

11-08-2024 LETTING ITEM 118

**INDEX OF SHEETS**  
FOR INDEX OF SHEETS, SEE SHEET NO. 2

**INDEX OF HIGHWAY STANDARDS**  
FOR INDEX OF HIGHWAY STANDARDS, SEE SHEET NO. 2

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PLANS FOR PROPOSED FEDERAL AID HIGHWAY

## FAU ROUTE 4077 (FLAT IRON ROAD) OVER MOKELER CREEK BRIDGE REPLACEMENT SECTION 19-00508-00-BR PROJECT 4IDQ(698) MCHENRY COUNTY

FAU RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	1
FED. ROAD DIST. NO. 1		ILLINOIS	CONTRACT NO. 61K76	



LOCATION OF SECTION INDICATED THUS: — ■ —

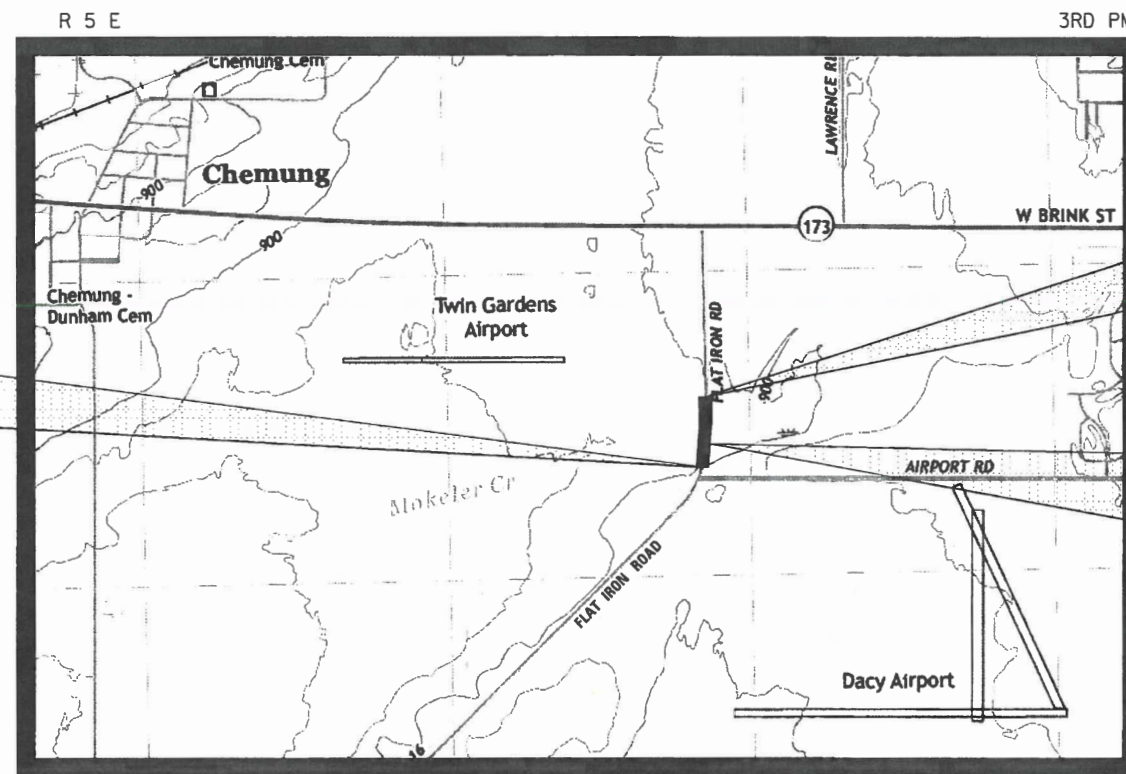
**DESIGN SPEED:**  
FLAT IRON ROAD - 60 MPH

**POSTED SPEED:**  
FLAT IRON ROAD - 55 MPH (STATUTORY)

**DESIGN DESIGNATIONS:**  
FLAT IRON ROAD - MAJOR COLLECTOR

**TRAFFIC DATA**  
2021 ADT = 1,550  
2050 ADT = 2,800

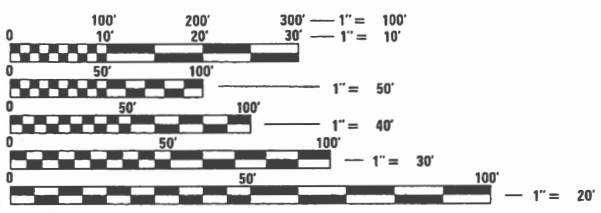
C-91-071-20



RECONSTRUCTION BEGINS  
STA. 121+01.40

RECONSTRUCTION ENDS  
STA. 127+32.50

BRIDGE REPLACEMENT  
EX. STRUCTURE NO. SN 056-3019  
PR. STRUCTURE NO. SN 056-3055



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

**J.U.L.I.E.**  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123 OR 811

DUNHAM TOWNSHIP  
LOCATION MAP  
NOT TO SCALE

PROJECT LENGTH:  
GROSS LENGTH = 631.10 FT. (0.120 MILE)  
NET LENGTH = 631.10 FT. (0.120 MILE)



SIGNED: [Signature]  
DATE: 07-16-2024  
EXPIRES: 11-30-2025  
FOR DRAWINGS 40 TO 65



SIGNED: [Signature]  
DATE: 07-16-2024  
EXPIRES: 11-30-2025  
FOR DRAWINGS 1 TO 39, 66 TO 92

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

APPROVED: July 22 2024  
Joseph R. Karpalinski  
COUNTY OF MCHENRY, COUNTY ENGINEER

PASSED: Aug 22 2024  
[Signature]  
DISTRICT ONE ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID  
BASED ON LIMITED  
REVIEW: Aug 22nd 2024  
[Signature]  
REGIONAL ENGINEER

**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**



Two Pierce Place, Suite 1400 - Itasca, Illinois 60143  
Tel: 630.773.3900 - Fax: 630.773.3975  
www.civiltechinc.com

FEDERAL AID DESIGN PROGRAM ENGINEER: CARMEN E. RAMOS, P.E. SCHAUMBURG, IL

## INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES
3	GENERAL NOTES AND COMMITMENTS
4 TO 8	SUMMARY OF QUANTITIES
9 TO 11	TYPICAL SECTIONS
12	SCHEDULE OF EARTHWORK
13 TO 16	SCHEDULE OF QUANTITIES
17	ALIGNMENT, TIES, AND BENCHMARKS
18	REMOVAL PLAN
19 TO 20	PLAN AND PROFILE
21 TO 22	DETOUR PLAN AND NOTES
23	STORMWATER POLLUTION PREVENTION PLAN AND NOTES
24	SOIL EROSION AND SEDIMENT CONTROL GENERAL NOTES
25	SOIL EROSION AND SEDIMENT CONTROL PLAN
26 TO 29	EROSION AND SEDIMENT CONTROL DETAILS
30 TO 31	DRAINAGE AND GRADING PLAN
32 TO 36	PLAT OF HIGHWAYS
37	CREEK GRADING PLAN
38	PAVEMENT MARKING AND SIGNING PLAN
39	LANDSCAPING AND PERMANENT EROSION CONTROL PLAN
40 TO 65	STRUCTURAL PLANS
66	WETLAND AND WATERS IMPACT EXHIBIT
67	SUPERELEVATION DETAILS
68 TO 74	CONSTRUCTION DETAILS AND DISTRICT ONE DETAILS
75 TO 92	CROSS SECTIONS

## HIGHWAY STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420401-13	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB
515001-04	NAME PLATE FOR BRIDGES
601001-05	PIPE UNDERDRAINS
601101-02	CONCRETE HEADWALL FOR PIPE UNDERDRAINS
602301-04	INLET - TYPE A
604001-05	FRAME AND LIDS TYPE 1
630001-13	STEEL PLATE BEAM GUARDRAIL
630201-07	PCC / HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-18	TRAFFIC BARRIER TERMINAL, TYPE 6
666001-01	RIGHT OF WAY MARKERS
701001-02	OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-04	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701901-09	TRAFFIC CONTROL DEVICES
725001-01	OBJECT AND TERMINAL MARKERS
780001-05	TYPICAL PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

## IDOT DISTRICT ONE STANDARDS

BD-34	DETAILS FOR DEPRESSED CURB & GUTTER AND SHOULDER TREATMENT AT TBT TY.1 SPL
BD-51	BENCHING DETAIL FOR EMBANKMENT WIDENING
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-21	DETOUR SIGNING FOR CLOSING STATE HIGHWAYS
TC-22	ARTERIAL ROAD INFORMATION SIGN

## GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ("STANDARD SPECIFICATIONS"), ADOPTED JANUARY 1, 2022; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", ADOPTED JANUARY 1, 2024; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", (IMUTCD); THE DETAILS IN THE PLANS, AND THE SPECIAL PROVISIONS AND IDOT STANDARD DRAWINGS INCLUDED IN THE CONTRACT DOCUMENTS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. DO NOT SCALE THE PLANS FOR CONSTRUCTION DIMENSIONS.
- ALL WORK SHALL BE COMPLETED WITHIN THE LIMITS OF THE PROJECT SHOWN. NO EQUIPMENT, MATERIAL YARD OR FIELD OFFICE SHALL BE SET UP OR STORED ON COUNTY OR PRIVATE PROPERTY WITHOUT WRITTEN PERMISSION OF THE ENGINEER.
- THE CONTRACTOR SHALL TAKE EXTREME CAUTION DURING ALL PHASES OF CONSTRUCTION TO PREVENT THE DEPOSITION OF ANY MATERIAL INTO THE WATERWAY. DEMOLITION AND CONSTRUCTION ACTIVITIES WITHIN THE FLOODPLAIN SHALL BE LIMITED TO THE GRADING LIMITS SHOWN IN THE PLANS. ALL PROPOSED CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH REGIONAL PERMIT NUMBER LRC-2023-129 OF THE DEPARTMENT OF THE ARMY AUTHORIZED UNDER SECTION 404 OF THE CLEAN WATER ACT. THE IEPA HAS ISSUED SECTION 401 WATER QUALITY CERTIFICATION FOR THIS ACTIVITY. SEE SPECIAL PROVISIONS FOR CONDITIONS.
- PHOSPHORUS FERTILIZER HAS BEEN INTENTIONALLY OMITTED FROM THE CONTRACT. A PHOSPHORUS-FREE FERTILIZER SHALL BE USED (MIDDLE NUMBER SHOULD BE 0).
- THE CONTRACTOR SHALL CONTACT THE IDOT D1 TRAFFIC CONTROL SUPERVISOR, KALPANA KANNAN-HOSADURGA, AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK (INSTALLATION OF ADVANCE WORK OR DETOUR SIGNS).

### PAVING

- HOT-MIX ASPHALT SURFACE COURSE AND HOT-MIX ASPHALT BINDER COURSE SHALL NOT BE PLACED UNTIL ALL EARTH EXCAVATION AND TOPSOIL PLACEMENT HAVE BEEN COMPLETED TO THE SATISFACTION OF THE ENGINEER.
- THE THICKNESSES OF HOT-MIX ASPHALT MIXTURES SHOWN ON THE PLANS ARE NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACE, BINDER, OR BASE UPON WHICH THE HOT-MIX ASPHALT MATERIALS ARE PLACED.
- ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS, AND TIE BARS IN PAVEMENT, SHOULDERS, CURB, GUTTER, COMBINATION CURB AND GUTTER, MEDIAN, AND CHAIR SUPPORTS FOR CRC PAVEMENT, SHALL BE EPOXY COATED, UNLESS NOTED ON THE PLAN.

### MCHENRY COUNTY STANDARD DRAIN TILE NOTES

- DRAIN TILES DISTURBED DURING CONSTRUCTION SHALL BE RECONNECTED BY THOSE RESPONSIBLE FOR THEIR DISTURBANCE, UNLESS THE PLANS SPECIFY ABANDONMENT OF THE DRAIN TILES.
- ALL ABANDONED DRAIN TILES WITHIN DISTURBED AREAS SHALL BE REMOVED IN THEIR ENTIRETY.
- DRAIN TILES WITHIN THE DISTURBED AREA OF A CONSTRUCTION SITE SHALL BE REPLACED OR BYPASSED AROUND THE SITE. THE SIZE OF THE REPLACED OR BYPASSED DRAIN TILE SHALL BE EQUIVALENT TO THE EXISTING DRAIN TILE.

### DRAINAGE

- DURING CONSTRUCTION OPERATIONS, ALL LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES, PERMANENT DITCHES, AND TEMPORARY DITCHES THAT OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. AT THE CONCLUSION OF THE CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURES SHALL BE CLEANED AS NECESSARY TO ENSURE THAT THEY ARE FREE FROM ALL DIRT AND DEBRIS PRIOR TO THE FINAL INSPECTION OF THE PROJECT.
- INVESTIGATION INDICATED NO DRAIN TILES ARE PRESENT, HOWEVER, IF ANY FARM DRAIN, FIELD TILE SYSTEM OR OTHER UNDERGROUND TILE FACILITIES IS ENCOUNTERED IN THE WORK ZONE, THE TILE SHALL BE LOCATED, STAKED AND REPORTED TO THE ENGINEER. ANY DRAINAGE LINES WHICH ARE CUT OR DAMAGED BY GRADING, TRENCHING, EXCAVATION OR OTHER CONSTRUCTION ACTIVITIES SHALL BE REPAIRED AS TO MAINTAIN ITS ORIGINAL ALIGNMENT.

PRIOR TO MAKING THE CONNECTION, THE CONTRACTOR SHALL CLEAN THE ENDS OF THE TILE TO BE CONNECTED IN ACCORDANCE WITH SECTION 611 OF THE STANDARD SPECIFICATIONS, THE EXISTING TILE SHALL BE REMOVED OR CRUSHED AND TRENCH BACKFILL MATERIAL SHALL BE PLACED IN THE TRENCH LEFT BY THE REMOVAL.

THE WORK SHALL BE IN ACCORDANCE WITH THE SPECIAL PROVISION FOR "OUTFALL STRUCTURE".

- MORTAR: ALL CONNECTION POINTS WHERE THE DRAIN TILE OR STORM SEWER ENTERS THE DRAINAGE STRUCTURE SHALL BE MORTARED ON THE INSIDE AND OUTSIDE OF THE DRAINAGE STRUCTURE. THE MORTAR MATERIAL SHALL BE PLACED AROUND THE ENTIRE CIRCUMFERENCE OF THE PIPE. THE MORTAR MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 602.04.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE THROUGHOUT THE CONSTRUCTION OF THIS PROJECT.

PLAN	DATE
SURVEYED	BY
PLOTTED	
ALIGNMENT CHECKED	
ROAD FILE NAME	
NO.	

PROFILE	DATE
SURVEYED	BY
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NO.	

MODEL: SH06ELMAMES  
FILE NAME: ...132939 Gen Notes

USER NAME = djk	DESIGNED - KDC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES</b>		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 100.0000' / in.	CHECKED - DJK	REVISED -				4077	19-00508-00-BR	MCHENRY	92	2
PLOT DATE = 8/23/2024	DATE - 7/16/2024	REVISED -		SCALE: N.T.S.		SHEET 1 OF 2 SHEETS		CONTRACT NO. 61K76		
								ILLINOIS FED. AID PROJECT		

**GENERAL NOTES (CONTINUED)**

ROADWAY EXCAVATION AND SUBGRADE

1. THE SUBGRADE STABILITY SHALL BE VERIFIED BY PROOF ROLLING WITH A FULLY LOADED TANDEM-AXLE TRUCK.
2. ANY AGGREGATE SUBGRADE IMPROVEMENT CONTAMINATED AND/OR DAMAGED BY THE CONTRACTOR'S VEHICLES AND/OR EQUIPMENT IS TO BE REMOVED AND REPLACED AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
3. GEOTECHNICAL FABRIC FOR GROUND STABILIZATION AND/OR AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAS BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH AGGREGATE SUBGRADE IMPROVEMENT WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 OF THE SSRBC AND IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED, AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.
4. THE CONTRACTOR WILL NOT BE ALLOWED TO STOCKPILE MATERIAL(S) BEYOND THE PROJECT LIMITS. THE CONTRACTOR SHALL NOT PLACE STOCKPILES IN LOCATIONS WHERE THEY WILL INTERFERE WITH DRAINAGE WAYS OR ON PAVEMENTS THAT ARE NOT SPECIFIED FOR REMOVAL. ANY DAMAGE CAUSED BY THE CONTRACTOR'S STOCKPILING OR CONSTRUCTION OPERATIONS WILL BE REPAIRED BY THE CONTRACTOR.
5. ALL EXCAVATION AND EMBANKMENT LOCATIONS REQUIRING SEEDING SHALL BE CONSTRUCTED TO 6 INCHES BELOW FINISHED GRADE LINE TO ALLOW TOPSOIL PLACEMENT.
6. PAVEMENT ELEVATIONS: THE ELEVATIONS SHOWN ON THE PLANS ARE FINISHED GRADES FOR THE PROPOSED PAVEMENT OR SURFACE COURSE, UNLESS OTHERWISE INDICATED.
7. THE AGGREGATE GRADATION FOR THE AGGREGATE SUBGRADE IMPROVEMENT 12" LOWER LIFT SHALL BE CS1 OR RR1.

STAKING

1. THE CONSTRUCTION BASELINE HAS BEEN ESTABLISHED FOR STAKING PURPOSES ONLY AND IS NOT INTENDED TO BE A CENTERLINE OF RIGHT-OF-WAY.
2. RIGHT-OF-WAY MARKERS AND DRAINAGE MARKERS SHALL BE INSTALLED USING METHOD B OF THE STANDARD SPECIFICATIONS.

UTILITIES

1. BEFORE STARTING ANY EXCAVATION. THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED UTILITIES AND FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED.)
2. THE LOCATIONS OF THE EXISTING UTILITIES, AS SHOWN ON THE DRAWINGS, REPRESENT DATA RECEIVED FROM VARIOUS SOURCES. IT IS NOT GUARANTEED TO BE CORRECT OR ALL INCLUSIVE. THE CONTRACTOR SHALL CONDUCT THEIR OWN INVESTIGATIONS INTO THE LOCATION, SIZE, DEPTH, AND NATURE OF ANY AND ALL EXISTING FACILITIES WHICH MAY INTERFERE WITH THE WORK UNDER THIS CONTRACT. ANY EXISTING UTILITIES WHICH ARE TO REMAIN IN SERVICE SHALL BE FULLY PROTECTED BY THE CONTRACTOR AND ANY DAMAGE CAUSED BY THE CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED IN ACCORDANCE WITH ARTICLE 105.07.
3. THE CONTRACTOR SHALL COOPERATE WITH THE COUNTY IF ANY UNDERGROUND IMPROVEMENTS ARE REQUIRED BY THE COUNTY OR STATE WITHIN THE DURATION OF THE CONTRACT.

COMPENSATORY STORAGE

1. THE CONTRACTOR SHALL PROVIDE THE FINISHED GRADE DIGITAL TERRAIN MODEL (DTM) TO THE ENGINEER PRIOR TO LANDSCAPING TO VERIFY COMPENSATORY STORAGE HAS BEEN PROVIDED IN CONFORMANCE WITH THE MCHENRY COUNTY STORMWATER MANAGEMENT PERMIT.

**PUBLIC SERVICE CONTACT LIST**

HARVARD FIRE PROTECTION DISTRICT  
502 S EASTMAN STREET, HARVARD, IL 60033  
(815) 943-6927  
CONTACT: JOHN KIMMEL, FIRE CHIEF

CHEMUNG TOWNSHIP  
807 8TH STREET, P.O. BOX 22, HARVARD, IL 60033  
(815) 943-4553  
CONTACT: ROBERT NYSTROM, HIGHWAY COMMISSIONER

NORTHWEST RESCUE CRITICAL CARE TRANSPORT  
306 W FRONT STREET, HARVARD, IL 60033  
(855) 426-5074  
CONTACT: RYAN KURTH, CHIEF EXECUTIVE OFFICER

UNITED STATES POSTAL SERVICE  
300 NORTH EASTMAN STREET, HARVARD, IL 60033  
(815) 943-5182  
CONTACT: JENNIFER A LONGO, POSTMASTER

HARVARD POLICE DEPARTMENT  
203 W DIGGINS ST, HARVARD, IL 60033  
(815) 943-4431  
CONTACT: TYSON BAUMAN, CHIEF OF POLICE

MCHENRY COUNTY SHERIFF'S OFFICE  
2200 NORTH SEMINARY AVENUE, WOODSTOCK, IL 60098  
(815) 338-2144  
CONTACT: ROBB TADELMAN, SHERIFF

DUNHAM TOWNSHIP  
107 AIRPORT ROAD, HARVARD, IL 60033  
(815) 943-5751  
CONTACT: DAVID NOLAN, HIGHWAY COMMISSIONER

ILLINOIS DEPARTMENT OF TRANSPORTATION - DISTRICT 1  
201 WEST CENTER COURT, SCHAUMBURG, ILLINOIS 60196  
KANNAN-HOSADURGA@ILLINOIS.GOV  
(847) 705-4091  
CONTACT: KALPANNA KANNAN-HOSADURGA, TRAFFIC CONTROL SUPERVISOR

HARVARD COMMUNITY UNIT SCHOOL DISTRICT 50  
401 N DIVISION ST, HARVARD, IL 60033  
(815) 943-4022  
CONTACT: COREY TAFOYA, SUPERINTENDENT

**PERMITTING CONTACT**

HARVARD COMMUNITY DEVELOPMENT (HCD)  
201 WEST DIGGINS STREET, HARVARD, IL 60033  
(815) 943-6468 X108  
CONTACT: DONOVAN DAY

ILLINOIS DEPARTMENT OF NATURAL RESOURCES - OFFICE OF WATER RESOURCES  
ONE NATURAL RESOURCES WAY, SPRINGFIELD, IL 602702  
(217) 782-3863  
CONTACT: WILLIAM BOYD

MCHENRY-LAKE COUNTY SOIL AND WATER CONSERVATION DISTRICT (MLCSWCD)  
1648 S. EASTWOOD DRIVE, WOODSTOCK, IL 60098  
(815) 338-0444 X3  
CONTACT: RYAN BIEBER

UNITED STATES ARMY CORPS OF ENGINEERS (USACOE) - CHICAGO DISTRICT REGULATORY BRANCH  
231 SOUTH LASALLE STREET, SUITE 1500, CHICAGO, IL 60604  
(312) 846-5530  
CONTACT: AARON SPENCER

**UTILITY CONTACT**

AT&T  
TOM LASKOWSKI  
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TL7895@ATT.COM

NICOR  
JIMMY LY  
331.238.0176  
JILY@SOUTHERNCO.COM

COMED  
KURT ARMSTRONG  
779.231.3174  
KURT.ARMSTRONG@COMED.ED

**COMMITMENTS**

THERE ARE NO COMMITMENTS.

PLAN	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK NO.	ALIGNMENT CHECKED		
	FIELD FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
NOTE BOOK NO.	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		

MODEL: SH06ELMAMES  
FILE NAME: ...13838 Gen Notes

USER NAME = djc	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED - DJC	REVISED -
PLOT DATE = 8/23/2024	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES AND COMMITMENTS**

SCALE: N.T.S. SHEET 2 OF 2 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	3
				CONTRACT NO. 61K76
		ILLINOIS	FED. AID PROJECT	

PLAN	DESIGNED	DATE
	BY	
NOTE BOOK NO.	CHECKED	DATE
	BY	
CADD FILE NAME	REVISED	DATE
	BY	

PROFILE	DESIGNED	DATE
	BY	
NOTE BOOK NO.	CHECKED	DATE
	BY	
STRUCTURE ADJUSTING CHKD	REVISED	DATE
	BY	

MODEL: MODELNAME  
FILE NAME: 3839\_04\_500.dwg

SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
					0004	0010	0042
					ROADWAY 80% FEDERAL / 20% COUNTY	BRIDGE 80% FEDERAL / 20% COUNTY	TRAINEES 80% FEDERAL / 20% COUNTY
	20200100	EARTH EXCAVATION	CU YD	2672	2672		
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	1451	1451		
	20300100	CHANNEL EXCAVATION	CU YD	361		361	
	20400800	FURNISHED EXCAVATION	CU YD	388	388		
	21001000	GEO TECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	3982	3982		
	21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	781	781		
	21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	486	486		
X	25000210	SEEDING, CLASS 2A	ACRE	1.00	1.00		
X	25000312	SEEDING, CLASS 4A	ACRE	0.50	0.50		
X	25000314	SEEDING, CLASS 4B	ACRE	0.25	0.25		
X	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	73	73		
X	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	73	73		
	28000200	EARTH EXCAVATION FOR EROSION CONTROL	CU YD	118	118		
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	115	115		
	28000305	TEMPORARY DITCH CHECKS	FOOT	168	168		
	28000400	PERIMETER EROSION BARRIER	FOOT	1618	1618		
	28001000	AGGREGATE (EROSION CONTROL)	TON	342	342		

USER NAME = kdc	DESIGNED - KDC	REVISED -
PLOT SCALE = 2.0000' / 1"	DRAWN - KDC	REVISED -
PLOT DATE = 9/5/2024	CHECKED - DJK	REVISED -
	DATE - 7/16/2024	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N.T.S. SHEET 1 OF 5 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	4
ILLINOIS FED. AID PROJECT				
CONTRACT NO. 61K76				

PLAN	DATE	BY
	NO.	NO.
PROFILE	DATE	BY
	NO.	NO.

DATE	BY
NO.	NO.

SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
					0004	0010	0042
					ROADWAY	BRIDGE	TRAINEES
					80% FEDERAL / 20% COUNTY	80% FEDERAL / 20% COUNTY	80% FEDERAL / 20% COUNTY
	28100107	STONE RIPRAP, CLASS A4	SQ YD	586	154	432	
	28200200	FILTER FABRIC	SQ YD	755	323	432	
	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	1461	1461		
	30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	2206	2206		
	35102000	AGGREGATE BASE COURSE, TYPE B 8"	SQ YD	209	209		
	40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	4367	4367		
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	780	780		
	40600370	LONGITUDINAL JOINT SEALANT	FOOT	952	952		
	40701881	HOT-MIX ASPHALT PAVEMENT (FULL-DEPTH), 10"	SQ YD	1269	1269		
	42000060	WELDED WIRE REINFORCEMENT	SQ YD	105	105		
	42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	140	140		
	42001300	PROTECTIVE COAT	SQ YD	140	140		
	44000100	PAVEMENT REMOVAL	SQ YD	1655	1655		
	48101600	AGGREGATE SHOULDERS, TYPE B 8"	SQ YD	9	9		
	48203005	HOT-MIX ASPHALT SHOULDERS, 2"	SQ YD	209	209		
	48203037	HOT-MIX ASPHALT SHOULDERS, 10"	SQ YD	463	463		
	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1	

MODEL: KMODEL\MANAGES  
FILE NAME: 3839\_SHT\_500.dwg

USER NAME = kdc	DESIGNED - KDC	REVISED -
PLOT SCALE = 2.0000' / in.	DRAWN - KDC	REVISED -
PLOT DATE = 9/5/2024	CHECKED - DJK	REVISED -
	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 2 OF 5 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	5
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	BY	
NOTE BOOK NO.	ALIGNED	
	CHECKED	
	RT. OF WAY CHECKER	
	DATE FILE MADE	

PROFILE	GRADES CHECKED	DATE
	BY	
NOTE BOOK NO.	STRUCTURE	
	ARTISANS	
	CHIEF	

MODEL: MODELNAME\$  
FILE NAME: ...1989 SH SDD.dwg

SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
					0004	0010	0042
					ROADWAY 80% FEDERAL / 20% COUNTY	BRIDGE 80% FEDERAL / 20% COUNTY	TRAINEES 80% FEDERAL / 20% COUNTY
	50105220	PIPE CULVERT REMOVAL	FOOT	43	43		
	50200100	STRUCTURE EXCAVATION	CU YD	184		184	
	50300225	CONCRETE STRUCTURES	CU YD	76.1		76.1	
	50300255	CONCRETE SUPERSTRUCTURE	CU YD	102.2		102.2	
	50300260	BRIDGE DECK GROOVING	SQ YD	392		392	
	50300300	PROTECTIVE COAT	SQ YD	481		481	
	50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	94.2		94.2	
	50401305	FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE BEAMS, IL27N	FOOT	277		277	
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	66230		66230	
	51200958	FURNISHING METAL SHELL PILES 14" X 0.250"	FOOT	328		328	
	51202305	DRIVING PILES	FOOT	328		328	
	51203200	TEST PILE METAL SHELLS	EACH	2		2	
	51500100	NAME PLATES	EACH	1		1	
	58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	124		124	
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	72		72	
	60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	7	5	2	
	60108204	PIPE UNDERDRAINS, TYPE 2, 4"	FOOT	950	950		

USER NAME = kdc	DESIGNED - KDC	REVISED -
PLOT SCALE = 2.0000' / in.	DRAWN - KDC	REVISED -
PLOT DATE = 9/5/2024	CHECKED - DJK	REVISED -
	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 3 OF 5 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	6
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	BY	DATE
	NOTE BOOK NO.		
PROFILE	GRADES CHECKED		
	STRUCTURE NOTATIONS		

PROFILE	GRADES CHECKED	BY	DATE
	STRUCTURE NOTATIONS		

SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
					0004	0010	0042
					ROADWAY	BRIDGE	TRAINEES
					80% FEDERAL / 20% COUNTY	80% FEDERAL / 20% COUNTY	80% FEDERAL / 20% COUNTY
	60146304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	132		132	
X	63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	188	188		
X	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4		
X	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4		
	63200310	GUARDRAIL REMOVAL	FOOT	115	115		
	66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	9	9		
	67100100	MOBILIZATION	L SUM	1	1		
	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	84	84		
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	842	842		
	70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	2525	2525		
X	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4		
X	78004620	PREFORMED PLASTIC PAVEMENT MARKING, TYPE D - STANDARD - LINE 4"	FOOT	2525	2525		
X	78011025	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	2525	2525		
X	78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	24	24		
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	14	14		
	X2130010	EXPLORATION TRENCH, SPECIAL	FOOT	100	100		
X	X2511630	EROSION CONTROL BLANKET (SPECIAL)	SQ YD	10762	10762		

MODEL: SMODEL\MAMES  
FILE NAME: 13839.sil.s00.rpt

USER NAME = kdc	DESIGNED - KDC	REVISED -
PLOT SCALE = 2.0000' / in.	DRAWN - KDC	REVISED -
PLOT DATE = 9/5/2024	CHECKED - DIK	REVISED -
	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: N.T.S. SHEET 4 OF 5 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	7
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	BY
NOTE BOOK NO.	CHECKED BY	DATE
	BY	DATE

PROFILE	SURVEYED	DATE
	PLOTTED	BY
NOTE BOOK NO.	CHECKED BY	DATE
	BY	DATE

SPECIALTY ITEM	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
					0004	0010	0042
					ROADWAY	BRIDGE	TRAINEES
					80% FEDERAL / 20% COUNTY	80% FEDERAL / 20% COUNTY	80% FEDERAL / 20% COUNTY
	X5021507	DEWATERING	L SUM	1	1		
	X5080530	BAR TERMINATORS	EACH	266		266	
	X6700405	ENGINEER'S FIELD OFFICE, TYPE A (MODIFIED)	CAL MO	9	9		
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1		
	XX006821	CONCRETE TRUCK WASHOUT	L SUM	1	1		
	XX007061	OUTFALL STRUCTURE	EACH	2	2		
X	Z0007124	STEEL RAILING (SPECIAL)	FOOT	112		112	
	Z0013797	STABILIZED CONSTRUCTION ENTRANCE	SQ YD	267	267		
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
X	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	131	131		
X	Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	2	2		
	Z0076600	TRAINEES	HOUR	500			500
	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	500			500

MODEL: 6100ELM416E  
FILE NAME: J3893\_01\_000.dgn

USER NAME = kdc	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 2.0000" / in.	CHECKED - DJK	REVISED -
PLOT DATE = 9/5/2024	DATE - 7/16/2024	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N.T.S. SHEET 5 OF 5 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	8
CONTRACT NO. 61K76				

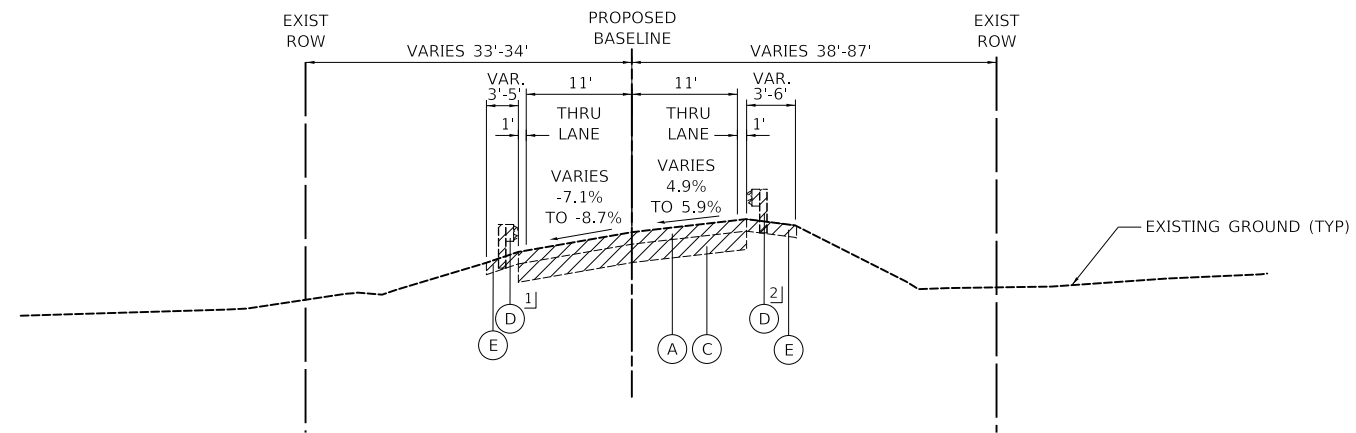
ILLINOIS FED. AID PROJECT



DATE	
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ALIGNMENT CHECKED	
GRADE CHECKED	
STRUCTURE NOTATION CHECKED	
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PLAN	
NOTE BOOK NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATION CHECKED	
PROFILE	
NOTE BOOK NO.	

MODEL: SMODEL\MAMES  
FILE NAME: ...03-11\p1e1a103B38-sh1.typ



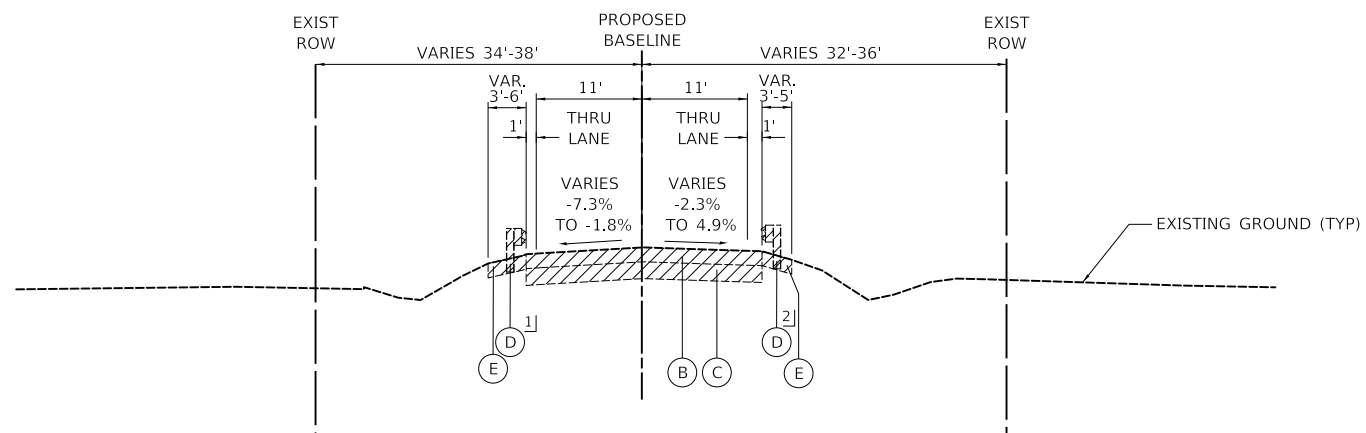
**EXISTING TYPICAL SECTION**

FLAT IRON ROAD  
STA. 121+01.40 TO STA. 123+33.49

1] STA. 123+07 TO STA. 123+33.49

2] STA. 123+02 TO STA. 123+33.49

FLAT IRON ROAD  
STA. 123+33.49 TO STA. 123+65.96  
SN 056-3019  
SEE BRIDGE PLANS



**EXISTING TYPICAL SECTION**

FLAT IRON ROAD  
STA. 123+65.96 TO STA. 127+32.50

1] STA. 123+65.96 TO STA. 123+98

2] STA. 123+65.96 TO STA. 123+91

**LEGEND**

- (A) EXISTING H.M.A. PAVEMENT (7.5" & VARIES)
  - (B) EXISTING H.M.A. PAVEMENT (9" & VARIES)
  - (C) EXISTING AGGREGATE BASE (11" & VARIES)  
(REMOVE WHEN REQUIRED FOR AGGREGATE SUBGRADE PLACEMENT. PAID FOR AS "EARTH EXCAVATION")
  - (D) EXISTING GUARDRAIL
  - (E) EXISTING AGGREGATE SHOULDER  
(REMOVAL PAID FOR AS "EARTH EXCAVATION")
- REMOVAL

USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/26/2024	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**EXISTING TYPICAL SECTIONS**

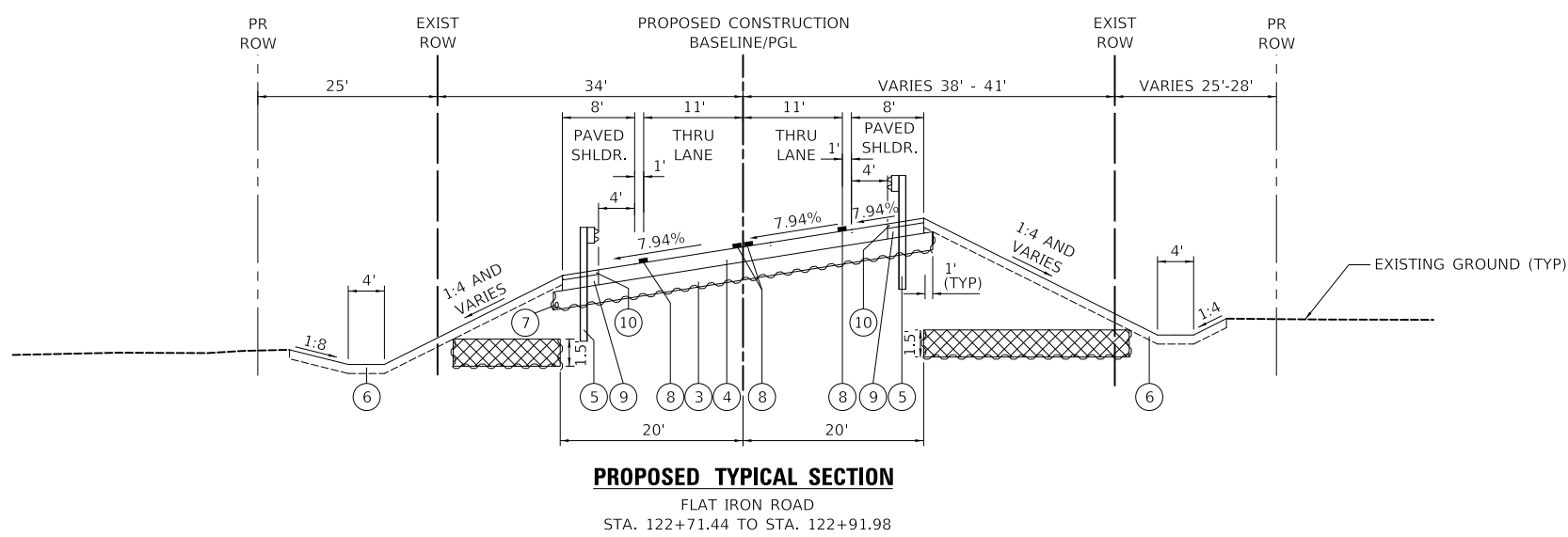
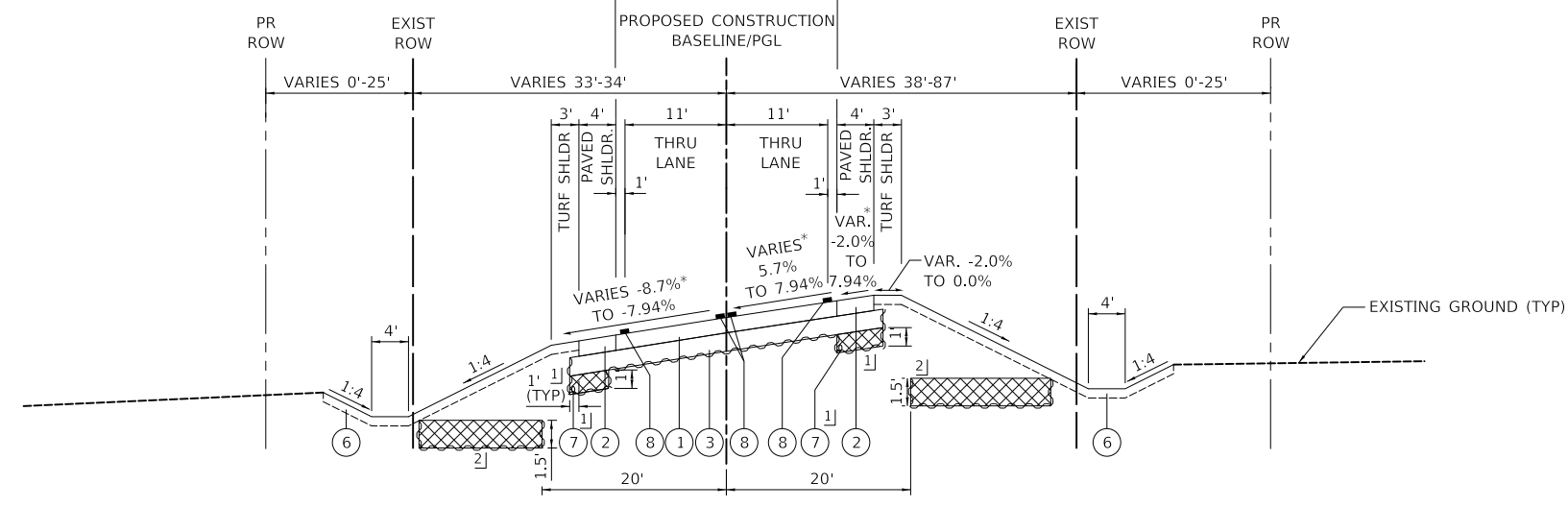
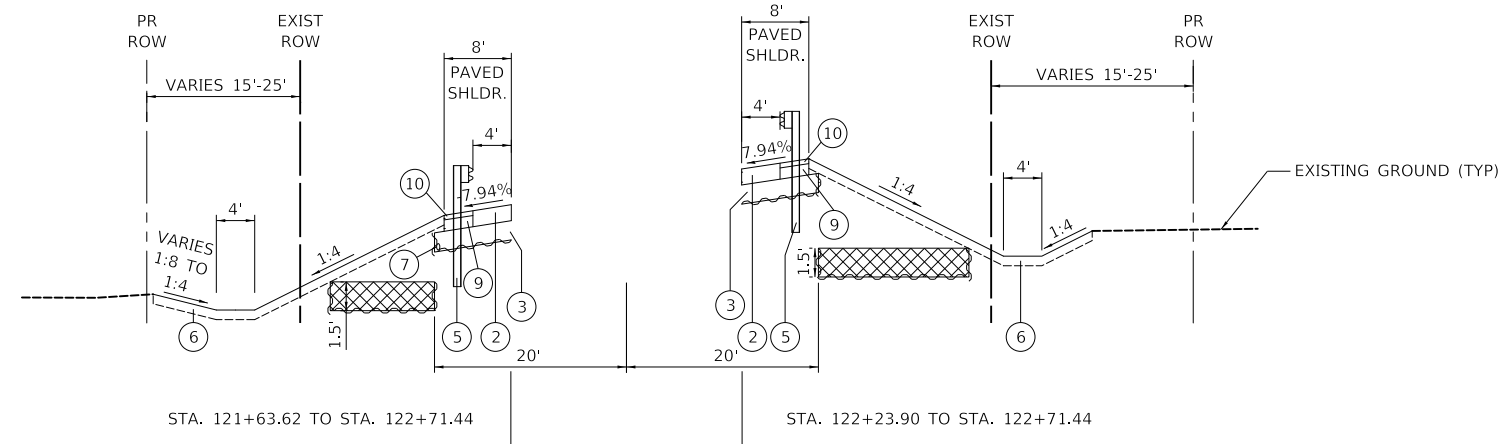
SCALE: N.T.S. SHEET 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	9
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
PLAN	
SURVEYED	
PLOTTED	
ALIGNED	
CHECKED	
FILE NAME	
NO.	

DATE	
BY	
PROFILE	
SURVEYED	
PLOTTED	
GRADES	
CHECKED	
STRUCTURE	
NOTATION	
NO.	

MODEL: SH06LNAME5  
FILE NAME: ...032-TYPICAL03B38-sh1.txd



**LEGEND**

- ① HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 10"
  - ② HOT-MIX ASPHALT SHOULDER, 10"
  - ③ AGGREGATE SUBGRADE IMPROVEMENT, 12"
  - ④ PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLABS
  - ⑤ STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FT. POST
  - ⑥ TOPSOIL EXCAVATION AND PLACEMENT, 6"  
SEE LANDSCAPING SHEETS FOR SEED TYPE
  - ⑦ PIPE UNDERDRAIN, TYPE 2, 4"
  - ⑧ PREFORMED PLASTIC PAVEMENT MARKING - TYPE D - STANDARD - LINE 4"  
GROOVING FOR RECESSED PAVEMENT MARKING 5"
  - ⑨ AGGREGATE BASE COURSE, TYPE B, 8"
  - ⑩ HOT-MIX ASPHALT SHOULDER, 2"
- PROPOSED UNDERCUT  
 (REPLACE WITH AGGREGATE SUBGRADE IMPROVEMENT)  
 SEE MSET GEOTECHNICAL REPORT DATED 07/11/2024  
 FOR REPLACEMENT LIMITS
- GEOTECHNICAL FABRIC FOR GROUND STABILIZATION

HOT-MIX ASPHALT MIXTURE REQUIREMENTS TABLE		
MIXTURE TYPE	AIR VOIDS @ Ndes	QMP
HMA PAVEMENT (FULL DEPTH), 10"		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70; 2"	4% @ 70 GYR.	LR 1030-2
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70; 8"	4% @ 70 GYR.	LR 1030-2
HMA SHOULDERS, 10"		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70; 2"	4% @ 70 GYR.	LR 1030-2
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70; 8"	4% @ 70 GYR.	LR 1030-2
HMA SHOULDERS, 2"		
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", IL-9.5, N70; 2"	4% @ 70 GYR.	LR 1030-2
QMP DESIGNATION: QUALITY CONTROL/QUALITY ASSURANCE (QC/QA) PER LR 1030-2		

**NOTES:**

1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LB/SY-IN.
2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 58-28" UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.
3. THE LONGITUDINAL JOINT SEALANT SHALL BE PLACED UNDER THE HMA SURFACE LIFT AND UNDER THE TOP BINDER LIFT.

USER NAME = djk	DESIGNED - KDC	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - KDC	REVISED -
PLOT DATE = 7/26/2024	CHECKED - DJK	REVISED -
	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

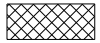

**PROPOSED TYPICAL SECTIONS**

SCALE: N.T.S. SHEET 1 OF 2 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	10
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				

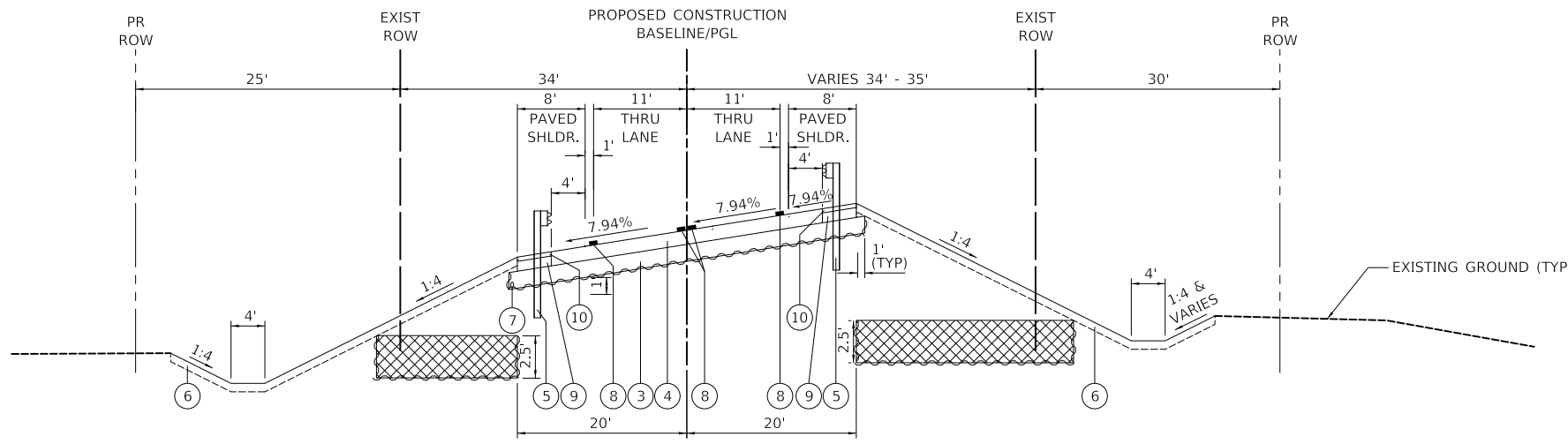
FLAT IRON ROAD  
 STA. 122+91.98 TO STA. 124+08.02  
 SN 056-3055  
 SEE BRIDGE PLANS

**LEGEND**

- ① HOT-MIX ASPHALT PAVEMENT (FULL DEPTH), 10"
  - ② HOT-MIX ASPHALT SHOULDER, 10"
  - ③ AGGREGATE SUBGRADE IMPROVEMENT, 12"
  - ④ PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLABS
  - ⑤ STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FT. POST
  - ⑥ TOPSOIL EXCAVATION AND PLACEMENT, 6"  
SEE LANDSCAPING SHEETS FOR SEED TYPE
  - ⑦ PIPE UNDERDRAIN, TYPE 2, 4"
  - ⑧ PREFORMED PLASTIC PAVEMENT MARKING - TYPE D - STANDARD - LINE 4"  
GROOVING FOR RECESSED PAVEMENT MARKING 5"
  - ⑨ AGGREGATE BASE COURSE, TYPE B, 8"
  - ⑩ HOT-MIX ASPHALT SHOULDER, 2"
-  PROPOSED UNDERCUT  
 (REPLACE WITH AGGREGATE SUBGRADE IMPROVEMENT)  
 SEE MSET GEOTECHNICAL REPORT DATED 07/11/2024  
 FOR REPLACEMENT LIMITS
-  GEOTECHNICAL FABRIC FOR GROUND STABILIZATION

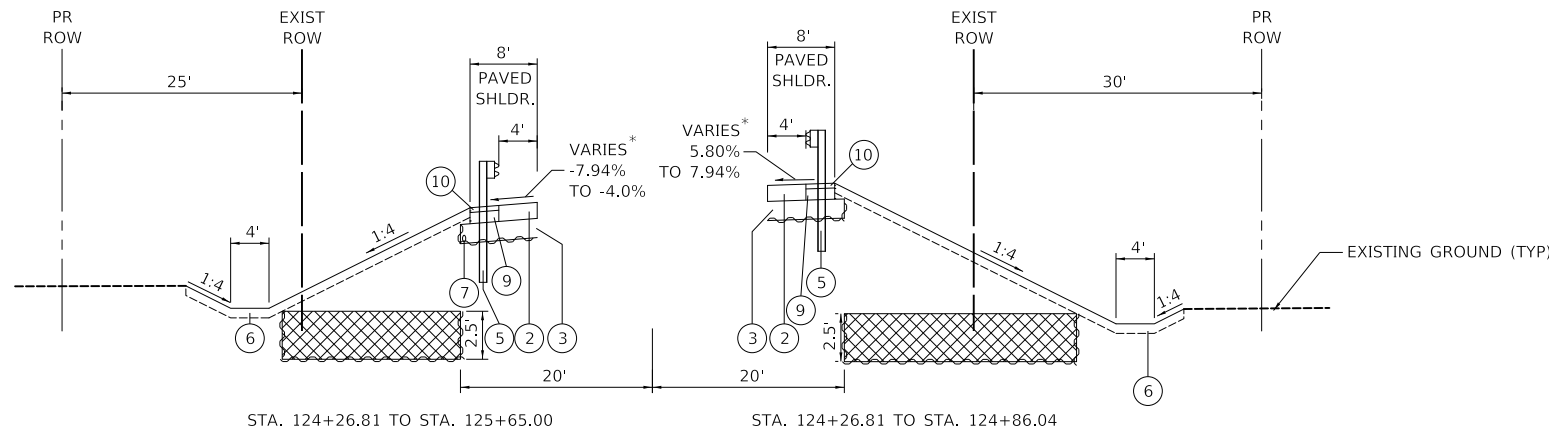
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GRADE CHECKED	
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SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATION CHECKED	
FILE NAME	
NO.	



**PROPOSED TYPICAL SECTION**

FLAT IRON ROAD  
 STA. 124+08.02 TO STA. 124+26.81



**PROPOSED TYPICAL SECTION**

FLAT IRON ROAD  
 STA. 124+26.81 TO STA. 127+32.50

\* SEE SHEET 67 FOR SUPERELEVATION TRANSITION DETAILS

USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/26/2024	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**PROPOSED TYPICAL SECTIONS**

SCALE: N.T.S. SHEET 2 OF 2 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	11
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				

MODEL: SMODELNAMES  
 FILE NAME: ...032-TYPICAL03B3B-sh-1.txd

PLAN	SURVEYED	DATE
	PLOTTED	BY
NOTE BOOK NO.	ALIGNMENT CHECKED	
	GRADE CHECKED	
	FIELD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
NOTE BOOK NO.	GRADES CHECKED	
	STRUCTURE NOTATION CHECKED	

MODEL: SMODEL\MAMES  
FILE NAME: ...3393-Earthwork Schedules.dgn

SCHEDULE OF EARTHWORK											
FLAT IRON ROAD											
STATION	DISTANCE	CUT	TOPSOIL STRIPPING	UNDERCUTS	EMBANKMENT REQUIRED	AGGREGATE SUBGRADE IMPROVEMENT	CUT	TOPSOIL STRIPPING	UNDERCUTS	EMBANKMENT REQUIRED	AGGREGATE SUBGRADE IMPROVEMENT
(XX+XX)	(FT.)	(SQ. FT.)	(SQ. FT.)	(SQ. FT.)	(SQ. FT.)	(SQ. FT.)	(CU. YD.)	(CU. YD.)	(CU. YD.)	(CU. YD.)	(CU. YD.)
120+80.	21	0.0	12.3	0.0	0.0	0.0	7.3	13.5	0.0	3.3	0.0
121+01.4	0	18.3	21.9	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0
121+01.41	49	62.1	21.9	10.5	7.8	10.5	135.1	48.8	16.6	55.5	16.6
121+50.	50	88.0	32.3	7.9	53.9	7.9	349.5	66.3	56.4	296.6	56.4
122+00.	50	289.4	39.3	53.0	266.4	53.0	496.0	76.9	100.8	489.7	100.8
122+50.	50	246.3	43.8	55.8	262.4	55.8	376.5	74.2	105.0	446.3	105.0
123+00.	21	160.3	36.3	57.6	219.6	57.6	92.9	28.4	44.5	131.4	44.5
123+21.25	58	75.9	35.9	55.5	114.3	55.5	0.0	0.0	0.0	0.0	0.0
123+79.34	21	64.1	28.3	95.5	104.0	105.2	72.9	23.3	74.0	101.5	78.5
124+00.	50	126.5	32.6	97.9	161.3	99.9	195.8	59.8	202.1	334.5	205.8
124+50.	50	85.0	32.0	120.4	200.0	122.3	158.2	63.0	205.4	321.4	207.1
125+00.	50	85.9	36.0	101.4	147.1	101.4	133.1	67.8	106.5	189.1	106.7
125+50.	50	57.9	37.2	13.6	57.1	13.8	150.6	72.1	20.1	74.2	20.4
126+00.	50	104.7	40.7	8.1	23.0	8.1	219.5	75.5	15.1	33.3	15.1
126+50.	50	132.4	40.8	8.1	12.9	8.1	197.9	67.7	16.8	24.5	16.8
127+00.	32	81.3	32.4	10.0	13.6	10.0	78.7	30.8	12.0	16.7	12.0
127+32.49	0	49.4	18.9	10.0	14.2	10.0	0.0	0.0	0.0	0.0	0.0
127+32.5	28	15.1	18.9	0.0	17.4	0.0	7.7	12.9	0.0	8.8	0.0
127+60.		0.0	6.5	0.0	0.0	0.0					
EMBANKMENT REQUIRED TO FILL IN TEMPORARY SEDIMENT TRAPS							0.0	0.0	0.0	117.9	0.0
FLAT IRON ROAD							2,671.7	781.1	975.5	2,644.7	985.8

SCHEDULE OF EARTHWORK					
CHANNEL EXCAVATION					
STATION	DISTANCE	CUT	EMBANKMENT REQUIRED	CUT	EMBANKMENT REQUIRED
(XX+XX)	(FT.)	(SQ. FT.)	(SQ. FT.)	(CU. YD.)	(CU. YD.)
200+68.01		0.0	0.0		
200+69.68	2	15.6	0.3	0.5	0.0
200+75.	5	37.1	1.4	5.2	0.2
200+92.82	18	81.7	0.0	39.2	0.5
201+00.	7	109.9	0.1	25.5	0.0
201+08.72	9	148.1	0.0	41.7	0.0
201+09.48	1	152.6	0.0	4.2	0.0
201+17.81	8	135.3	0.0	44.4	0.0
201+25.	7	152.5	0.0	38.3	0.0
201+40.01	15	155.9	0.0	0.0	0.0
201+47.52	8	172.0	3.3	45.6	0.5
201+48.28	1	171.3	9.7	4.8	0.2
201+50.	2	156.6	11.1	10.4	0.7
201+63.93	14	41.9	2.6	51.2	3.5
201+75.	11	61.6	12.7	21.2	3.1
201+93.97	19	9.9	1.7	25.1	5.1
201+96.38	2	0.0	0.0	3.9	0.7
CHANNEL EXCAVATION				360.9	14.4

EARTHWORK SUMMARY					
LINE		FLAT IRON ROAD	MOKELER CREEK		
		SY	CY	SY	CY
1	PROPOSED TOPSOIL REQUIRED (6")	5169	862	0	0
2	TOPSOIL EXCAVATION AND PLACEMENT		781		0
3	TOPSOIL FURNISH AND PLACE, 6" (LINE 1 MINUS LINE 2)	486	81		0
4	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (UNDERCUTS PER GEOTECH REPORT)		976		0
5	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (UNDERCUTS)		475		0
6	TOTAL REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (SUM OF LINES 4 AND 5)		1451		0
7	AGGREGATE SUBGRADE IMPROVEMENT (UNDERCUTS PER GEOTECH REPORT)		986		0
8	AGGREGATE SUBGRADE IMPROVEMENT (UNDERCUTS)		475		0
9	TOTAL AGGREGATE SUBGRADE IMPROVEMENT		1461		0
10	TOTAL CHANNEL EXCAVATION (CREEK)		0		361
11	TOTAL EARTH EXCAVATION FOR EROSION CONTROL		118		0
12	EXCAVATION (ROADWAY)		2672		0
13	TOTAL EARTH EXCAVATION (LINE 12)		2672		0
14	ROADWAY EARTH EXCAVATION AVAILABLE FOR EMBANKMENT ((1 - SHRINKAGE FACTOR) TIMES LINE 13)		2271		0
15	EMBANKMENT REQUIRED		2645		14
16	FURNISHED EXCAVATION (LINE 15 MINUS LINE 14)		374		14

THE SHRINKAGE FACTOR SHALL BE 15%.

USER NAME = djc	DESIGNED - KDC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF EARTHWORK		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 2,0000 ' / in.	DRAWN - KDC	REVISED -		SCALE: N.T.S.	SHEET 1 OF 1 SHEETS	4077	19-00508-00-BR	MCHENRY	92	12
PLOT DATE = 7/26/2024	CHECKED - DJK	REVISED -				CONTRACT NO. 61K76				
	DATE - 7/16/2024	REVISED -				ILLINOIS FED. AID PROJECT				







PLAN	SURVEYED	DATE
	PLOTTED	BY
NOTE BOOK NO.	ALIGNMENT CHECKED	
	ROAD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
NOTE BOOK NO.	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	

SCHEDULE OF GUARDRAIL REFLECTORS, TYPE A		
78200005		
STATION	LOCATION	QUANTITY (EACH)
121+98.6	LT	1
122+23.6	LT	1
122+48.6	LT	1
122+53.9	RT	1
122+73.6	LT	1
122+73.9	RT	1
122+93.9	RT	1
122+98.6	LT	1
123+13.9	RT	1
123+23.6	LT	1
123+33.9	RT	1
123+55.0	LT	1
123+76.0	RT	1
123+85.0	LT	1
123+96.0	RT	1
124+05.0	LT	1
124+16.0	RT	1
124+30.0	LT	1
124+36.0	RT	1
124+55.0	LT	1
124+56.0	RT	1
124+80.0	LT	1
125+05.0	LT	1
125+30.0	LT	1
TOTAL:		24

SCHEDULE OF RAISED REFLECTIVE PAVEMENT MARKER REMOVAL			
78300200			
START STATION	END STATION	LOCATION	QUANTITY (EACH)
121+01.4	121+50.0	CENTERLINE	1
121+50.0	122+00.0	CENTERLINE	2
122+00.0	122+50.0	CENTERLINE	1
122+50.0	123+00.0	CENTERLINE	1
123+00.0	123+50.0	CENTERLINE	1
123+50.0	124+00.0	CENTERLINE	2
124+00.0	124+50.0	CENTERLINE	1
124+50.0	125+00.0	CENTERLINE	1
125+00.0	125+50.0	CENTERLINE	1
125+50.0	126+00.0	CENTERLINE	1
126+00.0	126+50.0	CENTERLINE	1
127+00.0	127+32.5	CENTERLINE	1
TOTAL:			14

SCHEDULE OF EROSION CONTROL BLANKET (SPECIAL)			
X2511630			
START STATION	END STATION	LOCATION	QUANTITY (SQ YD)
PERMANENT CONDITION			
120+80.0	121+50.0	LT	162.0
120+80.0	121+50.0	RT	252.1
121+50.0	122+00.0	LT	160.8
121+50.0	122+00.0	RT	256.7
122+00.0	122+50.0	LT	189.9
122+00.0	122+50.0	RT	261.9
122+50.0	123+00.0	LT	205.5
122+50.0	123+00.0	RT	249.6
123+00.0	S CREEK LIMITS	LT	81.9
123+00.0	S CREEK LIMITS	RT	196.2
N CREEK LIMITS	124+00.0	LT	153.7
N CREEK LIMITS	124+00.0	RT	92.7
124+00.0	124+50.0	LT	173.8
124+00.0	124+50.0	RT	236.8
124+50.0	125+00.0	LT	180.1
124+50.0	125+00.0	RT	240.8
125+00.0	125+50.0	LT	183.1
125+00.0	125+50.0	RT	252.2
125+50.0	126+00.0	LT	199.5
125+50.0	126+00.0	RT	254.5
126+00.0	126+50.0	LT	223.1
126+00.0	126+50.0	RT	256.1
126+50.0	127+00.0	LT	220.1
126+50.0	127+00.0	RT	212.7
127+00.0	127+60.0	LT	147.5
127+00.0	127+60.0	RT	124.7
TEMPORARY CONDITION			
120+80.0	121+50.0	LT	162.0
120+80.0	121+50.0	RT	252.1
121+50.0	122+00.0	LT	160.8
121+50.0	122+00.0	RT	256.7
122+00.0	122+50.0	LT	189.9
122+00.0	122+50.0	RT	261.9
122+50.0	123+00.0	LT	205.5
122+50.0	123+00.0	RT	258.6
123+00.0	S CREEK LIMITS	LT	101.7
123+00.0	S CREEK LIMITS	RT	250.0
N CREEK LIMITS	124+00.0	LT	184.1
N CREEK LIMITS	124+00.0	RT	124.8
124+00.0	124+50.0	LT	195.5
124+00.0	124+50.0	RT	250.4
124+50.0	125+00.0	LT	180.1
124+50.0	125+00.0	RT	241.0
125+00.0	125+50.0	LT	183.1
125+00.0	125+50.0	RT	252.2
125+50.0	126+00.0	LT	199.5
125+50.0	126+00.0	RT	254.5
126+00.0	126+50.0	LT	223.1
126+00.0	126+50.0	RT	256.1
126+50.0	127+00.0	LT	220.1
126+50.0	127+00.0	RT	212.7
127+00.0	127+60.0	LT	147.5
127+00.0	127+60.0	RT	124.7
STOCKPILE RESTORATION			245.1
TOTAL:			10,781.7
ADJUSTED TOTAL:			10,762

SCHEDULE OF STABILIZED CONSTRUCTION ENTRANCE	
Z0013797	
LOCATION	QUANTITY (SQ YD)
SOUTH PROJECT LIMIT	133.3
NORTH PROJECT LIMIT	133.3
TOTAL:	266.6
ADJUSTED TOTAL:	267

SCHEDULE OF TEMPORARY TRAFFIC SIGNAL TIMING	
Z0073510	
INTERSECTION	QUANTITY (EACH)
US 14 & AIRPORT RD	1
US 14 & IL RTE 173	1
TOTAL:	2

MODEL: S:\MODEL\NAMES  
FILE NAME: ...13839\_51u-schedules.dgn

USER NAME = djk	DESIGNED - KDC	REVISED -
PLOT SCALE = 2,0000 ' / in.	DRAWN - KDC	REVISED -
PLOT DATE = 7/26/2024	CHECKED - DJK	REVISED -
	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

SCALE: N.T.S.		SHEET 4 OF 4 SHEETS	
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**SCHEDULE OF QUANTITIES**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	16
				CONTRACT NO. 61K76
		ILLINOIS	FED. AID PROJECT	



## BENCHMARKS

TBM NO.	LOCATION	ELEVATION	DESCRIPTION
1	STA. 120+95, 34' RT	903.00	RAILROAD SPIKE (SET) IN POWER POLE IN THE NE CORNER OF FLAT IRON ROAD & AIRPORT ROAD.
2	STA. 128+43, 33' RT	900.68	RAILROAD SPIKE (SET) IN FIFTH POWER POLE NORTH OF AIRPORT ROAD ON THE EAST SIDE OF FLAT IRON ROAD.
3	STA. 119+48, 31' LT	903.84	RAILROAD SPIKE (SET) IN FIRST POWER POLE SOUTH OF THE BRIDGE OVER MOKELER CREEK ON THE WEST SIDE OF FLAT IRON ROAD.
4	STA. 123+34, 14' LT	899.97	BOX CUT (SET) IN SW WINGWALL OF THE BRIDGE OVER MOKELER CREEK.
5	STA. 130+18, 34' RT	901.19	RAILROAD SPIKE (SET) IN SIXTH POWER POLE NORTH OF AIRPORT ROAD ON THE EAST SIDE OF FLAT IRON ROAD.

BASIS OF ELEVATIONS: ELEVATIONS ARE BASED ON MULTIPLE G.P.S. OBSERVATIONS AT TRAVERSE STATION #2 MEASURED ON MARCH 2, 2021. NAVD '88 ELEVATION 904.07

## FLAT IRON ROAD ALIGNMENT DATA

POINT	STATION	NORTHING	EASTING
BOA	114+42.86	2,090,782.898	900,390.389
PC	115+01.50	2,090,824.270	900,431.951
PI	120+30.41	2,091,197.409	900,806.800
PT	125+01.58	2,091,726.240	900,797.678
EOA	131+11.87	2,092,336.439	900,787.153

## MOKELER CREEK ALIGNMENT DATA

POINT	STATION	NORTHING	EASTING
BOA	200+00.00	2,091,569.267	900,663.750
PC	200+52.60	2,091,565.161	900,716.188
PI	200+65.44	2,091,564.159	900,728.993
PT	200+78.15	2,091,566.425	900,741.636
PC	201+54.57	2,091,579.907	900,816.856
PI	201+81.47	2,091,584.654	900,843.340
PT	202+08.30	2,091,592.905	900,868.949
EOA	202+56.94	2,091,607.822	900,915.248

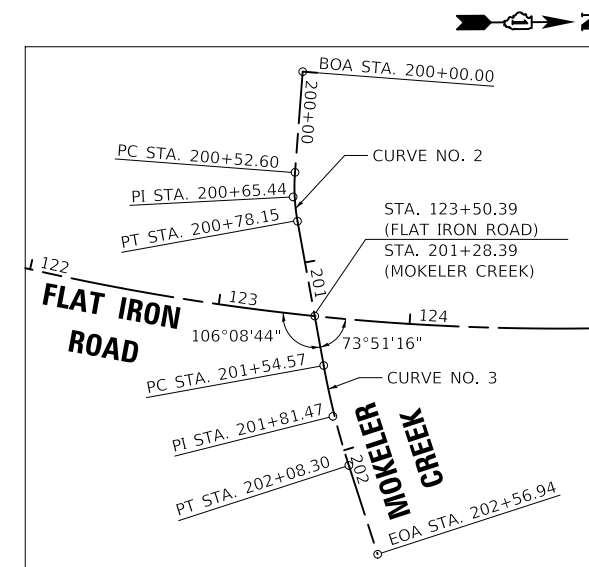
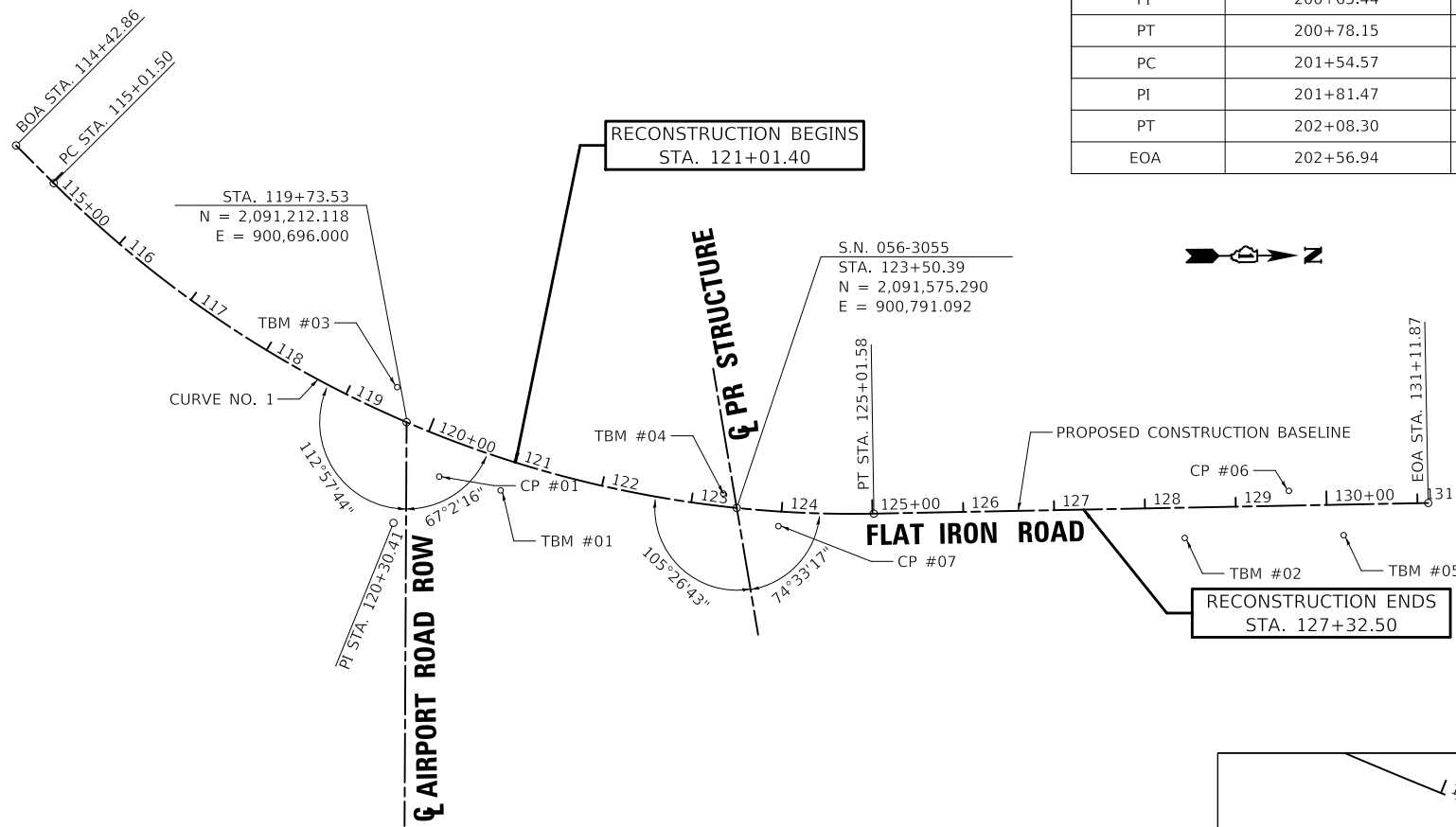
FLAT IRON ROAD	
CURVE NO. 1	
PI STA. =	120+30.41
Δ =	46° 07' 08.76" (LT)
D =	4° 36' 41.59"
R =	1,242.44'
T =	528.91'
L =	1000.08'
E =	107.89'
P.C. STA. =	115+01.50
P.T. STA. =	125+01.58
e =	7.94%
T.R. =	61.37'
S.E. RUN =	211.69'

NOTE:  
 BOA = BEGINNING OF ALIGNMENT  
 PC = POINT OF CURVATURE  
 PT = POINT OF TANGENCY  
 PI = POINT OF INTERSECTION  
 EOA = END OF ALIGNMENT  
 TBM = TEMPORARY BENCHMARK  
 CP = CONTROL POINT

MOKELER CREEK		MOKELER CREEK	
CURVE NO. 2		CURVE NO. 3	
PI STA. =	200+65.44	PI STA. =	201+81.47
Δ =	14° 38' 17.38" (LT)	Δ =	7° 41' 46.82" (LT)
D =	57° 17' 44.81"	D =	14° 19' 26.20"
R =	100.00'	R =	400.00'
T =	12.84'	T =	26.91'
L =	25.55'	L =	53.73'
E =	0.81'	E =	0.90'
P.C. STA. =	200+52.60	P.C. STA. =	201+54.57
P.T. STA. =	200+78.15	P.T. STA. =	202+08.30

DATE	
BY	
PLAN	SURVEYED
	PLOTTED
	ALIGNED
	CHECKED
	FILE NAME
	NO.

DATE	
BY	
PROFILE	SURVEYED
	PLOTTED
	GRADES
	CHECKED
	STRUCTURE
	NOTATION
	CHKD
	NO.

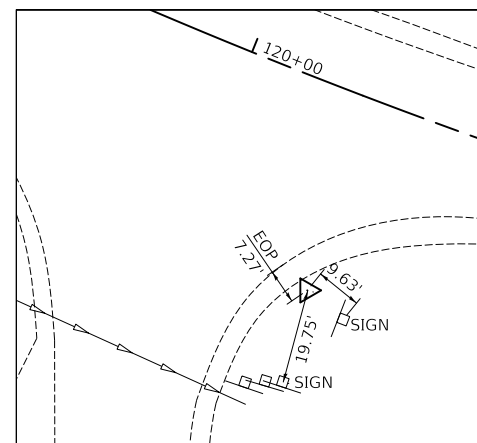


MOKELER CREEK ALIGNMENT  
SCALE = 1"=50'

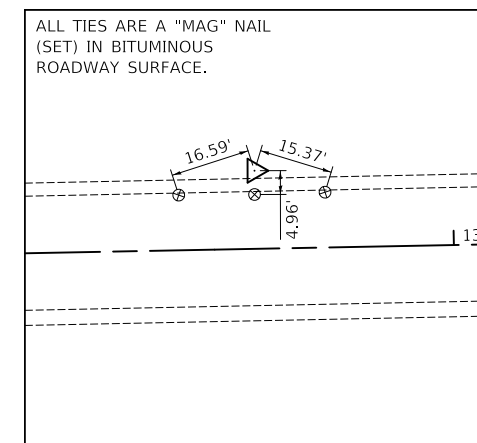
## CONTROL POINTS

POINT NO.	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
1	2,091,247.932	900,755.918	120+28.34	42.06' RT	5/8" IRON ROD WITH CAP SET
6	2,092,183.067	900,773.507	129+58.76	16.29' LT	5/8" IRON ROD WITH CAP SET
7	2,091,621.160	900,811.257	123+97.51	16.18' RT	5/8" IRON ROD WITH CAP SET

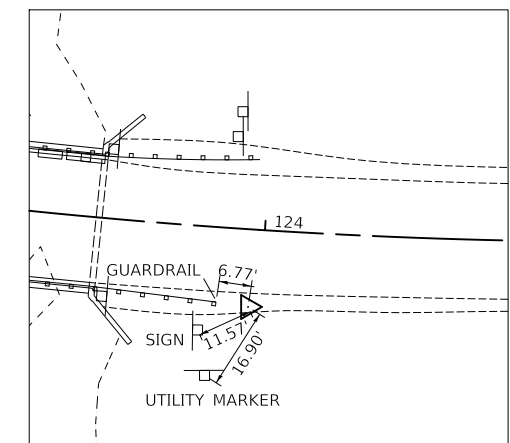
NOTE: BEARINGS AND COORDINATES ARE REFERENCED TO THE ILLINOIS COORDINATE SYSTEM NAD 83(2011) EAST ZONE



CONTROL POINT CP#01  
5/8" IRON ROD WITH CAP SET  
SCALE = 1"=20"



CONTROL POINT CP#06  
5/8" IRON ROD WITH CAP SET  
SCALE = 1"=20"



CONTROL POINT CP#07  
5/8" IRON ROD WITH CAP SET  
SCALE = 1"=20"

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES, AND BENCHMARKS

SCALE: 1"=100' SHEET 1 OF 1 SHEETS STA. 121+01.40 TO STA. 127+32.50

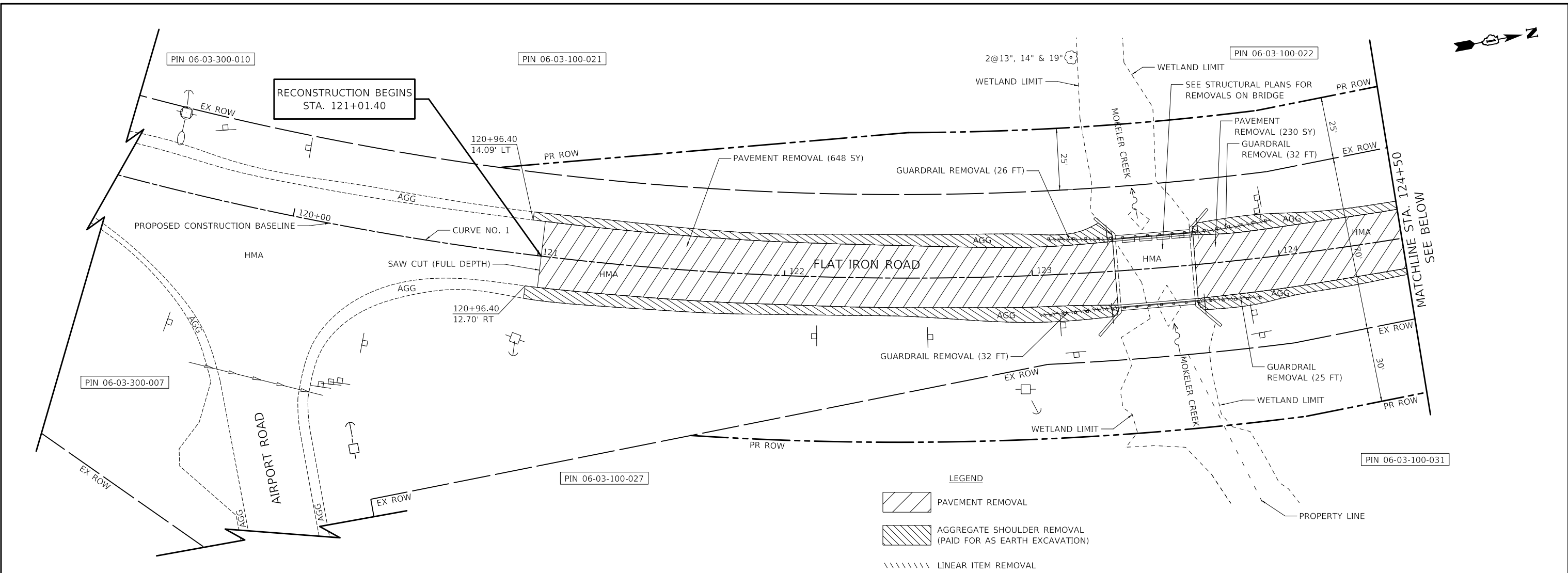
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	17
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				

MODEL: SMODELNAMES  
FILE NAME: ...13939\_ATB.dgn

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	
	CHECKED	
	FILE NAME	
	NO.	

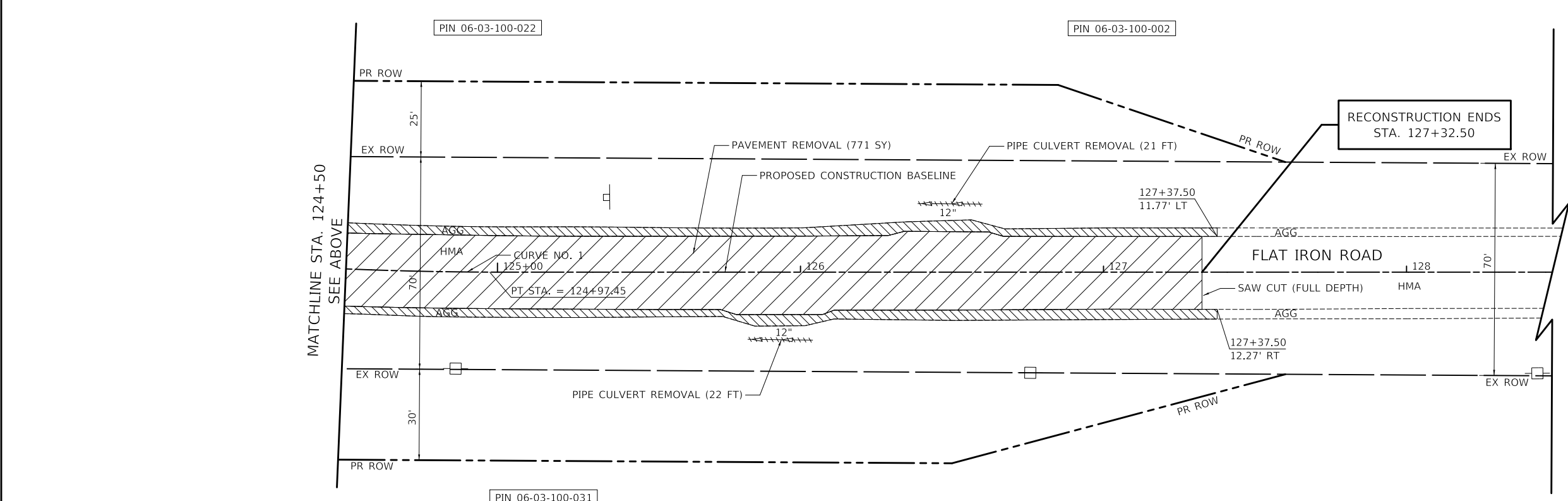
PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES	
	CHECKED	
	STRUCTURE	
	NOTATION	
	NO.	

MODEL: SMODELNAMES  
FILE NAME: ...06-removals1839-sitk.dwg



LEGEND

	PAVEMENT REMOVAL
	AGGREGATE SHOULDER REMOVAL (PAID FOR AS EARTH EXCAVATION)
	LINEAR ITEM REMOVAL



- NOTES**
1. A QUANTITY OF "RAISED REFLECTIVE PAVEMENT MARKER REMOVAL" HAS BEEN INCLUDED WITHIN THE LIMITS OF RECONSTRUCTION. SEE SCHEDULE OF QUANTITIES.

USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**REMOVAL PLAN**

SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. 121+01.40 TO STA. 127+32.50

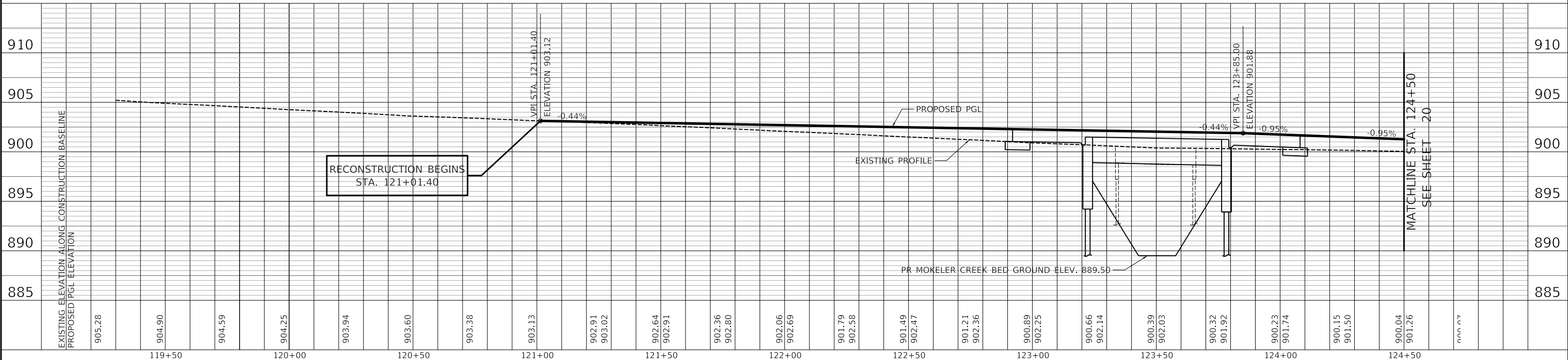
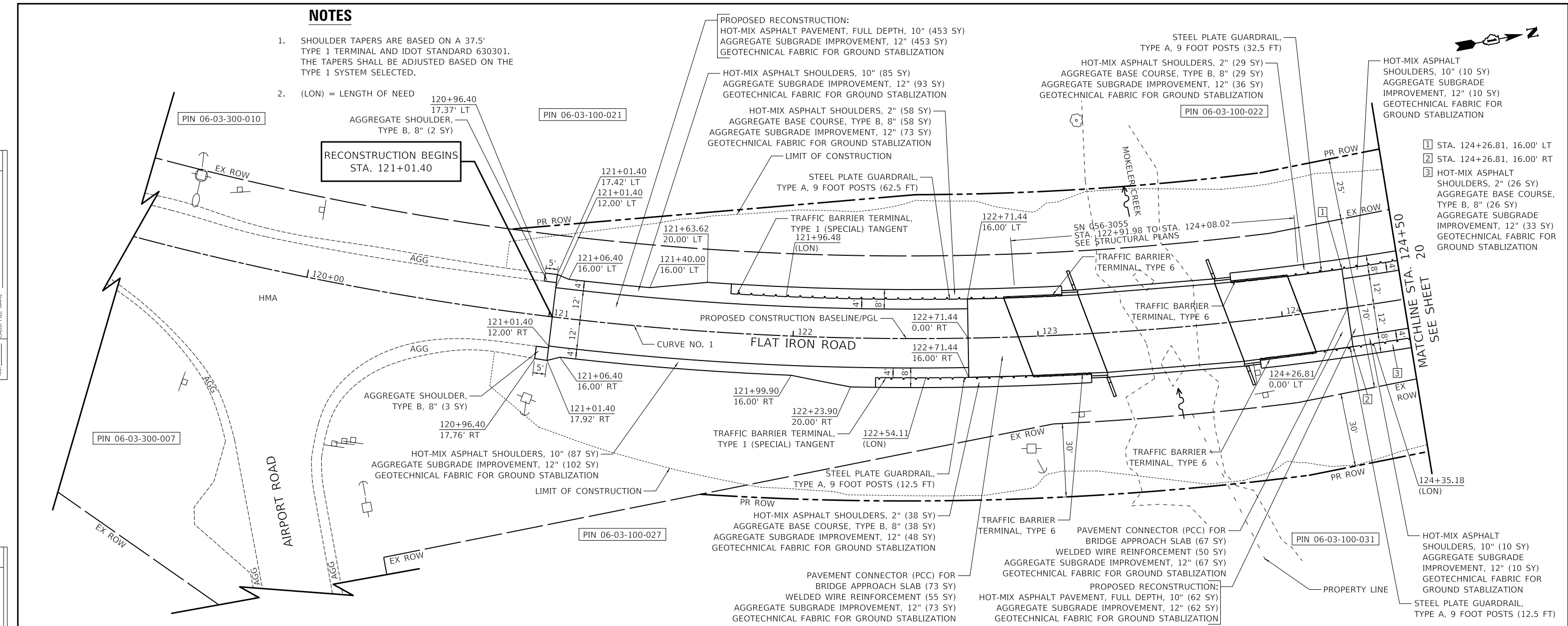
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	18
				CONTRACT NO. 61K76
				ILLINOIS FED. AID PROJECT

**NOTES**

- SHOULDER TAPERS ARE BASED ON A 37.5' TYPE 1 TERMINAL AND IDOT STANDARD 630301. THE TAPERS SHALL BE ADJUSTED BASED ON THE TYPE 1 SYSTEM SELECTED.
- (LON) = LENGTH OF NEED

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNED	
	CHECKED	
	FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES	
	CHECKED	
	STRUCTURE	
	NOTATION	
	NO.	



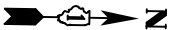
MODEL: SHODLNAME  
FILE NAME: ...333333-11\_PP

USER NAME = djk	DESIGNED - KDC	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN - KDC	REVISED -
PLOT DATE = 7/23/2024	CHECKED - DJK	REVISED -
	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PLAN AND PROFILE**  
SCALE: 1"=20'H/5'V SHEET 1 OF 2 SHEETS STA. 121+01.40 TO STA. 124+50.00

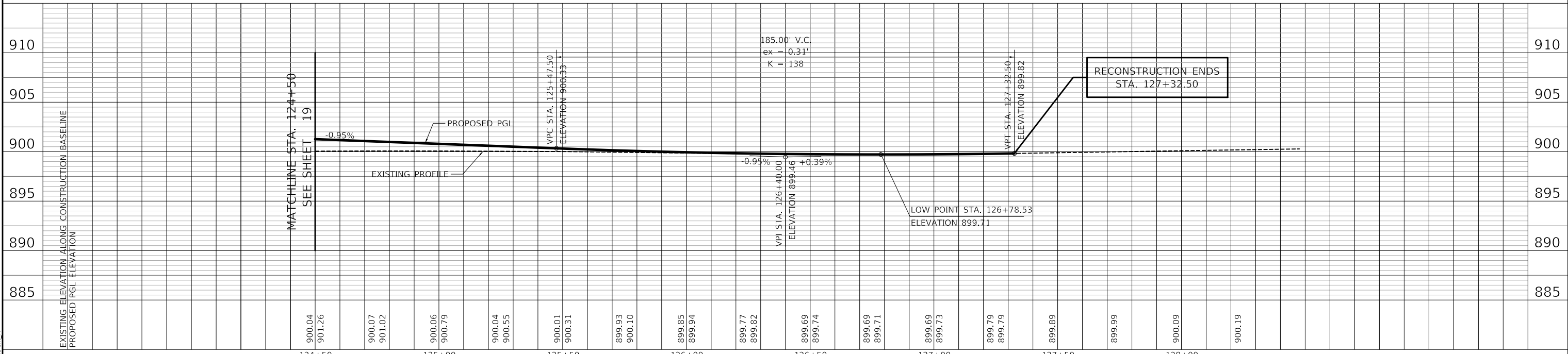
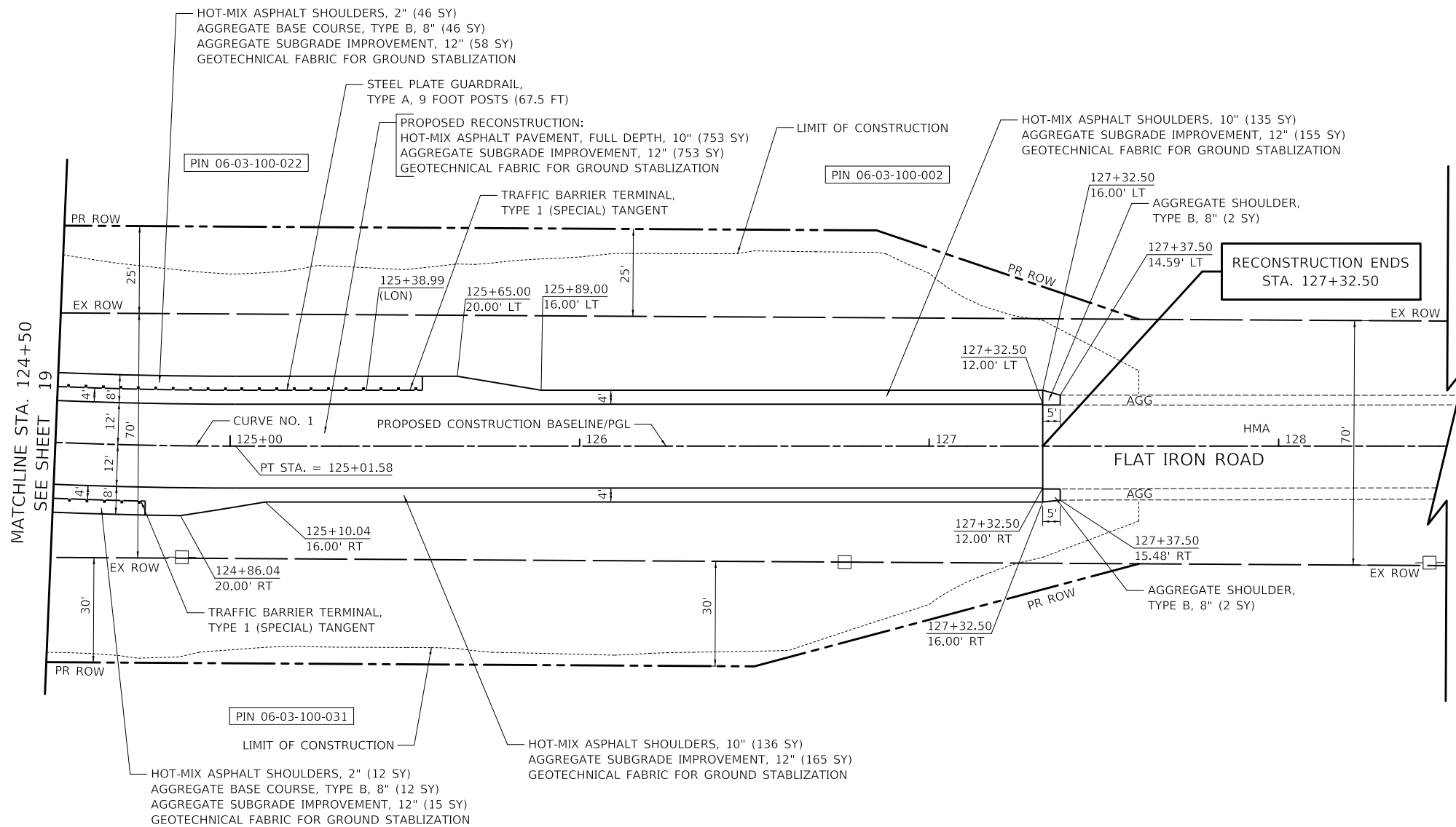
F.A.U. RTE. 4077	SECTION 19-00508-00-BR	COUNTY MCHENRY	TOTAL SHEETS 92	SHEET NO. 19
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61K76	



PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNED	
	CHECKED	
	FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES	
	CHECKED	
	STRUCTURE	
	NOTATION	
	NO.	

MODEL: SMOELMAMES  
FILE NAME: ...133335-HI\_PP



USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PLAN AND PROFILE</b>	
SCALE: 1"=20'H/5'V	SHEET 2 OF 2 SHEETS
STA. 124+50.00 TO STA. 127+32.50	

F.A.U. RTE. 4077	SECTION 19-00508-00-BR	COUNTY MCHENRY	TOTAL SHEETS 92	SHEET NO. 20
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
ROAD FILE NAME	
NO.	
PLAN	
NOTE BOOK	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NO.	
PROFILE	
NOTE BOOK	
NO.	

### GENERAL NOTES

1. THE TRAFFIC CONTROL DEPICTED HEREIN IS THE MINIMUM REQUIREMENT. ADDITIONAL TRAFFIC CONTROL DEVICES, AS SPECIFIED BY THE SPECIAL PROVISIONS OR THE ENGINEER, SHALL BE PLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.
2. ALL SIGN COLORS SHALL BE ACCORDING TO THE LATEST EDITION OF THE MUTCD.
3. NO WORK SHALL COMMENCE UNTIL TRAFFIC CONTROL REQUIREMENTS ARE MET.
4. TRAFFIC CONTROL DEVICES: ALL TRAFFIC CONTROL DEVICES USED FOR THE DETOUR AS DETAILED ON THE PLANS SHALL BE REFLECTORIZED PRIOR TO INSTALLATION AND CLEANED AS NECESSARY THROUGHOUT THE DURATION OF THE CONTRACT OR AS DIRECTED BY THE ENGINEER.

### TEMPORARY DETOUR DURATION

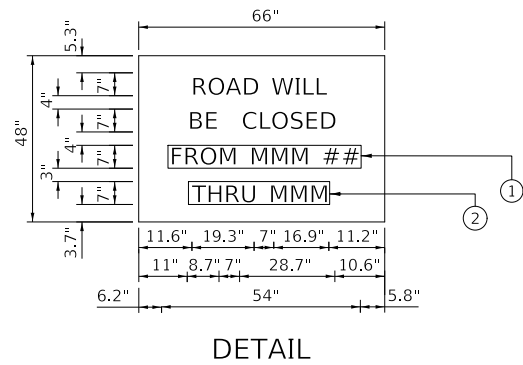
1. THE CONTRACT DOCUMENTS WILL ALLOW THE ROADWAY CLOSURE AND TEMPORARY DETOUR DETAILED IN THESE PLANS TO REMAIN IN PLACE TO THE COMPLETION DATE IDENTIFIED IN THE BDE SPECIAL PROVISION FOR "COMPLETION DATE PLUS WORKING DAYS". THE DETOUR AND ROAD CLOSURE DOES NOT APPLY TO THE ADDITIONAL WORKING DAYS.
2. THE CONTRACTOR WILL BE EXPECTED TO COMPLETE ALL PROPOSED WORK RELATED TO THE CONSTRUCTION OF THE PROPOSED BRIDGE AND ROADWAY DURING THIS CLOSURE. THE ROADWAY MUST HAVE HMA SURFACE COURSE PLACED AND THE GUARDRAIL INSTALLED BEFORE THE ROADWAY IS OPENED TO TRAFFIC.

### TEMPORARY TRAFFIC SIGNAL TIMING

1. THE ANTICIPATED IMPACTS ON STATE ROUTES AS A RESULT OF THE PROPOSED CONSTRUCTION INCLUDES ADDITIONAL TRAFFIC AT THE INTERSECTION OF US 14 AND AIRPORT ROAD AND AT THE INTERSECTION OF US 14 AND IL ROUTE 173 IN THE CITY OF HARVARD.
2. TO MINIMIZE TRAFFIC IMPACTS, THE CONTRACTOR WILL HIRE AN IDOT APPROVED CONSULTANT TO IMPLEMENT TEMPORARY TRAFFIC SIGNAL ADJUSTMENTS AT THE ABOVE INTERSECTIONS TO REDUCE QUEUE DELAYS ON THE DETOUR ROUTE. WORK SHALL BE PAID FOR UNDER THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL TIMING".

### TEMPORARY INFORMATION SIGN

1. THE CONTRACTOR SHALL ERECT A TEMPORARY INFORMATION SIGN AT THE NORTH AND SOUTH ENDS OF THE PROJECT (2 TOTAL) TO INFORM THE PUBLIC OF THE CONSTRUCTION DURATION.
2. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER ON THE EXACT PLACEMENT OF THE SIGN. THE SIGN SHALL BE IN PLACE FOR THE ENTIRE DURATION OF THE CONTRACT OR AS DIRECTED BY THE ENGINEER. THE SIGN SHALL BE UPDATED IF THE COMPLETION DATE CHANGES.
3. THE TEMPORARY SIGN SHALL BE AS DIMENSIONED AND DETAILED ON THE DETOUR NOTES.
4. THE SIGNING, WHICH INCLUDES POST AND MOUNTING, SHALL BE PAID FOR AS "TEMPORARY INFORMATION SIGNING" PER SQ FT FOR EACH SIGN ERECTED.

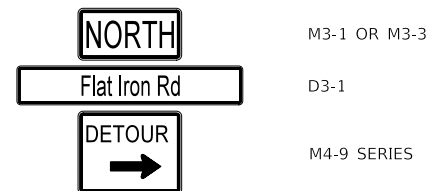


1. SIGN SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING. ONE SIGN ASSEMBLY EQUALS 27.3 SQ FT.
2. OVERLAY PANELS SHALL BE "HIGHWAY C" FONT.
3. OVERLAY PANEL ① TO CONTAIN STARTING DATE OF FULL CLOSURE AND DETOUR IMPLEMENTATION.
4. OVERLAY PANEL ② TO CONTAIN ENDING MONTH OF FULL CLOSURE AND DETOUR OMIT THE DATE ON PANEL ②; MONTH ONLY.
5. ERECT SIGN ASSEMBLY (POST MOUNTED) WITH PANELS ① AND ② IN PLACE ON ROAD TO BE CLOSED IN EACH DIRECTION NEAR POINT OF CLOSURE OR WITHIN SECTION TO BE FULLY CLOSED TWO (2) WEEKS PRIOR TO START DATE OF FULL CLOSURE. REMOVE ASSEMBLY AFTER CLOSURE.

### LIMITATIONS OF CONSTRUCTION

THE CONTRACTOR SHALL COORDINATE THE ITEMS OF WORK IN ORDER TO KEEP HAZARDS AND TRAFFIC INCONVENIENCES TO A MINIMUM, AS SPECIFIED BELOW.

1. IF THE CONSTRUCTION OPERATIONS ARE COMPLETED OUTSIDE THE DURATION OF THE ROADWAY CLOSURE, THOSE CONSTRUCTION OPERATIONS WILL BE CONDUCTED SO ONE LANE ON FLAT IRON ROAD REMAINS OPEN AT ALL TIME THROUGH THE USE OF FLAGGERS AS SHOWN ON THE HIGHWAY STANDARDS.
2. THE CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN ALL THE NECESSARY SIGNS, BARRICADES, CONES, DRUMS, AND LIGHTS FOR THE WARNING AND PROTECTION OF TRAFFIC AS REQUIRED BY SECTION 1106 OF THE STANDARD SPECIFICATIONS OR AS MODIFIED BY THE ENGINEER.



TYPICAL DETOUR SIGN ASSEMBLIES

### KEEPING ROADS OPEN TO TRAFFIC

1. THE CONTRACTOR SHALL SCHEDULE HIS OR HER SEQUENCE OF OPERATION TO PERMIT THE CONSTRUCTION OF THIS SECTION WITH THE LEAST INCONVENIENCE TO THE TRAVELING PUBLIC. THE CONTRACTOR'S SCHEDULE SHALL REFLECT THE FOLLOWING REQUIREMENTS AND SEQUENCE OF CONSTRUCTION. THESE REQUIREMENTS FOLLOW THE SUGGESTED TRAFFIC CONTROL PLAN INCLUDED IN THE DRAWINGS.
2. FLAT IRON ROAD WILL BE COMPLETELY CLOSED TO TRAFFIC FOR THE DURATION SPECIFIED IN THE CONSTRUCTION DOCUMENTS.

### SEQUENCE OF CONSTRUCTION

1. COORDINATE UTILITY RELOCATES.
2. SET UP TEMPORARY INFORMATION SIGNS.
3. SET UP DETOUR AS DETAILED IN THE PLAN.
4. SET UP TEMPORARY EROSION CONTROL MEASURES.
5. REMOVE EXISTING PAVEMENTS, BRIDGE STRUCTURE, AND WINGWALLS.
6. CONSTRUCT THE PROPOSED BRIDGE STRUCTURE AND WINGWALLS.
7. CONSTRUCT EMBANKMENT, SUBGRADE, AND AGGREGATE BASE COURSES.
8. CONSTRUCT SHOULDERS AND PAVEMENTS (INCLUDING FINAL SURFACES).
9. PLACE GUARDRAILS AND TRAFFIC BARRIER TERMINALS.
10. PLACE PERMANENT PAVEMENT MARKINGS. \*\*
11. PLACE PERMANENT RESTORATION.
12. FINALIZE PUNCH LIST AND SITE CLEANUP.

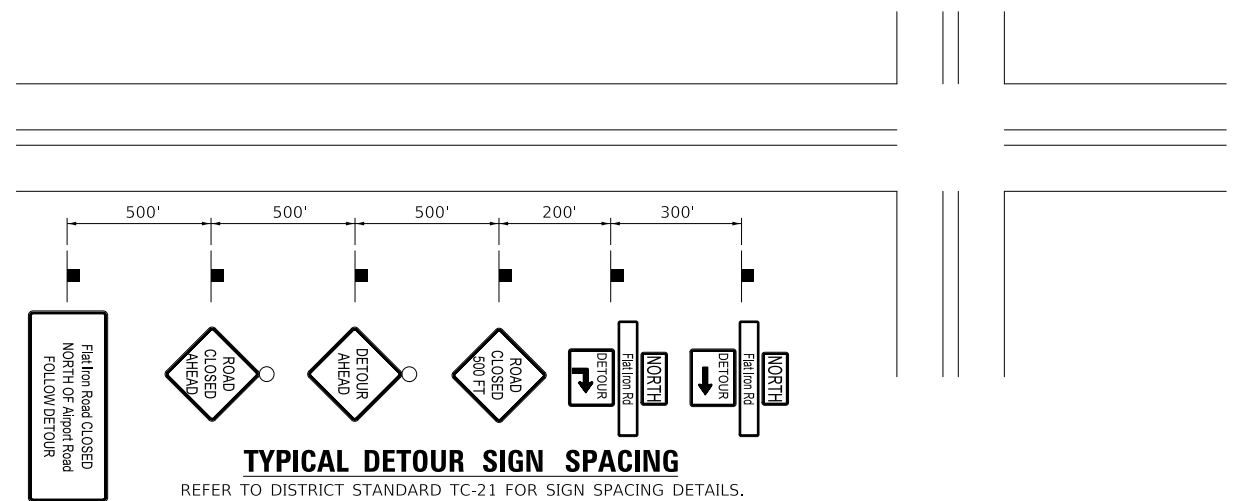
\*\* IF CONTRACTOR ELECTS TO COMPLETE PERMANENT PAVEMENT MARKING OUTSIDE OF THE CLOSURE PERIOD, THEN THE CONTRACTOR SHALL PLACE THE APPROPRIATE TEMPORARY PAVEMENT MARKINGS. ALL TEMPORARY MARKINGS ON THE PERMANENT SURFACES SHALL BE TYPE IV TAPE.

### CONTRACTS & COORDINATION

1. THE CONTRACTOR WILL BE REQUIRED TO COORDINATE MAINTENANCE OF TRAFFIC OPERATIONS WITH ALL SCHOOL DISTRICTS, MUNICIPALITIES, TOWNSHIPS, COUNTIES, AND ENTITIES LISTED ON THE GENERAL NOTES PLAN SHEETS.
2. THE CONTRACTOR SHALL NOTIFY MCHENRY COUNTY DIVISION OF TRANSPORTATION (MCDOT) PRIOR TO THE DETOUR REMOVAL IN ORDER FOR MCDOT TO SCHEDULE THE SIGN REPLACEMENT.

### TRAFFIC CONTROL – IDOT STANDARD DRAWINGS

1. THE CONTRACTOR IS ENCOURAGED TO COMPLETE ALL WORK UNDER THE DETOUR CLOSURE. NO ADDITIONAL COMPENSATION FOR TRAFFIC CONTROL AND PROTECTION SHALL BE APPROVED IF THE CONTRACTOR IS NOT ABLE TO COMPLETE WORK WITHIN THE DETOUR TIME FRAME.
2. IN THE EVENT THE CONTRACTOR'S OPERATION REQUIRES WORK THAT WILL NOT BE COMPLETED UNDER THE DETOUR CLOSURE, THE CONTRACTOR WILL COMPLETE THE WORK UTILIZING THE APPLICABLE IDOT TRAFFIC CLOSURE STANDARDS.
3. THE APPLICATION OF EACH STANDARD SHALL BE APPROVED BY THE ENGINEER. A LIST OF POTENTIAL STANDARD DRAWINGS HAS BEEN INCLUDED ON THE INDEX OF SHEETS AND GENERAL NOTES PLAN SHEET AS WELL AS IN THE SPECIAL PROVISION FOR "TRAFFIC CONTROL PLAN".



TYPICAL DETOUR SIGN SPACING

REFER TO DISTRICT STANDARD TC-21 FOR SIGN SPACING DETAILS.

MODEL: SMODELNAMER  
FILE NAME: ...13939-Detour-Notes

USER NAME = kdc	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 9/5/2024	DATE - 7/16/2024	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

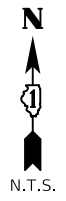
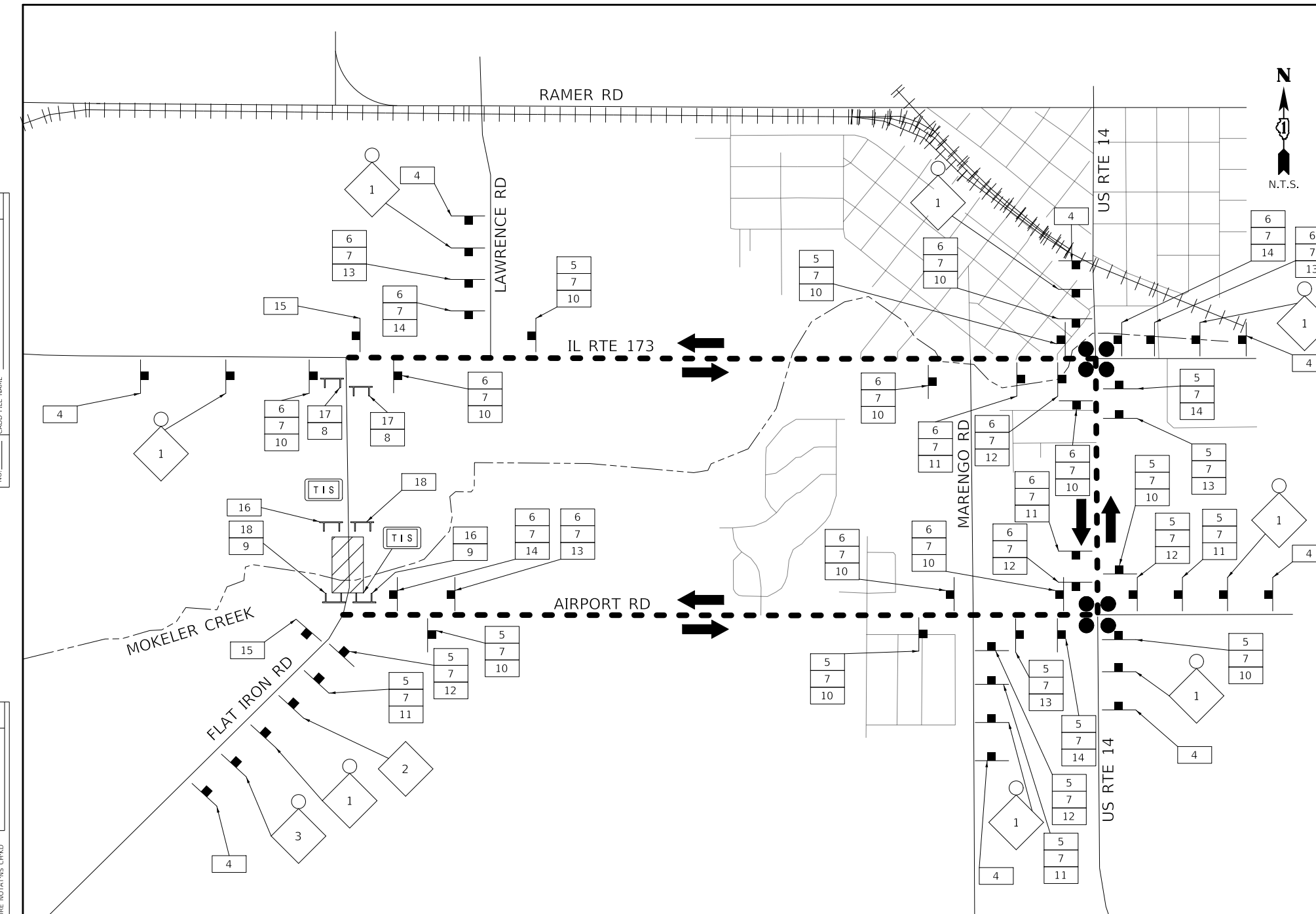
DETOUR NOTES

SCALE: N.T.S. SHEET 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	21
				CONTRACT NO. 61K76
				ILLINOIS FED. AID PROJECT

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	GRADE CHECKED	
	STRUCTURE NOTATION CHK'D	
	NOTE BOOK NO.	
	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATION CHK'D	
	NOTE BOOK NO.	
	FILE NAME	



**NOTES:**

\* SIGN 4 SHALL BE A SPECIAL ROAD NAME SIGN WITH MINIMUM 6" BLACK UPPERCASE LETTERS ON AN ORANGE REFLECTIVE BACKGROUND. WHEN LOWERCASE LETTERS ARE BEING USED THEY SHALL BE 3/4 OF THE SIZE OF THE UPPERCASE LETTERS.

\*\* SIGN 7 SHALL BE A SPECIAL SIGN WITH MINIMUM 6" BLACK UPPERCASE LETTERS ON AN ORANGE REFLECTIVE BACKGROUND.

1. ALL DETOUR SIGNS SHALL BE POST MOUNTED PER APPLICABLE SIGN MOUNTING STANDARDS AND SHALL BE NEW OR IN LIKE NEW CONDITION.
2. SIGN LOCATION MAY BE ADJUSTED TO FIT FIELD CONDITIONS WITH PRIOR APPROVAL OF THE ENGINEER.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL DETOUR SIGNING AND APPURTENANCES ARE OPERATIONAL 24 HOURS A DAY, 7 DAYS A WEEK WHILE THE DETOUR IS IN EFFECT. THIS INCLUDES MAINTAINING THE VISIBILITY OF ALL CONSTRUCTION AND DETOUR SIGNING. INCLUDING CLEARING BACK VEGETATION IF DEEMED NECESSARY BY THE ENGINEER.
4. WHEN DETOUR SIGNS ARE TO BE PLACED, THE AREA NEEDS TO BE MARKED BY JULIE (FLAGS PLACED). ONCE THE DETOUR SIGN IS INSTALLED, ALL OF THE JULIE MARKING FLAGS ARE REQUIRED TO BE REMOVED AND DISPOSED OF PROPERLY.
5. WHEN THE DETOUR ROUTE SIGNS ARE INSTALLED, CARE AND CONSIDERATION ARE TO BE GIVEN TO THE INSTALLATION (TEMPORARY SIGN POST WINGS NEED TO BE INSTALLED SO AS TO BE BELOW GRADE), AND THE DETOUR SIGNS ARE TO BE INSTALLED RESPECTING THE LOCATION AND VISIBILITY OF THE EXISTING SIGNAGE SO AS TO NOT CAUSE TRAFFIC ISSUES.

**SCHEDULE OF DETOUR SIGNS**

SIGN NO.	SIGN TYPE	SIGN TYPE
1		W20-2(O)-4848
2		W20-3(O)-4848
3		W20-3(O)-4848
4*		SPECIAL-(O)-6030
5		M3-1(O)-2412
6		M3-3(O)-2412
7**		D3-1-(O)-3612
8		M4-10L-4818
9		M4-10R-4818
10		M4-9(O)-3024
11		M4-9R(O)-3024
12		M4-9R(O)-3024
13		M4-9L(O)-3024
14		M4-9L(O)-3024
15		M4-8A(O)-2418
16		R11-2-4830
17		R11-3b-6030
18		R11-2-4830 (MODIFIED)
19		R11-4-6030

**LEGEND**

	TEMPORARY INFORMATION SIGN (SEE SHEET 74 FOR DETAILS)		DETOUR ROUTE
	W20 SERIES DETOUR SIGN WITH AMBER FLASHING LIGHT (NUMBER DENOTES TYPE)		DETOUR ROUTE DIRECTION OF TRAVEL
	M4-9 SERIES DETOUR SIGN WITH ROAD NAME & DIRECTION PLATES (NUMBER DENOTES TYPE)		DETOUR SIGN ASSEMBLY
	OTHER DETOUR SIGN (NUMBER DENOTES TYPE)		TYPE III BARRICADE WITH AMBER FLASHING LIGHTS
	WORK ZONE		SIGNALIZED INTERSECTION WITH TEMPORARY TRAFFIC SIGNAL TIMING

MODEL: SMODELNAMAS  
FILE NAME: ...3393-Detour-Notes

USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETOUR PLAN**  
SCALE: N.T.S. SHEET 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	22
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				

## STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

THE FOLLOWING PLAN IS ESTABLISHED AND INCORPORATED IN THE PROJECT TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TEMPORARY EROSION AND SEDIMENT CONTROL SYSTEMS AND TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE UNDER NPDES.

THE PURPOSE OF THIS PLAN IS TO MINIMIZE EROSION WITHIN THE CONSTRUCTION SITE AND TO LIMIT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE BY UTILIZING PROPER TEMPORARY EROSION AND SEDIMENT CONTROL SYSTEMS AND PROVIDING GROUND COVER WITHIN A REASONABLE AMOUNT OF TIME.

CERTAIN SEDIMENT CONTROL FACILITIES SHALL BE INSTALLED BY THE CONTRACTOR AT THE BEGINNING OF CONSTRUCTION. OTHER ITEMS SHALL BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER, OWNER, OR MCHENRY-LAKE COUNTY SOIL AND WATER CONSERVATION DISTRICT ON A CASE BY CASE SITUATION DEPENDING ON THE CONTRACTOR'S SEQUENCE OF ACTIVITIES, TIME OF YEAR, AND EXPECTED WEATHER CONDITIONS.

THE CONTRACTOR SHALL INSTALL PERMANENT EROSION CONTROL SYSTEMS AND SEEDING WITHIN A TIME FRAME SPECIFIED HEREIN AND AS DIRECTED BY THE ENGINEER, THEREFORE MINIMIZING THE AMOUNT OF AREA SUSCEPTIBLE TO EROSION AND REDUCING THE AMOUNT OF TEMPORARY SEEDING. THE ENGINEER WILL DETERMINE IF ANY TEMPORARY EROSION CONTROL SYSTEMS NOT SHOWN IN THE PLAN CAN BE DELETED AND IF ANY ADDITIONAL EROSION CONTROL SYSTEMS, WHICH ARE NOT INCLUDED IN THIS PLAN, SHALL BE ADDED. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN IN IDOT STANDARD 280001.

SECTION 280, TEMPORARY EROSION CONTROL, OF THE STANDARD SPECIFICATIONS ADDITIONALLY SUPPLEMENTS THIS PLAN.

## SITE AND CONSTRUCTION ACTIVITY DESCRIPTION

- THE PROJECT IS LOCATED ON FLAT IRON ROAD OVER MOKELER CREEK, APPROXIMATELY 0.1 MILES NORTH OF AIRPORT ROAD.
- THE PROJECT SHALL GENERALLY CONSIST OF THE FOLLOWING:
  - REMOVAL OF EXISTING STRUCTURE AND PAVEMENT;
  - CONSTRUCTION OF FLAT IRON ROAD BRIDGE OVER MOKELER CREEK AND INSTALLATION OF RIP RAP;
  - CONSTRUCTION OF ROADWAY IMPROVEMENTS, INCLUDING ROADWAY RECONSTRUCTION, GRADING, BINDER, SURFACE AND PAVEMENT MARKINGS;
  - SEEDING AND ALL OTHER COLLATERAL WORK SUCH AS SITE RESTORATION.

## SEQUENCE FOR MAJOR CONSTRUCTION ACTIVITIES

- INSTALL SEDIMENT AND EROSION CONTROL SYSTEMS PRIOR TO EARTHWORK ACTIVITIES.
- STRIP AND STOCKPILE TOPSOIL AND BEGIN MASS GRADING, TEMPORARY SEED AS REQUIRED.
- DEMOLISH EXISTING STRUCTURE WITHOUT IMPACT OR DEBRIS ENTERING THE EXISTING WATERWAY.
- DRIVE PILES FOR NEW STRUCTURE, BUILD CONCRETE SUBSTRUCTURES, THEN BUILD CONCRETE SUPERSTRUCTURES.
- COMPLETE ROADWAY RECONSTRUCTION THROUGH BINDER AND GRADING.
- COMPLETE FINAL SURFACE, PAVEMENT MARKINGS AND RESTORATION.
- REMOVE EROSION CONTROL MEASURES AND RESTORE.

## CONSTRUCTION SITE DISTURBANCE

THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE 1.47 ACRES TO BE DISTURBED BY EXCAVATION, GRADING, AND OTHER ACTIVITIES.

## SWPPP REFERENCED DOCUMENTS

- INFORMATION OF THE SOILS AND TERRAIN WITHIN THE SITE WAS OBTAINED FROM TOPOGRAPHIC SURVEYS AND SOIL BORINGS THAT WERE FOR THE DEVELOPMENT OF THE PROPOSED TEMPORARY EROSION AND SEDIMENT CONTROL SYSTEMS.
- PROJECT PLAN DOCUMENTS, SPECIFICATIONS AND SPECIAL PROVISIONS, AND PLAN DRAWINGS INDICATING DRAINAGE PATTERNS AND APPROXIMATE SLOPES ANTICIPATED AFTER GRADING ACTIVITIES WERE UTILIZED FOR THE PROPOSED PLACEMENT OF THE TEMPORARY EROSION CONTROL SYSTEMS.

## DRAINAGE TRIBUTARIES FROM THIS CONSTRUCTION SITE

THE SITE DRAINS INTO MOKELER CREEK AND EVENTUALLY INTO PISCASAW CREEK.

## COUNTY REQUIREMENTS

MCHENRY COUNTY REQUIRES COMPLIANCE WITH NPDES PHASE II PROGRAM. AS SUCH, ALL DEVELOPMENTS SHALL PROVIDE TO THE EXTENT POSSIBLE, CONSTRUCTION SITE RUNOFF CONTROL AND ILLICIT DISCHARGE PREVENTION AND ELIMINATION.

- THE OWNER IS RESPONSIBLE FOR SUBMITTING THE NOTICE OF INTENT (NOI) TO THE IEPA AFTER THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE NOI IS POSTMARKED AT LEAST 30 DAYS BEFORE COMMENCEMENT OF ANY WORK ON THE SITE.
- THE CONTRACTOR IS RESPONSIBLE FOR HAVING THE SWPPP ON SITE AT ALL TIMES.
- INSPECTION OF CONTROLS WILL BE COMPLETED BY THE OWNER AT LEAST ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A STORM 0.5" OR GREATER, OR EQUIVALENT SNOWFALL.
- AN INCIDENT OF NON-COMPLIANCE (ION) MUST BE COMPLETED AND SUBMITTED BY THE OWNER TO THE IEPA AND COPIED TO THE COUNTY IF, AT ANY TIME, AN EROSION OR SEDIMENT CONTROL DEVICE FAILS.
- A NOTICE OF TERMINATION (NOT) SHALL BE COMPLETED AND SUBMITTED BY THE OWNER IN COMPLIANCE WITH NPDES PHASE II REQUIREMENTS WHEN ALL PERMANENT EROSION CONTROL MEASURES ARE IN PLACE AND VEGETATION IS GROWING AND THRIVING. THE NOT SHALL BE SENT TO THE IEPA AND MCHENRY COUNTY.
- THE CONTRACTOR SHALL TAKE THE NECESSARY STEPS TO CONTROL WASTE SUCH AS DISCARDED MATERIALS, CONCRETE TRUCK WASH OUT, CHEMICALS, LITTER AND SANITARY WASTE AT THE CONSTRUCTION SITE THAT MAY CAUSE ADVERSE IMPACTS TO WATER QUALITY.

## MISCELLANEOUS

- TEMPORARY EROSION CONTROL SEEDING SHALL BE APPLIED AT A RATE OF 100LB/ACRES, IF DESIRED.
- ALL EROSION AND SEDIMENT CONTROL PRODUCTS FURNISHED SHALL BE SPECIFICALLY RECOMMENDED BY THE MANUFACTURER FOR THE USE SPECIFIED IN THE EROSION AND SEDIMENT CONTROL PLAN. PRIOR TO THE APPROVAL AND USE OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A NOTARIZED CERTIFICATION BY THE PRODUCER STATING THE INTENDED USE OF THE PRODUCT AND THAT THE PHYSICAL PROPERTIES REQUIRED FOR THIS APPLICATION ARE MET OR EXCEEDED. THE CONTRACTOR SHALL PROVIDE MANUFACTURER INSTALLATION PROCEDURES TO FACILITATE THE ENGINEER IN CONSTRUCTION INSPECTION.

## POLLUTION PREVENTION DURING CONSTRUCTION

- DURING CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION LIMITS SHALL BE PROTECTED. THE CONTRACTOR SHALL NOT USE THIS AREA FOR STAGING, PARKING OF VEHICLES OR CONSTRUCTION EQUIPMENT, STORAGE OF MATERIALS OR OTHER CONSTRUCTION RELATED ACTIVITIES.
  - WITHIN THE CONSTRUCTION LIMITS, AREAS WHICH MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE ENGINEER SHALL REMAIN UNDISTURBED UNTIL FULL SCALE CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION.
  - AS CONSTRUCTION PROCEEDS, THE CONTRACTOR SHALL INSTITUTE THE FOLLOWING AS DIRECTED BY THE ENGINEER.
    - PLACE TEMPORARY SEDIMENT CONTROL PRACTICES AT LOCATIONS SHOWN ON THE PLANS.
    - TEMPORARILY SEED ERODIBLE BARE EARTH ON A WEEKLY BASIS TO MINIMIZE THE AMOUNT OF ERODIBLE SURFACE AREA WITHIN THE CONTRACT LIMITS.

## POLLUTION PREVENTION DURING CONSTRUCTION (CONTINUED)

- EXCAVATED AREAS AND EMBANKMENT SHALL BE PERMANENTLY SEEDED IMMEDIATELY AFTER FINAL GRADING. IF NOT, THEY SHALL BE TEMPORARILY SEEDED IF NO CONSTRUCTION ACTIVITY IS PLANNED FOR SEVEN (7) DAYS.
- CONSTRUCTION EQUIPMENT SHALL BE STORED AND FUELED ONLY AT DESIGNATED LOCATIONS. ALL NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR OTHER POLLUTANT IN ACCORDANCE WITH EPA WATER QUALITY REGULATIONS. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.
- THE OWNER OR THE DESIGNATED REPRESENTATIVE SHALL INSPECT THE PROJECT WEEKLY DURING CONSTRUCTION ACTIVITIES. INSPECTION SHALL ALSO BE DONE AFTER RAINS OF 1/2- INCH OR GREATER OR EQUIVALENT SNOWFALL.
- SEDIMENT COLLECTED DURING CONSTRUCTION FROM THE VARIOUS TEMPORARY SEDIMENT CONTROL SYSTEMS SHALL BE DISPOSED OF ON A REGULAR BASIS AS DIRECTED BY THE ENGINEER. THE COST OF THIS MAINTENANCE SHALL BE INCLUDED IN THE COST OF THE ASSOCIATED EROSION CONTROL PRACTICE.
- THE TEMPORARY EROSION AND SEDIMENT CONTROL SYSTEMS SHALL BE REMOVED, AS DIRECTED BY THE ENGINEER, AFTER USE IS NO LONGER NEEDED OR NO LONGER FUNCTIONING.
- EXCEPT AS PREVENTED BY INCLEMENT WEATHER CONDITIONS, ALL DISTURBED AREAS TO REMAIN INACTIVE FOR MORE THAN 7 DAYS SHALL BE STABILIZED BY SEEDING, SODDING, MULCHING, COVERING, OR BY OTHER EQUIVALENT EROSION CONTROL MEASURES WITHIN 7 DAYS. PERMANENT SOIL STABILIZATION SHALL BE PROVIDED WITHIN 14 DAYS AFTER FINAL GRADE IS ESTABLISHED.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE REMOVED AND DISPOSED OF WITHIN 30 DAYS AFTER SITE STABILIZATION IS ACHIEVED OR AFTER TEMPORARY PRACTICES ARE NO LONGER NEEDED. TRAPPED SEDIMENT SHALL BE PERMANENTLY REMOVED TO PREVENT FURTHER EROSION.

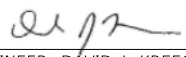
## MAINTENANCE AFTER CONSTRUCTION

CONSTRUCTION IS COMPLETE AFTER ACCEPTANCE BY THE PROJECT OWNER. MAINTENANCE UP TO THIS DATE WILL BE BY CONTRACTOR.

## CERTIFICATIONS

THIS PLAN HAS BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF THE NPDES PERMIT NUMBER IR10 ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITE ACTIVITIES.

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

  
ENGINEER: DAVID J. KREEGER, P.E.

7/16/2024  
DATE:

### OWNER'S CERTIFICATION

"I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

OWNER: MCHENRY COUNTY DIVISION OF TRANSPORTATION

 P.E. Design Manager 7/18/2024  
NAME, PE TITLE DATE

PLAN	SURVEYED	DATE
	PLOTTED	
NOTE BOOK NO.	ALIGNMENT CHECKED	
	FIELD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
NOTE BOOK NO.	GRADES CHECKED	
	STRUCTURE NOTARIZED	

MODEL: S:\MODEL\MAMES  
FILE NAME: ...3838 Stormwater Plan Notes

USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STORMWATER POLLUTION PREVENTION PLAN AND NOTES

SCALE: N.T.S. SHEET 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	23
			CONTRACT NO. 61K76	
		ILLINOIS	FED. AID PROJECT	

**GENERAL SOIL EROSION AND SEDIMENT CONTROL NOTES**

1. THE RESIDENT ENGINEER MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION MEETING, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
2. A COPY OF THE APPROVED STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE MAINTAINED ON SITE.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM ANY SUB-CONTRACTOR(S) WHO MAY PERFORM WORK ON THIS PROJECT OF THE REQUIREMENTS TO IMPLEMENT AND MAINTAIN THE SWPPP AND ALL PERMIT CONDITIONS REQUIRED BY THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) ILR10 PERMIT SET FORTH BY THE ILLINOIS EPA, THE U.S. ARMY CORPS OF ENGINEERS JOINT 404 PERMIT, THE MCHENRY COUNTY STORMWATER MANAGEMENT PERMIT, AND ALL REQUIREMENTS SET FORTH BY THE MCHENRY-LAKE COUNTY SOIL AND WATER CONSERVATION DISTRICT (MLCSWCD) AND THE STATE OF ILLINOIS.
4. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE ENGINEER OR THE COUNTY.
5. THE CONTRACTOR SHALL ARRANGE A PRE-CONSTRUCTION MEETING WITH ALL SUBCONTRACTORS, THE COUNTY, THE MLCSWCD AND OTHER INTERESTED REGULATORY AGENCIES AND OFFICIALS PRIOR TO CONSTRUCTION.
6. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR OF EROSION CONTROL MEASURES.
7. THE MLCSWCD IS RESPONSIBLE FOR CONDUCTING SITE VISITS, VERIFYING THE PRACTICES ARE WORKING PROPERLY AND DETERMINING IF ADDITIONAL PRACTICES ARE NEEDED FOR BETTER SOIL EROSION AND SEDIMENT CONTROL. IF ADDITIONAL PRACTICES ARE DEEMED NECESSARY, THE CONTRACTOR WILL IMPLEMENT THE PRACTICE IN A TIMELY MANNER.
8. ALL AREAS OF DISTURBED SOIL SHALL BE STABILIZED WITH EROSION CONTROL BLANKET (SPECIAL) FOLLOWING COMPLETION OF SOIL DISTURBING ACTIVITIES. THE EROSION CONTROL BLANKET SHALL BE WILDLIFE-FRIENDLY PLASTIC-FREE BLANKET AND USED AROUND WETLANDS AND ADJACENT TO NATURAL AREAS TO PREVENT ENTANGLEMENT OF NATIVE WILDLIFE.
9. AS A PERMIT CONDITION REQUIRED FOR THIS PROJECT, THE CONTRACTOR WILL NEED TO SUBMIT AN IN-STREAM WORK PLAN TO THE COUNTY, THE US ARMY CORPS OF ENGINEERS, MLCSWCD AND ENGINEER FOR APPROVAL. 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 CONTRACT UNIT PRICE FOR WORK FOR WHICH IT IS REQUIRED AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
10. CONCRETE WASHOUT(S) ARE ANTICIPATED FOR THIS PROJECT AND SHALL BE DRAWN ONTO THE PLANS AT THE TIME OF INSTALLATION. WASHOUTS ARE TO BE MAINTAINED IN A MANNER CONSISTENT WITH THE DETAILS ON THE PLANS AND THE LATEST EDITION OF THE ILLINOIS URBAN MANUAL. CONCRETE WASHOUT SHALL BE CONTAINED AT ALL TIMES. WASHOUT MATERIAL SHALL NOT BE ALLOWED TO ENTER WATER BODIES, STORM SEWERS, OR LEACH INTO THE SOIL UNDER ANY CIRCUMSTANCES. ANY WASTE SHALL BE DISPOSED OF PROPERLY AND THE LOCATION OF THE WASHOUT SHALL BE DESIGNATED WITH PROPER SIGNAGE. FAILURE TO COMPLY COULD RESULT IN A VIOLATION.
11. STABILIZED CONSTRUCTION ENTRANCES ARE ANTICIPATED FOR THIS PROJECT. A QUANTITY HAS BEEN INCLUDED IN THE PROJECT TO COMPLETE THIS WORK. IT IS ANTICIPATED THAT THE STABILIZED CONSTRUCTION ENTRANCES WILL BE PLACED NORTH AND SOUTH OF THE PROJECT LIMITS. IF THE ENTRANCE LOCATIONS ARE TO BE REVISED, THE CONTRACTOR SHALL SUBMIT THE LOCATION AND DETAILS THROUGH THE ENGINEER FOR APPROVAL.

**DIVERSION AND DEWATERING NOTES**

1. WHEN DIVERSION AND DEWATERING OF THE CONSTRUCTION AREA IS NECESSARY, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION. ALL WATERS SHALL BE FILTERED USING FILTER BAGS OR AN ALTERNATIVE MEASURE APPROVED BY MLCSWCD. ALL FILTER BAGS MUST HAVE SECONDARY CONTAINMENT DEVICES AND SHOULD BE PLACED ON LEVEL GROUND. DEWATERING DIRECTLY INTO STREAMS, WETLANDS, FIELD TILES OR STORMWATER STRUCTURES IS PROHIBITED.
2. WORK IN THE WATERWAY SHOULD BE TIMED TO TAKE PLACE DURING LOW OR NO-FLOW CONDITIONS. LOW FLOW CONDITIONS ARE FLOW AT OR BELOW THE NORMAL ELEVATION.
3. IF BYPASS PUMPING IS NECESSARY, THE INTAKE HOSE SHALL BE PLACED WITHIN A SUMP PIT TO PREVENT SEDIMENT FROM ENTERING THE HOSE. THE BYPASS DISCHARGE SHALL BE PLACED ON A NON-ERODIBLE, ENERGY DISSIPATING SURFACE (ROCK CHECK DAM, PLYWOOD, SHEET PILE, ETC.) PRIOR TO REJOINING THE STREAM FLOW AND SHALL NOT CAUSE EROSION OF DOWNSTREAM AREAS.
4. DEWATERING SHALL INCLUDE MEANS, METHOD AND MATERIALS TO DEWATER AND TO PROVIDE FILTRATION OF WATERS BEFORE RE-ENTERING THE WATERWAY AND SHALL BE COORDINATED WITH THE MLCSWCD AT THE PRE-CONSTRUCTION MEETING.

**MCHENRY-LAKE COUNTY SOIL AND WATER CONSERVATION DISTRICT NOTES**

1. THE CONTRACTOR AND ENGINEER SHALL MEET WITH THE MCHENRY-LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT TO COORDINATE ALL IN-STREAM WORK ACTIVITIES.
2. THE CONTRACTOR'S IN-STREAM WORK PLAN SHALL BE SUBMITTED TO THE SOIL & WATER CONSERVATION DISTRICT AND MCHENRY COUNTY FOR REVIEW AND APPROVAL PRIOR TO STARTING ANY WORK. THERE WILL BE NO ADDITIONAL COMPENSATION FOR PROVIDING THE COORDINATION AND WORK PLAN.
3. SEE EROSION CONTROL PLAN SHEETS FOR ADDITIONAL DETAILS, CONDITIONS, AND NOTES.

**MCHENRY COUNTY STANDARD SOIL EROSION AND SEDIMENT CONTROL NOTES**

1. CONTROL MEASURES SHALL MEET THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE ILLINOIS URBAN MANUAL (HTTPS://ILLINOISURBANMANUAL.ORG/) UNLESS STATED OTHERWISE.
2. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. AREAS OF THE DEVELOPMENT SITE THAT ARE NOT TO BE DISTURBED SHALL BE PROTECTED FROM CONSTRUCTION TRAFFIC OR OTHER DISTURBANCE UNTIL FINAL STABILIZATION IS ACHIEVED.
3. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, DEVELOPMENT SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
4. STABILIZATION BY SEEDING SHALL INCLUDE TOPSOIL PLACEMENT AND FERTILIZATION AS NECESSARY.
5. NATIVE SEED MIXTURES SHALL INCLUDE RAPID GROWING ANNUAL GRASSES OR SMALL GRAINS TO PROVIDE INITIAL TEMPORARY SOIL STABILIZATION.
6. OFF-SITE PROPERTY SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. VELOCITY DISSIPATION DEVICES SHALL BE PLACED AT CONCENTRATED DISCHARGE LOCATIONS AND ALONG THE LENGTH OF ANY OUTFALL CHANNEL, AS NECESSARY TO PREVENT EROSION.
7. SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO DISTURBANCE OF THE TRIBUTARY AREAS.
8. STABILIZATION OF DISTURBED AREAS SHALL BE INITIATED IMMEDIATELY WHENEVER ANY CLEARING, GRADING, EXCAVATING, OR OTHER EARTH DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED ON ANY PORTION OF THE DEVELOPMENT SITE, OR TEMPORARILY CEASED ON ANY PORTION OF THE DEVELOPMENT SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 7 CALENDAR DAYS. STABILIZATION OF DISTURBED AREAS SHALL BE INITIATED WITHIN 7 WORKING DAYS OF PERMANENT OR TEMPORARY CESSATION OF EARTH DISTURBING ACTIVITIES AND SHALL BE COMPLETED AS SOON AS POSSIBLE, BUT NOT LATER THAN 14 CALENDAR DAYS FROM THE INITIATION OF STABILIZATION IN THE WORK AREA. EXCEPTIONS TO THESE TIME FRAMES ARE SPECIFIED BELOW:
  - A. WHERE THE INTIATION OF STABILIZATION MEASURES IS PRECLUDED BY SNOW COVER, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE; AND
  - B. IN AREAS WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED AND WILL RESUME, A TEMPORARY STABILIZATION METHOD MAY BE USED.
9. DISTURBANCE OF STEEP SLOPES SHALL BE MINIMIZED. AREAS OR EMBANKMENTS HAVING SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITH STAKED IN PLACE EROSION CONTROL BLANKET IN COMBINATION WITH SEEDING, OR AN EQUIVALENT CONTROL MEASURE.
10. PERIMETER CONTROL MEASURES SHALL BE PROVIDED DOWNSLOPE AND PERPENDICULAR TO THE FLOW OF RUNOFF FROM DISTURBED AREAS, WHERE THE TRIBUTARY AREA IS GREATER THAN 5,000 SQUARE FEET, AND WHERE RUNOFF WILL FLOW IN A SHEET FLOW MANNER. PERIMETER EROSION BARRIER CONTROL SHALL ALSO BE PROVIDED AT THE BASE OF STOCKPILES.
11. THE STORMWATER MANAGEMENT SYSTEM SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION DOWNSLOPE FROM DISTURBED AREAS. INLET PROTECTION THAT REDUCES SEDIMENT LOADING, WHILE ALLOWING RUNOFF TO ENTER THE INLET SHALL BE REQUIRED FOR ALL STORM SEWERS. CHECK DAMS, OR AN EQUIVALENT CONTROL MEASURE, SHALL BE REQUIRED FOR ALL CHANNELS. FILTER FABRIC INLET PROTECTION AND STRAW BALE DITCH CHECKS ARE NOT ACCEPTABLE EROSION CONTROL MEASURES.
12. IF DEWATERING SERVICES ARE USED, DISCHARGES SHALL BE ROUTED THROUGH AN EFFECTIVE SEDIMENT CONTROL MEASURE (E.G. SEDIMENT TRAP OR AN EQUIVALENT MEASURE). THE ENFORCEMENT OFFICER SHALL BE NOTIFIED PRIOR TO THE COMMENCEMENT OF DEWATERING ACTIVITIES.
13. ALL TEMPORARY SOIL AND EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION OF THE DEVELOPMENT SITE IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NECESSARY. TRAPPED SEDIMENT SHALL BE REMOVED AND DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED.
14. STOCKPILED SOIL AND MATERIALS SHALL BE REMOVED FROM FLOOD HAZARD AREAS AT THE END OF EACH WORK DAY. SOIL AND MATERIALS STOCKPILED IN ISOLATED WETLANDS OF MCHENRY COUNTY (IWMC) OR BUFFER AREAS SHALL BE PLACED ON TIMBER MATS, OR AN EQUIVALENT CONTROL MEASURE.
15. EFFECTIVE CONTROL MEASURES SHALL BE UTILIZED IN ORDER TO MINIMIZE THE DISCHARGE OF POLLUTANTS FROM THE DEVELOPMENT SITE. AT A MINIMUM, CONTROL MEASURES SHALL BE IMPLEMENTED IN ORDER TO:
  - A. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATER; AND
  - B. MINIMIZE THE EXPOSURE TO BUILDING MATERIALS, BUILDING PRODUCTS, CONSTRUCTION WASTES, TRASH, LANDSCAPE MATERIALS, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, VEHICLE FLUIDS, SANITARY WASTE, AND OTHER MATERIALS PRESENT ON THE DEVELOPMENT SITE TO PRECIPITATION AND STORMWATER.
16. ADEQUATE RECEPTACLES SHALL BE PROVIDED FOR THE DEPOSITING OF ALL CONSTRUCTION MATERIAL DEBRIS GENERATED DURING THE DEVELOPMENT PROCESS. THE APPLICANT SHALL NOT CAUSE OR PERMIT THE DUMPING, DEPOSITING, DROPPING, THROWING, DISCARDING, OR LEAVING OF CONSTRUCTION MATERIAL DEBRIS UPON OR INTO ANY DEVELOPMENT SITE, CHANNEL, OR IWMC. THE DEVELOPMENT SITE SHALL BE MAINTAINED FREE OF CONSTRUCTION MATERIAL DEBRIS.
17. THE ENFORCEMENT OFFICER MAY REQUIRE ADDITIONAL SOIL EROSION AND SEDIMENT CONTROL MEASURES BASED ON DEVELOPED SITE SPECIFIC CONSIDERATIONS AND THE EFFECTIVENESS OF THE INSTALLED CONTROLLED MEASURES.

PLAN	SURVEYED	DATE
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NOTE BOOK NO.	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	

PROFILE	SURVEYED	DATE
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NOTE BOOK NO.	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	

MODEL: SH06ELMAMES  
FILE NAME: ...33939\_Soil Erosion Settlement Control Notes

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	DRAWN - KDC	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 8/23/2024	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SOIL EROSION AND SEDIMENT CONTROL GENERAL NOTES**

SCALE: N.T.S. SHEET 1 OF 1 SHEETS

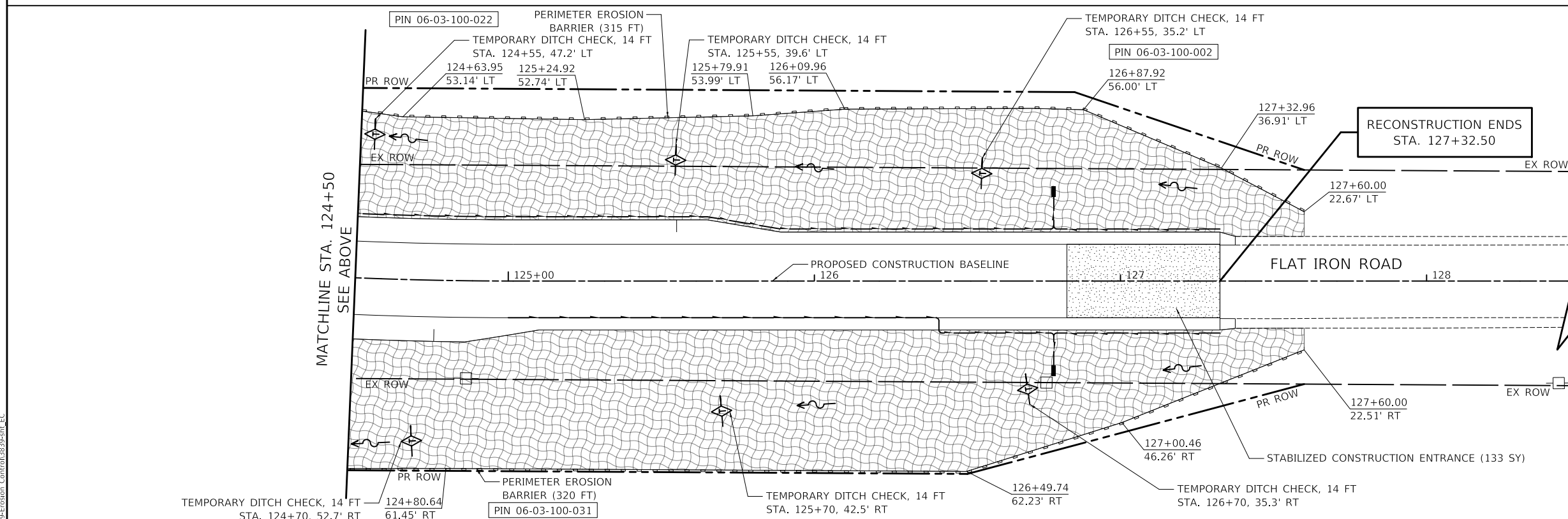
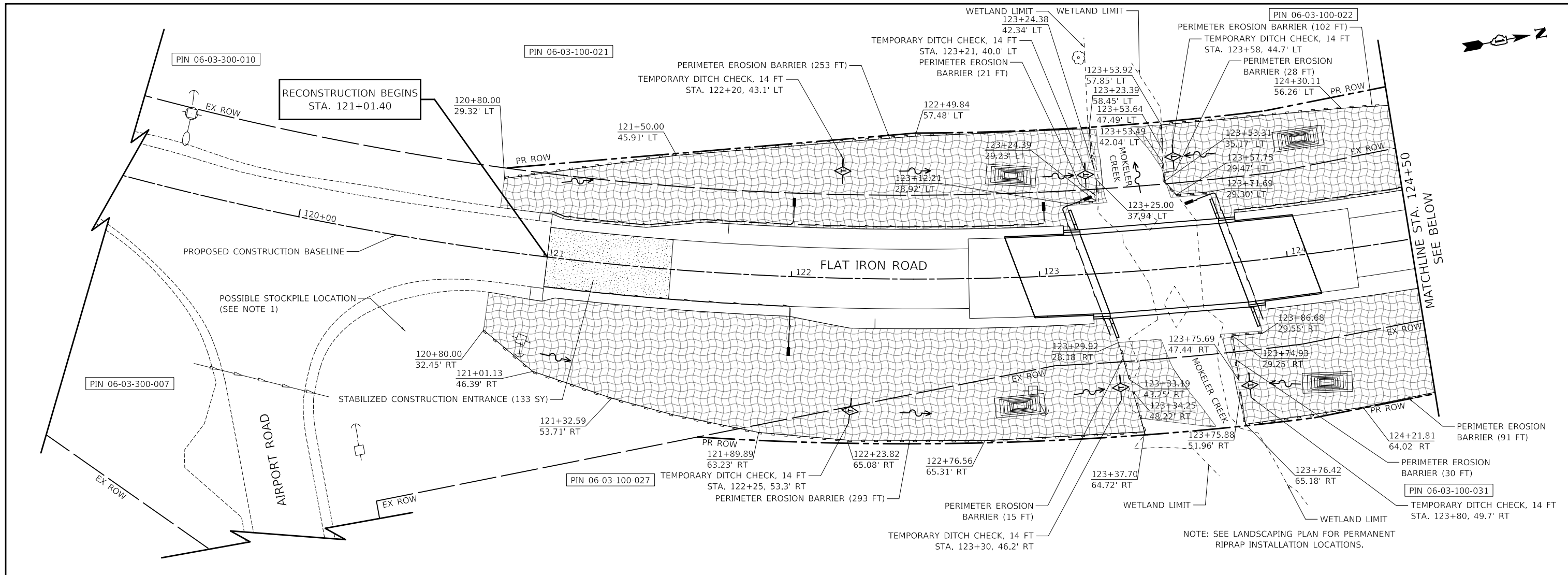
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4077	19-00508-00-BR	MCHENRY	92	24
CONTRACT NO. 61K76				
ILLINOIS		FED. AID PROJECT		



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	NOTE BOOK NO.	
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MODEL: SMODEL\MAMES  
FILE NAME: ...002-Erosion Control\13339-ent\_EC



**LEGEND**

- EROSION CONTROL BLANKET (SPECIAL)
- TEMPORARY DITCH CHECKS
- STABILIZED CONSTRUCTION ENTRANCE
- PERIMETER EROSION BARRIER
- EXISTING TREES
- TEMPORARY SEDIMENT TRAP  
SEE DETAIL SHEET 26

**NOTE 1:** THE CONTRACTOR SHALL SUBMIT HIS/HER PLAN FOR STOCKPILING OF MATERIAL TO THE ENGINEER FOR APPROVAL PRIOR TO THE START OF WORK. THE CONTRACTOR MAY PROPOSE OTHER LOCATIONS FOR THE STOCKPILE WITHIN THE PROJECT LIMITS. TEMPORARY EROSION CONTROL FOR THE STOCKPILE SHALL BE PAID FOR USING THE VARIOUS EROSION CONTROL PAY ITEMS IN THE CONTRACT.

STOCKPILED SOIL AND MATERIALS SHALL BE REMOVED FROM FLOOD HAZARD AREAS AT THE END OF EACH WORK DAY. SOIL AND MATERIALS STOCKPILED IN IWMC OR BUFFER AREAS SHALL BE PLACED ON TIMBER MATS, OR AN EQUIVALENT CONTROL MEASURE.

USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

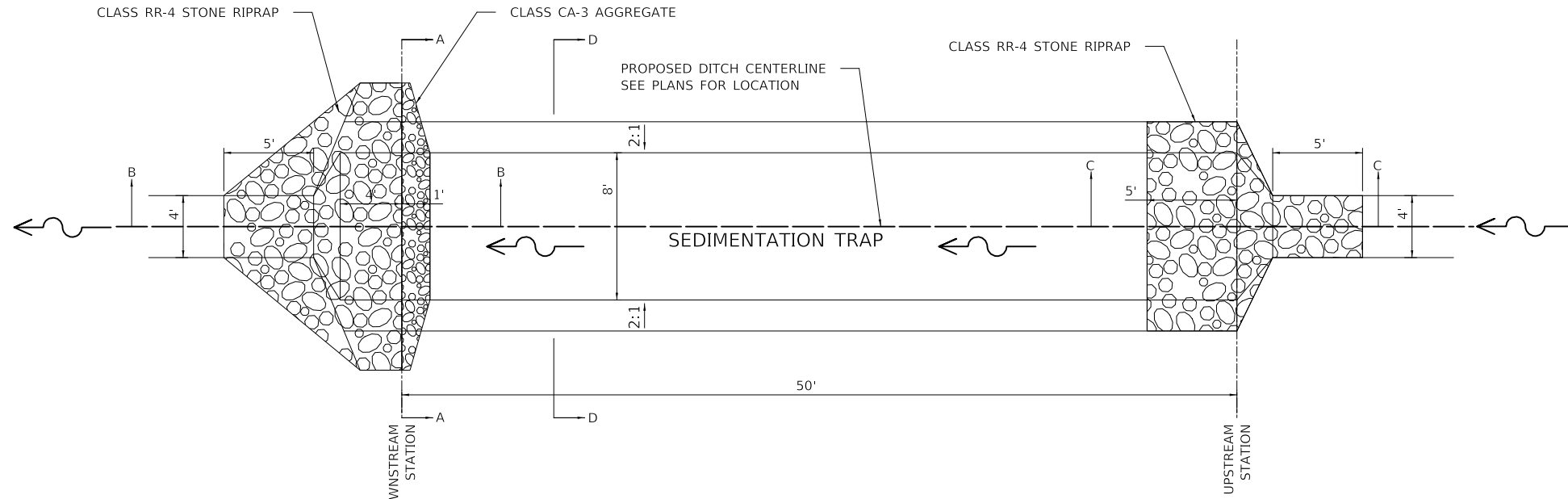
**SOIL EROSION AND SEDIMENT CONTROL PLAN**

SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. 121+01.40 TO STA. 127+32.50

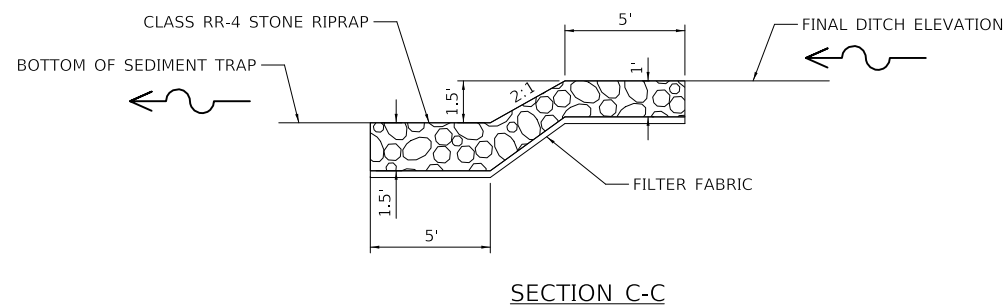
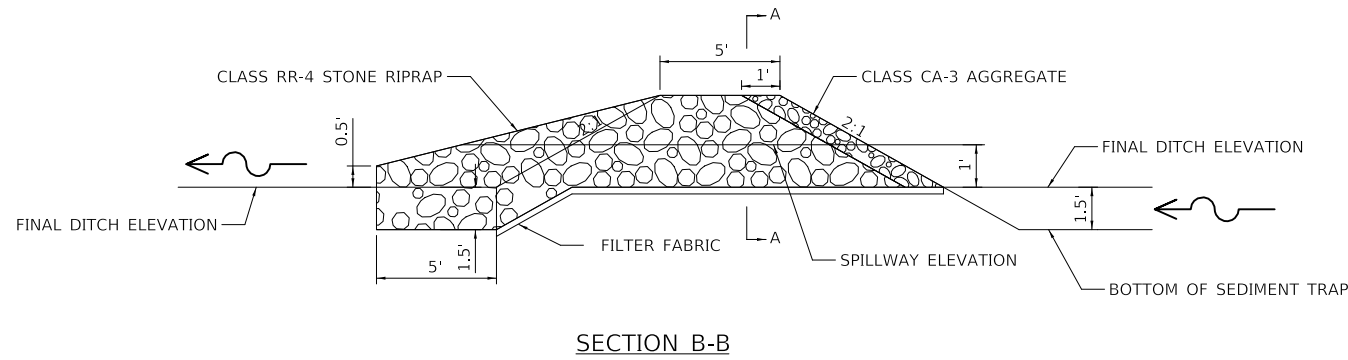
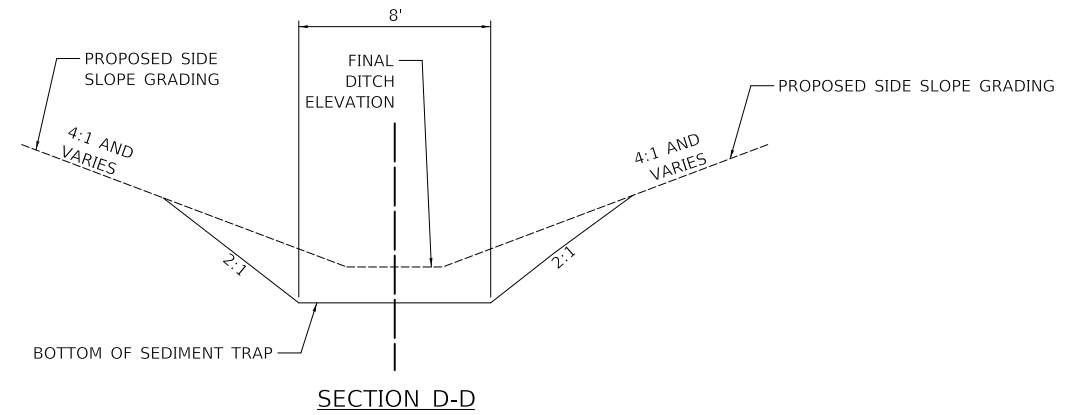
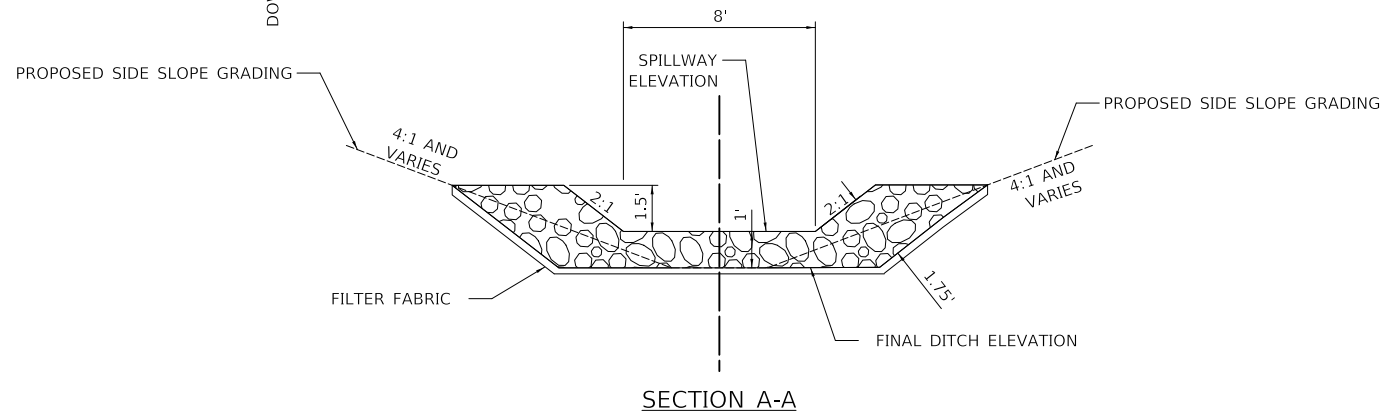
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4077	19-00508-00-BR	MCHENRY	92	25
			CONTRACT NO. 61K76	
		ILLINOIS	FED. AID PROJECT	

DATE	
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BY	
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SEDIMENT TRAP NO.	LOCATION		SPILLWAY	
	UPSTREAM STATION	DOWNSTREAM STATION	RT	ELEV
ST-1	122+50	123+00	RT	896.53
ST-2	122+50	123+00	LT	896.14
ST-3	124+50	124+00	RT	895.34
ST-4	124+50	124+00	LT	894.00



NOTES:  
 1) THIS WORK SHALL BE PERFORMED PER THE REQUIREMENTS FOR SEDIMENT BASINS CONTAINED WITHIN SECTION 280 OF THE STANDARD SPECIFICATIONS. THE UNIT WEIGHT USED TO CALCULATE RR-4 STONE IS 110 LB/CF AND THE UNIT WEIGHT USED TO CALCULATE CA-3 AGGREGATE IS 125 LB/CF, BOTH OF WHICH SHALL BE PAID FOR AS "AGGREGATE (EROSION CONTROL)". MATERIAL REQUIRED TO FILL THE SEDIMENT TRAP TO MEET THE FINAL CONDITION SHALL BE MEASURED AND PAID FOR AS "FURNISHED EXCAVATION".

**SEDIMENT TRAP DETAIL**

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	DRAWN - KDC	REVISED -
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PLOT DATE = 8/23/2024	DATE - 7/16/2024	REVISED -

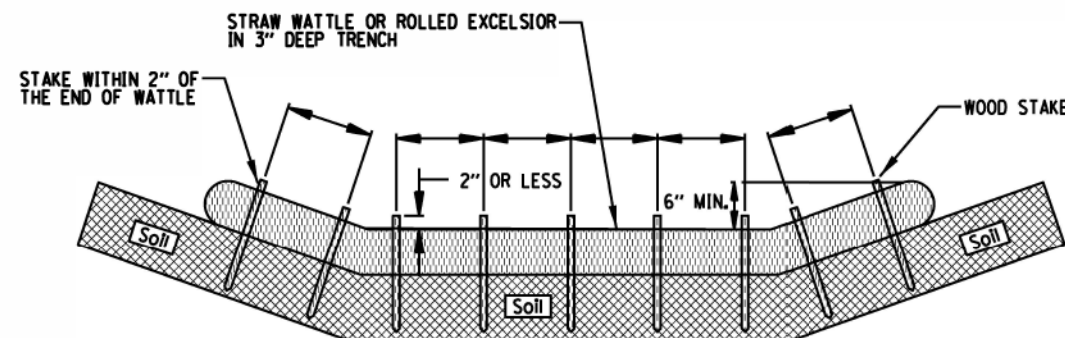
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>EROSION AND SEDIMENT CONTROL DETAILS</b>	
SCALE: N.T.S.	SHEET 1 OF 4 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				

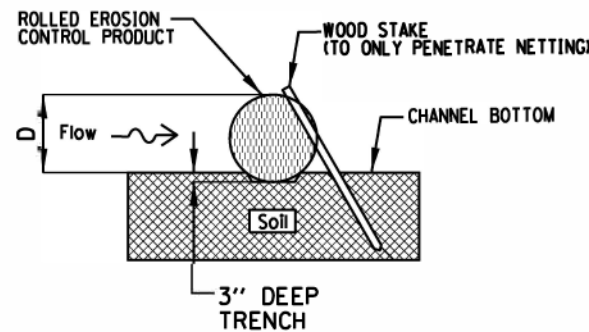
# ROLLED EROSION CONTROL PRODUCTS

## STAKING PATTERN GUIDE



- NOTES:**
1. OVERLAP MINIMUM IS THE DIAMETER OF THE ROLL.
  2. 4' SPACING FOR WATTLES.
  3. 2' SPACING FOR ROLLED EXCELSIOR.
  4. OR SPACE ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

## STAKE DETAIL



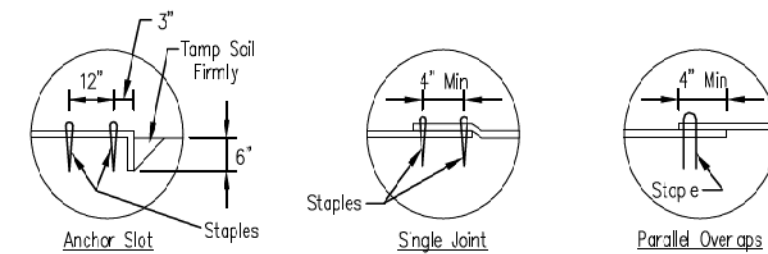
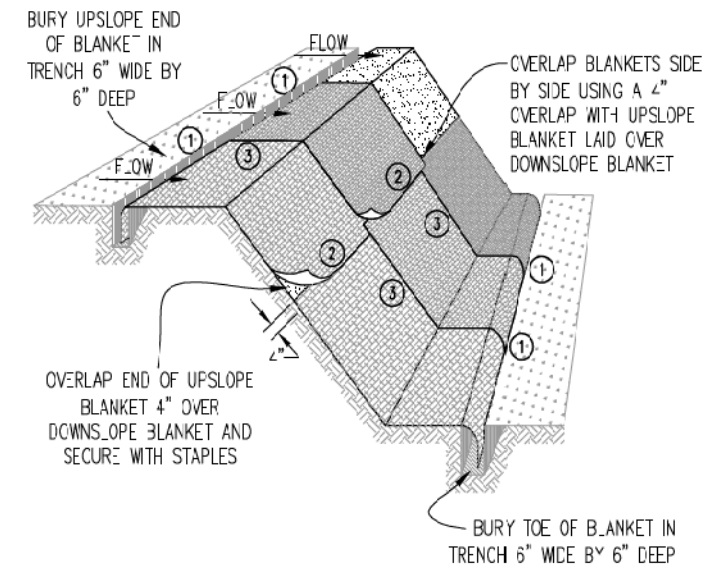
- NOTES:**
1. DRAWINGS ARE NOT TO SCALE.
  2. ENDS OF WATTLES OR ROLLED EXCELSIOR SHALL BE TURNED AT LEAST 6" UPSLOPE.
  3. RECOMMENDED STAKES ARE 1 1/8" WIDE x 1 1/8" THICK x 30" LONG.
  4. STAKES SHALL NOT EXTEND ABOVE THE STRAW WATTLE MORE THAN 2".
  5. SPACING: THE TOE OF THE UPSTREAM DITCH CHECK SHALL CREATE A HORIZONTAL LINE WITH THE TOP OF THE DOWNSTREAM DITCH CHECK.

REFERENCE Project	_____
Designed	_____ Date _____
Checked	_____ Date _____
Approved	_____ Date _____



STANDARD DWG. NO.  
IUM-514  
SHEET 1 OF 1  
DATE 08-2-2019

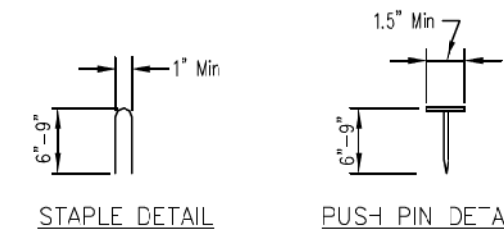
AUTOCAD2006



DETAIL 1

DETAIL 2

DETAIL 3



STAPLE DETAIL

PUSH PIN DETAIL

**NOTES:**

1. Staples shall be placed in a diamond pattern at 2 per s.y. for stiched blankets. Non-stiched shall use 4 staples per s.y. of material. This equates to 200 staples with stiched blanket and 400 staples with non-stiched blanket per 100 s.y. of material.
2. Staple or push pin lengths shall be selected based on soil type and conditions. (minimum staple length is 6")
3. Erosion control material shall be placed in contact with the soil over a prepared seedbed.
4. All anchor slots shall be stapled at approximately 12" intervals.

Sheet 1 of 1  
IUM-530

## EROSION CONTROL BLANKET INSTALLATION DETAILS

Designed	_____	Date	_____
Drawn	E. JOHNSON	Date	11/08
Checked	_____		
Approved	_____		

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	AS-BUILT	
	NO. _____	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
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PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

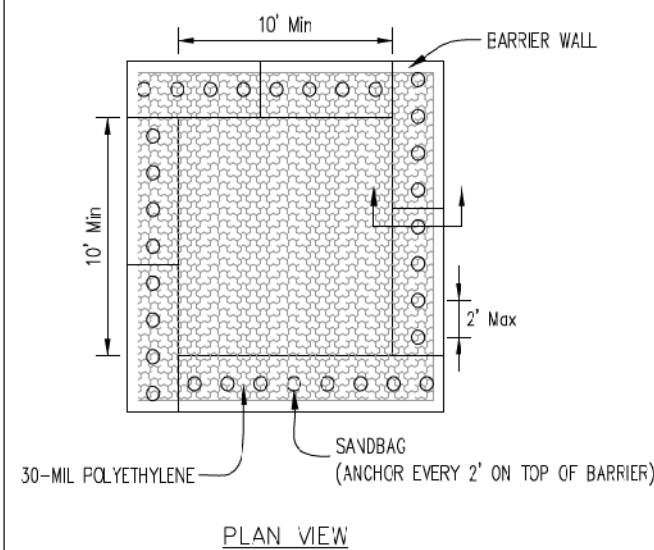
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SCALE: N.T.S. SHEET 2 OF 4 SHEETS

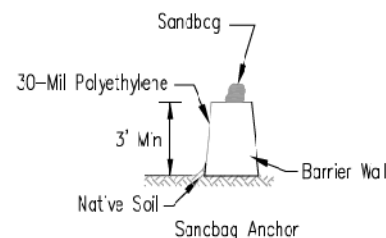
EROSION AND SEDIMENT CONTROL DETAILS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 61K76	
ILLINOIS FED. AID PROJECT				

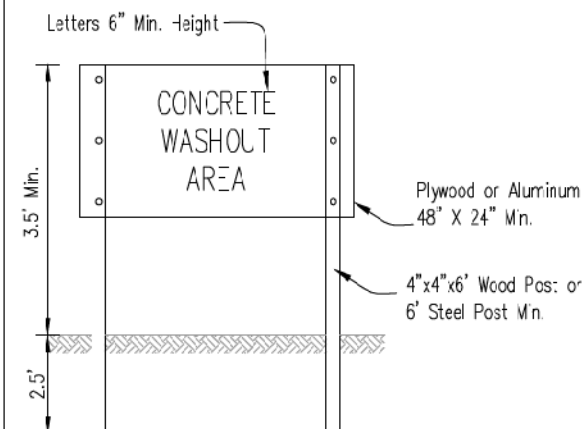
90 ILLICAD2006



PLAN VIEW



BARRIER WALL ANCHOR SECTION



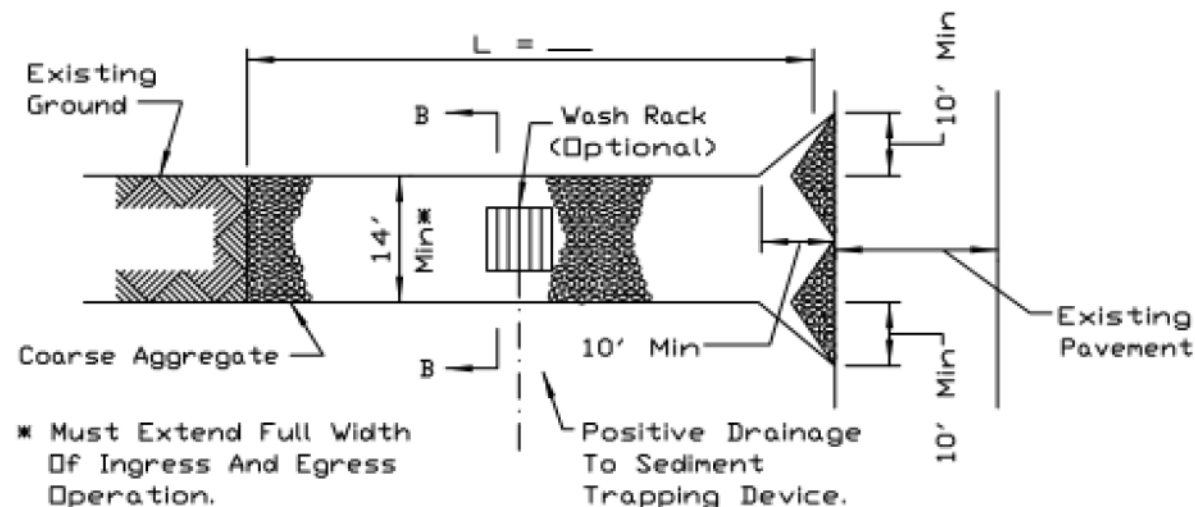
SIGN DETAIL

NOTES:

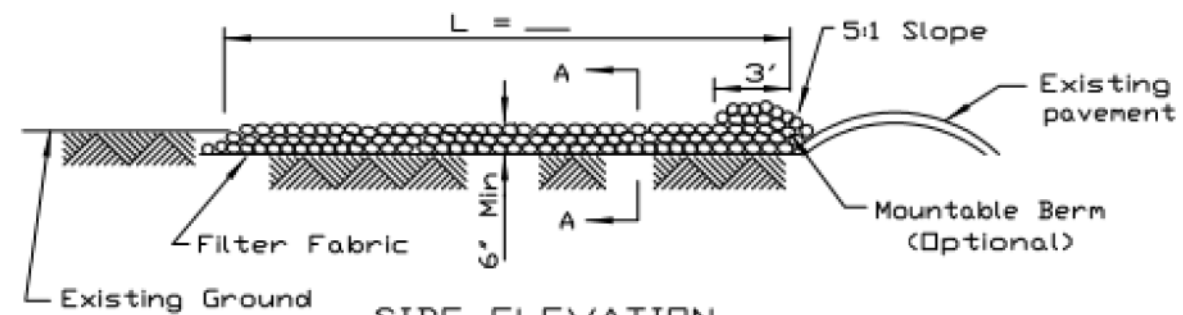
1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.

3/16/24 1/10/24 1/10/24 1/10/24 1/10/24	DESIGNED - KDC	DATE
	DRAWN - KDC	6/08
	CHECKED - DJK	
	APPROVED	
	TEMPORARY CONCRETE WASHOUT FACILITY - BARRIER WALL	

STABILIZED CONSTRUCTION ENTRANCE PLAN



PLAN VIEW



SIDE ELEVATION

NOTES:

1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table I or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
2. Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
3. Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
4. If wash racks are used they shall be installed according to the manufacturer's specifications.

REFERENCE	
Project	_____
Designed	_____ Date _____
Checked	_____ Date _____
Approved	_____ Date _____



STANDARD DWG. NO.
IL-630
SHEET 1 OF 2
DATE 8-18-94

PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	GRADE CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
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	FILE NAME	

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	DATE - 7/16/2024	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL DETAILS

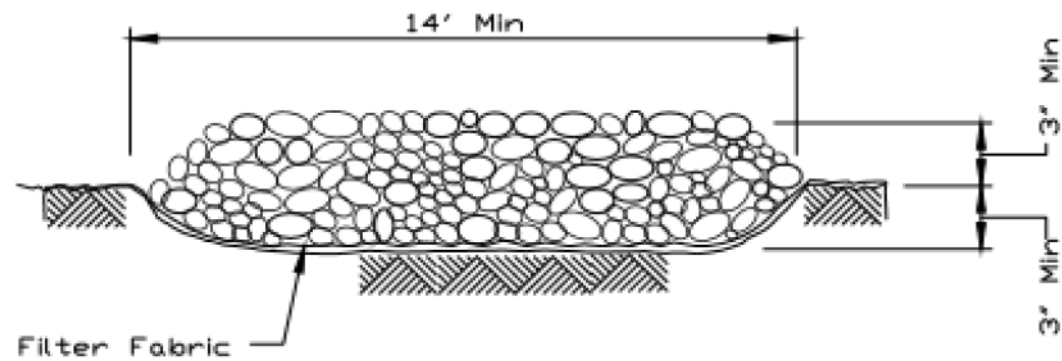
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				

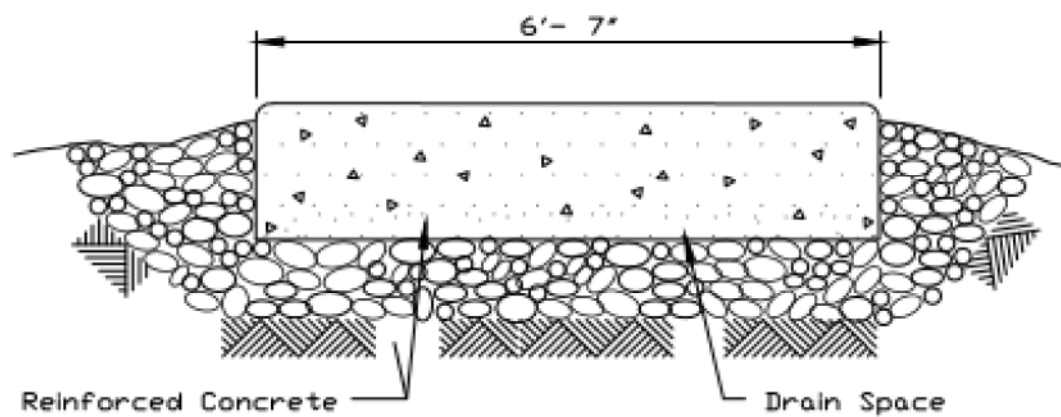
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### STABILIZED CONSTRUCTION ENTRANCE PLAN



SECTION A-A



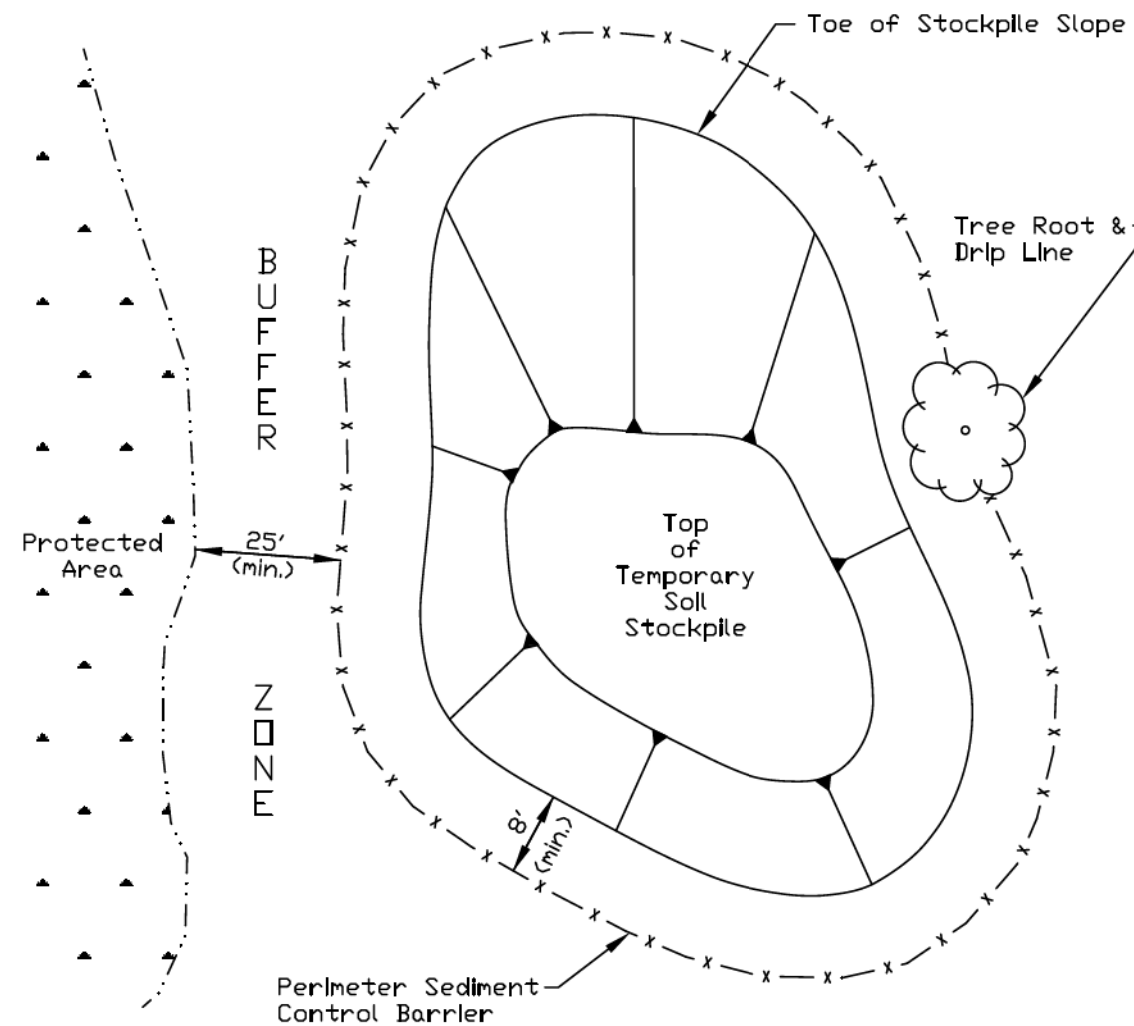
SECTION B-B

REFERENCE	Project	_____
	Designed	_____ Date _____
	Checked	_____ Date _____
	Approved	_____ Date _____



STANDARD DWG. NO.  
IL-630  
SHEET 2 OF 2  
DATE 8-18-94

### TEMPORARY SOIL STOCKPILE DETAIL



**NOTES:**

1. Stockpile slopes should be based on angle of repose of the soil material to avoid potential sloughing of the slope.
2. Soil stockpile to be stabilized in accordance with practical standards.
3. Do not locate stockpile within overland drainage flow path, designated floodways, drip line or over the root crown of adjacent trees.
4. Provisions for sediment control practices may be required along haul roads and entrance/exit locations for access the soil stockpile that can create flow path for stormwater runoff.
5. Installation of benches, terraces, or slope interrupters should be considered.
6. Avoid building soil stockpiles on impervious surfaces.
7. Linear sediment trap surrounding the stockpile base may be used to control sediment.

REFERENCE	Project	_____
	Designed	_____ Date _____
	Checked	_____ Date _____
	Approved	_____ Date _____



STANDARD DWG. NO.  
IUM-627  
SHEET 1 OF 1  
DATE JANUARY 2017

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL DETAILS

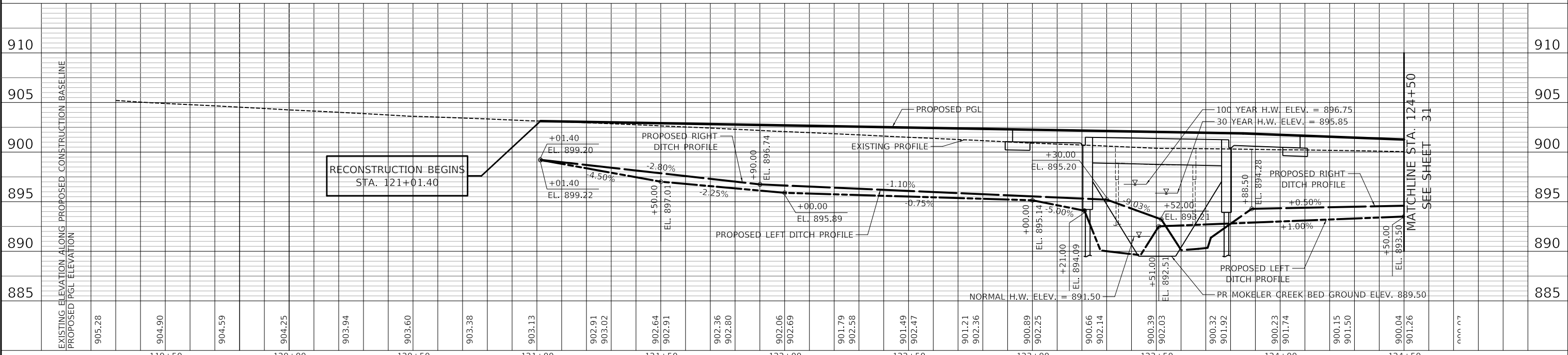
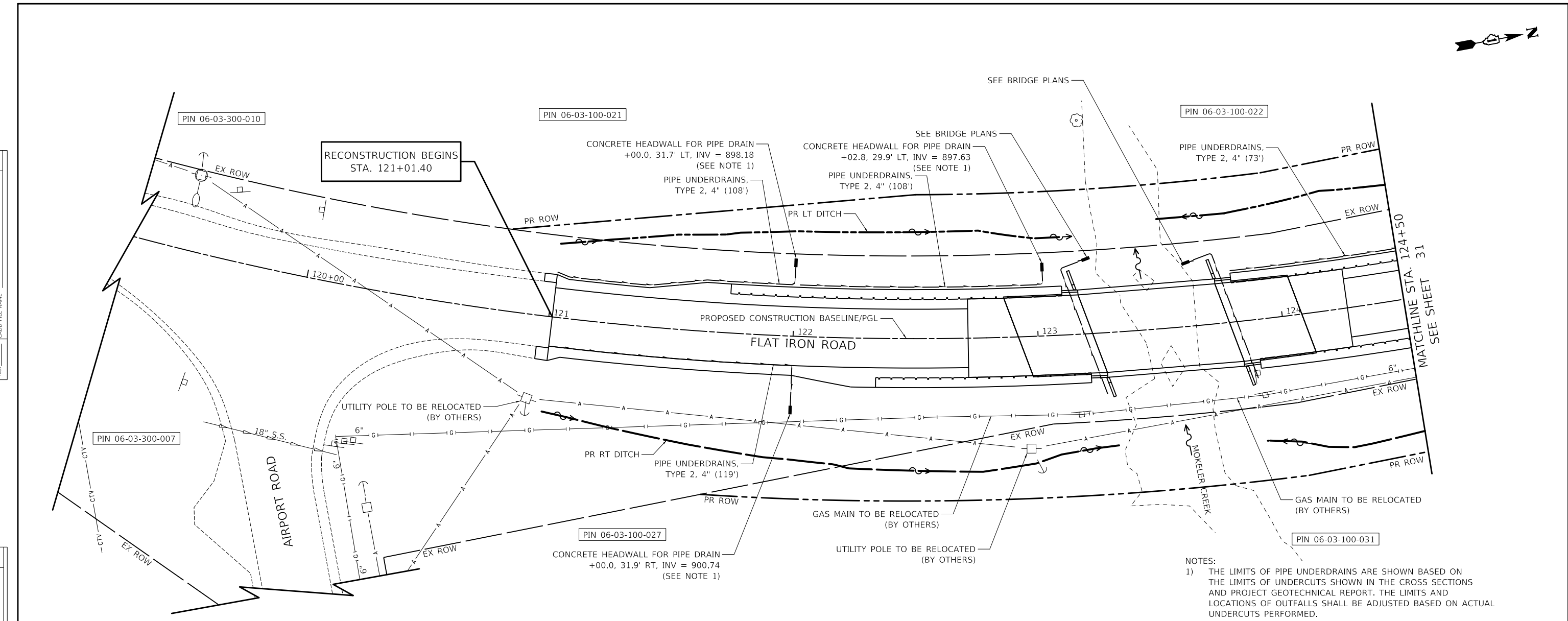
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 61K76	
ILLINOIS			FED. AID PROJECT	



PLAN	SURVEYED	DATE
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	ALIGNMENT CHECKED	
	NOTE BOOK NO.	
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PROFILE	SURVEYED	DATE
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	GRADES CHECKED	
	NOTE BOOK NO.	
	STRUCTURE NOTATIONS CHECKED	



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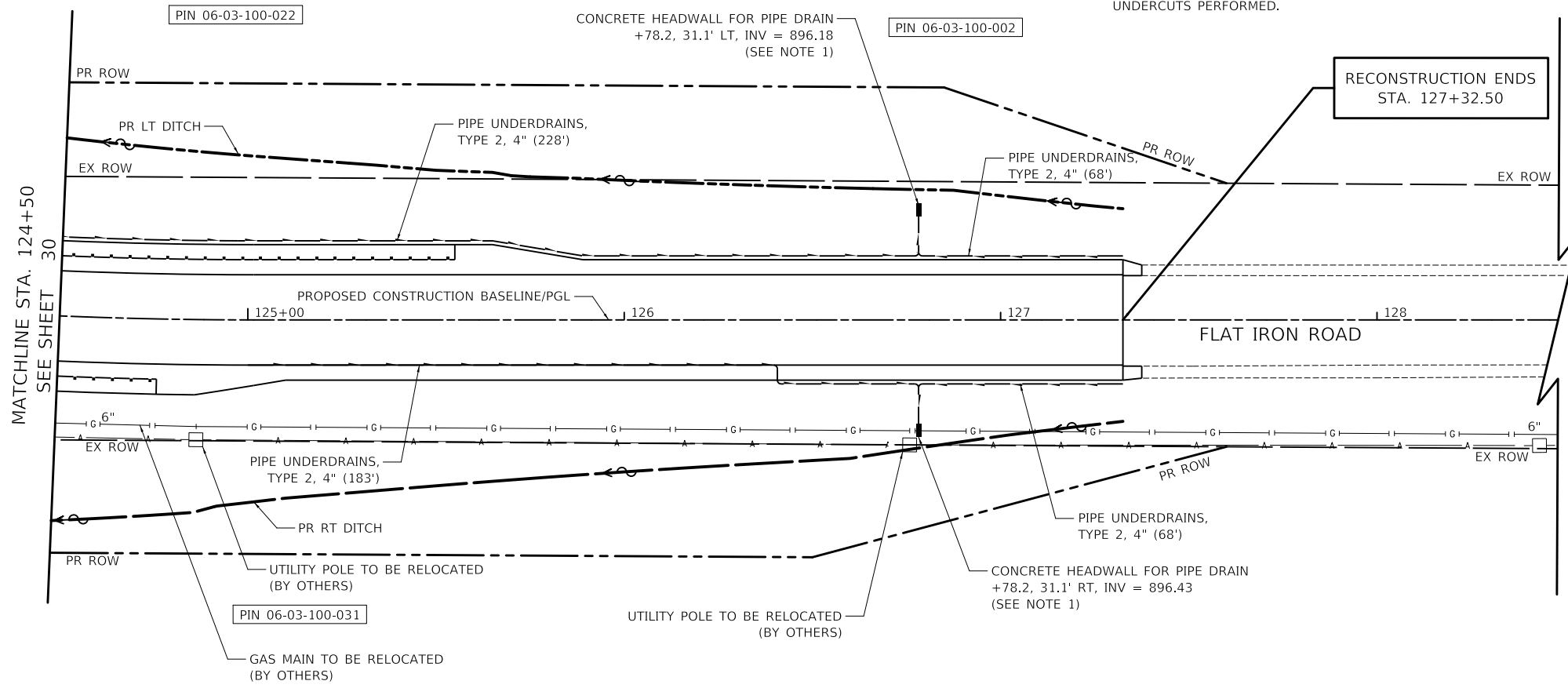
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>DRAINAGE AND GRADING</b>	
SCALE: 1"=20'H/5'V	SHEET 1 OF 2 SHEETS
STA. 121+01.40 TO STA. 124+50.00	

F.A.U. RTE. 4077	SECTION 19-00508-00-BR	COUNTY MCHENRY	TOTAL SHEETS 92	SHEET NO. 30
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				

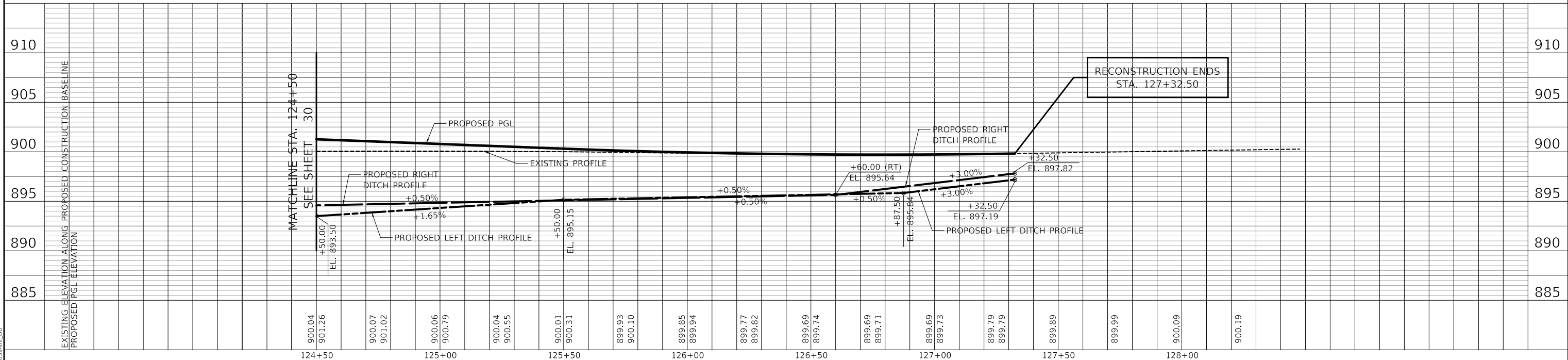


NOTES:  
 1) THE LIMITS OF PIPE UNDERDRAINS ARE SHOWN BASED ON THE LIMITS OF UNDERCUTS SHOWN IN THE CROSS SECTIONS AND PROJECT GEOTECHNICAL REPORT. THE LIMITS AND LOCATIONS OF OUTFALLS SHALL BE ADJUSTED BASED ON ACTUAL UNDERCUTS PERFORMED.



PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	FILE NAME	
	NO.	
	BY	
	DATE	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	FILE NAME	
	NO.	
	BY	
	DATE	



MODEL: SMODEL\MAMES  
 FILE NAME: ...133235-HI\_D01

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	DRAWN - KDC	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 8/23/2024	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**DRAINAGE AND GRADING**  
 SCALE: 1"=20'H/5'V SHEET 2 OF 2 SHEETS STA. 124+50.00 TO STA. 127+32.50

F.A.U. RTE. 4077	SECTION 19-00508-00-BR	COUNTY MCHENRY	TOTAL SHEETS 92	SHEET NO. 31
			CONTRACT NO. 61K76	
			ILLINOIS FED. AID PROJECT	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

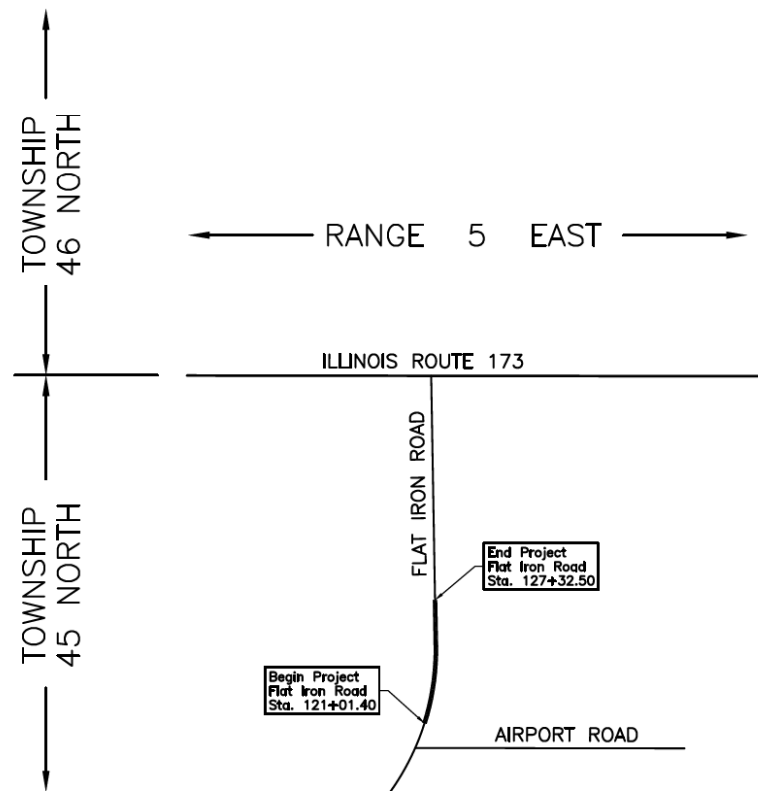
# PLAT OF HIGHWAYS

**ROUTE: FLAT IRON ROAD**  
**SECTION: 19-00508-00-BR**  
**COUNTY: McHENRY**  
**LIMITS: AT MOKELER CREEK**  
**JOB NO.: R-55-001-97**

PLAN	SURVEYED	DATE
	PLOTTED	
NOTE BOOK NO.	ALIGNMENT CHECKED	
	FIELD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
NOTE BOOK NO.	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	

PARCEL NUMBER	OWNER	SHEET NUMBER	PROPERTY ACQUIRED BY
0001	Thomas R. Hansen, as Trustee of a Trust Agreement dated April 7, 1981, known as The Thomas R. Hansen Declaration of Trust	2 & 3	
0002	Thomas R. Hansen, as Trustee of a Trust Agreement dated April 7, 1981, known as The Thomas R. Hansen Declaration of Trust	2 & 4	
0003	Flat Iron Farms II, LLC, an Illinois limited liability company	2 & 4	



**LOCATION MAP**

PROJECT LENGTH = 631.10 LIN. FT. = 0.120 MILE, FLAT IRON ROAD

McHENRY LAKE  
KANE DuPAGE COOK  
WILL  
SCHAUMBURG  
DISTRICT HEADQUARTERS: \*  
LOCATION OF SECTION INDICATED THUS: -

**PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS**

IDOT USE ONLY

MODEL: SMODEL\MAMES  
FILE NAME: ...11-ROW Plats\3839-sh-plat.dgn

USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PLAT OF HIGHWAYS

SCALE: N.T.S. SHEET 1 OF 5 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	32
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				





PART OF THE WEST 1/2 OF SEC. 3 AND PART OF THE EAST 1/2 OF SEC. 4, TWP. 45 N., R. 5 E. OF THE 3RD. P.M., IN McHENRY COUNTY, ILLINOIS.

### LEGEND

	SECTION CORNER		QUARTER SECTION CORNER
	SECTION LINE		QUARTER SECTION LINE
	PLATTED LOT LINE		PROPERTY (DEED) LINE
	APPARENT PROPERTY LINE		EXISTING CENTER LINE
	PROPOSED CENTER LINE		EXISTING RIGHT OF WAY LINE
	PROPOSED RIGHT OF WAY LINE		PROPOSED EASEMENT
	EXISTING EASEMENT		EXISTING ACCESS CONTROL LINE
	PROPOSED ACCESS CONTROL LINE		MEASURED DIMENSION
	COMPUTED DIMENSION		RECORD DIMENSION
	EXISTING BUILDING	 Scale: 1"=200'	

Bearings and Coordinates are referenced to the Illinois Coordinate System NAD 83(2011) East Zone.

- IRON PIPE OR ROD FOUND      ⊕ "MAG" NAIL SET
- + CUT CROSS FOUND OR SET      ● 5/8" REBAR SET
- 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.
- M 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 SURVEYORS REGISTRATION NUMBER.
- ⊙ PERMANENT SURVEY MARKER, I.D.O.T STD 667101-02 (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET.

STATE OF ILLINOIS }  
 COUNTY OF LAKE }SS

THIS IS TO CERTIFY THAT WE, JORGENSEN & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION, NUMBER 184-2771, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON BETWEEN SECTION 3, TOWNSHIP 45N., RANGE 5E. AND SECTION 4, TOWNSHIP 45N., RANGE 5E., OF THE THIRD PRINCIPAL MERIDIAN, McHENRY 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 THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT LAKE VILLA, ILLINOIS THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_ A.D.

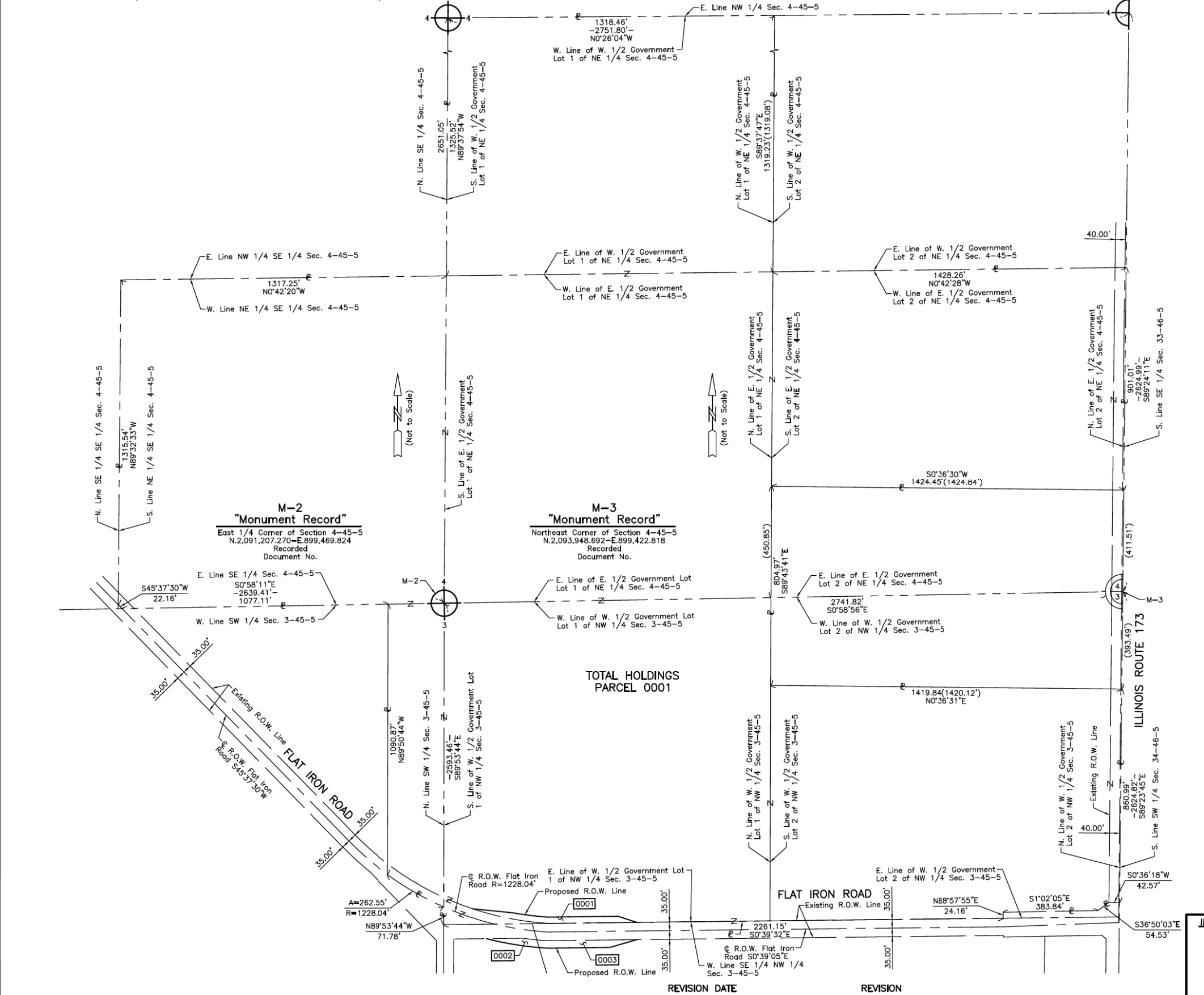
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-2797  
 LICENSE EXPIRATION DATE: NOVEMBER 30, 2024  
 THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

All dimensions are measured unless otherwise specified.  
 Areas shown on this plat are ground.  
 All measured and computed distances are grid not ground.  
 To obtain ground distances, divide grid distances shown by the combined factor of 0.9999450576.

JORGENSEN & ASSOCIATES, INC.  
 120 PARK AVENUE  
 LAKE VILLA, ILLINOIS 60046  
 (847) 356-3371

**PLAT OF HIGHWAYS**  
 STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 FLAT IRON ROAD  
 LIMITS: AT MOKELER CREEK COUNTY: McHENRY  
 SECTION: 19-00508-00-BR JOB NO.: R-55-001-97  
 STATION NONE TO STATION  
 SCALE: 1"=200' SHEET 3 OF 5

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



PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNED	
	CHECKED	
	FILED	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES	
	CHECKED	
	STRUCTURE	
	NOTARIS	
	CHWD	

MODEL: SHODLNAME  
 FILE NAME: ...11-HROW Plats\3839-sh-plat.dgn

USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SCALE: N.T.S.	SHEET 3 OF 5 SHEETS
---------------	---------------------

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	34
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				

PART OF THE NORTH 1/2 OF SEC. 3, TWP. 45 N., R. 5 E. OF THE 3RD. P.M., IN McHENRY COUNTY, ILLINOIS.

**LEGEND**

SECTION CORNER: 9 10 15 16

QUARTER SECTION CORNER: 16 15

SECTION LINE: ---

QUARTER SECTION LINE: - - -

QUARTER, QUARTER SECTION LINE: - · - · -

PLATTED LOT LINE: - · - · -

PROPERTY (DEED) LINE: - - -

APL: ---

APPARENT PROPERTY LINE: ---

EXISTING CENTER LINE: ---

PROPOSED CENTER LINE: ---

EXISTING RIGHT OF WAY LINE: ---

PROPOSED RIGHT OF WAY LINE: ---

EXISTING EASEMENT: ---

PROPOSED EASEMENT: ---

EXISTING ACCESS CONTROL LINE: ---

PROPOSED ACCESS CONTROL LINE: ---

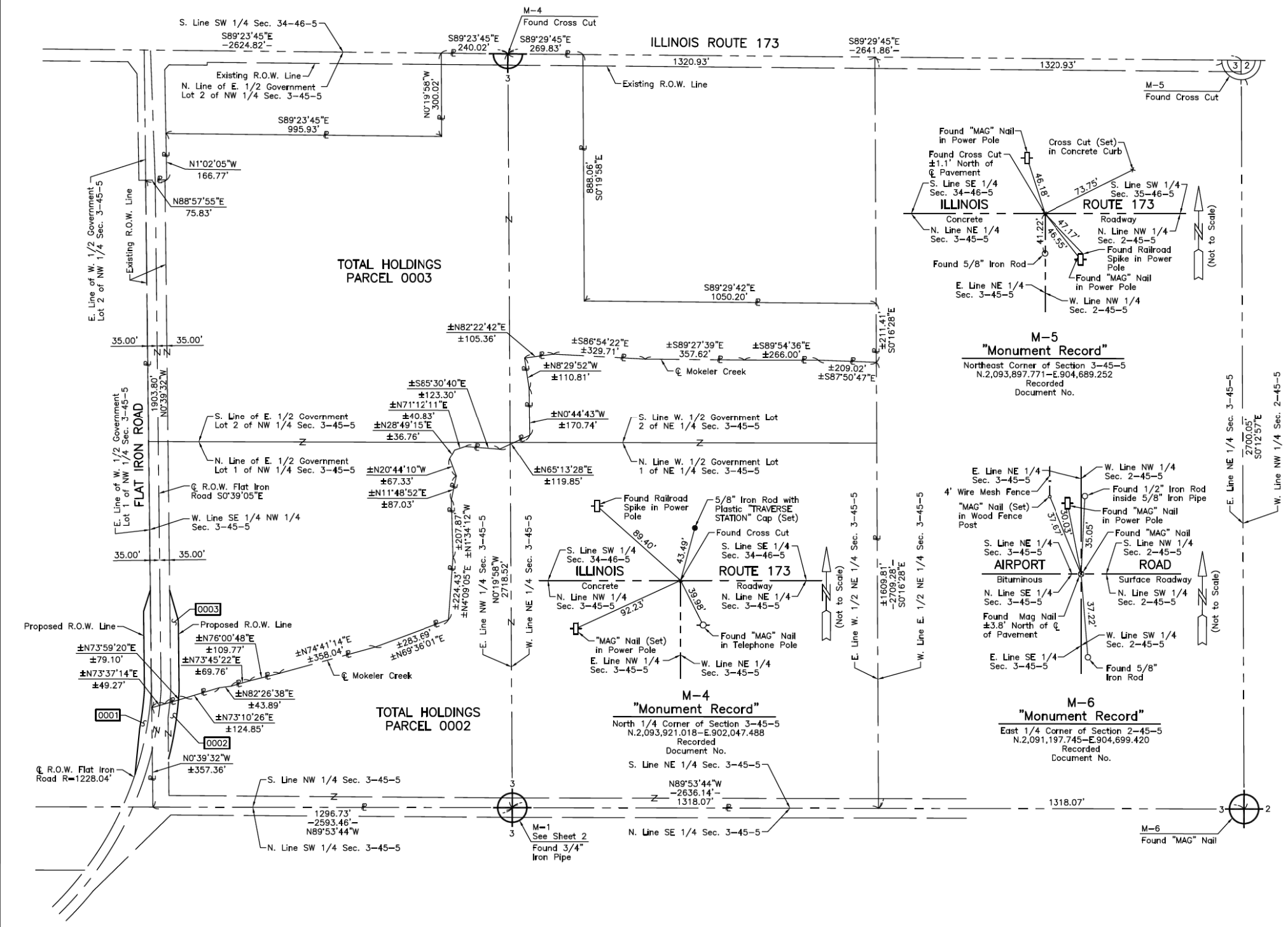
MEASURED DIMENSION: ---

COMPUTED DIMENSION: ---

RECORD DIMENSION: ---

EXISTING BUILDING: [Hatched Box]

Scale: 1"=200'



Bearings and Coordinates are referenced to the Illinois Coordinate System NAD 83(2011) East Zone.

○ IRON PIPE OR ROD FOUND      ⊕ "MAG" NAIL SET

+ CUT CROSS FOUND OR SET      ● 5/8" REBAR SET

■ 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.

■ M 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 SURVEYORS REGISTRATION NUMBER.

⊙ PERMANENT SURVEY MARKER, I.D.O.T STD 667101-02 (TO BE SET BY OTHERS)

□ RIGHT OF WAY STAKING PROPOSED TO BE SET.

STATE OF ILLINOIS } SS

COUNTY OF LAKE } SS

THIS IS TO CERTIFY THAT WE, JORGENSEN & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION, NUMBER 184-2771, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 3, TOWNSHIP 45N., RANGE 5E., OF THE THIRD PRINCIPAL MERIDIAN, McHENRY 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 THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT LAKE VILLA, ILLINOIS THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-2797  
 LICENSE EXPIRATION DATE: NOVEMBER 30, 2024  
 THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

All dimensions are measured unless otherwise specified.  
 Areas shown on this plat are ground.  
 All measured and computed distances are grid not ground.  
 To obtain ground distances, divide grid distances shown by the combined factor of 0.9999450576.

JORGENSEN & ASSOCIATES, INC.  
 120 PARK AVENUE  
 LAKE VILLA, ILLINOIS 60046  
 (847) 356-3371

**PLAT OF HIGHWAYS**  
 STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 FLAT IRON ROAD  
 LIMITS: AT MOKELER CREEK COUNTY: McHENRY  
 SECTION: 19-00508-00-BR JOB NO.: R-55-001-97  
 STATION NONE TO STATION  
 SCALE: 1"=200' SHEET 4 OF 5

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

DATE	
BY	
PLAN	
SURVEYED	
PLOTTED	
ALIGNED	
CHECKED	
NO. _____	
NOTE BOOK	
NO. _____	
FILE NAME	
FILE NO.	

DATE	
BY	
PROFILE	
SURVEYED	
PLOTTED	
GRADES CHECKED	
NO. _____	
NOTE BOOK	
NO. _____	
FILE NAME	
FILE NO.	

REVISION DATE      REVISION

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PLAT OF HIGHWAYS

USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	35
				CONTRACT NO. 61K76
SCALE: N.T.S.		SHEET 4 OF 5 SHEETS		ILLINOIS FED. AID PROJECT

MODEL: SHODLNAME5  
 FILE NAME: ...11-ROW Plots3839-sh-plat.dgn

PART OF THE WEST 1/2 OF SEC. 3, TWP. 45 N., R. 5 E. OF THE 3RD. P.M., IN McHENRY COUNTY, ILLINOIS.

**LEGEND**

- SECTION CORNER
- QUARTER SECTION CORNER
- SECTION LINE
- QUARTER SECTION LINE
- QUARTER, QUARTER SECTION LINE
- PLATTED LOT LINE
- PROPERTY (DEED) LINE
- APL APPARENT PROPERTY LINE
- EXISTING CENTER LINE
- PROPOSED CENTER LINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED RIGHT OF WAY LINE
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING ACCESS CONTROL LINE
- PROPOSED ACCESS CONTROL LINE
- MEASURED DIMENSION
- COMPUTED DIMENSION
- RECORD DIMENSION
- EXISTING BUILDING

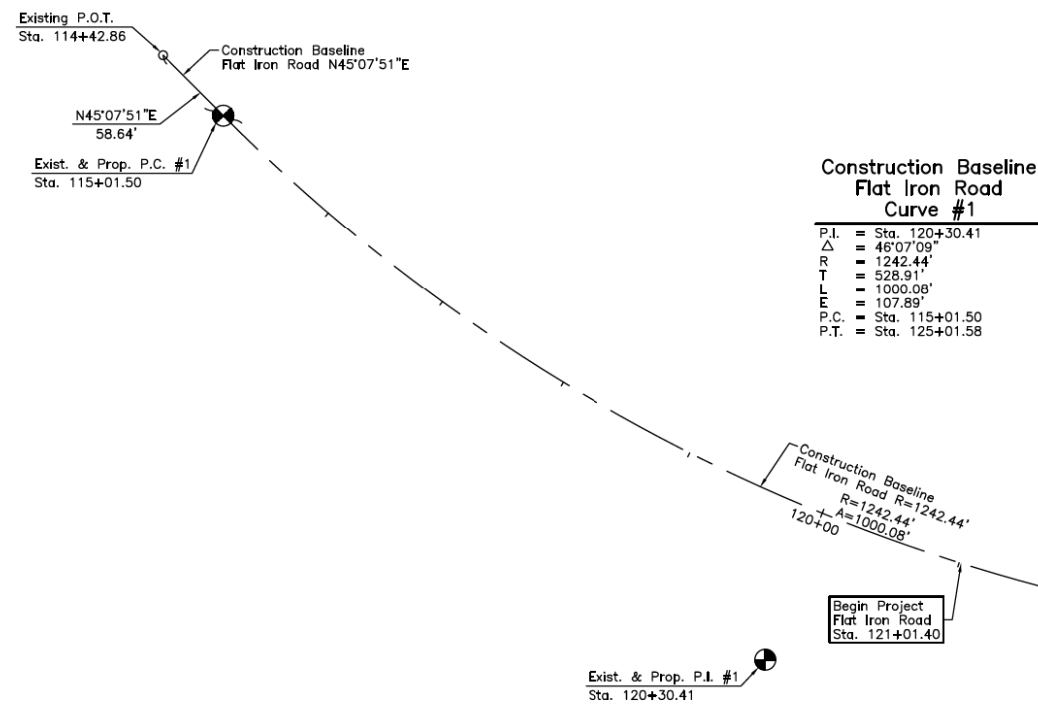
Scale: 1"=60'

Bearings and Coordinates are referenced to the Illinois Coordinate System NAD 83(2011) East Zone.

- IRON PIPE OR ROD FOUND
- ⊕ "MAG" NAIL SET
- + CUT CROSS FOUND OR SET
- 5/8" REBAR SET
- 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.
- M 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 SURVEYORS REGISTRATION NUMBER.
- ⊙ PERMANENT SURVEY MARKER, I.D.O.T STD 667101-02 (TO BE SET BY OTHERS)
- RIGHT OF WAY STAKING PROPOSED TO BE SET.

PROJECT COORDINATES  
Illinois Coordinate System NAD 83(2011) East Zone

STATION	NORTH	EAST
114+42.86	2,090,782.898	900,390.389
115+01.50	2,090,824.270	900,431.950
120+30.41	2,091,197.409	900,806.800
121+01.40	2,091,331.900	900,740.578
125+01.58	2,091,726.240	900,797.678
127+32.50	2,091,957.126	900,793.696
131+11.87	2,092,336.439	900,787.153



STATE OF ILLINOIS }  
 COUNTY OF LAKE }SS

THIS IS TO CERTIFY THAT WE, JORGENSEN & ASSOCIATES, INC., AN ILLINOIS PROFESSIONAL DESIGN FIRM LAND SURVEYING CORPORATION, NUMBER 184-2771, HAVE SURVEYED THE PLAT OF HIGHWAYS SHOWN HEREON IN SECTION 3, TOWNSHIP 45N., RANGE 5E., OF THE THIRD PRINCIPAL MERIDIAN, McHENRY 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 THE SURVEY TO BE RETRACED. MADE FOR THE DEPARTMENT OF TRANSPORTATION, STATE OF ILLINOIS.

DATED AT LAKE VILLA, ILLINOIS THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_ A.D.

ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-2797  
 LICENSE EXPIRATION DATE: NOVEMBER 30, 2024  
 THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

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JORGENSEN & ASSOCIATES, INC.  
 120 PARK AVENUE  
 LAKE VILLA, ILLINOIS 60046  
 (847) 356-3371

**PLAT OF HIGHWAYS**  
 STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 FLAT IRON ROAD

LIMITS: AT MOKELER CREEK COUNTY: McHENRY  
 SECTION: 19-00508-00-BR JOB NO.: R-55-001-97  
 STATION 114+42.86 TO STATION 131+11.87  
 SCALE: 1"=60' SHEET 5 OF 5

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

REVISION DATE	REVISION

PLAN

DATE	BY

SURVEYED  
 PLOTTED  
 ALIGNED CHECKED  
 NOTE BOOK NO. \_\_\_\_\_  
 CAD FILE NAME \_\_\_\_\_

PROFILE

DATE	BY

SURVEYED  
 PLOTTED  
 GRADES CHECKED  
 STRUCTURE NOTATIONS CHECKED  
 NOTE BOOK NO. \_\_\_\_\_

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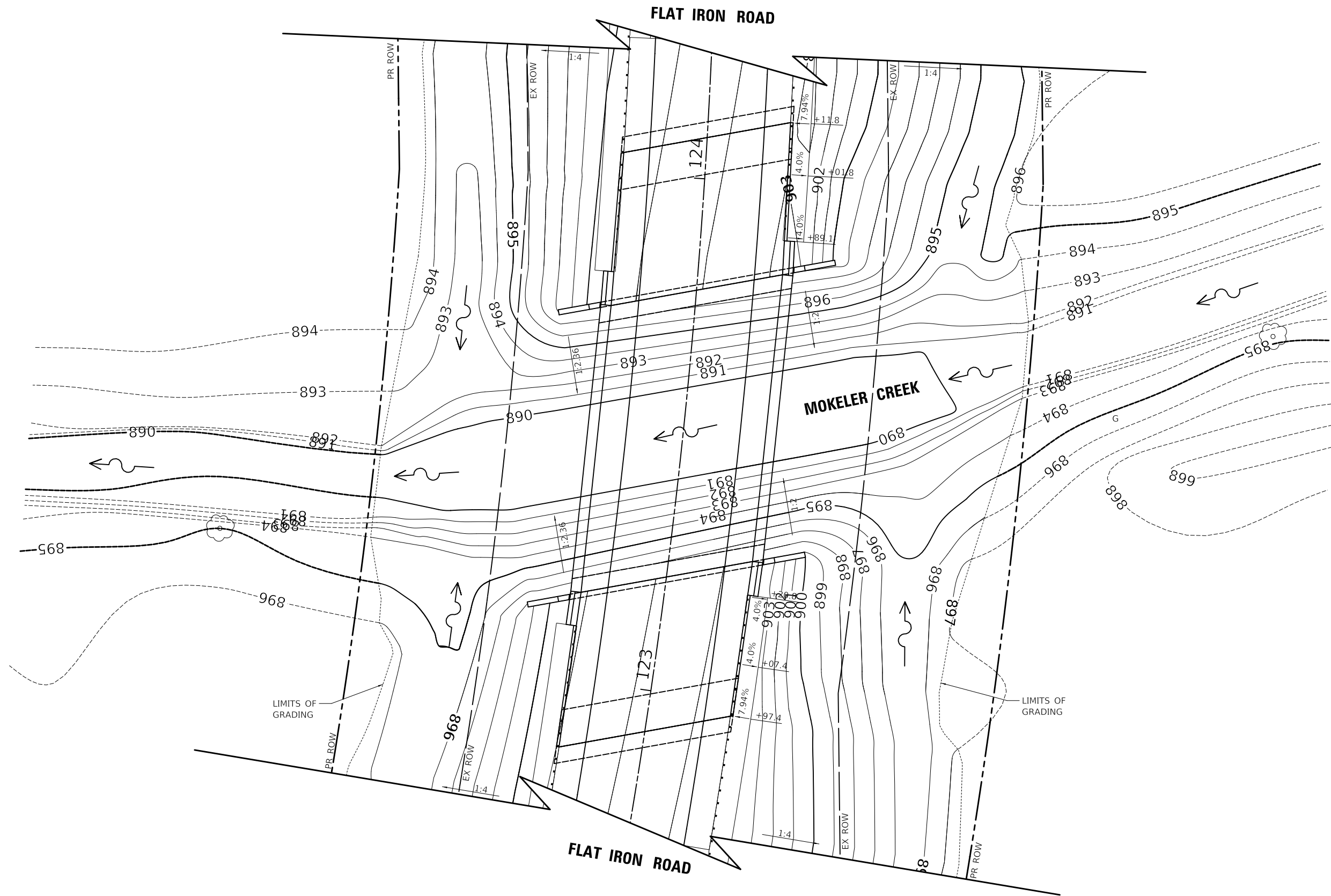
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PLOT SCALE = 40.0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PLAT OF HIGHWAYS

SCALE: N.T.S.	SHEET 5 OF 5 SHEETS
---------------	---------------------

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	36
CONTRACT NO. 61K76				ILLINOIS FED. AID PROJECT



PLAN	SURVEYED	DATE
NOTE BOOK NO.	PLOTTED	BY
	ALIGNMENT CHECKED	
	STRUCTURE NOTATION CHWD	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
NOTE BOOK NO.	GRADES CHECKED	BY
	STRUCTURE NOTATION CHWD	

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PLOT DATE = 7/23/2024	CHECKED - DJK	REVISED -
	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

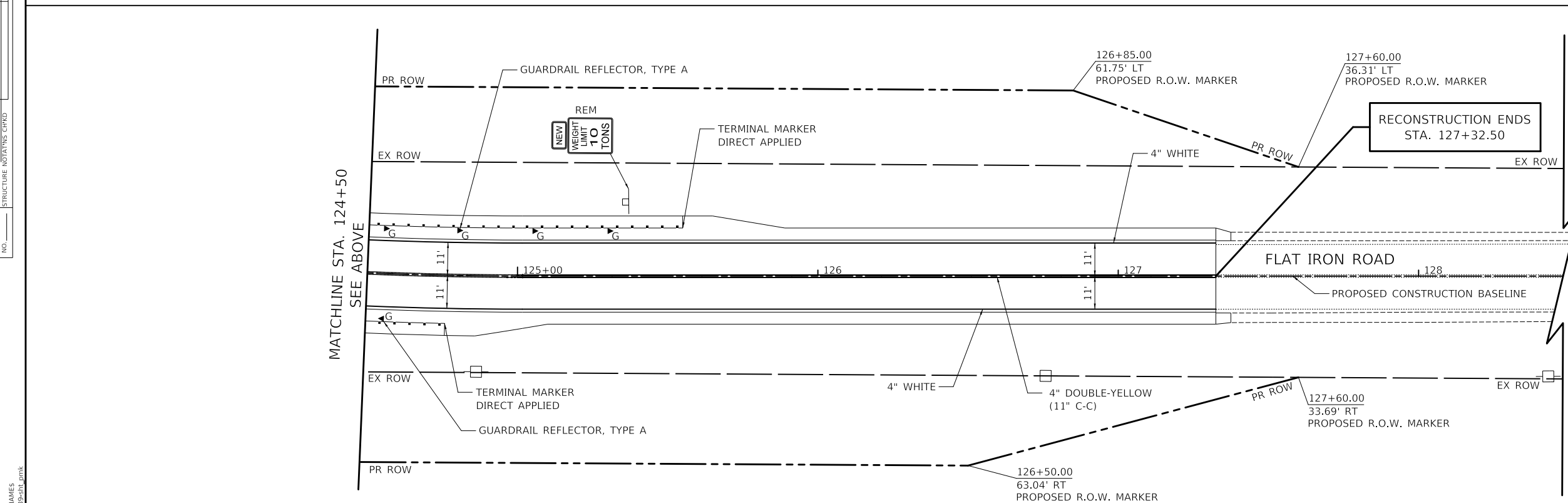
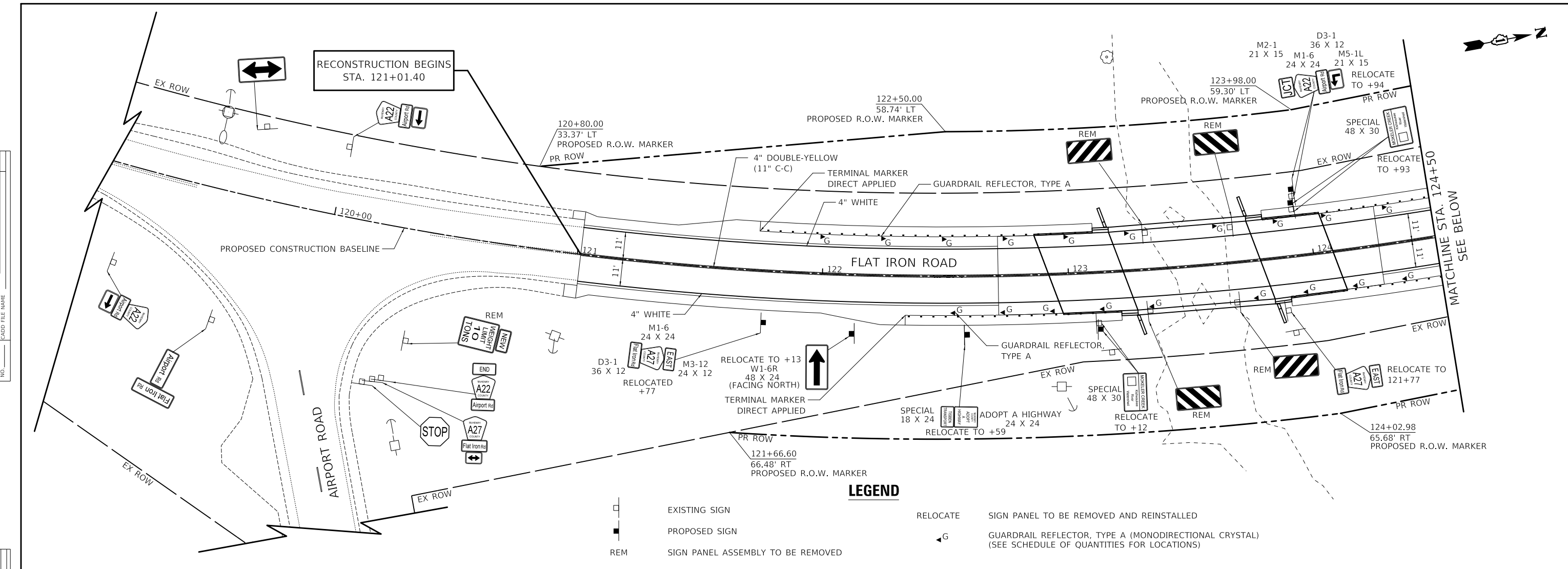
SCALE: 1"=10'	SHEET 1 OF 1 SHEETS
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**GRADING PLAN - MOKELER CREEK**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	37
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNMENT CHECKED	
	GRADE CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	



- NOTES**
- DIMENSIONS TO PAVEMENT MARKINGS ARE TO THE CENTER OF A SINGLE LINE OR THE CENTER OF GAP FOR A DOUBLE LINE.
  - ALL PAVEMENT MARKINGS SHALL BE GROOVED PREFORMED PLASTIC, TYPE D.
  - EXISTING SIGNING SHALL REMAIN UNLESS OTHERWISE NOTED.
  - ALL WORK TO REMOVE OR REMOVE/REINSTALL SIGNS SHALL BE PERFORMED BY THE COUNTY.

MODEL: SMODELNAMER  
FILE NAME: ...139395-HL.dgn

USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 40.0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND SIGNING PLAN**

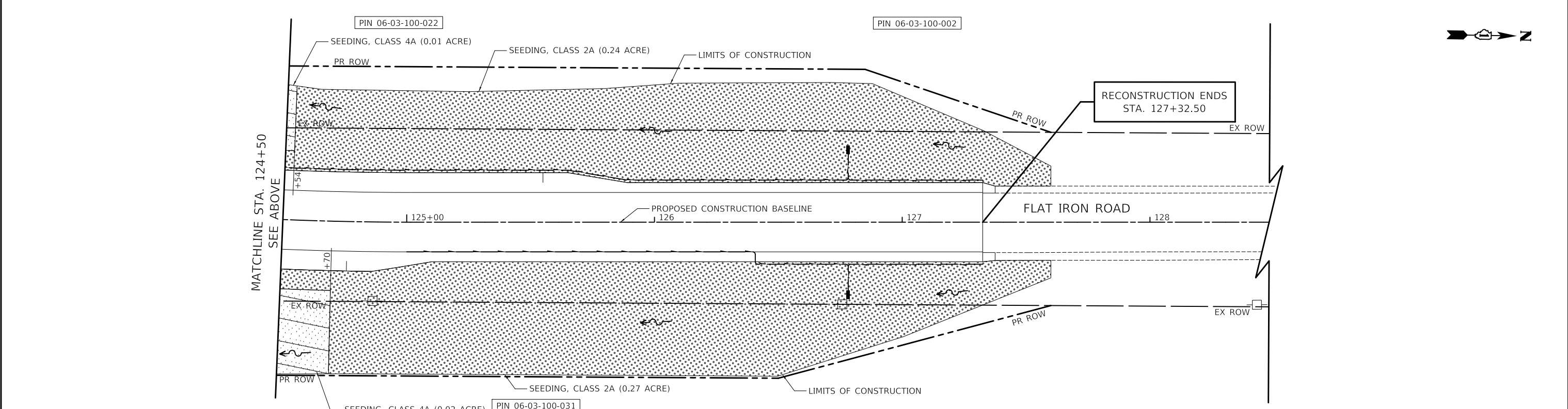
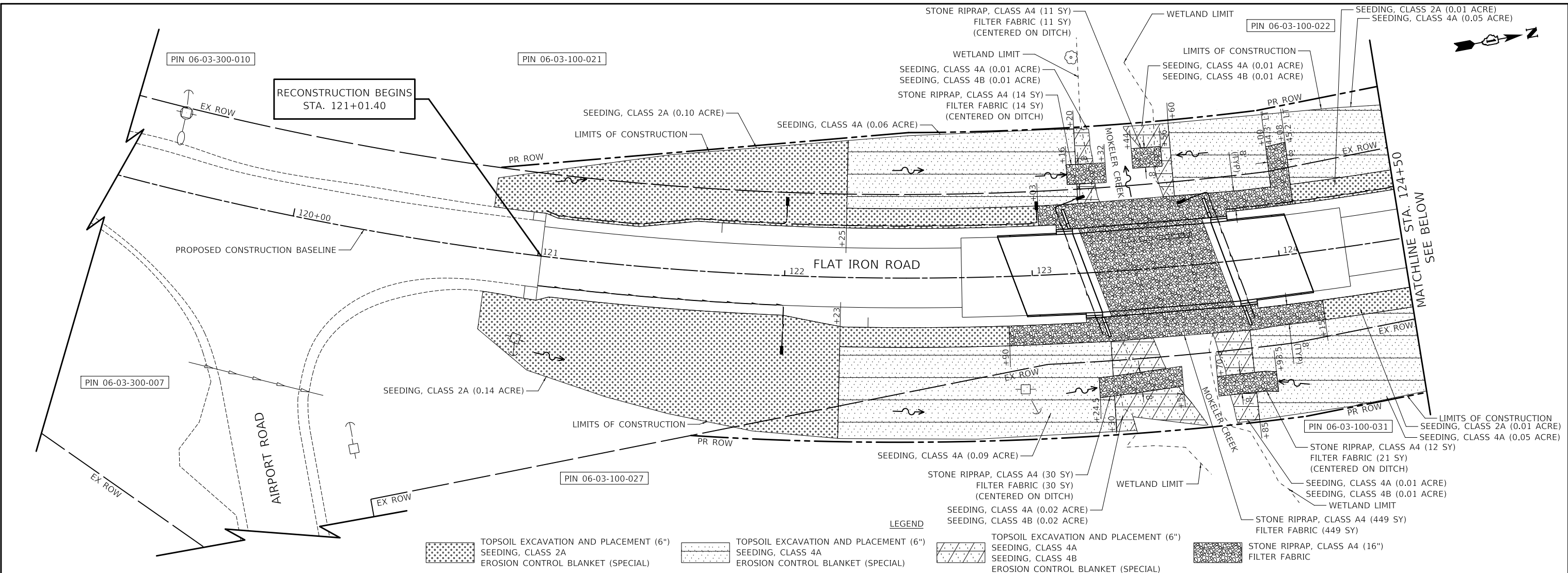
SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. 121+01.40 TO STA. 127+32.50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	38
				CONTRACT NO. 61K76
				ILLINOIS FED. AID PROJECT

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNMENT CHECKED	
	NOTE BOOK	
	NO.	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	NOTE BOOK	
	NO.	
	STRUCTURE NOTATIONS CHWD	

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FILE NAME: ...134-landscaping1839-int\_L5



USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 40,0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

DESIGNED - KDC	REVISED -
DRAWN - KDC	REVISED -
CHECKED - DJK	REVISED -
DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**LANDSCAPING AND PERMANENT EROSION CONTROL PLAN**

SCALE: 1"=20' SHEET 1 OF 1 SHEETS STA. 121+01.40 TO STA. 127+32.50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	39
				CONTRACT NO. 61K76
				ILLINOIS FED. AID PROJECT

Bench Mark: T.B.M. #1 located at railroad spike (set) in power pole in the northeast corner of Flat Iron Road & Airport Road. NAVD '88 elevation 903.00.  
 T.B.M. #2 located at railroad spike (set) in fifth power pole north of Airport Road on the east side of Flat Iron Road. NAVD '88 Elevation 900.68

Existing Structure: S.N. 056-3019 was built in 1950 as Section 36-B-1 MFT by McHenry County. The bridge consists of a reinforced concrete slab superstructure supported on highwall abutments founded on timber piles. The bridge is 32'-6" long measured back to back of abutments and is 30'-4" wide measured out to out.

Bridge will be closed and traffic will be detoured during construction.

Salvage: None.

**DESIGN SCOUR ELEVATION TABLE**

Event / Limit State	Design Scour Elevations (ft.)		
	S. Abut.	N. Abut.	Item 113
0100	894.15	893.92	8
0200	894.15	893.92	
Design	894.15	893.92	
Check	894.15	893.92	

**WATERWAY INFORMATION**

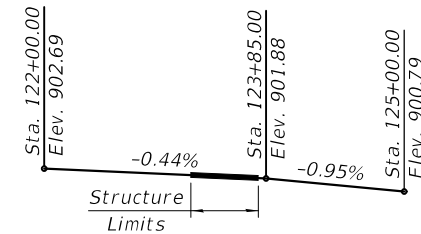
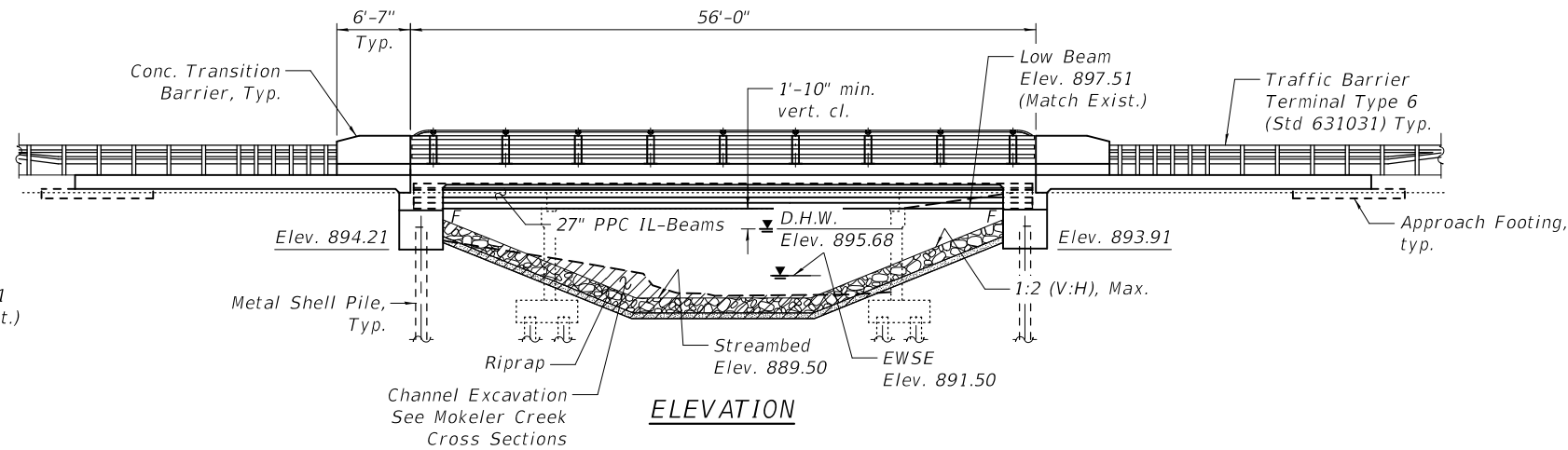
Drainage Area = 5.59 sq.mi. Low Grade Elev. 899.55 @ Sta. 126+78

Flood	Freq. Yr.	Q C.F.S.	Opening Ft <sup>2</sup>		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	493	107	174	895.06	0.12	0.08	895.18	895.14
Base	30	742	126	193	895.68	0.36	0.17	896.04	895.85
Overtopping	100	1073	148	217	896.42	0.69	0.33	897.11	896.75
Max. Calc.	500	1554	172	237	897.21	1.38	0.69	898.59	897.90

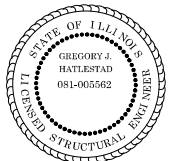
10 year velocity through the existing bridge = 4.59 ft/s  
 10 year velocity through the proposed bridge = 2.83 ft/s

**CURVE DATA**

P.I. Sta. = 120+30.41  
 $\Delta = 46^\circ 07' 08.76''$  (Lt.)  
 $D = 4^\circ 36' 41.59''$   
 $R = 1,242.44'$   
 $T = 528.91'$   
 $L = 1,000.08'$   
 $E = 107.89'$   
 $e = 7.94\%$   
 $T.R. = 61.37'$   
 $S.E. Run = 211.69'$   
 $P.C. Sta. = 115+01.50$   
 $P.T. Sta. = 124+01.58$



CIVILTECH ENGINEERING, INC.  
 GREGORY J. HATLESTAD, S.E.



GREGORY J. HATLESTAD, S.E.  
 # 081-005562

EXP 11/30/2024

DATE 07/16/2024

I certify that to the best of knowledge, information, and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO LRFD Bridge Design Specifications for Highway Bridges.

**LOADING HL-93**

Allow 50#/sq. ft. for future wearing surface.

**DESIGN SPECIFICATIONS**

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

**DESIGN STRESSES**

**FIELD UNITS**

$f'_c = 3,500$  psi  
 $f'_c = 4,000$  psi (Superstructure Concrete)  
 $f_y = 60,000$  psi (Reinforcement)  
**PRECAST PRESTRESSED UNITS**  
 $f'_c = 8,500$  psi  
 $f'_ci = 6,500$  psi  
 $f_{pu} = 270,000$  psi (0.6"  $\odot$  Low Relax Strands)  
 $f_{pbt} = 202,300$  psi (0.6"  $\odot$  Low Relax Strands)

**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 0  
 Design Spectral Acceleration at 1.0 sec. (SD1) = 0.076  
 Design Spectral Acceleration at 0.2 sec. (SDS) = 0.127  
 Soil Site Class = D

**GENERAL PLAN & ELEVATION**

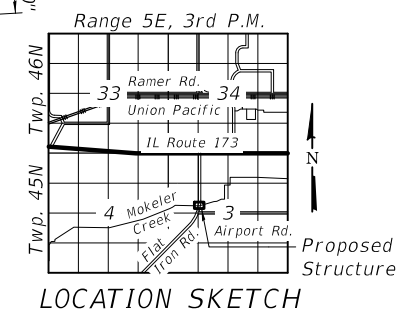
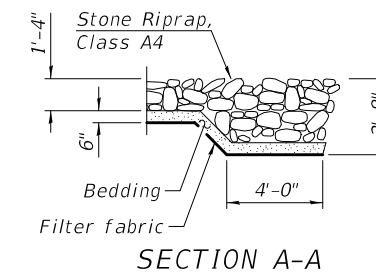
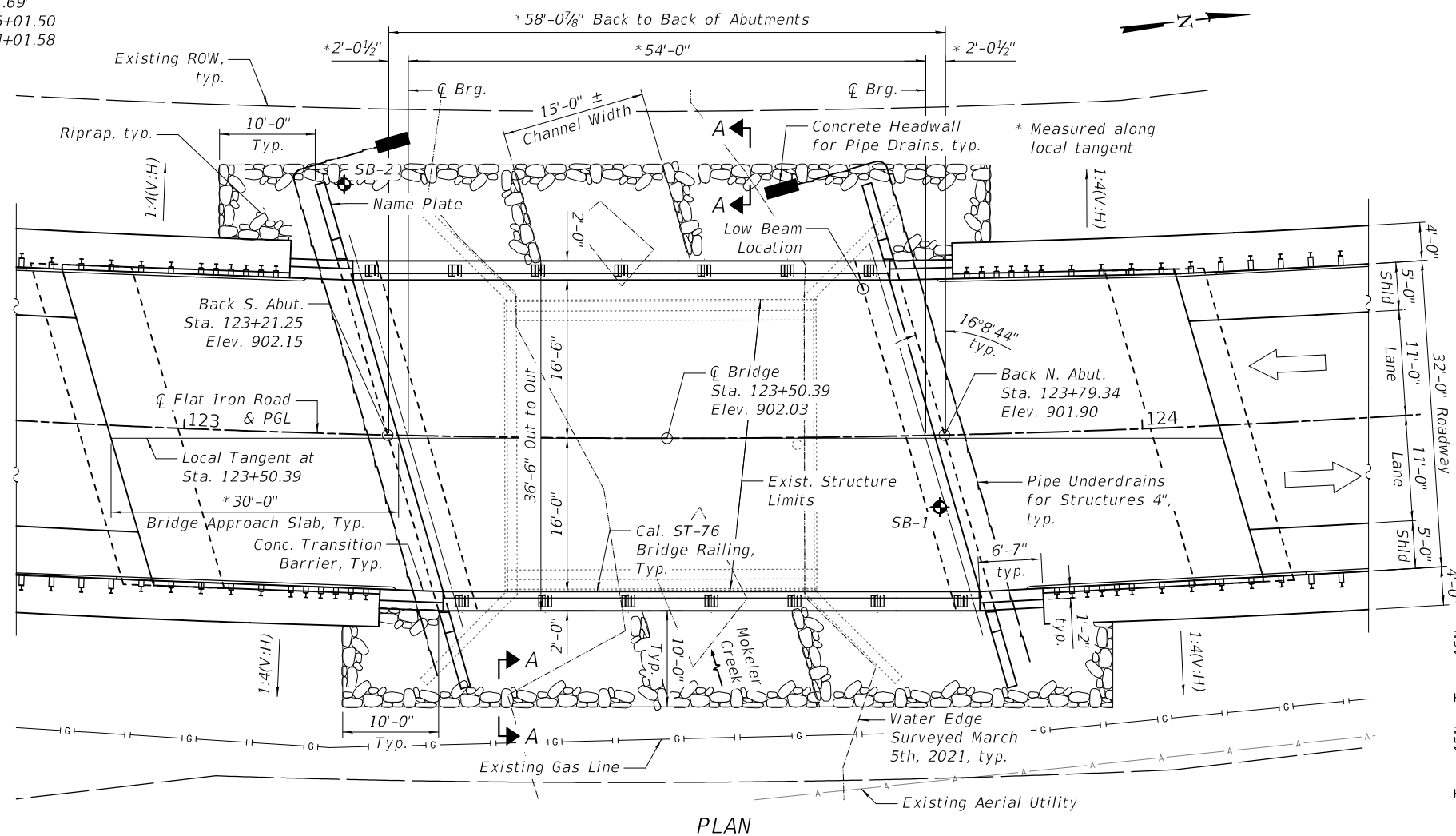
**FLAT IRON ROAD OVER MOKELER CREEK**

F.A.U. RTE. 4077 - SEC. 19-00508-00-BR

McHENRY COUNTY

STATION 123+50.39

STRUCTURE NO. 056-3055



MODEL: \$MODELNAMES  
 FILE NAME: \$FILES

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DRAWN -	JAL	REVISED -			
PLOT SCALE =	N/A	CHECKED -	GJH	REVISED -	
PLOT DATE =	7/23/2024	DATE -	7/16/2024	REVISED -	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN  
 STRUCTURE NO. 056-3055

SHEET S1 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	40
			CONTRACT NO. 61K76	
ILLINOIS FED. AID PROJECT				



**GENERAL NOTES**

- Reinforcement bars designated (E) shall be epoxy coated.
- The finishing machine rails shall be placed on the top of the top flange of the exterior beams within the deck pour. Beam blocks shall be placed between beams at all tie locations in each bay for the full width of the deck pour.
- Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

**INDEX OF SHEETS**

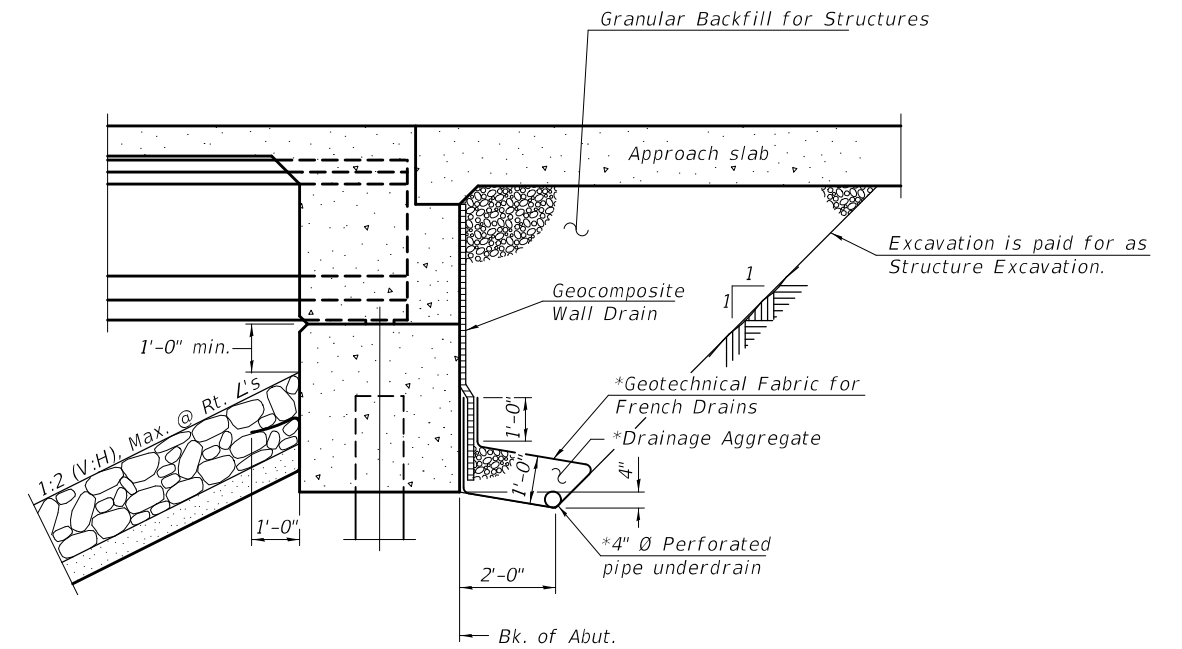
- S1. General Plan & Elevation
- S2. General Data
- S3-4. Top of Slab Elevations
- S5. Top of Approach Slab Elevations
- S6. Superstructure
- S7. Superstructure Details
- S8. Diaphragm Details
- S9-12. Steel Railing Details
- S13. South Approach Slab
- S14. North Approach Slab
- S15. Approach Slab Details
- S16. Framing Plan
- S17. IL27N Beam
- S18. IL27N Beam Details
- S19. South Abutment
- S20. North Abutment
- S21. Abutment Details
- S22. Metal Shell Pile Details
- S23-24. Soil Boring Logs
- S25-26. Existing Plans

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	Cu. Yd.	-	-	361
Stone Riprap, Class A4	Sq. Yd.	-	432	432
Filter Fabric	Sq. Yd.	-	432	432
Removal of Existing Structures	Each	-	-	1
Structure Excavation	Cu. Yd.	-	184	184
Concrete Structures	Cu. Yd.	20.4	55.7	76.1
Concrete Superstructure	Cu. Yd.	102.2	-	102.2
Bridge Deck Grooving	Sq. Yd.	392	-	392
Protective Coat	Sq. Yd.	481	-	481
Concrete Superstructure (Approach Slab)	Cu. Yd.	94.2	-	94.2
Furnishing and Erecting Precast Prestressed Concrete Beams, IL27N	Foot	277	-	277
Reinforcement Bars, Epoxy Coated	Pound	55,580	10,550	66,230
Furnishing Metal Shell Piles 14" x 0.250"	Foot	-	328	328
Driving Piles	Foot	-	328	328
Test Pile Metal Shells	Each	-	2	2
Name Plates	Each	-	-	1
Granular Backfill for Structures	Cu. Yd.	-	124	124
Geocomposite Wall Drain	Sq. Yd.	-	72	72
Concrete Headwall for Pipe Drains	Each	-	-	2
Pipe Underdrains for Structures 4"	Foot	-	132	132
Bar Terminators	Each	74	192	266
Steel Railing (Special)	Foot	112	-	112

MOKELER CREEK  
BUILT 202\_ BY  
MCHENRY COUNTY  
SEC. 19-00508-00-BR  
F.A.U. RT. 4077 STA. 123+50.39  
STR. NO. 056-3055 LOADING HL-93

**NAME PLATE**  
See Std. 515001



**SECTION THRU INTEGRAL ABUTMENT**  
(Horiz. dim. @ Rt. L's)

\*Included in the cost of Pipe Underdrains for Structures.

Note:  
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

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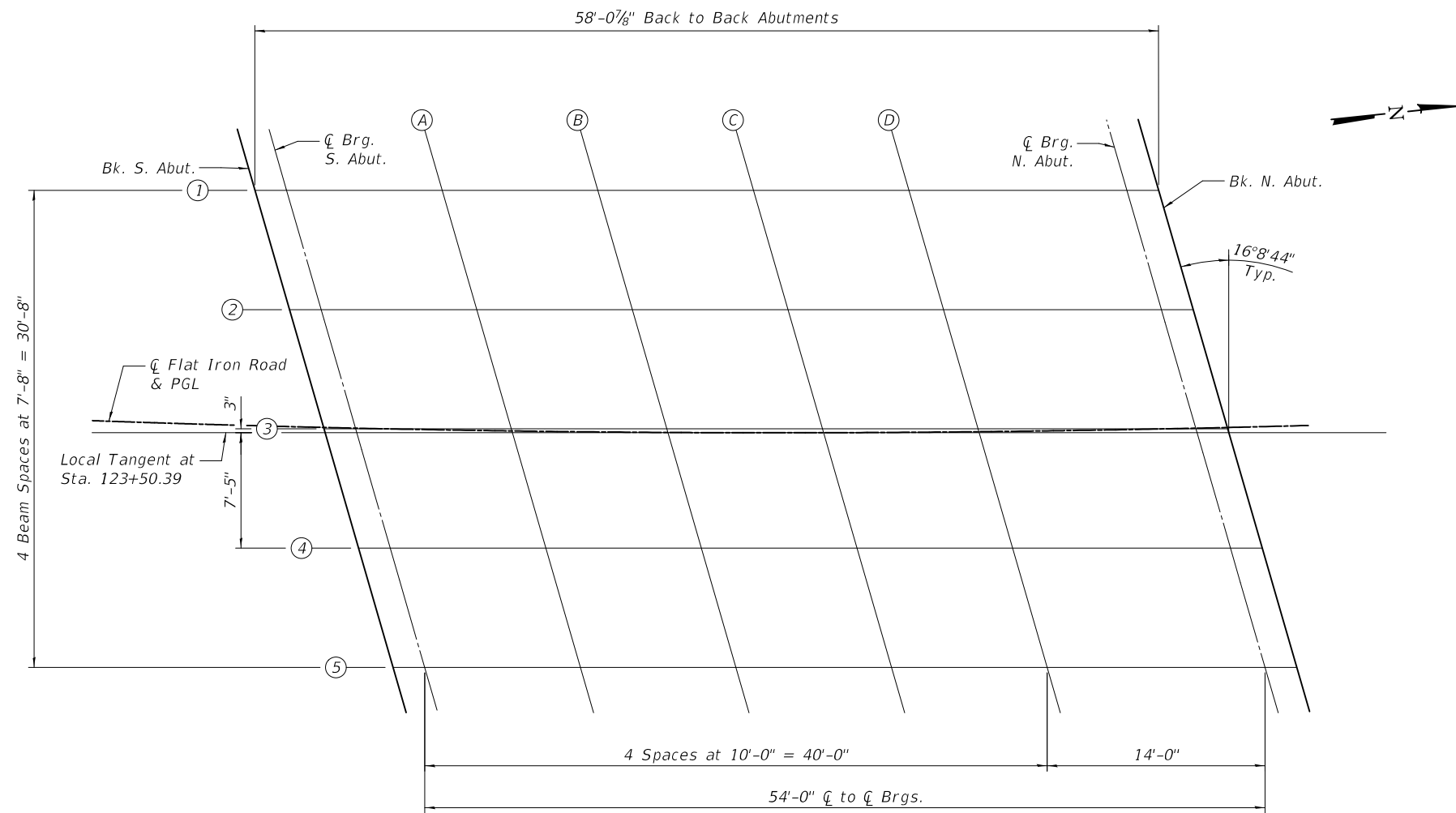
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PLOT DATE =	7/23/2024	DATE -	7/16/2024	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

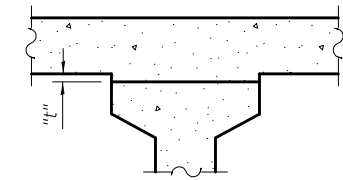
**GENERAL DATA  
STRUCTURE NO. 056-3055**

SHEET S2 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	41
			CONTRACT NO. 61K76	
		ILLINOIS	FED. AID PROJECT	

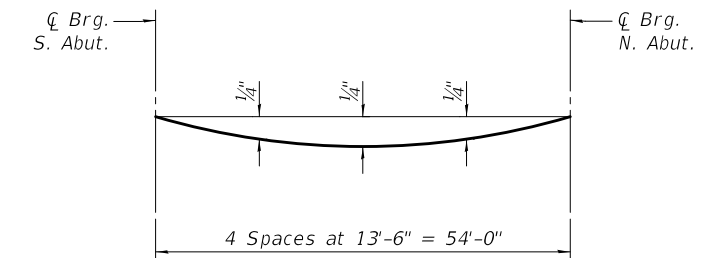


PLAN



To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown below, minus slab thickness, equals the fillet heights "t" above top flanges of beams.

FILLET HEIGHTS



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete, excluding beams).

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on Sheets S3 thru S4.

Beam 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	123+16.42	-15.12	900.98	900.98
☐ Brg. S. Abut.	123+18.49	-15.18	900.97	900.97
A	123+28.61	-15.39	900.90	900.92
B	123+38.74	-15.53	900.85	900.87
C	123+48.86	-15.58	900.80	900.83
D	123+58.99	-15.55	900.76	900.78
☐ Brg. N. Abut.	123+73.16	-15.38	900.71	900.71
Bk. N. Abut.	123+75.23	-15.34	900.70	900.70

Beam 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	123+18.87	-7.52	901.57	901.57
☐ Brg. S. Abut.	123+20.92	-7.57	901.56	901.56
A	123+30.98	-7.77	901.50	901.51
B	123+41.04	-7.88	901.45	901.47
C	123+51.11	-7.92	901.40	901.42
D	123+61.17	-7.87	901.36	901.38
☐ Brg. N. Abut.	123+75.26	-7.67	901.31	901.31
Bk. N. Abut.	123+77.31	-7.63	901.31	901.31

Beam 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	123+21.28	0.09	902.17	902.17
☐ Brg. S. Abut.	123+23.32	0.05	902.15	902.15
A	123+33.32	-0.13	902.10	902.11
B	123+43.32	-0.23	902.04	902.07
C	123+53.32	-0.25	902.00	902.02
D	123+63.32	-0.18	901.96	901.98
☐ Brg. N. Abut.	123+77.32	0.04	901.92	901.92
Bk. N. Abut.	123+79.36	0.09	901.91	901.91

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		DRAWN -	JAL	REVISED -	
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PLOT DATE =	7/23/2024	DATE -	7/16/2024	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS I  
STRUCTURE NO. 056-3055

SHEET S3 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	42
			CONTRACT NO. 61K76	
		ILLINOIS FED. AID PROJECT		

☒ & PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	123+21.25	0.00	902.16	902.16
☒ Brg. S. Abut.	123+23.30	0.00	902.15	902.15
A	123+33.36	0.00	902.11	902.12
B	123+43.39	0.00	902.06	902.08
C	123+53.39	0.00	902.02	902.04
D	123+63.37	0.00	901.97	901.99
☒ Brg. S. Abut.	123+77.31	0.00	901.91	901.91
Bk. S. Abut.	123+79.34	0.00	901.90	901.90

Beam 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	123+23.66	7.71	902.76	902.76
☒ Brg. S. Abut.	123+25.69	7.66	902.75	902.75
A	123+35.63	7.50	902.69	902.71
B	123+45.57	7.43	902.64	902.67
C	123+55.51	7.43	902.60	902.62
D	123+65.45	7.51	902.56	902.58
☒ Brg. S. Abut.	123+79.36	7.76	902.52	902.52
Bk. S. Abut.	123+81.39	7.81	902.52	902.52

Beam 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	123+26.02	15.33	903.36	903.36
☒ Brg. S. Abut.	123+28.03	15.29	903.34	903.34
A	123+37.91	15.15	903.29	903.30
B	123+47.79	15.09	903.24	903.26
C	123+57.67	15.10	903.20	903.22
D	123+67.55	15.20	903.16	903.18
☒ Brg. S. Abut.	123+81.38	15.47	903.12	903.12
Bk. S. Abut.	123+83.39	15.53	903.12	903.12

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS II  
STRUCTURE NO. 056-3055**

SHEET S4 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	43
			CONTRACT NO. 61K76	
		ILLINOIS FED. AID PROJECT		

West Edge of Shoulder

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr. Slab	122+86.44	-16.00	901.04
A	122+96.69	-16.10	900.99
B	123+06.94	-16.12	900.94
N. End S. Appr. Slab	123+17.18	-16.06	900.90
S. End N. Appr. Slab	123+73.92	-16.28	900.64
C	123+84.00	-16.26	900.59
D	123+94.07	-16.17	900.51
N. End N. Appr. Slab	124+04.14	-16.00	900.43

West Lane Line

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr. Slab	122+88.19	-11.00	901.43
A	122+98.42	-11.00	901.39
B	123+08.63	-11.00	901.34
N. End S. Appr. Slab	123+18.81	-11.00	901.30
S. End N. Appr. Slab	123+75.36	-11.00	901.05
C	123+85.38	-11.00	901.00
D	123+95.38	-11.00	900.91
N. End N. Appr. Slab	124+05.36	-11.00	900.81

CL & PGL

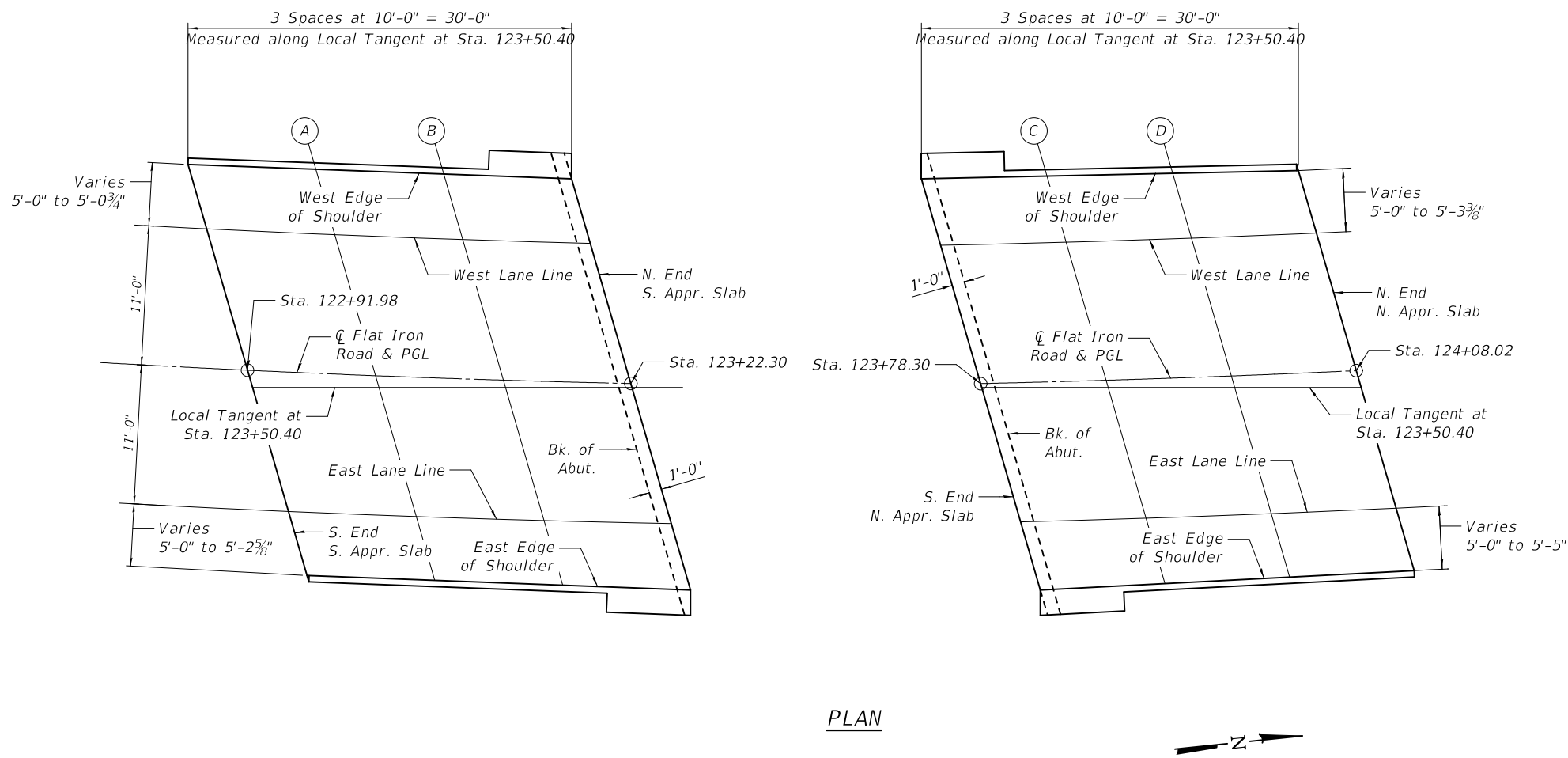
Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr. Slab	122+91.98	0.00	902.29
A	123+02.11	0.00	902.24
B	123+12.22	0.00	902.20
N. End S. Appr. Slab	123+22.30	0.00	902.15
S. End N. Appr. Slab	123+78.30	0.00	901.91
C	123+88.23	0.00	901.85
D	123+98.14	0.00	901.76
N. End N. Appr. Slab	124+08.02	0.00	901.66

East Lane Line

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr. Slab	122+95.69	11.00	903.14
A	123+05.73	11.00	903.10
B	123+15.74	11.00	903.06
N. End S. Appr. Slab	123+25.72	11.00	903.01
S. End N. Appr. Slab	123+81.19	11.00	902.77
C	123+91.03	11.00	902.70
D	124+00.84	11.00	902.60
N. End N. Appr. Slab	124+10.64	11.00	902.51

East Edge of Shoulder

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr. Slab	122+97.36	16.00	903.53
A	123+07.35	16.00	903.49
B	123+17.34	16.06	903.45
N. End S. Appr. Slab	123+27.33	16.22	903.42
S. End N. Appr. Slab	123+82.60	16.42	903.19
C	123+92.33	16.20	903.10
D	124+02.07	16.06	902.99
N. End N. Appr. Slab	124+11.81	16.00	902.90



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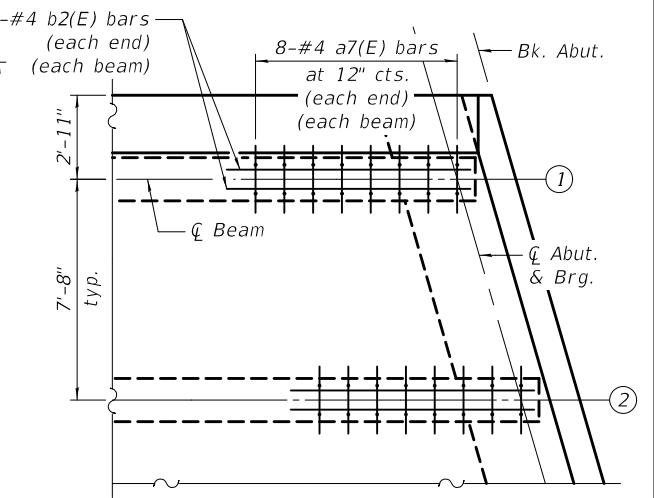
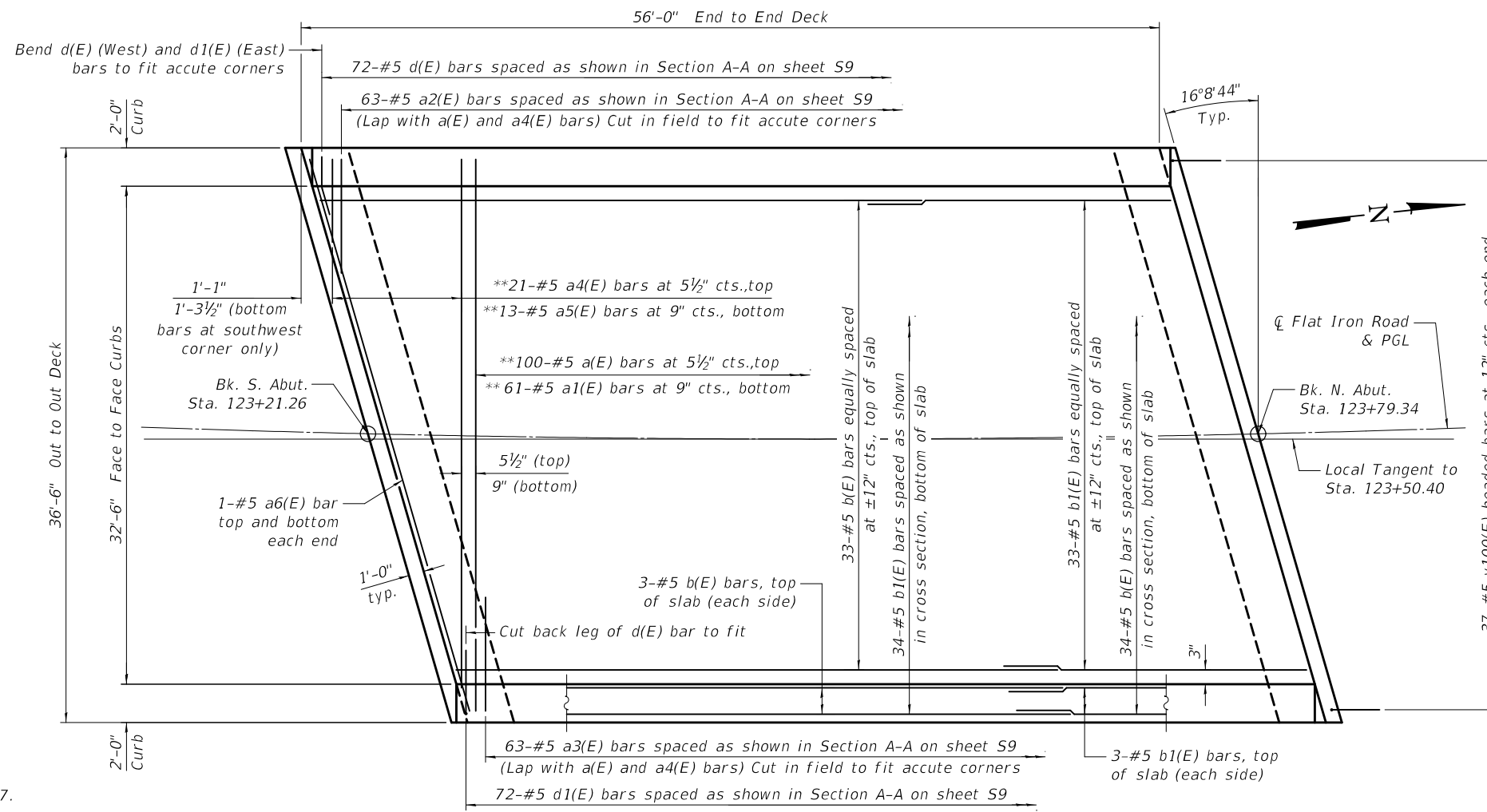
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB ELEVATIONS  
STRUCTURE NO. 056-3055

SHEET S5 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	44
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				



**PARTIAL PLAN**

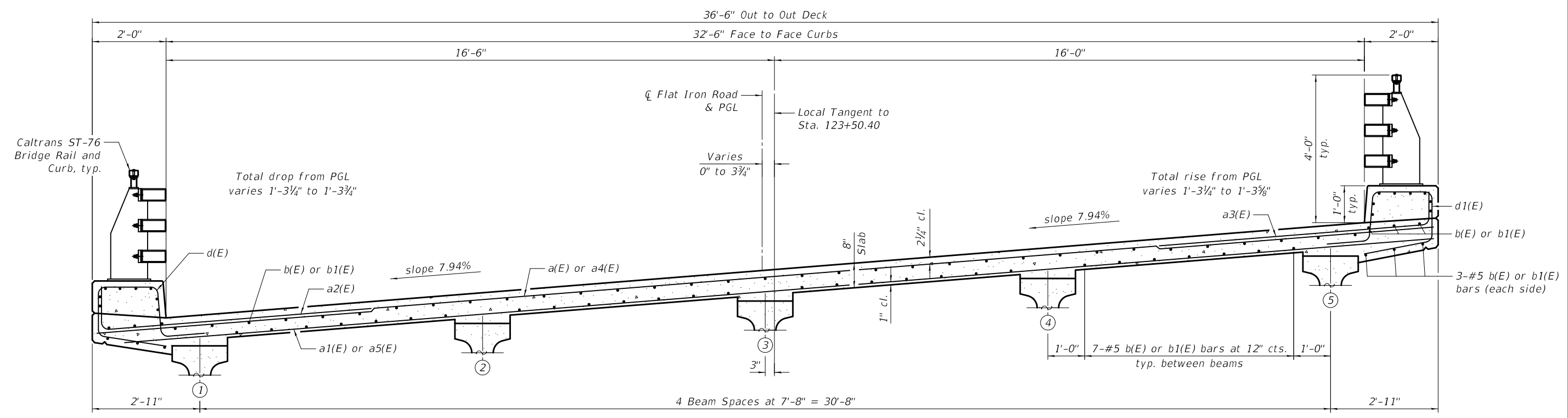
Showing Fillet Reinforcement  
Beam 1 and 2 are shown, other beams are similar

Notes:  
See sheet S7 for superstructure details and Bill of Material.  
Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

**MINIMUM BAR LAP**  
#5 bar = 3'-6"

\* See Field Cutting Diagram on sheet S7.  
\*\* Place bars to miss post anchor bolts.

**PLAN**



**CROSS SECTION**

(Looking North)

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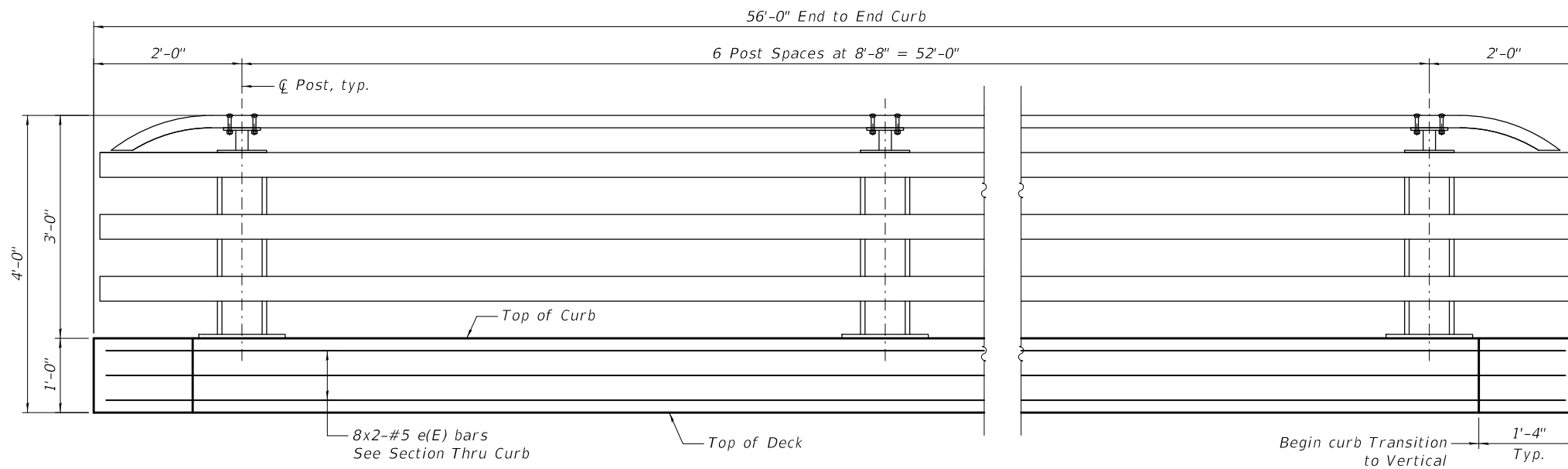
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

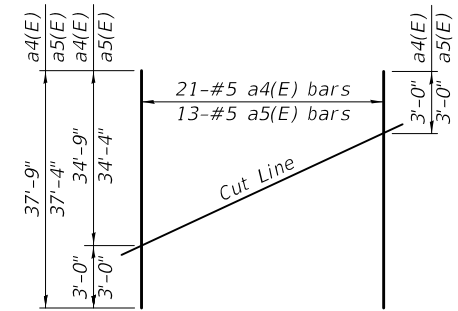
**SUPERSTRUCTURE**  
**STRUCTURE NO. 056-3055**

SHEET S6 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				

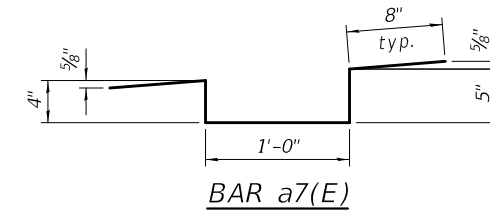


**INSIDE ELEVATION OF BRIDGE RAIL AND CURB**

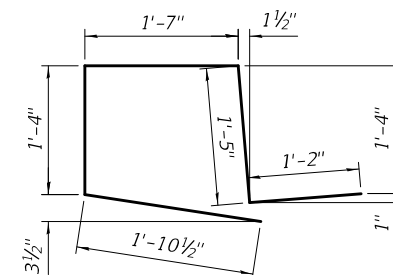


**FIELD CUTTING DIAGRAM**

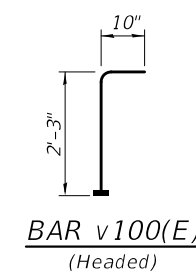
Order a4(E) and a5(E) bars full length. Cut as shown and use remainder of bars in opposite end of deck.



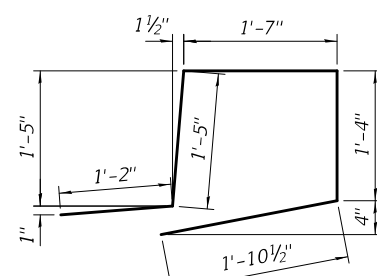
**BAR a7(E)**



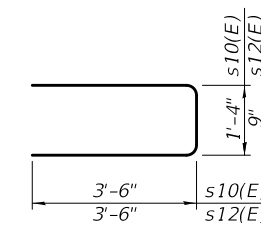
**BAR d(E)**



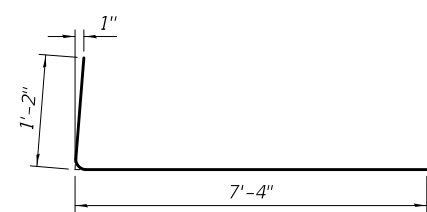
**BAR v100(E)  
(Headed)**



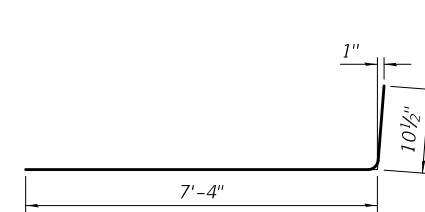
**BAR d1(E)**



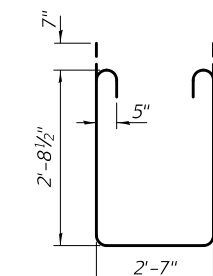
**BARS s10(E) & s12(E)**



**BAR a2(E)**



**BAR a3(E)**

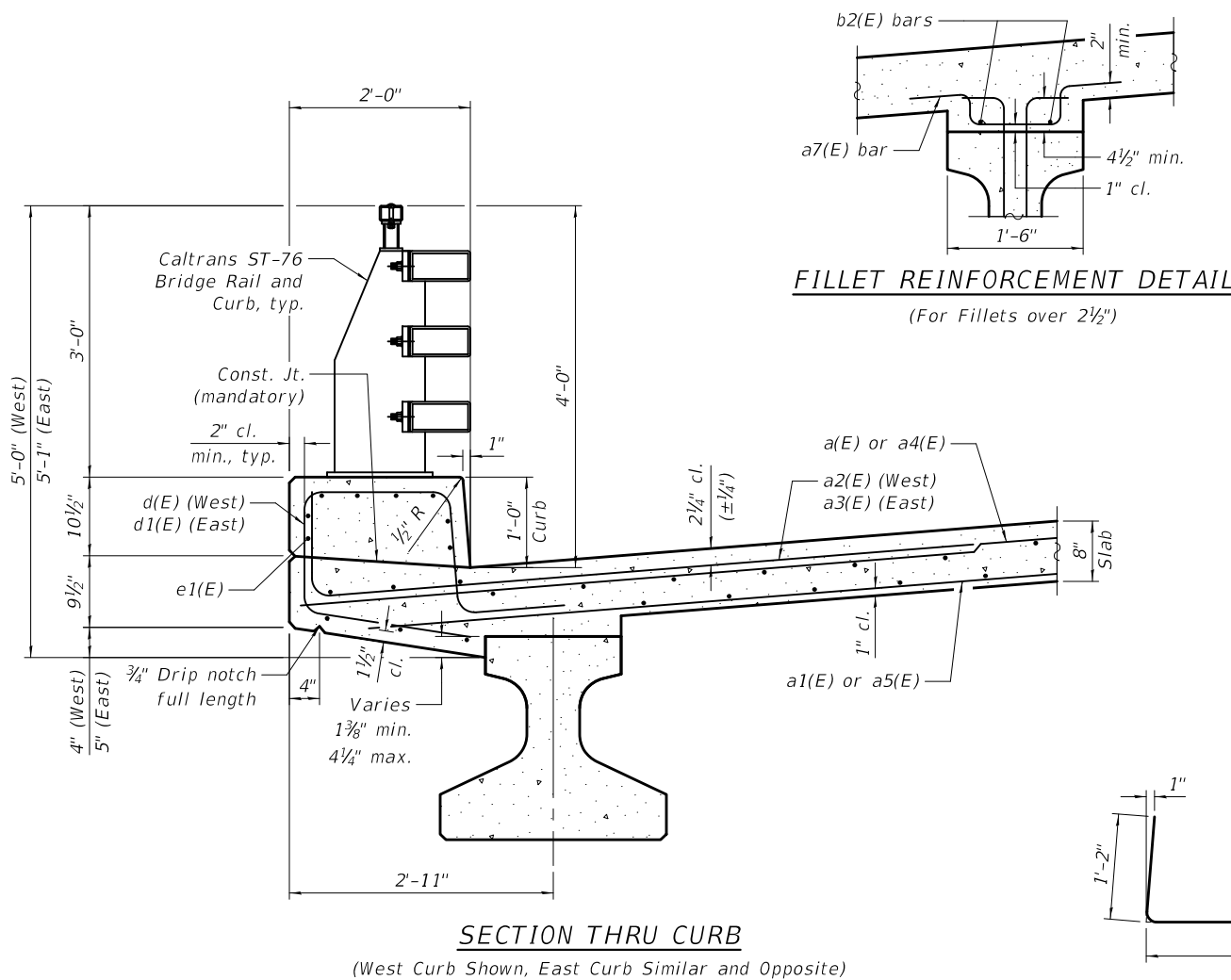


**BAR s11(E)**

**SUPERSTRUCTURE  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	100	#5	36'-3"	—
a1(E)	61	#5	35'-6"	—
a2(E)	63	#5	8'-6"	┌
a3(E)	63	#5	8'-3"	┌
a4(E)	21	#5	37'-9"	—
a5(E)	13	#5	37'-4"	—
a6(E)	4	#5	37'-9"	—
a7(E)	80	#4	3'-1"	┌
b(E)	73	#5	30'-0"	—
b1(E)	73	#5	29'-2"	—
b2(E)	20	#4	8'-6"	—
d(E)	72	#5	7'-5"	┌
d1(E)	72	#5	7'-5"	┌
e(E)	32	#5	29'-7"	—
m10(E)	8	#6	37'-9"	—
m11(E)	16	#6	6'-9"	—
m12(E)	8	#6	2'-3"	—
m13(E)	8	#6	5'-0"	—
m14(E)	4	#6	1'-4"	—
m15(E)	20	#5	4'-0"	—
s10(E)	56	#5	8'-4"	┌
s11(E)	56	#5	9'-2"	┌
s12(E)	40	#5	7'-9"	┌
v100(E)	74	#5	3'-1"	┌
Concrete Superstructure		Cu. Yd.	97.5	
Bridge Deck Grooving		Sq. Yd.	190	
Protective Coat		Sq. Yd.	241	
Reinforcement Bars, Epoxy Coated		Pound	17,900	
Bar Terminators		Each	74	

Bars indicated thus 1 x 2-#4 etc. indicates 1 line of bars with 2 lengths per line.



**SECTION THRU CURB**

(West Curb Shown, East Curb Similar and Opposite)

MODEL: \$MODELNAMES  
FILE NAME: \$FILES

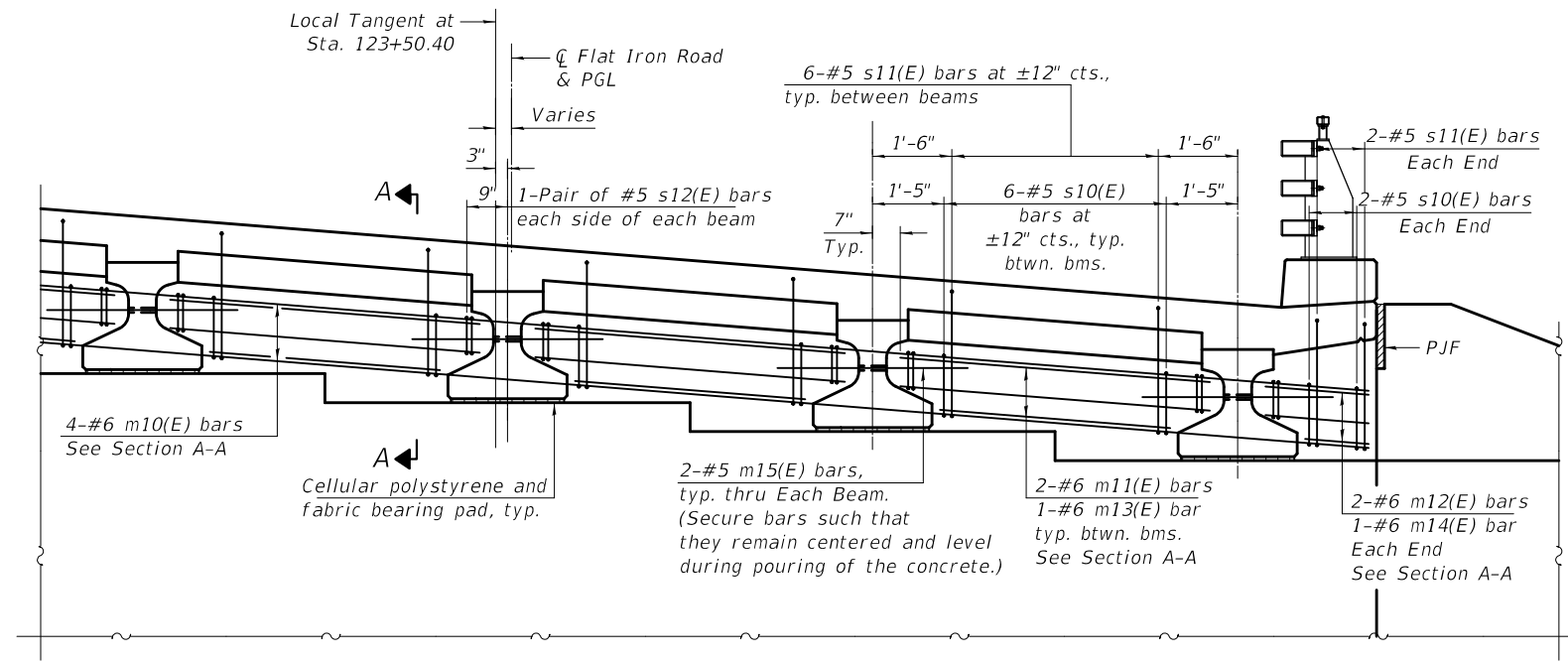
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PLOT SCALE =	N/A	DRAWN -	JAL	REVISED -	
PLOT DATE =	7/23/2024	CHECKED -	GJH	REVISED -	
		DATE -	7/16/2024	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

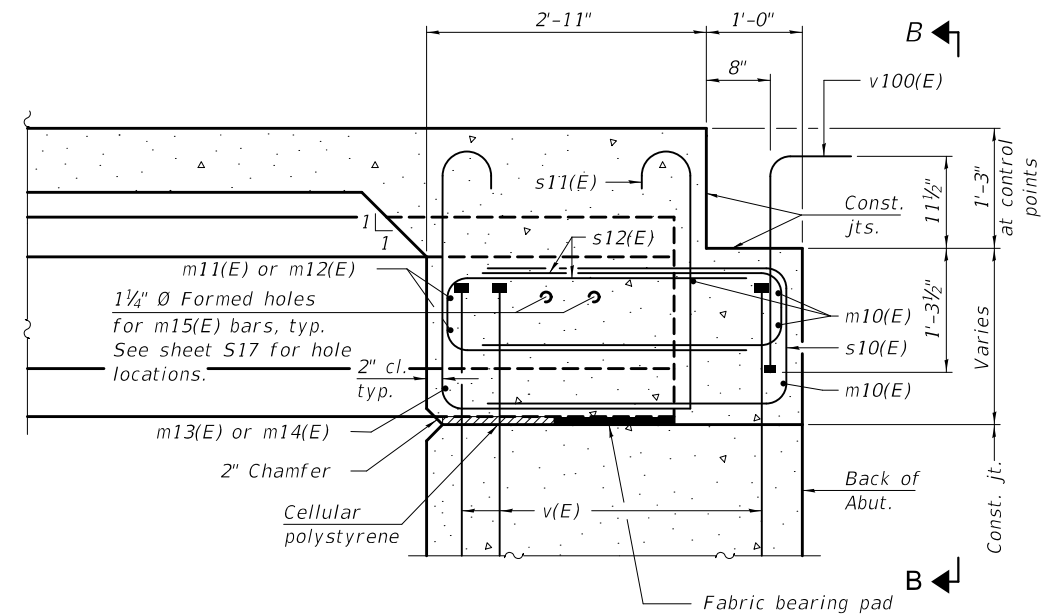
**SUPERSTRUCTURE DETAILS  
STRUCTURE NO. 056-3055**

SHEET S7 OF S26 SHEETS

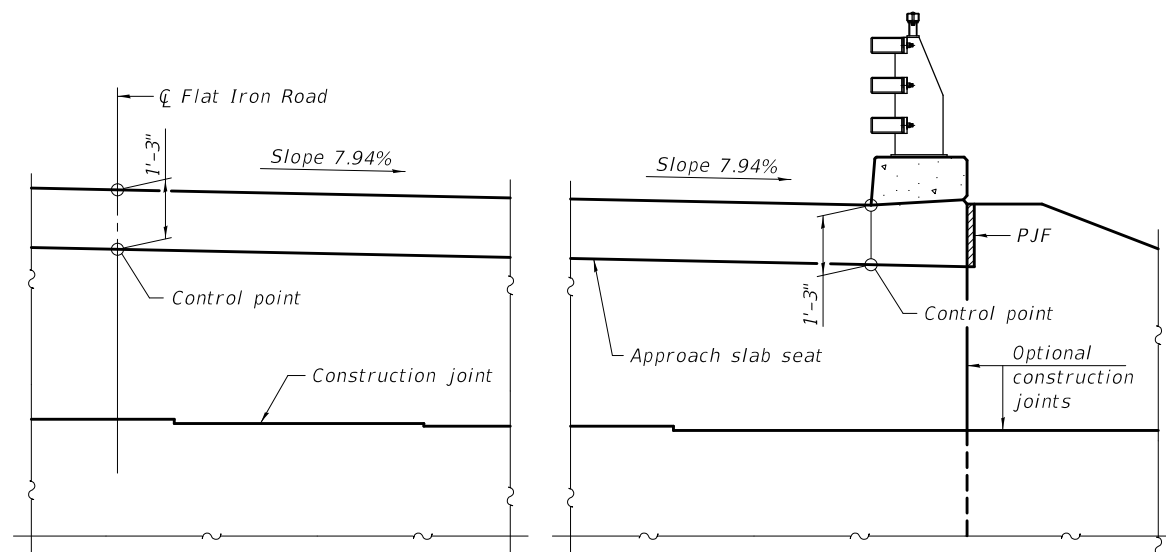
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	46
			CONTRACT NO. 61K76	
ILLINOIS FED. AID PROJECT				



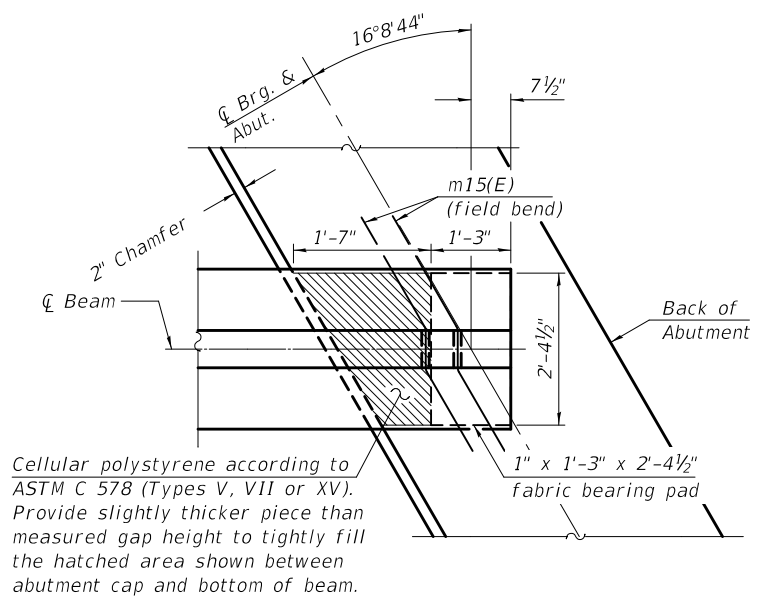
**DIAPHRAGM AT ABUTMENT**



**SECTION A-A**  
(at Rt. L's)



**VIEW B-B**



Cellular polystyrene according to ASTM C 578 (Types V, VII or XV). Provide slightly thicker piece than measured gap height to tightly fill the hatched area shown between abutment cap and bottom of beam.

**PLAN AT ABUTMENT**  
(Showing bottom flange of beam)

**Notes:**  
See sheet S7 for superstructure details and Bill of Material.  
See sheets S13 and S14 for P.J.F. details.  
The s10(E), s11(E) and s12(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.  
The approach slab seat shall have a constant slope determined from the control points shown.  
Cost of cellular polystyrene is included with Concrete Superstructure.

MODEL: \$MODELNAMES  
FILE NAME: \$FILES

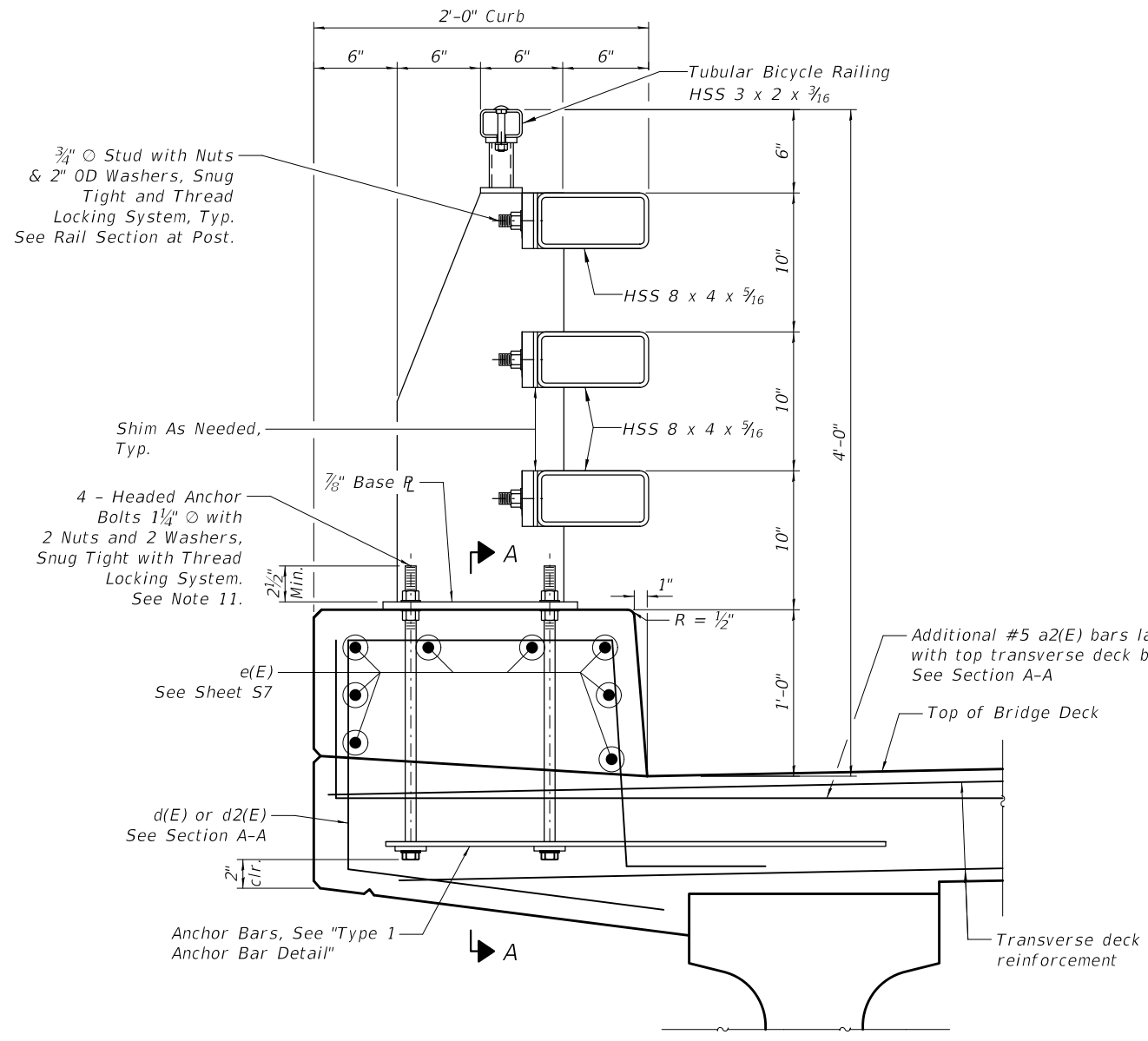
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DRAWN -	JAL	REVISED -			
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PLOT DATE =	7/23/2024	DATE -	7/16/2024	REVISED -	

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

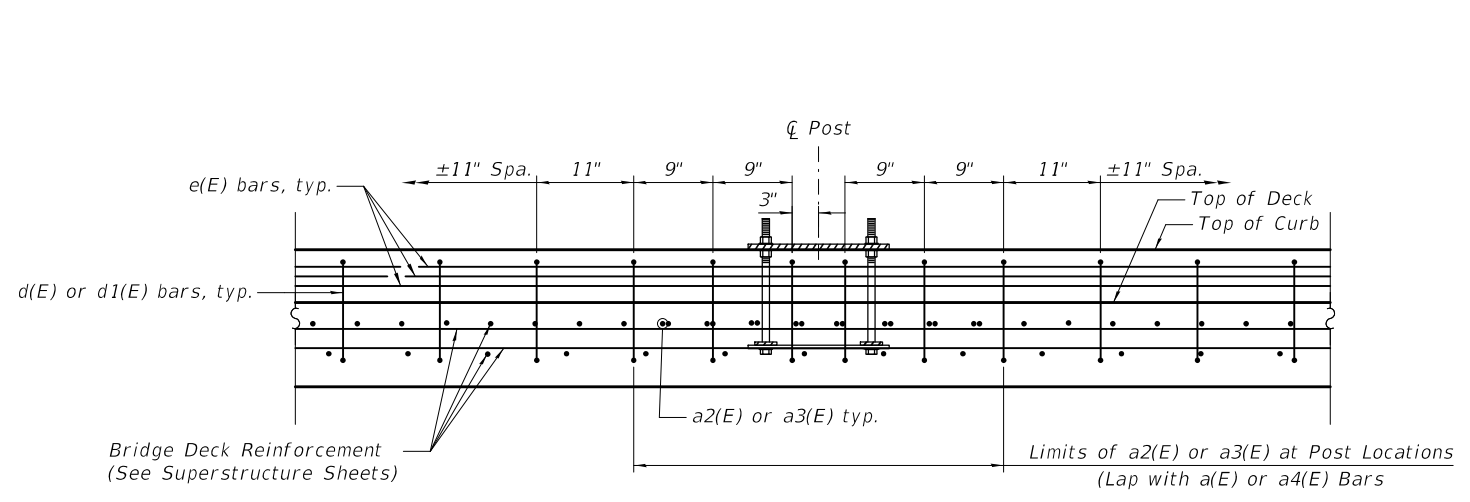
**DIAPHRAGM DETAILS**  
**STRUCTURE NO. 056-3055**

SHEET S8 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	47
			CONTRACT NO. 61K76	
ILLINOIS FED. AID PROJECT				

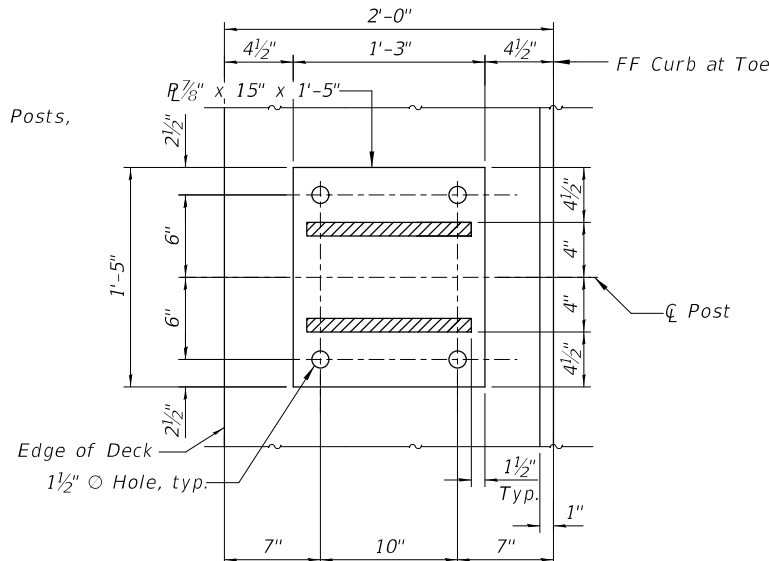


**SECTION B-B - ASSEMBLY DETAIL**  
(Longitudinal bars in the deck not shown for clarity)

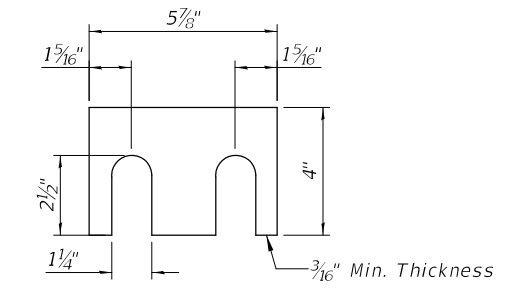


**SECTION A-A**

Note: Post not shown for clarity.

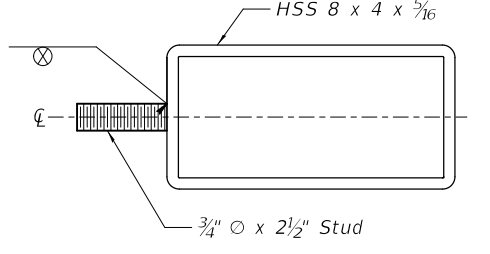


**BASE PLATE**



**SHIM DETAILS**

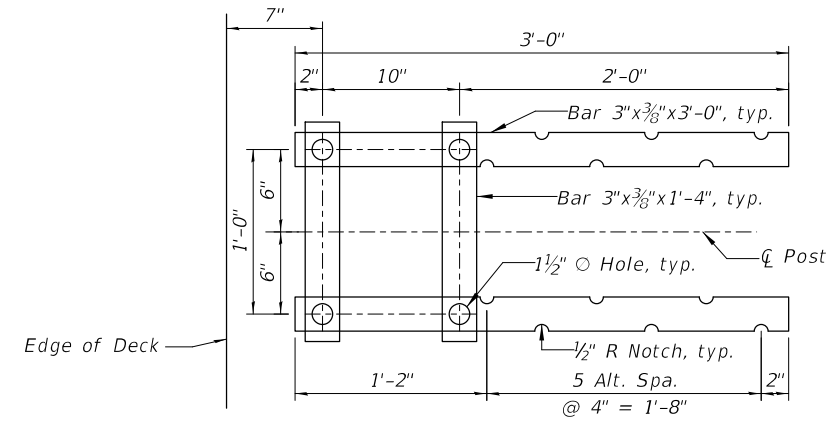
Note: Shims as needed to get fill bearing between posts and HSS Rail Tubes



**RAIL SECTION AT POST**

**GENERAL NOTES**

1. All railing components shall be galvanized. Type 1 anchor bar is not galvanized.
2. HS bolts with nut and washers, snug tightened, and thread locking system.
3. For rail splices use 1/2" O X 3 7/16 BOLTS (HSS 3 X 2 X 5/16) and use 3/4" O X 5 5/16 BOLTS (HSS 8 X 4 X 5/16)
4. Each rail length must be continuous over a minimum of two posts.
5. The fabricator must check that the tubular sleeve splices conform to the dimensions indicated to assure proper clearance.
6. Not more than one splice permitted per same side of post.
7. All horizontal members are parallel to longitudinal profile grade.
8. Posts are normal to profile grade of structure.
9. Posts are vertical to the transverse cross section.
10. Anchor bolts may be tack welded to anchorage.
11. Use extra thick washers for anchor bolts, with a minimum thickness of 0.305" and a maximum thickness of 0.375".
12. All railing components shall be paid for as Steel Railing (Special).



**TYPE 1 ANCHOR BAR DETAIL**

MODEL: \$MODEL\$  
FILE NAME: \$FILES\$

USER NAME =	djk	DESIGNED -	JAL	REVISED -	
PLOT SCALE =	N/A	CHECKED -	GJH	REVISED -	
PLOT DATE =	7/23/2024	DATE -	7/16/2024	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

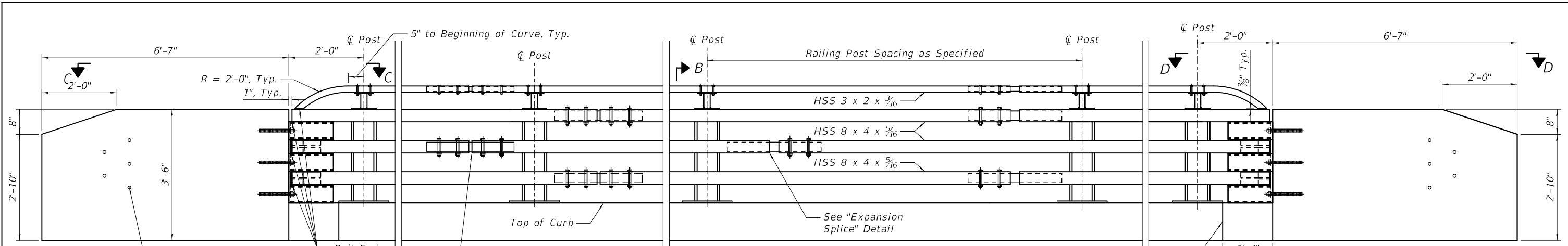
**STEEL RAILING DETAILS I  
STRUCTURE NO. 056-3055**

SHEET S9 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	48
CONTRACT NO. 61K76				

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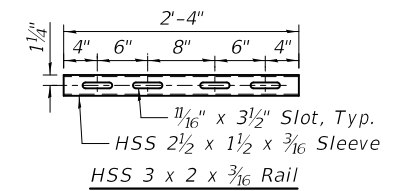




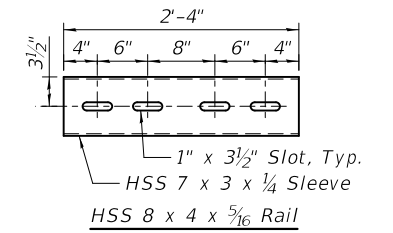
**TYPICAL ELEVATION**  
(See Sheet S12 for Section B-B)

**END BLOCK**

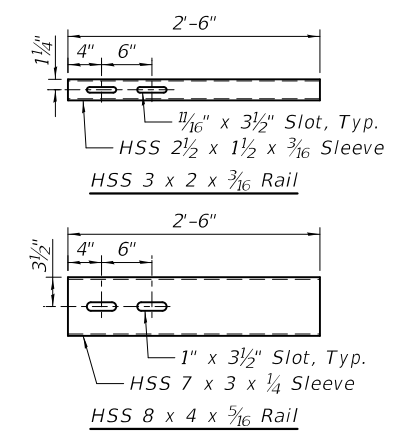
**END BLOCK**



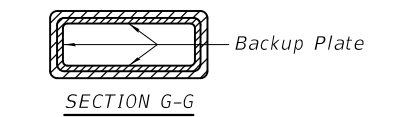
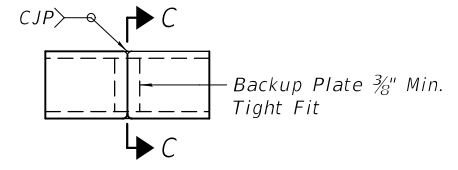
**STANDARD SLEEVE DETAILS**



**ALTERNATE TUBE WELDED STANDARD SPLICE**



**EXPANSION SLEEVE DETAILS**



(5) 1"  $\varnothing$  Formed Hole, Typ. for Traffic Barrier Terminal, Type 6 (See Std. 631031-18)

Rail End Caps, Typ. See "Standard Splice" Detail

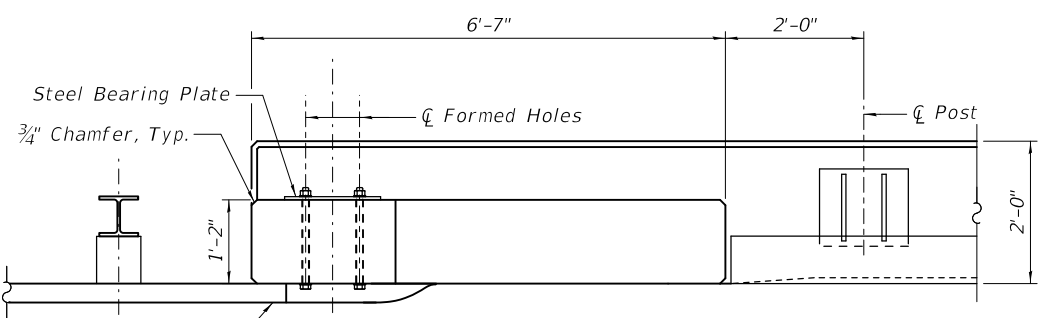
Top of Curb

See "Expansion Splice" Detail

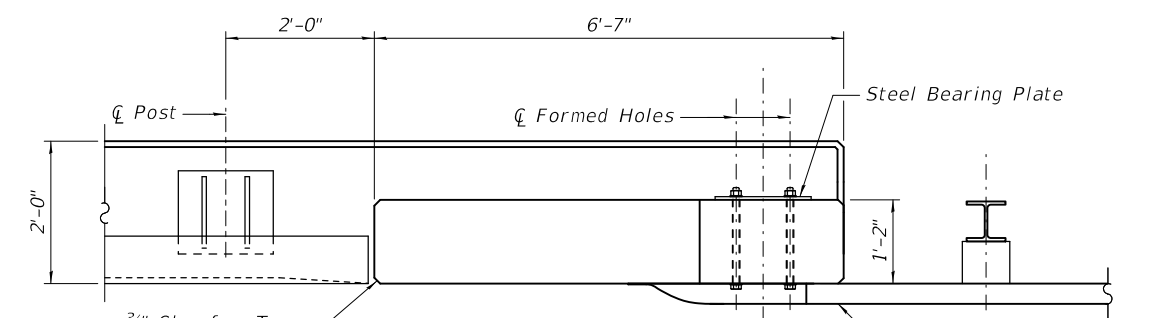
Begin Curb Transition to Vertical

Trans. Typ.

Direction of Traffic



**SECTION C-C - END BLOCK (DEPARTURE)**

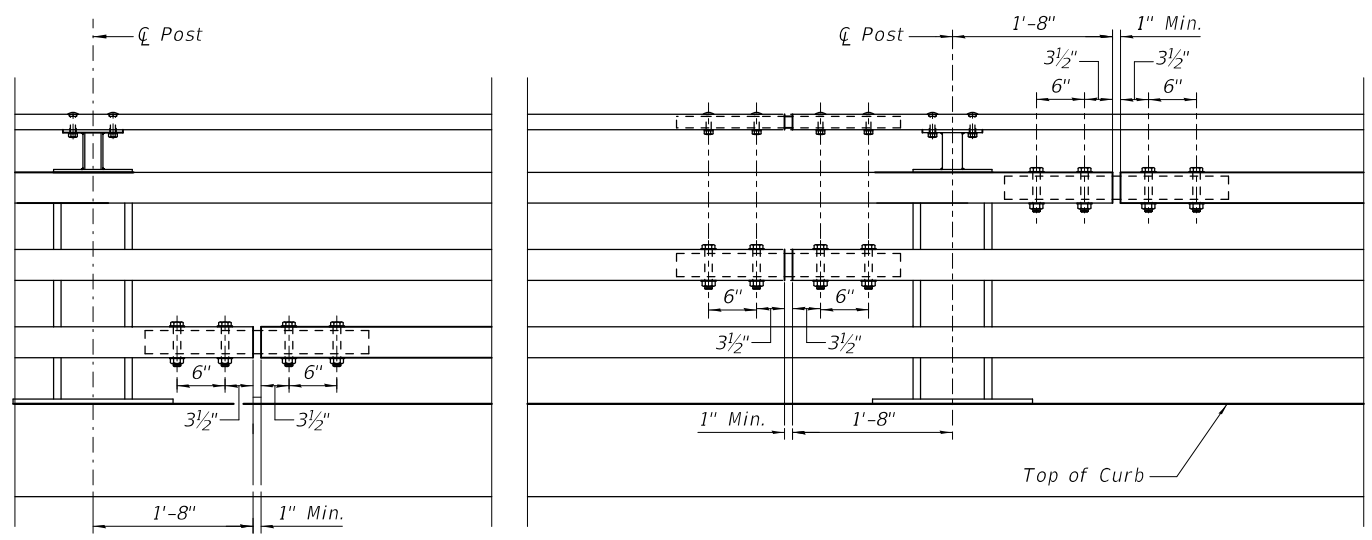


**SECTION D-D - END BLOCK (APPROACH)**

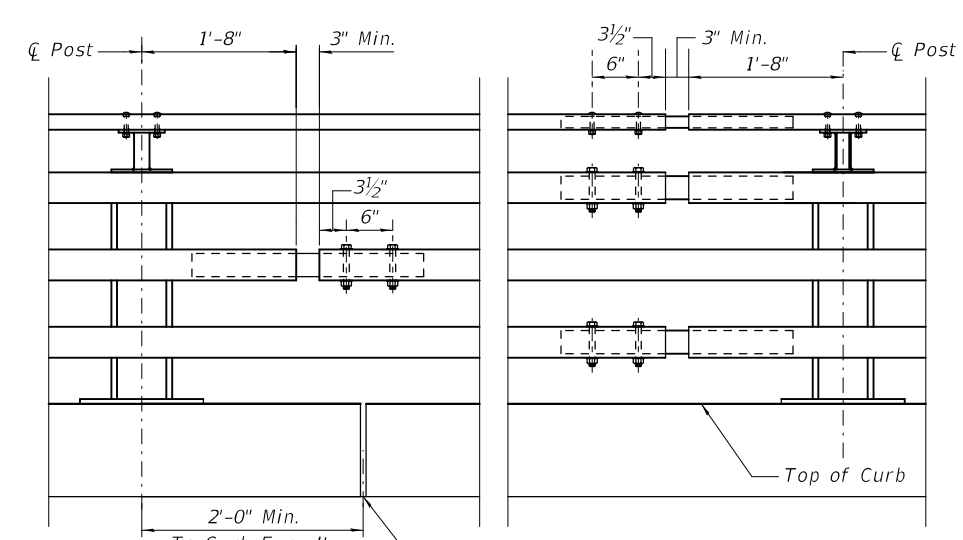
Traffic Barrier Terminal, Type 6 (Std. 631031-18)

Traffic Barrier Terminal, Type 6 (Std. 631031-18)

**TYPICAL PLAN DETAILS**



**STANDARD SPLICE**



**EXPANSION SPLICE**

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STEEL RAILING DETAILS II  
STRUCTURE NO. 056-3055**

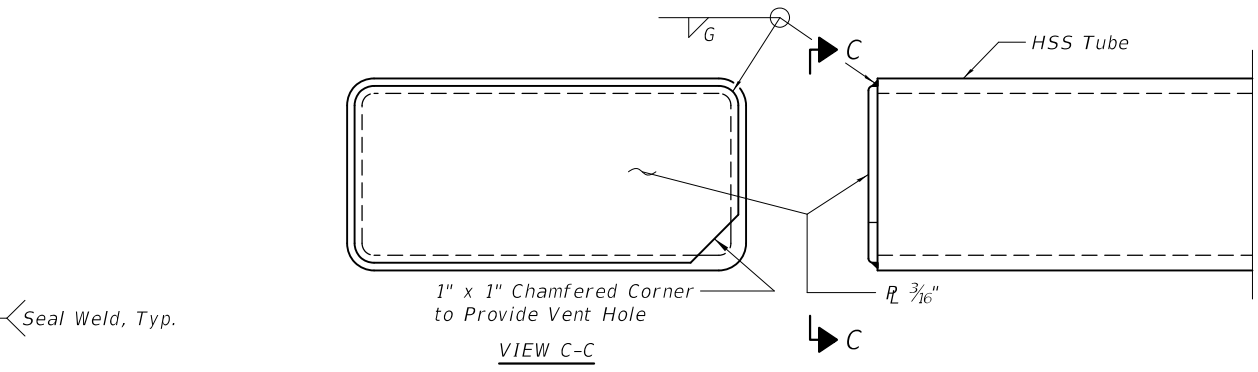
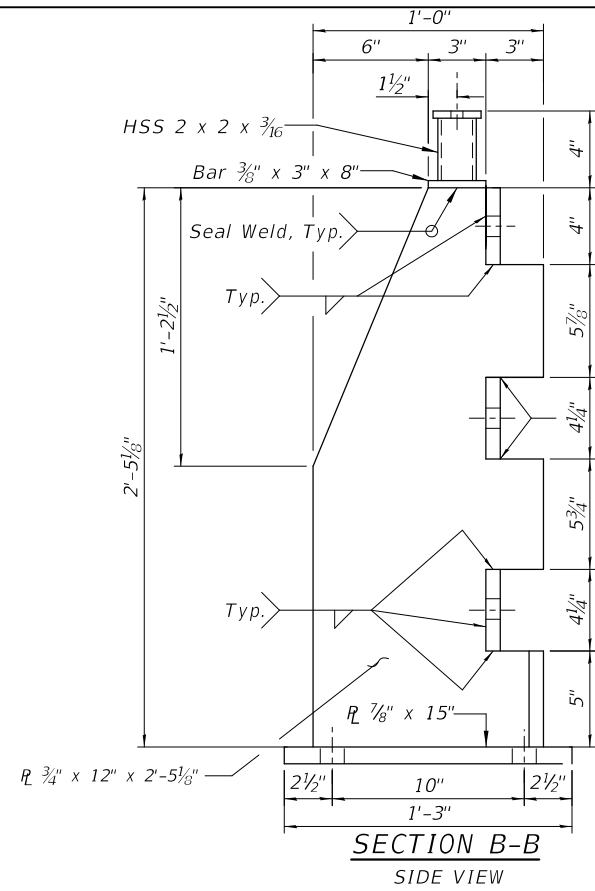
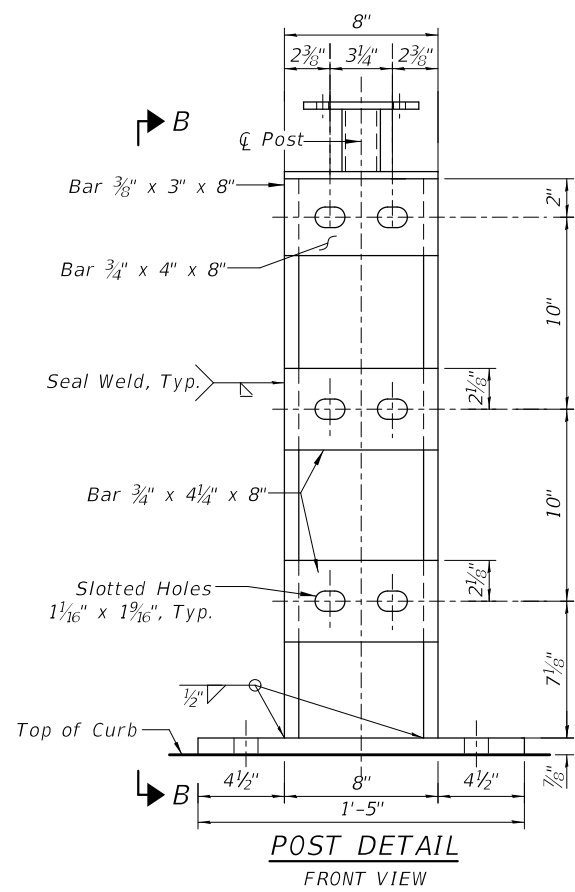
SHEET S10 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	49
			CONTRACT NO. 61K76	

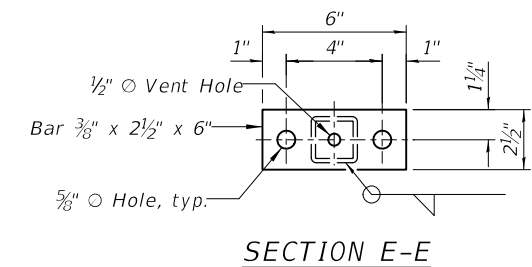
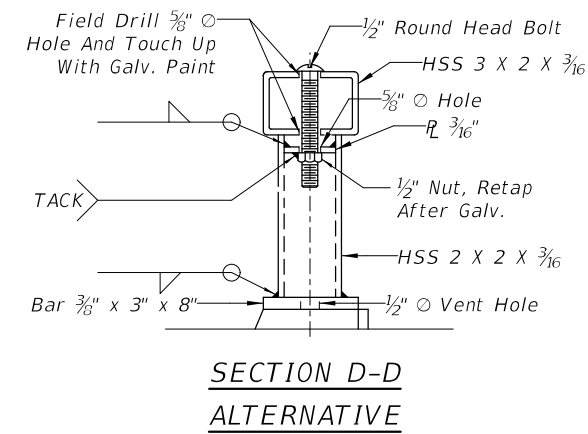
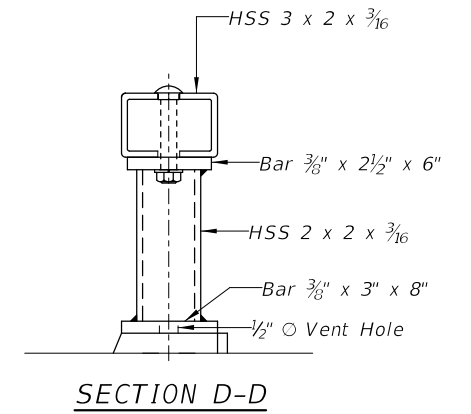
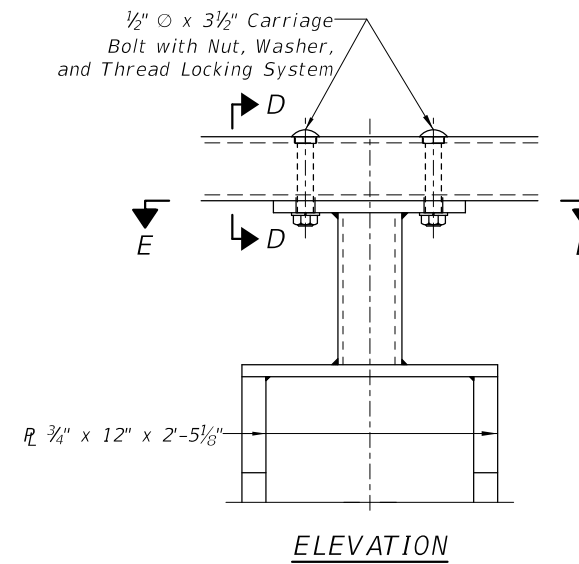
ILLINOIS FED. AID PROJECT

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djk	JAL	
	DRAWN -	REVISED -
	JAL	
PLOT SCALE =	CHECKED -	REVISED -
N/A	GJH	
PLOT DATE =	DATE -	REVISED -
7/23/2024	7/16/2024	



Note: For vehicular rail tube and bicycle railing tubes.



MODEL: \$MODELNAMES  
FILE NAME: \$FILES

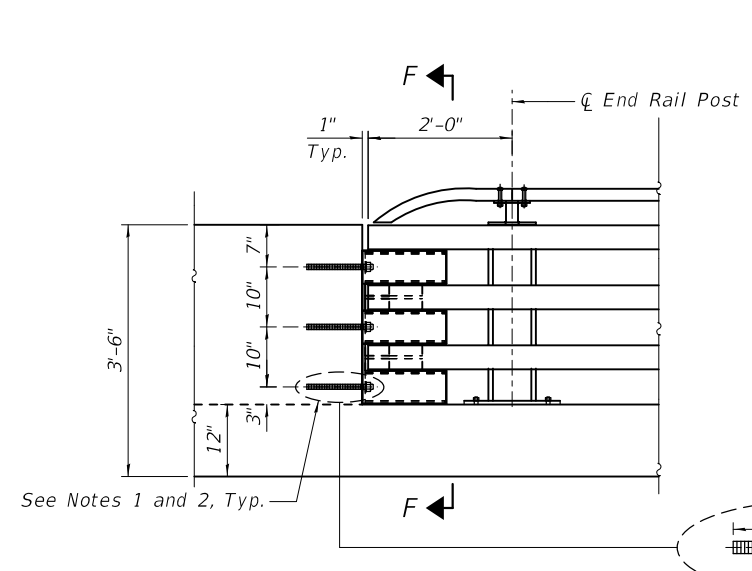
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DRAWN -	JAL	REVISED -			
PLOT SCALE =	N/A	CHECKED -	GJH	REVISED -	
PLOT DATE =	7/23/2024	DATE -	7/16/2024	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

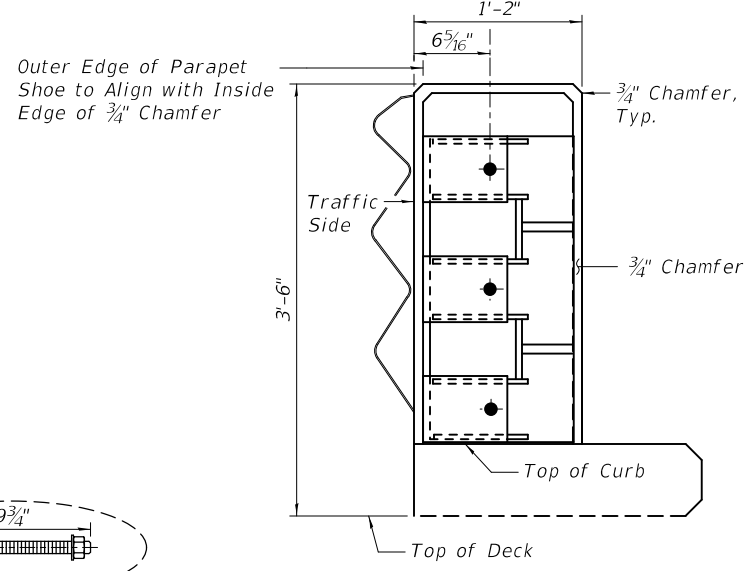
STEEL RAILING DETAILS III  
STRUCTURE NO. 056-3055

SHEET S11 OF S26 SHEETS

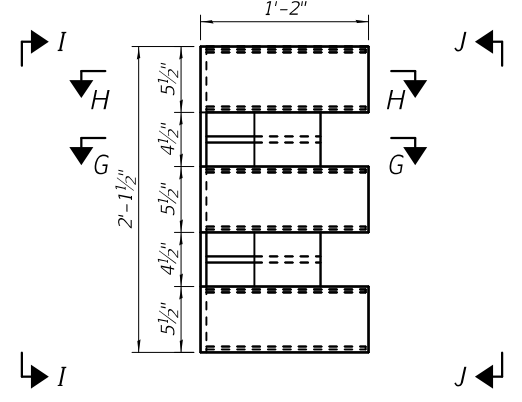
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	50
			CONTRACT NO. 61K76	
			ILLINOIS FED. AID PROJECT	



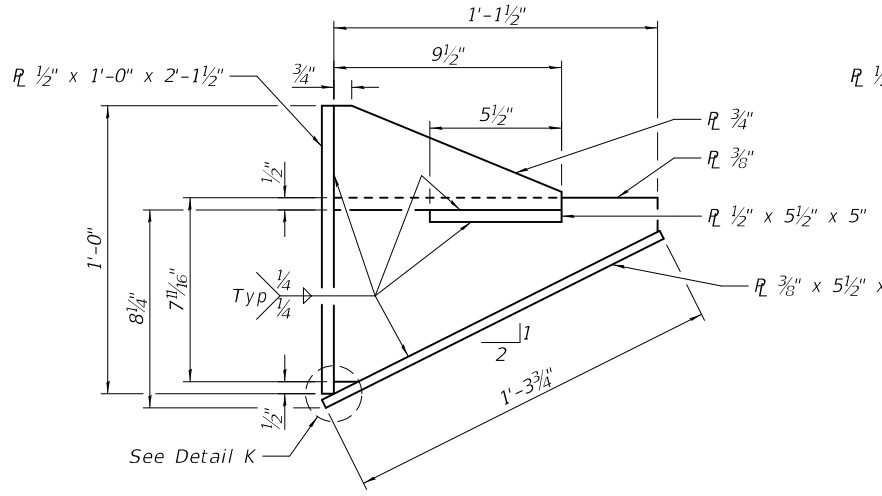
**PARAPET SHOE AT END BLOCK (DEPARTURE)**  
Note: Parapet shoe connection to approach end block is similar.



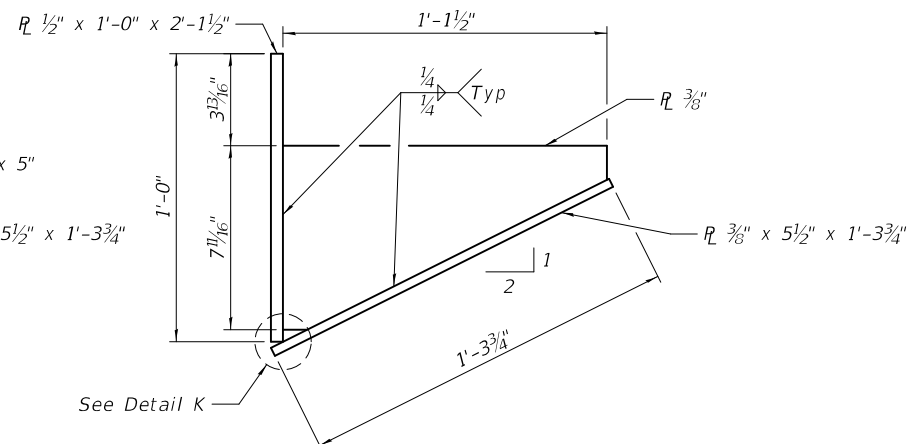
**SECTION F-F**  
Note: Bridge railing not shown for clarity.



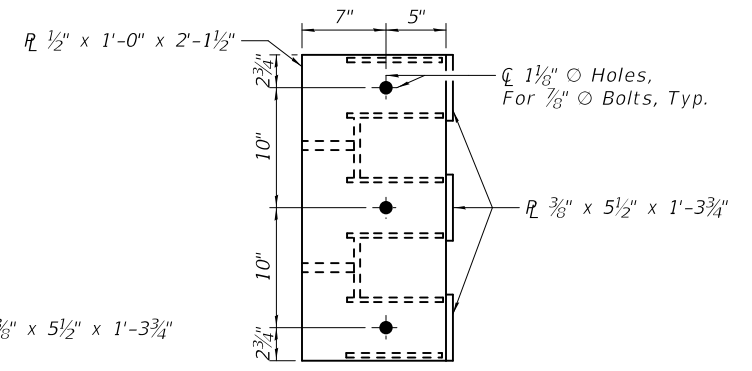
**PARAPET SHOE ELEVATION**



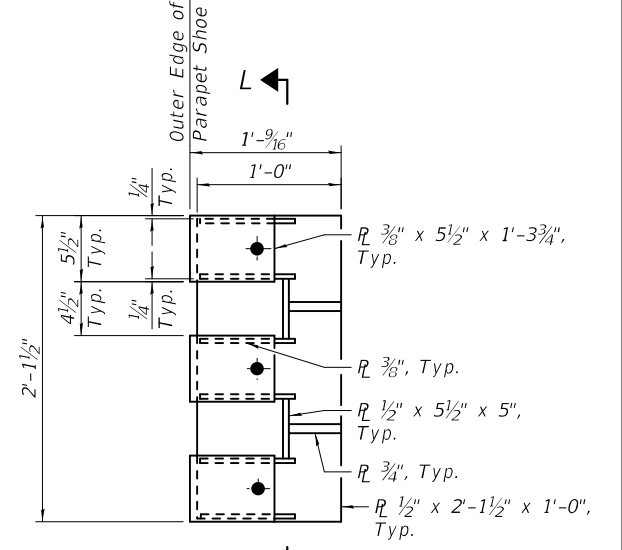
**SECTION G-G**



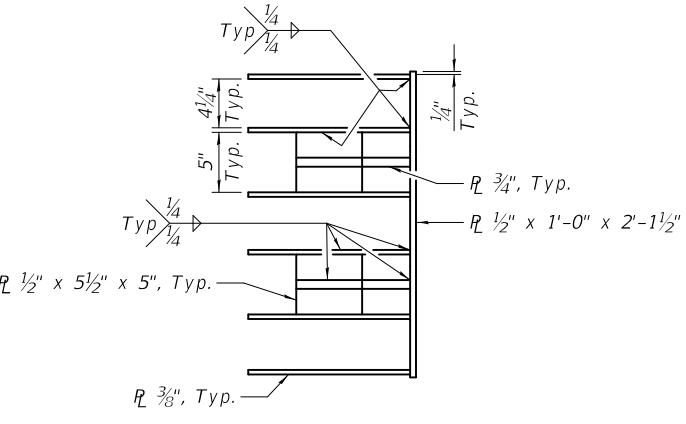
**SECTION H-H**



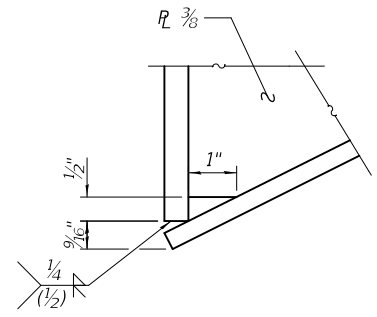
**VIEW I-I**



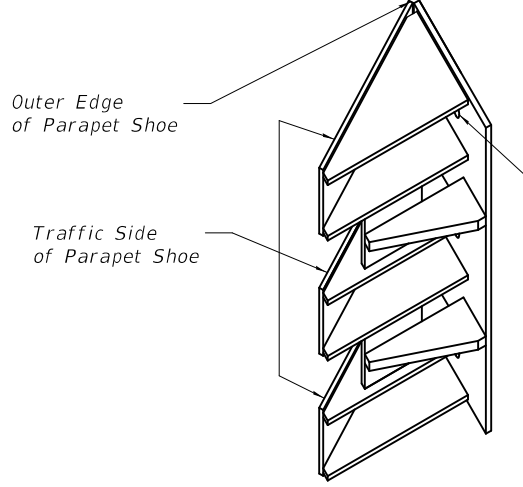
**VIEW J-J**



**SECTION L-L**



**DETAIL K**



**ISOMETRIC VIEW**

Note: Isometric view is mirrored to show more details.

**Notes:**

- Anchor bolts must be 7/8" Dia. and ASTM F1554 Grade 105 fully threaded rods with heavy hex nut and one hardened washer (1 3/4" OD) each. Embed threaded rods 8" into concrete anchor block with DRILL AND BOND (CHEMICAL ADHESIVE) anchorage system.
- DRILL AND BOND (CHEMICAL ADHESIVE) anchorages is subjected to approval of Engineer. Installation procedure must comply with manufacturer's instructions.

**BILL OF MATERIAL**

Item	Unit	Total
Steel Railing (Special)	Foot	112

MODEL: \$MODEL\$  
FILE NAME: \$FILE\$

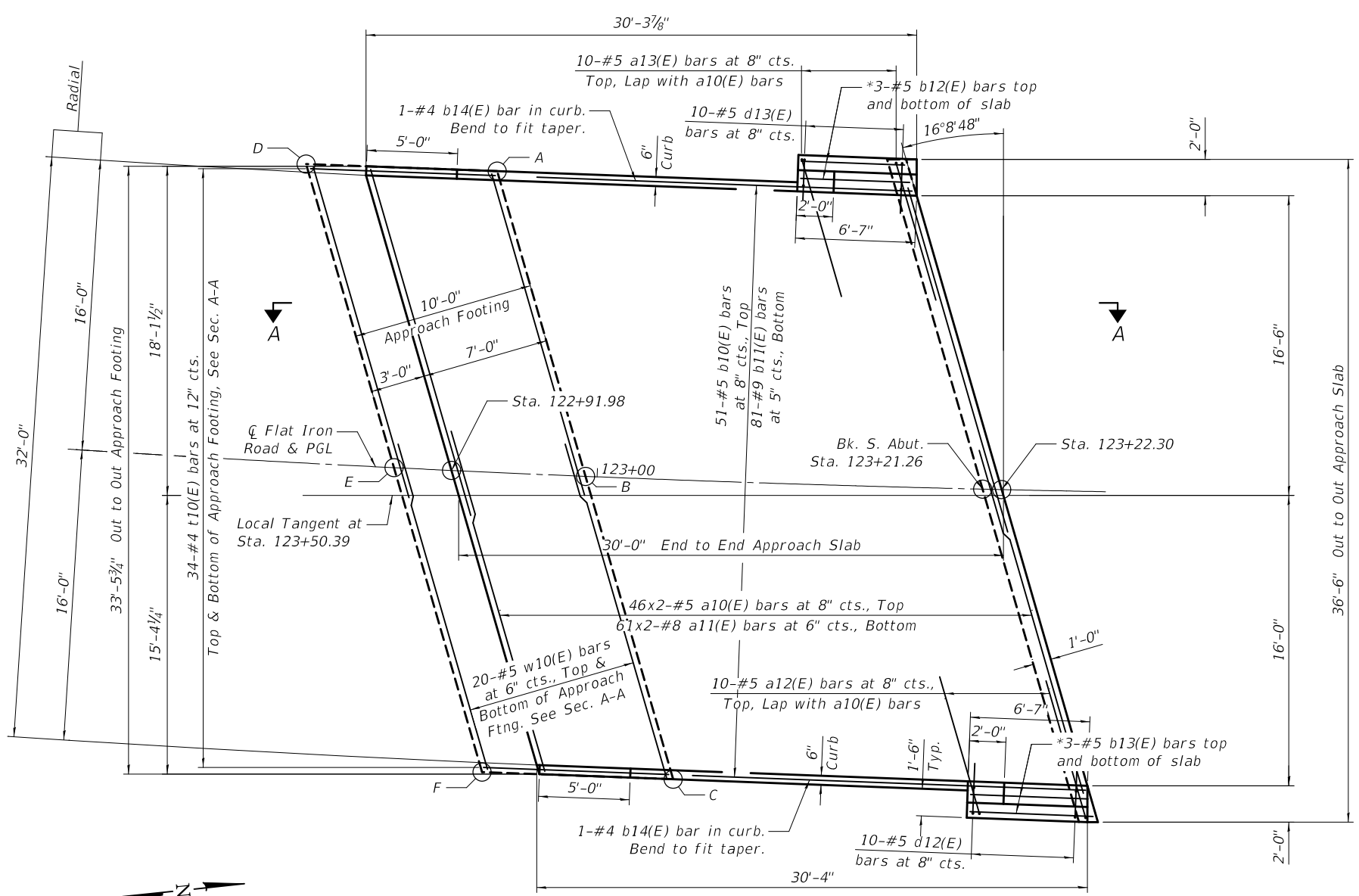
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DRAWN -	JAL	REVISED -			
PLOT SCALE =	N/A	CHECKED -	GJH	REVISED -	
PLOT DATE =	7/23/2024	DATE -	7/16/2024	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**STEEL RAILING DETAILS IV  
STRUCTURE NO. 056-3055**

SHEET S12 OF S26 SHEETS

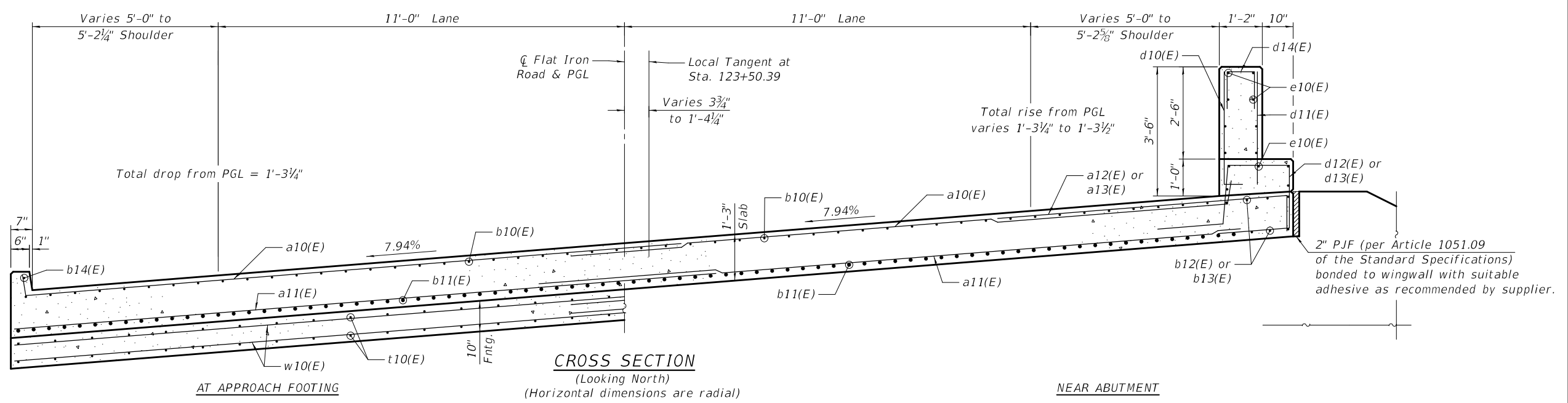
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	51
			CONTRACT NO. 61K76	
		ILLINOIS FED. AID PROJECT		



TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

North Approach		
Point/Location	Top	Bottom
A -	899.71	898.88
B -	901.00	900.17
C -	902.29	901.46
D -	899.77	898.94
E -	901.05	900.22
F -	902.34	901.50

PLAN



CROSS SECTION

(Looking North)  
(Horizontal dimensions are radial)

MODEL: \$MODELNAMES  
FILE NAME: \$FILES

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DRAWN -		JAL	REVISED -		
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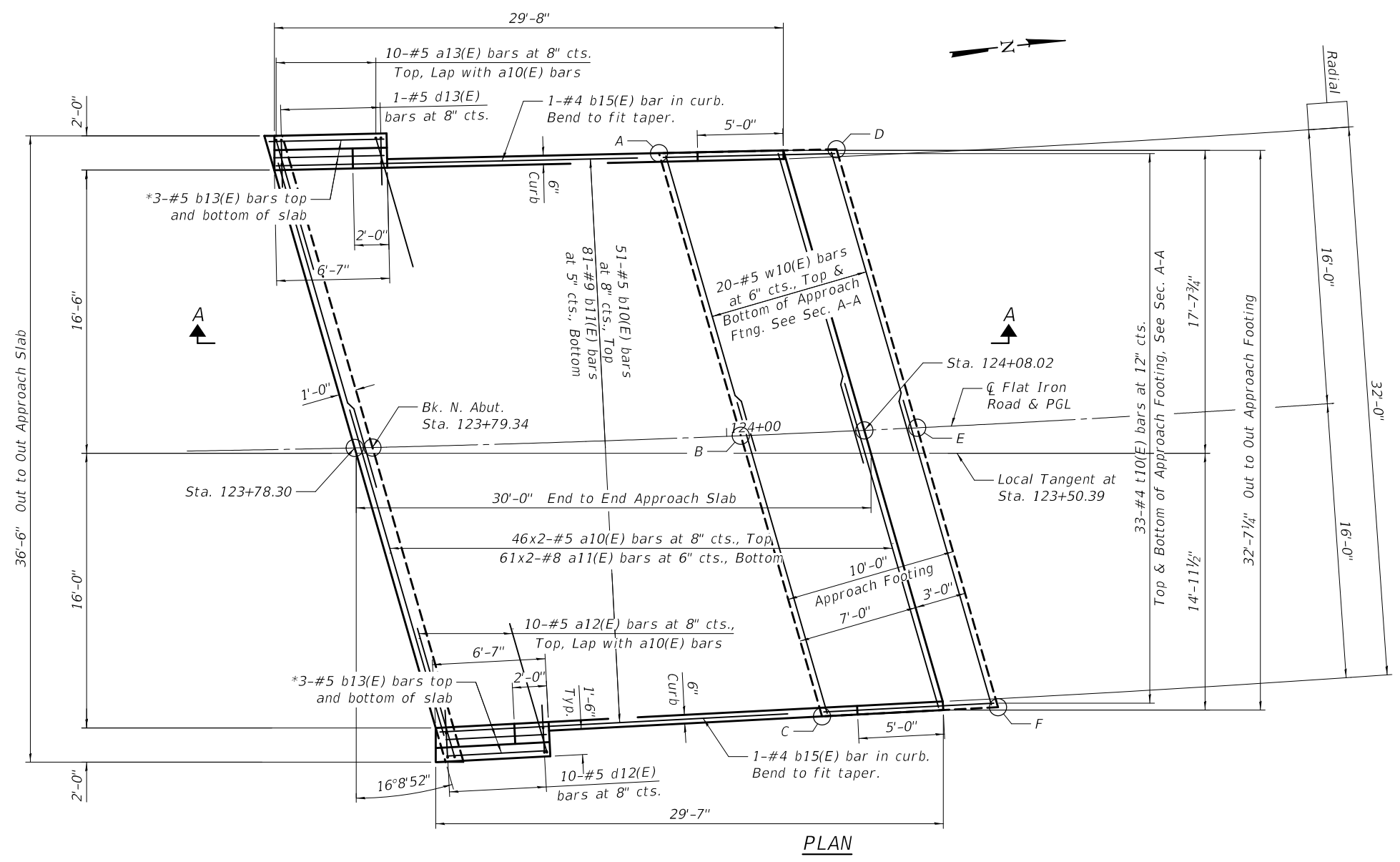
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SOUTH APPROACH SLAB  
STRUCTURE NO. 056-3055

SHEET S13 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	52
CONTRACT NO. 61K76				

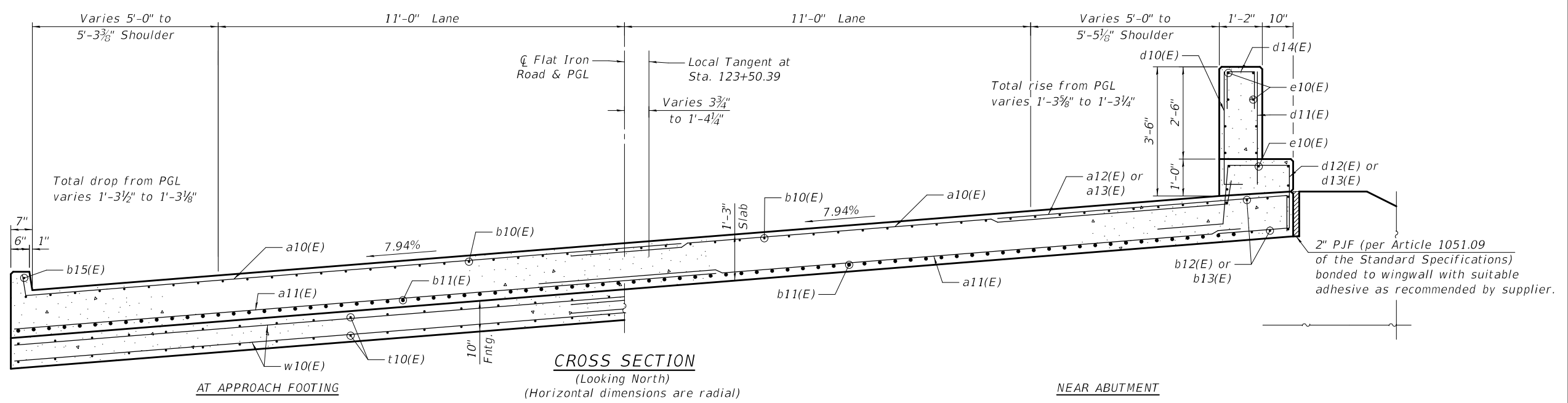
ILLINOIS FED. AID PROJECT



PLAN

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

South Approach		
Point/Location	Top	Bottom
A -	899.20	898.36
B -	900.48	899.65
C -	901.76	900.92
D -	899.12	898.28
E -	900.38	899.55
F -	901.66	900.82



CROSS SECTION

(Looking North)  
(Horizontal dimensions are radial)

USER NAME =	djk	DESIGNED -	JAL	REVISED -	
DRAWN -		JAL	REVISED -		
PLOT SCALE =	N/A	CHECKED -	GJH	REVISED -	
PLOT DATE =	7/23/2024	DATE -	7/16/2024	REVISED -	

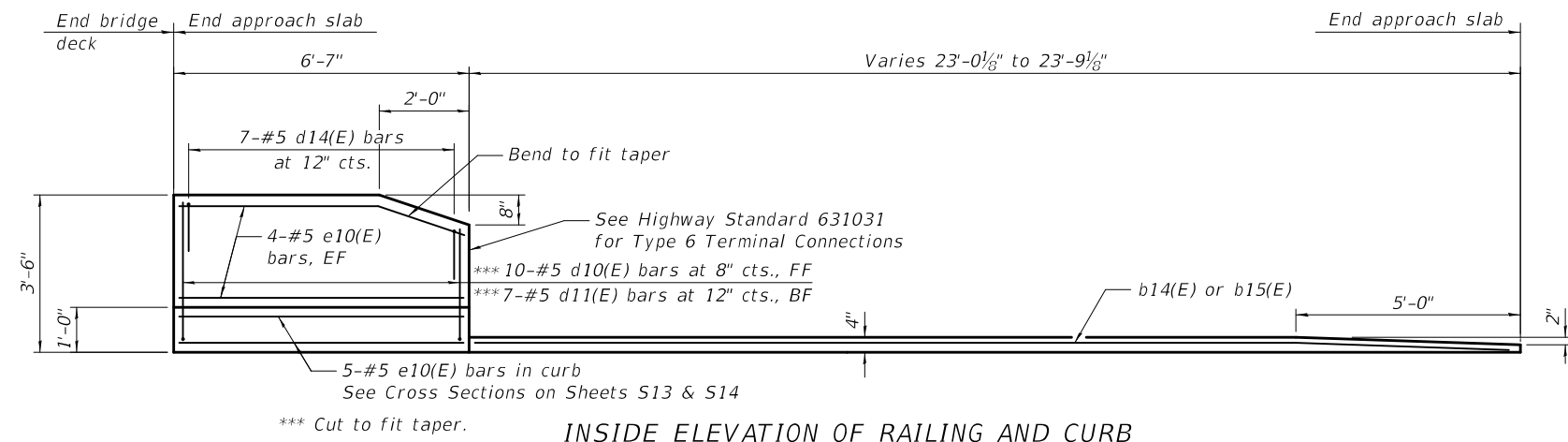
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

NORTH APPROACH SLAB  
STRUCTURE NO. 056-3055

SHEET S14 OF S26 SHEETS

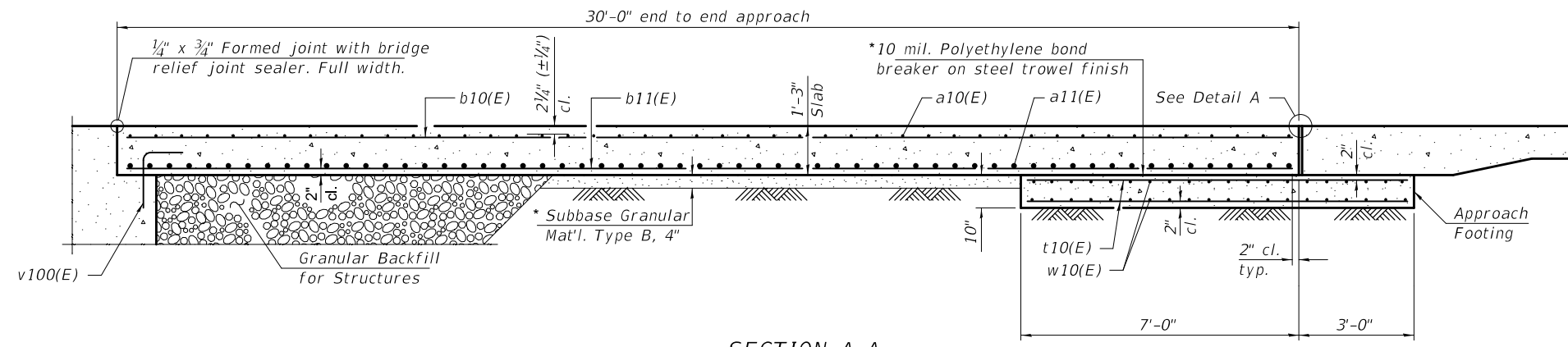
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	53
CONTRACT NO. 61K76			ILLINOIS FED. AID PROJECT	

MODEL: \$MODELNAMES  
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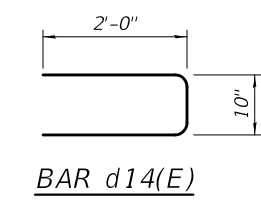


**INSIDE ELEVATION OF RAILING AND CURB**

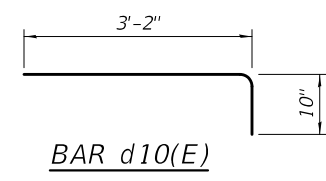
**Notes:**  
 The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.  
 Curb concrete under railing shall be paid for as Concrete Superstructure. Approach slab shall be paid for as Concrete Superstructure (Approach Slab). Approach footing concrete shall be paid for as Concrete Structures. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf. Cost of excavation for approach footing included with Concrete Structures. For Granular Backfill for Structures and drainage treatment details, see sheet S2. For railing details, see sheets S9 through S12.



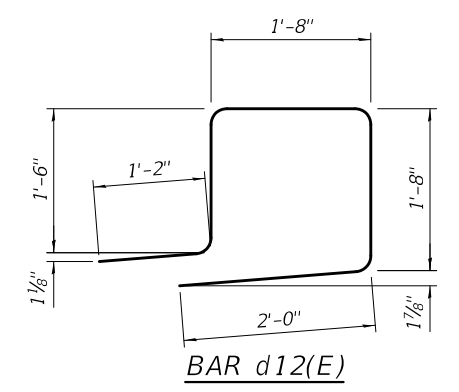
**SECTION A-A**



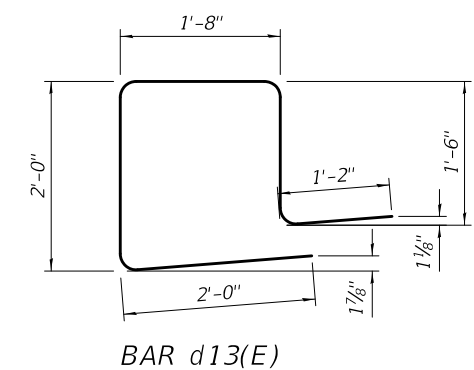
**BAR d14(E)**



**BAR d10(E)**



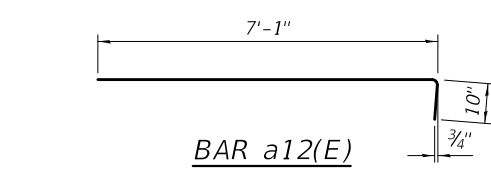
**BAR d12(E)**



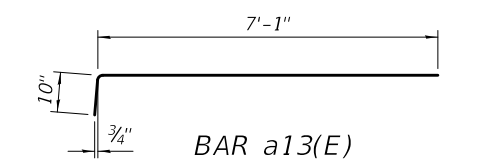
**BAR d13(E)**



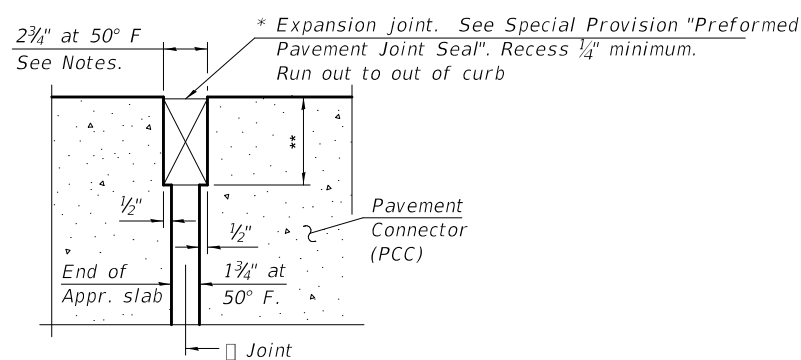
**BAR a10(E)**



**BAR a12(E)**



**BAR a13(E)**



**DETAIL A**

\* Cost included with Concrete Superstructure (Approach Slab).  
 \*\* Per manufacturer recommendations

**TWO APPROACHES  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a10(E)	184	#5	19'-10"	—
a11(E)	244	#8	19'-8"	—
a12(E)	20	#5	7'-4"	—
a13(E)	20	#5	7'-4"	—
b10(E)	102	#5	29'-8"	—
b11(E)	162	#9	29'-8"	—
b12(E)	12	#5	6'-3"	—
b13(E)	12	#5	6'-9"	—
b14(E)	2	#5	23'-3"	—
b15(E)	5	#5	22'-8"	—
d10(E)	40	#5	4'-0"	—
d11(E)	28	#5	3'-0"	—
d12(E)	20	#5	8'-0"	—
d13(E)	20	#5	8'-4"	—
d14(E)	28	#5	4'-10"	—
e10(E)	52	#5	6'-3"	—
t10(E)	67	#4	9'-8"	—
w10(E)	160	#5	18'-11"	—
Concrete Superstructure		Cu. Yd.	4.7	
Concrete Superstructure (Approach Slab)		Cu. Yd.	94.2	
Concrete Structures		Cu. Yd.	20.4	
Bridge Deck Grooving		Sq. Yd.	202	
Protective Coat		Sq. Yd.	240	
Reinforcement Bars, Epoxy Coated		Pound	41,370	

MODEL: \$MODEL\$  
 FILE NAME: \$FILES\$

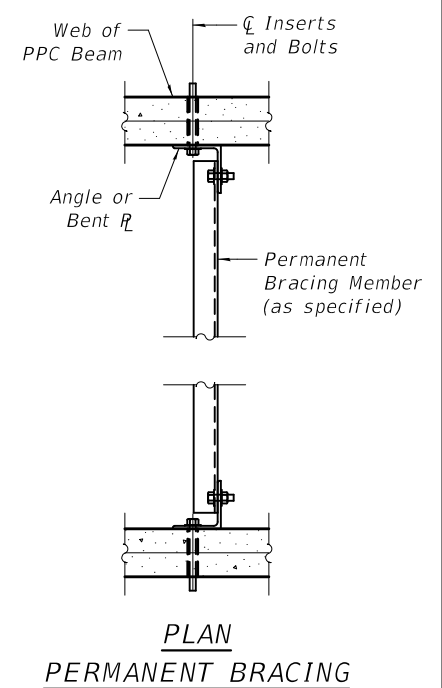
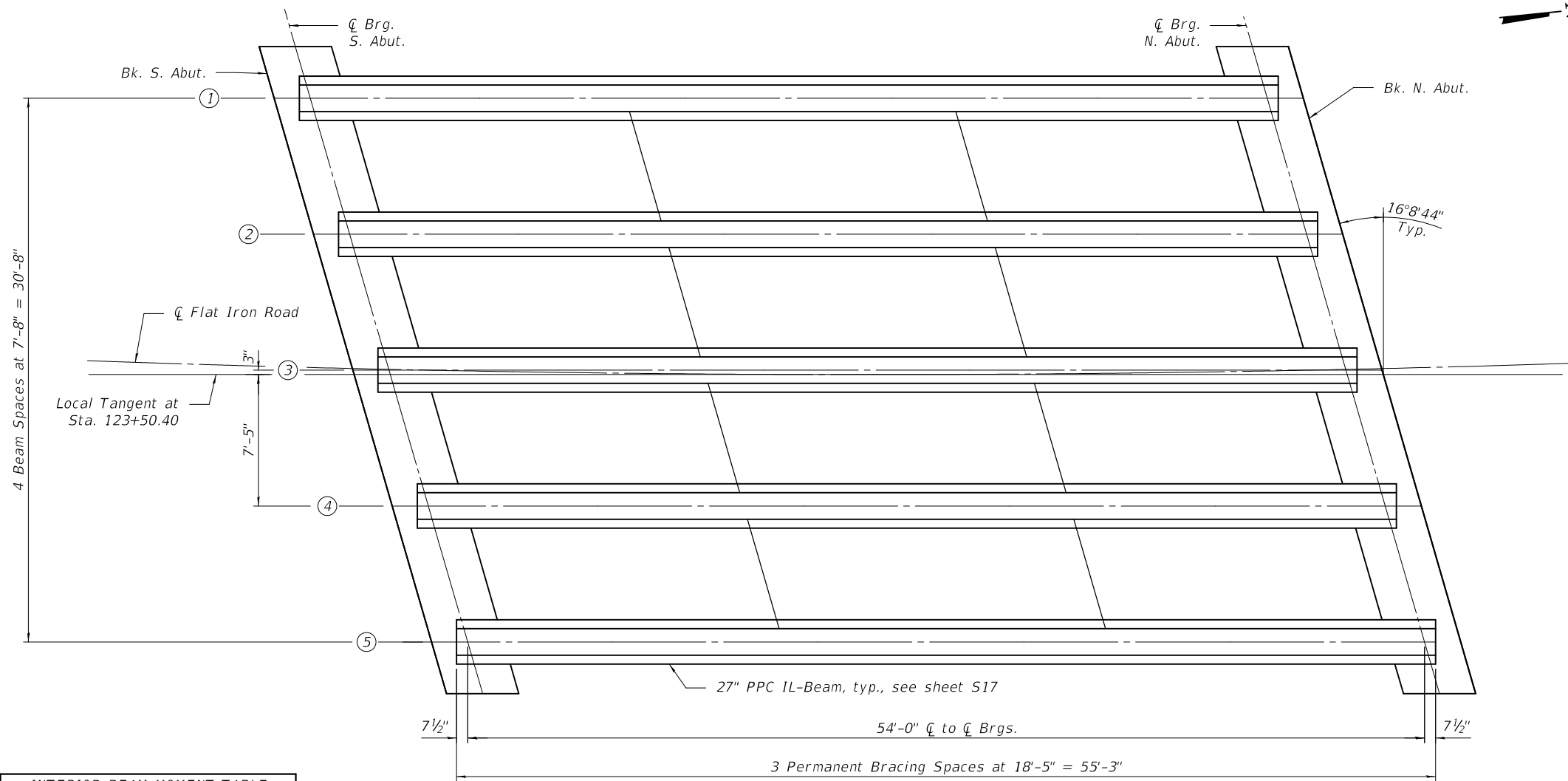
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PLOT DATE =	8/23/2024	CHECKED -	GJH	REVISED -	
		DATE -	7/16/2024	REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**APPROACH SLAB DETAILS  
 STRUCTURE NO. 056-3055**

SHEET S15 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	54
			CONTRACT NO. 61K76	
			ILLINOIS FED. AID PROJECT	



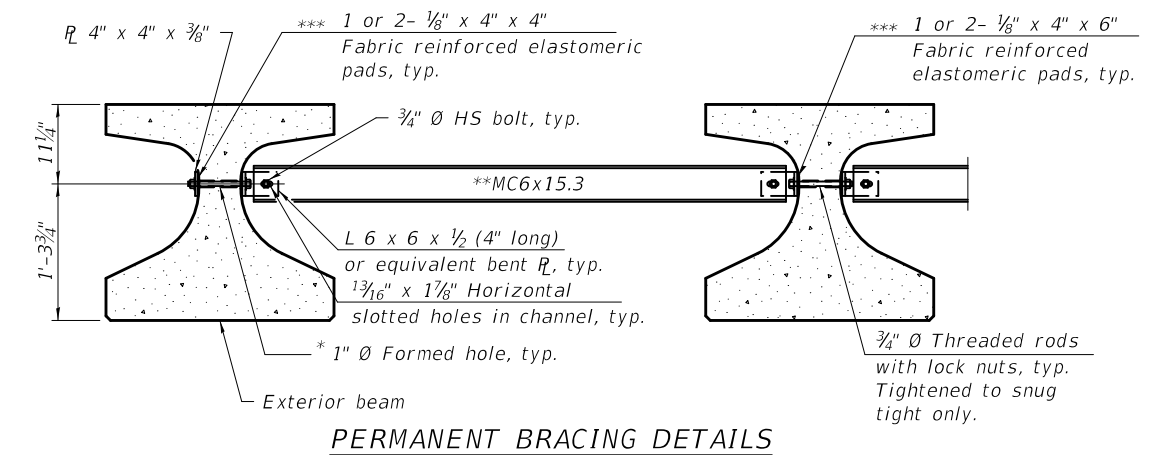
INTERIOR BEAM MOMENT TABLE	
	0.5 Span
I	(in <sup>4</sup> ) 33,879
I'	(in <sup>4</sup> ) 131,951
S <sub>b</sub>	(in <sup>3</sup> ) 3,060
S <sub>b</sub> '	(in <sup>3</sup> ) 6,131
S <sub>t</sub>	(in <sup>3</sup> ) 2,127
S <sub>t</sub> '	(in <sup>3</sup> ) 24,085
DC1	(k/ft.) 1.300
MDC1	(k) 473.8
DC2	(k/ft.) 0.160
MDC2	(k) 58.3
DW	(k/ft.) 0.383
MDW	(k) 139.6
LLDF	0.730
M <sub>L</sub> + 1M	(k) 769.5

INTERIOR BEAM REACTION TABLE	
	Abutments
LLDF	0.791
OCF	1.053
RDC1	(k) 35.1
RDC2	(k) 4.3
RDW	(k) 10.3
R <sub>L</sub> + 1M	(k) 80.3
RTotal (Strength I)(Impact)	(k) 205.4
RTotal (Strength I)(No Impact)(k)	176.7

**FRAMING PLAN**

I: Non-composite moment of inertia of beam section (in.<sup>4</sup>).  
 I': Composite moment of inertia of beam section (in.<sup>4</sup>).  
 S<sub>b</sub>: Non-composite section modulus for the bottom fiber of the prestressed beam (in.<sup>3</sup>).  
 S<sub>b</sub>': Composite section modulus for the bottom fiber of the prestressed beam (in.<sup>3</sup>).  
 S<sub>t</sub>: Non-composite section modulus for the top fiber of the prestressed beam (in.<sup>3</sup>).  
 S<sub>t</sub>': Composite section modulus for the top fiber of the prestressed beam (in.<sup>3</sup>).  
 DC1: Un-factored non-composite dead load (kips/ft.).  
 MDC1: Un-factored moment due to non-composite dead load (kip-ft.).  
 DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).  
 MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).  
 DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).  
 MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).  
 LLDF: Live Load Distribution Factor for moment and shear computed according to Article 4.6.2.2 and further IDOT provisions.  
 M<sub>L</sub> + 1M: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).  
 OCF: Obtuse Correction Factor computed according to Article 4.6.2.2.3c or as further simplified by IDOT provisions.

- \* Fabricator shall locate to miss strands within permissible tolerances.
- \*\* Alternate MC6x18 channels are permitted to facilitate material acquisition.
- \*\*\* Place pads as necessary to provide a flat mounting surface between the steel and concrete.



**PERMANENT BRACING DETAILS**

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN  
STRUCTURE NO. 056-3055

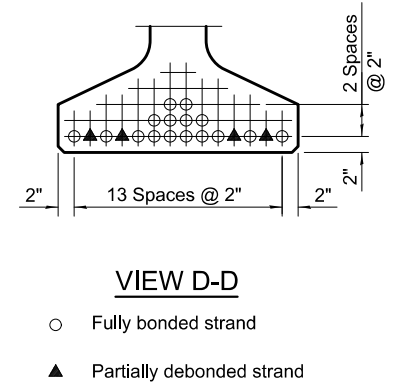
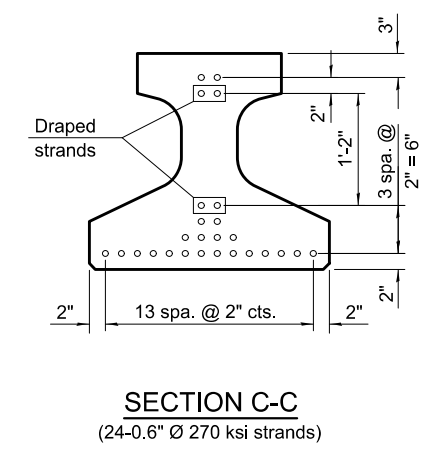
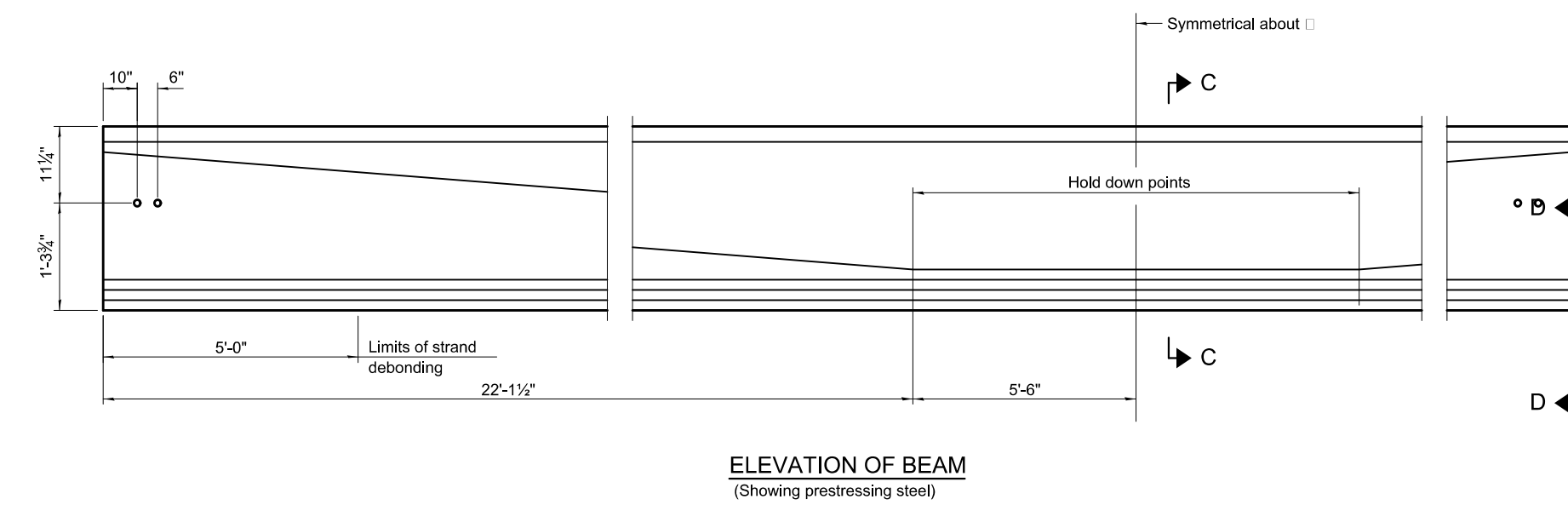
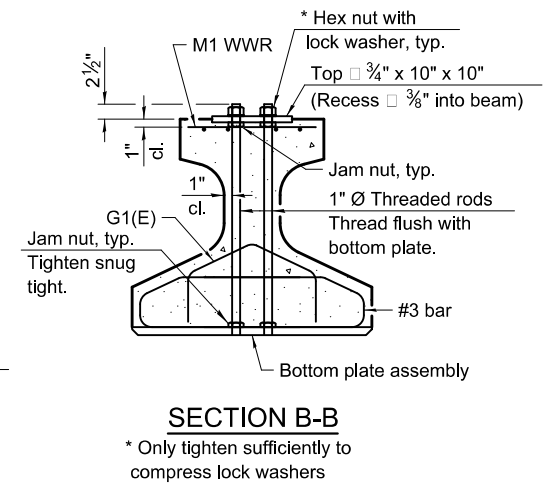
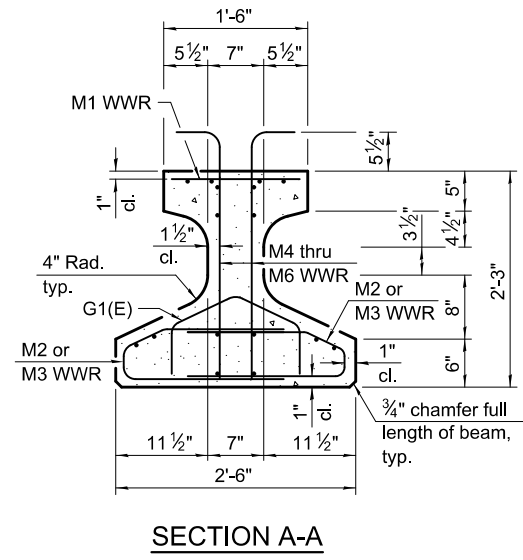
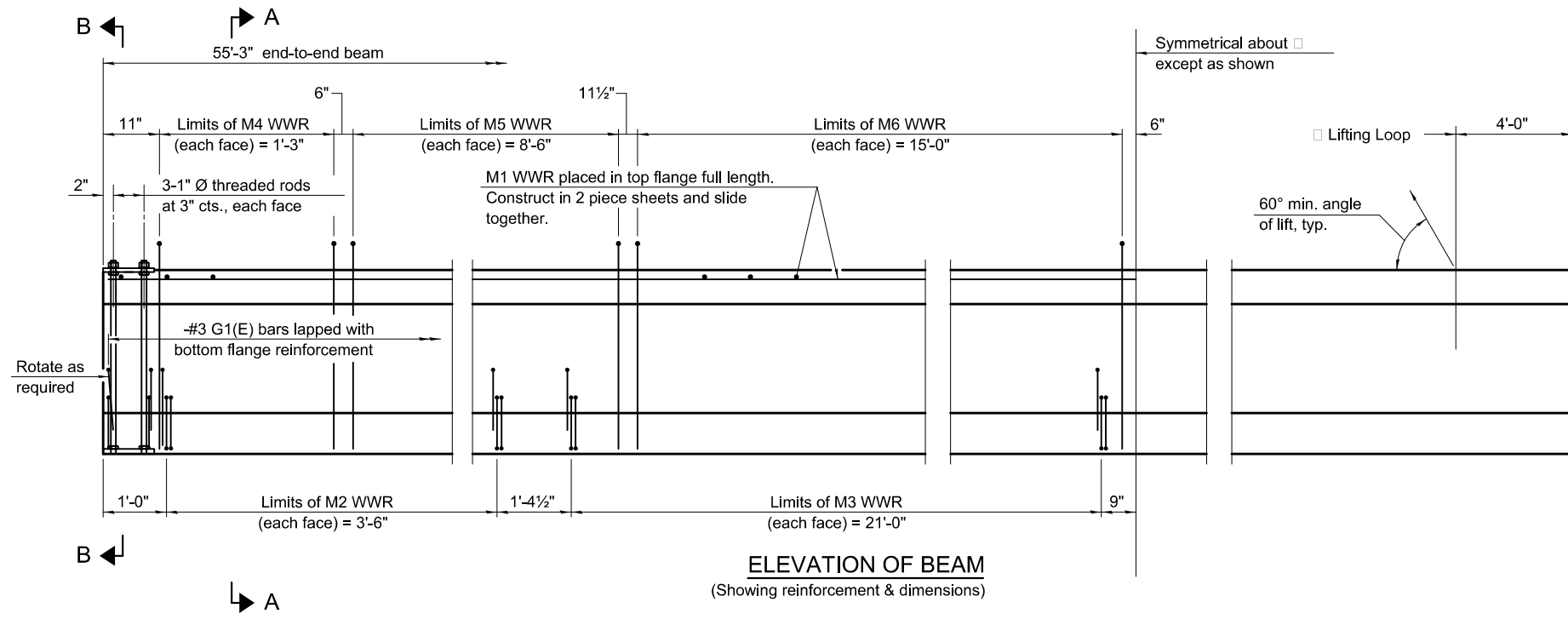
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	55
			CONTRACT NO. 61K76	

SHEET S16 OF S26 SHEETS

ILLINOIS FED. AID PROJECT

MODEL: \$MODELNAMES  
FILE NAME: \$FILES

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PLOT SCALE =	N/A	DRAWN -	JAL	REVISED -	
PLOT DATE =	7/23/2024	CHECKED -	GJH	REVISED -	
		DATE -	7/16/2024	REVISED -	



Note:  
See sheet S18 for additional details and Bill of Material.

MODEL: \$MODELNAMES  
FILE NAME: \$FILES

IL27-1830

5-15-2023

USER NAME =	djk	DESIGNED -	JAL	REVISED -	
DRAWN -	JAL	REVISED -			
PLOT SCALE =	N/A	CHECKED -	GJH	REVISED -	
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

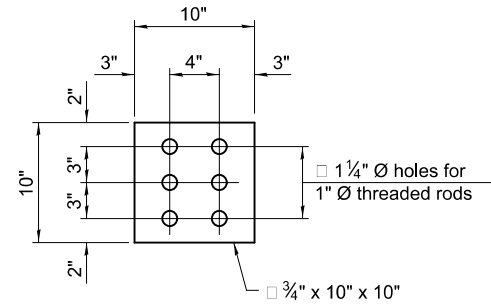
**IL27N BEAM**  
**STRUCTURE NO. 056-3055**

SHEET S17 OF S26 SHEETS

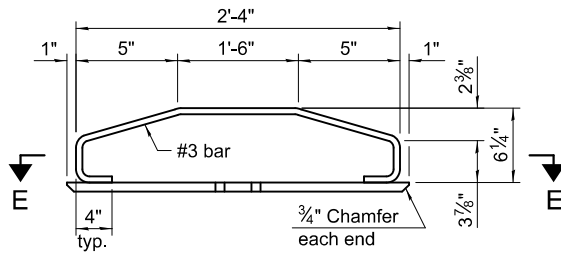
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	56
			CONTRACT NO. 61K76	

ILLINOIS FED. AID PROJECT

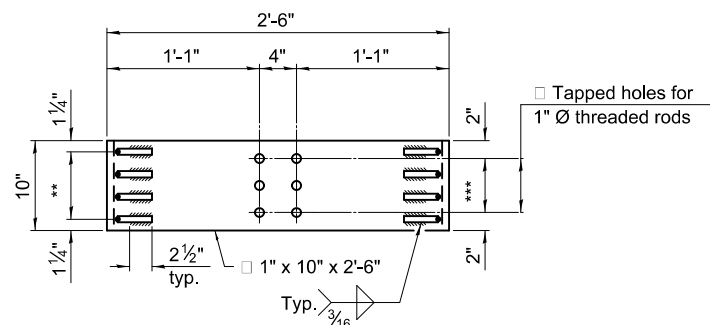




PLAN - TOP PLATE



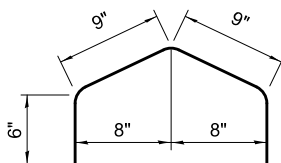
ELEVATION - BOTTOM PLATE ASSEMBLY



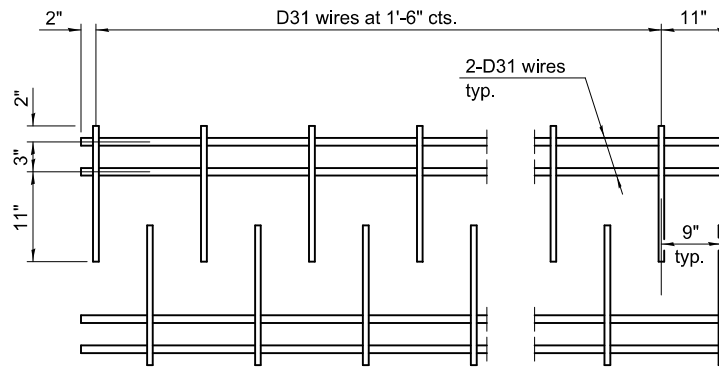
SECTION E-E

\*\* 3 Spaces at 2 1/2" = 7 1/2"

\*\*\* 2 Spaces at 3" = 6"

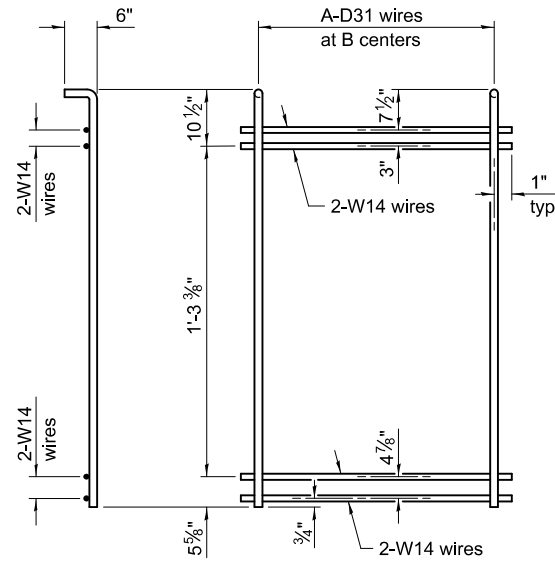


BAR G1(E)



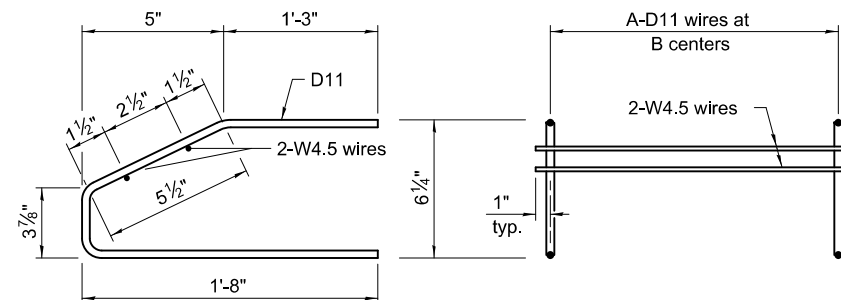
M1 WWR DETAIL

When multiple sheets of M1 WWR are required along the beam length, #5(E) bars (5'-0" long) shall be used to splice the longitudinal D31 wires together (Min. Lap 2'-2").



M4 THRU M6 WWR DETAIL

(See Table of Dimensions)



M2 AND M3 WWR DETAIL

(See Table of Dimensions)

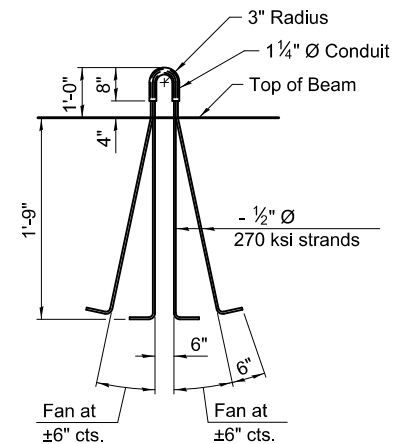
TABLE OF DIMENSIONS

(The WWR designs assume grade 60. If necessary, this permits the fabricator to directly substitute grade 60 rebar as detailed in the Manual for Fabrication of Precast Prestressed Concrete Products.)

WWR	A	B
M2	15	3"
M3	15	1'-6"
M4	6	3"
M5	18	6"
M6	16	1'-0"

NOTES

- Inserts for 3/4" Ø threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams.
- Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter for beam strands shall be 0.6" and the nominal cross-sectional area shall be 0.217 sq. in. The nominal diameter for lifting loops shall be 1/2" and the nominal cross sectional area shall be 0.153 sq. in.
- The beams shall have a final concrete compressive strength, f<sub>c</sub>, of 8500 psi and a release concrete compressive strength, f<sub>ci</sub>, of 6500 psi.
- A minimum 2 1/2" Ø lifting pin shall be used to engage the lifting loops during handling.
- Bend the extended strands inward on the fascia beams to maintain 1 1/2" clearance inside the pier diaphragm.
- The top and bottom plates shall be AASHTO M270 Grade 50.
- The top plates and bottom plate assemblies shall be galvanized according to AASHTO M111.
- The threaded rods, nuts and washers shall be galvanized according to AASHTO M232.
- Threaded rods shall be ASTM F 1554 Grade 55.
- Welded Wire Reinforcement (WWR) shall conform to ASTM A884 with a Class A, Type 1 epoxy coating or ASTM A1060, Table 3 galvanized coating.



LIFTING LOOP DETAIL

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete Beams, IL27N	Ft.	277

MODEL: \$MODELNAMES  
FILE NAME: \$FILES

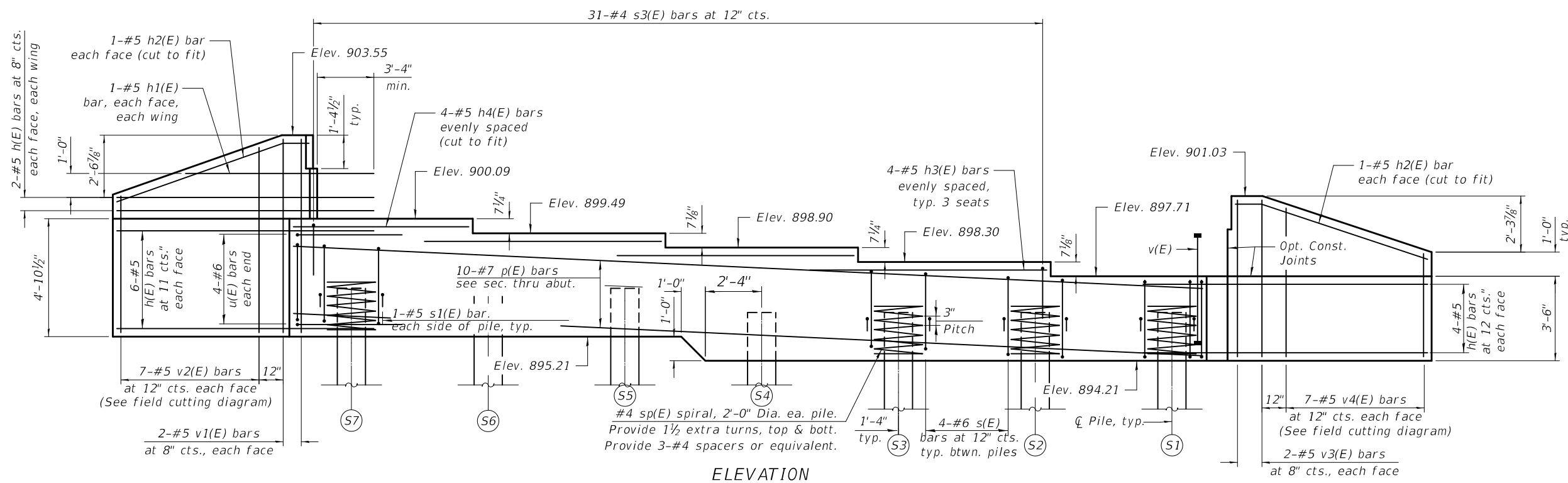
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PLOT DATE =	7/23/2024	DATE -	7/16/2024	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

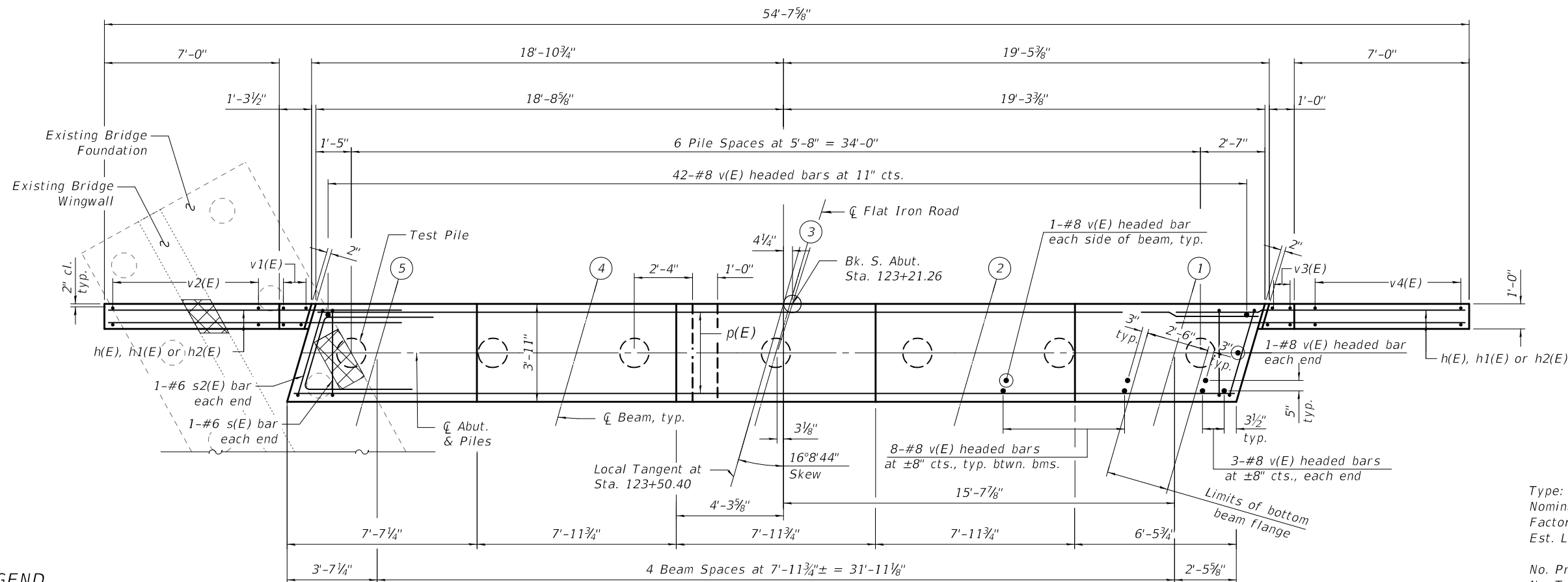
IL27N BEAM DETAILS  
STRUCTURE NO. 056-3055

SHEET S18 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	57
			CONTRACT NO. 61K76	
		ILLINOIS FED. AID PROJECT		



**ELEVATION**



**PLAN**

**PILE DATA**  
 Type: Metal Shell Pile 14"  $\Phi$  x 0.25"  
 Nominal Required Bearing: 403 kips  
 Factored Resistance Available: 222 kips  
 Est. Length: 26 ft. (Piles S1 to S4)  
 27 ft. (Piles S5 to S7)  
 No. Production Piles: 6  
 No. Test Piles: 1

**LEGEND**

Removal of portions of the existing structure below the grade that interfere with the proposed construction in accordance with Article 501.04.

MODEL: \$MODELNAME\$  
FILE NAME: \$FILEL\$

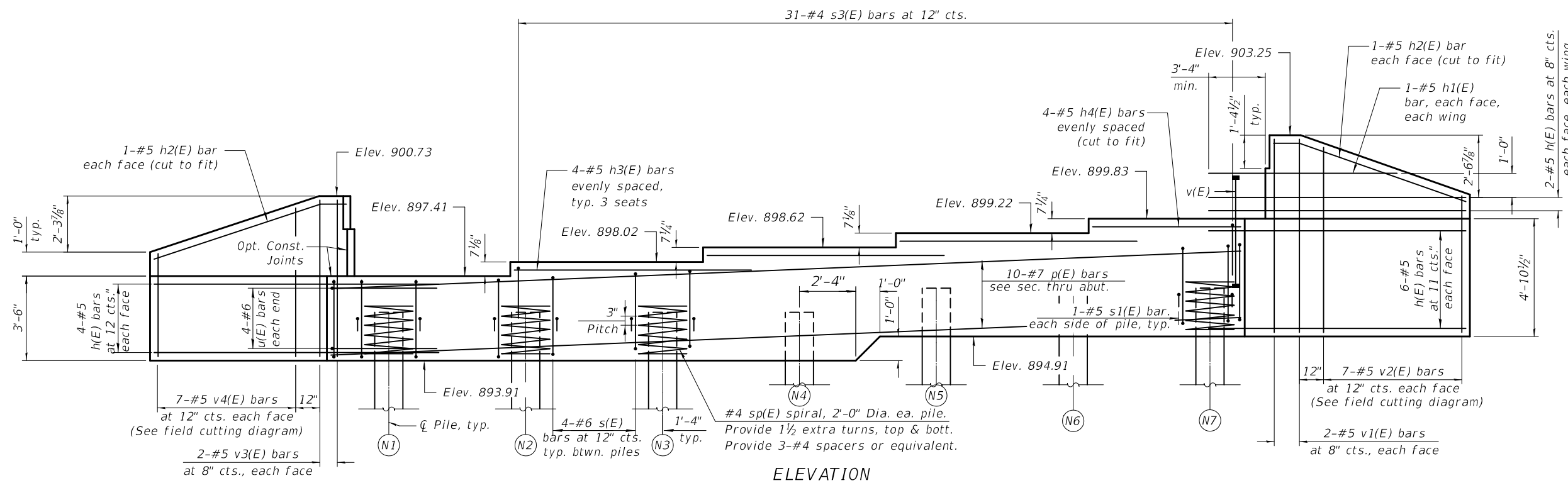
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PLOT DATE =	7/23/2024	DATE -	7/16/2024	REVISED -	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

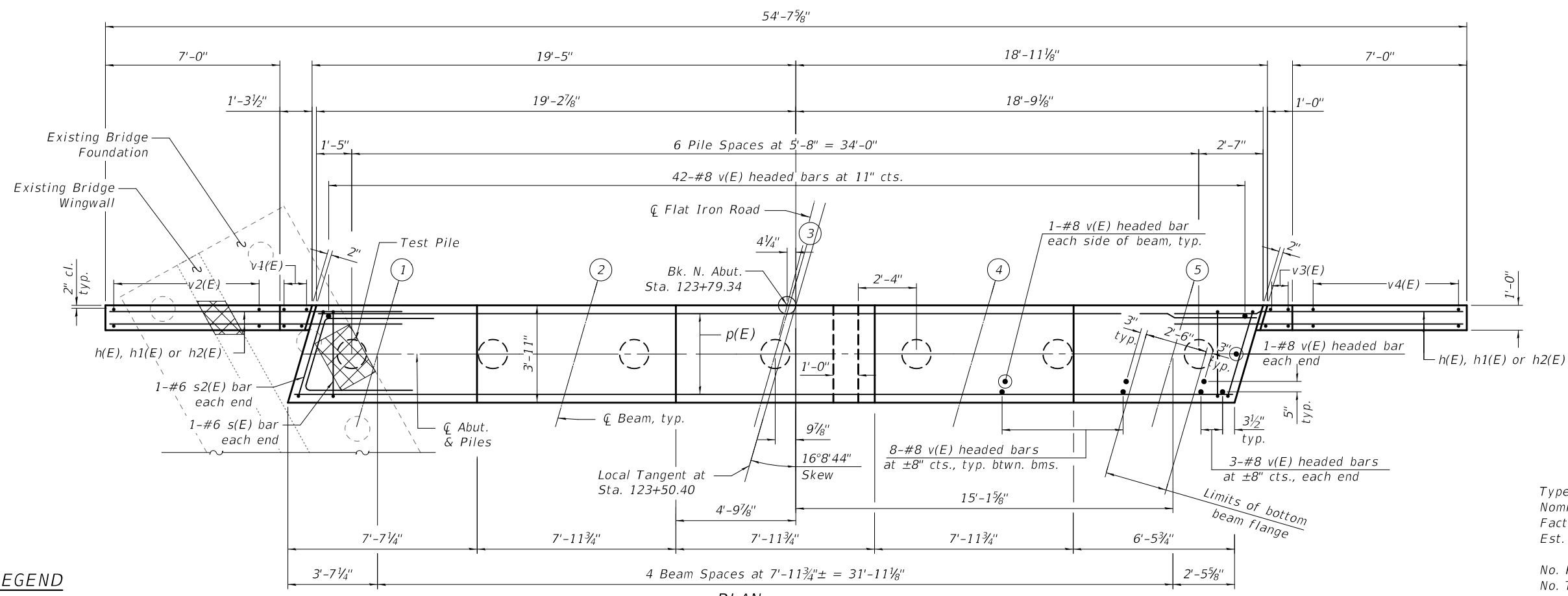
**SOUTH ABUTMENT  
STRUCTURE NO. 056-3055**

SHEET S19 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	58
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				



**ELEVATION**



**PLAN**

**PILE DATA**  
 Type: Metal Shell Pile 14"  $\Phi$  x 0.25"  
 Nominal Required Bearing: 400 kips  
 Factored Resistance Available: 220 kips  
 Est. Length: 20 ft. (Piles N1 to N4)  
 21 ft. (Piles N5 to N7)  
 No. Production Piles: 6  
 No. Test Piles: 1

**LEGEND**  
 Removal of portions of the existing structure below the grade that interfere with the proposed construction in accordance with Article 501.04.

MODEL: SMOELNAMES  
 FILE NAME: SFILES

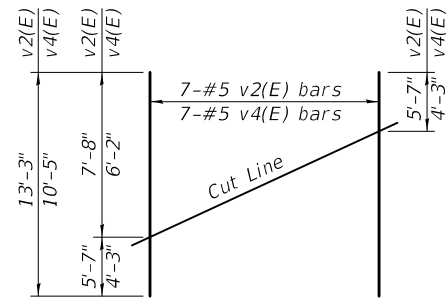
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PLOT SCALE =	N/A	CHECKED -	GJH	REVISED -	
PLOT DATE =	7/23/2024	DATE -	7/16/2024	REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

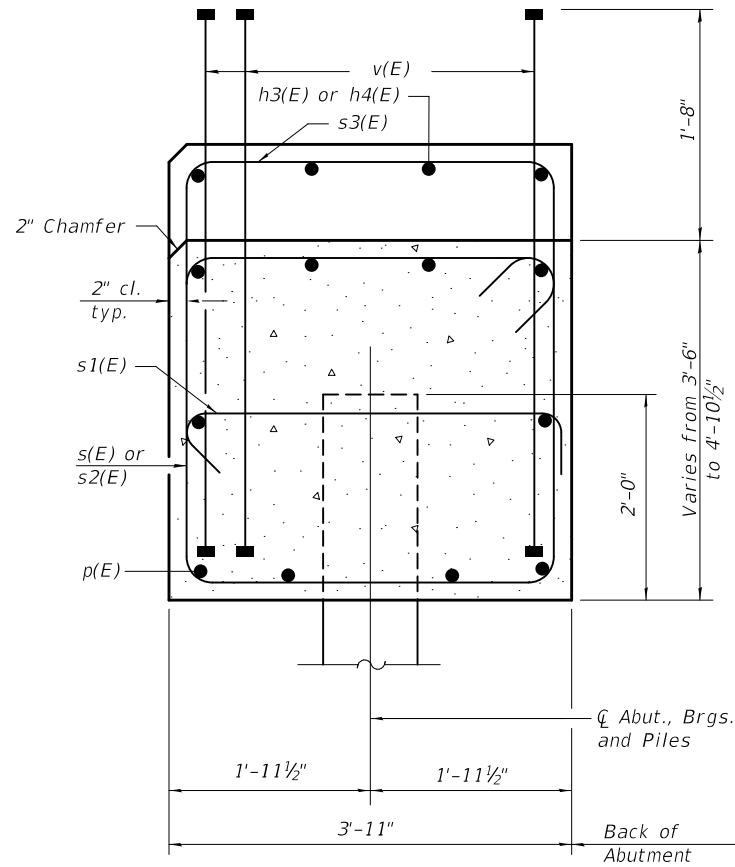
**NORTH ABUTMENT  
 STRUCTURE NO. 056-3055**

SHEET S20 OF S26 SHEETS

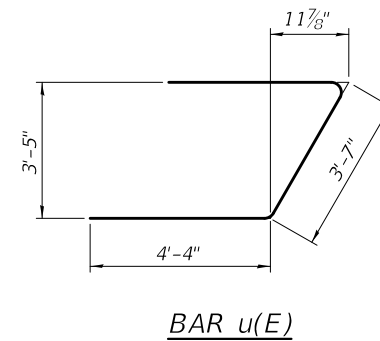
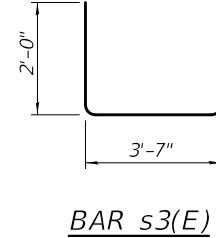
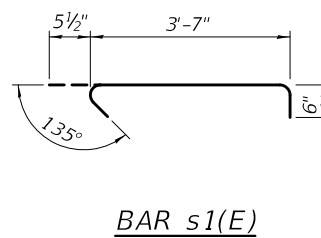
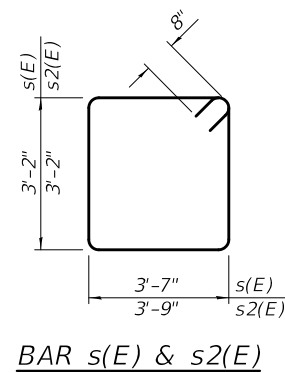
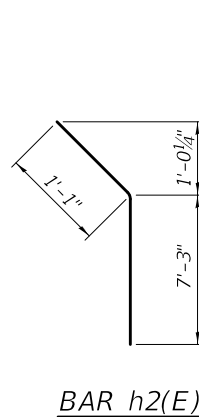
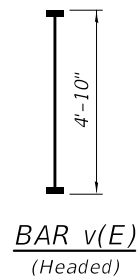
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	59
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				



Order v2(E) and v4(E) full length. Cut as shown and use remainder of bars in opposite wingwall face.



SEC. THRU ABUT.  
Dimensions at right angles to abutment.



**SOUTH ABUTMENT  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	28	#5	11'-9"	—
h1(E)	2	#5	8'-3"	—
h2(E)	2	#5	8'-4"	—
h3(E)	12	#5	10'-0"	—
h4(E)	4	#5	7'-5"	—
p(E)	10	#7	37'-8"	—
s(E)	26	#6	14'-10"	□
s1(E)	14	#5	4'-7"	U
s2(E)	2	#6	15'-2"	□
s3(E)	31	#4	7'-2"	U
sp(E)	7	#4	2'-0"	WWW
u(E)	8	#6	12'-5"	—
v(E)	48	#8	4'-10"	—
v1(E)	4	#5	8'-0"	—
v2(E)	7	#5	13'-3"	—
v3(E)	4	#5	6'-6"	—
v4(E)	7	#5	10'-5"	—
Structure Excavation		Cu. Yd.	91	
Concrete Structures		Cu. Yd.	27.8	
Reinforcement Bars, Epoxy Coated		Pound	3,480	
Furnishing Metal Shell Piles, 14" x 0.250"		Foot	185	
Driving Piles		Foot	185	
Test Pile, Metal Shells		Each	1	
Granular Backfill for Structures		Cu. Yd.	62	
Geocomposite Wall Drain		Sq. Yd.	36	
Pipe Underdrains for Structures 4"		Foot	65	
Bar Terminators		Each	96	

\* Length is height of spiral.

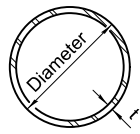
**NORTH ABUTMENT  
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	28	#5	11'-9"	—
h1(E)	2	#5	8'-3"	—
h2(E)	2	#5	8'-4"	—
h3(E)	12	#5	10'-0"	—
h4(E)	4	#5	7'-5"	—
p(E)	10	#7	37'-8"	—
s(E)	26	#6	14'-10"	□
s1(E)	14	#5	4'-7"	U
s2(E)	2	#6	15'-2"	□
s3(E)	31	#4	7'-2"	U
sp(E)	7	#4	2'-0"	WWW
u(E)	8	#6	12'-5"	—
v(E)	48	#8	4'-10"	—
v1(E)	4	#5	8'-0"	—
v2(E)	7	#5	13'-3"	—
v3(E)	4	#5	6'-6"	—
v4(E)	7	#5	10'-5"	—
Structure Excavation		Cu. Yd.	93	
Concrete Structures		Cu. Yd.	27.9	
Reinforcement Bars, Epoxy Coated		Pound	3,480	
Furnishing Metal Shell Piles, 14" x 0.250"		Foot	143	
Driving Piles		Foot	143	
Test Pile, Metal Shells		Each	1	
Granular Backfill for Structures		Cu. Yd.	62	
Geocomposite Wall Drain		Sq. Yd.	36	
Pipe Underdrains for Structures 4"		Foot	67	
Bar Terminators		Each	96	

Notes:  
Pour steps monolithically with cap.  
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.  
For details of piles see sheet S22.

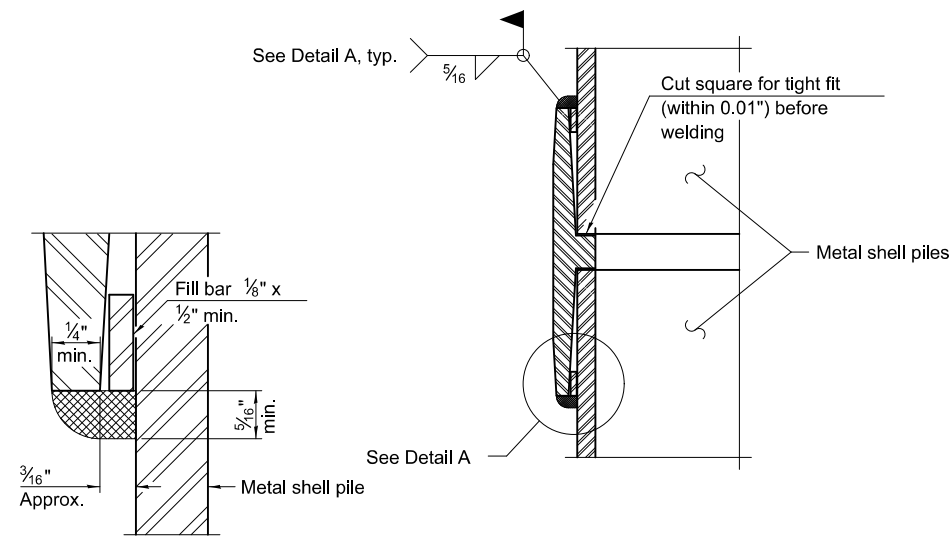
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DRAWN -	JAL	REVISED -			
PLOT SCALE =	N/A	CHECKED -	GJH	REVISED -	
PLOT DATE =	7/23/2024	DATE -	7/16/2024	REVISED -	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	60
			CONTRACT NO. 61K76	
		ILLINOIS FED. AID PROJECT		



**METAL SHELL PILE TABLE**

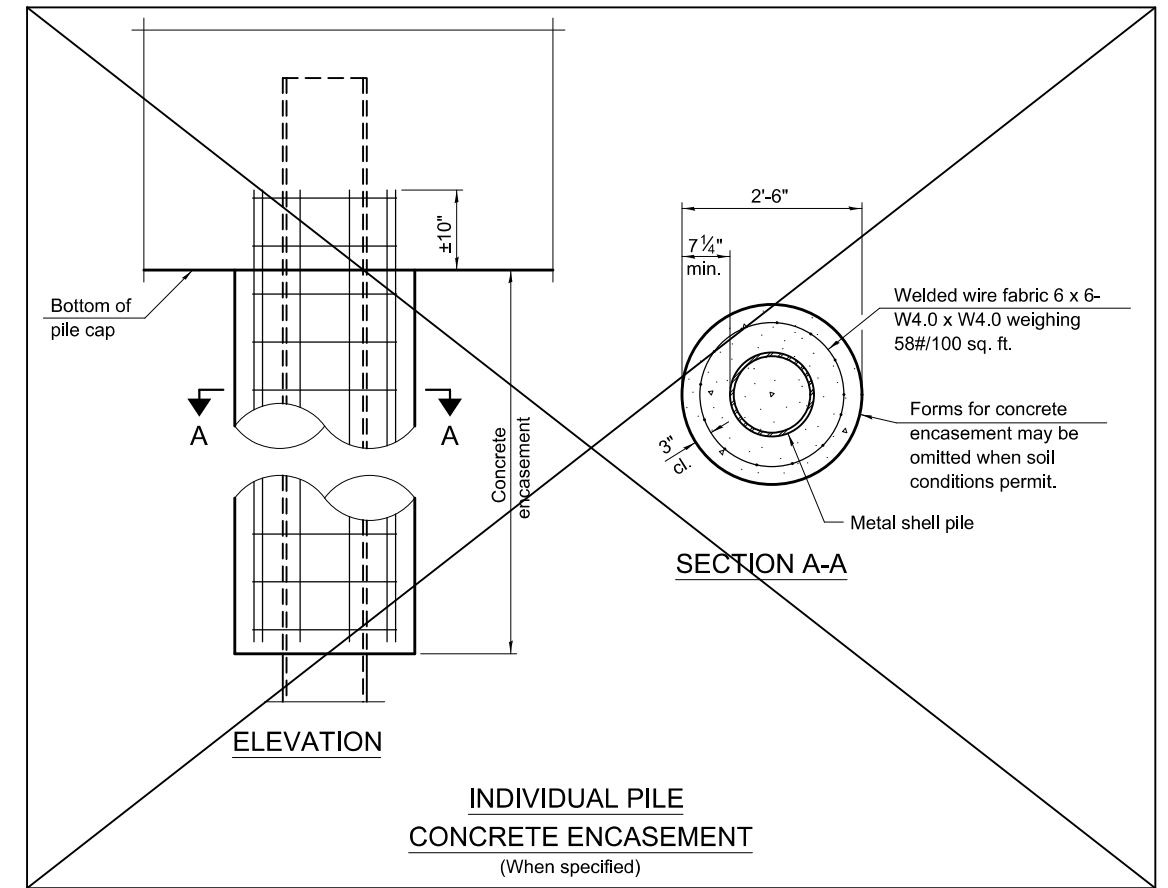
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. <sup>3</sup> /ft.)
PP12	0.250"	31.40	0.0267
PP14	0.250"	36.75	0.0368
PP14	0.312"	45.65	0.0361
PP16	0.312"	52.32	0.0478
PP16	0.375"	62.64	0.0470



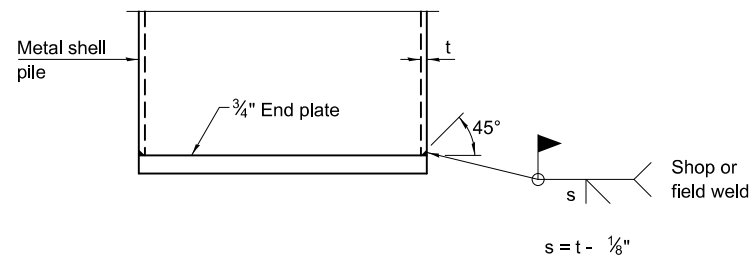
**DETAIL A**

**WELDED COMMERCIAL SPLICE**

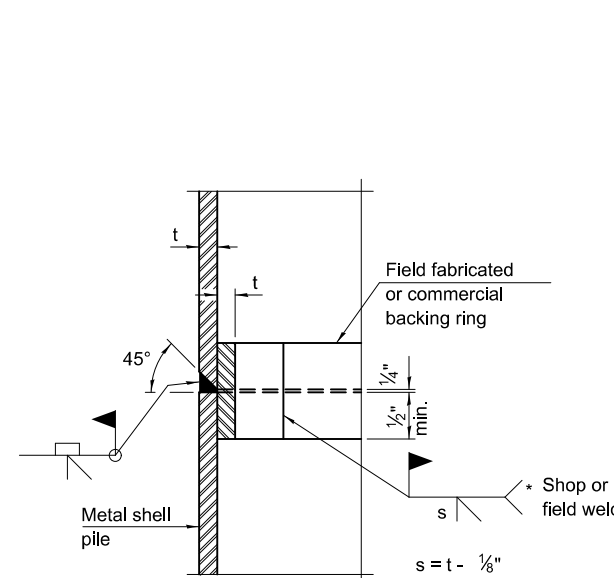
Notes:  
 The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.  
 Pile segments shall be driven to solid contact with splicer before welding.



**INDIVIDUAL PILE CONCRETE ENCASEMENT**  
(When specified)

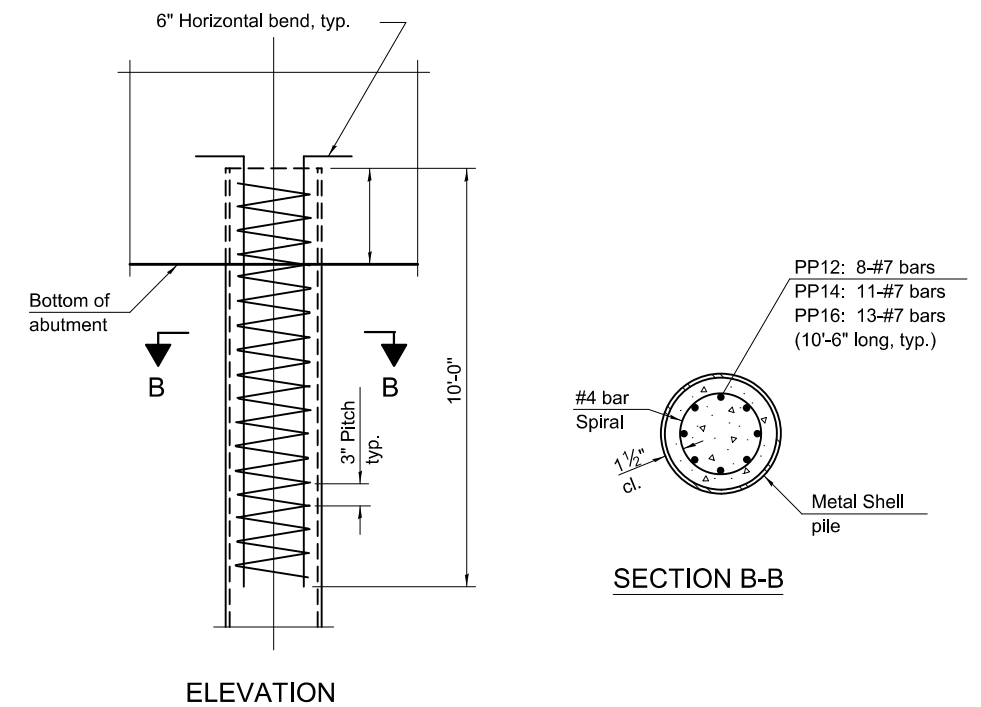


**END PLATE ATTACHMENT**

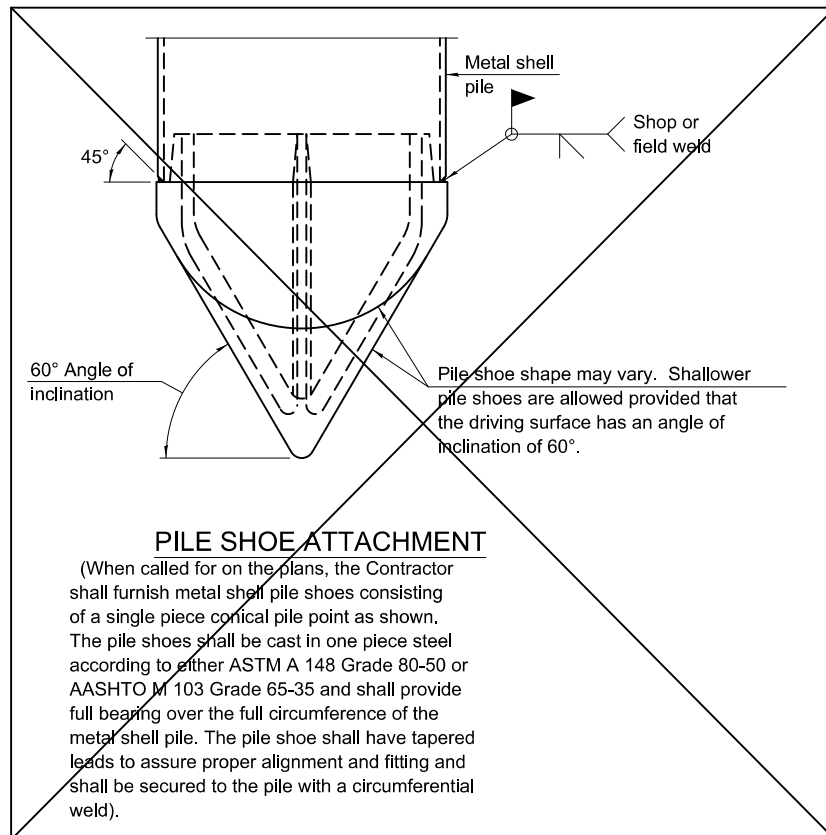


**COMPLETE PENETRATION WELD SPLICE**

\* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



**REINFORCEMENT AT ABUTMENTS**  
(Omit when concrete encasement is specified)



**PILE SHOE ATTACHMENT**

(When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 80-50 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld).

Note:  
 The metal shell piles shall be according to Article 1006.05 of the Standard Specifications.

MODEL: \$MODEL\$  
 FILE NAME: \$FILES\$

F-MS

5-15-2023

USER NAME =	djk	DESIGNED -	JAL	REVISED -	
		DRAWN -	JAL	REVISED -	
PLOT SCALE =	N/A	CHECKED -	GJH	REVISED -	
PLOT DATE =	7/23/2024	DATE -	7/16/2024	REVISED -	

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**METAL SHELL PILE DETAILS  
 STRUCTURE NO. 056-3055**

SHEET S22 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	61
			CONTRACT NO. 61K76	
ILLINOIS FED. AID PROJECT				

MSET PROJECT NO.: 21263		LOG OF BORING NO. SB-1		Page 1 of 2				
PROJECT: Flat Iron Road Bridge			SITE LOCATION: Harvard, IL					
BORING LOCATION: Station 23+79, 7.2' R			CLIENT: Civiltech Engineering					
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS		REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc%	
0		Pavement: 9" Bit. Concrete over 10" Granular Base	900.7					
		Brown SAND with Gravel, A-1, medium dense	899.1	SS	1	14	4	
3		Reddish-Brown and Grey CLAY, A-6, very stiff	896.7	SS	2A	10	5	2.0 (Qp)
		Probable FILL		SS	2B	7	23	
6		Black Organic CLAY, A-7-6 to A-8, firm	895.2	SS	3	4	170	0.5 (Qp)
9		Brown and Grey SAND with Gravel, A-1, medium dense	892.7	SS	4	17	10	
12		Reddish-Brown Sandy Clay LOAM, A-6, medium dense	890.2	SS	5	25	16	
15		Brown SAND with Gravel, A-1, dense to medium dense	887.7	SS	6	39	12	
18				SS	7	24	20	
21								

WATER LEVEL OBSERVATIONS, ft.  
 DURING DRILLING: 11.0'  
 IMMEDIATELY AFTER DRILLING: Dry  
 DELAYED READING AFTER



BORING STARTED: 4/27/21  
 BORING COMPLETED: 4/28/21  
 LOGGED BY: MF/GPF/mhp  
 BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 410 Nolen Drive, South Elgin, Illinois 60177 (847) 844-1895 f(847) 844-3875

MSET PROJECT NO.: 21263		LOG OF BORING NO. SB-1		Page 2 of 2				
PROJECT: Flat Iron Road Bridge			SITE LOCATION: Harvard, IL					
BORING LOCATION: Station 23+79, 7.2' R			CLIENT: Civiltech Engineering					
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS		REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc%	
24		Brown SAND, A-1-b, medium dense	877.7	SS	8	25	19	
27		Brown Sandy LOAM (f-c) with Gravel, A-2-4, very dense	875.7	SS	9			
30				SS	10	60	9	
33				SS	11	55	10	
36								
39		Brown Sandy LOAM (fine), A-2-4, extremely dense	863.2	SS	12	50/4"	14	
		End of Boring at 40.0'	860.7					

WATER LEVEL OBSERVATIONS, ft.  
 DURING DRILLING: 11.0'  
 IMMEDIATELY AFTER DRILLING: Dry  
 DELAYED READING AFTER



BORING STARTED: 4/27/21  
 BORING COMPLETED: 4/28/21  
 LOGGED BY: MF/GPF/mhp  
 BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 410 Nolen Drive, South Elgin, Illinois 60177 (847) 844-1895 f(847) 844-3875

MODEL: \$MODELNAME\$  
 FILE NAME: \$FILES\$

USER NAME =	djk	DESIGNED -	JAL	REVISED -	
DRAWN -	JAL	REVISIONS -			
PLOT SCALE =	N/A	CHECKED -	GJH	REVISED -	
PLOT DATE =	7/23/2024	DATE -	7/16/2024	REVISED -	

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS I  
 STRUCTURE NO. 056-3055

SHEET S23 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	62
			CONTRACT NO. 61K76	
		ILLINOIS FED. AID PROJECT		

MSET PROJECT NO.: 21263		LOG OF BORING NO. SB-2		Page 1 of 2				
PROJECT: Flat Iron Road Bridge			SITE LOCATION: Harvard, IL					
BORING LOCATION: Station 23+16, 26' L			CLIENT: Civiltech Engineering					
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS		REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc%	
0		TOPSOIL - Black Sandy CLAY with Roots (4")	896.5 896.2					
		FILL - Blck to Brown Sandy LOAM with Gravel, A-2-4, slightly dense	895.0	SS 1A	6	8		
		Brown, Grey and Dark Grey Clay LOAM, A-6, soft		SS 1B	3	27		0.25 (Qp)
3		Grey Sandy LOAM (f-m), A-2-4, slightly dense	893.5	SS 2A	6	11		
		Brown SAND (f-c) with Gravel, A-1, moist to wet, medium dense to dense	892.5	SS 2B	14	10		
6				SS 3	20	8		
9				SS 4	26	8		
12				SS 5	24	12		
15				SS 6	23	13		
18				SS 7	30	14		
21				SS 8	37	9		
				SS 9	29	12		

WATER LEVEL OBSERVATIONS, ft.  
 DURING DRILLING: 5.5'  
 IMMEDIATELY AFTER DRILLING: Dry  
 DELAYED READING AFTER:



BORING STARTED: 5/20/21  
 BORING COMPLETED: 5/20/21  
 LOGGED BY: GPF  
 BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 410 Nolen Drive, South Elgin, Illinois 60177 (847) 844-1895 f(847) 844-3875

MSET PROJECT NO.: 21263		LOG OF BORING NO. SB-2		Page 2 of 2				
PROJECT: Flat Iron Road Bridge			SITE LOCATION: Harvard, IL					
BORING LOCATION: Station 23+16, 26' L			CLIENT: Civiltech Engineering					
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS		REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc%	
24		Brown SAND (f-c) with Gravel, A-1, SP	873.0	SS 10	26	9		
				SS 11	19	17		
27				SS 12	34			
30								
33		Grey SAND (f-c) with Gravel, A-1, SP, dense	864.0	SS 13	33	14		
36								
39		Grey Silt LOAM, A-4, medium dense to extremely dense	859.0	SS 14	16	14		3.5 (Qp)
42								
		Hardpan		SS 15	50/4"	12		4.5+ (Qp)
		End of Boring at 45.0'	851.5					

WATER LEVEL OBSERVATIONS, ft.  
 DURING DRILLING: 5.5'  
 IMMEDIATELY AFTER DRILLING: Dry  
 DELAYED READING AFTER:



BORING STARTED: 5/20/21  
 BORING COMPLETED: 5/20/21  
 LOGGED BY: GPF  
 BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 410 Nolen Drive, South Elgin, Illinois 60177 (847) 844-1895 f(847) 844-3875

MODEL: \$MODELNAMES  
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USER NAME =	djk	DESIGNED -	JAL	REVISED -	
DRAWN -	JAL	CHECKED -	GJH	REVISED -	
PLOT SCALE =	N/A	DATE -	7/16/2024	REVISED -	
PLOT DATE =	7/23/2024				

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS II  
 STRUCTURE NO. 056-3055

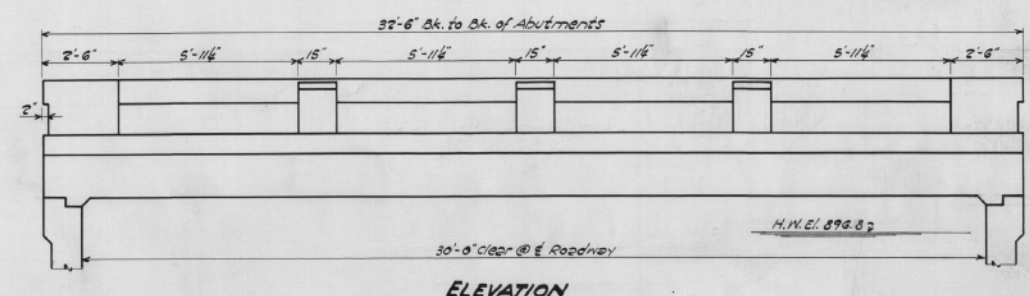
SHEET S24 OF S26 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	63
			CONTRACT NO. 61K76	
		ILLINOIS FED. AID PROJECT		

B.M. a On S.E. Corner Wingwall Elev. 898.17  
Existing Structure: Beam & Slab 20' Span Rdwy. is  
Concrete Substructure. Contractor to remove Struct. No Salvage

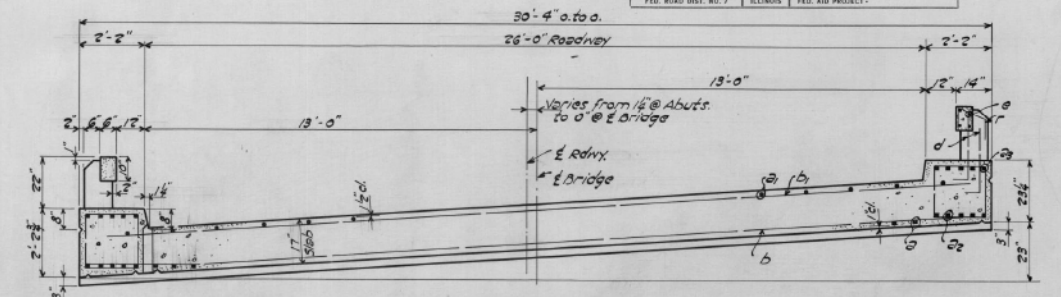
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROAD DIST. NO. 7	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ILLINOIS		FED. AID PROJECT		2 SHEETS

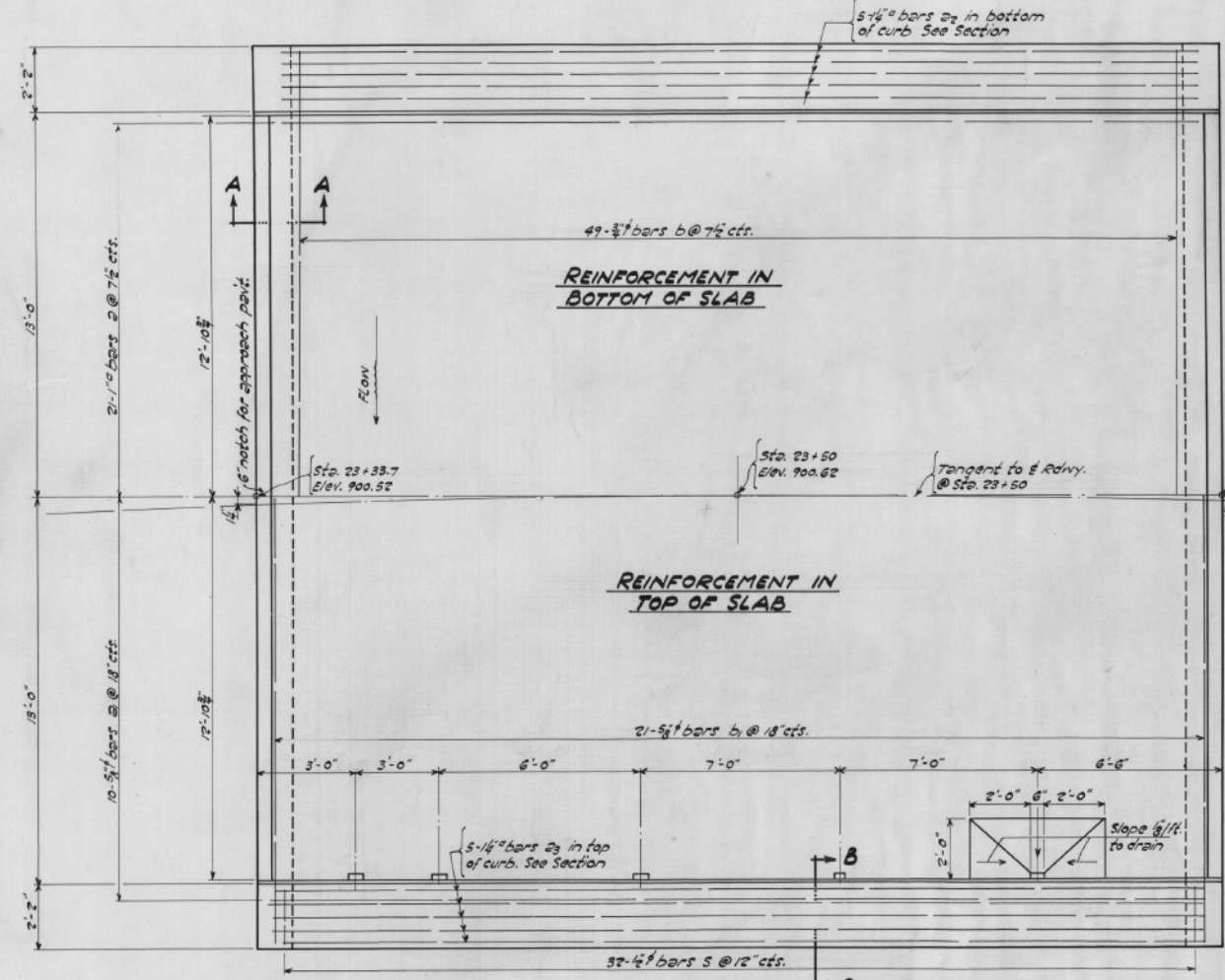


ELEVATION

Note: For Handrail details see Std 2070  
R Type 3 B



CROSS SECTION OF RDWY. LOOKING NORTH

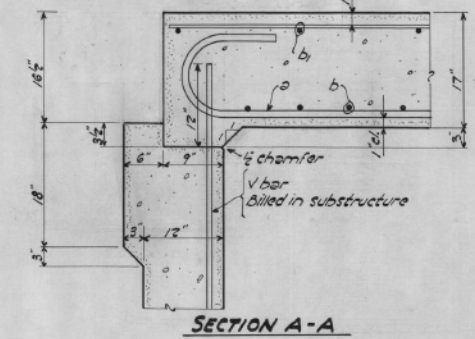


PLAN

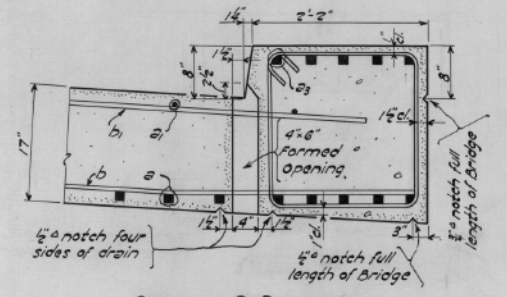
BAR-F

BAR-D

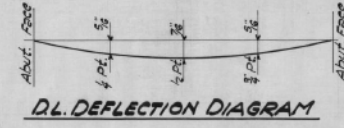
BAR-S



SECTION A-A



SECTION B-B

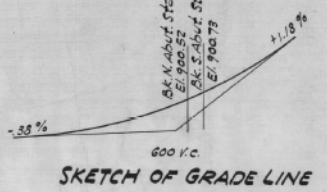


STATION 23+50  
BUILT 1950 BY  
MC HENRY COUNTY  
SECTION 36-B-1 MFT  
H-15 LOADING

NAME PLATE DATA  
Std 1884

GENERAL NOTES

Class X Concrete shall be used thru-out except as noted.  
Handrail concrete shall be used in Handrail.  
Handrail shall not be poured until falsework has been removed.  
concrete floor slab shall be finished in accordance with Art. 6.3(e) of the Standard Specifications  
The concrete floor slab shall be poured in one continuous operation.  
For backfill behind abuts. see Art. 53.2(i) of the Standard Specification.  
curbs shall be built monolithically with slab.



STRESSES  
fc = 1200 psi Super  
fc = 800 psi Sub  
fs = 20,000 psi  
n = 10  
H-15 LOADING

BILL OF MATERIAL - SUPER

BAR	No	SIZE	LENGTH	SHAPE	
a	41	1"Ø	33'-6"	□	
a	19	5/8"	31'-0"	□	
a2	10	1 1/2"	35'-3"	□	
a3	10	1 1/2"	32'-0"	□	
b	49	5/8"	30'-0"	□	
b	21	5/8"	28'-0"	□	
d	44	5/8"	3'-9"	□	
e	8	5/8"	30'-8"	□	
r	20	1/2"	2'-9"	□	
s	64	1/2"	8'-0"	□	
Class X Concrete				Cu. Yds.	54.5
Handrail Concrete				Cu. Yds.	1.6
Reinforcement Bars				Lbs.	12480
Name Plate				Ea.	1

TOTAL BILL OF MATERIAL

ITEM	SUPER	SUB	TOTAL
Class X Concrete	Cu. Yds.	54.5	139.5
Handrail Concrete	Cu. Yds.	1.6	1.6
Reinf. Bars	Lbs.	12480	15890
Name Plate	Ea.	one	one
Untreated Piles	L.H.F.	-	848
Test Piles	Ea.	-	one
Removal Exist. Str.	Ea.	-	1
Metal Shoes	Ea.	54	54

SCHUTT BRIDGE OVER  
MOKELER CREEK  
SA. RT. 29 SEC. 36 B-1 MFT.  
DUNHAM TWP.  
MC HENRY COUNTY  
STA. 23+50

DESIGNED Samuel C. Ziesenheim  
CHECKED Ralph K. H. H. H.  
DRAWN S.C. Ziesenheim K. OEHMKE  
CHECKED Ralph K. H. H. H.

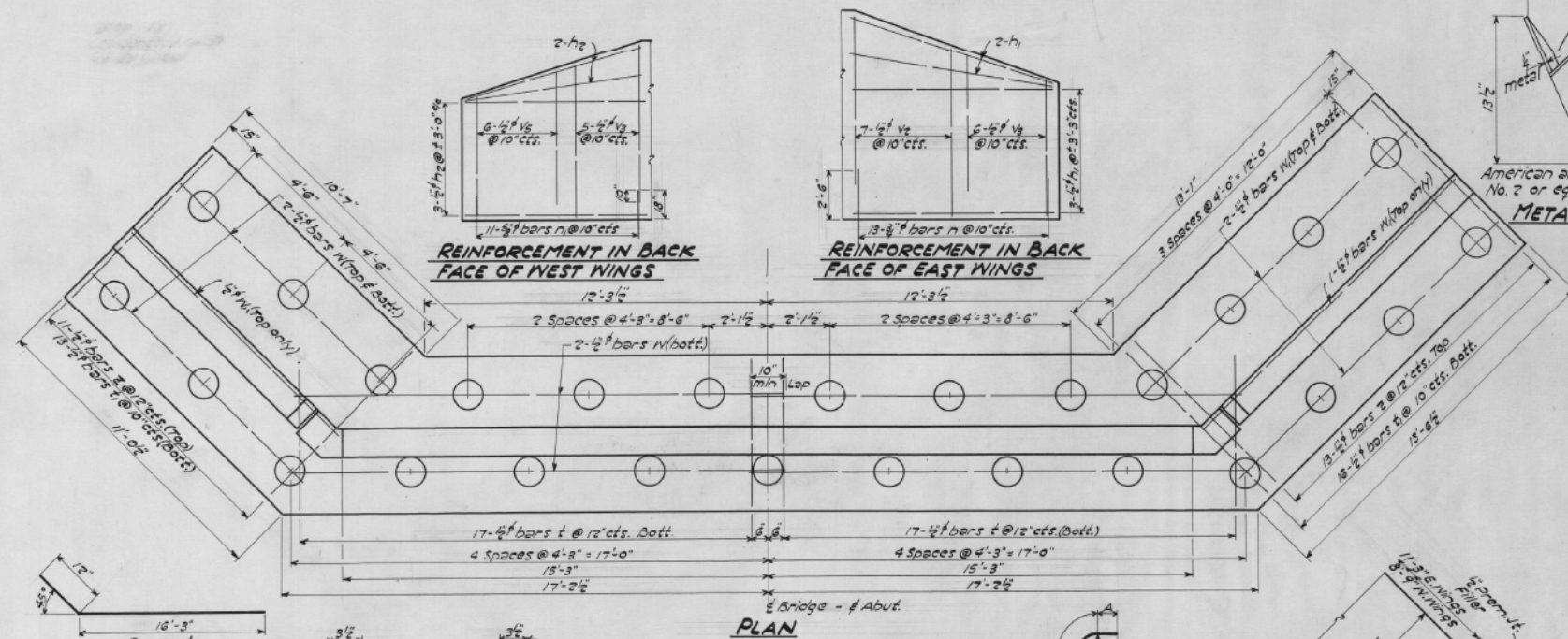
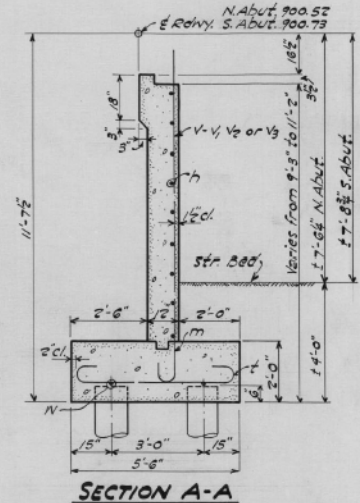
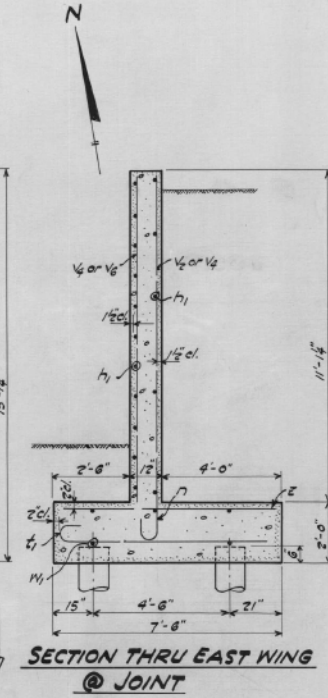
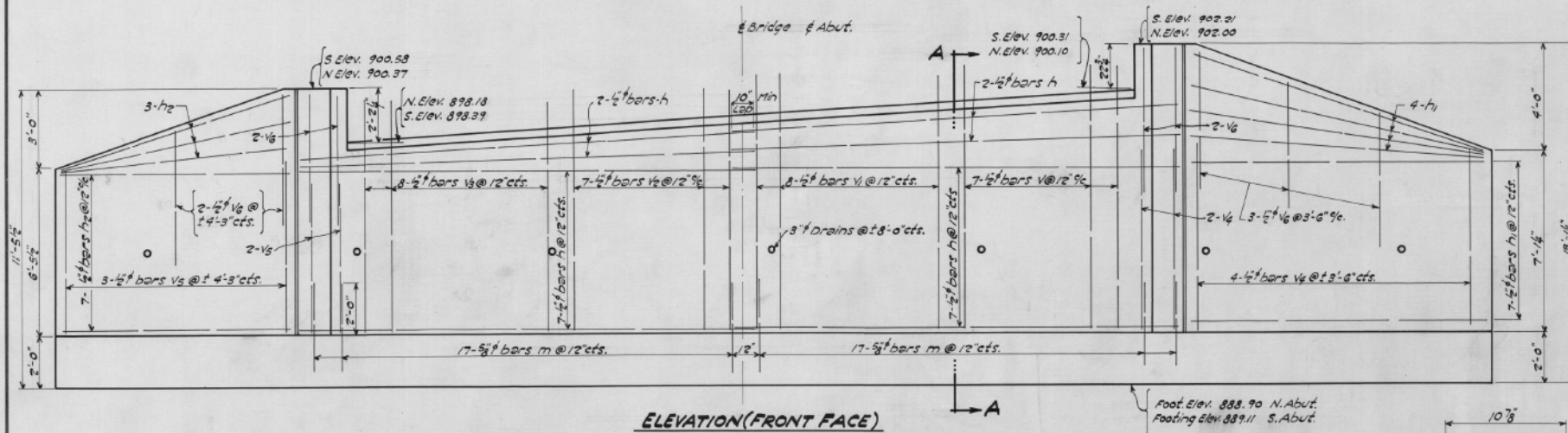
EXAMINED J. T. Burch  
PASSED H. E. Sumner  
APPROVED C. M. Hatterway

5-26-1950



STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROAD DIST. NO. 7	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ILLINOIS		PER. AID PROJECT	



BILL OF MATERIAL - SUB

BAR	NO	SIZE	LENGTH	SHAPE
h	36	1/2"	17'-3"	
h1	32	1/2"	11'-6"	
h2	30	1/2"	9'-0"	
m	68	5/8"	4'-6"	
n	26	3/4"	5'-3"	
n1	22	3/4"	4'-0"	
t	48	1/2"	6'-6"	
t1	58	1/2"	7'-9"	
v	14	1/2"	10'-0"	
v1	16	1/2"	9'-6"	
v2	28	1/2"	9'-0"	
v3	26	1/2"	8'-3"	
v4	28	1/2"	7'-0"	
v5	26	1/2"	6'-3"	
v6	26	1/2"	5'-0"	
w	8	1/2"	17'-6"	
w1	20	1/2"	13'-6"	
z	48	1/2"	7'-0"	

Class X concrete Cu. Yds. 85.0

Reinforcement Bars Lbs. 3410

Untreated Piles (16'0" Lg.) Lin. Ft. 848

Test Pile (16'0" Lg.) Ea. 019

Metal Shoes Ea. 54

DESIGNED *Raymond C. Zinsmeister*

CHECKED *Ralph H. H. H.*

DRAWN *S. C. Zinsmeister* *CHEMKE*

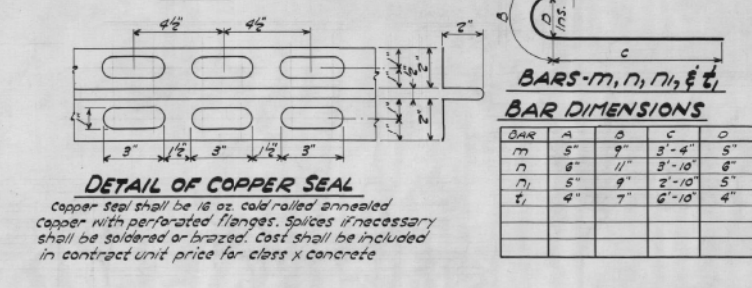
CHECKED *Ralph H. H. H.*

EXAMINED *H. E. Surman*

PASSED *H. E. Surman*

APPROVED *C. M. Hartaway*

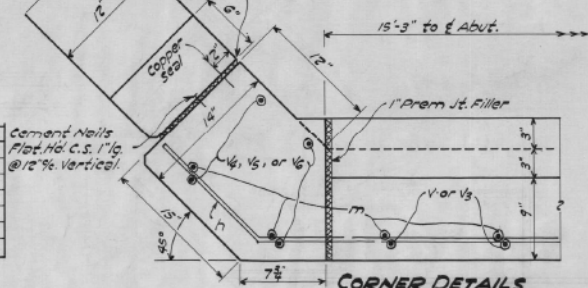
5-26-1950



BAR DIMENSIONS

BAR	A	B	C	D
m	5"	9"	3'-4"	5"
n	8"	11"	3'-10"	6"
n1	5"	9"	2'-10"	5"
t1	4"	7"	6'-10"	4"

Cement Nails Flat. Hd. C.S. 1" lg. @ 12" Vertical.



SCHUTT BRIDGE OVER  
MOKELER CREEK  
S.A. RT. 29 SEC. 36 B-1 M.F.T.  
DUNHAM TWP.  
MC HENRY COUNTY  
STA. 23 + 50

MODEL: SMOELNAMES  
FILE NAME: SFILES

USER NAME =	djk	DESIGNED -	JAL	REVISED -	
PLOT SCALE =	N/A	DRAWN -	JAL	REVISED -	
PLOT DATE =	7/23/2024	CHECKED -	GJH	REVISED -	
		DATE -	7/16/2024	REVISED -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS II  
STRUCTURE NO. 056-3055

SHEET S26 OF S26 SHEETS

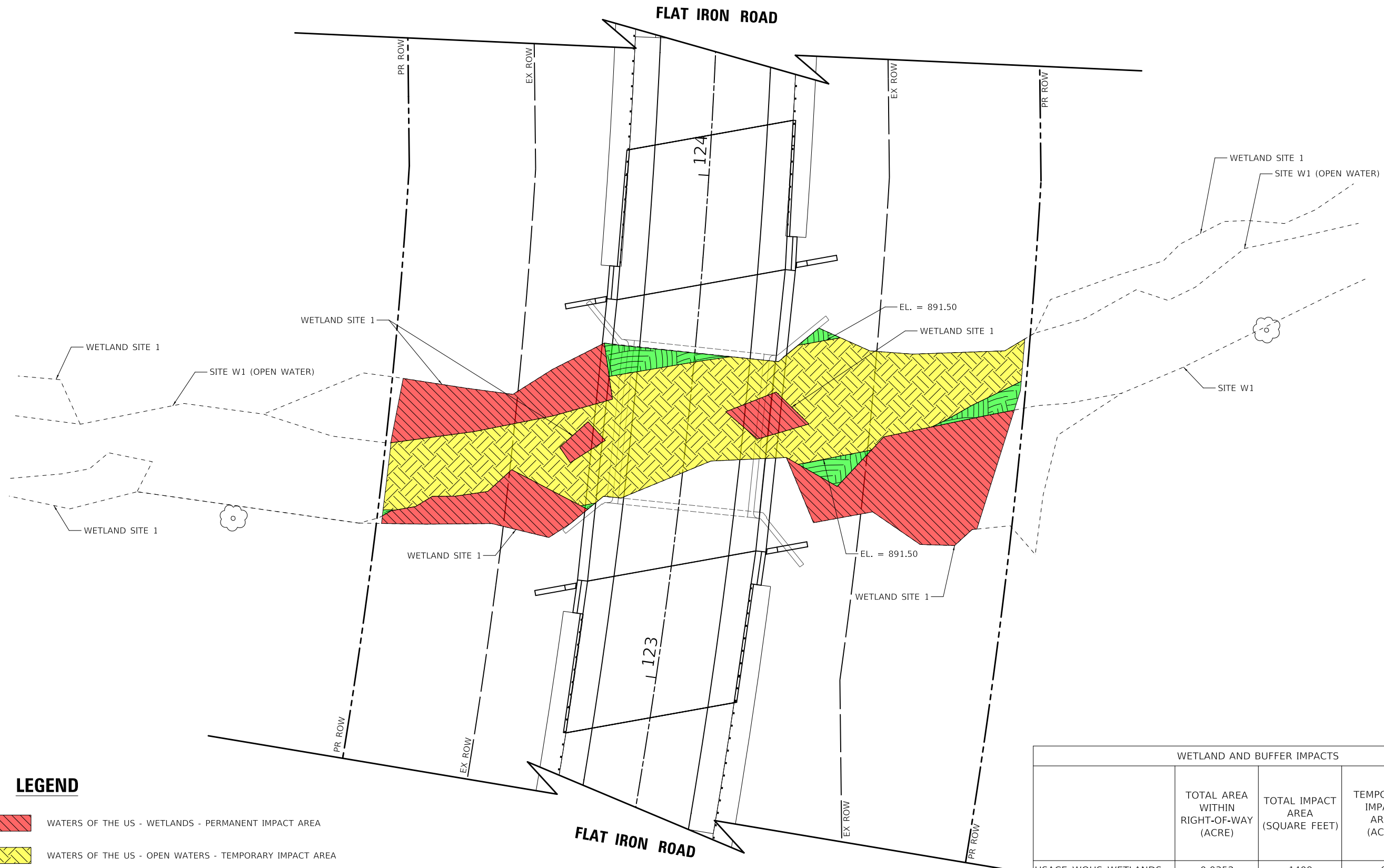
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	McHENRY	92	65
				CONTRACT NO. 61K76

ILLINOIS FED. AID PROJECT



PLAN	SURVEYED	DATE
	PLOTTED	
NOTE BOOK	ALIGNED	BY
	CHECKED	
NO.	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	
NOTE BOOK	GRADES CHECKED	BY
	STRUCTURE NOTATIONS CHECKED	
NO.		



**LEGEND**

- WATERS OF THE US - WETLANDS - PERMANENT IMPACT AREA
- WATERS OF THE US - OPEN WATERS - TEMPORARY IMPACT AREA
- WATERS OF THE US - OPEN WATERS - PERMANENT IMPACT AREA

WETLAND AND BUFFER IMPACTS				
	TOTAL AREA WITHIN RIGHT-OF-WAY (ACRE)	TOTAL IMPACT AREA (SQUARE FEET)	TEMPORARY IMPACT AREA (ACRE)	PERMANENT IMPACT AREA (ACRE)
USACE WOUS WETLANDS	0.0352	1409	0	0.0323
USACE WOUS OPEN WATER	0.0506	2174	0.0458	0.0041

MODEL: SMODEL\MAMES FILE NAME: ...13939-511-WOUS.dgn

USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

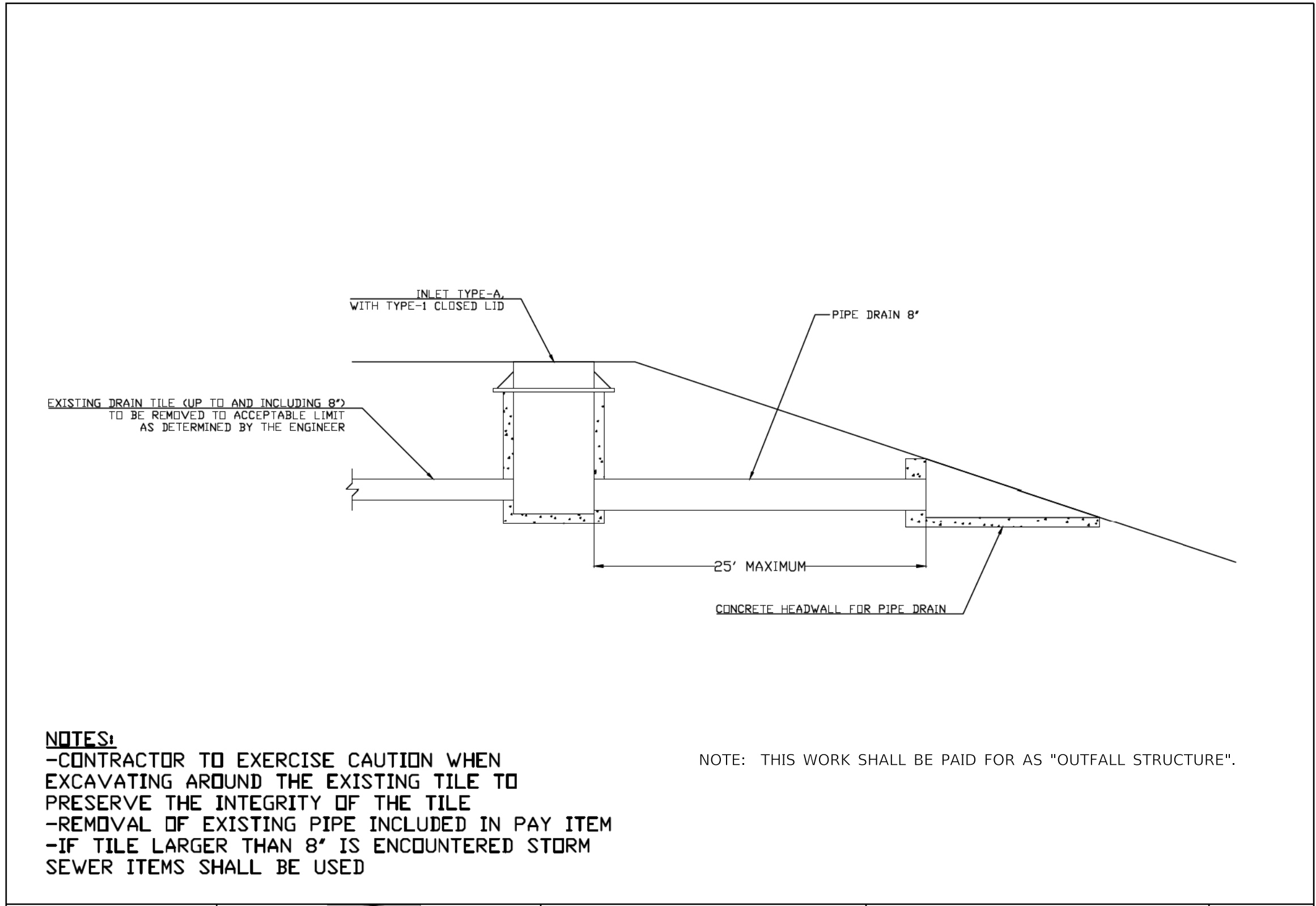
**WETLAND AND WATERS IMPACT PLAN**  
SCALE: 1"=10'  
SHEET 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	66
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				



PLAN	SURVEYED	DATE
	PLOTTED	
	ALIGNMENT CHECKED	
	NOTE BOOK NO.	
	FILE NAME	


PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE NOTATION	
	NOTE BOOK NO.	
	FILE NAME	



**NOTES:**

- CONTRACTOR TO EXERCISE CAUTION WHEN EXCAVATING AROUND THE EXISTING TILE TO PRESERVE THE INTEGRITY OF THE TILE
- REMOVAL OF EXISTING PIPE INCLUDED IN PAY ITEM
- IF TILE LARGER THAN 8" IS ENCOUNTERED STORM SEWER ITEMS SHALL BE USED

NOTE: THIS WORK SHALL BE PAID FOR AS "OUTFALL STRUCTURE".

MC6011		DRAIN TILE OUTFALL, SPECIAL	<b>REVISIONS</b>	<b>DATE</b>
			ORIGINAL DRAWING	4/30/24
Pg ____ of ____				

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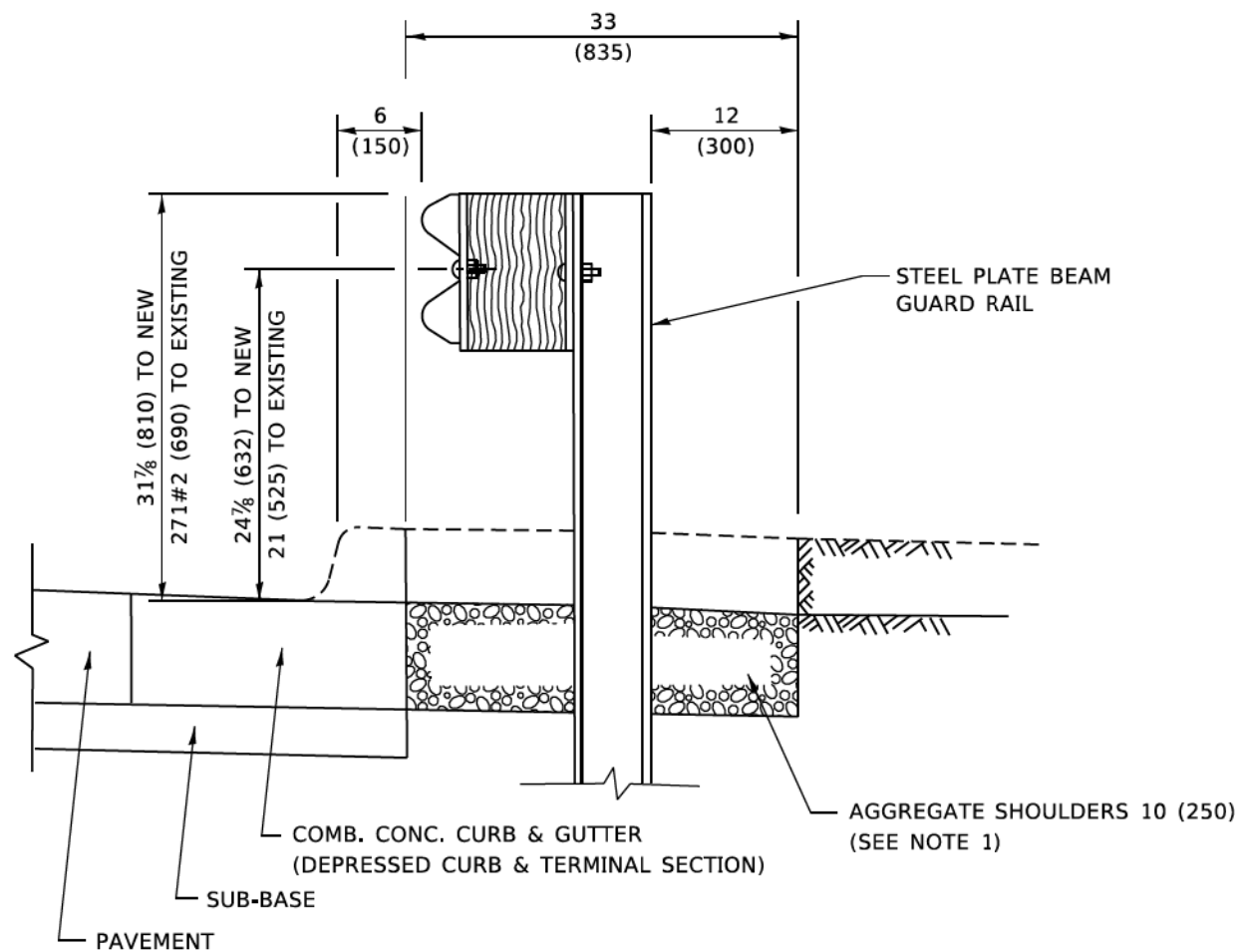
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PLOT DATE = 8/23/2024	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**OUTFALL STRUCTURE**

SCALE: N.T.S. SHEET 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	68
CONTRACT NO. 61K76				
ILLINOIS FED. AID PROJECT				



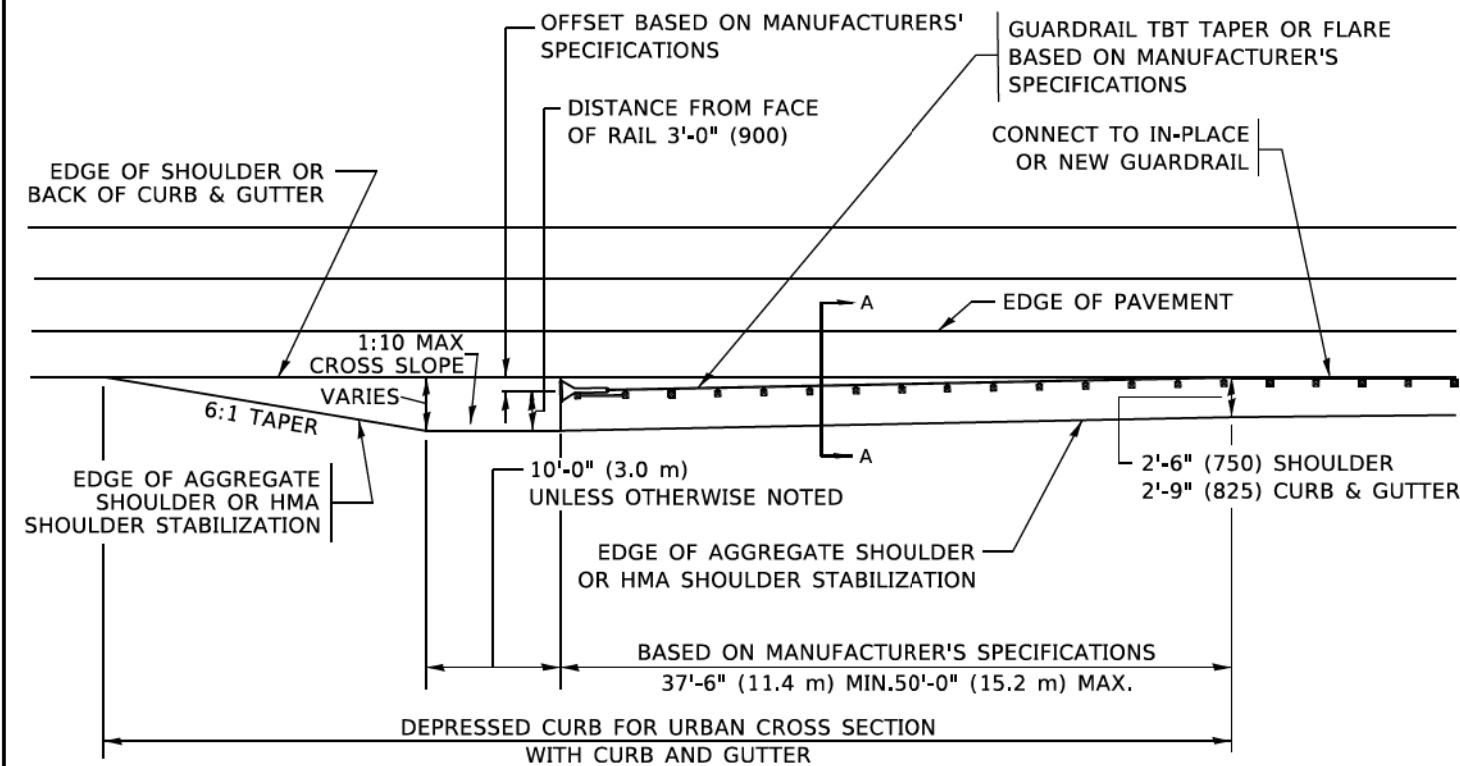
**SECTION A-A**

**NOTES:**

1. THE AGGREGATE SHOULDER, 10 (250) OR HMA SHOULDER, 6 (150) (IF REQUIRED) SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL.
2. "EXISTING" GUARDRAIL REFERS TO CONNECTING TERMINAL SECTION TO GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
3. THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL SECTION. COST INCLUDED WITH THE COST OF THE TERMINAL. THE EXISTING GUARDRAIL HEIGHT SHALL TRANSITION TO MATCH THE NEW TERMINAL END SECTION AND SHALL BE PAID FOR AS VERTICAL ADJUSTMENT OF EXISTING GUARDRAIL.

**DETAILS FOR STEEL PLATE BEAM  
GUARD RAIL ADJACENT TO CURB AND GUTTER**

**[FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]**



**DEPRESSED CURB AND GUTTER AND  
SHOULDER TREATMENT AT TBT TY.1 SPL.**

AGGREGATE SHOULDER, 10 (250) WILL BE PAID ACCORDING TO SECTION 481.

HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE PAID ACCORDING TO SECTION 482.

COMB. CONC. C&G, STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

TBT = TRAFFIC BARRIER TERMINAL  
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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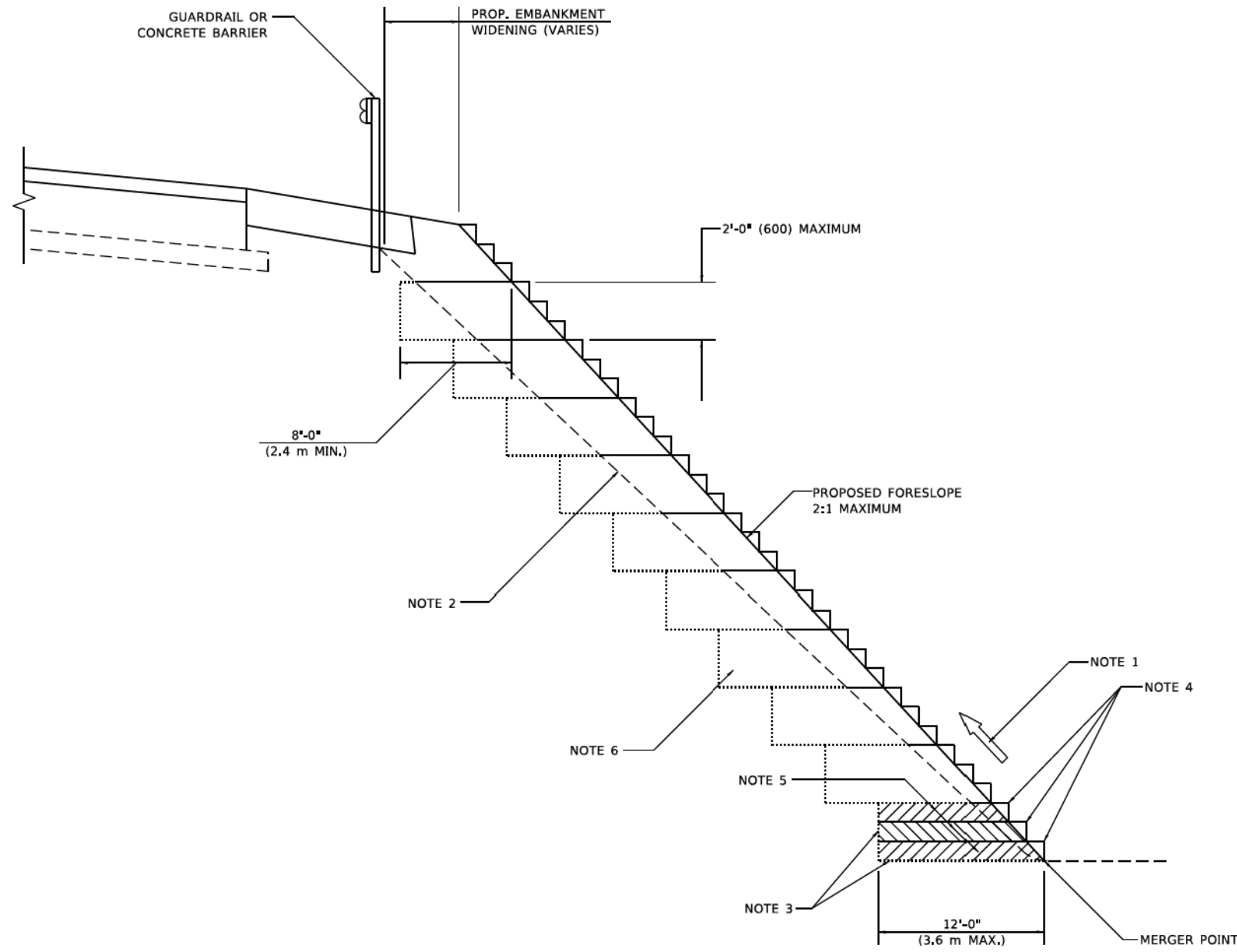
USER NAME - Lawrence,DeManche	DESIGNED - M. DE YONG	REVISED - R. BORO 09-14-2009
PLOT SCALE = 100,0000 * / 1/8"	CHECKED -	REVISED - R. BORO 05-08-2015
PLOT DATE = 11/18/2022	DATE - 09-22-90	REVISED - K. SMITH 11-18-22

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DETAILS FOR DEPRESSED CURB & GUTTER AND  
SHOULDER TREATMENT AT TBT TY.1 SPL.

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE. 4077	SECTION 19-00508-00-BR	COUNTY MCHENRY	TOTAL SHEETS 92	SHEET NO. 69
BD600-10 (BD-34)		CONTRACT NO. 61K76		
ILLINOIS FED. AID PROJECT				



**TYPICAL BENCHING DETAIL  
FOR EMBANKMENT**

**GENERAL NOTES**

1. CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
2. EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
3. 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.

**BASIS OF PAYMENT**

1. 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.

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

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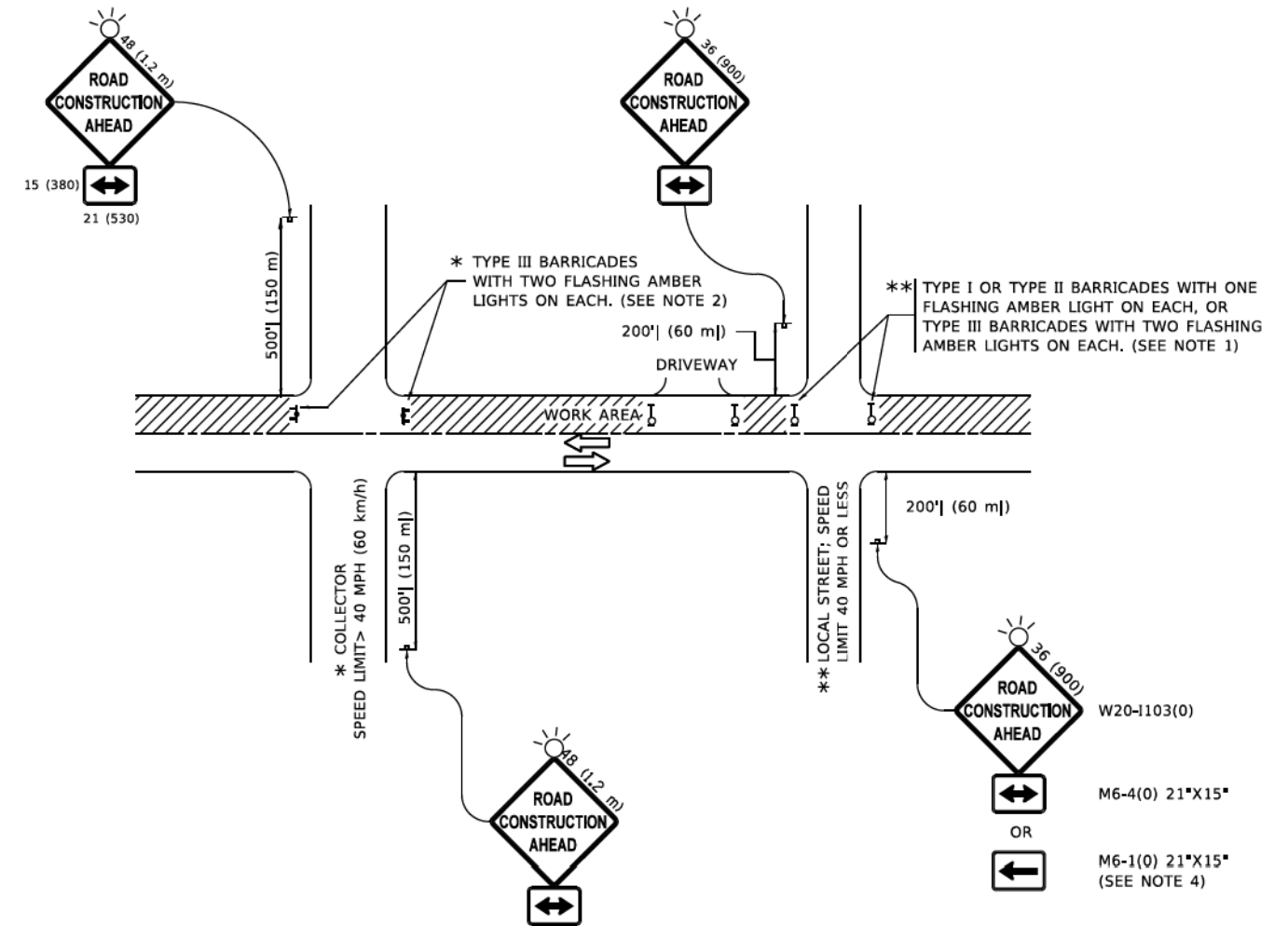
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DRAWN	-	CADD	-	REVISED	-	
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PLOT DATE	= 11/18/2022	DATE	-	06-16-04	REVISED	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BENCHING DETAIL  
FOR EMBANKMENT WIDENING**

SCALE: NONE    SHEET 1 OF 1 SHEETS    STA.    TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	70
<b>BD-51</b>			CONTRACT NO. 61K76	
ILLINOIS FED. AID PROJECT				



**NOTES:**

1. 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 x 48 (1.2 m x 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) IN HEIGHT.
4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
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 ENGINEER.
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.

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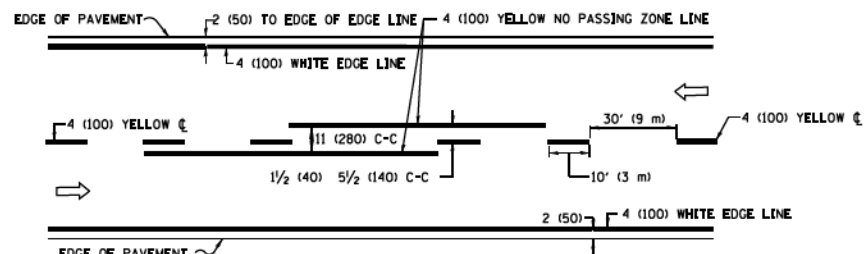
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		DRAWN	-	REVISED	A. SCHUETZE 07-01-13
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PLOT DATE	= 5/3/2024	DATE	06-89	REVISED	D. SENDERAK 05-03-24

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

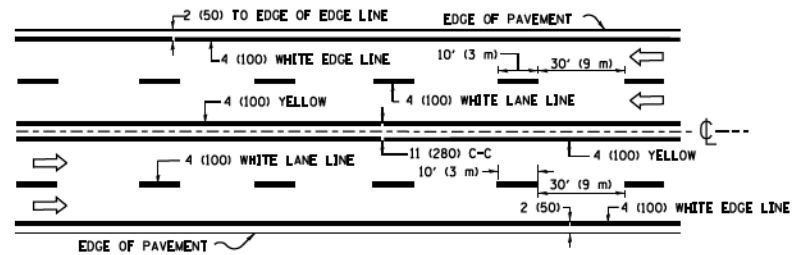
**TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

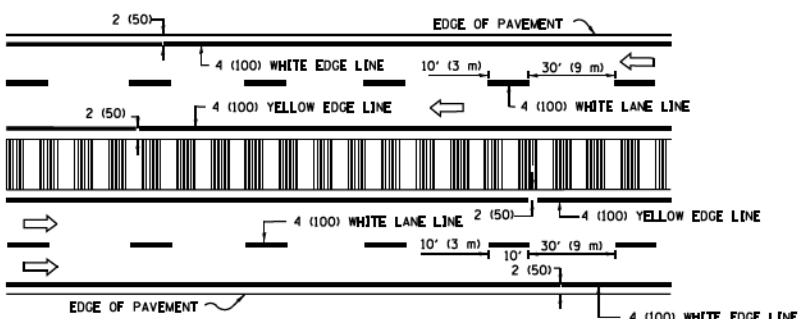
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	71
<b>TC-10</b>			CONTRACT NO. 61K76	
ILLINOIS FED. AID PROJECT				



**2-LANE ROADWAY**

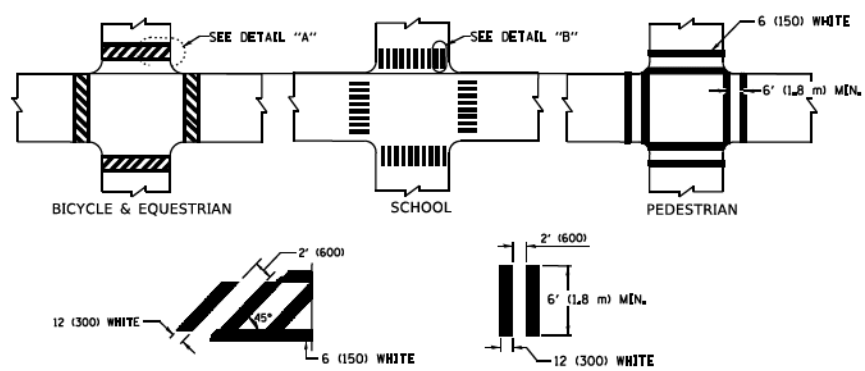


**MULTI-LANE UNDIVIDED**



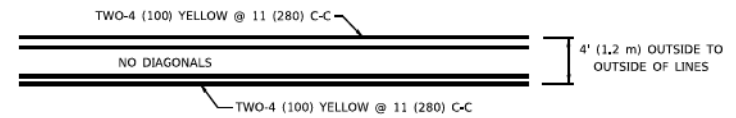
**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

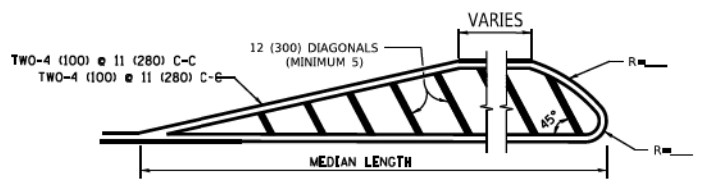


**TYPICAL CROSSWALK MARKING**

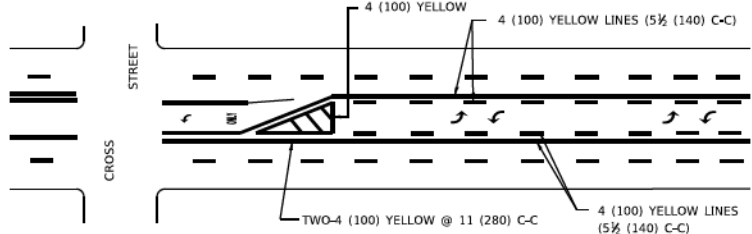
\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



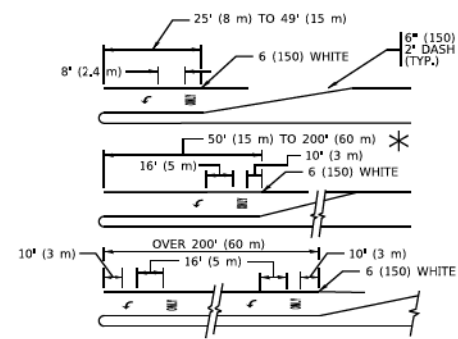
**4' (1.2 m) WIDE MEDIANS ONLY**



**MEDIANS OVER 4' (1.2 m) WIDE**



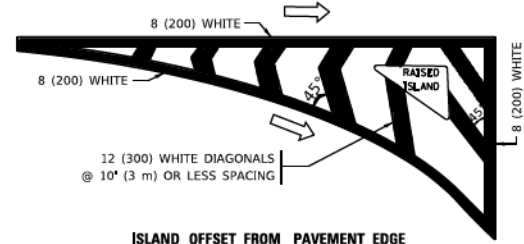
**MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING**



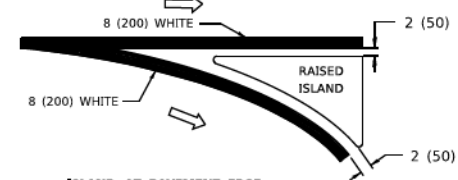
**TYPICAL LEFT (OR RIGHT) TURN LANE**

**TYPICAL TURN LANE MARKING**

FULL SIZE LETTERS 8" (2.4 m) AND ARROWS SHALL BE USED.  
 AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
 \* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

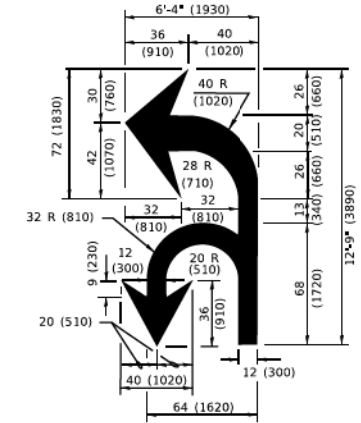


**ISLAND OFFSET FROM PAVEMENT EDGE**

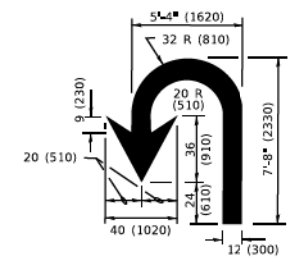


**ISLAND AT PAVEMENT EDGE**

**TYPICAL ISLAND MARKING**



**COMBINATION LEFT AND U-TURN**



**U-TURN**

**LANE REDUCTION TRANSITION**

\* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5 1/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE: FULL SIZE LETTERS & SYMBOLS (8" (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8" (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	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 POSSIBLE.
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 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))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES: "RR" 15 6" (1.8 m) LETTERS: 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

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

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		C. JUCIUS 07-01-13
		C. JUCIUS 12-21-15
		C. JUCIUS 04-12-16

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET 1	OF 2 SHEETS	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	72
TC-13		CONTRACT NO. 61K76		
ILLINOIS FED. AID PROJECT				



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 PROJECT: 19-00508-00-BR

**ROUTE MARKERS**

FOR U.S. ROUTES  
M1-40-2424

FOR ILLINOIS ROUTES  
M1-50-2424

R.R., UNMARKED ROUTES  
SPECIAL 24" x 18" VARIABLE  
4" BLACK LETTERS ON WHITE  
REFLECTIVE BACKGROUND

**ARROWS SIGNS**

M5-1L-2115

M5-1R-2115

M6-1-2115

M6-2-2115

M6-3-2115

**CARDINAL DIRECTION & DETOUR SIGNS**

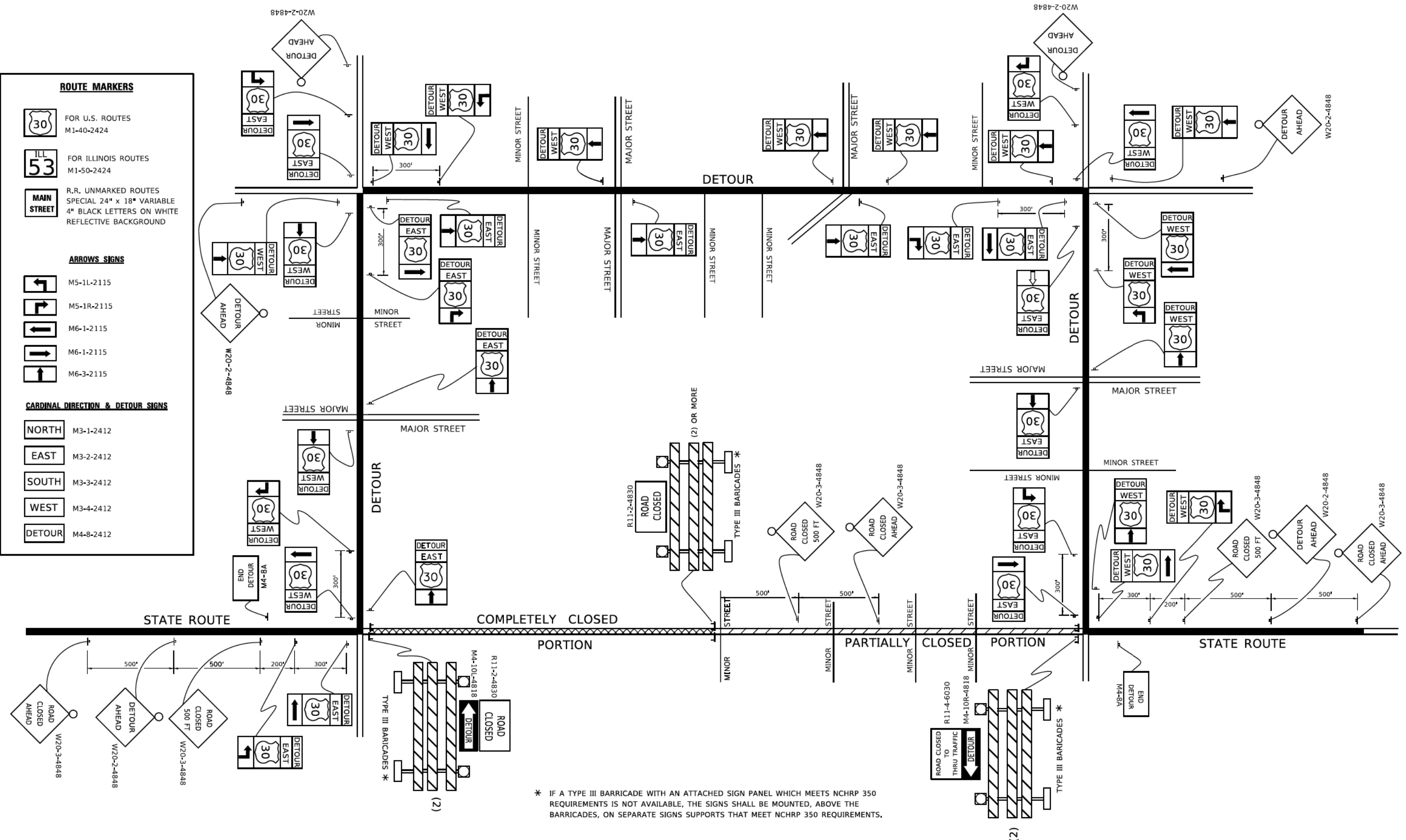
NORTH M3-1-2412

EAST M3-2-2412

SOUTH M3-3-2412

WEST M3-4-2412

DETOUR M4-8-2412



\* IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 REQUIREMENTS IS NOT AVAILABLE, THE SIGNS SHALL BE MOUNTED, ABOVE THE BARRICADES, ON SEPARATE SIGNS SUPPORTS THAT MEET NCHRP 350 REQUIREMENTS.

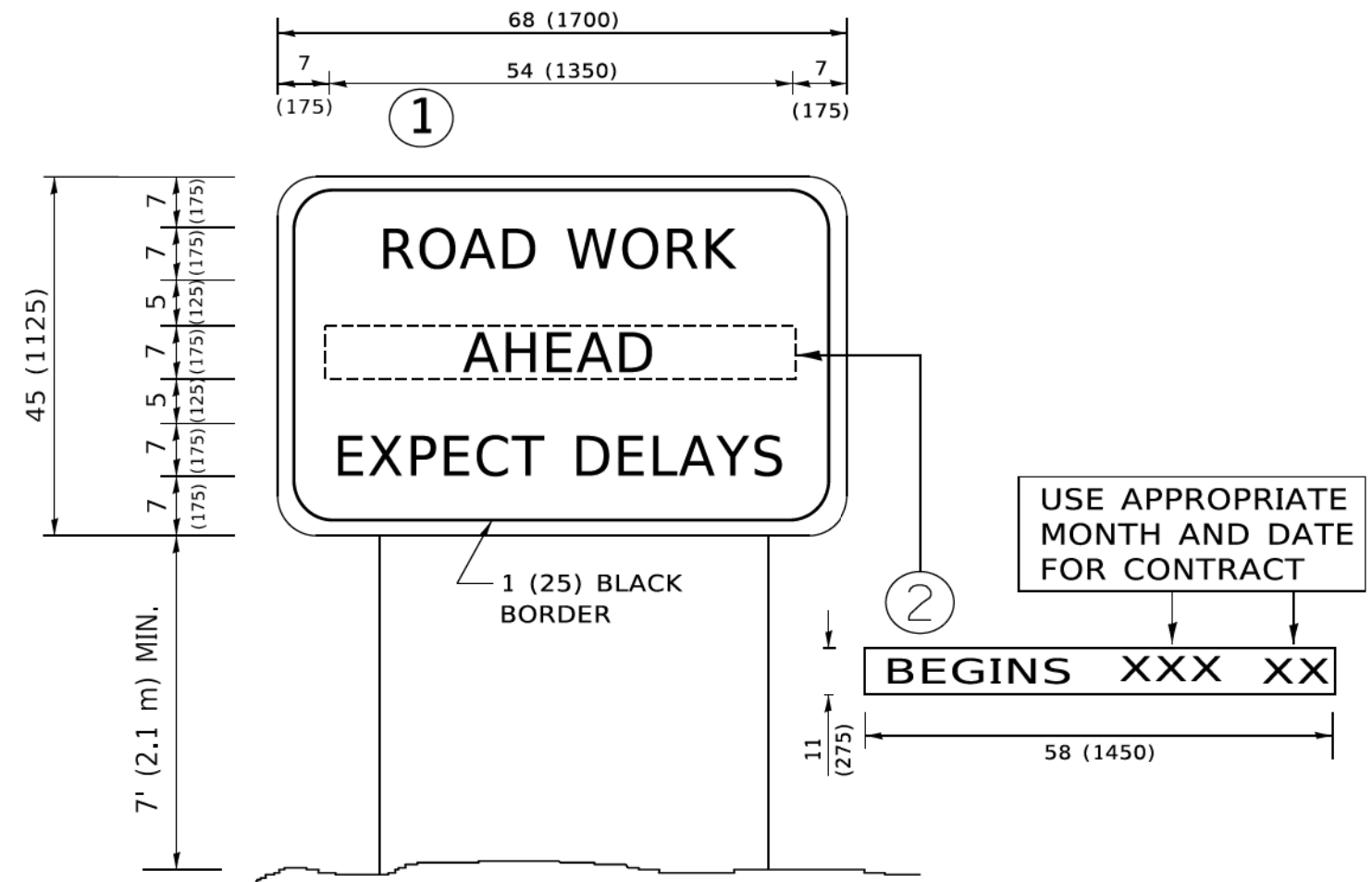
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PLOT DATE - 3/4/2019		REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**DETOUR SIGNING  
 FOR CLOSING STATE HIGHWAYS**

SCALE: NONE SHEET 1 OF 1 SHEETS

F.A.U. RTE. 4077	SECTION 19-00508-00-BR	COUNTY MCHENRY	TOTAL SHEETS 92	SHEET NO. 73
TC-21		CONTRACT NO. 61K76		
ILLINOIS FED. AID PROJECT				



**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.

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footemj	R. MIRS 09-15-97	R. MIRS 12-11-97
DRAWN -	CHECKED -	REVISED -
	T. RAMMACHER 02-02-99	
PLOT SCALE	DATE -	REVISED -
50,0000 ' / in.		C. JUCIUS 01-31-07
PLOT DATE		
3/4/2019		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

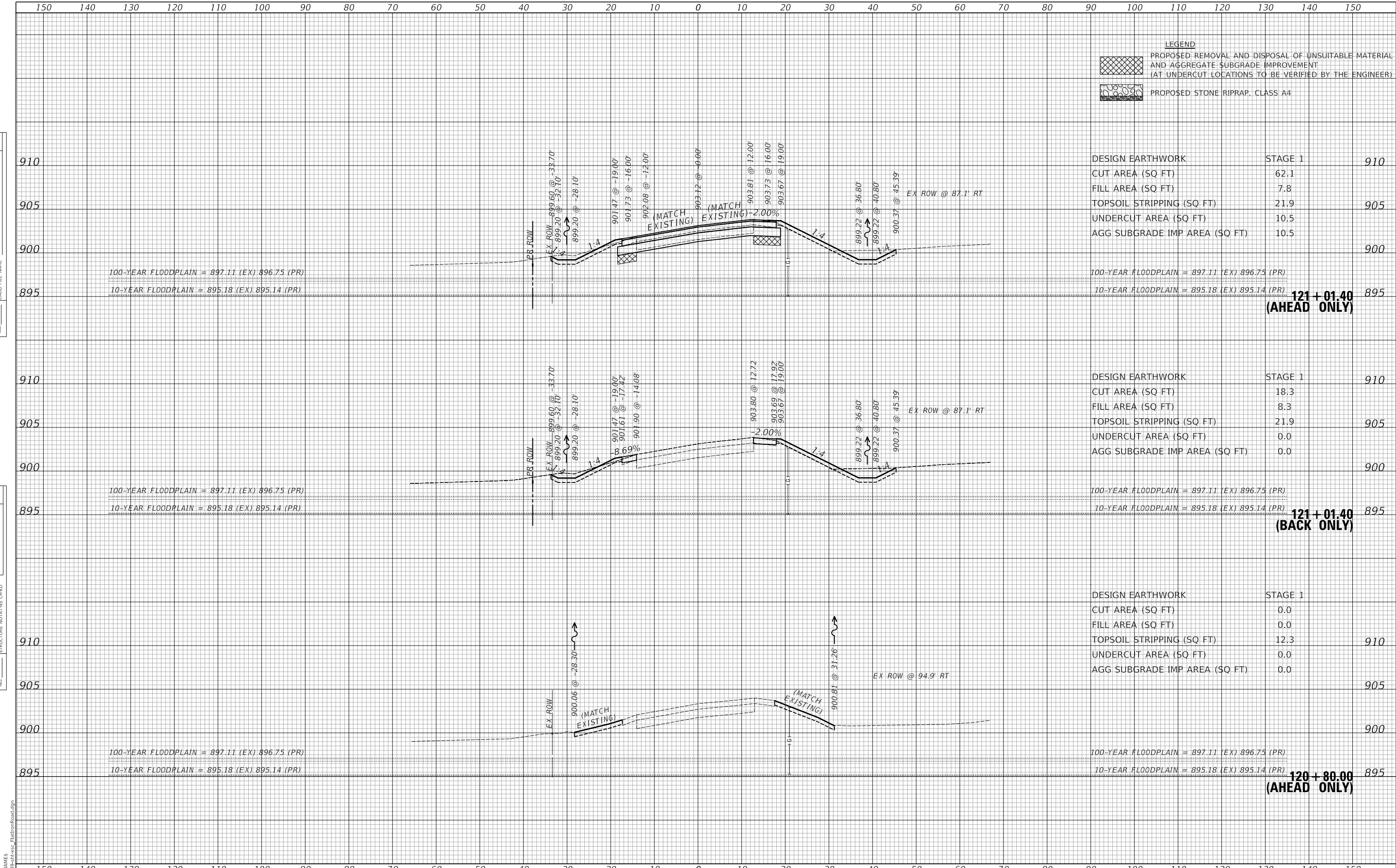
**ARTERIAL ROAD  
INFORMATION SIGN**

SCALE: NONE SHEET 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	74
<b>TC-22</b>		CONTRACT NO. 61K76		
ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNMENT CHECKED	
	CADD FILE NAME	
NOTE BOOK NO. _____		

PROFILE	SURVEYED	DATE
	GRADES CHECKED	BY
	STRUCTURE NOTATIONS CHWD	
NOTE BOOK NO. _____		



**LEGEND**

	PROPOSED REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND AGGREGATE SUBGRADE IMPROVEMENT (AT UNDERCUT LOCATIONS TO BE VERIFIED BY THE ENGINEER)
	PROPOSED STONE RIPRAP, CLASS A4

DESIGN EARTHWORK	STAGE 1	
CUT AREA (SQ FT)	62.1	910
FILL AREA (SQ FT)	7.8	
TOPSOIL STRIPPING (SQ FT)	21.9	905
UNDERCUT AREA (SQ FT)	10.5	
AGG SUBGRADE IMP AREA (SQ FT)	10.5	900

DESIGN EARTHWORK	STAGE 1	
CUT AREA (SQ FT)	18.3	910
FILL AREA (SQ FT)	8.3	
TOPSOIL STRIPPING (SQ FT)	21.9	905
UNDERCUT AREA (SQ FT)	0.0	
AGG SUBGRADE IMP AREA (SQ FT)	0.0	900

DESIGN EARTHWORK	STAGE 1	
CUT AREA (SQ FT)	0.0	
FILL AREA (SQ FT)	0.0	
TOPSOIL STRIPPING (SQ FT)	12.3	910
UNDERCUT AREA (SQ FT)	0.0	
AGG SUBGRADE IMP AREA (SQ FT)	0.0	905

USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
FLAT IRON ROAD**

SCALE: 1"=10'H/5'V SHEET 1 OF 12 SHEETS STA. 120+80.00 TO STA. 121+01.41

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	75
CONTRACT NO. 61K76			ILLINOIS FED. AID PROJECT	

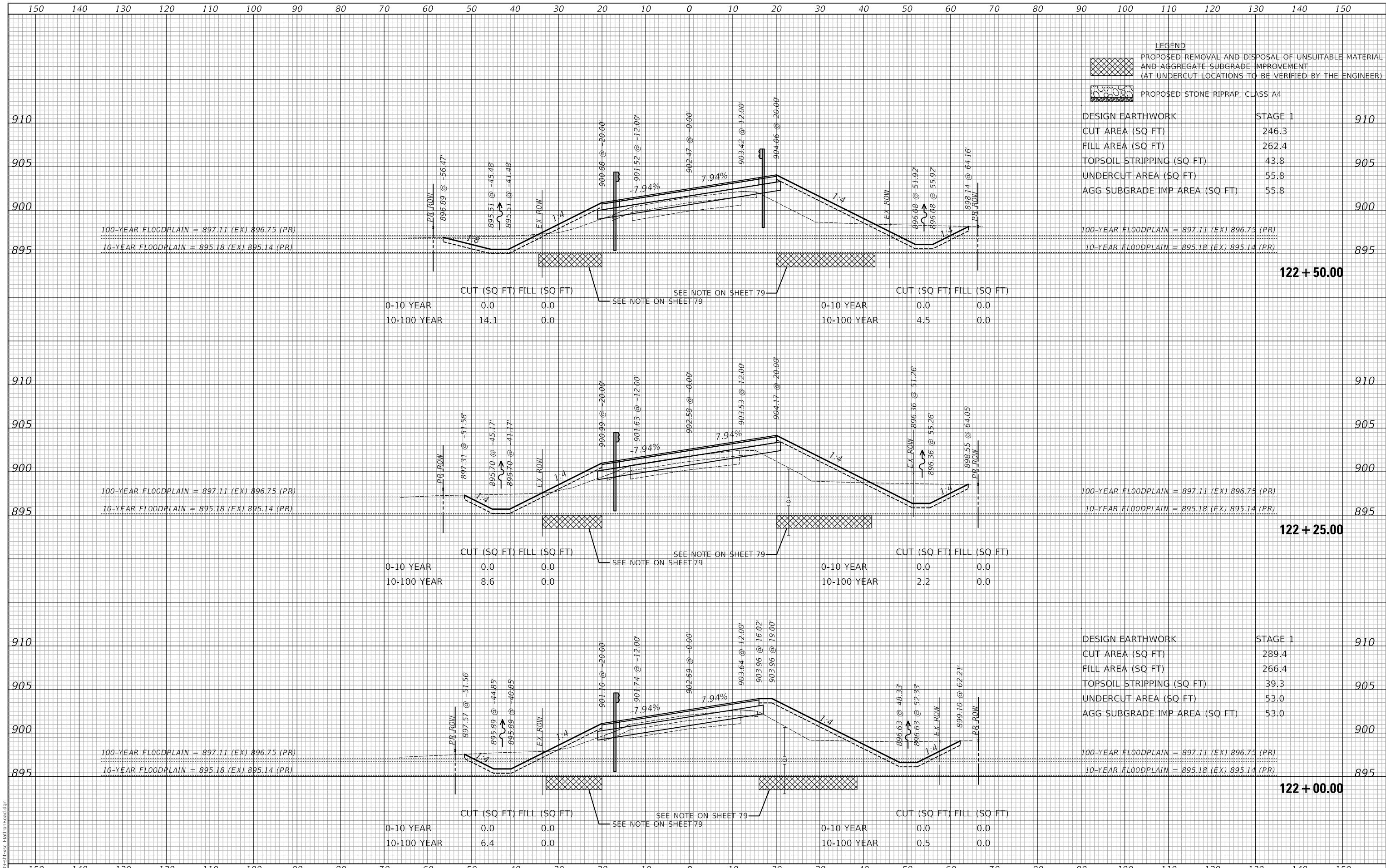
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SURVEYED	
PLOTTED	
GRADES	
CHECKED	
STRUCTURE	
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**LEGEND**

PROPOSED REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND AGGREGATE SUBGRADE IMPROVEMENT (AT UNDERCUT LOCATIONS TO BE VERIFIED BY THE ENGINEER)

PROPOSED STONE RIPRAP, CLASS A4

DESIGN EARTHWORK	STAGE 1	910
CUT AREA (SQ FT)	246.3	905
FILL AREA (SQ FT)	262.4	900
TOPSOIL STRIPPING (SQ FT)	43.8	895
UNDERCUT AREA (SQ FT)	55.8	
AGG SUBGRADE IMP AREA (SQ FT)	55.8	

100-YEAR FLOODPLAIN = 897.11 (EX) 896.75 (PR)  
10-YEAR FLOODPLAIN = 895.18 (EX) 895.14 (PR)

	CUT (SQ FT)	FILL (SQ FT)		CUT (SQ FT)	FILL (SQ FT)
0-10 YEAR	0.0	0.0	SEE NOTE ON SHEET 79	0.0	0.0
10-100 YEAR	14.1	0.0		4.5	0.0

100-YEAR FLOODPLAIN = 897.11 (EX) 896.75 (PR)  
10-YEAR FLOODPLAIN = 895.18 (EX) 895.14 (PR)

	CUT (SQ FT)	FILL (SQ FT)		CUT (SQ FT)	FILL (SQ FT)
0-10 YEAR	0.0	0.0	SEE NOTE ON SHEET 79	0.0	0.0
10-100 YEAR	8.6	0.0		2.2	0.0

100-YEAR FLOODPLAIN = 897.11 (EX) 896.75 (PR)  
10-YEAR FLOODPLAIN = 895.18 (EX) 895.14 (PR)

	CUT (SQ FT)	FILL (SQ FT)		CUT (SQ FT)	FILL (SQ FT)
0-10 YEAR	0.0	0.0	SEE NOTE ON SHEET 79	0.0	0.0
10-100 YEAR	6.4	0.0		0.5	0.0

USER NAME	= djk
DESIGNED	- KDC
DRAWN	- KDC
CHECKED	- DJK
DATE	- 7/16/2024

REVISED	-
REVISED	-
REVISED	-
REVISED	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

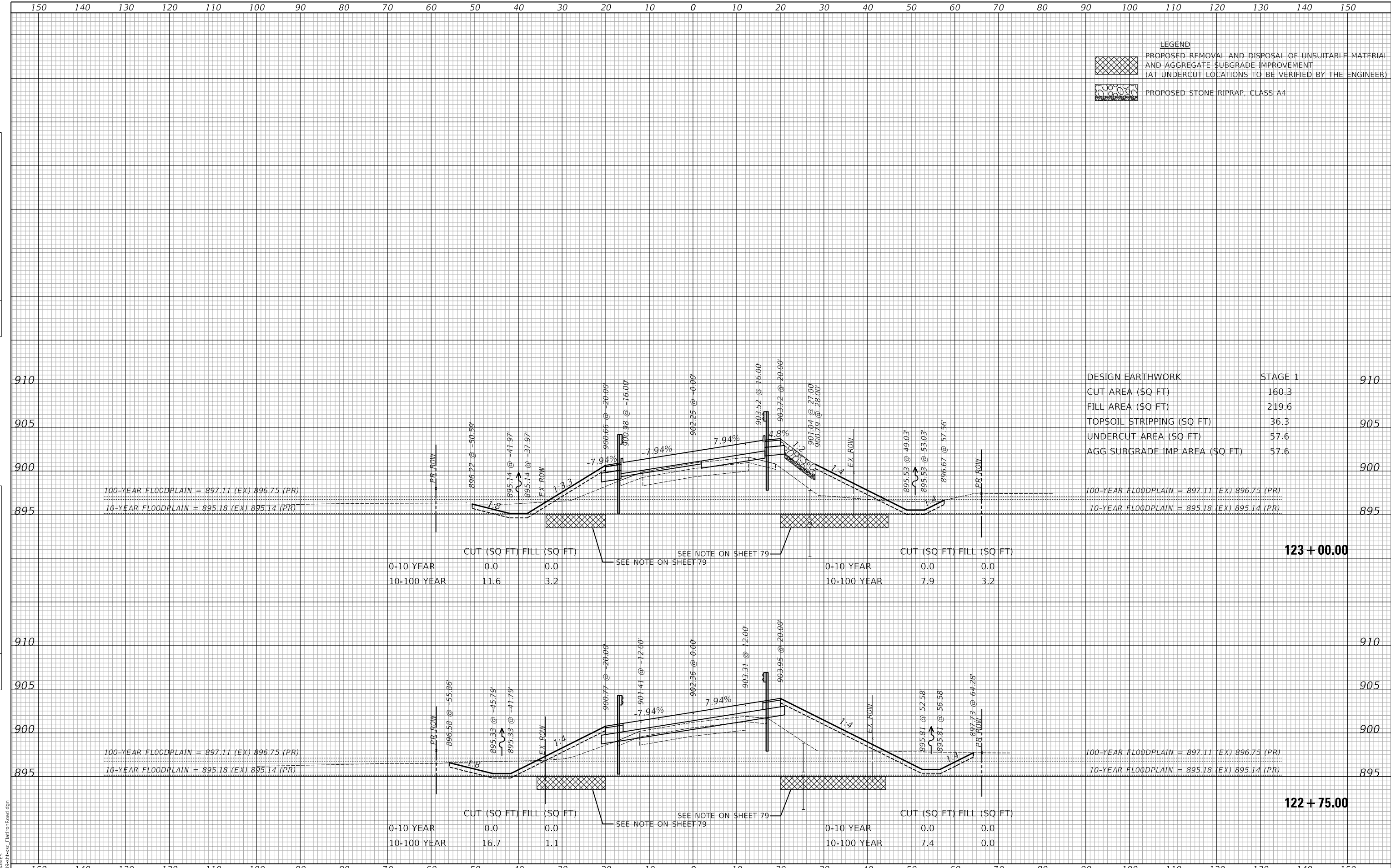
**CROSS SECTIONS  
FLAT IRON ROAD**

SCALE: 1"=10'H/5'V SHEET 3 OF 12 SHEETS STA. 122+00.00 TO STA. 122+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	77
CONTRACT NO. 61K76			ILLINOIS FED. AID PROJECT	

PLAN	SURVEYED	DATE
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	ALIGNMENT CHECKED	
	FILE NAME	
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PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATION	
	NO.	



DESIGN EARTHWORK	STAGE 1	910
CUT AREA (SQ FT)	160.3	
FILL AREA (SQ FT)	219.6	
TOPSOIL STRIPPING (SQ FT)	36.3	905
UNDERCUT AREA (SQ FT)	57.6	
AGG SUBGRADE IMP AREA (SQ FT)	57.6	

	CUT (SQ FT)	FILL (SQ FT)		CUT (SQ FT)	FILL (SQ FT)
0-10 YEAR	0.0	0.0	SEE NOTE ON SHEET 79	0-10 YEAR	0.0
10-100 YEAR	11.6	3.2	SEE NOTE ON SHEET 79	10-100 YEAR	7.9

	CUT (SQ FT)	FILL (SQ FT)		CUT (SQ FT)	FILL (SQ FT)
0-10 YEAR	0.0	0.0	SEE NOTE ON SHEET 79	0-10 YEAR	0.0
10-100 YEAR	16.7	1.1	SEE NOTE ON SHEET 79	10-100 YEAR	7.4

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
FLAT IRON ROAD**

USER NAME	= djk
DESIGNED	- KDC
DRAWN	- KDC
CHECKED	- DJK
DATE	- 7/16/2024

REVISED	-
REVISED	-
REVISED	-
REVISED	-

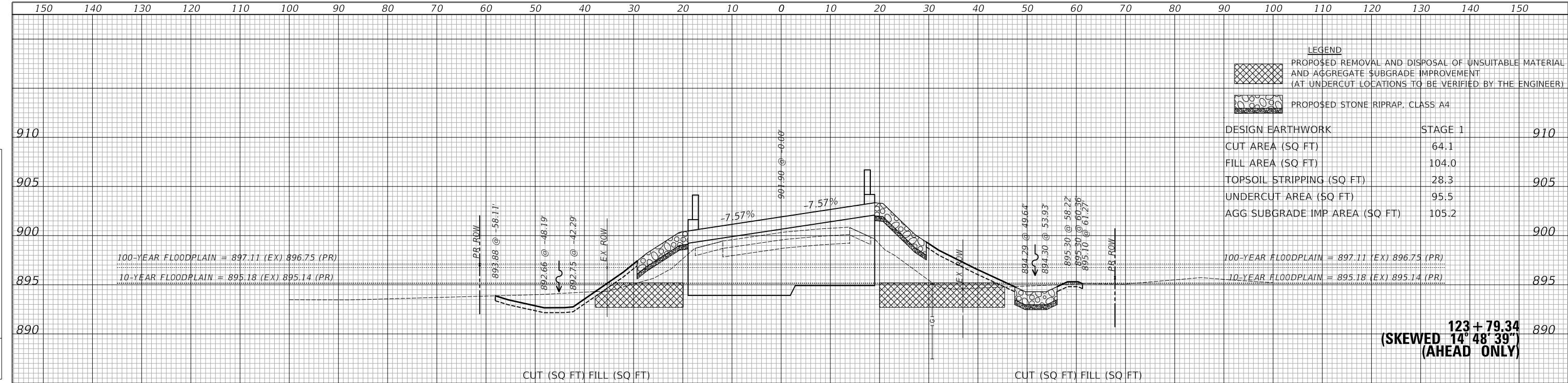
SCALE:	1"=10'H/5'V
SHEET	4 OF 12 SHEETS
STA.	122+75.00 TO STA. 123+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	78
			CONTRACT NO. 61K76	
ILLINOIS FED. AID PROJECT				

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FILE NAME: ...33938-111-cvcc-FlatIronRoad.dgn

PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	ALIGNMENT CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	ALIGNMENT CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	



**LEGEND**

	PROPOSED REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND AGGREGATE SUBGRADE IMPROVEMENT (AT UNDERCUT LOCATIONS TO BE VERIFIED BY THE ENGINEER)
	PROPOSED STONE RIPRAP, CLASS A4

DESIGN EARTHWORK		STAGE 1	
CUT AREA (SQ FT)		64.1	910
FILL AREA (SQ FT)		104.0	
TOPSOIL STRIPPING (SQ FT)		28.3	905
UNDERCUT AREA (SQ FT)		95.5	
AGG SUBGRADE IMP AREA (SQ FT)		105.2	900

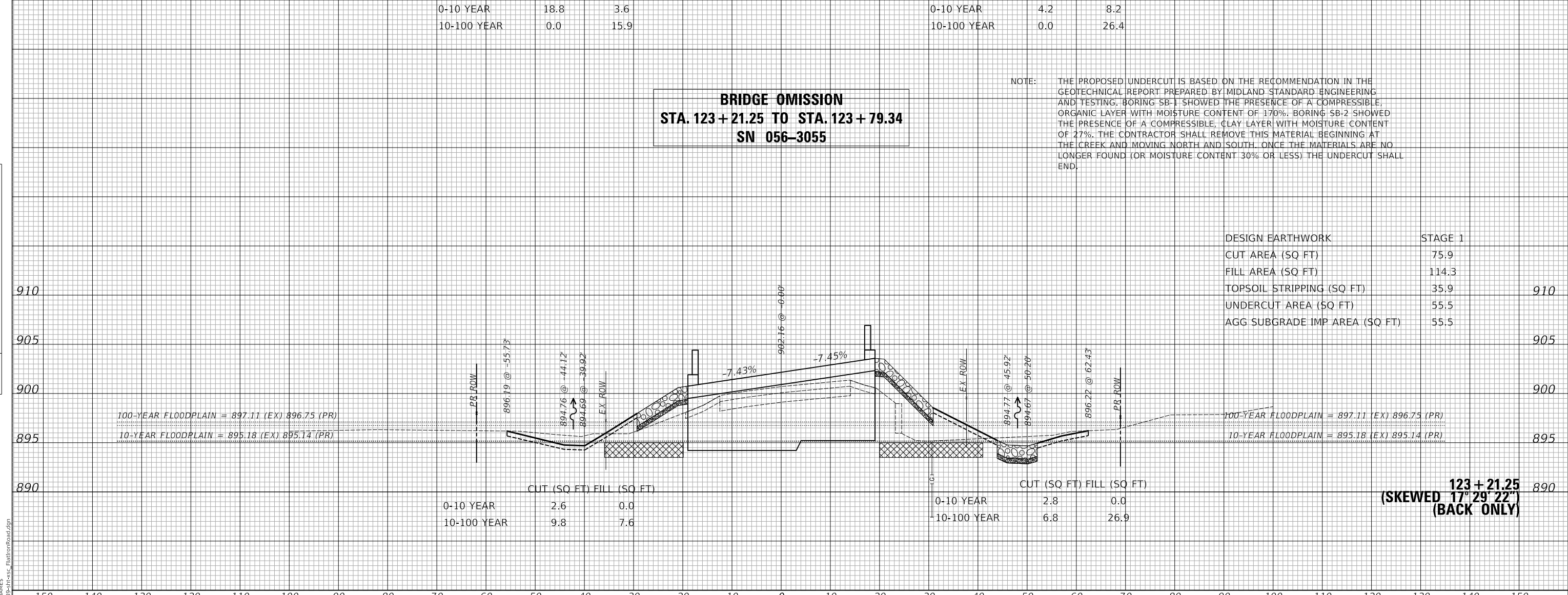
CUT (SQ FT) FILL (SQ FT)			
0-10 YEAR	18.8	3.6	
10-100 YEAR	0.0	15.9	

CUT (SQ FT) FILL (SQ FT)			
0-10 YEAR	4.2	8.2	
10-100 YEAR	0.0	26.4	

**BRIDGE OMISSION**  
**STA. 123 + 21.25 TO STA. 123 + 79.34**  
**SN 056-3055**

**NOTE:** THE PROPOSED UNDERCUT IS BASED ON THE RECOMMENDATION IN THE GEOTECHNICAL REPORT PREPARED BY MIDLAND STANDARD ENGINEERING AND TESTING. BORING SB-1 SHOWED THE PRESENCE OF A COMPRESSIBLE ORGANIC LAYER WITH MOISTURE CONTENT OF 170%. BORING SB-2 SHOWED THE PRESENCE OF A COMPRESSIBLE CLAY LAYER WITH MOISTURE CONTENT OF 27%. THE CONTRACTOR SHALL REMOVE THIS MATERIAL BEGINNING AT THE CREEK AND MOVING NORTH AND SOUTH. ONCE THE MATERIALS ARE NO LONGER FOUND (OR MOISTURE CONTENT 30% OR LESS) THE UNDERCUT SHALL END.

**123 + 79.34**  
**(SKEWED 14° 48' 39")**  
**(AHEAD ONLY)**



DESIGN EARTHWORK		STAGE 1	
CUT AREA (SQ FT)		75.9	910
FILL AREA (SQ FT)		114.3	
TOPSOIL STRIPPING (SQ FT)		35.9	905
UNDERCUT AREA (SQ FT)		55.5	
AGG SUBGRADE IMP AREA (SQ FT)		55.5	900

CUT (SQ FT) FILL (SQ FT)			
0-10 YEAR	2.6	0.0	
10-100 YEAR	9.8	7.6	

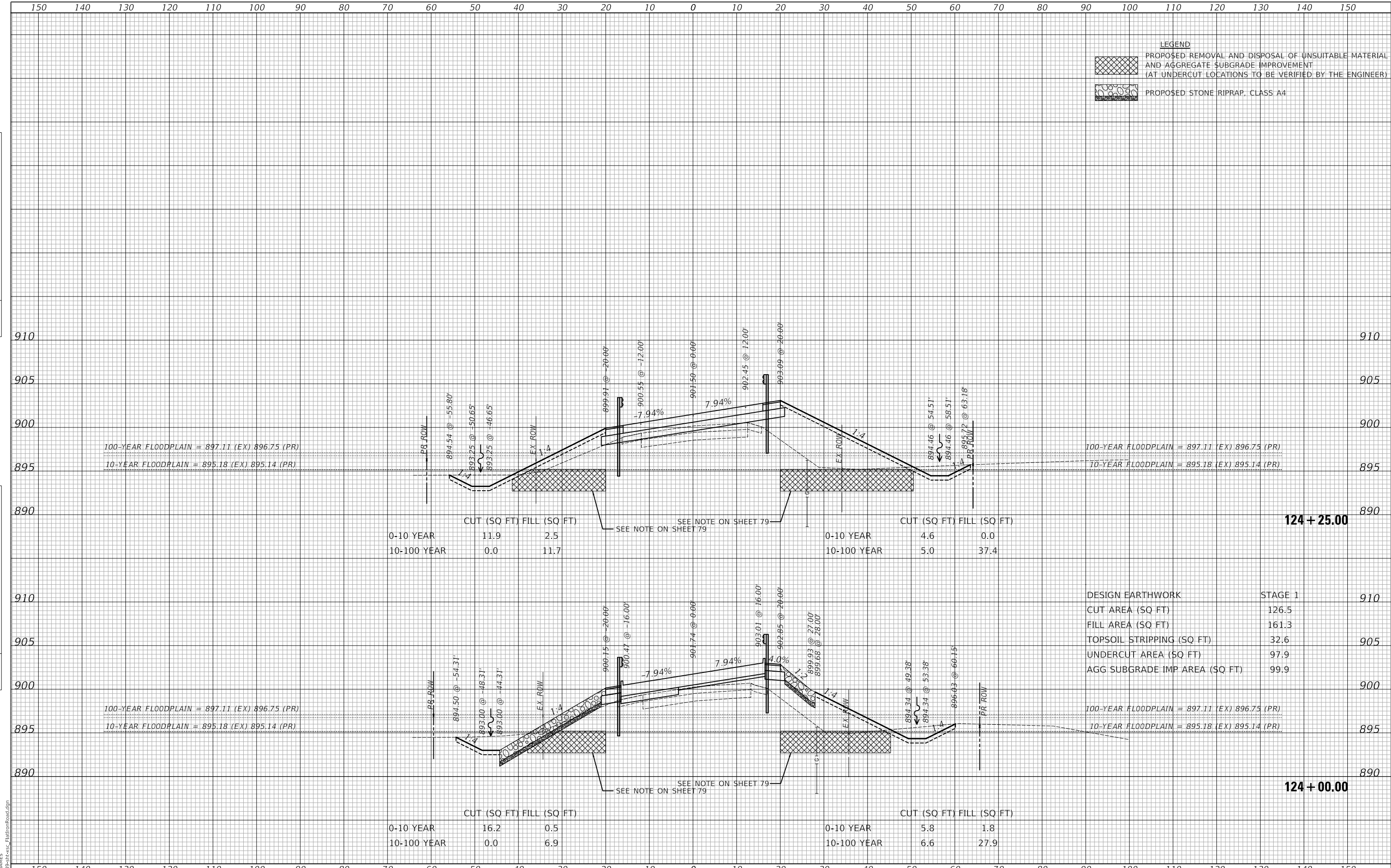
CUT (SQ FT) FILL (SQ FT)			
0-10 YEAR	2.8	0.0	
10-100 YEAR	6.8	26.9	

**123 + 21.25**  
**(SKEWED 17° 29' 22")**  
**(BACK ONLY)**

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PROFILE	SURVEYED	DATE
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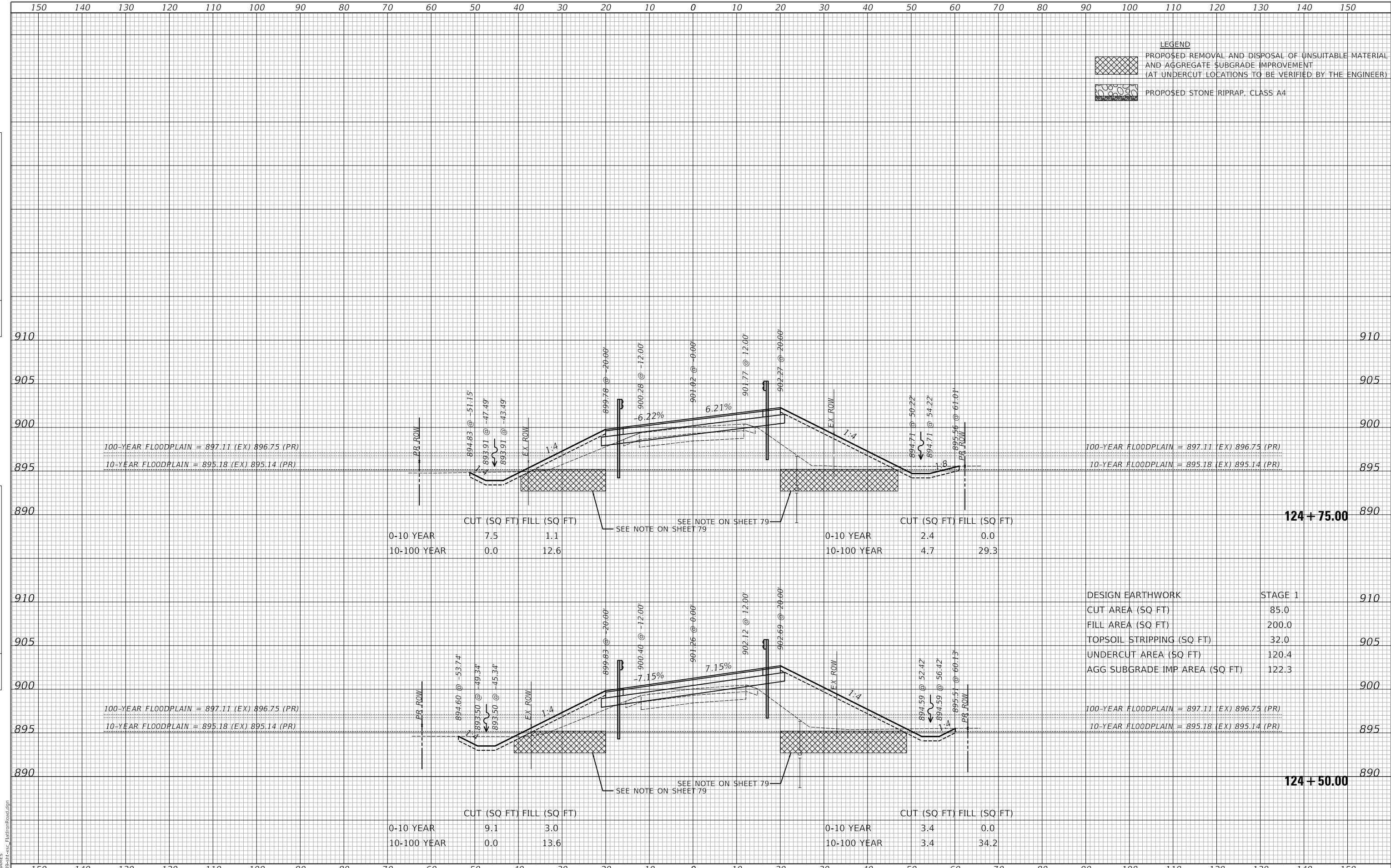


DESIGN EARTHWORK	STAGE 1
CUT AREA (SQ FT)	126.5
FILL AREA (SQ FT)	161.3
TOPSOIL STRIPPING (SQ FT)	32.6
UNDERCUT AREA (SQ FT)	97.9
AGG SUBGRADE IMP AREA (SQ FT)	99.9



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	ALIGNMENT CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	



LEGEND	
	PROPOSED REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND AGGREGATE SUBGRADE IMPROVEMENT (AT UNDERCUT LOCATIONS TO BE VERIFIED BY THE ENGINEER)
	PROPOSED STONE RIPRAP, CLASS A4

CUT (SQ FT)		FILL (SQ FT)	
0-10 YEAR	7.5	1.1	
10-100 YEAR	0.0	12.6	

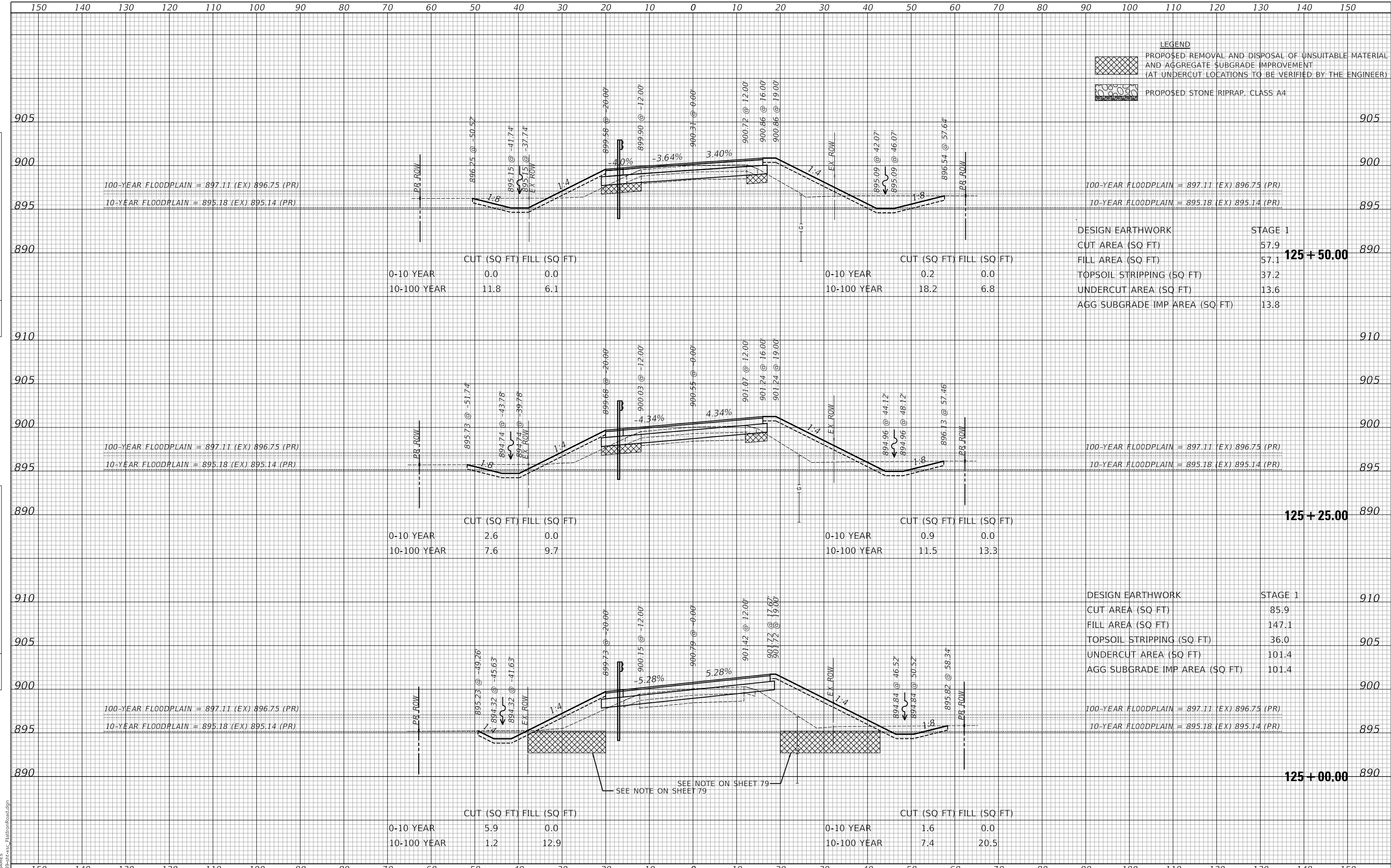
CUT (SQ FT)		FILL (SQ FT)	
0-10 YEAR	9.1	3.0	
10-100 YEAR	0.0	13.6	

DESIGN EARTHWORK		STAGE 1
CUT AREA (SQ FT)		85.0
FILL AREA (SQ FT)		200.0
TOPSOIL STRIPPING (SQ FT)		32.0
UNDERCUT AREA (SQ FT)		120.4
AGG SUBGRADE IMP AREA (SQ FT)		122.3

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	PLOTTED	BY
	ALIGNMENT CHECKED	
	GRADE CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	



**LEGEND**

	PROPOSED REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND AGGREGATE SUBGRADE IMPROVEMENT (AT UNDERCUT LOCATIONS TO BE VERIFIED BY THE ENGINEER)
	PROPOSED STONE RIPRAP, CLASS A4

DESIGN EARTHWORK	STAGE 1
CUT AREA (SQ FT)	57.9
FILL AREA (SQ FT)	57.1
TOPSOIL STRIPPING (SQ FT)	37.2
UNDERCUT AREA (SQ FT)	13.6
AGG SUBGRADE IMP AREA (SQ FT)	13.8

DESIGN EARTHWORK	STAGE 1
CUT AREA (SQ FT)	85.9
FILL AREA (SQ FT)	147.1
TOPSOIL STRIPPING (SQ FT)	36.0
UNDERCUT AREA (SQ FT)	101.4
AGG SUBGRADE IMP AREA (SQ FT)	101.4

USER NAME	= djk
DESIGNED	- KDC
DRAWN	- KDC
CHECKED	- DJK
DATE	- 7/16/2024

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REVISED	-
REVISED	-

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

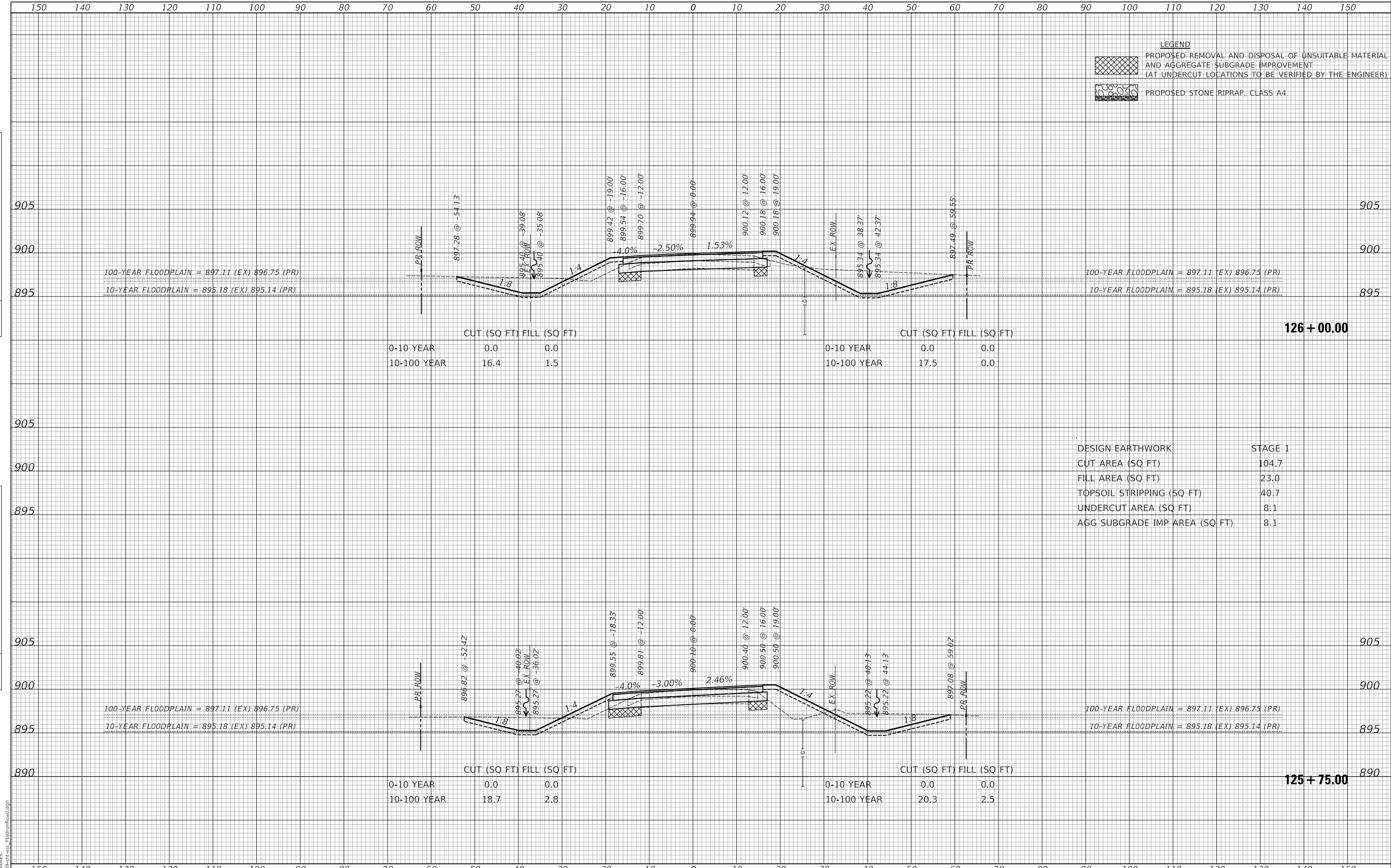
<b>CROSS SECTIONS FLAT IRON ROAD</b>			
SCALE: 1"=10'H/5'V	SHEET 8	OF 12 SHEETS	STA. 125+00.00 TO STA. 125+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	82
			CONTRACT NO.	61K76
			ILLINOIS	FED. AID PROJECT

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GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
NOTE BOOK NO.	
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LEGEND	
	PROPOSED REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND AGGREGATE SUBGRADE IMPROVEMENT (AT UNDERCUT LOCATIONS TO BE VERIFIED BY THE ENGINEER)
	PROPOSED STONE RIPRAP, CLASS A4

CUT (SQ FT)		FILL (SQ FT)	
0-10 YEAR	0.0	0.0	0.0
10-100 YEAR	16.4	1.5	0.0

DESIGN EARTHWORK		STAGE 1
CUT AREA (SQ FT)		104.7
FILL AREA (SQ FT)		23.0
TOPSOIL STRIPPING (SQ FT)		40.7
UNDERCUT AREA (SQ FT)		8.1
AGG SUBGRADE IMP AREA (SQ FT)		8.1

CUT (SQ FT)		FILL (SQ FT)	
0-10 YEAR	0.0	0.0	0.0
10-100 YEAR	18.7	2.8	2.5

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
FLAT IRON ROAD**

USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

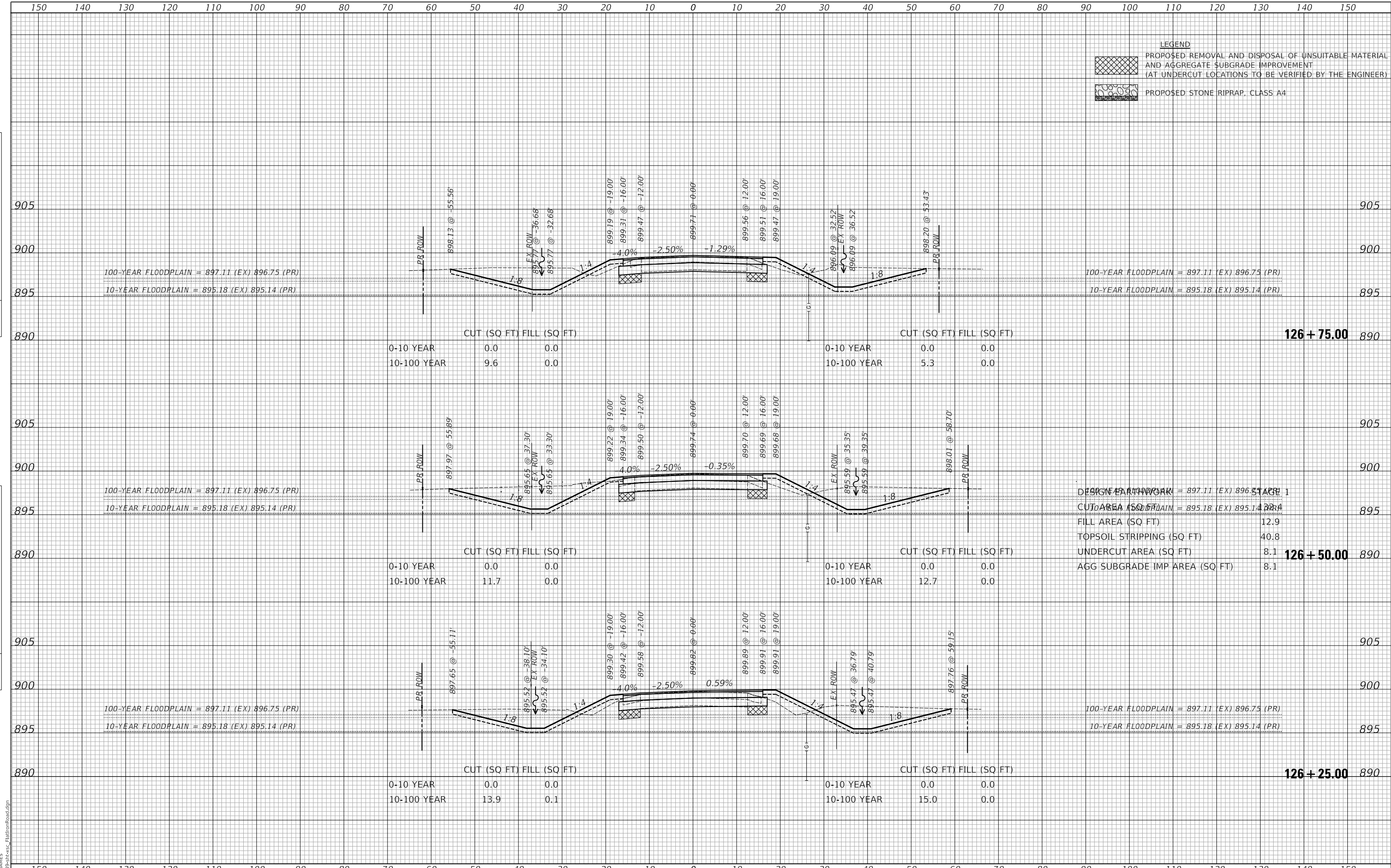
SCALE: 1"=10'H/5'V	SHEET 9 OF 12 SHEETS	STA. 125+75.00 TO STA. 126+00.00
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F.A.U. RTE. 4077	SECTION 19-00508-00-BR	COUNTY MCHENRY	TOTAL SHEETS 92	SHEET NO. 83
			CONTRACT NO. 61K76	
			ILLINOIS FED. AID PROJECT	

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	GRADE CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATION CHECKED	
	NOTE BOOK NO.	
	CADD FILE NAME	



**LEGEND**

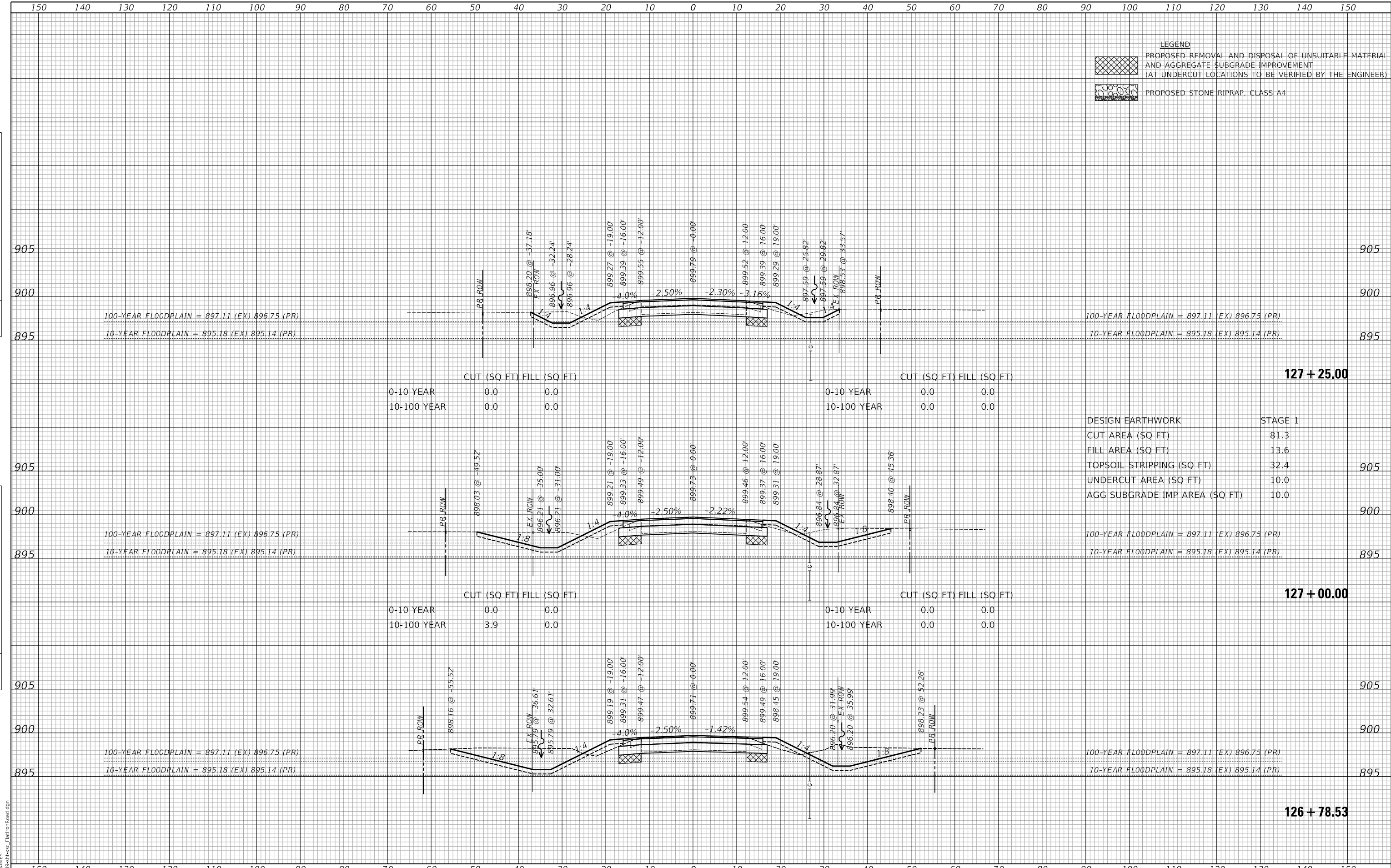
	PROPOSED REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND AGGREGATE SUBGRADE IMPROVEMENT (AT UNDERCUT LOCATIONS TO BE VERIFIED BY THE ENGINEER)
	PROPOSED STONE RIPRAP, CLASS A4

USER NAME = djk	DESIGNED - KDC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS FLAT IRON ROAD</b>		F.A.U. RTE. 4077	SECTION 19-00508-00-BR	COUNTY MCHENRY	TOTAL SHEETS 92	SHEET NO. 84
PLOT SCALE = 20.0000' / in.	CHECKED - DJK	REVISED -		SCALE: 1"=10'H/5'V	SHEET 10 OF 12 SHEETS	STA. 126+25.00 TO STA. 126+75.00	ILLINOIS FED. AID PROJECT		CONTRACT NO. 61K76	
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -								

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	PLOTTED
	ALIGNMENT CHECKED
	GRADE CHECKED
	STRUCTURE NOTATION CHECKED
NOTE BOOK NO.	
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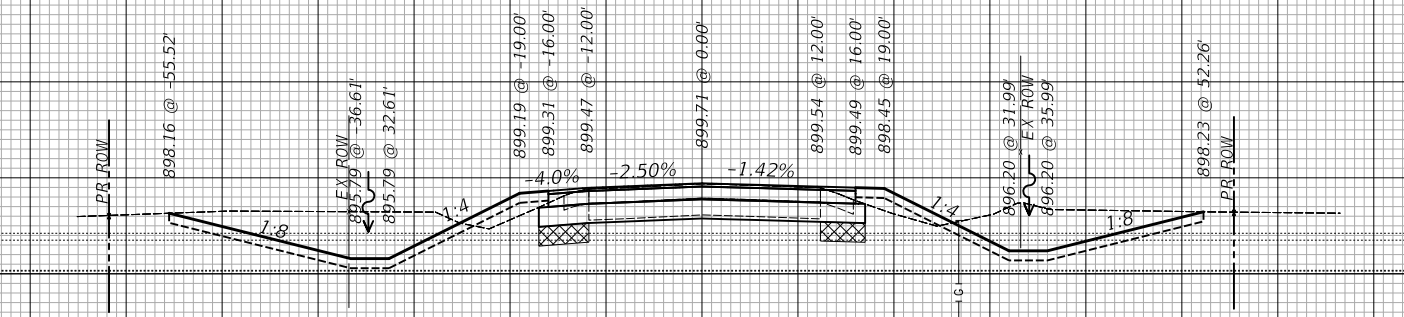
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	PROPOSED REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND AGGREGATE SUBGRADE IMPROVEMENT (AT UNDERCUT LOCATIONS TO BE VERIFIED BY THE ENGINEER)
	PROPOSED STONE RIPRAP, CLASS A4

CUT (SQ FT) FILL (SQ FT)	
0-10 YEAR	0.0 0.0
10-100 YEAR	0.0 0.0

DESIGN EARTHWORK	STAGE 1
CUT AREA (SQ FT)	81.3
FILL AREA (SQ FT)	13.6
TOPSOIL STRIPPING (SQ FT)	32.4
UNDERCUT AREA (SQ FT)	10.0
AGG SUBGRADE IMP AREA (SQ FT)	10.0

CUT (SQ FT) FILL (SQ FT)	
0-10 YEAR	0.0 0.0
10-100 YEAR	3.9 0.0

DESIGN EARTHWORK	STAGE 1
CUT AREA (SQ FT)	81.3
FILL AREA (SQ FT)	13.6
TOPSOIL STRIPPING (SQ FT)	32.4
UNDERCUT AREA (SQ FT)	10.0
AGG SUBGRADE IMP AREA (SQ FT)	10.0



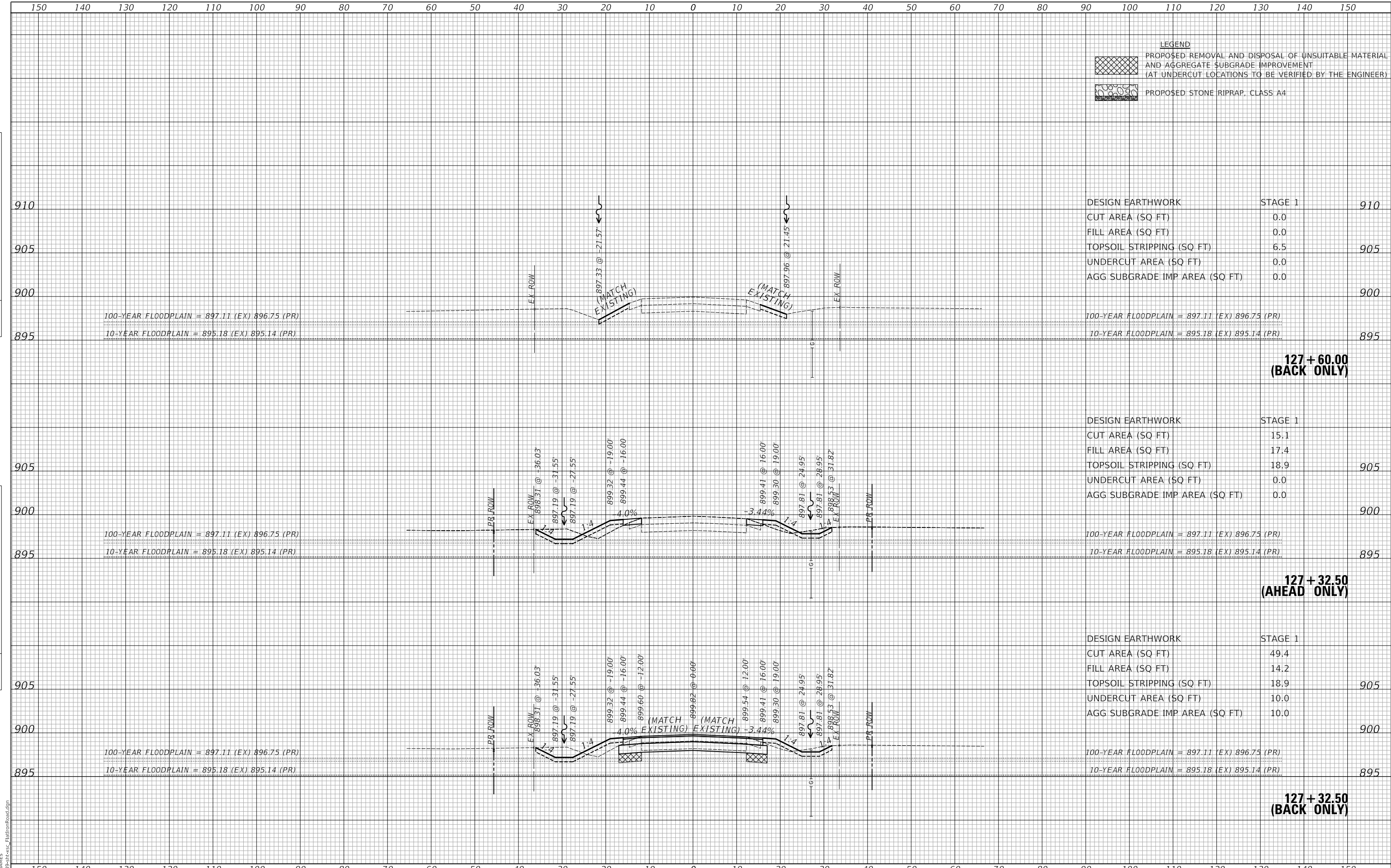
CUT (SQ FT) FILL (SQ FT)	
0-10 YEAR	0.0 0.0
10-100 YEAR	0.0 0.0

DESIGN EARTHWORK	STAGE 1
CUT AREA (SQ FT)	81.3
FILL AREA (SQ FT)	13.6
TOPSOIL STRIPPING (SQ FT)	32.4
UNDERCUT AREA (SQ FT)	10.0
AGG SUBGRADE IMP AREA (SQ FT)	10.0

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	FILE NAME	
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PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NO.	



LEGEND	
	PROPOSED REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL AND AGGREGATE SUBGRADE IMPROVEMENT (AT UNDERCUT LOCATIONS TO BE VERIFIED BY THE ENGINEER)
	PROPOSED STONE RIPRAP, CLASS A4

DESIGN EARTHWORK	STAGE 1	
CUT AREA (SQ FT)	0.0	910
FILL AREA (SQ FT)	0.0	
TOPSOIL STRIPPING (SQ FT)	6.5	905
UNDERCUT AREA (SQ FT)	0.0	
AGG SUBGRADE IMP AREA (SQ FT)	0.0	900
100-YEAR FLOODPLAIN = 897.11 (EX) 896.75 (PR)		
10-YEAR FLOODPLAIN = 895.18 (EX) 895.14 (PR)		895

DESIGN EARTHWORK	STAGE 1	
CUT AREA (SQ FT)	15.1	
FILL AREA (SQ FT)	17.4	905
TOPSOIL STRIPPING (SQ FT)	18.9	
UNDERCUT AREA (SQ FT)	0.0	
AGG SUBGRADE IMP AREA (SQ FT)	0.0	900
100-YEAR FLOODPLAIN = 897.11 (EX) 896.75 (PR)		
10-YEAR FLOODPLAIN = 895.18 (EX) 895.14 (PR)		895

DESIGN EARTHWORK	STAGE 1	
CUT AREA (SQ FT)	49.4	
FILL AREA (SQ FT)	14.2	905
TOPSOIL STRIPPING (SQ FT)	18.9	
UNDERCUT AREA (SQ FT)	10.0	
AGG SUBGRADE IMP AREA (SQ FT)	10.0	900
100-YEAR FLOODPLAIN = 897.11 (EX) 896.75 (PR)		
10-YEAR FLOODPLAIN = 895.18 (EX) 895.14 (PR)		895

USER NAME = djk				DESIGNED - KDC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		CROSS SECTIONS FLAT IRON ROAD				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN - KDC				CHECKED - DJK	REVISED -			4077	19-00508-00-BR	MCHENRY	92	86				
PLOT SCALE = 20.0000' / in.				DATE - 7/16/2024	REVISOR -	REVISOR -	SCALE: 1"=10'H/5'V	SHEET 12 OF 12 SHEETS	STA. 127+32.49	TO STA. 127+60.00	CONTRACT NO. 61K76		ILLINOIS FED. AID PROJECT			

MODEL: S:\MODEL\NAMES  
FILE NAME: ...13939-511-cv-c-FlatIronRoad.dgn



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PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	NOTE BOOK NO.	
	STRUCTURE NOTATIONS CHECKED	



MODEL: SMODEL\MAMES  
FILE NAME: SFILE5

USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = \$SCALES	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

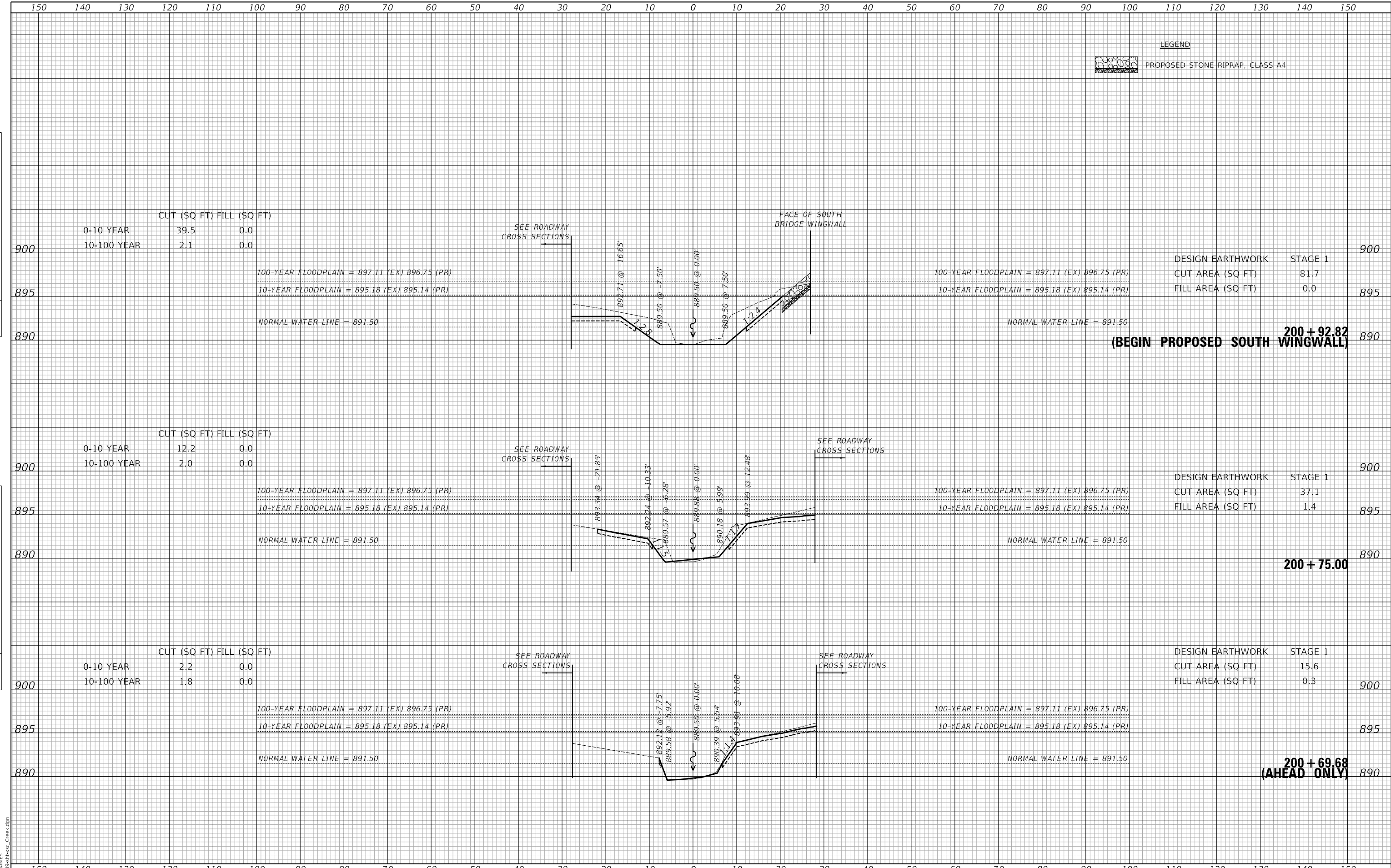
**CROSS SECTION LOCATIONS - MOKELER CREEK**

SCALE: 1"=10'      SHEET 1 OF 1 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	87
			CONTRACT NO. 61K76	
		ILLINOIS	FED. AID PROJECT	

PLAN	SURVEYED	DATE
	PLOTTED	BY
	ALIGNMENT CHECKED	
	GRADE CHECKED	
	FILE NAME	
	NO.	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATION	
	NO.	



**LEGEND**  
 PROPOSED STONE RIPRAP, CLASS A4

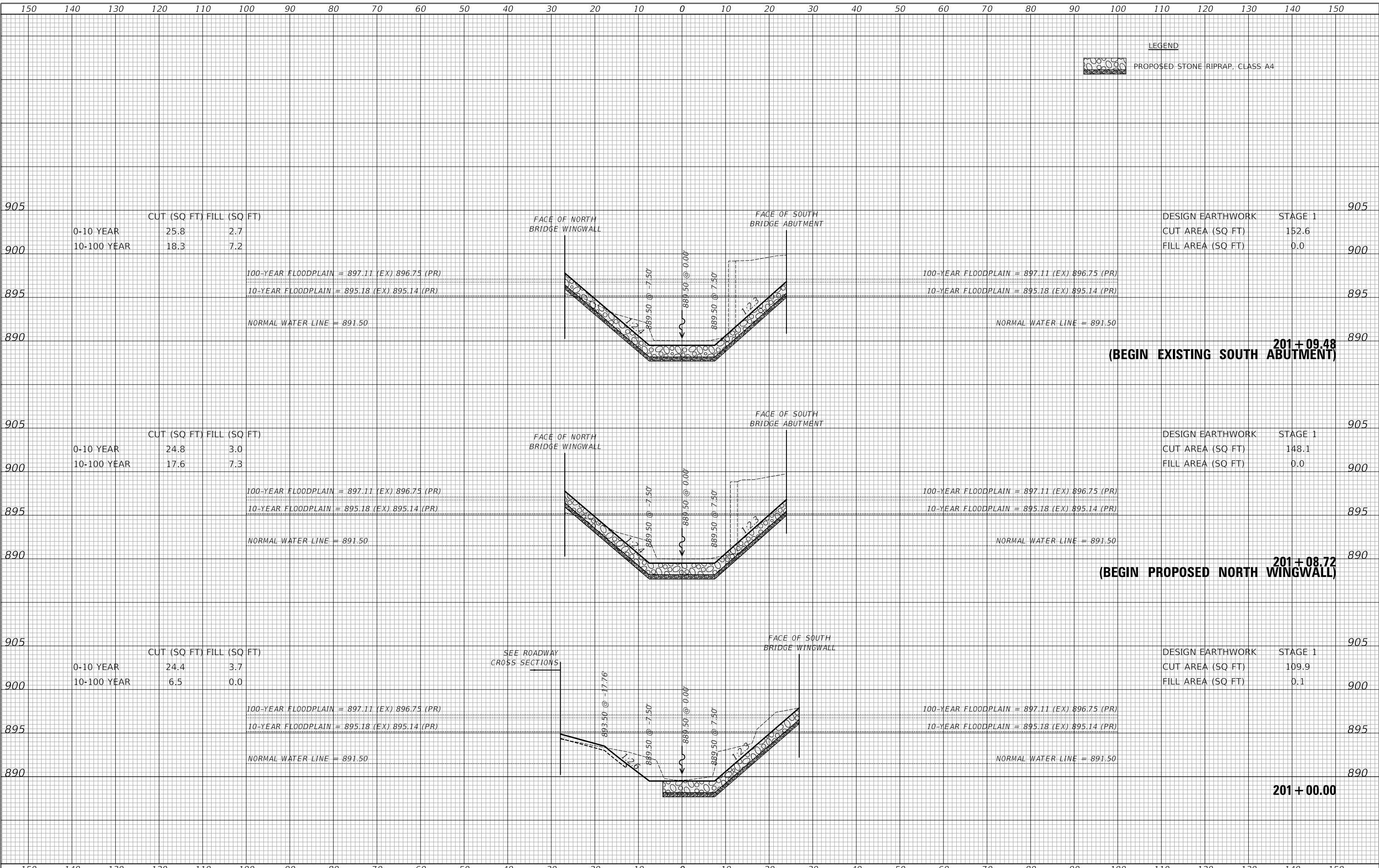
MODEL: SH061MAMES	USER NAME = djk	DESIGNED - KDC	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS MOKELER CREEK</b>	F.A.U. RTE. 4077	SECTION 19-00508-00-BR	COUNTY MCHENRY	TOTAL SHEETS 92	SHEET NO. 88			
FILE NAME: ...131333-st1-cv-c_creek.dgn	PLOT SCALE = 20.0000' / in.	CHECKED - DJK	REVISED -			SCALE: 1"=10'H/5'V	SHEET 1 OF 5 SHEETS	STA. 200+60.08	TO STA. 200+00.00	CONTRACT NO. 61K76			
	PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -			ILLINOIS FED. AID PROJECT							




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ALIGNMENT CHECKED	
GRADE CHECKED	
STRUCTURE NOTATION CHECKED	
NOTE BOOK NO.	
FILE NAME	

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PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATION CHECKED	
NOTE BOOK NO.	
FILE NAME	

MODEL: SH061MAMES  
FILE NAME: ...3393st-creek.dgn



**LEGEND**  
 PROPOSED STONE RIPRAP, CLASS A4

CUT (SQ FT) FILL (SQ FT)	
0-10 YEAR	25.8 2.7
10-100 YEAR	18.3 7.2

DESIGN EARTHWORK	STAGE 1
CUT AREA (SQ FT)	152.6
FILL AREA (SQ FT)	0.0

CUT (SQ FT) FILL (SQ FT)	
0-10 YEAR	24.8 3.0
10-100 YEAR	17.6 7.3

DESIGN EARTHWORK	STAGE 1
CUT AREA (SQ FT)	148.1
FILL AREA (SQ FT)	0.0

CUT (SQ FT) FILL (SQ FT)	
0-10 YEAR	24.4 3.7
10-100 YEAR	6.5 0.0

DESIGN EARTHWORK	STAGE 1
CUT AREA (SQ FT)	109.9
FILL AREA (SQ FT)	0.1

USER NAME = djk	DESIGNED - KDC	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN - KDC	REVISED -
PLOT DATE = 7/23/2024	CHECKED - DJK	REVISED -
	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
MOKELER CREEK**

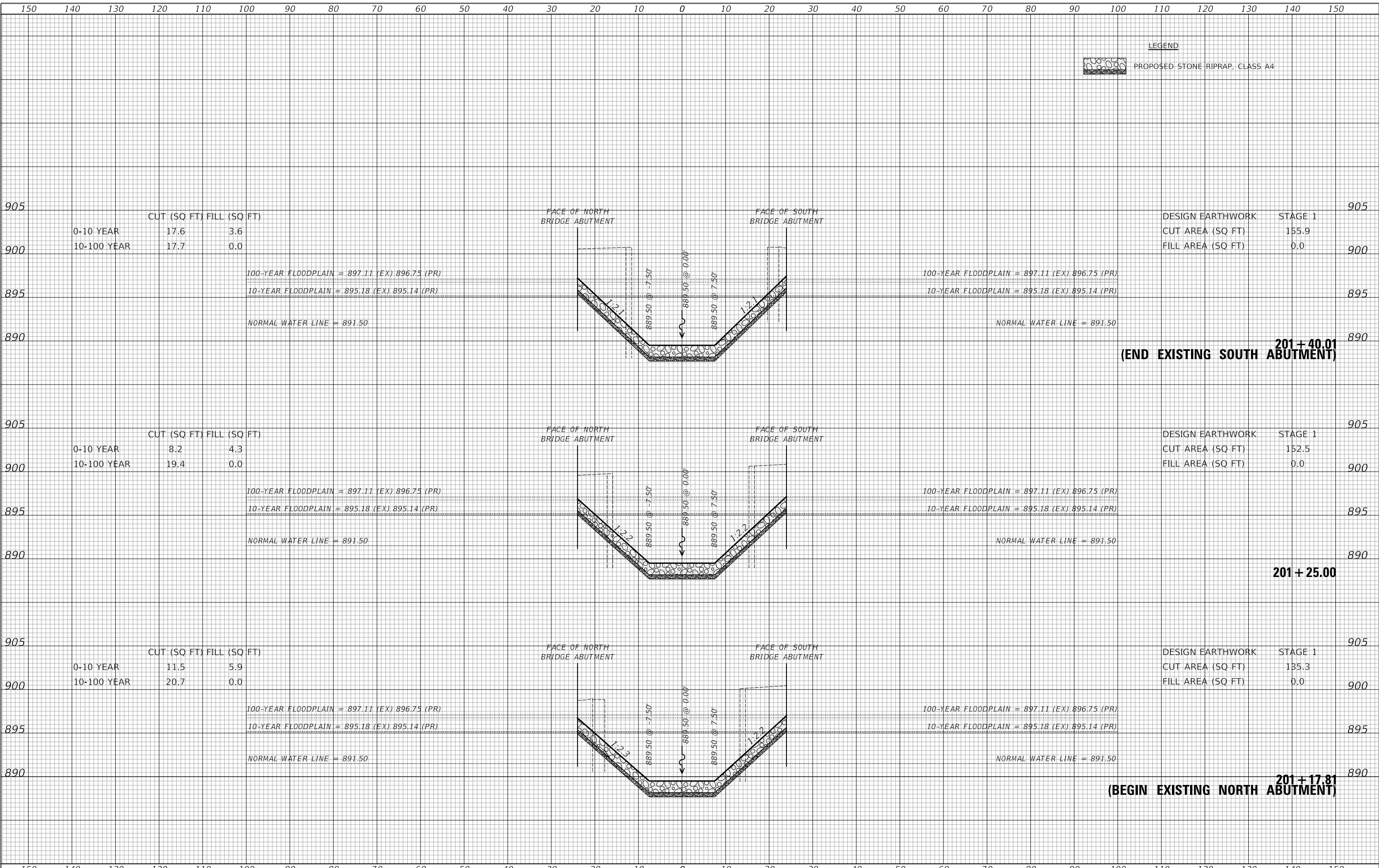
SCALE: 1"=10'H/5'V SHEET 2 OF 5 SHEETS STA. 201+00.00 TO STA. 201+06.08

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	89
			CONTRACT NO. 61K76	
			ILLINOIS FED. AID PROJECT	

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GRADE CHECKED	
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PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CHECKED	
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MODEL: SH061MAMES  
FILE NAME: ...13939-st1-crc\_Creek.dgn



**LEGEND**  
 PROPOSED STONE RIPRAP, CLASS A4

USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
 MOKELER CREEK**

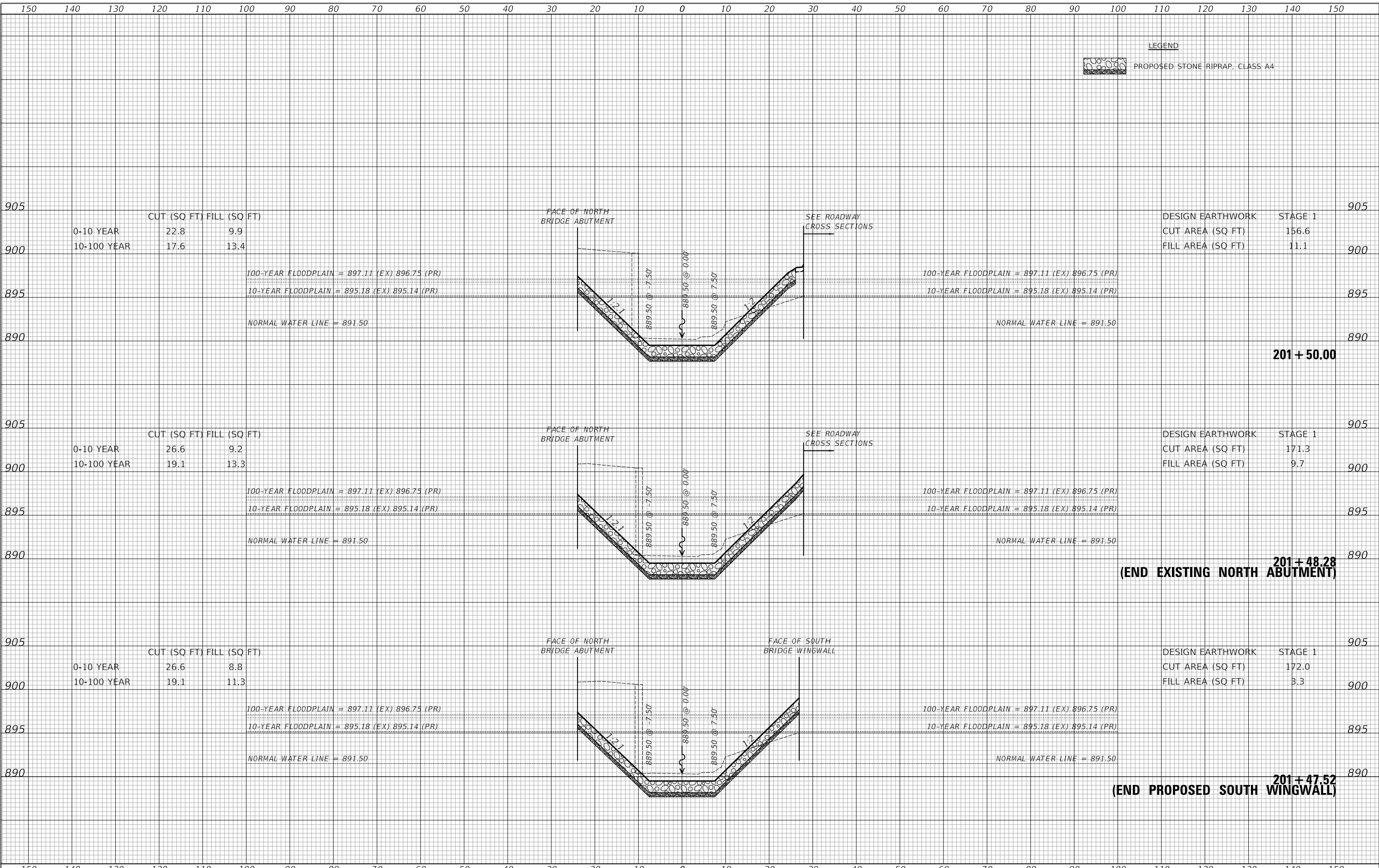
SCALE: 1"=10'H/5'V SHEET 3 OF 5 SHEETS STA. 201+17.81 TO STA. 201+40.01


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	90
			CONTRACT NO. 61K76	
		ILLINOIS FED. AID PROJECT		

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GRADE CHECKED	
STRUCTURE NOTATION CHECKED	
NOTE BOOK NO.	
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PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATION CHECKED	
NOTE BOOK NO.	
CADD FILE NAME	

MODEL: SH0616M06ES  
FILE NAME: ...33939-st1-cv-c\_Creek.dgn



**LEGEND**  
 PROPOSED STONE RIPRAP, CLASS A4

CUT (SQ FT) FILL (SQ FT)	
0-10 YEAR	22.8 9.9
10-100 YEAR	17.6 13.4

DESIGN EARTHWORK	STAGE 1
CUT AREA (SQ FT)	156.6
FILL AREA (SQ FT)	11.1

CUT (SQ FT) FILL (SQ FT)	
0-10 YEAR	26.6 9.2
10-100 YEAR	19.1 13.3

DESIGN EARTHWORK	STAGE 1
CUT AREA (SQ FT)	171.3
FILL AREA (SQ FT)	9.7

CUT (SQ FT) FILL (SQ FT)	
0-10 YEAR	26.6 8.8
10-100 YEAR	19.1 11.3

DESIGN EARTHWORK	STAGE 1
CUT AREA (SQ FT)	172.0
FILL AREA (SQ FT)	3.3

USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
MOKELER CREEK**

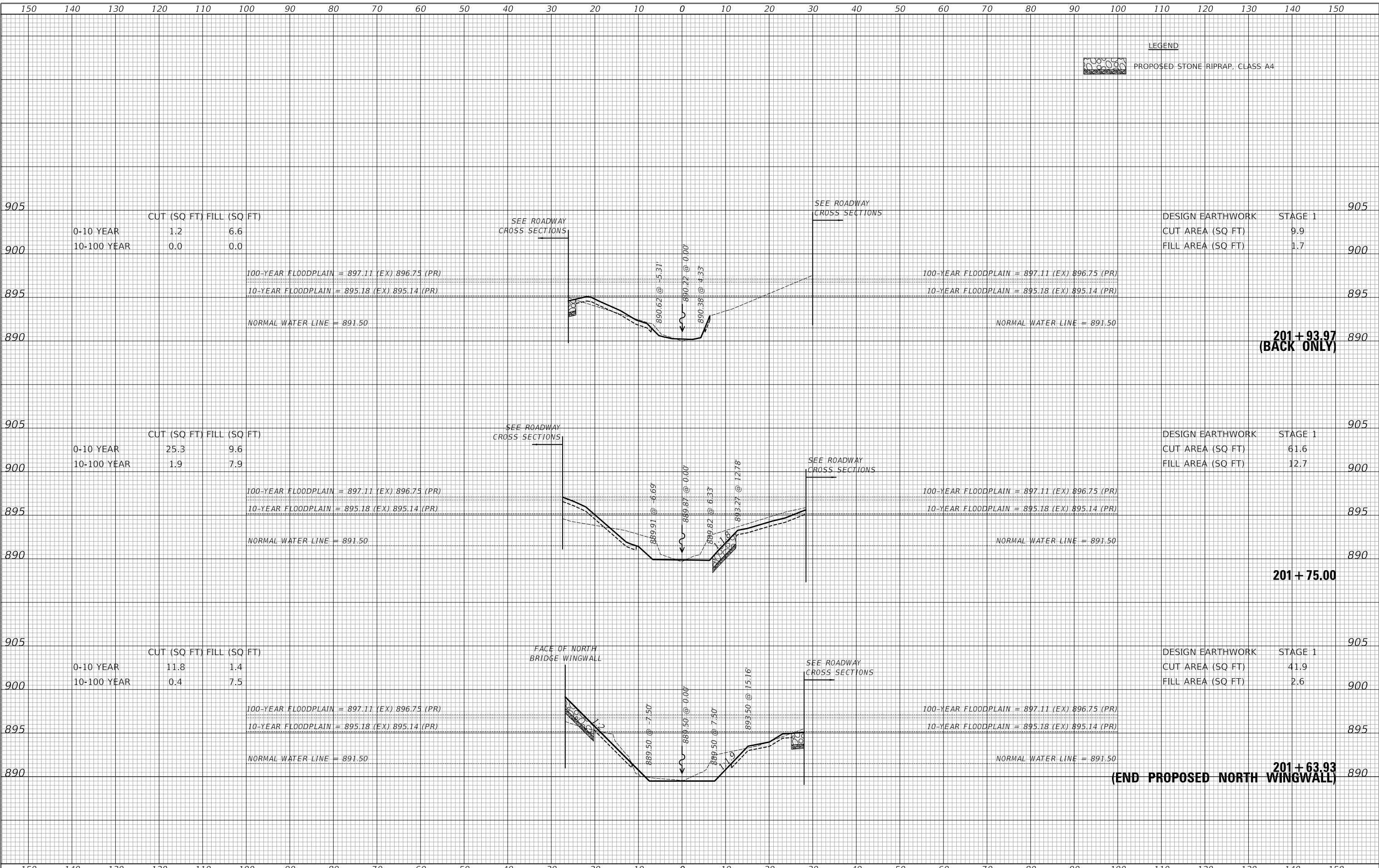
SCALE: 1"=10'H/5'V SHEET 4 OF 5 SHEETS STA. 201+40.59 TO STA. 201+50.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	91
			CONTRACT NO. 61K76	
			ILLINOIS FED. AID PROJECT	

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GRADE CHECKED	
STRUCTURE NOTATION CHECKED	
NOTE BOOK NO.	
CADD FILE NAME	

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GRADES CHECKED	
STRUCTURE NOTATION CHECKED	
NOTE BOOK NO.	
CADD FILE NAME	

MODEL: SH061MAMES  
FILE NAME: ...13039-st-creek.dgn



USER NAME = djk	DESIGNED - KDC	REVISED -
	DRAWN - KDC	REVISED -
PLOT SCALE = 20.0000' / in.	CHECKED - DJK	REVISED -
PLOT DATE = 7/23/2024	DATE - 7/16/2024	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS  
MOKELER CREEK**

SCALE: 1"=10'H/5'V SHEET 5 OF 5 SHEETS STA. 201+63.98 TO STA. 202+00.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4077	19-00508-00-BR	MCHENRY	92	92
			CONTRACT NO. 61K76	
ILLINOIS		FED. AID PROJECT		