11-5-2021 LETTING ITEM 005 STATE OF ILLINOIS FOR INDEX OF SHEETS, SEE SHEET NO. 2 PROJECT LOCATED IN VILLAGES OF WADSWORTH, LAKE DEPARTMENT OF TRANSPORTATION **BLUFF AND GURNEE AND CITY OF LAKE FOREST PROPOSED** TRAFFIC DATA (US 41)* **LOCATION 4** LOCATION 1 2019 ADT = 46,400**HIGHWAY PLANS** 2019 ADT = 22,700POSTED SPEED (US 41 SB) = 55 MPH POSTED SPEED = 55 MPH POSTED SPEED (US 41 NB) = 45 MPH FAP ROUTE 346: US 41 (SKOKIE HWY) **LOCATIONS 2 AND 3 LOCATION 5** NORTH OF IL 173 TO SOUTH OF WESTLEIGH ROAD 2019 ADT = 33.2002017 ADT = 39.500**SECTION 2019-049-T** POSTED SPEED = 55 MPH POSTED SPEED = 45-55 MPH PROJECT: NHPP-TVJM(289) * FUNCTIONAL CLASSIFICATION = OTHER PRINCIPAL ARTERIAL OUIGG ENGINEERING INC. MAURICE MICHAEL OKRENT, P.E. 4062-035785 HBM ENGINEERING GROUP, LLC **CULVERT REHABILITATION, CULVERT** ROBERT T. BORD, P.E. *062-043749 **REMOVAL AND DRAINAGE** Lobert 1. Boro me ment of DATE: 07/29/2021 LAKE COUNTY DATE: 07/29/2021 SIGNATURE AND SEAL APPLY TO DRAWINGS: EXPIRATION DATE: 11-30-2021 SIGNATURE AND SEAL APPLY TO DRAWINGS: C-91-394-19 EXPIRATION DATE: 11-30-2021 19, 35, 39, 59 AND R11E R12E HBM ENGINEERING GROUP, LLC MOUSSA A. ISSA, PH.D. P.E., S.E. *081-005738 Mousse A Issa DATE: 07/29/2021 SIGNATURE AND SEAL EXPIRATION DATE: 11-30-2022 LOC. 1, US 41 OVER CR (0.4 M1) M OF (L 173, SN 049-0228) 3 ACCURATE DROUP, INC. DAVID A. HEYDEN, P.E. -002-051707 DAVID A HEYDEN 062-061701 DATE: 07/29/2021 SIGNATURE AND SEAL APPLY TO DRAWINGS 15-18, 20-34, 49-58 EXPIRATION DATE: 11-30-2021 LOC 2, US 41 OVER SMALL CR [0.3 MIL N OF IL 21, SN 049-2016] LOC, S. US 41 OVER DITCH (0.29 MG. S. OF B. 176) LAGE BLIFF LOC 3, US 41 OVER SMALL CR (0.5 Mg, N OF IL 21, SN 049-2016) LOC. 4. US 41 OVER DITCH (0.25 MI. 5 OF WESTLEIGH RD., SN 049-0576) LAGE FOREST FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREVENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED. JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 DR 815 PROJECT ENGINEER PRAVEEN KAINI, PE (847) 705-4237 QUIGG ENGINEERING INC PROJECT MANAGER J. ALAIN MIDY, P.E. (847) 221-3056 LOCATION MAP NOT TO SCALE CONTRACT NO. 62J26 GROSS LENGTH = NET LENGTH = 2300 FT = 0.44 MILE

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D-91-174-19



HBM ENGINEERING GROUP, LLC

STATE OF BLENOIS

DEPARTMENT OF TRANSPORTATION

SUBMITTED JULY 30 20 21

October 1 20 21

ENGINEER OF DESIGN AND ENVIRONMENT

October 1 21

DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION 2

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

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LIST OF HIGHWAY STANDARDS

STANDARD NO. DESCRIPTION

STANDARD SYMBOLS ABBREVIATIONS AND PATTERNS 000001-08 AREAS OF REINFORCEMENT BARS 001001-02 TEMPORARY EROSION CONTROL SYSTEMS 280001-07 442201-03 CLASS C AND D PATCHES 515001-04 NAME PLATE FOR BRIDGES 542301-03 PRECAST REINFORCED CONCRETE FLARED END SECTION 542546-01 FLUSH INLET BOX FOR MEDIAN 602401-07 4' (1.22 m) DIAMETER PRECAST MANHOLE TYPE A

602402-03 5' (1.52 m) DIAMETER PRECAST MANHOLE TYPE A 630001-12 STEEL PLATE BEAM GUARDRAIL STRONG POST GUARDRAIL ATTACHED TO STRUCTURE

630101-10 LONG-SPAN GUARDRAIL OVER CULVERT 630106-02

630301-09

SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS 631011-10 TRAFFIC BARRIER TERMINAL, TYPE 2

642001-02 SHOULDER RUMBLE STRIPS, 16 IN. SAND MODULE IMPACT ATTENUATORS 643001-02

701006-05 OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE

701101-05 OFF-RD OPERATIONS, MULTILANE, 15' TO 24"FROM PAVEMENT EDGE OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5m) AWAY 701106-02

701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

701311-03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY

LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS >= 45 MPH 701411-09 701421-08 LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS >= 45 MPH TO 55 MPH

701422-10 LANE CLOSURE, MULTILANE, FOR SPEEDS >= 45 MPH TO 55 MPH

701423-10 LANE CLOSURE, MULTILANE, WITH BARRIER, FOR SPEEDS >= 45 TO 55 MPH

701426-09 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS>= 45 MPH

701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED

701601-09 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN

701701-10 URBAN LANE CLOSURE, MULTILANE INTERSECTION 701901-08 TRAFFIC CONTROL DEVICES

TEMPORARY CONCRETE BARRIER 704001-08 725001-01 OBJECT AND TERMINAL MARKERS

TYPICAL PAVEMENT MARKINGS 780001-05 781001-04 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

COMMITMENTS



782006-01

USER NAME = ali.issa	DESIGNED -	AMI	REVISED -
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PLOT SCALE = 10.0000 / in.	CHECKED -	KJD, JMG	REVISED -
PLOT DATE = 6/18/2021	DATE -	6/18/2021	REVISED -

GENERAL NOTES

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL ""J.U.L.I.E.""AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
- 2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, AND THE VILLAGES OF WADSWORTH AND GURNEE AND CITY OF LAKE FOREST.
- 3. THE CONTRACTOR SHALL VERIFY THE EXISTING TYPE/HEIGHT OF EXISTING GUARDRAIL BEFORE ORDERING THE NEW TERMINAL SECTION. COST INCLUDED WITH THE COST OF THE TERMINAL, THE TERMINAL SECTION SHALL MATCH THE HEIGHT OF THE EXISTING GUARDRAIL..
- 4. FOR STORM SEWER CONSTRUCTED UNDER THE ROADWAY, BACKFILLING METHODS TWO AND THREE AUTHORIZED UNDER THE PROVISIONS OF ARTICLE 550.07 OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED.
- 5. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AS REQUIRED, PRIOR TO COMMENCING WITH CONSTRUCTION.
- 6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE BID PRICE FOR THE WORK,
- 7. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- 8. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS PRIOR TO BEGINNING WORK.
- 9. THE RESIDENT ENGINEER SHALL CONTACT WALTER CZARNY, AREA TRAFFIC FIELD ENGINEER, AT WALTER.CZARNY@ILLINOIS.GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT PAVEMENT MARKINGS.
- 10. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- 11. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 12. THE REMOVAL OF GUARDRAIL TERMINAL SECTIONS SHALL BE INCLUDED IN THE UNIT PRICE PER FOOT FOR "GUARDRAIL REMOVAL".
- 13. ALL DAMAGE TO EXISTING PAVEMENT MARKINGS OR RAISED REFLECTIVE PAVEMENT MARKERS OUTSIDE THE REMOVAL LINE SHOWN ON THE PLANS SHALL BE REPLACED AT NO ADDITIONAL COST TO THE DEPARTMENT.
- 14. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- 15. THIS PROJECT REQUIRES A US ARMY CORPS OF ENGINEERS (USACE) 404 PERMIT THAT WILL BE SECURED BY THE DEPARTMENT. AS A CONDITION OF THIS PERMIT, THE CONTRACTOR WILL NEED TO SUBMIT AN IN-STREAM WORK PLAN TO THE DEPARTMENT FOR APPROVAL. GUIDELINES ON ACCEPTABLE IN-STREAM WORK TECHNIQUES CAN BE FOUND ON THE USACE WEBSITE. THE USACE DEFINES AND DETERMINES IN-STREAM WORK. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT AN IN-STREAM WORK PLAN WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED WITH THE EXCEPTION OF COFFERDAMS WHICH WILL BE PAID FOR AS "COFFERDAM (TYPE 1) (IN-STREAM/WETLAND WORK)" WITH A BASIS OF PAYMENT OF EACH.
- 16. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF EXISTING PLANT MATERIAL FOR WHICH THE CONTRACT DOES NOT PROVIDE REMOVAL. THE PROTECTION OF EXISTING PLANT MATERIAL AND THE REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 201 OF THE STANDARD SPECIFICATIONS.
- 17. ALL TREE PROTECTION, TREE REMOVAL, PRUNING AND ROOT PRUNING SHALL BE COMPLETED BEFORE CONSTRUCTION OPERATIONS COMMENCE IN THE AREA. AT NO TIME SHALL THE CONTRACTOR PRUNE OR REMOVE ANY TREES UNLESS SPECIFICALLY DIRECTED BY THE ENGINEER.
- 18. THE ENGINEER WILL CONTACT THE ROADSIDE DEVELOPMENT UNIT AT (847)705-4171, AT LEAST 7 DAYS PRIOR TO TREE REMOVAL AND PRIOR TO PLANTING TO CHECK THE LAYOUT OF THE TREE REMOVAL, SELECTIVE CLEARING, WOODY PLANT CARE, AND OTHER LANDSCAPING ITEMS.
- 19. THE COST OF CONNECTING THE TRAFFIC BARRIER TERMINAL, TYPE 2 TO THE EXISTING GUARDRAIL AT STRUCTURE NO. 049-0575 IS INCLUDED IN THE COST OF THE TRAFFIC BARRIER TERMINAL, TYPE 2
- 20. THE CONTRACTOR SHALL ATTACH AN ALUMINUM SIGN WITH THE FOLLOWING TEXT: "PROTECTED WETLAND NO INTRUSION". THE SIGN(S) WILL BE ATTACHED TO THE STAKES BY THE METHOD APPROVED BY THE ENGINEER, THE SIGN(S) WILL BE PROVIDED BY THE DEPARTMENT AND SHALL BE PICKED UP BY THE CONTRACTOR FROM THE DISTRICT ONE ROADSIDE DEVELOPMENT ARCHITECT IN SCHAUMBURG, ILLINOIS. SCHEDULING THE PICK UP OF THE SIGNS CAN BE ARRANGED BY CONTACTING THE DISTRICT ONE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4171. WHEN WORK HAS BEEN COMPLETED, THE SIGN(S) SHALL BE RETURNED TO THE DISTRICT ONE ROADSIDE DEVELOPMENT UNIT. THE COST OF PICKING UP, ATTACHING THE SIGNS TO THE TEMPORARY STAKES AND RETURNING THE SIGNS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PERIMETER EROSION BARRIER.
- 21. THE RESIDENT ENGINEER WILL CONTACT LAKE COUNTY FOREST PRESERVE PRIOR TO THE START OF CONSTRUCTION TO INFORM THEM OF THE INITIATION OF CONSTRUCTION ACTIVITIES NEAR THEIR PROPERTIES.

SCALE: 10.0000 ' / in SHEET 1

GENERAL NOTES, INDEX OF SHEETS AND LIST OF HIGHWAY STANDARDS **US-41 CULVERTS** OF 1 SHEETS STA. TO STA.

SECTION COLINTY 2019-049-T LAKE 139 CONTRACT NO. 62J26

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

				CONSTRUCTION CODE						
					8	0% FED 20% STAT	`E			
CODE			TOTAL		T	0004	Γ			
NO.	ITEM	UNIT	QUANTITY	LOCATION 1	LOCATION 2	LOCATION 3	LOCATION 4	LOCATION 5		
				SN 049-0228	SN 049-2016	SN 049-2015	SN 049-0575			
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	84	69			15			
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	243	227			16			
20101000	TEMPORARY FENCE	FOOT	180				180			
20200100	EARTH EXCAVATION	CU YD	3909	405	1330	1330	841	3		
20200100		00 1.5		.00	1330	1330	0.12			
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	46.2	11.6	22.6	12				
20400800	FURNISHED EXCAVATION	CU YD	106		36	45	25			
20700220	POROUS GRANULAR EMBANKMENT	CU YD	47	14	9	13	11			
20800150	TRENCH BACKFILL	CU YD	73	57			16			
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	550	151	146	72	181			
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	60					60		
21400100	GRADING AND SHAPING DITCHES	FOOT	280	70			210			
25000210	SEEDING, CLASS 2A	ACRE	0.58	0.19	0.18	0.03	0.17	0.01		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	87	25	23	11	27	1		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	87	25	23	11	27	1		
2300000	OTASSISM FERTILIZER MOTRIENT	1 JOIND	37	2.7	2.5	**		1		
* SPECIAL	I TY ITEM									

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 PLOT DATE
 = 10/8/2020
 DATE
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

 SUMMARY OF QUANTITIES
 F.A.P. RTE.
 SECTION

 US-41 CULVERTS
 346
 2019-0

 SCALE: 80.0000 ' / in SHEET 1 OF 8 SHEETS STA. TO STA.
 TO STA.
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				CONSTRUCTION CODE							
						30% FED 20% STAT					
CODE			TOTAL			0004	L				
NO.	ITEM	UNIT	QUANTITY	LOCATION 1	LOCATION 2	LOCATION 3	LOCATION 4	LOCATION 5			
""			95/11/11/1	SN 049-0228	SN 049-2016	SN 049-2015	SN 049-0575	200/11011 3			
				311 013 0220	311 013 2010	311 613 2613	314 013 0373				
25100630	EROSION CONTROL BLANKET	SQ YD	2811	941	852	157	841	20			
25100635	HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	1944	406	409	452	637	40			
28000305	TEMPORARY DITCH CHECKS	FOOT	100	30	10	10	20	30			
28000400	PERIMETER EROSION BARRIER	FOOT	6263	2069	2047	332	1785	30			
28100105	STONE RIPRAP, CLASS A3	SQ YD	12					12			
20100103		34.13	12								
28100107	STONE RIPRAP, CLASS A4	SQ YD	47		22	25					
28100113	STONE RIPRAP, CLASS A7	SQ YD	48	48							
28200200	FILTER FABRIC	SQ YD	81	34	22	25					
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	1892	1892							
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	10415	1573	2528	2528	3786				
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	1300	118	449	449	284				
40700100	BITUMINOUS MATERIALS (TACK COAT)	POUND	142	142							
40701881	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 10"	SQ YD	1892	1892							
44000300	CURB REMOVAL	FOOT	701	701							
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PLOT DATE = 10/8/2020	DATE	-	10/8/2020	REVISED -

SUMMARY OF QUANTITIES	F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
US-41 CULVERTS	346	2019-049-T	LAKE	139	4
00-11 00EVENTO			CONTRAC	T NO. 62	2J26
SCALE: 80.0000 / in SHEET 2 OF 8 SHEETS STA. TO STA.		ILLINOIS FED. /	AID PROJECT		

	1			CONSTRUCTION CODE							
					8	0% FED 20% STAT	<u>E</u>				
CODE			TOTAL		T	0004					
NO.	ITEM	UNIT	QUANTITY	LOCATION 1	LOCATION 2	LOCATION 3	LOCATION 4	LOCATION 5			
				SN 049-0228	SN 049-2016	SN 049-2015	SN 049-0575				
44003100	MEDIAN REMOVAL	SQ FT	1465	1465							
44003100	INICOTAN REMOVAL	30 11	1405	1405							
44004250	PAVED SHOULDER REMOVAL	SQ YD	10415	1573	2528	2528	3786				
		34 .5	10.13	1373		2323	3.00				
48101620	AGGREGATE SHOULDERS, TYPE B 10"	SQ YD	111	55	36	14	6				
48203045	HOT-MIX ASPHALT SHOULDERS, 12"	SQ YD	10415	1573	2528	2528	3786				
50102400	CONCRETE REMOVAL	CU YD	108.2	25.2	45.3	31	6.7				
50105220	PIPE CULVERT REMOVAL	FOOT	10					10			
E020022E	CONCRETE STRUCTURES	CU YD	19.5		19.5						
30300223	CONCRETE STRUCTURES	CO 1D	19.5		19.5						
50800105	REINFORCEMENT BARS	POUND	21,570	5550	10,970	5000		50			
50800515	BAR SPLICERS	EACH	16		16						
51500100	NAME PLATES	EACH	3	1	1	1					
52200010	TEMPORARY SHEET PILING	SQ FT	2640	1105	512	1023					
F 4003000	CONCRETE DOX CHINEDIG	CIL YO	76.0	25.5	20.0	20.4					
54003000	CONCRETE BOX CULVERTS	CU YD	76.8	25.5	20.9	30.4					
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	1	1							
			-	-							
54213675	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	EACH	1					1			



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PLOT SCALE = 80.0000 ' / in.	CHECKED -	KJD, JMG	REVISED -
PLOT DATE = 10/8/2020	DATE -	10/8/2020	REVISED -

	SUMMARY OF QUANTITIES US-41 CULVERTS							F.A.P. RTE. SECTION		TOTAL SHEETS	SHEET NO.
								2019-049-T	LAKE	139	5
		٠,	,,	COLVE	1113		CONTRACT NO. 62J26				
SCALE: 80.0000 ' / in SHEET 3 OF 8 SHEETS STA. TO STA.							(ILLINOIS (FED. AID PROJECT				

URBAN CONSTRUCTION CODE

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					8	0% FED 20% STAT	·E	
CODE			TOTAL			0004		
NO.	ITEM	UNIT	QUANTITY	LOCATION 1	LOCATION 2	LOCATION 3	LOCATION 4	LOCATION 5
				SN 049-0228	SN 049-2016	SN 049-2015	SN 049-0575	
54244405	FLUSH INLET BOX FOR MEDIAN, STANDARD 542546	EACH	1	1				
54248510	CONCRETE COLLAR	CU YD	0.9					0.9
E424022E	PIPE CULVERTS, CLASS A, TYPE 1 30"	FOOT	6					6
542AU235	PIPE COLVERTS, CLASS A, TYPE 1 30"	FOOT	0					
E E O A O O S O	STORM SEWERS, CLASS A, TYPE 1 16"	FOOT	20		20			
330A0080	STORM SEWERS, CLASS A, TIPE 1 10	F001	20		20			
55040090	STORM SEWERS, CLASS A, TYPE 1 18"	FOOT	18				18	
330/10030	Status, Ceriss A, Tite 1	1001	10					
550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT	117	74			43	
55100500	STORM SEWER REMOVAL 12"	FOOT	28	28				
55100800	STORM SEWER REMOVAL 16"	FOOT	20		20			
55100900	STORM SEWER REMOVAL 18"	FOOT	18	18				
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	108.1				108.1	
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1				
60221000	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1				1	
60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1				1	
63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	1075	512.5	387.5	137.5	37.5	



	USER NAME = ali.issa	DESIGNED	-	AMI	REVISED -
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	PLOT SCALE = 80.0000 / in.	CHECKED	-	KJD, JMG	REVISED -
	PLOT DATE = 10/8/2020	DATE	-	10/8/2020	REVISED -
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	SUMMARY OF QUANTITIES US-41 CULVERTS							F.A.P. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
								2019-049-T		LAKE	139	6
	<u>, </u>	03		COLVE	1110					CONTRACT	NO. 62	2J26
	SCALE: 80.0000 / in SHEET 4	OF	8	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT					

			URBAN CONSTRUCTION CODE						
CODE		TOTAL		8	0% FED 20% STAT	E			
CODE	LINIT	TOTAL QUANTITY	LOCATION 1	LOCATION 2	0004 LOCATION 3	LOCATION 4	LOCATION F		
NO. ITEM	UNIT	QUANTITY	SN 049-0228	SN 049-2016	SN 049-2015	SN 049-0575	LOCATION 5		
			SN 049-0228	SN 049-2016	SN 049-2015	SN 049-0373			
* 63000030 STRONG POST GUARDRAIL ATTACHED TO CULVERT	FOOT	63	25	13	25				
* 63000350 LONG-SPAN GUARDRAIL OVER CULVERT, 12 FT 6 IN SPAN	FOOT	26		13		13			
* 63100045 TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	7	2	2	2	1			
* 63100167 TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2	2						
63200310 GUARDRAIL REMOVAL	FOOT	629	194	79	79	277			
63301210 REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	100		37.5	25	37.5			
* 63301235 REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURES	FOOT	38		13	25				
63302000 REMOVE AND REERECT TRAFFIC BARRIER TERMINALS, TYPE 2	EACH	156	16	64	76				
63800920 MODULAR GLARE SCREEN SYSTEM, TEMPORARY	FOOT	2410		1205	1205				
64200116 SHOULDER RUMBLE STRIPS, 16 INCH	FOOT	11129	1147	3733	3075	3174			
* 66900200 NON-SPECIAL WASTE DISPOSAL	CU YD	3320	664	664	664	664	664		
* 66900530 SOIL DISPOSAL ANALYSIS	EACH	6	1.2	1.2	1.2	1.2	1.2		
* 66901001 REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	0.2	0.2	0.2	0.2	0.2		
* 66901003 REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	0.2	0.2	0.2	0.2	0.2		
* 66901006 REGULATED SUBSTANCES MONITORING	CAL DA	10	2	2.5	2.5	2	1		

^{*} SPECIALTY ITEM



USER NAME = ali.issa	DESIGNED	-	AMI	REVISED	-
	DRAWN	-	AMI	REVISED	-
PLOT SCALE = 80.0000 ' / in.	CHECKED	-	KJD, JMG	REVISED	-
PLOT DATE = 8/3/2021	DATE	-	8/3/2021	REVISED	-

SUMMARY	F.A.P. RTE.	SECTION			
US-41	346	2019-049-7			
00-11	OOLVL				,
SCALE: 80.0000 ' / in SHEET 5 OF 8	SHEETS	STA.	TO STA.		(ILLIN

				URBAN				
					C	ONSTRUCTION COD	E	
					8	0% FED 20% STAT	Е	
CODE			TOTAL		T	0004		
NO.	ITEM	UNIT	QUANTITY	LOCATION 1	LOCATION 2	LOCATION 3	LOCATION 4	LOCATION 5
				SN 049-0228	SN 049-2016	SN 049-2015	SN 049-0575	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	2.4	2.4	2.4	2.4	2.4
67100100	MOBILIZATION	L SUM	1	0.2	0.2	0.2	0.2	0,2
07100100	MODILIZATION	L JOIN	1	0,2	0,2	0,2	0 , 2	0,2
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	252	112	42	42	56	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	36	13	5	5	13	
70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	31791	5412	12998	6241	7140	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	2376	500	475	450	788	163
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	2550	900	937.5	412.5	300	
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	3	1	1	1		
70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	4		1		2	1
70600332	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	1				1	
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	3		2	1		
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	2	2				
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	16357	1754	7072	3831	3700	
* 70000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	1587	1587				
/6000500	THE TOWNS - LINE &	1001	1387	138/				
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	1699	170	726	561	242	
* SPECIAL	TV ITEM							



USER NAME = ali.issa	DESIGNED	-	AMI	REVISED	-
	DRAWN	-	AMI	REVISED	-
PLOT SCALE = 80.0000 / in	CHECKED	-	KJD, JMG	REVISED	-
PLOT DATE = 8/13/2021	DATE	-	8/13/2021	REVISED	-

	5	SUMMA	ARY	OF QU	ANTITIES	3
		US	– 4′	CULVE	RTS	
SCALE: 80.0000 / in	SHEET 6	OF	8	SHEETS	STA.	TO STA

F.A.P. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEE NO.
346	2019-049-T		LAKE	139	8
			CONTRACT	NO. 62	2J26
	ILLINOIS	FED. A	ID PROJECT		

				CONSTRUCTION CODE 80% FED 20% STATE						
CODE			TOTAL		<u> </u>	0004	E			
NO.	ITEM	UNIT	QUANTITY	LOCATION 1 SN 049-0228	LOCATION 2 SN 049-2016	LOCATION 3 SN 049-2015	LOCATION 4 SN 049-0575	LOCATION 5		
78100300	REPLACEMENT REFLECTOR	EACH	182	16	88	36	42			
78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	31	11	12	6	2			
78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	14					14		
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	5339	670	2206	1222	1241			
K1004595	PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	L SUM	1	0.5			0.5			
X0322194	POLYMER MODIFIED PORTLAND CEMENT MORTAR	SQ FT	132		38	94				
X0323723	CONCRETE BARRIER WALL REMOVAL AND REPLACEMENT, LOCATION 1	L SUM	1				1			
X0327301	RELOCATE EXISTING MAILBOX	EACH	1			1				
X0900064	MEMBRANE WATERPROOFING SYSTEM FOR BURIED STRUCTURES	SQ YD	78	22	41	15				
X0900075	COFFERDAM (TYPE 1) (IN-STREAM/WETLAND WORK)	EACH	5	1	1	1	1	1		
X2501800	SEEDING, CLASS 4 (MODIFIED)	ACRE	0.45	0.09	0.1	0.09	0.16	0.01		
X2502024	SEEDING, CLASS 4B (MODIFIED)	ACRE	0.44							
X5430110	CORRUGATED STEEL ARCH LINER	FOOT	139	139						
X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	411	160	143	62	46			

^{*} SPECIALTY ITEM

^{**} NON-PARTICIPATING



USER NAME = ali.issa	DESIGNED - AMI	REVISED -
	DRAWN - AMI	REVISED -
PLOT SCALE = 80.0000 / in.	CHECKED - KJD, JMG	REVISED -
PLOT DATE = 6/18/2021	DATE - 6/18/2021	REVISED -

SUMMARY OF QUANTITIES	F.A RT	F.A.P. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.		
US-41 CULVERTS	3-	346	2019-049-T		LAKE	139	9	
03-41 COLVENTS						CONTRACT	T NO. 62	2J26
SCALE: 80.0000 / in SHEET 7 OF 8 SHEETS STA. TO S	TA.			ILLINOIS	FED. AI	D PROJECT		

				URBAN						
_				CONSTRUCTION CODE						
CODE			TOTAL		8	00% FED 20% STAT 0004	E			
NO.	ITEM	UNIT	QUANTITY	LOCATION 1 LOCATION 2		LOCATION 3	LOCATION 4	LOCATION		
				SN 049-0228	SN 049-2016	SN 049-2015	SN 049-0575			
X5537900	STORM SEWERS TO BE CLEANED 15"	FOOT	111		111					
X5538000	STORM SEWERS TO BE CLEANED 18"	FOOT	182				182			
X5538200	STORM SEWERS TO BE CLEANED 24"	FOOT	252				252			
X7010216	5 TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1.00					1.00		
X7030005	5 TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	10597	1804	4333	2080	2380			
X7830050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	182	16	88	36	42			
Z0005305	5 BOX CULVERTS TO BE CLEANED	FOOT	312		99	113	100			
Z0013798	3 CONSTRUCTION LAYOUT	L SUM	1	0.2	0.2	0.2	0.2	0.2		
Z0015550	DEBRIS REMOVAL	CU YD	20					20		
Z0018500	D DRAINAGE STRUCTURES TO BE CLEANED	EACH	4	1			3			
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	211	77.1	25.7	57.2	51			
Z0054400	O ROCK FILL	CU YD	47	12	23	12				
Z0076600) TRAINEES	HOUR								
	7 CLASS D PATCHES, TYPE I, 8 INCH (SPECIAL)	SQ YD	188	48	115	25				
	3 CLASS D PATCHES, TYPE I, 13 INCH (SPECIAL)	SQ YD	101	32			69			
Z0076600	TRAINEES	HOURS	500	500						
Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOURS	500	500						

^{*} SPECIALTY ITEM

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HBM ENGINEERING GROUP, LLC

USER NAME = ali.Issa	DESIGNED	-	AMI	REVISED _	Ī
	DRAWN	-	AMI	REVISED -	
PLOT SCALE = 80.0000 ' / in.	CHECKED	-	KJD, JMG	REVISED -	
PLOT DATE = 10/8/2020	DATE	-	10/8/2020	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

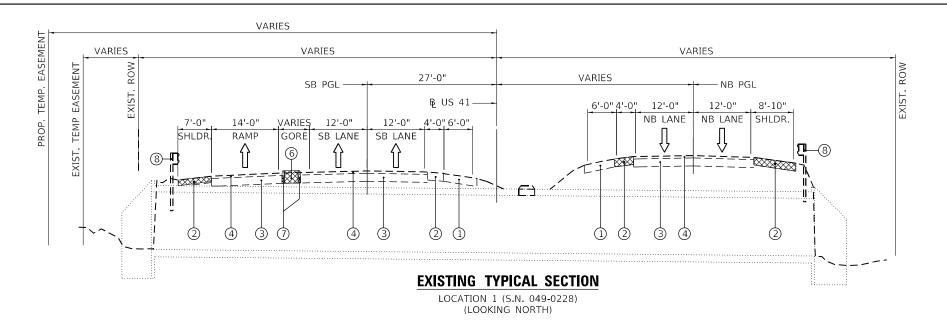
		NON-PART 100% STA	TΕ
SUMMARY OF QUANTITIES	F.A.P. RTE.	SECTION	С
US-41 CULVERTS	346	2019-049 <i>-</i> T	
OS-41 GOLVENIS			

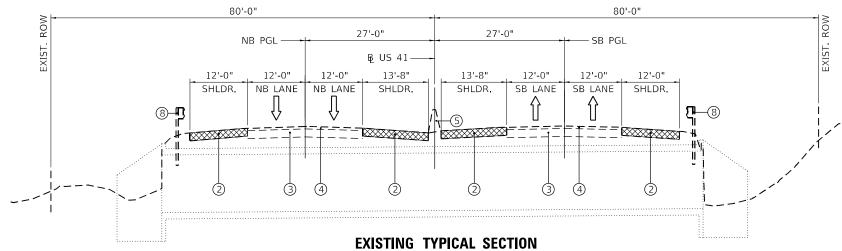
TO STA.

SCALE: 80.0000 ' / in SHEET 8 OF 8 SHEETS STA.

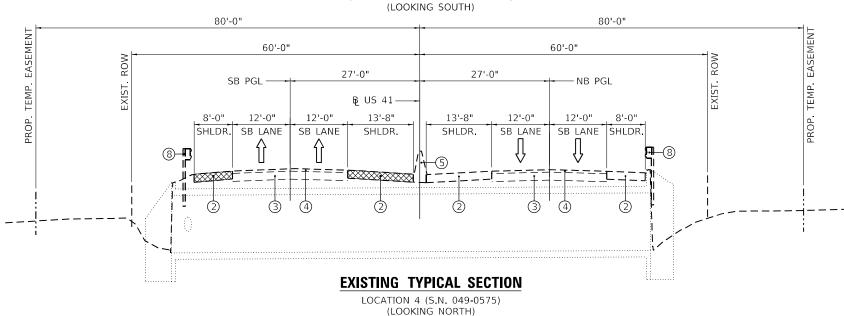
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^{**} NON-PARTICIPATING





LOCATION 2 AND 3 (S.N. 049-2016 AND S.N. 049-2015) (CULVERT S.N. 049-2016 SHOWN)



SHOULDER DEPTHS

LOCATION	SHOULDER
(SN)	DEPTHS
LOCATION 1	
049-0228	8"
LOCATION 2	
049-2016	8"
LOCATION 3	
049-2015	8"
LOCATION 4	0.11
049-0575	8"

LEGEND

- (1) EXISTING AGGREGATE SHOULDER
- (2) EXISTING HMA SHOULDER
- ③ EXISTING CONCETE PAVEMENT 10"
- 4 EXISTING HMA SURFACE 3"
- (5) EXISTING CONCRETE BARRIER WALL
- 6 MEDIAN REMOVAL
- 7 CURB REMOVAL
- 8 GUARDRAIL REMOVAL

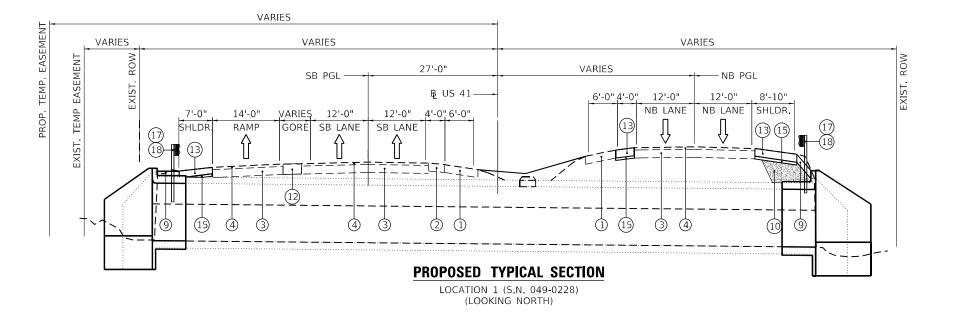
ENGINEERING GROUP LLC

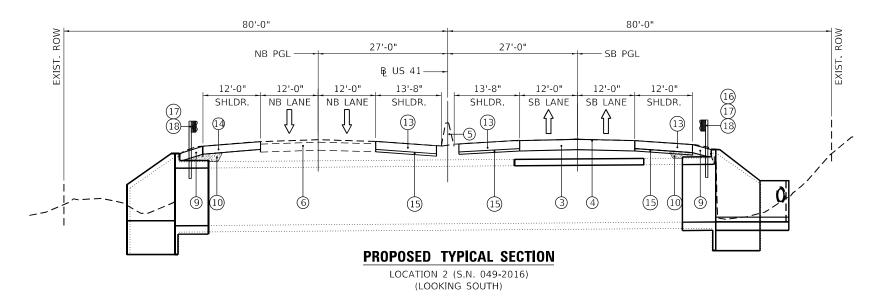
USER NAME = ali.issa	DESIGNED	-	AMI	REVISED	-
	DRAWN	-	AMI	REVISED	-
PLOT SCALE = 20.0000 / in.	CHECKED	-	KJD, JMG	REVISED	-
PLOT DATE = 10/8/2020	DATE	-	10/8/2020	REVISED	-

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

	RTE.	SECTION					
	346	2019-049-					
SCALE: 20.0000 / in SHEE	T 1 OF	3	SHEETS	STA.	TO STA.		ILLII

LAKE 139 11 CONTRACT NO. 62J26





HMA MIXTURE TABLE

PAY ITEM MIX TYPE		% AIR VOIDS	QMP			
DESCRIPTION	MIX THE	@ Ndes	DESIGNATION			
CLASS D PATCHES, (SPECIAL)	HOT-MIX ASPHALT SURFACE COURSE, MIX D, N70 (IL-9.5mm); TOP 2"	4%@70 GYR	QC/QA			
	(HMA BINDER IL-19 mm)	4%@70 GYR	QC/QA			
SHOULDER RUMBLE STRIPS, 16 INCH	HOT-MIX ASPHALT SURFACE COURSE, MIX D, N70 (IL-9.5mm)	4%@70 GYR	QC/QA			
HMA PAVEMENT FULL DEPTH 10"	HOT-MIX ASPHALT SURFACE COURSE, MIX D, N70 (IL-9.5mm); TOP 2"	4%@70 GYR	QC/QA			
	(HMA BINDER IL-19 mm)	4%@70 GYR	QC/QA			
HMA SHOULDER, 12" HOT-MIX ASPHALT SURFACE COURSE, MIX D, N70 (IL-9.5mm); TOP 2"		4%@70 GYR	QC/QA			
	(HMA BINDER IL-19 mm)	4%@70 GYR	QC/QA			
OMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA):						

QUALITY CONTROL FOR PERFORMANCE (QCP)

QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIES THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIX QUANTITIES IS 112 LBS/SQYD/IN, THE AC TYPE FOR POLYMERIZIED HMA MIXTURES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR USE OF RECYCLE MATERIALS SEE DISTRICT ONE SPECIAL PROVISIONS.

LEGEND

- 1 EXISTING AGGREGATE SHOULDER
- ② EXISTING HMA SHOULDER
- EXISTING CONCETE PAVEMENT 10"
- (4) EXISTING HMA SURFACE 3"
- (5) EXISTING CONCRETE BARRIER WALL
- (6) CLASS D PATCHES, TYPE I, 13 INCH (SPECIAL)
- CONCRETE BARRIER WALL REMOVAL AND REPLACEMENT, LOCATION 1
- TOPSOIL EXCAVATION AND PLACEMENT
- AGGREGATE SHOULDER, TYPE B 10"
- 10 POROUS GRANULAR EMBANKMENT
- (11) EMBANKMENT
- 12) HMA PAVEMENT FULL DEPTH 10" WITH AGGREGATE SUBGRADE IMPROVEMENT 12"
- (13) HMA SHOULDER, 12"
- CLASS D PATCHES, TYPE I, 8 INCH (SPECIAL)
- SUBBASE GRANULAR MATERIAL, TYPE B

- (16) LONG-SPAN GUARDRAIL OVER CULVERT, 12 FT 6 IN SPAN STA. 379+93.50 RT TO STA. 380+06.00 RT STA. 69+91.50 LT TO STA. 70+04.00 LT
- STRONG POST GUARDRAIL ATTACHED TO CULVERT STA. 49+98.50 LT TO STA. 50+11.00 LT STA. 49+96.25 RT TO STA. 50+08.75 RT STA. 379+95.25 LT TO STA. 380+07.75 LT STA. 393+84.25 LT TO STA. 393+96.75 LT STA. 393+25.25 RT TO STA. 393+37.75 RT
- STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS STA, 49+73.50 LT TO STA, 49+98.50 LT STA. 45+40.00 RT TO STA. 49+96.25 RT STA, 50+08,75 RT TO STA, 50+27,50 RT STA. 379+76.50 LT TO STA. 379+95.25 LT STA. 380+07.75 LT TO STA. 380+26.50 LT STA. 379+68.50 RT TO STA. 379+93.50 RT STA, 380+06.00 RT TO STA, 383+18.00 RT STA. 393+66.13 LT TO STA. 393+84.25 LT STA. 393+96.75 LT TO STA. 394+15.50 LT STA. 392+94.00 RT TO STA. 393+25.25 RT STA, 393+37.75 RT TO STA, 393+81.50 RT STA. 69+79.00 LT TO STA. 69+91.50 LT STA. 70+04.00 LT TO STA. 70+29.00 LT

HBM
ENGINEERING GROUP, LLC

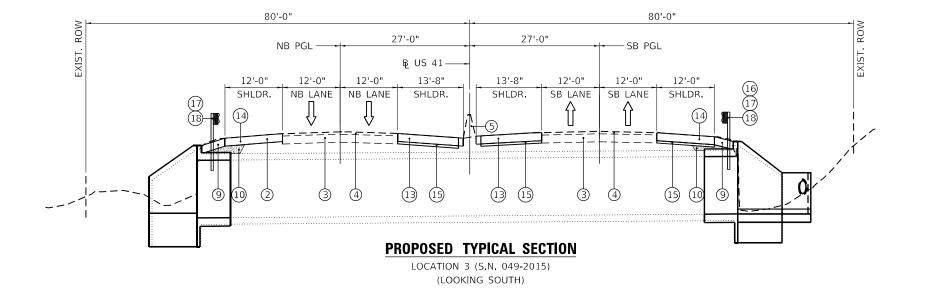
USER NAME = ali.issa	DESIGNED -	-	AMI	REVISED -
	DRAWN -	-	AMI	REVISED -
PLOT SCALE = 20.0000 / in.	CHECKED -	-	KJD, JMG	REVISED -
PLOT DATE = 10/8/2020	DATE -		10/8/2020	REVISED -

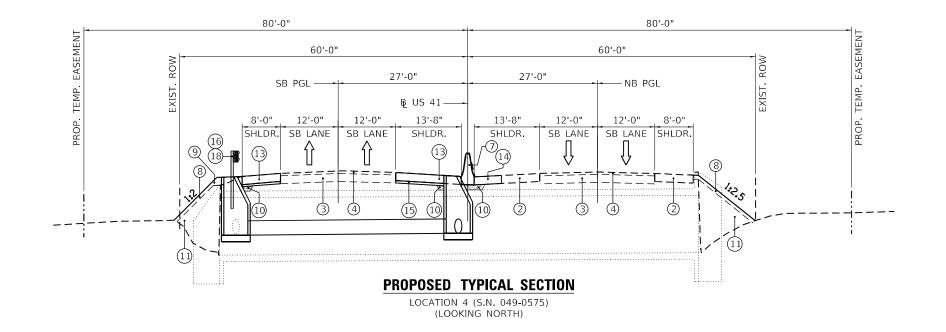
STATE OF ILLINOIS

PROPOSED TYPICAL SECTIONS US-41 CULVERTS								

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHI	
346	2019-049-T	LAKE	139	1	
		CONTRACT	NO. 62	2J26	
	TITIMOIS	EED A	ID PROJECT		

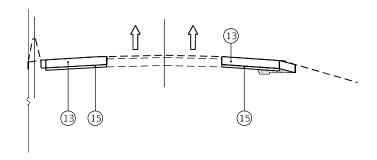
DEPARTMENT OF TRANSPORTATION





LEGEND

- (1) EXISTING AGGREGATE SHOULDER
- 2 EXISTING HMA SHOULDER
- ③ EXISTING CONCETE PAVEMENT 10"
- 4 EXISTING HMA SURFACE 3"
- 5 EXISTING CONCRETE BARRIER WALL
- (6) CLASS D PATCHES, TYPE I, 13 INCH (SPECIAL)
- O CONCRETE BARRIER WALL REMOVAL AND REPLACEMENT, LOCATION 1
- 8 TOPSOIL EXCAVATION AND PLACEMENT
- (9) AGGREGATE SHOULDER, TYPE B 10"
- (10) POROUS GRANULAR EMBANKMENT
- 11) EMBANKMENT
- (12) HMA PAVEMENT FULL DEPTH 10" WITH AGGREGATE SUBGRADE IMPROVEMENT 12"
- (13) HMA SHOULDER, 12"
- (14) CLASS D PATCHES, TYPE I, 8 INCH (SPECIAL)
- (15) SUBBASE GRANULAR MATERIAL, TYPE B 4"
- (16) LONG-SPAN GUARDRAIL OVER CULVERT, 12 FT 6 IN SPAN STA. 379+93.50 RT TO STA. 380+06.00 RT STA. 69+91.50 LT TO STA. 70+04.00 LT
- (1) STRONG POST GUARDRAIL ATTACHED TO CULVERT STA. 49+98.50 LT TO STA. 50+11.00 LT STA. 49+96.25 RT TO STA. 50+08.75 RT STA. 379+95.25 LT TO STA. 380+07.75 LT STA. 393+84.25 LT TO STA. 393+96.75 LT STA. 393+25.25 RT TO STA. 393+37.75 RT
- (18) STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS STA. 49+73.50 LT TO STA. 49+98.50 LT STA. 45+40.00 RT TO STA. 49+96.25 RT STA. 50+08.75 RT TO STA. 50+27.50 RT STA. 379+76.50 LT TO STA. 379+95.25 LT STA. 380+07.75 LT TO STA. 380+26.50 LT STA. 379+68.50 RT TO STA. 379+93.50 RT STA. 380+06.00 RT TO STA. 383+18.00 RT STA. 393+66.13 LT TO STA. 393+84.25 LT STA. 393+96.75 LT TO STA. 394+15.50 LT STA. 392+94.00 RT TO STA. 393+25.25 RT STA. 393+37.75 RT TO STA. 393+81.50 RT STA. 69+79.00 LT TO STA. 69+91.50 LT STA. 70+04.00 LT TO STA. 70+29.00 LT



TYPICAL PRESTAGE SHOULDER RECONSTRUCTION. FOR STAGED TRAFFIC



	USER NAME = ali.issa	DESIGNED	-	AMI	REVISED -	l
		DRAWN	-	AMI	REVISED -	1
	PLOT SCALE = 20.0000 / in.	CHECKED	-	KJD, JMG	REVISED -	1
	PLOT DATE = 10/8/2020	DATE	-	10/8/2020	REVISED -	
_						

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTIONS US-41 CULVERTS								
SCALE: 20.0000 / in	SHEET 3	OF	3	SHEETS	STA.	TO STA.		

					EARTHWORK SC	CHEDULE			
LOCATION	STRUTURE NUMBER	EARTH EXCAVATION (CU YD)		EXCAVATION FOR CULVERT (CU YD)	EXCAVATION FOR DRAINAGE STRUCTURES (CU YD)	EXCAVATION ADJUSTED FOR SHRINKAGE 15% (CU YD)	UNSUITABLE MATERIAL (CU YD)	EMBANKMENT (CU YD)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU YD)
LOCATION 1	SN 049-0228	405	85	326	69	680	0	381	+299
LOCATION 2	SN 049-2016	1330	91	312	0	1396	0	303	+1093
LOCATION 3	SN 049-2015	1330	88	389	0	1462	0	376	+1086
LOCATION 4	SN 049-0575	841	116	17	16	743	0	53	+690
LOCATION 5		3	-	6	0	8	0	10	-2
TOTAL	-	-	-	-	-	-	-	-	+3166

				TEMPORARY TR	AFFIC CONTROL				
LOCATION	OCATION STRUTURE STATION TO STATION		RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL (EACH) X7830050	PAVEMENT MARKING REMOVAL WATER BLASTING (SQ FT) X0327980	TEMPORARY PAVEMENT MARKING REMOVAL (SQ FT) X7030005	REPLACEMENT REFLECTOR (EACH) 78100300	PAVEMENT MARKING TAPE, TYPE IV -4" (FOOT) 70300904	FILL EXISTING RUMBLE STRIP (FOOT) X0326650	
LOCATION 1	SN 049-0228	36+62.00	54+17.00	16	480	1804	16	5412	1147
LOCATION 2	SN 049-2016	370+01.00	390+80.00	30	1637	2799.8	30	8399.3	3733
LOCATION 3	SN 049-2015	390+80.00	407+26.00	35	1447	2344.6	35	7033.8	3075
LOCATION 4	SN 049-0575	61+60.00	78+95.00	42	1341	2381.3	42	7143.8	3174

TREE REMOVAL (6 TO 15 UNITS DIAMETER)									
LOCATION	STRUTURE NUMBER	STATION	OFFSET	DIAMETER					
LOCATION 1	SN 049-0228	STA. 46+29	76' LT	6					
		STA. 46+34	79' LT	6					
		STA, 48+91	78' LT	14					
		STA. 50+04	72' RT	12					
		STA, 50+17	80' LT	9					
		STA. 51+54	84' LT	10					
		STA. 51+79	80' LT	12					
LOCATION 4	SN 049-0575	STA. 69+55	80' RT	15					

	TREE REMOVAL (OVER 15 UNITS DIAMETER)									
LOCATION	STRUTURE NUMBER	STATION	OFFSET	DIAMETER						
LOCATION 1	SN 049-0228	STA, 45+28	70' RT	28						
		STA. 46+08	76' LT	30						
		STA. 46+09	76' LT	24						
		STA. 46+52	78' LT	24						
		STA. 47+98	81' LT	24						
		STA. 49+91	81' RT	17						
		STA. 49+86	79' LT	17						
		STA. 50+13	81' RT	23						
		STA. 50+65	81' LT	24						
		STA. 51+80	81' LT	16						
LOCATION 4	SN 049-0575	STA, 69+76	78' RT	16						

	SHOULDER RUMBLE STRIPS, 16 INCH										
LOCATION BOUND STAGE STATION TO STATION OFFSET											
LOCATION 1	SB	1	48+40.00		55+40.00	20 TO 34 RT	466.67				
LOCATION 1	NB	1	47+64.00		51+75.00	46 TO 73 RT	182.67				
LOCATION 1	NB	2	46+61.00		54+17.00	14 LT	924.00				
LOCATION 2/3	NB	1	372+26.00		407+26.00	14 RT	5055.56				
LOCATION 2/3	SB	1	370+01.00		403+09.00	14 LT	4778.22				
LOCATION 2	SB	2	370+01.00		387+46.00	14 RT	2132.78				
LOCATION 4	SB	1	64+30.00		78+70.00	14 LT	1280.00				
LOCATION 4	SB	2	61+60.00		78+94.00	41 LT	2506.11				

GUARDRAIL REMOVAL									
GOARDINAL REMOVAL									
LOCATION	BOUND	STAGE	STATION	то	STATION	LENGTH			
LOCATION 1	NB	1	49+12.00		50+40.50	128.5			
LOCATION 1	SB	3	49+84.00		50+49.00	65			
LOCATION 2	NB	1	379+87.00		380+26.50	39.5			
LOCATION 2	SB	2	379+68.50		380+08.00	39.5			
LOCATION 3	NB	1	393+76.00		394+15.50	39.5			
LOCATION 3	SB	2	392+94.00		393+33.50	39.5			
LOCATION 4	NB	2	68+04.00		70+31.00	227			
LOCATION 4	SB	2	69+79.00		70+29.00	50			

		STEEL PLATE	BEAM GUARDRAII	_, TY	PE A	
LOCATION	BOUND	STAGE	STATION	то	STATION	LENGTH
LOCATION 1	SB	3	49+73.50		49+98.50	25'
	NB	1	45+40.00		49+96.25	462.5
	NB	1	50+08.75		50+27.50	25'
LOCATION 2	NB	1	379+68.50		379+93.50	25'
	NB	1	380+06.00		383+18.00	312.5'
	SB	2	379+76.50		379+95.25	25'
	SB	2	380+07.75		380+26.50	25'
LOCATION 3	NB	1	392+94.00		393+25.25	37.5
	NB	1	393+37.75		393+81.50	50'
	SB	2	393+66.13		393+84.25	25'
	SB	2	393+96.75		394+15.50	25'
LOCATION 4	SB	2	69+79.00		69+91,50	12.5'
	SB	2	70+04.00		70+29.00	25'

STRONG POST GUARDRAIL ATTACHED TO CULVERT									
LOCATION	STATION	LENGTH							
LOCATION 1	SB	3	49+98.50		50+11.00	12.5'			
	NB	1	49+96.25		50+08.75	12.5'			
LOCATION 2	SB	2	379+95.25		380+07.75	12.5			
LOCATION 3	SB	2	393+84.25		393+96.75	12.5			
	NB 1 393+25.25 393+37.75 12.5'								

LONG-SPAN GUARDRAIL OVER CULVERT									
LOCATION BOUND STAGE STATION TO STATION LENGTH									
LOCATION 2	SB	2	379+93.50		380+06.00	12.5'			
LOCATION 4	LOCATION 4 SB 2 69+91.50 70+04.00 12.5'								

TRAFFIC BARRIER TERMINAL, TYPE 2									
LOCATION	BOUND	STAGE	STATION	ТО	STATION	NUMBER			
LOCATION 1	NB	1	50+27.50		50+40.00	1			
	SB	3	49+61.00		49+73.50	1			
LOCATION 2	NB	1	383+18.00		383+30.50	1			
	SB	2	379+64.00		379+76.50	1			
LOCATION 3	NB	1	393+81.50		393+94.00	1			
	SB	2	393+56.42		393+94.00	1			
LOCATION 4	NB	2	68+04.00		68+16.50	1			

FLUSH INLET BOX FOR MEDIAN								
LOCATION BOUND STAGE STATION OFFSET								
LOCATION 1 NB 2 50+32.42 5.45' RT								

MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID EACH							
LOCATION BOUND STAGE STATION OFFSET							
LOCATION 1 NB 3 50+32.52 70.02' RT							

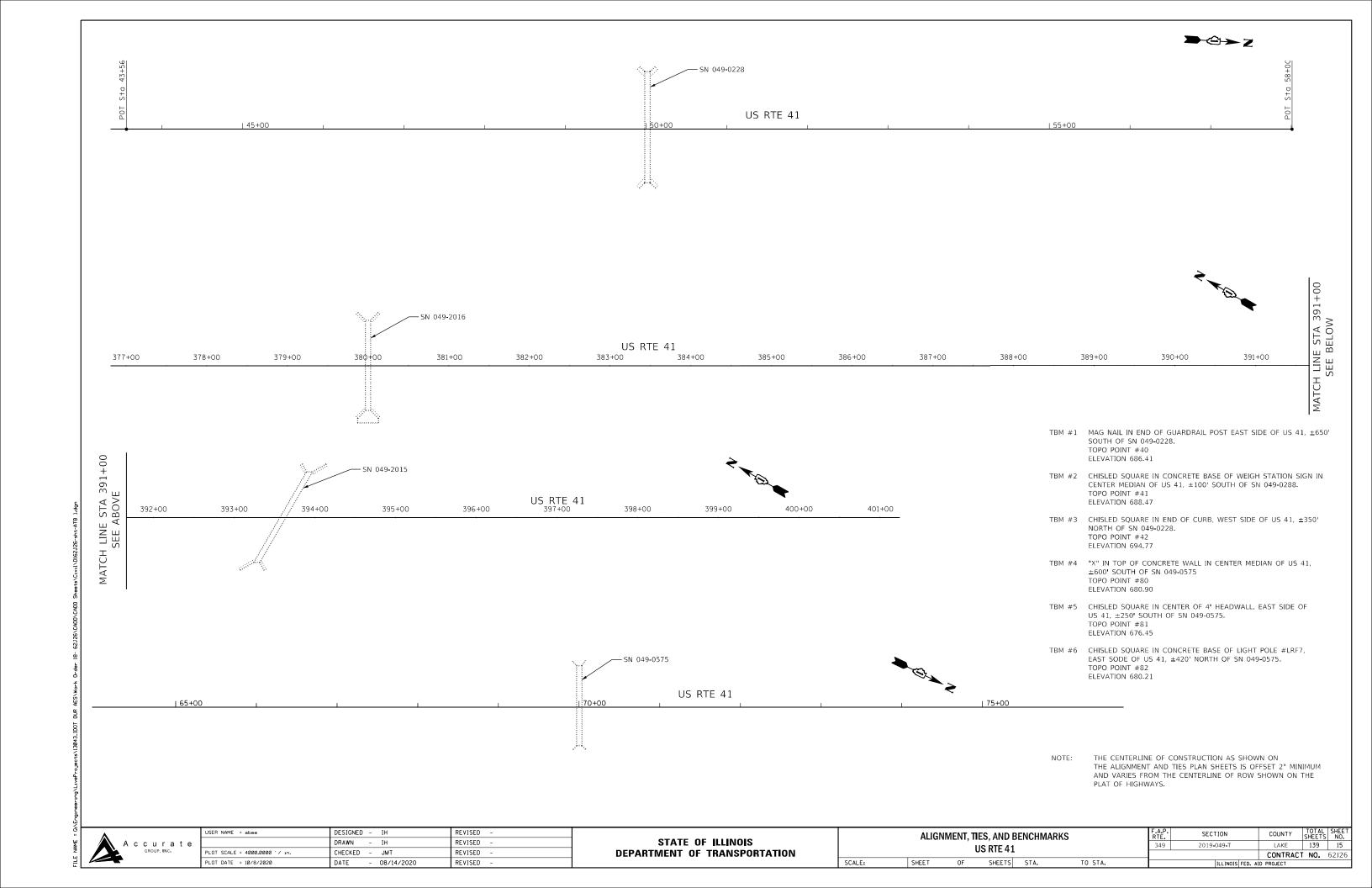
MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, OPEN LID EACH						
LOCATION	BOUND	STAGE	STATION	OFFSET		
LOCATION 4	SB	1	70+00.25	1.94' LT		

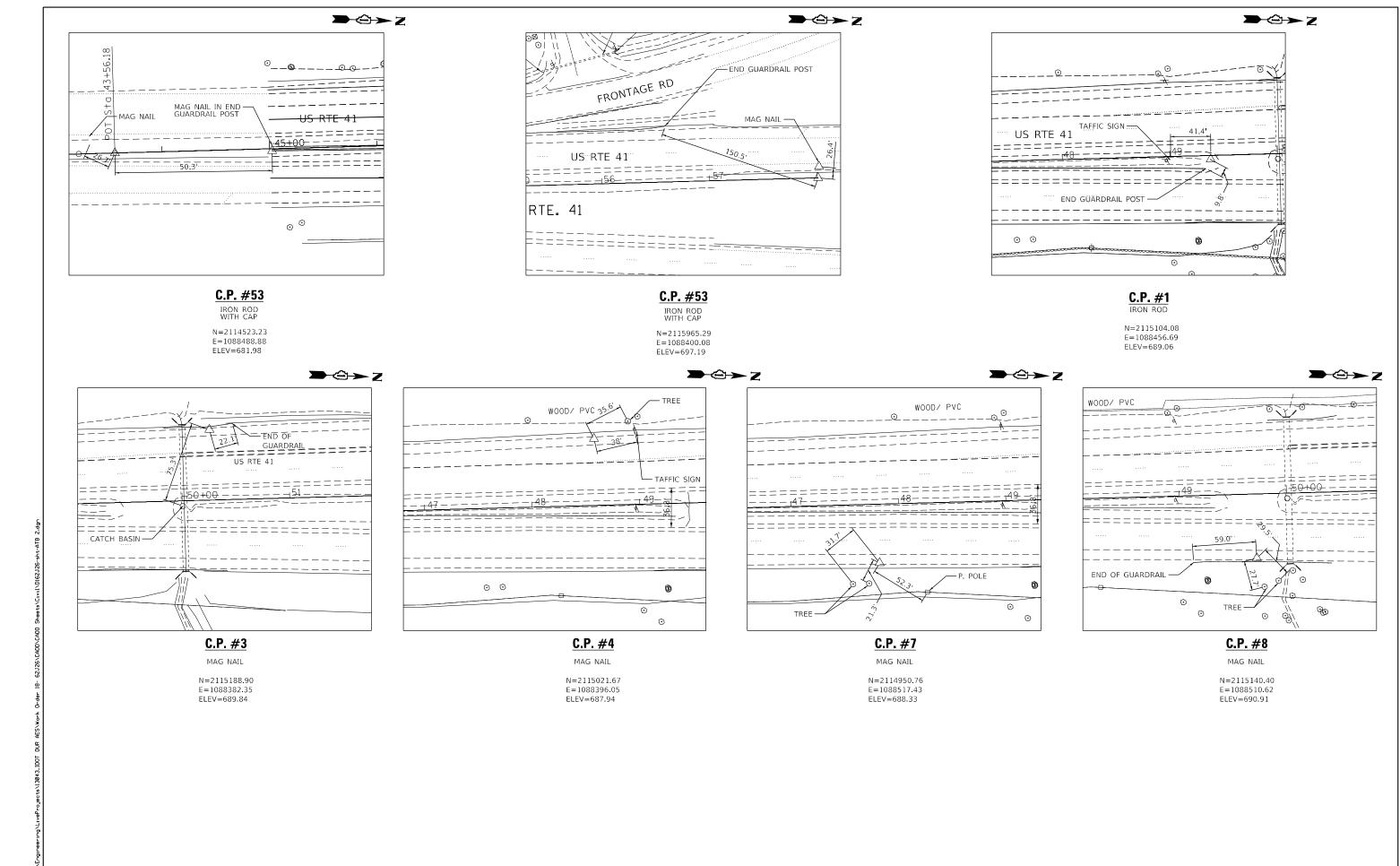
MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID EACH							
LOCATION	BOUND	STAGE	STATION	OFFSET			
LOCATION 4	SB	2	70+00.25	48.32' LT			



USER NAME = ali.issa	DESIGNED - AMI	REVISED -
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PLOT SCALE = 80.0000 / in.	CHECKED - KJD, JMG	REVISED -
PLOT DATE = 10/8/2020	DATE - 10/8/2020	REVISED -

SCHEDULE OF QUANTITIES		F.A.P. RTE.	SEC ⁻	LION		COUNTY	TOTAL SHEETS	SHEET NO.
US-41 CULVERTS		346	2019-	049-T		LAKE	139	14
						CONTRACT	NO. 62	2J26
SCALE: 80.0000 / in SHEET 1 OF 1 SHEETS STA.	TO STA.			ILLINOIS	FED. AI	D PROJECT		

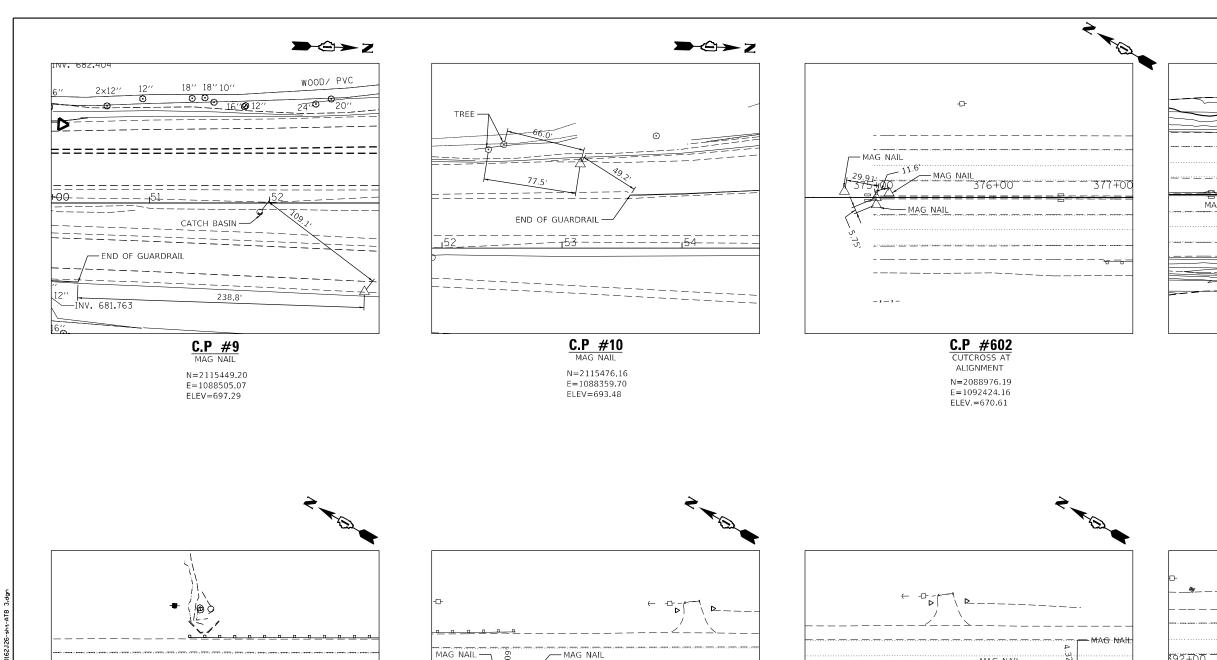


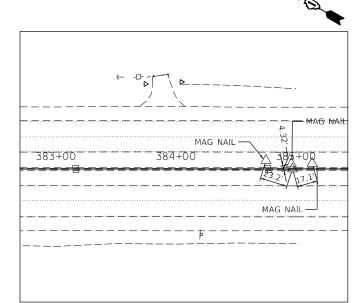


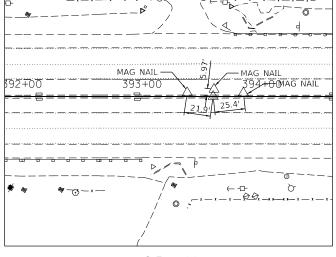
Accurate GROUP, INC.

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE:







C.P #600 CUTCROSS ON TOP OF BARRIER WALL N=2088546.82 E=1092673.77 ELEV.=670.85

- MAG NAIL

C.P #603 CUTCROSS ON TOP OF BARRIER WALL N=2088331.59 E=1092799.06 ELEV.=671.10

— MAG NAIL

383+00

382+00

C.P #604 CUTCROSS ON TOP OF BARRIER WALL N=2088116.40 E=1092924.19 ELEV.=671.16

SCALE:

C.P #605 CUTCROSS ON TOP OF BARRIER WALL N=2087371.13 E=1093357.75 ELEV.=671.95

Accurate GROUP, INC.

MAG NAIL -

USER NAME = abee	DESIGNED - IH	REVISED -
	DRAWN - IH	REVISED -
PLOT SCALE = 4000.0000 '/ 10.	CHECKED - JMT	REVISED -
PLOT DATE = 10/8/2020	DATE - 08/14/2020	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGN	IMENT, TI	ES, AND B	ENCHMA	RKS		F.A.P. RTE.	SECTION
	, í	JS RTE 41				349	2019-049-T
		JO KIL TI					
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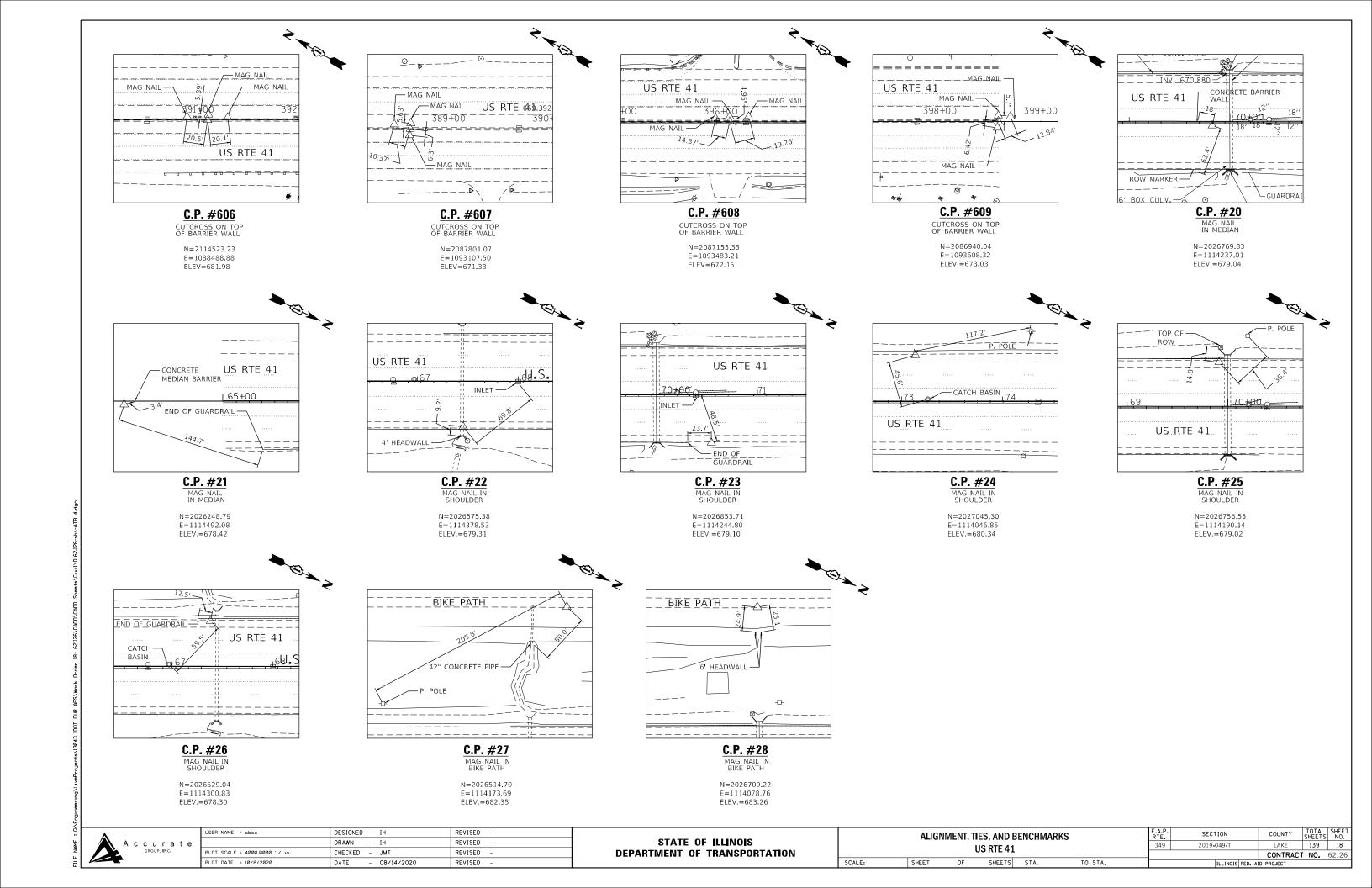
MAG NAIL
16.31 MAG NAIL

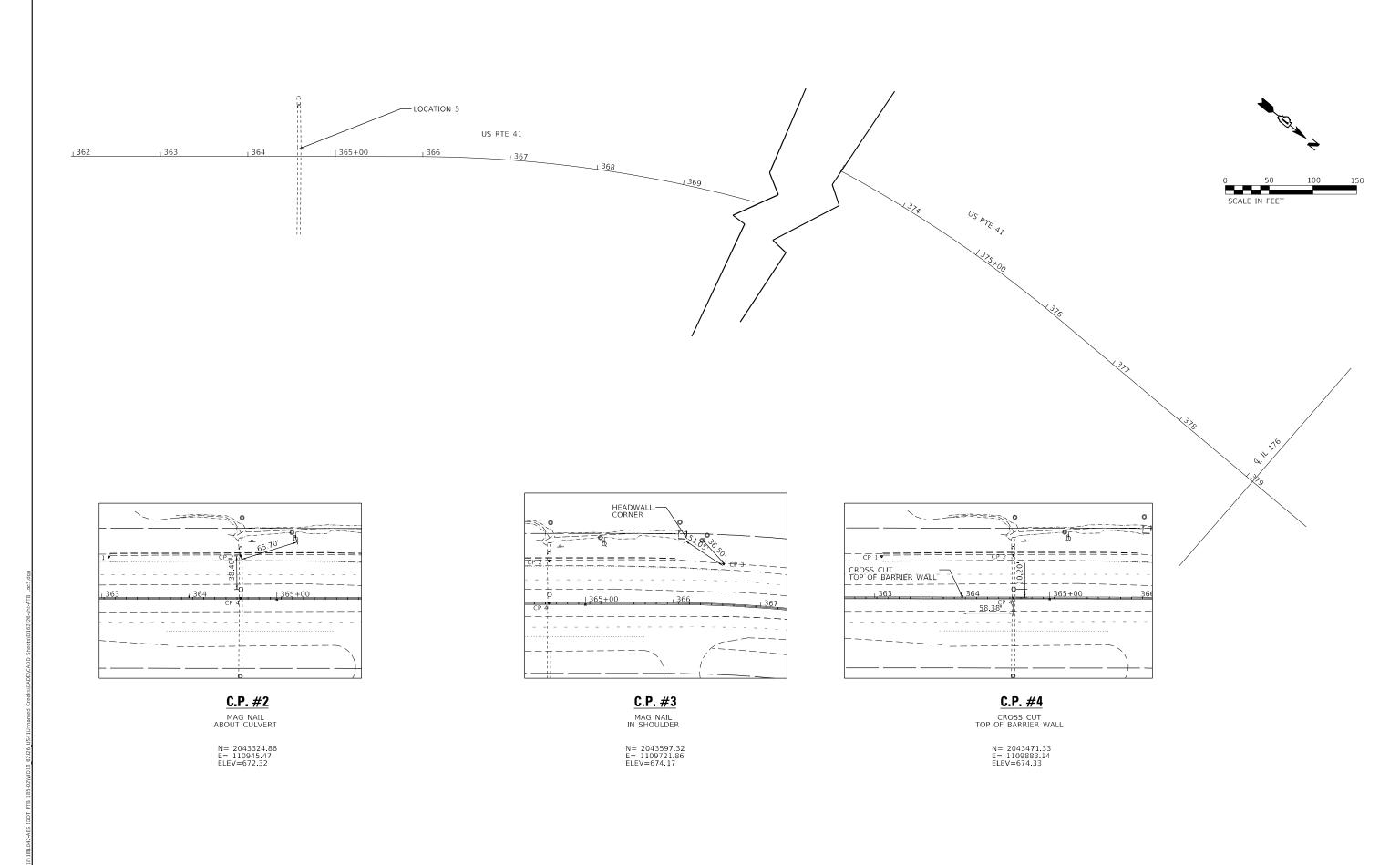
C.P #601 CUTCROSS ON TOP OF BARRIER WALL

N=2088761.13

E=1092549.10

ELEV.=670.86





QUIGG ENGINEERING INC

DESIGNED -REVISED DRAWN REVISED CHECKED REVISED PLOT DATE = 10/6/2020 DATE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES AND BENCHMARKS LOCATION 5

SECTION LAKE 139 19
CONTRACT NO. 62J26 2019-149-T SHEETS STA. TO STA.

- THE TRAFFIC CONTROL DEPICTED HEREIN IS THE MINIMUM REQUIREMENT. ADDITIONAL TRAFFIC CONTROL DEVICES AS SPECIFIED IN THE HIGHWAY STANDARDS AS SHOWN ON THE INDEX OF SHEETS AND THE SPECIAL PROVISIONS SHALL BE PLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER. ALL TRAFFIC CONTROL DEVICES SHALL BE CONSIDERED INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, (SPECIAL) UNLESS OTHERWISE INDICATED WITHIN THESE GENERAL NOTES, PLANS OR SPECIAL PROVISIONS.
- 2. TRAFFIC CONDITIONS, ACCIDENTS, AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL PROMPTLY RESPOND AT THE TIME OF NOTIFICATION BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC CONTROL DEVICES.
- 3. DRUMS OR TYPE II BARRICADES SHALL BE PROVIDED AS SHOWN IN THE PLANS AND SPACED 100 FEET CENTER TO CENTER IN TANGENTS, 50 FEET CENTER TO CENTER IN TAPERS, AND 25 FEET CENTER TO CENTER IN RADII IN THE CONSTRUCTION WORK ZONE.
- 4. ALL TEMPORARY PAVEMENT MARKINGS SHOWING DETERIORATION AFTER 7 DAYS OF SERVICE SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. SUFFICIENT QUANTITIES FOR THE INITIAL PLACEMENT AND A ONE-TIME REPLACEMENT HAVE BEEN PROVIDED FOR EACH STAGE. ALL MARKINGS THAT REQUIRE REPLACEMENT PRIOR TO 7 DAYS OF SERVICE OR REPLACEMENT AFTER THE INITIAL REPLACEMENT SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
- 5. WORK ZONE SPEED LIMIT SHALL BE 45 MPH ON US ROUTE 41.
- 6. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN TRAFFIC IN ACCORDANCE WITH THE TRAFFIC CONTROL PLANS, SPECIAL PROVISIONS, APPLICABLE STATE STANDARDS, AND AS DIRECTED BY THE ENGINEER. ANY CHANGES TO THE TRAFFIC CONTROL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO IMPLEMENTING ANY CHANGES.
- 7. THE ENGINEER SHALL BE INFORMED 48 HOURS IN ADVANCE OF ANY PROPOSED CHANGE TO THE SUGGESTED STAGE OF CONSTRUCTION AND TRAFFIC CONTROL PLAN.
- 8. THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY DRAINAGE AND EROSION CONTROL PROTECTION DURING ALL PHASES OF CONSTRUCTION.
- 9. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE 12' THRU-LANE FOR BOTH NB AND SB TRAFFIC UNLESS OTHERWISE SPECIFIED.
- 10. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISOR, AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING OF WORK
- 11. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE ALL EXISTING PAVEMENT MARKINGS WHICH CONFLICT WITH THE DESIGNATED TRAFFIC CONTROL AS SHOWN IN PLANS.
- 12. IMMEDIATELY AFTER THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL RESTORE ALL PERMANENT PAVEMENT MARKINGS, SIGNS, AND OTHER TRAFFIC CONTROL DEVICES THAT WERE COVERED, IF THEY WERE REMOVED, DAMAGED, OR OTHERWISE AFFECTED BY CONSTRUCTION. THE COST TO REPAIR ANY DAMAGES WITH BE BORNE BY THE CONTRACTOR AND NOT THE RESPONSIBILITY OF THE DEPARTMENT.
- 13. TEMPORARY CONCRETE BARRIER WALL SHALL BE CONTINUOUSLY PINNED TO THE PAVEMENT IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION WHERE A 3.5 FOOT CLEAR ZONE FREE FROM DROP-OFFS, FIXED OBJECTS, OR OTHER OBSTACLES CANNOT BE PROVIDED BEHIND THE WALL, LIMITS OF PINNING ARE SHOWN IN THE SUGGESTED MAINTENANCE OF TRAFFIC PLANS.
- 14. ALL TEMPORARY PAVEMENT MARKINGS WILL BE PAVEMENT MARKING TAPE, TYPE IV, UNLESS OTHERWISE NOTED.
- 15. REMOVAL OF TEMPORARY PAVEMENT MARKINGS WILL BE PAID FOR AS TEMPORARY PAVEMENT MARKING REMOVAL.
- 16. VEHICULAR ACCESS TO LOCAL PROPERTIES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
- 17. SHOULDERS SHALL BE RECONSTRUCTED AT THE LOCATIONS AS SHOWN IN THE PLANS PRIOR TO STAGING TRAFFIC.

SUGGESTED SEQUENCE OF CONSTRUCTION AND MAINTENANCE OF TRAFFIC

THE FOLLOWING SEQUENCE OF CONSTRUCTION AND MAINTENANCE OF TRAFFIC IS SUGGESTED. VARIATIONS MAY BE MADE WITH THE APPROVAL OF THE ENGINEER. FOR EACH STAGE OF CONSTRUCTION, PROVIDE TRAFFIC CONTROL AS SHOWN ON THE MAINTENANCE OF TRAFFIC PLANS. COORDINATE INSTALLATION OF TRAFFIC CONTROL DEVICES WITH THE EXISTING TRAFFIC PATTERNS AT THE ENDS OF THE PROJECT ALONG US ROUTE 41 AND IMPACTED CROSS STREETS. THE IMPROVEMENTS WILL BE CONSTRUCTED USING LANE SHIFTS ONTO EXISTING SHOULDERS, SHORT TERM AND LONG TERM SHOULDER AND LANE CLOSURES, PER DISTRICT ONE STANDARDS TC-09, TC-10, TC-12, TC-13, TC-14, TC-16, TC-17, TC-22 TC-26, HIGHWAY STANDARDS 701006, 701101, 701106, 701301, 701311, 701411, 701421, 701422, 701423, 701426, 701501, 701601, 701701 AND 701901.

SEQUENCE OF CONSTRUCTION: STRUCTURAL AND ROADWAY IMPROVEMENTS

LOCATION 1 - US ROUTE 41 AT CULVERT 049-0228 -STAGE 1

- 1. RECONSTRUCT EXISTING RIGHT SHOULDER OF SOUTHBOUND FRONTAGE ROAD AND NORTHBOUND MEDIAN SHOULDER UTILIZING IDOT STANDARD 701421 AT LOCATIONS SHOWN IN THE PLANS.
- 2. USE SHORT TERM LANE CLOSURE (LESS THAN 72 HOURS) TO CLOSE RIGHT LANE OF SOUTHBOUND 41 PER STANDARD 701422. USE HIGHWAY STANDARD 701423 FOR SHORT TERM TRAFFIC SHIFT TO SHIFT FRONTAGE ROAD TRAFFIC TO THE WEST. REMOVE EXISTING GORE LANDSCAPING AND CURB & GUTTER AND INSTALL ASPHALT PAVED GORE AND TEMPORARY GORE STRIPING.

SUGGESTED SEQUENCE OF CONSTRUCTION AND MAINTENANCE OF TRAFFIC (CONTINUED)

- 3. INSTALL TRAFFIC CONTROL DEVICES AS SHOWN IN THE MOT PLANS AND IN ACCORDANCE WITH STANDARD 701423 TO CLOSE THE RIGHT NORTHBOUND LANE AND SHIET TRAFFIC ONTO LEFT SHOULDER
- 4. COMPLETE EAST SIDE CULVERT REPAIRS, INSTALL PROPOSED SEWER HALF WAY ACROSS RIGHT LANE, PATCHING, SHOULDER RECONSTRUTION, GUARDRAIL, AND LANDSCAPING. PRIOR TO REMOVING TEMPORARY CONCRETE BARRIER WALL ANY OPEN HOLES IN THE ROADWAY SHALL BE FILLED OR PLATED FOR SAFTEY. THE COST FOR PLATING OR FILLING OF OPEN HOLES SHALL BE INCLUDED IN THE LUMP SUM FOR ITEM X7010216 TRAFFIC CONTROL AND PROTECTION SPECIAL.

LOCATION 1 - US ROUTE 41 AT CULVERT 049-0228 -STAGE 2

- 1. INSTALL TRAFFIC CONTROL DEVICES AS SHOWN IN THE MOT PLANS AND IN ACCORDANCE WITH STANDARD 701423 TO CLOSE THE LEFT NORTHBOUND LANE AND SHIFT TRAFFIC ONTO RIGHT SHOULDER. RELOCATE TEMPORARY CONCRETE BARRIER FROM STAGE 1.
- 2. INSTALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH STANDARD 701421 TO CLOSE THE LEFT SOUTHBOUND LANE ON A DAILY BASIS AS NEEDED. DRUMS SHOULD BE USED TO CLOSE SHOULDER WHEN LANE CLOSURE IS NOT IN USE.
- 3, COMPLETE PROPOSED SEWER FROM STAGE I END POINT TO MEDIAN AND COMPLETE MEDIAN DRAINAGE WORK,

LOCATION 1 - US ROUTE 41 AT CULVERT 049-0228 -STAGE 3

- 1. INSTALL TRAFFIC CONTROL DEVICES AS SHOWN IN THE MOT PLANS AND MERGE FRONTAGE ROAD TRAFFIC INTO SOUTHBOUND 41 LANES USING STANDARD 701411.
- 2. RELOCATE TEMPORARY CONCRETE BARRIER WALL FROM NORTHBOUND TO SOUTHBOUND US ROUTE 41
- 3. INSTALL PERMANENT STRIPING NORTHBOUND TO RESTORE TO NORMAL TRAFFIC CONFIGURATION.
- 4. COMPLETE WEST SIDE CULVERT WORK, GUARDRAILS AND LANDSCAPING.
- 5. REMOVE CONCRETE BARRIER AND INSTALL FINAL PAVEMENT MARKINGS IN PAVED GORE AREA USING STANDARD 701421 AND 701426 TO RESTORE SOUTHBOUND TRAFFIC TO NORMAL CONFIGURATION.

LOCATIONS 2 & 3 - US ROUTE 41 AT CULVERTS 049-2015 & 049-2016 - STAGE 1

- 1. RECONSTRUCT EXISTING SOUTHBOUND AND NORTHBOUND MEDIAN SHOULDERS, INSTALL TEMPORARY GLARE SCREEN AND BARRIER WALL DELINEATORS, TYPE C ON MEDIAN WALL UTILIZING IDOT STANDARD 701421 AS SHOWN IN THE PLANS.
- 2. INSTALL TRAFFIC CONTROL DEVICES FOR US ROUTE 41 NORTHBOUND AS SHOWN IN MOT PLANS WHICH INCLUDES SHIFTING THE NORTHBOUND TRAFFIC TO THE MEDIAN.
- 3. INSTALL TEMPORARY CONCRETE BARRIER AS SHOWN NORTHBOUND AND COMPLETE THE EAST SIDE CULVERT WORK, GUARDRAILS AND LANDSCAPING FOR STRUCTURES 2015 & 2016

LOCATIONS 2 & 3 - US ROUTE 41 AT CULVERTS 049-2015 & 049-2016 - STAGE 2

- 1. INSTALL TRAFFIC CONTROL DEVICES FOR US ROUTE 41 SOUTHBOUND AS SHOWN IN MOT PLANS WHICH INCLUDES SHIFTING THE SOUTHBOUND TRAFFIC TO THE MEDIAN. RELOCATE TEMPORARY CONCRETE BARRIER WALL FROM NORTHBOUND TO SOUTHBOUND.
- 2. INSTALL PERMANENT PAVEMENT MARKINGS NORTHBOUND TO RESTORE TRAFFIC TO NORMAL TRAFFIC CONFIGURATION USING STANDARDS 701421 AND 701426.
- 3. COMPLETE ALL SOOUTHBOUND STAGE 2 CULVERT REPAIRS AS SHOWN, RECONSTRUCT OUTSIDE SHOULDER AND COMPLETE ALL GUARDRAIL AND LANSCAPING ITEMS.

LOCATION 2 - US ROUTE 41 AT CULVERT 049-2016 - STAGE 3

- 1. INSTALL TRAFFIC CONTROL DEVICES FOR US ROUTE 41 SOUTHBOUND AS SHOWN IN MOT PLANS WHICH INCLUDES SHIFTING THE SOUTHBOUND TRAFFIC TO THE OUTSIDE SHOULDER. INSTALL TEMPORARY CONCRETE BARRIER WALL AS SHOWN.
- ${\it 2.}~{\it COMPLETE}~{\it REMAINING}~{\it SOUTHBOUND}~{\it CULVERT}~{\it REPAIRS}.$
- 3. REMOVE ALL TRAFFIC CONTROL DEVICES AND INSTALL PERMANENT PAVEMENT MARKINGS TO RESTORE SOUTHBOUND TRAFFIC TO EXISTING CONFIGURATION USING STANDARDS 701421 AND 701426.

LOCATION 4 - US ROUTE 41 AT CULVERT 049-0575 - STAGE 1

- 1. RECONSTRUCT EXISTING SOUTHBOUND MEDIAN AND OUTSIDE SHOULDERS UTILIZING IDOT STANDARD 701421 AT LOCATIONS SHOWN IN THE PLANS
- 2. INSTALL TRAFFIC CONTROL DEVICES FOR US ROUTE 41 NORTHBOUND AND SOUTHBOUND STAGE 1 AS SHOWN IN MOT PLANS WHICH INCLUDES SHIFTING THE SOUTHBOUND TRAFFIC TO THE WEST AND CLOSING THE NB MEDIAN SHOUDLER TO PERFORM THE WORK IN THE MEDIAN
- 3. COMPLETE ALL MEDIAN WORK.

LOCATION 4 - US ROUTE 41 AT CULVERT 049-0575 - STAGE 2

- 1. REMOVE BARRIER WALL FROM STAGE 1 SOUTHBOUND.
- 2. INSTALL TRAFFIC CONTROL DEVICES FOR SOUTHBOUND US ROUTE 41 STAGE 2 AS SHOWN IN THE MOT PLANS WHICH INCLUDES SHIFTING TRAFFIC TO THE EAST. RELOCATE NORTHBOUND TEMPORARY CONCRETE BARRIER WALL TO SOUTHBOUND, INSTALL ADDITIONAL WALL AS NEEDED.
- 3. UTILIZE DAILY LANE CLOSURES TO CLOSE NORTHBOUND RIGHT LANE TO COMPLETE CULVERT WALL REMOVALS, FILLING OF CULVERT, REGRADING AND GUARDRAIL ITEMS. EXISTING GUARDRAIL IS TO REMAIN IN PLACE UNTIL AREA IS SAFELY TRAVERSABLE.
- 4. COMPLETE SOUTHBOUND OUTSIDE SHOUDLER DRAINAGE WORK AND GUARDRAIL.

SCALE:

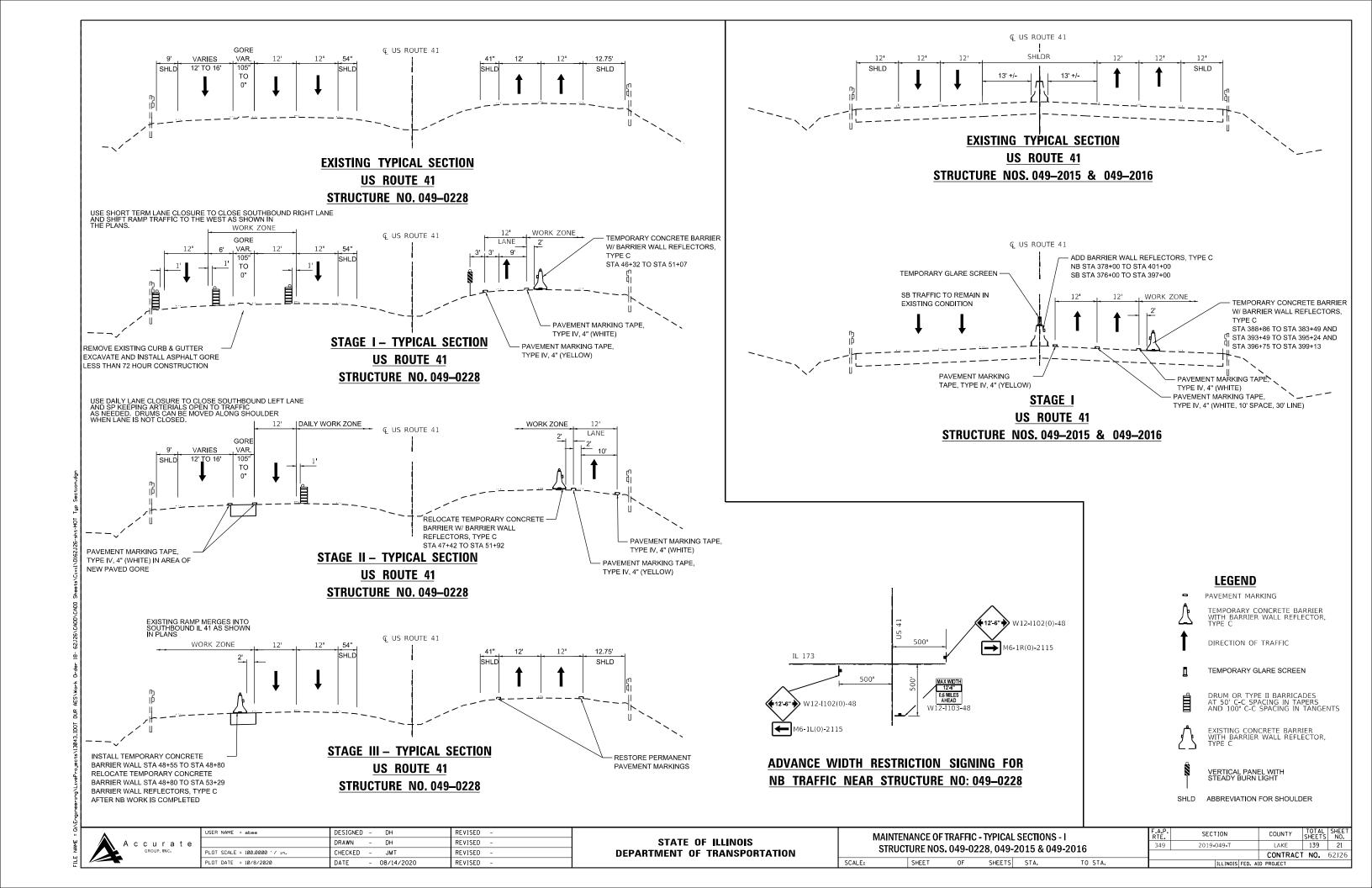
5. AFTER COMPLETION OF WORK, REMOVE SHIFT AND RESTORE PERMANENT PAVEMENT MARKINGS USING STANDARDS 701421 AND 701426.

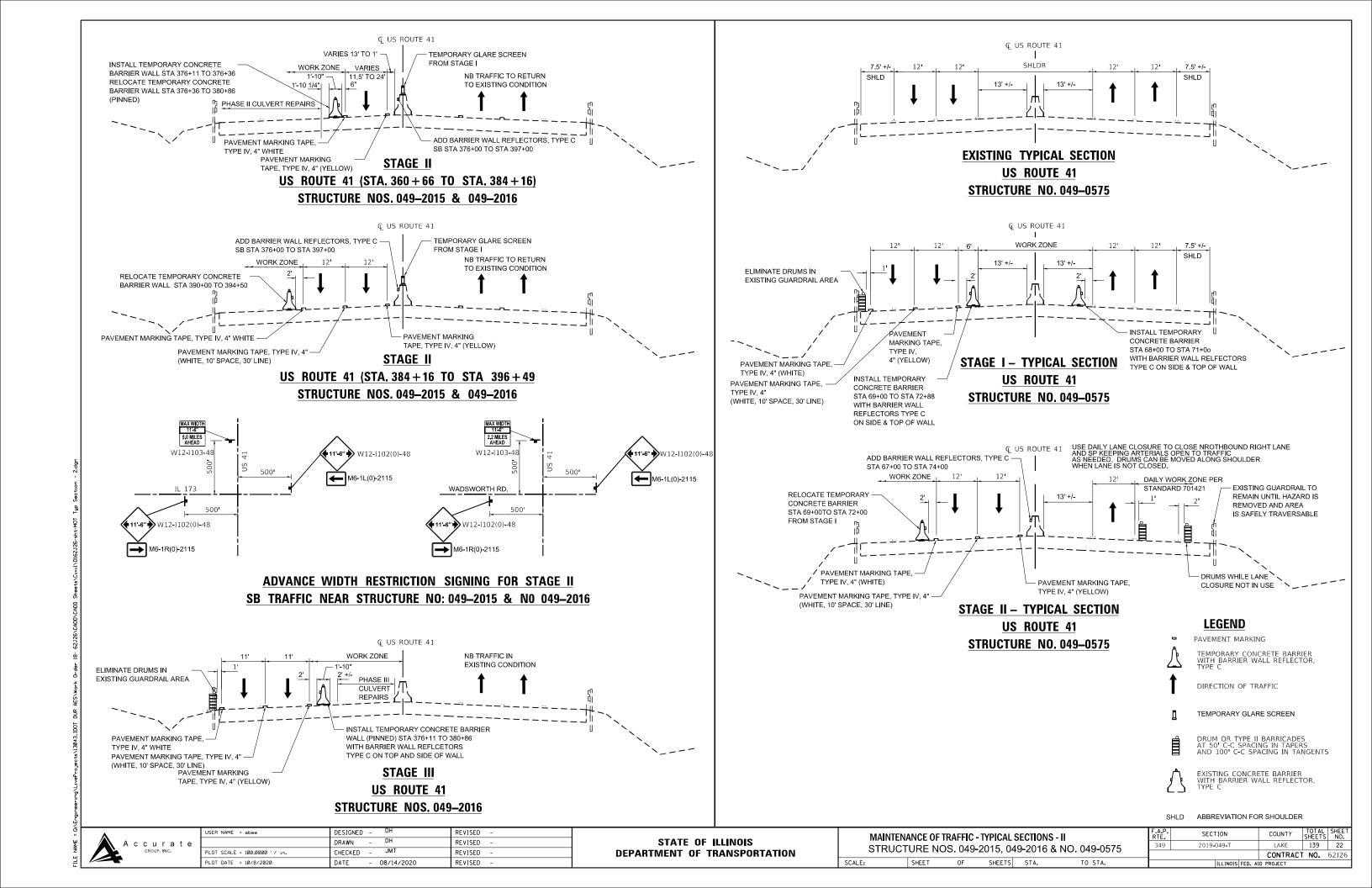


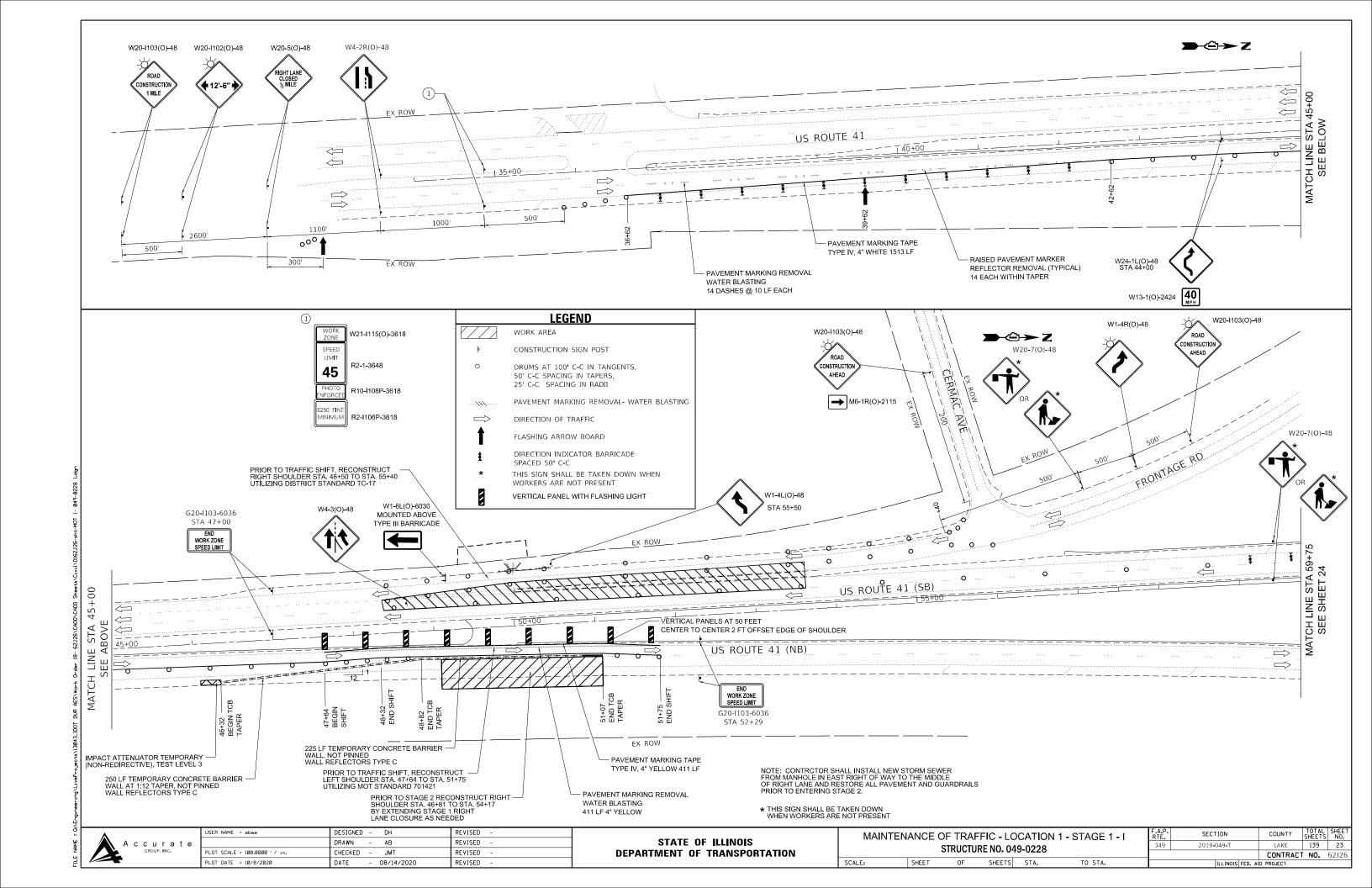
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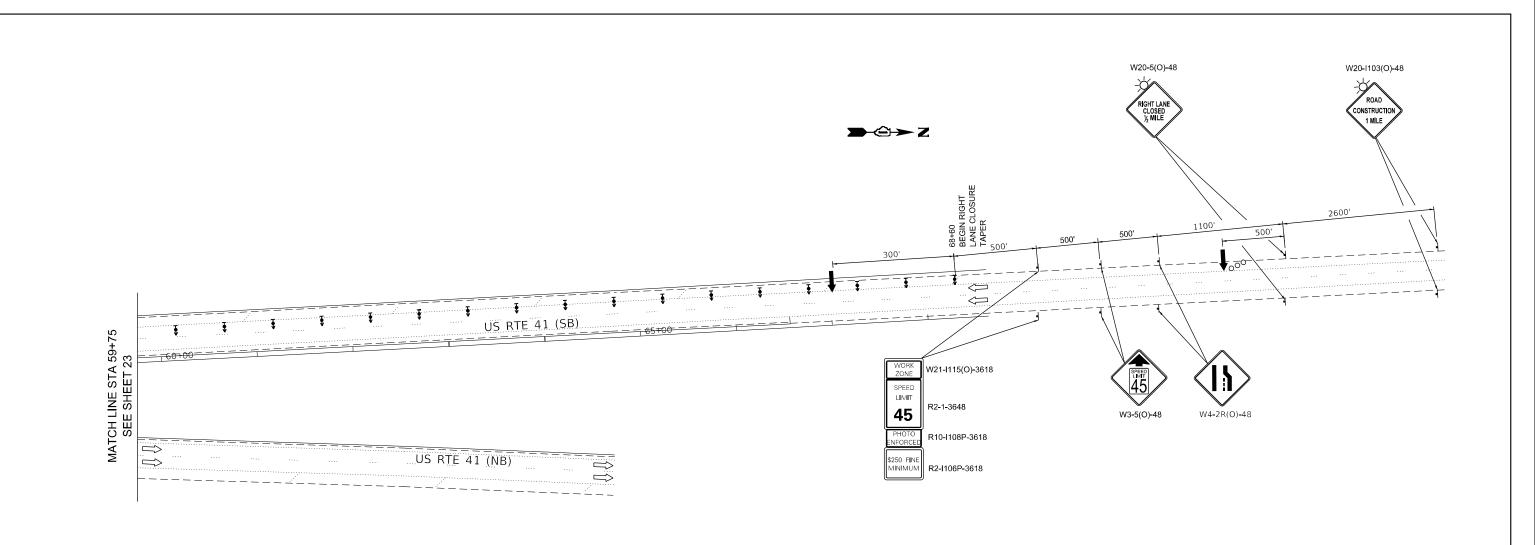


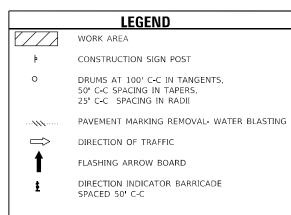
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AND SEQUENCE OF CONSTRUCTION			349	2019-0	49-T	LAKE	139	20			
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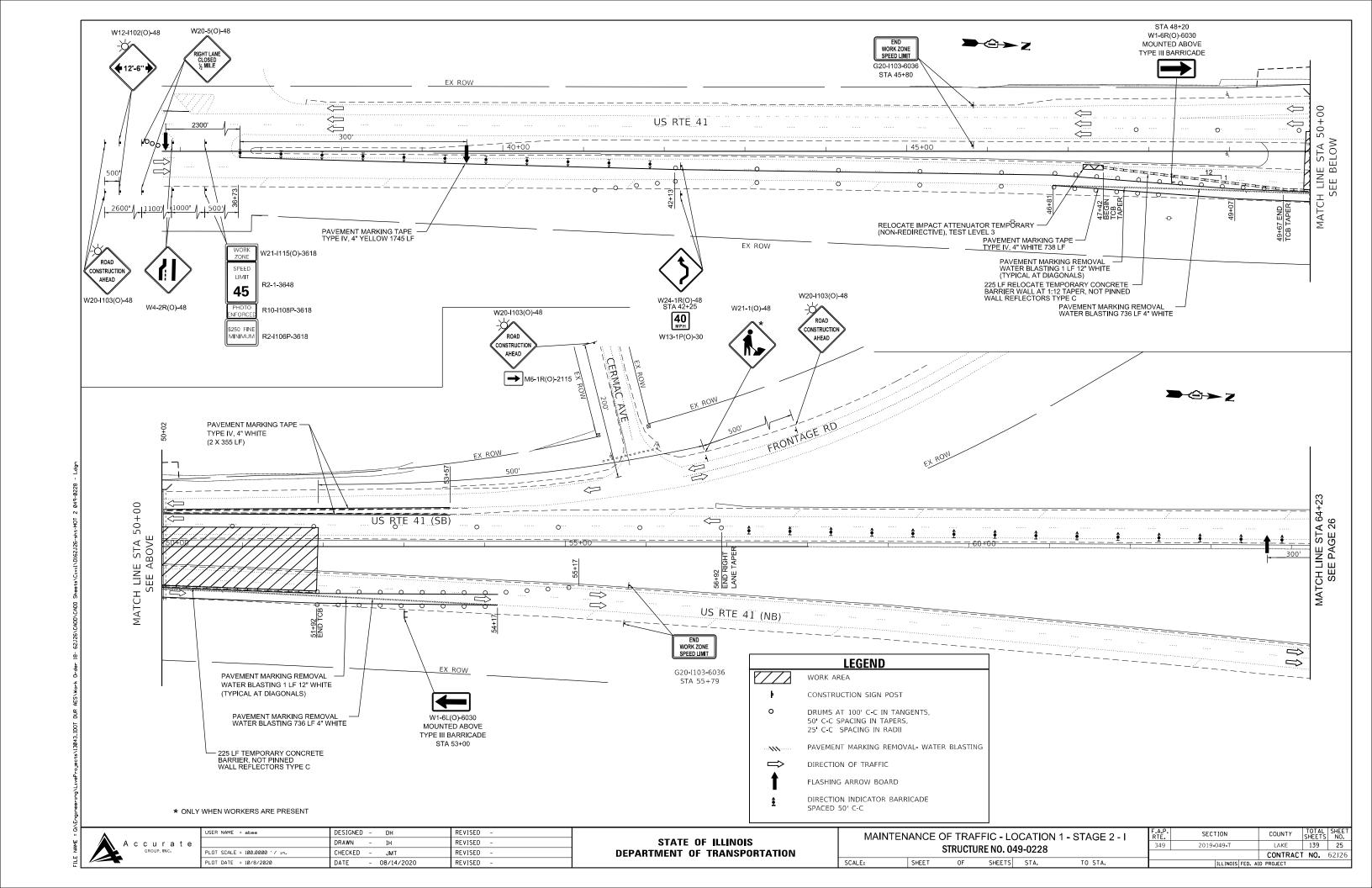


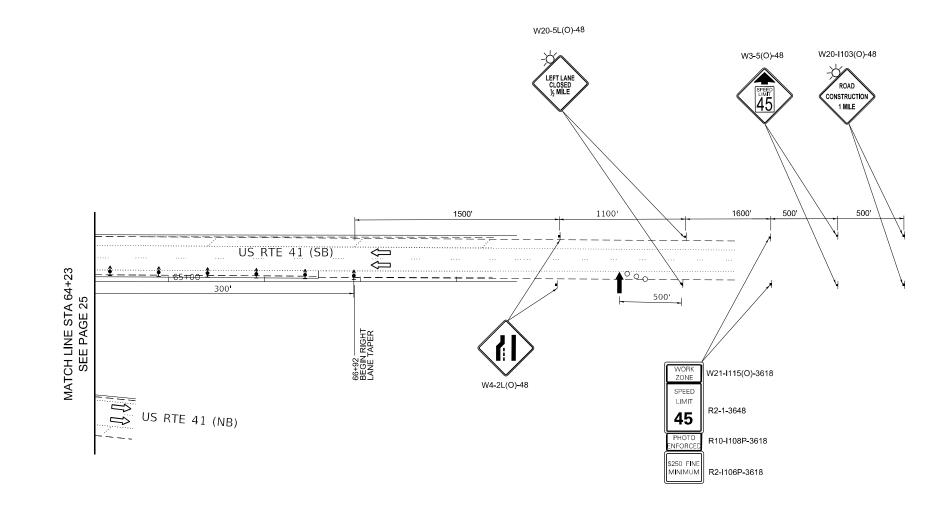
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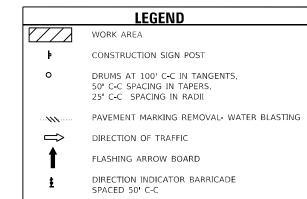
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

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SCALE:	SHEET	OF	SHEETS	STA.	TO STA.

.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT	NO.	62J26
	ILLINOIS FED. A	ID PROJECT		







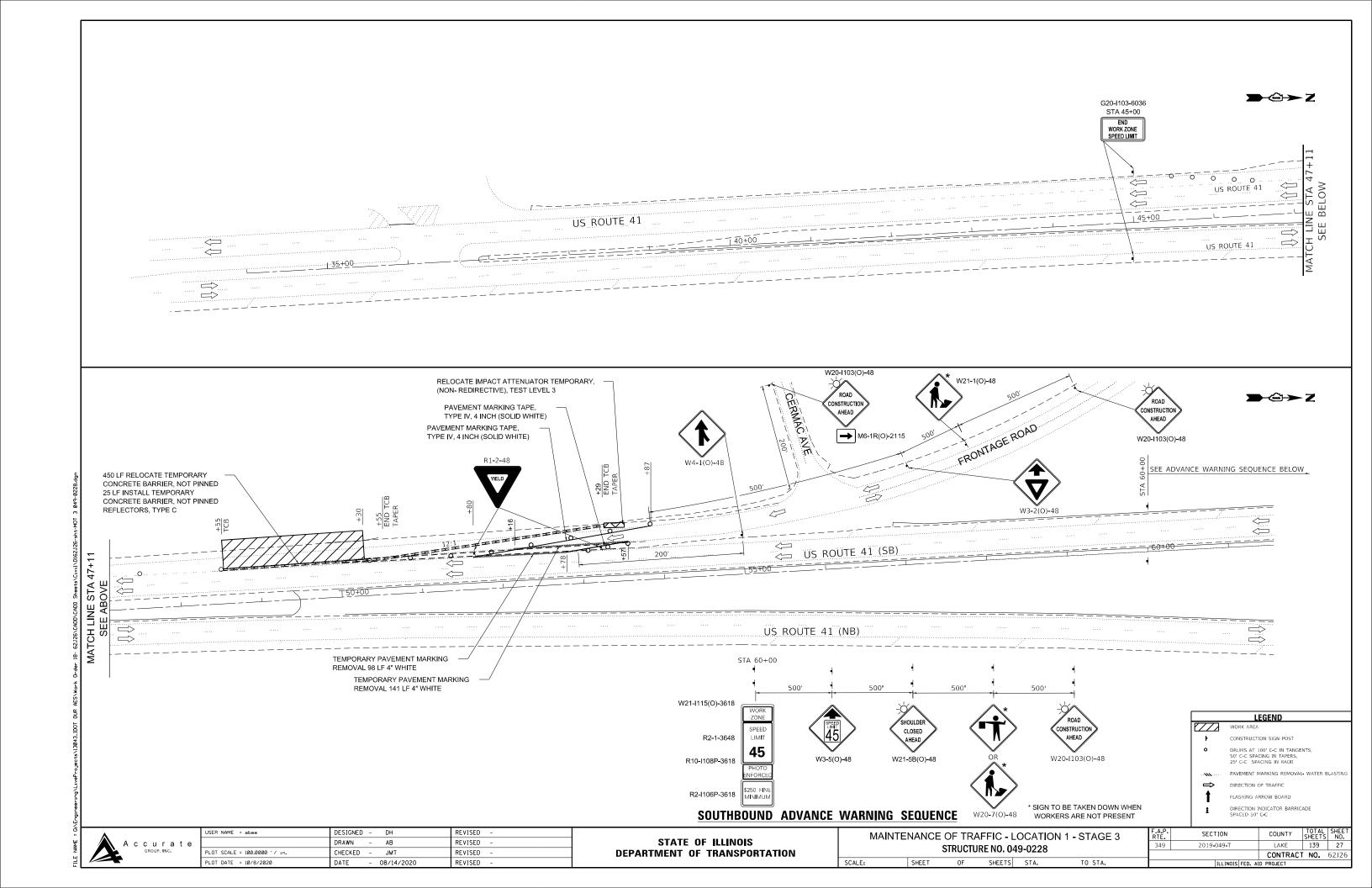


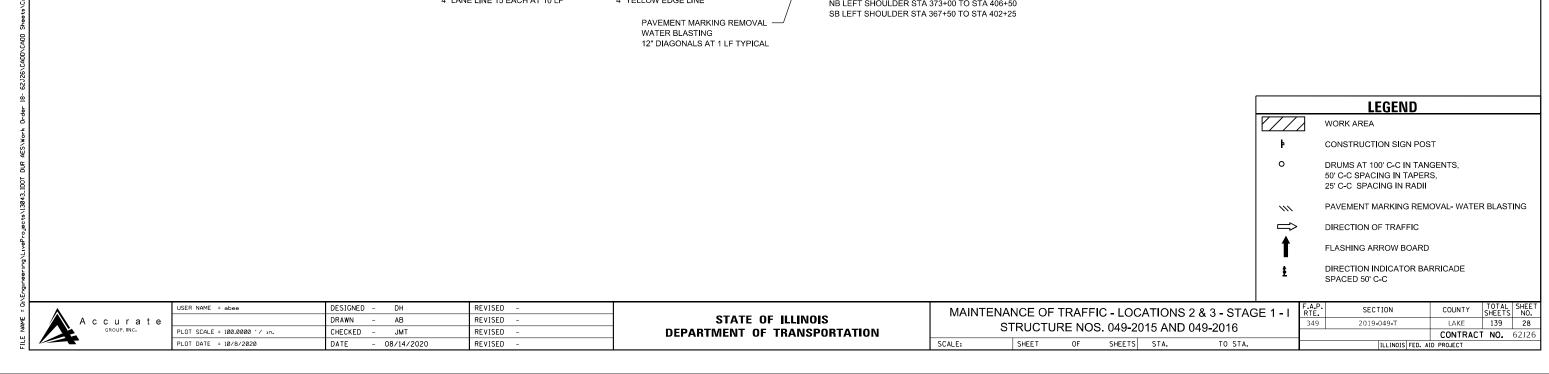
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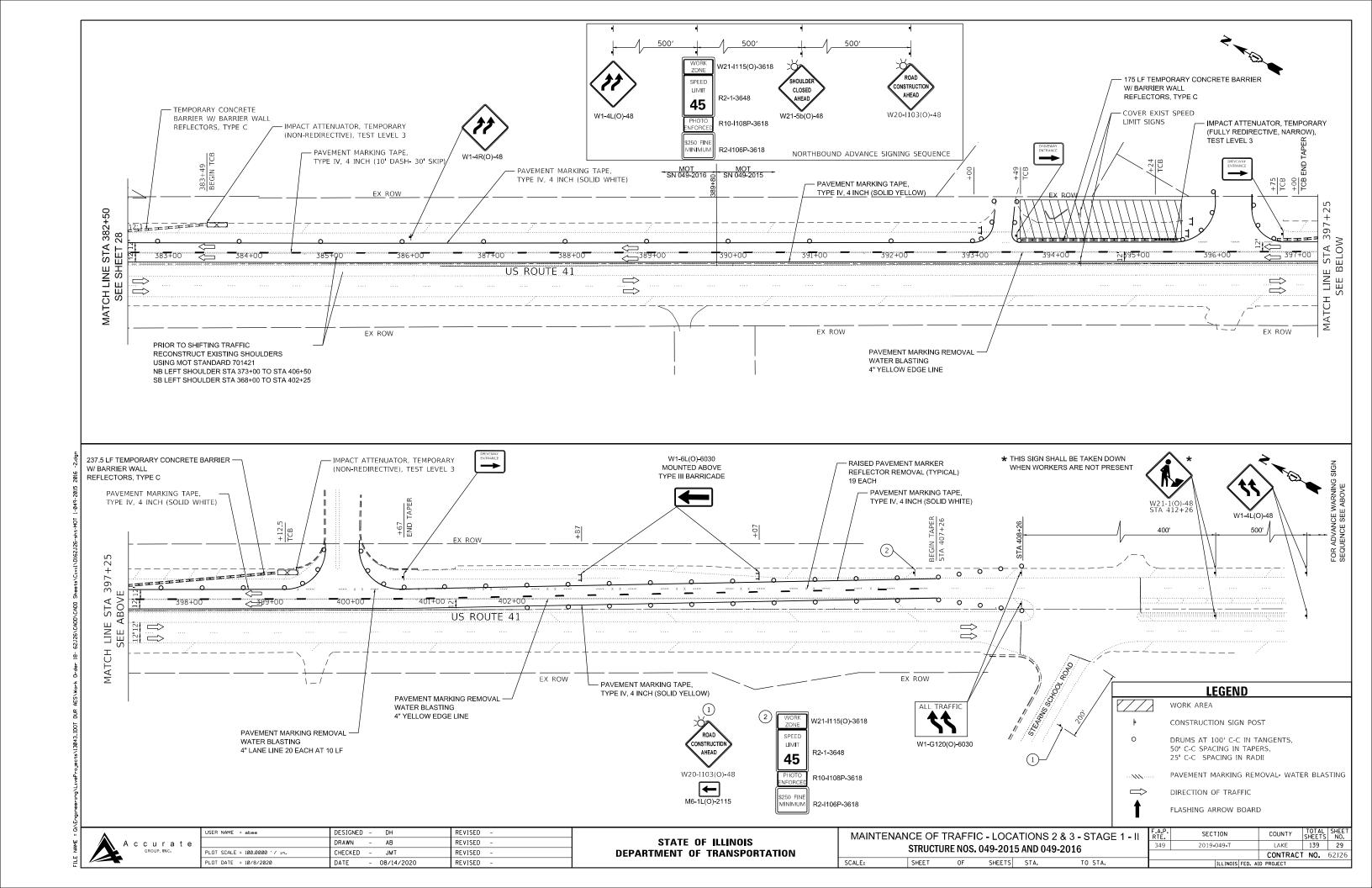
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

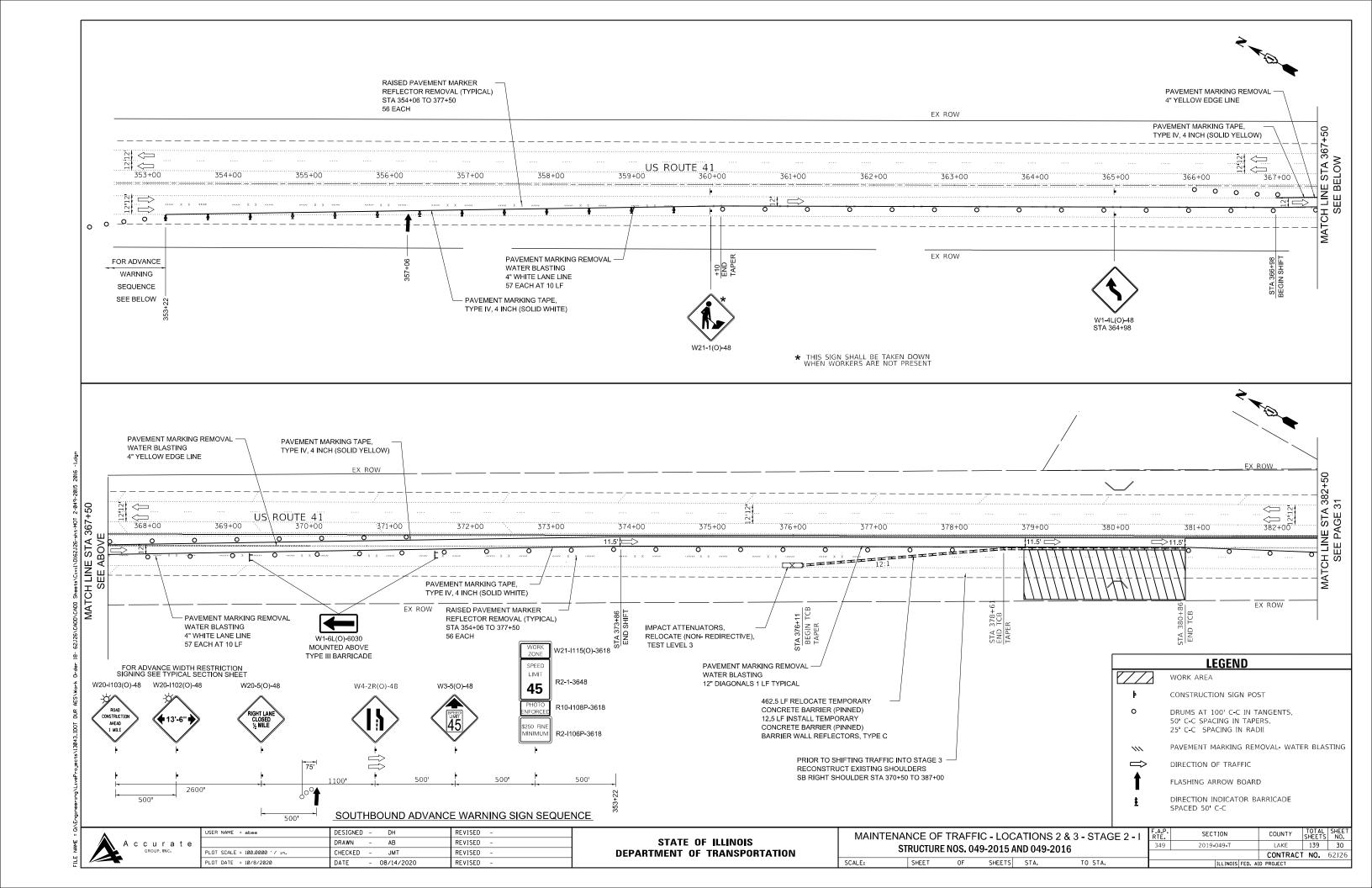
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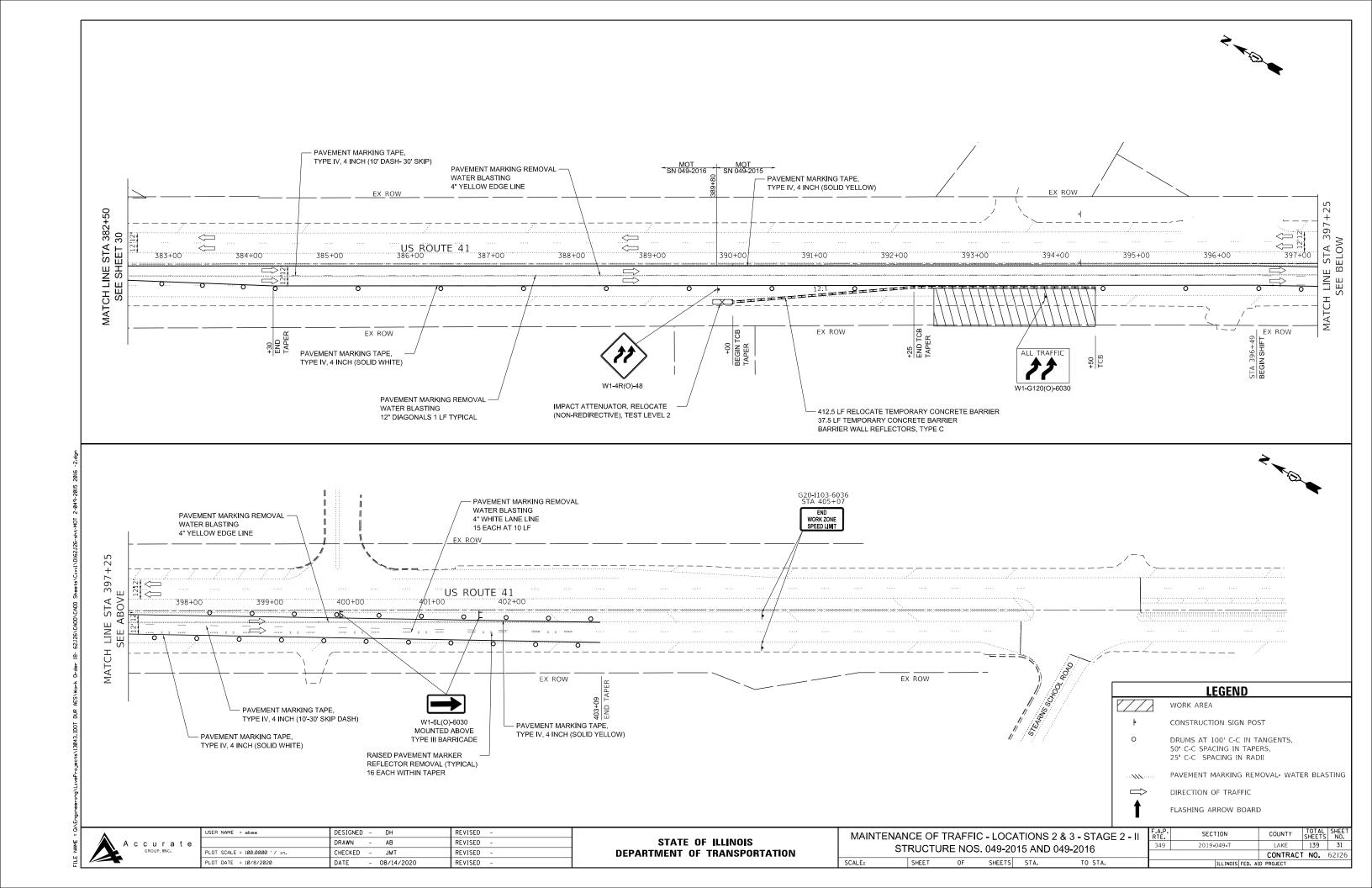
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		CONTRACT	NO.	62J26			
ILLINOIS FED. AID PROJECT							

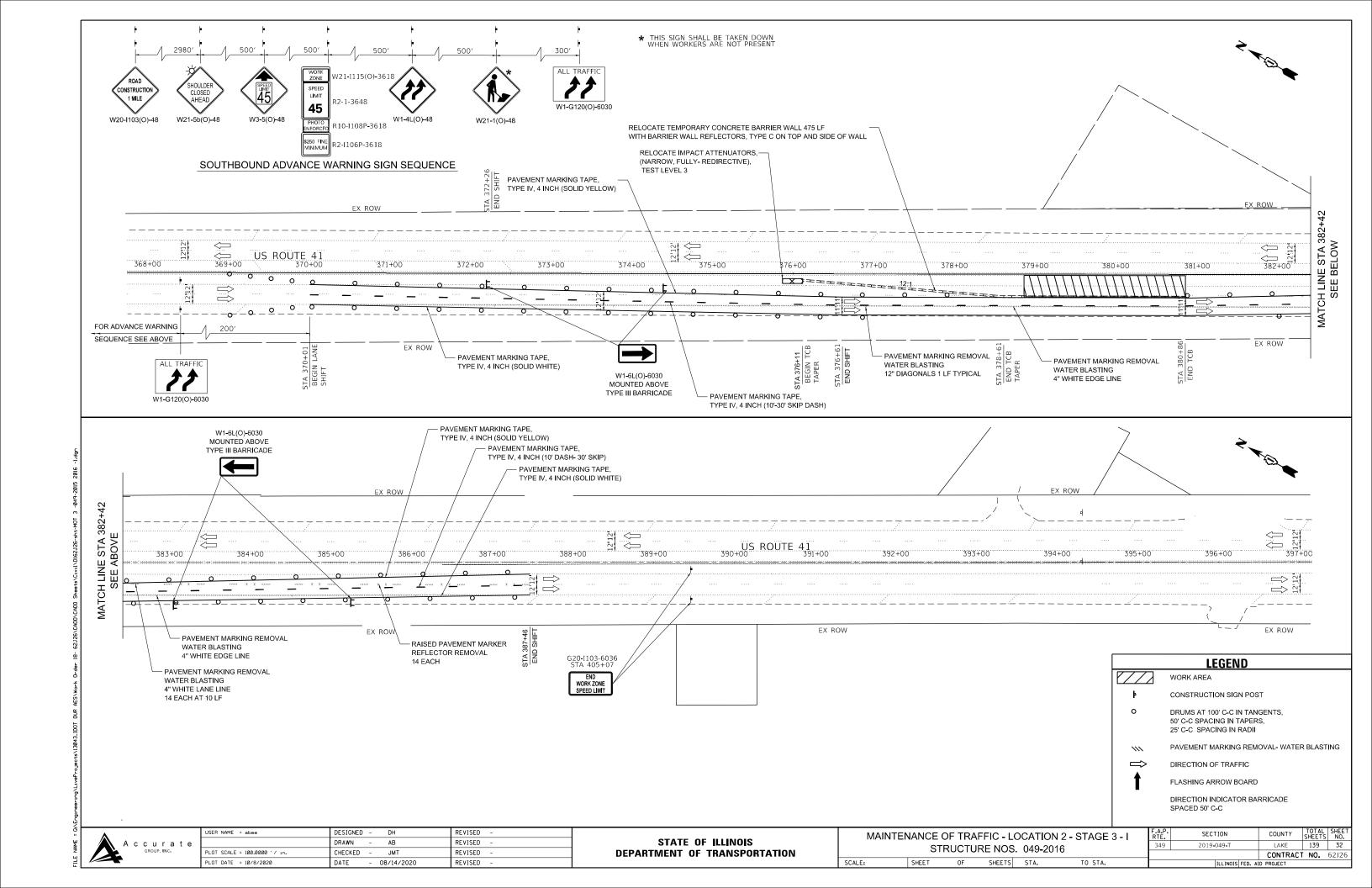


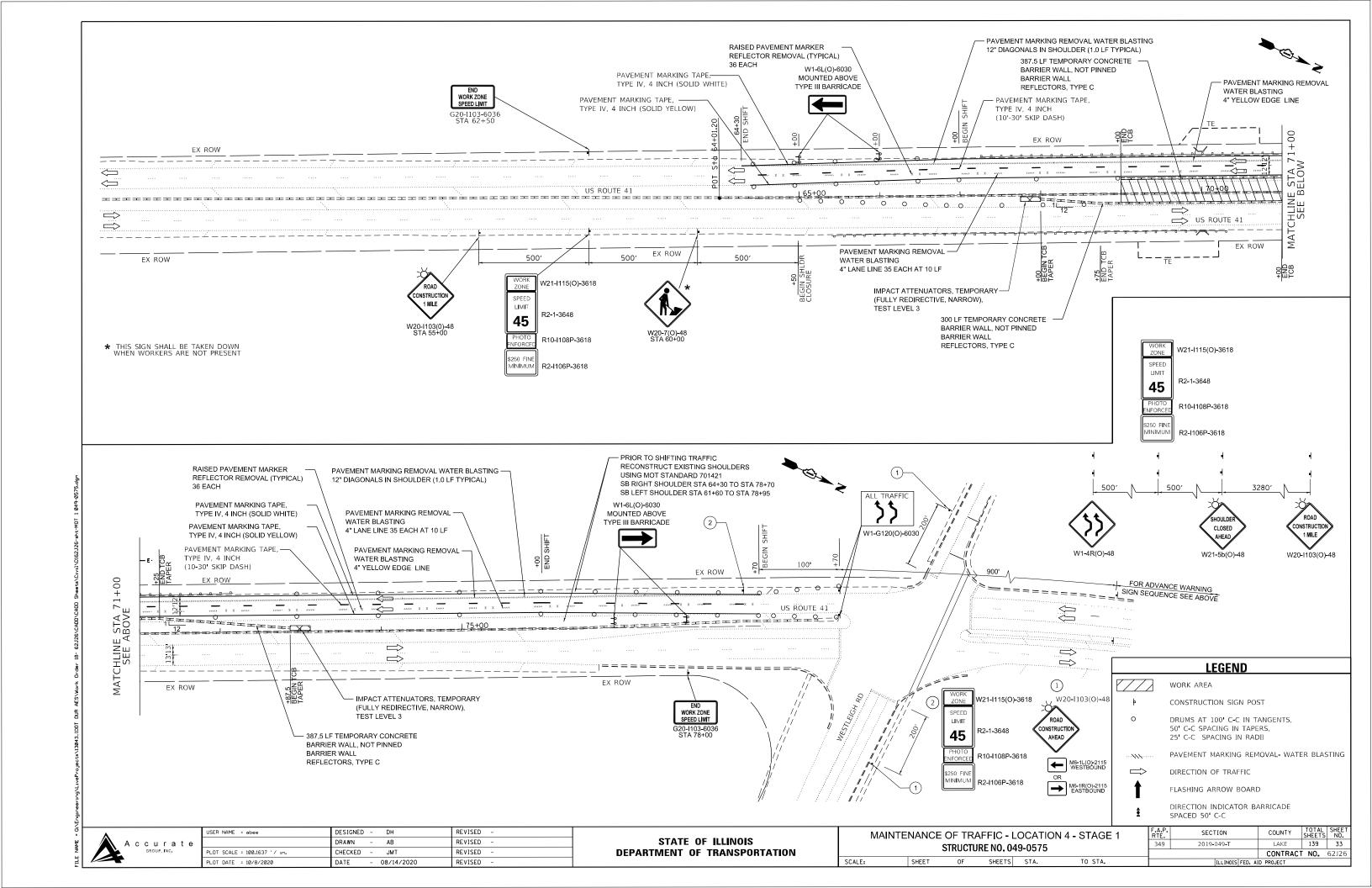


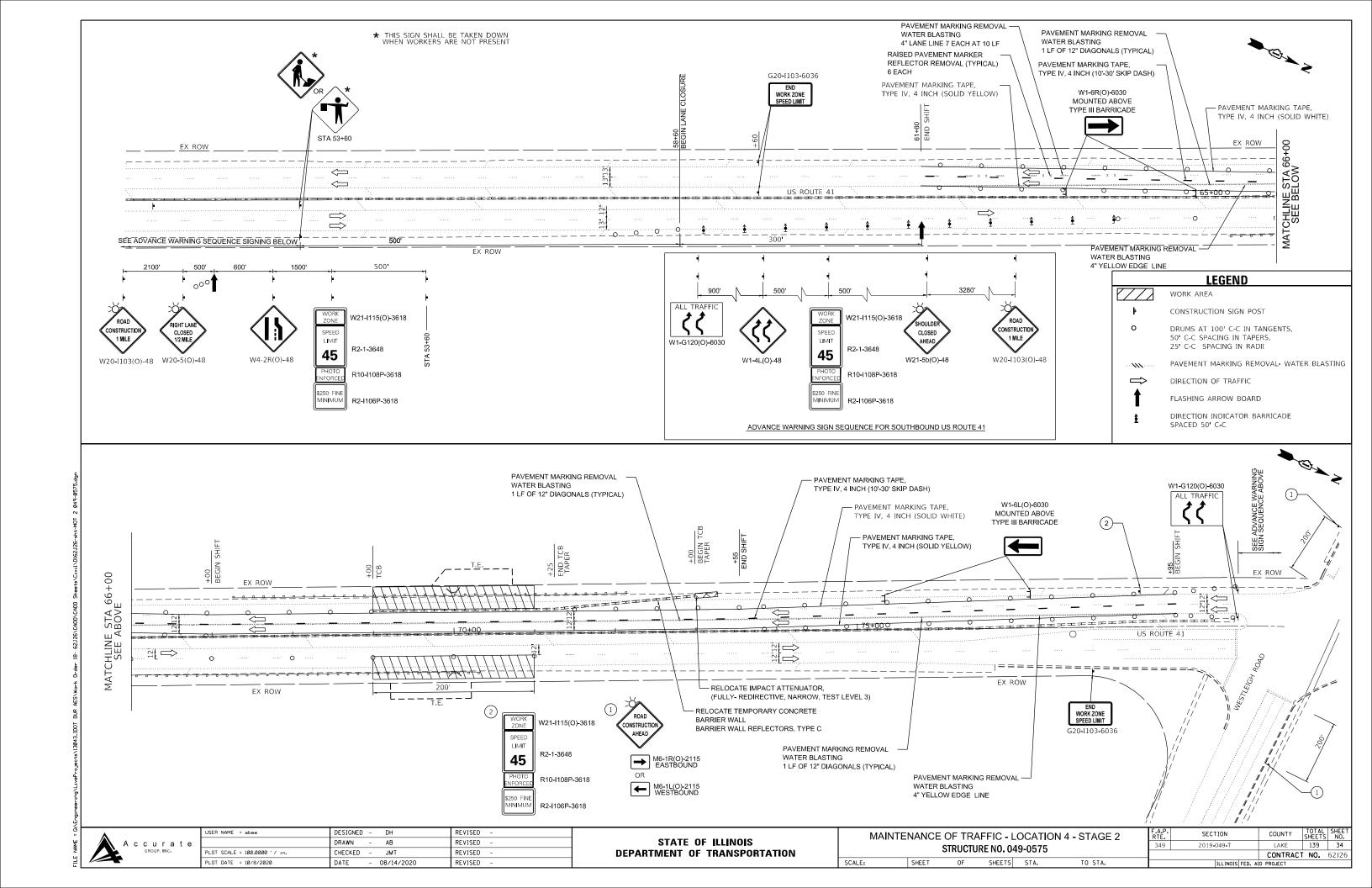


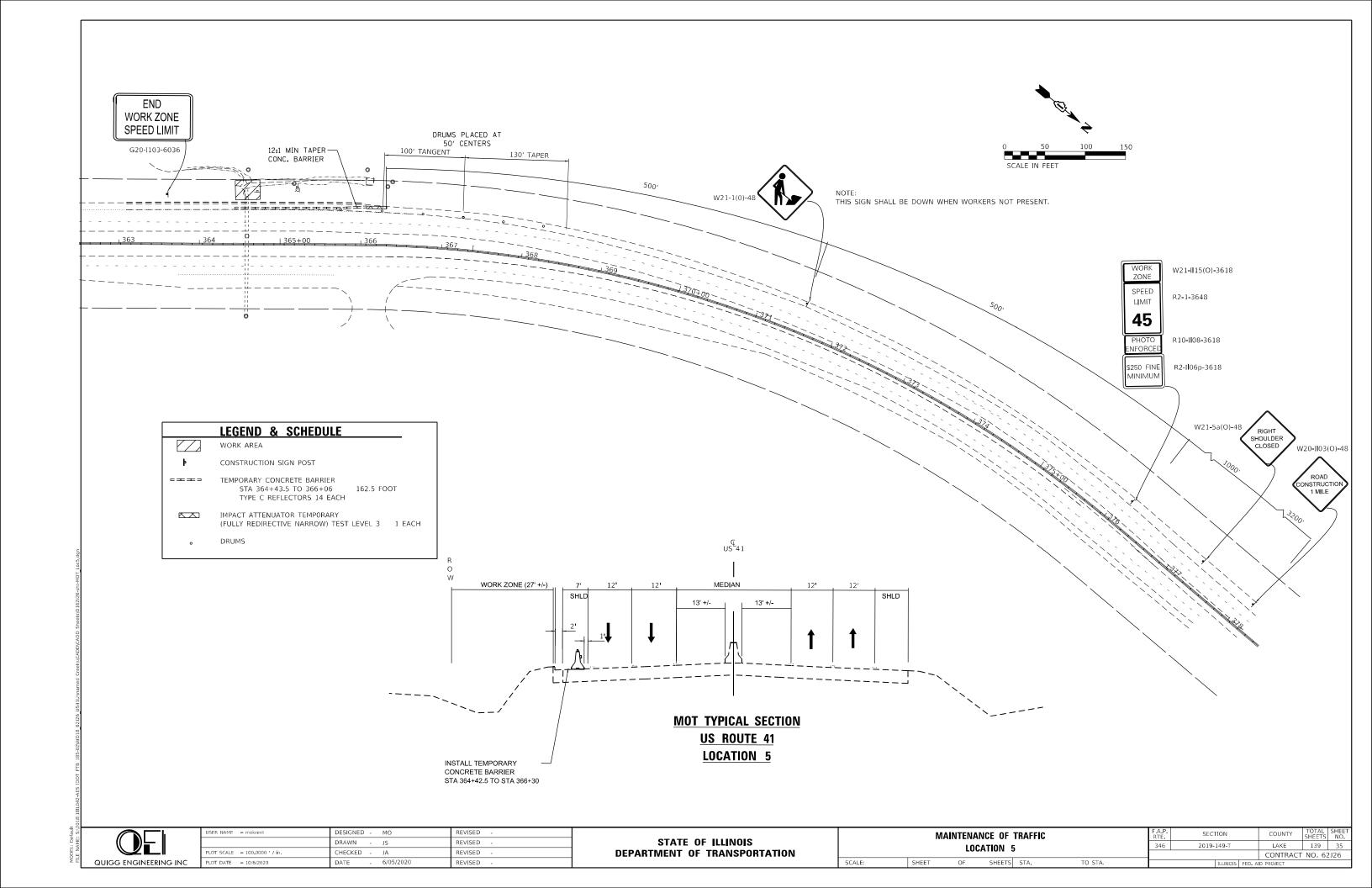


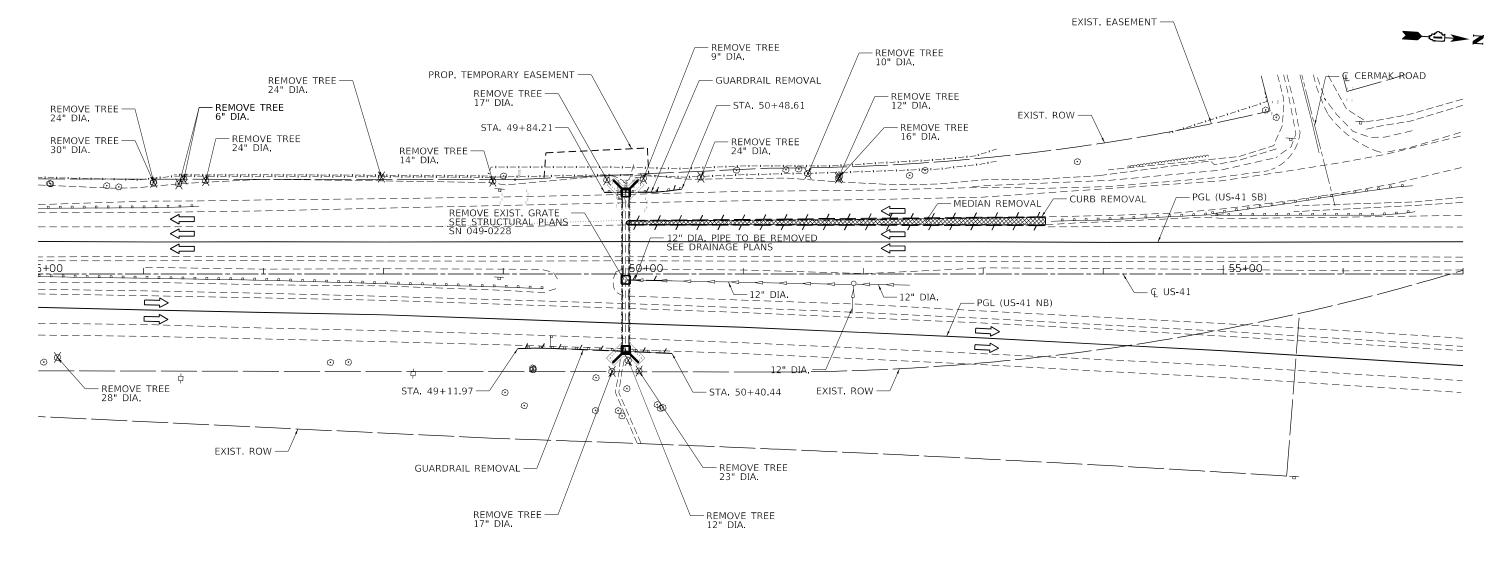












REMOVAL PLAN

NOTES:

- 1. EXISTING DRAINAGE OUTLETS SHALL BE MAINTAINED NEAR CULVERTS.
- 2. EXISTING TREES AND BRUSH ALONG THE WEST SHOULDER OF THE ON-RAMP SHALL BE PRUNED AND CLEARED PER THE "PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE" SPECIAL PROVISION.

REMOVAL LEGEND

TREE REMOVAL



MEDIAN REMOVAL

/ → / → / → EXISTING STORM SEWER REMOVAL

GUARDRAIL REMOVAL

CURB REMOVAL

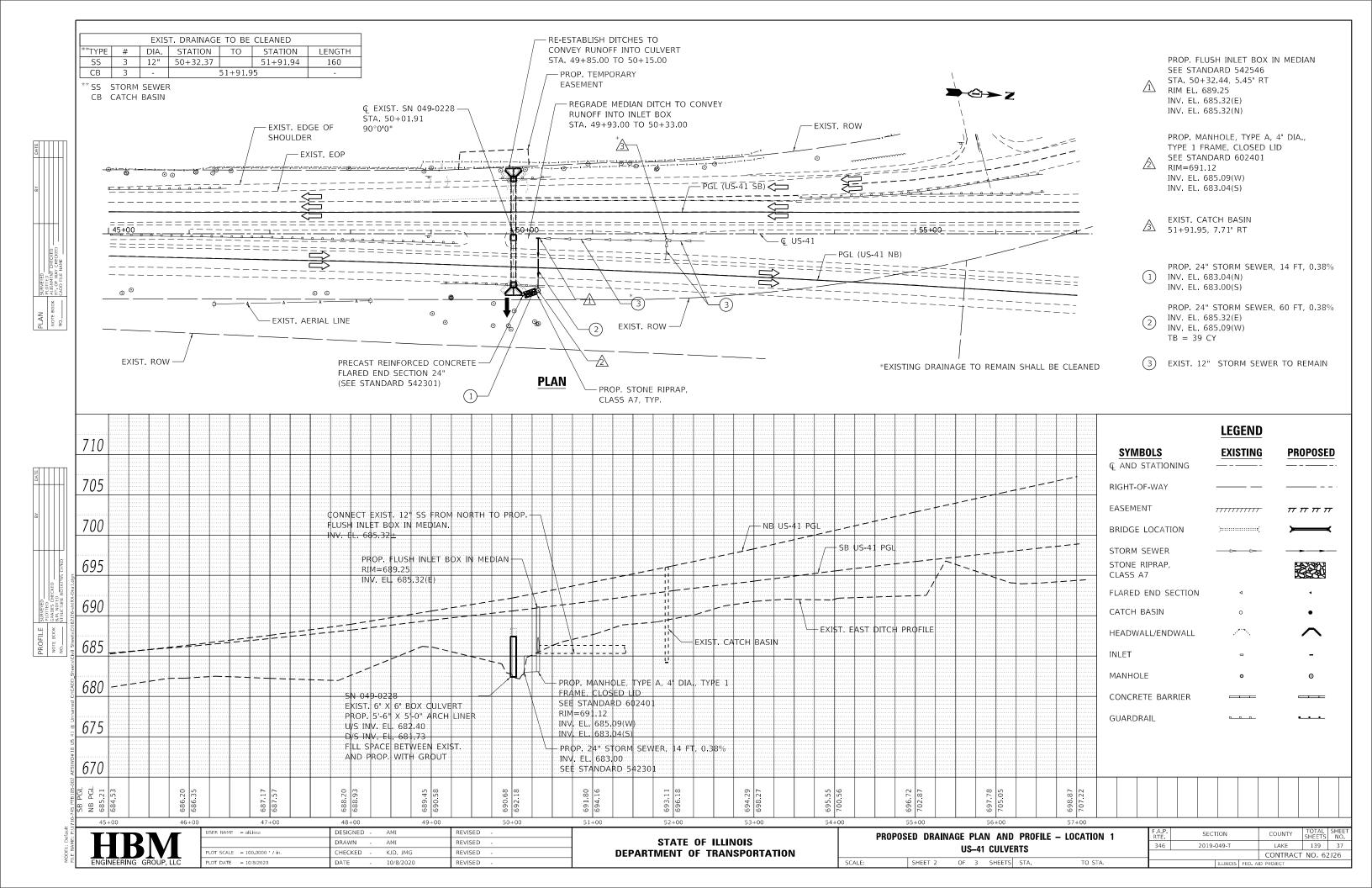
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ENGINEERING GROUP, LLC	

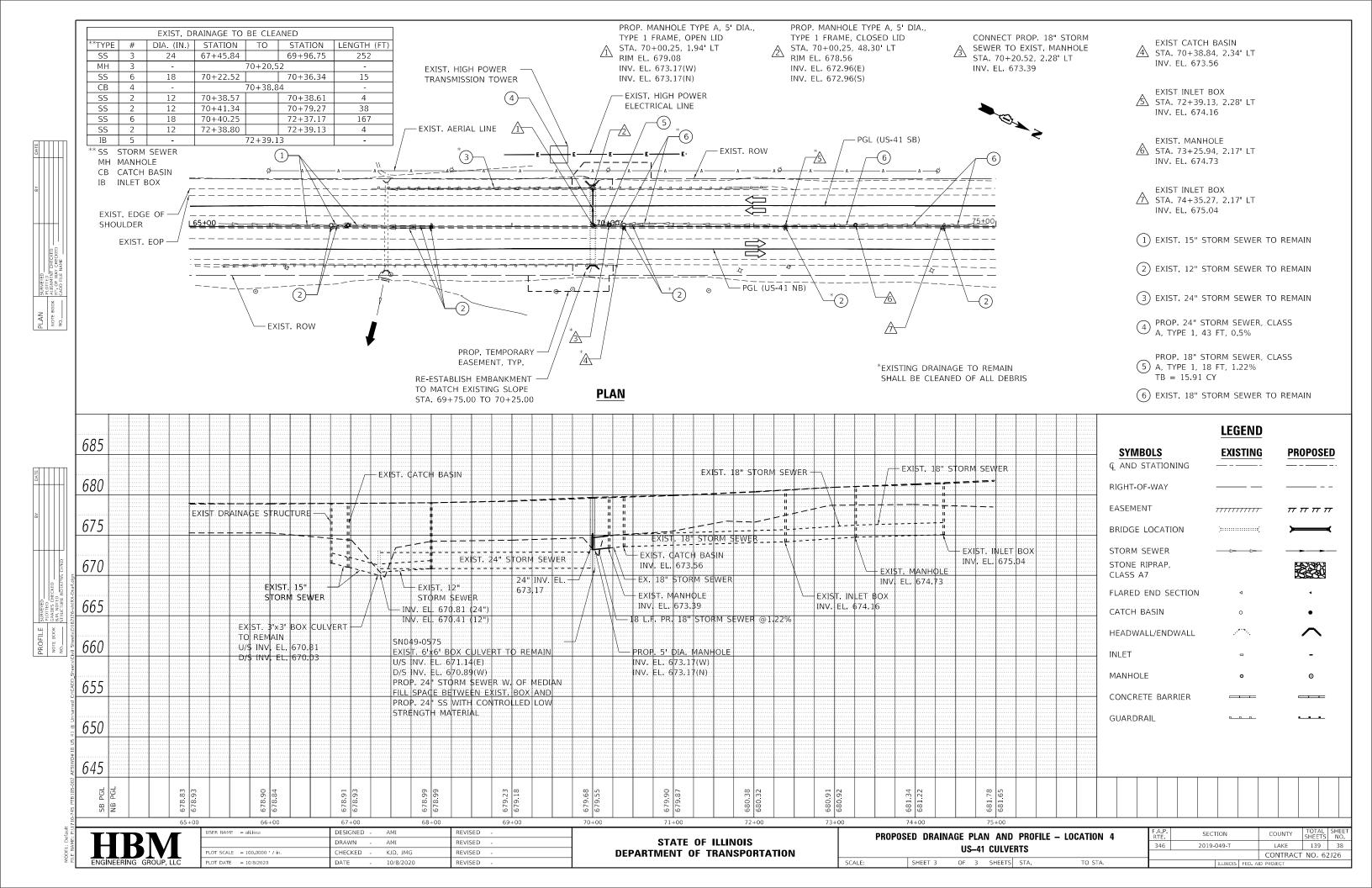
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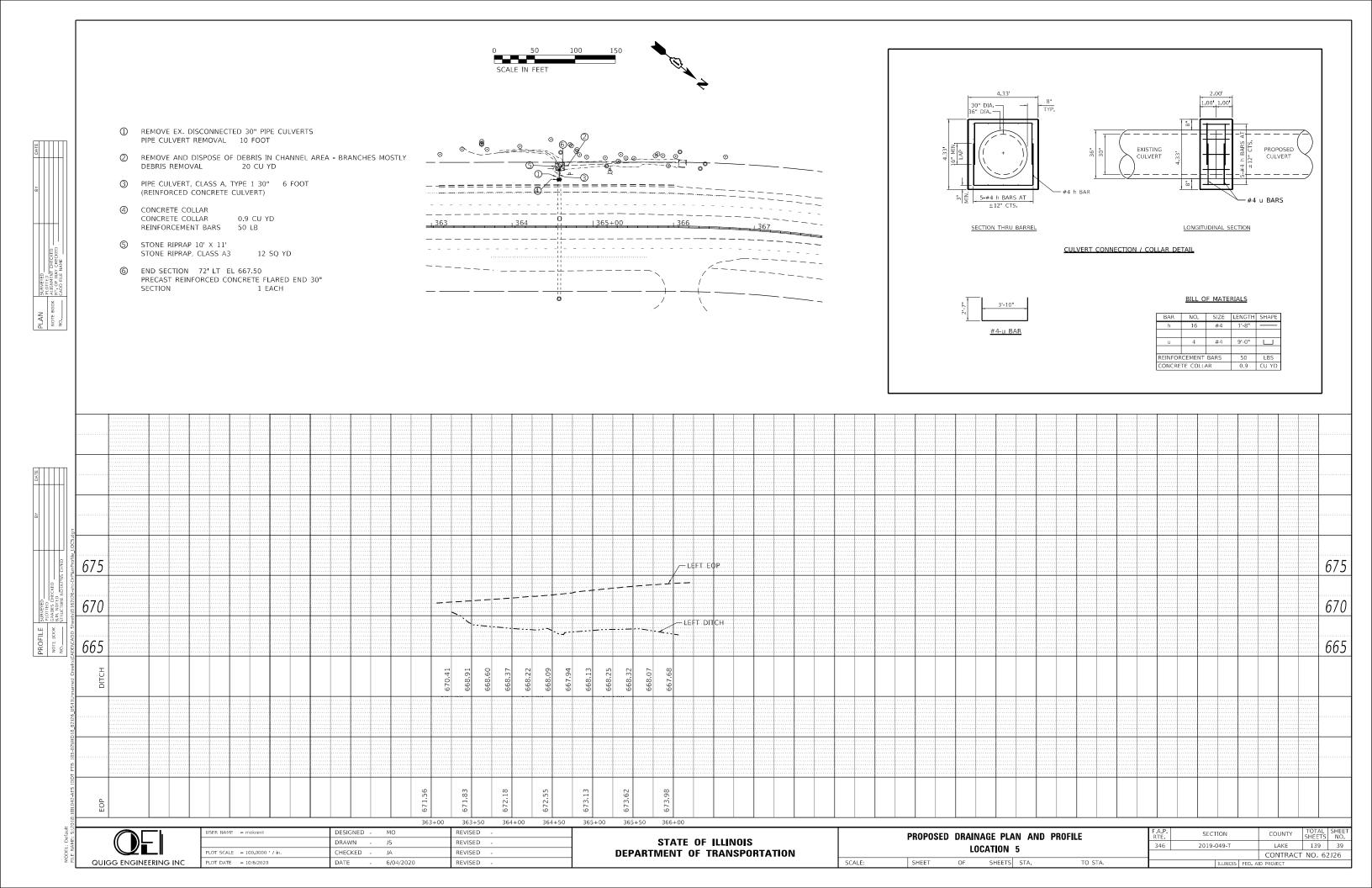
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DEPARTMENT OF TRANSPORTATION

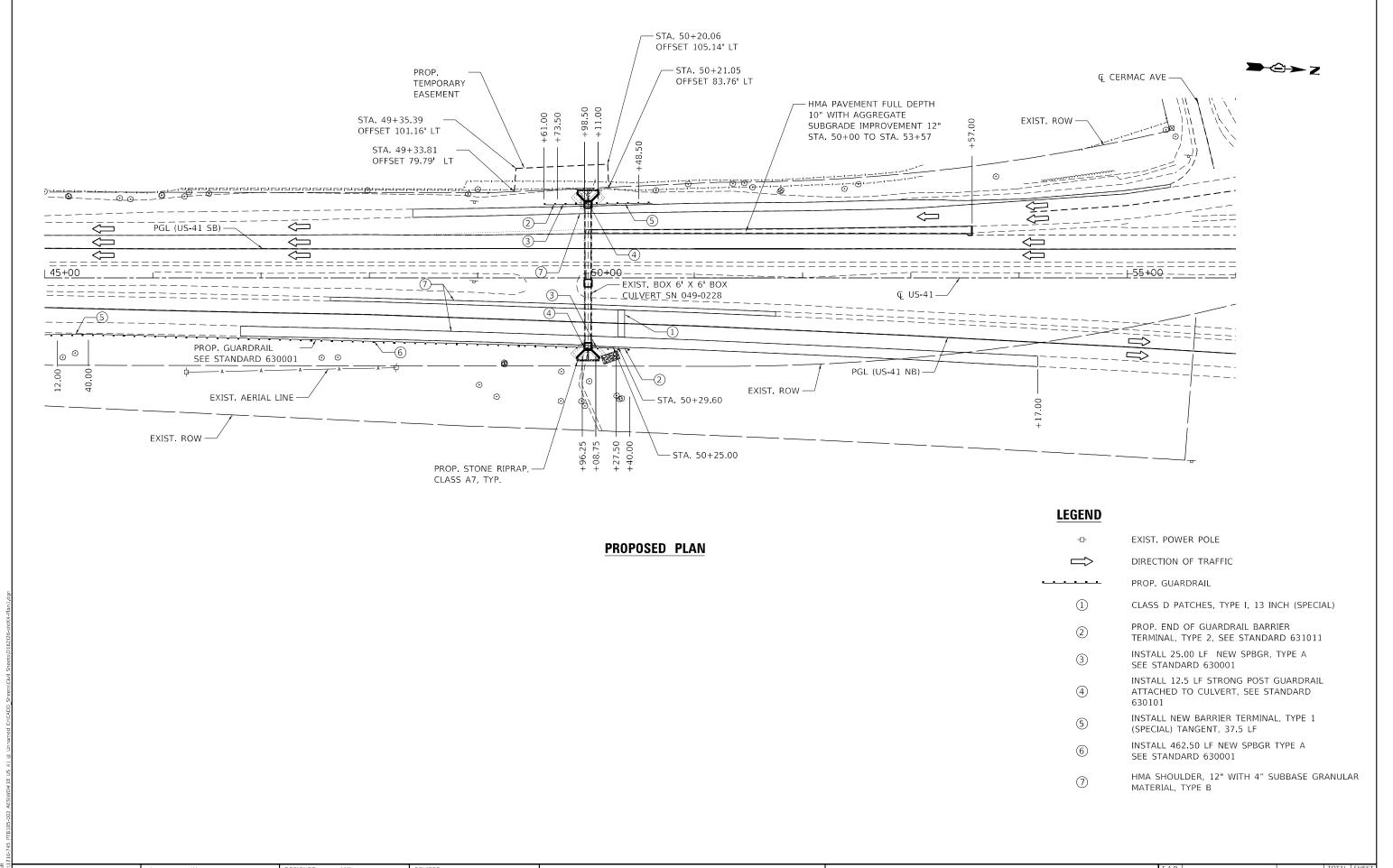
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F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
346	2019-049-T		LAKE	139	36
		CONTRACT NO. 62J26			
	ILLINOIS	ID PROJECT			







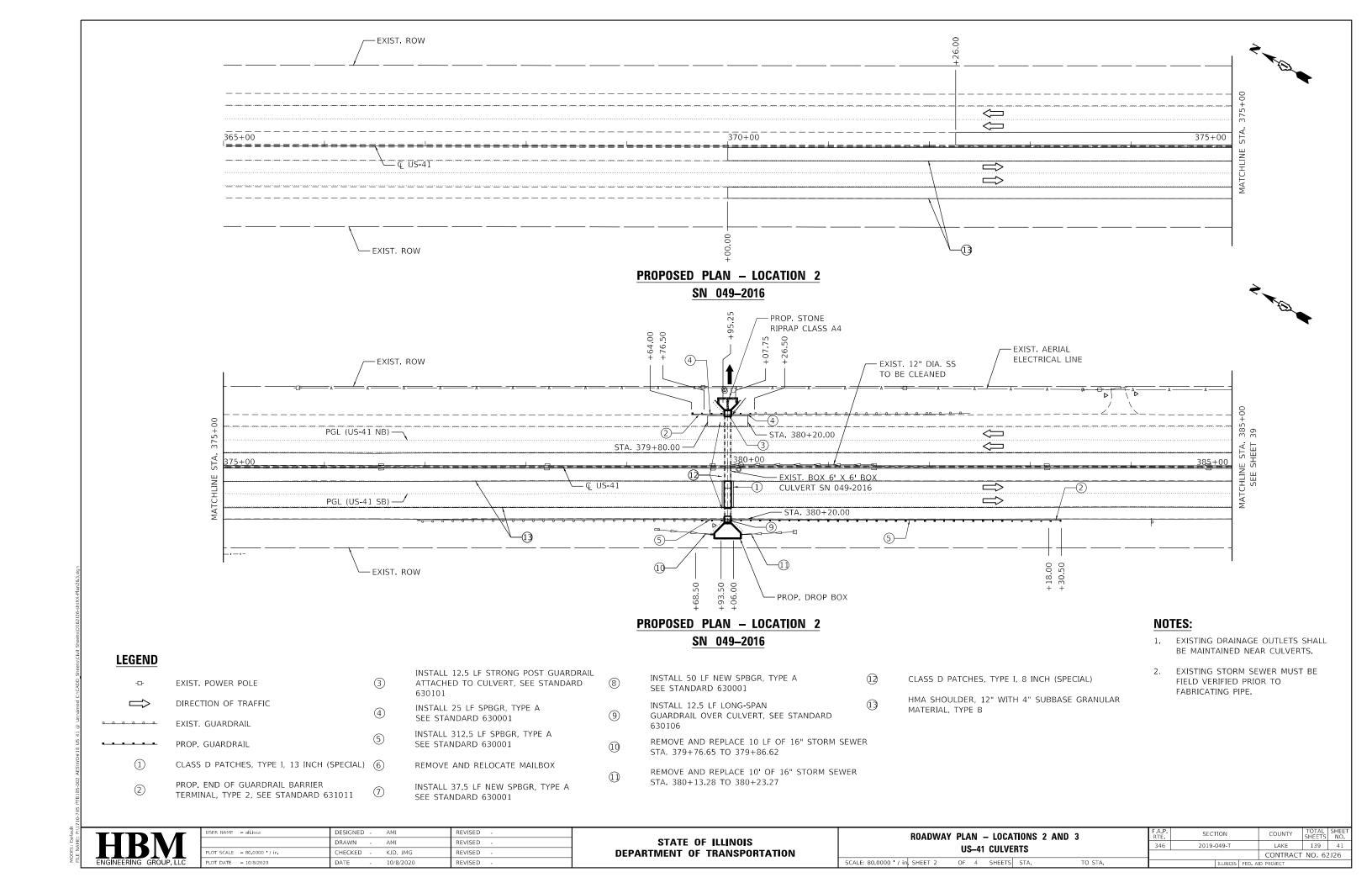


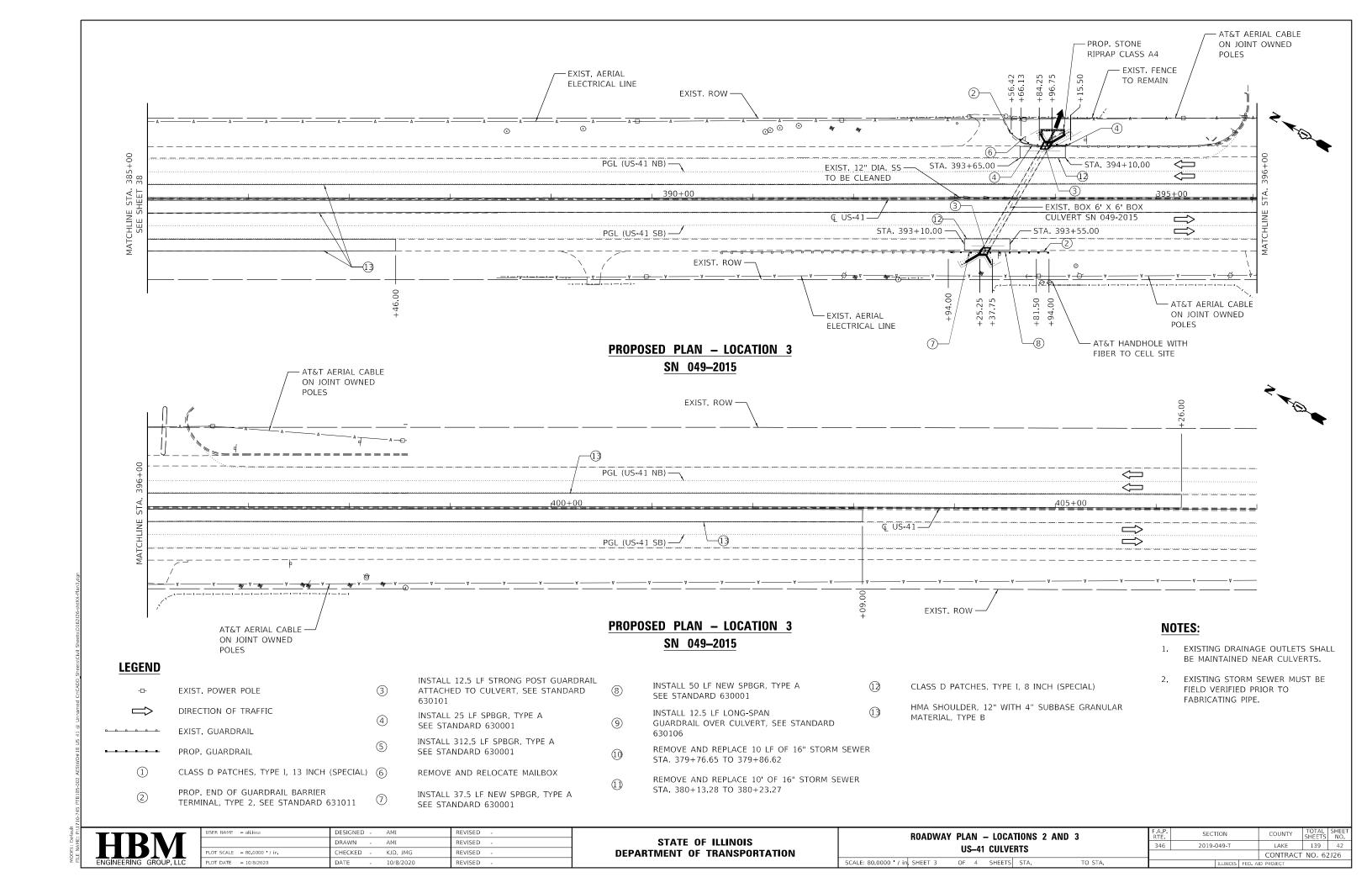
HBM ENGINEERING GROUP, LLC

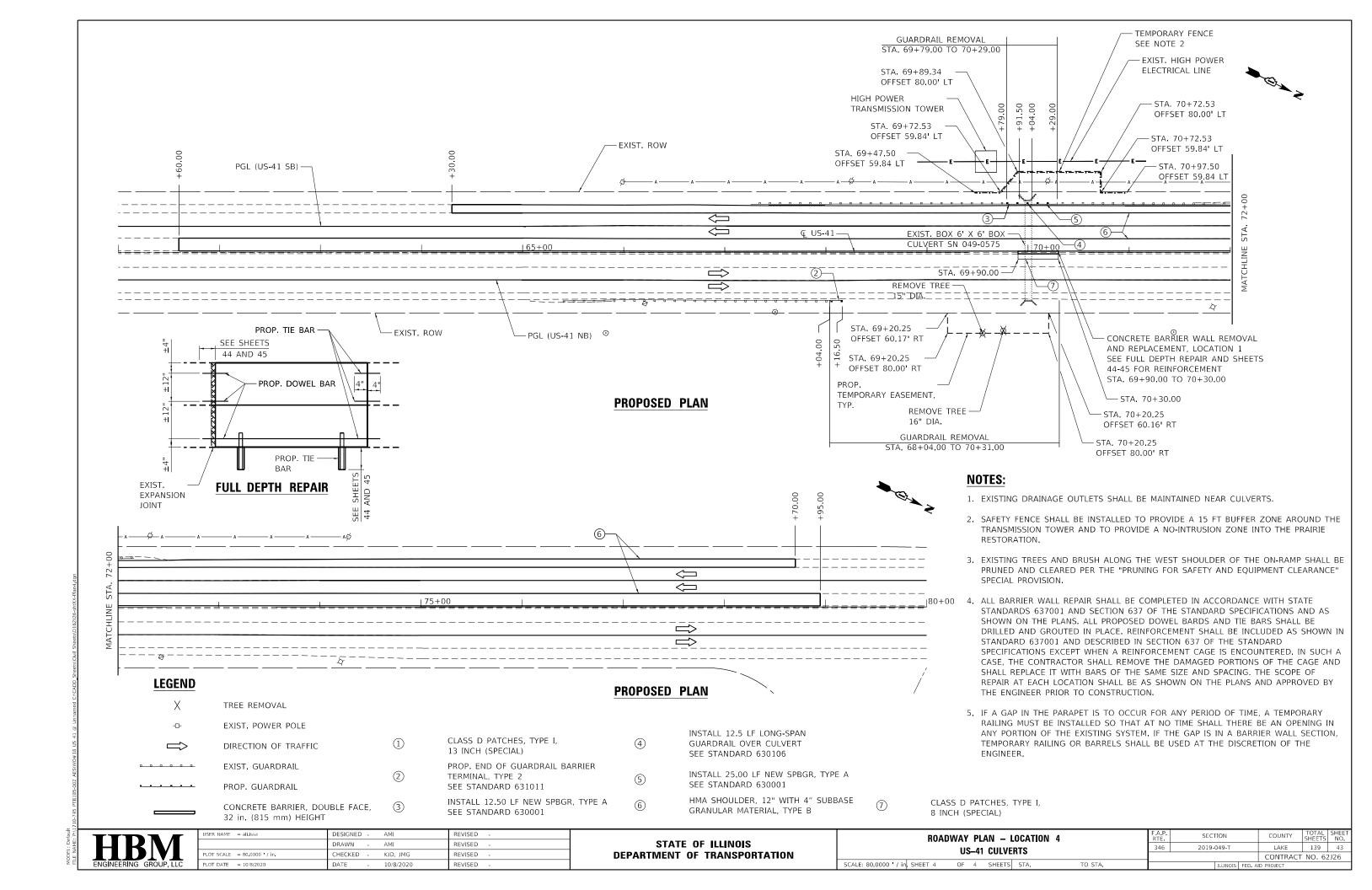
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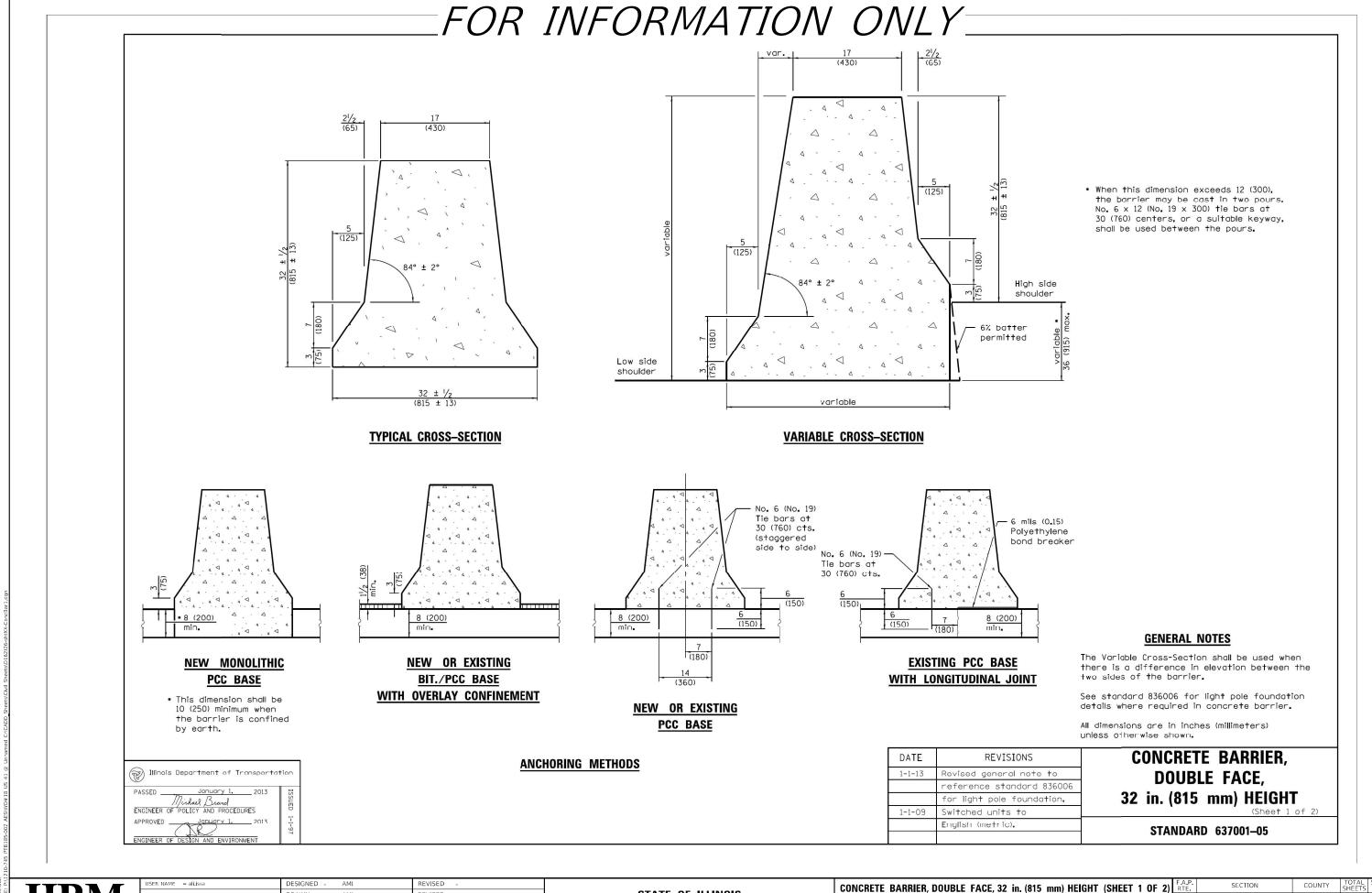
ROADWAY	PLAN	WITH	GOR	E RECOI	NSTRUCTION	LOCATION	1	R1
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RTE	SEC	HON		COUNTY	SHEETS	NO.
346	2019-	049-T		LAKE	139	40
				CONTRACT	NO. 62	2J26
		ILLINOIS	FED. A	ID PROJECT		





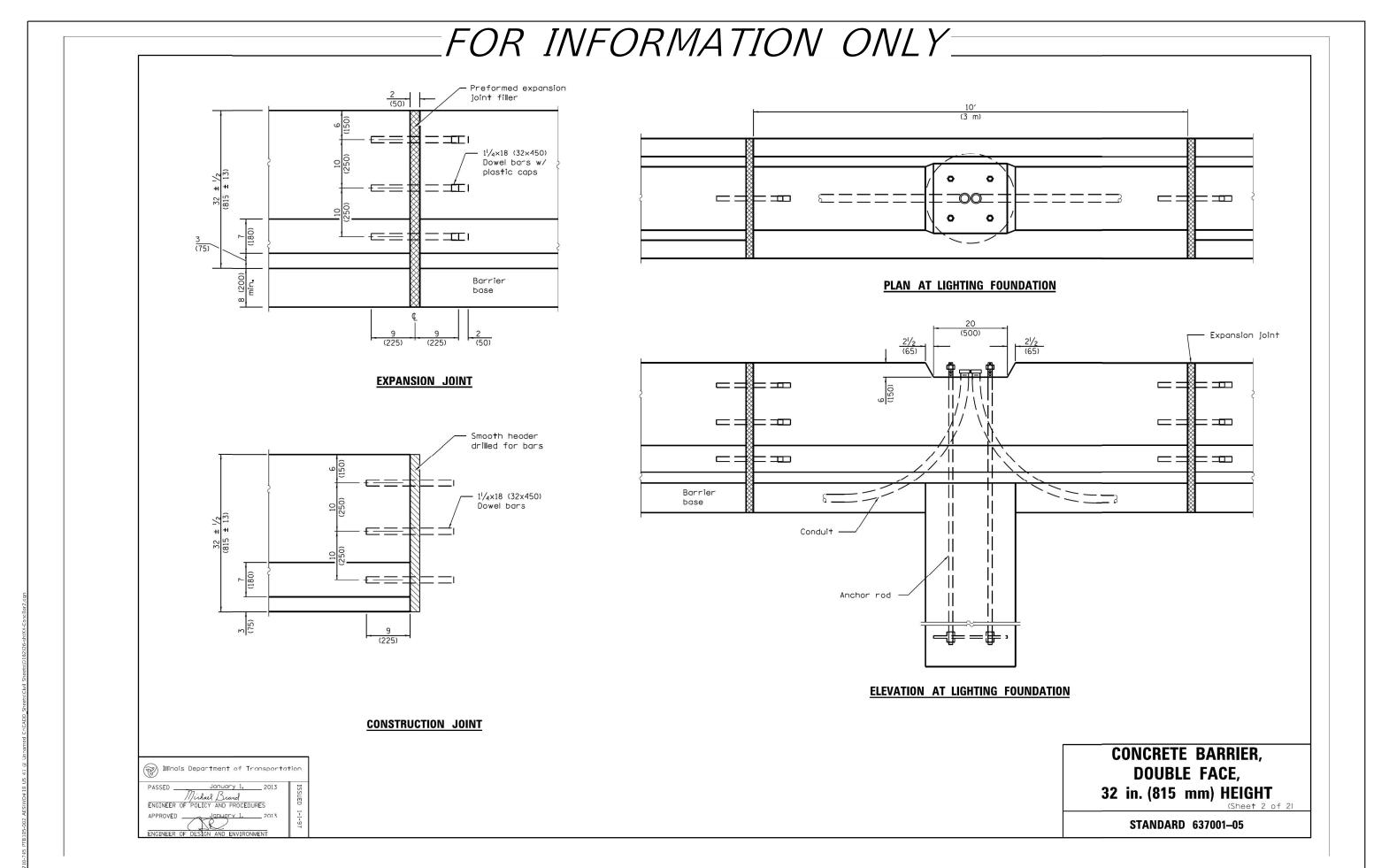




HBM ENGINEERING GROUP, LLC

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CONCRETE BARRIER, DOUBLE FACE, 32 in. (815 mm) HEIGHT (SHEET 1 OF 2)	F.A.P. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
US-41 CULVERTS - LOCATION 4	346	346 2019-049-T		LAKE	139	44
03-41 COLVENTS - ECCATION 4				CONTRACT	NO. 62	2J26
SCALE: 2.0000 ' / in. SHEET 1 OF 2 SHEETS STA. TO STA.		ILLINOIS	FED. AID	PROJECT		



HBM ENGINEERING GROUP, LLC

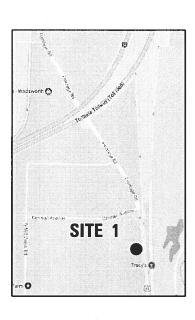
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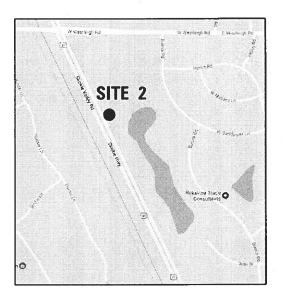
CONCRETE BARRIER, DOUBLE FACE, 32 in. (815 mm) HEIGHT (SHEET 2 OF 2)						F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
US-41 CULVERTS - LOCATION 4							346 2019-049-T		LAKE	139	45
US-41 COLVENTS - LUCATION 4								CONTRAC	T NO. 6	2J26	
SCALE: 2.0000 ' / in.	SHEET 2	OF	2	SHEETS	STA.	TO STA.		ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS**

PLAT OF HIGHWAYS

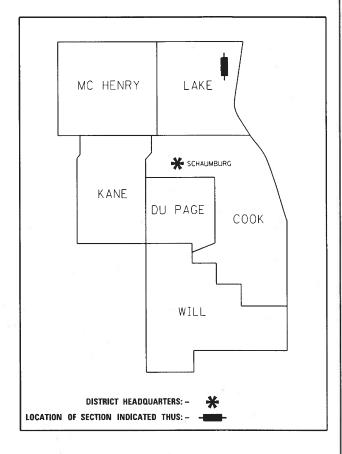
US ROUTE 41 (SKOKIE HIGHWAY) SECTION LAKE COUNTY N OF IL 173 & S OF WESTLEIGH RD R-91-017-17





LOCATION MAPS

GROSS LENGTH SITE 1 = 88 FT. = 0.017 MILE GROSS LENGTH SITE 2=152 FT. = 0.029 MILE



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

> **IDOT USE ONLY** RECEIVED OCT 0 3 2017/11 PLATS & LEGALS

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PARCEL NUMBER

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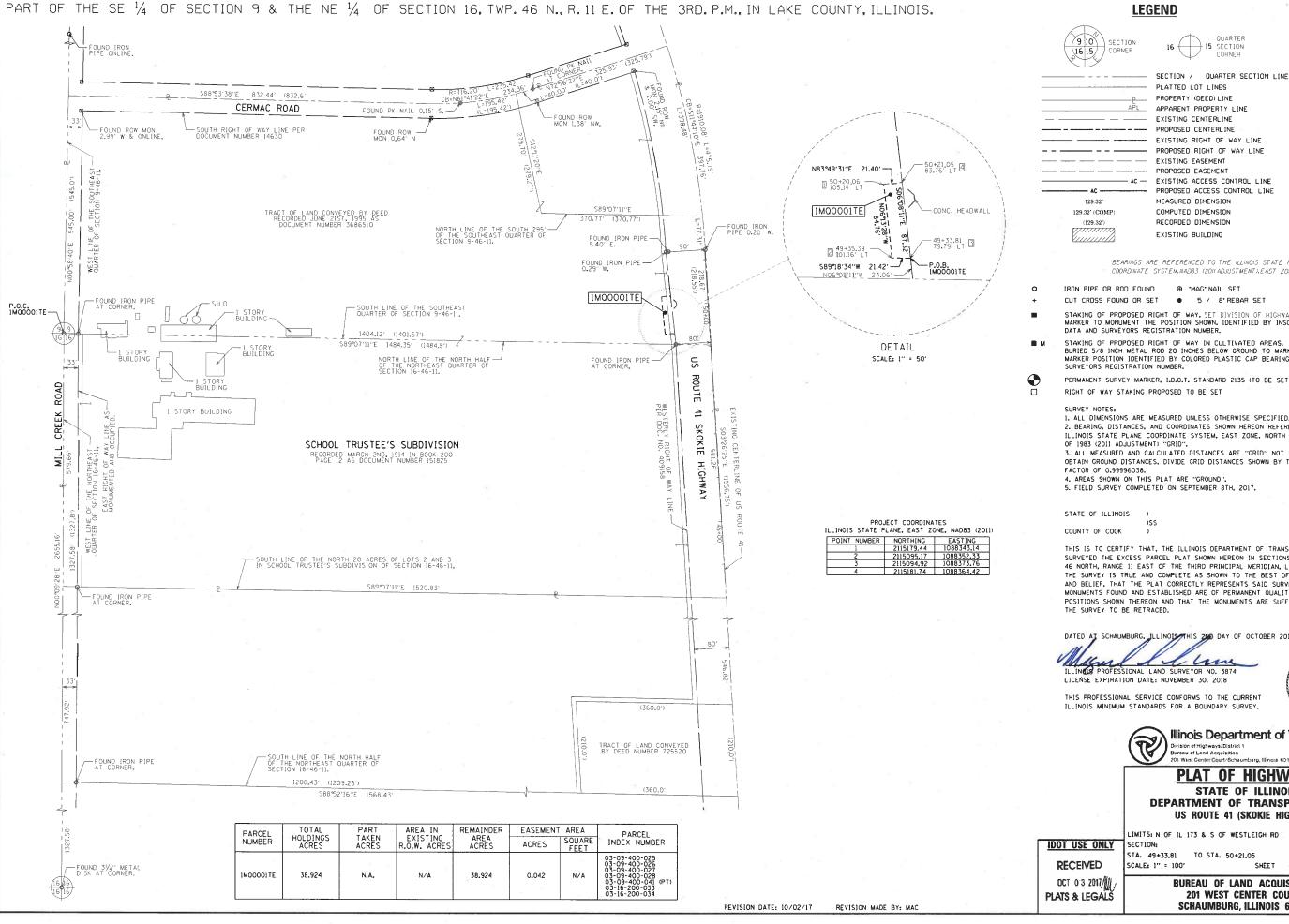
MILL CREEK VENTURE LLC, AN ILLINOIS LIMITED LIABILITY COMPANY

COMMONWEALTH EDISON COMPANY, AN ILLINOIS CORPORATION

THE PONDS HOMEOWNERS ASSOCIATION ON BEHALF OF THE LOT OWNERS OF ROBERT W. KENDLER'S PONDS SUBDIVISION

PROPERTY ACQUIRED BY

3





GRAPHIC SCALE FEET 0 100 SCALE: 1" = 100"

PROPOSED ACCESS CONTROL LINE MEASURED DIMENSION COMPUTED DIMENSION RECORDED DIMENSION EXISTING BUILDING

BEARINGS ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM. NAD83 (2011 ADJUSTMENT). EAST ZONE.

STAKING OF PROPOSED RIGHT OF WAY. SET DIVISION OF HIGHWAYS SURVEY MARKER TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS REGISTRATION NUMBER.

STAKING OF PROPOSED RIGHT OF WAY IN CULTIVATED AREAS, BURIED 5/8 INCH METAL ROD 20 INCHES BELOW GROUND TO MARK FUTURE SURVEY MARKER POSITION IDENTIFIED BY COLORED PLASTIC CAP BEARING

PERMANENT SURVEY MARKER, I.D.O.T. STANDARD 2135 (TO BE SET BY OTHERS) RIGHT OF WAY STAKING PROPOSED TO BE SET

1. ALL DIMENSIONS ARE MEASURED UNLESS OTHERWISE SPECIFIED. 2. BEARING, DISTANCES, AND COORDINATES SHOWN HEREON REFERENCE THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM

3. ALL MEASURED AND CALCULATED DISTANCES ARE "GRID" NOT "GROUND", TO OBTAIN GROUND DISTANCES, DIVIDE GRID DISTANCES SHOWN BY THE COMBINATION

4. AREAS SHOWN ON THIS PLAT ARE "GROUND".

5. FIELD SURVEY COMPLETED ON SEPTEMBER 8TH, 2017.

THIS IS TO CERTIFY THAT, THE ILLINOIS DEPARTMENT OF TRANSPORTATION, HAS SURVEYED THE EXCESS PARCEL PLAT SHOWN HEREON IN SECTIONS 9 & 16, TOWNSHIP

46 NORTH, RANGE 11 EAST OF THE THIRD PRINCIPAL MERIDIAN, LAKE COUNTY, THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE PLAT CORRECTLY REPRESENTS SAID SURVEY, THAT ALL MONUMENTS FOUND AND ESTABLISHED ARE OF PERMANENT QUALITY AND OCCUPY THE POSITIONS SHOWN THEREON AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE

DATED AT SCHAUMBURG, JLLINOIS THIS 200 DAY OF OCTOBER 2017 A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3874 LICENSE EXPIRATION DATE: NOVEMBER 30. 2018

THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.



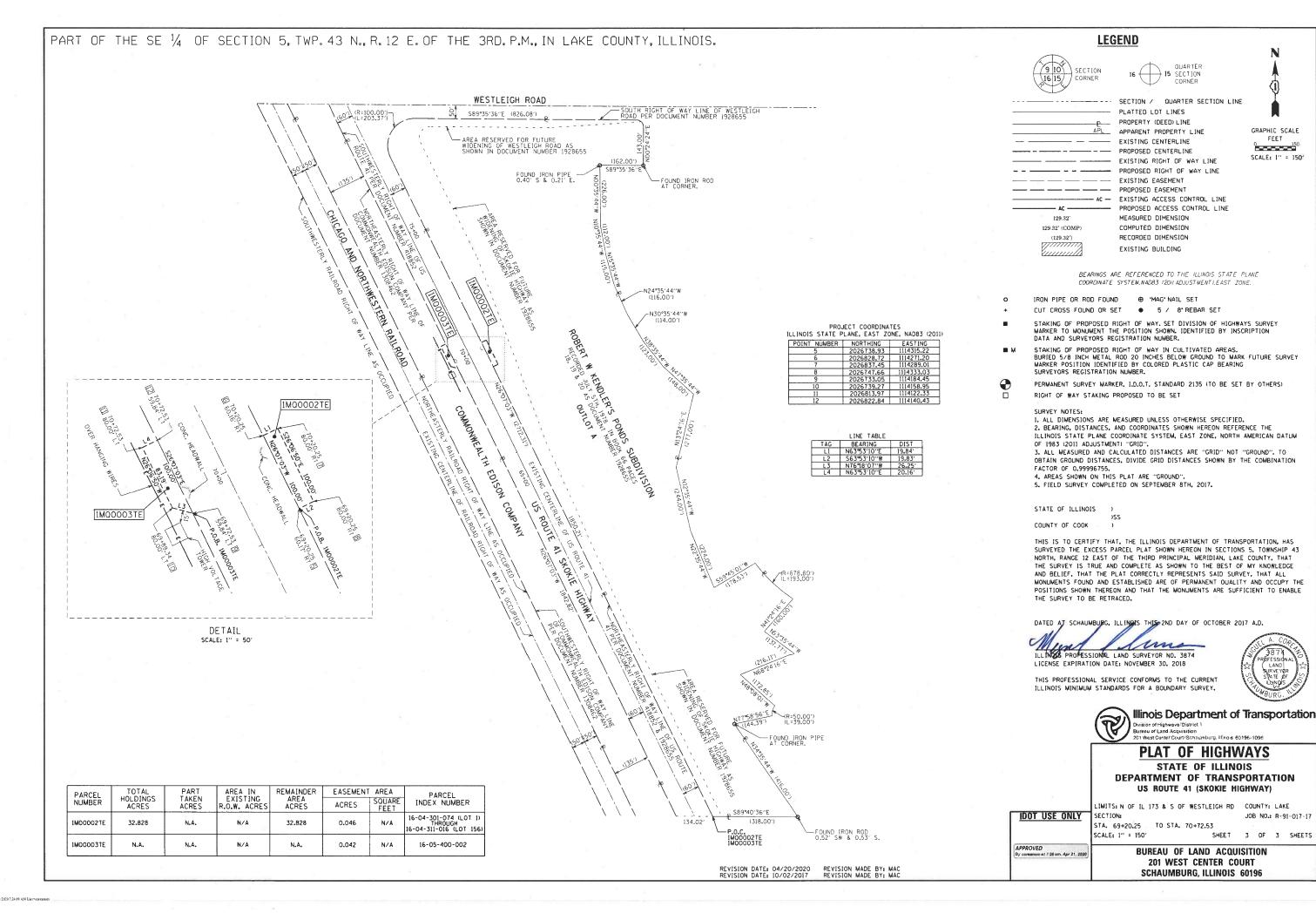
Illinois Department of Transportation Division of Highways/District 1 Bureau of Land Acquisition

PLAT OF HIGHWAYS STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

US ROUTE 41 (SKOKIE HIGHWAY) IMITS: N OF IL 173 & S OF WESTLEIGH RD . COUNTY: LAKE

JOB NO.: R-91-017-17 TO STA. 50+21.05 SHEET 2 OF 3 SHEETS

> **BUREAU OF LAND ACQUISITION 201 WEST CENTER COURT** SCHAUMBURG, ILLINOIS 60196



GRAPHIC SCALE

FEET

0 150

SCALE: 1" = 150"

SHEET 3 OF 3 SHEETS

3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT SEDIMENT TRANSPORT OFF THE SITE IS REDUCED BY A COMBINATION OF MINIMIZATION OF EROSION AT THE SOURCE AND THE INSTALLATION OF SPECIFIC MEASURES TO CONTROL OR REDUCE THE TRANSPORT OF SEDIMENT. A COPY OF THE EROSION AND SEDIMENT CONTROL SCHEDULE BEING IMPLEMENTED BY THE CONTRACTOR MUST BE APPROVED BY THE ENGINEER AND WILL BE ON THE CONSTRUCTION SITE AT ALL TIMES.

4. ALL RUNOFF ORIGINATING ON DISTURBED AREAS ASSOCIATED WITH THIS PROJECT WILL PASS THROUGH ONE OR MORE MEASURES THAT WILL MINIMIZE THE OFF-SITE SEDIMENT IMPACTS OF THE CONSTRUCTION ACTIVITIES.

5. DISTURBED AREAS ARE TO BE PROTECTED FROM EROSION IN A TIMELY MANNER.

UPON COMPLETION OF GRADING OR CONSTRUCTION ACTIVITY, THE AREA WILL

BE STABILIZED (USING PERMANENT MEASURES WHEN POSSIBLE) WITHIN ONE (1)

CALENDAR DAY

6. THE CONTRACTOR MUST CLEAN UP, GRADE THE WORK AREA AS THE PROJECT PROGRESSES AND INSTALL EROSION PROTECTION TO ELIMINATE THE CONCENTRATION OF RUNOFF, OR MUST INSTALL APPROPRIATE SEDIMENT CONTROL DEVICES TO TRAP SEDIMENT. PAVEMENT MUST BE CLEANED DAILY OR AS NECESSARY TO REMOVE EARTHEN MATERIAL TO THE SATISFACTION OF THE ENGINEER OR AUTHORIZED IDOT PERSONNEL.

7. STABILIZATION OF CUT OR FILL SLOPES WITH TEMPORARY OR PERMANENT EROSION CONTROL MEASURES IS REQUIRED WHENEVER THE CUT OR FILL ACTIVITY REACHES 10-FT VERTICALLY OR THE FINISHED SLOPE EQUALS 30-FT, WHICHEVER IS MORE RESTRICTIVE. ONCE THE STABILIZATION MEASURES ARE INSTALLED, THE PLACEMENT OF FILL EXCAVATION ACTIVITIES ARE ALLOWED TO PROCEED.

8. THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR MAINTENANCE OF ALL SOIL EROSION CONTROL DURING CONSTRUCTION. THE CONTRACTOR SHALL DESIGNATE ONE OF HIS EMPLOYEES TO BE RESPONSIBLE FOR IMPLEMENTATION OF THE EROSION AND SEDIMENT CONTROL PLAN ON ALL DISTURBED AREAS THROUGHOUT THE PROJECT.

9. THE CONTRACTOR'S REPRESENTATIVE HAS TO BE KNOWLEDGEABLE ABOUT INSTALLATION AND MAINTENANCE OF THE REQUIRED MEASURES AND HAVE TAKEN AN ILLINOIS DEPARTMENT OF TRANSPORTATION OR APPROVED EQUAL EROSION AND SEDIMENT CONTROL COURSE. THIS PERSON SHALL HAVE THE AUTHORITY TO CARRY OUT THE IMPLEMENTATION OF ANY INSTRUCTION CONCERNING THE EROSION AND SEDIMENT CONTROL PLAN PROVIDED BY THE ENGINEER. THIS INDIVIDUAL AND THE ENGINEER MUST MAKE INSPECTIONS A MINIMUM OF ONCE EVERY SEVEN DAYS OF THE FOIL OWING:

A. DISTURBED AREAS OF THE PROJECT SITE THAT HAVE NOT BEEN FULLY STABILIZED.

B. STRUCTURAL CONTROL MEASURES (SUCH AS PERIMETER EROSION BARRIER, ETC.)

C. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE PROJECT SITE.

WEEKLY AND WITHIN 24-HOURS AFTER A 24-HOUR RAINFALL OR EQUIVALENT SNOWFALL EVENT EQUAL OR GREATER THAN 0.5-INCH. DURING WINTER MONTHS, ALL MEASURES MUST BE CHECKED BY THE CONTRACTOR AFTER EACH SIGNIFICANT SNOWMELT.

10. ALL THE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED DURING THE CONSTRUCTION SEASON, AS WELL AS OVER THE WINTER SHUTDOWN PERIOD AND OTHER DAYS WHEN THE PROJECT IS CLOSED DOWN FOR A LONGER DURATION. ANY CONTROL MEASURES FILLED MORE THAN 75% MUST BE CLEANED AND RESET AND THESE SPOILS REMOVED TO AN APPROVED SITE.

11. SALVAGED TOPSOIL SHALL BE PLACED ON WELL DRAINED LAND AWAY FROM INTERMITTENT AND ACTIVE DRAINAGE PATHS WITH THE APPROPRIATE RUNOFF CONTROL AND SEDIMENT CONTROL MEASURES INSTALLED AROUND THE STORAGE SITE. IMMEDIATELY AFTER THE FINAL SHAPING OF THE STOCKPILE, THE TOPSOIL WILL BE STABILIZED IN ACCORDANCE WITH THE METHOD APPROVED BY IDOT. THE CONTRACTOR WILL PROVIDE ADEQUATE QUANTITY OF SILT FENCE TO CONTROL THE PERIMETER OF THE STOCKPILE.

12. EXCAVATION TO BE USED FOR EMBANKMENTS SHALL NOT BE STOCKPILED UNLESS PERIMETER CONTROLS ARE UTILIZED. WHEN THIS MATERIAL IS STOCKPILED FOR THE CONVENIENCE OF THE CONTRACTOR, THE COST OF THE CONTROLS WILL BE BORNE BY THE CONTRACTOR. IF THE MATERIAL IS STOCKPILED AT THE DIRECTION OF THE ENGINEER, THE DEPARTMENT WILL ASSUME THE COST OF INSTALLING AND MAINTAINING THE CONTROLS.

13. IF AND/OR WHEN THE CONTRACTOR REQUESTS CHANGE TO POSTPONE COMPLETION OF THE EXCAVATION OF A SPECIFIC AREA AS A CONTINUOUS OPERATION AND PLACING THE TOPSOIL AS DEFINED IN THE STANDARD SPECIFICATIONS, THE ENGINEER MAY ALLOW THE CONTRACTOR TO STABILIZE THE AREA USING TEMPORARY STABILIZATION WITH STRAW MULCH 25 FEET AWAY FROM THE SHOULDER OF THE ROAD PROVIDED THE FOLLOWING CONDITIONS ARE MET:

A. ALL AREAS BEING STABILIZED ARE 1:3 SLOPES OR FLATTER

BE PAVED IN THE FUTURE NOR ON TEMPORARY STEEP SLOPES.

THE ENTIRE PROJECT CAN BE PERMANENTLY SEEDED AT ONE TIME.

THE CONTRACTOR BEARS THE COST OF PREPARING THE SEED BED AND STABILIZING THE AREA WITH TEMPORARY STABILIZATION WITH MULCH METHOD 2.

. ALL REQUIRED SEDIMENT CONTROL MEASURES FOR THE SECTION OF ROAD IN OUESTION HAVE BEEN INSTALLED AND ARE BEING MAINTAINED.

14. TOPSOIL PLACEMENT:

TOPSOIL WILL BE PLACED ON FINAL SLOPES WHICH WILL NOT BE DISTURBED BY
FUTURE CONSTRUCTION. TOPSOIL WILL NOT BE PLACED ON SURFACES WHICH WILL

15. IN AREAS WHERE A PERMANENT VEGETATIVE COVER IS PRACTICABLE AND INCLUDED IN THE CONTRACT DOCUMENTS, A SPECIAL EFFORT SHOULD BE MADE TO ESTABLISH A COVER AS SOON AS A DISTURBED AREA IS BROUGHT TO FINAL GRADE. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR PROLONG FINAL GRADING AND SHAPING SO THAT

16. THE CONTRACTOR'S REPRESENTATIVE AND THE ENGINEER MUST KEEP A WRITTEN REPORT SUMMARIZING THE REQUIRED INSPECTIONS. THE REPORTS MUST BE KEPT AT THE SITE DURING CONSTRUCTION. THE REPORT MUST ALSO BE RETAINED FOR THREE YEARS FROM THE DATE THE SITE IS FINALLY STABILIZED.

17. ANY SEDIMENT LADEN DEWATERING DISCHARGE MUST BE DIRECTED TO AN APPROVED SEDIMENT TRAPPING CONTROL MEASURE PRIOR TO RELEASE FROM THE PROJECT SITE.

18. NO WORK IS ALLOWED BEYOND THE PERMITTED AREA. ANY WORK WITHIN A CREEK OR DITCH CAPABLE OF CONVEYING WATER MUST BE CONDUCTED IN THE DRY. PROVISIONS MUST BE MADE TO BYPASS PUMP OR DEWATER ANY AREAS IN WHICH WORK WILL BE CONDUCTED. IN HIGH FLOW CHANNELS WHERE DEWATERING IS NOT POSSIBLE OR PRACTICAL, SILT FENCE OR SEDIMENT CURTAINS MAY BE INSTALLED PARALLEL TO THE STREAM BANK. IN NO CASE WILL THE CURTAINS BE INSTALLED PERPENDICULAR TO THE FLOW. DEWATERING MUST BE DISCHARGED TO A STABLE, NON-ERODIBLE SURFACE AND IN-STREAM WORK BARRIERS MUST BE COMPOSED OF NON-ERODIBLE MATERIAL.

19. SEEDING USAGE

CLASS 3 AND CLASS 4B (MODIFIED):
USED ON FINAL DISTURBED CONSTRUCTION AREAS INDICATED ON THE PLANS.

TEMPORARY EROSION CONTROL SEEDING: USED IN AREAS REQUIRING SHORT TERM TEMPORARY SEEDING DURING CONSTRUCTION.

20. THE CONTRACTOR MUST COOPERATE WITH THE ENGINEER AND HIS/HER REPRESENTATIVE WHO WILL MAKE SITE VISITS TO REVIEW THE COMPLIANCE OF THE PLANS IN THE FIELD AND AUDIT IF NECESSARY. THE CONTRACTOR MUST PREPARE THE LOGS AND RECORDS WHEN REQUIRED AND SUBMIT TO IDOT AND/OR APPROPRIATE AGENCIES.

21. THE INSTALLATION, MAINTENANCE, REMOVAL AND RESTORATION OF THE AREA DISTURBED BY THE PLACEMENT OF THE PERIMETER EROSION BARRIER ARE INCLUDED IN THE CONTRACT UNIT PRICE FOR PERIMETER EROSION BARRIER. AFTER ALL PERIMETER EROSION BARRIER IS REMOVED, THE AREAS DAMAGED BY THE PERIMETER EROSION CONTROL BARRIER MUST BE RESTORED TO THEIR ORIGINAL CONDITION.

22. TEMPORARY OR PERMANENT STABILIZATION MEASURES SHALL BE INITIATED IMMEDIATELY WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORABILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN ONE (1) DAY AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORABILY OR PERMANENTLY CEASED ON ALL DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION WILL NOT OCCUR FOR A PERIOD OF FOURTEEN (14) OR MORE CALENDAR DAYS.

23. THE CONTRACTOR WILL PROVIDE THE ENGINEER A PLAN TO ENSURE THAT A STABILIZED FLOW LINE WILL BE PROVIDED DURING STORM SEWER CONSTRUCTION. THIS IS IMPORTANT WHERE NEW STORM SEWER CONNECTS TO EXISTING CULVERTS. USE A STABILIZED FLOW LINE BETWEEN INSTALLED STORM SEWER AND OPEN DISTURBANCE, ESPECIALLY WHEN RAIN IS FORECAST, SO THAT FLOW WILL NOT BE EROSIVE AND WILL REDUCE THE POTENTIAL FOR THE OFFSITE DISCHARGE OF SEDIMENT-BEARING WATERS. THE LACK OF AN APPROVED PLAN OR FAILURE TO COMPLY WILL RESULT IN AN ESC DEFICIENCY DEDUCTION.

24. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER, SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

25. EROSION CONTROL ITEMS ARE CONSIDERED TO BE A HIGH PRIORITY ON THIS CONTRACT. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEAUSURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE ENGINEER.

26. THE CONTRACTOR IS REQUIRED TO PROVIDE WASHOUT FACILITIES AND STABILIZED CONSTRUCTION ENTRANCES TO COMPLY WITH EROSION CONTROL REQUIREMENTS.

27. THE CONTRACTOR SHALL ATTACH AN ALUMINUM SIGN WITH THE FOLLOWING TEXT: "PROTECTED WETLAND - NO INTRUSION". THE SIGN(S) WILL BE ATTACHED TO THE STAKES BY THE METHOD APPROVED BY THE ENGINEER. THE SIGN(S) WILL BE PROVIDED BY THE DEPARTMENT AND SHALL BE PICKED UP BY THE CONTRACTOR FROM THE DISTRICT ONE ROADSIDE DEVELOPMENT ARCHITECT IN SCHAUMBURG, ILLINOIS. SCHEDULING THE PICK UP OF THE SIGNS CAN BE ARRANGED BY CONTACTING THE DISTRICT ONE ROADSIDE DEVELOPMENT UNIT AT (847) 705-4171. WHEN WORK HAS BEEN COMPLETED, THE SIGN(S) SHALL BE RETURNED TO THE DISTRICT ONE ROADSIDE DEVELOPMENT UNIT. THE COST OF PICKING UP, ATTACHING THE SIGNS TO THE TEMPORARY STAKES AND RETURNING THE SIGNS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PERIMETER EROSION BARRIER.

28. THE US ARMY CORPS OF ENGINEERS MUST BE NOTIFIED 10 DAYS PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES AND ONE WEEK PRIOR TO THE FINAL INSPECTION.

29. THIS PROJECT REQUIRES A US ARMY CORPS OF ENGINEERS (USACE) 404 PERMIT THAT WILL BE SECURED BY THE DEPARTMENT. ALL CONDITIONS OF THE 404 PERMIT FOUND IN THE SPECIAL PROVISIONS MUST BE FOLLOWED. AS A CONDITION OF THE PERMIT, THE CONTRACTOR WILL NEED TO SUBMIT AN IN-STREAM WORK PLAN (INCLUDING WORK WITHIN WETLANDS) TO THE DEPARTMENT FOR APPROVAL. GUIDELINES ON ACCEPTABLE IN-STREAM WORK TECHNIQUES (INCLUDING WORK WITHIN WETLANDS) CAN BE FOUND ON THE USACE WEBSITE. THE USACE DEFINES AND DETERMINES IN-STREAM WORK.

SOIL PROTECTION SCHEDULE:

STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	ост.	NOV.	DEC.
PERMANENT SEEDING						-	-				-	
DORMANT SEEDING			-									•
TEMPORARY SEEDING										-		
EROSION BLANKET / HYDROMULCH											-	

SOIL EROSION AND SEDIMENT CONTROL STRATEGY:

1. INSTALL TRAFFIC CONTROL DEVICES.

2. ERECT PERIMETER EROSION BARRIERS, DITCH CHECKS AND PIPE PROTECTION AS SHOWN ON THE PLANS.

3. ESTABLISH STABILIZED CONSTRUCTION ENTRANCES.

4. REMOVE EXISTING PAVEMENTS AND STRUCTURES AS SHOWN ON THE PLANS.

5. CONSTRUCT PROJECT IMPROVEMENTS AS SHOWN ON THE PLANS.

. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES FOR THE DURATION OF CONSTRUCTION.

7. TEMPORARY STABILIZATION OF EACH STAGE SHOULD BE COMPLETED BEFORE WORK BEGINS ON SUBSEQUENT STAGES.

3. STABILIZE DISTURBED AREAS WITH TEMPORARY EROSION CONTROL MEASURES. USE THE PERMANENT SEEDING WITH EROSION CONTROL BLANKET AS SHOWN ON THE PLANS FOR PERMANENT STABILIZATION.

9. WHEN THE PERMANENT STABILIZATION IS ESTABLISHED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

HIGHWAY STANDARD

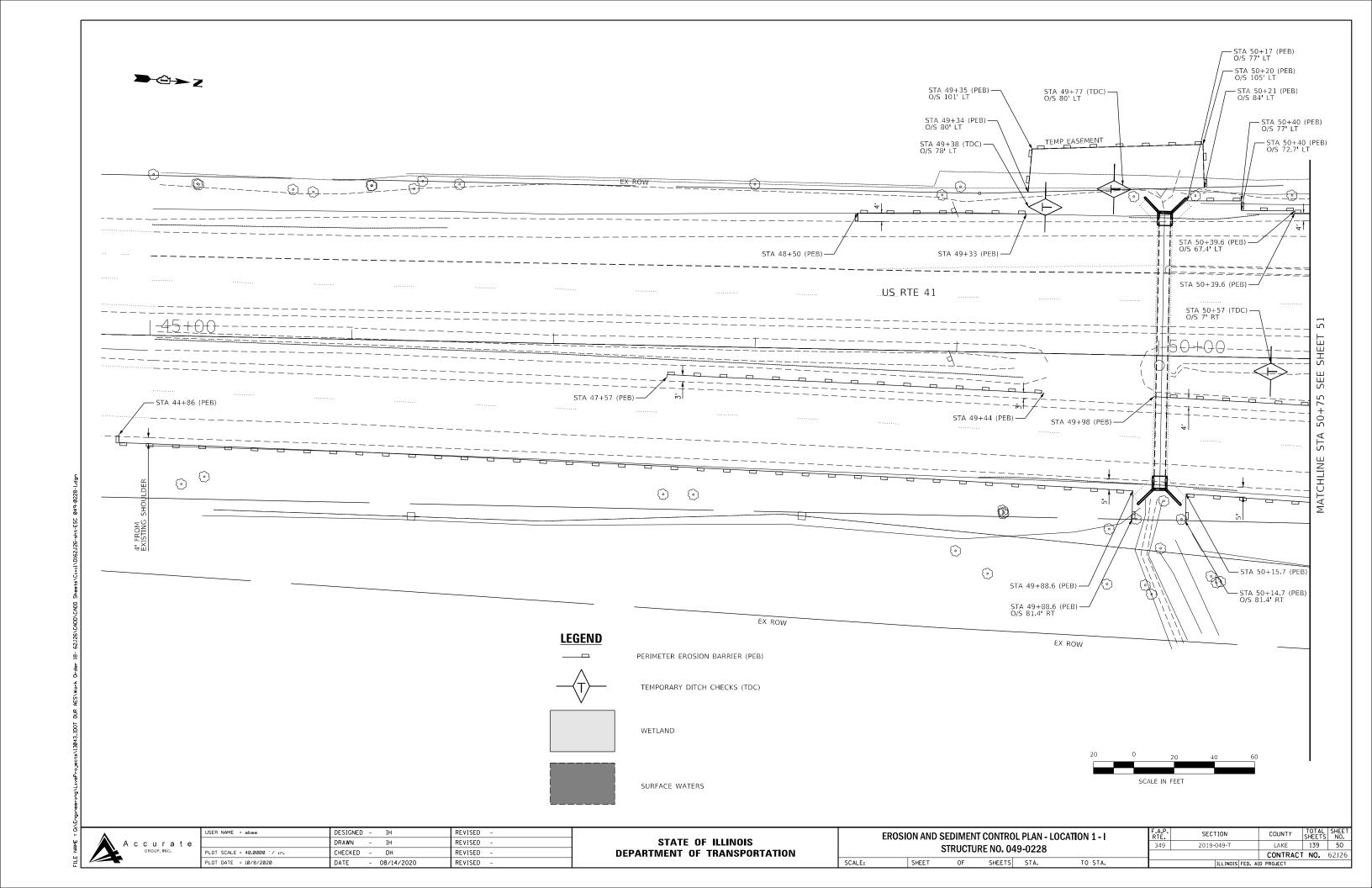
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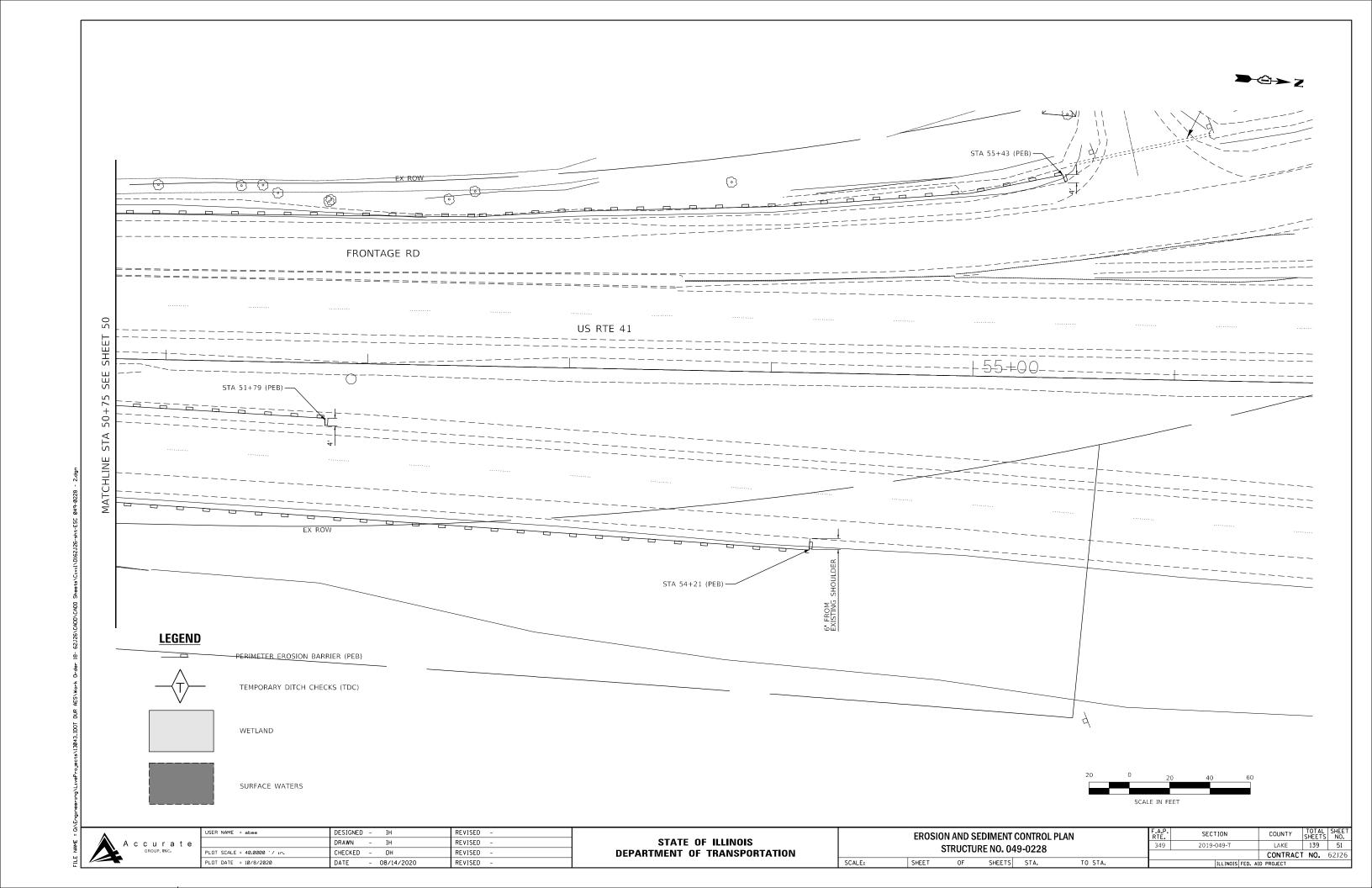
280001 TEMPORARY EROSION CONTROL SYSTEMS

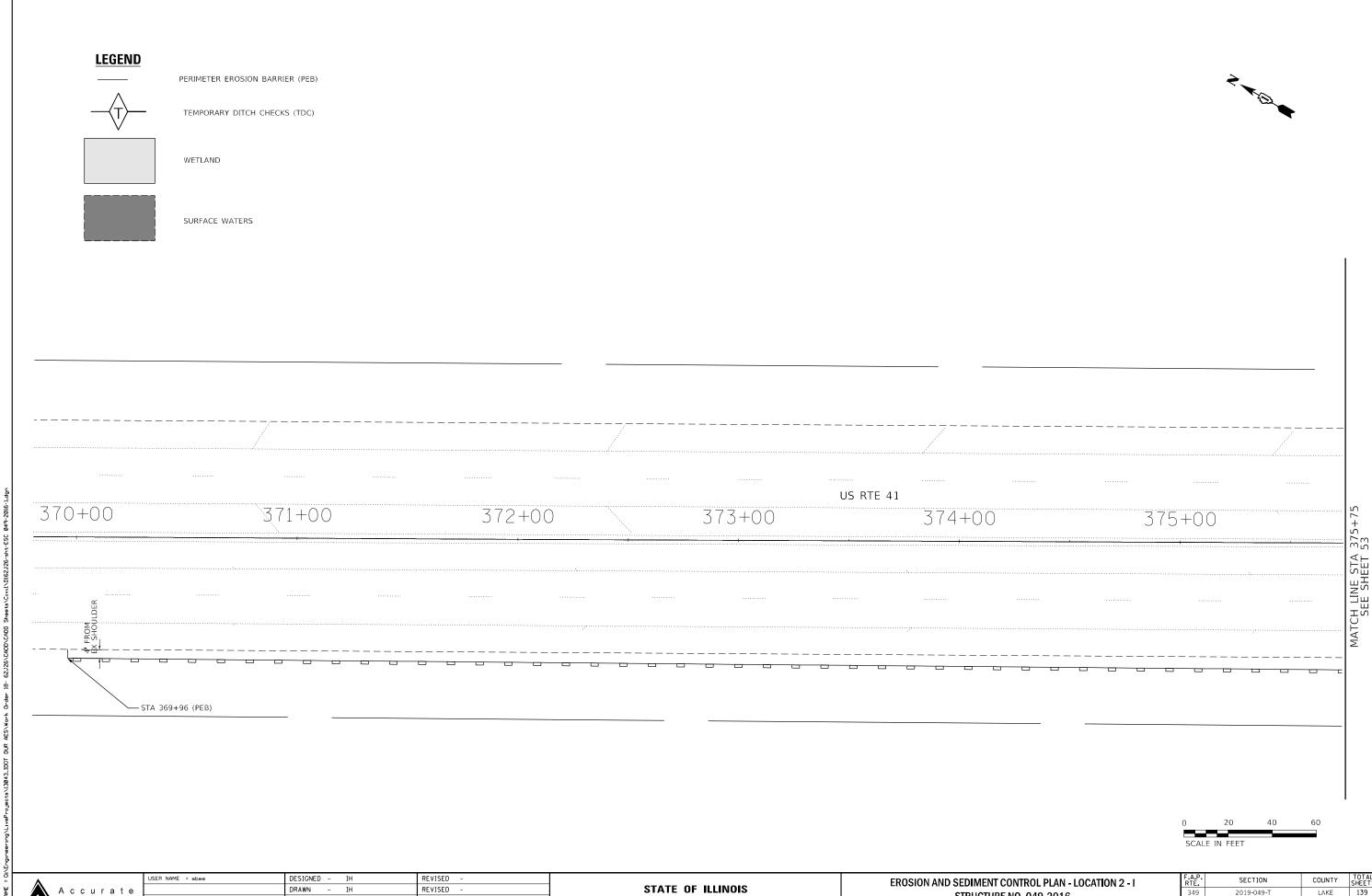


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PLOT DATE = 10/8/2020	DATE - 08/14/2020	REVISED -

SCALE:







CHECKED - DH

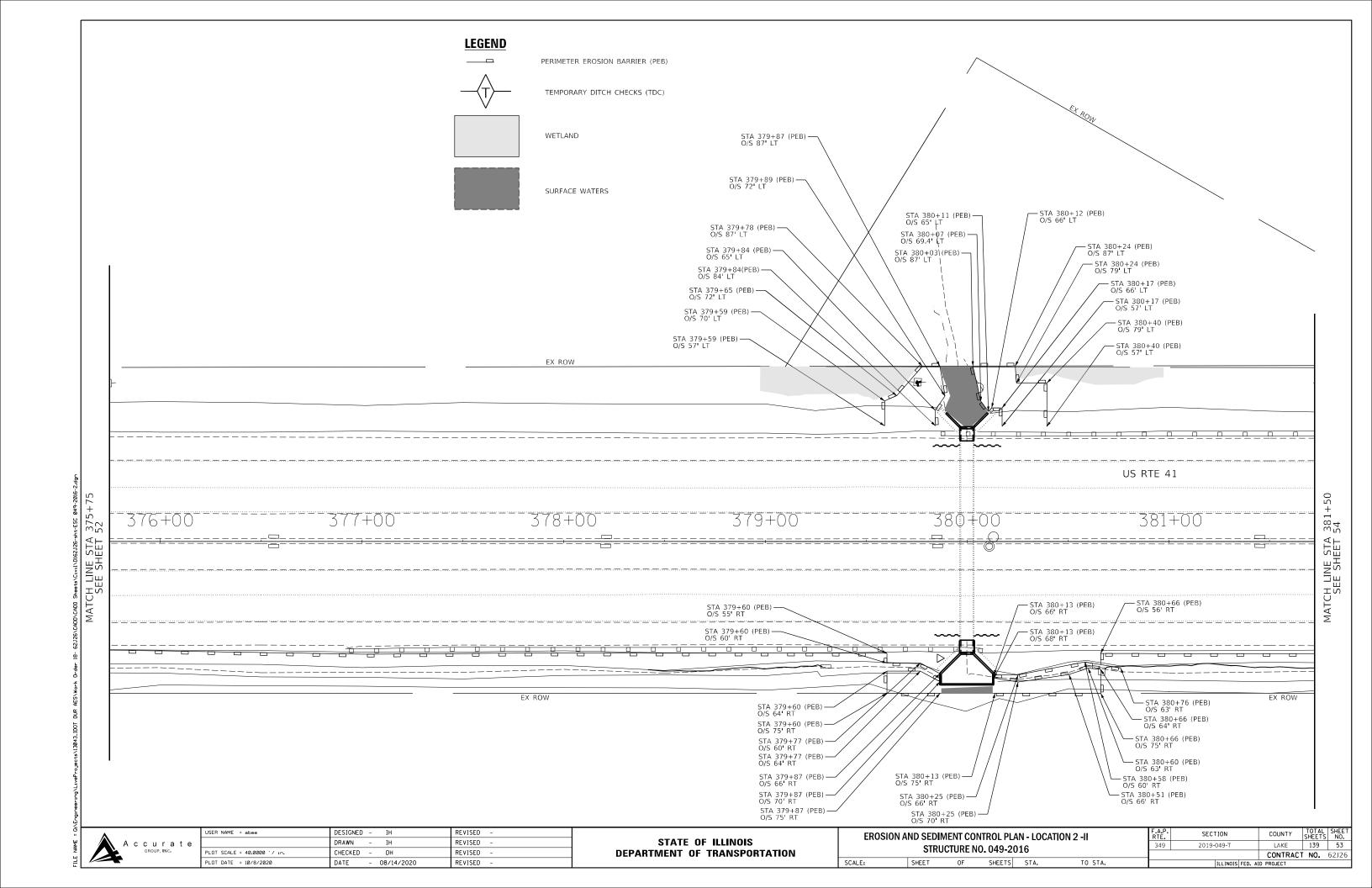
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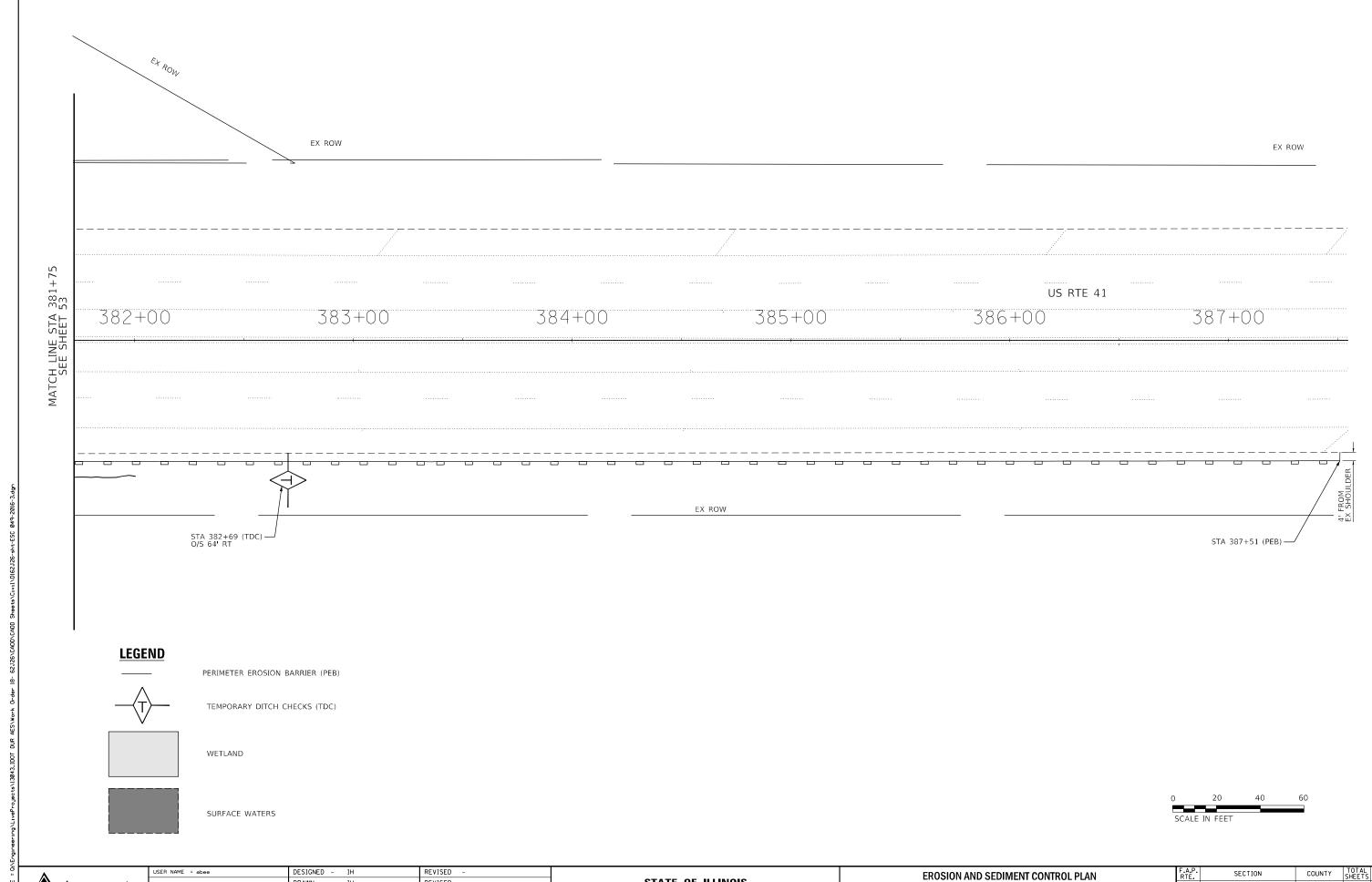
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

STRUCTURE NO. 049-2016 SHEET OF SHEETS STA.

2019-049-T





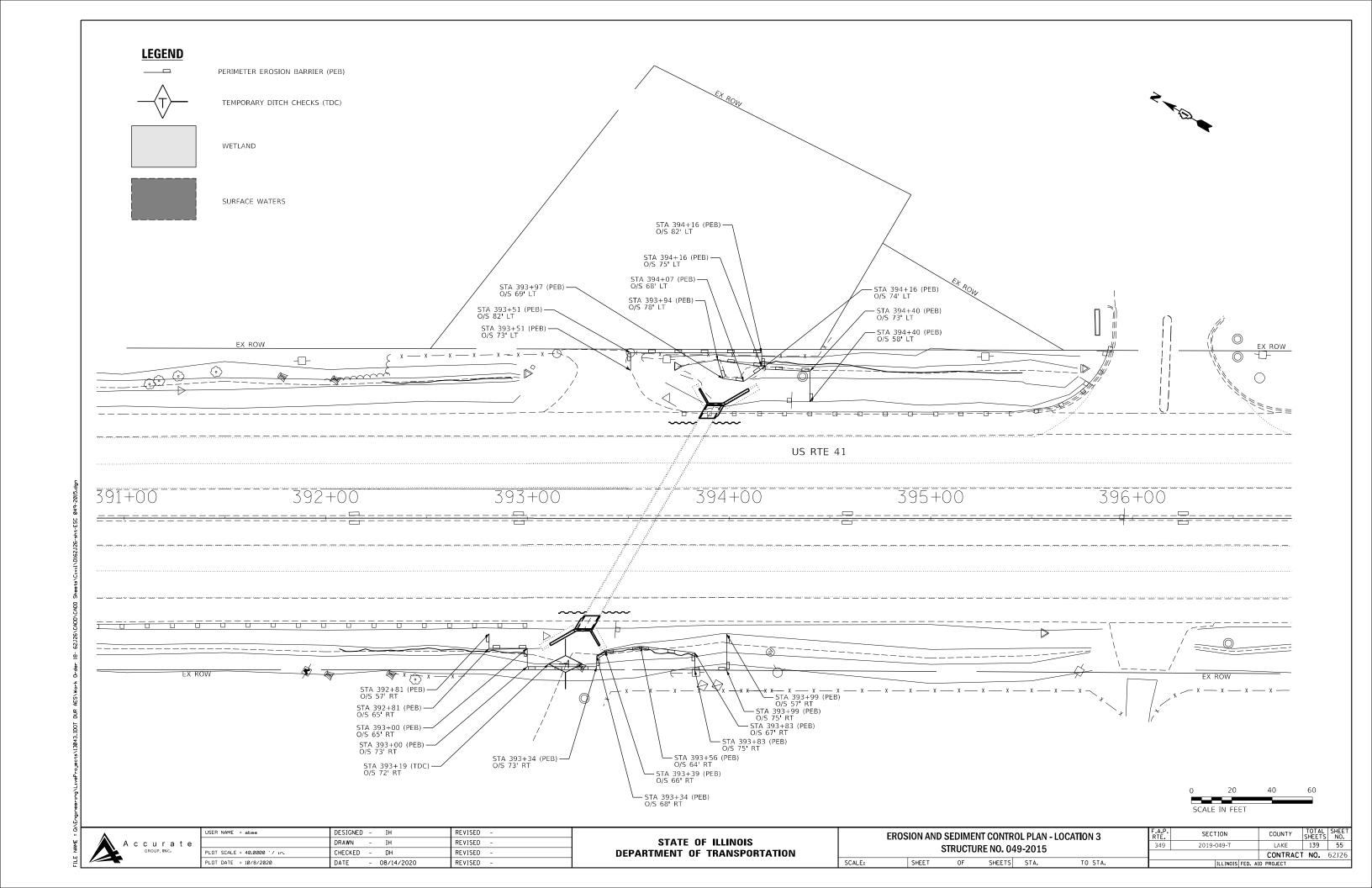
Accurate GROUP, INC.

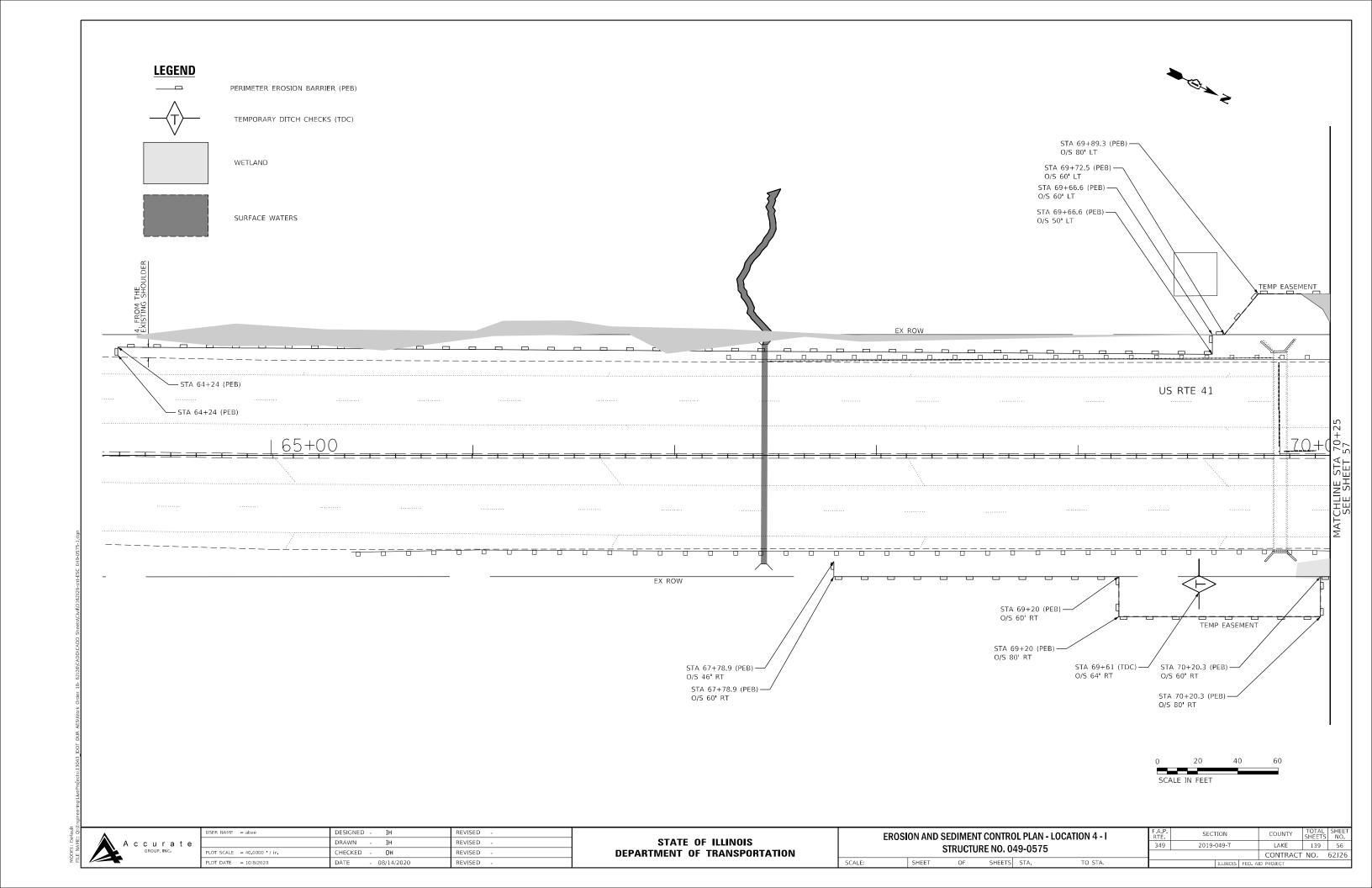
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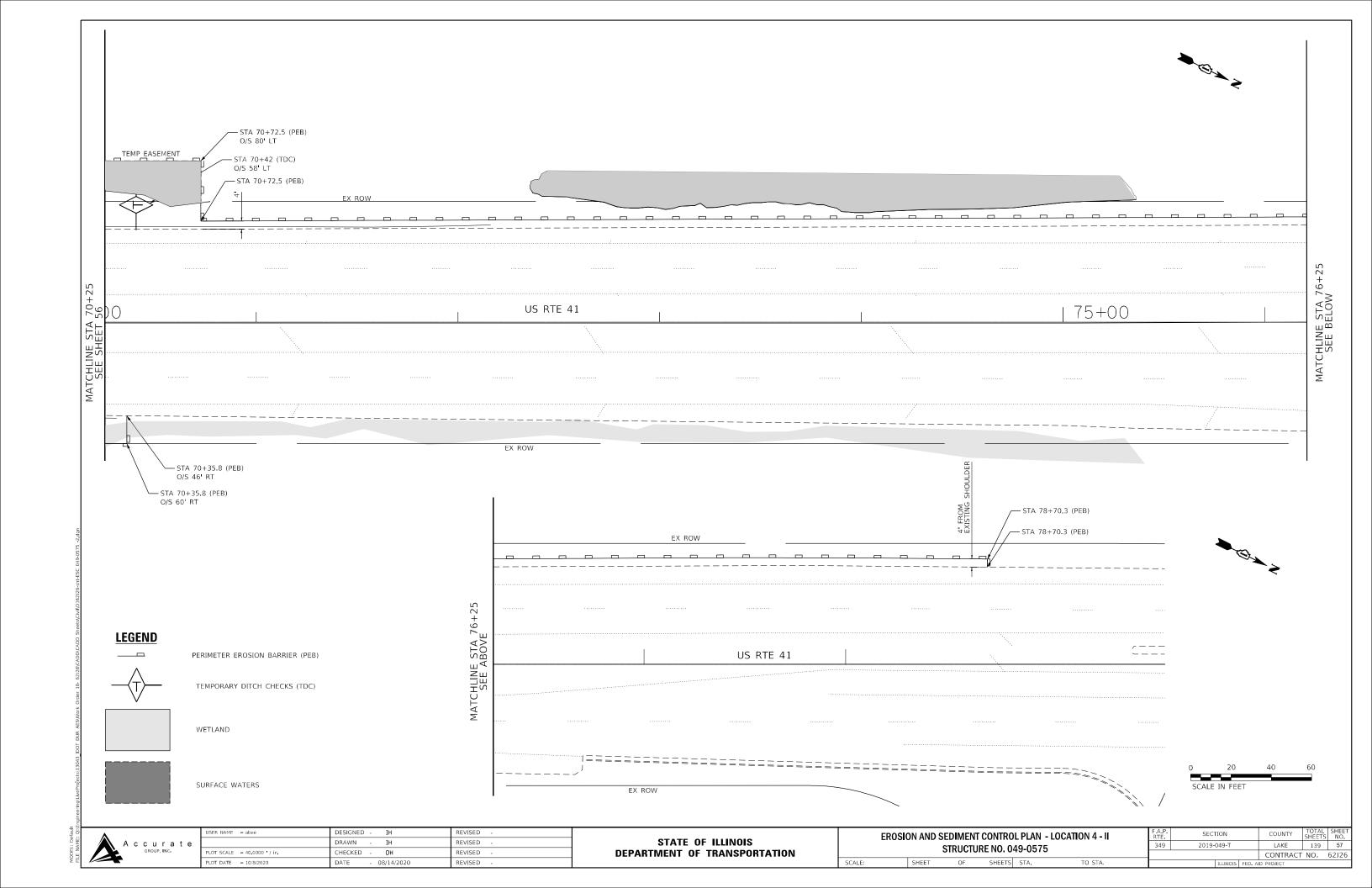
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DEPARTMENT	0F	TRANSPORTATION

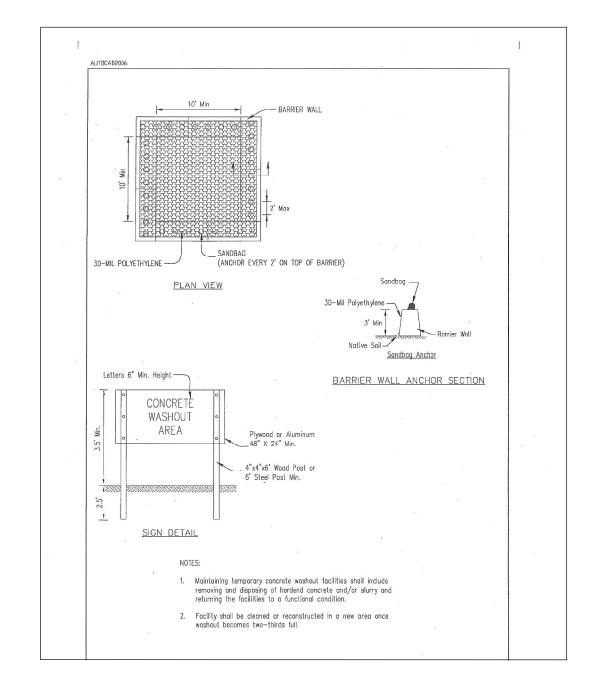
STRUCTURE NO. 049-2016 2019-049-T LAKE 139 54 CONTRACT NO. 62J26	ION AND SEDIMENT CONTROL PLAN	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
CONTRACT NO. 62J26	STRUCTURE NO. 0/19-2016	349	2019-049-T	LAKE	139	54	
OF SUFFICE STA TO STA	311001011E110: 043-2010			CONTRACT	NO.	62J26	
OF SHEETS STA. TO STA.	OF SHEETS STA. TO STA.	ILLINOIS FED. AID PROJECT					

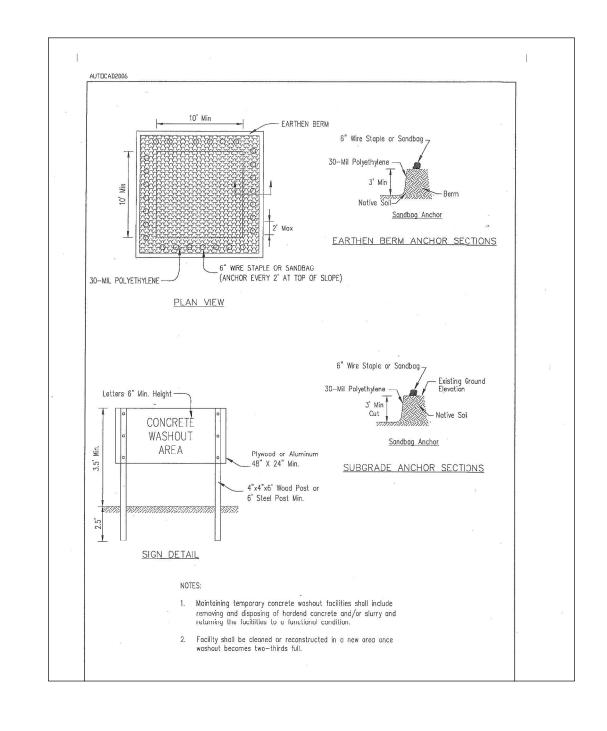
SHEET









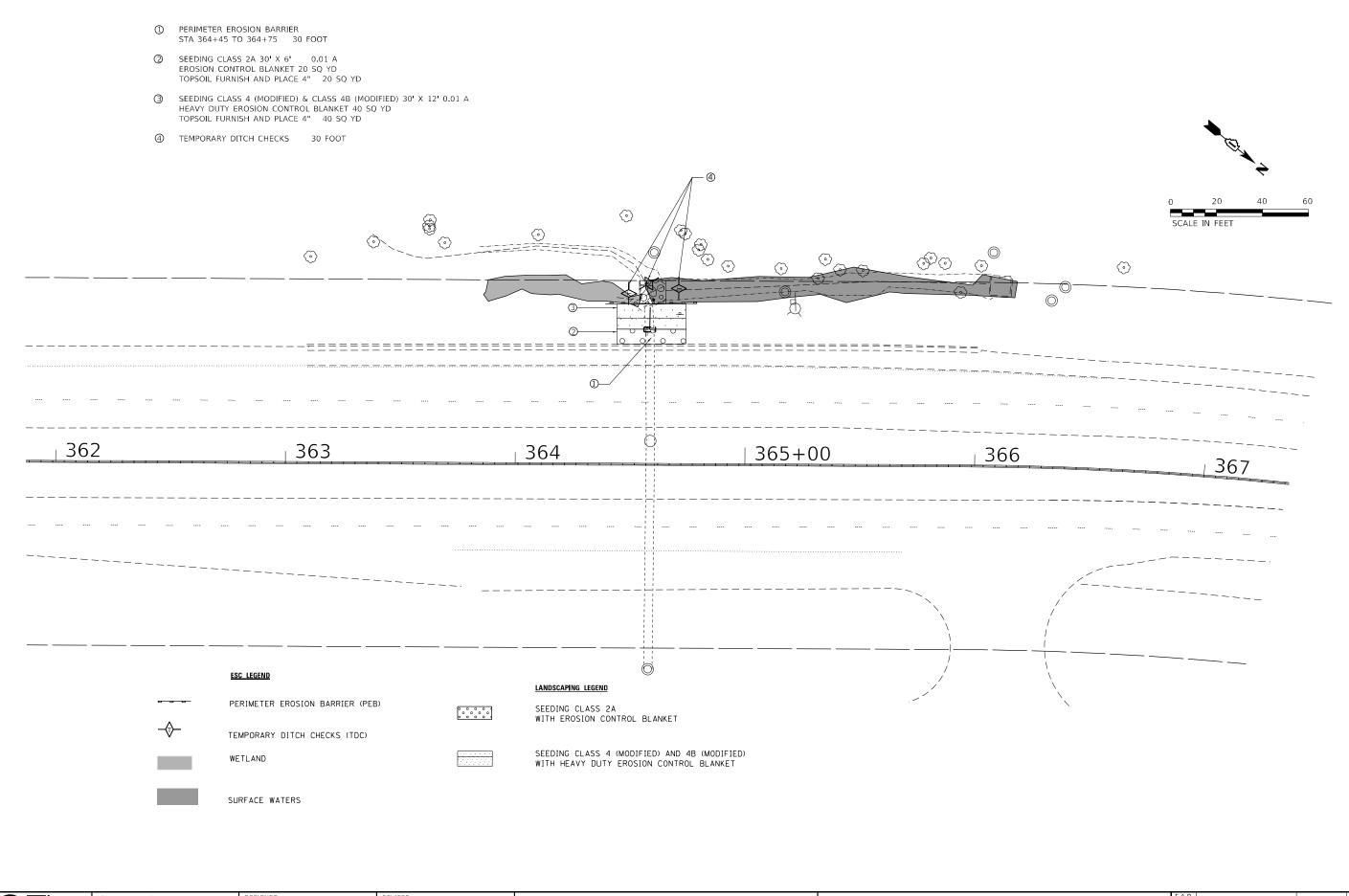




DRAWN - IH REVISED -	
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PLOT DATE = 10/8/2020 DATE - 08/14/2020 REVISED -	

SCALE:

EROSION AND SEDIMENT CONTROL DETAILS				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
US RTE 41					349	2019 - 049-T	LAKE	139	58	
00 KIL 41						CONTRAC	NO.	62J26		
SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. AID PROJECT				



QUIGG ENGINEERING INC

 USER NAME
 = mokrent
 DESIGNED - MO
 REVISED - REVISED

 DRAWN - JS
 REVISED - REVISED

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 PLOT DATE = 10/6/2020
 DATE - 6/05/2020
 REVISED

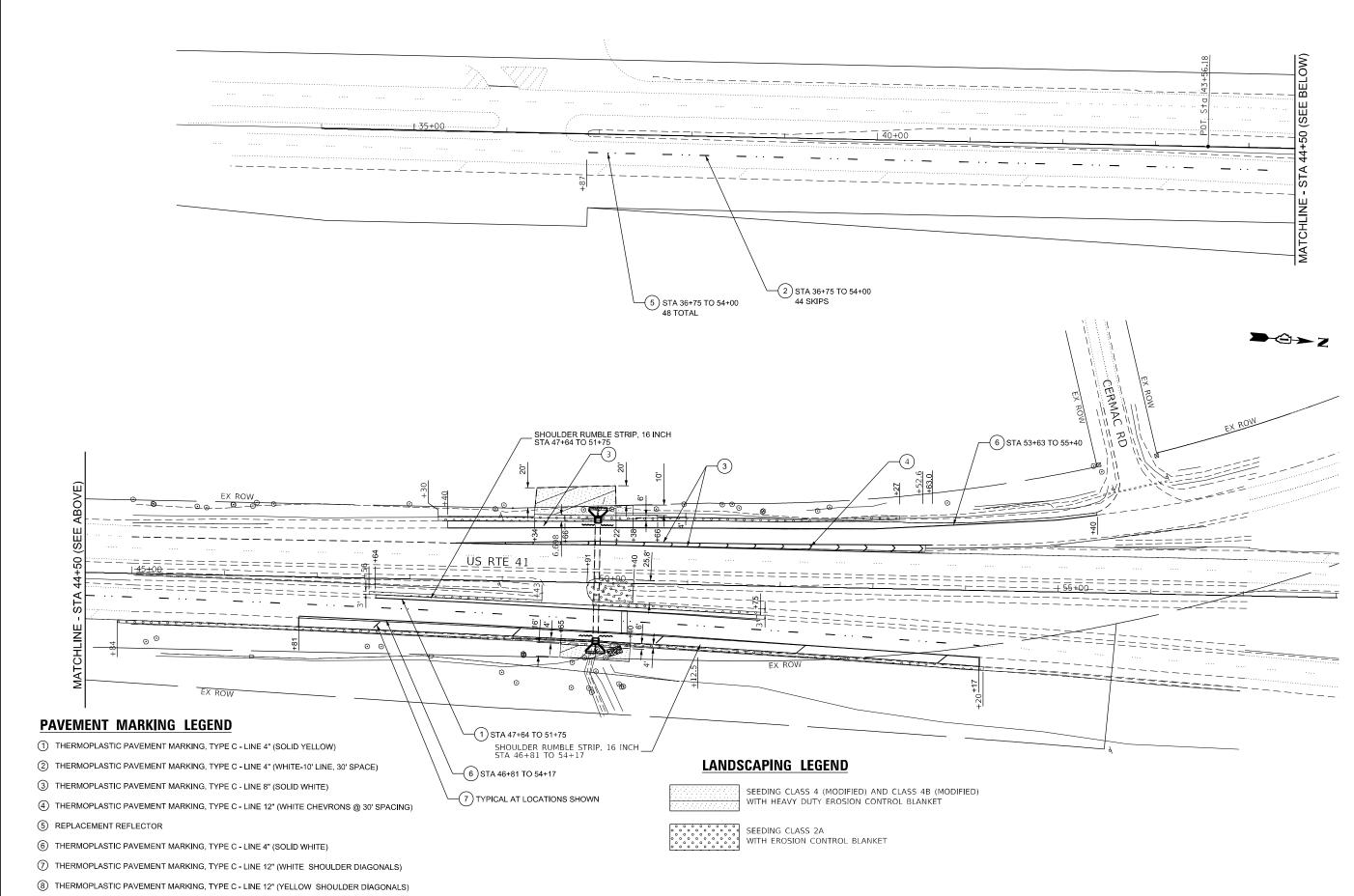
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE:

 LANDSCAPING
 AND
 EROSION
 CONTROL PLANS
 F.A.P. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS NO.

 346
 2019-149-T
 LAKE
 139
 59

 SHEET
 OF
 SHEETS STA.
 TO STA.
 ILLINOIS FED. AID PROJECT



A c c

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PAVEMENT MARKING AND LANDSCAPING PLANS
STRUCTURE NO. 049-0228

SHEET OF SHEETS STA. TO STA.

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

DESIGNED -

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PLOT DATE = 10/8/2020

DRAWN - IH

CHECKED - DH

DATE - 08/14/2020

REVISED

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REVISED

COUNTY TOTAL SHEET NO.

LAKE 139 61

CONTRACT NO. 62J26

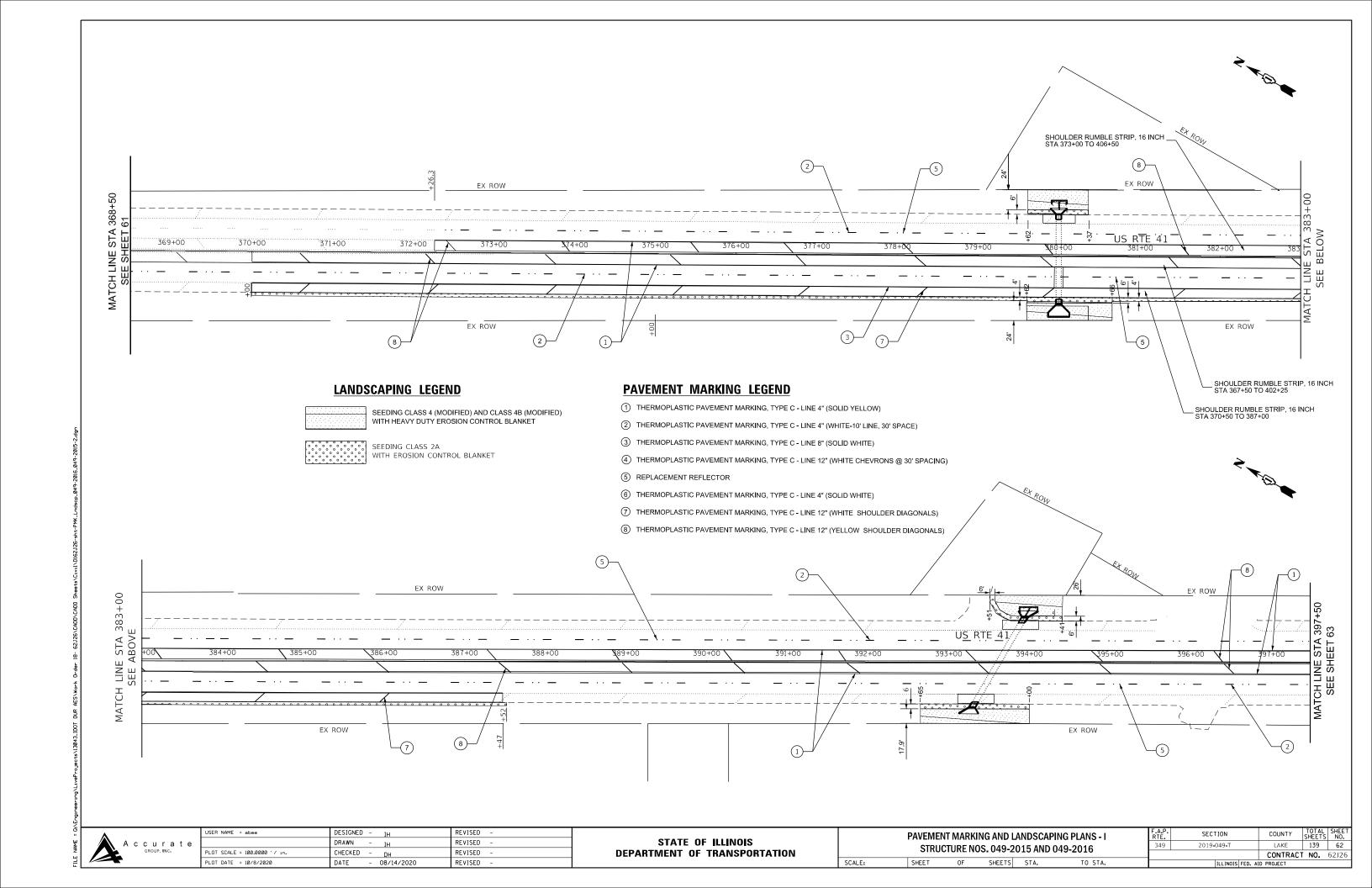
SECTION

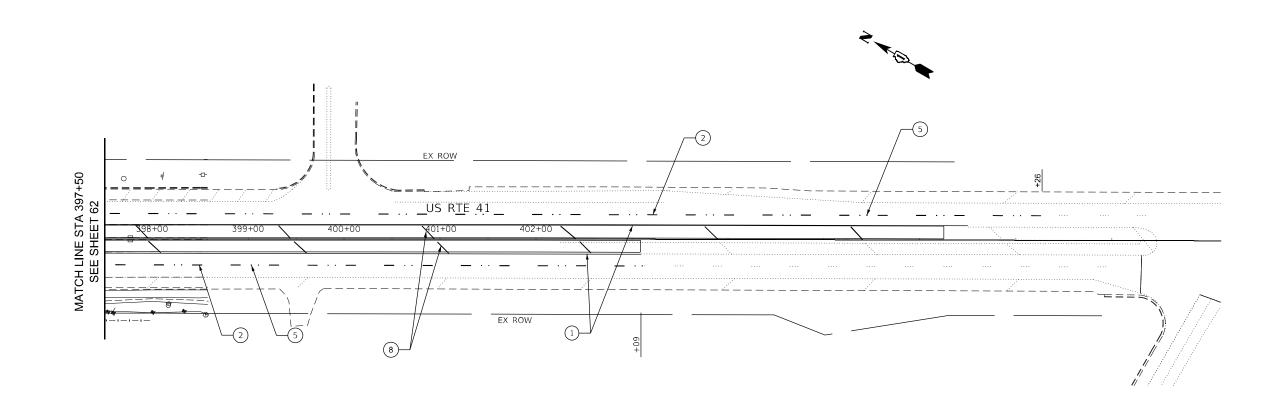
2019-049-T

PAVEMENT MARKING AND LANDSCAPING PLANS - I

STRUCTURE NOS. 049-2015 AND 049-2016

OF SHEETS STA.





LANDSCAPING LEGEND

SEEDING CLASS 4 (MODIFIED) AND CLASS 4B (MODIFIED) WITH HEAVY DUTY EROSION CONTROL BLANKET



SEEDING CLASS 2A WITH EROSION CONTROL BLANKET

SCALE:

PAVEMENT MARKING LEGEND

- 1 THERMOPLASTIC PAVEMENT MARKING, TYPE C LINE 4" (SOLID YELLOW)
- ② THERMOPLASTIC PAVEMENT MARKING, TYPE C LINE 4" (WHITE-10' LINE, 30' SPACE)
- ③ THERMOPLASTIC PAVEMENT MARKING, TYPE C LINE 8" (SOLID WHITE)
- 4 THERMOPLASTIC PAVEMENT MARKING, TYPE C LINE 12" (WHITE CHEVRONS @ 30' SPACING)
- ⑤ REPLACEMENT REFLECTOR
- (6) THERMOPLASTIC PAVEMENT MARKING, TYPE C LINE 4" (SOLID WHITE)
- 7 THERMOPLASTIC PAVEMENT MARKING, TYPE C LINE 12" (WHITE SHOULDER DIAGONALS)
- (8) THERMOPLASTIC PAVEMENT MARKING, TYPE C LINE 12" (YELLOW SHOULDER DIAGONALS)

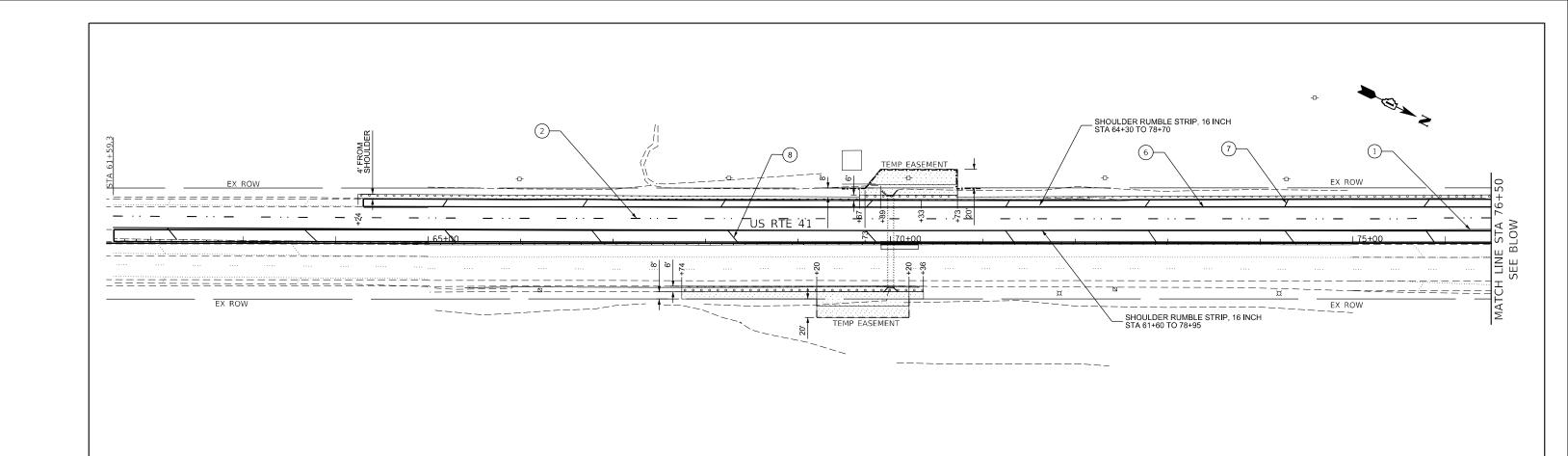
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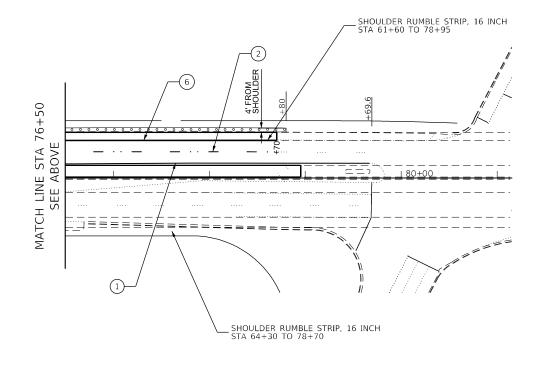
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STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

 		AND LAND 049-2015		9-2016
SHEET	OF	SHEETS	STA.	TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
349	2019-049-T	LAKE	139	63
		CONTRACT	NO.	62J2
	ILLINOIS FED. A	ID PROJECT		





LANDSCAPING LEGEND

SEEDING CLASS 4 (MODIFIED) AND CLASS 4B (MODIFIED) WITH HEAVY DUTY EROSION CONTROL BLANKET



SEEDING CLASS 2A WITH EROSION CONTROL BLANKET

PAVEMENT MARKING LEGEND

- 1 THERMOPLASTIC PAVEMENT MARKING, TYPE C LINE 4" (SOLID YELLOW)
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- (8) THERMOPLASTIC PAVEMENT MARKING, TYPE C LINE 12" (YELLOW SHOULDER DIAGONALS)

A	С	U ROUP		t	е

USER NAME = abee	DESIGNED -IH	REVISED -	
	DRAWN -IH	REVISED -	
PLOT SCALE = 100.0000 / in.	CHECKED -DH	REVISED -	
PLOT DATE = 10/8/2020	DATE - 08/14/2020	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

P	PAVEMENT MARKING AND LANDSCAPING PLANS							
	STRUCTURE NO. 049-0575							
	31K0010KE NO. 043-0373							
	SHEET	OF	SHEETS	STA.	TO STA.	T		

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.	
349	2019 - 049 - T	LAKE	139	64	
			CONTRACT	NO.	62J2
	ILLINOIS	FED. A	ID PROJECT		

Benchmark: Chisled square in concrete base of weigh station sign in the center median of US-41 (Located approximately 100' South LOADING HS-20 of SN 049-0228). Elevation 688.47. Allow 50 #/sq. ft. for future Existing Structure: The structure at US 41 located 0.5 miles north of IL Route 173 is a single-cell reinforced concrete box culvert. The wearing surface culvert is 138'-3" in length (out-to-out headwalls). The cell width and height are both approximately 6 ft. The structure spans east to west and carries two northbound lanes, two southbound lanes, and one southbound ramp lane for a total of five traffic lanes. A metal guardrail is present on both sides of the culvert. DESIGN SPECIFICATIONS 2017 AASHTO LRFD Design Salvage : No Salvage Specifications, 8th Edition Precast Alternative is not allowed 138'-3" Out-to-Out of Exist and Prop. Headwalls 136'-3" 1'-0" 1'-0'' - NB PGL 27'-0" 41'-0" U.S. Route 41 Prop. Guardrail, typ. 8'-10" 14'-0" Median 12'-0" 12'-0" 10'-0" 5'-0" 19'-0" 10'-0" 12'-0" 12'-0" 8'-10" Shldr Ramp SB Lane SB Lane Shldr. Shldr NB Lane NB Lane Shldr. 7'-0" Culvert barrel, 7'-0" Culvert barrel, headwall and wingwalls to be removed and replaced - SB PGL U.S. Route 41 headwall and wingwalls to - ₽ U.S. Route 41 6.87% e removed and replaced 5.78% 1'-31/5" - Horizontal Wingwall, typ. Exist. Box <u>▼ E.W</u>.S. 0.48% Prop. 3" Ø Culvert 6'x6' Elev. 683.30 Weep holes Exist. 3" Ø 7'-0" Flev Elev. 677.48 679.40 Weep holes Top slab Corrugated Steel 8" — Const. Jt Reconstruction Arch Liner D.S. Inv. Stone Riprap └─ 3" ø Weep Hole, Porous Granular Material Elev. 681.73 Class A7, Typ. CA-7, 6", Typ. Тур. LONGITUDINAL SECTION U.S. Inv. Remove unsuitable material (Dimesnions at Rt. L's to @ Roadway) Elev. 682.40 and replace with Rock fill, (Looking Upstation) Тур. Stone Riprap 10'-0" 138'-3" Out-to-Out of Exist. and Prop. Headwalls Class A7 Stone Riprap 124'-3" Exist. Culvert -NB PGL U.S. Route 41 - B U.S. Route 41 -SB PGL U.S. Route 41 Exist. 12" Storm Sewer 7'-0" Culvert barrel, Redding to be removed, see 7'-0" Culvert barrel; headwall and wingwalls roadway plans Filter fabric headwall and wingwalls to be removed and Prop. Culvert 90°0'0" to be removed and € Prop. Structure replaced SECTION A-A replaced Sta. 50+01.91 - @ Culvert Prop. Headwall Flow Prop. headwall Limits of Removal - Grate in top slab of Unsuitable of culvert to be Range 11E, 3rd P.M. Material removed 65'-10" 51'-5" Top slab Reconstruction – Prop. Guardrail Structure Location Median 10'-0" 19'-0" 10'-0' 12'-0' Shldr Ramp SB Lane SB Lane Shoulder Shoulder NB Lane NB Lane Shoulder LOCATION SKETCH Exist ROW GENERAL PLAN Exist Easement Moussa A. Issa U.S. 41 (SKOKIE HIGHWAY) OVER Temp. Easement PLANLEGEND Dr. Moussa A. Issa, S.E. UNNAMED CREEK Offset Station II. Lic. No. 081-005738 MOUSSA A B-1 49+90.00 57ft Rt. F.A.P. 346 SECTION 2019-049-T Temporary Sheet Piling Expires 11-30-2022 49+90.00 62ft Lt. B-2 LAKE COUNTY Soil Boring ILLINOIS NOTE07/29/2021 STA. 50+01.91 Limits of Removal of Unsuitable Material For General Notes, Scope of Work, Index of For Sheets S1-01 Thru S1-12 STRUCTURE NO. 049-0228 Sheets and Bill of Material, see Sheet S1-02. (Total of 12 Sheets) Stone Riprap, Class A7 DESIGNED - FL, LAB REVISED -SECTION COUNTY STATE OF ILLINOIS CHECKED - MI, MAI REVISED 2019-049-T LAKE 139 65 S.N. 049-0228 US 41 (SKOKJE HIGHWAY) OVER UNNAMED CREEK REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 62J26 SHEET S1-01 OF S1-12 SHEETS PLOT DATE = DATE REVISED - 9/22/2021

GENERAL NOTES:

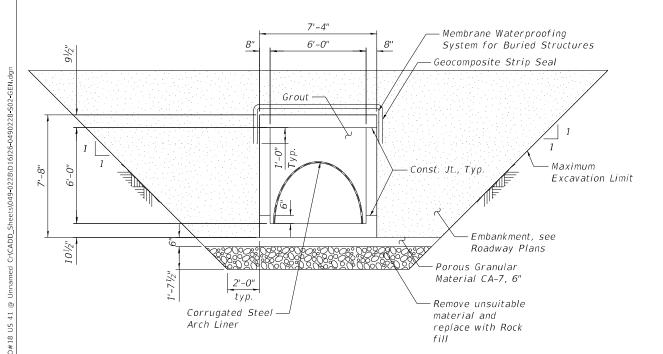
- 1. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- 2. It shall be the responsibility of the contractor to divert the stream flow during construction in order to keep the construction area free of water. The method of the water diversion shall be subjected to the approval of the Engineer and the cost shall be included with the cost of concrete box culverts.
- 3. The presented elevations and limits of the existing structure have been take from historical design drawings and Survey data. Dimensions may not present "as-built" condition. All existing structure limits shall be field verified by the contractor and coordinated with the engineer prior to ordering materials, fabrication and construction of the proposed culvert extension.

INDEX OF SHEETS

- S1-01 General Plan
- S1-02 General Notes, Index of Sheets & Total Bill of Material
- S1-03 Stage Removal and Construction (Sheet 1 of 2)
- S1-04 Stage Removal and Construction (Sheet 2 of 2)
- S1-05 Temporary Sheet Piling S1-06 Existing Structure Partial Removal
- S1-07 Top Slab Reconstruction
- S1-08 Culvert East End Reconstruction Plan and Sections
- S1-09 Culvert West End Reconstruction Plan and Sections
- S1-10 Culvert Sections and Details
- S1-11 Culvert Liner Details S1-12 Boring Logs

SCOPE OF WORK:

- 1. Remove and reconstruct the 7'-0" of the east and west portions of culvert barrel.
- 2. Remove and reconstruct the west and east culvert headwalls and wingwalls.
- 3. Install culvert pipe liner and fill area between liner and top slab of culvert with grout.
- 4. Remove and re-erect the new steel plate beam guardrails and guardrail posts on the east and west sides of the roadway.
- 5. Pave Frontage Road gore and remove existing Frontage Road curb.
- 6. Remove and reconstruct the portions of the shoulder on the east and west sides of the roadway.
- 7. Remove 7'-0" portion of top slab and the existing grate in the top slab and reconstruct the top slab.



TYPICAL SECTION THRU BARREL

DESIGNED - FL, LAB REVISED -CHECKED - MI, MAI REVISED -REVISED DATE REVISED . - 9/22/2021

STATE OF ILLINOIS

TOTAL BILL OF MATERIAL

Item	Unit	Total
Removal And Disposal Of Unsuitable Material	Cu Yd	11.6
Stone Riprap, Class A7	Sq Yd	48
Filter Fabric	Sq Yd	34
Concrete Removal	Cu Yd	25.2
Reinforcement Bars	Pound	5550
Name Plates	Each	1
Temporary Sheet Piling	Sq Ft	1105
Concrete Box Culverts	Cu Yd	25.5
Membrane Waterproofing System For Buried Structures	Sq Yd	22
Corrugated Steel Arch Liner	Foot	139
Rock Fill	Cu Yd	11.6

WATERWAY INFORMATION

Drainage Area = 0	e miles Existing Overtopping Elev. = Proposed Overtopping Elev. =								
Flood	Freq.	Discharge	Opening	Opening Sq. Ft.		Head	- ft	Headwater l	Elevation – ft
	Yr.	C.F.S	Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.
	10	33.1	10	9	684.0**	0*	0.2	684.0*	684.2
Design	50	67.6	13	12	684.6**	0.4*	0.7	685.0*	685.3
Base	100	89.8	14	13	684.8**	0.7*	1.2	685.5*	686.0
Overtop Existing								690.58	
Overtop Proposed									690.58
Max. Calc.									

10-year velocity through the existing culvert = 3.67 fps. 10-year velocity through the proposed culvert = 3.83 fps.

2 Year Peak Flow (Q) = 23.9 cfs

Estimated Water Surface Elevation = 683.30 ft

STATION 50+01.91 RE-BUILT 202* BY STATE OF ILLINOIS F.A.P. 346 SECTION 2019-049-T LOADING HL-93 STRUCTURE NO. 049-0228

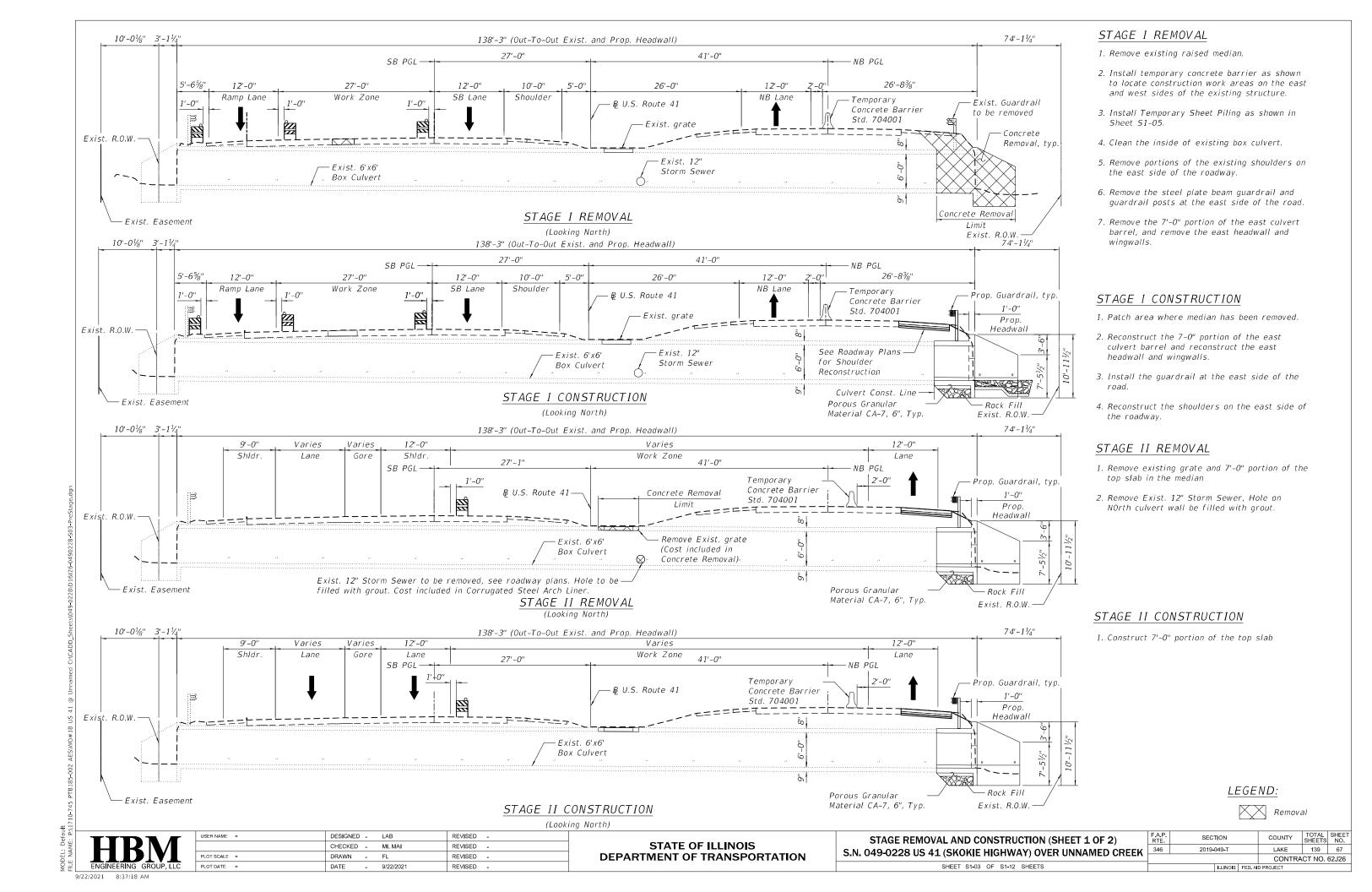
> NAME PLATE See Std. 515001

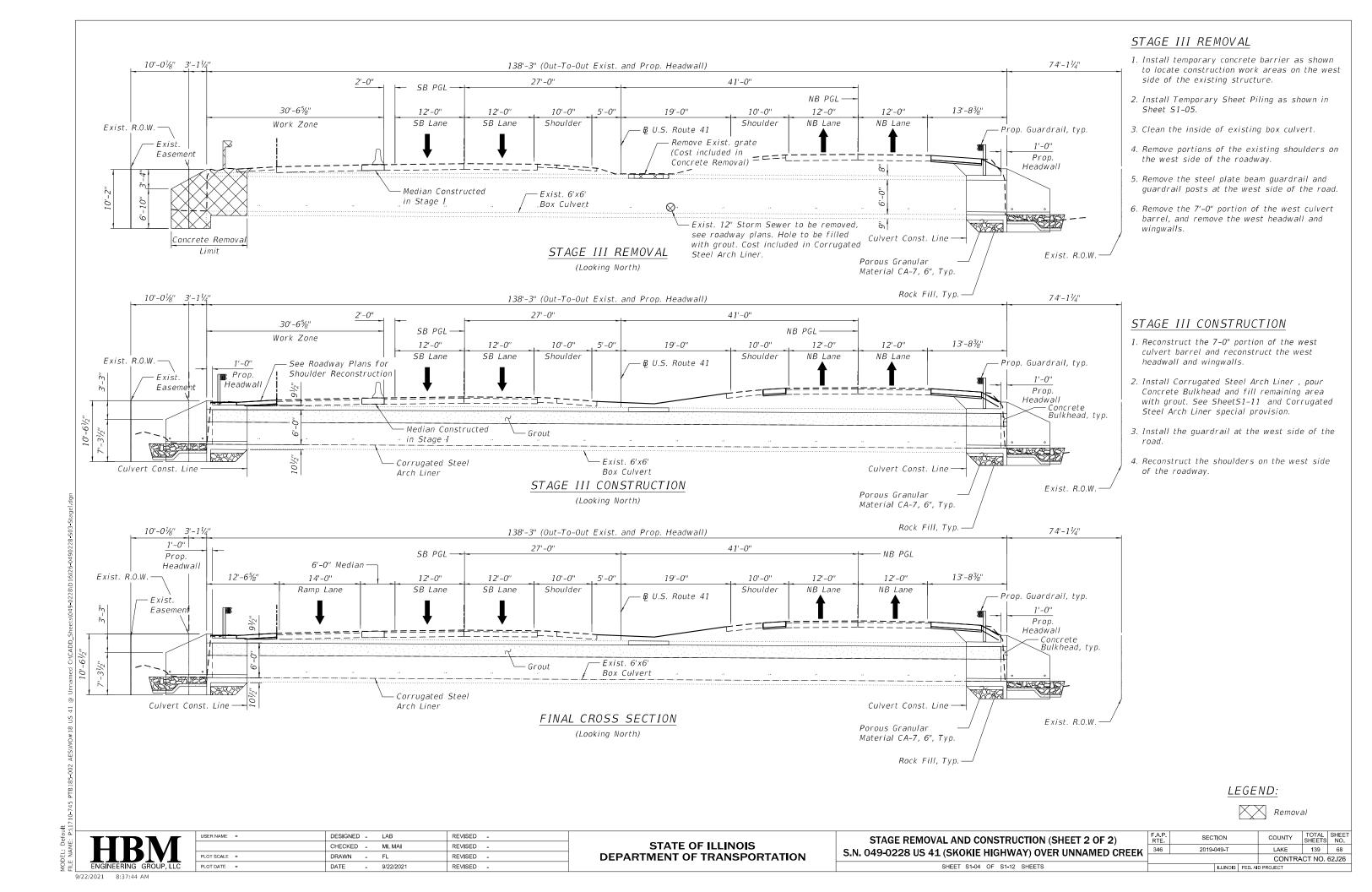
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DEPARTMENT OF TRANSPORTATION

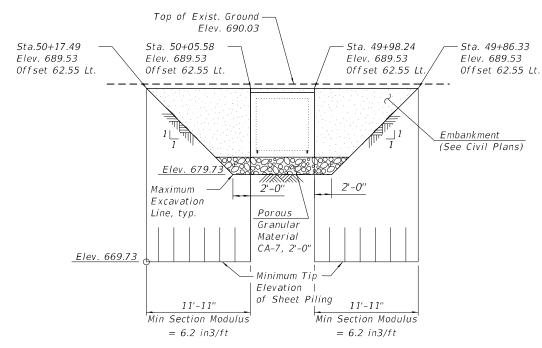
GENERAL NOTES, INDEX OF SHEETS & TOTAL BILL OF MATERIAL RTE. S.N. 049-0228 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK SHEET S1-02 OF S1-12 SHEETS

SECTION COUNTY 2019-049-T LAKE 139 66 CONTRACT NO. 62J26 ILLINOIS FED. AID PROJECT

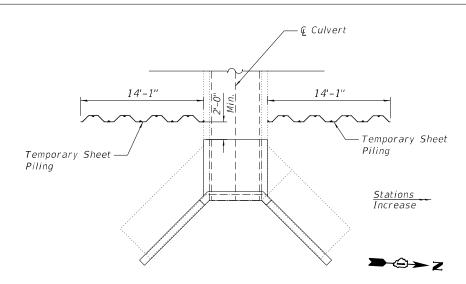




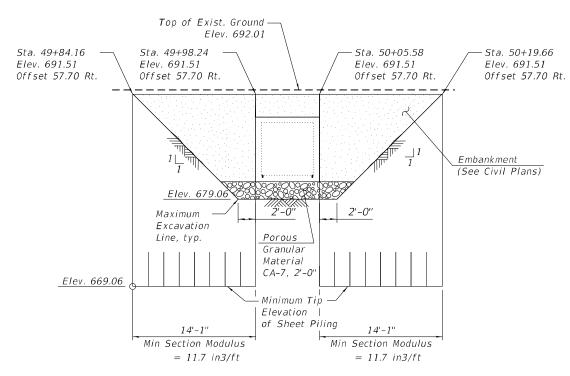
PARTIAL PLAN AT WEST CULVERT END



<u>ELEVATION - TEMPORARY SHEET PILING AT WEST CULVERT END</u>
(Looking East)



PARTIAL PLAN AT EAST CULVERT END



ELEVATION - TEMPORARY SHEET PILING AT EAST CULVERT END
(Looking West)

LEGEND

Porous Granular Material CA-7, 2'-0"



Temporary Sheet Piling

<u>NOTE:</u>

1. If the Contractor chooses to alter the temporary cantilevered sheet piling design requirement shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

BILL OF MATERIAL

ITEM	UNIT	Quantity
Temporary Sheet Piling	Sq Ft	1,105



USER NAME =	DESIGNED -	FL, LAB	REVISED -
	CHECKED -	MI, MAI	REVISED -
PLOT SCALE =	DRAWN -	HMI	REVISED -
PLOT DATE =	DATE -	9/22/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY SHEET PILING

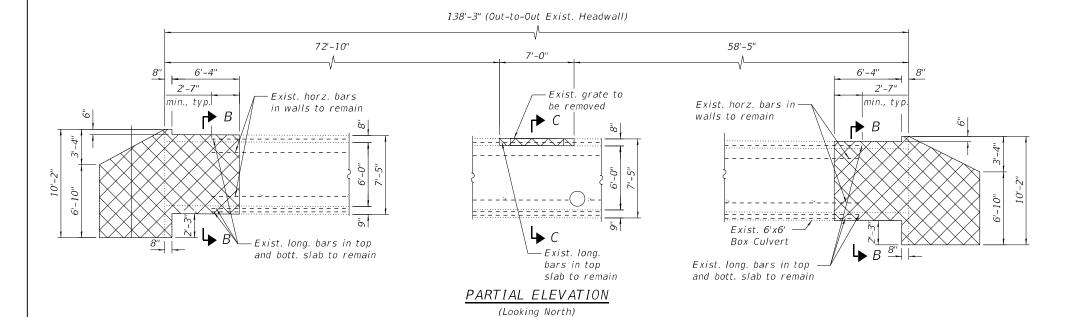
S.N. 049-0228 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK

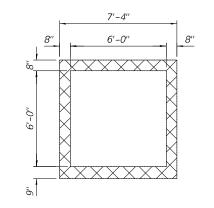
SHEET S1-05 OF S1-12 SHEETS

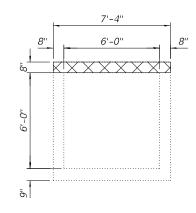
SHEET S1-05 OF S1-12 SHEETS

BILL OF MATERIAL



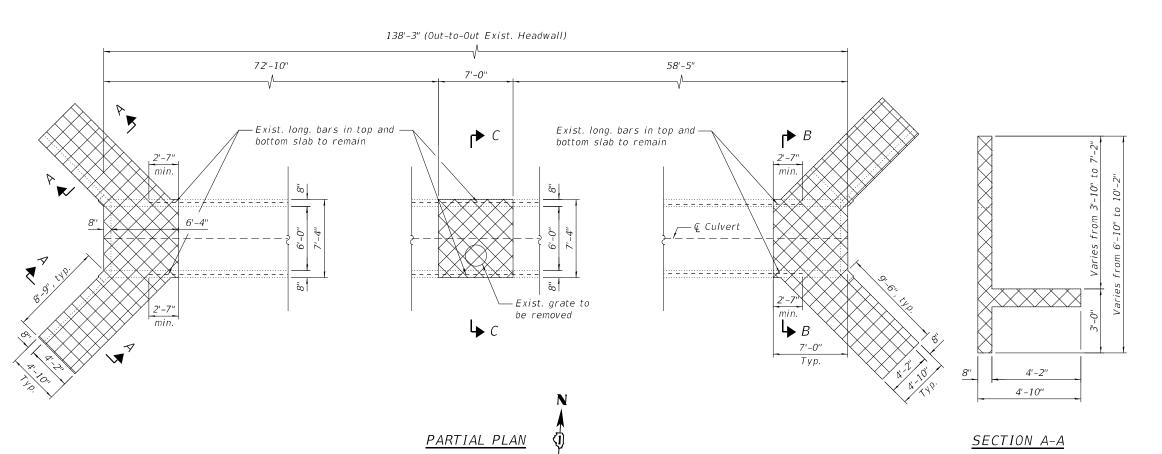






SECTION B-B

SECTION C-C



NOTES:

- 1. For Temporary Sheet Piling, see Sheet S1-05.
- Existing reinforcement shall be cleaned and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- 3. Removal of steel wide flange on the west end cost should be included with Concere Removal.

<u>LEGEND:</u>



HBM ENGINEERING GROUP, LLC

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	CHECKED	-	MI, MAI	REVISED	-
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PLOT DATE =	DATE	-	9/22/2021	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

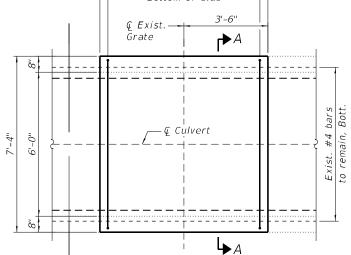
EXISTING CULVERT PARTIAL REMOVAL

S.N. 049-0228 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK

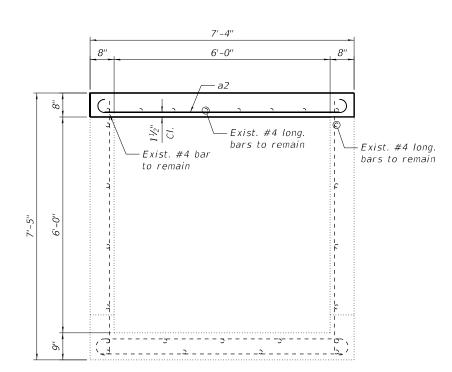
SHEET S1-06 OF S1-12 SHEETS

A.P.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
46	2019-049-T	LAKE	139	70	
			CONTRA	CT NO.	62J26
	ILLINOIS	FED. All	D PROJECT		

ENGINEERING GR



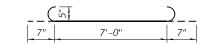
TOP SLAB RECONSTRUCTION - PARTIAL PLAN



SECTION A-A

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2	17	#5	8'-2"	Ĺ
Reinforcei	nent Bars	Pound	150	
Concrete I	Box Culve	Cu Yd	1.30	
Membrane Waterproofing System For Buried Structures			Sq Yd	8.00



<u>BAR a2</u>

<u>TOP SLAB RECONSTRUCTION - PARTIAL ELEVATION</u>

7'-0''

-\-- Ēxist. #5 bar -

— Exist. #4 bar to remain

72'-10"

West Culvert Headwall

NOTES:

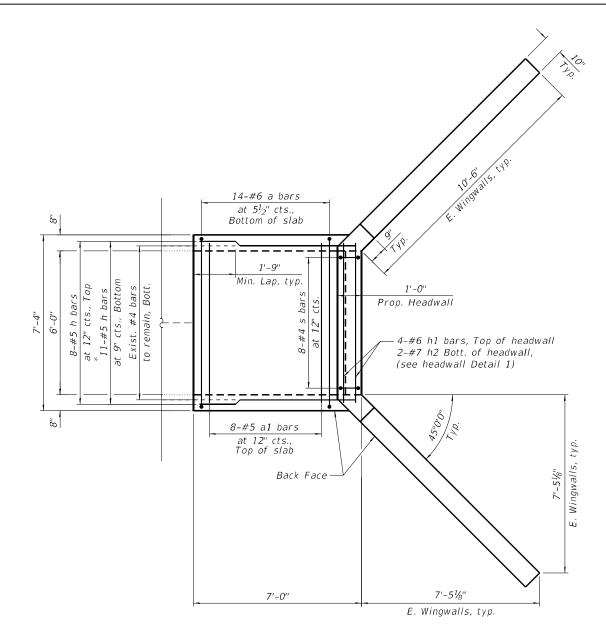
58'-5" East Culvert Headwall

1. Existing reinforcement shall be cleaned and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

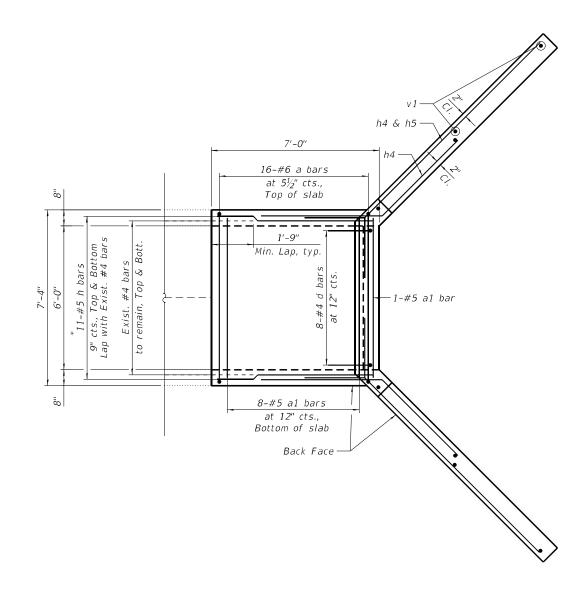
HBM ENGINEERING GROUP, LLC

USER NAME =	DESIGNED -	MAA, EBK	REVISED -
	CHECKED -	MI, MAI	REVISED -
PLOT SCALE =	DRAWN -	EBK	REVISED -
PLOT DATE =	DATE -	9/22/2021	REVISED -

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EAST TOP SLAB PARTIAL PLAN



EAST BOTTOM SLAB PARTIAL PLAN



Lap with existing reinforcement

NOTE:

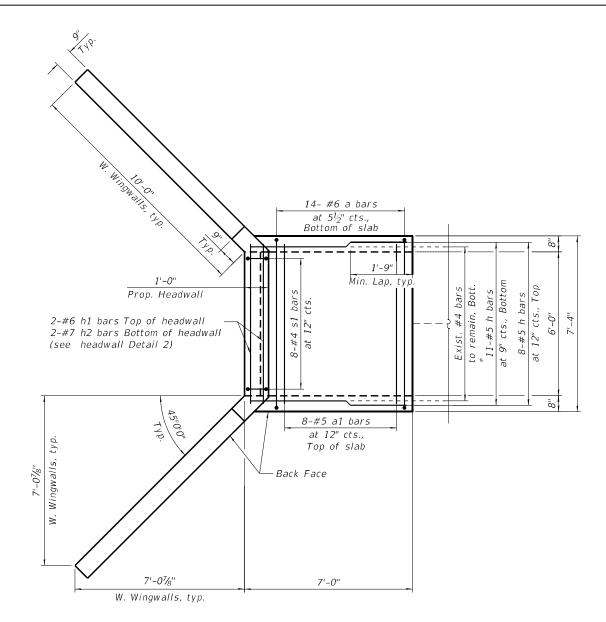
1. For Sections, bar diagrams and Bill of Material, see Sheet S1-10.

HBM ENGINEERING GROUP, LLC

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

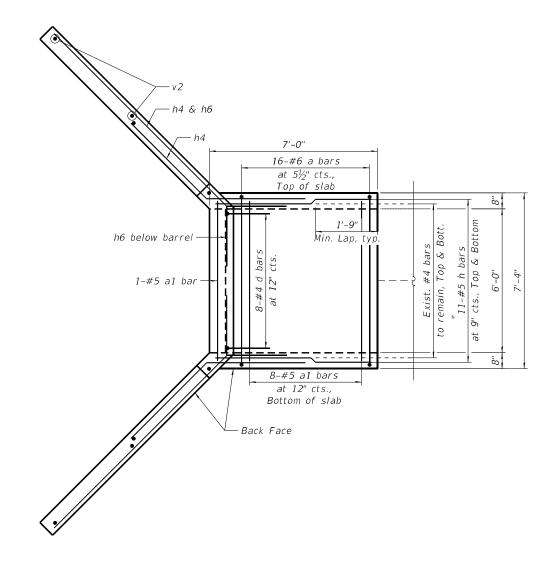
CULVERT EAST END RECONSTRUCTION PLAN AND SECTIONS
S.N. 049-0228 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK

SHEET S1-08 OF S1-12 SHEETS



WEST TOP SLAB PARTIAL PLAN





WEST BOTTOM SLAB PARTIAL PLAN



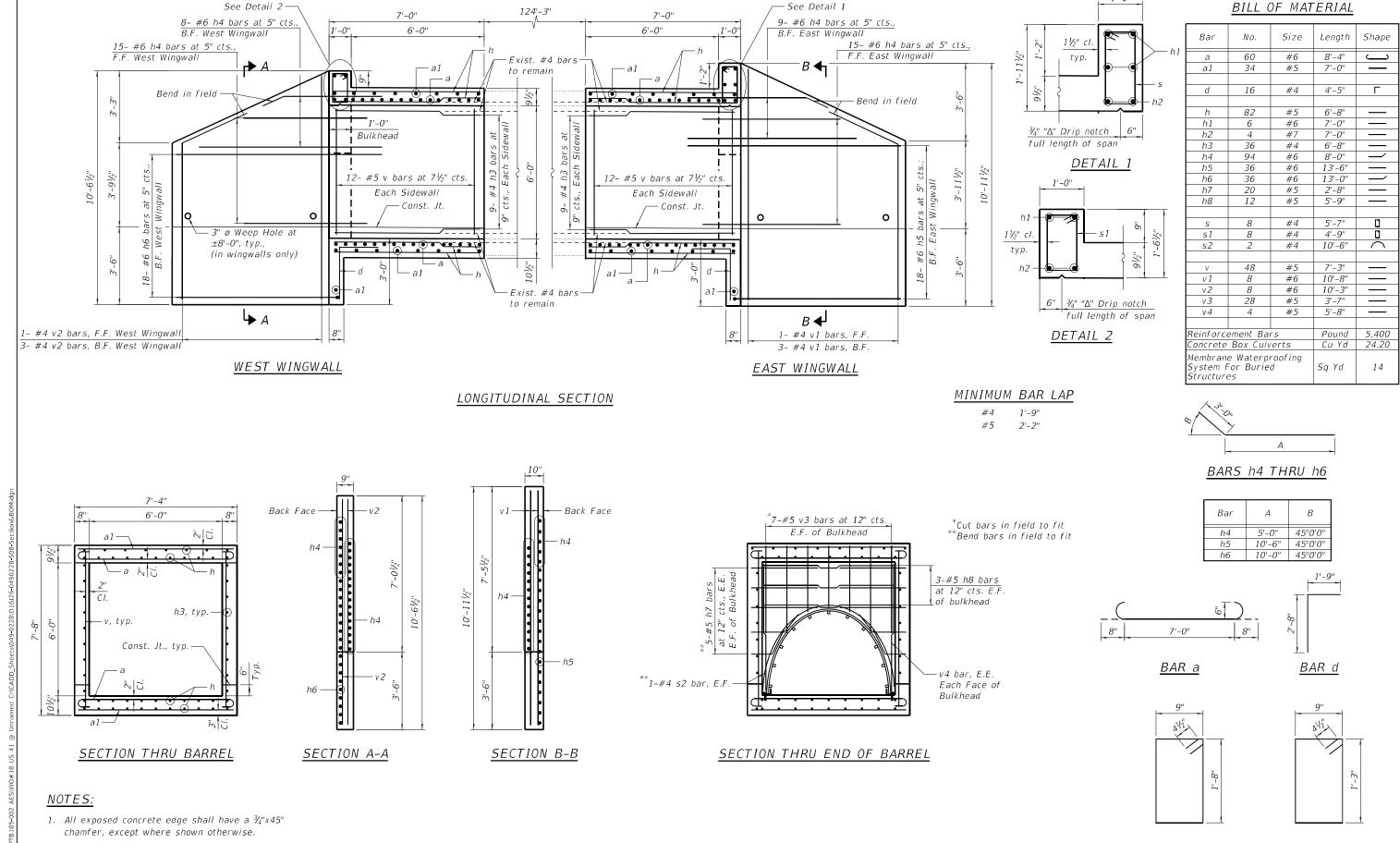
Lap with existing reinforcement

NOTE:

1. For Sections, bar diagrams and Bill of Material, see Sheet S1-10.



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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CULVERT SECTIONS AND DETAILS

S.N. 049-0228 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK

SHEET S1-10 OF S1-12 SHEETS

BAR s1

BAR s

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with the wingwalls.

2. The culvert barrels shall be poured monolithically

DESIGNED - FL, EBK, LAB

EBK, FL

CHECKED - MI, MAI

REVISED

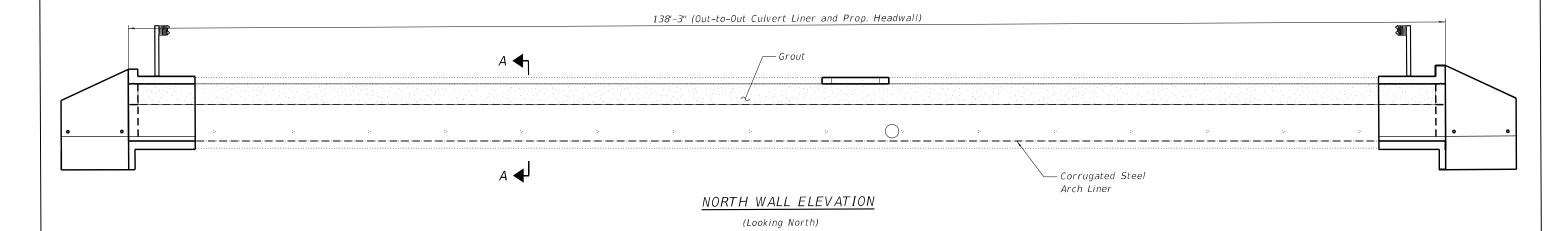
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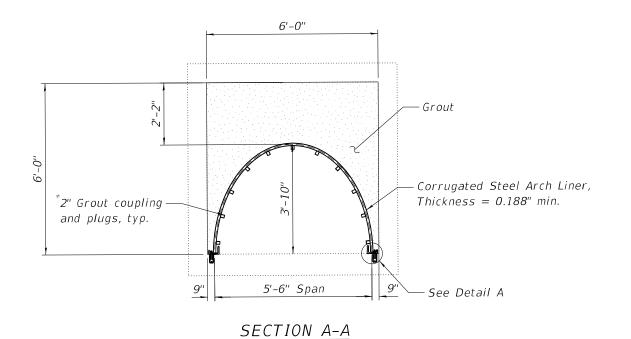
REVISED -

REVISED -

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Corrugated Steel Arch Liner	Foot	139





*Location and spacing of grout couplings shall be in accordance with manufacturer's recommendations. Typically, grouting proceeds from bottom to topwith a two foot maximum per lift. Both sides of the arch may be done simulteously or alternately, but sides must be allowed to set before beginning the next lift.

NOTES:

1. The grout shall be pumped in at a pressure no greater than 5 psi.

Galvanized steel channel base for corrugated steel liner

2. The cost including all material, equipment and labor to install the steel arch liner, anchor bolts, connecting bolts, grout, and all other material required to build the steel arch liner shall be include in the cost of Corrugated Steel Arch Liner.

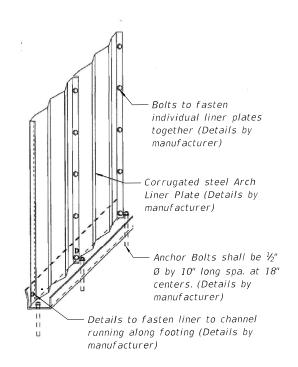


PLATE CONNECTION DETAILS

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	Γ
	Г
ENGINEERING GROUP, LLC	Γ

USER NAME =	DESIGNED - FL, LAB	REVISED -
	CHECKED - MI, MAI	REVISED -
PLOT SCALE =	DRAWN - FL	REVISED -
PLOT DATE =	DATE - 9/22/2021	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

CULVERT LINER DETAILS								
S.N. 049-0228 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK								
SHEET S1-11 OF S1-12 SHEETS								

- Corrugated Steel Arch Liner

Grout

Exist. Culvert

DETAIL A

F.A.P. RTE	SEC ⁻	COUNTY	TOTAL SHEETS	SHEET NO.		
346	2019-	049-T	LAKE	139	75	
				CONTRA	CT NO.	62J26
		ILLINOIS	FED. A	D PROJECT		

9/22/2021 8:40:13 AM

P	Illinois Dep of Transpol Division of Highways GSG Consultants INC	artment rtation
ROUTE	US-41	DESCRIPTION
SECTION	North of Illinois 173 to S Westleigh	South of LOCA

SOIL BORING LOG

Date 3/26/20

			PTION	ON US Route 41 Culvert Repair				L0	LOGGED BY			ES/RM	
North of Illinois 173 to SECTION Westleigh			OCAT	ION _		9-0228, SEC. , TWP. ,	RNG.,						
					Latitu	de , Longitude				21			
COUNTY Lake D	RILLING	ME	THOD	-		HSA	HAMMER	TYPE		Αl	JTO		
STRUCT. NO. SN-049-0228 Station 50+01.8 BORING NO. SN-049-0228-B-		D E P T	B L O W	U C S	M O I S	Surface Water Elev. Stream Bed Elev. Groundwater Elev.:			D E P T	B L O W	U C S	M O I S	
Station 49+90	_	Н	S	Qu	Т	First Encounter	673.3	ft ▼	Н	S	Qu	T	
Station 49+90 Offset 57.00ft Right						Upon Completion	N/A	ft					
Ground Surface Elev. 691.76	ft	(ft)	(/6")	(tsf)	(%)	After Hrs.	N/A	_ft	(ft)	(/6")	(tsf)	(%)	
6 inches of Asphalt	691.26					Loose							
Brown and Gray, Moist						Brown, Moist SII TY SAND, with gr	(M2) lave						
FILL: SAND, with gravel		-	9			(continued)	river (chir)						
			5 5			(A.							
		10	J						_				
	000.00	_						200.00					
Brown, Gray and Black, Moist	688.26		3			Very Stiff		668.26		3			
FILL: SILTY CLAY, trace gravel		_	4	4.5		Brown, Moist			_	4	2.0		
		-5	8	Р		SANDY CLAY LOAM	Л		-25	5	Р		
			2										
			2	2.0									
		-	3	Р					_				
			1						-	2			
			2	2.5						6	2.5	-	
		-10	2	P P					-30	9	P.0		
		-10		<u> </u>		•			50				
		-	1						-				
	680.26		3										
Very Stiff		0.0	5	3.0									
Brown, Moist SILTY CLAY (CL/ML)		-	4	Р									
SIETT SEAT (SEINE)		_											
			2			D		658.26		7			
			2	3.5		Dense Gray, Moist				19			
		- D	4	9.5 P		SANDY LOAM, with	gravel and		-	13			
		<u>-15</u>	-	1.5		clay			- <u>35</u>		_	\vdash	
		95							-				
		_	1										
		88	1						-				
			1										
	673.26	▼						653.26					
Loose Brown Moist			2			Hard Gray Moist				7			
Brown, Moist SILTY SAND, with gravel (SM)			4 5			Gray, Moist SILTY CLAY, trace g	ravel (CL/ML)		-	13 40	4.5		
S.E S. II ID, WILL GRAVE (ON)		-20	5				(02.1112)	651.76	-40	40	Р		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



SOIL BORING LOG

Date 3/26/20

	North of Illino	ois 173 to Sout	th of		*		US Route 41 Culvert R 9-0228, SEC., TWP., R	•		GED BY	ES/RM
							de , Longitude				
COUNTY	Lake	DRILL	ING MET	HOD	-		HSA	HAMMER 1	YPE	AU'	го
	IO. SN-0		D E P	B L O	U C S	М О І	Surface Water Elev. Stream Bed Elev.				
Station _	O. <u>SN-049</u> 49 57.00	9+90 Oft Right	T H	W S	Qu	S T	Groundwater Elev.: First Encounter Upon Completion	N/A	ft		
	urface Elev.		ft (ft)	(/6")	(tsf)	(%)	After Hrs.	N/A	ft		
End of Bor	fragments at 3 ing	9.5 leet]									

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation ROUTE US-41 DESCRIPTION

SOIL BORING LOG

US Route 41 Culvert Repair

Page <u>1</u> of <u>1</u>

Date 3/13/20 LOGGED BY PS/RM

SECTION		ois 173 to So estleigh	uth o		OCAT	ION _		9-0228, SEC. , TWP. , R de , Longitude	NG. ,					
COUNTY	Lake	DRIL	LING	MET	HOD			HSA	HAMMER TY	PE_		AL	JTO	
STRUCT. N Station _ BORING No Station _ Offset	50 5. <u>SN-049</u> 49	149-0228 1+01.8 1-0228-B-2 9+90 10ft Left	-0 -0 -0 -0	D E P T H	B L O W S	U C S	M O I S T	Surface Water Elev. Stream Bed Elev. Groundwater Elev.: First Encounter Upon Completion	N/A N/A None	ft	D E P T	B L O W s	U C S	M O I S T
	urface Elev.	689.78	ft	(ft)	(/6")	(tsf)	(%)	After Hrs.	N/A		ft)	(/6")	(tsf)	(%)
	Gray, Moist to	Wet	89.28		3 5 4	1.9 B	20	Very Stiff to Stiff Gray, Moist SILTY CLAY, trace sa (CL/ML) (continued)	nd and gravel	-	_			

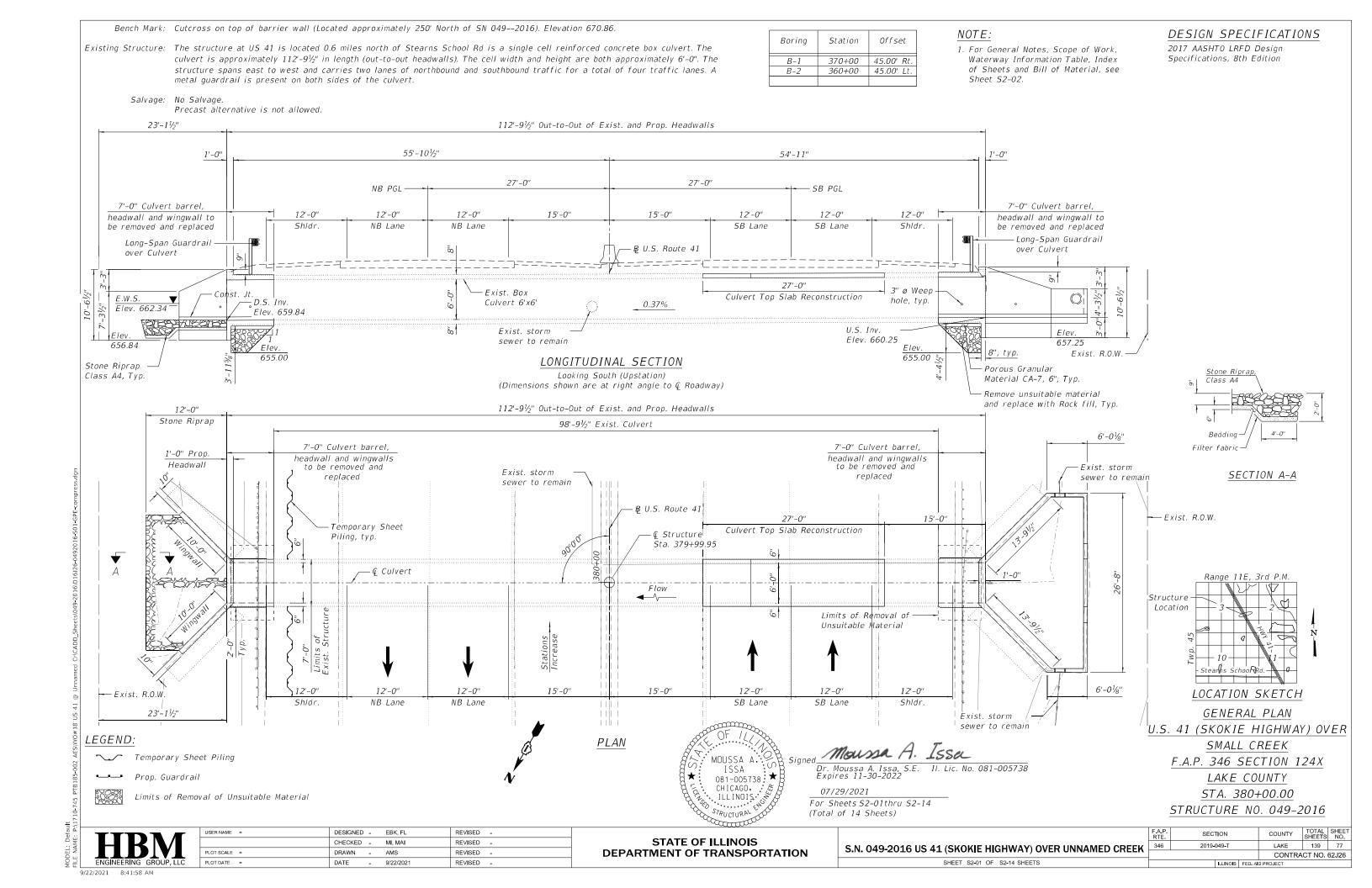
		2			Pushed rock at 23.5 feet		5		
	-5	2 3	0.4 B	22		- <u>25</u>	6 8	1.0 B	20
		2				_			
		3 5	2.9 B	18		_			
	:	2			Cobble at 28.5 feet	_	16		
	-10	2 3	1.0 P	20	00000 at 20.0 look	-30	9	1.9 B	20
979.9		3				_			
678.28 Very Stiff Gray and Brown, Moist SILTY CLAY, trace sand and gravel	<u> </u>	6 7	3.5 B	18		_			
(CL/ML)						_			

6 12 2.9 15

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

USER NAME =	DESIGNED - FL, LAB	REVISED -
	CHECKED - MI, MAI	REVISED -
PLOT SCALE =	DRAWN - FL, LAB	REVISED -
PLOT DATE =	DATE - 9/22/2021	REVISED -



GENERAL NOTES:

- 1. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- 2. It shall be the responsibility of the contractor to divert the stream flow during construction in order to keep the construction area free of water. The method of the water diversion shall be subjected to the approval of the Engineer and the cost shall be included with the cost of concrete box culverts.
- 3. The presented elevations and limits of the existing structure have been take from historical design drawings and Survey data. Dimensions may not present "as-built" condition. All existing structure limits shall be field verified by the contractor and coordinated with the engineer prior to ordering materials, fabrication and construction of the proposed culvert extension.
- 4. 2-Year Flow (Q) = 15.7 cfs

SCOPE OF WORK:

- 1. Remove and reconstruct the 7'-0" of the east and west portions of culvert barrel.
- 2. Remove and reconstruct the west and east culvert headwalls and wingwalls.
- 3. Remove and reconstruct the 27'-0" portion of the culvert top slab over the SB lane.
- Remove and reerect the new steel plate beam guardrails and guardrail posts on the east and west sides of the roadway.
- Pave Frontage Road gore and remove existing Frontage Road curb.
- Remove and reconstruct the portions of the shoulder on the east and west sides of the roadway.

INDEX OF SHEETS

S2-01 General Plan

S2-02 General Notes, Index of Sheets & Total Bill of Material

S2-03 Stage Removal and Construction (Sht 1 of 2)

S2-04 Stage Removal and Construction (Sht 2 of 2)

S2-05 Temporary Sheet Piling

S2-06 Existing Structure Partial Removal

S2-07 Top Slab Reconstruction

S2-08 Culvert East End Reconstruction Plan

S2-09 Culvert West End Reconstruction Plan

S2-10 Culvert West End Sections and Dropbox Details

S2-11 Culvert Sections and Details

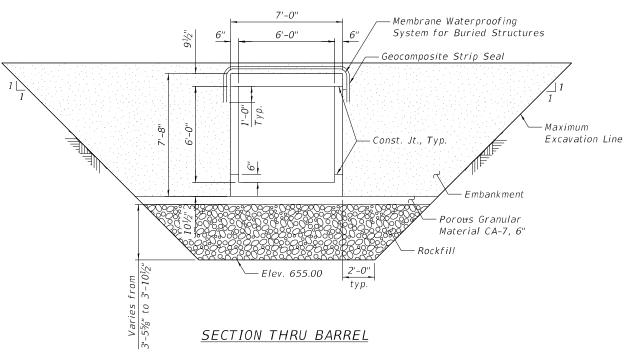
S2-12 Culvert Repairs

S2-13 Bar Splicers

S2-14 Boring Logs

STATION 379+99.95 RE-BUILT 202* BY STATE OF ILLINOIS F.A.P. 346 SECTION 2019-049-T LOADING HL-93 STRUCTURE NO. 049-2016

NAME PLATE
See Std. 515001



TOTAL BILL OF MATERIAL

Item	Unit	Total
Removal And Disposal Of Unsuitable Material	Cu Yd	22.6
Stone Riprap, Class A4	Sq Yd	22
Filter Fabric	Sq Yd	22
Concrete Removal	Cu Yd	45.3
Concrete Structures	Cu Yd	19.5
Reinforcement Bars	Pound	10,970
Bar Splicers	Each	16
Name Plates	Each	1
Temporary Sheet Piling	Sq Ft	512
Concrete Box Culverts	Cu Yd	20.9
Polymer Modified Portland Cement Mortar	Sq Ft	38
Membrane Waterproofing System For Buried Structures	Sq Yd	41
Box Culverts To Be Cleaned	Foot	99
Rock Fill	Cu Yd	22.6

HBN ENGINEERING GROUP

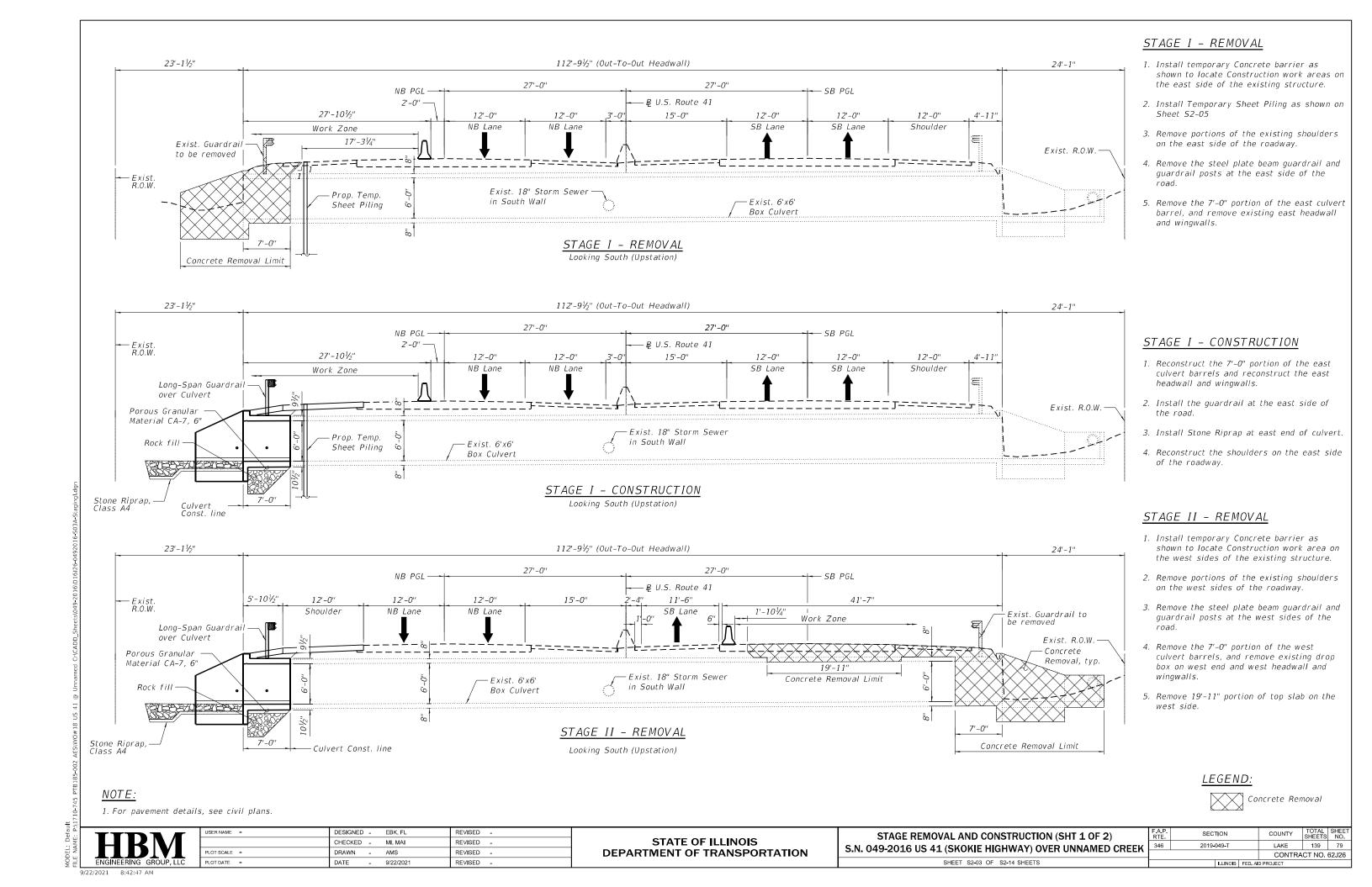
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	CHECKED	-	MI, MAI	REVISED -
PLOT SCALE =	DRAWN	-	AMS	REVISED -
PLOT DATE =	DATE	-	9/22/2021	REVISED -

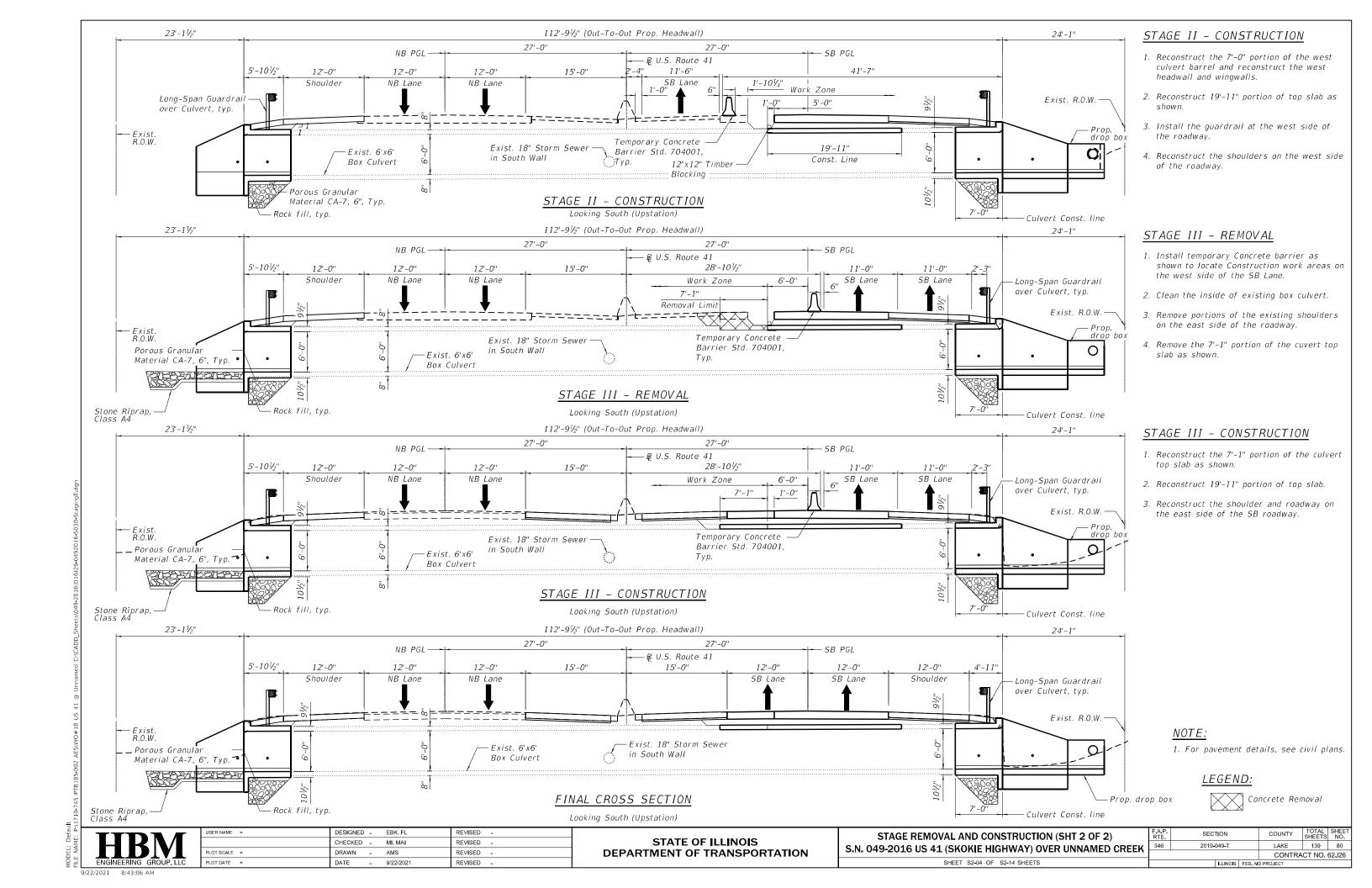
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS & TOTAL BILL OF MATERIAL
S.N. 049-2016 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK

SHEET \$2-02 OF \$2-14 SHEETS

A.P. TE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.			
46	2019-049-T	LAKE	139	78				
		CONTRA	CT NO.	62J26				
	ILLINOIS FED. AID PROJECT							





ELEVATION - TEMPORARY SHEET PILING AT EAST CULVERT END

(Looking West)

12'-6"

Min Section Modulus = 8.6 in3/ft

1. If the Contractor chooses to alter the temporary cantilevered sheet piling design requirement shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

NOTE:

BILL OF MATERIAL

Temporary Sheet Piling

UNIT Quantity

512

Sq Ft

LEGEND



Porous GranularMaterial CA-7, 2'-0"



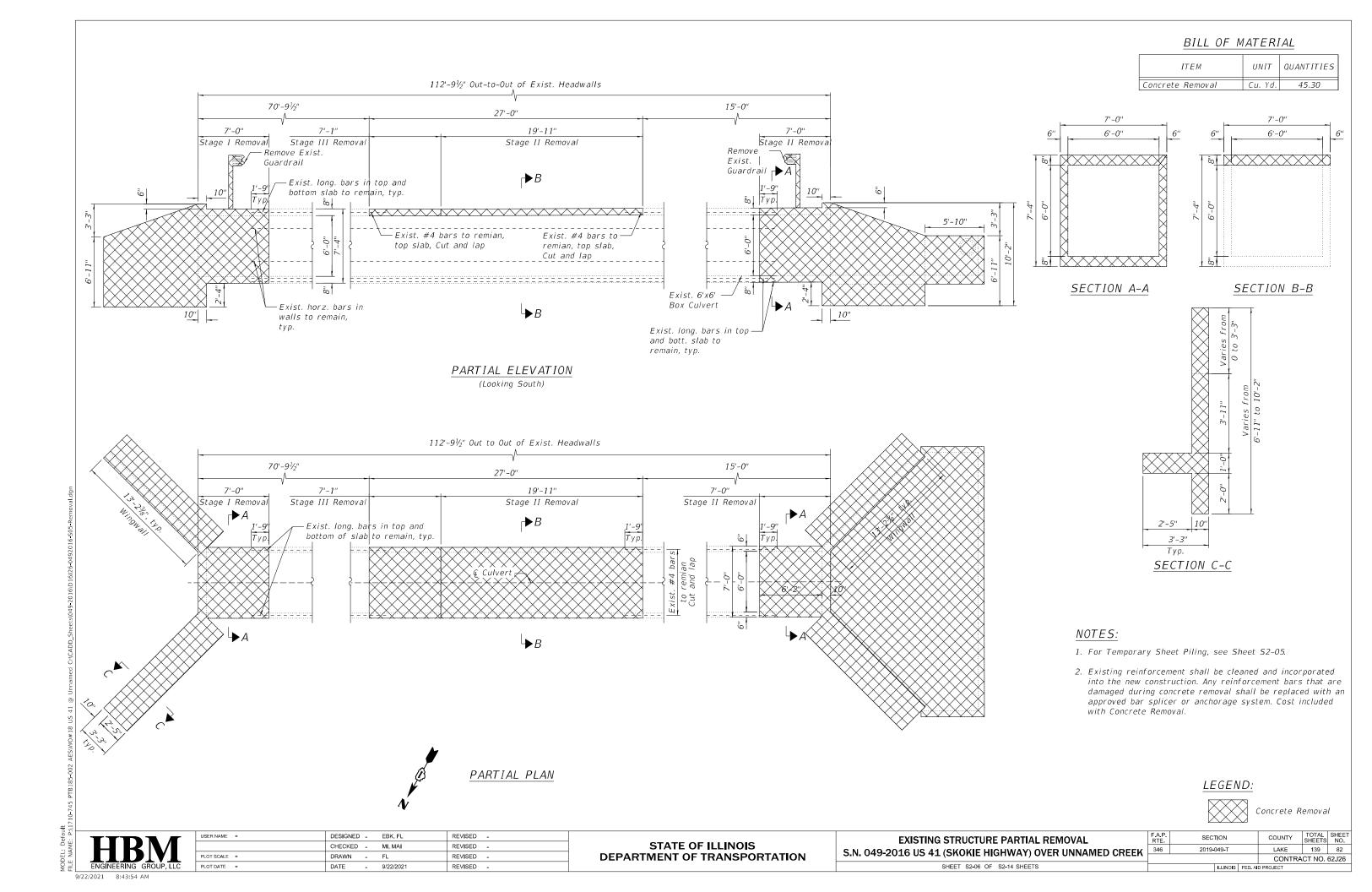
Temporary Sheet Piling

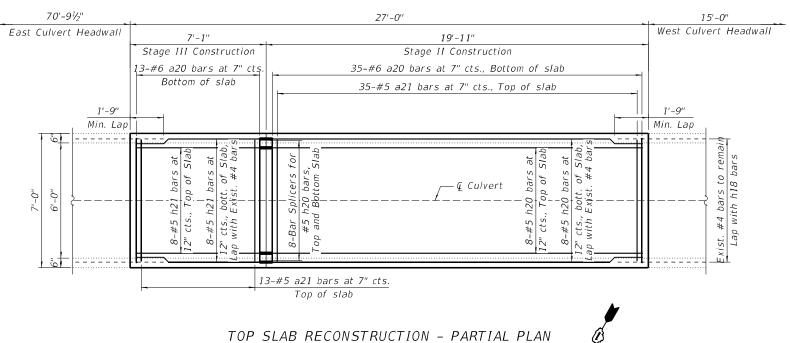


12'-6"

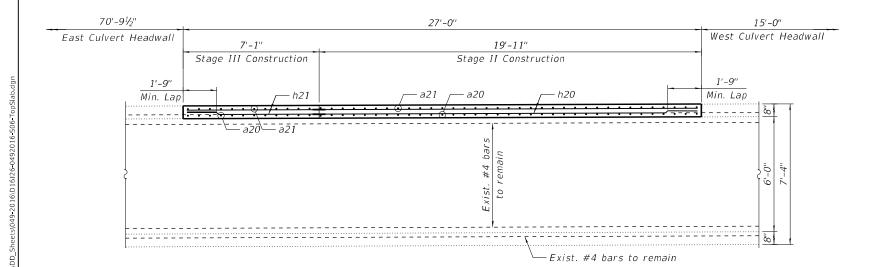
Min Section Modulus = 8.6 in3/ft

F.A.P. RTE	SEC	TION		COUNTY	TOTAL SHEETS	SHEET NO.
346	2019-	2019-049-T			139	81
			CONTRA	CT NO.	62J26	
ILLINOIS FED.			FED. Al	D PROJECT		









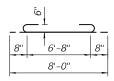
TOP SLAB RECONSTRUCTION - PARTIAL ELEVATION

NOTES:

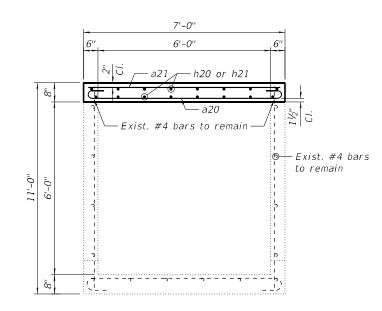
1. Existing reinforcement shall be cleaned and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
a20	48	#6	8'-0"	J
a21	48	#5	6'-8"	
h20	16	#5	19'-7"	
h21	16	#5	6'-9"	
Reinforce	Reinforcement Bars			1,350
Concrete	Box Cui	Cu Yd	4.70	
Membrand System F Structure	or Buri	Sq Yd	27	



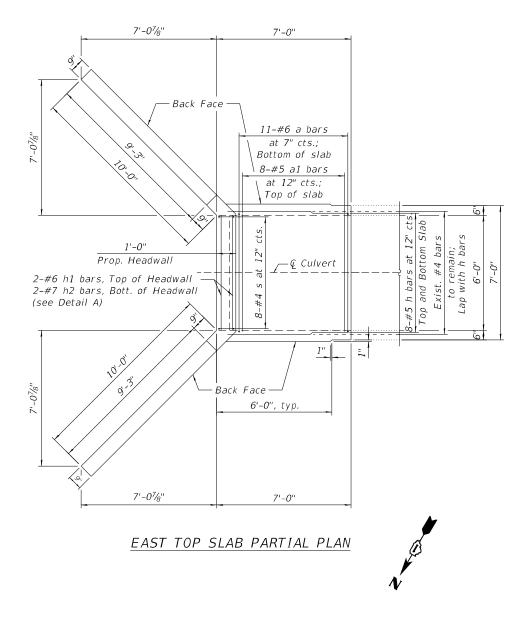
BAR a20

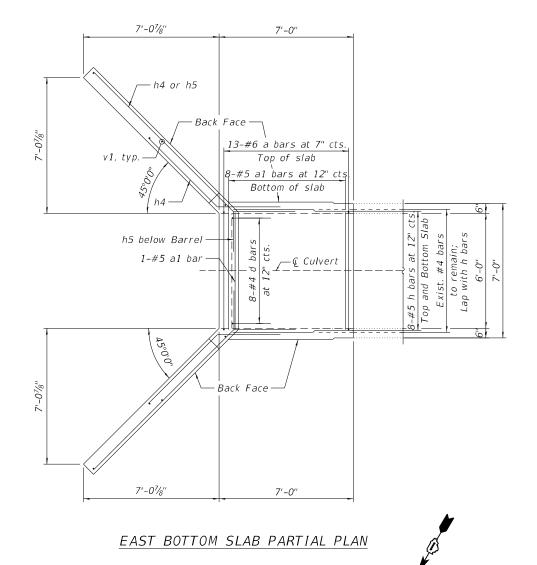


SECTION A-A

HBM	
ENGINEERING GROUP, LLC	

USER NAME =	DESIGNED	-	MAA, EBK	REVISED -
	CHECKED	-	MI, MAI	REVISED -
PLOT SCALE =	DRAWN	-	EBK	REVISED -
PLOT DATE =	DATE	-	9/22/2021	REVISED -





NOTES:

- 1. For Detail A, Sections and Bill of Material, see Sheet S2-08.
- 2. Existing reinforcement shall be cleaned and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- 3. All exposed concrete edge shall have a 3/4"x45° chamfer, except where shown otherwise.
- 4. The culvert barrels shall be poured monolithically with the wingwalls.

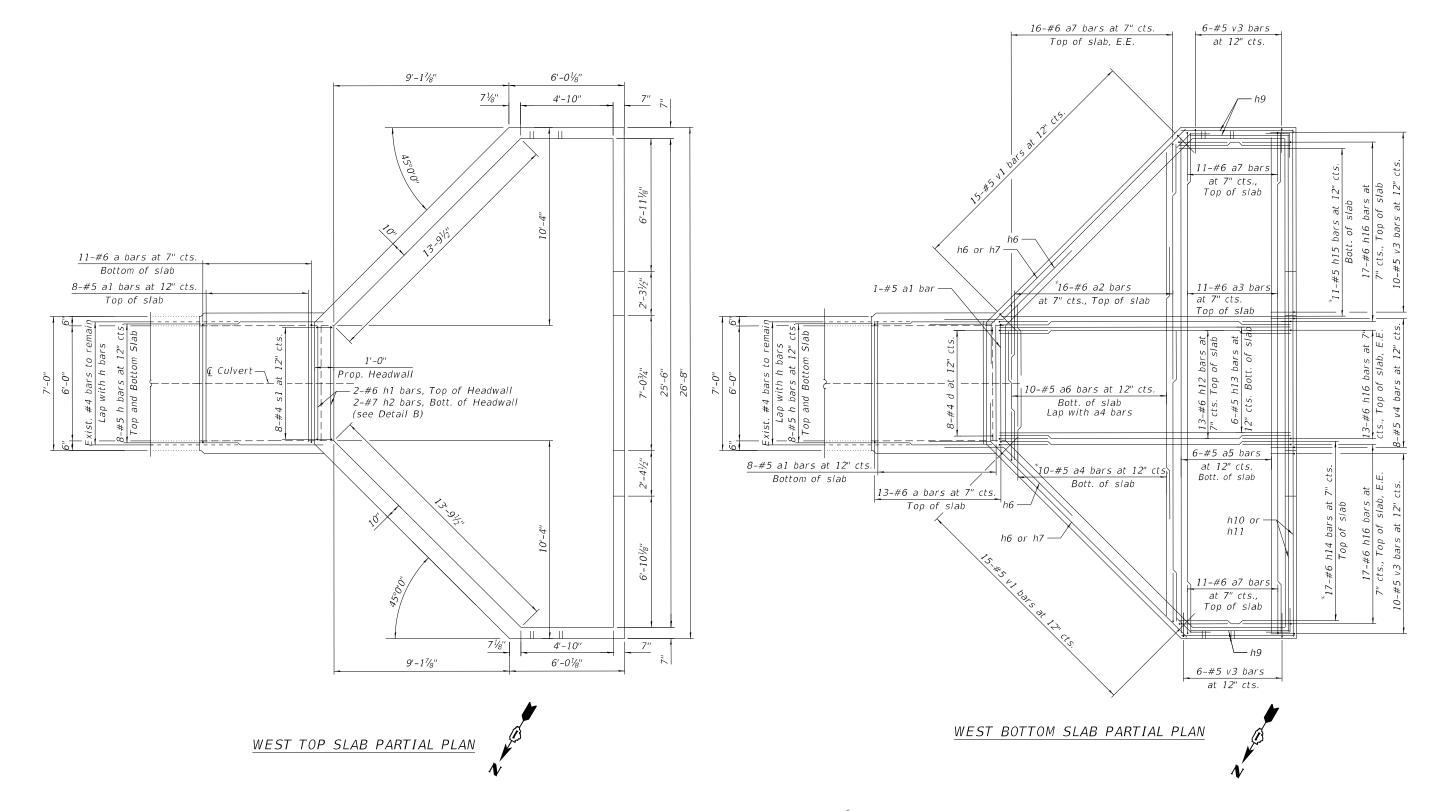
HBM
ENGINEERING GROUP, LLC

USER NAME =	DESIGNED	-	EBK, FL	REVISED	-
	CHECKED	-	MI, MAI	REVISED	-
PLOT SCALE =	DRAWN	-	MA	REVISED	-
PLOT DATE =	DATE	-	9/22/2021	REVISED	-

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

CULVERT EAST END RECONSTRUCTION PLAN S.N. 049-2016 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK SHEET S2-08 OF S2-14 SHEETS

SECTION COUNTY 2019-049-T LAKE 139 84 CONTRACT NO. 62J26



*order bars Full length cut as shown in cutting diagram on Sheet S2-11, use remainder of bar in opposite end

NOTE:

1. For Notes, Detail B, Sections and Bill of Material, see Sheet S2-11.

HBM ENGINEERING GROUP ILC

USER NAME =	DESIGNED	-	MAA, EBK	REVISED	-
	CHECKED	-	MI, MAI	REVISED	-
PLOT SCALE =	DRAWN	-	MAA	REVISED	-
PLOT DATE =	DATE	-	9/22/2021	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT WEST END RECONSTRUCTION PLAN
S.N. 049-2016 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK

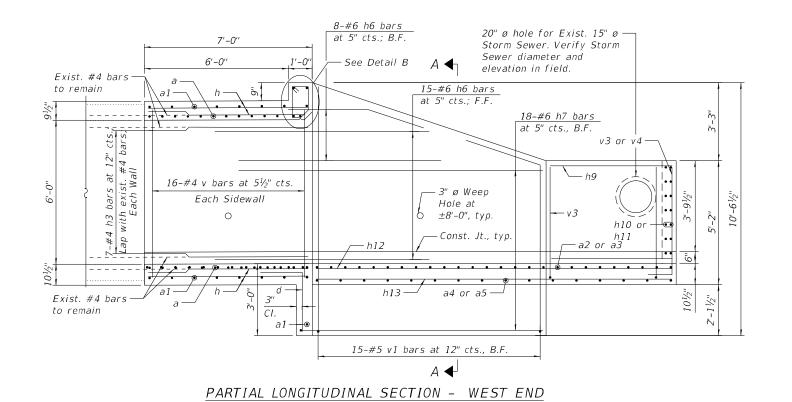
SHEET \$2-09 OF \$2-14 \$HEETS

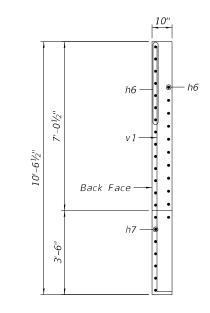
 SECTION
 COUNTY
 TOTAL SHEETS NO.

 2019-049-T
 LAKE
 139
 85

 CONTRACT NO. 62J26

E.E. Each End

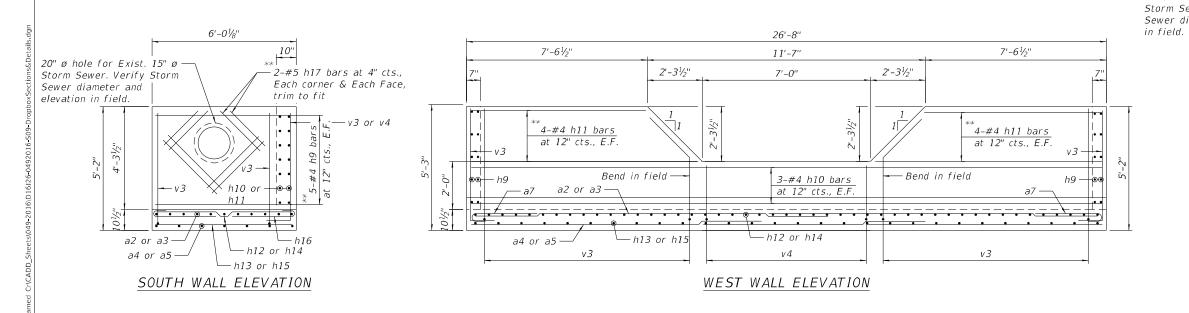


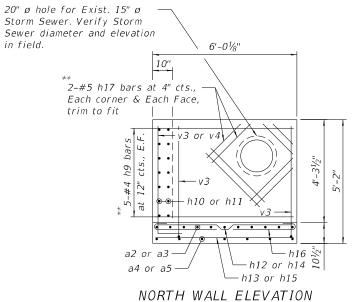


NOTES:

- 1. For Detail B, Sections and Bill of Material, see Sheet S2-11
- 2. Existing reinforcement shall be cleaned and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- 3. All exposed concrete edge shall have a ¾"x45° chamfer, except where shown otherwise.
- The culvert barrels shall be poured monolithically with the wingwalls.

SECTION A-A





*
Bend in field

**
Cut and fit in field



USER NAME =	DESIGNED	-	MAA, LAB	REVISED -	
	CHECKED	-	MI, MAI	REVISED -	
PLOT SCALE =	DRAWN	-	MAA	REVISED -	
PLOT DATE =	DATE	-	9/22/2021	REVISED -	
					_

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT WEST END SECTIONS AND DROPBOX DETAILS
S.N. 049-2016 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK

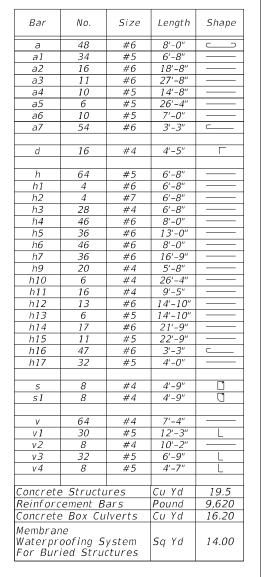
SHEET S2-10 OF S2-14 SHEETS

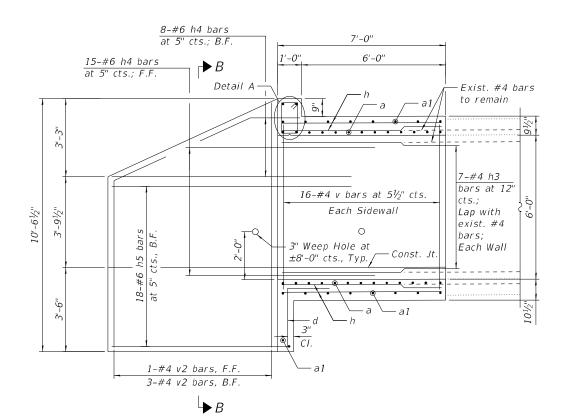
 FAP. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS
 SHEETS NO.

 346
 2019-049-T
 LAKE
 139
 86

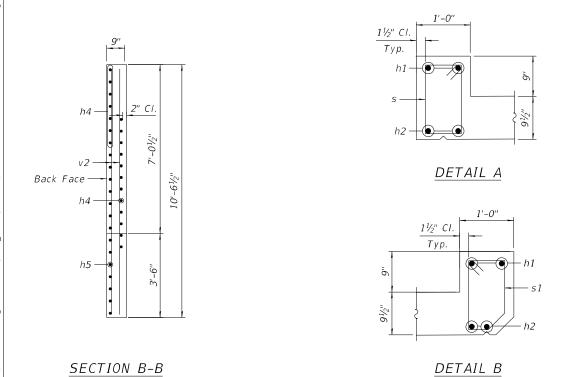
 CONTRACT NO. 62J26

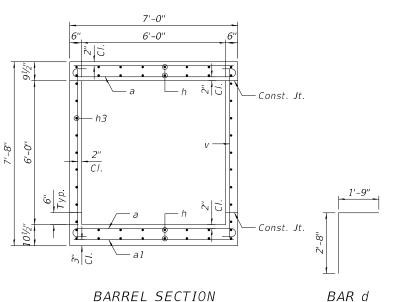
BILL OF MATERIAL

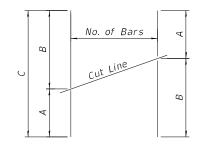




PARTIAL LONGITUDINAL SECTION - EAST END







BAR CUTTING DIAGRAM

BAR TABLE SCHEDULE

Bar	No. of Bars	No. of Sets	А	В	С
a2	16	1	5'-2"	13'-9"	18'-11"
a4	10	1	2'-10"	11'-8"	14'-8"
h14	17	1	6'-0"	15'-9"	21'-9"
h15	11	1	7'-0"	15'-9"	22'-9"

Order bars full length. Cut as shown and use remainder of bars in opposite end



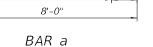
BAR s BARS v1, v3 & v4

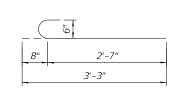
8'-0"

2'-2"

2" 7"

BAR s1





MINIMUM BAR LAP

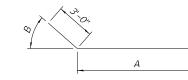
BARS a7 AND h16

NOTES:

- 1. Existing reinforcement shall be cleaned and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- 2. All exposed concrete edge shall have a 3/4"x45° chamfer, except where shown otherwise.
- 3. The culvert barrels shall be poured monolithically with the wingwalls.

TABLE 1

Bar	А	В
h4	5'-0"	45°0'0"
h5	10'-0"	45°0'0"
h6	5'-0"	45°0'0"
h7	13'-9"	45°0'0"



BARS h4 THRU h7



USER NAME =	DESIGNED	-	MAA, EBK	REVISED -	
	CHECKED	-	MI, MAI	REVISED -	7
PLOT SCALE =	DRAWN	-	EBK	REVISED -	7
PLOT DATE =	DATE	-	9/22/2021	REVISED -	7

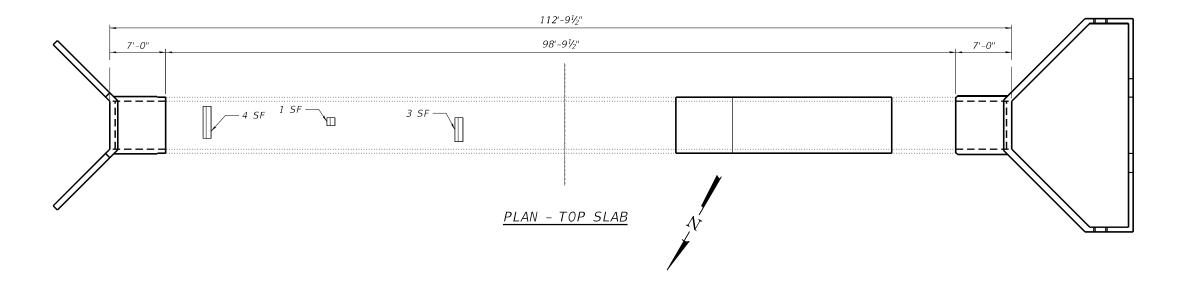
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

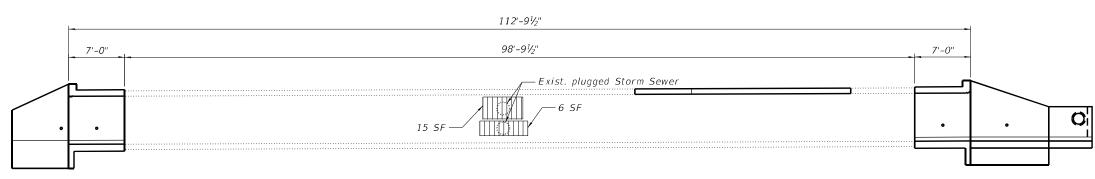
CULVERT SECTIONS AND DETAILS								
S.N. 049-2016 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK	F							
SHEET S2-11 OF S2-14 SHEETS	1							

A.P. TE	SEC ⁻	ION		COUNTY	TOTAL SHEETS	SHEET NO.			
46	2019-	049 - T		LAKE	139	87			
			CONTRA	CT NO.	62J26				
	ILLINOIS FED. AID PROJECT								

BILL OF MATERIAL

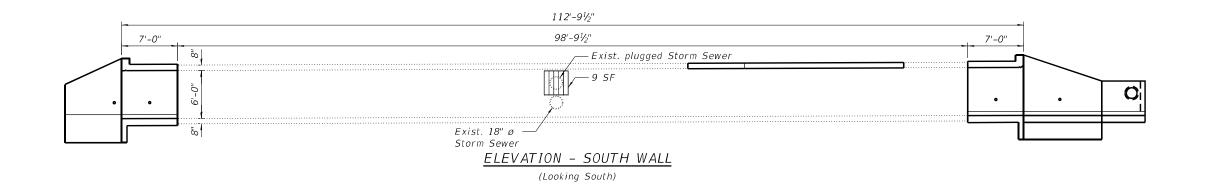
ITEM	UNIT	TOTAL
Polymer Modified Portland Cement Mortar	SQ FT	38





ELEVATION - NORTH WALL

(Looking North)



<u>LEGEND</u>

Polymer Modified Portland Cement Mortar Repair

SF Square Feet

HBM	
ENGINEERING GROUP, LLC	

USER NAME =	DESIGNED	-	FL, MAA	REVISED -
	CHECKED	-	MI, MAI	REVISED -
PLOT SCALE =	DRAWN	-	FL	REVISED -
PLOT DATE =	DATE	-	9/22/2021	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT REPAIRS

S.N. 049-2016 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK

SHEET S2-12 OF S2-14 SHEETS

A.P. TE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.				
46	2019-049-T		LAKE	139	88				
		CONTRA	CT NO.	62J26					
	ILLINOIS FED. AID PROJECT								

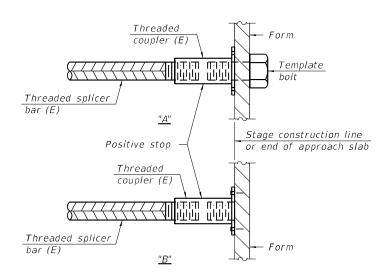
STANDARD BAR SPLICER ASSEMBLY PLAN

(All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + $1\frac{1}{2}$ " + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

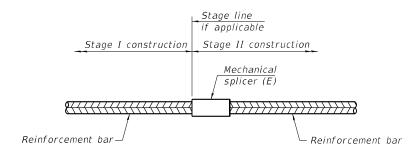
Location	Bar size	No. assemblies required	Minimum lap length
Top Slab Reconstruction	Top Slab construction #5		2'-2"



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E): Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

1-1-2020

	USER NAME =	DESIGNED	-	EBK	REVISED -
ı		CHECKED	-	MI, MAI	REVISED -
ı	PLOT SCALE =	DRAWN	-	EBK	REVISED -
	PLOT DATE =	DATE	-	9/22/2021	REVISED -

SOIL BORING LOG

Page <u>1</u> of <u>1</u>

Date 3/12/20

ROUTE US-41 DESCRIPTION					US Route 41 Culvert Repair				LOGGED BY		PS/RM	
North of Illinois 173 to SECTION Westleigh			OCAT	ION .		9-2016, SEC. , TWP. , de , Longitude	RNG.,					
COUNTY Lake DF	RILLING	ME	THOD	Pt.	Latita		HAMMER 1	YPE		Αl	JTO	
STRUCT. NO. SN 049-2016 Station 379+99.95		D E P	B L O	U C S	M O I	Surface Water Elev. Stream Bed Elev.	N/A N/A	ft	D E P	B L O	U C S	M O I
BORING NO. SN-049-2016-B-1 Station 370+00 Offset 45.00ft Right	_	H	S	Qu	S T	Upon Completion	639.8 N/A	ft	H	W S	Qu	S T
Ground Surface Elev. 668.33 8 inches of Asphalt	ft	(ft)	(/6")	(tsf)	(%)	After Hrs. Very Stiff to Stiff	N/A	ft	(ft)	(/6")	(tsf)	(%)
Black and Gray, Moist to Wet FILL: SILTY CLAY LOAM, some	667.66		2			Gray, Moist SILTY CLAY, trace so (CL/ML) (continued)	and and gravel		_			
fine grained sand, trace gravel			5 6	3.0 P	12	(OE/NIE) (COMMICCO)						
									_			
		-	2	0.8	18				_	2	1.0	20
			2	0.6 P	10				 - <u>25</u>	5	B	20
		_	-						_			
		_	2	1.8	33				_			
			3	Р			00.5.64					
Construct Days Mainth Variation	659.83					0			<u></u>	0		
Gray and Brown, Moist to Very Moist FILL: SILTY CLAY, trace sand and			2	0.8	24	Sandy clay seam at 2	28.5 feet			5	1.3	19
gravel		10	3	В					-30	3	В	
		_	1						_			
		_	2 2	0.4 B	25				_			
		_		В								
Very Stiff	654.83	_	4						_	4		
Brown and Gray, Moist SILTY CLAY, trace sand and gravel		-15	9	2.7 B	18				-35	5 6	3.1 B	20
(CL/ML)									-55			
			-						_			
Very Stiff to Stiff	650.33											
Gray, Moist SILTY CLAY, trace sand and gravel			3 5	2.5	23				_	4	1.0	18
(CL/ML)		-20	_	B				628.33	-40	4	В	.5

End of Boring

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



SOIL BORING LOG

Page <u>1</u> of <u>1</u>

Date 3/13/20

		CRIPTION			US Route 41 Culvert Repair	L0	OGGE	ED BY	PS	/RM_
North of Illinois 1 SECTION Westle	73 to South of eigh	LOCAT	ION _	SN-04	9-2016, SEC. , TWP. , RNG. , de , Longitude					
COUNTY Lake DRILLING METHOD				Lutitu		TYPE		Αl	JTO	
STRUCT. NO. SN 049-2 Station 379+99 BORING NO. SN-049-200	1.95 I	D B L P O T W	U C S	M O I S	Surface Water Elev. N/A Stream Bed Elev. N/A Groundwater Elev.:	_ ft	D E P T	вьож	n c ø	M O - S
Station 360+0 Offset 45.00ft L	0 _eft	H S	Qu	T	First Encounter 639.5 Upon Completion N/A	_ ft	H	S	Qu	T
Ground Surface Elev. 6 7 inches of Asphalt		ft) (/6")	(tsf)	(%)	After Hrs N/A Medium Stiff to Very Stiff	_ ft	(π)	(/6")	(tsf)	(%)
Brown, Gray and Black, Dry to Moist FILL: SILTY CLAY, with fine	667.92_ o	3			Gray, Moist SILTY CLAY, trace sand and gravel (CL/ML) (continued)		_			
grained sand, some gravel	-	5 4		1			_			
	_	_ 2						2		
	_	4 4	1.3 B	22			 - <u>25</u>	5 5	1.9 B	20
	_	_ 2								
	_	3 4	0.8 B	19						
Brown and Gray, Moist	660.00	3					_	3		
FILL: SILTY CLAY, trace sand gravel and roots		6 -10 8	3.3 B	20	Silt seam at 29 to 33.5 feet		-30	5 8	1.0 B	18
	_	4								
	_	6 8	4.6 B	20						
	 654.50							4		
Medium Stiff to Very Stiff Gray, Moist		4 -15 5	2.1 B	22			-35	5 6	2.5 B	24
SILTY CLAY, trace sand and (CL/ML)	gravei —	2-					=			
	_						_			
	_	S					_			
	_	2 3	0.8	19				3	1.9	23
		-20 3	В		End of Boring	628.50	-40	6	В	

End of Boring

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

The SPT (N value) Is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

LAKE 139 90

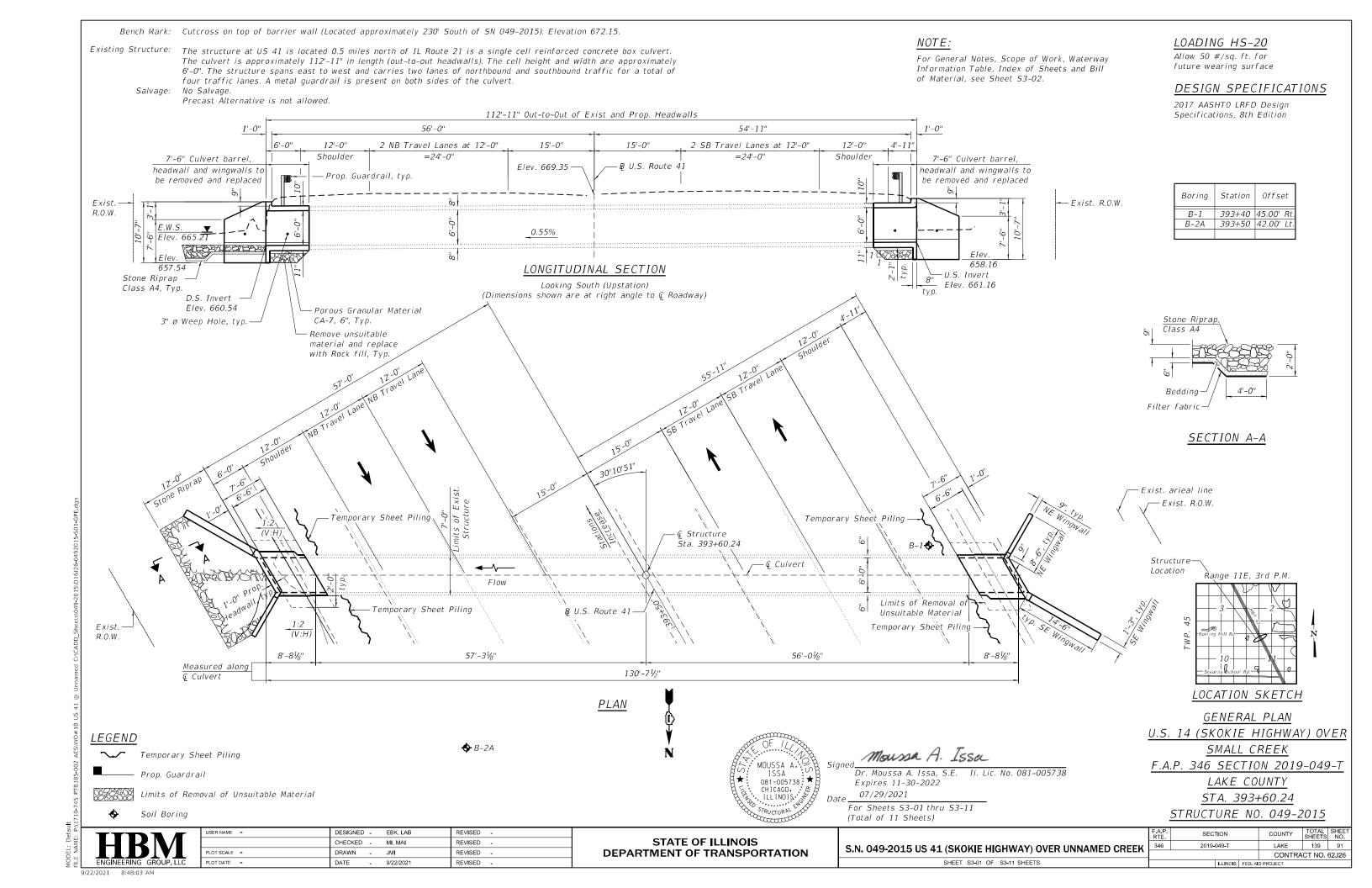
CONTRACT NO. 62J26



USER NAME =	DESIGNED	-	FL	REVISED -	
	CHECKED	-	MI, MAI	REVISED -	
PLOT SCALE =	DRAWN	-	EBK,FL	REVISED -	
PLOT DATE =	DATE	-	9/22/2021	REVISED -	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

BORING LOG		SEC	TION		COUNTY
S.N. 049-2016 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK	346	2019-	049 - T		LAKE
3.14. 043-2010 03 41 (SNONIE HIGHWAT) OVER ONNAMED ONEER					CON
SHEET S2-14 OF S2-14 SHEETS			ILLINOIS	FED. A	D PROJECT



GENERAL NOTES

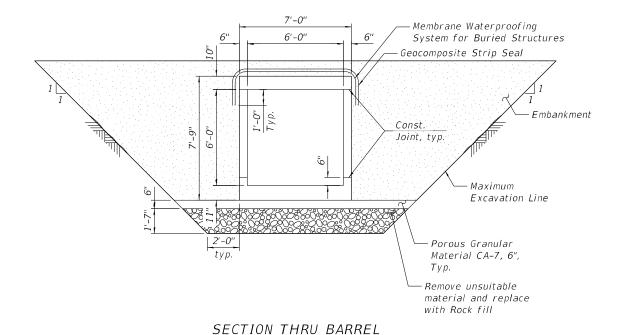
- 1. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- 2. It shall be the responsibility of the contractor to divert the stream flow during construction in order to keep the construction area free of water. The method of the water diversion shall be subjected to the approval of the Engineer and the cost shall be included with the cost of concrete box
- 3. The presented elevations and limits of the existing structure have been taken from historical design drawings and Survey data. Dimensions may not present "as-built" condition. All existing structure limits shall be field verified by the contractor and coordinated with the engineer prior to ordering materials, fabrication and construction of the proposed culvert
- 4. 2-Year Flow (Q) = 36.0 cfs

INDEX OF SHEETS

- S3-01 General Plan
- S3-02 General Notes, Index of Sheets & Total Bill of Material
- Stage Removal and Construction
- 53-04 Temporary Sheet Piling
- S3-05 Existing Structure Partial Removal
- S3-06 Culvert East End Reconstruction Plan
- S3-07 Culvert West End Reconstruction Plan
- S3-08 Culvert Sections and Details
- 53-09 Culvert Repairs
- S3-10 Boring Logs I
- S3-11 Boring Logs II

SCOPE OF WORK

- 1. Remove and reconstruct the 7'-6" of the east and west portions of culvert barrel.
- 2. Remove and reconstruct the west and east culvert headwalls and wingwalls.
- 3. Remove and reerect new steel beam quardrails and quardrail posts on the east and west sides of the roadway.
- 4. Remove and reconstruct the portions of the shoulder on the east and west sides of the roadway.



USER NAME =	DESIGNED	_	EBK, LAB	REVISED -
	CHECKED	-	MI, MAI	REVISED -
PLOT SCALE =	DRAWN	-	JMI	REVISED -
PLOT DATE =	DATE	-	9/22/2021	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SECTION COUNTY 2019-049-T LAKE 139 92 CONTRACT NO. 62J26

STATION 393+60.24 RE-BUILT 202* BY STATE OF ILLINOIS

F.A.P. 346 SECTION 2019-049-T LOADING HL-93 STRUCTURE NO. 049-2015

TOTAL BILL OF MATERIAL

Removal And Disposal Of

Stone Riprap, Class A4

Temporary Sheet Piling

Concrete Box Culverts

For Buried Structures

Polymer Modified Portland Cement

Membrane Waterproofing System

Box Culverts To Be Cleaned

Unsuitable Material

ilter Fabric

Name Plates

Rock Fill

Concrete Removai

Reinforcement Bars

UNIT

Cu Yd

Sq Yd

Cu Yd

Pound

Each

Sq Ft

Cu Yd

Sq Ft

Sq Yd

Foot

Cu Yd

TOTAL

12.0

31.0

5000

1.0 1023

30.4

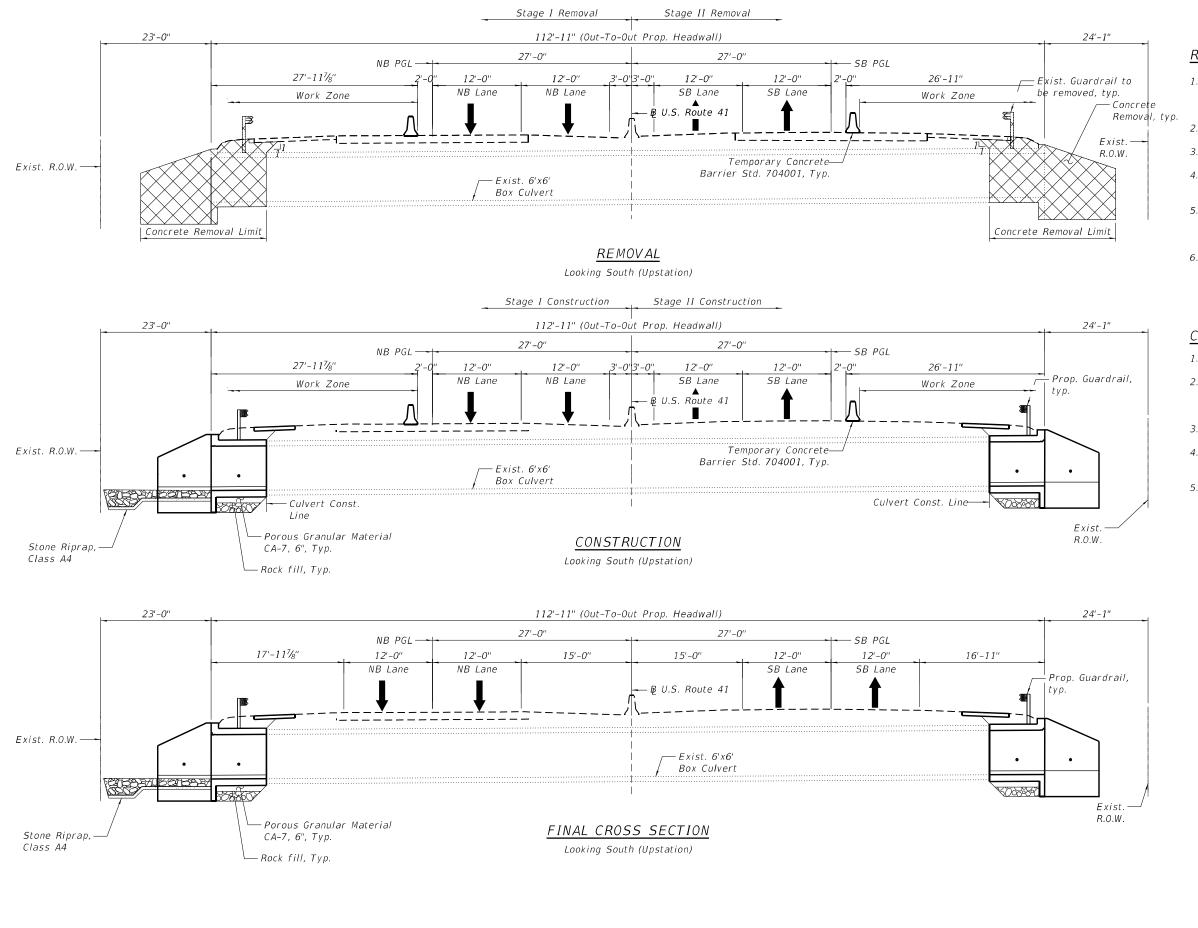
94

15

113 12.0

NAME PLATE See Std. 515001

GENERAL NOTES, INDEX OF SHEETS & TOTAL BILL OF MATERIAL S.N. 049-2015 US 41 (SKOKJE HIGHWAY) OVER UNNAMED CREEK SHEET S3-02 OF S3-11 SHEETS



REMOVAL:

- 1. Install temporary Concrete barrier as shown to locate Construction work areas on the east and west sides of the existing structures.
- 2. Install Temporary Sheet Piling as shown on Sheet S3-04.
- 3. Clean the inside of existing box culvert.
- 4. Remove portions of the existing shoulders on the east and west sides of the roadway.
- 5. Remove the steel plate beam guardrail and guardrail posts at the east and west sides of the road
- 6. Remove the 7'-6" portion of the east and west culvert barrels, and remove the east and west headwalls and wingwalls.

CONSTRUCTION:

- 1. Clean the inside of the existing box culvert.
- 2. Reconstruct the 7-6" portion of the east and west culvert barrels and reconstruct the east and west headwalls and wingwalls.
- 3. Install Stone Riprap at east end of culvert.
- 4. Install the guardrail at the east and west side of the road.
- 5. Reconstruct the shoulders on the east and west sides of the roadway.

LEGEND:



Concrete Removal

HBM ENGINEERING GROUP LIC

USER NAME =	DESIGNED	-	EBK, LAB	REVISED -
	CHECKED	-	MI, MAI	REVISED -
PLOT SCALE =	DRAWN	-	EBK	REVISED -
PLOT DATE =	DATE	-	9/22/2021	REVISED -

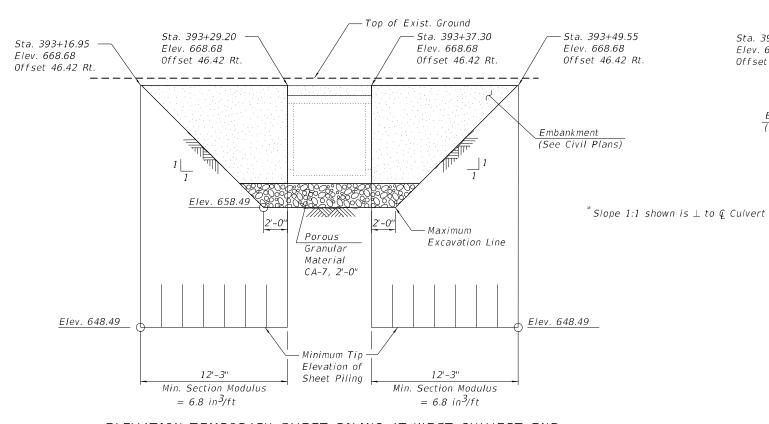
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE REMOVAL AND CONSTRUCTION
S.N. 049-2015 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK

SHEET \$3-03 OF \$3-11 SHEETS

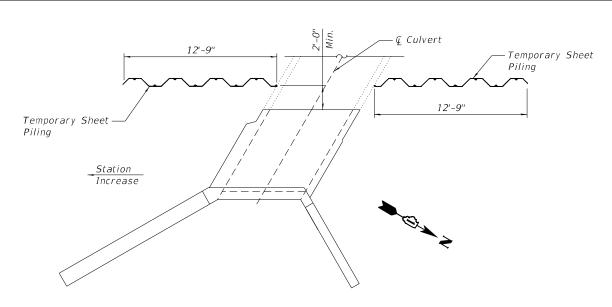
λ.Ρ. ΓΕ	SEC.	TION		COUNTY	TOTAL SHEETS	SHEET NO.
16	2019-049-T			LAKE	139	93
			CONTRA	CT NO.	62J26	
ILLINOIS FED. AID PROJECT						

PARTIAL PLAN AT WEST CULVERT END

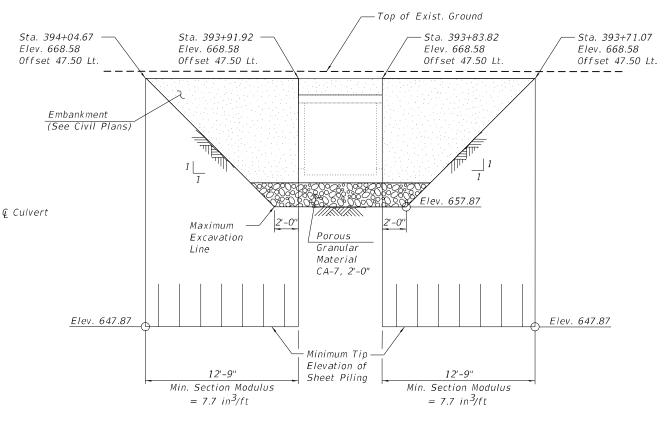


ELEVATION-TEMPORARY SHEET PILING AT WEST CULVERT END

(Looking East)



PARTIAL PLAN AT EAST CULVERT END



ELEVATION-TEMPORARY SHEET PILING AT EAST CULVERT END

(Looking West)

LEGEND:



Porous Granular Material CA-7, 2'-0"



Temporary Sheet Pilling

NOTE:

1. If the Contractor chooses to alter the temporary cantilevered sheet piling design requirement shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Temporary Sheet Pilling	Sq. Ft.	1,023



USER NAME =	DESIGNED	-	EBK, LAB	REVISED	-
	CHECKED	-	MI, MAI	REVISED	-
PLOT SCALE =	DRAWN	-	НМІ	REVISED	-
PLOT DATE =	DATE	-	9/22/2021	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

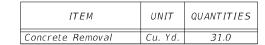
TEMPORARY SHEET PILING
S.N. 049-2015 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK

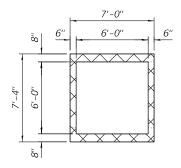
SHEET S3-04 OF S3-11 SHEETS

SHEET S3-04 OF S3-11 SHEETS

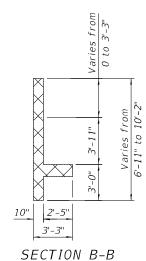
F.A.P. RTE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
346	2019-049-T	LAKE	139	94	
		CONTRA	CT NO.	62J26	
	ILLINOIS	D PROJECT			

0/22/2021 9:40:20





SECTION A-A



NOTES:

- 1. Dimension shown have been take from historical design drawings, field measurements, and survey data and may not represent "as built" conditions. The Contractor must verify all dimensions in the field. Variation in the field dimensions shall not warrant additional compensation for Concrete Removal.
- 2. For Temporary Sheet Piling, see Sheet S3-04.
- 3. Existing reinforcement shall be cleaned and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

LEGEND:



USER NAME = DESIGNED - FL, LAB REVISED CHECKED - MI, MAI REVISED -- FL REVISED DATE - 9/22/2021 REVISED -

7'-6"

10"

-Exist. long. bars in top and bottom slabs to remain, typ.

€ Culvert

PARTIAL PLAN

7'-6"

min.

10"

Exist. 6'x6' 10"

Box Culvert

112'-11" (Out-To-Out Exist. Headwall)

-Exist. long. bars in

to remain, typ.

Exist. horiz. bars in walls

PARTIAL ELEVATION (Looking Upstation)

to remain, typ.

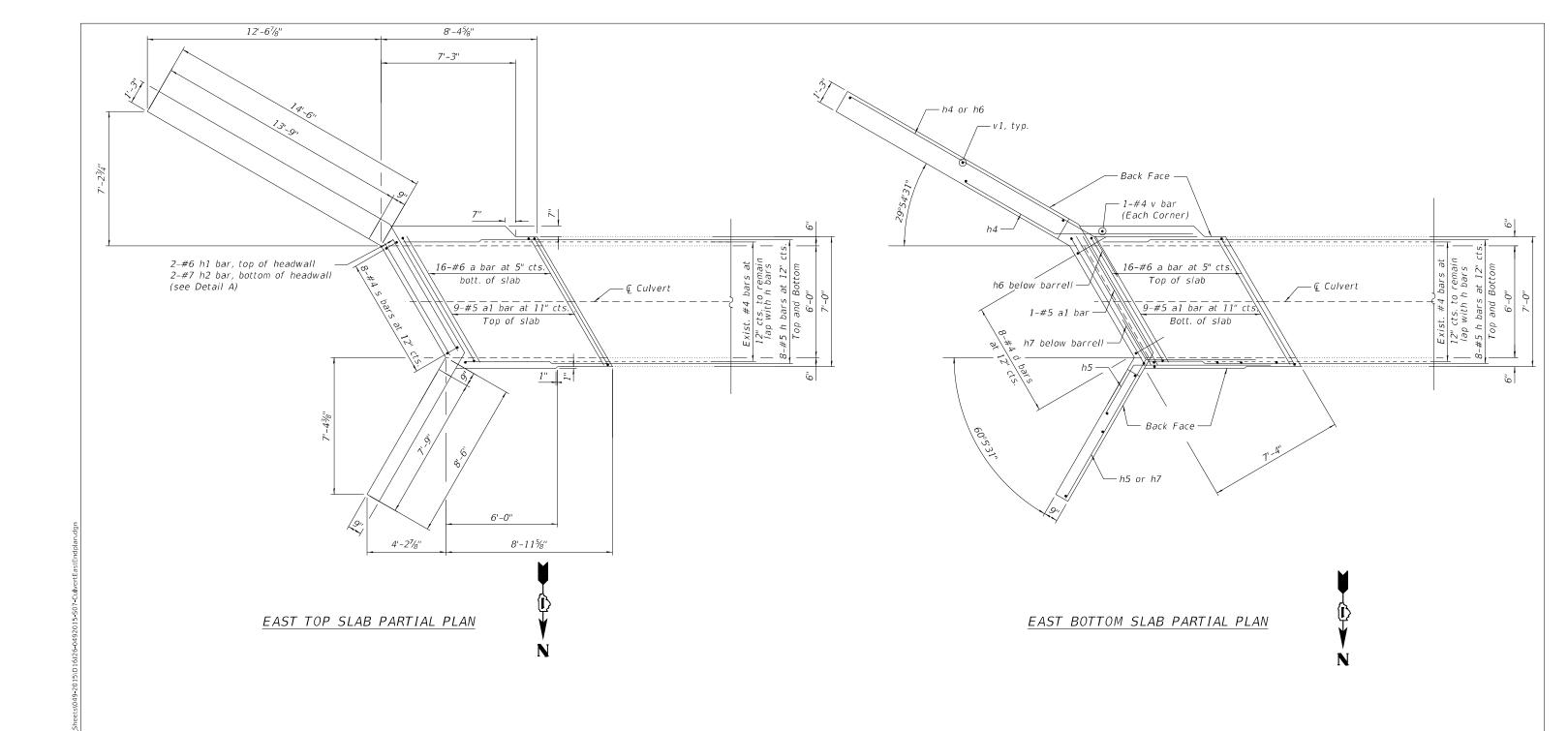
top and bottom slabs

STATE OF ILLINOIS

CULVERT PARTIAL REMOVAL S.N. 049-2015 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK SHEET S3-05 OF S3-11 SHEETS

SECTION COUNTY 2019-049-T LAKE 139 95 CONTRACT NO. 62J26

DEPARTMENT OF TRANSPORTATION



NOTES:

- 1. For Detail A, Sections, bar diagrams and bill of material, see Sheet S3-08.
- 2. Existing reinforcement shall be cleaned and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal
- 3. All exposed concrete edge shall have a 3/4"x45° chamfer, except where shown otherwise
- 4. The culvert barrels shall be poured monolithically with the wingwalls.

HRM
ENGINEERING GROUP, LLC

USER NAME =	DESIGNED	-	MAA, LAB	REVISED	-	
	CHECKED	-	MI, MAI	REVISED	-	
PLOT SCALE =	DRAWN	-	MAA	REVISED	-	
PLOT DATE =	DATE	-	9/22/2021	REVISED	-	
						_

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT EAST END RECONSTRUCTION PLAN
S.N. 049-2015 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK

SHEET S3-06 OF S3-11 SHEETS

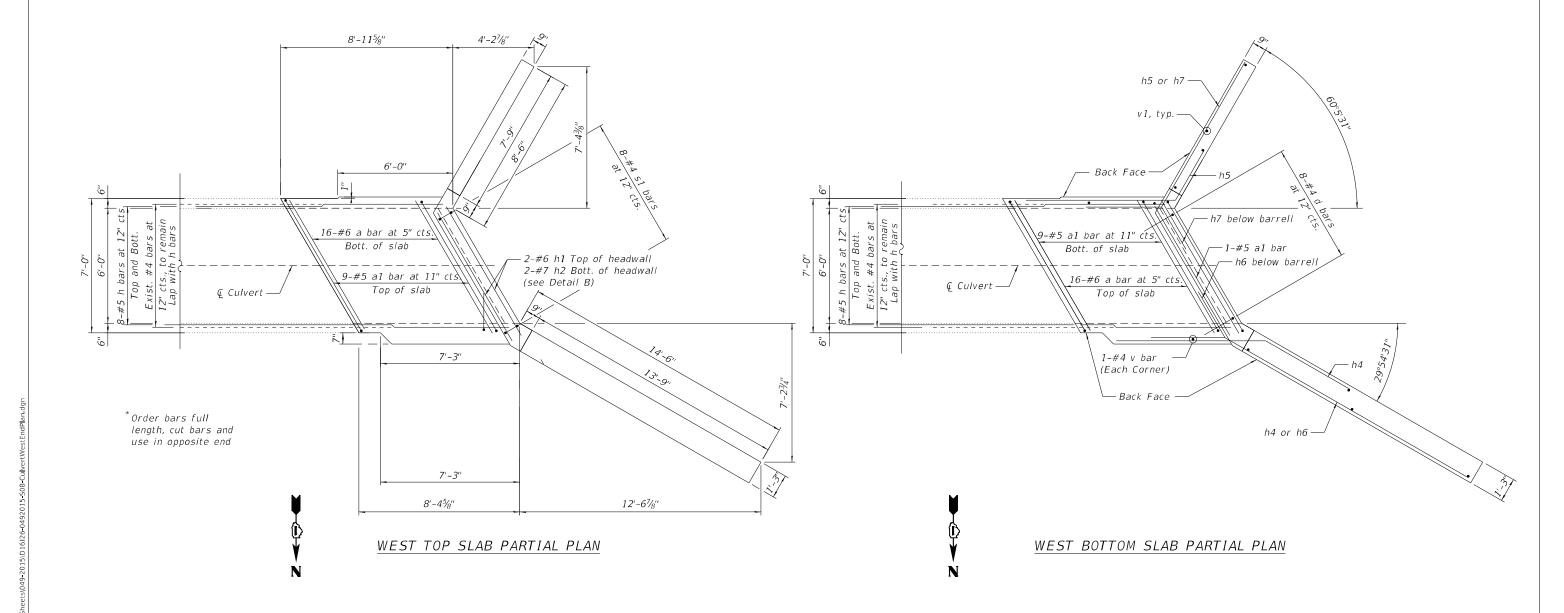
F.A.P. SECTION COUNTY TOTAL SHEETS NO.

346 2019-049-T LAKE 139 96

CONTRACT NO. 62J26

| ILLINOIS | FED. AID PROJECT

9/22/2021 8:50:02 AM



NOTES:

- 1. For Detail B, Sections, bar diagrams and bill of material, see Sheet S3-08.
- 2. Existing reinforcement shall be cleaned and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- 3. All exposed concrete edge shall have a ¾"x45° chamfer, except where shown otherwise.
- 4. The culvert barrels shall be poured monolithically with the wingwalls.

HRM	
ENGINEERING GROUP, LLC	

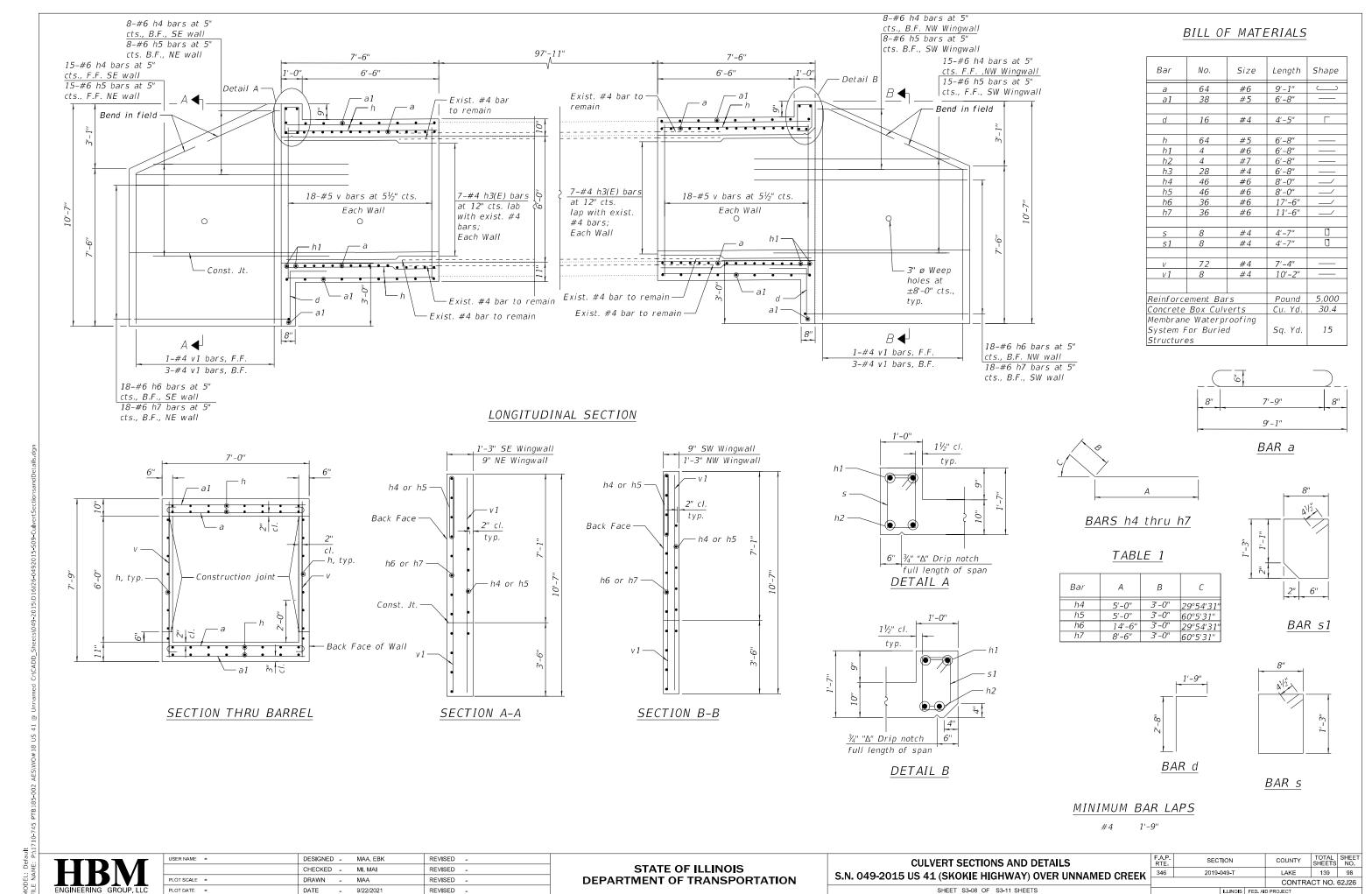
USER NAME =	DESIGNED	-	MAA, LAB	REVISED	-
	CHECKED	-	MI, MAI	REVISED	-
PLOT SCALE =	DRAWN	-	MAA	REVISED	-
PLOT DATE =	DATE	-	9/22/2021	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

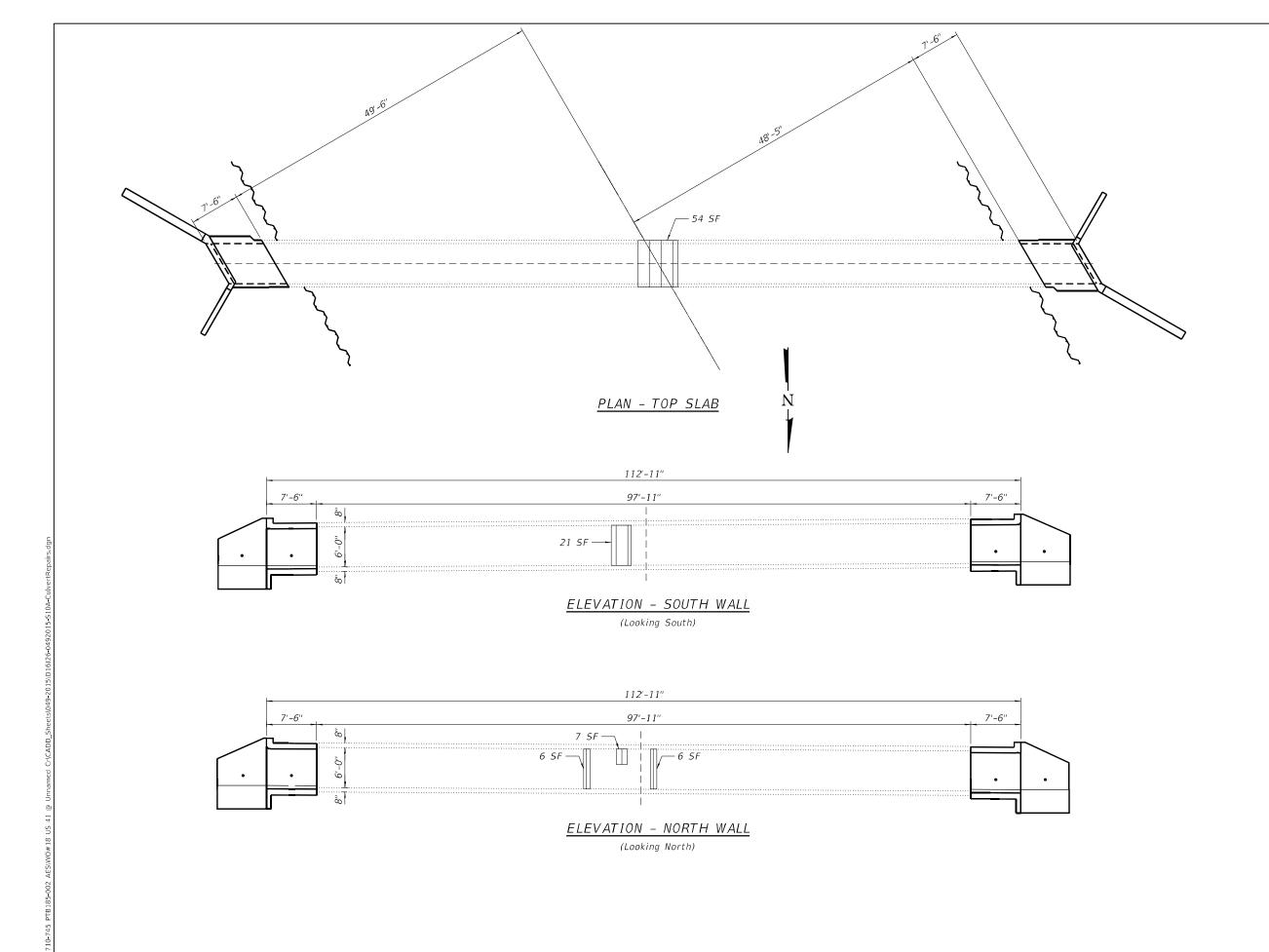
CULVERT WEST END RECONSTRUCTION PLAN
S.N. 049-2015 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK

SHEET S3-07 OF S3-11 SHEETS

9/22/2021 8:50:17 AM



9/22/2021 8:50:40 AM



BILL OF MATERIAL

Item	Unit	Quantity
Polymer Modified	Sq Ft	94

LEGEND:

Polymer Modified Portland Cement Mortar Repair

SF Square Feet

DESIGNED - EBK, MAA REVISED -CHECKED - MI, MAI REVISED -DRAWN - EBK REVISED -REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

CULVERT REPAIRS S.N. 049-2015 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK SHEET S3-09 OF S3-11 SHEETS

SECTION LAKE 139 99

CONTRACT NO. 62J26 2019-049-T



SOIL BORING LOG

Page <u>1</u> of <u>2</u>

Date 3/12/20

ROUTE US-41					US Route 41 Culvert Repa	air L	OGGED	ЭВҮ	PS/RM			
North of Illinois 173 to Se SECTION Westleigh	outh of	LOCAT	ON _	SN-049-2015, SEC., TWP., RNG.,								
COUNTY Lake DRI	ILLING ME	THOD		Latitu	de , Longitude HSA	HAMMER TYPE	TYPEAUTO					
STRUCT. NO. SN 049-2015 Station 393+60.24	D E P	B L O	UCS	M O I	Surface Water Elev		D E P	B L O	U C S	M O I		
BORING NO. SN-049-2015-B-1 Station 393+40 Offset 45.00ft Right	_ H	W S	Qu	S T	Upon Completion	635.2 ft <u>▼</u> N/A ft	T H	W S	Qu (4-5)	S T		
Ground Surface Elev. 669.18 8 inches of Asphalt	ft (ft)	(/6")	(tsf)	(%)	After Hrs Hard to Stiff	<u>N/A</u> ft	(ft) ((/6'')	(tsf)	(%)		
Brown, Moist FILL: SILTY CLAY LOAM, with fine	668.51 — ——	2	0.0	40	Gray and Brown, Moist SILTY CLAY, trace sand (CL/ML) (continued)	and gravel						
grained sand, some gravel		5 5	0.6 B	10								
Brown and Gray, Moist to Very Moist	665.68	2	2.5	25				2	1.9	19		
FILL: SILTY CLAY, trace sand and gravel			P				- <u>25</u>	6	В			
		3	2.9	15								
	_	6	В	10								
	-	2 5	4.2	18			+	2	2.3	19		
		7	В				-30	6	В			
	_	4 10	5.4	18								
		13	В									
Hard to Stiff	655.18	3	4.2	20	Very Loose	635.18	<u>*</u>	0		25		
Gray and Brown, Moist SILTY CLAY, trace sand and gravel (CL/ML)	 <u>15</u> 	7	В	20	Gray, Wet SAND, fine grained (SP)		-35	2		25		
		_										
		-										
	-20	1 3 6	2.5 B	18	Very Stiff Gray and Brown, Very Mo	630.18 oist 629.18		4 5 6	2.1 B	25		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



SOIL BORING LOG

Page $\underline{2}$ of $\underline{2}$

Date 3/12/20

GSG Consultants INC					Date
ROUTEUS-41	DESCRIPTIO	N	US Route 41 Culvert	Repair LOGGE	DBY PS/RM
North of Illinois 173	to South of				
SECTION Westleigh	LOC/	ATION S	SN-049-2015, SEC., TWP.,	, RNG. ,	
			Latitude , Longitude	HAMMER TYPE	
COUNTYLake	DRILLING METHOL	·	HSA	HAMMER TYPE	AUTO
TRUCT. NO. SN 049-201	5 D B	U	M Surface Water Elev.	N1/A #	
Station 393+60.24		1000	Carract Water Liev.	N/A ft	
	P O		I Stream Bea = 1811		
SORING NOSN-049-2015-	₃₋₁ T W		S Groundwater Elev.:		
Station 393+40	H S	Qu	T First Encounter	635.2_ ft ▼	
Offset 45.00ft Right		\	Upon Completion	N/A ft ft	
Ground Surface Elev. 669.		') (tsf)	(%) After Hrs.	N/A ft	
ILTY CLAY, trace sand and gra	vel				
CL/ML) nd of Boring					
nd of Boring	_				
	_				
	45				
	<u>-45</u>				
	_				
	*				
	50				
	_				
	_				
	-				
	_				
	-				
	55				
	_				
	,				
	00				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



USER NAME =	DESIGNED	-	MAA, EBK	REVISED	-
	CHECKED	-	MI, MAI	REVISED	-
PLOT SCALE =	DRAWN	-	MAA	REVISED	-
PLOT DATE =	DATE	-	9/22/2021	REVISED	-



SOIL BORING LOG

Page <u>1</u> of <u>2</u>

Date 3/31/20

ROUTE US-41 DE	SCR	IPTION		US Router 41 Culvert Repair					D BY	ES/RM	
North of Illinois 173 to South SECTION Westleigh	of l	LOCAT	ION _	SN-04	9-2015, SEC. , TWP. , RN de , Longitude	NG. ,					
COUNTY Lake DRILLIN	G ME	THOD				HAMMER TYPE			Αl	JTO	
STRUCT. NO. SN 049-2015 Station 393+60.24	D E P	B L O	U C S	M O I	Surface Water Elev Stream Bed Elev	N/A	ft	D E P	B L O	U C S	M O I
BORING NO. SN-049-2015-B-2A Station 393+50 Offset 42.00ft Left	H	w s	Qu	S T	Groundwater Elev.: First Encounter Upon Completion After Hrs.	631.1	ft <u>▼</u>	H	W S	Qu	S T
Ground Surface Elev. 669.60 ft	(ft)	(/6")	(tsf)	(%)	After Hrs	N/A	ft	(ft)	(/6")	(tsf)	(%)
8 inches of Asphalt 668.93 Brown, Moist FILL: SAND, with gravel	<u> </u>				Hard to Very Stiff Brown and Gray, Moist SILTY CLAY, trace grav (continued)	vel (CL/ML)		_			
		6 7			,						
666.10 Brown and Gray, Moist FILL: SILTY CLAY, trace gravel		3	4.5					_	9	4.5	
, o		Q	P P					- <u>25</u>	7	P P	
		4 7	4.5								
004.4	_	11	Р					_			
Hard to Very Stiff Brown and Gray, Moist SILTY CLAY, trace gravel (CL/ML)	_	4 6 10	4.5 P		Cobbles at 29 feet Medium Dense Gray, Moist		640.60 640.10		6 11 6		
, , , , , , , , , , , , , , , , , , ,	10		P		SANDY CLAY (CLS) Medium Dense Gray, Moist			30	0		
	_	5 6 8	4.0 P		SAND (SP)						
	_	2							2		
		4	3.0 P		Very Stiff Gray, Moist		635.10	- <u>-</u>	5 8	3.0 P	
	_	-			SILTY CLAY (CL/ML)			_			
								_			
		3	0.0		Multima		630.60	Y	3		
	_ -20	4 7	3.0 P		Medium Dense Gray, Moist		629.60	 -40	4 7		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



SOIL BORING LOG

Page $\underline{2}$ of $\underline{2}$

Date <u>3/31/20</u>

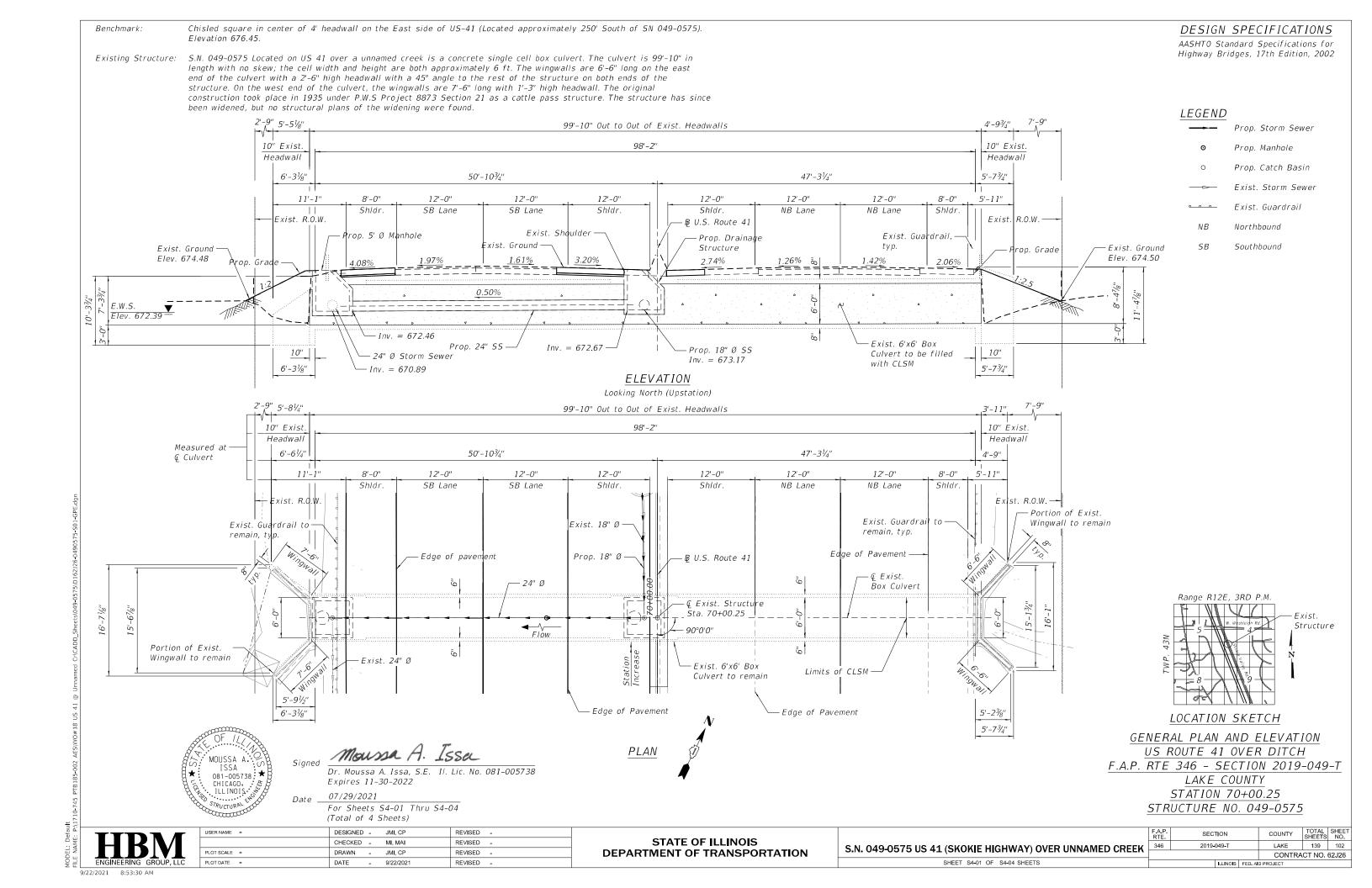
					PTION			US Router 41 Culvert R	epair LOG	GED BY ES/RM
North SECTION	n of Illinoi: We	s 173 to So estleigh	uth o	f I	OCAT	ION	SN-04	9-2015, SEC. , TWP. , R	NG.	
							Latitu	de , Longitude		
COUNTY	Lake	DRIL	LING	MET	HOD			HSA	HAMMER TYPE	AUTO
STRUCT. NO.	SN 04	9-2015	_	D	В	U	М	Surface Water Elev.	N/A ft	
Station	393+	-60.24	_	E P	Lo	C S	0	Stream Bed Elev.	N/A ft	
BORING NO. S	SN-049-2	015-B-2A	_	T	W		S	Groundwater Elev.:	_	
Station	393	3+50	_	Н	S	Qu	Т	First Encounter		
Offset				/£4\	//em	/to=5\	(0/)	Upon Completion	N/A ft	
Ground Surface I	Elev	669.60	_ ft	(11)	(/6")	(tsf)	(%)	After Hrs.	N/A ft	
SAND (SP)										
End of Boring										
				<u>-45</u>						
				4						
				_						
				_						
				_						
				50						
				_						
				_						
				_						
				<u>-55</u>						
				_						
				_						
				_						
				-						
				_						
				-60		1		II		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)



USER NAME =	DESIGNED	-	MAA, EBK	REVISED -
	CHECKED	-	MI, MAI	REVISED -
PLOT SCALE =	DRAWN	-	MAA	REVISED -
PLOT DATE =	DATE	-	9/22/2021	REVISED -



GENERAL NOTES:

- 1. Plan Dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- 2. It shall be the responsibility of the contractor to divert the stream flow during construction in order to keep the construction area free of water. The method of the water diversion shall be subjected to the approval of the Engineer and the cost shall be included with the cost of concrete box culverts.
- 3. 2-Year Flow (Q) = 7.41 cfs

SCOPE OF WORK:

- 1. Clean the inside of existing box culvert.
- 2. Perform concrete removal of top portion of existing wingwalls, headwalls, and top slab of box culvert.
- 3. Install proposed 24" ∅ storm sewer in West portion of culvert.
- 4. Fill the void around the storm sewer inside the box culvert with CLSM.

INDEX OF SHEETS

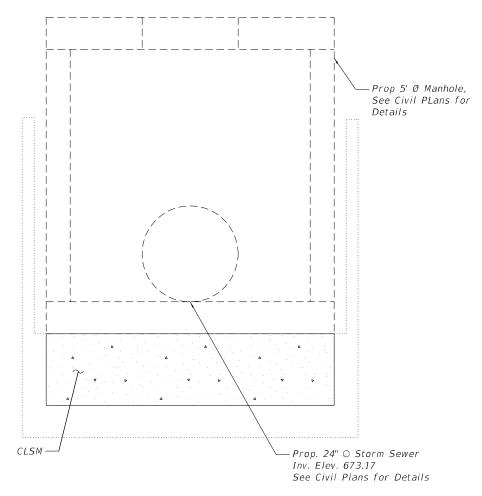
S4-01 General Plan and Elevation

S4-02 General Notes, Index of Sheets & Bill of Material

S4-03 Stage I and II Construction S4-04 Existing Structure Removal

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu Yd	6.7
Controlled Low-Strength Material	Cu Yd	108.1
Box Culverts To Be Cleaned	Foot	100



<u>BARREL SECTION</u>
(At drainage structure locations)



USER NAME =	DESIGNED	-	JMI, CP	REVISED -	
	CHECKED	-	MI, MAI	REVISED -	
PLOT SCALE =	DRAWN	-	JMI, CP	REVISED -	
PLOT DATE =	DATE	-	9/22/2021	REVISED -	

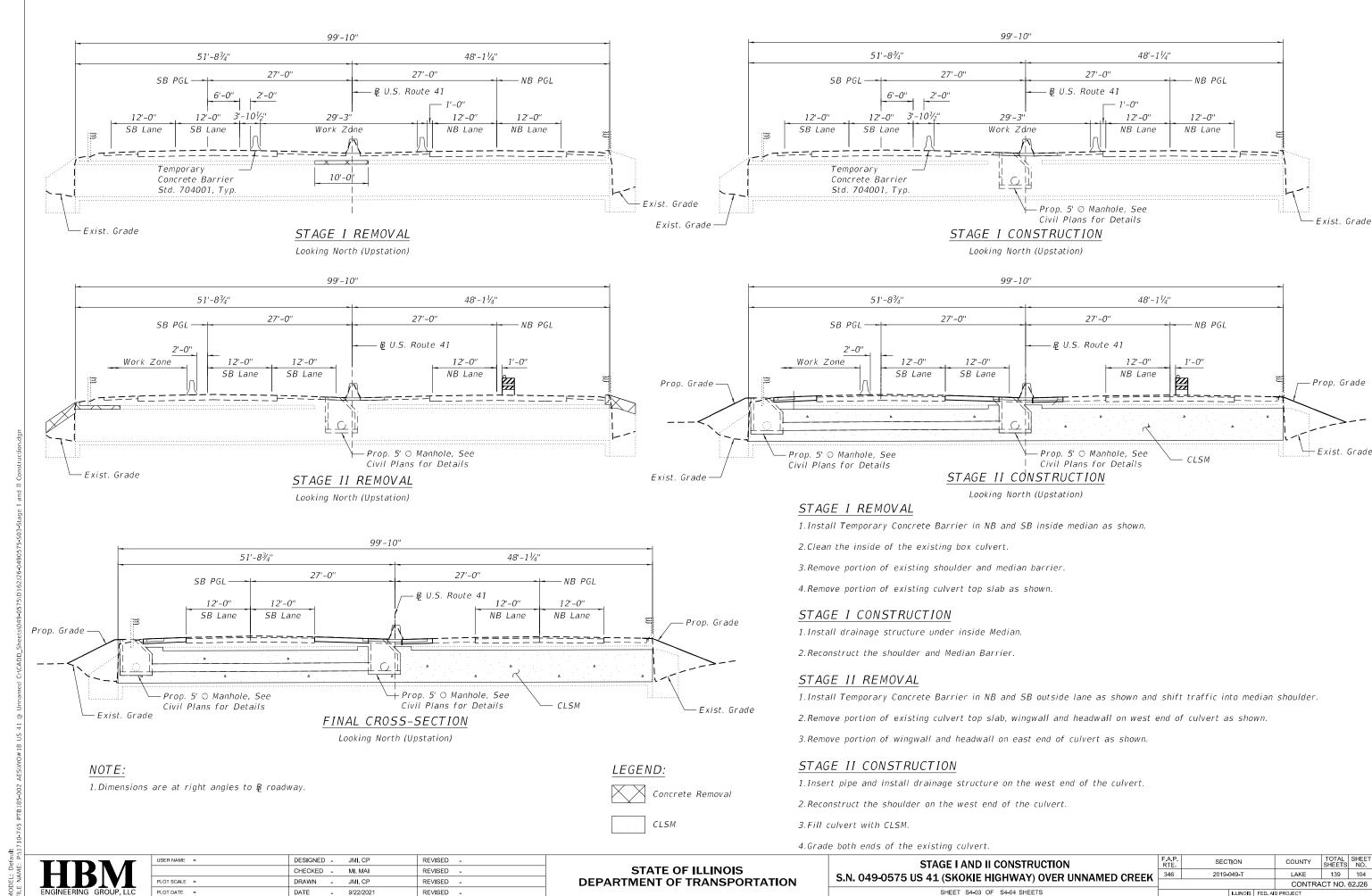
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS & BILL OF MATERIAL S.N. 049-0575 US 41 (SKOKIE HIGHWAY) OVER UNNAMED CREEK

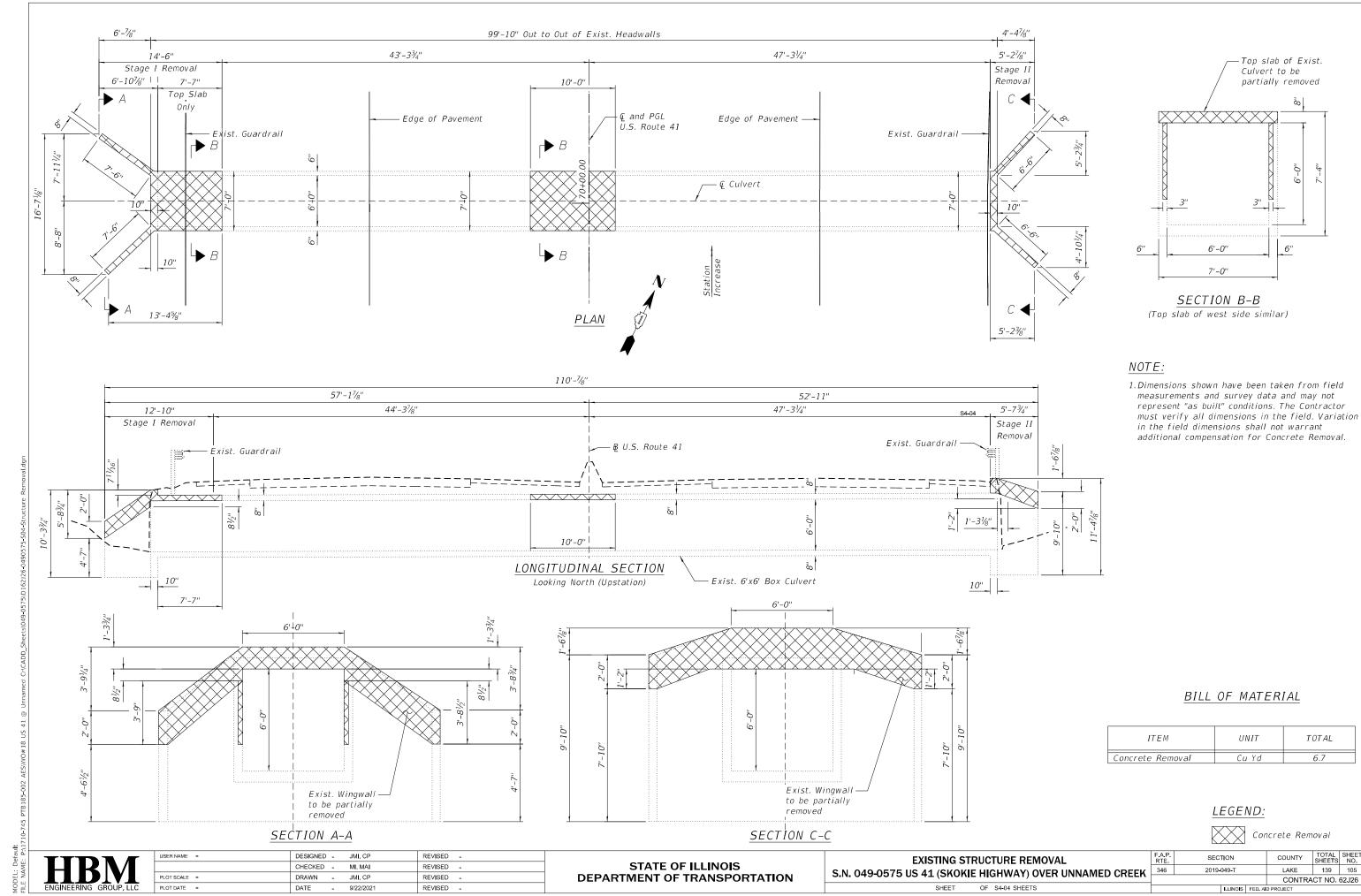
P. SECTION COUNTY TOTAL SHEETS NO.

5 2019-049-T LAKE 139 103

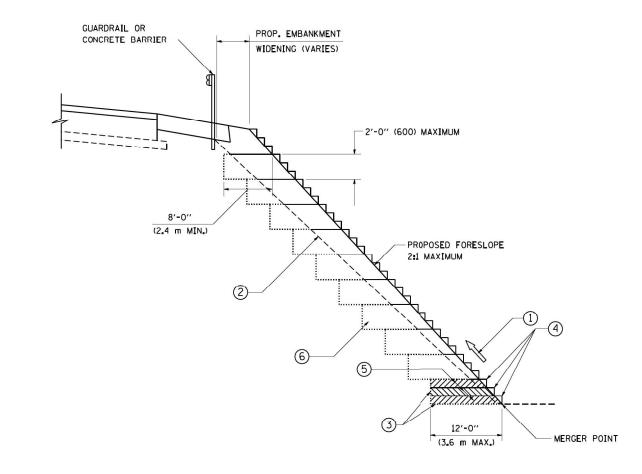
CONTRACT NO. 62J26



9/22/2021 8:54:21 AM



9/22/2021 8:54:59 AM



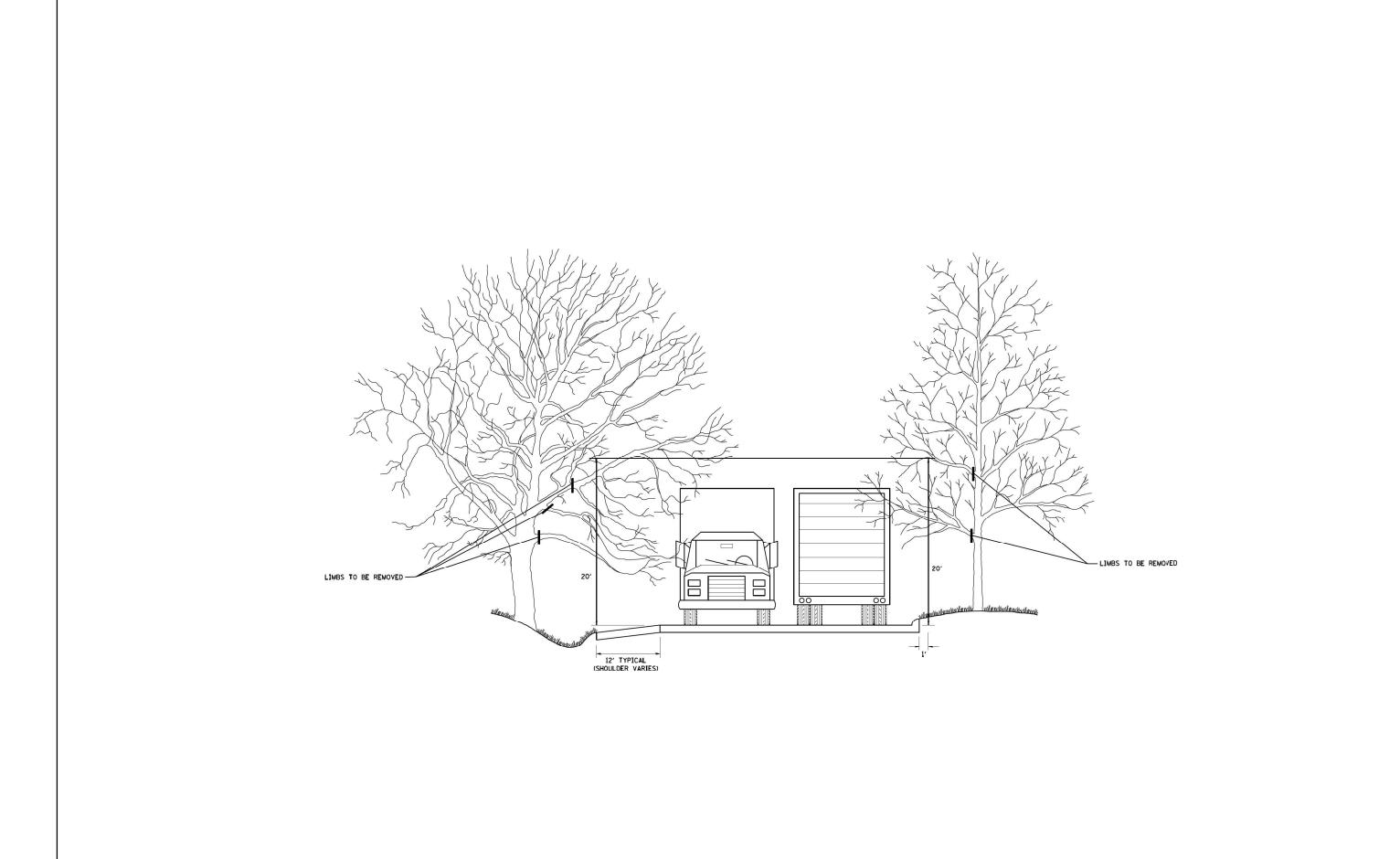
TYPICAL BENCHING DETAIL FOR EMBANKMENT

NOTES:

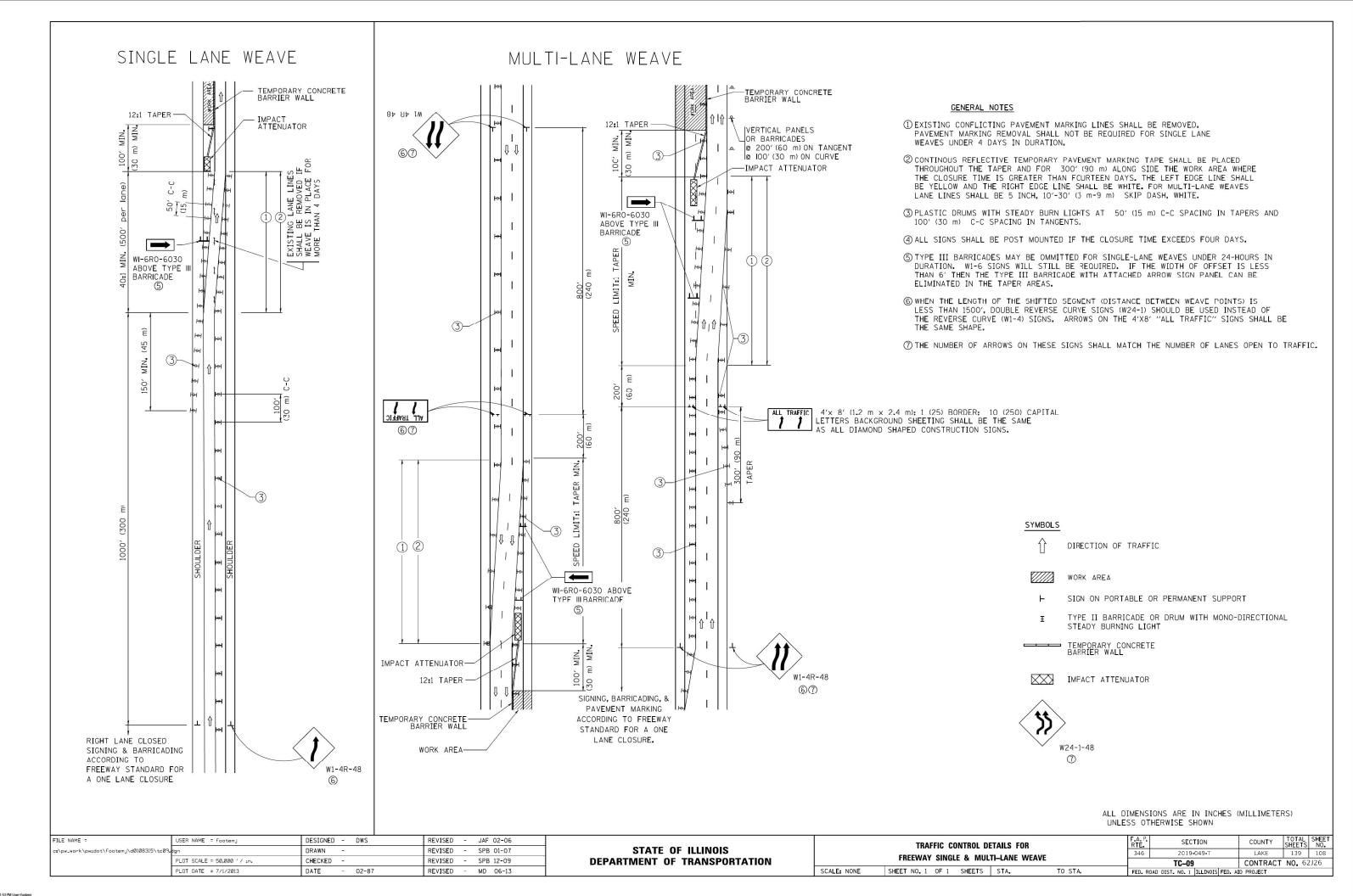
- ONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- (4) TRIM TO FINAL SLOPE.
- (5) EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

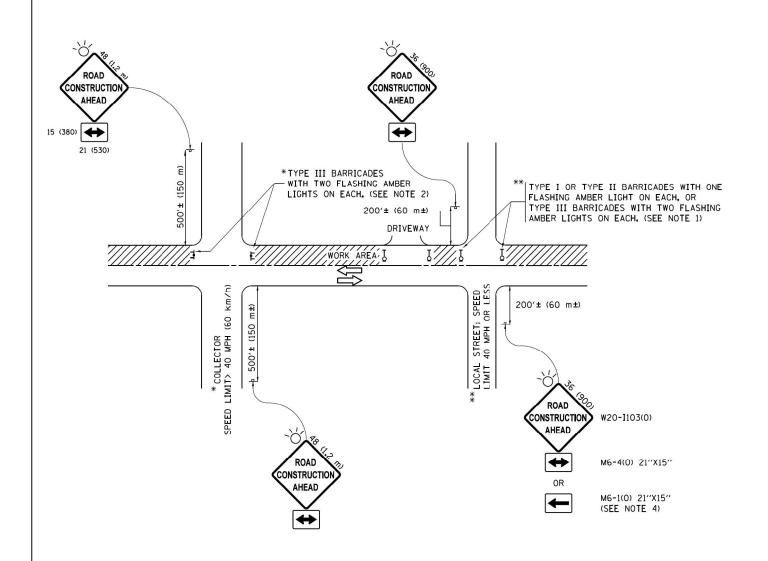
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -			BENCHING DETAIL		F.A. P.	SECTION	COUNTY	TOTAL	SHEE
W:\diststd\22×34\bd51.dgn		DRAWN - CADD	REVISED -	STATE OF ILLINOIS				346	2019 - 049-T	LAKE	139	106
	PLOT SCALE = 50.0000 '/ IN.	CHECKED - S.E.B.	REVISED -	DEPARTMENT OF TRANSPORTATION		FOR EMBANKMENT WIDENING			BD-51	CONTRACT NO		J26
	PLOT DATE = 1/4/2008	DATE - 06-16-04	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED ROAD DE	ST NO 1 TILINOIS FED.	ATD PROJECT		



FILE NAME = USER NAME = gaglianobt DESIGNED REVISED - R. BORO 10-31-06 PRUNING FOR SAFETY AND STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION REVISED REVISED W:\diststd\22x34\bm20.dgn DRAWN EQUIPMENT CLEARANCE CHECKED PLOT SCALE = 50.000 '/ [N. PLOT DATE = 1/4/2008 DATE REVISED SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.





NOTES:

- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200" (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 \times 48 (1.2 m \times 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500" (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710)
- 4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

SCALE: NONE

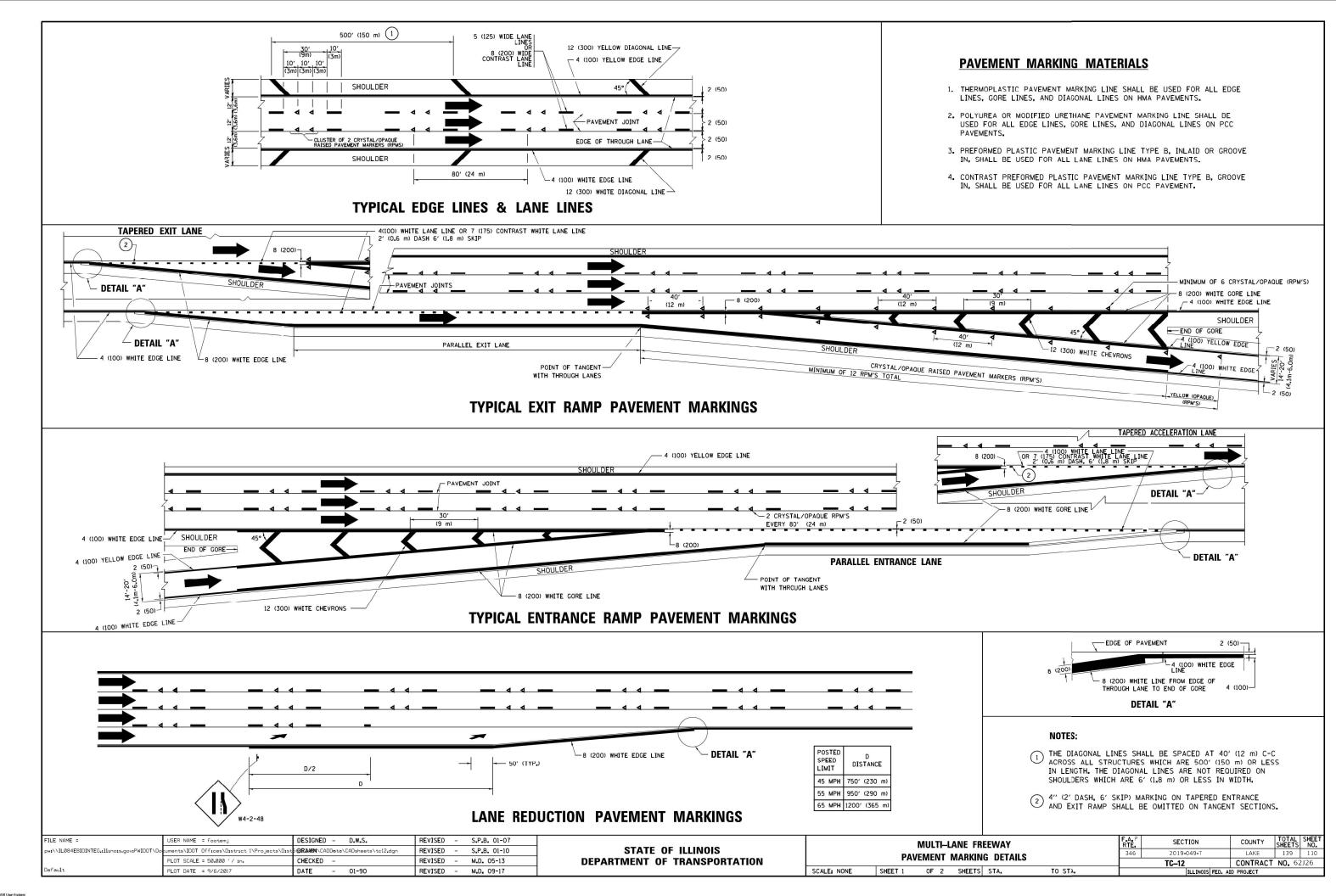
- 5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- 6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE
- 7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

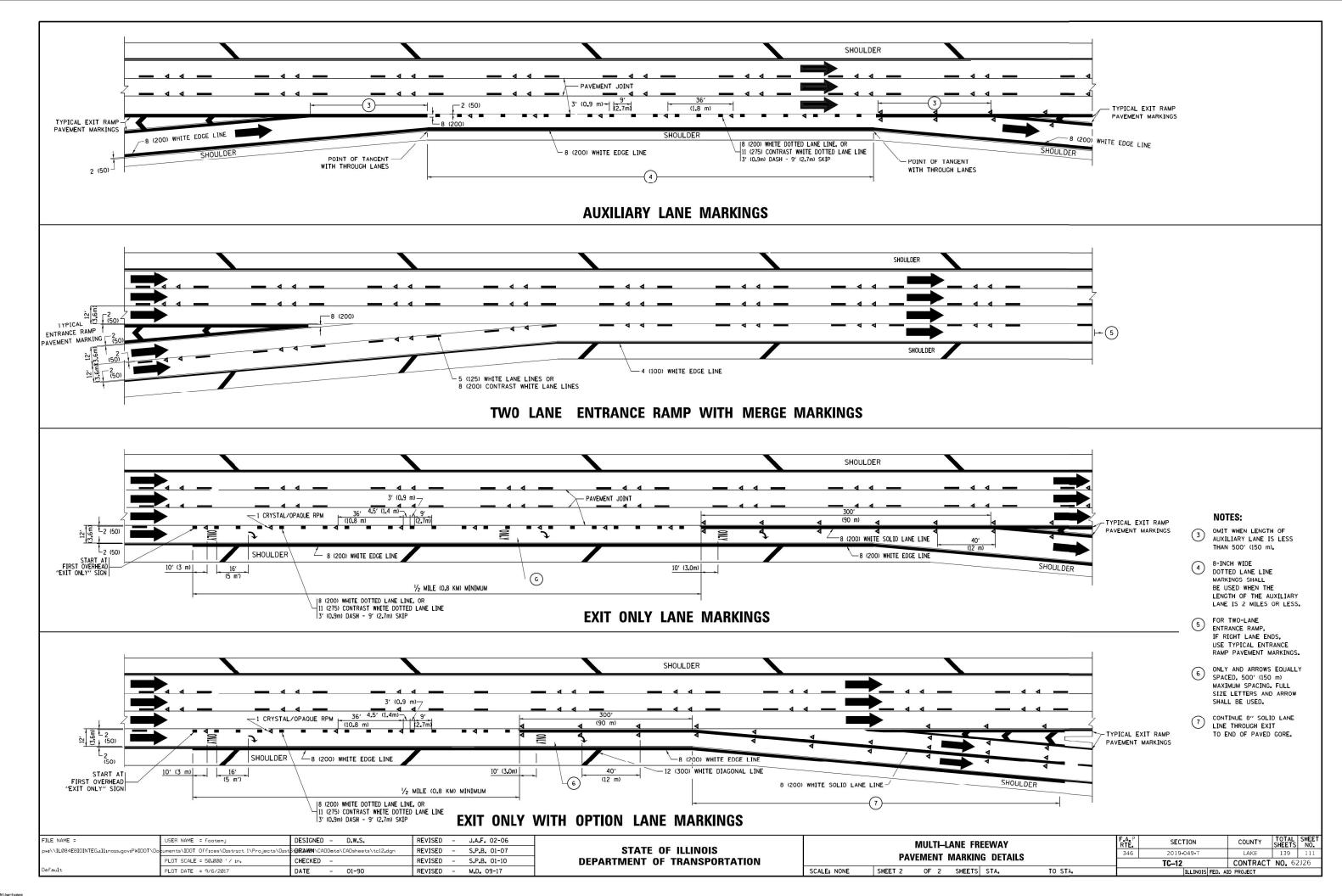
All dimensions are in inches (millimeters) unless otherwise shown.

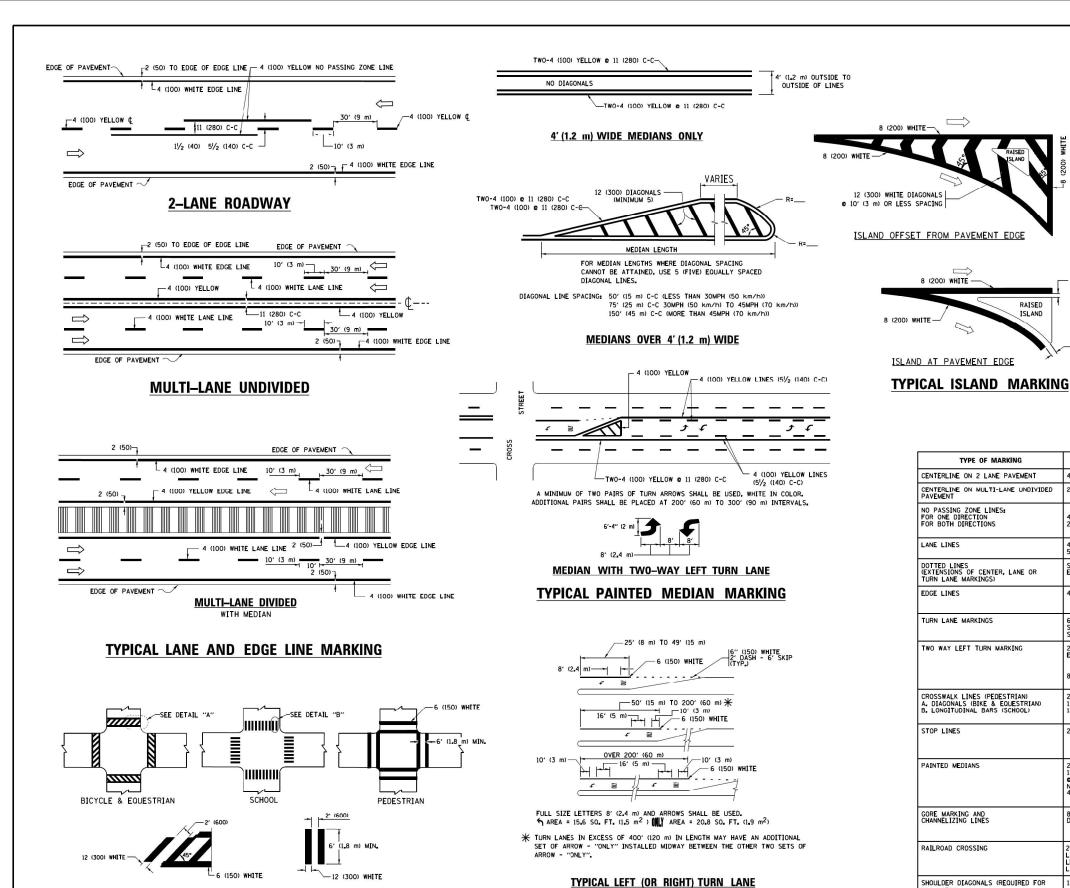
FILE NAME =	USER NAME = footemj	DESIGNED - L.H.A.	REVISED	- A. HOUSEH 10-15-96
pwi//IL084EBIDINTEG.illinois.gov:PWIDOT/Do	cuments\IDOT Offices\District 1\Projects\Dist	St DRAWM \CADData\CADsheets\tc10.dgn	REVISED	-T. RAMMACHER 01-06-00
	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED	- A. SCHUETZE 07-01-13
Default	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED	- A. SCHUETZE 09-15-16

STATE OF ILLINOIS								
DEPARTMENT	0F	TRANSPORTATION						

TRAFFIC CONTROL AND PROTECTION FOR	F.A.P RTE.	SECTION	
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	346 2019-049		
SIDE NUADS, INTERSECTIONS, AND DRIVEWATS	TC-10		
SHEET 1 OF 1 SHEETS STA. TO STA.		TI I INOI	







TYPICAL TURN LANE MARKING

6'-4" (1930) D(FT) SPEED LIMIT (1020) 345 30 425 35 (1020) 500 40 580 45 665 50 750 55 32 R (810) 40 (1020) 64 (1620) **COMBINATION** LEFT AND U-TURN 5'-4" (1620) √ 32 R (810) LANE REDUCTION TRANSITION 40 (1020) 12 (300)

U-TURN TYPE OF MARKING WIDTH OF LINE **PATTERN** SPACING /REMARKS CENTERLINE ON 2 LANE PAVEMENT SKIP-DASH YELLOW 10' (3 m) LINE WITH 30' (9 m) SPACE YELLOW CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS 4 (100) 2 **6** 4 (100) √2 (140) C-C FROM SKIP-DASH CENTERLINE
1 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN SKIP-DASH SKIP-DASH LANE LINES 10' (3 m) LINE WITH 30' (9 m) SPACE 4 (100) 5 (125) ON FREEWAYS DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS) SAME AS LINE BEING EXTENDED SKIP-DASH SAME AS LINE BEING EXTENCED 2' (600) LINE WITH 6' (1.8 m) SPACE EDGE LINES 4 (100) SOLID YELLOW-LEFT WHITE-RIGHT OUTLINE MEDIANS IN YELLOW 6 (150) LINE: FULL SIZE LETTERS & SYMBOLS (8' (2.4m)) TURN LANE MARKINGS SOLID WHITE SEE TYPICAL TURN LANE MARKING DETAIL 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL SKIP-DASH AND SOLID IN PAIRS TWO WAY LEFT TURN MARKING YELLOW CROSSWALK LINES (PEDESTRIAN)
A. DIAGONALS (BIKE & EQUESTRIAN)
B. LONGITUDINAL BARS (SCHOOL) NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS. PLACE 4' (1,2 m) IN ADVANCE OF AND
PARALLEL TO CROSSWALK, IF PRESENT.
OTHERWISE, PLACE AT DESIRED STOPPING
POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE STOP LINES 24 (600) SOLID WHITE PAINTED MEDIANS 2 @ 4 (100) WITH 12 (300) DIAGONALS SOLID YELLOW: TWO WAY TRAFFIC 11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING. WHITE:
ONE WAY TRAFFIC NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS 8 (200) WITH 12 (300) DIAGONALS @ 45° SOLID DIACONALS: 15: (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h)) GORE MARKING AND CHANNELIZING LINES 24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 LETTERS; 16 (400) LINE FOR "X" SEE STATE STANDARD /80001 AREA OF: "R"=3.6 SO. FT. (0.33 m²) EACH "X"=54.0 SO. FT. (5.0 m²) RAILROAD CROSSING SOLID WHITE 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) T0 45MPH (70 km/h)) 150' (45 m) C-C (0VER 45MPH (70 km/h)) SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS \geq 8') WHITE - RIGHT YELLOW - LEFT 12 (300) @ 45° SOLID U TURN ARROW SEE DETAIL SOL ID WHITE 2 ARROW COMBINATION LEFT AND U TURN 30.4 SF

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

SCALE: NONE

__ 2 (50)

(50)

RAISED

ISLAND

unless otherwise shown.

* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OF

GREATER OR WHEN SPECIFIED IN PLANS.

FILE NAME = JSER NAME = leysa DESIGNED - EVERS REVISED - C. JUCIUS 09-09-09 DRAWN REVISED - C. JUCIUS 07-01-13 \diststd\22x34\tc13.dgr CHECKED REVISED - C. JUCIUS 12-21-15 PLOT SCALE = 50.000 ' / in. PLOT DATE = 6/23/2017 DATE 03-19-90 REVISED -C. JUCIUS 04-12-16

TYPICAL CROSSWALK MARKING

 \divideontimes MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

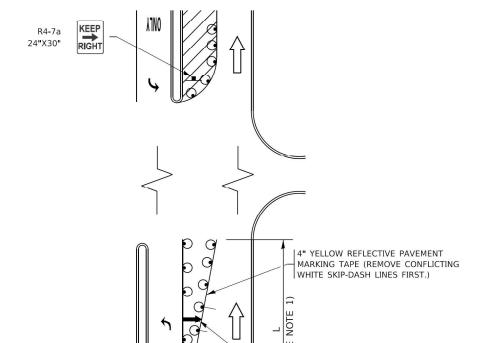
DETAIL "A"

DETAIL "B"

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SECTION COUNTY DISTRICT ONE 2019-049-T LAKE TYPICAL PAVEMENT MARKINGS TC-13 CONTRACT NO. 62J26 SHEET 1 OF 1 SHEETS STA. TO STA.

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER



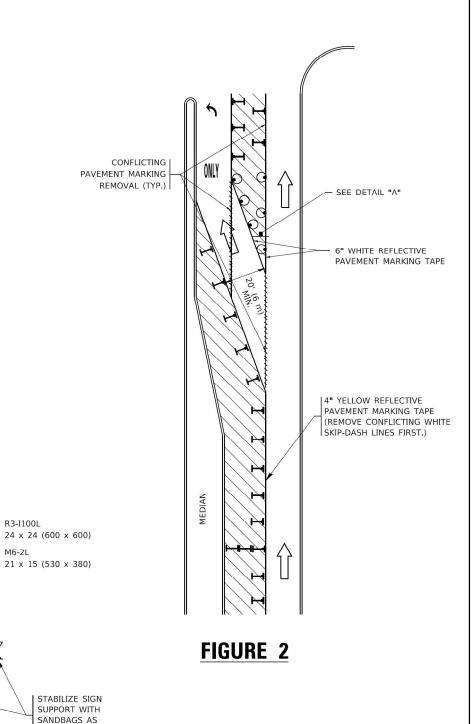
- ARROW BOARD

LEGEND WORK AREA LANE OPEN TO TRAFFIC ARROW BOARD TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT DRUM WITH STEADY BURN LIGHT TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

- 1. A) WHEN "L" IS ≤ THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
 - B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
- 2. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
- 3. LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
- 4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
- 5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
- 6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
- 7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
- 8. TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

TURN BAY ENTRANCE WITHIN A LANE CLOSURE



DETAIL A

NECESSARY

M6-2L

TURN

LANE

All dimensions are in inches (millimeters) unless otherwise shown

139 113

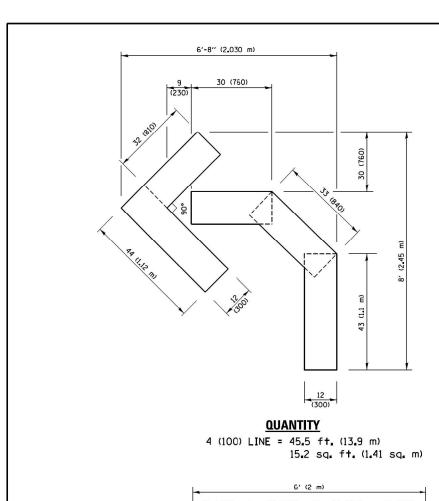
JSER NAME = footemj DESIGNED -T. RAMMACHER 09-08-94 REVISED - R. BORO 09-14-09 - A. HOUSEH 11-07-95 REVISED - A. SCHUETZE 07-01-13 CHECKED -A. HOUSEH 10-12-96 REVISED - A. SCHUETZE 09-15-16 PLOT DATE = 3/4/2019 DATE -T. RAMMACHER 01-06-00 REVISED -

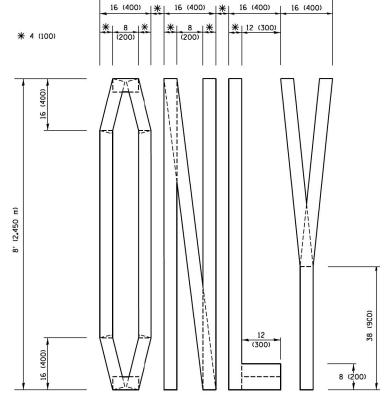
FIGURE 1

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

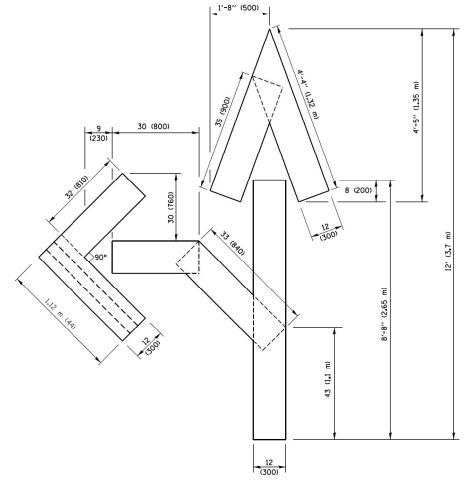
SECTION COUNTY TRAFFIC CONTROL AND PROTECTION AT TURN BAYS 2019-049-T LAKE (TO REMAIN OPEN TO TRAFFIC) TC-14 CONTRACT NO. 62J26 SHEET 1 OF 1 SHEETS STA. SCALE: NONE

SEE DETAIL "A" -





4 (100) LINE = 64.1 ft. (19.5 m) 21.4 sq. ft. (1.99 sq. m)

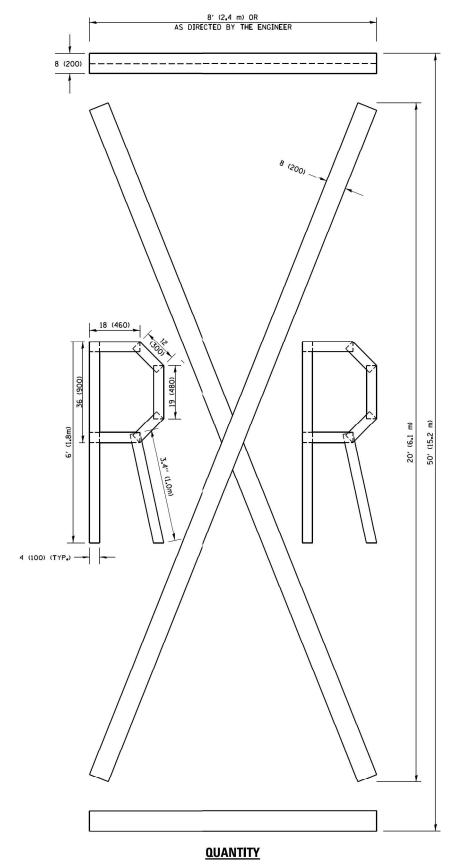


QUANTITY

4 (100) LINE = 82.5 ft. (25.1 m) 27.5 sq. ft. (2.53 sq. m)

NOTE:

ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



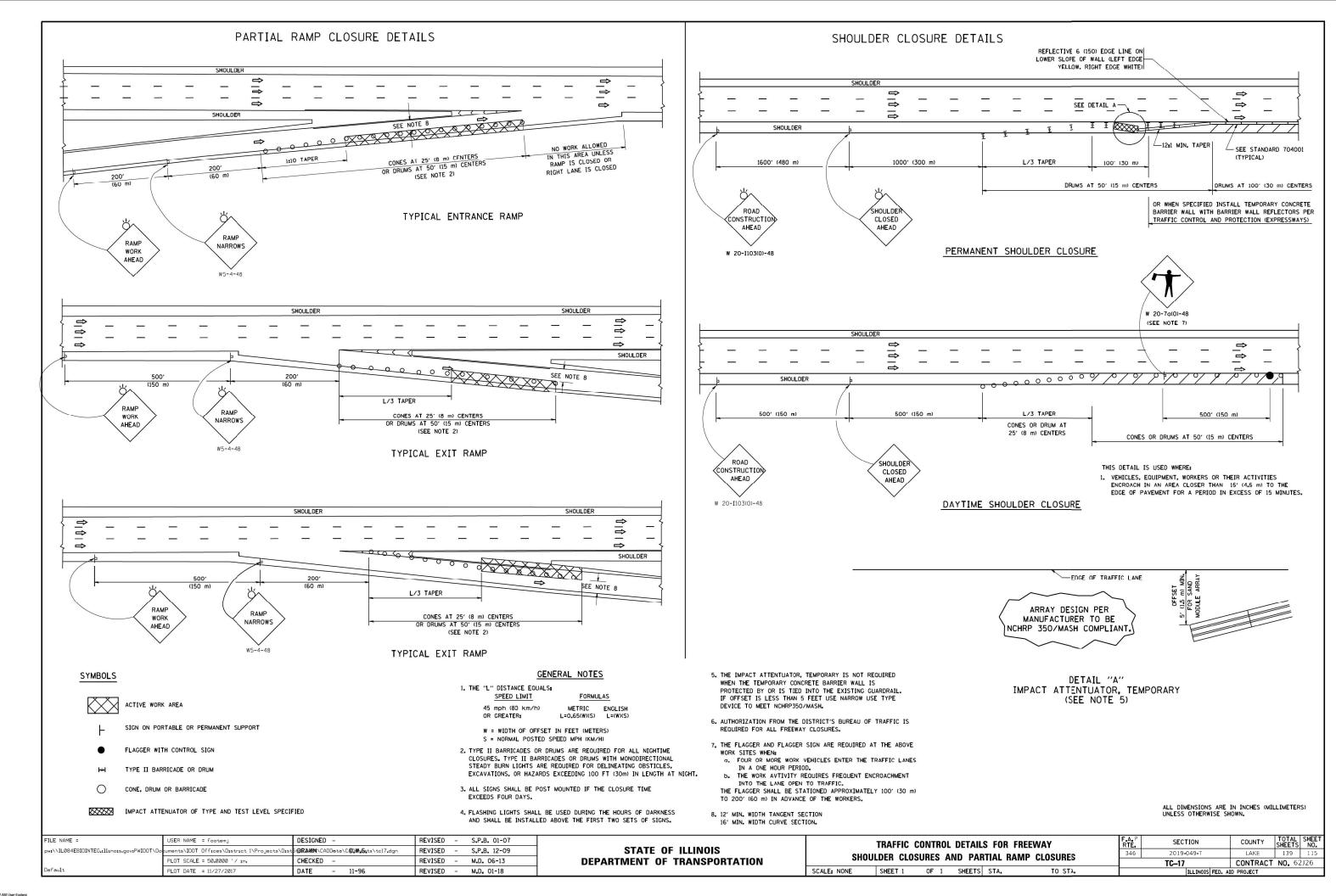
4 (100) LINE = 225.9 ft. (68.9 m) 75.3 sq. ft. (6.99 sq. m)

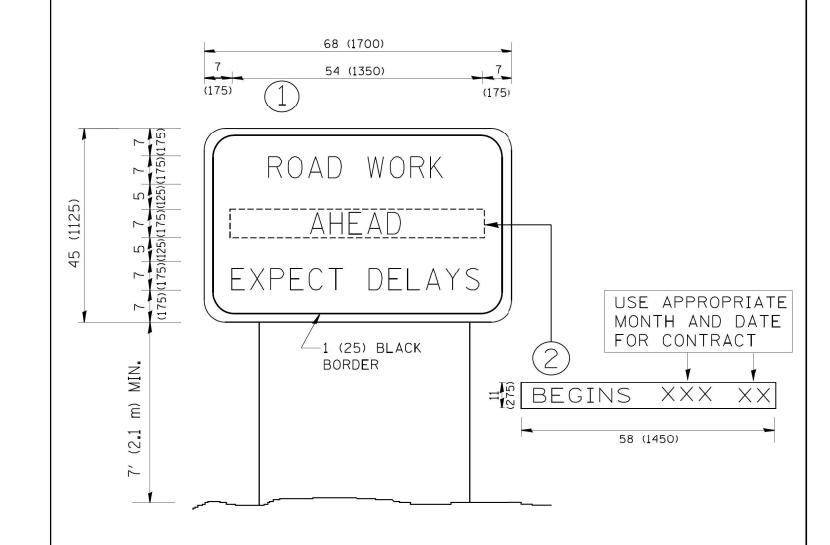
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED	-T. RAMMACHER 03-02-9
pwi\\ILØ84EBIDINTEG.illinois.goviPWIDOT\Do	cuments\IDOT Offices\District 1\Projects\Dist	DRAWN\CADData\CADsheets\tc16.dgn	REVISED	- E. GOMEZ 08-28-00
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED	- E. GOMEZ 08-28-00
	PLOT DATE = 9/15/2016	DATE - 09-18-94	REVISED	- A. SCHUFTZF 09-15-16

QUANTITY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



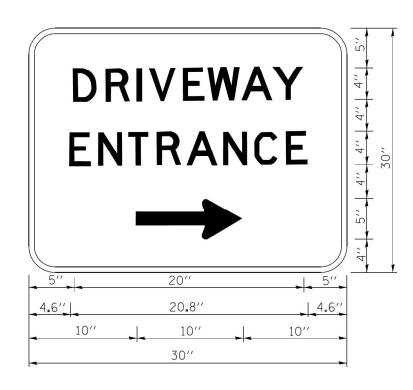


NOTES:

- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -	R. MIRS 09-15-97			ARTERIAL ROAD		RTF.	SECTION	COUNTY	SHEETS NO.
W:\diststd\22x34\tc22.dgn		DRAWN -	REVISED -	R. MIRS 12-11-97	STATE OF ILLINOIS				346	2019-049-T	LAKE	139 116
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -	T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION	INFORMATION SIGN			TC-22	CONTRACT	Γ NO. 62J26	
	PLOT DATE = 1/4/2008	DATE -	REVISED -	C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD I			



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED "ORIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

- 1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
- 2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
- 3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

TILL MADE -	OSEN NAME - gagitanoot	DESIGNED	NEVISED C. 000103 02 13 01	
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	PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED -	DEPARTME
	PLOT DATE = 12/13/2012	DATE -	REVISED -	

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STATE OF ILLINOIS					346	346 2019-049-T		
MENT OF TRANSPORTATION						TC-26	CONTRAC	
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