FINAL ACCEPTANCE REPORT
Faribault County Ditch No. 62 Woodchip Bioreactor Rehabilitation

16762
November 2020

REPORT FOR:
Merissa Lore
Drainage Manager
Faribault County Drainage Authority
415 South Grove Street, Suite 8
Blue Earth, MN, 56013
507.526.2388
Merissa.Lore@co.faribault.mn.us

FROM:
Mark Origer, PE
Civil Engineer
ISG
115 E Hickory Street, Suite 300
Mankato, MN 56001
507.387.6651
Mark.Origer@isginc.com

ISG

ARCHITECTURE + ENGINEERING + ENVIRONMENTAL + PLANNING

November 2nd, 2020

Merissa Lore
Faribault County Drainage Authority
415 South Grove Street, Suite 8
Blue Earth, MN 56013

Re: Faribault County Ditch No. 62 Woodchip Bioreactor Rehabilitation

Ms. Lore:

The rehabilitation of Faribault County Ditch No. 62 Woodchip Bioreactor has been fully completed. The contractor Brunz Construction from Madison Lake, MN has completed 100% of the project.

The cost estimate for construction from the Final Engineering Report was $124,380.75. The original contract price was $117,671.70 with no additional change orders; the final contract price is $126,964.15.

To date, the contractor has been paid $112,518.80 with an unpaid balance of $14,445.35 left in remaining bid items and retainage to be paid. The final approved payment being requested is $126,964.15.; $9,292.45 over the contract price. The As-built Drawings, total completed quantities, final Pay Request No. 4 and IC-134's are enclosed.

We recommend payment and final acceptance of this project at this time.

Please feel free to contact us with any questions.

Sincerely,

Mark Origer

Mark Origer, P.E.

Enclosure
Attachment

Cc: Tom Brunz – Brunz Construction

APPENDIX A:
As-Built Plans

FARIBAULT COUNTY DITCH 62

AS-BUILT
10/28/20

PRESCOTT TWP, MN

CONSTRUCTION PLANS FOR:

ISG PROJECT # 16762

WOODCHIP BIOREACTORS REHABILITATION

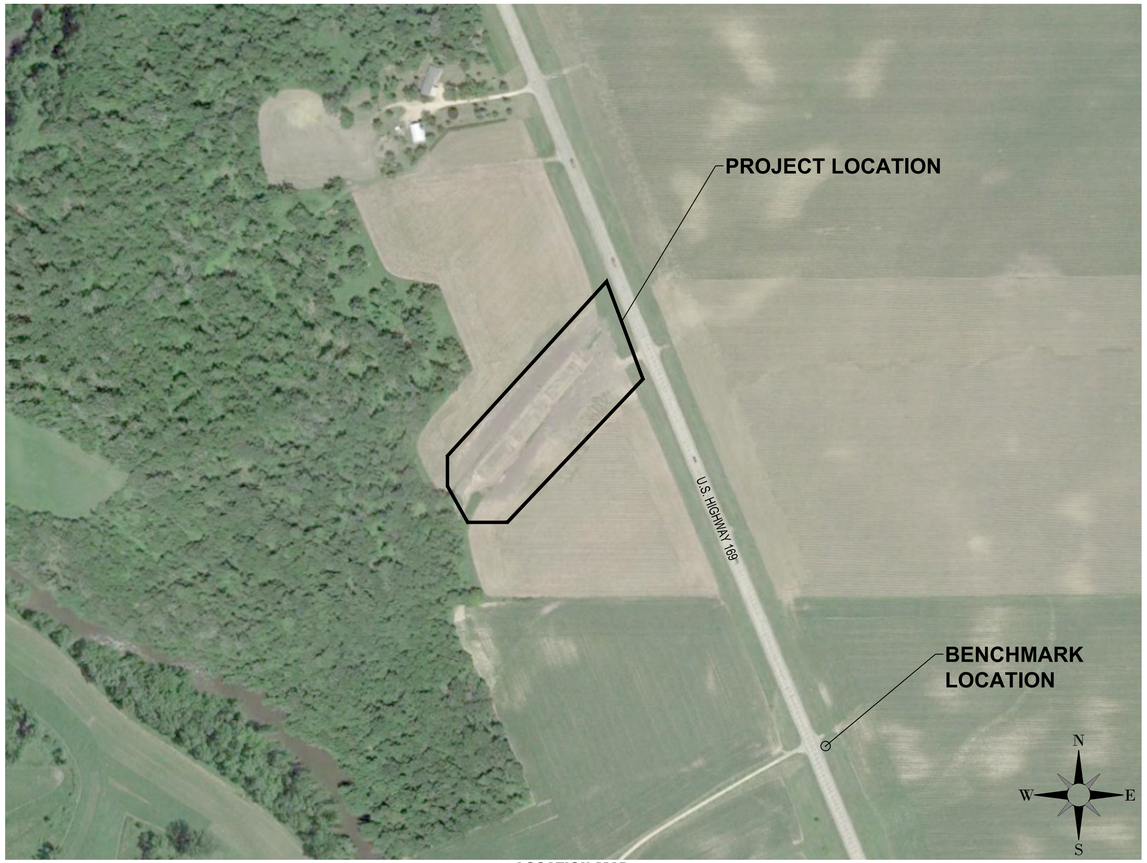
LEGEND

EXISTING

- CITY LIMITS
- SECTION LINE
- QUARTER SECTION LINE
- RIGHT OF WAY LINE
- PROPERTY / LOTLINE
- EASEMENT LINE
- ACCESS CONTROL
- WATER EDGE
- WETLAND BOUNDARY
- WETLAND / MARSH
- FENCE LINE
- CULVERT
- STORM SEWER
- SANITARY SEWER
- SANITARY SEWER FORCEMAIN
- WATER
- GAS
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTRIC
- UNDERGROUND TELEPHONE
- UNDERGROUND TV
- OVERHEAD UTILITY
- UNDERGROUND UTILITY
- UNDERGROUND FIBER OPTIC
- CONTOUR (MAJOR)
- CONTOUR (MINOR)
- DECIDUOUS TREE
- CONIFEROUS TREE
- TREE LINE
- MANHOLE/STRUCTURE
- CATCH BASIN
- HYDRANT
- VALVE
- CURB STOP
- POWER POLE
- UTILITY PEDESTAL / CABINET

PROPOSED

- LOT LINE
- RIGHT OF WAY
- EASEMENT
- CULVERT
- STORM SEWER
- STORM SEWER (PIPE WIDTH)
- SANITARY SEWER
- SANITARY SEWER (PIPE WIDTH)
- WATER
- GAS
- OVERHEAD ELECTRIC
- UNDERGROUND ELECTRIC
- UNDERGROUND TV
- CONTOUR
- MANHOLE
- CATCH BASIN
- HYDRANT
- VALVE



LOCATION MAP

SCALE IN FEET
0 250 500

SHEET LIST INDEX

1	TITLE
2	NOTES AND QUANTITIES
3	WOODCHIP BIOREACTOR DETAILS
4	WOODCHIP BIOREACTOR DETAILS
5	WOODCHIP BIOREACTOR DETAILS
6	STORMWATER POLLUTION PREVENTION PLAN (SWPP)
7	PROPOSED WOODCHIP BIOREACTOR PLAN
8	PROPOSED WOODCHIP BIOREACTOR PROFILE
9	PROPOSED WOODCHIP BIOREACTOR CROSS-SECTIONS

PROJECT GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS, WHICH INCLUDE, BUT ARE NOT LIMITED TO, THE OWNER - CONTRACTOR AGREEMENT, THE PROJECT MANUAL (WHICH INCLUDES GENERAL SUPPLEMENTARY CONDITIONS AND SPECIFICATIONS), DRAWINGS OF ALL DISCIPLINES AND ALL ADDENDA, MODIFICATIONS AND CLARIFICATIONS ISSUED BY THE ARCHITECT/ENGINEER.
2. CONTRACT DOCUMENTS SHALL BE ISSUED TO ALL SUBCONTRACTORS BY THE GENERAL CONTRACTOR IN COMPLETE SETS IN ORDER TO ACHIEVE THE FULL EXTENT AND COMPLETE COORDINATION OF ALL WORK.
3. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR CONDITIONS REQUIRING INFORMATION OR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
4. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR CONDITIONS REQUIRING INFORMATION OR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
5. DETAILS SHOWN ARE INTENDED TO BE INDICATIVE OF THE PROFILES AND TYPE OF DETAILING REQUIRED THROUGHOUT THE WORK. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO DETAILS SHOWN. WHERE SPECIFIC DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
6. ALL MANUFACTURED ARTICLES, MATERIALS AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED, ERECTED, CLEANED AND CONDITIONED ACCORDING TO MANUFACTURERS' INSTRUCTIONS. IN CASE OF DISCREPANCIES BETWEEN MANUFACTURERS' INSTRUCTIONS AND THE CONTRACT DOCUMENTS, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
7. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO AVOID GALVANIC CORROSION.
8. THE LOCATION AND TYPE OF ALL INPLACE UTILITIES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY AND ARE ACCURATE AND COMPLETE TO THE BEST OF THE KNOWLEDGE OF I & S GROUP, INC. (ISG). NO WARRANTY OR GUARANTEE IS IMPLIED. THE CONTRACTOR SHALL VERIFY THE SIZES, LOCATIONS AND ELEVATIONS OF ALL INPLACE UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES OR VARIATIONS FROM PLAN.
9. THE CONTRACTOR IS TO CONTACT "GOPHER STATE ONE CALL" FOR UTILITY LOCATIONS, MINIMUM 2 BUSINESS DAYS PRIOR TO ANY EXCAVATION / CONSTRUCTION (1-800-252-1166).

PROJECT INDEX:

OWNER:

FARIBAULT COUNTY
DRAINAGE AUTHORITY
415 SOUTH GROVE ST. SUITE 8
BLUE EARTH, MN 56013
PH: 507-526-2388

PROJECT ADDRESS / LOCATION:

SECTIONS 30
PRESCOTT TWP
FARIBAULT COUNTY, MINNESOTA

MANAGING OFFICE:

MANKATO OFFICE
115 EAST HICKORY STREET
SUITE 300
MANKATO, MN 56001
PHONE: 507.387.6651
FAX: 507.387.3583

PROJECT MANAGER: MARK ORIGER
EMAIL: MARK.ORIGER@IS-GRP.COM

SPECIFICATIONS REFERENCE

ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF FARIBAULT COUNTY REQUIREMENTS AND MnDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2018 EDITION, AND THE STANDARD SPECIFICATIONS FOR SANITARY SEWER, STORM DRAIN AND WATERMAIN AS PROPOSED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA 2013, UNLESS DIRECTED OTHERWISE.

PROJECT DATUM

HORIZONTAL COORDINATES HAVE BEEN REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83), 1996 ADJUSTMENT (NAD83(1996)) ON THE FARIBAULT COUNTY COORDINATE SYSTEM, IN U.S. SURVEY FEET.
ELEVATIONS HAVE BEEN REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
RTK GPS METHODS WERE USED TO ESTABLISH HORIZONTAL AND VERTICAL COORDINATES FOR THIS PROJECT.

B.M. ELEVATION=1081.88
IRON PIPE CONTROL POINT
50 FEET EAST OF HWY 169
40 FEET SOUTH PRIVATE DRIVEWAY

TOPOGRAPHIC SURVEY

THIS PROJECT'S TOPOGRAPHIC SURVEY CONSISTS OF DATA COLLECTED IN SEPTEMBER 2018 BY ISG.

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.

MARK ORIGER

Mark Origer

DATE 08/06/19 LIC. NO. 54863

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PROJECT

FARIBAULT COUNTY DITCH 62

PRESCOTT TWP. MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	16762
CAD FILE NAME	16762 TITLE
DRAWN BY	SMW
DESIGNED BY	MAO/SMW
REVIEWED BY	MAO
ORIGINAL ISSUE DATE	08/06/19
CLIENT PROJECT NO.	-

TITLE

TITLE

SHEET

1 OF 9

ITEM NO.	CONSTRUCTION ITEM	UNIT	QUANTITY
2021.501	MOBILIZATION	LS	1
2105.504	TYPE 3 GEOTEXTILE FABRIC	SF	11,979
2105.504	NON-WOVEN GEOTEXTILE FABRIC	SF	25,000
2105.507	COMMON EXCAVATION	CY	4,291
2105.507	TOPSOIL STRIP	AC	0.28
2105.607	INSTALL WOODCHIPS	CY	2,075
2105.607	REINSTALL WOODCHIPS (SALVAGED)	CY	1,625
2105.607	3/4" WASHED CRUSHED ROCK	CY	46.8
2501.602	INSTALL 18" DROP INTAKE	EA	1
2503.503	4" PVC PIPE	LF	46
2503.503	6" PVC PIPE	LF	80
2503.503	10" PVC PIPE	LF	51
2503.503	12" DUAL WALL HDPE	LF	83
2503.503	60" DUAL WALL HDPE	LF	18
2503.503	10" SLOTTED WELL	LF	130
2573.501	STABILIZED CONSTRUCTION EXIT	EA	1
2573.502	INLET PROTECTION	EA	1
2573.503	SILT FENCE, PREASSEMBLED	LF	0
2573.503	SEDIMENT CONTROL LOG	LF	0
2575.504	MnDOT CATEGORY 4 EROSION CONTROL BLANKET	SY	2,518
2575.508	SEEDING - MnDOT SEED MIXTURE 33-261	AC	1.72

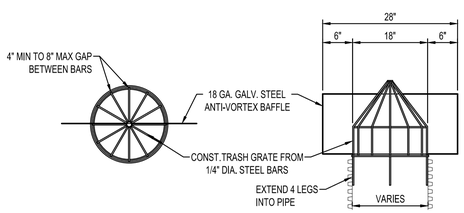
Earthwork Calculations			
	Clay	Topsoil	Total
Excavation	1,056	2,520	**3,576**
Bioreactor Redress (1')	0	-375	
West Berm	-686	-77	
East Berm	0	-323	
North Swale	-110	-650	
South Swale	0	-699	
Southwest Spoils	-260	-396	
Total Excess	0	0	0

Note: All grading assoicated within table to be included in bid "Common Excavation." Topsoil Stripping to be paid separte from Common Excavation.

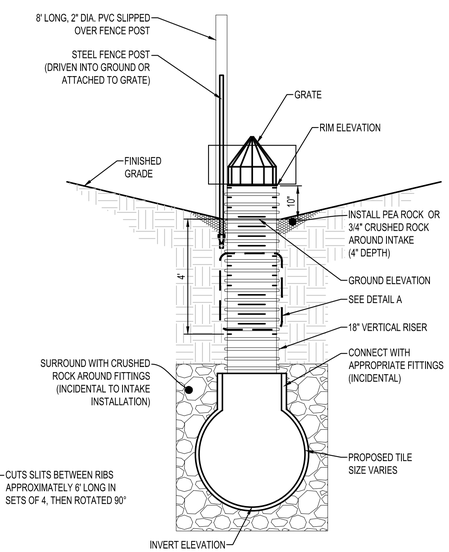
Topsoil depth was calculated assuming 1-foot of topsoil thickness. Actual topsoil thickness may vary on site and will be paid for as total CY of Common Excavation.

GENERAL NOTES:

1. DURING CONSTRUCTION, CONTRACTOR SHALL MAINTAIN A DRAINAGE OUTLET FOR THE ENTIRE CD 62 SYSTEM.
2. ALL ROAD SIGNAGE, COORDINATION, AND TRAFFIC CONTROL SIGNAGE SHALL BE INCIDENTAL TO ROAD RESTORATIONS.
3. ANY DEWATERING FOR THE PROJECT IS INCIDENTAL.
4. ALL EFFORTS SHALL BE MADE DURING CONSTRUCTION TO SEPARATE SOIL TYPES. TOPSOIL SHALL BE REPLACED BACK ON TOP OF COMPACTED BACKFILL AND TOP TWO (2) FEET SHALL BE LEFT UNCOMPACTED AS MUCH AS POSSIBLE. EXCAVATED SPOILS SHALL BE SPREAD EVENLY IN CONSTRUCTION AREA AS TO NOT IMPEDE DRAINAGE.
5. UNLESS OTHERWISE NOTED, ALL HDPE PIPE BENDS AND FITTINGS SHALL BE INCIDENTAL TO THE TILE PAY ITEMS, AND MUST BE BANDED, WRAPPED IN FABRIC, AND SURROUNDED WITH CRUSHED ROCK.
6. ALL BENDS LARGER THAN 11.25° MUST BE CONSTRUCTED USING PRE-FABRICATED BENDS.
7. VERIFY EXISTING TILE LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION. ANY ALIGNMENT CHANGES MADE DUE TO EXISTING TILE LOCATIONS SHALL BE APPROVED BY THE ENGINEER DURING CONSTRUCTION. ALL EFFORTS WILL BE MADE TO UTILIZE THE SAME FITTINGS AS DESIGNED AND CONTRACTOR SHALL BE COMPENSATED FOR ADDITIONAL BENDS AND FITTINGS, IF NEEDED.
8. DROP INTAKES WILL BE PAID FOR BY EACH AND NO ADDITIONAL COMPENSATION WILL BE MADE FOR IN-FIELD ELEVATIONS THAT VARY FROM THE PLANS. CUT INTAKES TO 8" ABOVE GRADE. MINOR SHAPING AROUND DROP INTAKES AND CULVERT INLETS SHALL BE INCIDENTAL TO THESE RESPECTIVE PAY ITEMS.
9. 10" SLOTTED WELL SHALL HAVE 0.025" STANDARD SLOT OPENING WITH A MINIMUM OPEN AREA OF 17.5 SQUARE INCHES PER FOOT.
10. ALL EXISTING MONITORING STATIONS, SQV, AND INLET/ OUTLET STRUCTURES SHALL BE PROTECTED
11. SALVAGE AND REINSTALLATION WOODCHIPS SHALL BE PAID PER CY.
12. INSTALLATION OF WOODCHIPS SHALL BE PAID AS CY INSTALLED. WOODCHIP HAULING NOT INCLUDED WITH BID AND WILL BE STOCKPILED ON SITE.



SURFACE INLET GRATE
(INCIDENTAL)



SECTION

NOTES:

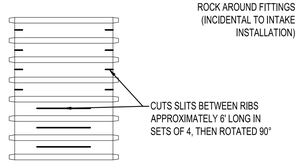
ALL APPROPRIATE FITTINGS ARE INCIDENTAL TO INTAKE CONSTRUCTION.

ALL INTAKES SHALL BE CONNECTED TO SUBSURFACE TILE BY MEANS OF APPROPRIATE ELBOWS, TEES, OR CONNECTED BY APPROPRIATE FITTINGS.

ALL VERTICAL RISERS SHALL BE WRAPPED WITH MnDOT TYPE 1 GEOTEXTILE FABRIC (INCIDENTAL TO EACH INTAKE)

VERTICAL RISERS MAY BE CUT DOWN AND BURIED AFTER FINAL TELEVISING; PER LANDOWNER REQUEST (SHALL BE PAID FOR AS "CAP DROP INTAKE")

INTAKE CAPS SHALL BE SUBSTITUTED FOR TRASH GRATES IN AREAS THAT WILL NOT TAKE SURFACE FLOW, AS APPROVED BY THE ENGINEER.



DETAIL A

DROP INTAKE
NTS AG320

ISG

AS-BUILT 10/28/20

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MARK ORIGER

Mark Origer

DATE 08/06/19 LIC. NO. 54863

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PROJECT

FARIBAULT COUNTY DITCH 62

PRESCOTT TWP. MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	16762
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DRAWN BY	SMW
DESIGNED BY	MAO/SMW
REVIEWED BY	MAO
ORIGINAL ISSUE DATE	08/06/19
CLIENT PROJECT NO.	-

TITLE

QUANTITIES, NOTES, AND DETAILS

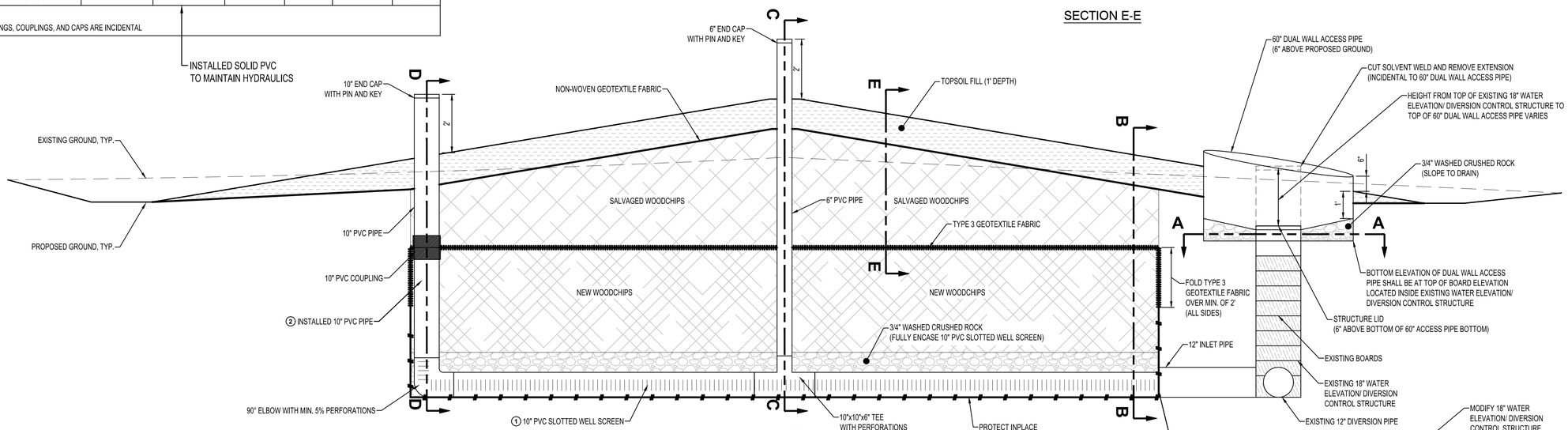
SHEET

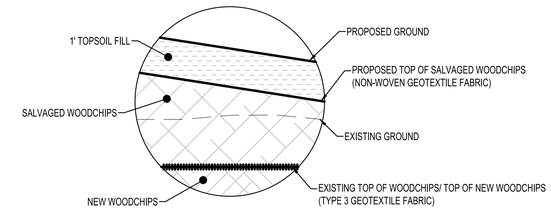
2 OF 9

WOODCHIP BIOREACTOR INLET QUANTITIES						
	10" SLOTTED WELL (HORIZONTAL) ①	10" SLOTTED WELL (VERTICAL) ②	10" PVC ③	6" PVC ④	60" DUAL WALL ACCESS PIPE	3/4" WASHED CRUSHED ROCK
WOODCHIP BIOREACTOR #1	2 - 11.0'	4.0'	4.0'	13.0'	3.0 LF	3.0 CY
WOODCHIP BIOREACTOR #2	2 - 11.0'	4.0'	4.5'	13.5'	3.5 LF	3.0 CY
WOODCHIP BIOREACTOR #3	2 - 11.0'	4.0'	4.5'	13.5'	2.5 LF	3.0 CY
NOTES: ALL FITTINGS, COUPLINGS, AND CAPS ARE INCIDENTAL						

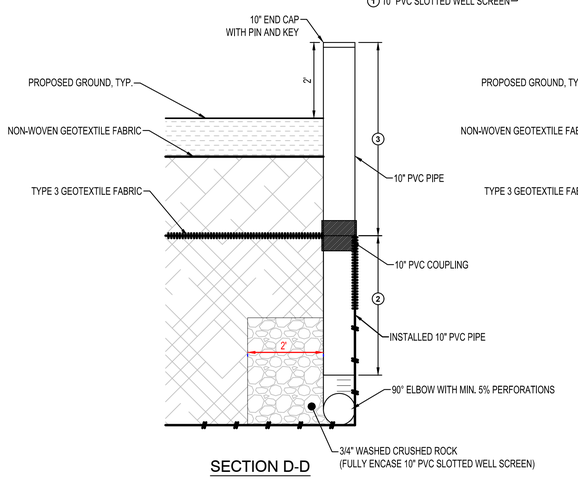
WOODCHIP BIOREACTOR OUTLET QUANTITIES						
	10" SLOTTED WELL (HORIZONTAL) ①	10" SLOTTED WELL (VERTICAL) ②	10" PVC ③	6" PVC ④	60" DUAL WALL ACCESS PIPE	3/4" WASHED CRUSHED ROCK
WOODCHIP BIOREACTOR #1	2 - 11.0'	4.0'	4.0'	13.0'	3.0 LF	3.0 CY
WOODCHIP BIOREACTOR #2	2 - 11.0'	4.0'	4.5'	13.5'	3.0 LF	3.0 CY
WOODCHIP BIOREACTOR #3	2 - 11.0'	4.0'	4.5'	13.5'	3.5 LF	3.0 CY
NOTES: ALL FITTINGS, COUPLINGS, AND CAPS ARE INCIDENTAL						

INSTALLED SOLID PVC TO MAINTAIN HYDRAULICS





SECTION E-E



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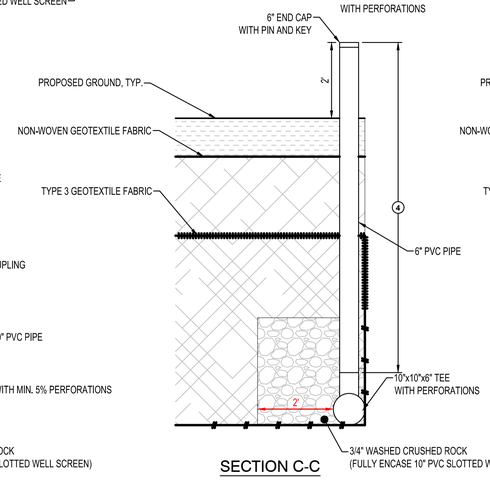

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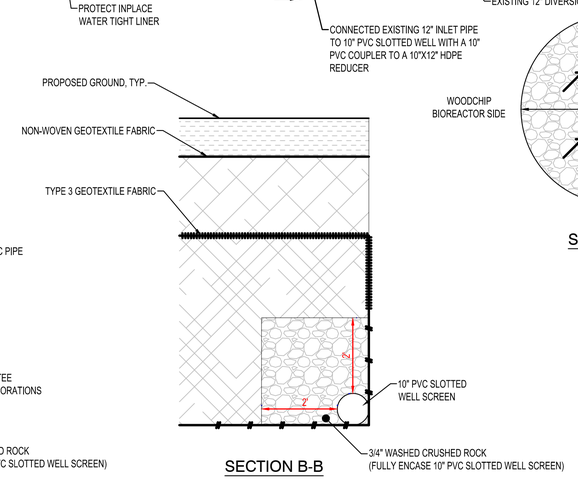
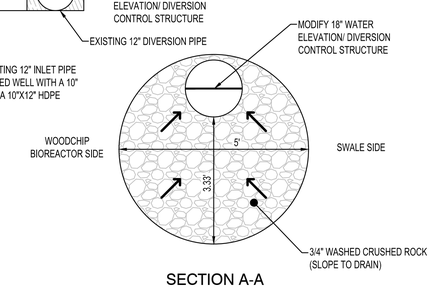


SECTION B-B



SECTION A-A

WOODCHIP BIOREACTOR INLET/OUTLET SECTION

NTS

* NOTE: MIRROR DETAIL FOR OUTLET SECTION

ISG

AS-BUILT 10/28/20

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TITLE

WOODCHIP BIOREACTOR DETAILS

SHEET

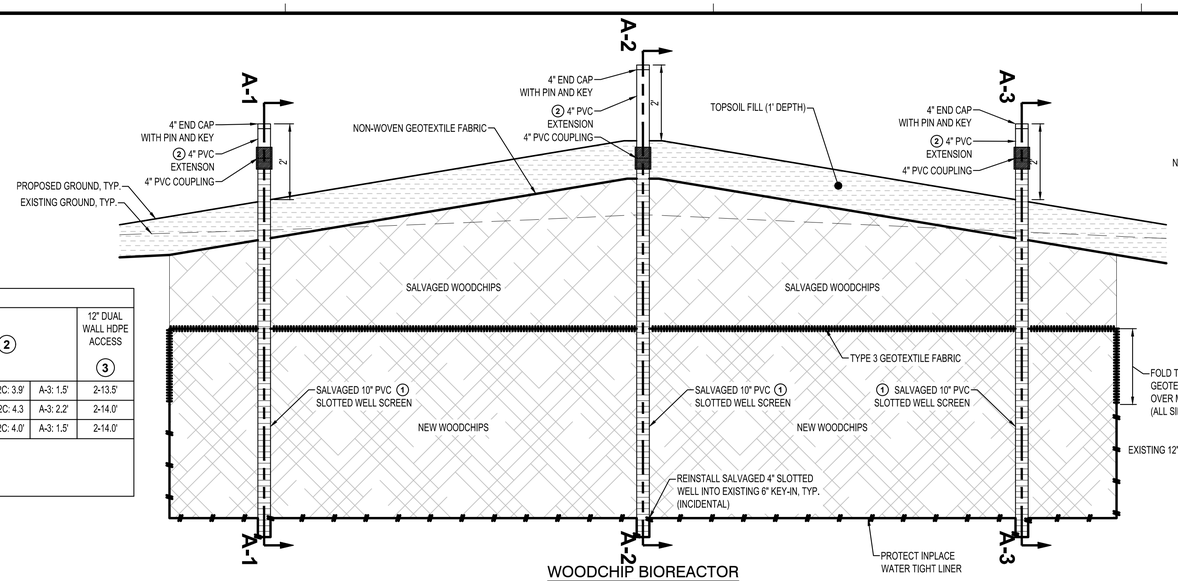
3 OF 9

WOODCHIP BIOREACTOR SECTION 1 AND SECTION 2 QUANTITIES												
	SALVAGED 4" SLOTTED WELL (1)					4" PVC EXTENSION (2)						12" DUAL WALL HDPE ACCESS (3)
WOODCHIP BIOREACTOR #1	A-1: 10'	A-2A: 10'	A-2B: 9.7'	A-2C: 9.6'	A-3: 9.5'	A-1: 1.0'	A-2A: 3.5'	A-2B: 3.8'	A-2C: 3.9'	A-3: 1.5'	2-13.5'
WOODCHIP BIOREACTOR #2	A-1: 9.6'	A-2A: 9.7'	A-2B: 9.6'	A-2C: 9.7'	A-3: 9.7'	A-1: 2.3'	A-2A: 4.3'	A-2B: 4.4'	A-2C: 4.3	A-3: 2.2'	2-14.0'
WOODCHIP BIOREACTOR #3	A-1: 10.0'	A-2A: 10.0'	A-2B: 10.0'	A-2C: 10.0'	A-3: 10.0'	A-1: 1.5'	A-2A: 4.0'	A-2B: 4.0'	A-2C: 4.0'	A-3: 1.5'	2-14.0'

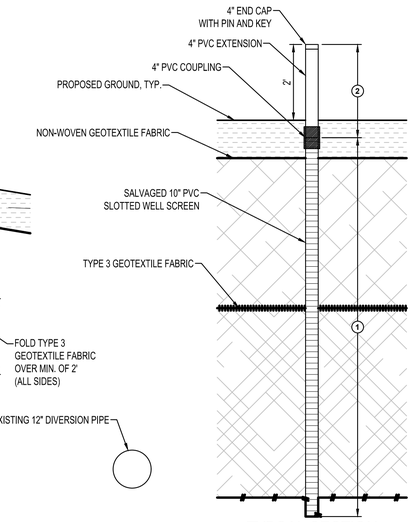
NOTES:

ALL REINSTALLATIONS ARE INCIDENTAL

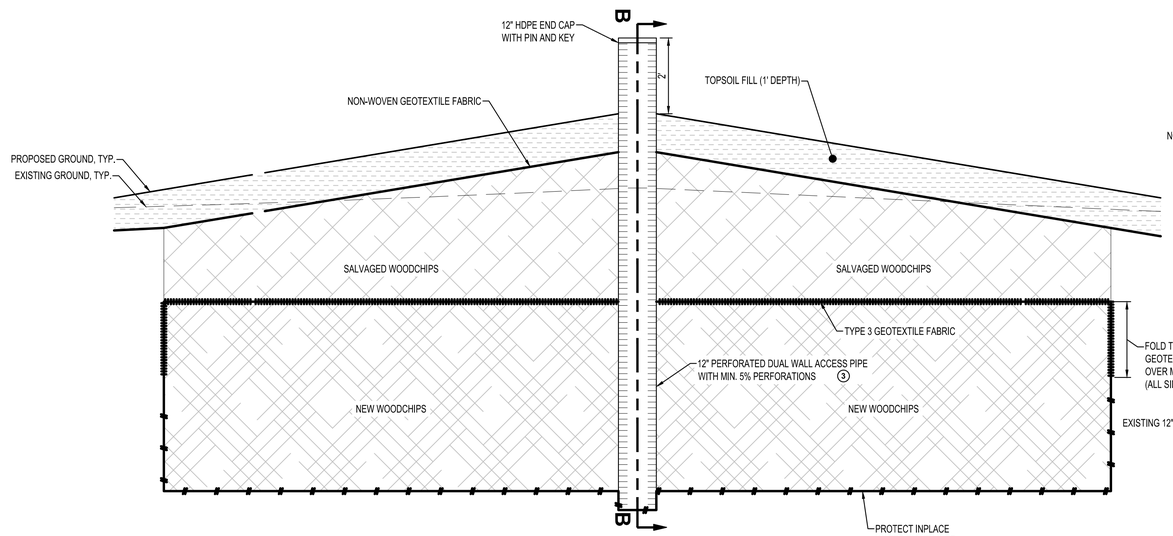
ALL FITTINGS, COUPLINGS, AND CAPS ARE INCIDENTAL



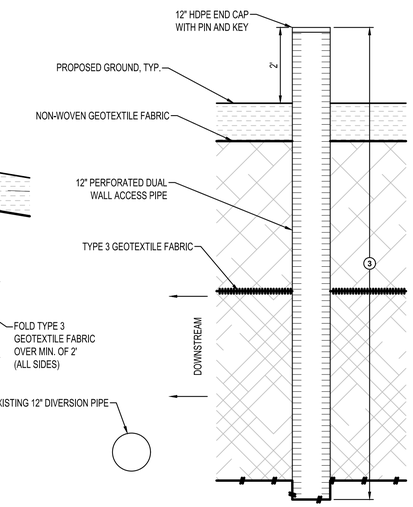
WOODCHIP BIOREACTOR
SECTION #1



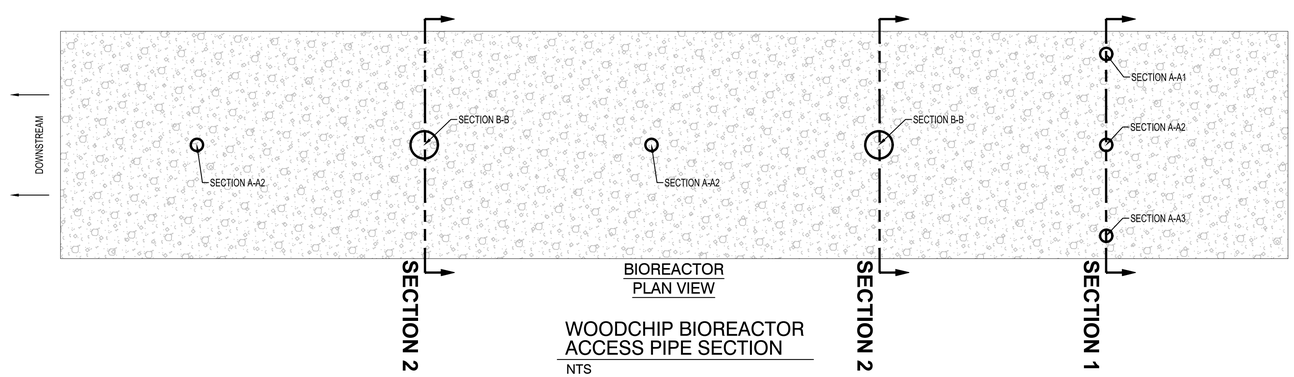
TYPCAL SECTION
A-A#



WOODCHIP BIOREACTOR
SECTION #2



SECTION B-B



BIOREACTOR
PLAN VIEW

WOODCHIP BIOREACTOR
ACCESS PIPE SECTION
NTS

ISG

AS-BUILT 10/28/20

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.

MARK ORIGER

Mark Origer

DATE 08/06/19 LIC. NO. 54863

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PROJECT

FARIBAULT COUNTY DITCH 62

PRESCOTT TWP MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	16762
CAD FILE NAME	16762 BIO REACTOR DETAILS
DRAWN BY	SMW
DESIGNED BY	MAO/ SMW
REVIEWED BY	MAO
ORIGINAL ISSUE DATE	08/06/19
CLIENT PROJECT NO.	-

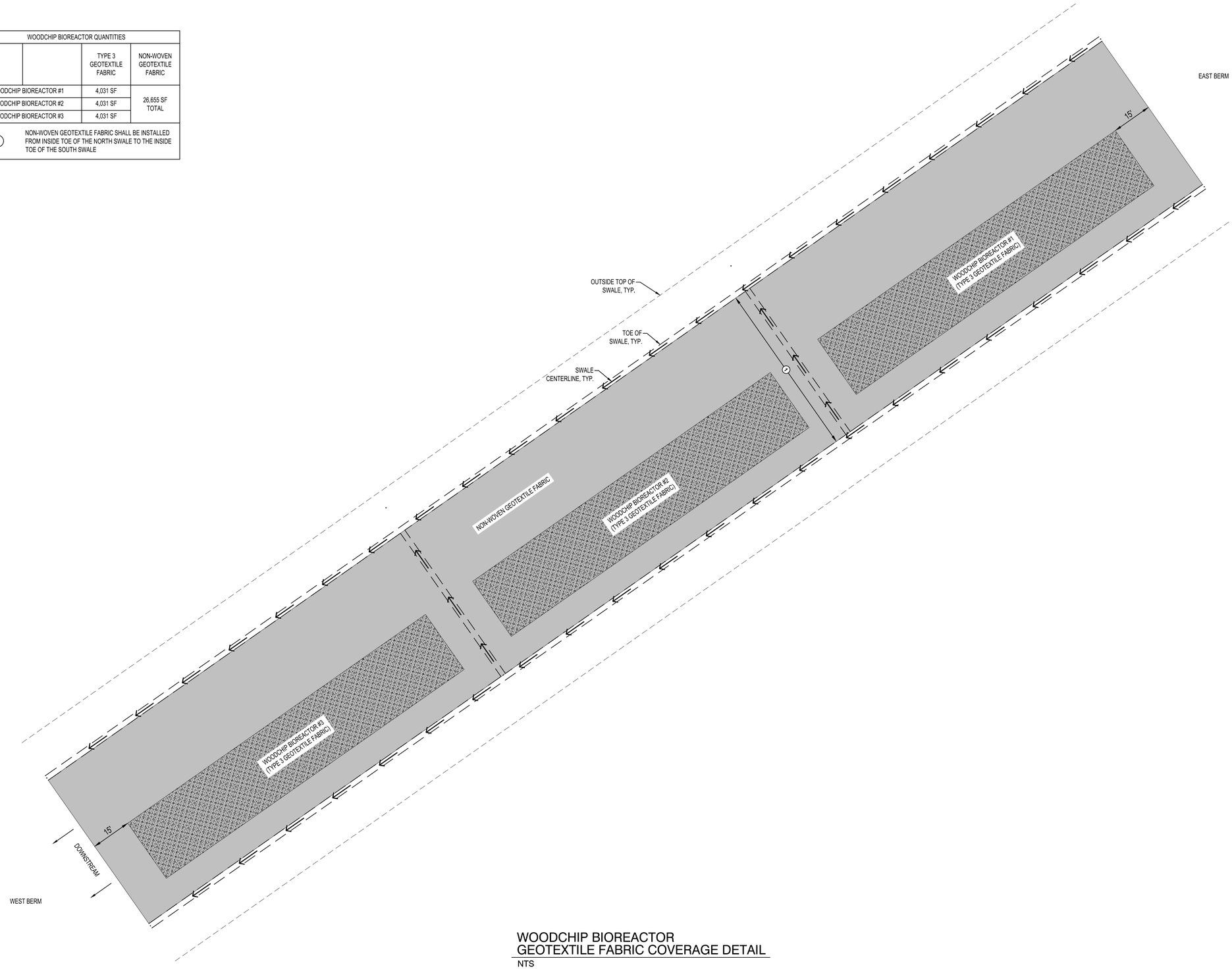
TITLE

WOODCHIP BIOREACTOR DETAILS

SHEET

4 OF 9

WOODCHIP BIOREACTOR QUANTITIES		
	TYPE 3 GEOTEXTILE FABRIC	NON-WOVEN GEOTEXTILE FABRIC
WOODCHIP BIOREACTOR #1	4,031 SF	26,655 SF TOTAL
WOODCHIP BIOREACTOR #2	4,031 SF	
WOODCHIP BIOREACTOR #3	4,031 SF	
1	NON-WOVEN GEOTEXTILE FABRIC SHALL BE INSTALLED FROM INSIDE TOE OF THE NORTH SWALE TO THE INSIDE TOE OF THE SOUTH SWALE	



WOODCHIP BIOREACTOR
GEOTEXTILE FABRIC COVERAGE DETAIL
NTS

ISG

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PROJECT

FARIBAULT COUNTY DITCH 62

PRESCOTT TWP MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	16762
CAD FILE NAME	16762 BIO REACTOR DETAILS
DRAWN BY	SMW
DESIGNED BY	MAO/ SMW
REVIEWED BY	MAO
ORIGINAL ISSUE DATE	08/06/19
CLIENT PROJECT NO.	-

TITLE

WOODCHIP BIOREACTOR DETAILS

SHEET

5 OF 9

EROSION CONTROL LEGEND

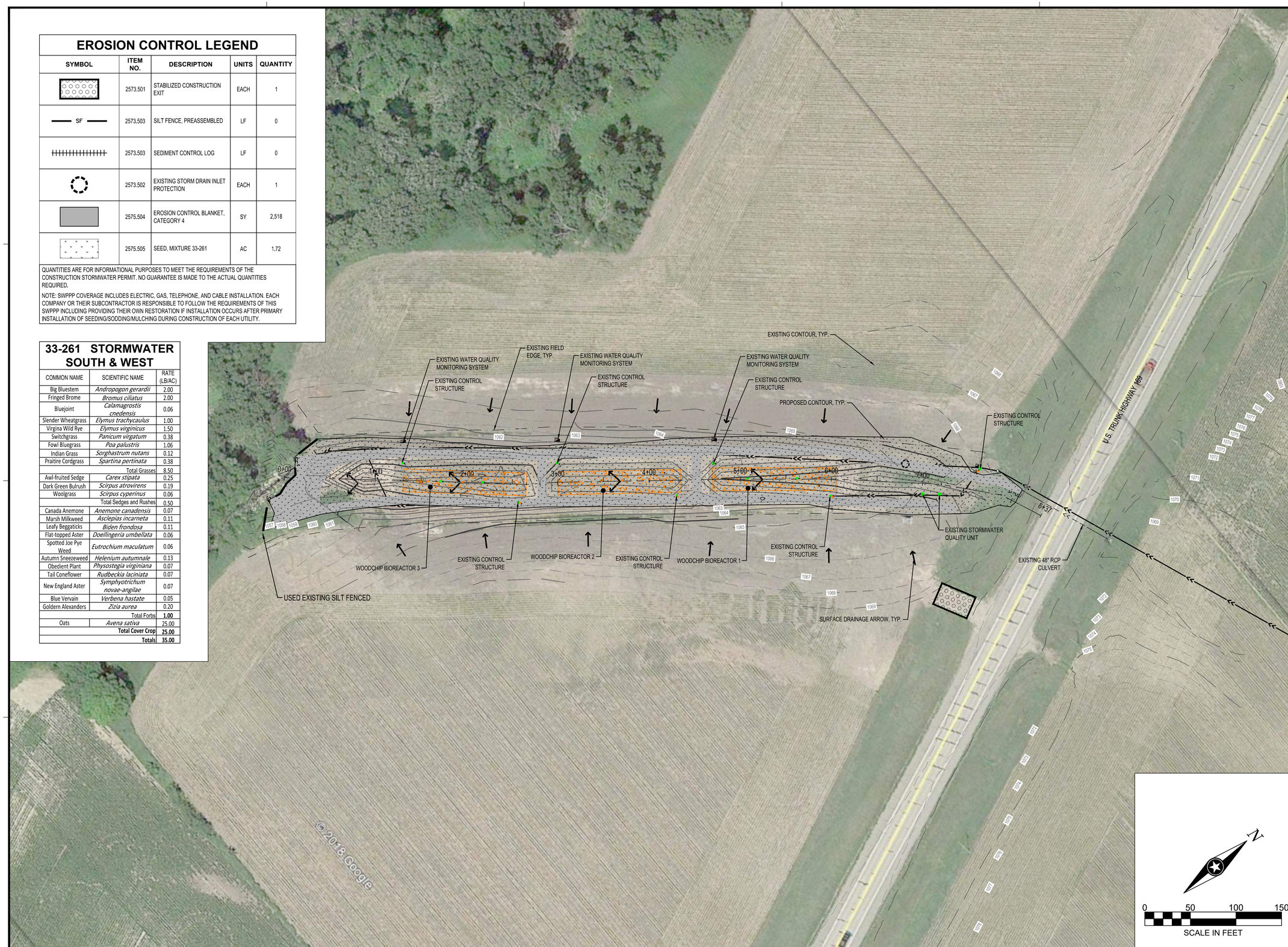
SYMBOL	ITEM NO.	DESCRIPTION	UNITS	QUANTITY
	2573.501	STABILIZED CONSTRUCTION EXIT	EACH	1
SF	2573.503	SILT FENCE, PREASSEMBLED	LF	0
	2573.503	SEDIMENT CONTROL LOG	LF	0
	2573.502	EXISTING STORM DRAIN INLET PROTECTION	EACH	1
	2575.504	EROSION CONTROL BLANKET, CATEGORY 4	SY	2,518
	2575.505	SEED, MIXTURE 33-261	AC	1.72

QUANTITIES ARE FOR INFORMATIONAL PURPOSES TO MEET THE REQUIREMENTS OF THE CONSTRUCTION STORMWATER PERMIT. NO GUARANTEE IS MADE TO THE ACTUAL QUANTITIES REQUIRED.

NOTE: SWPPP COVERAGE INCLUDES ELECTRIC, GAS, TELEPHONE, AND CABLE INSTALLATION. EACH COMPANY OR THEIR SUBCONTRACTOR IS RESPONSIBLE TO FOLLOW THE REQUIREMENTS OF THIS SWPPP INCLUDING PROVIDING THEIR OWN RESTORATION IF INSTALLATION OCCURS AFTER PRIMARY INSTALLATION OF SEEDING/SODDING/MULCHING DURING CONSTRUCTION OF EACH UTILITY.

33-261 STORMWATER SOUTH & WEST

COMMON NAME	SCIENTIFIC NAME	RATE (LB/AC)
Big Bluestem	*Andropogon gerardii*	2.00
Fringed Brome	*Bromus ciliatus*	2.00
Bluejoint	*Calamagrostis cnedensis*	0.06
Slender Wheatgrass	*Elymus trachycaulus*	1.00
Virgina Wild Rye	*Elymus virginicus*	1.50
Switchgrass	*Panicum virgatum*	0.38
Fowl Bluegrass	*Poa palustris*	1.06
Indian Grass	*Sorghastrum nutans*	0.12
Praitire Cordgrass	*Spartina pertinata*	0.38
	Total Grasses	8.50
Awl-fruited Sedge	*Carex stipata*	0.25
Dark Green Bulrush	*Scirpus atrowirens*	0.19
Woolgrass	*Scirpus cyperinus*	0.06
	Total Sedges and Rushes	0.50
Canada Anemone	*Anemone canadensis*	0.07
Marsh Milkweed	*Asclepias incarneta*	0.11
Leafy Beggaticks	*Biden frondosa*	0.11
Flat-topped Aster	*Doellingeria umbellata*	0.06
Spotted Joe Pye Weed	*Eutrochium maculatum*	0.06
Autumn Sneezeweed	*Helenium autumnale*	0.13
Obedient Plant	*Physostegia virginiana*	0.07
Tail Coneflower	*Rudbeckia laciniata*	0.07
New England Aster	*Symphyotrichum novae-angilae*	0.07
Blue Vervain	*Verbena hastate*	0.05
Goldern Alexanders	*Zizia aurea*	0.20
	Total Forbs	**1.00**
Oats	*Avena sativa*	25.00
	Total Cover Crop	**25.00**
	Totals	**35.00**



ISG

AS-BUILT 10/28/20

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MARK ORIGER

Mark Origer

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PROJECT

FARIBAULT COUNTY DITCH 62

PRESCOTT TWP. MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	16762
CAD FILE NAME	16762 BIO REACTOR SWPPP
DRAWN BY	SMW
DESIGNED BY	MAO/SMW
REVIEWED BY	MAO
ORIGINAL ISSUE DATE	08/06/19
CLIENT PROJECT NO.	-

TITLE

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

SHEET

6 OF 9

COMMON EXCAVATION: 3,576 CY
SALVAGED WOODCHIPS: 1625 CY
WOODCHIP IMPORT FOR BIORREACTORS: 1875 CY

N

0 50 100 150
SCALE IN FEET

ISG

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PROJECT

FARIBAULT COUNTY DITCH 62

PRESCOTT TWP. MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	16762
CAD FILE NAME	16762 BIO REACTOR PLAN - BALANCED
DRAWN BY	SMW
DESIGNED BY	MAO/SMW
REVIEWED BY	MAO
ORIGINAL ISSUE DATE	08/06/19
CLIENT PROJECT NO.	-

TITLE

PROPOSED WOODCHIP BIOREACTOR PLAN

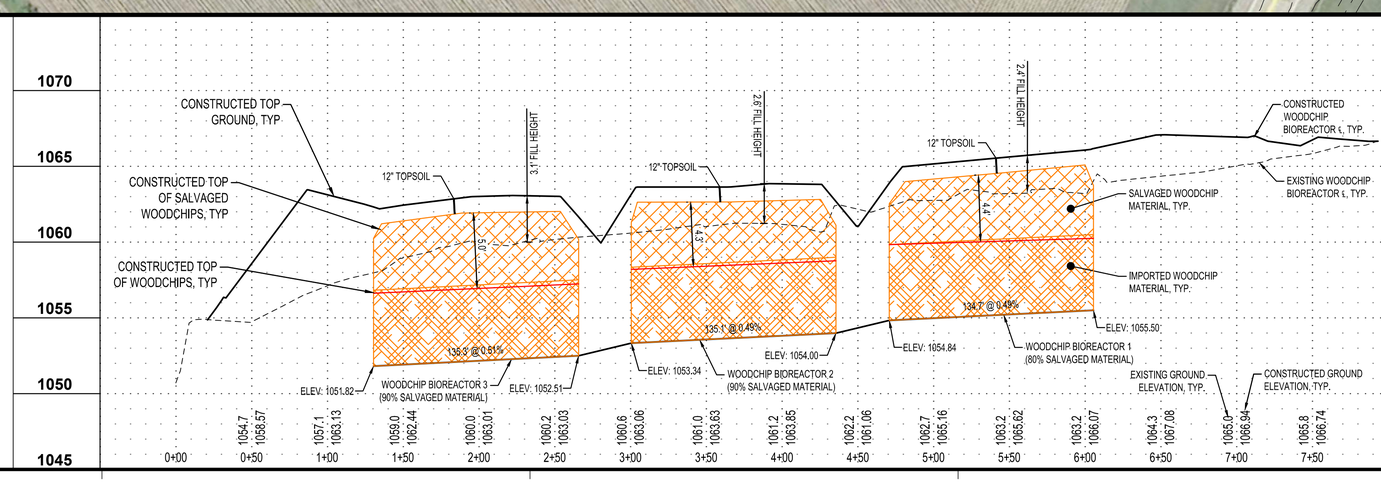
SHEET

7 OF 9

COMMON EXCAVATION: 3,576 CY
SALVAGED WOODCHIPS: 1625 CY
WOODCHIP IMPORT FOR BIORREACTORS: 1875 CY

N

0 50 100 150
SCALE IN FEET



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PROJECT

FARIBAULT COUNTY DITCH 62

PRESCOTT TWP. MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	16762
CAD FILE NAME	16762 BIO REACTOR PLAN - BALANCED
DRAWN BY	SMW
DESIGNED BY	MAO/SMW
REVIEWED BY	MAO
ORIGINAL ISSUE DATE	08/06/19
CLIENT PROJECT NO.	-

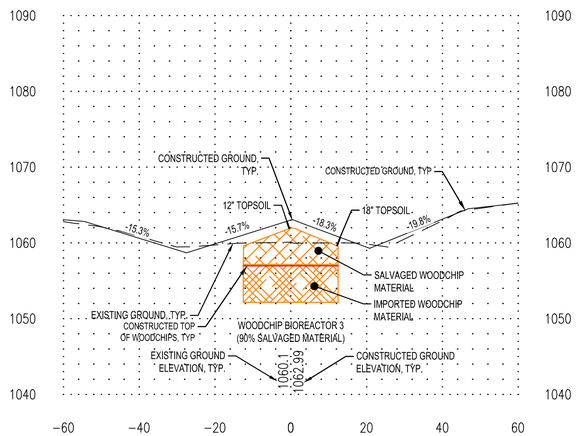
TITLE

PROPOSED WOODCHIP BIOREACTOR PROFILE

SHEET

8 OF 9

XS A



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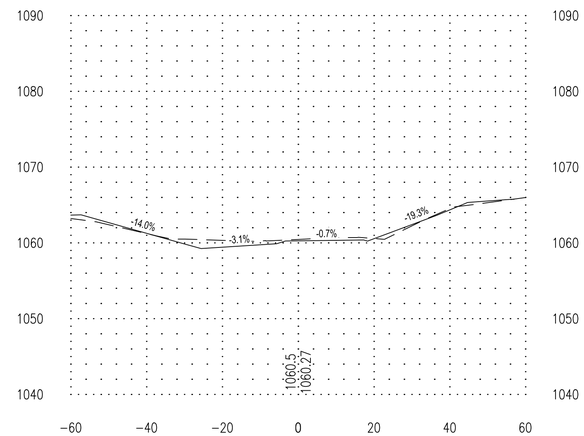

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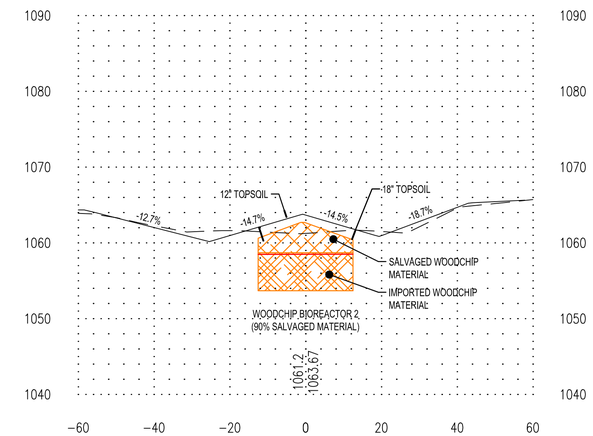

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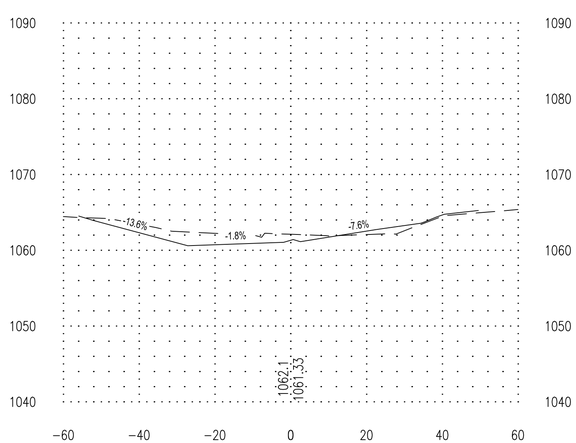

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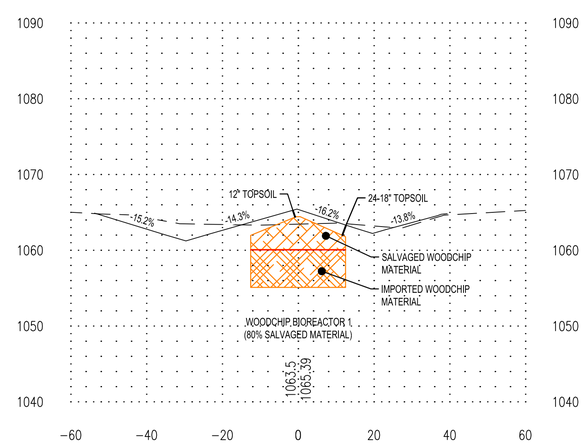

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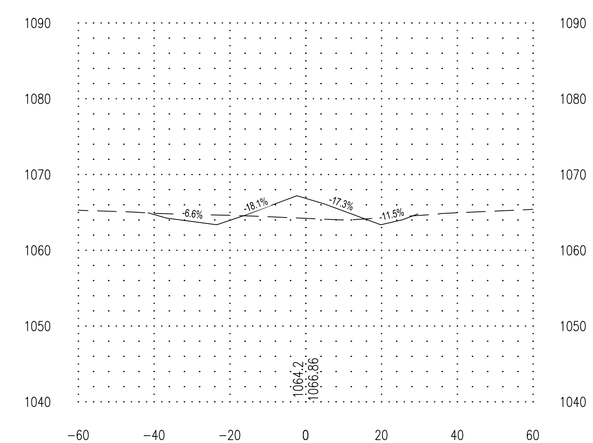

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MARK ORIGER

Mark Origer

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PROJECT

FARIBAULT COUNTY DITCH 62

PRESCOTT TWP MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO.	16762
CAD FILE NAME	16762 BIO REACTOR X-SEC
DRAWN BY	SMW
DESIGNED BY	MAO/ SMW
REVIEWED BY	MAO
ORIGINAL ISSUE DATE	08/06/19
CLIENT PROJECT NO.	-

TITLE

PROPOSED WOODCHIP BIOREACTOR CROSS-SECTIONS

SHEET

9 OF 9

APPENDIX B:
Final Pay Request

EJCDC
ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

Contractors's Application for Payment No.	4

Application Period:	9/19/2020 - 11/3/2020	Application Date:	11/2/2020
To (Owner):	Faribault County Drainage Authority 415 S. Grove Street 0	From (Contractor):	Brunz Construction Co Inc. PO Box 187 Madison Lake, MN 56063
Via (Engineer):	Mark Origer 115 E Hickory St #300 Mankato, MN 56001		
Project:	Woodchip Bioreactors Rehabilitation	Contract:	
Owner's Contract No.:		Contractor's Project No.	
Engineer's Project No.	16762		

Application For Payment
Change Order Summary

1. ORIGINAL CONTRACT PRICE	$117,671.70
2. Net change by Change Orders	$0.00
3. Current Contract Price (Line 1 ± 2)	$117,671.70
4. TOTAL COMPLETED AND STORED TO DATE	$126,964.15
5. Temporary Withholdings	$0.00
6. TOTAL COMPLETED AND STORED TO DATE LESS TEMPORARY WITHHOLDINGS	$126,964.15
7. RETAINAGE:	
a. 0.00% x $126,964.15 Work Completed	$0.00
b. 0.00% x $476.00 Stored Materials	$0.00
c. Total Retainage (7.a + 7.b)	$0.00
8. Amount Eligible To Date (Lines 6 - Line 7.c)	$126,964.15
9. Less Previous Payments (Line 8 from prior Applications)	$112,518.80
10. Amount Due This Application	$14,445.35
11. Balance To Finish, Plus Retainage	$0.00

The undersigned Contractor certifies, to the best of its 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 Signature

By: [signature] Date: 11/04/20

Payment of: **$14,445.35**
(Line 8 or other - attach explanation of the other amount)

Is recommended by: Mark Origer
(Engineer) — (Date) 11/06/2020

Payment of: _____
(Line 8 or other - attach explanation of the other amount) — (Date)

Is approved by: _____
(Owner) — (Date)

Approved by: _____
Funding or Financing Entity (if applicable) — (Date)

Completed Items

ISG	**Project Number:**	16762	**Engineer:**	Mark Origer	**Client:**	Faribault County Drainage Authority	**Contractor:**	Brunz Construction Co Inc.	**Pay Request No.** 4
	Project Name:	Woodchip Bioreactors Rehabilitation		115 E Hickory St #300		415 S. Grove Street		PO Box 187	**Starting:** 9/19/2020
	Project Location:	Blue Earth, MN		Mankato, MN 56001		0		Madison Lake, MN 56063	**Ending:** 11/3/2020

Item Number	Bid Item	Unit	Quantity	Unit Price	Total Amount	Quantity This Pay	Amount This Pay Request	Quantity To Date	Amount To Date	Quantity Remaining	Amount Remaining
2015.501	TOPSOIL STRIP	AC	0.28	$6,000.00	$1,680.00	0.00	$0.00	0.28	$1,680.00	0.00	$0.00
2021.501	MOBILIZATION	LS	1.00	$15,000.00	$15,000.00	0.00	$0.00	1.00	$15,000.00	0.00	$0.00
2105.501	COMMON EXCAVATION	CY	3,576.00	$6.00	$21,456.00	0.00	$0.00	4291.20	$25,747.20	0.00	$0.00
2105.503	NON-WOVENGEOTEXTILE FABRIC	SF	26,655.00	$0.45	$11,994.75	0.00	$0.00	29330.00	$13,198.50	0.00	$0.00
2105.503	TYPE 3 GEOTEXTILE FABRIC	SF	12,093.00	$0.65	$7,860.45	0.00	$0.00	12093.00	$7,860.45	0.00	$0.00
2105.607	3/4" WASHED CRUSHED ROCK	CY	18.00	$50.00	$900.00	0.00	$0.00	40.80	$2,040.00	0.00	$0.00
2105.607	INSTALL WOODCHIPS	CY	1,875.00	$4.00	$7,500.00	0.00	$0.00	2185.00	$8,740.00	0.00	$0.00
2105.607	REINSTALL WOODCHIPS (SALVAGED)	CY	1,625.00	$8.00	$13,000.00	0.00	$0.00	1625.00	$13,000.00	0.00	$0.00
2501.602	INSTALL DROP INTAKE	EA	1.00	$2,000.00	$2,000.00	0.00	$0.00	1.00	$2,000.00	0.00	$0.00
2503.503	12" DUAL WALL HDPE	LF	83.00	$30.00	$2,490.00	0.00	$0.00	83.00	$2,490.00	0.00	$0.00
2503.503	10" SLOTTED WELL	LF	156.00	$50.00	$7,800.00	0.00	$0.00	156.00	$7,800.00	0.00	$0.00
2503.503	4" PVC PIPE	LF	46.00	$16.00	$736.00	0.00	$0.00	46.00	$736.00	0.00	$0.00
2503.503	6" PVC PIPE	LF	80.00	$20.00	$1,600.00	0.00	$0.00	80.00	$1,600.00	0.00	$0.00
2503.503	60" DUAL WALL HDPE	LF	18.00	$300.00	$5,400.00	0.00	$0.00	18.00	$5,400.00	0.00	$0.00
2503.503	10" PVC PIPE	LF	26.00	$25.00	$650.00	0.00	$0.00	51.00	$1,275.00	0.00	$0.00
2573.501	STABILIZED CONSTRUCTION EXIT	EA	1.00	$3,000.00	$3,000.00	0.00	$0.00	1.00	$3,000.00	0.00	$0.00
2573.502	INLET PROTECTION	EA	1.00	$150.00	$150.00	0.00	$0.00	1.00	$150.00	0.00	$0.00
2573.503	SEDIMENT CONTROL LOG	LF	350.00	$4.00	$1,400.00	0.00	$0.00	0.00	$0.00	0.00	$0.00
2573.503	SILT FENCE, PREASSEMBLED	LF	65.00	$6.00	$390.00	0.00	$0.00	0.00	$0.00	0.00	$0.00
2574.504	MnDOT CATEGORY 4 EROSION CONTROL BLANKET	SY	2,081.00	$4.50	$9,364.50	1888.50	$8,498.25	2518.00	$11,331.00	0.00	$0.00
2575.505	SEEDING - MnDOT SEED MIXTURE 33-261 WITH MULCH	AC	1.65	$2,000.00	$3,300.00	0.00	$0.00	1.72	$3,440.00	0.00	$0.00
					$117,671.70		**$8,498.25**		**$126,488.15**		**$0.00**

Stored Materials Summary

ISG	**Project Number:**	16762	**Engineer:**	Mark Origer	**Client:**	Faribault County Drainage Authority	**Contractor:**	Brunz Construction Co Inc.	**Pay Request No.** 4
	Project Name:	Woodchip Bioreactors Rehabilitation		115 E Hickory St #300		415 S. Grove Street		PO Box 187	**Starting:** 9/19/2020
	Project Location:	Blue Earth, MN		Mankato, MN 56001		0		Madison Lake, MN 56063	**Ending:** 11/3/2020

Item Number	Bid Item	Quantity Paid	Amount Paid	Installed To Date	Amount To Date	Quantity Remaining	Amount Remaining
2503.503	4" PVC PIPE	46	368.00	46	$368.00	0.00	0.00
2503.503	60" DUAL WALL HDPE	20	3,000.00	18	$2,700.00	2.00	300.00
2573.503	SEDIMENT CONTROL LOG	88	176.00	0	$0.00	88.00	176.00
							$476.00

Payment Request Summary

ISG	**Project Number:**	16762	**Engineer:**	Mark Origer	**Client:**	Faribault County Drainage Authority	**Contractor:**	Brunz Construction Co Inc.	**Pay Request No.** 4
	Project Name:	Woodchip Bioreactors Rehabilitation		115 E Hickory St #300		415 S. Grove Street		PO Box 187	**Starting:** 9/19/2020
	Project Location:	Blue Earth, MN		Mankato, MN 56001		0		Madison Lake, MN 56063	**Ending:** 11/3/2020

Pay Request No.	Start Date	End Date	Retainage	Bid Items Total	Change Order Total	Work Completed This Payrequest	Payment This Payrequest	Total Completed and Stored to Date
1	7/24/2020	8/22/2020	5.00%	$48,590.00	$0.00	$48,590.00	$49,350.10	$52,134.00
2	8/23/2020	9/1/2020	5.00%	$48,069.95	$0.00	$48,069.95	$45,335.25	$99,835.95
3	9/2/2020	9/18/2020	5.00%	$21,329.95	$0.00	$21,329.95	$17,833.45	$118,465.90
4	9/19/2020	11/3/2020	0.00%	$8,498.25	$0.00	$8,498.25	$14,445.35	$126,964.15

DEPARTMENT OF REVENUE

Contractor Affidavit Submitted

Thank you, your Contractor Affidavit has been approved.

Confirmation Summary

Confirmation Number:	0-806-624-544
Submitted Date and Time:	3-Nov-2020 11:12:41 AM
Legal Name:	BRUNZ CONSTRUCTION CO INC
Federal Employer ID:	41-1666046
User Who Submitted:	Kathleen48
Type of Request Submitted:	Contractor Affidavit

Affidavit Summary

Affidavit Number:	**896393216**
Minnesota ID:	2919603
Project Owner:	FARIBAULT COUNTY DRAINAGE AUTHORITY
Project Number:	16762
Project Begin Date:	22-Jul-2020
Project End Date:	14-Oct-2020
Project Location:	FARIBAULT COUNTY PRESCOTT TWP
Project Amount:	$126,964.15
Subcontractors:	No Subcontractors

Important Messages

A copy of this page must be provided to the contractor or government agency that hired you.

Contact Us

If you need further assistance, contact our Withholding Tax Division at 651-282-9999, (toll-free) 800-657-3594, or (email) withholding.tax@state.mn.us. Business hours are 8:00 a.m. - 4:30 p.m. Monday - Friday.

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