BANK RESTORATION AND PIPE PROTECTION TOMAH BL MISSISSIPPI RIVER PIPELINE

NORTHERN NATURAL GAS LA CROSSE, WISCONSIN







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ENGINEER CONTACT: Josh Petersen, PE

Merjent, Inc. 1 Main Street SE, Suite 300 Minneapolis, Minnesota 55414 612-746-3660

OWNER CONTACT: Zach Kruse Northern Natural Gas Pipeline Integrity & Risk Office: 402-398-7718



(920) 393-9198



Call before you dig.

DATE OF PLOT: 08/29/2025

90% DESIGN

merjent.

REVISION RECORD						
NO.	DATE	DESCRIPTION	BY	CHK'D	APP'D	

PROFESSIONAL ENGINEER'S CERTIFICATION				
I hereby certify that this plan, specification, or under my direct supervision and that I am engineer under the laws of the State of Wisc	a duly licensed prof			
(Signature)	(Date)			
Printed Name: Josh Petersen, P.E. My license renewal date is 07/31/2026	License No:	49607		

NORTHERN NATURAL GAS TOMAH BL MISSISSIPPI RIVER PIPELINE LA CROSSE COUNTY, WISCONSIN

C900

TITLE SHEET SHEET 1 OF 12

GENERAL NOTES:

- 1. THE CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS PRIOR TO WORK COMMENCING.
- 2. CONTRACTOR SHALL CONTACT UTILITY LOCATION SERVICES 48 HOURS PRIOR TO STARTING WORK.
- 3. THIS SITE PLAN IS FOR INSTALLATION OF CIVIL WORKS ONLY. ALL MECHANICAL EQUIPMENT, BUILDING PADS, BUILDING STRUCTURES SHALL BE BY OTHERS.
- 4. STOP WORK IF ENCOUNTERING ANY SUBSURFACE LATENT CONDITIONS, PIPE LINE BREAKS, DAMAGED UTILITIES, OR OTHER UNKNOWN OR UNFORESEEN INFRASTRUCTURE DAMAGE.
- CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PROTECT THE OWNERS EXISTING PROPERTY FROM DAMAGE DUE DIRECTLY OR INDIRECTLY FROM THE CONTRACTOR'S WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY SUCH DAMAGE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INJURY AND DAMAGE OF ANY KIND RESULTING FROM THIS WORK TO PERSONS OR PROPERTY.
- RENTAL CHARGES, SAFETY, PROTECTION AND MAINTENANCE OF RENTED EQUIPMENT SHALL BE CONTRACTOR'S RESPONSIBILITY
- 8. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, AND SHALL PAY FOR AND OBTAIN PERMITS AND ALL NECESSARY APPROVALS. CONTRACTOR SHALL OBTAIN ALL APPROVALS AND PERMITS FOR CONSTRUCTION FROM THE MUNICIPAL AGENCIES HAVING JURISDICTION, PRIOR TO COMMENCEMENT OF WORK, AT THEIR OWN EXPENSE.
- 9. ANY PRODUCT SPECIFIED SHOULD COMPLY WITH MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS AND COMPLY WITH MANUFACTURER'S INSTALLATION PROCEDURES.
- THE WORK UNDER THIS SITE PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH LOCAL AND STATE REQUIREMENTS.
- 11. IN ACCORDANCE WITH NPDES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL PROTECTION DURING CONSTRUCTION AS WELL AS PROVIDING PROTECTION TO ADJOINING STREETS FROM POLLUTED RUNOFF AS WELL AS KEEPING EXISTING PAVEMENT CLEAN OF MUD AND DEBRIS. PAVEMENT SWEEPING OF CITY ROADS SHALL BE PERFORMED AS NECESSARY OR AT THE DIRECTION OF THE LOCAL JURISDICTION.
- 12. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AND CLEANED OR OTHERWISE MAINTAINED ON A WEEKLY BASIS, AND WITHIN 24 HOURS AFTER ANY SIGNIFICANT RAINFALL (0.5 INCHES OR GREATER) TO INSURE THAT ANY DAMAGE THAT MAY HAVE OCCURRED IS REPAIRED.
- 13. SEVEN (7) DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER INTENT TO BEGIN CONSTRUCTION AND MAY BE REQUESTED TO ATTEND AN ON-SITE MEETING PRIOR TO CONSTRUCTION BEGINNING.
- 14. RECORD DRAWINGS SHOULD BE KEPT ON THE PROJECT FOR ANY CHANGES OR FINAL CONDITIONS OF THE DESIGN ON THE PROJECT. RECORD DRAWINGS SHALL INCLUDE MAJOR VARIATIONS IN GRADING PLAN.
- 15. UNLESS DIRECTLY NOTIFIED ON THE DEMOLITION PLAN, ALL EXISTING UTILITIES ON-SITE SHOULD BE PROTECTED AND PREVENTED FROM DAMAGE OR OUTAGES.
- 16. IF STONE, BONE, OR OTHER ARTIFACTS ARE UNCOVERED, WORK SHALL CEASE IMMEDIATELY AND A QUALIFIED ARCHAEOLOGIST SHALL BE CONSULTED TO DEVELOP ANY REQUIRED MITIGATION MEASURES TO REDUCE ARCHAEOLOGICAL IMPACTS BEFORE WORK RESUMES ON-SITE.
- 17. NO WORK SHALL BE COMPLETED IN THE CITY RIGHT OF WAY UNTIL APPROVAL TO PROCEED HAS BEEN GRANTED BY THE CITY OR LOCAL JURISDICTION.
- 18. CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF TEMPORARY SIGNS, BRIDGES, BARRICADES, FLAGGING PERSONNEL, AND OTHER FACILITIES TO ADEQUATELY SAFEGUARD THE GENERAL PUBLIC AND WORK, AND TO PROVIDE FOR PROPER ROUTING OF VEHICULAR AND PEDESTRIAN TRAFFIC AS NECESSARY.
- 19. WORK SHALL BE COORDINATED WITH OWNER'S REPRESENTATIVE AND ALL IDENTIFIED PROJECT REPRESENTATIVES.
- VERIFY WITH LOCAL JURISDICTION FOR REGULAR WORK HOURS AND REQUIREMENTS FOR NOISE AND OTHER IMPACTS DURING CONSTRUCTION.
- 21. WETLAND OR WATERBODY IMPACTS WILL BE CONDUCTED IN COMPLIANCE WITH PERMIT ISSUED BY WDNR.

STATEMENT OF ESTIMATED QUANTITIES				
NO.	MATERIAL	UNIT	QTY	
1	SILT FENCE (SEDIMENT BARRIER)	LIN. FT.	375	
2	REMOVE TREES	AC.	0.08	
3	RELOCATE GAS VENT	EACH	1	
4	EROSION CONTROL BLANKET - NETLESS	SQ. FT.	14675	
6	ROCK ENTRANCE (TRACKING PAD)	EACH	3	
7	SLOPE BREAKERS	LIN. FT.	95	
8	SEEDING	AC.	0.34	
9	SEED MIX - WETLAND 60	LBS.	6.5	
9	SEED MIX - UPLAND 70A	LBS.	8.4	
10	GEOTEXTILE FABRIC TYPE SAS	SQ. FT.	3200	
11	EMBANKMENT (CV)	CU. YD.	550	
12	HEAVY RIPRAP	CU. YD.	145	
13	GRANULAR BEDDING/BACKFILL TYPE 2	CU. YD.	110	

SEED MIX RATE: 65 LBS. PER ACRE FOR WETLAND SEED MIX RATE: 35 LBS. PER ACRE UPLAND

DATE OF PLOT: 08/29/2025

90% DESIGN



onsin Office:	
4 Uni Drive lom, WI 54130	
393-9198	

REVISION RECORD					
NO.	DATE	DESCRIPTION	BY	CHK'D	APP'D

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[Signature] (Chate)

Printed Name: Josh Petersen, P.E.

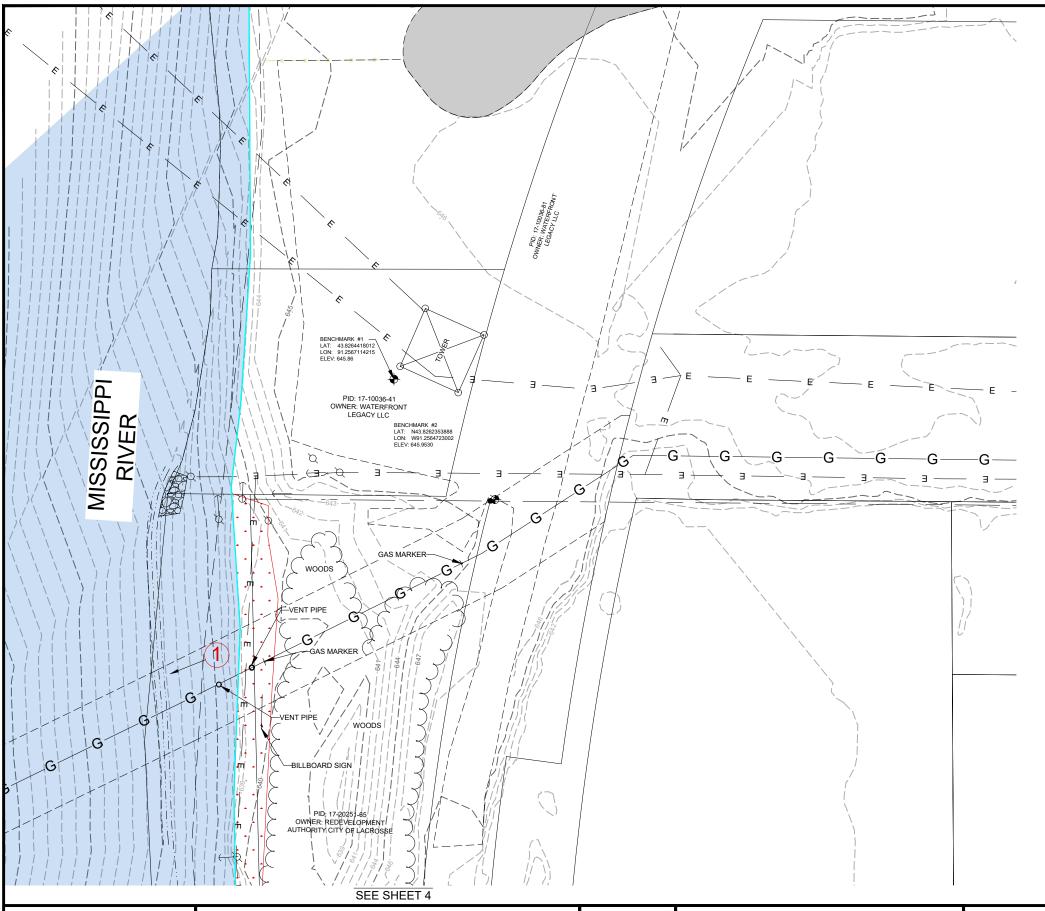
My license renewal date is 07/31/2026 | License No: 49607

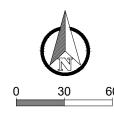
NORTHERN NATURAL GAS
TOMAH BL MISSISSIPPI RIVER PIPELINE
LA CROSSE COUNTY, WISCONSIN

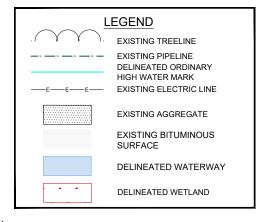
GENERAL NOTES

C901

SHEET 2 OF 12







EXISTING SURVEY NOTES:

- 1. EXISTING SURVEY COMPLETED BY OTHERS. VERIFY ALL FIELD CONDITIONS PRIOR TO CONSTRUCTION. MERJENT AND THE ENGINEER CAN NOT AND DOES NOT ASSUME RESPONSIBILITY OF THE EXISTENCES OR LOCATION OF ANY STRUCTURE SUCH AS, BUT NOT LIMITED TO, UTILITIES, PIPELINES, SEWERS, AND/OR OTHER ITEMS FOUND ON-SITE.
- 2. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL AGENCIES AND/OR OWNERS TO VERIFY SURVEY INFORMATION PRIOR TO AND DURING CONSTRUCTION OF SITE PLAN. CONTACT THE ENGINEER IN THE EVENT OF ANY DISCREPANCY.
- 3. SEE SITE PLAN FOR PROJECT WORKSPACES AND STAGING AREAS.



IMAGE OF EXISTING CONDITION OVER PIPE

DATE OF PLOT: 08/29/2025

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REVISION RECORD DATE DESCRIPTION BY CHK'D APF

PROFESSIONAL ENGINEER'S CERTIFICATION 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 Wisconsin Printed Name: Josh Petersen, P.E. My license renewal date is 07/31/2026

License No:

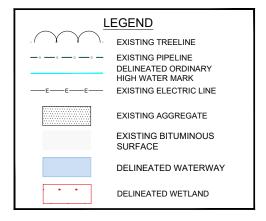
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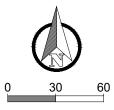
LA CROSSE COUNTY, WISCONSIN

C902

EXISTING CONDITIONS SHEET 3 OF 12







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DATE OF PLOT: 08/29/2025

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Corporate Office: Wisconsin Office:

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(Signature)	(Date)		
Printed Name: Josh Petersen, P.E. My license renewal date is 07/31/2026	License No:	49607	

NORTHERN NATURAL GAS
TOMAH BL MISSISSIPPI RIVER PIPELINE
LA CROSSE COUNTY, WISCONSIN

C903

EXISTING CONDITIONS

SHEET 4 OF 12

Printed Name: Josh Petersen, P.E.

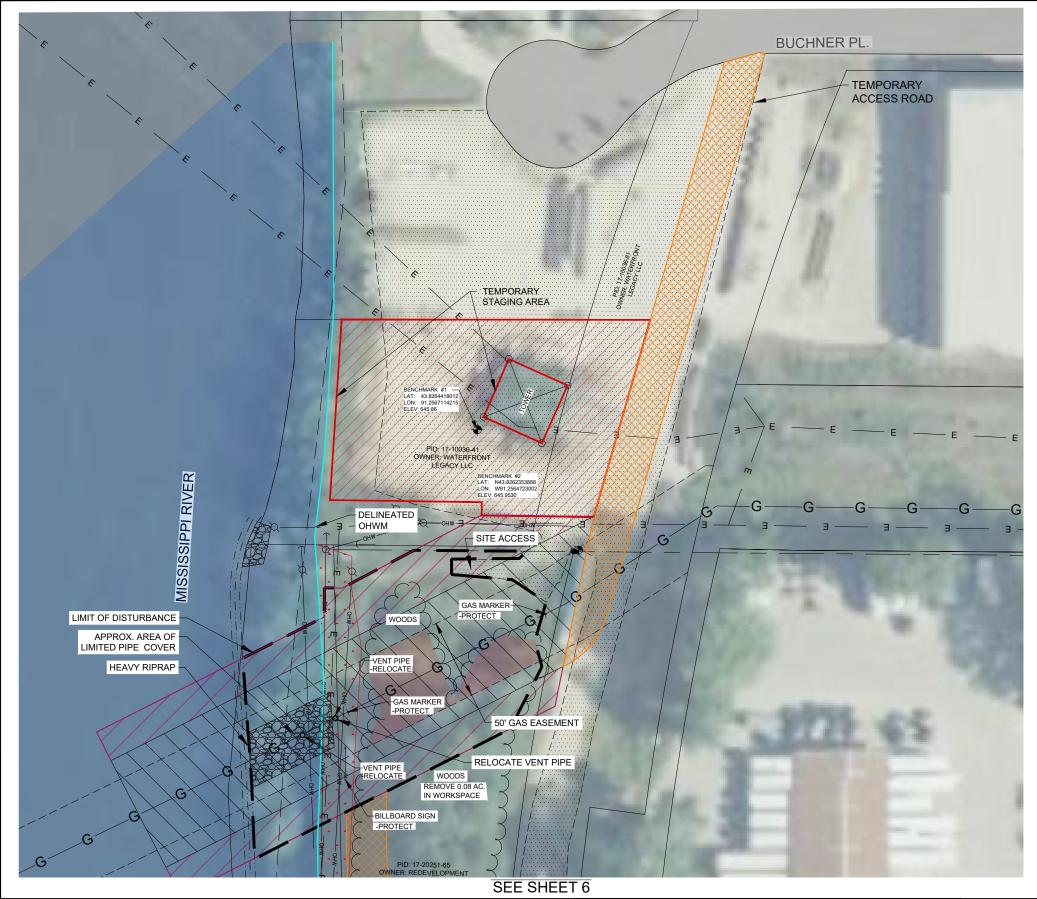
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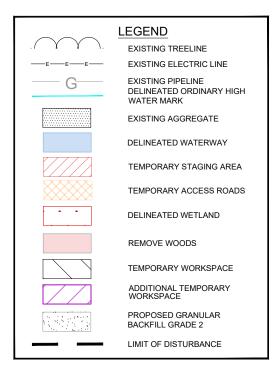
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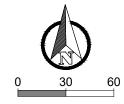
SHEET 5 OF 12

PLOTTED SIZE: ANSI full bleed B (11 00 x 17 00 inches)

(920) 393-9198







CONTROL POINT LOCATIONS (INSTALLED BY EFN SURVEY)				
CONTROL POINT NUMBER	LAT. / LONG/ ELEV.			
BENCHMARK #1	LAT: 43.8264418012 LON: 91.2567114215 ELEV: 645.86			
BENCHMARK #2	LAT: N43.8262353888 LON: W91.2564723002 ELEV: 645.9530			
LEC	<u>GEND</u>			
- BENCHMARK				

DATE OF PLOT: 08/29/2025

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(Signature) (Date)

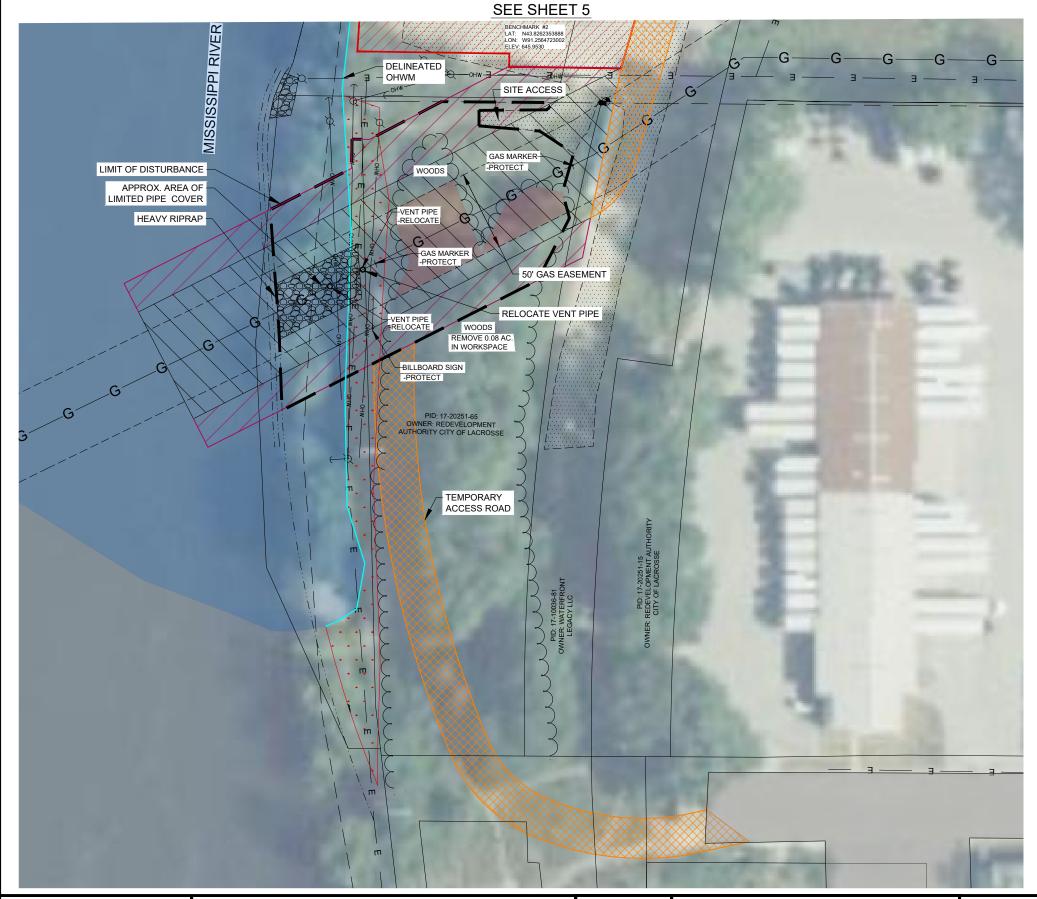
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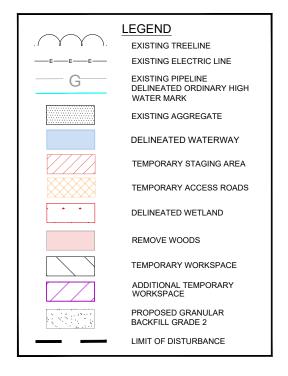
My license renewal date is 07/31/2026 License No: 49607

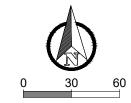
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TOMAH BL MISSISSIPPI RIVER PIPELINE
LA CROSSE COUNTY, WISCONSIN

C905

SITE PLAN SHEET 6 OF 12







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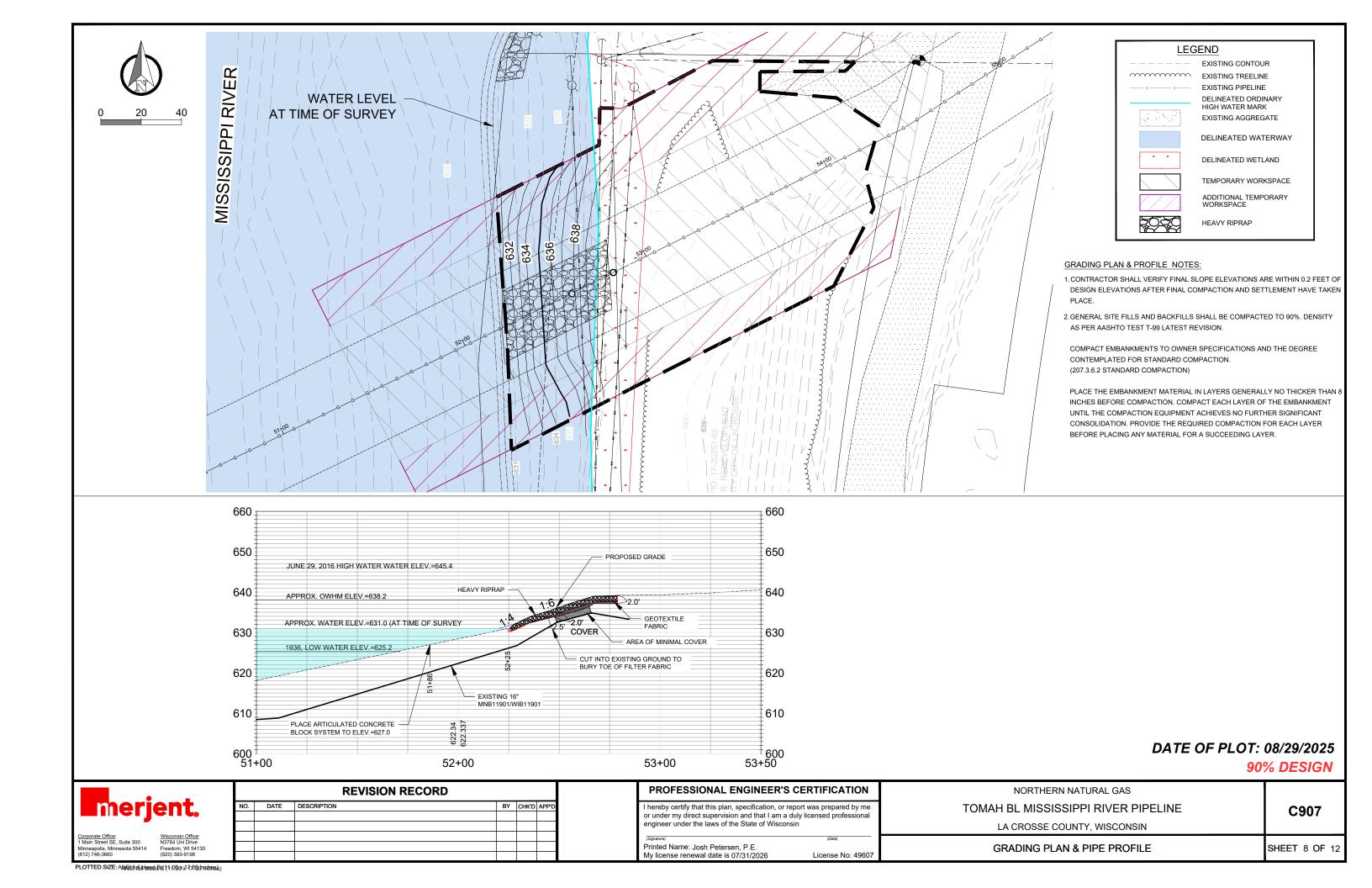
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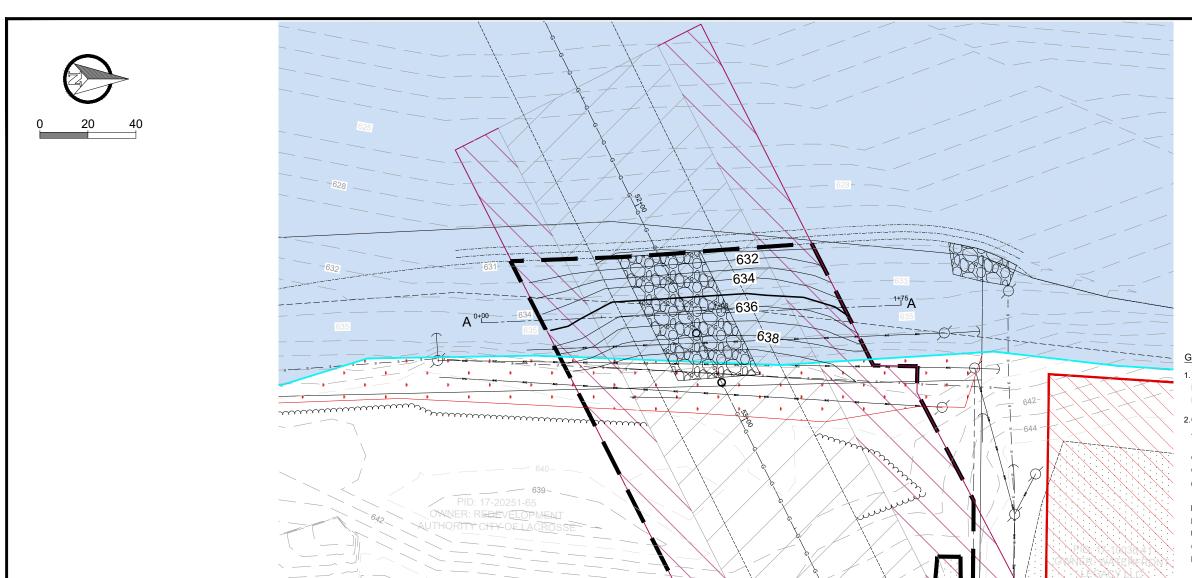
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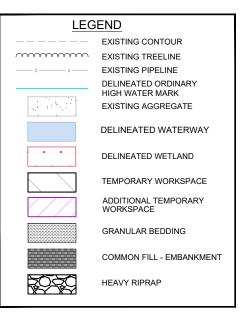
NORTHERN NATURAL GAS TOMAH BL MISSISSIPPI RIVER PIPELINE LA CROSSE COUNTY, WISCONSIN

C906

SITE PLAN





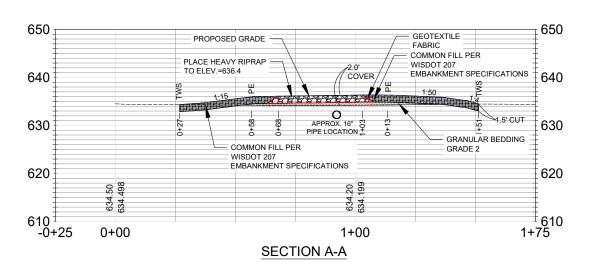


GRADING PLAN & PROFILE NOTES:

- 1. CONTRACTOR SHALL VERIFY FINAL SLOPE ELEVATIONS ARE WITHIN 0.2 FEET OF DESIGN ELEVATIONS AFTER FINAL COMPACTION AND SETTLEMENT HAVE TAKEN
- 2.GENERAL SITE FILLS AND BACKFILLS SHALL BE COMPACTED TO 90%. DENSITY AS PER AASHTO TEST T-99 LATEST REVISION.

COMPACT EMBANKMENTS TO OWNER SPECIFICATIONS AND THE DEGREE CONTEMPLATED FOR STANDARD COMPACTION. (207.3.6.2 STANDARD COMPACTION)

PLACE THE EMBANKMENT MATERIAL IN LAYERS GENERALLY NO THICKER THAN 8 INCHES BEFORE COMPACTION. COMPACT EACH LAYER OF THE EMBANKMENT UNTIL THE COMPACTION EQUIPMENT ACHIEVES NO FURTHER SIGNIFICANT CONSOLIDATION. PROVIDE THE REQUIRED COMPACTION FOR EACH LAYER BEFORE PLACING ANY MATERIAL FOR A SUCCEEDING LAYER.



DATE OF PLOT: 08/29/2025

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Corporate Office: 1 Main Street SE, Suite 300	Wisconsin Office: N3764 Uni Drive	

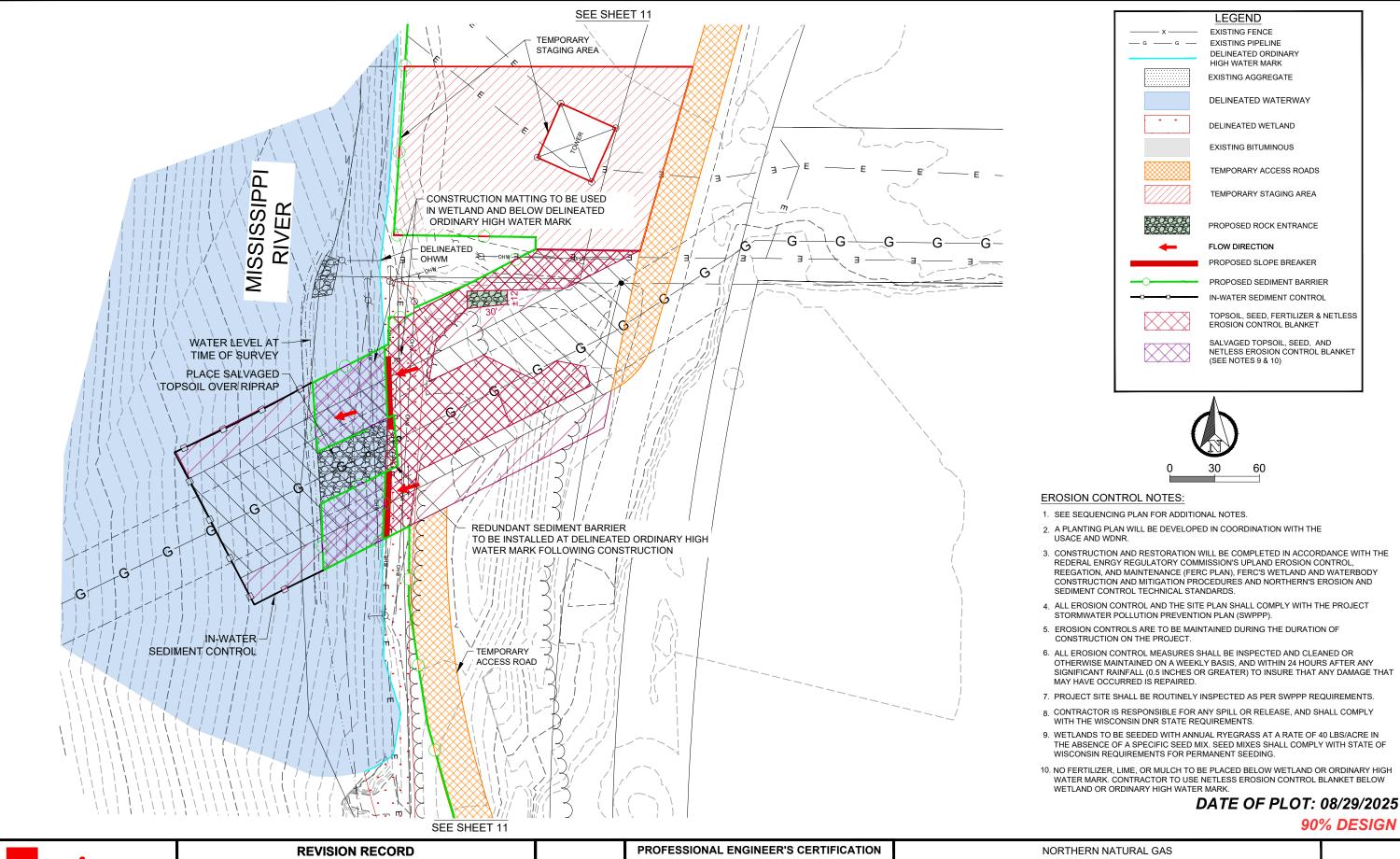
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NORTHERN NATURAL GAS TOMAH BL MISSISSIPPI RIVER PIPELINE C908 LA CROSSE COUNTY, WISCONSIN

GRADING PLAN & PIPE PROFILE SHEET 9 OF 12

(612) 746-3660



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

License No:

engineer under the laws of the State of WISCONSIN

Printed Name: Josh Petersen, P.E.

My license renewal date is 07/31/2026

(920) 393-9198

DATE DESCRIPTION

BY CHK'D APF

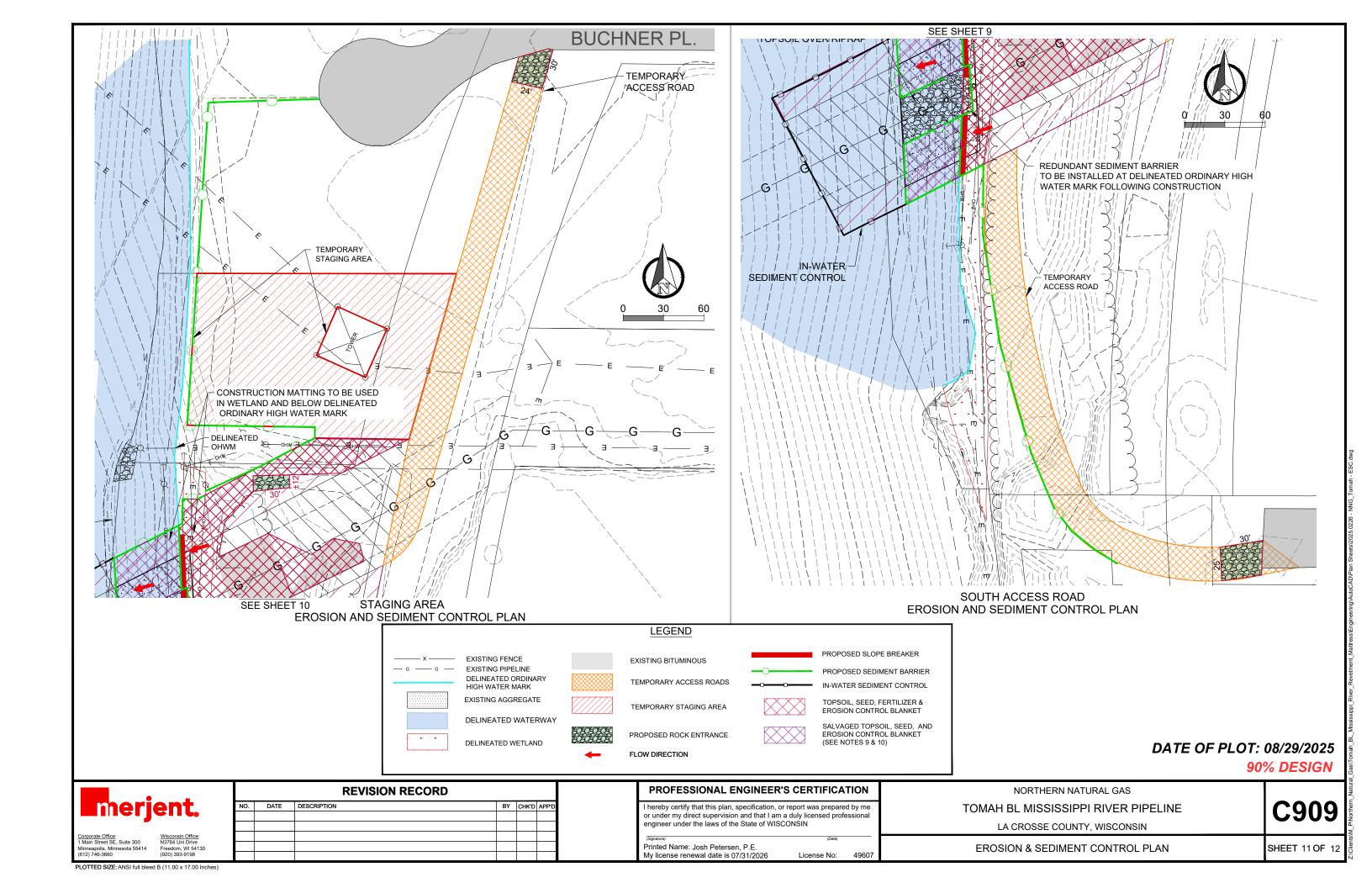
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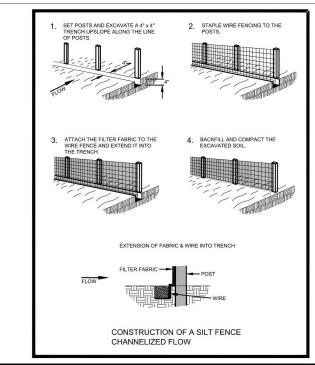
LA CROSSE COUNTY, WISCONSIN

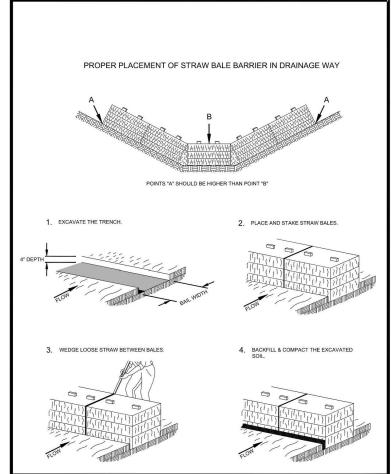
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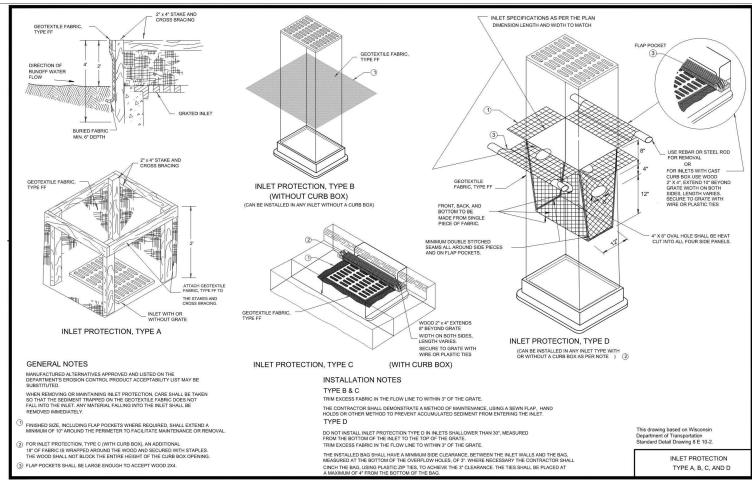
C908

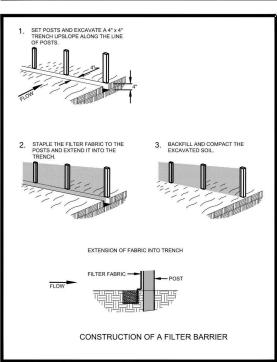
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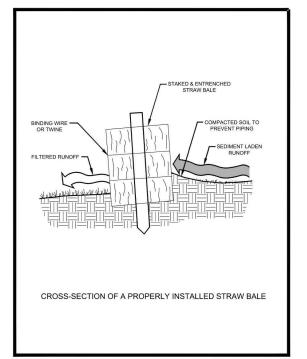














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Printed Name: Josh Petersen, P.E. My license renewal date is 07/31/2026	License No:	40007				

NORTHERN NATURAL GAS
TOMAH BL MISSISSIPPI RIVER PIPELINE
LA CROSSE COUNTY, WISCONSIN

C911

DETAIL - ESC SHEET 12 OF 12

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