

Information for File # 2014-00266-TJH

Applicant: Spencer Brook Township
Mr. Jon Bogart, Spencer Brook Township Engineer,
Bogart, Pederson & Associates, Inc.

Corps Contact: Tom Hingsberger

Address: 180 E. 5th Street, Suite 700, St. Paul, Minnesota 55101-1638

E-Mail: thomas.j.hingsberger@usace.army.mil

Phone: (651) 290-5367

Primary County: Isanti County

Section: Sec. 21

Township: 35N

Range: 25W

Information Complete On: February 24, 2014

Posting Expires On March 7, 2014

Authorization Type: LOP-05-MN

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Sections 9 & 10 of the Rivers and Harbor Act of 1899 and 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 could result in modifications to the scope of the project's regulated waterbody/wetland impacts and compensatory mitigation requirements identified above.

Project Includes: Road reconstruction to include widening, culvert installations, and resurfacing.

PROJECT DESCRIPTION AND PURPOSE: The applicant proposes to discharge fill material into portions of five wetland basins in conjunction with the rehabilitation of Variolite Street NW, between CSAH 5 and 303d Avenue NW in Spencer Brook Township, Isanti County. The rehabilitation would consist of grading, culvert replacement, new culvert installations, repairing the aggregate base, bituminous

resurfacing, and turf establishment on 1.3 miles of Variolite Street NW for the purpose of rehabilitating the deteriorated roadway and improving traffic/pedestrian safety.

NAME, AREA AND TYPES OF WATERS (INCLUDING WETLANDS) SUBJECT TO LOSS: Fill material would be discharged into Wetland Basins 1, 2, 3, 4, and 6 along Variolite Street NW at the locations shown on the attached drawings. The total area of wetland types and vegetative communities that would be filled are 8,830 square feet of Type 3 Shallow marsh wetlands, and 15,002 square feet of Type 6 Shrub carr - Alder thicket wetlands. The project would result in the permanent loss of 23,832 square feet of wetlands that are part of the tributary system of the Rum River.

ALTERNATIVES CONSIDERED: The no action alternative does not address structural deficiencies in the existing roadway that have resulted from many years of patching and vehicular traffic loads. The preferred alternative would utilize the existing roadway which would be rehabilitated and widened in accordance with current township road construction standards. Inslopes along wetland areas would be steepened from 4:1 (horizontal:vertical) to 3:1 to minimize wetland impacts.

COMPENSATORY MITIGATION: Compensatory mitigation for the permanent loss of 23,832 square feet (0.55 acre) of wetlands would be provided via a wetland credit withdrawal of 0.55 acre from the BWSR Road Replacement Program.

Drawings See attached.

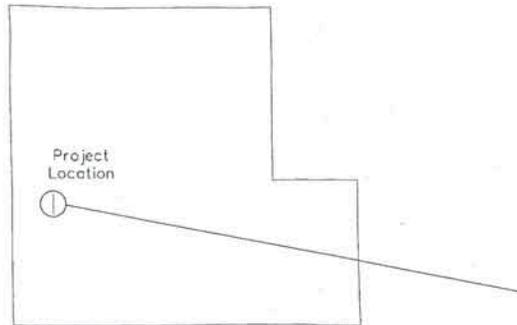
VARIOLITE STREET NW

SPENCER BROOK TOWNSHIP
ISANTI COUNTY, MINNESOTA

FOR

SPENCER BROOK TOWNSHIP ROAD IMPROVEMENTS

ISANTI COUNTY, MINNESOTA



VICINITY MAP

CALL 48 HOURS BEFORE OCCURRING
GOPHER STATE ONE CALL
TWIN CITY AREA 651-654-0002
MINNESOTA TOLL FREE 1-800-252-1188

PROJECT BENCHMARK:
Near the NW corner of the SW 1/4 of Section 16, T15, R25, Isanti County, Mn. Approximately 330 feet east of Variolite Street NW & 28 feet south of 303rd Avenue NW. 8 feet 1/2" easterly of 1st power pole east of intersection of 303rd & Variolite.
Elev. = 946.69 Feet (NAVD 88)

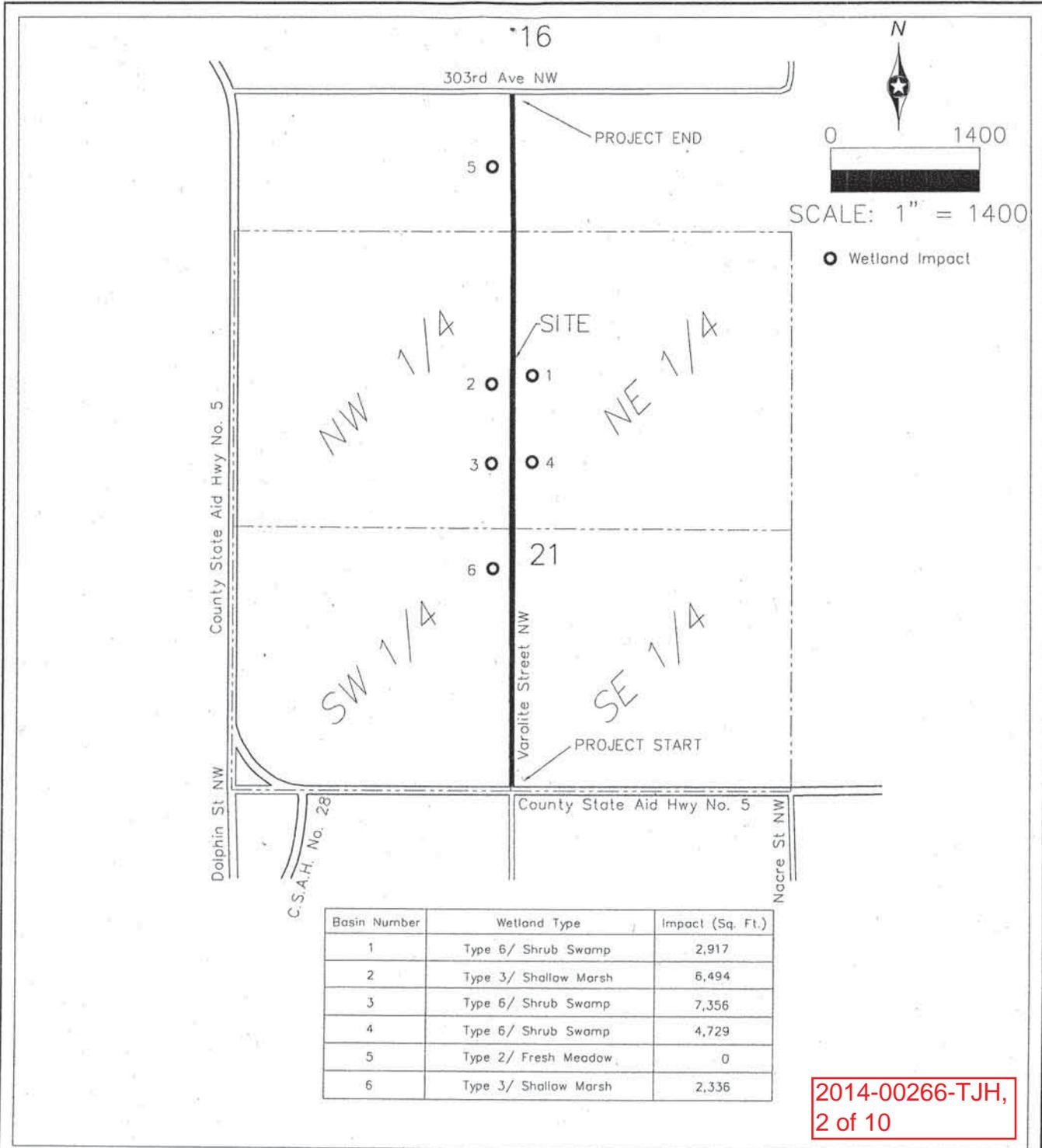
TITLE & INDEX SHEET	1
SWPPP	2
PLAN & PROFILES	3-8
DETAILS	9-10
CROSS SECTIONS	11-22

LOCATION OF SWPPP REQUIREMENTS IN PROJECT PLAN

DESCRIPTION	TITLE	LOCATION
Erosion Control Details	Erosion Control Details	Sheet 9-10
Erosion Control Locations	Plan and Profiles	Sheet 3-8

DATE: 10/03/13	DESIGN BY: JSC	DESIGNER: JSC	DATE: 10/03/13	DESCRIPTION:
DRAWN BY: JSC	CHECKED BY: JSC	DWG FILE: JPP_Correc	FILE NO.: 13-0066500	
<p>MINN. STATE ENGINEERING & SURVEYING I hereby certify that the above described work was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer in the State of Minnesota.</p>				
<p>Signed: JOY K. BOGART Date: _____ Reg. No. 19500</p>				
<p>BOGART, PEDERSON & ASSOCIATES, INC. LAND SURVEYING ENGINEERING & CONSULTING 1874 19th Street NW, Suite 100 Minneapolis, MN 55411 TEL: 763-541-1827 FAX: 763-541-1821</p>				
<p>VARIOLITE STREET NW SPENCER BROOK TOWNSHIP ISANTI COUNTY, MN TITLE SHEET & INDEX</p>				
SHEET NO. 1				22

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Basin Number	Wetland Type	Impact (Sq. Ft.)
1	Type 6/ Shrub Swamp	2,917
2	Type 3/ Shallow Marsh	6,494
3	Type 6/ Shrub Swamp	7,356
4	Type 6/ Shrub Swamp	4,729
5	Type 2/ Fresh Meadow	0
6	Type 3/ Shallow Marsh	2,336

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**BOGART, PEDERSON
& ASSOCIATES, INC.**

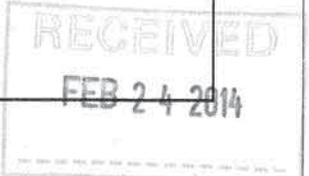
LAND SURVEYING
CIVIL ENGINEERING
MAPPING

13076 FIRST STREET, BECKER, MN 55308-9322
TEL: 763-262-8822 FAX: 763-262-8844

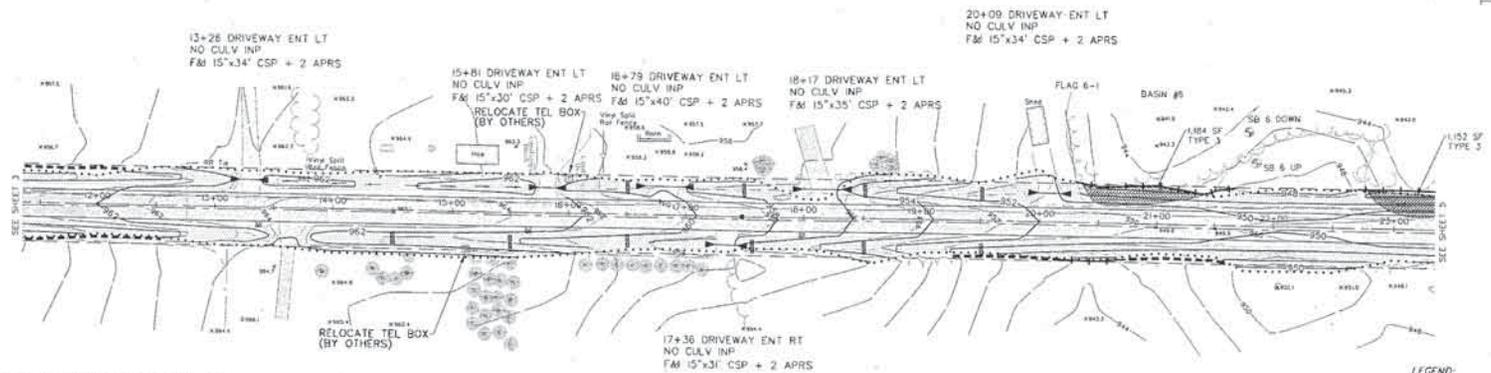
Variolite Street NW Reconstruction Project

Spencer Brook Township
Isanti County, Minnesota

Wetland Index Map
BPA Job #13-0066.00

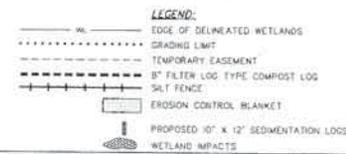


VARIOLITE STREET NW



NOTES:

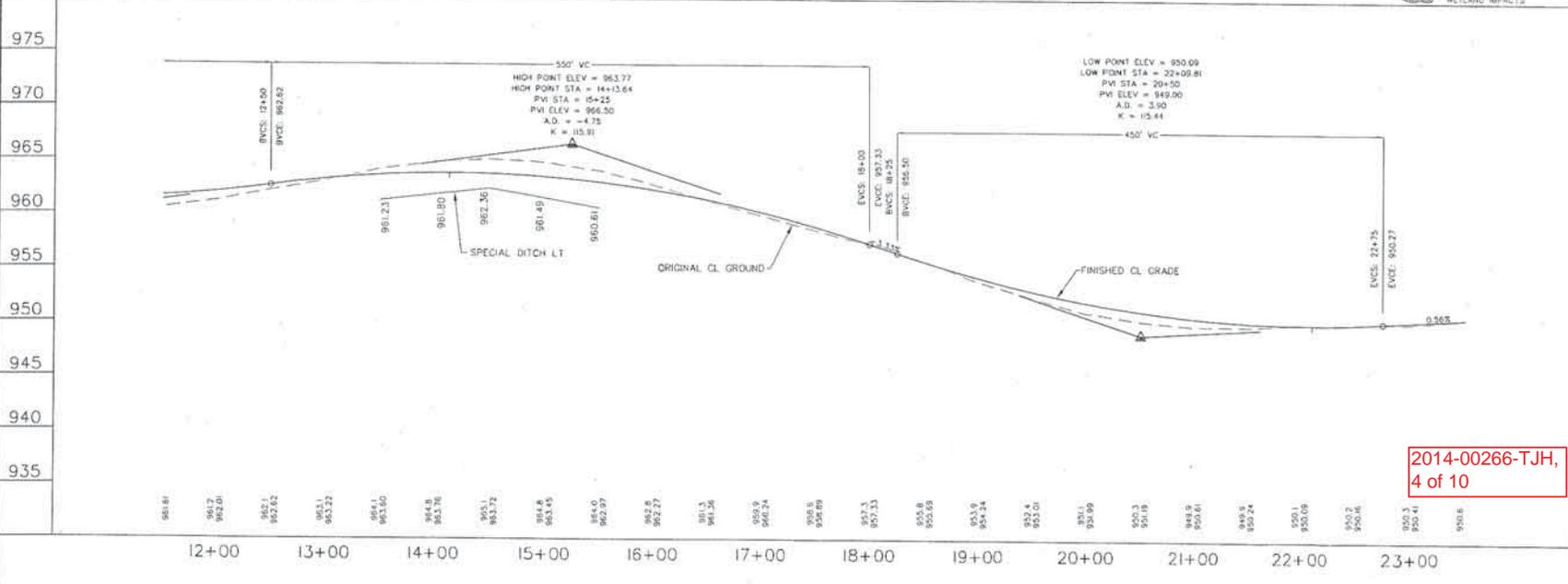
- 1) STATIONING REFERS TO PROPOSED ROAD CENTERLINE.
- 2) PLACE ADDITIONAL CLASS 5 AGGREGATE ON DRIVEWAYS & FIELD APPROACHES AS NECESSARY TO RESTORE ORIGINAL CONDITIONS.
- 3) ALL UTILITIES TO BE RELOCATED BY OTHERS.
- 4) CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING UTILITY RELOCATION.
- 5) CONTRACTOR SHALL SAWCUT ALL PAVED DRIVEWAYS AT RIGHT OF WAY PRIOR TO REMOVAL.
- 6) CONTRACTOR SHALL RESTORE PAVEMENT ON ALL DISTURBED DRIVEWAYS. RESTORED DRIVEWAY SLOPES ARE TO BE MAINTAINED.
- 7) CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY LOCATION OF MAILBOXES DURING CONSTRUCTION. TEMPORARY LOCATION TO BE COORDINATED W/ POSTMASTER.
- 8) CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND TEMPORARY AND PERMANENT REPLACEMENT OF ALL PERMANENT STREET, TRAFFIC CONTROL, & FIRE NO. SIGNAGE. (TRAFFIC SIGNS WILL BE PLACED IN ACCORDANCE TO MN. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.) INCIDENTAL TO PROJECT.



REV	DATE	DESCRIPTION

DATE: 10/03/13
 DESIGN BY: JCS
 DRAWN BY: JCS
 CHECKED BY: JCS
 DWG. FILE: 4.PP
 FILE NO.: 13-00665.00

Signature: JON K. BOGART
 Date: _____
 Reg. No. 19900



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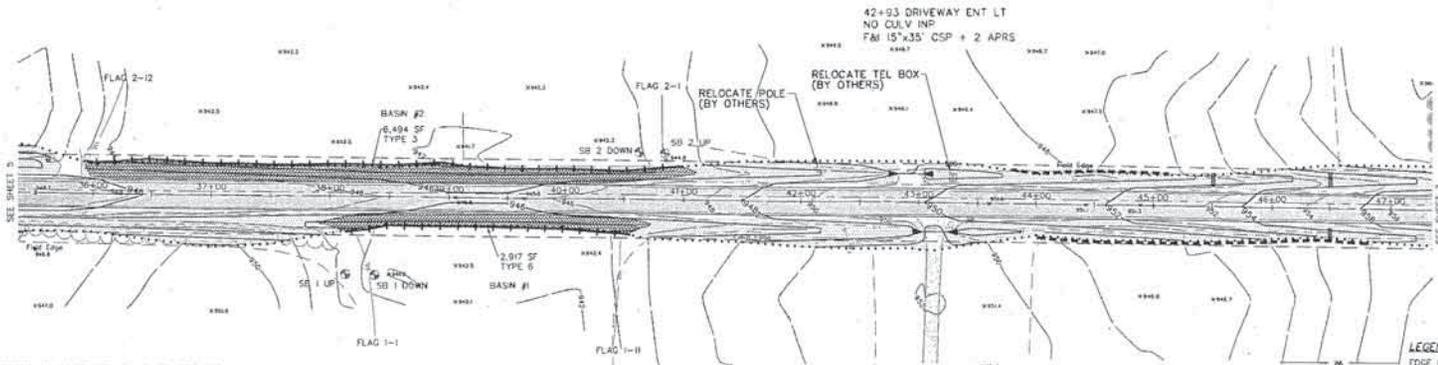
VARIOLITE STREET NW
 SPENCER BROOK TOWNSHIP
 ISANTI COUNTY, MN
 PLAN & PROFILE

4

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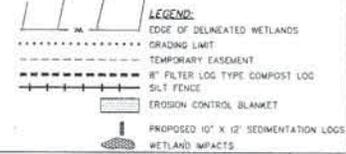
BOGART, PEDERSON & ASSOCIATES, INC.
 LAND SURVEYING
 CIVIL ENGINEERING
 3204 AWA STREET, MINNETONKA, MN 55345-4322
 TEL: 952-891-8821 FAX: 952-891-8849

VARIOLITE STREET NW



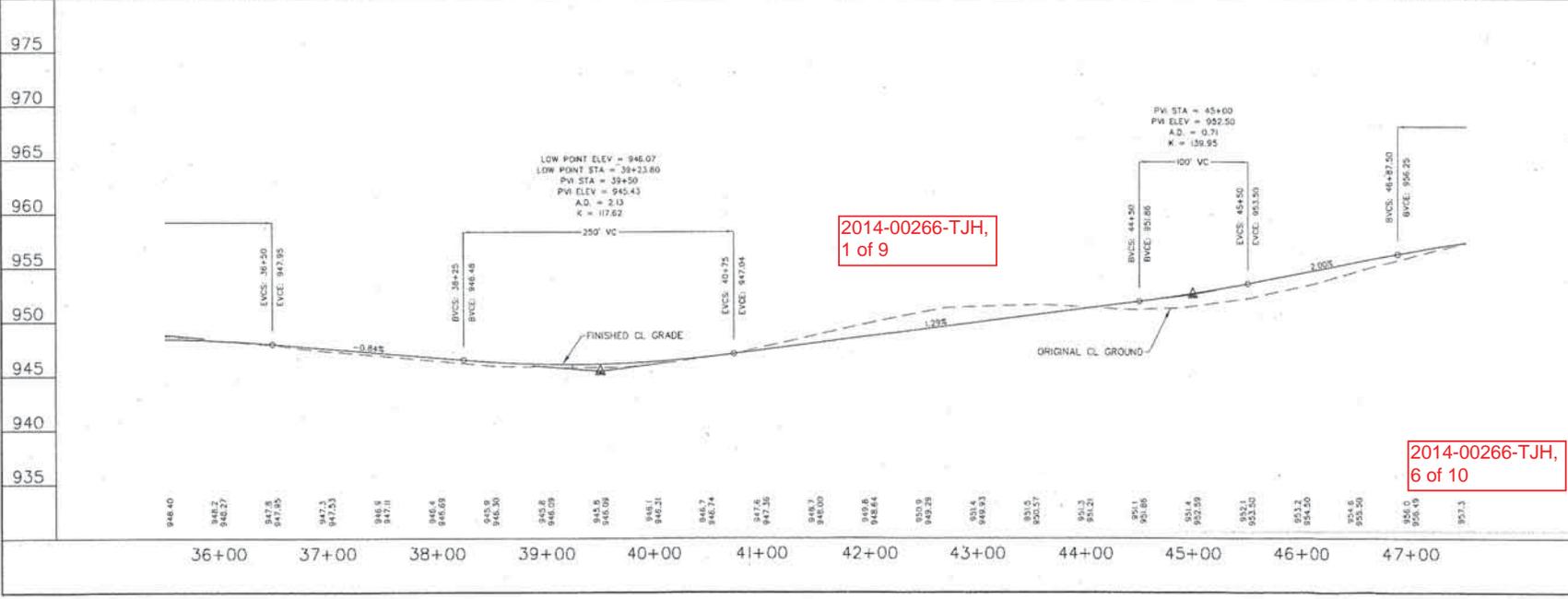
NOTES:

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DATE	REV. NO.	DESCRIPTION
10/07/13	1	DATE
DESIGN BY: PJC		
DRAWN BY: PJC		
CHECKED BY: JJB		
DWG FILE: 6.PJC		
FILE NO.: 13-0056.00		

I certify that this plan, specification or report was 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.
 Engineer: **JOHN K. BOGART** Reg. No. 19900
 Date: _____



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1 of 9

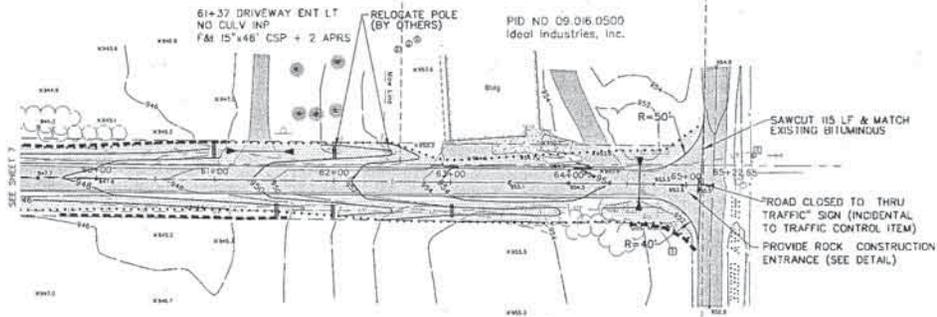
2014-00266-TJH,
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BOGART, PEDERSON & ASSOCIATES, INC.
 LAND SURVEYING & ENGINEERING
 609 W. 4TH STREET, MINNEAPOLIS, MN 55408-1022
 TEL: 612-331-8827 FAX: 612-331-8811

VARIOLITE STREET NW
 SPENCER BROOK TOWNSHIP
 ISANTI COUNTY, MN
 PLAN & PROFILE

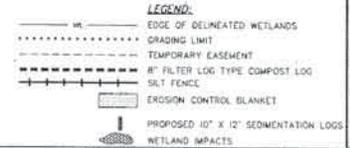
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VARIOLITE STREET NW



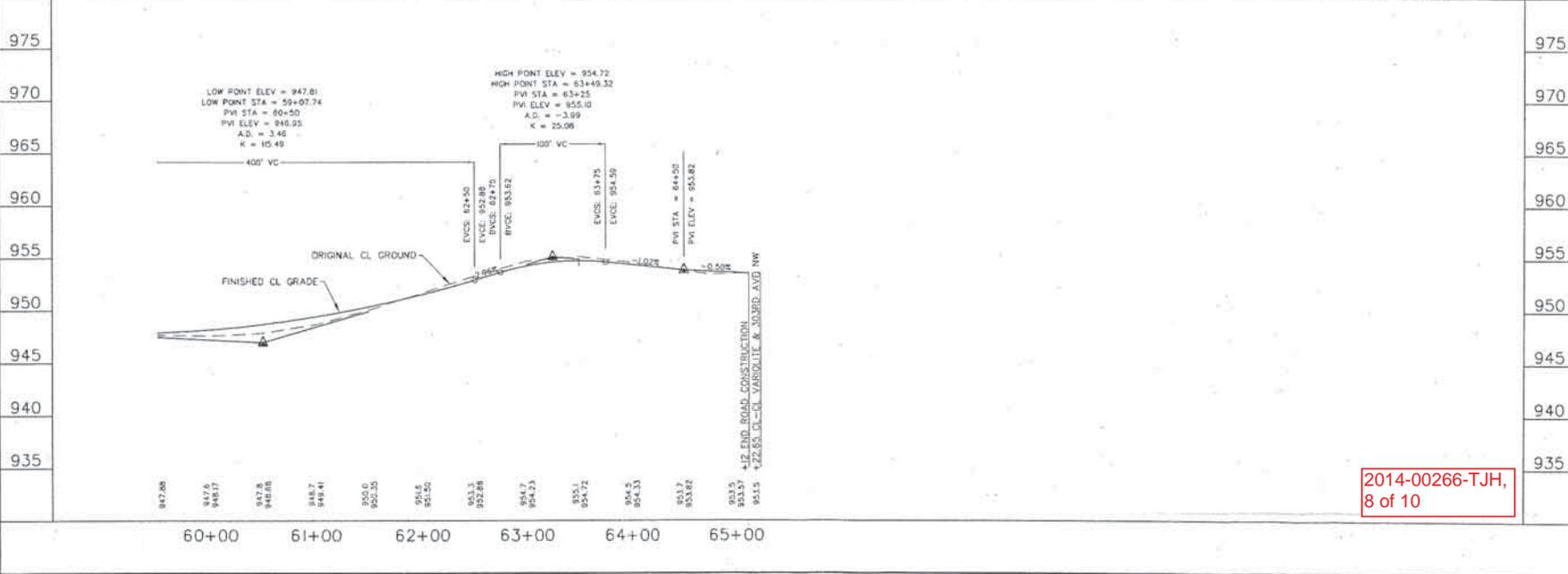
NOTES:

- 1) STATIONING REFERS TO PROPOSED ROAD CENTERLINE.
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REV. NO.	DATE	DESCRIPTION
10/20/13		
DESIGN BY: PJC		
DRAWN BY: JJB		
CHECKED BY: JJB		
DWG FILE: E_PJC		
FILE NO.: 13-0266.DWG		

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
 Signed: **JOHN A. PEDERSON**
 Date: _____ Reg. No. 19900

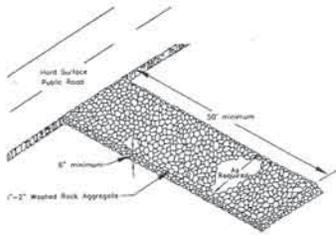


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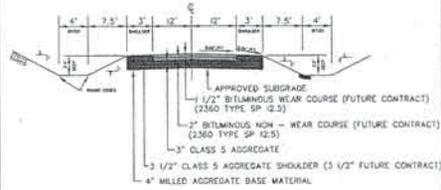
BOGART, PEDERSON & ASSOCIATES, INC.
 LAND SURVEYING, ENGINEERING & ARCHITECTURE
 100 NORTH STREET, PECKER AVE 13206-4222
 ST. CLOUD, MN 56301-1022 TEL: 763-321-0344

VARIOLITE STREET NW
 SPENCER BROOK TOWNSHIP
 ISANTI COUNTY, MN
 PLAN & PROFILE

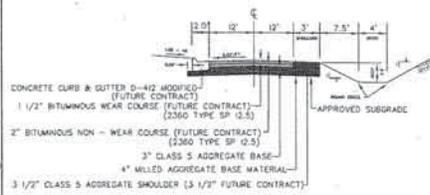
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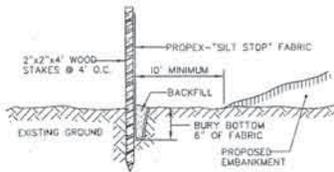
ROCK CONSTRUCTION ENTRANCE



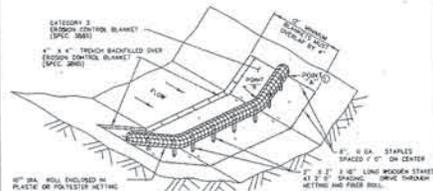
TYPICAL ROAD SECTION



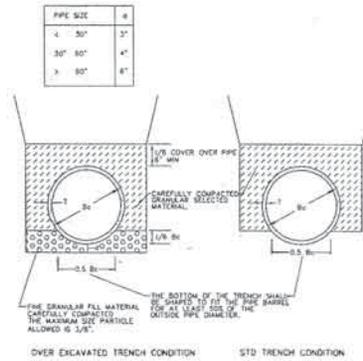
CURB ROAD SECTION (62+83 TO 64+47)



SILT FENCE DETAIL (NTS)



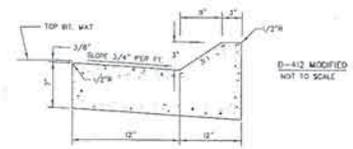
FIBER LOGS / BLANKET SYSTEM



REFERENCE:
CONCRETE PIPE DESIGN MANUAL
PREPARED BY AMERICAN CONCRETE PIPE INSTITUTE

NOTE:
TOP ROCK OR OTHER INCOMPRESSIBLE MATERIALS, THE TRENCH SHOULD BE OVEREXCAVATED A MINIMUM OF 6" AND REFILLED WITH GRANULAR MATERIAL.

CLASS C PIPE BEDDING



MOUNTABLE CURB SECTION

DATE: 10/03/13	REV. NO.	DESCRIPTION
DESIGN BY: JPS		
DRAWN BY: JPS		
CHECKED BY: JPS		
DWG. FILE: 13-000000		
FILE NO.: 13-000000		

I hereby certify that this plan, specification or report was prepared by me or under the direct supervision and professional seal of a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature: JOHN K. BOGART Reg. No. 19950

BOGART, PEDERSON & ASSOCIATES, INC.
LAND SURVEYING, ENGINEERING, ARCHITECTURE
100 W. WASHINGTON ST., SUITE 200
MINNEAPOLIS, MN 55402

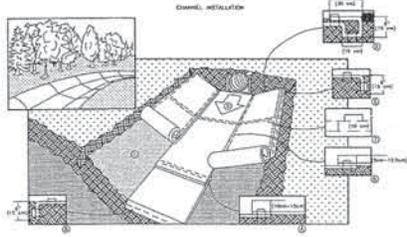
VARIOLITE STREET NW
SPENCER BROOK TOWNSHIP
ISANTI COUNTY, MN

DETAILS

SHEET NO. 10

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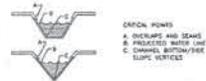
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WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREAS. CELL-O-SEED MUST BE INSTALLED WITH PAPER BACK DOWN WHO APPROXIMATELY 12" (DOWN) OF BLANKET EXTENDING BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAPLES APPROXIMATELY 12" (DOWN) AWAY IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FILL REMAINING 12" (DOWN) PORTION OF BLANKET BACK WITH SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAPLES SPACES APPROXIMATELY 12" (DOWN) AWAY ACROSS THE WIDTH OF THE BLANKET.

ALONG THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAPLES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN GOOD GRADING, BEST PRACTICE - STAPLES/STAPLES SHOULD BE PLACED THROUGH EACH OF THE COLORED BOXES CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.

- STAPLES STANDARD 4" (DOWN) ANCHOR AND 4" (DOWN) ON CENTER TO SECURE BLANKETS.
- 12" (DOWN) ANCHOR IN A 6" (DOWN) DEEP X 6" (DOWN) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM EDGE ON THE BLANKET BEING OVERLAPPED.
- A DOUBLE ROW OF STAPLES STANDARD 4" (DOWN) ANCHOR AND 4" (DOWN) ON CENTER SEAM EDGE WITH OF THE CHANNEL.
- IN A 6" (DOWN) DEEP X 6" (DOWN) WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

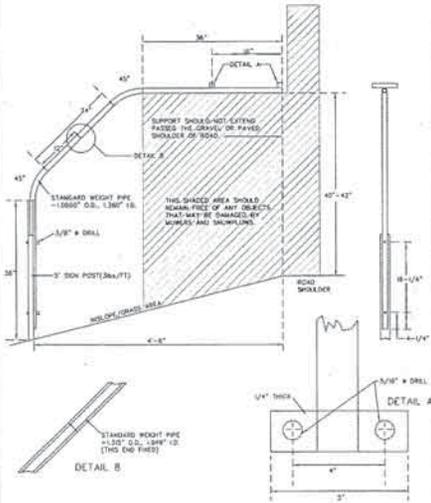


NOTE:
 - CHANNELS SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CHANNEL PROPERLY TO THE CHANNEL SURFACE.
 - IN A LOOSE SOIL ENVIRONMENT, THE USE OF STAPLE OR STAPLE LENGTHS GREATER THAN 6" (DOWN) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKET.

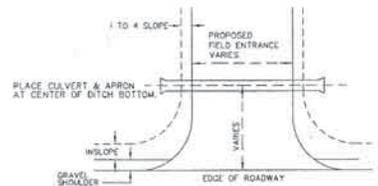
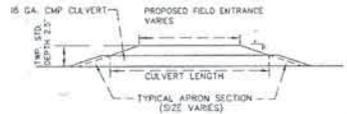
EROSION CONTROL MATTING (DITCH)

EROSION CONTROL NOTES:

- Contractor shall confine construction operations to the construction/grading limits shown.
- All work shall conform to the Minnesota Pollution Control Agency's Storm Water Permit requirements. Contractor shall obtain NPDES General Permit for construction and comply with all requirements.
- The site soil erosion and sediment control facilities shall be installed and maintained to conform with the standards specified by the permit.
- Contractor shall install temporary erosion control measures on the entire site at least every 7 days and within 24 hours of any measurable rainfall. Non-seeded soil fence or other erosion control device or practices shall be repaired immediately. Inspection and maintenance of devices shall continue until the site has undergone final stabilization and a Notice of Termination is submitted to the MPCA.
- All grading operations shall be conducted in a manner to minimize the potential for site erosion.
- Silt fences shall be installed prior to the disturbance of any areas and maintained until all tributary disturbed areas are restored.
- All soils tracked onto pavement or any other off-site areas shall be removed daily.
- The site sediment control facilities for the project must be installed prior to any site grading operation. Contact the Soil and Water Conservation District (SWCD) once said facilities are installed and before any grading can take place.
- The Contractor shall be responsible for the removal of all erosion control measures, including silt fence and holes, upon establishment of permanent vegetation in said areas.
- All ditches and areas disturbed during construction shall be restored and vegetated as soon as possible. Any finished areas shall be seeded and mulched within 14 days after finished grading is completed according to Mn/DOT 2005.
- All disturbed areas shall be re-vegetated with Mn/DOT seed mix 240, mulched, fertilized & soil anchored, per the following schedule:
 Seed mix 240: 75 lb/ac
 Fertilizer 20-10-20: 350 lb/ac
 Mulch Type II: 2 T/ac.



MAILBOX SUPPORT



NOTES:
 CULVERT APRON LIP IS TO BE PLACED AT DITCH BOTTOM. IN THE OCCURRENCE THAT DITCH IS DEEPER THAN THE MINIMUM, THE CULVERT LENGTH SHALL BE EXTENDED TO MAINTAIN 1 TO 4 SLOPE.

TYPICAL FIELD ENTRANCE CULVERT PLACEMENT

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BOGART, PEDERSON & ASSOCIATES, INC.
 LAND SURVEYING
 CIVIL ENGINEERING
 1001 PETER STREET, SUITE 100, ST. CLOUD, MN 56301
 TEL: (800) 821-1111 FAX: (800) 821-1111

VARIOLITE STREET NW
 SPENCER BROOK TOWNSHIP
 SANTI COUNTY, MN
 DETAILS

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SHEET NO. 10
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