

RED LAKE WATERSHED DISTRICT

October 13, 2022

9:00 a.m.

Agenda

9:00 a.m.	Call to Order	Action
	Review and approve agenda	Action
	Requests to appear	Information
	September 22, 2022 Minutes	Action
	Financial Report dated October 12, 2022	Action
	General Fund Budget as of September 30, 2022	Information
	Mud River Floodplain Access Project, RLWD Project No. 180C FDRWG Funding	Information
	Red Lake River 1W1P, RLWD Project No. 149 2021 Grant Extension Crescent Avenue, Crookston	Information Info./Action
	Clearwater River 1W1P, RLWD Project No. 149A-Channel Recon Plan Approval Channel Stability Reconnaissance	Information Info./Action
	Thief River 1W1P, RLWD Project No. 149A-Grant Extension	Information
	FEMA Disaster Declaration Black River Impoundment, RLWD Project No. 176 Moose River Impoundment, RLWD Project No. 13	Information
	Ring Dikes Larson Ring Dike, RLWD Project No. 129AV Sorum Ring Dike, RLWD project No. 129AW -Pay Est No. 2 Fladeland Ring Dike, Rocksbury Township, Pennington Co. Bohl Ring Dike, Nesbit Township, Polk County (NRCS) Beich Ring Dike, Agder Township, Marshall County	Action Action Action Action Action
9:30 a.m.	Quotes-State Ditch 83/Thief River Streambank Stabilization Project Thief River 1W1P, RLWD Project No. 149A	Action
	Knutson Dam, RWLD Project No. 50F	Information
	Demarais Hanson Repair, RLWD Project No. 149	Information

JD 72, RLWD Project No. 41BB-Payment for Damages	Information
Red River Basin – Retention Policy Statement	Information
Impoundment Updates	Information
River Watch Forum	Information
Erosion Control Project, RLWD Proj. 164 - Red Lake SWCD Ralph Perrault, Gervais Township Val Gagnon, Gervais Township Tony Gerardy, Emmardville Township Matt Knutson, Red Lake Falls Township	Info./Action
West Polk SWCD Funding Reimbursement, RLWD Project No. 164-Hangsleben and Boushee Projects	Information
Permit Violations	Info/Action
Permits: No. 22183, 22212, 22216-22219, 22222-22225, 22227-22233 22235-22338	Action
Red River Basin FDRWG-Project Team Handbook	Information
MAWD Annual Meeting	Information
Change November 24, 2022 Board Meeting	Action
Administrators Update	Information
Legal Counsel Update	Information
Managers' updates	Information
Adjourn	Action

UPCOMING MEETINGS

October 18, 2022	RRWMB Meeting, Ada, 10:00 a.m.
October 27, 2022	RLWD Board Meeting, 9:00 a.m.
November 10, 2022	RLWD Board Meeting, 9:00 a.m.
November 11, 2022	Office Closed-Veterans Day
November 16, 2022	Red River Basin FDRWG Project Team Handbook, 1:00
November 24-25, 2022	Office Closed-Thanksgiving Holiday
Nov. 29-Dec. 3, 2022	MAWD Annual Conference, Alexandria

DRAFT

RED LAKE WATERSHED DISTRICT
Board of Manager's Minutes
September 22, 2022

President, Dale M. Nelson, called the meeting to order at 9:00 a.m. at the Red Lake Watershed District Office, Thief River Falls, MN.

Present: Managers: Gene Tiedemann, Terry Sorenson, Allan Page, Brian Dwight, Tom Anderson, and Dale M. Nelson. Absent: LeRoy Ose. Staff Present: Myron Jesme, Tammy Audette, and Legal Counsel, Delray Sparby.

The Board reviewed the agenda. A motion was made by Page, seconded by Dwight, and passed by unanimous vote that the Board approve the agenda. Motion carried.

The Board reviewed the September 8, 2022, minutes. Motion by Sorenson, seconded by Anderson, to approve the September 8, 2022, Board meeting minutes. Motion carried.

The Board reviewed the Financial Report dated September 21, 2022. Motion by Anderson, seconded by Sorenson, to approve the Financial Report dated September 21, 2022, as presented. Motion carried. Staff member Ann Joppru noted the increased interest rate at American Federal Bank-Fosston and the interest rates obtained with Edward Jones for the purchase of three Certificate of Deposits.

A motion was made by Anderson, seconded by Sorenson, that Edward Jones be designated as a depository for the RLWD with the following signatures on the signature cards: Dale M. Nelson, Gene Tiedemann, LeRoy Ose, Terry Sorenson, Myron Jesme, and Ann Joppru. Motion carried.

Staff member Ann Joppru noted that staff health insurance will have a 5% increase for 2023 premiums, with the dental insurance premiums increased by 24%.

Engineer Tony Nordby, Houston Engineering, Inc., reviewed the Technical Memorandum for the Amendment to the Elm Lake Trigger Elevations dated September 23, 2022. Administrator Jesme discussed the difference between using 1929 datum versus 1988 datum. To provide consistency and avoid confusion in future operations, this amendment will convert all Elm Lake referenced pool levels and report all downstream trigger elevations be converted to 1988 datum. It was noted that this doesn't not change the operating plan, just gives future staff better direction in operating Elm Lake Structure. Nordby noted that in the report completed in 2006, it did not identify the roadway overtopping at the Site 2 location, which is dictated by the back level of State Ditch 83. Motion by Tiedemann, seconded by Page, to approve the conversion of datum from 1929 to 1988 datum for operation of the Elm Lake Project, RLWD Project No. 52. Motion carried. Nordby indicated that he will provide District and MnDNR staff with information indicated with trigger point levels. Administrator Jesme noted that the District staff will adjust staff gages as well as install an additional gauge near Site 2 Trigger Point.

The following quotes were received for the Demarais/Hanson Repair, RLWD Project No. 149: Quality Spray Foam LLC/Anderson Excavating, \$92,619.00; and Triple D Construction and Leasing, Inc., \$145,923.00. Motion by Page, seconded by Tiedemann, to approve the low quote from Quality Spray Foam LLC/Anderson Excavating in the amount of \$92,619.00, for the Demarais/Hanson Repair, RLWD Project No. 149. Motion carried.

The Board reviewed Pay Estimate No. 19 in the amount of \$23,050.59 to R.J. Zavoral & Sons, Inc., for construction of the Black River Impoundment, RLWD Project No. 176. Engineer Tony Nordby, Houston Engineering, Inc., stated that there is minor cleanup along the backslope of County Road 12 that needs to be leveled, along with the mill over and overlay on CSAH 3 where the water enters the impoundment. Motion by Tiedemann, seconded by Sorenson, to approve Pay Estimate No. 19 in the amount of \$23,050.59 to R.J. Zavoral & Sons, Inc., for construction of the Black River Impoundment, RLWD Project No. 176. Motion carried.

Administration Jesme stated that engineering staff from the NRCS will be in the area to review the repairs needed at the Burnham Creek Impoundment/BR6, RLWD Project No. 43A.

The Board reviewed Pay Estimate No. 3 in the amount of \$9,993.99 to Spruce Valley Corporation, Inc. for construction of the Thief River Falls Oxbow Project, RLWD Project No. 46Q. Motion by Sorenson, seconded by Anderson, to approve Pay Estimate No. 3 in the amount of \$9,993.99 to Spruce Valley Corporation for construction of the Thief River Falls Oxbow Project, RLWD Project No. 46Q. Motion carried. The City of Thief River Falls will set the date for the Final Payment Hearing, which will be held at the City Council meeting.

Staff member Nate Koland discussed construction activity at the Sorum Ring Dike, RLWD Project No. 129AW. Motion by Dwight, seconded by Tiedemann, to approve Pay Estimate No. 1 in the amount of \$87,517.61, to Paul Zavoral, Inc./Higher Ground for construction of the Sorum Ring Dike, RLWD Project No. 129AW. Motion carried.

Discussion was held on construction of the Nelson Ring Dike, RLWD Project No. 129AU, and minor items left to complete the construction.

Administrator Jesme stated that the State of Minnesota has funding for the construction of ring dikes through a LCMRR Grant. This grant will be provided to the RRWMB, for ring dike construction in 2023.

The District office will host the River Watch Fall Kickoff on October 6th. It is estimated that 75 students and teachers will participate in the event.

Repairs to the Brandt, Euclid East and Parnell Impoundments have been noted and will be repaired through FEMA funding. Discussion was held on mowing of the Moose River Impoundment, and the request by the MnDNR to minimize mowing between the two structures this year and then complete all of the mowing in 2023. FEMA funding will be used to clean up all debris on the Moose River Impoundment. Discussion was held on the south access road erosion.

Motion by Sorenson, seconded by Anderson, to approve amending RLWD Permit No. 22195, Jeremy Nelson, Grand Plain Township, Marshall County. Motion carried.

The Board reviewed the permits for approval. Motion by Tiedemann, seconded by Sorenson, to approve the following permits with conditions stated on the permit: No. 22155, Mary A. Miller, Tilden Township, Polk County; No. 22205, Brady Anderson, North Township, Pennington County; No. 22206, Brandon Blaine, Benville Township, Beltrami County; No. 22207 and 22208, Aaron Miller, Reiner Township, Pennington County; No. 22209, John Klein, Terrebonne Township, Red Lake County; No. 22210, Daniel Payment, Terrebonne Township, Red Lake County; No. 22211, Paul Engelstad, Parnell Township, Polk County; No. 22213, Baylen Hagen, Veldt Township, Marshall County; No. 22214, Steve Goodwin, Euclid Township, Polk County; and No. 22215, Tom Anderson, Leo Township, Clearwater County. Motion carried.

Administrators update:

- Jesme attended the September 20th RRWMB meeting via teams.
- The District received the signed 10-year rental agreement and first payment from Roger and Roxanne Hagen for the Brandt Channel Restoration Project.
- Staff members Hanson and Slowinski participated in Pennington County Outdoor Education Day.
- There will be a Mud River Project Team meeting on September 23, 2022.
- Jesme participated in a Virtual Drainage Workgroup meeting on September 8, 2022. One of the main topics was the proposed “Drainage Portal” being proposed by the environmental groups and appears to be supported by BWSR. Jesme will participate in an Association of MN Counties meeting on September 29th on the same topic.
- Jesme will participate in the MAWD Legislative meeting on September 29 via Zoom.
- Jesme will attend the MAWD Strategic Plan meeting scheduled for September 29, 2022.
- A Clearwater River 1W1P Planning Workgroup meeting was held on September 21st in preparation of approval by BWSR for the plan.
- The Upper/Lower Red Lake 1W1P Policy Committee meeting will be held on October 4th at 10:00 a.m.

Attorney Jerry VanKorf completed a draft Appeals Brief for the Appeal of the Improvement to Polk County Ditch 39, RLWD Project No. 179.

Manager Dwight stated that the Upper Red Lake Association will present the “Keep It Clean” campaign at MAWD Annual Convention.

Motion by Sorenson, seconded by Anderson, to adjourn the meeting. Motion carried.

LeRoy Ose, Secretary

RED LAKE WATERSHED DISTRICT
Financial Report for October 13, 2022

Ck#	Check Issued to:	Description	Amount
online	EFTPS	Withholding FICA, Fed & Medicare (9-28-22 payroll)	\$ 4,952.02
online	MN Department of Revenue	Withholding taxes (9-28-22 payroll)	\$ 889.68
online	Public Employers Retirement Assn.	PERA (9-28-22 payroll)	\$ 2,817.46
online	Further	Employee HSA (9-28-22 payroll)	\$ 175.00
online	Public Employers Retirement Assn.	PERA (10-12-22 payroll)	\$ 2,792.38
online	Further	Employee HSA (10-12-22 payroll)	\$ 175.00
	40376 Spruce Valley Corporation	Pay Estimate #3 Thief River Oxbow Proj. #46Q	\$ 9,993.99
	40377 Higher Ground	Pay Estimate #1 - Sorum Ring Dike Proj. #129AW	\$ 87,517.61
	40378 RJ Zavoral & Sons	Pay Est. #19 - Black River Impoundment Proj. #176	\$ 23,050.59
	40379 Shane Vonasek Mowing	Mowing Proj. #43B, #117, #123, #169	\$ 15,833.00
	40380 Brady Martz & Assoc. PA	Accounting assistance - 12 hrs@ \$175	\$ 2,100.00
	40381 Marco	Telephone expense	\$ 348.77
	40382 NCPERS Group	Life Insurance for staff	\$ 128.00
	40383 Oil Boyz Express Lube	Oil change on vehicle #933	\$ 84.48
	40384 Pizza Hut	River Watch Kick off - Lunch for 75 kids	\$ 383.15
	40385 B.I.L. Manufacturing	6 18" culvert traps (1 for Proj. 129AW & 1 for #175	\$ 1,074.00
	40386 Farmers Union Oil Company	Gas for vehicles	\$ 1,436.69
	40387 Fastenal Company	Drill bits & caulking	\$ 37.45
	40388 Fleet Supply	Spot Sprayer & Tie Down Straps for ATV	\$ 199.98
	40389 HDR Inc.	* see below for project details	\$ 8,953.35
	40390 Houston Engineering	** see below for project details	\$ 36,957.25
	40391 Hugo's #7	Meeting expenses	\$ 244.61
	40392 Jessica Vettleson	Clean offices	\$ 210.00
	40393 Les Cota	September Mowing Proj. #171	\$ 460.00
	40394 Les's Sanitation	Garbage pickup	\$ 35.74
	40395 Marco	Copier expense	\$ 160.47
	40396 Northdale Oil Company	Gas for vehicles	\$ 79.00
	40397 Pennington SWCD	Expenses for Proj. #149 and #149A	\$ 3,096.32
	40398 RMB Environmental Laboratories	Lab analysis of water quality samples	\$ 9,318.59
	40399 Robert Johnson	Mowing Proj. #49	\$ 900.00
	40400 Thief River Falls Times	2 Boxes of Envelopes	\$ 80.25
	40401 Thomas Maruska	Beaver Dam clean out Proj. #49	\$ 250.00
	40402 TRF Hardware	Water festival Supplies & sampler supply parts #46	\$ 53.59
	40403 Craig & Melinda Larson	Refund for overpayment for Ring Dike Proj. #129AV	\$ 730.69
online	AT & T Mobility	Cell phone expense	\$ 429.55
online	Garden Valley	Internet expense	\$ 68.95
online	Further	Medical FSA - Audette	\$ 19.08
online	Northwest Service Cooperative	Health insurance premium	\$ 3,204.71
online	Aflac Insurance	Staff paid insurance	\$ 408.82
online	Delta Dental	Dental insurance premium	\$ 571.10
online	City of Thief River Falls	Utilities	\$ 597.61
online	Cardmember Services	*** see below for details	\$ 893.35
direct	Terry Sorenson	Mileage	\$ 93.76
direct	Dale Nelson	Mileage	\$ 22.50
direct	Brian Dwight	Mileage	\$ 423.75
direct	Al Page	Mileage	\$ 65.00
direct	Loren Sanderson	Mileage	\$ 41.54
direct	Ryan Lund	Proj. #41BB damages	\$ 1,410.06
	Staff & Board Payroll	9/28/22 & 10/12/2022	\$ 31,413.02
	Total Checks		\$ 255,181.91

***HDR Engineering**

Proj. #180C - Mud River Restoration	2248.49
Proj. #149 CD 99 Slope Repair	1217.49
Proj. #43B Burnham Creek	3967.13
Proj. #26B phase II- Pine Lk Lost Rvr	<u>1520.24</u>
Total	8953.35

**** Houston Engineering**

Proj. 50F Knutson Dam Structure	2,316.50
Proj. 149A TR/SD 83 Streambank	14,412.00
Proj. 52 Elm Lake	2,760.00
Proj. 149 Demarais-Hanson	5,407.25
Proj. 176 Black River Impoundment	<u>12,061.50</u>
Total	36,957.25

**** Cardmember Services**

U of M - Culvert seminar for staff	135.00
USPS - cert. letters #41BB	12.45
Craguns Lodging - BWSR Acad.	523.22
Meal - PWT Proj. 180C	170.30
Meeting expenses River Watch	<u>52.38</u>
Total	893.35

Banking Northern State Bank

Balance as of September 22, 2022	\$ 149,194.12
Total Checks Written	\$ (255,181.91)
Receipt #224183 Transfer funds from AFB to NSB	\$ 250,000.00
Receipt #224185 Monthly Interest	\$ 125.59
Balance as of October 13, 2022	<u>\$ 144,137.80</u>

Current interest rate is .20%

American Federal Bank-Fosston

Balance as of September 22, 2022	\$ 5,094,380.28
Receipt #224183 Transfer funds from AFB to NSB	\$ (250,000.00)
Receipt #224184 RRWMB Waterbase funding for Schirrick Dam Proj. #25	\$ 34,026.75
Receipt #224186 Monthly Interest	\$ 4,911.53
Balance as of October 13, 2022	<u>\$ 4,883,318.56</u>

Current interest rate is 1.50% as of 9-23-22

Edward Jones

Balance	12 month CD 3.45%	
	Expiry 9-15-23	<u>\$ 241,000.00</u>

Edward Jones

Balance	12 month CD 3.7%	
	Expiry 9-22-23	<u>\$ 240,000.00</u>

Edward Jones

Balance	12 month CD 3.7%	
	Expiry 9-22-23	<u>\$ 17,000.00</u>

Total Cash**\$ 5,508,456.36**

2022 GENERAL FUND BUDGET

as of September 30, 2022

(unaudited)

	2022 BUDGET	2022 Exp	(over) under	3rd Qtr Exp.
		TO 9-30-22		
Manager's fees, salaries	40,000.00	29,002.33	10,997.67	30,000.00
Board of Manager's expense	24,200.00	12,613.01	11,586.99	18,150.00
Staff salaries	567,000.00	392,416.41	174,583.59	425,250.00
Payroll taxes	43,375.50	30,920.52	12,454.98	32,531.63
Employee benefits	87,500.00	82,596.00	4,904.00	65,625.00 1
Unemployment Benefits		1,490.00		
Travel and meetings(inc. mileage & exp.	5,000.00	5,014.94	(14.94)	3,750.00 2
Audit	9,450.00	9,450.00	0.00	7,087.50
Legal	16,000.00	4,978.00	11,022.00	12,000.00
Office supplies	20,000.00	8,985.12	11,014.88	15,000.00
Office equipment	30,000.00	21,077.42	8,922.58	22,500.00 3
Appraiser/Viewer Expense	2,000.00	0.00	2,000.00	1,500.00
Professional services	20,000.00	21,555.95	(1,555.95)	15,000.00 4
Dues and subscriptions	10,000.00	10,080.00	(80.00)	7,500.00 5
Insurance and bonds	45,000.00	46,622.00	(1,622.00)	33,750.00 6
Repairs and maintenance-Building	15,000.00	16,031.07	(1,031.07)	11,250.00 7
Utilities	12,000.00	7,136.51	4,863.49	9,000.00
Advertising and publications	4,000.00	6,820.78	(2,820.78)	3,000.00 8
Telephone	11,000.00	7,357.70	3,642.30	8,250.00
Vehicle expense and maintenance	14,000.00	15,216.39	(1,216.39)	10,500.00 9
Engineering supplies	3,000.00	1,547.47	1,452.53	2,250.00
Engineering equipment	40,000.00	52,983.45	(12,983.45)	30,000.00 10
Interest	0.00	0.00	0.00	0.00
TOTAL	1,018,525.50	783,895.07	234,630.43	763,894.13
Less: Overhead	850,500.00	603,657.98	(246,842.02)	637,875.00
Less: Miscellaneous revenue	5,000.00	19,844.26	14,844.26	3,750.00 11
General Fund Budget	163,025.50	160,392.83	2,632.67	122,269.13

		TO 9-30-22
January 1, 2022 Beg. Balance	244,098.50	244,098.50
County levies revenue	0.00	75,168.51
Gross balance with revenue		319,267.01
Less net expenses		(160,392.83)
Subtotal- General Fund w/o interest		158,874.18

Plus interest earned-if allocated to GF 100%	17,753.38
General Fund Balance 9-30-22	176,627.56

- 1- Health insurance adjustment
- 2- Travel increased after Covid
- 3- Quick Books training & custom reports
- 4- Brady Martz accounting assistance
- 5- MAWD \$7500, LCMIT \$2119
- 6- Increase in Liability insurance

- 7- Painting \$4945, snow removal \$1480, mowing \$2400
- 8- Advertising for Ditch inspector
- 9- Increase in gas & vehicle maintenance
- 10- Purchase of 2022 Ford pickup
- 11- Sale of 2011 Ford pickup

FDRWG Meeting Highlights

September 28, 2022

*Reporting on meetings of the Red River Basin
Flood Damage Reduction Work Group*



Project Updates: Bennet Uhler of Houston Engineering presented three projects that are in construction or nearly ready to bid at the Buffalo-Red River Watershed District. These are the Whiskey Creek Enhancement project; Upper South Branch Buffalo River Restoration project; and Glyndon East Tributary Restoration.

Technical Support Grants: The Work Group awarded a \$30,000 grant to the Red Lake Watershed District for field data collection and modeling of the Mud River Project. This leaves \$10,000 for other technical support grants in the FDRWG budget through June 30, 2023.

Committee Reports: The Work Group's various committees have been implementing their work plans for the current calendar year. Highlights include:

- The Legislative-Citizen Commission on Minnesota Resources (LCCMR) has recommended the Work Group receive \$920,000 for a five-year program of project monitoring.
- Professional facilitators are now under contract and available to support project teams.
- A proposal for mapping of 10-year floodplains in heavily farmed areas will be discussed at a meeting of watershed district administrators in October.
- Fact sheets covering different aspects of the FDRWG's activities have been completed.
- The *FDRWG Currents* newsletter is being prepared for a fall 2022 release.

FY 2022 Expenditures: The FDRWG's use of available funding during the fiscal year that ended on June 30, 2022 is summarized below:

Project planning and development (disbursed to six watershed districts):	\$207,241
Project monitoring and five-year monitoring plan	30,086
Technical and Scientific Advisory Committee and technical paper updates	16,092
Work Group meetings and Annual Conference	9,608
Other items	<u>974</u>
Total Spent	\$264,000

TSAC Wetlands Technical Paper: The Work Group discussed the recently completed technical paper on planning and designing wetland features as part of projects in the Red River Basin. Action on the paper and its relationship to technical papers prepared in 1998 was tabled, pending review of the paper by the Red River Watershed Management Board.

The **next meeting** of the FDRWG is scheduled for **December 7, 2022**, at the *Prairie Grains Conference* in Grand Forks, ND.

For more information: contact the Minnesota DNR's Red River Basin Coordinator
Phone: 218-606-0128 / Email: Andrew.Graham@state.mn.us

Crescent Avenue Streambank Stabilization Project

Landowners: Jacob Snyder (east portion, 218-281-6445), Dustin Ingeman (west portion, 701-730-0519)

Actively eroding streambank in the City of Crookston, along Crescent Avenue, approximately 0.7 miles downstream of the Hwy 2 bridge:

During the summer of 2022, a chunk of streambank along the Snyder property began slumping. A large chunk of streambank had already washed-out along the Ingeman property. The width of the slump is approximately 15 feet. The height of the bank is approximately 9 feet, at the toe. The total length of the erosion issue was approximately 80 feet (roughly paced-out during a site visit). The bank had sloughed down approximately 2 feet as of July 15, 2022. According to Snyder, it had dropped several more feet by the end of July. This project could “check multiple boxes” for priority streambank stabilization projects. It is actively eroding at a high rate. For potential feasibility, it has willing landowners and a relatively low bank height. It is also located within a Red Lake River 1W1P priority area. One potential impediment identified during a site visit was a lack of space for accessing the riverbank with large equipment. The space between the homes is tight, but there is an alleyway that leads to an adjoining undeveloped parcel, from the east, that is also owned by Snyder.



Looking west, from the east
end of the Snyder slump



Looking east, from the west
end of the Ingeman washout



CLIENT/OWNER SERVICES AGREEMENT

PROJECT NAME: Clearwater River Channel Stability Reconnaissance

HOUSTON JOB NO.: _____ HOUSTON PROJ. MGR.: Tony Nordby

CLIENT/OWNER NAME: Red Lake Watershed District

CLIENT/OWNER ADDRESS: 1000 Pennington Ave. S. Thief River Falls, MN 56701

CLIENT/OWNER PHONE NO.: 218-681-5800 CLIENT/OWNER CONTACT: Myron Jesme

This Client/Owner Services Agreement ("Agreement") is made and entered into effective as of this 13th day of October, 2022, by and between **HOUSTON ENGINEERING, INC.** ("Houston") and Red Lake Watershed District ("Client").

Recitals

A. Client has requested Houston to perform certain professional services in connection with a project generally referred to as Clearwater River Channel Stability Reconnaissance ("Project").

B. Houston desires to provide the professional services requested by Client in accordance with this Agreement.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Houston and Client agree as follows:

1. Services. Houston shall perform the services set forth in Attachment A ("Services") in accordance with the terms and conditions of this Agreement.

2. Term of Agreement. This Agreement shall commence on the date first stated above, and Houston is authorized to commence performance of the Services as of that date. This Agreement shall terminate on the 31st day of December, 2023, unless terminated earlier pursuant to the terms and conditions of this Agreement.

3. Attachments. The Attachments below, which have been marked for inclusion, are hereby specifically incorporated into and made a part of this Agreement:

- ☒ ATTACHMENT A - SERVICES LETTER (Houston assumes no responsibility to perform any services not specifically listed.)
- ☒ ATTACHMENT B - SCOPE AND FEE SCHEDULE
- ☒ ATTACHMENT C - GENERAL TERMS AND CONDITIONS
- ☒ FEE SCHEDULE - DATED 2022.

4. Compensation.

\$ _____ Lump Sum Fee - Based on the Services defined herein

\$ 4,890 Estimated Fee - Client invoiced on an hourly basis commensurate with the attached Fee Schedule

\$ _____ Percentage of Estimated Construction Cost

\$ _____ Other - _____

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the date first above written:

CLIENT/OWNER

BY: _____
AUTHORIZED REPRESENTATIVE

TITLE: _____

HOUSTON ENGINEERING, INC.

BY: Tony A. Nordby
AUTHORIZED REPRESENTATIVE

TITLE: PRINCIPLE/OFFICE MANAGER

PLEASE SIGN AND RETURN ONE COPY TO HOUSTON AT THE ADDRESS ABOVE

September 29, 2022

Red Lake Watershed District
Myron Jesme, Administrator
1000 Pennington Ave. S
Thief River Falls, MN 56701

via email: Myron.Jesme@redlakewatershed.org

**Subject: Scope and Fee Proposal – Summary of Engineering Services
Clearwater River Channel Stability Reconnaissance**

Dear Myron,

The Red Lake Watershed District and 1W1P Team is seeking to identify and understand the benefits of projects that would restore and stabilize the Clearwater River in Sections 22 and 27 of Greenwood Township, Clearwater County. This document describes professional services that will be provided by Houston Engineering, Inc. (HEI). These professional services will deliver an assessment of potential practices and locations to restore stream and drainage functions to this part of the Clearwater River.

The intent of this effort is to perform a site investigation to identify potential stream restoration and stabilization opportunities for the Clearwater River in Sections 22 and 27 of Greenwood Township, and to assess the benefits of the potential projects consistent with the goals of the Clearwater River Watershed 1W1P. These findings, recommendations, and benefits will be summarized in a Summary of Opinions Memo. The detail will be cursory in nature and based primarily on professional opinion. The intent of the work is to develop a direction, scope/magnitude, and conceptual level costs of potential projects along this reach of the Clearwater River.

The following is a summary of the proposed scope of services:

TASK 1 – Gather Data Through Field Drone Flight

HEI will gather initial drone imagery/video of the proposed reach to identify unstable and erosive areas. HEI will also work with RLWD to request any available information from previous studies.

TASK 2 – Conduct Field Inspection

The primary basis of the technical memo will be developed through the cursory drone imagery survey review and creating maps identifying the unstable and erosive areas. HEI will coordinate with RLWD staff to conduct a field survey to review the identified mapped areas. We envision collecting the following information:

- Field confirm the suitability of locations for 5 types of stream restoration/stabilization practices. Field confirm opportunities for grade control structures, side water inlets, subsurface seepage drains, channel slope armoring of high velocity/energy sections of channel, and potential restoration of historic channel meanders.

HEI Deliverables:

- Mapped area of numbered locations and recommended practices

TASK 3 – Summarize Potential Projects, Practices and Benefits

The information from **Task 1** and **Task 2** will be used to provide a Summary of Opinions Memo highlighting the locations, practices, and benefits of potential projects. This will be based on the collected drone data, field

September 29, 2022

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inspection and professional opinions resulting from the field inspection. The memo will likely include a mapped area of potential project locations and a one to two-page narrative summarizing the primary basis for the opinions provided. A concept level cost per unit measure for each practice type will be provided to indicate practicality and value characteristics of the practice recommended. HEI will provide one revision to the summary memo based upon feedback from the RLWD.

HEI Deliverables:

- Summary of Opinions Memo with Practice and Locations Map

Currently there are no fixed or hard deadlines for the work to be completed. However, HEI intends to complete the work in the fall/winter of year 2022.

The proposed scope and fee schedule attachment includes a detailed breakdown of proposed tasks and associated hours/fees. A 2022 Fee Schedule is also attached for your reference. It is proposed that the fee for services reflect a time and materials basis with an estimated total fee of \$4,890. The Primary intent is to provide the Drainage Authority with direction and value associated with restoring the channel to stable condition.

Please consider the proposal provided and inform me of any questions, concerns or comments which should be addressed prior to proceeding with the proposed work.

Again, we appreciate this opportunity to work with the district in completing this project.

Sincerely,

HOUSTON ENGINEERING, INC.



Tony A. Nordby, PE
Project Engineer
tnordby@houstoneng.com

SCOPE AND FEE SCHEDULE
CLEARWATER RIVER STABILITY RECONNAISSANCE- RED LAKE WATERSHED DISTRICT
PREPARED BY: HOUSTON ENGINEERING, INC.



		Engineer 8 \$ 184	Technician 5 \$ 133	Technician 1 \$ 104	Drone Pilot \$ 141	Drone Visual Observer \$ 56	GPS Equipment \$ 25	Small UAS (Drone) \$ 25	Mileage \$ 0.785	Total Cost
1.	Task 1 - Gather Data Through Field Drone LiDAR Flight									
	Field Drone Flight			5				3	120	\$ 689.20
	Processing Drone Video Data for Mapping		3							\$ 399.00
	Subtotal	0	3	5	0	0	0	3	120	
	Subtotal Cost	\$ 0	\$ 399	\$ 520	\$ 0	\$ 0	\$ 0	\$ 75	\$ 94	\$ 1,088.00
2.	Task 2 - Conduct Field Inspection									
	Mapping area of numbered locations from drone flight	1		4						\$ 600.00
	Conduct field review with RLWD for site review and practice recommendation	8							150	\$ 1,589.75
	Subtotal	9	0	4	0	0	0	0	150	
	Subtotal Cost	\$ 1,656	\$ 0	\$ 416	\$ 0	\$ 0	\$ 0	\$ 0	\$ 118	\$ 2,190.00
3.	Task 3 - Summarize Potential Projects, Practices, and Benefits									
	Summary of Opinions Memo (including concept level cost per unit measure for each practice type)	4		2						\$ 944.00
	Mapping Recommended Practices	0.5		2						\$ 300.00
	Coordination with RLWD & Revisions to Summary of Opinions Memo Based on Feedback	2								\$ 368.00
	Subtotal	6.5	0	4	0	0	0	0	0	
	Subtotal Cost	\$ 1,196	\$ 0	\$ 416	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,612.00
	Category Total	15.5	3	13	0	0	0	3	270	
	Total Cost	\$ 2,852	\$ 399	\$ 1,352	\$ 0	\$ 0	\$ 0	\$ 75	\$ 212	\$ 4,890.00

General Terms and Conditions

1. STANDARD OF CARE

Houston shall perform its Services in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances in the region where the Project is located.

2. PAYMENT TERMS

Invoices will be submitted periodically (customarily on a monthly basis) and are due and payable upon receipt. Client agrees to pay a service charge on all accounts 30 days or most past due at a rate equal to one percent (1%) each month but in no event shall such service charge exceed the maximum amount allowed by law. Acceptance of any payment from Client without accrued service charges shall not be deemed to be a waiver of such service charges by Houston. In the event Client is past due with respect to any invoice Houston may, after giving five (5) days written notice to Client, suspend all services without liability until Client has paid in full all amounts owing Houston on account of services rendered and expenses incurred, including service charges on past due invoices. Payment of invoices is not subject to discount or offset by Client.

3. CHANGES OR DELAYS

If the Project requires conceptual or process development services, such services often are not fully definable in the initial planning. If, as the Project progresses, facts develop that in Houston's judgment dictate a change in the Services to be performed, Houston shall inform Client of such changes and the parties shall negotiate, in good faith, with respect to any change in scope and adjustment to the time of performance and compensation and modify the Agreement accordingly. In the event the parties are unable to reach an agreement, either party may terminate this Agreement without liability by giving fourteen (14) days written notice to the other party. In the event of termination, the final invoice will include all Services and expenses associated with the Project up to the effective date of termination, and will also include equitable adjustment to reimburse Houston for any termination settlement costs incurred relating to commitments that had become firm before termination plus a 10 percent markup on those settlement costs.

4. PAYMENT

Where the method of payment under the Agreement is based upon cost reimbursement (e.g., hourly rate, time and materials, direct personnel expense, per diem, etc.), the following shall apply: (a) the minimum time segment for charging work is one-quarter hour; (b) labor (hours worked) and expenses will be charged at rates commensurate with the attached fee schedule or, if none is attached, with Houston's current fee schedule (at the time of the work); (c) when applicable, rental charges will be applied to cover the cost of pilot-scale facilities or equipment, apparatus, instrumentation, or other technical machinery. When such charges are applicable, Client will be advised at the start of an assignment, task, or phase; and (d) invoices based upon cost reimbursement will be submitted showing labor (hours worked) and total expense. If requested by Client, Houston shall provide supporting documentation at Client's cost, including labor and copying costs.

5. TERMINATION

Either party may terminate this Agreement, in whole or in part, by giving fourteen (14) days written notice to the other party, if the other party fails to fulfill its obligations under this Agreement through no fault of the terminating party. In such event, and subject to the limitations set forth in this Agreement, the non-defaulting party may pursue its rights and remedies as contemplated by this Agreement and as allowed by law.

6. LIMITATION OF LIABILITY

In no event shall Houston be liable for incidental, indirect or consequential damages of any kind. Houston's maximum cumulative liability with respect to all claims and liabilities under this Agreement, whether or not insured, shall not exceed the greater of \$50,000 or the total compensation received by Houston under this Agreement. The disclaimers and limitations of liability set forth in this Agreement shall apply regardless of any other contrary provision set forth and regardless of the form of action, whether in contract, tort or otherwise. Each provision of this Agreement which provides for a limitation of liability, disclaimer of warranty or condition or exclusion of damages is severable and independent of any other provision and is to be enforced as such. Client hereby releases Houston from any and all liability over and above the limitations set forth in this paragraph.

7. INSURANCE

Houston shall obtain and maintain during the term of this Agreement, at its own expense, workers' compensation insurance and comprehensive general liability insurance in amounts determined by Houston and will, upon request, furnish insurance certificates to Client. The existence of any such insurance shall not increase Houston's liability as limited by paragraph 6 above.

8. HAZARDOUS SUBSTANCES

Client shall furnish or cause to be furnished to Houston all documents and information known by Client that relate to the identity, location, quantity, nature, or characteristics of any asbestos, pollutant or hazardous substance, however defined ("Hazardous Substances") at, on or under the Project site. Houston is not, and has no responsibility as a handler, generator, operator, treater, storer, transporter, or disposer of Hazardous Substances found or identified at the Project. Client agrees to bring no claim for fault, negligence, breach of contract, indemnity, or other action against Houston, its principals, employees, agents, and consultants, if such claim in any way would relate to Hazardous Substances in connection with the Project. Client further agrees, to the fullest extent permitted by law, to defend, indemnify, and hold harmless Houston, its principals, employees, agents, and consultants from and against all claims, damages, losses, and expenses, direct or indirect, or consequential damages, including but not limited to fees and charges for attorneys and court and arbitration costs, arising out of or resulting from the performance of Houston's Services hereunder, or claims brought against Houston by third parties arising from Houston's Services or the services of others and/or work in any way associated with Hazardous Substance activities. This indemnification shall survive termination of this Agreement.

9. INDEMNIFICATION

Client shall indemnify, and hold harmless Houston, together with its officers, directors, agents, consultants and employees from and against any and all claims, costs, losses and damages, including attorneys' fees and other costs of litigation or dispute resolution arising directly or indirectly from Client's breach of this Agreement or Client's fault, negligent acts or omissions or intentional misconduct in connection with this Agreement or the Project. Subject to the limitations set forth in this Agreement, Houston shall indemnify and hold harmless Client, together with its officers, directors, agents, consultants and employees from and against any and all claims, costs, losses and damages, including attorneys' fees and other costs of litigation or dispute resolution arising directly or indirectly from Houston's breach of this Agreement or Houston's fault, negligent acts or omissions or intentional misconduct in connection with this Agreement or the Project. The indemnification obligations set forth in this paragraph shall survive termination of this Agreement.

10. WARRANTY

Except as specifically set forth in this Agreement, Houston has not made and does not make any warranties or representations whatsoever, express or implied, as to Services performed or products provided including, without limitation, any warranty or representation as to: (a) the merchantability or fitness or suitability of the Services or products for a particular use or purpose whether or not disclosed to Houston; and (b) delivery of the Services and products free of the rightful claim of any person by way of infringement (including, but not limited to, patent or copyright infringement) or the like. Houston does not warrant and will not be liable for any design, material or construction criteria furnished or specified by Client and incorporated into the Services provided hereunder.

11. PROJECT SITE

Client shall furnish such reports, data, studies, plans, specifications, documents, and other information regarding surface and subsurface site conditions required by Houston for proper performance of its Services. Houston shall be entitled to rely upon Client provided documents and information in performing the Services required under this Agreement. Houston assumes no responsibility or liability for the accuracy or completeness of any such documents or information. Houston will not direct, supervise, or control the work, means or methods of contractors or their subcontractors in connection with the Project. Houston's Services will not include a review or evaluation of the contractor's or subcontractor's safety measures. The presence of Houston, its employees, agents or subcontractors on a site shall not imply that Houston controls the operations of others nor shall it be construed to be an acceptance by Houston of any responsibility for job-site safety.

12. CONFIDENTIALITY

Houston shall maintain as confidential and not disclose to others without Client's prior consent all information obtained from Client that was not otherwise previously known to Houston or in the public domain and is expressly designated by Client in writing to be "CONFIDENTIAL." The provisions of this paragraph shall not apply to information in whatever form that (a) is published or comes into the public domain through no fault of Houston, (b) is furnished by or obtained from a third party who is under no obligation to keep the information confidential, or (c) is required to be disclosed by law on order of a court, administrative agency, or other authority with proper jurisdiction. Client agrees that Houston may use and publish Client's name and a general description of Houston's services with respect to the Project in describing Houston's experience and qualifications to other clients or potential clients.

13. RE-USE OF DOCUMENTS

All documents, including drawings and specifications, prepared or furnished by Houston (and Houston's affiliates, agents, subsidiaries, independent professional associates, consultants, and subcontractors) pursuant to this Agreement are instruments of service in respect of the Project, and Houston shall retain ownership thereof, whether or not the Project is completed. Client may make and retain copies for information and reference in connection with the Project; however, such documents are not intended or represented to be suitable for re-use by Client or others on extensions of the Project or on any other project. Any re-use without written verification or adaptation by Houston for the specific purpose intended will be at Client's sole risk and without liability to Houston or Houston's affiliates, agents, subsidiaries, independent professional associates, consultants, and subcontractors with respect to any and all costs, expenses, fees, losses, claims, demands, liabilities, suits, actions, and damages whatsoever arising out of or resulting therefrom. Any such verification or adaptation will entitle Houston to further compensation at rates to be agreed upon by Client and Houston.

14. REMEDIES

Subject to the limitations set forth in this Agreement, in the event any party is in default of this Agreement, the non-defaulting party shall be entitled to pursue all rights and remedies available to it under this Agreement or as allowed by law.

15. PROPRIETARY DATA

The technical and pricing information in connection with the Services provided by Houston is confidential and proprietary and is not to be disclosed or otherwise made available to third parties by Client without the express written consent of Houston.

16. GOVERNING LAW

The validity, construction and performance of this Agreement and all disputes between the parties arising out of or related to this Agreement shall be governed by the laws, without regard to the law as to choice or conflict of law, of the State of Minnesota. Client consents to jurisdiction as to all issues concerning or relating to this Agreement or the Project with the federal or state district courts designated for Pennington County, Minnesota.

17. DATA PRACTICES ACT REQUESTS

Houston considers certain information developed during the execution of services as "not public" and "protected" from public disclosure under the various local, state and federal data practices laws. Client shall reimburse Houston for any and all costs and expenses, including attorneys' fees associated with any requests for release of information under any such laws.

18. FORCE MAJURE

Houston shall not be liable for any loss, damage or delay resulting out of its failure to perform hereunder due to causes beyond its reasonable control including, without limitation, acts of nature or the Client, acts of civil or military authority, terrorists threats or attacks, fires, strikes, floods, epidemics, quarantine restrictions, war, riots, delays in transportation, transportation embargos, extraordinary weather conditions or other natural catastrophe or any other cause beyond the reasonable control of Houston. In the event of any such delay, Houston's performance date(s) will be extended for that length of time as may be reasonably necessary to compensate for the delay.

19. WAIVER OF JURY

In the interest of expediting any disputes that might arise between Houston and Client, Client hereby waives its rights to a trial by jury of any dispute or claim concerning this Agreement, the Services, the Project and any other documents or agreements contemplated by or executed in connection with this Agreement.

20. NOTICES

Any and all notices, demands or other communications required or desired to be given under this Agreement shall be in writing and shall be validly given or made if personally served; sent by commercial carrier service; or if deposited in the United States Mail, certified or registered, postage prepared, return receipt requested. If such notice or demand is served personally, notice shall be deemed constructively made at the time of such personal service. If such notice, demand or other communication is given by mail or commercial carrier service, such notice shall be conclusively deemed given three (3) days after deposit thereof in the United States Mail or with a commercial carrier service. Notices, demand or other communications required or desired hereunder shall be addressed to the individuals indicated in this Agreement at the addresses indicated in this Agreement. Any party may change its address or authorized recipient for purposes of this paragraph by written notice given in the manner provided above.

21. MISCELLANEOUS

This Agreement shall take precedence over any inconsistent or contradictory provisions contained in any proposal, contract, purchase order, requisition, notice-to-proceed, or like document regarding the Services. If any provision of this Agreement is determined to be invalid or unenforceable in whole or part by a court of competent jurisdiction, the remaining provisions hereof shall remain in full force and effect and be binding upon the parties hereto. The parties agree to reform this Agreement to replace any such invalid or unenforceable provision with a valid and enforceable provision that as closely as possible expresses the intention of the stricken provision. This Agreement, including but not limited to the indemnification provisions, shall survive the completion of the Services under this Agreement and the termination of this Agreement. This Agreement gives no rights or benefits to anyone other than Houston and Client and has no third party beneficiaries except as may be specifically set forth in this Agreement. This Agreement constitutes the entire agreement between the parties and shall not in any way be modified, varied or amended unless in writing signed by the parties. Prior negotiations, writings, quotes, and understandings relating to the subject matter of this Agreement are merged herein and are superseded and canceled by this Agreement. Headings used in this Agreement are for the convenience of reference only and shall not affect the construction of this Agreement. This Agreement and the rights and duties hereunder may not be assigned by Client, in whole or in part, without Houston's prior written approval. No failure or delay on the part of Houston in exercising the right, power or remedy under this Agreement shall operate as a waiver thereof; nor shall any single or partial exercise of any rights, power or remedy preclude any other or further exercise thereof or the exercise of any other right, power or remedy hereunder. The remedies provided in this Agreement are cumulative and not exclusive of any remedies provided by law.

2022 FEE SCHEDULE

LABOR RATES

The following is a schedule of hourly rates and charges for services offered by Houston Engineering, Inc. These rates are subject to a modest increase on January 1st of each year (typically no more than 5%).

Category	2022 Rates	Category	2022 Rates	Category	2022 Rates
Engineering Intern	\$104	Technician Intern	\$91	Project Assistant 1	\$74
Engineer 1	126	Technician 1	104	Project Assistant 2	85
Engineer 2	133	Technician 2	111	Project Assistant 3	91
Engineer 3	140	Technician 3	119	Project Assistant 4	95
Engineer 4	146	Technician 4	126	Project Assistant 5	101
Engineer 5	156	Technician 5	133	Project Assistant 6	106
Engineer 6	166	Technician 6	140	Planner 1	\$146
Engineer 7	175	Technician 7	147	Planner 2	160
Engineer 8	184	Technician 8	155	Planner 3	174
Engineer 9	193	Technician 9	162	Planner 4	202
Engineer 10	202	Technician 10	170	Planner 5	212
Engineer 11	211	Technician 11	177	Land Surveyor 1	\$133
Engineer 12	221	GIS Intern	\$64	Land Surveyor 2	152
Engineer 13	230	GIS Analyst 1	99	Land Surveyor 3	168
Scientist 1	\$123	GIS Analyst 2	109	Land Surveyor 4	180
Scientist 2	133	GIS Analyst 3	119	Land Surveyor 5	202
Scientist 3	146	GIS Analyst 4	130	Land Surveyor 6	221
Scientist 4	157	GIS Analyst 5	140	CAD Technician 1	\$91
Scientist 5	167	GIS Analyst 6	150	CAD Technician 2	97
Scientist 6	196	Project Manager 1 – Technology	152	CAD Technician 3	104
Scientist 7	221	Project Manager 2 – Technology	168	CAD Technician 4	111
Hydrogeologist 1	\$133	Project Manager 3 – Technology	196	CAD Technician 5	119
Hydrogeologist 2	147	Software Engineer 1	\$115	CAD Technician 6	126
Hydrogeologist 3	167	Software Engineer 2	129	Drone Pilot	\$141
Hydrogeologist 4	208	Software Engineer 3	139	Drone Visual Observer	56
Hydrogeologist 5	221	Software Engineer 4	149	Landscape Architect 1	\$121
Senior Consultant 1	\$187	Software Engineer 5	160	Landscape Architect 2	131
Senior Consultant 2	233	Software Engineer 6	170	Landscape Architect 3	141
Senior Consultant 3	243	Computer Technician	\$161	Landscape Architect 4	151
Senior Consultant 4	252			Landscape Architect 5	161
Senior Consultant 5	262				

SURVEY CREWS & REIMBURSABLE EXPENSES

Category	2022 Rates	Category	2022 Rates
Survey Crews:		ATV/Snowmobile/ Boat	\$15/hour
1-Person Crew (plus equipment)	\$162/hour	ATV w/Tracks	\$30/hour
2-Person Crew (plus equipment)	\$197/hour	Hydrone RCV	\$50/hour
3-Person Crew (plus equipment)	\$244/hour	Small UAS (Drone)	\$25/hour
4-Person Crew (plus equipment)	\$273/hour	Large UAS (Drone)	\$50/hour
Meals	Actual Cost	Deliveries/Postage/Printing	Actual Cost
Hotel	Actual Cost	Surveying Materials: Lath, Hubs, Pipe, etc.	Actual Cost
Mileage – Vehicles:		Special Equipment and Other Materials Required	Actual Cost
2-Wheel Drive	IRS Standard Mileage Rate	Subconsultants	Actual Cost + 10%
4-Wheel Drive	IRS Standard Mileage Rate + \$.20/Mile		
GPS Equipment	\$25/hour/unit		
Robotic Total Station	\$40/hour		

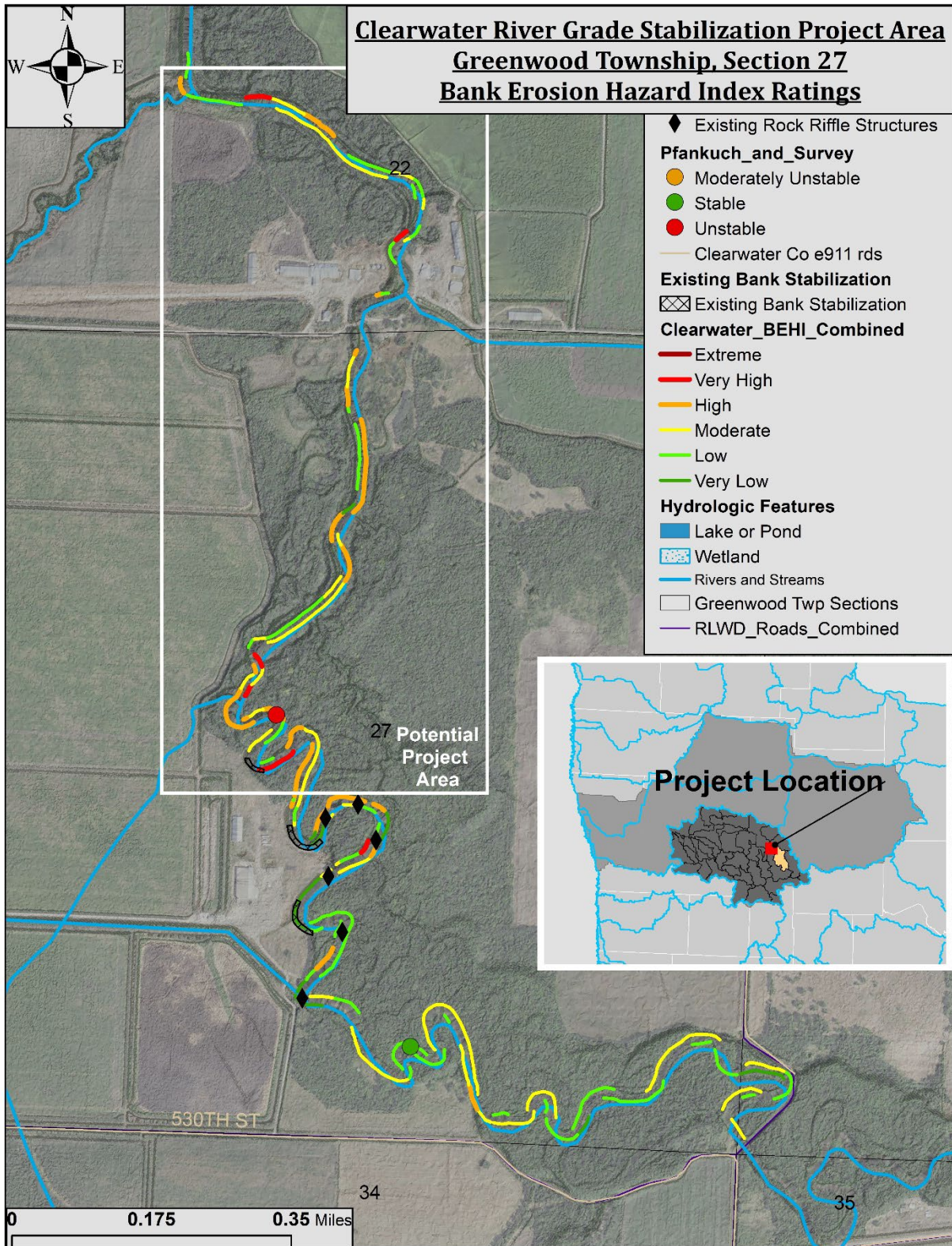
Clearwater River Grade Stabilization – Greenwood 27 Phase III

Previous Clearwater River grade stabilization work in Section 27 of Greenwood Township installed 5 rock riffle and cross-vane weir structures along the upstream extent of channel degradation caused by the transition in slope between the channelized section of the river and the natural channel upstream. The previous work (completed two phases in 2001-2003) also involved streambank stabilization and the installation of structures to slow the development of cross-floodplain channels and restore the floodplain.

Though the previously completed project has been mostly successful, channel/streambed degradation has alarmingly continued downstream of the extent of the Greenwood 27 project. Geomorphology reconnaissance and detailed Bank Erosion Hazard Index (BEHI) assessments identified a striking contrast between channel and bank stability indicators recorded upstream and downstream of the installed structures. There is a section of channel that has evidence of headcutting along with rapidly eroding banks between the existing grade stabilization structures and the confluence with Ruffy Brook. Evidence of channel degradation can be seen in layers of shell fragments and pebbles that have been revealed in eroded banks, 3-5 feet above the current streambed. Deep gouges in the channel bottom were discovered during the geomorphology reconnaissance effort, a short distance downstream of the last cross-vein weir rock structure. The channel degradation is the most likely cause of the highly unstable and actively eroding streambanks along this portion of the stream. Rod Skoe, the landowner in the project area, is in favor of the project, as long as the grade stabilization structures do not impact drainage.

The primary focus of this stabilization project will be addressing the underlying cause of erosion by halting channel degradation and establishing a stable gradient through the natural-to-channelized transitional area. Additional streambank stabilization and floodplain restoration work may be needed, as recommended by project engineers after a detailed study of the project area. Disturbance of well-vegetated, stable streambanks during construction should be minimized. LiDAR data shows some evidence of channel formation across the floodplain in this area, so the need for restoration/stabilization of the floodplain could be examined. A floodplain structure from the previously completed work may need to be repaired.





Scouring and channel degradation



Pebbles and shell fragments in the face of an eroded streambank



Previously installed cross-vane weir
grade stabilization structure



Eroding streambanks



Damage Inventory

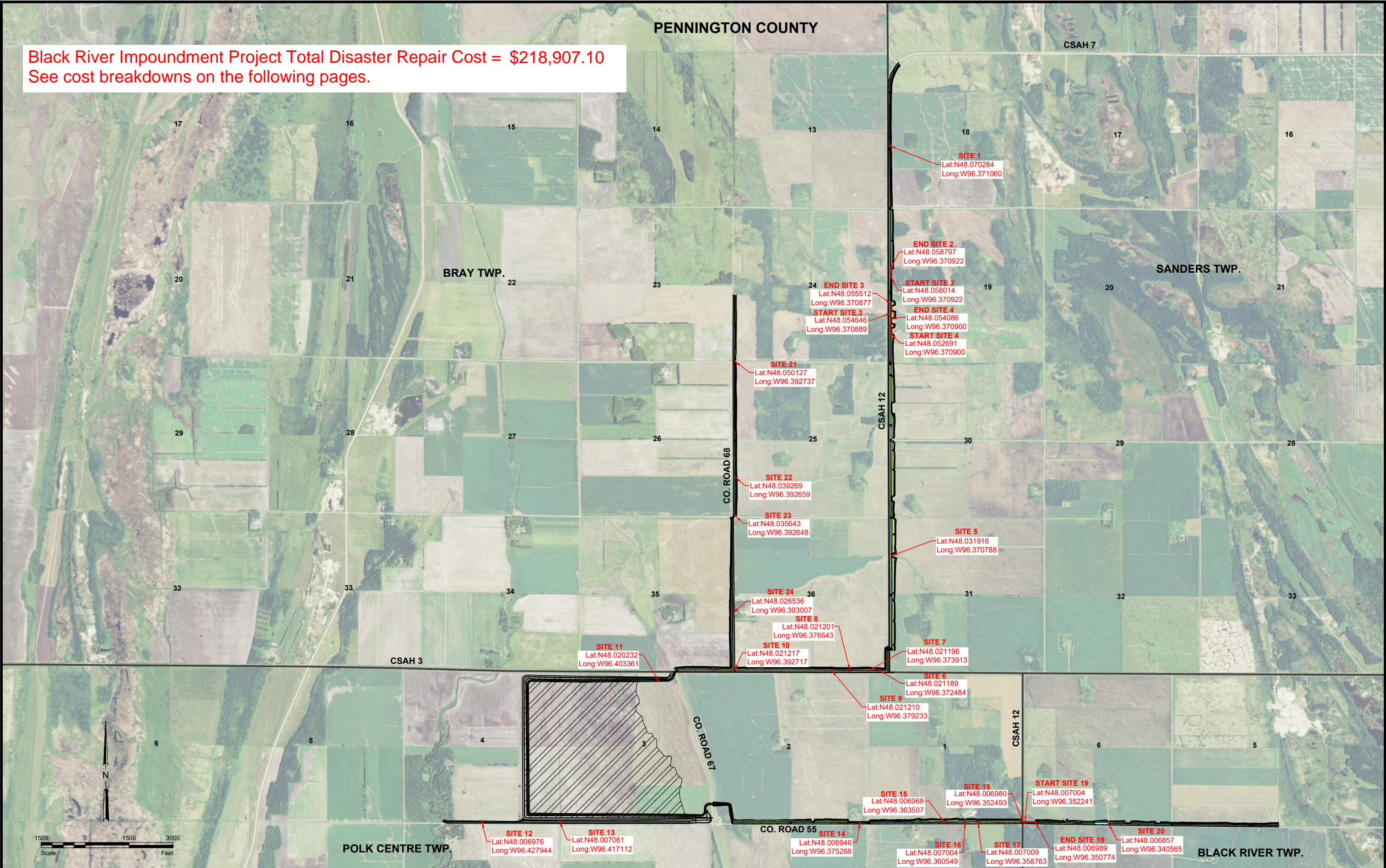
Disaster Number:		DR 4659 - MN				Program Delivery Manager (PDMG) Name:			Curtis T. Pope						
Applicant Name:		Red Lake Watershed District				Program Delivery Manager (PDMG) Phone:			(540) 632-9654						
Applicant FIPS:		000-U078N-00				Program Delivery Manager (PDMG) Email:			curtis.pope@associates.fema.dhs.gov						
Applicant Point of Contact Name:		Tammy Audette													
Applicant Point of Contact Phone:		(218) 681-5800													
Applicant Point of Contact Email:		tammy.audette@redlakewatershed.org													
Category	Name of damage/facility	Address 1	Address 2	City	State	Zip	Latitude	Longitude	Describe Damage	Primary Cause of Damage	Approx. Cost	% Work Complete	Labor Type	Has received PA grant(s) on this facility in a past?	Applicant priority
A	Moose River Impoundment				Minnesota		48.4307	-95.44348	debris/bog removal						
B	Moose River Impoundment				Minnesota		48.4307	-95.44348	Emergency Operation			100%			
D	State Ditch 83				Minnesota		48.1424	-96.0717	reseed grass						
D	State Ditch 83				Minnesota				Erosion						
B	Schirrick Dam				Minnesota		47.9372	-96.38422	Emergency Operation			100%			
D	Schirrick Dam				Minnesota		47.9372	-96.38422	damage to gates						
D	Schirrick Dam				Minnesota				downstream erosion			100%			
A	Schirrick Dam				Minnesota		47.9372	-96.38422	debris cleanup_sediment			100%			
D	Miller Dam				Minnesota				Erosion						
D	Latundresse Dam				Minnesota				Erosion						
B	Pine Lake Outlet				Minnesota		47.422141	-95.313679	Emergency Operation			100%			
D	Ditch 7				Minnesota		47.89131	-95.6895	Erosion		\$500	100%			
A	Euclid East Impoundment				Minnesota		47.963707	-96.6177	debris		\$4,900	100%			
B	Euclid East Impoundment				Minnesota		47.977307	-96.622436	Emergency Operation			100%			
D	Euclid East Impoundment				Minnesota		47.977307	-96.622436	wave erosion		\$2,800	100%			
D	Euclid East Impoundment Outlet				Minnesota		47.977137	-96.623368	erosion		\$500	100%			
D	Euclid East Impoundment Road				Minnesota		47.97711	-96.623611	erosion		\$700	100%			
D	Euclid East Impoundment outlet				Minnesota		47.97675	-96.628612	erosion		\$2,500	100%			
D	Euclid East Impoundment inlet ditch				Minnesota		47.972741	-96.613006	erosion		\$450	100%			
D	Euclid East Impoundment outlet channel				Minnesota		47.583708	-96.373215	erosion			100%			
A	Brandt Impoundment				Minnesota		47.992559	-96.600037	debris		\$500	100%			
B	Brandt Impoundment				Minnesota		47.992559	-96.600037	Emergency Operation			100%			
A	Brandt Impoundment inlet channel				Minnesota		48.002829	-96.59074	debris		\$450	100%			
C	Brandt Impoundment culvert				Minnesota		48.002749	-96.590979	culvert separated		\$400	100%			
B	Parnell Impoundment				Minnesota				Emergency Operation			100%			
D	Parnell Impoundment				Minnesota		47.926699	-96.56042	embankment		\$1,000	100%			
D	Parnell Impoundment				Minnesota		47.926555	-96.56035	wave erosion		\$2,000	100%			
D	Parnell Impoundment				Minnesota		47.920294	-96.556211	wave erosion		\$5,000	100%			
D	Parnell Impoundment				Minnesota		47.920322	-96.554029	erosion		\$750	100%			
D	Parnell Impoundment				Minnesota		47.920362	-96.557451	debris		\$10,000	100%			
D	Ditch 10				Minnesota		47.90157	-96.22366	erosion			100%			
D	Ditch 10				Minnesota		47.91188	-96.22360	erosion/slough/sediment			100%			
A	Ditch 14 - Proj. 171A				Minnesota		48.06308	-96.09202	debris removal						
A	Ditch 14 - Proj. 171A				Minnesota				inspect underground culv.						
A	Ditch 14 - Proj. 171A				Minnesota				remove underground sed.						
C	TRF Westside-CSAH 16 culvert				Minnesota		48.073490	-96.200870	erosion			100%			
D	TRF Westside-Outlet Structure				Minnesota		48.073490	-96.200870	erosion			100%			
D	TRF Westside-Outlet Structure				Minnesota		48.073569	-96.200759	ersosion/rock washed away		\$5,000	100%			
D	TRF Westside-Outlet Structure				Minnesota				erosion/rock washed away			100%			
C	TRF Westside-SWI				Minnesota				erosion			100%			

Damage Inventory

C	TRF Westside-SWI			Minnesota				erosion		100%			
D	Ditch 15, Proj 175			Minnesota		48.02131	-96.72994	erosion/blowout sloughing					
D	Ditch 15, Proj 175			Minnesota		48.021468	-96.730002	erosion	\$2,050				
D	Ditch 15, Proj 175			Minnesota		48.14779999	-96.402658	erosion/slough					
D	Ditch 16, Proj. 177 (54 sites)			Minnesota				erosion and sed removal					
D	Polk Co. Ditch 63, Proj. 134			Minnesota		47.444417	-96.402492	erosion/sediment					
D	Polk Co. Ditch 63, Proj. 134			Minnesota		47.443493	-96.402831	erosion/sediment					
D	Burnham Creek Proj. 43A			Minnesota				wave erosion					
C	Black River Imp.-Site 1	CSAH 12		Minnesota		48.0702840	-96.371060	erosion scour field swale		100%			
C	Black River Imp.-Site 2	CSAH 12		Minnesota		48.0580140	-96.370922	erosion scour field swale		100%			
C	Black River Imp.-Site 3	CSAH 12		Minnesota		48.0546460	-96.370889	erosion scour field swale		100%			
C	Black River Imp.-Site 4	CSAH 12		Minnesota		48.0526910	-96.370900	erosion scour field swale		100%			
C	Black River Imp.-Site 5	CSAH 12		Minnesota		48.0319160	-96.370788	erosion scour at riprap		100%			
C	Black River Imp.-Site 6	CSAH 3		Minnesota		48.0211890	-96.372484	riprap displaced/eroded		100%			
C	Black River Imp.-Site 7	CSAH 3		Minnesota		48.0211960	-96.373913	riprap displaced/eroded		100%			
C	Black River Imp.-Site 8	CSAH 3		Minnesota		48.0211960	-96.376643	culvert washed out		100%			
C	Black River Imp.-Site 9	CSAH 3		Minnesota		48.0212210	-96.379233	riprap displaced/eroded		100%			
C	Black River Imp.-Site 10	CSAH 3		Minnesota		48.0212170	-96.392717	culvert washed out		100%			
C	Black River Imp.-Site 11	IMPOUNDMENT		Minnesota		48.0202320	-96.403361	erosion scour field swale		100%			
C	Black River Imp.-Site 12	OUTLET CHANNEL		Minnesota		48.0069760	-96.427944	erosion scour field swale		100%			
C	Black River Imp.-Site 13	EMERGENCY SPILLWAY DITCH		Minnesota		48.0070610	-96.417112	erosion outlet CL pipe		100%			
C	Black River Imp.-Site 14	SOUTH DIVERSION		Minnesota		48.0069460	-96.375268	culvert erosion scour		100%			
C	Black River Imp.-Site 15	SOUTH DIVERSION		Minnesota		48.0069680	-96.363507	culvert washed out		100%			
C	Black River Imp.-Site 16	SOUTH DIVERSION		Minnesota		48.0070040	-96.360548	culvert erosion scour		100%			
C	Black River Imp.-Site 17	SOUTH DIVERSION		Minnesota		48.0070090	-96.358763	culvert washed out		100%			
C	Black River Imp.-Site 18	SOUTH DIVERSION		Minnesota		48.0069800	-96.352493	culvert erosion both ends		100%			
C	Black River Imp.-Site 19	SOUTH DIVERSION		Minnesota		48.0070040	-96.352241	erosion scour both ends		100%			
C	Black River Imp.-Site 20	SOUTH DIVERSION		Minnesota		48.0068570	-96.340565	erosion scour outlend end		100%			
C	Black River Imp.-Site 21	CTY 68 DIV		Minnesota		48.0501270	-96.392737	erosion scour		100%			
C	Black River Imp.-Site 22	CTY 68 DIV		Minnesota		48.0392690	-96.392659	erosion scour field swale		100%			
C	Black River Imp.-Site 23	CTY 68 DIV		Minnesota		48.0356430	-96.392648	culvert wshed out		100%			
C	Black River Imp.-Site 24	CTY 68 DIV		Minnesota		48.0265360	-96.393007	erosion scour outlend end		100%			
B	Black River	IMPOUNDMENT		Minnesota				Emergency Operation		100%			
D	Black River	IMPOUNDMENT		Minnesota		48.0074800	-96.406080	wave erosion/sloughing		100%			
A	Black River	IMPOUNDMENT		Minnesota		48.00747	-96.40103	debris		100%			
A	Black River	IMPOUNDMENT		Minnesota		48.02042	-96.41575	debris removed		100%			
A	Black River	IMPOUNDMENT		Minnesota		48.02041	-96.42195	debris removal site		100%			

Labor Key: MAA - Mutual Aid Agreement; MOU - Memorandum of Understanding; FA - Force Account; C - Contract; FA/C - Both FA and C; DR - Donated Resources

Black River Impoundment Project Total Disaster Repair Cost = \$218,907.10
See cost breakdowns on the following pages.



					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. <div>6/6/19</div>	 <div>Houston Engineering Inc.</div>	Thief River Falls	Drawn by BGJ	Date 5-25-18	BLACK RIVER IMPOUNDMENT PROJECT RED LAKE WATERSHED DISTRICT THIEF RIVER FALLS, MINNESOTA	PROJECT SITE PLAN PROJECT NO. 3655-091	G 3
No.	Revision	Date	By	Tony A. Nordby License No. 51392	Date		P: 218.681.2951 F: 218.681.2987	Checked by TAN	Scale AS SHOWN			

Black River Impoundment Project FEMA Repair Locations				
SITE	DITCH SYSTEM	LATITUDE	LONGITUDE	DESCRIPTION
1	CSAH 12	N48.070284	W96.371060	EROSION SCOUR COMING OFF FIELD SWALE
2	CSAH 12	START N48.058014 END N48.058797	START W96.370922 END W96.370922	EROSION SCOUR COMING OFF FIELD SWALE
3	CSAH 12	START N48.054646 END N48.055512	START W96.370889 END W96.370877	EROSION SCOUR COMING OFF FIELD SWALE
4	CSAH 12	START N48.052691 END N48.054086	START W96.370900 END W96.370900	EROSION SCOUR COMING OFF FIELD SWALE
5	CSAH 12	N48.031916	W96.370788	EROSION SCOUR AROUND RIPRAP
6	CSAH 3	N48.021189	W96.372484	RIPRAP DISPLACED/ERODED
7	CSAH 3	N48.021196	W96.373913	RIPRAP DISPLACED/ERODED
8	CSAH 3	N48.021196	W96.376643	142"x91"x72' CSPA (Beveled Ends)WASHED OUT
9	CSAH 3	N48.021210	W96.379233	RIPRAP DISPLACED/ERODED
10	CSAH 3	N48.021217	W96.392717	142"x91"x72' CSPA (Beveled Ends) WASHED OUT
11	IMPOUNDMENT	N48.020232	W96.403361	RIPRAP DISPLACED/ERODED
12	OUTLET CHANNEL	N48.006976	W96.427944	EROSION SCOUR COMING OFF FIELD SWALE
13	EMERGENCY SPILLWAY DITCH	N48.007061	W96.417112	EROSION SCOUR OUTLET END OF CL PIPE
14	SOUTH DIV	N48.006946	W96.375268	73"x55"x30' CSPA (GS APRONS) EROSION SCOUR
15	SOUTH DIV	N48.006968	W96.363507	64"x43"x30' CSPA (GS APRONS) WASHED OUT
16	SOUTH DIV	N48.007004	W96.360549	64"x43"x48' CSPA (GS APRONS)EROSION SCOUR
17	SOUTH DIV	N48.007009	W96.358763	64"x43"x58' CSPA (GS APRONS) WASHED OUT
18	SOUTH DIV	N48.006980	W96.352493	65"x40"x76' RCPA EROSION SCOUR BOTH ENDS
19	SOUTH DIV	START N48.007004 END N48.006989	START W96.352241 END W96.350774	EROSION SCOUR COMING OFF FIELD SWALE
20	SOUTH DIV	N48.006857	W96.340565	EROSION SCOUR OUTLET END OF 42"x29"X44 CSPA
21	CTY 68 DIV	N48.050127	W96.392737	EROSION SCOUR
22	CTY 68 DIV	N48.039269	W96.392659	EROSION SCOUR COMING OFF FIELD SWALE
23	CTY 68 DIV	N48.035643	W96.392648	24"x34' CSP WASHED OUT
24	CTY 68 DIV	N48.026536	W96.393007	EROSION SCOUR OUTLET END OF 73"x55"x38' CSPA



Site #1 – Erosion off field swale.



Site #2,3,4,5 – Erosion scour off field. Rock chute needed.



Site #6,#7,#9 – Rip rap displaced/eroded.



Site # 8 – Mainline pipe washed out.



Site #10 – Mainline pipe washed out.



Site #11 – Riprap displaced eroded.



Site #12 – Field swale eroded.



Site #13 – Centerline pipe outlet eroded.



Site #14, 15 – Mainline pipe eroded.



Site #16 – Mainline pipe and channel erosion.



Site #17 – Mainline pipe and channel erosion.



Site #18 – Erosion damage from highway ditch.



Site #19 – Erosion damage from field swale.



Site #20 – Erosion scour damage at outlet end of pipe.



Site # 21,22 – Erosion damage off field swale.



Site #23 – Erosion damage, culvert washed out, exposed subsurface drain tile line.



Site #23 – Culvert washed out.

PARTIAL PAYMENT ESTIMATE

Client Project No.
176

HEI Project No.
3655-0091

PAYMENT NUMBER: 17

Project: Black River Impoundment Project

Location: Bray, Sanders, Polk Centre, & Black River Townships, Pennington Cty

PERIOD OF ESTIMATE:

FROM **6/20/2022** TO **8/5/2022**

CONTRACT CHANGE ORDER SUMMARY

Change Order		AMOUNT	
NO.	DATE	ADDITIONS	DEDUCTIONS
1	01/15/21	\$51,564.65	
2	05/06/21	\$3,691.44	
3	08/12/21	\$12,993.75	
4	08/16/21	\$4,207.50	
5	08/25/21	\$9,800.00	
6	06/22/22	\$78,442.00	
TOTALS		\$ 160,699.34	\$ -
NET CHANGE		\$ 160,699.34	

ESTIMATE

1. Original Contract	\$ 4,374,457.66
2. Change Orders	\$ 160,699.34
3. Revised Contract (1+2)	\$ 4,535,157.00
4. Work Completed*	\$ 4,606,939.85
5. Stored Materials*	\$ -
6. Adjustments*	\$ -
7. Subtotal (4+5+6)	\$ 4,606,939.85
8. Retainage 3.00%	\$ 138,208.20
9. Previous Payments	\$ 4,305,542.73
10. Amount Due (7-8-9)	\$ 163,188.92

*Detailed Breakdown Attached if Non-Zero Value

CONTRACT TIME

Completion Date Contract

Original (days)

N/A

Revised

N/A

Remaining

N/A

On Schedule? Yes

Starting Date: 10/23/2020

Final Completion: 8/31/2022

CONTRACTOR'S CERTIFICATION:

The undersigned Contractor certifies, to the best of his/her knowledge, the following:

- (1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;
- (2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all Liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such Liens, security interest, or encumbrances); and
- (3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

Contractor:

R.J. Zavoral & Sons, Inc.

By:

[Signature]

Date:

08/09/2022

ENGINEER'S RECOMMENDATION:

I have reviewed the progress of the work, and to the best of my knowledge, information and belief, in accordance with the terms of the Contract, the Contractor is entitled to a partial payment in the amount requested.



Engineer:

By:

[Signature]
Tony A. Nordby

Date:

08-09-2022

Disaster repair total for pay estimate 17 = \$162,626

All items highlighted in yellow represent work performed due to repair caused from spring events.

REMIT PAYMENT TO:

R.J. Zavoral & Sons, Inc.
1706 Bygland Rd SE
P.O. Box 435
East Grand Forks, MN 56721



Client Project No. 176
HEI Project No. 3655-0091
Project: Black River Impoundment Project
Location: Bray, Sanders, Polk Centre, & Black River Townships, Pennington Cty
Contractor: R.J. Zavoral & Sons, Inc.

PAY ESTIMATE

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PAY ESTIMATE #:	17
SUBMITTED:	8/11/2022
BEGIN DATE:	6/20/2022
END DATE:	8/5/2022

ITEM NO.	DESCRIPTION	UNIT	CONTRACT			CURRENT PAY ESTIMATE		PREVIOUS PAY ESTIMATES		PAY ESTIMATES TO DATE			
			QUANTITY	PRICE	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT		
Original Contract Items													
2021.501	MOBILIZATION	Lump Sum	1	\$	100,000.00	\$	100,000.00		\$	-	1.	\$	100,000.00
2101.501	CLEARING AND GRUBBING	Lump Sum	1	\$	30,000.00	\$	30,000.00		\$	-	1.	\$	30,000.00
2104.502	SALVAGE SIGN	Each	7	\$	225.00	\$	1,575.00		\$	-	7.	\$	1,575.00
2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	Lin. Ft.	496	\$	2.25	\$	1,116.00		\$	-	511.	\$	1,149.75
2104.503	REMOVE PIPE CULVERTS	Lin. Ft.	1,445	\$	10.00	\$	14,450.00		\$	-	1,473.	\$	14,730.00
2104.503	SALVAGE AND INSTALL PIPE CULVERT	Lin. Ft.	110	\$	95.00	\$	10,450.00		\$	-	110.	\$	10,450.00
2104.504	REMOVE BITUMINOUS PAVEMENT	SY	1,304	\$	7.80	\$	10,171.20		\$	-	1,133.	\$	8,837.40
2105.507	COMMON EXCAVATION (P)	C.Y.	286,438	\$	1.78	\$	509,859.64		\$	-	286,438.	\$	509,859.64
2105.601	DEWATERING	Lump Sum	1	\$	14,905.00	\$	14,905.00		\$	-	0.5	\$	7,452.50
2105.602	TEST HOLE	Each	10	\$	265.00	\$	2,650.00		\$	-	10.	\$	2,650.00
2105.607	TOPSOIL EXCAVATION (P)	C.Y.	211,673	\$	1.75	\$	370,427.75		\$	-	211,673.	\$	370,427.75
2106.507	COMMON EMBANKMENT (CV) (P)	C.Y.	557,799	\$	2.63	\$	1,467,011.37		\$	-	557,799.	\$	1,467,011.37
2112.601	SUBGRADE PREPARATION (CV) (P)	C.Y.	61,542	\$	2.00	\$	123,084.00		\$	-	61,542.	\$	123,084.00
2118.509	AGGREGATE SURFACING CLASS 1	Ton	249	\$	15.00	\$	3,735.00		\$	-	380.52	\$	5,707.80
2123.510	DOZER	Hour	46	\$	145.00	\$	6,670.00		\$	-	66.	\$	9,570.00
2123.610	CRAWLER MOUNTED BACKHOE	Hour	14	\$	175.00	\$	2,450.00		\$	-	14.	\$	2,450.00
2211.509	AGGREGATE BASE CLASS 5	Ton	1,602	\$	14.25	\$	22,828.50		\$	-	837.	\$	11,927.25
2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (2,B)	Ton	330	\$	105.00	\$	34,650.00		\$	-	496.18	\$	52,098.90
2411.601	CONCRETE OUTLET STRUCTURE	Each	1	\$	195,000.00	\$	195,000.00		\$	-	1.	\$	195,000.00
2411.607	CONCRETE PIPE CRADLE	C.Y.	43	\$	1,230.00	\$	52,890.00		\$	-	47.	\$	57,810.00
2412.502	12X5 PRECAST CONCRETE END SECTION	Each	2	\$	8,070.00	\$	16,140.00		\$	-	2.	\$	16,140.00
2412.502	14X7 PRECAST CONCRETE END SECTION (TYPE III)	Each	2	\$	17,615.00	\$	35,230.00		\$	-	2.	\$	35,230.00
2412.503	12X5 PRECAST CONCRETE BOX CULVERT	Lin. Ft.	62	\$	950.00	\$	58,900.00		\$	-	62.	\$	58,900.00
2412.503	14X7 PRECAST CONCRETE BOX CULVERT	Lin. Ft.	90	\$	1,130.00	\$	101,700.00		\$	-	90.	\$	101,700.00
2451.507	GRANULAR BACKFILL (CV) (P)	C.Y.	727	\$	21.50	\$	15,630.50		\$	-	727.	\$	15,630.50
2451.507	GRANULAR BEDDING (CV) (P)	C.Y.	1,573	\$	21.50	\$	33,819.50		\$	-	1,573.	\$	33,819.50
2452.618	VINYL SHEET PILING	SQ. FT.	8,250	\$	9.50	\$	78,375.00		\$	-		\$	-
2501.502	18" GS APRON	Each	4	\$	150.00	\$	600.00		\$	-	4.	\$	600.00
2501.502	24" GS APRON	Each	2	\$	200.00	\$	400.00		\$	-	2.	\$	400.00
2501.502	36" GS APRON	Each	2	\$	430.00	\$	860.00		\$	-	2.	\$	860.00
2501.502	60" RC PIPE APRON	Each	2	\$	2,300.00	\$	4,600.00		\$	-	2.	\$	4,600.00
2501.502	FLAP GATE FOR 18" CS PIPE CULVERT	Each	33	\$	615.00	\$	20,295.00	2.	\$	1,230.00	39.	\$	23,985.00
2501.502	FLAP GATE FOR 24" CS PIPE CULVERT	Each	6	\$	680.00	\$	4,080.00		\$	-	8.	\$	5,440.00
2501.502	FLAP GATE FOR 36" CS PIPE CULVERT	Each	1	\$	1,000.00	\$	1,000.00		\$	-	1.	\$	1,000.00
2501.502	35" SPAN GS PIPE-ARCH APRON	Each	6	\$	355.00	\$	2,130.00		\$	-	6.	\$	2,130.00
2501.502	42" SPAN GS PIPE-ARCH APRON	Each	8	\$	470.00	\$	3,760.00		\$	-	8.	\$	3,760.00
2501.502	57" SPAN GS PIPE-ARCH APRON	Each	4	\$	965.00	\$	3,860.00		\$	-	4.	\$	3,860.00
2501.502	64" SPAN GS PIPE-ARCH APRON	Each	6	\$	1,170.00	\$	7,020.00		\$	-	6.	\$	7,020.00
2501.502	71" SPAN GS PIPE-ARCH APRON	Each	10	\$	1,470.00	\$	14,700.00		\$	-	10.	\$	14,700.00
2501.502	73" SPAN GS PIPE-ARCH APRON	Each	8	\$	2,300.00	\$	18,400.00		\$	-	8.	\$	18,400.00
2501.502	65" SPAN RC PIPE-ARCH APRON	Each	2	\$	2,100.00	\$	4,200.00		\$	-	2.	\$	4,200.00
2501.503	18" CS PIPE CULVERT	Lin. Ft.	1,474	\$	30.00	\$	44,220.00	140.	\$	4,200.00	1,786.	\$	53,580.00
2501.503	24" CS PIPE CULVERT	Lin. Ft.	328	\$	35.00	\$	11,480.00		\$	-	454.	\$	15,890.00
2501.503	36" CS PIPE CULVERT	Lin. Ft.	72	\$	54.00	\$	3,888.00		\$	-	72.	\$	3,888.00
2501.503	35" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	132	\$	53.00	\$	6,996.00		\$	-	132.	\$	6,996.00



Client Project No. 176
HEI Project No. 3655-0091
Project: Black River Impoundment Project
Location: Bray, Sanders, Polk Centre, & Black River Townships, Pennington Cty
Contractor: R.J. Zavoral & Sons, Inc.

PAY ESTIMATE

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PAY ESTIMATE #:	17
SUBMITTED:	8/11/2022
BEGIN DATE:	6/20/2022
END DATE:	8/5/2022

ITEM NO.	DESCRIPTION	UNIT	CONTRACT			CURRENT PAY ESTIMATE		PREVIOUS PAY ESTIMATES		PAY ESTIMATES TO DATE	
			QUANTITY	PRICE	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
2501.503	42" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	172	\$ 60.00	\$ 10,320.00		\$ -	172.	\$ 10,320.00	172.	\$ 10,320.00
2501.503	57" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	78	\$ 85.00	\$ 6,630.00		\$ -	78.	\$ 6,630.00	78.	\$ 6,630.00
2501.503	64" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	136	\$ 115.00	\$ 15,640.00		\$ -	136.	\$ 15,640.00	136.	\$ 15,640.00
2501.503	71" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	300	\$ 140.00	\$ 42,000.00		\$ -	300.	\$ 42,000.00	300.	\$ 42,000.00
2501.503	73" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	158	\$ 130.00	\$ 20,540.00		\$ -	158.	\$ 20,540.00	158.	\$ 20,540.00
2501.503	87" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	170	\$ 160.00	\$ 27,200.00		\$ -	92.	\$ 14,720.00	92.	\$ 14,720.00
2501.503	103" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	159	\$ 190.00	\$ 30,210.00		\$ -	160.	\$ 30,400.00	160.	\$ 30,400.00
2501.503	117" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	68	\$ 225.00	\$ 15,300.00		\$ -	68.	\$ 15,300.00	68.	\$ 15,300.00
2501.503	142" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	134	\$ 355.00	\$ 47,570.00		\$ -	134.	\$ 47,570.00	134.	\$ 47,570.00
2501.503	65" SPAN RC PIPE-ARCH CULVERT	Lin. Ft.	76	\$ 230.00	\$ 17,480.00		\$ -	76.	\$ 17,480.00	76.	\$ 17,480.00
2501.503	60" RC PIPE CULVERT DESIGN 3006 CLASS II	Lin. Ft.	82	\$ 215.00	\$ 17,630.00		\$ -	82.	\$ 17,630.00	82.	\$ 17,630.00
2501.503	60" RC PIPE CULVERT DESIGN 3006 CLASS III	Lin. Ft.	52	\$ 235.00	\$ 12,220.00		\$ -	52.	\$ 12,220.00	52.	\$ 12,220.00
2501.602	PLUG AND ABANDON PIPE CULVERT	Each	8	\$ 775.00	\$ 6,200.00		\$ -	8.	\$ 6,200.00	8.	\$ 6,200.00
2511.507	RANDOM RIPRAP CLASS II	C.Y.	259	\$ 95.00	\$ 24,605.00		\$ -	336.	\$ 31,920.00	336.	\$ 31,920.00
2511.507	RANDOM RIPRAP CLASS III	C.Y.	3,941	\$ 95.00	\$ 374,395.00	729.	\$ 69,255.00	3,777.	\$ 358,815.00	4,506.	\$ 428,070.00
2563.601	TRAFFIC CONTROL	Lump Sum	1	\$ 25,000.00	\$ 25,000.00		\$ -	1.	\$ 25,000.00	1.	\$ 25,000.00
2573.501	STABILIZED CONSTRUCTION EXIT	Lump Sum	1	\$ 3,500.00	\$ 3,500.00		\$ -		\$ -		\$ -
2573.503	SILT FENCE TYPE MS	Lin. Ft.	2,020	\$ 1.20	\$ 2,424.00		\$ -	673.	\$ 807.60	673.	\$ 807.60
2573.503	SEDIMENT CONTROL LOG TYPE STRAW	Lin. Ft.	370	\$ 5.00	\$ 1,850.00		\$ -		\$ -		\$ -
2573.503	FLOTATION SILT CURTAIN TYPE WORK AREA	Lin. Ft.	120	\$ 20.00	\$ 2,400.00		\$ -		\$ -		\$ -
2573.607	ROCK DITCH CHECK	C.Y.	114	\$ 120.00	\$ 13,680.00		\$ -	38.	\$ 4,560.00	38.	\$ 4,560.00
2574.508	FERTILIZER, TYPE 1	Pound	53,876	\$ 0.45	\$ 24,244.20		\$ -	60,192.	\$ 27,086.40	60,192.	\$ 27,086.40
2575.504	RAPID STABILIZATION METHOD 4	S.Y.	1,983	\$ 1.10	\$ 2,181.30		\$ -	1,994.	\$ 2,193.40	1,994.	\$ 2,193.40
2575.504	EROSION CONTROL BLANKET CATEGORY 3	S.Y.	5,999	\$ 1.00	\$ 5,999.00		\$ -	500.	\$ 500.00	500.	\$ 500.00
2575.505	SEEDING	Acre	289.6	\$ 100.00	\$ 28,960.00		\$ -	300.4	\$ 30,040.00	300.4	\$ 30,040.00
2575.505	DISK ANCHORING	Acre	289.6	\$ 20.00	\$ 5,792.00		\$ -	319.95	\$ 6,399.00	319.95	\$ 6,399.00
2575.508	SEED MIXTURE 22-111	Pound	8,833	\$ 2.50	\$ 22,082.50		\$ -	7,994.	\$ 19,985.00	7,994.	\$ 19,985.00
2575.508	SEED MIXTURE 25-141	Pound	17,086	\$ 3.00	\$ 51,258.00		\$ -	15,464.	\$ 46,392.00	15,464.	\$ 46,392.00
2575.509	MULCH MATERIAL TYPE 1	Ton	579.2	\$ 85.00	\$ 49,232.00		\$ -	560.4	\$ 47,634.00	560.4	\$ 47,634.00
2582.503	4" SOLID LINE PAINT (WHITE)	Lin. Ft.	686	\$ 2.20	\$ 1,509.20		\$ -		\$ -		\$ -
2582.503	4" BROKEN LINE PAINT (YELLOW)	Lin. Ft.	90	\$ 2.20	\$ 198.00		\$ -		\$ -		\$ -
Extra / Change Order Items											
2101.601	CLEARING AND GRUBBING	Acre	3.5	\$ 2,480.00	\$ 8,680.00		\$ -	3.5	\$ 8,680.00	3.5	\$ 8,680.00
2104.601	CSAH 3 DIVERSION DITCH STA. 20+98.40 SALVAGE AND INSTALL 142" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	72.	\$ 283.00	\$ 20,376.00	72.	\$ 20,376.00		\$ -	72.	\$ 20,376.00
2104.601	CSAH 3 DIVERSION DITCH STA. 60+40 SALVAGE AND INSTALL 142" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	62.	\$ 283.00	\$ 17,546.00	62.	\$ 17,546.00		\$ -	62.	\$ 17,546.00
2104.601	SOUTH DIVERSION DITCH STA. 84+63 SALVAGE AND INSTALL 64" SPAN CS PIPE-ARCH CULVERT WITH APRONS	Lin. Ft.	30.	\$ 165.00	\$ 4,950.00	30.	\$ 4,950.00		\$ -	30.	\$ 4,950.00
2104.601	SOUTH DIVERSION DITCH STA. 96+17 SALVAGE AND INSTALL 64" SPAN CS PIPE-ARCH CULVERT WITH APRONS	Lin. Ft.	58.	\$ 165.00	\$ 9,570.00	58.	\$ 9,570.00		\$ -	58.	\$ 9,570.00
2105.507	COMMON EXCAVATION (LEVEE)	C.Y.	2,852	\$ 2.50	\$ 7,130.00		\$ -	2,852.	\$ 7,130.00	2,852.	\$ 7,130.00
2105.507	COMMON EXCAVATION (CHURCH AREA)	C.Y.	6,140	\$ 5.20	\$ 31,928.00		\$ -	6,140.	\$ 31,928.00	6,140.	\$ 31,928.00
2105.507	COMMON EXCAVATION (P) (Co Road 68 Diversion Ditch Modification)	C.Y.	1,870	\$ 2.25	\$ 4,207.50		\$ -	1,870.	\$ 4,207.50	1,870.	\$ 4,207.50
2105.601	CLAY BORROW (LV)	C.Y.	1,000	\$ 11.00	\$ 11,000.00	1,424.	\$ 15,664.00		\$ -	1,424.	\$ 15,664.00
2106.507	COMMON EMBANKMENT (CV) (P)	C.Y.	1,455	\$ 2.63	\$ 3,826.65	80.5	\$ 13,685.00	1,455.	\$ 3,826.65	1,455.	\$ 3,826.65
2123.510	DOZER (2022 FUEL ADJUSTMENT)	Hour	40	\$ 170.00	\$ 6,800.00	112.5	\$ 19,295.00		\$ -	113.5	\$ 19,295.00



Client Project No. 176
 HEI Project No. 3655-0091
 Project: *Black River Impoundment Project*
 Location: *Bray, Sanders, Polk Centre, & Black River Townships, Pennington Cty*
 Contractor: *R.J. Zavoral & Sons, Inc.*

PAY ESTIMATE

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PAY ESTIMATE #:	17
SUBMITTED:	8/11/2022
BEGIN DATE:	6/20/2022
END DATE:	8/5/2022

ITEM NO.	DESCRIPTION	UNIT	CONTRACT			CURRENT PAY ESTIMATE		PREVIOUS PAY ESTIMATES		PAY ESTIMATES TO DATE	
			QUANTITY	PRICE	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
2123.610	CRAWLER MOUNTED BACKHOE (2022 FUEL ADJUSTMENT)	Hour	40	\$ 205.00	\$ 8,200.00	30.	\$ 6,150.00		\$ -	30.	\$ 6,150.00
2452.618	VINYL SHEET PILING (EXCAVATED METHOD)	Sq. Ft.	5,775	\$ 11.75	\$ 67,856.25		\$ -	8,250.	\$ 96,937.50	8,250.	\$ 96,937.50
2452.618	VINYL SHEET PILING	Sq. Ft.	-5,775	\$ 9.50	\$ (54,862.50)		\$ -		\$ -		\$ -
2501.502	INSTALL 71" SPAN GS PIPE-ARCH APRON	Each	2	\$ 467.97	\$ 935.94		\$ -	2.	\$ 935.94	2.	\$ 935.94
2501.503	INSTALL 71" SPAN GS PIPE-ARCH CULVERT	Lin. Ft.	50	\$ 55.11	\$ 2,755.50		\$ -	50.	\$ 2,755.50	50.	\$ 2,755.50
2501.503	71" SPAN CS STRUCTURAL PLATE-ARCH CULVERT	Lin. Ft.	28	\$ 350.00	\$ 9,800.00		\$ -	28.	\$ 9,800.00	28.	\$ 9,800.00
Totals											
					Original Contract Amount	\$ 4,374,457.66					
					Extra / Change Order Amount	\$ 160,699.34					
						Work Completed	\$ 168,236.00		\$ 4,438,703.85		\$ 4,606,939.85

PARTIAL PAYMENT ESTIMATE

Client Project No.
176

HEI Project No.
3655-0091

PAYMENT NUMBER: 18

Project: Black River Impoundment Project

Location: Bray, Sanders, Polk Centre, & Black River Townships, Pennington Cty

PERIOD OF ESTIMATE:

FROM **8/6/2022** TO **9/2/2022**

CONTRACT CHANGE ORDER SUMMARY

Change Order		AMOUNT	
NO.	DATE	ADDITIONS	DEDUCTIONS
1	01/15/21	\$51,564.65	
2	05/06/21	\$3,691.44	
3	08/12/21	\$12,993.75	
4	08/16/21	\$4,207.50	
5	08/25/21	\$9,800.00	
6	06/22/22	\$78,442.00	
TOTALS		\$ 160,699.34	\$ -
NET CHANGE		\$ 160,699.34	

ESTIMATE

1. Original Contract	\$ 4,374,457.66
2. Change Orders	\$ 160,699.34
3. Revised Contract (1+2)	\$ 4,535,157.00
4. Work Completed*	\$ 4,675,100.70
5. Stored Materials*	\$ -
6. Adjustments*	\$ -
7. Subtotal (4+5+6)	\$ 4,675,100.70
8. Retainage 3.00%	\$ 140,253.02
9. Previous Payments	\$ 4,468,731.65
10. Amount Due (7-8-9)	\$ 66,116.03

*Detailed Breakdown Attached if Non-Zero Value

CONTRACT TIME


Completion Date Contract

Original (days)	N/A	On Schedule? Yes	Starting Date: 10/23/2020
Revised	N/A		
Remaining	N/A		Final Completion: 8/31/2022

CONTRACTOR'S CERTIFICATION:

The undersigned Contractor certifies, to the best of his/her knowledge, the following:

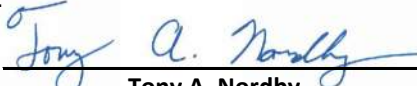
- (1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;
- (2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all Liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such Liens, security interest, or encumbrances); and
- (3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

Contractor: R.J. Zavoral & Sons, Inc.
By: 
Date: 09/07/2022

ENGINEER'S RECOMMENDATION:

I have reviewed the progress of the work, and to the best of my knowledge, information and belief, in accordance with the terms of the Contract, the Contractor is entitled to a partial payment in the amount requested.



Engineer: 
By: Tony A. Nordby
Date: 09/07/2022

Disaster repair total for pay estimate 18 = \$6,231.50

All items highlighted in yellow represent work performed due to repair caused from spring events.

REMIT PAYMENT TO:

R.J. Zavoral & Sons, Inc.
1706 Bygland Rd SE
P.O. Box 435
East Grand Forks, MN 56721



Client Project No. 176
HEI Project No. 3655-0091
Project: Black River Impoundment Project
Location: Bray, Sanders, Polk Centre, & Black River Townships, Pennington Cty
Contractor: R.J. Zavoral & Sons, Inc.

PAY ESTIMATE

Page 1 of 3

PAY ESTIMATE #:	18
SUBMITTED:	9/8/2022
BEGIN DATE:	8/6/2022
END DATE:	9/2/2022

ITEM NO.	DESCRIPTION	UNIT	CONTRACT			CURRENT PAY ESTIMATE		PREVIOUS PAY ESTIMATES		PAY ESTIMATES TO DATE	
			QUANTITY	PRICE	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
Original Contract Items											
2021.501	MOBILIZATION	Lump Sum	1	\$ 100,000.00	\$ 100,000.00		\$ -	1.	\$ 100,000.00	1.	\$ 100,000.00
2101.501	CLEARING AND GRUBBING	Lump Sum	1	\$ 30,000.00	\$ 30,000.00		\$ -	1.	\$ 30,000.00	1.	\$ 30,000.00
2104.502	SALVAGE SIGN	Each	7	\$ 225.00	\$ 1,575.00		\$ -	7.	\$ 1,575.00	7.	\$ 1,575.00
2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	Lin. Ft.	496	\$ 2.25	\$ 1,116.00		\$ -	511.	\$ 1,149.75	511.	\$ 1,149.75
2104.503	REMOVE PIPE CULVERTS	Lin. Ft.	1,445	\$ 10.00	\$ 14,450.00		\$ -	1,473.	\$ 14,730.00	1,473.	\$ 14,730.00
2104.503	SALVAGE AND INSTALL PIPE CULVERT	Lin. Ft.	110	\$ 95.00	\$ 10,450.00		\$ -	110.	\$ 10,450.00	110.	\$ 10,450.00
2104.504	REMOVE BITUMINOUS PAVEMENT	SY	1,304	\$ 7.80	\$ 10,171.20		\$ -	1,133.	\$ 8,837.40	1,133.	\$ 8,837.40
2105.507	COMMON EXCAVATION (P)	C.Y.	286,438	\$ 1.78	\$ 509,859.64		\$ -	286,438.	\$ 509,859.64	286,438.	\$ 509,859.64
2105.601	DEWATERING	Lump Sum	1	\$ 14,905.00	\$ 14,905.00	0.5	\$ 7,452.50	0.5	\$ 7,452.50	1.	\$ 14,905.00
2105.602	TEST HOLE	Each	10	\$ 265.00	\$ 2,650.00		\$ -	10.	\$ 2,650.00	10.	\$ 2,650.00
2105.607	TOPSOIL EXCAVATION (P)	C.Y.	211,673	\$ 1.75	\$ 370,427.75		\$ -	211,673.	\$ 370,427.75	211,673.	\$ 370,427.75
2106.507	COMMON EMBANKMENT (CV) (P)	C.Y.	557,799	\$ 2.63	\$ 1,467,011.37		\$ -	557,799.	\$ 1,467,011.37	557,799.	\$ 1,467,011.37
2112.601	SUBGRADE PREPARATION (CV) (P)	C.Y.	61,542	\$ 2.00	\$ 123,084.00		\$ -	61,542.	\$ 123,084.00	61,542.	\$ 123,084.00
2118.509	AGGREGATE SURFACING CLASS 1	Ton	249	\$ 15.00	\$ 3,735.00		\$ -	380.52	\$ 5,707.80	380.52	\$ 5,707.80
2123.510	DOZER	Hour	46	\$ 145.00	\$ 6,670.00		\$ -	66.	\$ 9,570.00	66.	\$ 9,570.00
2123.610	CRAWLER MOUNTED BACKHOE	Hour	14	\$ 175.00	\$ 2,450.00		\$ -	14.	\$ 2,450.00	14.	\$ 2,450.00
2211.509	AGGREGATE BASE CLASS 5	Ton	1,602	\$ 14.25	\$ 22,828.50	3,481.	\$ 49,604.25	837.	\$ 11,927.25	4,318.	\$ 61,531.50
2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (2,B)	Ton	330	\$ 105.00	\$ 34,650.00		\$ -	496.18	\$ 52,098.90	496.18	\$ 52,098.90
2411.601	CONCRETE OUTLET STRUCTURE	Each	1	\$ 195,000.00	\$ 195,000.00		\$ -	1.	\$ 195,000.00	1.	\$ 195,000.00
2411.607	CONCRETE PIPE CRADLE	C.Y.	43	\$ 1,230.00	\$ 52,890.00		\$ -	47.	\$ 57,810.00	47.	\$ 57,810.00
2412.502	12X5 PRECAST CONCRETE END SECTION	Each	2	\$ 8,070.00	\$ 16,140.00		\$ -	2.	\$ 16,140.00	2.	\$ 16,140.00
2412.502	14X7 PRECAST CONCRETE END SECTION (TYPE III)	Each	2	\$ 17,615.00	\$ 35,230.00		\$ -	2.	\$ 35,230.00	2.	\$ 35,230.00
2412.503	12X5 PRECAST CONCRETE BOX CULVERT	Lin. Ft.	62	\$ 950.00	\$ 58,900.00		\$ -	62.	\$ 58,900.00	62.	\$ 58,900.00
2412.503	14X7 PRECAST CONCRETE BOX CULVERT	Lin. Ft.	90	\$ 1,130.00	\$ 101,700.00		\$ -	90.	\$ 101,700.00	90.	\$ 101,700.00
2451.507	GRANULAR BACKFILL (CV) (P)	C.Y.	727	\$ 21.50	\$ 15,630.50		\$ -	727.	\$ 15,630.50	727.	\$ 15,630.50
2451.507	GRANULAR BEDDING (CV) (P)	C.Y.	1,573	\$ 21.50	\$ 33,819.50		\$ -	1,573.	\$ 33,819.50	1,573.	\$ 33,819.50
2452.618	VINYL SHEET PILING	SQ. FT.	8,250	\$ 9.50	\$ 78,375.00		\$ -	\$ -		\$ -	
2501.502	18" GS APRON	Each	4	\$ 150.00	\$ 600.00		\$ -	4.	\$ 600.00	4.	\$ 600.00
2501.502	24" GS APRON	Each	2	\$ 200.00	\$ 400.00		\$ -	2.	\$ 400.00	2.	\$ 400.00
2501.502	36" GS APRON	Each	2	\$ 430.00	\$ 860.00		\$ -	2.	\$ 860.00	2.	\$ 860.00
2501.502	60" RC PIPE APRON	Each	2	\$ 2,300.00	\$ 4,600.00		\$ -	2.	\$ 4,600.00	2.	\$ 4,600.00
2501.502	FLAP GATE FOR 18" CS PIPE CULVERT	Each	33	\$ 615.00	\$ 20,295.00		\$ -	41.	\$ 25,215.00	41.	\$ 25,215.00
2501.502	FLAP GATE FOR 24" CS PIPE CULVERT	Each	6	\$ 680.00	\$ 4,080.00		\$ -	8.	\$ 5,440.00	8.	\$ 5,440.00
2501.502	FLAP GATE FOR 36" CS PIPE CULVERT	Each	1	\$ 1,000.00	\$ 1,000.00		\$ -	1.	\$ 1,000.00	1.	\$ 1,000.00
2501.502	35" SPAN GS PIPE-ARCH APRON	Each	6	\$ 355.00	\$ 2,130.00		\$ -	6.	\$ 2,130.00	6.	\$ 2,130.00
2501.502	42" SPAN GS PIPE-ARCH APRON	Each	8	\$ 470.00	\$ 3,760.00		\$ -	8.	\$ 3,760.00	8.	\$ 3,760.00
2501.502	57" SPAN GS PIPE-ARCH APRON	Each	4	\$ 965.00	\$ 3,860.00		\$ -	4.	\$ 3,860.00	4.	\$ 3,860.00
2501.502	64" SPAN GS PIPE-ARCH APRON	Each	6	\$ 1,170.00	\$ 7,020.00		\$ -	6.	\$ 7,020.00	6.	\$ 7,020.00
2501.502	71" SPAN GS PIPE-ARCH APRON	Each	10	\$ 1,470.00	\$ 14,700.00		\$ -	10.	\$ 14,700.00	10.	\$ 14,700.00
2501.502	73" SPAN GS PIPE-ARCH APRON	Each	8	\$ 2,300.00	\$ 18,400.00		\$ -	8.	\$ 18,400.00	8.	\$ 18,400.00
2501.502	65" SPAN RC PIPE-ARCH APRON	Each	2	\$ 2,100.00	\$ 4,200.00		\$ -	2.	\$ 4,200.00	2.	\$ 4,200.00
2501.503	18" CS PIPE CULVERT	Lin. Ft.	1,474	\$ 30.00	\$ 44,220.00		\$ -	1,926.	\$ 57,780.00	1,926.	\$ 57,780.00
2501.503	24" CS PIPE CULVERT	Lin. Ft.	328	\$ 35.00	\$ 11,480.00		\$ -	454.	\$ 15,890.00	454.	\$ 15,890.00
2501.503	36" CS PIPE CULVERT	Lin. Ft.	72	\$ 54.00	\$ 3,888.00		\$ -	72.	\$ 3,888.00	72.	\$ 3,888.00
2501.503	35" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	132	\$ 53.00	\$ 6,996.00		\$ -	132.	\$ 6,996.00	132.	\$ 6,996.00

Client Project No. 176
 HEI Project No. 3655-0091
 Project: *Black River Impoundment Project*
 Location: *Bray, Sanders, Polk Centre, & Black River Townships, Pennington Cty*
 Contractor: *R.J. Zavoral & Sons, Inc.*

PAY ESTIMATE

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PAY ESTIMATE #:	18
SUBMITTED:	9/8/2022
BEGIN DATE:	8/6/2022
END DATE:	9/2/2022

ITEM NO.	DESCRIPTION	UNIT	CONTRACT			CURRENT PAY ESTIMATE		PREVIOUS PAY ESTIMATES		PAY ESTIMATES TO DATE	
			QUANTITY	PRICE	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
2501.503	42" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	172	\$ 60.00	\$ 10,320.00		\$ -	172.	\$ 10,320.00	172.	\$ 10,320.00
2501.503	57" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	78	\$ 85.00	\$ 6,630.00		\$ -	78.	\$ 6,630.00	78.	\$ 6,630.00
2501.503	64" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	136	\$ 115.00	\$ 15,640.00		\$ -	136.	\$ 15,640.00	136.	\$ 15,640.00
2501.503	71" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	300	\$ 140.00	\$ 42,000.00		\$ -	300.	\$ 42,000.00	300.	\$ 42,000.00
2501.503	73" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	158	\$ 130.00	\$ 20,540.00		\$ -	158.	\$ 20,540.00	158.	\$ 20,540.00
2501.503	87" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	170	\$ 160.00	\$ 27,200.00		\$ -	92.	\$ 14,720.00	92.	\$ 14,720.00
2501.503	103" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	159	\$ 190.00	\$ 30,210.00		\$ -	160.	\$ 30,400.00	160.	\$ 30,400.00
2501.503	117" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	68	\$ 225.00	\$ 15,300.00		\$ -	68.	\$ 15,300.00	68.	\$ 15,300.00
2501.503	142" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	134	\$ 355.00	\$ 47,570.00		\$ -	134.	\$ 47,570.00	134.	\$ 47,570.00
2501.503	65" SPAN RC PIPE-ARCH CULVERT	Lin. Ft.	76	\$ 230.00	\$ 17,480.00		\$ -	76.	\$ 17,480.00	76.	\$ 17,480.00
2501.503	60" RC PIPE CULVERT DESIGN 3006 CLASS II	Lin. Ft.	82	\$ 215.00	\$ 17,630.00		\$ -	82.	\$ 17,630.00	82.	\$ 17,630.00
2501.503	60" RC PIPE CULVERT DESIGN 3006 CLASS III	Lin. Ft.	52	\$ 235.00	\$ 12,220.00		\$ -	52.	\$ 12,220.00	52.	\$ 12,220.00
2501.602	PLUG AND ABANDON PIPE CULVERT	Each	8	\$ 775.00	\$ 6,200.00		\$ -	8.	\$ 6,200.00	8.	\$ 6,200.00
2511.507	RANDOM RIPRAP CLASS II	C.Y.	259	\$ 95.00	\$ 24,605.00		\$ -	336.	\$ 31,920.00	336.	\$ 31,920.00
2511.507	RANDOM RIPRAP CLASS III	C.Y.	3,941	\$ 95.00	\$ 374,395.00		\$ -	4,506.	\$ 428,070.00	4,506.	\$ 428,070.00
2563.601	TRAFFIC CONTROL	Lump Sum	1	\$ 25,000.00	\$ 25,000.00		\$ -	1.	\$ 25,000.00	1.	\$ 25,000.00
2573.501	STABILIZED CONSTRUCTION EXIT	Lump Sum	1	\$ 3,500.00	\$ 3,500.00		\$ -		\$ -		\$ -
2573.503	SILT FENCE TYPE MS	Lin. Ft.	2,020	\$ 1.20	\$ 2,424.00	673.	\$ 807.60	673.	\$ 807.60	1,346.	\$ 1,615.20
2573.503	SEDIMENT CONTROL LOG TYPE STRAW	Lin. Ft.	370	\$ 5.00	\$ 1,850.00		\$ -		\$ -		\$ -
2573.503	FLOTATION SILT CURTAIN TYPE WORK AREA	Lin. Ft.	120	\$ 20.00	\$ 2,400.00		\$ -		\$ -		\$ -
2573.607	ROCK DITCH CHECK	C.Y.	114	\$ 120.00	\$ 13,680.00	19.	\$ 2,280.00	38.	\$ 4,560.00	57.	\$ 6,840.00
2574.508	FERTILIZER, TYPE 1	Pound	53,876	\$ 0.45	\$ 24,244.20		\$ -	60,192.	\$ 27,086.40	60,192.	\$ 27,086.40
2575.504	RAPID STABILIZATION METHOD 4	S.Y.	1,983	\$ 1.10	\$ 2,181.30		\$ -	1,994.	\$ 2,193.40	1,994.	\$ 2,193.40
2575.504	EROSION CONTROL BLANKET CATEGORY 3	S.Y.	5,999	\$ 1.00	\$ 5,999.00		\$ -	500.	\$ 500.00	500.	\$ 500.00
2575.505	SEEDING	Acre	289.6	\$ 100.00	\$ 28,960.00		\$ -	300.4	\$ 30,040.00	300.4	\$ 30,040.00
2575.505	DISK ANCHORING	Acre	289.6	\$ 20.00	\$ 5,792.00		\$ -	319.95	\$ 6,399.00	319.95	\$ 6,399.00
2575.508	SEED MIXTURE 22-111	Pound	8,833	\$ 2.50	\$ 22,082.50		\$ -	7,994.	\$ 19,985.00	7,994.	\$ 19,985.00
2575.508	SEED MIXTURE 25-141	Pound	17,086	\$ 3.00	\$ 51,258.00		\$ -	15,464.	\$ 46,392.00	15,464.	\$ 46,392.00
2575.509	MULCH MATERIAL TYPE 1	Ton	579.2	\$ 85.00	\$ 49,232.00		\$ -	560.4	\$ 47,634.00	560.4	\$ 47,634.00
2582.503	4" SOLID LINE PAINT (WHITE)	Lin. Ft.	686	\$ 2.20	\$ 1,509.20		\$ -		\$ -		\$ -
2582.503	4" BROKEN LINE PAINT (YELLOW)	Lin. Ft.	90	\$ 2.20	\$ 198.00		\$ -		\$ -		\$ -
Extra / Change Order Items											
2101.601	CLEARING AND GRUBBING	Acre	3.5	\$ 2,480.00	\$ 8,680.00		\$ -	3.5	\$ 8,680.00	3.5	\$ 8,680.00
2104.601	CSAH 3 DIVERSION DITCH STA. 20+98.40 SALVAGE AND INSTALL 142" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	72.	\$ 283.00	\$ 20,376.00		\$ -	72.	\$ 20,376.00	72.	\$ 20,376.00
2104.601	CSAH 3 DIVERSION DITCH STA. 60+40 SALVAGE AND INSTALL 142" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	62.	\$ 283.00	\$ 17,546.00		\$ -	62.	\$ 17,546.00	62.	\$ 17,546.00
2104.601	SOUTH DIVERSION DITCH STA. 84+63 SALVAGE AND INSTALL 64" SPAN CS PIPE-ARCH CULVERT WITH APRONS	Lin. Ft.	30.	\$ 165.00	\$ 4,950.00		\$ -	30.	\$ 4,950.00	30.	\$ 4,950.00
2104.601	SOUTH DIVERSION DITCH STA. 96+17 SALVAGE AND INSTALL 64" SPAN CS PIPE-ARCH CULVERT WITH APRONS	Lin. Ft.	58.	\$ 165.00	\$ 9,570.00		\$ -	58.	\$ 9,570.00	58.	\$ 9,570.00
2105.507	COMMON EXCAVATION (LEVEE)	C.Y.	2,852	\$ 2.50	\$ 7,130.00		\$ -	2,852.	\$ 7,130.00	2,852.	\$ 7,130.00
2105.507	COMMON EXCAVATION (CHURCH AREA)	C.Y.	6,140	\$ 5.20	\$ 31,928.00		\$ -	6,140.	\$ 31,928.00	6,140.	\$ 31,928.00
2105.507	COMMON EXCAVATION (P) (Co Road 68 Diversion Ditch Modification)	C.Y.	1,870	\$ 2.25	\$ 4,207.50		\$ -	1,870.	\$ 4,207.50	1,870.	\$ 4,207.50
2105.601	CLAY BORROW (LV)	C.Y.	1,000	\$ 11.00	\$ 11,000.00	464.	\$ 5,104.00	1,424.	\$ 15,664.00	1,888.	\$ 20,768.00
2106.507	COMMON EMBANKMENT (CV) (P)	C.Y.	1,455	\$ 2.63	\$ 3,826.65		\$ -	1,455.	\$ 3,826.65	1,455.	\$ 3,826.65
2123.510	DOZER (2022 FUEL ADJUSTMENT)	Hour	40	\$ 170.00	\$ 6,800.00	10.5	\$ 1,785.00	113.5	\$ 19,295.00	124.	\$ 21,080.00



Client Project No. 176
 HEI Project No. 3655-0091
 Project: *Black River Impoundment Project*
 Location: *Bray, Sanders, Polk Centre, & Black River Townships, Pennington Cty*
 Contractor: *R.J. Zavoral & Sons, Inc.*

PAY ESTIMATE

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PAY ESTIMATE #:	18
SUBMITTED:	9/8/2022
BEGIN DATE:	8/6/2022
END DATE:	9/2/2022

ITEM NO.	DESCRIPTION	UNIT	CONTRACT			CURRENT PAY ESTIMATE		PREVIOUS PAY ESTIMATES		PAY ESTIMATES TO DATE	
			QUANTITY	PRICE	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
2123.610	CRAWLER MOUNTED BACKHOE (2022 FUEL ADJUSTMENT)	Hour	40	\$ 205.00	\$ 8,200.00	5.5	\$ 1,127.50	30.	\$ 6,150.00	35.5	\$ 7,277.50
2452.618	VINYL SHEET PILING (EXCAVATED METHOD)	Sq. Ft.	5,775	\$ 11.75	\$ 67,856.25		\$ -	8,250.	\$ 96,937.50	8,250.	\$ 96,937.50
2452.618	VINYL SHEET PILING	Sq. Ft.	-5,775	\$ 9.50	\$ (54,862.50)		\$ -		\$ -		\$ -
2501.502	INSTALL 71" SPAN GS PIPE-ARCH APRON	Each	2	\$ 467.97	\$ 935.94		\$ -	2.	\$ 935.94	2.	\$ 935.94
2501.503	INSTALL 71" SPAN GS PIPE-ARCH CULVERT	Lin. Ft.	50	\$ 55.11	\$ 2,755.50		\$ -	50.	\$ 2,755.50	50.	\$ 2,755.50
2501.503	71" SPAN CS STRUCTURAL PLATE-ARCH CULVERT	Lin. Ft.	28	\$ 350.00	\$ 9,800.00		\$ -	28.	\$ 9,800.00	28.	\$ 9,800.00
Totals											
					Original Contract Amount	\$ 4,374,457.66					
					Extra / Change Order Amount	\$ 160,699.34					
						Work Completed	\$ 68,160.85		\$ 4,606,939.85		\$ 4,675,100.70

PARTIAL PAYMENT ESTIMATE

Client Project No.
176

HEI Project No.
3655-0091

PAYMENT NUMBER: 19

Project: Black River Impoundment Project

Location: Bray, Sanders, Polk Centre, & Black River Townships, Pennington Cty

PERIOD OF ESTIMATE:

FROM **9/3/2022** TO **9/16/2022**

CONTRACT CHANGE ORDER SUMMARY

Change Order		AMOUNT	
NO.	DATE	ADDITIONS	DEDUCTIONS
1	01/15/21	\$51,564.65	
2	05/06/21	\$3,691.44	
3	08/12/21	\$12,993.75	
4	08/16/21	\$4,207.50	
5	08/25/21	\$9,800.00	
6	06/22/22	\$78,442.00	
TOTALS		\$ 160,699.34	\$ -
NET CHANGE		\$ 160,699.34	

ESTIMATE

1. Original Contract	\$ 4,374,457.66
2. Change Orders	\$ 160,699.34
3. Revised Contract (1+2)	\$ 4,535,157.00
4. Work Completed*	\$ 4,698,864.20
5. Stored Materials*	\$ -
6. Adjustments*	\$ -
7. Subtotal (4+5+6)	\$ 4,698,864.20
8. Retainage 3.00%	\$ 140,965.93
9. Previous Payments	\$ 4,534,847.68
10. Amount Due (7-8-9)	\$ 23,050.59

*Detailed Breakdown Attached if Non-Zero Value

CONTRACT TIME

Completion Date Contract

Original (days)

N/A

Revised

N/A

Remaining

N/A

On Schedule? Yes

Starting Date: 10/23/2020

Final Completion: 8/31/2022

CONTRACTOR'S CERTIFICATION:

The undersigned Contractor certifies, to the best of his/her knowledge, the following:

- (1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;
- (2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all Liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such Liens, security interest, or encumbrances); and
- (3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

Contractor:

R.J. Zavoral & Sons, Inc.

By:

[Signature]

Date:

09/21/2022

ENGINEER'S RECOMMENDATION:

I have reviewed the progress of the work, and to the best of my knowledge, information and belief, in accordance with the terms of the Contract, the Contractor is entitled to a partial payment in the amount requested.



Engineer:

By:

[Signature]
Tony A. Nordby

Date:

09/21/2022

Disaster repair total for pay estimate 19 = \$10,503.00

All items highlighted in yellow represent work performed due to repair caused from spring events.

REMIT PAYMENT TO:

R.J. Zavoral & Sons, Inc.
1706 Bygland Rd SE
P.O. Box 435
East Grand Forks, MN 56721



Client Project No. 176
HEI Project No. 3655-0091
Project: *Black River Impoundment Project*
Location: *Bray, Sanders, Polk Centre, & Black River Townships, Pennington Cty*
Contractor: *R.J. Zavoral & Sons, Inc.*

PAY ESTIMATE

Page 1 of 3

PAY ESTIMATE #:	19
SUBMITTED:	9/8/2022
BEGIN DATE:	9/3/2022
END DATE:	9/16/2022

ITEM NO.	DESCRIPTION	UNIT	CONTRACT			CURRENT PAY ESTIMATE		PREVIOUS PAY ESTIMATES		PAY ESTIMATES TO DATE	
			QUANTITY	PRICE	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
Original Contract Items											
2021.501	MOBILIZATION	Lump Sum	1	\$ 100,000.00	\$ 100,000.00		\$ -	1.	\$ 100,000.00	1.	\$ 100,000.00
2101.501	CLEARING AND GRUBBING	Lump Sum	1	\$ 30,000.00	\$ 30,000.00		\$ -	1.	\$ 30,000.00	1.	\$ 30,000.00
2104.502	SALVAGE SIGN	Each	7	\$ 225.00	\$ 1,575.00		\$ -	7.	\$ 1,575.00	7.	\$ 1,575.00
2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	Lin. Ft.	496	\$ 2.25	\$ 1,116.00		\$ -	511.	\$ 1,149.75	511.	\$ 1,149.75
2104.503	REMOVE PIPE CULVERTS	Lin. Ft.	1,445	\$ 10.00	\$ 14,450.00		\$ -	1,473.	\$ 14,730.00	1,473.	\$ 14,730.00
2104.503	SALVAGE AND INSTALL PIPE CULVERT	Lin. Ft.	110	\$ 95.00	\$ 10,450.00		\$ -	110.	\$ 10,450.00	110.	\$ 10,450.00
2104.504	REMOVE BITUMINOUS PAVEMENT	SY	1,304	\$ 7.80	\$ 10,171.20		\$ -	1,133.	\$ 8,837.40	1,133.	\$ 8,837.40
2105.507	COMMON EXCAVATION (P)	C.Y.	286,438	\$ 1.78	\$ 509,859.64		\$ -	286,438.	\$ 509,859.64	286,438.	\$ 509,859.64
2105.601	DEWATERING	Lump Sum	1	\$ 14,905.00	\$ 14,905.00		\$ -	1.	\$ 14,905.00	1.	\$ 14,905.00
2105.602	TEST HOLE	Each	10	\$ 265.00	\$ 2,650.00		\$ -	10.	\$ 2,650.00	10.	\$ 2,650.00
2105.607	TOPSOIL EXCAVATION (P)	C.Y.	211,673	\$ 1.75	\$ 370,427.75		\$ -	211,673.	\$ 370,427.75	211,673.	\$ 370,427.75
2106.507	COMMON EMBANKMENT (CV) (P)	C.Y.	557,799	\$ 2.63	\$ 1,467,011.37		\$ -	557,799.	\$ 1,467,011.37	557,799.	\$ 1,467,011.37
2112.601	SUBGRADE PREPARATION (CV) (P)	C.Y.	61,542	\$ 2.00	\$ 123,084.00		\$ -	61,542.	\$ 123,084.00	61,542.	\$ 123,084.00
2118.509	AGGREGATE SURFACING CLASS 1	Ton	249	\$ 15.00	\$ 3,735.00		\$ -	380.52	\$ 5,707.80	380.52	\$ 5,707.80
2123.510	DOZER	Hour	46	\$ 145.00	\$ 6,670.00		\$ -	66.	\$ 9,570.00	66.	\$ 9,570.00
2123.610	CRAWLER MOUNTED BACKHOE	Hour	14	\$ 175.00	\$ 2,450.00		\$ -	14.	\$ 2,450.00	14.	\$ 2,450.00
2211.509	AGGREGATE BASE CLASS 5	Ton	1,602	\$ 14.25	\$ 22,828.50		\$ -	4,318.	\$ 61,531.50	4,318.	\$ 61,531.50
2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (2,B)	Ton	330	\$ 105.00	\$ 34,650.00		\$ -	496.18	\$ 52,098.90	496.18	\$ 52,098.90
2411.601	CONCRETE OUTLET STRUCTURE	Each	1	\$ 195,000.00	\$ 195,000.00		\$ -	1.	\$ 195,000.00	1.	\$ 195,000.00
2411.607	CONCRETE PIPE CRADLE	C.Y.	43	\$ 1,230.00	\$ 52,890.00		\$ -	47.	\$ 57,810.00	47.	\$ 57,810.00
2412.502	12X5 PRECAST CONCRETE END SECTION	Each	2	\$ 8,070.00	\$ 16,140.00		\$ -	2.	\$ 16,140.00	2.	\$ 16,140.00
2412.502	14X7 PRECAST CONCRETE END SECTION (TYPE III)	Each	2	\$ 17,615.00	\$ 35,230.00		\$ -	2.	\$ 35,230.00	2.	\$ 35,230.00
2412.503	12X5 PRECAST CONCRETE BOX CULVERT	Lin. Ft.	62	\$ 950.00	\$ 58,900.00		\$ -	62.	\$ 58,900.00	62.	\$ 58,900.00
2412.503	14X7 PRECAST CONCRETE BOX CULVERT	Lin. Ft.	90	\$ 1,130.00	\$ 101,700.00		\$ -	90.	\$ 101,700.00	90.	\$ 101,700.00
2451.507	GRANULAR BACKFILL (CV) (P)	C.Y.	727	\$ 21.50	\$ 15,630.50		\$ -	727.	\$ 15,630.50	727.	\$ 15,630.50
2451.507	GRANULAR BEDDING (CV) (P)	C.Y.	1,573	\$ 21.50	\$ 33,819.50		\$ -	1,573.	\$ 33,819.50	1,573.	\$ 33,819.50
2452.618	VINYL SHEET PILING	SQ. FT.	8,250	\$ 9.50	\$ 78,375.00		\$ -		\$ -		\$ -
2501.502	18" GS APRON	Each	4	\$ 150.00	\$ 600.00		\$ -	4.	\$ 600.00	4.	\$ 600.00
2501.502	24" GS APRON	Each	2	\$ 200.00	\$ 400.00		\$ -	2.	\$ 400.00	2.	\$ 400.00
2501.502	36" GS APRON	Each	2	\$ 430.00	\$ 860.00		\$ -	2.	\$ 860.00	2.	\$ 860.00
2501.502	60" RC PIPE APRON	Each	2	\$ 2,300.00	\$ 4,600.00		\$ -	2.	\$ 4,600.00	2.	\$ 4,600.00
2501.502	FLAP GATE FOR 18" CS PIPE CULVERT	Each	33	\$ 615.00	\$ 20,295.00		\$ -	41.	\$ 25,215.00	41.	\$ 25,215.00
2501.502	FLAP GATE FOR 24" CS PIPE CULVERT	Each	6	\$ 680.00	\$ 4,080.00		\$ -	8.	\$ 5,440.00	8.	\$ 5,440.00
2501.502	FLAP GATE FOR 36" CS PIPE CULVERT	Each	1	\$ 1,000.00	\$ 1,000.00		\$ -	1.	\$ 1,000.00	1.	\$ 1,000.00
2501.502	35" SPAN GS PIPE-ARCH APRON	Each	6	\$ 355.00	\$ 2,130.00		\$ -	6.	\$ 2,130.00	6.	\$ 2,130.00
2501.502	42" SPAN GS PIPE-ARCH APRON	Each	8	\$ 470.00	\$ 3,760.00		\$ -	8.	\$ 3,760.00	8.	\$ 3,760.00
2501.502	57" SPAN GS PIPE-ARCH APRON	Each	4	\$ 965.00	\$ 3,860.00		\$ -	4.	\$ 3,860.00	4.	\$ 3,860.00
2501.502	64" SPAN GS PIPE-ARCH APRON	Each	6	\$ 1,170.00	\$ 7,020.00		\$ -	6.	\$ 7,020.00	6.	\$ 7,020.00
2501.502	71" SPAN GS PIPE-ARCH APRON	Each	10	\$ 1,470.00	\$ 14,700.00		\$ -	10.	\$ 14,700.00	10.	\$ 14,700.00
2501.502	73" SPAN GS PIPE-ARCH APRON	Each	8	\$ 2,300.00	\$ 18,400.00		\$ -	8.	\$ 18,400.00	8.	\$ 18,400.00
2501.502	65" SPAN RC PIPE-ARCH APRON	Each	2	\$ 2,100.00	\$ 4,200.00		\$ -	2.	\$ 4,200.00	2.	\$ 4,200.00
2501.503	18" CS PIPE CULVERT	Lin. Ft.	1,474	\$ 30.00	\$ 44,220.00		\$ -	1,926.	\$ 57,780.00	1,926.	\$ 57,780.00
2501.503	24" CS PIPE CULVERT	Lin. Ft.	328	\$ 35.00	\$ 11,480.00		\$ -	454.	\$ 15,890.00	454.	\$ 15,890.00
2501.503	36" CS PIPE CULVERT	Lin. Ft.	72	\$ 54.00	\$ 3,888.00		\$ -	72.	\$ 3,888.00	72.	\$ 3,888.00



Client Project No. 176
HEI Project No. 3655-0091
Project: *Black River Impoundment Project*
Location: *Bray, Sanders, Polk Centre, & Black River Townships, Pennington Cty*
Contractor: *R.J. Zavoral & Sons, Inc.*

PAY ESTIMATE

Page 2 of 3

PAY ESTIMATE #:	19
SUBMITTED:	9/8/2022
BEGIN DATE:	9/3/2022
END DATE:	9/16/2022

ITEM NO.	DESCRIPTION	UNIT	CONTRACT			CURRENT PAY ESTIMATE		PREVIOUS PAY ESTIMATES		PAY ESTIMATES TO DATE	
			QUANTITY	PRICE	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
2501.503	35" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	132	\$ 53.00	\$ 6,996.00		\$ -	132.	\$ 6,996.00	132.	\$ 6,996.00
2501.503	42" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	172	\$ 60.00	\$ 10,320.00		\$ -	172.	\$ 10,320.00	172.	\$ 10,320.00
2501.503	57" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	78	\$ 85.00	\$ 6,630.00		\$ -	78.	\$ 6,630.00	78.	\$ 6,630.00
2501.503	64" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	136	\$ 115.00	\$ 15,640.00		\$ -	136.	\$ 15,640.00	136.	\$ 15,640.00
2501.503	71" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	300	\$ 140.00	\$ 42,000.00		\$ -	300.	\$ 42,000.00	300.	\$ 42,000.00
2501.503	73" SPAN CS PIPE-ARCH CULVERT	Lin. Ft.	158	\$ 130.00	\$ 20,540.00		\$ -	158.	\$ 20,540.00	158.	\$ 20,540.00
2501.503	87" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	170	\$ 160.00	\$ 27,200.00		\$ -	92.	\$ 14,720.00	92.	\$ 14,720.00
2501.503	103" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	159	\$ 190.00	\$ 30,210.00		\$ -	160.	\$ 30,400.00	160.	\$ 30,400.00
2501.503	117" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	68	\$ 225.00	\$ 15,300.00		\$ -	68.	\$ 15,300.00	68.	\$ 15,300.00
2501.503	142" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	134	\$ 355.00	\$ 47,570.00		\$ -	134.	\$ 47,570.00	134.	\$ 47,570.00
2501.503	65" SPAN RC PIPE-ARCH CULVERT	Lin. Ft.	76	\$ 230.00	\$ 17,480.00		\$ -	76.	\$ 17,480.00	76.	\$ 17,480.00
2501.503	60" RC PIPE CULVERT DESIGN 3006 CLASS II	Lin. Ft.	82	\$ 215.00	\$ 17,630.00		\$ -	82.	\$ 17,630.00	82.	\$ 17,630.00
2501.503	60" RC PIPE CULVERT DESIGN 3006 CLASS III	Lin. Ft.	52	\$ 235.00	\$ 12,220.00		\$ -	52.	\$ 12,220.00	52.	\$ 12,220.00
2501.602	PLUG AND ABANDON PIPE CULVERT	Each	8	\$ 775.00	\$ 6,200.00		\$ -	8.	\$ 6,200.00	8.	\$ 6,200.00
2511.507	RANDOM RIPRAP CLASS II	C.Y.	259	\$ 95.00	\$ 24,605.00		\$ -	336.	\$ 31,920.00	336.	\$ 31,920.00
2511.507	RANDOM RIPRAP CLASS III	C.Y.	3,941	\$ 95.00	\$ 374,395.00		\$ -	4,506.	\$ 428,070.00	4,506.	\$ 428,070.00
2563.601	TRAFFIC CONTROL	Lump Sum	1	\$ 25,000.00	\$ 25,000.00		\$ -	1.	\$ 25,000.00	1.	\$ 25,000.00
2573.501	STABILIZED CONSTRUCTION EXIT	Lump Sum	1	\$ 3,500.00	\$ 3,500.00		\$ -		\$ -		\$ -
2573.503	SILT FENCE TYPE MS	Lin. Ft.	2,020	\$ 1.20	\$ 2,424.00		\$ -	1,346.	\$ 1,615.20	1,346.	\$ 1,615.20
2573.503	SEDIMENT CONTROL LOG TYPE STRAW	Lin. Ft.	370	\$ 5.00	\$ 1,850.00		\$ -		\$ -		\$ -
2573.503	FLOTATION SILT CURTAIN TYPE WORK AREA	Lin. Ft.	120	\$ 20.00	\$ 2,400.00		\$ -		\$ -		\$ -
2573.607	ROCK DITCH CHECK	C.Y.	114	\$ 120.00	\$ 13,680.00		\$ -	57.	\$ 6,840.00	57.	\$ 6,840.00
2574.508	FERTILIZER, TYPE 1	Pound	53,876	\$ 0.45	\$ 24,244.20		\$ -	60,192.	\$ 27,086.40	60,192.	\$ 27,086.40
2575.504	RAPID STABILIZATION METHOD 4	S.Y.	1,983	\$ 1.10	\$ 2,181.30	4,430	\$ 4,430	1,994.	\$ 2,193.40	1,994.	\$ 2,193.40
2575.504	EROSION CONTROL BLANKET CATEGORY 3	S.Y.	5,999	\$ 1.00	\$ 5,999.00	5,400	\$ 5,400.00	500.	\$ 500.00	5,900.	\$ 5,900.00
2575.505	SEEDING	Acre	289.6	\$ 100.00	\$ 28,960.00	11.5	\$ 1,150	300.4	\$ 30,040.00	338.4	\$ 33,840.00
2575.505	DISK ANCHORING	Acre	289.6	\$ 20.00	\$ 5,792.00	10.6	\$ 212	319.95	\$ 6,399.00	345.95	\$ 6,919.00
2575.508	SEED MIXTURE 22-111	Pound	8,833	\$ 2.50	\$ 22,082.50	350	\$ 875	7,994.	\$ 19,985.00	9,153.	\$ 22,882.50
2575.508	SEED MIXTURE 25-141	Pound	17,086	\$ 3.00	\$ 51,258.00	678	\$ 2,034	15,464.	\$ 46,392.00	17,706.	\$ 53,118.00
2575.509	MULCH MATERIAL TYPE 1	Ton	579.2	\$ 85.00	\$ 49,232.00	21.2	\$ 1,802	560.4	\$ 47,634.00	612.4	\$ 52,054.00
2582.503	4" SOLID LINE PAINT (WHITE)	Lin. Ft.	686	\$ 2.20	\$ 1,509.20		\$ -		\$ -		\$ -
2582.503	4" BROKEN LINE PAINT (YELLOW)	Lin. Ft.	90	\$ 2.20	\$ 198.00		\$ -		\$ -		\$ -
Extra / Change Order Items											
2101.601	CLEARING AND GRUBBING	Acre	3.5	\$ 2,480.00	\$ 8,680.00		\$ -	3.5	\$ 8,680.00	3.5	\$ 8,680.00
2104.601	CSAH 3 DIVERSION DITCH STA. 20+98.40 SALVAGE AND INSTALL 142" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	72.	\$ 283.00	\$ 20,376.00		\$ -	72.	\$ 20,376.00	72.	\$ 20,376.00
2104.601	CSAH 3 DIVERSION DITCH STA. 60+40 SALVAGE AND INSTALL 142" SPAN CS PIPE-ARCH CULVERT (BEVELED)	Lin. Ft.	62.	\$ 283.00	\$ 17,546.00		\$ -	62.	\$ 17,546.00	62.	\$ 17,546.00
2104.601	SOUTH DIVERSION DITCH STA. 84+63 SALVAGE AND INSTALL 64" SPAN CS PIPE-ARCH CULVERT WITH APRONS	Lin. Ft.	30.	\$ 165.00	\$ 4,950.00		\$ -	30.	\$ 4,950.00	30.	\$ 4,950.00
2104.601	SOUTH DIVERSION DITCH STA. 96+17 SALVAGE AND INSTALL 64" SPAN CS PIPE-ARCH CULVERT WITH APRONS	Lin. Ft.	58.	\$ 165.00	\$ 9,570.00		\$ -	58.	\$ 9,570.00	58.	\$ 9,570.00
2105.507	COMMON EXCAVATION (LEVEE)	C.Y.	2,852	\$ 2.50	\$ 7,130.00		\$ -	2,852.	\$ 7,130.00	2,852.	\$ 7,130.00
2105.507	COMMON EXCAVATION (CHURCH AREA)	C.Y.	6,140	\$ 5.20	\$ 31,928.00		\$ -	6,140.	\$ 31,928.00	6,140.	\$ 31,928.00
2105.507	COMMON EXCAVATION (P) (Co Road 68 Diversion Ditch Modification)	C.Y.	1,870	\$ 2.25	\$ 4,207.50		\$ -	1,870.	\$ 4,207.50	1,870.	\$ 4,207.50
2105.601	CLAY BORROW (LV)	C.Y.	1,000	\$ 11.00	\$ 11,000.00		\$ -	1,888.	\$ 20,768.00	1,888.	\$ 20,768.00



Client Project No. 176
HEI Project No. 3655-0091
Project: *Black River Impoundment Project*
Location: *Bray, Sanders, Polk Centre, & Black River Townships, Pennington Cty*
Contractor: *R.J. Zavoral & Sons, Inc.*

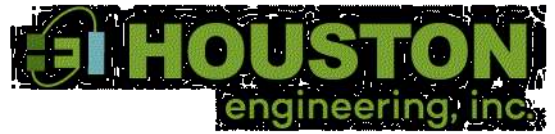
PAY ESTIMATE

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PAY ESTIMATE #:	19
SUBMITTED:	9/8/2022
BEGIN DATE:	9/3/2022
END DATE:	9/16/2022

ITEM NO.	DESCRIPTION	UNIT	CONTRACT			CURRENT PAY ESTIMATE		PREVIOUS PAY ESTIMATES		PAY ESTIMATES TO DATE	
			QUANTITY	PRICE	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
2106.507	COMMON EMBANKMENT (CV) (P)	C.Y.	1,455	\$ 2.63	\$ 3,826.65		\$ -	1,455.	\$ 3,826.65	1,455.	\$ 3,826.65
2123.510	DOZER (2022 FUEL ADJUSTMENT)	Hour	40	\$ 170.00	\$ 6,800.00		\$ -	124.	\$ 21,080.00	124.	\$ 21,080.00
2123.610	CRAWLER MOUNTED BACKHOE (2022 FUEL ADJUSTMENT)	Hour	40	\$ 205.00	\$ 8,200.00		\$ -	35.5	\$ 7,277.50	35.5	\$ 7,277.50
2452.618	VINYL SHEET PILING (EXCAVATED METHOD)	Sq. Ft.	5,775	\$ 11.75	\$ 67,856.25		\$ -	8,250.	\$ 96,937.50	8,250.	\$ 96,937.50
2452.618	VINYL SHEET PILING	Sq. Ft.	-5,775	\$ 9.50	\$ (54,862.50)		\$ -		\$ -		\$ -
2501.502	INSTALL 71" SPAN GS PIPE-ARCH APRON	Each	2	\$ 467.97	\$ 935.94		\$ -	2.	\$ 935.94	2.	\$ 935.94
2501.503	INSTALL 71" SPAN GS PIPE-ARCH CULVERT	Lin. Ft.	50	\$ 55.11	\$ 2,755.50		\$ -	50.	\$ 2,755.50	50.	\$ 2,755.50
2501.503	71" SPAN CS STRUCTURAL PLATE-ARCH CULVERT	Lin. Ft.	28	\$ 350.00	\$ 9,800.00		\$ -	28.	\$ 9,800.00	28.	\$ 9,800.00
Totals											
					Original Contract Amount	\$ 4,374,457.66					
					Extra / Change Order Amount	\$ 160,699.34					
						Work Completed	\$ 23,763.50		\$ 4,675,100.70		\$ 4,698,864.20

INVOICE



HEI Invoice 60353 Items Qualifying for FEMA Disaster = \$6,410.10
See highlighted breakdowns attached.

Remit to:

1401 21st Ave N, Fargo, ND 58102

Phone: 701.237.5065

Fed Tax ID: 45-0314557

Interest of 1%/month applied to past due invoices

Red Lake Watershed District
1000 Pennington Avenue South
Thief River Falls, MN 56701

Invoice Number: 60353
Date: July 12, 2022
Project Number: R163655-0091

Black River Impoundment

For Professional Services Rendered Through: July 02, 2022

Work Performed:

Phase 006) Multiple project site inspections with RLWD staff after severe rainfall events, evaluation of damages, document damages, and punch list items, project coordination, drainage area calcs for additional SWI's, spring damage evaluation and cost estimate, construction meeting with RJZ and RLWD to go over remaining items and if contract responsible or not, draft and execute change order for failed culverts, construction inspection, construction culvert staking, and construction coordination.

006 - Construction Engineering Professional Services

	Hours	Rate	Amount
Engineer 12	.25	221.00	\$55.25
Engineer 3	1.50	140.00	\$210.00
Engineer 8	37.00	184.00	\$6,808.00
Technician 4	57.00	126.00	\$7,182.00
	95.75		\$14,255.25

Reimbursable Expenses

	Units	Rate	Amount
Unit - Company Survey/Inspection Mileage (TRF)	110.0000	.785	\$86.35
Unit - GPS (TRF)	4.0000	25.000	\$100.00
			\$186.35

006 - Construction Engineering Total: \$14,441.60

Invoice Total \$14,441.60

Outstanding Invoices

Invoice		0 - 30	31 - 60	61-90	Over 90	Balance
0059408	4/30/2022		\$3,552.50			\$3,552.50
Invoice # 0059408			\$3,552.50			\$3,552.50
Total Prior Billing			\$3,552.50			\$3,552.50

Houston Engineering, Inc.

Backup

Invoice #: 60353

Date: July 12, 2022

Firm ID: R163655-0091

For Professional Services Rendered Through: July 02, 2022

006 - Construction Engineering
Professional Services

	Date	Hours	Rate	Amount
Engineer 12				
Langan, Jeffery J.	6/7/2022	.25	221.00	\$55.25
review site and discuss access abilities to outlet structure				
Engineer 3				
Halstensgard, Ericka L.	5/4/2022	.75	140.00	\$105.00
drainage area for Side Inlet pipe at Station 39+86				
Halstensgard, Ericka L.	6/16/2022	.75	140.00	\$105.00
Determining drainage area and pipe sizes for side inlets				
Engineer 8				
Nordby, Tony A.	4/27/2022	2.50	184.00	\$460.00
Site inspection and review of recent rain runoff				
Nordby, Tony A.	4/29/2022	.50	184.00	\$92.00
Gate closure coordination				
Nordby, Tony A.	5/4/2022	.50	184.00	\$92.00
Project and erosion coordination				
Nordby, Tony A.	5/5/2022	.50	184.00	\$92.00
Project and erosion coordination				
Nordby, Tony A.	5/10/2022	.50	184.00	\$92.00
Cost estimate for damages for disaster claims				
Nordby, Tony A.	5/12/2022	.25	184.00	\$46.00
Disaster declaration coordination				
Nordby, Tony A.	5/24/2022	1.50	184.00	\$276.00
Review of items needing to be completed and coordination with contractor				
Nordby, Tony A.	5/27/2022	1.50	184.00	\$276.00
Punch list coordination				
Nordby, Tony A.	5/31/2022	1.00	184.00	\$184.00
Coordination with erosion from project on private property				
Nordby, Tony A.	6/1/2022	6.00	184.00	\$1,104.00
Preparation and inspection/punch list items review on site with Myron and go over list with Travis to implement in list to review with contractor.				
Nordby, Tony A.	6/3/2022	.50	184.00	\$92.00
Project coordination				
Nordby, Tony A.	6/6/2022	.25	184.00	\$46.00
Communication on upcoming meeting				
Nordby, Tony A.	6/7/2022	4.00	184.00	\$736.00
Reviewed punch list items and determine if payable or part of contract with Travis				
Nordby, Tony A.	6/8/2022	1.50	184.00	\$276.00
Coordination with RLWD, punch list, prep for board meeting				

Nordby, Tony A.	6/9/2022	1.50	184.00	\$276.00
Project coordination, prep for RJZ meeting				
Nordby, Tony A.	6/10/2022	4.00	184.00	\$736.00
Preparation and meeting with RJZ and coordination after meeting				
Nordby, Tony A.	6/13/2022	1.00	184.00	\$184.00
Project coordination with contractor on change order				
Nordby, Tony A.	6/14/2022	3.00	184.00	\$552.00
Change order draft and coordination				
Nordby, Tony A.	6/20/2022	4.00	184.00	\$736.00
Construction coordination, change order discussion and review.				
Nordby, Tony A.	6/22/2022	1.50	184.00	\$276.00
Change order final and coordination				
Nordby, Tony A.	6/23/2022	.50	184.00	\$92.00
Project coordination				
Nordby, Tony A.	6/27/2022	.50	184.00	\$92.00
Coordination with RLWD and RJZ on getting punch list going and schedule				
Technician 4				
Nelson, Travis M.	4/22/2022	.50	126.00	\$63.00
Impoundment closure and erosion communication				
Nelson, Travis M.	4/28/2022	1.00	126.00	\$126.00
Flood Damage Project Communication				
Nelson, Travis M.	5/19/2022	4.00	126.00	\$504.00
Disaster Declaration Cost Estimates and mapping				
Nelson, Travis M.	5/23/2022	8.00	126.00	\$1,008.00
Site visit with Nate Koland to identify disaster damage list. Site map, photos, and spreadsheet preparation for FEMA meeting.				
Nelson, Travis M.	5/25/2022	1.00	126.00	\$126.00
Disaster Damage assessment				
Nelson, Travis M.	5/26/2022	6.00	126.00	\$756.00
Punchlist inventory on Black River Project				
Nelson, Travis M.	5/27/2022	5.00	126.00	\$630.00
Creating a working punchlist from the project inspection notes completed on 5.26.22.				
Nelson, Travis M.	5/31/2022	2.00	126.00	\$252.00
Construction Inspection and punchlist inventory.				
Nelson, Travis M.	6/1/2022	4.00	126.00	\$504.00
Construction Inspection and punchlist inventory.				
Nelson, Travis M.	6/6/2022	2.00	126.00	\$252.00
Documentation of the punch list draft for the 2022 construction season.				
Nelson, Travis M.	6/7/2022	6.00	126.00	\$756.00
Documentation and review of the working draft punch list for construction meeting.				
Nelson, Travis M.	6/10/2022	3.00	126.00	\$378.00
Construction meeting with RJZ at the RLWD office to discuss the project items that need to be addressed during this construction season.				
Nelson, Travis M.	6/13/2022	1.00	126.00	\$126.00
Phone calls with contractor, RJZ, discussing the construction schedule and construction staking needs.				
Nelson, Travis M.	6/15/2022	5.00	126.00	\$630.00
Staking mainline culverts on CSAH 3 Diversion Ditch.				
Nelson, Travis M.	6/16/2022	1.00	126.00	\$126.00
Phone calls and emails on project schedule and repair work coordination				
Nelson, Travis M.	6/20/2022	6.00	126.00	\$756.00
Construction inspection on CSAH 3 Diversion mainline pipe replacement.				
Nelson, Travis M.	6/21/2022	.50	126.00	\$63.00
Construction inspection communication and scheduling.				

Nelson, Travis M.	6/22/2022	.50	126.00	\$63.00
Construction inspection communication				
Nelson, Travis M.	6/27/2022	.50	126.00	\$63.00
Project communication				
Totals		95.75		\$14,255.25
				\$14,255.25

Reimbursable Expenses

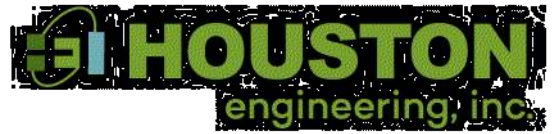
	Date	Qty	Unit Rate	Amount
Unit - Company Survey/Inspection Mileage (TRF)	5/26/2022	50.00	.785	\$39.25
Unit - Company Survey/Inspection Mileage (TRF)	6/15/2022	30.00	.785	\$23.55
Unit - Company Survey/Inspection Mileage (TRF)	6/20/2022	30.00	.785	\$23.55
Unit - GPS (TRF)	6/15/2022	4.00	25.000	\$100.00
Totals				\$186.35
				\$186.35

006 - Construction Engineering Total:

\$14,441.60

Backup Total \$14,441.60

INVOICE



HEI Invoice 60771 Items Qualifying for FEMA Disaster = \$28,533.00
See highlighted breakdowns attached.

Remit to:
1401 21st Ave N, Fargo, ND 58102

Phone: 701.237.5065

Fed Tax ID: 45-0314557

Interest of 1%/month applied to past due invoices

Red Lake Watershed District
1000 Pennington Avenue South
Thief River Falls, MN 56701

Invoice Number: 60771
Date: August 08, 2022
Project Number: R163655-0091

Black River Impoundment

For Professional Services Rendered Through: July 30, 2022

Work Performed:

Phase 006) Construction inspection, construction staking, landowner communication, construction coordination, and contractor prevailing wage payroll review/coordination.

006 - Construction Engineering Professional Services

	Hours	Rate	Amount
Engineer 2	4.00	133.00	\$532.00
Engineer 8	13.50	184.00	\$2,484.00
Project Assistant 1	2.00	74.00	\$148.00
Technician 4	192.00	126.00	\$24,192.00
	211.50		\$27,356.00

Reimbursable Expenses

	Units	Rate	Amount
Unit - Company Survey/Inspection Mileage (TRF)	800.0000	.825	\$660.00
Unit - GPS (TRF)	72.0000	25.000	\$1,800.00
Unit - Hubs (TRF)	1.0000	15.000	\$15.00
Unit - Lath (TRF)	5.0000	30.000	\$150.00
			\$2,625.00

006 - Construction Engineering Total: \$29,981.00

Invoice Total \$29,981.00

Outstanding Invoices

Invoice	0 - 30	31 - 60	61-90	Over 90	Balance
0059408 4/30/2022			\$3,552.50		\$3,552.50
Invoice # 0059408			\$3,552.50		\$3,552.50
Total Prior Billing			\$3,552.50		\$3,552.50

Houston Engineering, Inc.

Backup

Invoice #: 60771
 Date: August 08, 2022
 Firm ID: R163655-0091

For Professional Services Rendered Through: July 30, 2022

006 - Construction Engineering Professional Services

	Date	Hours	Rate	Amount
Engineer 2				
Kukowski, Kade A.	7/19/2022	4.00	133.00	\$532.00
staking checklist items				
Engineer 8				
Nordby, Tony A.	7/5/2022	.25	184.00	\$46.00
Construction coordination				
Nordby, Tony A.	7/6/2022	.50	184.00	\$92.00
Construction coordination and field design				
Nordby, Tony A.	7/7/2022	1.50	184.00	\$276.00
Construction coordination				
Nordby, Tony A.	7/8/2022	.50	184.00	\$92.00
Construction coordination				
Nordby, Tony A.	7/11/2022	.25	184.00	\$46.00
Construction coordination				
Nordby, Tony A.	7/12/2022	.50	184.00	\$92.00
Construction coordination				
Nordby, Tony A.	7/13/2022	.75	184.00	\$138.00
Construction coordination				
Nordby, Tony A.	7/14/2022	3.50	184.00	\$644.00
Construction coordination on Swanson crossing and culvert issues.				
Nordby, Tony A.	7/15/2022	.50	184.00	\$92.00
Construction coordination				
Nordby, Tony A.	7/18/2022	1.00	184.00	\$184.00
Construction coordination on Swanson Culvert				
Nordby, Tony A.	7/19/2022	1.25	184.00	\$230.00
Construction coordination				
Nordby, Tony A.	7/20/2022	.75	184.00	\$138.00
Construction coordination				
Nordby, Tony A.	7/21/2022	.50	184.00	\$92.00
Construction coordination				
Nordby, Tony A.	7/22/2022	.75	184.00	\$138.00
Construction coordination				
Nordby, Tony A.	7/28/2022	.50	184.00	\$92.00
Construction coordination				
Nordby, Tony A.	7/29/2022	.50	184.00	\$92.00
Construction coordination				
Project Assistant 1				
Jung, Beverly J.	7/5/2022	.25	74.00	\$18.50
-Checking prevailing wage rates for this project				

Jung, Beverly J.	7/8/2022	.25	74.00	\$18.50
-Checking prevailing wage rates for this project				
Jung, Beverly J.	7/18/2022	.50	74.00	\$37.00
-Checked prevailing wage rates for this project				
Jung, Beverly J.	7/21/2022	.75	74.00	\$55.50
-Checked multiple wage rates for this project				
Jung, Beverly J.	7/29/2022	.25	74.00	\$18.50
-Began some wage reviews for this project				
Technician 4				
Nelson, Travis M.	7/6/2022	3.00	126.00	\$378.00
Construction schedule. Contractor and Landowner communication				
Nelson, Travis M.	7/7/2022	12.00	126.00	\$1,512.00
Construction inspection for repair and punchlist items.				
Meeting with Curtis Swanson and Tim Sedalek about field crossing.				
Staking mainline pipes on CSAH 2 diversion ditch and south diversion ditch. Staking side inlet pipe on south diversion at STA 89+90.				
Nelson, Travis M.	7/8/2022	10.00	126.00	\$1,260.00
Construction inspection and staking.				
South diversion mainline pipe replacement at 84+63.				
Nelson, Travis M.	7/11/2022	12.00	126.00	\$1,512.00
Construction inspection.				
Staking side inlet pipe and ditch cleanouts along the South Diversion Ditch.				
Nelson, Travis M.	7/12/2022	12.00	126.00	\$1,512.00
Construction inspection.				
CSAH 3 Mainline Culvert Salvage and Re-install				
Nelson, Travis M.	7/13/2022	12.00	126.00	\$1,512.00
Construction inspection.				
CSAH 3 Mainline Culvert Salvage and Re-install				
Nelson, Travis M.	7/14/2022	12.00	126.00	\$1,512.00
Construction inspection.				
CSAH 3 Mainline Culvert Salvage and Re-install				
Nelson, Travis M.	7/18/2022	5.00	126.00	\$630.00
Construction inspection. Construction staking.				
CSAH 3 Mainline pipe installation.				
Nelson, Travis M.	7/19/2022	12.00	126.00	\$1,512.00
Construction inspection. Construction staking.				
CSAH 3 mainline pipe installation. Rip rap installation.				
Nelson, Travis M.	7/20/2022	14.00	126.00	\$1,764.00
Construction inspection. Construction Staking.				
South Diversion mainline pipe installation. Punchlist item inspection.				
Nelson, Travis M.	7/21/2022	14.00	126.00	\$1,764.00
Construction inspection. Construction Staking.				
South Diversion mainline pipe installation. Punchlist item inspection.				

Nelson, Travis M.	7/22/2022	11.00	126.00	\$1,386.00
Construction inspection. Construction Staking.				
South Diversion mainline pipe installation. Punchlist item inspection.		12		\$1,512
Nelson, Travis M.	7/25/2022	14.00	126.00	\$1,764.00
Construction inspection. Construction staking.				
Cty Rd 68 side inlet pipe installation, drain tile pipe and mainline pipe repairs.				
South Diversion and Outlet Channel slope restoration.				
Outlet Structure access road rough grading.				
Nelson, Travis M.	7/26/2022	11.00	126.00	\$1,386.00
Construction inspection				
Nelson, Travis M.	7/27/2022	13.00	126.00	\$1,638.00
Construction inspection.				
Construction staking.				
Punchlist items on the South Diversion ditch and the Outlet Channel.				
Nelson, Travis M.	7/28/2022	14.00	126.00	\$1,764.00
Construction inspection and staking.				
South Diversion Ditch and CSAH 3 Diversion Ditch Punchlist items.				
Nelson, Travis M.	7/29/2022	11.00	126.00	\$1,386.00
Construction inspection and staking.				
CSAH 3 Diversion Ditch and Sty Rd 68 Punchlist items.				
Totals		211.50		\$27,356.00
				\$27,356.00

Reimbursable Expenses

	Date	Qty	Unit Rate	Amount
Unit - Company Survey/Inspection Mileage (TRF)	7/7/2022	40.00	.825	\$33.00
Unit - Company Survey/Inspection Mileage (TRF)	7/8/2022	40.00	.825	\$33.00
Unit - Company Survey/Inspection Mileage (TRF)	7/11/2022	40.00	.825	\$33.00
Unit - Company Survey/Inspection Mileage (TRF)	7/12/2022	40.00	.825	\$33.00
Unit - Company Survey/Inspection Mileage (TRF)	7/13/2022	40.00	.825	\$33.00
Unit - Company Survey/Inspection Mileage (TRF)	7/14/2022	40.00	.825	\$33.00
Unit - Company Survey/Inspection Mileage (TRF)	7/18/2022	40.00	.825	\$33.00
Unit - Company Survey/Inspection Mileage (TRF)	7/19/2022	40.00	.825	\$33.00
Unit - Company Survey/Inspection Mileage (TRF)	7/20/2022	60.00	.825	\$49.50
Unit - Company Survey/Inspection Mileage (TRF)	7/21/2022	60.00	.825	\$49.50
Unit - Company Survey/Inspection Mileage (TRF)	7/22/2022	60.00	.825	\$49.50
Unit - Company Survey/Inspection Mileage (TRF)	7/25/2022	60.00	.825	\$49.50
Unit - Company Survey/Inspection Mileage (TRF)	7/26/2022	60.00	.825	\$49.50
Unit - Company Survey/Inspection Mileage (TRF)	7/27/2022	60.00	.825	\$49.50
Unit - Company Survey/Inspection Mileage (TRF)	7/28/2022	60.00	.825	\$49.50
Unit - Company Survey/Inspection Mileage (TRF)	7/29/2022	60.00	.825	\$49.50
Unit - GPS (TRF)	7/7/2022	4.00	25.000	\$100.00
Unit - GPS (TRF)	7/8/2022	2.00	25.000	\$50.00
Unit - GPS (TRF)	7/11/2022	3.00	25.000	\$75.00
Unit - GPS (TRF)	7/12/2022	4.00	25.000	\$100.00
Unit - GPS (TRF)	7/13/2022	4.00	25.000	\$100.00
Unit - GPS (TRF)	7/14/2022	4.00	25.000	\$100.00

Unit - GPS (TRF)	7/18/2022	2.00	25.000	\$50.00
Unit - GPS (TRF)	7/19/2022	6.00	25.000	\$150.00
Unit - GPS (TRF)	7/20/2022	2.00	25.000	\$50.00
Unit - GPS (TRF)	7/21/2022	6.00	25.000	\$150.00
Unit - GPS (TRF)	7/22/2022	6.00	25.000	\$150.00
Unit - GPS (TRF)	7/25/2022	6.00	25.000	\$150.00
Unit - GPS (TRF)	7/26/2022	1.00	25.000	\$25.00
Unit - GPS (TRF)	7/27/2022	8.00	25.000	\$200.00
Unit - GPS (TRF)	7/28/2022	8.00	25.000	\$200.00
Unit - GPS (TRF)	7/29/2022	6.00	25.000	\$150.00
Unit - Hubs (TRF)	7/19/2022	1.00	15.000	\$15.00
Unit - Lath (TRF)	7/11/2022	1.00	30.000	\$30.00
Unit - Lath (TRF)	7/19/2022	1.00	30.000	\$30.00
Unit - Lath (TRF)	7/25/2022	1.00	30.000	\$30.00
Unit - Lath (TRF)	7/27/2022	1.00	30.000	\$30.00
Unit - Lath (TRF)	7/29/2022	1.00	30.000	\$30.00

Totals

\$2,625.00

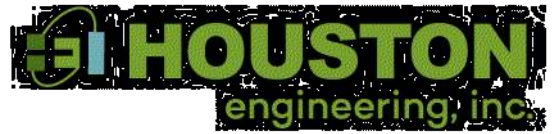
\$2,625.00

006 - Construction Engineering Total:

\$29,981.00

Backup Total \$29,981.00

INVOICE



HEI Invoice 61208 Items Qualifying for FEMA Disaster = \$4,603.50
See highlighted breakdowns attached.

Remit to:
1401 21st Ave N, Fargo, ND 58102

Phone: 701.237.5065

Fed Tax ID: 45-0314557

Interest of 1%/month applied to past due invoices

Red Lake Watershed District
1000 Pennington Avenue South
Thief River Falls, MN 56701

Invoice Number: 61208
Date: September 02, 2022
Project Number: R163655-0091

Black River Impoundment

For Professional Services Rendered Through: August 27, 2022

Work Performed:

Phase 006) Construction inspection, construction staking, landowner communication, construction coordination, and contractor prevailing wage payroll review/coordination.

006 - Construction Engineering Professional Services

	Hours	Rate	Amount
Engineer 8	17.25	184.00	\$3,174.00
Project Assistant 1	2.25	74.00	\$166.50
Technician 4	164.00	126.00	\$20,664.00
	183.50		\$24,004.50

Reimbursable Expenses

	Units	Rate	Amount
Unit - Company Car Mileage (TRF)	20.0000	.625	\$12.50
Unit - Company Survey/Inspection Mileage (TRF)	1020.0000	.825	\$841.50
Unit - GPS (TRF)	58.0000	25.000	\$1,450.00
Unit - Lath (TRF)	3.0000	30.000	\$90.00
			\$2,394.00

006 - Construction Engineering Total: \$26,398.50

Invoice Total \$26,398.50

Outstanding Invoices

Invoice	0 - 30	31 - 60	61-90	Over 90	Balance
0059408 4/30/2022				\$3,552.50	\$3,552.50
Invoice # 0059408				\$3,552.50	\$3,552.50
Total Prior Billing				\$3,552.50	\$3,552.50

Houston Engineering, Inc.

Backup

Invoice #: 61208

Date: September 02, 2022

Firm ID: R163655-0091

For Professional Services Rendered Through: August 27, 2022

006 - Construction Engineering
Professional Services

	Date	Hours	Rate	Amount
Engineer 8				
Nordby, Tony A. Construction inspection with Myron and Travis	8/1/2022	3.00	184.00	\$552.00
Nordby, Tony A. Construction coordination	8/2/2022	1.00	184.00	\$184.00
Nordby, Tony A. Construction coordination	8/3/2022	.25	184.00	\$46.00
Nordby, Tony A. Black River Inspection with Myron and Travis	8/4/2022	2.75	184.00	\$506.00
Nordby, Tony A. Construction coordination	8/5/2022	.50	184.00	\$92.00
Nordby, Tony A. Construction coordination on aggregate surfacing with RJZ, partial payment 17 review and quantities with Travis.	8/8/2022	1.50	184.00	\$276.00
Nordby, Tony A. Partial payment 17 and construction coordination	8/9/2022	.50	184.00	\$92.00
Nordby, Tony A. Construction coordination	8/10/2022	1.00	184.00	\$184.00
Nordby, Tony A. Construction coordination	8/11/2022	.50	184.00	\$92.00
Nordby, Tony A. Construction coordination	8/12/2022	.75	184.00	\$138.00
Nordby, Tony A. Construction coordination	8/16/2022	.50	184.00	\$92.00
Nordby, Tony A. Construction coordination	8/19/2022	.25	184.00	\$46.00
Nordby, Tony A. Construction inspection with Myron and Travis	8/22/2022	3.25	184.00	\$598.00
Nordby, Tony A. Construction coordination	8/23/2022	1.00	184.00	\$184.00
Nordby, Tony A. Construction coordination	8/25/2022	.50	184.00	\$92.00
Project Assistant 1				
Jung, Beverly J. -Checked Wages for this project	8/1/2022	.50	74.00	\$37.00
Jung, Beverly J. -Starting checking wages for this project	8/5/2022	.25	74.00	\$18.50
Jung, Beverly J. -Finished checking wages for this project	8/8/2022	.25	74.00	\$18.50

Jung, Beverly J.	8/12/2022	.25	74.00	\$18.50
- Began Wage review for this project				
Jung, Beverly J.	8/15/2022	.25	74.00	\$18.50
Finished wage reviews for this project				
Jung, Beverly J.	8/22/2022	.25	74.00	\$18.50
-Review Wages for this project				
Jung, Beverly J.	8/26/2022	.50	74.00	\$37.00
-Review Wages for this project				
Technician 4				
Nelson, Travis M.	8/1/2022	13.00	126.00	\$1,638.00
Construction inspection				
Construction staking				
CSAH 12 Diversion Ditch				
Nelson, Travis M.	8/2/2022	13.00	126.00	\$1,638.00
Construction inspection				
Construction staking				
CSAH 12 Diversion Ditch				
Nelson, Travis M.	8/3/2022	13.00	126.00	\$1,638.00
Construction inspection				
Construction staking				
CSAH 12 Diversion Ditch				
Nelson, Travis M.	8/4/2022	14.00	126.00	\$1,764.00
Construction inspection				
Construction staking				
CSAH 12 Diversion Ditch				
Nelson, Travis M.	8/5/2022	12.00	126.00	\$1,512.00
Construction inspection				
Construction staking				
CSAH 12 Diversion Ditch				
Nelson, Travis M.	8/8/2022	10.00	126.00	\$1,260.00
Construction inspection.				
Construction Staking.				
CSAH 12 Diversion Ditch. Punchlist items.				
Nelson, Travis M.	8/9/2022	10.00	126.00	\$1,260.00
Construction inspection.				
Construction Staking.				
CSAH 12 Diversion Ditch. Punchlist items.				
Nelson, Travis M.	8/10/2022	8.00	126.00	\$1,008.00
Construction inspection.				
Construction Staking.				
CSAH 12 Diversion Ditch. Punchlist items.				

Nelson, Travis M. 8/11/2022 6.00 126.00 \$756.00

Construction inspection. CSAH 12 Diversion Ditch.

Meeting with Pennington County to look at what roads to gravel.

Nelson, Travis M. 8/15/2022 8.00 126.00 \$1,008.00

Construction inspection.

3

\$378

Construction staking.

Nelson, Travis M. 8/16/2022 ~~6.00~~ 126.00 ~~\$756.00~~

Construction Inspection.

CSAH 12 and CTY RD 68 Diversion Ditch Survey and staking.

3

\$378

Sediment Removal, slope reshaping, Culvert aprons and riprap corrections.

Nelson, Travis M. 8/17/2022 ~~6.00~~ 126.00 ~~\$756.00~~

Construction Inspection.

CSAH 12 and CTY RD 68 Diversion Ditch Survey and staking.

3

\$378

Sediment Removal, slope reshaping, Culvert aprons and riprap corrections.

Nelson, Travis M. 8/18/2022 ~~9.00~~ 126.00 ~~\$1,134.00~~

Construction inspection.

Construction Staking.

CSAH 12 Punchlist items

Outlet Structure Road Construction Staking

CTY Rd 68 Punchlist items. Apron repairs and rip rap.

Nelson, Travis M. 8/19/2022 2.00 126.00 \$252.00

Construction inspection.

2

\$252

Outlet Channel road construction

Nelson, Travis M. 8/22/2022 ~~8.00~~ 126.00 ~~\$1,008.00~~

Construction inspection.

Site visit with RJZ to look at progress on the the Outlet Structure road.

Site visit inspection with RLWD staff and project engineer.

Nelson, Travis M. 8/23/2022 9.00 126.00 \$1,134.00

Construction inspection

CSAH 12 seeding prep

4

\$504

Surface gravel on county and township roads.

Nelson, Travis M. 8/24/2022 ~~8.00~~ 126.00 ~~\$1,008.00~~

Construction inspection.

Meeting with Zach Bopp with RJZ to discuss punchlist items.

Meeting with Dale Berhow to discuss seeding and blanket items.

Nelson, Travis M. 8/25/2022 6.00 126.00 \$756.00

Construction inspection.

Communication with contractor.

Photo data uploads.

Nelson, Travis M. 8/26/2022 3.00 126.00 \$378.00

Construction inspection.

Punch list items.

Totals

183.50

\$24,004.50

\$24,004.50

Reimbursable Expenses

	Date	Qty	Unit Rate	Amount
Unit - Company Car Mileage (TRF)	8/5/2022	20.00	.625	\$12.50
Unit - Company Survey/Inspection Mileage (TRF)	8/1/2022	60.00	.825	\$49.50
Unit - Company Survey/Inspection Mileage (TRF)	8/2/2022	60.00	.825	\$49.50
Unit - Company Survey/Inspection Mileage (TRF)	8/3/2022	60.00	.825	\$49.50
Unit - Company Survey/Inspection Mileage (TRF)	8/4/2022	80.00	.825	\$66.00
Unit - Company Survey/Inspection Mileage (TRF)	8/5/2022	80.00	.825	\$66.00
Unit - Company Survey/Inspection Mileage (TRF)	8/8/2022	60.00	.825	\$49.50
Unit - Company Survey/Inspection Mileage (TRF)	8/9/2022	60.00	.825	\$49.50
Unit - Company Survey/Inspection Mileage (TRF)	8/10/2022	60.00	.825	\$49.50
Unit - Company Survey/Inspection Mileage (TRF)	8/11/2022	60.00	.825	\$49.50
Unit - Company Survey/Inspection Mileage (TRF)	8/15/2022	40.00	.825	\$33.00
Unit - Company Survey/Inspection Mileage (TRF)	8/16/2022	40.00	.825	\$33.00
Unit - Company Survey/Inspection Mileage (TRF)	8/17/2022	40.00	.825	\$33.00
Unit - Company Survey/Inspection Mileage (TRF)	8/18/2022	80.00	.825	\$66.00
Unit - Company Survey/Inspection Mileage (TRF)	8/19/2022	40.00	.825	\$33.00
Unit - Company Survey/Inspection Mileage (TRF)	8/22/2022	40.00	.825	\$33.00
Unit - Company Survey/Inspection Mileage (TRF)	8/23/2022	40.00	.825	\$33.00
Unit - Company Survey/Inspection Mileage (TRF)	8/24/2022	40.00	.825	\$33.00
Unit - Company Survey/Inspection Mileage (TRF)	8/25/2022	40.00	.825	\$33.00
Unit - Company Survey/Inspection Mileage (TRF)	8/26/2022	40.00	.825	\$33.00
Unit - GPS (TRF)	8/1/2022	6.00	25.000	\$150.00
Unit - GPS (TRF)	8/2/2022	6.00	25.000	\$150.00
Unit - GPS (TRF)	8/3/2022	8.00	25.000	\$200.00
Unit - GPS (TRF)	8/4/2022	8.00	25.000	\$200.00
Unit - GPS (TRF)	8/5/2022	8.00	25.000	\$200.00
Unit - GPS (TRF)	8/8/2022	6.00	25.000	\$150.00
Unit - GPS (TRF)	8/9/2022	6.00	25.000	\$150.00
Unit - GPS (TRF)	8/10/2022	4.00	25.000	\$100.00
Unit - GPS (TRF)	8/15/2022	2.00	25.000	\$50.00
Unit - GPS (TRF)	8/17/2022	2.00	25.000	\$50.00
Unit - GPS (TRF)	8/18/2022	2.00	25.000	\$50.00
Unit - Lath (TRF)	8/4/2022	2.00	30.000	\$60.00
Unit - Lath (TRF)	8/5/2022	1.00	30.000	\$30.00
Totals				\$2,394.00
				\$2,394.00

006 - Construction Engineering Total:

\$26,398.50

Backup Total \$26,398.50

Red Lake Watershed District
Statement of Activity by Class
January 1, 2019 - September 26, 2022

	Capital Project Fund	129AV LARSON RING DIKE	Total Capital Project Fund	TOTAL
Revenue				
41200 RED RIVER WATERSHED		19,601.63	19,601.63	19,601.63
42140 RING DIKE REVENUE - LANDOWNER		6,739.73	6,739.73	6,739.73
Estimated payment from RRWMB		4,434.53	4,434.53	4,434.53
Total Revenue	\$ 0.00	\$ 30,775.89	\$ 30,775.89	\$ 30,775.89
Gross Profit	\$ 0.00	\$ 30,775.89	\$ 30,775.89	\$ 30,775.89
Expenditures				
60020 CONSTRUCTION		42,927.29	42,927.29	42,927.29
60040 OVERHEAD		5,145.03	5,145.03	5,145.03
Total Expenditures	\$ 0.00	\$ 48,072.32	\$ 48,072.32	\$ 48,072.32
Net Operating Revenue	\$ 0.00	-\$ 17,296.43	-\$ 17,296.43	-\$ 17,296.43
Net Revenue	\$ 0.00	-\$ 17,296.43	-\$ 17,296.43	-\$ 17,296.43

Landowners portion 12.5%	\$ 6,009.04
Landowner Paid	\$ 6,739.73
Amount due back to landowner	\$ 730.69

RED LAKE WATERSHED DISTRICT
Application for Payment
Estimate of Work Completed

ESTIMATE NUMBER: 2
PROJECT NAME: Sorum Ring Dike
OWNER: Red Lake Watershed District
CONTRACT AMOUNT: \$129,214.40
CONTRACTOR: Paul Zavoral, Inc. dba Higher Ground

DATE: October 12, 2022
PROJECT NUMBER: 129AW
CONTRACT DATE: July 15, 2022
WORK COMPLETED: October 12, 2022

ITEM NO.	SPEC. NO.	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	QUANTITY COMPLETED			TOTAL AMOUNT
						PREVIOUS	CURRENT	TOTAL	
1	2021.501	Mobilization	LS	1	\$1,800.00	1	0	1	\$1,800.00
2	2101.501	Clearing and Grubbing	LS	1	\$2,800.00	1	0	1	\$2,800.00
3	2106.507	Common Excavation (P) Stripping	CY	1,302	\$2.995	1,302	0	1302	\$3,900.00
4	2106.507	Common Borrow (CV) (P) Embankment	CY	5,672	\$18.50	4,254	1,418	5672	\$104,932.00
5	2118.507	Aggregate Surfacing Class 5	CY	20	\$38.00	0	12	12	\$456.00
6	2123.51	Dozer - Interior Grading	HOUR	16	\$110.00	0	4	4	\$440.00
7	2501.502	18" CS Apron	EACH	3	\$220.80	2	1	3	\$717.60
8	2501.502	18" Gate Waterman Model C10	EACH	2	\$1,212.00	2	0	2	\$1,818.00
9	2501.503	18 CS Pipe Culvert	LF	80.00	\$43.50	60	20	80	\$3,480.00
10	2511.507	Random Riprap Class II	CY	15.00	\$56.00	0	6	6	\$336.00
11	2574.508	Fertilizer, Type 1	POUND	320	\$1.20	0	320	320	\$384.00
12	2575.505	Seeding	ACRE	1.60	\$960.00	0	2	2	\$1,536.00
13	2575.508	Seed Mixture 25-131	POUND	352	\$9.00	0	352	352	\$3,168.00
14	2575.509	Mulch Material Type 1	TON	3.2	\$240.00	0	3	3	\$768.00

Subtotal \$126,535.60

Additional Material

0.00 0 \$0.00

Total \$126,535.60

SUMMARY:

Total of Work to Date	\$126,535.60
Less 5% Retainage	\$6,326.78
Amount Paid on Previous Payments	\$87,517.61
Amount Due this Estimate	\$32,691.21
Percentage of work completed	98%

Original Contract Amount Due	\$129,214.40
Amount Deleted from Original Contract	\$0.00
Additional Material	\$0.00
Total Estimated Contract Costs	\$129,214.40

RECAP OF PAYMENTS:

DATE	PAYMENT
09/21/22	AMOUNT
	\$ 87,517.61

Total \$87,517.61

Approved by Contractor: Paul Zavoral, Paul Zavoral, Inc., dba Higher Ground

Date

Approved by Administrator: Myron Jesme, Red Lake Watershed District

Date





















10/11/2022

Project:	Knutson Dam Structure Replacement	TNS Order #:	FP19571
Owner:	Red Lake Watershed District	TNS Quote #:	C04224228
Engineer:	Houston Engineering, Inc.	Contractor:	Taggart Excavating

To Whom It May Concern:

It has been brought to our attention that a section of a 48" 12ga T2 pipe was damaged during install & left a small hole about 1" in diameter as well as some minor indentations/scrapes along corrugations spanning about 2ft in length. A viable option to fix the hole issue is for the Contractor to cut out a small section from the scrap 3ft pipe section they have on-site to lay over the top of the hole & weld in place. The section cutout should extend at least 2" in either direction of the hole and coating repair performed (both inside & outside of pipe) following the removal of all weld flux residue. The scrapes following the hole should be cleaned up & coating repair performed without the need to cover those areas with any scrap cutout sections.

Proper coating repair conforming to ASTM A760 is as follows:

Coating repair is to be performed due to metallic coating being burned by welding or being otherwise damaged is to be performed per ASTM A780, section A2 *Repair Using Paints Containing Zinc Dust*, which is an industry-approved repair method for both Galvanized & Aluminized Type-2 coatings.

- Surfaces to be reconditioned with paints containing zinc dust shall be clean, dry, and free of oil, grease, preexisting paint, and corrosion by-products.
- The damaged area shall be cleaned by blast cleaning, power disk sanding, or wire brushing & the cleaned area shall extend at least 1/2" into the undamaged section of the coating.
- If the coating repair area includes welds, first remove all weld flux residue and weld spatter (of a size that cannot be removed by wire brushing) by mechanical means, such as chipping, grinding, or power scaling, etc.
- Apply the paint to a dry film thickness of at least 0.005" over the damaged section and surrounding cleared areas.

Given that these steps are taken as described will not void any preexisting warranty.

Regards,

Bryce Cable
Senior Quality Assurance Manager
1522 40th St N
Fargo, ND 58102
701-373-7789



RLC, LLC.

422 Brunswick Dr. Bismarck, ND 58503

September 21, 2022

Red Lake Watershed District
Myron Jesme Administrator
1000 Pennington Ave South
Thief Rive Falls, MN 56701-4013

RE: suggested allocation of declined RLC, LLC funds for Right Away purchase. Ditch 101/ JD #72 Project No.41

Mr. Jesme:

Myron, I enjoyed our conversation today pertaining to the above matter and summarizing RLC position. The equitable allocation of funds declined by RLC would be to leave them in the Ditch 101 fund for future use. With regards to Right Away Access MN Ditch Code already as a statute for temporary Right Away access for maintenance if or when required.

Confirming our conversation today per written response sent certified mail December 2018 & June 2021 RLC, LLC our position remains the same; RLC, LLC declines to accept compensation and is not interested in accepting or selling "Right Away Access", Granting Access, Granting Jurisdiction, accepting "Damages to Parcel for grass strip R/W", or accepting "Benefits".

Let me know if you would like us to cc a copy to the other entities on the June 2021 correspondence.

Sincerely



Kyle Kalamaha
RLC, LLC





RED RIVER RETENTION AUTHORITY

1120 28th Avenue North, Suite B, Fargo, ND 58102 Phone: 701-356-6644

RED RIVER RETENTION AUTHORITY RETENTION POLICY STATEMENT SEPTEMBER 7, 2022

The Red River Retention Authority (RRRA) vision is: **Reduce Red River mainstem and tributary peak flood flows by 20 percent through flood water retention.**

RRRA Flood Retention Efforts: Since the formation of the RRRA in May 2010 there have been five flood retention projects completed in the RRB along with the rehabilitation of TONGUE RIVER DAM #M-4 (RENNICK DAM). There are currently over twenty flood retention projects in various phases of planning.

The study and complexity of social, economic, and environmental resources results in most projects taking years to complete the plan, design and install the retention project. Getting timely and adequate project retention project funding is a major challenge.

Current Situation: Since the first Red River Basin (RRB) of the North PL 83-566 dam rehabilitation project on the TONGUE RIVER DAM #M-4 (RENNICK DAM) located in Pembina County, North Dakota; there have been seven additional existing PL 83-566 dams identified as high hazard structures in the North Dakota portion of the RRB. These structures currently being studied and are having rehabilitation plans developed. During the USDA Natural Resources Conservation Service (NRCS) and local sponsors planning process there is a moderate to high risk that retention storage will be lost when these structures are rehabilitated or decommissioned.

Desired Future Condition: The RRRA's policy position is that any future rehabilitation of existing retention structures should not, except for only in the rarest of circumstances, allow for the loss of flood storage in the watershed. Rehabilitation plans need to address how lost storage impacts are to be planned into the watershed's flood damage reduction needs.

The RRRA requests its flood retention partners work with the USDA, NRCS and sponsoring member watershed districts (WD) and water resource districts (WRD) to ensure flood storage is not reduced in watershed dam rehabilitation projects.









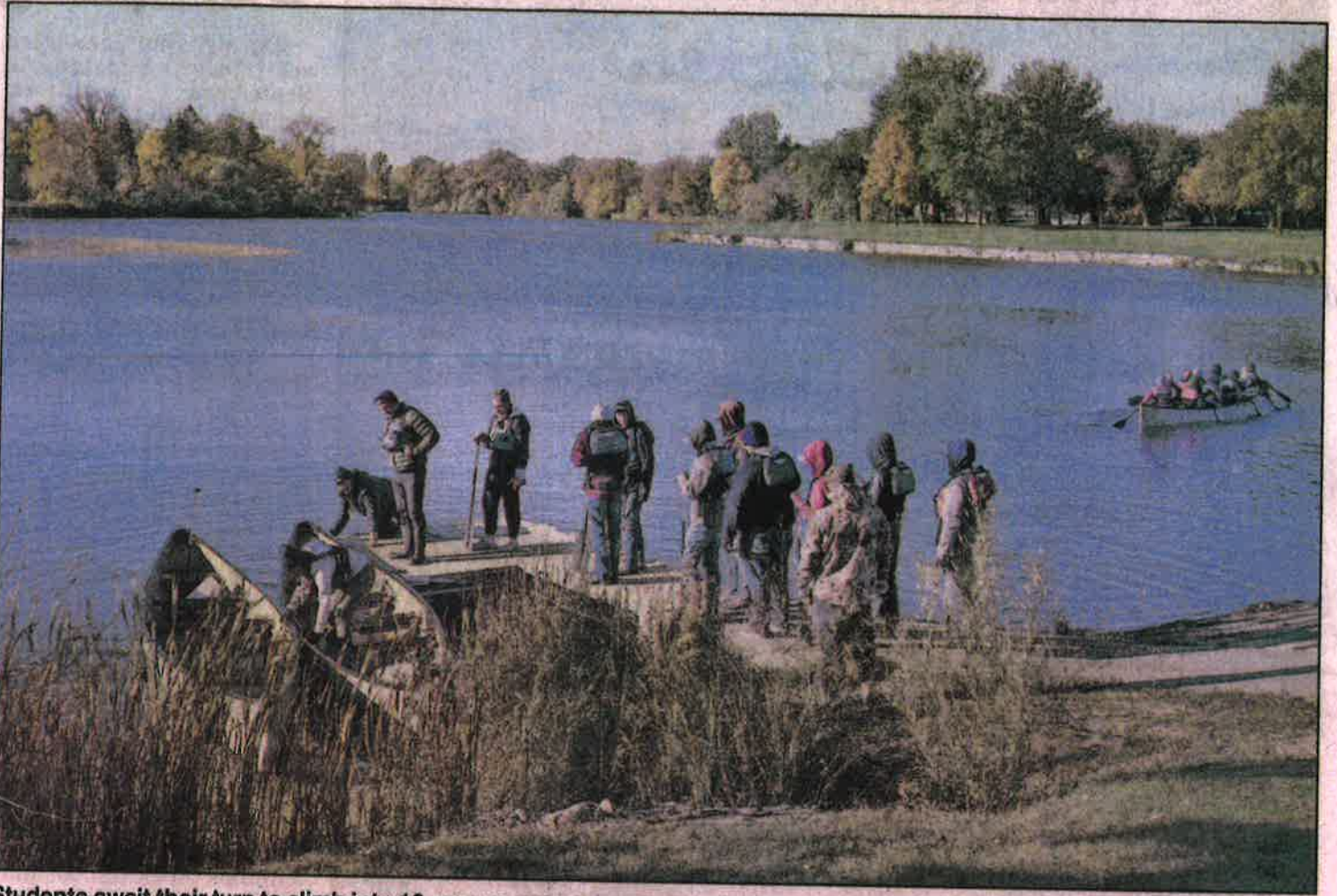






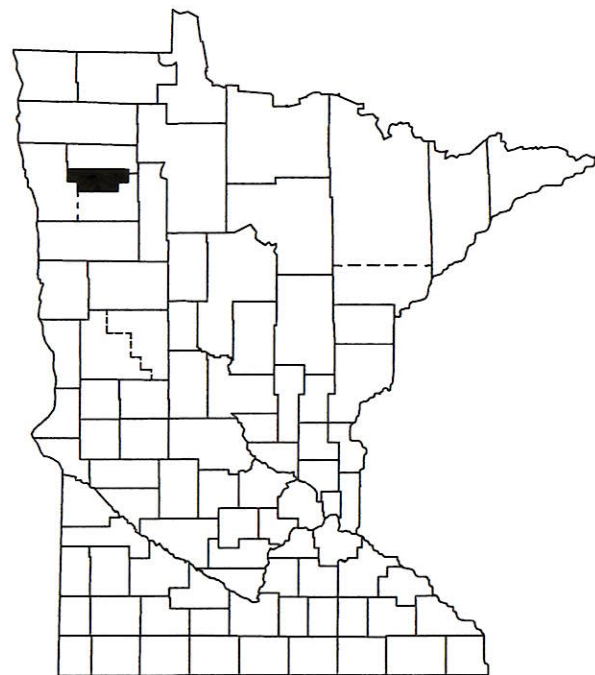


Chilly but educational



Students await their turn to climb into 10-person canoes provided by Wilderness Inquiry. It was a very chilly day for a ride, but it was on behalf of education and learning about River Watch, a hands-on educational program for youth that's offered through the International Water Institute and area schools. During the year-long program, students will study watersheds and take samples of river water. The tem-

perature at the time the students were climbing into the canoes was 37 degrees Fahrenheit, but the windchill made it feel like 28-degrees Fahrenheit. On Friday, students from St. Bernard's and Challenger Elementary School were to participate in a canoe adventure as part of the River of Dreams program.



RALPH PERRAULT GERVAIS 32 PROJECT



T 151 N R 43 W
SECTION 32
GERVAIS TWP.
RED LAKE COUNTY

LOCATION MAP

TO THE BEST OF MY PROFESSIONAL KNOWLEDGE,
JUDGMENT AND BELIEF, THESE PLANS MEET
APPLICABLE NRCS STANDARDS AND SPECIFICATIONS.

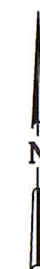
BEFORE START OF CONSTRUCTION, THE OWNERS OF ANY UTILITIES INVOLVED MUST BE NOTIFIED. THE EXCAVATOR IS RESPONSIBLE FOR GIVING THIS NOTICE BY CALLING "GOPHER STATE ONE-CALL" AT (651) 454-0002 (TWIN CITIES METRO AREA) OR (800) 252-1166 (ALL OTHER LOCATIONS) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.

THE OWNER IS RESPONSIBLE FOR OBTAINING LAND RIGHTS AND ALL PERMITS OR OTHER PERMISSION NECESSARY TO PERFORM AND MAINTAIN THE PROJECT.

-- GOVERNING SPECIFICATIONS --

THE CONSTRUCTION AND MATERIALS SPECIFICATIONS PREPARED FOR THIS PROJECT SHALL GOVERN. THESE SPECIFICATIONS ARE PART OF THE PLAN.

CHANGES IN THE DRAWINGS OR SPECIFICATIONS MUST BE AUTHORIZED BY THE OWNER AND THE RESPONSIBLE ENGINEER. THE OWNER IS RESPONSIBLE FOR CONTACTING THE RED LAKE SWCD AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.



SHEET INDEX

SHEET NO.	TITLE
1	SHEET INDEX, LEGEND, & LOCATION MAP
2	PLAN AND QUANTITIES
3	GRADE STABILIZATION STRUCTURE 52 - PROFILE AND DETAILS
4	GRADE STABILIZATION STRUCTURE 52 - DETAILS
5	GRADE STABILIZATION STRUCTURE 53 - PROFILE AND DETAILS
6	GRADE STABILIZATION STRUCTURE 53 - DETAILS
7	GRADE STABILIZATION STRUCTURE 53.2
8	GRADE STABILIZATION STRUCTURE 54

LEGEND

SURVEY POINT	△ INST.#1
SOIL BORING	● TH#1
BUILDING	
WELL	○ WELL
BENCH MARK, TEMPORARY	✦ TBM#1
ORIGINAL GROUND	---
CONTOUR, INDEX	---90---
FENCE, EXISTING	-x-x-
FENCE TO BE CONSTRUCTED	-I-I-
FENCE TO BE REMOVED	-0-0-
DIVERSION	~~~~~
STREAM	~~~~~
MARSH	~~~~~
COMMON EXCAVATION	⊙
EARTHFILL, CLASS C COMPACTION	⊙
EXISTING TILE LINE	—○—
PLANNED TILE LINE	—○—
CENTERLINE OF IMPROVEMENTS	—+—
BASE LINE	—+—
DECIDUOUS TREE	⊙
CONIFEROUS TREE	✱
IRON PIPE	•
EMBANKMENT	YY
RIPRAP	⬢
UTILITY POLE	⬢

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.

JAMES HEST
Signature: *James Hest*
Date: *8/7/20* Reg. No. 24511

SHEET INDEX, LEGEND AND LOCATION MAP

Red Lake Soil & Water Conservation District
Red Lake County, Minnesota

PREPARED BY

JAMES HEST, PE

P.O. Box 126 GRYGLA, MINNESOTA 56727 (218) 294-6701
Drawn by JAH Checked by JAH Date 08-07-20 Sheet 1 of 8



GRADE STABILIZATION STRUCTURE 52

GRADE STABILIZATION STRUCTURE 53

GRADE STABILIZATION STRUCTURE 53.2

GRADE STABILIZATION STRUCTURE 54

ESTIMATED QUANTITIES

Quantities are measured in place according to neat-line shown on the plans. No allowance is made for shrinkage, overlapping, connecting bands, joints, etc.

ITEM	QUANTITY	UNIT
Seed, Fertilize & Mulch	0.2	Acre
Compacted Earth Fill (Class C)	200	Cu. Yd.
Salvage and Spreading Topsoil	1	Job
18" PE Riser	1	Each
18" Anti-Vortex Trash Rack	1	Each
12" Dual-Wall Tile	120	Ln. Ft.
30" PE Riser	1	Each
30" Anti-Vortex Trash Rack	1	Each
24" Dual-Wall Tile	80	Ln. Ft.
#4 Rebar	36	Ln. Ft.
Inlet Rock Riprap Class I (D ₅₀ =3")	8	Cu. Yd.
Outlet Rock Riprap Class II (D ₅₀ =6")	30	Cu. Yd.
Non-Woven Geotextile	80	Sq. Yd.
Concrete	2	Cu. Yd.
Clearing Grubbing	1	Job
18" CMP w/24" Connecting Bands	90	Ln. Ft.
18" Steel Apron	2	Each

RALPH PERRAULT

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.

JAMES HEST

SIGNATURE:

Date 01/17/20 Reg. No. 24511

PLAN AND QUANTITIES

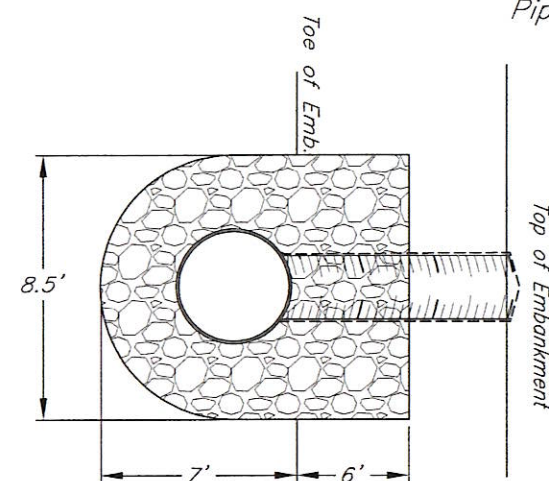
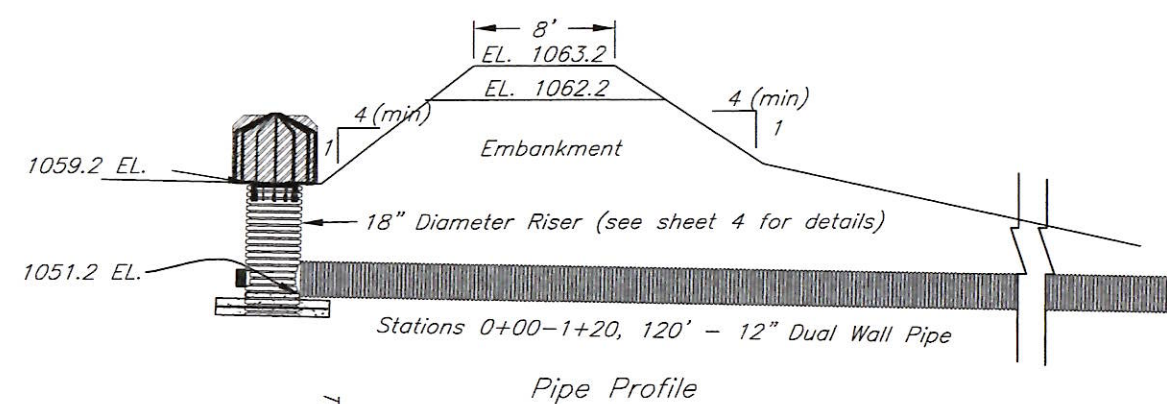
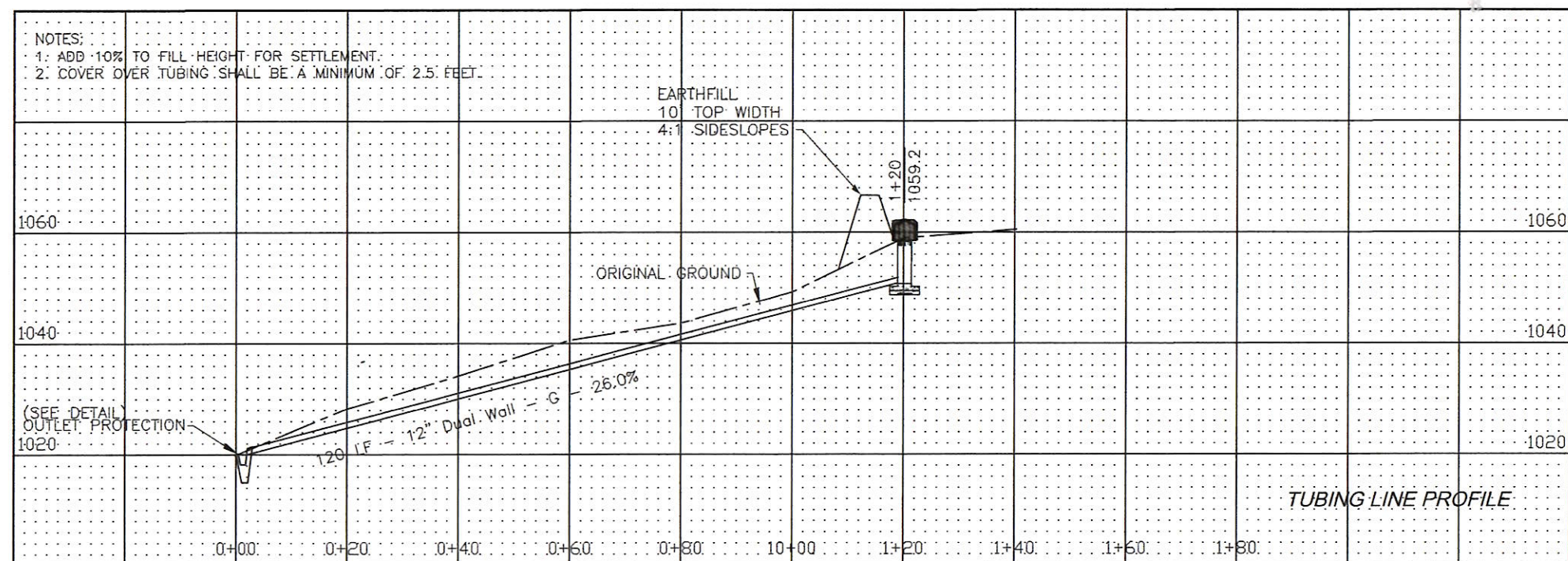
Red Lake Soil & Water Conservation District
Red Lake County, Minnesota

PREPARED BY

JAMES HEST, PE

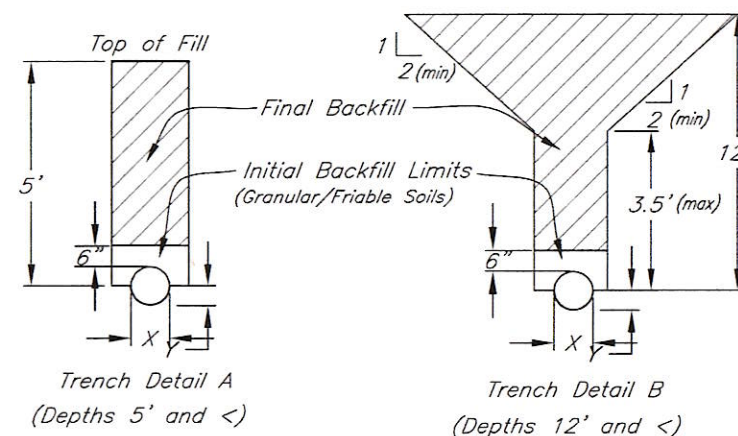
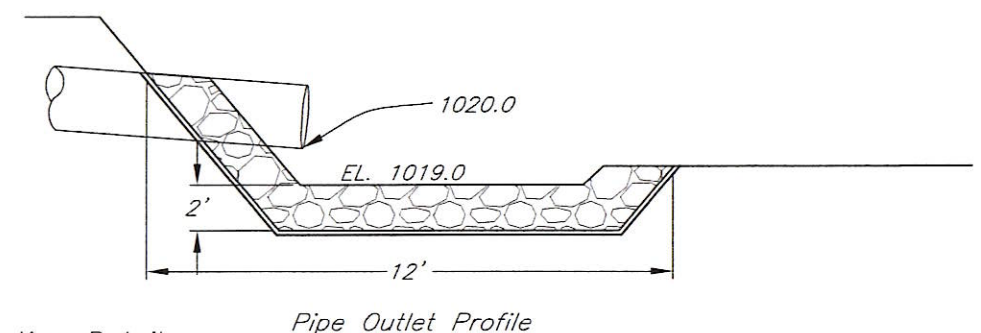
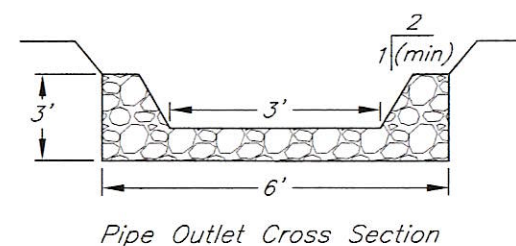
P.O. BOX 126 GRYGLA, MINNESOTA 56727 (218) 294-6701

Drawn by JAH Checked by JAH Date 08-07-20 Sheet 2 of 8



MNDOT
Class 1
100% - 6"
50% - 3"
10% - 1"
12" Thickness

DIA	X	Y
8"	9-1/2"	4-3/4"
10"	11-5/8"	5-3/4"
12"	14-1/4"	7-0"
15"	18-3/8"	9-1/4"
18"	21-1/2"	10-3/4"
24"	28-1/2"	14-1/2"



MNDOT
Class II
100% - 12"
75% - 9"
50% - 6"
10% - 2"
24" Thickness

RALPH PERRAULT

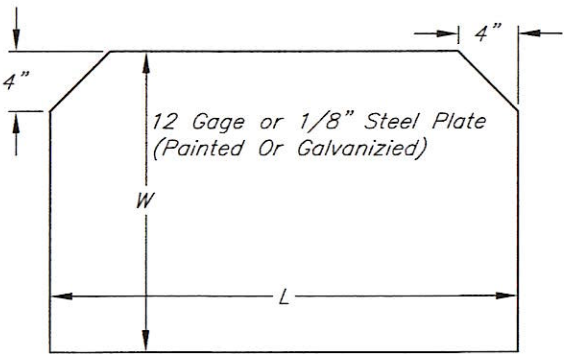
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

JAMES HEST
Signature: James Hest
Date: 8/7/20 Reg. No. 24511

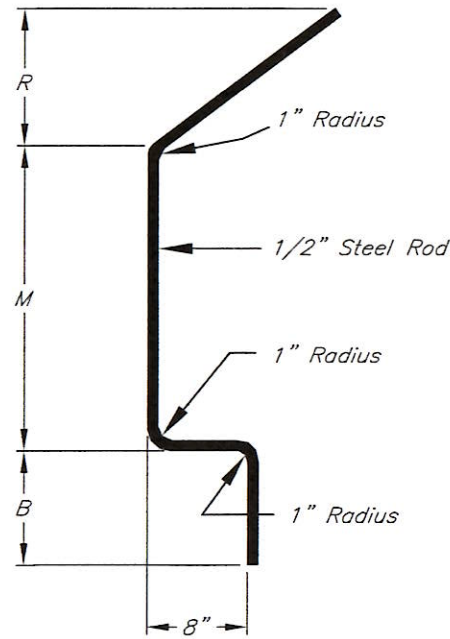
GRADE STABILIZATION STRUCTURE #52 PROFILE AND DETAILS

<i>Red Lake Soil & Water Conservation District</i> <i>Red Lake County, Minnesota</i>			
PREPARED BY JAMES HEST, PE			
P.O. BOX 126		GRYGLA, MINNESOTA 56727	
Drawn by JAH		(218) 294-6701	
Checked by JAH	Date 08-7-20	Sheet	3 of 8

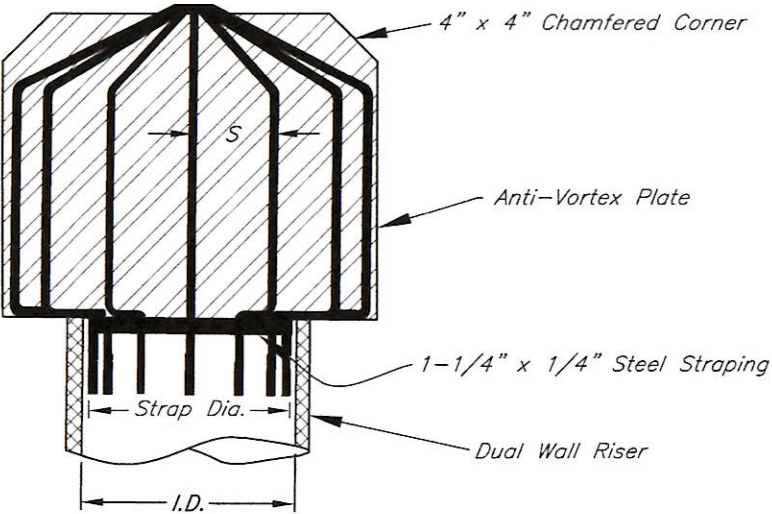
Trash Rack & Anti-Vortex Dimensions							
Pipe I.D. In.	Strap Dia. In.	S In.	B In.	M In.	R In.	W In.	L In.
12	11 1/4	5-6	9	9	12	20	28
15	14 1/4	5-6	9	9	13	21	31
18	17 1/4	6-7	9	9	14	22	34
24	23 1/4	7-8	12	15	11	25	40
30	29 1/4	8-9	12	18	10	27	46
36	35 1/4	9-10	12	21	9	29	52



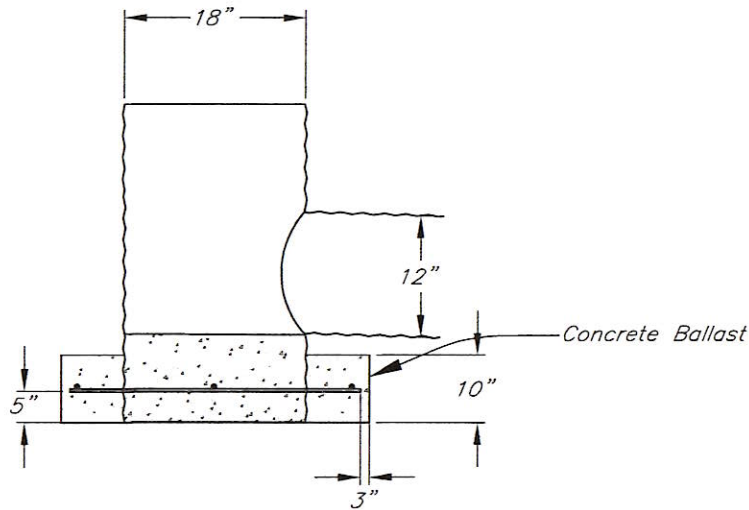
Anti-Vortex Detail



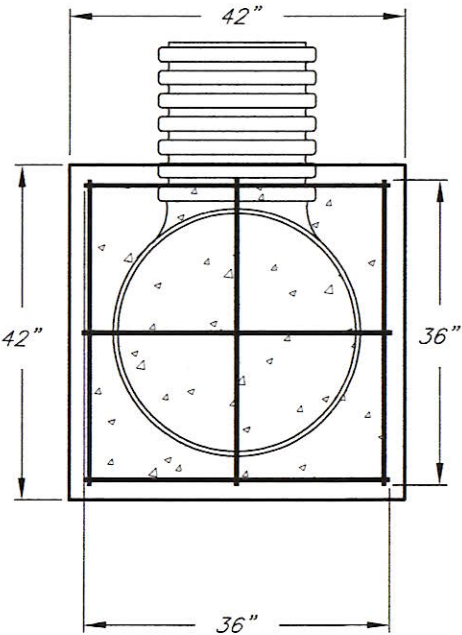
Rod Bending Detail



Trash Rack / Anti-Vortex Detail

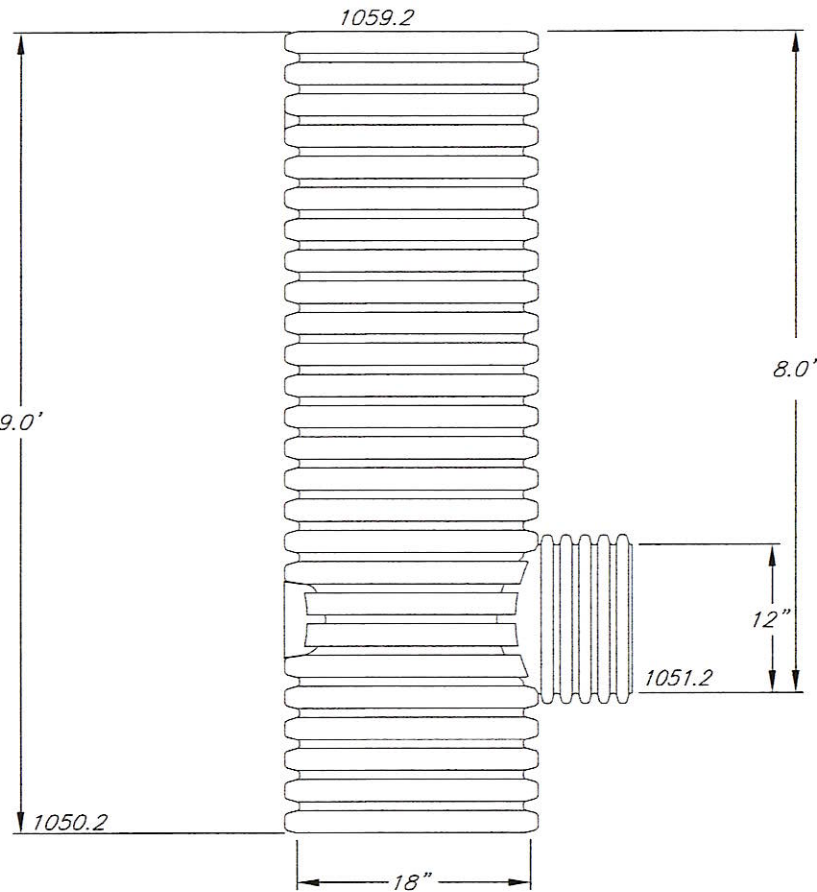


Riser Ballast Detail



Installation Notes

1. Corrugated dual wall pipe riser requires CLASS II backfill material a minimum 2 feet width around the riser. Corrugated dual wall riser outlet stub connection requires a watertight connection such as a bell to bell with gaskets.
2. Trash Rack/Antivortex requires anchoring at each end of the anti-vortex with a fence post or anchor driven into the ground a minimum 2.5 to 3'.
3. Steel reinforcement is #4 Bar. Concrete will require adequate consolidation to eliminate voids, honeycomb and fully encase rebar and embedments.



Dual Wall Riser Detail

RALPH PERRAULT

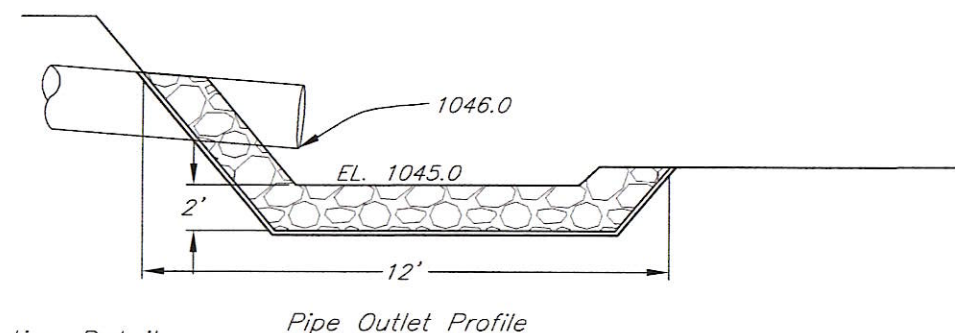
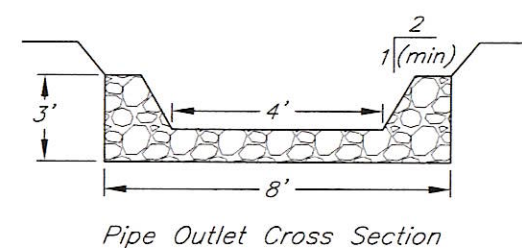
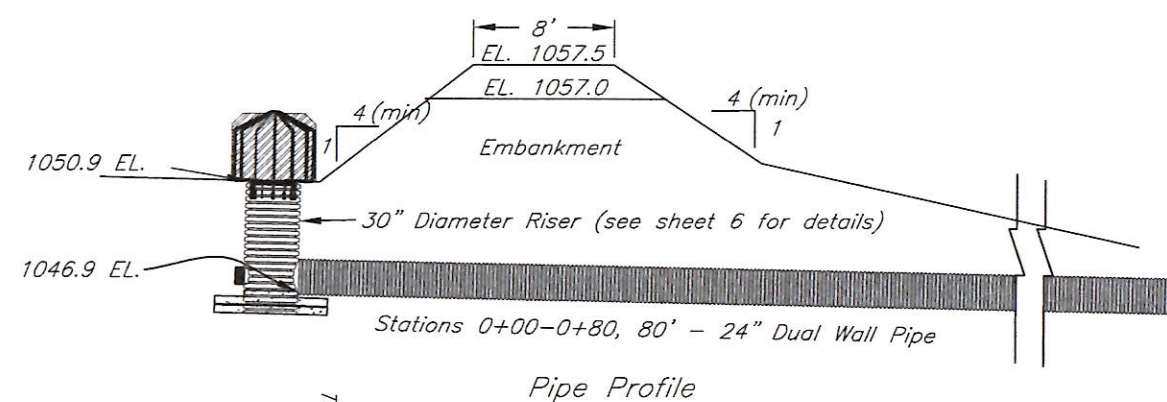
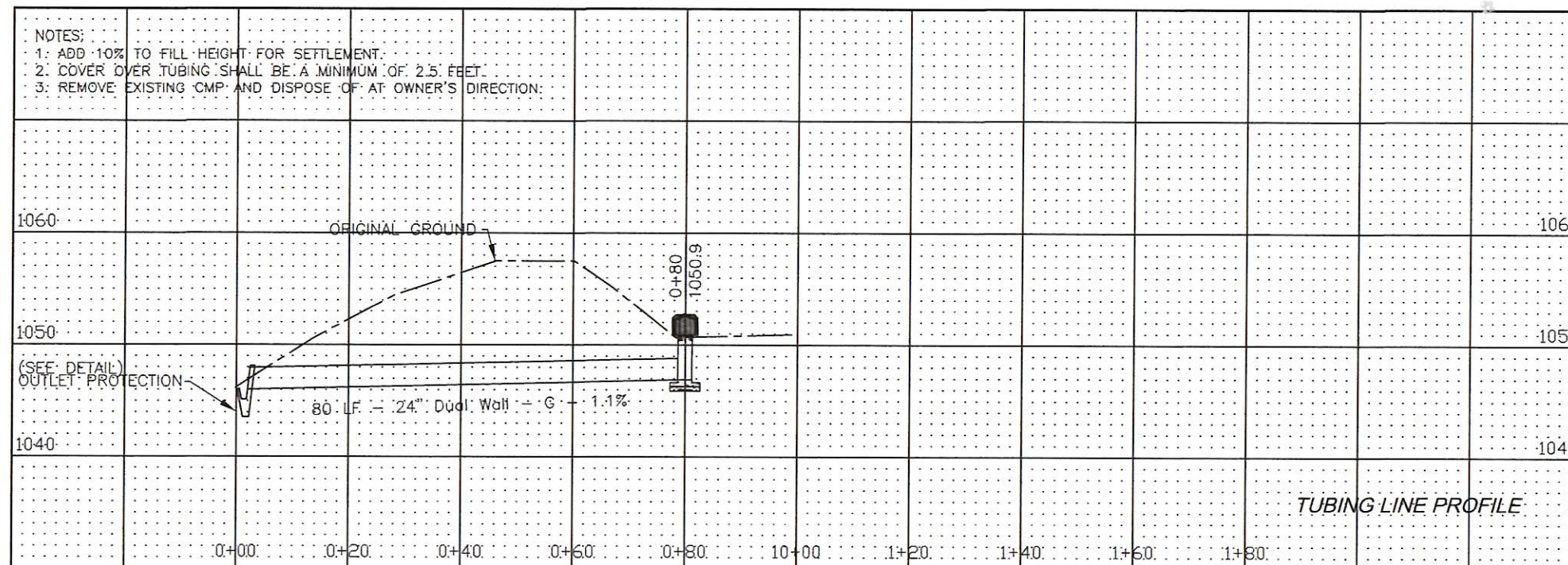
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

JAMES HEST
Signature: *James Hest*
Date: *8/19/20* Reg. No. 24511

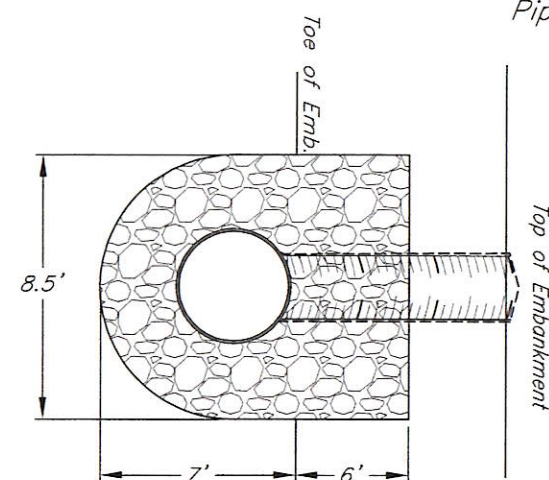
GRADE STABILIZATION STRUCTURE
#52 DETAILS

Red Lake Soil & Water Conservation District
Red Lake County, Minnesota

PREPARED BY
JAMES HEST, PE
P.O. BOX 126 GRYGLA, MINNESOTA 56727 (218) 294-6701
Drawn by JAH Checked by JAH Date 08-07-20 Sheet 4 of 8



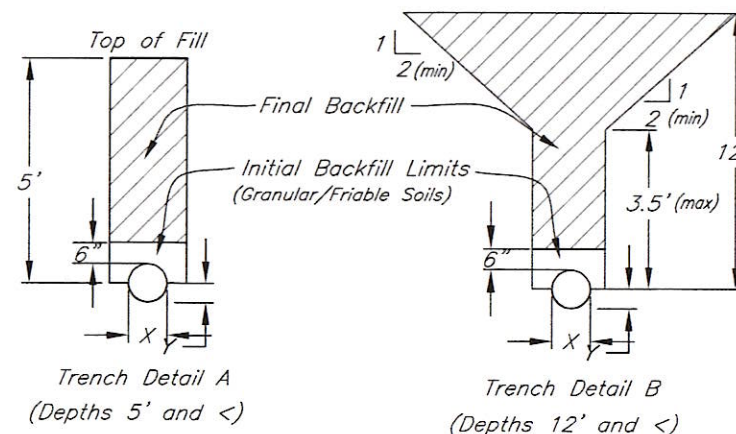
Outlet Protection Details



MNDOT
Class I
100% - 6"
50% - 3"
10% - 1"
12" Thickness

DIA	X	Y
8"	9-1/2"	4-3/4"
10"	11-5/8"	5-3/4"
12"	14-1/4"	7-0"
15"	18-3/8"	9-1/4"
18"	21-1/2"	10-3/4"
24"	28-1/2"	14-1/2"

Trench Spoon Dimensions



MNDOT
Class II
100% - 12"
75% - 9"
50% - 6"
10% - 2"
24" Thickness

RALPH PERRAULT

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.

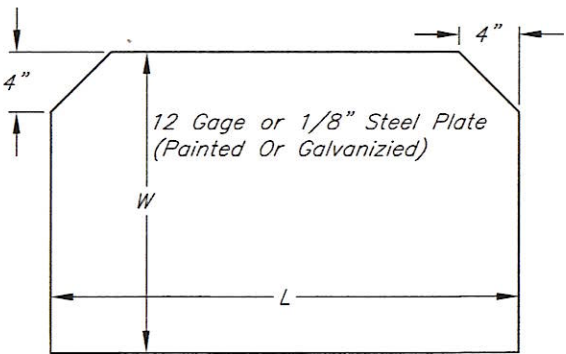
JAMES HEST
 Signature: *[Signature]*
 Date: 8/9/20 Reg. No. 24511

GRADE STABILIZATION STRUCTURE #53 PROFILE AND DETAILS

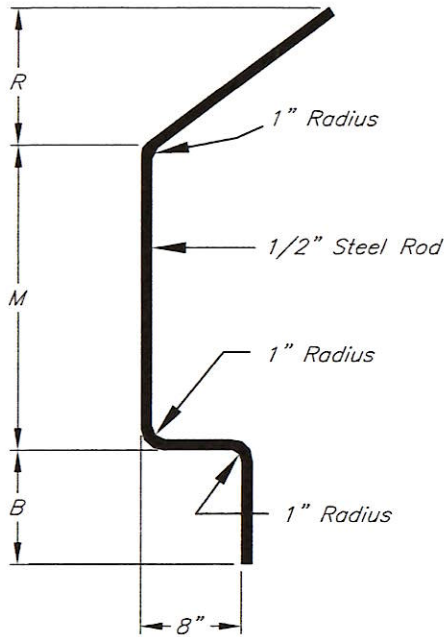
Red Lake Soil & Water Conservation District
 Red Lake County, Minnesota

PREPARED BY
 JAMES HEST, PE
 P.O. BOX 126 GRAYLA, MINNESOTA 56727 (218) 294-6701
 Drawn by JAH Checked by JAH Date 08-7-20 Sheet 5 of 8

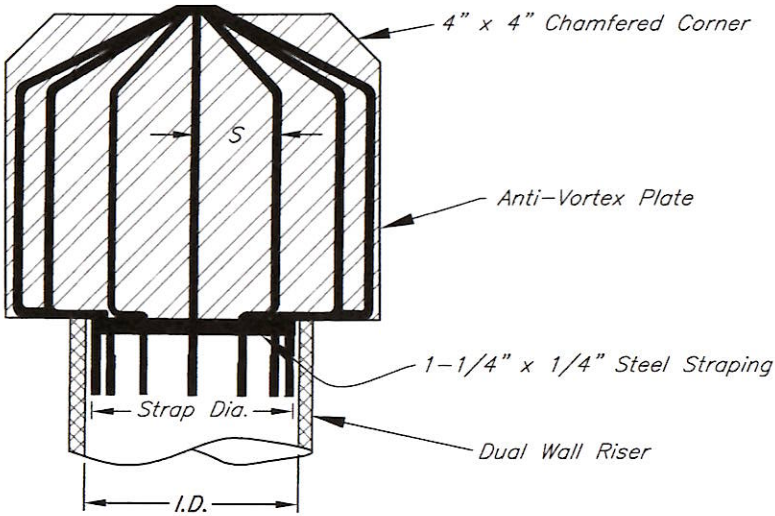
Trash Rack & Anti-Vortex Dimensions							
Pipe I.D. In.	Strap Dia. In.	S In.	B In.	M In.	R In.	W In.	L In.
12	11 1/4	5-6	9	9	12	20	28
15	14 1/4	5-6	9	9	13	21	31
18	17 1/4	6-7	9	9	14	22	34
24	23 1/4	7-8	12	15	11	25	40
30	29 1/4	8-9	12	18	10	27	46
36	35 1/4	9-10	12	21	9	29	52



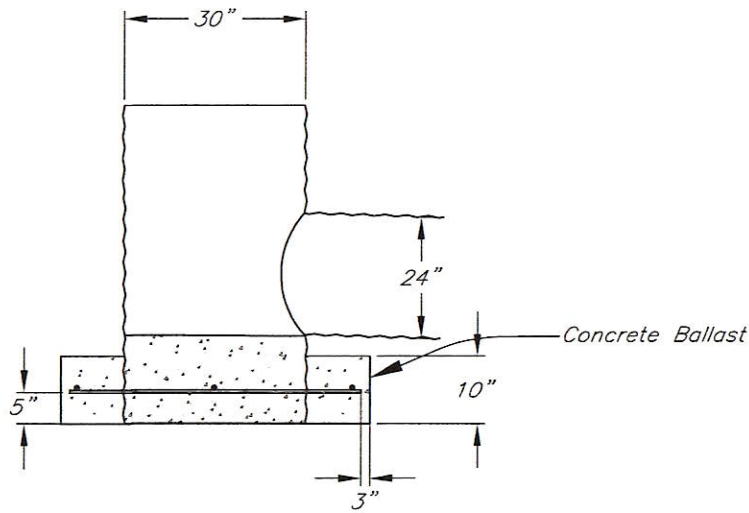
Anti-Vortex Detail



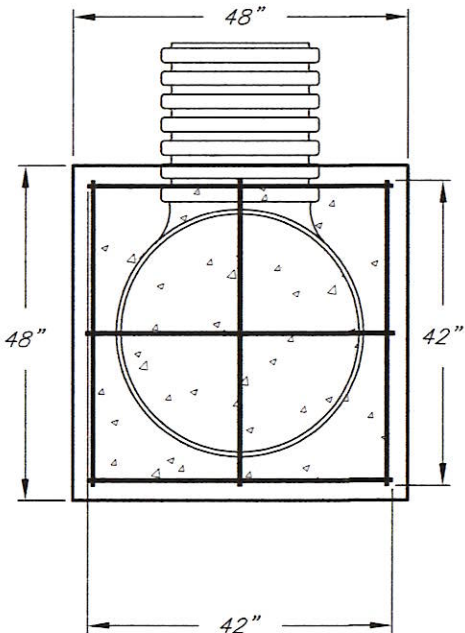
Rod Bending Detail



Trash Rack / Anti-Vortex Detail

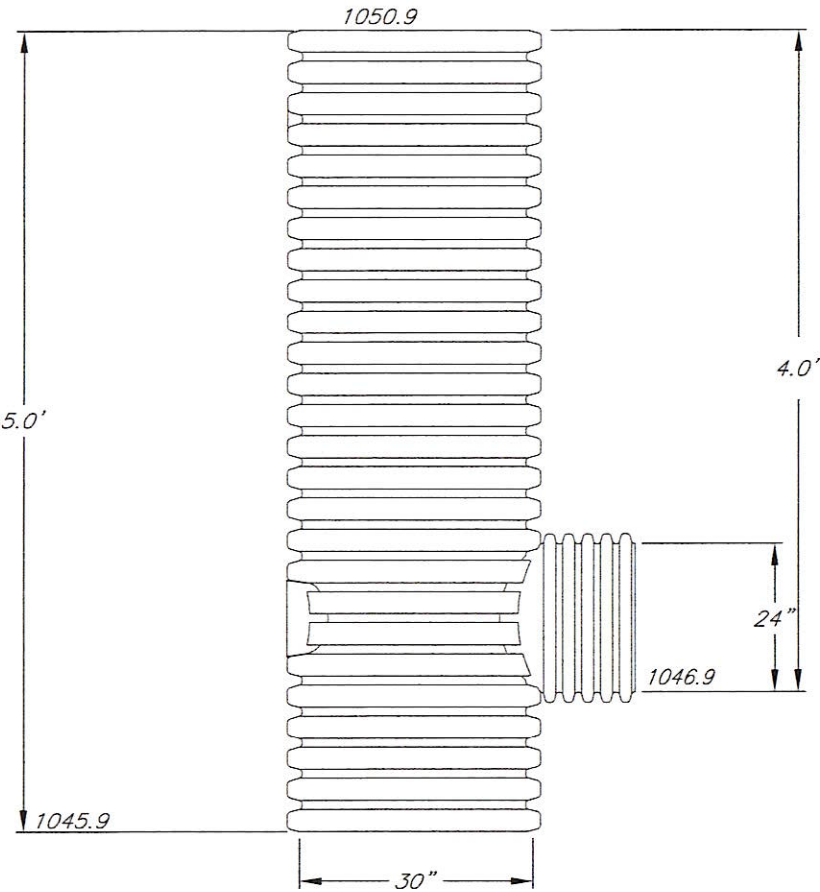


Riser Ballast Detail



Installation Notes

1. Corrugated dual wall pipe riser requires CLASS II backfill material a minimum 2 feet width around the riser. Corrugated dual wall riser outlet stub connection requires a watertight connection such as a bell to bell with gaskets.
2. Trash Rack/Antivortex requires anchoring at each end of the anti-vortex with a fence post or anchor driven into the ground a minimum 2.5 to 3'.
3. Steel reinforcement is #4 Bar. Concrete will require adequate consolidation to eliminate voids, honeycomb and fully encase rebar and embedments.



Dual Wall Riser Detail

RALPH PERRAULT

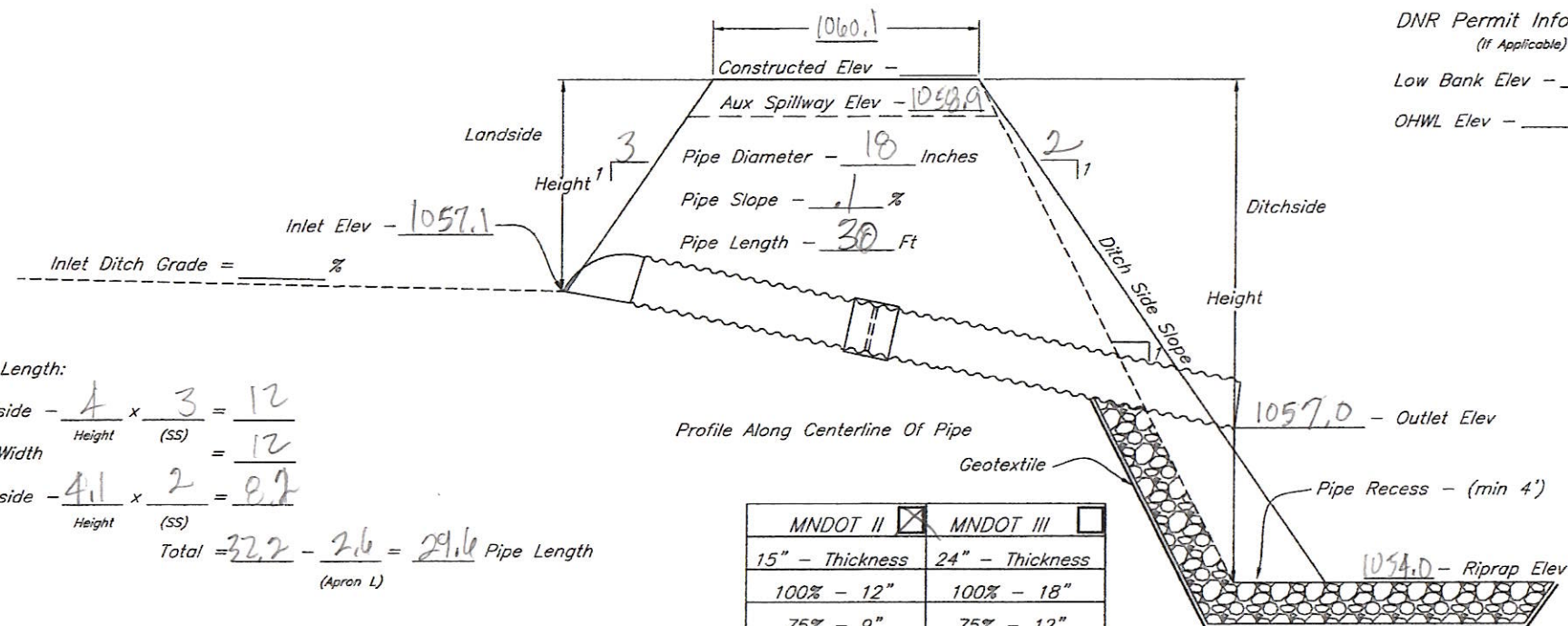
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

JAMES HEST
Signature: *James Hest*
Date: 03/17/20 Reg. No. 24511

GRADE STABILIZATION STRUCTURE
#53 DETAILS

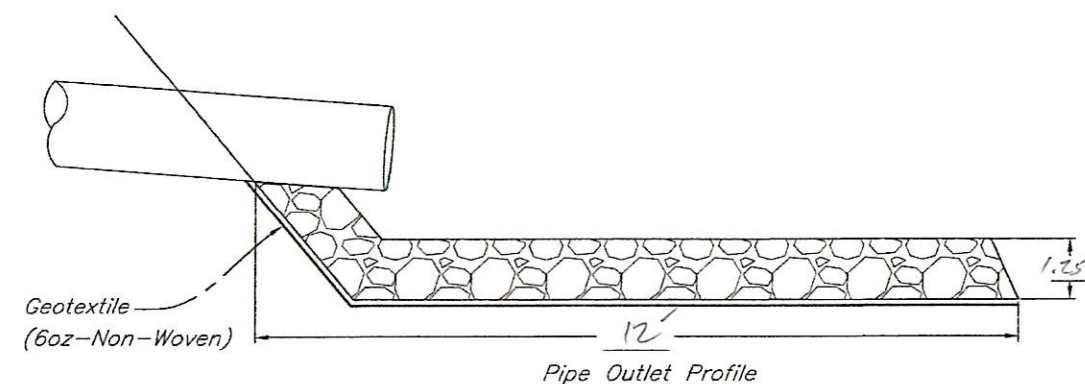
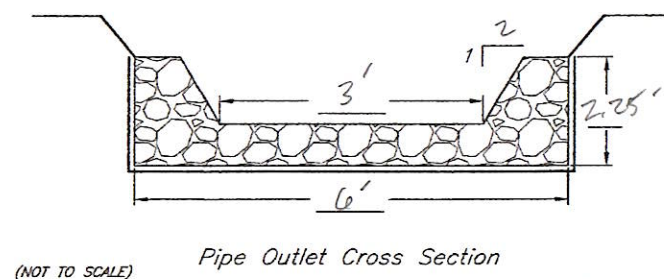
Red Lake Soil & Water Conservation District
Red Lake County, Minnesota

PREPARED BY
JAMES HEST, PE
P.O. BOX 126 GRYGLA, MINNESOTA 56727 (218) 294-6701
Drawn by JAH Checked by JAH Date 08-07-20 Sheet 6 of 8



Design Information:

Peak Discharge $Q_{10} = 10$ CFS - (EFH2); Drainage Area < 40 Acres
 Drainage Curve $Q = 5.0$ CFS - (Minimum pipe capacity)
 Pipe Head = 1.8 Ft - (Aux Spillway Elev - Pipe Inlet Elev)
 Pipe Diameter = 18 Inches ; Pipe Capacity = 7.1 CFS -
 Aux Spillway Capacity = 29 CFS - (Peak Discharge Q_{10} - Pipe Capacity)
 Aux Spillway Width = 10 Ft - (Chart) Aux Spillway Depth = 1.5 Ft - (Chart)
 Aux Spillway Location = X LDS: RDS: Both:

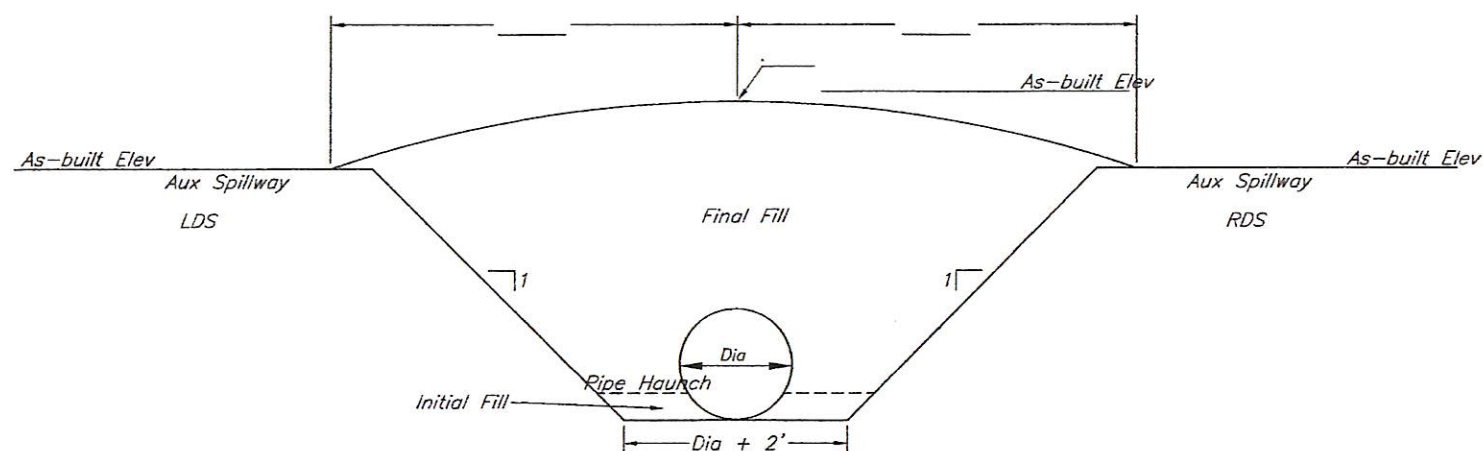


DNR Permit Information
 (If Applicable)
 Low Bank Elev -
 OHWL Elev -

Construction Notes:

1. Initial Fill - fill material under the pipe haunch (lower third) shall be free of rocks and clods over 3" in diameter. Initial fill should be knifed in along the bottom area of the pipe and hand tamped with a 2 x 4 inch lumber or an equivalent to ensure uniform placement.
2. Final Fill - fill material over pipe haunch shall be free of rock and soil clods over 6" in diameter and placed in lifts of 9" before compaction. Final fill material shall be compacted to a density equal to adjoining undisturbed ground. Dozer compaction will require at a minimum complete coverage of area with the track and lifts not to exceed 5" before compaction.
3. Fill material shall be placed alternately on each side of the pipe at equal elevations. Hand equipment or mechanical tampers are required for final fill compaction. The moisture content of the backfill material should form a ball when kneaded by hand and will not readily separate.
4. Connecting bands shall be free of soil during installation and tapped with a mallet while tightening to insure a tight joint. Pipe head > 5 feet require watertight connecting bands. Connecting bands may be supplied with gaskets or asphalt mastic where water-tightness is required.
5. Trench depths > than 5' require OSHA approved trenching procedures.

6. REMOVE EXISTING CMP AND DISPOSE OF AT OWNER'S DIRECTION.



WIDTH FEET	DEPTH - FEET		
	0.5	0.6	1.0
CAPACITY - CFS			
10	6	9	21
15	9	13	30
20	12	17	
25	15	22	
30	18	26	

AUXILIARY SPILLWAY CAPACITIES

Diameter inches	Length inches	Length feet
15	26	2.2
18	31	2.6
21	36	3.0
24	41	3.4
30	51	4.2

Apron Lengths

MN Drainage Curve
Curve #3

Acres	CFS
10	1.3
20	2.6
30	3.9
40	5.0
50	6.2
60	7.4
70	8.4
80	9.4
90	10.0
100	11.0
110	12.0
120	13.0
130	14.0
140	15.0
150	16.0
160	17.0
170	18.0
180	19.0
190	20.0
200	21.0
220	22.0
240	24.0

PIPE CAPACITY CHART

Head (H) Feet	Pipe Capacities - CFS				
	15"	18"	21"	24"	30"
1.0	2.8				
1.2	3.8				
1.4	4.2	5.7			
1.5	4.4	6.1	7.5	8.3	
1.6	4.5	6.6	8.1	9.2	
1.8	4.9	7.1	9.5	11.0	13.5
2.0	5.4	7.6	10.4	12.8	16.1
2.2	5.6	8.2	11.4	13.9	18.5
2.4	6.0	8.9	12.1	15.0	21.3
2.5	6.1	9.0	12.4	15.6	22.1
2.6	6.3	9.2	12.9	16.0	23.2
2.8	6.5	9.6	13.6	17.0	25.2
3.0	6.8	10.2	14.3	18.0	26.9
3.2	7.0	10.6	15.0	19.0	28.2
3.4	7.2	11.0	15.6	19.8	30.0
3.5	7.4	11.2	15.9	20.1	30.3
3.6	7.6	11.4	16.1	20.4	31.8
3.8	7.8	11.9	16.6	21.1	33.5
4.0	8.1	12.1	17.2	21.9	34.5

Date 8/7/20
 Designed JAH
 Drawn JAH
 Checked JAH
 Approved JAH

PERRAULT T-15IN R43W
 SEC 11
 GRADE STABILIZATION STRUCTURE 53.2

USDA NRCS
 Natural Resources Conservation Service

Rev - 4/2014

Sheet 7 of 8

BM = 1058.9

DNR Permit Information

(If Applicable)

Low Bank Elev -

OHWL Elev -

Construction Notes:

1. Initial Fill - fill material under the pipe haunch (lower third) shall be free of rocks and clods over 3" in diameter. Initial fill should be knifed in along the bottom area of the pipe and hand tamped with a 2 x 4 inch lumber or an equivalent to ensure uniform placement.
2. Final Fill - fill material over pipe haunch shall be free of rock and soil clods over 6" in diameter and placed in lifts of 9" before compaction. Final fill material shall be compacted to a density equal to adjoining undisturbed ground. Dozer compaction will require at a minimum complete coverage of area with the track and lifts not to exceed 5" before compaction.
3. Fill material shall be placed alternately on each side of the pipe at equal elevations. Hand equipment or mechanical tampers are required for final fill compaction. The moisture content of the backfill material should form a ball when kneaded by hand and will not readily separate.
4. Connecting bands shall be free of soil during installation and tapped with a mallet while tightening to insure a tight joint. Pipe head > 5 feet require watertight connecting bands. Connecting bands may be supplied with gaskets or asphalt mastic where water-tightness is required.
5. Trench depths > than 5' require OSHA approved trenching procedures.
6. REMOVE EXISTING CMP AND DISPOSE OF AT OWNER'S DIRECTION.

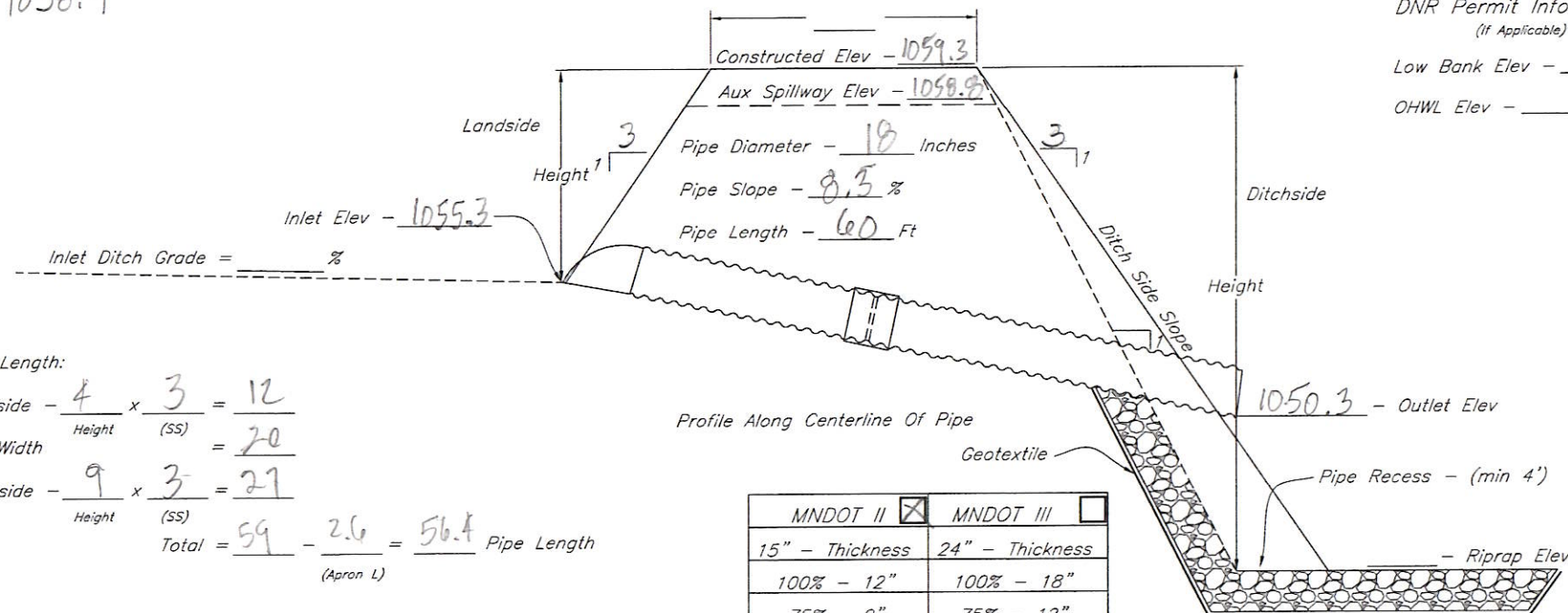
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8/17/20
8/17/20
8/17/20
8/17/20
Designed JAH
Drawn JAH
Checked JAH
Approved JAH

PERRAULT T 151N R43W
SEC 11
GRADE STABILIZATION STRUCTURE 54

USDA NRCS
Natural Resources Conservation Service

Rev - 4/2014

Sheet 8 of 9



Pipe Length:

$$\text{Landside} - \frac{4}{\text{Height}} \times \frac{3}{(\text{SS})} = \frac{12}{20}$$

$$\text{Top Width} = \frac{9}{\text{Height}} \times \frac{3}{(\text{SS})} = \frac{27}{21}$$

$$\text{Ditchside} - \frac{9}{\text{Height}} \times \frac{3}{(\text{SS})} = \frac{27}{21}$$

$$\text{Total} = 59 - 2.6 = 56.4 \text{ Pipe Length (Apron L)}$$

MNDOT II <input checked="" type="checkbox"/>	MNDOT III <input type="checkbox"/>
15" - Thickness	24" - Thickness
100% - 12"	100% - 18"
75% - 9"	75% - 12"
50% - 6"	50% - 9"
10% - 2"	10% - 3"
Discharge Q < 25 cfs	Discharge Q < 38 cfs

Design Information:

Peak Discharge $Q_{10} = 8$ CFS - (EFH2); Drainage Area 40 Acres

Drainage Curve $Q = 5$ CFS - (Minimum pipe capacity)

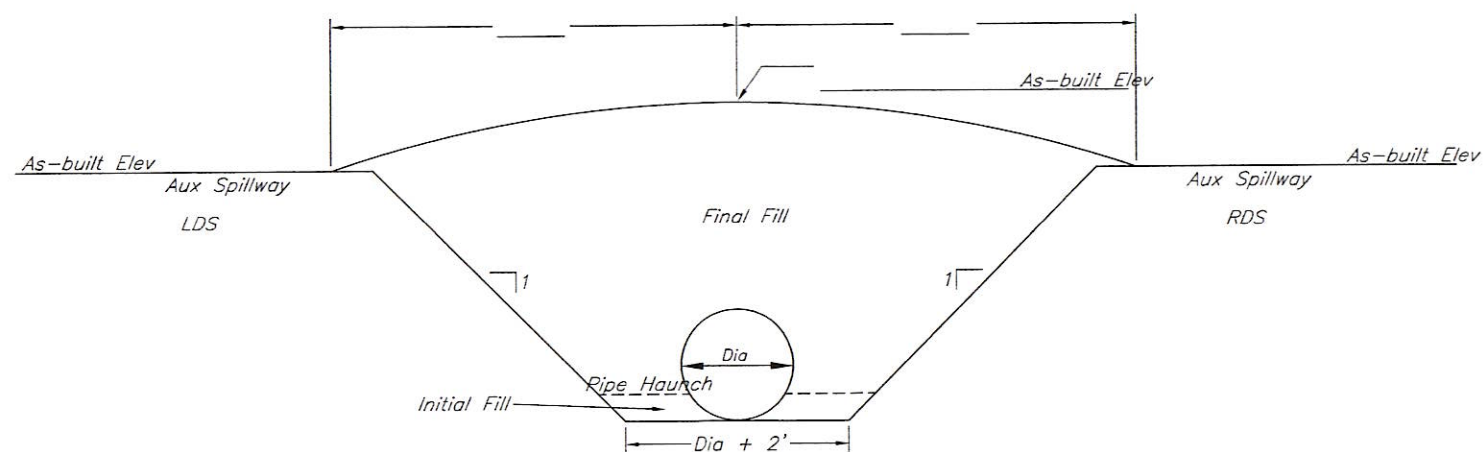
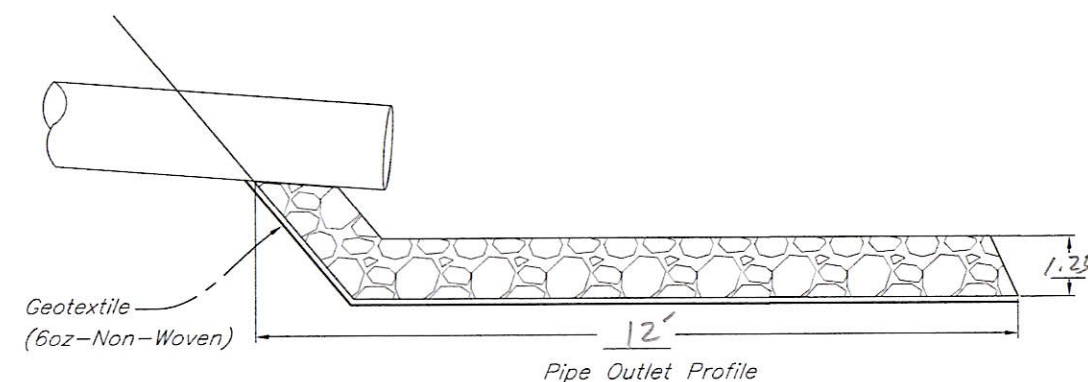
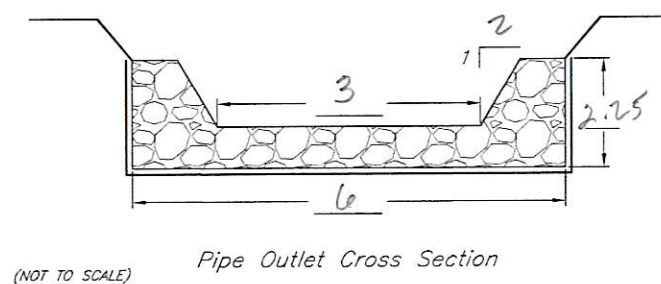
Pipe Head = 3.5 Ft - (Aux Spillway Elev - Pipe Inlet Elev)

Pipe Diameter = 18 Inches ; Pipe Capacity = 11.2 CFS -

Aux Spillway Capacity = CFS - (Peak Discharge Q_{10} - Pipe Capacity)

Aux Spillway Width = Ft - (Chart) Aux Spillway Depth = Ft - (Chart)

Aux Spillway Location = LDS: RDS: Both: 11.2 > 8



Typical Section & As-Built Documentation

(Look Downstream)

WIDTH	DEPTH - FEET
FEET	0.5 0.6 1.0
	CAPACITY - CFS
10	6 9 21
15	9 13 30
20	12 17
25	15 22
30	18 26

AUXILIARY SPILLWAY CAPACITIES

Diameter inches	Length inches	Length feet
15	26	2.2
18	31	2.6
21	36	3.0
24	41	3.4
30	51	4.2

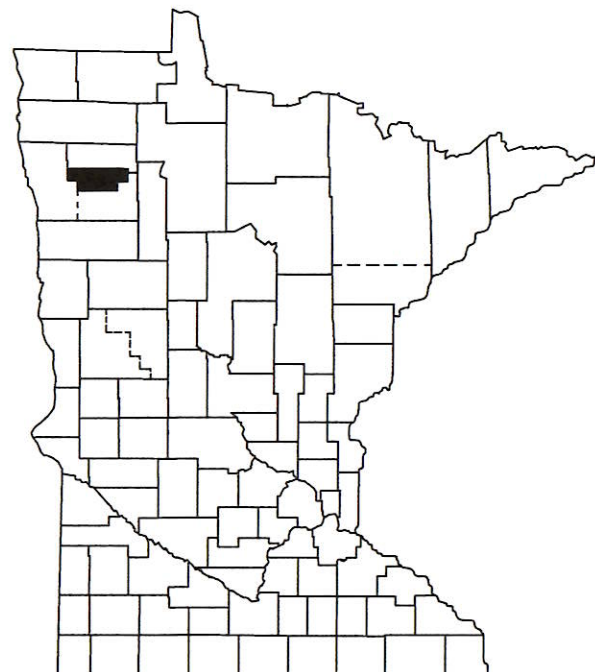
Apron Lengths

MN Drainage Curve
Curve #3

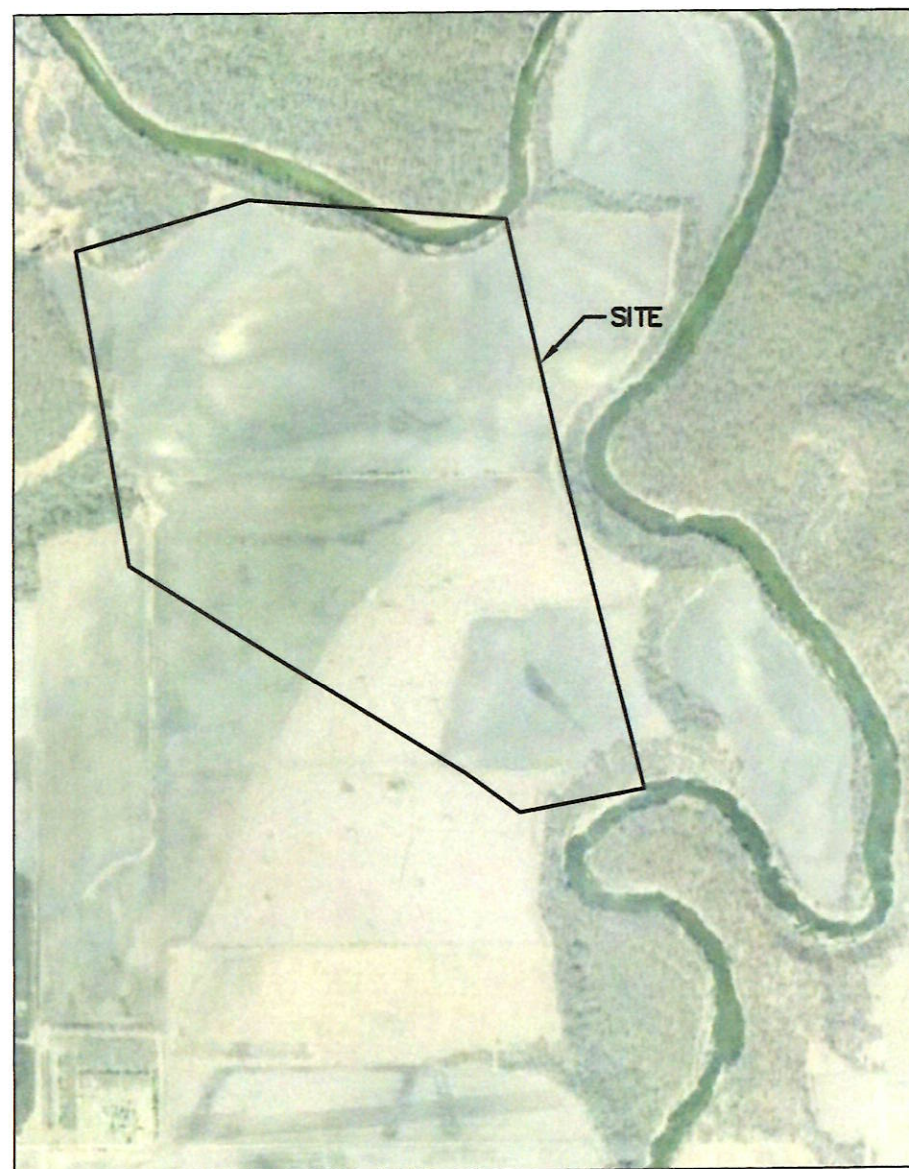
Acres	CFS
10	1.3
20	2.6
30	3.9
40	5.0
50	6.2
60	7.4
70	8.4
80	9.4
90	10.0
100	11.0
110	12.0
120	13.0
130	14.0
140	15.0
150	16.0
160	17.0
170	18.0
180	19.0
190	20.0
200	21.0
220	22.0
240	24.0

PIPE CAPACITY CHART

Head (H)	Qpipe Capacities - CFS				
Feet	15"	18"	21"	24"	30"
1.0	2.8				
1.2	3.8				
1.4	4.2	5.7			
1.5	4.4	6.1	7.5	8.3	
1.6	4.5	6.6	8.1	9.2	
1.8	4.9	7.1	9.5	11.0	13.5
2.0	5.4	7.6	10.4	12.8	16.1
2.2	5.6	8.2	11.4	13.9	18.5
2.4	6.0	8.9	12.1	15.0	21.3
2.5	6.1	9.0	12.4	15.6	22.1
2.6	6.3	9.2	12.9	16.0	23.2
2.8	6.5	9.6	13.6	17.0	25.2
3.0	6.8	10.2	14.3	18.0	26.9
3.2	7.0	10.6	15.0	19.0	28.2
3.4	7.2	11.0	15.6	19.8	30.0
3.5	7.4	11.2	15.9	20.1	30.3
3.6	7.6	11.4	16.1	20.4	31.8
3.8	7.8	11.9	16.6	21.1	33.5
4.0	8.1	12.1	17.2	21.9	34.5



RALPH PERRAULT GERVAIS 34 PROJECT



T 151 N R 43 W
SECTION 34
GERVAIS TWP.
RED LAKE COUNTY

LOCATION MAP

TO THE BEST OF MY PROFESSIONAL KNOWLEDGE,
JUDGMENT AND BELIEF, THESE PLANS MEET
APPLICABLE NRCS STANDARDS AND SPECIFICATIONS.

BEFORE START OF CONSTRUCTION, THE OWNERS OF ANY UTILITIES INVOLVED MUST BE NOTIFIED. THE EXCAVATOR IS RESPONSIBLE FOR GIVING THIS NOTICE BY CALLING "GOPHER STATE ONE-CALL" AT (651) 454-0002 (TWIN CITIES METRO AREA) OR (800) 252-1166 (ALL OTHER LOCATIONS) AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.

THE OWNER IS RESPONSIBLE FOR OBTAINING LAND RIGHTS AND ALL PERMITS OR OTHER PERMISSION NECESSARY TO PERFORM AND MAINTAIN THE PROJECT.

-- GOVERNING SPECIFICATIONS --

THE CONSTRUCTION AND MATERIALS SPECIFICATIONS PREPARED FOR THIS PROJECT SHALL GOVERN. THESE SPECIFICATIONS ARE PART OF THE PLAN.

CHANGES IN THE DRAWINGS OR SPECIFICATIONS MUST BE AUTHORIZED BY THE OWNER AND THE RESPONSIBLE ENGINEER. THE OWNER IS RESPONSIBLE FOR CONTACTING THE RED LAKE SWCD AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.



SHEET INDEX	
SHEET NO.	TITLE
1	SHEET INDEX, LEGEND, & LOCATION MAP
2	PLAN AND QUANTITIES
3	GRADE STABILIZATION STRUCTURE 55 - PROFILE AND DETAILS
4	GRADE STABILIZATION STRUCTURE 55 - DETAILS
5	ROCK RIPRAP CHUTE STRUCTURE #56
6	GRADE STABILIZATION STRUCTURE 57 - PROFILE AND DETAILS
7	GRADE STABILIZATION STRUCTURE 57 - DETAILS
8	GRADE STABILIZATION STRUCTURE 58 - PROFILE AND DETAILS
9	GRADE STABILIZATION STRUCTURE 58 - DETAILS

LEGEND

SURVEY POINT	△ INST.#1
SOIL BORING	● TH#1
BUILDING	□
WELL	○ WELL
BENCH MARK, TEMPORARY	✦ TBM#1
ORIGINAL GROUND	---
CONTOUR, INDEX	---90---
FENCE, EXISTING	-x-x-
FENCE TO BE CONSTRUCTED	-I-I-
FENCE TO BE REMOVED	-O-O-
DIVERSION	~~~~~
STREAM	~~~~~
MARSH	~~~~~
COMMON EXCAVATION	⊙
EARTHFILL, CLASS C COMPACTION	⊙
EXISTING TILE LINE	—○—
PLANNED TILE LINE	—○—
CENTERLINE OF IMPROVEMENTS	—+—
BASE LINE	—+—
DECIDUOUS TREE	⊙
CONIFEROUS TREE	✱
IRON PIPE	—+—
EMBANKMENT	—+—
RIPRAP	—+—
UTILITY POLE	—+—

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.

JAMES HEST

Signature: *James Hest*

Date: *8/10/20* Reg. No. 24511

SHEET INDEX, LEGEND AND LOCATION MAP

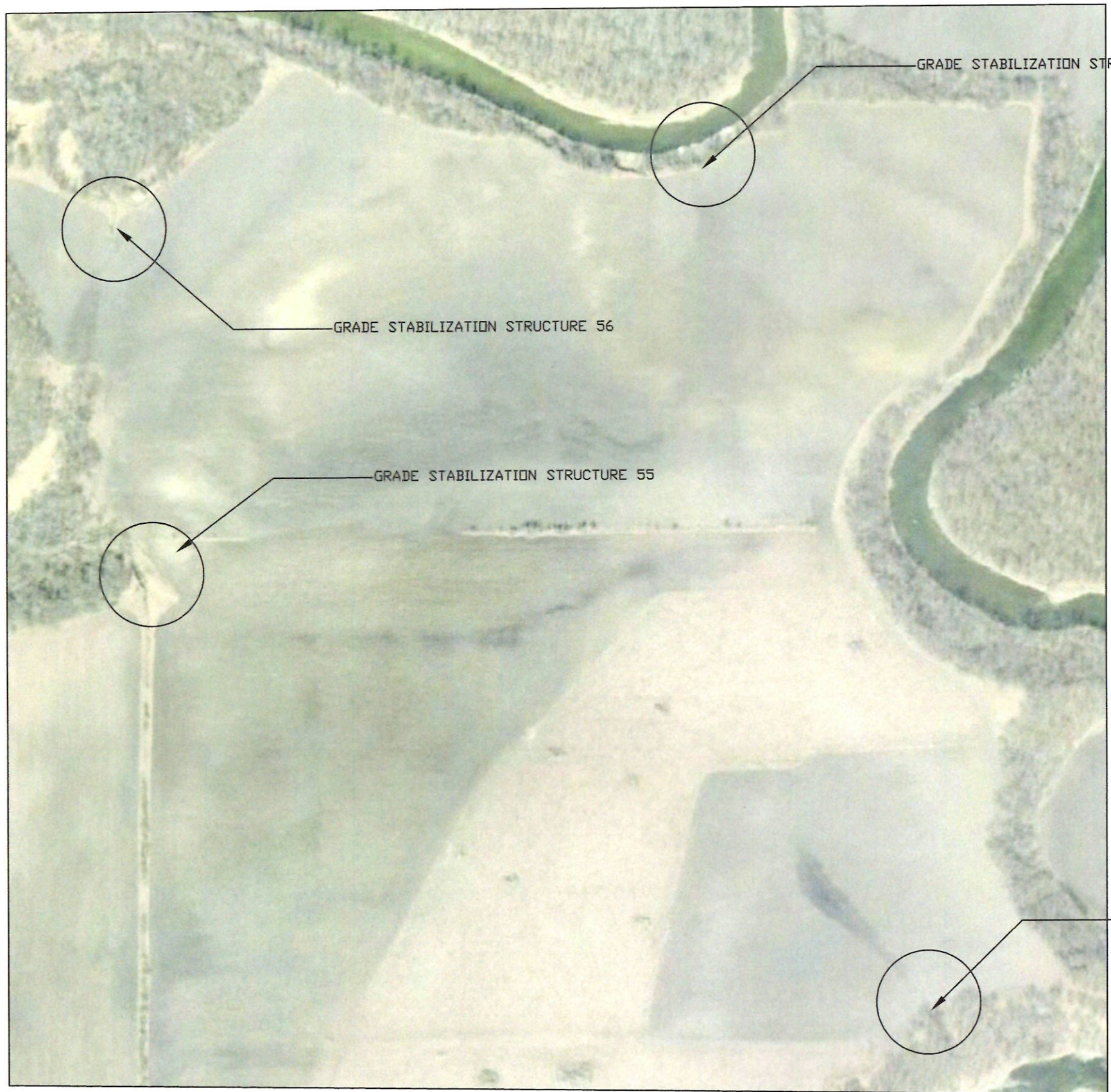
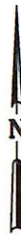
Red Lake Soil & Water Conservation District
Red Lake County, Minnesota

PREPARED BY

JAMES HEST, PE
GRYGLA, MINNESOTA 56727

P.O. Box 126 (218) 294-6701

Drawn by JAH Checked by JAH Date 08-18-20 Sheet 1 of 9



ESTIMATED QUANTITIES

Quantities are measured in place according to neat-line shown on the plans. No allowance is made for shrinkage, overlapping, connecting bands, joints, etc.

ITEM	QUANTITY	UNIT
Seed, Fertilize & Mulch	0.6	Acre
Compacted Earth Fill (Class C)	1400	Cu. Yd.
Salvage and Spreading Topsoil	1	Job
24" PE Riser	1	Each
24" Anti-Vortex Trash Rack	1	Each
15" Dual-Wall Tile	120	Ln. Ft.
30" PE Riser	2	Each
30" Anti-Vortex Trash Rack	2	Each
24" Dual-Wall Tile	150	Ln. Ft.
#4 Rebar	60	Ln. Ft.
Inlet Rock Riprap Class I (D ₅₀ =3")	12	Cu. Yd.
Outlet Rock Riprap Class II (D ₅₀ =6")	24	Cu. Yd.
Outlet Rock Riprap Class III (D ₅₀ =9")	75	Cu. Yd.
Non-Woven Geotextile	250	Sq. Yd.
Concrete	3	Cu. Yd.
Clearing Grubbing	1	Job

RALPH PERRAULT

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.

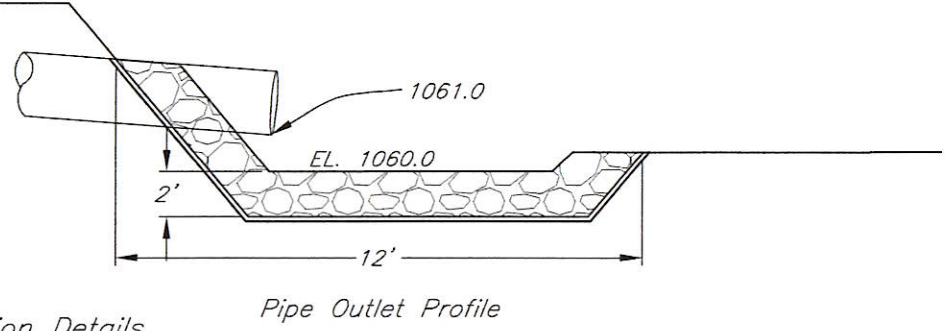
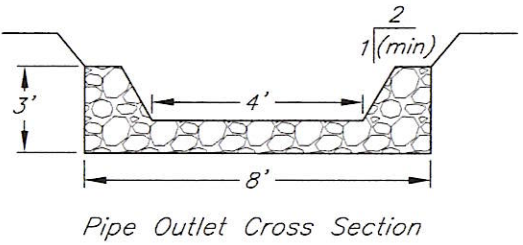
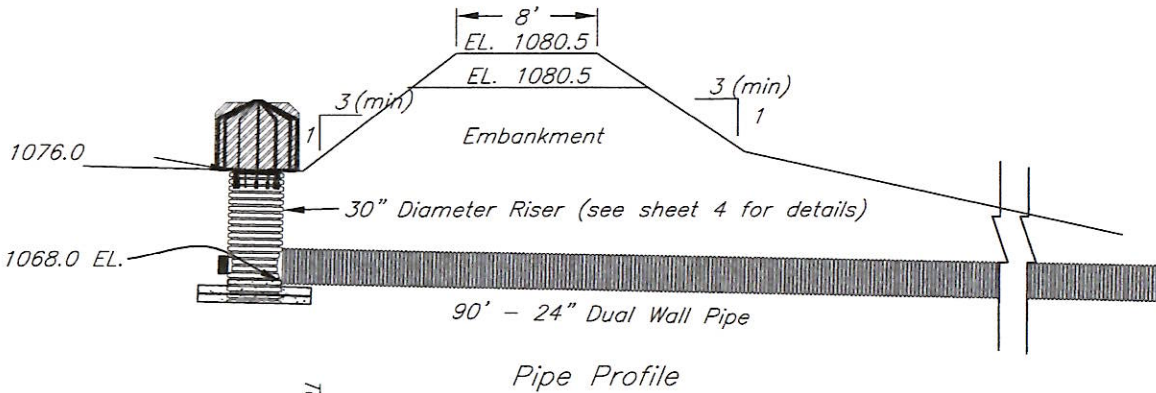
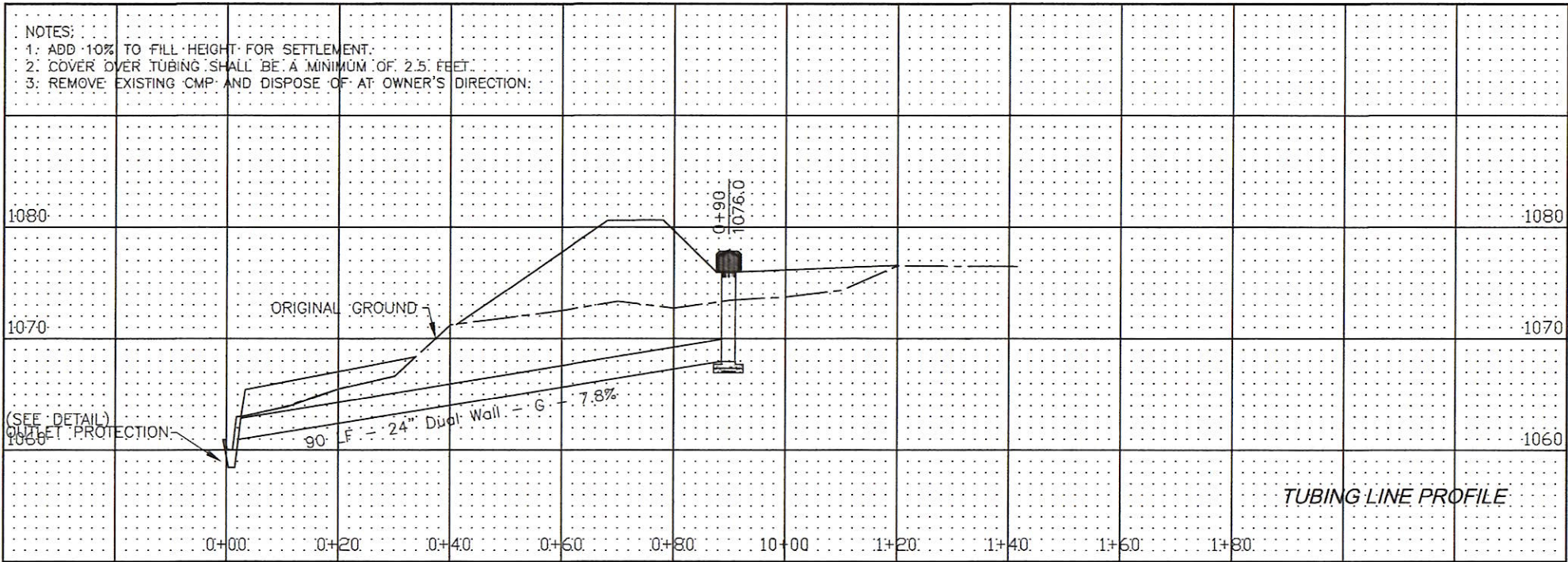
SIGNATURE: JAMES HEST
Date 2/19/20 Reg. No. 24511

PLAN AND QUANTITIES

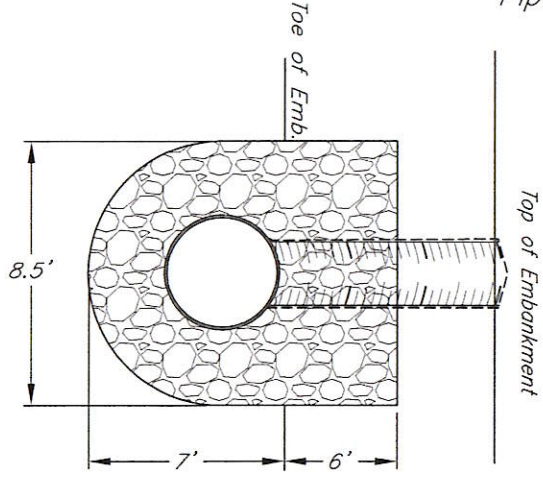
Red Lake Soil & Water Conservation District
Red Lake County, Minnesota

PREPARED BY
JAMES HEST, PE

P.O. BOX 126 GRYGLA, MINNESOTA 56727 (218) 294-6701
Drawn by JAH Checked by JAH Date 08-18-20 Sheet 2 of 9



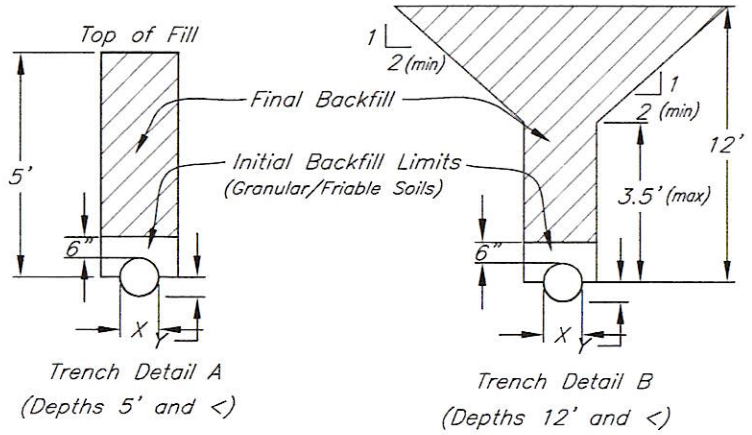
Outlet Protection Details



MNDOT
Class I
100% - 6"
50% - 3"
10% - 1"
12" Thickness

DIA	X	Y
8"	9-1/2"	4-3/4"
10"	11-5/8"	5-3/4"
12"	14-1/4"	7-0"
15"	18-3/8"	9-1/4"
18"	21-1/2"	10-3/4"
24"	28-1/2"	14-1/2"

Trench Spoon Dimensions



MNDOT
Class II
100% - 12"
75% - 9"
50% - 6"
10% - 2"
24" Thickness

RALPH PERRAULT

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JAMES HEST
 Signature: *James Hest*
 Date: 8/19/20 Reg. No. 24511

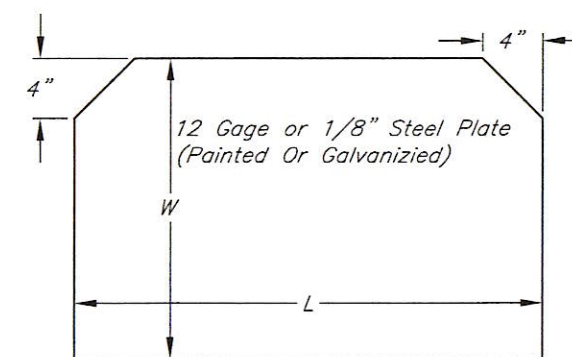
GRADE STABILIZATION STRUCTURE
 #55 PROFILE AND DETAILS

Red Lake Soil & Water Conservation District
 Red Lake County, Minnesota

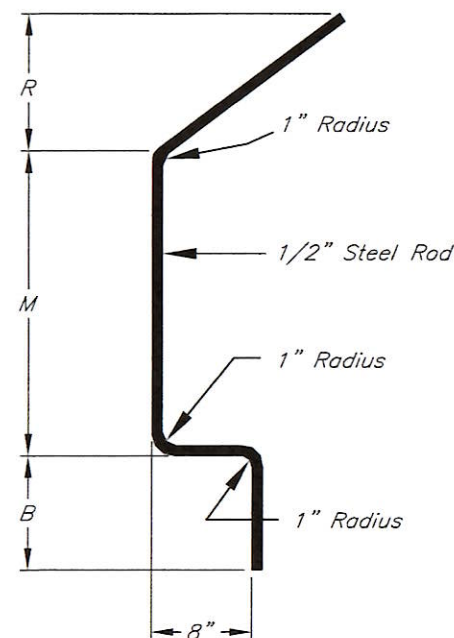
PREPARED BY
 JAMES HEST, PE
 GRYGLA, MINNESOTA 56727 (218) 294-6701

P.O. BOX 126
 Drawn by JAH Checked by JAH Date 08-18-20 Sheet 3 of 9

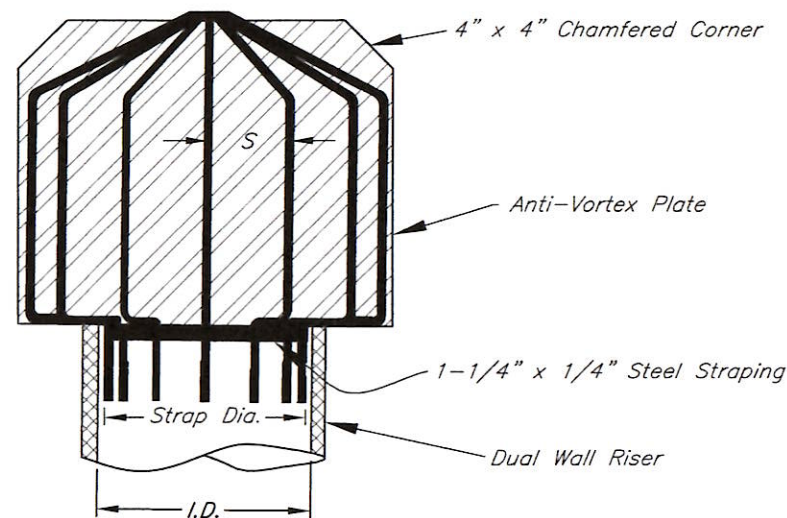
Trash Rack & Anti-Vortex Dimensions							
Pipe I.D. In.	Strap Dia. In.	S In.	B In.	M In.	R In.	W In.	L In.
12	11 1/4	5-6	9	9	12	20	28
15	14 1/4	5-6	9	9	13	21	31
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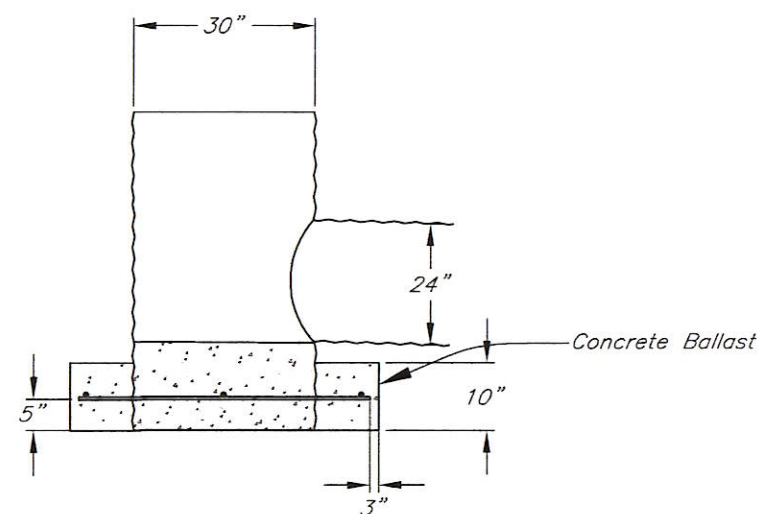
Anti-Vortex Detail



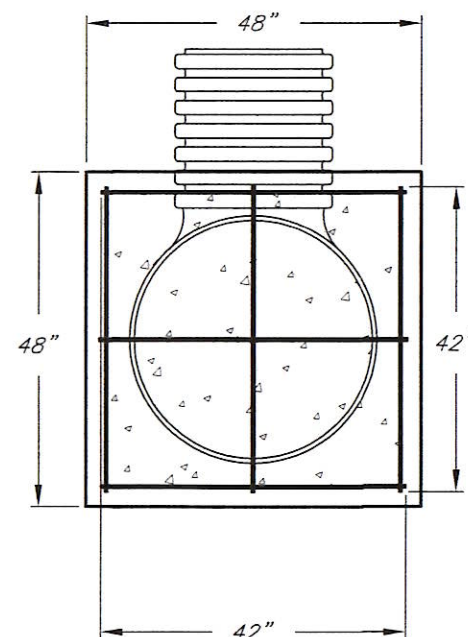
Rod Bending Detail



Trash Rack / Anti-Vortex Detail

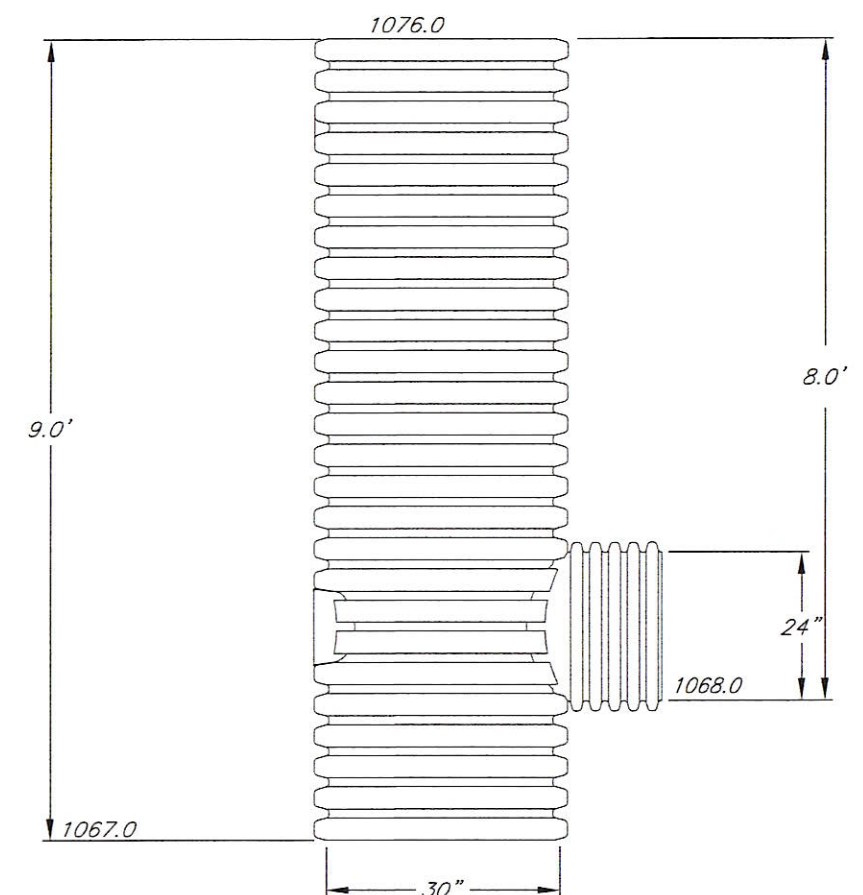


Riser Ballast Detail



Installation Notes

1. Corrugated dual wall pipe riser requires CLASS II backfill material a minimum 2 feet width around the riser. Corrugated dual wall riser outlet stub connection requires a watertight connection such as a bell to bell with gaskets.
2. Trash Rack/Antivortex requires anchoring at each end of the anti-vortex with a fence post or anchor driven into the ground a minimum 2.5 to 3'.
3. Steel reinforcement is #4 Bar. Concrete will require adequate consolidation to eliminate voids, honeycomb and fully encase rebar and embedments.



Dual Wall Riser Detail

RALPH PERRAULT

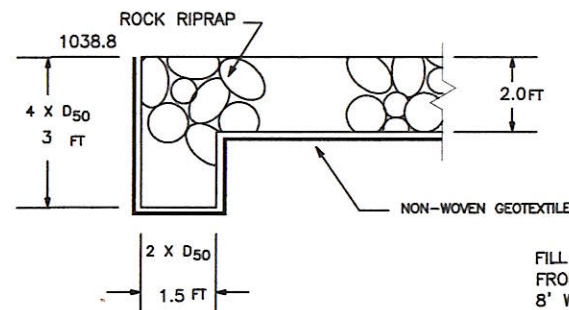
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

JAMES HEST
Signature: *[Signature]*
Date: *2/18/20* Reg. No. 24511

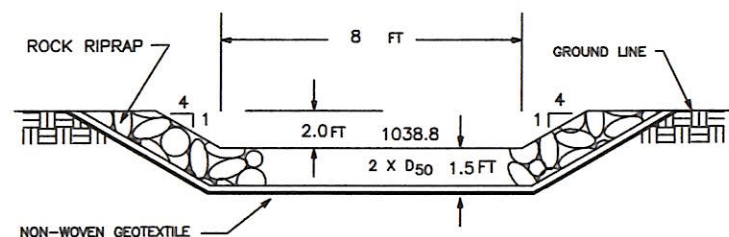
GRADE STABILIZATION STRUCTURE #55 DETAILS

Red Lake Soil & Water Conservation District
Red Lake County, Minnesota

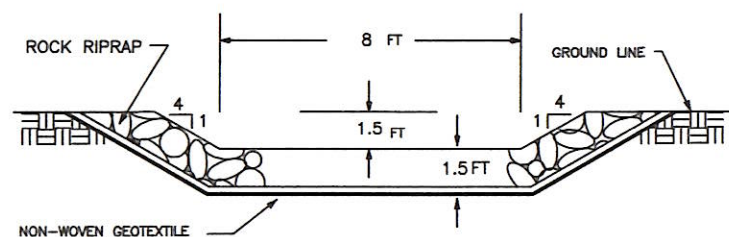
PREPARED BY
JAMES HEST, PE
P.O. BOX 126 GRYGLA, MINNESOTA 56727 (218) 294-6701
Drawn by JAH Checked by JAH Date 08-18-20 Sheet 4 of 9



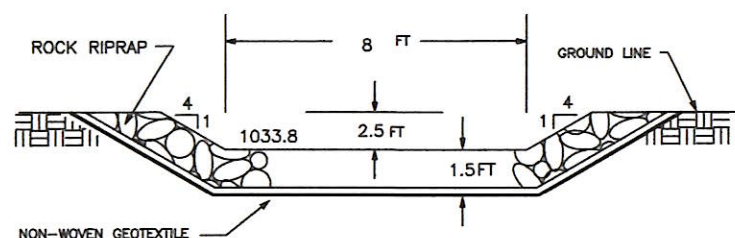
CHUTE ANCHOR DETAIL
(NOT TO SCALE)



TYPICAL SECTION J-J
(NOT TO SCALE)



TYPICAL SECTION K-K
(NOT TO SCALE)



TYPICAL SECTION L-L
(NOT TO SCALE)

CHUTE STANDARD ROCK GRADATIONS

ROCK RIPRAP SHALL MEET THE REQUIREMENTS OF MN-DOT STANDARD SPECIFICATIONS CLASS III ROCK RIPRAP

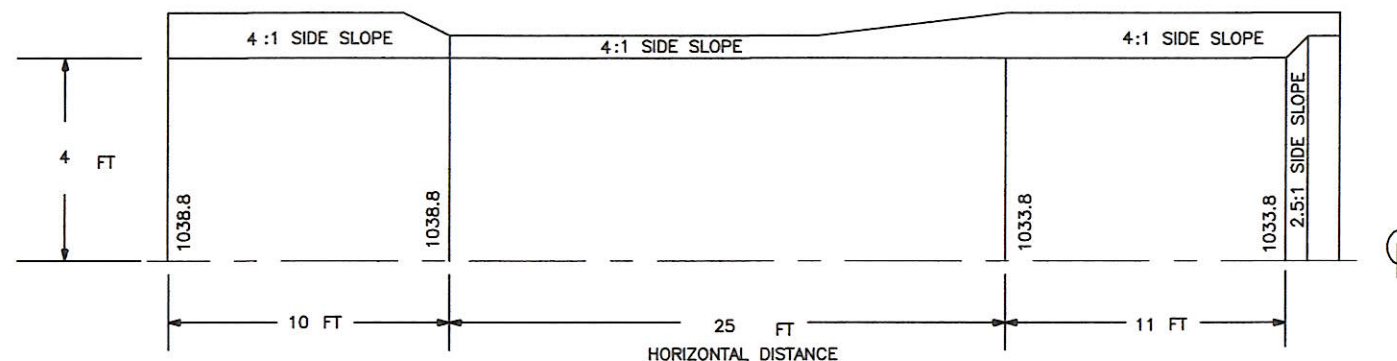
FILL IN WATERWAY EROSION FROM 0+49 - 1+90 8' WIDE, 4H:1V SIDESLOPES

TOP OF ROCK CHUTE APRON ELEV. 1038.8

SEE CHUTE ANCHOR DETAIL

NON-WOVEN GEOTEXTILE

CHUTE C PROFILE
(NOT TO SCALE)



HALF PLAN
(NOT TO SCALE)

CONSTRUCTION NOTES

1. GEOTEXTILE AND ROCK SHALL NOT BE PLACED UNTIL THE SUBGRADE SURFACE HAS BEEN INSPECTED AND APPROVED BY THE ENGINEER OR ENGINEER'S REPRESENTATIVE.
2. ROCK RIPRAP SHALL MEET THE REQUIREMENTS OF NRCS CONSTRUCTION SPECIFICATION MN-61.
3. ROCK PLACEMENT SHALL BEGIN AT THE BOTTOM OF SLOPE.
4. ROCK SHALL NOT BE DROPPED MORE THAN 3 FT. ONTO GEOTEXTILE.
5. A SUFFICIENT AMOUNT OF ROCK SHALL BE HAND PLACED TO SECURE CONTACT BETWEEN STONES AND INSURE A NEAT, UNIFORM SURFACE.

MATERIALS NOTES

1. GEOTEXTILE SHALL BE NON-WOVEN, CLASS I, AND MEET THE REQUIREMENTS OF NRCS MATERIAL SPECIFICATION MN-592.
2. ROCK RIPRAP SHALL MEET THE REQUIREMENTS OF NRCS MATERIAL SPECIFICATION MN-523, ROCK FOR RIPRAP.

RALPH PERRAULT

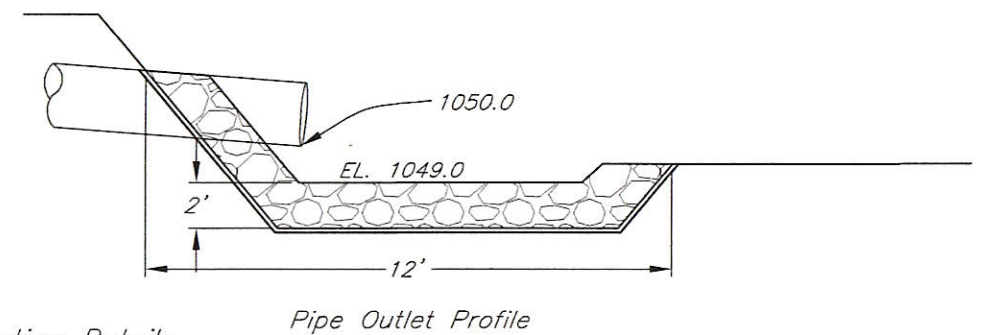
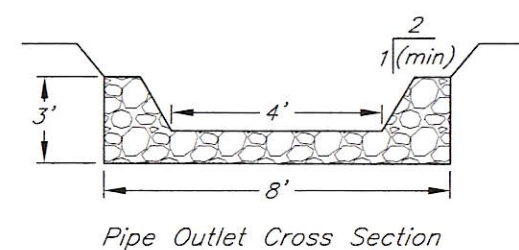
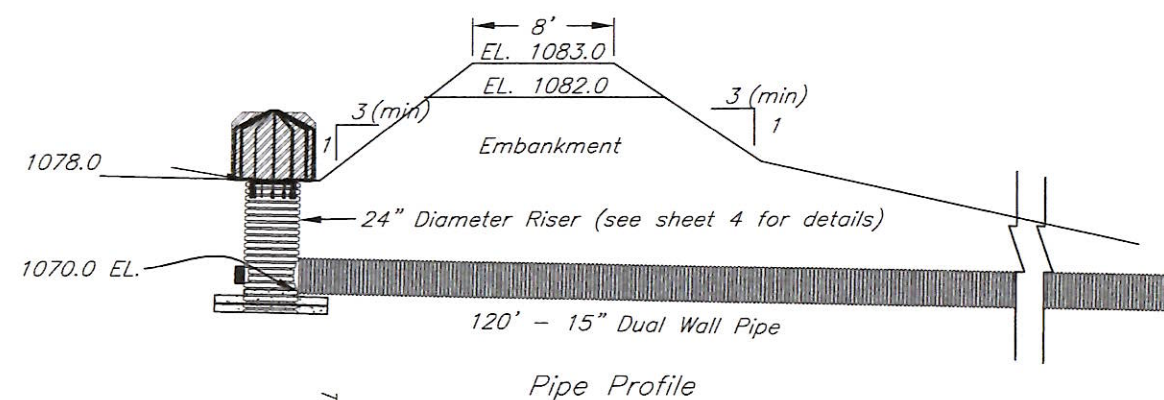
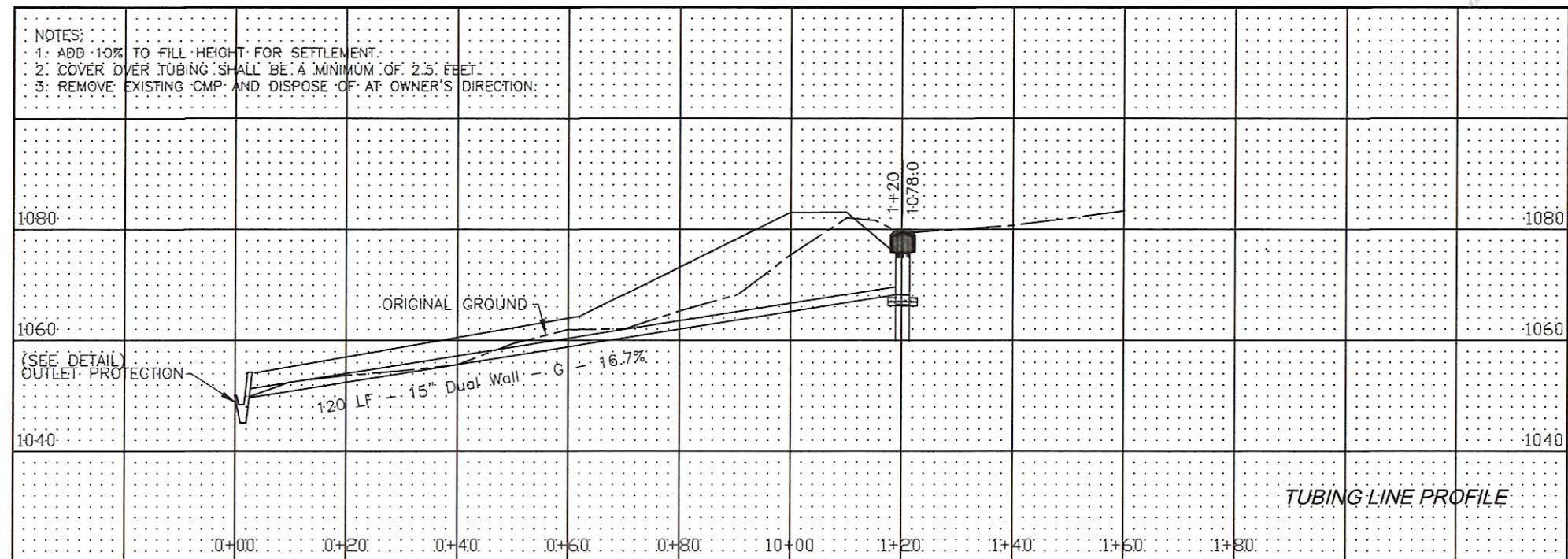
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

JAMES HEST
SIGNATURE: *James Hest*
Date: *8/19/20* Reg. No. 24511

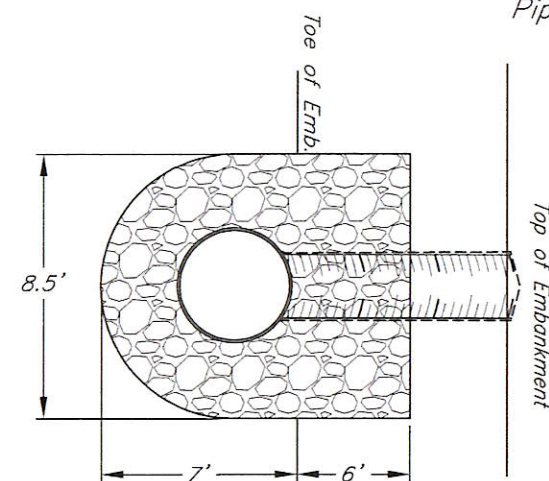
ROCK RIPRAP CHUTE STRUCTURE #56

Red Lake Soil & Water Conservation District
Red Lake County, Minnesota

PREPARED BY
JAMES HEST, PE
P.O. BOX 126 GRYGLA, MINNESOTA 56727 (218) 294-6701
Drawn by JAH Checked by JAH Date 8-17-20 Sheet 5 of 9



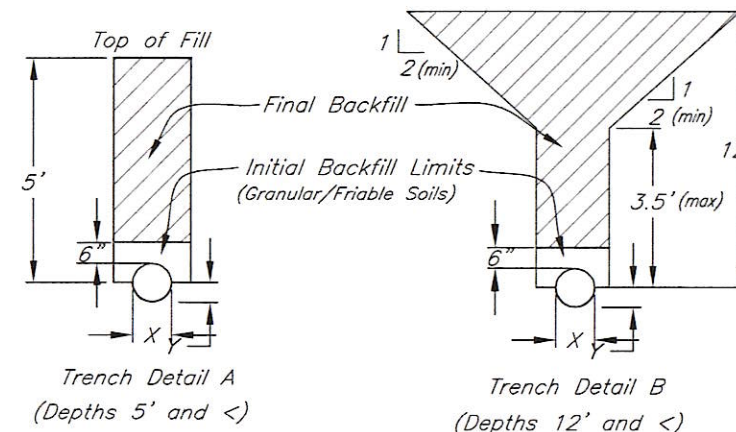
Outlet Protection Details



MNDOT
Class I
100% - 6"
50% - 3"
10% - 1"
12" Thickness

DIA	X	Y
8"	9-1/2"	4-3/4"
10"	11-5/8"	5-3/4"
12"	14-1/4"	7-0"
15"	18-3/8"	9-1/4"
18"	21-1/2"	10-3/4"
24"	28-1/2"	14-1/2"

Trench Spoon Dimensions



Trenching Details

MNDOT
Class II
100% - 12"
75% - 9"
50% - 6"
10% - 2"
24" Thickness

RALPH PERRAULT

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JAMES HEST
 Signature: *James Hest*
 Date: 2/18/20 Reg. No. 24511

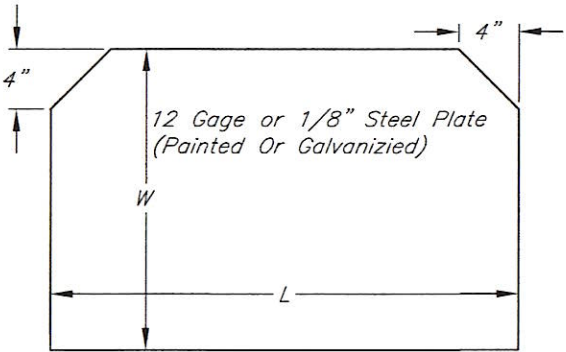
GRADE STABILIZATION STRUCTURE
 #57 PROFILE AND DETAILS

Red Lake Soil & Water Conservation District
 Red Lake County, Minnesota

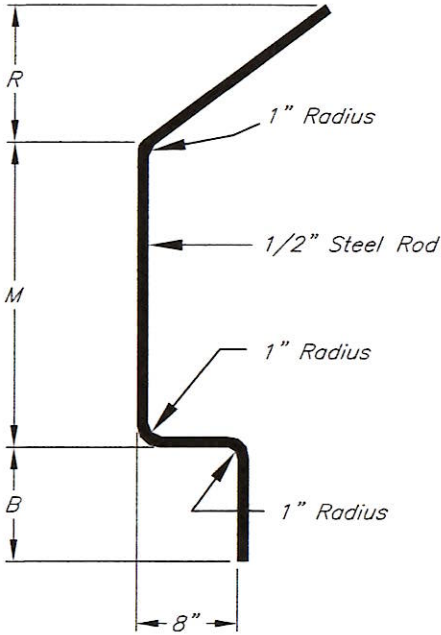
PREPARED BY
 JAMES HEST, PE
 P.O. BOX 126 GRYGLA, MINNESOTA 56727 (218) 294-6701

Drawn by JAH Checked by JAH Date 08-18-20 Sheet 6 of 9

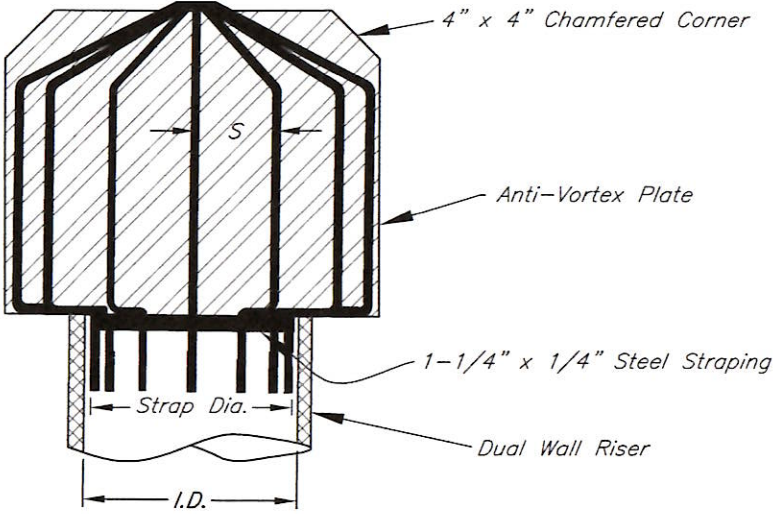
Trash Rack & Anti-Vortex Dimensions							
Pipe I.D. In.	Strap Dia. In.	S In.	B In.	M In.	R In.	W In.	L In.
12	11 1/4	5-6	9	9	12	20	28
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36	35 1/4	9-10	12	21	9	29	52



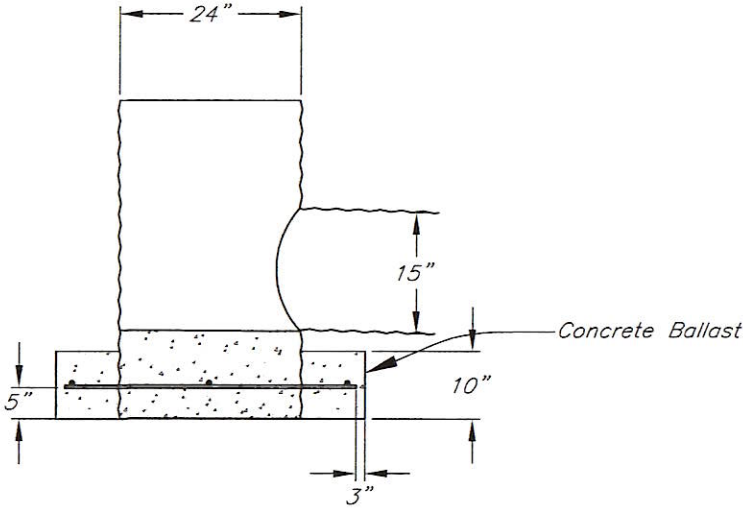
Anti-Vortex Detail



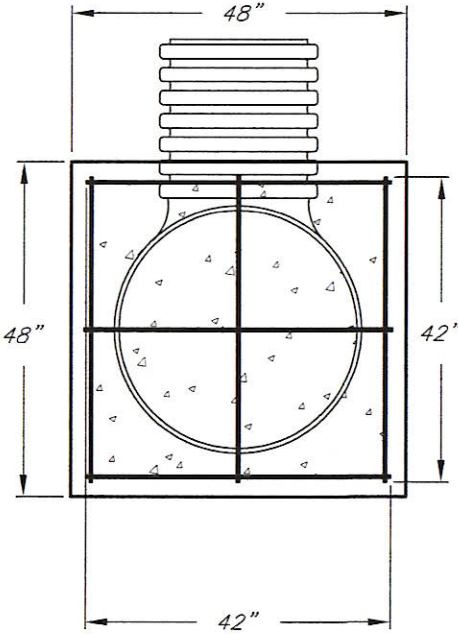
Rod Bending Detail



Trash Rack / Anti-Vortex Detail

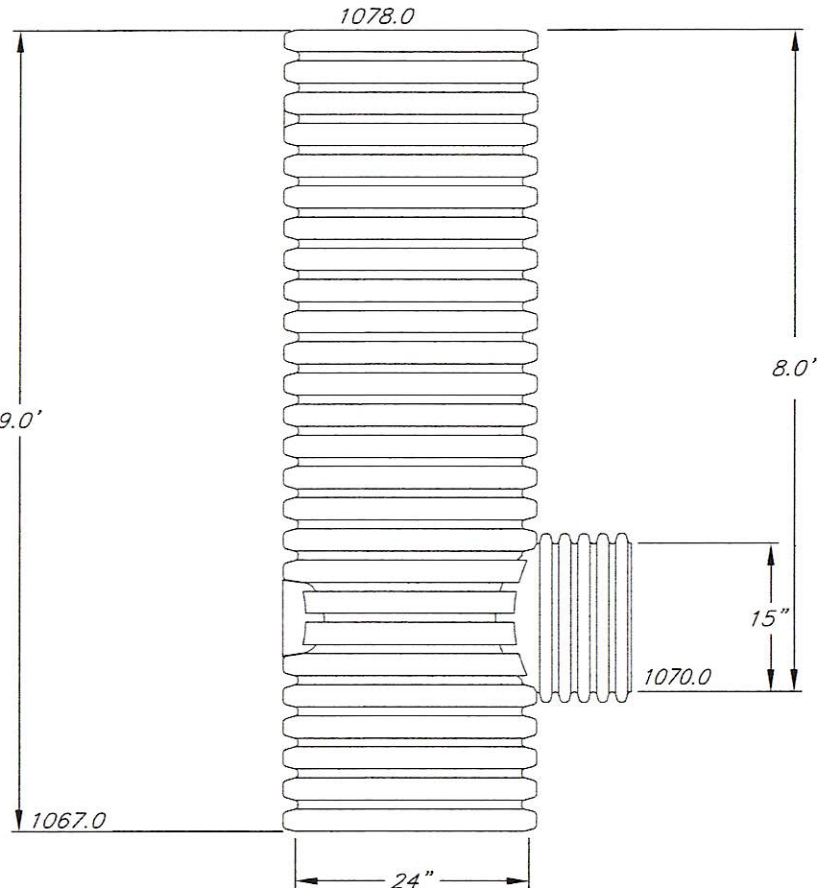


Riser Ballast Detail



Installation Notes

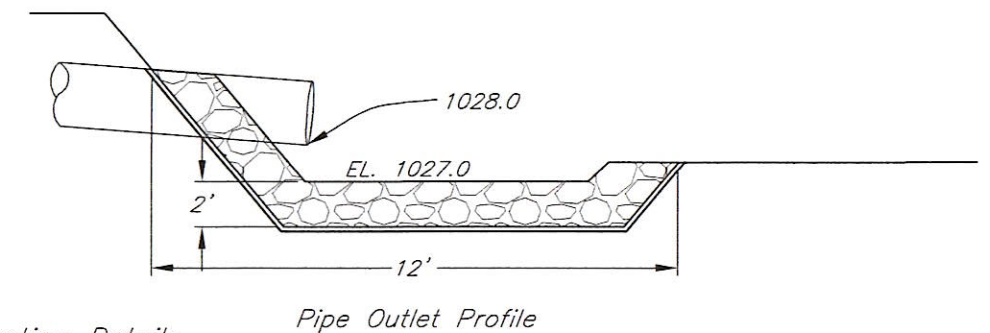
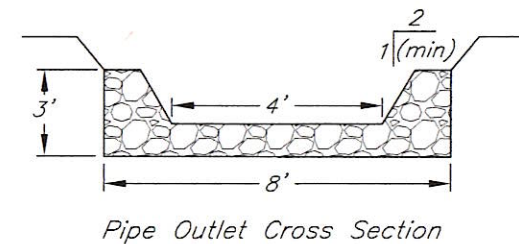
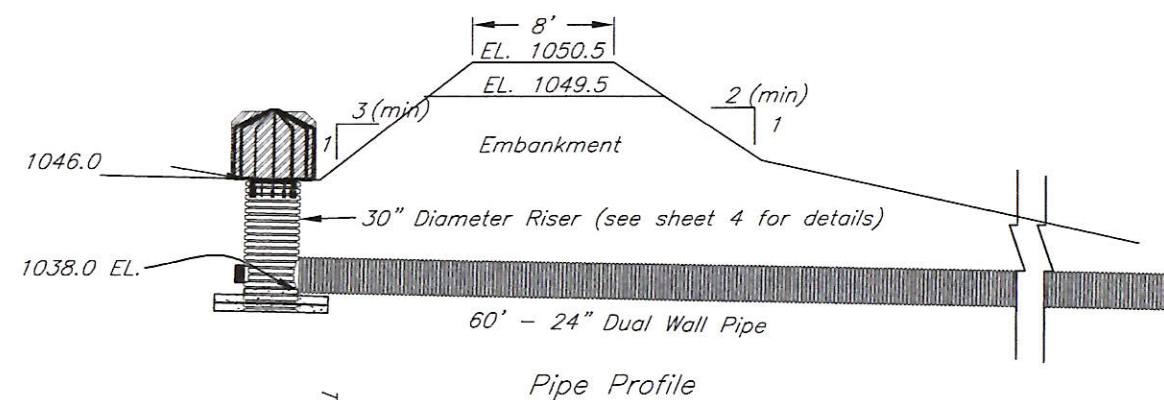
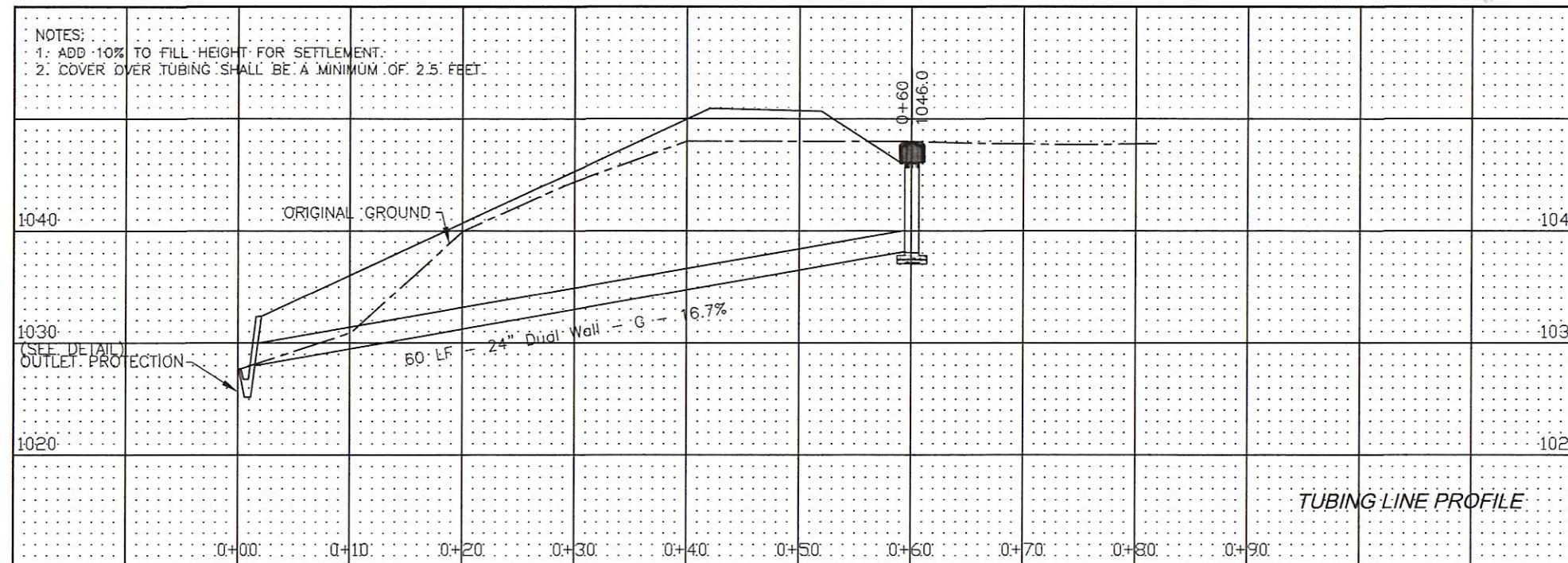
1. Corrugated dual wall pipe riser requires CLASS II backfill material a minimum 2 feet width around the riser. Corrugated dual wall riser outlet stub connection requires a watertight connection such as a bell to bell with gaskets.
2. Trash Rack/Antivortex requires anchoring at each end of the anti-vortex with a fence post or anchor driven into the ground a minimum 2.5 to 3'.
3. Steel reinforcement is #4 Bar. Concrete will require adequate consolidation to eliminate voids, honeycomb and fully encase rebar and embedments.



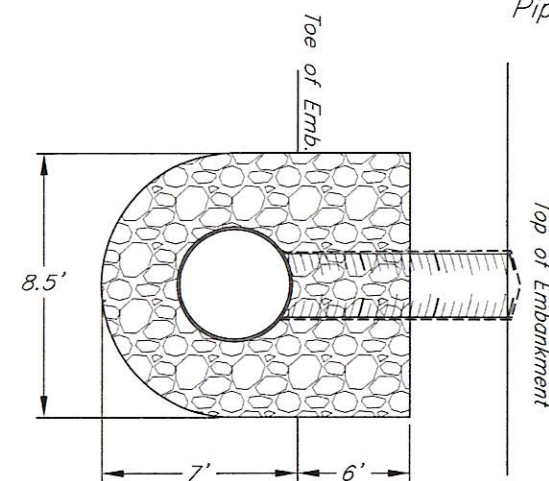
Dual Wall Riser Detail

RALPH PERRAULT

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.		GRADE STABILIZATION STRUCTURE #57 DETAILS	
JAMES HEST Signature: <i>[Signature]</i> Date: <i>2/18/22</i>		Red Lake Soil & Water Conservation District Red Lake County, Minnesota	
Reg. No. 24511		PREPARED BY JAMES HEST, PE GRYGLA, MINNESOTA 56727 (218) 294-6701	
Date: <i>2/18/22</i>		Drawn by JAH Checked by JAH Date 08-18-20 Sheet 7 of 9	



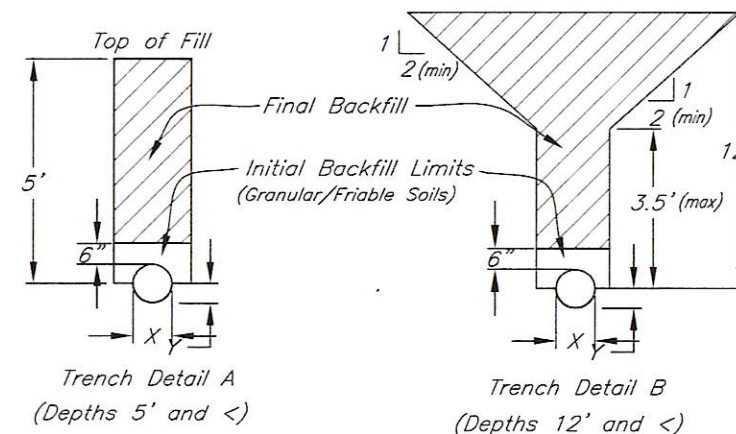
Outlet Protection Details



MNDOT
Class I
100% - 6"
50% - 3"
10% - 1"
12" Thickness

DIA	X	Y
8"	9-1/2"	4-3/4"
10"	11-5/8"	5-3/4"
12"	14-1/4"	7-0"
15"	18-3/8"	9-1/4"
18"	21-1/2"	10-3/4"
24"	28-1/2"	14-1/2"

Trench Spoon Dimensions



Trenching Details

MNDOT
Class II
100% - 12"
75% - 9"
50% - 6"
10% - 2"
24" Thickness

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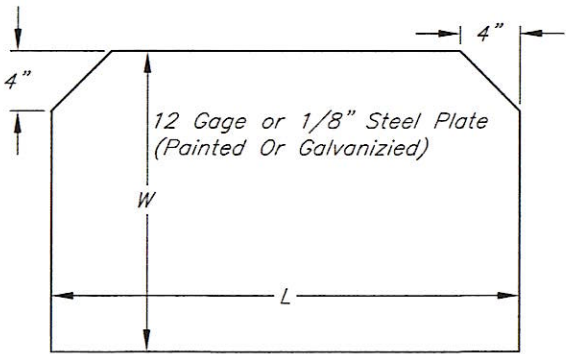
JAMES HEST
 Signature: *[Signature]*
 Date: 2/18/20 Reg. No. 24511

GRADE STABILIZATION STRUCTURE #58 PROFILE AND DETAILS

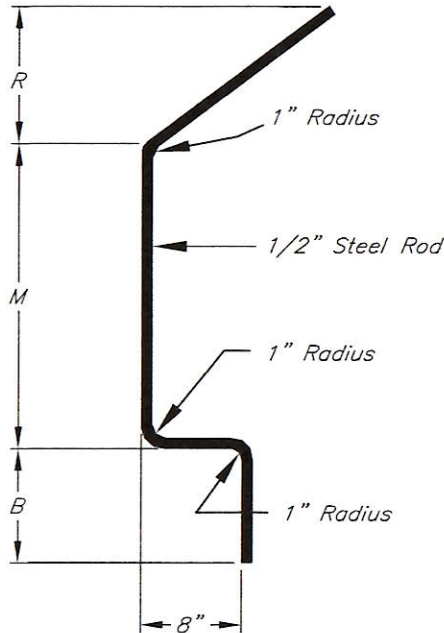
Red Lake Soil & Water Conservation District
 Red Lake County, Minnesota

PREPARED BY
 JAMES HEST, PE
 P.O. BOX 126 GRYGLA, MINNESOTA 56727 (218) 294-6701
 Drawn by JAH Checked by JAH Date 08-18-20 Sheet 8 of 9

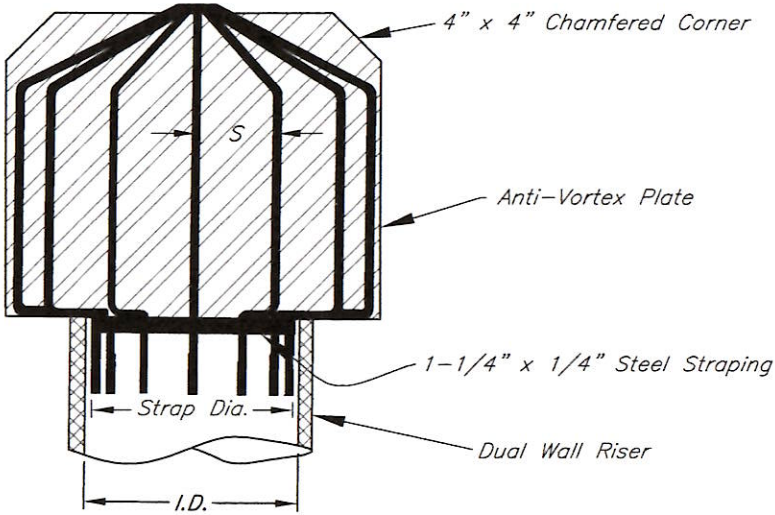
Trash Rack & Anti-Vortex Dimensions							
Pipe I.D. In.	Strap Dia. In.	S In.	B In.	M In.	R In.	W In.	L In.
12	11 1/4	5-6	9	9	12	20	28
15	14 1/4	5-6	9	9	13	21	31
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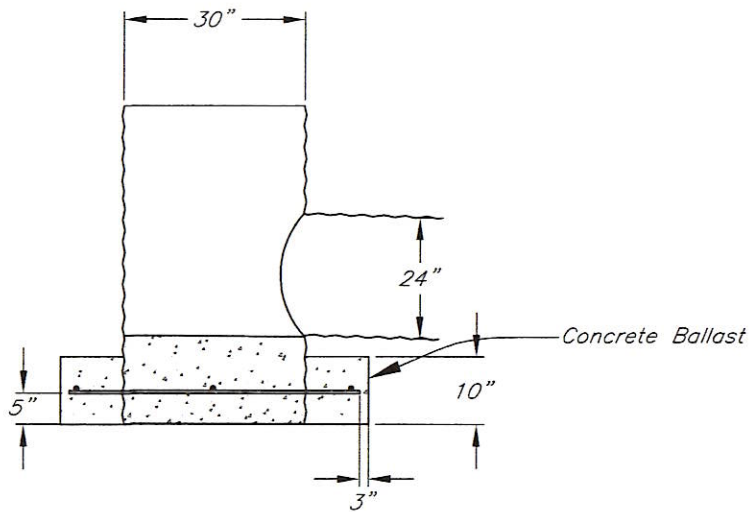
Anti-Vortex Detail



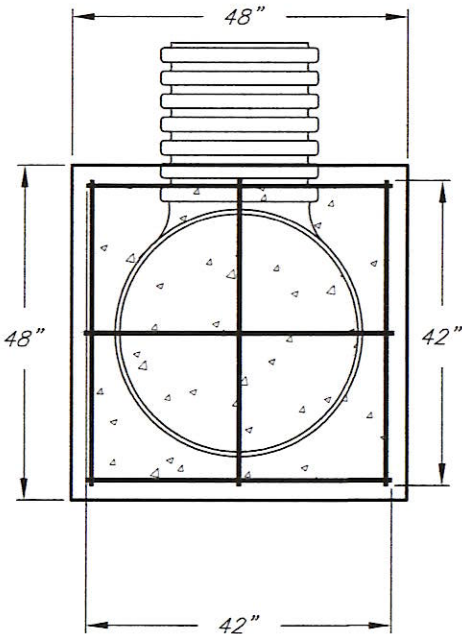
Rod Bending Detail



Trash Rack / Anti-Vortex Detail

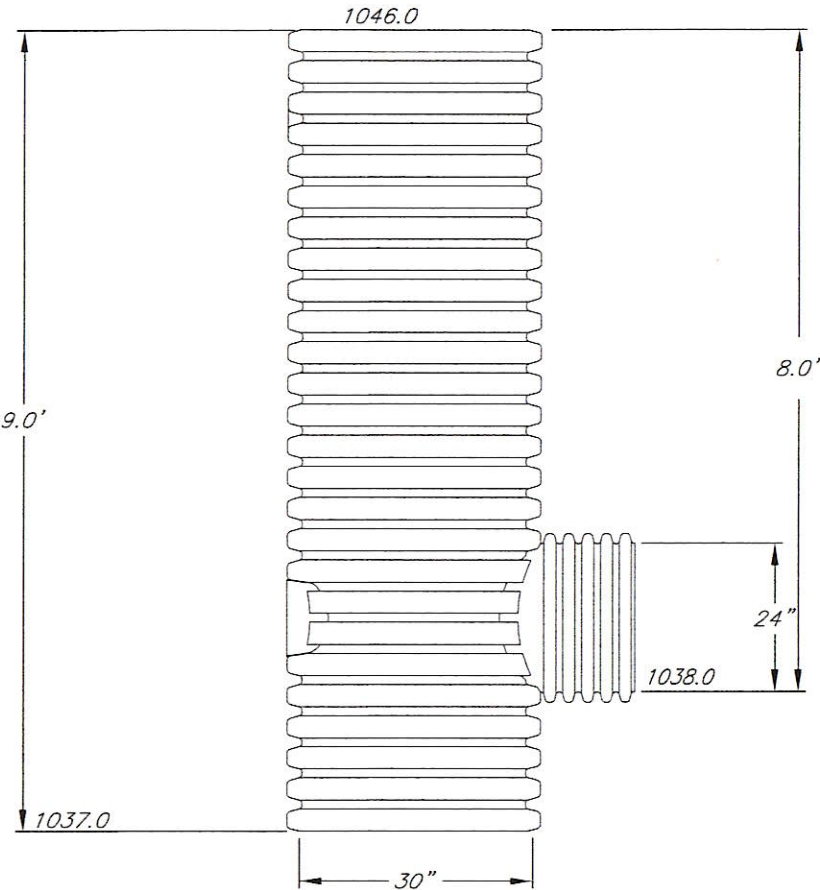


Riser Ballast Detail



Installation Notes

1. Corrugated dual wall pipe riser requires CLASS II backfill material a minimum 2 feet width around the riser. Corrugated dual wall riser outlet stub connection requires a watertight connection such as a bell to bell with gaskets.
2. Trash Rack/Antivortex requires anchoring at each end of the anti-vortex with a fence post or anchor driven into the ground a minimum 2.5 to 3'.
3. Steel reinforcement is #4 Bar. Concrete will require adequate consolidation to eliminate voids, honeycomb and fully encase rebar and embedments.



Dual Wall Riser Detail

RALPH PERRAULT

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.

JAMES HEST
 Signature: *[Signature]*
 Date: *8/18/20* Reg. No. 24511

GRADE STABILIZATION STRUCTURE
 #58 DETAILS

Red Lake Soil & Water Conservation District
 Red Lake County, Minnesota

PREPARED BY
 JAMES HEST, PE
 P.O. BOX 126 GRYGLA, MINNESOTA 56727 (218) 294-6701

Drawn by JAH Checked by JAH Date 08-18-20 Sheet 9 of 9

RALPH PERRAULT GRADE STABILIZATION PROJECTS REPAIRS
SECTION 32,34 GERVAIS TWP.
BID FORM
RED LAKE COUNTY SWCD

Bid Item No.	Description	Unit of Measure	Contract Quantity	Unit Price (\$)	Contract Amount (\$)
2021.501	MOBILIZATION	LUMP SUM	1	\$1,500.00	\$1,500.00
2105.507	COMMON EXCAVATION (P) (EV)	C.Y.	200	\$10.00	\$2,000.00
2106.507	COMMON EMBANKMENT (P) CV)	C.Y.	200	\$12.00	\$2,400.00
2511.507	RANDOM RIPRAP, CLASS II	C.Y.	10	\$125.00	\$1,250.00
2575.501	TURF ESTABLISHMENT	LUMP SUM	1	\$2,000.00	\$2,000.00
Total Bid Amount =					\$9,150.00

Red Lake County SWCD
2602 Wheat Drive – Suite 103
Red Lake Falls, MN 56750

October 11, 2022

Myron Jesme, Administrator
Red Lake Watershed District
1000 Pennington Avenue
Thief River Falls, MN 56701

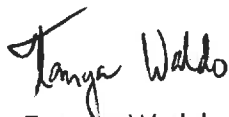
Red Lake County SWCD would like to request \$925.00, from the Red Lake Watershed District, for the repairs needed to four 2020 installed Grade Stabilization Structure Projects in Red Lake County.

The project that needs local assistance is located in Gervais Township Section 32 & 34. Repairs are needed to four structures from the erosion caused by the spring flood event. Houston Engineering Inc. Opinion of Probable Cost is \$9,150.00. Red Lake County SWCD developed a contract with the landowner in the amount of \$7,000.00.

The Red Lake County SWCD would like to request \$925.00 from the Red Lake Watershed District to assist with the local match requirement for this project. The total project cost bid from Ryan's Backhoe Service was \$6,306.87. Red Lake County SWCD will be using 2021 BWSR Clean Water funding to fund 75% of this project. The local match requirement is \$1,576.72. The property owner will be in charge of paying \$651.72; if the Red Lake Watershed District approves the \$925.00 request.

If you have any questions, please give me a call at (218)253-2593.

Thank you,

A handwritten signature in black ink that reads "Tanya Waldo". The signature is written in a cursive, flowing style.

Tanya Waldo, District Manager
Red Lake County SWCD

**VAL GAGNON GRADE STABILIZATION PROJECTS
SECTION 28 GERVAIS TWP.
OPINION OF PROBABLE COST
RED LAKE COUNTY SWCD**

8/09/2021

Bid Item No.	Description	Unit of Measure	Contract Quantity	Unit Price (\$)	Contract Amount (\$)
2021.501	MOBILIZATION	LUMP SUM	1	\$1,500.00	\$1,500.00
2104.503	REMOVE PIPE CULVERT	LIN. FT.	37	\$15.00	\$555.00
2105.507	COMMON BORROW (P) (CV)	C.Y.	62	\$12.00	\$744.00
2105.507	COMMON EXCAVATION (P) (EV)	C.Y.	136	\$4.00	\$544.00
2451.507	GRANULAR BEDDING (P) (CV)	C.Y.	5	\$30.00	\$150.00
2501.601	12" RODENT GUARD	EACH	1	\$100.00	\$100.00
2503.503	12" CP PIPE SEWER (SMOOTH)	LIN. FT.	48	\$30.00	\$1,440.00
2503.601	18" CP PIPE RISER (SMOOTH)	LIN. FT.	8.5	\$135.00	\$1,147.50
2503.602	18" ANTI-VORTEX TRASH RACK	EACH	1	\$800.00	\$800.00
2511.507	RANDOM RIPRAP, CLASS II	C.Y.	7	\$100.00	\$700.00
2575.501	TURF ESTABLISHMENT	LUMP SUM	1	\$1,000.00	\$1,000.00
Total Construction Cost =					\$8,680.50
Contingencies (5%) =					\$430.00
TOTAL CONSTRUCTION COST =					\$9,110.50

VAL GAGNON GRADE STABILIZATION PROJECTS
SECTION 28 GERVAIS TWP.
BID FORM
RED LAKE COUNTY SWCD

Bid Item No.	Description	Unit of Measure	Contract Quantity	Unit Price (\$)	Contract Amount (\$)
2021.501	MOBILIZATION	LUMP SUM	1		
2104.503	REMOVE PIPE CULVERT	LIN. FT.	37		
2105.507	COMMON BORROW (P) (CV)	C.Y.	62		
2105.507	COMMON EXCAVATION (P) (EV)	C.Y.	136		
2451.507	GRANULAR BEDDING (P) (CV)	C.Y.	5		
2501.601	12" RODENT GUARD	EACH	1		
2503.503	12" CP PIPE SEWER (SMOOTH)	LIN. FT.	48		
2503.601	18" CP PIPE RISER (SMOOTH)	LIN. FT.	8.5		
2503.602	18" ANTI-VORTEX TRASH RACK	EACH	1		
2511.507	RANDOM RIPRAP, CLASS II	C.Y.	7		
2575.501	TURF ESTABLISHMENT	LUMP SUM	1		
Total Bid Amount =					

CONSTRUCTION PLANS FOR
RED LAKE COUNTY SWCD
VAL GAGNON GRADE STABILIZATION
SECTION 28, GERVAIS TWP, RED LAKE COUNTY
AUGUST, 2021

HOUSTON
engineering, inc.
125 3rd STREET E
THIEF RIVER FALLS, MN 56701
P: 218.681.2951
www.houstoneng.com

SHEET INDEX

- | | |
|---|------------------|
| 1 | COVER SHEET |
| 2 | QUANTITIES |
| 3 | RISER DETAILS |
| 4 | PLAN AND PROFILE |

GOVERNING SPECIFICATIONS:

THE 2018 EDITION OF THE MINNESOTA DEPARTMENT OF
TRANSPORTATION "STANDARD SPECIFICATIONS FOR
CONSTRUCTION" SHALL GOVERN.

UTILITY NOTE:

UNDERGROUND UTILITIES WERE NOT LOCATED AS PART OF THE
PRELIMINARY SURVEY OR DATA GATHERING FOR THIS SITE.

STATE LAW REQUIRES THE EXCAVATOR TO CONTACT GOPHER STATE
ONE-CALL AT (800) 252-1166 FOR UTILITY LOCATION 48 HOURS PRIOR TO
START OF EXCAVATION WORK.

HORIZONTAL AND VERTICAL CONTROL

- ALL COORDINATES LISTED IN THIS PLAN ARE MNDOT, RED LAKE
COUNTY, U.S. FOOT
- ALL ELEVATIONS ARE NAVD 88 DATUM

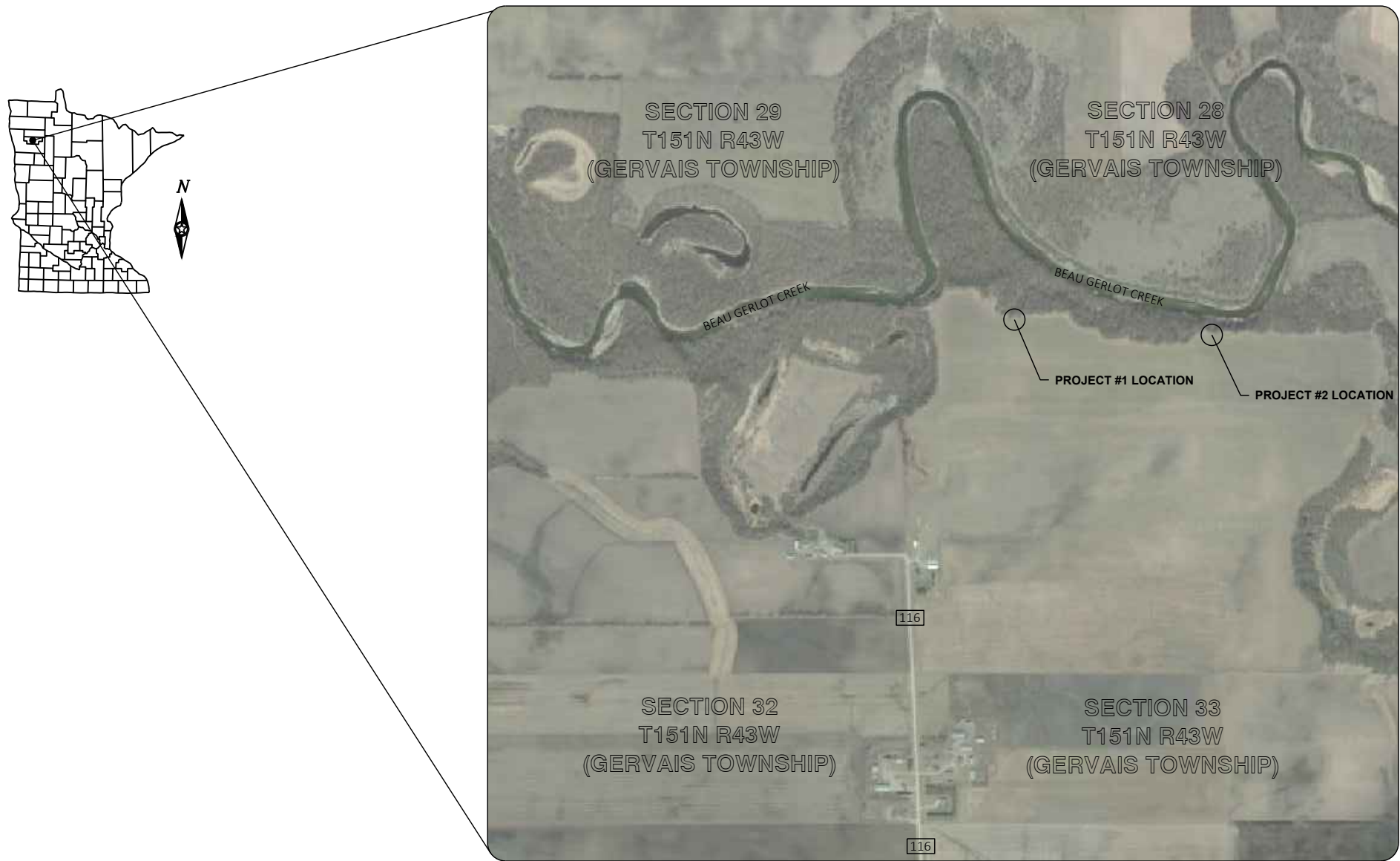
TO THE BEST OF MY PROFESSIONAL
KNOWLEDGE, JUDGEMENT, AND
BELIEF, THESE PLANS MEET
APPLICABLE NRCS STANDARDS.

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.

Tony A. Nordby

Tony A. Nordby
License No. 51392

Date: 8/09/21

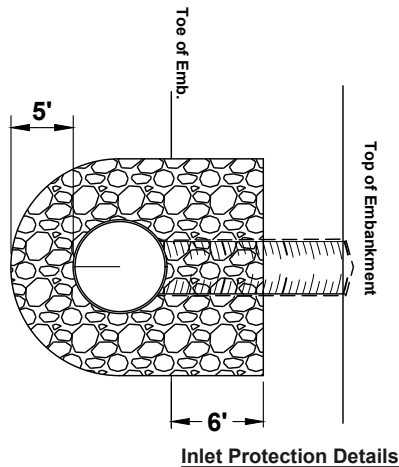
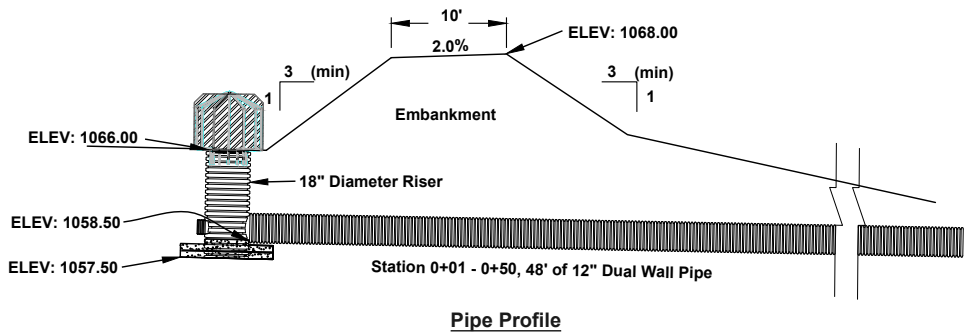


LOCATION MAP

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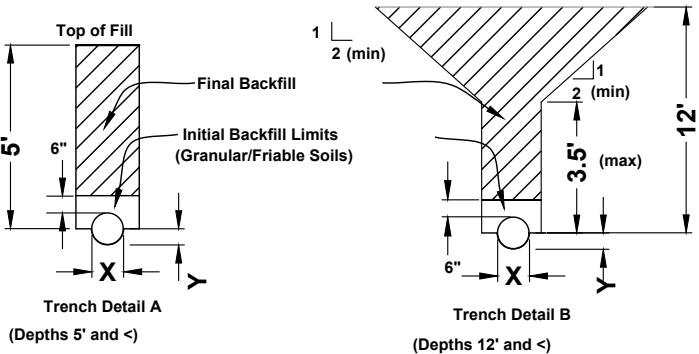
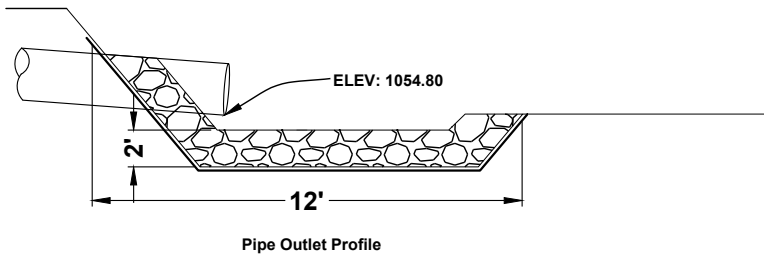
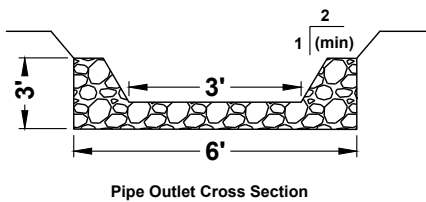
STATEMENT OF ESTIMATED QUANTITIES				
NOTES	ITEM NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
	2021.501	MOBILIZATION	LUMP SUM	1
	2104.503	REMOVE PIPE CULVERTS	LIN. FT.	37
(1) (2)	2105.507	COMMON BORROW (P) (CV)	C.Y.	62
(1)	2105.507	COMMON EXCAVATION (EV) (P)	C.Y.	136
(1)	2451.507	GRANULAR BEDDING (P) (CV)	C.Y.	5
(5)	2501.601	12" RODENT GUARD	EACH	1
	2503.503	12" CP PIPE SEWER (SMOOTH)	LIN. FT.	48
(6)	2503.601	18" CP PIPE RISER (SMOOTH)	LIN. FT.	8.5
	2503.602	18" ANTI-VORTEX TRASH RACK	EACH	1
(3)	2511.507	RANDOM RIPRAP, CLASS II	C.Y.	7
(4)	2575.501	TURF ESTABLISHMENT	LUMP SUM	1

BASIS OF ESTIMATED QUANTITIES	
SEED, MIXTURE 25-141	59 LB PLS/ACRE
SEED, MIXTURE 21-112	25 LB PLS/ACRE
MULCH MATERIAL, TYPE 1	2 TON/ACRE
FERTILIZER, TYPE 1 (20-20-10)	250 LB/ACRE



DIA	X	Y
8"	9-1/2"	4-3/4"
10"	11-5/8"	5-3/4"
12"	14-1/4"	7-0"
15"	18-3/8"	9-1/4"
18"	21-1/2"	10-3/4"
24"	28-1/2"	14-1/2"

Trench Spoon Dimensions



CONSTRUCTION NOTES:

- (1) (P) DENOTES A PLAN QUANTITY ITEM WITH NO ADDITIONAL COMPENSATION MADE. (CV) DENOTES COMPACTED VOLUME. (EV) DESIGNATES AN EXCAVATED VOLUME ITEM WITH NO ADDITIONAL DIRECT COMPENSATION MADE THEREOF.
- (2) ITEM NO. 2501.507 "COMMON EXCAVATION (EV) (P)" SHALL INCLUDE STOCKPILING MATERIAL OBTAINED FROM EXCAVATION OF SITE 2. STOCKPILE SHALL BE PLACED A MINIMUM OF 20 FT. AWAY FROM TIE-IN WITH EXISTING GROUND AS SHOWN ON THE PLAN TO ALLOW FOR SEEDING LIMITS.
- (3) ITEM NO. 2105.507 "COMMON BORROW (CV) (P)" INCLUDES THE ESTIMATED QUANTITY FOR CONSTRUCTING THE DIKES TO THE PROFILE, TOP WIDTH, AND SLOPES AS SHOWN IN THE PLAN ON SHEET. THE COMMON BORROW MATERIAL FOR THE DIKE SHALL BE SUPPLIED BY THE CONTRACTOR. GRADING WORK SHOWN ON PLAN AND PROFILE SHEETS FOR PROPOSED WATERWAY PROFILE SHALL BE CONSIDERED INCIDENTAL TO ITEM NO. 2105.507 "COMMON BORROW (P) (CV)." SEE SPECIAL PROVISIONS FOR MORE DETAIL.
- (4) ITEM NO. 2511.507 "RANDOM RIPRAP, CLASS II" SHALL BE FOR CONSTRUCTION OF THE INLET AND OUTLET PROTECTION FOR THE RISER STRUCTURES AND PIPE OUTLETS. GEOTEXTILE FABRIC TYPE III SHALL BE PLACED UNDER ALL RIPRAP AND IS CONSIDERED INCIDENTAL TO ITEM NO. 2511.507 "RANDOM RIPRAP, CLASS II" AND NO ADDITIONAL COMPENSATION WILL BE MADE THEREOF. EXCAVATION FOR INSTALLATION OF RIPRAP IS CONSIDERED INCIDENTAL TO ITEM NO. 2511.507 "RANDOM RIPRAP, CLASS II." SEE SPECIAL PROVISIONS FOR MORE DETAIL.
- (5) SEE THE SPECIAL PROVISIONS FOR MORE DETAIL ON SPECIFICATIONS FOR ITEM NO. 2575.501 "TURF ESTABLISHMENT."
- (6) RODENT GUARDS SHALL BE INSTALLED ON ANY OUTLET PIPE SIZE 15" AND SMALLER. RODENT GUARDS SHALL BE AGRI DRAIN CORPORATION OR APPROVED EQUIVALENT.
- (7) CONCRETE BALLAST FOR ITEM NO. 2503.601 "CP PIPE RISER (SMOOTH)" MAY BE PRECAST OR POURED IN PLACE. CONCRETE BALLAST SHALL MEET THE REQUIREMENTS OF MNDOT 2411. ALL #4 REBAR AND CONCRETE SHALL BE INCIDENTAL TO ALL ITEM NO. 2503.601 "CP PIPE RISER (SMOOTH)" AND NO COMPENSATION SHALL BE MADE THEREOF.

VAL GAGNON GRADE STABILIZATION
RED LAKE COUNTY SWCD
SECTION 28, GERVAIS TOWNSHIP, RED LAKE COUNTY, MN

QUANTITIES AND RISER DETAIL



Drawn By
KMF
Checked By
TAN
Date
8-09-21
Scale
As Shown
Project No.
10861-0001

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.

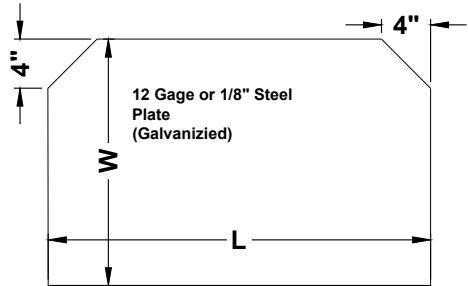
Tony A. Nordby
Tony A. Nordby
License No. 51392

Date: 8/09/21

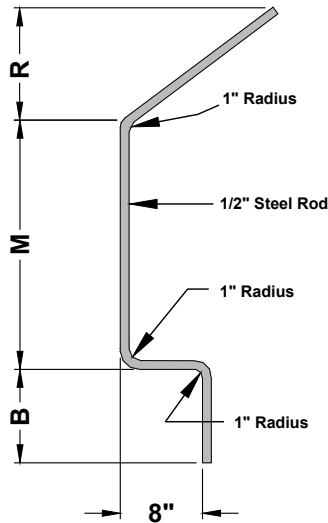
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2

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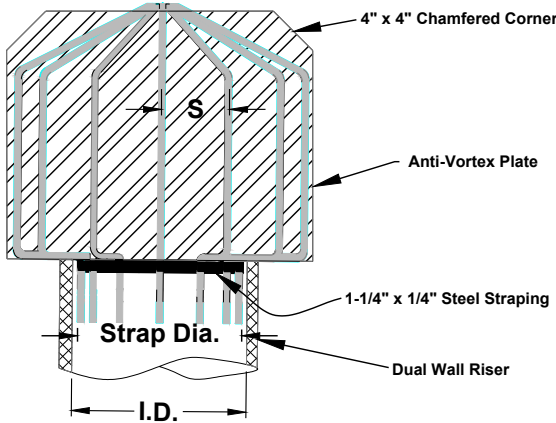
TRASH RACK & ANTI-VORTEX DIMENSIONS							
Pipe I.D. (In.)	Strap Dia. (In.)	S (In.)	B (In.)	M (In.)	R (In.)	W (In.)	L (In.)
12	11 1/4	5-6	9	9	12	20	28
15	14 1/4	5-6	9	9	13	21	31
18	17 1/4	6-7	9	9	14	22	34
24	23 1/4	7-8	12	15	11	25	40
30	29 1/4	8-9	12	18	10	27	46
36	35 1/4	9-10	12	21	9	29	52



Anti-Vortex Detail



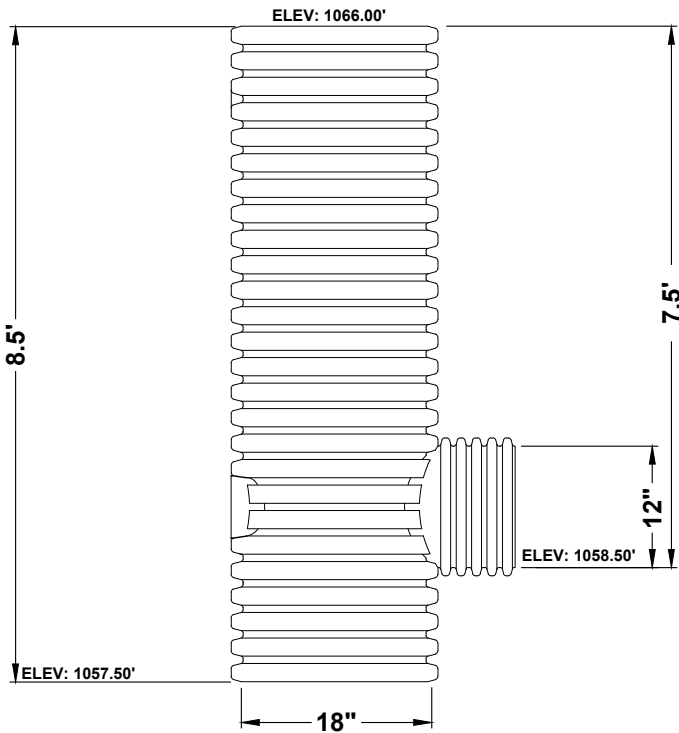
Rod Bending Detail



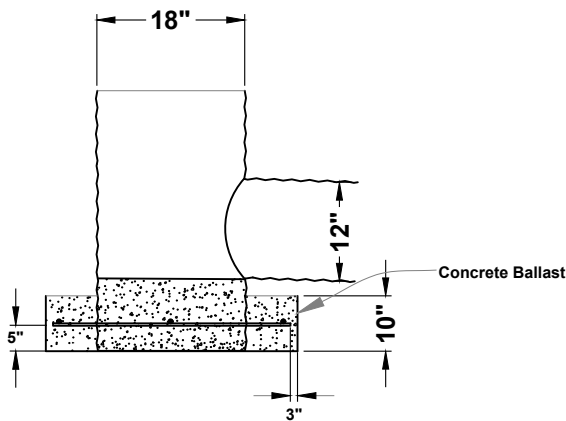
Trash Rack / Anti-Vortex Detail

Installation Notes:

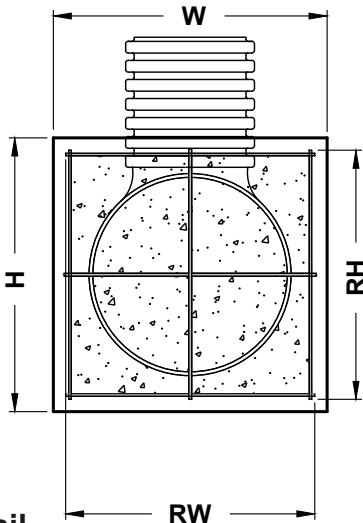
1. Corrugated dual wall pipe riser requires CLASS II backfill material a minimum 2 feet width around the riser. Corrugated dual wall riser outlet stub connection requires a watertight connection such as a bell to bell with gaskets.
2. Trash Rack/Antivortex requires anchoring at each end of the anti-vortex with a fence post or anchor driven into the ground a minimum 2.5 to 3'.
3. Steel reinforcement is #4 Bar. Concrete will require adequate consolidation to eliminate voids, honeycomb and fully encase rebar and embedments.



Dual Wall Riser Detail



Riser Ballast Detail



RISER BALLAST SIZING CHART				
PIPE SIZE	H	W	RH	RW
12"	24"	24"	18"	18"
18"	30"	30"	24"	24"
24"	36"	36"	30"	30"
30"	42"	42"	36"	36"
54"	66"	66"	60"	60"

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.

Tony A. Nordby

Tony A. Nordby
License No. 51392

Date: 8/09/21



Drawn By
KMF

Checked By
TAN

Date
8-09-21

Scale
As Shown

Project No.
10861-0001

SHEET
3

VAL GAGNON GRADE STABILIZATION
RED LAKE COUNTY SWCD
SECTION 28, GERVAIS TOWNSHIP, RED LAKE COUNTY, MN

RISER DETAIL

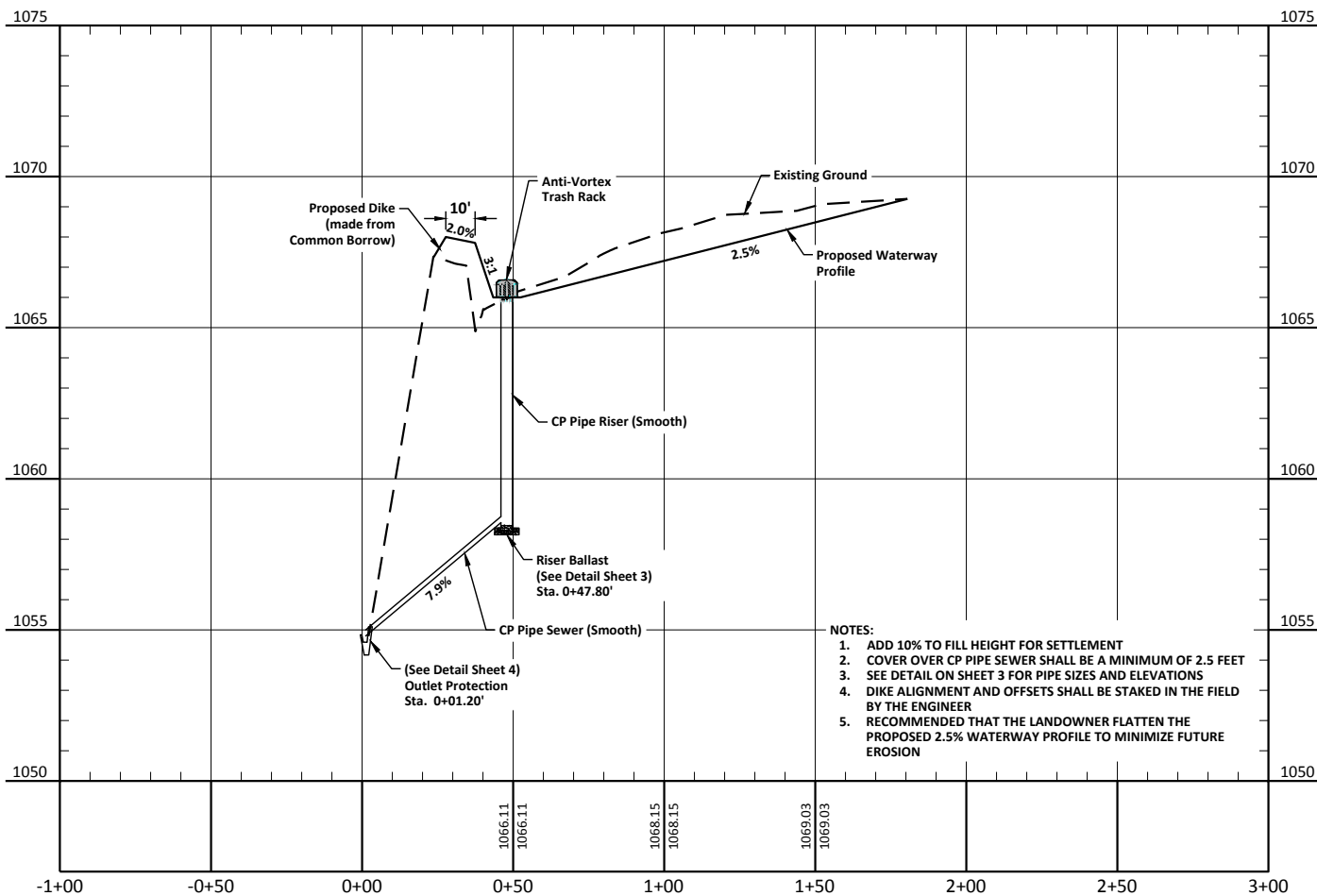
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Revision

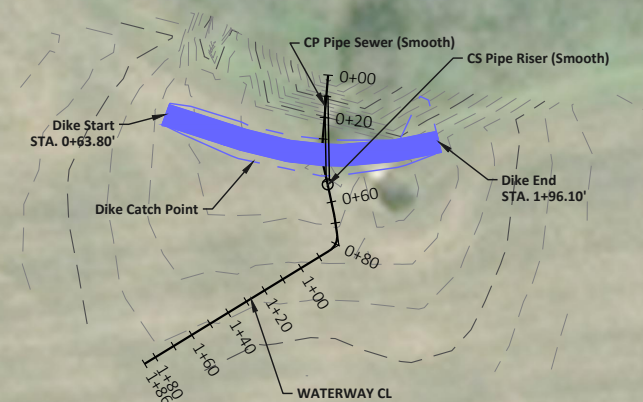
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By

Sta. 0+23.00 to Sta. 0+43.00



SITE #1



Common Excavation (CV) (P): 136 cu. yd.

Remove Existing Pipe Culvert: 37 ft.
Common Borrow (CV): 62 cu. yd.
Rip-Rap: 7 cu. yd.
Granular Bedding: 86 cu. yd.

18" CS Pipe Riser (Smooth): 8.5 ft.
12" CP Pipe Sewer: 48 ft.
12" Rodent Guard

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.

Tony A. Nordby
License No. 51392

Date: 8/09/21

No.	Revision

PLAN AND PROFILE



HOUSTON
Engineering Inc.

Drawn By
KMF

Checked By	TAN
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Date

8-09-21

Scale	
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As Shown

Project No.

0861-0001

SHEET

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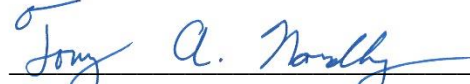
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Val Gagnon Grade Stabilization **Sect. 28 Gervais Twp.** **Red Lake County**

<u>SP2018#</u>	<u>ITEM#</u>	<u>DATA</u>	<u>PAGE</u>
S-1	(2021)	MOBILIZATION	2
S-2	(2105)	EXCAVATION AND EMBANKMENT	2
S-3	(2451)	STRUCTURE EXCAVATIONS AND BACKFILLS.....	3
S-4	(2503)	PIPE SEWERS	4
S-5	(2511)	RIPRAP	4
S-6	(2575)	ESTABLISHING TURF AND CONTROLLING EROSION.....	5

I Hereby certify that these Special Provisions 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.



Tony A. Nordby, PE, Lic. No. 51392

8/9/2021

Date

DIVISION S

S-1 (2021) MOBILIZATION

- S-1.1 Item No. 2021.501, "Mobilization", shall be compensation for all mobilization and demobilization costs on this project including costs associated with, but not limited to, any Contracts, Bonds, and required Insurance.

S-2 (2105) EXCAVATION AND EMBANKMENT

Modify MnDOT 2105 as follows:

- S-2.1 Item No. 2105.507, "Common Borrow (P) (CV)", shall be a Plan Quantity Item.

Item No. 2105.507, "Common Borrow (P) (CV)", includes the borrow material necessary to construct the dikes to the elevation, profile, and cross section as shown in the plan. 6 inches of topsoil shall be stripped from the footprint of the dike prior to placing borrow material and placed back on the dike at the finished top elevation and cross section as shown in the plan. Borrow material shall be free of all frozen soil, brush, roots, or other perishable material. Item No. 2105.507, "Common Borrow (P) (CV)", includes the stripping, stockpiling, and replacing of all topsoil, excavation/fill of all erosion waterway areas upstream from the riser structures identified on the plan, and construction of dikes to the line, slopes, cross sections, and grades shown on the plans. All unsuitable materials for dike construction such as roots, rubbish, stumps, or other objectionable material shall be properly disposed of in accordance with the plans, special provisions and all applicable rules and regulations.

During placement and compaction of the common borrow material, the moisture of the material being placed shall be maintained within the specified range. The application of water to the common borrow material shall be accomplished at the borrow areas insofar as practicable. Water may be applied by sprinkling the material after placement on the dike, if necessary. Uniform moisture distribution shall be obtained by disking. Material that is too wet when deposited on the dike shall either be removed or be dried to the specified moisture content prior to compaction.

The common borrow compaction shall comply with MnDOT 2105.3 F.2 – Quality Compaction Method.

The common borrow shall be placed in uniform layers not exceeding 12 inches of uniform thickness, and thoroughly mixed by disking or other approved methods to obtain uniformity of material.

During the course of the work, the Engineer may perform such quality assurance tests as are required to identify materials; determine compaction characteristics; determine moisture content; and determine density of common borrow in place. Tests performed by the Engineer will be used to verify that the common borrow conforms to contract requirements of the specifications and not as a replacement for the Contractor's quality control program. Densities of the common borrow areas once placed requiring compaction will be determined in accordance with the appropriate ASTM methods which may include ASTM D1556 (Sand Cone Method), D2167 (Balloon Method), D2922 (Nuclear Methods) 2937 (Drive Cylinder Method) and other methods approved by the Engineer. The Engineer will determine the density test which is appropriate for the conditions and materials encountered.

The moisture content will be determined in accordance with appropriate ASTM methods which may include ASTM D2216, D3017, D4643, D4944, D4959 and other methods approved by the Engineer. The Engineer will determine moisture content tests which are appropriate for the conditions and materials encountered.

Where the density tests do not meet the minimum requirements as set forth above, the Contractor, at his own expense, shall remove, replace, and re-compact the spoil bank material. A retest shall be required for every density test that does not meet the minimum requirements for moisture and density and paid for by the Contractor.

Once each lift has been adequately processed, the surface of each lift shall be scarified to a minimum of 2 inches prior to placing additional lifts.

In placing of the common borrow, hauling equipment shall be routed so that the material is distributed uniformly over the entire width of each layer of material. Special care shall be exercised in construction of the common borrow to avoid displacement or other damage to the structure and to obtain satisfactory compaction.

Stones of over three inches in maximum dimension will not be permitted in the dike. Stumps, logs, large roots, snow, ice, frozen lumps of earth, or other objectionable materials shall not be placed in any portion of the dike.

The common borrow shall not be placed during periods when the material freezes while being placed and compacted, nor shall any common borrow material be placed on soil that is frozen. Where the foundation soil is frozen at a time when weather conditions are such that dike construction could be continued without the material freezing as it is being placed and compacted, the Contractor may be permitted to excavate the frozen foundation soil and proceed with the common borrow placement as the weather permits, but only if and to the extent approved by the Engineer, and with the understanding that the additional costs involved shall be borne by the Contractor. The frozen soil shall be pulverized or coarsened and replaced with other suitable material as may be necessary to construct the dike as specified.

Finish surface shall be approved by the Engineer prior to seeding.

All costs associated with providing the work necessary to complete Item No. 2105.507, "Common Borrow (P) (CV)", including, but not limited to, stripping, stockpiling, replacing, excavation, fill, loading, hauling, placing, drying/watering, compacting, and/or disposing of common borrow material shall be included in the unit bid price for Item No. 2105.507, "Common Borrow (P) (CV)", and no additional compensation will be considered thereof.

Measurement for Item No. 2105.507, "Common Borrow (P) (CV)", shall be by Plan Quantity (P) Compacted Volume (CV), and Cubic Yard (CY) basis. The volume of common borrow material placed to the design plan, grade, and cross section will be included in the Plan Quantity (P) for payment, and no direct measurement will be made unless determined necessary by the Engineer.

S-2.2 Item No. 2105.507, "Common Excavation", shall be a Plan Quantity Item.

Approximately 136 CY of excavated material shall be removed and stockpiled a minimum of 20 feet away from the tie-in with existing ground as directed by the Engineer in the field. All costs associated with removal and stockpiling of common excavation shall be solely borne by the Contractor and included in Item No. 2105.507, "Common Excavation", and no additional payment will be considered thereof.

S-3 (2451) STRUCTURE EXCAVATIONS AND BACKFILLS

Modify MnDOT 2451 as follows:

S-3.1 Excavation and backfilling operations associated with the removal of existing structures and installation of new pipe culverts and drainage structures will be performed in accordance with MnDOT 2451. All labor, equipment and material costs associated with excavation and backfilling work necessary for the removal and/or installation of pipe culverts, drainage structures, rip rap and all items

- requiring excavation operations for installation shall be considered an incidental cost to the respective Pay Items, and no direct payment for structure excavation and backfilling will be made thereof.
- S-3.2 Where applicable, a minimum of 6" of topsoil shall be salvaged, stockpiled within the construction area and placed over the finished graded slope areas affected by the pipe sewer, culverts and risers excavation and backfilling operations. All associated labor, equipment and material costs necessary to salvage and place the topsoil shall be incidental to the respective Bid Item and no direct compensation will be considered thereof.
- S-3.3 Any clearing and grubbing necessary to remove or install pipe sewer, culverts, or riser structures shall be completed and disposed of by the Contractor off the project site. All associated labor, equipment and material costs necessary to clear and grub shall be incidental to the respective pipe sewer, culvert, or riser structure Bid Item and no direct compensation will be considered thereof.
- S-3.4 All pipe sewer and culverts shall be backfilled with Granular Bedding in accordance with MnDOT 3149 and placed in accordance with the typical plan details and these special provisions. Measurement for Item No. 2451.507, "Granular Bedding (P) (CV)", shall be considered Plan Quantity (P), Compacted Volume (CV) and measured by the Cubic Yard (CU. YD.).

S-4 (2503) PIPE SEWERS

Modify MnDOT 2503 as follows:

- S-4.1 The applicable provisions of MnDOT 2503 shall apply to Item No. 2503.503, "12" CP Pipe Sewer (Smooth) and Item No. 2503.601, "18" CP Pipe Riser (Smooth)", in addition to the following:
- S-4.2 Corrugated polyethylene pipe and fittings shall be 12" nominal diameter manufactured from high-density polyethylene (HDPE) virgin compounds. Clean reworked HDPE materials from the manufacturer's own production may be used by the manufacturer of HDPE pipe, provided that the pipe and fittings produced meet all the requirements of these Special Provisions, MnDOT 3247, AASHTO M294. The corrugated polyethylene pipe shall be appropriately marked with ASTM or AASHTO designation. Coupling connections shall be made with bell and spigot joints. Bell and spigot joints shall be designed with a gasket meeting ASTM F477.
- S-4.3 All excavation and backfill (backfill above the granular bedding, as applicable) for the 12" CP Pipe Sewer (Smooth) and 18" CP Pipe Riser (Smooth), will not be measured for separate payment but shall be considered incidental to the respective pipe sewer or riser structure with no additional compensation considered thereof.
- S-4.4 Item No. 2503.602, "18" Anti-Vortex Trash Rack", includes the furnishing and installation of the Anti-Vortex Trash Racks including all mounting hardware. Mounting hardware shall be galvanized as per MnDOT 3392, "Galvanized Hardware". Installation of the Trash Rack shall be in accordance with the manufacturer's recommendations.
- S-4.5 Item No. 2503.602, "18" Anti-Vortex Trash Rack", shall be measured and paid per unit Each. All labor, equipment, and material costs required to furnish and install Item No. 2503.602, "18" Anti-Vortex Trash Rack", shall be included in the unit bid price and no additional compensation will be made thereof.

S-5 (2511) RIPRAP

This work shall be performed in accordance with the applicable provisions of MnDOT 2511 and MnDOT 3601, as supplemented by the following:
Modify MnDOT 2105 as follows:

- S-5.1 Item No. 2511.507, "Random Riprap, Class II", shall conform to requirement outlined for each classification in MnDOT Table 3601-1.

For Item No. 2511.507, "Random Riprap, Class II", Section 3601.2.A.1 shall be followed:
All requirements of 3601 remain in effect.

The Contractor shall furnish Geotextile Filter, Type III for use under Random Riprap Class II as shown on the plans and shall be performed in accordance with the applicable provisions of MnDOT 2511 and 3733.

All material and work associated with the placement of the geotextile filter shall be incidental to Item No. 2511.507, "Random Riprap, Class II". The Engineer will require material certification prior to the placement of any "Geotextile Filter".

Measurement for Item No. 2511.507, "Random Riprap, Class II", shall be field measured and based on a cubic yard (CY) unit of measure basis.

Payment for Item No. 2511.507, "Random Riprap, Class II", shall include all labor, equipment, and material costs associated with furnishing and placing riprap as detailed in the plan, specifications, and described above. All costs shall be included in the unit bid price for Item No. 2511.507, Item No. 2511.507, "Random Riprap, Class II", and no additional compensation will be considered thereof.

S-6 (2575) ESTABLISHING TURF AND CONTROLLING EROSION

Modify MnDOT 2575 as follows:

- S-6.1 All areas outside the agricultural field extents shall have turf establishment and erosion control measures.

Seeding and placement of erosion control mulch shall be performed by the Contractor, as directed by the Engineer. All associated costs shall be included in Item No. 2575.501 "Turf Establishment."

Seed: Shall be MnDOT Mixture 25-141 and MnDOT Mixture 21-112

Fertilizer: Shall be MnDOT Type 1, 20-20-10

Mulch: MnDOT Type 1

Sowing Seed: Seed Mixture 25-141 shall be applied at the rate of 59 pounds per acre over all disturbed areas as shown in the plans. Seeding shall be done as soon as possible after finish grading has been completed. Seed Mixture 21-112 shall be applied at a rate of 25 pounds per acre over all disturbed areas as shown in the plan.

Applying Fertilizer and Conditioners: Fertilizer shall be applied at 250 pounds per acre over all seeded areas of turf establishment.

Sowing Mulch: Mulch Material Type 1 shall be applied at the rate of 2 tons per acre over all disturbed areas as shown in the plans. Mulching shall be done as soon as possible after finish grading has been completed and disk anchored into the ground.

Maintenance: The Contractor shall be solely responsible for replacement and/or repair of any seeded area that may wash-out, erode, or fail to grow prior to acceptance with no additional compensation, therefore. The Contractor is also responsible for maintenance of seed per the MnDOT Specifications.

Item No. 2575.501, "Turf Establishment", shall apply to all disturbed areas within the project limits, unless directed otherwise by the Engineer. Measurement and payment in accordance with MnDOT 2575.

Red Lake County SWCD
2602 Wheat Drive – Suite 103
Red Lake Falls, MN 56750

October 11, 2022

Myron Jesme, Administrator
Red Lake Watershed District
1000 Pennington Avenue
Thief River Falls, MN 56701

Red Lake County SWCD would like to request \$600.00, from the Red Lake Watershed District, for the repairs needed to a 2021 installed Grade Stabilization Structure Replacement Project in Red Lake County.

The project that needs local assistance is located in Gervais Township Section 8. Repairs are needed to the structure from the erosion caused by the spring flood event. Houston Engineering Inc. Opinion of Probable Cost is \$3,044.00. Red Lake County SWCD developed a contract with the landowner in the amount of \$4,000.00.

The Red Lake County SWCD would like to request \$600.00 from the Red Lake Watershed District to assist with the local match requirement for this project. The total project cost bid from Ryan's Backhoe Service was \$3,683.43. Red Lake County SWCD will be using 2021 BWSR Clean Water funding to fund 75% of this project. The local match requirement is \$920.86. The property owner will be in charge of paying \$320.86; if the Red Lake Watershed District approves the \$600.00 request.

If you have any questions, please give me a call at (218)253-2593.

Thank you,

A handwritten signature in black ink that reads "Tanya Waldo". The signature is written in a cursive, flowing style.

Tanya Waldo, District Manager
Red Lake County SWCD

TONY GERARDY - GRADE STABILIZATION PROJECT
SECTION 33, EMARDVILLE TWP.
OPINION OF PROBABLE COST
RED LAKE COUNTY SWCD

7/15/2022

Bid Item No.	Description	Unit of Measure	Contract Quantity	Unit Price (\$)	Contract Amount (\$)
2021.501	MOBILIZATION	LUMP SUM	1	\$1,500.00	\$1,500.00
2106.507	EXCAVATION - COMMON (P)	C.Y.	62	\$8.00	\$496.00
2106.507	COMMON EMBANKMENT (P) (CV)	C.Y.	36	\$10.00	\$360.00
2511.507	RANDOM RIPRAP CLASS II	C.Y.	46	\$120.00	\$5,520.00
2574.508	FERTILIZER TYPE 1	LB	70	\$0.80	\$56.00
2575.505	DISK ANCHORING	ACRE	0.28	\$100.00	\$28.00
2575.505	SEEDING	ACRE	0.28	\$500.00	\$140.00
2575.508	SEED MIXTURE 21-112	LB	7	\$3.00	\$21.00
2575.508	SEED MIXTURE 25-141	LB	17	\$7.00	\$119.00
2575.509	MULCH MATERIAL TYPE 1	TON	0.56	\$120.00	\$67.20
Total Construction Cost =					\$8,307.20

TONY GERARDY - GRADE STABILIZATION PROJECT
SECTION 33, EMARDVILLE TWP.
BID FORM
RED LAKE COUNTY SWCD

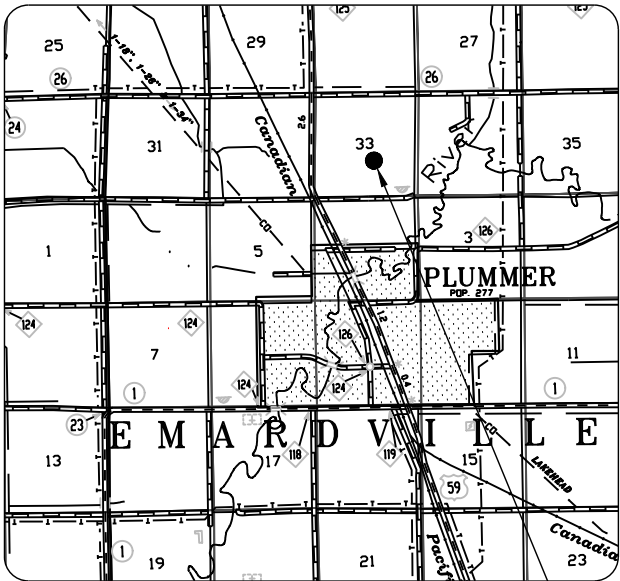
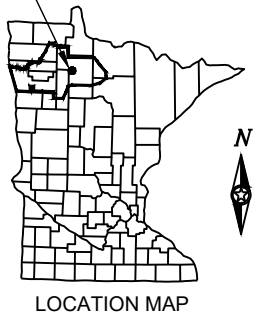
7/15/2022

Bid Item No.	Description	Unit of Measure	Contract Quantity	Unit Price (\$)	Contract Amount (\$)
2021.501	MOBILIZATION	LUMP SUM	1		
2106.507	EXCAVATION - COMMON (P)	C.Y.	62		
2106.507	COMMON EMBANKMENT (P) (CV)	C.Y.	36		
2511.507	RANDOM RIPRAP CLASS II	C.Y.	46		
2574.508	FERTILIZER TYPE 1	LB	70		
2575.505	DISK ANCHORING	ACRE	0.28		
2575.505	SEEDING	ACRE	0.28		
2575.508	SEED MIXTURE 21-112	LB	7		
2575.508	SEED MIXTURE 25-141	LB	17		
2575.509	MULCH MATERIAL TYPE 1	TON	0.56		
Total Bid Amount =					

CONSTRUCTION PLANS FOR
TONY GERARDY GRADE STABILIZATION PROJECT
RED LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT
SEC. 33, EMARDVILLE TWP, RED LAKE COUNTY
JULY, 2022



PROJECT LOCATION



INDEX SHEET

- | | |
|---|------------------------------------------------------------|
| 1 | COVER SHEET |
| 2 | ESTIMATED QUANTITIES, NOTES, TYPICAL, AND ROCK DROP DETAIL |
| 3 | PLAN AND PROFILE |

THIS PLAN CONTAINS 3 SHEETS

GOVERNING SPECIFICATIONS:

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" DIVISION II AND III SHALL GOVERN FOR CONSTRUCTION DETAILS AND MATERIALS.

UTILITY NOTE:

THE UNDERGROUND UTILITIES WERE NOT LOCATED AS PART OF THE PRELIMINARY SURVEY OR DATA GATHERING FOR THIS SITE.

STATE LAW REQUIRES THE EXCAVATOR TO CONTACT GOPHER STATE ONE-CALL AT (800)-252-1166 FOR UTILITY LOCATION 48 HOUR PRIOR TO START OF EXCAVATION WORK.

HORIZONTAL AND VERTICAL CONTROLS

1. ALL COORDINATES LISTED IN THIS PLAN ARE MNDOT, RED LAKE COUNTY, U.S FOOT
2. ALL ELEVATIONS ARE NAVD 88 DATUM

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.

Tony A. Nordby
Tony A. Nordby
License No. 51392

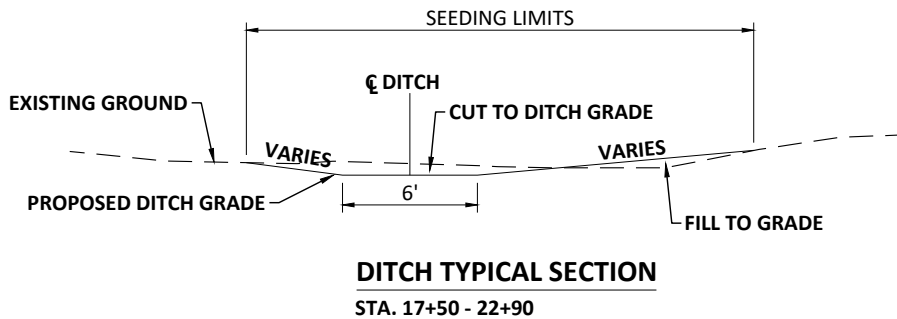
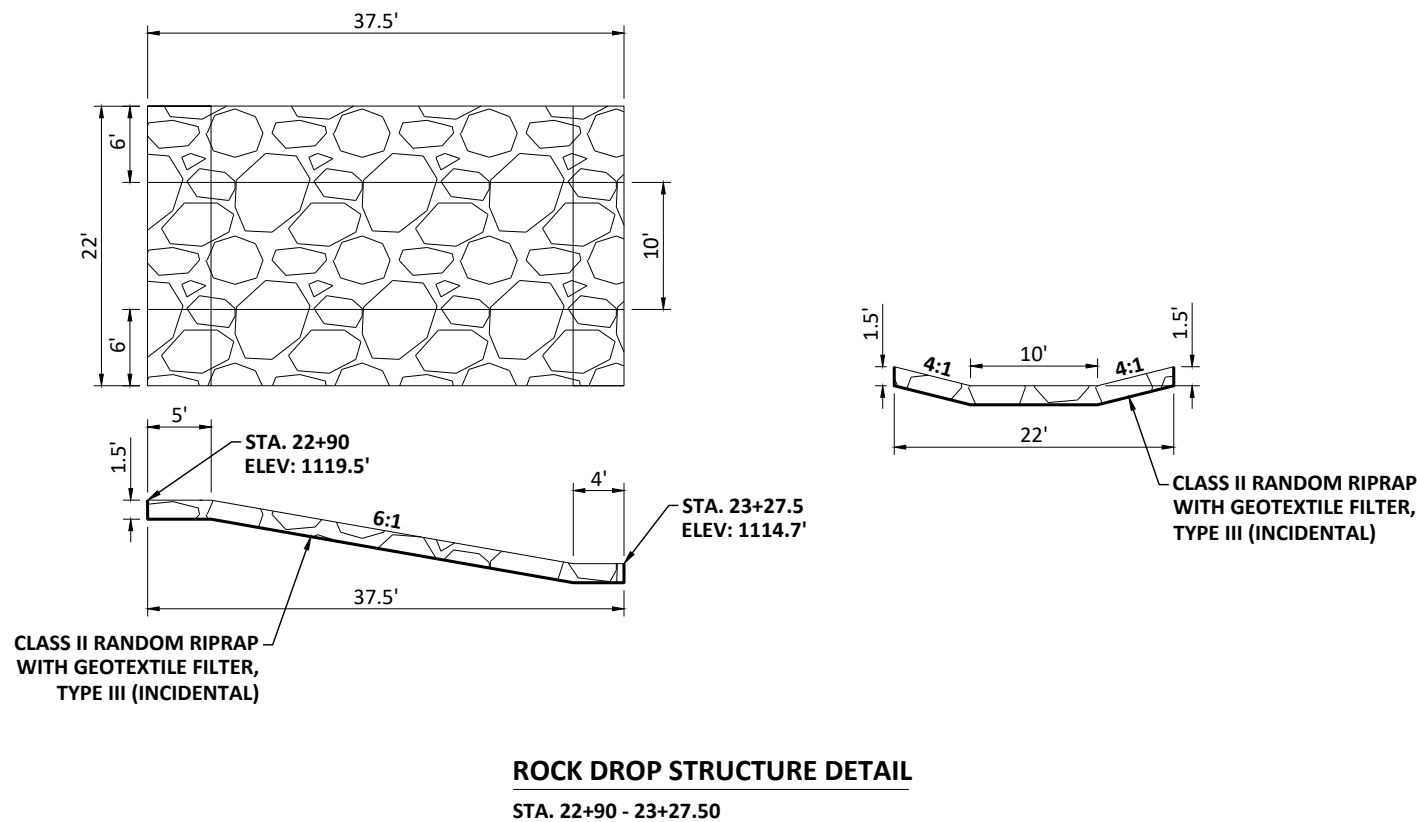
Date: 07/15/2022

H:\JBM\10861\10861_0007 Gerardy\CAD\ESTIMATED QUANTITIES.dwg-ESTIMATED QUANTITIES AND NOTES-7/15/2022 9:53 AM-(kkukowski)

STATEMENT OF ESTIMATED QUANTITIES				
NOTES	ITEM NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
	2021.501	MOBILIZATION	LUMP SUM	1
	2106.507	EXCAVATION - COMMON (P)	C.Y.	62
(2)	2106.507	COMMON EMBANKMENT (P) (CV)	C.Y.	36
(3)	2511.507	RANDOM RIPRAP CLASS II	C.Y.	46
	2574.508	FERTILIZER TYPE 1	LB	70
	2575.505	DISK ANCHORING	ACRE	0.28
	2575.505	SEEDING	ACRE	0.28
	2575.508	SEED MIXTURE 21-112	LB	7
	2575.508	SEED MIXTURE 25-141	LB	17
	2575.509	MULCH MATERIAL TYPE 1	TON	0.56

CONSTRUCTION NOTES:

- (1) (P) DENOTES A PLAN QUANTITY ITEM WITH NO ADDITIONAL COMPENSATION MADE. (CV) DENOTES COMPACTED VOLUME.
- (2) ITEM NO. 2106.507, "COMMON EMBANKMENT (P) (CV)" INCLUDES THE QUANTITY FOR FILLING ERODED AREAS ALONG DITCH BETWEEN STA. 7+00 TO 15+00.
- (3) ITEM NO. 2511.507, "RANDOM RIPRAP CLASS II" SHALL BE FOR THE CONSTRUCTION OF THE ROCK DROP STRUCTURE FROM STA. 22+90 TO 23+27.50. GEOTEXTILE FABRIC TYPE III SHALL BE PLACED UNDER ALL RIPRAP AND IS CONSIDERED INCIDENTAL AND NO ADDITIONAL COMPENSATION WILL BE MADE THEREOF. EXCAVATION FOR INSTALLATION OF RIPRAP IS CONSIDERED INCIDENTAL AND NO ADDITIONAL COMPENSATION WILL BE MADE THEREOF. SEE SPECIAL PROVISIONS FOR MORE DETAIL.



BASIS OF ESTIMATED QUANTITIES	
SEED, MIXTURE 25-141	59 LB PLS/ACRE
SEED, MIXTURE 21-112	25 LB PLS/ACRE
MULCH MATERIAL TYPE 1	2 TON/ACRE
FERTILIZER TYPE 1 (20-20-10)	250 LB/ACRE

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.

Tony A. Nordby

Tony A. Nordby
License No. 51392

Date: 07/15/2022



Drawn By
KAK

Checked By
TAN

Date
7-13-22

Scale
As Shown

Project No.
10861-0007

SHEET
2

TONY GERARDY GRADE STABILIZATION PROJECT
RED LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT
SEC. 33, EMARDVILLE TWP, RED LAKE COUNTY

ESTIMATED QUANTITIES, NOTES, TYPICAL, AND ROCK DROP DETAIL

No.	Revision	Date	By

INDEX--SP2020BOOK

Tony Gerardy - Grade Stabilization Project Sect. 33 Emardville Twp. Red Lake County

<u>SP2018#</u>	<u>ITEM#</u>	<u>DATA</u>	<u>PAGE</u>
S-1	(2021)	MOBILIZATION	2
S-2	(2106)	EXCAVATION AND EMBANKMENT – COMPACTED VOLUME METHOD	2
S-3	(2511)	RIPRAP	3
S-4	(2574)	SOIL PREPARATION	4
S-5	(2575)	ESTABLISHING TURF AND CONTROLLING EROSION	4

I Hereby certify that these Special Provisions 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.



Tony A. Nordby, PE, Lic. No. 51392

07/15/2022

Date

DIVISION S

S-1 (2021) MOBILIZATION

- S-1.1 Item No. 2021.501, “Mobilization”, shall be compensation for all mobilization and demobilization costs on this project including costs associated with, but not limited to, any Contracts, Bonds, and required Insurance.

S-2 (2106) EXCAVATION AND EMBANKMENT – COMPACTED VOLUME METHOD

Modify MnDOT 2106 as follows:

- S-2.1 Item No. 2106.507, “Excavation – Common (P)” and “Common Embankment (P) (CV)”, shall be a Plan Quantity Item.
Modify MnDOT 2106 as follows:

- S-2.2 Item No. 2106.507, “Excavation – Common (P)” includes the estimated quantity of excavation of materials required to the line and grade shown in the plans including, but not limited to stripping, stockpiling, and disposal of excess material outside the project limits as detailed in the plan. Excavation material shall be used as common embankment material within the reaches shown in the plans. Any excess excavation material is the contractors responsibility and shall be placed outside the project limits. All unsuitable excavated materials such as roots, rubbish, stumps, or other objectionable material shall be properly disposed of in accordance with the plans, special provisions and all applicable rules and regulations.

All costs associated with providing the work necessary to complete Item No. 2106.507, “Excavation – Common (P)”, including, but not limited to, excavation, loading, hauling, and/or disposing of excavated material shall be included in the unit bid price for Item No. 2106.507, “Excavation – Common (P)”, and no additional compensation will be considered thereof.

Measurement for Item No. 2106.507, “Excavation – Common (P)”, shall be by the Plan Quantity (P) and Cubic Yard (CY) basis. The volume of material excavated to the design plan, grade, and cross section will be included in the Plan Quantity (P) for payment, and no direct measurement will be made unless determined necessary by the Engineer

- S-2.3 Item No. 2106. 507, “Common Embankment (P) (CV)”, includes the embankment material necessary to fill erosion areas to the elevation, profile, and cross section as shown in the plan. Four inches of topsoil shall be placed back on the eroded areas as the finished top elevation and cross section as shown in the plan. Embankment material shall be free of all frozen soil, brush, roots, or other perishable material. Item No. 2106.507, “Common Embankment (P) (CV)”, includes the filling of eroded areas to the line, slopes, cross sections, and grades shown on the plans. All unsuitable materials for fill such as roots, rubbish, stumps, or other objectionable material shall be properly disposed of in accordance with the plans, special provisions and all applicable rules and regulations.

During placement and compaction of the common embankment material, the moisture of the material being placed shall be maintained within the specified range. The application of water to the common embankment material shall be accomplished at the borrow areas insofar as practicable. Water may be applied by sprinkling the material after placement on the eroded areas, if necessary. Uniform moisture distribution shall be obtained by disking. Material that is too wet when deposited in the eroded areas shall either be removed or be dried to the specified moisture content prior to compaction.

The common embankment compaction shall comply with MnDOT 2106.3 G.2 – Quality Compaction.

The common embankment shall be placed in uniform layers not exceeding 12 inches of uniform thickness, and thoroughly mixed by disking or other approved methods to obtain uniformity of material.

Once each lift has been adequately processed, the surface of each lift shall be scarified to a minimum of 2 inches prior to placing additional lifts.

In placing of the common embankment, hauling equipment shall be routed so that the material is distributed uniformly over the entire width of each layer of material. Special care shall be exercised in construction of the common borrow to avoid displacement or other damage to the structure and to obtain satisfactory compaction.

Stones of over three inches in maximum dimension will not be permitted in the eroded areas. Stumps, logs, large roots, snow, ice, frozen lumps of earth, or other objectionable materials shall not be placed in any portion of the eroded areas.

The common embankment shall not be placed during periods when the material freezes while being placed and compacted, nor shall any common borrow material be placed on soil that is frozen. Where the foundation soil is frozen at a time when weather conditions are such that erosion filling could be continued without the material freezing as it is being placed and compacted, the Contractor may be permitted to excavate the frozen foundation soil and proceed with the common embankment placement as the weather permits, but only if and to the extent approved by the Engineer, and with the understanding that the additional costs involved shall be borne by the Contractor. The frozen soil shall be pulverized or coarsened and replaced with other suitable material as may be necessary to construct the dike as specified.

Finish surface shall be approved by the Engineer prior to seeding.

All costs associated with providing the work necessary to complete Item No. 2106.507, "Common Embankment (P) (CV)", including, but not limited to replacing topsoil on eroded areas, fill, placing, drying/watering, compacting, and/or disposing of common embankment material shall be included in the unit bid price for Item No. 2106.507, "Common Embankment (P) (CV)", and no additional compensation will be considered thereof.

Measurement for Item No. 2106.507, "Common Embankment (P) (CV)", shall be by Plan Quantity (P) Compacted Volume (CV), and Cubic Yard (CY) basis. The volume of common embankment material placed to the design plan, grade, and cross section will be included in the Plan Quantity (P) for payment, and no direct measurement will be made unless determined necessary by the Engineer.

S-3 (2511) RIPRAP

This work shall be performed in accordance with the applicable provisions of MnDOT 2511 and MnDOT 3601, as supplemented by the following:

- S-3.1 Item No. 2511.507, "Random Riprap Class II", shall conform to requirement outlined for each classification in MnDOT Table 3601.2-1.

For Item No. 2511.507, "Random Riprap Class II", Section 3601.2.A.2 shall be followed:

The Contractor shall furnish Geotextile Filter, Type 3 for use under Random Riprap Class II as shown on the plans and shall be performed in accordance with the applicable provisions of MnDOT 2511 and 3733.

All material and work associated with the placement of the geotextile filter shall be incidental to Item No. 2511.507, "Random Riprap Class II". The Engineer will require material certification prior to the placement of any "Geotextile Filter".

Measurement for Item No. 2511.507, "Random Riprap Class II", shall be field measured and based on a cubic yard (CY) unit of measure basis.

Payment for Item No. 2511.507, "Random Riprap Class II", shall include all labor, equipment, and material costs associated with furnishing and placing riprap as detailed in the plan, specifications, and described above. All costs shall be included in the unit bid price for Item No. 2511.507, "Random Riprap Class II", and no additional compensation will be considered thereof.

S-4 (2574) SOIL PREPARATION

Modify MnDOT 2574 as follows:

- S-4.1 All areas outside the agricultural field extents shall have fertilizer.

Fertilizer: Shall be MnDOT Type 1, 20-20-10

Applying Fertilizer and Conditioners: Fertilizer shall be applied at 250 pounds per acre over all seeded areas of turf establishment.

S-5 (2575) ESTABLISHING TURF AND CONTROLLING EROSION

Modify MnDOT 2575 as follows:

- S-5.1 All areas outside the agricultural field extents shall have turf establishment and erosion control measures.

Seeding and placement of erosion control mulch shall be performed by the Contractor, as directed by the Engineer.

Seed: Shall be MnDOT Mixture 25-141 and MnDOT Mixture 21-112

Mulch: MnDOT Type 1

Sowing Seed: Seed Mixture 25-141 shall be applied at the rate of 59 pounds per acre over all disturbed areas as shown in the plans. Seeding shall be done as soon as possible after finish grading has been completed. Seed Mixture 21-112 shall be applied at a rate of 25 pounds per acre over all disturbed areas as shown in the plan.

Sowing Mulch: Mulch Material Type 1 shall be applied at the rate of 2 tons per acre over all disturbed areas as shown in the plans. Mulching shall be done as soon as possible after finish grading has been completed and disk anchored into the ground.

Maintenance: The Contractor shall be solely responsible for replacement and/or repair of any seeded area that may wash-out, erode, or fail to grow prior to acceptance with no additional compensation, therefore. The Contractor is also responsible for maintenance of seed per the MnDOT Specifications.

Red Lake County SWCD
2602 Wheat Drive – Suite 103
Red Lake Falls, MN 56750

October 11, 2022

Myron Jesme, Administrator
Red Lake Watershed District
1000 Pennington Avenue
Thief River Falls, MN 56701

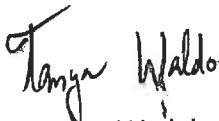
Red Lake County SWCD would like to request \$1,200.00, from the Red Lake Watershed District, for the installation of a Grade Stabilization Structure Replacement Project in Red Lake County.

The project that needs local assistance is located in North Emardville Township Section 33. Houston Engineering has completed the survey and design work for this project. Houston Engineering Inc. Opinion of Probable Cost is \$8,307.20. Red Lake County SWCD developed a contract with the landowner in the amount of \$10,000.00.

The Red Lake County SWCD would like to request \$1,200.00 from the Red Lake Watershed District to assist with the local match requirement for this project. The total project cost bid from Nathan Knott was \$8,730.00. Red Lake County SWCD will be using 2020 and 2021 State Cost-Share funding to fund 75% of this project. The local match requirement is \$2,182.50. The property owner will be in charge of paying \$982.50; if the Red Lake Watershed District approves the \$1,200.00 request.

If you have any questions, please give me a call at (218)253-2593.

Thank you,

A handwritten signature in black ink that reads "Tanya Waldo". The signature is written in a cursive, flowing style.

Tanya Waldo, District Manager
Red Lake County SWCD

**MATT KNUTSON GRADE STABILIZATION PROJECT
RED LAKE FALLS AND GERVAIS TWP.
OPINION OF PROBABLE COST
RED LAKE COUNTY SWCD**

10/7/2022

Site #11 Constructed to design. Needs vegetation restored and established. Landowner should preserve vegetation on embankment and 15ft out from the toe of the embankment. Vegetation should also be established and preserved upstream of structure to maintain stabilization. Landowner is currently tilling farm field too close to embankment and riser structure causing erosion and silting. Landowner also needs to maintain the trash rack during years of heavy crop residue to insure that the intake riser is performing as designed.

Site #7, #8, and #9 - Extend embankment to allow emergency spillway activation to break out away from structure outlet pipe. Salvage and restore existing riprap at outlet. Additional riprap may be needed. Seed and mulch to restore vegetation stabilization. Landowner needs to maintain vegetation and trash rack residue for long term performance and stability. Landowner should maintain vegetation buffer 20ft from all structure riser intakes to preserve stabilization and filter sediment.

Remaining sites (Excluding sites #1, #2, and #3) as needed- Topsoil borrow from farm fields to fill in minor erosion rills on embankment. Seed and mulch. Landowner will need to maintain vegetation and structure moving forward.

Bid Item No.	Description	Unit of Measure	Contract Quantity	Unit Price (\$)	Contract Amount (\$)
2021.501	MOBILIZATION	LUMP SUM	1	\$1,000.00	\$1,000.00
2106.507	COMMON EMBANKMENT (P) (CV)	C.Y.	100	\$12.00	\$1,200.00
2511.507	RANDOM RIPRAP CLASS III	C.Y.	10	\$125.00	\$1,250.00
2575.501	TURF ESTABLISHMENT	LUMP SUM	1	\$2,000.00	\$2,000.00
10% Construction Contingency					\$545.00
Total Construction Cost =					\$5,995.00

Red Lake County SWCD
2602 Wheat Drive – Suite 103
Red Lake Falls, MN 56750

October 11, 2022

Myron Jesme, Administrator
Red Lake Watershed District
1000 Pennington Avenue
Thief River Falls, MN 56701

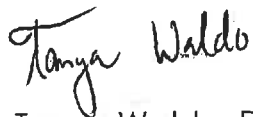
Red Lake County SWCD would like to request \$400.00, from the Red Lake Watershed District, for the repairs needed on four 2021 installed Grade Stabilization Structure Projects in Red Lake County.

The projects that need local assistance is located in Red Lake Falls Township Sections 25, 35, and 36. Repairs are needed to four structures from the erosion caused by the spring flood event. Houston Engineering Inc. Opinion of Probable Cost is \$5,995.00. Red Lake County SWCD developed a contract with the landowner in the amount of \$6,500.00.

The Red Lake County SWCD would like to request \$400.00 from the Red Lake Watershed District to assist with the local match requirement for this project. The total project cost bid from Ryan's Backhoe Service was \$3,080.00. Red Lake County SWCD will be using 2021 BWSR Clean Water funding to fund 75% of this project. The local match requirement is \$770.00. The property owner will be in charge of paying \$370.00; if the Red Lake Watershed District approves the \$400.00 request.

If you have any questions, please give me a call at (218)253-2593.

Thank you,

A handwritten signature in black ink that reads "Tanya Waldo". The signature is written in a cursive, flowing style.

Tanya Waldo, District Manager
Red Lake County SWCD

MATT KNUTSON GRADE STABILIZATION PROJECTS
SECTIONS 25, 35, AND 36 RED LAKE TWP.
OPINION OF PROBABLE COST
RED LAKE COUNTY SWCD

8/02/2021

Bid Item No.	Description	Unit of Measure	Contract Quantity	Unit Price (\$)	Contract Amount (\$)
2021.501	MOBILIZATION	LUMP SUM	1	\$4,000.00	\$4,000.00
2104.503	REMOVE PIPE CULVERTS	LIN. FT.	20	\$15.00	\$300.00
2105.507	COMMON BORROW (P) (CV)	C.Y.	1,983	\$8.00	\$15,864.00
2451.507	GRANULAR BEDDING (P) (CV)	C.Y.	93	\$30.00	\$2,790.00
2501.502	30" GS PIPE APRON	EACH	2	\$400.00	\$800.00
2501.503	30" CS PIPE CULVERT	LIN. FT.	54	\$50.00	\$2,700.00
2501.601	12" RODENT GUARD	EACH	4	\$100.00	\$400.00
2501.601	15" RODENT GUARD	EACH	3	\$120.00	\$360.00
2503.503	12" CP PIPE SEWER (SMOOTH)	LIN. FT.	228	\$30.00	\$6,840.00
2503.503	15" CP PIPE SEWER (SMOOTH)	LIN. FT.	332	\$35.00	\$11,620.00
2503.503	18" CP PIPE SEWER (SMOOTH)	LIN. FT.	166	\$38.00	\$6,308.00
2503.503	24" CP PIPE SEWER (SMOOTH)	LIN. FT.	86	\$45.00	\$3,870.00
2503.601	18" CP PIPE RISER (SMOOTH)	LIN. FT.	31.5	\$135.00	\$4,252.50
2503.601	24" CP PIPE RISER (SMOOTH)	LIN. FT.	30	\$140.00	\$4,200.00
2503.601	30" CP PIPE RISER (SMOOTH)	LIN. FT.	9	\$145.00	\$1,305.00
2503.602	18" ANTI-VORTEX TRASH RACK	EACH	4	\$800.00	\$3,200.00
2503.602	24" ANTI-VORTEX TRASH RACK	EACH	5	\$1,000.00	\$5,000.00
2503.602	30" ANTI-VORTEX TRASH RACK	EACH	1	\$1,200.00	\$1,200.00
2511.507	RANDOM RIPRAP, CLASS II	C.Y.	163	\$100.00	\$16,300.00
2575.501	TURF ESTABLISHMENT	LUMP SUM	1	\$2,000.00	\$2,000.00
Total Construction Cost =					\$93,309.50
Contingencies (5%) =					\$4,670.00
TOTAL CONSTRUCTION COST =					\$97,979.50

**MATT KNUTSON GRADE STABILIZATION PROJECTS
SECTIONS 25, 35, AND 36 RED LAKE TWP.
BID FORM
RED LAKE COUNTY SWCD**

Bid Item	Description	Unit	Quantity	Unit Price	Total Price
2021.501	MOBILIZATION	LUMP SUM	1		
2104.503	REMOVE PIPE CULVERTS	LIN. FT.	20		
2105.507	COMMON BORROW (P) (CV)	C.Y.	1983		
2451.507	GRANULAR BEDDING (P) (CV)	C.Y.	93		
2501.502	30" GS PIPE APRON	EACH	2		
2501.503	30" CS PIPE CULVERT	LIN. FT.	54		
2501.601	12" RODENT GUARD	EACH	4		
2501.601	15" RODENT GUARD	EACH	3		
2503.503	12" CP PIPE SEWER (SMOOTH)	LIN. FT.	228		
2503.503	15" CP PIPE SEWER (SMOOTH)	LIN. FT.	332		
2503.503	18" CP PIPE SEWER (SMOOTH)	LIN. FT.	166		
2503.503	24" CP PIPE SEWER (SMOOTH)	LIN. FT.	86		
2503.601	18" CP PIPE RISER (SMOOTH)	LIN. FT.	31.5		
2503.601	24" CP PIPE RISER (SMOOTH)	LIN. FT.	30		
2503.601	30" CP PIPE RISER (SMOOTH)	LIN. FT.	9		
2503.602	18" ANTI-VORTEX TRASH RACK	EACH	4		
2503.602	24" ANTI-VORTEX TRASH RACK	EACH	5		
2503.602	30" ANTI-VORTEX TRASH RACK	EACH	1		
2511.507	RANDOM RIPRAP, CLASS II	C.Y.	163		
2575.501	TURF ESTABLISHMENT	LUMP SUM	1		
Total Bid Amount =					

CONSTRUCTION PLANS FOR
RED LAKE COUNTY SWCD
MATT KNUTSON GRADE STABILIZATION PROJECTS
SECT. 25,35 & 36 RED LAKE TWP,
RED LAKE COUNTY
AUGUST, 2021

HOUSTON
engineering, inc.
125 3rd STREET E
THIEF RIVER FALLS, MN 56701
P: 218.681.2951
www.houstoneng.com

SHEET INDEX

- | | |
|------|------------------------------|
| 1 | COVER SHEET |
| 2 | QUANTITIES |
| 3 | RISER DETAILS |
| 4 | RISER ELEVATIONS AND DETAILS |
| 5 | SITE 10 SWI DETAILS |
| 6-11 | PLAN AND PROFILES |

GOVERNING SPECIFICATIONS:

THE 2018 EDITION OF THE MINNESOTA DEPARTMENT OF
TRANSPORTATION "STANDARD SPECIFICATIONS FOR
CONSTRUCTION" SHALL GOVERN.

UTILITY NOTE:

UNDERGROUND UTILITIES WERE NOT LOCATED AS PART OF THE
PRELIMINARY SURVEY OR DATA GATHERING FOR THIS SITE.

STATE LAW REQUIRES THE EXCAVATOR TO CONTACT GOPHER STATE
ONE-CALL AT (800) 252-1166 FOR UTILITY LOCATION 48 HOURS PRIOR TO
START OF EXCAVATION WORK.

HORIZONTAL AND VERTICAL CONTROL

- ALL COORDINATES LISTED IN THIS PLAN ARE MNDOT, RED LAKE
COUNTY, U.S. FOOT
- ALL ELEVATIONS ARE NAVD 88 DATUM

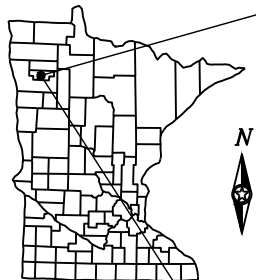
TO THE BEST OF MY PROFESSIONAL
KNOWLEDGE, JUDGEMENT, AND
BELIEF, THESE PLANS MEET
APPLICABLE NRCS STANDARDS.

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.

Tony A. Nordby

Tony A. Nordby
License No. 51392

Date: 8/02/21



LEGEND:

 - PROJECT SITE LOCATIONS.

LOCATION MAP

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STATEMENT OF ESTIMATED QUANTITIES				
NOTES	ITEM NO.	ITEM	UNIT	TOTAL ESTIMATED QUANTITIES
	2021.501	MOBILIZATION	LUMP SUM	1
	2104.503	REMOVE PIPE CULVERTS	LIN. FT	20
(1) (2)	2105.507	COMMON BORROW (P) (CV)	C.Y.	1,983
(1)	2451.507	GRANULAR BEDDING (P) (CV)	C.Y.	93
	2501.502	30" GS PIPE APRON	EACH	2
	2501.503	30" CS PIPE CULVERT	LIN. FT.	54
(5)	2501.601	12" RODENT GUARD	EACH	4
(5)	2501.601	15" RODENT GUARD	EACH	3
	2503.503	12" CP PIPE SEWER (SMOOTH)	LIN. FT.	228
	2503.503	15" CP PIPE SEWER (SMOOTH)	LIN. FT.	332
	2503.503	18" CP PIPE SEWER (SMOOTH)	LIN. FT.	166
	2503.503	24" CP PIPE SEWER (SMOOTH)	LIN. FT.	86
(6) (7)	2503.601	18" CP PIPE RISER (SMOOTH)	LIN. FT.	31.5
(7)	2503.601	24" CP PIPE RISER (SMOOTH)	LIN. FT.	30
(7)	2503.601	30" CP PIPE RISER (SMOOTH)	LIN. FT.	9
	2503.602	18" ANTI-VORTEX TRASH RACK	EACH	4
	2503.602	24" ANTI-VORTEX TRASH RACK	EACH	5
	2503.602	30" ANTI-VORTEX TRASH RACK	EACH	1
(3)	2511.507	RANDOM RIPRAP, CLASS II	C.Y.	163
(4)	2575.501	TURF ESTABLISHMENT	LUMP SUM	1

STANDARD PLATES	
THE FOLLOWING MN/DOT STANDARD PLATES, AS APPROVED BY THE FHWA, SHALL APPLY.	
3040F	CORRUGATED METAL PIPE CULVERT (STANDARD 2-2/3"x1/2" CORRUGATION)
3123J	METAL APRON FOR C.S.PIPE
3124B	METAL APRON FOR CONNECTION
3221D	CORRUGATED STEEL PIPE COUPLING BAND

BASIS OF ESTIMATED QUANTITIES	
SEED, MIXTURE 25-141	59 LB PLS/ACRE
SEED, MIXTURE 21-112	25 LB PLS/ACRE
MULCH MATERIAL, TYPE 1	2 TON/ACRE
FERTILIZER, TYPE 1 (20-20-10)	250 LB/ACRE

CONSTRUCTION NOTES:

- (1) (P) DENOTES A PLAN QUANTITY ITEM WITH NO ADDITIONAL COMPENSATION MADE. (CV) DENOTES COMPACTED VOLUME.
- (2) ITEM NO. 2105.507 "COMMON BORROW (CV) (P)" INCLUDES THE ESTIMATED QUANTITY FOR CONSTRUCTING THE DIKES TO THE PROFILE, TOP WIDTH, AND SLOPES AS SHOWN IN THE PLAN ON SHEETS 6 THROUGH 11. THE COMMON BORROW MATERIAL FOR THE DIKE SHALL BE SUPPLIED BY THE CONTRACTOR. GRADING WORK SHOWN ON PLAN AND PROFILE SHEETS FOR PROPOSED WATERWAY PROFILE SHALL BE CONSIDERED INCIDENTAL TO ITEM NO. 2105.507 "COMMON BORROW (P) (CV)." SEE SPECIAL PROVISIONS FOR MORE DETAIL.
- (3) ITEM NO. 2511.507 "RANDOM RIPRAP, CLASS II" SHALL BE FOR CONSTRUCTION OF THE INLET AND OUTLET PROTECTION FOR THE RISER STRUCTURES AND PIPE OUTLETS. GEOTEXTILE FABRIC TYPE III SHALL BE PLACED UNDER ALL RIPRAP AND IS CONSIDERED INCIDENTAL TO ITEM NO. 2511.507 "RANDOM RIPRAP, CLASS II" AND NO ADDITIONAL COMPENSATION WILL BE MADE THEREOF. EXCAVATION FOR INSTALLATION OF RIPRAP IS CONSIDERED INCIDENTAL TO ITEM NO. 2511.507 "RANDOM RIPRAP, CLASS II." SEE SPECIAL PROVISIONS FOR MORE DETAIL.
- (4) SEE THE SPECIAL PROVISIONS FOR MORE DETAIL ON SPECIFICATIONS FOR ITEM NO. 2575.501 "TURF ESTABLISHMENT."
- (5) RODENT GUARDS SHALL BE INSTALLED ON ANY OUTLET PIPE SIZE 15" AND SMALLER. RODENT GUARDS SHALL BE AGRI DRAIN CORPORATION OR APPROVED EQUIVALENT.
- (6) RISER COVER FOR SITE 4 SHALL BE AN 18" HEAVY DUTY COVER FOR CORRUGATED PIPE MADE BY POLYLOK, INC. OR APPROVED EQUIVELANT. THE 18" COVER SHALL BE FASCINED TO THE RISER AS RECOMMENDED BY THE MANUFACTURER. ALL EQUIPMENT, METAL, AND LABOR REQUIRED FOR 18" COVER INSTALLATION SHALL BE CONSIDERED INCIDENTAL TO ITEM NO. 2503.601 "18" CP PIPE RISER (SMOOTH)" AND NO PAYMENT MADE THEREOF.
- (7) CONCRETE BALLAST FOR ITEM NO. 2503.601 "CP PIPE RISER (SMOOTH)" MAY BE PRECAST OR POURED IN PLACE. CONCRETE BALLAST SHALL MEET THE REQUIREMENTS OF MNDOT 2411. ALL #4 REBAR AND CONCRETE SHALL BE INCIDENTAL TO ALL ITEM NO. 2503.601 "CP PIPE RISER (SMOOTH)" AND NO COMPENSATION SHALL BE MADE THEREOF.

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.



Tony A. Nordby
License No. 51392

Date: 8/02/21



Drawn By
KMF

Checked By
TAN

Date
8-02-21

Scale

As Shown

Project No.
10861-0001

SHEET
2

MATT KNUTSON GRADE STABILIZATION
RED LAKE COUNTY SWCD
SECTION 18 & 19, GERVAIS TOWNSHIP, RED LAKE COUNTY, MN

QUANTITIES

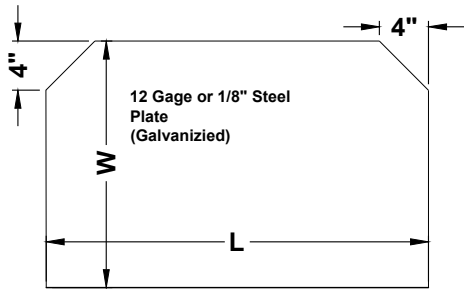
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Date

By

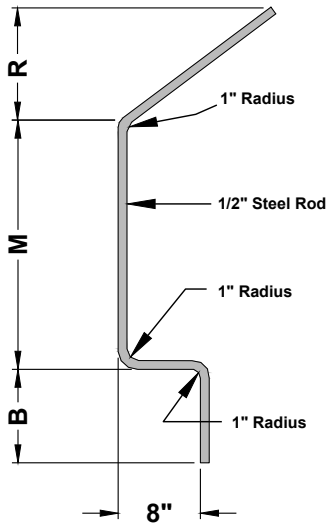
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TRASH RACK & ANTI-VORTEX DIMENSIONS							
Pipe I.D. (In.)	Strap Dia. (In.)	S (In.)	B (In.)	M (In.)	R (In.)	W (In.)	L (In.)
12	11 1/4	5-6	9	9	12	20	28
15	14 1/4	5-6	9	9	13	21	31
18	17 1/4	6-7	9	9	14	22	34
24	23 1/4	7-8	12	15	11	25	40
30	29 1/4	8-9	12	18	10	27	46
36	35 1/4	9-10	12	21	9	29	52

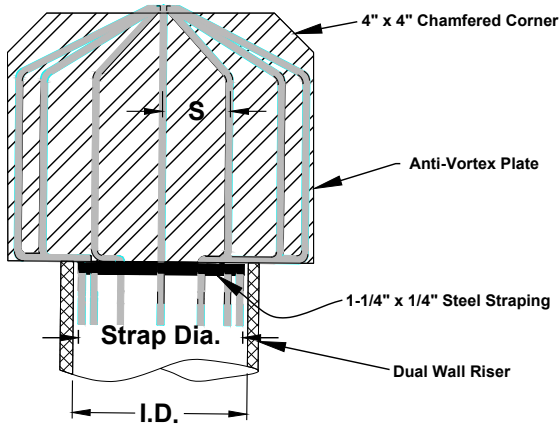


NOTE:
SEE RISER ELEVATIONS AND
DETAILS ON SHEET 4 FOR
STRUCTURE ELEVATIONS.

Anti-Vortex Detail

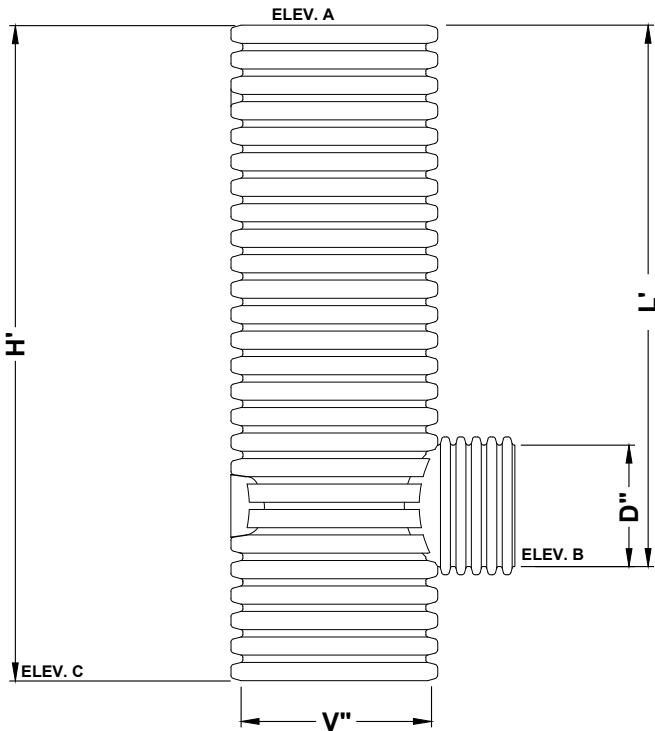


Rod Bending Detail

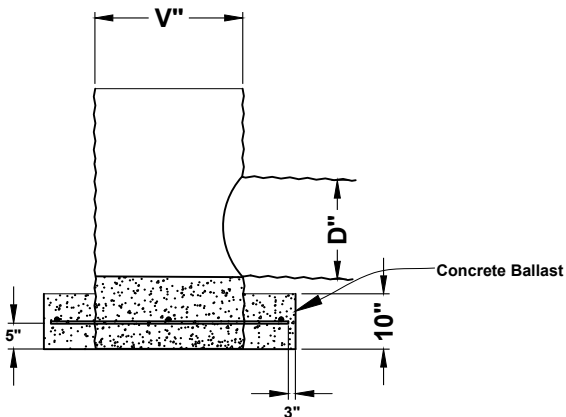


Trash Rack / Anti-Vortex Detail

- Installation Notes:
1. Corrugated dual wall pipe riser requires CLASS II backfill material a minimum 2 feet width around the riser. Corrugated dual wall riser outlet stub connection requires a watertight connection such as a bell to bell with gaskets.
 2. Trash Rack/Antivortex requires anchoring at each end of the anti-vortex with a fence post or anchor driven into the ground a minimum 2.5 to 3'.
 3. Steel reinforcement is #4 Bar. Concrete will require adequate consolidation to eliminate voids, honeycomb and fully encase rebar and embeddings.

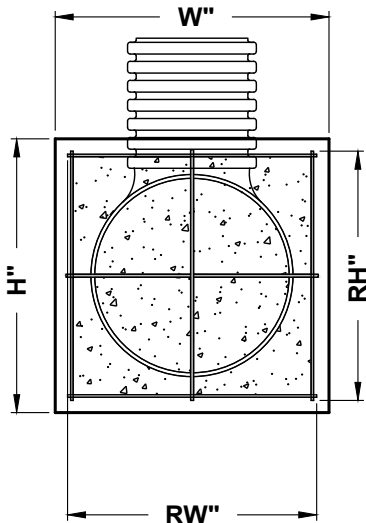


Dual Wall Riser Detail



Riser Ballast Detail

- NOTE:
- (1) RISER SHALL BE CAST INSIDE THE CONCRETE BALLAST WITH #4 REBAR DOWELED THROUGH CENTER AS SHOWN IN "RISER BALLAST DETAIL"
 - (2) CONCRETE INSIDE OF RISER SHALL BE LEVEL WITH ELEVATION B SHOWN ON THIS SHEET "DUAL WALL RISER DETAIL"



RISER BALLAST SIZING CHART				
PIPE SIZE	H	W	RH	RW
12"	24"	24"	18"	18"
18"	30"	30"	24"	24"
24"	36"	36"	30"	30"
30"	42"	42"	36"	36"
54"	66"	66"	60"	60"

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.

Tony A. Nordby
Tony A. Nordby
License No. 51392

Date: 8/02/21



Drawn By
KMF
Checked By
TAN
Date
8-02-21
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As Shown
Project No.
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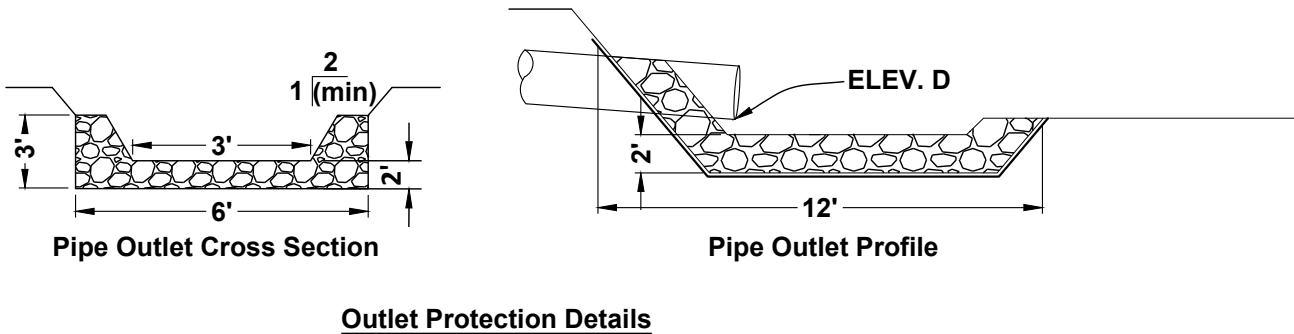
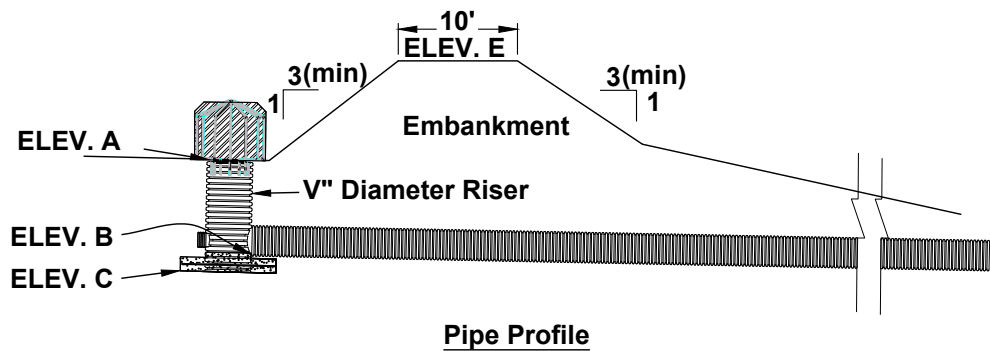
MATT KNUTSON GRADE STABILIZATION
RED LAKE COUNTY SWCD
SECTION 18 & 19, GERVAIS TOWNSHIP, RED LAKE COUNTY, MN
RISER DETAIL

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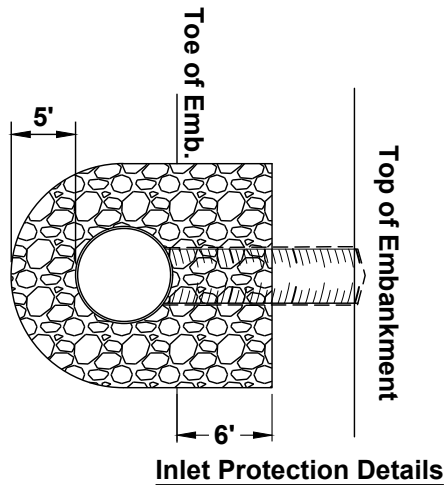
Detail Elevations					
Site #	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E
Site #1	1040.50	1032.50	1031.50	1026.50	1043.30
Site #2	1040.00	1032.00	1031.00	1030.30	1042.60
Site #3	1037.00	1033.50	1032.50	1031.00	1040.10
Site #4	1040.00	1030.00	1029.00	1029.00	N/A
Site #5	1040.00	1035.00	1034.00	1033.00	1042.10
Site #6	1038.50	1034.00	1033.00	1033.20	1041.10
Site #7	1041.00	1035.00	1034.00	1024.40	1046.60
Site #8	1047.00	1044.00	1043.00	1043.00	1049.90
Site #9	1047.00	1039.00	1038.00	1035.00	1051.50
Site #10	N/A	1046.50	N/A	1044.80	1052.00
Site #11	1031.00	1026.50	1025.50	1023.00	1033.50

Pipe Sizes						
Site #	X"	D"	L'	H'	V"	Y"
Site #1	15"	15"	8'	9'	24"	7.5"
Site #2	24"	24"	8'	9'	30"	12"
Site #3	18"	18"	3.5'	4.5'	24"	9"
Site #4	12"	12"	10'	11'	18"	6"
Site #5	12"	12"	5'	6'	18"	6"
Site #6	12"	12"	4.5"	5.5'	18"	6"
Site #7	18"	18"	6'	7'	24"	9"
Site #8	15"	15"	3'	4'	24"	7.5"
Site #9	12"	12"	8'	9'	18"	6"
Site #10	N/A	N/A	N/A	N/A	N/A	N/A
Site #11	15"	15"	4.5"	5.5'	24"	7.5"

NOTE:
DIMENSIONS H, D, L, AND V ARE SHOWN ON
SHEET 3. DIMENSIONS X AND Y ARE SHOWN ON
SHEET 4.

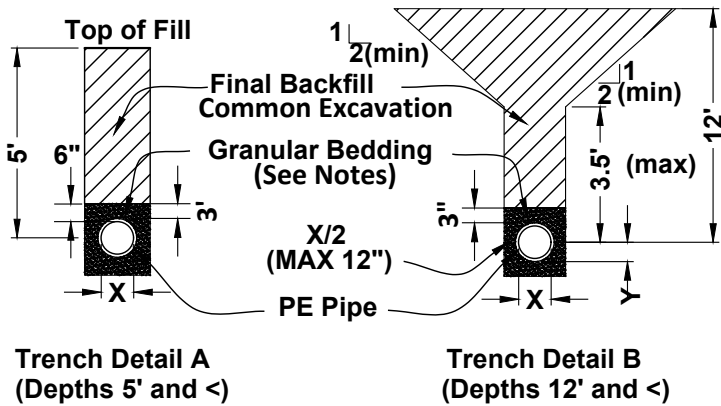


NOTE:
GRANULAR BEDDING SHALL BE CARRIED TO 3"
ABOVE TOP OF PIPE AS SHOWN, AND SHALL BE
HAND TAMPED TO THIS LEVEL.



DIA	X	Y
8"	9-1/2"	4-3/4"
10"	11-5/8"	5-3/4"
12"	14-1/4"	7-0"
15"	18-3/8"	9-1/4"
18"	21-1/2"	10-3/4"
24"	28-1/2"	14-1/2"

Trench Spoon Dimensions



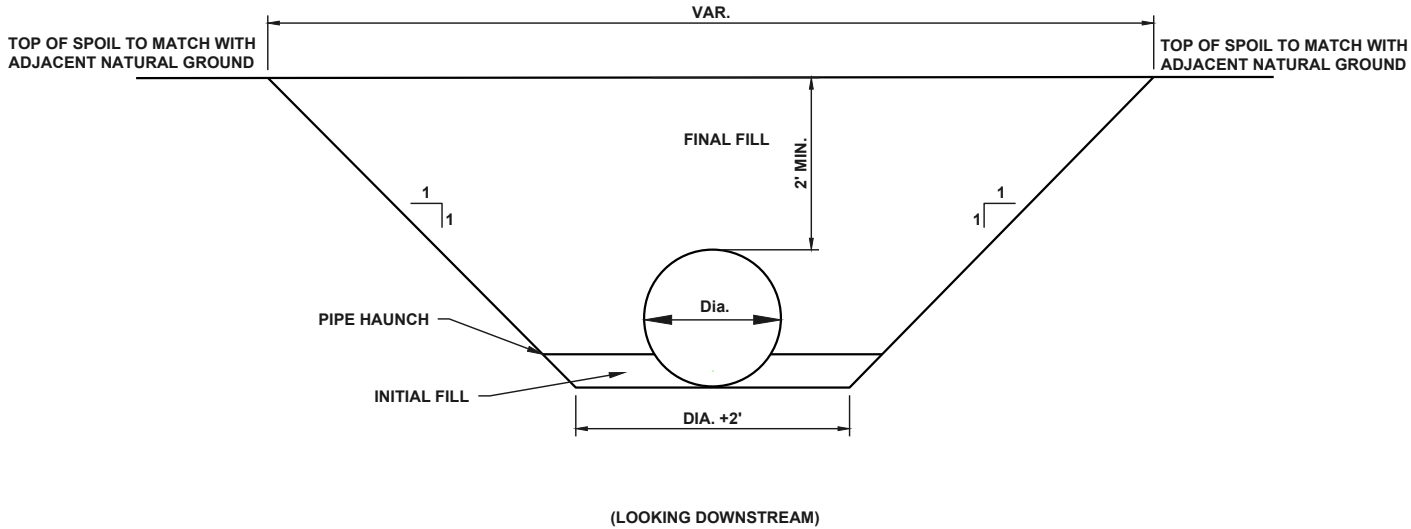
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Tony A. Nordby
Tony A. Nordby
License No. 51392

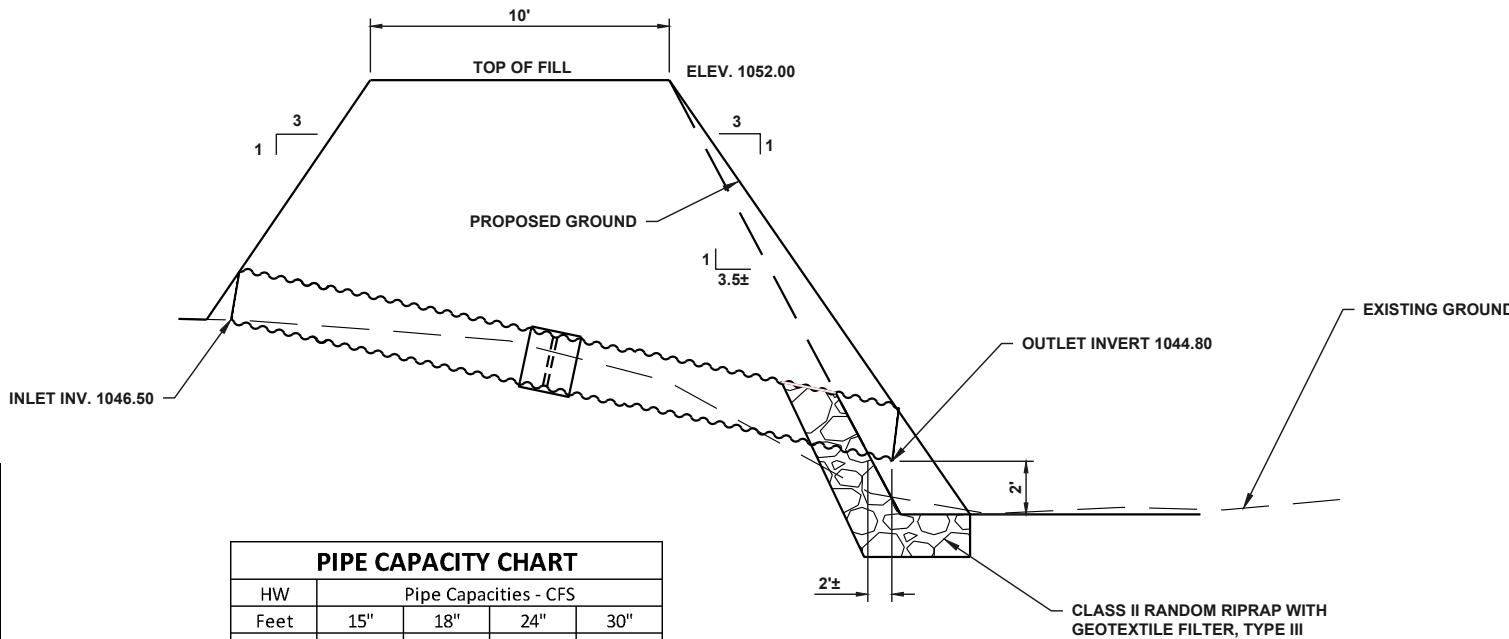
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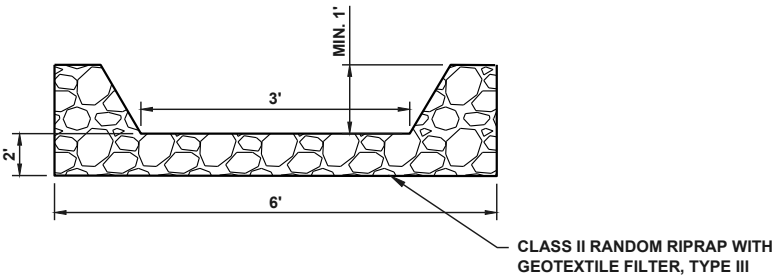
1. INITIAL FILL - FILL MATERIAL UNDER THE PIPE HAUNCH (LOWER THIRD) SHALL BE FREE OF ROCKS AND CLODS OVER 3" IN DIAMETER. INITIAL FILL SHOULD BE KNIFED IN ALONG THE BOTTOM AREA OF THE PIPE AND HAND TAMPED WITH 2 x 4 INCH LUMBER OR AN EQUIVALENT TO ENSURE UNIFORM PLACEMENT.
2. FINAL FILL - FILL MATERIAL OVER PIPE HAUNCH SHALL BE FREE OF ROCK AND SOIL CLODS OVER 6" IN DIAMETER AND PLACED IN LIFTS OF 9" BEFORE COMPACTION. FINAL FILL MATERIAL SHALL BE COMPACTED TO A DENSITY EQUAL TO ADJOINING UNDISTURBED GROUND. DOZER COMPACTION WILL REQUIRE AT A MINIMUM COMPLETE COVERAGE OF AREA WITH THE TRACK AND LIFTS NOT TO EXCEED 5" BEFORE COMPACTION.
3. FILL MATERIAL SHALL BE PLACED ALTERNATELY ON EACH SIDE OF THE PIPE AT EQUAL ELEVATIONS. HAND EQUIPMENT OR MECHANICAL TAMPERS ARE REQUIRED FOR FINAL FILL COMPACTION. THE MOISTURE CONTENT OF THE BACKFILL MATERIAL SHOULD FORM A BALL WHEN KNEADED BY HAND AND WILL NOT READILY SEPARATE.
4. CONNECTING BANDS SHALL BE FREE OF SOIL DURING INSTALLATION AND TAPPED WITH A Mallet WHILE TIGHTENING TO INSURE A TIGHT JOINT. PIPE HEAD >5 FEET REQUIRE WATERTIGHT CONNECTING BANDS. CONNECTING BANDS MAY BE SUPPLIED WITH GASKETS OR ASPHALTIC MASTIC WHERE WATER-TIGHTNESS IS REQUIRED.
5. TRENCH DEPTHS > THAN 5' REQUIRE OSHA APPROVED TRENCHING PROCEDURES.
6. ALL PIPES SHALL HAVE A MINIMUM 2' OF COVER UNDER FULL TOP OF SPOIL WIDTH.



TYPICAL SIDE INLET FILL SECTION
NOT TO SCALE



TYPICAL FIELD INLET SECTION
NOT TO SCALE



RIPRAP CROSS SECTION
NOT TO SCALE

DRAINAGE CURVE (DC)	
Acres	#3 - CFS
0	0.0
10	1.3
20	2.6
30	3.9
40	5.0
50	6.2
60	7.4
70	8.4
80	9.4
90	10.0
100	11.0
110	12.0
120	13.0
130	14.0
140	15.0
150	16.0
160	17.0
170	18.0
180	19.0
190	20.0
200	21.0
220	22.0
240	24.0
300	28.0

PIPE CAPACITY CHART					
HW Feet	Pipe Capacities - CFS				
	15"	18"	24"	30"	
0.0	0.0	0.0	0.0	0.0	
1.0	2.8				
1.2	3.8				
1.4	4.2	5.7			
1.5	4.4	6.1	8.3		
1.6	4.5	6.6	9.2		
1.8	4.9	7.1	11.0	13.5	
2.0	5.4	7.6	12.8	16.1	
2.2	5.6	8.2	13.9	18.5	
2.4	6.0	8.9	15.0	21.3	
2.5	6.1	9.0	15.6	22.1	
2.6	6.3	9.2	16.0	23.2	
2.8	6.5	9.6	17.0	25.2	
3.0	6.8	10.2	18.0	26.9	
3.2	7.0	10.6	19.0	28.2	
3.4	7.2	11.0	19.8	30.0	
3.5	7.4	11.2	20.1	30.3	
3.6	7.6	11.4	20.4	31.8	
3.8	7.8	11.9	21.1	33.5	
4.0	8.1	12.1	21.9	34.5	

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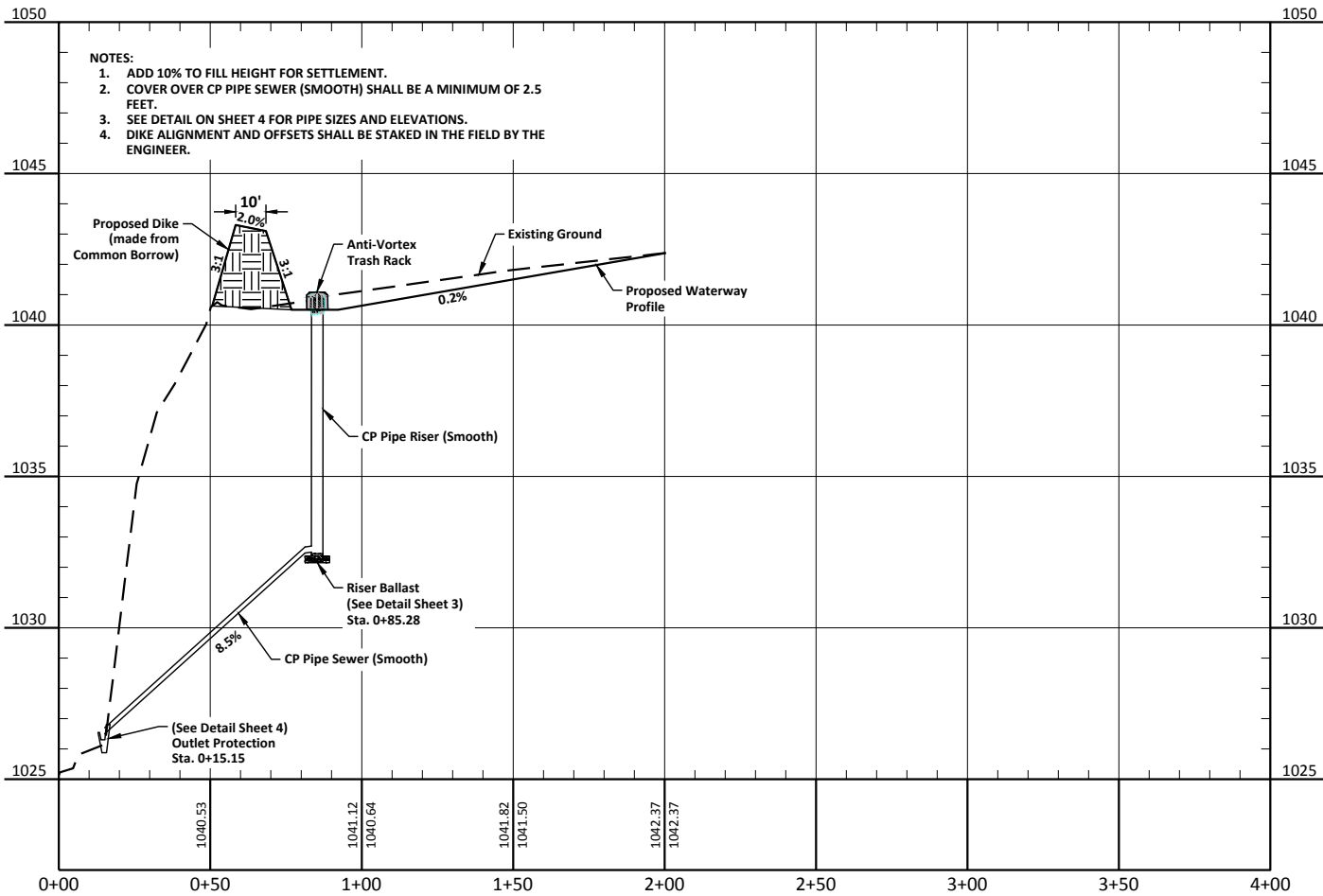
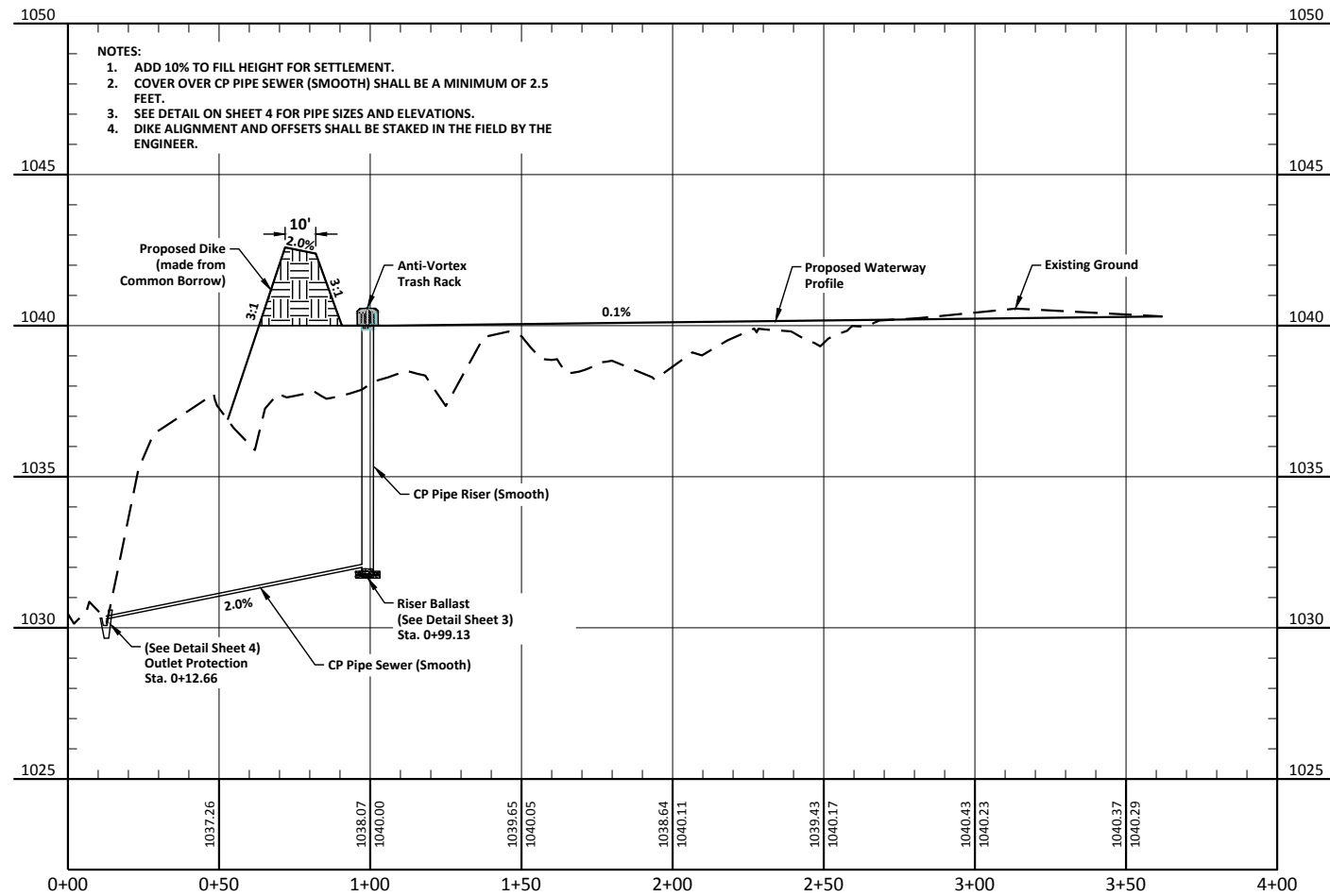
Tony A. Nordby

Tony A. Nordby
License No. 51392

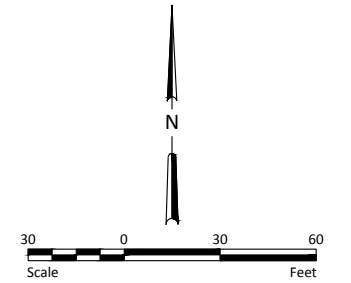
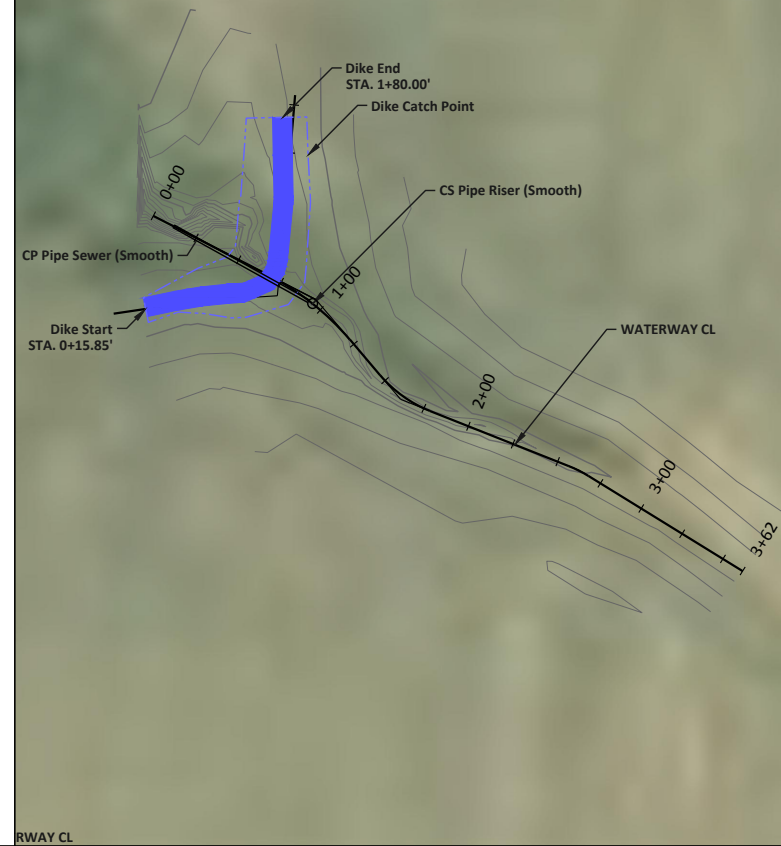
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SITE #2

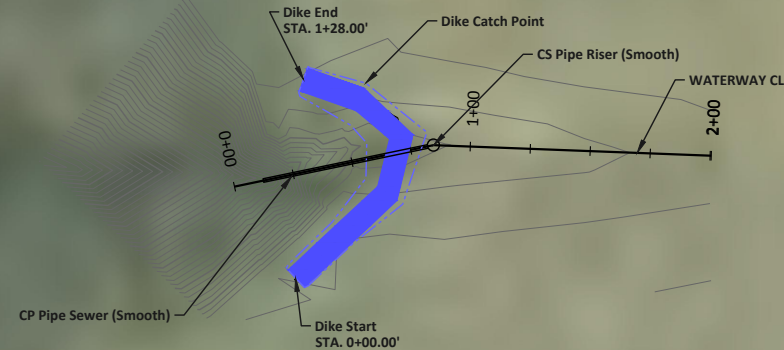


Site #2

Common Borrow (CV): 442 cu. yd.
Rip-Rap: 17 cu. yd.
Granular Bedding: 14 cu. yd.
Rebar: 18 ft.

30" CS Pipe Riser (Smooth): 9 ft.
24" CP Pipe Sewer: 86 ft.

SITE #1



Site #1

Common Borrow (CV): 192 cu. yd.
Rip-Rap: 17 cu. yd.
Granular Bedding: 9 cu. yd.
Rebar: 15 ft.

24" CP Pipe Riser (Smooth): 9 ft.
15" CP Pipe Sewer: 70 ft.
15" Rodent Guard

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Tony A. Nordby
Tony A. Nordby
License No. 51392
Date: 8/02/21

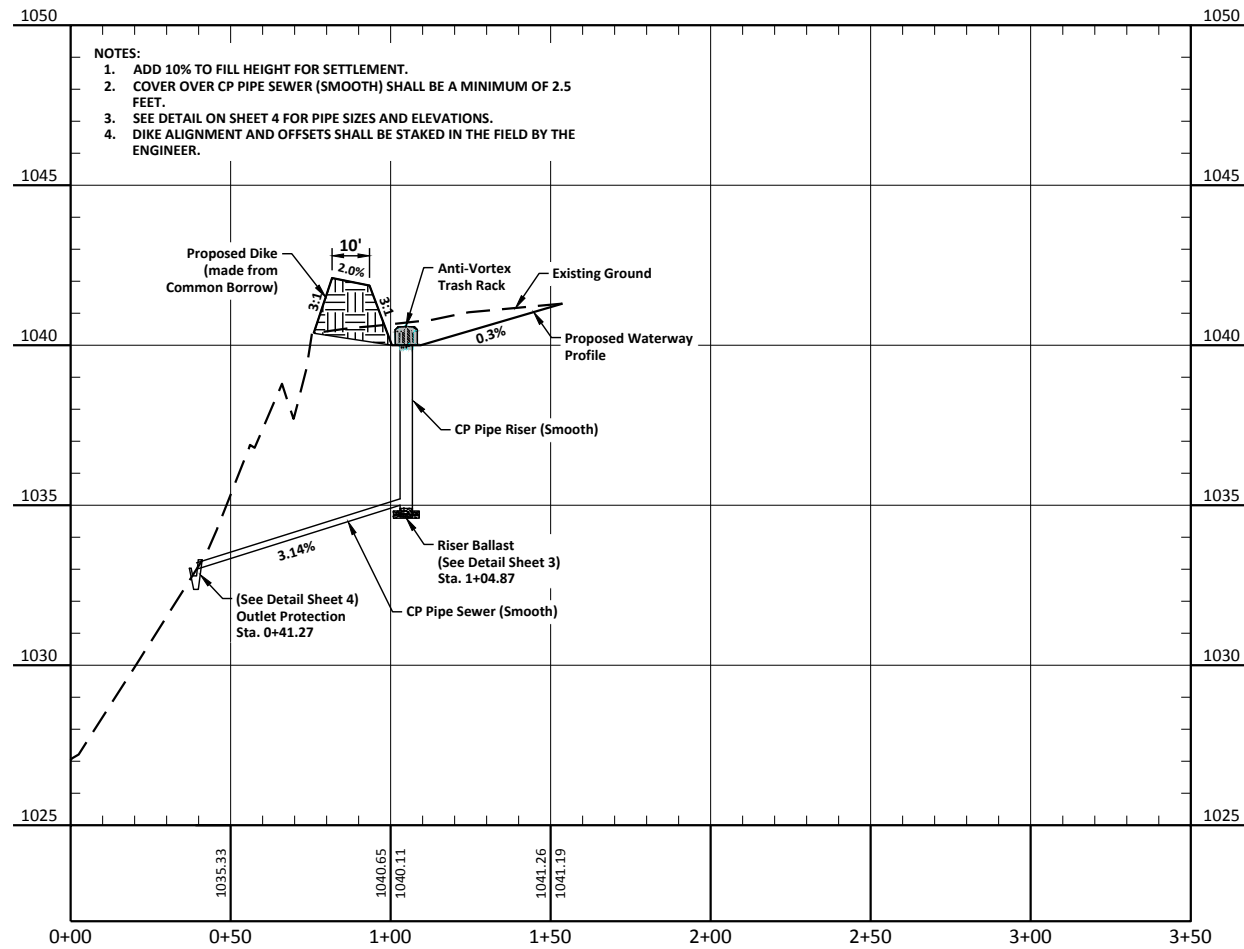
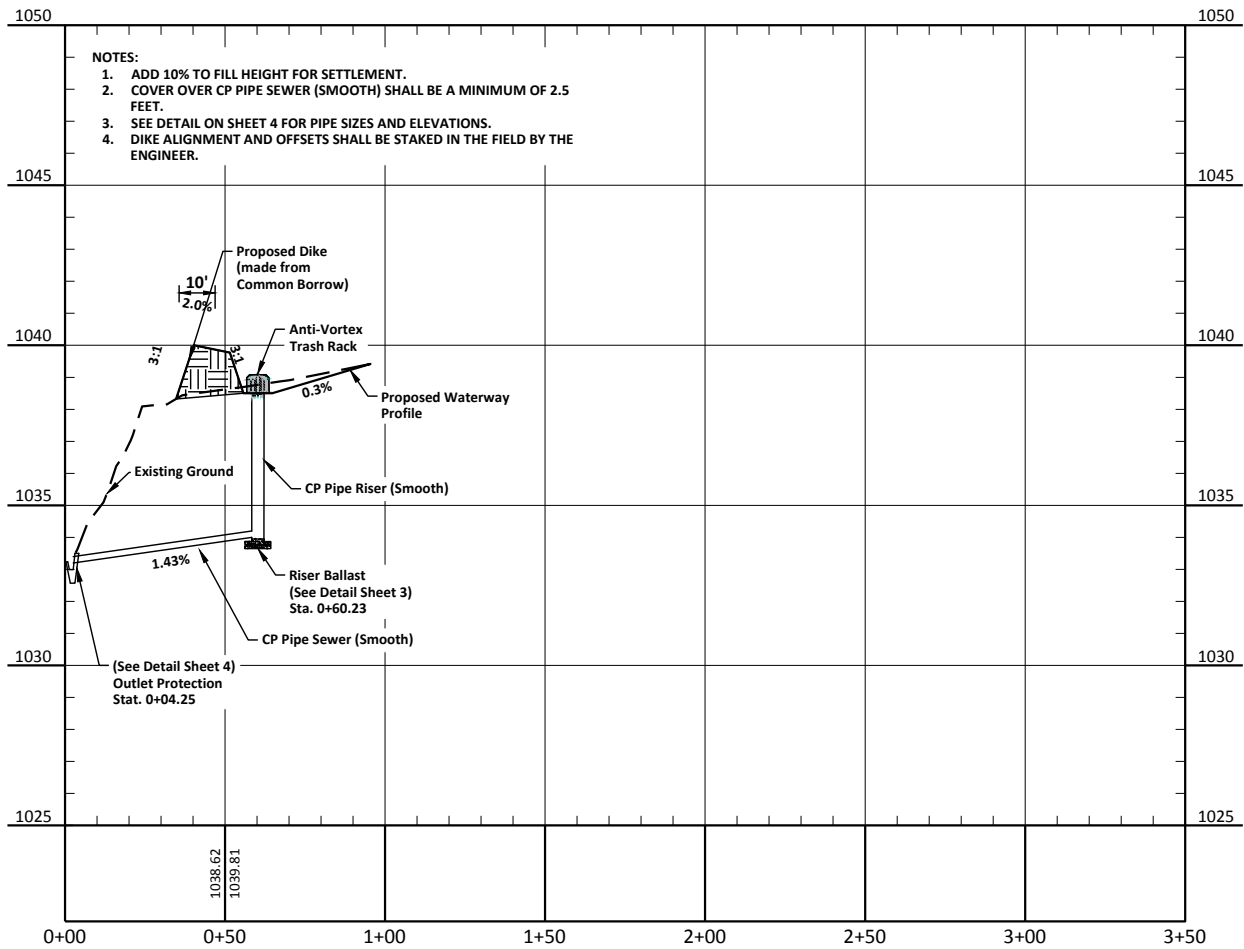
MATT KNUTSON GRADE STABILIZATION
RED LAKE COUNTY SWCD
SECT. 18, 19, 25, 35, 36, GERVAIS AND RED LAKE TWP., RED LAKE COUNTY, MN



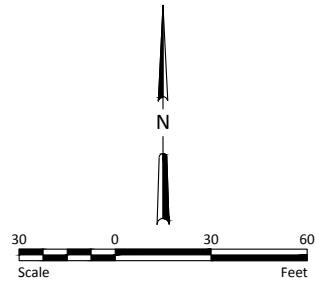
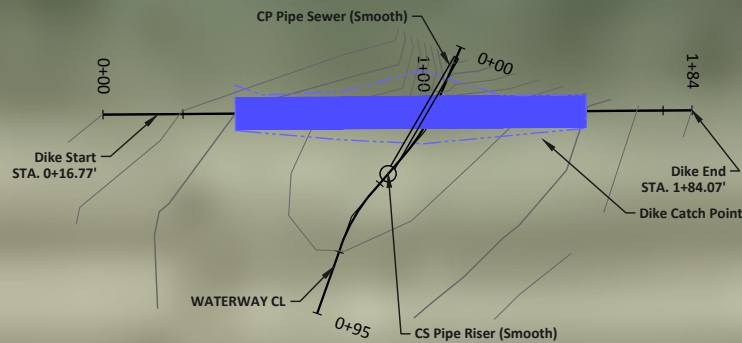
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SITE #6

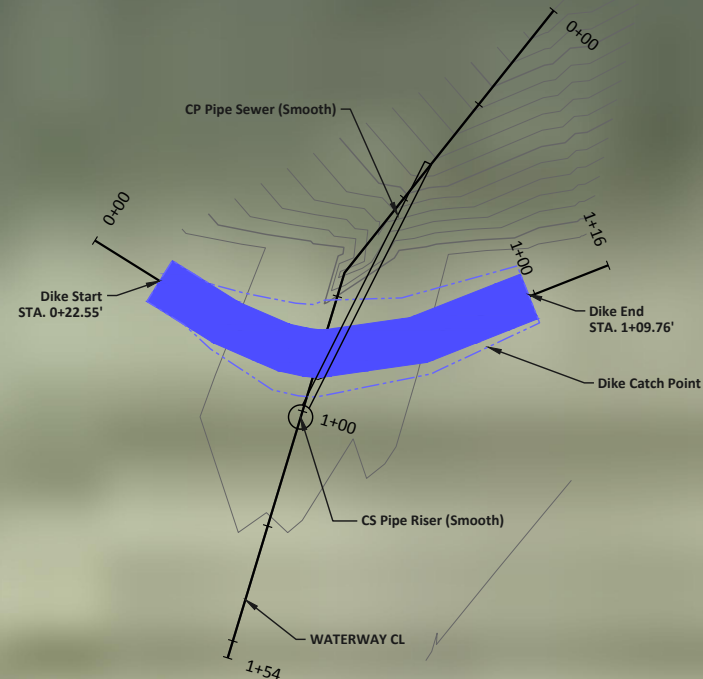


Site #6

Common Borrow (CV): 70 cu. yd.
Rip-Rap: 15 cu. yd.
Granular Bedding: 5 cu. yd.
Rebar: 12 ft.

18" CS Pipe Riser (Smooth): 5.5 ft.
12" CP Pipe Sewer: 56 ft.
12" Rodent Guard

SITE #5



Site #5

Common Borrow (CV): 36 cu. yd.
Rip-Rap: 15 cu. yd.
Granular Bedding: 5 cu. yd.
Rebar: 12 ft.

18" CS Pipe Riser (Smooth): 6 ft.
12" CP Pipe Sewer: 64 ft.
12" Rodent Guard

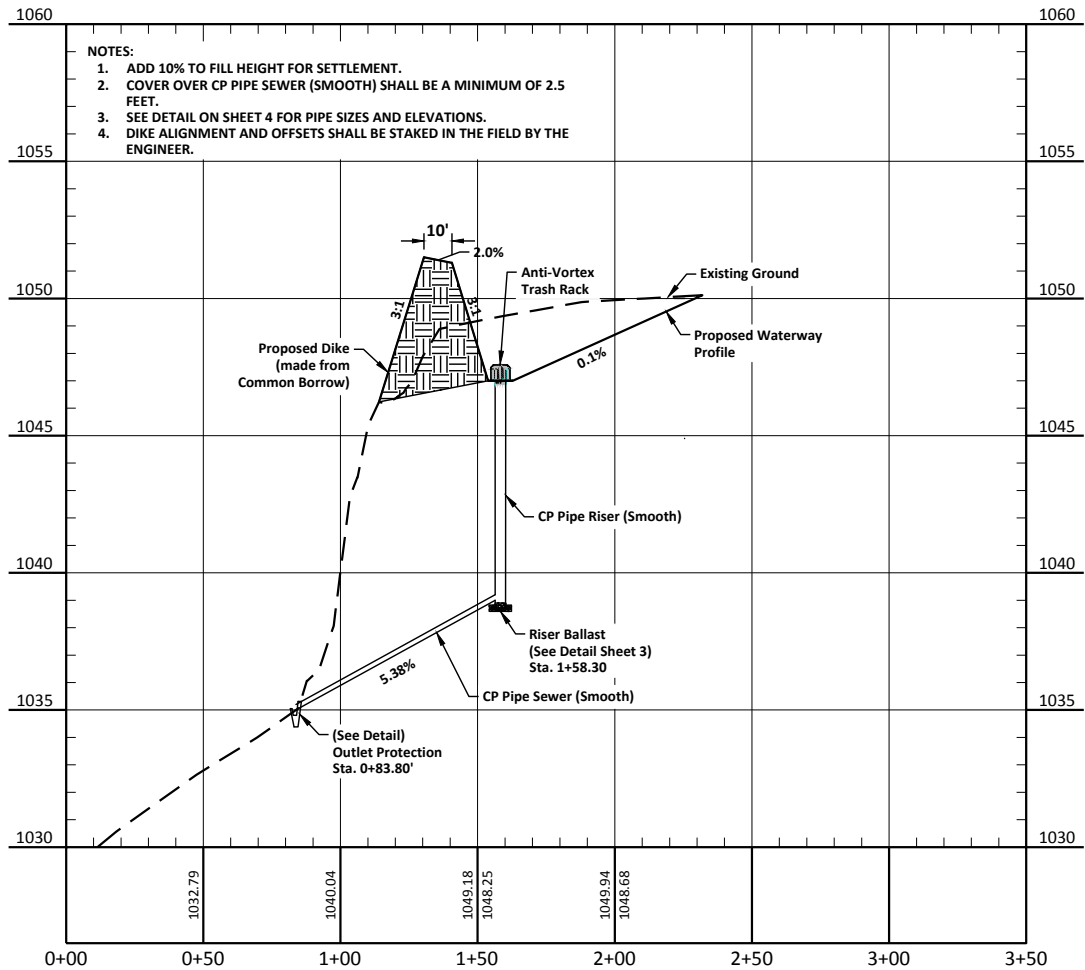
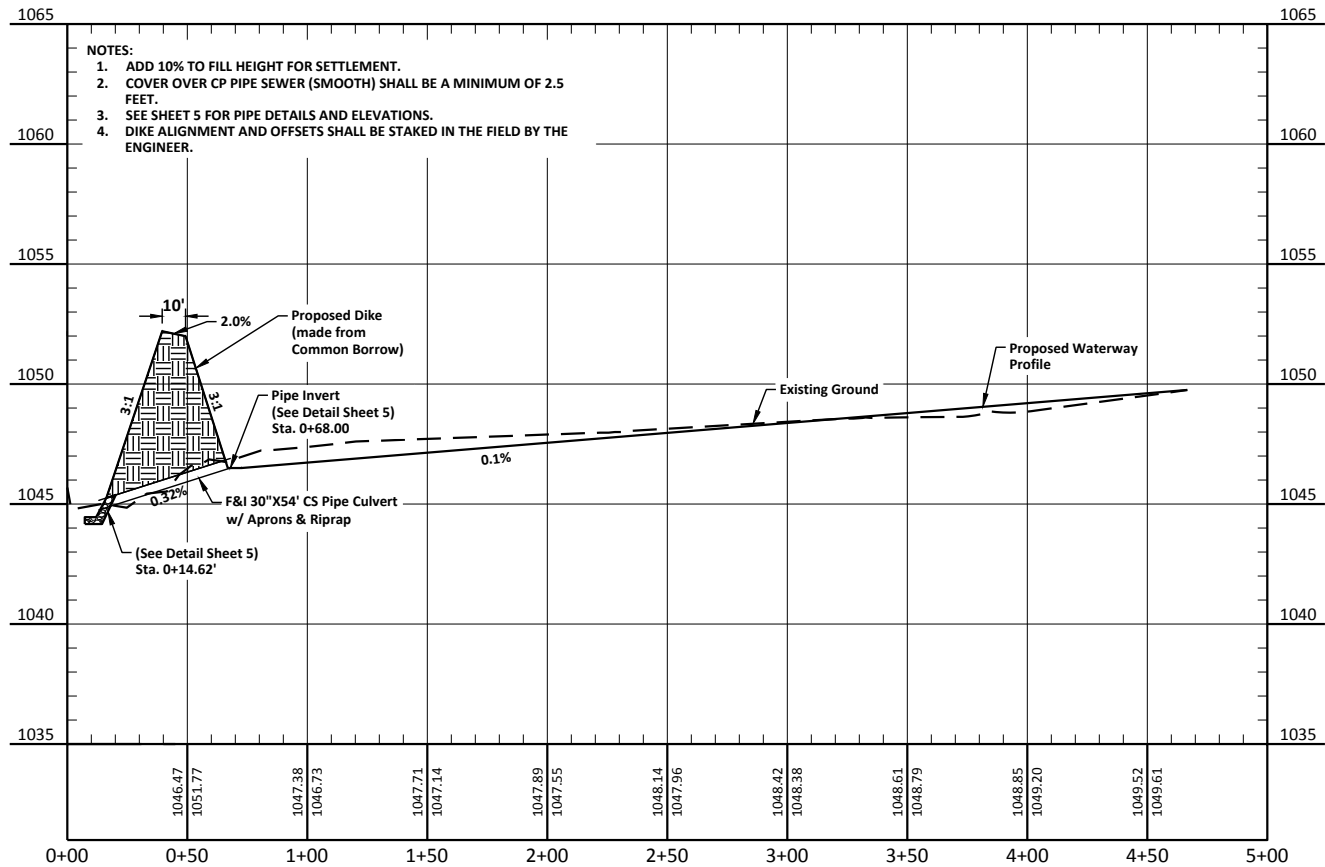
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Tony A. Nordby
Tony A. Nordby
License No. 51392

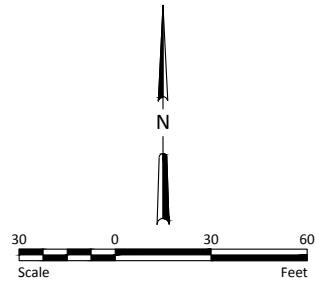
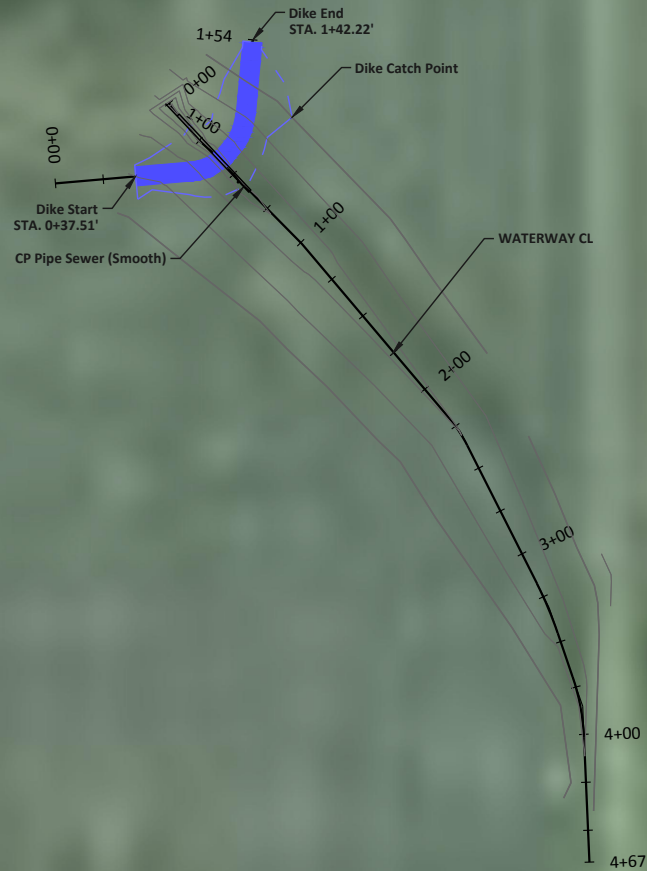
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PLAN AND PROFILE			
MATT KNUTSON GRADE STABILIZATION RED LAKE COUNTY SWCD SECT. 18, 19, 25, 35, 36, GERVAIS AND RED LAKE TWP., RED LAKE COUNTY, MN			
Houston Engineering, Inc.			
Drawn By	KMF	Checked By	TAN
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SITE #10



Site #10

Common Borrow (CV): 240 cu. yd.
Rip-Rap: 16 cu. yd.
Granular Bedding: 9 cu. yd.

30" CS Pipe Culvert: 54 ft.
2 - 30" GS Pipe Aprons

SITE #9



Site #9

Common Borrow (CV): 107 cu. yd.
Rip-Rap: 15 cu. yd.
Granular Bedding: 6 cu. yd.

18" CS Pipe Riser (Smooth): 9 ft.
12" CP Pipe Sewer: 74 ft.
12" Rodent Guard

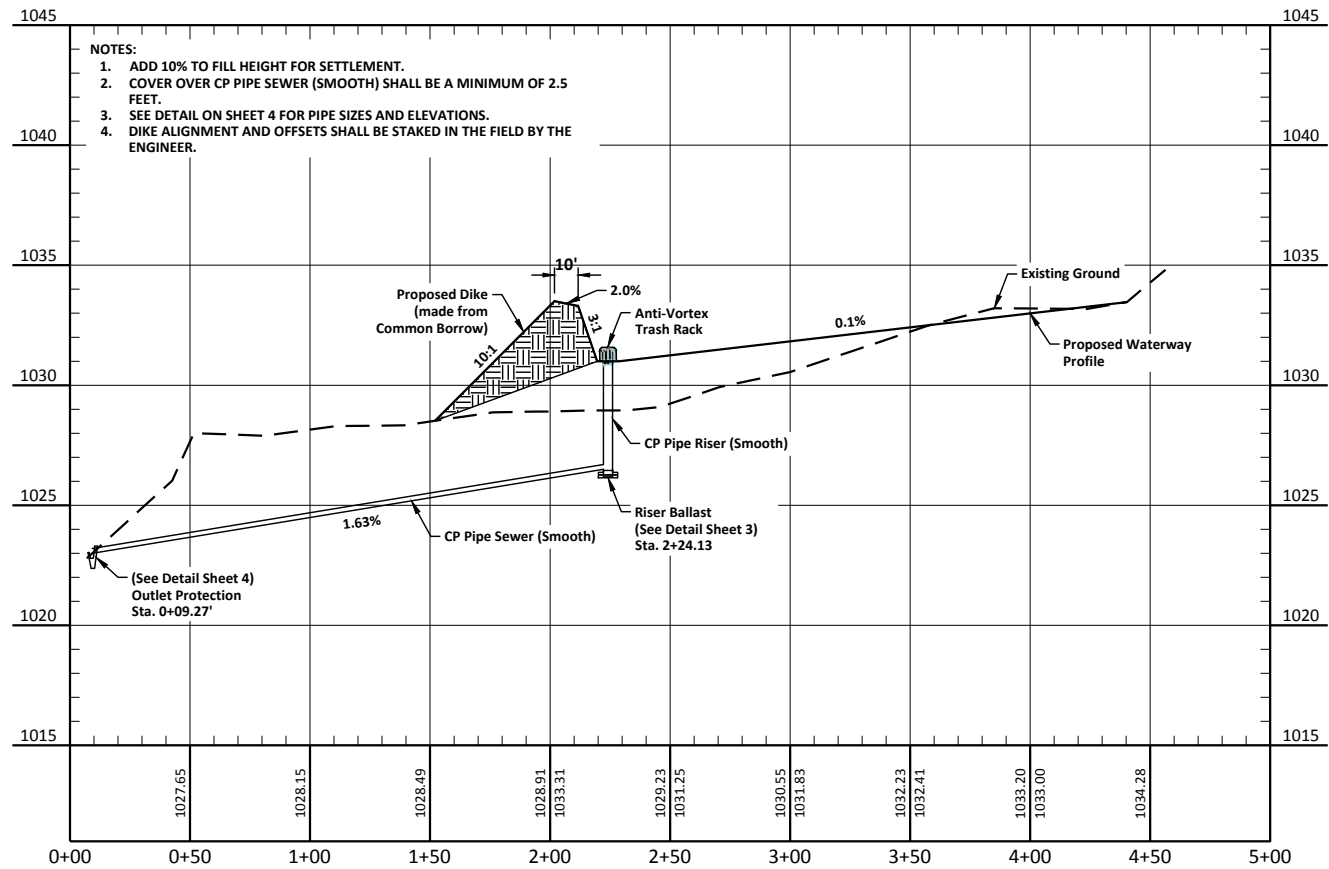
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision, and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Tony A. Nordby
Tony A. Nordby
License No. 51392

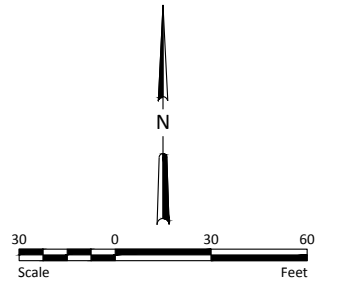
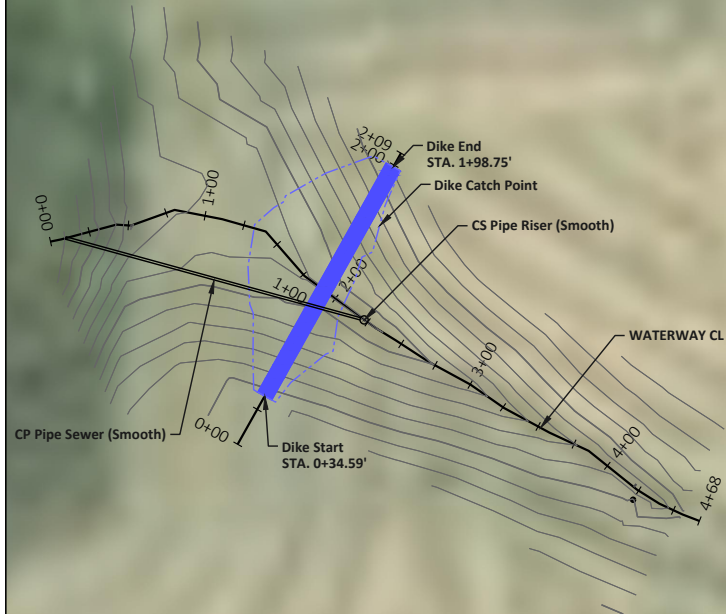
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By	Date	Revision	No.
PLAN AND PROFILE			
MATT KNUTSON GRADE STABILIZATION RED LAKE COUNTY SWCD SECT. 18, 19, 25, 35, 36; GERVAIS AND RED LAKE TWP., RED LAKE COUNTY, MN			
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SITE #11



Site #11

Common Borrow (CV): 445 cu. yd.
Rip-Rap: 17 cu. yd.
Granular Bedding: 19 cu. yd.

24" CS Pipe Riser (Smooth): 5.5 ft.
15" CP Pipe Sewer: 216 ft.
15" Rodent Guard

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.

Tony A. Nordby

Tony A. Nordby
License No. 51392

Date: 8/02/21

MATT KNUTSON GRADE STABILIZATION
RED LAKE COUNTY SWCD
SECT. 18, 19, 25, 35, 36, GERVAIS AND RED LAKE TWP., RED LAKE COUNTY, MN



Drawn By
KMF

Checked By
TAN

Date
8-02-21

Scale
As Shown

Project No.
10861-0001

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No. Revision

Date

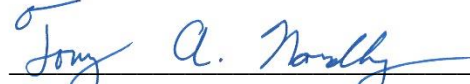
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INDEX--SP2018BOOK

Matt Knutson Grade Stabilization Projects Sections 25, 35 & 36 Red Lake Twp. Red Lake County

<u>SP2018#</u>	<u>ITEM#</u>	<u>DATA</u>	<u>PAGE</u>
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S-3	(2451)	STRUCTURE EXCAVATIONS AND BACKFILLS.....	3
S-4	(2503)	PIPE SEWERS	4
S-5	(2511)	RIPRAP	4
S-6	(2575)	ESTABLISHING TURF AND CONTROLLING EROSION.....	5

I Hereby certify that these Special Provisions 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.



Tony A. Nordby, PE, Lic. No. 51392

8/2/2021

Date

DIVISION S

S-1 (2021) MOBILIZATION

- S-1.1 Item No. 2021.501, "Mobilization", shall be compensation for all mobilization and demobilization costs on this project including costs associated with, but not limited to, any Contracts, Bonds, and required Insurance.

S-2 (2105) EXCAVATION AND EMBANKMENT

Modify MnDOT 2105 as follows:

- S-2.1 Item No. 2105.507, "Common Borrow (P) (CV)", shall be a Plan Quantity Item.

Item No. 2105.507, "Common Borrow (P) (CV)", includes the borrow material necessary to construct the dikes to the elevation, profile, and cross section as shown in the plan. 6 inches of topsoil shall be stripped from the footprint of the dike prior to placing borrow material and placed back on the dike at the finished top elevation and cross section as shown in the plan. Borrow material shall be free of all frozen soil, brush, roots, or other perishable material. Item No. 2105.507, "Common Borrow (P) (CV)", includes the stripping, stockpiling, and replacing of all topsoil, excavation/fill of all erosion waterway areas upstream from the riser structures identified on the plan, and construction of dikes to the line, slopes, cross sections, and grades shown on the plans. All unsuitable materials for dike construction such as roots, rubbish, stumps, or other objectionable material shall be properly disposed of in accordance with the plans, special provisions and all applicable rules and regulations.

During placement and compaction of the common borrow material, the moisture of the material being placed shall be maintained within the specified range. The application of water to the common borrow material shall be accomplished at the borrow areas insofar as practicable. Water may be applied by sprinkling the material after placement on the dike, if necessary. Uniform moisture distribution shall be obtained by disking. Material that is too wet when deposited on the dike shall either be removed or be dried to the specified moisture content prior to compaction.

The common borrow compaction shall comply with MnDOT 2105.3 F.2 – Quality Compaction Method.

The common borrow shall be placed in uniform layers not exceeding 12 inches of uniform thickness, and thoroughly mixed by disking or other approved methods to obtain uniformity of material.

During the course of the work, the Engineer may perform such quality assurance tests as are required to identify materials; determine compaction characteristics; determine moisture content; and determine density of common borrow in place. Tests performed by the Engineer will be used to verify that the common borrow conforms to contract requirements of the specifications and not as a replacement for the Contractor's quality control program. Densities of the common borrow areas once placed requiring compaction will be determined in accordance with the appropriate ASTM methods which may include ASTM D1556 (Sand Cone Method), D2167 (Balloon Method), D2922 (Nuclear Methods) 2937 (Drive Cylinder Method) and other methods approved by the Engineer. The Engineer will determine the density test which is appropriate for the conditions and materials encountered.

The moisture content will be determined in accordance with appropriate ASTM methods which may include ASTM D2216, D3017, D4643, D4944, D4959 and other methods approved by the Engineer. The Engineer will determine moisture content tests which are appropriate for the conditions and materials encountered.

Where the density tests do not meet the minimum requirements as set forth above, the Contractor, at his own expense, shall remove, replace, and re-compact the spoil bank material. A retest shall be required for every density test that does not meet the minimum requirements for moisture and density and paid for by the Contractor.

Once each lift has been adequately processed, the surface of each lift shall be scarified to a minimum of 2 inches prior to placing additional lifts.

In placing of the common borrow, hauling equipment shall be routed so that the material is distributed uniformly over the entire width of each layer of material. Special care shall be exercised in construction of the common borrow to avoid displacement or other damage to the structure and to obtain satisfactory compaction.

Stones of over three inches in maximum dimension will not be permitted in the dike. Stumps, logs, large roots, snow, ice, frozen lumps of earth, or other objectionable materials shall not be placed in any portion of the dike.

The common borrow shall not be placed during periods when the material freezes while being placed and compacted, nor shall any common borrow material be placed on soil that is frozen. Where the foundation soil is frozen at a time when weather conditions are such that dike construction could be continued without the material freezing as it is being placed and compacted, the Contractor may be permitted to excavate the frozen foundation soil and proceed with the common borrow placement as the weather permits, but only if and to the extent approved by the Engineer, and with the understanding that the additional costs involved shall be borne by the Contractor. The frozen soil shall be pulverized or coaxed and replaced with other suitable material as may be necessary to construct the dike as specified.

Finish surface shall be approved by the Engineer prior to seeding.

All costs associated with providing the work necessary to complete Item No. 2105.507, "Common Borrow (P) (CV)", including, but not limited to, stripping, stockpiling, replacing, excavation, fill, loading, hauling, placing, drying/watering, compacting, and/or disposing of common borrow material shall be included in the unit bid price for Item No. 2105.507, "Common Borrow (P) (CV)", and no additional compensation will be considered thereof.

Measurement for Item No. 2105.507, "Common Borrow (P) (CV)", shall be by Plan Quantity (P) Compacted Volume (CV), and Cubic Yard (CY) basis. The volume of common borrow material placed to the design plan, grade, and cross section will be included in the Plan Quantity (P) for payment, and no direct measurement will be made unless determined necessary by the Engineer.

S-3 (2451) STRUCTURE EXCAVATIONS AND BACKFILLS

Modify MnDOT 2451 as follows:

- S-3.1 Excavation and backfilling operations associated with the removal of existing structures and installation of new pipe culverts and drainage structures will be performed in accordance with MnDOT 2451. All labor, equipment and material costs associated with excavation and backfilling work necessary for the removal and/or installation of pipe culverts, drainage structures, rip rap and all items requiring excavation operations for installation shall be considered an incidental cost to the respective Pay Items, and no direct payment for structure excavation and backfilling will be made thereof.
- S-3.2 Where applicable, a minimum of 6" of topsoil shall be salvaged, stockpiled within the construction area and placed over the finished graded slope areas affected by the pipe sewer, culverts and risers excavation and backfilling operations. All associated labor, equipment and material costs necessary to salvage and place the topsoil shall be incidental to the respective Bid Item and no direct compensation will be considered thereof.

- S-3.3 Any clearing and grubbing necessary to remove or install pipe sewer, culverts, or riser structures shall be completed and disposed of by the Contractor off the project site. All associated labor, equipment and material costs necessary to clear and grub shall be incidental to the respective pipe sewer, culvert, or riser structure Bid Item and no direct compensation will be considered thereof.
- S-3.4 All pipe sewer and culverts shall be backfilled with Granular Bedding in accordance with MnDOT 3149 and placed in accordance with the typical plan details and these special provisions. Measurement for Item No. 2451.507, "Granular Bedding (P) (CV)", shall be considered Plan Quantity (P), Compacted Volume (CV) and measured by the Cubic Yard (CU. YD.).

S-4 (2503) PIPE SEWERS

Modify MnDOT 2503 as follows:

- S-4.1 The applicable provisions of MnDOT 2503 shall apply to Item No. 2503.503, "12" CP Pipe Sewer (Smooth)", Item No. 2503.503, "15" CP Pipe Sewer (Smooth)", Item No. 2503.503, "18" CP Pipe Sewer (Smooth)", Item No. 2503.503, "21" CP Pipe Sewer (Smooth)", Item No. 2503.503, "24" CP Pipe Sewer (Smooth)", Item No. 2503.601, 18" CP Pipe Riser (Smooth), Item No. 2503.601, 24" CP Pipe Riser (Smooth), and Item No. 2503.601, 30" CP Pipe Riser (Smooth), in addition to the following:
- S-4.2 Corrugated polyethylene pipe and fittings shall be 12", 15", 18", and 24" nominal diameter manufactured from high-density polyethylene (HDPE) virgin compounds. Clean reworked HDPE materials from the manufacturer's own production may be used by the manufacturer of HDPE pipe, provided that the pipe and fittings produced meet all the requirements of these Special Provisions, MnDOT 3247, AASHTO M294. The corrugated polyethylene pipe shall be appropriately marked with ASTM or AASHTO designation. Coupling connections shall be made with bell and spigot joints. Bell and spigot joints shall be designed with a gasket meeting ASTM F477.
- S-4.3 All excavation and backfill (backfill above the granular bedding, as applicable) for the 12", 15", 18", and 24" CP Pipe Sewer (Smooth) and 18", 24", and 30" CP Pipe Riser (Smooth), will not be measured for separate payment but shall be considered incidental to the respective pipe sewer or riser structure with no additional compensation considered thereof.
- S-4.4 Item No. 2503.602, "18" Anti-Vortex Trash Rack", Item No. 2503.602, "24" Anti-Vortex Trash Rack" and Item No. 2503.602, "30" Anti-Vortex Trash Rack", includes the furnishing and installation of the Anti-Vortex Trash Racks including all mounting hardware. Mounting hardware shall be galvanized as per MnDOT 3392, "Galvanized Hardware". Installation of the Trash Rack shall be in accordance with the manufacturer's recommendations.
- S-4.5 Item No. 2503.602, "18" Anti-Vortex Trash Rack", Item No. 2503.602, "24" Anti-Vortex Trash Rack" and Item No. 2503.602, "30" Anti-Vortex Trash Rack", shall be measured and paid per unit Each. All labor, equipment, and material costs required to furnish and install Item No. 2503.602, "18" Anti-Vortex Trash Rack", Item No. 2503.602, "24" Anti-Vortex Trash Rack" and Item No. 2503.602, "30" Anti-Vortex Trash Rack" shall be included in the unit bid price and no additional compensation will be made thereof.

S-5 (2511) RIPRAP

This work shall be performed in accordance with the applicable provisions of MnDOT 2511 and MnDOT 3601, as supplemented by the following:
Modify MnDOT 2105 as follows:

- S-5.1 Item No. 2511.507, "Random Riprap, Class II", shall conform to requirement outlined for each classification in MnDOT Table 3601-1.

For Item No. 2511.507, "Random Riprap, Class II", Section 3601.2.A.1 shall be followed:
All requirements of 3601 remain in effect.

The Contractor shall furnish Geotextile Filter, Type III for use under Random Riprap Class II as shown on the plans and shall be performed in accordance with the applicable provisions of MnDOT 2511 and 3733.

All material and work associated with the placement of the geotextile filter shall be incidental to Item No. 2511.507, "Random Riprap, Class II". The Engineer will require material certification prior to the placement of any "Geotextile Filter".

Measurement for Item No. 2511.507, "Random Riprap, Class II", shall be field measured and based on a cubic yard (CY) unit of measure basis.

Payment for Item No. 2511.507, "Random Riprap, Class II", shall include all labor, equipment, and material costs associated with furnishing and placing riprap as detailed in the plan, specifications, and described above. All costs shall be included in the unit bid price for Item No. 2511.507, Item No. 2511.507, "Random Riprap, Class II", and no additional compensation will be considered thereof.

S-6 (2575) ESTABLISHING TURF AND CONTROLLING EROSION

Modify MnDOT 2575 as follows:

- S-6.1 All areas outside the agricultural field extents shall have turf establishment and erosion control measures.

Seeding and placement of erosion control mulch shall be performed by the Contractor, as directed by the Engineer. All associated costs shall be included in Item No. 2575.501 "Turf Establishment."

Seed: Shall be MnDOT Mixture 25-141 and MnDOT Mixture 21-112

Fertilizer: Shall be MnDOT Type 1, 20-20-10

Mulch: MnDOT Type 1

Sowing Seed: Seed Mixture 25-141 shall be applied at the rate of 59 pounds per acre over all disturbed areas as shown in the plans. Seeding shall be done as soon as possible after finish grading has been completed. Seed Mixture 21-112 shall be applied at a rate of 25 pounds per acre over all disturbed areas as shown in the plan.

Applying Fertilizer and Conditioners: Fertilizer shall be applied at 250 pounds per acre over all seeded areas of turf establishment.

Sowing Mulch: Mulch Material Type 1 shall be applied at the rate of 2 tons per acre over all disturbed areas as shown in the plans. Mulching shall be done as soon as possible after finish grading has been completed and disk anchored into the ground.

Maintenance: The Contractor shall be solely responsible for replacement and/or repair of any seeded area that may wash-out, erode, or fail to grow prior to acceptance with no additional compensation, therefore. The Contractor is also responsible for maintenance of seed per the MnDOT Specifications.

Item No. 2575.501, "Turf Establishment", shall apply to all disturbed areas within the project limits, unless directed otherwise by the Engineer. Measurement and payment in accordance with MnDOT 2575.



West Polk Soil & Water Conservation District

528 Strander Avenue
Crookston, Minnesota 56716-2912
Telephone: 1-218-281-6070
www.westpolkswcd.org

AN EQUAL OPPORTUNITY EMPLOYER

10/12/2022

Red Lake Watershed District Board

Re: Cost Share

Attached you will find invoice #2147, in the amount of \$13,725.00.

These two projects were presented to the Red Lake Watershed District Board in May of 2021 and received approval of 75% cost share.

Construction on these projects were completed in the early fall of 2021. Cost share was paid to the landowner by WPSWCD district funds 11/18/2021.

On behalf of West Polk SWCD, the district is requesting reimbursement of the \$13,725.00 for these two completed projects.

Please contact me with any questions.

Thank you.

A handwritten signature in cursive script, reading 'Nicole Bernd', is located below the 'Thank you.' text.

Nicole Bernd
District Manager
West Polk SWCD

Board of Supervisors:
Chris Cournia, Chairman
Derek Peterson, Vice Chair
Eric McWalter, Secretary
Christian Pester, Treasurer
John Sorenson, PR & I

West Polk Soil and Water Conservation District

528 Strander Ave
Crookston MN 56716
Phone 218-281-6070

INVOICE

INVOICE #2147
DATE: OCTOBER 12, 2022
CONTRACT #_DF(RLWD) 01-21_DF(RLWD) 02-21

TO:

Red Lake Watershed District
1000 Pennington Ave S
Thief River Falls MN 56701

Reimbursement of cost share on two grade stabilizations.

DESCRIPTION	NUMBER OF ITEM	RATE	AMOUNT
E. Boushee; Huntsville twp., section 29 One side water inlet (pipe), construction, and materials	1		\$7,350.00
B. Hangsleben (GKT Farms), Huntsville twp., section 4 One side water inlet (pipe), construction and materials	1		\$6,350.00
It was a pleasure working with you.		TOTAL DUE	\$13,725.00

Make all checks payable to **West Polk Soil and Water Conservation District**

Total due in 30 days. Overdue accounts subject to a service charge of 1.5 % per month.

Thank you for your business!

RED LAKE WATERSHED DISTRICT
Board of Manager's Minutes
May 13, 2021

President Dale M. Nelson called the meeting to order at 9:00 a.m. at the Red Lake Watershed District Office, Thief River Falls, MN.

Present: Managers Dale M. Nelson, Allan Page, Terry Sorenson, Gene Tiedemann, Tom Anderson, LeRoy Ose and Brian Dwight. Staff Present: Myron Jesme and Tammy Audette, and Legal Counsel, Delray Sparby.

The Board reviewed the agenda. A motion was made by Ose, seconded by Tiedemann, and passed by unanimous vote that the Board approve the agenda. Motion carried.

The Board reviewed the April 22, 2021 minutes. Motion by Sorenson, seconded by Anderson, to approve the April 22, 2021 Board meeting minutes as presented. Motion carried.

The Board reviewed the Financial Report dated May 12, 2021. Motion by Page, seconded by Ose, to approve the Financial Report dated May 12, 2021. Motion carried.

Staff member Nick Olson stated that landowner, Wayne Thorson, had contacted the District regarding a 72" culvert that has failed on Branch No. 108 of Ditch 12, RLWD Project No. 169. Mr. Thorson, who participated in the meeting via Zoom, requested that the District replace the existing culvert. Olson stated that when Ditch 12, RLWD Project No. 169 was established, this lateral along with two other laterals were included in the proceedings and turned over to the District but no work was completed other than establishing the buffer strips. Olson indicated that after reviewing the 1954 and 1984 ditch plans, there was no crossing or culvert shown on the plans and it appears this crossing was not installed as part of the legal drainage system. Legal Counsel Sparby stated that if the culvert was not part of the as-built plans, a hearing will need to be held to allow for the system to pay for the replacement of the culvert. Motion by Ose, seconded by Tiedemann, to schedule a hearing for June 24, 2021 at 9:30 a.m., at the Red Lake Watershed District office, for the purpose of adding a replacement 72" culvert in Branch No. 108, of Ditch 12, RLWD Project No. 169, as an improvement to the project. Motion carried.

Nicole Bernd, West Polk SWCD, participating via Zoom, requested funding for the following two grade stabilization projects from the District's 2021 Erosion Control Funds, RLWD Project No. 164: Hangsleben Project, Huntsville Township, Polk County, estimated project cost of \$8,500, with a request for cost share in the amount of \$6,375.00; and the Boushee Project, Huntsville Township, Polk County, estimated project cost of \$9,800, with a request for cost share in the amount of \$7,350, for a total of \$13,725. Motion by Tiedemann, seconded by Sorenson, to approve cost share in the amount of \$13,725 for the Hangsleben and Boushee Erosion Control Projects from the District's 2021 Erosion Control Funds, RLWD Project No. 164. Motion carried.

Nicole Bernd, West Polk SWCD, inquired on the status of the litigation for the Improvement to Polk County Ditch 39, RLWD Project No. 179. Bernd stated that she had secured a grant in the

amount of \$160,000 for the installation of side water inlets and if the project does not get constructed this year, the grant will be lost.

Engineer Tony Nordby gave an update on the Outlet Repair for Ditch No. 10, RLWD Project No. 161. Nordby also presented Change Order No. 1 in the amount of \$7,500.00 which included the installation of "Air Vents" on the 60" RCP Outlet Structure. Motion by Tiedemann, seconded by Anderson, to approve Change Order No. 1, in the amount of \$7,500.00 for R.J. Zavoral & Sons, Inc. for repairs to the outlet of Ditch 10, RLWD Project No. 161. Motion carried.

Engineer Tony Nordby, Houston Engineering, Inc., presented Change Order No. 2 in the amount of \$3,691.44 for installation of a 71" x 47" CSPA for the Black River Impoundment Project, RLWD Project No. 176. Nordby stated that Administrator Jesme negotiated with the landowner, that he is pay for the cost of the culvert, with the District paying for the installation of said culvert. Discussion was had that if the crossing was added to the project, would it then be the responsibility of the District. Jesme indicated that for future maintenance and if added to the "As Built" it would be best to add it to the project. Motion by Ose, seconded by Tiedemann, to approve Change Order No. 2 in the amount of \$3,691.44 to R.J. Zavoral & Sons, Inc. for construction of the Black River Impoundment Project, RLWD Project No. 176. Motion by Dwight, seconded by Tiedemann, to approve Pay Estimate No. 6, in the amount of \$102,112.08, to R.J. Zavoral & Sons, Inc. for construction of the Black River Impoundment Project, RLWD Project No. 176. Motion carried. Administrator Jesme stated that the larger spruce trees are planted at the Black River Church, black dirt has been placed and will be seeded by RLWD staff and Pennington SWCD will plant the potted spruce trees this week or early next week.

Engineer Dillion Nelson, HDR Engineering, Inc., and Wayne Johnson, City of Thief River Falls, appeared before the Board for discussion on potential additional items for construction of the City of Thief River Falls Oxbow Restoration and Stormwater Treatment Project, RLWD Project No. 46Q. Nelson proposed the installation of 6" drain tile where the City of Thief River Falls currently uses the area as snow storage, deeper pool for longer life span, installation of a third structure to bypass high flows and make hydrodynamic separator more effective to filter out trash, sediment and pollutants. Total additional potential cost is \$170,000. Nelson indicated that they have added a condition in the Specifications that the owner will have the right to remove full bid items if the bids come in over budget. Discussion was held on requesting additional funding from the project partners. Motion by Ose, seconded by Dwight, to approve the Plans and Specifications for construction of the Thief River Falls Oxbow Project, RLWD Project No. 46Q. Motion carried.

Administrator Jesme stated that easements will be required for two landowners for the construction of the Pine Lake Flood Damage Reduction and Fish Habitat Project, RLWD Project No. 26B. Jesme stated that on other FDR projects, the District has offered the landowner the taxable market value multiplied by 1.2 per acre. Motion by Anderson, seconded by Sorenson, to authorize the purchase of a permanent easement from Robert & Gail Coxen for 1.53 acres at total cost of \$9,447.35; and Alan & Katie Gingerich for .400 acres at a cost of \$2,874.91 which includes 2021 taxable market value multiplied by 1.2. Motion carried. Jesme indicated that one of the landowners requested a small plaque in honor of her late father who had previously owned

the property and was an instrumental in getting the original project completed. It was the consensus of the Board, that the District would place a plaque on the structure.

Administrator Jesme discussed an invoice to CenturyLink for the utilities for construction of Ditch 16, RLWD Project No. 177. Jesme discussed previous invoices submitted, and request to CenturyLink to review the invoices versus work actually completed. Motion by Sorenson, seconded by Page, to approve payment to CenturyLink in the amount of \$16,844.45, for construction of Ditch 16, RLWD Project No. 177. Motion carried.

Staff member Nick Olson participated in an inspection of the BR 6 Impoundment, RLWD Project No. 43A with staff from the NRCS. There is some concern with the outlet pipe cradle that has been tipping, and wave action erosion on the bank of the impoundment.

The Board reviewed a letter from the MnDNR regarding a domestic well interference complaint in Red Lake County that has been fully settled with the local landowners with irrigation systems.

Staff member Corey Hanson presented a quote in the amount of \$4,869.70 from Eureka for the purchase of a water quality sonde. Hanson discussed the cost to repair the current sonde versus purchasing new equipment. Motion by Tiedemann, seconded by Ose, to approve the purchase of a water quality sonde in the amount of \$4,869.70 from Eureka. Motion carried.

The board reviewed the permits for approval. Motion by Page, seconded by Anderson, to approve the following permits with conditions stated on the permit: No. 21038, Daniel Caillier, Louisville Township, Red Lake County; No. 21040, Knute Township, Polk County; No. 21041, Wayne DeMarais, Kertsonville Township, Polk County; No. 21044, Clarice DeBoer, Kertsonville Township, Polk County; No. 21045, Thief River Falls Regional Airport, Rocksbury Township, Pennington County; No. 21046, Minnesota Department of Transportation, Knute Township, Polk County; No. 21047, Red Lake County Highway Department, Terrebonne Township, Red Lake County; No. 21048, Red Lake County Highway Department, Red Lake Falls Township, Red Lake County; No. 21049, Kevin Malwitz, Emmardville Township, Red Lake County; No. 21050, Donavon Dahl, Rollis Township, Marshall County; No. 21051, Trent Stanley, Moylan Township, Marshall County; No. 21052, Moylan Township, Marshall County; No. 21053, Lonnie Longtin, Garnes Township, Red Lake County; No. 21054, Marshall County Highway Department, Grand Plain, Marshall County; and No. 21055, Como Township, Marshall Township. Motion carried.

The Board reviewed a list of Excess or Surplus Property that was determined to be no longer needed or needs replacement. Motion by Tiedemann, seconded by Sorenson, to advertise of Bids the Excess or Surplus Property, with bids to be received by 4:30 p.m., June 23, 2021 at the Red Lake Watershed District office, and will be publicly opened at the Board of Managers meeting on June 24, 2021 at 9:15 a.m. The Board reserves the right to reject any or all bids.

Administrators Update:

- Jesme and Manager Ose will attend the May 18, 2021 RRWMB meeting.
- The Policy Committee for the Clearwater River 1W1P met on April 28, 2021. Included in the packet was the agenda for the meeting.
- Staff member Slowinski has been working with schools on River Watch this spring.

- MAWD Region 1 Administrators will meet on May 19, 2021 to discuss BWSR activity and other legislative items as we near the end of the legislative session.

Legal Counsel Sparby discussed the Appeal for the Improvement to Polk County Ditch 39 Project, RLWD Project No. 179. Sparby filed a Motion, and a hearing has been held before the Court. Sparby stated that the court has to decide if they have jurisdiction and if the appeal was filed properly.

Manager Ose discussed the RRWMB meeting and research the USGS is conducting on the lack of water and water quality in the Thief River 1W1P.

Manager Ose stated that he will not be at the May 27, 2021 meeting.

Manager Page stated that landowner Mike Knott approached him with his concerns on the burying of stumps at the outlet of Ditch 10, RLWD Project N. 161, and the possibility of the area settling once the stumps rot. Administrator Jesme stated that he asked the contractor to bury the trees close to the tree row and that the concerns of the landowner can be addressed in the temporary easement document. The District will monitor the situation.

Motion by Ose, seconded by Sorenson, to adjourn the meeting.



LeRoy Ose, Secretary

Red Lake Watershed District

President
Dale M. Nelson

Vice President
Gene Tiedemann

Treasurer
Terry Sorenson

1000 Pennington Avenue South
Thief River Falls, MN 56701
218-681-5800

218-681-5839 FAX
e-mail: RLWD@redlakewatershed.org
www.redlakewatershed.org

Secretary
LeRoy Ose

Managers
Brian Dwight
Allan Page
Tom Anderson

October 12, 2022

Gary and Theresa Weiss
15236 170th Ave SW
Red Lake Falls, MN 56750

Re: Non-permitted work (ditch cleaning) – SW 1/4 Sec. 27 Wylie Twp., Red Lake County

Gary and Theresa:

As directed by the Red Lake Watershed District (RLWD) Board of Managers, this letter is a first, and only warning, pertaining to unauthorized/unpermitted work. It is in reference to the ditch cleaning at the above-mentioned location. It was brought to our attention that there has been ditch cleaning along 170th Ave SW, and 150th St. SW in the SW 1/4, Section 27, Wylie Township. We have reviewed our files and have no record of a permit application for the work. The work completed at this location was unpermitted and un-satisfactory with vertical cuts in the ditch. You can fix the vertical cuts and put the ditch slope back to what it was before the work was completed. If it is not completed by October 26th 2022, RLWD will hire a contractor to complete the work and you will be billed for all costs incurred.

The RLWD issues permits, on a regular basis for this type of work. However, as part of the conditions we state that, all excavation shall be consistent with the existing road and ditch slopes, or, the existing slopes may be improved to enhance safety, and there shall be no vertical excavation faces.

In the future, if you plan to do any work that requires a permit application, submit to our office in a timely manner so appropriate inspection and review can be completed prior to the actual work. Permit applications are available on our web site at www.redlakewatershed.org

I have enclosed a copy of the RLWD Permit and Drainage Rules.

If you have any questions, please call our office, and speak to me or Administrator Myron Jesme.

Sincerely,

Tony Olson
Engineering Specialist

Enclosures:

Pc: Al Page RLWD Board Manager Red Lake County
Wylie Township
Red Lake County



150th St SW
Looking East

150th St SW
Looking West





These data are provided on an "AS-IS" basis, without warranty of any type, expressed or implied, including but not limited to any warranty as to their performance, merchantability, or fitness for any particular purpose.

Wylie Twp	
1:9,000	Date: 10/4/2022
This map is not a substitute for accurate field survey or for locating actual property lines and any adjacent features.	

Red Lake County



Minnesota

Red Lake Watershed District

President
Dale M. Nelson

Vice President
Gene Tiedemann

Treasurer
Terry Sorenson

1000 Pennington Avenue South
Thief River Falls, MN 56701
218-681-5800

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Secretary
LeRoy Ose

Managers
Brian Dwight
Allan Page
Tom Anderson

October 12, 2022

John and Ashley Wavra
2133 9th Street SE
East Grand Forks, MN 56721

Re: Non-permitted work (ditch cleaning) – SW 1/4 Sec. 21 Louisville Twp., Red Lake County

John and Ashley:

As directed by the Red Lake Watershed District (RLWD) Board of Managers, this letter is a first, and only warning, pertaining to unauthorized/unpermitted work. It is in reference to the ditch cleaning at the above-mentioned location. It was brought to our attention that there has been ditch cleaning along County Road 3, north of County Road 18 in the SW 1/4, Section 21, Louisville Township. We have reviewed our files and have no record of a permit application for the work. The work completed at this location was unpermitted and un-satisfactory with vertical cuts in the ditch. You can fix the vertical cuts and put the ditch slope back to what it was before the work was completed. If it is not completed by October 26th 2022, RLWD will hire a contractor to complete the work and you will be billed for all costs incurred.

The RLWD issues permits, on a regular basis for this type of work. However, as part of the conditions we state that, all excavation shall be consistent with the existing road and ditch slopes, or, the existing slopes may be improved to enhance safety, and there shall be no vertical excavation faces.

In the future, if you plan to do any work that requires a permit application, submit to our office in a timely manner so appropriate inspection and review can be completed prior to the actual work. Permit applications are available on our web site at www.redlakewatershed.org

I have enclosed a copy of the RLWD Permit and Drainage Rules.

If you have any questions, please call our office, and speak to me or Administrator Myron Jesme.

Sincerely,

Tony Olson
Engineering Specialist

Enclosures:
Pc: Al Page RLWD Board Manager Red Lake County
Red Lake County Highway Department
Louisville Township



Looking North

County Road 3



Looking South

County Road 18

County Road 3

Red Lake Watershed District

President
Dale M. Nelson

Vice President
Gene Tiedemann

Treasurer
Terry Sorenson

1000 Pennington Avenue South
Thief River Falls, MN 56701
218-681-5800

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e-mail: RLWD@redlakewatershed.org
www.redlakewatershed.org

Secretary
LeRoy Ose

Managers
Brian Dwight
Allan Page
Tom Anderson

October 12, 2022

Justin Halvorson
18696 430th Ave SW
East Grand Forks, MN 56721

Re: Non-permitted work (ditch cleaning/field access) – W 1/2 Sec. 5 Louisville Twp., Red Lake County

Mr. Halvorson:

As directed by the Red Lake Watershed District (RLWD) Board of Managers, this letter is a first, and only warning, pertaining to unauthorized/unpermitted work. It is in reference to the ditch cleaning/field access at the above-mentioned location. It was brought to our attention that there has been ditch cleaning along 190th Ave SW, and 165th St. SW in the W 1/2, Section 5, Louisville Township. We have reviewed our files and have no record of a permit application for the work. The work completed at this location was unpermitted and un-satisfactory with vertical cuts in the ditch and adding a field crossing with an unknown culvert size. You can fix the vertical cuts and put the ditch slope back to what it was before the work was completed. After we receive your "After the Fact Permit" application, RLWD will verify the culvert size to make sure it is compliant. If it is not completed by October 26th 2022, RLWD will hire a contractor to complete the work and you will be billed for all costs incurred.

The RLWD issues permits, on a regular basis for this type of work. However, as part of the conditions we state that, all excavation shall be consistent with the existing road and ditch slopes, or, the existing slopes may be improved to enhance safety, and there shall be no vertical excavation faces.

In the future, if you plan to do any work that requires a permit application, submit to our office in a timely manner so appropriate inspection and review can be completed prior to the actual work. Permit applications are available on our web site at www.redlakewatershed.org

I have enclosed a copy of the RLWD Permit and Drainage Rules.

If you have any questions, please call our office, and speak to me or Administrator Myron Jesme.

Sincerely,

Tony Olson
Engineering Specialist

Enclosures:

Pc: Al Page RLWD Board Manager Red Lake County
Louisville Township
Red Lake County







Permit # **22-183**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Greg Stolker	G & S Farms	2328 Pinehurst Ct NW East Grand Forks, MN 56721		tel:218-779-1593 mobile: fax:

General Information

(1) The proposed project is a:

Surface Drainage (New Ditch or Improvement)

(2) Legal Description

(3) County: **Polk** Township: **Grand Forks** Range: **43** Section: **11 1/4**:(4) Describe in detail the work to be performed. **It is my understanding that the flow of water should be from Hwy 220 going West. Is this correct?**(5) Why is this work necessary? Explain water related issue/problem being solved. **Over the years blown dirt and silt has changed the structure of the township road ditch. It needs cleaning.****Status**

Status	Notes	Date
Approved	P.A. #22-183 – G & S Farms/Greg Stocker Polk County – Grand Forks Township – Section 11 Red Lake Watershed District (RLWD) approval upon approval from Grand Forks Twp to clean ditch along 110th St. Ditch is in Twp Rd. right of way. RLWD staff completed a survey of the ditch and is attached. If any work is within a public road and/or public ditch Right-of-Way, applicant shall contact the appropriate road/ditch authority for their approval and must meet their specs/conditions. Permit Holder shall contact the road authorities when cutting through roads. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Oct. 7, 2022
Received	None	Aug. 8, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Applicant Information

Name	Organization	Address	Email	Phone Number(s)
	Pennington County Highway Department	250 125th Avenue NE Thief River Falls, MN 56701		tel: 218-683-7017 mobile: fax:

General Information

(1) The proposed project is a:

Culvert Installation / Removal / Modification

(2) Legal Description

(3) County: **Pennington** Township: **Sanders** Range: **44** Section: **36** 1/4: **SE1/4 SW1/4**

(4) Describe in detail the work to be performed. **Install flap gate (36")**

(5) Why is this work necessary? Explain water related issue/problem being solved. **During flood events water overflows County Ditch 96**

Status

Status	Notes	Date
Approved	P.A. #22-212 – Pennington County Hwy Dept. Pennington County – Sanders Township – Section 36 Red Lake Watershed District (RLWD) approval to install a 36" flap gate to stop water from continuing west in road ditch. RLWD staff has completed a survey and found that the water should travel east from the installed gate location. See survey profile and map. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Sept. 27, 2022
Received	None	Aug. 31, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-216**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Minnesota DNR		None		tel: 218-689-7376 mobile: fax:

General Information

(1) The proposed project is a:

Culvert Installation / Removal / Modification

(2) Legal Description

(3) County: **Marshall** Township: **Agder** Range: **42** Section: **16 1/4**:(4) Describe in detail the work to be performed. **Install a new 60" culvert for access into wildlife**

(5) Why is this work necessary? Explain water related issue/problem being solved.

Status

Status	Notes	Date
Approved	P.A. #22-216 – Minnesota DNR Marshall County – Agder Township – Section 15/16 Red Lake Watershed District (RLWD) approval as per approval from Agder Twp, and Marshall County to add a 60" culvert for a new crossing to access public hunting land install new pipe (as close as possible) to the same flowline/invert elev. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Sept. 29, 2022
Received	None	Sept. 19, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-217**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Mike Rosendahl		20637 330th Ave NW Warren, MN 56762		tel: 218-686-8666 mobile: fax:

General Information

(1) The proposed project is a:

Culvert Installation / Removal / Modification

(2) Legal Description

(3) County: **Polk** Township: **Tabor** Range: **48** Section: **29** 1/4:(4) Describe in detail the work to be performed. **Install 80' of 18" culvert on NE corner of field. Township intersection is too small for our equipment. This new crossing will allow us access to the field from our farm.**(5) Why is this work necessary? Explain water related issue/problem being solved. **Allow access to the field from farm****Status**

Status	Notes	Date
Approved	P.A. #22-217 – Kevin Ritterman/Mike Rosendahl Polk County – Tabor Township – Section 29 Red Lake Watershed District (RLWD) approval to install an 18" culvert for a new field crossing to access field. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Sept. 28, 2022
Received	None	Sept. 19, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-218**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Dale Kolseth		20193 120th SE Plummer, MN 56748		tel: 218-681-1720 mobile: fax:

General Information

(1) The proposed project is a:

Culvert Installation / Removal / Modification

(2) Legal Description

(3) County: **Pennington** Township: **Wyandotte** Range: **42** Section: **10 1/4**:(4) Describe in detail the work to be performed. **Remove silt in the N/S sides of 120th Street SE**(5) Why is this work necessary? Explain water related issue/problem being solved. **Poor Drainage****Status**

Status	Notes	Date
Approved	P.A. #22-218 – Dale Kolseth Pennington County – Wyandotte Township – Section 10/15 Red Lake Watershed District (RLWD) approval to clean the township road ditch, as per approval of Wyandotte Township; proposed work is within Township Road Right-of-Way. All excavation shall be consistent with the existing road and ditch slopes and there shall be no vertical excavation faces. Current flow patterns shall remain “as-is” and there shall be no additional drainage area or flows from the adjacent agriculture land routed to the ditch that was cleaned. For work on lands not owned by applicant, he/she must obtain, in writing, approval from the affected landowners signing off on the performed work. Applicant shall work with neighboring landowners to ensure that all unpermitted work is done to their satisfaction. Applicant shall ensure that all disturbed areas are seeded. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Sept. 30, 2022
Received	None	Sept. 20, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-219**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Chad Lundeen		13497 340th Ave SE Trail, MN 56684		tel: 218-686-9496 mobile: fax:

General Information

(1) The proposed project is a:

Tiling

(2) Legal Description

(3) County: **Red Lake** Township: **Equality** Range: **40** Section: **15 1/4**:(4) Describe in detail the work to be performed. **Pattern Tile Lift Station/Pump**(5) Why is this work necessary? Explain water related issue/problem being solved. **Improve drainage****Status**

Status	Notes	Date
Approved	P.A. #22-219 – Chad Lundeen Red Lake County – Equality Township – Section 15 The Red Lake Watershed District (RLWD) approves the Pattern tile project with a 'pump' outlet. If any work is within a public road and/or public ditch Right-of-Way, applicant shall contact the appropriate road/ditch authority for their approval and must meet their specs/conditions. Directly downstream of the tile and/or pump station(s) outlets, applicant shall ensure that adequate grade and drainage is provided. If any of the work will be done near the adjacent wetlands or public watercourse, applicant shall contact the appropriate jurisdictional authority prior to the installation of the tile lines and meet their spec's/conditions. Applicant shall ensure that the tile outlets are visibly marked. Applicant shall install appropriate erosion control measures for energy dissipation at the tile outlets. ■ Note: Please be aware of and review the 'bullet points' on the bottom half of the application. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. RLWD recommends contacting Red Lake SWCD regarding potential wetland issues. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Oct. 4, 2022
Received	None	Sept. 20, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-222**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Mike Beedy		15925 120th Ave NW Thief River Falls, MN 56701		tel: 218-689-4153 mobile: fax:

General Information

(1) The proposed project is a:

Culvert Installation / Removal / Modification

(2) Legal Description

(3) County: **Pennington** Township: **Sanders** Range: **44** Section: **4 1/4**:(4) Describe in detail the work to be performed. **Install new crossing. RLWD to size culvert**(5) Why is this work necessary? Explain water related issue/problem being solved. **Addition to property****Status**

Status	Notes	Date
Approved	P.A. #22-222 – Mike Beedy Pennington County – Sanders Township – Section 4 Red Lake Watershed District (RLWD) approval to install an 15" culvert for a new crossing to access property. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Sept. 30, 2022
Received	None	Sept. 21, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-223**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Jeffrey Olson		116 Belleville Court Thief River Falls, MN 56701		tel: 218-689-3788 mobile: fax:

General Information

(1) The proposed project is a:

Culvert Installation / Removal / Modification

(2) Legal Description

(3) County: **Pennington** Township: **Norden** Range: **44** Section: **18 1/4**:(4) Describe in detail the work to be performed. **Install crossing/culvert**(5) Why is this work necessary? Explain water related issue/problem being solved. **Access to Property****Status**

Status	Notes	Date
Approved	P.A. #22-223 – Jeff Olson Pennington County – Norden Township – Section 18 Red Lake Watershed District (RLWD) approval to install an 18" culvert for a new field crossing to access property. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Sept. 30, 2022
Received	None	Sept. 21, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-224**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
North Township		18453 130th Ave. NE Thief River Falls, MN 56701		tel: 218-686-7257 mobile: fax:

General Information

(1) The proposed project is a:

Culvert Installation / Removal / Modification

(2) Legal Description

(3) County: **Pennington** Township: **North** Range: **43** Section: **29** 1/4:(4) Describe in detail the work to be performed. **Clean ditch along west side of 130th Ave. Township road ditch between 6th street and 180th street. North of culverts from TRF Westside project**(5) Why is this work necessary? Explain water related issue/problem being solved. **High spots in ditch - blocks drainage****Status**

Status	Notes	Date
Approved	P.A. #22-224 – North Township Pennington County – North Township – Section 29 Red Lake Watershed District (RLWD) approval upon approval from North Twp. to clean the west side of 130th Ave NE ditch. Ditch is in Twp Rd Right of Way. RLWD staff has completed a survey of the ditch and found that there are culverts that are installed backwards according to the design survey. It is recommended that the culverts in question be re-installed to follow the design flow of the ditch. If any work is within a public road and/or public ditch Right-of-Way, applicant shall contact the appropriate road/ditch authority for their approval and must meet their specs/conditions. Permit Holder shall contact the road authorities when cutting through roads. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Sept. 30, 2022
Received	None	Sept. 21, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-225**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Jason Kotrba		36304 180th St. NE Goodridge, MN 56725		tel: mobile: fax:

General Information

(1) The proposed project is a:

Culvert Installation / Removal / Modification

(2) Legal Description

(3) County: **Pennington** Township: **Reiner** Range: **39** Section: **29** 1/4:(4) Describe in detail the work to be performed. **Watershed survey & draft up profile sheet. Along 3/4 mile on north ditch along Hwy 1**(5) Why is this work necessary? Explain water related issue/problem being solved. **Improve Ag drainage****Status**

Status	Notes	Date
Approved	P.A. #22-225 – David Vraa Pennington County – Reiner Township – Section 29 Section 29 - Red Lake Watershed District (RLWD) approval to clean the North Road ditch along Hwy 1, as per approval of MN DOT; proposed work is within State Hwy 1 Road Right-of-Way. RLWD staff completed a survey of this ditch. (See Attachments) All excavation shall be consistent with the existing road and ditch slopes and there shall be no vertical excavation faces. Current flow patterns shall remain "as-is" and there shall be no additional drainage area or flows from the adjacent agriculture land routed to the ditch that was cleaned. If any work is within a public road and/or public ditch Right-of-Way, applicant shall contact the appropriate road/ditch authority for their approval and must meet their specs/conditions. Permit Holder shall contact the road authorities when cutting through roads. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Oct. 12, 2022
Received	None	Sept. 21, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-227**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
	Pennington County Highway Department	Thief River Falls, MN 56701		tel: mobile: 218-689-0300 fax:

General Information

(1) The proposed project is a:

Culvert Installation / Removal / Modification

(2) Legal Description

(3) County: **Pennington** Township: **Reiner** Range: **39** Section: **19 1/4**: **W1/2**(4) Describe in detail the work to be performed. **Install 24" flapgates**

(5) Why is this work necessary? Explain water related issue/problem being solved.

Status

Status	Notes	Date
Approved	P.A. #22-227 – Pennington County Pennington County – Reiner Township – Section 19 Red Lake Watershed District (RLWD) approval upon approval from Pennington County to install three flap gates on center line pipes that are crossing 350th Ave in section 19 of Reiner Twp. The purpose of the gates is to keep water in JD 13 and prevent it from back feeding out of the ditch. If any work is within a public road and/or public ditch Right-of-Way, applicant shall contact the appropriate road/ditch authority for their approval and must meet their specs/conditions. Permit Holder shall contact the road authorities when cutting through roads. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Oct. 12, 2022
Received	None	Sept. 22, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-228**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Jeanne brekken		35837 250th Avenue SW Crookston, MN 56716		tel: 218-280-0074 mobile: fax:

General Information

(1) The proposed project is a:

Culvert Installation / Removal / Modification

(2) Legal Description

(3) County: **Polk** Township: **Russia** Range: **46** Section: **18 1/4**: **SE1/4**(4) Describe in detail the work to be performed. **Install field approach on the west side of Highway 9. There is no field access for over 3/4 of a mile. Approach would be installed directly across from the driveway of the bin site at mile marker 217.**(5) Why is this work necessary? Explain water related issue/problem being solved. **Lack of field access.****Status**

Status	Notes	Date
Approved	P.A. #22-228 – Robin Brekken/Jeanne Brekken Polk County – Russia Township – Section 18 Red Lake Watershed District (RLWD) approval to install a 24" culvert for a new field crossing. If any work is within a public road and/or public ditch Right-of-Way, applicant shall contact the appropriate road/ditch authority for their approval and must meet their specs/conditions. Permit Holder shall contact the road authorities when cutting through roads. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Oct. 4, 2022
Received	None	Sept. 29, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-229**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Preston Solberg		28473 Highway 75 NW Warren, MN 56762		tel:218-201-1535 mobile: fax:

General Information

(1) The proposed project is a:

Surface Drainage (New Ditch or Improvement)

(2) Legal Description

(3) County: **Marshall** Township: **Grand Plain** Range: **41** Section: **14** 1/4: **W1/2**(4) Describe in detail the work to be performed. **Clean east side of 270th Ave road ditch. West side of section 14**(5) Why is this work necessary? Explain water related issue/problem being solved. **Ditch is plugged****Status**

Status	Notes	Date
Approved	P.A. #22-229 – Preston Solberg Marshall County – Grand Plain Township – Section 14 Section 14 - Red Lake Watershed District (RLWD) approval to clean the township road ditch, as per approval of Grand Plain Township; proposed work is within Township Road Right-of-Way. All excavation shall be consistent with the existing road and ditch slopes and there shall be no vertical excavation faces. Current flow patterns shall remain “as-is” and there shall be no additional drainage area or flows from the adjacent agriculture land routed to the ditch that was cleaned. If any work is within a public road and/or public ditch Right-of-Way, applicant shall contact the appropriate road/ditch authority for their approval and must meet their specs/conditions. Permit Holder shall contact the road authorities when cutting through roads. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Oct. 12, 2022
Received	None	Oct. 3, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-230**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Emardville Township	Emardville Township	14151 US Hwy 59 SE Plummer, MN 56748		tel: mobile: 218-686-3032 fax:

General Information

(1) The proposed project is a:

Surface Drainage (New Ditch or Improvement)

(2) Legal Description

(3) County: **Red Lake** Township: **Emardville** Range: **42** Section: **33** 1/4: **SE1/4**(4) Describe in detail the work to be performed. **Clean ditch.**(5) Why is this work necessary? Explain water related issue/problem being solved. **Sediment buildup in ditch bottom from spring flood of 2022.****Status**

Status	Notes	Date
Approved	P.A. #22-230 – Emardville Township Red Lake County – Emardville Township – Section 33 Section 33 - Red Lake Watershed District (RLWD) approval to clean the township road ditch, as per approval of Emardville Township; proposed work is within Township Road Right-of-Way. All excavation shall be consistent with the existing road and ditch slopes and there shall be no vertical excavation faces. Current flow patterns shall remain “as-is” and there shall be no additional drainage area or flows from the adjacent agriculture land routed to the ditch that was cleaned. Silt flowed into the ditch bottom during the April 2022 flood event. If any work is within a public road and/or public ditch Right-of-Way, applicant shall contact the appropriate road/ditch authority for their approval and must meet their specs/conditions. Permit Holder shall contact the road authorities when cutting through roads. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Oct. 10, 2022
Received	None	Oct. 4, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-231**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Emardville Township	Emardville Township	14151 US Hwy 59 SE Plummer, MN 56748		tel: mobile: 218-686-3032 fax:

General Information

(1) The proposed project is a:

Culvert Installation / Removal / Modification

(2) Legal Description

(3) County: **Red Lake** Township: **Emardville** Range: **42** Section: **35** 1/4: **SW1/4 SW1/4**(4) Describe in detail the work to be performed. **Replace culvert due to spring flood of 2022.**(5) Why is this work necessary? Explain water related issue/problem being solved. **culvert washed out.****Status**

Status	Notes	Date
Approved	P.A. #22-231 – Emardville Township Red Lake County – Emardville Township – Section 35 Red Lake Watershed District (RLWD) approval to replace a 36" culvert that was washed out due to the Spring Flood in 2022. Install new pipe (as close as possible) to the same flowline/invert elev. as existing pipe and repair roadway washout caused during April 2022 flood event. This is an "after the fact permit". If any work is within a public road and/or public ditch Right-of-Way, applicant shall contact the appropriate road/ditch authority for their approval and must meet their specs/conditions. Permit Holder shall contact the road authorities when cutting through roads. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Oct. 10, 2022
Received	None	Oct. 4, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Applicant Information

Name	Organization	Address	Email	Phone Number(s)
	Emardville Township	14151 US Highway 59 SE Plummer, MN 56748		tel: mobile: 218-686-3032 fax:

General Information

(1) The proposed project is a:

Culvert Installation / Removal / Modification

(2) Legal Description

(3) County: **Red Lake** Township: **Emardville** Range: **42** Section: **13** 1/4: **SW1/4 SW1/4**

(4) Describe in detail the work to be performed. **Replaced failed culvert.**

(5) Why is this work necessary? Explain water related issue/problem being solved. **Culvert failed due to Spring flood of 2022.**

Status

Status	Notes	Date
Approved	P.A. #22-232 – Emardville Township Red Lake County – Emardville Township – Section 13/14 Red Lake Watershed District (RLWD) approval to replace a 42" culvert that was washed out due to the Spring Flood in 2022. Install new pipe (as close as possible) to the same flowline/invert elev. as existing pipe and repair roadway washout caused during April 2022 flood event. This is an "after the fact permit". If any work is within a public road and/or public ditch Right-of-Way, applicant shall contact the appropriate road/ditch authority for their approval and must meet their specs/conditions. Permit Holder shall contact the road authorities when cutting through roads. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Oct. 10, 2022
Received	None	Nov. 4, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-233**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
	Emardville Township	14151 US Hwy 59 SE Plummer, MN 56748		tel: mobile: 218-686-3032 fax:

General Information

(1) The proposed project is a:

Culvert Installation / Removal / Modification

(2) Legal Description

(3) County: **Red Lake** Township: **Emardville** Range: **42** Section: **20** 1/4:(4) Describe in detail the work to be performed. **Replaced failed culverts**(5) Why is this work necessary? Explain water related issue/problem being solved. **Culvert failed due to spring flood of 2022.****Status**

Status	Notes	Date
Approved	P.A. #22-233 – Emardville Township Red Lake County – Emardville Township – Section 20 Red Lake Watershed District (RLWD) approval to replace a failed 48” culvert that was washed out due to the Spring Flood in 2022. Install new pipe (as close as possible) to the same flowline/invert elev. as existing pipe and repair roadway washout caused during April 2022 flood event. This is an “after the fact permit”. If any work is within a public road and/or public ditch Right-of-Way, applicant shall contact the appropriate road/ditch authority for their approval and must meet their specs/conditions. Permit Holder shall contact the road authorities when cutting through roads. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Oct. 10, 2022
Received	None	Oct. 4, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-235**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Darwin Boutain		36402 195th Street NE Goodridge, MN 56725		tel: mobile: 218-686-4309 fax:

General Information

(1) The proposed project is a:

Surface Drainage (New Ditch or Improvement)

(2) Legal Description

(3) County: **Pennington** Township: **Reiner** Range: **39** Section: **17 1/4: NW1/4**(4) Describe in detail the work to be performed. **Clean west road ditch. Clean ditch to grade to drain to the south**(5) Why is this work necessary? Explain water related issue/problem being solved. **Remove sediment.****Status**

Status	Notes	Date
Approved	P.A. #22-235 – Darwin Boutain Pennington County – Reiner Township – Section 17 Section 17 - Red Lake Watershed District (RLWD) approval to clean the township road ditch, as per approval of Reiner Township; proposed work is within Township Road Right-of-Way. All excavation shall be consistent with the existing road and ditch slopes and there shall be no vertical excavation faces. Current flow patterns shall remain "as-is" and there shall be no additional drainage area or flows from the adjacent agriculture land routed to the ditch that was cleaned. If any work is within a public road and/or public ditch Right-of-Way, applicant shall contact the appropriate road/ditch authority for their approval and must meet their specs/conditions. Permit Holder shall contact the road authorities when cutting through roads. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Oct. 12, 2022
Received	None	Oct. 4, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-236**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Ronnie Davidson		69 State Street Newfolden, MN 56738		tel: mobile: 218-689-3535 fax:

General Information

(1) The proposed project is a:

Culvert Installation / Removal / Modification

(2) Legal Description

(3) County: **Pennington** Township: **Rocksbury** Range: **43** Section: **12 1/4: NW1/4 SE1/4**(4) Describe in detail the work to be performed. **Install 18" culvert and crossing.**(5) Why is this work necessary? Explain water related issue/problem being solved. **No current access to property.****Status**

Status	Notes	Date
Approved	P.A. #22-236 – Robert Davidson. Pennington County – Rocksbury Township – Section 12 Red Lake Watershed District (RLWD) approval upon approval from DOT to add an 18" culvert for a new driveway for access to property. Install new pipe (as close as possible) to the same flowline/invert elev. If any work is within a public road and/or public ditch Right-of-Way, applicant shall contact the appropriate road/ditch authority for their approval and must meet their specs/conditions. Permit Holder shall contact the road authorities when cutting through roads. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Oct. 7, 2022
Received	None	Oct. 5, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Applicant Information

Name	Organization	Address	Email	Phone Number(s)
Pennington County Hwy Dept	Pennington County Highway Department	250 125th Avenue NE Thief River Falls, MN 56701		tel: mobile: 218-689-0330 fax:

General Information

(1) The proposed project is a:

Culvert Installation / Removal / Modification

(2) Legal Description

(3) County: **Pennington** Township: **Bray** Range: **45** Section: **4 1/4: SE1/4**

(4) Describe in detail the work to be performed. **Remove 2 field crossings and move to the west of County right of way on Judicial Ditch 25.**

(5) Why is this work necessary? Explain water related issue/problem being solved. **Culvert failure**

Status

Status	Notes	Date
Approved	P.A. #22-237 – Pennington County Pennington County – Bray Township – Section 4/9 Section 4/9 - Red Lake Watershed District (RLWD) approval to Move two field crossings to the west to the County Road Right of Way on Judicial Ditch 25. Proposed work is within County Road Right-of-Way. All excavation shall be consistent with the existing road and ditch slopes and there shall be no vertical excavation faces. Current flow patterns shall remain “as-is” and there shall be no additional drainage area or flows from the adjacent agriculture land routed to the ditch that was cleaned. Applicant shall ensure that all disturbed areas are seeded and that rock riprap with filter fabric is placed at the outlet end of the permitted culvert. If any work is within a public road and/or public ditch Right-of-Way, applicant shall contact the appropriate road/ditch authority for their approval and must meet their specs/conditions. Permit Holder shall contact the road authorities when cutting through roads. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Oct. 12, 2022
Received	None	Oct. 6, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

Permit # **22-238**Status Report: **Approved****Applicant Information**

Name	Organization	Address	Email	Phone Number(s)
Pennington County Hwy Dept	Pennington County Highway Department	250 125th Avenue NE Thief River Falls, MN 56701		tel: mobile: 218-689-0330 fax:

General Information

(1) The proposed project is a:

Surface Drainage (New Ditch or Improvement)

(2) Legal Description

(3) County: **Pennington** Township: **Bray** Range: **45** Section: **9 1/4**:(4) Describe in detail the work to be performed. **Clean ditch south side of County Road 61 for 520 feet.**(5) Why is this work necessary? Explain water related issue/problem being solved. **To get better drainage to try to stop water from going over the road.****Status**

Status	Notes	Date
Approved	P.A. #22-238 – Pennington County Pennington County – Bray Township – Section 4/9 Section 4/9 - Red Lake Watershed District (RLWD) approval to clean the south side of County Rd 61/150th St NW in Bray Twp Section 9 to help improve drainage to try stop the water from topping the road. Proposed work is within County Road Right-of-Way. All excavation shall be consistent with the existing road and ditch slopes and there shall be no vertical excavation faces. Current flow patterns shall remain “as-is” and there shall be no additional drainage area or flows from the adjacent agriculture land routed to the ditch that was cleaned. If any work is within a public road and/or public ditch Right-of-Way, applicant shall contact the appropriate road/ditch authority for their approval and must meet their specs/conditions. Permit Holder shall contact the road authorities when cutting through roads. This application does not exempt the permit applicant from local, state, or federal authority that might require their approval. Applicant is responsible for utility locates by calling Gopher 1. (1-800-252-1166) T.O.	Oct. 12, 2022
Received	None	Oct. 6, 2022

Conditions

NOTE: This permit does not relieve the applicant of any requirements for other permits which may be necessary from Township, County, State, or Federal Government Agencies.

The Red River Basin Flood Damage Reduction Work Group (FDRWG) recently updated its *Project Team Handbook*. The Handbook outlines the process used to plan and develop projects that reduce flood damages and improve natural resources in the RRB under the 1998 Red River Basin Mediation Agreement. Project Teams are usually formed by watershed districts in the basin. They can include staff and board members of watershed districts or SWCDs; state, local and federal agencies; local farmers and landowners; non-profit conservation organizations; and stakeholders with a direct interest in flooding and natural resources in the region. Many of you receiving this have served, or may serve in the future, on a project team.

I will be leading a training session on the updated *Project Team Handbook* on two dates in November.

The training is designed to answer questions that often come up about forming project teams, planning projects, evaluating alternatives, and seeking funding for implementation. Familiarity with these topics can help existing or planned project teams to be more efficient and productive in reaching consensus on projects for flood damage reduction and natural resource enhancement that can be practically implemented, permitted and funded. The training is purely voluntary and is not a “prerequisite” for participating on project teams.

The training dates are:

Wednesday, November 16, 2022 from 1:00 to 3:30 at the Red Lake Watershed District in **Thief River Falls**; and

Friday, November 18, 2022 from 10:00 to 12:30 at the DNR office in **Fergus Falls**.

The training on each date will cover identical material, so those interested should pick just one to attend.

If you would like to attend, please RSVP by replying to this email and indicating the date you plan to attend. If you will send more than one person to the training, please include the name and email address of all those attending on each date. There is no fee for participating in the training. **Please respond by Friday, October 21.**

If you are not able to make one of these dates but have a strong interest in the training, let me know. If there is a need, we may arrange additional sessions later.

PS: The Project Team Handbook is available in PDF format at this link:

https://mfiles.wildricewatershed.org/mfiles_rrwmb/#CC774983-AC09-4666-81D9-8B8AAA310342/views/V102/L30

Andrew Graham

Red River Coordinator | NW Region, Ecological and Water Resources Division

Minnesota Department of Natural Resources

1732 North Tower Road

Detroit Lakes, MN 56501-7959

Mobile Phone: 218-606-0128

Email: Andrew.Graham@state.mn.us
mndnr.gov



Program Schedule Overview

WEDNESDAY, NOVEMBER 30

- 9 A.M.-2 P.M. MN Association of Watershed Administrators (MAWA) Meeting - Lake Nokomis
5 P.M.-7 P.M. MAWD Board of Directors Meeting - Lake Nokomis

THURSDAY, DECEMBER 1

PRE-CONFERENCE SESSIONS

- 8 A.M.-9 A.M. Registration and Breakfast - Ballroom Lobby
9 A.M.-4 P.M. Basic Watershed Management Workshop - Lake Nokomis
9 A.M.-4 P.M. Minnesota Drainage Seminar - Lake Itasca and Lake Vermillion
9 A.M.-4 P.M. Staff Development | Mindfulness - Lake Minnewaska
12 P.M. Lunch - Lake Miltona

ANNUAL MEETING

- 6 P.M.-9 P.M. Trade Show and Welcome Reception - Tennis Center
5 P.M.-7 P.M. Night at the Movies - Lake Minnewaska

FRIDAY, DECEMBER 2

- 7 A.M.-9 A.M. Breakfast - Trade Show Floor, Tennis Center
8 A.M.-10:45 A.M. MAWD Business Meeting and Resolutions Hearing - Lake Itasca
8 A.M.-11:40 A.M. Morning Concurrent General Sessions, check schedule for room locations.
11:15 A.M. -12 P.M. Regional Caucuses
12 P.M.-2 P.M. Luncheon - Ballroom
Keynote Speaker: Paul Gardner, Executive Director - Clean Water Council
DNR Watershed District of the Year
BWSR Watershed District Employee of the Year Awards
Trade Show Door Prizes
2 P.M.-4:30 P.M. Afternoon Concurrent General Sessions, check schedule for room locations
5 P.M.-6:30 P.M. Social Hour and Live Music - Ballroom
6:30 P.M.-8 P.M. Dinner and Awards - Ballroom
Watershed District Program of the Year Award
Watershed District Project of the Year Award
MAWD Convention Award - Night at the Movies "Best Picture"
MAWD Convention Award - Watershed District - Share your Best Idea Award

SATURDAY, DECEMBER 3

- 7 A.M.-9 A.M. Last Chance Networking Breakfast - Ballroom
9 A.M.-11 A.M. MAWD Board of Directors Meeting - Lake Miltona

Red Lake Watershed District - Administrators Report

October 13, 2022

Red River Watershed Management Board – I will be attending the Red Board meeting via Teams which will be held in Ada October 18, 2022. LeRoy will be attending the meeting live.

Grand Marias Outlet Restoration Project – DNR Restoration Evaluation Specialists (with the Restoration Evaluation Program for Clean Water Legacy projects) reached out to RLWD staff concerning a site re-visit on the Grand Marais Creek project. They're basically checking to see how it looks since the initial site evaluation visit that occurred back in 2015. The meeting has been set for October 25th with RLWD and Houston Engineering staff participating as well.

Mud River Project Team – There was a Mud River Project Team meeting held at 9:00 am Friday September 23, 2022. Due to lack of landowner participation due to harvest, RLWD staff and HDR will set up a meeting date for an informal meeting with landowners to get them up to speed on what was covered that the meeting.

Thief River 1W1P – There will be a Planning Workgroup meeting held at 9:00 am Friday October 21st in preparation of the Policy Committee meeting which is scheduled for 9:00 Friday October 28th. I will be also requesting a one year extension for the 2020 Watershed Based Funding Grant most likely prior to the Policy Committee meeting.

Drainage Workgroup Meeting – If our meeting today is over in time, I will be participating in the Virtual Drainage Workgroup meeting which will be held at 11:00 am today.

MAWD Legislative Meeting – I attended the virtual MAWD Legislative meeting held at 1:00 pm September 29th. I will be attending another meeting which has yet to be determined.

Lammers Township Meeting – Tony Olson and Tammy will be attending the Lammers Township meeting which is scheduled for 5:30 pm October 19th. This meeting will once again be held to allow other landowners and township supervisors a better understanding of the jurisdictional duties of the township as well as the benefited area discussions.

Upper/Lower Red Lake 1W1P – There was a Policy Committee meeting for the newly approved plan development for 10:00 am October 4th. I will have Brian give an update on that meeting as he sees fit.

Minnesota Association of Watershed Administrators – I will be attending a MAWA meeting scheduled for Friday November 4th in Fergus Falls.