

Erosion Control – Water & Sediment Control Basin

Location: Sect. 34 Milaca Township



East end of the field looking west

Project Summary

John is looking to control the reoccurring gully erosion on one of his fields. There is a history of erosion across the field from an east central point eroding down the southwest. Most years the gully has been farmed through with nothing done to stabilize it. Currently the gully empties toward the Rum River West Branch. The project includes 1 rock settling basin, 2 inlets and over 1,180' of tiles to control erosion over 26 acres. Pollution reductions include 67.53 lbs. of nitrogen, 18.15 lbs. of phosphorus and 3.194 tons of TSS. The amount of phosphorus is thought to be higher than calculated as it's near an old operation.

Installation will be either this spring in tandem with the previously approved water and sediment control basin or in the fall once the crops are off. The engineer's estimate is \$24,139.50.

Project Status:

Initiated: 9/14/2022

Contract approved:

Completed:

Funding:

Total cost: \$24,139.50

Implementation

assistance:

FY23 WBIF Rum River

Watershed

Partnership

Landowner match:

Resource Concern:

Erosion Control

Cooperators:

Mille Lacs Soil and
Water Conservation
District (SWCD)

Funder: Rum River
Watershed
Partnership,
Watershed Based
Implementation
Funding

Engineering: West
Central Technical
Service Area

Contractor:

Geise Excavating Inc.

Location:

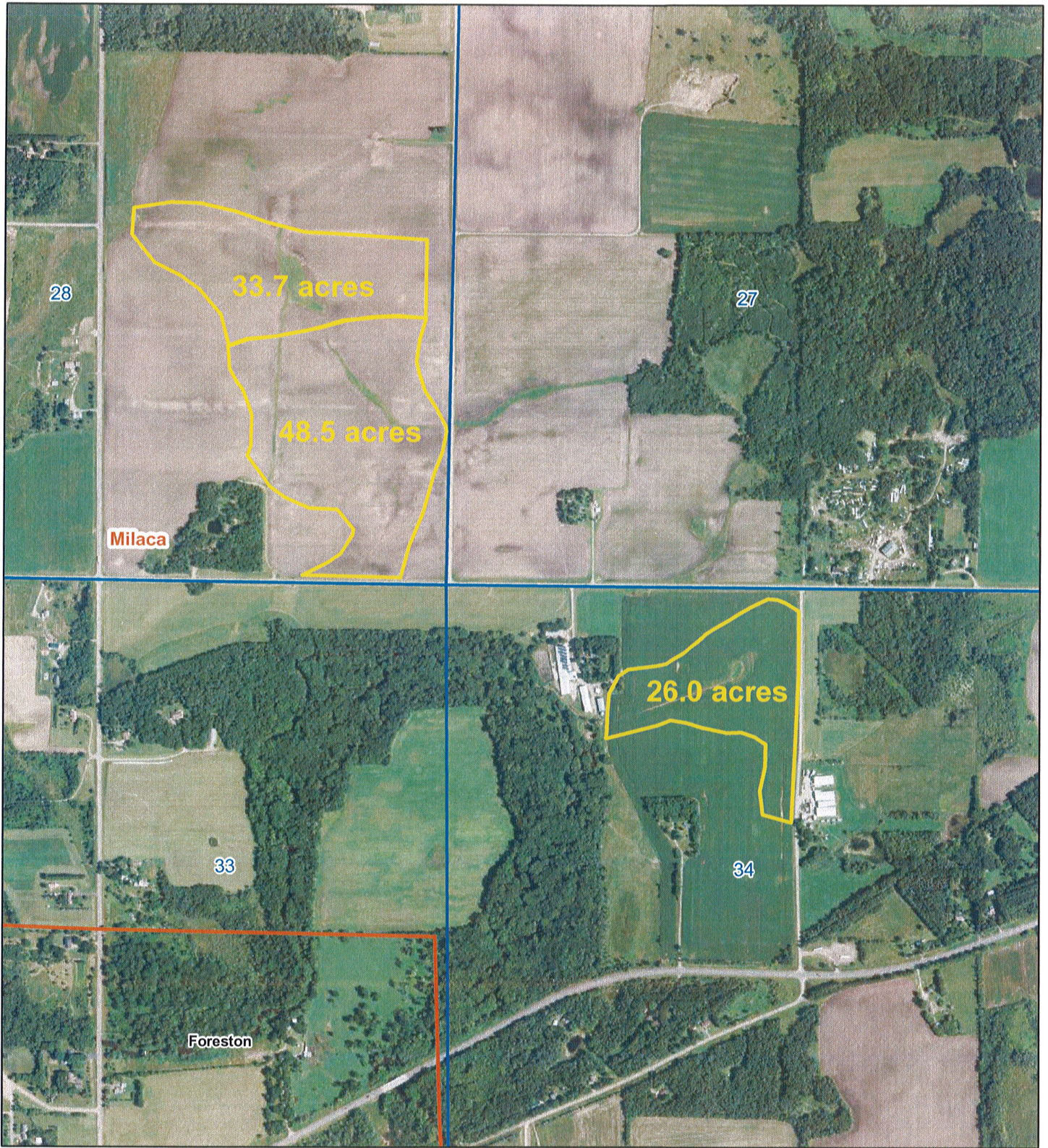
Rum River Watershed



View from the east central point of the field where the erosion begins




Southwest end of the field viewing to the east where the gully starts

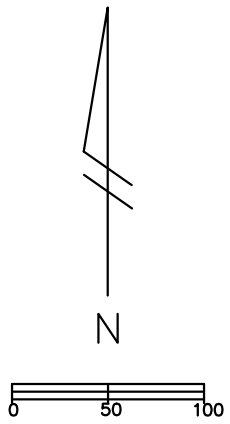
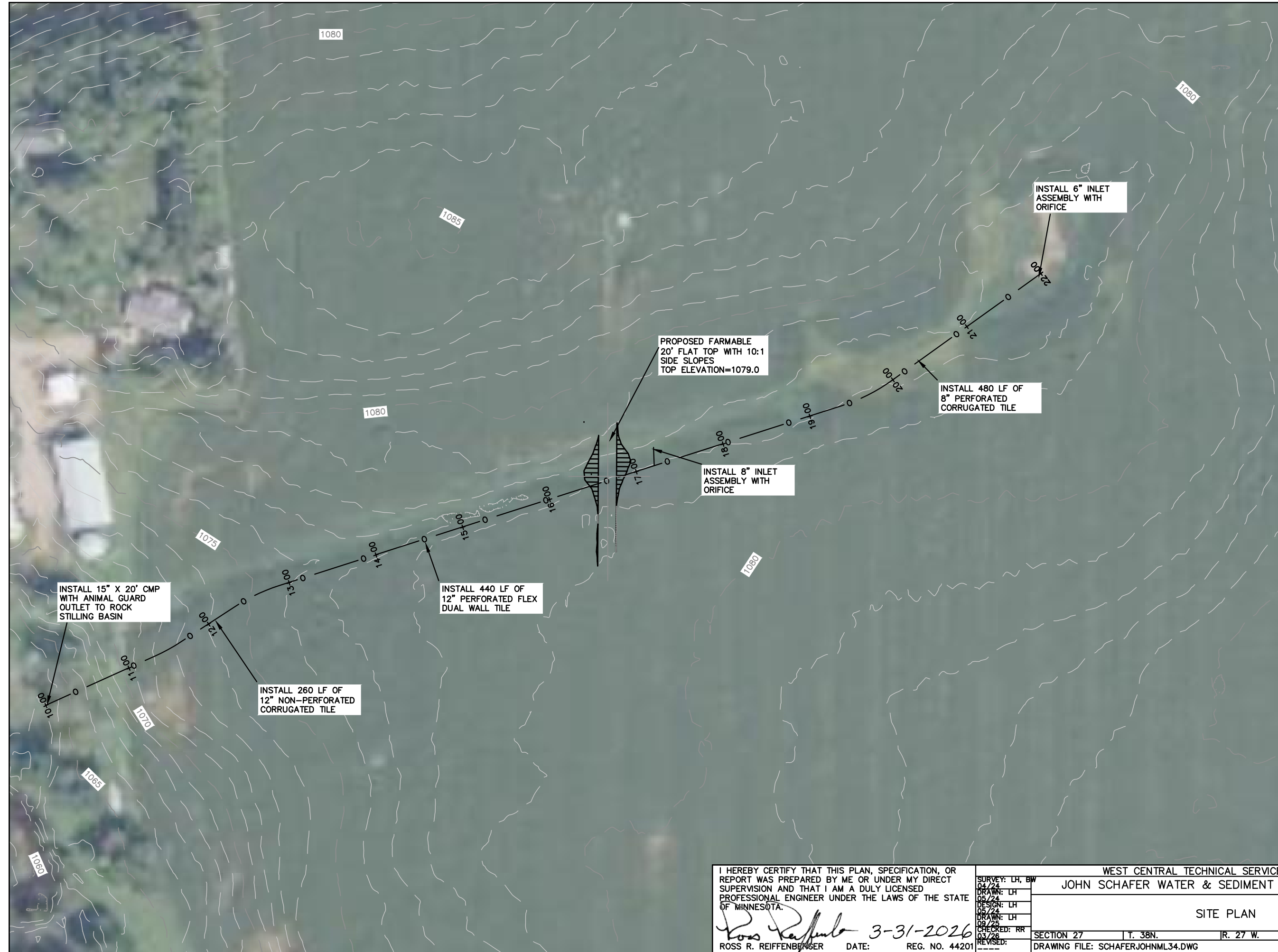


 Townships
 Sections

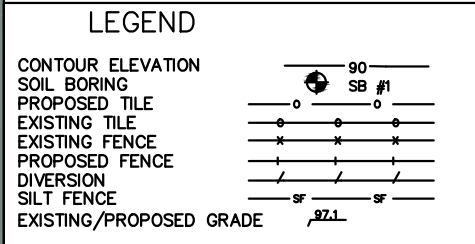
1 inch = 1,000 feet 1:12,000

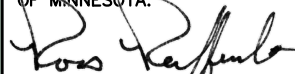
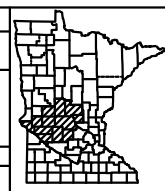
0 350 700 1,400 Feet






- CONSTRUCTION NOTES:**
- PRECAUTIONS SHALL BE TAKEN TO MINIMIZE EROSION DURING CONSTRUCTION & EARTHWORK ACTIVITIES.
 - TILE LINES ARE OFFSET 15-20 FEET FROM CENTERLINE DRAW.
 - SALVAGE & RESPREAD TOPSOIL FROM CONSTRUCTION AREAS PRIOR TO PLACING ANY FILL.
 - GRADING & SHAPING ALONG TOE SLOPE MAY BE REQUIRED TO PROVIDE POSITIVE DRAINAGE TO INTAKE.
 - EXISTING TILE LINES SHOULD BE LOCATED PRIOR TO CONSTRUCTION TO AVOID DAMAGE.
 - SWCD/TSA IS NOT RESPONSIBLE FOR LOCATING OR DAMAGE TO EXISTING TILE LINES.
 - TILE OUTLETS INTO ROCK STILLING BASIN.
 - SEED, FERTILIZE, & MULCH WATER & SEDIMENT CONTROL BASIN.
 - EXCAVATION IN OR NEAR RIGHT OF WAY TO BE APPROVED BY HIGHWAY AUTHORITY. UTILITIES ARE LOCATED NEAR CONSTRUCTION LIMITS
 - WETLANDS LOCATED NEAR PROJECT SITE. WETLAND BOUNDARIES SHALL BE FLAGGED PRIOR TO CONSTRUCTION.



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.  ROSS R. REIFFENBERGER	SURVEY: LH, BW 04/24 DRAWN: LH 05/24 DESIGN: LH 05/24 DRAWN: LH 08/25 CHECKED: RR 03/26 REVISED:	WEST CENTRAL TECHNICAL SERVICE AREA (WCTSA) JOHN SCHAFER WATER & SEDIMENT CONTROL BASINS		
	SITE PLAN		SECTION 27 T. 38N. R. 27 W. MILLE LACS COUNTY DRAWING FILE: SCHAFERJOHNML34.DWG PLAN SHEET 2 OF 4	

John Schafer
Benton SWCD
WASCOB
Cost Estimate

By rr
Checked by _____

3/31/2026
Date _____

Item No.	Work or Material	Quantity	Unit	Unit Price	Amount (\$)
1	Mobilization	1	Job	2,500.00	2,500.00
2	Salvage & Spread Topsoil (~200 CY)	1	Job	1,000.00	1,000.00
3	Fill & Grade Gully	1	Job	1,000.00	1,000.00
4	Compacted Earthfill, Class C Compaction (CV)	350	Cu. Yd.	6.00	2,100.00
5	6" Hickenbottom Inlet Assembly	1	Each	275.00	275.00
6	8" Hickenbottom Inlet Assembly	1	Each	325.00	325.00
7	8" Perforated Heavy Duty Corrugated Tile	480	Ln. Ft.	6.00	2,880.00
8	12" Perforated Flexible Dual Wall Tile	440	Ln. Ft.	15.00	6,600.00
9	12" Non-Perforated Heavy Duty Corrugated Tile	260	Ln. Ft.	12.00	3,120.00
10	Orifice Plate	2	Each	25.00	50.00
11	15" x 20' CMP w/ Animal Guard	1	Each	1,500.00	1,500.00
12	Fieldstone Riprap (MNDOT Class II)	7	Cu. Yd.	75.00	525.00
13	Geotextile Fabric (MNDOT Type III, Non-Woven)	14	Sq. Yd.	5.00	70.00

(CV) = Compacted Volume

Subtotal	21,945.00
10% Contingency	2,194.50
TOTAL	24,139.50

The rates and estimate above is for the "Owners" use only and should not be shared. This estimate is based on average costs for similar type work completed for similar projects. It may not reflect the actual cost for the work as determined by the contractor you select. Additional dollars requested for this project after work begins may only be approved if site conditions require a change in the plan or specifications. Additional cost-share dollars are not guaranteed and are approved on a case by case basis and availability. **This project is subject to prevailing wage rules per MN Statute 177.41 through 177.44.** It is the contractors responsibility to comply with these rules accordingly.