

ENVIRONMENTAL ASSESSMENT WORKSHEET

This Environmental Assessment Worksheet (EAW) form and EAW Guidelines are available at the Environmental Quality Board's website at:

<http://www.eqb.state.mn.us/EnvRevGuidanceDocuments.htm>. The EAW form provides information about a project that may have the potential for significant environmental effects. The EAW Guidelines provide additional detail and resources for completing the EAW form.

Cumulative potential effects can either be addressed under each applicable EAW Item, or can be addresses collectively under EAW Item 19.

Note to reviewers: Comments must be submitted to the RGU during the 30-day comment period following notice of the EAW in the *EQB Monitor*. Comments should address the accuracy and completeness of information, potential impacts that warrant further investigation and the need for an EIS.

1. **Project title:** Steelton Hill Double Track, St. Louis County and City of Duluth

2. **Proposer:** Wisconsin Central Ltd.

Contact person: Justin Trush

Title: Field Engineer

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3. **RGU (City of Duluth)**

Contact person: Charles Froseth

Title: Land Use Supervisor

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4. **Reason for EAW Preparation:** (check one)

Required:

☐ EIS Scoping

☒ Mandatory EAW

Discretionary:

☐ Citizen petition

☐ RGU discretion

☐ Proposer initiated

If EAW or EIS is mandatory give EQB rule category subpart number(s) and name(s):

MN Administrative Rules 4410.4300, Subpart 26. Stream diversion. The project will involve impacts to/channelization of a portion of two designated trout streams. This has been discussed with the Minnesota Department of Natural Resources (MnDNR) and they have indicated these two areas are classified as "high value resources". As such, this EAW focuses on these two areas. Other elements of the project will be presented in less detail.

5. Project Location:

County: St. Louis County

City/Township: Portions of City of Duluth and Midway Township

PLS Location (¼, ¼, Section, Township, Range): Portions of Sections 3, 4, & 5, T48N R15W and portions of Sections 29, 30, 32, 33, 34 T49N R15W

Watershed (81 major watershed scale): St. Louis River

GPS Coordinates: Northwest extent: 46.703950°N -92.292178°W; southeast extent: 46.675970°N -92.219992°W

Tax Parcel Number: 010-2730-00300, 010-3540-03440, 010-2746-01470, 010-2746-01430, 010-2746-01420, 010-2730-00240, 010-2730-00340, 010-2730-00343, 010-2730-00360, 010-2730-00365, 010-2730-00570, 010-2730-00410, 010-2730-00440, 010-2730-00450, 450-0010-05200, 450-0010-05270, 450-0010-04725

At a minimum attach each of the following to the EAW:

- County map showing the general location of the project;
- U.S. Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries (photocopy acceptable); and
- Site plans showing all significant project and natural features. Pre-construction site plan and post-construction site plan.

Site location maps (Figures 1, 2 and 3) and project plans depicting existing and proposed conditions in the locations of the two high value resource streams are enclosed.

6. Project Description:

- a. Provide the brief project summary to be published in the *EQB Monitor*, (approximately 50 words).

The project consists of the construction of a second mainline railroad track adjacent to the existing mainline track on Steelton Hill. A portion of the mainline railroad track will be re-aligned to improve both the horizontal and vertical track alignment. The project will cross several streams and wetlands including two streams of high resource value as determined by the MnDNR. A Joint Permit Application has been submitted to and is currently being reviewed by the USACE, MnDNR and the City of Duluth as the LGU under the Minnesota Wetland Conservation Act.

- b. Give a complete description of the proposed project and related new construction, including infrastructure needs. If the project is an expansion include a description of the existing facility. Emphasize: 1) construction, operation methods and features that will cause physical manipulation of the environment or will produce wastes, 2) modifications to existing equipment or industrial processes, 3) significant demolition, removal or remodeling of existing structures, and 4) timing and duration of construction activities.

It is noted that the following description and much of the information used to complete this EAW was presented in a Joint Permit Application (JPA) submitted to and currently being reviewed by the US Army Corps of Engineers (USACE), MnDNR and City of Duluth as the Local Government Unit (LGU) under the Minnesota Wetland Conservation

Act (WCA). Details regarding impacts to natural resources such as streams, wetlands and streams were include in the JPA submittal.

The project consists of the construction of a second mainline railroad track adjacent to the existing mainline track and realignment of a portion of the mainline railroad track to improve both the horizontal and vertical track alignment to add train capacity and increase train speed on Steelton Hill. The project limits commence at North Steelton Yard (Railroad Milepost [MP] 467.50) and terminate at a point southeast of Interstate Highway I-35 (Railroad MP 472.20). Along this 4.7 mile piece of railroad track, there are a total of 10 horizontal curves. All track construction shall be designed to meet current FRA design and safety requirements.

The new tracks will be constructed on an embankment of compacted fill. The majority of the fill will consist of clean material obtained from a commercial source, while some of the fill may be obtained from portions of the existing embankment in the areas where the existing tracks are being realigned.

The existing railroad bridge located just north of 108th Avenue will no longer be required as the existing railroad track will be realigned to the new alignment. As a result, this existing railroad bridge shall be removed. The existing superstructure will be removed and the bridge piers will also be removed to the existing ground elevation. During the removal of the existing bridge, netting will be installed below the bridge to catch demolition debris and ballast that may drop from the bridge.

The proposed project will involve the crossing of watercourses in 14 locations. Two of these locations (i.e., Structures 471.55 and 470.31) have been identified as high resource value by the MnDNR. These two locations as well as the locations of other watercourses and wetland on the Site are depicted on Figure 3.

Each watercourse crossing has been evaluated for integrity of the existing culvert structure(s) and hydraulic characteristics associated with base flows and storm events up to the 500-year event. Replacement culverts and new culverts and watercourse crossings have been designed to maintain or improve the hydraulic characteristics and habitat value of the watercourse in accordance with the most recent guidance from the MnDNR (i.e., MnDNR "Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-0001", i.e., Best Practices Manual). Details for the vicinity of each of the high value resource crossings are depicted on the enclosed design plans.

Although there may not currently be effective fish passage at the existing culvert locations, fish passage will be provided at each of the two high value resources as well as other locations in which fish passage may be required by the MnDNR.

The general procedure for culvert replacements will include installing the new culvert in a location as close as feasible to the existing culvert using directional boring techniques to install the culvert through the existing railroad embankment. The directionally bored culvert will then be connected to the new culvert section that will be installed through the new embankment by preparing the bed in the desired location, laying down the appropriately sized culvert, and backfilling with engineered fill. Once the new culvert is

installed and the end sections stabilized, the existing culvert will be plugged at the downstream limits and abandoned in place by grouting the entire length of the culvert. Protruding end sections and/or culvert headwalls from the abandoned culverts will be removed. At this time, there are no more specific details for culvert installation or abandonment, as the final means and methods may vary depending on contractor selection. However, it is understood that all work associated with culvert installation and restoration of temporarily disturbed areas associated within the stream bed, banks, and any associated wetlands will be performed in accordance with the requirements of permits issued by the USACE, MnDNR and City of Duluth.

Silt fence will be properly placed to avoid loss of sediment into the watercourses or adjacent wetlands during construction. In-stream booms or silt curtains will be utilized, where appropriate, to limit sediment dispersal in the vicinity of the project area and avoid downstream impacts due to siltation. Appropriate soil erosion and sedimentation controls will be implemented in accordance with a Stormwater Pollution Prevention Plan (SWPPP) prepared for the project. A draft copy of the SWPPP was included with the JPA.

There will be a new railroad bridge constructed over 108th Avenue, which crosses U.S. Steel Creek with an existing culvert underneath 108th Avenue. Final design of the bridge has yet to be determined. However, the base elevation of the new bridge deck will be approximately 30 feet higher than the 100-year flood elevation and the new bridge will not result in the increased flood stage of U.S. Steel Creek.

There will also be two new railroad bridges constructed over Commonwealth Avenue. Currently there is an existing single span railroad structure over Commonwealth Avenue. To facilitate construction and minimize the amount of time the existing railroad track needs to be taken out of service during construction, rather than build a single structure able to accommodate two railroad tracks, two single track structures will be constructed. One structure will be located north of the existing structure, while the other will be located south of the existing structure. Once constructed, the existing bridge will be removed. The new bridge will accommodate the latest Minnesota DOT (MnDOT) clearance requirements.

In addition to the proposed railroad structures, there will also be two new recreation trail bridges. The Munger Trail currently crosses over the WCL railroad on a single span structure. In the area where the Munger Trail crosses the railroad, the existing mainline track will be realigned further to the west. As a result, a new 125 foot span structure will be required to convey the trail over the railroad and a portion of the existing trail must be realigned as well. The existing Munger Trail Bridge will remain in its current location and will not be removed. The proposed structure will provide a minimum of 23 foot vertical clearance between the railroad and the low bridge chord.

The second trail bridge to be constructed is the Mission Creek Trail bridge. Currently, the Mission Creek Trail crosses over the WCL railroad on a single span structure. At the location of the Mission Creek Trail, a second railroad track is proposed to be constructed adjacent to the existing track. The second track will run through the location of the existing bridge abutment. As a result, the existing Mission Creek Trail bridge will be

removed, and a new, longer structure will be constructed. The new structure will be a single span structure that provides 23 foot minimum vertical clearance between the railroad and the low bridge chord.

Beck Road currently passes over the WCL railroad on a three span structure with the existing railroad track passing through the middle span. At this location, a second mainline track will be constructed adjacent to the existing mainline track. The new track will be built to the west of the existing mainline track and will also pass through the middle span. As a result, pier protection will be added to the existing highway bridge piers. It is anticipated that the pier protection to be added will be integrated with the existing piers.

Portions of the existing railroad embankment in realignment areas will be partially removed and used as fill for the new tracks. The embankment will be removed by first removing the existing tracks, wood ties and other track material including plates and spikes. These items will be transported off the Site to be salvaged or properly disposed of. Once the tracks material has been removed, ballast, sub-ballast, and items of debris will be removed from the top and sides of the embankment and transported off the Site for proper disposal. The underlying embankment material will then be removed and transported to other portions of the Site to be used as fill for the new tracks. The embankment will be removed to an elevation that does not affect or change the existing drainage characteristics. The remaining, exposed embankment will be covered with topsoil and re-vegetated.

The project will require filling and grading in some stream, wetland and floodplain areas. Wetland impacts will generally include excavation and filling. Topsoil and subsoil that is not suitable for use as engineered fill in the new embankment will be removed (excavated). The wetland areas will then be built up to desired grades with imported fill. Soil removed from wetlands that cannot be used as engineered fill may be used as topsoil for exposed areas along slopes or on other disturbed areas on the Site. Soil that cannot be used for topsoil will be placed in uplands, covered with topsoil, seeded and/or otherwise stabilized in accordance with the Storm Water Pollution Prevention Plan (SWPPP). The specific locations in which excess soil from the wetlands will be placed cannot be determined at this time. However, it is understood that no soil or other materials will be placed in wetlands, streams, floodplains or other regulated areas without proper authorization from the appropriate regulatory agency(ies).

If required, temporary access drives may be installed across wetland areas. Any such crossing will be constructed in accordance with guidance provided in the MnDNR Best Practices Manual or Minnesota Erosion Control Association document "Temporary Stream, Wetland and Soft Soil Crossings". Areas of temporarily impacted wetlands will be restored by removing the crossing structures, restoring the ground surface to previously existing contours and seeding with a native wetland seed mixture approved by the Minnesota Board of Soil and Water Resources.

Work will be performed in accordance with typical construction practices for similar projects. The following is a reasonable approximation of the overall construction sequence and methods that will be used based on prior experience with similar work.

The sequence and methods are subject to change based on the contractor's equipment and means and potential limitations due to weather. Substantive changes to the following will be discussed with representatives of the MnDNR, USACE and City of Duluth prior to implementation.

- Designate/stake work areas and install SESC measures and implement BMPs in accordance with the SWPPP
- Cut trees and clear vegetation in work areas. Debris from tree and shrub clearing will be transported off Site for disposal and will not be placed in the adjacent wetlands.
- Establish designated materials and equipment staging areas on the Site. Staging areas will be located in uplands with appropriate measures installed and implemented to ensure there is no erosion or deposition of materials into surface waters or wetlands.
- Strip topsoil and unsuitable subsoil as needed and stage on Site pending re-use in final Site stabilization (i.e., topsoil placement and seeding).
- Install culverts and watercourse crossings as needed and within the window of opportunity based on any limitation due to fish spawning (trout streams).
- Import engineered fill and build up areas to proposed grades.
- Construct bridges and overpass structures.
- Place required surface covering over filled areas (e.g., sand base, geotextile, gravel, railroad ballast, etc.).
- Restore areas along slopes and construction limits in areas where construction is complete. Includes restoration of temporary stream and wetland impacts.
- Remove silt fence and other temporary SESC measures when exposed soils are stabilized by vegetation.

The following is a summary of some general work practices and procedures that will be performed by the contractor during construction:

- Before work begins, wetland, stream and floodplain areas in the vicinity of proposed construction will be defined with high visibility flagging and/or fencing.
- Appropriate SESC measures and BMPs will be implemented and periodic inspections and maintenance will be performed throughout the project in accordance with the SWPPP.
- Contractors will be informed of and avoid wetland, stream, and FP locations except in permitted work areas or areas in which temporary impacts are necessary to facilitate access. In such events, the contractor shall discuss the need for access and obtain approval from WCL or other designated authority before establish the temporary crossing.

- Construction will be performed in accordance with standard construction practices. Heavy equipment such as cranes, excavators, trucks, bulldozers and compactors will be utilized. Construction equipment will operate within the proposed/permitted impact areas and adjacent uplands except for limited circumstances in which temporary stream or wetland crossings are required. In such events, the contractor shall discuss the need for access and obtain approval from WCL or other designated authority(ies) before establishing the temporary crossings.
- The new embankment will be compacted in horizontal lifts. Side slopes will be "stepped" and keyed into the topsoil layer. Due to steep conditions, there will be no tracking or use of heavy equipment along the base of the side slopes except as needed to maintain soil erosion and sedimentation control measures or shore up/stabilize soil in critical areas.
- Designated equipment and material staging areas will be established along the project Site in uplands. Equipment and material staging areas and internal haul roads may move as the project progresses and temporary staging of lesser quantities of construction materials may occur in work areas closer to (but not within) streams or wetlands, except when permitted to do so. Appropriate precautions will be taken to avoid loss of material into nearby wetlands or surface waters.
- Throughout the project, BMPs will be implemented and maintained in accordance with the SWPPP and no soil, equipment or construction materials will be staged or placed in regulated stream, wetland or FP areas without approval from the appropriate regulatory agencies (MnDNR, USACE, City of Duluth, etc.)

In summary, construction will be performed using standard construction practices for similar work. Equipment and material staging areas and haul roads will be located within existing uplands on the Site and may move as the project progresses. Appropriate SESC measures and BMPs will be implemented throughout the project. When construction and restoration activities are complete and exposed soils stabilized by vegetation, silt fencing and other temporary erosion controls will be removed. Throughout the project, no soil, equipment or construction materials or debris will be staged or placed in regulated areas without appropriate approval.

At this time, it is assumed that work in designated trout streams or protected tributaries thereto as determined by the MnDNR will be restricted from September 15 to April 30 for brook trout spawning (i.e., there will be no work allowed in these streams except from May 1 to September 14). This work limitation may be waived by the MnDNR if it is determined that one or more of the streams is not a critical trout stream. A final determination of work limitations in various watercourses will be determined by the MnDNR upon review of Site conditions.

c. Project magnitude:

Total Project Acreage	46 acres (see note)
Linear project length	Approx. 4.89 miles
Number and type of residential units	1
Commercial building area (in square feet)	NA
Industrial building area (in square feet)	NA
Institutional building area (in square feet)	NA
Other uses – specify (in square feet)	NA
Structure height(s)	NA

Note: The project will take place along approximately 4.89 miles of an existing railroad corridor in an area covering approximately 75 acres (i.e., the Site). Earth moving and grading operations will be limited to approximately 46 acres of the overall Site limits.

d. Explain the project purpose; if the project will be carried out by a governmental unit, explain the need for the project and identify its beneficiaries.

The project purpose is to improve both the horizontal and vertical track alignment to add train capacity and increase train speed on Steelton Hill. The track profile on Steelton Hill climbs steadily from North Steelton Yard to Nopeming Junction with existing grades ranging from 1.50 percent to 1.90 percent. Typically a railroad mainline track has a vertical grade of less than 1.00 percent. Taking into account the horizontal grades on the track profile, the compensated grade for the Steelton Hill is greater than 2.00 percent. This relatively steep grade leads to an increase in fuel consumption and decrease in train speed and efficiency for trains traveling to and from the Steelton Yard. In addition, at the north end of Steelton Yard, the turnout into Steelton Yard is a right hand turnout. This requires that all trains operating along the mainline track must operate through the diverging side of the turnout, not the straight side of the turnout. As a result, train speeds are restricted at North Steelton Yard as they have to operate through the diverging side of the turnout.

The construction of a second mainline track and the realignment of the existing mainline track on Steelton Hill will improve the efficiency of the WCL rail network to transport products for industrial and commercial use, which is needed to safely and cost-effectively provide materials to various end users. The proposed new track will have a compensated grade less than 2 percent, which is much more efficient for train use. It is well documented that transporting large quantities of materials by rail is one of the most efficient means of transportation, resulting in significantly lower environmental impacts than over-the-road transportation for similar quantities of materials. Moving freight by rail is three times more fuel efficient than moving freight on the highway. Trains can move a ton of freight nearly 450 miles on a single gallon of fuel. Efficient use of fuel means fewer greenhouse gas emissions.

- e. Are future stages of this development including development on any other property planned or likely to happen? ☐ Yes ☒ No
If yes, briefly describe future stages, relationship to present project, timeline and plans for environmental review.

Due to the size and complexity of the project, the project has been planned for completion in 2 phases. Phase 1 will begin from North Steelton Yard (the east limits of the Site) and extend to a point approximately 300 to 400 feet east of where the Munger Trail crosses over the WCL railroad. Phase 2 will include the remainder of the project north to Interstate 35 (I-35). Upon consideration of construction methods and the scope of project activities, it is expected that Phase 1 would be completed during the 2014 construction season. Phase 2 is anticipated to begin at first opportunity in 2015 and is expected to be completed during the 2015 construction season. It is expected that the project will be complete and the Site fully stabilized by end of 2016.

- f. Is this project a subsequent stage of an earlier project? ☐ Yes ☒ No
If yes, briefly describe the past development, timeline and any past environmental review.

7. **Cover types:** Estimate the acreage of the site with each of the following cover types before and after development:

	Before	After		Before	After
Wetlands	8	6	Lawn/landscaping	5	5
Deep water/streams	4	2	Impervious surface	0	0
Wooded/forest	30	21	Stormwater Pond	0	0
Brush/Grassland	10	5	Other (describe) Railway	18	36
Cropland	0	0			
			TOTAL	75	75

The above estimate is an approximation based on cursory visual evaluation of information obtained from aerial photographs, project surveys and other information compiled in planning for this project.

8. **Permits and approvals required:** List all known local, state and federal permits, approvals, certifications and financial assistance for the project. Include modifications of any existing permits, governmental review of plans and all direct and indirect forms of public financial assistance including bond guarantees, Tax Increment Financing and infrastructure. *All of these final decisions are prohibited until all appropriate environmental review has been completed. See Minnesota Rules, Chapter 4410.3100.*

<u>Unit of government</u>	<u>Type of application</u>	<u>Status</u>
USACE	Section 404 Wetland Permit	Submitted/Pending Approval
MnDNR	Public Waters Work Permit	Submitted/Pending Approval
MnDNR	Access/Easement	To be Submitted
City of Duluth	Wetland Conservation Act Permit	Submitted/Pending Approval
City of Duluth	General Floodplain Special Use Permit	Submitted/Pending Approval
City of Duluth	Bridge Permits	To be Submitted
MPCA	401 Water Quality Certification	Submitted/Pending Approval
MPCA	NPDES/SDS Construction Stormwater Permit (SWPPP)	To be Submitted
St. Louis County	Major Land Disturbance Permit	To be Submitted
St. Louis County	Road Construction (Pier Protection)	To be Submitted
Minnesota BWSR	Construction Stormwater Permit	To be Submitted
MnDOT	Bridge Permit	To be Submitted
SHPO	Section 106 Review and Clearance	Submitted/Pending Approval

For each of the above listed permits and approvals, WCL has engaged and is coordinating review and approval with the respective agencies.

Cumulative potential effects may be considered and addressed in response to individual EAW Item Nos. 9-18, or the RGU can address all cumulative potential effects in response to EAW Item No. 19. If addressing cumulative effect under individual items, make sure to include information requested in EAW Item No. 19

9. Land use:

a. Describe:

- i. Existing land use of the site as well as areas adjacent to and near the site, including parks, trails, prime or unique farmlands.

The majority of the proposed project is planned for areas currently within the railroad right of way for the Wisconsin Central Ltd Railway. The project is also proposed to cross areas with current land uses of rural residential and vacant land.

The project will intersect the Willard Munger State Trail. The Willard Munger State Trail is a collection of multiple use trails between Hinckley and Duluth. It consists of interconnecting trails offering hiking, bicycling, in-line skating and snowmobiling. The trail follows the route of the abandoned railroad right of way formerly utilized by the St. Paul & Duluth Railroad and the Burlington Northern Railway.

The project will also intersect the Mission Creek Nature Trail owned by the City of Duluth. The 3.75 mile trail follows part of the old Skyline Blvd.

Adjacent land uses consist of residential, rural residential, commercial, and recreational lands. Nearby recreational lands consist of Snively Park, N. B. Merritt Memorial Park, and Fond du Lac Park.

- ii. Plans. Describe planned land use as identified in comprehensive plan (if available) and any other applicable plan for land use, water, or resources management by a local, regional, state, or federal agency.

Midway Township (Excerpted from Midway Township Comprehensive Plan: 2008 Update/ An Evolving Tradition):

Beginning with Midway's first plan the cornerstone concept has been that the community has been, is, and desires to remain a place characterized as a rural, low-density residential area. Low density does not necessarily have to be translated into zoning through exclusive use of large lots (in this case, five acres). The same level of density (one unit per five acres) can be achieved through creative development design that combines smaller lots with extensive permanently undeveloped areas. This technique, known as clustered or conservation subdivisions, has been promoted by the Township and is the single best tool for preserving large expanses of woodland and open fields within Midway.

A key feature of Midway's landscape is the dominance of forestland and agricultural fields. These lands create Midway's sense of ruralness and perform vital ecological functions regarding water supply, water quality, wildlife habitat, and surface water flow. Through its authorities and cooperative ventures with other entities, Midway will work to insure that existing open space and significant natural features are protected. These features include streams, wetlands, artesian wells, hills, rock outcrops, unique vegetation, and wildlife habitat.

Nearly half of Midway Township located south of I-35 is owned by the City of Duluth as dedicated park space, and, adjacent to the town is the Spirit Mountain Recreation Area and Jay Cooke State Park. Midway recognizes the exceptional value of these public resources and intends to protect them from adverse impacts generated by development on lands within Midway. The primary means of implementing this buffer concept is to limit development to low density residential uses that minimize disruption of the landscape for roads and driveways, cleared areas, and structures. Cluster or conservation subdivisions will be strongly urged for this area so as minimize land disturbance, provide quality building sites, and retain large tracts of land in an undeveloped state. Public or private recreational systems such as trails or associated facilities may be allowed if they involve minimal clearing of land, blend into the landscape, and enhance the existing public recreational systems. A corollary aspect of the buffer concept is that the residential development in Midway is to be buffered from any adverse impacts generated by the public recreational systems. In particular, this refers to negative impacts caused by traffic, parking, night lighting, noise, removal of excessive amounts of tree cover, and significant changes to the physical landscape.

City of Duluth (Excerpted from City of Duluth Comprehensive Plan):

Within the City of Duluth, the proposed project transects areas with future land uses of General Industrial, Auto Orientated Commercial, Preservation within a Sensitive Lands Overlay, and Rural Residential.

A description of these planned future land uses is as follows:

General Industrial - Areas for manufacturing, processing and other activities that may have off-site impacts and are generally isolated from other uses or buffered from them. Sites should have direct access to major regional transportation facilities and other infrastructure.

Auto Orientated Commercial - Commercial and office development focused primarily on needs and convenience of the motorist, without losing pedestrian access and connection. No residential uses. Situated along arterial roads. Can include a mix of auto- and neighborhood-oriented commercial uses or transition into neighborhood commercial.

Preservation within a Sensitive Lands Overlay - Lands with substantial restrictions. High natural resource or scenic value, or severe development limitations. Primarily public lands but limited private use is anticipated subject to use and design controls. Examples include: most city parklands and primary viewsheds; shorelands of lake, rivers, streams; wetlands and floodplains; high-value habitat; low-intensity private or public uses. High resource value lands or natural resources that may be developed under conservation design standards, transfer of development rights program designs, or low-impact performance standards.

Rural Residential - Areas of single-family lots of at least five acres. Limits the extension of municipal utilities for new development. Includes existing rural density areas with lots as small as an acre now served by municipal utilities but not planned for further subdivision.

- iii. Zoning, including special districts or overlays such as shoreland, floodplain, wild and scenic rivers, critical area, agricultural preserves, etc.

Midway Township

The portions of the proposed project within Midway Township are presently zoned Residential Rural 2 (RR-2) and Open Space (O-1).

A description of these zoning units is as follows:

Rural Residential 2 - The RR-2 Rural Residential District is established to provide semi-rural living within the predominately forested portions of the Township while insuring, to the greatest degree possible, the continued existence and values of the existing forested lands.

Open Space - The intent of the "O-1" Open Space District is to prevent destruction of natural or man-made resources where developments would result in hazards to health or safety, would deplete or destroy resources; or be otherwise incompatible with the public welfare.

City of Duluth

The portions of the proposed project within the City of Duluth are presently zoned Residential Rural 1 (RR-1) and Industrial-General (IG).

A description of these zoning units is as follows:

Rural Residential 1 - The RR-1 district is established to accommodate large-lot, single-family detached residential uses, typically surrounded by significant open space, on lots of at least 5 acres each. The district encourages distinctive neighborhoods with a semi-rural character. Complimentary uses such as limited agriculture, small-scale institutional uses, parks, minor utilities and certain temporary uses.

Industrial General - The IG district is intended to provide for general to heavy impact industrial, processing, assembly, fabrication and manufacturing uses. Office uses are allowed provided they are clearly incidental to and supportive of on-site industrial uses. The district is intended primarily for locations close to major transportation corridors and active commercial centers. This district should be located away from residential development.

Floodplain

The project will require the placement of fill in areas within (below) the 100-year floodplain (FP) elevation of two watercourses (i.e., U.S. Steel Creek and an unnamed tributary thereto). A copy of the Federal Emergency Management Agency (FEMA) floodplain map for the Site and vicinity is attached (Figure 3). The project includes mitigation of floodplain storage displacement by creating areas of compensating cut equal to or greater than floodplain fill. A Special Use Permit application has been submitted to and is being reviewed by the City of Duluth.

- b. Discuss the project's compatibility with nearby land uses, zoning, and plans listed in Item 9a above, concentrating on implications for environmental effects.

The majority of the proposed project is planned for areas currently within the railroad right of way for the WCL railway. The project is also proposed to cross areas with current land uses of rural residential and vacant land.

The project will intersect the Willard Munger State Trail. The Willard Munger State Trail is a collection of multiple use trails between Hinckley and Duluth. It consists of interconnecting trails offering hiking, bicycling, in-line skating and snowmobiling. The trail follows the route of the abandoned railroad right of way formerly utilized by the St. Paul & Duluth Railroad and the Burlington Northern Railway.

The project will also intersect the Mission Creek Nature Trail owned by the City of Duluth. The 3.75 mile trail follows part of the old Skyline Blvd.

Adjacent land uses consist of residential, rural residential, commercial, and recreational lands. Nearby recreational lands consist of Snively Park, N. B. Merritt Memorial Park, and Fond du Lac Park.

The project will not significantly affect nearby land use beyond that which is currently affected by the existing railway. The existing railway has been present for many decades. The new double track will result in a wider "footprint" for the railway. However, it will not otherwise affect any adjoining land use except for relatively minor impacts at road and trail

crossing locations. Access at these crossings will still be maintained, though specific crossing locations will be modified to facilitate safe passage of both trains and the public.

With respect to conditions at the two high value resource stream crossings, conditions will be improved by providing fish passage where none currently exists and the hydraulics will be improved to result in less impact upstream (flooding) and sediment deposition downstream.

- c. Identify measures incorporated into the proposed project to mitigate any potential incompatibility as discussed in Item 9b above.

The proposed road and trail crossings have been designed to meet current FRA and local safety and design/functionality requirements. WCL has been in consultation with the USACE and SHPO regarding measures to mitigate impacts to historic features associated with these crossings. The two trail crossings have been designed to “blend in” with the existing trail and maintain an aesthetic appearance to the crossings.

10. Geology, soils and topography/land forms:

- a. Geology - Describe the geology underlying the project area and identify and map any susceptible geologic features such as sinkholes, shallow limestone formations, unconfined/shallow aquifers, or karst conditions. Discuss any limitations of these features for the project and any effects the project could have on these features. Identify any project designs or mitigation measures to address effects to geologic features.

According to the Geological Map of Minnesota-Bedrock Geology (Jirsa et. al, 2011), the Site is underlain by Duluth Complex including intrusions of troctolitic and gabbroic rocks that are part of the Midcontinent Rift. The bedrock, generally located approximately 0 to 50 feet bgs, is of Middle Proterozoic age (~1099 million years (Ma) to ~1098 Ma). According to the Surficial Geology of the West Duluth Quadrangle (Hobbs, 2009), the project alignment is underlain by surficial units including the Knife River member and Lakewood member of the Barnum Formation and the Cromwell Formation. The glacial units were deposited during the Nickerson, Split rock, and Autumba phases of Wisconsin Glaciation. Till deposits consist of reddish-brown unsorted sediment with a clay matrix. There are no known sinkholes, shallow limestone formations, unconfined/shallow aquifers, or karst conditions on the Site.

- b. Soils and topography - Describe the soils on the site, giving NRCS (SCS) classifications and descriptions, including limitations of soils. Describe topography, any special site conditions relating to erosion potential, soil stability or other soils limitations, such as steep slopes, highly permeable soils. Provide estimated volume and acreage of soil excavation and/or grading. Discuss impacts from project activities (distinguish between construction and operational activities) related to soils and topography. Identify measures during and after project construction to address soil limitations including stabilization, soil corrections or other measures. Erosion/sedimentation control related to stormwater runoff should be addressed in response to Item 11.b.ii.

Review of the NRCS Soil Survey Map (Figures 4a through 4e) indicates 10 soil type map units are expected on the Site. The following table presents a summary of soil type map

units on the Site and whether or not the soil is listed as hydric by the National Technical Committee on Hydric Soils (NTCHS). A hydric soil is defined as a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part.

Table 1: NRCS Soil Types Mapped Within Site

Soil Name	Soil Map Symbol	Hydric (%)	Drainage Status	Landscape Location
Ahmeek-Rock outcrop-Fluvaquents, frequently flooded, complex, 0-50% slopes	F148F	Partially (10%)	Well drained	Moraines
Augustana-Hegberg complex, 1-8% slopes	F111B	Partially (11%)	Moderately well drained	Moraines
Cuttre complex, 0-8% slopes	E3B	Partially (20%)	Somewhat poorly drained	Till plains
Forbay-Augustana complex, 3-18% slopes	F112D	Partially (2%)	Well drained	Moraines
Miskoaki-Udifluvents, flooded, complex, 1-45% slopes	E23F	Partially (25%)	Well drained	Till plains
Rock outcrop-Mesaba-Barto complex, 18-60% slopes	F160F	No	Well drained	Moraines
Udalfs-Eutrudepts complex, 0-8% slopes	F155B	Partially (5%)	Moderately well drained	Relict glacial lakes
Udalfs-Eutrudepts complex, 25-70% slopes	F155G	Partially (5%)	Well drained	Relict glacial lakes
Urban land-Cuttre Rock outcrop complex, 0-3% slopes	E18A	Partially (20%)	Unknown	Till plains
Wahbegon, depressional-Eldes complex, 0-2% slopes	F109A	Yes (100%)	Very poorly drained	Depressions on moraines

The results of limited evaluation during visits to the Site to conduct wetland delineation and general Site reconnaissance generally confirm the presence of these soil types on the Site except in some of the historically disturbed areas immediately adjacent to the historically built up railroad and associated artificial surface water drainage features (i.e., ditches and side cast soils). Soil in these areas has been modified by historic filling and/or grading.

The majority of soil in the project area consists of loamy/clayey material with low permeability and relatively steep slopes. Much of the native soil is limited for use in construction due to its "softness" and high liquid limits.

Topography on a landscape level has several hundred feet of elevation change between the north and east ends of the Site. Topography within and adjacent to the proposed work limits is undulating with variations in elevation from 10 to 40 feet often associated with drainage features and watercourses. Slopes within and adjacent to the Site range from nearly level to 12 percent or more. Contours are depicted on the enclosed project plans. Runoff is expected to be significant during storm events. As indicated in Section

6.c., that portion of the Site in which earth moving is anticipated will be limited to an area approximately 46 acres in size. The project will be completed in phases and stages to minimize the extent of disturbed soil at any given time.

It is expected that much of the soil needed to construct the new embankment will be imported from an off-site source by the selected contractor. It is noted that some of the soil generated on Site from excavation will be used as feasible for fill to construct the new embankments. However, it is expected that some of the soil may not be suitable for use as engineered fill. Soil that is not suitable will be transported off the Site and disposed of properly by the project contractor.

Soil will be stabilized during and after construction following procedures outlined in the soil erosion control and storm water permits that will be issued by the state and local agencies. A draft Stormwater Pollution Prevention Plan was included with the JPA and may be provided for review upon request.

NOTE: For silica sand projects, the EAW must include a hydrogeologic investigation assessing the potential groundwater and surface water effects and geologic conditions that could create an increased risk of potentially significant effects on groundwater and surface water. Descriptions of water resources and potential effects from the project in EAW Item 11 must be consistent with the geology, soils and topography/land forms and potential effects described in EAW Item 10.

Not applicable

11. Water resources:

- a. Describe surface water and groundwater features on or near the site in a.i. and a.ii. below.
 - i. Surface water - lakes, streams, wetlands, intermittent channels, and county/judicial ditches. Include any special designations such as public waters, trout stream/lake, wildlife lakes, migratory waterfowl feeding/resting lake, and outstanding resource value water. Include water quality impairments or special designations listed on the current MPCA 303d Impaired Waters List that are within 1 mile of the project. Include DNR Public Waters Inventory number(s), if any.

The project will cross existing watercourses in 14 locations. Two of the watercourses have been identified as high value resources by the MnDNR (i.e.; East Branch Mission Creek, Structure MP 471.55 and Sargent Creek, Structure MP 470.31), while the remaining watercourses include US Steel Creek and unnamed tributaries to Mission Creek and Sargent Creek.

Wetlands are present along the project Site. Wetland limits within the proposed project area have been delineated and are depicted on the attached Figure 5. Wetlands on the Site are described in a wetland delineation report prepared by Golder Associates Inc. dated December 5, 2013. A copy of the wetland report was included in the JPA package. The project will impact a total of approximately 1.36 acres of wetlands.

- ii. Groundwater – aquifers, springs, seeps. Include: 1) depth to groundwater; 2) if project is within a MDH wellhead protection area; 3) identification of any onsite and/or nearby wells, including unique numbers and well logs if available. If there are no wells known on site or nearby, explain the methodology used to determine this.

A search of the Minnesota Department of Health County Well Index database did not identify any wells within the project area. Given the almost 6-mile length of the project, depth to groundwater varies along the Site.

- b. Describe effects from project activities on water resources and measures to minimize or mitigate the effects in Item b.i. through Item b.iv. below.

- i. Wastewater - For each of the following, describe the sources, quantities and composition of all sanitary, municipal/domestic and industrial wastewater produced or treated at the site.
 - 1) If the wastewater discharge is to a publicly owned treatment facility, identify any pretreatment measures and the ability of the facility to handle the added water and waste loadings, including any effects on, or required expansion of, municipal wastewater infrastructure.

Not Applicable

- 2) If the wastewater discharge is to a subsurface sewage treatment systems (SSTS), describe the system used, the design flow, and suitability of site conditions for such a system.

Not Applicable

- 3) If the wastewater discharge is to surface water, identify the wastewater treatment methods and identify discharge points and proposed effluent limitations to mitigate impacts. Discuss any effects to surface or groundwater from wastewater discharges.

Not Applicable

- ii. Stormwater - Describe the quantity and quality of stormwater runoff at the site prior to and post construction. Include the routes and receiving water bodies for runoff from the site (major downstream water bodies as well as the immediate receiving waters). Discuss any environmental effects from stormwater discharges. Describe stormwater pollution prevention plans including temporary and permanent runoff controls and potential BMP site locations to manage or treat stormwater runoff. Identify specific erosion control, sedimentation control or stabilization measures to address soil limitations during and after project construction.

There are no specific calculations for stormwater runoff from construction at specific locations on the Site. Calculations for stormwater runoff in the various watercourses were prepared and are included with the JPA. Stormwater from the Site will run off into the various watercourses, into Mission Creek, US Steel Creek or Sargent Creek and ultimately into the St. Louis River. Temporary and permanent best management practices (BMPs) will be implemented on Site in accordance with the SWPPP and USACE, MnDNR and City of Duluth permits to

reduce the amount of pollutants in storm water discharged from the project during construction.

- iii. Water appropriation - Describe if the project proposes to appropriate surface or groundwater (including dewatering). Describe the source, quantity, duration, use and purpose of the water use and if a DNR water appropriation permit is required. Describe any well abandonment. If connecting to an existing municipal water supply, identify the wells to be used as a water source and any effects on, or required expansion of, municipal water infrastructure. Discuss environmental effects from water appropriation, including an assessment of the water resources available for appropriation. Identify any measures to avoid, minimize, or mitigate environmental effects from the water appropriation.

The project will not result in any water appropriation from the two high value resource streams or any other watercourses on the Site. A search of the Minnesota Department of Health County Well Index database did not identify any wells within the project area.

iv. Surface Waters

- a) Wetlands - Describe any anticipated physical effects or alterations to wetland features such as draining, filling, permanent inundation, dredging and vegetative removal. Discuss direct and indirect environmental effects from physical modification of wetlands, including the anticipated effects that any proposed wetland alterations may have to the host watershed. Identify measures to avoid (e.g., available alternatives that were considered), minimize, or mitigate environmental effects to wetlands. Discuss whether any required compensatory wetland mitigation for unavoidable wetland impacts will occur in the same minor or major watershed, and identify those probable locations.

As indicated in the response to Item 11.a.1., wetlands are present along the project Site and the project will impact a total of approximately 1.36 acres of wetlands. Alternatives considered to minimize wetland impacts were presented in the JPA and included using steep slopes along the new railroad embankment to reduce wetland impacts. Wetland impacts will be mitigated by purchasing credits in an approved wetland mitigation bank.

- b) Other surface waters- Describe any anticipated physical effects or alterations to surface water features (lakes, streams, ponds, intermittent channels, county/judicial ditches) such as draining, filling, permanent inundation, dredging, diking, stream diversion, impoundment, aquatic plant removal and riparian alteration. Discuss direct and indirect environmental effects from physical modification of water features. Identify measures to avoid, minimize, or mitigate environmental effects to surface water features, including in-water Best Management Practices that are proposed to avoid or minimize turbidity/sedimentation while physically altering the water features. Discuss how the project will change the number or type of watercraft on any water body, including current and projected watercraft usage.

As indicated in Item 6.b., the general procedure for culvert replacements will include installing the new culvert in a location as close as feasible to the existing culvert using directional boring techniques. In areas where a new culvert is required and there is no existing culvert, the new culvert will be installed by preparing the bed in the desired location (i.e., removing poor material and placing engineered fill such as gravel), laying down the appropriately sized culvert, and backfilling with engineered fill.

Construction of the new culverts will be completed "in the dry" adjacent to the existing culverts and streams. Once the new culvert is completed, the stream will be allowed to flow into the new culvert and the old culvert and stream channel will be filled.

All work associated with culvert installation and restoration of temporarily disturbed areas associated within the stream bed, banks, and any associated wetlands will be performed in accordance with the requirements of permits issued by the USACE, MnDNR and City of Duluth.

Silt fence will be properly placed to avoid loss of sediment into the watercourses or adjacent wetlands during construction. In-stream booms or silt curtains will be utilized, where appropriate, to limit sediment dispersal in the vicinity of the project area and avoid downstream impacts due to siltation. Appropriate soil erosion and sedimentation controls will be implemented in accordance with a SWPPP and permit requirements of the USACE, MnDNR and USACE.

Fish passage will be provided in the two high value resource streams where none is currently present and may be provided in other locations deemed necessary by the MnDNR.

None of the streams on the Site are currently suitable for watercraft use nor will they be after completion.

12. Contamination/Hazardous Materials/Wastes:

- a. Pre-project site conditions - Describe existing contamination or potential environmental hazards on or in close proximity to the project site such as soil or ground water contamination, abandoned dumps, closed landfills, existing or abandoned storage tanks, and hazardous liquid or gas pipelines. Discuss any potential environmental effects from pre-project site conditions that would be caused or exacerbated by project construction and operation. Identify measures to avoid, minimize or mitigate adverse effects from existing contamination or potential environmental hazards. Include development of a Contingency Plan or Response Action Plan.

Not Applicable. There is no known hazardous contamination at the site, particularly in the location of the high value resource streams.

- b. Project related generation/storage of solid wastes - Describe solid wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from solid waste handling, storage and disposal. Identify measures to avoid, minimize or mitigate adverse effects from the generation/storage of solid waste including source reduction and recycling.

Some solid waste (construction materials) will be generated during construction. Solid waste generated during construction will be removed from the Site and properly disposed of. This will be addressed by the SWPPP.

- c. Project related use/storage of hazardous materials - Describe chemicals/hazardous materials used/stored during construction and/or operation of the project including method of storage. Indicate the number, location and size of any above or below ground tanks to store petroleum or other materials. Discuss potential environmental effects from accidental spill or release of hazardous materials. Identify measures to avoid, minimize or mitigate adverse effects from the use/storage of chemicals/hazardous materials including source reduction and recycling. Include development of a spill prevention plan.

Some hazardous materials including petroleum products will be used at the Site during construction. These materials will be staged in defined and protected areas away from sensitive area such as streams and wetlands. Equipment fueling and maintenance areas will be placed at least 100 feet away from any sensitive areas. Where work takes place in or near sensitive areas, the use of hazardous materials will be limited to the minimum amount needed to complete the work. Potential spills would be of "de-minimus" quantities and cleaned up quickly. These items are addressed by the SWPPP.

- d. Project related generation/storage of hazardous wastes - Describe hazardous wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from hazardous waste handling, storage, and disposal. Identify measures to avoid, minimize or mitigate adverse effects from the generation/storage of hazardous waste including source reduction and recycling.

Not Applicable. There will be no significant quantities of hazardous waste generated on the Site during construction.

13. Fish, wildlife, plant communities, and sensitive ecological resources (rare features):

- a. Describe fish and wildlife resources as well as habitats and vegetation on or in near the site.

The project corridor consists of rolling hill topography with upland forested and grassed areas dissected by deep wooded/forested valleys. The project crosses several streams and tributaries. These streams are part of the St. Louis River's watershed. Two of the streams have been identified as high value resources and trout streams by the MnDNR.

- b. Describe rare features such as state-listed (endangered, threatened or special concern) species, native plant communities, Minnesota County Biological Survey Sites of Biodiversity Significance, and other sensitive ecological resources on or within close proximity to the site. Provide the license agreement number (LA-____) and/or correspondence number (ERDB _____) from which the data were obtained and attach the Natural Heritage letter from the DNR. Indicate if any additional habitat or species survey work has been conducted within the site and describe the results.

A Natural Heritage Information System (NHIS) Data Request Form was submitted to the MnDNR on January 9, 2014. Based on information and comments received from the MnDNR (i.e., MnDNR Correspondence #ERDB 20140195 dated February 11, 2014; Appendix A) there is only one rare feature that may be adversely impacted by the proposed project. This feature is the presence of an area documented by the Minnesota Biological Survey (MBS) as a Site of Biodiversity Significance along portions of the Site. Impacts to potential Sites of Biodiversity Significance will be minimized by limiting project activities to minimal work areas as needed to complete the project activities and implementation of the BMPs in the SWPPP.

- c. Discuss how the identified fish, wildlife, plant communities, rare features and ecosystems may be affected by the project. Include a discussion on introduction and spread of invasive species from the project construction and operation. Separately discuss effects to known threatened and endangered species.

Fish and wildlife will benefit from the project as a result of improved fish passage and water quality. Plant communities will be affected by clearing and loss of some habitat. Stream, wetland and floodplain impacts will be mitigated as required by permits from the USACE, MnDNR and City of Duluth. All necessary precautions will be taken to avoid the spread of invasive species as a result of the project.

- d. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to fish, wildlife, plant communities, and sensitive ecological resources.

The project will be limited to the minimal area required to complete the project. Impacts will be minimized by constructing the project in accordance with the SWPPP and conditions of permits from the USACE, MnDNR and City of Duluth.

14. Historic properties:

Describe any historic structures, archeological sites, and/or traditional cultural properties on or in close proximity to the site. Include: 1) historic designations, 2) known artifact areas, and 3) architectural features. Attach letter received from the State Historic Preservation Office (SHPO). Discuss any anticipated effects to historic properties during project construction and operation. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to historic properties.

A Phase 1 and Phase 2 archaeological survey has been completed for the Site. These reports were included in the JPA. A section 106 historical review has been initiated with the

USACE and SHPO. In summary, the Section 106 Review indicated the proposed project will have potential impacts on the following cultural resources:

- Mission Creek Trail
- Willard Munger State Trail
- CNR Bridges

WCL continues to coordinate with the SHPO to determine what, if any, specific mitigation activities will be required before any historic property is impacted. The final project will be designed to avoid or result in minimal impacts to these historic resources.

15. Visual:

Describe any scenic views or vistas on or near the project site. Describe any project related visual effects such as vapor plumes or glare from intense lights. Discuss the potential visual effects from the project. Identify any measures to avoid, minimize, or mitigate visual effects.

Visual impacts from the proposed project will be consistent with the existing views from all reasonably available vantage points with the exception of a realigned section of railway that will be more visible along approximately ¼ mile of Beck Road west of 108th Avenue.

16. Air:

- a. Stationary source emissions - Describe the type, sources, quantities and compositions of any emissions from stationary sources such as boilers or exhaust stacks. Include any hazardous air pollutants, criteria pollutants, and any greenhouse gases. Discuss effects to air quality including any sensitive receptors, human health or applicable regulatory criteria. Include a discussion of any methods used assess the project's effect on air quality and the results of that assessment. Identify pollution control equipment and other measures that will be taken to avoid, minimize, or mitigate adverse effects from stationary source emissions.

Not Applicable.

- b. Vehicle emissions - Describe the effect of the project's traffic generation on air emissions. Discuss the project's vehicle-related emissions effect on air quality. Identify measures (e.g. traffic operational improvements, diesel idling minimization plan) that will be taken to minimize or mitigate vehicle-related emissions.

Even though the project will result in increased train use and capacity, the overall effect of the project will be to decrease the total amount of vehicle emissions. This will be accomplished by improving train efficiency by decreasing slopes, thereby reducing the number of locomotives required to move trains up the hill, and reducing the overall need for over-the-road trucking of goods and materials, as trains are much more efficient and use less fuel per unit to transport materials.

- c. Dust and odors - Describe sources, characteristics, duration, quantities, and intensity of dust and odors generated during project construction and operation. (Fugitive dust may be discussed under item 16a). Discuss the effect of dust and odors in the vicinity of the

project including nearby sensitive receptors and quality of life. Identify measures that will be taken to minimize or mitigate the effects of dust and odors.

Some dust will be generated during construction. However, this will be minimal and temporary in nature. Fugitive dust will be controlled following procedures in the SWPPP. There will be no increase in long-term dust or odors associated with the completed project.

17. Noise

Describe sources, characteristics, duration, quantities, and intensity of noise generated during project construction and operation. Discuss the effect of noise in the vicinity of the project including 1) existing noise levels/sources in the area, 2) nearby sensitive receptors, 3) conformance to state noise standards, and 4) quality of life. Identify measures that will be taken to minimize or mitigate the effects of noise.

The proposed project will result in increased noise during construction. However, vehicle noise will be controlled as much as possible. All vehicles will meet noise and emissions standards.

18. Transportation

- a. Describe traffic-related aspects of project construction and operation. Include: 1) existing and proposed additional parking spaces, 2) estimated total average daily traffic generated, 3) estimated maximum peak hour traffic generated and time of occurrence, 4) indicate source of trip generation rates used in the estimates, and 5) availability of transit and/or other alternative transportation modes.

The proposed project will not affect existing parking or road traffic.

- b. Discuss the effect on traffic congestion on affected roads and describe any traffic improvements necessary. The analysis must discuss the project's impact on the regional transportation system.

If the peak hour traffic generated exceeds 250 vehicles or the total daily trips exceeds 2,500, a traffic impact study must be prepared as part of the EAW. Use the format and procedures described in the Minnesota Department of Transportation's Access Management Manual, Chapter 5 (available at: <http://www.dot.state.mn.us/accessmanagement/resources.html>) or a similar local guidance,

Not Applicable

- c. Identify measures that will be taken to minimize or mitigate project related transportation effects.

Not Applicable

19. Cumulative potential effects: (Preparers can leave this item blank if cumulative potential effects are addressed under the applicable EAW Items)

- a. Describe the geographic scales and timeframes of the project related environmental effects that could combine with other environmental effects resulting in cumulative potential effects.

The project-related environmental effects that could result in cumulative potential effect include the following:

1. Change in stream conditions (alignment and hydraulics) in approximately 1,072 lineal feet of streams immediately upon completion and for the foreseeable future.
 2. Fish passage in at least 2 locations immediately upon completion and for the foreseeable future.
 3. Vehicle emissions immediately upon completion and in the future.
 4. Tree and vegetation clearing and development from the beginning of the project and for the foreseeable future.
 5. Permanent impacts to approximately 1.36 acres of wetlands during the project.
- b. Describe any reasonably foreseeable future projects (for which a basis of expectation has been laid) that may interact with environmental effects of the proposed project within the geographic scales and timeframes identified above.

Unknown

- c. Discuss the nature of the cumulative potential effects and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to these cumulative effects.

The cumulative potential effects of the project are as follows:

1. Increased water quality through hydraulic improvements to existing watercourses and the loss of approximately 1,072 lineal feet of open stream channel, though this may be mitigated pending permits from the USACE, MnDNR and City of Duluth.
2. Improved opportunities for fish passage.
3. Decreased vehicle emissions as a result of the more efficient use of trains to transport goods and materials until a more efficient means of transportation is developed.
4. Loss of approximately 18 acres of forested habitat and "green space".
5. Wetland impacts will be mitigated within the project watershed in accordance with requirements of the USACE and City of Duluth. There will be no long term cumulative impacts to regional wetland functions and values.

- 20. Other potential environmental effects:** If the project may cause any additional environmental effects not addressed by items 1 to 19, describe the effects here, discuss the how the environment will be affected, and identify measures that will be taken to minimize and mitigate these effects.

RGU CERTIFICATION. *(The Environmental Quality Board will only accept **SIGNED** Environmental Assessment Worksheets for public notice in the EQB Monitor.)*

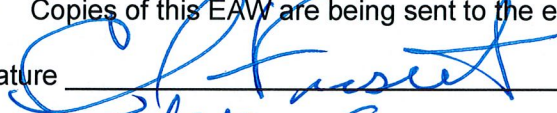
I hereby certify that:

- The information contained in this document is accurate and complete to the best of my knowledge.
- The EAW describes the complete project; there are no other projects, stages or components other than those described in this document, which are related to the project as connected actions or phased actions, as defined at Minnesota Rules, parts 4410.0200, subparts 9c and 60, respectively.
- Copies of this EAW are being sent to the entire EQB distribution list.

Signature

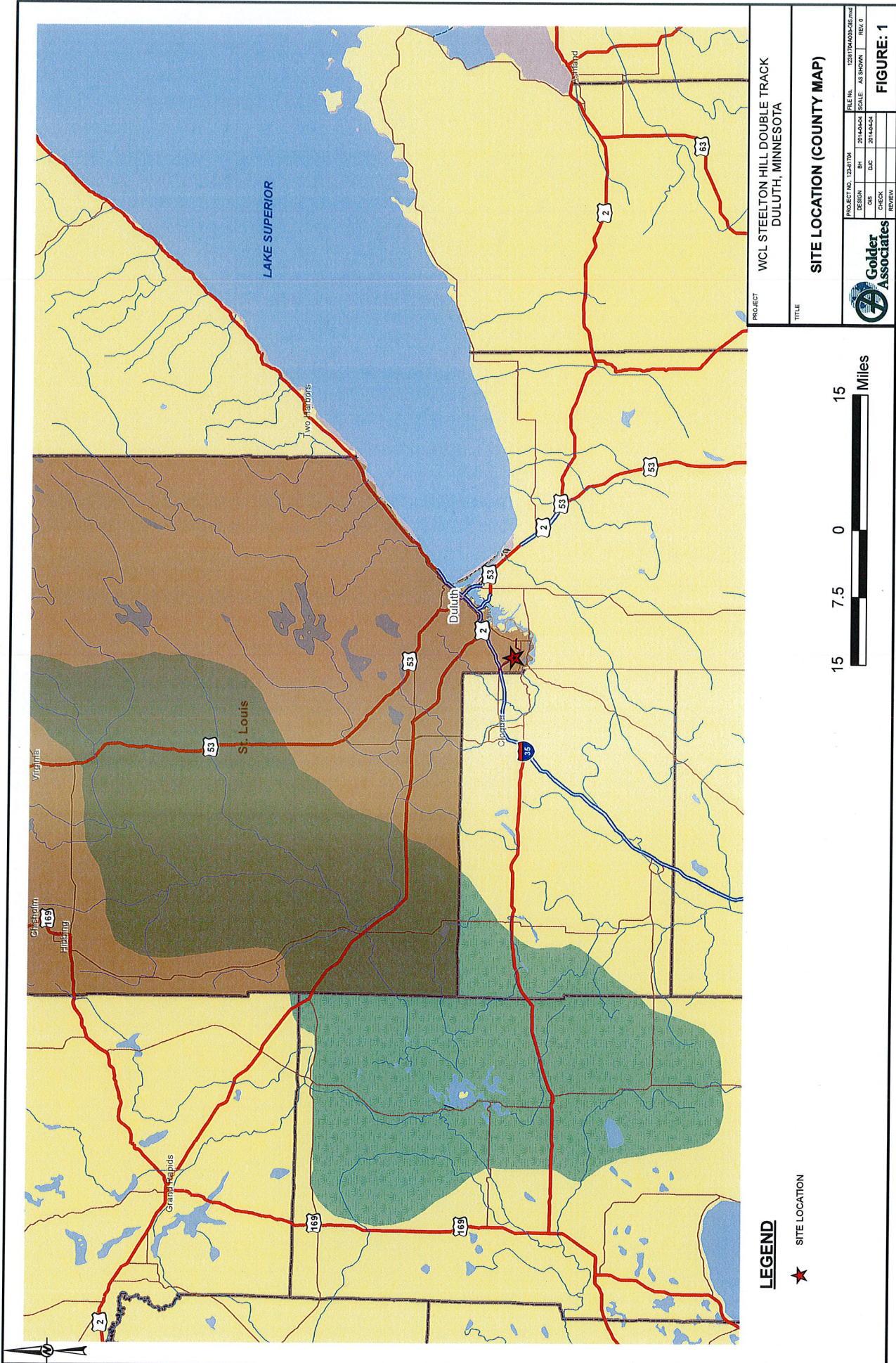
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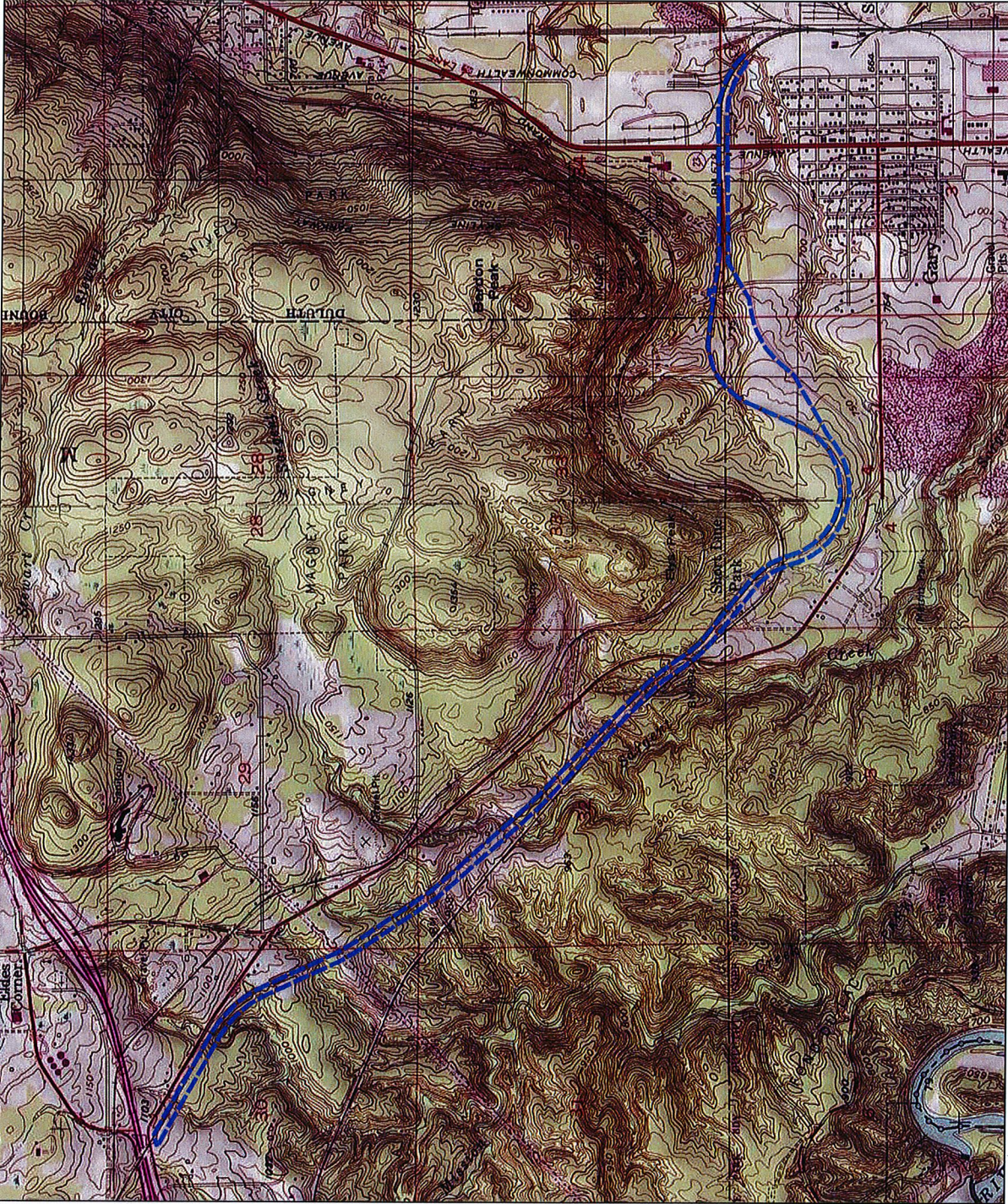
Title


Land Use Supervisor

May 2, 2014

Figures





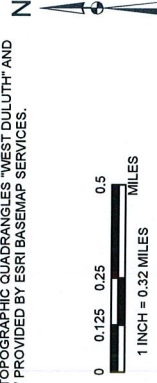
LEGEND

APPROXIMATE LIMITS OF THE SITE



REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA NORTH
FIPS 2201 FEET.
USGS TOPOGRAPHIC QUADRANGLES "WEST DULUTH" AND
"ESKO" PROVIDED BY ESRI BASEMAP SERVICES.



PROJECT

WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

TITLE

SITE LOCATOR MAP


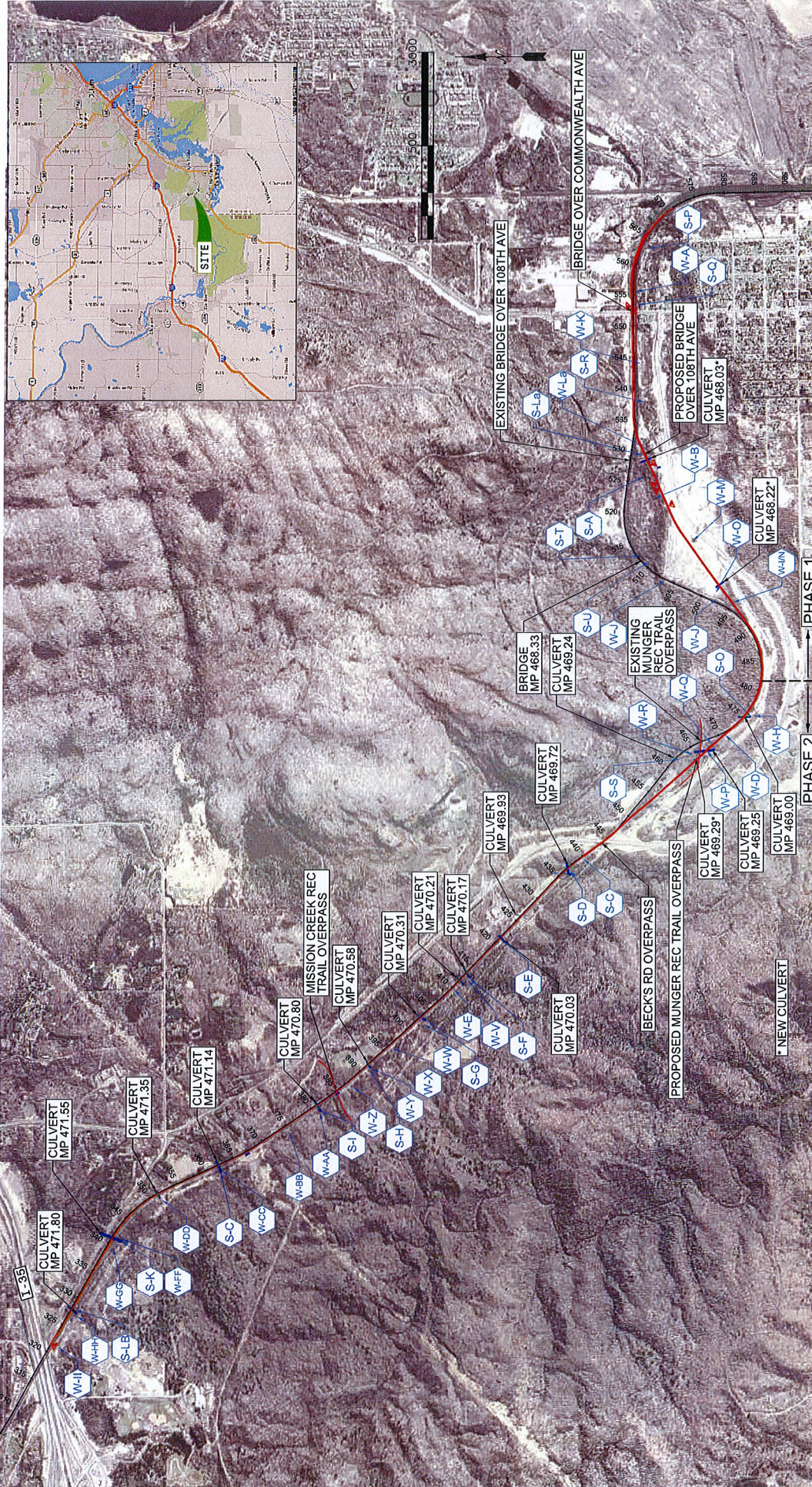
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	GIS	KJC	2/10/2014				
	CHECK	BH	2/10/2014				
	REVIEW	KT	2/10/2014				

FIGURE 2

FIGURE 2



benesch
engineers · scientists · planners

Alfred Benesch & Company
4633 Washington Road
Kenosha, Wisconsin 53144
262-662-6677 Job No. 20171.00

WISCONSIN CENTRAL LTD
NORTH DIVISION
SUPERIOR SUB
STEELETON, MN

PROJECT LOCATION MAP
Figure 3

OFFICE OF DESIGN & CONSTRUCTION
DRAWN BY: BJW SCALE: 1"=1500' DWG NO.
CHECKED BY: DATE: 4/7/2014 FILE: ACOE Overview.dgn
Y:\eshkosh\201008\20171.00\eng_Docs\Exhibits ACOE Overview.dgn

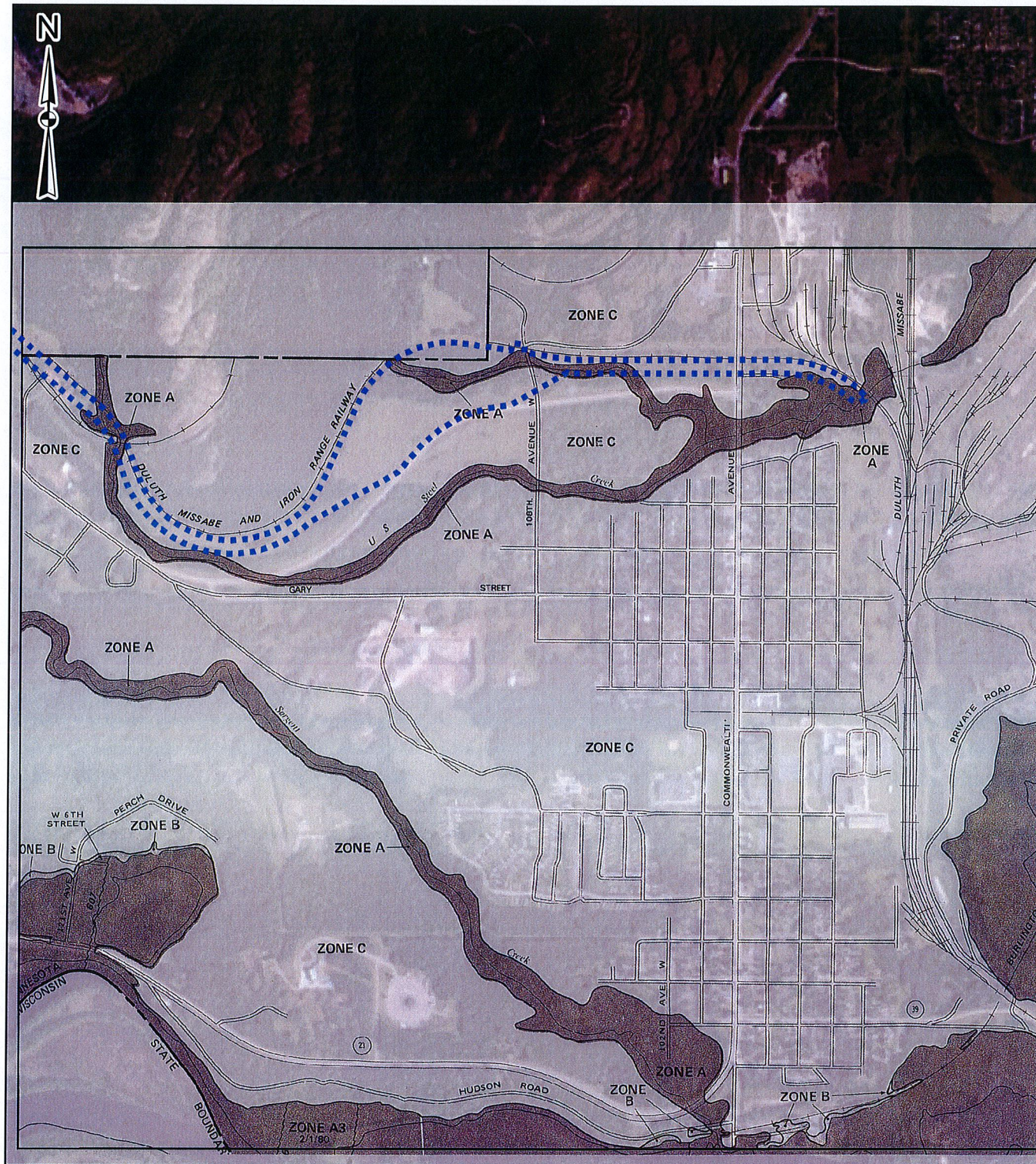
REVISIONS
DATE BY

APPROVALS
SHEET OF

LEGEND

WETLAND ID NO. W-H

STREAM ID NO. S-H

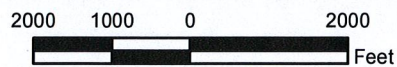


Legend

- Zone A is 1% Annual Chance Flood Hazard
- Levee
- Zone X is Area of Minimal Flood Hazard
- Approximate Location of the Site

REFERENCE

Projection: WGS 1984 Web Mercator. Datum: D_WGS_1984. Note: Some or all thematic layer may not appear within the extent of this map.
 Flood Data WMS: <http://hazards.fema.gov/wmsconnector/wmsconnector/Service/NFHL?REQUEST=GetCapabilities&SERVICE=WMS&...>
 and the Web Map Service to National Levee Database



PROJECT
**WCL STEELTON HILL DOUBLE TRACK
 DULUTH, MINNESOTA**

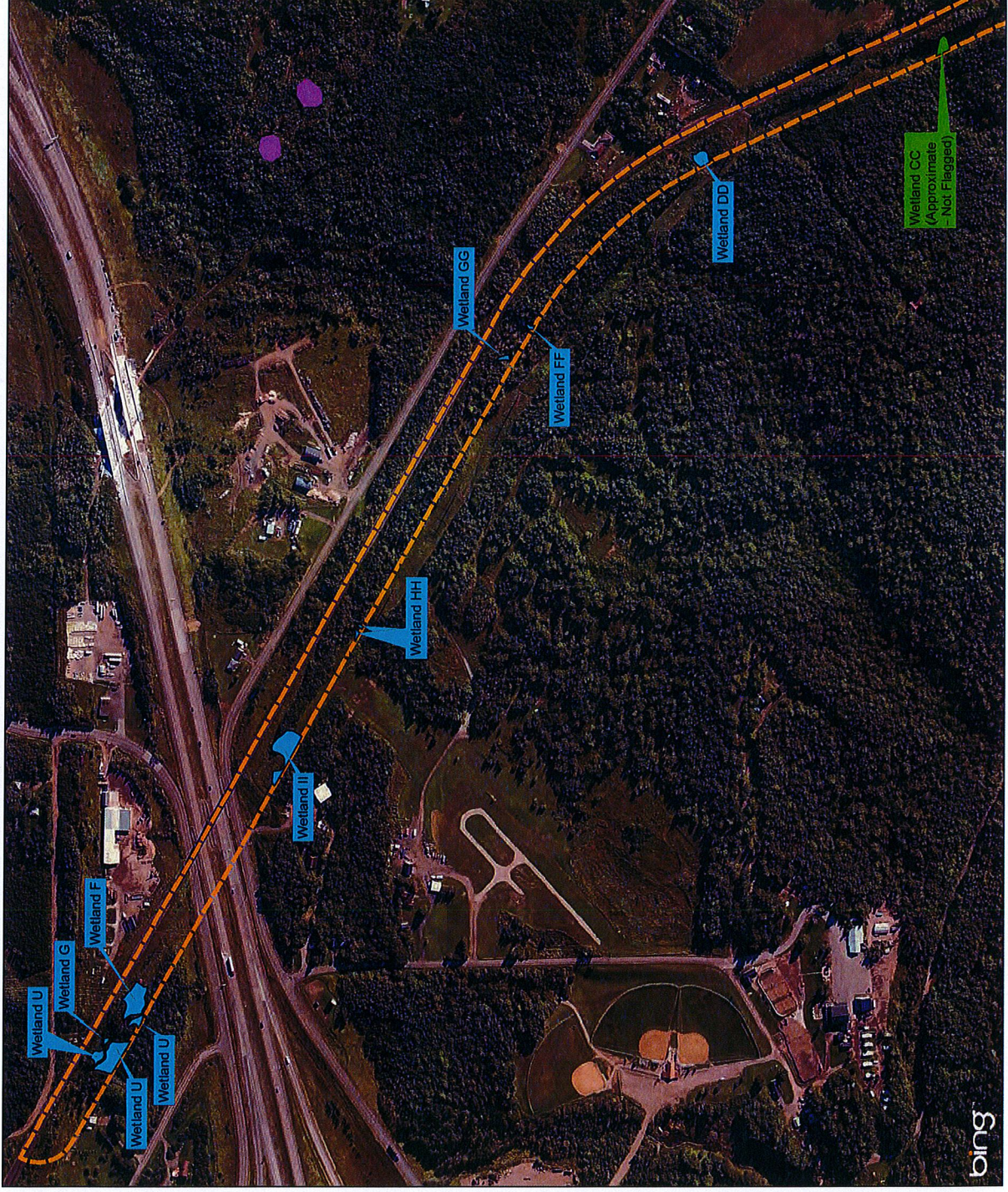
TITLE
Floodplain Map - City of Duluth



**Golder
 Associates**

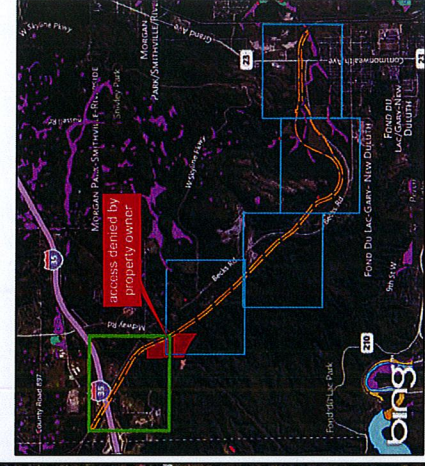
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GIS	JLL 2/11/2014		
CHECK			
REVIEW	MB 2/13/14		

FIGURE: 4



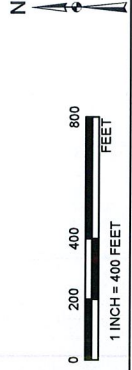
LEGEND

- FLAGGED WETLAND BOUNDARY
- WETLAND BOUNDARY ESTIMATED FROM SITE AERIAL - DID NOT ACCESS PROPERTY
- APPROXIMATE LIMITS OF THE SITE
- NATIONAL WETLANDS INVENTORY
- FRESHWATER FORESTED/SHRUB WETLAND



REFERENCES

COORDINATE SYSTEM: NAD 1983 STATE PLANE MINNESOTA
 NORTH FIPS 2201 FEET
 NMI DATA DOWNLOADED BY GOLDBER ON NOVEMBER 4, 2013
 FROM HTTP://WWW.FWS.GOV/WETLANDS/



PROJECT: WCL STEELTON HILL DOUBLE TRACK
 DULUTH, MINNESOTA

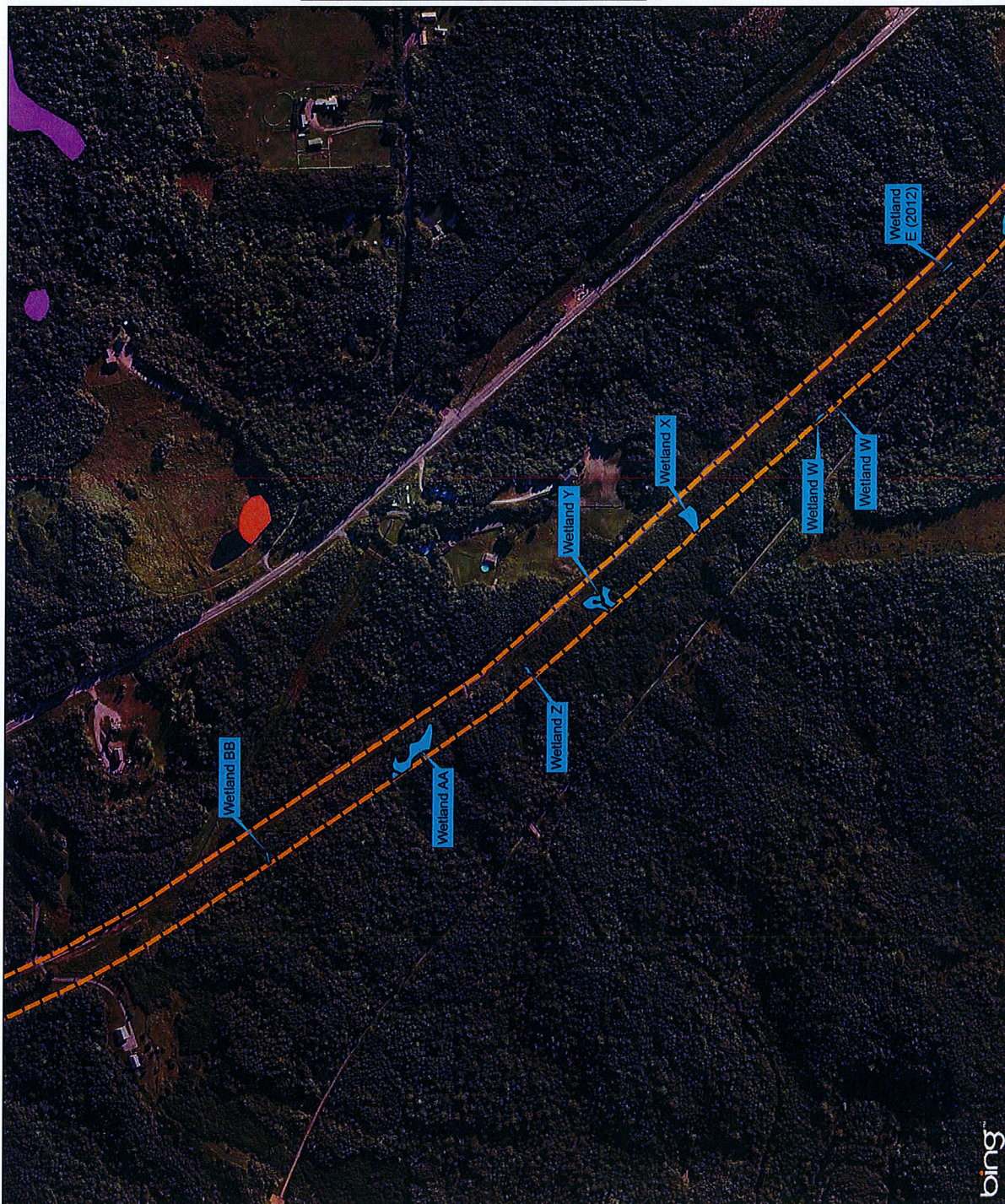
TITLE

NATIONAL WETLANDS INVENTORY MAPS

PROJECT No.		1338 024	FILE No.	Figure 5a	DATE	REV	0
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REVIEW		GIS	GIS	11/25/2013	11/25/2013	11/25/2013	0

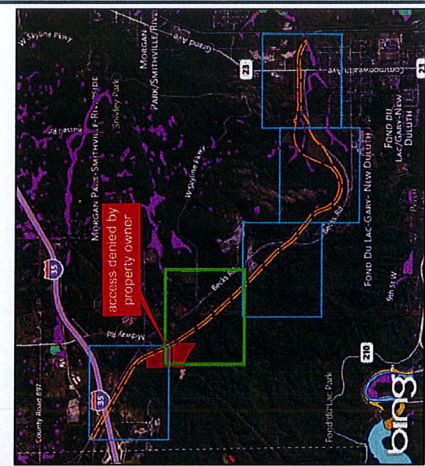


FIGURE 5a



LEGEND

- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE
- NATIONAL WETLANDS INVENTORY
- FRESHWATER FORESTED/SHRUB WETLAND
- FRESHWATER POND



REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA
 NORTH FIPS 2201 FEET.
 NIM DATA DOWNLOADED BY GOLDER ON NOVEMBER 4, 2013
 FROM [HTTP://WWW.FWS.GOV/WETLANDS/](http://www.fws.gov/wetlands/).



PROJECT		WCL STEELTON HILL DOUBLE TRACK DULUTH, MINNESOTA			
TITLE		NATIONAL WETLANDS INVENTORY MAPS			
PROJECT No.		12345678	FILE No.	Figure4_WetlandMap.mxd	
DESIGN		KJC	KJC	SCALE	AS SHOWN
GIS		KJC	KJC	SCALE	AS SHOWN
CHECK		BH	BH	11/25/2013	REV 0
REVIEW		KT	KT	11/25/2013	REV 0




FIGURE 5b

FIGURE 5b



LEGEND

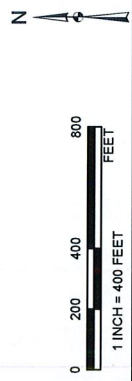
- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE

NATIONAL WETLANDS INVENTORY
NO WETLANDS MAPPED ON NWI MAP



REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA
NORTH FIPS 2201 FEET
NWI DATA DOWNLOADED BY GOLDBER ON NOVEMBER 4, 2013
FROM [HTTP://WWW.FWS.GOV/WETLANDS/](http://www.fws.gov/wetlands/)

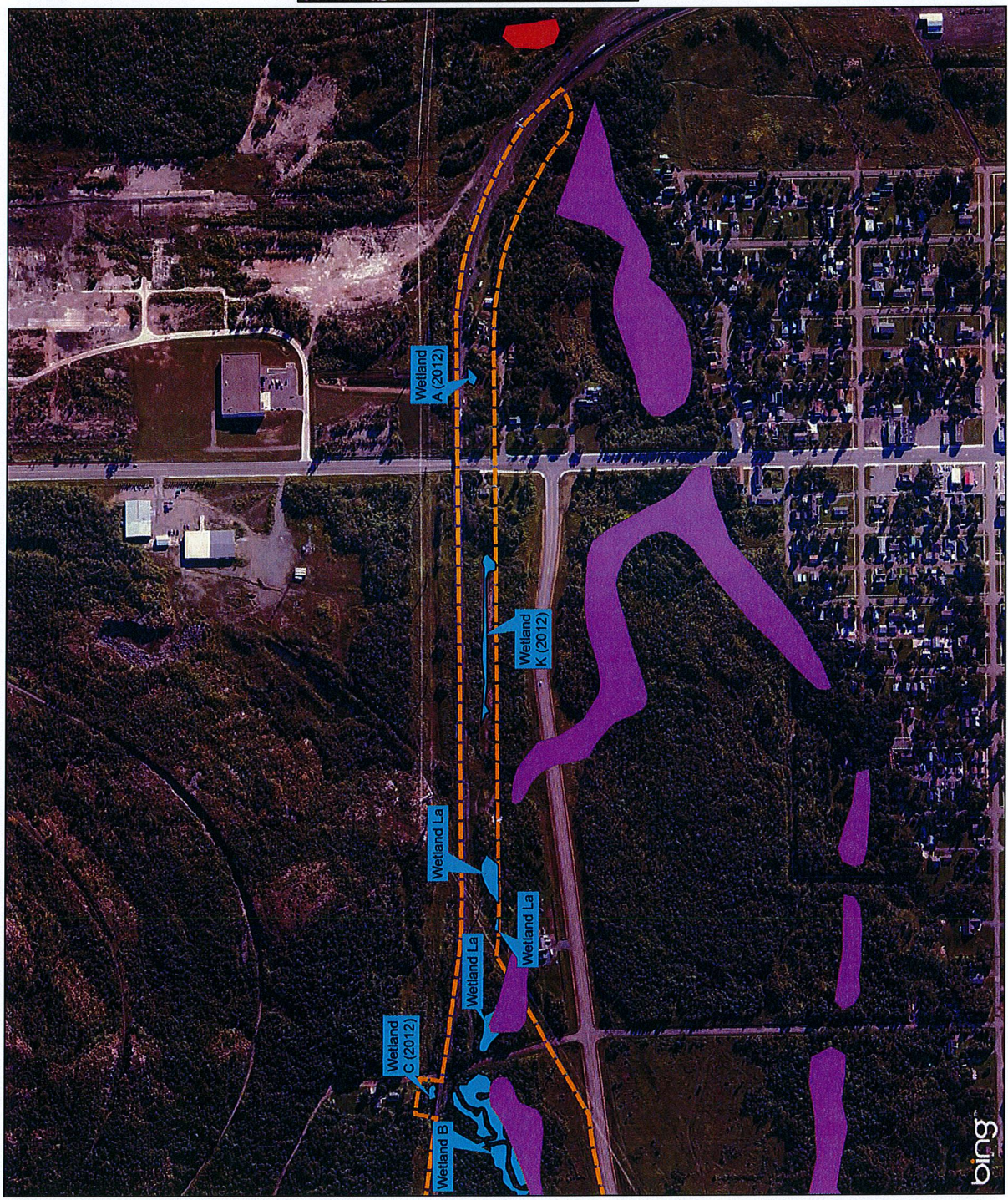


PROJECT
TITLE
WCL STEELTON HILL DOUBLE TRACK
DULUTH, MINNESOTA

NATIONAL WETLANDS INVENTORY MAPS

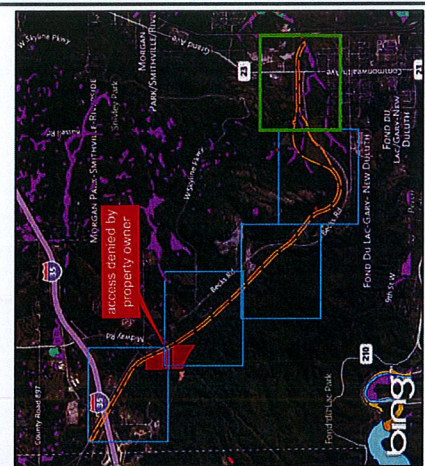
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		GIS	AC	AC	AC	AC	AC	AC	AC	AC	AC
		CHECK	AC	AC	AC	AC	AC	AC	AC	AC	AC
		REVIEW	AC	AC	AC	AC	AC	AC	AC	AC	AC

FIGURE 5c



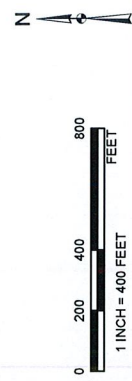
LEGEND

- FLAGGED WETLAND BOUNDARY
- APPROXIMATE LIMITS OF THE SITE
- NATIONAL WETLANDS INVENTORY
- FRESHWATER FORESTED/SHRUB WETLAND
- FRESHWATER POND



REFERENCES

COORDINATE SYSTEM: NAD 1983 STATEPLANE MINNESOTA
 NORTH FIPS 2201 FEET
 NMI DATA DOWNLOADED BY GOLDER ON NOVEMBER 4, 2013
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PROJECT: WCL STEELTON HILL DOUBLE TRACK
 DULUTH, MINNESOTA

PROJECT		TITLE	
1238 074		NATIONAL WETLANDS INVENTORY MAPS	
PROJECT NO.	1238 074	FILE NO.	Figure_AWMA001.mxd
DESIGN	G/C	SCALE	AS SHOWN
GIS	G/C	DATE	11/25/2013
CHECK	BH	DATE	11/25/2013
REVIEW	KT	DATE	11/25/2013



Attachment A

Project Plans



MAIN SITE WORKS AND TRACK CONSTRUCTION

STEELTON HILL DOUBLE TRACK

SUPERIOR SUBDIVISION

MP 467.32 - 471.96

STEELTON, MN

14 FEB 2014

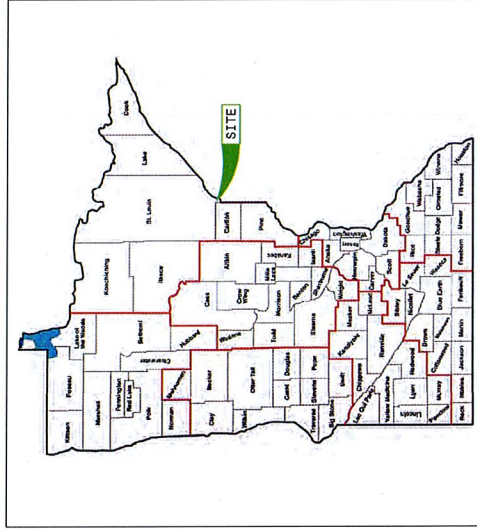
STANDARD REFERENCE DRAWINGS

ALL DIMENSIONS LISTED ON THIS PLAN SHALL BE CONSIDERED A PART THEREOF.

NONE USED

BENCHMARKS

BMP OF RAILROAD TRACK AT _____, TOP OF THE LETTER "O" OF "XX".
PALETTE
ELEVATION = XXX.XX' (NAD 83)



SITE VICINITY MAP
SCALE: N.T.S.





SITE LOCATION MAP
SCALE: N.T.S.

INDEX

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ISSUED FOR
PERMIT APPLICATION

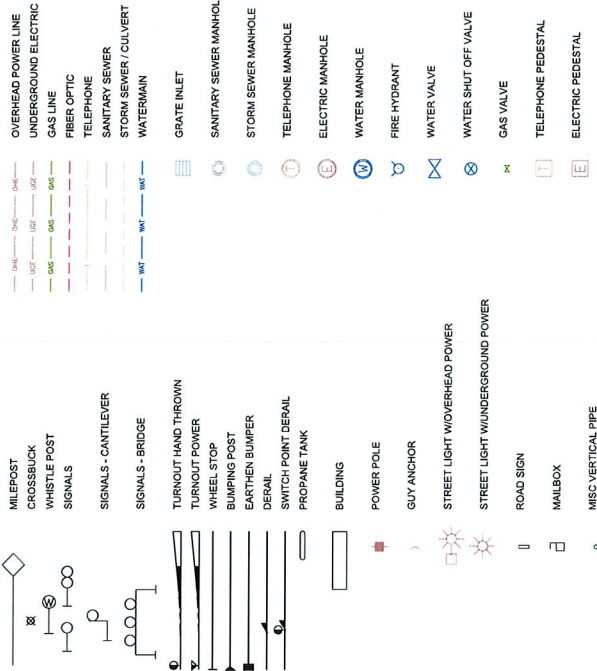
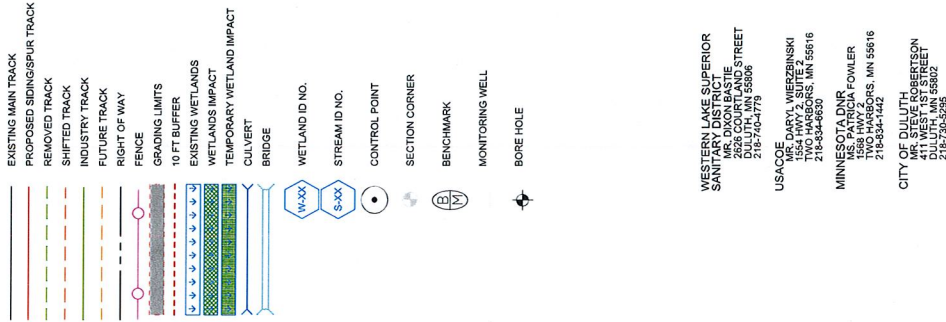
 SOUTHERN REGION	REVISIONS	DATE	BY
	1 OF 222		
 engineers - scientists - planners Allred Benesch & Company 4633 Washington Road Kenosha, Wisconsin 53144 262-652-6677 Job No. 20171.00	APPROVALS		
	SHEEF 1 OF 222		
WISCONSIN CENTRAL LTD STEELTON HILL SUPERIOR SUB STEELTON, MN		OFFICE OF DESIGN & CONSTRUCTION STEELTON HILL DATE: 2/14/2014 FILE: 0101_11.dgn	

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Twin Cities Metro: 651-454-0002
Greater MN Area: 800-252-1166
Nationally: 811



GENERAL NOTES

- ALL RAILROAD WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE WISCONSIN CENTRAL LTD. "SPECIFICATIONS FOR GRADING AND CONSTRUCTION OF INDUSTRIAL TRACKS" AND (CN) ENGINEERING TRACK STANDARDS, LATEST EDITION
- ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING UTILITIES SO THAT THEIR FACILITIES AND APPURTENANCES MAY BE LOCATED AND ADJUSTED OR MOVED IF NECESSARY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM ALL AFFECTED AGENCIES AND TO BE IN THE STANDARD SPECIFICATIONS.
- THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, SANITARY SEWERS, WATER LINES AND OTHER UTILITY LINES AS SHOWN ON THE PLANS, IS APPROXIMATE AND THEIR HORIZONTAL AND VERTICAL LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. NO COMPENSATION WILL BE MADE TO THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING EXACT LOCATIONS AND ELEVATIONS OF ALL UTILITIES, INCLUDING SEWER AND WATER FROM THE OWNERS OF THE RESPECTIVE UTILITIES. ALL UTILITY OWNERS SHALL BE NOTIFIED BY THE CONTRACTOR 72 HOURS PRIOR TO EXCAVATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH IT MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER OR OWNER. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.
- AT LEAST 10 DAYS PRIOR TO ANY EXCAVATION WORK ON OR ADJACENT TO THE TRACKS, THE CONTRACTOR SHALL CONTACT THE WISCONSIN CENTRAL LTD. (WCL) FOR SIGNAL CABLE LOCATION. THE WCL WILL PERFORM ANY SIGNAL CABLE RELOCATION.
- AT LEAST 72 HOURS PRIOR TO ANY EXCAVATING, THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS, FIBER OPTIC, AND CABLE TELEVISION FACILITIES.
- THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS OR PROPERTY OR REFERENCE MARKERS UNTIL THE OWNER, HIS AGENT OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
- ALL OFFSET LOCATIONS GIVEN ON THE DETAILED PLANS FOR DRAINAGE STRUCTURES ARE FROM THE CENTERLINE OF THE EXISTING OR PROPOSED WCL MAINLINE TRACK.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
- PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURES HAVE BEEN TAKEN FROM EXISTING PLANS AND FIELD SURVEY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD AND MAKE NECESSARY IMPROVED ADJUSTMENTS TO THE ORDERING OF MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK.
- GOLDER ASSOCIATES, INC. SOILS REPORT DATED DECEMBER 2013 IS MADE A PART OF THIS CONTRACT. ALL INFORMATION CONCERNING COMPACTION, UNSUITABLE MATERIALS, RELIEF OF ON-SITE MATERIAL, SOILS CONTAINING ORGANIC MATERIALS, TOPSOIL REMOVAL AND PLACEMENT, LOCATION OF BORINGS AND BORING LOGS ARE ALL CONTAINED WITHIN THE SOILS REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL INFORMATION IN THE SOILS REPORT AND PROVIDE AN AMOUNT IN THEIR BID TO COVER UNSUITABLE MATERIALS. NO ADDITIONAL COMPENSATION BEFORE THE BIDDING WILL BE PROVIDED FOR UNSUITABLE EXCAVATION.
- ALL WORK WITHIN 25' OF ANY TRACK, WILL REQUIRE FLAGGING PROTECTION. ANY FLAGGING PROTECTION PROVIDED BY WCL WILL BE AT THE CONTRACTOR'S EXPENSE.
- ALL SCRAP TIES SHALL BE REMOVED FROM THE WCL R.O.W. AND BE DISPOSED OF IN AN APPROVED MANNER. NO BURNING WILL BE PERMITTED.
- ALL POWERPOLES TO BE REMOVED SHALL BE PULLED. CONTRACTOR WILL NOT BE PERMITTED TO SAW POLES AND LEAVE BASE IN THE GROUND.
- PROTECT AND MAINTAIN EXISTING SIGNAL CABLE, SIGNALS AND SIGNAL BUNGALOWS.
- DURING CONSTRUCTION, CONTRACTOR SHALL MAINTAIN THE CURRENT ACCESS TO ALL EXISTING ROADS, TRAILS, AND FACILITIES IN ACCORDANCE WITH EXISTING ACCESS AND MANAGEMENT AGREEMENTS.
- CLEARING & GRUBBING SHALL BE DONE TO INCLUDE ALL AREAS WITHIN THE WORK LIMITS
- CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION STAKEOUT
- CONTRACTOR SHALL CONDUCT ACTIVITIES IN REGULATED AREAS IN ACCORDANCE WITH PERMIT ISSUED BY USACOE, MNDNR, CITY OF DULUTH AND OTHER REGULATORY AGENCIES.



CONTACTS

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DULUTH, MN 55806
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CITY OF DULUTH
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MR. BRIAN HUBNER
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MILWAUKEE, WI 53227
984-432-1070



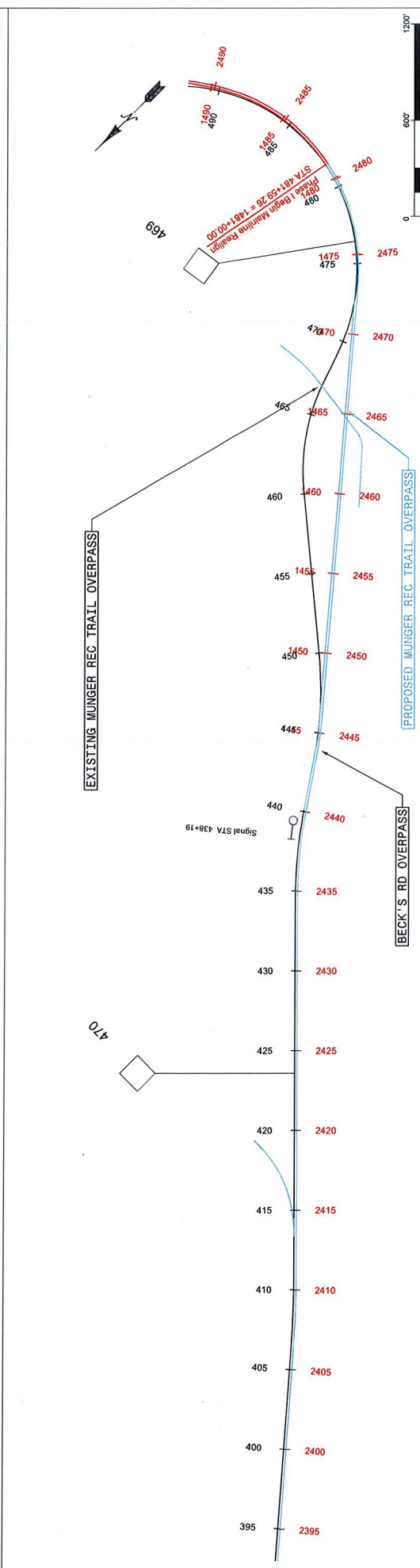
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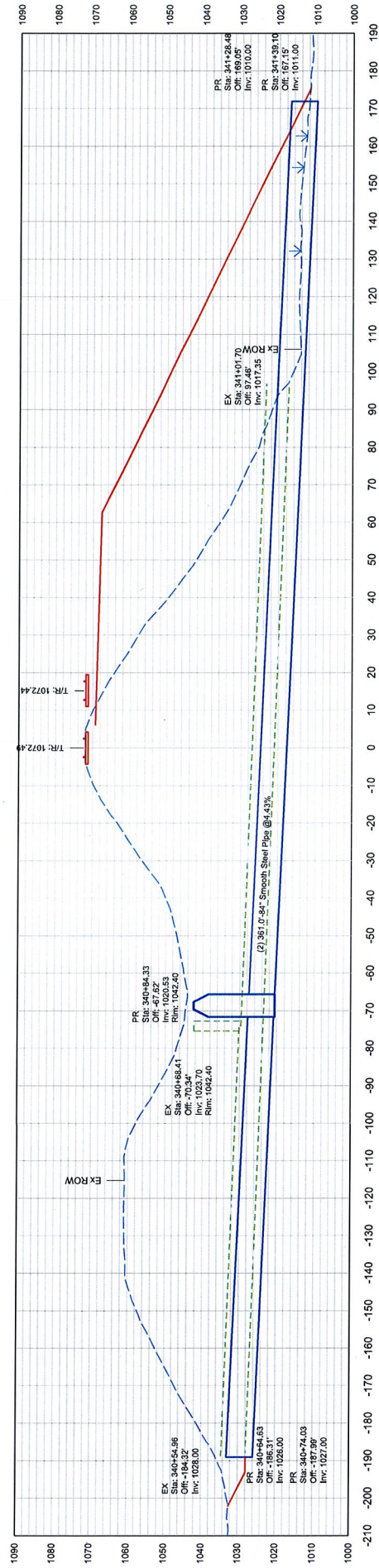
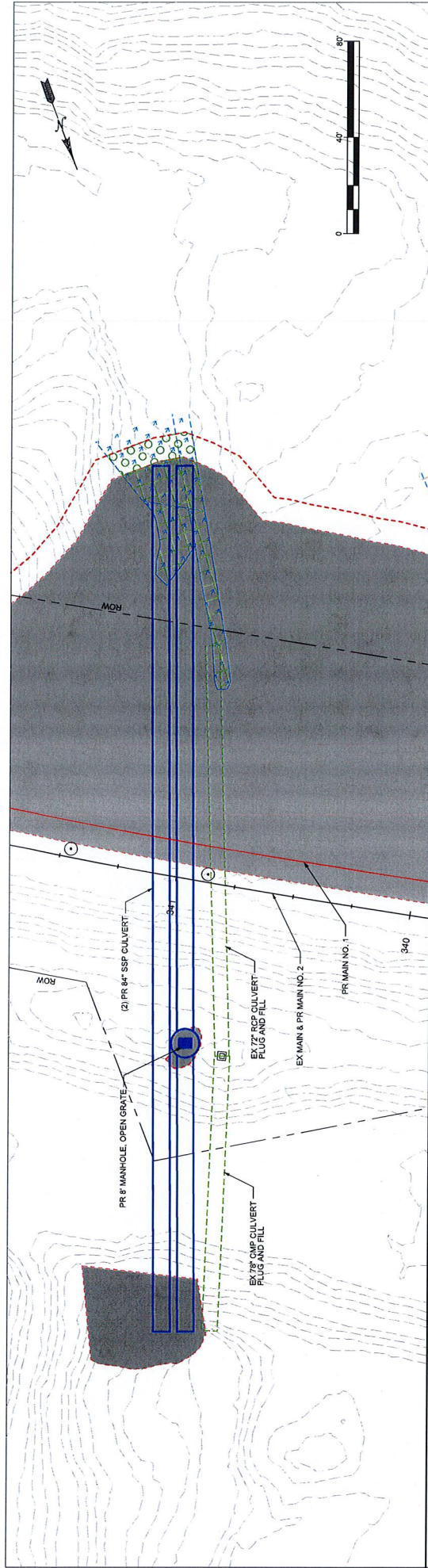
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<p>LEGEND</p> <p>EXISTING MAIN TRACK</p> <p>PHASE I PROPOSED TRACK</p> <p>PHASE II PROPOSED TRACK</p>	 <p>benesch engineers · scientists · planners</p> <p>Alfred Benesch & Company 4633 Washington Road Kenosha, Wisconsin 53144 262-652-5877 Job No. 20171.00</p>	<p>NOTES:</p>	<p>REVISIONS BY DATE</p>		 <p>WISCONSIN GENERAL LTD NORTH DIVISION SUPERIOR SUB STEELETON, MN</p>
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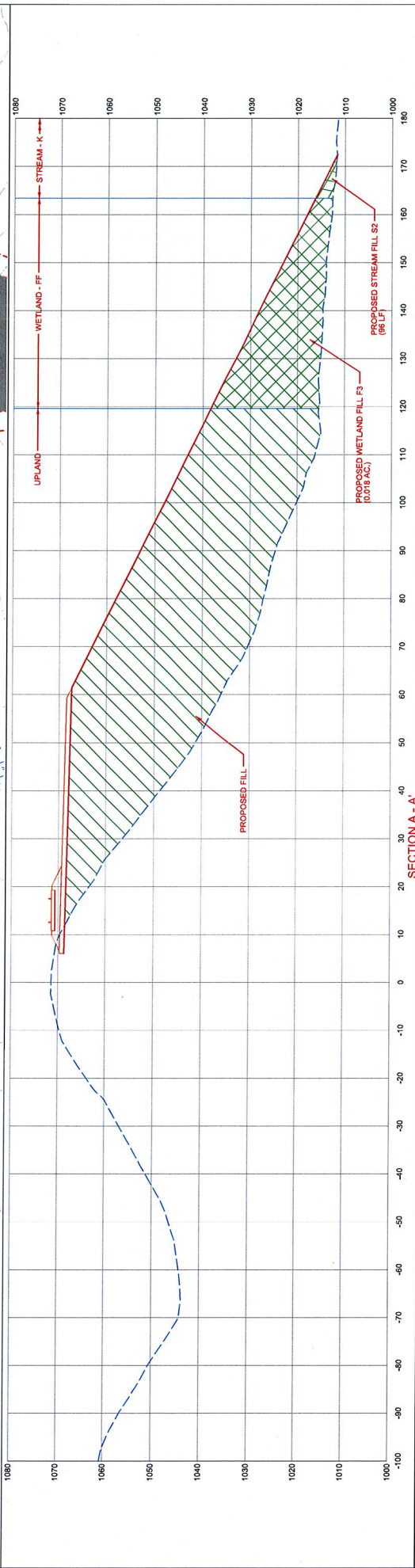
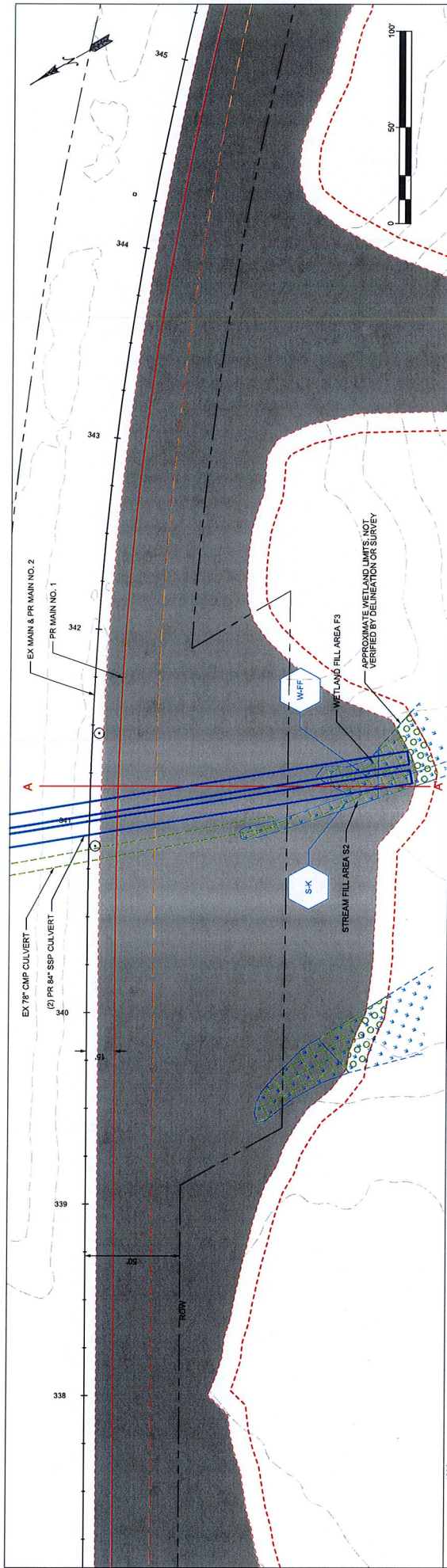
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LEGEND

- PROPOSED FILL
- WETLAND FILL/IMPACT
- STREAM FILL/IMPACT
- WETLAND ID NO.
- STREAM ID NO.

NOTES:

Wetland (As identified in National Wetlands Inventory)	Proposed Fill Area (acres)	Proposed Impact Area (to be restored) (acres)
Wetland	0.018	0.006

SECTION A - A

Wetland	Proposed Stream Crossing (Designation on project plans)	Proposed Stream Crossing (Designation on project plans)	Proposed Stream Crossing (Designation on project plans)	Proposed Stream Crossing (Designation on project plans)
Wetland	Wetland	Wetland	Wetland	Wetland

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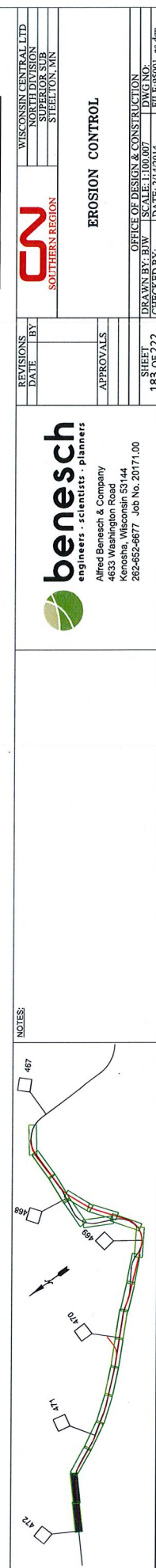
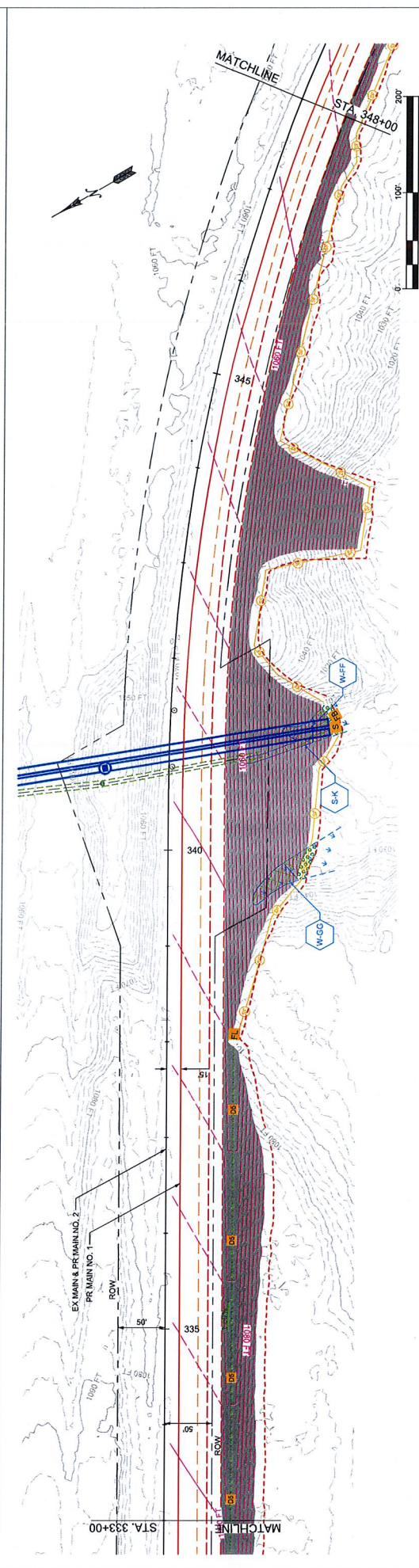
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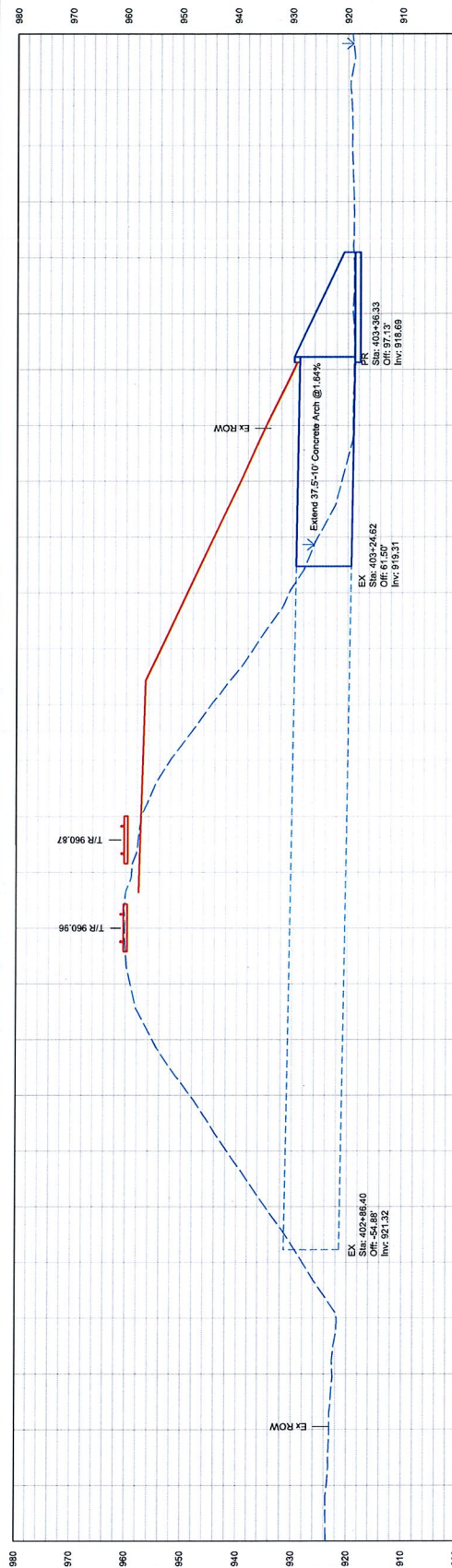
WETLAND & STREAM IMPACT
W-FF & S-K



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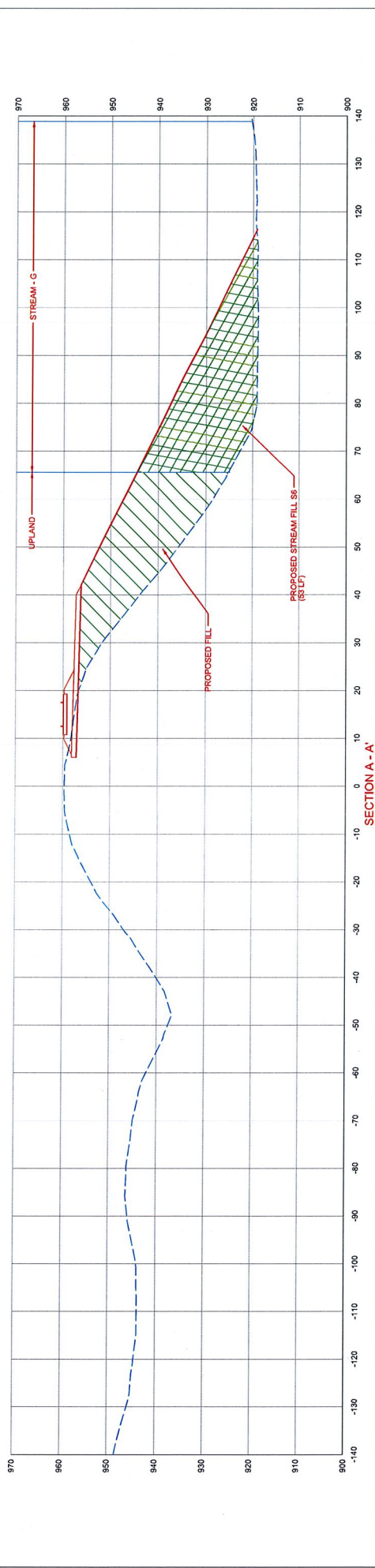
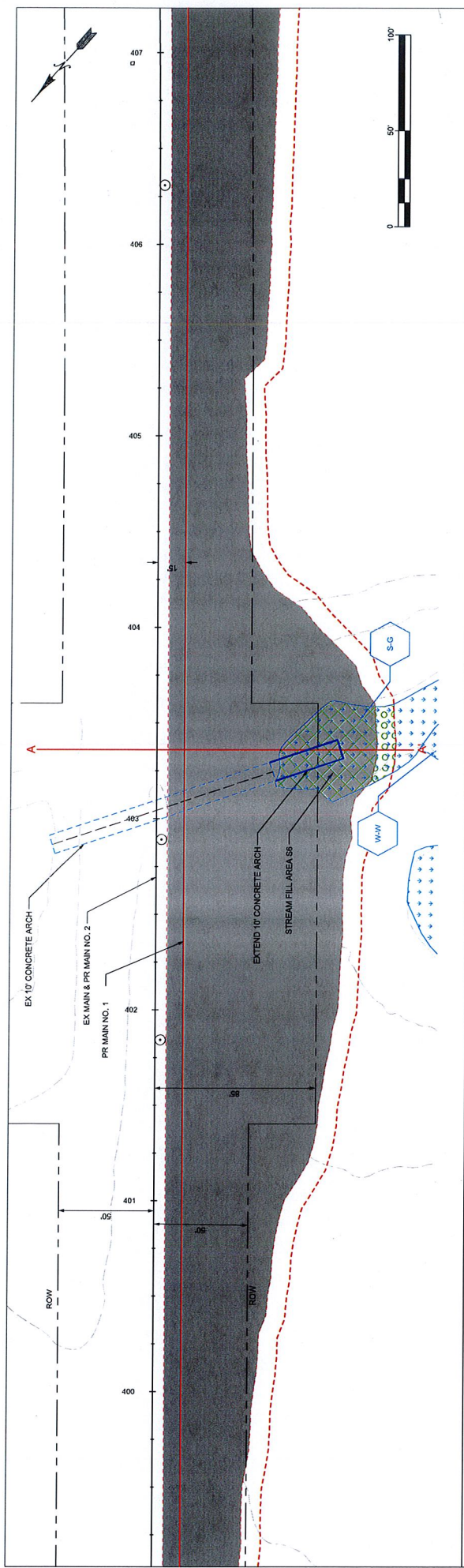
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LEGEND

- PROPOSED FILL
- WETLAND FILL/IMPACT
- STREAM FILL/IMPACT
- WETLAND ID NO.
- STREAM ID NO.

NOTES:

Proposed Stream Crossing (Designation on project Plans)	MN Public Water (Y=Yes) (N=No)	Designated Trout Stream (Y=Yes) (N=No)	Tributary to a Designated Trout Stream (Y=Yes) (N=No)	Proposed Impact Area (LF)	
				Stream	Wetland
G	Y	N	N	58	58

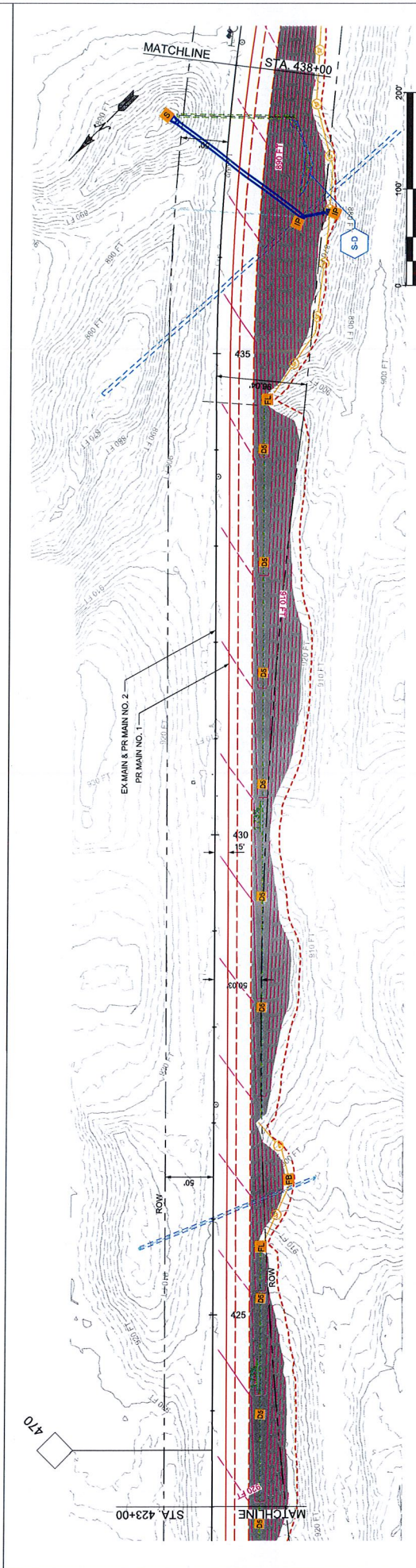
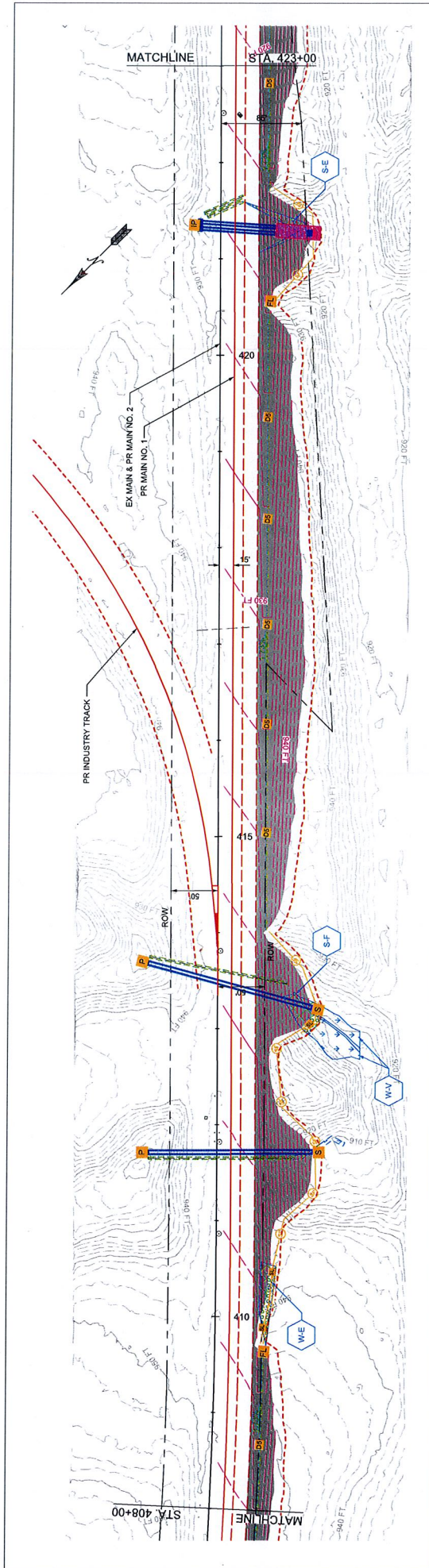
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WETLAND & STREAM IMPACT S-G

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NOTES:

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		<p>EROSION CONTROL</p>						
<p>REVISIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>DATE</th> <th>BY</th> </tr> <tr> <td> </td> <td> </td> </tr> </table>	DATE	BY			<p>APPROVALS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td> </td> </tr> </table>		<p>OFFICE OF DESIGN & CONSTRUCTION</p> <p>DRAWN BY: BW SCALE: 1"=100.00' DWG NO: </p> <p>CHECKED BY: DATE: 2/14/2014 FILE: 95004.ec.dgn</p>	
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<p>SHEET 186 OF 222</p>								

Appendix B

MnDNR Letter dated February 11, 2014



Minnesota Department of Natural Resources

Division of Ecological and Water Resources, Box 25

500 Lafayette Road

St. Paul, Minnesota 55155-4025

Phone: (651) 259-5109 E-mail: lisa.joyal@state.mn.us

February 11, 2014

Correspondence # ERDB 20140195

Ms. Sarah Zink
Alfred Benesch & Company
14748 West Center Rd
Omaha, NE 68144

RE: Natural Heritage Review of the proposed CN Steelton Hill Double Track

County	Township (N)	Range (W)	Section(s)
St. Louis	48	15	3,4
St. Louis	49	15	29,30,32,33,34

Dear Ms. Zink,

As requested, the Minnesota Natural Heritage Information System has been queried to determine if any rare species or other significant natural features are known to occur within an approximate one-mile radius of the proposed project. Based on this query, rare features have been documented within the search area (for details, see the enclosed database reports; please visit the Rare Species Guide at <http://www.dnr.state.mn.us/rsg/index.html> for more information on the biology, habitat use, and conservation measures of these rare species). Please note that the following **rare features may be adversely affected** by the proposed project:

- Most of the proposed project is within an area that the Minnesota Biological Survey (MBS) has identified as a Site of High Biodiversity Significance. Sites of Biodiversity Significance have varying levels of native biodiversity and are ranked based on the relative significance of this biodiversity at a statewide level. Sites ranked as High contain very good quality occurrences of the rarest species, high quality examples of the rare native plant communities, and/or important functional landscapes (see enclosed map; GIS shapefiles of MBS Sites of Biodiversity Significance and MBS Native Plant Communities can be downloaded from the DNR Data Deli at <http://deli.dnr.state.mn.us>). Within this Site, the proposed track crosses an Aspen – Birch – Basswood Forest native plant community, which is considered uncommon but not rare in Minnesota.

Given the ecological significance of this area, disturbance within the MBS Site should be minimized to the extent feasible. Actions to minimize disturbance may include, but are not limited to, the following recommendations:

- As much as possible, operate within already-disturbed areas;
- Minimize vehicular disturbance in the area (allow only vehicles/equipment necessary for track removal and installation);
- Do not park equipment or stockpile supplies in the area;
- Do not place spoil within MBS Sites or other sensitive areas;
- Inspect and clean all equipment prior to bringing it to the site to prevent the introduction and spread of invasive species;
- If possible, conduct the work under frozen ground conditions;
- Use effective erosion prevention and sediment control measures;
- Revegetate disturbed soil with native species suitable to the local habitat as soon after

- construction as possible; and
- Use only weed-free mulches, topsoils, and seed mixes.
- Please include a copy of this letter in any DNR license or permit application.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. **If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.**


The enclosed results include an Index Report of records in the Rare Features Database, the main database of the NHIS. To control the release of specific location data, the report is copyrighted and only provides rare features locations to the nearest section. The Index Report may be reprinted, unaltered, in any environmental review document (e.g., EAW or EIS), municipal natural resource plan, or report compiled by your company for the project listed above. If you wish to reproduce the Index Report for any other purpose, please contact me to request written permission.

For environmental review purposes, the Natural Heritage letter and database reports are valid for one year; they are only valid for the project location (noted above) and the project description provided on the NHIS Data Request Form. Please contact me if project details change or for an updated review if construction has not occurred within one year.

The Natural Heritage Review does not constitute review or approval by the Department of Natural Resources as a whole. Instead, it identifies issues regarding known occurrences of rare features and potential effects to these rare features. To determine whether there are other natural resource concerns associated with the proposed project, please contact your DNR Regional Environmental Assessment Ecologist (contact information available at http://www.dnr.state.mn.us/eco/ereview/erp_regioncontacts.html). Please be aware that additional site assessments or review may be required.

Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources. An invoice will be mailed to you under separate cover.

Sincerely,



Lisa Joyal
Endangered Species Review Coordinator

enc. Rare Features Database: Index Report
Map

cc: Rian Reed
Patricia Fowler

Rare Features Database:

Element Name and Occurrence Number	Federal Status	MN Status	Draft Status	SGCN Status	State Rank	Global Rank	Last Obs Date	EO ID #
Vertebrate Animal								
<u>Acipenser fulvescens</u> (Lake Sturgeon) #124 T48N R15W S1, T48N R15W S2; St. Louis County		SPC		SGCN	S3	G3G4	2002-07-08	23181
<u>Acipenser fulvescens</u> (Lake Sturgeon) #125 T48N R15W S11, T48N R15W S2; St. Louis County		SPC		SGCN	S3	G3G4	2002-07-08	23182
Invertebrate Animal								
<u>Lasmigona compressa</u> (Creek Heelsplitter) #239 T48N R15W S10, T48N R15W S11, T48N R15W S6, T48N R15W S8, T [...]; St. Louis County		SPC		SGCN	S3	G5	2000-08-01	33709
Vascular Plant								
<u>Actaea pachypoda</u> (White Baneberry) #18 T49N R15W S28, T49N R15W S29, T49N R15W S33; St. Louis County	Watchlist				SNR	G5	2004-09-08	3305
<u>Adoxa moschatellina</u> (Moschatel) #21 T48N R15W S5, T48N R15W S6, T49N R15W S29, T49N R15W S30, T [...]; Carlton, St. Louis County	Watchlist				S3	G5	1950-06-04	3336
<u>Adoxa moschatellina</u> (Moschatel) #46 T49N R15W S28, T49N R15W S29, T49N R15W S32, T49N R15W S33; St. Louis County	Watchlist				S3	G5	2010-05-14	8405
<u>Bidens discoidea</u> (Bur-marigold) #3 T48N R15W S10, T48N R15W S11, T48N R15W S2, T48N R15W S3; St. Louis County	SPC				SNR	G5	1945-09-15	3793
<u>Bidens discoidea</u> (Bur-marigold) #5 T48N R15W S1, T48N R15W S10, T48N R15W S11, T48N R15W S2, T [...]; St. Louis County	SPC				SNR	G5	1944-08-26	3795
<u>Bidens discoidea</u> (Bur-marigold) #6 T49N R15W S25, T49N R15W S26, T49N R15W S27, T49N R15W S34, T [...]; St. Louis County	SPC				SNR	G5	1940-09-11	3796
<u>Calamagrostis lacustris</u> (Marsh Reedgrass) #3 T48N R15W S4, T48N R15W S5, T48N R15W S6, T48N R15W S7, T [...]; St. Louis County	SPC				S3	G3Q	1889	3888
<u>Claytonia caroliniana</u> (Carolina Spring-beauty) #23 T48N R15W S5, T48N R15W S6, T49N R15W S29, T49N R15W S30, T [...]; Carlton, St. Louis County	Watchlist				S3	G5	1943-05-23	4238

Rare Features Database:

Element Name and Occurrence Number	Federal Status	MN Status	Draft Status	SGCN Status	State Rank	Global Rank	Last Obs Date	EO ID #
Vascular Plant								
<u>Claytonia caroliniana</u> (Carolina Spring-beauty) #101 T49N R15W S28; St. Louis County		Watchlist			S3	G5	2000-06-08	27805
<u>Elodea bifoliata</u> (Twoleaf Waterweed) #1 T48N R15W S10, T48N R15W S11, T48N R15W S2, T48N R15W S9; St. Louis County		END			SNR	G4G5	1949-08-20	35281
Native Plant Community (This may not represent a complete list. Also see MCBS Native Plant Communities at http://deli.dnr.state.mn.us.)								
<u>Sugar Maple - Basswood - (Bluebead Lily) Forest Type #1040</u> T49N R15W S28, T49N R15W S29, T49N R15W S32, T49N R15W S33; St. Louis County		N/A			S3	GNR	1982-06-11	7986

Records Printed = 14

Minnesota's endangered species law (*Minnesota Statutes*, section 84.0895) and associated rules (*Minnesota Rules*, part 6212.1800 to 6212.2300 and 6134) prohibit the taking of threatened or endangered species without a permit. For plants, taking includes digging or destroying. For animals, taking includes pursuing, capturing, or killing.

An Explanation of Fields:

Element Name and Occurrence Number: The Element is the name of the rare feature. For plant and animal species records, this field holds the scientific name followed by the common name in parentheses; for all other elements it is solely the element name. Native plant community names correspond to Minnesota's Native Plant Community Classification (Version 2.0). The Occurrence Number, in combination with the Element Name, uniquely identifies each record.

Federal Status: The status of the species under the U.S. Endangered Species Act: LE = endangered; LT = threatened; LE,LT = listed endangered in part of its range, listed threatened in another part of its range; LT,PDL = listed threatened, proposed for delisting; C = candidate for listing. If null or 'No Status,' the species has no federal status.

MN Status: The legal status of the plant or animal species under the Minnesota Endangered Species Law: END = endangered; THR = threatened; SPC = special concern; NON = tracked, but no legal status. Native plant communities, geological features, and colonial waterbird nesting sites do not have any legal status under the Endangered Species Law and are represented by a N/A.

Draft Status: Proposed change to the legal status of the plant or animal species under the Minnesota Endangered Species Law: END = endangered; THR = threatened; SPC = special concern; Watchlist = tracked, but no legal status.

SGCN Status: SGCN = The species is a Species in Greatest Conservation Need as identified in Minnesota's State Wildlife Action Plan (<http://www.dnr.state.mn.us/cwcs/index.html>). This designation applies to animals only.

State Rank: Rank that best characterizes the relative rarity or endangerment of the taxon or plant community in Minnesota. The ranks do not represent a legal status. They are used by the Minnesota Department of Natural Resources to set priorities for research, inventory and conservation planning. The state ranks are updated as inventory information becomes available. S1 = Critically imperiled in Minnesota because of extreme rarity or because of some factor(s) making it especially vulnerable to extirpation from the state. S2 = Imperiled in Minnesota because of rarity or because of some factor(s) making it very vulnerable to extirpation from the state. S3 = Vulnerable in Minnesota either because rare or uncommon, or found in a restricted range, or because of other

Minnesota Natural Heritage Information System
Index Report of records within 1 mile radius of:
ERDB# 20140195 - CN Steelton Hill Double Track

Multiple TRS

St. Louis County

factors making it vulnerable to extirpation. S4 = Apparently secure in Minnesota, usually widespread. S5 = Demonstrably secure in Minnesota, essentially ineradicable under present conditions. SH = Of historical occurrence in the state, perhaps having not been verified in the past 20 years, but suspected to be still extant. An element would become SH without the 20-year delay if the only known occurrences in the state were destroyed or if it had been extensively and unsuccessfully looked for. SNR = Rank not yet assessed. SU = Presumed extinct in Minnesota. SNA = Rank not applicable. S#S# = Range Rank: a numeric range rank (e.g., S2S3) is used to indicate the range of uncertainty about the exact status of the element. S#B, S#N = Used only for migratory animals, whereby B refers to the breeding population of the element in Minnesota and N refers to the non-breeding population of the element in Minnesota.

Global Rank: The global (i.e., range-wide) assessment of the relative rarity or imperilment of the species or community. Ranges from G1 (critically imperiled due to extreme rarity on a world-wide basis) to G5 (demonstrably secure, though perhaps rare in parts of its range). Global ranks are determined by NatureServe, an international network of natural heritage programs and conservation data centers.

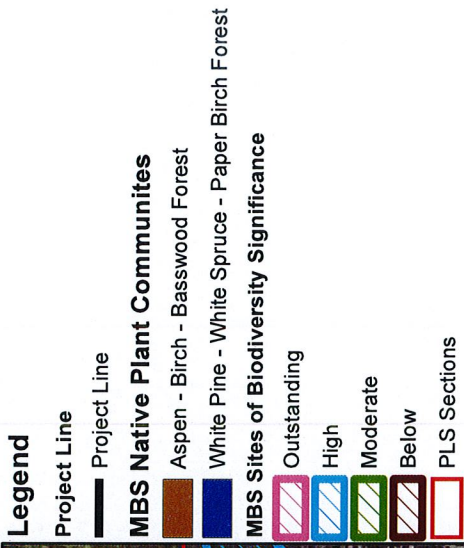
Last Observed Date: Date that the Element Occurrence was last observed to be extant at the site in format YYYY-MM-DD.

EO ID #: Unique identifier for each Element Occurrence record.

Element Occurrence: An area of land and/or water in which an Element (i.e., a rare species or community) is, or was, present, and which has practical conservation value for the Element as evidenced by potential continued (or historical) presence and/or regular recurrence at a given location. Specifications for each species determine whether multiple observations should be considered 1 Element Occurrence or 2, based on minimum separation distance and barriers to movement.

ERDB# 20140195 - CN Steelton Hill Double Track Multiple TRS St. Louis County

GIS shapefiles of MBS Sites of Biodiversity Significance and MBS Native Plant Communities can be downloaded from the DNR Data Deli at <http://deli.dnr.state.mn.us>.



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Rare Feature, Prairie Railroad Survey, Native Plant Community,
and Sites of Biodiversity Significance data are from the
Natural Heritage Information System. The absence of rare features
for a particular location should not be construed to mean that the
DNR is confident rare features are absent from that location.