

Information for File # 2014-00850-DWW

Applicant	City of Duluth
Corps Contact	Daryl W. Wierzbinski
Address	600 South Lake Avenue, Suite 211 Duluth, Minnesota 55802
E-Mail	daryl.w.wierzbinski@usace.army.mil
Phone	218-720-5291 extension 35401
Primary County	St. Louis County
Section	12, 13
Township	49N
Range	15W
Information Complete On	April 8, 2015
Posting Expires On	April 20, 2015
Authorization Type	LOP-05-MN

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Section 404 of the Clean Water Act identified in Regulatory Guidance Letter 07-01. We have made a preliminary determination that the aquatic resources that would be impacted by the proposed project are regulated by the Corps of Engineers under Section 404 of the Clean Water Act. Our jurisdictional review and final jurisdictional determination could result in modifications to the scope of the project's regulated waterbody/wetland impacts and compensatory mitigation requirements identified above. An approved jurisdictional determination will be made prior to reaching a permit decision, and will be posted on the St. Paul District web page at <http://www.mvp.usace.army.mil/>.

PROJECT: The City of Duluth has applied for a Department of the Army permit to work in wetlands and waters for the purpose of constructing Phase 4 of the Cross City Trail. The trail would consist of approximately 1.1 mile alignment on an existing railroad grade beginning at the intersection of 63rd Avenue West and Greene Street, and continuing west on the former Duluth, Winnipeg, and Pacific (DWP) Railway line and terminating at Waseca Street at the Lake Superior Zoo. The proposed alignment would include the construction of bridges across Keene Creek and a tributary of Keene Creek.

NAME, AREA AND TYPES OF WATERS (INCLUDING WETLANDS) SUBJECT TO LOSS: The project would result in the permanent discharge of dredged and fill materials in 0.22-acre of wetlands for the purpose of constructing Phase 4 of the Cross City Trail. The wetlands are adjacent to Keene Creek and unnamed tributary to Keene Creek, both designated trout streams, which flow into Lake Superior, a navigable water of the United States. The wetlands proposed to be permanently impacted in the project corridor consist of the following vegetative types: 0.02-acre fresh wet meadow (Type 2) and 0.20-acre of shrub carr/alder thicket (Type 6) wetlands.

The proposed temporary wetland impacts of .03-acre of shrub-carr within the construction limits of the project corridor would be restored to pre-project conditions.

The project would include the discharge of 181 cubic yards of riprap in Keene Creek within approximately 40 linear feet.

ALTERNATIVES CONSIDERED:

No Action: No trail improvements and the gap in the existing paved trail system would persist; and

Alternative 1: this trail alignment would have resulted in connecting segments adjacent to active BNSF railway tracks and on an on-street pathway.

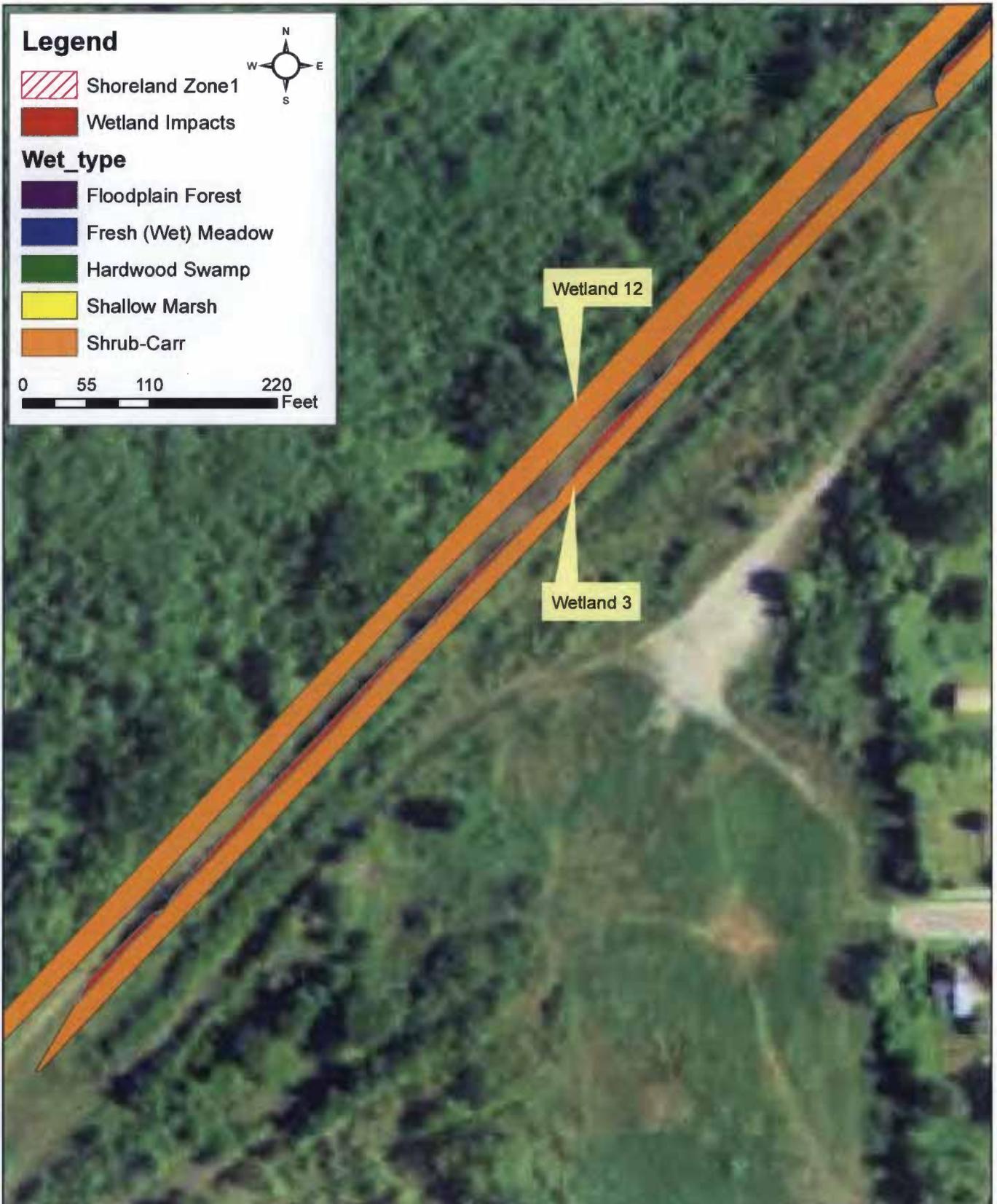
COMPENSATORY MITIGATION: Compensatory mitigation for discharges into waters/wetlands would not be required; proposed wetland impacts are not within a shoreland protection zone and the overall proposed permanent discharge in wetlands is less than 10,000 square feet within an 80% counties. The placement of riprap within Keene Creek would facilitate the bridge construction activity and stabilize the banks.

Drawings See attached.



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	418 W SUPERIOR ST, SUITE 200 DULUTH, MN 55802 PHONE: (218) 279-3000 FAX: (888) 908-8166 TF: (800) 325-2055 www.sehinc.com	Project: DULUT 109680 Print Date: 1/22/2015 Map by: tambruster Projection: UTM, 15N, NAD83 Source: MnGeo, SEH	Wetland Location Map Cross City Trail - Phase 4 Duluth, Minnes	Figure 2
	<small>This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance. This map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.</small>			



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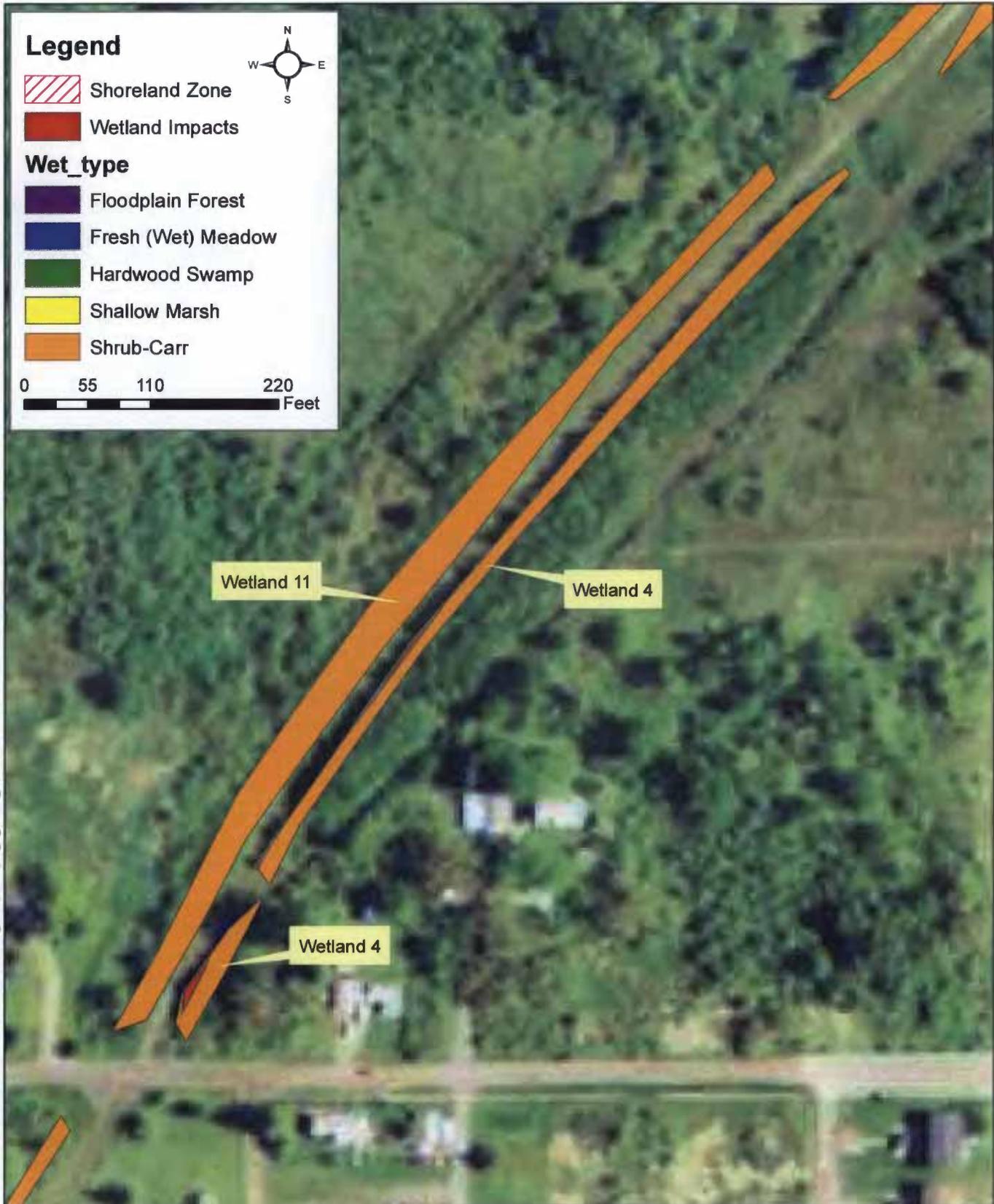
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 PHONE: (218) 279-3000
 FAX: (888) 908-8166
 TF: (800) 325-2055
 www.sehinc.com

Project: DULUT 109680
 Print Date: 2/5/2015
 Map by: krhanson
 Projection: UTM, 15N, NAD83
 Source: MnGeo, SEH

Proposed Wetland Impacts Map
 Cross City Trail - Phase 4
 Duluth, Minnes

Figure
 4b

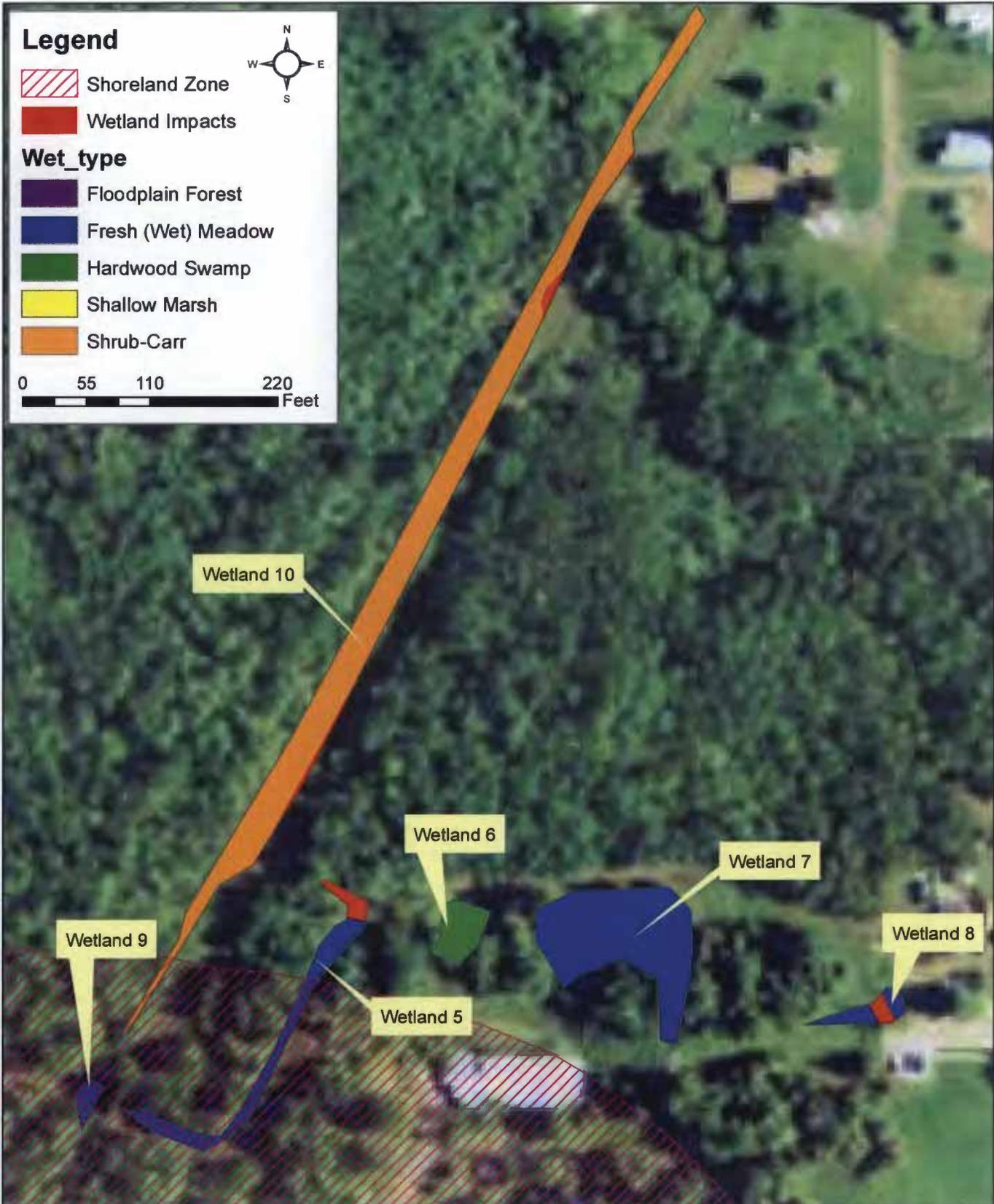
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		Map by: khanson Projection: UTM, 15N, NAD83 Source: MxGeo, SEH		

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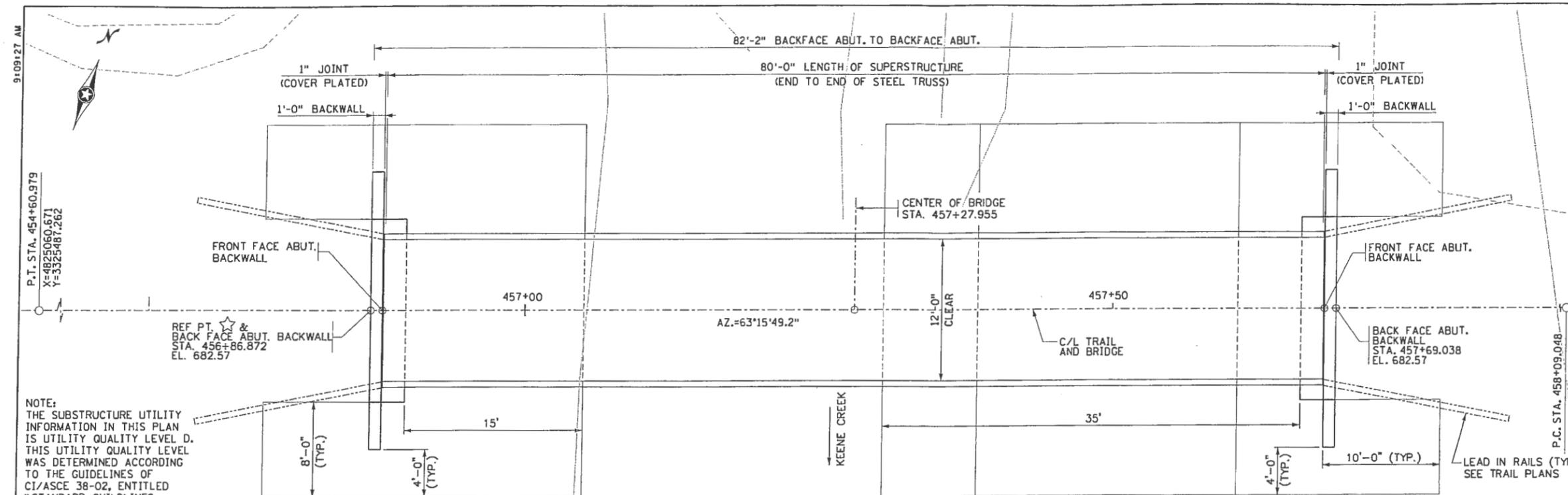
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Proposed Wetland Impacts Map
 Cross City Trail - Phase 4
 Duluth, Minnes

Figure 4d

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DESIGN DATA

2014 AND CURRENT INTERIM AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS
 2009 LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES
 PEDESTRIAN LOADING: 90 PSF
 DESIGN VEHICLE: H10 (20,000 LBS.)

MATERIAL DESIGN PROPERTIES:
 REINFORCED CONCRETE:
 $f'_c = 4$ KSI $n = 8$
 $f_y = 60$ KSI REINFORCEMENT

STRUCTURAL STEEL:
 STEEL, PER MNDOT 3309 & 3361 TYPE C
 $f_y = 50000$ PSI MINIMUM

DESIGN SPEED:
 OVER = 20 MPH
 APPROXIMATE DECK AREA 960 SQ. FT.

LIST OF SHEETS

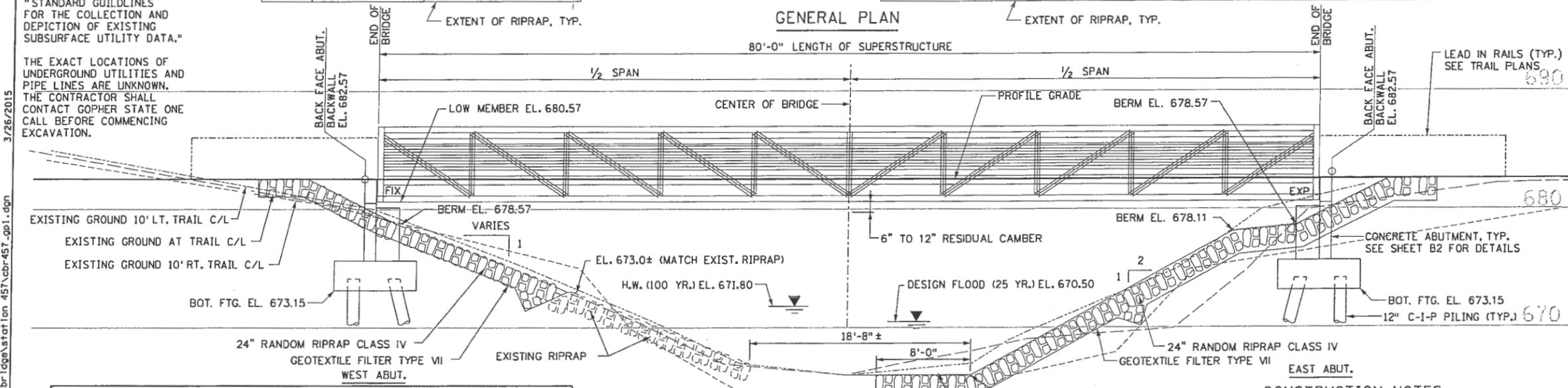
NO	DESCRIPTION
B1	GENERAL PLAN & ELEVATION
B2	ABUTMENT DETAILS
B3	RIPRAP DETAILS
B4	B-DETAILS
B5	AS-BUILT BRIDGE DATA
B6	BRIDGE SURVEY
B7	BRIDGE SURVEY PLAN AND PROFILE

NOTE:
 THE SUBSTRUCTURE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF C/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

THE EXACT LOCATIONS OF UNDERGROUND UTILITIES AND PIPE LINES ARE UNKNOWN. THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL BEFORE COMMENCING EXCAVATION.

NOTES:
 ☆ REF. PT. = REFERENCE POINT IS AT THE BACK FACE OF ABUTMENT BACKWALL OF NEW BRIDGE

ABUTMENTS ARE IDENTICAL AND AS SHOWN OR NOTED OTHERWISE.
 BRIDGE SUPPLIER TO PLACE PLAQUE WITH MNDOT BRIDGE NUMBER AND LOAD LIMIT SIGN ON EACH END OF BRIDGE.



APPROVED: _____
 DATE: _____ CITY OF DULUTH

SEH
 3535 VADNAIS CENTER DRIVE
 ST PAUL, MN 55110
 PHONE (651) 490-2000
 FAX (651) 490-2150

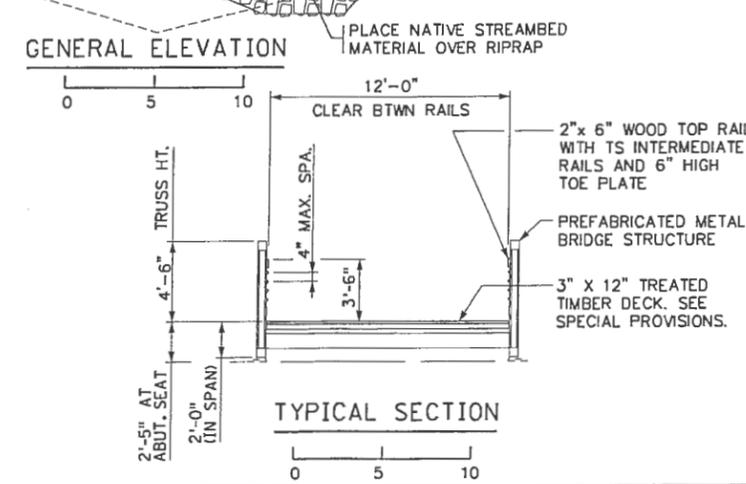
I HEREBY CERTIFY THAT SHEETS B1 THROUGH B6 WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNED: _____
 DATE: 3/26/2015 REG. NO. 17280

SCHEDULE OF QUANTITIES FOR ENTIRE BRIDGE

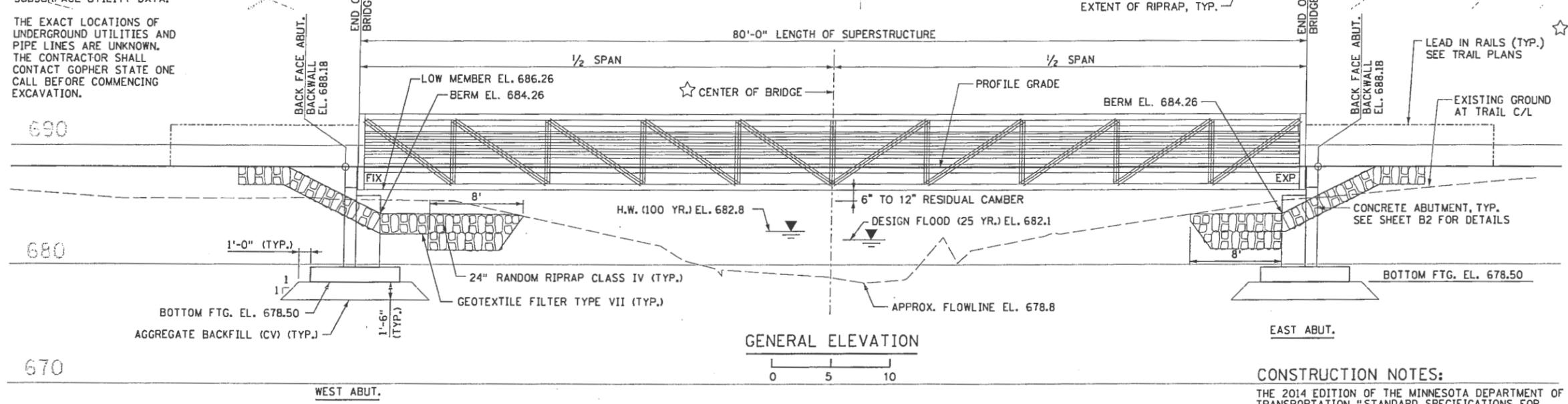
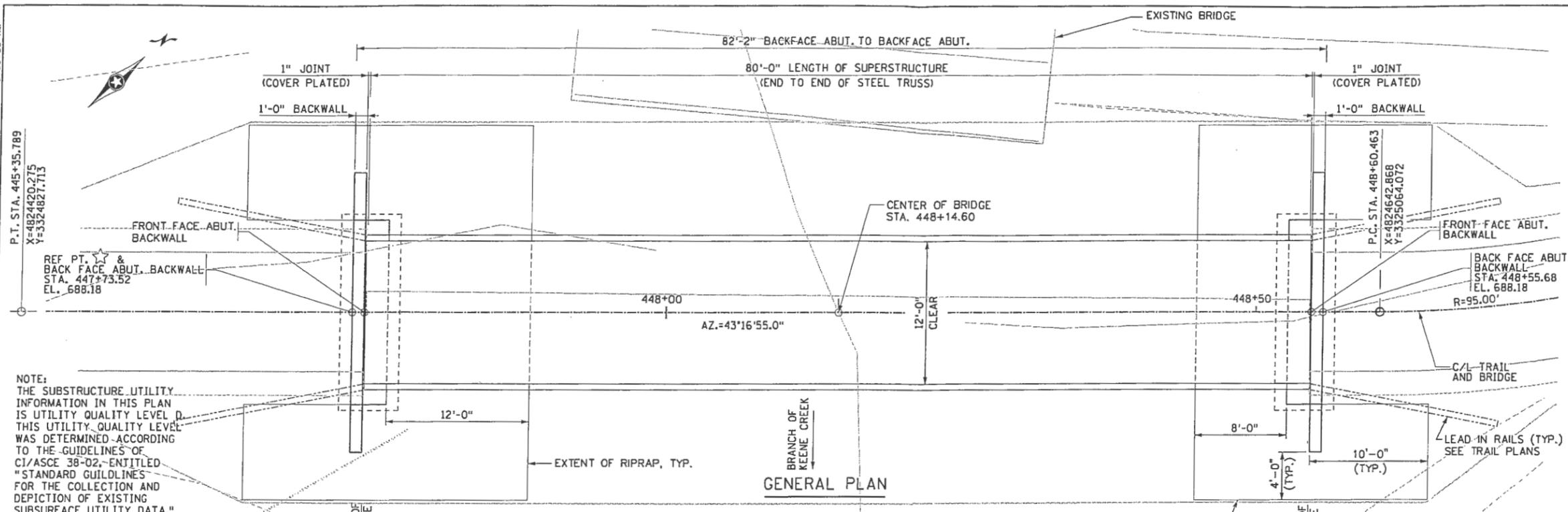
ITEM NO	ITEM	UNIT	QUANTITY
①② 2402.601	PEDESTRIAN BRIDGE (SUPERSTRUCTURE)	LUMP SUM	1
2401.501	STRUCTURAL CONCRETE (1A43)	CU YD	21 (P)
2401.501	STRUCTURAL CONCRETE (3Y43)	CU YD	23 (P)
2401.541	REINFORCEMENT BARS	POUND	1160 (P)
2401.541	REINFORCEMENT BARS (EPOXY COATED)	POUND	1870 (P)
2401.601	STRUCTURE EXCAVATION	LUMP SUM	1
2401.601	SLOPE PREPARATION	LUMP SUM	1
2452.507	C-I-P CONCRETE PILING DELIVERED 12"	LIN FT	210
2452.508	C-I-P CONCRETE PILING DRIVEN 12"	LIN FT	210
2452.519	C-I-P CONC TEST PILE 45 FT LONG 12"	EACH	2
2511.501	RANDOM RIPRAP CLASS IV	CU YD	214 (P)
2511.515	GEOTEXTILE FILTER TYPE VII	SQ. YD.	292 (P)

① INCLUDES ANCHOR BOLTS, NUTS & WASHERS AND DECK END JOINT COVER PLATES.
 ② SEE SPECIAL PROVISIONS.



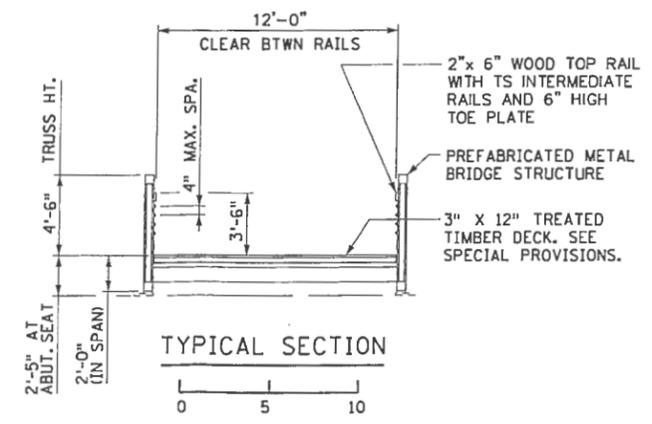
CONSTRUCTION NOTES:
 THE 2014 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND THE 2014 EDITION OF THE "MATERIALS LAB SUPPLEMENTAL SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.
 THE BAR SIZES SHOWN ARE IN U.S. CUSTOMARY DESIGNATIONS.
 THE BARS MARKED WITH THE SUFFIX "E" SHALL BE EPOXY COATED.
 DRAWINGS ARE NOT TO BE SCALED.
 BRIDGE SEAT REINFORCEMENT SHALL BE CAREFULLY PLACED TO AVOID INTERFERENCE WITH DRILLING HOLES FOR ANCHOR RODS. THE SUPERSTRUCTURE SHALL BE ERRECTED IN FINAL POSITION PRIOR TO DRILLING HOLES FOR AND PLACING ANCHOR BOLTS.
 ALL TIMBER SHALL BE PRESERVATIVE TREATED IN ACCORDANCE WITH SPEC. 3491 AND SPECIAL PROVISIONS.
 APPROACH FILL AND ROUGH GRADING PROVIDED UNDER GRADING PORTION OF CONTRACT. RESTORATION OF SIDE SLOPES SHALL BE INCLUDED IN PRICE BID FOR STRUCTURE EXCAVATION. FORESLOPE SHALL BE PLACED AND COMPACTED IN SUBSTANTIAL CONFORMANCE WITH ITS FINAL SHAPE BEFORE ABUTMENT IS BACKFILLED.

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2401.501	STRUCTURAL CONCRETE (3Y43)	CY	28 (P)
2401.541	REINFORCEMENT BARS	LB	1040 (P)
2401.541	REINFORCEMENT BARS (EPOXY COATED)	LB	2070 (P)
2401.601	STRUCTURE EXCAVATION	LS	1
2401.601	SLOPE PREPARATION	LS	1
2451.505	AGGREGATE BACKFILL (CV)	CU YD	25 (P)
2511.501	RANDOM RIPRAP CLASS IV	CU YD	131 (P)
2511.515	GEOTEXTILE FILTER TYPE VII	SG. YD.	160 (P)

① INCLUDES ANCHOR BOLTS, NUTS & WASHERS AND DECK END JOINT COVER PLATES.
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DESIGN SPEED:
 OVER = 20 MPH

APPROXIMATE DECK AREA 960 SQ. FT.

LIST OF SHEETS

NO	DESCRIPTION
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B2	ABUTMENT DETAILS
B3	RIPRAP DETAILS
B4	B-DETAILS
B5	AS-BUILT BRIDGE DATA
B6	BRIDGE SURVEY
B7	BRIDGE SURVEY PLAN AND PROFILE

FOUNDATION DATA:
 SPREAD FOOTING ON SUBCUT W/ AGGREGATE BACKFILL.
 4.0 KSF ALLOWABLE BEARING CAPACITY (MIN.)

NOTES:

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BRIDGE SUPPLIER TO PLACE PLAQUE WITH MNDOT BRIDGE NUMBER AND LOAD LIMIT SIGN ON EACH END OF BRIDGE.

APPROVED: _____ CITY OF DULUTH
 DATE: _____

3535 VADNAIS CENTER DRIVE
 ST PAUL, MN 55110
 PHONE (651) 490-2000
 FAX (651) 490-2150

I HEREBY CERTIFY THAT SHEETS B1 THROUGH B6 WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNED: JEFF A. JOHNSON
 DATE: 3/26/2015 REG. NO. 17280

CITY OF DULUTH, MINNESOTA

TRAIL BRIDGE R0701
 CROSS CITY TRAIL BRIDGE
 OVER BRANCH OF KEENE CREEK
 LOCATED IN WEST DULUTH

A SINGLE-SPAN PREFABRICATED STEEL TRUSS
 80'-0" LONG X 12'-0" CLEAR WIDTH, 0° SKEW

IDENTIFICATION NO 302
GENERAL PLAN & ELEVATION
 SEC 13 TWP 49 N R 15 W
 CITY OF DULUTH ST. LOUIS COUNTY

APPROVED: _____ DATE: _____
 DES: J/
 CHK: M/