09-20-2024 LIETTING ITEM 008

STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

# **PROPOSED HIGHWAY PLANS**

**FAU ROUTE 1332 A DAKTON STREET OVER DES PLAINES RIVER** SECTION: FAU 1332 A 22 BJ

**PROJECT:** BR-513V (749) BRIDGE DECK OVERLAY AND BRIDGE REPAIRS **COOK COUNTY** 

C-91-344-22

## TRAFFIC DATA-OAKTON STREET

PROJECT LOCATED IN CITY OF DES PLAINES

FOR LIST OF APPLICABLE HIGHWAY STANDARDS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

2022 ADT: 18,200 **POSTED SPEED LIMIT: 35 MPH FUNCTIONAL CLASSIFICATION: MINOR ARTERIAL** 

**SEE SHEET 2** 

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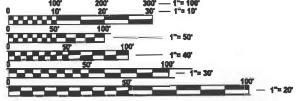
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**PROJECT LOCATION OAKTON STREET OVER DES PLAINES RIVER** SN 016-2601 STA 105+73.96

> **BEGIN IMPROVEMENTS © OAKTON STREET** STA 103+93.29

> > T 41 N

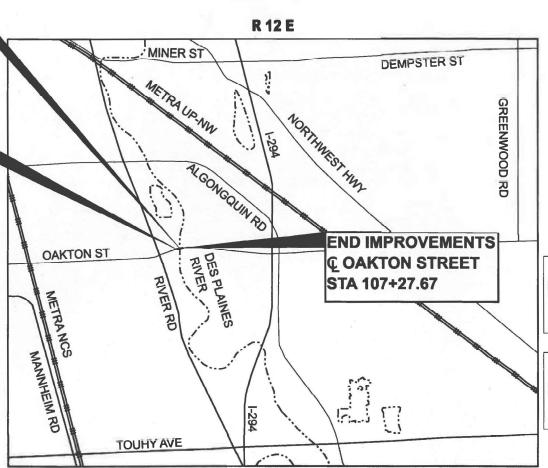


ON REDUCED PLANS. THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

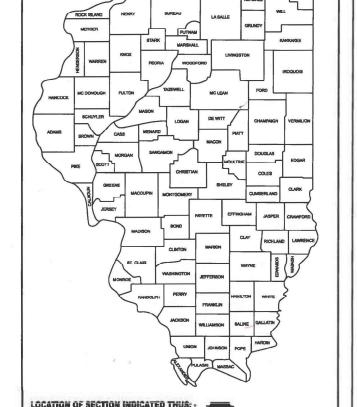
PROJECT ENGINEER: VESELIN VELICHKOV (847) 705-4432 **PROJECT MANAGER: FAWAD AQUEEL** 

**CONTRACT NO. 62T37** 



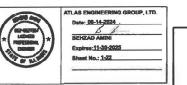
**MAINE TOWNSHIP LOCATION MAP** N.T.S.

GROSS LENGTH = 334.38 FT. = 0.063 MILE NET LENGTH = 334.38 FT. = 0.063 MILE



1332 FAU 1332 A 22 BJ

D-91-290-22





AEG ATLAS ENGINEERING

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

#### INDEX OF SHEETS

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- COVER SHEET
- INDEX OF SHEETS, IDOT HIGHWAY STANDARDS, HMA MIX TABLE & GENERAL NOTES
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- ALIGNMENT
- MAINTENANCE OF TRAFFIC - 17
  - REMOVAL PLAN 18 ROADWAY PLAN
- PAVEMENT MARKING PLAN 20 - 22
- STRUCTURAL PLANS S.N. 016-2601 23 - 37
  - BUTT JOINT AND HMA TAPER DETAILS (BD-32)
  - TRAFFIC CONTROL PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10) 38A
  - TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) (TC-11) 39
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- 67 EXISTING BRIDGE PLANS S.N. 016-2601

#### **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
631006-08	TRAFFIC BARRIER TERMINAL, TYPE 1B
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS-DAY ONLY
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION, FOR SPEEDS ≤ 40 MPH
701602-10	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701611-01	URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-09	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

#### **HOT-MIX ASPHALT MIXTURE TABLE**

MIXTURE TYPE:	AIR VOIDS @ NDES	QUALITY MANAGEMENT PROGRAM (QMP)				
BUTT JOINT AND APPROACH PAVEMENT OVERLAY						
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70 1-3/4"	4% @ 70 GYR	QC/QA				
QMP DESIGNATION: QUALITY CONTOL AND ASSURANCE (QC/QA); QUALITY CONTROL FOR PERFORMANCE (QCP); PAY FOR PERFORMANCE (PFP)						

#### MIXTURE REQUIREMENT NOTES:

- 1. THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/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 64 -22" UNLESS MODIFIED BY RECLAIMED MATERIALS SPECIFICATIONS.

#### **GENERAL NOTES**

- EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITY AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES.
- MEADE ELECTRIC COMPANY. THE IDOT DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR LOCATES IDOT ELECTRICAL FOUIPMENT AND UNDERGROUND CABLES, CALL 773-287-7672 FOR THE INITIAL LOCATE. REQUEST FOR LOCATES OF PREVIOUSLY MARKED FACILITIES MAY BE AT THE CONTRACTOR'S EXPENSE.
- IN ADDITIONAL TO FIELD REVIEW AND AERIAL DATA, PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING FACILITIES HAVE BEEN TAKEN FROM EXISTING PLANS AND AERIALS AND ARE SUBJECT TO CONSTRUCTION VARIATIONS. PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING PLANS ARE SUBJECT TO ROUTINE VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY EXISTING DIMENSIONS AND DETAILS AFFECTING NEW CONSTRUCTION AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING MATERIALS. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE BID PRICE FOR THE WORK.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION OF EXISTING PLANT MATERIAL FOR WHICH THE CONTRACT DOES NOT PROVIDE REMOVAL. THE PROTECTION OF EXISTING PLANT MATERIAL AND THE REPAIR OR REPLACEMENT OF EXISTING PLANT MATERIAL DAMAGED BY THE CONTRACTOR SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 201 OF THE STANDARD SPECIFICATIONS.
- THE DEPARTMENT HAS NOT OBTAINED ANY PERMITS FOR OFFSITE BORROW, WASTE, USE (BWU) AREAS. PRIOR TO WORKING IN BWU AREAS, IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING PERMITS IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPER PERMITS. IN ADDITION TO THE BORROW REVIEW (BDE 2289) AND USE/WASTE REVIEW (BDE 2290) SUBMITTALS, THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENT CONTROL (ESC) PLAN FOR EVERY BWU SITE TO THE DEPARTMENT FOR ACCEPTANCE, GUIDELINES FOR ACCEPTABLE BWU PRACTICES CAN BE FOUND IN SECTION 11/G/1/ THE COST OF ALL MATERIALS AND LABOR NECESSARY TO COMPLY WITH THE ABOVE PROVISIONS TO PREPARE AND IMPLEMENT ESC PLANS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICES AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- THE CONTRACTOR SHALL CONTACT KALPANA KANNAN-HOSADURGA. THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT KALPANA KANNAN-HOSADURGA@LLLINOIS GOV A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
- THE RESIDENT ENGINEER SHALL CONTACT FADI SULTAN, AREA TRAFFIC FIELD ENGINEER, AT FADI.SULTAN@ILLINOIS,GOV A MINIMUM OF TWO (2) WEEKS PRIOR TO THE PLACEMENT OF PERMANENT
- THE DEPARTMENT HAS DETERMINED THAT IN STREAM WORK IS NOT REQUIRED FOR THE WORK SPECIFIED IN THIS CONTRACT. THE DEPARTMENT HAS NOT OBTAINED A USACE PERMIT. IF THE CONTRACTOR CHOOSES TO USE ACTIVITIES REQUIRING AN USACE PERMIT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROPOSE USACE PERMITS. THE COST OF ALL MATERIALS AND LABOR NECESSARY TO SECURE AND COMPLY WITH A USACE PERMIT FOR CONTRACTOR'S ACTIVITIES WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 11. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH WILL REMAIN, ANY DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- 12. SAW CUTTING PRIOR TO ANY REMOVAL ITEMS NOTED ON THE PLANS OR DIRECTED BY THE ENGINEER SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.
- FOR WORK OUTSIDE LIMITS OF BRIDGE APPROACH PAVEMENT, ALL REFERENCES IN THE HIGHWAY STANDARDS AND STANDARD SPECIFICATIONS FOR REINFORCEMENT, DOWEL BARS AND TIE BARS IN PAVEMENT SHALL BE EPOXY COATED UNLESS NOTED ON THE PLANS.
- 14. RAISED REFLECTIVE PAVEMENT MARKERS ARE TO BE USED AS SHOWN ON THE DISTRICT ONE DETAIL "TYPICAL APPLICATIONS-RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)" SHOWN IN PLAN.
- OAKTON STREET CENTERLINE IS RECREATED FROM AS-BUILT PLANS AND IS FOR INFORMATION ONLY.
- BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD FOR FUTURE REFERENCE, ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE RE-ESTABLISHED FOR STRIPING, EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTER BY THE ENGINEER

- 17. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO BEGINNING CONSTRUCTION AND ORDERING MATERIALS.
- 18. THE CITY OF DES PLAINES SHALL BE NOTIFIED 72 HOURS PRIOR TO THE START OF CONSTRUCTION.
- 19. ALL SHORT TERM PAVEMENT MARKINGS ON THE FINAL WEARING SURFACES SHALL BE TYPE IV TAPE
- 20. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
- 21. PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE AND SELECTIVE CLEARING SHALL BE DONE PRIOR TO CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL CONTACT IDOT ROADSIDE DEVELOPMENT UNIT AT 847-705-4171 ONE WEEK PRIOR TO STARTING WORK TO VERIFY FORESTRY LAYOUT
- ACCESS TO MULTI-USE PATH ON NORTH SIDE OF BRIDGE TO BE MAINTAINED DURING CONSTRUCTION, SOUTH SIDE SIDEWALK TO BE CLOSED DURING REMOVAL AND INSTALLATION OF JOINTS.
- THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROTECT THE PEDESTRIANS AND BICYCLISTS IN THE WORK ZONE BY PLACING CONSTRUCTION DRUMS DELINEATING THE PATHS VISIBLE TO THEM DURING THE CONSTRUCTION.

DESIGNED - NKA USER NAME = nappelt REVISED -A E G ATLAS ENGINEERING DRAWN - NKA REVISED -REVISED REVISED -PLOT DATE = 05/06/2024 DATE - 05/06/2024

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

**OAKTON STREET OVER DES PLAINES RIVER** INDEX OF SHEETS, IDOT HWY STD, HMA MIX TABLE & GENERAL NOTES SHEET 1 OF 1 SHEETS STA.

TOTAL SHEETS SECTION COUNTY 1332 FAU 1332 A 22 BJ COOK 67 CONTRACT NO. 62T37 ILLINOIS | FED. AID PRO

				80% FED
	T	T .		20% STATE BRIDGE
CODE			TOTAL	0059
NO.	ITEM	UNIT	QUANTITY	URBAN
28000400	PERIMETER EROSION BARRIER	FOOT	221	221
28000510	INLET FILTERS	EACH	20	20
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	384	384
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	442	442
40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	84	84
50102400	CONCRETE REMOVAL	CU YD	18.2	18.2
50300255	CONCRETE SUPERSTRUCTURE	CU YD	20.6	20.6
50300300	PROTECTIVE COAT	SQ YD	1,368	1,368
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2,810	2,810
50800515	BAR SPLICERS	EACH	48	48
52000110	PREFORMED JOINT STRIP SEAL	FOOT	137	137
63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	1	1
67100100	MOBILIZATION	LSUM	1	1
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	138	138
70300100	SHORT TERM PAVEMENT MARKING	FOOT	630	630

	· ·		_	80% FED 20% STATI
CODE NO.	ITEM	UN <b>I</b> T	TOTAL	BRIDGE 0059 URBAN
1				
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	4,042	4,042
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	10,174	10,174
70307130	TEMPORARY PAVEMENT MARKING - LINE 6" - TYPE IV TAPE	FOOT	46	46
70400100	TEMPORARY CONCRETE BARRIER	FOOT	837.5	837.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	850	850
70600255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	2	2
70600322	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	3	3
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	37	37
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	4,254	4,254
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	272	272
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	163	163
78004635	PREFORMED PLASTIC PAVEMENT MARKING, TYPE D - STANDARD - LINE 7"	FOOT	120	120
78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	1,209	1,209
78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	6	6

<sup>\*\* -</sup> SPECIALTY ITEMS

ILE NAME	A	Ε	G	<b>ATLAS ENGINEERIN</b> GROUP, LTD.
ILE NA	A	Ε	G	GROUP, LTD.

USER NAME = nappelt	DESIGNED	-	NKA	REVISED -
	DRAWN	-	NKA	REVISED -
PLOT SCALE = 0.16666667 ' / in.	CHECKED	-	PK	REVISED -
PLOT DATE = 6/12/2024	DATE	-	05/06/2024	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE:

CONSTR. CODE

	SUMMARY OF QUANTITIES						SECTION	COUNTY	TOTAL	SHEE NO.
						1332	FAU 1332 A 22 BJ	соок	67	3
							96	CONTRACT	NO. 62	Г37
- 3	SHEET 1	OF 2	SHEETS	STA.	TO STA.		ILLINOIS   FED. AID PROJECT			

<sup>\* -</sup> SPECIAL PROVISIONS

NO.	ITEM	PAVEMENT MARKING - LINE 12"  FOOT 94  SSED PAVEMENT MARKING 8"  FOOT 120  AVEMENT MARKER  EACH 5  AVEMENT MARKER REMOVAL  EACH 8  EEMOVAL - WATER BLASTING  SQ FT 2,214  CAND EQUIPMENT CLEARANCE  L SUM 1  CLEANED  EACH 13	URBAN	
78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	94	94
78011040	GROOVING FOR RECESSED PAVEMENT MARKING 8"	FOOT	120	120
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	5	5
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	8	8
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	2,214	2,214
K1004595	PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	LSUM	1	1
X5030539	FLOOR DRAINS TO BE CLEANED	EACH	13	13
X0326766	CLEAN & RESEAL RELIEF JOINT	FOOT	128	128
X0327638	STREAM GAUGE	EACH	1	1
X2010516	SELECTIVE CLEARING	UNIT	2	2
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	1,278	1,278
X6333500	TRAFFIC BARRIER TERMINAL REMOVAL	EACH	1	1
X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	12	12
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1	1

	_			CONSTR. C 80% FEI 20% STA
CODE			TOTAL	BRIDGE 0059
NO.	ITEM	UNIT	QUANTITY	URBAN
X7830050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	108	108
X7830052	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REPLACEMENT	EACH	108	108
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	42	42
Z0006016	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 3/4 INCHES	SQ YD	1,318	1,318
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	1,318	1,318
Z0013798	CONSTRUCTION LAYOUT	LSUM	1	1
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	2	2
Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	1,361	1,361
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	67.1	67.1
Z0073510	TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1	1
Z0052000	REPAIR STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	50	50

\* - SPECIAL PROVISIONS

CODE

\*\* - SPECIALTY ITEMS

	A	Ε	G	ATLAS ENGINEERING GROUP, LTD.
- 1				

user name = nappelt	DESIGNED -	NKA	REVISED -
	DRAWN -	NKA	REVISED -
PLOT SCALE = 0.16666667 ' / in.	CHECKED -	PK	REVISED -
PLOT DATE = 5/7/2024	DATE -	05/06/2024	REVISED -
	PLOT SCALE = 0.16666667 '/ in.	DRAWN -	DRAWN

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

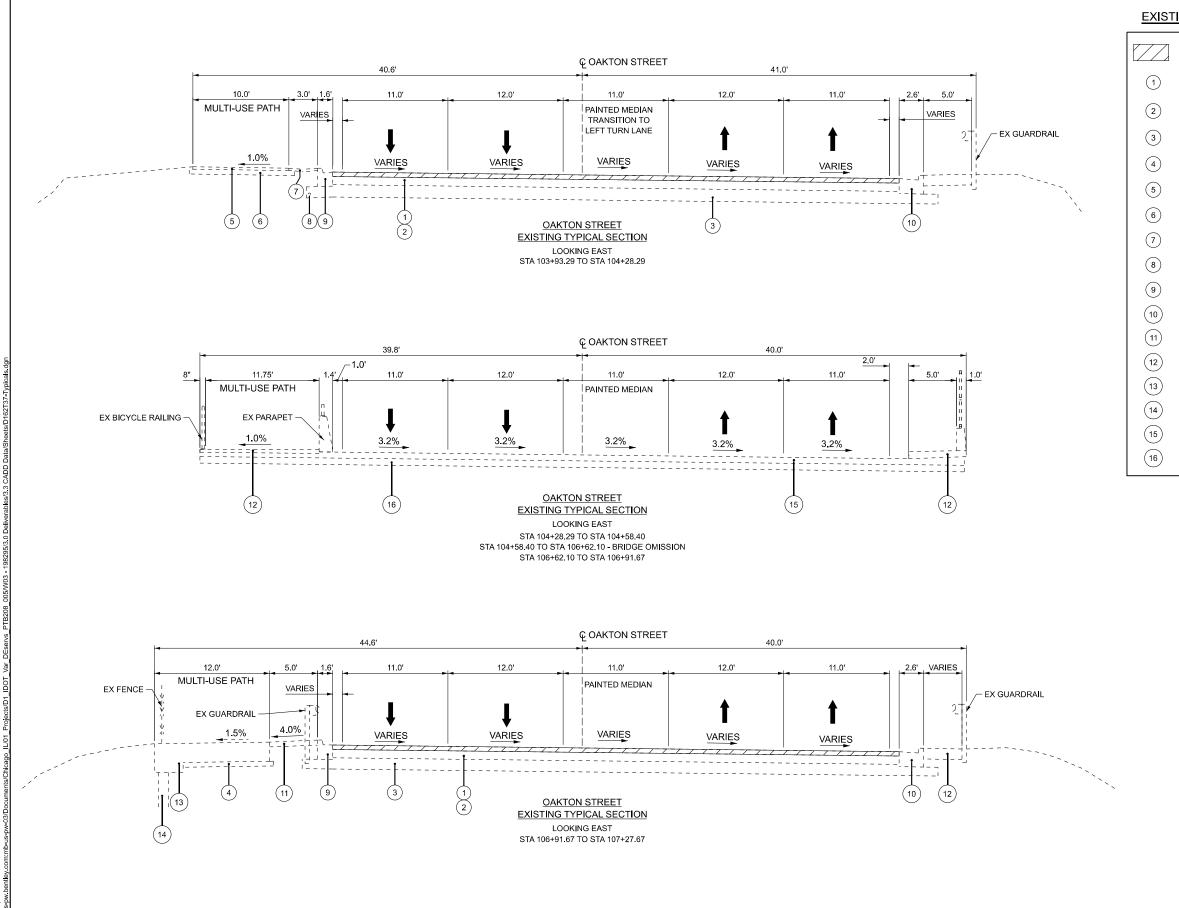
SCALE:

80% FED
20% STATE
BRIDGE

0059

TOTAL

	SUMMARY OF QUANTITIES						F.A.U. RTE. SECTION		TOTAL	SHEET NO.
	·					1332	FAU 1332 A 22 BJ	соок	67	4
							W	CONTRACT	NO. 627	37
- 3	SHEET 2	OF 2	SHEETS	STA.	TO STA.		ILLINOIS FED. AID PROJECT			



#### **EXISTING LEGEND**

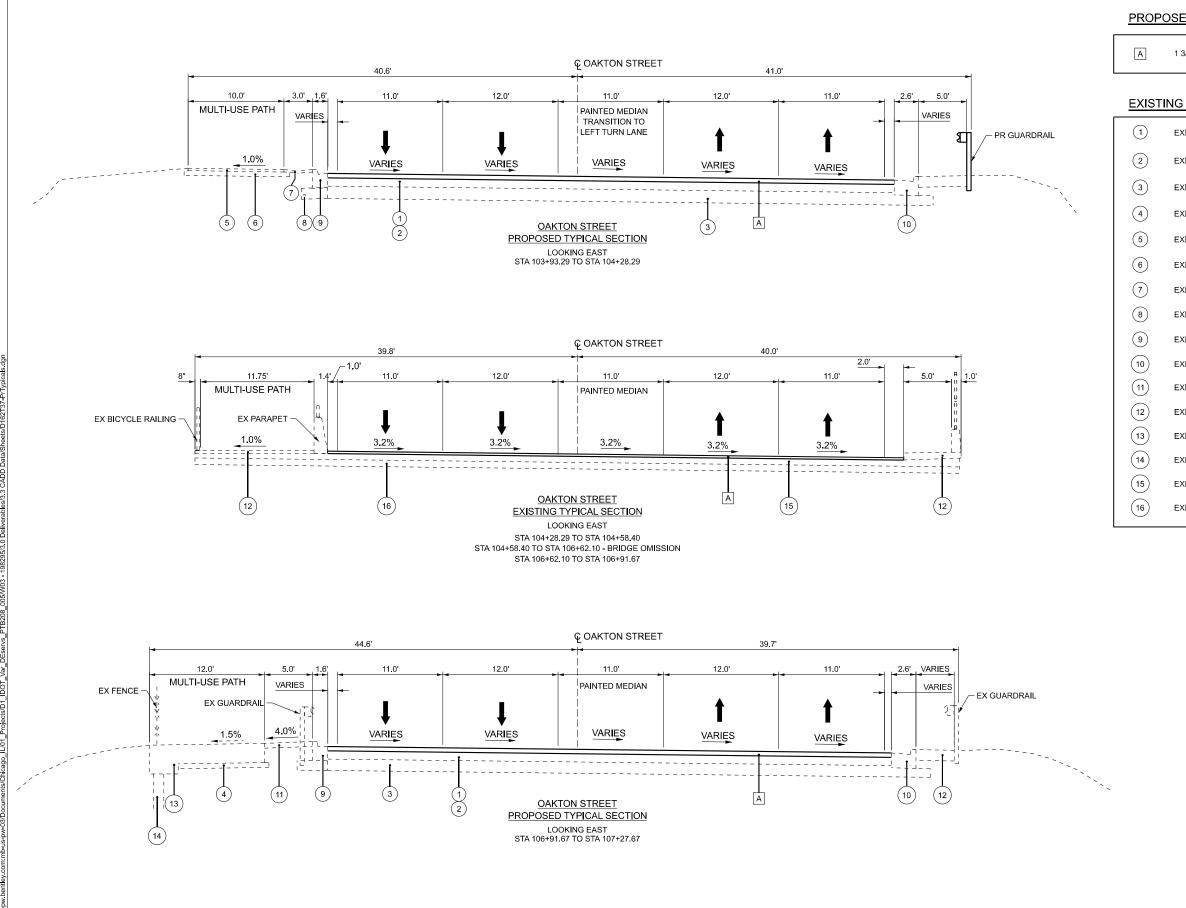
27401	ING EEGEND
	BUTT-JOINT REMOVAL (SEE BD-32), VARIABLE DEPTH
1	EXISTING HOT-MIX ASPHALT SURFACE COURSE, 1 1/2"
2	EXISTING POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, 3/4"
3	EXISTING AGGREGATE SUBGRADE IMPROVEMENT, 12"
4	EXISTING AGGREGATE BASE COURSE, 4"
5	EXISTING HOT-MIX ASPHALT SURFACE COURSE, 3"
6	EXISTING AGGREGATE BASE COURSE, 6"
7	EXISTING TOPSOIL / GRASS
8	EXISTING PIPE UNDERDRAINS, 4"
9	EXISTING COMBINATION CURB & GUTTER, TYPE B-6.12
10	EXISITNG COMBINATION CURB & GUTTER, TYPE B-6.24
11)	EXISTING HMA SHOULDER 3"
12	EXISTING SIDEWALK
13	EXISTING CIP WALL CAP
14)	EXISTING RETAINING WALL
15	EXISTING PCC APPROACH PAVEMENT
16	EXISTING APPROACH SUBGRADE

USER NAME = nappelt	DESIGNED -	NKA	REVISED -
	DRAWN -	NKA	REVISED -
PLOT SCALE = 9.99998000 ' / in.	CHECKED -	PK	REVISED -
PLOT DATE = 05/06/2024	DATE -	05/06/2024	REVISED -

SCALE: N.T.S.

OAKTON STREET OVER DES PLAINES RIVER	F.A.U. RTE	SECTION
TYPICAL SECTIONS	1332	FAU 1332 A 22 BJ
THIORE SECTIONS		
DUEST 4 OF D DUESTO OTA TO OTA		

A.U. TE	SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.
32	FAU 1332 A 2	2 BJ		соок	67	5
				CONTRACT	NO. 62	Г37
		ILLINOIS	FED. AII	D PROJECT		



#### PROPOSED LEGEND

1 3/4" HOT-MIX ASPHALT SURFACE COURSE, IL-9.5 MIX"D", N70

#### **EXISTING LEGEND**

(	1)	EXISTING HOT-MIX ASPHALT SURFACE COURSE, 1 1/2"	

EXISTING POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, 3/4"

EXISTING AGGREGATE SUBGRADE IMPROVEMENT, 12"

EXISTING AGGREGATE BASE COURSE, 4"

EXISTING HOT-MIX ASPHALT SURFACE COURSE, 3"

EXISTING AGGREGATE BASE COURSE, 6"

EXISTING TOPSOIL / GRASS

EXISTING PIPE UNDERDRAINS, 4"

EXISTING COMBINATION CURB & GUTTER, TYPE B-6.12

EXISITNG COMBINATION CURB & GUTTER, TYPE B-6.24

EXISTING HMA SHOULDER 3"

EXISTING SIDEWALK

EXISTING CIP WALL CAP

EXISTING RETAINING WALL

EXISTING PCC APPROACH PAVEMENT

EXISTING APPROACH SUBGRADE

STATE OF ILLINOIS

SCALE:

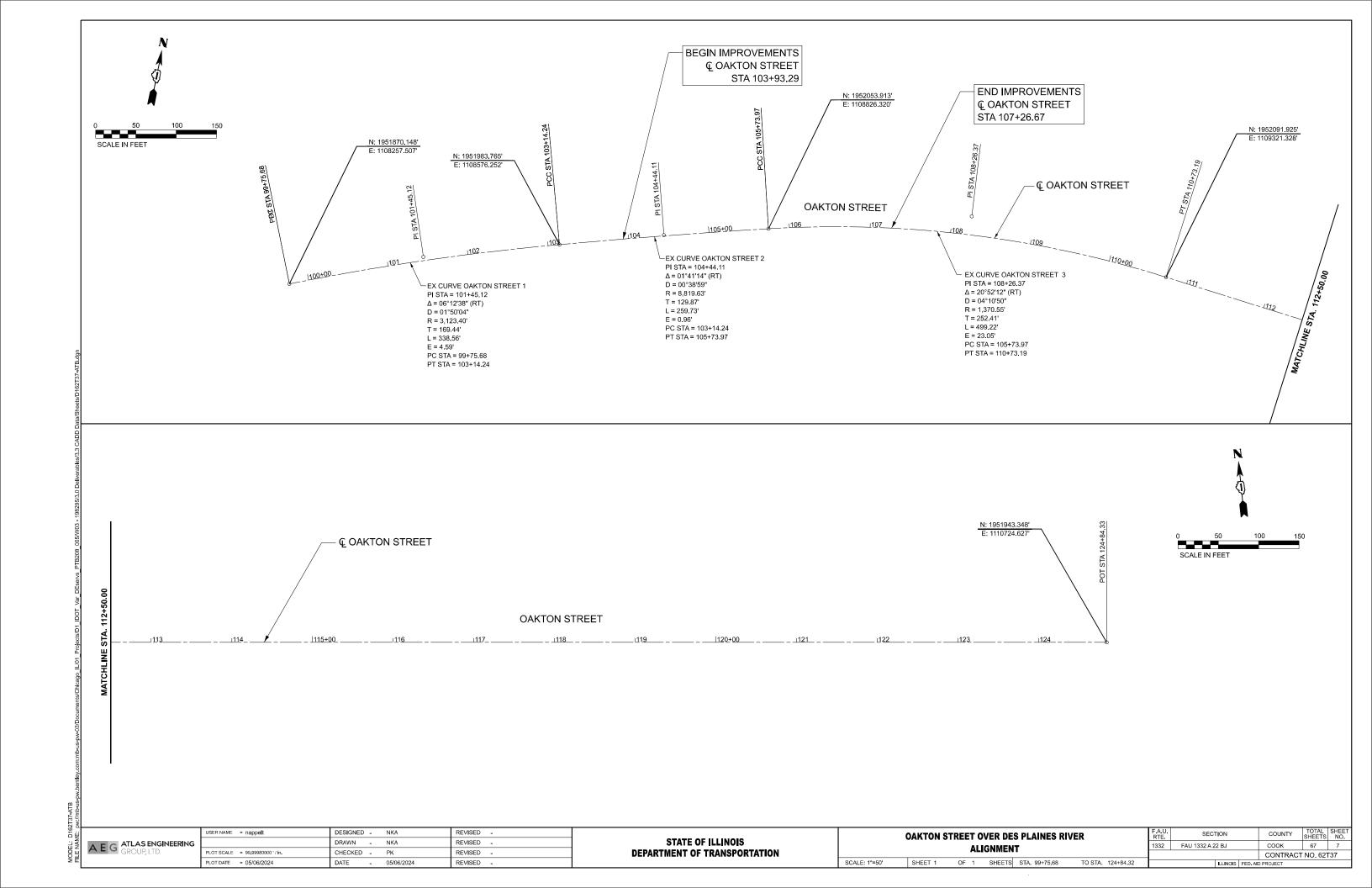
(	OAKTON STREET OVER DES PLAINES RIVER TYPICAL SECTIONS					
	SHEET 2	OF 2	SHEETS	STA.	TO STA.	

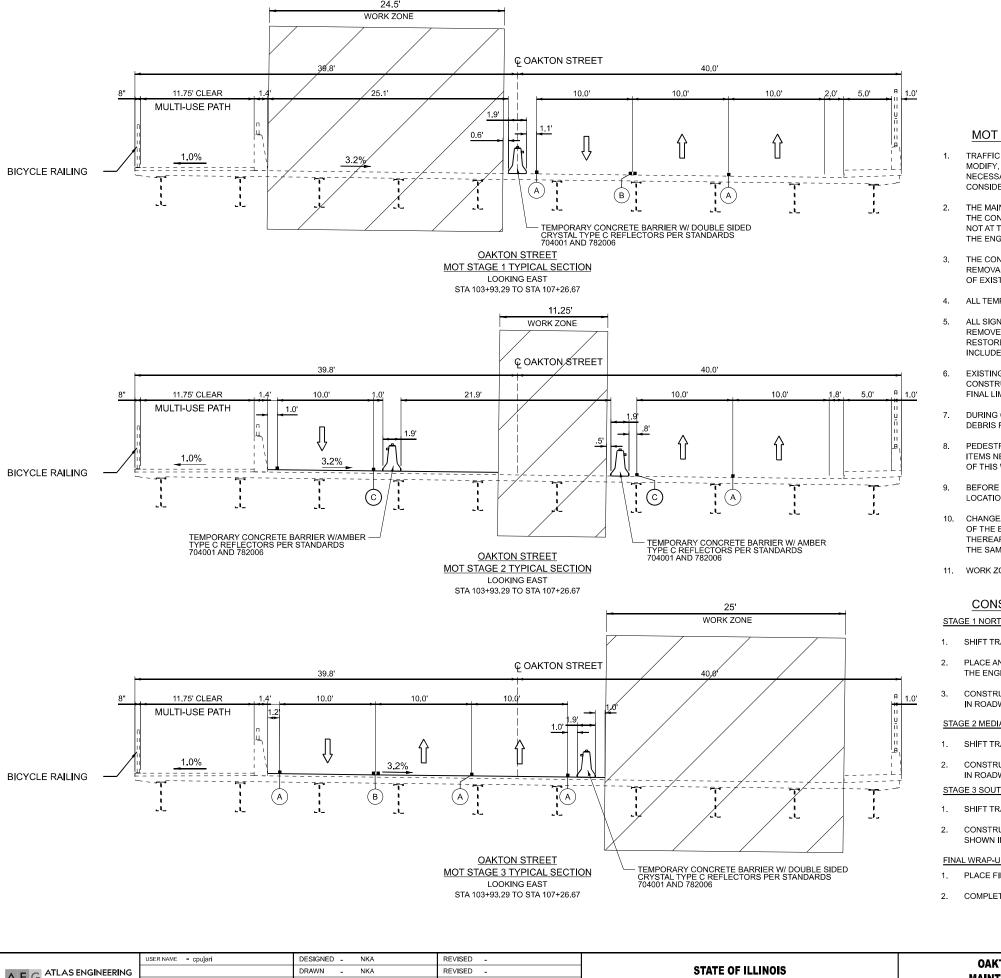
SECTION COUNTY 1332 FAU 1332 A 22 BJ COOK 67 6 CONTRACT NO. 62T37

A E G ATLAS ENGINEERING

USER NAME = nappelt DESIGNED - NKA REVISED DRAWN -NKA REVISED -REVISED PLOT DATE = 05/06/2024 DATE REVISED -05/06/2024

**DEPARTMENT OF TRANSPORTATION** 





**LEGEND** 

A) T

TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE (SOLID WHITE)

(B)

TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE (SOLID YELLOW)

TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE (DOUBLE YELLOW @ 11" C-C'



TEMPORARY CONCRETE BARRIER WITH TYPE C REFLECTORS

PER STD. 704001 AND 782006

#### MOT GENERAL NOTES

- TRAFFIC CONDITIONS, CRASHES, AND OTHER UNFORSEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY, OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAKE THE NECESSARY ADJUSTMENTS AS DIRECTED BY THE ENGINEER WITHOUT DELAY. COMPLIANCE WITH THIS REQUIREMENT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE OF TRAFFIC CONTROL AND PROTECTION (SPECIAL).
- THE MAINTENANCE OF TRAFFIC PLANS SHALL SERVE AS A GUIDE FOR THE SAFE DIVERSION OF TRAFFIC DURING EXECUTION OF THE CONTRACT. THE CONTRACTOR MAY MODIFY THE MAINTENANCE OF TRAFFIC PLANS TO MEET CONSTRUCTION NEEDS, BUT NOT AT THE EXPENSE OF PUBLIC SAFETY OR CONVENIENCE. ANY CHANGES TO THE TRAFFIC CONTROL SHALL BE SUBMITTED TO THE FIGURE FOR REVIEW AND APPROVAL.
- 3. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY OR EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE STAGING. REMOVAL OF TEMPORARY PAVEMENT MARKING LINE WILL BE PAID FOR AS TEMPORARY PAVEMENT MARKING REMOVAL, REMOVAL OF EXISTING PAVEMENT MARKING ON PAVEMENT TO REMAIN WILL BE PAID FOR AS PAVEMENT MARKING REMOVAL - WATER BLASTING.
- ALL TEMPORARY PAVEMENT MARKINGS SHALL BE PAVEMENT MARKING TAPE TYPE IV.
- 5. ALL SIGNAGE TO BE IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). THE CONTRACTOR SHALL REMOVE OR COVER ALL EXISTING SIGNS THAT CONFLICT WITH OR DO NOT APPLY TO THE REVISED TRAFFIC PATTERNS AND SHALL RESTORE THE SIGNS AT THE END OF CONSTRUCTION AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE TRAFFIC CONTROL AND PROTECTION (SPECIAL).
- EXISTING RAISED REFLECTIVE PAVEMENT MARKER REFLECTORS WITHIN MAINTENANCE OF TRAFFIC LIMITS AND OUTSIDE OF CONSTRUCTION LIMITS SHALL BE REMOVED PRIOR TO CONSTRUCTION AND REPLACED AT END OF ALL STAGES OF CONSTRUCTION. FINAL LIMITS OF REFLECTOR REPLACEMENT TO BE DETERMINED BY THE ENGINEER.
- DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO AVOID ANY CONSTRUCTION DEBRIS FROM ENCROACHING INTO TRAVEL LANES.
- EDESTRIAN ACCESS SHALL BE MAINTAINED AT ALL TIMES. ANY TEMPORARY SIGNAGE, TEMPORARY ACCESS PATHS, OR OTHER ITEMS NEEDED TO REROUTE PEDESTRIAN TRAFFIC AROUND WORK ZONES SHALL BE APPROVED BY THE ENGINEER. THE COST OF THIS WORK SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE OF TRAFFIC CONTROL AND PROTECTION (SPECIAL)
- 9. BEFORE INSTALLING POST MOUNTED SIGNS, THE CONTRACTOR SHALL CALL J.U.L.I.E. AT 1-800-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GASS FACILITIES.
- 10. CHANGEABLE MESSAGE SIGNS SHALL BE INSTALLED TWO WEEKS PRIOR TO ALL TRAFFIC STAGE CHANGES ON EACH APPROACH OF THE EFFECTED ROADWAY TO WARN MOTORISTS OF THE UPCOMING EVENT. THE SIGNS SHALL BE REMOVED TWO WEEKS THEREAFTER UNLESS THE SIGNS ARE NEEDED AGAIN FOR A SUBSEQUENT FUTURE EVENT THAT WILL OCCUR WITHIN 2 WEEKS ON THE SAME APPROACH OF THE EFFECTED ROADWAY. THE SIGN LOCATIONS SHALL BE DETERMINED BY THE ENGINEER.
- 11. WORK ZONE SPEED LIMIT IS 35 MPH.

#### CONSTRUCTION STAGING

#### STAGE 1 NORTH SIDE OF OAKTON CONSTRUCTION

- 1. SHIFT TRAFFIC AS SHOWN ON THE MAINTENANCE OF TRAFFIC STAGE 1 SHEETS.
- PLACE AND MAINTAIN SEDIMENT AND EROSION CONTROL MEASURES PER THE EXISTING AND REMOVAL PLAN AND AS DIRECTED BY THE ENGINEER.
- 3. CONSTRUCT PROPOSED BRIDGE, APPROACH SLAB, AND ROADWAY IMPROVEMENTS ON NORTH SIDE OF OAKTON STREET AS SHOWN IN ROADWAY AND STRUCTURAL PLANS.

#### STAGE 2 MEDIAN OF OAKTON CONSTRUCTION

- 1. SHIFT TRAFFIC AS SHOWN ON THE MAINTENANCE OF TRAFFIC STAGE 2 SHEETS.
- CONSTRUCT PROPOSED BRIDGE, APPROACH SLAB, AND ROADWAY IMPROVEMENTS ON MEDIAN OF OAKTON STREET AS SHOWN IN ROADWAY AND STRUCTURAL PLANS.

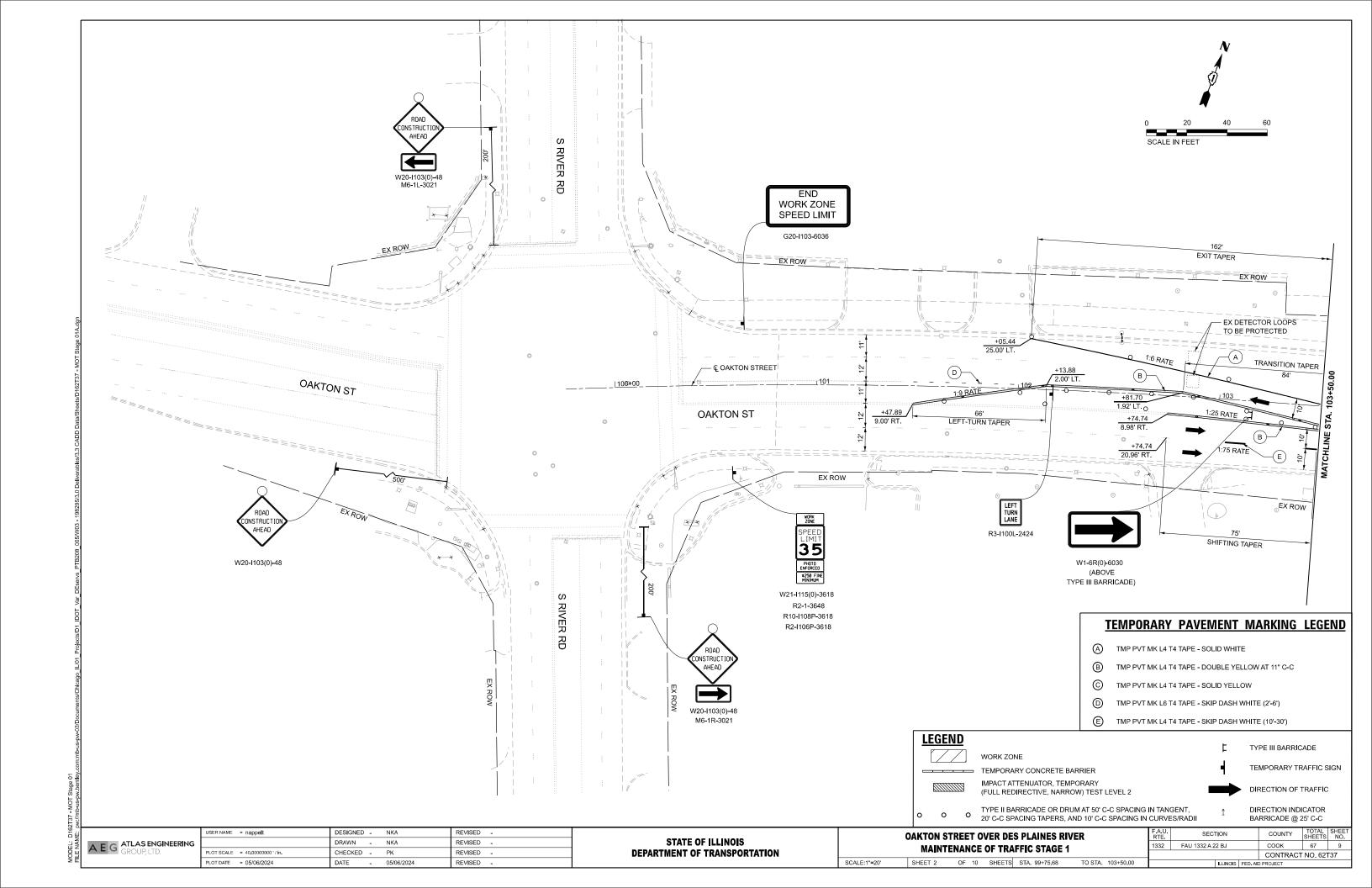
#### STAGE 3 SOUTH SIDE OF OAKTON CONSTRUCTION

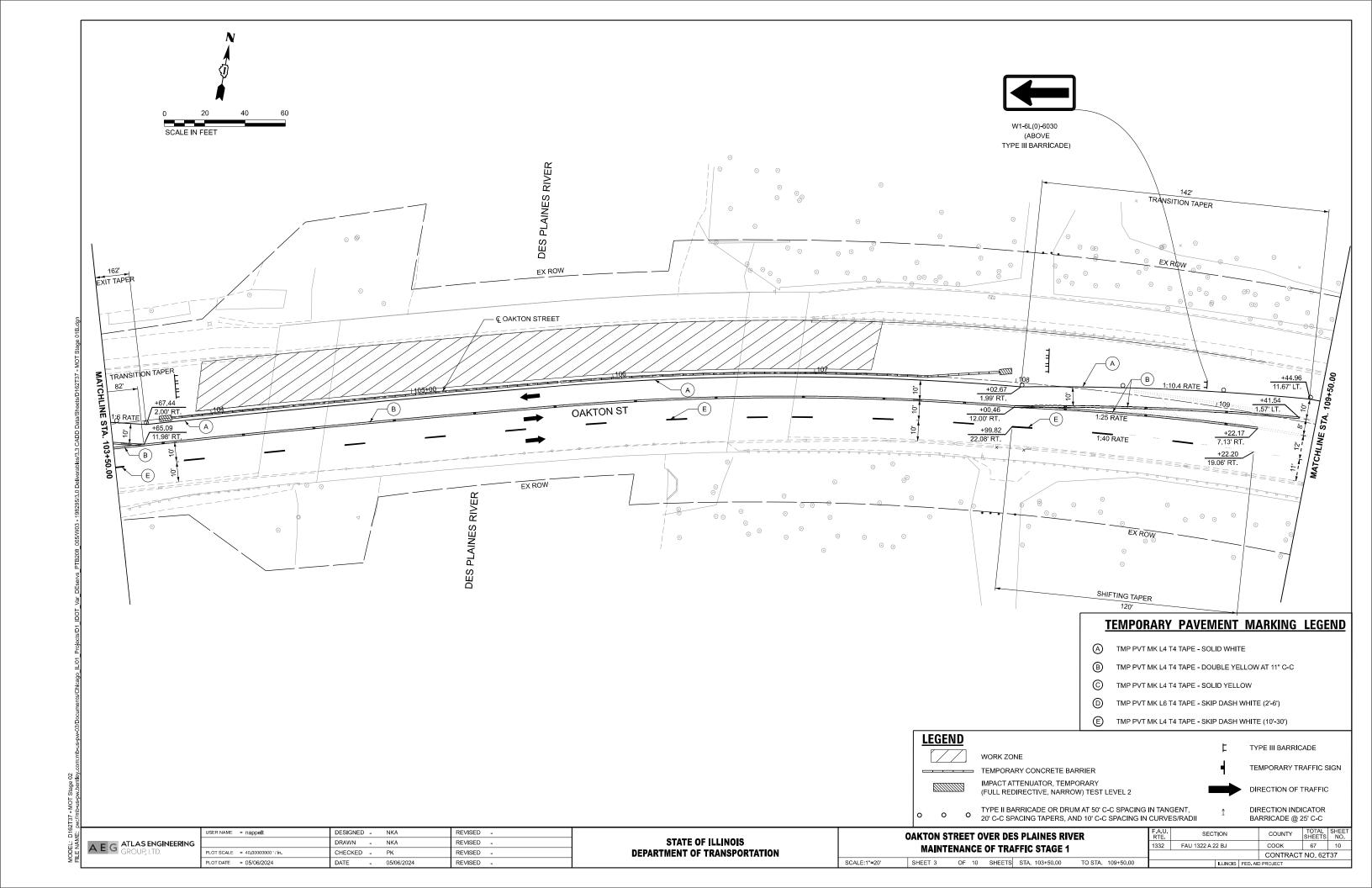
- 1. SHIFT TRAFFIC AS SHOWN ON THE MAINTENANCE OF TRAFFIC STAGE 3 SHEETS.
- CONSTRUCT PROPOSED BRIDGE, APPROACH SLAB, AND ROADWAY IMPROVEMENTS ON SOUTH SIDE OF OAKTON STREET AS SHOWN IN ROADWAY AND STRUCTURAL PLANS.

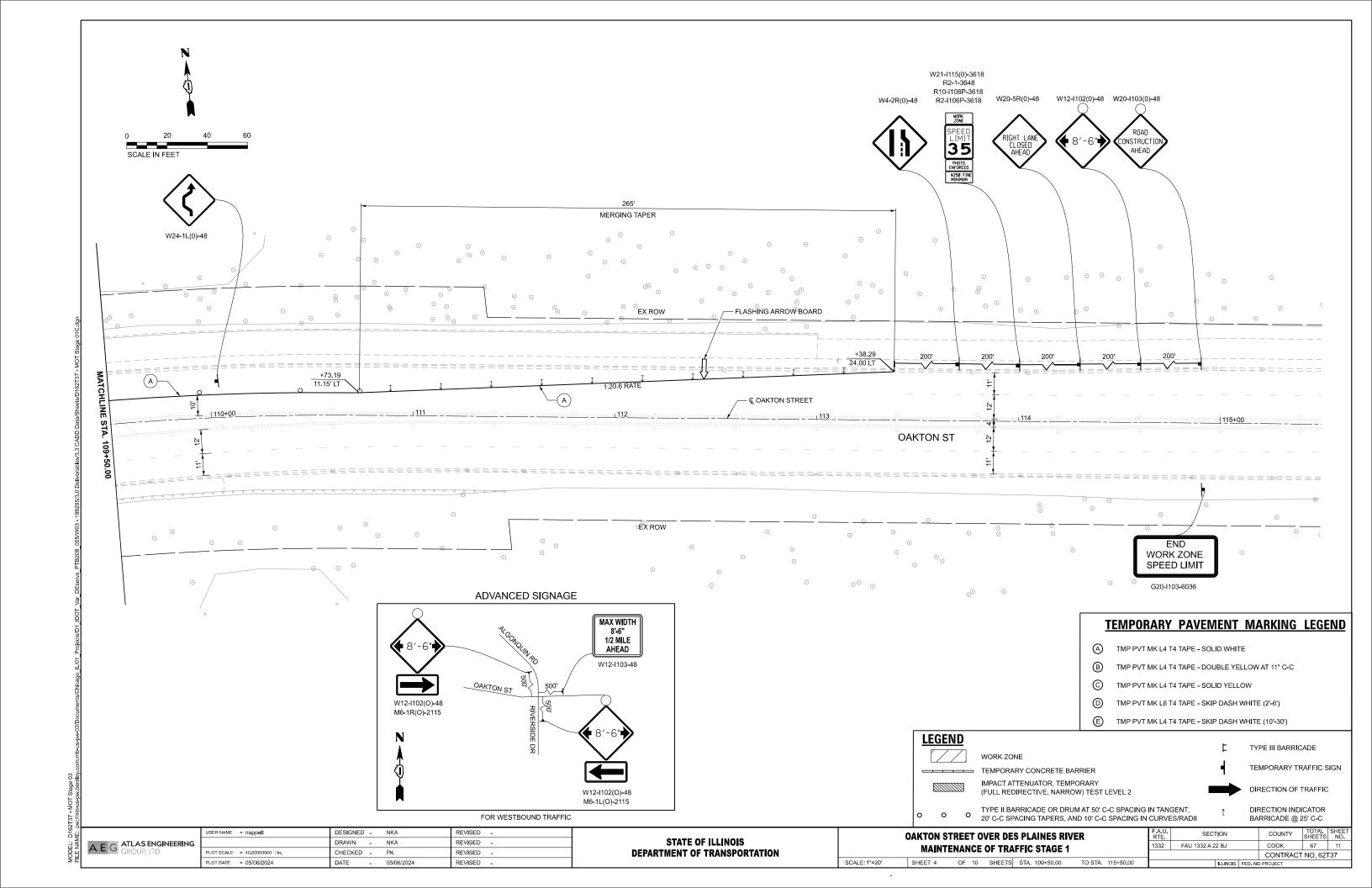
#### FINAL WRAP-UP CONSTRUCTION

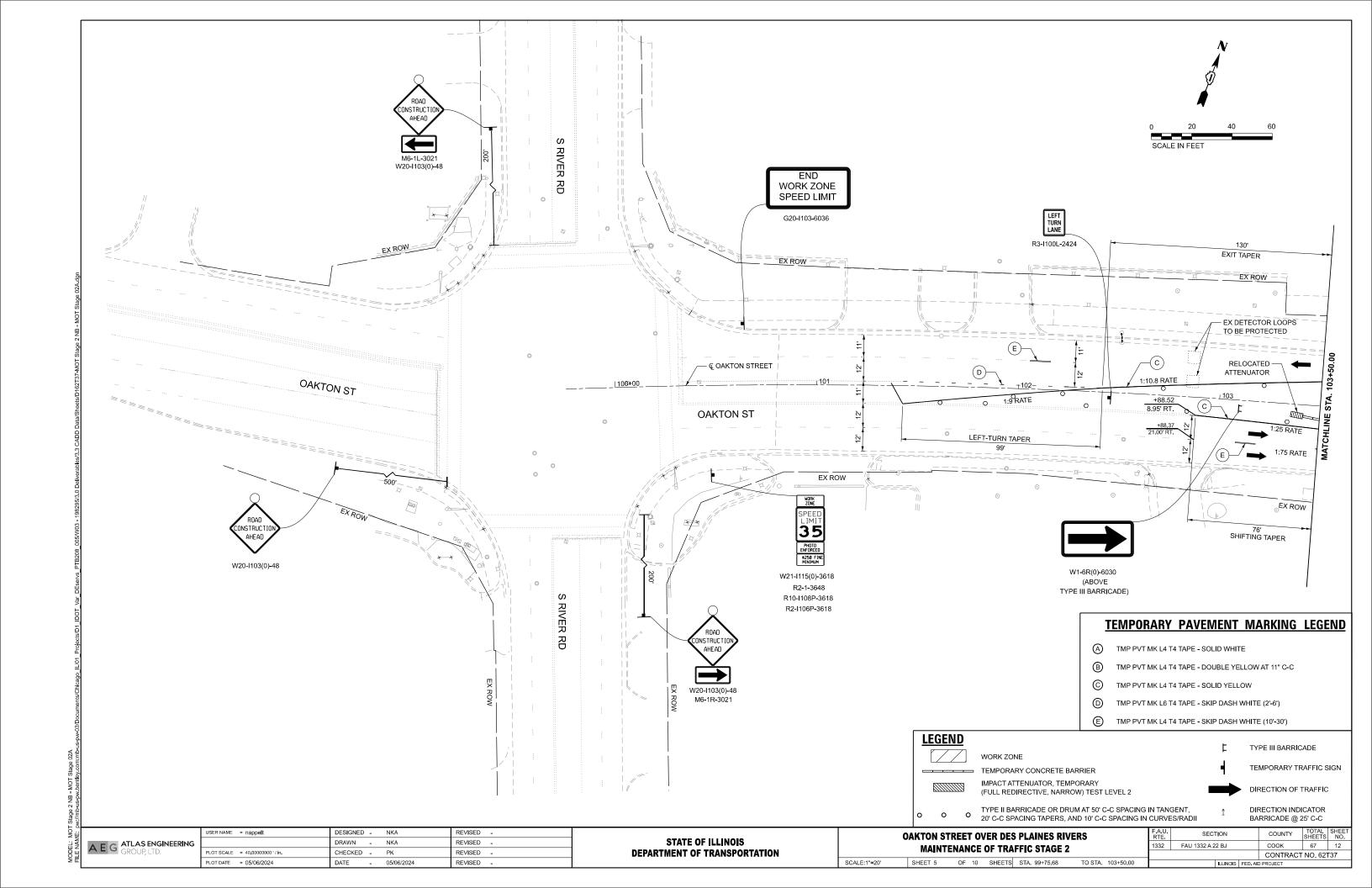
- 1. PLACE FINAL PAVEMENT MARKINGS AND RE-INSTALL EXISTING PAVEMENT MARKER REFLECTORS.
- COMPLETE REMAINING PUNCH LIST ITEMS.

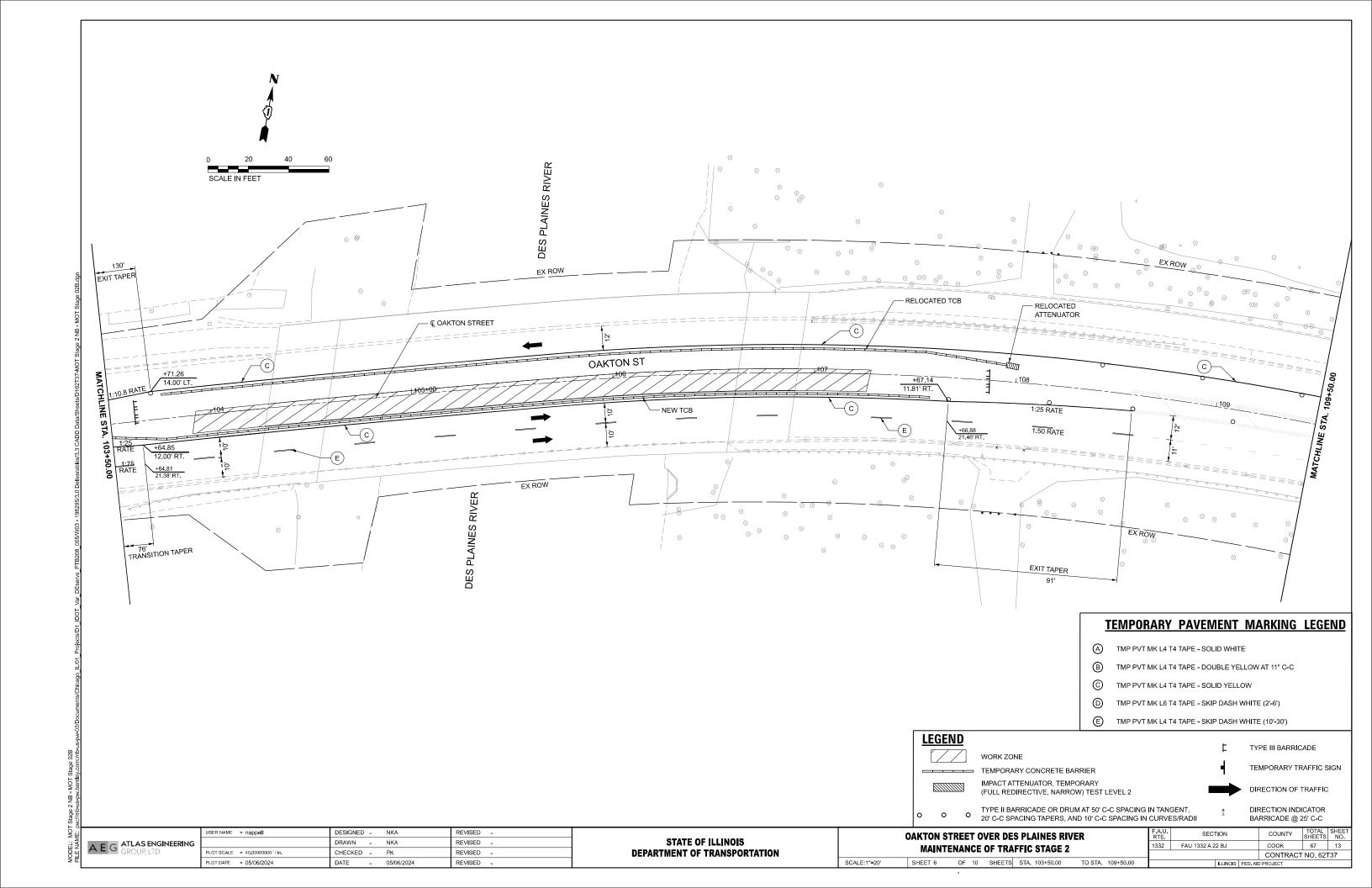
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GROUP, LTD.	PLOT SCALE = 9.99998000 ' / in.	CHECKED - PK	REVISED -	DEPARTMENT OF TRANSPORTATION				CONTRACT NO		NO 62T	37
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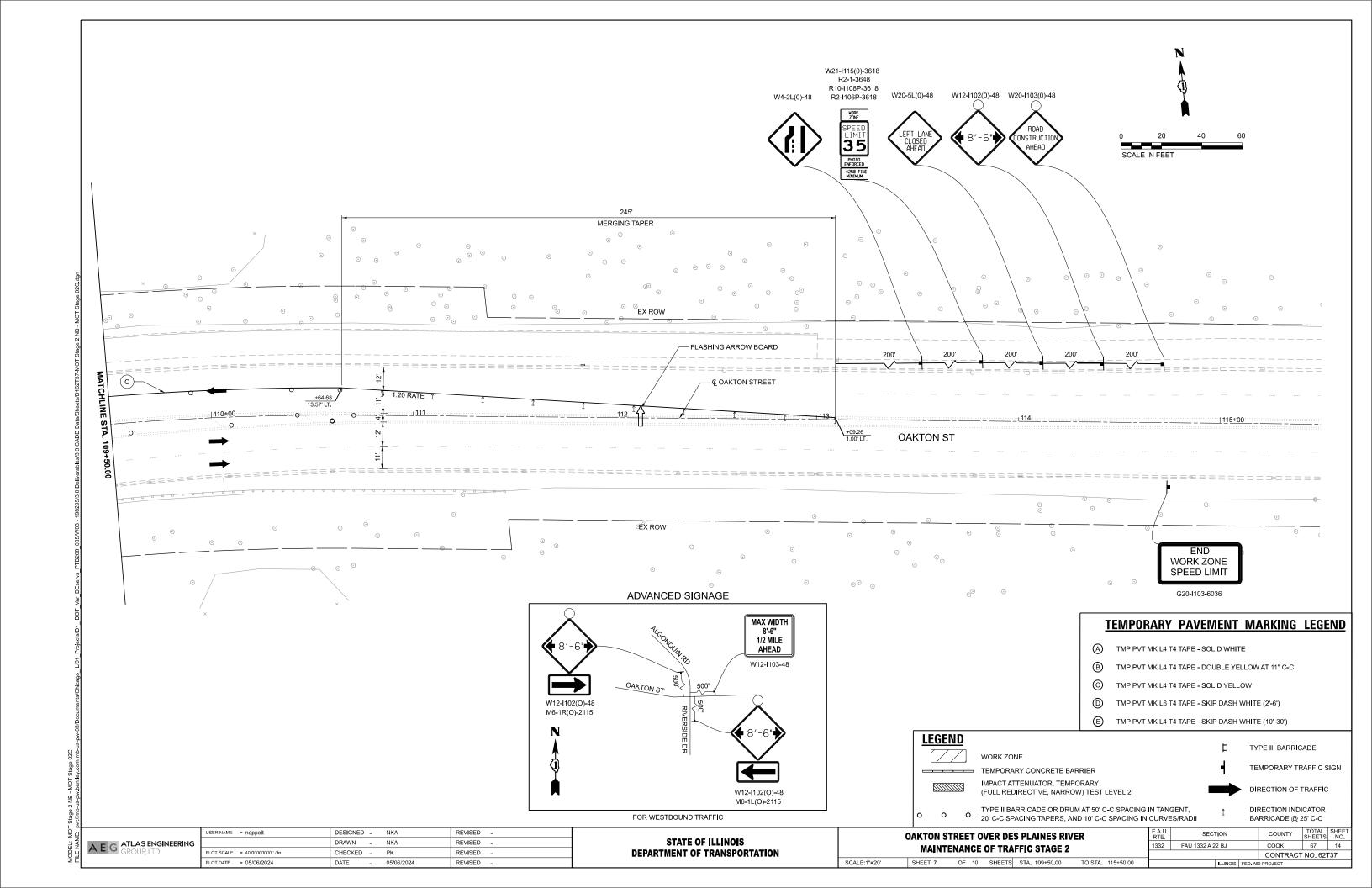


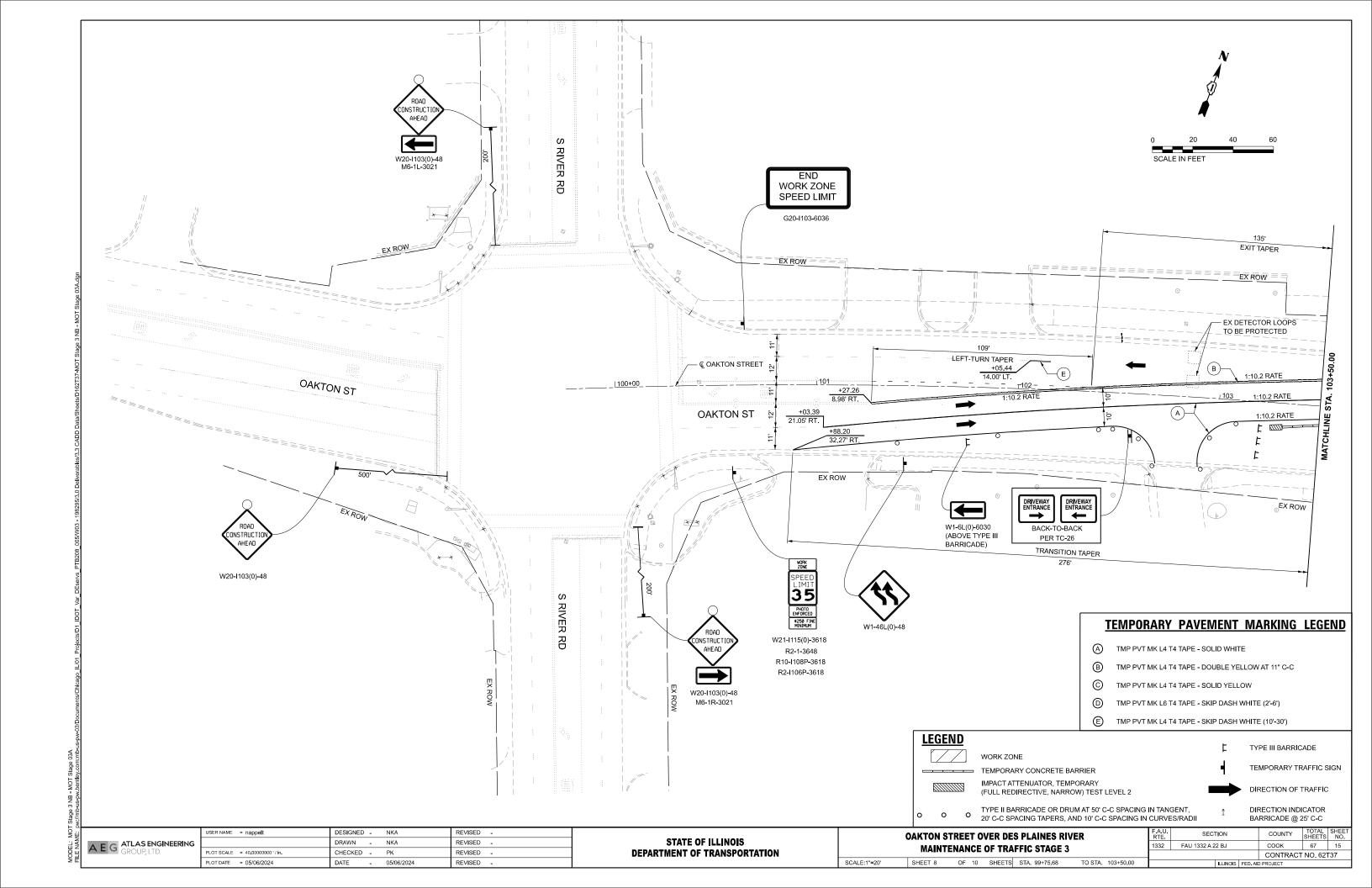


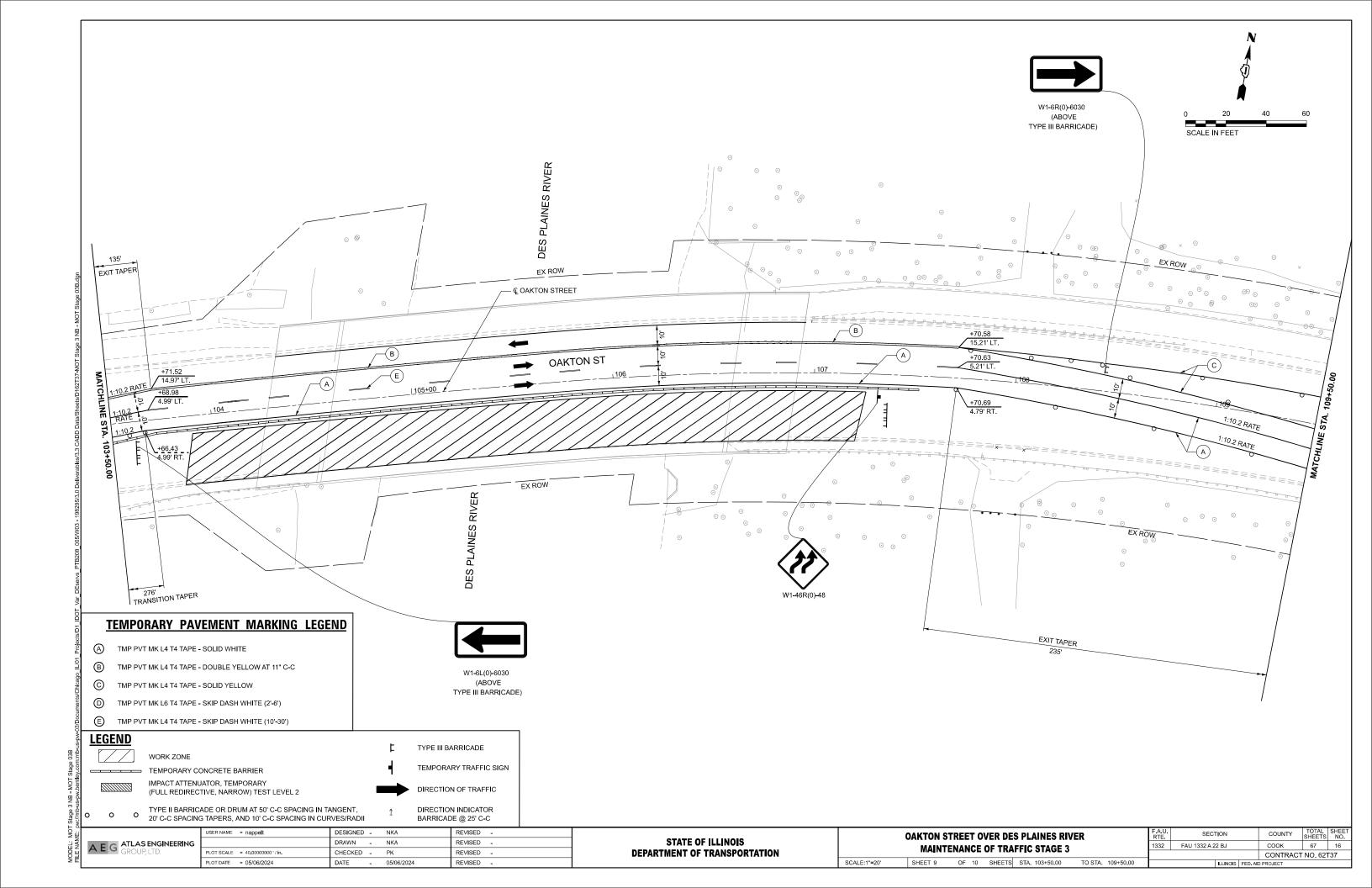


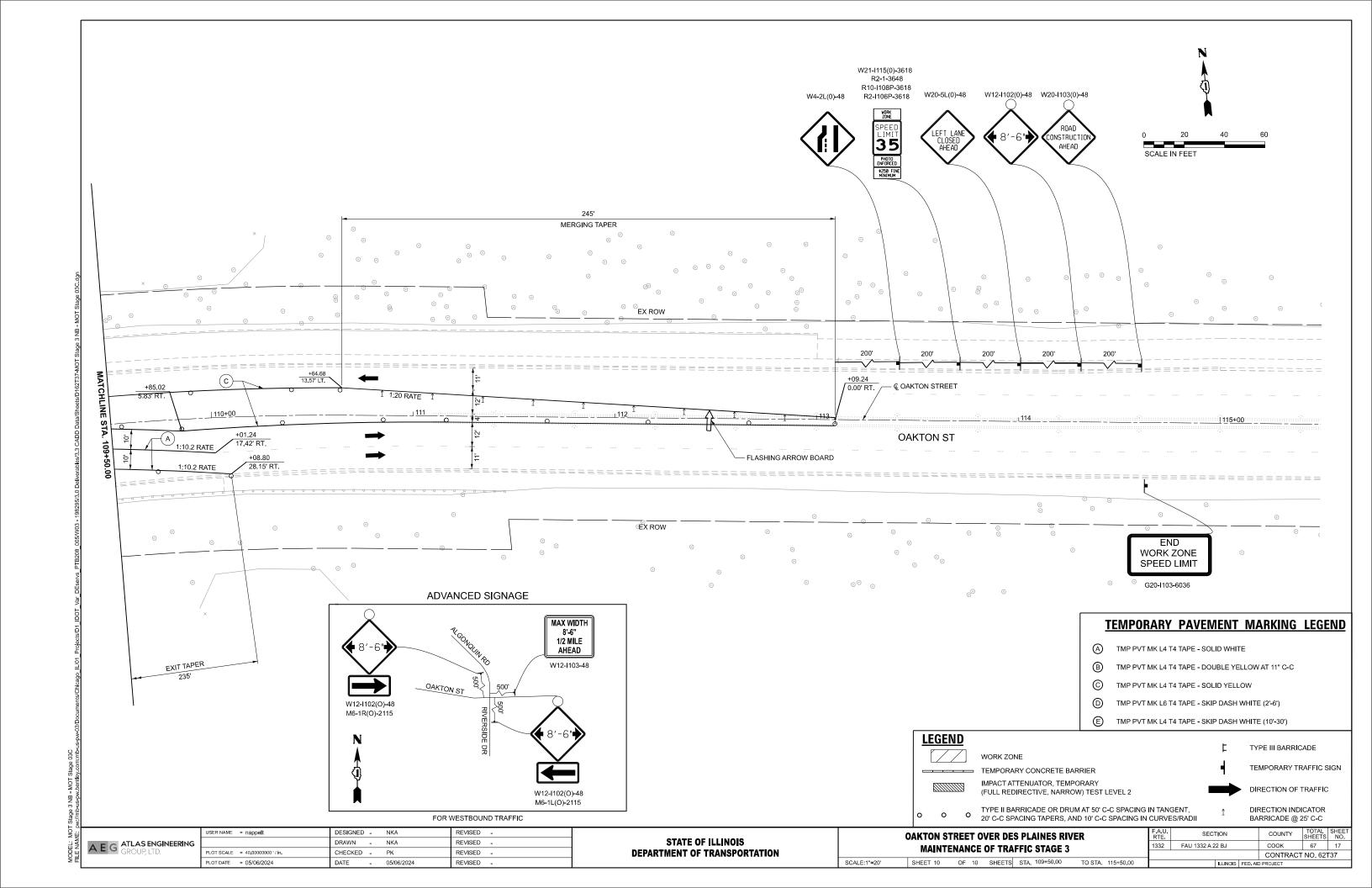


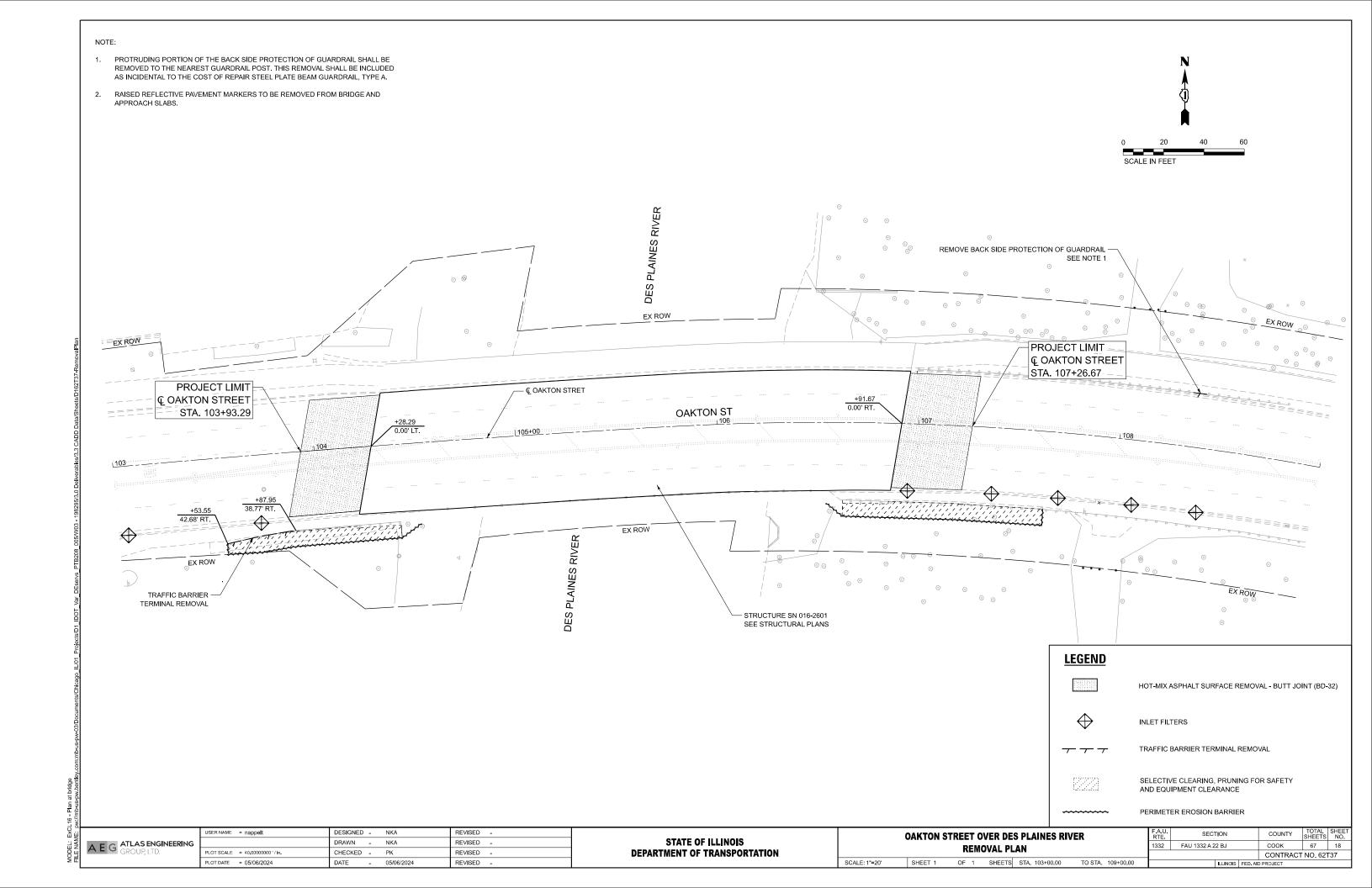


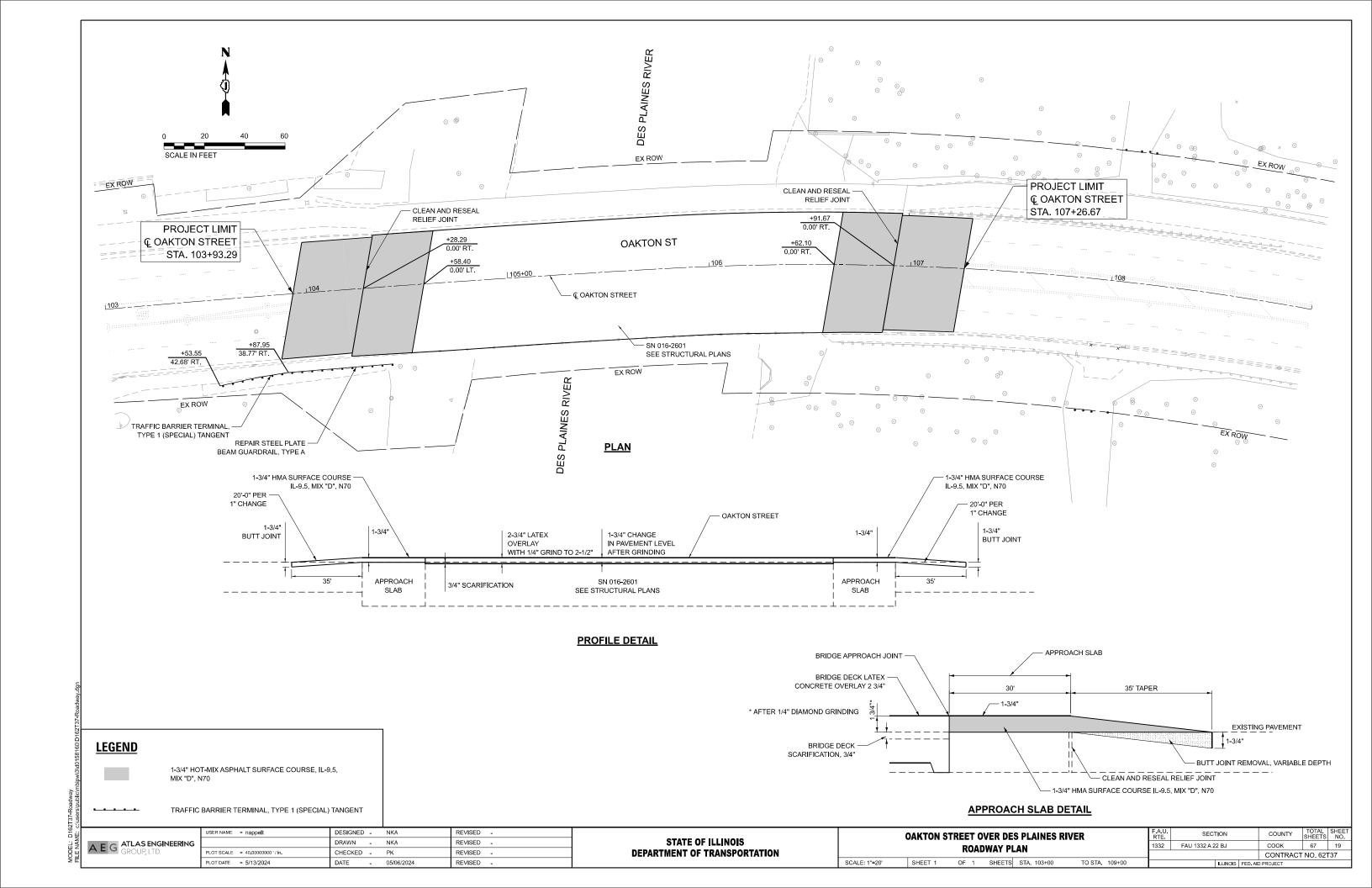


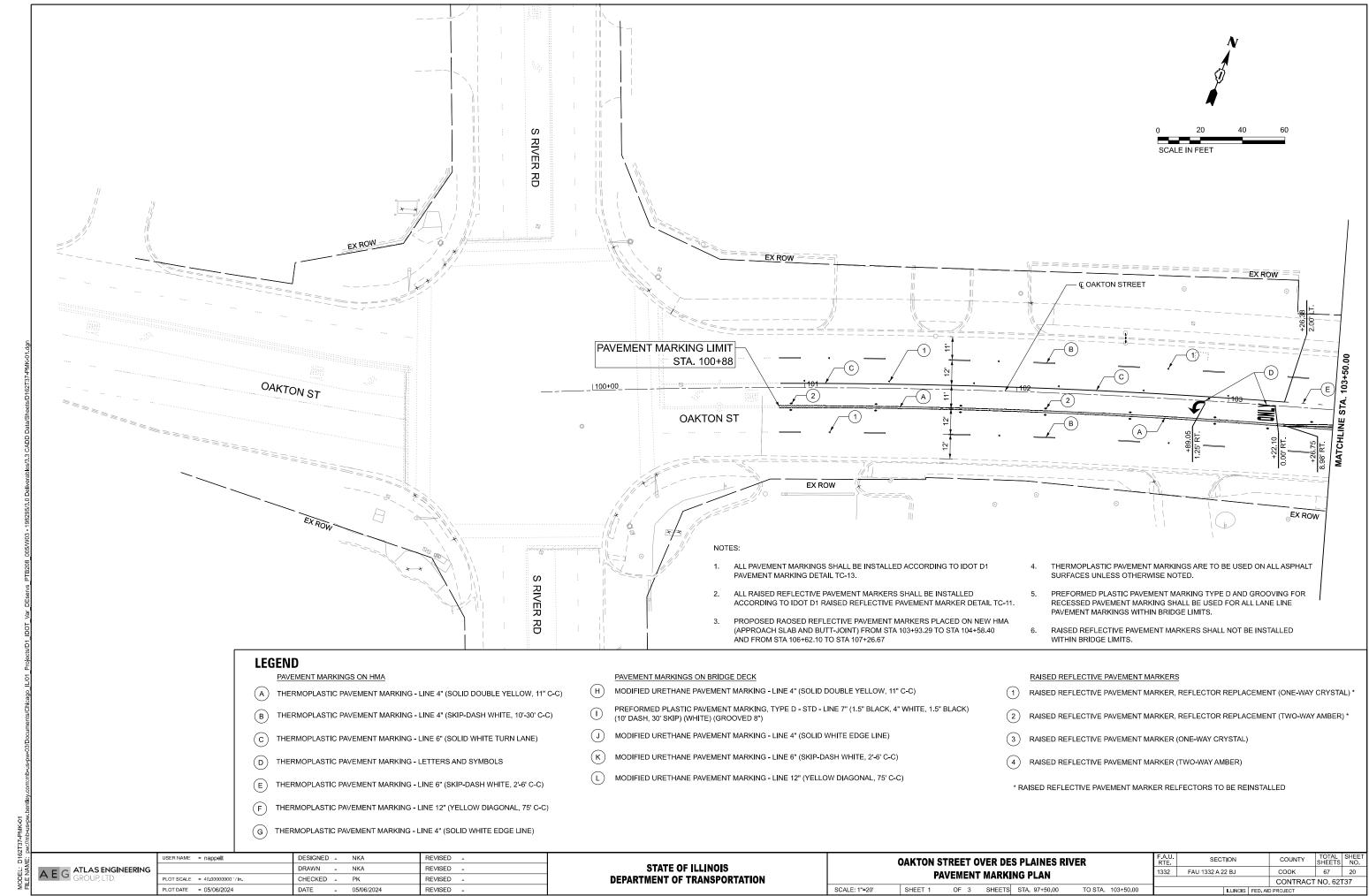


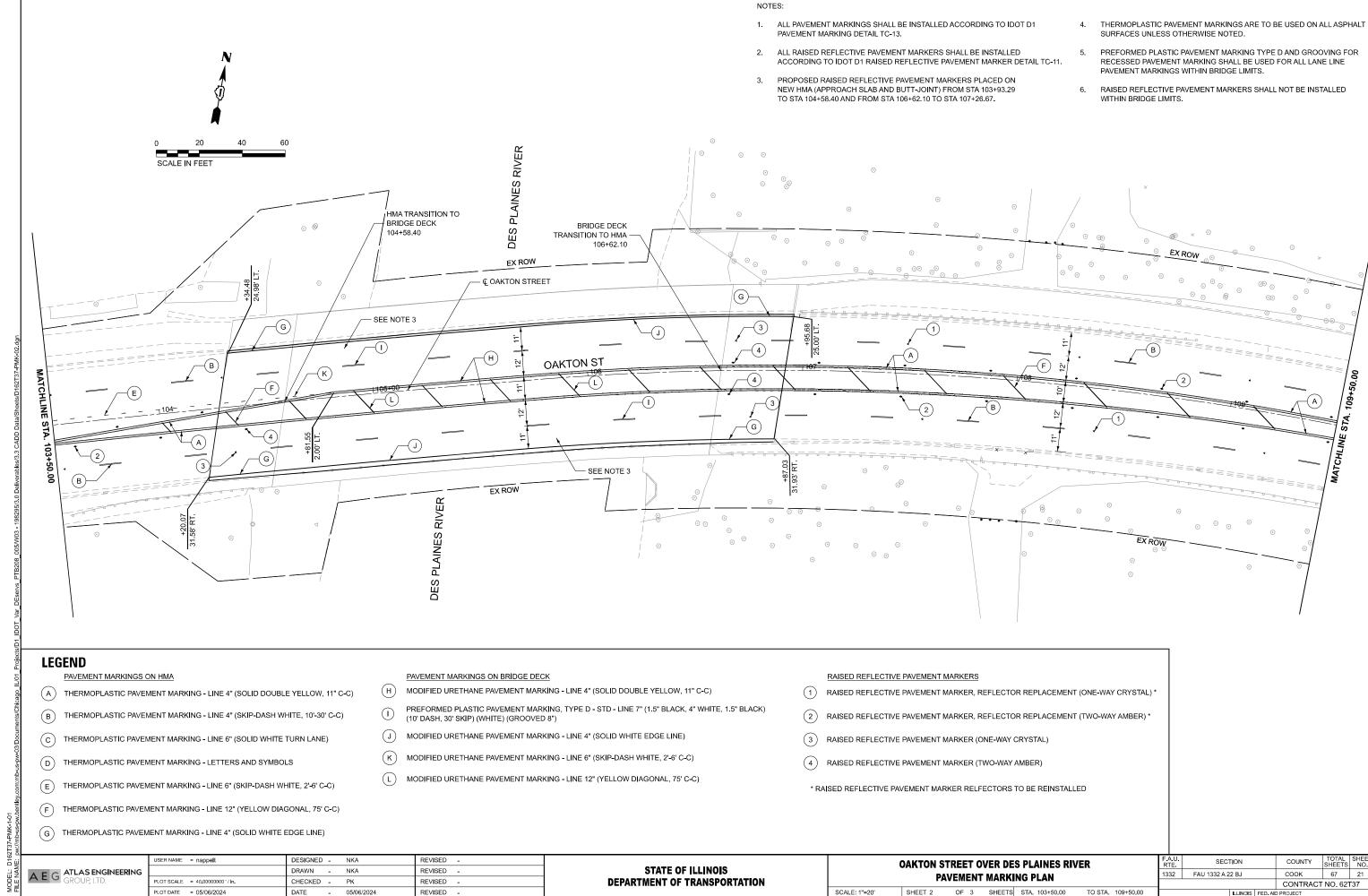












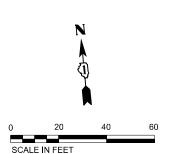
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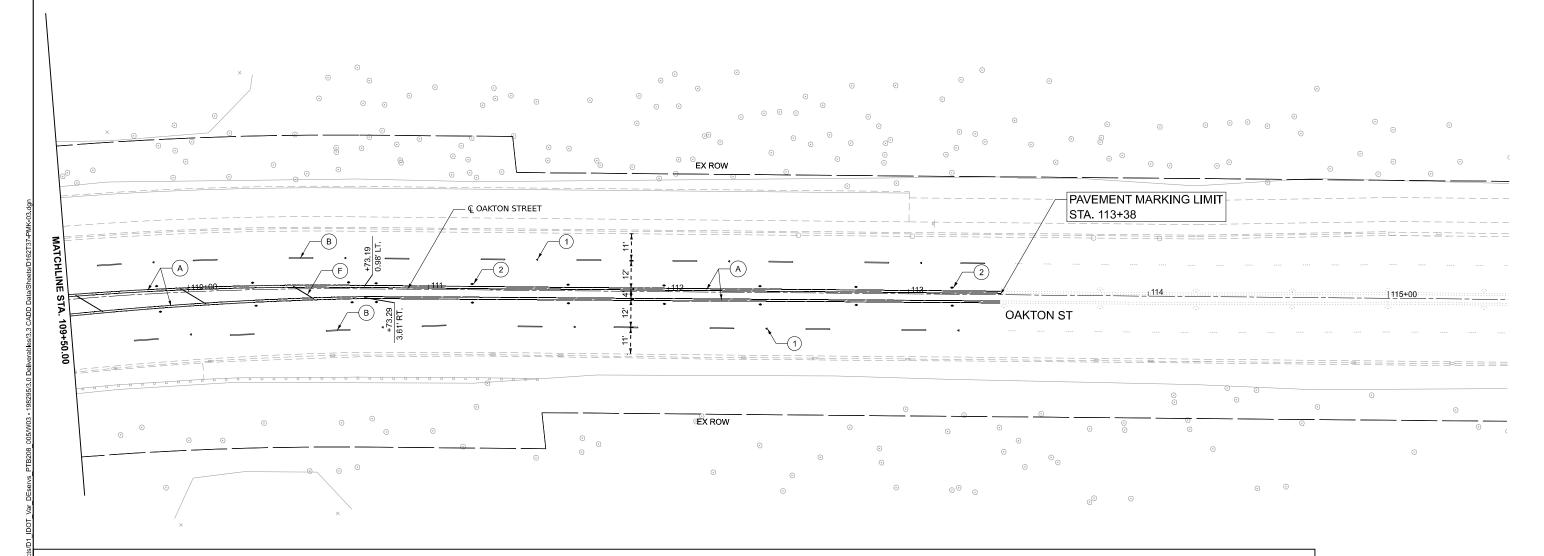
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REVISED

#### NOTES:

- ALL PAVEMENT MARKINGS SHALL BE INSTALLED ACCORDING TO IDOT D1
  PAVEMENT MARKING DETAIL TC-13.
- ALL RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED
  ACCORDING TO IDOT D1 RAISED REFLECTIVE PAVEMENT MARKER DETAIL TC-11.
- PROPOSED RAOSED REFLECTIVE PAVEMENT MARKERS PLACED ON NEW HMA (APPROACH SLAB AND BUTT-JOINT) FROM STA 103+93.29 TO STA 104+58.40 AND FROM STA 106+62.10 TO STA 107+26.67
- THERMOPLASTIC PAVEMENT MARKINGS ARE TO BE USED ON ALL ASPHALT SURFACES UNLESS OTHERWISE NOTED.
- PREFORMED PLASTIC PAVEMENT MARKING TYPE D AND GROOVING FOR RECESSED PAVEMENT MARKING SHALL BE USED FOR ALL LANE LINE PAVEMENT MARKINGS WITHIN BRIDGE LIMITS.
- 6. RAISED REFLECTIVE PAVEMENT MARKERS SHALL NOT BE INSTALLED WITHIN BRIDGE LIMITS.





#### **LEGEND**

PAVEMENT MARKINGS ON HMA

- (A) THERMOPLASTIC PAVEMENT MARKING LINE 4" (SOLID DOUBLE YELLOW, 11" C-C)
- (B) THERMOPLASTIC PAVEMENT MARKING LINE 4" (SKIP-DASH WHITE, 10'-30' C-C)
- (C) THERMOPLASTIC PAVEMENT MARKING LINE 6" (SOLID WHITE TURN LANE)
- (D) THERMOPLASTIC PAVEMENT MARKING LETTERS AND SYMBOLS
- (E) THERMOPLASTIC PAVEMENT MARKING LINE 6" (SKIP-DASH WHITE, 2'-6' C-C)
- F THERMOPLASTIC PAVEMENT MARKING LINE 12" (YELLOW DIAGONAL, 75' C-C)
- G THERMOPLASTIC PAVEMENT MARKING LINE 4" (SOLID WHITE EDGE LINE)

#### PAVEMENT MARKINGS ON BRIDGE DECK

- H) MODIFIED URETHANE PAVEMENT MARKING LINE 4" (SOLID DOUBLE YELLOW, 11" C-C)
- PREFORMED PLASTIC PAVEMENT MARKING, TYPE D STD LINE 7" (1.5" BLACK, 4" WHITE, 1.5" BLACK) (10' DASH, 30' SKIP) (WHITE) (GROOVED 8")
- J MODIFIED URETHANE PAVEMENT MARKING LINE 4" (SOLID WHITE EDGE LINE)
- (K) MODIFIED URETHANE PAVEMENT MARKING LINE 6" (SKIP-DASH WHITE, 2'-6' C-C)
- (L) MODIFIED URETHANE PAVEMENT MARKING LINE 12" (YELLOW DIAGONAL, 75' C-C)

#### RAISED REFLECTIVE PAVEMENT MARKERS

- 1 RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REPLACEMENT (ONE-WAY CRYSTAL) \*
- 2 RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REPLACEMENT (TWO-WAY AMBER) \*
- 3 RAISED REFLECTIVE PAVEMENT MARKER (ONE-WAY CRYSTAL)
- (4) RAISED REFLECTIVE PAVEMENT MARKER (TWO-WAY AMBER)
- \* RAISED REFLECTIVE PAVEMENT MARKER RELFECTORS TO BE REINSTALLED

ΑE	G	ATLAS ENGINEERIN GROUP, LTD.
,	_	GROUP, LTD.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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 F.A.U. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS
 SHEE NO.

 1332
 FAU 1332 A 22 BJ
 COOK
 67
 22

 CONTRACT NO. 62T37

 ILLINOIS FED. AID PROJECT

MODEL: D162T37-PMK-2-01

Benchmark: OSBM 20-1 Square cut on southwest corner of conc. wall on south side of Oakton St. Bridge over the Des Plaines River. Elev. 639.57. All elevations taken from 1993 and 2022 bridge plans. LOADING HS-20 (EXIST.) DESIGN SPECIFICATIONS (EXIST.) Existing Structure: Structure 016-2601 was constructed in 1995, which replaced structure 016-0554 as part of project ACBRM-ACSTPM-7003 (056). The structure consists of 3 span continuous curved Pedestrian Live Load = 90 psf (on multi-use path) 1989 AASHTO with 1990 Interim Specifications rolled beams on pile bent abutments and wall piers on spread footings. The bridge is 205'-1 1/2 " from back of abutment to back of abutment, and has spans 60'-8", 78'-8", and 60'-8" measured along No future wearing surface. 1983 Seismic Guide Specification with 1985 and the local tangent. The bridge is skewed 13°00'00" to the left. The deck was sealed in 2019 and an 11'-9" multi-use path was added to the north side of the bridge in 2022 with a single slope parapet, 1988 Interims bicycle railing, and a built-up path. The original out to out width of the bridge was 80'-0" measured radially, but was reduced to 79'-10" as part of the multi-use path modification in 2022. **DESIGN STRESSES** 1980 Guide Specifications for Horizontally FIELD UNITS (EXIST.) Curved Bridges with Interims thru 1990 Traffic to be maintained utilizing stage construction. f'c = 4,000 psi (Multi-Use Path)2002 AASHTO Standard Specifications for 205'-11/2" Back to Back of Abutment f'c = 3,500 psi (Superstructure)Highway Bridges, 17th Edition No salvage. f'c = 3,500 psi (Substructure)Along Local Tangent 2'-63/4" 60'-8" Span 1 78'-8" Span 2 60'-8" Span 3 2' 6¾" fy = 60,000 psi (Reinforcement)DESIGN SPECIFICATIONS (NEW CONST.) fy = 50,000 psi (M270 Grade 50)Exist. Bicycle Railing - Ç Brg. E. Abut. © Brg. W. Abut. – Ç Pier 1 – Ç Pier 2 fy = 36,000 psi (M270 Grade 36)2002 AASHTO Standard Specifications Exist. Traffic Barrier Type 6 for Highway Bridges, 17th Edition FIELD UNITS (NEW CONST.) typ. (see Roadway Plans) TO O DE PER PRESENTATION DE LA CONTROL DE LA 1121211221221212121212 f'c = 4,000 psi (Superstructure)Exist. W36 Exist. W. Abut. fy = 60,000 psi (Reinforcement)C. Bra. W. Abut. -- Ç Brg. E. Abut. Steel H-Pile, typ © Pier 2 – Bk. E. Abut. End W. Appr. Slab - 21/2" Exist. E. Abut. End E. Appr. Slab Local Tangent at 1'-2" Sta. 105+73.96 C Oakton Street, FAU 1332 **ELEVATION** \*After 1/4" Diamond Grinding (Looking North) 2'-63/4" 60'-8" 52'-7%" 26'-01/8" 2'-63/4" 715/16" 205'- $1\frac{1}{2}$ " Back to Back of Abutment 63'-23/4" 60'-8" Span 3 <sup>∠</sup> 63'-2<sup>3</sup>/<sub>4</sub>" 2'-63/4" 29'-6" 60'-8" Span 1 78'-8" Span 2 Along Local Tangent Along Local Tangent 61/8" 61/8" 205'-1½" Bk. to Bk. Abut. nstall Stream EXIST. OFFSET SKETCH Exist. Underground Gauge Fiber Optic 30'-0" /30'-0" Appr. Slab. & Brg. W. Abut. Appr. Slab. Exist. Traffic Barrier Terminal to remain Sta. 104+60.46 Clean & Reseal Elev. 638.33\* 081-009103 © Pier 2 LICENSED Relief Joint, typ. Sta. 105+99.91 13° Skew, typ. ୍ରା ଜୁ Bridge STRUCTURAL (See Roadway Local Tangent at Elev. 638.70\* Sta. 105+73.96 ENGINEER Sta. 105+73.96 Plans) EAMON HOMEDI, P.E., S.E. DATE: 6/28/2024 Q Pier 1 \_\_\_107 C Oakton Street OF IL NO. 081-009103 Sta. 105+21.26 FAU 1332 EXP. DATE 11/30/2024 Joint Removal and -Elev. 638.60\* © Brg. E. Abut. Replacement, typ. Range 12E, 3rd P.M. Bk of E. Abut. Bk. of W. Abut. Sta. 106+60.07 Sta. 106+62.60 Sta. 104+57.89 HMA Taper with Butt Joint, Exist. Name Plate to remain Elev. 638.64\* Elev. 638.64 Elev. 638.31 typ. (See Roadway Plans) Exist. Traffic Barrier |11'-8"|11'-8"|-3 Spa. @ 12'-3½" |11'-8" 11'-8" 3 Spa. @ 12'-5%"<del>-|</del>11'-8"11'-8" <sup>–</sup>3 Spa` @ 13'-10" Exist, Storm Sewer Terminal to be repaired  $= 37'-5^{3}/4''$  $= 55'-4\frac{1}{8}"$ = 36'-10%''(See Roadway Plans) Exist. Traffic Barrier Terminal to remain – Bridge Deck Scarification  $^{3}\!4$ "-Exist. ROW Exist. Storm Sewer Drain Spacing Exist. Inlet, typ. Exist. Deck Drain to & Bridge Deck Latex Location -  $1^{3/4}$ " HMA Overlay, be Cleaned and Concerete Overlay 23/4" with typ. (See Roadway Protected, typ. LOCATION SKETCH  $\frac{1}{4}$ " Diamond Grinding, typ. **PLAN** Plans) EXIST. HORIZONTAL CURVE DATA EXIST. HORIZONTAL CURVE DATA GENERAL PLAN AND ELEVATION P.I. Sta. = 104 + 44.13P.I. Sta. = 108 + 26.39 $\Delta = 1^{\circ}-41^{\circ}-14.4^{\circ}$  $\Delta = 20^{\circ}-52'-11"$ OAKTON STREET OVER DES PLAINES RIVER  $D = 0^{\circ}-38'-59"$  $D = 4^{\circ}-10^{\circ}-50^{\circ}$ Stations and elevations are taken from existing plans. **FAU RTE. 1332** R = 8,819.63R = 1,370.55 $T = 129.88^{\circ}$ T = 252.41SECTION FAU 1332 A 22 BJ L = 259.73L = 499.22'**COOK COUNTY** E = 0.96E = 23.05 $S.E. = 0.032 \, ^{1}$  $S.E. = 0.032 \frac{1}{2}$ STATION 105+73.96 S.E. Transition Limits = Sta. 102+64.00 to Sta. 104+39.00 S.E. Transition Limits = Sta. 110+50.00 to Sta. 111+90.20 Full S.E. = Sta. 104+39 to Sta. 105+73.96 Full S.E. = Sta. 105+73.96 to Sta 110+50.00 STRUCTURE NO. 016-2601 P.C. Sta. = 103 + 14.25P.C. Sta. = 105 + 73.96P.T. Sta. = 105 + 73.96P.T. Sta. = 110 + 73.20JSER NAME = DESIGNED - JJI REVISED SECTION COUNTY **GENERAL PLAN AND ELEVATION** A E G ATLAS ENGINEERING STATE OF ILLINOIS CHECKED - EH REVISED FAU 1332 A 22 BJ 1332 COOK 67 23 **STRUCTURE NO. 016-2601** LOT SCALE = REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 62T37 SHEET S-1 OF S-15 SHEETS PLOT DATE = CHECKED - 6/25/2024 REVISED

#### **INDEX OF SHEETS**

S-1 General Plan and Elevation

S-2 General Data

S-3 to S-5 Stage Construction Details

S-6 Not Used S-7 Deck Repair

S-8 to S-11 Joint Removal and Replacement Details S-12 to S-13 Preformed Joint Strip Seal - Sidewalk

S-14 Pier 2 Stream Gauge

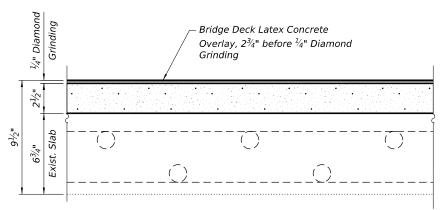
S-15 Bar Splicer Assembly and Mechanical Splicer Details

#### SCOPE OF WORK

- 1. Perform  $\frac{3}{4}$ " bridge deck scarification.
- 2. Perform partial and full depth deck repairs.
- 3. Clean bridge floor drains.
- 4. Perform partial depth approach slab repairs.
- 5. Remove & Re-erect parapet sliding plate.
- 6. Replace expansion joint at each abutment.
- 7. Place  $2\frac{3}{4}$ " bridge deck latex overlay.
- 8. Clean and reseal pavement relief joints (see Roadway Plans).
- 9. Place  $1\frac{3}{4}$ " HMA overlay on approach slabs (see Roadway Plans).
- 10. Perform diamond grinding on deck overlay.
- 11. Perform longitudinal bridge deck grooving.
- 12. Apply protective coat to latex overlay and new joint concrete. See Sheet S-7 for limits.
- - Bridge Deck Scarification, <sup>3</sup>/<sub>4</sub>"

    | Fig. 12 | Fig. 12

EXISTING DECK CROSS SECTION DETAIL



#### PROPOSED DECK CROSS SECTION DETAIL

#### **GENERAL NOTES**

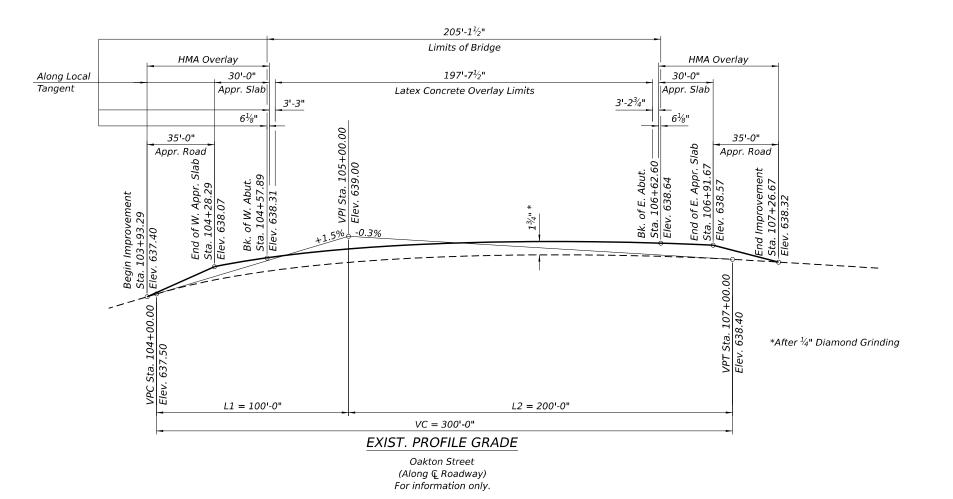
- 1. Plan dimensions and details relative to the existing structure have been taken from existing plans and are subject to nominal construction variations. The contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of work; however, the Contractor shall be paid for the quantity actually furnished at the unit price bid for the work.
- 2. Reinforcement bars designated (E) shall be epoxy coated.
- 3. Prior to pouring the new concrete overlay, all heavy or loose rust, loose mill scale, and other loose detrimental foreign material shall be removed from the surfaces in contact with concrete (SSPC- SP3 standards). Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be paid for according to Article 109.04 of the Standard Specifications.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding ¼ in. deep shall be identified and reported to the Bureau of Bridges & Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

- 4. Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the joint concrete is poured at an ambient temperature other than 50°F.
- 5. Existing reinforcement bars extending into the removal area shall be cleaned, straightened, and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- 6. Contractor shall not scale dimensions from the contract plans for construction purposes. Scales shown for information only.
- 7. All exposed concrete edges shall have a  $\frac{3}{4}$ "x45° chamfer except where shown otherwise.

#### TOTAL BILL OF MATERIAL

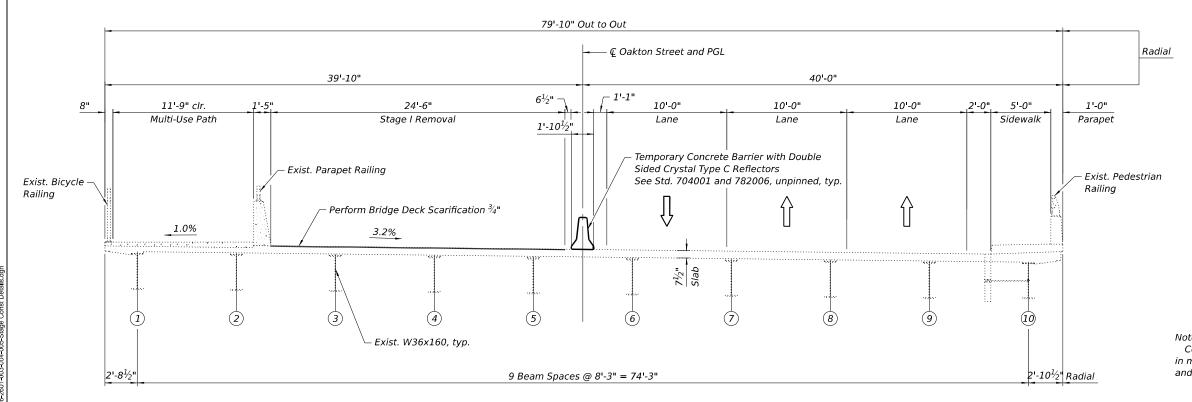
ITEM	UNIT	SUPER	SUB	TOTAL
Inlet Filters	Each	13	-	13
Concrete Removal	Cu. Yd.	18.2	-	18.2
Concrete Superstructure	Cu. Yd.	20.6	-	20.6
Protective Coat	Sq. Yd.	1368	-	1368
Reinforcement Bars, Epoxy Coated	Pound	2810	-	2810
Bar Splicers	Each	48	-	48
Preformed Joint Strip Seal	Foot	137	-	137
Floor Drains to be Cleaned	Each	13	-	13
Stream Gauge	Each	-	1	1
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	1278	-	1278
Approach Slab Repair (Partial Depth)	Sq. Yd.	42	-	42
Bridge Deck Latex Concrete Overlay, $2\frac{3}{4}$ Inches	Sq. Yd.	1318	-	1318
Bridge Deck Scarification, 3/4"	Sq. Yd.	1318	-	1318
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	2	-	2
Diamond Grinding (Bridge Section)	Sq. Yd.	1361	-	1361



A E G ATLAS ENGINEERING

 USER NAME =
 DESIGNED - JJI
 REVISED - CHECKED - EH
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



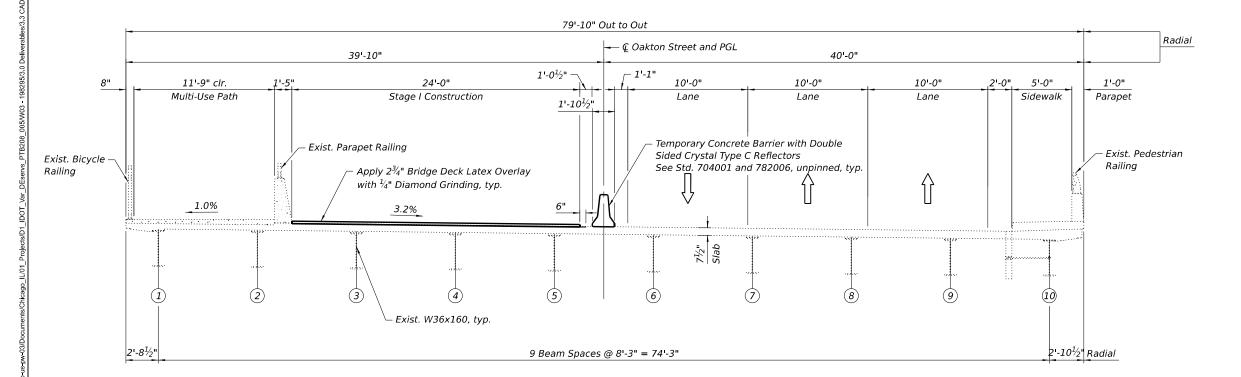
#### STAGE I REMOVAL

- 1. Install temporary concrete barrier as shown.
- 2. Remove and store parapet sliding plates.
- 3. Remove joint and concrete portions of parapet, abutment stem, and deck slab adjacent of joint.
- 4. Scarify  $\frac{3}{4}$ " from bridge deck as shown.

Contractor to protect pedestrians and bicyclists in multi-use path at locations of parapet removal and replacement.

#### STAGE I REMOVAL

Looking East @ © Structure Sta. 105+73.96



#### 5. Perform $\frac{1}{4}$ " diamond grinding.

6. Perform bridge deck grooving for the latex overlay. 7. Reinstall parapet sliding plate.

1. Perform partial and full-depth approach slab repairs

2. Perform full-depth bridge deck repairs at locations

3. Install preformed joint strip seal at each abutment

and replace concrete and reinforcement adjacent to

4. Apply  $2\frac{3}{4}$ " bridge deck latex concrete overlay to

STAGE I CONSTRUCTION

at locations shown in the plans.

shown in the plans.

bridge deck.

8. Apply protective coat to the latex overlay and new concrete at joint replacements.

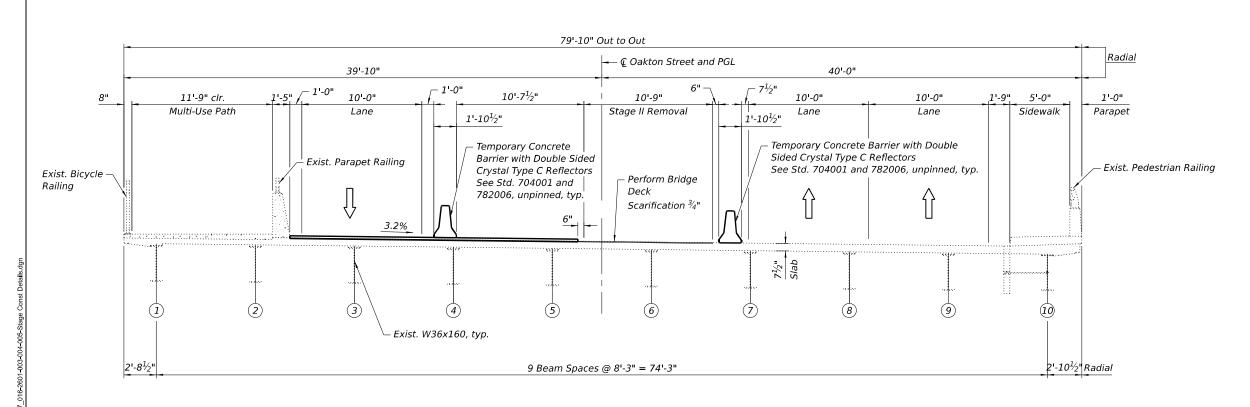
#### STAGE I CONSTRUCTION

Looking East @ © Structure Sta. 105+73.96

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A E G ATLAS ENGINEERING		CHECKED - EH	REVISED -
AEG GROUP, LTD.	PLOT SCALE =	DRAWN - JJI	REVISED -
	PLOT DATE =	CHECKED - 3/15/2024	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

SECTION COUNTY STAGE CONSTRUCTION DETAILS 1332 FAU 1332 A 22 BJ COOK 67 25 **STRUCTURE NO. 016-2601** CONTRACT NO. 62T37 SHEET S-3 OF S-15 SHEETS

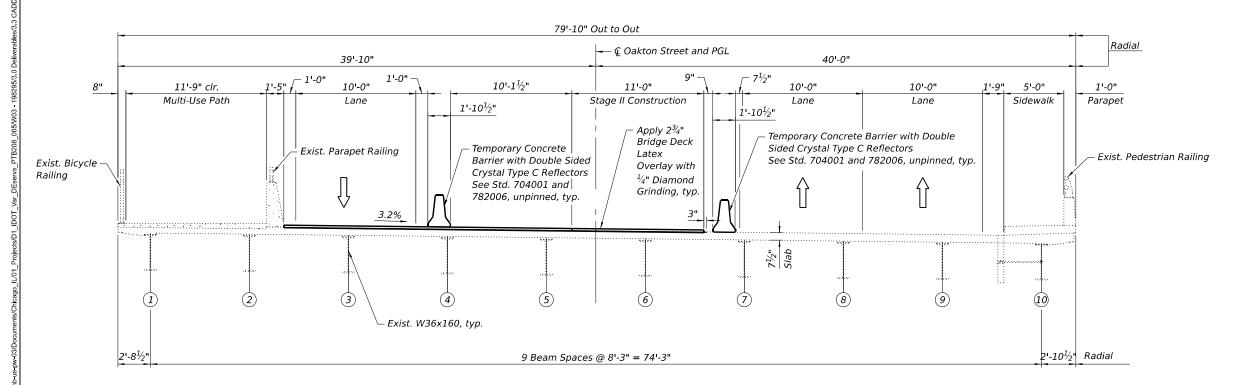


#### STAGE II REMOVAL

- 1. Install temporary concrete barrier as shown.
- 2. Remove joint and concrete portions of
- abutment stem and deck slab adjacent of joint.
- 3. Scarify  $\frac{3}{4}$ " from bridge deck as shown.

#### STAGE II REMOVAL

Looking East @ © Structure Sta. 105+73.96



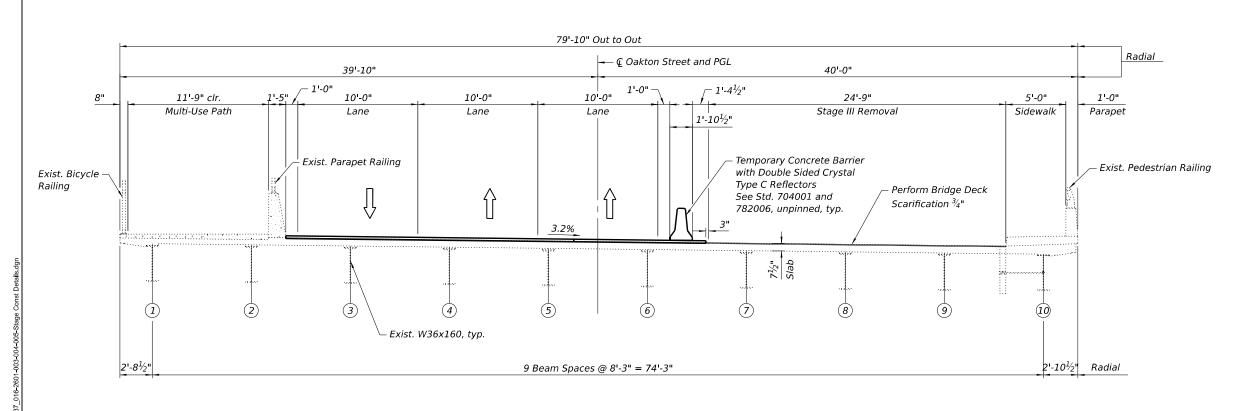
#### STAGE II CONSTRUCTION

- 1. Perform partial and full-depth approach slab repairs at locations shown in the plans.
- 2. Perform full-depth bridge deck repairs at locations shown in the plans.
- 3. Install preformed joint strip seal at each abutment and replace associated concrete and reinforcement
- 4. Apply  $2^{3/4}$ " bridge deck latex concrete overlay to bridge deck.
- 5. Perform  $\frac{1}{4}$ " diamond grinding.
- 6. Perform bridge deck grooving for the latex overlay.
  7. Apply protective coat to the latex overlay.

#### STAGE II CONSTRUCTION

Looking East @ **€** Structure Sta. 105+73.96

	USER NAME =	DESIGNED - JJI	REVISED -
ATLAS ENGINEERING		CHECKED - EH	REVISED -
GROUP, LTD.	PLOT SCALE =	DRAWN - JJI	REVISED -
	PLOT DATE =	CHECKED - 3/15/2024	REVISED -

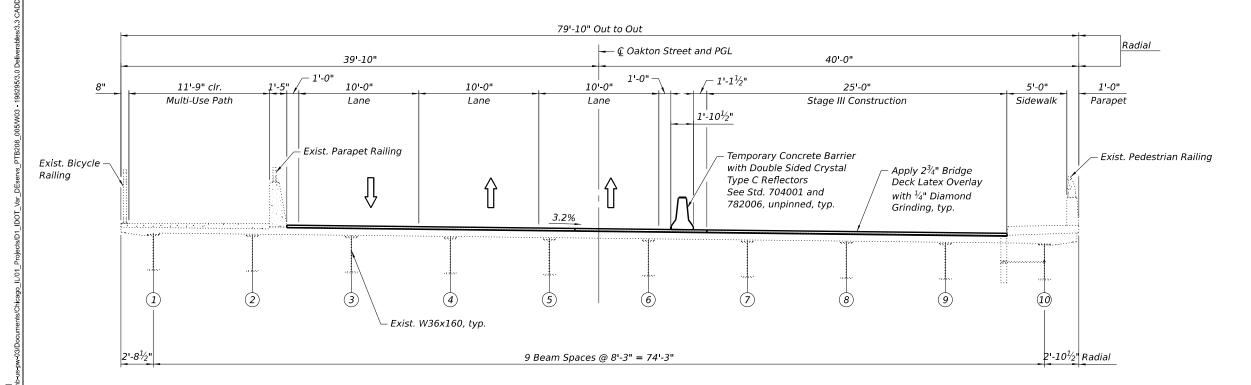


#### STAGE III REMOVAL

- 1. Install temporary concrete barrier as shown.
- 2. Remove joint and concrete portions of parapet, abutment stem, and deck slab adjacent of joint.
- 3. Scarify  $\frac{3}{4}$ " from bridge deck as shown.

#### STAGE III REMOVAL

Looking East @ © Structure Sta. 105+73.96



#### STAGE III CONSTRUCTION

- 1. Perform partial and full-depth approach slab repairs at locations shown in the plans.
- 2. Perform full-depth bridge deck repairs at locations shown in the plans.
- 3. Install preformed joint strip seal at each abutment and replace associated concrete and reinforcement
- 4. Apply  $2^{3/4}$ " bridge deck latex concrete overlay to bridge deck.
- 5. Perform  $\frac{1}{4}$ " diamond grinding.
- 6. Perform bridge deck grooving for the latex overlay.7. Apply protective coat to the latex overlay and new concrete at joint replacements.

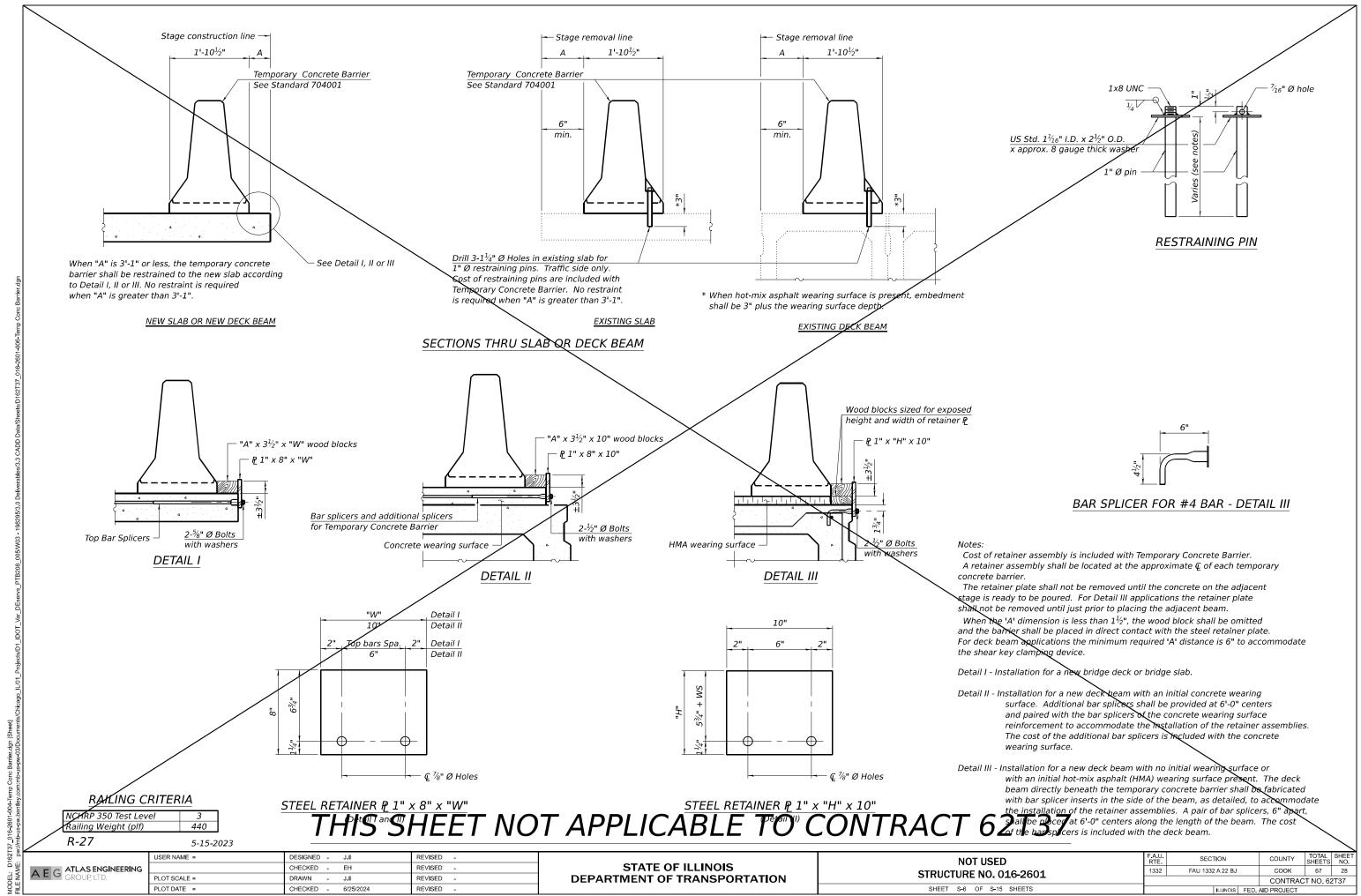
#### STAGE III CONSTRUCTION

Looking East @ © Structure Sta. 105+73.96

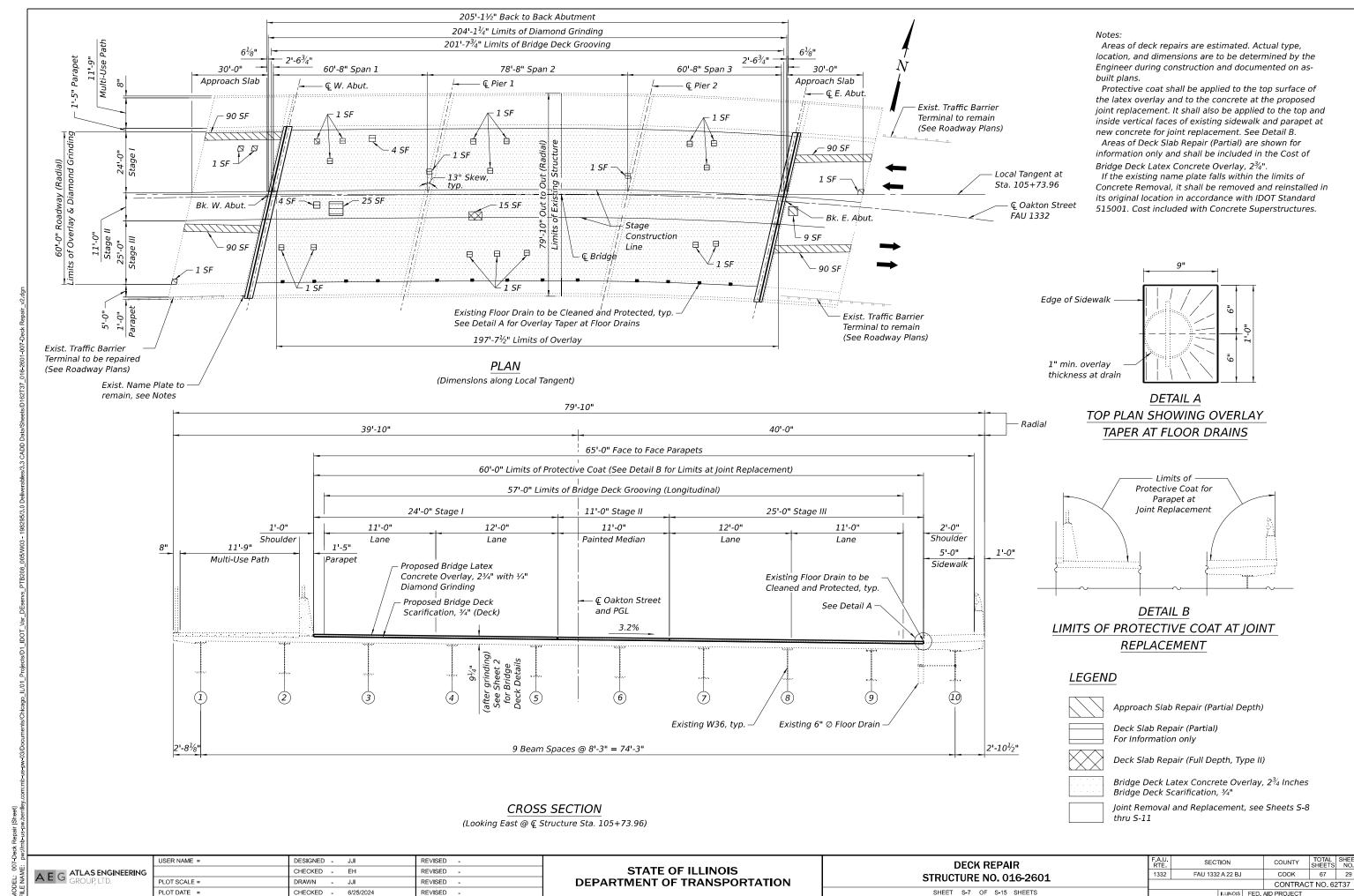
A E G ATLAS ENGINEERING GROUP, LTD.	USER NAME =	DESIGNED - JJI	REVISED -	
		CHECKED - EH	REVISED -	
	PLOT SCALE =	DRAWN - JJI	REVISED -	
	PLOT DATE =	CHECKED - 3/15/2024	REVISED -	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

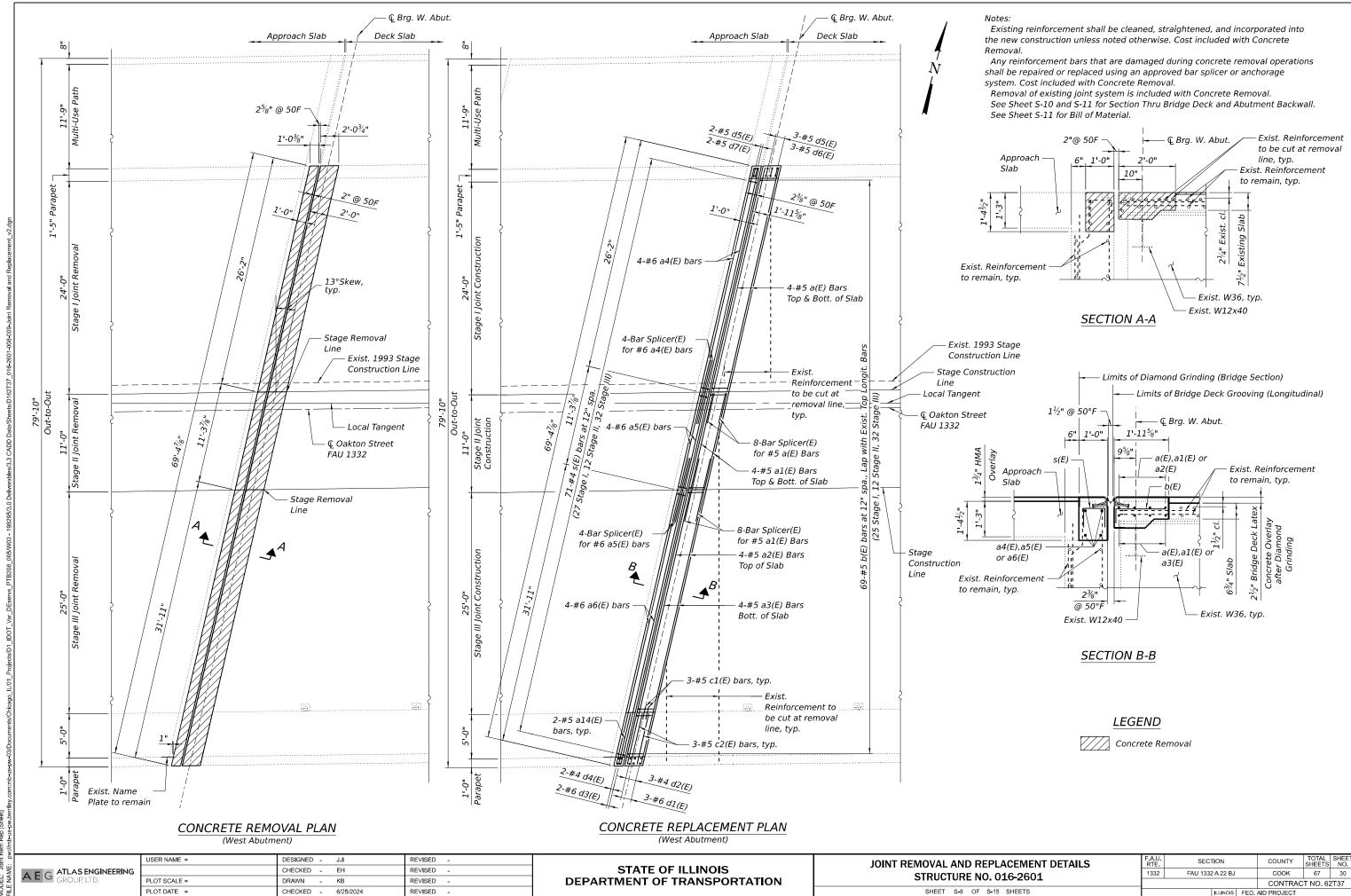
SECTION COUNTY STAGE CONSTRUCTION DETAILS 1332 FAU 1332 A 22 BJ соок 67 27 **STRUCTURE NO. 016-2601** CONTRACT NO. 62T37 SHEET S-5 OF S-15 SHEETS

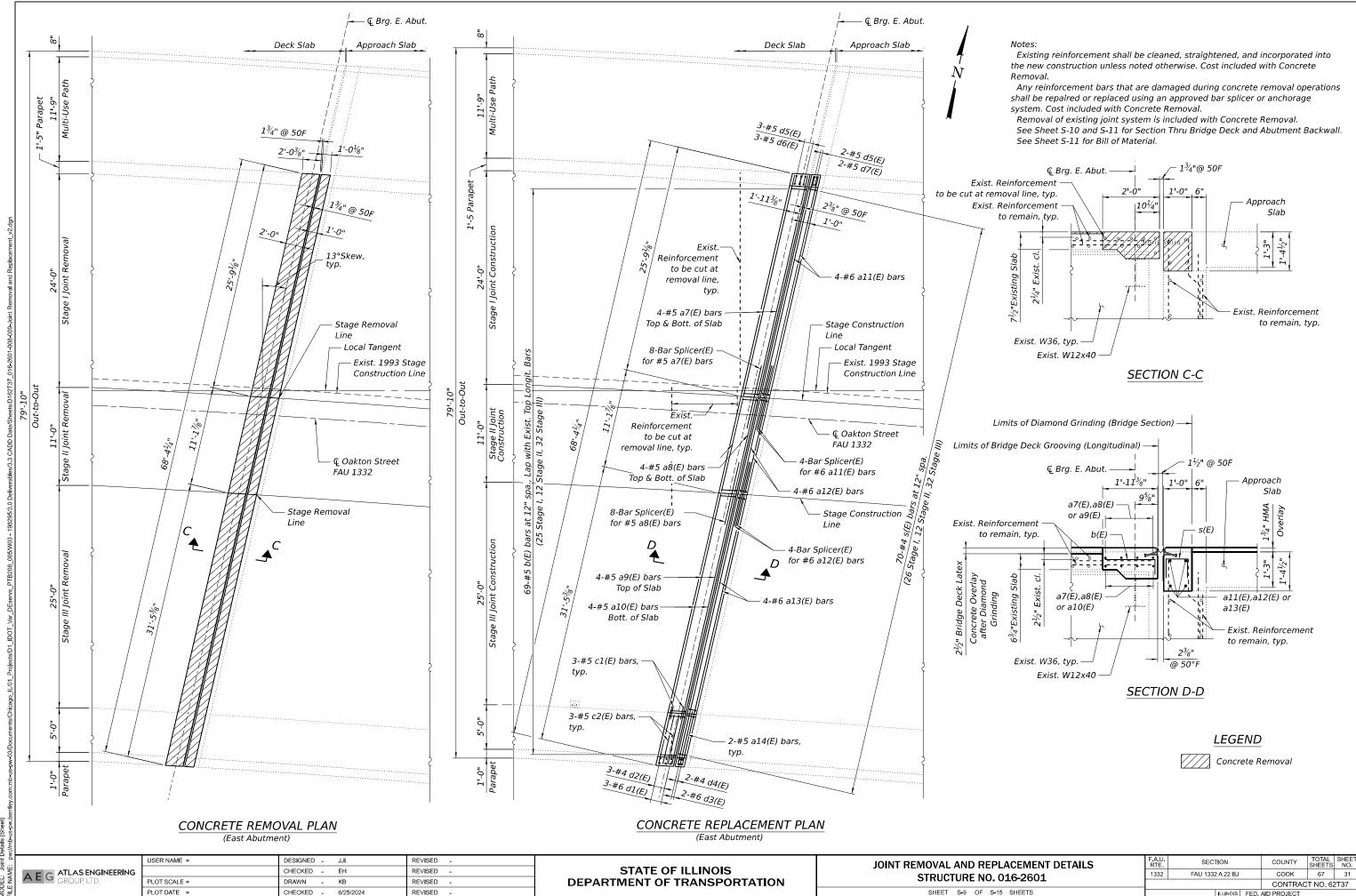


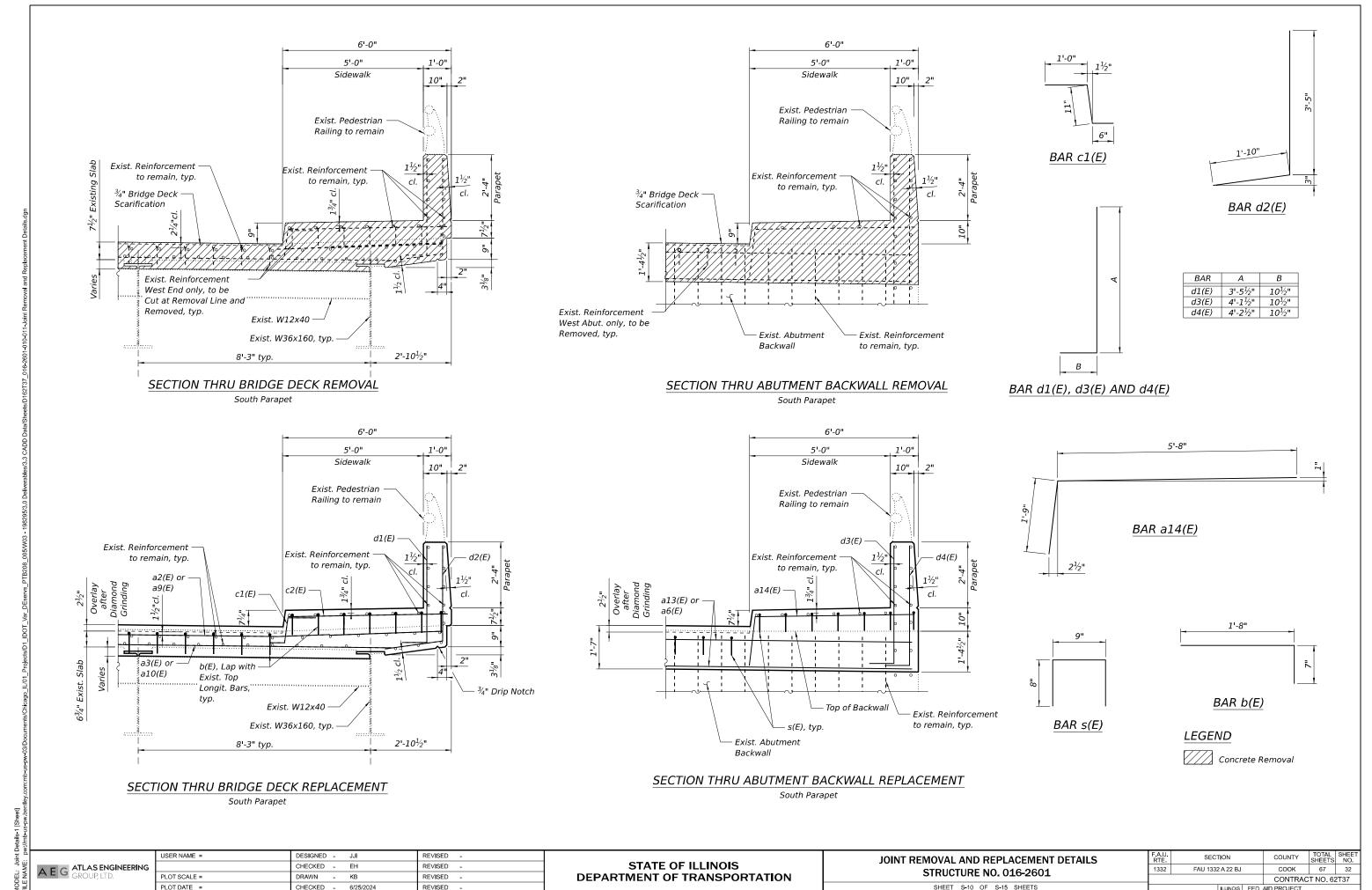
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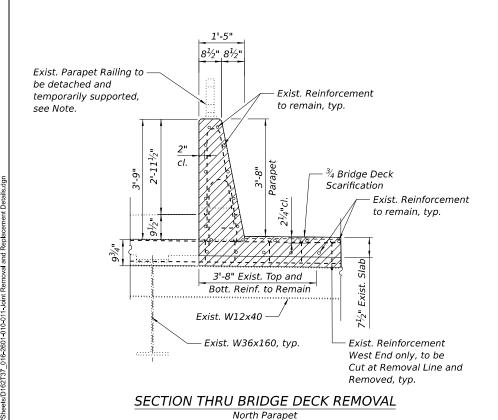
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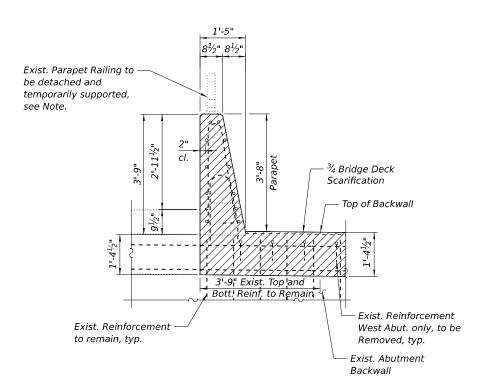


\_\_\_1'-5" 81/2",81/2"

d5(E) -

d6(E)

cI.



# 2½" 9¾" 6"

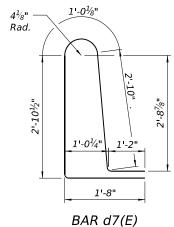
**BAR** d5(E)

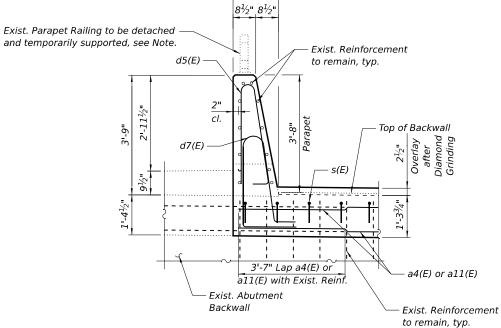
## 4½" Rad. 1'-01/4" 1'-2" 1'-8"

SECTION THRU ABUTMENT BACKWALL REMOVAL

North Parapet







a(E) or a7(E)

Exist. Reinforcement

Exist. Reinforcement to remain, typ.

b(E), Lap with Exist. Top

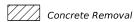
Longit. Bars, typ.

to remain, typ.

## SECTION THRU ABUTMENT BACKWALL REPLACEMENT

North Parapet

#### LEGEND



#### BILL OF MATERIAL FOR TWO JOINTS

Bar	No.	Size	Length	Shape
a(E)	8	#5	25'-10"	
a1(E)	8	#5	10'-11"	
a2(E)	4	#5	31'-7"	
a3(E)	4	#5	29'-8"	
a4(E)	4	#6	25'-10"	
a5(E)	4	#6	10'-11"	
a6(E)	4	#6	31'-7"	
a7(E)	8	#5	25'-5"	
a8(E)	8	#5	10'-9"	
a9(E)	4	#5	31'-1"	
a10(E)	4	#5	29'-1"	
a11(E)	4	#6	25'-5"	
a12(E)	4	#6	10'-9"	
a13(E)	4	#6	31'-1"	
a14(E)	4	#5	7'-5"	Г
b(E)	138	#5	2'-3"	
c1(E)	6	#5	2'-5"	7
c2(E)	6	#5	5'-8"	
d1(E)	6	#6	4'-4"	
d2(E)	6	#4	5'-3"	
d3(E)	4	#6	5'-0"	
d4(E)	4	#4	5'-1"	
d5(E)	10	#5	7'-0"	
d6(E)	6	#5	7'-10"	
d7(E)	4	#5	9'-7"	
s(E)	141	#4	2'-1"	
Concrete	Remova	l	Cu. Yd.	18.2
Concrete	Superstr	ucture	Cu. Yd.	20.6
Reinforc	ement Ba	Bound	2.010	
Ероху С	oated		Pound	2,810
			<u></u>	

The existing parapet railing attached to the north parapet shall be detached and temporarily supported during expansion joint replacement at both ends of the bridge. After the completion of the joint installation at the parapet, the parapet railing must be reattached to the parapet wall. All activities related to the handling of the railing during joint reconstruction will be paid for under the "Concrete Removal" pay item.

SECTION THRU BRIDGE DECK REPLACEMENT

3'-6" Lap a(E) or

a7(E) with Exist. Reinf.

Exist. W36x160, typ.

North Parapet

A E G ATLAS ENGINEERING

Exist. W12x40

Exist. Parapet Railing to be

detached and temporarily

supported, see Note.

	USER NAME =	DESIGNED	-	JJI	REVISED	-
•		CHECKED	-	EH	REVISED	-
	PLOT SCALE =	DRAWN	-	KB	REVISED	-
	PLOT DATE =	CHECKED	-	6/25/2024	REVISED	-

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**  JOINT REMOVAL AND REPLACEMENT DETAILS **STRUCTURE NO. 016-2601** SHEET S-11 OF S-15 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
1332	FAU 1332 A 22 BJ	соок	67	33	
	·		CONTRAC	T NO. 62	2T37
	ILLINOIS	FED.	AID PROJECT		

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## Concrete flush with back face of $\frac{3}{8}$ " plate ¾" Plate c--0 2" Chamfer Concrete flush with back face of 3/4" plate TRIMETRIC VIEW (Showing embedded plates only)

1½" at 50° F

3" at 50°F

#### Notes:

The strip seal shall be made continuous and shall have a minimum thickness of  $\frac{1}{4}$ ". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

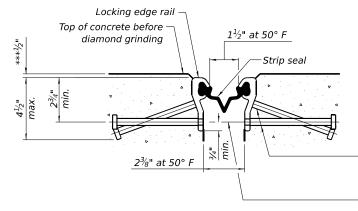
The Maximum space between locking edge rail segments shall be  $\frac{3}{16}$ " and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.

Cost of removal and re-erection of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required.

#### \*\*\*Prior to 1/4" grinding



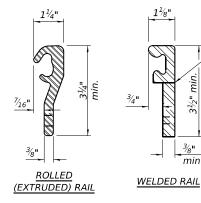
SHOWING ROLLED RAIL JOINT

\*  $\frac{5}{8}$ " Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

 $^3\!\!/\!\!s$  " Ø threaded rods in  $^7\!\!/\!\!16$  " Ø holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

#### SECTION A-A

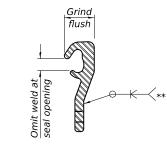
\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



## LOCKING EDGE RAILS

3/8"

\*\* Back gouge not required if complete joint penetration is verified by mock-up.



#### LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

#### **BILL OF MATERIAL**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	137

A E G ATLAS ENGINEERING

USER NAME =	DESIGNED	-	JJI	REVISED	-
	CHECKED	-	EH	REVISED	-
PLOT SCALE =	DRAWN	-	SPB	REVISED	-
PLOT DATE =	CHECKED	-	6/25/2024	REVISED	-

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

SHOWING WELDED RAIL JOINT

Locking edge rail -

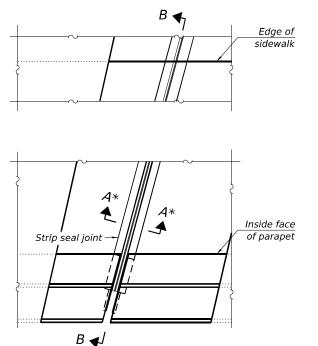
Top of concrete before

diamond grinding

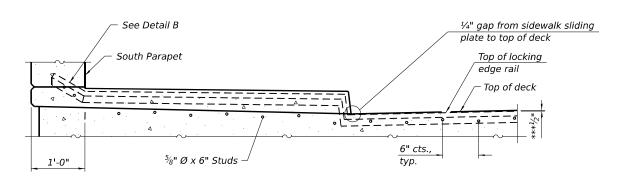
PREFORMED JOINT STRIP SEAL - SIDEWALK **STRUCTURE NO. 016-2601** SHEET S-12 OF S-15 SHEETS

	F.A.U. RTE. SECTION		COUNTY	TOTAL SHEETS	SHE		
	1332	FAU 1332 A 22 BJ		соок	67	34	
_					CONTRAC	T NO. 62	2T37
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DETAIL B



SECTION B-B AT RAISED SIDEWALK

\*See Sheet S-12 for Section A-A.

Contractor to protect

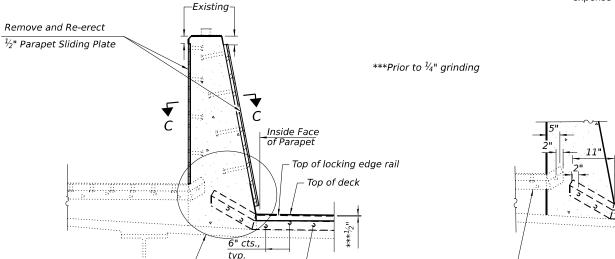
parapet.

existing rails and strip seal

and reincorporate into new

#### PLAN AT RAISED SIDEWALK

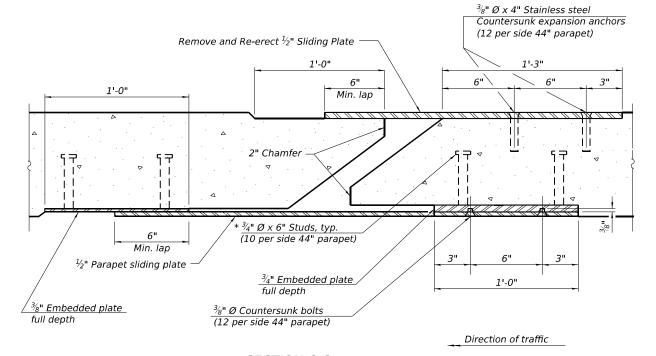
2" Max



#### Note:

DETAIL C

Any damage to existing strip seal in multi-use path during concrete removal operations shall be repaired or replaced at the Contractor's expense by methods approved by the Engineer.



#### SECTION THRU MULTI-USE PATH

See Detail C

5/8" Ø x 6" Studs -

#### SECTION C-C

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LE NAME:	A E G ATLAS ENGINEERING GROUP, LTD.

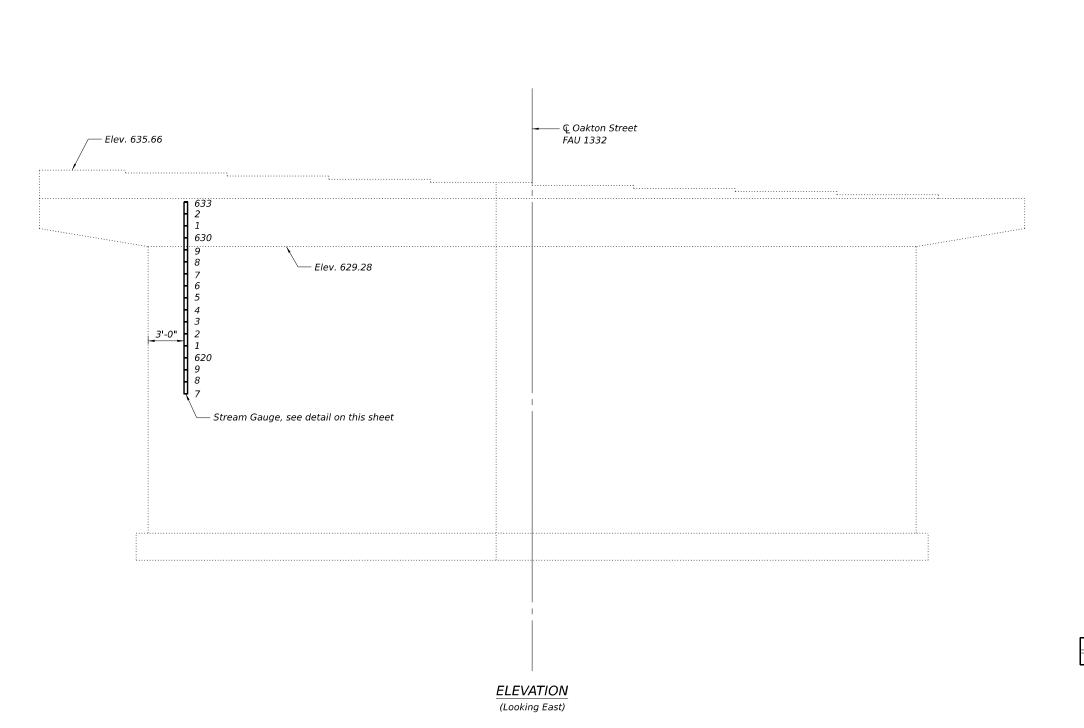
	USER NAME =	DESIGNED	-	JJI	REVISED	-
G		CHECKED	-	EH	REVISED	-
	PLOT SCALE =	DRAWN	-	SPB	REVISED	-
	PLOT DATE =	CHECKED	-	3/15/2024	REVISED	-

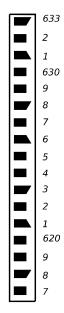
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

 PREFORMED JOINT STRIP SEAL - SIDEWALK
 F.A.U. RTE.
 SECTION
 COUNTY
 TOTAL SHEET SNO.
 SHEET SNO.

 STRUCTURE NO. 016-2601
 1332
 FAU 1332 A 22 BJ
 COOK
 67
 35

 SHEET S-13 OF S-15 SHEETS
 CONTRACT NO. 62 T37





#### STREAM GAUGE DETAIL

#### Notes:

The gauge plates shall be porcelain enameled iron plate graduated in feet and tenths, unnumbered, and  $3^{1/2}$ " wide. Gauge plates shall be WaterMark Style "E" or approved equivalent.

Each individual number plate should be a black numeral on 2" x 3" white porcelain enameled iron plate. Number plates shall be "WaterMark" Style "E" or approved equivalent.

Both the gauge plates and number plates shall be fastened directly to the pier with a  $^{1}\!4$ " diamenter,  $1^{1}\!2$ " long masonry screw with a hex washer head.

Three digit elevations to be installed at the top of the gauge and at every elevation ending with 0. At all of the other whole elevations, place the last digit as shown in the detail.

#### BILL OF MATERIAL

 ITFM	UNIT	TOTAL
11 21-1	0.11.	
Stream Gauge	Each	1

A E G ATLAS ENGINEERING

	USER NAME =	DESIGNED	-	JJI	REVISED	-
G		CHECKED	-	EH	REVISED	-
	PLOT SCALE =	DRAWN	-	SPB	REVISED	-
	PLOT DATE =	CHECKED	-	5/6/2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 STREAM GAUGE STRUCTURE NO. 016-2601 SHEET S-14 OF S-15 SHEETS  
 F.A.U. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS
 SHEETS NO.

 1332
 FAU 1332 A 22 BJ
 COOK
 67
 36

 CONTRACT NO. 62T37

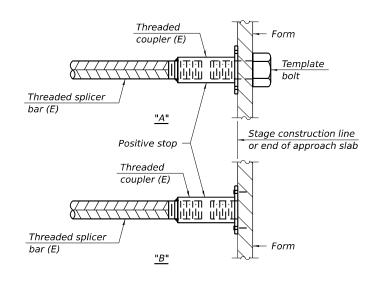
#### STANDARD BAR SPLICER ASSEMBLY PLAN

Only bar splicer assemblies as presented on the approved QPL list may be used.

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

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

Location	Bar	No. assemblies	Minimum
Location	size	required	lap length
W. End of Deck	#5	16	3'-6"
W. Abut. Backwall	#6	8	4'-0"
E. End of Deck	#5	16	3'-6"
E. Abut. Backwall	#6	8	4'-0"

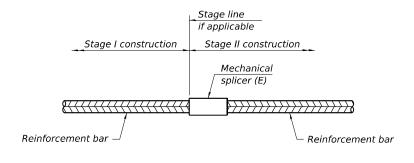


### INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt.

"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



### STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

#### Notes:

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

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

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

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

COUNTY

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CONTRACT NO. 62T37

67 37

BSD-1

5-15-2023

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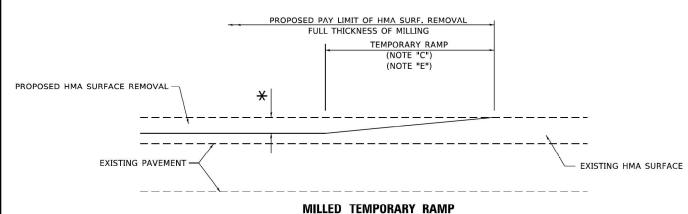
 USER NAME =
 DESIGNED - JJI
 REVISED - RE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 016-2601

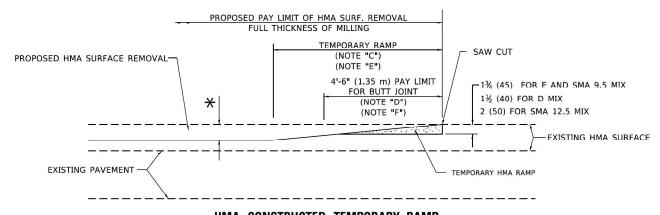
SHEET S-15 OF S-15 SHEETS

FAU. SECTION
1332 FAU 1332 A 22 BJ



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

### OPTION 1

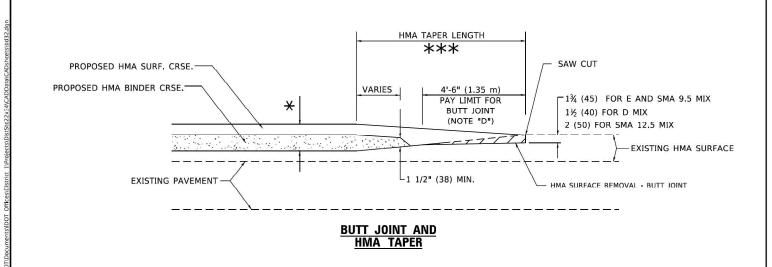


### HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

### OPTION 2

### TYPICAL TEMPORARY RAMP



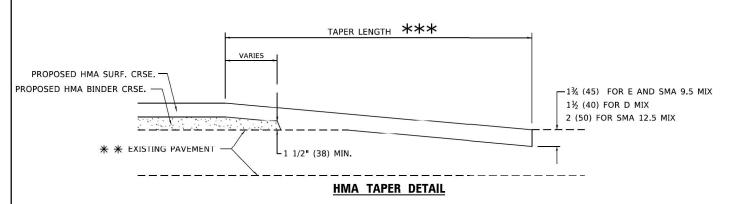
### **TYPICAL BUTT JOINT AND HMA TAPER** FOR MILLING AND RESURFACING

JSER NAME = Lawrence.DeManche DESIGNED - M. DE YONG DRAWN -REVISED - M, GOMEZ 04-06-01 PLOT SCALE = 100,0000 ' / in. CHECKED -REVISED -R. BORO 01-01-07 LOT DATE = 11/18/2022 DATE K. SMITH 11-18-22

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

**BUTT JOINT AND** 1332 FAU 1332 A 22 B.I HMA TAPER DETAILS BD400-05 BD-32 SHEET 1 OF 1 SHEETS STA. TO STA.

PROPOSED HMA OR PCC SURFACE REMOVAL - BUTT JOINT 30'-0" (9.0 m) (NOTE "A") EXISTING HMA OR PCC SURFACE -SAW CUT 15'-0" (4.5 m) (NOTE "B") (NOTE "D") 40'-0" (12.0M) (NOTE "A1") -1¾ (45) FOR E AND SMA 9.5 MIX 1½ (40) FOR D MIX 2 (50) FOR SMA 12.5 MIX \* \* EXISTING PAVEMENT **BUTT JOINT DETAIL** 



### TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

\*\* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

### **GENERAL NOTES**

- A. MAINLINE ARTERIAL ROADWAYS AND MAJOR SIDE ROADS.
- A1. INTERSTATES
- B. MINOR SIDE ROADS.
- C. THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D. THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E. TAPER THE TEMP. RAMP AT A RATE OF 3' 4" (1.02m) PER 1 INCH (25 mm) OF MILLING THICKNESS.
  - igstar SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- F. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

#### **BASIS OF PAYMENT**

- THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL-BUTT JOINT".
- THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT JOINT

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

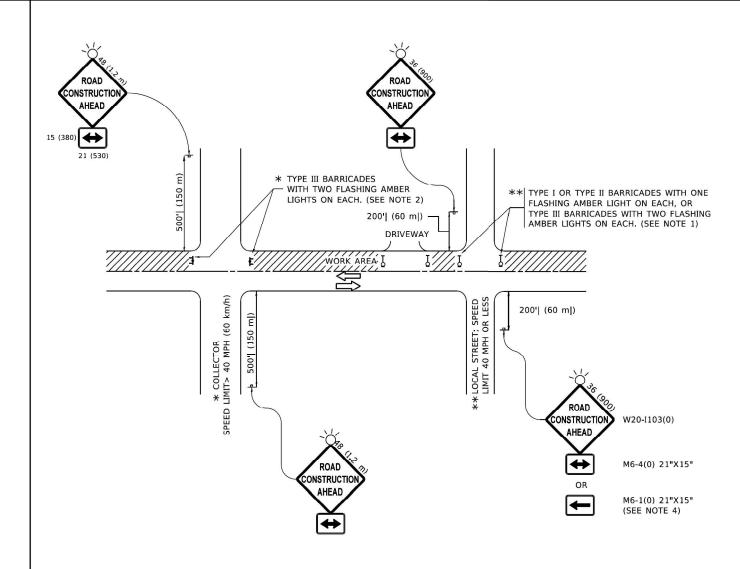
COUNTY

67 38

CONTRACT NO.62T37

COOK

SCALE: NONE



#### 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.
- THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY
  b) 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
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE
  4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL
  BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

SCALE: NONE

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

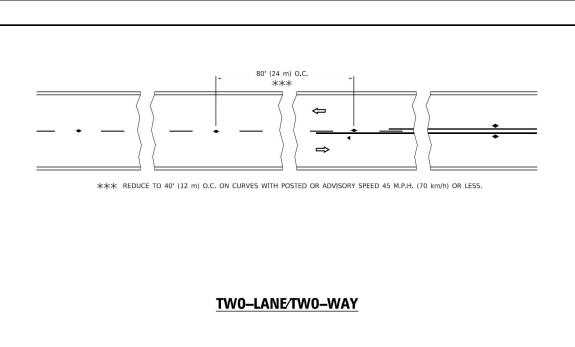
All dimensions are in inches (millimeters) unless otherwise shown.

USER NAME = Lawrence, DeManche	DESIGNED - L.H.A.	REVISED - T. RAMMACHER 01-06-00
	DRAWN -	REVISED - A. SCHUETZE 07-01-13
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED - A. SCHUETZE 09-15-16
PLOT DATE = 5/3/2024	DATE - 06-89	REVISED - D. SENDERAK 05-03-24

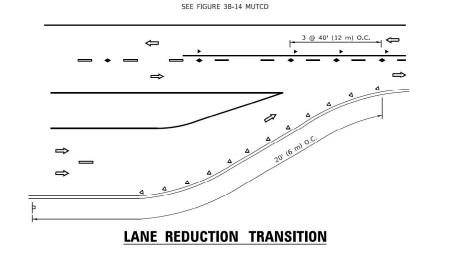
STATE (	OF ILLINOIS
DEPARTMENT O	F TRANSPORTATION

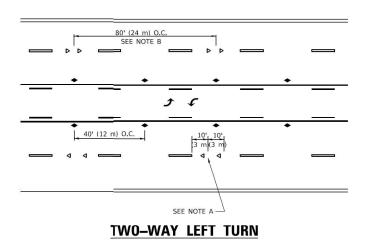
DE RO	ADS	, INTI	ERS	SECTIONS	, AND	TION FOR DRIVEWAYS
SHEET	1	OF	1	SHEETS	STA.	TO STA.

F.A.U. RTE.	SECT	ПОИ		COUNTY	TOTAL SHEETS	SHEET NO.
1332	FAU 1332 A	22 BJ		соок	67	38A
TC-10				CONTRACT	NO. 62	T37
		ILLINOIS	FED. A	ID PROJECT		



SEE NOTE A





**SYMBOLS** 

ONE-WAY AMBER MARKER

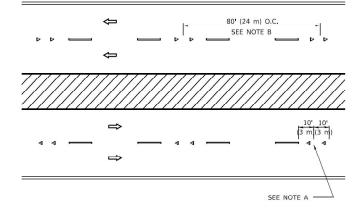
TWO-WAY AMBER MARKER

ONE-WAY CRYSTAL MARKER (W/O)

YELLOW STRIPE

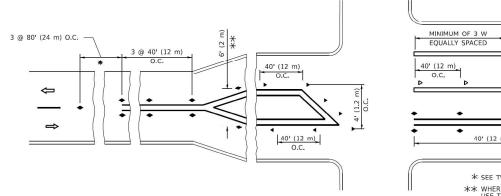
WHITE STRIPE

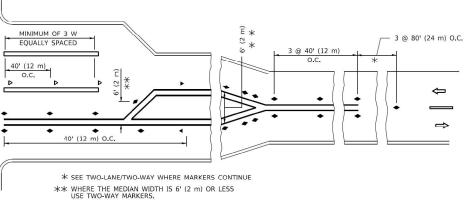
# 80' (24 m) O.C. SEE NOTE B 40' (12 m) O.C. 3 m) (3 m) 4 4



### MULTI-LANE/UNDIVIDED

### MULTI-LANE/DIVIDED





### **TURN LANES**

### **GENERAL NOTES**

- MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- 2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
- MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.
- 4. MARKERS ARE TO BE USED ADJACENT TO BOTH SOLID WHITE LINES IN DUAL LEFT TURN LANES

### LANE MARKER NOTES

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

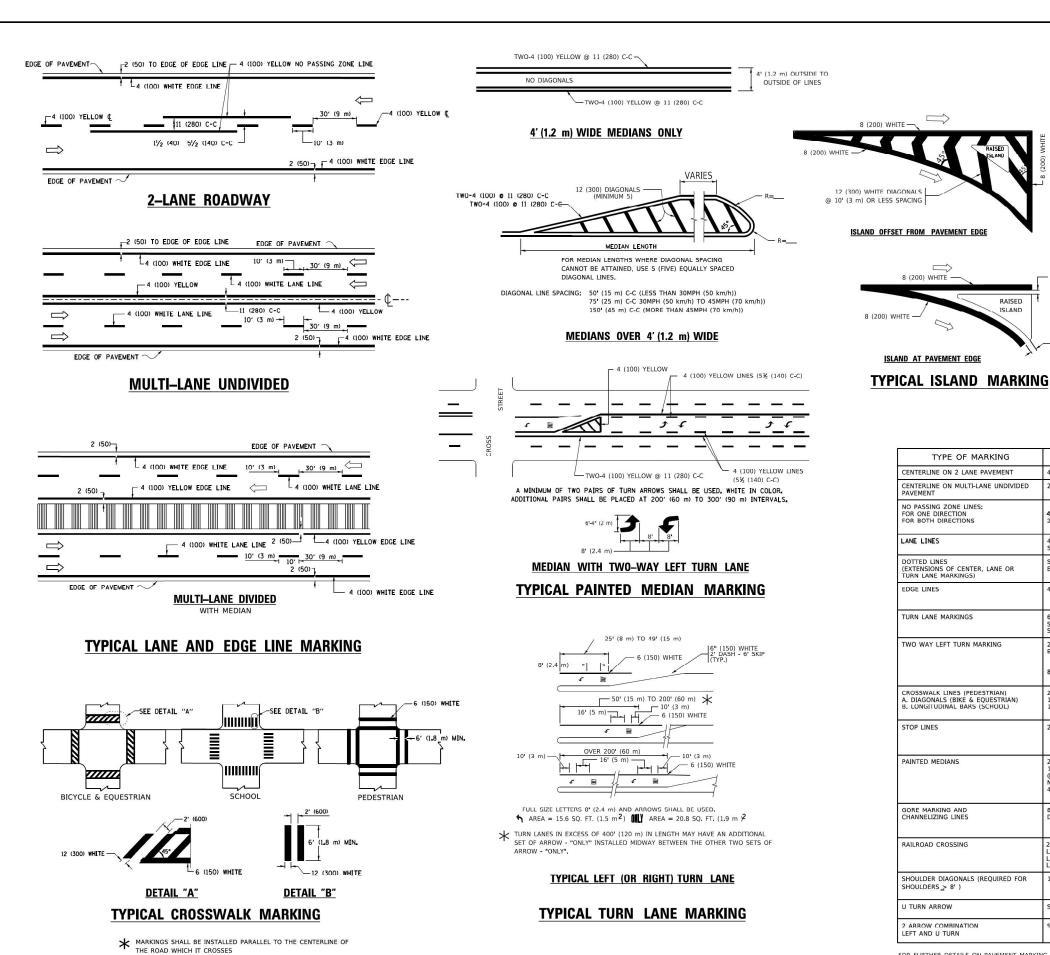
### **DESIGN NOTES**

- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
- MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

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

USER NAME = footemj DESIGNED -REVISED - T. RAMMACHER 03-12-99 SECTION TYPICAL APPLICATIONS STATE OF ILLINOIS DRAWN -REVISED - T. RAMMACHER 01-06-00 1332 FAU 1332 A 22 BJ COOK 67 39 RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT) CHECKED -REVISED - C. JUCIUS 09-09-09 **DEPARTMENT OF TRANSPORTATION** TC-11 CONTRACT NO.62T37 C. JUCIUS 07-01-13 SHEET 1 OF 1 SHEETS STA. PLOT DATE = 3/4/2019 DATE REVISED -

See 2/4/2010 10:20:00 AM I Francisco



D(FT) SPEED LIMIT 345 425 35 45 **COMBINATION** LEFT AND U-TURN 5'-4" (1620) - 32 R (810) LANE REDUCTION TRANSITION \* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

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	5½ (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	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
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 5EE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4" (1.2 m) IN ADVANCE OF AND PARAILEL TO CROSSWAIK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT: PARAILEL 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" IS 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 PEACH "X"=54.0 SQ. FT. (5.0 m P
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

**U-TURN** 

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

SCALE: NONE

RAISED

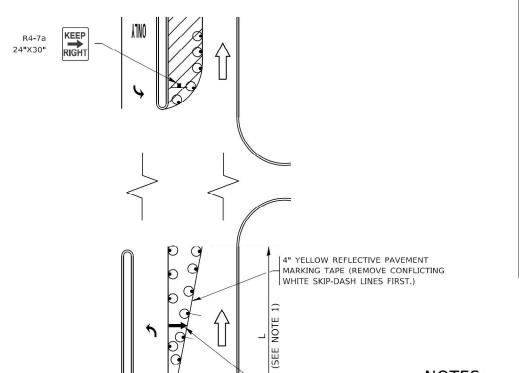
All dimensions are in inches (millimeters) unless otherwise shown.

SECTION DISTRICT ONE 1332 FAU 1332 A 22 BJ COOK 67 40 TYPICAL PAVEMENT MARKINGS TC-13 CONTRACT NO. 62T37 OF 2 SHEETS STA. SHEET 1

USER NAME = footemj	DESIGNED - EVERS	REVISED - C. JUCIUS 09-09-09
	DRAWN -	REVISED - C. JUCIUS 07-01-13
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - C. JUCIUS 12-21-15
PLOT DATE = 3/4/2019	DATE 03-19-90	REVISED C. ILICIUS 04-12-16

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

### TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER



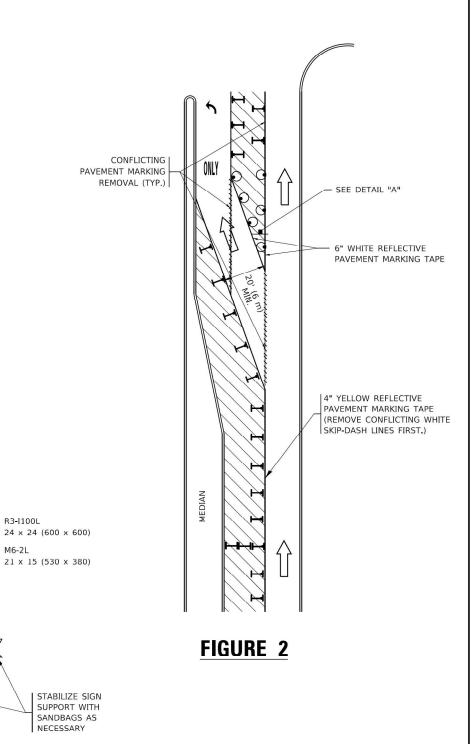
- ARROW BOARD

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

### NOTES:

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

### **TURN BAY ENTRANCE** WITHIN A LANE CLOSURE



### **DETAIL A**

TURN

LANE

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

USER NAME = Tootemj	DESIGNED	-1.	RAMMACHER 09-08-94	REVISED	-	R. BORO 09-14-09
	DRAWN		A. HOUSEH 11-07-95	REVISED	- A	. SCHUETZE 07-01-13
PLOT SCALE = 50,0000 ' / in,	CHECKED	-	A. HOUSEH 10-12-96	REVISED	- A	. SCHUETZE 09-15-16
PLOT DATE = 3/4/2019	DATE	- T.	RAMMACHER 01-06-00	REVISED	-	

FIGURE 1

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

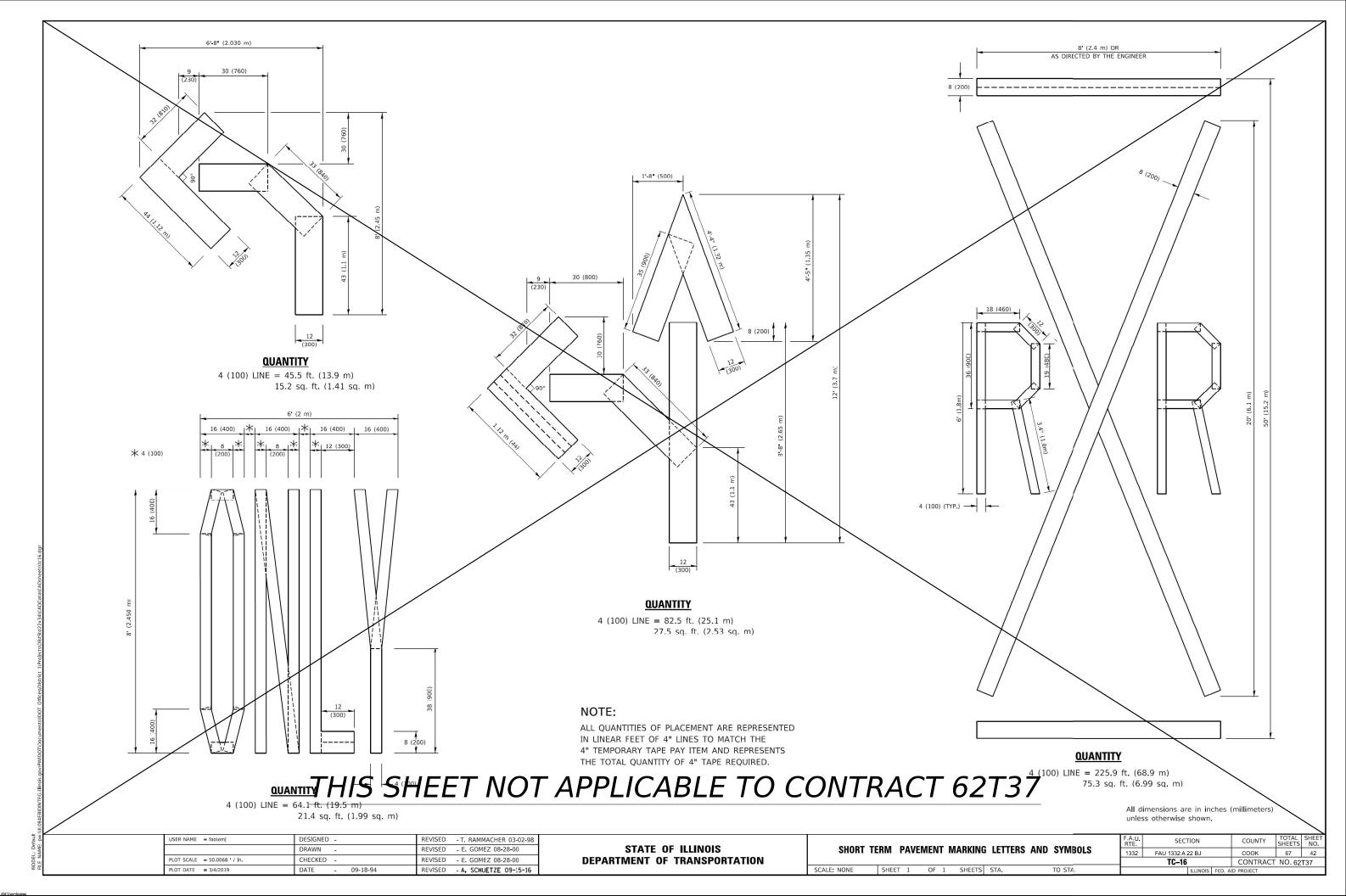
TRAFFIC	CONT	ROL AN	ID PROTE	CTION AT TUR	N BAYS	F.A.U. RTE.	SECTION
	/TO	DEMAI	N ODEN	TO TRAFFIC)		1332	FAU 1332 A 22 BJ
	(10	NLIVIAI	IN OF LIN	IO INALITO			TC-14
	IFFT 1	0.5	1 CHIEFTC	CTA	TO CTA		

SEE DETAIL "A"

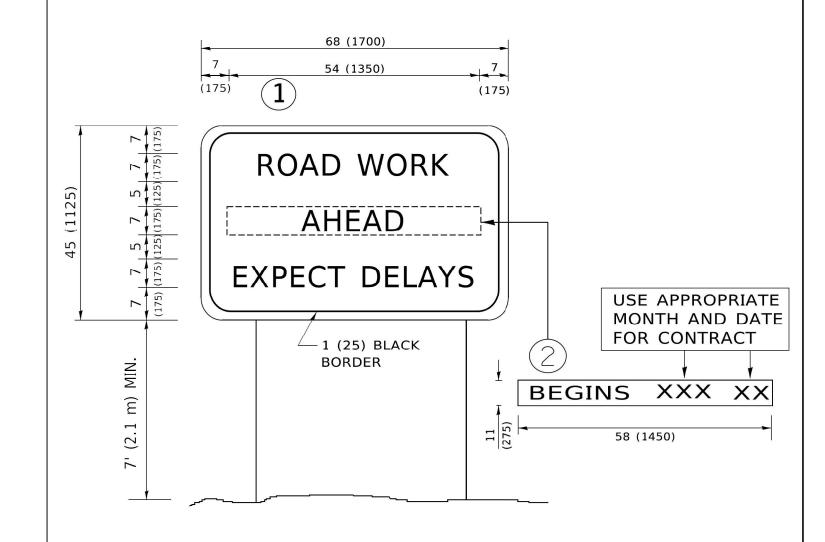
SCALE: NONE

SHEET 1 OF 1 SHEETS STA.

COOK 67 41 CONTRACT NO. 62T37



6 dm 3/4/7019 10-37-35

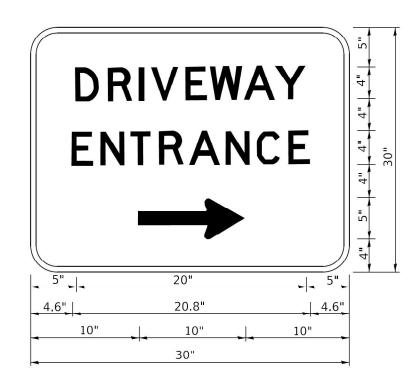


### NOTES:

- 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.

USER NAME = footemj	DESIGNED -	REVISED - R. MIRS 09-15-97			ARTERIAL ROAD		F.A.U.	SECTION	COUNTY	TOTAL	SHEE
	DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS				1332	FAU 1332 A 22 BJ	соок	67	43
PLOT SCALE = 50,0000 ' / in.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION		INFORMATION SIGN		'	TC-22		NO. 62	T37
PLOT DATE = 3/4/2019	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE	SHEET 1 OF 1 SHEETS STA.	TO STA.			. AID PROJECT		



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

### NOTES:

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

USER NAME = leysa DESIGNED - REVISED - C. JUCIUS 02-15-07
DRAWN - REVISED PLOT SCALE = 50.0000 ' / in. CHECKED - REVISED PLOT DATE = 8/6/2021 DATE - REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

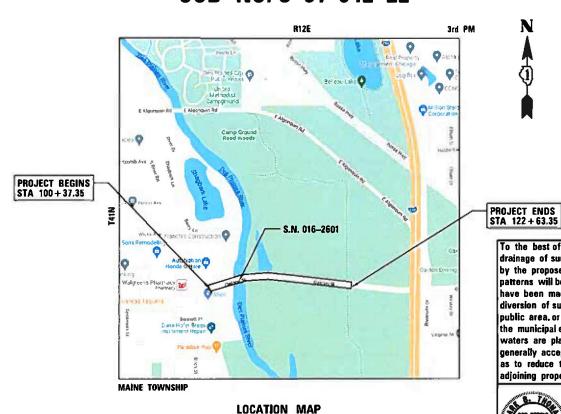
01-20-2023 LETTING ITEM 050

STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

# PROPOSED HIGHWAY PLANS

FAU 1332 (OAKTON STREET) SIDEPATH
S. RIVER ROAD TO DES PLAINES RIVER TRAIL
SECTION 20-00224-00-BT
PROJECT #0E4U(312)
RESURFACING AND SHARED-USE PATH CONSTRUCTION
CITY OF DES PLAINES
COOK COUNTY
JOB NO. C-91-042-22



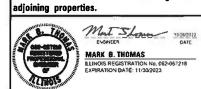
(NOT TO SCALE)

GROSS LENGTH = 2,226 FT. = 0.42 MILE

NET LENGTH = 2,226 FT. = 0.42 MILE

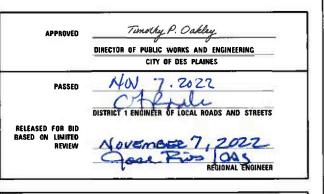
by the proposed development. If any drainage patterns will be changed, reasonable provisions have been made for the collection and diversion of such surface waters into the public area, or drains approved for the use by the municipal engineer, and that such surface waters are planned for in accordance with generally accepted engineering practices so as to reduce the likelihood of damages to

To the best of my knowledge and belief, the drainage of surface waters will not be changed



CHRISTOPHER B. BURKE ENGINEERING. LTD.
9575 W. Higgins Road. Suite 600
Rosemont, Illinois 60018
(847) 823-0500





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR LIST OF APPLICABLE HIGHWAY STANDARDS SEE SHEET 2

THIS PROJECT PASSES THROUGH:

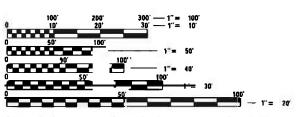
CITY OF DES PLAINES

0

0

TRAFFIC DATA

OAKTON STREET
FUNCTIONAL CLASSIFICATION: MINOR ARTERIAL
ADT = 19,700 VEHICLES PER DAY
40 MPH POSTED SPEED



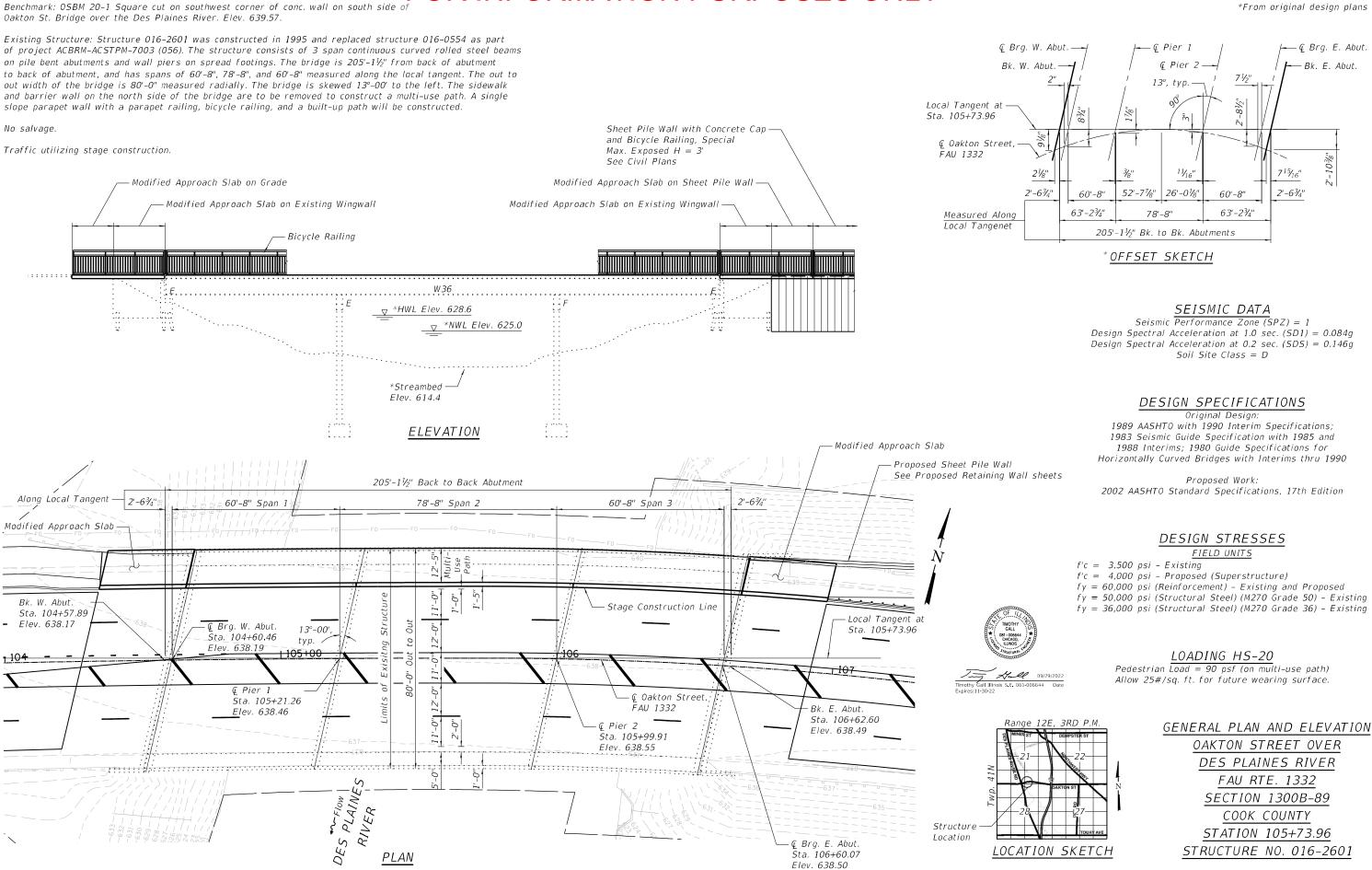
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS THE AROVE SCALES MAY RE USED.

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

CONTRACT NO. 61J19

AT IT CONCENTION TO SOMEON THE MANAGES CONTINUED TO SOMEON THE INTERPRETATIONS OF THE INTERPRETATIONS OFTEN OF THE INTERPRETATIONS OF THE

0



STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

DESIGNED -

DRAWN

DATE

CHECKED

USER NAME = dreilly

PLOT DATE = 11/16/2022

CMS

CMS

TCG

11/2/2022

REVISED

REVISED

REVISED

REVISED

SECTION

20-00224-00-BT

OAKTON STREET OVER THE DES PLAINES RIVER

**GENERAL PLAN AND ELEVATION** 

SHEET 1 OF 10 SHEETS STA.

SCALE: N.T.S.

COUNTY

COOK 89 39

CONTRACT NO. 61J19

INDEX OF SHEETS

General Data

Approach Slabs

Railing Details

5-2

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S-5

5-6

S-7

5-8

5-9

General Plan and Elevation

Stage Construction Details

Superstrúcture Details

Approach Slab Details

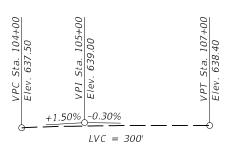
Temporary Concrete Barrier Details

Preformed Joint Strip Seal Details 1

S-10 Preformed Joint Strip Seal Details 2

### GENERAL NOTES

- 1. Reinforcement bars designated (E) shall be epoxy coated.
- 2. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.
- 3. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid



\* PROFILE GRADE

### \* CURVE DATA

P.T. Sta. = 105+73.96

P.I. Sta. = 104+44.13 $\Delta = 1^{\circ} - 41' - 14.4''$  $D = 0^{\circ}-38'-59''$ R = 8,819.63T = 129.88' $L = 259.73^{\circ}$ E = 0.96'S.E. = 0.032'/'S.E. Transition Limits = Sta. 102+64 to Sta. 104+39 Full S.E. = Sta. 104+39 to Sta. 105+73.96 P.C. Sta. = 103+14.25

### \* CURVE DATA

 $\overline{P.I. Sta.} = 108+26.39$  $\Delta = 20^{\circ} - 52' - 11''$  $D = 4^{\circ}-10'-50''$ R = 1,370.55'T = 252.41'L = 499.22'E = 23.05'S.E. = 0.032'/'Full S.E. = Sta. 105+73.96 to Sta 110+50 S.E. Transition Limits = Sta. 110+50 to Sta. 111+90.20 P.C. Sta. = 105+73.96P.T. Sta. = 110+73.20

\*From original design plans

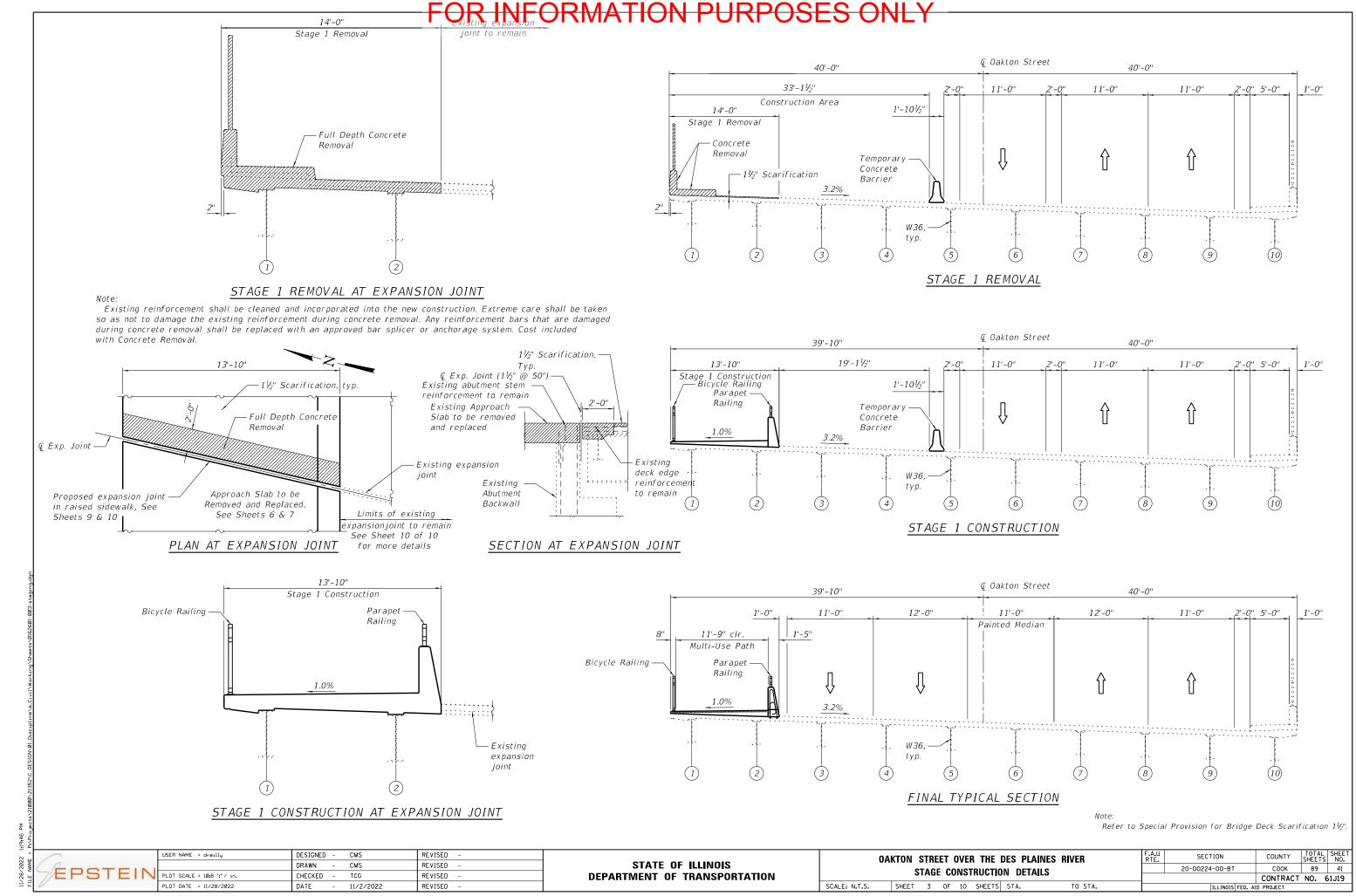
# EPSTEIN

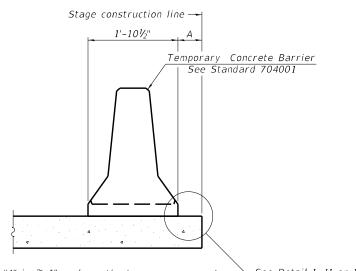
	USER NAME = dreilly	DESIGNED	-	CMS	REVISED	-
į,		DRAWN	-	CMS	REVISED	=
J	PLOT SCALE = 32.0000 '/ in.	CHECKED	-	TCG	REVISED	=
	PLOT DATE = 11/22/2022	DATE	-	11/2/2022	REVISED	=

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

ITEM	UNIT	SUPER	SUB	TOTAL
Welded Wire Reinforcement	Sq Yd	269		269
Concrete Removal	Cu Yd	48.2		48.2
Bridge Rail Removal	Foot	199		199
Concrete Superstructure	Cu Yd	88.0		88.0
Protective Coat	Sq Yd	587		587
Concrete Superstructure (Approach Slab)	Cu Yd	45.2		45.2
Reinforcement Bars, Epoxy Coated	Pound	19,680		19,680
Preformed Joint Strip Seal	Foot	25		25
Approach Slab Removal	Sq Yd	88		88
Bridge Deck Scarification 1 1/2"	Sq Yd	304		304
Bicycle Railing	Foot	264		264
Parapet Railing	Foot	264		264

TOTAL BILL OF MATERIAL





— See Detail I, II or III When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

 Stage removal line — Stage removal line 1'-101/2" 1'-101/2" Temporary Concrete Barrier See Standard 704001 6" min. min. Drill 3-11/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

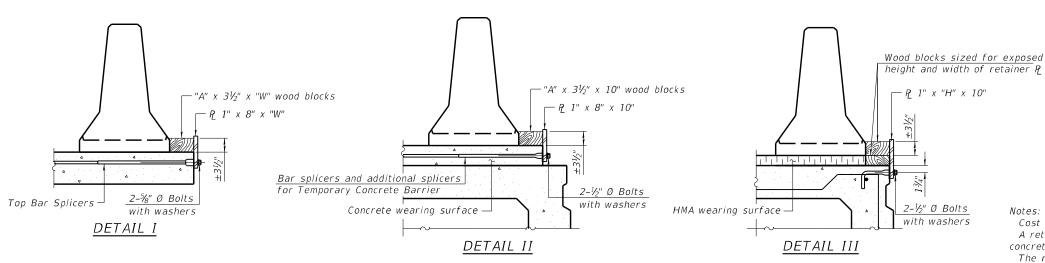
\* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

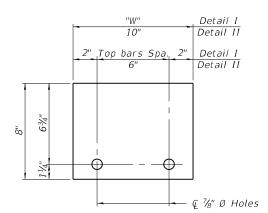
EXISTING DECK BEAM

### NEW SLAB OR NEW DECK BEAM

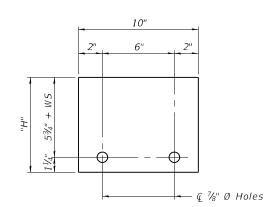
### SECTIONS THRU SLAB OR DECK BEAM

EXISTING SLAB





R-27 10-12-2021



STEEL RETAINER P 1" x "H" x 10" (Detail III)

RESTRAINING PIN

### BAR SPLICER FOR #4 BAR - DETAIL III

Cost of retainer assembly is included with Temporary Concrete Barrier. A retainer assembly shall be located at the approximate Q of each temporary concrete barrier.

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

1x8 UNC

US Std. 11/16" I.D. x 21/2" O.D. x approx. 8 gauge thick washer

When the 'A' dimension is less than  $1\frac{1}{2}$ ", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

- Detail I Installation for a new bridge deck or bridge slab.
- Detail II Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
- Detail III Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

### RAILING CRITERIA

STEEL RETAINER P 1" x 8" x "W" NCHRP 350 Test Level (Detail I and II) Railing Weight (plf) 440

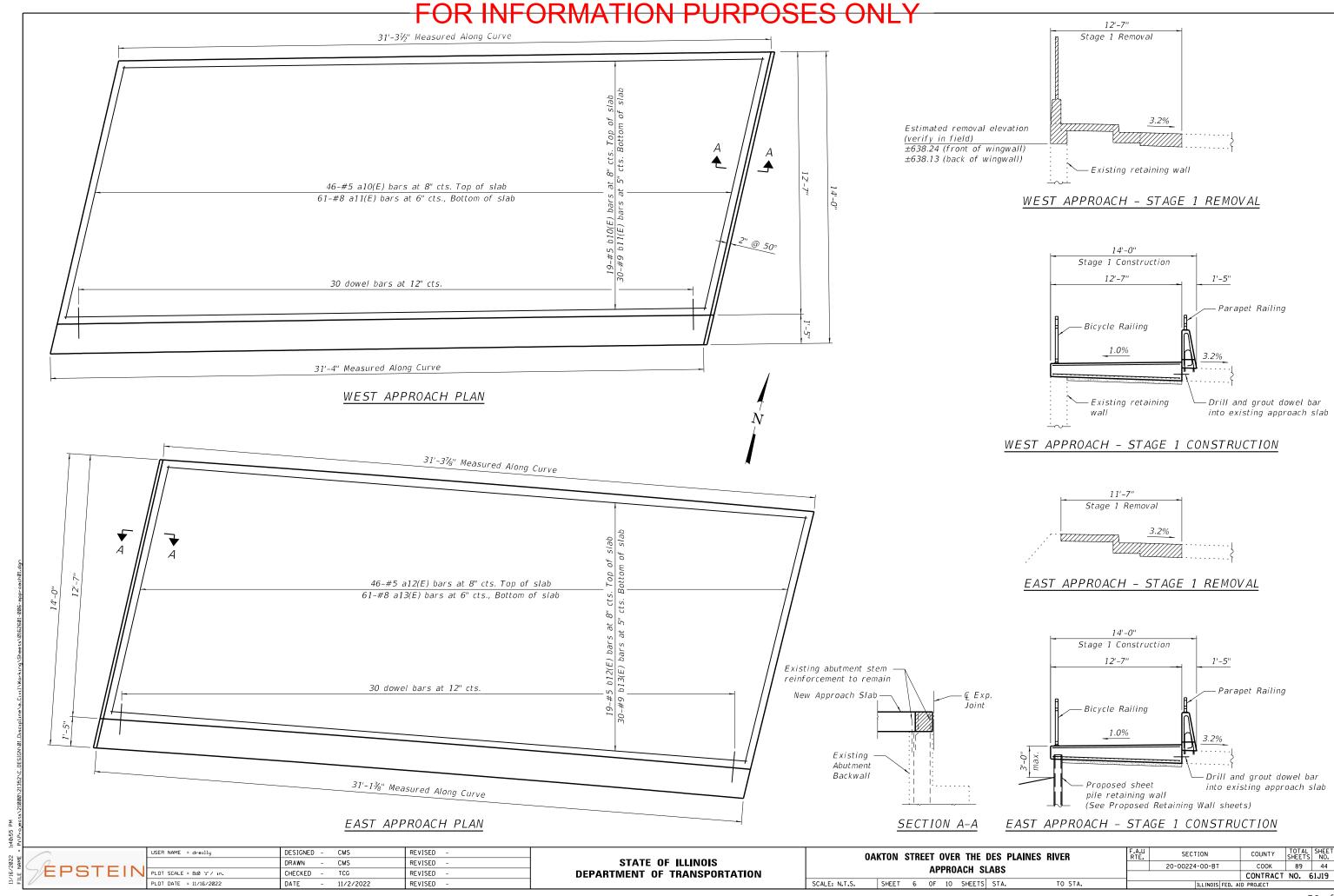
USER NAME = dreilly DESIGNED - CMS REVISED DRAWN - CMS REVISED CHECKED -TCG REVISED PLOT DATE = 11/16/2022 DATE 11/2/2022 REVISED

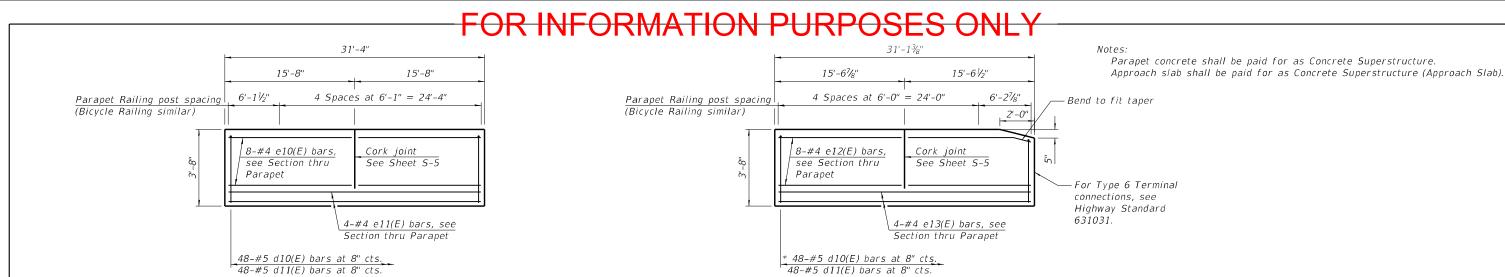
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

OAKTON STREET OVER THE DES PLAINES RIVER TEMPORARY CONCRETE BARRIER DETAILS SCALE: N.T.S. SHEET 4 OF 10 SHEETS STA.

SECTION COUNTY 20-00224-00-BT COOK 89 42 CONTRACT NO. 61J19

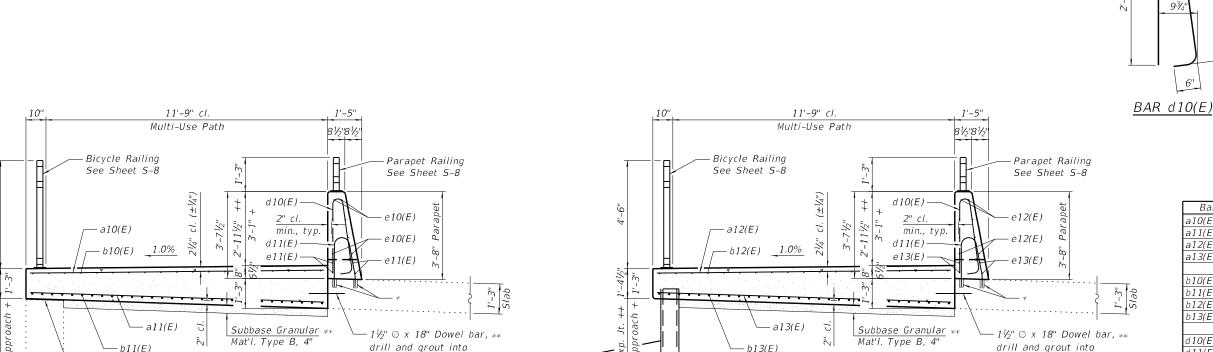
#### FOR INFORMATION PURPOSES ONLY 20 Spaces at $9'-6\frac{1}{2}" = 190'-10"$ 9'-63/8" Parapet Railing post spacing 201'-27/8" end to end parapet G Pier 2 - @ Pier 1 (Bicycle Railing 17'-3¾" 2 Panels at $17'-3\frac{1}{2}''$ long = 34'-7'19'-81/2" 19'-8¾" 19'-81/2" 17'-03/4" similar) 9'-9" 9'-9" 9'-9" 9'-9" 2 Panels at 17'-1'' long = 34'-2''8-#4 e1(E) bars, 8-#4 e1(E) bars 8-#4 e1(E) bars, 8-#4 e1(E) bars, Cork joint (typ. between see Section thru see Section thru see Section thru panels except at See Section thru aluminum joints) Parapet Parapet Parapet Parapet 8-#4 e(E) bars, <sup>|</sup> 8-#4 e(E) bars, 8-#4 e2(E) bars <sup>|</sup>8-#4 e2(E) bars 8-#4 e2(E) bars 8-#4 e3(E) bars, 8-#4 e4(E) bars, see Section thru Parapet Parapet Parapet Parapet Parapet Parapet Parapet 2" @ 50° 4-#4 e1(E) bars, 4-#4 e1(E) bars, 4-#4 e1(E) bars, 4-#4 e1(E) bars, $4 \times 2 - \# 4 \ e5(E) \ bars,$ 4 x 3-#4 e6(E) bars, 4 x 2-#4 e7(E) bars, see Section thru Parapet see Section thru see Section thru see Section thru Parapet see Section thru see Section thru see Section thru Parapet Parapet Parapet Parapet Parapet 1¾" @ 50° 302-#5 d(E) bars at 8" cts. 1/8" Aluminum sheet 1/8" Aluminum sheet 302-#5 d1(E) bars at 8" cts. joints in parapet joints in parapet INSIDE ELEVATION OF PARAPET Polyurethane sealant MINIMUM BAR LAP $#4 \ bar = 2'-5''$ %" Ø Backer rod-1/3" Preformed self-expanding cork joint filler 11'-9" clr Multi-Use Path 81/3" 81/3" Const. jt. PARAPET JOINT DETAILS Parapet Railing (mandatory) Bicycle Railing See Sheet S-8 See Sheet S-8 The $\frac{1}{8}$ " Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure. The Polyurethane Sealant shall be according to Article 1050.04 e(E) thru of the Std. Spec. and the color shall be gray. | e4(E) *SUPERSTRUCTURE* min., typ. BILL OF MATERIAL e(E) thru d(E)e4(E) Bar No. Size Length Shape d1(E)-6x6-W2.9xW2.9 302 #5 7'-0" e1(E) or d1(E) 302 #5 4'-7" e5(E) thru e7(E) 48 #4 9'-5" 41/8" e5(E) thru 1'-01/8" 24 #4 19'-4" Rad. e7(E) 16 #4 8 #4 16'-8" e5(E) 8 #4 27'-0" 21'-3" 12 #4 e6(E) | e7(E) #4 26'-8" Existing expansion joint to remain 93/4" Reinforcement Bars, Lbs. 5,260 \* Core and set #5 d1(E) bar according to Article 509.06 Epoxy Coated Notes. of the Standard Specifications. Cored holes shall be Welded Wire See Sheets S-9 and S-10 for Preformed Joint Strip Seal. 269 Sq. Yds. roughened or scored per manufacturer's recommendations. Reinforcement See Sheet S-10 for Section Thru Multi-Use Path at joint. Maximum depth of hole shall not exceed 6". Concrete Cu. Yds. 78.5 10¾" Superstructure Bars indicated thus 1 x 2-#4 etc. indicates $BAR \ d(E)$ SECTION THRU MULTI-USE PATH AND PARAPET BAR d1(E)1 line of bars with 2 lengths per line. USER NAME = dreilly DESIGNED - CMS REVISED SECTION COUNTY OAKTON STREET OVER THE DES PLAINES RIVER STATE OF ILLINOIS DRAWN - CMS REVISED 20-00224-00-BT COOK 89 43 SUPERSTRUCTURE DETAILS CHECKED -TCG REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 61J19 SCALE: N.T.S. SHEET 5 OF 10 SHEETS STA. TO STA. PLOT DATE = 11/16/2022 DATE 11/2/2022 REVISED





### INSIDE ELEVATION OF EAST PARAPET

\* Cut last 3 bars to fit taper



SECTION THRU WEST APPROACH MULTI-USE PATH AND PARAPET

1/2" Preformed Expansion Joint Filler \*\* according to Article 1051.09 of the

Standard Specifications

INSIDE ELEVATION OF WEST PARAPET

\* Core and set #5 d11(E) bar according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6".

existing approach slab

SECTION THRU EAST APPROACH
MULTI-USE PATH AND PARAPET

Proposed sheet pile retaining wall

existing approach slab

# TWO APPROACHES BILL OF MATERIAL

1'-01/8"

10¾"

BAR d11(E)

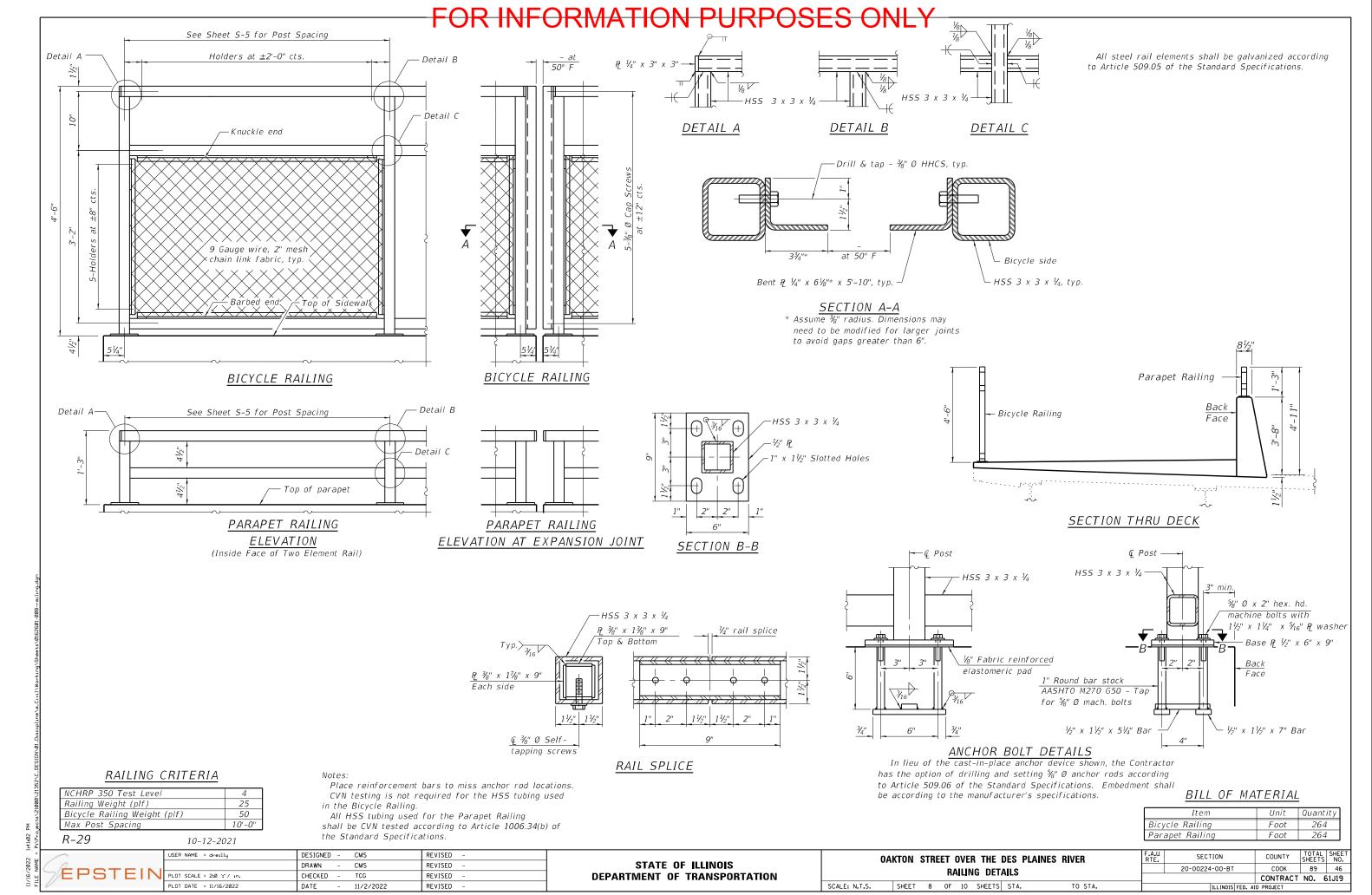
Bar	No.	Size	Length	Shape
a10(E)	46	#5	12'-7"	
a11(E)	61	#8	12'-7"	
a12(E)	46	#5	12'-4"	
a13(E)	61	#8	12'-4"	
b10(E)	19	#5	30'-11"	
b11(E)	30	#9	30'-11"	
b12(E)	19	#5	30'-9"	
b13(E)	30	#9	30'-9"	
d10(E)	96	#5	7'-0"	[]
d11(E)	96	#5	4'-7"	N
e10(E)	16	#4	15'-4"	
e11(E)	4	#4	31'-0"	
e12(E)	16	#4	15'-2"	
e13(E)	4	#4	30'-9"	
Concrete	Superstr	ucture	Cu. Yds.	8.9
Concrete	Superstr	ucture	Cu. Yds.	45.2
(Approach	ı Slab)		cu. Tus.	45.2
Reinforce	ment Bai	´S,	Lbs.	14,420
Ероху Со	ated		LUS.	14,420

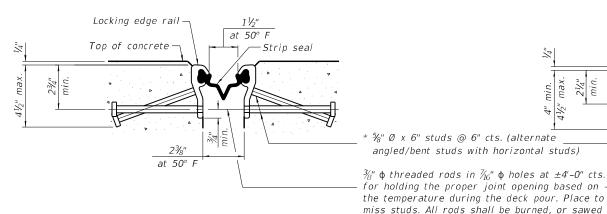
USER NAME = dreilly DESIGNED - CMS REVISED SECTION COUNTY OAKTON STREET OVER THE DES PLAINES RIVER STATE OF ILLINOIS DRAWN CMS REVISED 20-00224-00-BT COOK 89 45 EPSTEIN APPROACH SLAB DETAILS CHECKED TCG REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 61J19 SCALE: N.T.S. SHEET 7 OF 10 SHEETS STA. TO STA. PLOT DATE = 11/16/2022 DATE REVISED 11/2/2022

Existing

retaining wall

<sup>\*\*</sup> Cost included with Concrete Superstructure (Approach Slab).





Locking edge rail

Top of concrete

\*  $\frac{1}{2}$ \*  $\frac{1}$ 

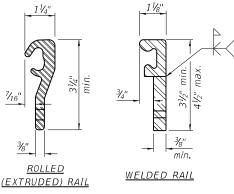
SHOWING WELDED RAIL JOINT

SHOWING ROLLED RAIL JOINT

### SECTION THRU JOINT

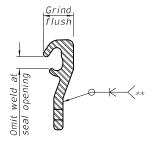
\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

off flush with the plates after concrete is set.



### LOCKING EDGE RAILS

\*\* Back gouge not required if complete joint penetration is verified by mock-up.



### LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar. Notes:

The strip seal shall be made continuous and shall have a minimum thickness of  $\frac{1}{4}$ ". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be  $\frac{3}{16}$ " and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.

Cost of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.

39" constant slope barrier shown, 44" constant slope barrier similar as noted.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

The sliding plates and other structural shapes shall be fabricated to satisfy shop drawing details and conform to the configuration of the concrete barrier or sidewalk. The fabrication shall be according to Articles 505.04 through 505.10.

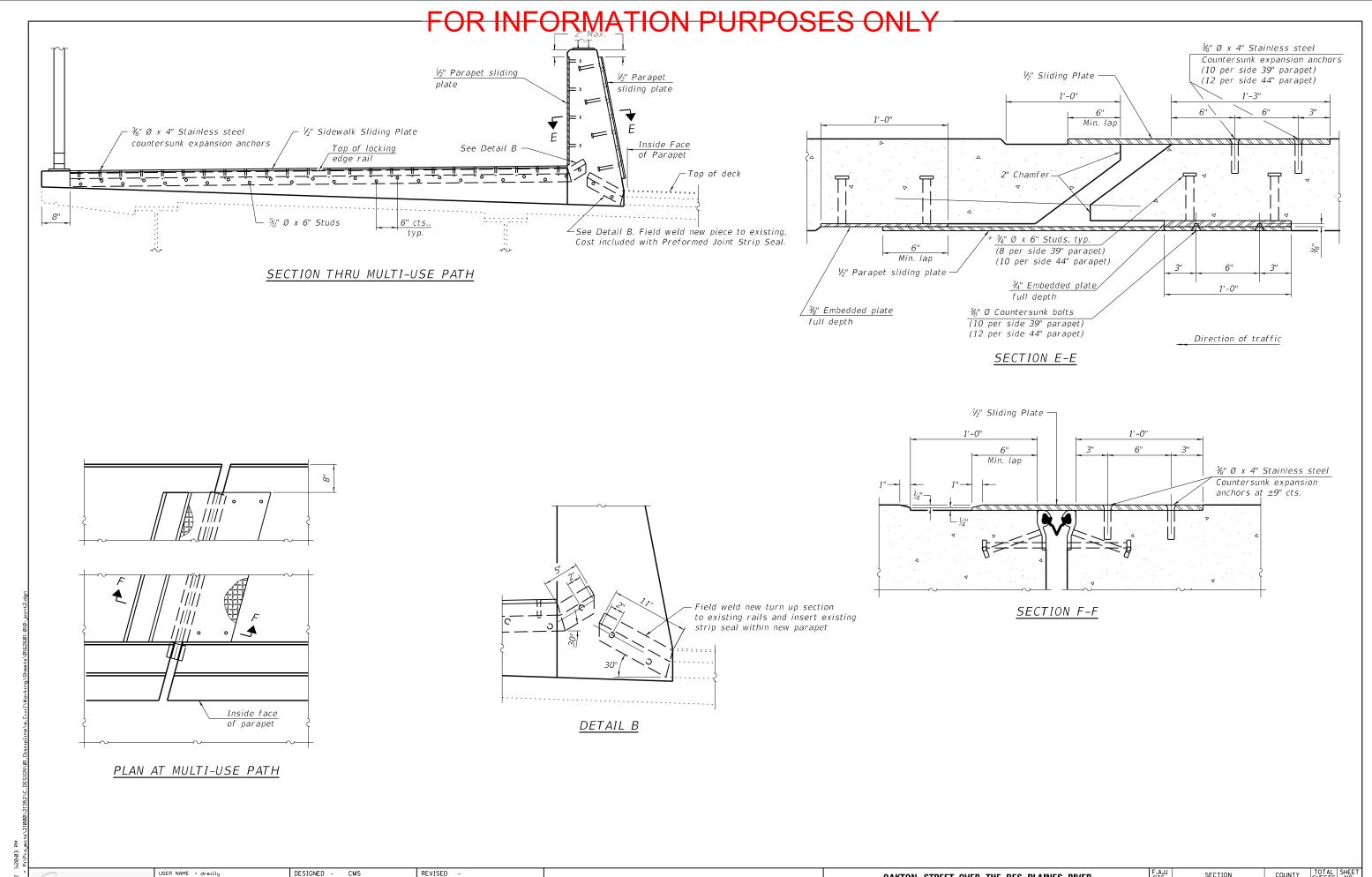
#### BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	25

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OAKTON STREET OVER THE DES PLAINES RIVER
PREFORMED JOINT STRIP SEAL DETAILS 1

SCALE: N.T.S. SHEET 9 OF 10 SHEETS STA. TO STA



EPSTEIN

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OAKTON STREET OVER THE DES PLAINES RIVER
PREFORMED JOINT STRIP SEAL DETAILS 2

SCALE: N.T.S. SHEET 10 OF 10 SHEETS STA. TO STA.

### **DEPARTMENT OF TRANSPORTATION**

**DIVISION OF HIGHWAYS** 

FOR INDEX OF SHEETS, SEE SHEET NO. 2

# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

F.A.U. 1332 (OAKTON STREET) & F.A.U. 2710 (DES PLAINES RIVER ROAD) OVER DESPLAINES RIVER **SECTION 1300B-89** PROJECT RCBRM-RCSTPM-7003 (056) STRUCTURE REPLACEMENT, PAVEMENT REPLACEMENT AND RESURFACING

> COOK COUNTY C-91-239-89

MUNICIPALITY INVOLVED CITY OF DES PLAINES AND PARK RIDGE

DESIGN DESIGNATION 28,000(05) URBAN MINOR ARTERIAL (8-20)

TRAFFIC DATA 26,854

RULL SIZE PLANS HAVE BEEN PREPARED USIK'S STANDARD

MEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS IN REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

**CONTRACT NO. 80455** 

RANGE 12 EAST IMPROVEMENT BEGINS (ALGONQUIN ROAD)
STATION 193 + 00.00 STATION EQUATION:
STATION 210+00.00 BACK
=STATION 10+00.00 AHEAD IMPROVEMENT BEGINS (OAKTON STREET) IMPROVEMENT BEGINS (DES PLAINES RIVER ROAD) ALGONQUIN WOODS PRESERVE IMPROVEMENT ENDS (OAKTON STREET)
STATION 138 + 90.00 IMPROVEMENT ENDS (ALGONQUIN ROAD)
STATION 26 + 20.00

- GROSS LENGTH OF IMPROVEMENT = 4430.00 FEET = 0.8390 MILES OAKTON STREET - NET LENGTH OF IMPROVEMENT = 44 30.00 FEET = 0.8390 MILES DES PLAINES RIVER RD. - GROSS LENGTH OF IMPROVEMENT = 1124.00 FEET = 0.2129 MILES DES PLAINES RIVER RD. - NET LENGTH OF IMPROVEMENT = 1124.00 FEET = 0.2129 MILES - GROSS LENGTH OF IMPROVEMENT = 3320.00 FEET = 0.6288 MILES ALGONQUIN ROAD - NET LENGTH OF IMPROVEMENT = 3320.00 FEET = 0.6288 MILES

LOCATION MAP 0.5 MILE

| NAU | SECTION | COUNTY | TOTAL | SECTION | COUNTY | COU

D- 91 - 239-89

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FOR UNDERGOUND UTILITY LOCATION CALL JULIE: TOLL FREE 1-800-892-0;23

COOK COUNTY SECTION 1300 B-89 F.A.U. RTE. 1332

В

Project Site-

SECTION 1300B-89 INCLUDES A THREE SPAN WIDE FLANGED CONCRETE DECK STRUCTURE

CARRYING OAKTON ST. OVER DESPLAINES RIVER ON R.C. ABUTMENTS AND PIERS ON PILES FOR STRUCTURE NUMBER 016-2601.
WORK ALSO INCLUDES THE APPROACH
PAVEMENTS AND THEIR APPURTENANCE FOR OAKTON STREET.
WORK ALSO INCLUDES RESURFACING OF

DES PLAINES RIVER ROAD RESURFACING AND WIDENING OF ALGONQUIN ROAD AND MODERNIZING THE TRAFFIC SIGNAL

IMPROVEMENT ENDS (DES PLAINES RIVER ROAD)

STATION 94 + 60.00

STATION 55+69.00

STATION 44 + 45.00

В

D

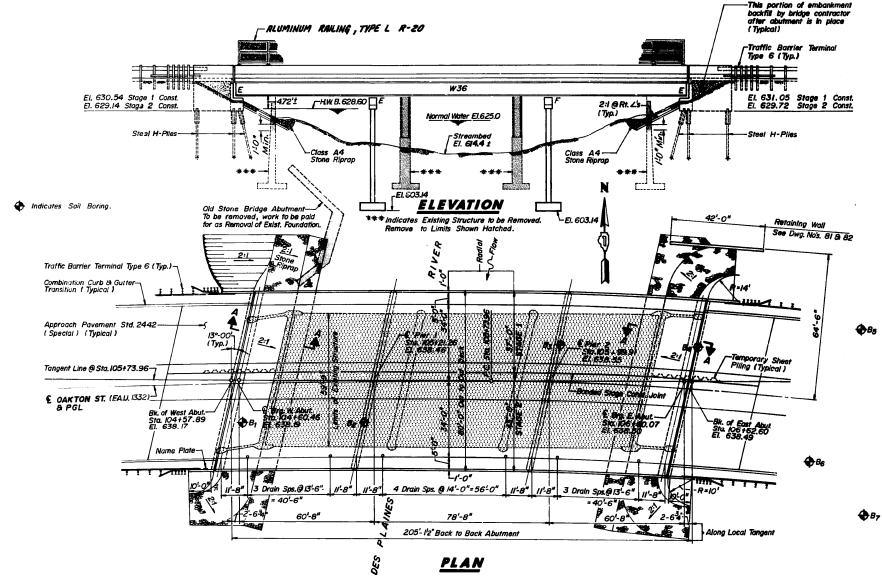
55 of 67

### B.M. MSD #322 Located 75' South of the S.W. Corner of Existing Oakton Street Bridge. Elev. 634,83

Existing Structure: 3 Simple Span Concrete T-Beam Bridge on Closed Abutments and Concrete Piers. Built in 1930. Structure No. 016-0554.

Traffic to be Maintained Utilizing Stage Construction

No Salvage.



### HORIZONTAL CURVE DATA

PC. Sta. 103+14.25 P.C. Sta. 105+73.96 P.I. Sta. 104+44.13 PL Sta 108+26.39 P.T. Sta. 105+73.96 P.T. Sta. 110+73, 20 Δ = 1°-41'-14.4" Δ = 20°-52'-11" D = 0°-38'-59" D = 4°-10'-50" R = 8819.63' R = 1370.55'

L = 259.73' L = 499.22' E = 0.96' E = 23.05' T = 129.88 T = 252.41' S.E.= 0.032 1/1 S.E.= 0.032 %

Overtopping

Max. Calc.

S.E. Transition = Sta. 102+64 Full S.E. = Sta. 105+73.96 to Sta. 104+39 S.E. Transition = Sta. 110+50 to Sta. 111+90.20 Full S.E.= Sta. 109 + 73.96 to Sta. 110+50 Full S.E. = Sta. 104+39 to Sta. 105+73.96

JS

RCE

RAAK

EMM

DESIGNED

CHECKED

CHECKED

DRAWN

### P.I. Sta. 105+00 Elev. 639.00 -0.3% 100' 200' L.V.C. = 300' PROFILE GRADE OAKTON STREET (FAU 1332) (Along & Roadway)

### DESIGN SPECIFICATIONS

1989 AASHTO with 1990 Interim Specifications.
1983 Selsmic Guide Specification with 1985 and 1988 Interims. 1980 Guide Specifications for Harizontally Curved Bridges with Interims thru 1990. <u>LOADING HS 20-44</u>

Allow 25 /sq.ft. for future wearing surface

### DESIGN STRESSES

FIELD UNITS

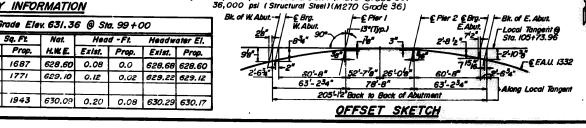
f'c = 3,500 psi fy = 60,000 psi (Reinf.)

= 50,000 psi (Structural Steel ) (M270 Grade 50)

Drainage Area = 405 Sq. Mi. Low Grade Elev. 631.36 @ Sta. 99+00 Opening Sq. Ft. Nat. Head - Ft. Headwater El. Flood C.F.S. Exist. Prop. H.W.E. Exist. Prop. Exist. Prop. Design 50 5040 1596 1687 628.60 0.08 0.0 628.68 628.60 Base 100 1668 1771 629.10 0.12 0.02 629.22 629.12

500 6480 1814

WATERWAY INFORMATION



### GENERAL NOTES:

Fasteners shall be high strength boits. Boits 78 #, open holes 1516 #, unless otherwise noted. Calculated weight of Structural Steel = M270 GR.36 - 46760 # The Zinc-silicate and vinyl paint system shall be used for shop and field painting of structural steel except where otherwise naded. The color of the vinyl finish coat shall be Munsell No. 2.5 YR 3/4. Reddish brown for fascla beams and Munsell No. 10Y 7/1 Light grey for interior beams.

Field welding of construction accessories will not be permitted to the bottom flonge of beams nor to the top flonge for a distance equal to ane-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

The main load carrying member components subject to tensile stress shall conform to the supplemental requirements for Notch Toughness Zone 2. These components are the wide flange beam diaphragms and all splice plate material except fill plates. Reinforcement bars shall conform to the requirements of AASHT M-31, M-42 or M-53 Grade 60.

Layout of slope protection system may be varied in the field suit ground conditions as directed by the Engineer. Anchor bolts shall be set before bolting diaphragms over support

Bearing seat surface shall be constructed or adjusted to the elevations within a tolerance of 8 Inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 8" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type 1 Elastomeric Bearings, shims of the dimensions of top plate shall be provided and placed as detailed.

The contractor shall drive one steel HP IO x 42 test pile in a permanent location at each abutment as directed by the Engineer before ordering the remainder of piles.

Unless specified or noted, all utilities that need to be relocated will be done by and at the expense of the utility companies. All utilities will have to reapply for attachment permits. No utilities are to be encased in the

ROUTE NO.	SECTION	COUNTY	TOTAL SHEET	SHEET N
FAU. 1332	i300B-89	соок	128	79
FED.ROAD	DIST. NO. I	ILLINOIS	FED. AID PRO	JECT

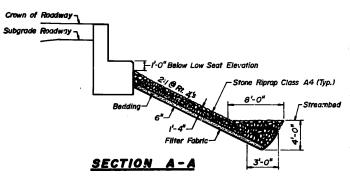
SHEET NO. S-I OF 21 SHEETS

### TOTAL BILL OF MATERIAL

UNIT	SUB	SUPER	TOTAL
Each	_	6	6
L. Sum	_	_	1
Cu Yd.	268	_	268
Lin.Ft.	-	85	85
Lin.Ft.	_	85	85
Cu. Yd.	-	499.5	499.5
Sq.Yd.		1877	1877
Each	-	20	20
Each	_	10	10
Cu.Yd.	546.4	_	546.4
L. Sum		1	1
Each	1	594 <i>0</i>	5940
Pound	47 880	121 480	169 360
Lin.Ft.	1728	-	1728
Each	2		2
Sq. Ft.	II 92		1192
Cu.Yd.	672		672
Each	2	_	2
Each	2	_	2
Each	_	1	1
Sq. Yd	802	_	802
Sq. Ft.	466		466
Sq.Yd.		1478	1478
Lin.Ft.		398	398
Sq. Yd.	802	_	802
Each	176	738	914
Cu.Yd.	134.5		134.5
	Each L. Sum Cu Yd. Lin.Ft. Cu. Yd. Sq.Yd. Each Cu.Yd. L. Sum Each Cu.Yd. L. Sum Each Pound Lin.Ft. Each Sq. Ft. Cu.Yd. Each Sq. Ft. Cu.Yd. Lach Each Sq. Yd. Lin.Ft. Sq. Yd. Each Sq. Yd. Lin.Ft. Sq. Yd. Each	Each —  L. Sum —  Cu Yd. 268  Lin.Fr. —  Cu. Yd. —  Sq.Yd. —  Each —  Each —  Cu.Yd. 546.4  L. Sum —  Each 2  Sq.Fr. 1192  Cu.Yd. 672  Each 2  Each 2  Sq.Yd. 672  Each 2  Sq.Yd. 672  Each 2  Sq.Yd. 672  Each 2  Each 3  Sq.Yd. 672  Each 3  Sq.Yd. 672	Each — 6  L. Sum — — 6  L. Sum — 6  Lin.Ft. — 85  Lin.Ft. — 85  Cu. Yd. — 499.5  Sq.Yd. — 1877  Each — 20  Each — 10  Cu.Yd. 546.4 — 1  Each — 594.0  Pound 47880 121480  Lin.Ft. 1728 — 594.0  Each 2 — 594.0  Each 2 — 10  Cu.Yd. 672 — 12  Each 2 — 12  Each 2 — 13  Sq. Ft. 11 92 — 1  Each 2 — 1  Sq. Yd. 802 — 1  Sq. Yd. 802 — 1478  Lin.Ft. — 398  Sq. Yd. 802 — 1478  Lin.Ft. — 398  Sq. Yd. 802 — 1478  Lin.Ft. — 398  Sq. Yd. 802 — 1478  Lin.Ft. — 398

\* Quantity Includes Bridge Deck Surface.

\*\* See Special Provisions.



NAME PLATE (STD. 2113)

STATION 105 + 73.96

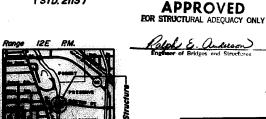
STATE OF ILLINOIS

FA.U. RTE. 1332 SEC. 13008-89

PROJ. ACRON-ACSTPM-7003 (054)

LOCANG NS-20 STR NO. OIL-2601

BUILT 199 BY:



LOCATION SKETCH

EFREN M. Miranda

~ M. Uhrada 10/16/92 EKP 11-30-94

GENERAL PLAN ELEVATION & GENERAL NOTES OAKTON STREET OVER DES PLAINES RIVER SECTION 1300B-89 FA.U. RTE. 1332

COOK COUNTY Sta. 105+73.96 STRUCTURE NUMBER 016-2601

### Cofferdam T/Sheet Piling - El. 630.60 18'-0<sup>5</sup>8" 17'-78" € OAKTON ST. 0 Tangent Line @ 1 È Pier 2 Ftg. Sta. 105†99.91 da. 104+76.4 Bk. of East Abut Sta. 106 + 62.60 Sta. 106 + 44 17 T/Sheet Piling-El.638.30 B/Sheet Piling-El.621.60 T/Sheet Piling-Eli 638.60 NOTE: iling-81.622.20 The Information shown for temporary sheet piling is estimated. It is the contractors responsibility to provide a design and computation of temporary sheet piling and associated members, if required, subject to the approval of the Engineer. 63'-2<sup>3</sup>4" 63'-234" Along Local 205'-1'2"Back to Back of Abutment STAGE I CONSTRUCTION Indicates Removal of Existing Structures.

ROUTE NO	SECTION	COUNTY	TOTAL SHEET	SHEET NO.	SHEET NO. S-2
F.A.U. RTE-1332	<b>:3008-8</b> 9	соок	128	80	OF 21 SHEETS
FED. ROAD	DIST, NO.1	ILLINOIS	FED AID PRO	JECT	

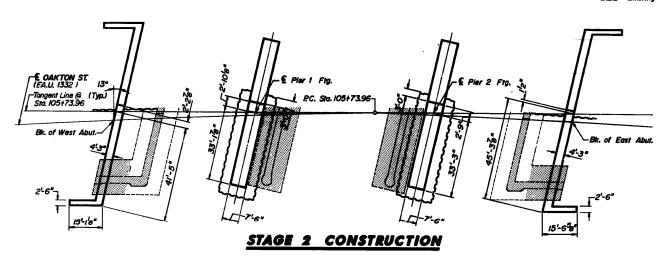
#### STAGE 1 CONSTRUCTION

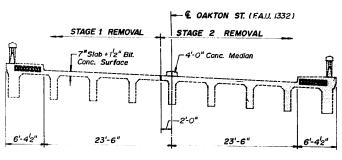
- Make preparation to close north half of the structure
- ove north half of structure to limits shown.
- Drive temporary sheet piling and cofferdam as shown
- Excavate to bottom of proposed
- Construct north half of substructure to limits shown.
- ra sheet piling except those behind existing abut
- Construct north half of superstructure. (Including Approach

### STAGE 2 CONSTRUCTION

- Remove remaining portion of the structure.

- Remove sheet piling at the Approach Slabs.





INDEX OF DRAWING:

**DESCRIPTION** 

GENERAL PLAN, ELEVATION & GENERAL NOTES

INDEX OF DRAWING & CONSTRUCTION STAGING

TOP OF SLAB LAYOUT & ELEVATIONS

PARAPET ELEVATIONS & DETAILS

STEEL FRAMING PLAN & DETAILS

212" NEOPRENE JOINT DETAILS

ELASTOMERIC BEARING DETAILS

STEEL FRAMING DETAILS

ANCHOR BOLT DETAILS BAR SPLICER DETAILS

PEDESTRIAN RAILING

SOIL BORING

SOIL BORING

TEMPORARY CONCRETE BARRIER

WEST ABUTMENT

EAST ABUTMENT

PIER I

PIER 2

DECK PLAN, CROSS SECTION & DETAILS

ELASTOMERIC & STEEL BEARING DETAILS

TOP OF SLAB ELEVATIONS

SHEET NO.

5-1.

S - 2.

S-4.

S - 5.

S - 6.

S - 7.

5-8

S - 9.

5-10.

5-11.

S -12.

S-/3.

5-14.

S-15.

S-/6.

S-17. S-18.

S-19.

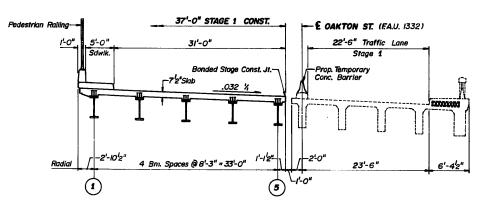
S -20.

S-21.

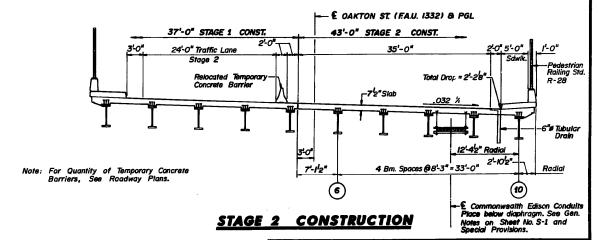
### **EXISTING** CONDITION

Note: Removal of concrete slab and bituminous concrete surface is incidental to Removal of Existing Structure."

CHECKED	EMM	dia Associates, It.	Automo Archine Sirver 2014 Sheber St Seles (2017) Chingo, J. Salasi
DRAWN	RAAjt.	Nakawatase, Wyns and Associates, Inc.	
CHECKED	RCE		
DESIGNED	J S		



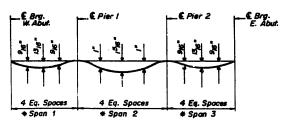
STAGE 1 CONSTRUCTION (LOOKING EAST)



INDEX OF DRAWING A CONSTRUCTION STAGING OAKTON STREET OVER DES PLAINES RIVER F.A.U. RTE. 1332 SECTION 1300B-89 COOK COUNTY

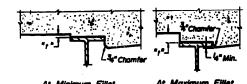
> Sta. 105 + 73.96 STRUCTURE NUMBER 016-2601

57 of 67



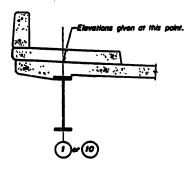
### DEAD LOAD DEFLECTION DIAGRAM

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 below.



To determine "1": After all structural steel has been erected, elevations of the top flonges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Deed Load Deflection"shown ohis sheet & Sht. No. 5-4 minus stab thickness equals the fillet heights above top flange of beams.

#### FILLET HEIGHTS



ROUTE NO. SECTION COUNTY TOTAL SHEET SHEET NO. SHEET NO. 5-3 FAU.1332 13006-89 COOK 128 81 OF 21 SHEETS FED ROAD DIST NO. II ILLINOIS PED AID PROJECT

### BEAM 1

	Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grad Elevations Adjusts For Dead Load Deflection
	BKWABT	10466.943	37.125	639.43/	639.43/
	BRWABT	10469.502	37.125	639.449	639.449
	A	10479.460	37.125	639.509	639.545
	8	10489.418	37.125	639.558	639.616
	c	10499.376	37.125	639.594	639.660
	ō	10509 334	37.125	639 . 623	639.682
	E	10519.292	37.125	639.648	639.686
	E PIER 1	10530.034	37.125	639.673	639.673
	F	10539.992	37.125	639.692	639.742
İ	G	10549.950	37.125	639.708	639.793
	H	10559.908	37.125	639.722	639.827
	ï	10589.866	37.125	639.732	639.84/
	J	10582,299	37.125	639.741	639.848
	K	10592.035	37.125	639.745	639.829
	ï	10601.772	37.125	639.746	639.794
ı	E PIER 2	10607.538	37.125	639.745	639.745
	M	10617.274	37.125	639.742	639.778
	ïi	10627.010	37.125	639 . 735	639.793
	. 0	10636.747	37.125	639 . 726	639.792
	p	10646.483	37.125	639.714	639.773
	Ö	10656.219	37.125	639.698	639.736
	BREABT	10666.051	37.125	639.68/	639 . 681
	BKEABT	10668.513	37.125		
1	UNLAGI	10000.313	31.125	639.675	639.675

**2**)-

### BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BKWABT  A  B  C  D  E  FIER 1  F  G  H  I	10464 .939 10467 .501 10477 .468 10487 .453 10507 .370 10517 .337 10528 .092 10538 .060 10548 .027 10557 .962 10567 .962	28.875 28.875 28.875 28.875 28.875 28.875 28.875 28.875 28.875 28.875 28.875 28.875 28.875	639.146 639.164 639.226 639.277 639.316 639.346 639.372 639.417 639.448 639.459 639.469	639 . 146 639 . 164 639 . 262 639 . 335 639 . 382 639 . 405 639 . 410 639 . 519 639 . 519 639 . 537 639 . 577 639 . 576
K L PIER 2 M N O P O BREABT BKEABT	10580-429 10590-279 10600-073 10605-880 10615-673 10625-467 10635-261 10645-054 10654-848 10664-750 10667-227	28.875 28.875 28.875 28.875 28.875 28.875 28.873 28.875 28.875 28.875	639.469 639.474 639.473 639.470 639.468 639.466 639.444 639.429 639.411	639.576 639.522 639.473 639.506 639.503 639.523 639.523 639.408 639.411 639.407

#### BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BKWABT	10462.931	20.625	638.867	638.867
BRWABT	10465.495	20.625	638.885	638.885
A	10475.472	20.625	638.951	638 .987
8	10485.449	20.625	639.004	639 .062
c	10495.425	20.625	639.045	639 . 111
0	10505.402	20.625	639.076	639 . / 35
E	10515.379	20.625	639.103	639 . 141
€ PIER 1	10526.147	20.625	639.128	639 . 128
F	10536.124	20.625	639.149	639.199
G	10546.100	20.625	639.167	639.252
н	10556.077	20.625	639.181	639 .286
1	10566.054	20.625	639./93	639 .302
J	10578.649	20.625	639.203	639 .3/0
K	10588,501	20.625	639.208	639 . 292
_ L	10598.353	20.625	639.210	639 .258
€ PIER 2	10604.201	20.625	639.210	639.210
M	10614.053	20.625	639.207	639 . 243
N	10623.905	20.625	639.201	639.259
0	10633.757	20.625	639.192	639.250
P	10643.608	20.625	639.181	639.240
e	10653 - 460	20.625	639.168	639.206
BREABT	10665 . 433	20.625	639. /49	639 . 149
BKEAOT	10665.925	20.625	639.145	639.145

 $\mathbf{W}$   $\mathbf{W}$   $\mathbf{O}$   $\mathbf{P}$   $\mathbf{O}$ 

#### BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BKWÄBT	10460.920	12.375	638 . 587	638 . 587
BRWABT	10463.486	12.375	638.606	638 . 606
l A	10473.472	12.375	638.674	638.710
8	10483.458	12.375	638.730	638 . 788
C	10493.444	12.375	638 .773	638.840
0	10503.430	12.375	638.806	638.865
, E	10513.416	12.375	638 .833	638.871
€ PIER 1	10524.198	12.375	638.860	638.860
F	10534.184	12.375	638 . 881	638 . 93/
6	10544.170	12.375	638 . 899	638 . 984
H	10554.156	12.375	638.914	639 . 019
1	10564.142	12.375	638 . 927	639.036
J J	10576.791	12.375	638.938	639.045
K	10586 . 701	12.375	630 . 943	639.027
L . L	10596 . 612	12.375	638.945	638.994
E PIER 2	10602.503	12.375	638 . 946	638.946
M	106 1 2 . 413	12.375	638.944	638.980
N .	10622.324	12.375	638.939	638.997
0	10632 : 234	12.375	638.930	678.996
P	10642 . 145	12.375	638.919	638.978
	10652.055	12.375	638.905	638.943
BREABT	10662.100	12.375	638 . 888	638. £86
BKEABT	10664.607	12.375	638 . 883	638. 88 3

### BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BKWABT	10458.904	4.125	638.307	638 .307
BRWABT	10461 .473	4.125	638.327	638 .327
A	10471 .469	4.125	638.398	638 . 434
l 8	10481 .464	4.125	638.456	638.514
C	10491 .459	4.125	638.502	638.568
0	10501 .455	4.125	638.537	638.595
Ε	10511 .450	4.125	638 . 564	638.602
€ PIER 1	10522.245	4 .125	638 . 591	638.591
F	10532.240	4 .125	638,613	638.663
6	10542.236	4.125	638.632	638.717
H	10552.231	4.125	638.646	638.753
1 1	10562.226	4 . 125	638.660	638 .770
, ,	10574 - 909	4.125	638.672	638.780
K	10584.879	4.125	638.679	638.763
L . L	10594.849	4.125	638.681	638.729
€ PIER 2	10600.783	4.125.	638.682	638.682
M	106 10 . 753	4.125	638.680	638.716
, <i>N</i>	10620.723	4.125	638 .675	638 .733
0	10630.693	4.125	638.668	638 .734
, ,	10640.663	4.125	638.657	638 .716
9	10650.633	4.125	638.643	638 .681
BREABT	10660.750	4.125	538.626	638 .626
BKEABT	10663.273	4.125	638 .62/	638 .62/

#### E ROADWAY & PGI

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BKWAST	10457 . 895	0.000	638 . 167	638 . 167
BRWABT	10460 .465	0.000	638 . 188	638 . 188
A	10470 .465	0.000	638,259	638 . 295
8	10480 .465	0.000	638 . 319	638 . 377
С	10490 .465	0.000	638 . 365	638 - 43/
D	10500 .465	0.000	638.401	638 . 460
_ E	10510 .465	0.000	638.430	638 . 468
E PIER 1	10521.267	0.000	638 . 457	638 . 457
F	10531 . 267	0.000	638 . 479	638 . 529
G	10541 . 267	0.000	638 . 498	638 . 583
H	10551 . 267	0.000	638 . 514	638 . 6/9
1	10561 .267	0.000	638.527	638 - 636
J	10573 .960	0.000	638 . 539	638 . 646
K	10583.960	0.000	638 . 546	638 . 630
_ L	10593.960	0.000	638 . 549	638 . 597
€ PIER 2	10599 .915	0.000	638 . 550	638 . 550
M	10609 . 915	0.000	638 . 549	638 . 585
N	10619 . 915	0.000	638 . 544	638 . 602
0	10629 . 915	0.000	638 . 537	638 . 603
P	10639 . 915	0.000	638.526	638 . 585
0	10649 . 915	0.000	638 . 5/3	638 . 551
BREABT	10660 . 069	0.000	638.496	638 . 496
BKEABT	10662 - 600	0.000	638 . 49/	638 . 49/

### LONG. BONDED STAGE CONST. JT.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grad Elevations Adjusts For Deed Load Deflection
BKWABT BRWABT A B C O E E PIER 1 F G H 1	10458 . 629 10461 . 199 10471 . 195 10481 . 192 10491 . 188 10501 . 185 10511 . 182 10521 . 972 10541 . 985 10561 . 965 10574 . 651	3.000	638 - 269 638 - 269 638 - 360 638 - 419 638 - 454 638 - 528 638 - 528 638 - 537 638 - 577 638 - 575 638 - 614 638 - 614 638 - 614	Deflection  638 , 269 638 , 396 638 , 396 638 , 396 638 , 558 638 , 558 638 , 558 638 , 627 638 , 768 638 , 763 638 , 773 638 , 773 638 , 773
K L E PIER 2 M N O P O P O BREABT BKEABT	10584.629 10594.607 10600.545 10620.503 10620.503 10630.481 10640.459 10650.438 10660.565	3.000 3.000 3.000 3.000 3.000 3.000	638 . 642 638 . 645 638 . 646 638 . 644 638 . 640 638 . 621 638 . 607 638 . 591 638 . 596	638 ,725 638 ,693 639 ,646 639 ,690 639 ,690 639 ,696 639 ,646 638 ,591 638 ,591

### DESIGNED J. S. RCE DRAWN RAAK/FOM

EMM

CHECKED

€ Brg. West Abut. ----(BRWABT)

Back West Abut. (BKWABT)

13° (Typ.)

PLAN

Horizontal Dimensions are taken along € of Individual Beam:

-- P.C. Sta. 105 + 73.96

 $\mathcal{O}(\mathbf{K})$  (L)

TOP OF SLAB ELEVATIONS OAKTON STREET OVER DES PLAINES RIVER SECTION 13008-89 FA.U. RTE. 1332 GOOK GOUNTY

Ste. 105 + 73.96 STRUCTURE NUMBER OIG-2601

5 Spaces @ 10'-0"=50'-0" | Varies | 4 Spaces @ 10'-0"=

\*Span 1

+ See Structural Steel Sheet No. S-8 for Span Dimensions.

**#**Span 3

-- € Brg. East Abut. (BREABT)

\_Bock East Abut. (BKEABT)

LE OAKTON ST. B PGL

ROUTE NO.	SECTION	COUNTY	TOTAL SHEET	SHEET NO.	SHEET
FA.U. 1332	13008-89	COOK	120	82	OF 21

		EAM	6	
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BKWABT	10456.885	-4.125	638.027	638.027
BRWABT	10459.456	4.125	638.047	638.047
A	10469.461	-4.125	638.120	638.156
8	10479.466	-4.125	638.181	638.239
c	10489.471	-4.125	638.230	638 . 296
D	10499.475	-4.125	638.266	638 . 325
_ Ε	10509.480	-4.125	638.295	638.333
€ PIER 1	10520.288	-4.125	638.323	638 . 323
F	10530.293	-4.125	638.345	638.395
G	10540, 298	-4.125	638.364	638 . 449
н	10550, 302	- 4.125	638.381	638.486
I	10560.307	-4.125	638.394	638.503
J	10573.007	-4.125	638.407	638.514
K	10583.035	-4.125	638.4/3	638.497
_ L	10593.065	-4.125	638.417	638.465
€ PIER 2	10599.042	-4.125	638.418	638.418
м	10609.072	-4.125	638.417	638.453
N	106 19 . 103	-4.125	638.412	638.470
0	10629, 133	-4.125	638.405	638.471
P	10639.163	-4.125	638.395	638 . 454
Q	10649.193	- 4.125	638.382	638 . 420
BREABT	10659.384	-4.125	638.365	638.365
BKEABT	10661.923	- 4.125	638.360	638.360

BEAM 7

			<u>,                                      </u>								
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection							
BKWABT	10454,861	-12.375	637.746	637 . 746							
BRWABT	10457.436	-12.375	637.768	637 . 768							
A	10457.450	-12.375	637.843	637.879							
8	10477.464	-12.375	637.906	637 . 964							
c	10487.478	~12.375	637 . 957	638.023							
D	10497.492	-12.375	637 . 996	638.055							
E	10507.506	-12.375	638.026	638.064							
€ .TIER 1	105 18.328	-12.375	638.054	638.054							
F	10528.342	-12.375	638.077	638 . 127							
G	10538.356	-12.375	638.097	638.182							
H	10548.370	-12.375	638 . 114	638.219							
r	10558.384	-12.375	638 . 128	638.237							
J	10571 .099	-12.375	638.141	638 . 248							
K	10581 . 167	-12.375	638.148	638.232							
L	10591 . 259	-12.375	638 . 153	638 . 201							
€ PIER 2	10597.280	-12.375	638.154	638.154							
М	10607.371	-12.375	638.153	638.189							
N	106 17 . 462	-12.375	638.149	638 . 207							
Ö	106 27 . 553	-12.375	638 . 143	638.209							
P	10637.644	-12.375	638.133	638 . 192							
0	10647.735	-12.375	638.120	638 . 158							
BREABT	10658.002	-12.375	638 . 103	638.103							
BKEABT	10660.556	-12.375	638.100	638.100							
DILLADI	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-12.3/3	636.700	1 030.700							

BEAM 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BKWABT	10452.834	-20.625	637.465	637 . 465
BRWABT	10455.411	- 20 . 625	637 . 487	637 . 487
A	10465.435	-20.625	637 . 565	637.601
В	10475.458	- 20 . 625	637.630	637.688
C	10485.481	- 20.625	637.684	637.750
D	10495.505	-20.625	637.726	637.785
E	10505.528	-20.625	637.756	637.794
€ PIER 1	10516.364	-20.625	637.785	637.785
F	10526.387	-20.625	637 . 809	637.859
G	10536.411	-20.625	637 . 829	637.914
н	10546.434	- 20 . 625	637.847	637.952
I	10556.457	- 20 . 625	637.862	637.971
J	10569.187	-20.625	637.876	637.983
K	10579.276	- 20. 625	637 . 884	637.968
_ L '	10589.429	- 20 . 625	637 . 668	637 . 936
€ PIER 2	105 95.495	-20.625	637 . 890	637.890
M	10605.648	-20.625	637 . 890	637 . 926
N	10615.801	- 20 . 625	637 . 886	637 . 944
0	10625.954	- 20 . 625	637 . 880	637.946
P	10636.106	-20.625	637.870	637 . 929
Q	10646.259	- 20 . 625	637.858	637 . 896
BREABT	10656.602	- 20 . 625	637.842	637 . 842
BKEABT	10659.172	- 20 . 625	637.637	637 . 837

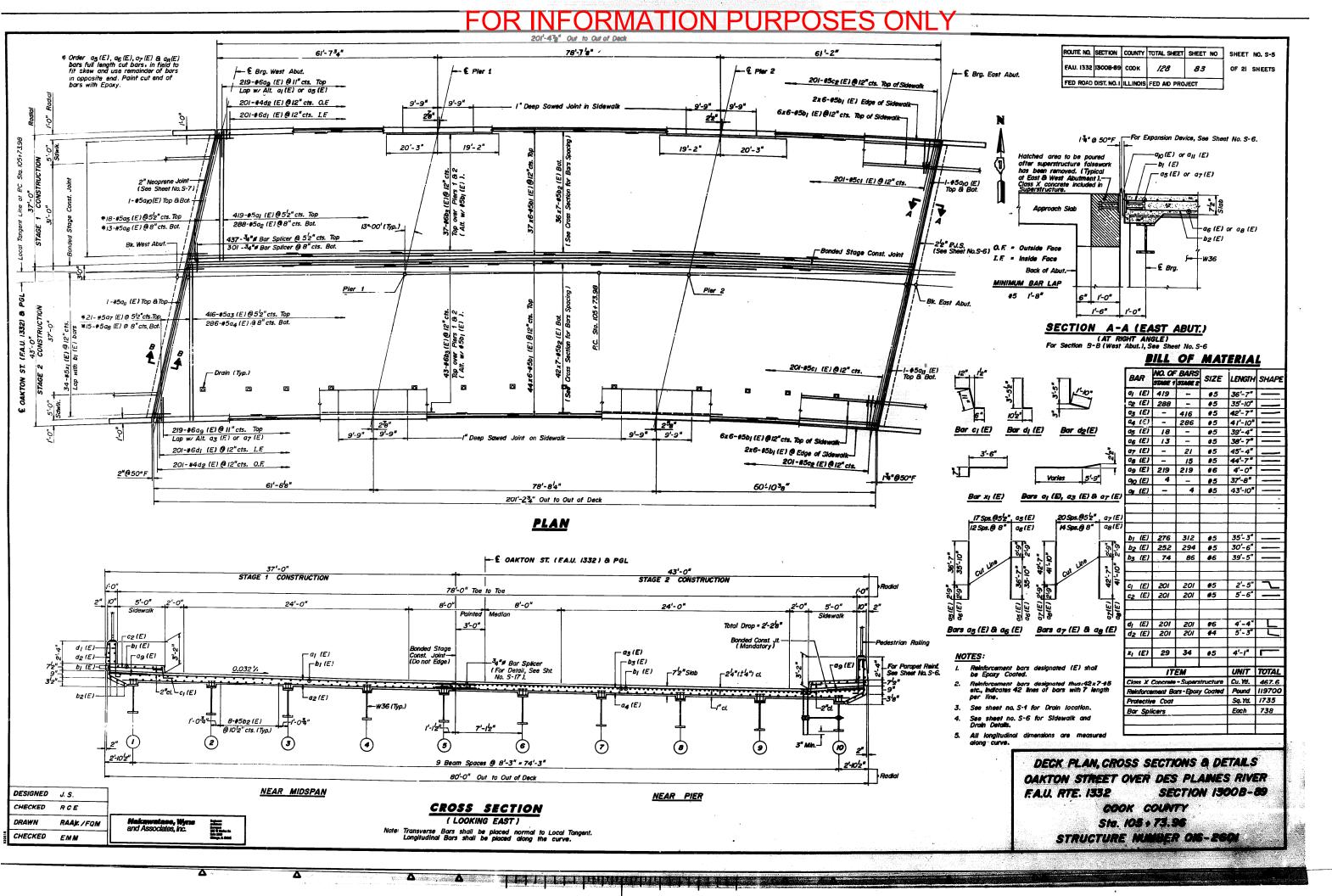
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BKWABT	10450.803	-20.875	637 . 183	637 . 183
BRWABT	10453.383	-28.875	637.206	637.206
A	10463.415	- 28 . 875	637.286	637 . 322
8	10473.448	-28.875	637 . 354	637.412
c	10483.481	- 28 . 875	637.410	637 . 476
D	10493,514		637 . 456	637.515
C E	10503.547		637.486	637 . 524
E PIER 1	105 14.396	- 28 . 875	637.516	637.516
F	10524.429		637.540	637 . 590
G	10534.461	- 28 . 875	637 . 562	637 . 647
H	10544.494	- 28 . 875	637.580	637 . 685
į	10554.527	- 28 . 875	637.595	637 . 704
_	10567.271	- 28 . 875	637.610	637.717
K	10577,361	- 28 . 875	637.618	637 . 702
c	10587.577	-20.075	637.624	637.672
E PIER 2 M	10593.688	· 28 . 875	637.625	637 . 625
N	10603.904	- 28 . 875	637.626	637 . 662
		- 20 . 075	637.623	637.681
0	10624.334	-28.875	637.617	637.683
5	10644.764	- 28 . 875 - 28 . 875	637.608	637.667
BREABT	10655.185	-28.875	637.596 637.580	637.634 637.580
BKEART	10657.771	-20.075	637 . 576	637.576

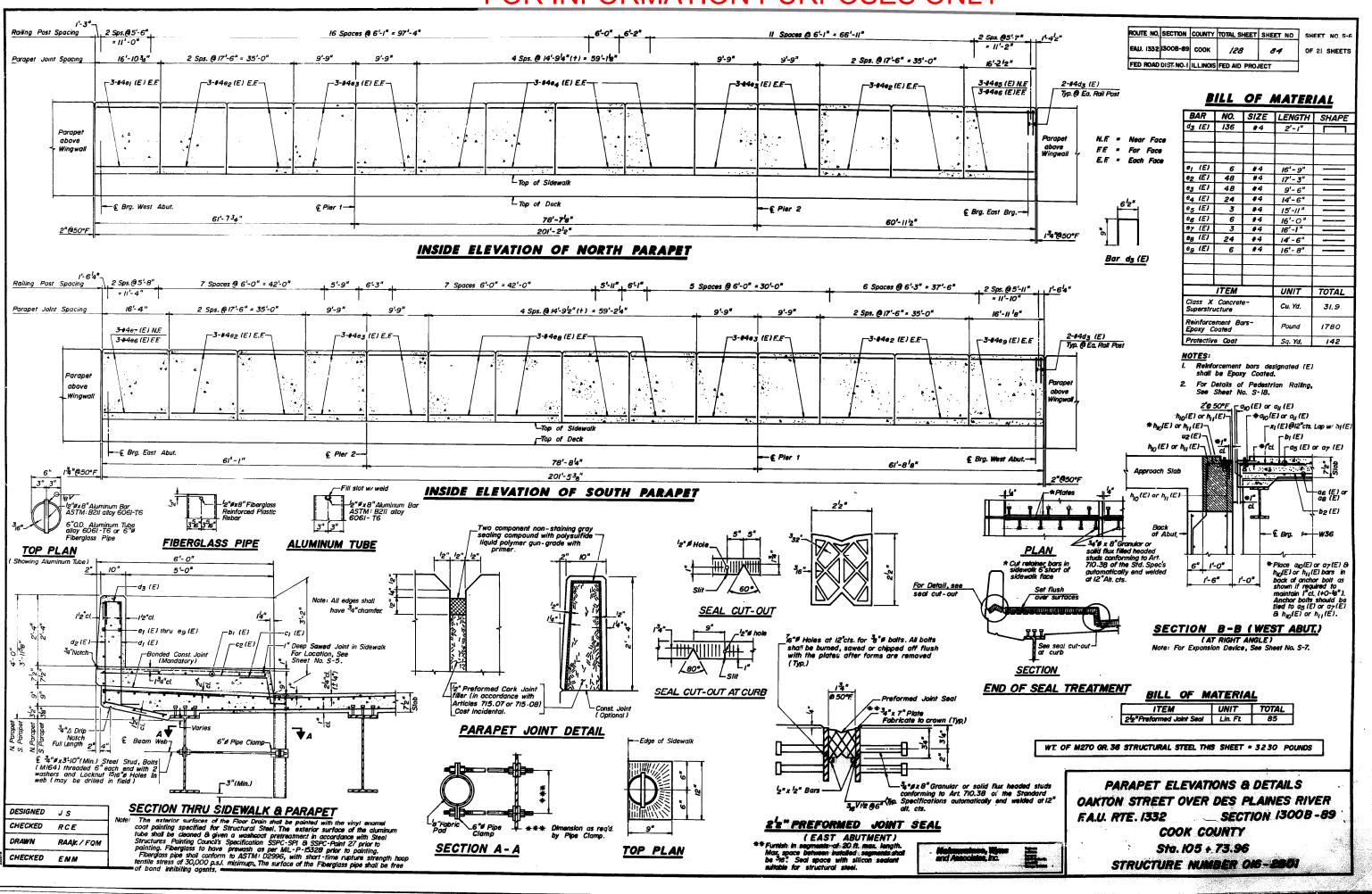
BEAM 10					
Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection		
10448 .768	-37 125	637 109	637 . 109		
			637.132		
			637.251		
10471 .435			637.343		
10481 .477			637.410		
10491 .519			637.452		
10501 .562	- 37 . 125	637.425	637.463		
10512.424	-37.125	637.485	637.455		
10522.466	- 37 . 125	637 . 480	637.530		
10532.508	-37.125	637.502	637.587		
10542.551	-37.125	637.520	637.625		
10552.593	- 37 . 125	637.536	637.645		
	- 37 . 125	637.552	637.659		
	-37.125	637.561	637.645		
10585 .701	- 37 . 125	637.567	637.615		
		637.569	637.569		
			637.606		
			637.626		
			637.628		
			637.613		
			637 .580		
			637.527		
10656 .353	-37.125	637.522	637 . 522		
	Station  10448.768 10461.350 10461.350 10461.351 10481.477 10491.519 10501.562 10512.424 10522.466 10532.308	Station Offset  10448.768 -37.125 10461.350 -37.125 10461.350 -37.125 10461.350 -37.125 10461.371 -37.125 10481.77 -37.125 10491.519 -37.125 10512.424 -37.125 10512.424 -37.125 10512.508 -37.125 10512.508 -37.125 10512.509 -37.125 10512.509 -37.125 10512.509 -37.125 10512.509 -37.125 10512.509 -37.125 10512.509 -37.125 10512.509 -37.125 10612.415 -37.125 10612.415 -37.125 10613.509 -37.125 10613.509 -37.125 10613.509 -37.125 10613.509 -37.125 10613.509 -37.125 10613.509 -37.125 10613.509 -37.125 10613.509 -37.125 10613.509 -37.125 10613.509 -37.125 10613.509 -37.125	Station		

DESIGNED JS CHECKED RCE RAAjr. CHECKED E M M

TOP OF SLAB ELEVATIONS OAKTON STREET OVER DES PLAINES RIVER F.A.U. RTE. 1332 SECTION 1300B-89

> COOK COUNTY Sta. 105 + 73.96 STRUCTURE NUMBER 016-2601





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### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET	NO.
F.A.U. 1332	1300B-89	соок	128	85	
FED. ROAD D	IST. NO. I	ILLINOIS	FED. AID PRO	JECT-	

SHEET NO. S-7 OF 21 SHEETS

Joint Size	"C" at 50°F	"D" at 50°F
2*	2*	12" Min.

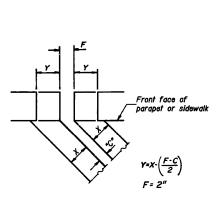
#### INSTALLATION NOTES

- Install sponge mandrels into positions shown to form flap convolution.
- 2 Install parapet or sidewalk piece (trim roadway flap to fit before applying epoxy).
- Install continuous seal in roadway.
- (4) Install anchor blocks as indicated.

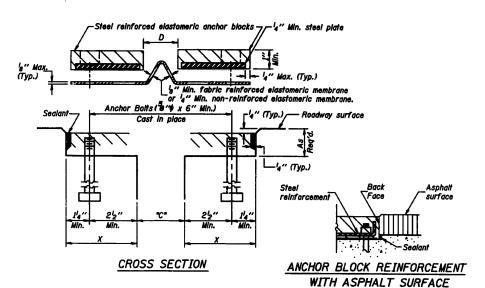
NOTE A: Maximum spacing of anchor bo#s shall be 12"

#### SKEW LIMITATIONS

The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews. For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed in accordance with dimension "D", might require modifications to insure a minimum clearance of 1½" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at ±12" cts.



FORMING BLOCKOUT <u>SKETCH</u>



#### **GENERAL NOTES**

Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane. See Special Provisions.

The elastomeric membrane shall be premolded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure.

The steel reinforcement must extend up the back face of anchor blocks when asphalt surfaces are used but is optional in concrete blockout.

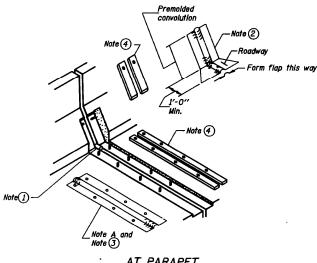
blockout.

The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed.

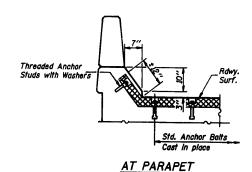
Joint openings shall be adjusted in accordance with Article 503.07(c) of the Standard Specifications when the deck is poured at the application of the standard specifications.

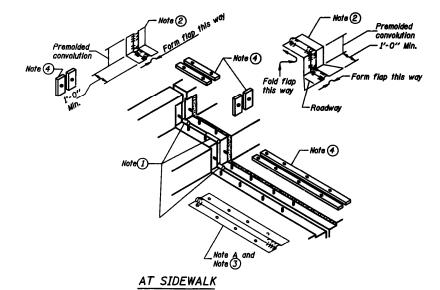
an ambient temperature other than 50°F.

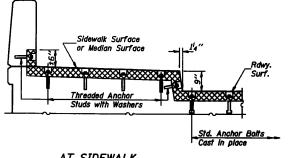
The parapet and sidewalk flaps may be furnished factory vulcanized to the roadway membrane provided the centerline of the convolution is maintained and the process and method meet the approval of the



### AT PARAPET







AT SIDEWALK TYPICAL END TREATMENTS

#### BILL OF MATERIAL

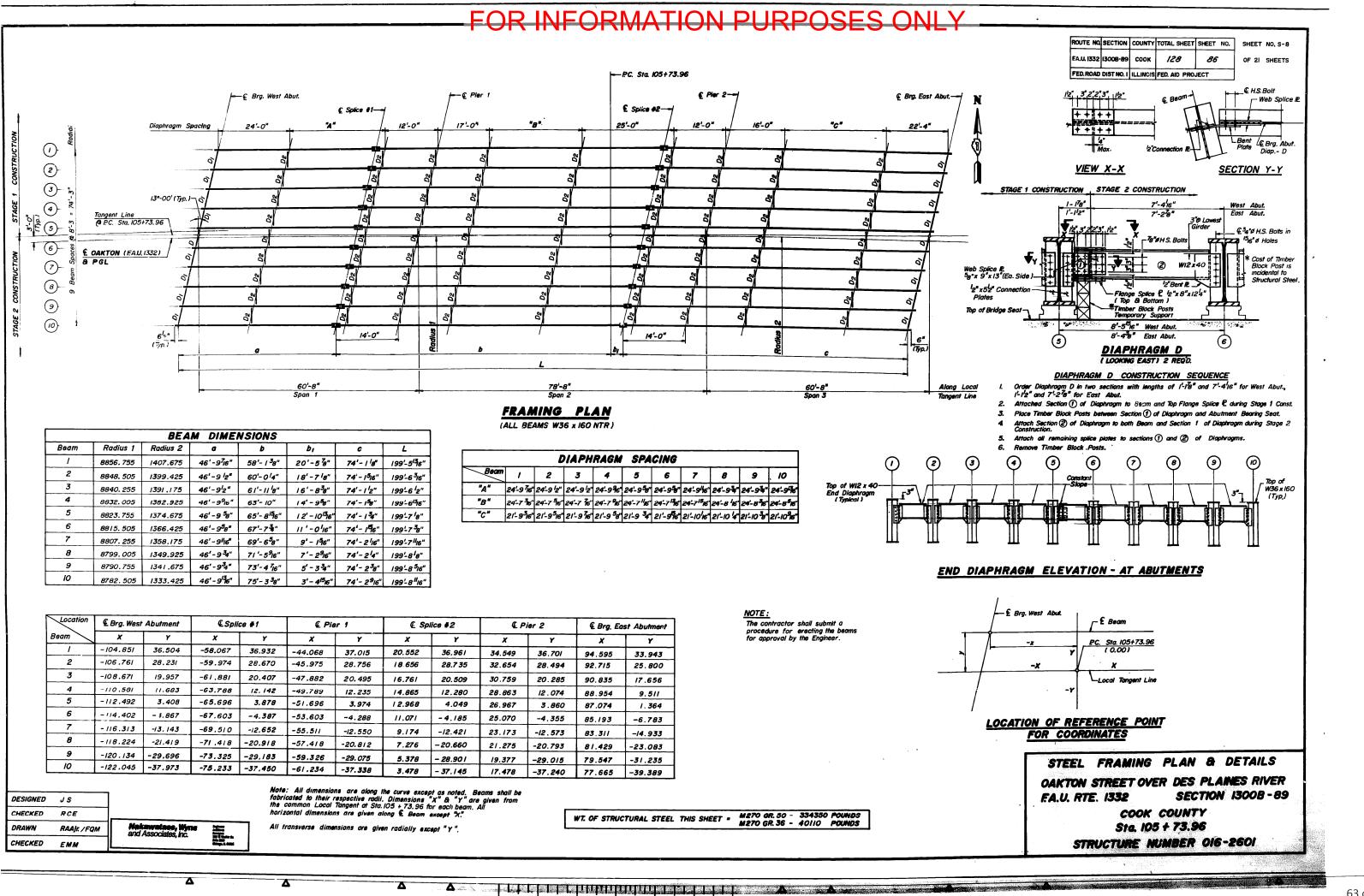
ITEM	UNIT	TOTAL
2"Neoprane Joint	Lin. Ft.	85

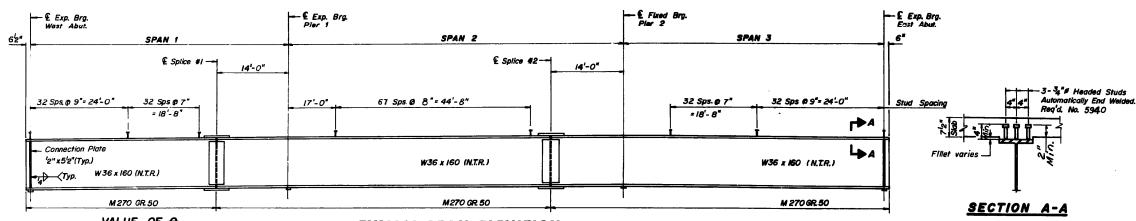
2" NEOPRENE JOINT DETAILS OAKTON STREET OVER DES PLAINES RIVER FA.U. RTE. 1332 SECTION 1300B-89 COOK COUNTY Sta. 105 + 73.96

STRUCTURE NUMBER OIS-ES

DESIGNED	JS	
CHECKED	RCE	
DRAWN	JGN	
CHECKED	EMM	

62 of 67





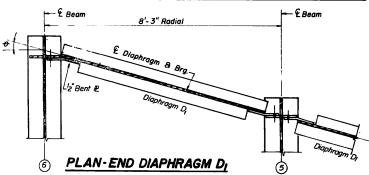
TYPICAL BEAM ELEVATION

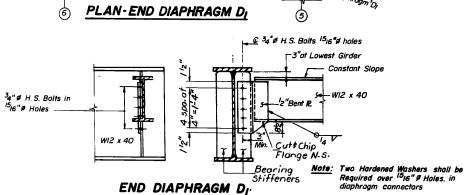
Note: For Beam Dimensions, See Table on Steel Framing Plan Sheet. Sheet No. S-9

N.T.R. = Indicates Notch Toughness Requirements.

Δ

#### 



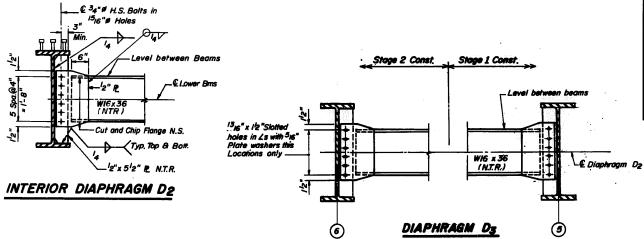


	TOP OF BEAM ELEVATIONS *									
Location Beam	& Brg. W. Abut.	€ Splice #1	€ Pier 1	£ Splice #2	€ Pier 2	€ Brg. E. Abut.				
	638.774	638.924	638.943	639.030	639.025	639.005				
2	638. <b>49</b> 7	638.655	638.674	638.765	638.761	638.744				
3	638.218	638. <b>386</b>	638.406	638.500	638.497	638.482				
4	637.940	638.117	638.138	638.236	638.233	638.221				
5	637.661	637 . 848	637.870	637.971	637.969	637.959				
6	637.381	637.578	637.601	637.706	637.705	637.698				
7	637.101	637.308	637 . 332		637.440	637.436				
8	636.820	637.038		637.176		637.175				
9	636.539	636.767		636.911	636.911	636.9/3				
10	636. <b>258</b>	636.497		636.646	636.647	636.652				

\* For Fabrication Only.

DESIGNED	J S	
CHECKED	RCE	
DRAWN	RAAjr.	
CHECKED	EMM	

nkgwatase, Wyns (1) Talanta (1) Associates, Inc. (1) Talanta (1) Associates, Inc. (1) Associates



Note: The Bolts for Slotted Holes

shall only be finger tightened prior to Deck Slab pouring and then fully tightened after

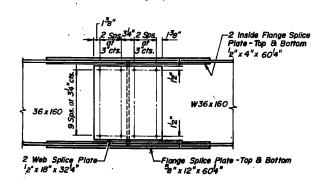
For Itams not shown or noted,

Weight of Structural Steel shown on this sheet is included on sheet no. S-8.

1/2" 9 Sps. at 3"cts, 3/4" 9 Sps. at 3"cts, 1/2"

Note:

34"# H.S. Bolts for Web Splice
6"# H.S. Bolts for Flange Splice



### SPLICES #1 8 #2

Note: High Strength Bolts shall conform to AASHTO M-164 Specification (A-325). All Materials NTR. Steel For Splice Shall Conform to M270 Grade 50.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEET	SHEET NO.	
FA.U. 1332	1300B-89	соок	128	87	
FED.ROAD	DIST, NO. I	ILLINGIS	FED. AID PRO	FCT	

21 SHEETS

MOMENT TABLE - Composite 3 Span (Composite in Positive Moment Area Only)

INTERIOR BEAM MOMENT TABLE									
		O.4 Span I	Pier I	0.5 Span2	Pier 2	0.6 Span 3			
l <sub>s</sub>	(in4)	9750	9750	9750	9750	9750			
l <sub>C</sub>	(in4)	23783		23 783		23783			
Ss	(in <sup>3</sup> )	542	542	542	542	542			
Sc	(in <sup>3</sup> )	764	_	764	_	764			
Sbi	(in 3 )		24.5	24.5	24.5	24.5			
Q	(k/·)	0.975	1.375	0.975 1.375		0.975			
M Q	('k )	234	647	267	641	239			
S D	(k/, )	0.40		0.40		0.40			
Ms Q	('k )	113	1	150		114			
M L	('k )	524	337	614	337	522			
M imp	('k')	141	86	151	86	140			
53 (M L + I )	('k)	1108	705	1275	705	1103			
Ma	('k )	1 892	1758	2200	1750	1893			
Mbi	('k )		7.7	3.5	7.7	10.8			
fs @ non-comp	(ksi)	5.18	14.32	5.91	14.19	5.29			
fs @ (Comp)	(ksi)	1.77		2.36		1.79			
fs <sup>5</sup> 3 (4+1)	(ksi)	17.40	15.61	20.03	15.61	17.33			
fw	(ksi)	1	3.77	1.71	3.77	5.29			
(fs + fw)(Overload	(ksi)	_	<i>3</i> 2. <i>8</i> 3	29.62	32.70	28.48			
fs (Total)	(ksi )	31.66	38.91	36.79	38.74	31.73			
fs (Total) + fw	(ksi )	_	42.68	38.50	42.51	37.02			
VR	(k)	62.0	_	64.4		61.7			
Fb	(ksi )	50.00	45.91	50.0	45.91	50.0			

INTERIOR BEAM REACTION TABLE							
		Abut's	Piers				
R₽	(K)	31.3	106.2				
R Ł	(K)	44.5	60.9				
Imp	(K)	11.9	11.6				
RTOTAL	(K)	87.7	178.7				

 ${f I_g}$  and  ${f S_S}$  are the moment of inertia and section modulus of the steel section used in computing  ${f I_S}$  (Total and Overload )

Ic and Sc are the moment of inertia and section modulus of the composite section used in computing  $f_3$  (Total and Overload) VR is the maximum  $\frac{L}{L} + \frac{L}{L} + \frac{L}{L} + \frac{L}{L} = \frac{L}{L} + \frac{L}{L} + \frac{L}{L} = \frac{L}{L} +  

(fg+fw)(Overload) is the sum of the stress due to M Q+ Mg Q+53 (M Q+I)+ Mbi/1.3

 $f_S$  (Total) is the sum of the stress due to 1.3 [M Q +  $M_S$  Q + 53 (M Q + I)].

Shi is the section modulus for one flange plate for lateral flange bending.

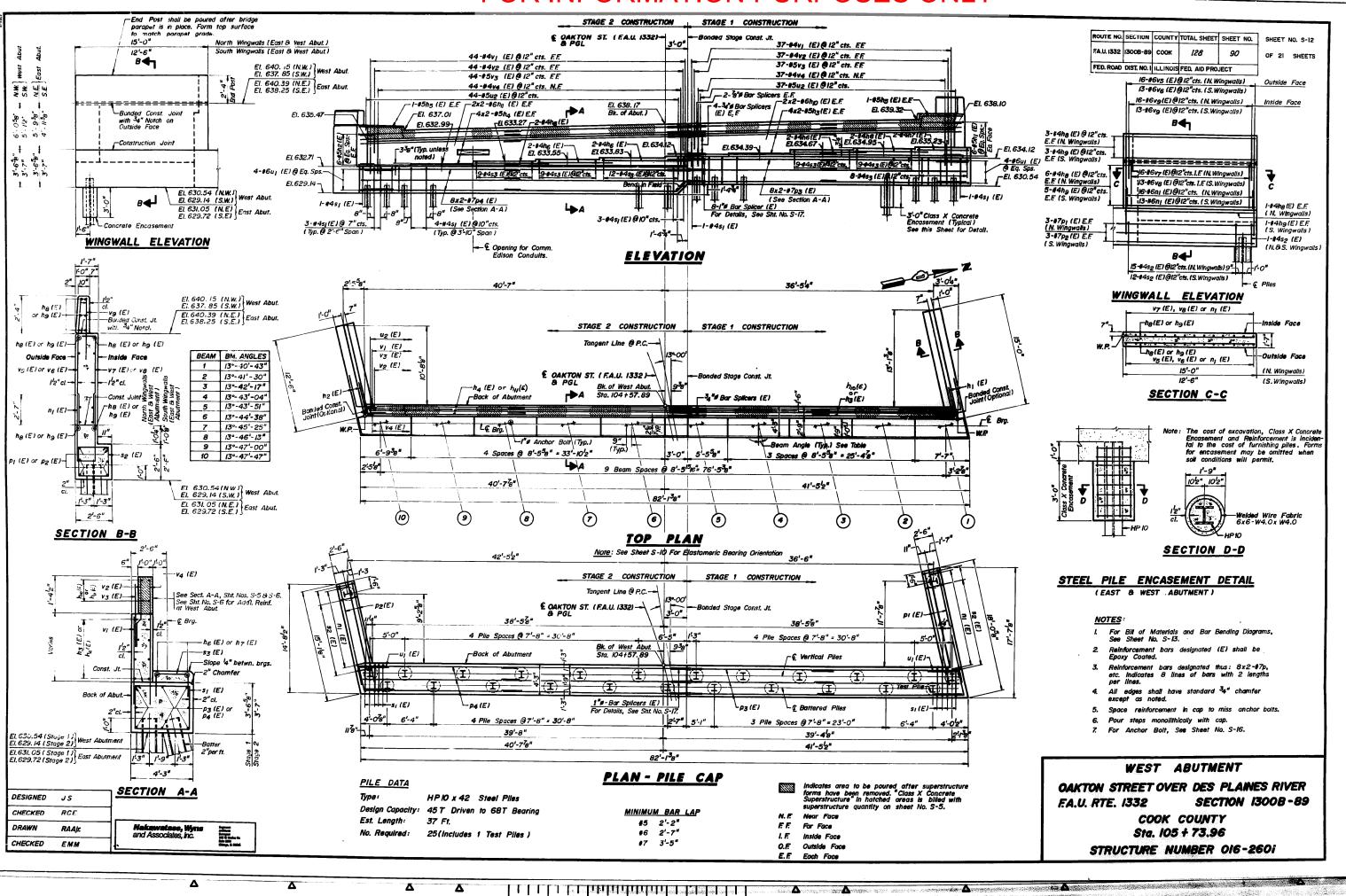
Mbi is the lateral bending moment for flange plate (factored)  $f_W$  is the calculated normal stress at edge of flange due to lateral bending (factored).

Mile and Rile have been increased due to the effect of centrifuguation.

Fb - Maximum allowable stress Fbu or Fby computed according to AASHTO [Guide Specifications for Horizonfally Curved Highway Bridges Section 2.12 (B) and 2.16].

STEEL FRAMING DETAILS
OAKTON STREET OVER DES PLAINES RIVER
F.A.U. RTE. 1332 SECTION 1300B-89

COOK COUNTY Sta. 105+73.96 STRUCTURE NUMBER 016-2601



STAGE 2 CONSTRUCTION STAGE 1 CONSTRUCTION ROUTE NO. SECTION COUNTY TOTAL SHEET SHEET NO. SHEET NO. S-13 Bonded Stage Const. Joint - 3'-0" - QAKTON ST. (FA.U. 1332) FA.U.1332 |3008-89 COOK 128 91 OF 21 SHEETS 37-#4vj (E) @ 12" cts. F.F. 44-#4vj (E)@12" cts. F.F. 37-#4v2 (E) @12"cts. FF 37-#5v3 (E) @12"cts. FF 44-#4v2 (E) @12" cts. FF 44-#5v3 (E) @12" cts. FF FED. ROAD DIST. NO.1 ILLINOIS FED. AID PROJECT —2-<sup>7</sup>8"ø Bar Spiicers (E.)E.F. 37-44v4 (E)@12"cts. N.F. 44-#444 (E) @12" cts. N.F. 1-45he(E) E.F BILL OF MATERIAL EI.638.34 -2x2-#6 h<sub>IO</sub>(E) E.F. --- I-#5hx (E) E.F. 4-34"# Bor Splicers (E) E.F. EL. 637.42r-El. 639.56 -4x2-45h3(E) E.F. →A –2x2-#6h; (E) E.F. -2-14hs (E) -FI 635.88 4'-3" 4'-3" <u>West abutment</u> \_-4x2-#5h4 (E) E.F <u>EAST ABUTMENT</u> r–EI. 633.81 NO. OF BARS SIZE LENGTH SHAPE NO. OF BARS -2-**04h**6 (E) √El.635.l2 Bar he (E) Bar hi (E) BAR BAR SIZE LENGTH SHAPE -2-14h6 (E) \_FEI.634.34 El. 634.60 -STAGE 1 STAGE 2 h, (E) 12 - #5 6'-9" 7-8453 (E) 9-8453 (E)@12'cts 9-8453 (E)@12'cts -36"(Typ. unless noted) h<sub>1</sub> (E) - 12 #5 6'-9" r-El. 633.55 - 12 #5 6'-9" h2 (E) | 12 | - | \$5 | 6'-9" | L 12.4453ENEZ CB. 9.4453ENEZ CB. 3/2" 4-#6u| (E)@ Eq. Sps. m m m h3 (E) 16 - #5 19'-0" #5 19'-0" h3 (E) | 16 h4 (E) - 16 #5 22'-1" · r-El. 629.72 h4 (E) — 16 #5 22'-1" 8x2-#7p3 (E) h<sub>5</sub> (E) 2 2 45 7'-9" El. 631.05- 1-#4s; (E)h5 (E) 2 2 #5 7'-9" ( See Section A-A Sheet No. S-I2 ) 8x2-#7p4 (E) ( See Section A-A Sheet No. S-I2 ) h6 (E) 4 6 #4 10'-2" h6 (E) 4 6 #4 10'-2" 4-#4s; (E) @10" cts. (Typ. @ 3'-10" Span ) 8-1"# Bar Spilcers (E) Bar hs (E) h<sub>7</sub> (E) 2 - #4 6'-7" h2 (E) 2 #4 6'-7" -3-#4s; (E)@10"cts. –3'-0" Class X Concrete Encasement (Typ.) For Detail, See Sheet No. S-12. h<sub>B</sub> (E) 20 - #4 |4'-9" -1-#4sj (E)h<sub>B</sub> (E) 20 #4 14'-9" € Opening for Comm.-Edison Conduits hg (E) - 18 #4 12'-3" -3/4 hg (E) — 18 #4 12'-3" h<sub>iO</sub> (E) 8 - #6 19'-0" h<sub>IO</sub> (E) 8 -#6 19'- 0" ELEVATION h<sub>II</sub> (E) \_ 8 #6 22'-1" h<sub>II</sub> (E) -8 #6 22'-1" 3'-04" 7 1 293 n<sub>I</sub> (E) 16 13 #6 10'-11" BEAM BM. ANGLES n<sub>i</sub> (E) 16 | 13 | #6 | 10'-11" | 1-3" 1 90-09'-01" STAGE 2 CONSTRUCTION STAGE 1 CONSTRUCTION 9\*-12'-16" <u>Bar nı (E)</u> 3 9°-15'-35" Bonded Stage Const. Joint-VI (E) P<sub>1</sub> (E) 6 - #7 |7'-2" - P<sub>2</sub> (E) - 6 #7 |4'-8" -PI (E) v3 (E) 4 9°-18'-55" P2 (E) - 6 #7 14'-8" E OAKTON ST. (FAU. 1332) 5 9\*-22'-18" V2 (E) P3 (E) 16 - #7 20'-3" P4 (E) - 16 #7 23'-9" P3 (E) | 16 | -9-25-44" Tangent Line @ P.C.—

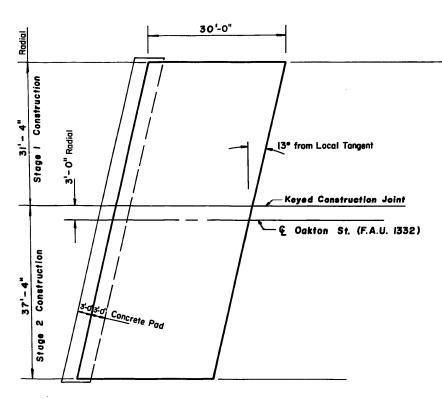
A P4 (E) - 16 #7 23'-9" 7 9"-29'-12" Rk. of East Abu — h3 (E) Or h<sub>io</sub>(ē) <sub>—</sub>Back of Abutment 8 9"-32'-43" Sta. 106 + 62.60 34"ø Bar Splicer (E)-The (E) or hi(E) 9 9°-36'-16" 10 9°-39'-52" s; (E) 36 44 #4 |4'-11" \$2 (E) | 16 | 13 | 84 | 9'-5" | 3 \$3 (E) | 25 | 30 | 84 | 7'-1" | si (E) 36 44 \$4 14'-11" \$2 (E) 16 13 #4 9'-5" \$3 (E) 26 30 #4 7'-1" V4 (E) -W.P | | | | | | Anchor Bolt | (Typ.) Beam Anale (Tvo) See Table 4 Spaces @ 8'-5<sup>5</sup>8" = 33'-10'2 3 Spaces @ 8'-5<sup>5</sup>8" = 25'-48" 8'-4<mark>4"</mark> 3 Beam Spaces @ 8'-4516" = 25'-0<sup>15</sup>16" 4 Beam Spaces @ 8 - 43e" = 33'-5'2" 8'-4<sup>7</sup>6" 3-95" u<sub>1</sub> (E) 4 4 \$6 9'-0" U2 (E) 2 2 uj (E) 4 4 #6 9'-0" 40'-78" 41'-5<sup>1</sup>2" u2 (E) 37 44 #5 1'-11" 82'-1<sup>3</sup>8" Bars sg (E) & u2 (E) 3'-11" s; (E) (4)  $\bigcirc$ (2) 3 (3) **6 (6)**  $\overline{(7)}$ **(B)** 9 VI (E) 37 44 #4 5'-1" \$2 (E) 2'-2" VI (E) 37 44 #4 5'-1" V2 (E) 37 44 #4 3'-10" V2 (E) 37 44 #4 3'-10" Bars s; (E) & s<sub>2</sub> (E) TOP PLAN v3 (E) 37 44 #5 3'-0" ---V3 (E) 37 #5 44 V4 (E) 37 44 #4 6'-7" --V4 (E) 37 44 #4 6'-7" Note: See Sheet S-IO For Elastomeric Bearing Orientation V5 (E) 16 - #6 8'-2" V5 (E) 16 #6 8'-2" 43'-04" 37'-0<sup>3</sup>4" 10 - 13 #6 7'-3" · V6 (E) -13 #6 7'-3" V6 (E) - **#**6 6'-10" V7 (E) 16 - #6 6'-10" V7 (E) 16 STAGE 1 CONSTRUCTION STAGE 2 CONSTRUCTION VB (E) -13 #6 6'-0" v<sub>8</sub> (E) — 13 #6 6'-0" onded Stage Const. Joint—— I3°-00° V9 (E) 16 13 #6 4'-11" Vg (E) 16 13 #6 4'-11" Ê OAKTON ST. (FA.U. 1332) & PGL Tangent Line @ P.C.--P2(E)-2 (E) 2 (S) 15.62 (S) 15.62 (S) 38'-5'8" Bar ve (E) 4 Pile Spaces @ 7'-8" = 30'-8 4 Pile Spaces @ 7'-8" = 30'-8" 1/2" Bk. of East Abut Sta. 106 + 62.60 5'.3" vs (E) uj (E)¬ UNIT TOTAL ITEM UNIT TOTAL Cu. Yds. 82.2 Class X Concrete Cu. Yds. 83.7 Class X Concrete 7380 Reinforcement Bars - Epoxy Coated Pounds 7540 Reinforcement Bars-Epaxy Coated Pounds i"ø Bar Splicers (E) 134 -p3 (E) -s, (F) Cu. Yds. 134 Cu. Yds. Structure Excavation Structure Excavation si (E) 840 Lin. Ft. 888 Steel Piles HPIO x 42 Steel Plies HPIOx 42 . Lin. Ft. 3'-278" 6'-4" Bars v<sub>5</sub> (E) & v<sub>6</sub> (E) 3 Pile Spaces @ 7'-8" = 23'-0" 4 Pile Spaces @ 7-8" = 30'-8 6'-4" Each 4'-102" Test Pile Steel (HPIOx42) Each I Test Pile Steel (HPIOx42) 1 Sq. Ft. 233 39'-8" 233 39'-4<sup>l</sup>8" Bridge Seat Sealer Bridge Seat Sealer Sq. Ft. 13 (E) 18 (E) Each 20 Each 20 Bor Splicer 41'-5<sup>1</sup>2" PLAN - PILE CAP EAST ABUTMENT PILE DATA OAKTON STREET OVER DES PLAINES RIVER NOTES: Bars v<sub>7</sub> (E) DESIGNED HPIO x 42 Steel Piles FA.U. RTE. 1332 SECTION 1300B-89 I. For Details & Reinforcement of Wind See Sheet No. S-12. & ve (E) Design Capacity: 45T Driven to 68T Bearing COOK COUNTY CHECKED RCF 2. For Notes and Sections. See Sheet No. S-12. Est. Length: 3. For Steel Pile Encasement Detail, See Sheet No. S-12. Sta. 105 + 73.96 RAAir No. Required: 25 (Includes 1 Test Pile) CHECKED EMM STRUCTURE NUMBER 016-2601 

### WEST APPROACH SLAB #

	APPROACH SLAB						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			And the second s		
Skew	Bottom Reinforcement			Top Reinforcement  Transverse #4 bi Longitudinal #4 au		Longitudinal #4  G. A. G. Transverse #5 h		Class X	Reinforcement Sin Area			
Angle & Degrees		Length	Longituainai ≠9 ( No. & Lengiti	Mo.	Length	No. & Length	02 B 03	//da	Longth	Concrete (Cu. Yde.)	(Pounds)	(Sq. Yde.)
			Stage 1 CON	STRUC		WEST APPROAC	CH PAVEMENT	·	· Annoning	n de vice est de la company de	Control of the contro	
13°	30	31-10"	62 at 6" cts. 29'- 6" long	8	31'-10'	25 bars - 29'-6" lang	34	24	32'-4"	49.4	8970	104.4
		· · · · · · · · · · · · · · · · · · ·	Stage 2 cor	VSTRUC	CTION	WEST APPRO	ACH PAVEMEN	T	· · · · · · · · · · · · · · · · · · ·	7 ( 1 · · · · · · · · · · · · · · · · · ·	ga in verna ni isin saw • kkaibana ka	Part Marine Cardy
13*	30x2	20'-2"	74at 6° cts. 29' - 6" long	8x2	20'-2"	30bars - 29'-:6" long	- 40	24x2	20-8	58.8	शिक्ष	124.4

\* East Approach Slab Same

### FOR INFORMATION ONLY



OAKTON STREET
West Approach Slab - As Shown
East Approach Slab - Similar

ROUTE NO SECTION COUNTY TOTAL SHEET NO.

F.A.U. RS2 + COOK 7/28 101

STA. TO STA.

FINAL SECTION LINE SECTION NO.

# 1300 9-89

Notes: The notation for the number of bars given as 8 x 2 indicates 8 lines of bars with 2 lengths per line. Winimum lap = 1'-8".

All reinforcement bars shall be <u>epoxy coated</u>.

BRIDGE APPROACH PAVENERT

Spent 2 of 3

STANDARD 24-02-20-02-1