of its disturbance to prevent sediment from entering Public Waters.

MAINTENANCE: Maintenance of this project to originally authorized conditions may be authorized by amendment to this permit.

REACH & STATION SPECIFIC CONDITIONS FOR PHASE I PERMIT AUTHORIZATION: Reach 10+00 to 12+00 These areas are relatively stable banks- no clearing/disturbance of riparian corridor on right bank- extent of change proposed here

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is not worth the disturbance it would cause, except in very limited areas where needed to key in structures. Any increase needed in floodplain/channel capacity should be limited to left bank. At cross section 11+51 Eliminate disturbance right bank; eliminate disturbance/grading from 65 to 80 ft- there is not much floodplain capacity gained here for amount of riparian disturbance. Reach 13+00 to 16+00 - Pool/eroding bank Reduce bank disturbance/grading at very beginning of pool (upstream of j-hook structure on north side (approx. 13+10 to 13+40). Minimize amount and extent of point bar disturbance/lowering to within the Bankfull Area only. Plans show large extent of grading without much gain in floodplain capacity. Don't fill the inside bend cutoff channel as this provides additional floodplain storage. Consider constructing grade control at the thalweg elevation at a few places within the channel to prevent channel from capturing more flow if concerned about project integrity. Station 15+30 According to long profile, this is within the middle of a riffle. Reconsider use of toewood within this area, since it is not likely to provide much habitat, as most of the wood will be out of the water, and will rot within a short timeframe. Station 16+17 This cross-section shows proposed increase in grade elevation on right bank where cedars should not be disturbed. There should be no change proposed on this bank outside of Bankfull elevation. Grading/disturbance on Left bank should end at 55 ft on cross-section. Additional gains in floodplain beyond this is not warranted for level of disturbance. Reach 18+50 to 21+50 - Channel relocation Narrative indicates the bends are being kept tight to replicate reference conditions, but neither of the reference reaches have tight bends. If radius of curvature values were included in the geomorphic assessment, this should be included in the permit application. Any relocation must match actual reference conditions. Station 19+06 There is no justification for grading on left bank beyond what is needed for channel construction (referring to area from 0- 25). It is not contributing to bankfull capacity, so leave as is with vegetative root structures in place. There is more than adequate floodplain capacity on the other side in this reach. Also no grading on right bank beyond 80 on cross-section (approximately 25 feet from bankfull), as it does not contribute significantly to increase floodplain connectivity. Station 22+97 Reduce disturbance on left bank- gaining no bankfull capacity, and very limited floodplain capacity in an area with quite a bit of flood capacity already. Left bank disturbance should be limited to 10 ft or less. Plans show that log rollers and cross vanes will be used to raise the stream bed elevation, grading should be minimal in this area. Station 24+94 Floodplain wetland feature between 100 and 120 should not be filled- this is storage capacity for base flow. Consider a compound pool at this meander, since the existing profile suggests this and it may lead to deeper habitat vs large radius bend which will be difficult to maintain depth. Please label and delineate the Fisheries easement on this sheet. Station 26+14 Placement of this cross section indicates that it should be a pool bend- which is what the existing shows. Trying to convert to a riffle is inappropriate at this location. Recommending shifting riffle/grade control structure downstream so it is not in the middle of compound pool bend. Floodplain wetland on right bank should be left as is- change to no filling (50 ft to 70 ft) and no disturbance. Station 28+98 With raising of stream bed, grading on either side will not provide much additional capacity, please leave undisturbed. Do not grade in this location. Station 31+00 Grading on right bank beyond 125 should be eliminated, to try to maintain whatever tree cover/bank root structure possible. There is more than adequate floodplain capacity on opposite side of channel. Fill within floodplain wetland/remnant channel should be eliminated as well to maintain wetland/floodplain storage/baseflow.

RIGHT TO REVIEW: The Minnesota Department of Natural Resources Division of Ecological and Water Resources reserves the right to review this permit as additional hydrologic data becomes available and to issue any further order as may become necessary to protect the public interest.

cc: Anna Hess, EWR District Manager
Neva Maxwell, SWCD, Lake County SWCD