



US Army Corps
of Engineers
St Paul District

APPLICANT: Nine Mile Creek
Watershed District
(NMCWD)

REFER TO: 2015-01510-MMJ

Public Notice

ISSUED: April 6, 2015

EXPIRES: May 5, 2016

SECTION: 404 - Clean Water Act

1. APPLICATION FOR PERMIT TO conduct stream bank stabilization and stream restoration work along 3.0 miles of the North Fork of Nine Mile Creek, in the City of Edina. We originally published a public notice for this project on 9/29/2015. However, the applicant (the Nine Mile Creek Watershed District) has recently redesigned portions of the project and expanded the construction limits along the project corridor to better accommodate restoration activities. Excavation and grading activities associated with the original project would have resulted in the disturbance of approximately 8.78 acres of streambed below the ordinary high water mark (OHWM) of the North Fork of Nine Mile Creek, and the discharge of fill material into 2.98 acres of wetland adjacent to the creek. As most recently proposed, excavation and grading activities associated with the revised project would result in the disturbance of approximately 3.88 acres of streambed below the OHWM of the North Fork of Nine Mile Creek, and the temporary discharge of fill material into approximately 9.28 acres of wetland adjacent to the creek. Construction activities associated with new stream channel excavation and floodplain grading would also result in the permanent conversion of an additional approximately 1.02 acres of wetland.

2. SPECIFIC INFORMATION.

APPLICANT'S ADDRESS:

Nine Mile Creek Watershed District
Attention: Kevin Bigalke
12800 Gerard Drive
Eden Prairie, Minnesota 55346

PROJECT LOCATION: The proposed improvement projects are located in the city of Edina, Minnesota. The North Fork of Nine Mile Creek enters the northwestern corner of the city at its boundary with Hopkins, near Trunk Highway (TH) 169. The stream then flows south and east, crossing TH 62 just east of Gleason Road and crosses the boundary between Edina and Bloomington just west of TH 100. The total stream length in the study area is 29,930 feet (5.7 miles), of which 15,870 feet (3.0 miles) are included in 14 reaches for proposed improvements.

The project corridor is located within Section 31, Township 117N, Range 21W, the NE ¼ of Section 6 Township 116N, Range 21W, Section 5 and Section 9 Township 116N, Range 21W. The approximate UTM coordinates are X: 470325.593323074 & Y: 4970052.1135031.

DESCRIPTION OF PROJECT: The North Fork of Nine Mile Creek suffers from stream bank erosion. The proposed stream bank improvement project involves channel realignment to a more stable meandering form, bank reshaping to shallower slopes, bank re-vegetation, channel toe stabilization and grade control. Water quality improvements are anticipated as a result of the channel stabilization.

Operations - Regulatory (2015-01510-MMJ – revised PN)

QUANTITY, TYPE, AND AREA OF FILL: The project would include work along approximately 15,870 linear feet of the North Fork of Nine Mile Creek at 14 separate locations, resulting in the disturbance of approximately 3.88 acres (168,964 square feet) of streambed below the OHWM of the creek, and the temporary discharge of fill material into approximately 9.28 acres (404,237 square feet) of wetland adjacent to the creek. Construction activities associated with new stream channel excavation and floodplain grading would also result in the permanent conversion of an additional approximately 1.02 acres (44,431 square feet) of wetland adjacent to the creek.

The project would also include relocating 4 highly degraded and eroded portions of stream channel to stabilize the channel sinuosity based on the creek's historic alignment, resulting in the restoration of an additional 3,065 linear feet of meandering stream channel. Portions of the new channels would be constructed in wetland complexes abutting the creek. The grading activities associated with excavating these new channels would result in the discharge of fill material into approximately 1.02 acres of wet meadow and shallow marsh type wetland. The previously straightened and degraded portions of the stream, 2,841 linear feet, would be abandoned and backfilled with the material excavated from the adjacent wetlands, which would result in the discharge of fill material into 0.71 acre of existing stream channel. The abandoned channel would be seeded and restored to a native wetland community.

VEGETATION IN AFFECTED AREA: **Currently, the majority of the stream banks along the project corridor are eroding and sparsely vegetated.** Post-construction all disturbed areas above the normal water level of the stream would be re-seeded with a native seed mix. As proposed, all temporarily impacted wetland areas would be restored to pre-construction contours and conditions within 90 days from the date of initial disturbance. with a

SOURCE OF FILL MATERIAL: The Applicant/contractor would be required to use suitable fill material, free from toxic pollutants in toxic amounts.

SURROUNDING LAND USE: Surrounding land use varies somewhat by reach, but overall the stream flows through residential and commercial areas with a naturalized buffer that varies from 10-foot wide (or less) in places to more than 1,000 feet in public parks. Reach 1 is located adjacent to a high-density mixed use and single-family residential. Reaches 2 through 4 are located adjacent to single-family residential and open space/woodland. Reaches 6 and 7 occur in open space/woodland between a school, community park, and a highway. Reaches 8 through 12 flow among single family residential areas and a wooded corridor. Reaches 13 through 15 flow through high density commercial developments. The majority of the North Fork corridor is publicly owned; however, for portions of the creek south of Valley View Road and north of West 70th Street, the creek alignment and portions of the proposed construction area extend onto private property. As part of this project, easements would be necessary from property owners adjacent to the creek, to be utilized for construction activities and future maintenance activities along the creek corridor.

DESCRIPTION OF DREDGING OR EXCAVATION:

The soil in proposed excavated areas would be disturbed, including the removal of the existing vegetation. Grading activities would leave bare soil that would be re-seeded soon after construction activities are completed. Vegetation in wetlands and along the stream channel banks, including the old channels, would be established by installing a native wet meadow seed mix. A seed mix would also be selected for upland areas with species typical of a native mesic prairie or woodland.

Operations - Regulatory (2015-01510-MMJ – revised PN)

THE FOLLOWING POTENTIALLY TOXIC MATERIALS COULD BE USED AT THE PROJECT SITE: None.

THE FOLLOWING PRECAUTIONS TO PROTECT WATER QUALITY HAVE BEEN DESCRIBED BY THE APPLICANT: Temporary erosion and sediment control best management practices would be installed during construction activities following MNDOT standards, NMCWD Rule 5.0 Erosion Control Requirements, and the MPCA NPDES General Storm Water Permit for Construction. Temporary measures generally include silt fences, ditch checks, inlet protection, street sweeping, dust control, preservation of existing vegetation, stabilized site exit locations, erosion control blankets, riprap at storm sewer outlets, and good housekeeping practices for material storage and waste control. The construction contractor would be required to follow the project's Construction Storm Water Pollution Prevention Plan (SWPPP) document. Permanent erosion and sediment control best management practices generally include the establishment of permanent vegetation on the areas of the site not being covered by impervious surfaces. The creek flow would not be diverted into the new excavated channel for approximately one year enabling the channel restoration to be established.

MITIGATION: Compensatory mitigation has not been proposed for this project. This is a stream bank stabilization and restoration project, intended to improve the resource. The project is expected to provide a net gain in wetland and stream functions.

3. REPLIES/COMMENTS.

Interested parties are invited to submit to this office written facts, arguments, or objections within 30 days of the date of this notice. These statements should bear upon the suitability of the location and the adequacy of the project and should, if appropriate, suggest any changes believed to be desirable. Comments received may be forwarded to the applicant.

Replies may be addressed to Regulatory Branch, St. Paul District, Corps of Engineers, 180 Fifth Street East, Suite 700, Saint Paul, MN 55101-1678.

Or, IF YOU HAVE QUESTIONS ABOUT THE PROJECT, call Melissa Jenny at the St. Paul office of the Corps, telephone number (651) 290-5363.

To receive Public Notices by e-mail, go to: http://mvp-extsttp/list_server/ and add your information in the New Registration Box.

4. FEDERALLY-LISTED THREATENED OR ENDANGERED WILDLIFE OR PLANTS OR THEIR CRITICAL HABITAT.

None were identified by the applicant or are known to exist in the permit area. However, Hennepin County is within the known or historic range of the following Federally-listed threatened (T) and endangered (E) species:

<u>Species</u>	<u>Habitat</u>
Northern Long-eared bat (T)	Caves and mines in fall & winter, upland forests in spring and summer.
Higgins' eye pearl mussel (E)	Mississippi and St. Croix Rivers

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This application is being coordinated with the U.S. Fish and Wildlife Service. Any comments it may have concerning Federally-listed threatened or endangered wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

5. JURISDICTION.

This application is being reviewed in accordance with current practices for documenting Corps jurisdiction under Section(s) 9 & 10 of the Rivers and Harbor Act of 1899 and Section 404 of the Clean Water Act. If an approved jurisdictional determination is completed as part of the review process for this application, a copy will be posted on the St. Paul District web page at the following link: <http://www.mvp.usace.army.mil/Missions/Regulatory.aspx>.

THE APPLICANT HAS STATED THAT THE FOLLOWING STATE, COUNTY, AND/OR LOCAL PERMITS HAVE BEEN APPLIED FOR/ISSUED:

Unit of government	Type of application
City of Edina	Right-of-Way and Utility Excavation Permit
Nine Mile Creek Watershed District	Wetland Conservation Act Permit
Nine Mile Creek Watershed District	Grading and Land Alteration Permit
Minnesota Department of Natural Resources	Work in Public Waters Permit
Army Corps of Engineers	Section 404 Permit

6. STATE SECTION 401 WATER QUALITY CERTIFICATION.

Valid Section 404 permits cannot be issued for any activity unless state water quality certification for the activity is granted or waived pursuant to Section 401 of the Clean Water Act. The state Section 401 authority in Minnesota is the Minnesota Pollution Control Agency (MPCA). The St. Paul District has provided this public notice and a copy of the applicant’s Section 404 permit application form to the MPCA. If MPCA needs any additional information in order for the Section 401 application to be considered complete by MPCA, the MPCA has indicated that it will request such information from the applicant. It is the permit applicant’s responsibility to ensure that the MPCA has received a valid, complete application for state Section 401 certification and to obtain a final Section 401 action from the MPCA.

The MPCA has indicated that this public notice serves as its public notice of the application for Section 401 water quality certification under Minnesota Rules Part 7001. The MPCA has also indicated that the Section 401 process shall begin to commence upon the issuance date of this public notice unless the MPCA notifies both the St. Paul District and the permit applicant to the contrary, in writing, before the expiration date of this public notice. Any comments relative to MPCA’s Section 401 Certification for the activity proposed in this public notice may be sent to:

Minnesota Pollution Control Agency, Resource Management and Assistance Division,
Attention: 401 Certification, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

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7. HISTORICAL/ARCHAEOLOGICAL.

This public notice is being sent to the National Park Service and the State Archaeologist for their comments. The Corps will review information on known cultural resources and/or historic properties within and adjacent to the project area. The Corps will also consider the potential effects of the project on any properties that have yet to be identified. The results of this review and the Corps' determination of effect will be coordinated with the State Historic Preservation Officer independent of this public notice. Any adverse effects on historic properties will be resolved prior to the Corps authorization, or approval, of the work in connection with this project.

8. PUBLIC HEARING REQUESTS.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, in detail, the reasons for holding a public hearing. A request may be denied if substantive reasons for holding a hearing are not provided or if there is otherwise no valid interest to be served.

9. PUBLIC INTEREST REVIEW.

The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. Environmental and other documents will be available for review in the St. Paul District Office.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Kristen Hafer
Chief, Southwest Section

Enclosures: Maps labeled as 2015-01510-MMJ, Public Notice Figures 1-19

LOCATION MAP



NINE MILE CREEK WATERSHED DISTRICT

NINE MILE CREEK STABILIZATION PROJECT

EDINA, MINNESOTA

VICINITY MAP



SHEET NO.	TITLE	SHEET NO.	TITLE	SHEET NO.	TITLE
GENERAL DRAWINGS					
G-01	TITLE SHEET & DRAWING INDEX	C-12	CREEK PLAN: REACH 6	C-30	CREEK PLAN: REACH 15
G-02	SHEET LAYOUT	C-13	SECTIONS & ELEVATIONS: REACH 6	C-31	SECTIONS & ELEVATIONS: REACH 15
CIVIL DRAWINGS					
C-01	CREEK PLAN: REACH 1	C-14	CREEK PLAN: REACH 8	D-01	DETAILS
C-02	SECTIONS & ELEVATIONS: REACH 1	C-15	SECTIONS & ELEVATIONS: REACH 8	D-02	DETAILS
C-03	CREEK PLAN: REACH 2	C-16	CREEK PLAN: REACH 9	D-03	DETAILS, VRSS
C-04	CREEK PLAN: REACH 2	C-17	PROFILE, SECTIONS & ELEVATIONS: REACH 9	D-04	DETAILS, TOE WOOD
C-05	PROFILE, SECTIONS & ELEVATIONS: REACH 2	C-18	CREEK PLAN: REACH 10	D-05	DETAILS
C-06	CREEK PLAN: REACH 3	C-19	SECTIONS & ELEVATIONS: REACH 10	RESTORATION DRAWINGS	
C-07	SECTIONS & ELEVATIONS: REACH 3	C-20	CREEK PLAN: REACH 11	R-01	RESTORATION PLAN REACHES 1 & 2
C-08	CREEK PLAN: REACH 4	C-21	PROFILE, SECTIONS & ELEVATIONS: REACH 11	R-02	RESTORATION PLAN REACHES 3 & 4
C-09	SECTIONS & ELEVATIONS: REACH 4	C-22	CREEK PLAN: REACH 12	R-03	RESTORATION PLAN REACHES 5 & 6
C-10	CREEK PLAN: REACH 5	C-23	CREEK PLAN: REACH 12	R-04	RESTORATION PLAN REACHES 8 & 9
C-11	SECTIONS & ELEVATIONS: REACH 5	C-24	PROFILE, SECTIONS & ELEVATIONS: REACH 12	R-05	RESTORATION PLAN REACHES 10 & 11
		C-25	CREEK PLAN: REACH 13	R-06	RESTORATION PLAN REACHES 12 & 13
		C-26	CREEK PLAN: REACH 13	R-07	RESTORATION PLAN REACHES 14 & 15
		C-27	SECTIONS & ELEVATIONS: REACH 13		
		C-28	CREEK PLAN: REACH 14		
		C-29	SECTIONS & ELEVATIONS: REACH 14		

90% DRAFT
NOT FOR CONSTRUCTION

I HEREBY CERTIFY THAT THE SEAL, SPECIFICATIONS OR REPORT WAS PROVIDED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A QUALIFIED LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.		CLIENT: BARR ENGINEERING CO. 4300 MARKETPOINTE DRIVE SUITE 200 MINNEAPOLIS, MN 55435 Lic. #051-832-2207 Minneapolis, Minnesota Fax: (612) 832-2661 www.barr.com		Scale: AS SHOWN Date: 12/22/2014 Drawn: EPF Checked: GDN Prepared: PJH Approved: JGW		NINE MILE CREEK WATERSHED DISTRICT		NINE MILE CREEK STABILIZATION PROJECT		BARR PROJECT No.: 23/27-1132.01 CLIENT PROJECT No.:	
A. USE LOGS 00000000/00/00/00 ISSUED FOR REVIEW NO. BY (CHK/APP) DATE REVISION DESCRIPTION		SIGNATURE: _____ PRINTED NAME: _____ DATE: _____ REG. NO.: _____		RELEASED TO: FOR _____ DATE RELEASED: _____		NINE MILE CREEK WATERSHED DISTRICT		TITLE SHEET & DRAWING INDEX		DWG. No.: G-01 REV. No.: A	



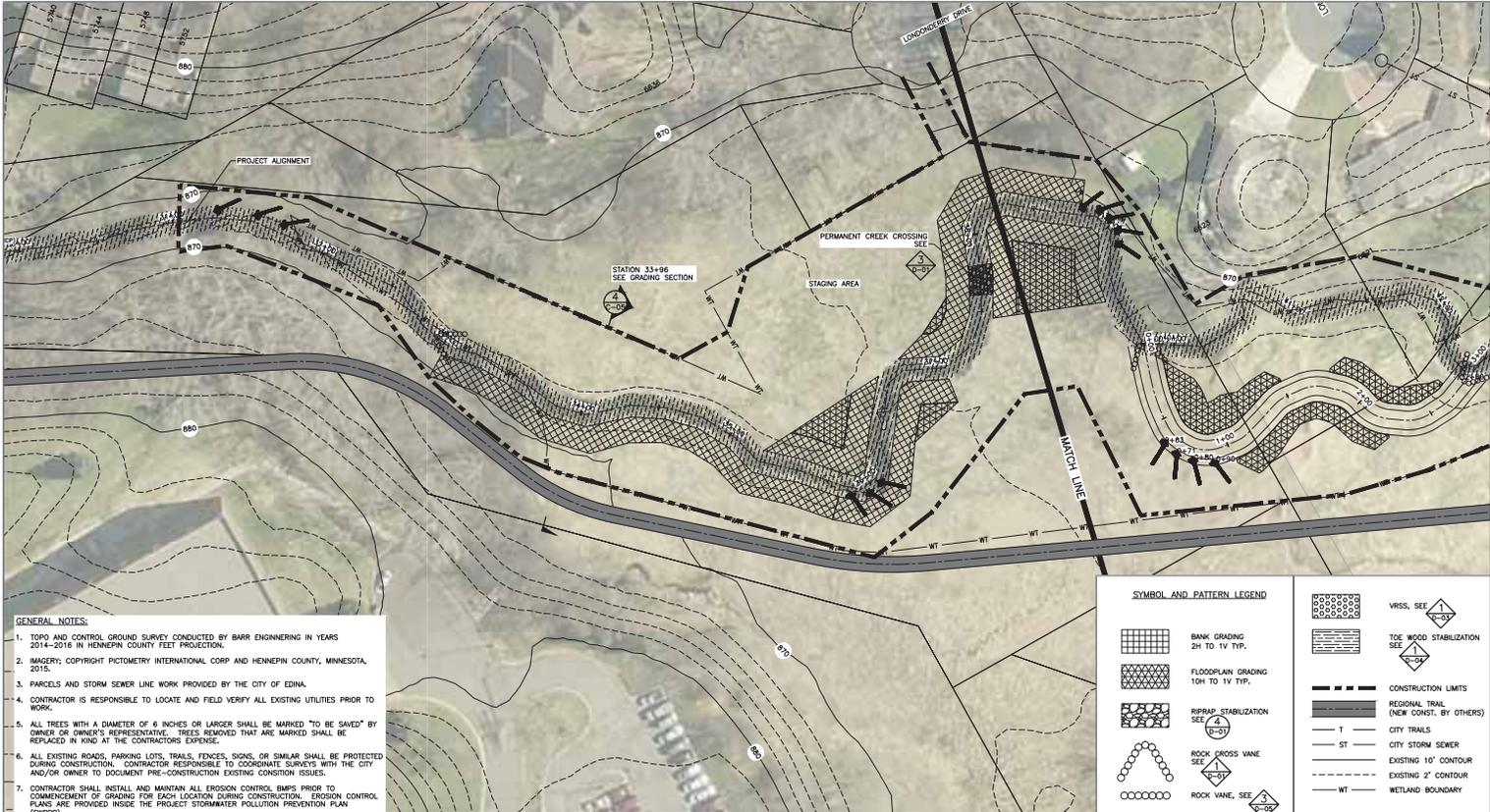
1 PLAN: SHEET LAYOUT
 0 500 1000 1200
 SCALE IN FEET

GENERAL NOTES:

1. TOPO AND CONTROL GROUND SURVEY CONDUCTED BY BARR ENGINEERING IN YEARS 2014-2016 IN HENNEPIN COUNTY FEET PROJECTION.
2. IMAGERY: COPYRIGHT PICTOMETRY INTERNATIONAL CORP AND HENNEPIN COUNTY, MINNESOTA, 2015.
3. PARCELS AND STORM SEWER LINE WORK PROVIDED BY THE CITY OF EDINA.
4. CONTRACTOR IS RESPONSIBLE TO LOCATE AND FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO WORK.
5. ALL TREES WITH A DIAMETER OF 6 INCHES OR LARGER SHALL BE MARKED "TO BE SAVED" BY OWNER OR OWNER'S REPRESENTATIVE. TREES REMOVED THAT ARE MARKED SHALL BE REPLACED IN KIND AT THE CONTRACTORS EXPENSE.
6. ALL EXISTING ROADS, PARKING LOTS, TRAILS, FENCES, SIGNS, OR SIMILAR SHALL BE PROTECTED DURING CONSTRUCTION. CONTRACTOR RESPONSIBLE TO COORDINATE SURVEYS WITH THE CITY AND/OR OWNER TO DOCUMENT PRE-CONSTRUCTION EXISTING CONDIION ISSUES.
7. CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL BMPs PRIOR TO COMMENCEMENT OF GRADING FOR EACH LOCATION DURING CONSTRUCTION. EROSION CONTROL PLANS ARE PROVIDED INSIDE THE PROJECT STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
8. ALL GROUND DISTURBANCE GENERATED FROM GRADING ACTIVITIES SHALL BE STABILIZED AND RESTORED WITH TOPSOIL, SEED W/COVER CROP AND EROSION CONTROL BLANKET OR STRAW MULCH.
9. CONTRACTOR TO MAINTAIN EXISTING STREAM BOTTOM WIDTH SO NOT TO DECREASE CREEK CROSS SECTIONAL AREA DURING RRPRP INSTALLATION.
10. DEBRIS OR WOODY MATERIAL FOUND IN CREEK WITHIN THE CONSTRUCTION LIMITS SHALL BE DISPOSED OFF-SITE UNLESS AUTHORIZED BY OWNER OR OWNER'S REPRESENTATIVE.

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I HEREBY CERTIFY THAT THE PLAN, SPECIFICATIONS OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A STATE LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. SIGNATURE: _____ PRINTED NAME: _____ REG. NO.: _____ DATE: _____		CLIENT: BARR ENGINEERING CO. PROJECT: NINE MILE CREEK STABILIZATION PROJECT SHEET: 23/27-1132.00 DATE: 12/22/2014 DRAWN: EPF CHECKED: GGN DESIGNED: PJH APPROVED: JCN	PROJECT OFFICE: BARR ENGINEERING CO. 4300 MARKETPOINTE DRIVE SUITE 200 MINNEAPOLIS, MN 55435 TEL: 612-832-2277 FAX: (612) 832-2261 WWW.BARR.COM	NINE MILE CREEK WATERSHED DISTRICT NINE MILE CREEK STABILIZATION PROJECT SHEET LAYOUT BARR PROJECT No.: 23/27-1132.00 CLIENT PROJECT No.: _____ DWG. No.: G-02 REV. No.: A
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- GENERAL NOTES:**
1. TOPO AND CONTROL GROUND SURVEY CONDUCTED BY BARR ENGINEERING IN YEARS 2014-2016 IN HENNEPIN COUNTY, MINNESOTA.
 2. IMAGE: COPYRIGHT PICTOMETRY INTERNATIONAL CORP AND HENNEPIN COUNTY, MINNESOTA, 2015.
 3. PARCELS AND STORM SEWER LINE WORK PROVIDED BY THE CITY OF EDINA.
 4. CONTRACTOR IS RESPONSIBLE TO LOCATE AND FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO WORK.
 5. ALL TREES WITH A DIAMETER OF 4 INCHES OR LARGER SHALL BE MARKED "TO BE SAVED" BY OWNER OR OWNER'S REPRESENTATIVE. TREES REMOVED THAT ARE MARKED SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
 6. ALL EXISTING ROADS, PARKING LOTS, TRAILS, FENCES, SIGNS, OR SIMILAR SHALL BE PROTECTED DURING CONSTRUCTION. CONTRACTOR RESPONSIBLE TO COORDINATE SURVEYS WITH THE CITY AND/OR OWNER TO DOCUMENT PRE-CONSTRUCTION EXISTING CONDIION ISSUES.
 7. CONTRACTOR SHALL INSTALL AND MAINTAIN ALL EROSION CONTROL BMP'S PRIOR TO COMMENCEMENT OF GRADING FOR EACH LOCATION DURING CONSTRUCTION. EROSION CONTROL PLANS ARE PROVIDED INSIDE THE PROJECT STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
 8. ALL GROUND DISTURBANCE GENERATED FROM GRADING ACTIVITIES SHALL BE STABILIZED AND RESTORED WITH TOPSOIL, SEED W/COVER CROP AND EROSION CONTROL BLANKET OR STRAW MULCH.
 9. CONTRACTOR TO MAINTAIN EXISTING STREAM BOTTOM WIDTH SO NOT TO DECREASE CREEK CROSS SECTIONAL AREA DURING RIPRAP INSTALLATION.
 10. DEBRIS OR WOODY MATERIAL FOUND IN CREEK WITHIN THE CONSTRUCTION LIMITS SHALL BE DISPOSED OFF-SITE UNLESS AUTHORIZED BY OWNER OR OWNER'S REPRESENTATIVE.

SYMBOL AND PATTERN LEGEND

	BANK GRADING 2H TO 1V TYP.		VRSIS, SEE [Symbol]
	FLOODPLAIN GRADING 10H TO 1V TYP.		TOE WOOD STABILIZATION SEE [Symbol]
	RIPPRAP STABILIZATION SEE [Symbol]		CONSTRUCTION LIMITS
	ROCK CROSS VANE SEE [Symbol]		REGIONAL TRAIL (NEW CONST. BY OTHERS)
	ROCK VANE, SEE [Symbol]		CITY TRAILS
	LOG VANE, SEE [Symbol]		CITY STORM SEWER
	ROOT WAD, SEE [Symbol]		EXISTING 10' CONTOUR
			EXISTING 2' CONTOUR
			WETLAND BOUNDARY

NO.	BY	DATE	REVISION DESCRIPTION
1	CON	05/20/16	ISSUED FOR REVIEW

CLIENT	NO.								
CONSTRUCTION									
RECORD									

BARR
 Project Office:
 BARR ENGINEERING CO.
 4300 MARKETPOINTE DRIVE
 SUITE 200
 MINNEAPOLIS, MN 55435
 Ph: 1-855-832-2277
 Fax: (952) 832-2661
 www.barr.com

Scale	AS SHOWN
Date	11/12/2015
Drawn	GGH
Checked	PLH
Designed	JCW
Approved	JCW

NINE MILE CREEK WATERSHED DISTRICT

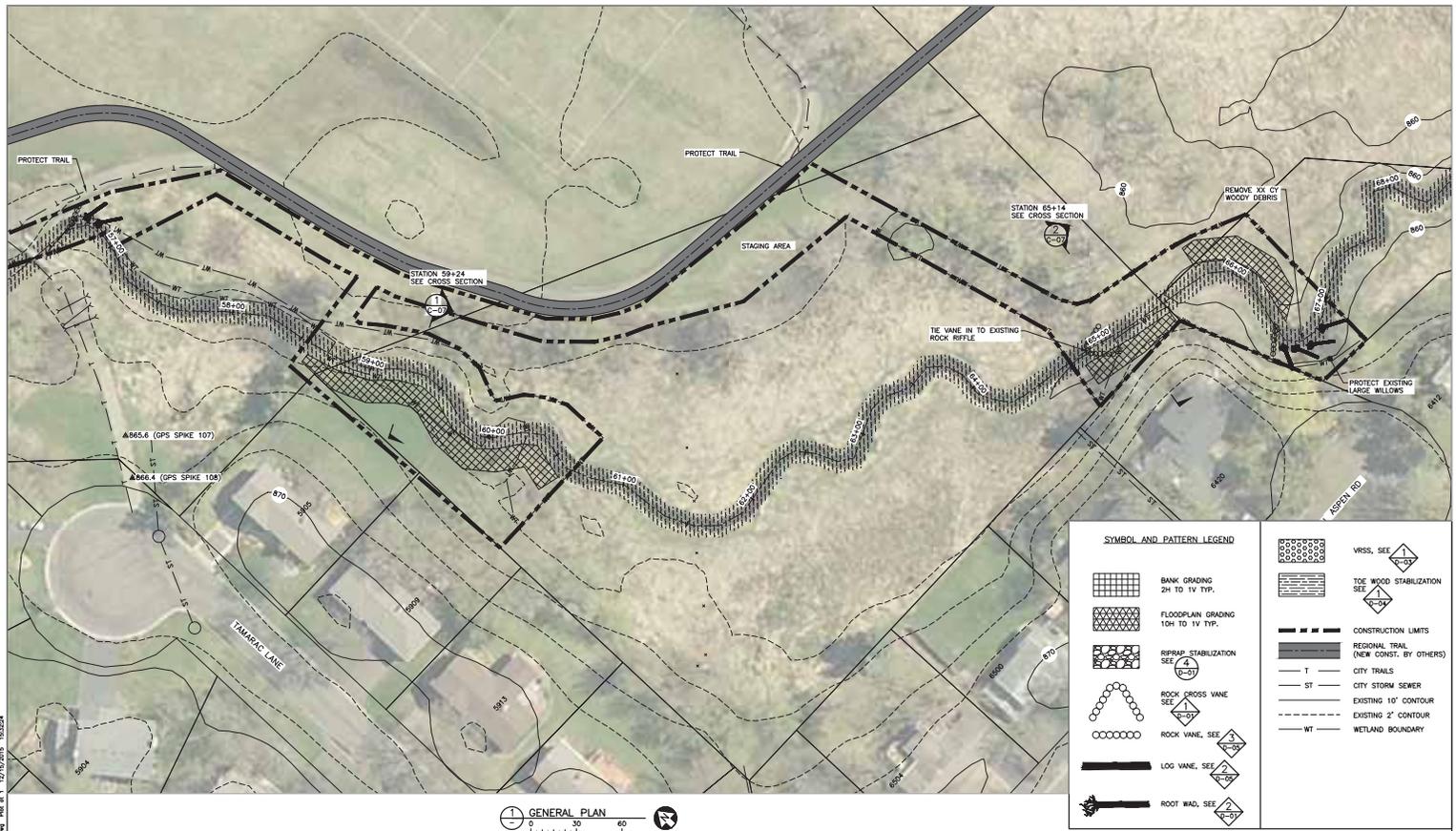
NINE MILE CREEK STABILIZATION PROJECT

CREEK PLAN REACH 2

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BARR PROJECT No.: 23/27-1132.01
 CLIENT PROJECT No.:
 DWG. No.: C-03
 REV. No.: A

CADD USER: Dwg: 154510-MMJ-01-01.dwg FILE: \\V:\DWG\2015\11\12\154510-MMJ-01-01.dwg PLOT SCALE: 1:0 PLOT DATE: 3/16/2016 3:00 PM



SYMBOL AND PATTERN LEGEND

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	FLOODPLAIN GRADING 10H TO 1V TYP.		CONSTRUCTION LIMITS
	RIPPRAP STABILIZATION SEE [Symbol]		REGIONAL TRAIL (NEW CONST. BY OTHERS)
	ROCK CROSS VANE SEE [Symbol]		CITY TRAILS
	ROCK VANE, SEE [Symbol]		CITY STORM SEWER
	LOG VANE, SEE [Symbol]		EXISTING 10' CONTOUR
	ROOT WAD, SEE [Symbol]		EXISTING 2' CONTOUR
			WT WETLAND BOUNDARY

GENERAL PLAN
SCALE IN FEET
0 30 60

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 USER: jay
 PLOT DATE: 11/12/2015 10:51:11 AM
 PLOT SCALE: 1.00
 PLOT DEVICE: HP DesignJet T1100e
 PLOTTER DRIVER: HPGL-ETL
 PLOTTER MODEL: HP DesignJet T1100e
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 PLOTTER PORT: LPT1
 PLOTTER STATUS: OK
 PLOTTER TYPE: HP DesignJet T1100e
 PLOTTER VERSION: 11.32.01

NO.	BY	DATE	REVISION DESCRIPTION
1	A. GONZALEZ	08/03/2016	ISSUED FOR REVIEW

CLIENT:	WATER DISTRICT
PROJECT:	STABILIZATION
CONTRACT:	NO. 15-01
DATE:	11/12/2015
SCALE:	AS SHOWN
DRAWN:	GGH
CHECKED:	PLH
DESIGNED:	JCW
APPROVED:	JCW

DATE RELEASED:	11/12/2015
RELEASED TO:	CLIENT
DATE RELEASED:	11/12/2015

BARR
 BARR ENGINEERING CO.
 4300 MARKETPOINTE DRIVE
 SUITE 200
 MINNEAPOLIS, MN 55435
 Phone: (612) 832-2277
 Fax: (612) 832-2661
 www.barr.com

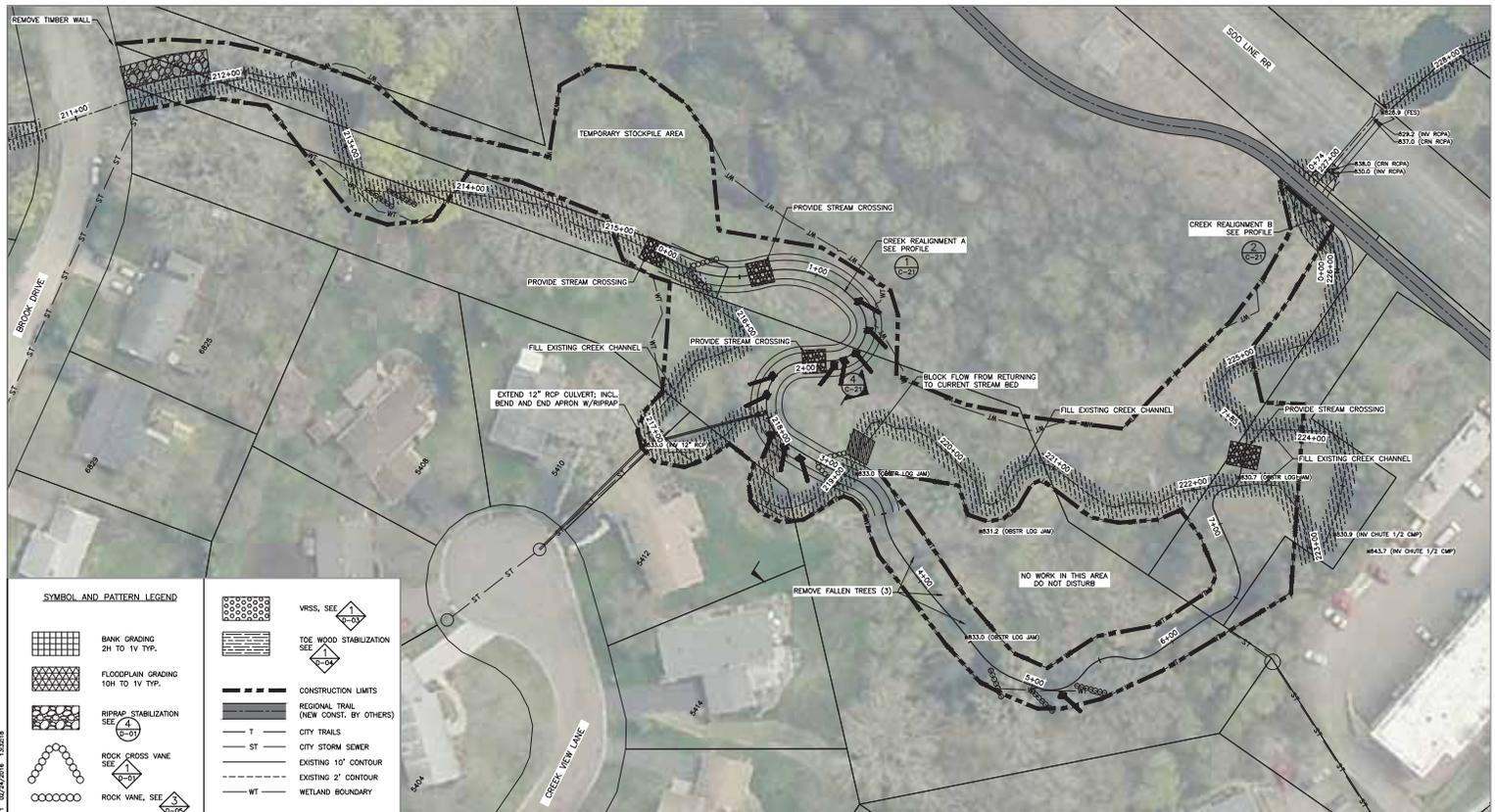
NINE MILE CREEK WATERSHED DISTRICT

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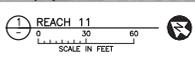
NINE MILE CREEK STABILIZATION PROJECT

CREEK PLAN REACH 3

BARR PROJECT No: 23/27-1132.01
 CLIENT PROJECT No:
 DWG. No.: C-06
 REV. No.: A



SYMBOL AND PATTERN LEGEND



NO.	BY	DATE	REVISION DESCRIPTION
1	A. SON	05/26/2015	ISSUED FOR REVIEW

CLIENT	NO.	DATE
BARR	1132.01	11/22/2015

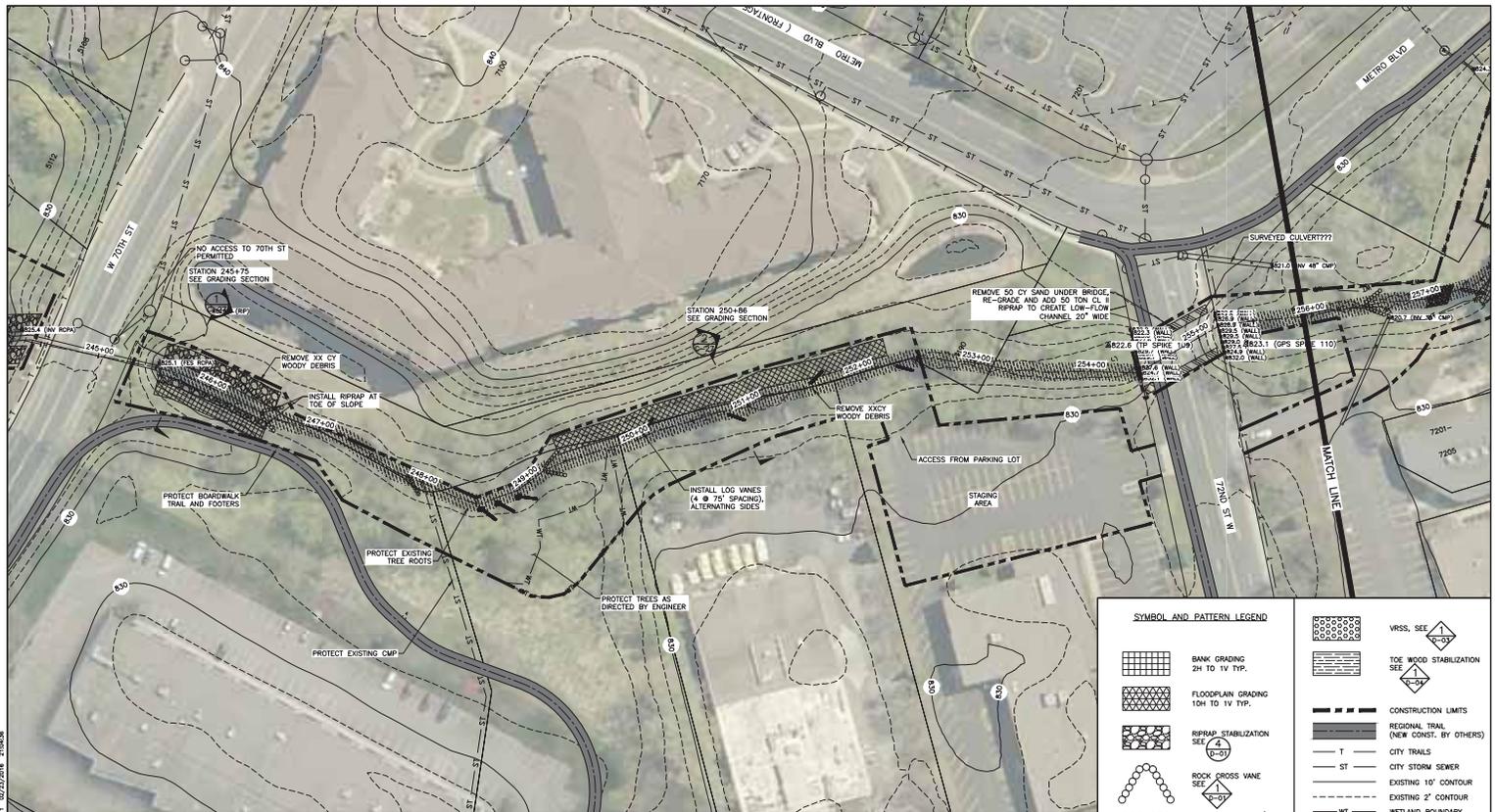
BARR
 Project Office:
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 Phone: (612) 832-2277
 Fax: (612) 832-2661
 www.barr.com

Scale	AS SHOWN
Date	11/22/2015
Drawn	GGH
Checked	PLH
Designed	JCW
Approved	JCW

NINE MILE CREEK WATERSHED DISTRICT	NINE MILE CREEK STABILIZATION PROJECT	BARR PROJECT No. 23/27-1132.01
	CREEK PLAN REACH 11	CLIENT PROJECT No.
	DWG. No. C-20	REV. No. A

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DATE PLOTTED: 11/22/2015 10:52:11 AM; PLOT SCALE: 1.00; PLOT AREA: 17.00; PLOT NO: 1; PLOT SHEET: 1; PLOT TOTAL SHEETS: 1; PLOT FILE: \\barr\projects\2015\1132.01\1132.01.dwg; PLOT USER: ggh; PLOT DEVICE: HP DesignJet T1100; PLOT STATUS: SUCCESS; PLOT TIME: 02/27/2016 13:52:18



PLAN: REACH 13
 SCALE IN FEET

SYMBOL AND PATTERN LEGEND

	BANK GRADING 2H TO 1V TYP.		TOE WOOD STABILIZATION SEE 4
	FLOODPLAIN GRADING 10H TO 1V TYP.		CONSTRUCTION LIMITS REGIONAL TRAIL (NEW CONST. BY OTHERS)
	RIPRAP STABILIZATION SEE 4		CITY STORM SEWER
	ROCK CROSS VANE SEE 3		CITY TRAILS
	ROCK VANE, SEE 3		EXISTING 10' CONTOUR
	LOG VANE, SEE 2		EXISTING 2' CONTOUR
	ROOT WAD, SEE 2		WETLAND BOUNDARY

**90% DRAFT
 NO FOR CONSTRUCTION**

NO.	BY	DATE	REVISION DESCRIPTION
1	A. SON	05/04/16	ISSUED FOR REVIEW

CLIENT	WATER
DESIGN	CONSTRUCTION
RECORD	
RELEASED TO/FOR	A B C O I 1 2 3
DATE RELEASED	

BARR
 Project Office:
 BARR ENGINEERING CO.
 4300 MARKETPOINTE DRIVE
 SUITE 200
 MINNEAPOLIS, MN 55435
 Phone: (612) 832-2277
 Fax: (612) 832-2661
 www.barr.com

Scale	AS SHOWN
Date	11/17/2015
Drawn	GGH
Checked	PLH
Designed	JCW
Approved	JCW

**NINE MILE CREEK
 WATERSHED DISTRICT**

**NINE MILE CREEK
 STABILIZATION PROJECT**
 CREEK PLAN
 REACH 13

BARR PROJECT No.: 23/27-1132.01
 CLIENT PROJECT No.:
 DWG. No.: C-25
 REV. No.: A

DATE PLOTTED: 11/17/2015 10:52:11 AM
 FILE: \\BARR\Projects\2015\1132\1132.01\1132.01.dwg
 PLOT SCALE: 1/8" = 1'-0"
 PLOT DATE: 11/17/2015 10:52:11 AM
 PLOT BY: JAW
 PLOT NO.: 1
 PLOT SIZE: 11.00 x 17.00
 PLOT AREA: 187.00
 PLOT PERIMETER: 34.00
 PLOT WEIGHT: 1.00 MB
 PLOT STATUS: OK
 PLOT MESSAGE:

