MP 1066 ML VALVE ACCESS PROJECT NAME - AFE# 1491292100 **CIVIL & STRUCTURAL ISSUED FOR 90% REVIEW**

LHB PROJECT MANAGER: BOB LISI LHB PROJECT NUMBER: 140218

> **CONSTRUCT BRI** STA. 53+00.00 TO

END PROJECT STA. 69+85.00



BEGIN PROJECT STA. 38+50.00



ENBRIDGE PIPELINES, INC. 1409 HAMMOND AVENUE SUPERIOR, WI 54880

129



INDEX MAP



R24W

ENBRIDGE PROJECT MANAGER: JUSTIN BAKER

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		B	ISSUED FI AFE# 149 ISSUE FO AFF# 149	OR 90% REVIEV 1292100 - MP 10 R REGULATOR) 1292100 - MP 10	/ 66 BRIDGE 7 REVIEW 56 BRIDGE	12/0 LHB/ 08/0	04/19 KDM 02/19	LHB/JWS	-
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			LIIILK	Ê	ENBRI	D)E		JGL.
	I HEREBY CERTIFY that this plan, specifica- tion 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.	M M	P 1066 L VALV) VE ACCE: SHEET	SS				
	SIGNATURE:	BY:L	HB/JRM	CHK:LHB/RDL	ENG. :LHB/JWS		ENB A	PPR: JB	
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SHT	DRAWING NUMBER	REV	DESCRIPTION	ISSUED FOR	ISSUED DATE	*
	GENERAL					
1	COVER SHEET	в	COVER SHEET	90% REVIEW	12/4/2019	
2	INDEX SHEET1	A	INDEX SHEET 1	90% REVIEW	12/4/2019	
						F
	CIVIL					
3	D-0-1.21-C0011-1066	в	MP 1066 ML VALVE ACCESS EROSION CONTROL NOTES	90% REVIEW	12/4/2019	
4	D-0-1.21-C0012-1066	в	MP 1066 ML VALVE ACCESS EROSION CONTROL DETAILS	90% REVIEW	12/4/2019	
5	D-0-1.21-C0013-1066	в	MP 1066 ML VALVE ACCESS RIPRAP SLOPES WITH GEOTEXTILE FABRIC	90% REVIEW	12/4/2019	
6	D-0-1.21-C0021-1066	в	MP 1066 ML VALVE ACCESS TYPICAL SECTION	90% REVIEW	12/4/2019	
7	D-0-1.21-C0031-1066	в	MP 1066 ML VALVE ACCESS EROSION CONTROL PLAN	90% REVIEW	12/4/2019	*
8	D-0-1.21-C0032-1066	в	MP 1066 ML VALVE ACCESS EROSION CONTROL PLAN	90% REVIEW	12/4/2019	
9	D-0-1.21-C0033-1066	в	MP 1066 ML VALVE ACCESS EROSION CONTROL PLAN	90% REVIEW	12/4/2019	
10	D-0-1.21-C0034-1066	в	MP 1066 ML VALVE ACCESS EROSION CONTROL PLAN	90% REVIEW	12/4/2019	
11	D-0-1.21-C0035-1066	в	MP 1066 ML VALVE ACCESS EROSION CONTROL PLAN	90% REVIEW	12/4/2019	
12	D-0-1.21-C0036-1066	В	MP 1066 ML VALVE ACCESS EROSION CONTROL PLAN	90% REVIEW	12/4/2019	*
13	D-0-1.21-C0041-1066	в	MP 1066 ML VALVE ACCESS PLAN AND PROFILE	90% REVIEW	12/4/2019	*
14	D-0-1.21-C0042-1066	В	MP 1066 ML VALVE ACCESS PLAN AND PROFILE	90% REVIEW	12/4/2019	*
15	D-0-1.21-C0043-1066	в	MP 1066 ML VALVE ACCESS PLAN AND PROFILE	90% REVIEW	12/4/2019	*
16	D-0-1.21-C0044-1066	В	MP 1066 ML VALVE ACCESS PLAN AND PROFILE	90% REVIEW	12/4/2019	*
17	D-0-1.21-C0045-1066	в	MP 1066 ML VALVE ACCESS PLAN AND PROFILE	90% REVIEW	12/4/2019	*
18	D-0-1.21-C0046-1066	В	MP 1066 ML VALVE ACCESS PLAN AND PROFILE	90% REVIEW	12/4/2019	*
19	D-0-1.21-C0061-1066	в	MP 1066 ML VALVE ACCESS CROSS SECTIONS	90% REVIEW	12/4/2019	*
20	D-0-1.21-C0062-1066	В	MP 1066 ML VALVE ACCESS CROSS SECTIONS	90% REVIEW	12/4/2019	*
21	D-0-1.21-C0063-1066	в	MP 1066 ML VALVE ACCESS CROSS SECTIONS	90% REVIEW	12/4/2019	*
22	D-0-1.21-C0064-1066	В	MP 1066 ML VALVE ACCESS CROSS SECTIONS	90% REVIEW	12/4/2019	
23	D-0-1.21-C0065-1066	в	MP 1066 ML VALVE ACCESS CROSS SECTIONS	90% REVIEW	12/4/2019	*
24	D-0-1.21-C0066-1066	В	MP 1066 ML VALVE ACCESS CROSS SECTIONS	90% REVIEW	12/4/2019	*
	STRUCTURAL					
25	D-0-2.72-S0011-1066	в	MP 1066 ML VALVE ACCESS GENERAL PLAN AND ELEVATION	90% REVIEW	12/4/2019	*
26	D-0-2.72-S0021-1066	A	MP 1066 ML VALVE ACCESS ABUTMENT DETAILS	90% REVIEW	12/4/2019	

А	ISSUED FO AFE# 1491	OR 90% REVIEW 292100 - MP 106	6 BRIDGE	12/04/19 LHB/KDM	LHB/JWS	-		
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	Genbridge "							
MP 1066 ML VALVE ACCESS								
BY:	BY:MFK CHK:RDL ENG.:JWS ENB APPR:JB							
DAT	DATE: 12/04/2019 SCALE: NONE STATUS: 90%							
D-0.5-LIST1-A-1066						REV NO: A		



EXISTING LEGEND

PR	OP	OSEC) LEGENI	D
				-

	EXIST. PROPERTY LINE		SECTION LINE
	EXIST. SECTION LINE		PERMANENT EASEMENT
	EXIST. R.O.W.		PROPOSED T.E.
— x — x —	EXIST. FENCE		PROPOSED C/L
	EXIST. GRAVEL SURFACE		ROAD-SHOULDER GRAVEL
WET WET	EXIST. WETLAND BOUINDARY		CONSTRUCTION/CLEARING & GRUBBING LIMITS
	EXIST. EDGE OF WATERWAY		
بروی میں میں میں میں میں میں میں میں میں می	EXIST. WETLANDS		AND SEED.
	EXIST. RIP RAP	× × × ×	EXIST. FENCE TO BE REMOVED
	EXIST. PIPELINE	o	SEE SHEET COOT2
— — 735 — —	EXIST. CONTOUR (5' INTERVAL)	oo	TURBIDITY CURTAIN SEE SHEET CO012
	EXIST. CONTOUR (1' INTERVAL)		PROP. FLOWLINE
c======>	EXIST. CULVERT		PROP. FLOW ARROW
>	EXIST. PERFORATED PIPE		PROP. CULVERT/STORM SEWER
\square	EXIST. APRON		PROP. APRON
ohp	EXIST. OVERHEAD ELECTRIC	۲	SOIL BORING
E-BUR	EXIST. UNDERGROUND ELECTRIC		
₽ <u>₹</u>	EXIST. LIGHT POLE		
-0-	EXIST. POWER POLE		
\downarrow	EXIST. ANCHOR		
НН	EXIST. ELECTRIC HAND HOLE		EDO
	EXIST. TREE LINE		1. SEE
$\widehat{}$	EXIST. CONTROL POINT		2. THE
	EXIST. BUILDING		DIST 3 ALL
			J. ALL ACT
			4. SED DIST

PROJECT	CONTROL
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CP	NORTHING (Y)	EASTING (X)	ELEV	DESCRIPTION
100	460273.820	543108.043	1246.53	CP SPIKE
101	460277.235	543098.940	1246.34	CP SPIKE
1347	462901.957	545007.349	1243.55	CHK CAPPED REBAR
1428	446949.998	531565.881	1247.23	СНК 20204

STANDARD PLATES

THE FOLLO	WING PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT							
PLATE NO.	D. DESCRIPTION							
3040F	CORRUGATED METAL PIPE CULVERT (STANDARD 2-2/3" X 1/2" CORRUGATION							
3122K	METAL APRON FOR C.M. PIPE-ARCH CULVERT							
3123J	METAL APRON FOR C.S. PIPE							
3134D	RIPRAP AT CSP OUTLETS							
8000J	CHANNELIZERS							

ABBREVIATIONS

EROSION CONTROL NOTES

- 1. SEE SWPPP NARRATIVE FOR ALL PROJECT REQUIREMENTS AND PROCEDURES
- THE CONTRACTOR IS RESPONSIBLE FOR EROSION CONTROL ON THIS PROJECT. CONSTRUCT EROSION CONTROL DEVICES TO PREVENT THE RUNOFF, TRACKING, OR LOSS OF SOIL MATERIALS FROM DISTURBED AREAS ON THE PROJECT SITE.
- 3. ALL PERIMETER EROSION CONTROL BMP'S SHALL BE IN PLACE PRIOR TO ANY LAND DISTURBING
- SEDIMENT AND EROSION CONTROL DEVICES SHALL BE FUNCTIONAL BEFORE ANY LAND IS OTHERWISE DISTURBED ON SITE.
- 5. DEWATER EXCAVATION AS NECESSARY TO PREVENT WASHOUTS DURING LARGE STORM EVENTS. ALL DEWATERING SHALL BE DONE THROUGH A FILTRATION DEVICE AS APPROVED BY ENBRIDGE ENVIRONMENTAL.
- 6. AT A MINIMUM, DURING CONSTRUCTION, REMOVE SEDIMENT DEPOSITS OF 2-FEET OR GREATER FROM TEMPORARY SEDIMENT BASINS. DISPOSE OF REMOVED SEDIMENT AT AN APPROVED OFFSITE DISPOSAL SITE.
- 7. THE SURFACE OF STRIPPED AREAS SHALL BE PERMANENTLY OR TEMPORARILY PROTECTED FROM SOIL EROSION WITHIN 14 DAYS AFTER FINAL GRADE IS REACHED. STRIPPED AREAS NOT AT FINAL GRADE THAT WILL REMAIN UNDISTURBED FOR MORE THAN 14 DAYS AFTER INITIAL DISTURBANCE SHALL BE PROTECTED FROM EROSION IMMEDIATELY.
- 8. BASED ON PERMIT CONDITION, TOTAL APPLICABLE SITE STABILIZATION TIMEFRAME IS 14 CALENDAR
- 9. IN-WATER WORK IS RESTRICTED FROM APRIL 1 TO JUNE 30. DURING WORK IN WATER RESTRICTION PERIOD FROM APRIL 1 TO JUNE 30, COMPLETION OF STABILIZATION OF EXPOSED SOIL AREAS THAT ARE WITHIN 200_FREET OF THE WATER'S EDGE WITHIN 24 HOURS AFTER ASSOCIATED CONSTRUCTION ACTIVITIES CEASE

IN ACCORDANCE WITH PERMIT, APPLICABLE FACILITY PERSONNEL WILL HAVE THE **APPROPIATE TRAINING QUALIFICATIONS AS INDICATED BELOW:**

INDIVIDUAL(S) OVERSEEING IMPLEMENTATION OF, REVISING, AND AMENDING THE SWPPP FACILITY PLANS AND INDIVIDUAL(S) PERFORMING INSPECTIONS. ENBRIDGE WILL ENSURE THAT AT LEAST ONE INDIVIDUAL PRESENT ON THE SITE (OR AVAILABLE TO THE PROJECT SITE WITHIN 72 HOURS) IS TRAINED IN THESE JOB DUTIES (I.e., THE EROSION AND SEDIMENT CONTROL SUPERVISOR).

2. INDIVIDUAL(S) PERFORMING, SUPERVISING, OR INSPECTING THE INSTALLATION, MAINTENANCE, AND REPAIR OF BMP'S AT THIS FACILITY (i.e., THE BMP INSTALLER).

NAME	COMPANY	PHONE	EMAIL	CERTIFICATION(S)
KRISTA DEVERA	ENBRIDGE	(218) 340-3136	kristy.devera@enbridge.com	CONSTRUCTION SITE MANAGEMENT DESIGN OF CONSTRUCTION SWPPP
				·



EARTH WORK NOTES

- ALL AREAS DISTURBED DUE TO CONSTRUCTION SHALL BE RESTORED TO PRECONSTRUCTION CONDITION UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 2. SUBGRADE PREPARATION
- BGRADE PREPARATION a. THE CONTRACTOR SHALL STRIP OFF ALL VEGETATION, TOPSOIL AND GRANULAR SURFACING PRIOR TO GRADING AND COMPACTING SUBGRADES. THIS INCLUDES ROAD TOP AND BASE COURSES, ROCK, AND GRAVEL SURFACING, ORGANICS AND SOFT UNSTABLE SOILS. REFER TO GEOTECHNICAL INVESTIGATION REPORT FOR TOPSOIL THICKNESS. THE CONTRACTOR SHALL SEGREGATE MATERIALS FOR REUSE TO THE MAXIMUM EXTENT PRACTICABLE. b. SUBGRADE SOILS SHALL BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE AFTER THE OVERLYING SOILS HAVE BEEN REMOVED AND PRIOR TO MOISTURE CONDITIONIG AND RECOMPACTION. c. PROOF ROLL ALL PREPARED SUBGRADE SOILS PRIOR TO THE PLACEMENT OF FILL MATERIALS. PROOF ROLLING SHALL BE BERFFORMED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK HAVING A MINIMUM GROSS WEIGHT OF 25 TONS, AND IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE.
- 3. FILLING
 - ING a. FILL TO CONTOURS AND ELEVATIONS INDICATED USING UNFROZEN MATERIAL. b. EMPLOY PLACEMENT METHOD THAT DOES NOT DISTURB OR DAMAGE OTHER WORK. c. BENCH FILL INTO NATIVE SOILS ON ALL SLOPED SURFACES 1:5 OR STEEPER. PLACE FILLS IN UNFORM THICKNESS HORIZONTAL LIFTS, NOT EXCEEDING 8 INCH COMPACTED THICKNESS.
- 4. FILL MATERIAL: a. NATIVE BACKFILL OR FILL: NON-ORGANIC SELECT COMPACTABLE SALVAGED L MATERIAL:
 a. NATVE BACKFILL OR FILL: NON-ORGANIC SELECT COMPACTABLE SALVAGED SUBSOIL EXCAVATED ON-SITE AND/OR IMPORTED CONFORMING TO MNDOT 2105.1.46 SELECT GRADING MATERIAL AND SHALL CONSIST OF SP, SC, SM OR CL. CLAY SOILS SHALL HAVE A LIQUID LIMIT NOT GREATER THAN 30 AND A PLASTICITY INDEX NOT GREATER THAN TOT GREATER THAN 30 AND A PLASTICITY INDEX NOT GREATER THAN 10 INCERTING THE CLAYS MAY BE USED EXCEPT AS INDICATED IN THE PROJECT DRAWINGS. MATERIAL MUST BE GRADED FREE FROM LUMPS LARGER THAN 3 INCHES, ROCKS LARGER THAN 2 INCHES, AND DEBRIS, WHEN THE QUANTITY OF ON-SITE SOLS ARE FOUND TO BE INSUFFICIENT OR THE SOILS ARE NOT COMPACTABLE DUE TO MOISTURE CONTENT OR NOT SUITABLE FOR USE FOR ANY OTHER REASON AS VERIFLD BY THE GEOTECHNICAL ENGINEER THEN THE CONTRACTOR SHALL PROVIDE IMPORTED SELECT GRADING MATERIAL AS NECESSARY TO COMPLETE THE WORK.
 b. SUB-BASE MATERIAL: HOMOGENOUS MIXTURE OF NON-ORGANIC MATERIALS CONFORMING TO MINDOT 3149, BSLECT GRANULAR MATERIAL CONFORMING TO NONDOT 3149, BSLECT GRANULAR MATERIAL MODIFIED TO NO MORE THAN 7.0% PASSING THE #200 SIEVE.
 G. CRUSHED ROCK: NON-ORGANIC CRUSHED STONE OR CRUSHED ROCK CONFORMING TO MNDOT 2211 AND MEETING THE GRADATION REQUIREMENTS OF MNDOT 3149.26.2 COARSE: AGGREGATE BEDDING.
 AGGREGATE SURFACE COARSE: NON-ORGANIC RUSHED STONE OR CRUSHED ROCK CONFORMING TO MNDOT 2114.90.00
 AGGREGATE SURFACE COARSE: NON-ORGANIC CRUSHED STONE OR CRUSHED ROCK CONFORMING TO MINDOT 2114.90.00
 AGGREGATE SURFACE COARSE: NON-ORGANIC MUSTING THE GRADATION REQUIREMENTS OF TABLE 3138-3 CLASS 50.
 GUNGNERED FILL: REFER TO STRUCTURAL NOTES.
 D. QUALUX CONTEDI
- 5. FIFLD QUALITY CONTROL
- D QUALITY CONTROL a. COMPACTION REQUIREMENTS SHALL CONFORM TO THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT UNLESS OTHERWISE NOTED IN THE DRAWINGS. b. MAXIMUM DENSITY SHALL BE DETERMINED IN ACCORDANCE WITH ASTM D1557 "STANDARD TEST METHODS FOR LABORATORY COMPACTION CHARACTERISTICS OF SOLL USING MODIFIED EFFORT". MINIMUM COMPACTION CHARACTERISTICS OF SOLL USING MODIFIED EFFORT". MINIMUM COMPACTION REQUIREMENTS AND TESTING FREQUENCY SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE.

	COMPACTION REQUIREMENTS					
	LOCATION	MINIMUM COMPACTION	TEST FREQU			
Ī	SUBGRADE	98%	ONE TEST PER 1250 SQ. OF MATERIAL PLACED			
	ROADWAYS	98%	ONE TEST PER 250 LF P			
	EMBANKMENTS	95%	ONE TEST PER 1250 SF			
ĺ	UTILITY TRENCHES	95%	ONE TEST PER 100 LF P MATERIAL PLACED			
	ALL OTHER AREAS	95%	ONE TEST PER 1250 SQ. OF MATERIAL PLACED			

6. GEOTEXTILE SEPARATOR FABRIC SHALL CONFORM TO THE FOLLOWING MINIMUM AVERAGE ROLL VALUES:

MINIMUM AVERAGE ROLL VALUES							
PROPERTY	ASTM	MINIMUM VAL					
PROPERIT	TEST METHOD	NON-WOVE					
GRAB STRENGTH (Ibs.)	D4632	205					
ELONGATION	D4632	50%					
TEAR STRENGTH (Ibs.)	D4533	80					
PUNCTURE STRENGTH (lbs.)	D6241	500					
MIN. PERMITTIVITY, SEC1	D4491	1.4					
MAX APPARENT OPENING SIZE (mm)	D4751	0.18					

NOTES: ASTM: AMERICAN SOCIETY FOR TESTING AND MATERIALS MILLIMETERS

WARNING
LOCATION OF ALL UNDERGROUND
THE CONTRACTOR.
CALL BEFORE DIGGING
MINNESOTA
ONE-CALL SYSTEM
1-800-252-1166
REQUIRED BY
MN STATUTE 216D

- NCY FT PER 1 FT PFR 8" LIFT PER 8" LIFT ER 3 FT OF FT PER 1 FT



- ALL MATERIALS NOT DESIGNATED FOR SALVAGE OR USED ELSEWHERE ON THE PROJECT SHALL BE REMOVED AS NEEDED AND RECYCLED IN ACCORDANCE WITH APPLICABLE MNDOT SPECIFICATIONS. MATERIALS NOT UTILIZED ON THE PROJECT WILL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OUTSIDE THE RIGHT-OF-WAY IN ACCORDANCE WITH SPECIFICATION 2104.
- ANY DEBRIS WHICH MAY BE ENCOUNTERED DURING GRADING SHALL BE DISPOSED OF BY THE CONTRACTOR OFF THE PROJECT RIGHT-OF-WAY IN A SUITABLE DISPOSAL AREA AS APPROVED BY THE ENGINEER.
- 9. STRIP ALL SOD AND TOPSOIL FROM AREAS TO BE DISTURBED BY CONSTRUCTION AND REUSE AS SLOPE DRESSING PLACED AT A MINIMUM 4" DEPTH
- 10. PROVIDE AND PLACE SEED MIXTURE 34-361 AND FERTILIZE WITH A TYPE 1 COMMERCIAL FERTILIZER IN ACCORDANCE WITH SPECIFICATIONS 3881.2.B3 AT A RATE OF 350 LBS/ACRE; FERTILIZER ANALYSIS 20-10-20. PLACE EROSION CONTROL BLANKET CATEGORY 3N (NATURAL NETTING).

GENERAL CONSTRUCTION NOTES

- CONTRACTOR SHALL PROTECT FROM DAMAGE ALL EXISTING PAVEMENTS DESIGNATED TO REMAIN, INCLUDING IN THE PUBLIC R.O.W. ANY PAVEMENTS DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- 2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES IN ACCORDANCE WITH THE ENBIRIDGE GROUND DISTURBANCE POLICY PRIOR TO COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL UNDERGOUND UTILITES. UNILIZE THE ONE CALL EXCAVATION NOTICE SYSTEM OF "MINNESOTA ONE-CALL" CALL 1800-252-1156 AND DERIVATE UNITIES ON DEVIATE PORDEPTY CALL 1-800-252-1166 AND PRIVATE UTILITIES ON PRIVATE PROPERTY.
- GRADES SHOWN ARE FINISH SURFACE ELEVATIONS. THE CONTRACTOR SHALL MAKE APPROPRIATE DEDUCTIONS FOR VARYING SURFACES TO DETERMINE SUBGRADE ELEVATIONS.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION STAKING. THE ENGINEER WILL PROVIDE CONTROL POINTS, BENCHMARKS AND ELECTRONIC FILES.
- 5. CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF CONSTRUCTION LIMIT BOUNDARY.
- 6. GOVERNING SPECIFICATIONS: ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE DRAWING. a. FCS-001 b. FCS-003 c. FCS-003 d. FCS-004 e. MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION 2018 EDITION
- 9. ALL SLOPES ARE EXPRESSED AS A RATIO OF VERTICAL DISTANCE : HORIZONTAL DISTANCE

	в	ISSUED FC AFE# 1491	0R 90% REVIEW 292100 - MP 106	6 BRIDGE	12/04/19 LHB/KDM	LHB/JWS	-
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I HEREBY CERTIFY that this plan, specifica- tion or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the	M M	P 1066 L VAL\	E ACCES	SS			
laws of the State of Minnesota.	EROSION CONTROL NOTES						
SIGNATURE:	BY:L	HB/JRM	CHK: LHB/RDL	ENG. : LHB/JWS	ENB	APPR: JB	
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		B SLC 253	OPE DRESS 74.507.	ING - COMMO	N TOPSOIL B	ORROW, N	InDOT
		© STF AS SAI DIS EXI	RIP 24 INC DIRECTED LVAGE TOP POSE OF E STING ORG	HES (MIN.) OF BY THE GEOT SOIL FOR RE- EXCESS MATER ANIC TOPSOIL	TOPSOIL AN ECHNICAL EN USE AS SLO RIAL OFF SITE REMOVAL SH	D ORGAN GINEER. PE DRESS . DEPTH IALL BE /	ICS OR IING. OF AT THE
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I HEREBY CERTIFY that this plan, specifica- tion or report was prepared by me or under	м	P 1066					
my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota	м —		/E ACCE	SS			
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2500 V 1250			
CAS PIPE 1240			
1235			
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	CUPYTHIGHT © THIS DRAWING IS THE PROPERTY OF ENBRIDGE AND SHALL NOT BE REPRODUC EITHER IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF ENBRIDGE.	εD
50+00 50+25	EENBRIDGE	
I HEREBY CERTIFY that this plan, specifica-	MP 1066	-
tion or report was prepared by me or under my direct supervision and that I am a duly	ML VALVE ACCESS	
Licensed Professional Engineer under the laws of the State of Minnesota.		
SIGNATURE:	BY:LHB/JRM CHK:LHB/RDL ENG.:LHB/JWS ENB APPR:JB	
TYPED OR PRINTED NAME:	DATE: 12/04/2019 SCALE: AS SHOWN STATUS: 90% DWG NO.: IREV NO:	
DATE: REG. NO.:	D-1.21-C0042-B-1066 B	























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I HEREBY CERTIFY that this plan, specifica- tion or report was prepared by me or under mv direct supervision and that I am a duly	M M	IP 1 IL V	066 /AL\	/E A	CCE	ES	s					
Licensed Professional Engineer under the laws of the State of Minnesota.	CF	RO	SS	SEC	тю	NS	6					
SIGNATURE:	BY:L DATE	LHB/J re: 12/	JRM /04/20	CHK: L 19	HB/RD	DL E	ENG. :LHB SCALE: 1":	/JWS =10'		ENB A	VPPR: JB JS: 90%	
DATE: REG. NO.:	DWG	G NO.:	Ë)-1.	21.	-C	2006	6-B-	106	6		REV NO: B



SURVEY CONTROL TABLE										
CONTROL POINTS	NORTHING	EASTING	ELEVATION	DESCRIPTION						
100	460273.820	2543108.043	1246.53	CONTROL POINT SPIKE						
101	460277.235	2543098.940	1246.34	CONTROL POINT SPIKE						

WORK POINT TABLE 5								
STATION	NORTHING	EASTING						
52+99.87	460222.554	2541616.280						
54+17.13	460256.279	2541728.575						
52+99.87	460210.582	2541619.875						
54+17.13	460244.307	2541732.170						
52+99.87	460198.611	2541623.471						
54+17.12	460232.336	2541735.766						

DESIGN DATA

DESIGNED IN ACCORDANCE WITH 2017 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

HL-93 & CATERPILLAR 594H PIPELAYER VEHICLE LIVE LOADING

SOIL PROPERTIES:

SOIL TYPE = SANDY LEAN CLAY (CL) & SILTY SAND (SM) (4)SOIL UNIT WEIGHT = 110-124 PCF

- PHI = 27-32 DEGREES C = 0 PCF
- Nspt = 2-9
- MATERIAL DESIGN PROPERTIES: REINFORCED CONCRETE:
- f'c = 4 KSI CONCRETE fy = 60 KSI EPOXY COATED BARS n = 8 FOR REINFORCEMENT BARS
- STRUCTURAL STEEL:
- Fy = 50 KSI (ASTM 572 GR 50) (SHEET PILE) Fy = 36 KSI (ASTM A36), OR BETTER (HELICAL PILE)
- APPROXIMATE DECK AREA = 1853 SQUARE FEET

CONSTRUCTION NOTES

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

SEE SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS.

BAR SIZES SHOWN IN THIS PLAN ARE IN U.S. CUSTOMARY DESIGNATIONS.

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

SHEET KEY NOTES

- (1) SLOPE IS APPROX. 2 (HORIZ.) TO 1 (VERT.). MEASURED PERPENDICULAR TO FRONT FACE OF ABUTMENTS.
- 2 SLOPE IS APPROX. 3 (HORIZ.) TO 1 (VERT.). MEASURED ALONG AND PERPENDICULAR TO STEEL SHEET PILE WINGWALLS.
- 3 HORIZONTAL RAILING ELEMENTS WITH LESS THAN 6" CLEAR VERTICAL OPENING HEIGHT THROUGHOUT LENGTH OF BRIDGE (TYP. EACH SIDE).
- (4) SOIL CHARACTERISTICS INFERRED FROM BORINGS TAKEN AT EAST AND WEST SIDES OF WILLOW RIVER NEAR PROPOSED BRIDGE LOCATION. SEE SHEET C0051 FOR BORING LOGS.
- (5) SEE ABUTMENT DETAILS, SHEET S0021, FOR ELEVATIONS.
- (6) CONTRACTOR TO VERIFY SHEET PILE DOES NOT INTERFERE WITH ABUTMENT FOOTING PRIOR TO DRIVING SHEETS.

SHEET PILE NOTES

THIS DETAILED SHORING SYSTEM INCLUDES DETAILS FOR USE AT THE PROPOSED ACCESS ROAD BRIDGE LOCATION. THE FOLLOWING MUST BE ADHERED TO ENSURE STRUCTURAL ADEQUACY.

THE RETAINED SOIL HEIGHT SHALL NOT EXCEED THAT SHOWN IN THE

NOTIFY ENGINEER IMMEDIATELY IF ANY SITE CONDITIONS ARE NOT AS SHOWN IN THESE PLANS.

STEEL SHEET PILE SHALL BE PZC-13 WITH A MINIMUM SECTION MODULUS OF 24.2 CUBIC INCHES PER FOOT AND A MINIMUM MOMENT OF INERTIA OF 152.0 INCHES TO THE FOURTH PER FOOT.

VERIFY LOCATION OF ALL EXISTING UTILITIES AND/OR OTHER UNDERGROUND SITE FEATURES PRIOR TO DRIVING SHEETS.

ALL SHEETS SHALL BE DRIVEN WITH AN APPROVED VIBRATORY OR DROP HAMMER. ALL SHEETS SHALL BE INTERLOCKED.

В	ISSUED FOR 90% REVIEW AFE# 1491292100 - MP 1066 BRIDGE	12/04/19 LHB/KDM	LHB/JWS	-					
Α	ISSUED FOR REGULATORY REVIEW AFE# 1491292100 - MP 1066 BRIDGE	08/02/19 LHB/JRM	LHB/JWS	-					
REV NO	REVISION DESCRIPTION	DATE BY	СНК	APPR					
COP	COPYRIGHT © THIS DRAWING IS THE PROPERTY OF ENBRIDGE AND SHALL NOT BE REPRODUCED EITHER IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF ENBRIDGE.								

MP 1066

GENERAL PLAN AND ELEVATION

BY:JRM	CHK: KDM	ENG. :JWS	ENB APPR: JB		
DATE: 08/02/20	19	SCALE: AS SHOWN	STATUS: 90%		
DWG NO.:				REV NO:	
Ľ	В				

SHEET NOTES

PROVIDE STANDARD HOOKS FOR REINFORCEMENT DIMENSIONS NOT SHOWN.

SHEET KEY NOTES

- 1 MEMBRANE WATERPROOFING SYSTEM PER. MNDOT SPEC. 2481.3.B.
- 2 REFER TO TRUSS / SUPERSTRUCTURE PLAN FOR BEARING PLATE AND ANCHOR DETAILS.

HELICAL PILE NOTES

WEST ABUTMENT: 10 STEEL HELICAL PILE 80 FT. LONG. (ESTIMATED)

EAST ABUTMENT:

10 STEEL HELICAL PILE 80 FT. LONG. (ESTIMATED)

ALL HELICAL PILE SHALL INCLUDE A LEAD SECTION FIN ARRANGEMENT COMPRISED OF A 12"/10"/8" DIAMETER BEARING PLATES WITH A MINIMUM ULTIMATE COMPRESSION CAPACITY OF 100 KIPS. PILE SHAFT DIAMETER, WALL THICKNESS, BEARING PLATE FIN THICKNESS, ETC., AS SPECIFIED PER HELICAL PILE SUPPLIER.

HELICAL PILE SHALL ALLOW FOR A MINIMUM REQUIRED INSTALLATION TORQUE OF 11,000 FT.-LBS PER PILE.

HELICAL PILE SHALL BE ROUND SHAFT TYPE.

HELICAL PILE SPACING IS SHOWN AT THE BOTTOM OF FOOTING.

HELICAL PILE SHAFT SECTIONS SHALL BE WELDED AT EACH SECTION CONNECTION POINT.

PROVIDE PILE CAP AT END OF EACH PILE TO BE EMBEDDED IN CONCRETE FOOTING.

DRAINAGE SYSTEM NOTES

ALL PIPE SHALL COMPLY WITH MNDOT SPEC. 3245.

ALL PIPE SHALL HAVE MINIMUM SLOPE OF 1/8" PER FT.

WRAP PERFORATED PIPE WITH GEOTEXTILE FILTER PER MNDOT SPEC. 3733, TYPE 1. ATTACH PIPE PER MNDOT SPEC. 2502.

PROVIDE PRECAST CONCRETE HEADWALL WITH RODENT SCREEN AT AT END OF PIPE LOCATIONS DAYLIGHT IN SLOPE. SEE MNDOT STANDARD PLATE 3131 FOR HEADWALL DETAILS.

SHEET LEGEND

DENOTES HELICAL PILE AND BATTER DIRECTION.

		° L	6"	1'	2'	3'		5'	
					3/8"	= 1'-0"			
0	6" I	1' I		2' I			4' I		

A	ISSUED FOR 90% REVIEW AFE# 1491292100 - MP 1066 BRIDGE	12/04/19 LHB/KDM	LHB/JWS	-					
REV NO	REVISION DESCRIPTION	DATE BY	СНК	APPR					
COP	OPYRIGHT © THIS DRAWING IS THE PROPERTY OF ENBRIDGE AND SHALL NOT BE REPRODUCED EITHER IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN CONSENT OF ENBRIDGE.								

MP 1066

ML VALVE ACCESS

ABUTMENT DETAILS

BY:KDM	CHK: JWS	ENG. : JWS	ENB APPR: JB	
DATE: 12/04/20	19	SCALE: AS SHOWN	STATUS: 90%	
DWG NO.:				REV NO:
D-2.72-S0021-A-1066				Α

PERMANENT ACCESS ROAD USE AGREEMENT

<u>Prepared By</u>: John McKay 26 East Superior Street, Suite #309 Duluth, MN 55802

<u>Return To</u>: Enbridge Energy, Limited Partnership 4602 Grand Avenue, Suite #900 Duluth, MN 55807

415

A447733

Office of the County Recorder Aitkin County, Minnesota

I HEREBY CERTIFY THE WITHIN INSTRUMENT WAS FILED, AND/OR RECORDED ON 10/4/2018 9:00 AM

PACKAGE: 60092 REC FEE: \$46.00

Michael T. Moriarty, Aitkin County Recorder

PIN: 33-0-048600

4 5

For Recorder's Use Only

Enbridge Tract No(s): MN-AI-058.000

The undersigned **Steven R. Weston and Lynn V. Weston, husband and wife**, ("Grantor"), whether one or more, its successors and assigns, for and in consideration of Ten Dollars (\$ 10.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, does hereby grant to Enbridge Energy, Limited Partnership, a Delaware limited partnership, with an office located at 119 North 25th Street East, Superior, Wisconsin 54880, its successors and assigns, ("Grantee"), and its agents, contractors and subcontractors, the perpetual right to open, maintain, repair, and use a vehicular roadway on, over and through private lands situated in the County of **Aitkin**, Minnesota (the "Road"), said lands and vehicular roadway being more particularly described in Exhibit A attached hereto and made a part hereof.

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The Grantor and Grantee further agree:

- 1. The Road may be used by Grantee for the purpose of ingress to and egress from Grantee's facility/pipeline right-of-way (whether located on or adjacent to the tract of land over which the Road is located) during any construction, operation, inspection, repair, replacement, and maintenance of Grantee's facilities/pipeline right-of-way. The Road may be used for the transport of equipment and the installation and use of such utilities as are deemed by Grantee to be necessary or convenient in the exercise of its rights with respect to Grantee's facilities.
- The Road right-of-way shall be exclusive, and shall not grant or reserve any rights by the public or any third party, but rather shall be limited to and

for the use of the Grantee, its agents and employees, and for persons, firms and corporations doing work for the Grantee. Notwithstanding the preceding sentence, Grantor shall be entitled to use of the Road, and to exercise Grantor's rights as fee owner of the land, subject to the Road, but such use and rights shall be subordinate to the rights granted to Grantee herein. Grantor shall promptly reimburse Grantee for any expenses incurred by Grantee in repairing damage to the Road caused by Grantor's use.

- 3. The existing Road surface, or the Road surface to be constructed by Grantee pursuant to this Agreement, will not be widened without the written consent of Grantor; however, it is understood and agreed that Grantee may use immediately adjacent property to maintain or repair the Road if necessary.
- 4. During the period of use by Grantee, Grantee will as soon as reasonably practicable repair damage to the Road caused by Grantee's operations or the operations of the Grantee's contractors or agents where such damage would impede traffic or endanger the safety of private landowners along the roadway. Grantee shall employ best efforts to keep the Road open to Grantor traffic. Additionally, Grantee shall use its best efforts to control dust in the areas of the Road in close proximity to housing, farming or other habitable areas.
- 5. Grantor agrees that the rights granted Grantee herein shall extend beyond any period of construction.
- 6. The rights granted hereby to Grantee may be assigned by Grantee in whole or in part, in Grantee's sole discretion.
- 7. The terms, stipulations, and conditions of this Agreement are subject to all applicable laws, regulations, and conditions of required permits, if any, held by Grantee.
- 8. This Agreement shall be governed by the law of the State of Minnesota without regard to conflict of law principles. This Agreement shall run with the land, and benefit and bind the parties and their respective successors and assigns.

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IN WITNESS WHEREOF, the Grantor and Grantee have executed this Road Use Access Agreement this 2/day of <u>September</u>, 20/8.

GRANTOR RI 120 Signature:

Print Name: Steven R. Weston

GRANTOR:

Signature: <u>Aym V West</u>

Print Name: Lynn V. Weston

ACKNOWLEDGMENT

STATE OF <u>Minnesola</u> COUNTY OF <u>Aitkin</u> SS.

On this <u>21st</u> day of <u>September</u>, 20<u>/8</u>, Steven R. Weston and Lynn V. Weston, husband and wife, personally appeared before me and who being by me duly sworn, acknowledged on oath that he/she/they executed this instrument of his/hers/their free will and for the purposes and consideration therein expressed.

TRENT L. HARRIS NOTARY PUBLIC-MINNESOTA My Comm. Exp. Jan. 31, 2020

Sign Name

___Notary Public

Print Name

My Commission Expires: 01-30 - 2020

3

GRANTEE:

12 11

ENBRIDGE ENERGY, LIMITED PARTNERSHIP BY: ENBRIDGE PIPELINES (LAKEHEAD) L.L.C. AS GENERAL PARTNER

By:

Print Name: John McKay Title: <u>Authorized Agent</u>

ACKNOWLEDGMENT

STATE OF MINNESOL) ss COUNTY OF

The foregoing instrument was acknowledged before me this _____day of _____day of ______day of ______day of ______ 20 ______, by John McKay, a duly Authorized Agent of Enbridge Pipelines (Lakehead) L.L.C., as General Partner of Enbridge Energy, Limited Partnership, a Delaware limited partnership, on behalf of the limited partnership.

111/2 ALINE	
Sign Name	
Welissa Sve Grundahl	Notary Public

Print Name

My Commission Expires: 01-31-2023

EXHIBIT A

This Exhibit A is attached to and made a part of this Road Use Agreement between **Steven R. Weston and Lynn V. Weston, husband and wife,** (Grantor) and Enbridge Energy, Limited Partnership (Grantee).

GRANTOR'S PROPERTY LEGAL DESCRIPTION (Grantor's Lands):

 \longrightarrow SW¼ of NE¼ of Sec. 31, Twp. 51, Rge. 24 in Aitkin County, Minnesota.

Parcel Identification Number (P.I.N.): 33-0-048600

Description of Road:

1.41

...

A parcel of land lying over, under, and across that part of the Southwest Quarter of the Northeast Quarter of Section 31, Township 51 North, Range 24 West of the 4th Principal Meridian, Aitkin County, Minnesota, that lies southerly of the following described line:

Commencing at the northwest corner of the Northeast Quarter of said Section 31; thence South 01 degrees 33 minutes 14 seconds West, along the west line of said Northeast Quarter, 2632.11 feet to the point of beginning of the line to be described; thence North 89 degrees 47 minutes 02 seconds East 1317.13 feet to the east line of said Southwest Quarter of the Northeast Quarter and said line terminating thereat. Said point of termination bears North 89 degrees 12 minutes 22 seconds West and is distant 1332.34 feet from the southeast corner of the Northeast Quarter of said Section 31. As depicted in the attached Exhibit B.

Containing 0.38 acres.

Basis of Bearings: MN State Plane System, NAD 83, (2011), North Zone, (grid) Distance Measure: U.S. Survey Foot (grid)

<u>A A A A</u>	ŀ	EXHIBIT R	}	1
	NW CORNER OF THE NE1/4, SECT. 31, T51N, R24W FOUND IRON MONUMENT POINT OF COMMENCEMENT		0 SCAL	N 200 E IN FEET
	Ν	I. LINE OF THE SW1/4 OF THE NE1/4		
S01°33'14"W 2632.11 -W. LINE OF THE SW1/4 OF THE NE1/4 (W. LINE OF THE NE1/4)		SW1/4 OF THE NE1/4 SECTION 31 T51N R24W ATTKIN COUNTY, MN	ΡΟΙΝΤ ΟΓ	E. LINE OF THE SW1/4 OF THE NE1/4
POIN	IT OF NNING	PERMANENT EASEMENT	TERMINATION-	N89°12'22"W
¥			SE CORNER SECT. 31, TS FOUND IRON	OF THE NE1/4, INN, R24W
NOTE: This is not a survey product. Thi	Exhibit is based on Minnesota S State Plane System, NAD83	Prepared for: ENBRIDGE ENERGY, LIMITE	D PARTNERSHIP	PREPARED BY: TDL
should not be used authoritative definit	for (2011), North Zone, U.S. Foot. Bearings shown are grid	Summary of Layout:		DATE: 08/09/2018 TRACT NUMBER
of legal boundary of property title.	are grid distances.	Easement Reference Line: 0 FT. Permanent Easement: 0.38 AC. 16,586 SQ.FT.		MN-AI-058.000

PERMANENT ACCESS ROAD USE AGREEMENT

<u>Prepared By</u>: John McKay 26 East Superior Street, Suite #309 Duluth, MN 55802

<u>Return To</u>: Enbridge Energy, Limited Partnership 4602 Grand Avenue, Suite #900 Duluth, MN 55807

A447734

Office of the County Recorder Aitkin County, Minnesota

I HEREBY CERTIFY THE WITHIN INSTRUMENT WAS FILED, AND/OR RECORDED ON 10/4/2018 9:00 AM

PACKAGE: 60092 REC FEE: \$46.00

Michael T. Moriarty, Aitkin County Recorder

For Recorder's Use Only

PIN: 33-0-048700

: t

Enbridge Tract No(s): MN-AI-058.002

The undersigned **Steven R. Weston and Lynn V. Weston, husband and wife**, ("Grantor"), whether one or more, its successors and assigns, for and in consideration of Ten Dollars (\$ 10.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, does hereby grant to Enbridge Energy, Limited Partnership, a Delaware limited partnership, with an office located at 119 North 25th Street East, Superior, Wisconsin 54880, its successors and assigns, ("Grantee"), and its agents, contractors and subcontractors, the perpetual right to open, maintain, repair, and use a vehicular roadway on, over and through private lands situated in the County of **Aitkin**, Minnesota (the "Road"), said lands and vehicular roadway being more particularly described in Exhibit A attached hereto and made a part hereof.

Т

The Grantor and Grantee further agree:

- 1. The Road may be used by Grantee for the purpose of ingress to and egress from Grantee's facility/pipeline right-of-way (whether located on or adjacent to the tract of land over which the Road is located) during any construction, operation, inspection, repair, replacement, and maintenance of Grantee's facilities/pipeline right-of-way. The Road may be used for the transport of equipment and the installation and use of such utilities as are deemed by Grantee to be necessary or convenient in the exercise of its rights with respect to Grantee's facilities.
- 2. The Road right-of-way shall be exclusive, and shall not grant or reserve any rights by the public or any third party, but rather shall be limited to and

for the use of the Grantee, its agents and employees, and for persons, firms and corporations doing work for the Grantee. Notwithstanding the preceding sentence, Grantor shall be entitled to use of the Road, and to exercise Grantor's rights as fee owner of the land, subject to the Road, but such use and rights shall be subordinate to the rights granted to Grantee herein. Grantor shall promptly reimburse Grantee for any expenses incurred by Grantee in repairing damage to the Road caused by Grantor's use.

- The existing Road surface, or the Road surface to be constructed by Grantee pursuant to this Agreement, will not be widened without the written consent of Grantor; however, it is understood and agreed that Grantee may use immediately adjacent property to maintain or repair the Road if necessary.
- 4. During the period of use by Grantee, Grantee will as soon as reasonably practicable repair damage to the Road caused by Grantee's operations or the operations of the Grantee's contractors or agents where such damage would impede traffic or endanger the safety of private landowners along the roadway. Grantee shall employ best efforts to keep the Road open to Grantor traffic. Additionally, Grantee shall use its best efforts to control dust in the areas of the Road in close proximity to housing, farming or other habitable areas.
- 5. Grantor agrees that the rights granted Grantee herein shall extend beyond any period of construction.
- 6. The rights granted hereby to Grantee may be assigned by Grantee in whole or in part, in Grantee's sole discretion.
- 7. The terms, stipulations, and conditions of this Agreement are subject to all applicable laws, regulations, and conditions of required permits, if any, held by Grantee.
- 8. This Agreement shall be governed by the law of the State of Minnesota without regard to conflict of law principles. This Agreement shall run with the land, and benefit and bind the parties and their respective successors and assigns.

Tract No: MN-AI-058.002 Date: August 23, 2018

٠.

IN WITNESS WHEREOF, the Grantor and Grantee have executed this Road Use Access Agreement this 2i day of <u>September</u>, $20\frac{18}{2}$.

GRANTOR Signature:

Print Name: Steven R. Weston

GRANTOR:

• •

Signature: dum V Waster

Print Name: Lynn V. Weston

ACKNOWLEDGMENT

STATE OF <u>Minnesola</u> COUNTY OF <u>Aitkin</u> SS.

On this <u>21</u> day of <u>September</u>, 20<u>/8</u>, Steven R. Weston and Lynn V. Weston, husband and wife, personally appeared before me and who being by me duly sworn, acknowledged on oath that he/she/they executed purposes this instrument of his/hers/their free will and for the and consideration therein expressed.

Sign Náme

rent Harris Notary Public Print Name

3

My Commission Expires: 01-31-2020

GRANTEE:

ENBRIDGE ENERGY, LIMITED PARTNERSHIP BY: ENBRIDGE PIPELINES (LAKEHEAD) L.L.C. AS GENERAL PARTNER

Bv

Print Name: John McKay Title: Authorized Agent

STATE OF MARCO) ss COUNTY OF (S

ACKNOWLEDGMENT

The foregoing instrument was acknowledged before me this day of <u>October</u> 20 8, by John McKay, a duly Authorized Agent of Enbridge Pipelines (Lakehead) L.L.C., as General Partner of Enbridge Energy, Limited Partnership, a Delaware limited partnership, on behalf of the limited partnership.

Min Sella	
Sign Name	
Walson Sie Engradel	Notary Public

Print Name

My Commission Expires: 01-31-2023

EXHIBIT A

This Exhibit A is attached to and made a part of this Road Use Agreement between **Steven R. Weston and Lynn V. Weston, husband and wife,** (Grantor) and Enbridge Energy, Limited Partnership (Grantee).

GRANTOR'S PROPERTY LEGAL DESCRIPTION (Grantor's Lands):

 \rightarrow SE¹/₄ NE¹/₄ of Sec. 31, Twp. 51, Rge. 24 in Aitkin County, Minnesota.

Parcel Identification Number (P.I.N.): 33-0-048700

Description of Road:

· . . · ·

A parcel of land lying over, under, and across that part of the Southeast Quarter of the Northeast Quarter of Section 31, Township 51 North, Range 24 West of the 4th Principal Meridian, Aitkin County, Minnesota, that lies southerly and easterly of the following described line:

Commencing at the southeast corner of the Northeast Quarter of said Section 31; thence North 01 degrees 24 minutes 47 seconds East, along the east line of said Southeast Quarter of the Northeast Quarter, 37.64 feet to the point of beginning of the line to be described; thence South 89 degrees 47 minutes 02 seconds West 60.53 feet; thence South 00 degrees 12 minutes 58 seconds East 14.14 feet; thence South 89 degrees 47 minutes 02 seconds West 1272.67 feet to the west line of said Southeast Quarter of the Northeast Quarter and said line terminating thereat. Said point of termination bears South 25 degrees 22 minutes 39 seconds East and is distant 2906.65 feet from the northwest corner of the Northeast Quarter of said Section 31.

As depicted in the attached Exhibit B.

Containing 0.63 acres.

Basis of Bearings: MN State Plane System, NAD 83, (2011), North Zone, (grid) Distance Measure: U.S. Survey Foot (grid)

PERMANENT ACCESS ROAD USE AGREEMENT

<u>Prepared By</u>: John McKay 26 East Superior Street, Suite #309 Duluth, MN 55802

<u>Return To</u>: Enbridge Energy, Limited Partnership 4602 Grand Avenue, Suite #900 Duluth, MN 55807

A447470

Office of the County Recorder Aitkin County, Minnesota I HEREBY CERTIFY THE WITHIN INSTRUMENT WAS FILED, AND/OR RECORDED ON 9/20/2018 9:00 AM

PACKAGE: 59933

REC FEE: \$46.00

Michael T. Moriarty, Aitkin County Recorder

For Recorder's Use Only

PIN: 33-0-049700

Enbridge Tract No(s): MN-AI-058.001

The undersigned **Todd A. Jones and Kitti J. Jones, husband and wife**, ("Grantor"), whether one or more, its successors and assigns, for and in consideration of Ten Dollars (\$ 10.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, does hereby grant to Enbridge Energy, Limited Partnership, a Delaware limited partnership, with an office located at 119 North 25th Street East, Superior, Wisconsin 54880, its successors and assigns, ("Grantee"), and its agents, contractors and subcontractors, the perpetual right to open, maintain, repair, and use a vehicular roadway on, over and through private lands situated in the County of **Aitkin**, Minnesota (the "Road"), said lands and vehicular roadway being more particularly described in Exhibit A attached hereto and made a part hereof.

The Grantor and Grantee further agree:

- 1. The Road may be used by Grantee for the purpose of ingress to and egress from Grantee's facility/pipeline right-of-way (whether located on or adjacent to the tract of land over which the Road is located) during any construction, operation, inspection, repair, replacement, and maintenance of Grantee's facilities/pipeline right-of-way. The Road may be used for the transport of equipment and the installation and use of such utilities as are deemed by Grantee to be necessary or convenient in the exercise of its rights with respect to Grantee's facilities.
- 2. The Road right-of-way shall be exclusive, and shall not grant or reserve any rights by the public or any third party, but rather shall be limited to and

for the use of the Grantee, its agents and employees, and for persons, firms and corporations doing work for the Grantee. Notwithstanding the preceding sentence, Grantor shall be entitled to use of the Road, and to exercise Grantor's rights as fee owner of the land, subject to the Road, but such use and rights shall be subordinate to the rights granted to Grantee herein. Grantor shall promptly reimburse Grantee for any expenses incurred by Grantee in repairing damage to the Road caused by Grantor's use.

- 3. The existing Road surface, or the Road surface to be constructed by Grantee pursuant to this Agreement, will not be widened without the written consent of Grantor; however, it is understood and agreed that Grantee may use immediately adjacent property to maintain or repair the Road if necessary.
- 4. During the period of use by Grantee, Grantee will as soon as reasonably practicable repair damage to the Road caused by Grantee's operations or the operations of the Grantee's contractors or agents where such damage would impede traffic or endanger the safety of private landowners along the roadway. Grantee shall employ best efforts to keep the Road open to Grantor traffic. Additionally, Grantee shall use its best efforts to control dust in the areas of the Road in close proximity to housing, farming or other habitable areas.
- 5. Grantor agrees that the rights granted Grantee herein shall extend beyond any period of construction.
- 6. The rights granted hereby to Grantee may be assigned by Grantee in whole or in part, in Grantee's sole discretion.
- 7. The terms, stipulations, and conditions of this Agreement are subject to all applicable laws, regulations, and conditions of required permits, if any, held by Grantee.
- 8. This Agreement shall be governed by the law of the State of Minnesota without regard to conflict of law principles. This Agreement shall run with the land, and benefit and bind the parties and their respective successors and assigns.

IN WITNESS WHEREOF, the Grantor and Grantee have executed this Road Use Access Agreement this <u>Access Agreement this</u> day of <u>Superior</u>, 20<u>0</u>.

GRANTOR:

Signature:

Print Name: Todd A. Jones

GRANTOR:

Signature: Ket J.

Print Name: Kitti J. Jones

ACKNOWLEDGMENT

STATE OF SS. COUNTY OF

Joshua Norton Trepl NOTARY PUBLIC MINNESOTA My Commission Expires Jan 31, 2023

Sign Name

LTON TAROL ___Notary Public Print Name

My Commission Expires: 3/ 2023

GRANTEE:

ENBRIDGE ENERGY, LIMITED PARTNERSHIP BY: ENBRIDGE PIPELINES (LAKEHEAD) L.L.C. AS GENERAL PARTNER

By:

Print Name: John McKay Title: <u>Authorized Agent</u>

STATE OF SS COUNTY OF

ACKNOWLEDGMENT

The foregoing instrument was acknowledged before me this _____day of _____day of ______ 20_____, by John McKay, a duly Authorized Agent of Enbridge Pipelines (Lakehead) L.L.C., as General Partner of Enbridge Energy, Limited Partnership, a Delaware limited partnership, on behalf of the limited partnership.

Sign Name

	0 1	1 . 0	
Melie	abelnn	dall	Notary Public
Print Na	ame	-	

My Commission Expires: 01-31-2023

EXHIBIT A

This Exhibit A is attached to and made a part of this Road Use Agreement between **Todd A. Jones and Kitti J. Jones, husband and wife,** (Grantor) and Enbridge Energy, Limited Partnership (Grantee).

GRANTOR'S PROPERTY LEGAL DESCRIPTION (Grantor's Lands):

The Northwest Quarter of Southeast Quarter (NW1/4 of SE1/4) of Section Thirty-one (31), Township Fifty-one (51), Range Twenty-four (24), Aitkin County, Minnesota.

Parcel Identification Number (P.I.N.): 33-0-049700

Description of Road:

A parcel of land lying over, under, and across that part of the Northwest Quarter of the Southeast Quarter of Section 31, Township 51 North, Range 24 West of the 4th Principal Meridian, Aitkin County, Minnesota, that lies northerly of the following described line:

Commencing at the northeast corner of the Southeast Quarter of said Section 31; thence North 89 degrees 54 minutes 10 seconds West, along the north line of said Southeast Quarter, 1332.68 feet to the east line of said Northwest Quarter of the Southeast Quarter; thence South 01 degrees 29 minutes 43 seconds West, along said east line, 13.81 feet to the point of beginning of the line to be described; thence South 89 degrees 47 minutes 02 seconds West 1317.12 feet to the west line of said Northwest Quarter of the Southeast Quarter and said line terminating thereat. Said point of termination bears North 01 degrees 33 minutes 14 seconds East and is distant 2636.11 feet from the southwest corner of the Southeast Quarter of said Section 31.

As depicted in the attached Exhibit B.

Containing 0.53 acres.

Basis of Bearings: MN State Plane System, NAD 83, (2011), North Zone, (grid) Distance Measure: U.S. Survey Foot (grid)

PERMANENT ACCESS ROAD USE AGREEMENT

<u>Prepared By</u>: John McKay 26 East Superior Street, Suite #309 Duluth, MN 55802

<u>Return To</u>: Enbridge Energy, Limited Partnership 4602 Grand Avenue, Suite #900 Duluth, MN 55807

A447471

Office of the County Recorder Aitkin County, Minnesota

I HEREBY CERTIFY THE WITHIN INSTRUMENT WAS FILED, AND/OR RECORDED ON 9/20/2018 9:00 AM

PACKAGE: 59933

REC FEE: \$46.00

24

Michael T. Moriarty, Aitkin County Recorder

For Recorder's Use Only

PIN: 33-0-049600

Enbridge Tract No(s): MN-AI-058.003

The undersigned **Todd A. Jones and Kitti J. Jones, husband and wife**, ("Grantor"), whether one or more, its successors and assigns, for and in consideration of Ten Dollars (\$ 10.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, does hereby grant to Enbridge Energy, Limited Partnership, a Delaware limited partnership, with an office located at 119 North 25th Street East, Superior, Wisconsin 54880, its successors and assigns, ("Grantee"), and its agents, contractors and subcontractors, the perpetual right to open, maintain, repair, and use a vehicular roadway on, over and through private lands situated in the County of **Aitkin**, Minnesota (the "Road"), said lands and vehicular roadway being more particularly described in Exhibit A attached hereto and made a part hereof.

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The Grantor and Grantee further agree:

- 1. The Road may be used by Grantee for the purpose of ingress to and egress from Grantee's facility/pipeline right-of-way (whether located on or adjacent to the tract of land over which the Road is located) during any construction, operation, inspection, repair, replacement, and maintenance of Grantee's facilities/pipeline right-of-way. The Road may be used for the transport of equipment and the installation and use of such utilities as are deemed by Grantee to be necessary or convenient in the exercise of its rights with respect to Grantee's facilities.
- 2. The Road right-of-way shall be exclusive, and shall not grant or reserve any rights by the public or any third party, but rather shall be limited to and

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for the use of the Grantee, its agents and employees, and for persons, firms and corporations doing work for the Grantee. Notwithstanding the preceding sentence, Grantor shall be entitled to use of the Road, and to exercise Grantor's rights as fee owner of the land, subject to the Road, but such use and rights shall be subordinate to the rights granted to Grantee herein. Grantor shall promptly reimburse Grantee for any expenses incurred by Grantee in repairing damage to the Road caused by Grantor's use.

- 3. The existing Road surface, or the Road surface to be constructed by Grantee pursuant to this Agreement, will not be widened without the written consent of Grantor; however, it is understood and agreed that Grantee may use immediately adjacent property to maintain or repair the Road if necessary.
- 4. During the period of use by Grantee, Grantee will as soon as reasonably practicable repair damage to the Road caused by Grantee's operations or the operations of the Grantee's contractors or agents where such damage would impede traffic or endanger the safety of private landowners along the roadway. Grantee shall employ best efforts to keep the Road open to Grantor traffic. Additionally, Grantee shall use its best efforts to control dust in the areas of the Road in close proximity to housing, farming or other habitable areas.
- 5. Grantor agrees that the rights granted Grantee herein shall extend beyond any period of construction.
- 6. The rights granted hereby to Grantee may be assigned by Grantee in whole or in part, in Grantee's sole discretion.
- 7. The terms, stipulations, and conditions of this Agreement are subject to all applicable laws, regulations, and conditions of required permits, if any, held by Grantee.
- 8. This Agreement shall be governed by the law of the State of Minnesota without regard to conflict of law principles. This Agreement shall run with the land, and benefit and bind the parties and their respective successors and assigns.

IN WITNESS WHEREOF, the Grantor and Grantee have executed this Road Use Access Agreement this <u>May of</u> <u>Solution</u>, 20<u>1</u>.

GRANTOR:

Signature:

Print Name: Todd A. Jones

GRANTOR:

Signature:

Print Name: Kitti J. Jones

ACKNOWLEDGMENT

<u>innesola</u> <u>Aitkin</u> STATE OF _ SS. COUNTY OF

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1	OL UNI STAN	Joshua Norton Trepl
		NOTARY PUBLIC
1		MINNESOTA
(My Commission Expires Jan 31, 2023

Sign Name

loc Tom Notary Public

Print Name

3

023 My Commission Expires:

GRANTEE:

ENBRIDGE ENERGY, LIMITED PARTNERSHIP BY: ENBRIDGE PIPELINES (LAKEHEAD) L.L.C. AS GENERAL PARTNER

Bv:

Print Name: John McKay Title: <u>Authorized Agent</u>

ACKNOWLEDGMENT

STATE OF ININO X SS COUNTY OF

The foregoing instrument was acknowledged before me this day of <u>20</u>, by John McKay, a duly Authorized Agent of Enbridge Pipelines (Lakehead) L.L.C., as General Partner of Enbridge Energy, Limited Partnership, a Delaware limited partnership, on behalf of the limited partnership.

Sign Name

Notary Public Print Name

My Commission Expires: 01-31-2023

EXHIBIT A

This Exhibit A is attached to and made a part of this Road Use Agreement between **Todd A. Jones and Kitti J. Jones, husband and wife,** (Grantor) and Enbridge Energy, Limited Partnership (Grantee).

GRANTOR'S PROPERTY LEGAL DESCRIPTION (Grantor's Lands):

Northeast Quarter of Southeast Quarter (NE1/4 of SE1/4) of Section Thirty-one (31), Township Fifty-one (51), Range Twenty-four (24), Aitkin County, Minnesota.

Parcel Identification Number (P.I.N.): 33-0-049600

Description of Road:

A parcel of land lying over, under, and across that part of the Northeast Quarter of the Southeast Quarter of Section 31, Township 51 North, Range 24 West of the 4th Principal Meridian, Aitkin County, Minnesota, that lies northerly and easterly of the following described line:

Commencing at the northeast corner of the Southeast Quarter of said Section 31; thence South 01 degrees 46 minutes 35 seconds West, along the east line of said Northeast Quarter of the Southeast Quarter, 22.39 feet to the point of beginning of the line to be described; thence South 89 degrees 47 minutes 02 seconds West 58.68 feet; thence North 00 degrees 12 minutes 58 seconds West 15.86 feet; thence South 89 degrees 47 minutes 02 seconds West 1273.61 feet to the west line of said Northeast Quarter of the Southeast Quarter and said line terminating thereat.

As depicted in the attached Exhibit B.

Containing 0.33 acres.

Basis of Bearings: MN State Plane System, NAD 83, (2011), North Zone, (grid) Distance Measure: U.S. Survey Foot (grid)

