

## **Information for File # 2013-04377-MMJ; St. Mary's Drainage Improvement Project**

**Applicant:** City of Plymouth

**Corps Contact:** Melissa Jenny

**Address:** 180 Fifth Street East, Suite 700, St. Paul, Minnesota 55101

**E-Mail:** Melissa.m.jenny@usace.army.mil

**Phone:** (651) 290-5363

**Primary County:** Hennepin

**Location:** Sec. 35, T. 118 N., R. 22 W.

**Information Complete On:** 11/15/2013

**Posting Expires On:** 11/25/2013

**Authorization Type:** MN-LOP-05

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 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 DESCRIPTION AND PURPOSE:** The project involves excavating an approximately 1,700 linear foot meandered channel through the wetland complex near St. Mary's Park, in Plymouth Minnesota. The project would improve surface water flow through the basin to provide additional flood protection for the surrounding residences. Aerial photography dating back to 1937 indicates that there was a straight ditch excavated through the wetland complex that was maintained at various times from the 1930's to the 1990's. The historic ditch has again filled in with sediment and vegetation, and needs to be maintained. However, the City has chosen to create a more natural meander through the wetland, because it is more appropriate for the resource and it will still serve the project purpose of providing for water flow and flood protection.

**NAME, AREA AND TYPES OF WATERS (INCLUDING WETLANDS) SUBJECT TO LOSS:** The excavated channel would be approximately 1,700 feet long, 25 feet wide and would average 3-4 feet deep. Grading and shaping activities associated with the excavation would result in the discharge of fill material over approximately 0.98 acre of deep marsh type wetland. There would be no changes to storm sewer pipes or outlet elevations of the wetland; the project would not adversely affect hydrology of the wetland. Also, the most recent channel maintenance work, assumed to be in the late 1990's, does not appear to have affected the size of the overall wetland complex.

**ALTERNATIVES CONSIDERED:** The City considered the no build option, but determined that it was not feasible due to the flooding potential of adjacent residential properties. The City also considered annual maintenance of the drainage system in this area, including excavating in front of storm sewer outfalls and removal of the dredged material from the area. This type of maintenance has occurred in the past, and it has not resulted in a significant improvement in flood protection for the area. The maintenance alternative is not considered sufficient to meet the needs of the City.

**COMPENSATORY MITIGATION:** Any permanent loss of wetlands resulting from this project would be compensated for according to the St. Paul District Wetland Mitigation Policy.

**Drawings:** See attached figures labeled as 2013-04377-MMJ, Posting figures 1-7.

St. Mary's Drainage Improvement  
Project - Plymouth, MN



St. Mary's Drainage Improvement Project - Plymouth, MN



PLAN SYMBOLS

- STATE LINE
- COUNTY LINE
- TOWNSHIP OR RANGE LINE
- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- RIGHT-OF-WAY LINE
- PRESENT RIGHT-OF-WAY LINE
- CONTROL OF ACCESS LINE
- PROPERTY LINE (Except Land Lines)
- VACATED PLATTED PROPERTY
- CORPORATE OR CITY LIMITS
  
- TRUNK HIGHWAY CENTER LINE
- RETAINING WALL
- RAILROAD
- RAILROAD RIGHT-OF-WAY LINE
- RIVER OR CREEK
- DRY RUN
- DRAINAGE DITCH
- DRAIN TILE
- CULVERT
- DROP INLET
- GUARD RAIL
- BARBED WIRE FENCE
- WOVEN WIRE FENCE
- CHAIN LINK FENCE
- RAILROAD SNOW FENCE
- STONE WALL OR FENCE
- HEDGE
- RAILROAD CROSSING SIGN
- RAILROAD CROSSING BELL
- ELECTRIC WARNING SIGN
- CROSSING GATE
- MEANDER CORNER
- SPRINGS
- MARSH
- TIMBER
- ORCHARD
- BRUSH
- NURSERY
- CATCH BASIN
- FIRE HYDRANT
- GATE VALVE
- SANITARY SEWER MANHOLE
- STORM SEWER MANHOLE
- OVERPASS (Highway Over)
- UNDERPASS (Highway Under)
- BRIDGE
- BUILDING (One Story Frame)
  - F-FRAME C-CONCRETE
  - S-STONE T-TILE
  - B-BRICK ST-STUCCO
- IRON PIPE OR ROD
- MONUMENT (STONE, CONCRETE, OR METAL)
- WOODEN HUB
- GRAVEL PIT
- ROCK QUARRY
- MAILBOX
- SIGN
- UTILITY SYMBOLS
- POWER POLE LINE
- TELEPHONE OR TELEGRAPH POLE LINE
- JOINT TELEPHONE AND POWER ON POWER POLES
- ON TELEPHONE POLES
- POWER POLE ANCHOR
- STEEL TOWER
- STREET LIGHT
- PEDESTAL (TELEPHONE CABLE TERMINAL)
- GAS MAIN
- WATER MAIN
- CONDUIT
- TELEPHONE CABLE IN CONDUIT
- ELECTRIC CABLE IN CONDUIT
- TELEPHONE MANHOLE
- ELECTRIC MANHOLE
- BURIED TELEPHONE CABLE
- BURIED ELECTRIC CABLE
- BURIED TELEVISION CABLE
- BURIED FIBER OPTIC
- SEWER, (SANITARY)
- SEWER, (STORM)
- SEWER MANHOLE



# CITY OF PLYMOUTH

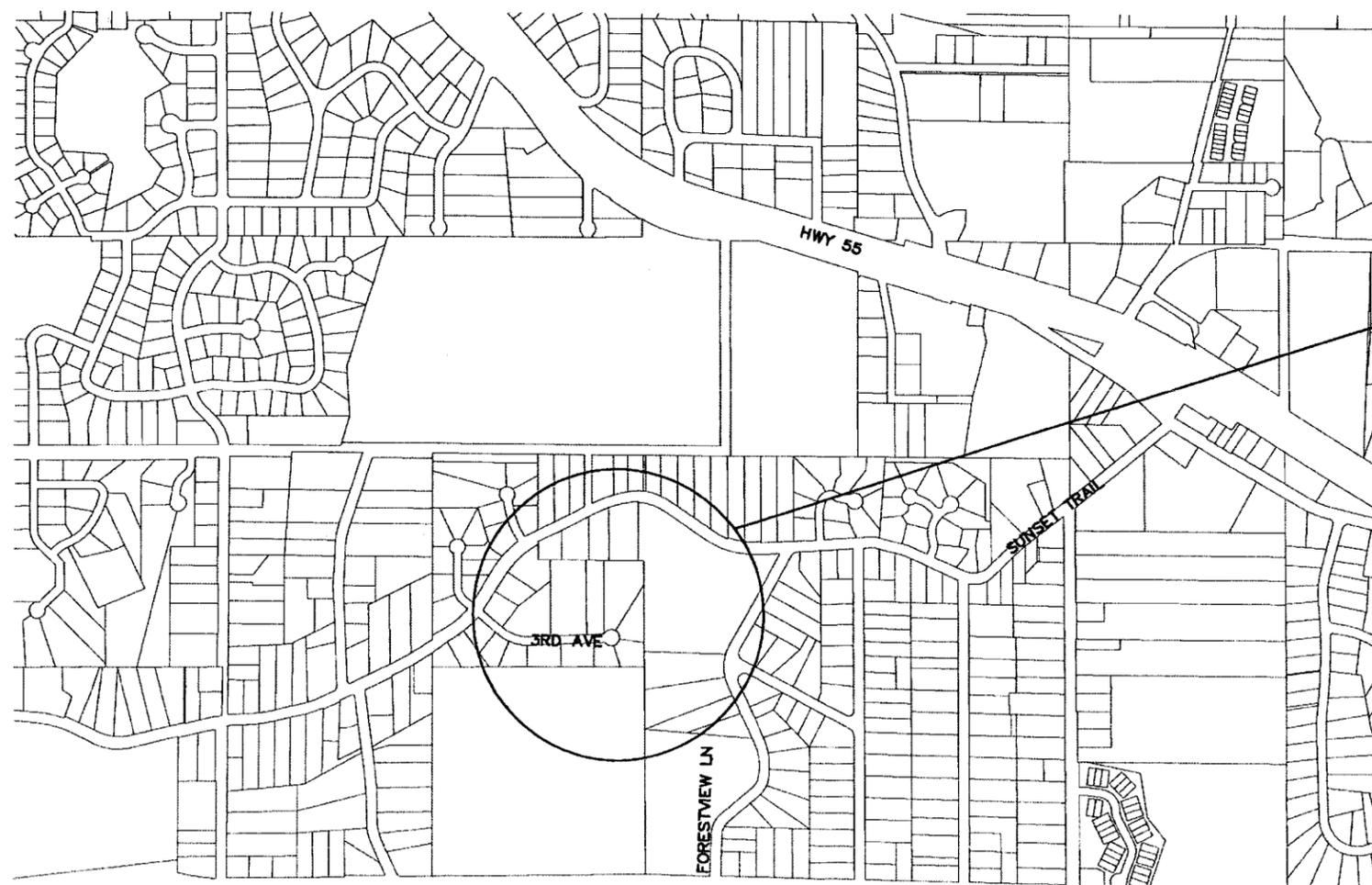
HENNEPIN COUNTY, MINNESOTA

CONSTRUCTION PLANS FOR :

DRAINAGE IMPROVEMENTS

## ST. MARY'S DRAINAGE IMPROVEMENT

CITY PROJECT NO. 12026



INDEX :

SHEET NO. DESCRIPTION

- 1 TITLE SHEET
- 2 LAYOUT & NOTES
- 3 DETAILS
- 4-5 PLAN & PROFILE

THIS PLAN SET CONTAINS 5 SHEETS

PROJECT AREA

GOVERNING SPECIFICATIONS:

THE 2005 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION THE MOST CURRENT "STANDARD SPECIFICATIONS FOR CONSTRUCTION" THE MOST CURRENT CITY OF PLYMOUTH "ENGINEERING GUIDELINES", AND THE CONTRACT DOCUMENTS, INCLUDING THE SPECIAL PROVISIONS, SHALL GOVERN ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES SHALL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

NOTE:

THE EXACT LOCATION OF UNDERGROUND UTILITIES SUCH AS GAS, TELEPHONE, WATER, ETC. ARE UNKNOWN THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITIES BEFORE COMMENCING EXCAVATION

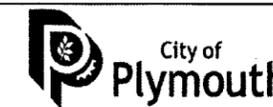
SCALES :

- PLAN \_\_\_\_\_ 50'
- (PLAN) \_\_\_\_\_ 30'
- PROFILE \_\_\_\_\_ HORIZ. 50'
- (X PROFILE) \_\_\_\_\_ HORIZ. 30'
- VERT. 5'
- X-SECTIONS \_\_\_\_\_ HORIZ. 10'
- VERT. 5'

I HEREBY CERTIFY THAT THIS PLAN 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.

ENGR. \_\_\_\_\_  
MICHAEL J. PAYNE, P.E., DESIGN MANAGER

Reg. No. \_\_\_\_\_ Date \_\_\_\_\_



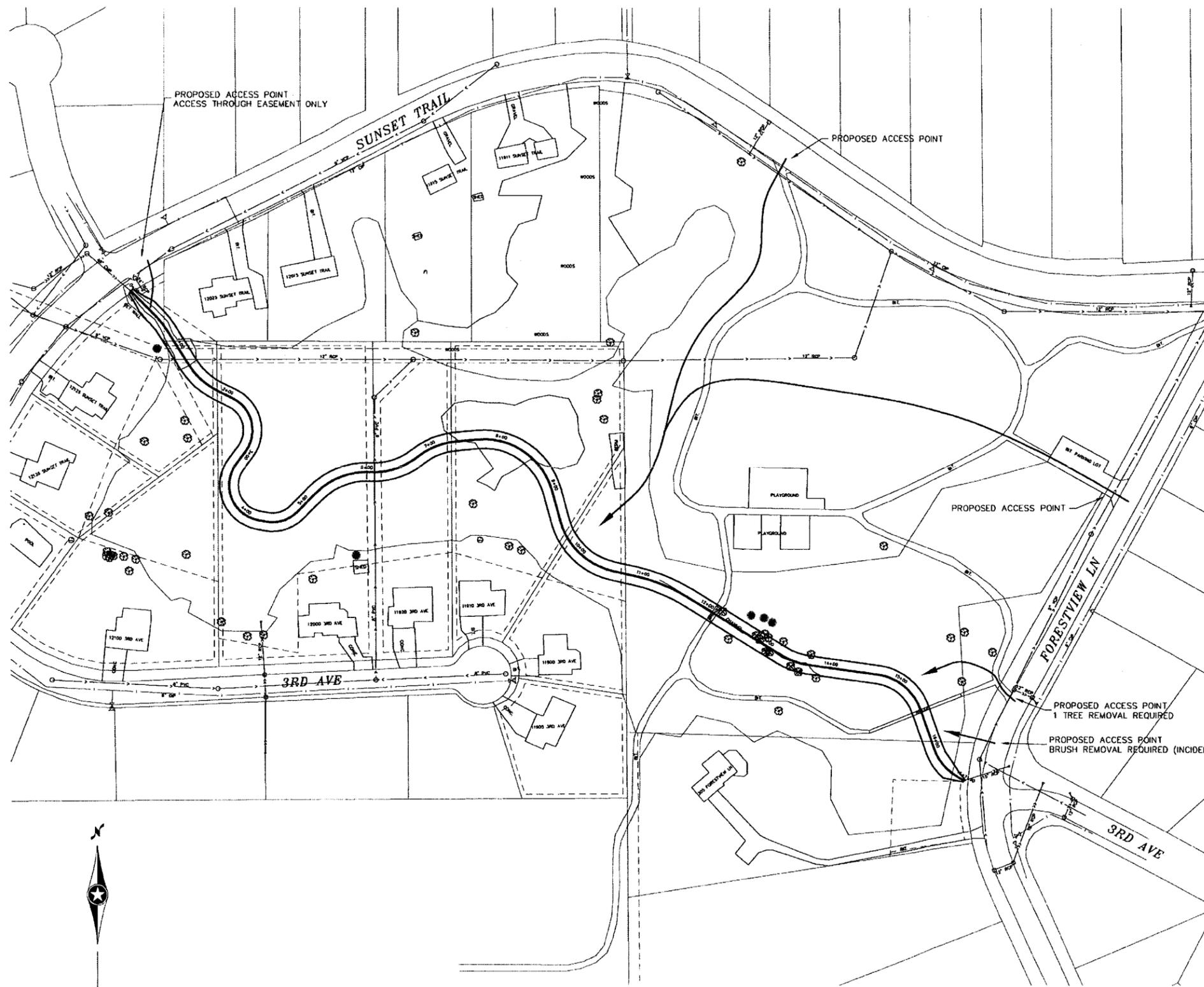
STATE AID PROJ. NO.	1
CITY PROJ. NO.	5
12024	

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

### GENERAL NOTES

1. THE EXACT LOCATION OF UNDERGROUND UTILITIES SUCH AS GAS, TELEPHONE, WATER, ETC. ARE UNKNOWN. THE CONTRACTOR SHALL CONTACT GOPHER ONE CALL BEFORE COMMENCING ANY EXCAVATION
2. ALL EXCESS EXCAVATED MATERIAL IS THE PROPERTY OF THE CONTRACTOR.
3. CONTRACTOR MUST MAINTAIN EROSION CONTROL FOR ENTIRE PROJECT.
4. ACCESS TO LOCAL RESIDENCES MUST BE MAINTAINED AT ALL TIMES THROUGHOUT CONSTRUCTION
5. A MINIMUM OF 48 HRS. NOTICE IS REQUIRED FOR ALL STAKING REQUESTS.
6. THE MOST CURRENT CITY OF PLYMOUTH ENGINEERING STANDARD DETAIL SPECIFICATION FOR SEWER, WATER, STORM SEWER, & STREETS APPLY TO THIS PROJECT.
7. NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS MARKED BY THE CITY OF PLYMOUTH FOR REMOVAL.
8. TRAFFIC CONTROL MUST BE PROPERLY MAINTAINED AT ALL TIMES IN ACCORDANCE WITH THE MNDOT TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS BOOKLET.
9. ACTUAL EXCAVATION LOCATIONS SHALL BE MARKED IN FIELD BY ENGINEER.
10. CONTRACTOR SHALL PROTECT ALL EXISTING LANDSCAPING.
11. CONTRACTOR SHALL APPLY FOR NPDES PERMIT.
12. PROPOSED SITE ACCESS IS SHOWN ON PLAN. CONTRACTOR SHALL NEGOTIATE WITH HOMEOWNER IF DIFFERENT ACCESS IS DESIRED.
13. CHANNEL ALIGNMENTS TO BE STAKED BY CITY.
14. CONTRACTOR SHALL USE DESIGNATED PROJECT ACCESS POINTS UNLESS ALTERNATE ACCESS POINTS ARE APPROVED BY ENGINEER.
15. EXACT PROJECT ACCESS POINTS SHALL BE MARKED IN THE FIELD BY ENGINEER.
16. CONTRACTOR SHALL REMOVE AND REPLACE DAMAGED TRAIL SECTIONS AFTER EXCAVATION COMPLETION AS DIRECTED BY ENGINEER.
17. AN ESTIMATED 2,830 CY OF MATERIAL IS TO BE EXCAVATED.

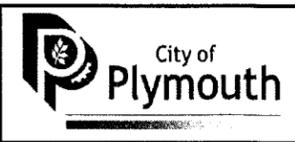
*0.943 acres*



NO	DATE	BY	CKD	APPR	REVISION

I hereby 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.

Signature: MICHAEL J. PAYNE  
 Date: 10-8-13 License #: 50484



PLYMOUTH, MINNESOTA  
 ST. MARY'S  
 DRAINAGE IMPROVEMENT  
 CITY PROJECT NO. 12026

LAYOUT & NOTES

STATE AID PROJ. NO.	DRAWN BY M. PAYNE	DATE 9-13
DWG NAME STMARY	DESIGNED BY M. PAYNE	9-13
	CHECKED BY D. ASCHE	9-13
	REVIEWED BY J. RENNEBERG	9-13

2  
5



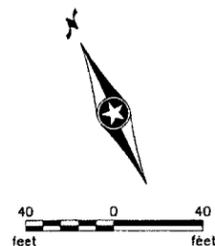
EX BM ELEVATION 917.95  
TNH ON S. SIDE OF 510 JONQUIL LN  
ON N. SIDE OF SUNSET TRAIL

**NOTE:**  
THE EXACT LOCATION OF UNDERGROUND UTILITIES  
SUCH AS GAS, TELEPHONE, WATER, ETC., ARE UNKNOWN.  
THE CONTRACTOR SHALL CONTACT GOPHER ONE-CALL  
BEFORE COMMENCING ANY EXCAVATION.

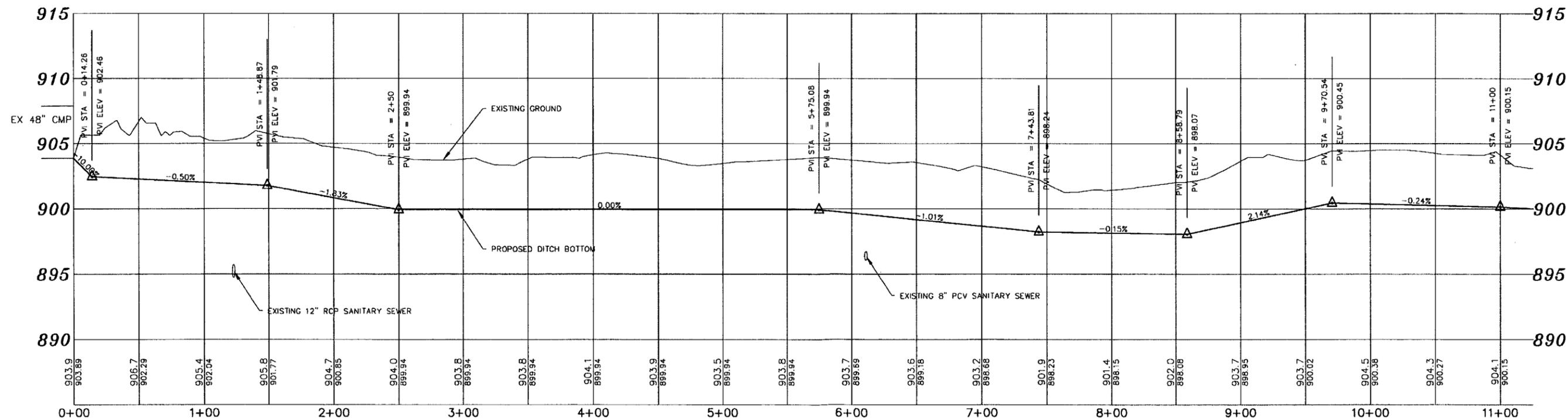
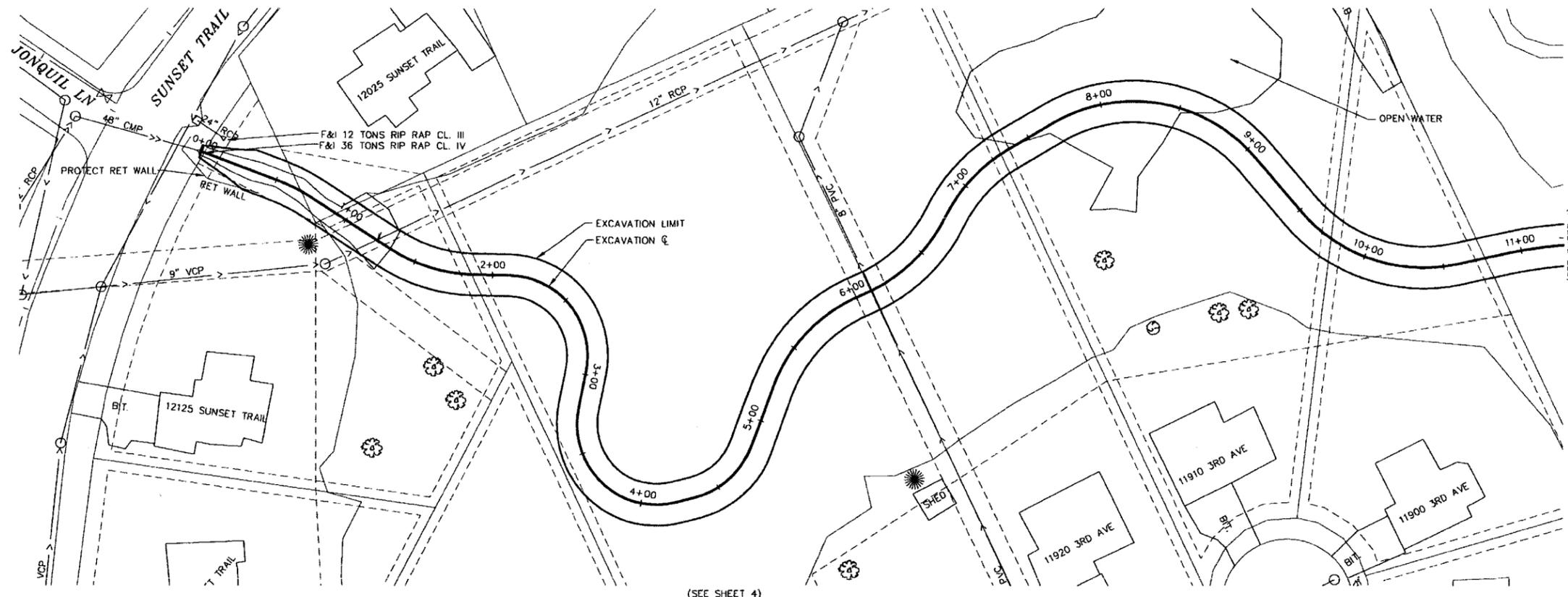
(21) DENOTES EXISTING STRUCTURE NUMBER  
(SEE EXISTING STRUCTURE SCHEDULE)

MAINTAIN LOCAL ACCESS  
AT ALL TIMES

ALL GATE VALVES ARE TO BE  
OPERATIONAL AT ALL TIMES

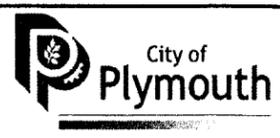


**NOTE:**  
CHANNEL SIDE SLOPES SHALL BE 2:1 INSTEAD OF 3:1 FROM STATIONS 0+00 TO  
STATION 1+25 AS DIRECTED BY ENGINEER.



NO	DATE	BY	CKD	APPR	REVISION

I hereby 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.  
Signature: MICHAEL J. PAYNE  
Date: 10-8-13 License: 50484



PLYMOUTH, MINNESOTA  
ST. MARY'S  
DRAINAGE IMPROVEMENT  
CITY PROJECT NO. 12026

PLAN & PROFILE

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	DESIGNED BY M. PAYNE	9-13
DWG NAME	CHECKED BY D. ASCHE	9-13
STIMARY	REVIEWED BY J. RENNEBERG	9-13

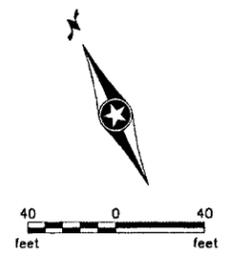
4  
5

EX BM ELEVATION 910.87  
TNH AT 330 FORESTVIEW LN

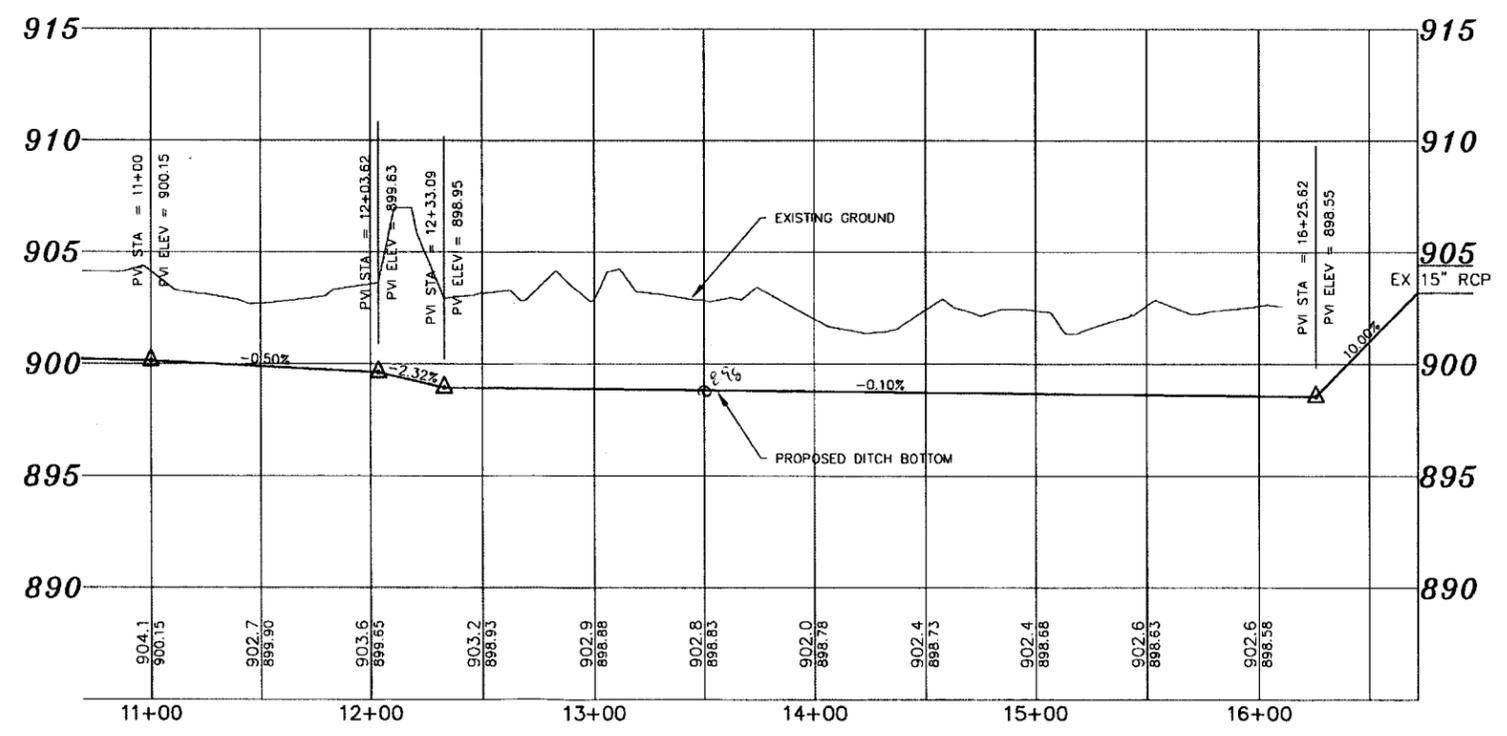
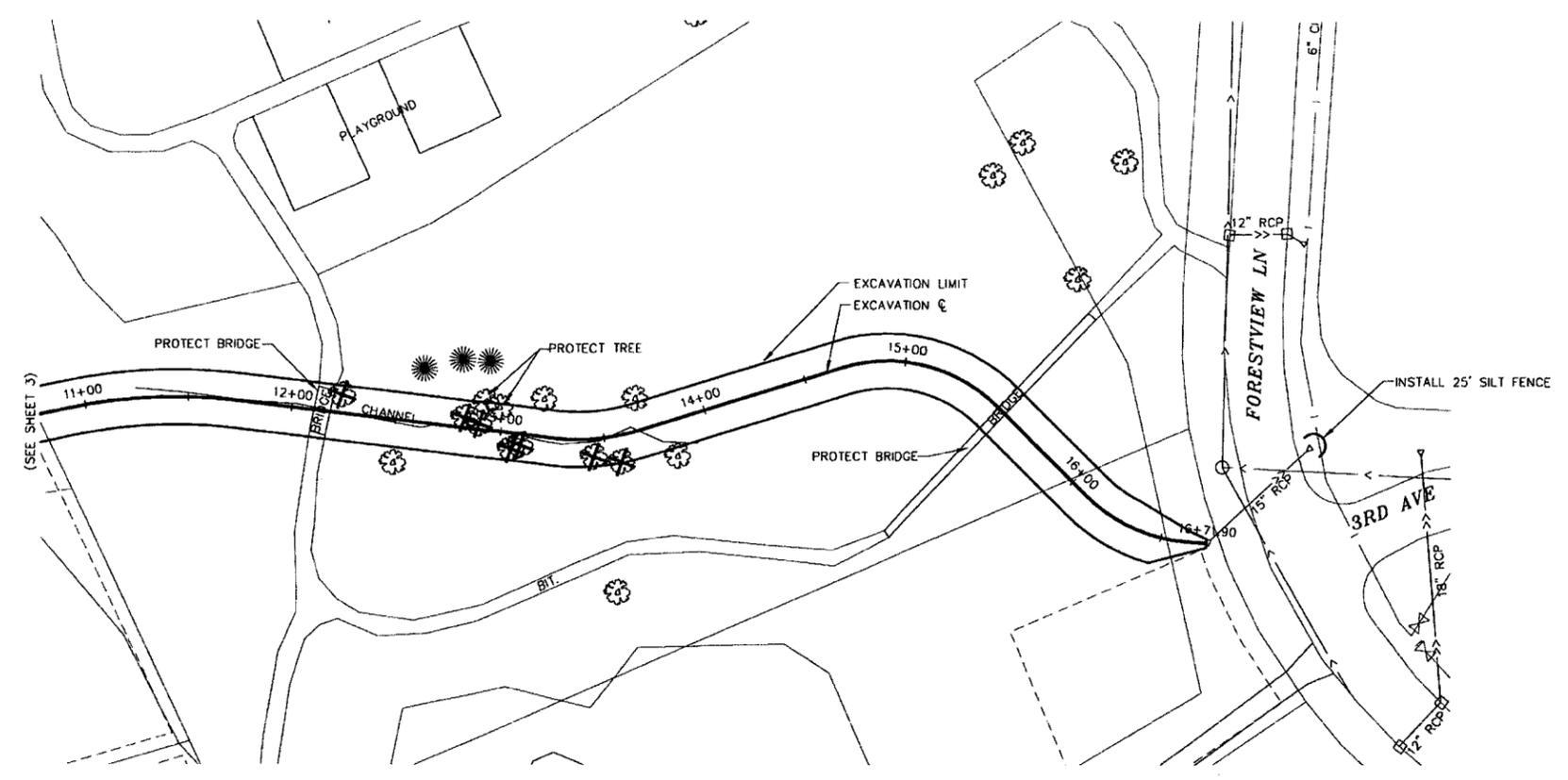
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MAINTAIN LOCAL ACCESS AT ALL TIMES

☼ DENOTES TREE TO BE REMOVED

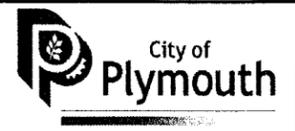


**NOTE:**  
CHANNEL SIDE SLOPES SHALL BE 2:1 INSTEAD OF 3:1 FROM STATIONS 12+00 TO STATION 13+50 AS DIRECTED BY ENGINEER.



NO	DATE	BY	CKD	APPR	REVISION

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STMARY	CHECKED BY D. ASCHÉ	DATE 9-13
	REVIEWED BY J. RENNEBERG	DATE 9-13

5  
5